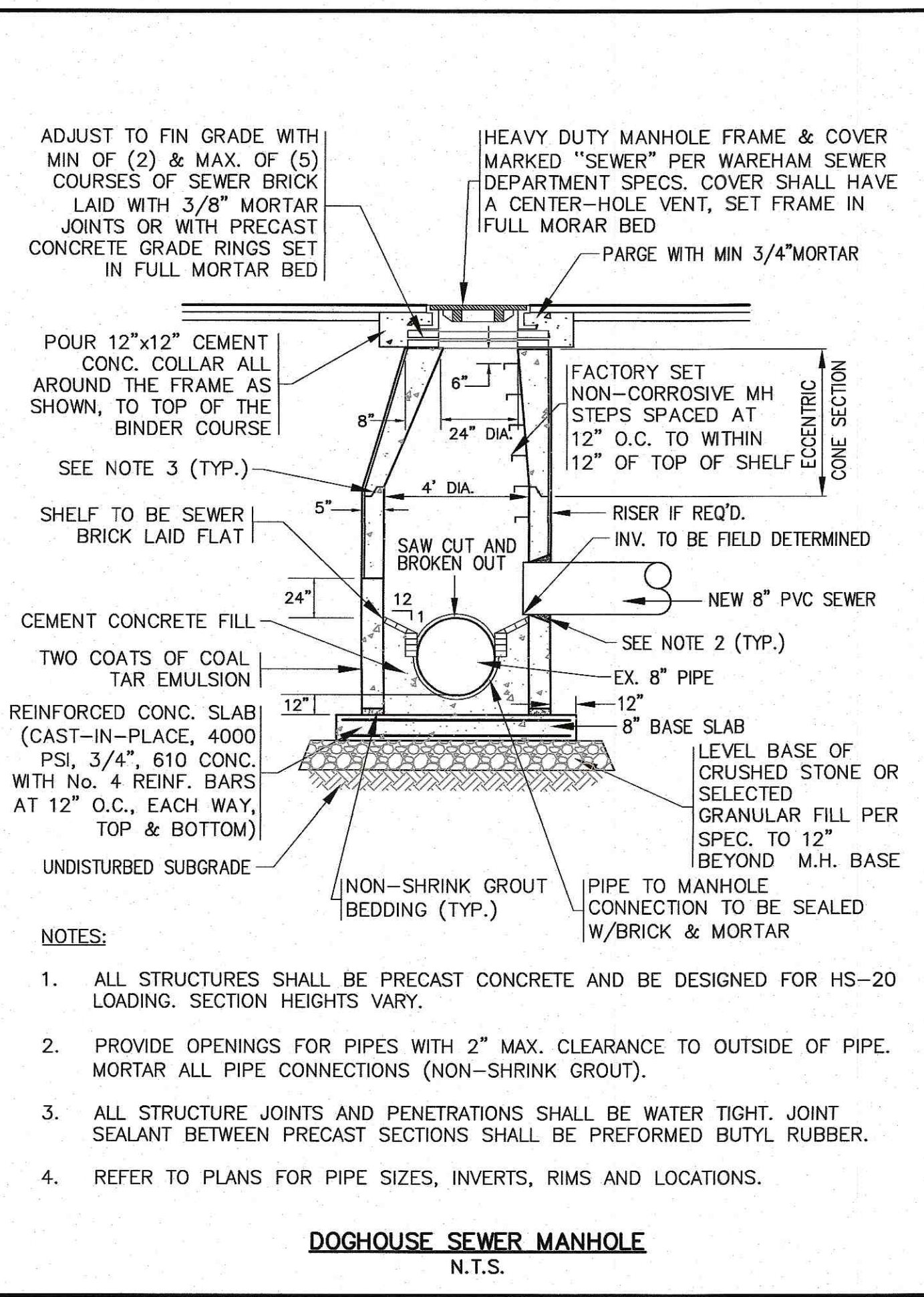
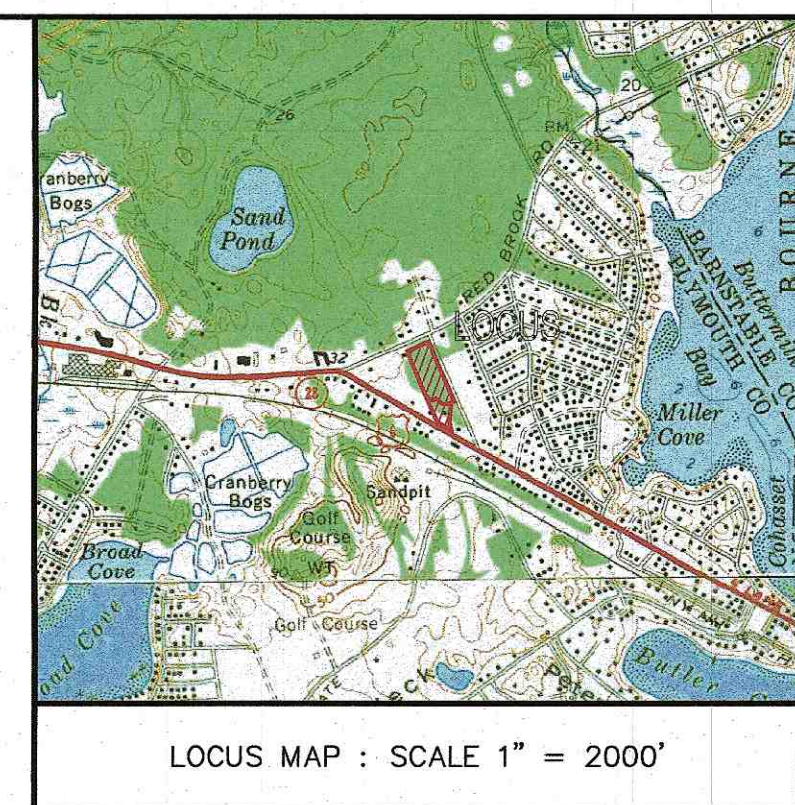


- NOTES:**
- ALL SUPERPAVE SHALL BE IN ACCORDANCE WITH MASSDOT SUBSECTION 702 OF THE 2021 STANDARD SPECIFICATIONS.
 - GRAVEL BORROW SHALL CONFORM TO MASSDOT SPEC. SECTION M1.03.0, TYPE B.
 - SUBGRADE & BASE SHALL BE COMPACTED TO MINIMUM 95% MAXIMUM DRY DENSITY.
 - CONTROL DENSITY FILL (FLOWABLE FILL) SHALL CONFORM TO MASSDOT M4.08.0 TYPE 1E OR TYPE 2E.
 - MATCH EXISTING PAVEMENT GRADES.



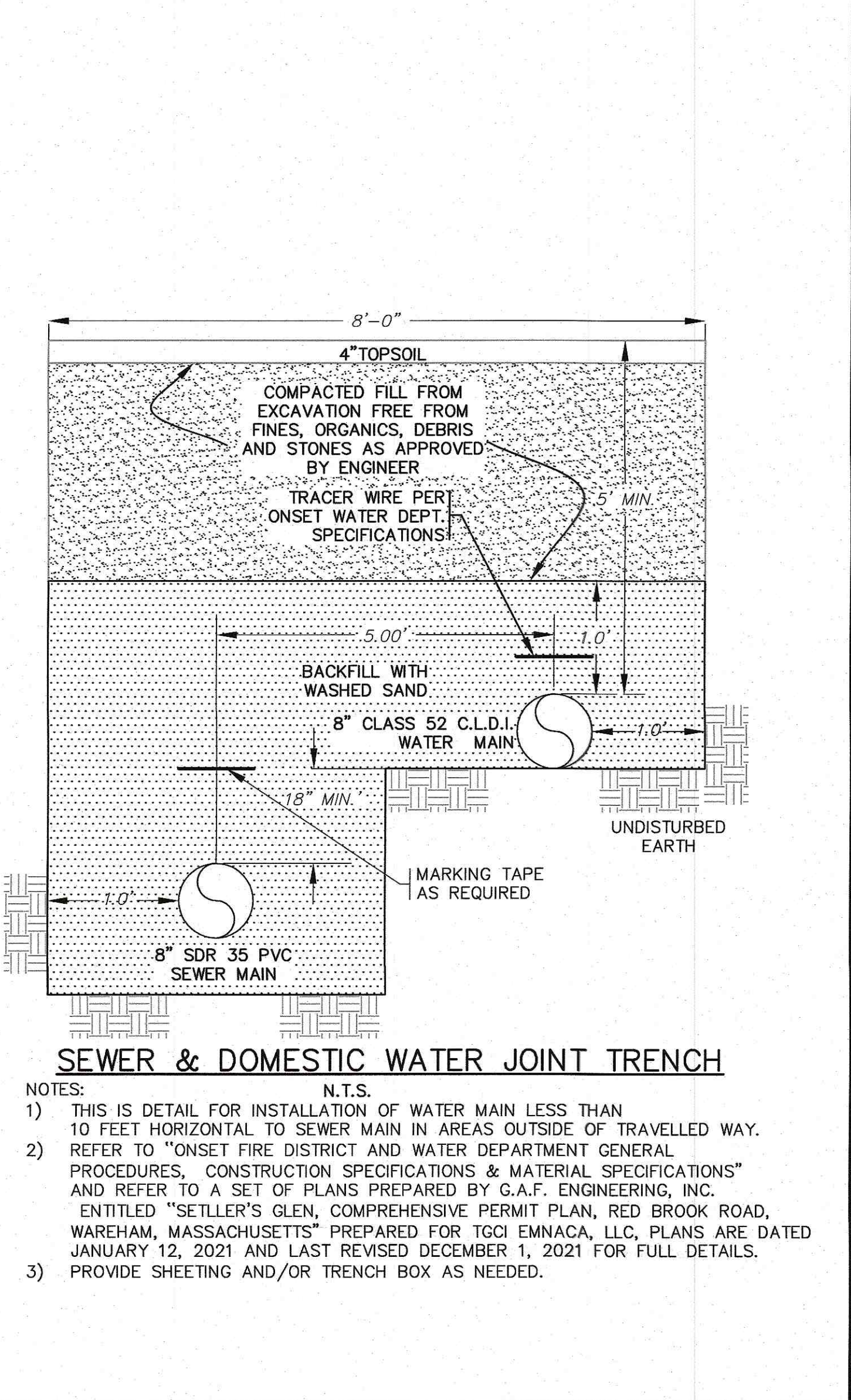
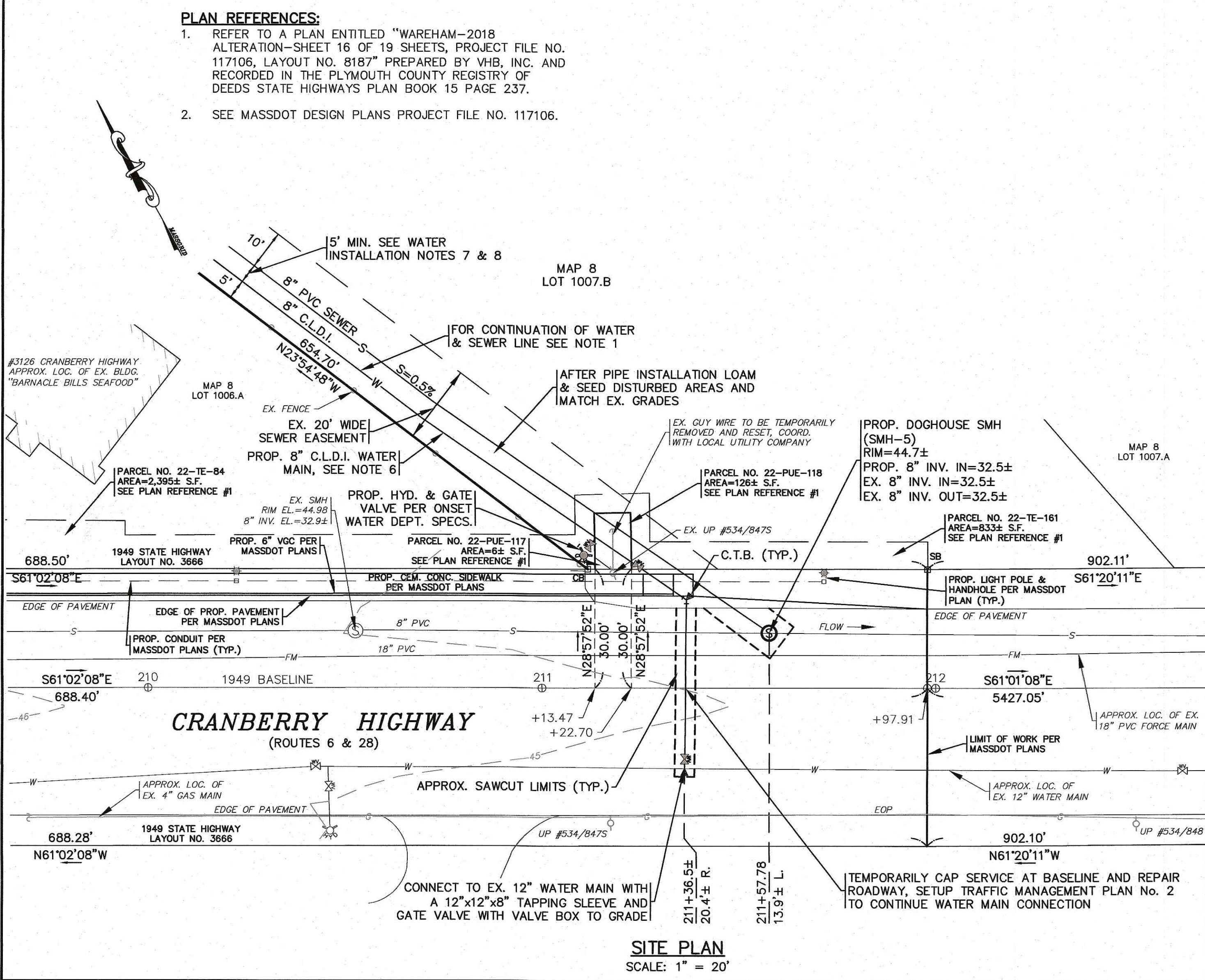
- NOTES:**
- ALL STRUCTURES SHALL BE PRECAST CONCRETE AND BE DESIGNED FOR HS-20 LOADING. SECTION HEIGHTS VARY.
 - PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS (NON-SHRINK GROUT).
 - ALL STRUCTURE JOINTS AND PENETRATIONS SHALL BE WATER TIGHT. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
 - REFER TO PLANS FOR PIPE SIZES, INVERTS, RIMS AND LOCATIONS.

- GENERAL NOTES:**
- ALL UNDERGROUND UTILITIES SHOWN OR NOT SHOWN WERE COMPILED ACCORDING TO AVAILABLE RECORD PLANS AND IN PART FROM FIELD SURVEY AND ARE APPROXIMATE ONLY. ACTUAL LOCATIONS MUST BE DETERMINED IN THE FIELD. BEFORE EXCAVATING, BLASTING, INSTALLING, BACKFILLING, GRADING, PAVEMENT RESTORATION, OR REPAIRING, ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE CONTACTED INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THIS PLAN. SEE MGL CHAPTER 370, ACTS OF 1963. CONTRACTORS MUST CALL DIG-SAFE AT (1-888-DIG-SAFE OR 811) G.A.F. ENGINEERING, INC. ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN.
 - EXISTING CONDITIONS INFORMATION IS BASED ON ACTUAL FIELD SURVEY, PRIVATE UTILITY PLANS, AND OTHER AVAILABLE SOURCES. FIELD SURVEY WAS PERFORMED BY G.A.F. ENGINEERING, INC., ON VARIOUS DATES AND MOST RECENTLY IN MARCH OF 2021.
 - THE CONTRACTOR SHALL COORDINATE AND OBTAIN ALL REQUIRED PERMITS, GIVE ALL NOTICES, COMPLY WITH ALL LAWS AND REGULATIONS, AND PAY ALL FEES ASSOCIATED WITH THE INSTALLATION OF THIS WORK.
 - THE CONTRACTOR SHALL FIELD VERIFY, PRIOR TO CONSTRUCTION ALL EXISTING UNDERGROUND UTILITY LOCATIONS AND POINTS OF INTERCONNECTION.
 - THE CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, SUPERVISION, TOOLS, EQUIPMENT, FUEL, POWER, SANITARY FACILITIES AND INCIDENTALS NECESSARY FOR THE FURNISHING, PERFORMANCE, TESTING, START-UP AND COMPLETION OF THIS WORK.
 - THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND OWNER OF ANY CONFLICTS DISCOVERED IN THE FIELD.
 - ANY CHANGES TO THESE SITE PLANS THAT ARE MADE IN THE FIELD DURING CONSTRUCTION SHALL BE RECORDED BY THE CONTRACTOR ON RECORD DOCUMENTS AND REPORTED TO THE OWNER AND ENGINEER.
 - THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AN EXCAVATION AND TRENCH PERMIT PURSUANT TO 520 CMR 14.00 AS APPLICABLE PRIOR TO THE START OF CONSTRUCTION.
 - ELEVATIONS ARE IN FEET AND TENTHS AND ARE BASED ON THE DATUM OF NAVD-88.
 - ALL PAVEMENT MARKINGS DISTURBED BY CONSTRUCTION SHALL BE RESTORED AS PART OF THIS WORK.
 - ALL METHODS AND MATERIALS SHALL CONFORM WITH MASSDOT STANDARDS AND SPECIFICATIONS, AND THE REQUIREMENTS OF THE TOWN OF WAREHAM MUNICIPAL MAINTENANCE DEPARTMENT.
 - THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF PERSONNEL AND PROTECTION OF PROPERTY AT THE SITE OR ADJACENT THERETO INCLUDING TREES, SHRUBS, LAWNS, PAVEMENTS, ROADWAYS, STRUCTURES AND UNDERGROUND UTILITIES NOT DESIGNED FOR REMOVAL, RELOCATION, OR REPLACEMENT.
 - THE CONTRACTOR SHALL INSTITUTE ALL SAFETY MEASURES NECESSARY TO PROTECT THE PUBLIC SAFETY. THIS SHALL INCLUDE, BUT NOT LIMITED TO, BARRICADES, SIGNS, LIGHTING, FENCES, POLICE DETAILS, AND ANY OTHER MEANS AS DIRECTED. NO TRENCHES ARE TO REMAIN OPEN OVERNIGHT.
 - THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION REQUIRED FOR THE INSTALLATION OF THIS WORK.
 - ALL MATERIALS SHALL BE NEW AND FREE FROM DEFECTS AND OF GOOD QUALITY.
 - THE CONTRACTOR SHALL KEEP THE PREMISES FREE FROM THE ACCUMULATION OF WASTE MATERIAL AND OTHER DEBRIS RESULTING FROM THIS WORK.



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DATE: DEC. 20, 2021
 DRAWN BY: JMP
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- WATER INSTALLATION NOTES:**
- ALL WATER MAINS, SERVICES, GATE VALVES/GATE BOX, CURB STOPS, HYDRANTS, FITTINGS, ETC. & METHOD OF INSTALLATION SHALL CONFORM TO THE ONSET FIRE DISTRICT AND ONSET WATER DEPARTMENTS RULES & REGULATIONS.
 - WATER MAIN SHALL BE PRESSURE TESTED, FLUSHED & DISINFECTED IN ACCORDANCE WITH THE ONSET FIRE DISTRICT AND ONSET WATER DEPARTMENTS REQUIREMENTS.
 - CONTRACTOR TO COORDINATE WITH THE ONSET FIRE DISTRICT AND THE ONSET WATER DEPARTMENT FOR THE INSPECTIONS OF THE WATER MAIN INSTALLATION.
 - THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS TO COMPLETE THE INSTALLATION OF THE WATER SYSTEM.
 - THE CONTRACTOR SHALL OBTAIN A COPY OF THE "ONSET FIRE DISTRICT, WATER DEPARTMENT GENERAL PROCEDURES, CONSTRUCTION SPECIFICATIONS & MATERIAL SPECIFICATIONS" FROM THE ONSET WATER DEPARTMENT BEFORE PROCEEDING WITH THE INSTALLATION OF THE WATER SYSTEM.
 - WATER MAIN SHALL BE RESTRAINED JOINT 8" CLASS 52 DOUBLE CEMENT LINED DUCTILE IRON PIPE WITH PUSH-ON JOINTS AND MECHANICAL JOINT FITTINGS OR APPROVED EQUAL.
 - WHEN A WATER LINE IS INSTALLED LESS THAN 10' TO A SEWER LINE THE WATER LINE MUST BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER AT SUCH ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER LINE.
- NOTES:**
- THIS PLAN HAS BEEN PREPARED TO PERMIT THE CONNECTION OF A PROPOSED SEWER MAIN AND WATER MAIN IN CRANBERRY HIGHWAY (ROUTE 6&28). FOR COMPLETE SITE PLAN DETAILS, REFER TO A SET OF PLANS PREPARED BY G.A.F. ENGINEERING, INC. ENTITLED "SETTLER'S GLEN, COMPREHENSIVE PERMIT PLAN, RED BROOK ROAD, WAREHAM, MASSACHUSETTS" PREPARED FOR TGI EMNACA, LLC, PLANS ARE DATED JANUARY 12, 2021 AND LAST REVISED DECEMBER 1, 2021.
 - ALL SEWER WORK SHALL BE DONE IN ACCORDANCE WITH THE TOWN OF WAREHAM SEWER COMMISSIONERS RULES AND REGULATIONS.
 - CONTRACTOR SHALL CONFIRM EXISTING SEWER ELEVATION PRIOR TO CONSTRUCTION.
 - ALL WATER WORK, MATERIAL AND CONSTRUCTION SPECIFICATIONS SHALL BE DONE IN ACCORDANCE WITH THE ONSET FIRE DISTRICT AND ONSET WATER DEPARTMENT RULES AND REGULATIONS.
 - ALL TRENCHING, BACKFILL AND PAVEMENT REPAIR SHALL BE DONE IN ACCORDANCE WITH THE TOWN OF WAREHAM MUNICIPAL MAINTENANCE DEPARTMENT RULES AND REGULATIONS.
 - ALL UNPAVED, DISTURBED AREAS WITHIN THE HIGHWAY LAYOUT SHALL RECEIVE 4" OF LOAM AND SEED IN ACCORDANCE WITH MASS HIGHWAY STANDARDS.
 - ALL PAVEMENT REPAIRS WILL MATCH EXISTING PAVEMENT CROSS SECTION.
 - THE CONTRACTOR SHALL PROTECT ALL SIGNS, FENCES, UTILITY POLES AND OTHER FEATURES FROM DAMAGE DURING CONSTRUCTION.
 - ALL WORK WITHIN THE SHLO SHALL COMPLY WITH THE REQUIREMENTS OF THE MASSDOT 2021 STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.
 - THE PROPOSED WATER AND SEWER CONNECTIONS SHALL BE COMPLETED BEFORE MASSDOT WORK ON CRANBERRY HIGHWAY BEGINS, SEE MASSDOT DESIGN PLANS PROJECT FILE NO. 117106.
 - SEE TRAFFIC CONTROL PLAN ON SHEET 2.
 - EXISTING UTILITY POLE #534/8475 SHALL BE SUPPORTED/PROTECTED DURING CONSTRUCTION. COORDINATE WITH UTILITY COMPANY PRIOR TO CONSTRUCTION.

G.A.F. ENGINEERING, INC.
 PROFESSIONAL ENGINEERS & LAND SURVEYORS
 266 MAIN STREET - WAREHAM, MA 02571
 TEL: (508) 295-6600 FAX: (508) 295-6634
 E-MAIL: info@gafenginc.com

SETTLER'S GLEN, LLC
 20 NORTH PARK AVE., SUITE 4
 PLYMOUTH, MA

DATE: 10/23/21
 WAREHAM, MA
 02571

PREPARED FOR:
 CRANBERRY HIGHWAY
 NON-VEHICULAR ACCESS PERMIT
 WAREHAM, MA

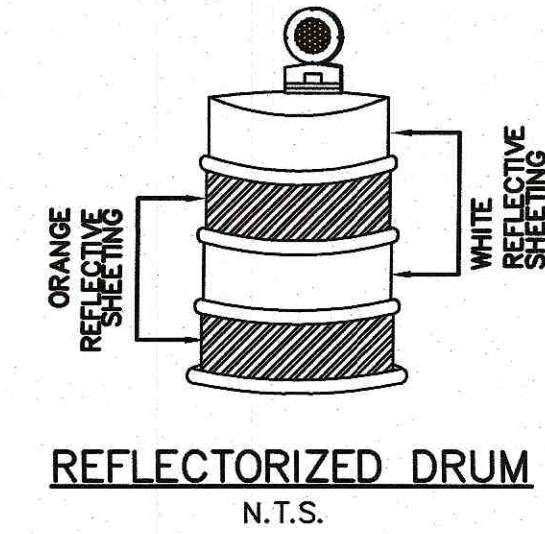
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 DWG. 1 OF 2

TRAFFIC MANAGEMENT NOTES:

- ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ALL REVISIONS, UNLESS SUPERCEDED BY THESE PLANS.
- ALL SIGN LEGENDS, BORDERS, AND MOUNTING SHALL BE IN ACCORDANCE WITH THE MUTCD.
- TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
- TEMPORARY CONSTRUCTION SIGNING, BARRICADES, AND ALL OTHER NECESSARY WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE HIGHWAY OR COVERED WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
- SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, CHANNELIZING DEVICES, BARRIERS, AND CRASH ATTENUATORS MUST PASS THE CRITERIA SET FORTH IN NCHRP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES" AND/OR "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH).
- CONTRACTORS SHALL NOTIFY EACH ADJUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT, AND SIMILAR OPERATIONS.
- THE FIRST TEN (10) PLASTIC DRUMS OF ANY TAPER SHALL BE EQUIPPED WITH SEQUENTIAL FLASHING LIGHTS.
- THE ADVISORY SPEED LIMIT, IF REQUIRED, SHALL BE DETERMINED BY THE ENGINEER.
- DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
- MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH, OR AS SHOWN ON THE PLANS.
- MINIMUM LANE WIDTH IS TO BE 11 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF DRUMS OR MEDIAN BARRIER.
- ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.

NOTES:

- DRUM DESIGN AND APPLICATION SHALL BE AS PER THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- DRUMS SHALL BE APPROXIMATELY 36" IN HEIGHT, HAVING A MINIMUM WALL THICKNESS OF 3/32" AND A MINIMUM DIAMETER OF 18" REGARDLESS OF ORIENTATION.
- DRUM MATERIAL MUST BE APPROVED U.V. RESISTANT, LOW DENSITY, IMPACT RESISTANT LINEAR POLYETHYLENE (OR APPROVED EQUIVALENT). METAL DRUMS ARE PROHIBITED FROM USE ON ALL STATE HIGHWAY PROJECTS.
- SHEETING SHALL BE APPROVED ORANGE AND WHITE TYPE IV REFLECTORIZED SHEETING CONFORMING TO M.9.30.3.5. ALL DRUMS SHALL BE WELL MAINTAINED INCLUDING REMOVAL OF DUST OR ROAD FILM, SO AS TO NOT REDUCE REFLECTIVE EFFICIENCY. WHEN A DRUM LOSES TARGET VALUE IT SHALL BE REPLACED.
- WHEN A DRUM IS NO LONGER NEEDED IT SHALL BE STORED IN A DRUM STORAGE AREA, UNLESS IT IS REQUIRED FOR FUTURE USE IN A FIVE DAY PERIOD, IN WHICH CASE IT MAY BE STORED ON LOCATION.
- ALL DRUM CONSTRUCTION AND DRUM PLACEMENT SHALL CONFORM WITH MASSDOT STANDARDS AND SPECIFICATIONS.
- THE FIRST TEN (10) PLASTIC DRUMS OF ANY TAPER SHALL BE EQUIPPED WITH SEQUENTIAL FLASHING LIGHTS.



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TEL: (508) 295-6600 FAX: (508) 295-6634
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PLAN TO ACCOMPANY APPLICATION FOR NON-VEHICULAR ACCESS PERMIT
CRANBERRY HIGHWAY WAREHAM, MA

PREPARED FOR:
SETTLER'S GLEN, LLC
20 NORTH PARK AVE., SUITE 4 PLYMOUTH, MA

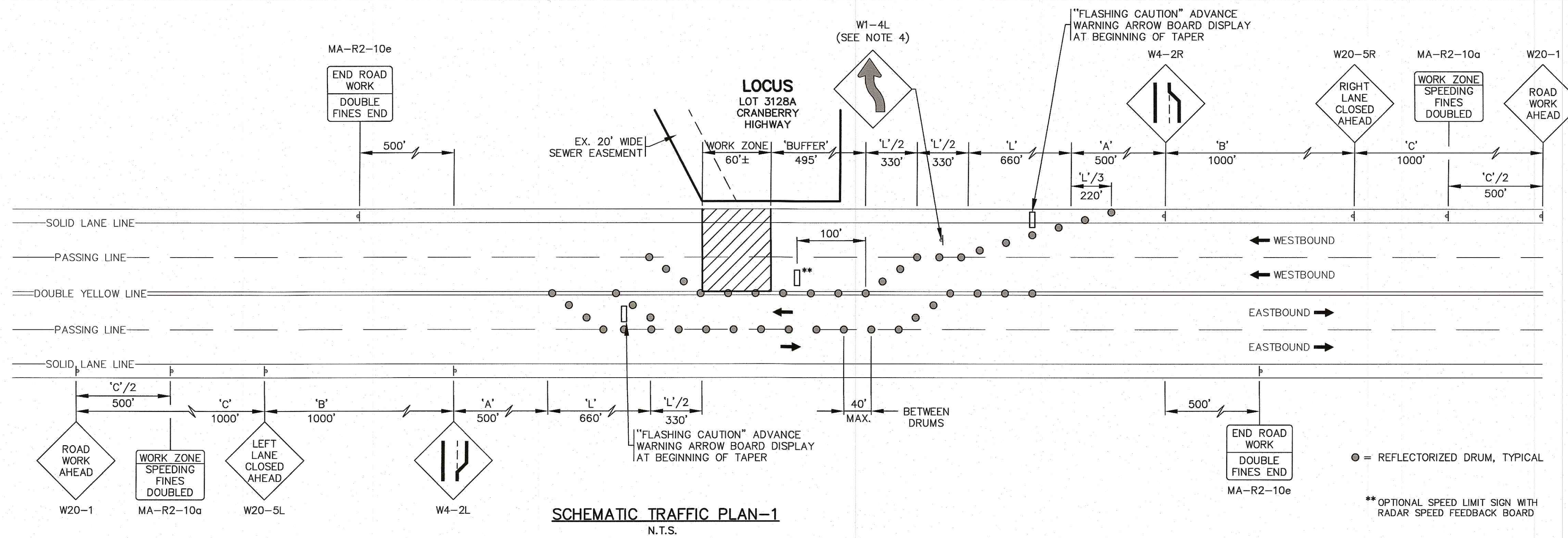
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TEMPORARY TRAFFIC CONTROL SIGNS

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	COLOR		TEXT DIMS. (INCHES)		S.F. UNIT AREA (EACH)	QTY.
	WIDTH	HEIGHT		BACK-GROUND	LEGEND BORDER	LETTER HEIGHT	VERT. SPACING		
MA-R2-10a	48"	36"	WORK ZONE SPEEDING FINES DOUBLED	FLUOR-ESCENT ORANGE	BLACK	BLACK	AS PER MASSDOT STANDARD	12.0	2
MA-R2-10e	36"	48"	END ROAD WORK DOUBLE FINES END	FLUOR-ESCENT ORANGE	BLACK	BLACK	AS PER MASSDOT STANDARD	12.0	2
W20-1	36"	36"	ROAD WORK AHEAD	FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS	9.0	2
W20-5R	36"	36"	RIGHT LANE CLOSED AHEAD	FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS	9.0	1
W20-5L	36"	36"	LEFT LANE CLOSED AHEAD	FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS	9.0	1
W4-2R	36"	36"	ROAD WORK AHEAD	FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS	9.0	1
W4-2L	36"	36"	ROAD WORK AHEAD	FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS	9.0	1

NOTES:

- ALL SIGNAGE SHALL COMPLY WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL SIGN PLACEMENT SHALL CONFORM WITH MASSDOT STANDARDS.
- SEE SHEET 1 FOR HWY. STATIONING AND ALL PLAN DETAILS.
- W1-4L SHALL BE PLACED AT THE MIDDLE OF THE TANGENT.



TEMPORARY TRAFFIC CONTROL SIGNS

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	COLOR		TEXT DIMS. (INCHES)		S.F. UNIT AREA (EACH)	QTY.
	WIDTH	HEIGHT		BACK-GROUND	LEGEND BORDER	LETTER HEIGHT	VERT. SPACING		
MA-R2-10a	48"	36"	WORK ZONE SPEEDING FINES DOUBLED	FLUOR-ESCENT ORANGE	BLACK	BLACK	AS PER MASSDOT STANDARD	12.0	2
MA-R2-10e	36"	48"	END ROAD WORK DOUBLE FINES END	FLUOR-ESCENT ORANGE	BLACK	BLACK	AS PER MASSDOT STANDARD	12.0	2
W20-1	36"	36"	ROAD WORK AHEAD	FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS	9.0	2
W20-5R	36"	36"	RIGHT LANE CLOSED AHEAD	FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS	9.0	1
W20-5L	36"	36"	LEFT LANE CLOSED AHEAD	FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS	9.0	1
W4-2R	36"	36"	ROAD WORK AHEAD	FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS	9.0	1
W4-2L	36"	36"	ROAD WORK AHEAD	FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS	9.0	1

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