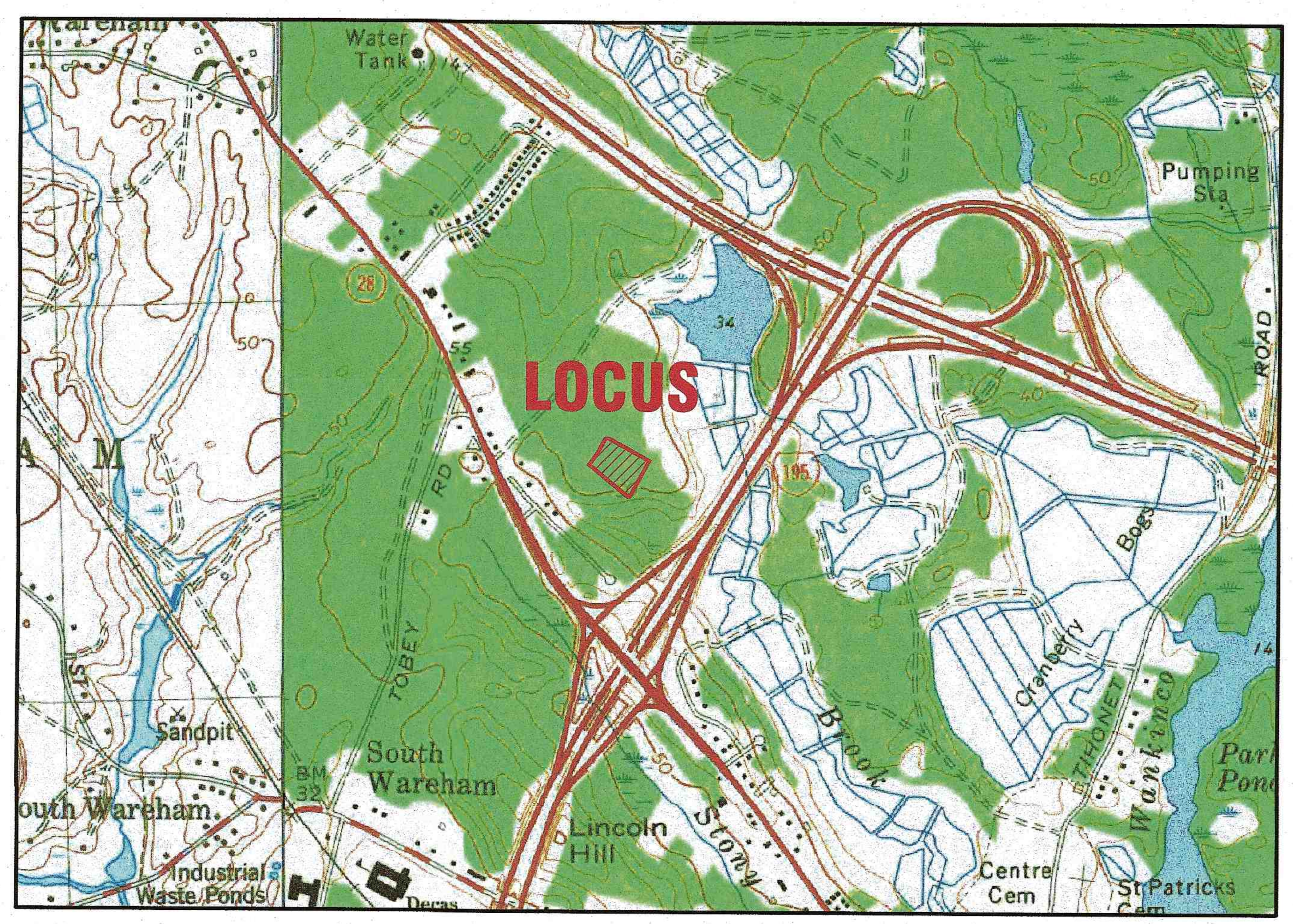
3 KENDRICK ROAD, LLC

SITE IMPROVEMENTS PLAN
3 KENDRICK ROAD
WAREHAM, MASSACHUSETTS

OWNER: 3 KENDRICK ROAD, LLC
P.O. BOX 1135
MARION, MA 02758

APPLICANT: 3 KENDRICK ROAD, LLC
P.O. BOX 1135
MARION, MA 02758



– U.S.G.S. LOCUS PLAN –

SCALE: 1"=1000'

– AERIAL OVERVIEW –

SCALE: 1"=500'

SITE DATA

ZONING DISTRICT: INDUSTRIAL
ASSESSOR'S MAP: 108
ASSESSOR'S LOT: 1006.C
REQUIRED LOT AREA: 30,000 S.F.
REQUIRED ROAD FRONTAGE: 150'
FRONT SETBACK: 20'
SIDE & REAR SETBACK: 10'
MAX. PRINCIPAL BUILDING HEIGHT: 50'
MAX. BUILDING COVERAGE: 50%
MAX. LOT COVERAGE: 70%
WATER SUPPLY: TOWN WATER
SANITARY SEWER: TOWN SEWER
LANDSCAPE BUFFER: 10'

ZONING DATA

ZONING TABLE	ALLOWED	EXISTING	PROVIDED
LOT AREA:	30,000 S.F.	120,294± S.F.	SAME AS EXISTING
FRONT SETBACK:	20'	48.9'	SAME AS EXISTING
SIDE SETBACK:	10'	49.6'	SAME AS EXISTING
REAR SETBACK:	10'	225.2'	125.3'
MAX. BUILDING COVERAGE:	50%	13.9%	22.0%
MAX. LOT COVERAGE:	70%	38.7%	50.1%

PARKING DATA:

REQUIRED: 1 SPACE PER 250 S.F. G.F.A. (OFFICE)
5,500 S.F./250 S.F.= 22 SPACES
REQUIRED: 1 SPACE PER 1.5 EMPLOYEES ON LARGEST SHIFT PLUS 1 PER VEHICLE STORED ON PREMISES.
PROPOSED NUMBER OF EMPLOYEES=20
NUMBER OF PARKING SPACES REQUIRED=14

TOTAL PARKING SPACES REQUIRED=36

TOTAL PROVIDED=40

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

FEBRUARY 10, 2022

PLAN INDEX:

FLOOD ZONE DATA:

THE PROJECT IS WITHIN FLOOD ZONE X.
REFER TO THE F.E.M.A. FLOOD INSURANCE RATE MAP PANEL NUMBER 25023C0488K, DATED: JULY 6, 2021.

H:\GAF DRAWINGS\2021 DRAWINGS\21-9731 (HENRY DEJESUS)\9731\dwg\9731_SITE PLAN_ALT-2_REV.-1.dwg

PERMIT SET
(NOT FOR CONSTRUCTION)

REV.	DATE	BY	APP'D	DESCRIPTION
1	4/28/22	JMP	WFM	NO CHANGE THIS SHEET

DATE: FEB. 10, 2022
DRAWN BY: JMP
CHECKED BY: WFM
JOB NO.: 21-9731
SCALE: AS NOTED

APPROVED BY:

APPROVED BY:

COMMONWEALTH OF MASSACHUSETTS
WILLIAM F. MADDEN
CIVIL
NO. 32863
REGISTERED PROFESSIONAL ENGINEER

G.A.F. ENGINEERING, INC.
PROFESSIONAL ENGINEERS & LAND SURVEYORS
266 MAIN STREET – WAREHAM, MA 02571
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SITE IMPROVEMENTS PLAN
COVER SHEET
3 KENDRICK ROAD WAREHAM, MA

PREPARED FOR:
3 KENDRICK ROAD, LLC
P.O. BOX 1135 MARION, MA

JOB NO.: 21-9731

DWG.
1 OF 10

GENERAL NOTES:

1. 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.
2. EXISTING CONDITIONS INFORMATION IS BASED ON ACTUAL FIELD SURVEY, PRIVATE UTILITY PLANS, AND OTHER AVAILABLE SOURCES. ACTUAL FIELD SURVEY WAS PERFORMED BY G.A.F. ENGINEERING, INC. ON VARIOUS DATES AND MOST RECENTLY IN JULY OF 2021.
3. 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.
4. THE CONTRACTOR SHALL FIELD VERIFY, PRIOR TO CONSTRUCTION ALL EXISTING UNDERGROUND UTILITY LOCATIONS AND POINTS OF INTERCONNECTION.
5. 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.
6. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND OWNER OF ANY CONFLICTS DISCOVERED IN THE FIELD.
7. ANY CHANGES TO THESE 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.
8. 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.

CONSTRUCTION NOTES:

1. IN GENERAL, THE PLANS ARE DIAGRAMMATIC AND ARE NOT INTENDED TO SHOW EVERY FITTING, CHANGE IN DIRECTION OR DETAIL OF CONSTRUCTION.
2. THE LOCATION OF UTILITIES WERE OBTAINED FROM VARIOUS SOURCES OF INFORMATION. THE EXACT LOCATION AND COMPLETENESS IS NOT GUARANTEED. THE CONTRACTOR MUST NOTIFY DIG SAFE PRIOR TO THE START OF CONSTRUCTION (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.
3. 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.
4. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION REQUIRED FOR THE INSTALLATION OF THIS WORK.
5. ALL MATERIALS SHALL BE NEW AND FREE FROM DEFECTS AND OF GOOD QUALITY.
6. THE CONTRACTOR SHALL KEEP THE PREMISES FREE FROM THE ACCUMULATION OF WASTE MATERIAL AND OTHER DEBRIS RESULTING FROM THIS WORK.
7. ALL PAVEMENT MARKINGS DISTURBED BY CONSTRUCTION SHALL BE RESTORED AS PART OF THIS WORK.
8. 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.
9. ELEVATIONS ARE IN FEET AND TENTHS AND ARE BASED ON THE DATUM OF NAVD-88.
10. SIDE SLOPE GRADING SHALL BE AS NOTED ON THE SITE PLANS.
11. ALL SIDE SLOPES SHALL BE DRESSED WITH 4 INCHES OF TOPSOIL. WHERE SIDE SLOPES EXCEED 3:1, PROVIDE AN EROSION CONTROL BLANKET OVER THE PLANTED SEED BED. SEE PLAN FOR LOCATIONS.
12. PERMANENT SEEDING (BEFORE SEPTEMBER 15) LIME TO PH OF 6.5 ACCORDING TO SOIL TEST OR APPLY AT THE RATE OF 100 TO 150 LBS. PER 1,000 SQUARE FEET. APPLY 10-20-20 FERTILIZER AT 1,000 LBS. PER ACRE. INCORPORATE LIME AND FERTILIZER IN TOP 4 INCHES OF SOIL. SEED 100 LBS. PER ACRE OF THE FOLLOWING SEED MIX.

PURE PERCENT	SEED
30-35%	CREEPING RED FESCUE
30-35%	PERENNIAL RYEGRASS
20-25%	KENTUCKY BLUEGRASS
10-15%	ANNUAL RYEGRASS

HYDRO SEEDING IS AN ALTERNATIVE FOR THIS APPLICATION. A MIXTURE OF SEED WATER AND MULCH IS SPRAYED ON THE SEED BED COMBINING THREE (3) SEPARATE ACTIONS INTO ONE (1) OPERATION

13. ALL SEWER AND PLUMBING WORK SHALL CONFORM WITH 248 CMR 10.00 UNIFORM STATE PLUMBING CODE AND THE TOWN OF WAREHAM SEWER DEPARTMENTS SPECIFICATIONS.
14. ALL METHODS AND MATERIALS SHALL CONFORM WITH MassDOT STANDARDS AND SPECIFICATIONS, AND THE REQUIREMENTS OF THE TOWN OF WAREHAM MUNICIPAL MAINTENANCE DEPARTMENT.
15. ALL UTILITY INSTALLATIONS SHALL BE IN CONFORMANCE WITH ALL APPLICABLE TOWN, STATE AND FEDERAL REQUIREMENTS & REGULATIONS.
16. DEWATERING IF REQUIRED SHALL BE DIRECTED TO A 5' MIN. DIAMETER RING OF HAYBALES OR A DIRTBAG. CONTRACTOR SHALL SIZE, PROVIDE AND MAINTAIN DEWATERING EQUIPMENT FOR THE CONTROL, COLLECTION AND DISPOSAL OF GROUND AND SURFACE WATER WHERE NECESSARY TO COMPLETE THE WORK.

EROSION CONTROL NOTES:

1. THE SITE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SUITABLE EROSION AND SEDIMENTATION CONTROL DEVICES ON SITE DURING CONSTRUCTION AS REQUIRED TO PREVENT SILT FROM LEAVING THE SITE. SILT WILL NOT BE ALLOWED BEYOND CONSTRUCTION LIMITS. ADDITIONAL PROTECTION: ON-SITE PROTECTION MUST BE PROVIDED THAT WILL NOT PERMIT SILT TO LEAVE THE PROJECT CONFINES DUE TO UNFORESEEN CONDITIONS OR ACCIDENTS.
2. EROSION CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLANS DOES NOT PROVIDE SUFFICIENT EROSION AND SEDIMENT CONTROL, ADDITIONAL CONTROL MEASURES SHALL BE IMPLEMENTED. CONTRACTOR IS RESPONSIBLE FOR REPAIRING OR REPLACING EROSION CONTROL DEVICES WHICH BECOME INEFFECTIVE.
3. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR ALL GRADING AND OTHER LAND DISTURBING ACTIVITIES PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE CLEANUP AND REMOVAL OF ANY BUILDUP OF SEDIMENT WHICH ESCAPES FROM THE SITE.
5. CONTRACTOR IS RESPONSIBLE FOR CLEANING SILT AND DEBRIS OUT OF ALL STORM DRAINAGE STRUCTURES UPON THE COMPLETION OF CONSTRUCTION.
6. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL TEMPORARY EROSION CONTROL MEASURES AFTER CONSTRUCTION IS COMPLETE AND ALL DISTURBED AREAS HAVE BEEN STABILIZED.
7. THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ANY FINES LEVIED AGAINST THE SITE FOR VIOLATIONS OF EROSION CONTROL REGULATIONS.
8. CONTRACTOR SHALL PROVIDE TEMPORARY GROUND COVER FOR ALL AREAS WITH EXPOSED SOIL WHICH WILL NOT BE DISTURBED BY GRADING OPERATIONS FOR A PERIOD OF THIRTY DAYS OR MORE.
9. IF WORK ON THIS PROJECT IS SUSPENDED FOR ANY REASON, THE CONTRACTOR SHALL MAINTAIN THE SOIL EROSION AND SEDIMENTATION CONTROL FACILITIES IN GOOD CONDITION DURING THE SUSPENSION OF WORK.
10. SPRINKLE OR APPLY DUST SUPPRESSERS TO MINIMIZE DUST AT THE CONSTRUCTION SITE. MAINTAIN DUST CONTROL MEASURES UNTIL ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.

PERMIT SET
(NOT FOR CONSTRUCTION)

DRAINAGE OPERATION AND MAINTENANCE SCHEDULE:

THE OPERATION AND MAINTENANCE (O&M) SCHEDULE DURING THE CONSTRUCTION PERIOD IS THE RESPONSIBILITY OF THE CONTRACTOR. THE OUTLINE BELOW SHALL BE FOLLOWED TO ENSURE THE PROPER CONSTRUCTION AND FUNCTION OF THE DRAINAGE FACILITIES.

1. IN CONJUNCTION WITH THE SITE CONSTRUCTION, ALL DRAINAGE STRUCTURES SHALL BE INSTALLED AND THE AFFECTED AREAS STABILIZED (LOAM AND SEED, HYDROSEED, PLANTED, RIP-RAP, ETC.). PERMANENT STABILIZATION OF THESE AREAS SHALL BE STARTED AS SOON AS POSSIBLE.
2. EROSION CONTROL SHALL BE PLACED ALONG THE LIMITS OF WORK WHERE SHOWN ON THE PLAN.
3. ALL EXISTING CATCH BASINS SHALL HAVE A TEMPORARY SILT SACK INSTALLED IN THEM PRIOR TO CONSTRUCTION. ALL PROPOSED CATCH BASINS SHALL HAVE TEMPORARY SILT SACK INSTALLED IN THEM AS SOON AS THE STRUCTURE IS SET. CONTRACTOR SHALL REMOVE AND DISPOSE OF THEM AT THE COMPLETION OF CONSTRUCTION. ALL EXISTINTG AND PROPOSED CATCH BASINS SHALL BE INSPECTED WEEKLY DURING CONSTRUCTION. IF THERE IS ANY SEDIMENT BUILDUP, THE AFFECTED STRUCTURES SHALL BE CLEANED IMMEDIATELY, AND ALL MATERIAL REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REQUIREMENTS.
4. ALL RAIN GUARDIAN STRUCTURES SHALL BE INSPECTED WEEKLY DURING CONSTRUCTION. IF THERE IS ANY SEDIMENT BUILDUP, THE AFFECTED STRUCTURES SHALL BE CLEANED IMMEDIATELY, AND ALL MATERIAL REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REQUIREMENTS.
5. THE DRAINAGE BASIN SHALL BE INSPECTED WEEKLY DURING CONSTRUCTION. IF THERE IS ANY SEDIMENT BUILDUP, THE AFFECTED STRUCTURES SHALL BE CLEANED IMMEDIATELY, AND ALL MATERIAL REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REQUIREMENTS.
6. STONE FILLED TRENCHES SHALL BE COVERED WITH AN ADDITIONAL TEMPORARY LAYER OF FILTER FABRIC UNTIL THE ABOVE GRADIENT SLOPE IS STABILIZED. IF THERE IS ANY EVIDENCE OF SEDIMENT ENTERING THE TRENCHES, THE AFFECTED AREA OF THE TRENCH SHALL BE FULLY RECONSTRUCTED INCLUDING THE FILTER FABRIC.
7. ALL AREAS SHALL BE INSPECTED WEEKLY, AND AFTER LARGE STORMS. IF THERE IS EVIDENCE OF EROSION, THE ERODED AREA SHALL BE RE-STABILIZED, AND MEASURES SHALL BE TAKEN TO PREVENT REOCCURRENCE. THIS SCHEDULE MUST BE ADHERED TO BY THE CONTRACTOR UNTIL THE PROJECT IS ACCEPTED BY THE OWNER.

POST-CONSTRUCTION OPERATION AND MAINTENANCE PLAN:

UPON THE COMPLETION OF CONSTRUCTION, MAINTENANCE SHALL BE CONDUCTED BY THE OWNER OR OWNER'S AGENT ON THE SITE. THE FOLLOWING SHALL BE CARRIED OUT BY THE RESPONSIBLE PARTY AND SHALL BE ADHERED TO ENSURE THE PROPER OPERATION OF THE DRAINAGE FACILITIES.

1. PARKING LOT SWEEPING IS AN EFFECTIVE NONSTRUCTURAL SOURCE CONTROL THAT WILL REMOVE SEDIMENT FROM PAVED SURFACES. PARKING LOT SWEEPING SHOULD BE DONE BY THE USE OF A HIGH EFFICIENCY VACUUM SWEEPER OR REGENERATIVE AIR SWEEPER. PARKING LOT SWEEPING SHALL BE DONE TWICE PER YEAR. ONCE REMOVED FROM PAVED SURFACES, THE SWEEPINGS MUST BE HANDLED AND DISPOSED OF PROPERLY IN ONE OF THE WAYS APPROVED BY MASSDEP (SEE POLICY # BAW-18-001: REUSE & DISPOSAL OF STREET SWEEPINGS).
2. RAIN GUARDIAN STRUCTURES SHALL BE INSPECTED AFTER EVERY MAJOR STORM EVENT IN THE FIRST FEW MONTHS AFTER CONSTRUCTION TO ENSURE PROPER STABILIZATION AND FUNCTION. THEREAFTER, RAIN GUARDIAN STRUCTURES SHALL BE CLEANED AT LEAST FOUR TIMES PER YEAR AND INSPECTED MONTHLY. REMOVE ALL SEDIMENT AND DEBRIS FROM THE TOP GRATE, WITHIN THE CHAMBER, AND ON THE VERTICAL DROP-IN FILTER WALL. THE FILTER WALL SHALL BE CLEANED MANUALLY WITH A STIFF BRISTLED BROOM OR RINSE CLEAN WITH PRESSURIZED WATER. ALL SEDIMENTS AND HYDROCARBAONS SHOULD BE HANDLED PROPERLY AND DISPOSED IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL GUIDELINES AND REGULATIONS.
3. DRAINAGE BASIN AREAS SHALL BE INSPECTED AT LEAST FOUR TIMES PER YEAR TO ENSURE THE BASINS ARE OPERATING AS INTENDED. ALSO INSPECT THE BASINS DURING AND AFTER MAJOR STORM EVENTS TO DETERMINE IF THE BASINS ARE MEETING THE EXPECTED DETENTION TIMES. POTENTIAL PROBLEMS THAT SHALL BE CHECKED INCLUDE: SUBSIDENCE, EROSION, CRACKING OR TREE GROWTH ON THE EMBANKMENT, SEDIMENT ACCUMULATION AROUND THE STONE FILLED TRENCH, DAMAGE TO THE EMERGENCY SPILLWAY, SEDIMENT ACCUMULATION AROUND THE OUTLET AND EROSION WITHIN THE BASIN AND BANKS. MAKE ANY NECESSARY REPAIRS IMMEDIATELY. MOW THE UPPER-STAGE, SIDE SLOPES AND EMBANKMENTS AT LEAST TWICE PER YEAR. REMOVE SEDIMENT AS NECESSARY, BUT AT LEAST ONCE EVERY FIVE YEARS. SEDIMENT SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
4. NYLOPLAST DRAIN MANHOLES SHALL INSPECTED MONTHLY, AND SHALL BE CLEANED AT LEAST FOUR TIMES PER YEAR AND AT THE END OF THE FOLIAGE AND SNOW-REMOVAL SEASONS. ALL DEBRIS, SEDIMENTS AND H YDROCARBONS SHOULD BE HANDLED PROPERLY AND DISPOSED IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL GUIDELINES AND REGULATIONS. IF THERE IS EVIDENCE THAT THEY HAVE BEEN CONTAMINATED BY A SPILL OR OTHER MEANS, THE CLEANINGS MUST BE EVALUATED IN ACCORDANCE WITH THE MASSDEP HAZARDOUS WASTE REGULATIONS, 310 CMR 30.000 AND HANDLED AS HAZARDOUS WASTE.
5. CRUSHED STONE SPLASH PADS SHALL BE CLEANED FOUR TIMES PER YEAR AND INSPECTED MONTHLY. ALL SEDIMENTS AND HYDROCARBONS SHOULD BE REMOVED AND DISPOSED IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS. REMOVE AND REPALCE STONE & FILTER FABRIC AS NEEDED.
6. STONE FILLED TRENCHES SHALL BE INSPECTED DURING AND 24 HOURS AFTER ALL MAJOR STORM EVENTS TO LOOK FOR PONDED WATER. IF THERE IS EVIDENCE OF PONDED WATER AT THE SURFACE OF THE TRENCH, IT IS LIKELY THAT THE TRENCH IS CLOGGED. REMOVE AND REPLACE THE FIRST LAYER OF STONE AGGREGATE AND FILTER FABRIC. IF WATER IS PONDED INSIDE THE TRENCH THEN THE TRENCH HAS FAILED. IN THIS CASE REMOVE ALL ACCUMULATED SEDIMENT, STONE AND FILTER FABRIC, THE BOTTOM OF THE TRENCH MUST BE SCARIFIED AND TILLED TO INDUCE INFILTRATION AND REPLACE WITH NEW STONE AND FILTER FABRIC. INSPECT STONE TRENCHES EVERY 6 MONTHS AND ROUTINELY REMOVE DEBRIS, TRASH, LEAVES, AND ANY SEDIMENT FROM THE SURFACE OF THE TRENCH, ADD STONE IF NECESSARY.
7. INSPECT POP-UP DRAINAGE EMITTERS DURING AND 24 HOURS AFTER ALL MAJOR STORM EVENTS. KEEP POP-UP DRAINAGE EMITTERS FREE AND CLEAR FROM BUILD UP OF DEBRIS ON THE LID. REMOVE SNOW WHEN REQUIRED. INSPECT THE POP-UP DRAINAGE EMITTER LID MONTHLY. REPAIR OR REPLACE AS NEEDED.

DRAINAGE INSTALLATION NOTES:

1. ALL DRAINAGE PIPES, UNLESS OTHERWISE NOTED, ARE TO BE ADS N-12 PIPE WITH SOIL TIGHT JOINTS AND FITTINGS. REFER TO PLAN FOR LOCATION, SIZES AND SLOPES.
2. ALL ROOF DRAIN PIPES, UNLESS OTHERWISE NOTED, ARE TO BE 6" ADS N-12 PIPE WITH SOIL TIGHT JOINTS AND FITTINGS. MINIMUM SLOPE TO BE 1.00% REFER TO PLAN FOR LOCATIONS.
3. MINIMUM COVER ON PIPES SHALL NOT BE LESS THAN 1.5 FEET.
4. ALL PERFORATED PIPE SHALL BE ADS HDPE PIPE WITH AASHTO CLASS II PERFORATION PATTERN.
5 ALL WORK AND MATERIAL SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE TOWN OF WAREHAM MUNICIPAL MAINTENANCE DEPARTMENT.

DEMOLITION NOTES:

1. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE HIS/HER OWN DETERMINATION OF SUBSURFACE CONDITIONS, INCLUDING THE LOCATION OF ROCK AND THE ACTUAL LOCATION OF UTILITIES OR OTHER FEATURES WHICH MAY AFFECT HIS/HER WORK. ANY UNSUITABLE MATERIAL ENCOUNTERED DURING CONSTRUCTION WILL BE REPORTED TO THE ENGINEER OF RECORD FOR RESOLUTION AND CONSTRUCTION METHOD.
2. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND APPARATUS NECESSARY AND SHALL DO ALL WORK REQUIRED TO COMPLETE THE DEMOLITION, REMOVAL, AND ALTERATIONS OF EXISTING FACILITIES, INCLUDING PIPING SYSTEMS AND APPURTENANCES, DRAINAGE, PAVEMENT, LANDSCAPE AND SITE FEATURES ENCOUNTERED DURING THE INSTALLATION AS INDICATED ON THE DRAWINGS, AS HEREIN SPECIFIED, AND/OR AS DIRECTED BY THE DESIGN ENGINEER.
3. ALL EQUIPMENT, PIPING, AND OTHER MATERIALS THAT ARE NOT TO BE RELOCATED OR TO BE RETURNED TO THE OWNER SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF BY HIM, AWAY FROM THE SITE OF THE WORK AND AT HIS OWN EXPENSE.
4. ALL DEMOLITION OR REMOVAL OF EXISTING STRUCTURES, PAVEMENT, UTILITIES, EQUIPMENT, AND APPURTENANCES, LANDSCAPE AND SITE FEATURES SHALL BE ACCOMPLISHED WITHOUT DAMAGING THE INTEGRITY OF EXISTING STRUCTURES, EQUIPMENT, PAVEMENT, APPURTENANCES, AND TREES TO REMAIN.
5. SUCH ITEMS THAT ARE DAMAGED SHALL BE EITHER REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE TO A CONDITION AT LEAST EQUAL TO THAT WHICH EXISTED PRIOR TO THE START OF HIS WORK TO THE SATISFACTION OF THE DESIGN ENGINEER AND/OR THE OWNER.
6. PROVIDE TWO (2) COPIES OF PROPOSED METHODS AND OPERATIONS OF DEMOLITION TO THE OWNER AND ENGINEER FOR REVIEW PRIOR TO THE START OF WORK. INCLUDE IN THE SCHEDULE THE COORDINATION FOR SHUTOFF, CAPPING AND CONTINUATION OF UTILITY SERVICES AS REQUIRED.
7. PROVIDE A DETAILED SEQUENCE OF WORK TO THE DESIGN ENGINEER AND THE OWNER FOR DEMOLITION AND REMOVAL WORK TO ENSURE THE UNINTERRUPTED PROGRESS OF THE OWNER'S OPERATIONS.
8. ENSURE THE SAFE PASSAGE OF PERSONS AROUND THE AREA OF DEMOLITION. CONDUCT OPERATIONS TO PREVENT INJURY TO ADJACENT BUILDINGS, STRUCTURES, OTHER FACILITIES AND PERSONS.
9. PROVIDE INTERIOR AND EXTERIOR SHORING, BRACING, OR SUPPORT TO PREVENT MOVEMENT, SETTLEMENT OR COLLAPSE OF STRUCTURES TO BE DEMOLISHED AND ADJACENT FACILITIES TO REMAIN.
10. THE CONTRACTOR SHALL PROMPTLY REPAIR DAMAGES CAUSED BY DEMOLITION OPERATIONS TO ADJACENT FACILITIES AT NO COST TO THE OWNER.

WATER INSTALLATION NOTES:

1. ALL WATER MAINS, SERVICES, GATE VALVES/GATE BOX, CURB STOPS, HYDRANTS, FITTINGS, ETC. & METHOD OF INSTALLATION SHALL CONFORM TO THE TOWN OF WAREHAM FIRE DISTRICT RULES & REGULATIONS.
2. WATER MAIN SHALL BE TESTED & DISINFECTED IN ACCORDANCE WITH THE TOWN OF WAREHAM FIRE DISTRICT REQUIREMENTS.
3. CONTRACTOR TO COORDINATE WITH THE TOWN OF WAREHAM FIRE DISTRICT FOR THE INSPECTIONS OF THE WATER MAIN INSTALLATION.
4. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS TO COMPLETE THE INSTALLATION OF THE WATER SERVICE.
5. THE CONTRACTOR SHALL OBTAIN A COPY OF THE REGULATIONS FROM THE TOWN OF WAREHAM FIRE DISTRICT BEFORE PROCEEDING WITH THE INSTALLATION OF THE WATER SERVICE.

TEST PIT DATA

DATE OF TESTING: DECEMBER 22, 2021
PERFORMED BY: BRIAN GRADY, G.A.F. ENGINEERING INC.
REFER TO EXISTING CONDITIONS & DEMOLITION PLAN FOR TEST PIT LOCATIONS

TP-1 EL.=48.5

0	A	DISTURBED/FILL
10"		
	B	FINE-MED. SAND W/ROOTS 10YR5/6
24"		
	C	MED.-COARSE SAND 2.5Y6/4
120"		

NO WATER ENC.

TP-2 EL.=48.7

0	A	DISTURBED/FILL
10"		
	B	FINE-MED. SAND W/ROOTS 10YR5/6
30"		
	C	MED.-COARSE SAND 2.5Y6/4
120"		

NO WATER ENC.

TP-3 EL.=45.5

0	A	DISTURBED/FILL
12"		
	B	FINE-MED. SAND W/ROOTS 10YR5/6
20"		
	C	MED.-COARSE SAND 2.5Y6/4
120"		

NO WATER ENC.

DATE OF TESTING: DECEMBER 6, 2000
PERFORMED BY: CHARLES L. ROWLEY, CHARLES L. ROWLEY & ASSOCIATES
REFER TO EXISTING CONDITIONS & DEMOLITION PLAN FOR TEST PIT LOCATION

TP-1 (CLR) EL.=47.3

0		WOODS LOAM
15"		
		SUBSOIL
32"		
		MED.-FINE SAND
120"		

NO WATER ENC.

ABBREVIATIONS

AC	ASBESTIC CONCRETE
ADS	ADVANCED DRAINAGE SYSTEM
APPROX.	APPROXIMATE
BC	BOTTOM OF CURB
BIT. CONC.	BITUMINOUS CONCRETE
BLDRS	BOULDERS
BW	BOTTOM OF WALL
BVW	BORDERING VEGETATED WETLANDS
CB	CATCH BASIN
CB/DH	CONCRETE BOUND/DRILL HOLE
CCB	CAPE COD BERM
CEM.	CEMENT
C.I.	CAST IRON
CONC.	CONCRETE
C.O.	CLEAN OUT
C.L.D.I.	CEMENT LINED DUCTILE IRON
CMP	CORRUGATED METAL PIPE
CPP	CORRUGATED PLASTIC PIPE
DIA	DIAMETER
DMH	DRAIN MANHOLE
D.I.	DUCTILE IRON
DCS	DRAINAGE CONTROL STRUCTURE
E	ELECTRIC
ELEV.,EL.	ELEVATION
EOP	EDGE OF PAVEMENT
EX.	EXISTING
F.D.C.	FIRE DEPARTMENT CONNECTION
F.E.S.	FLARED END SECTION
F.F.E.	FINISHED FLOOR ELEVATION
FND.	FOUND
FP	FIRE PROTECTION
G	GAS
GG,GV	GAS GATE, GAS VALVE
H.C.	HANDICAP PARKING
H.D.P.E.	HIGH DENSITY POLYETHYLENE
HYD	HYDRANT
INV.	INVERT
MAX	MAXIMUM
MED	MEDIUM
MIN.	MINIMUM
N.T.S.	NOT TO SCALE
N/F	NOW OR FORMERLY
OHW	OVERHEAD WIRE
PCC	PRECAST CONCRETE CURBING
PVC	POLYVINYL CHLORIDE PIPE
PROP.	PROPOSED
RCP	REINFORCED CONCRETE PIPING
R	RADIUS
R&D	REMOVE AND DISPOSE
R&S	REMOVE AND STOCK
SB/DH	STONE BOUND/DRILL HOLE
S	SEWER
SGC	SLOPED GRANITE CURBING
SMH	SEWER MANHOLE
STA	STATION
TC	TOP OF CURB
TW	TOP OF WALL
TYP.	TYPICAL
T/O/F	TOP OF FOUNDATION
UP	UTILITY POLE
UE	UNDERGROUND ELECTRIC
VGC	VERTICAL GRANITE CURB
W	WATER
WG,WV	WATER GATE, WATER VALVE
WQS	WATER QUALITY STRUCTURE
WQ CB	WATER QUALITY CAYCH BASIN

LEGEND

EXISTING	DESC.	PROPOSED
55	CONTOURS	55
53x5	SPOT GRADES	52x5 52x5
	WETLANDS	
	F.E.M.A. FLOOD ZONE	
D	DRAIN LINE	D
	PERFORATED DRAIN LINE	D
RD	ROOF DRAIN LINE	RD
	CATCH BASIN (CB)	
D	DRAIN MANHOLE (DMH)	D
	CLEAN OUT (C.O.)	
E	ELECTRIC MANHOLE (EMH)	E
UE	UNDERGROUND UTILITIES	UE
OHW	OVERHEAD WIRES	OHW
	UTILITY POLE	
	GUY POLE	
	WATER GATE VALVE	
	WATER SHUTOFF/CURB STOP	
	HYDRANT	
	POST INDICATOR VALVE	
W	WATER LINE	W
FP	FIRE PROTECTION LINE	FP
S	SEWER MANHOLE (SMH)	S
S	SEWER LINE	S
FM	FORCE MAIN	FM
	TREELINE	
	LIGHT POST	
G	GAS LINE	G
	GAS GATE/VALVE	
	GAS SHUTOFF	
	GAS METER	
	SIGN	
	FENCE	
	BOUND	
PT TP	TEST PIT/PERC TEST	
	SILT FENCE	
	GUARD RAIL	
	FLARED END SECTION	
	STONE WALL	

REV.	DATE	BY	APP'D	DESCRIPTION
1	4/28/22	JMP	WFM	NO CHANGE THIS SHEET

DATE: FEB. 10, 2022
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CHECKED BY: WFM
JOB NO.: 21-9731
SCALE: AS NOTED

APPROVED BY: [signature] 4/29/22

COMMONWEALTH OF MASSACHUSETTS — WILLIAM F. MCKEON, JR. — CIVIL — NO. 32883 — REGISTERED PROFESSIONAL ENGINEER

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@gafengrinc.com

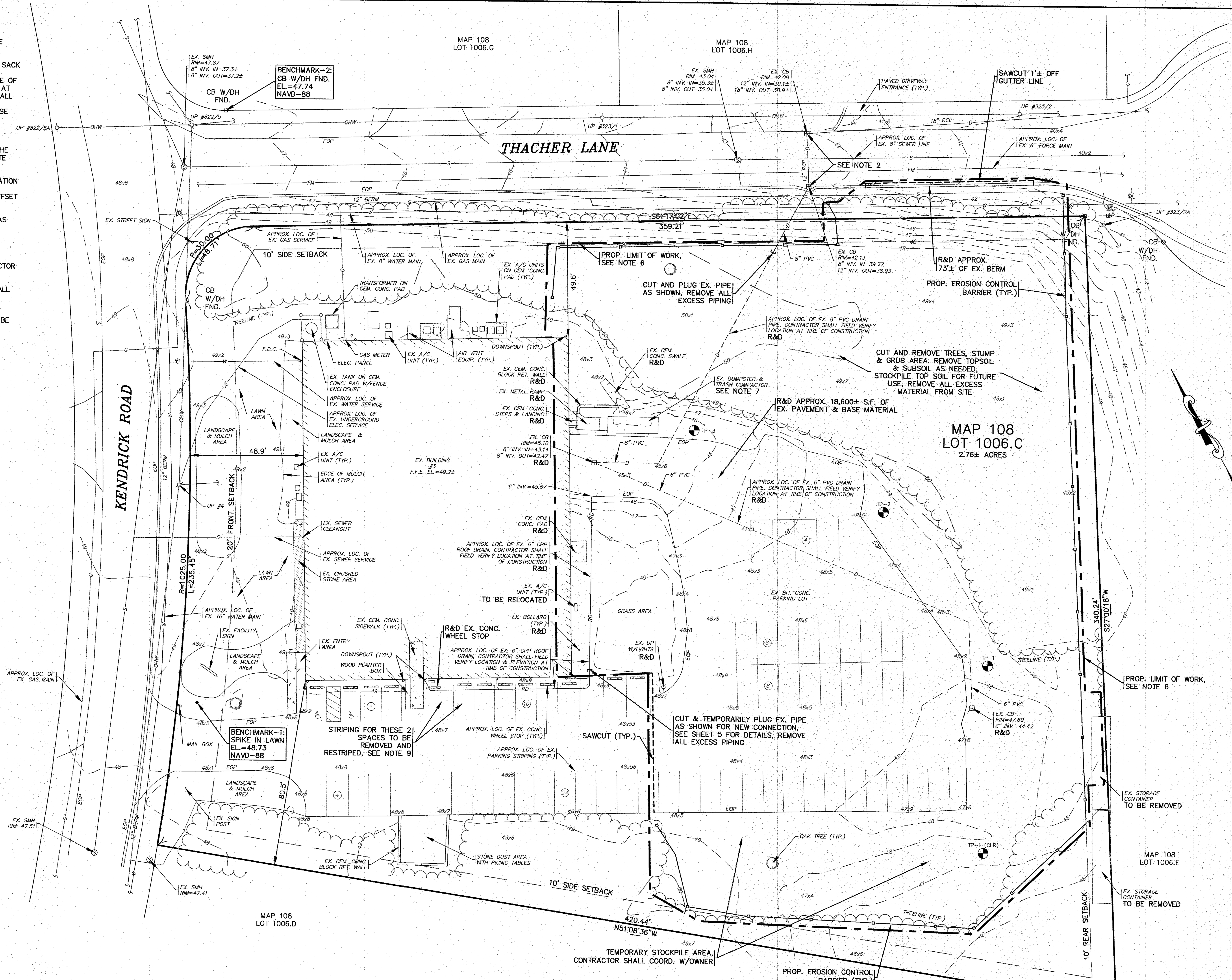
SITE IMPROVEMENTS PLAN
GENERAL NOTES & LEGEND
3 KENDRICK ROAD
WAREHAM, MA

PREPARED FOR:
3 KENDRICK ROAD, LLC
P.O. BOX 1135
MARION, MA

JOB NO.: 21-9731
DWG. 2 OF 10

NOTES:

1. ALL DEBRIS FROM DEMOLITION INCLUDING PIPE REMOVAL, PAVEMENT & STONE/GRAVEL REMOVAL, TREE CLEARING, STUMPING, GRUBBING, ETC. SHALL BE REMOVED FROM THE SITE AND NOT STOCKPILED.
2. EXISTING CATCH BASINS SHALL HAVE A TEMPORARY SILT SACK OR AN APPROVED EQUAL INSTALLED WITHIN PRIOR TO CONSTRUCTION. CONTRACTOR SHALL REMOVE AND DISPOSE OF THE SILT SACKS AT THE COMPLETION OF CONSTRUCTION. AT THE COMPLETION OF CONSTRUCTION THE CONTRACTOR SHALL INSPECT THE EXISTING CATCH BASINS FOR EVIDENCE OF SEDIMENT OR DEBRIS ACCUMULATION. REMOVE AND DISPOSE OF ANY DEBRIS AND SEDIMENT AS REQUIRED.
3. PROTECT ALL EXISTING UTILITIES DURING CONSTRUCTION.
4. A PERMANENT SITE BENCHMARK WILL BE SET PRIOR TO THE START OF CONSTRUCTION, CONTRACTOR SHALL COORDINATE WITH ENGINEER.
5. CONTRACTOR SHALL PROVIDE AND MAINTAIN STAKED SILTATION FENCING EROSION CONTROL BARRIER. SEE PLAN FOR LOCATIONS. THE EROSION CONTROL BARRIER IS SHOWN OFFSET IN SOME AREAS FOR CLARITY.
6. THE LIMIT OF WORK LINE IS SHOWN OFFSET IN SOME AREAS FOR CLARITY.
7. EXISTING DUMPSTER SHALL BE RELOCATED, CONTRACTOR SHALL COORDINATE WITH OWNER FOR LOCATION.
8. EXISTING STORAGE CONTAINERS TO BE REMOVED, CONTRACTOR SHALL COORDINATE WITH OWNER OF LOT 1006.E.
9. EXISTING PAVEMENT STRIPING SHOWN TO BE REMOVED SHALL BE PRESSURE WASHED AND SHALL NOT DAMAGE THE UNDERLYING PAVEMENT. SEE SHEET 4 FOR NEW STRIPPING LAYOUT. ALL PAVEMENT STRIPING NOT CALLED OUT TO BE REMOVED THAT ARE DISTURBED BY CONSTRUCTION SHALL BE RESTORED TO MATCH EXISTING CONDITIONS.



EX. CONDITIONS & DEMOLITION

SCALE: 1"=20'

0 20 40 80

PERMIT SET
(NOT FOR CONSTRUCTION)

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1	4/28/22	JMP	WFM	NO CHANGE THIS SHEET

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JOB NO.: 21-9731
SCALE: 1" = 20'

APPROVED BY:

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

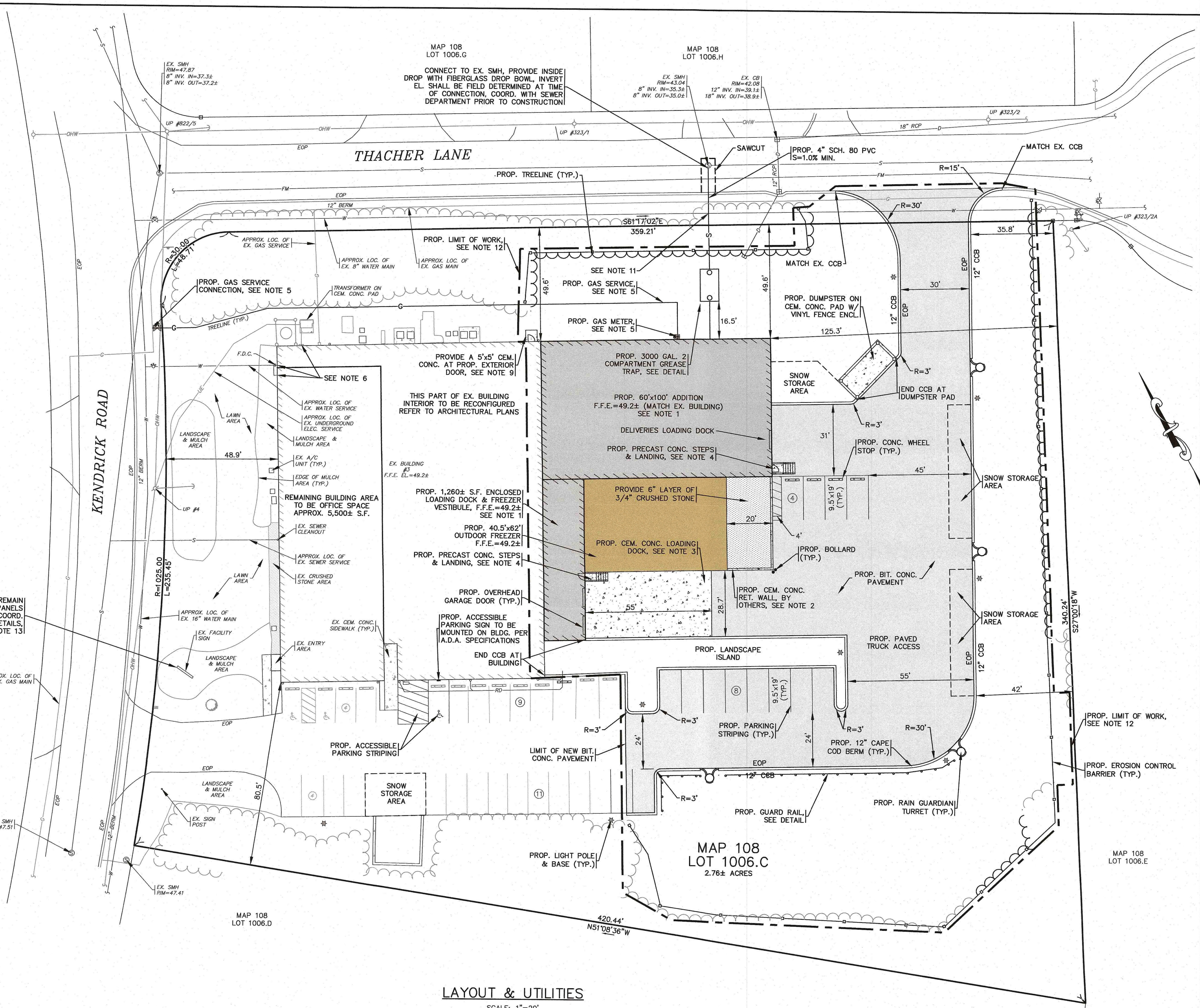
SITE IMPROVEMENTS PLAN
EX. CONDITIONS & DEMOLITION
3 KENDRICK ROAD WAREHAM, MA

PREPARED FOR:
3 KENDRICK ROAD, LLC
P.O. BOX 1135 MARION, MA

JOB NO.: 21-9731

NOTES:

1. FOR COMPLETE BUILDING ADDITION. FREEZER VESTIBULE, OUTDOOR FREEZER AND ENCLOSED LOADING DOCK DIMENSIONS, SPECIFICATIONS AND CONSTRUCTION DETAILS REFER TO PLANS BY CAPE BUILDING SYSTEMS, INC. CONTRACTOR SHALL CONFIRM THE BUILDING ADDITION, FREEZER VESTIBULE, OUTDOOR FREEZER AND ENCLOSED LOADING DOCK FINISHED FLOOR ELEVATION WITH OWNER AND ARCHITECT PRIOR TO CONSTRUCTION.
2. PROPOSED CEMENT CONCRETE RETAINING WALLS DESIGNED BY OTHERS, CONTRACTOR SHALL COORDINATE WITH OWNER AND STRUCTURAL ENGINEER. RETAINING WALLS SHALL BE PROVIDED WITH SAFETY GUARDRAILS/HANDRAILS PER 780 CMR AND MOST CURRENT EDITIONS OF THE MASSACHUSETTS STATE BUILDING CODE REGULATIONS AND SPECIFICATIONS. CONTRACTOR SHALL SUBMIT STAMPED SHOP DRAWINGS FOR RETAINING WALL DESIGN & CONSTRUCTION TO BUILDING DEPARTMENT FOR APPROVAL PRIOR TO CONSTRUCTION.
3. PROPOSED CEMENT CONCRETE LOADING DOCK DESIGNED BY OTHERS. CONTRACTOR SHALL SUBMIT STAMPED SHOP DRAWINGS FOR RAMP CONSTRUCTION TO BUILDING DEPARTMENT FOR APPROVAL PRIOR TO CONSTRUCTION.
4. PROPOSED PRECAST CONCRETE STEPS AND LANDING SHALL BE PROVIDED WITH HANDRAILS. HANDRAILS SHALL CONFORM TO THE MOST CURRENT EDITIONS OF THE MASSACHUSETTS STATE BUILDING CODE AND ADA RULES & REGULATIONS. FINAL DESIGN BY OTHERS.
5. THE FINAL LOCATION, SIZE, AND ALL CONSTRUCTION DETAILS OF THE PROPOSED GAS SERVICE AND GAS METER SHALL BE DETERMINED BY THE LOCAL GAS COMPANY. CONTRACTOR SHALL COORDINATE WITH LOCAL GAS COMPANY PRIOR TO CONSTRUCTION.
6. CONNECT TO THE EXISTING WATER, SEWER AND ELECTRIC SERVICE INSIDE THE EXISTING BUILDING, CONTRACTOR SHALL COORDINATE WITH APPROPRIATE UTILITY COMPANIES.
7. CONTRACTOR TO COORDINATE WITH THE FIRE PROTECTION CONTRACTOR FOR ALL DETAILS ON THE PROPOSED ADDITION FIRE PROTECTION SYSTEM.
8. CONTRACTOR TO COORDINATE WITH PLUMBER FOR ALL DETAILS ON INTERIOR PLUMBING AND FLOOR DRAINS. SEE DESIGN PLANS BY OTHERS.
9. REFER TO ARCHITECTURAL PLANS FOR THE FINAL PROPOSED EXTERIOR DOOR LOCATION.
10. ALL SEWER WORK SHALL BE DONE IN ACCORDANCE WITH THE TOWN OF WAREHAM SEWER COMMISSIONERS RULES AND REGULATIONS.
11. AT THE WATER AND SEWER LINE CROSSING ONE FULL LENGTH OF SEWER PIPE SHALL BE 200 PSI PRESSURE RATED PIPE CENTERED OVER WATER LINE MEETING LATEST AWWA STANDARDS AND SHALL BE PRESSURE TESTED TO ENSURE WATER TIGHTNESS. WATER AND SEWER LINES SHALL HAVE A MINIMUM OF 18" VERTICAL SEPARATION BETWEEN PIPES.
12. THE LIMIT OF WORK LINE IS SHOWN OFFSET IN SOME AREAS FOR CLARITY.
13. ALL CHANGES TO THE EXISTING SIGN WILL BE CONSISTENT WITH THE PROVISIONS OF ARTICLE 11: SIGNS, OF THE TOWN OF WAREHAM ZONING BYLAWS.
14. LOAM AND SEED ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITY.



LAYOUT & UTILITIES

SCALE: 1"=20'

0 20 40 80

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266 MAIN STREET – WAREHAM, MA 02571
TEL: (508) 295-6600 FAX: (508) 295-6634
E-MAIL: info@gafenginc.com

COMMONWEALTH OF MASSACHUSETTS — WILLIAM F. MADDEN — CIVIL — NO. 32883 — REGISTERED PROFESSIONAL ENGINEER

SITE IMPROVEMENTS PLAN
LAYOUT & UTILITIES

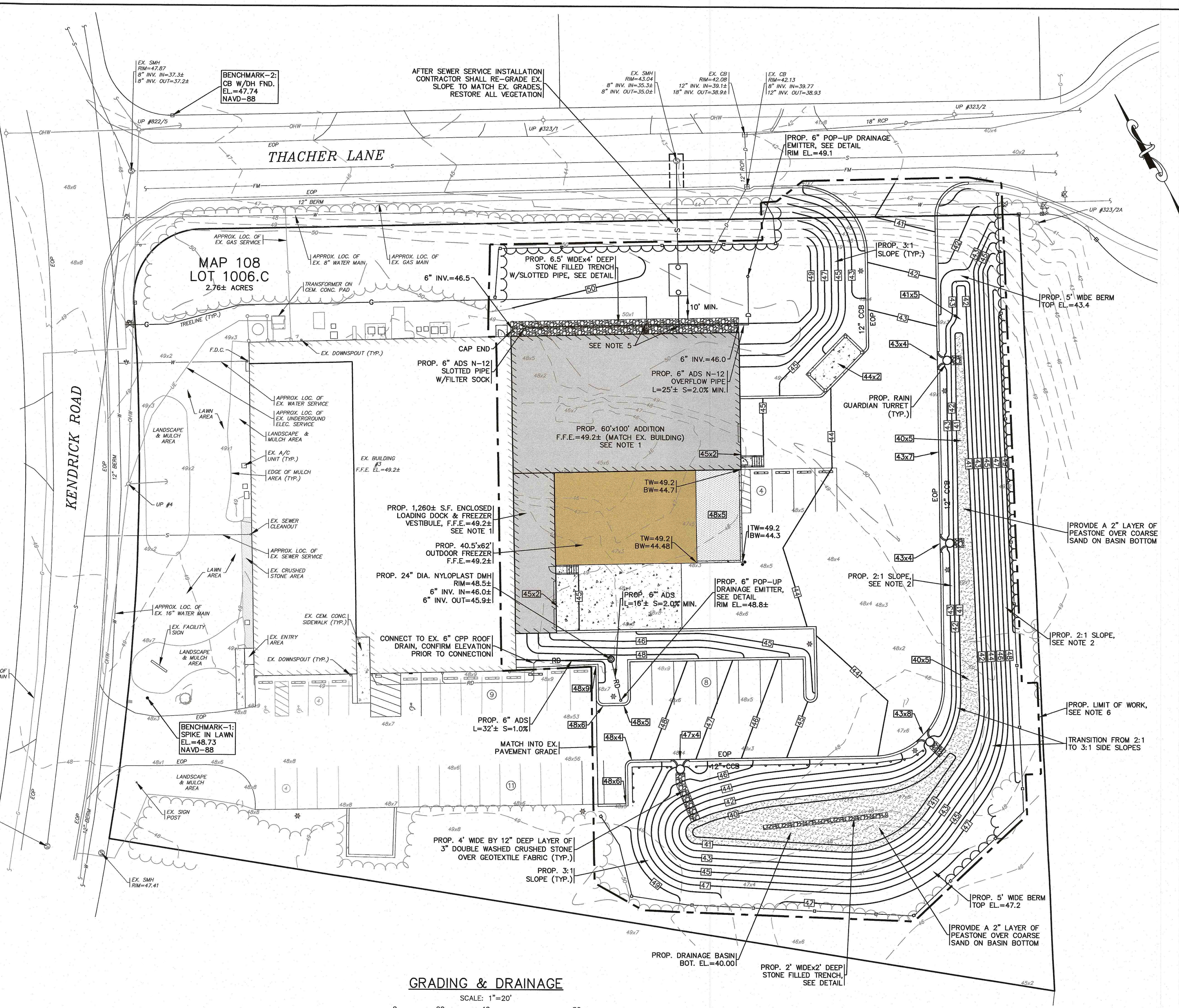
3 KENDRICK ROAD — WAREHAM, MA

PREPARED FOR:
3 KENDRICK ROAD, LLC
P.O. BOX 1135 — MARION, MA

JOB NO.: 21-9731
DWG. 4 OF 10

NOTES:

1. FOR COMPLETE BUILDING ADDITION, FREEZER VESTIBULE, OUTDOOR FREEZER AND ENCLOSED LOADING DOCK DIMENSIONS, SPECIFICATIONS AND CONSTRUCTION DETAILS REFER TO PLANS BY CAPE BUILDING SYSTEMS, INC. CONTRACTOR SHALL CONFIRM THE BUILDING ADDITION, FREEZER VESTIBULE, OUTDOOR FREEZER AND ENCLOSED LOADING DOCK FINISHED FLOOR ELEVATION WITH OWNER AND ARCHITECT PRIOR TO CONSTRUCTION.
2. 2:1 SIDE SLOPES SHALL BE STABILIZED WITH AN EROSION CONTROL BLANKET OVER THE PLANTED SEED BED.
3. COVER ALL PROPOSED STONE FILLED TRENCHES WITH AN ADDITIONAL TEMPORARY LAYER OF FILTER FABRIC UNTIL THE ABOVE GRADIENT SLOPE IS STABILIZED.
4. CONTRACTOR SHALL COORDINATE WITH STRUCTURAL ENGINEER FOR CEMENT CONCRETE RETAINING WALL ELEVATIONS AND ALL DESIGN DETAILS, SEE NOTE 2 ON SHEET 4.
5. WHERE THE PROPOSED SEWER AND GAS LINE CROSS THE STONE FILLED TRENCH CENTER AND ENCASE BOTH PIPES IN 12"x12" CEMENT CONCRETE. PIPES SHALL BE ENCASED FOR THE ENTIRE WIDTH OF THE TRENCH AND A MINIMUM OF 24" BEYOND THE EDGE OF THE TRENCH.
6. THE LIMIT OF WORK LINE IS SHOWN OFFSET IN SOME AREAS FOR CLARITY.
7. LOAM AND SEED ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITY.
8. FOR COMPLETE DRAINAGE OPERATION AND MAINTENANCE NOTES SEE SHEET 2.



GRADING & DRAINAGE

SCALE: 1"=20'

0 20 40 80

PERMIT SET
(NOT FOR CONSTRUCTION)

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PROFESSIONAL ENGINEERS & LAND SURVEYORS
266 MAIN STREET - WAREHAM, MA 02571
TEL: (508) 295-6600 FAX: (508) 295-6634
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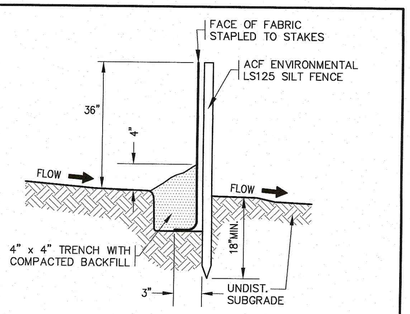
SITE IMPROVEMENTS PLAN
GRADING & DRAINAGE
3 KENDRICK ROAD WAREHAM, MA

PREPARED FOR:
3 KENDRICK ROAD, LLC
P.O. BOX 1135 MARION, MA

JOB NO.: 21-9731

NOTES:

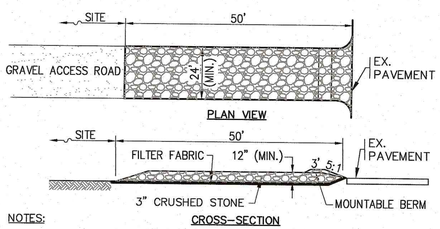
1. ALL EXISTING CATCH BASINS SHALL HAVE A TEMPORARY SILT SACK INSTALLED IN THEM PRIOR TO CONSTRUCTION. CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT SACKS AND PUMP CLEAN THE CATCH BASIN UPON COMPLETION OF CONSTRUCTION. ALL EXISTING CATCH BASINS SHALL BE INSPECTED WEEKLY DURING CONSTRUCTION. IF THERE IS ANY SEDIMENT BUILDUP, THE AFFECTED STRUCTURES SHALL BE CLEANED IMMEDIATELY, AND ALL MATERIAL REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REQUIREMENTS.
2. CONTRACTOR SHALL PROVIDE AND MAINTAIN STAKED SILTATION FENCING EROSION CONTROL BARRIER. SEE PLAN FOR LOCATIONS. THE EROSION CONTROL BARRIER IS SHOWN OFFSET IN SOME AREAS FOR CLARITY. EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL ALL VEGETATION IS ESTABLISHED.
3. FINAL LOCATION OF CONTRACTORS STAGING AREA SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR AT TIME OF CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH OWNER. NO ADDITIONAL TREE CLEARING SHALL BE DONE FOR STAGING AREA.
4. CEMENT CONCRETE WASHOUT AREA SHALL BE A SQUARE OF DOUBLE STAKED HAY BALES WITH SILTATION FENCE AND LINED WITH A 40 MIL. POLYETHYLENE BARRIER. SEE DETAIL. FINAL WASHOUT SIZE AND LOCATION SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR AT TIME OF CONSTRUCTION.
5. CONTRACTOR SHALL PROVIDE AND MAINTAIN COMPOST WATTLES ACROSS THE FRONT OF THE INLET TO ALL RAIN GUARDIAN TURRET STRUCTURES. ALL PROPOSED RAIN GUARDIAN TURRET STRUCTURES SHALL BE INSPECTED WEEKLY DURING CONSTRUCTION. IF THERE IS ANY SEDIMENT BUILDUP, THE AFFECTED STRUCTURES SHALL BE CLEANED IMMEDIATELY, AND ALL MATERIAL REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REQUIREMENTS.
6. THE LIMIT OF WORK LINE IS SHOWN OFFSET IN SOME AREAS FOR CLARITY.
7. COVER ALL PROPOSED STONE FILLED TRENCHES WITH AN ADDITIONAL TEMPORARY LAYER OF FILTER FABRIC UNTIL THE ABOVE GRADIENT SLOPE IS STABILIZED.
8. LOAM AND SEED ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITY.



NOTES:

1. SILTATION FENCE SHALL BE ACF ENVIRONMENTAL LS125 SILT FENCE OR AN APPROVED EQUAL.
2. SILTATION FENCING SHALL BE INSTALLED DOWNSLOPE OF ALL PROPOSED AND EXISTING DISTURBED AREAS, OR AS SHOWN ON THE PLANS.
3. EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL VEGETATIVE OR STABILIZED COVER HAS BEEN FIRMLY ESTABLISHED.
4. EROSION CONTROL MEASURES SHALL FOLLOW THE PERFORMANCE STANDARDS OF THE USDA SOIL CONSERVATION SERVICE, AND ANY APPLICABLE STATE/LOCAL CONSERVATION AUTHORITY.

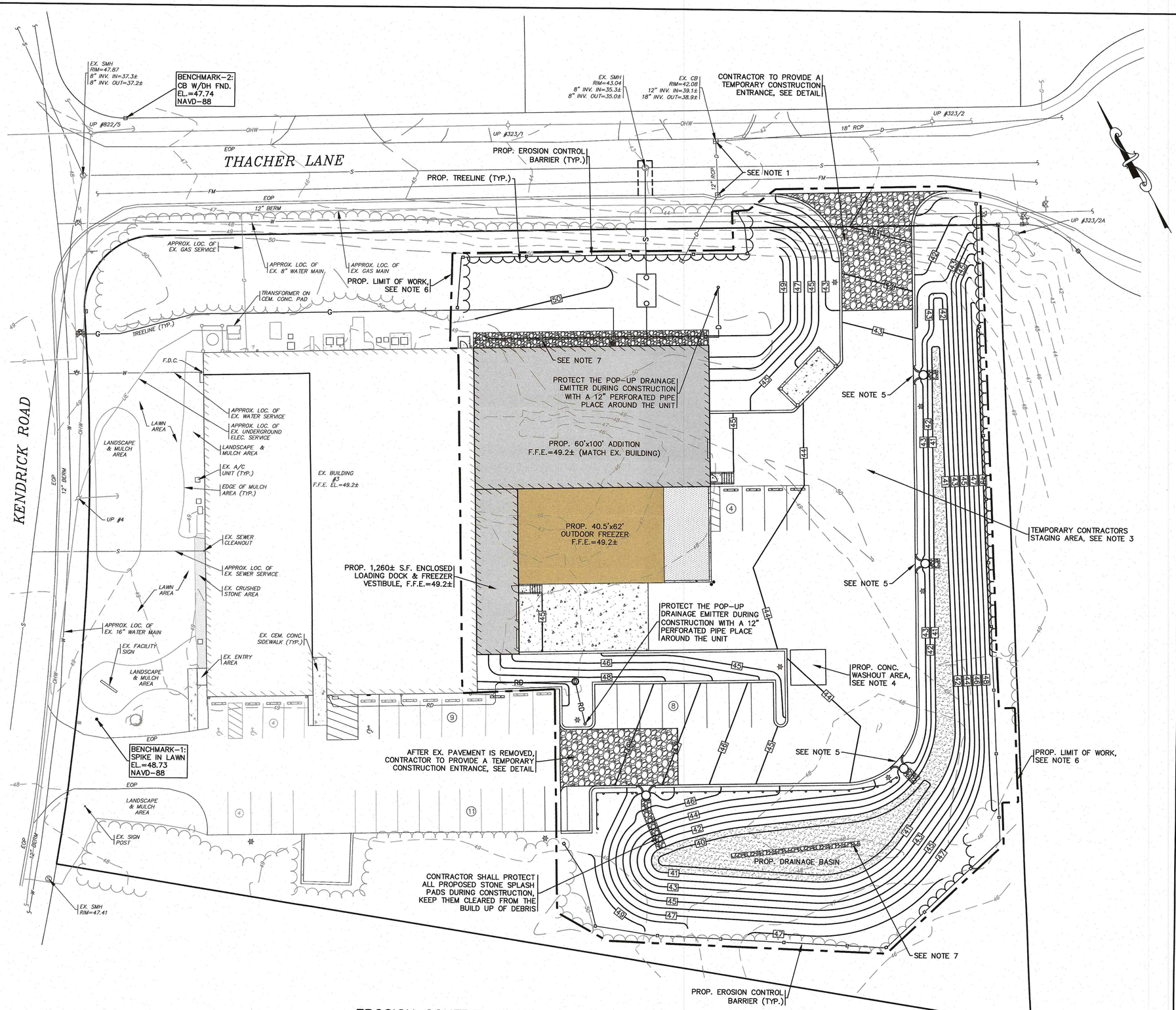
EROSION CONTROL BARRIER DETAIL
N.T.S.



NOTES:

1. ENTRANCE WIDTH SHALL BE 24 FEET MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY OR ONTO THE EXISTING PARKING LOT MUST BE REMOVED IMMEDIATELY. BERM SHALL BE PERMITTED. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED.

TEMPORARY CONSTRUCTION ENTRANCE
N.T.S.



EROSION CONTROL PLAN

SCALE: 1"=20'

0 20 40 80

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APPROVED BY:

APPROVED BY: 4/28/22
COMMONWEALTH OF MASSACHUSETTS WILLIAM F. MADER, CIVIL NO. 39865 REGISTERED PROFESSIONAL ENGINEER

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PROFESSIONAL ENGINEERS & LAND SURVEYORS
266 MAIN STREET - WAREHAM, MA 02571
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E-MAIL: info@gafenginc.com

SITE IMPROVEMENTS PLAN
EROSION CONTROL PLAN
3 KENDRICK ROAD — WAREHAM, MA

PREPARED FOR:
3 KENDRICK ROAD, LLC
P.O. BOX 1135
MARION, MA

JOB NO.: 21-9731

PERMIT SET
(NOT FOR CONSTRUCTION)

DWG. 6 OF 10

H:\GAF DRAWINGS\2021 DRAWINGS\21-9731 (HENRY DUESSE)\9731\dwg\9731_SITE PLAN_ALT-2_REV-1.dwg

PLANTING STANDARDS:

1. THE LANDSCAPE CONTRACTOR SHALL FURNISH AND INSTALL AND/OR DIG, BALL, BURLAP, AND TRANSPLANT ALL PLANT MATERIALS LISTED ON THE PLANT SCHEDULE. BARE-ROOT IS TYPICALLY NOT PERMITTED FOR ANY TREE.

2. PLANT MATERIALS SHALL CONFORM TO THE REQUIREMENTS DESCRIBED IN THE LATEST EDITION OF AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN. PLANTS SHALL BE NURSERY GROWN.

3. PLANTS SHALL CONFORM TO THE MEASUREMENTS SPECIFIED IN THE PLANT SCHEDULE.
A) CALIPER MEASUREMENTS SHALL BE TAKEN SIX (6) INCHES ABOVE GRADE FOR TREES UNDER FOUR (4) INCHES IN DIAMETER AND TWELVE (12) INCHES ABOVE GRADE FOR TREES FOUR (4) INCHES IN DIAMETER AND LARGER.
B) MINIMUM BRANCHING HEIGHT FOR ALL SHADE TREES SHALL BE SIX (6) FEET.
C) MINIMUM SIZE FOR SHADE TREES SHALL BE TWO AND ONE HALF (2.5) INCHES IN DIAMETER AND TWELVE (12) FEET IN HEIGHT.
D) MINIMUM SIZE FOR EVERGREEN TREES SHALL BE BETWEEN SIX (6) AND EIGHT (8) FEET IN HEIGHT
E) MINIMUM SIZE FOR SHRUBS SHALL BE THREE (3) FEET IN HEIGHT

4. A PROFESSIONAL HORTICULTURIST/NURSERYMAN SHALL BE CONSULTED TO DETERMINE THE PROPER TIME TO MOVE AND INSTALL PLANT MATERIAL SO THAT DISTRESS TO THE PLANT IS MINIMIZED. PLANTING OF DECIDUOUS MATERIAL MAY BE CONTINUED DURING WINTER MONTHS PROVIDED THERE IS NO FROST IN THE GROUND AND FROST-FREE TOPSOIL PLANTING MIXTURES ARE USED.

5. A LANDSCAPE CONTRACTOR SHALL EXCAVATE ALL PLANT PITS, VINE PITS, HEDGE TRENCHES, AND SHRUB BEDS AS FOLLOWS:
A) ALL PITS SHALL BE GENERALLY CIRCULAR IN OUTLINE, WITH VERTICAL SIDES. THE TREE PIT SHALL BE DEEP ENOUGH TO ALLOW ONE-EIGHTH (1/8) OF THE BALL TO BE ABOVE THE EXISTING GRADE. PLANTS SHALL REST ON UNDISTURBED EXISTING SOIL OR WELL COMPACTED BACKFILL ON EVERY SIDE, THE TREE PITS MUST BE A MINIMUM OF 2 TIMES THE ROOT BALL DIAMETER.
B) IF AREAS ARE DESIGNATED AS SHRUB BEDS OR HEDGE TRENCHES, THEY SHALL BE CULTIVATED TO AT LEAST EIGHTEEN (18) INCHES IN DEPTH. AREAS DESIGNATED FOR GROUND COVERS AND VINES SHALL BE CULTIVATED TO AT LEAST TWELVE (12) INCHES IN DEPTH.

6. EACH TREE, SHRUB, OR VINE SHALL BE PRUNED IN AN APPROPRIATE MANNER IN ACCORDANCE WITH ACCEPTED STANDARD PRACTICE.

7. ALL TRENCHES AND SHRUB BEDS SHALL BE EDGED AND CULTIVATED TO THE LINES SHOWN ON THE DRAWING. THE AREAS AROUND ISOLATED PLANTS SHALL BE EDGED AND CULTIVATED TO THE FULL DIAMETER OF THE PIT. SOD THAT HAS BEEN REMOVED AND STACKED SHALL BE USED TO TRIM THE EDGES OF ALL EXCAVATED AREAS TO THE NEAT LINES OF THE PLANT PIT SAUCERS, THE EDGE OF SHRUB AREAS, HEDGE TRENCHES AND VINE POCKETS.

8. AFTER CULTIVATION, ALL PLANT MATERIALS SHALL BE MULCHED WITH A LAYER BETWEEN TWO (2) AND THREE (3) INCHES DEEP OF HEMLOCK / SPRUCE MULCH OVER THE ENTIRE AREA OF THE BED OR SAUCER.

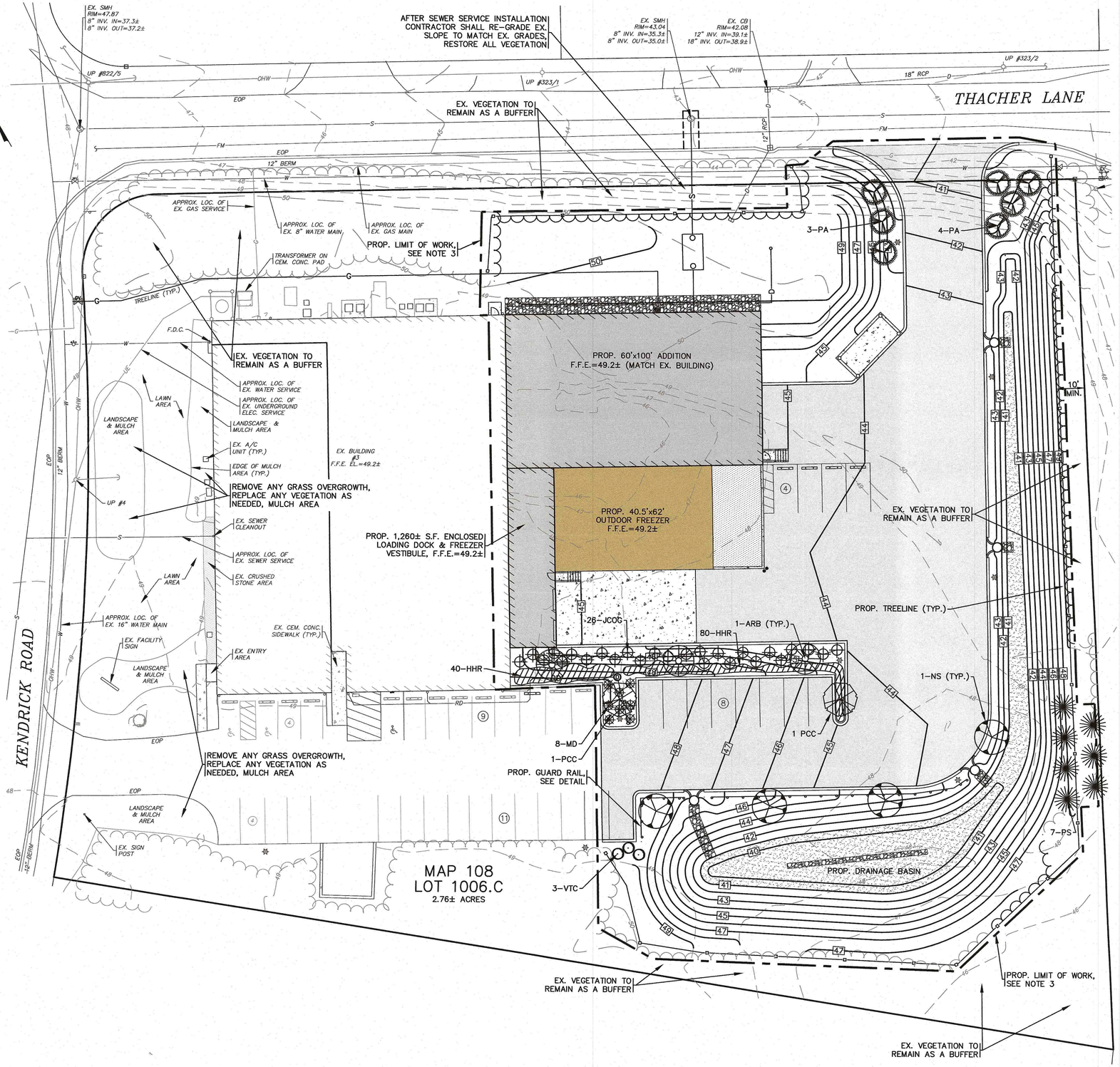
9. A TWO (2) YEAR GUARANTEE SHALL BE PROVIDED ON ALL NEW PLANT MATERIAL. IF ANY TREE OR SHRUB DIES WITHIN THIS PERIOD OF TIME, IT SHALL BE REPLACED.

10. ALL AREAS THAT ARE NOT LANDSCAPED SHALL BE LOAMED AND SEEDED UNLESS OTHERWISE NOTED.

11. EXISTING TREES & VEGETATION SHALL REMAIN TO THE GREATEST EXTENT POSSIBLE.

NOTES:

1. LANDSCAPE DESIGN BY E.A. FULLER, LANDSCAPE ARCHITECT, 24 SCOTT DRIVE, PLYMOUTH, MA, 02360.
2. THE LIMIT OF WORK LINE IS SHOWN OFFSET IN SOME AREAS FOR CLARITY.
3. LOAM AND SEED ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITY.



PLANT LIST

KEY		QTY	BOTANICAL NAME	COMMON NAME	SIZE	COMMENTS	REMARKS
SHRUBS							
⊕	JCOG	26	JUNIPERUS CHINENSIS 'OLD GOLD'	OLD GOLD PFITZER JUNIPER	24"-30" SPR.	5 GAL. OR B & B	PLANT 5' O.C.
✳	MD	8	MICROBIOTA DECUSSATA	SIBERIAN CARPET CYPRESS	18"-24" SPR.	3 GAL.	PLANT 3' O.C.
⊙	VTC	3	VIBURNUM TRILOBUM COMPACTUM	COMPACT AMERICAN CRANBERYYBUSH VIBURNUM	36" HT.	5 GAL. OR B & B	PLANT 5' O.C.
SHADE & ORNAMENTAL TREES							
✳	ARB	3	ACER RUBRUM 'BOWHALL'	BOWHALL COLUMNAR RED MAPLE	3" CAL.	B & B	PLANT AS SHOWN
✳	PA	7	PICEA ABIES	NORWAY SPRUCE	7'-8' HT.	B & B	PLANT 12' O.C.
✳	PCC	2	PYRUS CALLERYANA 'CHANTICLEER'	CLEVELAND SELECT CALLERY PEAR	3" CAL.	B & B	PLANT AS SHOWN
✳	NS	4	NYSSA SYLVATICA	BLACK TUPELO	3" CAL.	B & B	PLANT 40' O.C.
✳	PS	7	PINUS STROBUS	EASTERN WHITE PINE	7'-8' HT.	B & B	PLANT 15' O.C.
ORNAMENTAL GRASSES & PERENNIALS							
▨	HHR	120	HEMEROCALIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	1 GAL.	18" HT.	PLANT 12" O.C.

LANDSCAPING PLAN

SCALE: 1"=20'

0 20 40 80

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APPROVED BY: COMMONWEALTH OF MASSACHUSETTS EDWARD A. FULLER REGISTERED LANDSCAPE ARCHITECT NO. 619

APPROVED BY: COMMONWEALTH OF MASSACHUSETTS WILLIAM F. MARSH CIVIL NO. 33865 REGISTERED PROFESSIONAL ENGINEER

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

SITE IMPROVEMENTS PLAN
LANDSCAPING PLAN
3 KENDRICK ROAD
WAREHAM, MA

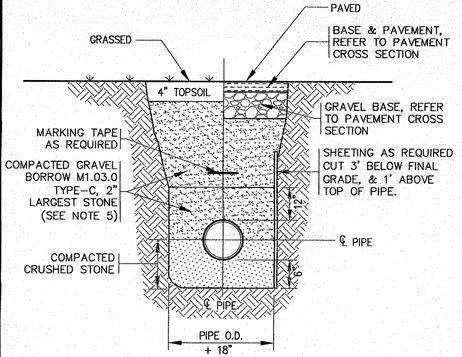
PREPARED FOR:
3 KENDRICK ROAD, LLC
P.O. BOX 1135
MARION, MA

JOB NO.: 21-9731

PERMIT SET
(NOT FOR CONSTRUCTION)

DWG.
7 OF 10

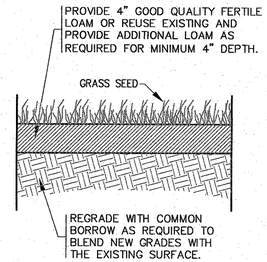
H:\GAF DRAWINGS\2021 DRAWINGS\21-9731 (HENRY DUESSES)\9731\dwg\9731_SITE PLAN_ALT-2_REV.-1.dwg



NOTES:

1. PIPE BEDDING SHALL BE COMPACTED BEFORE PIPE INSTALLATION.
2. COMPACTION AROUND PIPE SHALL BE BY TAMPER AT 6" MAX. LIFTS.
3. MIN. COVER OVER PIPE = 1'-6"
4. MIN. COVER OVER WATER SERVICES/MAINS = 5'-0".
5. FOR ALL WORK IN THACHER LANE USE FLOWABLE FILL AS REQUIRED BY THE TOWN OF WAREHAM MUNICIPAL MAINTENANCE DEPARTMENT.

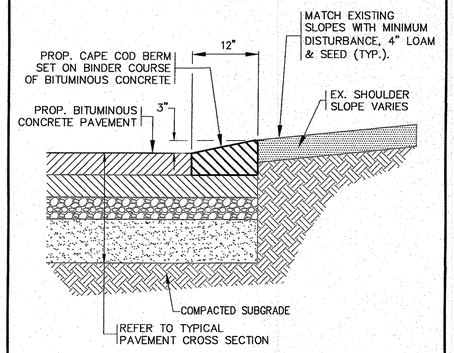
TYPICAL PIPE TRENCH
N.T.S.



NOTES:

1. MATERIALS AND CONSTRUCTION METHODS FOR LOAM BORROW AND TOPSOIL SHALL CONFORM TO THE RELEVANT PROVISIONS OF SECTION 751 OF THE MassDOT STANDARD SPECIFICATIONS AND WITH THE PROCEDURES DESCRIBED HEREIN.
2. MATERIALS AND CONSTRUCTION FOR SEEDING SHALL CONFORM TO THE RELEVANT PROVISIONS OF SECTION 765 OF THE MassDOT STANDARD SPECIFICATIONS.
3. SEED FOR GRASS STRIPS SHALL CONFORM TO MassDOT MATERIAL SPEC. M6.03.0, LONG TERM SEED MIXES FOR LAWNS AND SLOPES.
4. GRASS SHALL BE MAINTAINED A MINIMUM OF 4" HIGH WITHIN THE DRAINAGE AREAS.
5. LOAM AND SEED ALL DISTURBED AREAS.

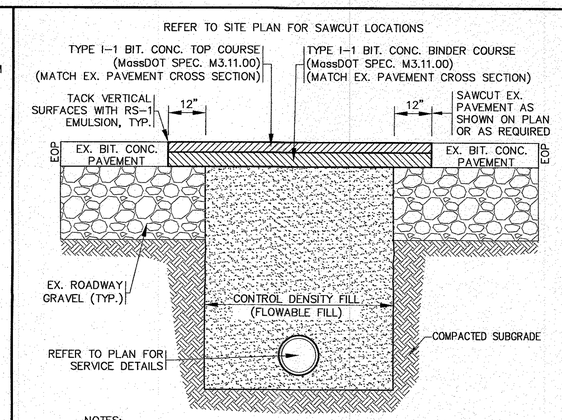
LOAM AND SEED DETAIL
N.T.S.



NOTES:

1. SEE PLAN FOR LOCATIONS.
2. ALL METHODS AND MATERIALS OF CONSTRUCTION SHALL COMPLY WITH THE LATEST REVISION OF MassDOT STANDARD SPECIFICATIONS.

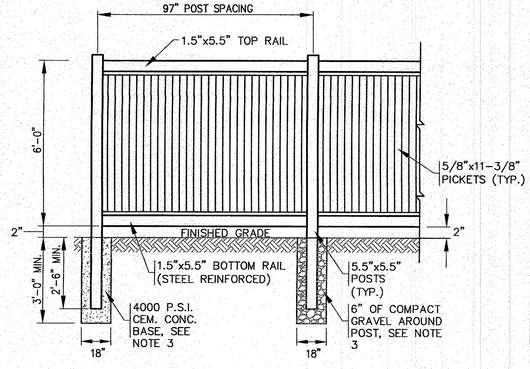
BITUMINOUS CONCRETE BERM
N.T.S.



NOTES:

1. ALL PAVEMENT SHALL BE IN ACCORDANCE WITH MassDOT SECTION 460 & 401, UNLESS OTHERWISE NOTED.
2. SUBGRADE & BASE SHALL BE COMPACTED TO MINIMUM 95% MAXIMUM DRY DENSITY.
3. CONTROL DENSITY FILL (FLOWABLE FILL) SHALL CONFORM TO MassDOT M4.08.0 TYPE 1E OR TYPE 2E.

PAVEMENT SAWCUT / TRENCH REPAIR DETAIL
N.T.S.



NOTES:

1. REFER TO MANUFACTURERS SPECIFICATIONS FOR COMPLETE DETAILS AND INSTALLATION GUIDELINES. CONTRACTOR SHALL COORDINATE WITH OWNER.
2. REFER TO PLAN FOR LOCATIONS.
3. CEMENT CONCRETE BASE SHALL BE USED AT ALL ENDS, ANGLE POINTS AND GATE POSTS. POSTS SHALL BE INSTALLED TO A DEPTH OF 2'-6" MIN. OR TO A DEPTH AS REQUIRED FOR FROST ADEQUATE PROTECTION.

VINYL FENCE DETAIL
N.T.S.

REV.	DATE	BY	APP'D	DESCRIPTION
1	4/28/22	JMP	WFM	NO CHANGE THIS SHEET

DATE: FEB. 10, 2022
DRAWN BY: JMP
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JOB NO.: 21-9731
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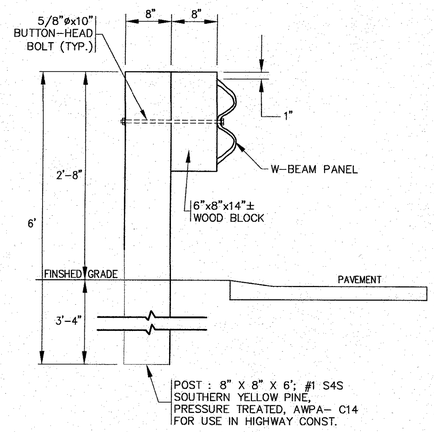
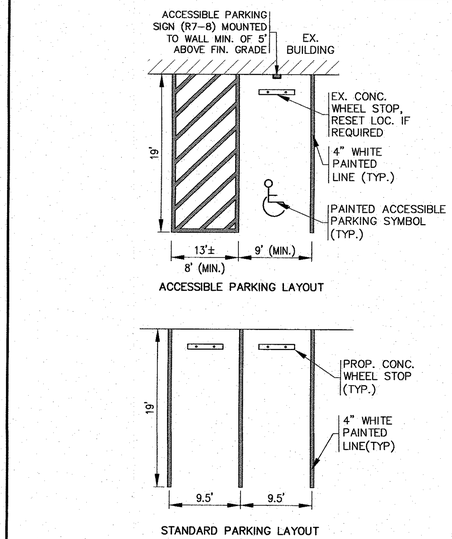


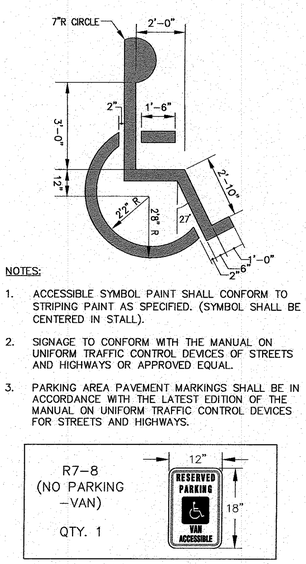
NOTES:

1. ALL METHODS OF CONSTRUCTION AND MATERIALS OF CONSTRUCTION SHALL CONFORM TO THE MOST CURRENT EDITION OF THE MassDOT STANDARD SPECIFICATIONS.
2. REFER TO PLAN FOR LOCATIONS.
3. FINAL GUARDRAIL DESIGN BY OTHERS, CONTRACTOR SHALL COORDINATE WITH OWNER.

GUARDRAIL DETAIL
N.T.S.



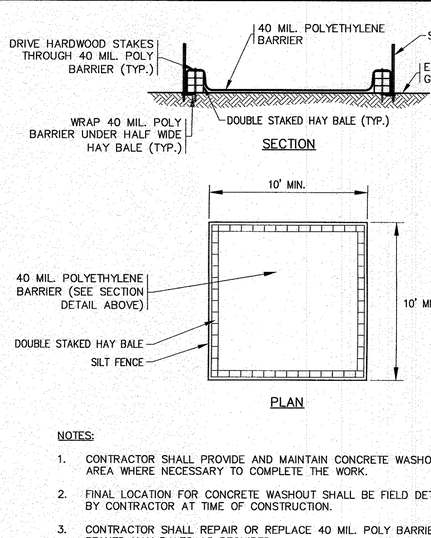
ACCESSIBLE PARKING AND STANDARD PARKING LAYOUTS
N.T.S.



NOTES:

1. ACCESSIBLE SYMBOL PAINT SHALL CONFORM TO STRIPING PAINT AS SPECIFIED. (SYMBOL SHALL BE CENTERED IN STALL).
2. SIGNAGE TO CONFORM WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES OF STREETS AND HIGHWAYS OR APPROVED EQUAL.
3. PARKING AREA PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.

ACCESSIBLE PARKING PAINT SYMBOL AND SIGN
N.T.S.



NOTES:

1. SEE PLAN FOR LOCATIONS.

TYPICAL BOLLARD DETAIL
N.T.S.

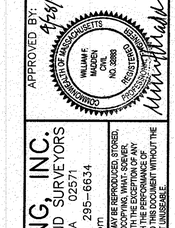
NOTES:

1. CONTRACTOR SHALL PROVIDE AND MAINTAIN CONCRETE WASHOUT AREA WHERE NECESSARY TO COMPLETE THE WORK.
2. FINAL LOCATION FOR CONCRETE WASHOUT SHALL BE FIELD DETERMINED BY CONTRACTOR AT TIME OF CONSTRUCTION.
3. CONTRACTOR SHALL REPAIR OR REPLACE 40 MIL. POLY BARRIER OR STAKED HAY BALES AS REQUIRED.

CONCRETE WASHOUT DETAIL
N.T.S.

APPROVED BY:

APPROVED BY: 4/28/22



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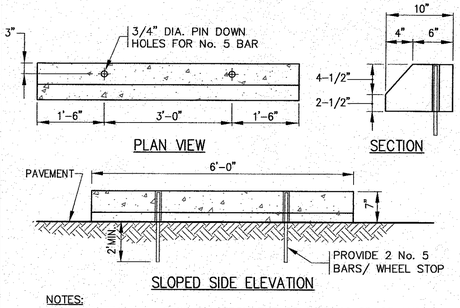
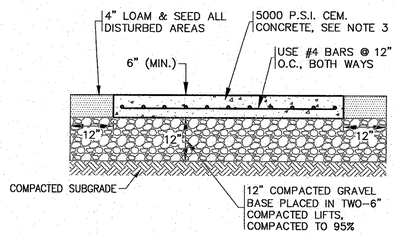


NOTES:

1. LOCATE WHEEL STOP 2'± FROM END OF PARKING SPACE AND CENTER ON WIDTH.
2. REFER TO PLAN FOR LOCATIONS.

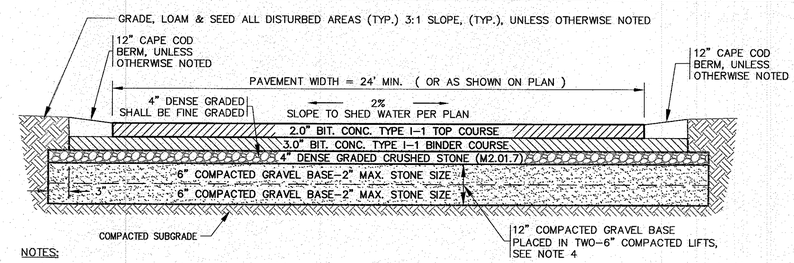
CEM. CONC. WHEEL STOP DETAIL
N.T.S.



NOTES:

1. CEMENT CONCRETE PAD SHALL BE A MINIMUM OF 6" THICK.
2. CONSTRUCTION JOINTS TO BE SET AT INTERVALS OF 1/4 OF LENGTH.
3. STRENGTH OF THE CEMENT CONCRETE SHALL BE 5000 P.S.I. @ 28 DAYS.
4. SUBGRADE & BASE SHALL BE COMPACTED TO MINIMUM 95% MAXIMUM DRY DENSITY.
5. SEE GRADING & DRAINAGE PLAN FOR ELEVATIONS.

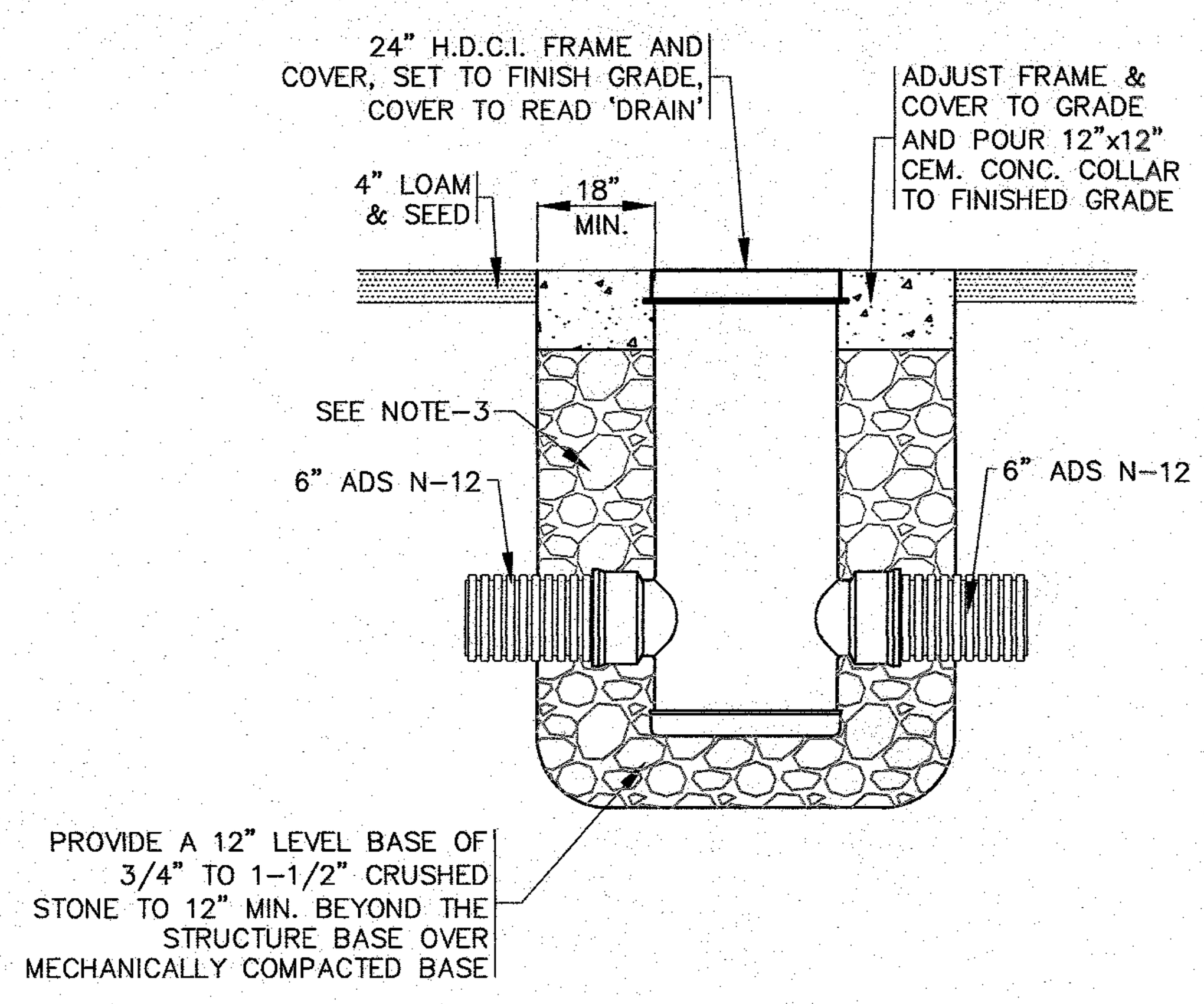
CEMENT CONCRETE DUMPSTER PAD
N.T.S.



NOTES:

1. ALL PAVEMENT SHALL BE IN ACCORDANCE WITH MassDOT MATERIAL SPEC. SECTION 460 & 401, UNLESS OTHERWISE NOTED.
2. GRAVEL BASE SHALL CONFORM TO MassDOT MATERIAL SPEC. SECTION M1.03.0 TYPE C.
3. SUBGRADE & BASE SHALL BE COMPACTED TO MINIMUM 95% MAXIMUM DRY DENSITY.
4. FINE GRADE THE GRAVEL TO 9" BELOW FINISHED GRADE PRIOR TO PLACEMENT OF DENSE GRADED CRUSHED STONE.

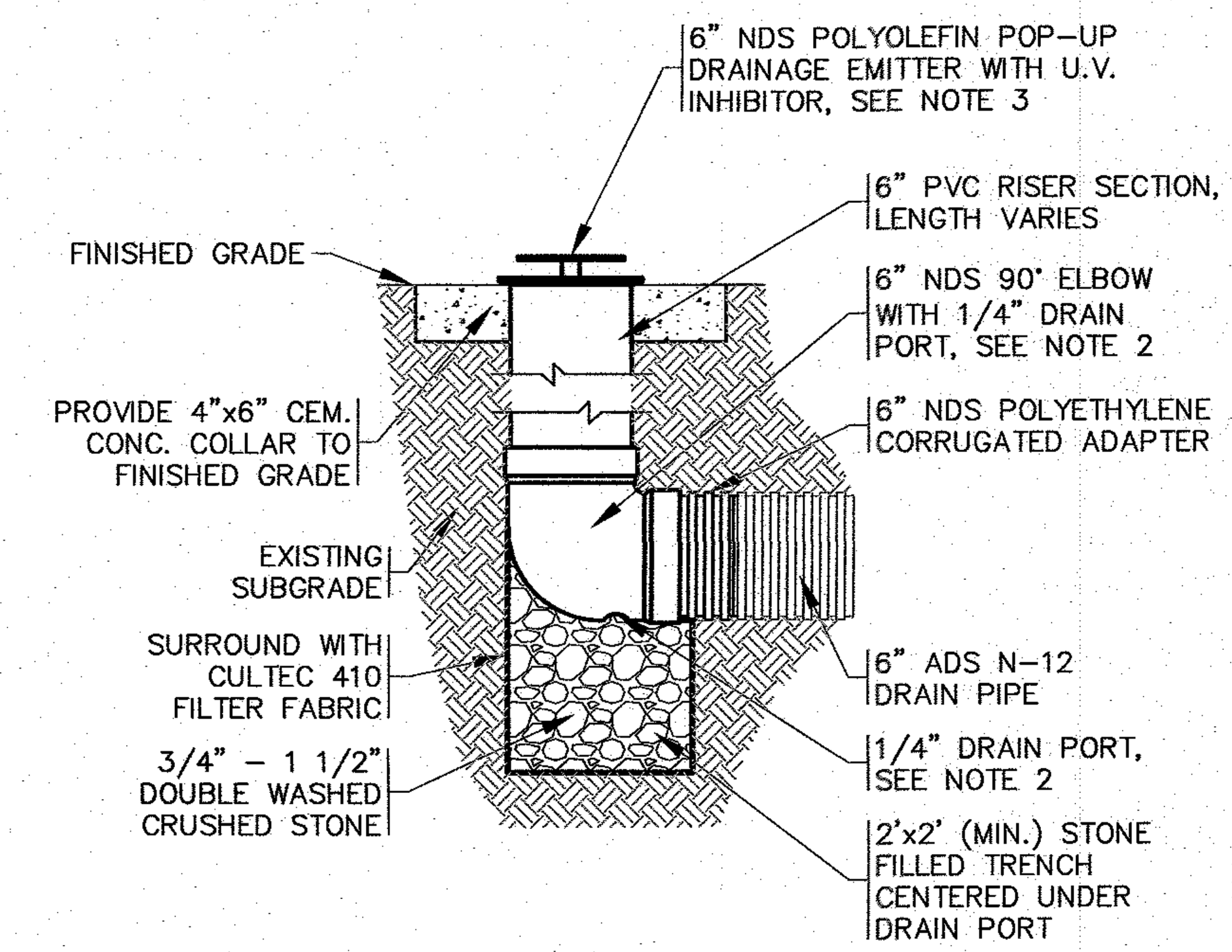
TYPICAL BITUMINOUS PAVING SECTION
N.T.S.



NOTES:

1. REFER TO GRADING & DRAINAGE PLAN FOR LOCATIONS AND ELEVATIONS.
2. INSTALLATION SHALL BE PER MANUFACTURERS SPECIFICATIONS.
3. THE BACKFILL MATERIAL SHALL BE CRUSHED STONE OR OTHER GRANULAR MATERIAL MEETING THE REQUIREMENTS OF CLASS I, CLASS II, OR CLASS III MATERIAL AS DEFINED IN ASTM D2321, OR AS DETERMINED BY LOCAL STANDARDS & SITE ENGINEER. BEDDING & BACKFILL FOR SURFACE DRAINAGE INLETS SHALL BE PLACED & COMPACTED UNIFORMLY IN ACCORDANCE WITH ASTM D2321.
4. DRAIN BASIN STRUCTURE, FRAME AND COVER TO MEET H-20 LOADING REQUIREMENTS.

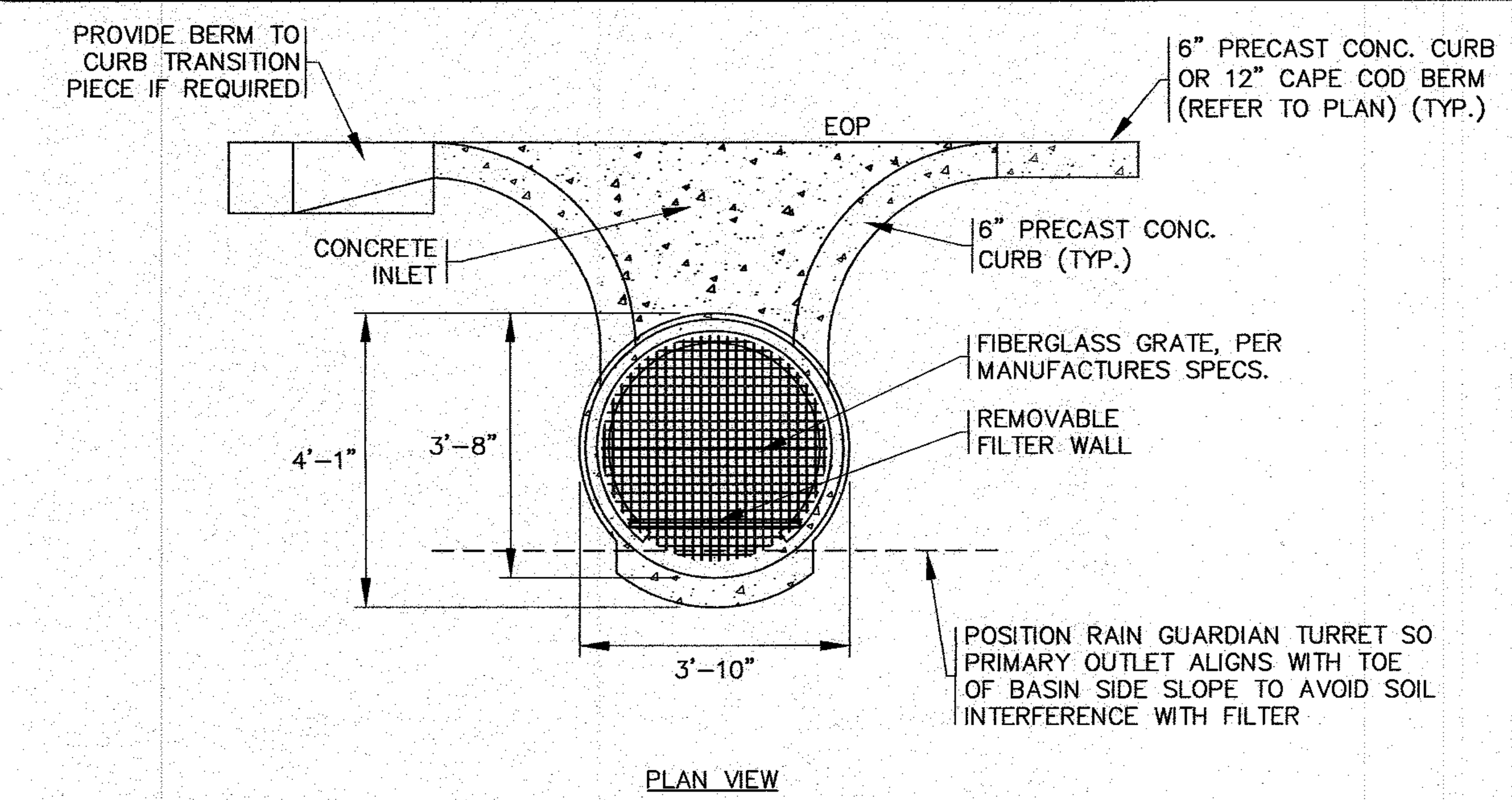
NYLOPLAST 24" DRAIN BASIN DETAIL
N.T.S.



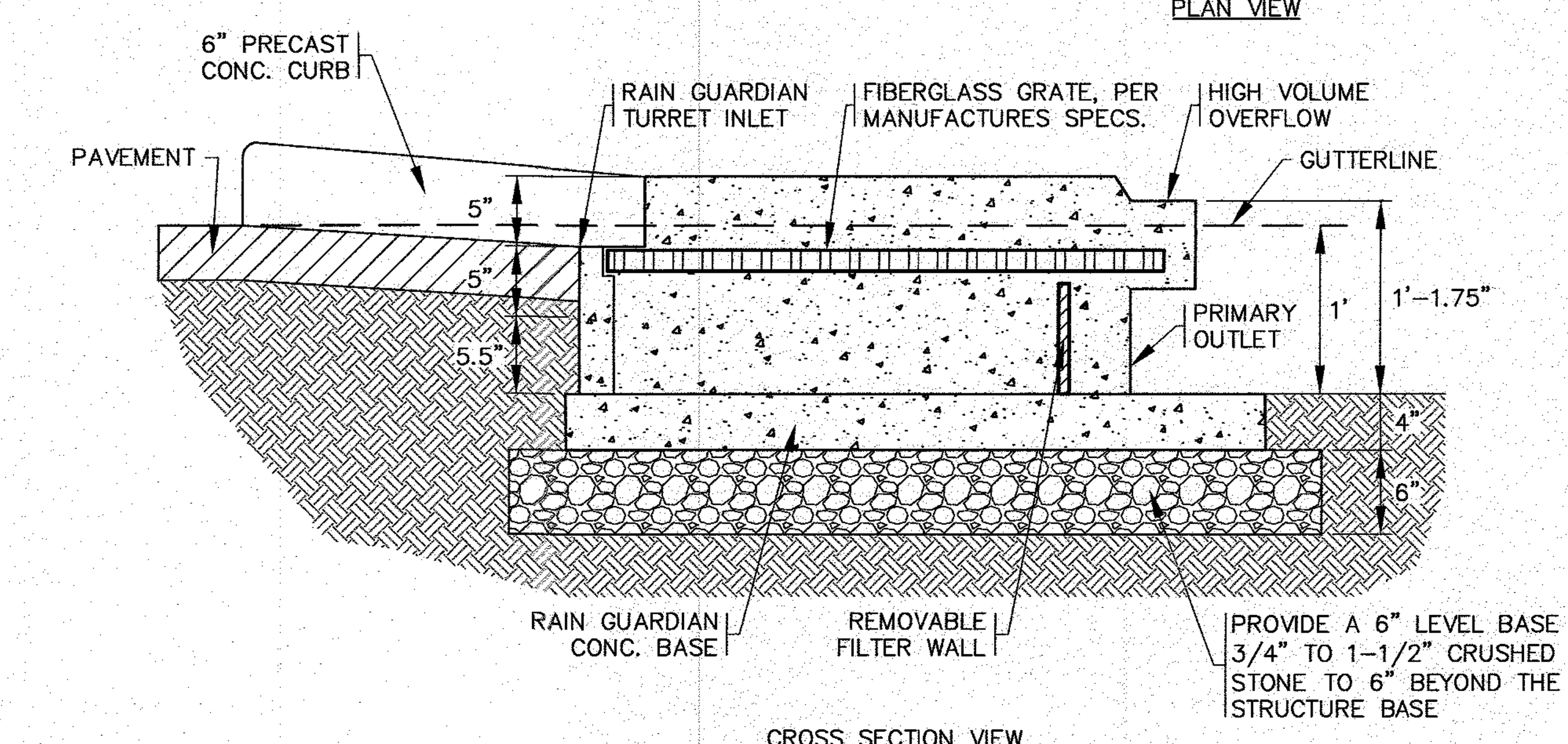
NOTES:

1. REFER TO SITE PLAN FOR LOCATION.
2. INCREASE THE 1/4" DRAIN PORT TO 1" DIA.
3. PROTECT THE POP-UP DRAINAGE EMITTER DURING CONSTRUCTION WITH A 12" PERFORATED PIPE PLACE AROUND THE UNIT.
4. FOR COMPLETE DETAILS AND INSTALLATION GUIDELINES REFER TO THE MANUFACTURER'S SPECIFICATIONS.

DRAINAGE EMITTER
N.T.S.



PLAN VIEW

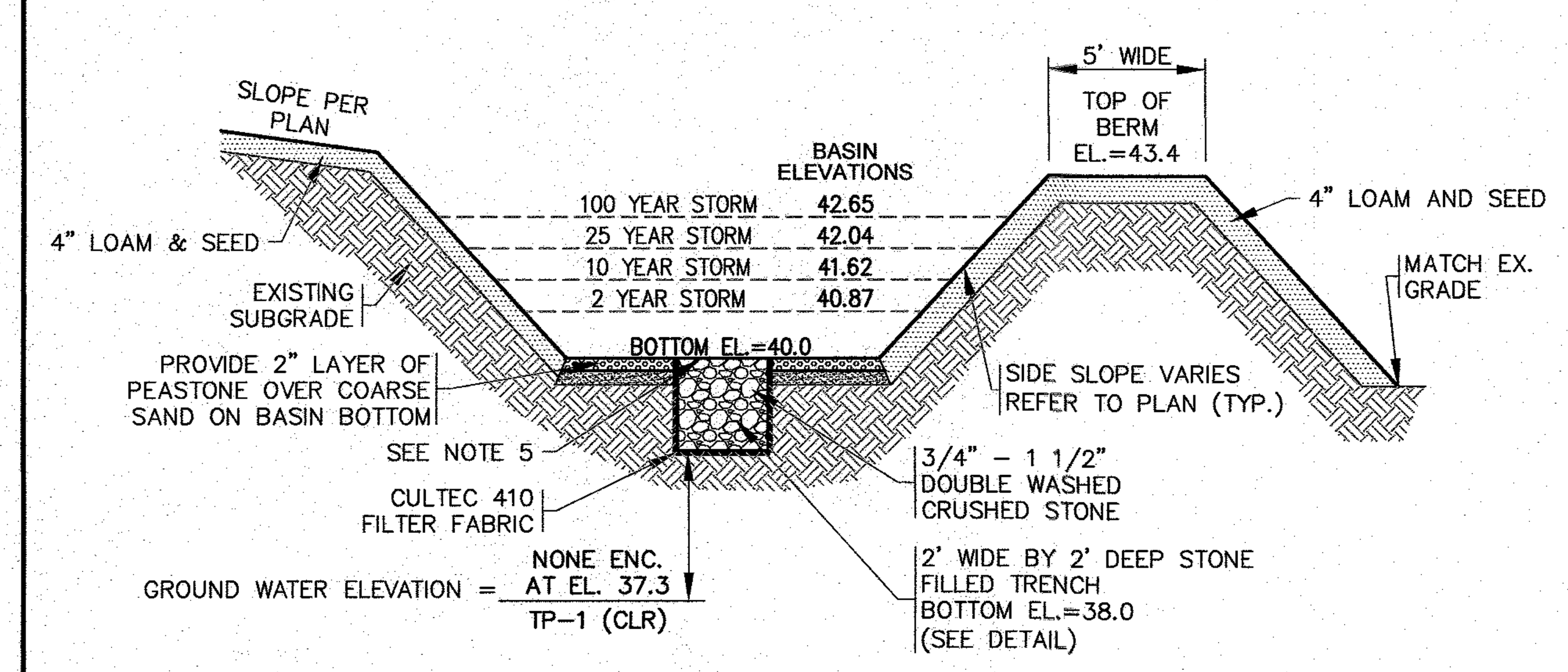


CROSS SECTION VIEW

NOTES:

1. FOR COMPLETE INSTALLATION DETAILS REFER TO RAIN GUARDIAN TURRET MANUFACTURERS INSTALLATION SPECIFICATIONS.
2. REFER TO PLAN FOR LOCATIONS AND ELEVATIONS.

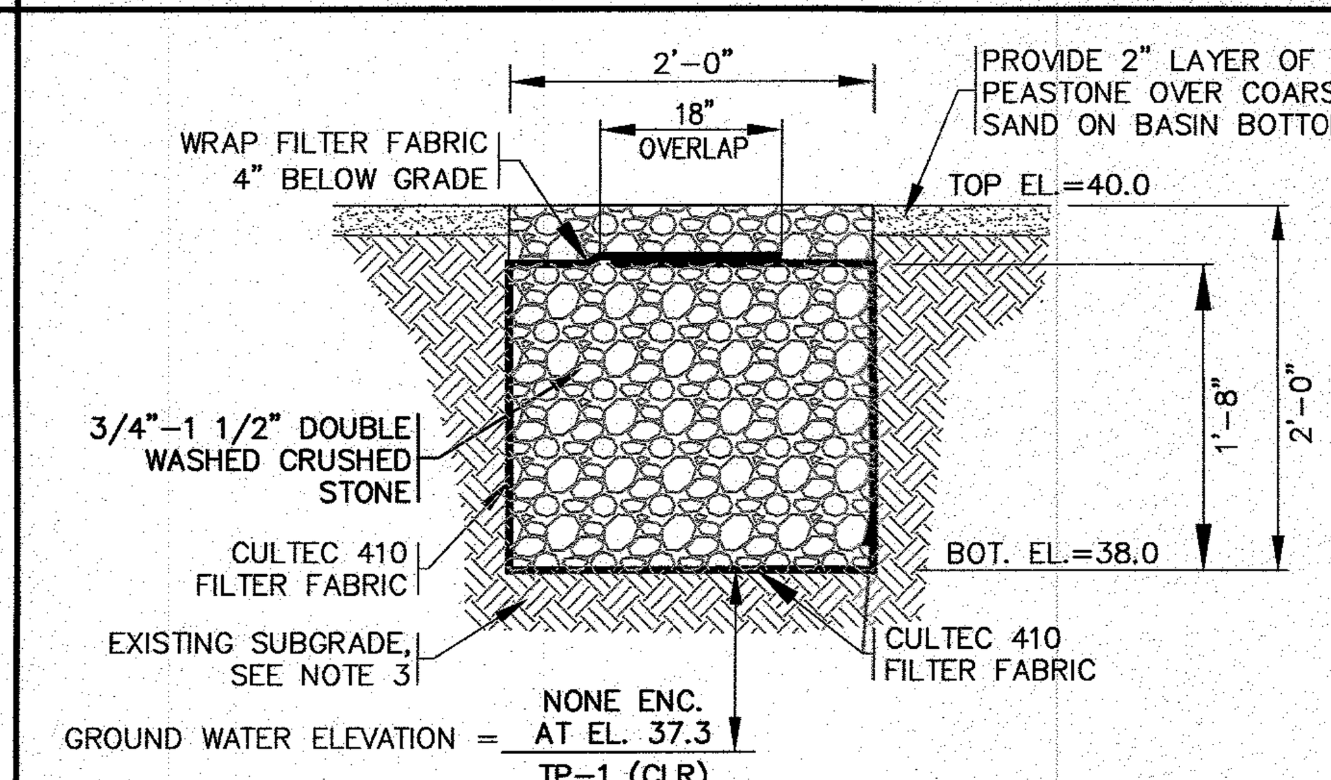
RAIN GUARDIAN TURRET
N.T.S.



NOTES:

1. GRASS SHALL BE MAINTAINED APPROXIMATELY 4" HIGH WITHIN THE DRAINAGE AREAS. REFER TO THE POST CONSTRUCTION MAINTENANCE NOTES.
2. SLOPES SHALL BE CLEAR OF ALL OTHER VEGETATION.
3. WHERE REQUIRED CONTRACTOR TO REMOVE ALL UNSUITABLE SOILS AND REPLACE WITH CLEAN SAND AND GRAVEL APPROVED BY DESIGN ENGINEER.
4. CONTRACTOR SHALL PLACE COMPACTED ORDINARY BORROW (M1.01.0) WITH STONE SIZE NO LARGER THAN 6" FOR FILL AREAS ADJACENT TO THE BERM.
5. COVER STONE WITH AN ADDITIONAL TEMPORARY LAYER OF FILTER FABRIC UNTIL THE ABOVE GRADIENT SLOPE IS STABILIZED.
6. REFER TO TEST PIT DATA FOR SOIL TYPES AND WATER TABLE ELEVATION.

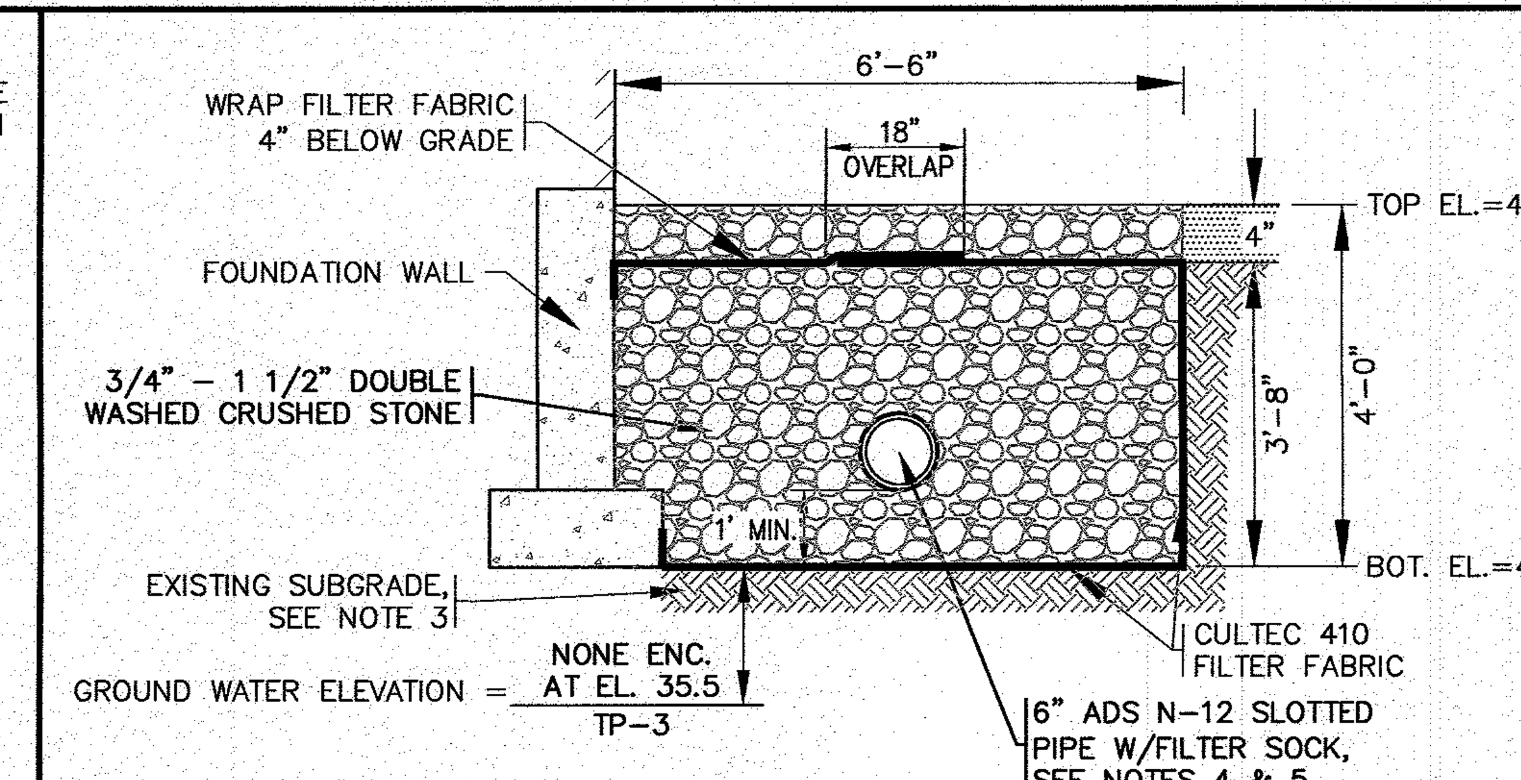
DRAINAGE BASIN DETAIL
N.T.S.



NOTES:

1. REFER TO PLAN FOR LOCATIONS.
2. COVER STONE FILLED TRENCHES WITH AN ADDITIONAL TEMPORARY LAYER OF FILTER FABRIC UNTIL THE COMPLETION OF CONSTRUCTION.
3. REMOVE UNSUITABLE SOIL 2' MINIMUM BENEATH AND AROUND ALL SIDES OF THE PROPOSED STONE FILLED TRENCH. THIS INCLUDES ORGANICS, TOPSOIL, ROOTS AND OTHER UNSUITABLE SOILS REPLACE WITH CLEAN SAND AND GRAVEL APPROVED BY DESIGN ENGINEER.

2'x2' STONE FILLED TRENCH
N.T.S.



NOTES:

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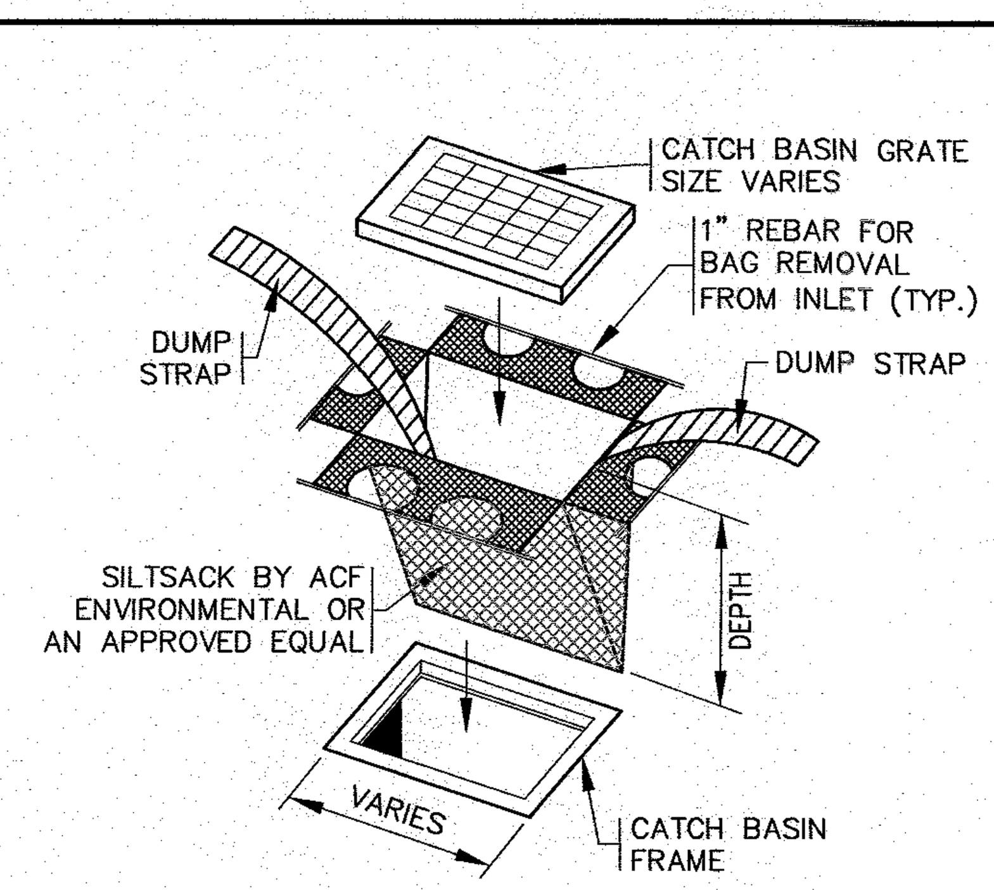
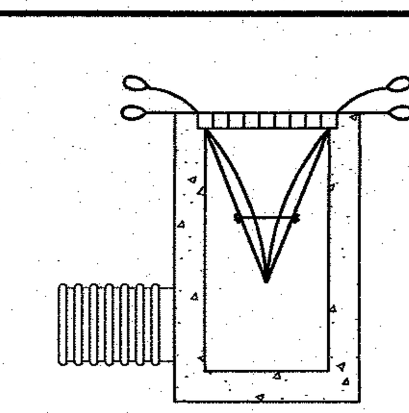
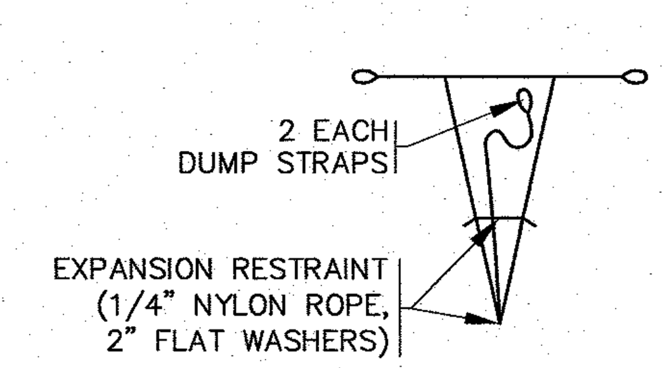
2. COVER STONE FILLED TRENCHES WITH AN ADDITIONAL TEMPORARY LAYER OF FILTER FABRIC UNTIL THE COMPLETION OF CONSTRUCTION.
3. REMOVE UNSUITABLE SOIL 2' MINIMUM BENEATH AND AROUND ALL SIDES OF THE PROPOSED STONE FILLED TRENCH. THIS INCLUDES ORGANICS, TOPSOIL, ROOTS AND OTHER UNSUITABLE SOILS REPLACE WITH CLEAN SAND AND GRAVEL APPROVED BY DESIGN ENGINEER.
4. ALL PIPES SHALL HAVE SOIL TIGHT JOINTS AND FITTINGS.
5. PIPE PERFORATION PATTERN SHALL BE AASHTO CLASS II.

STONE FILLED TRENCH W/ SLOTTED PIPE
N.T.S.





INSTALLATION DETAIL



BAG DETAIL

SILT SACK DETAIL
N.T.S.

REV.	DATE	BY	APP'D	DESCRIPTION
1	4/28/22	JMP	WFM	NO CHANGE THIS SHEET

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SITE IMPROVEMENTS PLAN
DETAIL SHEET 2
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PREPARED FOR:
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P.O. BOX 1135 MARION, MA

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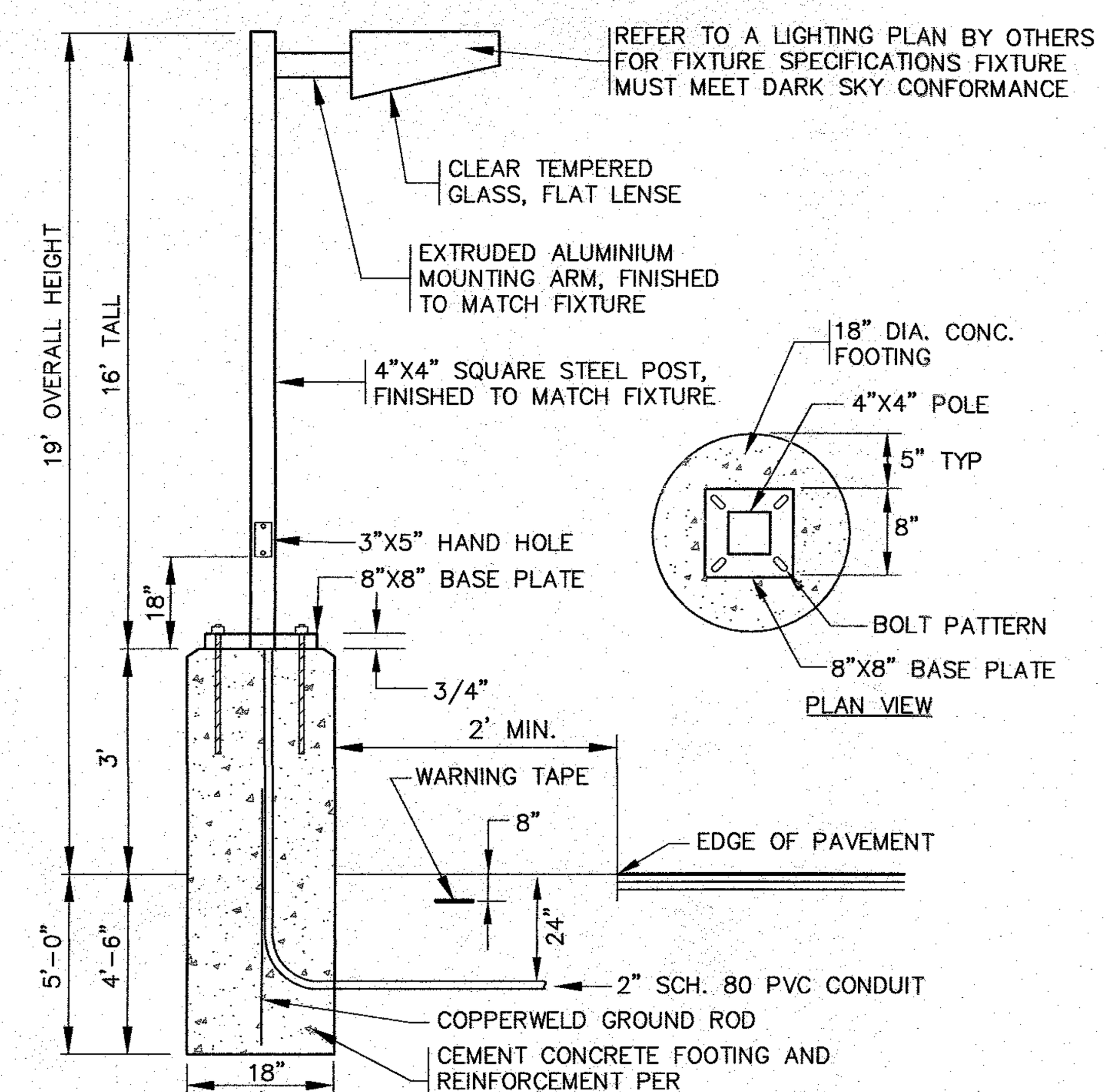
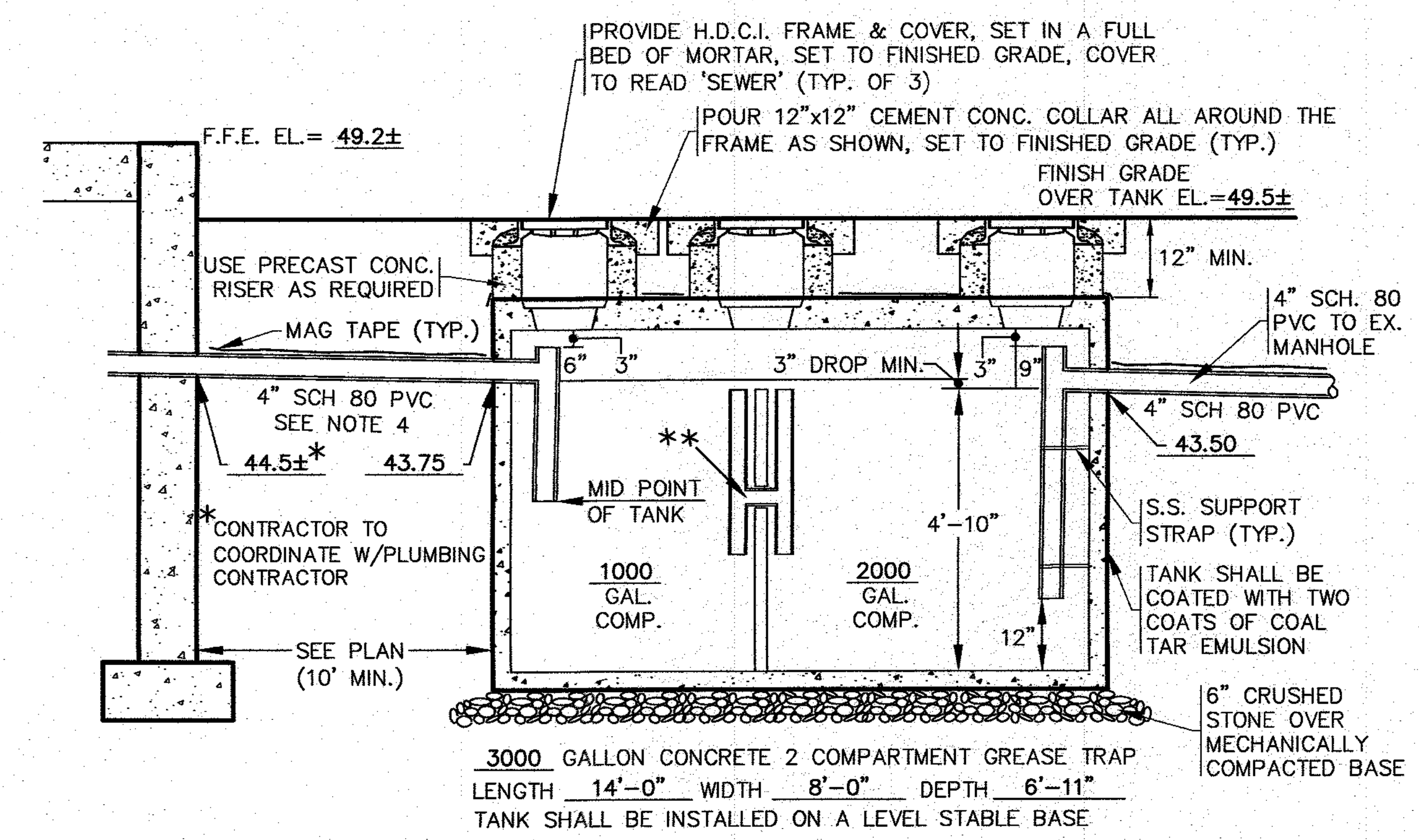
9 OF 10



NOTES:

1. CIRCUIT CONDUCTORS TO BE PULLED AND TERMINATED BY ELECTRIC CONTRACTOR TO COORDINATE.
2. CONTRACTOR TO COORDINATE WITH OWNER ON FINAL LIGHT FIXTURE SPECIFICATIONS.
3. ALL MOUNTING HARDWARE AND INSTALLATION SHALL BE PER MANUFACTURER SPECIFICATIONS.
4. ALL LIGHTING LAYOUT & FIXTURES SHALL COMPLY WITH SECTION 1240 (LIGHTING) OF THE TOWN OF WAREHAM ZONING BYLAW.

STANDARD LIGHT POLE W/BASE
N.T.S.

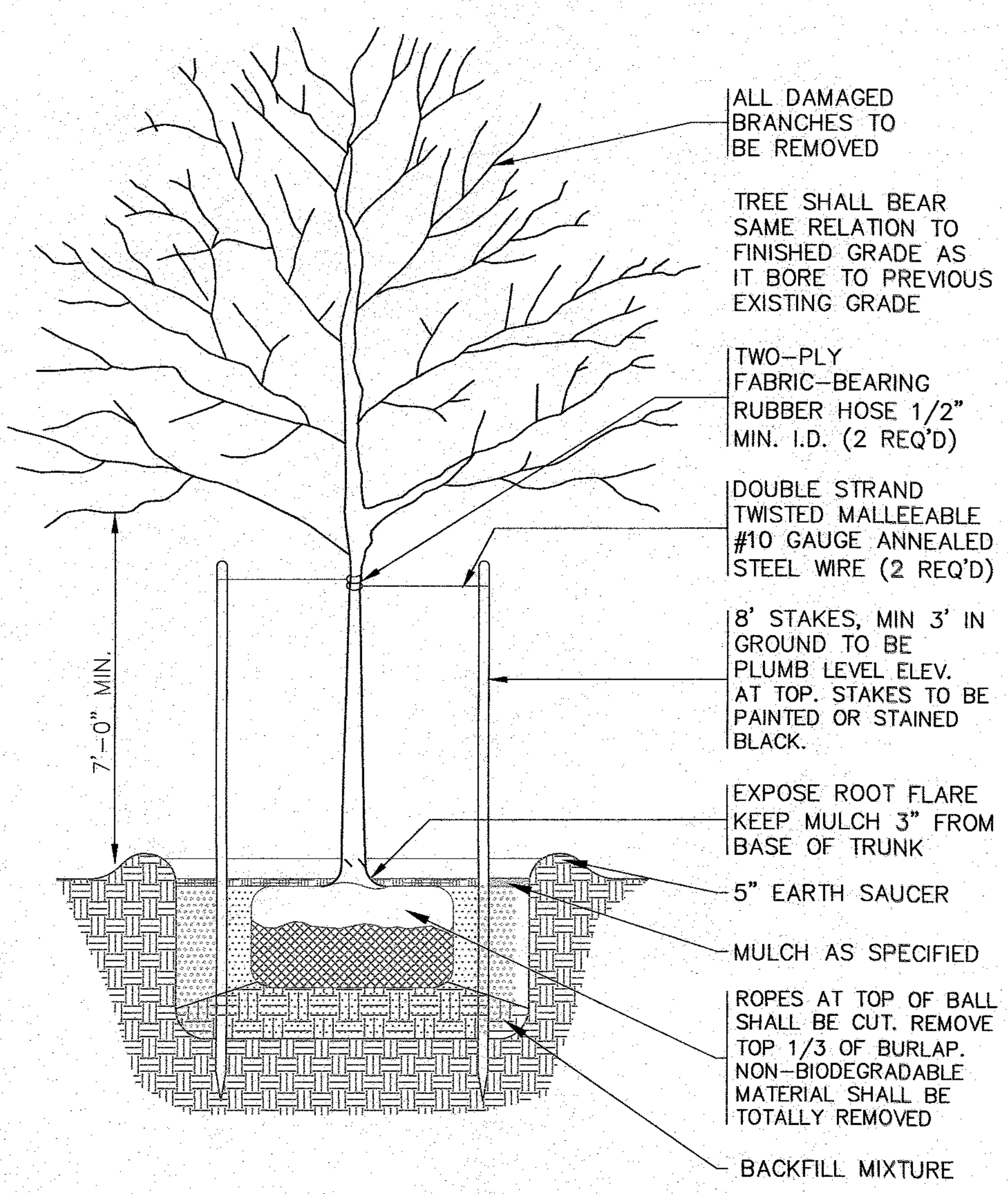


NOTES:

1. TANK SHALL BE MONOLITHIC, WATER TIGHT.
2. TANK SHALL MEET ALL REQUIREMENTS OF 310 CMR 15.230.
3. CONCRETE COLLAR SHALL MEET ALL MassDOT STANDARDS.
4. WHERE THE SEWER LINE CROSES THE STONE FILLED TRENCH, CENTER AND ENCASE SEWER PIPE IN 12"x12" CEMENT CONCRETE. SEWER PIPE CHALL BE ENCASED FOR THE ENTIRE WIDTH OF THE TRENCH AND A MINIMUM OF 24" BEYOND THE EDGE OF THE TRENCH.

**COMPARTMENTS SHALL BE INTERCONNECTED BY A 4" VENTED, INVERTED "H"-PIPE WHICH EXTENDS BELOW THE BOT. OF THE SCUM LAYER.

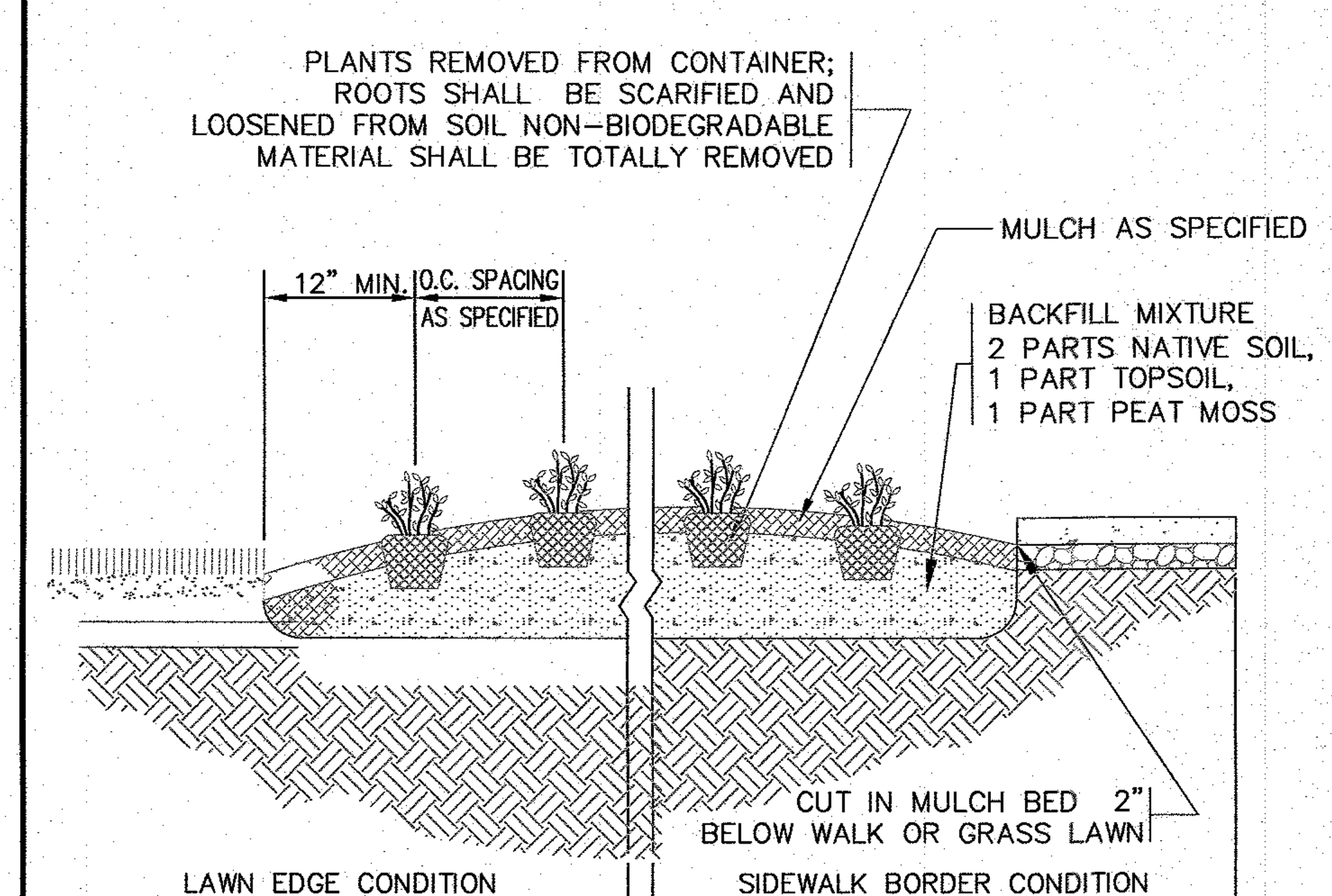
GREASE TRAP PROFILE
N.T.S./H-20 LOADING REQUIRED



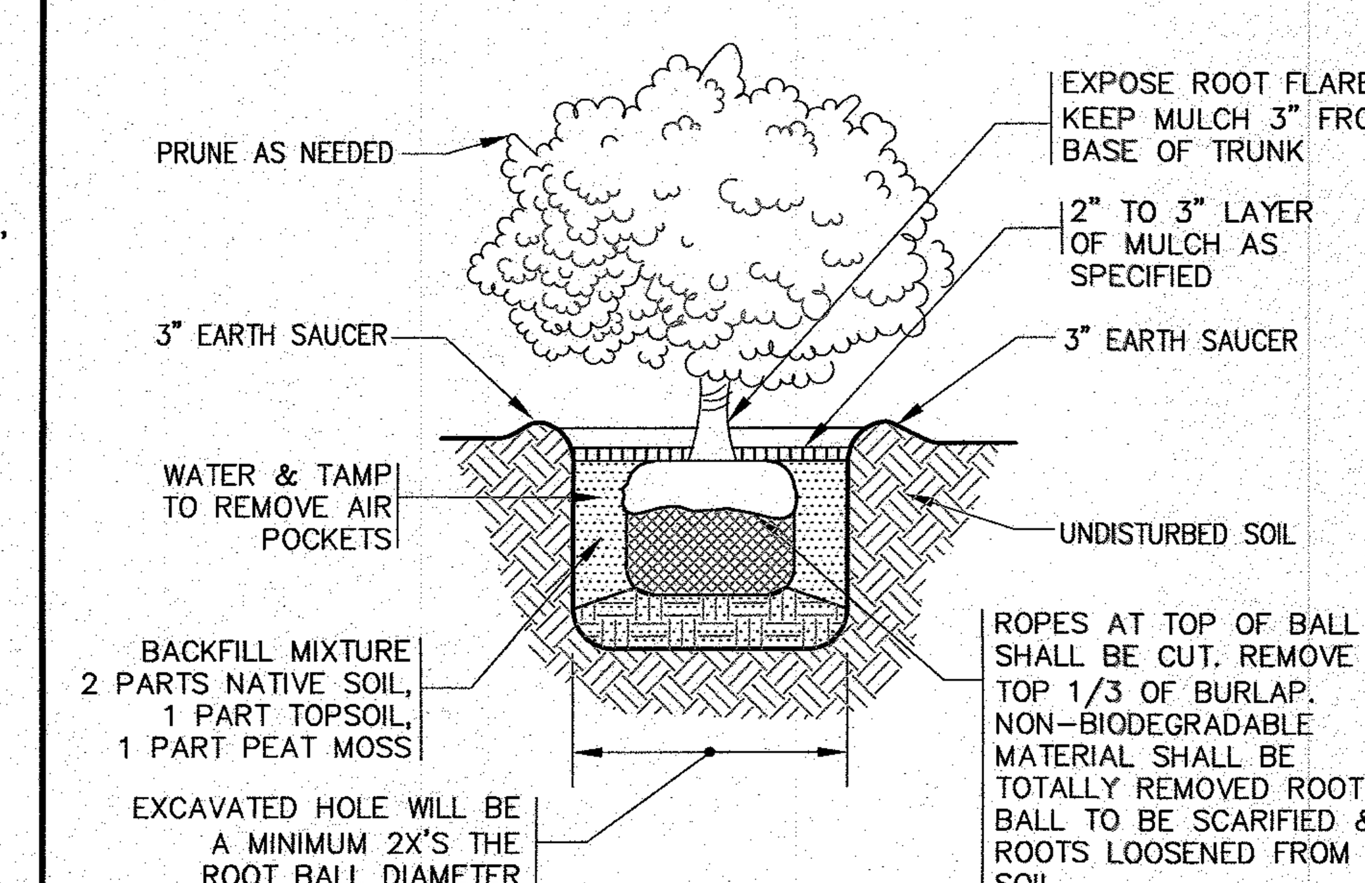
NOTES:

1. REFER TO LANDSCAPING PLAN FOR PLANTING LOCATIONS.

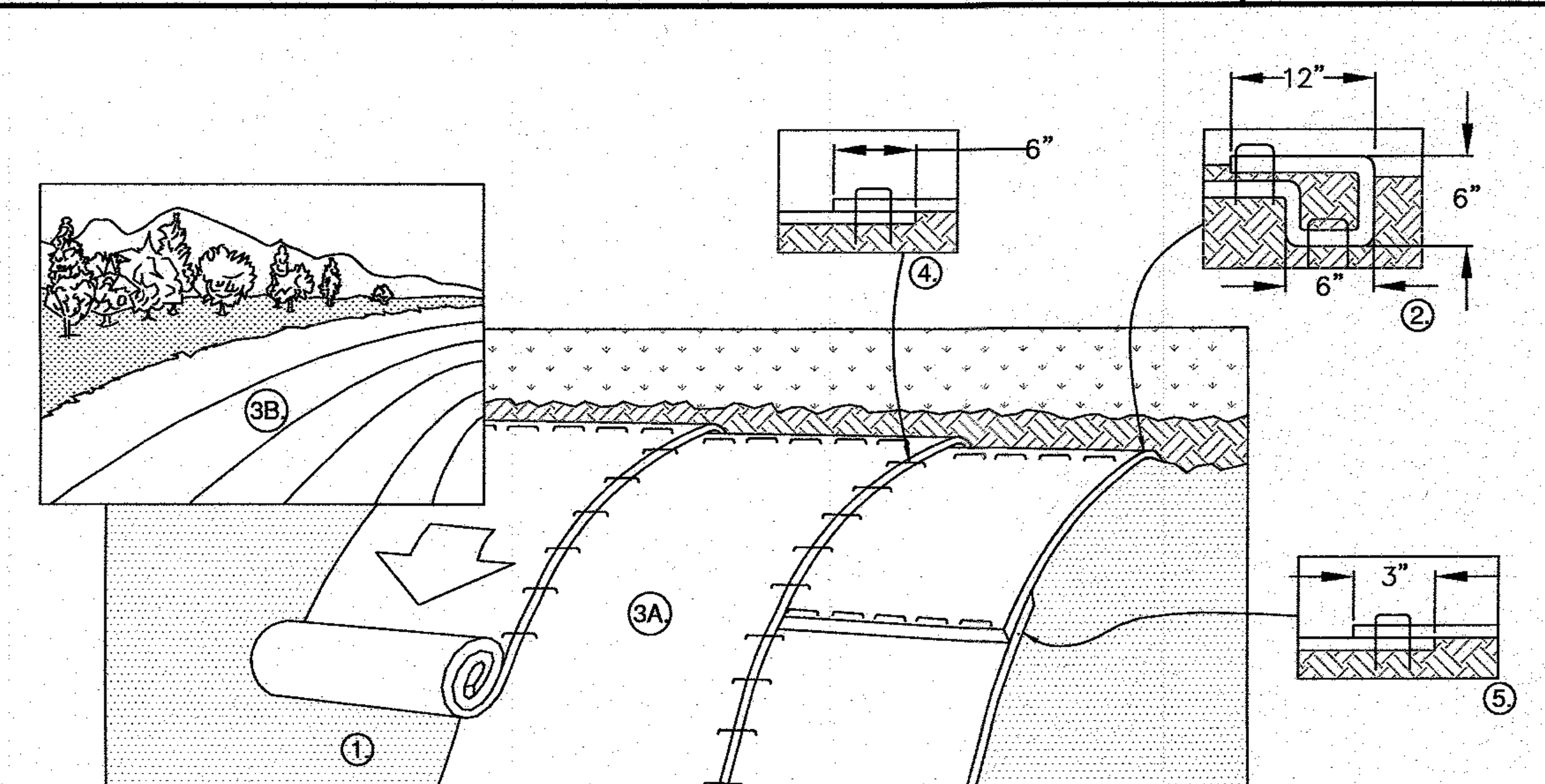
SHADE TREE PLANTING DETAIL
N.T.S.



GROUNDCOVER PLANTING DETAIL
N.T.S.



SHRUB PLANTING
N.T.S.



NOTES:

1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP's IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP's EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP's.
3. ROLL THE RECP's (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP's MUST BE STAPLED WITH APPROXIMATELY 6" OVERLAP.
5. CONSECUTIVE RECP's SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE RECP's WIDTH. NOTE: *IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE RECP's.
6. REFER TO NORTH AMERICAN GREEN FOR INSTALLATION METHODS AND STAPLE CONFIGURATION FOR PRODUCT #C125BN.

EROSION CONTROL BLANKET SLOPE DETAIL
N.T.S.

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266 MAIN STREET - WAREHAM, MA 02571
TEL: (508) 295-6600 FAX: (508) 295-6634
E-MAIL: info@gafenginc.com

SITE IMPROVEMENTS PLAN
DETAIL SHEET 3
3 KENDRICK ROAD WAREHAM, MA

PREPARED FOR:
3 KENDRICK ROAD, LLC
P.O. BOX 1135 MARION, MA

JOB NO.: 21-9731