

NOTES:

- 1. SUBJECT PARCEL IS SHOWN AS ASSESSORS MAP 14, BLOCK 114, LOT 35. RECORD TITLE FROM DEED BOOK 55043, PAGE 261.
- 2. UTILITY LOCATIONS DEPICTED ON THIS PLAN, BOTH ABOVE— AND BELOW—GROUND, ARE BASED UPON DIRECT FIELD OBSERVATIONS MADE BY METROWEST ENGINEERING, INC. PERSONNEL DURING A FIELD SURVEY, RECORD PLAN LOCATIONS, OR DIGSAFE PAINT—INDICATORS. METROWEST ENGINEERING, INC. DOES NOT WARRANT THAT ALL UTILITIES ARE SHOWN OR THAT UTILITIES THAT ARE DEPICTED ARE SHOWN IN THE CORRECT LOCATION, OR WITH THE PROPER MATERIAL DESIGNATION. METROWEST ENGINEERING, INC. DOES NOT WARRANT OR PROVIDE AN EXPRESS OR IMPLIED WARRANTY THAT ALL SUBSURFACE IMPROVEMENTS ARE SHOWN OR ARE SHOWN CORRECTLY, INCLUDING, BUT NOT LIMITED TO, UTILITIES, UNDERGROUND VAULTS, UNDERGROUND TANKS OR CHAMBERS, BUNKERS, DUCT BANKS, AND/OR OTHER MAN—MADE IMPROVEMENTS THAT LIE BENEATH THE GROUND SURFACE AT THE TIME OF THE SURVEY.
- 3. CONTRACTOR IS SOLELY RESPONSIBLE FOR ESTABLISHING EXISTING LOCATIONS OF ALL SUB-SURFACE UTILITIES AND MAN-MADE IMPROVEMENTS AND FOR THE REQUIREMENTS TO REPLACE, RELOCATE OR REPAIR EXISTING UTILITIES IN THE EVENT OF DAMAGE OCCURRING DURING CONSTRUCTION. MWE IS NOT RESPONSIBLE OR LIABLE FOR DELAYS OR COSTS ASSOCIATED WITH REMOVING/REPLACING/RELOCATING OF EXISTING UTILITIES REGARDLESS OF WHETHER SAID UTILITIES ARE ACCURATELY DEPICTED ON THIS SURVEY.
- 4. THE PROPERTY DESCRIBED ON THIS SURVEY DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD AREA AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY; THE PROPERTY LIES WITHIN ZONE "X" OF THE FLOOD INSURANCE RATE MAP IDENTIFIED AS MAP NUMBER 25027C1032E, BEARING AN EFFECTIVE DATE OF JULY 04, 2011.



CONTRACTOR TO VERIFY ACTUAL LOCATION OF EXISTING UTILITY SERVICES IN THE FIELD PRIOR TO CONSTRUCTION (WATER, ELECTRICAL, ETC.) CALL DIG—SAFE BEFORE YOU DIG 811.

TREE DESCRIPTION LEGEND

LE	EGEND	B.H. B.W. C.BK.	BULKHEAD BAY WINDOW CENTER BACK
CODE BW QA DEC HK HOL JM PR RM RO RP SM SNAG WA WP DBL	DESCRIPTION BLACK WALNUT QUAKING ASPEN DECIDUOUS HEMLOCK HOLLY JAPANESE MAPLE PEAR RED MAPLE RED OAK RED PINE SUGAR MAPLE SNAG WHITE ASH WHITE PINE DOUBLE	CHD= CHD BRG= D.H. DIAM. D.Y.L. E.O.P. (F) G.F.E. L= L.P. M.H.B. N/F O.H.W. P. R= S.W.L.	CHORD LENGTH CHORD BEARING DRILL HOLE DIAMETER DOUBLE YELLOW LINE EDGE OF PAVEMENT FOUND GARAGE FLOOR ELEV LENGTH LIGHT POST MASS. HIGHWAY BOU NOW OR FORMERLY OVERHEAD WIRE STONE POST RADIUS SINGLE WHITE LINE
TREE LOCATION OF	TREE DIAMETER	U.P.# W.F. W.G. Δ= 	WOOD FRAME WATER GATE DELTA EXISTING SPOT GRAD EXISTING GRADING EXISTING WATERLINE
SM SNAG WA WP DBL TREE LOCATIO	SUGAR MAPLE SNAG WHITE ASH WHITE PINE DOUBLE DOUBLE	N/F O.H.W. P. R= S.W.L. U.P.# W.F. W.G. ∆= +100.0 -100	NOW OR FOR OVERHEAD WE STONE POST RADIUS SINGLE WHIT UTILITY POLE WOOD FRAME WATER GATE DELTA EXISTING SPECISTING GR

<u>LEGE'NI</u>

ASBESTOS CONCRETE PIPE

BITUMINOUS CONCRETE BERM

<u>-</u>	<u>PROP</u> (JSED F
_	TREES	
	SYMBOL	SF
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_EVATION		ARB (THUJ <i>A</i>
BOUND Y	6	HONE (GLEDITSIA
		RE (QUERC
Ξ	SHRUB	S
	SYMBOL	SF
RADE		RED-OS

PROPOSED PLANTING_SCHEDULE

1 1001			
TREES	1		
SYMBOL	SPECIES	QUANTITY	SIZE AT PLANTING
	RED MAPLE (ACER RUBRUM)	5	2" CALIPER
	ARBORVITAE (THUJA PLICATA)	50	8-10'
	HONEYLOCUST (GLEDITSIA TRIACANTHOS)	2	2" CALIPER
	RED OAK (QUERCUS RUBRA)	5	2" CALIPER
~	~		

SYMBOL SPECIES QUANTITY SIZE AT PLANTING RED-OSIER DOGWOOD (CORNUS SERICEA) FLOWERING CRABAPPLE (MALUS SP.) SYMBOL SIZE AT PLANTING 2-4' 2-4'

GRAPHIC SCALE

1 inch = 30 ft.

0 15 30 60 (FEET) 120

30 (METER) 40

PROPOSED PARKING REQUIREMENTS

PROPOSED USE	FLOOR AREA	PARKING REQUIREMENT	TOTAL
ROPOSED BUILDING	31,200 SQUARE FEET	1 SPACE PER 1000 S.F. OF FLOOR AREA	31.2
	TOTAL	NUMBER OF REQUIRED PARKING SPACES	32
	TOTAL	NUMBER OF PROPOSED PARKING SPACES	51

PARKING REQUIREMENTS TAKEN FROM SECTION 2.03 (b) OF TOWN OF MENDON ZONING BYLAWS.

ZONING TABLE: 35 CAPE ROAD

MAP 114, BLOCK 114, LOT 35

REQUIRED

DESCRIPTION	HIGHWAY BUSINESS	EXISTING	PROPOSED
LOT AREA	40,000 SQ. FT. (MIN.)	182,166 SQ. FT.	182,166 SQ. FT.
LOT FRONTAGE	200 FT. (MIN.)	240.44 FT.	240.44 FT.
FRONT YARD SETBACK	50 FT. (MIN.)	14.0 FT.	83.9 FT.
SIDE YARD SETBACK	20 FT. (MIN.)	44.7 FT.	59.0 FT.
REAR YARD SETBACK	20 FT. (MIN.)	665.6 FT.	408.5 FT.
MAX BUILDING HEIGHT	35 FT. (2.5 STORIES)	2.0 STORIES	18 FT. 1 (STORY)
FLOOR AREA	N.A.	4,904 SQ. FT.	31,200 SQ. FT.
FLOOR AREA RATIO	N.A.	0.027± (2.7%)	0.171 (17.1%)
MAX. BUILDING COVERAGE	30%	0.020 (2.0%)	0.171 (17.1%)
BUILDING AREA	N.A.	3,594 SQ. FT.	31,200 SQ. FT
OTHER IMPERVIOUS SURFACES	N.A.	20,579 SQ. FT.	63,239 SQ. FT.
TOTAL IMPERVIOUS AREA	N.A.	24,173 SQ. FT.	94,439 SQ. FT.
PARKING	32 SPACES	0 SPACES	51 SPACES
HANDICAP PARKING	<i>3 SPACES</i>	0 SPACES	4 SPACES
UPLAND AREA	N.A.	182,166 SQ. FT.	182,166 SQ. FT.

PROPOSED SITE PLAN

#35 CAPE ROAD

IN
MENDON, MASS

PREPARED FOR:

ARES CONSTRUCTION 38 PHEASANT LANE MANCHESTER, NH 03109

PROPERTY OF:

WENGER REALTY, LLC 1040 SOUTH MAIN STREET BELLINGHAM, MA 02019

ENGINEERS &



METROWEST ENGINEERING, INC.
75 FRANKLIN STREET
FRAMINGHAM, MA 01702
TELE: (508)626-0063

EMAIL: INFO@MWENGINEERING.COM

SHEET 1 OF 1

CALC'D BY: BTN

FIELD BK: 712

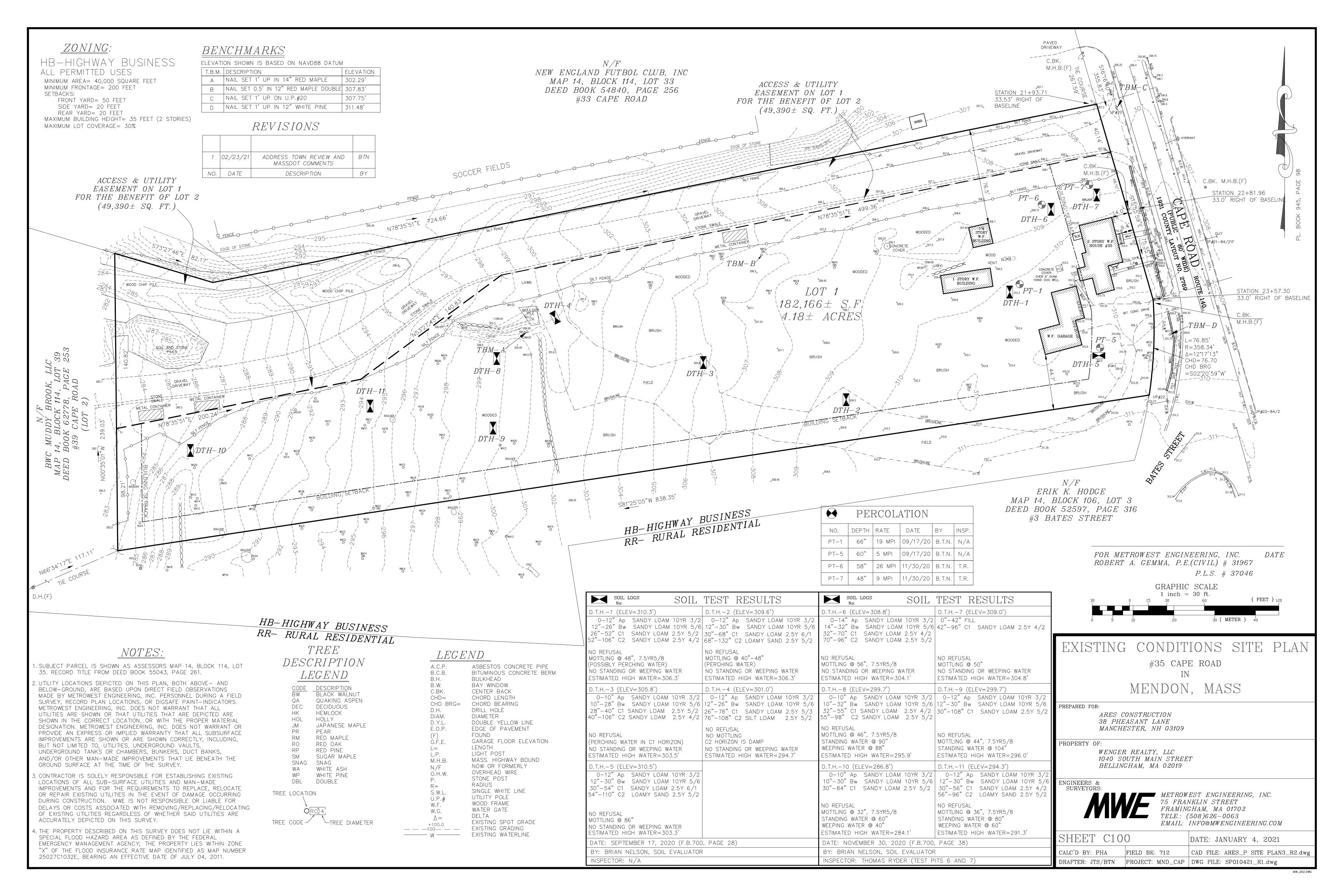
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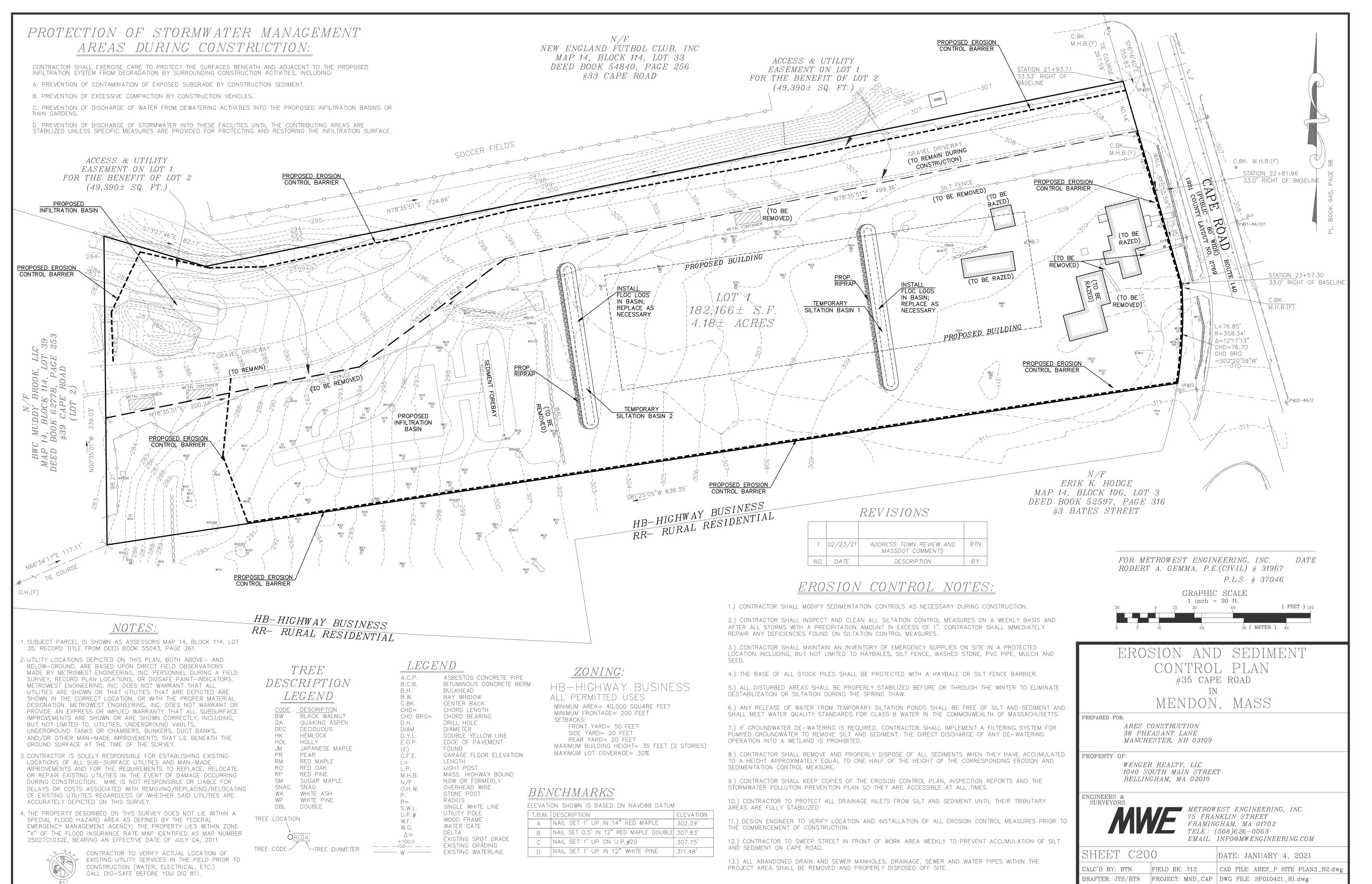
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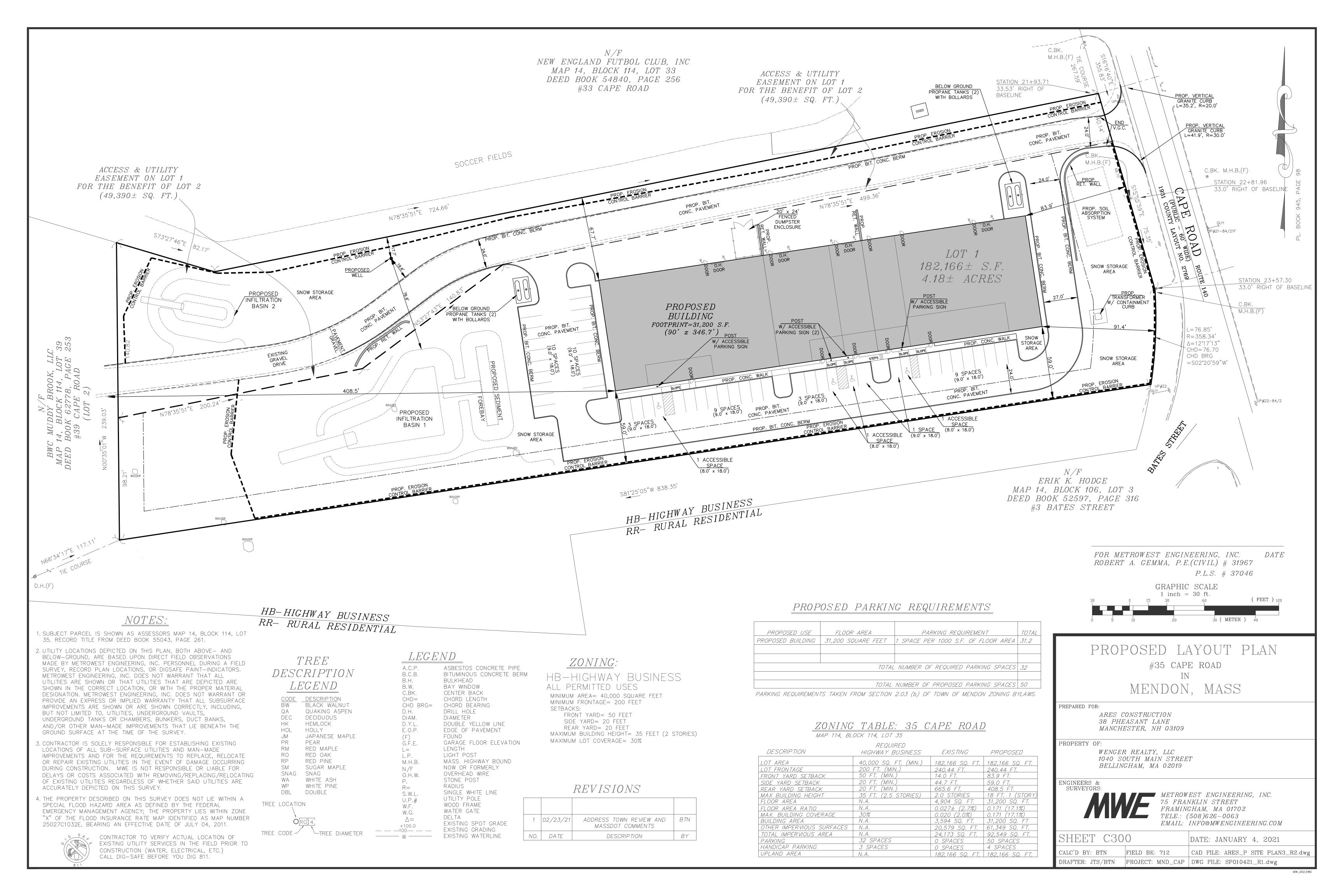
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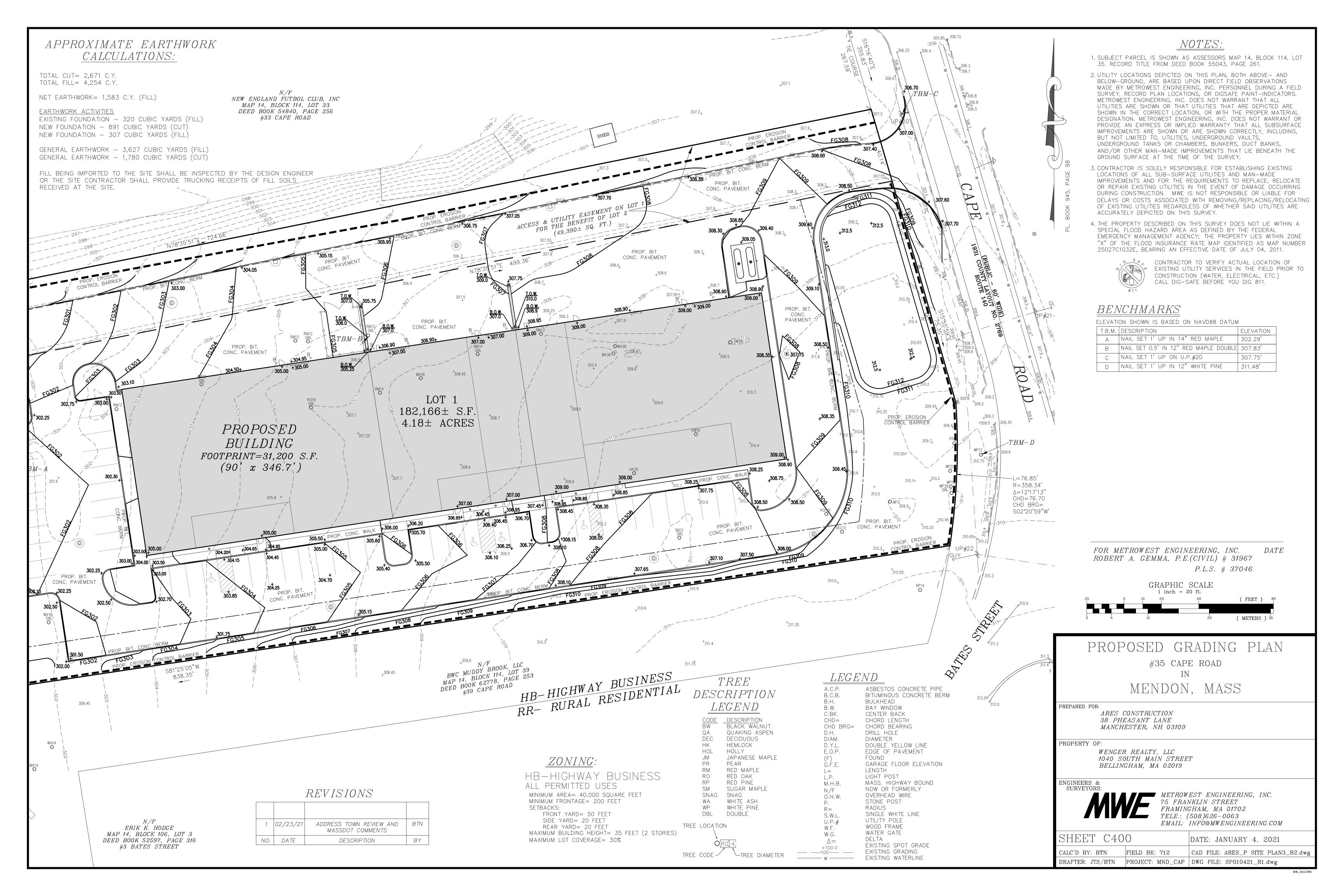
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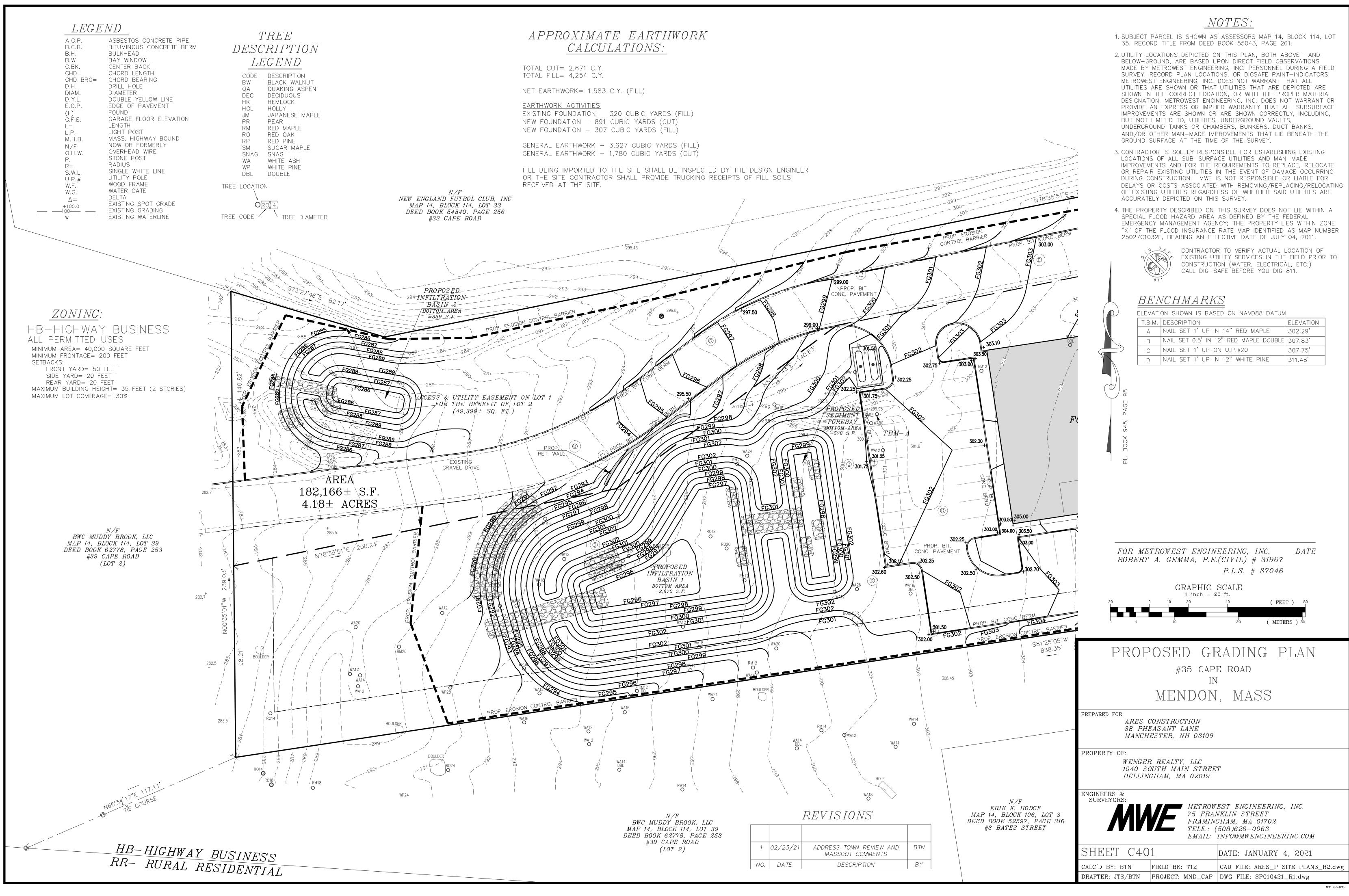
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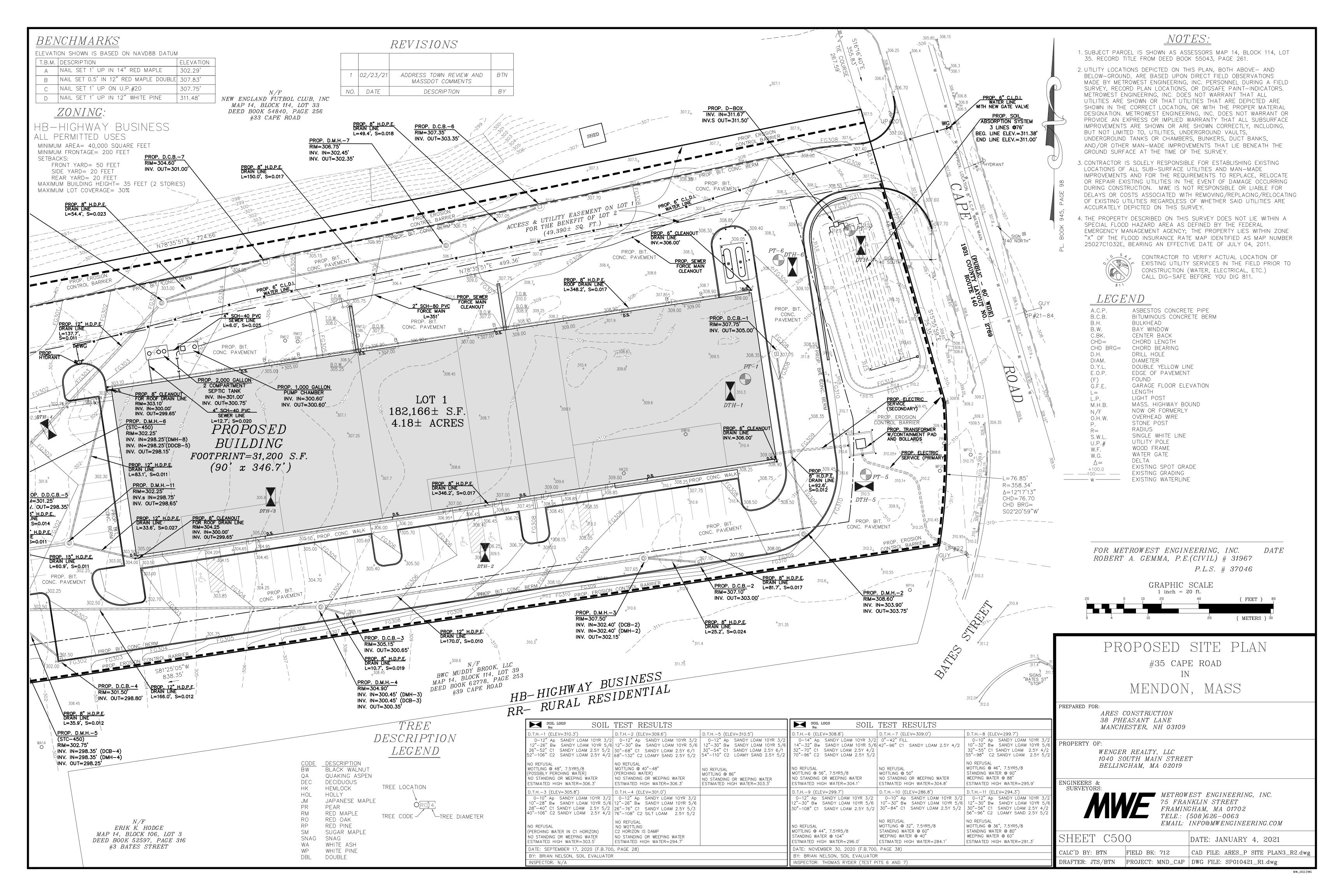


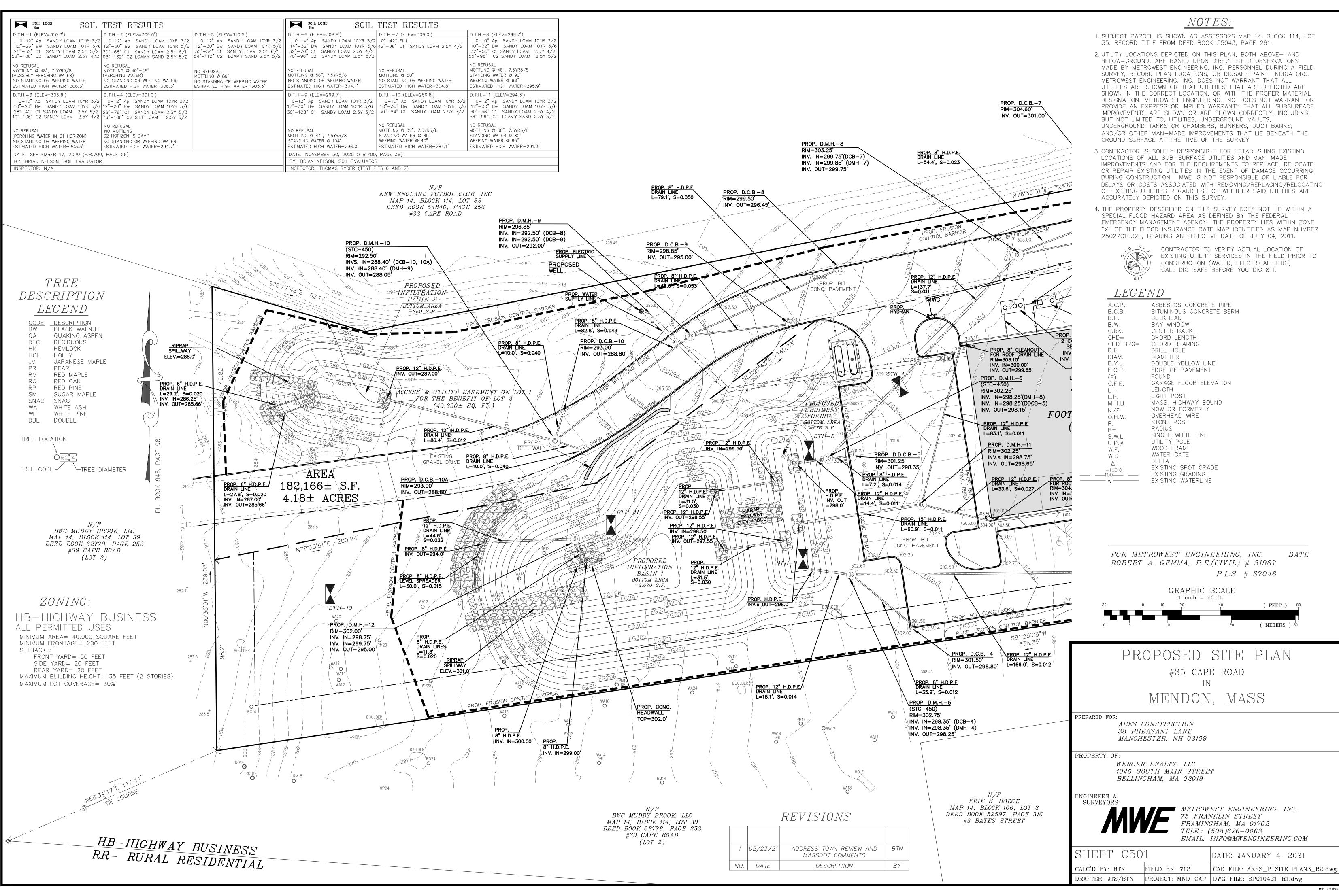


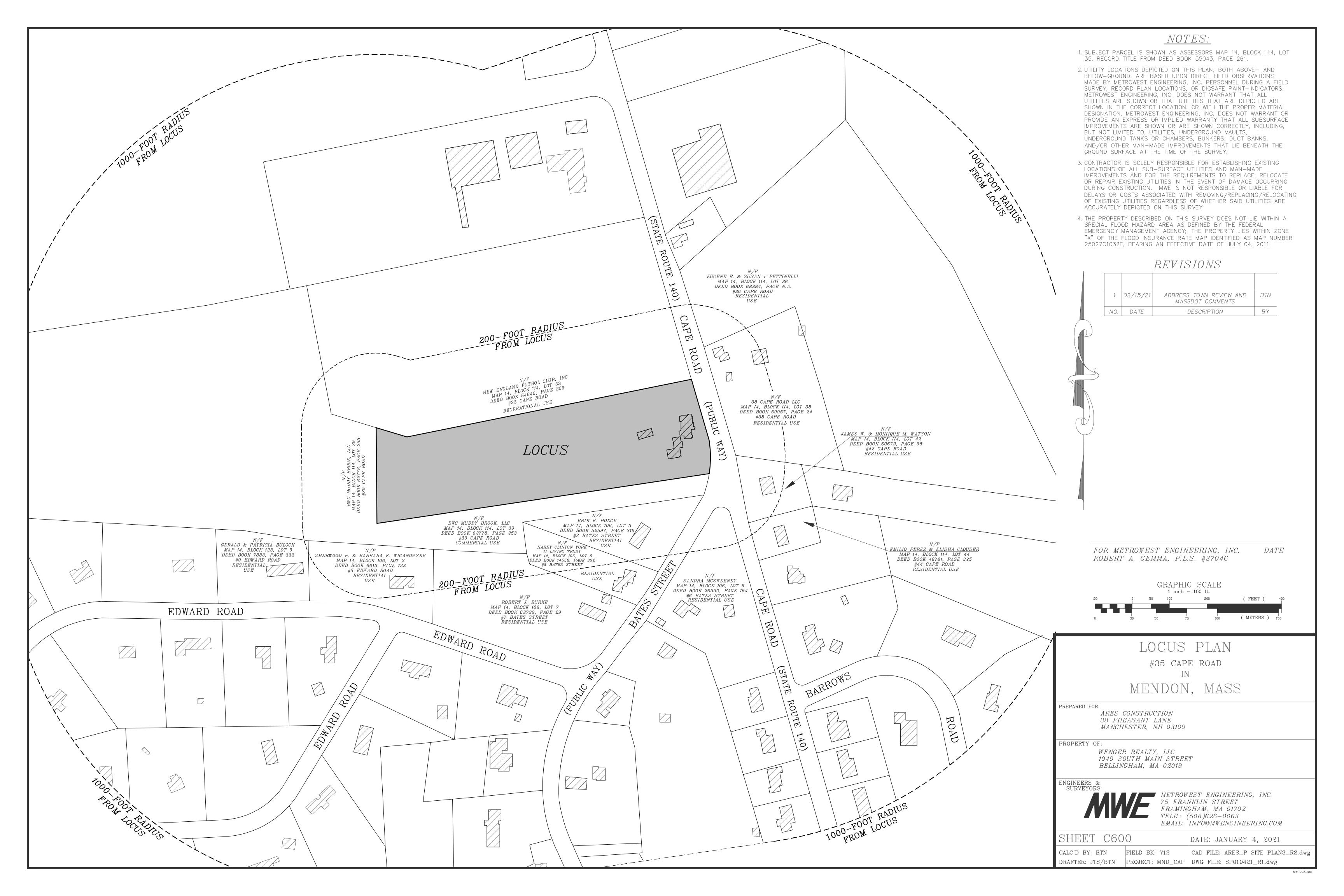












SEWER SYSTEM MATERIALS AND INSTALLATION

1) ALL MATERIALS AND CONSTRUCTION METHODS SHALL COMPLY WITH THE TOWN OF MENDON DEPARTMENT OF PUBLIC WORKS

2.) ALL PIPE AND OTHER APPURTENANCES SHALL BE HANDLED CAREFULLY AND INSPECTED PRIOR TO INSTALLATION. 3.) POLYVINYL CHLORIDE PIPE AND FITTINGS (P.V.C.) SHALL BE MINIMUM SDR 35 WITH DIAMETER DIMENSIONS CONFORMING TO SPECIFICATIONS FOR TYPE PSM P.V.C. SEWER PIPES AND FITTINGS, ASTM D-3034, LATEST REVISION.

4.) ALL P.V.C. PIPE SHALL HAVE AN INTEGRAL WALL BELL AND SPIGOT PUSH-ON JOINT WITH ELASTOMERIC GASKETS SECURED IN THE BELL END OF THE PIPE. ELASTOMERIC GASKETS SHALL CONFORM TO ASTM D3212.

5.) SPIGOT ENDS SHALL HAVE BEVELS FROM THE MANUFACTURER TO ENSURE PROPER INSERTION AND SHALL HAVE AN AŚSEMBLY STRIP IMPRINTED THEREUN TO WHICH THE BELL END OF THE MATED PIPE WILL EXTEND UPON JOINING THE PIPES. 6.) ALL PRECAST CONCRETE MANHOLS SHALL CONFORM TO ASTM DESIGNATION D478 AND SHALL BE MANUFACTURED WITH 4,000 P.S.I. (MINIMUM) COMPRESSIVE STRENGTH CONCRETE AND BE DESIGNED FOR HS-20 LOADING REQUIREMENTS. 7.) PRECAST SECTIONS SHALL BE JOINED BY BUTYL RUBBER SEALANT.

8.) MANHOLE FRAMES AND COVERS SHALL HAVE A MINIMUM CLEAR OPENING OF 24-INCHES AND BE A MINIMUM OF

9.) MANHOLE FRAMES AND COVERS SHALL BE MANUFACTURED BY EAST JORDAN IRON WORKS (FORMERLY LEBARON FOUNDRY) AND CONSIST OF 2111Z FRAME AND 2111A SEWER COVER.

10.) FRAMES SHALL BE ADJUSTED TO FINISH GRADE WITH MORTAR AND HARD RED BRICK; MINIMUM OF TWO COURSES AND MAXIMUM OF FIVE COURSES OF BRICK. 11.) GRAVITY SERVICE CONNECTION SHALL BE A MINIMUM OF SIX-INCH DIAMETER SDR 35 SEWER PIPE AND SHALL HAVE A MINIMUM SLOPE OF ONE-PERCENT (1.0%).

12.) ALL SERVICE CONNECTIONS TO THE SEWER MAIN SHALL BE MADE BY WYES, T-WYES OR SADDLE TYPE CONNECTIONS. 13.) PIPE SHALL BE LAID ACCURATELY TO LINE AND GRADE IN APPROVED BEDDING OR 3/4" CRUSHED STONE. BEDDING SHALL EXTEND NO LESS THAN SIX-INCHES (6") AROUND THE PIPE IN ALL DIRECTIONS.

14.) BEDDING MATERIAL SHALL BE COMPACTED BY HAND UNDER AND AROUND THE SEWER PIPE IN LAYERS NOT EXCEEDING SIX-INCHES (6").

14.) SEWER PIPE SHALL BE LAID AT LEAST TEN-FEET (10') FROM A WATER MAIN WHENEVER POSSIBLE.

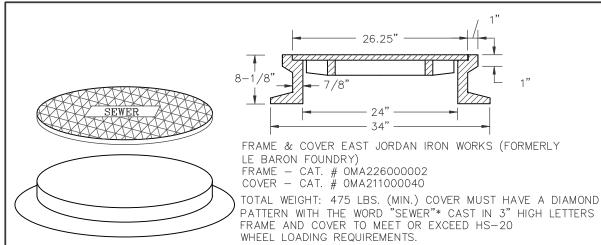
16.) THE CONTRACTOR SHALL PROVIDE TEMPORARY PLUGS AT ENDS OF SEWER LINES TO PREVENT THE ACCUMULATION OF DIRT OR SEDIMENT IN SEWER PIPES WHEN PIPE LAYING OPERATIONS ARE NOT IN PROGRESS.

15.) ALL SEWER PIPES SHALL BE CUT FLUSH WITH THE INSIDE FACE OF MANHOLE STRUCTURES UNLESS NOTED OTHERWISE ON

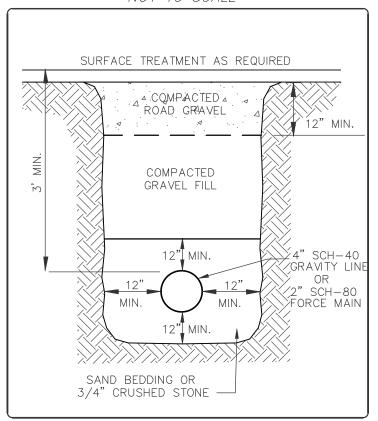
17.) ALL PIPE JOINTS SHALL BE MADE WATERTIGHT AND ALL JOINTING SHALL BE DONE IN CONFORMANCE WITH THE MANUFACTURERS RECOMMENDATIONS.

SEWER MANHOLE FRAME AND COVER

NOT TO SCALE



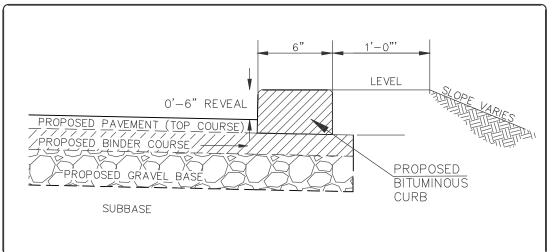
TYPICAL SEWER TRENCH



CONCRETE RAMP DETAIL

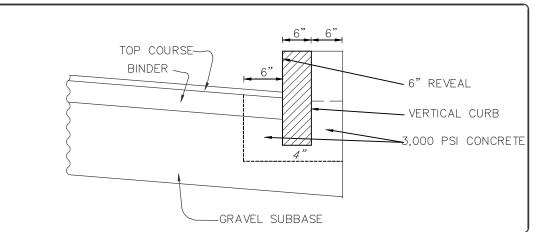
NOT TO SCALE

BITUMINOUS CURB DETAIL



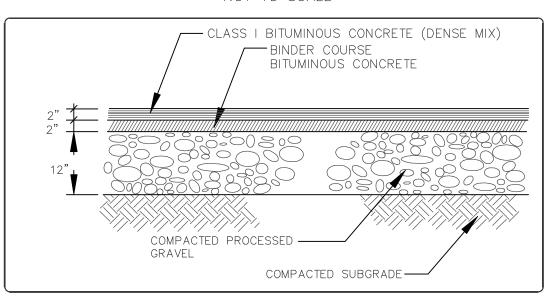
VERTICAL GRANITE AND CONCRETE CURB

NOT TO SCALE



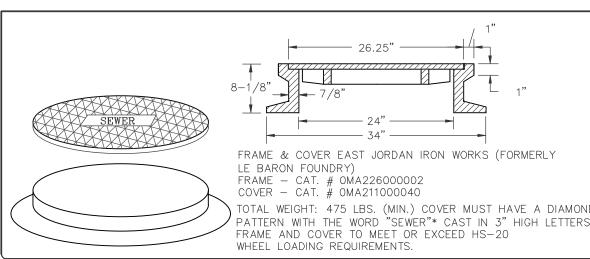
BITUMINOUS CONCRETE PAVEMENT

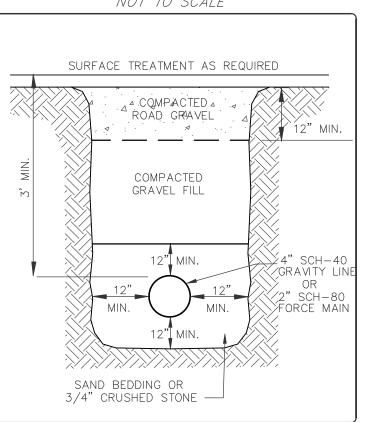
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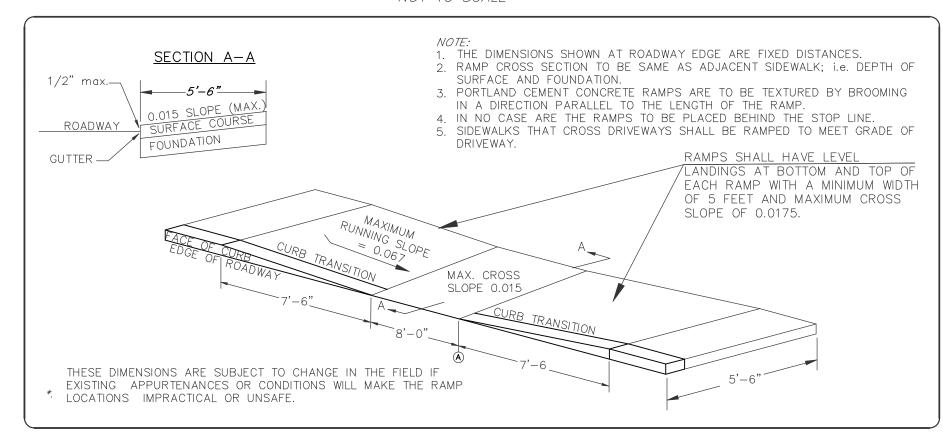
REVISIONS

1	02/23/21	ADDRESS TOWN REVIEW AND MASSDOT COMMENTS	BTN
NO.	DATE	DESCRIPTION	BY





NOT TO SCALE



PAVEMENT AND BASE MATERIALS AND INSTALLATION

1) ALL MATERIALS AND CONSTRUCTION METHODS SHALL COMPLY WITH THE TOWN OF MENDON DEPARTMENT OF PUBLIC WORKS CONSTRUCTION STANDARDS.

2.) BITUMINOUS PAVING SHALL NOT BE PLACED WHEN AMBIENT TEMPERATURE IS BELOW 40-DEGREES FAHRENHEIT, OR WHEN THERE IS FROST IN THE BASE, OR WHEN WEATHER CONDITIONS ARE UNSUITABLE IN ANY WAY.

3.) CONTRACTOR SHALL SAWCUT ALL EXISTING TRENCHES AND EXCAVATIONS WHEN LOCATED WITHIN LIMITS OF EXISTING PÁVEMENT. PAVEMENT BREAKER MAY BE USED FOR INITIAL EXCAVATION AND A SAWCUT MAY BE EMPLOYED TO PROVIDE NEATER CUT FOR TRENCH PRIOR TO PLACEMENT OF NEW PAVEMENT.

4.) SAWCUTS SHALL EXTEND COMPLETELY THROUGH BINDER AND TOP COURSE LAYERS.

ACCORDANCE WITH AASHTO SPECIFICATION T99.

5.) PAVEMENT EDGES SHALL BE TRIMMED AND CLEANED FOR A NEAT VERTICAL FACE FREE OF LOOSE MATERIALS AND DEBRIS. 6.) CONTRACTOR SHALL EXERCISE CARE TO PREVENT OR MINIMIZE DAMAGE TO EXISTING PAVEMENT SURROUNDING EXCAVATION

7.) BACKFILL IN TRENCHES SHALL BE IN ACCORDANCE WITH SPECIFIC UTILITY TRENCH REQUIREMENTS. BACKFILL MATERIAL IN TRENCHES SHALL CONSIST OF GRANULAR GRAVEL BORROW, PROCESSED GRAVEL, SAND OR CRUSHED STONE MATERIAL. BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED IN LAYERS NOT EXCEEDING 12-INCH LIFTS AND COMPACTED TO NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY AASHTO DESIGNATION T99 COMPACTION TEST METHODS.

8.) BROKEN PAVEMENT, LARGE STONES, ROOTS AND OTHER DEBRIS SHALL NOT BE USED IN TRENCH BACKFILL 9.) PERMANENT PAVEMENT SHALL CONSIST OF A TOP COURSE LAYER OF NOT LESS THAN TWO-INCHES (2") AND A BINDER COURSE LAYER OF NOT LESS THAN THREE-INCHES (2") AFTER COMPACTION. PAVEMENT SHALL BE MIXED IN ACCORDANCE WITH MASSDOT SPECIFICATION SECTION M3.11.03 (TABLE A).

10.) PAVEMENT SHALL BE COMPACTED AND ROLLED BY AN OSCILLATING ROLLER WITH A WEIGHT OF NOT LESS THAN 10-TONS. ROLLER SHALL MAKE AT LEAST FOUR PASSES OVER ALL NEWLY PLACED PAVEMENT. 11.) ROLLER SHALL NOT EXCEED A SPEED OF 3 MILES PER HOUR DURING ROLLING OPERATIONS TO ENSURE PROPER COMPACTION. ANY RIDGES, INDENTATIONS SHALL BE ROLLED ADDITIONALLY UNTIL THEY ARE REMOVED.

12.) GRAVEL BASE MATERIAL SHALL CONSIST OF A LAYER OF EITHER DENSE GRADE CRUSHED STONE COMPLYING WITH REQUIREMENTS OF MASSDOT SECTION M2.01.7 OR GRAVEL BORROW COMPLYING WITH REQUIREMENTS OF MASSDOT SECTION

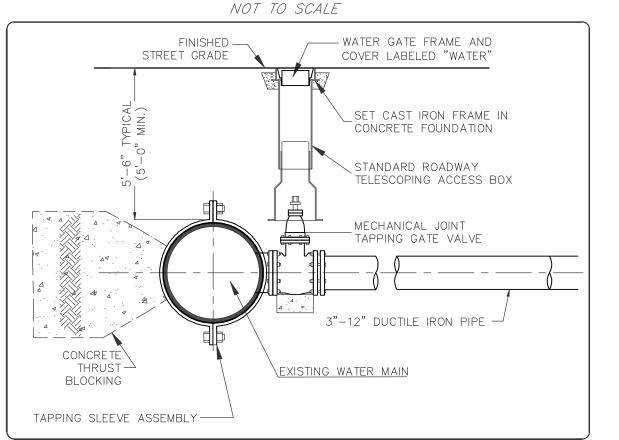
14.) SUITABLE SUBBASE MATERIALS SHALL BE COMPACTED TO NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY IN

13.) BASE MATERIALS SHALL BE PLACED IN LIFTS NOT TO EXCEED EIGHT-INCHES (8") AND COMPACTED TO NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY IN ACCODANCE WITH AASHTO SPECIFICATION T99.

15.) UNSUITABLE SUBBASE MATERIAL SHALL BE REMOVED AND REPLACED WITH MATERIAL IN CONFORMANCE WITH MASSDOT SPECIFICATION M1.02.0, SPECIAL BORROW OR SPECIFICATION M.2.03.0 FOR GRAVEL BORROW. 16.) IMPORTED SUBBASE MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING TWELVE-INCHES AND COMPACTED IN TO NOT LEŚS THAN 95% OF THE MAXIMUM DRY DENSITY IN ACCORDANCE WITH AASHTO SPECIFICATION T99.

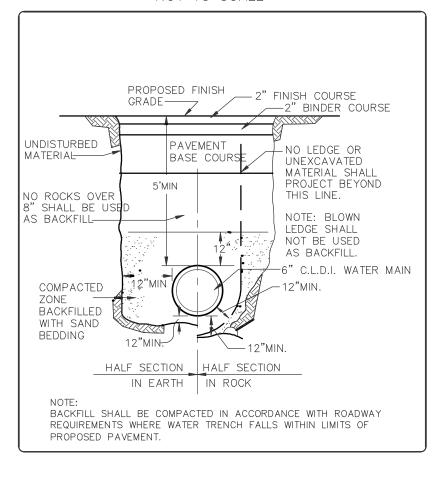
CONTRACTOR IS SOLELY RESPONSIBLE FOR ESTABLISHING EXISTING LOCATIONS OF ALL SUB-SURFACE UTILITIES AND REQUIREMENTS TO REPLACE, RELOCATE OR REPAIR EXISTING UTILITIES. MWE IS NOT RESPONSIBLE OR LIABLE FOR DELAYS OR COSTS ASSOCIATED WITH REMOVING/REPLACING/RELOCATING OF EXISTING UTILITIES.

FIRE PROTECTION SERVICE CONNECTION



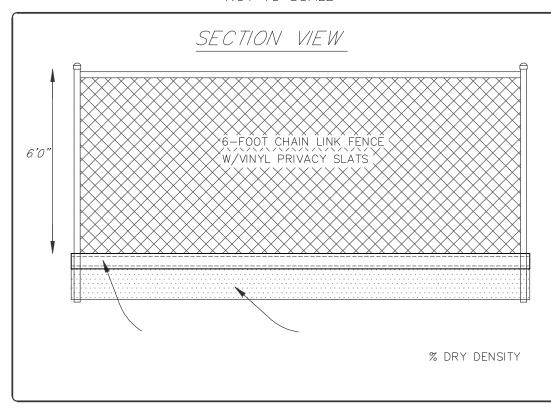
WATER MAIN TRENCH DETAIL

NOT TO SCALE



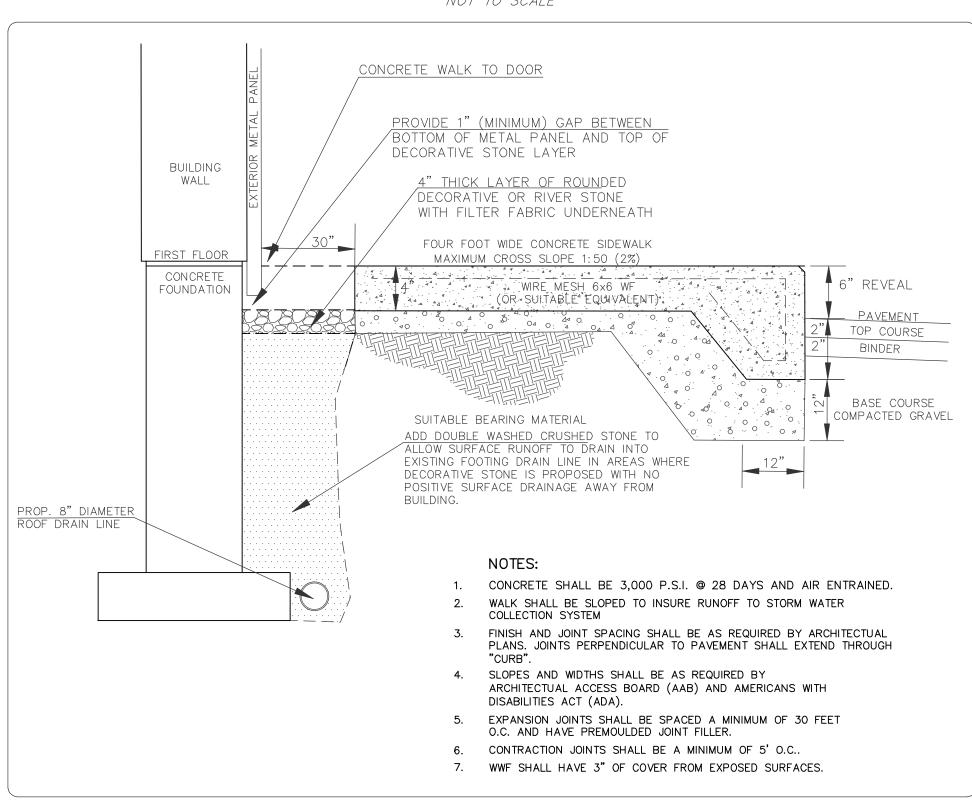
DUMPSTER ENCLOSURE

NOT TO SCALE

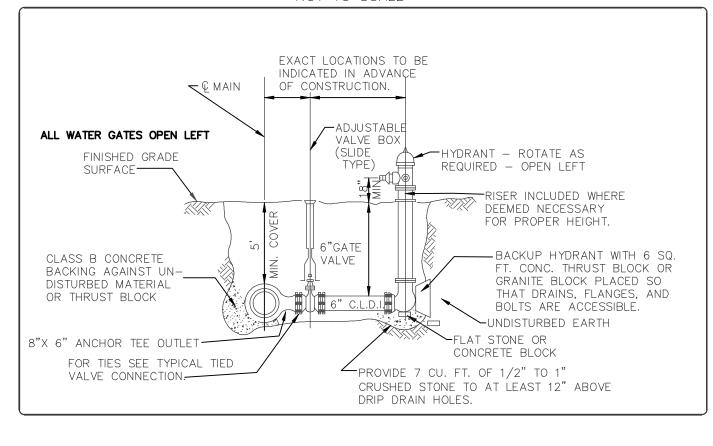


CONCRETE SIDEWALK AT BUILDING

NOT TO SCALE



TYPICAL HYDRANT AND VALVE NOT TO SCALE



WATER SYSTEM MATERIALS AND INSTALLATION

1) ALL MATERIALS AND CONSTRUCTION METHODS SHALL COMPLY WITH THE TOWN OF MENDON DEPARTMENT OF PUBLIC WORKS CONSTRUCTION STANDARDS, MENDON WATER DISTRICT AND REQUIREMENTS OF THE MENDON FIRE DEPARTMENT.

- 2.) ALL PIPE AND OTHER APPURTENANCES SHALL BE HANDLED CAREFULLY AND INSPECTED PRIOR TO INSTALLATION.
- 3.) ALL MATERIALS INCLUDING PIPE AND FITTINGS SHALL BE LEAD FREE.

4.) ALL WATER MAINS SHALL BE MINIMUM DUCTILE IRON CLASS 52, SINGLE GASKET, DOUBLE SEALING PIPE WITH CEMENT LINING. ALL DUCTILE IRON PIPE SHALL BE RATED FOR A MINIMUM OPERATING PRESSURE OF 350 P.S.I.

5.) MECHANICAL JOINT RESTRAINTS SHALL CONSIST OF ACTUATED WEDGES THAT INCREASE RESISTANCE TO PULL OUT AS PRESSURE INCREASES.

- 6.) USE SERIES 1100 MEGA-LUG RESTRAINTS OR APPROVED EQUAL FOR PIPE RESTRAINTS.
- 7.) PIPE FITTINGS SHALL BE CEMENT LINED DUCTILE IRON AND RATED FOR 350 P.S.I.

8.) PIPE FITTINGS SHALL BE FITTED WITH MECHANICAL JOINT RESTRAINTS WITH ALL NUTS AND BOLTS OF A SIMILAR TÝPE DUCTILE IRON OR KOR-10 STEEL T BOLTS AND NUTS.

9.) RESILIENT SEAT GATE VALVES SHALL BE MANUFACTURED OF DUCTILE IRON, OPEN LEFT (COUNTER CLOCKWISE) AND BÉ DESIGNED FOR A MINIMUM WORKING PRESSURE OF 250 P.S.I.

10.) GATE VALVE BOXES SHALL BE ADJUSTABLE, BUFFALO STYLE, WITH THE LOWER PART MADE OF CAST IRON AND THE UPPER PART OF STEEL OR CAST IRON. THE VALVE BOX SHALL BE DESIGNED TO PREVENT DIRECT TRANSMISSION OF TRAFFIC LOADS TO THE VALVE OR PIPE.

11.) HYDRANTS SHALL BE AMERICAN DARLING B-62B AS MANUFACTURED BY AMERICAN FLOW CONTROL INC.

12.) HYDRANTS SHALL HAVE A 5 1/4-INCH VALVE OPENED BY TURNING THE OPERATING UNIT IN THE COUNTER CLOCKWISE DIRECTION. THE HYDRANT SHALL HAVE ONE 4 1/2-INCH STEAMER CONNECTION AND TWO 2 1/2-INCH HOSE CONNECTIONS. ALL CONNECTIONS SHALL HAVE NATIONAL STANDARD THREADS.

13.) THE HYDRANT SHALL HAVE A BRONZE DRAIN RING SECURELY HELD BETWEEN THE BARREL AND THE BASE FLANGE. IT SHALL PROVIDE BRONZE TO BRONZE THREADED CONNECTION FOR HYDRANT SEAL. 14) ALL WATER PIPING SHALL BE INSTALLED WITH A MINIMUM OF FIVE-FEET (5') OF COVER. PIPE SHALL BE PROPERLY INSULATED WHEN THE PROPER COVER CAN NOT BE ACHIEVED.

15.) PIPE SHALL BE LAID ACCURATELY TO LINE AND GRADE IN SAND BEDDING (MASSDOT SPEC. M1.04.0, SAND BORROW) IN ACCORDANCE WITH AWWA GUIDELINES.

16.) PUSH-ON PIPE GASKETS SHALL BE CLEAN AND THOROUGHLY COATED WITH LUBRICANT SUPPLIED BY THE MANUFACTURER DURING INSTALLATION.

17.) ALL PIPE LINES SHALL BE PRESSURE TESTED FOR STRENGTH AND LEAKAGE AT A PRESSURE OF 200 P.S.I. BY A QUALIFIED THIRD PARTY.

18.) ALLOWABLE LEAKAGE AMOUNTS DURING TESTING SHALL CONFORM TO AWWA STANDARDS FOR PRESSURE TESTING DUCTILE IRON PIPE (AWWA C600.)

19.) ALL NEW HYDRANT LATERALS SHALL BE LEFT IN THE OPEN POSITION DURING TESTING. 20.) CONTRACTOR SHALL REPAIR ANY LEAKS DISCOVERED UNDER ANY OF THE REQUIRED TESTS AND RETEST PIPES IF

21.) CONTRACTOR SHALL SUBMIT A DETAILED DISINFECTION PLAN TO THE AUBURN D.P.W. AND WATER SUPERINTENDENT AND SHALL NOT BEGIN DISINFECTION UNTIL THE PLAN HAS BEEN APPROVED BY THE MENDON D.P.W.

22.) THE DISINFECTION PLAN SHALL INCLUDE THE INTENDED CHLORINE DOSAGE, METHOD FOR ESTABLISHING DOSAGE AND LOCATIONS FOR APPLICATION OF DOSAGE.

23.) THE CONTACT PERIOD FOR DISINFECTION SHALL BE AT LEAST 24-HOURS.

24.) THE PIPELINE SHALL BE ADEQUATELY FLUSHED WITH POTABLE WATER FOR THE DE-CHLORINATION OF RESIDUAL CHLORINATED WATER.

> FOR METROWEST ENGINEERING, INC. ROBERT A. GEMMA, P.E.(CIVIL) # 31967

DETAILS PLAN #35 CAPE ROAD MENDON, MASS

PREPARED FOR:

ARES CONSTRUCTION 38 PHEASANT LANE MANCHESTER, NH 03109

PROPERTY OF:

WENGER REALTY, LLC 1040 SOUTH MAIN STREET BELLINGHAM, MA 02019



75 FRANKLIN STREET FRAMINGHAM, MA 01702 TELE.: (508)626-0063 EMAIL: INFO@MWENGINEERING.COM

SHEET C700 DATE: JANUARY 4, 2021 FIELD BK: 712 CAD FILE: ARES_P SITE PLAN3_R2.dwg DRAFTER: JTS/BTN | PROJECT: MND_CAP | DWG FILE: SP010421_R1.dwg

PRECAST CONCRETE MANHOLE STANDARD MANHOLE FRAME & COVER TO BE: EAST JORDAN IRON WORKS OR APPPROVED EQUAL: 2111A COVER (OMA211125) COVER TO READ "DRAIN" 2111Z FRAME (OMA211000038) HARD RED SEWER BRICKS TO BE USED HARD 24"±1" - RED SEWER BRICKS MAY BE USED FOR GRADE DIAMETER ADJUSTMENTS. (2 MIN.-5 MAX. COURSES OF BRICK). FRAME TO BE SET IN FULL BED OF MORTÁR. BE SET IN FULL BED OF MORTAR. BUTYL RUBBER JOINT (TYP.) – 5"MIN. MIN. 0.12 SQ. IN. STEEL PER VERT. MIN. 0.12 SQ. IN. STEEL PER VERT. FOOT, PLACED 48"±1" DIAMETER ACCORDING TO FOOT, PLACED ACCORDING TO AASHTO DESIGNATION M 189 AASHTO DESIGNATION M 189 __1-#3 BAR AROUND OPENINGS 1-#3 BAR AROUND OPENINGS FOR PIPES 18" DIAMETER FOR PIPES 18" DIAMETER AND OVER 1" COVER AND OVER 1" COVER 30"DIA.(MAX.) -FLOOR OF STRUCTURE TO BE HEADERS LAID FLAT. DIAM. PIPE - BRICK CHIPS AND MORTAR OR CEMENT CONC. CLASS "A" MORTAR ALL PIPE OPENINGS WITH PROVIDE "V" OPENINGS NON SHRINK GROUT OR USE PIPE OPENINGS TO BE RESILIENT RUBBER BOOT PRECAST IN RISER SECTION CONNECTIONS WITH STAINLESS SJEEL CLAMPS ' INVERTED ARCH W/ BRICKS LAID ON ÉDGE 12" OF 1/2" TO 3/4" CRUSHED STONE ALL STRUCTURES TO BE CONSTRUCTED TO HS20-44 HEAVY DUTY LOADING SPECIFICATIONS

H.D.P.E. DRAIN PIPE MATERIALS AND INSTALLATION

) ALL PIPE SHALL CONFORM TO MASSDOT SECTION M5.03.10.

2.) PIPE SHALL BE SMOOTH INTERIOR WALL AND CORRUGATED EXTERIOR WALL AND SHALL BE BELL AND SPIGOT CONNECTION.

3.) PIPE SHALL COMPLY WITH REQUIREMENTS AND MARKINGS FOUND IN AASHTO DESIGNATIONS M252 AND M294.

4.) ALL PIPE SHALL SUPPORT AN HS-20 LIVE LOAD WITH A MAXIMUM DEFLECTION OF 5% OF THE PIPE DIAMETER.

5.) ALL PIPE AND FITTINGS SHALL BE MADE FROM VIRGIN POLYETHYLENE COMPOUNDS WHICH CONFORM TO CURRENT AASHTO CLASSIFICATIONS AND ALSO AS DEFINED IN ASTM

6.) PIPES SHALL BE CAREFULLY LAID TO LINES AND GRADES AS SHOWN ON DESIGN

7.) PIPE BEDDING MATERIAL SHALL BE PLACED TO A DEPTH OF NO LESS THAN SIX-INCHES BELOW THE INVERT OF THE PIPE.

8.) TRENCHES FOR DRAIN LINES SHALL PROVIDE MINIMUM OF TWELVE-INCHES (12") OF

HORIZONTAL CLEARANCE FROM SIDES OF PIPE TO EDGE OF TRENCH. 9.) INSTALLATION OF H.D.P.E. PIPE SHALL BE IN ACCORDANCE WITH ASTM D2321 AND AS

RECOMMENDED BY THE MANUFACTURER.

10.) WATER TIGHT JOINTS SHALL BE USED ON ALL PIPES IN ACCORDANCE WITH ASTM D3212. PIPE JOINTS SHALL BE BELL AND SPIGOT WITH ELASTOMERIC RUBBER GASKETS MEETING OR EXCEEDING ASTM F477.

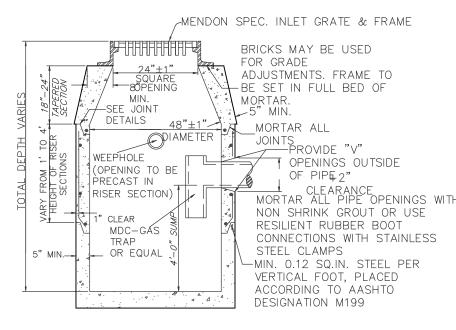
II.) PIPE BEDDING MATERIAL OR 3/4" CRUSHED STONE SHALL BE CAREFULLY BACKFILLED AND COMPACTED AROUND PIPE TO A DEPTH OF TWELVE-INCHES ABOVE THE TOP OF PIPE.

2.) MATERIAL FOR BACKFILLING THE REMAINDER OF THE TRENCH, PAVEMENT AND PAVEMENT BASE MATERIAL EXCLUDED, SHALL BE BACKFILLED AND COMPACTED IN TWELVE-INCH LIFTS WITH SUITABLE MATERIAL WITH NO STONES GREATER THAN FOUR-INCHES IN DIAMETER. MATERIAL SHOULD BE FREE OF ORGANICS AND DEBRIS.

3.) TRENCH SHALL BE FINISHED WITH SIX-INCHES (6") OF LOAM AND SEED IN NON PAVED AREAS AND PREPARED IN ACCORDANCE WITH PAVEMENT STRUCTURE IN PAVED AREAS.

PRECAST CONCRETE CATCH BASIN

NOT TO SCALE

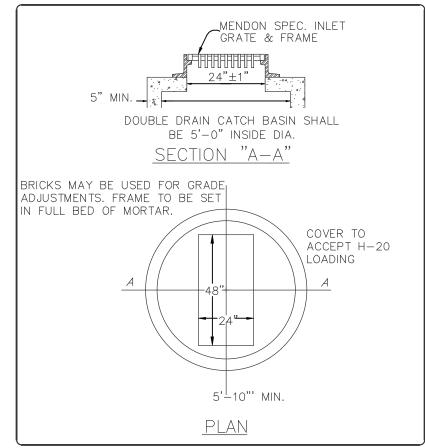


NOTE: ALL DRAINAGE STRUCTURES AND MATERIALS SHALL CONFORM TO TOWN OF AUBURN D.P.W. SPECIFICATIONS. NOTE: ALL DRAINAGE STRUCTURES AND MANHOLES DEEPR THAN 9-FEET

DOUBLE GRATE CATCH BASIN TOP

SHALL HAVE AN INSIDE DIAMETER OF AT LEAST 5-FEET.

NOT TO SCALE



PRECAST CONCRETE DRAIN CATCH BASIN MATERIALS AND INSTALLATION

1.) ALL MATERIALS ASSOCIATED SHALL BE IN ACCORDANCE WITH THE DESIGN PLANS, THE TOWN OF MENDON DEPARTMENT OF PUBLIC WORKS CONSTRUCTION STANDARDS.

2.) ALL CATCH BASINS SHALL HAVE A SUMP OF AT LEAST FOUR-FEET (48-INCHES) BELOW THE INVERT OF THE OUTLET PIPE AND SHALL HAVE A HOOD ON OUTLET PIPES.

3.) CATCH BASIN HOODS SHALL EXTEND AT LEAST ONE-FOOT BELOW THE INVERT OF THE OUTLET

4.) CATCH BASINS SHALL BE CONSTRUCTED OF REINFORCED PRECAST CONCRETE BASE SECTION, BARREL SECTION AND DOME SECTION MEETING THE REQUIREMENTS OF ASTM C78 AND AASHTO M199. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 P.S.I. 5.) IN CASES WHERE VERTICAL TOLERANCE DOES NOT PERMIT A CONE TOP SECTION, A PRECAST

6.) CATCH BASINS SHALL MEET OR EXCEED HS-20 LOADING REQUIREMENTS.

CONCRETE FLAT SECTION MAY BE USED.

5523A/5524Z FRAME AND 5520 M5 COVER.

7.) CATCH BASINS SHALL HAVE A MINIMUM OPENING OF 26-INCHES AND A MINIMUM INSIDE DIAMETER OF FOUR-FEET (4').

8.) CATCH BASINS SHALL HAVE TONGUE AND GROOVE JOINTS BETWEEN SECTIONS THAT ARE MORTARED OR SEALED WITH BUTYL RUBBER SEALANTS.

9.) PIPE INLETS AND OUTLETS SHALL BE SEALED WITH MORTAR OR RUBBER SEALANTS OR BOOT

10.) DRAIN MANHOLES SHALL BE PLACED ON A LAYER OF COMPACTED, LEVEL, BEDDING MATERIAL NOT LESS THAN SIX-INCHES IN HEIGHT. 11.) CATCH BASIN SECTIONS SHALL BE CAREFULLY PLACED SO THAT ALL SECTIONS ARE LEVEL

12.) EXCAVATION AROUND THE MANHOLE STRUCTURED SHALL BE BACKFILLED AND COMPACTED IN

TWELVE-INCH (12") LIFTS WITH SUITABLE MATERIALS. 13.) ROAD BASE MATERIAL AND PAVEMENT MATERIALS SHALL BE INSTALLED AROUND STRUCTURES

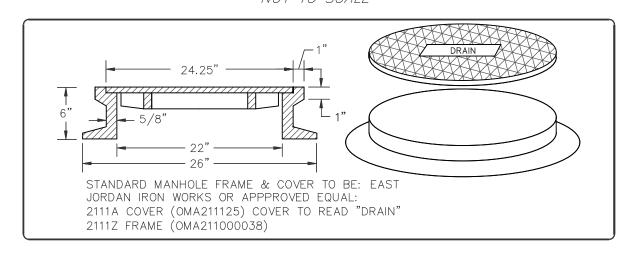
14.) MANHOLE ACCESS FRAME AND COVER SHALL CONSIST OF EAST JORDAN IRONWORKS

IN ACCORDANCE WITH BASE AND PAVEMENT PREPARATION INSTRUCTIONS.

15.) FRAME AND COVER SHALL BE ADJUSTED TO FINISH GRADE USING LAYERS OF MORTAR AND

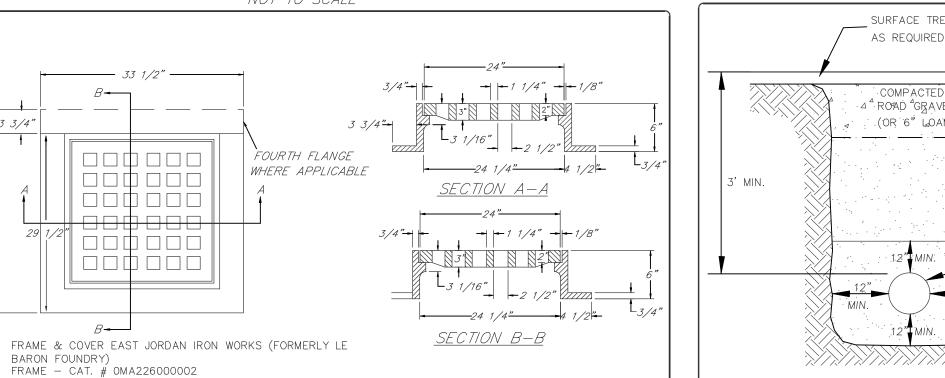
STANDARD DRAIN MANHOLE FRAME & COVER

NOT TO SCALE



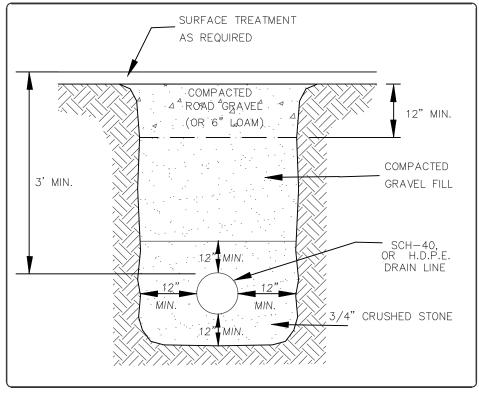
SQUARE CATCH BASIN FRAME & GRATE

NOT TO SCALE

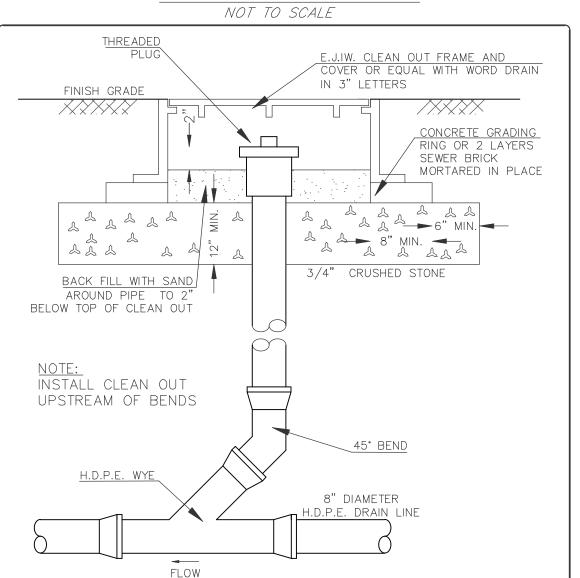


TYPICAL DRAIN LINE TRENCH

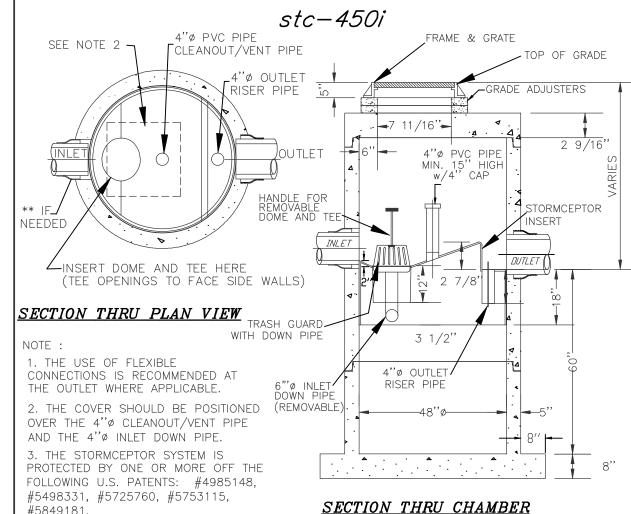
NOT TO SCALE



DRAIN LINE CLENAOUT



STORMCEPTOR NOT TO SCALE



#5849181.

5000 LB)

4. CONTRACTOR TO PROVIDE CRANE TO

SET UNIT (HEAVIEST SECTION WEIGHS

DRAINAGE MATERIALS NOTES:

SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 P.S.I.

6.) MANHOLES SHALL MEET OR EXCEED HS-20 LOADING REQUIREMENTS.

3.) FILTER FABRIC SHALL BE MIRAFI 140N (TENCATE INDUSTRIES) OR APPROVED EQUAL.

DEPARTMENT OF PUBLIC WORKS CONSTRUCTION STANDARDS.

FLAT SECTION MAY BE USED.

THAN SIX-INCHES IN HEIGHT.

SEALED WITH BUTYL RUBBER SEALANTS.

TWELVE-INCH (12") LIFTS WITH SUITABLE MATERIALS.

ACCORDANCE WITH BASE AND PAVEMENT PREPARATION INSTRUCTIONS.

FOUR-FEET (4').

CONNECTIONS.

FRAME AND COVER.

CONCRETE ADHESIVE

SHALL BE PLACE BETWEEN THE TOP

TWO COURSES/

MODULAR BLOCKS

FINISH GRADE=

MIN. 309.5'±

EMB. VARIES (6" MIN.)

PRECAST CONCRETE DRAIN MANHOLE MATERIALS AND INSTALLATION

1.) ALL MATERIALS ASSOCIATED SHALL BE IN ACCORDANCE WITH THE DESIGN PLANS, THE TOWN OF MENDON

2.) STORMCEPTOR UNITS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.

4.) MANHOLES SHALL BE CONSTRUCTION OF REINFORCED PRECAST CONCRETE BASE SECTION, BARREL

7.) MANHOLES SHALL HAVE A MINIMUM OPENING OF 26-INCHES AND A MINIMUM INSIDE DIAMETER OF

7.) MANHOLES SHALL HAVE TONGUE AND GROOVE JOINTS BETWEEN SECTIONS THAT ARE MORTARED OR

8.) PIPE INLETS AND OUTLETS SHALL BE SEALED WITH MORTAR OR RUBBER SEALANTS OR BOOT TYPE

9.) DRAIN MANHOLES SHALL BE PLACED ON A LAYER OF COMPACTED, LEVEL, BEDDING MATERIAL NOT LESS

10.) MANHOLE SECTIONS SHALL BE CAREFULLY PLACED SO THAT ALL SECTIONS ARE LEVEL AND PLUMB.

12.) ROAD BASE MATERIAL AND PAVEMENT MATERIALS SHALL BE INSTALLED AROUND STRUCTURES IN

13.) MANHOLE ACCESS FRAME AND COVER SHALL CONSIST OF EAST JORDAN IRONWORKS 2111A/2111Z

14.) FRAME AND COVER SHALL BE ADJUSTED TO FINISH GRADE USING LAYERS OF MORTAR AND BRICK.

TYPICAL MODULAR BLOCK RETAINING WALL

FINISH GRADE MAX. 313.0'±

TUCK 40 MIL LINER INTO FILL,

" OFF INSIDE FACE OF WALL

BACKFILL WALL PER BLOCK
MANUFACTURER SPECIFICATIONS WITH

FREE DRAINING, GRANULAR BACKFILL

"□"

(SEE IMPERVIOUS LINER DETAIL)

" BELOW FINISH GRADE

SET 40 MIL IMPERVIOUS LINER

LEACHING BED TITLE 5 SAND

SCH-40 PVC DRAIN

SUBCUT TO DEPTH "D" AS REQUIRED AND REPLACE WITH

SUITABLE COMPACTED STRUCTURAL FILL TO ACHIEVE THE REQUIRED BEARING CAPACITY AND SLIDING RESISTANCE AS DIRECTED BY THE SITE GEOTECHNICAL ENGINEER. ALL STRUCTURAL FILL IS TO BE COMPACTED TO A MINIMUM 98% STANDARD PROCTOR DENSITY.

/6"/XMX/

NOT TO SCALE

TOP BLOCK

BASE BLOCK

TUCK 40 MIL LINER INTO

FILL, 6" BELOW CRUSHED STONE LEVELING PAD

CRUSHED STONE BASE (6" MINIMUM THICKNESS)

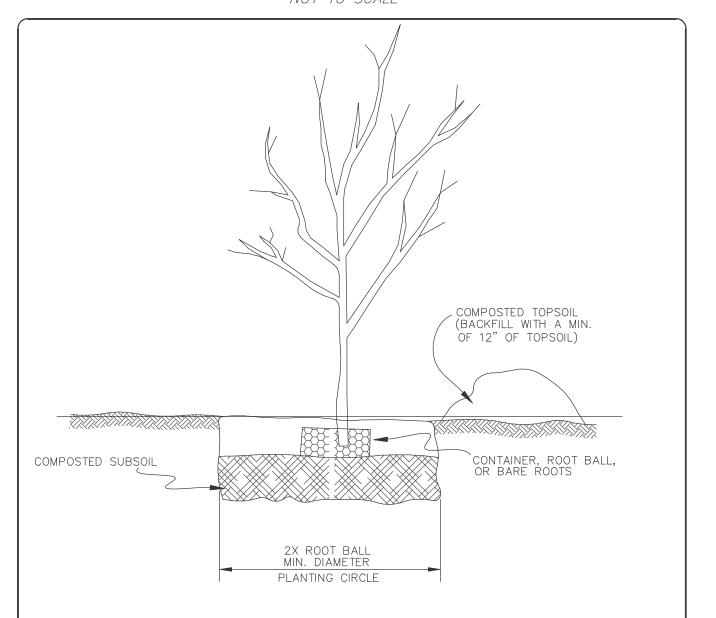
15.) FRAME AND COVERS SHALL MEET ASTM A888 ANDMADE FROM CLASS 20, GREY CAST IRON.

11.) EXCAVATION AROUND THE MANHOLE STRUCTURES SHALL BE BACKFILLED AND COMPACTED IN

SECTION AND DOME SECTION MEETING THE REQUIREMENTS OF ASTM C78 AND AASHTO M199. CONCRETE

5.) IN CASES WHERE VERTICAL TOLERANCE DOES NOT PERMIT A CONE TOP SECTION, A PRECAST CONCRETE

TREE PLANTING DETAIL NOT TO SCALE

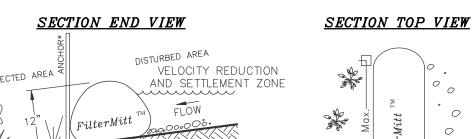


EROSION CONTROL BARRIER

NOT TO SCALE

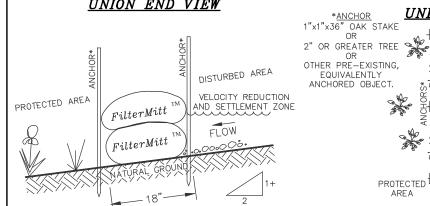


2:1 SLOPES OR GREATER



PROTECTED

UNION END VIEW



USE 18-INCH DIAMETER FILTER MITT.

OUTSIDE CASING: 100% organic hessian.

FILLER INGREDIENT: FiberRoot Mulch™ • A blend of coarse and fine compost and shredded wood. • Particle sizes: 100% passing a 3" screen;

90-100% passing a 1" screen; 70-100% passing a 0.75" screen; 30-75% passing a 0.25" screen.

• Weight: Approx. 850 lbs./cu.yd. (Ave. 30 lbs./l.f.) For more information visit:

www.groundscapesexpress.com Groundscapes Express, Inc.

P.O. Box 737 Wrentham, MA 02093 (508) 384-7140

FilterMitt INSTALLATION:

With the newest technology and equipment, sections can be constructed on site in lengths from 1' to 100'.

> Sections can also be delivered to the site in lengths from 1' to 8'.

o° FLOW

00

→ Overlap

O FLOW

-

DISTURBED

UNION TOP VIEW

DISTURBED

The flexibility of $FilterMitt^{ ext{ iny M}}$ allows it to conform to any contour or terrain while holding a slightly oval shape at 12" high

bv 18" wide. Where section ends meet, there shall be an overlap of 6" or greater. Both sides

shall be anchored (oak stakes, trees, etc.) to stabilize the union. Additional anchors shall also be placed at 5' intervals (max.) on the downslope or protected side to prevent movement.

REVISIONS

1	02/23/21	ADDRESS TOWN REVIEW AND MASSDOT COMMENTS	BTN
NO.	DATE	DESCRIPTION	BY

FOR METROWEST ENGINEERING, INC. ROBERT A. GEMMA, P.E.(CIVIL) # 31967

DETAILS PLAN #35 CAPE ROAD

MENDON, MASS

PREPARED FOR:

ARES CONSTRUCTION38 PHEASANT LANE MANCHESTER, NH 03109

PROPERTY OF:

WENGER REALTY, LLC 1040 SOUTH MAIN STREET BELLINGHAM, MA 02019

ENGINEERS & SURVEYORS:



METROWEST ENGINEERING, INC. 75 FRANKLIN STREET FRAMINGHAM, MA 01702 TELE.: (508)626-0063 EMAIL: INFO@MWENGINEERING.COM

SHEET C701 DATE: JANUARY 4, 2021 CAD FILE: ARES_P SITE PLAN3_R2.dwg FIELD BK: 712 DRAFTER: JTS/BTN | PROJECT: MND_CAP | DWG FILE: SP010421_R1.dwg

SEDIMENT FOREBAY AND INFILTRATION BASIN 1 DETAIL

<u>PROP. 12" H.D.P.E</u>

INV. IN=299.50'

PROPOSED SEDIMENT

FOREBAY

PROP. D.M.H.-6 (STC-450)

INV. OUT=298.15'

PROP. 12" H.D.P.E.

DRAIN LINE L=14.4', S=0.011

PROP. H.D.P.E.

INV. OUT=298.0'

INV. IN = 298.25'(DMH - 8)

INV. IN = 298.25'(DDCB - 5)

PROP. 15" H.D.P.E. DRAIN LINE

L=60.9', S=0.011

INV. OUT=298.0'

PROP. 12" H.D.P.E.

DRAIN LINE L=18.1', S=0.014

PROP. H.D.P.E. INV.s OUT=298.0

` PROP. D.M.H.−5

' INV. OUT=298.25'

INV. IN=298.35' (DCB-4)

/ INV. IN=298.35' (DMH-4)

— MAX. SLOPE 3H TO 1V

)) / (STC-450)

 $^{\prime\prime}$ RIM=302.75'

RIM=302.25'

BOTTOM AREA

+301.85

FG301

NOTE: BOTTOM OF INFILTRATION BASIN 1 TO BE HYDROSEEDED WITH A "NEW ENGLAND WET

MIX" NATIVE SEED BLEND AND APPLIED AT A RATE OF 1 POUND PER 1,000 SQUARE FEET.

NOT TO SCALE

FG299

12" H.D.P. DRAIN LINI L = 31.5',

HYDROSEED

BOTTOM WITH A

WETLAND BLEND

CONSERVATION

SEED MIX.

FG299 FG298

FG297

SPILLWAY ELEV.=301.0'

NV. OUT=297.55'

PROP.

12" H.D.P.E. DRAIN LINE

L = 31.5',

S = 0.030

PROPOSED

INFILTRATION

BASIN 1 BOTTOM AREA =2,670 S.F.

PROP. RETAINING WALL

SIDE VIEW

MANIFOLD

ANGULAR RIP-RAP 🗟

INSPECTION COVER H.D.P.E. TEE FITTING WITH COVER TO GRADE/

WASHED STONE 12" 3/4" TO 1 1/2"

MAX. SLOPE 3H TO 1V-

HYDROSEED SIDE SLOPES AND BERM

PROP. D.M.H.-12

INV. IN=298.75

INV. IN=299.75'

PROP. 12" H.D.P.E

L=44.6', S=0.022

INV. OUT=294.0'

PROP. 8" H.D.P.E. LEVEL SPREADER

L=50.0', S=0.015

8" H.D.P.E.

INV. OUT=294.0'

DRAIN LINES

L=11.3', S=0.020

SPILLWAY

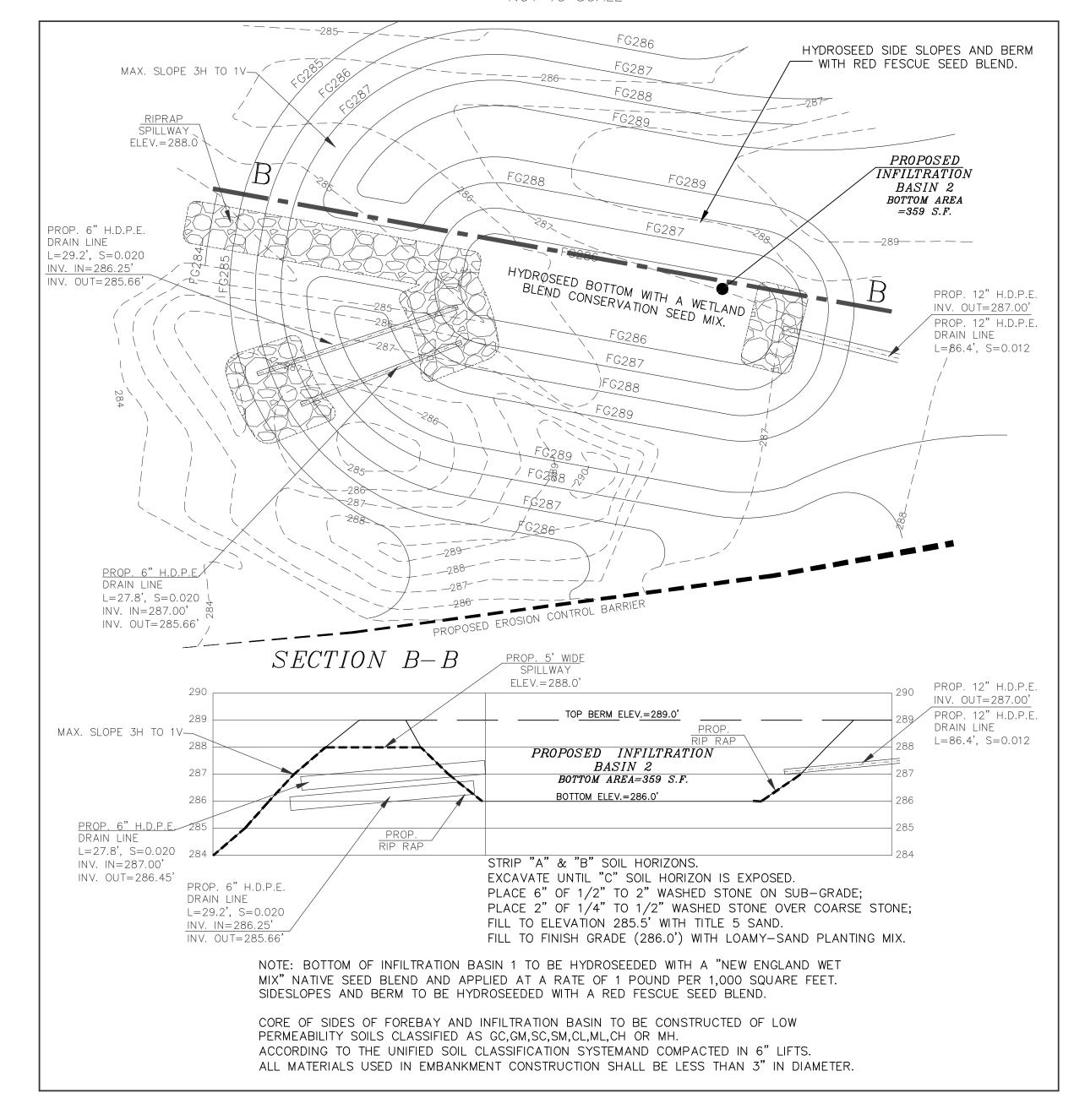
INV. OUT=295.00

WITH RED FESCUE SEED BLEND.

TOP=297.0', BOTTOM=294.0'

INFILTRATION BASIN 2 DETAIL

NOT TO SCALE



SIDESLOPES AND BERM TO BE HYDROSEEDED WITH A RED FESCUE SEED BLEND. CORE OF SIDES OF FOREBAY AND INFILTRATION BASIN TO BE CONSTRUCTED OF LOW PERMEABILITY SOILS CLASSIFIED AS GC,GM,SC,SM,CL,ML,CH OR MH. 8" H.D.P.E. ACCORDING TO THE UNIFIED SOIL CLASSIFICATION SYSTEMAND COMPACTED IN 6" LIFTS. 8" H.D.P.E. INV. IN=299.00' ALL MATERIALS USED IN EMBANKMENT CONSTRUCTION SHALL BE LESS THAN 3" IN DIAMETER. INV. IN=300.00' PROP. 10-FOOT WIDE SPILLWAY SECTION A-AELEV.=301.0' PROP. D.M.H.-12 PROP. CONC. RIM=302.00' INV. IN=298.75' PROP. 12" H.D.P.E. INV. IN=299.50' HEADWALL TOP ELEV.=302.0' PROP. H.D.P.E. PROP. 12" H.D.P.E. INV.s OUT=298.0' INV. IN=299.75' DRAIN LINE L=31.5', S=0.024 BOTTOM ELEV.=297.0' ELEV.=301.0' PROP. NV. OUT=295.00 PROP. PROP. RIP RAP------ SEDIMENT MAX. SLOPE 3H TO 1V-PROP. D.M.H.-6 FOREBAY|300| (STC-450) BOTTOM AREA RIM=302.25' =576 S.F. [299] INV. IN=298.25'(DMH-8) PROPOSED INFILTRATION PROP. 12" H.D.P.E. INV. OUT=298.75 PROP. [] INV. IN=298.25'(DDCB-5) 8" H.D.P.E. DRAIN LINES |298| INV. OUT=298.15' BASIN 1 BOTTOM ELEV.=298.0 BOTTOM AREA=2,670 S.F. L=11.3', S=0.03PROP. RIP RAP PROP. 12" H.D.P.E. 296 BOTTOM ELEV.=296.0 PROP. 12" H.D.P.E. 5 DRAIN LINE L=44.6', S=0.022 295 L=14.4', S=0.011PROP. H.D.P.E. STRIP "A" & "B" SOIL HORIZONS. PROP. 8" H.D.P.E. LEVEL SPREADER 293 INV. OUT=298.0' EXCAVATE UNTIL "C" SOIL HORIZON IS EXPOSED. L=50.0', S=0.015 PROP. 8" H.D.P.E. 292 PLACE 6" OF 1/2" TO 2" WASHED STONE ON SUB-GRADE; PLACE 2" OF 1/4" TO 1/2" WASHED STONE OVER COARSE STONE; PROP. RIP RAP FILL TO ELEVATION 297.5' (SEDIMENT FOREBAY), 295.5' (INFILTRATION BASIN) WITH TITLE 5 SAND. FILL TO FINISH GRADE 298.0'(SEDIMENT FOREBAY), 296.0" (INFILTRATION BASIN) WITH LOAMY-SAND PLANTING MIX.

LEVEL SPREADER FLOW MANIFOLD DETAIL

12" H.D.P.E. DRAIN LINE L=44.6', S=0.022

INV. IN= 294.0'

2-FOOT RIP RAP ENVELOPE AROUND

TOP OF PIPE=VARIES H.D.P.E. MANIFOLD

INV. @ END=293.6'

INV. @ END=293.6'

SPACE 1" DIAMETER HOLES EVERY 4 INCHES.

WITH COVER TO GRADE

PLAN VIEW

2-FOOT RIP RAP

ENVELOPE AROUND

H.D.P.E. MANIFOLD

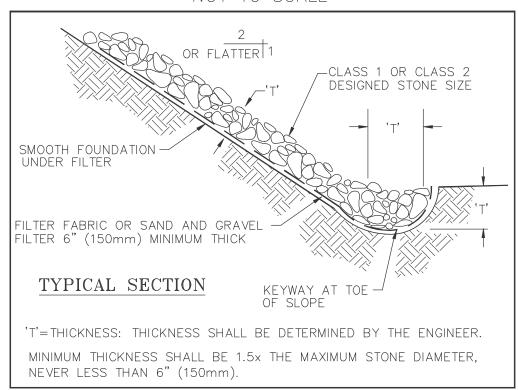
H.D.P.E. TEE FITTING

INSPECTION COVER H.D.P.E. TEE FITTING

WITH COVER TO GRADE

RIP RAP AND SPILLWAY DETAIL

NOT TO SCALE



REVISIONS

1	02/23/21	ADDRESS TOWN REVIEW AND MASSDOT COMMENTS	BTN
NO.	DATE	DESCRIPTION	BY

FOR METROWEST ENGINEERING, INC. ROBERT A. GEMMA, P.E.(CIVIL) # 31967



PREPARED FOR:

ARES CONSTRUCTION 38 PHEASANT LANE MANCHESTER, NH 03109

PROPERTY OF:

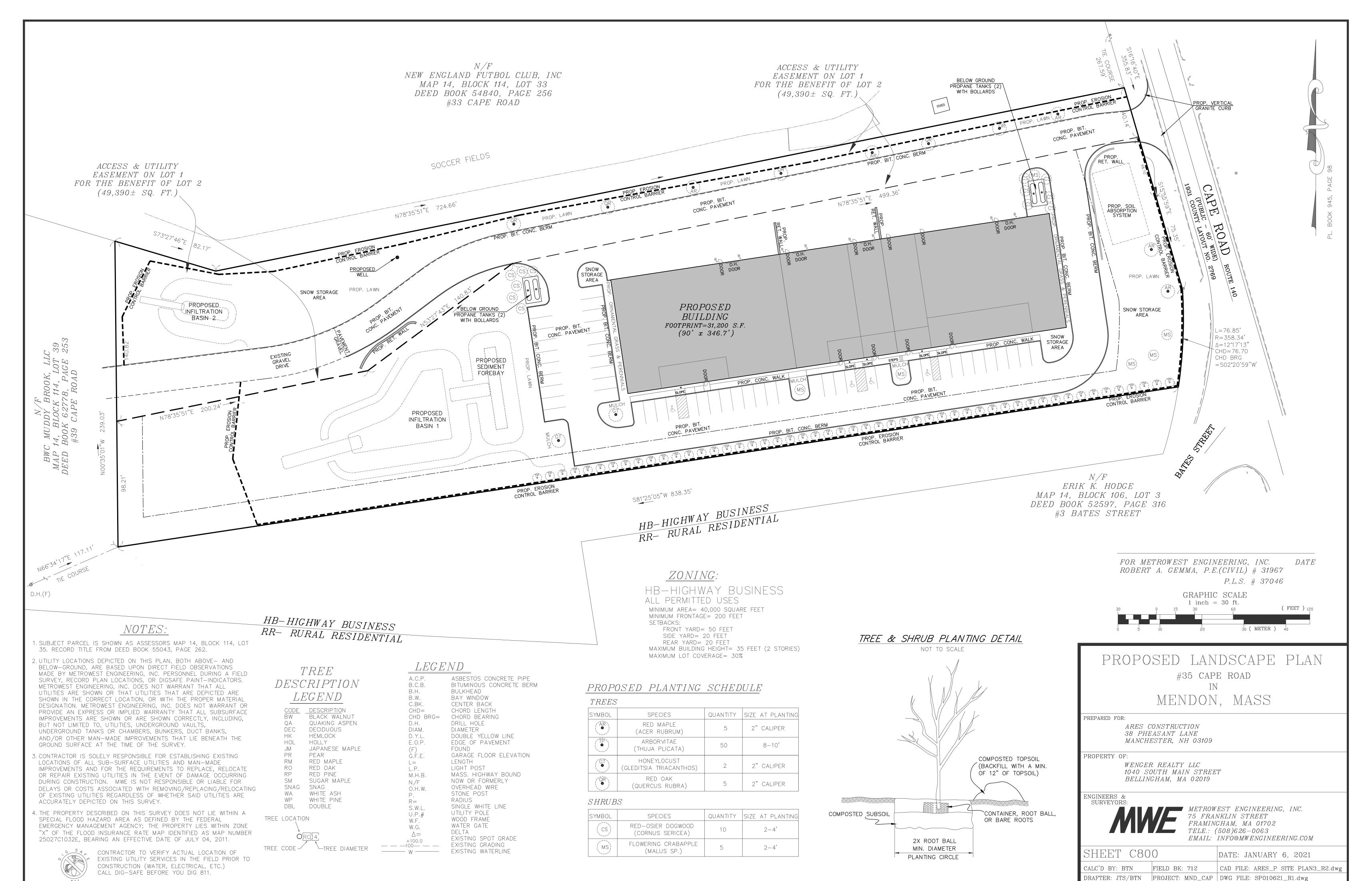
WENGER REALTY, LLC 1040 SOUTH MAIN STREET BELLINGHAM, MA 02019

ENGINEERS & SURVEYORS:



METROWEST ENGINEERING. INC. 75 FRANKLIN STREET FRAMINGHAM, MA 01702 TELE.: (508)626-0063 EMAIL: INFO@MWENGINEERING.COM

SHEET C702 DATE: JANUARY 4, 2021 CAD FILE: ARES_P SITE PLAN3_R2.dwg FIELD BK: 712 DRAFTER: JTS/BTN | PROJECT: MND_CAP | DWG FILE: SP010421_R1.dwg



NOTES:

- 1. SUBJECT PARCEL IS SHOWN AS ASSESSORS MAP 14, BLOCK 114, LOT 35. RECORD TITLE FROM DEED BOOK 55043, PAGES 261.
- 2. UTILITY LOCATIONS DEPICTED ON THIS PLAN, BOTH ABOVE- AND BELOW-GROUND, ARE BASED UPON DIRECT FIELD OBSERVATIONS MADE BY METROWEST ENGINEERING, INC. PERSONNEL DURING A FIELD SURVEY, RECORD PLAN LOCATIONS, OR DIGSAFE PAINT-INDICATORS. METROWEST ENGINEERING, INC. DOES NOT WARRANT THAT ALL UTILITIES ARE SHOWN OR THAT UTILITIES THAT ARE DEPICTED ARE SHOWN IN THE CORRECT LOCATION, OR WITH THE PROPER MATERIAL DESIGNATION. METROWEST ENGINEERING, INC. DOES NOT WARRANT OR PROVIDE AN EXPRESS OR IMPLIED WARRANTY THAT ALL SUBSURFACE IMPROVEMENTS ARE SHOWN OR ARE SHOWN CORRECTLY, INCLUDING, BUT NOT LIMITED TO, UTILITIES, UNDERGROUND VAULTS, UNDERGROUND TANKS OR CHAMBERS, BUNKERS, DUCT BANKS, AND/OR OTHER MAN-MADE IMPROVEMENTS THAT LIE BENEATH THE GROUND SURFACE AT THE TIME OF THE SURVEY.
- 3. CONTRACTOR IS SOLELY RESPONSIBLE FOR ESTABLISHING EXISTING LOCATIONS OF ALL SUB-SURFACE UTILITIES AND MAN-MADE IMPROVEMENTS AND FOR THE REQUIREMENTS TO REPLACE, RELOCATE OR REPAIR EXISTING UTILITIES IN THE EVENT OF DAMAGE OCCURRING DURING CONSTRUCTION. MWE IS NOT RESPONSIBLE OR LIABLE FOR DELAYS OR COSTS ASSOCIATED WITH REMOVING/REPLACING/RELOCATING OF EXISTING UTILITIES REGARDLESS OF WHETHER SAID UTILITIES ARE ACCURATELY DEPICTED ON THIS SURVEY.
- 4. THE PROPERTY DESCRIBED ON THIS SURVEY DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD AREA AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY; THE PROPERTY LIES WITHIN ZONE "X" OF THE FLOOD INSURANCE RATE MAP IDENTIFIED AS MAP NUMBER 25027C1032E, BEARING AN EFFECTIVE DATE OF JULY 04, 2011.



CONTRACTOR TO VERIFY ACTUAL LOCATION OF EXISTING UTILITY SERVICES IN THE FIELD PRIOR TO CONSTRUCTION (WATER, ELECTRICAL, ETC.) CALL DIG-SAFE BEFORE YOU DIG 811.

PROJECT CONTACTS 35 CAPE ROAD LLC

JOHN BOGGIA 38 PHEASANT LANE MANCHESTER, NH 03109 (603) 234-1401

> FRAN MARCOUX 52 SHADY LANE DOUGLAS MA 01516 (508) 843-8339

SHEET INDEX

COVER SHEET

SHEET C100 — EXISTING CONDITIONS SITE PLAN

SHEET C200 --- EROSION AND SEDIMENT CONTROL PLAN

SHEET C300 --- PROPOSED LAYOUT PLAN

SHEET C400-C401-PROPOSED GRADING PLANS

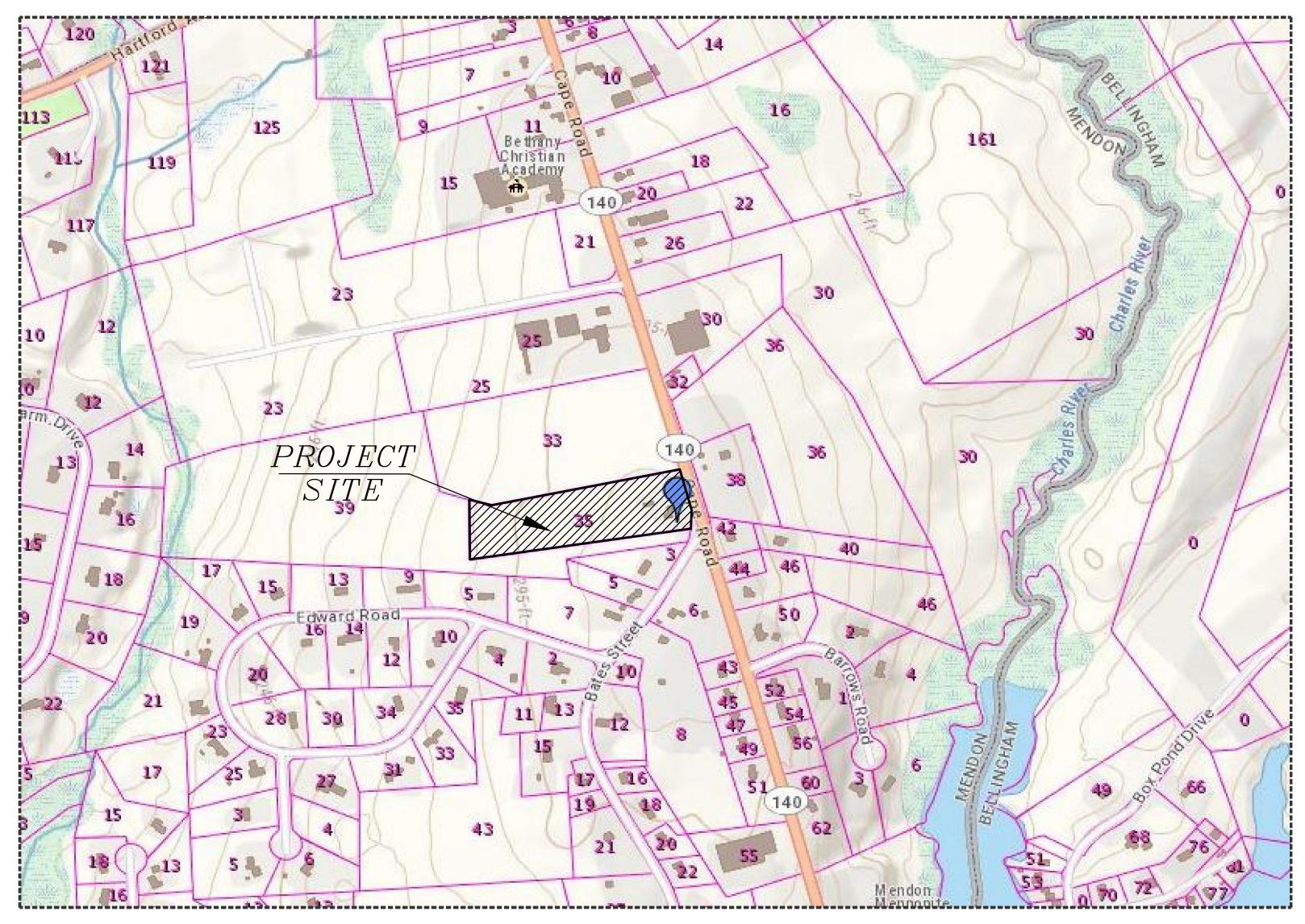
SHEET C500-C501 --- PROPOSED SITE PLANS

SHEET C600 — LOCUS PLAN

SHEET C700-C702 - DETAILS PLANS

SHEET C800 --- PROPOSED LANDSCAPE PLAN

PROPOSED SITE PLAN SET PROPOSED SITE REDEVELOPMENT 35 CAPE ROAD MENDON, MASSACHUSETTS



NO SCALE

PROPOSED PARKING REQUIREMENTS

PROPOSED USE	FLOOR AREA	PARKING REQUIREMENT	TOTAL
PROPOSED BUILDING	31,200 SQUARE FEET	1 SPACE PER 1000 S.F. OF FLOOR AREA	31.2
	TOTAL	NUMBER OF REQUIRED PARKING SPACES	32
	TOTAL	NUMBER OF PROPOSED PARKING SPACES	50

PARKING REQUIREMENTS TAKEN FROM SECTION 2.03 (b) OF TOWN OF MENDON ZONING BYLAWS FOR WHOLESALE, MANUFACTURING, CONTRACTORS YARDS, WAREHOUSING.

ZONING TABLE: 35 CAPE ROAD MAP 114, BLOCK 114, LOT 35

-	·		
DESCRIPTION	REQUIRED HIGHWAY BUSINESS	EXISTING	PROPOSED
LOT AREA	40,000 SQ. FT. (MIN.)	182,166 SQ. FT.	182,166 SQ. FT.
LOT FRONTAGE	200 FT. (MIN.)	240.44 FT.	240.44 FT.
FRONT YARD SETBACK	50 FT. (MIN.)	14.0 FT.	83.9 FT.
SIDE YARD SETBACK	20 FT. (MIN.)	44.7 FT.	59.0 FT.
REAR YARD SETBACK	20 FT. (MIN.)	665.6 FT.	408.5 FT.
MAX BUILDING HEIGHT	35 FT. (2.5 STORIES)	2.0 STORIES	18 FT. 1 (STORY)
FLOOR AREA	N.A.	4,904 SQ. FT.	31,200 SQ. FT.
FLOOR AREA RATIO	N.A.	0.027± (2.7%)	0.171 (17.1%)
MAX. BUILDING COVERAGE	30%	0.020 (2.0%)	0.171 (17.1%)
BUILDING AREA	N.A.	3,594 SQ. FT.	31,200 SQ. FT
OTHER IMPERVIOUS SURFACES	N.A.	20,579 SQ. FT.	61,349 SQ. FT.
TOTAL IMPERVIOUS AREA	N.A.	24,173 SQ. FT.	92,549 SQ. FT.
PARKING	32 SPACES	0 SPACES	50 SPACES
HANDICAP PARKING	3 SPACES	O SPACES	4 SPACES
UPLAND AREA	N.A.	182,166 SQ. FT.	182,166 SQ. FT.

MENDON PLANNING BOARD

DATE:

THE ENDORSEMENT OF THE PLANNING BOARD SHOULD NOT BE CONSTRUED TO BE A DETERMINATION OF CONFORMANCE WITH ZONING REGULATIONS.

ZONING:

HB-HIGHWAY BUSINESS ALL PERMITTED USES MINIMUM AREA= 40,000 SQUARE FEET MINIMUM FRONTAGE = 200 FEET SETBACKS: FRONT YARD= 50 FEET SIDE YARD= 20 FEET REAR YARD= 20 FEET MAXIMUM BUILDING HEIGHT= 35 FEET (2 STORIES) MAXIMUM LOT COVERAGE= 30%

REVISIONS

1	02/23/21	ADDRESS TOWN REVIEW AND MASSDOT COMMENTS	BTN
NO.	DATE	DESCRIPTION	BY

FOR METROWEST ENGINEERING, INC. ROBERT A. GEMMA, P.E.(CIVIL) # 31967 P.L.S. # 37046

> COVER SHEET #35 CAPE ROAD

MENDON, MASS

PREPARED FOR:

ARES CONSTRUCTION 38 PHEASANT LANE MANCHESTER, NH 03109

PROPERTY OF:

WENGER REALTY, LLC 1040 SOUTH MAIN STREET BELLINGHAM, MA 02019



METROWEST ENGINEERING, INC. 75 FRANKLIN STREET FRAMINGHAM, MA 01702 TELE:: (508)626-0063 EMAIL: INFO@MWENGINEERING.COM

SHEET 1 OF DATE: JANUARY 4, 2021 CALC'D BY: BTN FIELD BK: 712 CAD FILE: ARES_P SITE PLAN3_R2.dwg DRAFTER: JTS/BTN PROJECT: MND_CAP DWG FILE: SP010421_R1.dwg