

Drawing Index:

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CONSTRUCTION DETAILS

EROSION AND SEDIMENT CONTROL PLAN

Owner:

ESC-1

NEW ENGLAND TRUCK SOLUTIONS (NETS) OF AVON, LLC 11 LEDIN DRIVE AVON, MA 02322

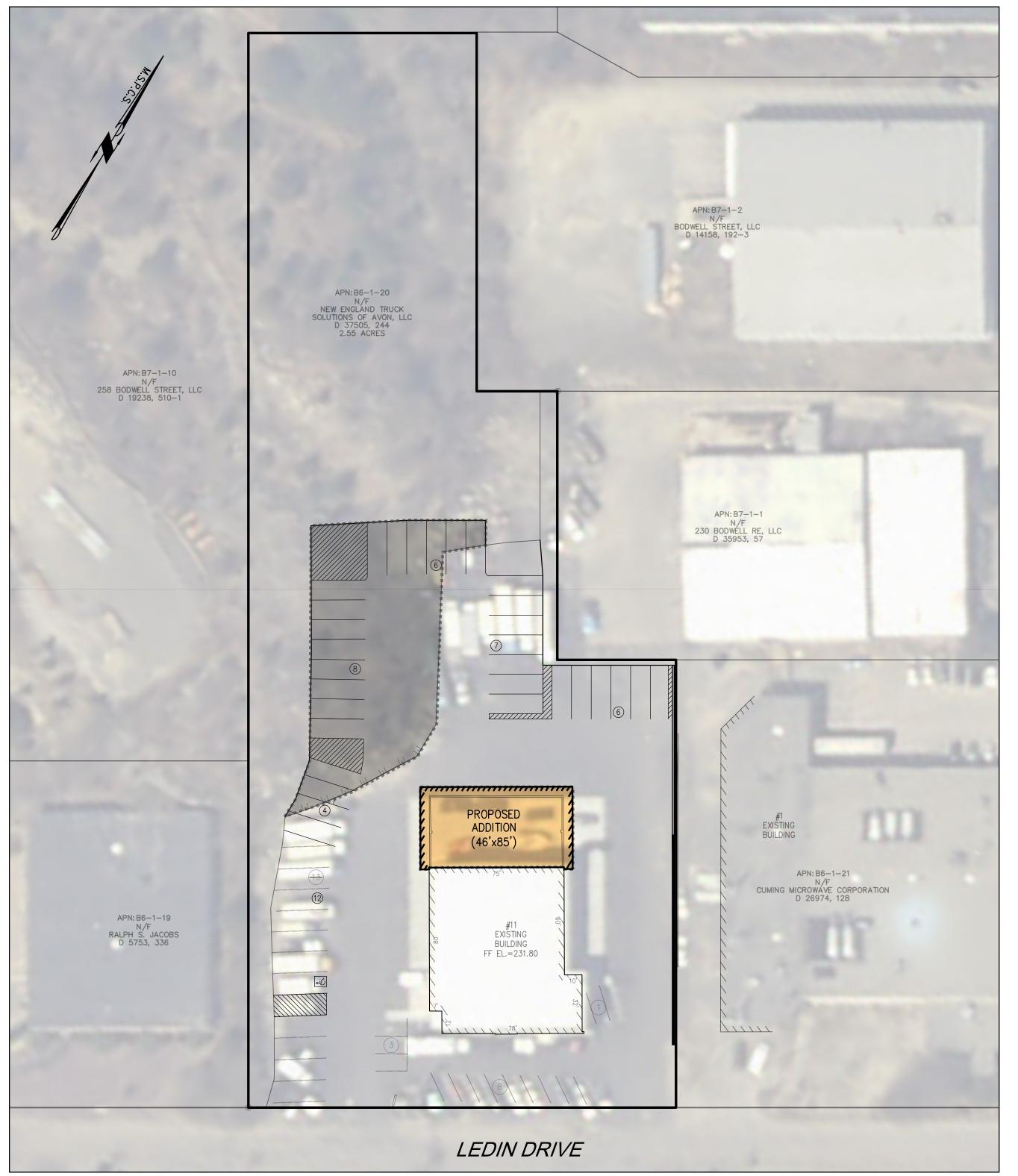
Applicant:

CONSERV GROUP, INC. 110 STATE ROAD SAGAMORE BEACH, MA 02562

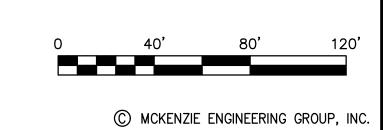
Engineer/Surveyor:

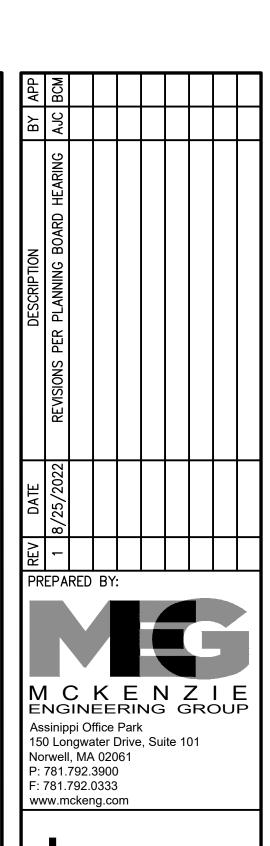
MCKENZIE ENGINEERING GROUP, INC. 150 LONGWATER DRIVE SUITE 101 NORWELL, MA 02061

SITE PLAN PROPOSED BUILDING ADDITION 11 LEDIN DRIVE IN AVON, MASSACHUSETTS



ISSUE DATE: JUNE 28, 2022 REVISED: AUGUST 25, 2022

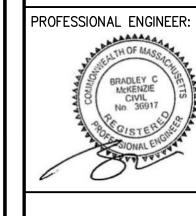




LAN LANGE B6-1-20)

RECEL NO. B6-1-20)

ROFESSIONAL ENGINEER:



CANT:
NSERV GROUP, INC.
STATE ROAD
AMORE BEACH, MA 02562

DRAWN BY:

DESIGNED BY:

CHECKED BY:

AJC

CHECKED BY:

APPROVED BY:

DATE:

JUNE 28, 2022

SCALE:

AS NOTED

PROJECT NO.:

222-122

DWG. TITLE:

COVER SHEET

DWG. NO:

CS-1

ABBREVIATIONS

REMOVE AND RESET REMOVE AND STACK SEWER

STONE BOUND/DRILL HOLE SLOPED GRANITE EDGING

TRAFFIC CONTROL BOX

TELEPHONE MANHOLE

VITRIFIED CLAY PIPE

VERTICAL GRANITE CURB

TAPPING SLEEVE, VALVE AND BOX

STONE BOUND

SEWER MANHOLE

SEWER SERVICE

STATION

STEEL

SIDEWALK

TELEPHONE

TRAFFIC LIGHT

TRANSFORMER TOP OF SLOPE

UTILITY POLE

VERTICAL

WATER MAIN WATER GATE

R&R R&S

SB/DH SGE SMH STA SS STL SW

TRANS

TSV TYP

VCP

VERT

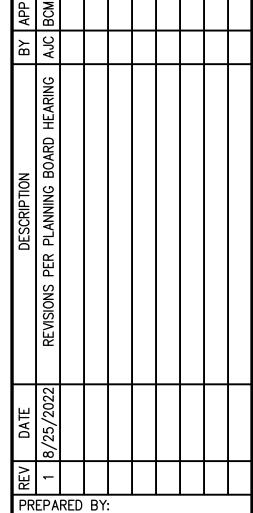
VGC

ABAN	ABANDONED	Existing	Proposed	Description		
ACP	ASBESTOS CEMENT PIPE					
ACR ADJ	ACCESSIBLE CURB RAMP ADJUST	× 100.50	+ 100.50	SPOT ELEVATIONS		
APPROX	APPROXIMATE	100.50	100.50 100.00	TOP & BOTTOM ELEVATIONS		
ASPH ACCMP	ASPHALT ASPHALT COATED CORRUGATED METAL PIPE	* 100.50	% 100.50	ODOT 51 51/4 TIONO WITH 1 5 AD55		
B BD	BOLLARD			SPOT ELEVATIONS WITH LEADER		
BLDG	BOUND BUILDING	ŀ ∳¹	ф	HYDRANT		
BIT CONC BM	BITUMINOUS CONCRETE BENCHMARK	<u>·</u>	H	WATER GATE VALVE		
BS	BOTTOM OF SLOPE	, ,	®	WELL		
CAP CB	CORRUGATED ALUMINUM PIPE CATCH BASIN	(_			
C&C	CUT AND CAPPED	©	©	GAS GATE		
CB/DH CB/EPLP	CONC. BOUND/DRILL HOLE CB/ESCUTCHEON	E	E	ELECTRIC HANDHOLE		
CCB	CAPE COD BERM	\\	☆	LIGHT POLE		
CIP CIT	CAST IRON PIPE CHANGE IN TYPE		ø	UTILITY POLE		
© CLF	CENTERLINE CHAIN LINK FENCE		•	GUY POLE		
CO	CLEAN OUT	D	D	GUY ANCHOR		
CONC COND	CONCRETE CONDUIT			DRAIN MANHOLE		
CMP	CORRUGATED METAL PIPE	(D)	(D)			
CPP CS	CORRUGATED POLYETHYLENE PIPE COMBINED SEWER	S	<u>\$</u>	SEWER MANHOLE		
CSMH CULV	COMBINED SEWER MANHOLE			CATCH BASIN		
Δ	CULVERT DELTA ANGLE			DOUBLE CATCH BASIN		
D DCB	DRAIN DOUBLE CATCH BASIN			TEST PIT		
DIP	DUCTILE IRON PIPE			BORING		
DMH E	DRAIN MANHOLE ELECTRIC		-	SIGN SINGLE POST		
ECC ELEV	EXTRUDED CONCRETE CURB		_	GRANITE OR CONCRETE BOUND		
EMH	ELEVATION ELECTRIC MANHOLE	_	_			
E/T/C EW	ELECTRIC, TELEPHONE, & CABLE TV END WALL			WETLAND FLAG		
EXIST	EXISTING	//////////////////////////////////////	<u> </u>	EXISTING BUILDING		
FAB FES	FIRE ALARM BOX FLARED END SECTION	(//////	(11111111)			
FND.	FOUND			PROPOSED BUILDING		
FND F&C	FOUNDATION FRAME AND COVER					
F&G G	FRAME AND GRATE GAS			MAJOR CONTOUR		
GD	GROUND			MINOR CONTOUR		
GG GIP	GAS GATE GALVANIZED IRON PIPE	X	X	CHAINLINK FENCE		
GP	GUARD POST	CTV	CTV	CABLE TV LINE		
GS GR	GAS SERVICE GUARD RAIL	E/T/C	E/T/C	ELECTRIC, TELEPHONE,		
GRAN. HDPE	GRANITE HIGH-DENSITY POLYETHYLENE PIPE			CABLE TV DUCTBANK		
HH	HANDHOLE	———— OHW ————	———— OHW ————	OVERHEAD ELECTRIC		
HOR HP	HORIZONTAL HIGH PRESSURE	G	G	NATURAL GAS LINE		
HWL	HEADWALL	S	\$	SANITARY SEWER MAIN		
HYD INV	HYDRANT INVERT	D	D	DRAIN PIPE		
I.P. I.R.	IRON PIN IRON ROD	——— т	т ——	TELEPHONE LINE		
L	LEAD	W	w	WATER MAIN		
LSA LP	LANDSCAPED AREA LIGHT POLE	**	•	FIRE PROTECTION LINE		
MAX	MAXIMUM		—— FP ——			
MC MCC	METAL COVER MONOLITHIC CONCRETE CURB			RETAINING WALL TREELINE		
MH MHB	MANHOLE MASS. HIGHWAY BOUND					
MIN	MINIMUM			HAYBALE & SILT FENCE		
MLP NIC	METAL LIGHT POLE NOT IN CONTRACT	<u> </u>		LIMIT BORDERING VEGETATED WETLAND RESOURCE(1)		
NTS	NOT TO SCALE			` '		
OHW PB	OVERHEAD WIRE PULL BOX			100' WETLAND BUFFER ZONE		
PE P	POLYETHYLENE PIPE PROPERTY LINE					
PROP	PROPOSED					
PVC PVMT	POLYVINYL CHLORIDE PIPE PAVEMENT					
PWW	PAVED WATER WAY					
RCP REM	REINFORCED CONCRETE PIPE REMOVE					
REMOD RET	REMODEL RETAIN					
ROW	RIGHT OF WAY					
RR R&R	RAILROAD REMOVE AND RESET					

LEGEND

GENERAL NOTES

- 1. LOCUS IS SHOWN AS PARCEL NUMBER B6-1-20 ON THE TOWN OF AVON ASSESSORS MAPS. 2. DEED TO LOCUS IS RECORDED IN THE NORFOLK COUNTY REGISTRY OF DEEDS AT BOOK 37505, PAGE
- 3. THIS SURVEY WAS MADE ON THE GROUND IN FEBRUARY OF 2022 BY MCKENZIE ENGINEERING GROUP, INC.
- 4. ELEVATIONS SHOWN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988. 5. WETLAND RESOURCE AREAS SHOWN ON THIS PLAN ARE COMPILED FROM RECORD PLANS, MASSGIS,
- AND FIELD VERIFICATION, AND THE LOCATION SHOULD BE CONSIDERED APPROXIMATE. 6. LOCUS IS ZONED INDUSTRIAL
- MINIMUM SETBACK REQUIREMENTS:
- FRONT YARD 40' SIDE YARD 25'
- REAR YARD 40'
- 7. LOCUS IS SITUATED IN ZONE X AS SHOWN ON F.I.R.M. No 25021C0218E, EFFECTIVE JULY 17, 2012. 8. LOCUS IS LOCATED WITHIN THE TOWN OF AVON INDUSTRIAL ZONING DISTRICT. THE PROPERTY IS NOT LOCATED IN A DEP ZONE 2 OR THE TOWN OF AVON WATER SUPPLY PROTECTION DISTRICT OR
- FLOODPLAIN OVERLAY DISTRICT. 9. UTILITY INFORMATION FROM ABOVE GROUND OBSERVED EVIDENCE IN CONJUNCTION WITH DIG SAFE MARKINGS AND RECORD PLANS. THE LAND SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN HEREON COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE LAND SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. BEFORE CONSTRUCTION CALL DIG SAFE SYSTEMS, INC. AT 1-888-344-7233.
- 10. PLAN REFERENCES: 395 OF 2003



M C K E N Z I E ENGINEERING GROUP

Assinippi Office Park 150 Longwater Drive, Suite 101

Norwell, MA 02061 P: 781.792.3900 F: 781.792.0333 www.mckeng.com

EL NO. B6-1-DRIVE

SOR PARCE LEDIN

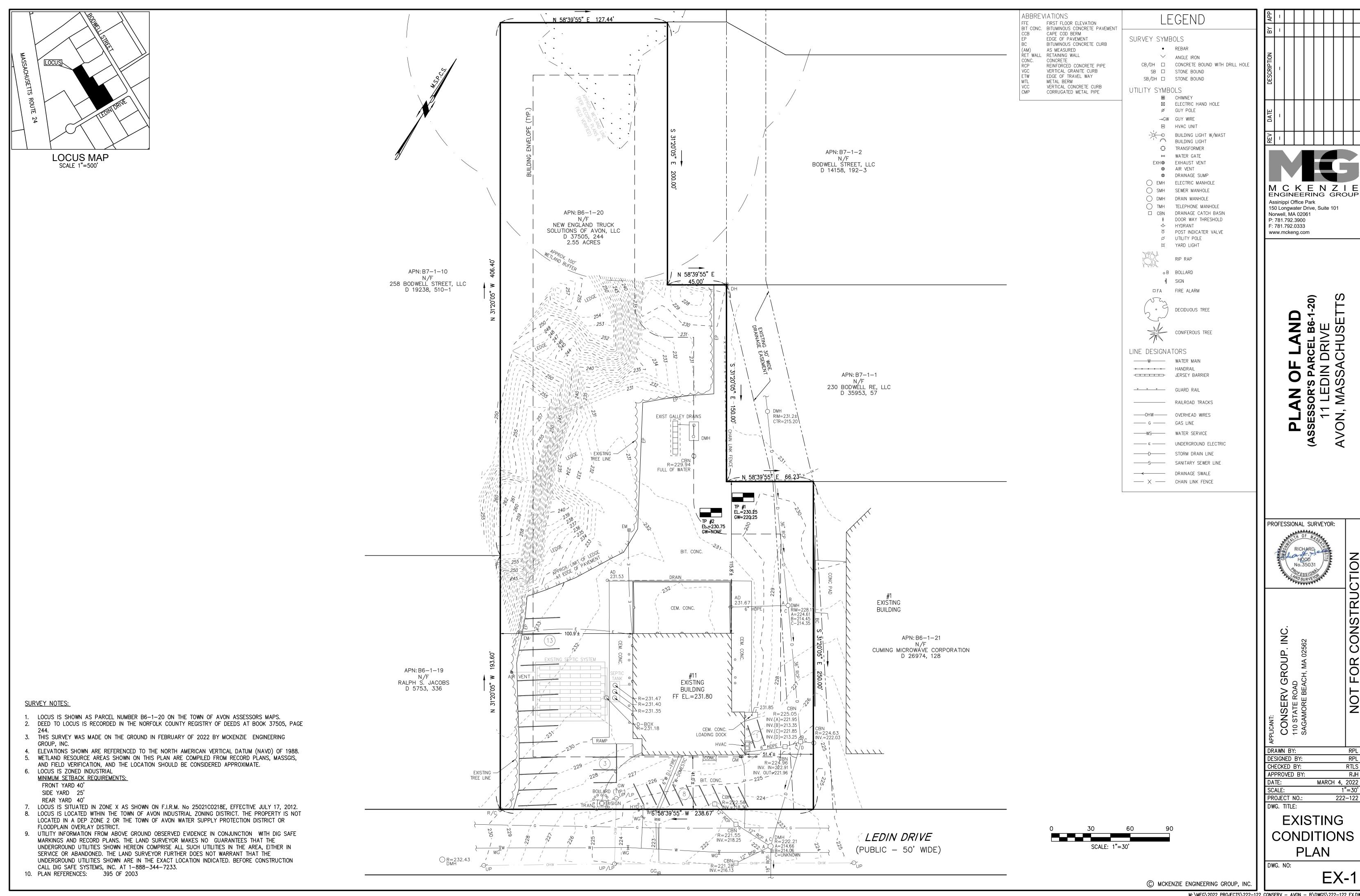
PROFESSIONAL ENGINEER:

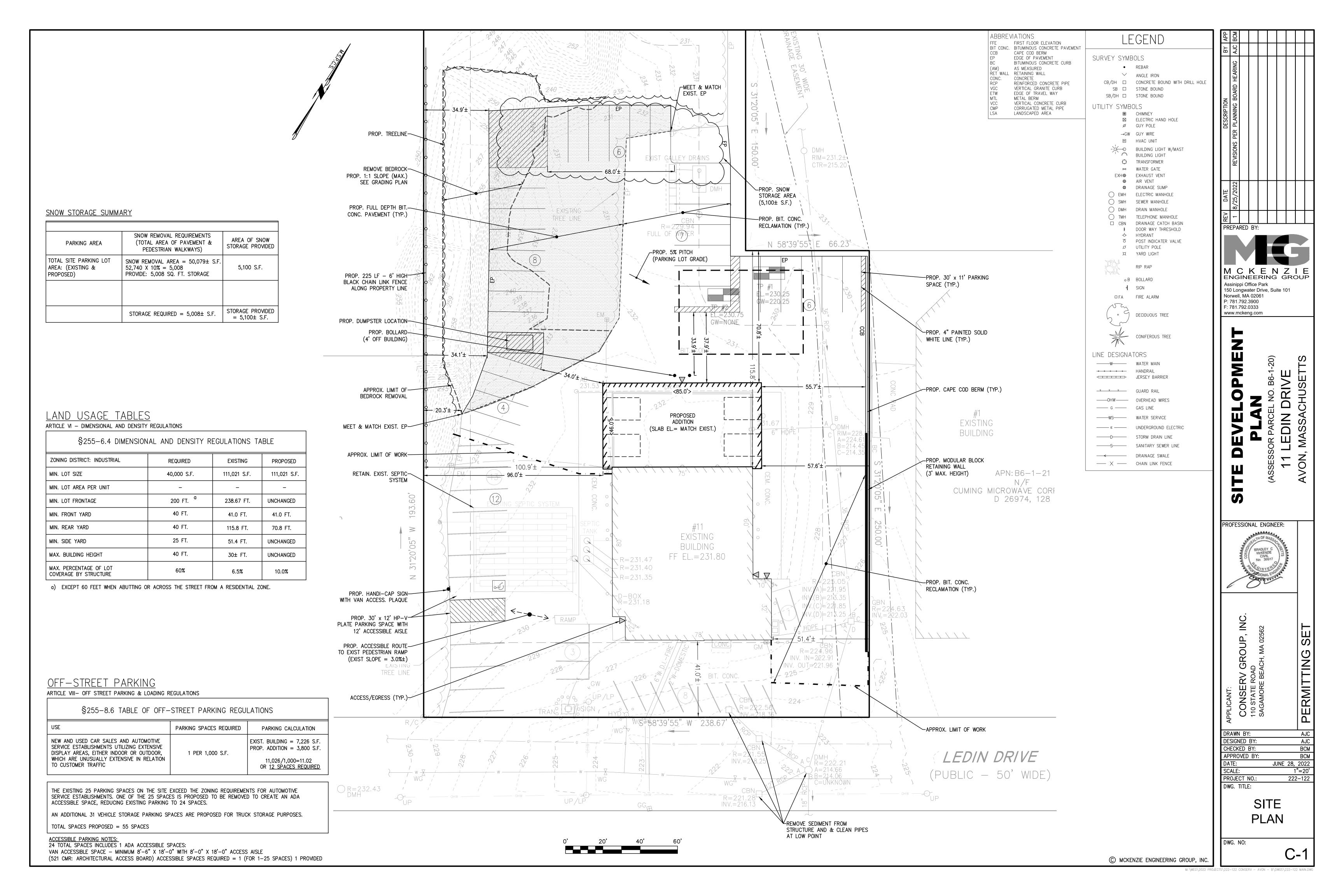
PERMITTING

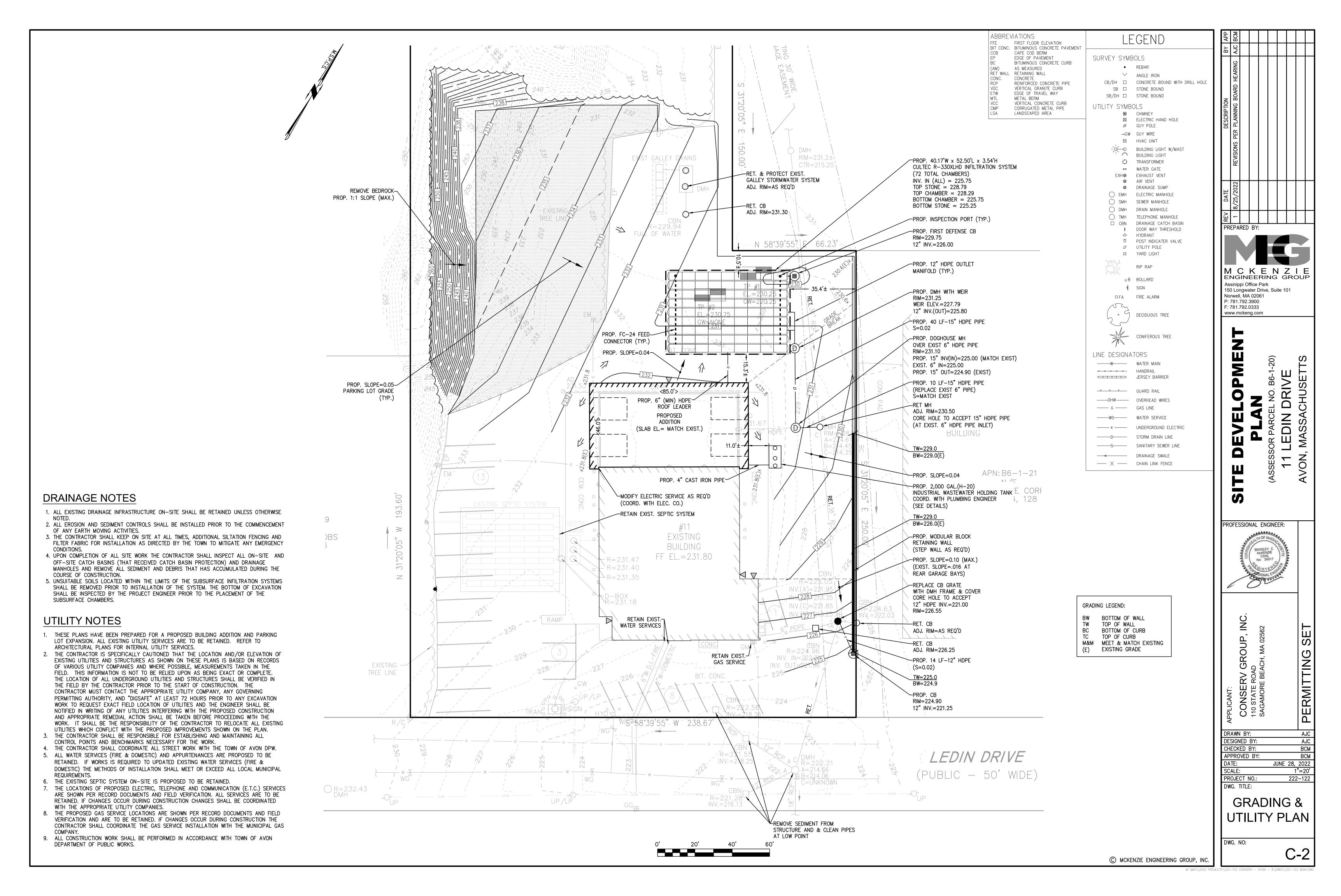
AJC AJC DESIGNED BY: CHECKED BY:
APPROVED BY:
DATE:
SCALE:
PROJECT NO.:
DWG. TITLE: BCM BCM JUNE 28, 2022 AS NOTED 222-122

DWG. NO:

LEGEND, **ABBREVIATIONS** & GENERAL NOTES





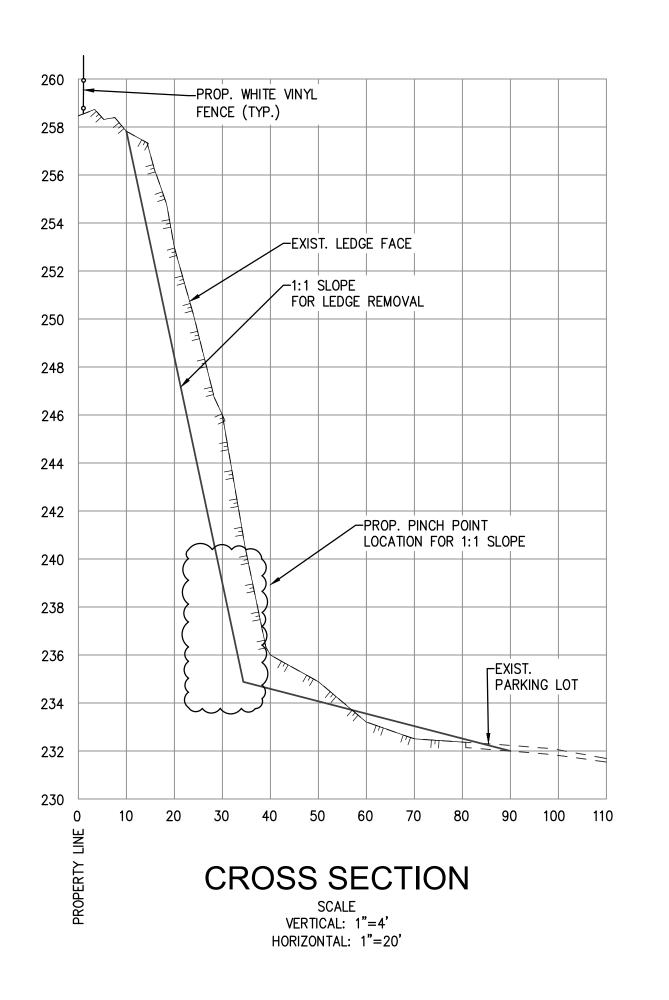


PROP. 225 LF — 6' HIGH— BLACK CHAIN LINK FENCE ALONG PROPERTY LINE ST GALLEY [DMH APPROX. LIMIT OF— LEDGE REMOVAL OF WATER 10' (MIN.) OFFSET TO— START OFGRADING REMOVE BEDROCK— PROP. 1:1 SLOPE (MAX.) CROSS-SECTION-PROP. PINCH POINT— LOCATION FOR 1:1 SLOPE EXIST. OFFSET FROM— PROPERTY LINE TO EDGE OF PAVEMENT PROPOSED ADDITION (SLAB EL.= MATCH EXIST.) PLAN VIEW

LEDGE REMOVAL SUMMARY

*	VOLUME (CUBIC YARDS)
TOTAL SITE CUT	-2,200 Cu.Yd.
TOTAL SITE FILL	+ 0 Cu.Yd.
DIFFERENCE	– 2,200 Cu.Yd.

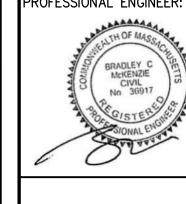
* EARTHWORK VOLUMES WERE CALCULATED BY COMPARING COMPUTER GENERATIONS OF EXISTING AND PROPOSED FINISHED SURFACE GRADES AND SHOULD BE CONSIDERED APPROXIMATE.



	APF	BCN				
	BY APF	AJC				
	DESCRIPTION	REVISIONS PER PLANNING BOARD HEARING AJC BCM				
	DATE	1 8/25/2022				
	REV	1				

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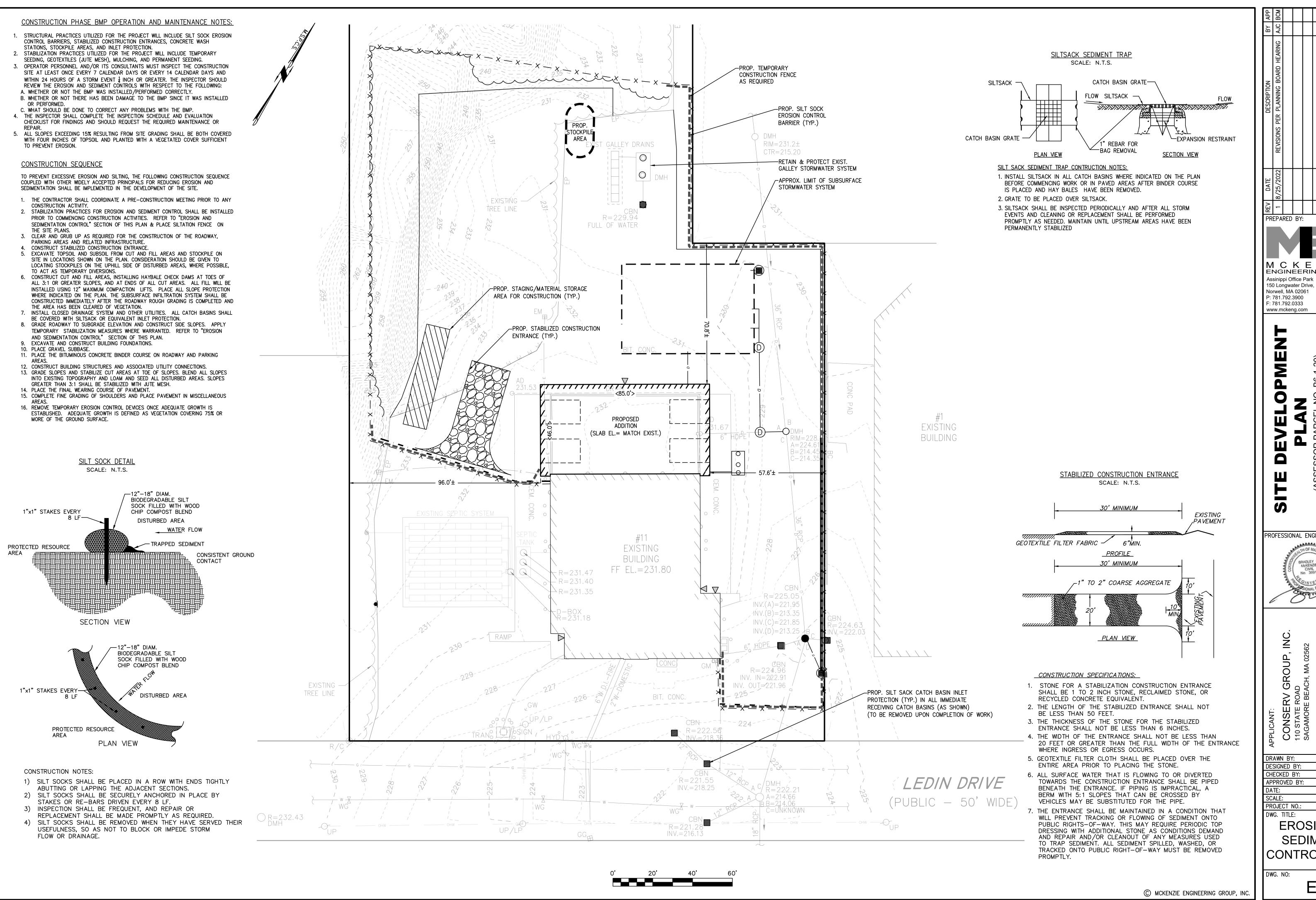
PROFESSIONAL ENGINEER:



AJC
AJC
BCM
BCM
JUNE 28, 2022
1"=20' DESIGNED BY: CHECKED BY:
APPROVED BY: SCALE:
PROJECT NO.:
DWG. TITLE: 222-122

LEDGE REMOVAL PLAN

C-3



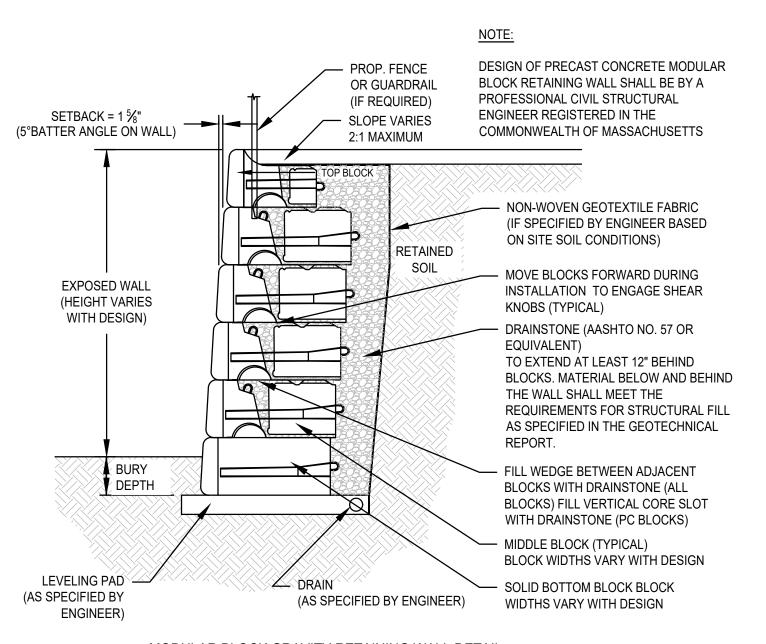
IM C K E N Z I i ENGINEERING GROUP 150 Longwater Drive, Suite 101

PROFESSIONAL ENGINEER:

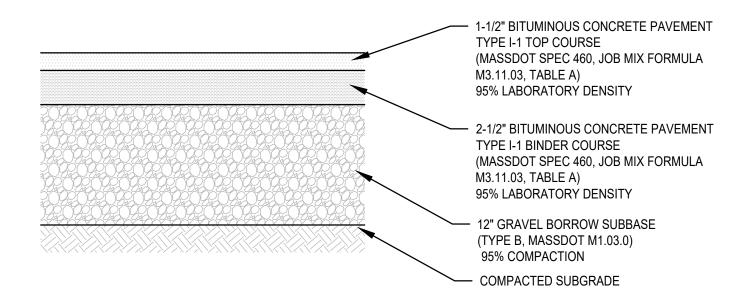
PERMI AJC AJC BCM BCM JUNE 28, 2022 1"=20 222-122

EROSION & SEDIMENT CONTROL PLAN

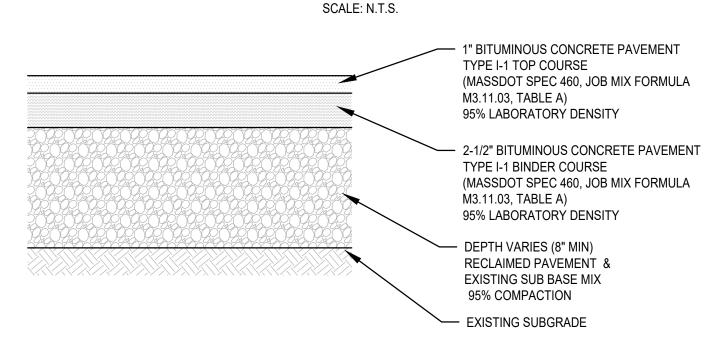
ESC-1



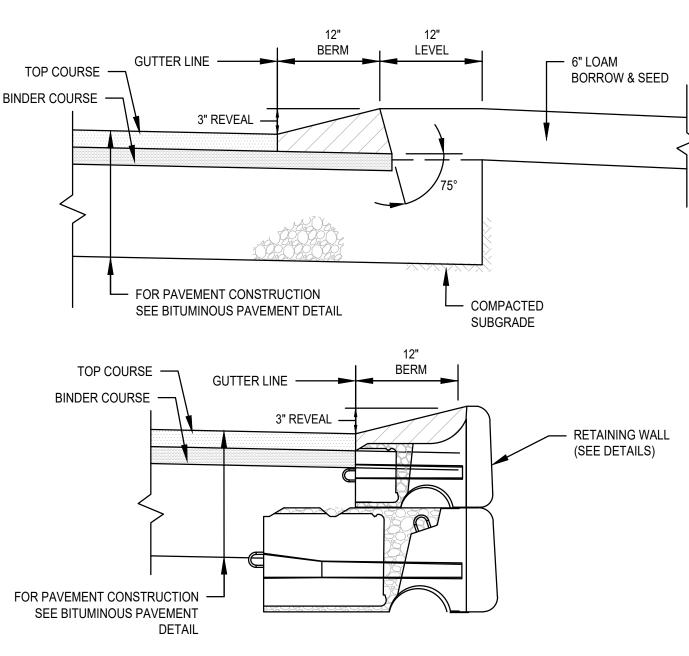
MODULAR BLOCK GRAVITY RETAINING WALL DETAIL SCALE: N.T.S.



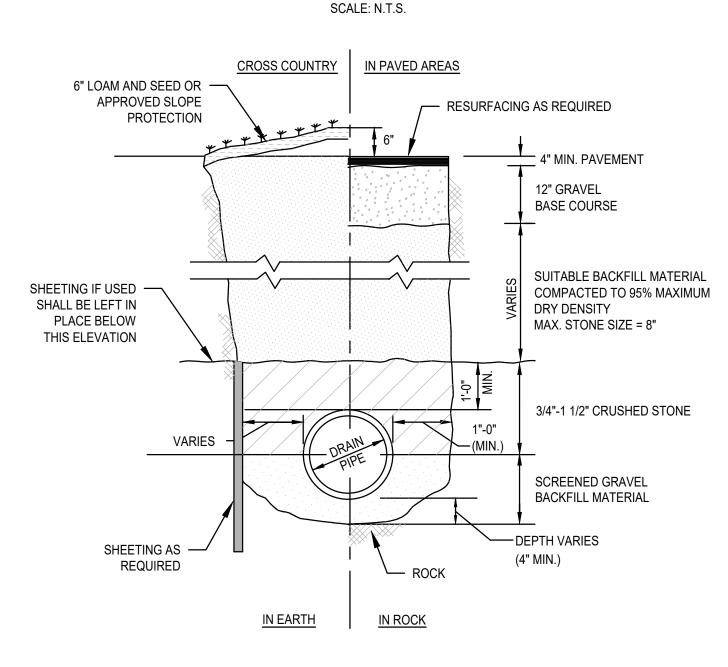
FULL DEPTH BITUMINOUS CONCRETE PAVEMENT DETAIL



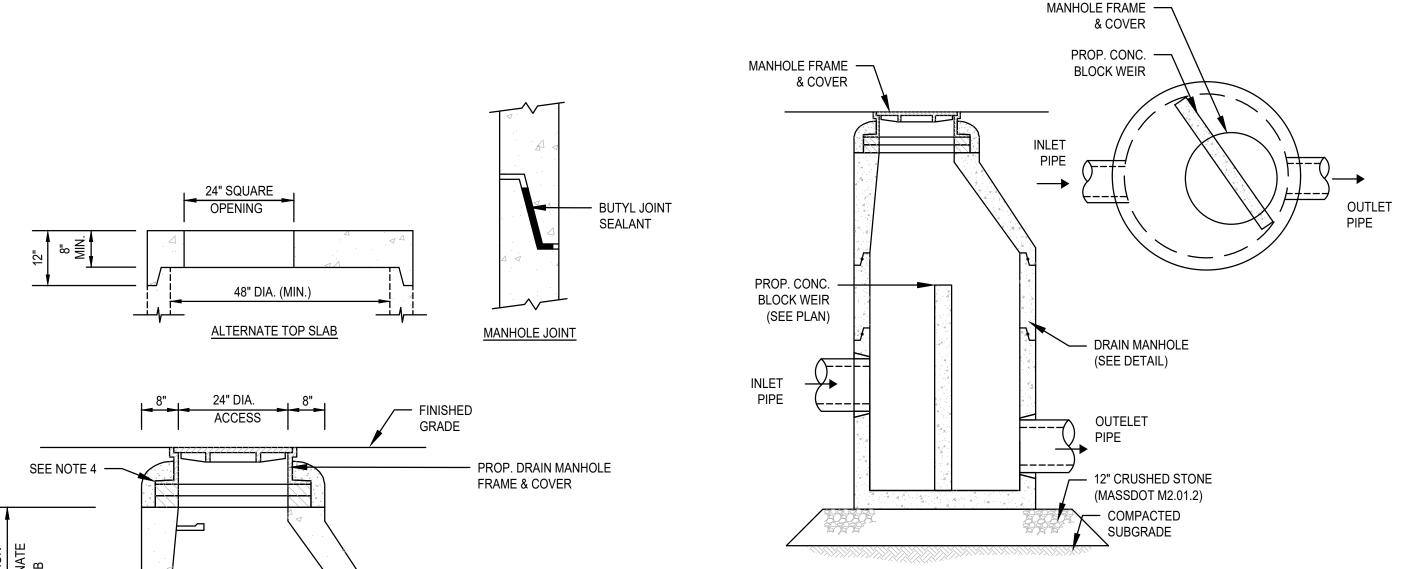
BITUMINOUS CONCRETE PAVEMENT RECLAMATION DETAIL SCALE: N.T.S.



MONOLITHIC BITUMINOUS CONCRETE BERM (CAPE COD BERM) DETAIL



TYPICAL DRAIN TRENCH DETAIL SCALE: N.T.S.



—— SEE NOTE 3

48" DIA. (MIN)

2. PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE

4. DRAIN MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY

5. COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.

DRAIN MANHOLE DETAIL

SCALE: N.T.S.

3. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.

BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM).

(TYP.)

1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.

1" PER FOOT

SHELF TO BE CONCRETE

FORMED AT A SLOPE OF

— CEMENT CONCRETE INVERT

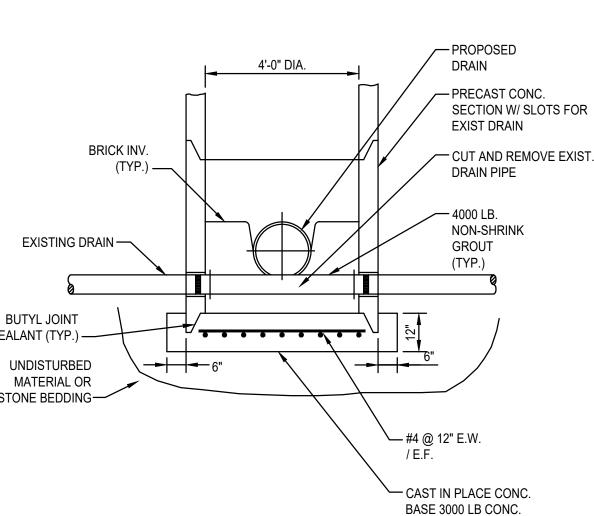
12" CRUSHED STONE

(MASSDOT M2.01.2)

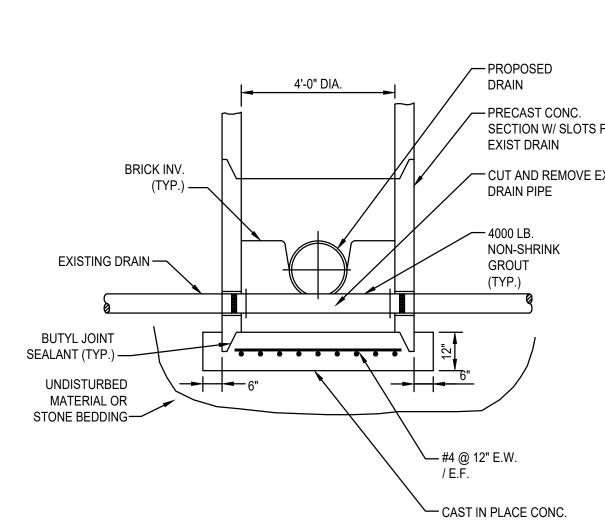
— COMPACTED

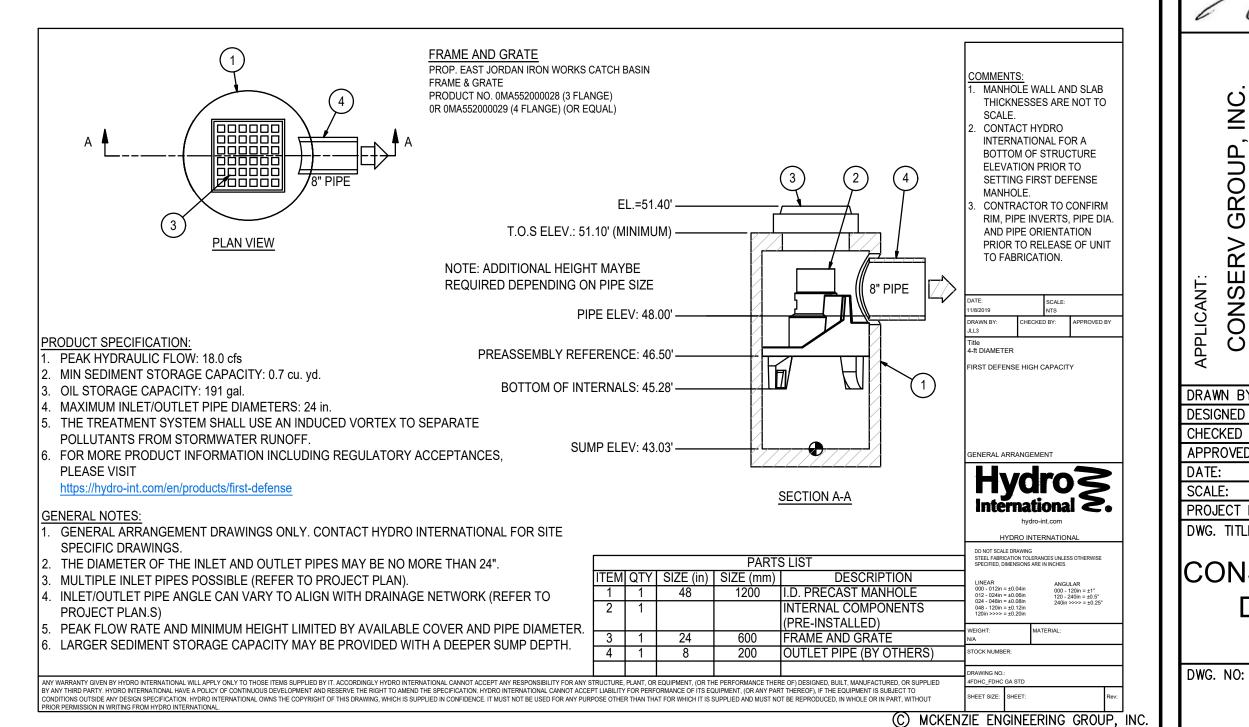
SUBGRADE

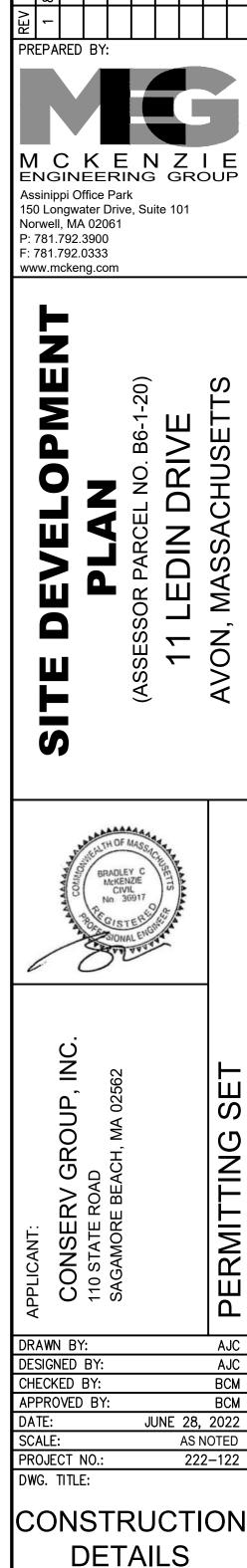
DRAINAGE MANHOLE WITH WEIR SCALE: N.T.S.

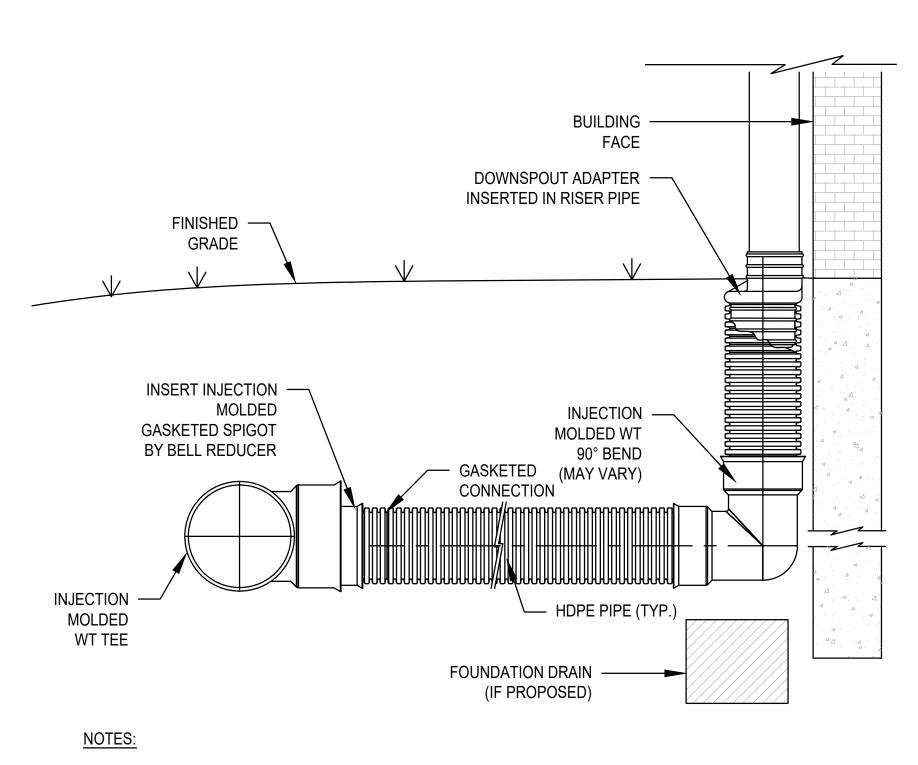


TYPICAL DOGHOUSE MANHOLE SCALE: N.T.S.



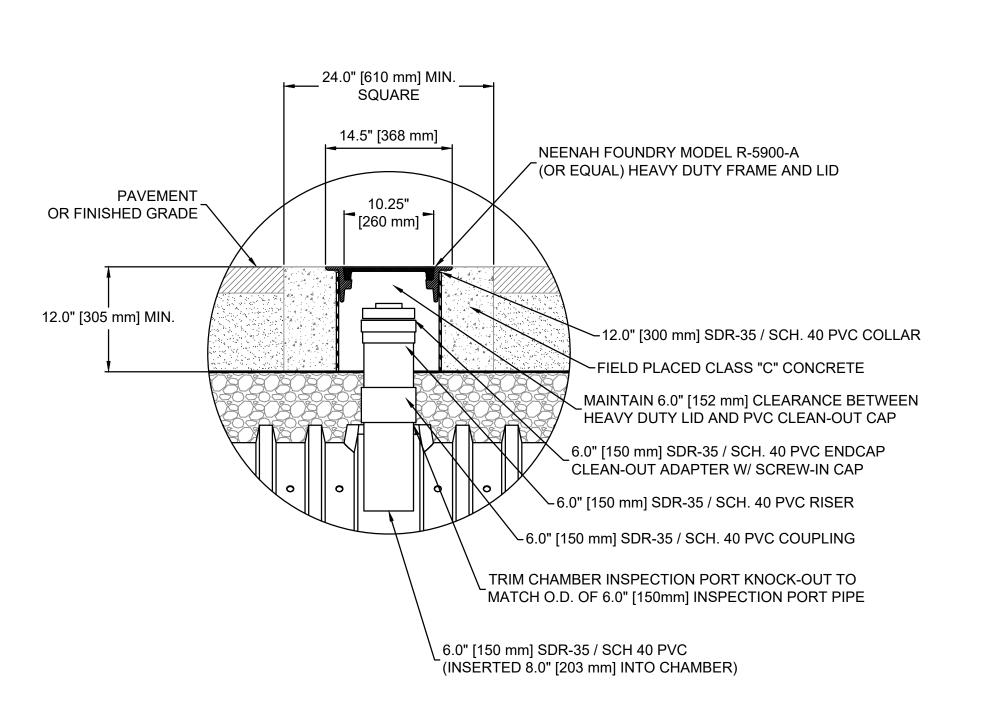






- 1. INJECTION MOLDED FITTING ARE AVAILABLE IN TEES, WYES, REDUCERS, 45° BENDS AND BELL/BELL COUPLERS.
- 2. WATERTIGHT (WT) JOINTS SHOWN. SOIL-TIGHT (ST) FITTINGS ARE ALSO AVAILABLE.

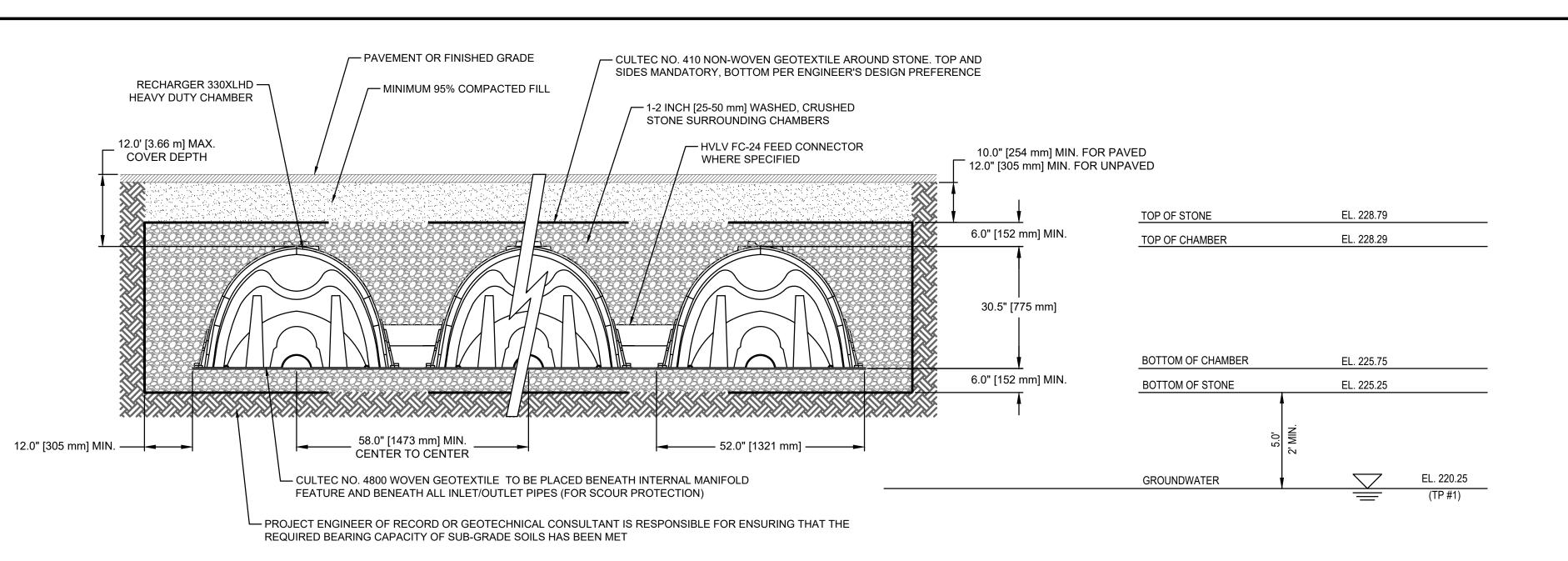
ROOF LEADER CONNECTION DETAIL SCALE: N.T.S.



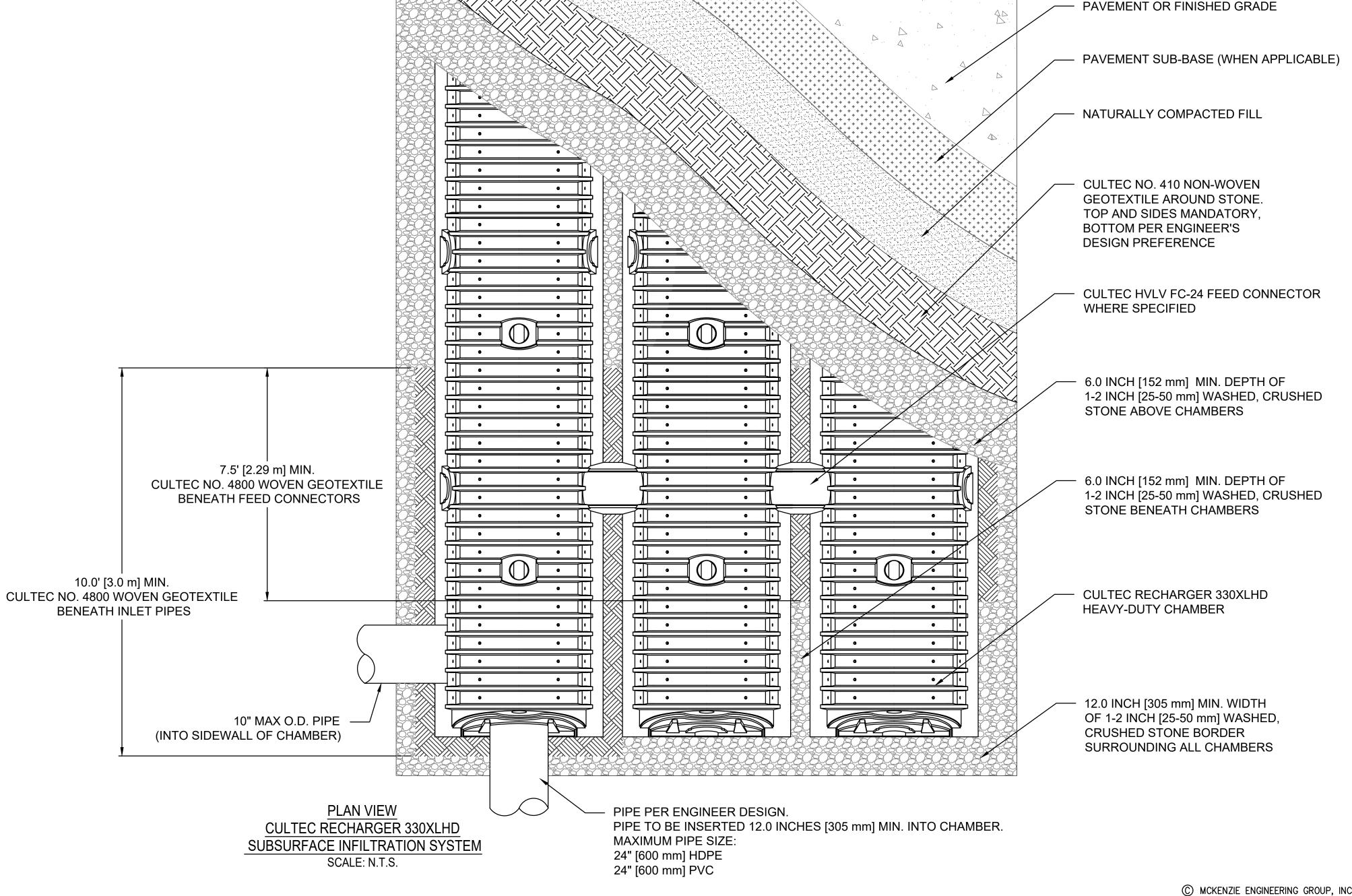
IN PAVEMENT

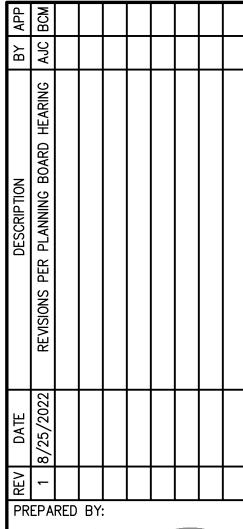
INSPECTION PORT DETAIL

SCALE: N.T.S.



CROSS SECTION CULTEC RECHARGER 330XLHD SUBSURFACE INFILTRATION SYSTEM SCALE: N.T.S.





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BRADLEY C McKENZIE CIVIL No 36917

CONSERV 110 STATE ROA SAGAMORE BE

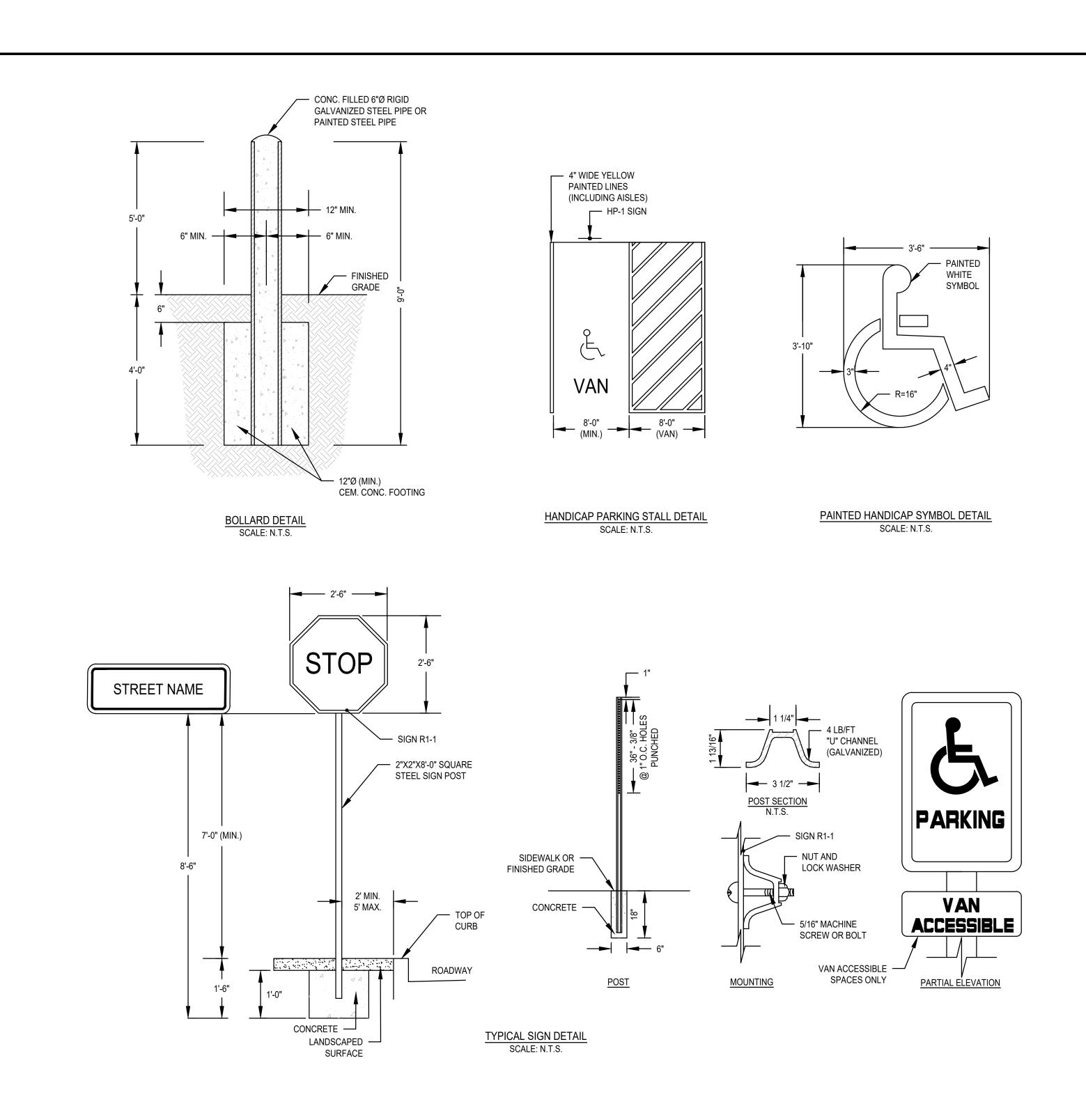
PERMITTING

AJC AJC DESIGNED BY: ВСМ CHECKED BY: APPROVED BY: BCM JUNE 28, 2022 SCALE: AS NOTED PROJECT NO.: 222-122 DWG. TITLE:

CONSTRUCTION **DETAILS**

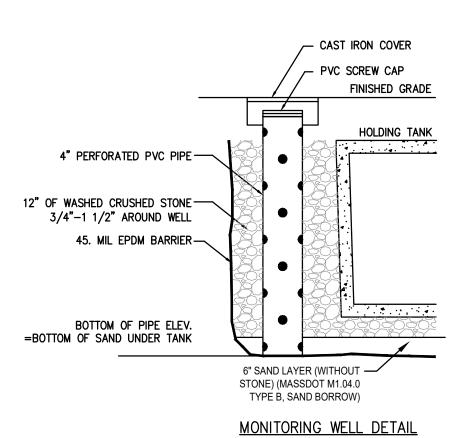
DWG. NO:

D-2



GENERAL NOTES:

- 1. EXISTING SITE FEATURES SHOWN HEREON WERE OBTAINED FROM A FIELD SURVEY PERFORMED BY MCKENZIE ENGINEERING GROUP, INC. IN FEBRUARY OF 2019.
- 2. EXISTING AND PROPOSED SITE FEATURES SHOWN HEREON ARE APPROXIMATE AND ARE NOT TO BE RELIED UPON AS BEING EXACT FOR PURPOSES OF CONSTRUCTION. MAJOR DISCREPANCIES, IF ENCOUNTERED DURING CONSTRUCTION, SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER PRIOR TO COMMENCING ANY FURTHER WORK.
- 3. SITE IS NOT LOCATED IN A DEP ZONE II.



INDUSTRIAL WASTEWATER HOLDING TANK (IWHT) NOTES

1. IWHT SIZING CALCULATION:

TANK ID: IWHT-1 FACILITY USE: TRUCK DEALERSHIP

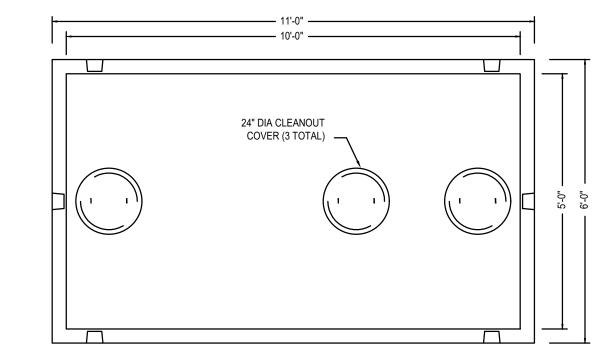
SIC USE CODE: 7699
ESTIMATED WATER USAGE:

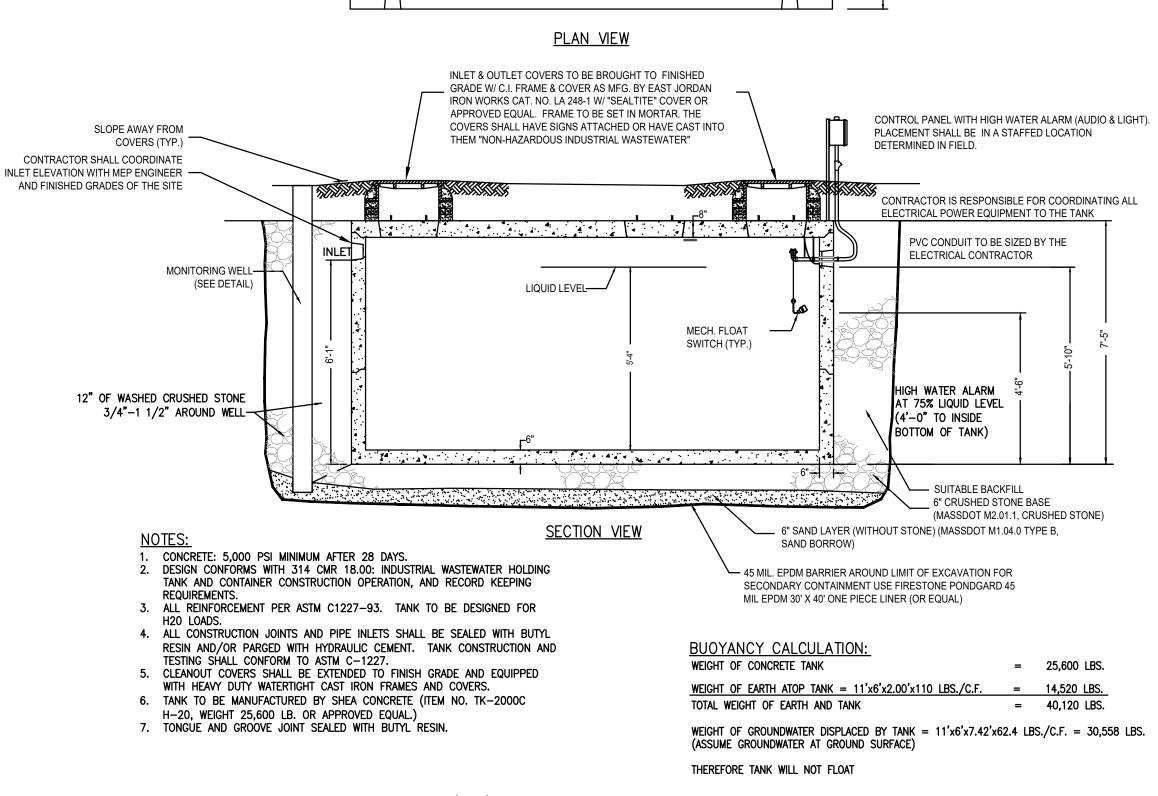
50 GPD/BAY X 4 BAYS = 200 GPD
DESIGN FLOW (PER 314 CMR 18.08(1)(a)(2)) = 500% OF AVERAGE DAILY FLOW
AVERAGE DAILY FLOW = 500% X 200 GPD = 1000 GAL.
PROPOSED TANK VOLUME: 2,000 GAL > 1000 GAL.

- 2. WHILE IN OPERATION, THE IWHT SHALL BE SUBJECT TO A MAINTENANCE AND OPERATION AGREEMENT WITH A LICENSED HAULER. THE AGREEMENT SHALL STIPULATE THE FREQUENCY OF REGULAR PUMPING, THE LOCATION AND METHOD OF DISPOSAL OF TANK CONTENTS, AND A SCHEDULE OF MAINTENANCE AND TESTING FOR ALARM SYSTEMS.
- 3. THE IWHT SHALL BE INSTALLED, OPERATED AND MAINTAINED IN ACCORDANCE WITH 314 CMR 18.00.
- 4. THE SIZE, TYPE AND LOCATION OF UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL PROPERLY LOCATE THE UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN UTILITY INFORMATION BY CONTACTING DIG SAFE (888–344–7233). THE CONTRACTOR SHALL EXCAVATE TEST PITS TO VERIFY UTILITY LINE LOCATIONS AS NECESSARY.
- 5. UPON COMPLETION OF CONSTRUCTION THE OWNER SHALL FILE A ONE TIME COMPLIANCE CERTIFICATE (DEP WP 56) WITH THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION IN ACCORDANCE WITH 314 CMR 18.00 INDUSTRIAL WASTEWATER HOLDING TANK AND CONTAINER CONSTRUCTION, OPERATION AND RECORD KEEPING REQUIREMENTS.
- 6. VENTING OF THE INDUSTRIAL WASTEWATER HOLDING SEPTIC TANK SHALL BE IN ACCORDANCE WITH COMMONWEALTH OF MASSACHUSETTS PLUMBING CODE.

INSPECTIONS REQUIRED

- INSPECT AND CERTIFY THAT EPDM LINER IS WATERPROOF
 INSPECT BACKFILLING.
- 3 INSPECT FINAL PAVEMENT FOR DEFECTS
- 3. INSPECT FINAL PAVEMENT FOR DEFECTS.
- 4. INSPECT MANHOLE COVER FOR WATERTIGHTNESS





2,000 GALLON (H20) INDUSTRIAL WASTEWATER HOLDING TANK DETAIL
NOT TO SCALE

© MCKENZIE ENGINEERING GROUP, INC.

PREPARED BY:

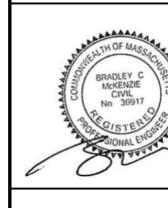
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ENGINEERING GROUP

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7. B6-1-20)

PLAN
SESSOR PARCEL NO. B6-1-2
11 LEDIN DRIVE

BRADLEY C MCKENZIE CIVIL No. 36917



SERV GROUP, INC.
ATE ROAD
IORE BEACH, MA 02562

DRAWN BY:
DESIGNED BY:
CHECKED BY:
APPROVED BY:
APPROVED BY:
BCM
APPROVED BY:
BCM
APPROVED BY:
BCM
DATE:
JUNE 28, 2022
SCALE:
AS NOTED

PROJECT NO.: 222–122

DWG. TITLE:

CONSTRUCTION

CONSTRUCTION DETAILS

DWG. NO:

D-3