

LOCUS MAP  
(NOT TO SCALE)

# CIVIL SITE PLANS FOR: STRADA

## MIXED USE BUILDING 252-262 MAIN STREET & 10 PINEVALE AVENUE READING, MA

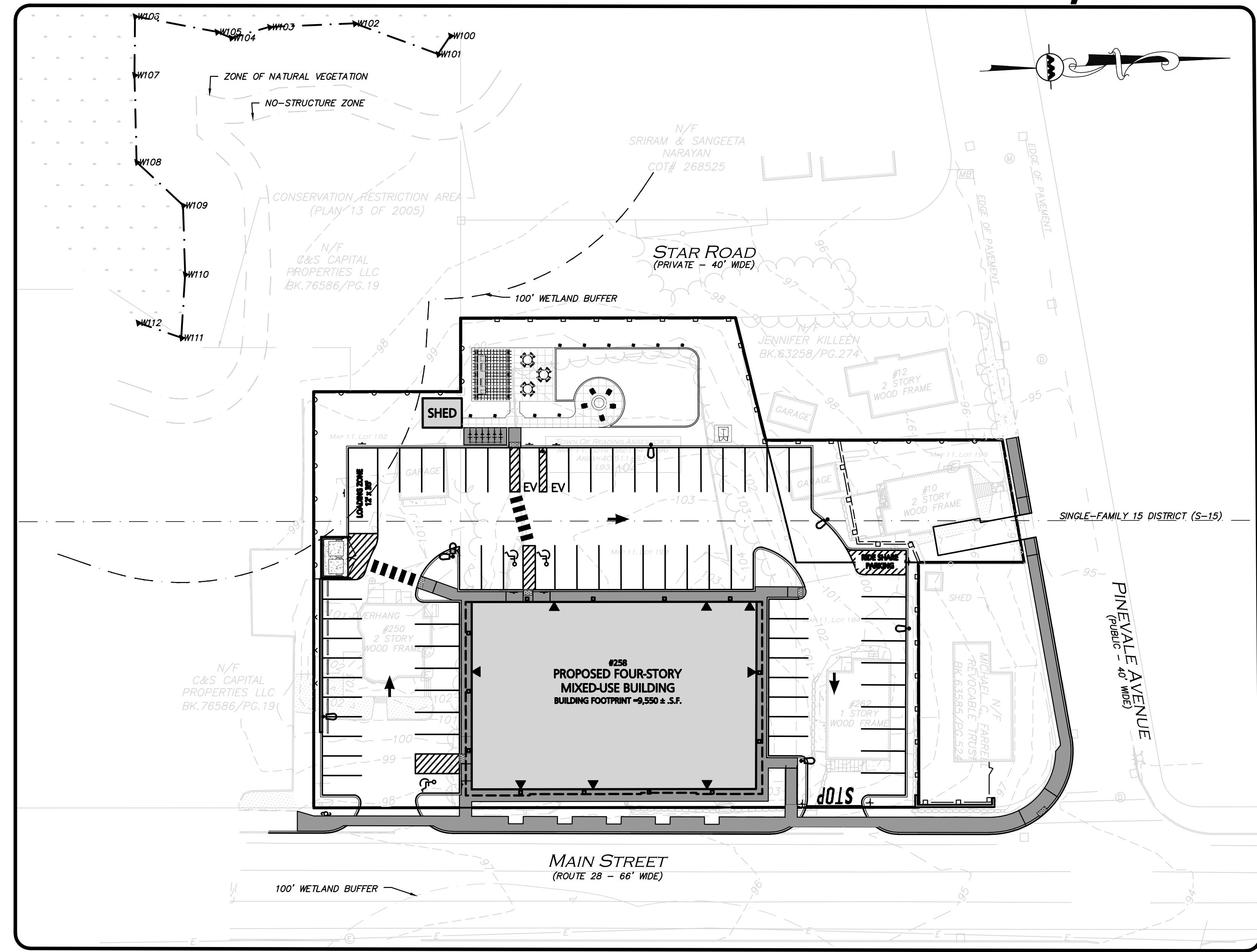
ASSESSOR'S INFORMATION			
MAP	LOT	BLOCK	AREA (ACRES)
11	192	000	0.23
11	193	000	0.60
11	194	000	0.11
11	196	000	0.11

**OWNER / APPLICANT:**  
BLVD READING, LLC  
c/o SAVERIO FULCINITI  
1 SYLVAN STREET  
PEABODY, MA 01960

**CIVIL ENGINEER/LANDSCAPE ARCHITECT  
& LAND SURVEYOR:**  
ALLEN & MAJOR ASSOCIATES  
100 COMMERCE WAY, SUITE 5  
WOBURN, MA 01801  
781.935.6889

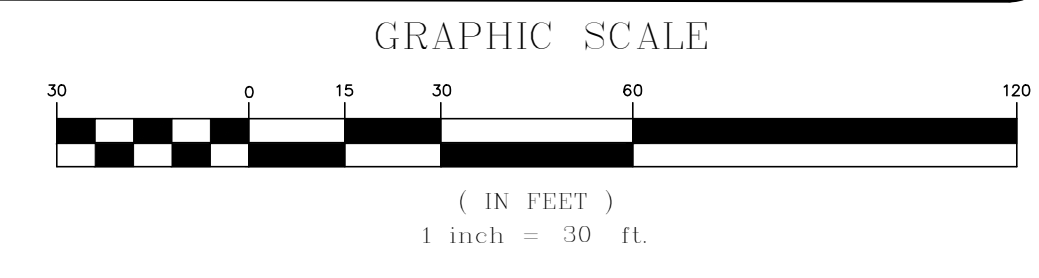
**ARCHITECT:**  
RP ARCHITECTURAL STUDIO  
78 HIGHLAND CIRCLE  
WAYLAND, MA 01778  
617.794.7759

**WETLAND SCIENTIST:**  
GODDARD CONSULTING, LLC  
291 MAIN STREET, SUITE 8  
NORTHBOROUGH, MA 01532  
508.393.3784



LIST OF DRAWINGS			
DRAWING TITLE	SHEET NO.	ISSUED	LAST REVISED
PROPERTY LINE/EXISTING CONDITIONS	V-101	09-06-2023	
ABBREVIATIONS & NOTES	C-001 - 002	10-05-2023	03-25-2024
EROSION CONTROL PLAN	C-100	10-05-2023	03-25-2024
SITE PREPARATION PLAN	C-101	10-05-2023	03-25-2024
LAYOUT & MATERIALS PLAN	C-102	10-05-2023	03-25-2024
GRADING & DRAINAGE PLAN	C-103	10-05-2023	03-25-2024
UTILITIES PLAN	C-104	10-05-2023	03-25-2024
LIGHTING PLAN	C-105	10-05-2023	03-25-2024
SNOW STORAGE PLAN	C-106	10-05-2023	03-25-2024
VEHICLE MOVEMENT PLAN	C-107A - C-107B	10-05-2023	03-25-2024
FIRE TRUCK TURNING PLAN	C-108	10-05-2023	03-25-2024
ABUTTING PROPERTY DIMENSION PLAN	C-109	10-05-2023	03-25-2024
SITE CROSS SECTION PLAN	C-201	10-05-2023	03-25-2024
DETAILS	C-501 - C-509	10-05-2023	03-25-2024
LANDSCAPE PLAN	L-101	10-05-2023	03-25-2024
SITE AMENITIES PLAN	L-102	10-05-2023	03-25-2024
LANDSCAPE NOTES & DETAILS	L-501 - L-502	10-05-2023	03-25-2024
SITE AMENITIES DETAILS	L-503	10-05-2023	03-25-2024

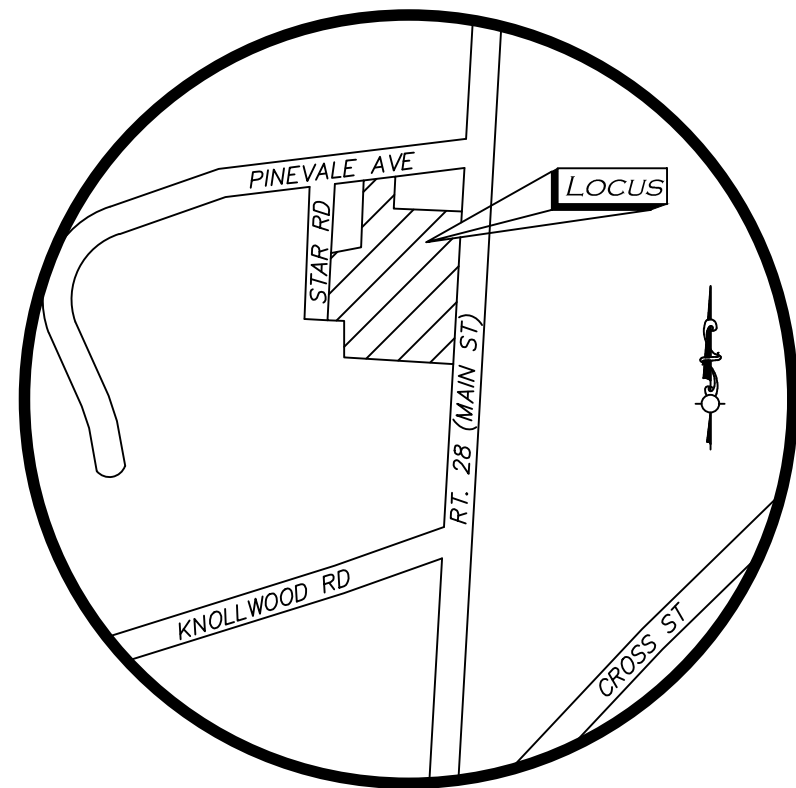
PREPARED BY:  
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PROFESSIONAL ENGINEER FOR  
ALLEN & MAJOR ASSOCIATES, INC.

ISSUED FOR APPROVAL: OCTOBER 5, 2023  
REVISED PER TOWN COMMENTS: FEBRUARY 29, 2024  
REVISED PER TOWN COMMENTS: MARCH 25, 2024

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LOCUS MAP  
(NOT TO SCALE)

**LEGEND**

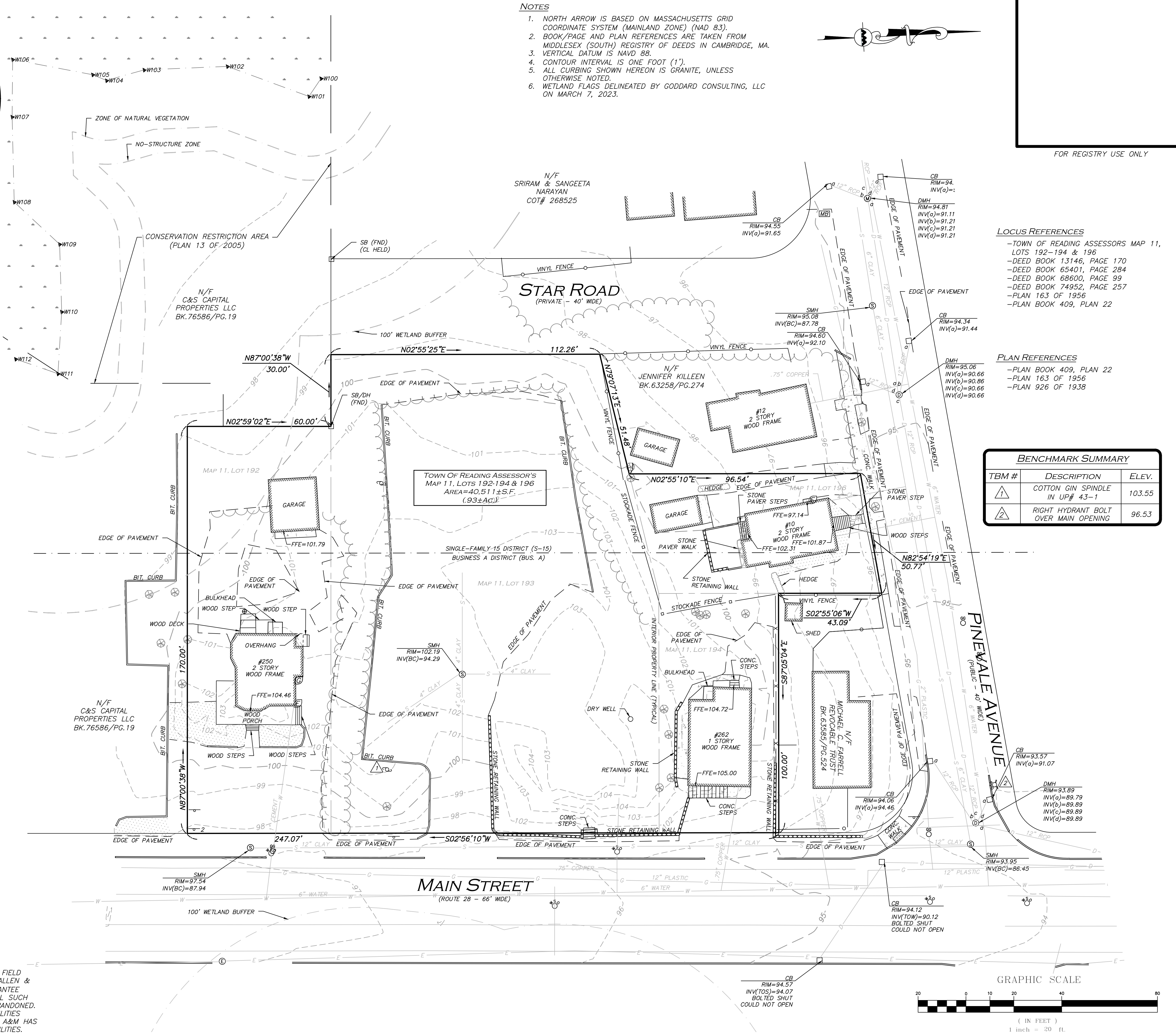
STONE BOUND (SB)	□
DRAIN MANHOLE (DMH)	⊙
SEWER MANHOLE (SMH)	⊙
ELECTRIC MANHOLE (EMH)	⊙
MISC. MANHOLE (MH)	⊙
CATCH BASIN (CB)	⊙
UTILITY POLE	⊙
FIRE HYDRANT	⊙
WATER GATE	⊙
GAS GATE	⊙
TREE	⊙
SIGN	⊙
MAILBOX	⊙
WETLAND FLAG	⊙
GAS METER	⊙
ELECTRIC METER	⊙
CONCRETE	⊙
LANDSCAPED AREA (LSA)	⊙
STONE PAVERS	⊙
TACTILE DOME STRIP	⊙
BUILDING	⊙
BUILDING OVERHANG	⊙
WETLAND	⊙
BUFFER ZONE	⊙
1' CONTOUR	⊙
5' CONTOUR	⊙
PROPERTY LINE	⊙
ABUTTERS LINE	⊙
INTERIOR PROPERTY LINE	⊙
ZONE LINE	⊙
STONE RETAINING WALL	⊙
TREE LINE	⊙
EDGE OF PAVEMENT	⊙
CURB	⊙
CHAIN LINK FENCE	⊙
STOCKADE FENCE	⊙
VINYL FENCE	⊙
WATER LINE	⊙
SEWER LINE	⊙
DRAIN LINE	⊙
GAS LINE	⊙
ELECTRIC LINE	⊙
TELEPHONE LINE	⊙
FINISHED FLOOR ELEVATION	FFE
CONCRETE	CONC.
STONE BOUND W/DRILL HOLE	SB/DH
CENTER LINE	CL
FOUND	FND
NOW OR FORMERLY	N/F
BOOK	BK.
PAGE	PG.

**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.

**NOTES**

1. NORTH ARROW IS BASED ON MASSACHUSETTS GRID COORDINATE SYSTEM (MAINLAND ZONE) (NAD 83).
2. BOOK/PAGE AND PLAN REFERENCES ARE TAKEN FROM MIDDLESEX (SOUTH) REGISTRY OF DEEDS IN CAMBRIDGE, MA.
3. VERTICAL DATUM IS NAVD 88.
4. CONTOUR INTERVAL IS ONE FOOT (1').
5. ALL CURBING SHOWN HEREON IS GRANITE, UNLESS OTHERWISE NOTED.
6. WETLAND FLAGS DELINEATED BY GODDARD CONSULTING, LLC ON MARCH 7, 2023.



**LOCUS REFERENCES**

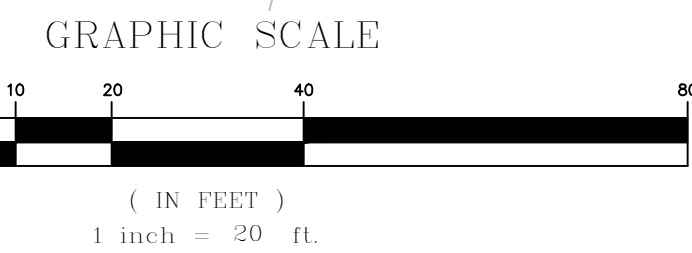
- TOWN OF READING ASSESSORS MAP 11, LOTS 192-194 & 196
- DEED BOOK 13146, PAGE 170
- DEED BOOK 65401, PAGE 284
- DEED BOOK 68600, PAGE 99
- DEED BOOK 74952, PAGE 257
- PLAN 163 OF 1956
- PLAN BOOK 409, PLAN 22

**PLAN REFERENCES**

- PLAN BOOK 409, PLAN 22
- PLAN 163 OF 1956
- PLAN 926 OF 1938

**BENCHMARK SUMMARY**

TBM #	DESCRIPTION	ELEV.
1	COTTON GIN SPINDLE IN UP# 43-1	103.55
2	RIGHT HYDRANT BOLT OVER MAIN OPENING	96.53

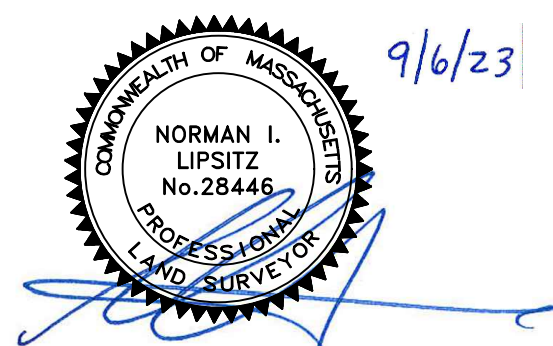


N:\PROJECTS\2398-01A\SURVEY\DRAWINGS\CURRENT\S-2398-01A-EC.DWG

WE HEREBY CERTIFY THAT:

THIS PLAN IS THE RESULT OF AN ACTUAL ON THE GROUND SURVEY PERFORMED ON OR BETWEEN APRIL 3, 2023 AND APRIL 13, 2023. 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 READING ASSESSOR'S INFORMATION. THE ABOVE IS CERTIFIED TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION AND BELIEF.

ALLEN & MAJOR ASSOCIATES, INC.  
 SEPT. 6, 2023  
 PROFESSIONAL LAND SURVEYOR FOR ALLEN & MAJOR ASSOCIATES, INC.



REV	DATE	DESCRIPTION

APPLICANT/OWNER:  
**ONE SYLVAN LLC**  
 PO BOX 4449  
 PEABODY, MA 01961

PROJECT:  
**252-260 MAIN STREET**  
 READING, MA

PROJECT NO. 2398-01A DATE: 09/06/23

SCALE: 1" = 20' DWG. NAME: S-2398-01A-EC

DRAFTED BY: COB/SMM CHECKED BY: COB/NIL

PREPARED BY:

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DRAWING TITLE: **PROPERTY LINE/ EXISTING CONDITIONS** SHEET NO. **V-101**

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# NOTES

## GENERAL NOTES:

- TOPOGRAPHIC INFORMATION AND EXISTING SITE FEATURES WERE OBTAINED FROM AN ACTUAL FIELD SURVEY PERFORMED BY ALLEN & MAJOR ASSOCIATES, INC., 100 COMMERCE WAY, WOBURN, MASSACHUSETTS.
- ZONING DISTRICT IS SINGLE-FAMILY 15 DISTRICT (S-15) AND BUSINESS A DISTRICT (BUS.A).
- OVERALL LOT SIZE: 1.05± ACRES
- DURING CONSTRUCTION, ALL VEHICLES MUST BE PARKED ON SITE.
- DURING CONSTRUCTION, ALL STAGING AND DELIVERIES WILL OCCUR ON SITE.
- 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.
- 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.
- ALL PROPOSED MAIN BUILDING ENTRANCES AND WALKS SHALL BE HANDICAP ACCESSIBLE PER FEDERAL ADA & MA AAB REGULATIONS.
- ALL SITE WORK DONE FOR THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH THE SITE PLANS AND SITE WORK SPECIFICATIONS FOR CONSTRUCTION.
- 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.
- 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.
- ALL APPLICABLE PERMITS AND AN APPROVED SET OF PLANS SHALL BE AVAILABLE AT THE CONSTRUCTION SITE.
- THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING A PRE-CONSTRUCTION MEETING WITH THE APPROPRIATE CITY 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.
- 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 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.
- ALL BUILDING DIMENSIONS ARE MEASURED TO THE OUTSIDE FACE OF THE BUILDING.
- ALL RADII ARE 3 FEET UNLESS OTHERWISE NOTED.
- ALL PARKING LOT AND AISLE DIMENSIONS ARE TAKEN FROM THE FACE OF CURB AND INDICATE EDGE OF PAVEMENT.
- 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.
- 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.
- 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.
- 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.
- EXISTING STRUCTURES WITHIN CONSTRUCTION LIMITS ARE TO BE PROTECTED, ABANDONED, REMOVED OR RELOCATED AS NECESSARY.
- 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.
- THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES TO DETERMINE EXACT POINT OF SERVICE CONNECTION AND DISCONNECTION AT EXISTING UTILITY.
- 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 GROUND BREAKING.
- 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.

- 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 CITY COUNCIL.
- 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 SIEVE 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.
- 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 CITY COUNCIL. ALL PROPOSED SIGNAGE MUST MEET THE REQUIREMENTS OF THE LOCAL ZONING CODE.

## GRADING & DRAINAGE NOTES:

- EXISTING PAVEMENT SHALL BE SAW-CUT AND PAVEMENT JOINT SHALL BE INSTALLED WHERE NECESSARY TO ENSURE A SMOOTH CONTINUOUS GRADE.
- PITCH EVENLY BETWEEN SPOT GRADES. ALL PAVED AREAS MUST PITCH TO DRAIN AT A MINIMUM OF 1/8" PER FOOT UNLESS OTHERWISE SPECIFIED. ANY DISCREPANCIES NOT ALLOWING THIS MINIMUM PITCH SHALL BE REPORTED TO THE ENGINEER PRIOR TO CONTINUING WORK.
- ALL GRADING OPERATIONS SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANIES.
- IN LANDSCAPED AREAS THE TOP ELEVATION OF MANHOLES SHALL MATCH THE FINISH GRADE OF THE TOPSOIL. IN PAVED AREAS THE TOP ELEVATIONS OF MANHOLES SHALL MATCH FINISH GRADE.
- ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE STABILIZED AS SOON AS POSSIBLE UPON COMPLETION OF CONSTRUCTION WORK IN THE AREA.
- 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.
- CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE PER DEMOLITION PLAN.
- 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.
- 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.
- ALL STORM PIPES ENTERING STRUCTURES SHALL BE GROUTED TO ENSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
- ALL STORM DRAIN MANHOLES SHALL HAVE TRAFFIC BEARING RING & COVERS & SHALL BE LABELED "DRAIN".
- 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.
- CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
- CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES STEEPER THAN 3H:1V.
- ALL DRAINAGE SYSTEM COMPONENTS SHALL CONFORM TO LOCAL REQUIREMENTS.

## UTILITY NOTES:

- 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.
- 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.
- 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, PLUG 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.
- THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENTS OF NATURAL GAS, ELECTRIC, TELEPHONE AND ANY OTHER UTILITY BY THE UTILITY OWNER.
- 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)
- BEFORE UTILITY WORK BEGINS, THE CONTRACTOR WILL COORDINATE WITH THE LOCAL MUNICIPALITY FOR THE APPROPRIATE PERMIT AND INSPECTION FEES.
- 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.
- ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
  - CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITY'S INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
  - MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
  - CONTRACTOR SHALL MAINTAIN A MINIMUM OF 5'-0" COVER AND A MAXIMUM OF 8'-0" COVER ON ALL WATERLINES.
  - 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 ENCASED IN CONCRETE.
  - ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH OF 3000 P.S.I.
  - 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.
  - 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.
  - DRAWINGS DO NOT NECESSARILY SHOW ALL EXISTING UTILITIES.

# ABBREVIATIONS

ABAN	ABANDON	L	LENGTH
ADJ	ADJUST	LB	LEACHING BASIN
		LP	LIGHT POLE
B	BORING	MAT	MATERIAL
BC	BOTTOM OF CURB	MAX	MAXIMUM
BIT	BITUMINOUS	MH	MANHOLE
BCB	BITUMINOUS CONCRETE BERM	MIN	MINIMUM
BLDG	BUILDING	MISC	MISCELLANEOUS
BM	BENCH MARK	MTD	MOUNTED
BOS	BOTTOM OF SLOPE	MW	MONITORING WELL
BOW	BOTTOM OF WALL		
BRK	BRICK	N	NORTH
BV&B	BUTTERFLY VALVE & BOX	NIC	NOT IN CONTRACT
BVW	BORDERING VEGETATED WETLAND	NO	NUMBER
		NTS	NOT TO SCALE
CATV	CABLE TELEVISION	OC	ON CENTER
CB	CATCH BASIN	OD	OUTSIDE DIAMETER
CF	CUBIC FEET	OHW	OVERHEAD WIRE
CFS	CUBIC FEET PER SECOND	OVHD	OVERHEAD
CI	CAST IRON (PIPE)	OW	OBSERVATION WELL
CL	CENTERLINE	PC	POINT OF CURVATURE
CLDI	CEMENT LINED DUCTILE IRON (PIPE)	PCC	PRECAST CONCRETE CURB
CM	CONSTRUCTION MANAGER	PI	POINT OF INTERSECTION
CMO	CORRUGATED METAL PIPE	PKG	PARKING
CO	CLEAN OUT	PL	PROPERTY LINE
CONC	CONCRETE	PLMB	PLUMBING
CONST	CONSTRUCTION	POC	POINT ON CURVATURE
CONT	CONTRACTOR	POT	POINT ON TANGENT
CRD	COORDINATE	PRC	POINT OF REVERSE CURVATURE
CPP	CORRUGATED POLYETHYLENE PIPE	PROP. P	PROPOSED
CUL	CULVERT	PT	POINT (OR POINT OF TANGENT)
CY	CUBIC YARD	PVC	POLYVINYL CHLORIDE (PIPE)
DB	DISTRIBUTION BOX		
DBL	DOUBLE	R&R	REMOVE & RESET/REPLACE
DEM	DEMOLISH	R&S	REMOVE & STACK
DET	DETENTION	RCP	REINFORCED CONCRETE PIPE
DI	DUCTILE IRON (PIPE)	RD	ROAD (OR ROOF DRAIN)
DIA	DIAMETER	RED	REDUCER
DIM	DIMENSION	RELOC	RELOCATE
DMH	DRAIN MANHOLE	REM	REMOVE
DW	DOMESTIC WATER (OR DRY WELL)	RET	RETAIN, RETAINING OR RETENTION
DWG	DRAWING	ROW	RIGHT OF WAY
DYCL	DOUBLE YELLOW CENTERLINE	RR	RAILROAD
		RWL	RAIN WATER LEADER
		RWY	ROADWAY
EHH	ELECTRIC HANDHOLE	SD	SUBDRAIN
EL	ELEVATION	SF	SQUARE FEET
ELEC	ELECTRIC	SGC	SLOPED GRANITE CURB
EMH	ELECTRIC MANHOLE	SMH	SEWER MANHOLE
EOP	EDGE OF PAVEMENT	SP	STANDPIPE
EOR	EDGE OF ROAD	SPEC	SPECIFICATION
EOW	EDGE OF WETLANDS	STA	STATION
ETC	ELECTRIC, TELEPHONE, CABLE	STC	STORMCEPTOR
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	TB	TEST BORING
FPS	FEET PER SECOND	TC	TOP OF CURB
FS	FIRE SERVICE	TD	TRENCH DRAIN
FT	FOOT/FEET	TEL	TELEPHONE
		TMH	TELEPHONE MANHOLE
GC	GENERAL CONTRACTOR	TOS	TOP OF SLOPE
GEN	GENERAL	TOW	TOP OF WALL
GG	GAS GATE	TP	TEST PIT
GR	GUIDE RAIL	TS&V	TAPPING SLEEVE & VALVE
GRAN	GRANITE	TYP	TYPICAL
GV	GATE VALVE	UD	UNDERDRAIN
GV&B	GATE VALVE & BOX	UL	UNDERWRITERS LABORATORY
GW	GROUND WATER	UP	UTILITY POLE
		VCP	VITRIFIED CLAY PIPE
HCR	HANDICAP RAMP	VERT	VERTICAL
HOR	HORIZONTAL	VGC	VERTICAL GRANITE CURB
HT	HEIGHT		
HW	HEADWALL	WD	WOOD
HWY	HIGHWAY	WG	WATER GATE
HYD	HYDRANT	WM	WATER MAIN
		WMH	WATER MANHOLE
ID	INSIDE DIAMETER	WSO	WATER SHUTOFF
IN	INCHES		
INCL	INCLUDE		
INST	INSTALLED		
INV, I.E.	INVERT, INVERT ELEVATION		



PROFESSIONAL ENGINEER FOR  
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
B	3/25/2024	REVISED PER TOWN COMMENTS
A	2/29/2024	REVISED PER TOWN COMMENTS

APPLICANT/OWNER:  
BLVD READING, LLC  
c/o SAVERIO FULCINITI  
1 SYLVAN STREET  
PEABODY, MA 01960



STRADA  
MIXED USE BUILDING  
258 MAIN STREET  
READING, MA

PROJECT NO. 2398-01A DATE: 10-05-2023

SCALE: NONE DWG. NAME: C-2398-01A

DESIGNED BY: MTB CHECKED BY: CMQ

PREPARED BY:



ALLEN & MAJOR  
ASSOCIATES, INC.

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

# EROSION CONTROL NOTES

## EROSION & SEDIMENTATION CONTROL NOTES:

1. 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 PRACTICES SHALL BE INSTALLED IN ACCORDANCE WITH B.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 BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY (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 AVOID LOSS DUE TO WIND. MULCH AND NETTING SHALL BE APPLIED IN THE BASE OF ALL GRASSED WATERWAYS, IN VEGETATIVE 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 SEEDING 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 GRADE MATS SHALL BE USED IN THE BASE OF ALL GRASSED WATERWAYS 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, SEEDING WITH RYE AT 3LBS PER 1,000 SQUARE FOOT AND MULCHED, AND REUSED AS REQUIRED. TUBULAR BARRIERS SHALL BE PLACED DOWN GRADIENT FROM STOCKPILED LOAM. 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 OR RUNOFF EVENT, MAINTAINED AND CLEANED UNTIL ALL AREAS HAVE AT LEAST 85-90% VIGOROUS PERENNIAL COVER OF GRASSES.
6. ADJACENT ROADS SHALL BE PERIODICALLY SWEEPED 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 CATCH BASIN INLETS SHALL BE PROTECTED DURING CONSTRUCTION BY THE USE 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 SEEDING 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 CONSERVATION COMMISSION MUST APPROVE THE REMOVAL OR RELOCATION OF ANY OF THE TUBULAR BARRIERS AND FILTER FABRIC. ONCE THE TUBULAR BARRIERS ARE REMOVED THE AREAS ARE TO BE LOAMED AND SEEDING 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 BY THE OWNER. THIS INCLUDES BUT IS NOT LIMITED TO REQUESTS BY MA DEP, THE 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 BY THE CONTRACTOR AND LOCATED IN THE CONTRACTORS 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 85-90% VEGETATED VIGOROUS 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 INFILTRATE THE MATERIALS AND THEREBY RENDER THE SAME UNSUITABLE FOR FILL USE.
18. ALL DISTURBED OR EXPOSED AREAS SUBJECT TO EROSION SHALL BE STABILIZED WITH MULCH OR SEEDING FOR TEMPORARY VEGETATIVE COVER. NO AREA SUBJECT TO EROSION SHALL BE LEFT DISTURBED AND UNSTABILIZED FOR PERIODS LONGER THAN IS ABSOLUTELY NECESSARY TO CARRY OUT THAT PORTION OF 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 FILTERS AND 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 AND 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.
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 SITE PLAN REGULATIONS FROM THE LOCAL AND USDA 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 DEWATERING 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 DIRECTING DISCHARGE TO THEM. IF A CONSTRUCTION EQUIPMENT BUCKET IS USED, IT SHALL EMPTY THE MATERIAL TO A STABLE AREA. NO DEWATERING 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 FLOW OR ITS VOLUME CAPACITY. WHENEVER POSSIBLE, THE DISCHARGE FROM THE SEDIMENT REMOVAL STRUCTURE SHALL DRAIN TO A WELL-VEGETATED BUFFER BY SHEET 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 EXISTING 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 NEEDS TO 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 RESPONSIBILITIES 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, FLOCCULANTS OR OTHER CHEMICAL UTILIZED FOR STABILIZATION) ARE PROHIBITED. IF ALL OTHER AVAILABLE STABILIZATION MEASURES ARE NOT POSSIBLE AND USE OF CATIONIC CHEMICALS IS 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 IMMEDIATELY TAKE ALL STEPS TO PREVENT POLLUTANT DISCHARGES UNTIL A PERMANENT SOLUTION IS 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:

1. 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:
  - INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.
  - ALL SEEDING AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A HEALTHY STAND OF GRASS IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDING AS NEEDED.
  - 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.
  - 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.
  - 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.
  - OUTLET STRUCTURES IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL 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:

1. 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.
2. THE EROSION CONTROL PLAN WILL BE IMPLEMENTED TO:
3. TREAT EROSION AS SOON AS POSSIBLE AFTER DISTURBANCE.
4. PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION AREA AND ENTERING THE RECEIVING WATERS.
5. CONSTRUCTION ACTIVITIES SHALL BE SCHEDULED TO MINIMIZE EROSION.
6. ONLY DISTURB, CLEAR, OR GRADE AREAS NECESSARY FOR CONSTRUCTION.



PROFESSIONAL ENGINEER FOR  
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
B	3/25/2024	REVISED PER TOWN COMMENTS
A	2/29/2024	REVISED PER TOWN COMMENTS

APPLICANT/OWNER:  
BLVD READING, LLC  
c/o SAVERIO FULCINITI  
1 SYLVAN STREET  
PEABODY, MA 01960

PROJECT:



**STRADA**  
MIXED USE BUILDING  
258 MAIN STREET  
READING, MA

PROJECT NO.	2398-01A	DATE:	10-05-2023
SCALE:	NONE	DWG. NAME:	C-2398-01A
DESIGNED BY:	MTB	CHECKED BY:	CMQ

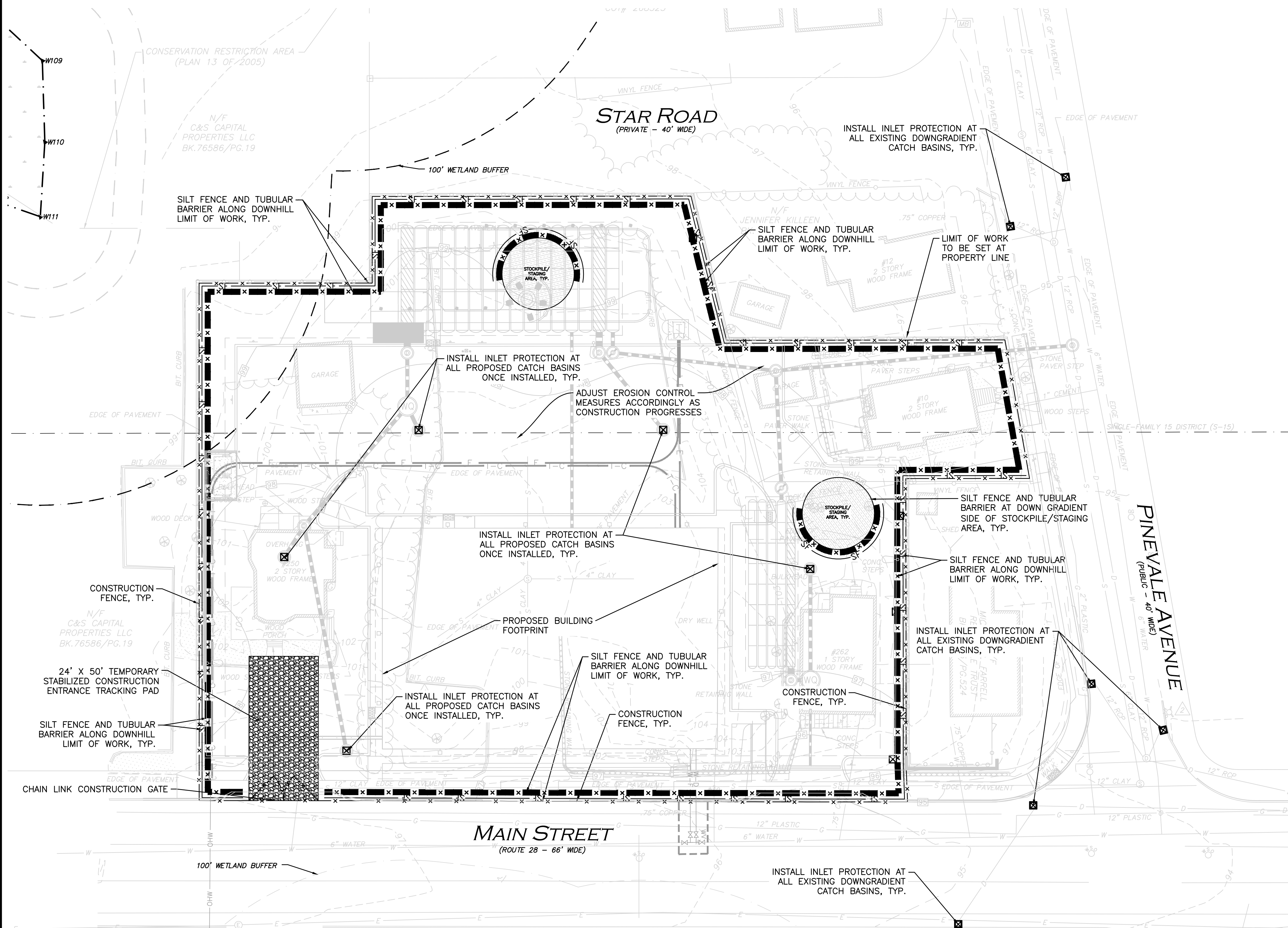
PREPARED BY:

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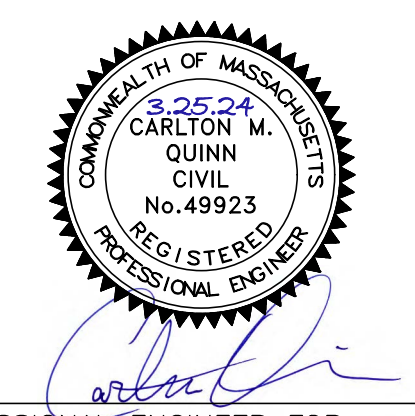
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DRAWING TITLE:	SHEET No.
ABBREVIATIONS & NOTES	C-002



LEGEND	
SILT FENCE	— SF —
TUBULAR BARRIER	— X — X — X —
EROSION CONTROL FABRIC	▨
CATCH BASIN FILTER	⊠
STONE CHECK DAM	▩
STABILIZED ENTRANCE	▨
CONSTRUCTION FENCE	— X —
STOCKPILE/STAGING AREA	▨

- NOTES:**
- 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.
  - ALL ELEVATIONS REFER TO NAVD 88.
  - THE INFORMATION SHOWN ON THIS PLAN IS THE SOLE PROPERTY OF ALLEN & MAJOR ASSOCIATES, INC. IT'S 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.
  - THE CONTRACTOR SHALL CONTACT "DIGSAFE" AND THE TOWN OF READING DEPARTMENT OF PUBLIC WORKS AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST THE LOCATION OF THE EXISTING UTILITIES.  
DIGSAFE: 1-800-344-7233  
READING DEPT. OF PUBLIC WORKS: 1-781-942-9092
  - SEE THE ABBREVIATIONS AND NOTES PLAN, C-001 AND C-002 FOR GENERAL NOTES, AND EROSION CONTROL NOTES.
  - EXISTING CONDITIONS BASE PLAN TAKEN FROM PLANS ENTITLED "PROPERTY LINE/EXISTING CONDITIONS 252-260 MAIN STREET READING" PREPARED BY ALLEN & MAJOR ASSOCIATES, SHEET V-101, ORIGINAL SCALE 1"=20', DATED SEPTEMBER 6, 2023.



PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
B	3/25/2024	REVISED PER TOWN COMMENTS
A	2/29/2024	REVISED PER TOWN COMMENTS

APPLICANT/OWNER:  
BLVD READING, LLC  
c/o SAVERIO FULCINITI  
1 SYLVAN STREET  
PEABODY, MA 01960



**STRADA**  
MIXED USE BUILDING  
258 MAIN STREET  
READING, MA

PROJECT NO.	2398-01A	DATE:	10-05-2023
SCALE:	1" = 20'	DWG. NAME:	C-2398-01A
DESIGNED BY:	MTB	CHECKED BY:	CMQ

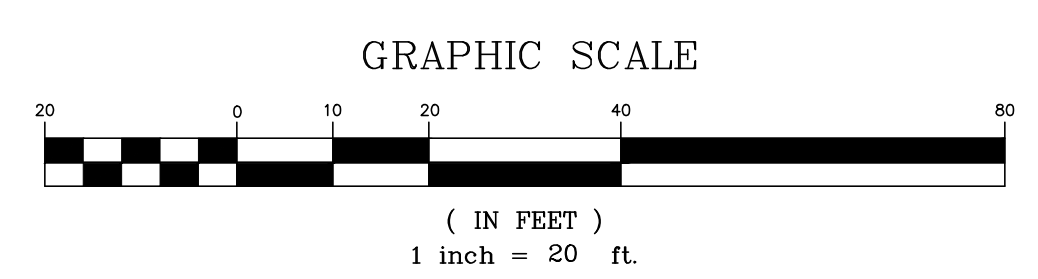
PREPARED BY:

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

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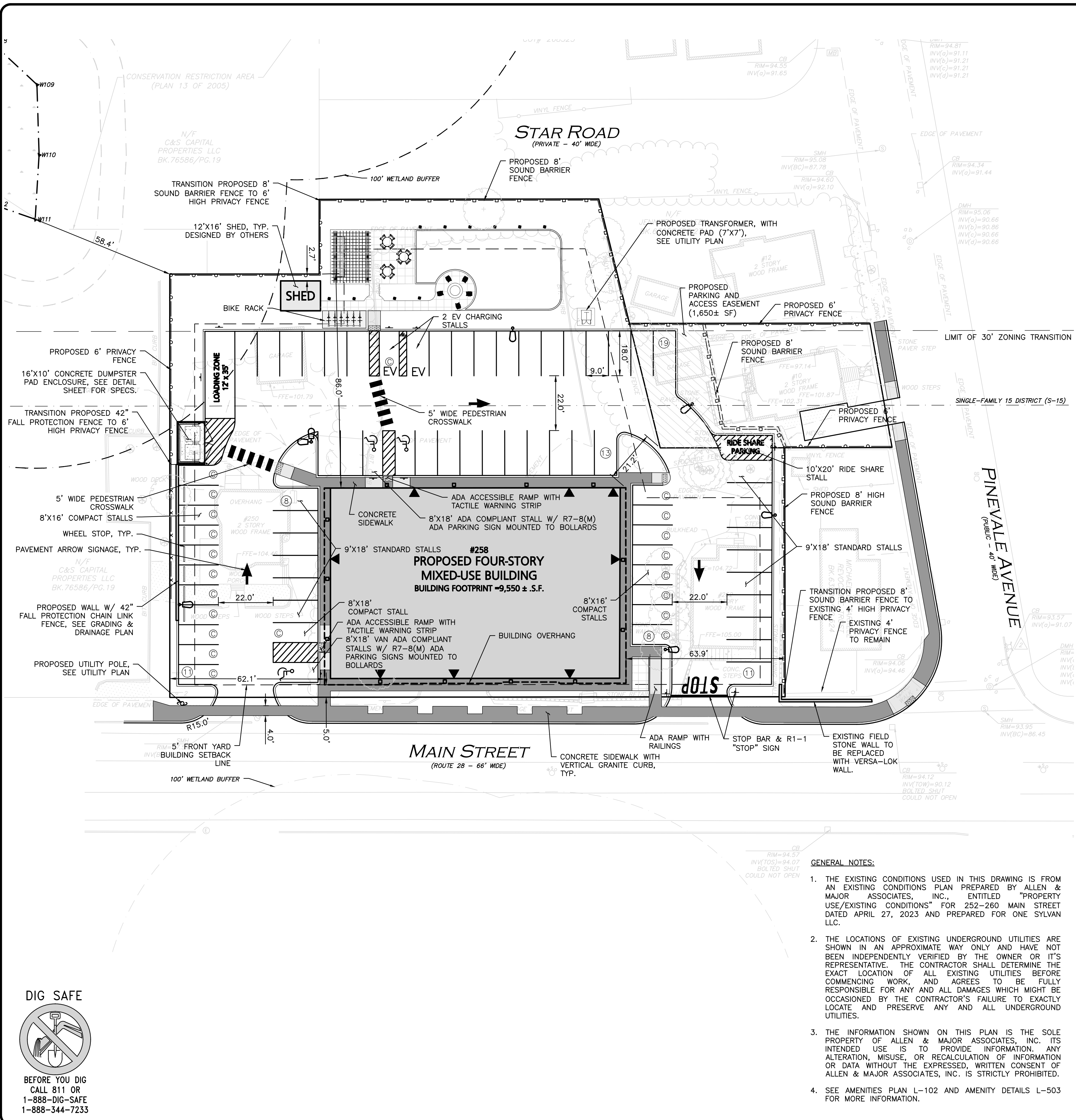
DRAWING TITLE:	SHEET No.
EROSION CONTROL PLAN	C-100



**DIG SAFE**

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





LEGEND	
PROP. PROPERTY LINE	---
SIGN	+
BOLLARD	•
BUILDING	[Symbol]
BUILDING ARCHITECTURE	[Symbol]
BUILDING INTERIOR WALLS	[Symbol]
CURB	[Symbol]
RETAINING WALL	[Symbol]
PARKING STRIPING	[Symbol]
ROADWAY STRIPING	[Symbol]
TRAFFIC ARROWS	[Symbol]
SIDEWALK	[Symbol]
ADA ACCESSIBLE RAMP	[Symbol]
ADA DET. WARNING SURFACE	[Symbol]
SETBACK LINE	[Symbol]
PARKING COUNT	⑩
COMPACT PARKING STALL	⊙
PRIVACY FENCE	—○—○—
CHAIN LINK FENCE	—x—x—
SILENT FENCE	—□—□—
TRANSFORMER	T
LIGHTING	○

**DIMENSIONAL REQUIREMENTS: BUSINESS-A DISTRICT (BUS. A) MIXED-USE DEVELOPMENT**

ITEM	REQUIRED/ALLOWED	PROPOSED
LOT AREA (MIN.)	N/A	41,354± S.F. 0.95± ACRES
LOT FRONTAGE (MIN.)	N/A	247.0
FRONT YARD BUILDING SETBACK	5' (MIN.)	5.0
SIDE YARD BUILDING SETBACK	10' (MIN.)	21.2'
REAR YARD BUILDING SETBACK	20' (MIN.)	21.2'
BUILDING LOT COVERAGE (MAX.)	60%	24%
BUILDING HEIGHT (MAX.)	45'	45.0'
OPEN SPACE	N/A	28%

**OFF-STREET PARKING SUMMARY**

USE: RETAIL STORES/OFFICES/CONSUMER ESTABLISHMENTS  
ONE SPACE PER 300 SQUARE FEET (S.F.) OF GROSS FLOOR AREA

RESIDENTIAL  
1.25 SPACES PER DWELLING UNIT

PARKING SUMMARY:  
USE: 7,500 S.F. RETAIL (NET)  
7,500/300 = 25 REQUIRED SPACES.

USE: 30 UNITS  
30\*1.25 = 38 REQUIRED SPACES

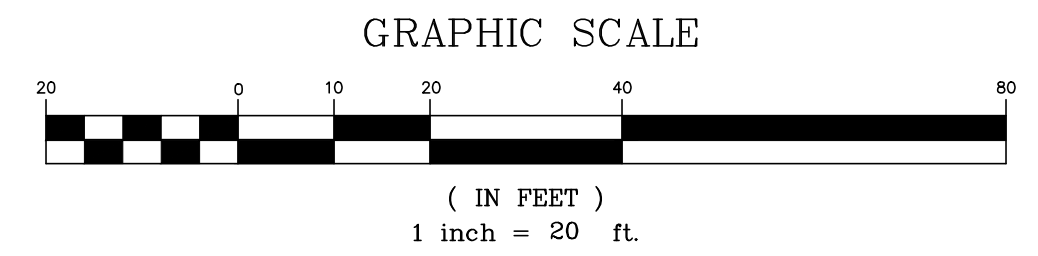
ADA REQUIRED: THERE ARE BETWEEN 51-75 PROPOSED PARKING SPACES, REQUIRING 4 TOTAL PARKING STALLS TO BE ACCESSIBLE AND ONE VAN ACCESSIBLE.

ADA PROVIDED: 3 TOTAL ACCESSIBLE WITH 1 VAN ACCESSIBLE

STANDARD (9'x18')	COMPACT (8'x16') (1)	TANDEM (9'x18')	ACCESSIBLE (8'x18')	TOTAL PROVIDED	TOTAL REQUIRED
46	21 (30%)	0	3	70	63

(1) PER READING ZONING BYLAW DATED APRIL 2022 SECTION 5.6.7.4(C), UP TO 30% OF THE TOTAL REQUIRED PARKING SPACES FOR A MIXED-USE PROJECT MAY BE STRIPED AND MARKED AS COMPACT SPACES (8'x16').

GENERAL 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.



- GENERAL NOTES:
- THE EXISTING CONDITIONS USED IN THIS DRAWING IS FROM AN EXISTING CONDITIONS PLAN PREPARED BY ALLEN & MAJOR ASSOCIATES, INC., ENTITLED "PROPERTY USE/EXISTING CONDITIONS" FOR 252-260 MAIN STREET DATED APRIL 27, 2023 AND PREPARED FOR ONE SYLVAN LLC.
  - 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.
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  - SEE AMENITIES PLAN L-102 AND AMENITY DETAILS L-503 FOR MORE INFORMATION.



PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

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c/o SAVERIO FULCINITI  
1 SYLVAN STREET  
PEABODY, MA 01960

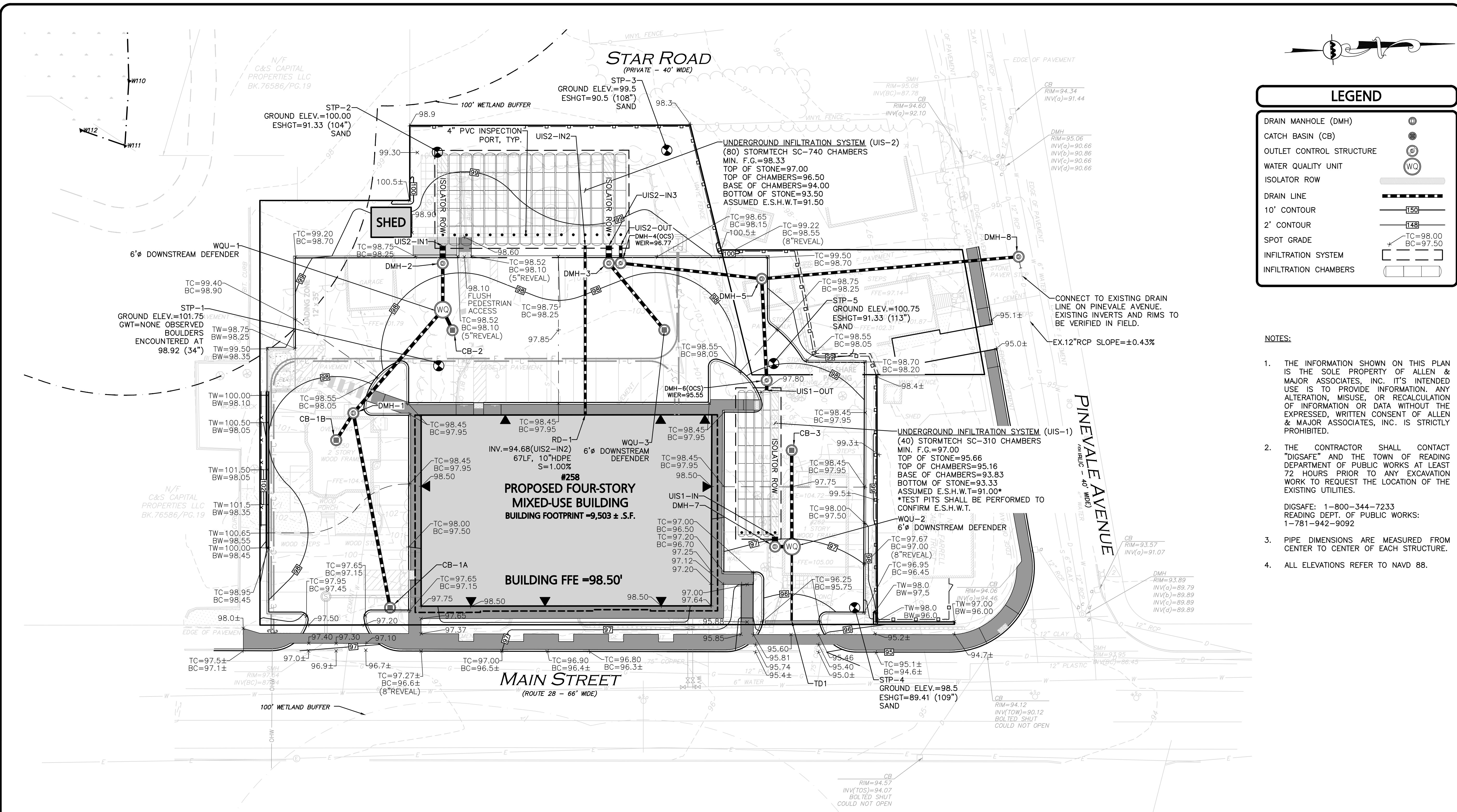


PROJECT NO.	2398-01A	DATE:	10-05-2023
SCALE:	1" = 20'	DWG. NAME:	C-2398-01A
DESIGNED BY:	MTB	CHECKED BY:	CMQ



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DRAWING TITLE:	SHEET No.
LAYOUT & MATERIALS PLAN	C-102



### LEGEND

DRAIN MANHOLE (DMH)	
CATCH BASIN (CB)	
OUTLET CONTROL STRUCTURE	
WATER QUALITY UNIT	
ISOLATOR ROW	
DRAIN LINE	
10' CONTOUR	
2' CONTOUR	
SPOT GRADE	
INFILTRATION SYSTEM	
INFILTRATION CHAMBERS	

- NOTES:**
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  - THE CONTRACTOR SHALL CONTACT "DIGSAFE" AND THE TOWN OF READING DEPARTMENT OF PUBLIC WORKS AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST THE LOCATION OF THE EXISTING UTILITIES.  
DIGSAFE: 1-800-344-7233  
READING DEPT. OF PUBLIC WORKS: 1-781-942-9092
  - PIPE DIMENSIONS ARE MEASURED FROM CENTER TO CENTER OF EACH STRUCTURE.
  - ALL ELEVATIONS REFER TO NAVD 88.



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**STRADA**  
MIXED USE BUILDING  
258 MAIN STREET  
READING, MA

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DRAWING TITLE:	SHEET No.
GRADING & DRAINAGE PLAN	C-103

#### DRAIN STRUCTURE TABLE

STRUCTURE	STRUCTURE DETAILS
CB-1A	RIM = 97.05 INV OUT = 94.14 (DMH-1)
CB-1B	RIM = 97.50 INV OUT = 93.87 (DMH-1)
CB-2	RIM = 97.40 INV OUT = 93.18 (WQU-1)
CB-3	RIM = 97.60 INV OUT = 92.74 (WQU-2)

#### DRAIN STRUCTURE TABLE

STRUCTURE	STRUCTURE DETAILS
DMH-1	RIM = 97.75 INV IN = 93.74 (CB-1B) INV IN = 93.74 (CB-1A) INV OUT = 93.64 (WQU-1)
DMH-2	RIM = 98.15 INV IN = 94.00 (WQU-1) INV OUT = 94.00 (UIS2-IN1)
DMH-3	RIM = 98.20 INV IN = 94.00 (WQU-3) INV OUT = 94.00 (UIS2-IN3)
DMH-4(OCS)	RIM = 98.18 INV IN = 94.00 (UIS2-OUT) INV OUT = 93.69 (DMH-5)

#### DRAIN STRUCTURE TABLE

STRUCTURE	STRUCTURE DETAILS
DMH-5	RIM = 98.70 INV IN = 93.10 (DMH-6(OCS)) INV IN = 93.10 (DMH-4(OCS)) INV OUT = 93.00 (DMH-8)
DMH-6(OCS)	RIM = 97.85 INV IN = 93.50 (UIS1-OUT) INV OUT = 93.50 (DMH-5)
DMH-7	RIM = 96.90 INV IN = 93.33 (WQU-2) INV OUT = 93.33 (UIS1-IN)
DMH-8	RIM = 95.10 INV IN = 92.00 (DMH-5) INV OUT = 90.50 (EX.12"RCP)

#### DRAIN STRUCTURE TABLE

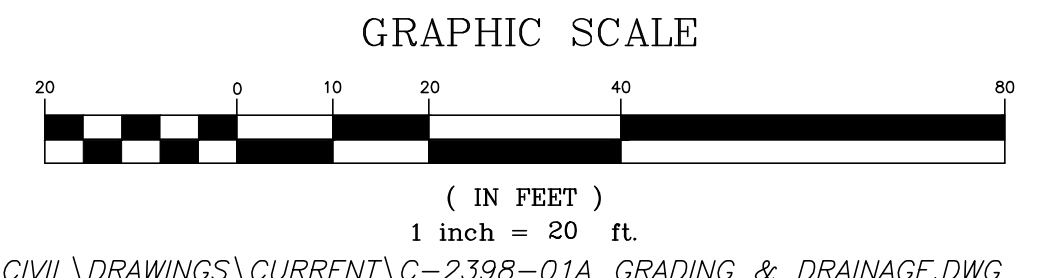
STRUCTURE	STRUCTURE DETAILS
TD1	RIM = 95.75 INV OUT = 93.84 (WQU-2)
WQU-1	RIM = 97.60 INV IN = 93.09 (DMH-1) INV IN = 93.09 (CB-2) INV OUT = 94.09 (DMH-2)
WQU-2	RIM = 96.95 INV IN = 92.36 (CB-3) INV IN = 92.36 (TD1) INV OUT = 93.36 (DMH-7)
WQU-3	RIM = 97.40 INV OUT = 94.35 (DMH-3)

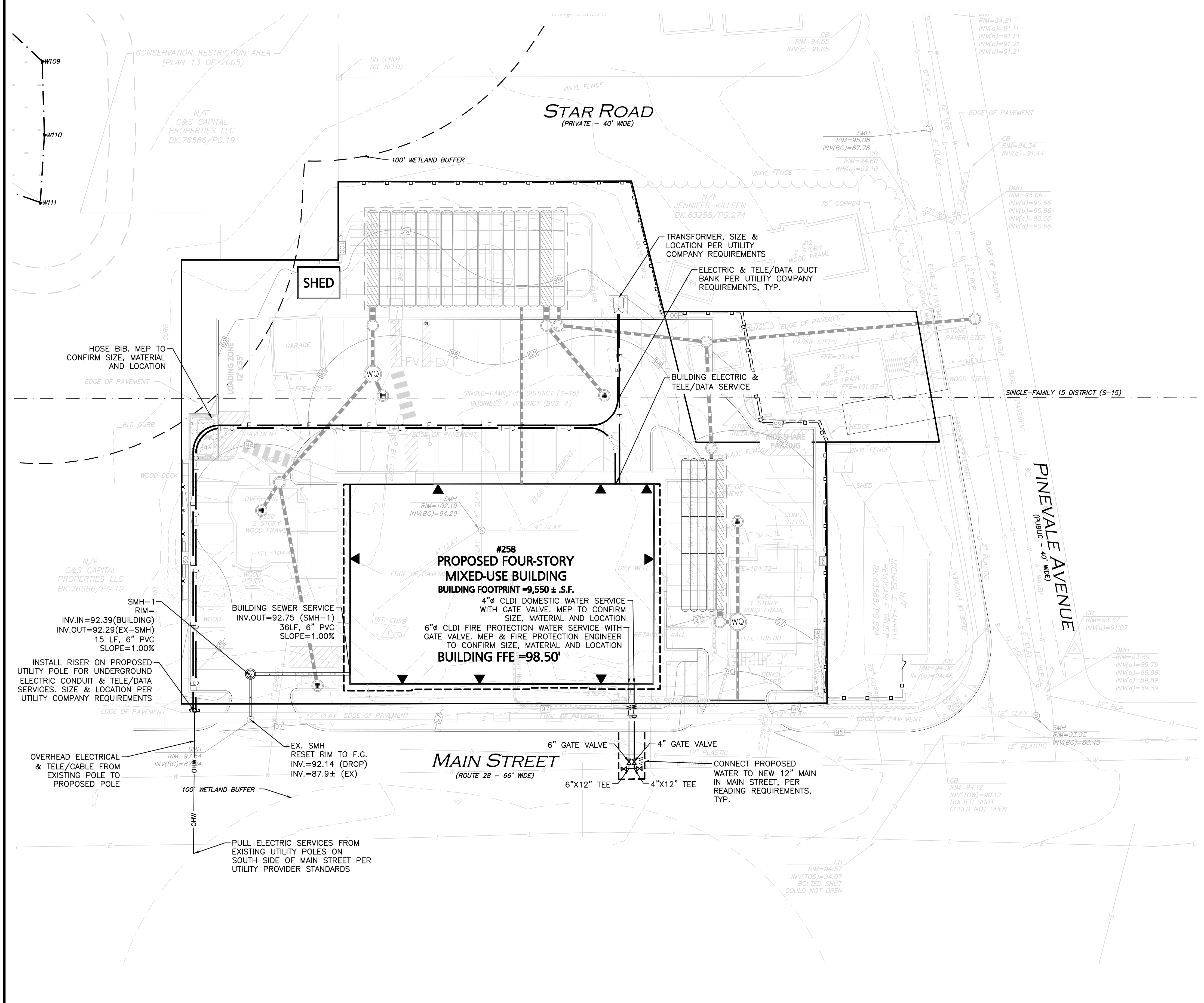
#### DRAIN PIPE TABLE

PIPE SEGMENT	SIZE	LENGTH	SLOPE	MATERIAL
CB-1A - DMH-1	12"	79'	0.50%	HDPE
CB-1B - DMH-1	12"	13'	1.00%	HDPE
CB-2 - WQU-1	12"	9'	1.00%	HDPE
CB-3 - WQU-2	12"	37'	1.00%	HDPE
DMH-1 - WQU-1	12"	55'	1.00%	HDPE
DMH-2 - UIS2-IN1	24"	7'	0.00%	HDPE
DMH-3 - UIS2-IN3	24"	7'	0.00%	HDPE
DMH-4(OCS) - DMH-5	12"	57'	1.04%	HDPE
DMH-5 - DMH-8	12"	103'	0.97%	HDPE
DMH-6(OCS) - DMH-5	12"	41'	1.00%	HDPE

#### DRAIN PIPE TABLE

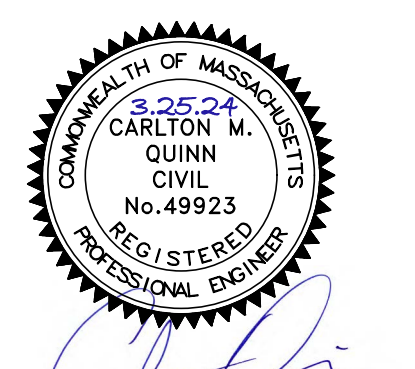
PIPE SEGMENT	SIZE	LENGTH	SLOPE	MATERIAL
DMH-7 - UIS1-IN	24"	4'	0.00%	HDPE
RD-1 - UIS2-IN2	10"	68'	1.00%	HDPE
TD1 - WQU-2	8"	30'	5.00%	HDPE
UIS1-OUT - DMH-6(OCS)	12"	4'	0.00%	HDPE
UIS2-OUT - DMH-4(OCS)	12"	7'	0.00%	HDPE
WQU-1 - DMH-2	12"	19'	0.50%	HDPE
WQU-2 - DMH-7	12"	7'	0.50%	HDPE
WQU-3 - DMH-3	12"	35'	1.00%	HDPE





LEGEND	
SEWER MANHOLE	⊙
SEWER LINE	—S—
WATER LINE	—W—
WATER (FIRE SERVICE)	—W-F—
WATER (DOMESTIC SERVICE)	—W-D—
WATER VALVE	WV
OVER HEAD WIRE	—OHW—
UTILITY POLE	⊙
ELECTRICAL CONDUIT	—E—
TELE/CABLE CONDUIT	—T-C—
SAWCUT LINE	---S---

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DIGSAFE: 1-800-344-7233  
READING DEPT. OF PUBLIC WORKS: 1-781-942-9092
  - ALL WATER CONSTRUCTION METHODS AND MATERIALS SHALL BE IN ACCORDANCE WITH TOWN OF READING STANDARDS, TYP.



PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
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1 SYLVAN STREET  
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**STRADA**  
MIXED USE BUILDING  
258 MAIN STREET  
READING, MA

PROJECT NO.	2398-01A	DATE:	10-05-2023
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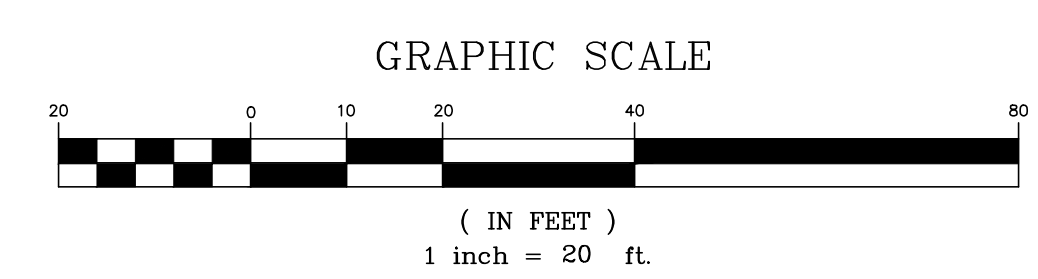
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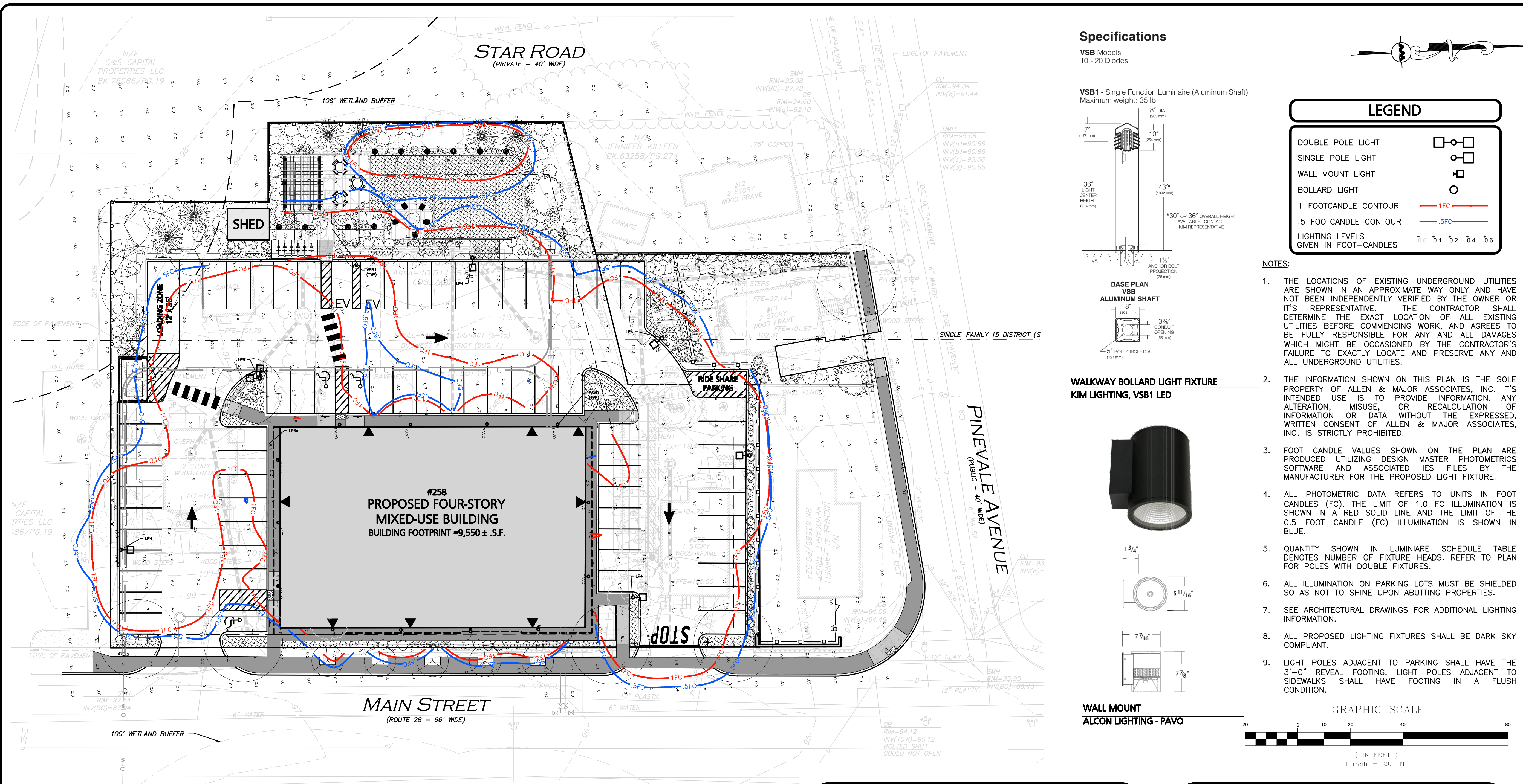
DRAWING TITLE:	SHEET No.
UTILITIES PLAN	C-104

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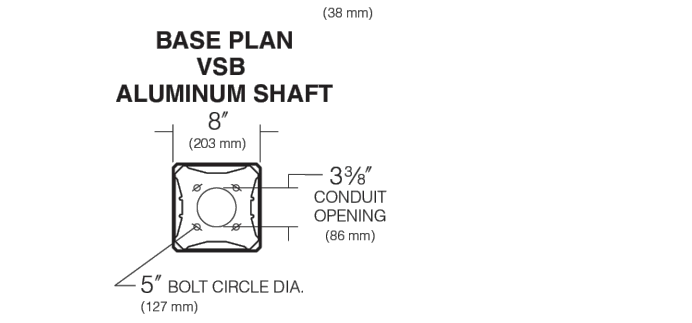
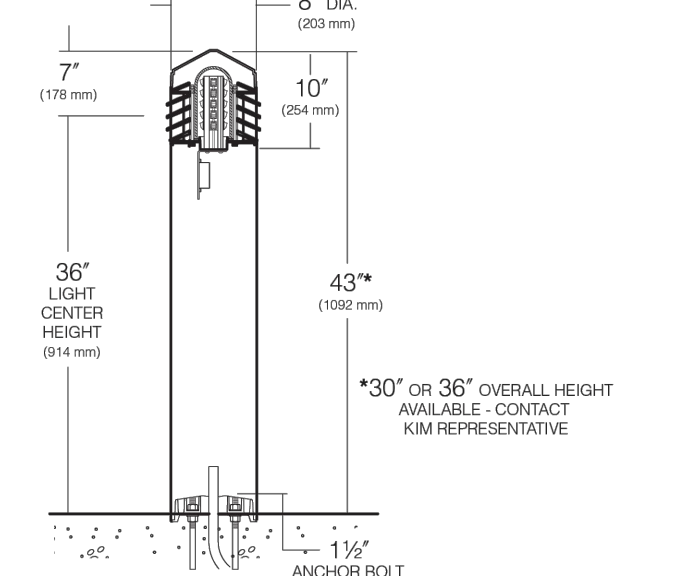




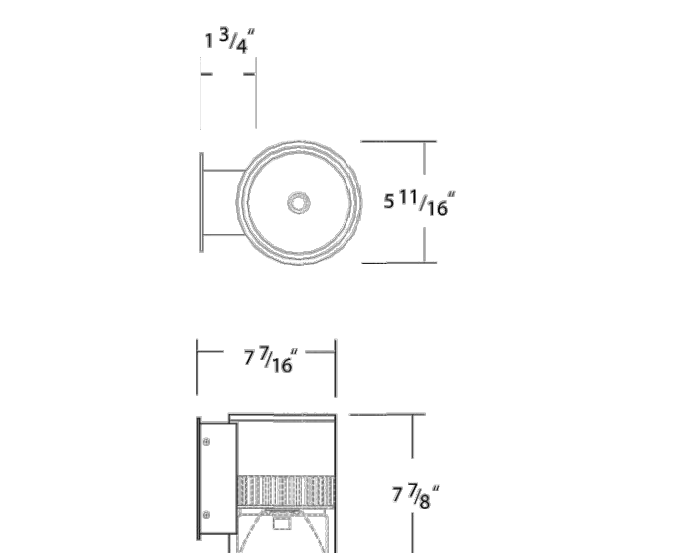
**Specifications**

**VSB Models**  
10 - 20 Diodes

**VSB1 - Single Function Luminaire (Aluminum Shaft)**  
Maximum weight: 35 lb



**WALKWAY BOLLARD LIGHT FIXTURE**  
KIM LIGHTING, VSB1 LED

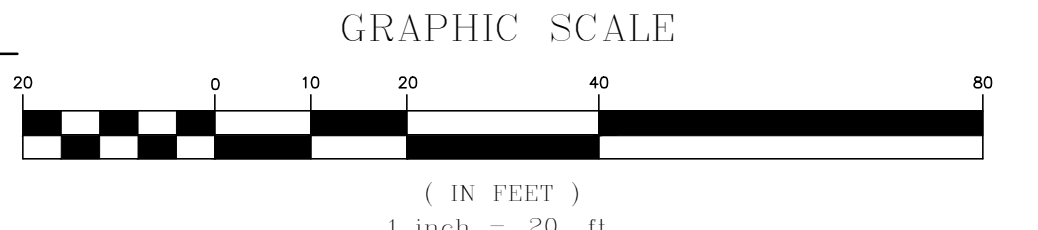


**WALL MOUNT**  
ALCON LIGHTING - PAVO

LEGEND	
DOUBLE POLE LIGHT	
SINGLE POLE LIGHT	
WALL MOUNT LIGHT	
BOLLARD LIGHT	
1 FOOTCANDLE CONTOUR	
.5 FOOTCANDLE CONTOUR	
LIGHTING LEVELS GIVEN IN FOOT-CANDLES	1.0 0.1 0.2 0.4 0.6

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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 0.5 FOOT CANDLE (FC) ILLUMINATION IS SHOWN IN BLUE.
- QUANTITY SHOWN IN LUMINAIRE SCHEDULE TABLE DENOTES NUMBER OF FIXTURE HEADS. REFER TO PLAN FOR POLES WITH DOUBLE FIXTURES.
- ALL ILLUMINATION ON PARKING LOTS MUST BE SHIELDED SO AS NOT TO SHINE UPON ADJACENT PROPERTIES.
- SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL LIGHTING INFORMATION.
- ALL PROPOSED LIGHTING FIXTURES SHALL BE DARK SKY COMPLIANT.
- LIGHT POLES ADJACENT TO PARKING SHALL HAVE THE 3'-0" REVEAL FOOTING. LIGHT POLES ADJACENT TO SIDEWALKS SHALL HAVE FOOTING IN A FLUSH CONDITION.

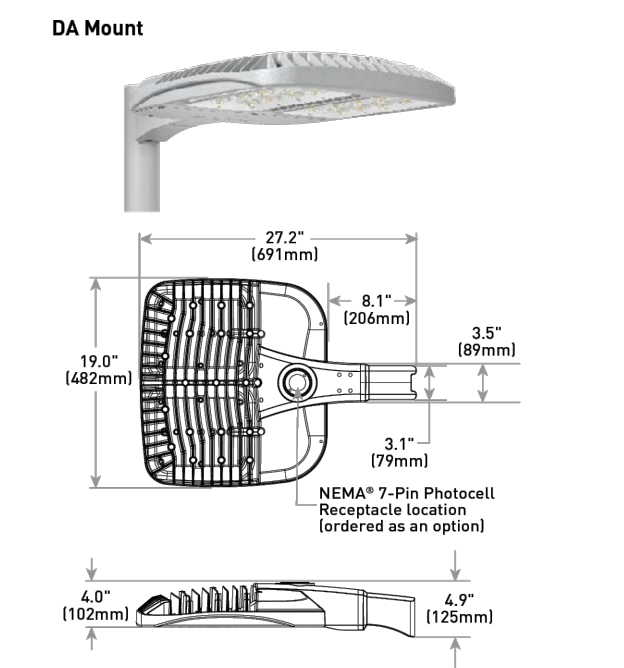


**GENERAL PHOTOMETRIC SCHEDULE**

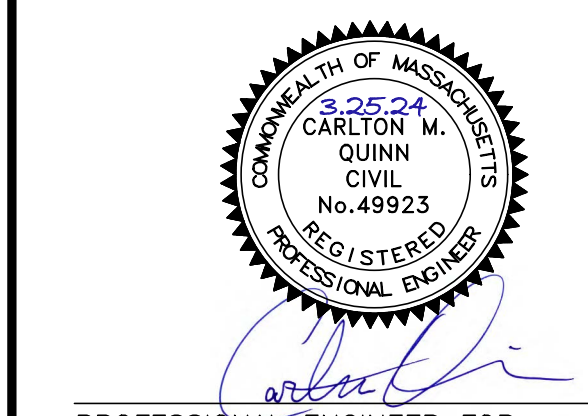
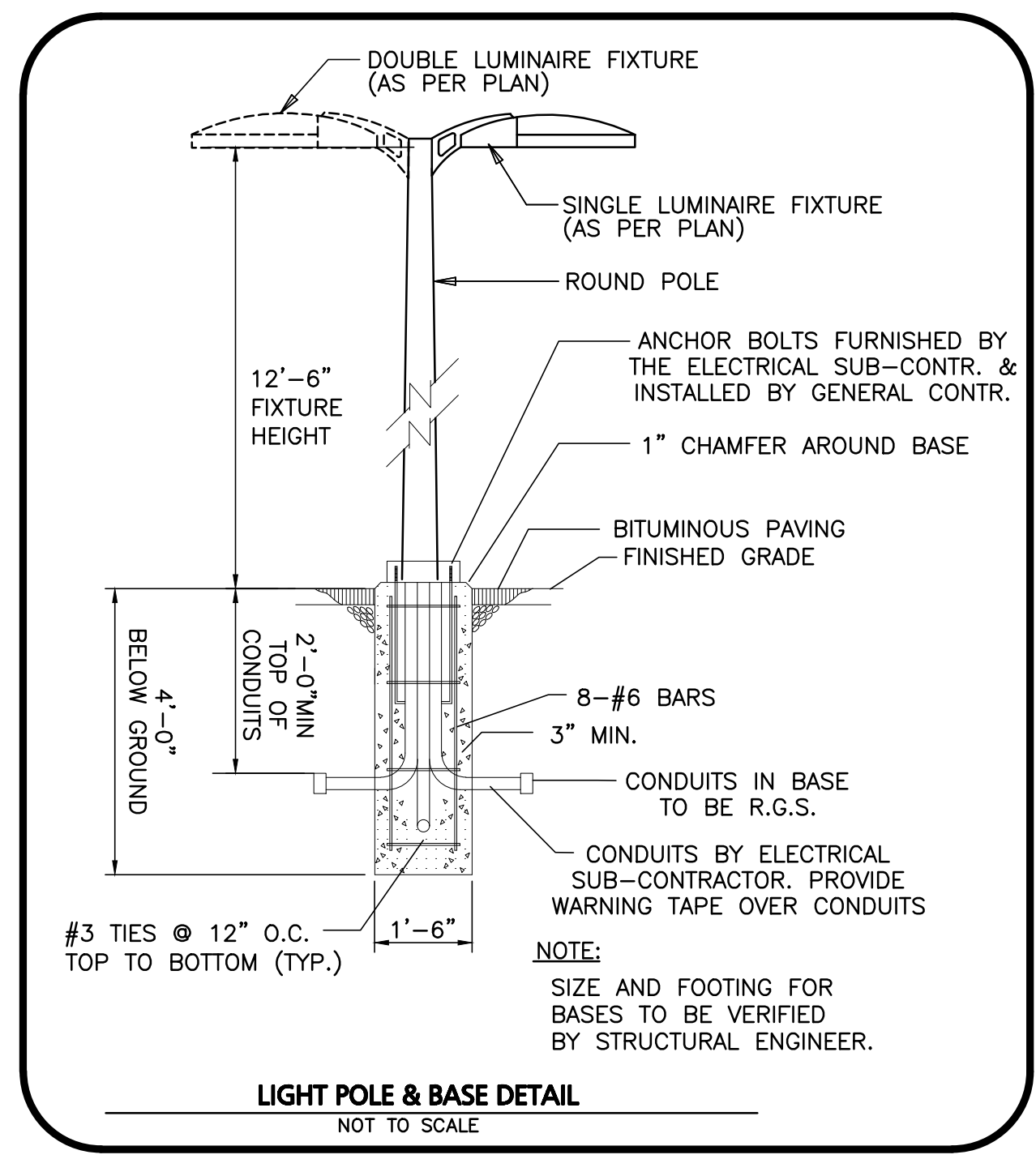
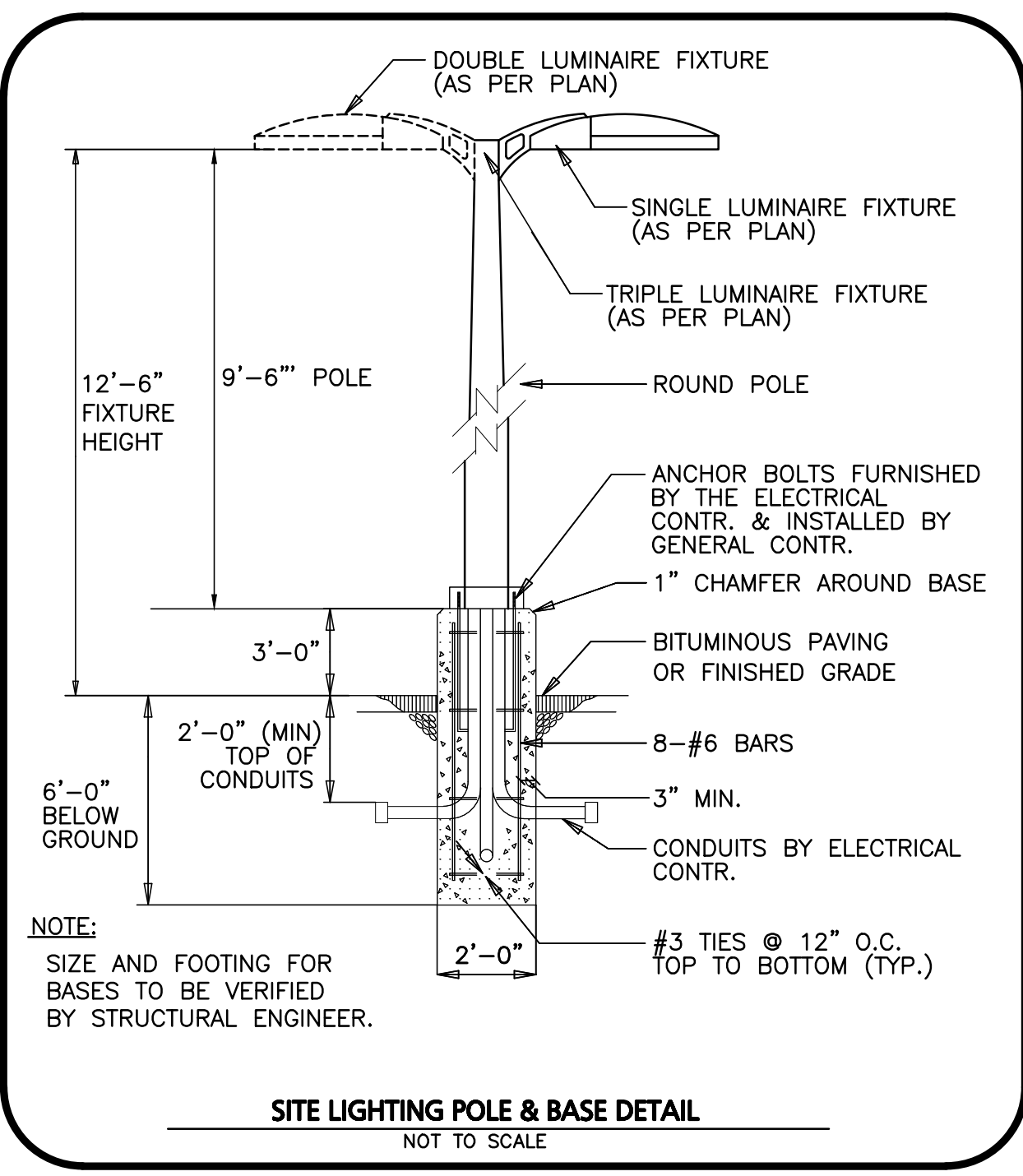
AVERAGE FOOT-CANDLES	1.96
MAXIMUM FOOT-CANDLES	25.6
MINIMUM FOOT-CANDLES	0.0

**LUMINAIRE SCHEDULE**

CALLOUT	QUANTITY	SYMBOL	DESCRIPTION	MOUNTING	MOUNTING HEIGHT	COLOR	TOTAL LUMENS	LAMP DEPRECIATION
LP4	7		Cree OSQ Series Area Luminaire, Type IV Medium w/ Backlight Shield, T Input Power Designator, 4000K	POLE	12'-6"	Grey	20427	0.9
PAVO	13		ALCON LIGHTING, INC. 6" ROUND 1-DIRECTION WALL MOUNT (IP65) 1500LM	WALL	16'-0"	White	1650	0.9
VSB1	11		KIM LIGHTING, VSB1-15L4K SQUARE BOLLARD LED	SURFACE	3'-0"	Grey	804	0.9



**LIGHT FIXTURE - OSQ LED AREA - LARGE**  
CREE LIGHTING - OSQ SERIES



PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
B	3/25/2024	REVISED PER TOWN COMMENTS
A	2/29/2024	REVISED PER TOWN COMMENTS

APPLICANT/OWNER:  
BLVD READING, LLC  
c/o SAVERIO FULCINITI  
1 SYLVAN STREET  
PEABODY, MA 01960

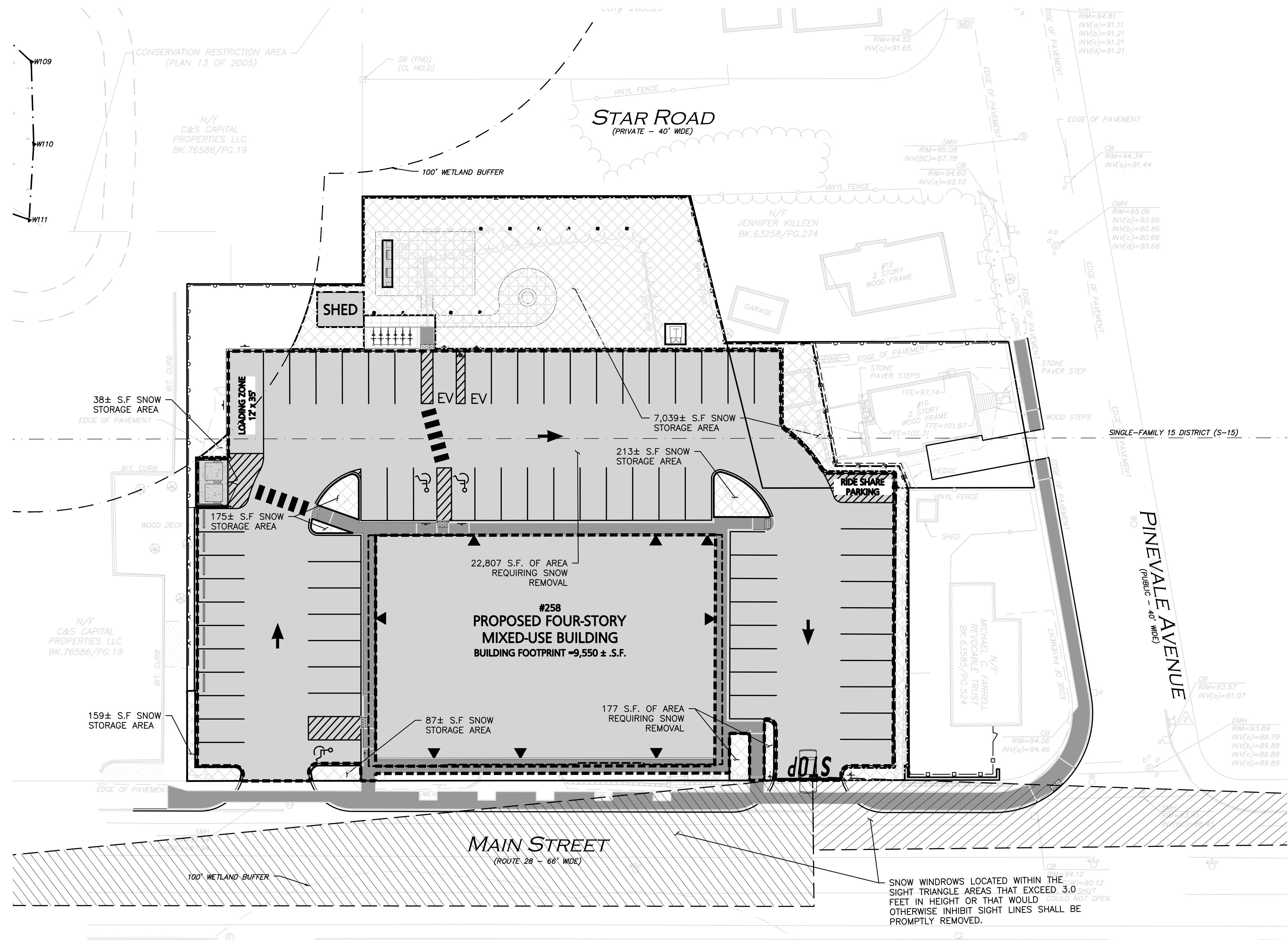


PROJECT NO.	2398-01A	DATE:	10-05-2023
SCALE:	1" = 20'	DWG. NAME:	C-2398-01A
DESIGNED BY:	JBT	CHECKED BY:	CMQ

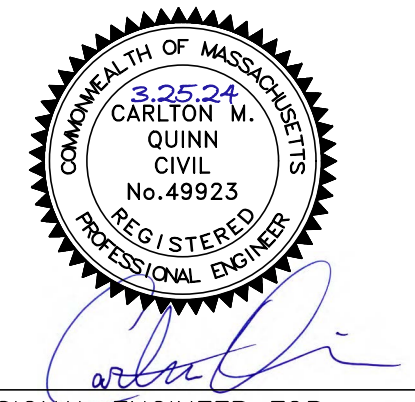


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DRAWING TITLE:	SHEET No.
LIGHTING PLAN	C-105



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  2. THE PLAN DEPICTS APPROXIMATELY 7,889 S.F. OF AREA AVAILABLE FOR PRIMARY SNOW STORAGE WITHIN THE PROJECT AREA FOR AN AREA OF 22,808 SF REQUIRING SNOW REMOVAL. THE AREA IS ESTIMATED TO ACCOMMODATE AN APPROXIMATE 6.9" 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 OR PROPOSED STORMWATER MANAGEMENT SYSTEM.
  5. SNOW STORAGE WILL BE IMPLEMENTED TO AVOID HYDRANTS, FENCES LANDSCAPING AND OTHER PERMANENT FEATURES.



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c/o SAVERIO FULCINITI  
1 SYLVAN STREET  
PEABODY, MA 01960



STRADA  
MIXED USE BUILDING  
258 MAIN STREET  
READING, MA

PROJECT NO.	2398-01A	DATE:	10-05-2023
SCALE:	1" = 20'	DWG. NAME:	C-2398-01A
DESIGNED BY:	MTB	CHECKED BY:	CMQ



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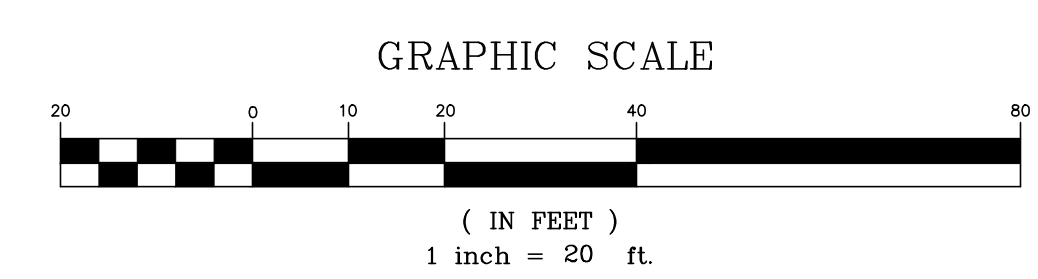
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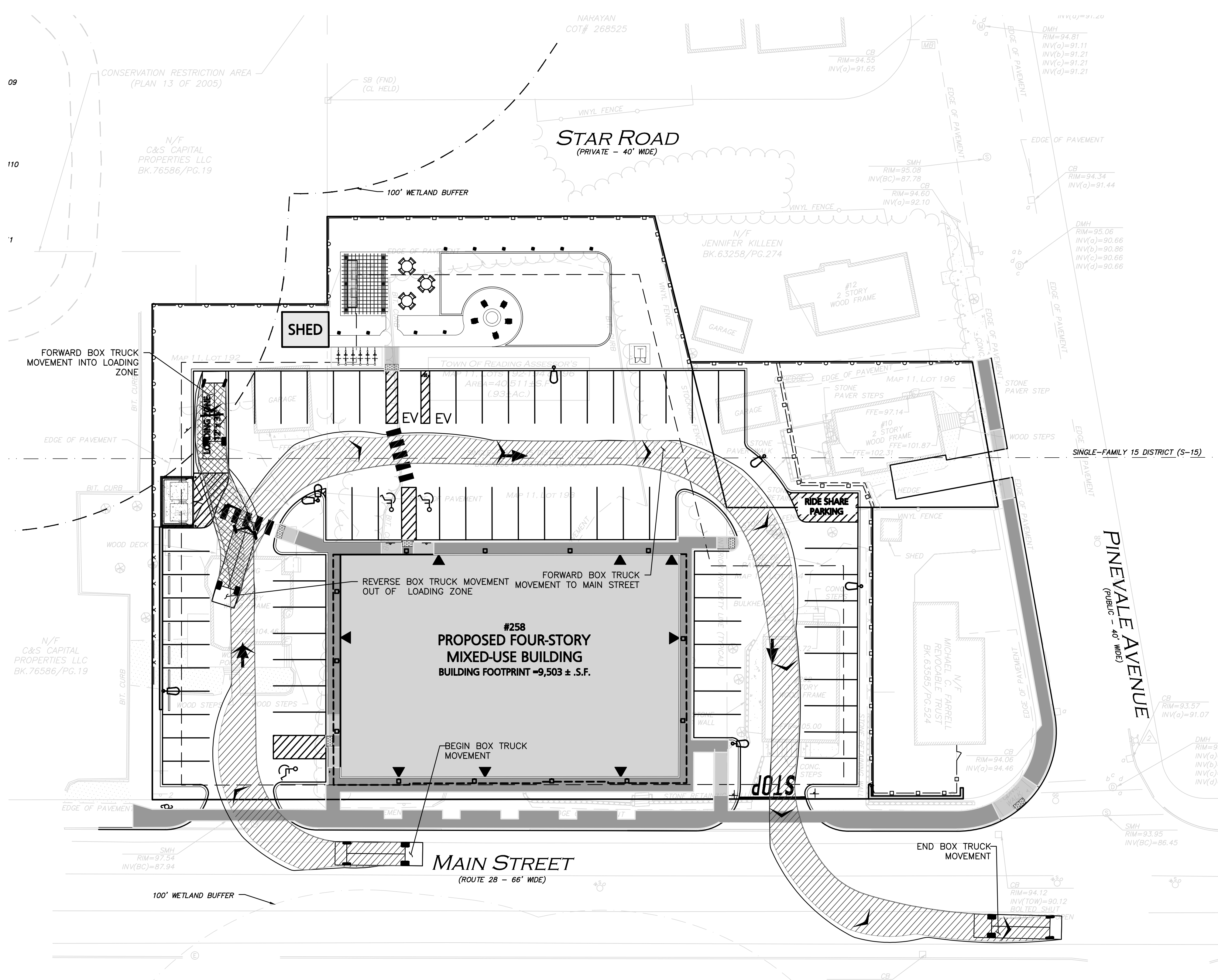
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DRAWING TITLE:	SHEET No.
SNOW STORAGE PLAN	C-106

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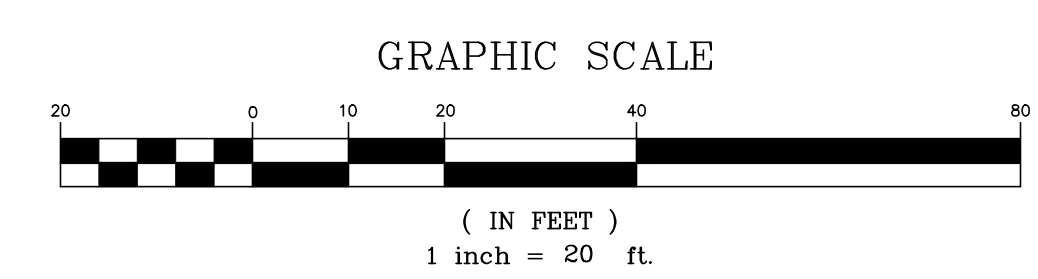
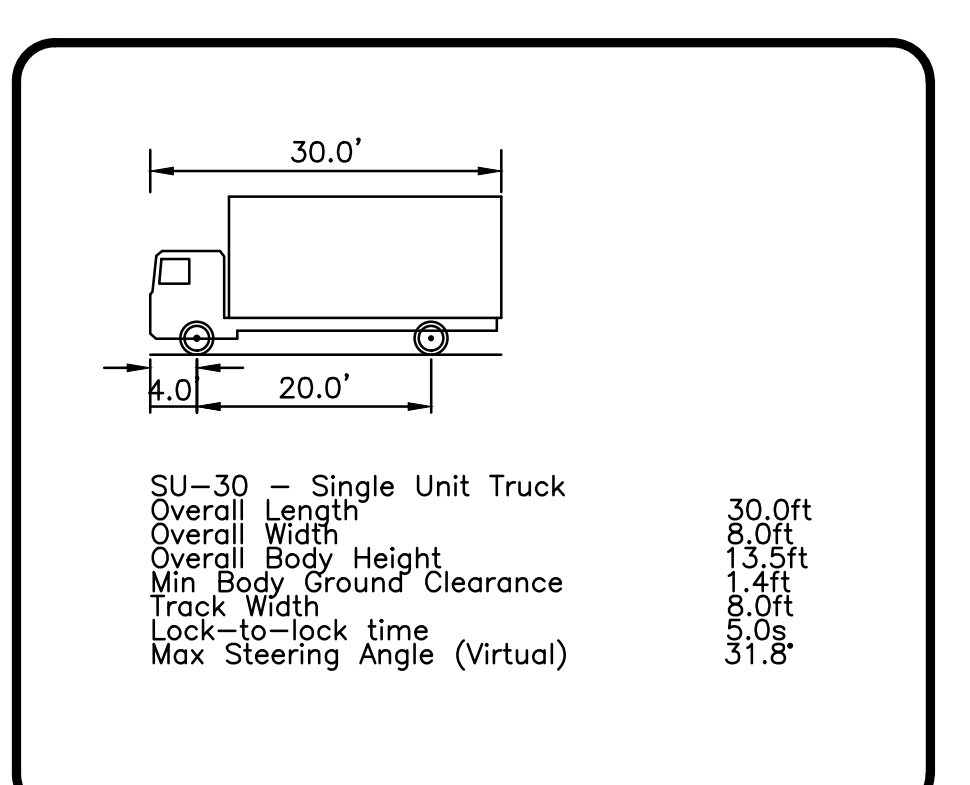
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1 SYLVAN STREET  
PEABODY, MA 01960



**STRADA**  
MIXED USE BUILDING  
258 MAIN STREET  
READING, MA

PROJECT NO.	2398-01A	DATE:	10-05-2023
SCALE:	1" = 20'	DWG. NAME:	C-2398-01A
DESIGNED BY:	MTB	CHECKED BY:	CMQ

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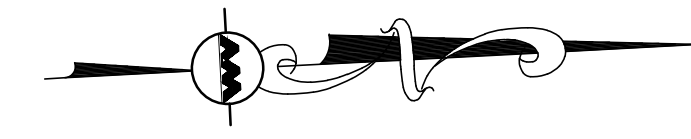
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DRAWING TITLE:	SHEET No.
VEHICLE MOVEMENT PLAN	C-107A

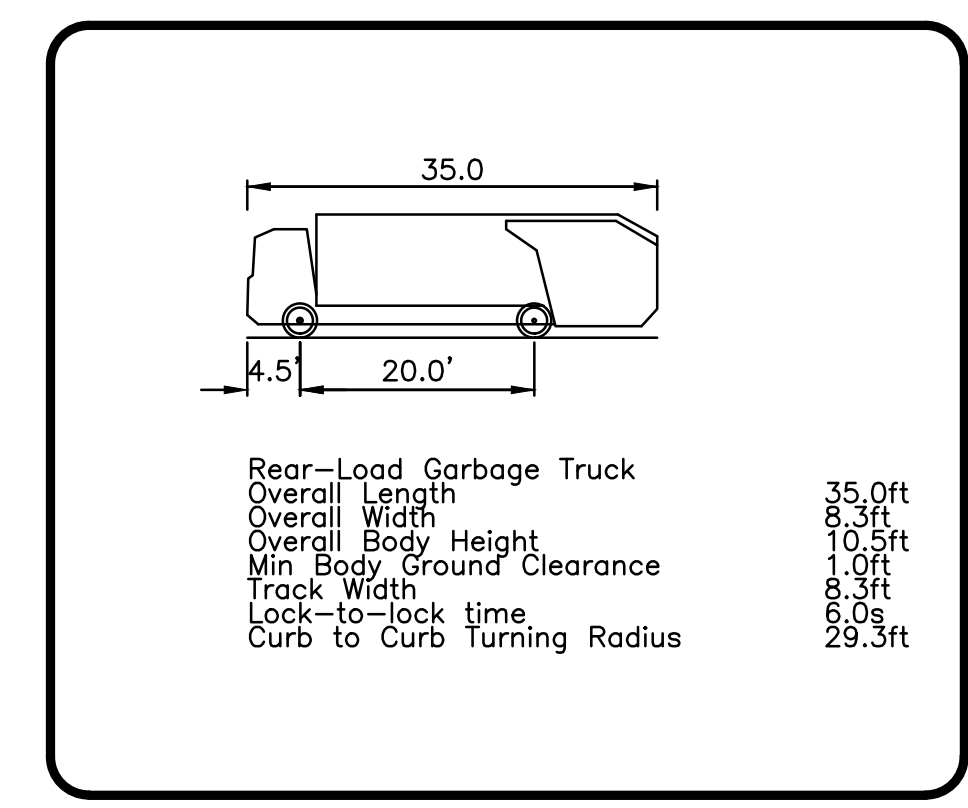
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PEABODY, MA 01960



**STRADA**  
MIXED USE BUILDING  
258 MAIN STREET  
READING, MA

PROJECT NO.	2398-01A	DATE:	10-05-2023
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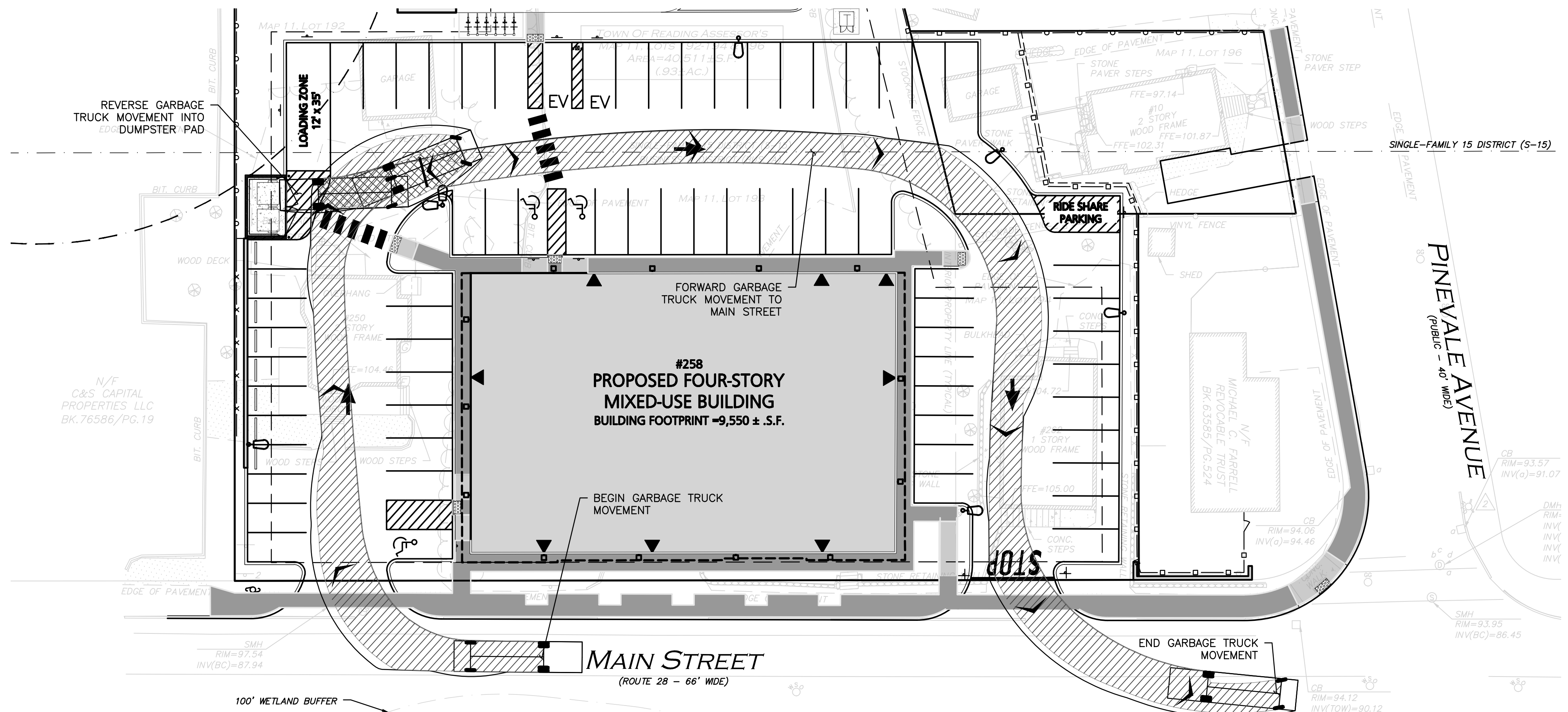
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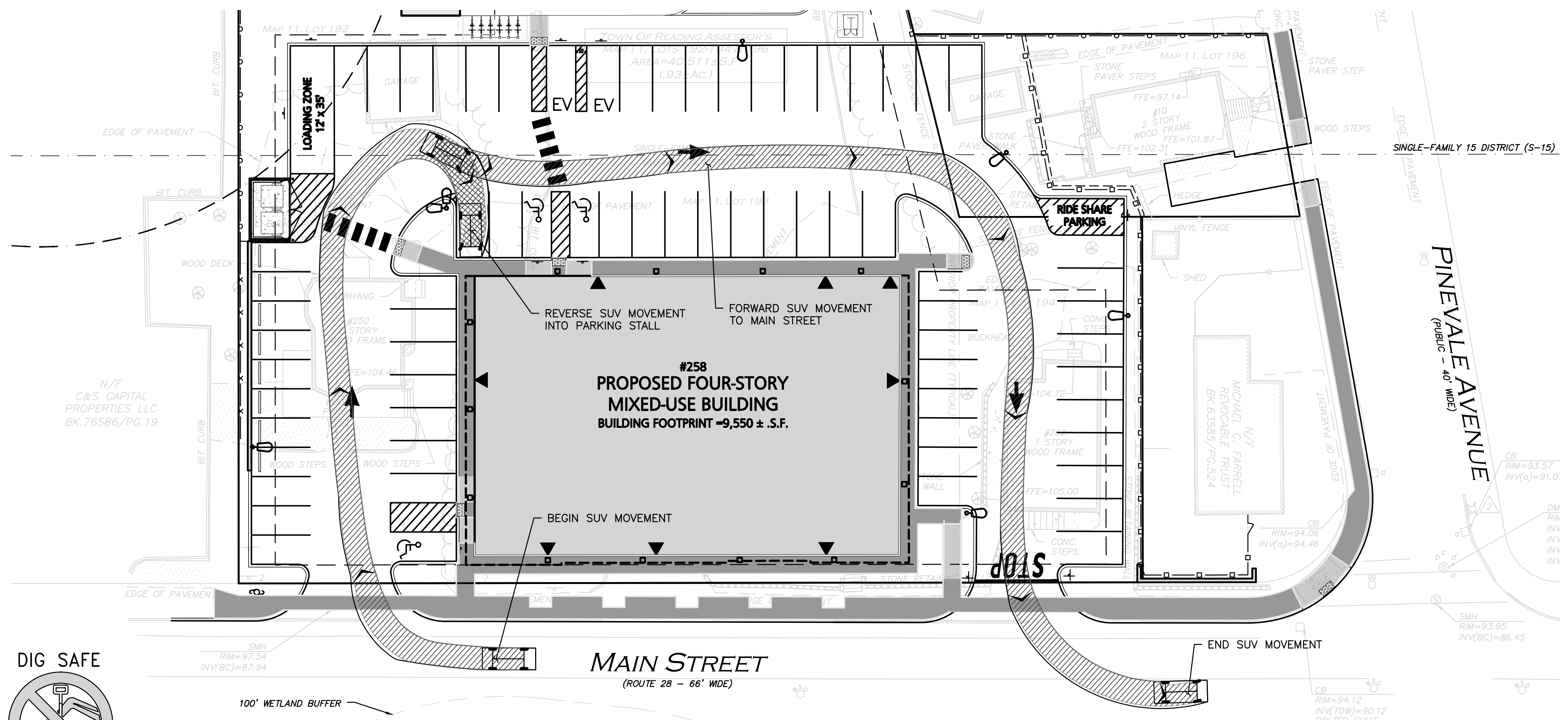
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DRAWING TITLE:	SHEET No.
VEHICLE MOVEMENT PLAN	C-107B

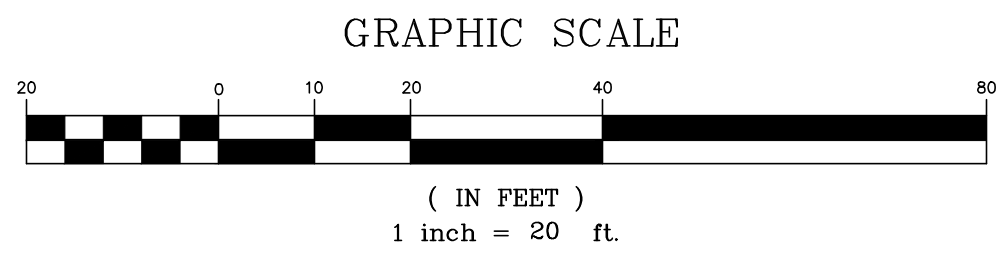
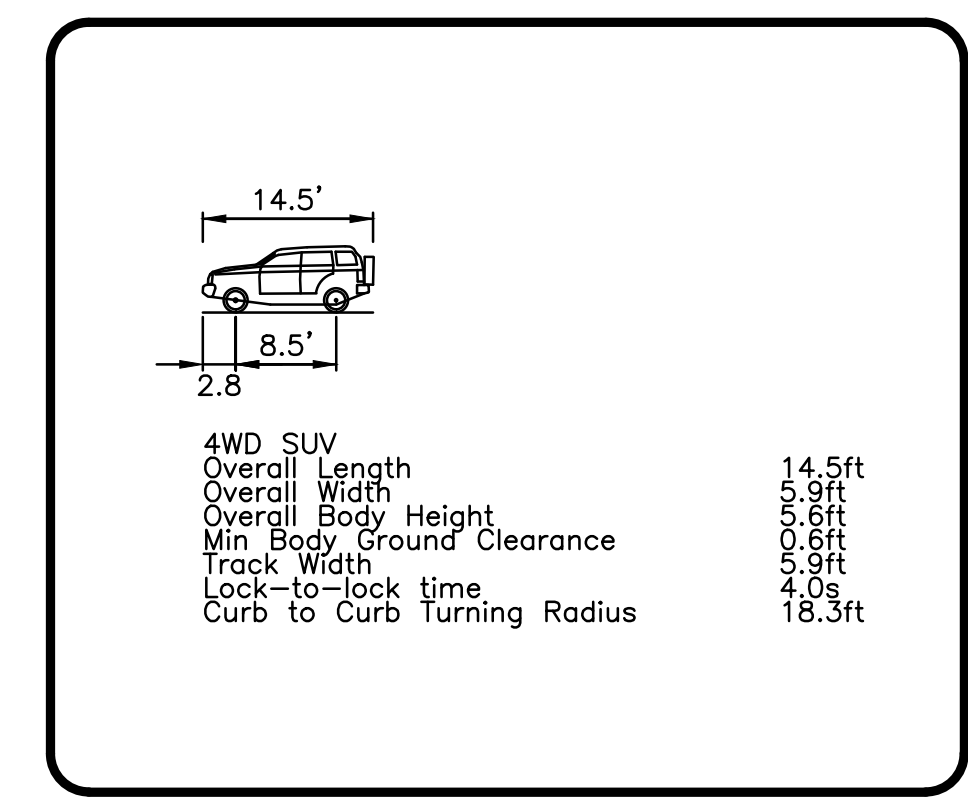
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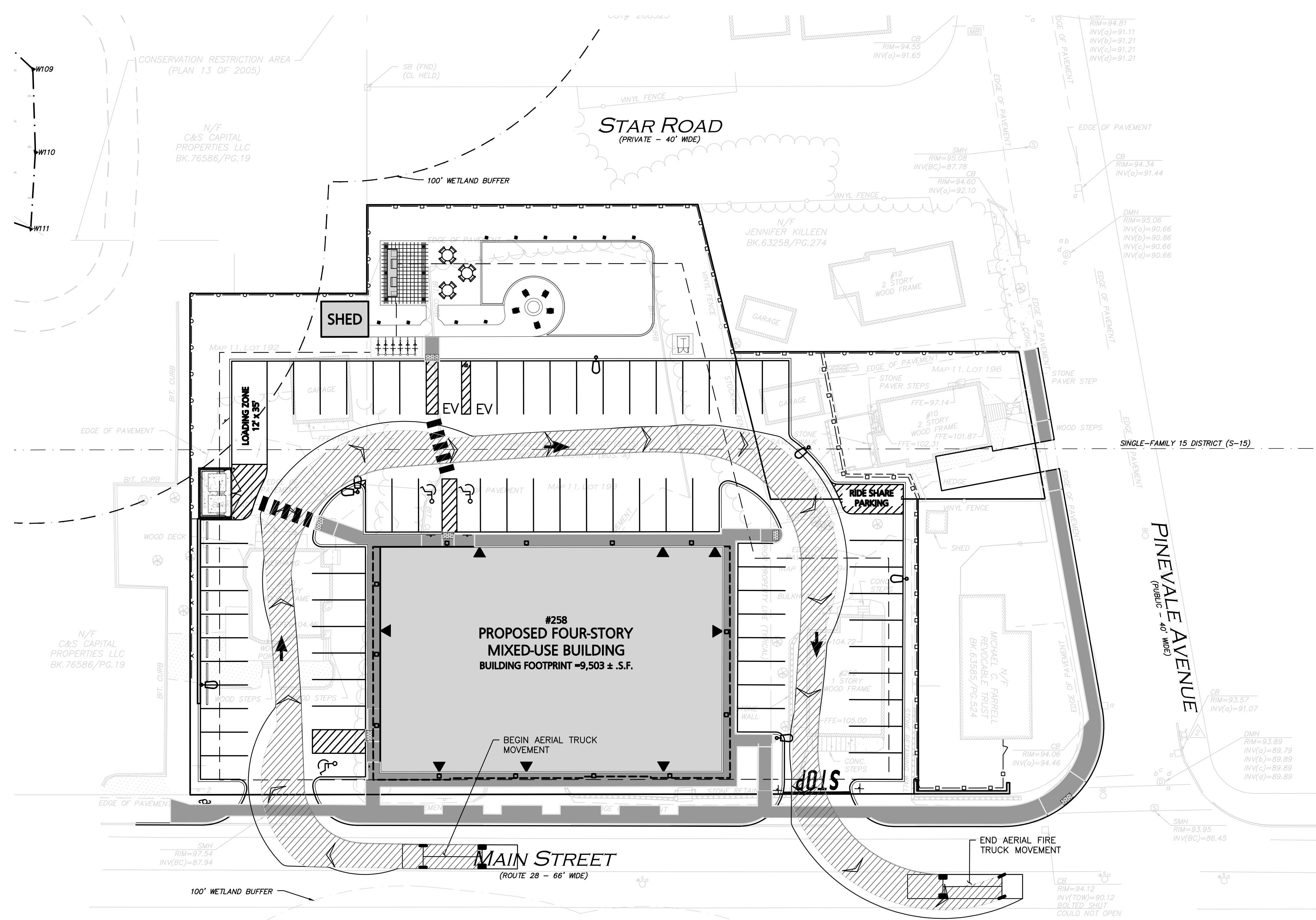
**EXHIBIT 1: REAR LOAD GARBAGE TRUCK CIRCULATION**



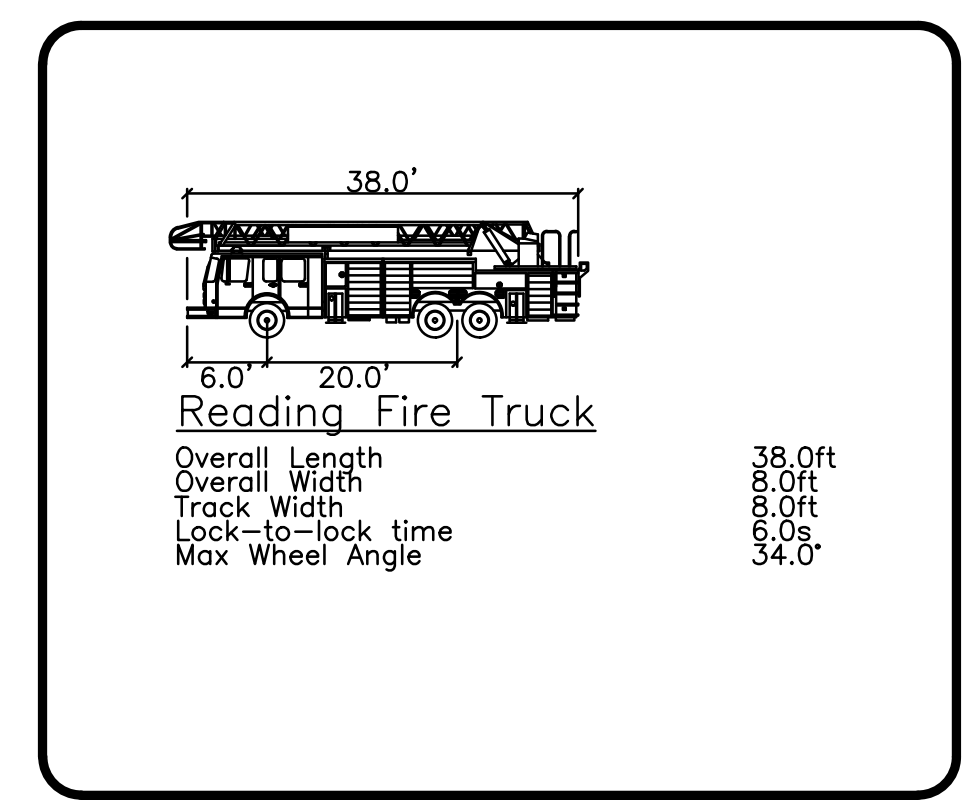
**EXHIBIT 2: 4WD SUV CIRCULATION**



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  2. FIRE TRUCK DIMENSIONS USED IN VEHICLE SWEEP PATH ANALYSIS WERE PROVIDED BY THE TOWN OF READING FIRE DEPARTMENT.



PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

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 PEABODY, MA 01960



**STRADA**  
 MIXED USE BUILDING  
 258 MAIN STREET  
 READING, MA

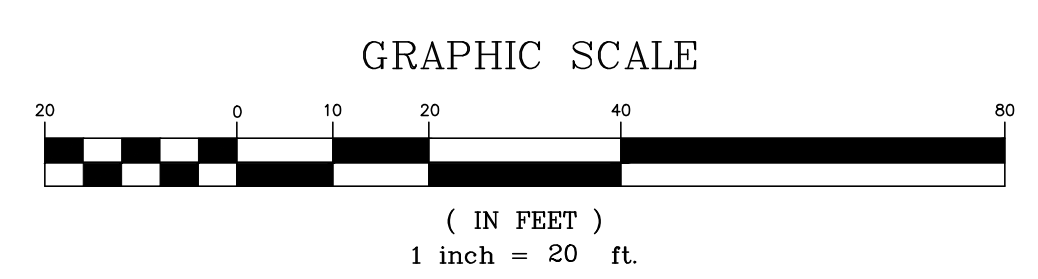
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DESIGNED BY:	MTB	CHECKED BY:	CMQ

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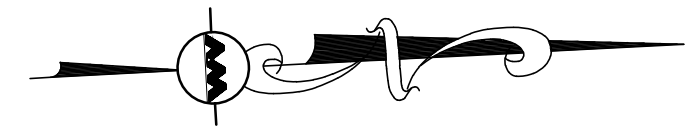
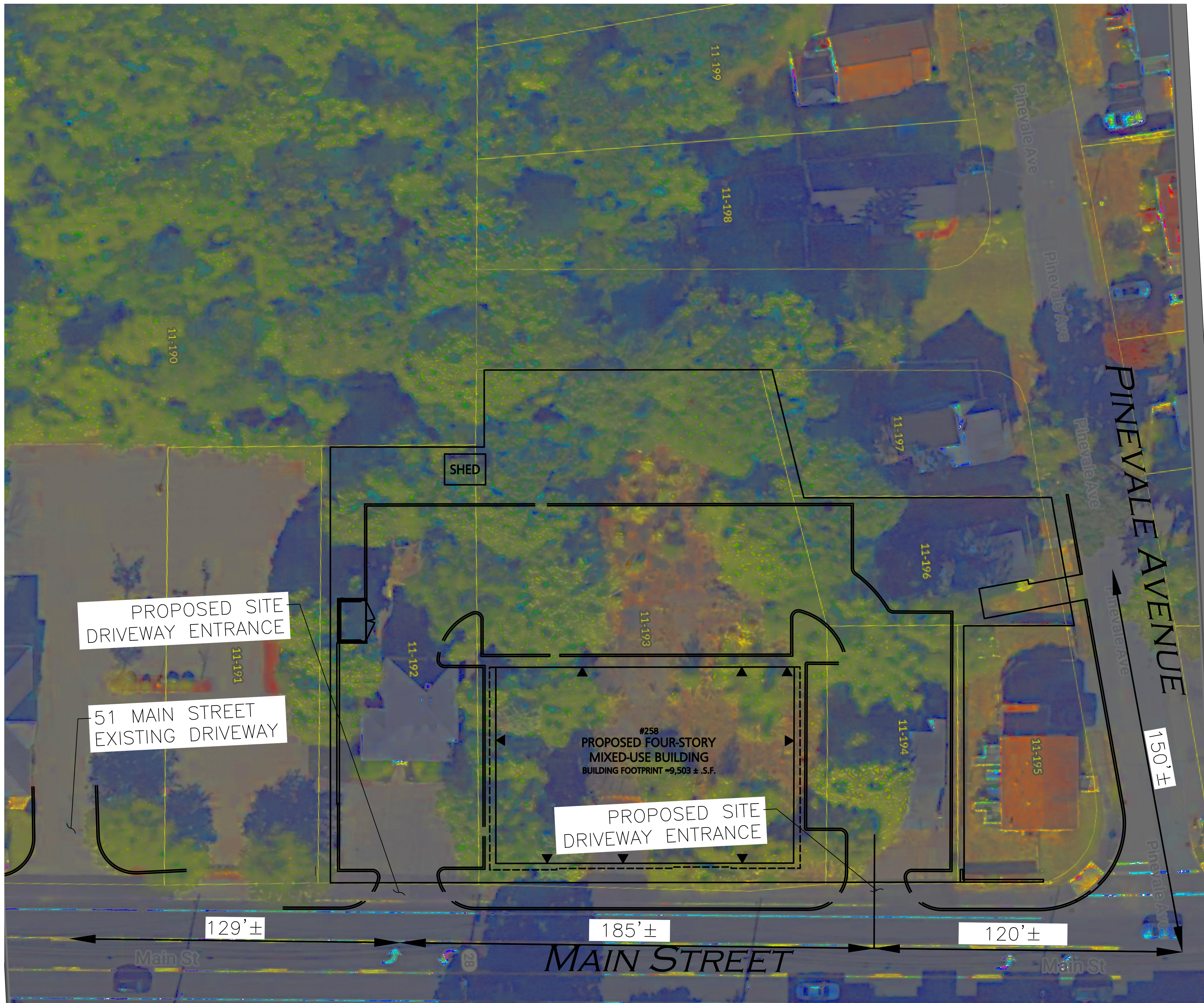
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DRAWING TITLE:	SHEET No.
<b>FIRE TRUCK TURNING PLAN</b>	<b>C-108</b>



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c/o SAVERIO FULCINITI  
1 SYLVAN STREET  
PEABODY, MA 01960

PROJECT:

**STRADA**  
MIXED USE BUILDING  
258 MAIN STREET  
READING, MA

PROJECT NO.	2398-01A	DATE:	10-05-2023
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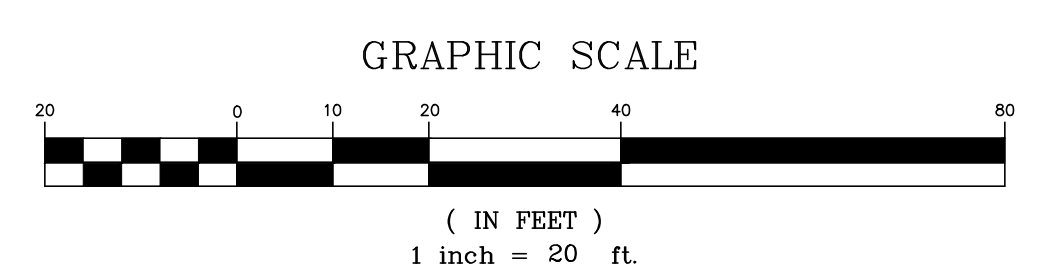
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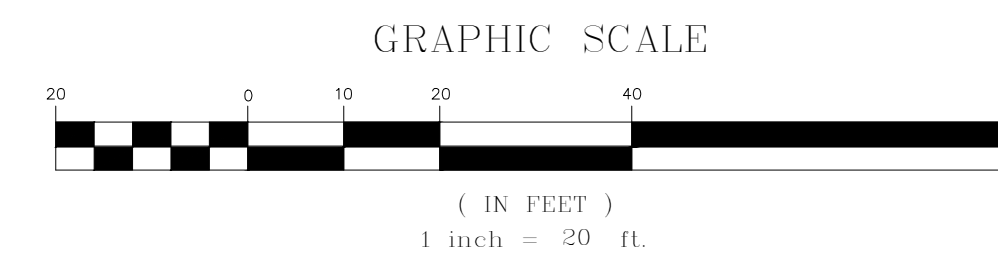
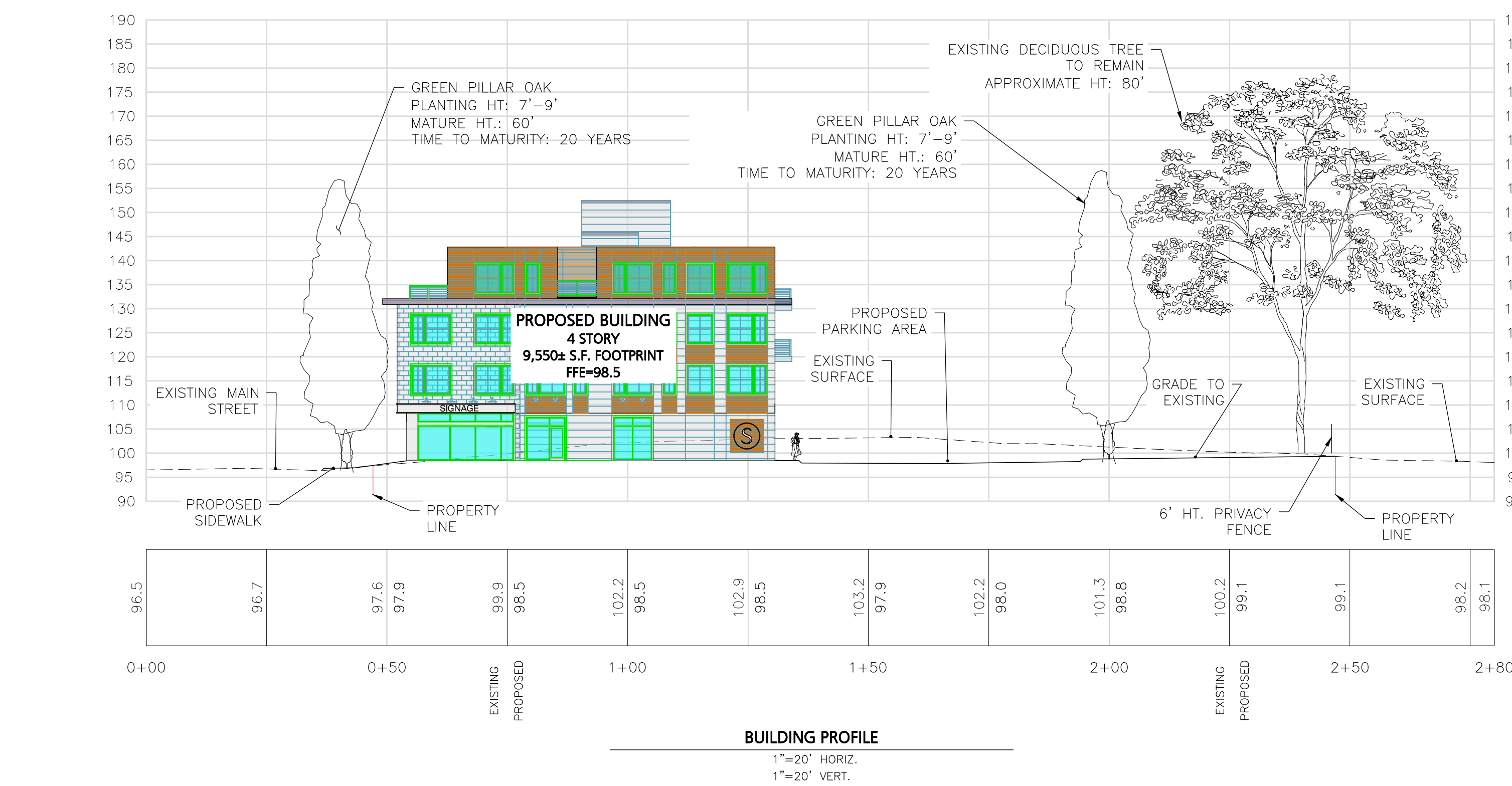
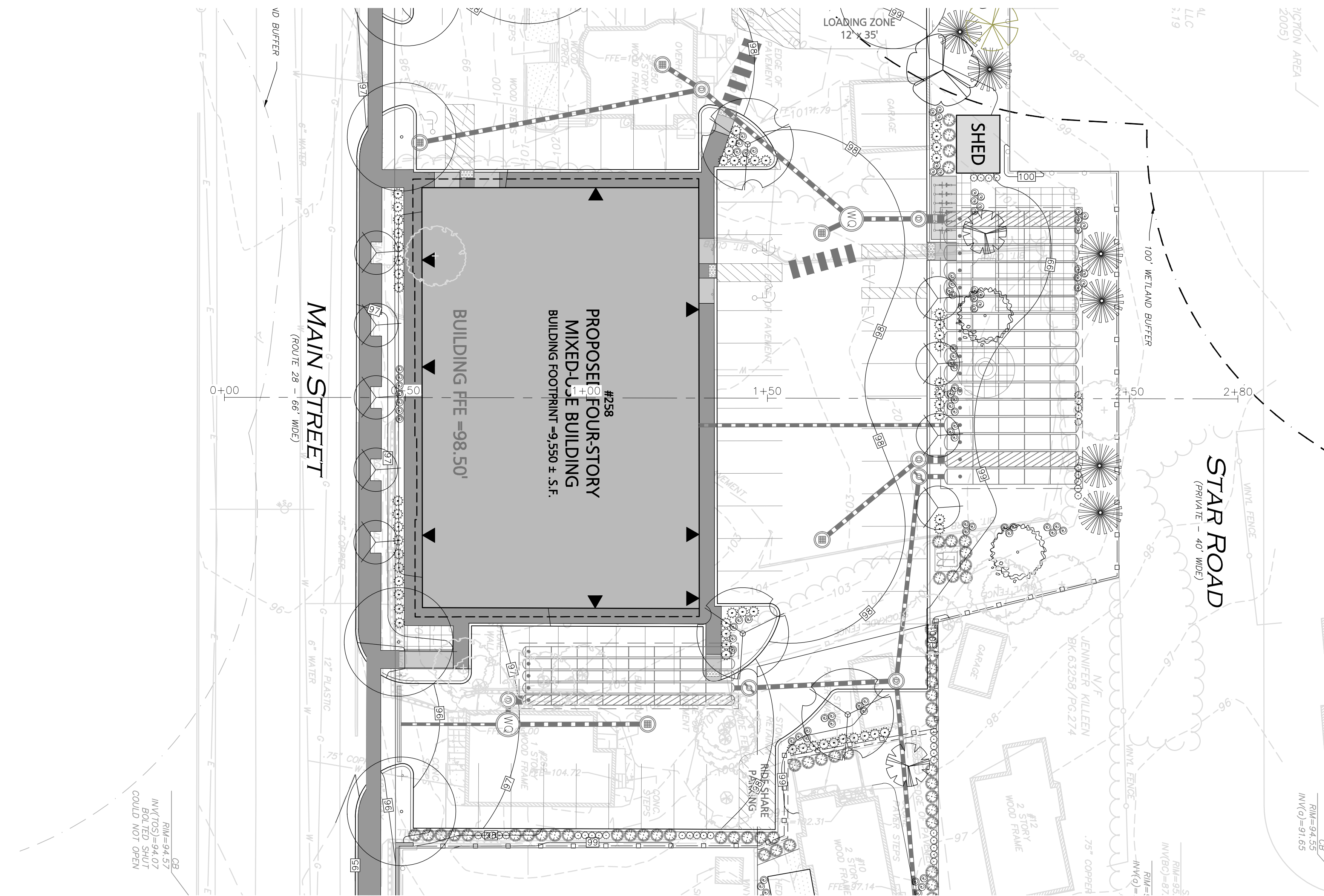
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DRAWING TITLE:	SHEET No.
ABUTTING PROPERTY DIMENSION PLAN	C-109



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READING, MA

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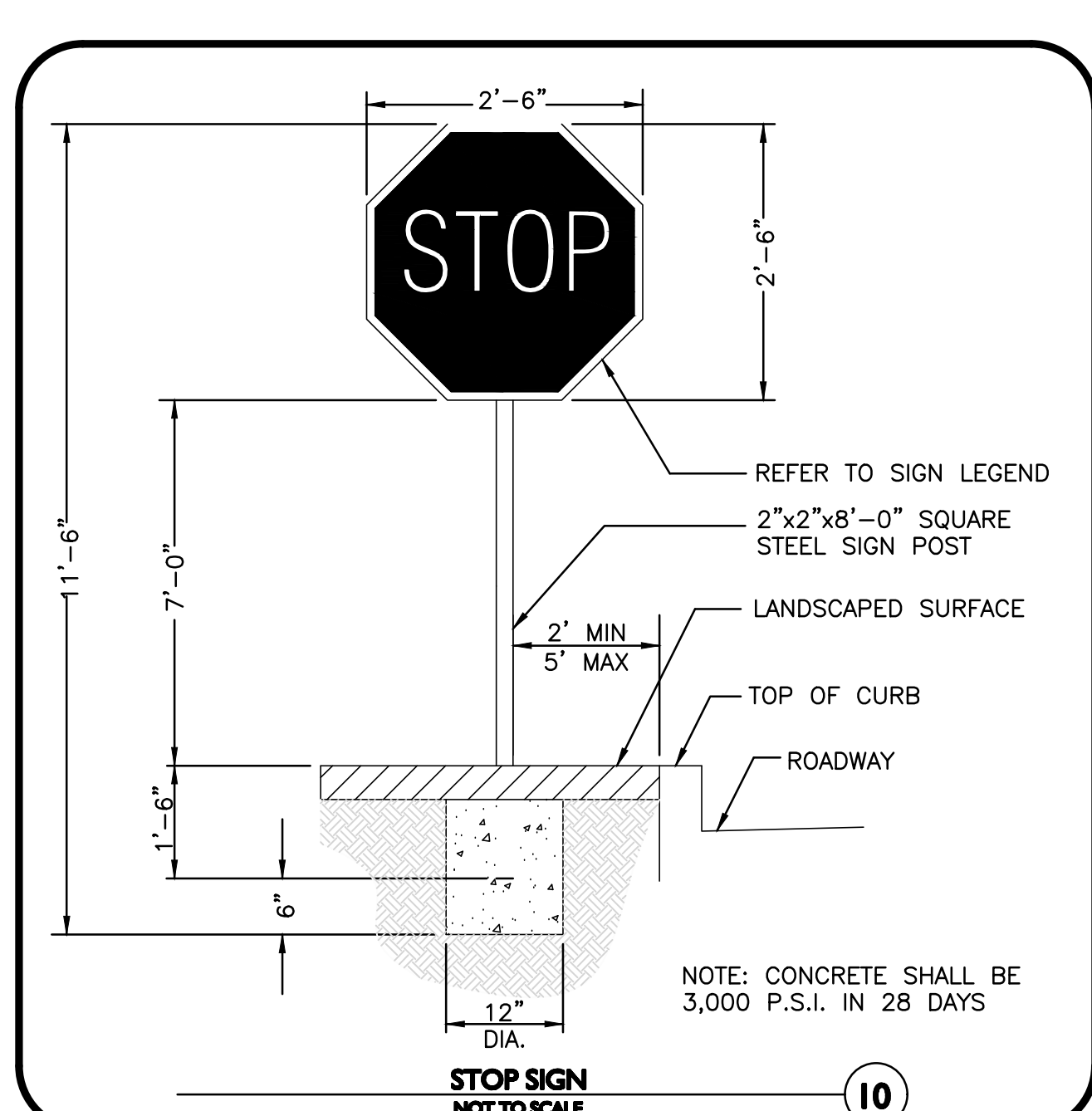
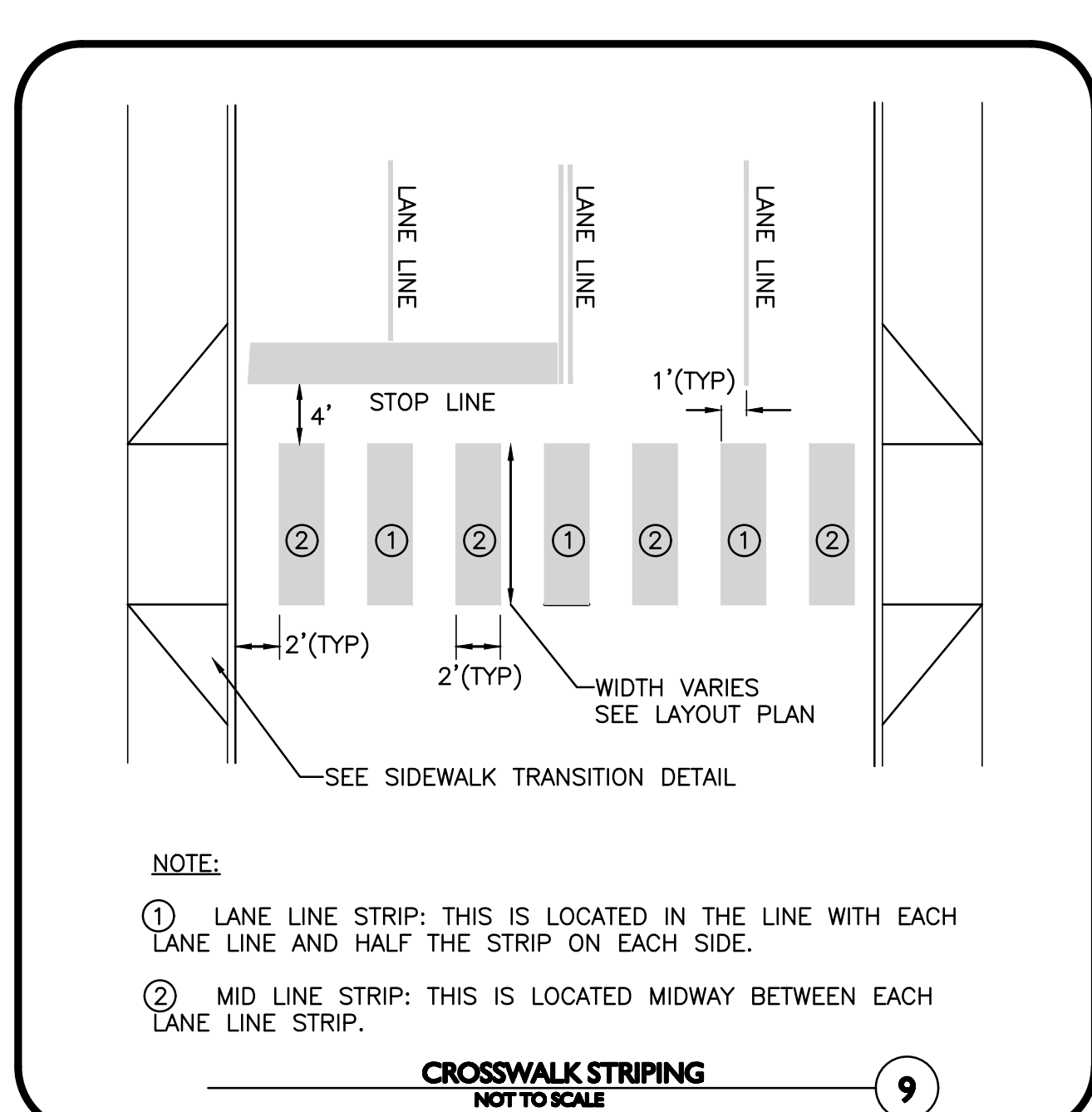
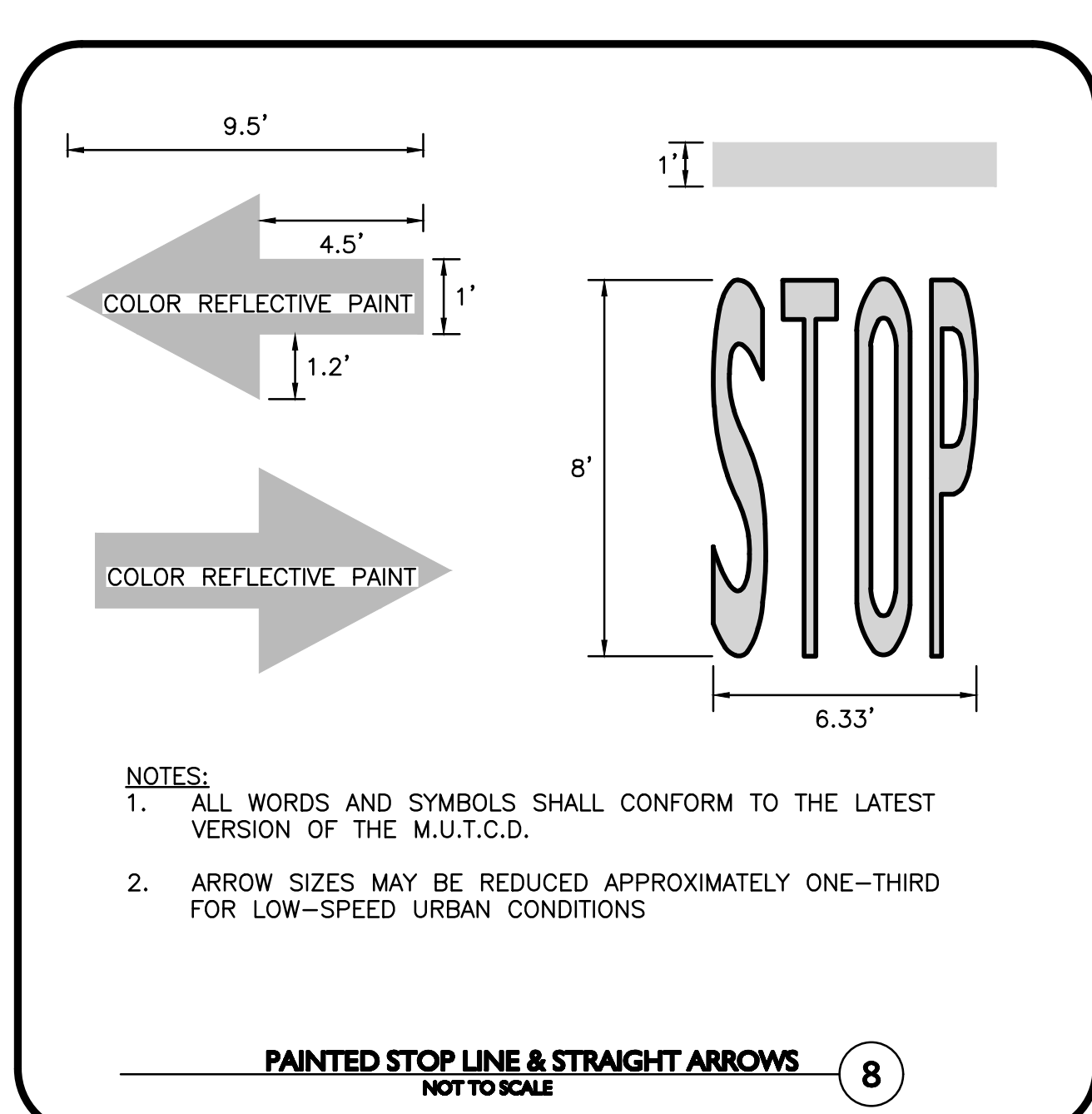
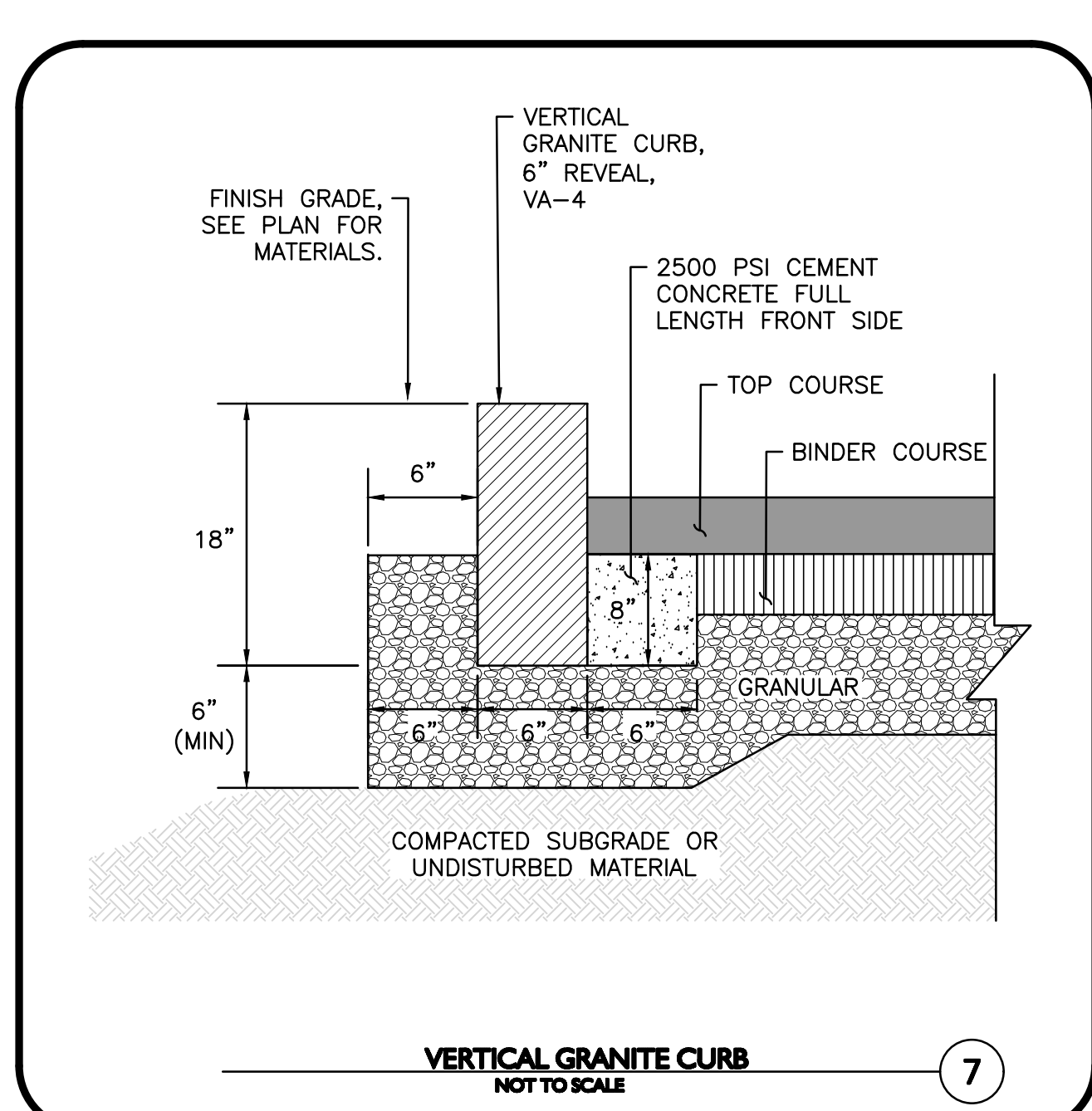
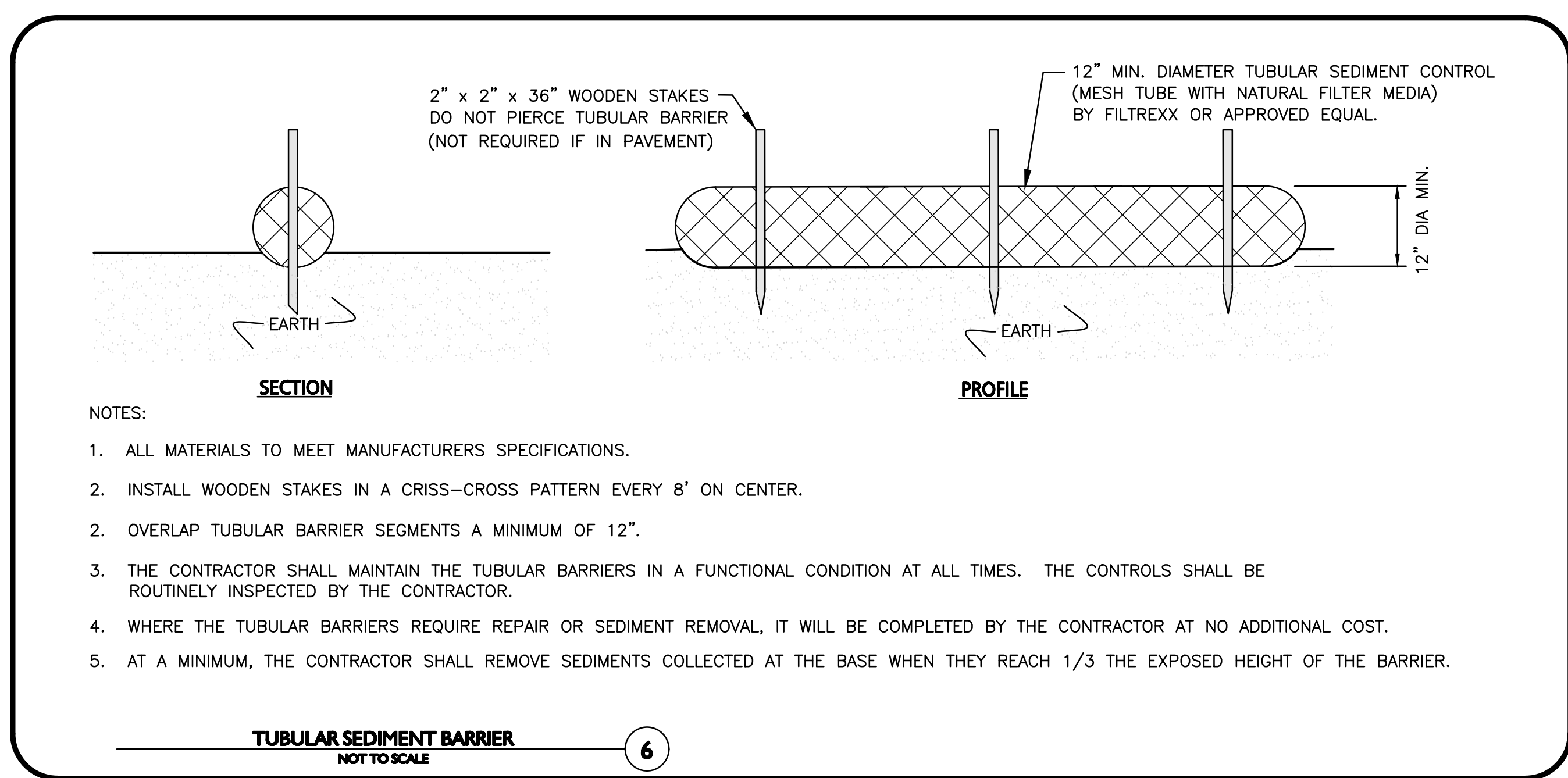
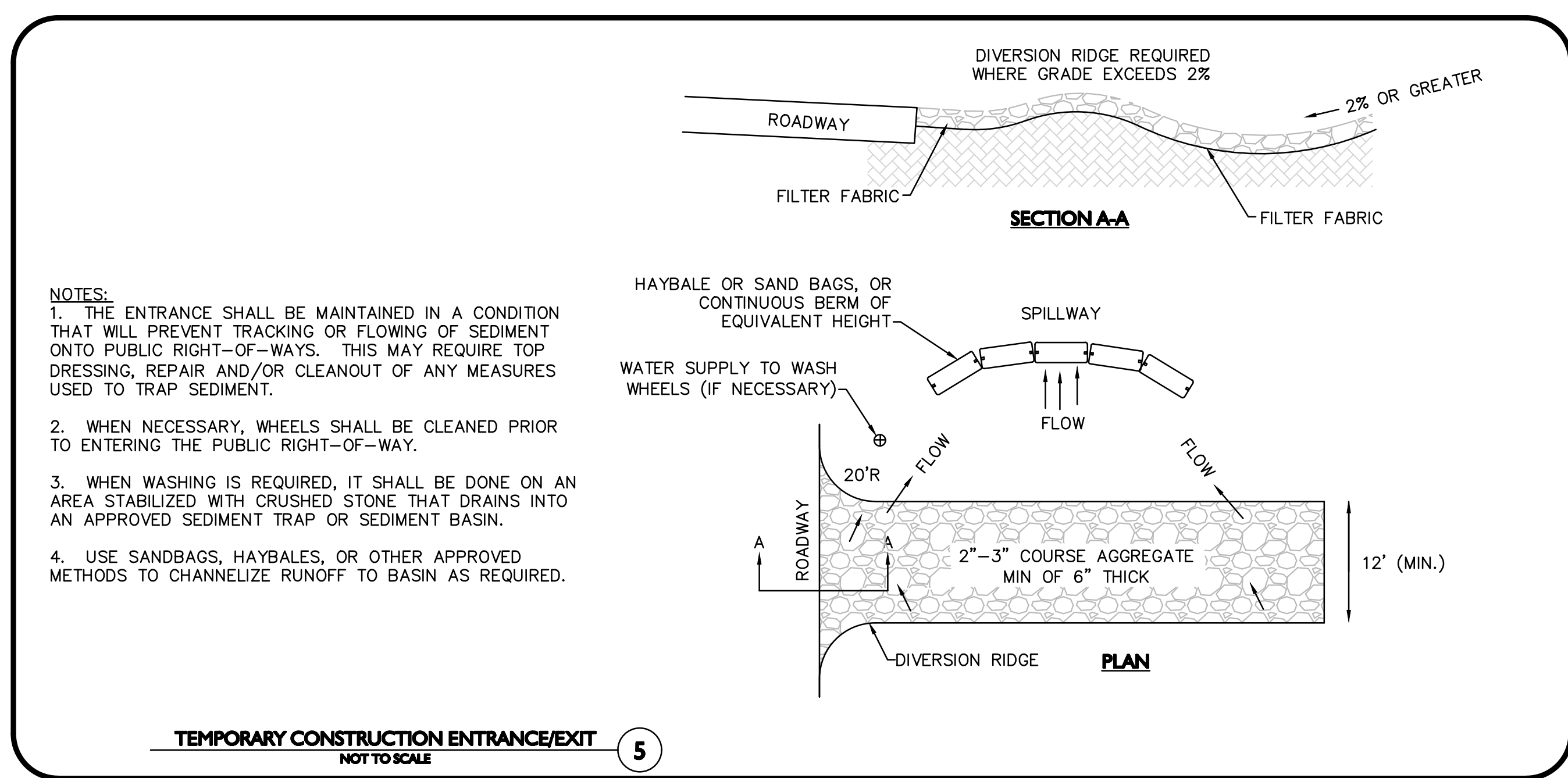
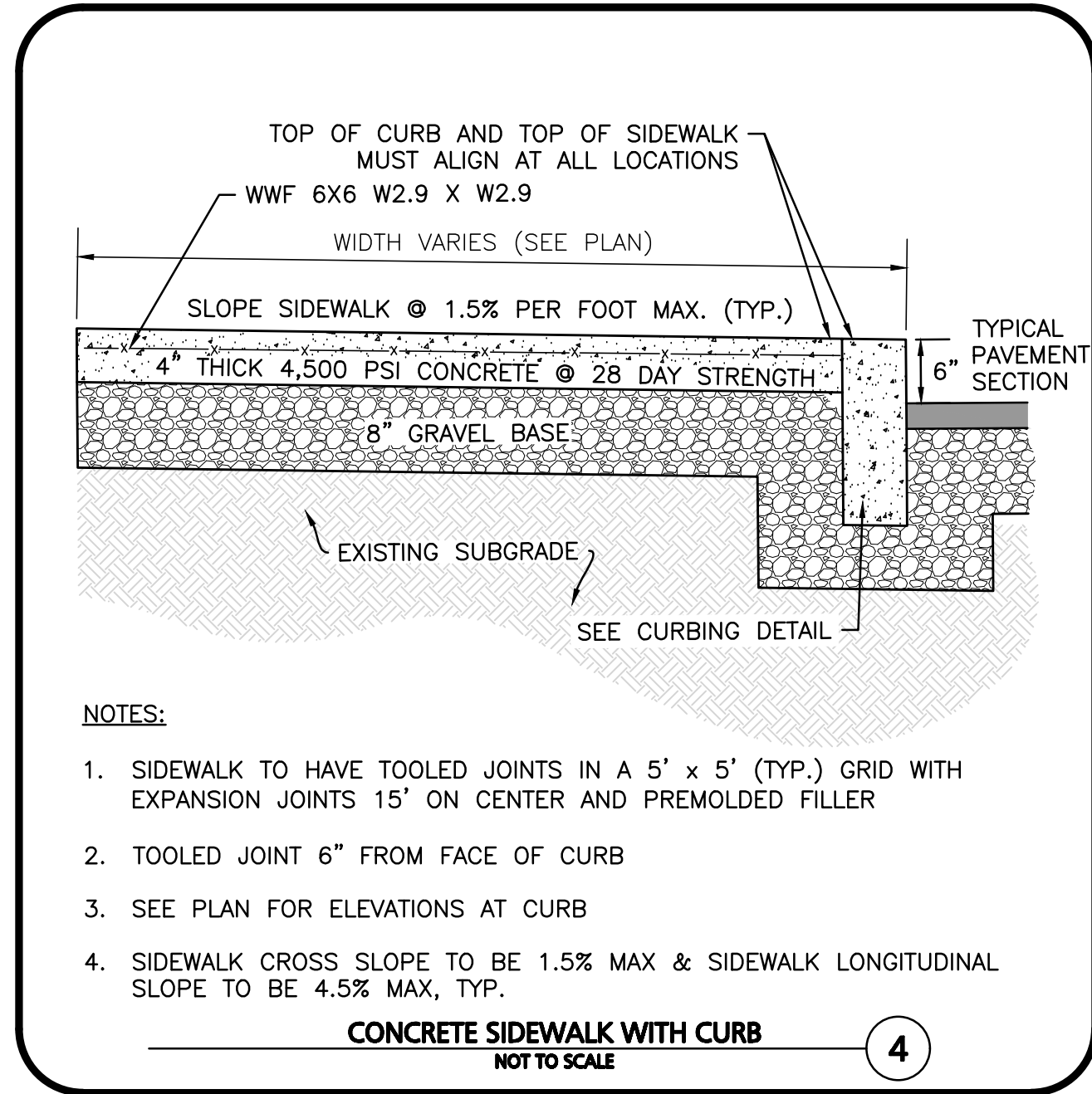
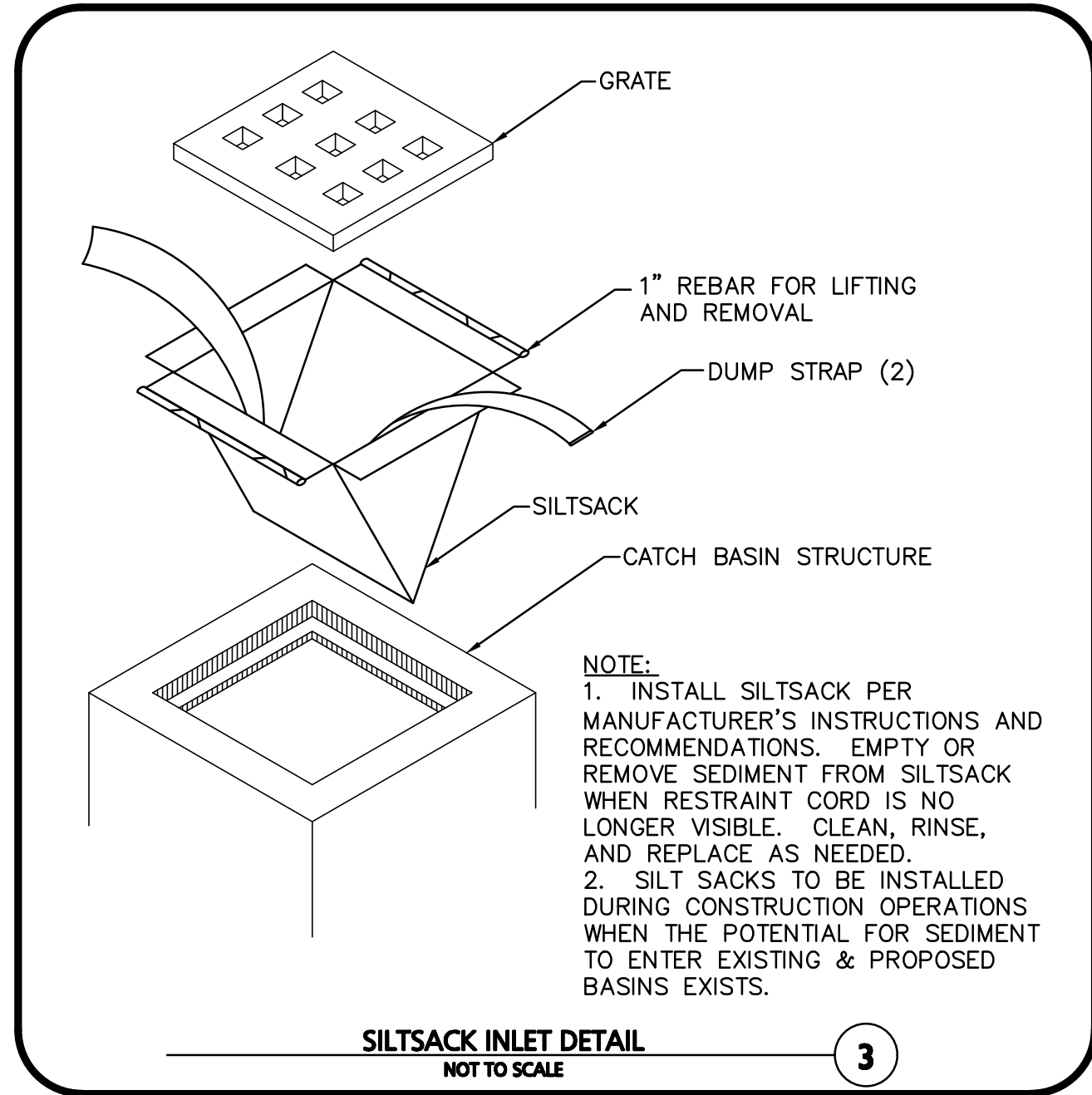
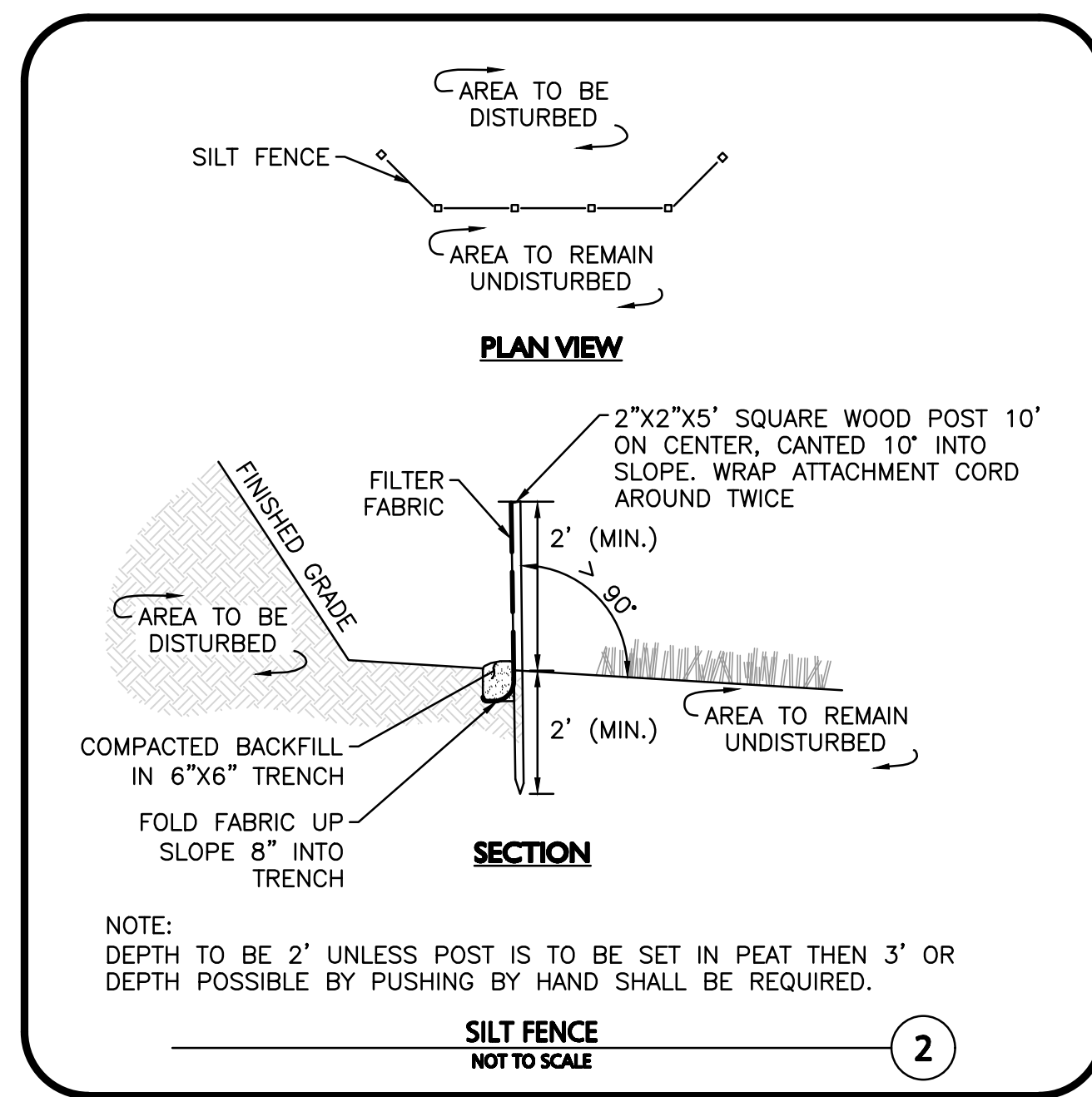
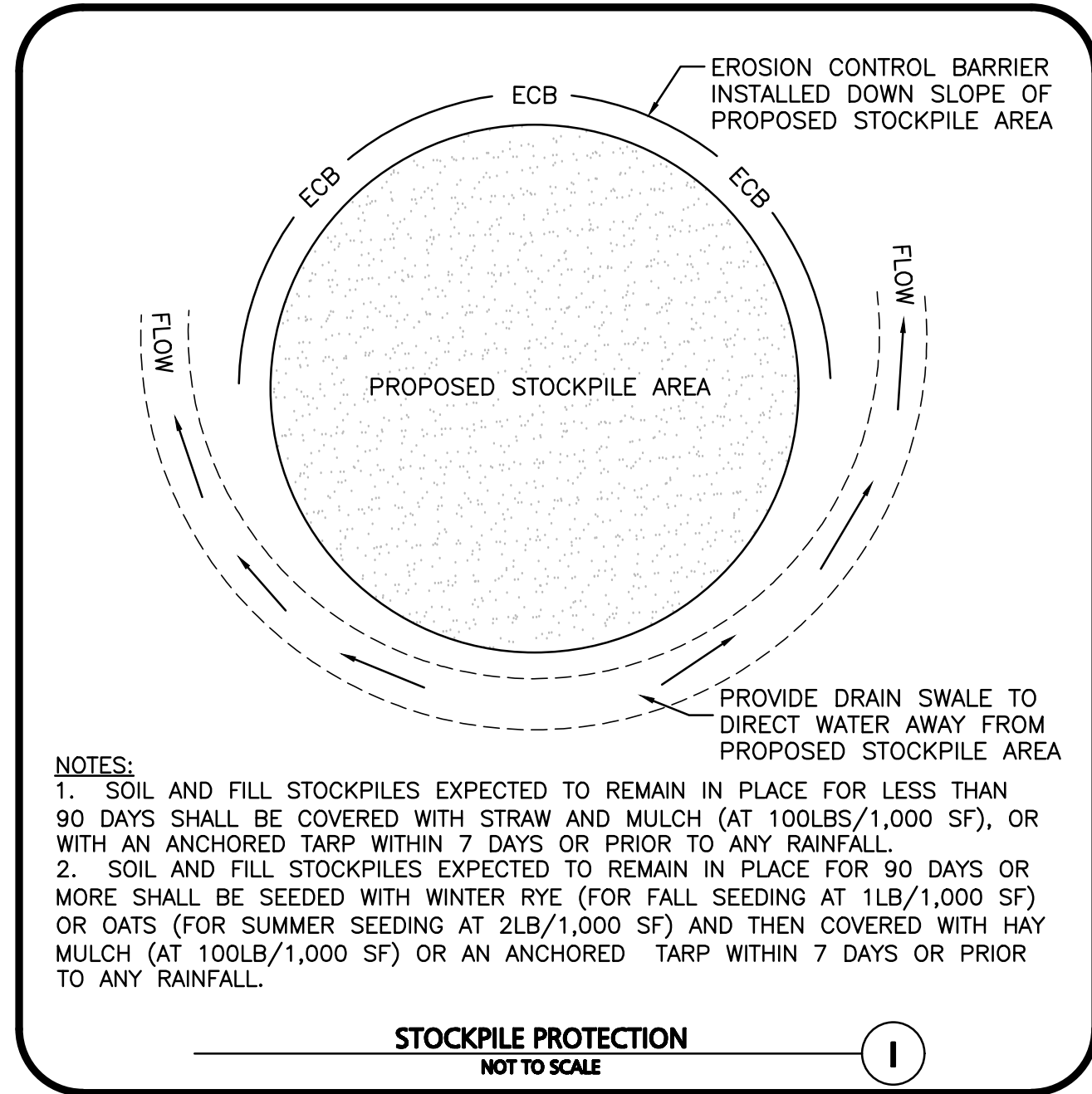
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DRAWING TITLE:	SHEET No.
SITE CROSS SECTION PLAN	C-201



PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

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PROJECT NO.	2398-01A	DATE:	10-05-2023
SCALE:	AS SHOWN	DWG. NAME:	C-2398-01A
DESIGNED BY:	MTB	CHECKED BY:	GMQ

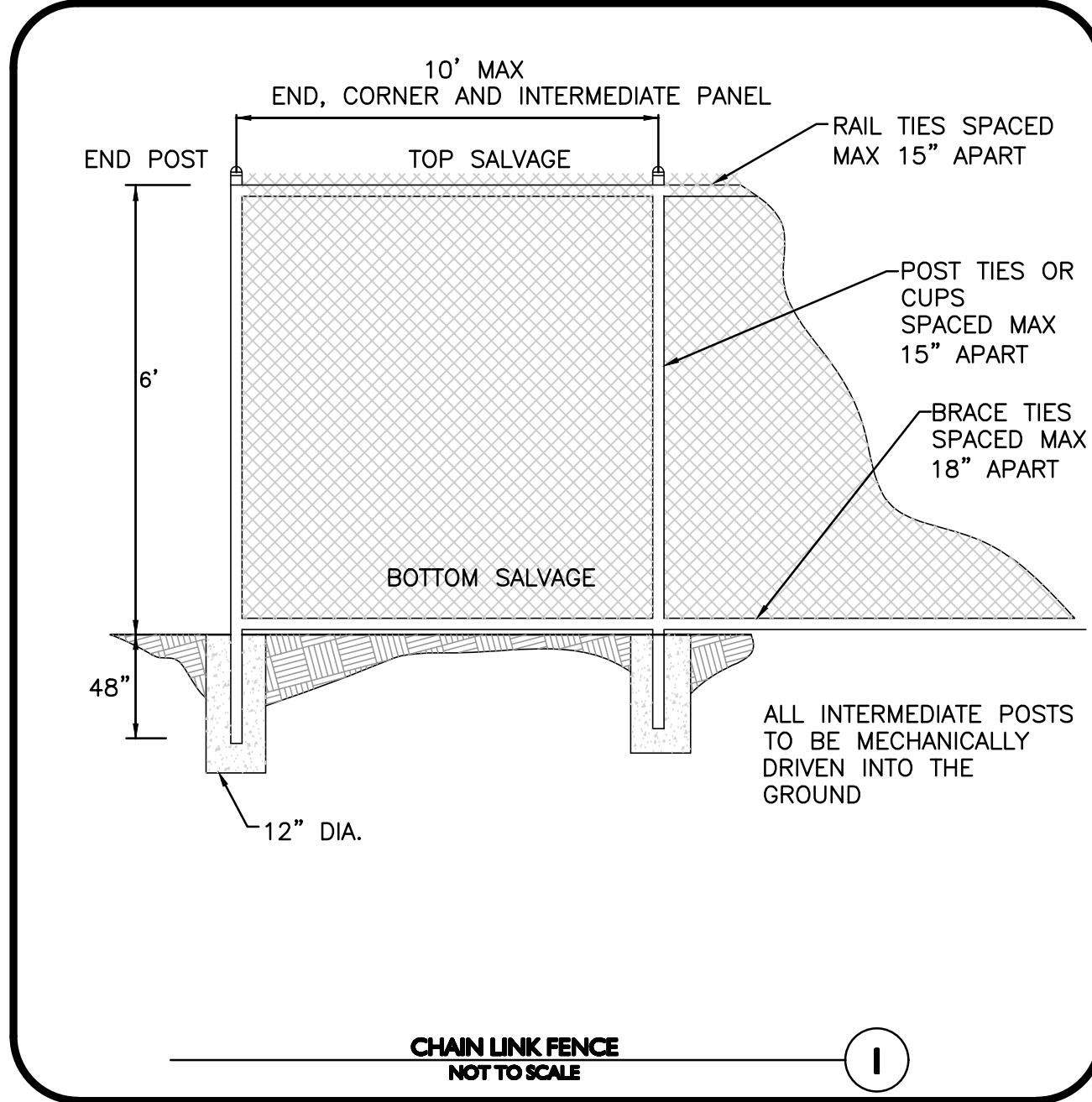
PREPARED BY:

**ALLEN & MAJOR ASSOCIATES, INC.**  
civil engineering • land surveying  
environmental consulting • landscape architecture  
www.allenmajor.com  
100 COMMERCE WAY, SUITE 5  
WOBURN MA 01801  
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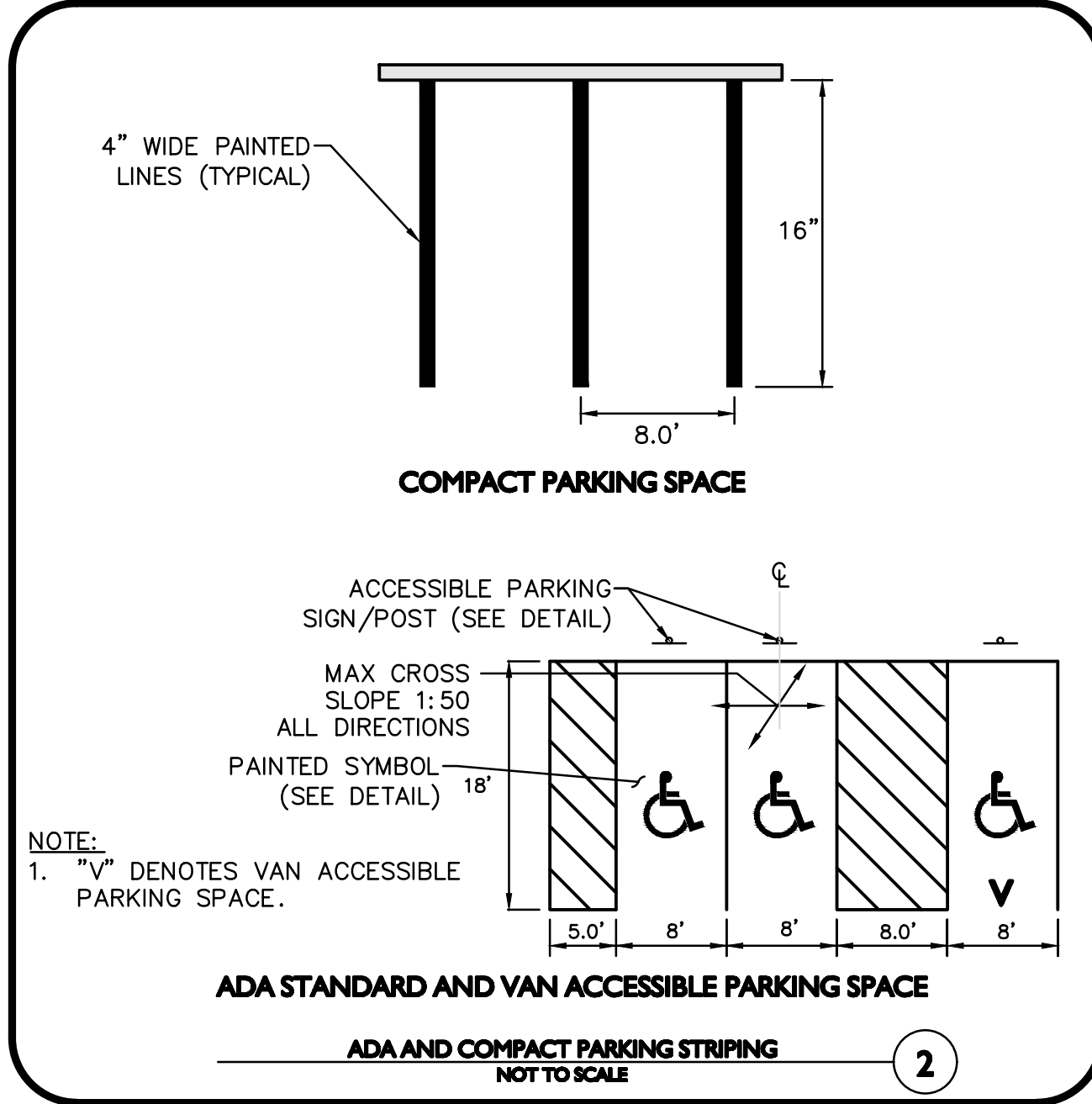
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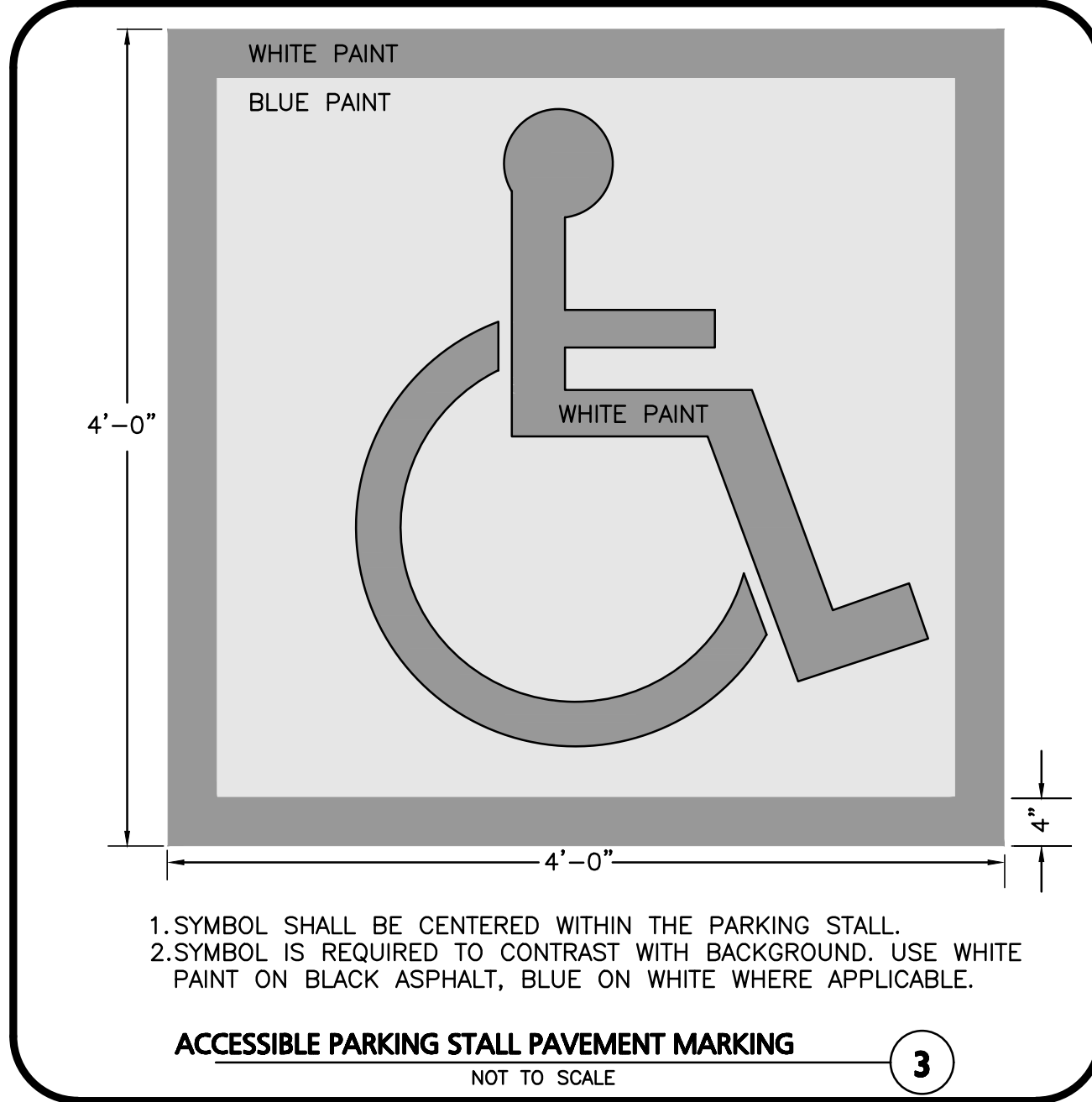
DRAWING TITLE:	SHEET No.
DETAILS	C-501



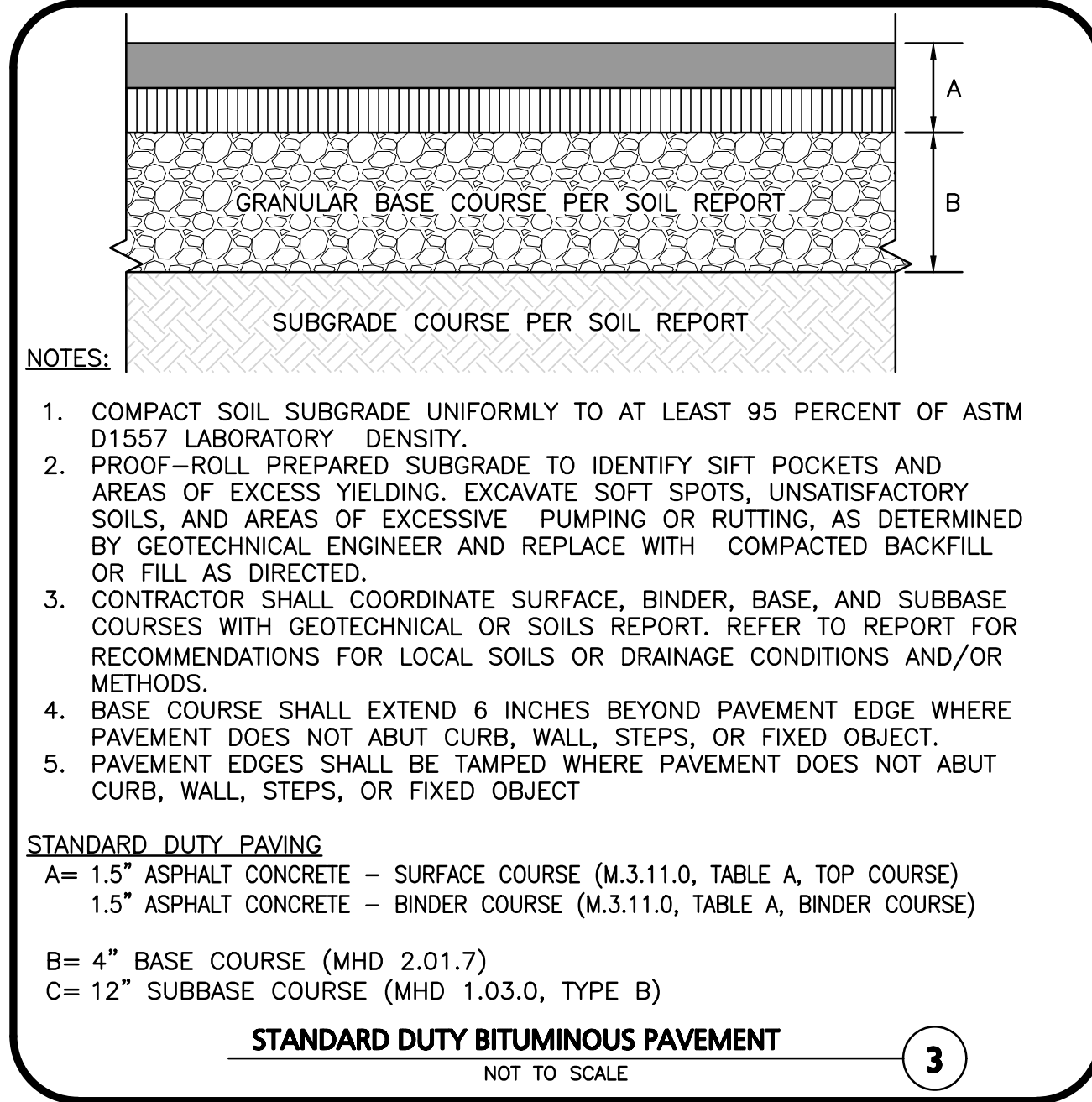
**CHAIN LINK FENCE**  
NOT TO SCALE



**ADA STANDARD AND VAN ACCESSIBLE PARKING SPACE**  
NOT TO SCALE



**ACCESSIBLE PARKING STALL PAVEMENT MARKING**  
NOT TO SCALE



**NOTES:**

1. COMPACT SOIL SUBGRADE UNIFORMLY TO AT LEAST 95 PERCENT OF ASTM D1557 LABORATORY DENSITY.
2. PROOF-ROLL PREPARED SUBGRADE TO IDENTIFY SIFT POCKETS AND AREAS OF EXCESS YIELDING. EXCAVATE SOFT SPOTS, UNSATISFACTORY SOILS, AND AREAS OF EXCESSIVE PUMPING OR RUTTING, AS DETERMINED BY GEOTECHNICAL ENGINEER AND REPLACE WITH COMPACTED BACKFILL OR FILL AS DIRECTED.
3. CONTRACTOR SHALL COORDINATE SURFACE, BINDER, BASE, AND SUBBASE COURSES WITH GEOTECHNICAL OR SOILS REPORT. REFER TO REPORT FOR RECOMMENDATIONS FOR LOCAL SOILS OR DRAINAGE CONDITIONS AND/OR METHODS.
4. BASE COURSE SHALL EXTEND 6 INCHES BEYOND PAVEMENT EDGE WHERE PAVEMENT DOES NOT ABUT CURB, WALL, STEPS, OR FIXED OBJECT.
5. PAVEMENT EDGES SHALL BE TAMPED WHERE PAVEMENT DOES NOT ABUT CURB, WALL, STEPS, OR FIXED OBJECT.

**STANDARD DUTY PAVING**  
A= 1.5" ASPHALT CONCRETE - SURFACE COURSE (M.3.11.0, TABLE A, TOP COURSE)  
1.5" ASPHALT CONCRETE - BINDER COURSE (M.3.11.0, TABLE A, BINDER COURSE)  
B= 4" BASE COURSE (MHD 2.01.7)  
C= 12" SUBBASE COURSE (MHD 1.03.0, TYPE B)

**STANDARD DUTY BITUMINOUS PAVEMENT**  
NOT TO SCALE



PROFESSIONAL ENGINEER FOR  
ALLEN & MAJOR ASSOCIATES, INC.

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**APPLICANT/OWNER:**  
BLVD READING, LLC  
c/o SAVERIO FULCINITI  
1 SYLVAN STREET  
PEABODY, MA 01960

**PROJECT:**

**STRADA**  
MIXED USE BUILDING  
258 MAIN STREET  
READING, MA

PROJECT NO. 2398-01A DATE: 10-05-2023

SCALE: AS SHOWN DWG. NAME: C-2398-01A

DESIGNED BY: MTB CHECKED BY: CMQ

PREPARED BY:



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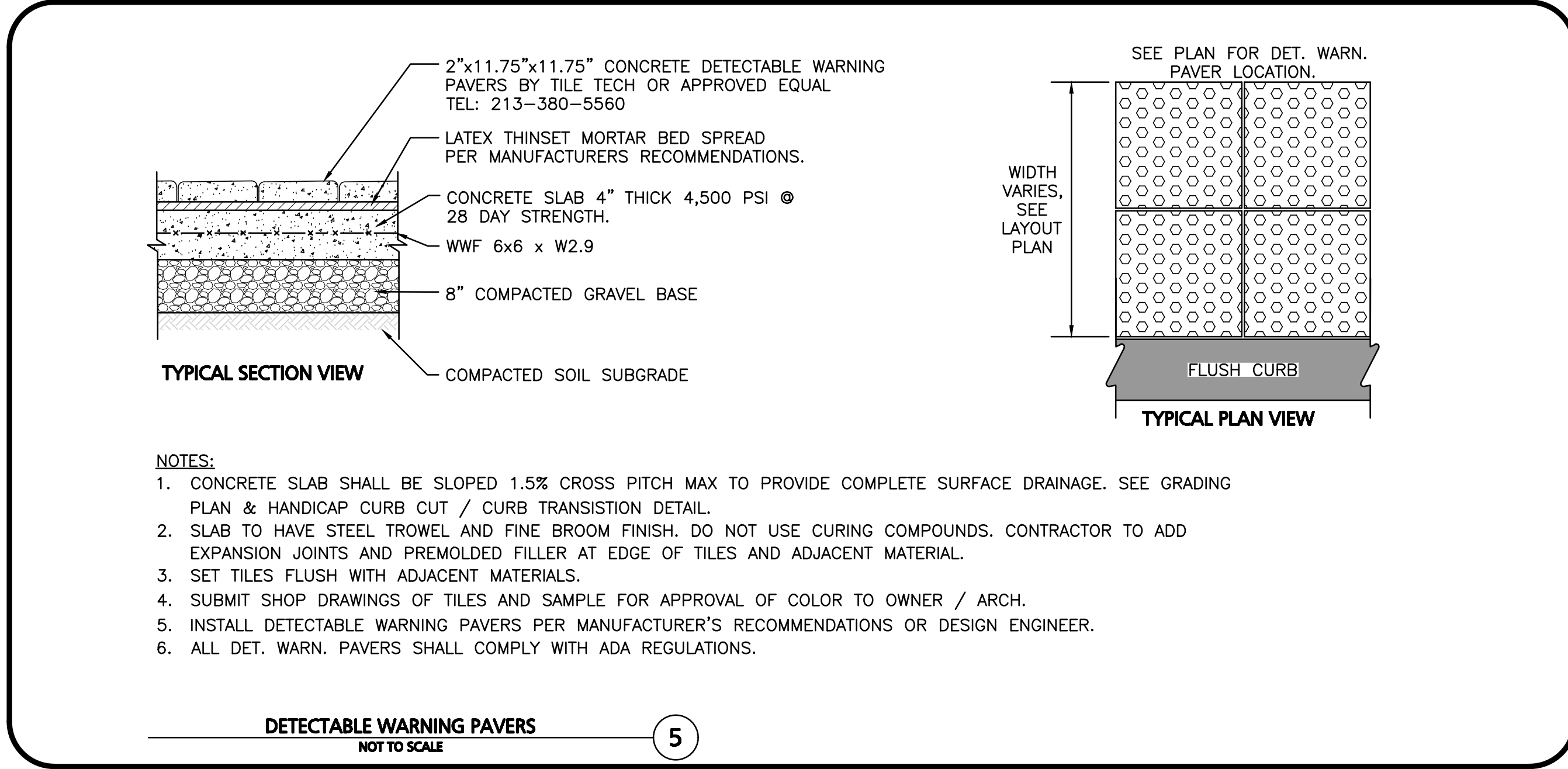
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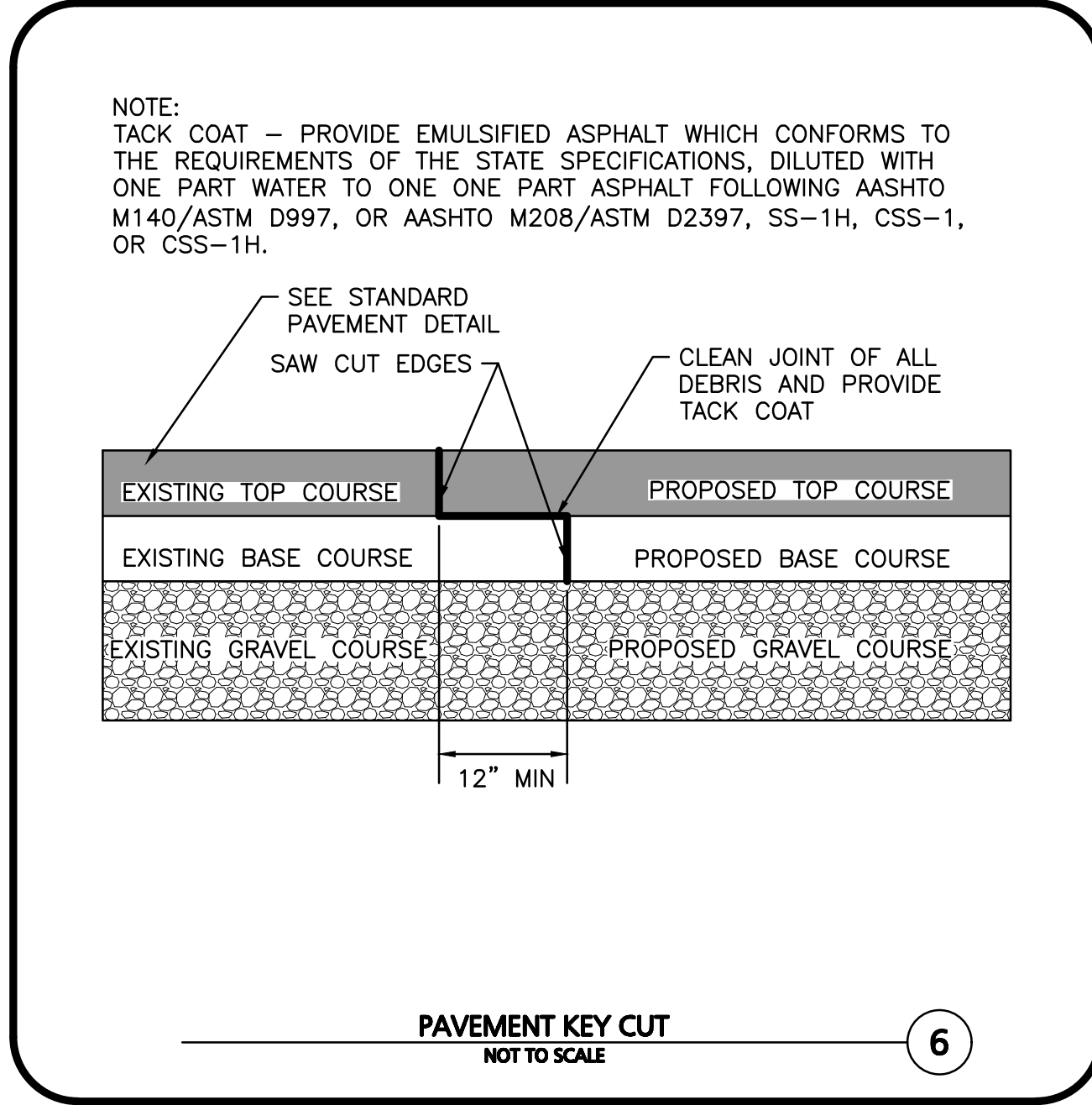
DRAWING TITLE: SHEET No.

DETAILS C-502

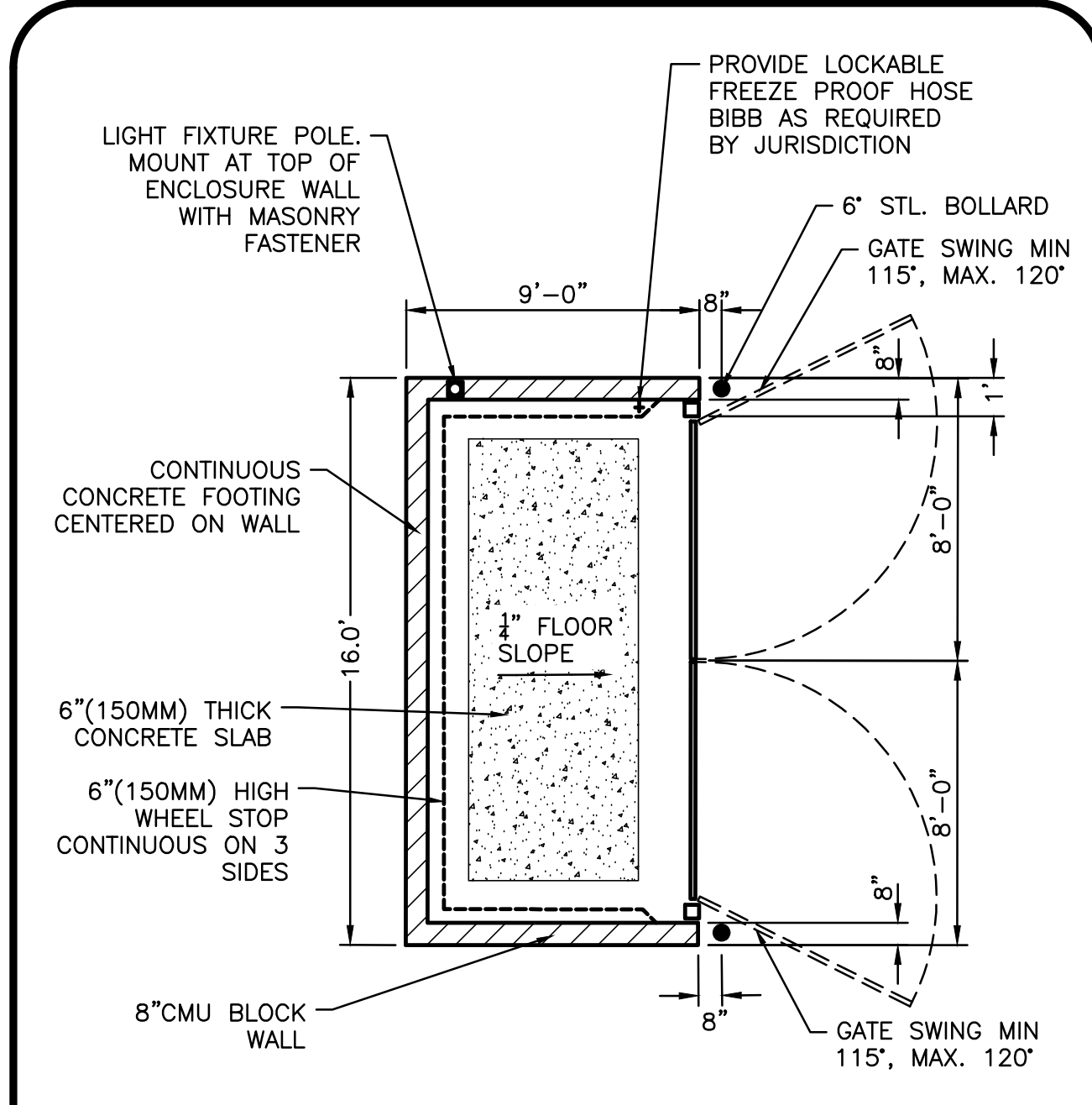
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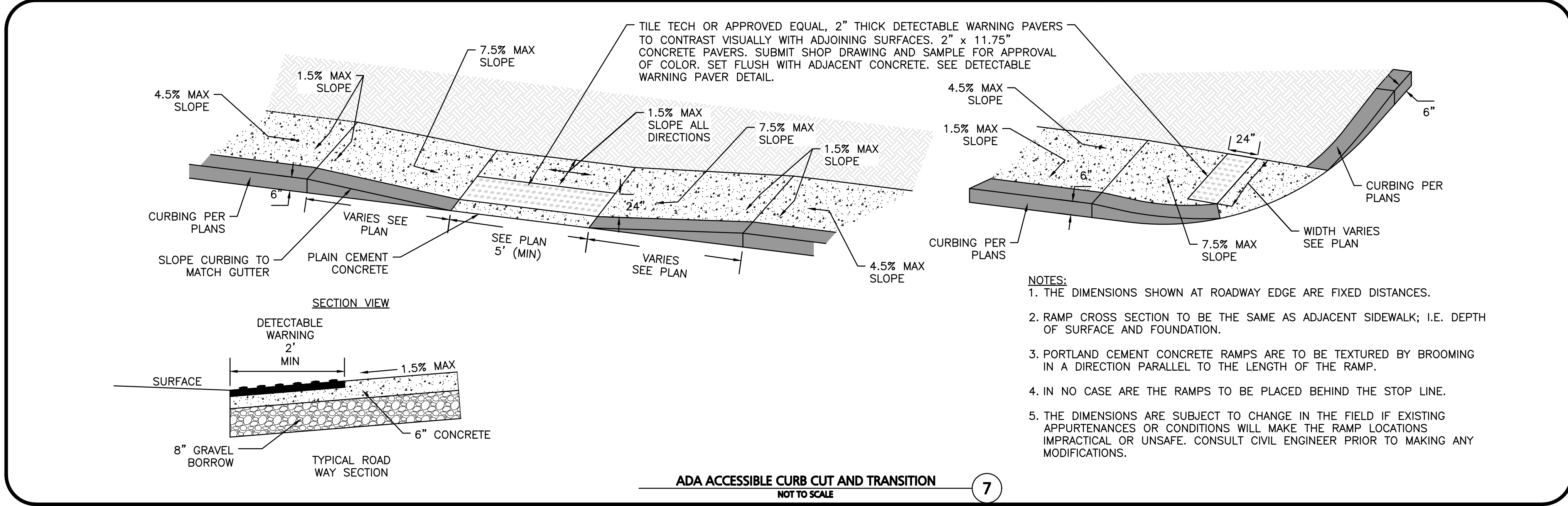
**DETECTABLE WARNING PAVERS**  
NOT TO SCALE



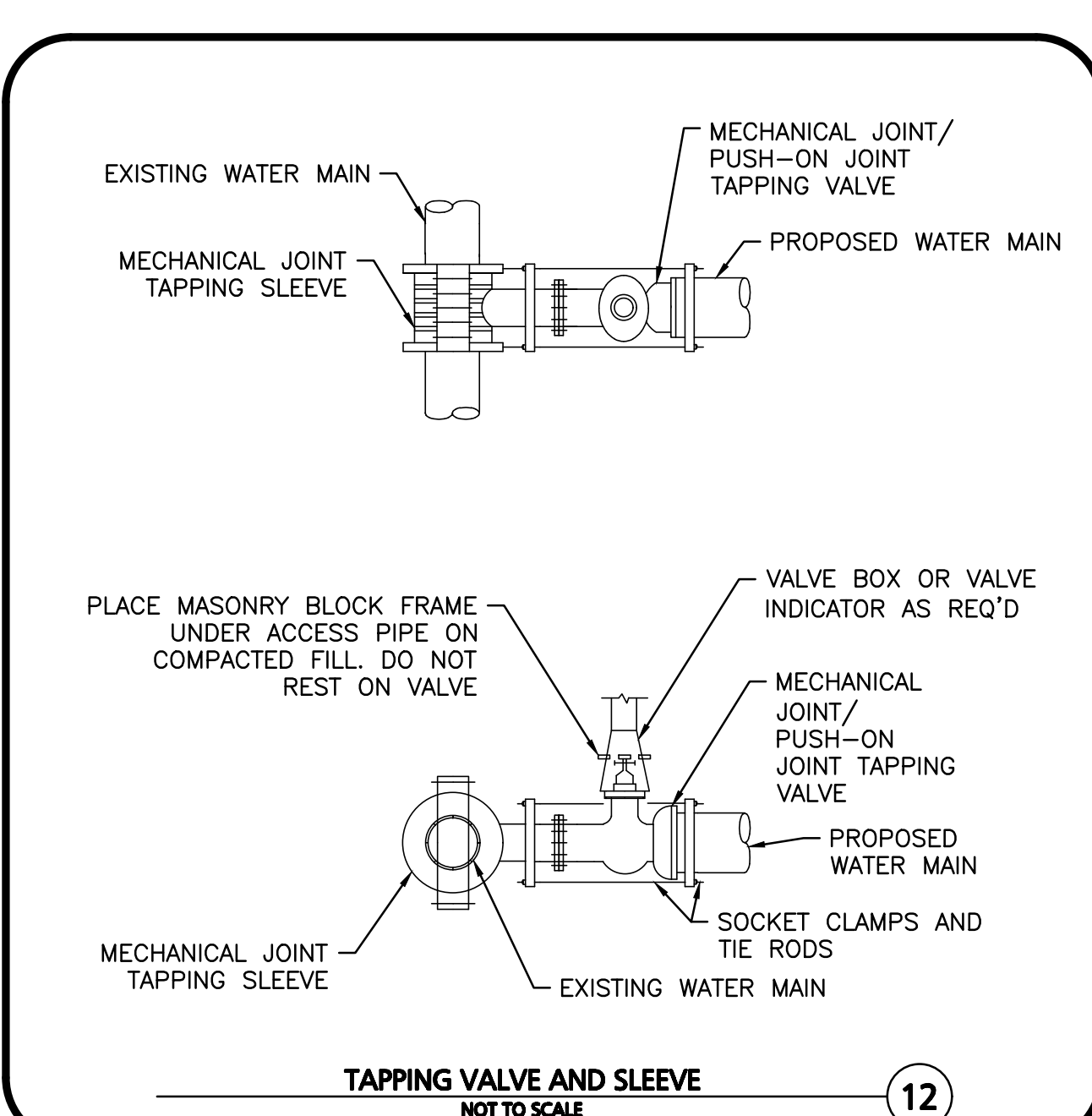
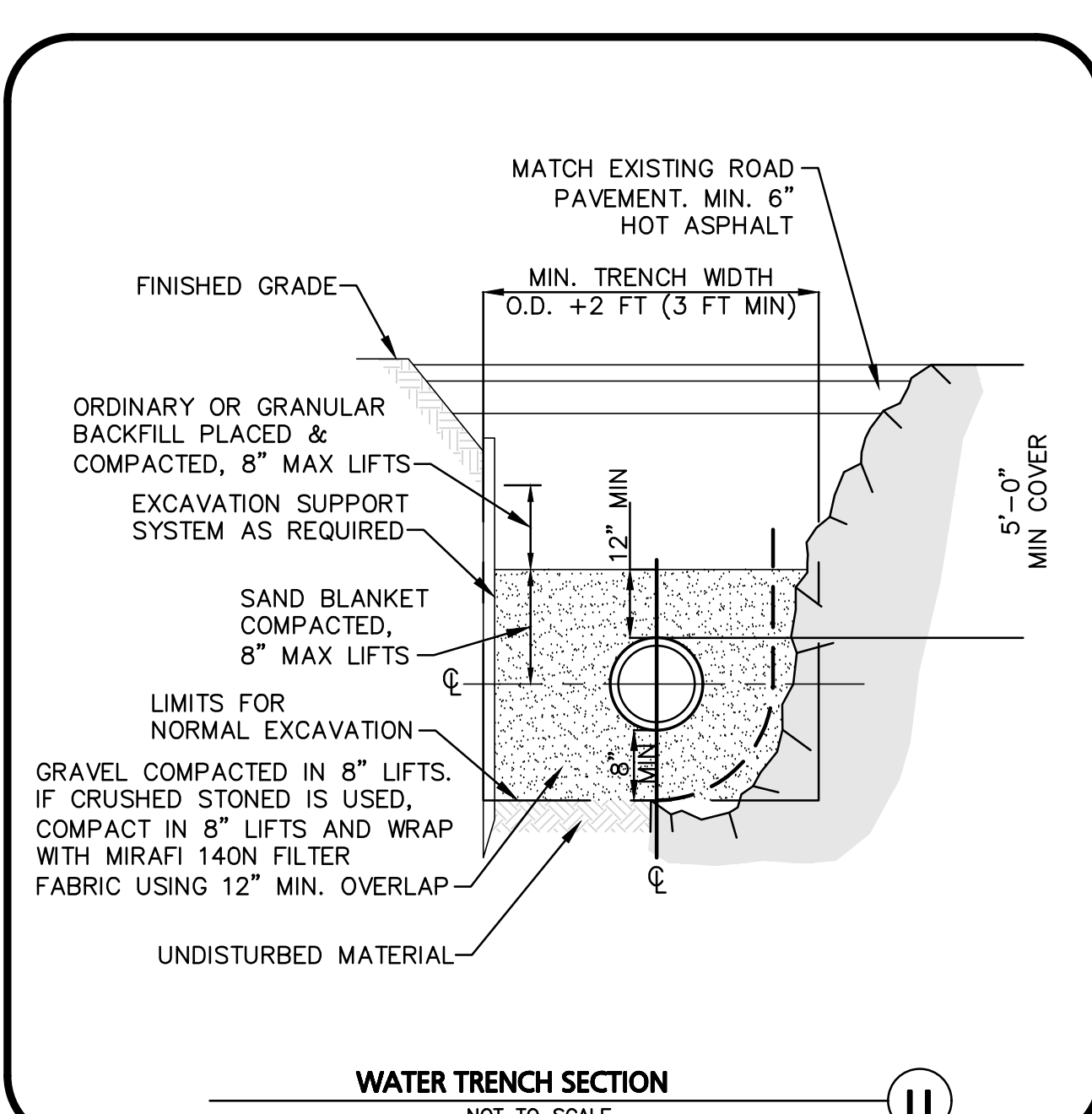
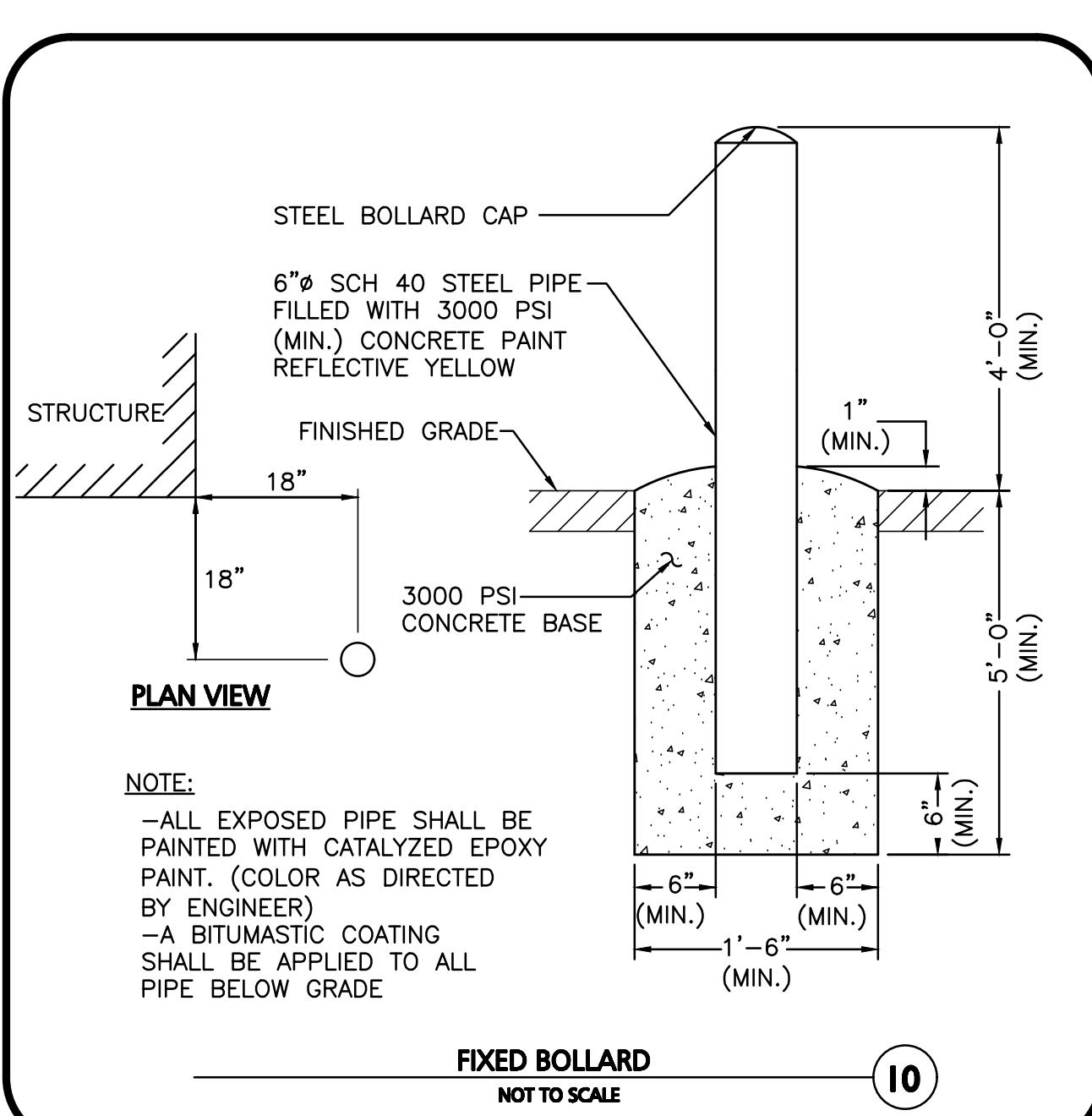
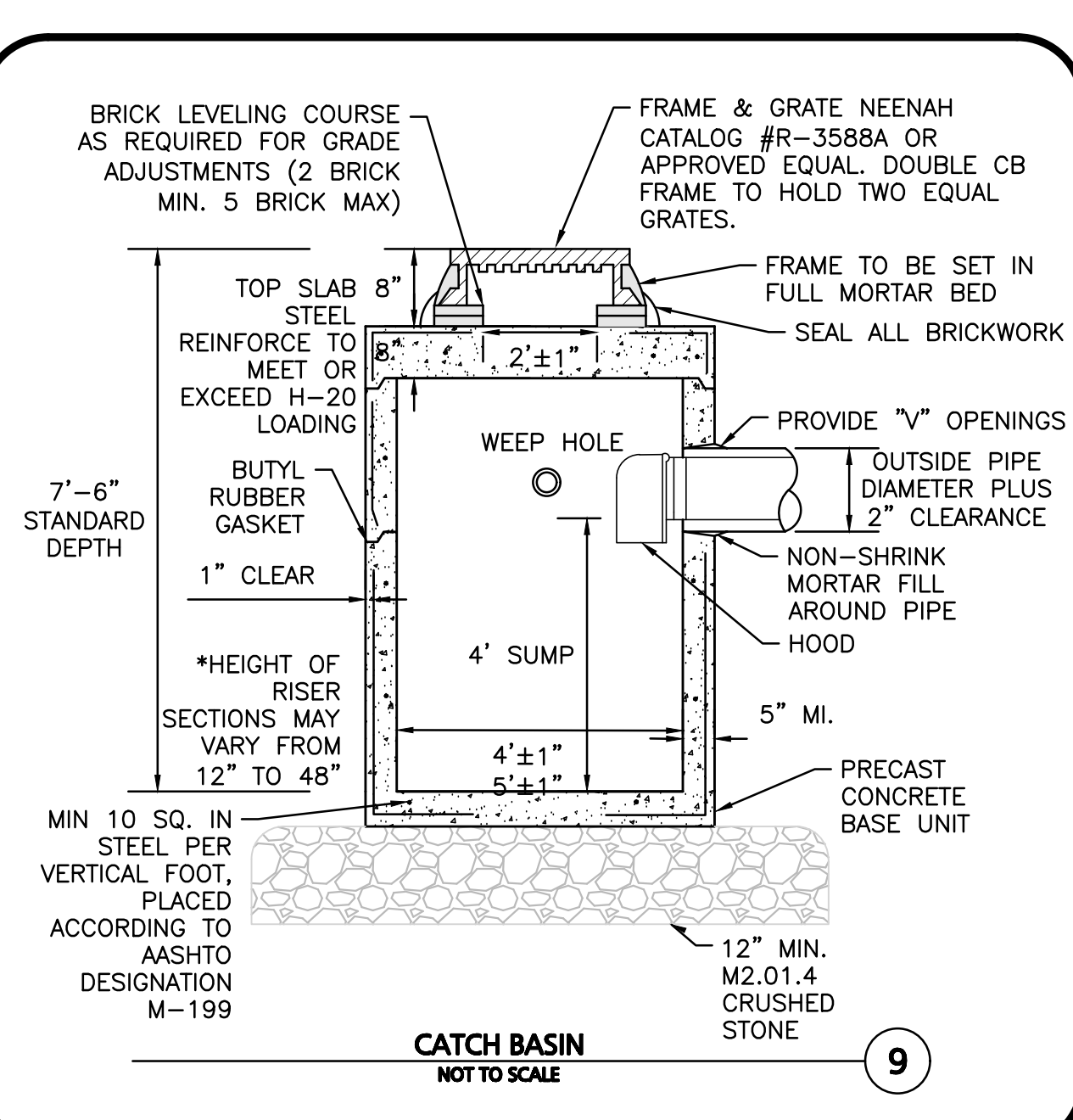
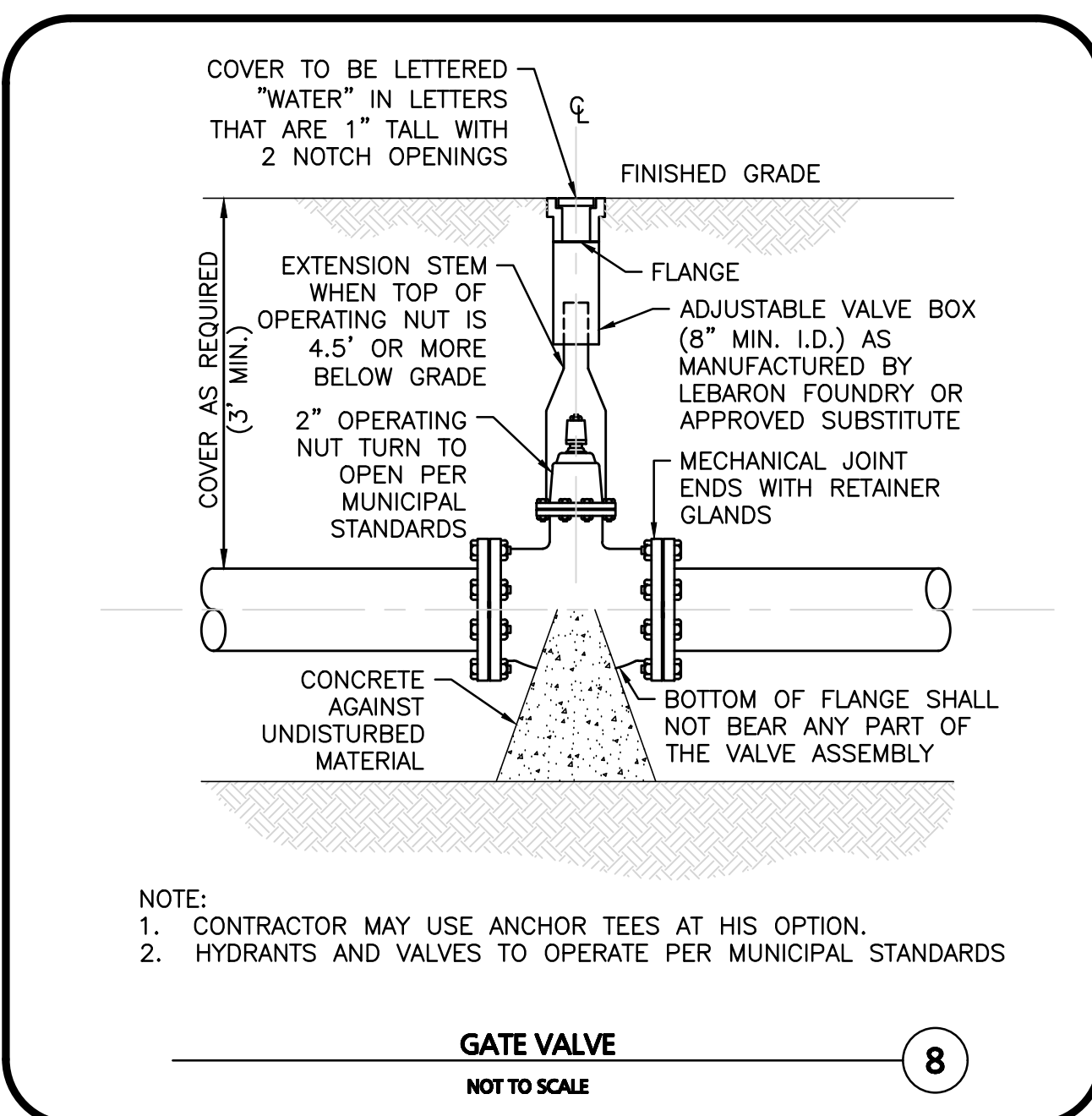
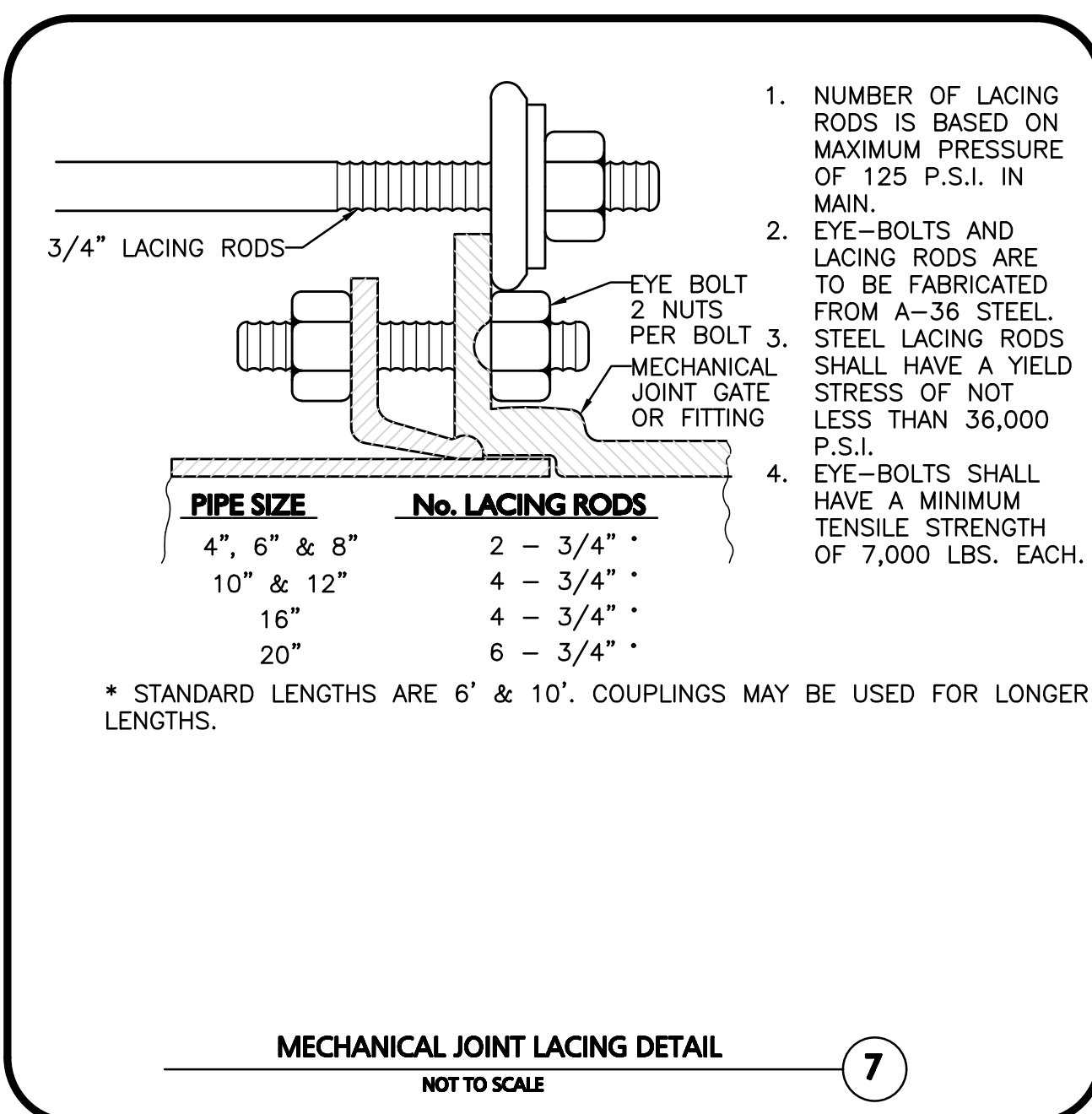
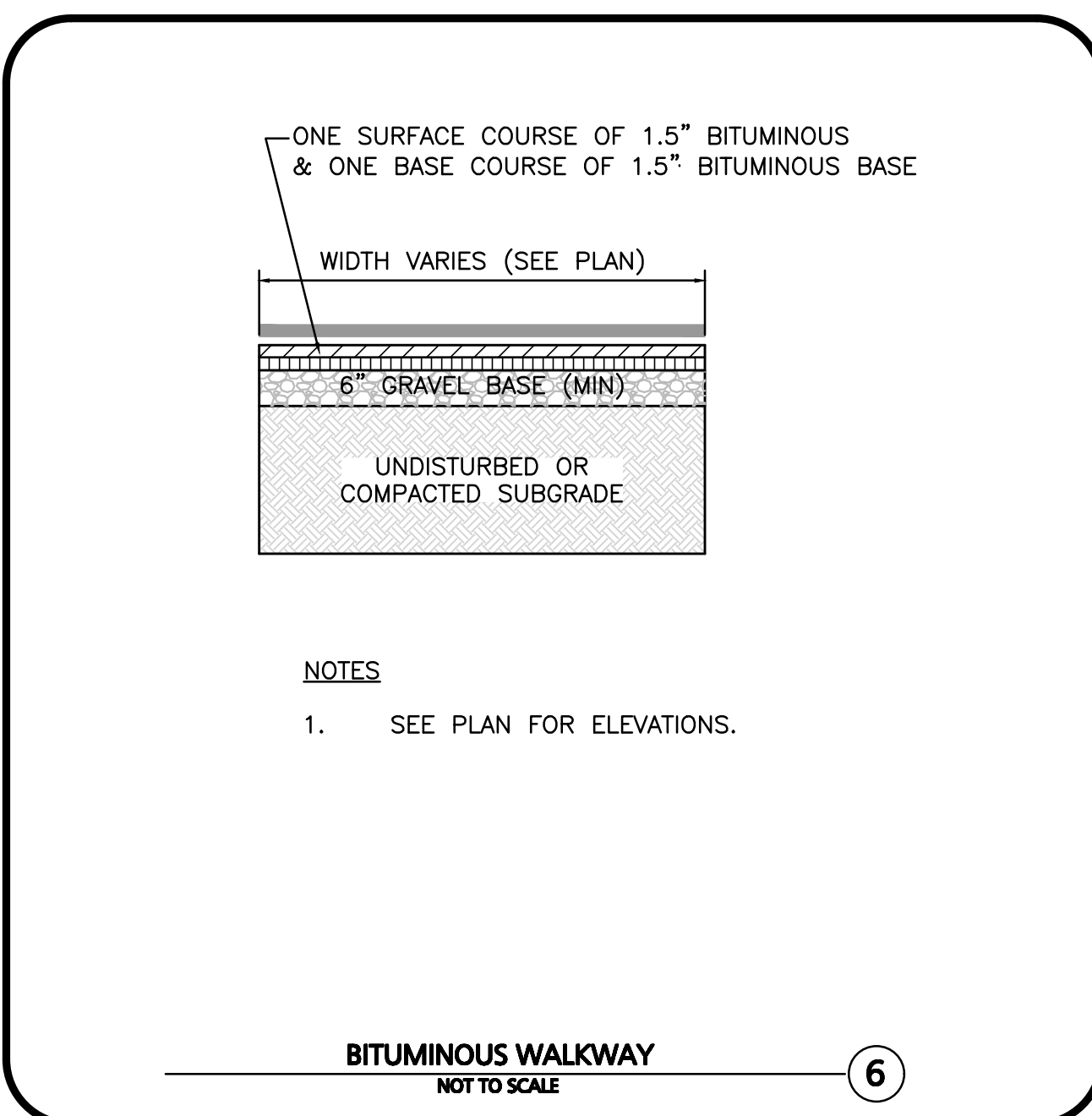
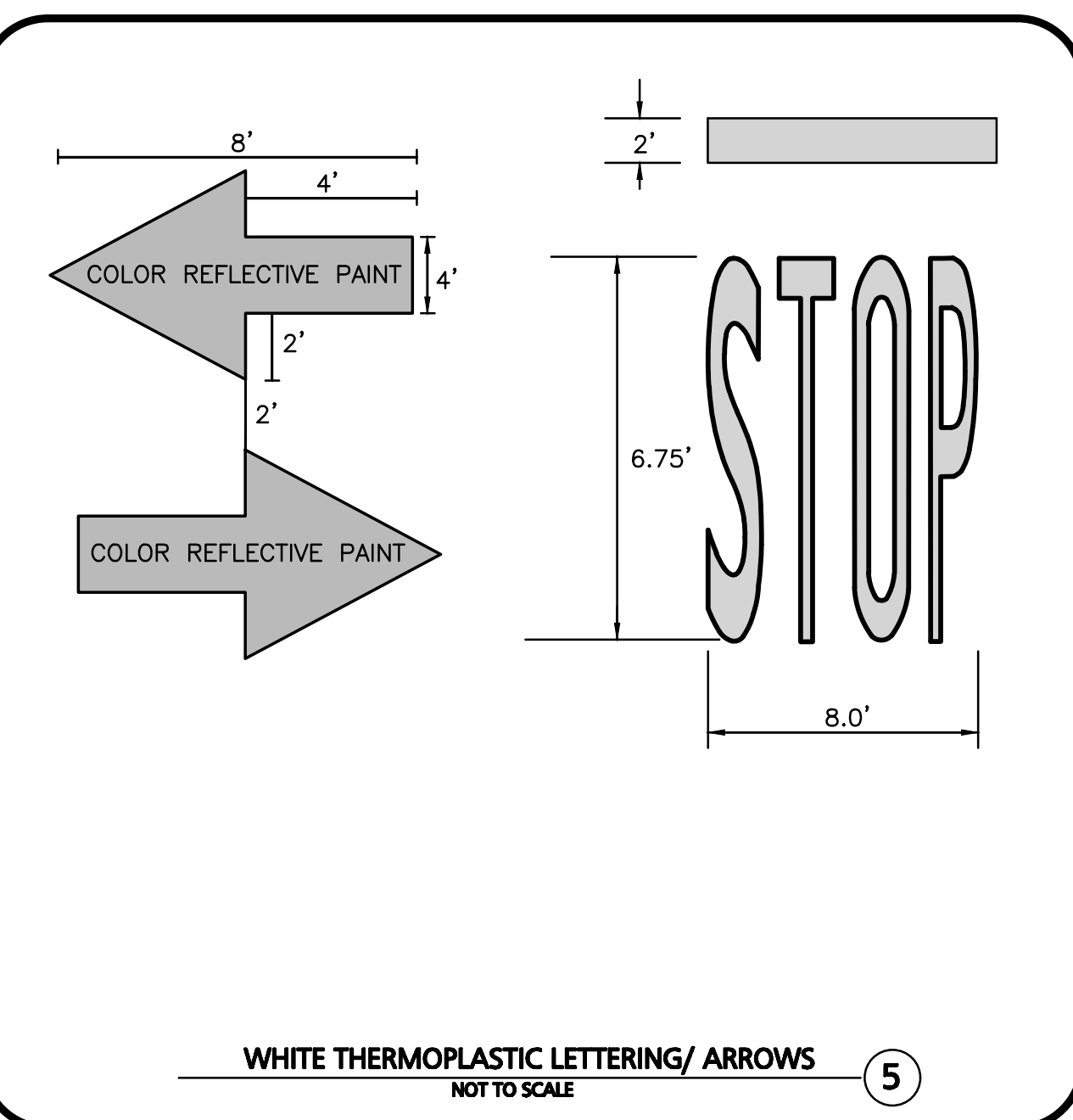
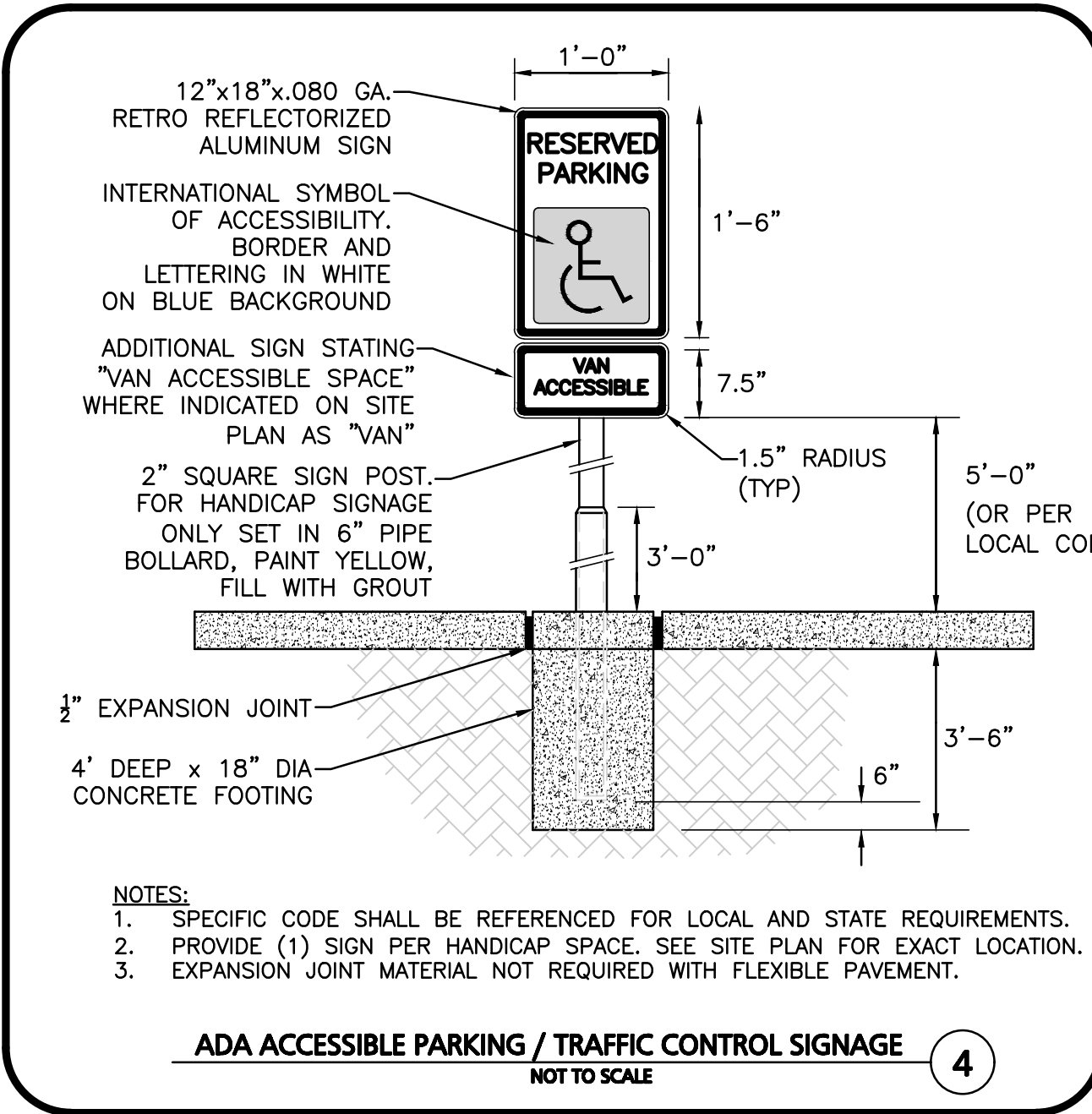
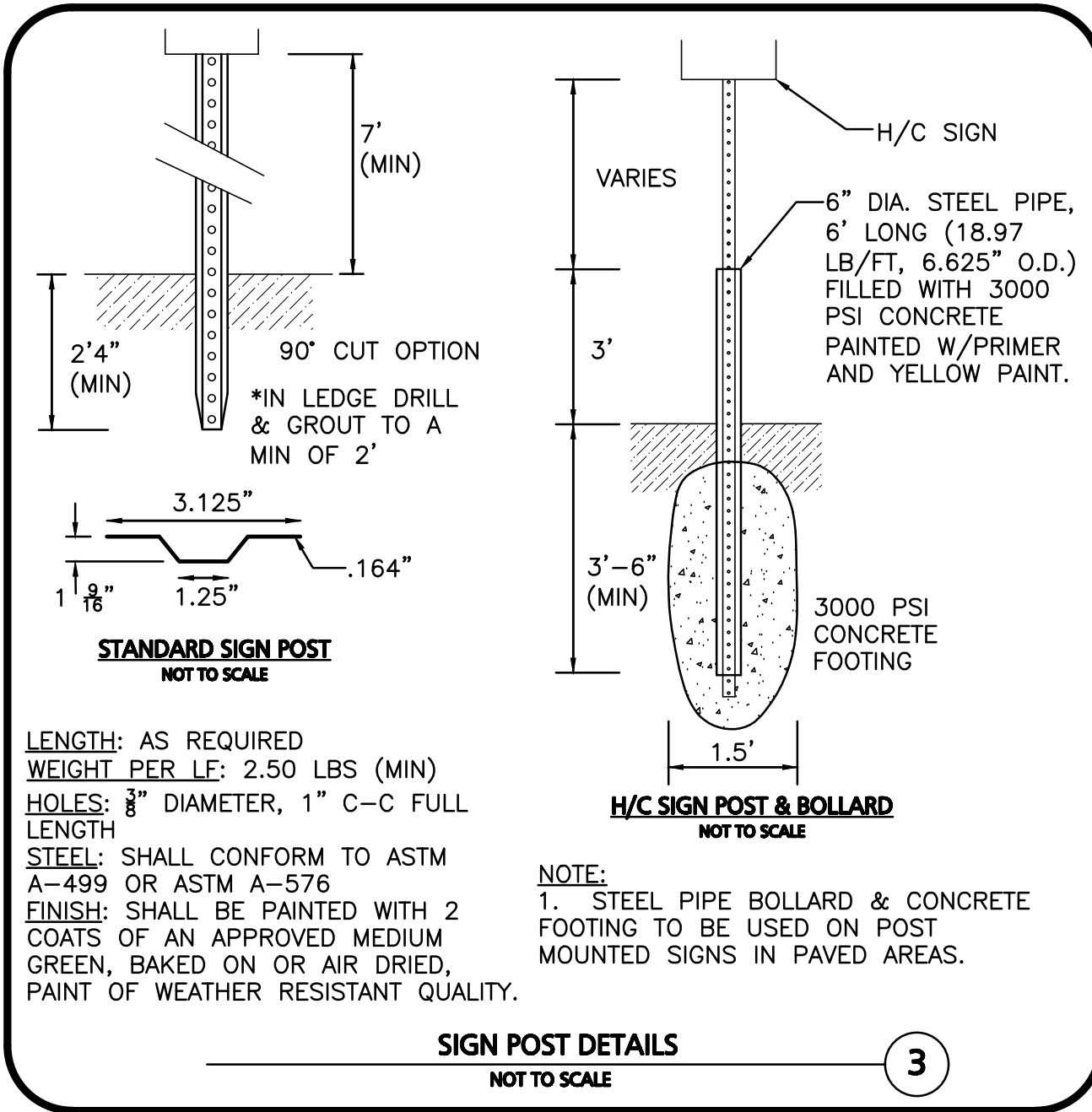
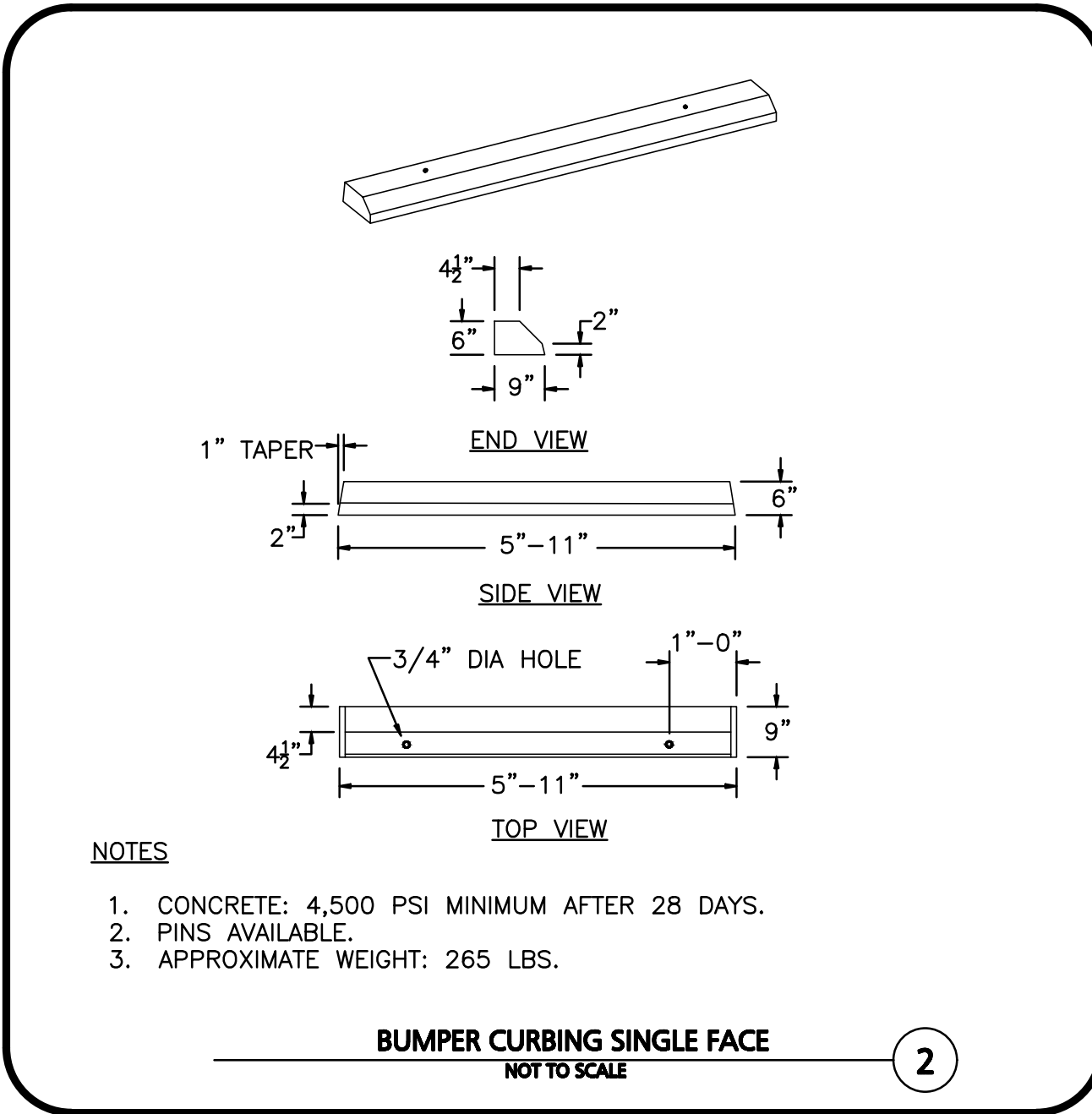
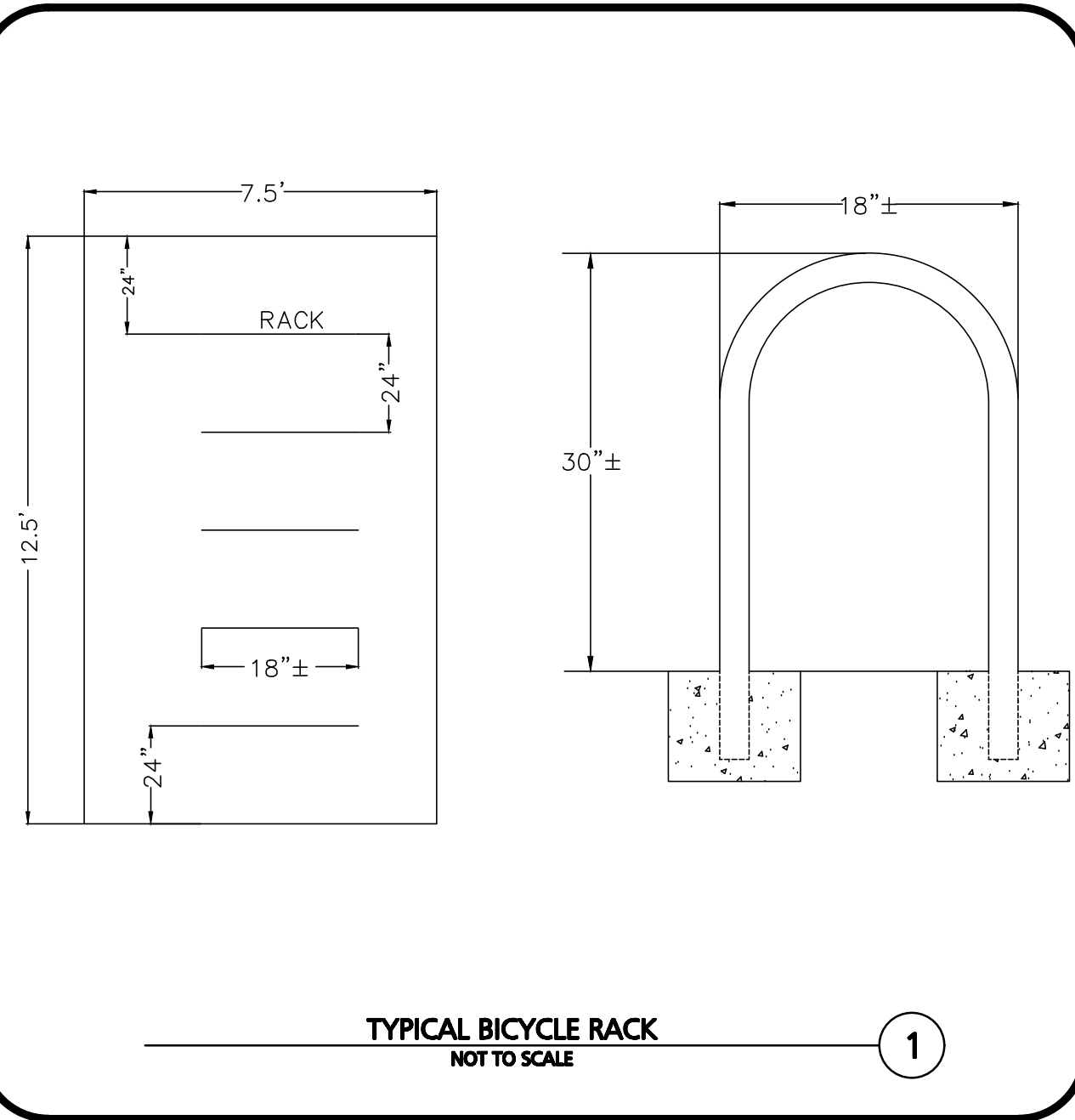
**PAVEMENT KEY CUT**  
NOT TO SCALE



**Trash Enclosure Details**  
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**ADA ACCESSIBLE CURB CUT AND TRANSITION**  
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PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

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258 MAIN STREET  
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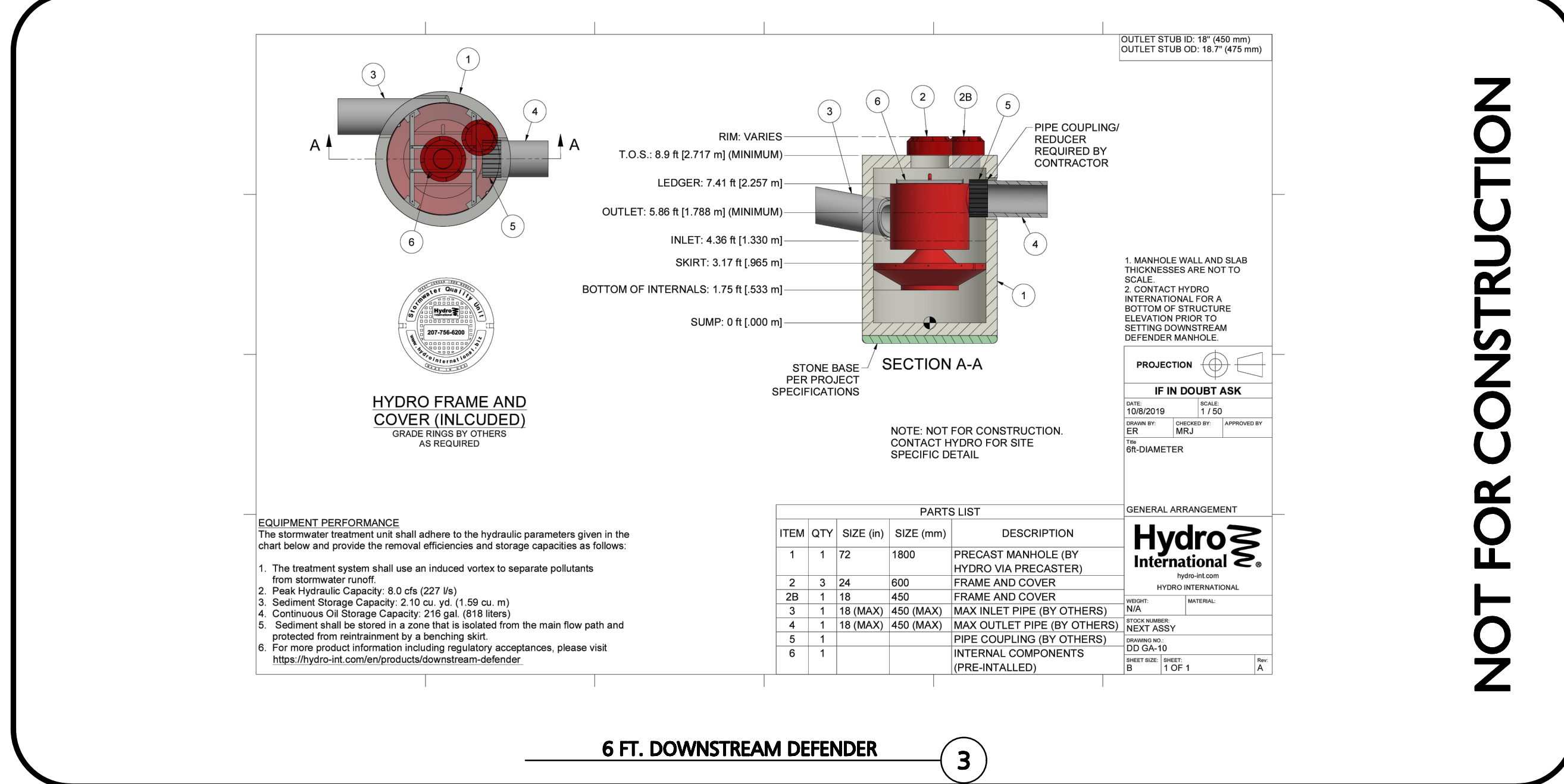
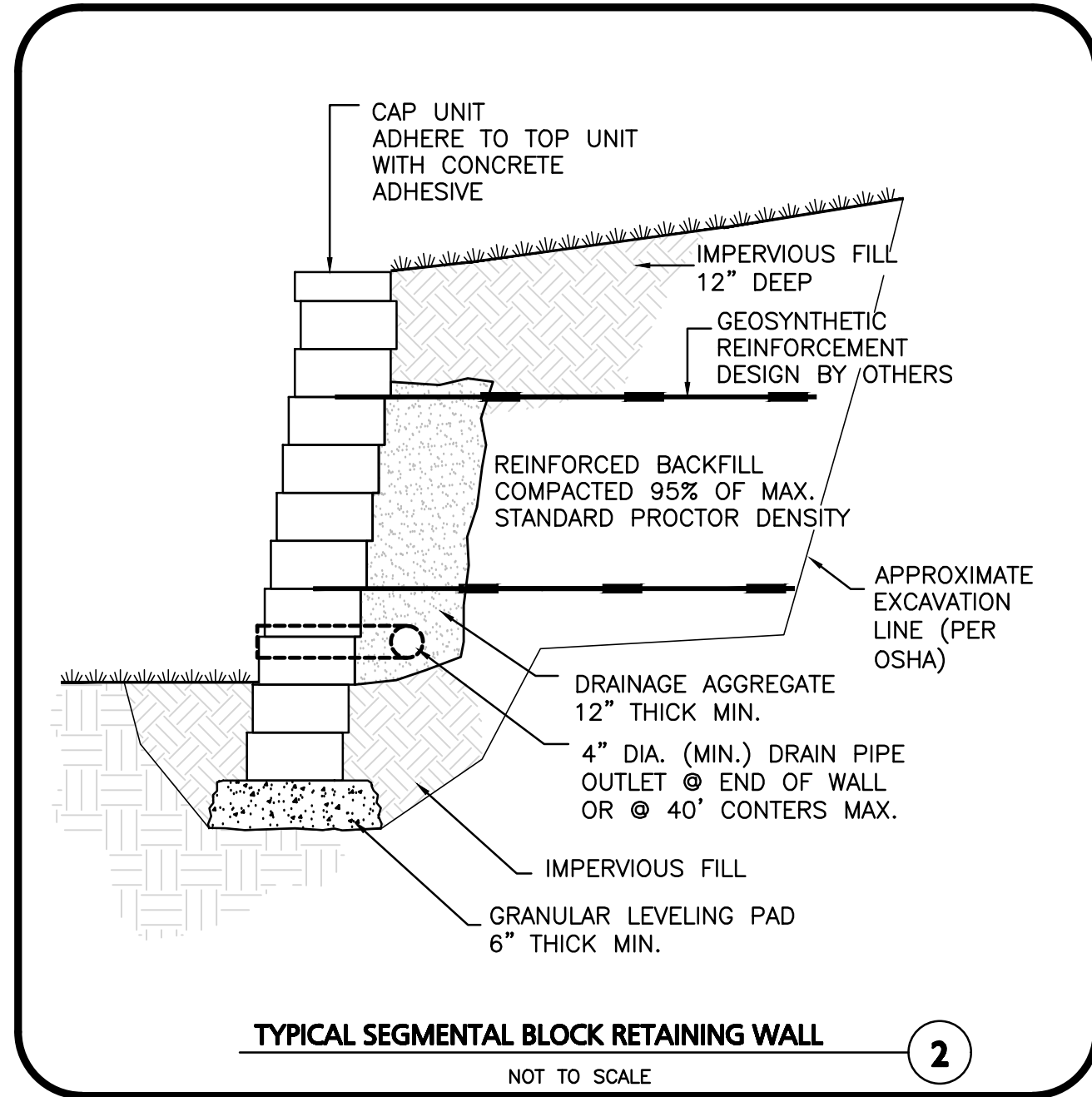
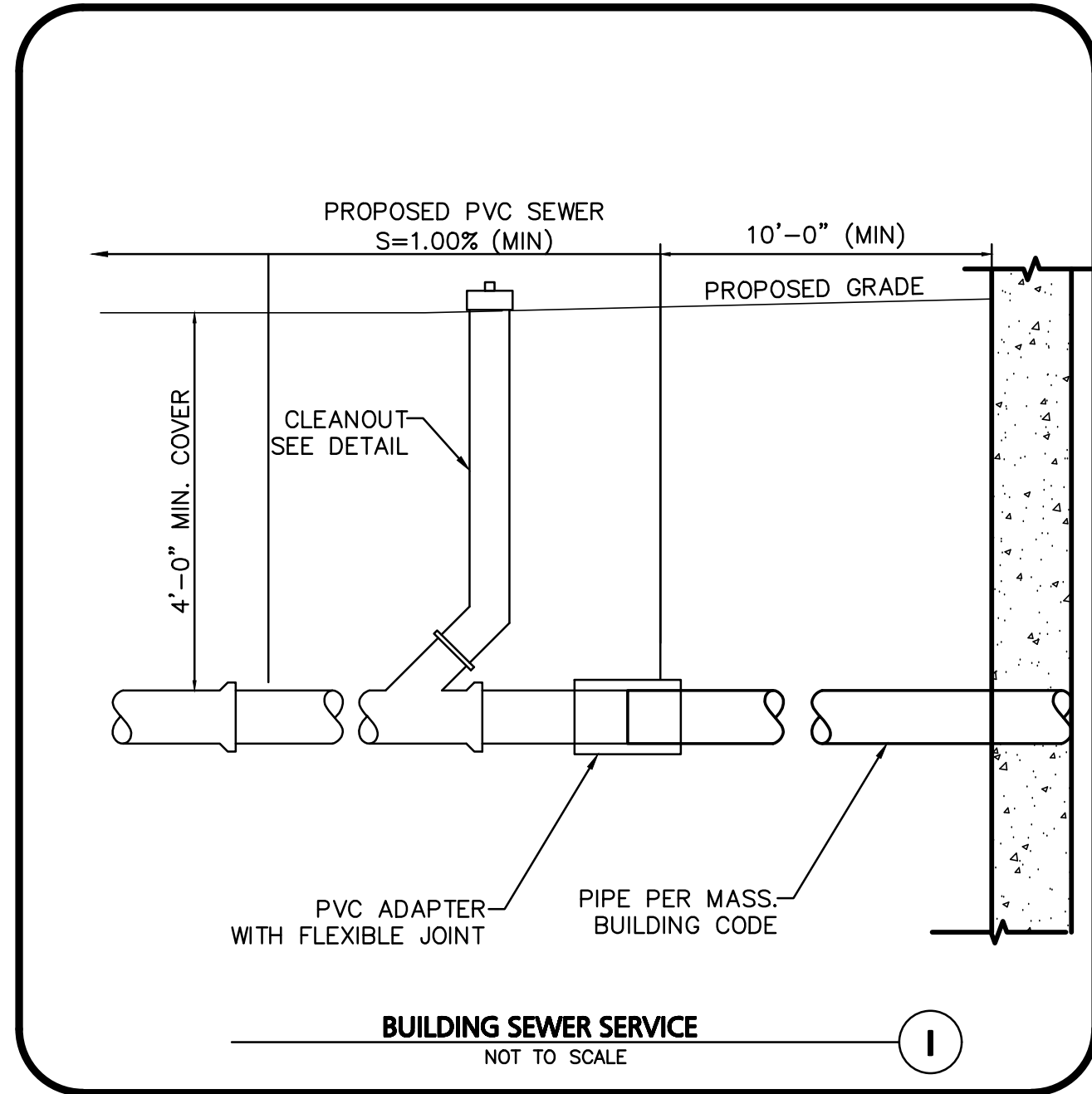
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PREPARED BY:

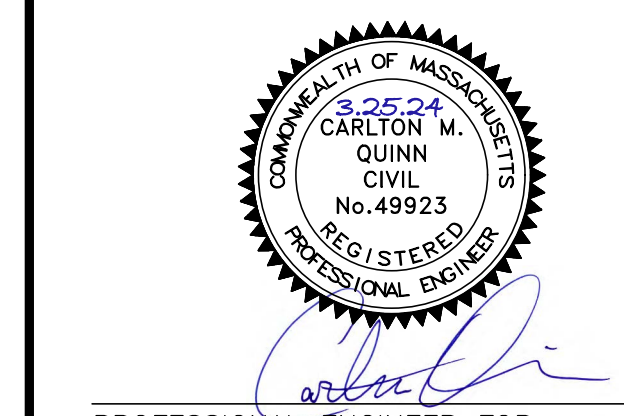
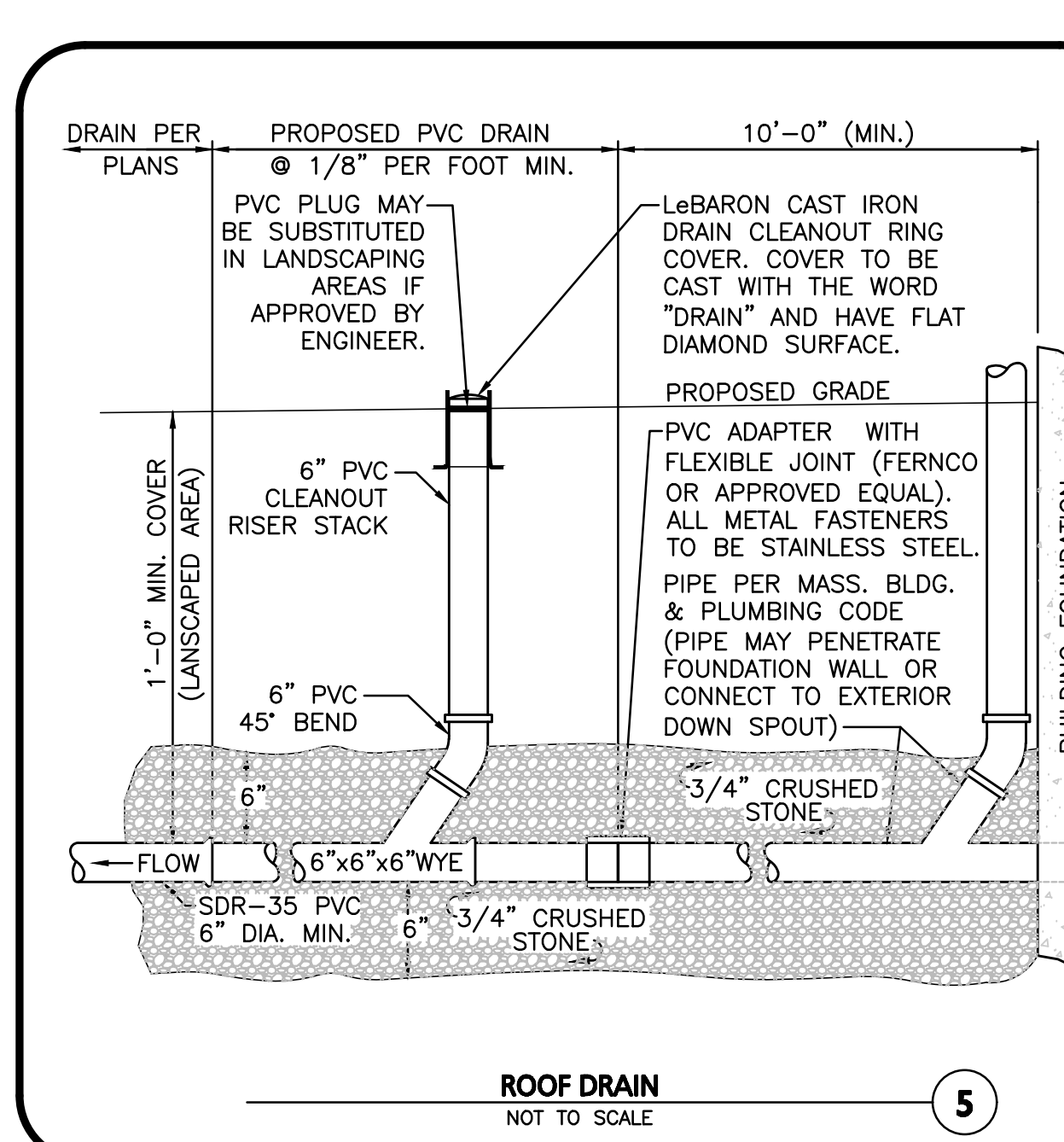
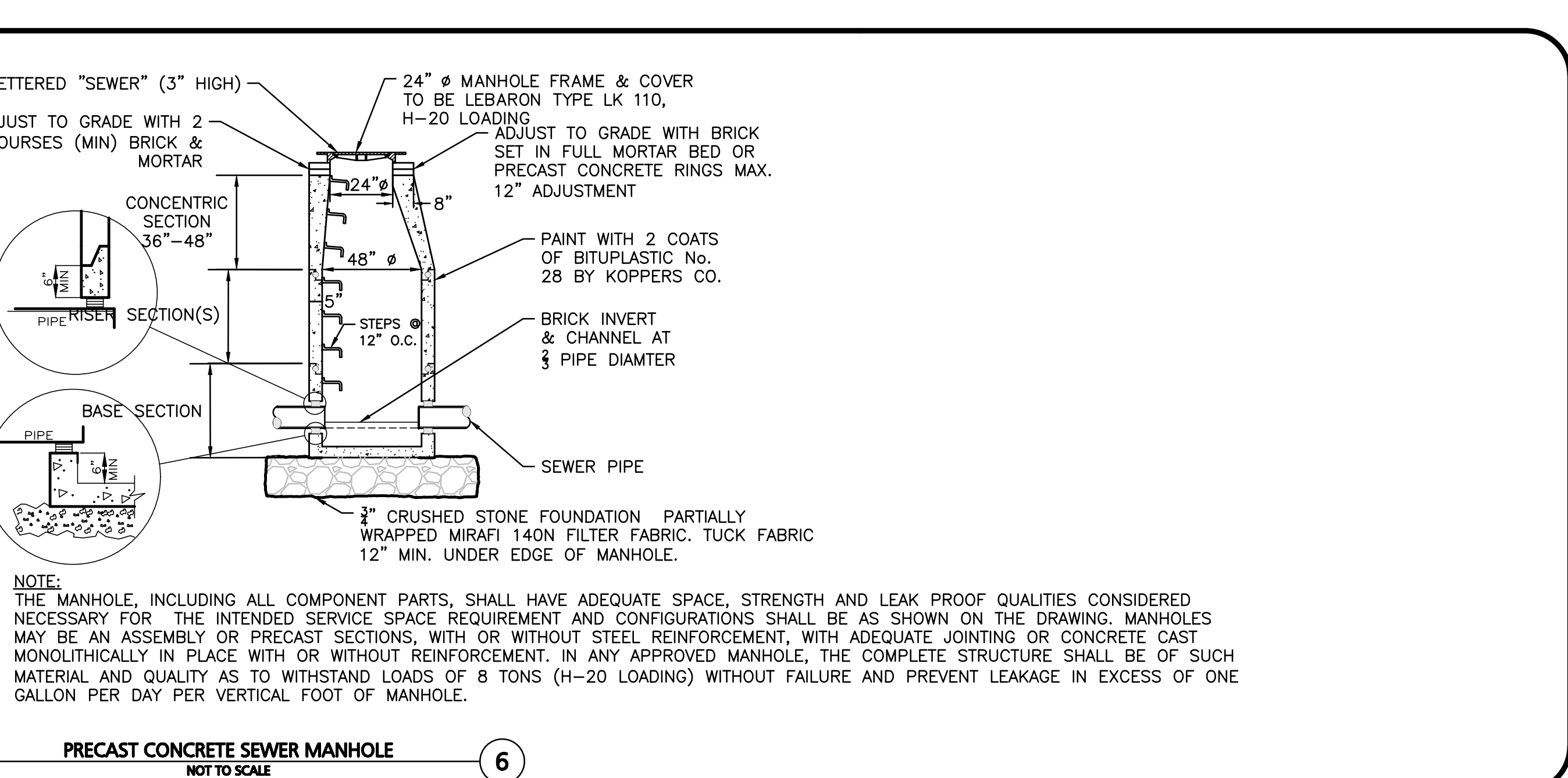
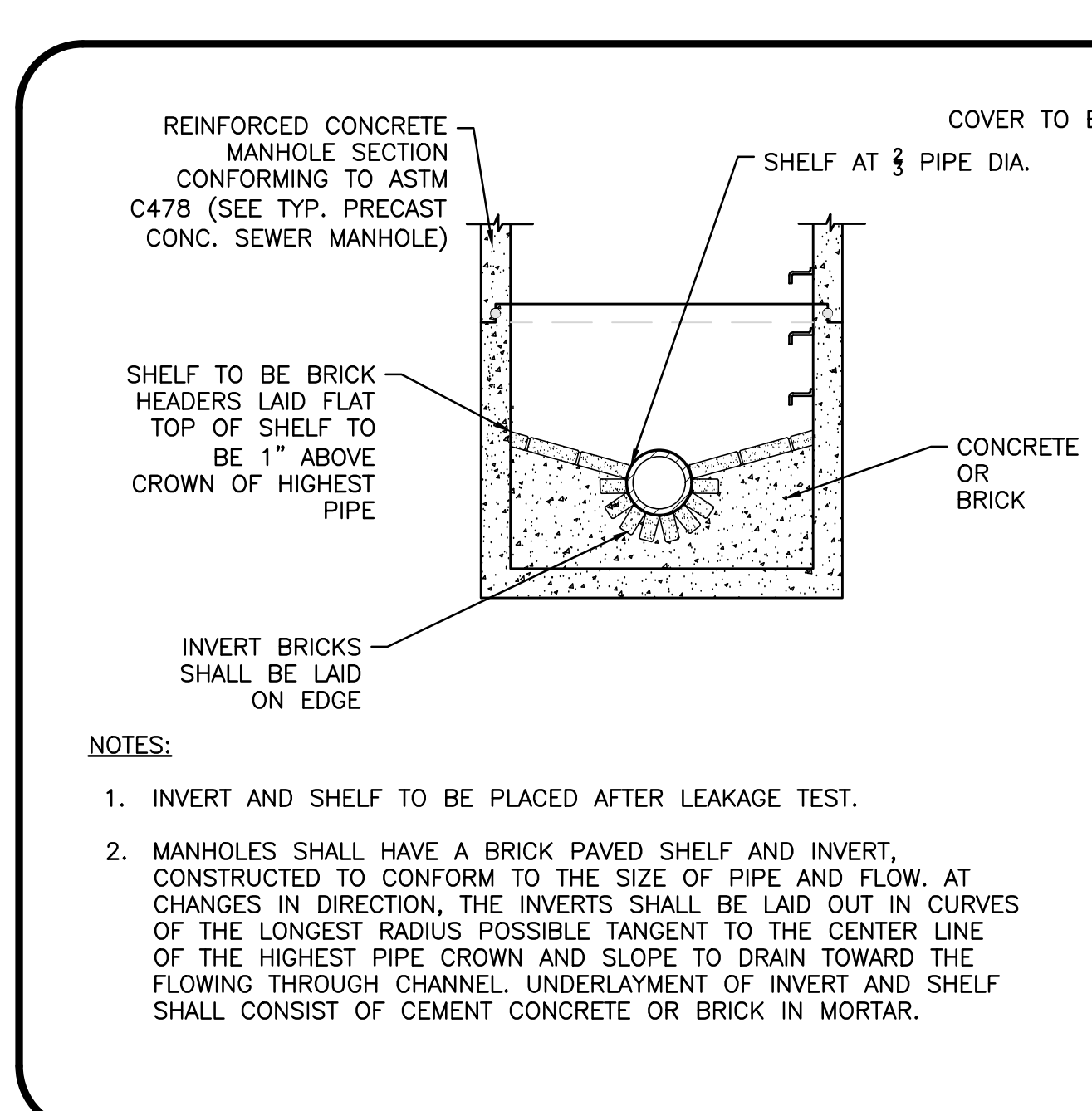
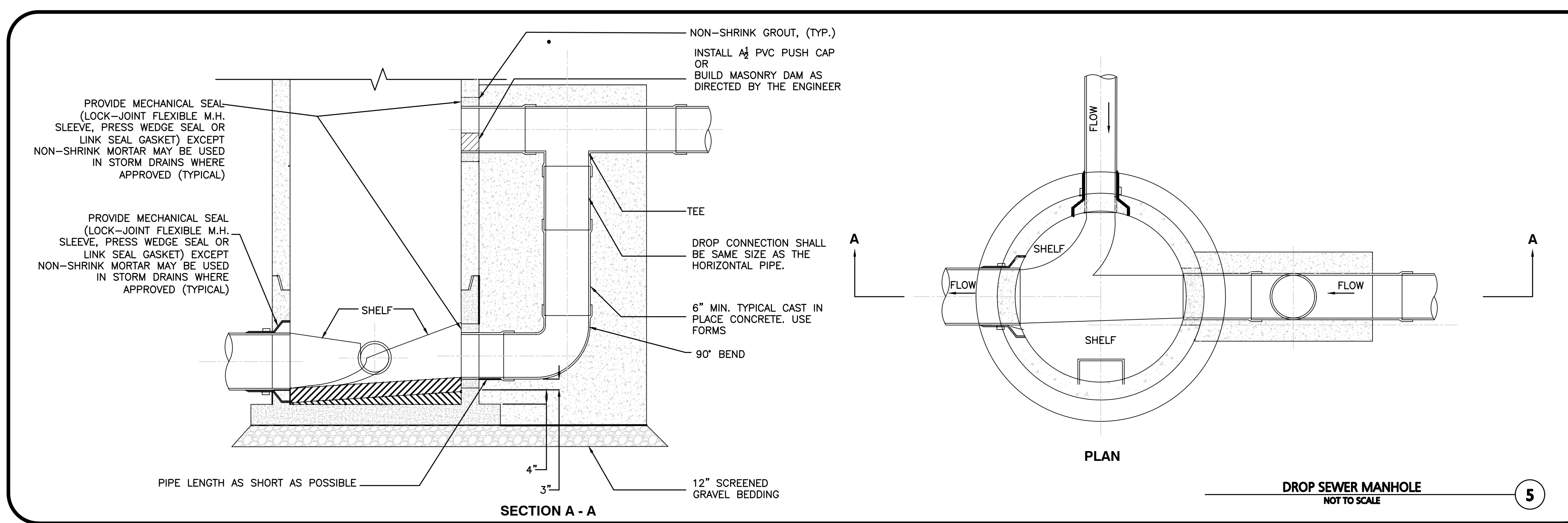
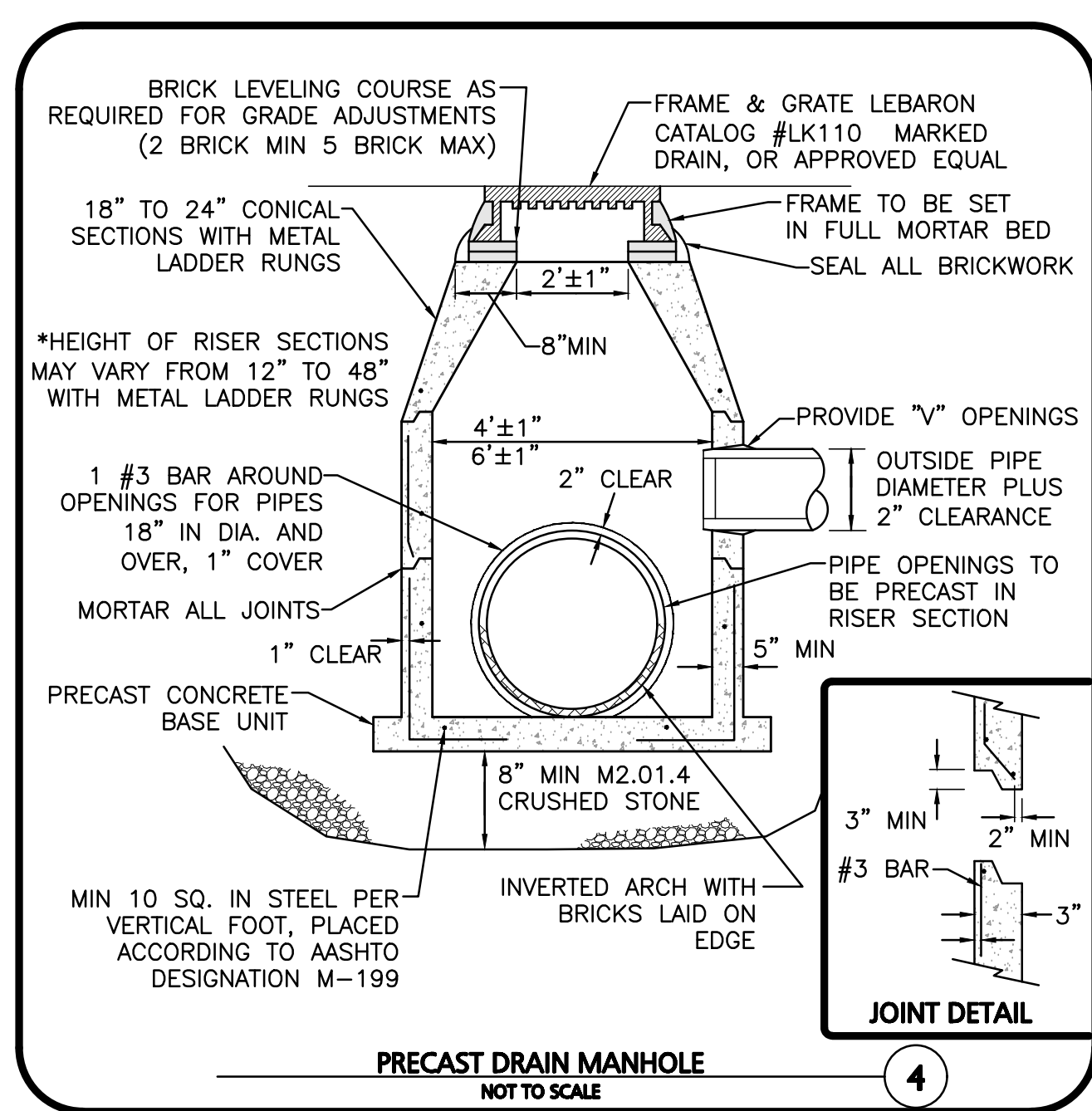
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DRAWING TITLE:	SHEET No.
DETAILS	C-503



**NOT FOR CONSTRUCTION**



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PEABODY, MA 01960



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DETAILS	C-504

### SC-310 STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH SC-310.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE OR POLYETHYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
  - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
  - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
  - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 400 LBS/FT<sup>3</sup>. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
  - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
  - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD. THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
  - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2922 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

SC-310 STORMTECH CHAMBER SPECIFICATION  
NOT TO SCALE 1

### IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-310 SYSTEM

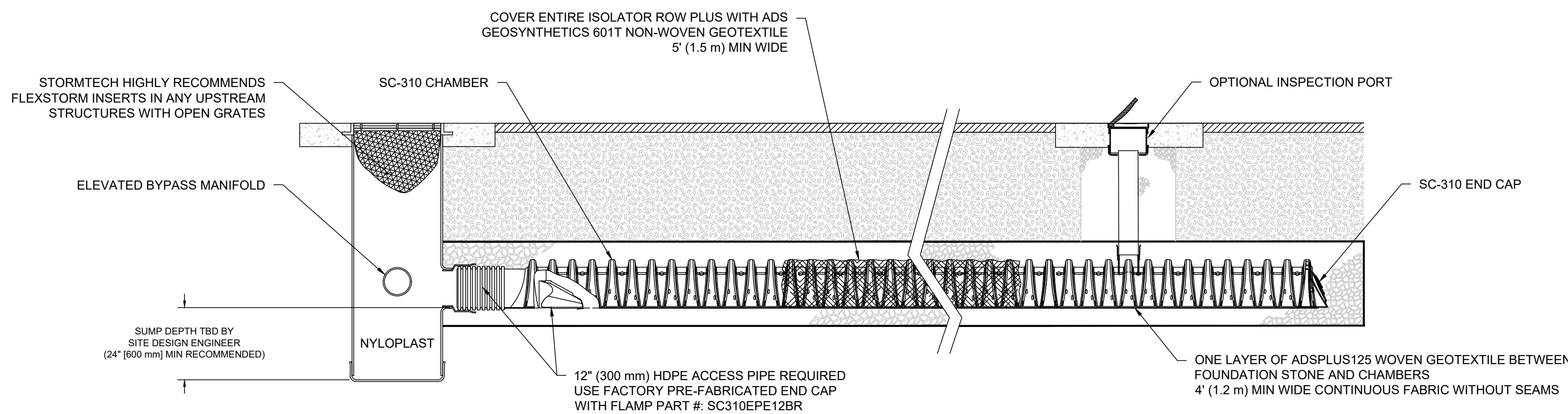
- STORMTECH SC-310 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE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

### NOTES FOR CONSTRUCTION EQUIPMENT

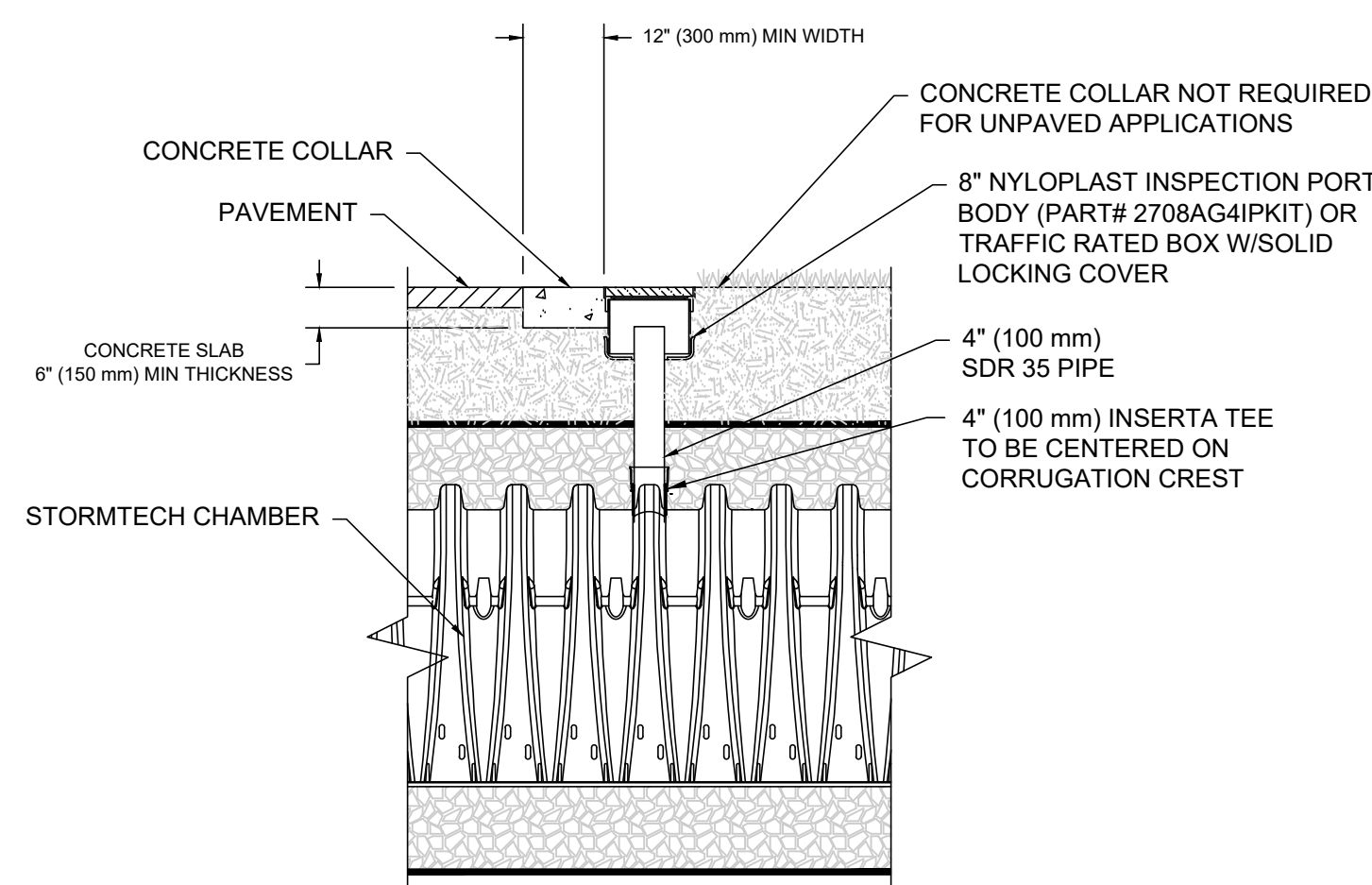
- STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- THE USE OF CONSTRUCTION EQUIPMENT OVER SC-310 & SC-740 CHAMBERS IS LIMITED:
  - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
  - NO RUBBER Tired LOADERS, DUMP TRUCKS, OR EXCAVATORS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

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

CONTACT STORMTECH AT 1-888-892-2894 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



SC-310 ISOLATOR ROW PLUS DETAIL  
NOT TO SCALE 2



NOTE: INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION CREST.

4" PVC INSPECTION PORT DETAIL (SC SERIES CHAMBER)  
NOT TO SCALE 3

### INSPECTION & MAINTENANCE

- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
- A.1. REMOVE OPEN LID ON NYLOPLAST IN-LINE DRAIN
- A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
- A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
- A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
- A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
- B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
- B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
- i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
- ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
- B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

### NOTES

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



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STRADA  
MIXED USE BUILDING  
258 MAIN STREET  
READING, MA

PROJECT NO. 2398-01A DATE: 10-05-2023

SCALE: DWG. NAME: C-2398-01A

DESIGNED BY: MTB CHECKED BY: CMQ

PREPARED BY:



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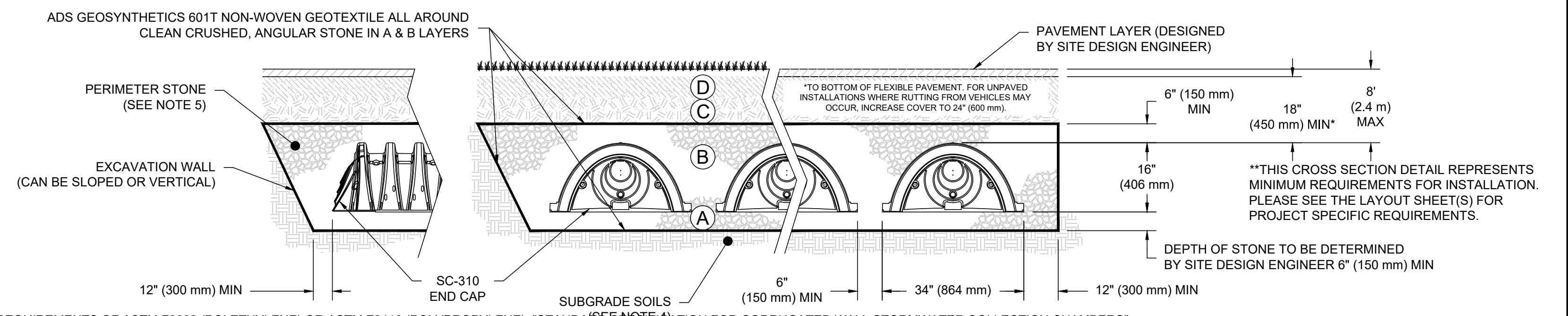
DRAWING TITLE: SHEET No.

DETAILS C-505

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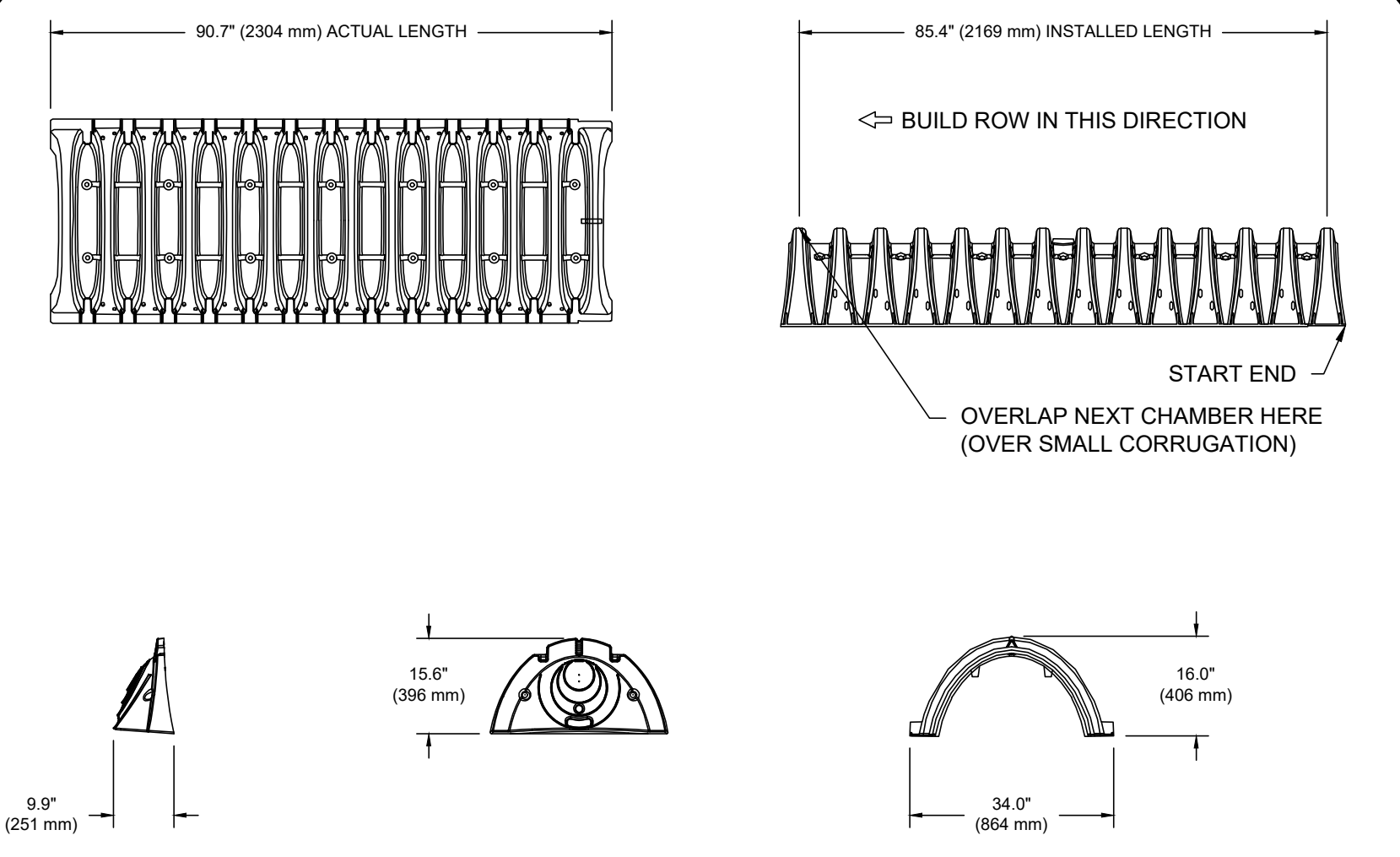
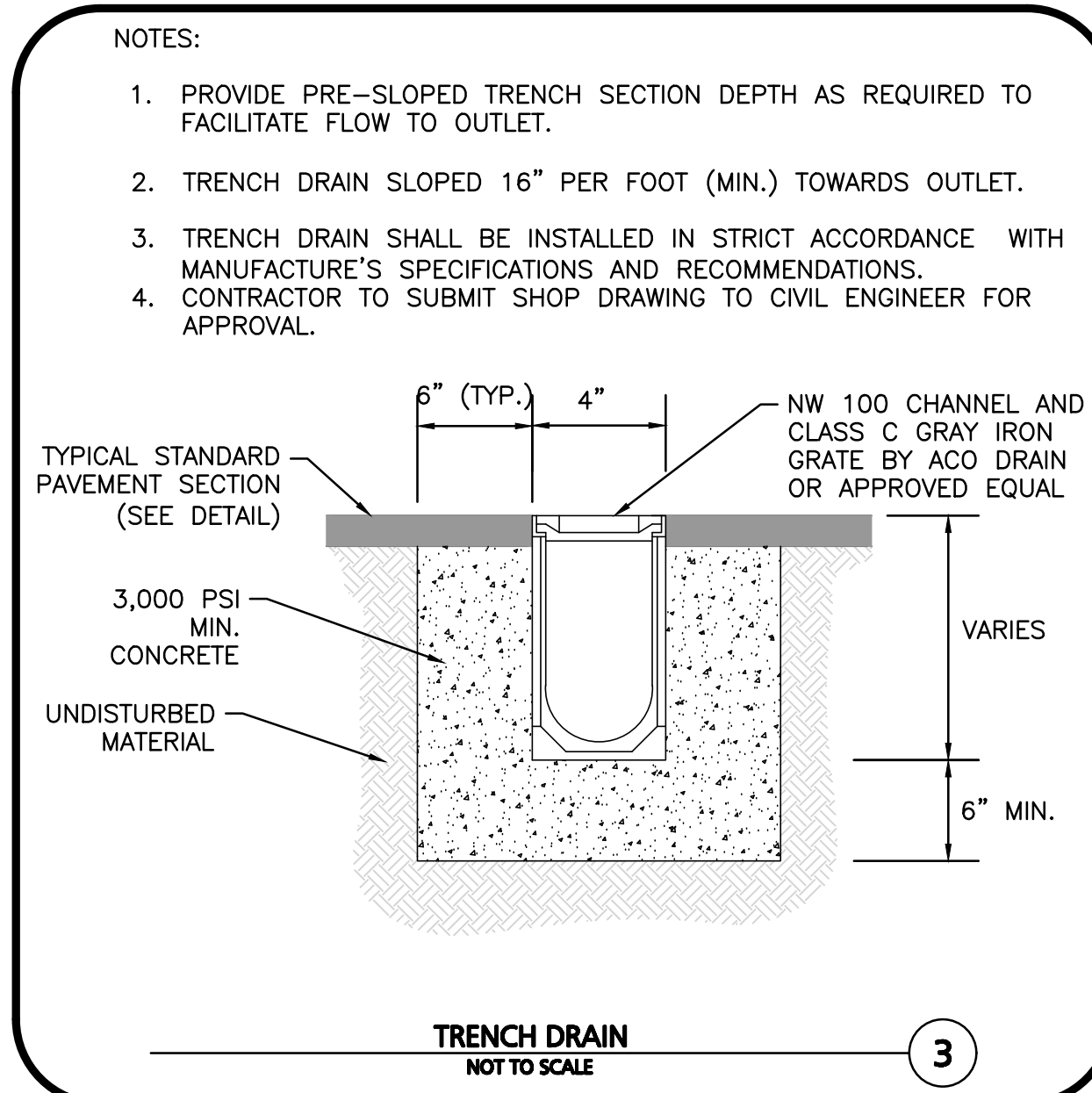
MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	AASHTO M145' A-1, A-2-4, A-3  OR AASHTO M43' 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN), DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43' 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M43' 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. <sup>2,3</sup>

PLEASE NOTE:  
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".  
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.  
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.  
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



**NOTES:**

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-310 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
  - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
  - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
  - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2922 SHALL BE GREATER THAN OR EQUAL TO 400 LBS/FT<sup>2</sup>. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.



**NOMINAL CHAMBER SPECIFICATIONS**

SIZE (W X H X INSTALLED LENGTH)	34.0" X 16.0" X 85.4"	(864 mm X 406 mm X 2169 mm)
CHAMBER STORAGE	14.7 CUBIC FEET	(0.42 m <sup>3</sup> )
MINIMUM INSTALLED STORAGE*	31.0 CUBIC FEET	(0.88 m <sup>3</sup> )
WEIGHT	35.0 lbs.	(16.8 kg)

\*ASSUMES 6" (152 mm) ABOVE, BELOW, AND BETWEEN CHAMBERS

PRE-FAB STUB AT BOTTOM OF END CAP WITH FLAMP END WITH "BR"  
PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"  
PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"  
PRE-CORED END CAPS END WITH "PC"

PART #	STUB	A	B	C
SC310EPE06T / SC310EPE06TPC	6" (150 mm)	9.6" (244 mm)	5.8" (147 mm)	---
SC310EPE06B / SC310EPE06BPC	---	---	---	0.5" (13 mm)
SC310EPE08T / SC310EPE08TPC	8" (200 mm)	11.9" (302 mm)	3.5" (89 mm)	---
SC310EPE08B / SC310EPE08BPC	---	---	---	0.6" (15 mm)
SC310EPE10T / SC310EPE10TPC	10" (250 mm)	12.7" (323 mm)	1.4" (36 mm)	---
SC310EPE10B / SC310EPE10BPC	---	---	---	0.7" (18 mm)
SC310EPE12B	12" (300 mm)	13.5" (343 mm)	---	0.9" (23 mm)
SC310EPE12BR	12" (300 mm)	13.5" (343 mm)	---	0.9" (23 mm)

ALL STUBS, EXCEPT FOR THE SC310EPE12B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

\* FOR THE SC310EPE12B THE 12" (300 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 0.25" (6 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

**SC-310 TECHNICAL SPECIFICATIONS**  
NOT TO SCALE



PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
B	3/25/2024	REVISED PER TOWN COMMENTS
A	2/29/2024	REVISED PER TOWN COMMENTS

APPLICANT/OWNER:  
BLVD READING, LLC  
c/o SAVERIO FULCINITI  
1 SYLVAN STREET  
PEABODY, MA 01960



PROJECT NO. 2398-01A DATE: 10-05-2023  
SCALE: AS SHOWN DWG. NAME: C-2398-01A  
DESIGNED BY: MTB CHECKED BY: CMQ



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DRAWING TITLE: DETAILS SHEET No. C-506

## SC-740 STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH SC-740.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
  - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
  - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
  - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 550 LBS/FT<sup>3</sup>. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
  - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
  - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD. THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
  - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

SC-740 STORMTECH CHAMBER SPECIFICATION  
NOT TO SCALE 1

## IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-740 SYSTEM

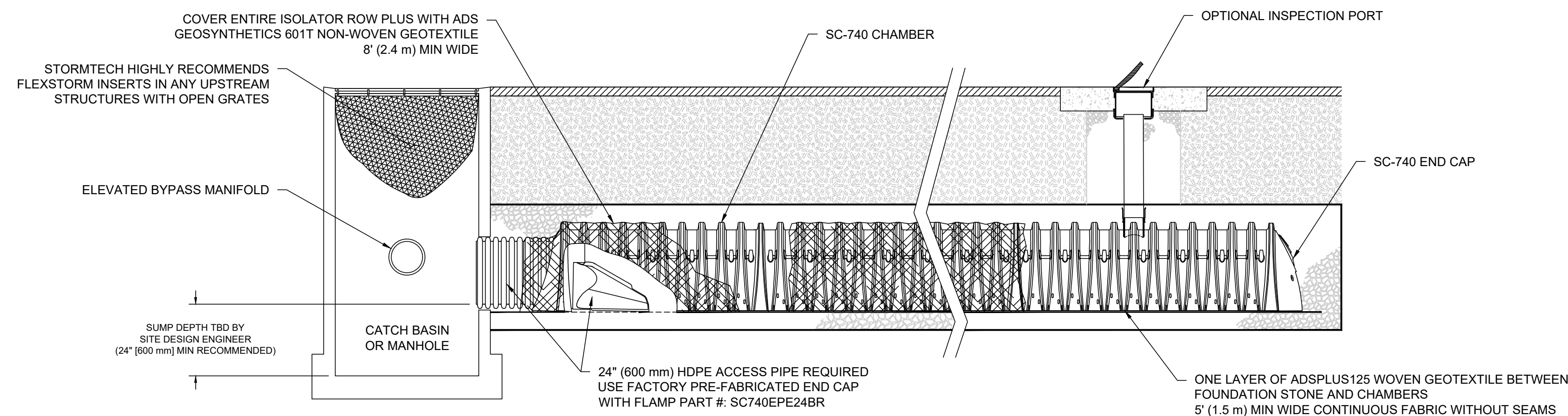
- STORMTECH SC-740 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE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

## NOTES FOR CONSTRUCTION EQUIPMENT

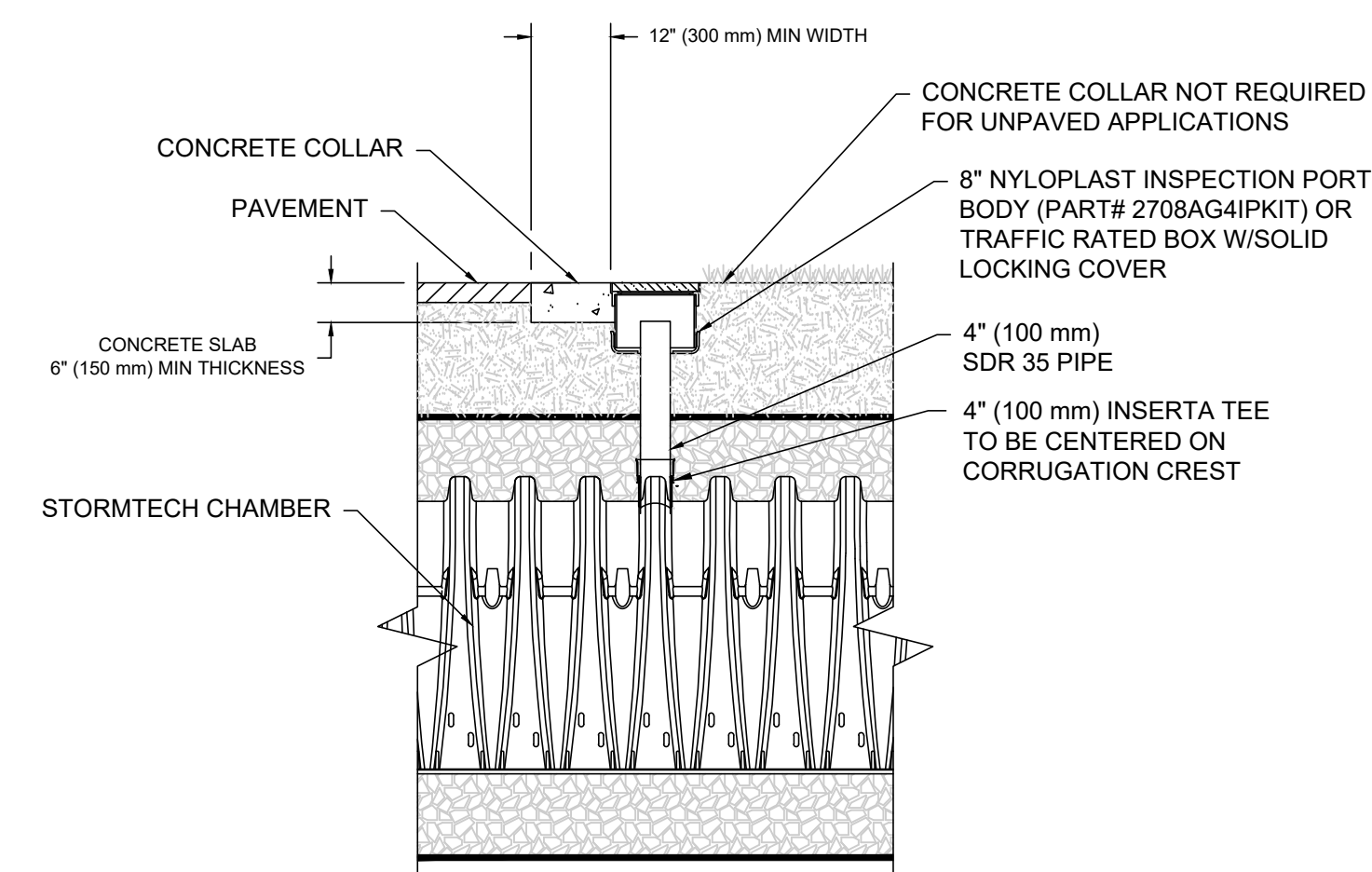
- STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- THE USE OF CONSTRUCTION EQUIPMENT OVER SC-740 CHAMBERS IS LIMITED:
  - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
  - NO RUBBER Tired LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED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

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

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



SC-740 ISOLATOR ROW PLUS DETAIL  
NOT TO SCALE 2



NOTE:  
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION CREST.

4\"/>

## INSPECTION & MAINTENANCE

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

## NOTES

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



PROFESSIONAL ENGINEER FOR  
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
B	3/25/2024	REVISED PER TOWN COMMENTS
A	2/29/2024	REVISED PER TOWN COMMENTS

APPLICANT/OWNER:  
BLVD READING, LLC  
c/o SAVERIO FULCINITI  
1 SYLVAN STREET  
PEABODY, MA 01960

PROJECT:

STRADA  
MIXED USE BUILDING  
258 MAIN STREET  
READING, MA

PROJECT NO.	2398-01A	DATE:	10-05-2023
SCALE:		DWG. NAME:	C-2398-01A
DESIGNED BY:	MTB	CHECKED BY:	CMQ

PREPARED BY:

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ASSOCIATES, INC.

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DRAWING TITLE:	SHEET No.
DETAILS	C-507

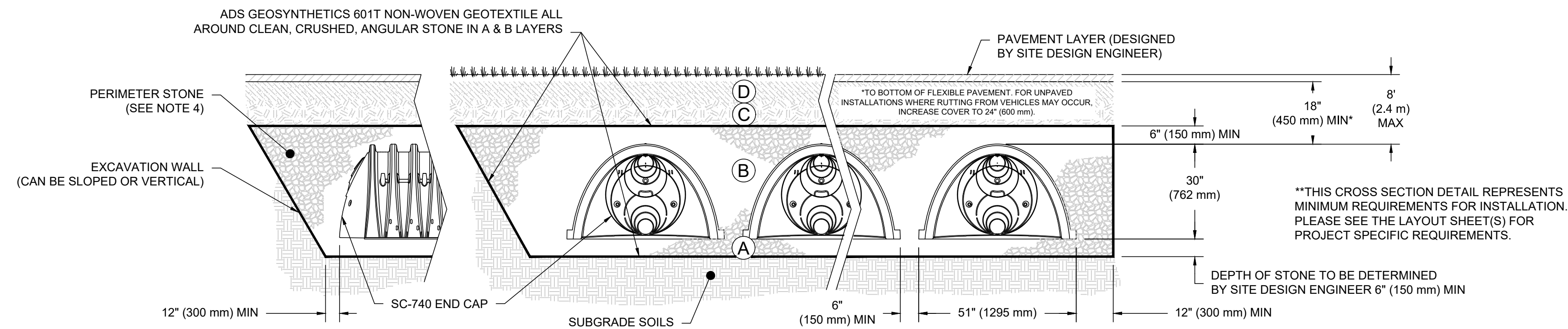
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## ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

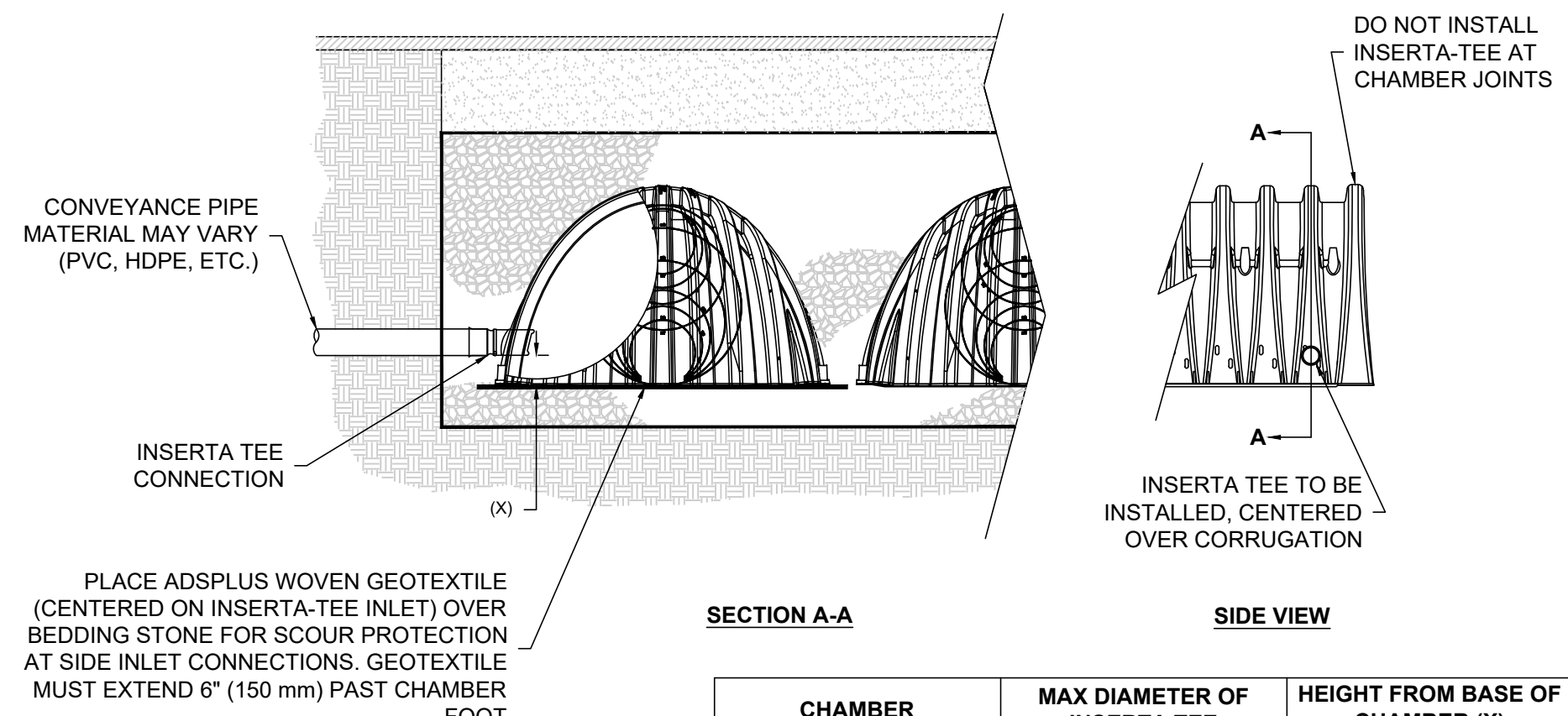
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### NOTES:

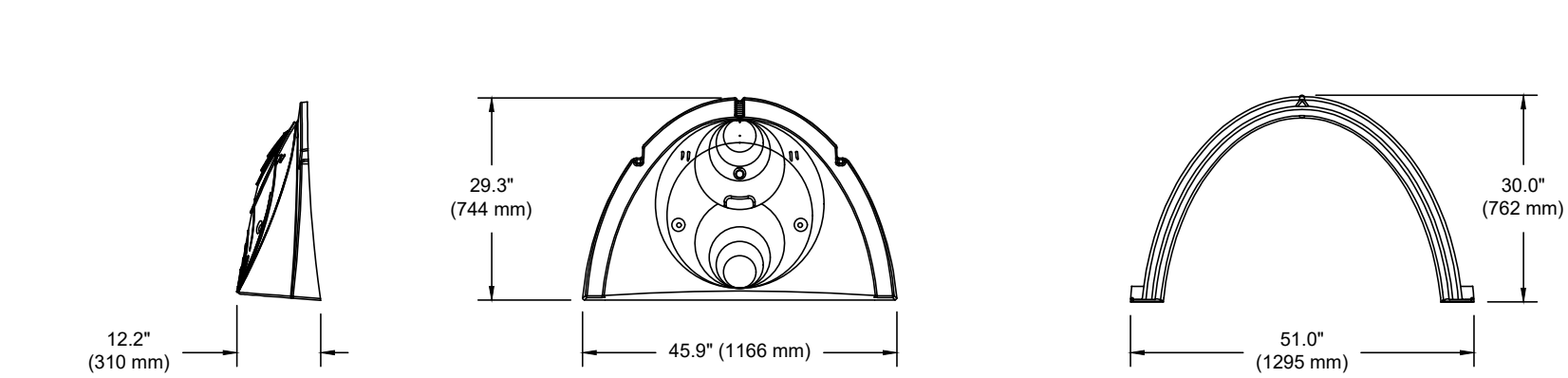
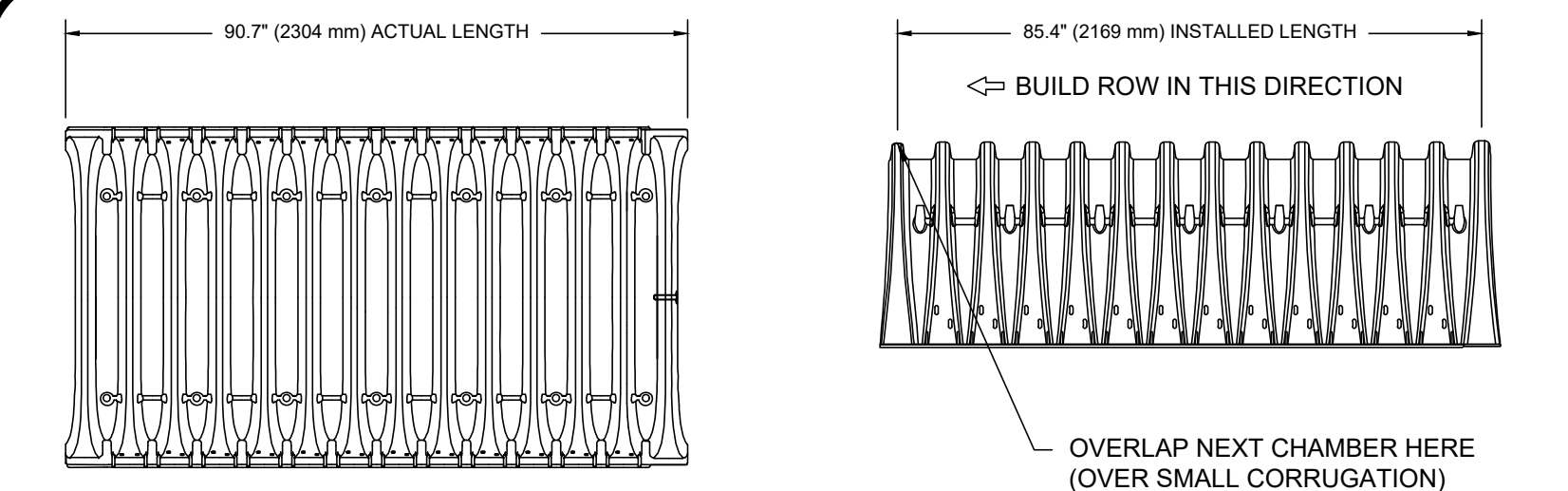
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- SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
  - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
  - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
  - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/FT<sup>2</sup>%, AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.



- NOTES:
- PART NUMBERS WILL VARY BASED ON INLET PIPE MATERIALS. CONTACT STORMTECH FOR MORE INFORMATION.
  - CONTACT ADS ENGINEERING SERVICES IF INSERTA TEE INLET MUST BE RAISED AS NOT ALL INVERTS ARE POSSIBLE.

CHAMBER	MAX DIAMETER OF INSERTA TEE	HEIGHT FROM BASE OF CHAMBER (X)
SC-310	6" (150 mm)	4" (100 mm)
SC-740	10" (250 mm)	4" (100 mm)
DC-780	10" (250 mm)	4" (100 mm)
MC-3500	12" (300 mm)	6" (150 mm)
MC-4500	12" (300 mm)	8" (200 mm)
MC-7200	12" (300 mm)	8" (200 mm)

INSERTA TEE FITTINGS AVAILABLE FOR SDR 26, SDR 35, SCH 40 IPS GASKETED & SOLVENT WELD, N-12, HP STORM, C-900 OR DUCTILE IRON



SIZE (W X H X INSTALLED LENGTH)	51.0" X 30.0" X 85.4"	(1295 mm X 762 mm X 2169 mm)
CHAMBER STORAGE	45.9 CUBIC FEET	(1.30 m <sup>3</sup> )
MINIMUM INSTALLED STORAGE*	74.9 CUBIC FEET	(2.12 m <sup>3</sup> )
WEIGHT	75.0 lbs.	(33.6 kg)

\*ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS

- PRE-FAB STUB AT BOTTOM OF END CAP WITH FLAMP END WITH "BR"
- PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
- PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
- PRE-CORED END CAPS END WITH "PC"

PART #	STUB	A	B	C
SC740EPE06T / SC740EPE06TPC	6" (150 mm)	10.9" (277 mm)	18.5" (470 mm)	---
SC740EPE06B / SC740EPE06BPC	---	---	---	0.5" (13 mm)
SC740EPE08T / SC740EPE08TPC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	---
SC740EPE08B / SC740EPE08BPC	---	---	---	0.6" (15 mm)
SC740EPE10T / SC740EPE10TPC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	---
SC740EPE10B / SC740EPE10BPC	---	---	---	0.7" (18 mm)
SC740EPE12T / SC740EPE12TPC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	---
SC740EPE12B / SC740EPE12BPC	---	---	---	1.2" (30 mm)
SC740EPE15T / SC740EPE15TPC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	---
SC740EPE15B / SC740EPE15BPC	---	---	---	1.3" (33 mm)
SC740EPE18T / SC740EPE18TPC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	---
SC740EPE18B / SC740EPE18BPC	---	---	---	1.6" (41 mm)
SC740EPE24B*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)
SC740EPE24BR*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)

ALL STUBS, EXCEPT FOR THE SC740EPE24B/SC740EPE24BR ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

\* FOR THE SC740EPE24B/SC740EPE24BR THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

### SC-740 TECHNICAL SPECIFICATIONS

NOT TO SCALE



PROFESSIONAL ENGINEER FOR  
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
B	3/25/2024	REVISED PER TOWN COMMENTS
A	2/29/2024	REVISED PER TOWN COMMENTS

APPLICANT OWNER:  
BLVD READING, LLC  
c/o SAVERIO FULCINITI  
1 SYLVAN STREET  
PEABODY, MA 01960



**STRADA**  
MIXED USE BUILDING  
258 MAIN STREET  
READING, MA

PROJECT NO.	2398-01A	DATE:	10-05-2023
SCALE:	AS SHOWN	DWG. NAME:	C-2398-01A
DESIGNED BY:	MTB	CHECKED BY:	CMQ

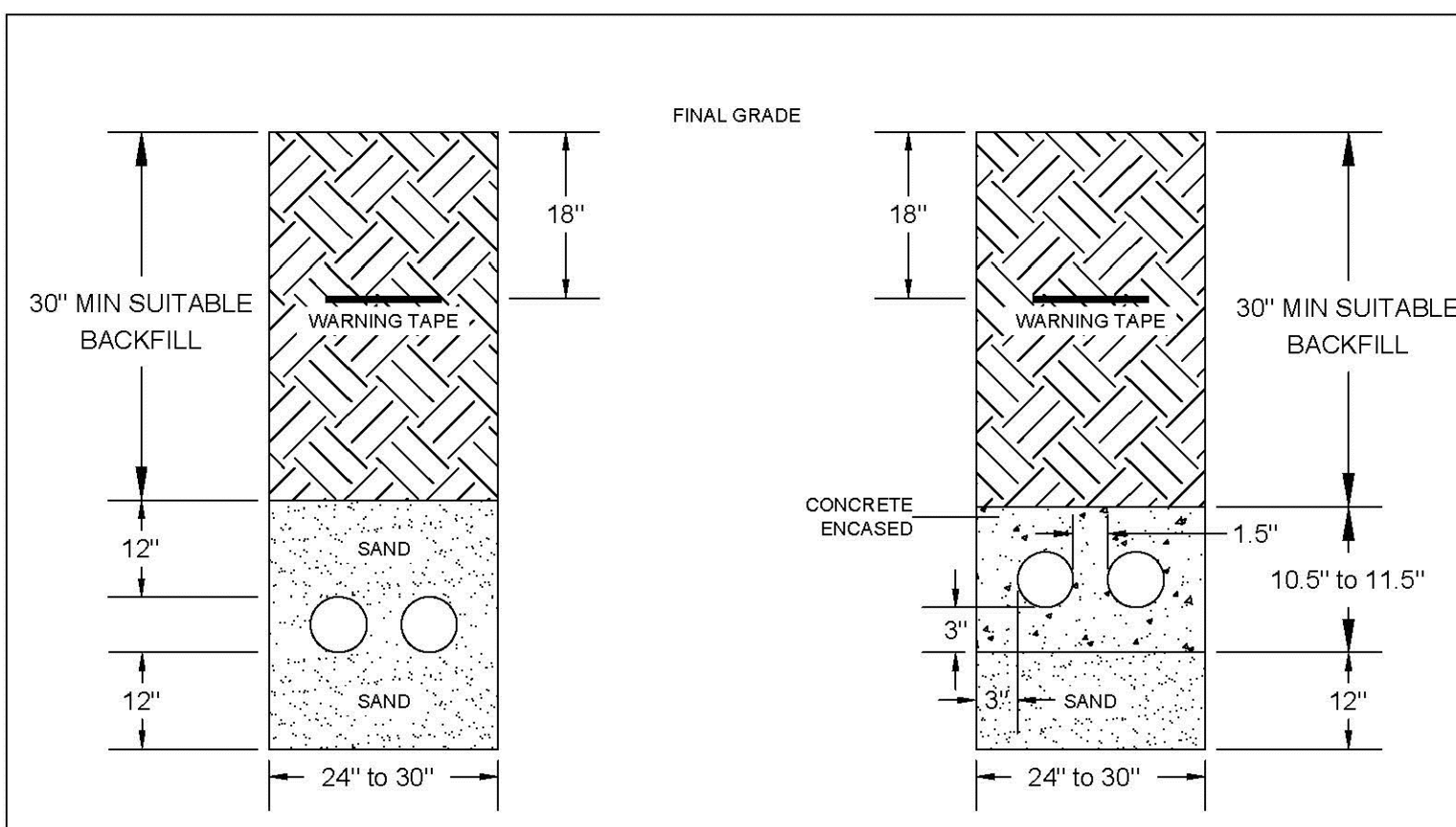
PREPARED BY:  
**ALLEN & MAJOR ASSOCIATES, INC.**  
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environmental consulting • landscape architecture  
www.allenmajor.com  
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WOBURN MA 01801  
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DRAWING TITLE:	SHEET No.
DETAILS	C-508

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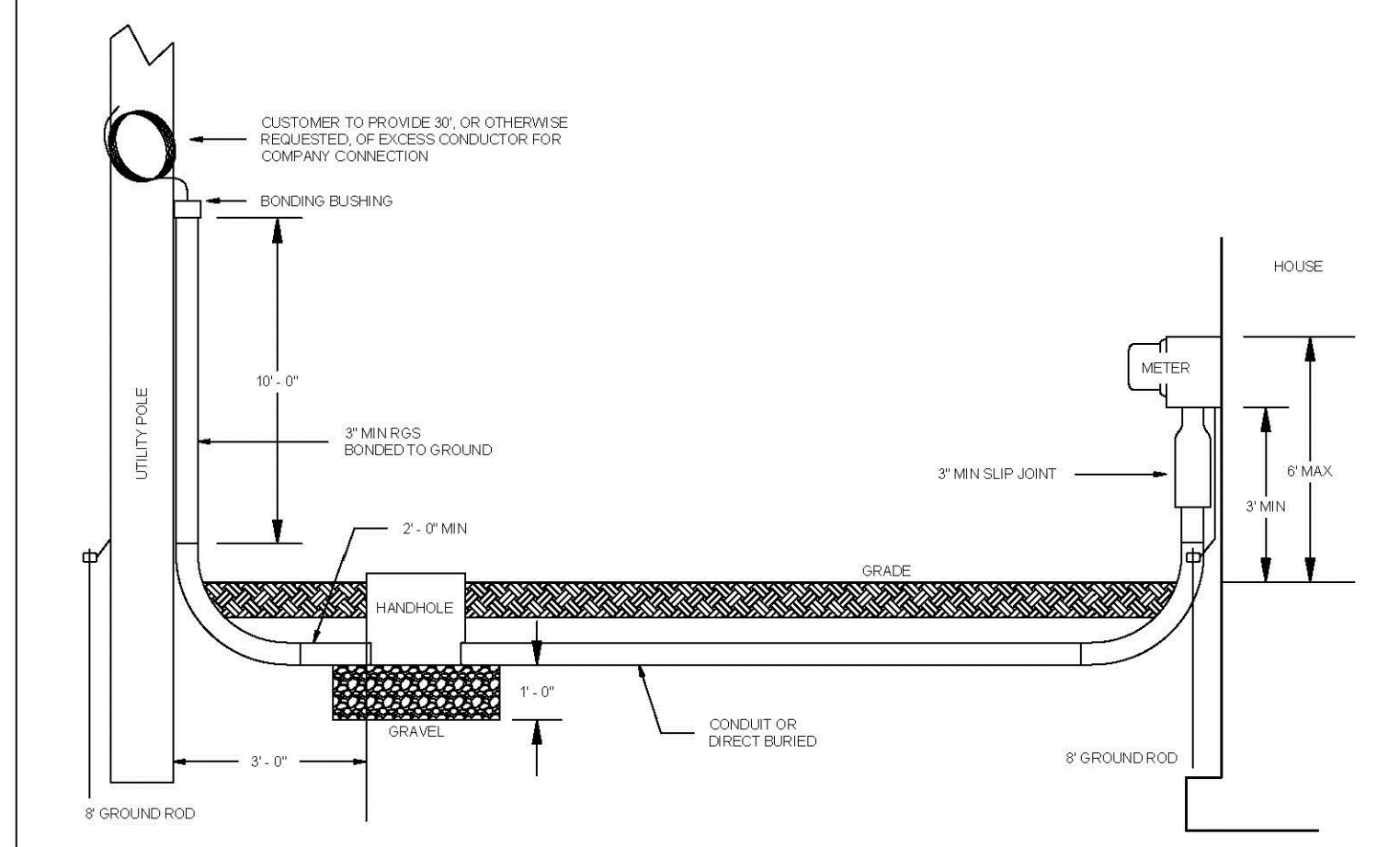
- SPECIFICATIONS:** ALL WORK SHALL BE IN ACCORDANCE WITH THESE STANDARDS, THE NATIONAL ELECTRICAL SAFETY CODE, STATE AND LOCAL CODE REQUIREMENTS. ADDITIONAL SPECIFICATIONS, WHEN REQUIRED, TO BE FURNISHED BY THE RMLD ENGINEERING DIVISION UPON REQUEST.
  - OWNERSHIP:** CONTRACTOR SHALL FURNISH TRENCH, BACKFILL, AND CONDUIT.
  - APPROVAL:** CUSTOMER SHALL OBTAIN APPROVAL OF PLANS BY THE RMLD ENGINEERING DIVISION. NO TRENCH SHALL BE BACKFILLED OR POURED WITH CONCRETE UNTIL INSPECTED BY RMLD ENGINEERING DIVISION.
  - CONDUIT:** TYPICAL INSTALLATION SHOWN. TYPICAL SIZE OF CONDUITS SHALL BE 4\"/>
- NOTES:**  
 ANY VARIATION IN TRENCH SPECIFICATIONS MUST HAVE PRIOR APPROVAL OF RMLD ENGINEERING DIVISION.  
 ALL REQUIRED EASEMENTS SHALL BE SECURED BY THE CONTRACTOR/OWNER  
 \*DIG SAFE\* NOTIFICATION IS THE RESPONSIBILITY OF THE CONTRACTOR

**RMLD** Reading Municipal Light Department  
 RELIABLE POWER FOR GENERATIONS

**FIGURE 22**  
 TYPICAL TRENCH SPECIFICATIONS

230 Ash St. Reading, MA 01867

SCALE: N.T.S. DATE: 9/24/2020



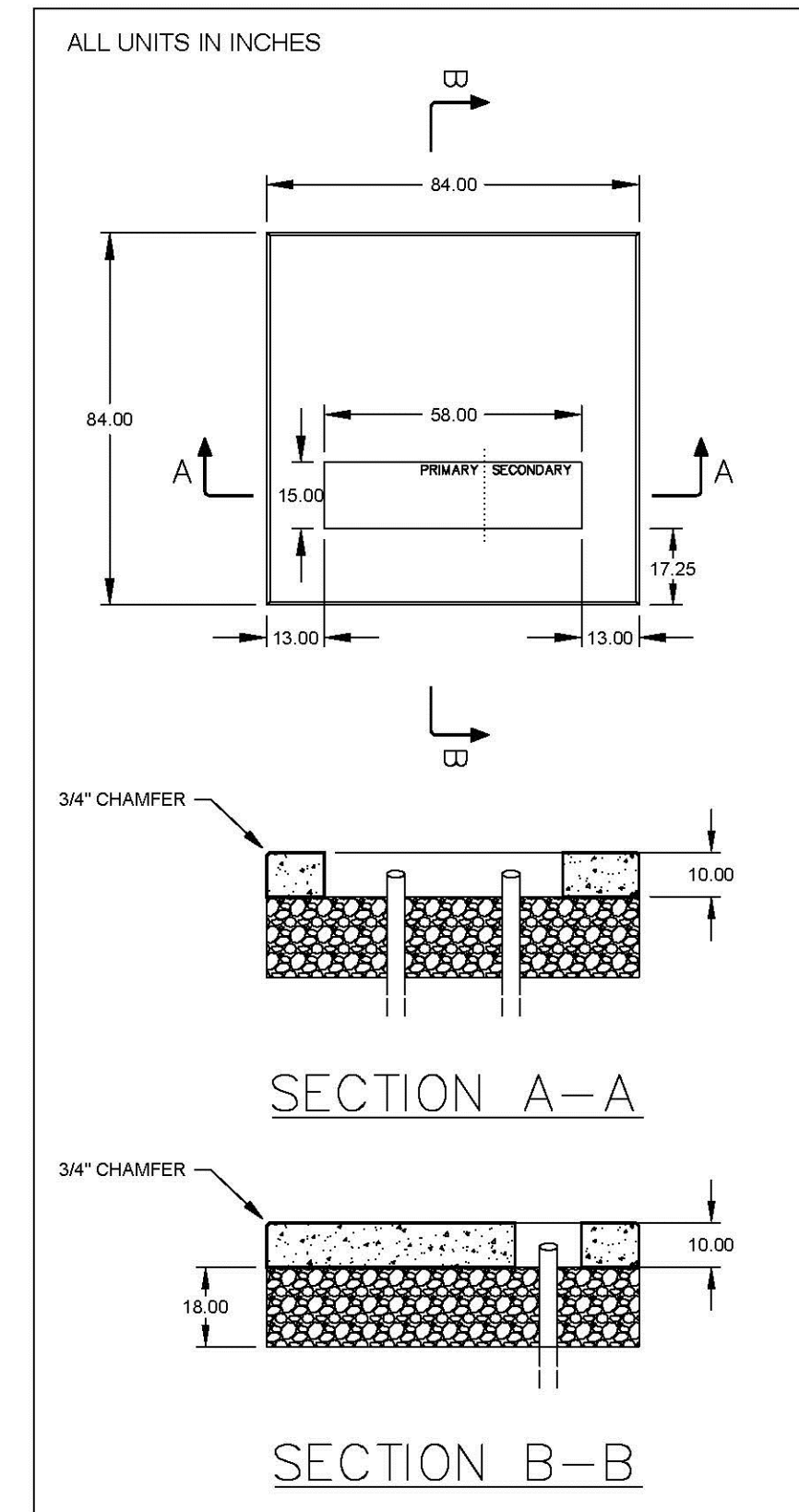
- NOTES:**
- ALL EQUIPMENT, EXCEPT WATT-HOUR METER, SHALL BE FURNISHED AND INSTALLED BY THE CUSTOMER, UNLESS SPECIFICALLY NOTED.
  - CUSTOMER TO INSTALL RISER AT RMLD UTILITY POLE. MINIMUM RISER INSTALLATION REQUIREMENTS: 1\"/>

**RMLD** Reading Municipal Light Department  
 RELIABLE POWER FOR GENERATIONS

**FIGURE 9**  
 CUSTOMER SECONDARY RISER AND SERVICE LATERAL (600V AND BELOW)

230 Ash St. Reading, MA 01867

SCALE: N.T.S. DATE: 9/24/2020



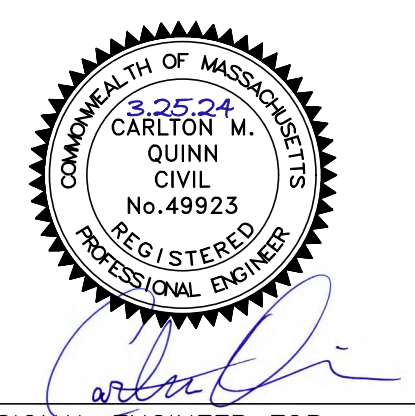
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- OWNERSHIP:** CONTRACTOR SHALL FURNISH AND OWN CONCRETE PAD, GROUND GRID, CONDUITS AND GROUND WIRES.
- APPROVAL:** CUSTOMER SHALL OBTAIN APPROVAL OF PLANS BY THE WIRE INSPECTOR AND RMLD. PLANS SHALL SHOW CONCRETE PAD, ALSO CONDUITS, LOCATION, TYPE, SIZE AND NUMBER.
- LOCATION / PROTECTION:** PAD LOCATION TO BE APPROVED BY RMLD. THERE SHALL BE NO OBSTRUCTIONS WITHIN 4\"/>

**RMLD** Reading Municipal Light Department  
 RELIABLE POWER FOR GENERATIONS

**FIGURE 27**  
 CONCRETE PAD (84x84) UP TO 500KVA

230 Ash St. Reading, MA 01867

SCALE: N.T.S. DATE: 9/24/2020



PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

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**APPLICANT/OWNER:**  
 BLVD READING, LLC  
 c/o SAVERIO FULCINITI  
 1 SYLVAN STREET  
 PEABODY, MA 01960



**STRADA**  
 MIXED USE BUILDING  
 258 MAIN STREET  
 READING, MA

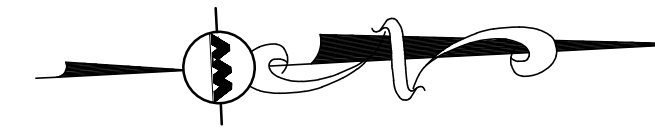
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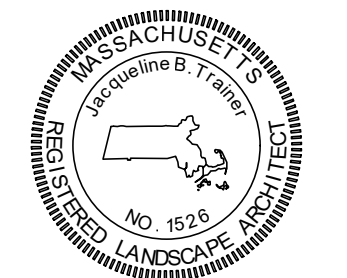
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DRAWING TITLE:	SHEET No.
DETAILS	C-509



**TOWN OF READING ZONING SUMMARY - LANDSCAPE**  
BUSINESS A AND SINGLE FAMILY 15 DISTRICTS

REGULATION	ITEM	REQUIRED / ALLOWED	PROPOSED
SECTION 6.5.2	IF THERE IS NOT AN ADEQUATE AMOUNT OF SIDE YARD AREA TO LANDSCAPE, A FENCE MAY BE ALLOWED AS AN ALTERNATIVE	SIDE YARD SCREENING	PRIVACY FENCE PROVIDED
SECTION 6.5.3	EXPOSED STORAGE AREAS, MACHINERY, GARBAGE DUMPSTERS, SERVICE AREAS, TRUCK LOADING AREAS, UTILITY BUILDINGS, AND STRUCTURES SHALL BE SCREENED FROM THE VIEW OF ABUTTING PROPERTIES AND STREETS USING PLANTINGS, FENCES, AND OTHER APPROPRIATE METHODS.	UTILITY SCREENING	SCREENING PROVIDED
SECTION 6.5.4	A LANDSCAPING MAINTENANCE PLAN SHALL BE PREPARED AND SUBMITTED AS PART OF THE LANDSCAPE DESIGN PLAN. ALL LANDSCAPED AREAS SHALL BE PROPERLY MAINTAINED. ANY TREE OR SHRUB THAT DIES SHALL BE REPLACED WITHIN ONE (1) GROWING SEASON. REPLACEMENT TREES OR SHRUBS SHALL BE OF SIMILAR TYPE AND SIZE TO WHAT WAS APPROVED AS PART OF THE ORIGINAL APPROVAL.	LANDSCAPE MAINTENANCE PLAN	SEE DETAIL SHEET
SECTION 6.5.6	NO MORE THAN 50 PERCENT (50%) OF THE TREES, APPROVED TO BE PLANTED, SHALL BE OF ANY ONE SPECIES AND NO LESS THAN 25 PERCENT (25%) OF THE TOTAL TREES PLANTED SHALL BE OF ANY ONE SPECIES. TREES SHALL BE CHOSEN FROM A LIST PROVIDED BY THE TREE WARDEN	TREE SPECIES	SEE PLAN
SECTION 6.5.8	THE MINIMUM ACCEPTABLE SIZE OF TREE TO BE PLANTED ALONG A PUBLIC WAY SHALL BE THREE (3) INCH TRUNK CALIPER AT FOUR (4) FEET ABOVE THE GRADE. AT THE TIME OF DELIVERY, THE TREE WARDEN MUST APPROVE THE PROPOSED TREES. EVERGREEN TREES SHALL BE AT LEAST EIGHT (8) FEET TALL AT THE TIME OF PLANTING.	TREE SIZE	3" CALIPER DECIDUOUS TREES AND 8' HT EVERGREEN TREES



*Paul B. T.* 03.25.2024  
PROFESSIONAL LANDSCAPE ARCHITECT FOR ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
B	3/25/2024	REVISED PER TOWN COMMENTS
A	2/29/2024	REVISED PER TOWN COMMENTS

APPLICANT/OWNER:  
BLVD READING, LLC  
c/o SAVERIO FULCINITI  
1 SYLVAN STREET  
PEABODY, MA 01960



**STRADA**  
MIXED USE BUILDING  
258 MAIN STREET  
READING, MA

PROJECT NO.	2398-01A	DATE:	10-05-2023
SCALE:	1" = 20'	DWG. NAME:	L-2398-01A
DESIGNED BY:	JBT	CHECKED BY:	CMQ

PREPARED BY:

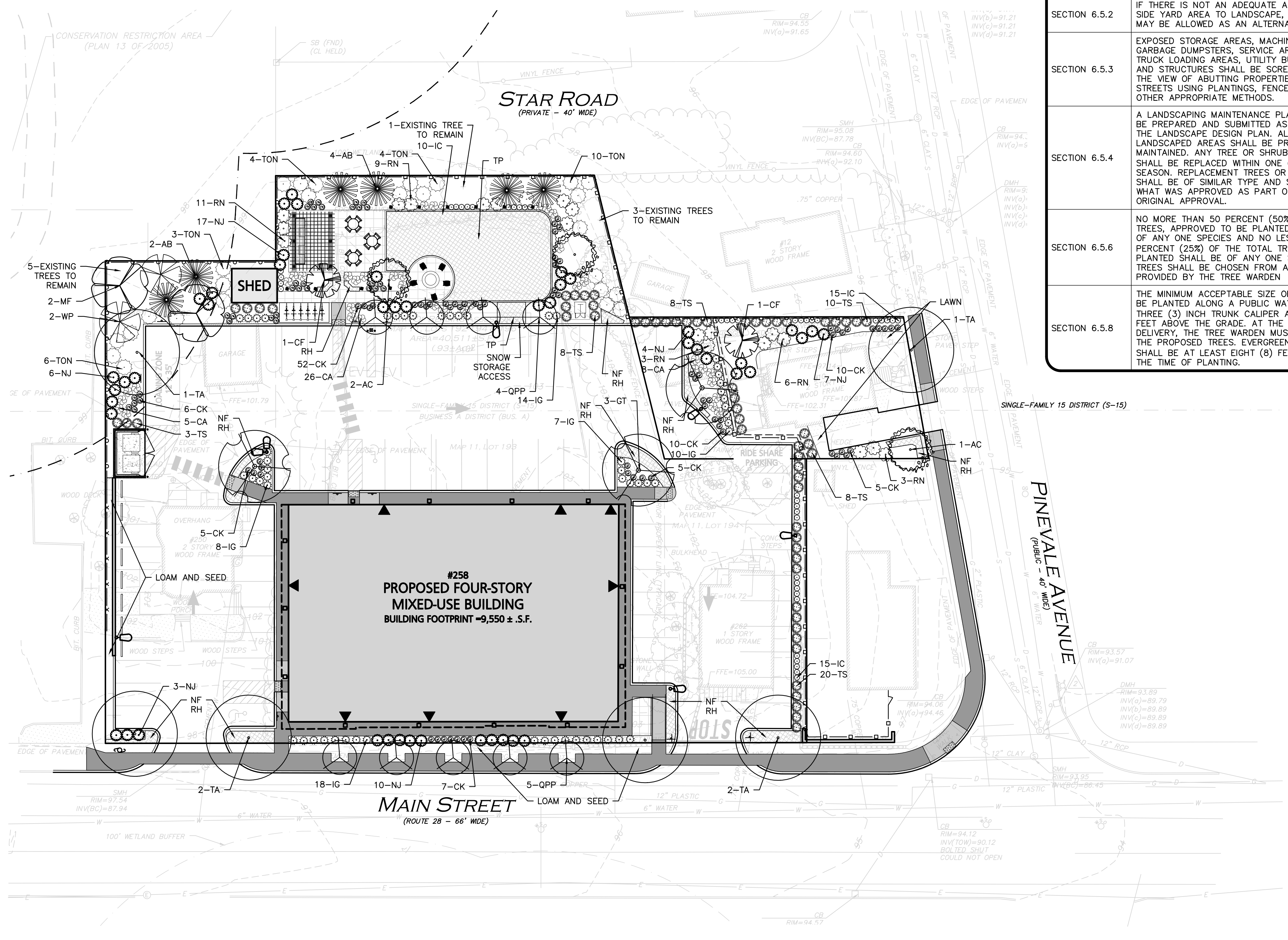
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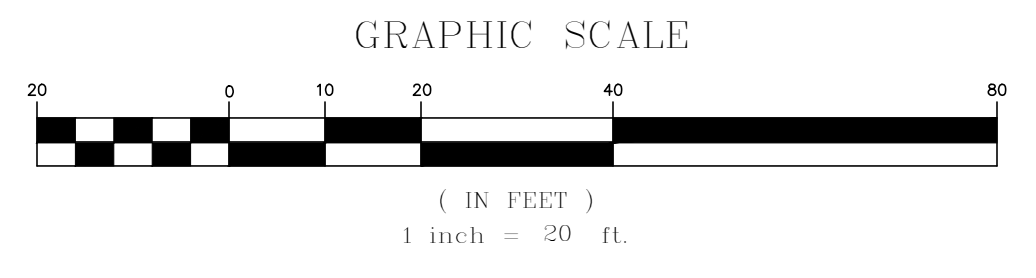
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**LEGEND**

DECIDUOUS TREE	
EVERGREEN TREE	
FLOWERING TREE	
SHRUBS	
MULCH BED	
PERENNIALS/GROUNDCOVER	
WILDFLOWER SEED MIX	
EROSION CONTROL SEED MIX	

- GENERAL NOTES:**
- THE EXISTING CONDITIONS USED IN THIS DRAWING IS FROM AN EXISTING CONDITIONS PLAN PREPARED BY ALLEN & MAJOR ASSOCIATES, INC., ENTITLED "PROPERTY USE/EXISTING CONDITIONS" FOR 252-260 MAIN STREET DATED APRIL 27, 2023 AND PREPARED FOR ONE SYLVAN LLC.
  - 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.
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  - A TOTAL OF 53 TREES LARGER THAN 6" DBH EXIST ON SITE.
  - THIS DESIGN PROVIDES 9 EXISTING TREES TO REMAIN.



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1-888-344-7233

CONSERVATION RESTRICTION AREA  
(PLAN 13 OF 2005)

N/F  
C&S CAPITAL  
PROPERTIES LLC  
BK.76586/PG.19

STAR ROAD  
(PRIVATE - 40' WDE)

JENNIFER KILLEN  
BK.63258/PG.274

MAP 11, LOT 196

MAP 11, LOT 194

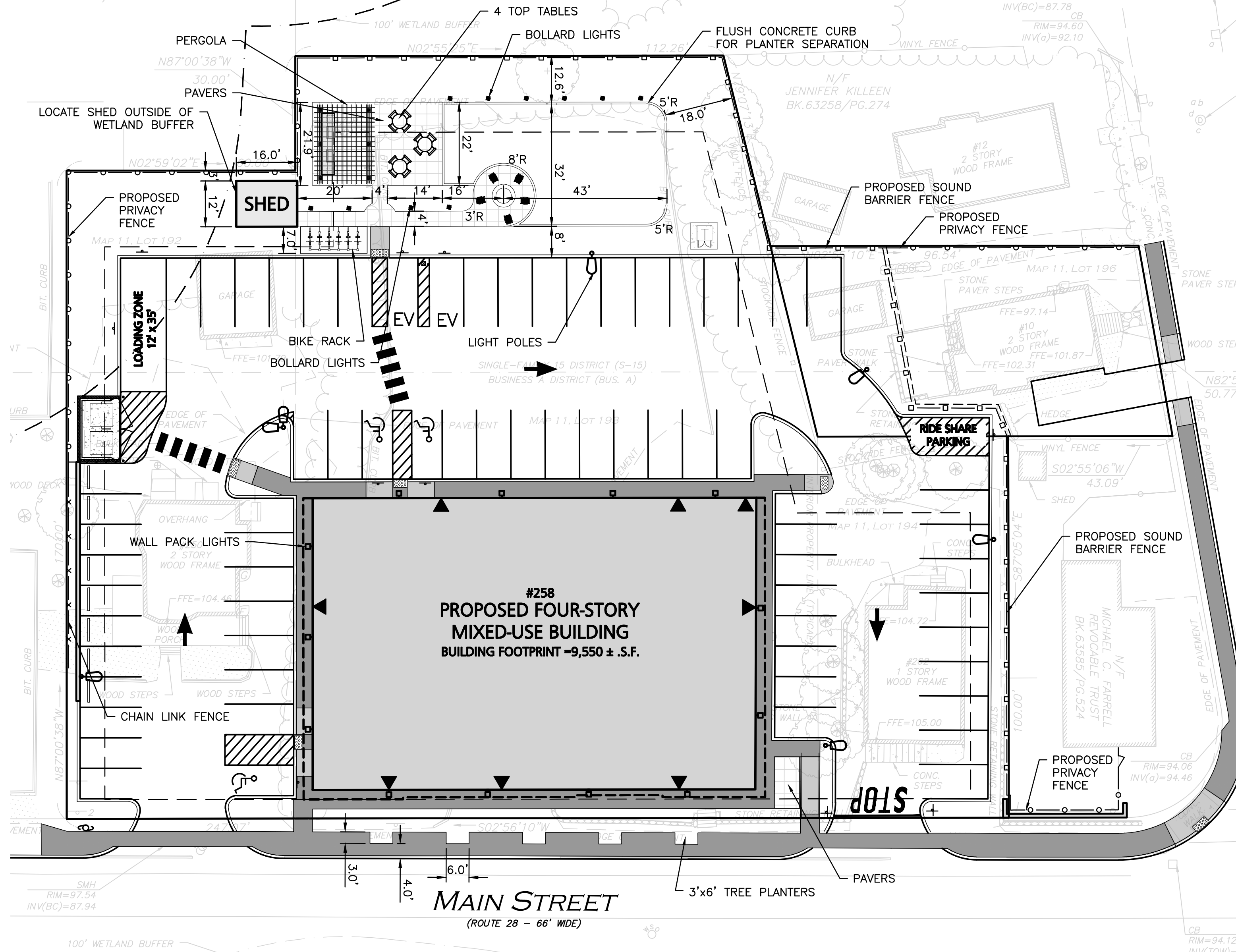
MAP 11, LOT 194

MAP 11, LOT 194

#258  
PROPOSED FOUR-STORY  
MIXED-USE BUILDING  
BUILDING FOOTPRINT -9,550 ± S.F.

MAIN STREET  
(ROUTE 28 - 66' WDE)

PINEVALE AVENUE  
(PUBLIC - 40' WDE)



MATERIALS SCHEDULE

HARDSCAPE & FURNITURE					
QTY	ITEM	MODEL NUMBER	COLOR	SIZE	COMPANY
	PAVERS	ARCANA	FIELD: CORVARA ACCENT: VIVANTO	24" x 24" 2" DEEP	UNILOCK.COM
235 LF±	PRIVACY FENCE	BUFFTECH CHESTERFIELD VINYL FENCE	WHITE	6' HEIGHT	AVOFENCEANDSUPPLY.COM
360 LF±	SOUND BARRIER FENCE	SILENT PROTECTOR	WHITE	8' HEIGHT	ACOUSTIGUARD.COM
1	PERGOLA	L.A. MODERN OR SILVERADO MODERN	MOSAIC REDWOOD	25'-6" x 12'-9"	FOREVERREDWOOD.COM
6	BIKE RACK	OAHU NO SCRATCH	TBD	36" RADIUS	SPORTWORKS.COM

- ALL COLORS AND FINISHES TO BE FINAL APPROVED/SELECTED BY OWNER/ARCHITECT
- SEE SHEET C-105 FOR LIGHT POLES, WALL PACKS, AND BOLLARDS.

GENERAL NOTES:

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Professional Landscape Architect for Allen & Major Associates, Inc.

REV	DATE	DESCRIPTION
B	3/25/2024	REVISED PER TOWN COMMENTS
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APPLICANT/OWNER:  
BLVD READING, LLC  
c/o SAVERIO FULCINITI  
1 SYLVAN STREET  
PEABODY, MA 01960

PROJECT:

STRADA  
MIXED USE BUILDING  
258 MAIN STREET  
READING, MA

PROJECT NO.	2398-01A	DATE:	10-05-2023
SCALE:	1" = 20'	DWG. NAME:	L-2398-01A
DESIGNED BY:	JBT	CHECKED BY:	CMQ

PREPARED BY:

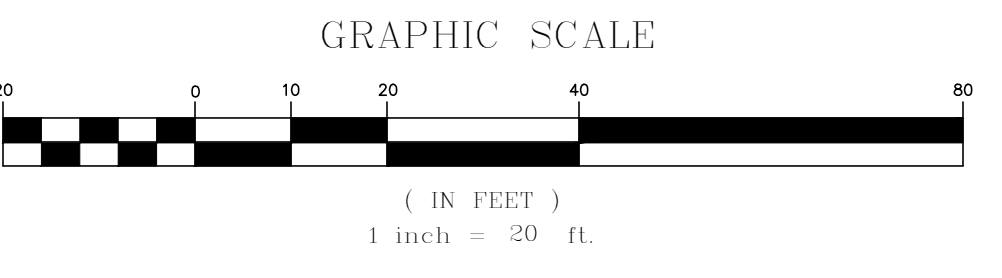
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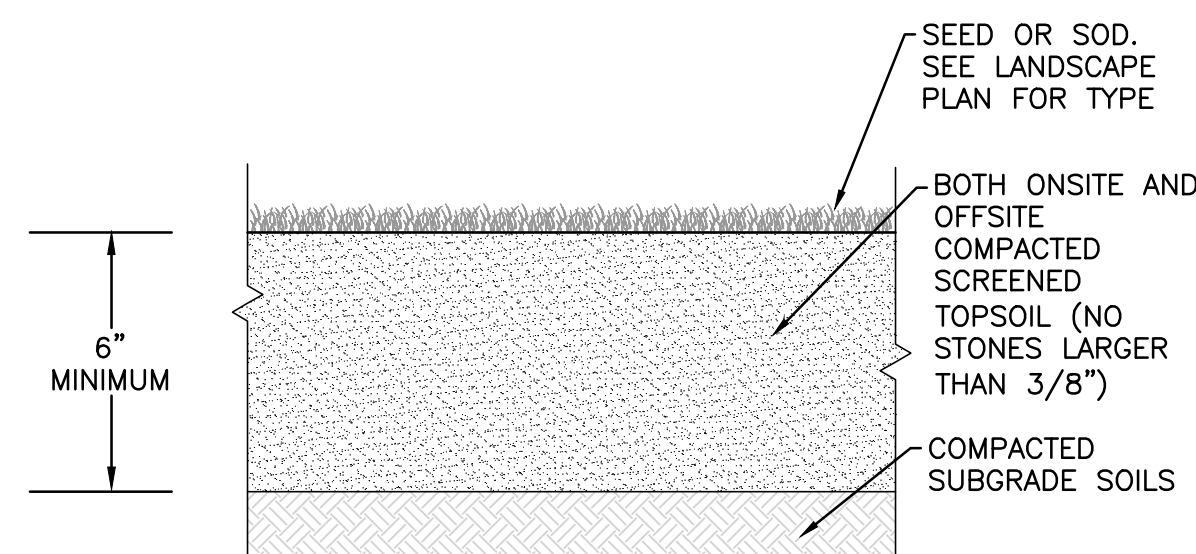
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1-888-344-7233



NOT USED  
NOT TO SCALE

1



TEXTURE CLASS	% OF TOTAL WEIGHT
SAND	45% - 65%
SILT	15% - 35%
CLAY	5% - 20%

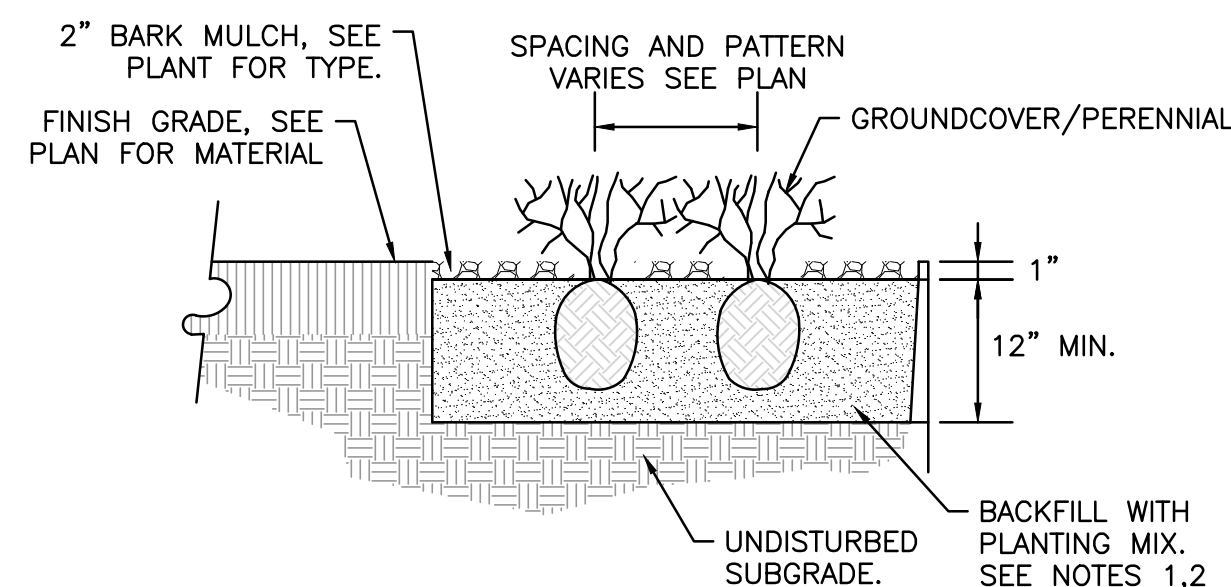
SIEVE	% PASSING
3/8"	100
NO. 4	85-100
NO. 40	60-85
NO. 100	38-60
NO. 200	28-40

**NOTES:**

- TOP OF LOAM (TOPSOIL) IS FINISH GRADE.
- ALL TOPSOIL (BOTH ONSITE AND OFFSITE SOURCES) SHALL BE COMPOSED OF A NATURAL, FERTILE, FRIABLE SOIL TYPICAL OF CULTIVATED TOPSOILS OF THE LOCALITY. SOIL SHALL BE SUITABLE FOR THE GERMINATION OF SEEDS AND SUPPORT OF VEGETATIVE GROWTH, WITH ADDITIVES, IF REQUIRED, TO ACHIEVE PARTICLE DISTRIBUTION AND ORGANIC CONTENT BELOW. TOPSOIL SHALL BE TAKEN FROM A WELL-DRAINED, ARIABLE SITE, FREE OF SUBSOIL, LARGE STONES, EARTH CLOUDS, STICKS, TRASH, STUMPS, CLAY LUMPS, ROOTS, OTHER OBJECTIONABLE, EXTRANEIOUS MATTER OR DEBRIS NOR CONTAIN TOXIC SUBSTANCES.
- THE CONTRACTOR SHALL PROVIDE THE OWNER / LANDSCAPE ARCHITECT WITH TOPSOIL TEST RESULTS (RECOMMEND UMMASS AMHERST SOIL TESTING LAB) FOR APPROVAL PRIOR TO OBTAINING AND PLACING THE SOIL. IF THE PLANTING SOIL (BOTH ONSITE AND OFFSITE SOURCES) DOES NOT FALL WITHIN THE REQUIRED SIEVE ANALYSIS, TEXTURAL CLASS, ORGANIC CONTENT, OR PH RANGE, IT SHALL BE ADJUSTED TO MEET THE SPECIFICATIONS THROUGH THE ADDITION OF SAND, COMPOST, LIMESTONE, OR ALUMINUM SULFATE TO BRING IT WITHIN THE SPECIFIED LIMITS.
- TOPSOIL SHALL HAVE A PH VALUE BETWEEN 5.5 AND 6.5. TOPSOIL SHALL CONTAIN BETWEEN 4% AND 8% ORGANIC MATTER OF TOTAL DRY WEIGHT AND SHALL CONFORM TO THE FOLLOWING GRADATION AND TEXTURE CLASS ABOVE.

TOPSOIL FOR TREES, SHRUBS, & PERENNIALS  
NOT TO SCALE

4

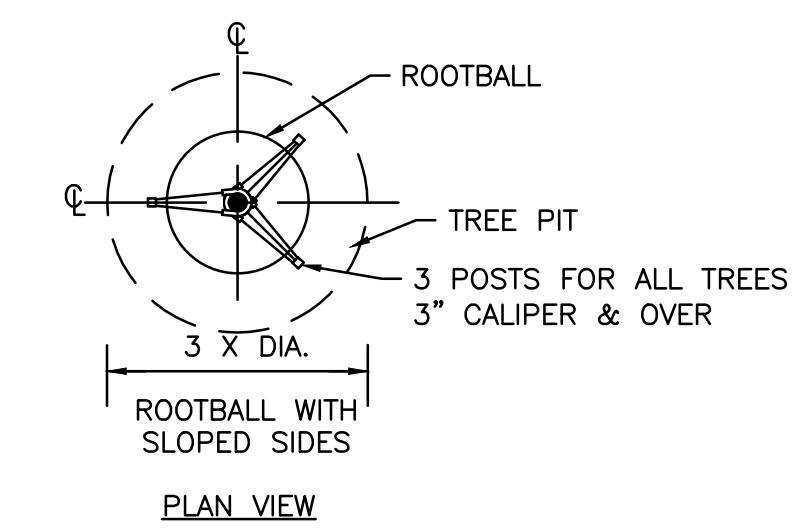
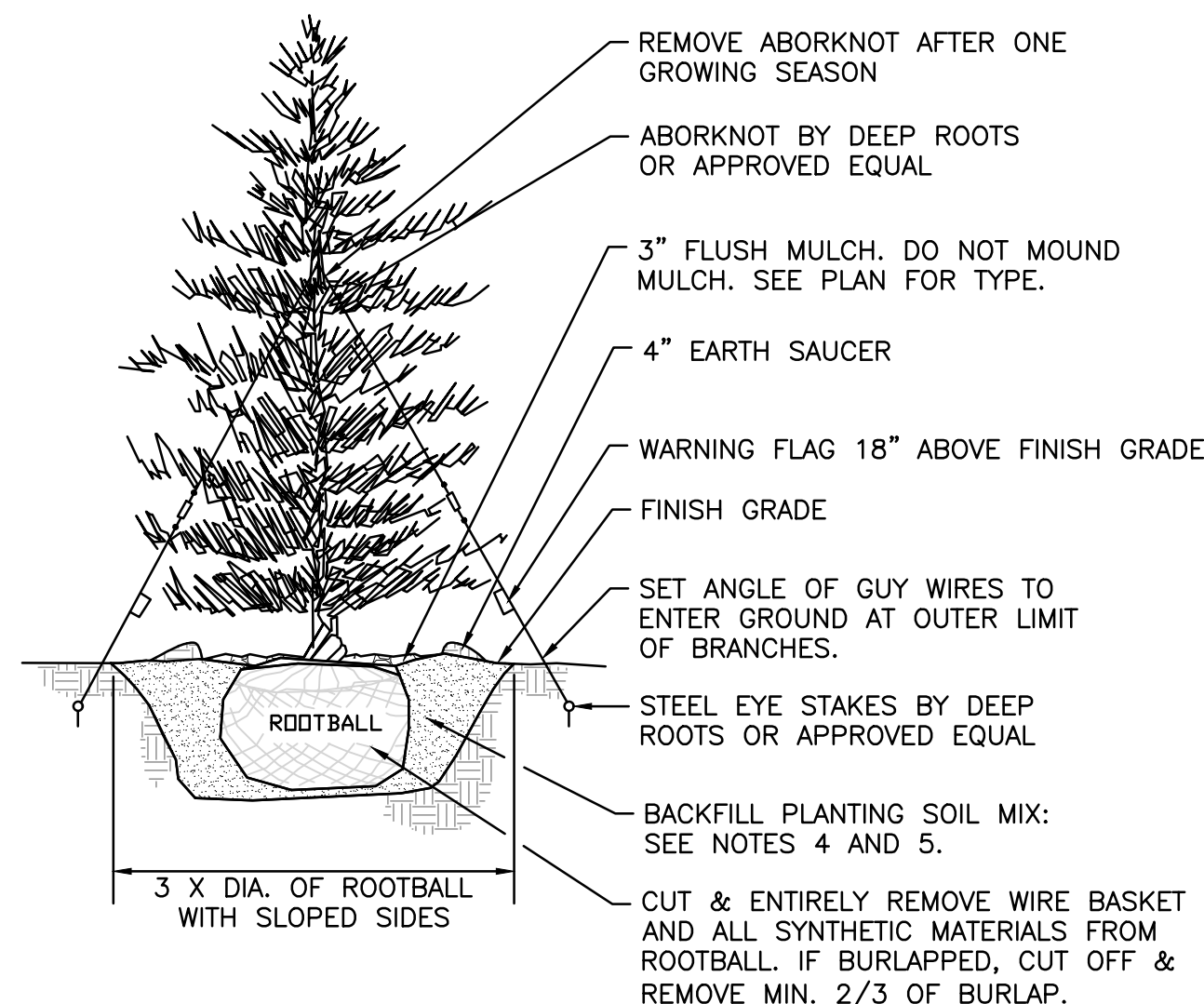


**NOTES:**

- ALL GROUNDCOVER/PERENNIALS SHALL HAVE THE SAME RELATIONSHIP TO FINISH GRADE AFTER PLANTING AS THEY HAD AT THE ORIGINAL NURSERY SETTING. ROOT FLARE SHALL BE 2" ABOVE FINISH GRADE. REMOVE SOIL FROM STEM OF GROUND COVER/ PERENNIAL TO DETERMINE ACTUAL ROOTBALL AREA.
- BACKFILL WITH PLANTING MIX. PLANT MIX TO BE: 50% NATIVE TOPSOIL, 20% BLENDED AND GROUND COMPOST (LEAVES & ORGANIC MATERIAL, NO ASH OR TOXIC MATERIALS) 20% PEAT MOSS, 10% SAND.
- ADD MYCORRHIZA SOIL ADDITIVES AND SLOW RELEASE FERTILIZER WHEN PLANT HOLES ARE 50% FILLED AND WATER THOROUGHLY AT COMPLETION.

GROUNDCOVER/PERENNIAL PLANTING  
NOT TO SCALE

5

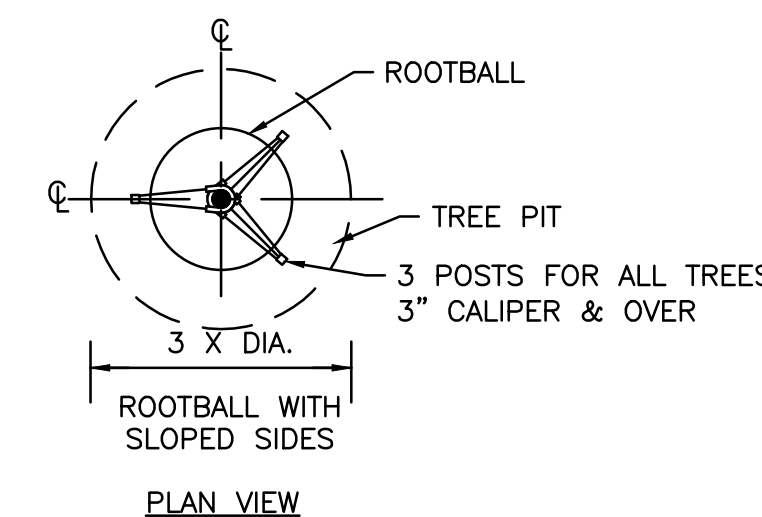
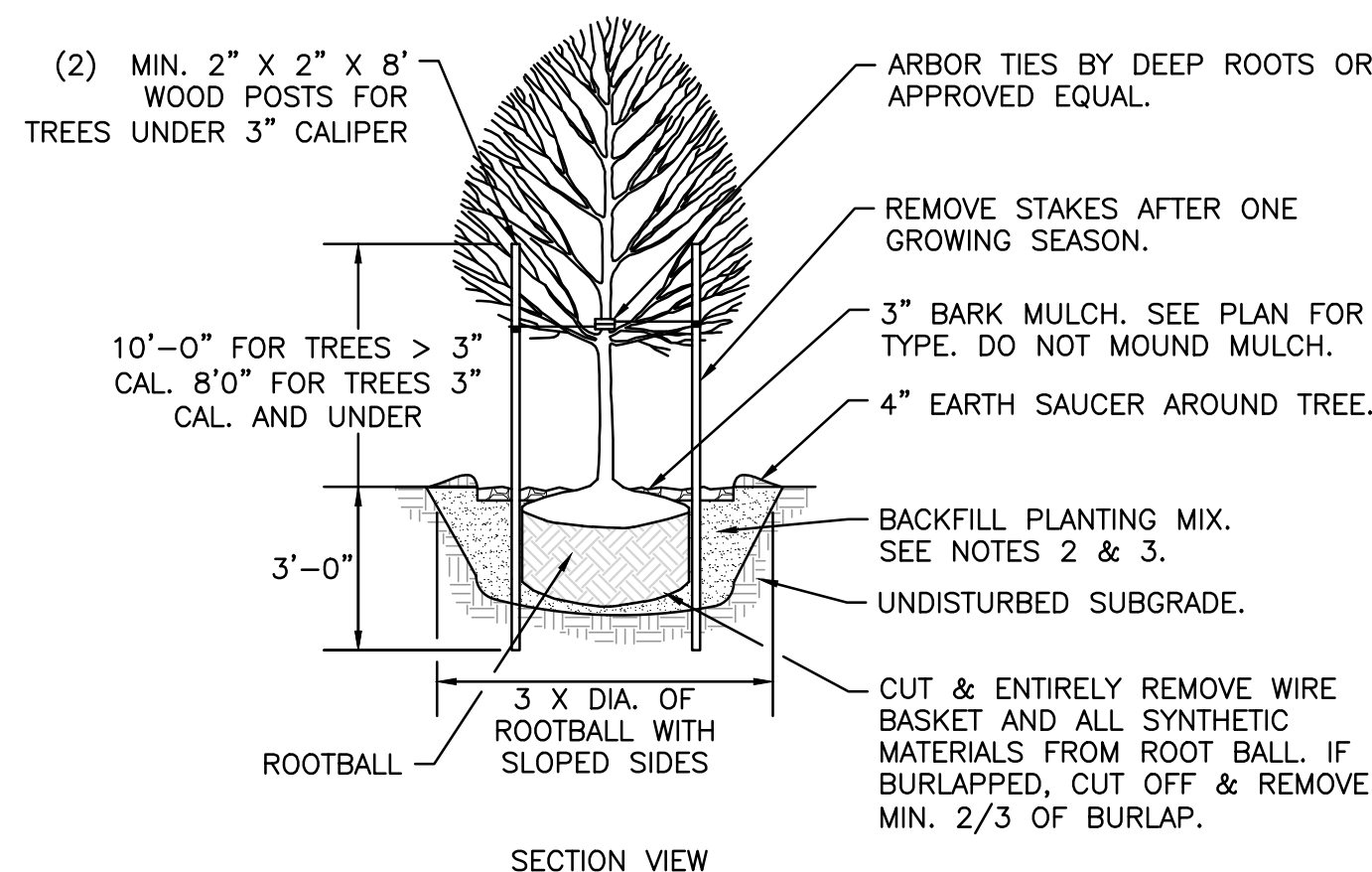


**NOTES:**

- TREES SHALL BEAR SAME RELATIONSHIP TO FINISH GRADE AS IT BORE TO NURSERY OR FIELD GRADE. ROOT FLARE SHALL BE 2" ABOVE FINISH GRADE. REMOVE SOIL FROM TRUNK FLARE OF TREE TO DETERMINE ACTUAL TOP OF ROOTBALL AREA.
- ATTACH GUY WIRES AT 2/3 HEIGHT OF TREE.
- BACKFILL WITH PLANTING MIX. PLANT MIX TO BE: 50% NATIVE TOPSOIL, 20% BLENDED AND GROUND COMPOST (LEAVES & ORGANIC MATERIAL, NO ASH OR TOXIC MATERIALS) 20% PEAT MOSS, 10% SAND.
- ADD MYCORRHIZA SOIL ADDITIVES AND SLOW RELEASE FERTILIZER WHEN PLANT HOLES ARE 50% FILLED AND WATER THOROUGHLY AT COMPLETION.

EVERGREEN TREE  
NOT TO SCALE

2

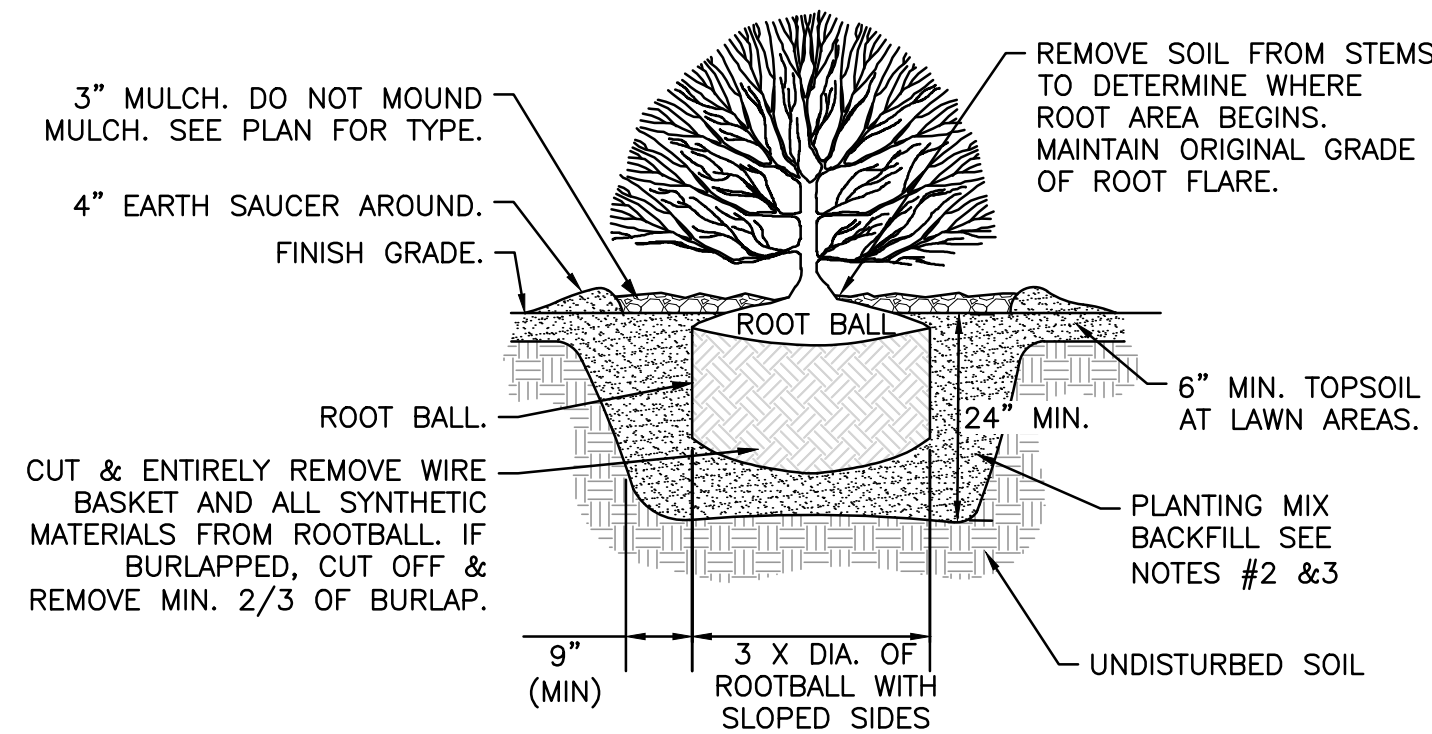


**NOTES:**

- ALL TREES SHALL HAVE THE SAME RELATIONSHIP TO FINISH GRADE AFTER PLANTING AS THEY HAD AT THE ORIGINAL NURSERY SETTING. ROOT FLARE SHALL BE 2" ABOVE FINISH GRADE. REMOVE SOIL FROM TRUNK FLARE OF TREE TO DETERMINE ACTUAL ROOTBALL AREA.
- BACKFILL WITH PLANTING MIX. PLANT MIX TO BE: 50% NATIVE TOPSOIL, 20% BLENDED AND GROUND COMPOST (LEAVES & ORGANIC MATERIAL, NO ASH OR TOXIC MATERIALS) 20% PEAT MOSS, 10% SAND.
- ADD MYCORRHIZA SOIL ADDITIVES AND SLOW RELEASE FERTILIZER WHEN PLANT HOLES ARE 50% FILLED AND WATER THOROUGHLY AT COMPLETION.

DECIDUOUS TREE  
NOT TO SCALE

3

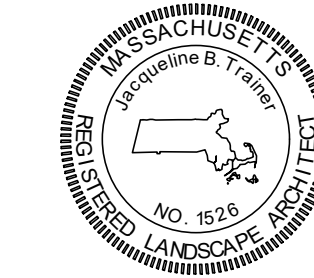


**NOTES:**

- ALL SHRUBS ROOT FLARE SHALL HAVE THE SAME RELATIONSHIP TO FINISH GRADE AFTER PLANTING AS THEY HAD AT THE ORIGINAL NURSERY SETTING.
- BACKFILL WITH PLANTING MIX. PLANT MIX TO BE: 50% NATIVE TOPSOIL, 20% COMPOST (LEAVES & ORGANIC MATERIAL, NO ASH) 20% PEAT MOSS, 10% SAND.
- ADD MYCORRHIZA SOIL ADDITIVES AND SLOW RELEASE FERTILIZER WHEN PLANT HOLES ARE 50% FILLED. WATER THOROUGHLY AT COMPLETION.
- SHRUB BEDS TO HAVE 24" MIN. OF CONTINUOUS PLANTING SOIL.

SHRUB  
NOT TO SCALE

6



*April B. T.* 03.25.2024  
PROFESSIONAL LANDSCAPE ARCHITECT FOR  
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
B	3/25/2024	REVISED PER TOWN COMMENTS
A	2/29/2024	REVISED PER TOWN COMMENTS

APPLICANT/OWNER:  
BLVD READING, LLC  
c/o SAVERIO FULCINITI  
1 SYLVAN STREET  
PEABODY, MA 01960

PROJECT:

**STRADA**  
MIXED USE BUILDING  
258 MAIN STREET  
READING, MA

PROJECT NO.	2398-01A	DATE:	10-05-2023
SCALE:	AS SHOWN	DWG. NAME:	L-2398-01A
DESIGNED BY:	JBT	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  
TEL: (781) 935-6889  
FAX: (781) 935-2896

WOBURN, MA • LAKEVILLE, MA • MANCHESTER, NH

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DRAWING TITLE:	SHEET No.
LANDSCAPE NOTES & DETAILS	L-501

**LANDSCAPE MANAGEMENT NOTES:**

**LANDSCAPE MANAGEMENT PLAN**

IT SHOULD BE RECOGNIZED THAT THIS IS A GENERAL GUIDELINE TOWARDS ACHIEVING HIGH QUALITY AND WELL GROOMED LANDSCAPED AREAS. THE GROUNDS STAFF / LANDSCAPE CONTRACTOR MUST RECOGNIZE THE SHORTCOMINGS OF A GENERAL MAINTENANCE PROGRAM SUCH AS THIS, AND MODIFY AND/OR AUGMENT IT BASED ON WEEKLY, MONTHLY, AND YEARLY OBSERVATIONS. IN ORDER TO ASSURE THE HIGHEST QUALITY CONDITIONS, THE STAFF MUST ALSO RECOGNIZE AND APPRECIATE THE NEED TO BE AWARE OF THE CONSTANTLY CHANGING CONDITIONS OF THE LANDSCAPING AND BE ABLE TO RESPOND TO THEM ON A PROACTIVE BASIS.

**FERTILIZER**

- MAINTENANCE PRACTICES SHOULD BE AIMED AT REDUCING ENVIRONMENTAL, MECHANICAL AND PEST STRESSES TO PROMOTE HEALTHY AND VIGOROUS GROWTH. WHEN NECESSARY, PEST OUTBREAKS SHOULD BE TREATED WITH THE MOST SENSITIVE CONTROL MEASURE AVAILABLE. SYNTHETIC CHEMICAL CONTROLS SHOULD BE USED ONLY AS A LAST RESORT TO ORGANIC AND BIOLOGICAL CONTROL METHODS. FERTILIZER, SYNTHETIC CHEMICAL CONTROLS AND PEST MANAGEMENT APPLICATIONS (WHEN NECESSARY) SHOULD BE PERFORMED ONLY BY LICENSED APPLICATORS IN ACCORDANCE WITH THE MANUFACTURER'S LABEL INSTRUCTIONS WHEN ENVIRONMENTAL CONDITIONS ARE CONDUCIVE TO CONTROLLED PRODUCT APPLICATION.

- ONLY SLOW-RELEASE ORGANIC FERTILIZERS SHOULD BE USED IN THE LANDSCAPED AREAS TO LIMIT THE AMOUNT OF NUTRIENTS THAT COULD ENTER DOWNSTREAM RESOURCE AREAS. FERTILIZATION OF DEVELOPED AREAS ON SITE WILL BE PERFORMED WITHIN MANUFACTURERS LABELING INSTRUCTIONS AND SHALL NOT EXCEED AN NPK RATIO OF 1:1:1 (I.E. TRIPLE 10 FERTILIZER MIX), CONSIDERED A LOW NITROGEN MIXTURE. ADDITIONALLY, THE FERTILIZER WILL INCLUDE A SLOW RELEASE ELEMENT.

**LANDSCAPE MAINTENANCE PROGRAM PRACTICES:**

**SHRUBS**

- MULCH NOT MORE THAN 3" DEPTH WITH SHREDDED PINE OR FIR BARK.
- HAND PRUNE ANNUALLY, IMMEDIATELY AFTER BLOOMING, TO REMOVE 1/3 OF THE ABOVE-GROUND BIOMASS (OLDER STEMS). STEM REMOVALS TO OCCUR WITHIN 6" OF THE GROUND TO OPEN UP SHRUB AND MAINTAIN TWO-YEAR WOOD (THE BLOOMING WOOD).
- FERTILIZE WITH 1/2 LB. SLOW-RELEASE FERTILIZER (SEE ABOVE SECTION ON FERTILIZER) EVERY SECOND YEAR.
- HAND PRUNE EVERGREEN SHRUBS ONLY AS NEEDED TO REMOVE DEAD AND DAMAGED WOOD AND TO MAINTAIN THE NATURALISTIC FORM OF THE SHRUB. NEVER MECHANICALLY SHEAR EVERGREEN SHRUBS.

**TREES**

- PROVIDE AFTERCARE FOR NEW TREE PLANTINGS FOR THE FIRST THREE YEARS.
- DO NOT FERTILIZE TREES, IT ARTIFICIALLY STIMULATES THEM (UNLESS TREE HEALTH WARRANTS).
- WATER ONCE A WEEK FOR THE FIRST YEAR; TWICE A MONTH THE SECOND, ONCE A MONTH THE THIRD YEAR.
- PRUNE TREES ON A FOUR-YEAR CYCLE.

**ORNAMENTAL GRASSES/PERENNIALS**

- APPLY LOW- NITROGEN 10-10-10 FERTILIZER AS GROWTH RESUMES IN THE SPRING.
- WATER THOROUGHLY.
- GRASSES/PERENNIALS DO NOT NEED TO BE CUT DOWN BEFORE WINTER. IN FACT, THEY ARE ATTRACTIVE WHEN LEFT STANDING AND THE FOLIAGE HELPS TO INSULATE THE CROWN OF THE PLANT.
- CUT BACK THE FOLIAGE TO ABOUT 4-6 INCHES IN THE SPRING BEFORE GROWTH RESUMES. WHEN FOLIAGE IS REMOVED, SPRING GROWTH WILL BEGIN EARLIER. OLD FOLIAGE LEFT ON THE PLANT CAN DELAY THE CROWN'S WARMING AND SUBSEQUENT GROWTH BY AS MUCH AS 3 WEEKS.

**WATERING**

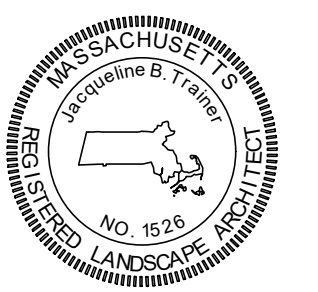
- WATERING TREES, SHRUBS AND PERENNIALS SHOULD BE DONE WEEKLY UPON ESTABLISHMENT FOR 6 MONTHS.

**LANDSCAPE NOTES**

- ALL WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE TOWN OF READING.
- PLANTING PLAN IS DIAGRAMMATIC IN NATURE. FINAL PLACEMENT OF PLANTS TO BE APPROVED BY THE LANDSCAPE ARCHITECT IN THE FIELD.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES, ANY PERMITTING AGENCIES, AND "DIG-SAFE" (1-888-344-7233) AT LEAST 72 HOURS IN ADVANCE OF ANY WORK THAT WILL REQUIRE EXCAVATION. CONTRACTOR SHALL NOTIFY THE OWNERS REPRESENTATIVE OF ANY CONFLICTS IN WRITING.
- NO PLANT MATERIAL SHALL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
- ANY TREES NOTED AS "SEAL OR SELECTED SPECIMEN" SHALL BE TAGGED AND SEALED BY THE LANDSCAPE ARCHITECT.
- ALL TREES SHALL BE BALLED AND BURLAPPED (B&B) UNLESS OTHERWISE NOTED OR APPROVED BY THE OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT.
- CONTRACTOR SHALL VERIFY QUANTITIES SHOWN ON PLANT LIST. QUANTITIES SHOWN ON PLANS SHALL GOVERN OVER PLANT LIST.
- ANY PROPOSED PLANT SUBSTITUTIONS MUST BE APPROVED IN WRITING BY OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT.
- ALL PLANT MATERIALS INSTALLED SHALL MEET THE GUIDELINES ESTABLISHED BY THE AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY AMERICANHORT (LATEST EDITION).
- ALL PLANT MATERIALS SHALL BE GUARANTEED FOR ONE YEAR FOLLOWING DATE OF ACCEPTANCE. ANY PLANT MATERIALS WHICH DIE WITHIN THE ONE YEAR PLANT GUARANTEE PERIOD WILL BE REPLACED BY THE LANDSCAPE CONTRACTOR. OWNERS TO COORDINATE DIRECTLY WITH THE LANDSCAPE CONTRACTOR FOR REPLACEMENT PLANTINGS.
- ANY FALL TRANSPLANTING HAZARD PLANTS SHALL BE DUG IN THE SPRING AND STORED FOR FALL PLANTING.
- TREES SHALL HAVE A MINIMUM CALIPER AS INDICATED ON THE PLANTING SCHEDULE TAKEN ONE FOOT ABOVE THE ROOT CROWN.
- ALL PLANT BEDS AND TREE SAUCERS TO RECEIVE 3" OF PINE BARK MULCH. GROUND COVER AREAS SHALL RECEIVE 1" OF PINE BARK MULCH.
- ALL DECIDUOUS TREES ADJACENT TO WALKWAYS AND ROADWAYS SHALL HAVE A BRANCHING PATTERN TO ALLOW FOR A MINIMUM OF 7' OF CLEARANCE BETWEEN THE GROUND AND THE LOWEST BRANCH.
- ALL TREE STAKES SHALL BE STAINED DARK BROWN.
- CONTRACTOR RESPONSIBLE FOR WATERING UNTIL A UNIFORM STAND OF VEGETATION IS ESTABLISHED AND ACCEPTED.
- ALL PARKING ISLANDS PLANTED WITH SHRUBS SHALL HAVE 24" OF TOP SOIL. FINISH GRADE SHALL BE SLOPED TO SIX INCHES (6") ABOVE THE TOP OF CURB.
- SOIL SAMPLES, TESTS, AND SHOP DRAWINGS SHALL BE PROVIDED TO THE LANDSCAPE ARCHITECT OR THE OWNER FOR APPROVAL PRIOR TO CONSTRUCTION.
- MULCH SHALL NOT BE NEWLY APPLIED WITHIN 18" OF ANY COMBUSTIBLE PORTION OF ANY BUILDING PER THE LATEST BOARD OF FIRE PREVENTION REGULATIONS (527 CMR 17.05).
- ALL LANDSCAPED AREAS WITH SHRUBS, TREES, AND PERENNIALS TO HAVE 2 FEET MINIMUM DEPTH OF TOPSOIL. TWO FEET OF TOPSOIL AROUND TREES AND SHRUBS DOES NOT INCLUDE AMENDED PLANTING SOIL WITHIN TREE / SHRUB PIT FOR FULL DEPTH OF ROOTBALLS. SEE PLANTING DETAILS FOR PLANTING DEPTH AT SHRUBS AND TREES. TOPSOIL TO BE TESTED BY CONTRACTOR, AND APPROVED BY A&M PRIOR TO PURCHASE AND OR PLACEMENT. GENERAL DEMOLITION, AND LANDSCAPE CONTRACTORS TO COORDINATE PROPER DEPTH OF EXISTING MATERIAL REMOVAL ACROSS SITE SO THAT 2 FEET MINIMUM DEPTHS OF PROPOSED TOPSOIL NOTED ABOVE ARE MET. SEE TOPSOIL DETAIL.
- PRIOR TO LAYING TOPSOIL, ALL SUBSOIL (BELOW PROPOSED TOPSOIL) TO BE TILLED TO A DEPTH OF AT LEAST 18" TO REMOVE CONSTRUCTION COMPACTION AND ALLOW FOR PROPER DRAINAGE OF TOPSOILS.
- IF THERE IS NO PROPOSED IRRIGATION SYSTEM AFTER PLANTINGS AREAS HAVE BEEN INSTALLED, LANDSCAPE CONTRACTOR RESPONSIBLE TO TEMPORARILY WATER ALL INSTALLED PLANTINGS, AREAS MIN. 4 TIMES A WEEK DURING INITIAL ESTABLISHMENT PERIOD OF 6 MONTHS AFTER ALL LANDSCAPING IS INSTALLED.
- ALL PROPOSED LANDSCAPE AREAS INCLUDING TREES, SHRUB BEDS, AND PERENNIALS SHALL BE PROVIDED WITH WATER EFFICIENT UNDERGROUND IRRIGATION. DESIGN AND INSTALLATION OF IRRIGATION SYSTEM TO BE PERFORMED BY AN APPROVED IRRIGATION DESIGN BUILD CONTRACTOR OR BY AN APPROVED EQUAL TO BE DETERMINED BY THE OWNERS REPRESENTATIVE AND LANDSCAPE ARCHITECT. IRRIGATION SYSTEM IS TO BE DESIGNED FOR EFFICIENT WATER USAGE INCLUDING: USE OF DRIP IRRIGATION FOR SHRUBS AND PERENNIALS, IRRIGATION SYSTEM WITH HEAD-TO-HEAD COVERAGE, A CENTRAL SHUT-OFF VALVE, SEPARATE ZONES FOR EACH TYPE OF BEDDING AREA BASED ON WATERING NEEDS, AND A RAIN SENSOR TO SHUT OFF IRRIGATION DURING RAIN EVENTS.

**PLANTING SCHEDULE -TREES, SHRUBS, GROUNDCOVERS & PERENNIALS**

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	COMMENTS
<b>DECIDUOUS SHADE AND FLOWERING TREES</b>						
* GT	3	GLEDITSIA TRICANTHOS	THORNLESS HONEYLOCUST	3" CAL.	AS SHOWN	B&B
* QPP	9	QUERCUS PALUSTRIS 'GREEN PILLAR'	GREEN PILLAR OAK	3" CAL.	AS SHOWN	B&B
* TA	6	TILIA AMERICANA 'REDMOND'	REDMOND AMERICAN LINDEN	3" CAL.	AS SHOWN	B&B
<b>ORNAMENTAL TREES</b>						
* AC	3	AMELANCHIER CANADENSIS	SHADBLOW SERVICEBERRY	6-7' HT.	AS SHOWN	B&B
* CF	2	CORNUS FLORIDA	FLOWERING DOGWOOD	3" CAL.	AS SHOWN	B&B
* MF	2	MALUS FLORIBUNDA	CRABAPPLE	3" CAL.	AS SHOWN	B&B
* WP	2	PRUNUS AMERICANA	WILD PLUM	3" CAL.	AS SHOWN	B&B
<b>EVERGREEN TREES</b>						
* AB	6	ABIES BALSAMEA	BALSAM FIR	#10	15' O.C.	POT
* TON	27	THUJA OCCIDENTALIS 'NIGRA'	AMERICAN ARBORVITAE	7-8' HT.	5' O.C.	B&B
TOTAL TREES	60					
<b>SHRUBS</b>						
* NJ	47	CEANOTHUS AMERICANUS	NEW JERSEY TEA	2.5'-3' HT.	AS SHOWN	B&B
* CA	39	CLETHRA ALNIFOLIA	SUMMERSWEET	#5	48" O.C.	POT
IC	40	ILEX CRENATA 'SKY PENCIL'	SKY PENCIL HOLLY	#15	24" O.C.	POT
* IG	57	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY	#7	36" O.C.	POT
* RN	32	RHODODENDRON 'NOVA ZEMBLA'	NOVA ZEMBLA RHODODENDRON	#5	6' O.C.	POT
* TS	57	THUJA OCCIDENTALIS 'SMARAGD'	SMARAGD ARBORVITAE	6-7' HT.	AS SHOWN	B&B
<b>PERENNIALS/GRASSES</b>						
CK	100	CALAMAGROSTIS 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS	#2	24" O.C.	STAGGERED
NF	TBD	NEPETA X FAASSENII 'WALKER'S LOW'	WALKER'S LOW CATMINT	#2	36" O.C.	STAGGERED
* RH	TBD	RUDBECKIA FULGIDA	BLACK EYED SUSAN	#1	30" O.C.	STAGGERED
TP	TBD	THYMUS PRAEOX 'ALBIFLORUS'	STEPABLES CREEPING THYME	QUART	8" O.C.	STAGGERED
<b>ANNUALS</b>						
	TBD	"PROVEN WINNERS" BREATHTAKING MIX		FLATS	AS NEEDED	STAGGERED
* DENOTES NATIVE SPECIES OR NATIVE CULTIVAR						



*Allen & Major*  
03.25.2024

PROFESSIONAL LANDSCAPE ARCHITECT FOR ALLEN & MAJOR ASSOCIATES, INC.

B	3/25/2024	REVISED PER TOWN COMMENTS
A	2/29/2024	REVISED PER TOWN COMMENTS
REV	DATE	DESCRIPTION

APPLICANT/OWNER:  
BLVD READING, LLC  
c/o SAVERIO FULCINITI  
1 SYLVAN STREET  
PEABODY, MA 01960

PROJECT:



**STRADA**  
MIXED USE BUILDING  
258 MAIN STREET  
READING, MA

PROJECT NO.	2398-01A	DATE:	10-05-2023
SCALE:	AS SHOWN	DWG. NAME:	L-2398-01A
DESIGNED BY:	JBT	CHECKED BY:	CMQ

PREPARED BY:

**ALLEN & MAJOR ASSOCIATES, INC.**  
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environmental consulting • landscape architecture  
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DRAWING TITLE:	SHEET No.
LANDSCAPE NOTES & DETAILS	L-502

**NOTES:**

1. THIS DETAIL IS PROTOTYPICAL IN NATURE AND IS NOT TO BE USED TO BUILD FROM FOR CONSTRUCTION. CONTRACTOR SHALL SUBMIT SHOP DRAWING FOR APPROVAL PRIOR TO ORDER & PURCHASE.
2. PERGOLA DESIGNED & BUILT BY FOREVER REDWOOD OR EQUAL. ALL PERGOLA WOOD TO BE MOSAIC REDWOOD, 12 YEAR WARRANTY.
3. FLUSH CUTTING RAFTER AND SUPPORTS END CUT DETAIL.
4. 4 POST ANCHOR KIT FOR WOOD WITH LAG BOLTS.
5. 4 FT. DEPTH MIN. CONC. FOOTINGS FOR ALL POSTS. WOODS TO BE STAINED OR LEFT NATURAL. TRANSPARENT SEALANT INCLUDED. FOR PRICING PURPOSES ONLY STAINED WITH 2 COATS. PROVIDE SHOP DRAWINGS FOR APPROVAL PRIOR TO ORDERING.
6. PERGOLA STRUCTURE INCLUDING FASTENERS, WOOD SIZING, AND 4 FT. DEPTH CONCRETE FOOTINGS FOR ALL POSTS TO BE REVIEWED AND APPROVED BY STRUCTURAL ENGINEER LICENSED IN THE STATE OF MA & AT CONTRACTOR'S COST PRIOR TO PURCHASE & INSTALLATION. PERGOLA CONTRACTOR TO COORD. PERGOLA INSTALLATION WITH ADJACENT LIGHTING, SURFACE MATERIALS, AND FOOTING CONTRACTORS.

FOREVER REDWOOD  
33732 ANNAPOLIS RD.  
ANNAPOLIS, CA 95412  
CUSTOMER SERVICE / ORDER INFO  
ALEJANDRO OR SOPHIA  
(866) 332-2403  
HELP@FOREVERREDWOOD.COM

**PERGOLA TO BE:**  
"THE L.A. MODERN PERGOLA" OR "THE SILVERADO MODERN PERGOLA"  
25'-6" X 12'-9", POST HEIGHT: 10 FT. NO WALL PRIVACY PANELS

8" x 8" POSTS ON 4 FT. DEPTH BELOW GRADE CONCRETE FOOTINGS (4,500 PSI) AT 28 DAY STRENGTH.

PERGOLA ROOF STYLE: OPEN ROOF WITH SLATS AT 12" AND RAFTERS AT 18"

POST DECORATIVE TRIM: VERTICAL POST  
DECORATIVE TRIM (ALL POSTS)

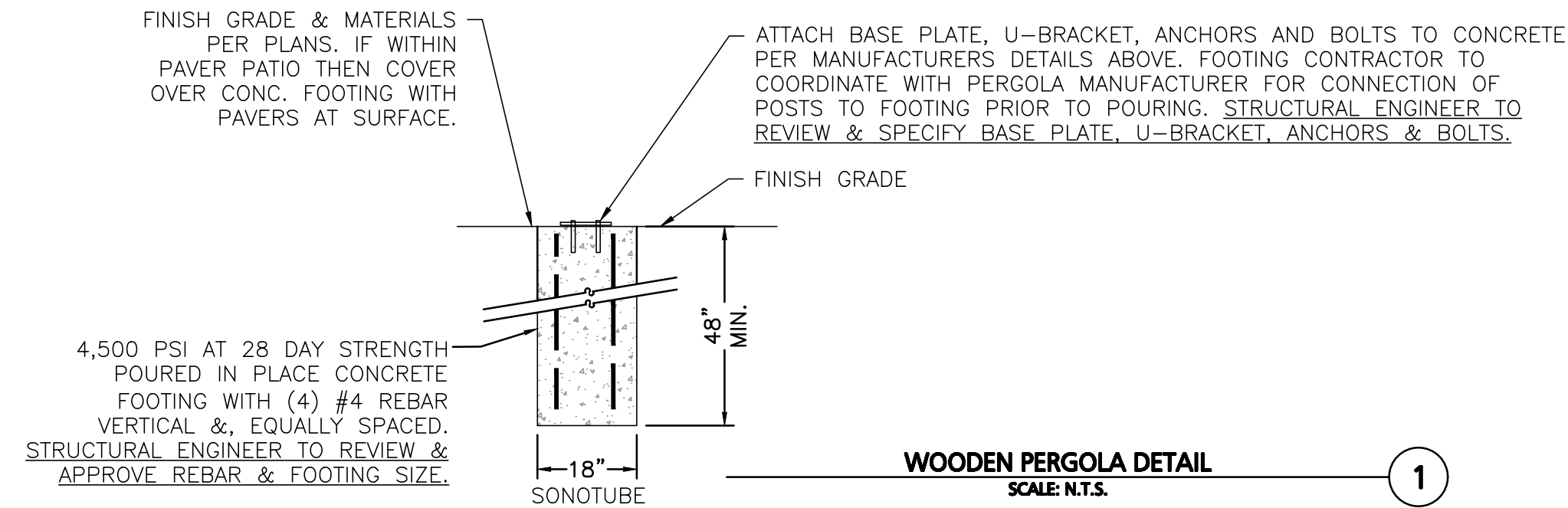
MINIMUM POST ANCHORING: POST ANCHOR KIT ON 4 FT. DEPTH BELOW GRADE CONC. FOOTINGS (4,500 PSI) FOR HURRICANE-WIND. A MASSACHUSETTS LICENSED STRUCTURAL ENGINEER (AT CONTRACTOR COST) TO PROVIDE REVIEW & APPROVAL FOR STATE CODES, & WIND & SNOW LOAD. CONTRACTOR TO MAKE CHANGES AS APPROPRIATE FOR THIS SITE & AS NOTED BY THE STRUCTURAL ENGINEER.



**L.A. MODERN PERGOLA**



**SILVERADO MODERN PERGOLA**



**Oahu No Scratch® Bicycle Rack**

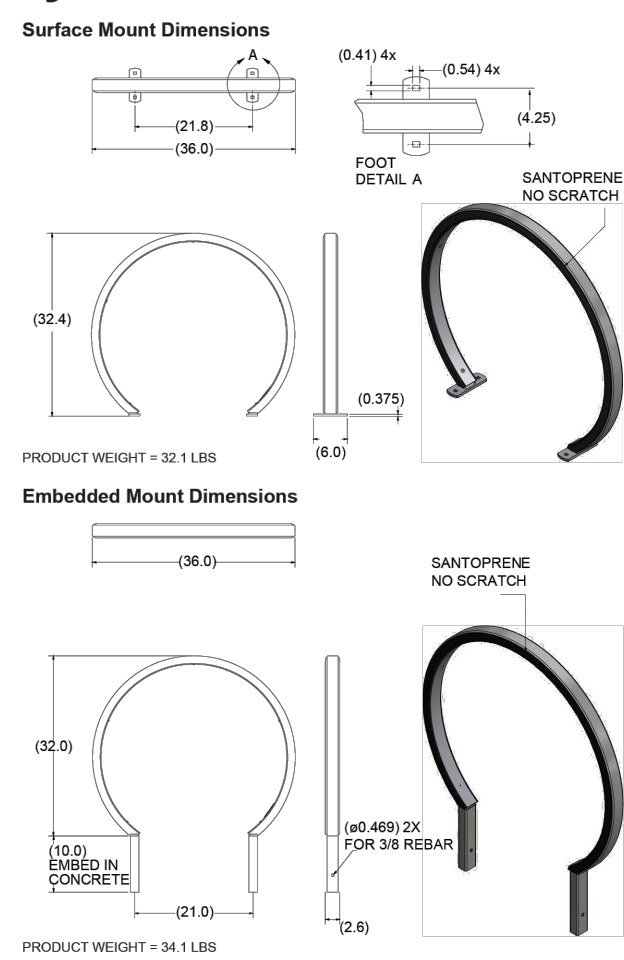
Capacity: 2 Bicycles Warranty: 1 Year

- No Scratch® bumper protects bike frames
- Superior functionality and aesthetics
- High security
- Extremely difficult to cut
- Works with a variety of lock types

**Product Specifications**

- Materials:**
- Stainless Steel or Mild Steel
  - Outer Tube: 2" x 1" x 0.120" rectangular tubing
  - Inner Bar: 0.25" x 2" flat bar
  - Santoprene® Rubber Bumper
- Finishing Options:**
- Stainless Steel Bead Blast Satin (recommended)
  - Stainless Steel Powder Coat
  - Stainless Steel Thermoplastic (Plascoat)
  - Mild Steel Hot Dipped Galvanized (Surface Mount Only)
  - Mild Steel Powder Coat
  - Mild Steel Thermoplastic (Plascoat)
- Mounting Options:**
- Surface Mount: 0.375" x 2" x 6" flat bar foot
  - Embedded In-Ground Mount into concrete footing

- Hardware Options:**
- Concrete Wedge Anchors (standard)
  - Tamper Resistant Nuts (recommended)
- For other hardware options contact our sales and support staff.



Revised: 11/09/2020

www.sportworks.com

**BIKE RACK**  
NOT TO SCALE

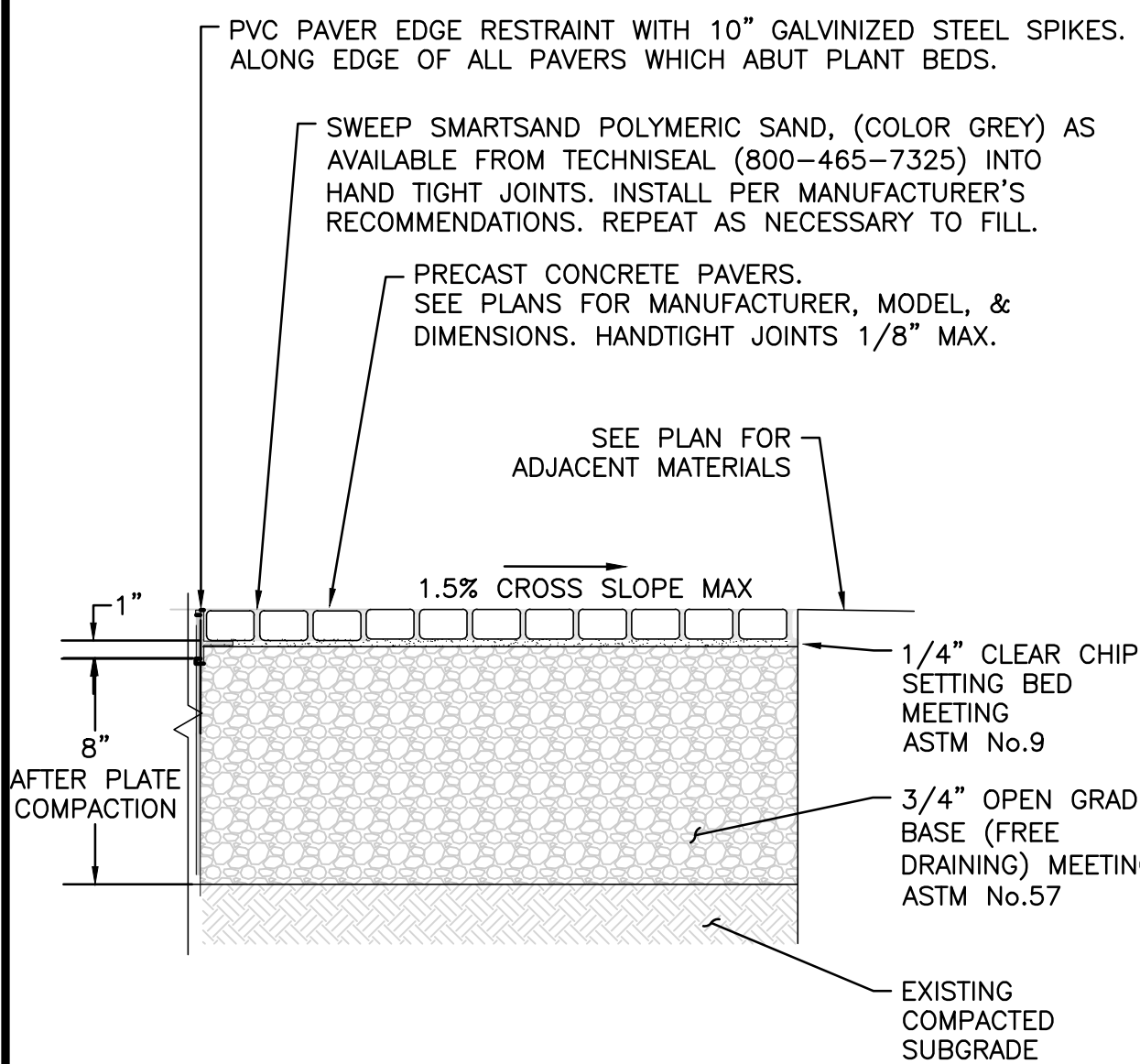
3

**FIELD PAVERS**

**ARCANA**

Manufactured with EasyClean, an integral sealer that is a property of the paver allowing for easier clean-ups when a spill happens before a stain can develop.

TO BE USED FOR FIREPAT PATIO AREA. PERMEABLE PAVER SPACERS WILL BE REQUIRED IN THIS APPLICATION TO MAKE ARCANA PERMEABLE.

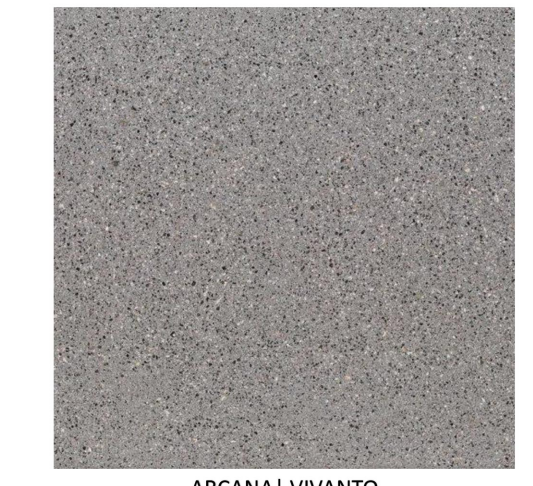


**ACCENT PAVERS**

**ARCANA**

Manufactured with EasyClean, an integral sealer that is a property of the paver allowing for easier clean-ups when a spill happens before a stain can develop.

TO BE USED FOR FIREPAT PATIO AREA. PERMEABLE PAVER SPACERS WILL BE REQUIRED IN THIS APPLICATION TO MAKE ARCANA PERMEABLE.

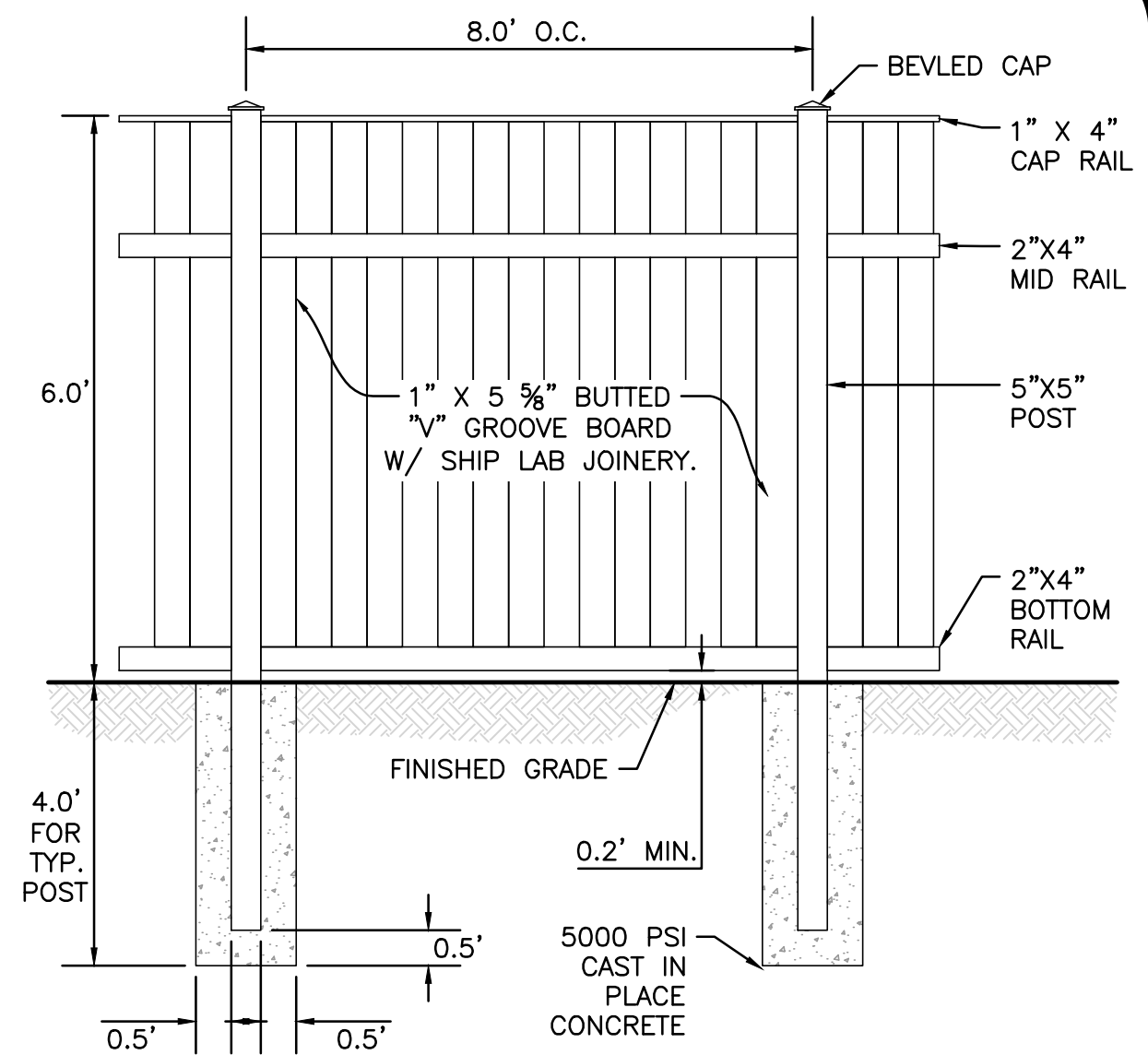


**NOTES:**

1. SUBMIT SAMPLES & SHOP DRAWING OF PAVERS AND COLOR CHART FOR APPROVAL PRIOR TO ORDERING.
2. SUBMIT SHOP DRAWING FOR APPROVAL OF SETTING BED AND FREE DRAINING BASE SIEVE ANALYSIS PRIOR TO ORDERING.
3. FIELD PAVERS TO BE 24" x 24" x 2" DEEP ARCANA IN CORVARA COLOR.
4. ACCENT BAND PAVERS TO BE 24" x 24" x 2" DEEP ARCANA IN VIVANTO COLOR.

**PRECAST CONCRETE PAVERS**  
NOT TO SCALE

4



- NOTES:**
1. 6" HEIGHT PRIVACY FENCE. SEE SHEET L-102 FOR MODEL NUMBER.
  2. PREPARE SHOP DRAWINGS FOR APPROVAL PRIOR TO CONSTRUCTION.
  3. COLOR TO BE WHITE AND TO BE APPROVED BY OWNER.
  4. SEE PLAN FOR LOCATIONS.

**PRIVACY FENCE**  
NOT TO SCALE

2

**AcoustiGuard**

**Sound Barrier / Absorption Wall**  
Acoustically Absorbent, High Transmission Loss Barrier Wall System

- NOTES:**
1. 6' HEIGHT SILENT PROTECTOR FENCE.
  2. PREPARE SHOP DRAWINGS FOR APPROVAL PRIOR TO CONSTRUCTION.
  3. COLOR TO BE WHITE AND TO BE APPROVED BY OWNER.
  4. SEE PLAN FOR LOCATIONS.



**SOUND BARRIER FENCE**  
NOT TO SCALE

6



03.25.2024  
PROFESSIONAL LANDSCAPE ARCHITECT FOR ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
B	3/25/2024	REVISED PER TOWN COMMENTS
A	2/29/2024	REVISED PER TOWN COMMENTS

APPLICANT/OWNER:  
BLVD READING, LLC  
c/o SAVERIO FULCINITI  
1 SYLVAN STREET  
PEABODY, MA 01960

PROJECT:



**STRADA**  
MIXED USE BUILDING  
258 MAIN STREET  
READING, MA

PROJECT NO.	2398-01A	DATE:	10-05-2023
SCALE:	AS SHOWN	DWG. NAME:	L-2398-01A
DESIGNED BY:	JBT	CHECKED BY:	CMQ

PREPARED BY:



**ALLEN & MAJOR ASSOCIATES, INC.**  
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environmental consulting • landscape architecture  
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DRAWING TITLE:	SHEET No.
SITE AMENITIES DETAILS	L-503