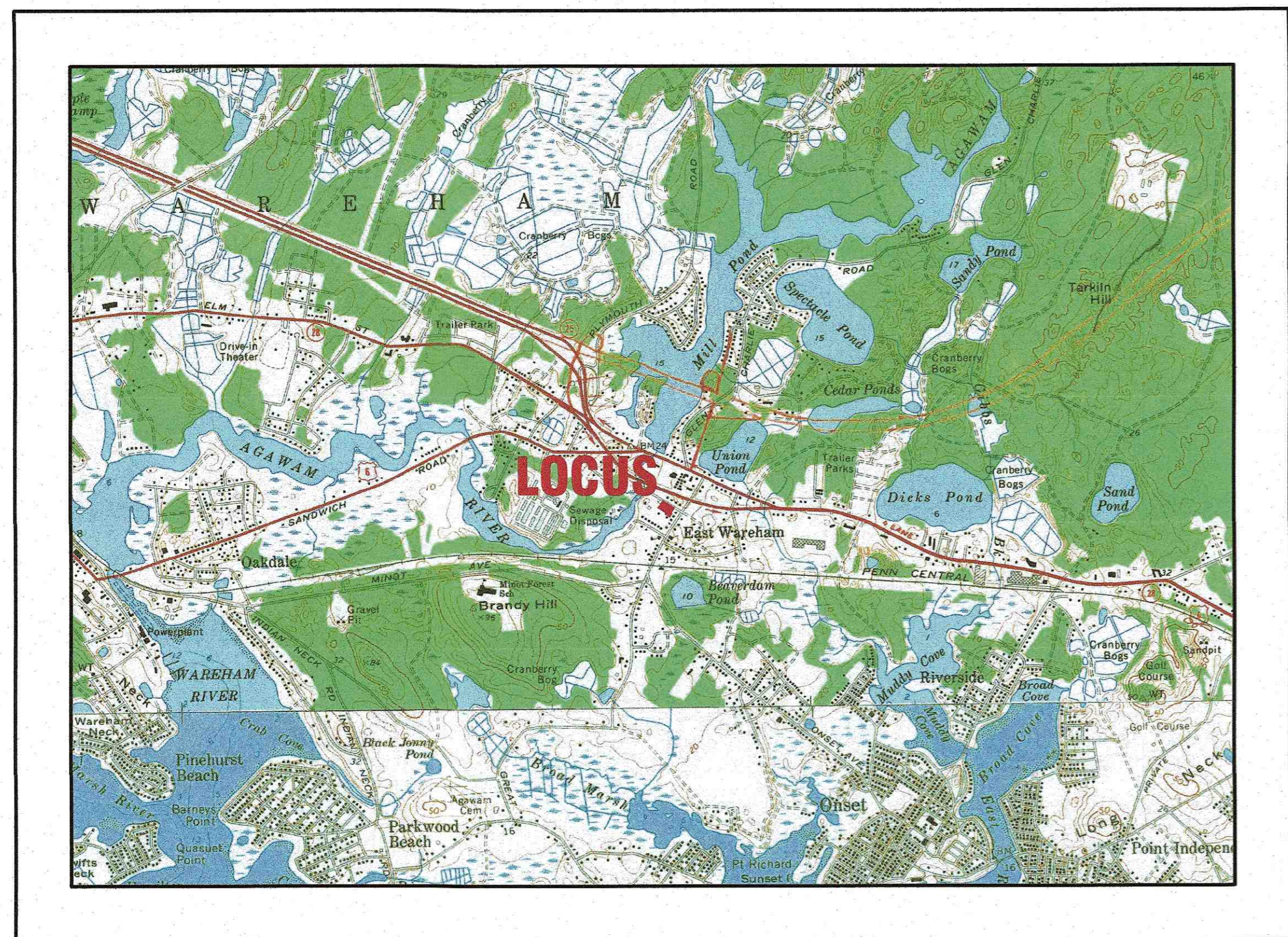


SITE DEVELOPMENT PLAN

6 CHAPEL LANE
WAREHAM, MASSACHUSETTS

OWNER: 6 CHAPEL LANE, LLC
19 DEPOT STREET
WAREHAM, MA 02571

APPLICANT: 6 CHAPEL LANE, LLC
19 DEPOT STREET
WAREHAM, MA 02571



— U.S.G.S. LOCUS PLAN —
SCALE: 1"=2000'



— AERIAL OVERVIEW —
SCALE: 1"=500'

SITE DATA

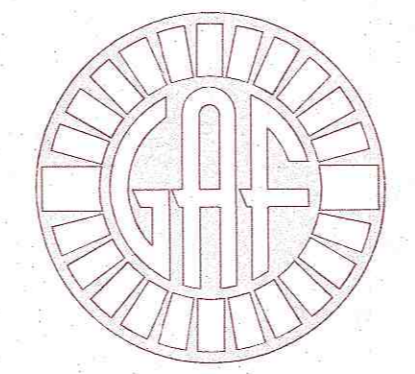
ZONING DISTRICT: MULTIPLE RESIDENCE 30
ASSESSOR'S MAP: 43
ASSESSOR'S LOTS: 1036, 1037.A, 1039, 1040.A & 1041.A
REQUIRED LOT AREA: 30,000 S.F.
REQUIRED ROAD FRONTAGE: 250'
FRONT SETBACK: 30'
SIDE & REAR SETBACK: 20'
MAX. PRINCIPAL BUILDING HEIGHT: 35'
MAX. BUILDING COVERAGE: 25%
MAX. LOT COVERAGE: NR
WATER SUPPLY: TOWN WATER
SANITARY SEWER: TOWN SEWER

ZONING DATA:

ZONING TABLE	ALLOWED	PROVIDED
LOT AREA:	30,000 S.F.	36,180± S.F. (EXISTING)
FRONTAGE:	250'	233.93' (EXISTING)
FRONT SETBACK:	30'	20.8'
SIDE SETBACK:	20'	25.0'
REAR SETBACK:	20'	65.3'
MAX. BUILDING COVERAGE:	25%	14.3%

PARKING DATA:

REQUIRED: 2 PARKING SPACES FOR EACH DWELLING UNIT
6 DWELLING UNITS=12 PARKING SPACES
TOTAL REQUIRED=12 PARKING SPACES
PROVIDED:
TOTAL PROVIDED=16 PARKING SPACES



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

NOVEMBER 14, 2022

PLAN INDEX:

SHEET NO.	DESCRIPTION:
1	COVER SHEET
2	GENERAL NOTES & LEGEND
3	EX. CONDITIONS & DEMOLITION
4	SITE OVERVIEW PLAN
5	LAYOUT & UTILITIES
6	GRADING & DRAINAGE
7	EROSION CONTROL PLAN
8	DETAIL SHEET 1
9	DETAIL SHEET 2
10	DETAIL SHEET 3

FLOOD ZONE DATE:

THE PROJECT IS LOCATED WITHIN FLOOD ZONE X (SHADED). REFER TO THE F.E.M.A. FLOOD INSURANCE RATE MAP PANEL NUMBER 25023C0493J, DATED JULY 17, 2012.

DATE: NOV. 14, 2022	REV.	DATE	BY	APPD	DESCRIPTION
DRAWN BY: JMP					
CHECKED BY: WFM					
JOB NO.: 20-9499					
SCALE: AS NOTED					
APPROVED BY:					
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 DEVELOPMENT PLAN COVER SHEET					
PREPARED FOR: 6 CHAPEL LANE, LLC 19 DEPOT STREET WAREHAM, MA					
JOB NO.: 20-9499					
DWG. 1 OF 10					

PERMIT SET
(NOT FOR CONSTRUCTION)

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.

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.

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.

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 PLANS.
- 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 EMPTY WHEN NEEDED AND REMOVE & DISPOSE OF THE SILT SACKS AT THE COMPLETION OF CONSTRUCTION. ALL EXISTING 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.

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. DEEP SUMP CATCH BASINS ARE UNDERGROUND RETENTION SYSTEMS DESIGNED TO REMOVE TRASH, DEBRIS AND COARSE SEDIMENT FROM STORMWATER RUNOFF AND SERVE AS TEMPORARY SPILL CONTAINMENT DEVICES FOR FLOATABLES SUCH AS OILS AND GREASE. INSPECT ALL CATCH BASINS MONTHLY AND CLEAN AT LEAST TWO TIMES PER YEAR AND AT THE END OF THE FOLIAGE AND SNOW-REMOVAL SEASONS. SEDIMENTS MUST ALSO BE REMOVED WHENEVER THE DEPTH OF DEPOSITS IS GREATER THAN OR EQUAL TO ONE HALF THE DEPTH FROM THE BOTTOM OF THE INVERT. SEDIMENT SHALL BE REMOVED THROUGH THE USE OF A VACUUM TRUCK. SEDIMENT MUST BE HANDLED AND DISPOSED OF PROPERLY IN ONE OF THE WAYS ALREADY APPROVED BY MASSDEP (SEE MASSDEP POLICY ON MANAGEMENT OF CATCH BASIN CLEANINGS). IF THERE IS ANY 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 30.00 AND HANDLED AS HAZARDOUS WASTE.

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:

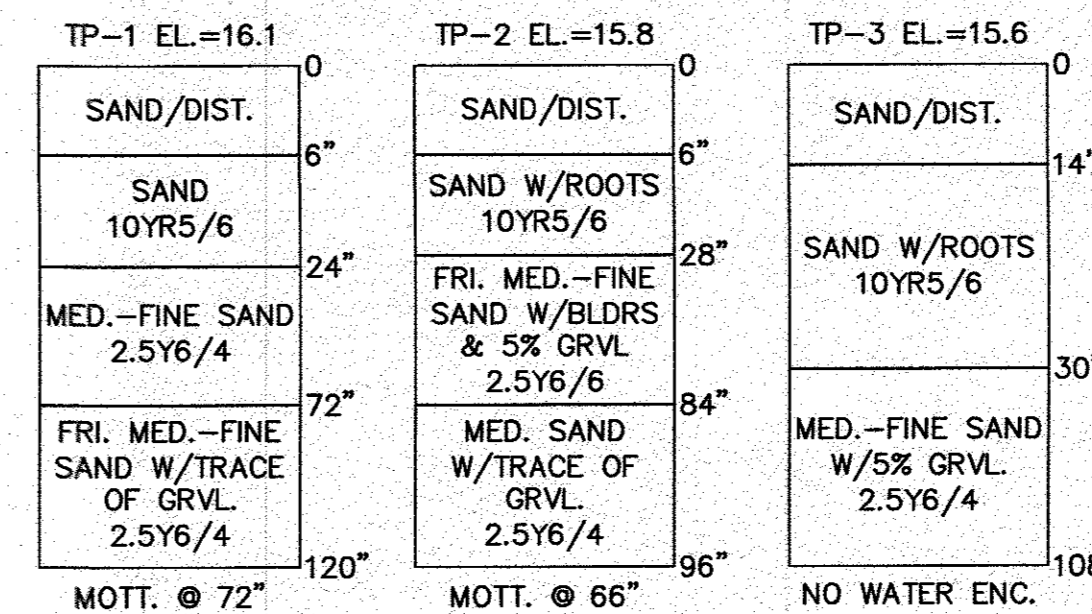
- 1. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE HIS/HER OWN DETERMINATION OF SUBSURFACE CONDITIONS, INCLUDING THE LOCATION OF ROCK AND THE ACTUAL LOCATION OF UTILITIES OR OTHER FEATURES WHICH MAY AFFECT HIS/HER WORK. ANY UNSUITABLE MATERIAL ENCOUNTERED DURING CONSTRUCTION WILL BE REPORTED TO THE ENGINEER OF RECORD FOR RESOLUTION AND CONSTRUCTION METHOD.
- 2. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND APPURTENANCES 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.

WATER INSTALLATION NOTES:

- 1. ALL WATER MAINS, SERVICES, GATE VALVES/GATE BOX, CURB STOPS, HYDRANTS, FITTINGS, ETC. & METHOD OF INSTALLATION SHALL CONFORM TO THE WAREHAM FIRE DISTRICT RULES & REGULATIONS.
- 2. WATER SERVICE SHALL BE FLUSHED TESTED & DISINFECTED IN ACCORDANCE WITH THE WAREHAM FIRE DISTRICT REQUIREMENTS.
- 3. CONTRACTOR TO COORDINATE WITH THE 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 WAREHAM FIRE DISTRICT BEFORE PROCEEDING WITH THE INSTALLATION OF THE WATER SERVICE.

TEST PIT DATA

DATE OF TESTING: JULY 28, 2022
PERFORMED BY: BRIAN GRADY, G.A.F. ENGINEERING INC.
REFER TO SHEET 3 FOR TEST PIT LOCATIONS



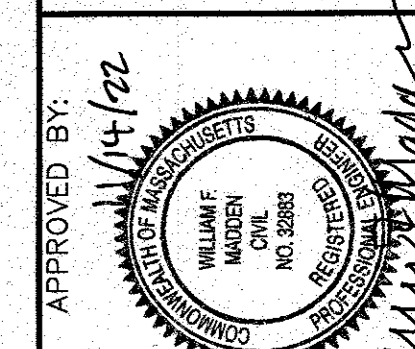
NOTE:
WHERE REQUIRED THE CONTRACTOR TO REMOVE ALL UNSUITABLE SOILS AND REPLACE WITH CLEAN SAND AND GRAVEL APPROVED BY DESIGN ENGINEER. SEE PLANS FOR DEPTHS AND LOCATIONS.

ABBREVIATIONS

AC	ASBESTIC CONCRETE
ADS	ADVANCED DRAINAGE SYSTEM
APPROX.	APPROXIMATE
BC	BOTTOM OF CURB
BIT. CONC.	BITUMINOUS CONCRETE
BLDRS	BOULDERS
BW	BOTTOM OF WALL
EVW	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.	CLEANOUT
C.L.D.I.	CEMENT LINED DUCTILE IRON
CMP	CORRUGATED METAL PIPE
CPP	CORRUGATED PLASTIC PIPE
C.T.B.	CONCRETE THRUST BLOCK
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
FOUND	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
PWW	PAVED WATERWAY
RAP	RECYCLED ASPHALT PRODUCT
RPC	REINFORCED CONCRETE PIPING
RADIUS	RADIUS
R	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 ELECTIC
VGC	VERTICAL GRANITE CURB
W	WATER
WG, WV	WATER GATE, WATER VALVE
WQS	WATER QUALITY STRUCTURE

DATE: NOV. 14, 2022
DRAWN BY: JMF
CHECKED BY: WFM
JOB NO.: 20-9499
SCALE: N.T.S.

APPROVED BY:



LEGEND

EXISTING	DESC.	PROPOSED
15	CONTOURS	15
15x5	SPOT GRADES	15x5
- - -	WETLANDS	- - -
- - -	30' NO ACTIVITY ZONE	- - -
- - -	100' BUFFER ZONE	- - -
- - -	200' RIVERFRONT AREA	- - -
- - -	F.E.M.A. FLOOD ZONE	- - -
D	DRAIN LINE	D
RD	ROOF DRAIN LINE	RD
⊞	CATCH BASIN (CB)	⊞
⊞	DRAIN MANHOLE (DMH)	⊞
⊞	ELECTRIC MANHOLE (EMH)	⊞
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
⊙	SEWER MANHOLE (SMH)	⊙
S	SEWER LINE	S
⊙	TREE/BRUSH LINE	⊙
⊙	LIGHT POST	⊙
G	GAS LINE	G
⊙	GAS GATE/VALVE	⊙
⊙	GAS SHUTOFF	⊙
⊙	GAS METER	⊙
⊙	SIGN	⊙
⊙	FENCE	⊙
⊙	BOUND	⊙
⊙	TEST PIT/PERC TEST	⊙
⊙	SILT FENCE	⊙
⊙	GUARD RAIL	⊙
⊙	FLARED END SECTION	⊙
⊙	STONE WALL	⊙
⊙	WELL	⊙

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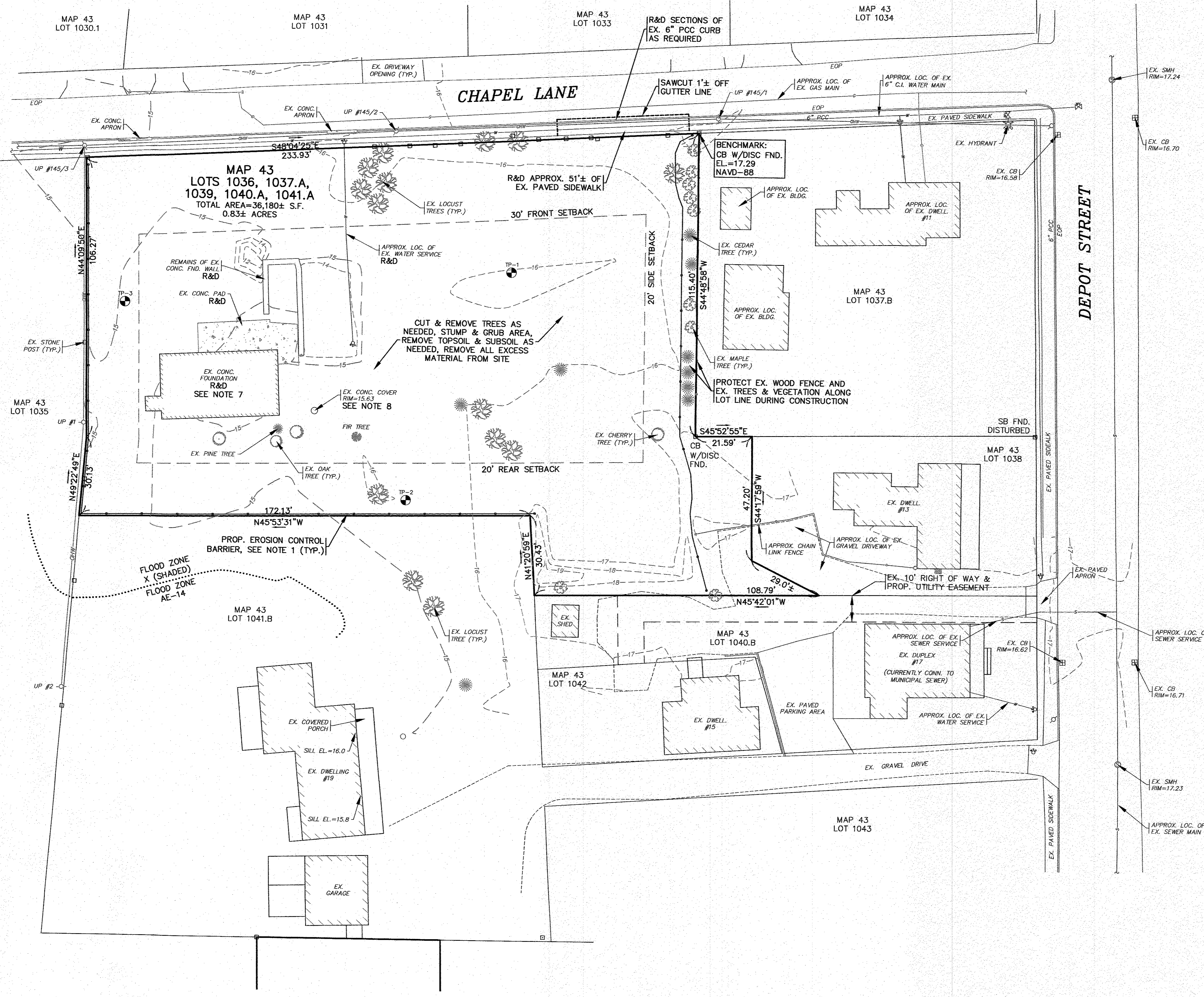
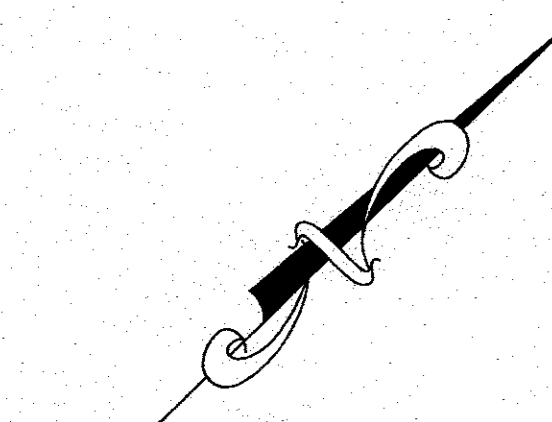
PREPARED FOR:
6 CHAPEL LANE
WAREHAM, MA

6 CHAPEL LANE, LLC
19 DEPOT STREET
WAREHAM, MA

SITE DEVELOPMENT PLAN
GENERAL NOTES & LEGEND

JOB NO.: 20-9499
DWG. 2 OF 10

PERMIT SET
(NOT FOR CONSTRUCTION)



EX. CONDITIONS & DEMOLITION PLAN

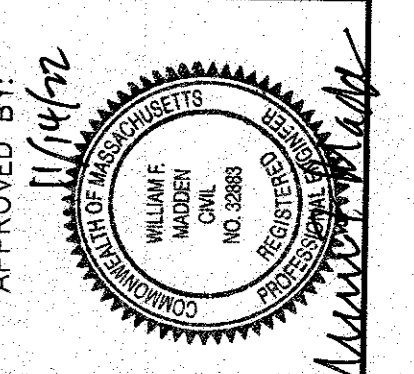
SCALE: 1"=20'
 0 20 40 80

- NOTES:**
- CONTRACTOR SHALL PROVIDE AND MAINTAIN STAKED SILT FENCE EROSION CONTROL BARRIERS WHERE SHOWN ON THE PLAN. SEE DETAIL ON SHEET 8. REFER TO THE COMPLETE SET OF EROSION CONTROL NOTES ON SHEET 2. EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL ALL VEGETATION IS ESTABLISHED.
 - ALL DEBRIS FROM DEMOLITION INCLUDING ANY PAVEMENT & CURBING REMOVAL, UTILITIES REMOVAL, STONE REMOVAL, FENCE REMOVAL, TREE CLEARING, STUMPING, GRUBBING, ETC. SHALL BE REMOVED FROM THE SITE AND NOT STOCKPILED UNLESS OTHERWISE NOTED.
 - CONTRACTOR SHALL CONFIRM THE EXACT LOCATIONS AND ELEVATIONS OF ALL EXISTING WATER LINES, SEWER LINES, ELECTRIC CONDUITS AND GAS LINES PRIOR TO CONSTRUCTION. ALL EXISTING UTILITY SERVICES SHALL BE REMOVED UNLESS OTHERWISE NOTED, COORDINATE WITH THE APPROPRIATE UTILITY COMPANY.
 - CONTRACTOR SHALL CONFIRM TYPE, SIZE AND ELEVATION OF EXISTING SEWER SERVICE PRIOR TO CONSTRUCTION. CONFIRM WITH WAREHAM SEWER DEPARTMENT AND ENGINEER.
 - REFER TO THE COMPLETE SET OF DEMOLITION NOTES ON SHEET 2.
 - ANY EXCAVATION/REMOVAL OF EXISTING FEATURES BELOW ADJACENT GRADE SHALL BE FILLED WITH COARSE SAND TO MATCH ADJACENT GRADE AS A TEMPORARY MEASURE PRIOR TO CONSTRUCTION.
 - AFTER REMOVAL OF THE EXISTING CONCRETE FOUNDATION THE AREA SHALL BE BACKFILLED WITH STRUCTURAL FILL AND COMPACTED TO MATCH ADJACENT GRADE.
 - CONTRACTOR TO CONFIRM PURPOSE OF EXISTING STRUCTURE BELOW CONCRETE COVER. THE STRUCTURE SHALL BE REMOVED IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.

REV.	DATE	BY	APPD.	DESCRIPTION

DATE: NOV. 14, 2022
 DRAWN BY: JWP
 CHECKED BY: WFM
 JOB NO.: 20-9499
 SCALE: 1" = 20'

APPROVED BY:



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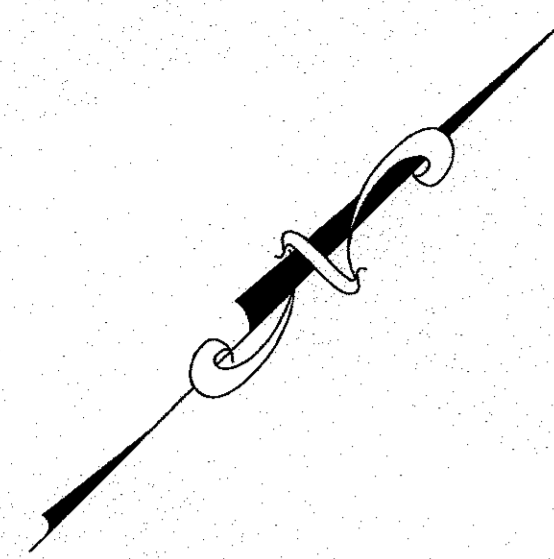
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SITE DEVELOPMENT PLAN
EX. CONDITIONS & DEMOLITION
 6 CHAPEL LANE WAREHAM, MA
 PREPARED FOR:
 6 CHAPEL LANE, LLC
 19 DEPOT STREET WAREHAM, MA

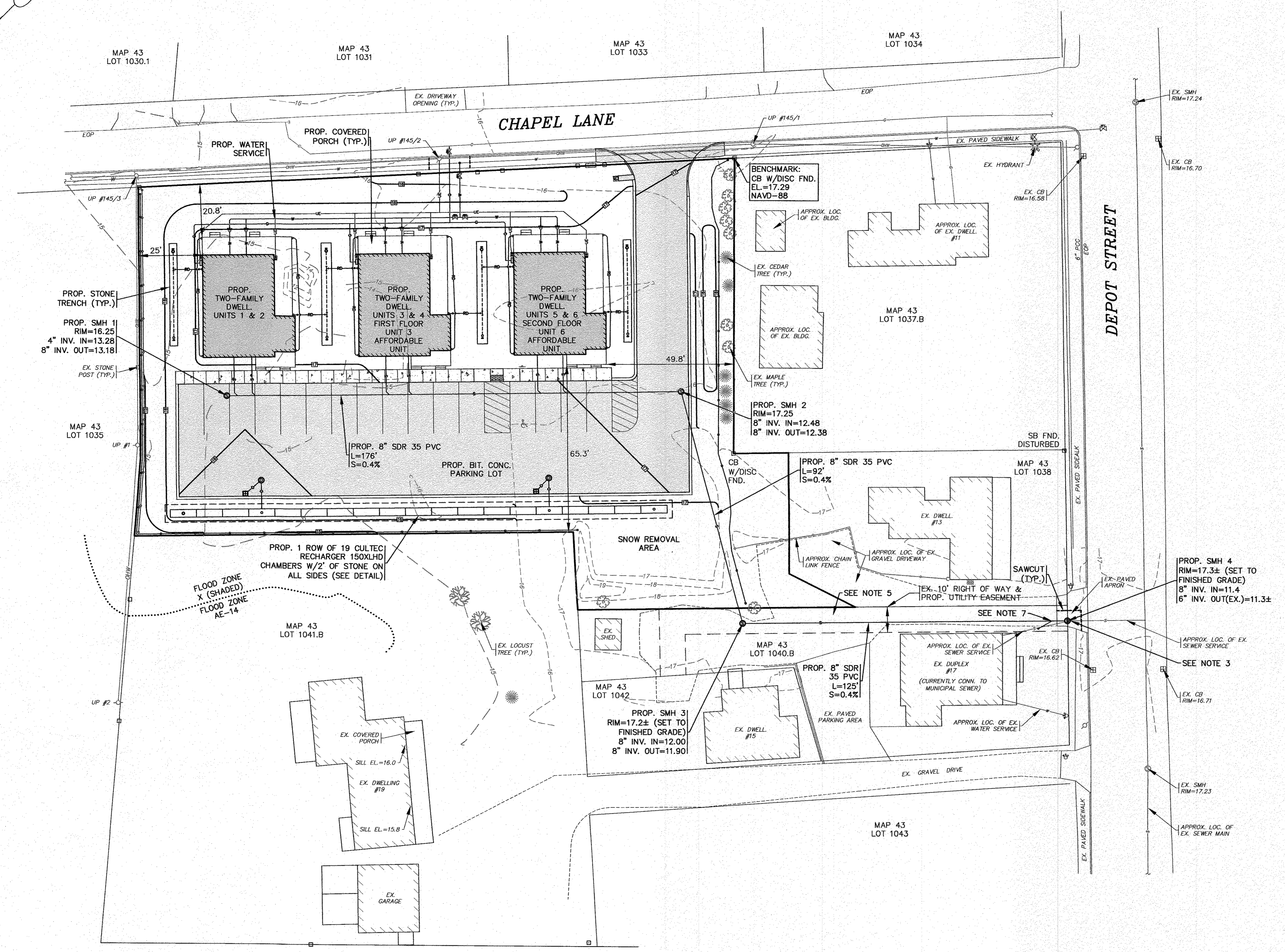
JOB NO.: 20-9499
 DWG. 3 OF 10

PERMIT SET
 (NOT FOR CONSTRUCTION)

H:\04\BRUNNCS\2020\BRUNNCS20-9499 (BEAUCEDM)\049810.dwg (1/19/23) DATEPLOT: 11/14/22



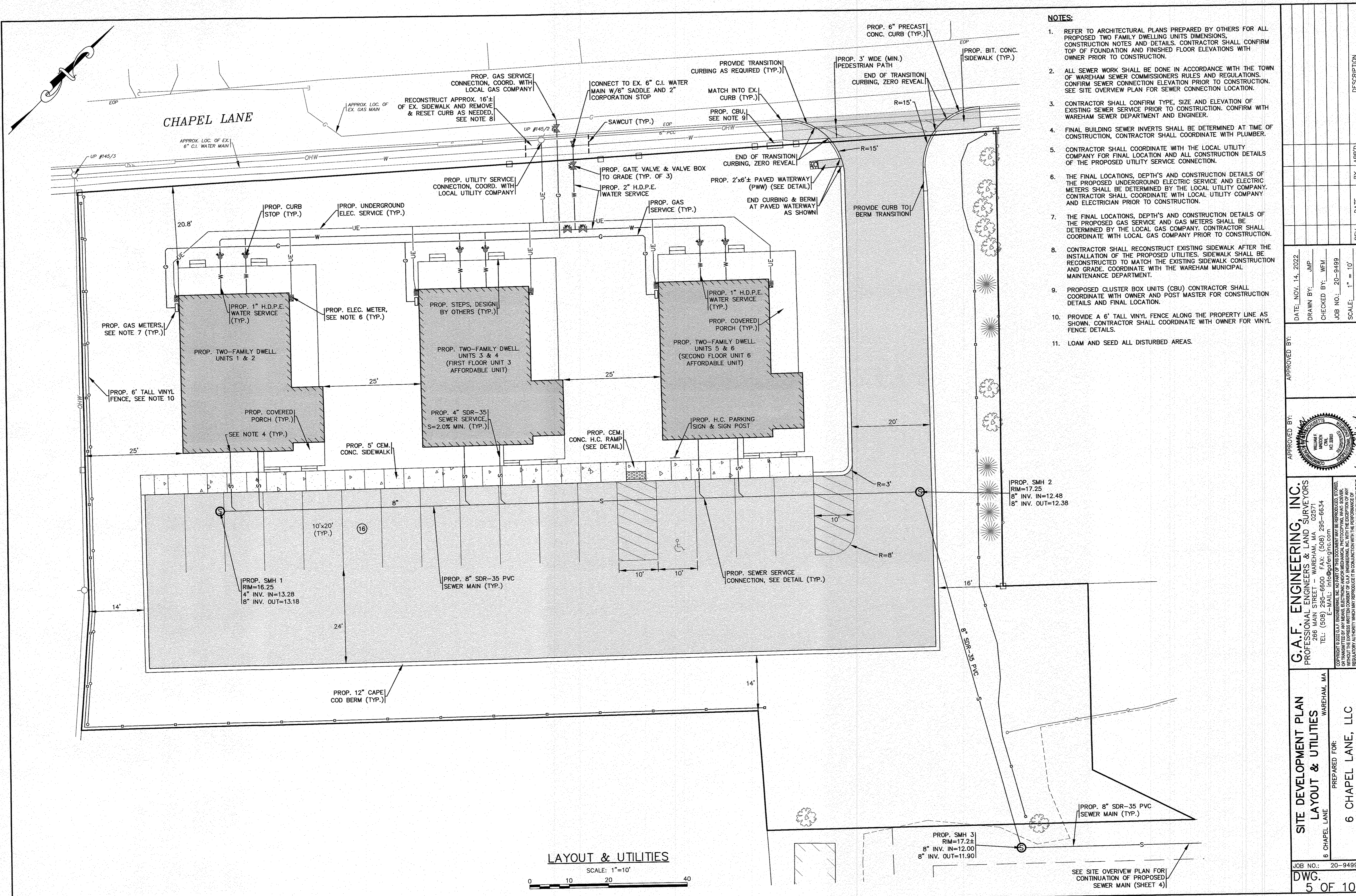
- NOTES:**
- REFER TO ARCHITECTURAL PLANS PREPARED BY OTHERS FOR ALL PROPOSED TWO FAMILY DWELLING UNITS DIMENSIONS, CONSTRUCTION NOTES AND DETAILS. CONTRACTOR SHALL CONFIRM TOP OF FOUNDATION AND FINISHED FLOOR ELEVATIONS WITH OWNER PRIOR TO CONSTRUCTION.
 - ALL SEWER WORK SHALL BE DONE IN ACCORDANCE WITH THE TOWN OF WAREHAM SEWER COMMISSIONERS RULES AND REGULATIONS. CONFIRM SEWER CONNECTION ELEVATION PRIOR TO CONSTRUCTION. SEE SITE OVERVIEW PLAN FOR SEWER CONNECTION LOCATION.
 - CONTRACTOR SHALL CONFIRM TYPE, SIZE AND ELEVATION OF EXISTING SEWER SERVICE PRIOR TO CONSTRUCTION. CONFIRM WITH WAREHAM SEWER DEPARTMENT AND ENGINEER.
 - FINAL BUILDING SEWER INVERTS SHALL BE DETERMINED AT TIME OF CONSTRUCTION, CONTRACTOR SHALL COORDINATE WITH PLUMBER.
 - CONTRACTOR SHALL RESTORE EXISTING GRAVEL DRIVEWAY & PAVED APRON AFTER THE INSTALLATION OF THE PROPOSED SEWER SERVICE AND MANHOLES.
 - LOAM AND SEED ALL DISTURBED AREAS.
 - CONNECT EX. 6" SEWER SERVICE TO NEW 8" SDR-35 PVC SEWER MAIN. CONTRACTOR SHALL CONFIRM ELEVATION AT TIME OF CONSTRUCTION. PROVIDE CLEAN OUT AS SHOWN.
 - CONFIRM FINAL SNOW REMOVAL AREA WITH OWNER.



SITE OVERVIEW PLAN
SCALE: 1"=20'

DATE: NOV. 8, 2022	DRAWN BY: JMP	CHECKED BY: WFM	JOB NO.: 20-9499	SCALE: 1" = 20'	REV.	DATE	BY	APPD	DESCRIPTION
APPROVED BY: [Signature]									
G.A.F. ENGINEERING, INC. PROFESSIONAL ENGINEERS & LAND SURVEYORS 266 MAIN STREET - WAREHAM, MA 02571 TEL: (508) 295-6800 FAX: (508) 295-6634 E-MAIL: info@gafeng.com									
PREPARED FOR: 6 CHAPEL LANE, LLC 19 DEPOT STREET WAREHAM, MA									
JOB NO.: 20-9499 DWG. 4 OF 10									

PERMIT SET
(NOT FOR CONSTRUCTION)



- NOTES:**
- REFER TO ARCHITECTURAL PLANS PREPARED BY OTHERS FOR ALL PROPOSED TWO FAMILY DWELLING UNITS DIMENSIONS. CONSTRUCTION NOTES AND DETAILS. CONTRACTOR SHALL CONFIRM TOP OF FOUNDATION AND FINISHED FLOOR ELEVATIONS WITH OWNER PRIOR TO CONSTRUCTION.
 - ALL SEWER WORK SHALL BE DONE IN ACCORDANCE WITH THE TOWN OF WAREHAM SEWER COMMISSIONERS RULES AND REGULATIONS. CONFIRM SEWER CONNECTION ELEVATION PRIOR TO CONSTRUCTION. SEE SITE OVERVIEW PLAN FOR SEWER CONNECTION LOCATION.
 - CONTRACTOR SHALL CONFIRM TYPE, SIZE AND ELEVATION OF EXISTING SEWER SERVICE PRIOR TO CONSTRUCTION. CONFIRM WITH WAREHAM SEWER DEPARTMENT AND ENGINEER.
 - FINAL BUILDING SEWER INVERTS SHALL BE DETERMINED AT TIME OF CONSTRUCTION, CONTRACTOR SHALL COORDINATE WITH PLUMBER.
 - CONTRACTOR SHALL COORDINATE WITH THE LOCAL UTILITY COMPANY FOR FINAL LOCATION AND ALL CONSTRUCTION DETAILS OF THE PROPOSED UTILITY SERVICE CONNECTION.
 - THE FINAL LOCATIONS, DEPTHS AND CONSTRUCTION DETAILS OF THE PROPOSED UNDERGROUND ELECTRIC SERVICE AND ELECTRIC METERS SHALL BE DETERMINED BY THE LOCAL UTILITY COMPANY. CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANY AND ELECTRICIAN PRIOR TO CONSTRUCTION.
 - THE FINAL LOCATIONS, DEPTHS AND CONSTRUCTION DETAILS OF THE PROPOSED GAS SERVICE AND GAS METERS SHALL BE DETERMINED BY THE LOCAL GAS COMPANY. CONTRACTOR SHALL COORDINATE WITH LOCAL GAS COMPANY PRIOR TO CONSTRUCTION.
 - CONTRACTOR SHALL RECONSTRUCT EXISTING SIDEWALK AFTER THE INSTALLATION OF THE PROPOSED UTILITIES. SIDEWALK SHALL BE RECONSTRUCTED TO MATCH THE EXISTING SIDEWALK CONSTRUCTION AND GRADE. COORDINATE WITH THE WAREHAM MUNICIPAL MAINTENANCE DEPARTMENT.
 - PROPOSED CLUSTER BOX UNITS (CBU) CONTRACTOR SHALL COORDINATE WITH OWNER AND POST MASTER FOR CONSTRUCTION DETAILS AND FINAL LOCATION.
 - PROVIDE A 6' TALL VINYL FENCE ALONG THE PROPERTY LINE AS SHOWN. CONTRACTOR SHALL COORDINATE WITH OWNER FOR VINYL FENCE DETAILS.
 - LOAM AND SEED ALL DISTURBED AREAS.

DATE: NOV. 14, 2022	APPROVED BY:
DRAWN BY: JMP	
CHECKED BY: WFM	APPROVED BY: <i>Armedy W. W.</i>
JOB NO.: 20-9499	
SCALE: 1" = 10'	

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

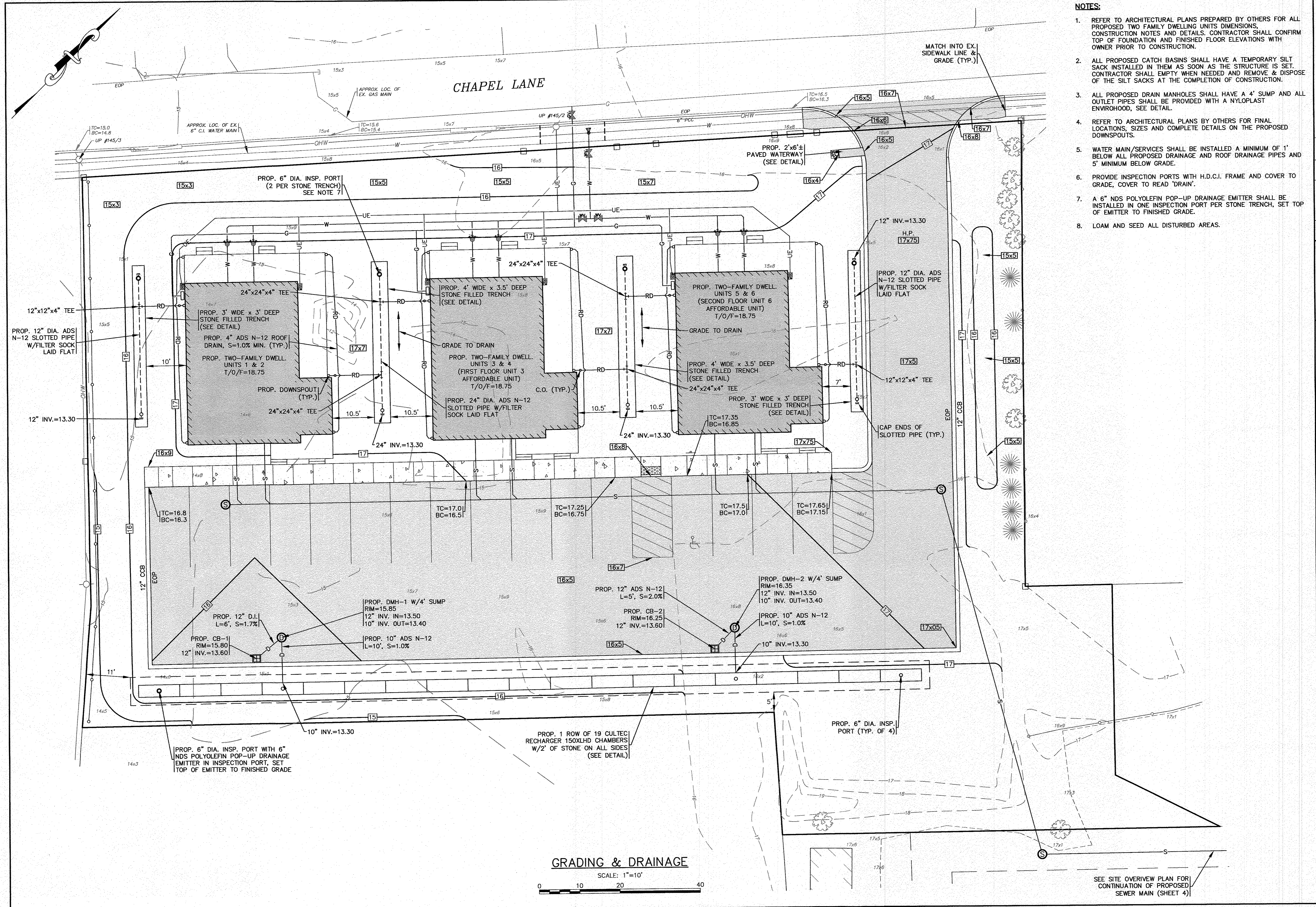
SITE DEVELOPMENT PLAN
LAYOUT & UTILITIES
 WAREHAM, MA

PREPARED FOR:
6 CHAPEL LANE, LLC
 WAREHAM, MA

JOB NO.: 20-9499
 DWG. 5 OF 10

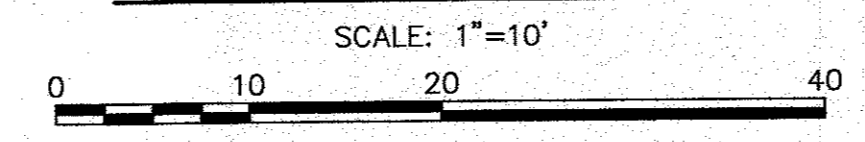
LAYOUT & UTILITIES
 SCALE: 1"=10'
 0 10 20 40

SEE SITE OVERVIEW PLAN FOR CONTINUATION OF PROPOSED SEWER MAIN (SHEET 4)



- NOTES:**
- REFER TO ARCHITECTURAL PLANS PREPARED BY OTHERS FOR ALL PROPOSED TWO FAMILY DWELLING UNITS DIMENSIONS. CONSTRUCTION NOTES AND DETAILS. CONTRACTOR SHALL CONFIRM TOP OF FOUNDATION AND FINISHED FLOOR ELEVATIONS WITH OWNER PRIOR TO CONSTRUCTION.
 - ALL PROPOSED CATCH BASINS SHALL HAVE A TEMPORARY SILT SACK INSTALLED IN THEM AS SOON AS THE STRUCTURE IS SET. CONTRACTOR SHALL EMPTY WHEN NEEDED AND REMOVE & DISPOSE OF THE SILT SACKS AT THE COMPLETION OF CONSTRUCTION.
 - ALL PROPOSED DRAIN MANHOLES SHALL HAVE A 4' SUMP AND ALL OUTLET PIPES SHALL BE PROVIDED WITH A NYLOPLAST ENVIROHOOD, SEE DETAIL.
 - REFER TO ARCHITECTURAL PLANS BY OTHERS FOR FINAL LOCATIONS, SIZES AND COMPLETE DETAILS ON THE PROPOSED DOWNSPOUTS.
 - WATER MAIN/SERVICES SHALL BE INSTALLED A MINIMUM OF 1' BELOW ALL PROPOSED DRAINAGE AND ROOF DRAINAGE PIPES AND 5' MINIMUM BELOW GRADE.
 - PROVIDE INSPECTION PORTS WITH H.D.C.I. FRAME AND COVER TO GRADE, COVER TO READ 'DRAIN'.
 - A 6" NDS POLYOLEFIN POP-UP DRAINAGE EMITTER SHALL BE INSTALLED IN ONE INSPECTION PORT PER STONE TRENCH, SET TOP OF EMITTER TO FINISHED GRADE.
 - LOAM AND SEED ALL DISTURBED AREAS.

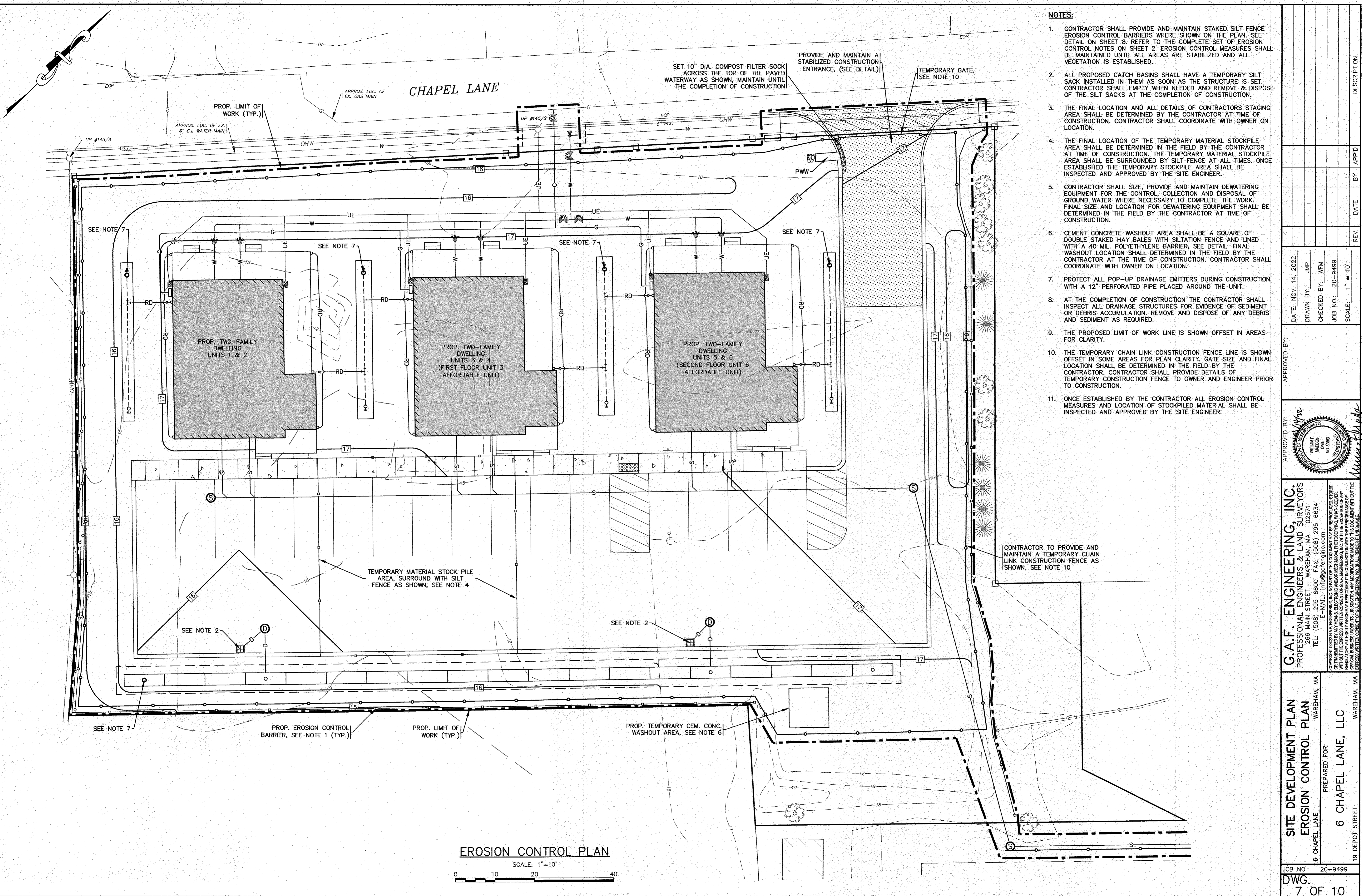
GRADING & DRAINAGE



SEE SITE OVERVIEW PLAN FOR CONTINUATION OF PROPOSED SEWER MAIN (SHEET 4)

DATE: NOV. 14, 2022	DRAWN BY: JMP	CHECKED BY: WEM	JOB NO.: 20-9499	SCALE: 1" = 10'	DESCRIPTION
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APPROVED BY:					REV.
APPROVED BY:					BY
APPROVED BY:					APP'D
<p>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@gafengr.com</p>					
<p>SITE DEVELOPMENT PLAN GRADING & DRAINAGE 6 CHAPEL LANE WAREHAM, MA</p>					
<p>PREPARED FOR: 6 CHAPEL LANE, LLC 19 DEPOT STREET WAREHAM, MA</p>					
<p>JOB NO.: 20-9499 DWG. 6 OF 10</p>					

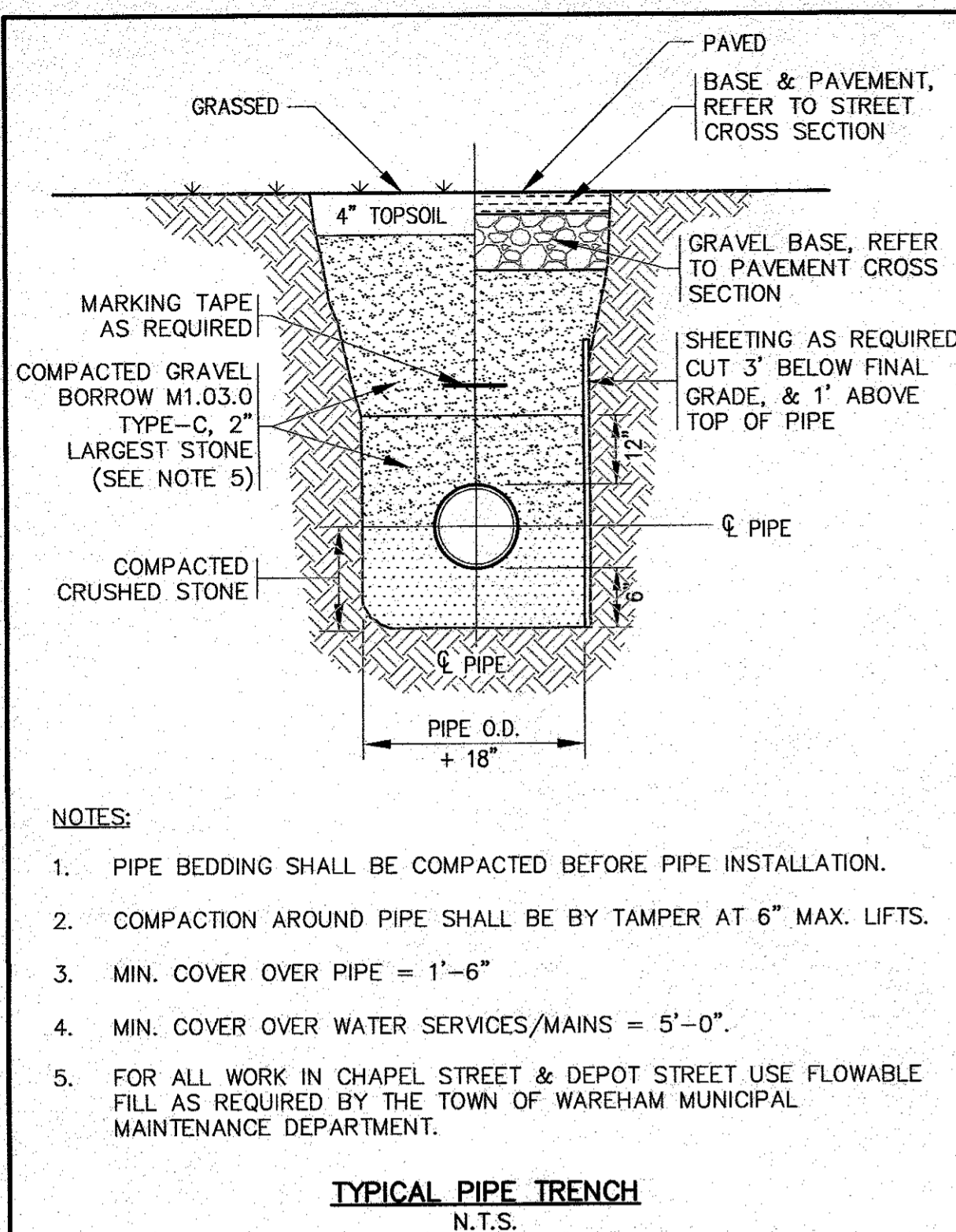
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- NOTES:**
- CONTRACTOR SHALL PROVIDE AND MAINTAIN STAKED SILT FENCE EROSION CONTROL BARRIERS WHERE SHOWN ON THE PLAN. SEE DETAIL ON SHEET 8. REFER TO THE COMPLETE SET OF EROSION CONTROL NOTES ON SHEET 2. EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL ALL AREAS ARE STABILIZED AND ALL VEGETATION IS ESTABLISHED.
 - ALL PROPOSED CATCH BASINS SHALL HAVE A TEMPORARY SILT SACK INSTALLED IN THEM AS SOON AS THE STRUCTURE IS SET. CONTRACTOR SHALL EMPTY WHEN NEEDED AND REMOVE & DISPOSE OF THE SILT SACKS AT THE COMPLETION OF CONSTRUCTION.
 - THE FINAL LOCATION AND ALL DETAILS OF CONTRACTORS STAGING AREA SHALL BE DETERMINED BY THE CONTRACTOR AT TIME OF CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH OWNER ON LOCATION.
 - THE FINAL LOCATION OF THE TEMPORARY MATERIAL STOCKPILE AREA SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR AT TIME OF CONSTRUCTION. THE TEMPORARY MATERIAL STOCKPILE AREA SHALL BE SURROUNDED BY SILT FENCE AT ALL TIMES. ONCE ESTABLISHED THE TEMPORARY STOCKPILE AREA SHALL BE INSPECTED AND APPROVED BY THE SITE ENGINEER.
 - CONTRACTOR SHALL SIZE, PROVIDE AND MAINTAIN DEWATERING EQUIPMENT FOR THE CONTROL, COLLECTION AND DISPOSAL OF GROUND WATER WHERE NECESSARY TO COMPLETE THE WORK. FINAL SIZE AND LOCATION FOR DEWATERING EQUIPMENT SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR AT TIME OF CONSTRUCTION.
 - 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 LOCATION SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR AT THE TIME OF CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH OWNER ON LOCATION.
 - PROTECT ALL POP-UP DRAINAGE EMITTERS DURING CONSTRUCTION WITH A 12" PERFORATED PIPE PLACED AROUND THE UNIT.
 - AT THE COMPLETION OF CONSTRUCTION THE CONTRACTOR SHALL INSPECT ALL DRAINAGE STRUCTURES FOR EVIDENCE OF SEDIMENT OR DEBRIS ACCUMULATION. REMOVE AND DISPOSE OF ANY DEBRIS AND SEDIMENT AS REQUIRED.
 - THE PROPOSED LIMIT OF WORK LINE IS SHOWN OFFSET IN AREAS FOR CLARITY.
 - THE TEMPORARY CHAIN LINK CONSTRUCTION FENCE LINE IS SHOWN OFFSET IN SOME AREAS FOR PLAN CLARITY. GATE SIZE AND FINAL LOCATION SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR. CONTRACTOR SHALL PROVIDE DETAILS OF TEMPORARY CONSTRUCTION FENCE TO OWNER AND ENGINEER PRIOR TO CONSTRUCTION.
 - ONCE ESTABLISHED BY THE CONTRACTOR ALL EROSION CONTROL MEASURES AND LOCATION OF STOCKPILED MATERIAL SHALL BE INSPECTED AND APPROVED BY THE SITE ENGINEER.

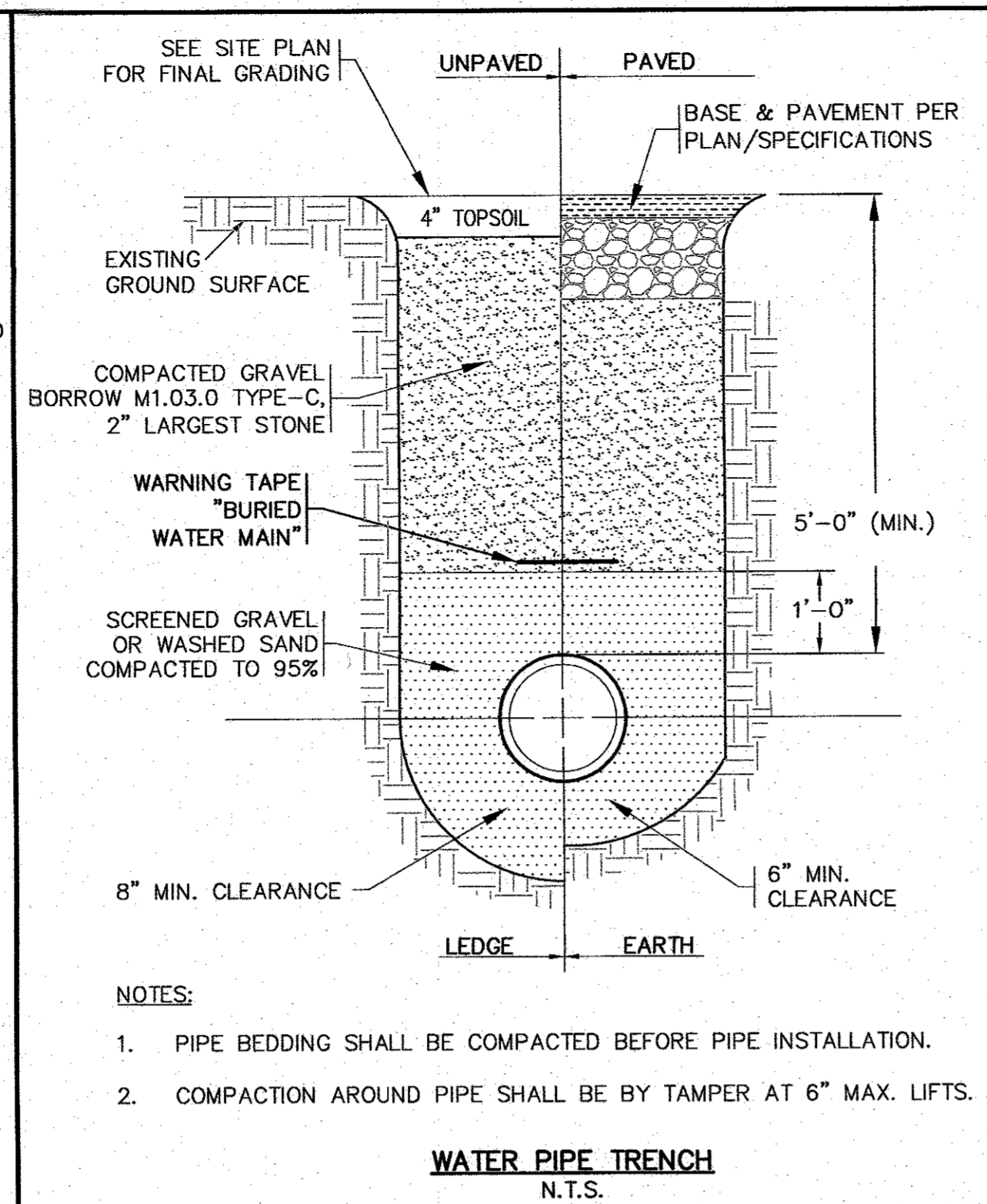
EROSION CONTROL PLAN
SCALE: 1"=10'
0 10 20 40

DATE: NOV. 14, 2022		APPROVED BY:	
DRAWN BY: J.M.P.	CHECKED BY: W.F.M.	APPROVED BY: <i>[Signature]</i>	
JOB NO.: 20-8499	SCALE: 1"=10'	REV.	DATE
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@gafenrinc.com		PREPARED FOR: 6 CHAPEL LANE, LLC 19 DEPOT STREET WAREHAM, MA	
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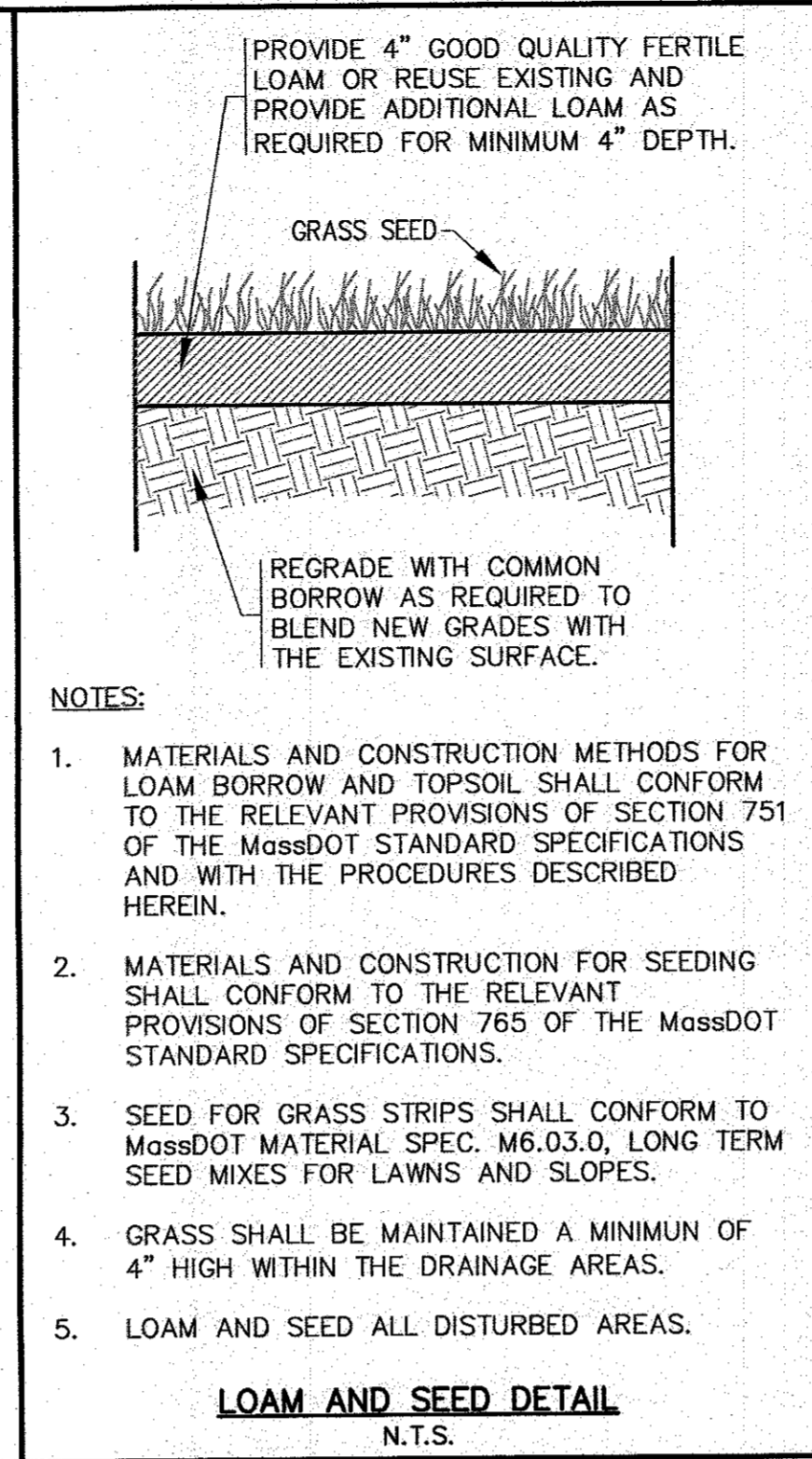
- NOTES:**
- PIPE BEDDING SHALL BE COMPACTED BEFORE PIPE INSTALLATION.
 - COMPACTION AROUND PIPE SHALL BE BY TAMPER AT 6" MAX. LIFTS.
 - MIN. COVER OVER PIPE = 1'-6"
 - MIN. COVER OVER WATER SERVICES/MAINS = 5'-0"
 - FOR ALL WORK IN CHAPEL STREET & DEPOT STREET USE FLOWABLE FILL AS REQUIRED BY THE TOWN OF WAREHAM MUNICIPAL MAINTENANCE DEPARTMENT.

TYPICAL PIPE TRENCH
N.T.S.



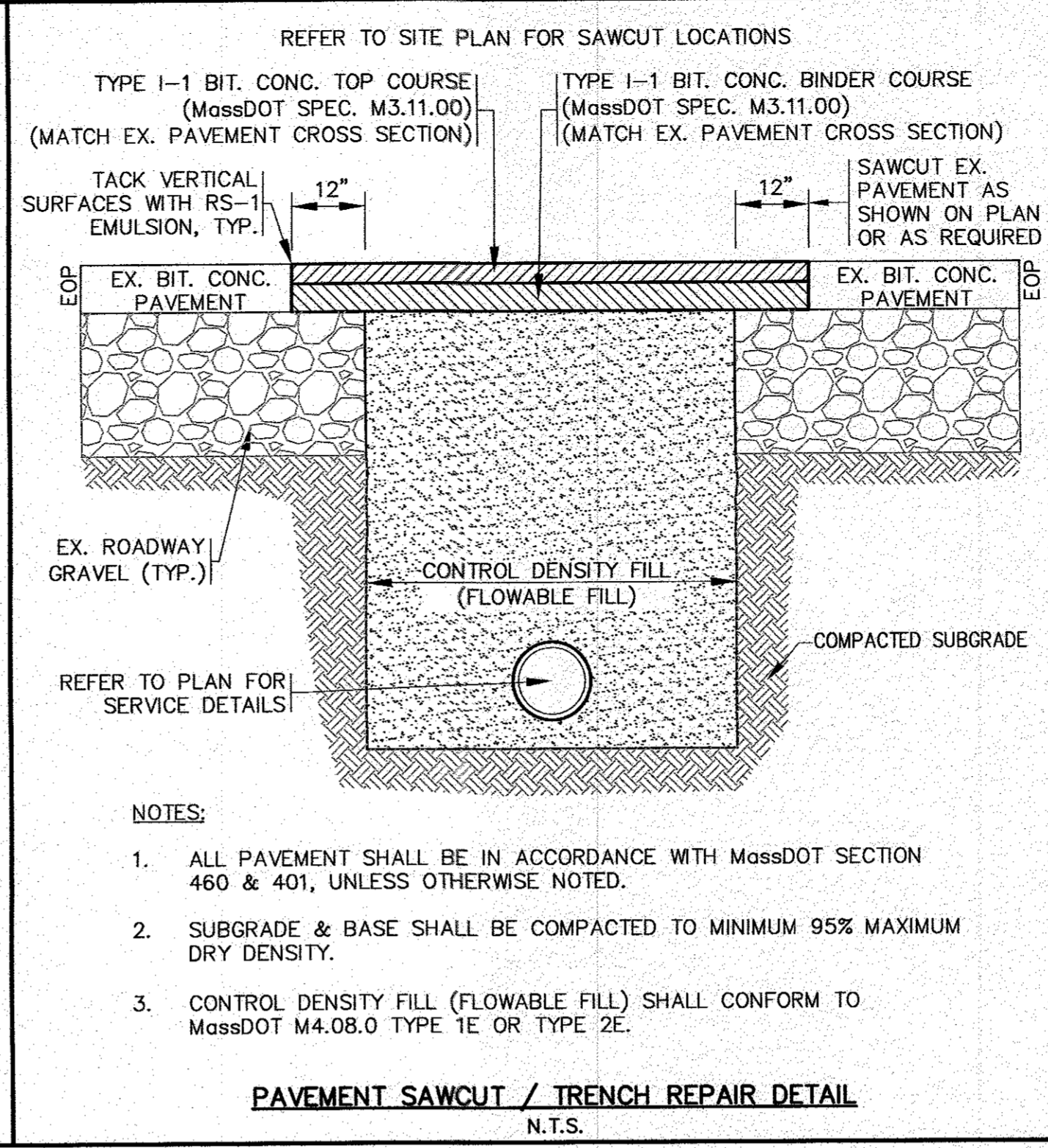
- NOTES:**
- PIPE BEDDING SHALL BE COMPACTED BEFORE PIPE INSTALLATION.
 - COMPACTION AROUND PIPE SHALL BE BY TAMPER AT 6" MAX. LIFTS.

WATER PIPE TRENCH
N.T.S.



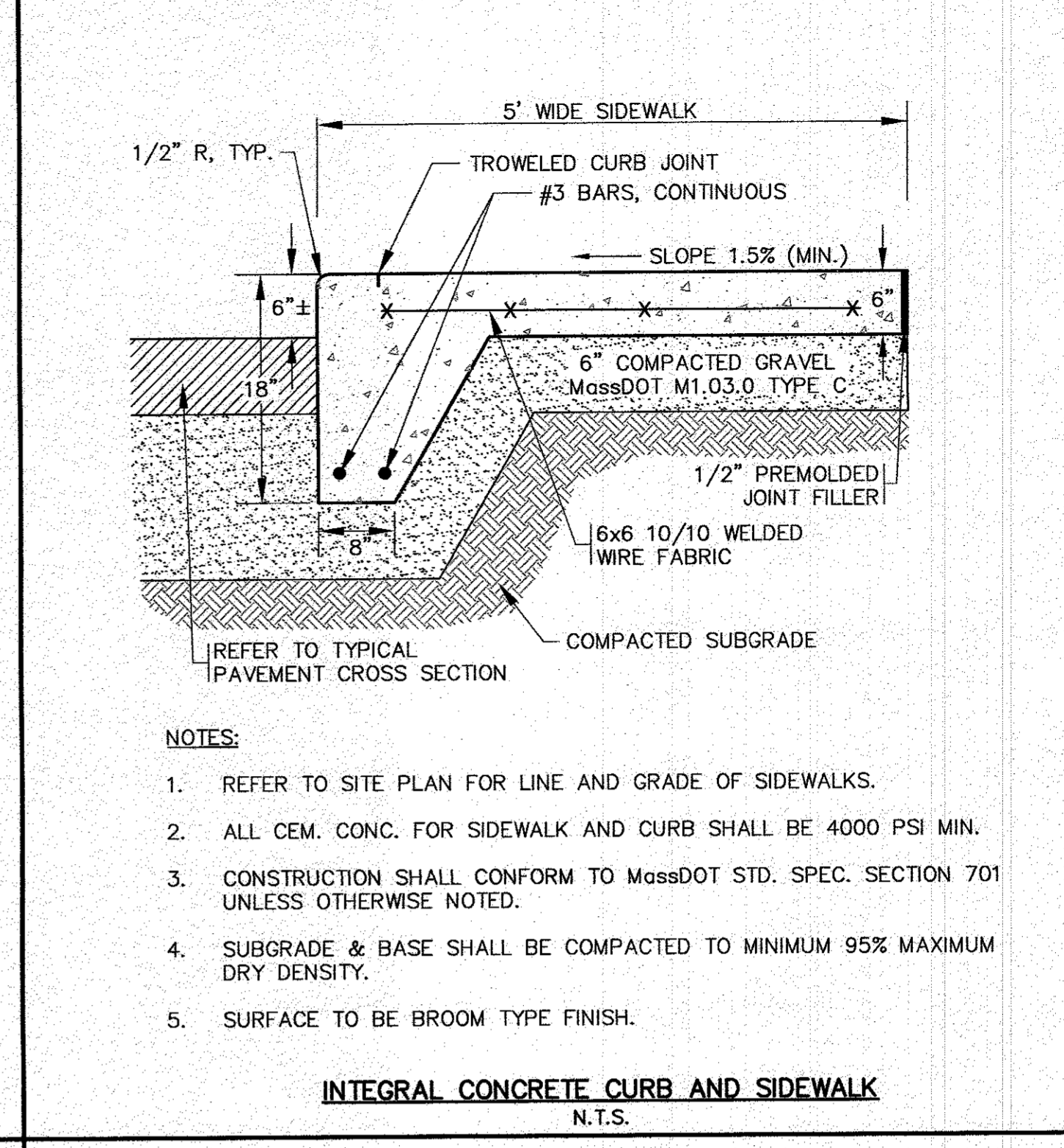
- NOTES:**
- MATERIALS AND CONSTRUCTION METHODS FOR LOAM BORROW AND TOPSOIL SHALL CONFORM TO THE RELEVANT PROVISIONS OF SECTION 751 OF THE MassDOT STANDARD SPECIFICATIONS AND WITH THE PROCEDURES DESCRIBED HEREIN.
 - MATERIALS AND CONSTRUCTION FOR SEEDING SHALL CONFORM TO THE RELEVANT PROVISIONS OF SECTION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

LOAM AND SEED DETAIL
N.T.S.



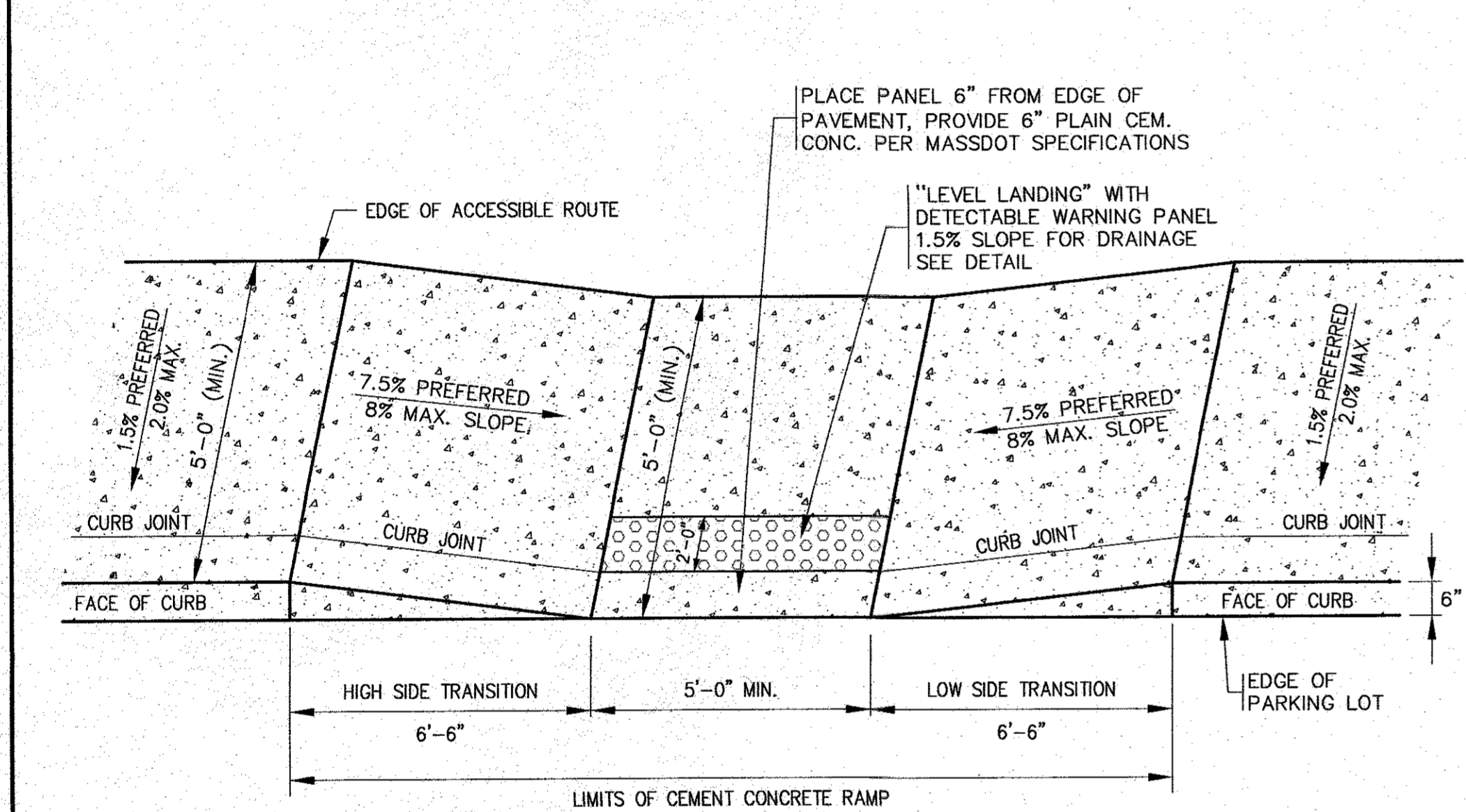
- NOTES:**
- ALL PAVEMENT SHALL BE IN ACCORDANCE WITH MassDOT SECTION 460 & 401, UNLESS OTHERWISE NOTED.
 - SUBGRADE & BASE SHALL BE COMPACTED TO MINIMUM 95% MAXIMUM DRY DENSITY.
 - CONTROL DENSITY FILL (FLOWABLE FILL) SHALL CONFORM TO MassDOT M4.08.0 TYPE 1E OR TYPE 2E.

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



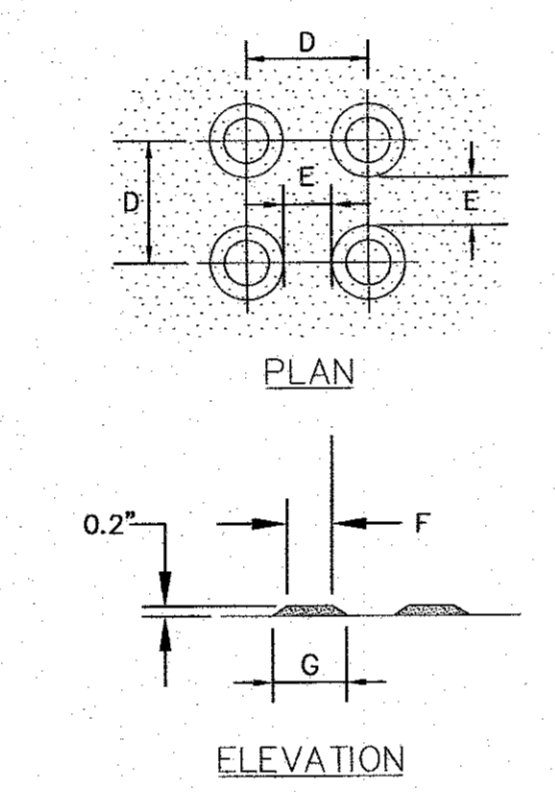
- NOTES:**
- REFER TO SITE PLAN FOR LINE AND GRADE OF SIDEWALKS.
 - ALL CEM. CONC. FOR SIDEWALK AND CURB SHALL BE 4000 PSI MIN.
 - CONSTRUCTION SHALL CONFORM TO MassDOT STD. SPEC. SECTION 701 UNLESS OTHERWISE NOTED.
 - SUBGRADE & BASE SHALL BE COMPACTED TO MINIMUM 95% MAXIMUM DRY DENSITY.
 - SURFACE TO BE BROOM TYPE FINISH.

INTEGRAL CONCRETE CURB AND SIDEWALK
N.T.S.



- NOTES:**
- SEE PLAN FOR LOCATIONS.
 - ALL METHODS AND MATERIALS OF CONSTRUCTION SHALL COMPLY WITH THE LATEST REVISION OF MassDOT STANDARD SPECIFICATIONS AND ALL ADA REGULATIONS & SPECIFICATIONS.

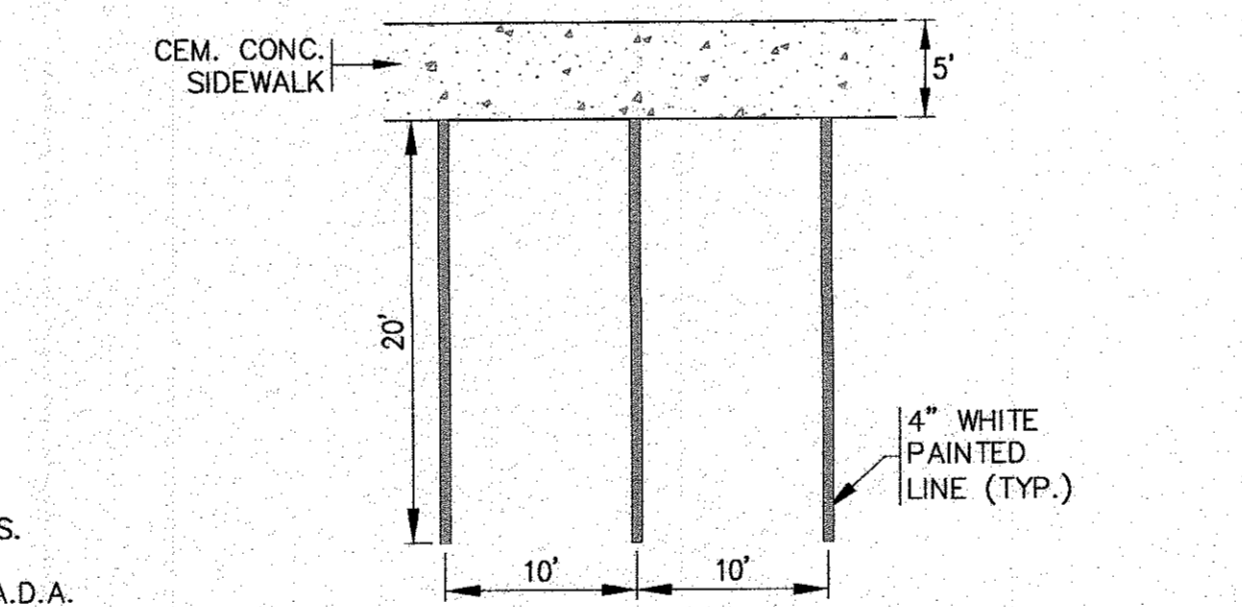
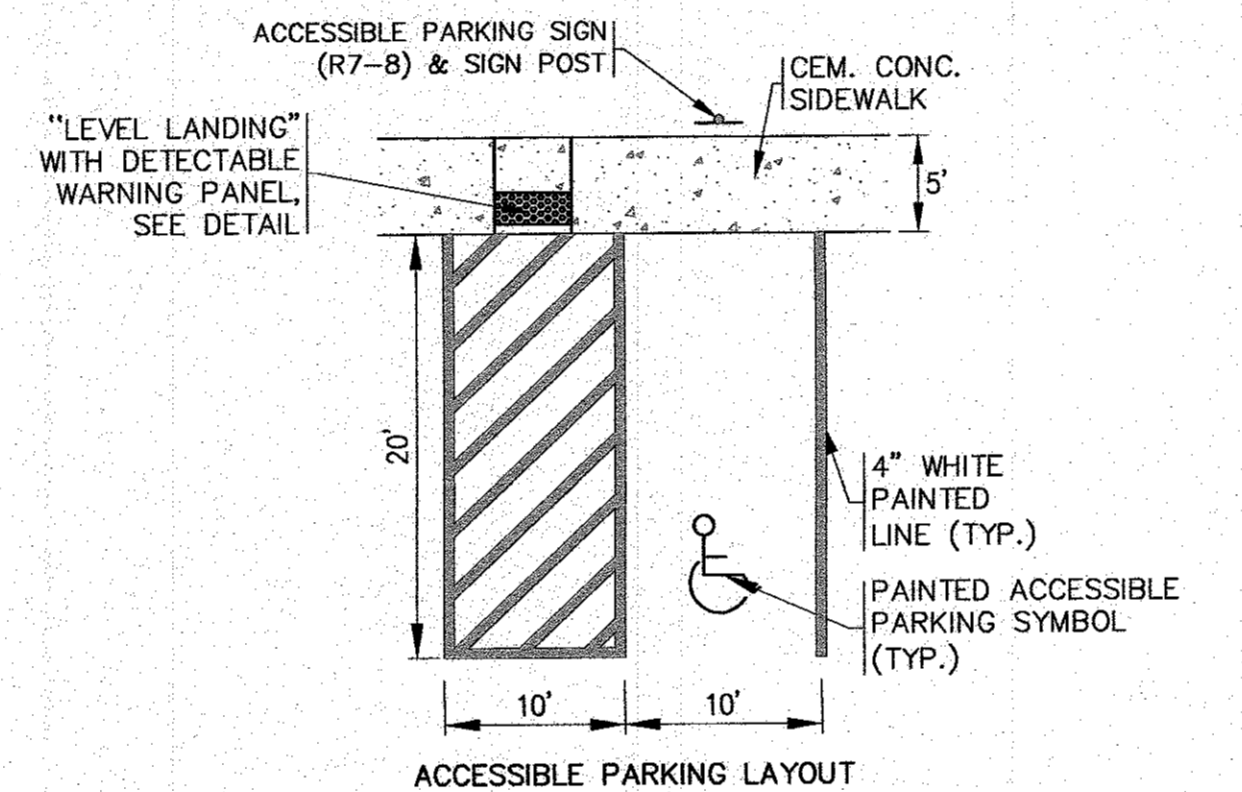
HANDICAP RAMP (INTEGRAL CURB)
N.T.S.



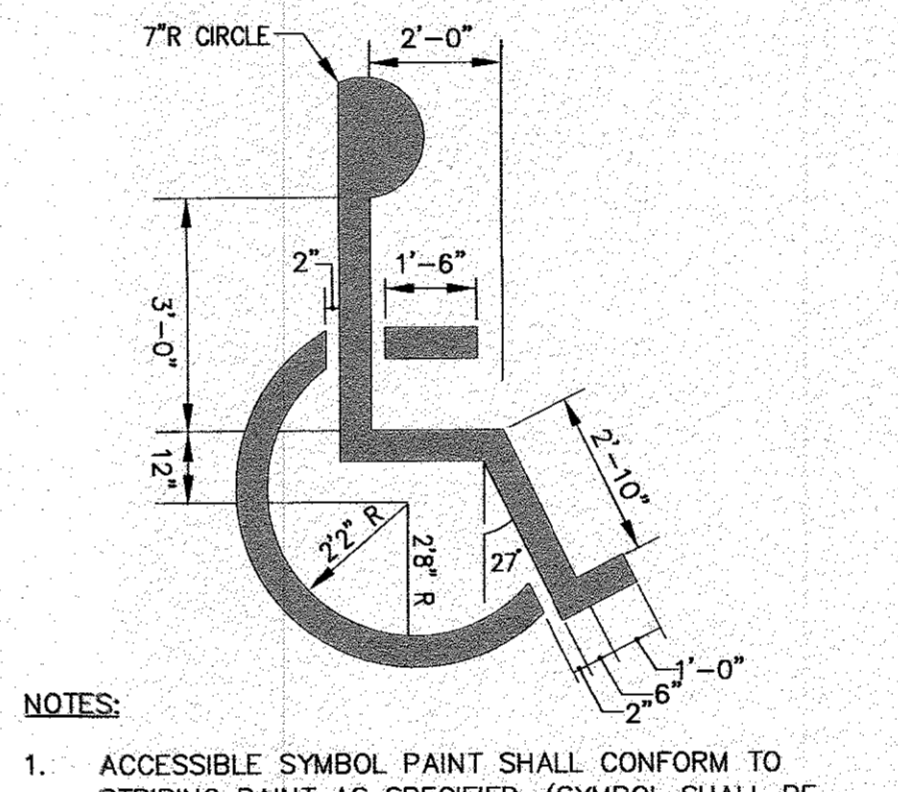
	D	E	F	G
MIN.	1.60"	.65"	.45"	.90"
MAX.	2.40"	1.50"	.80"	1.40"

- NOTES:**
- REFER TO PLAN FOR LOCATIONS.
 - ALL WORK SHALL COMPLY TO A.D.A. SPECIFICATIONS AND MassDOT CONSTRUCTION STANDARD DETAILS.

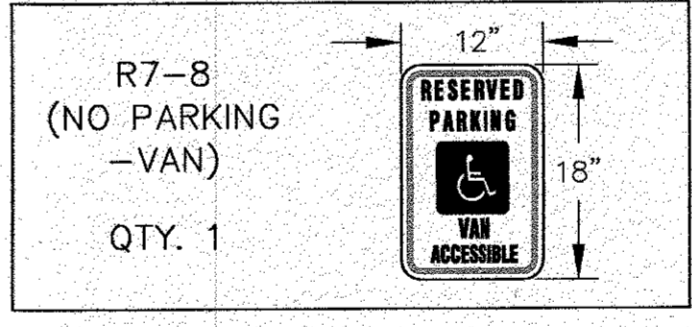
TRUNCATED DOME DETECTABLE WARNING PANEL
N.T.S.



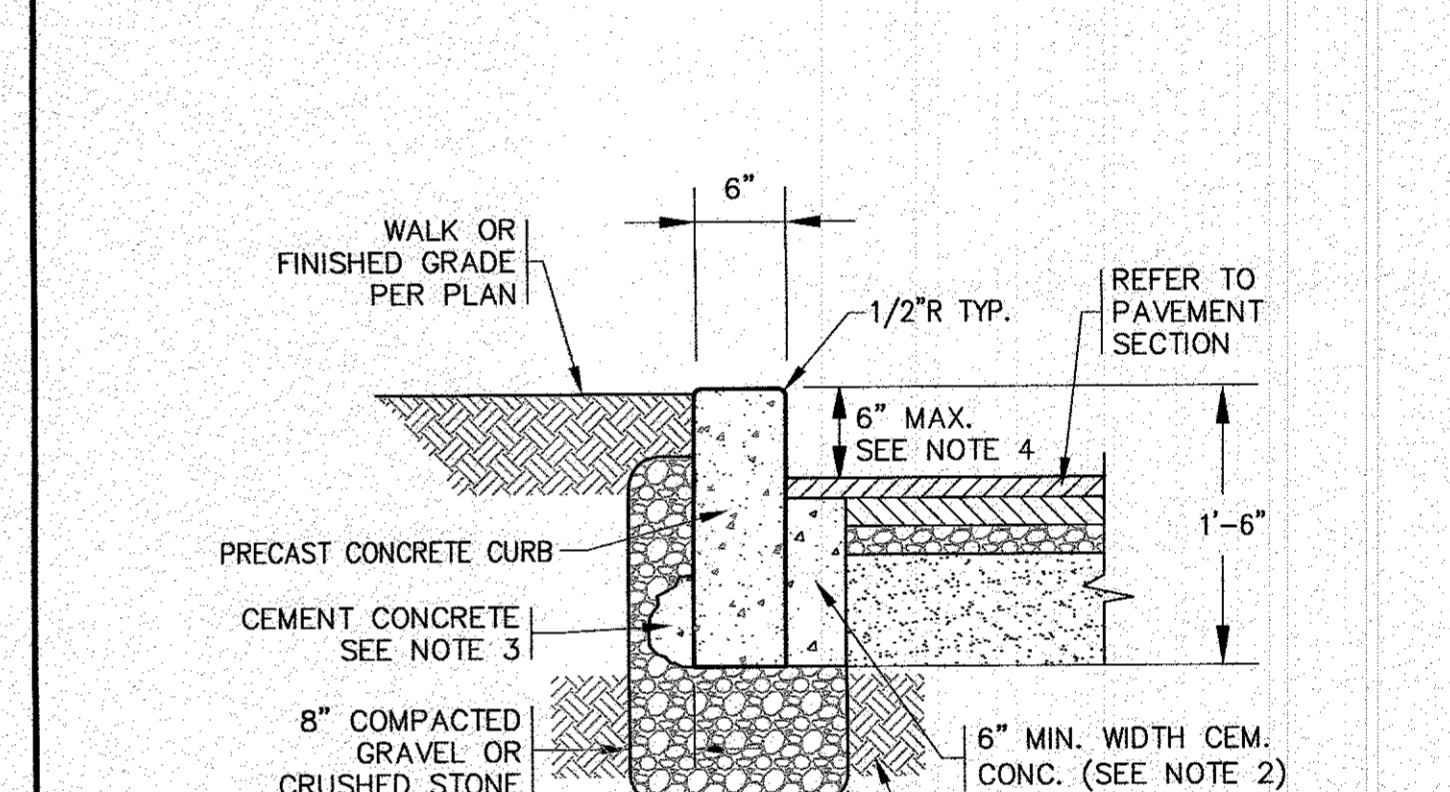
ACCESSIBLE PARKING AND STANDARD PARKING LAYOUTS
N.T.S.



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

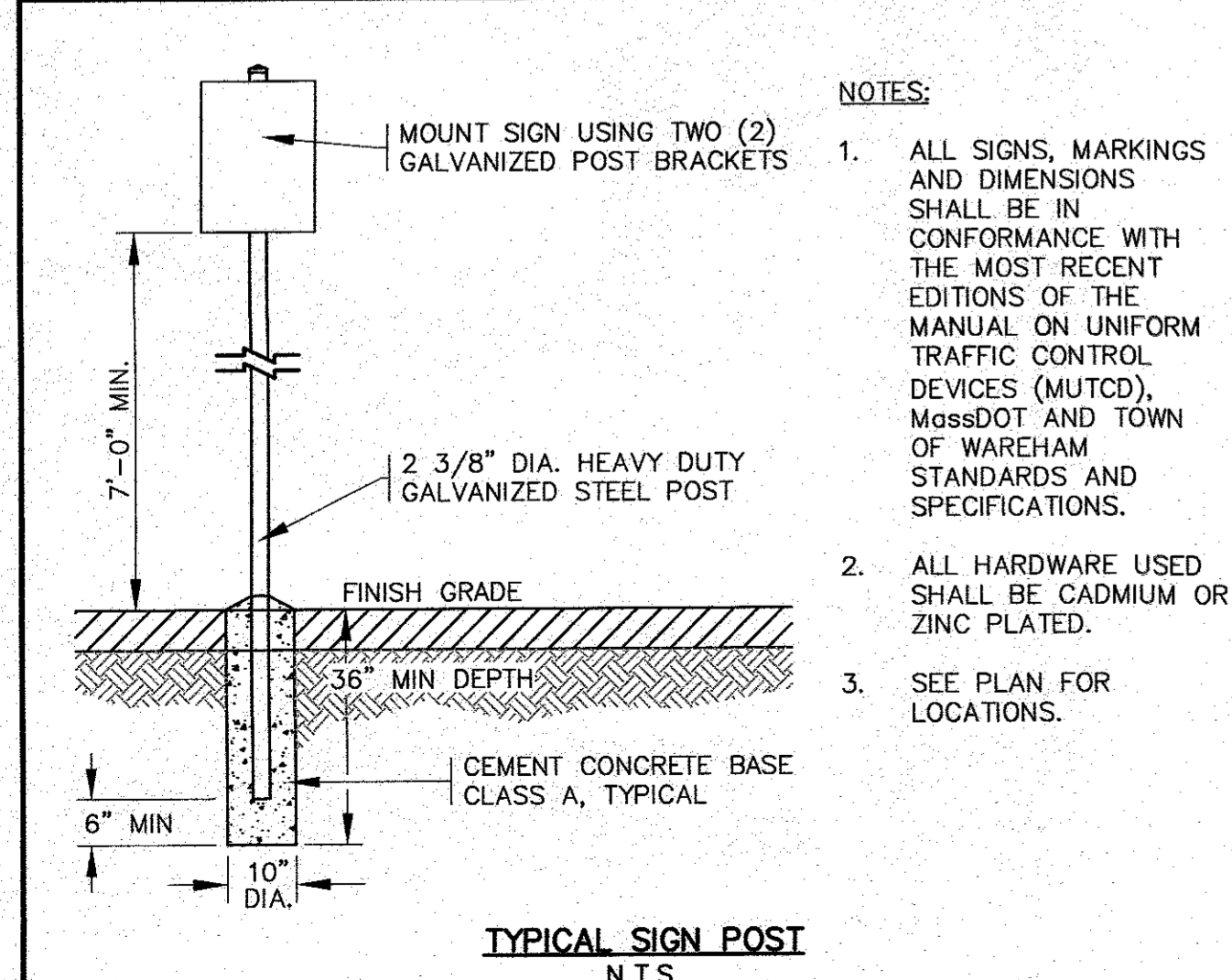


ACCESSIBLE PARKING PAINT SYMBOL AND SIGN
N.T.S.



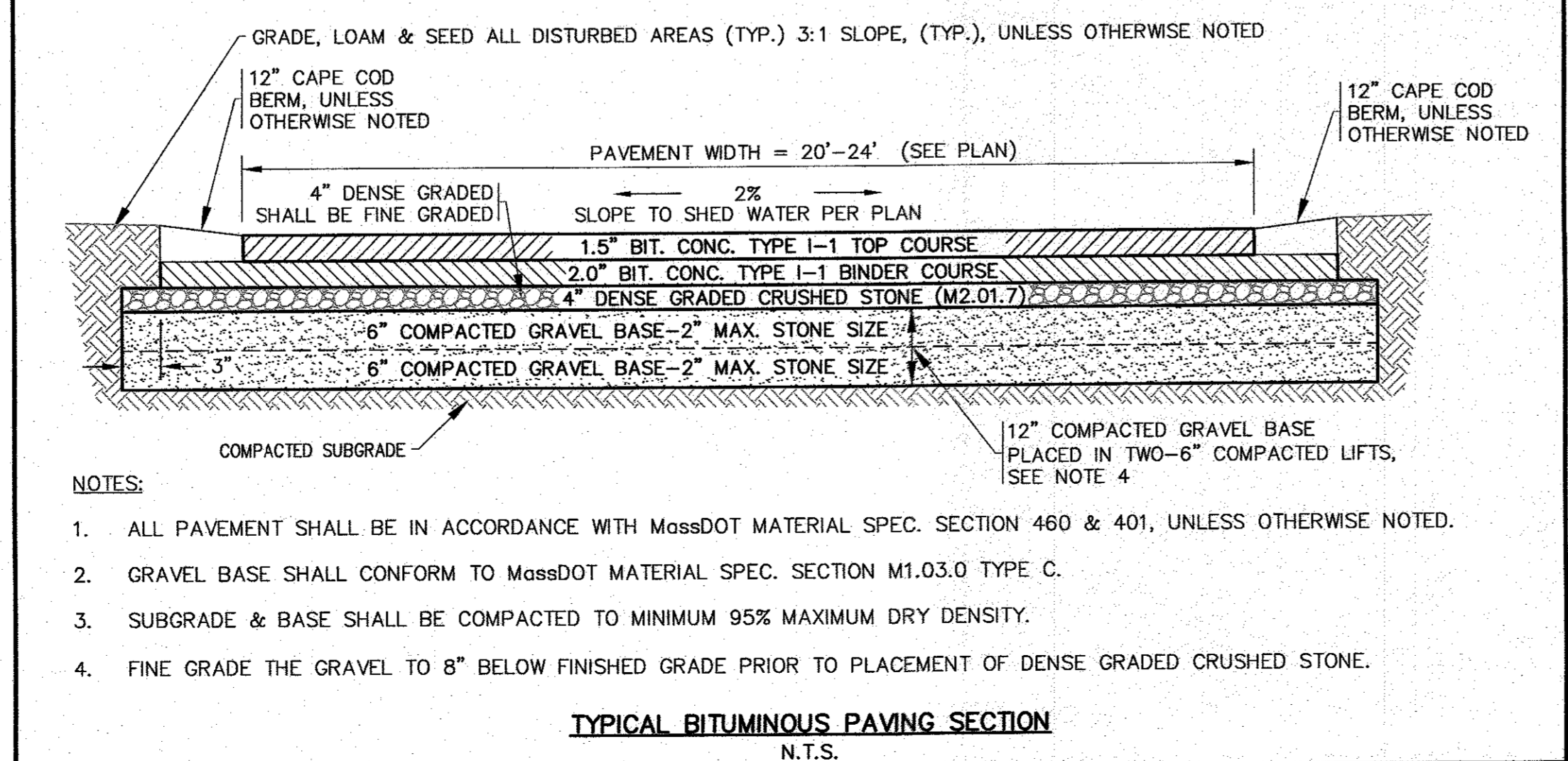
- NOTES:**
- CEMENT CONCRETE SHALL CONFORM TO SECTION M4 OF THE LATEST REVISION OF MassDOT STANDARD SPECIFICATIONS. BIT. CONC. NOT ACCEPTABLE.
 - 4000 PSI CEMENT CONCRETE WILL BE CONTINUOUS FOR ENTIRE LENGTH OF CURB.
 - 1 CU.YD. OF 4000 PSI CEMENT CONCRETE WILL BE PLACED WITHIN 12" OF ALL JOINTS AT BACK OF CURBING, AS SHOWN.
 - MATCH EXISTING PRECAST CONCRETE CURB REVEAL WHERE REQUIRED. CONTRACTOR SHALL FIELD VERIFY EXISTING PRECAST CONCRETE CURB REVEAL PRIOR TO CONSTRUCTION.

PRECAST CONCRETE CURB
N.T.S.



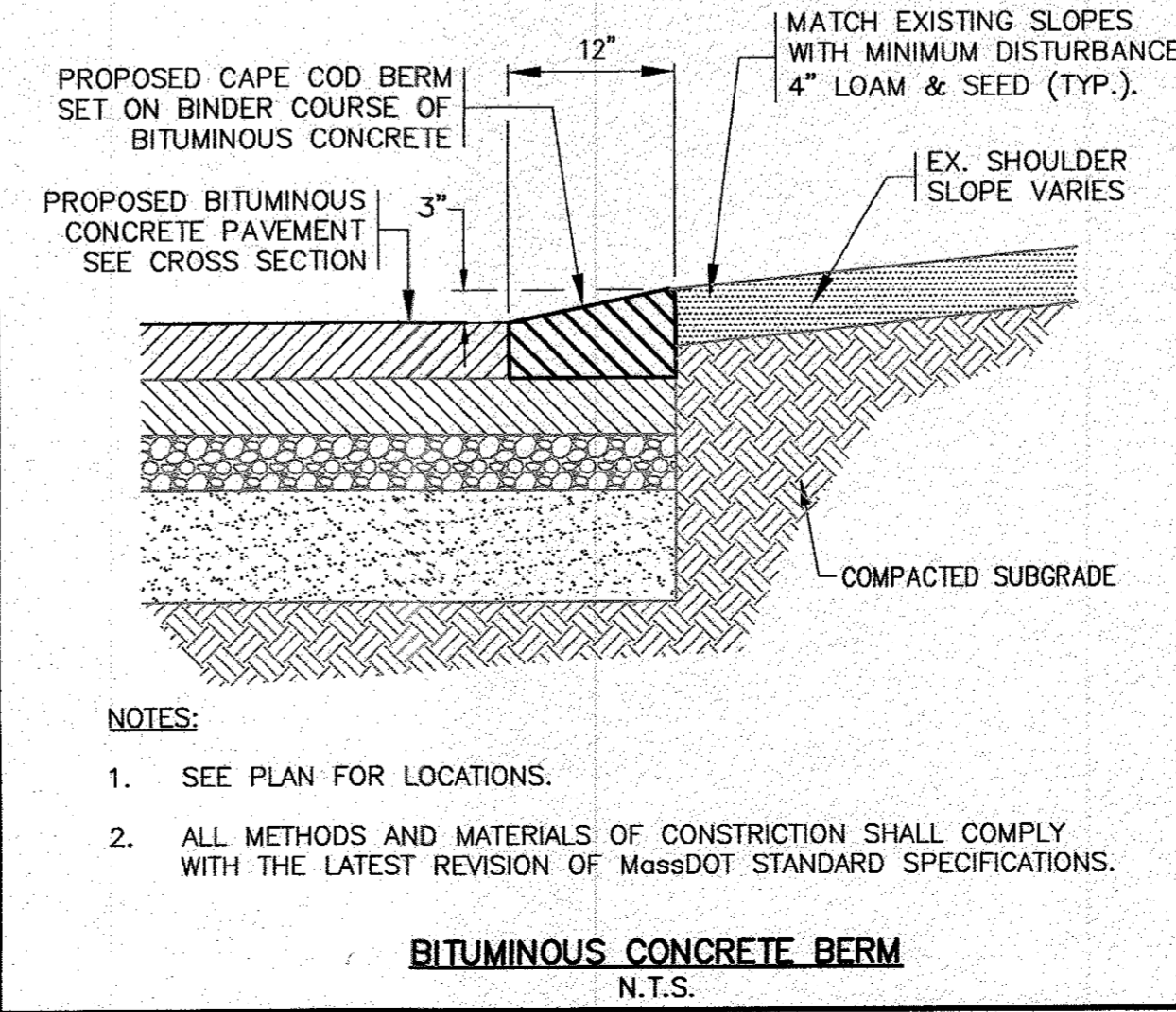
- NOTES:**
- ALL SIGNS, MARKINGS AND DIMENSIONS SHALL BE IN CONFORMANCE WITH THE MOST RECENT EDITIONS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), MassDOT AND TOWN OF WAREHAM STANDARDS AND SPECIFICATIONS.
 - ALL HARDWARE USED SHALL BE CADMIUM OR ZINC PLATED.
 - SEE PLAN FOR LOCATIONS.

TYPICAL SIGN POST
N.T.S.



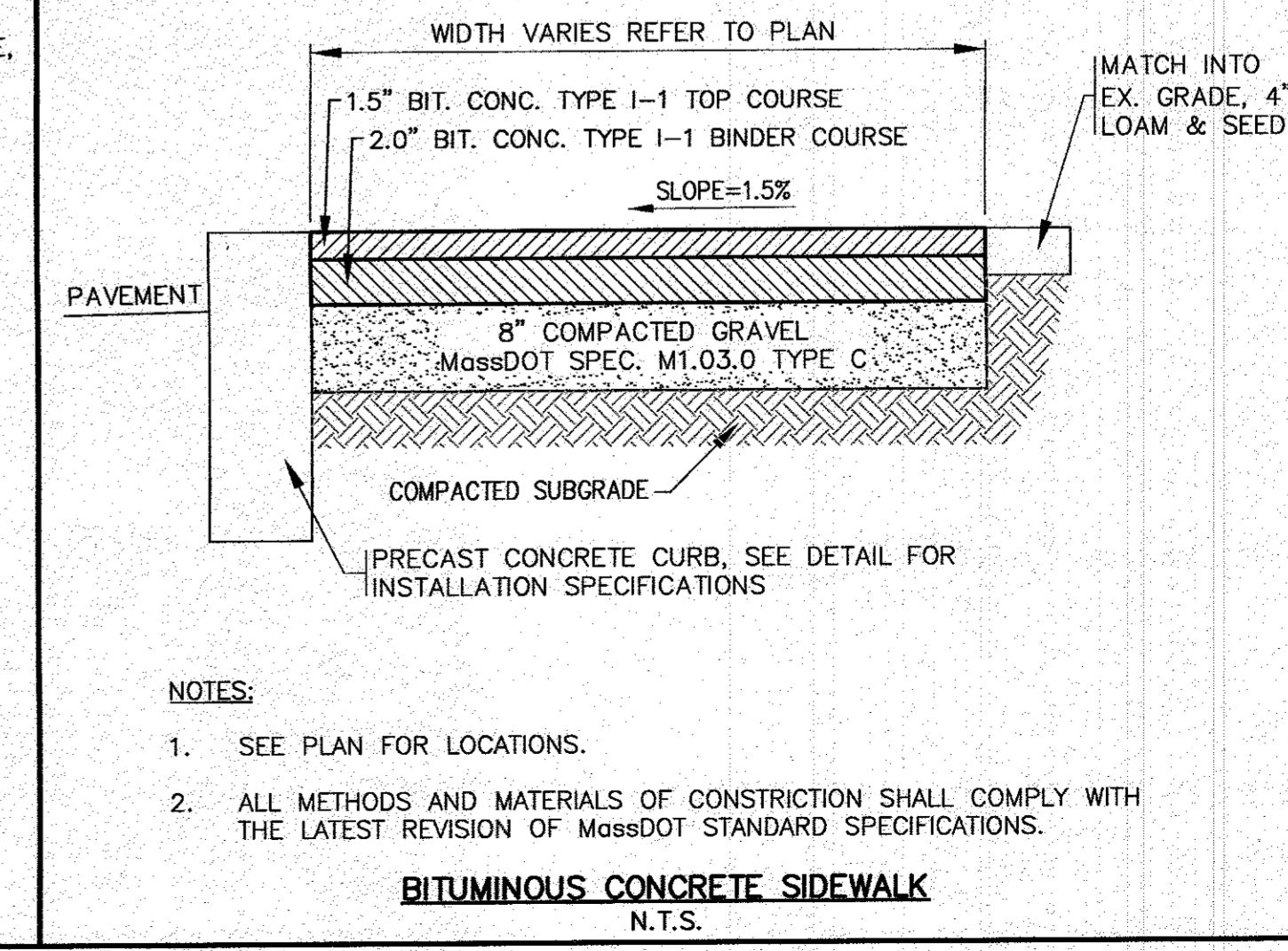
- NOTES:**
- ALL PAVEMENT SHALL BE IN ACCORDANCE WITH MassDOT MATERIAL SPEC. SECTION 460 & 401, UNLESS OTHERWISE NOTED.
 - GRAVEL BASE SHALL CONFORM TO MassDOT MATERIAL SPEC. SECTION M1.03.0 TYPE C.
 - SUBGRADE & BASE SHALL BE COMPACTED TO MINIMUM 95% MAXIMUM DRY DENSITY.
 - FINE GRADE THE GRAVEL TO 8" BELOW FINISHED GRADE PRIOR TO PLACEMENT OF DENSE GRADED CRUSHED STONE.

TYPICAL BITUMINOUS PAVING SECTION
N.T.S.



- NOTES:**
- SEE PLAN FOR LOCATIONS.
 - ALL METHODS AND MATERIALS OF CONSTRUCTION SHALL COMPLY WITH THE LATEST REVISION OF MassDOT STANDARD SPECIFICATIONS.

BITUMINOUS CONCRETE BERM
N.T.S.



- NOTES:**
- SEE PLAN FOR LOCATIONS.
 - ALL METHODS AND MATERIALS OF CONSTRUCTION SHALL COMPLY WITH THE LATEST REVISION OF MassDOT STANDARD SPECIFICATIONS.

BITUMINOUS CONCRETE SIDEWALK
N.T.S.

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APPROVED BY: 11/14/22

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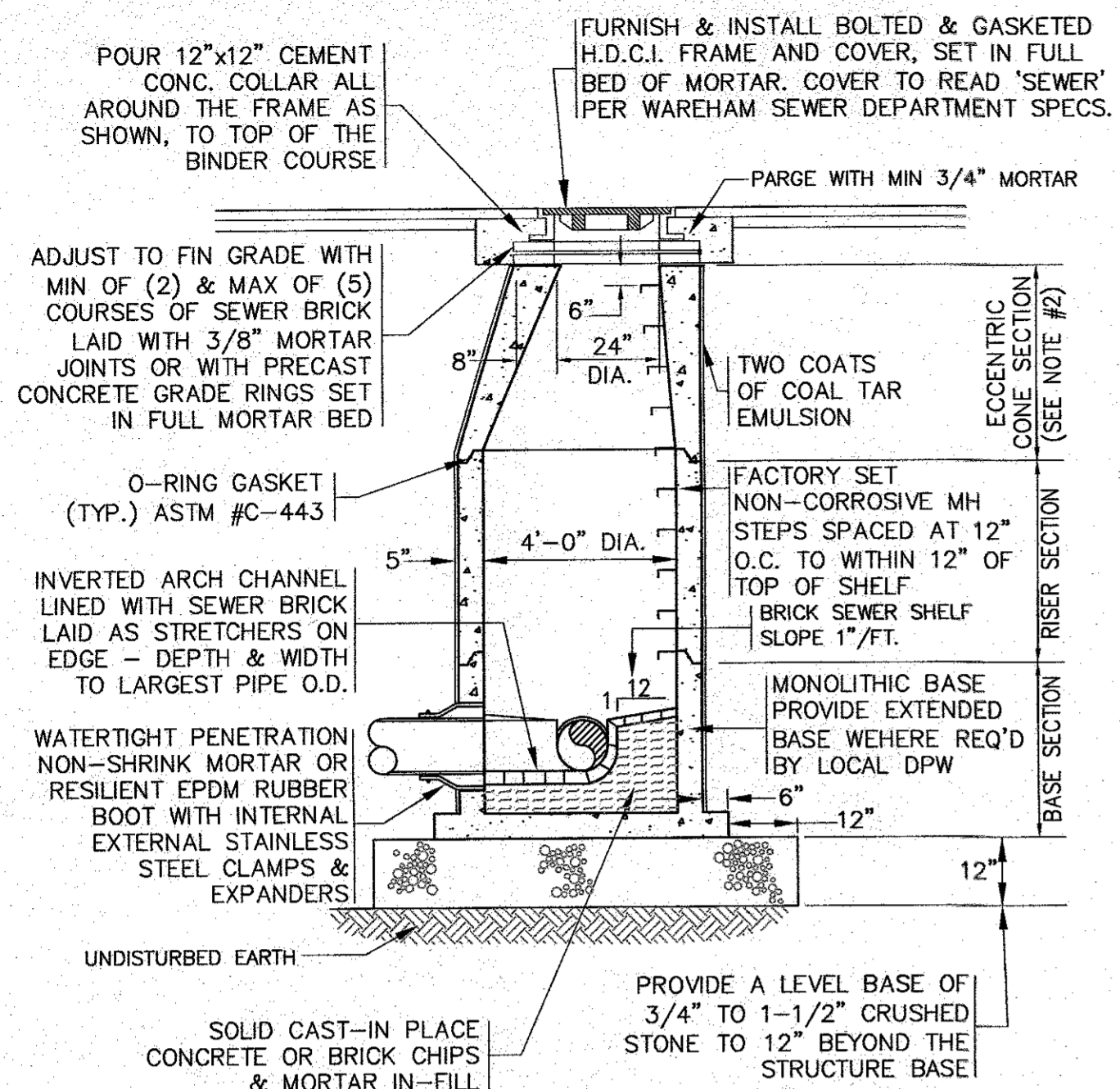
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TEL: (508) 295-5600 FAX: (508) 295-6634
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SITE DEVELOPMENT PLAN
DETAIL SHEET 1

WAREHAM, MA
6 CHAPEL LANE
19 DEPOT STREET

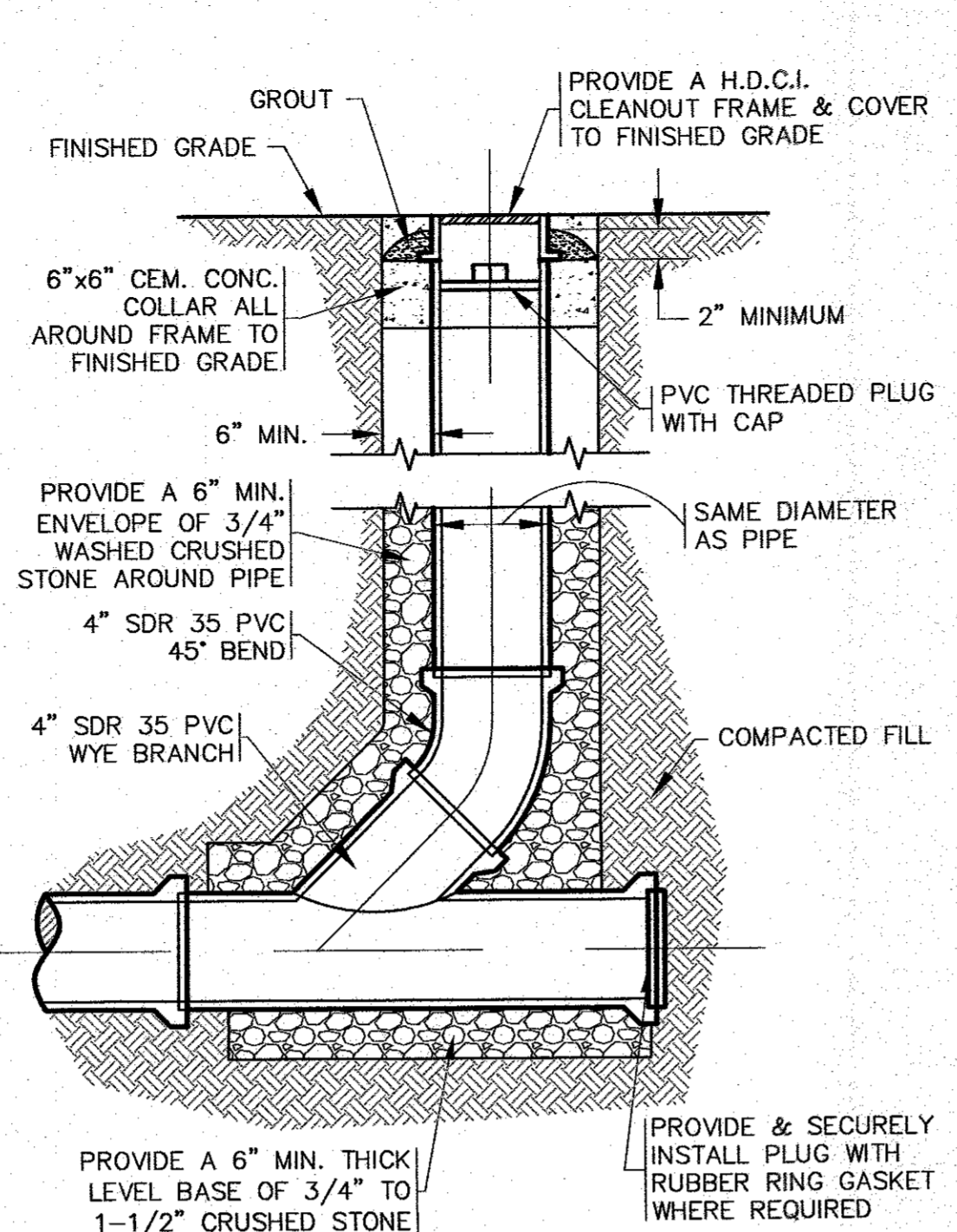
PREPARED FOR:
6 CHAPEL LANE, LLC

JOB NO.: 20-9499
DWG. 8 OF 10



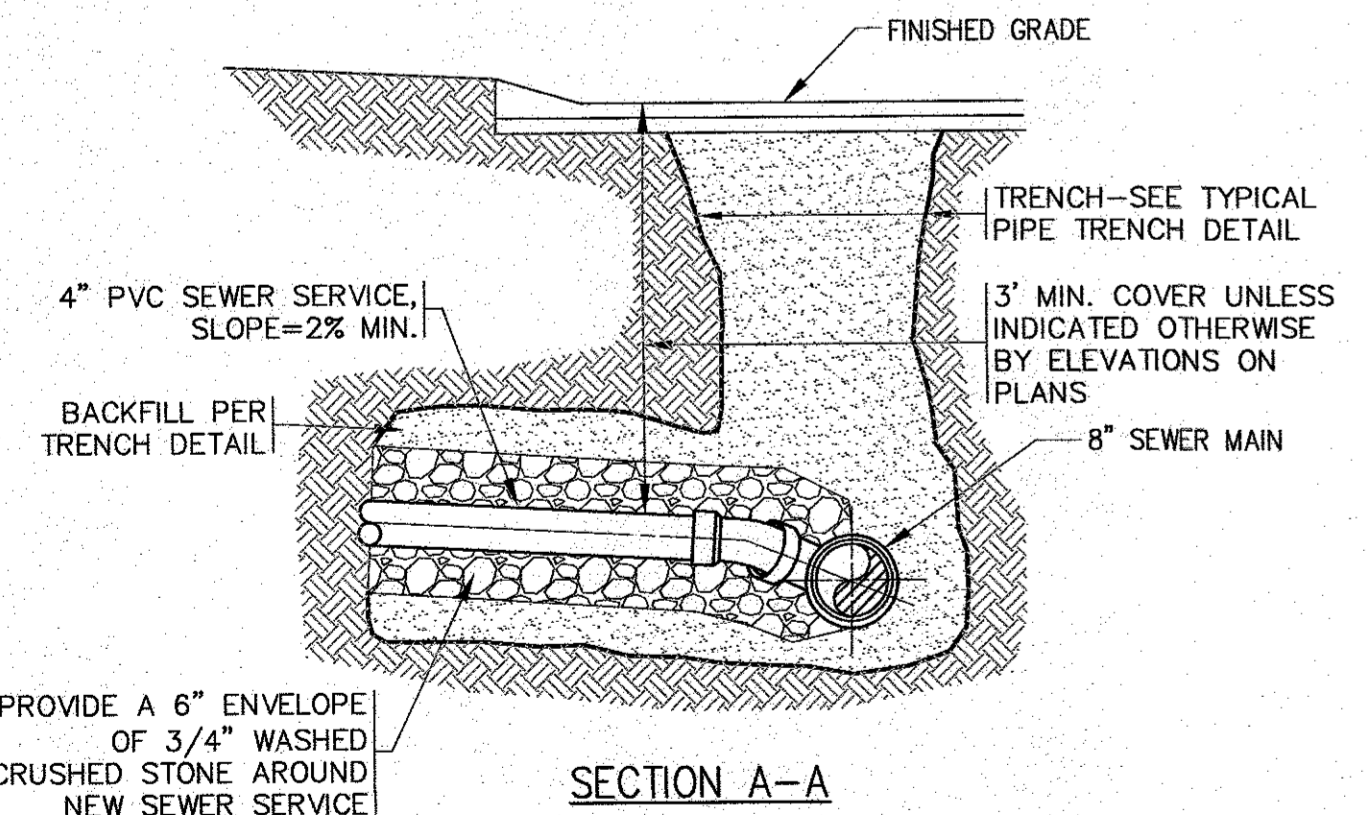
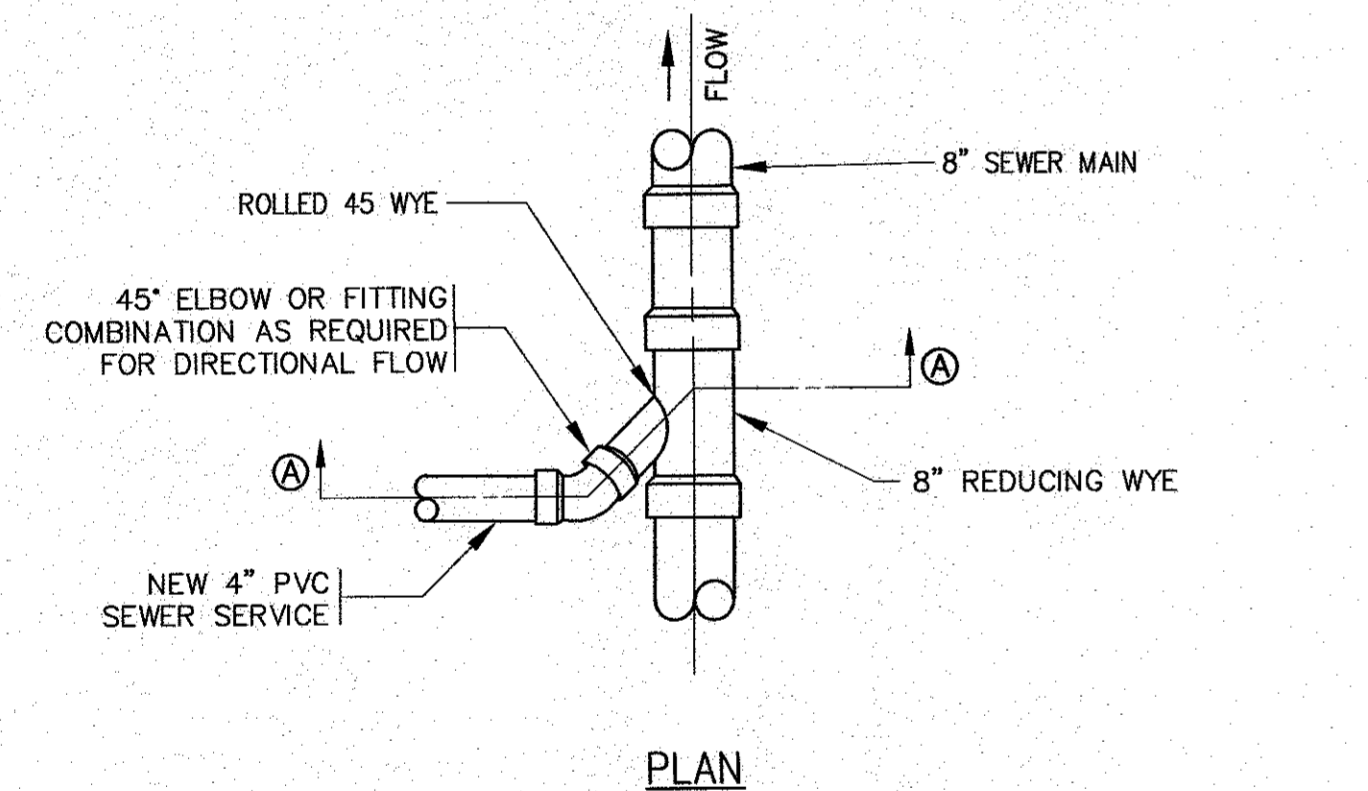
- NOTES:**
- ALL STRUCTURES SHALL BE PRECAST CONC. IN ACCORDANCE WITH ASTM C-478 WITH H-20 LOADING. SECTION HEIGHTS VARY.
 - FOR SHALLOW INSTALLATION AND WHEN APPROVED BY THE ENGINEER, FLAT TOP H-20 SLAB ALLOWED, SUBMIT SHOP DWGS.
 - ALL STRUCTURE JOINTS AND PENETRATIONS SHALL BE WATER TIGHT. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
 - REFER TO PLANS FOR PIPE SIZES, INVERTS, RIMS AND LOCATIONS.

SEWER MANHOLE
N.T.S.



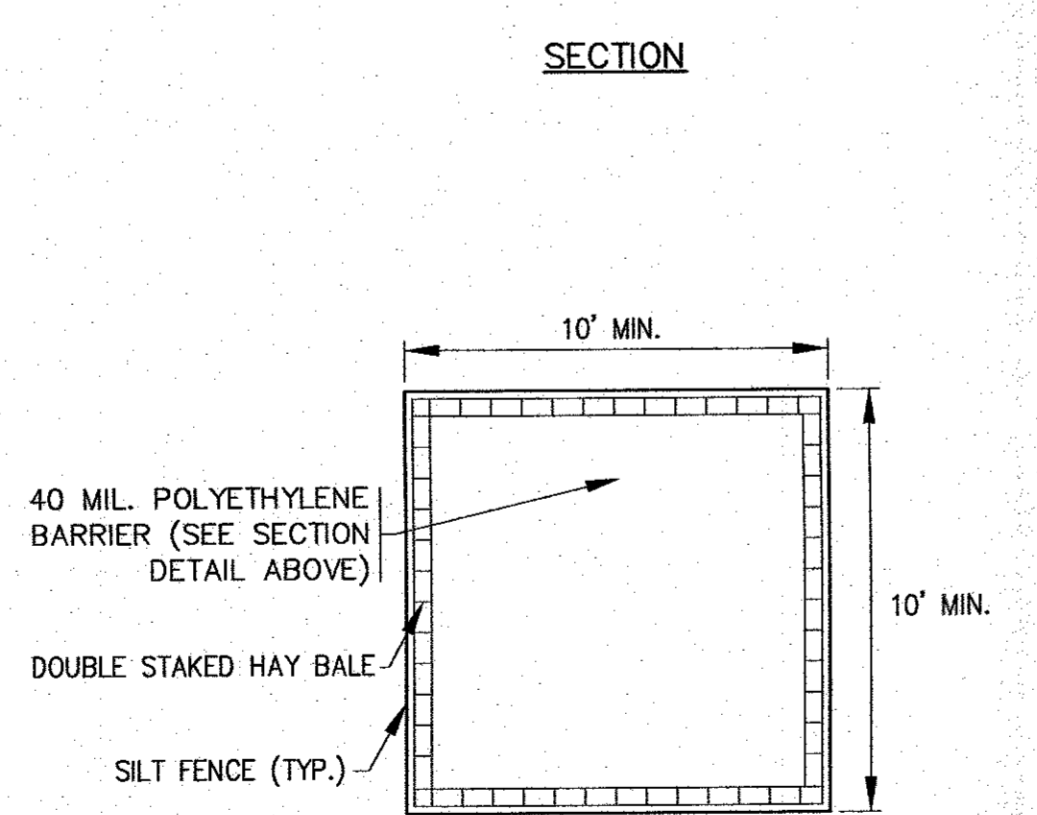
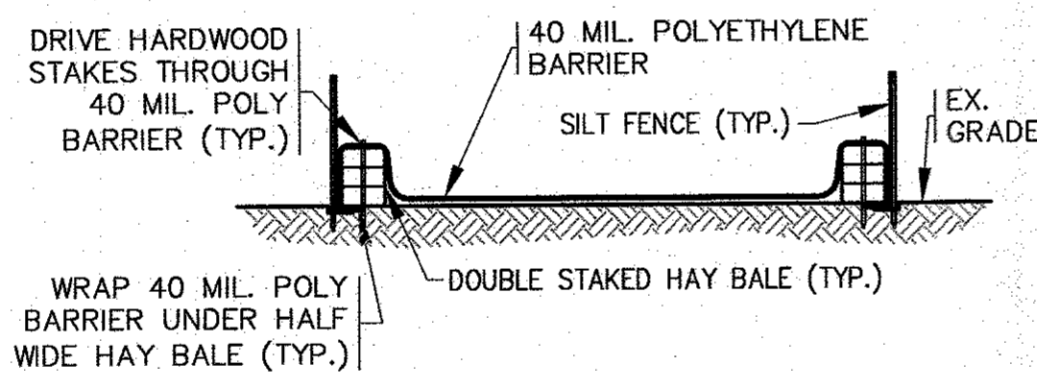
- NOTES:**
- REFER TO PLAN FOR LOCATIONS.

STANDARD CLEANOUT
N.T.S.



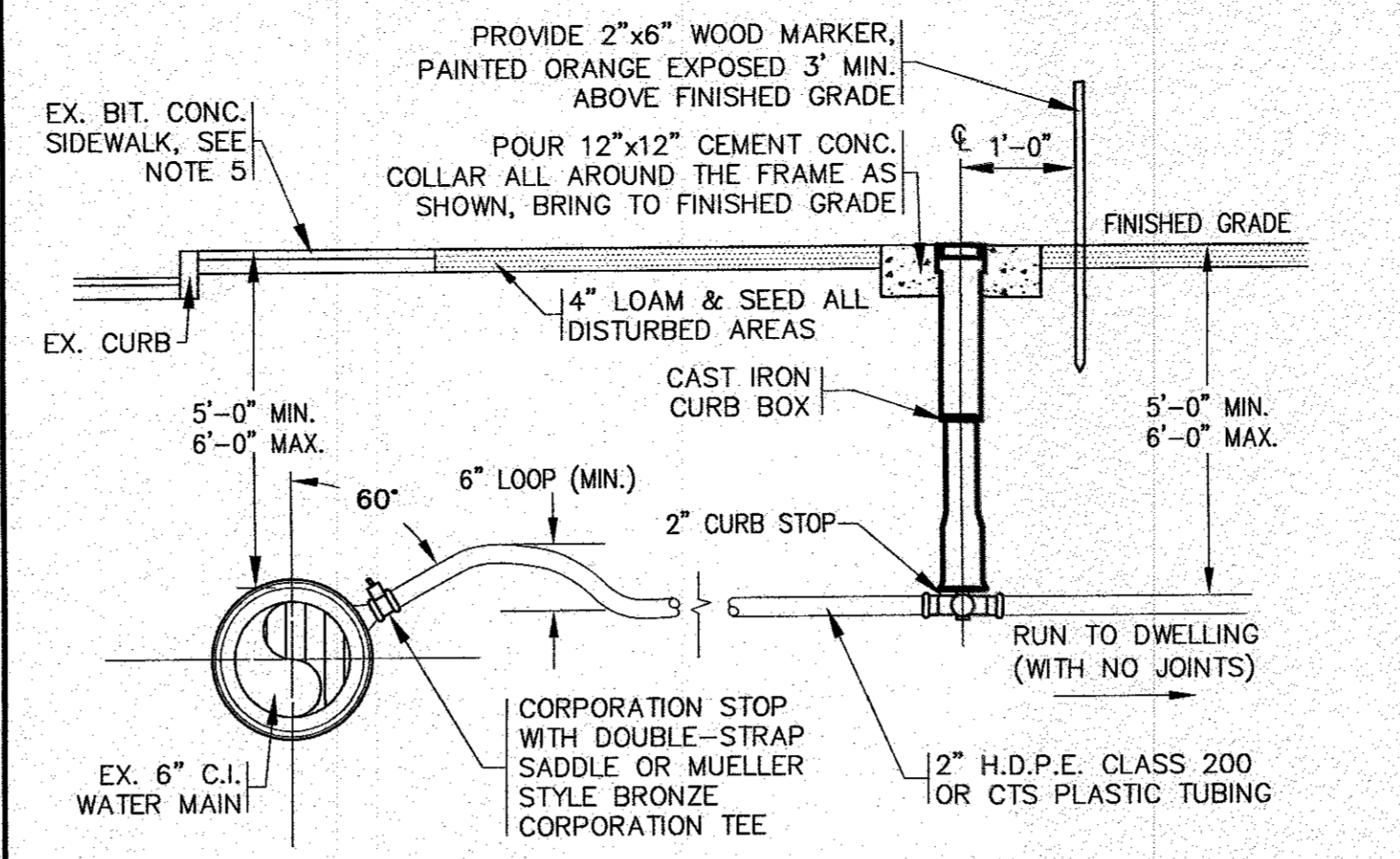
- NOTES:**
- REFER TO PLAN FOR LOCATIONS.
 - EXISTING SANITARY SEWER MAIN SHALL BE SAWCUT AND REDUCING WYE SHALL BE INSTALLED AT PROPER ANGLE TO ALLOW 1% OR GREATER SLOPE TO THE NEW SANITARY SEWER SERVICE PIPE.
 - ALL SEWER WORK SHALL BE DONE IN ACCORDANCE WITH THE TOWN OF WAREHAM SEWER COMMISSIONERS RULES AND REGULATIONS.
 - CONTRACTOR TO COORDINATE WITH THE TOWN OF WAREHAM SEWER DEPARTMENT PRIOR TO CONSTRUCTION.
 - A SERVICE CHIMNEY MAY BE SUBSTITUTED AS REQUIRED. CONTRACTOR SHALL COORDINATE WITH THE WAREHAM SEWER DEPARTMENT AND ENGINEER.

WYE SANITARY SEWER CONNECTION DETAIL
N.T.S.



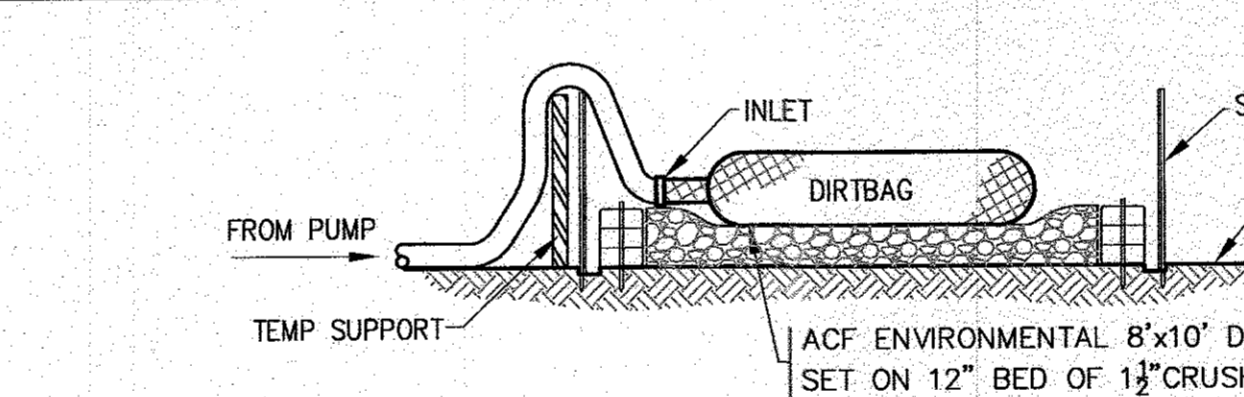
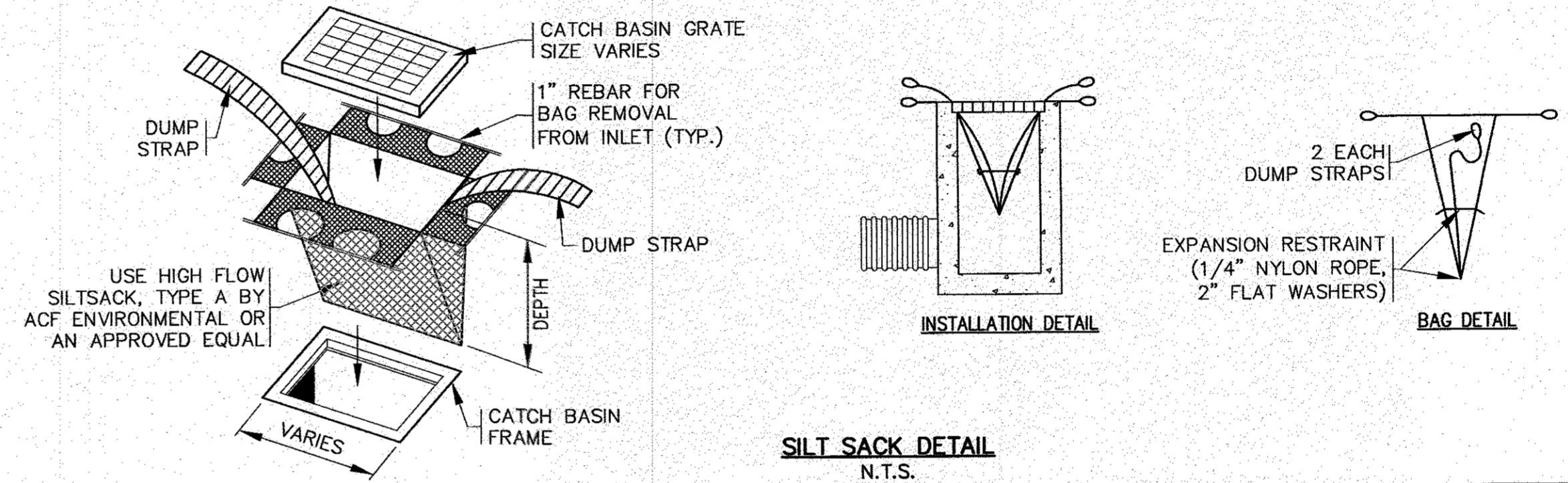
- NOTES:**
- CONTRACTOR SHALL PROVIDE AND MAINTAIN CONCRETE WASHOUT AREA WHERE NECESSARY TO COMPLETE THE WORK.
 - FINAL LOCATION FOR CONCRETE WASHOUT SHALL BE FIELD DETERMINED BY CONTRACTOR AT TIME OF CONSTRUCTION.
 - CONTRACTOR SHALL REPAIR OR REPLACE 40 MIL POLY BARRIER OR STAKED HAY BALES AS REQUIRED.

CONCRETE WASHOUT DETAIL
N.T.S.



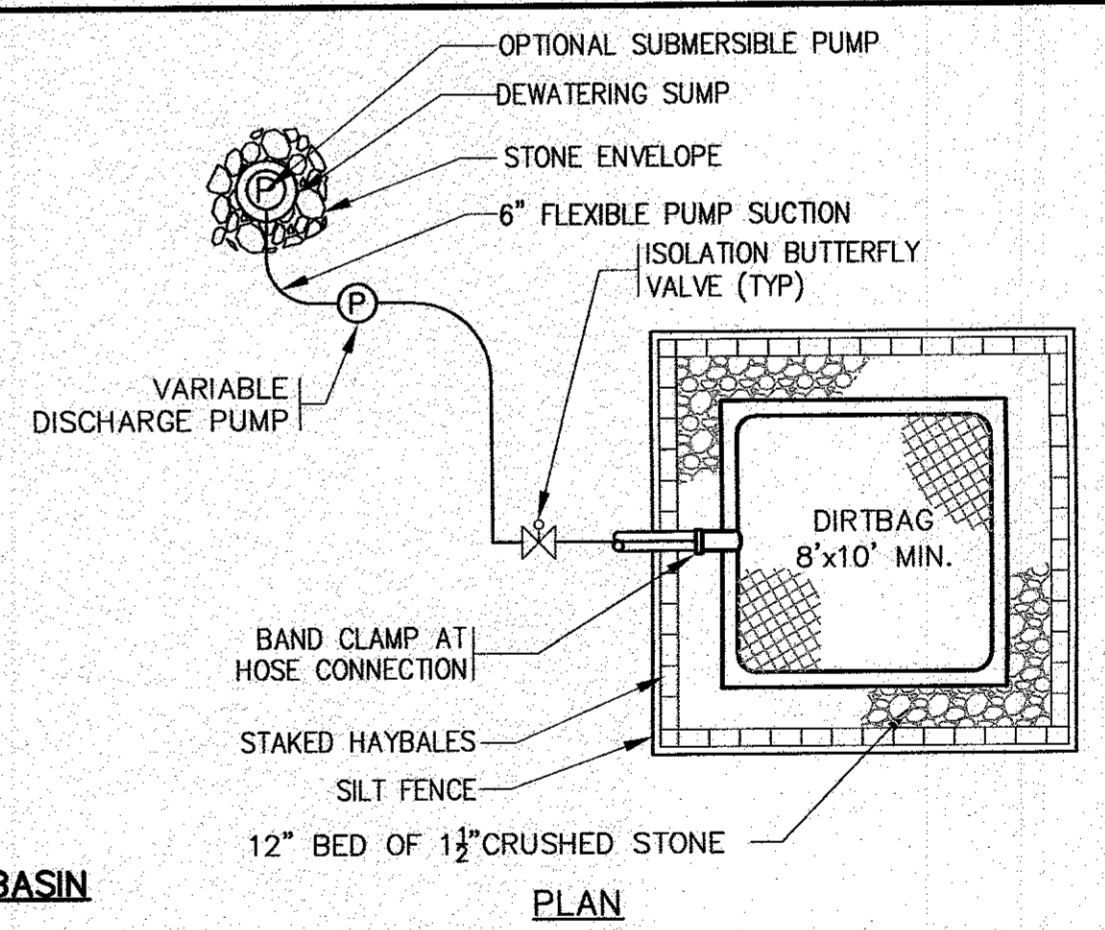
- NOTES:**
- CURB STOPS AND CORPORATION STOPS MUST BE BRASS AND CONFORM TO THE LATEST REVISION OF AWWA STANDARD C-800, (OPEN LEFT).
 - ALL CURB BOXES SHALL BE NORTH AMERICAN MADE "BUFFALO" STYLE 2.5" TO INCLUDE COVER, SLIDE TOP, AND BASE.
 - ALL PROPOSED WORK, MATERIAL AND CONSTRUCTION SPECIFICATIONS SHALL BE APPROVED AND DONE IN ACCORDANCE WITH THE WAREHAM FIRE DISTRICTS RULES AND REGULATIONS.
 - SEE WATER PIPE TRENCH DETAIL FOR BACKFILL MATERIAL.
 - RECONSTRUCT EXISTING SIDEWALK AFTER WATER SERVICE CONNECTION. SIDEWALK SHALL BE RECONSTRUCTED TO MATCH THE EXISTING SIDEWALK CONSTRUCTION AND GRADE.

WATER SERVICE CONNECTION / CURB STOP
N.T.S.



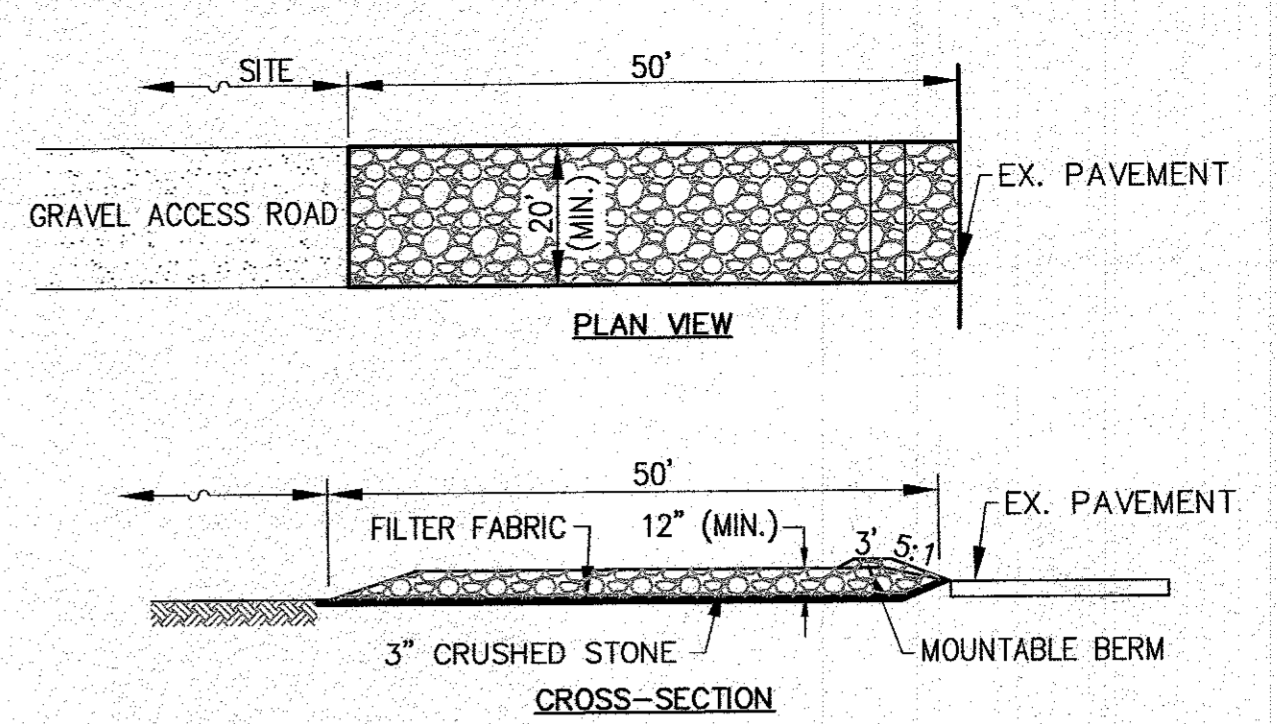
- NOTES:**
- CONTRACTOR SHALL SIZE, PROVIDE AND MAINTAIN DEWATERING EQUIPMENT FOR THE CONTROL, COLLECTION AND DISPOSAL OF GROUND AND SURFACE WATER WHERE NECESSARY TO COMPLETE THE WORK.
 - FINAL LOCATION AND SIZE FOR DEWATERING EQUIPMENT SHALL BE FIELD DETERMINED BY CONTRACTOR AT TIME OF CONSTRUCTION.

ONSITE DEWATERING BASIN
N.T.S.



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

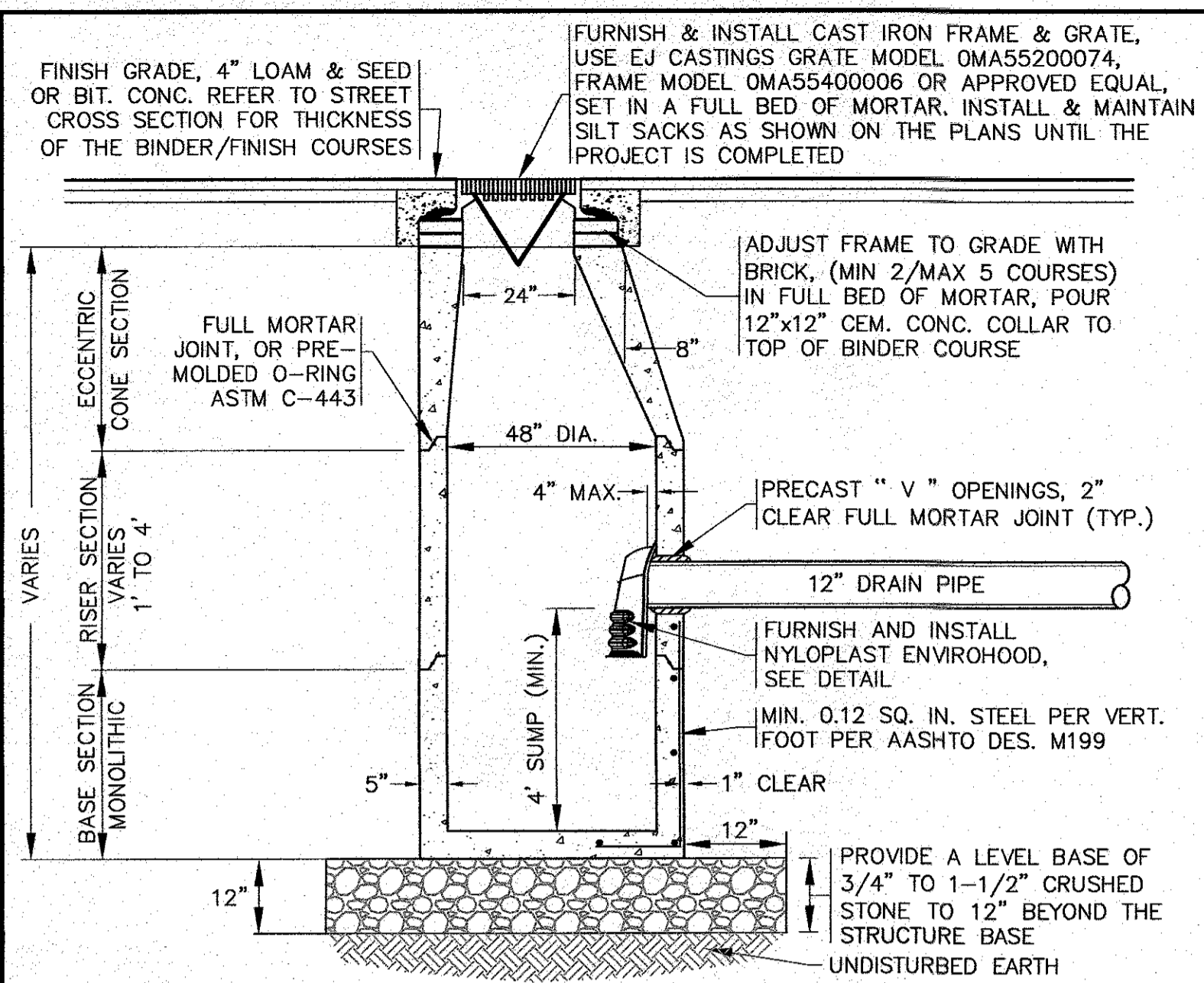
EROSION CONTROL BARRIER DETAIL
N.T.S.



- NOTES:**
- ENTRANCE WIDTH SHALL BE 20 FEET MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
 - 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.
 - THE ENTRANCE SHALL BE INSPECTED AT THE END OF EACH WORK DAY TO ENSURE NO SEDIMENT OR DEBRIS WILL BE TRACKED ON SWIFTS BEACH ROAD, EXISTING PAVEMENT SHOULD BE KEPT CLEAN DAILY. MAINTENANCE OF THE ENTRANCE SHALL BE PROVIDED AS NEEDED.

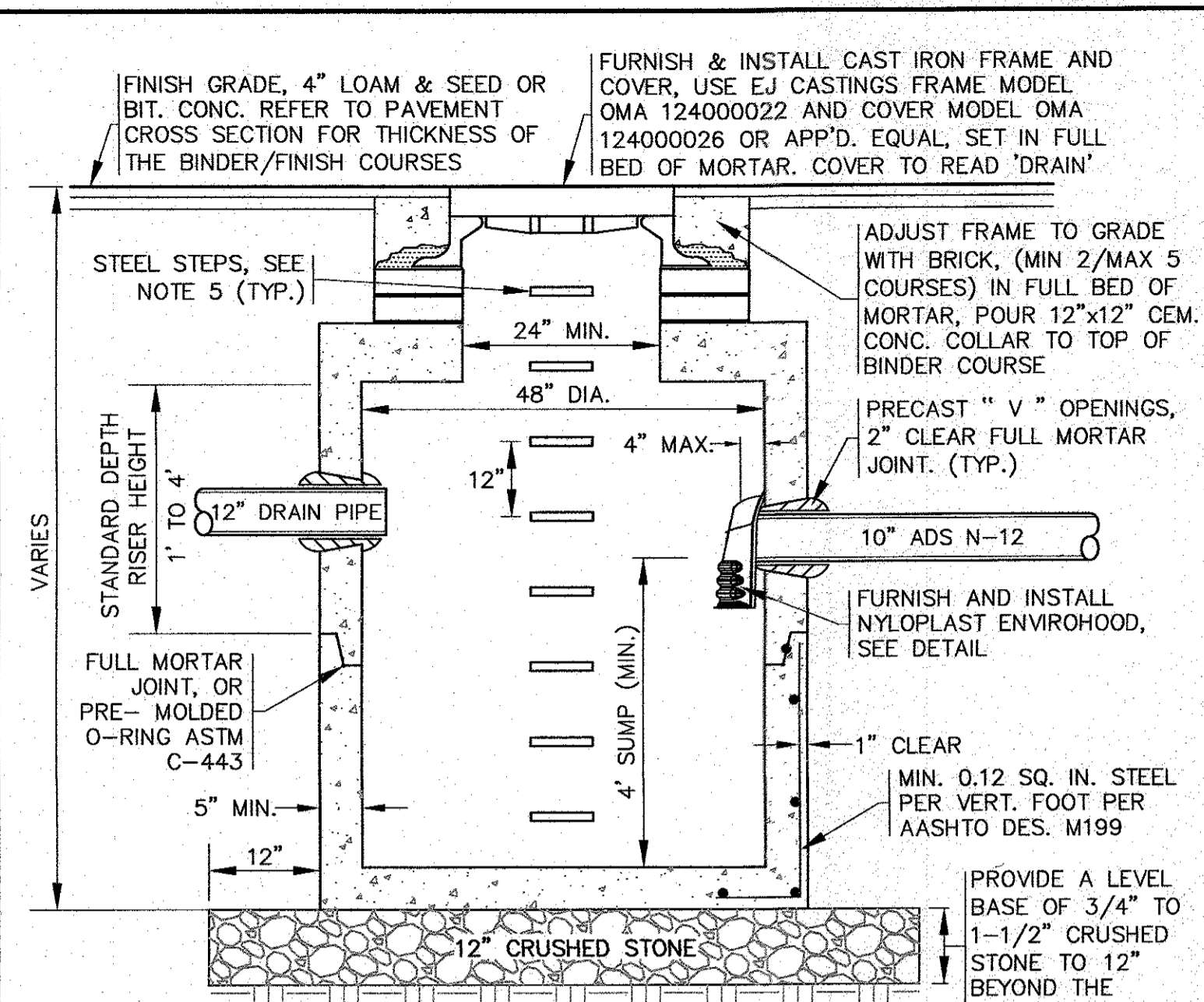
TEMPORARY CONSTRUCTION ENTRANCE
N.T.S.

DATE: NOV. 14, 2022	APPROVED BY:		G.A.F. ENGINEERING, INC. PROFESSIONAL ENGINEERS & LAND SURVEYORS 268 MAIN STREET - WAREHAM, MA 02571 TEL: (508) 295-6800 FAX: (508) 295-6634 E-MAIL: info@gafeng.com
DRAWN BY: JMP	DATE:		
CHECKED BY: WFM	REV. DATE:	PREPARED FOR: 6 CHAPEL LANE, LLC 19 DEPOT STREET WAREHAM, MA	SITE DEVELOPMENT PLAN DETAIL SHEET 2
JOB NO.: 20-9499	BY: APP'D		
SCALE: N.T.S.	DESCRIPTION:	PERMIT SET (NOT FOR CONSTRUCTION) DWG. 9 OF 10	



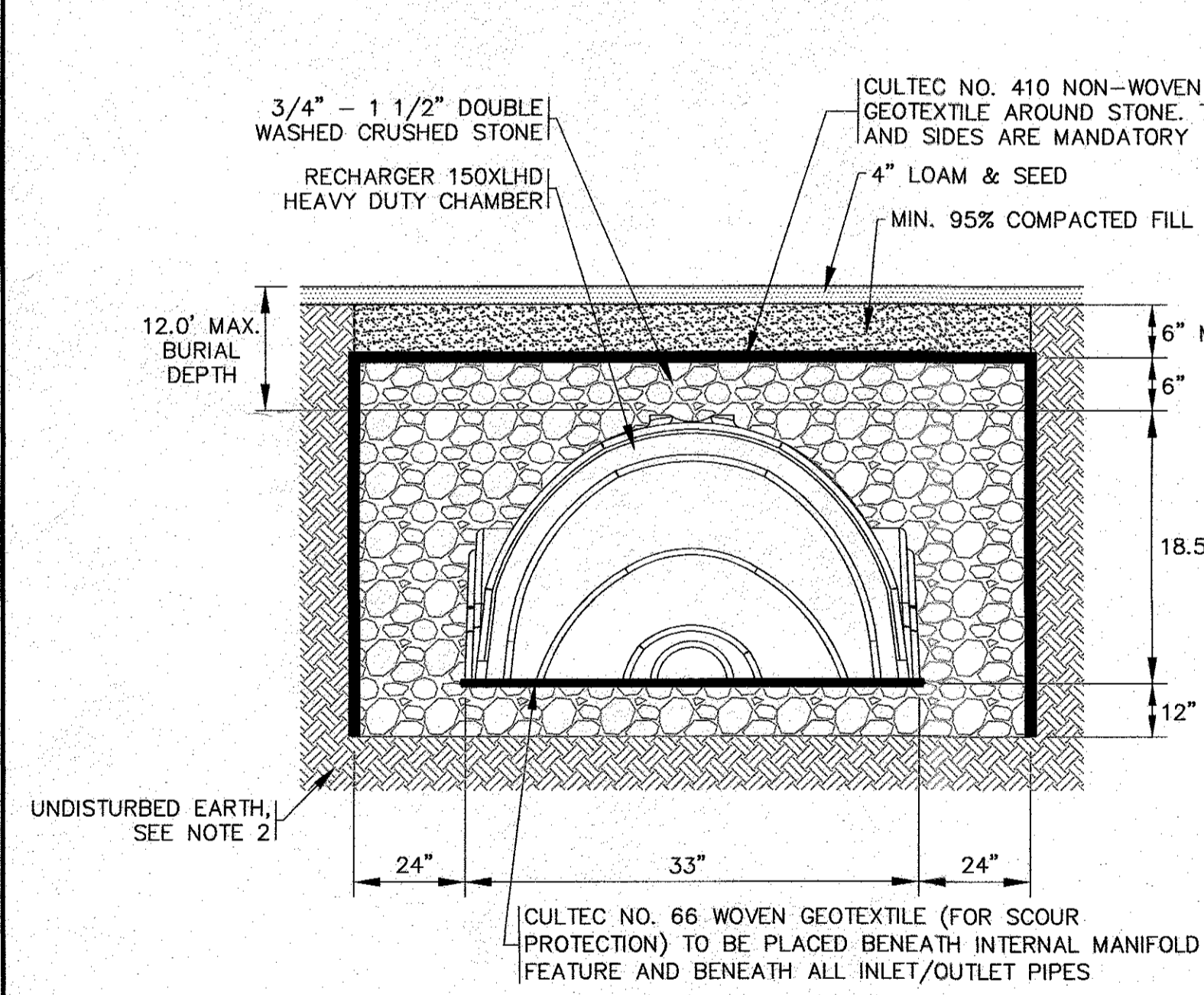
- NOTES:**
- STRUCTURES SHALL BE PRECAST CONCRETE IN ACCORDANCE WITH ASTM C-478, WITH H-20 LOADING, SECTION HEIGHTS VARY. CONCRETE STRENGTH 4000 PSI @ 28 DAYS.
 - FOR SHALLOW INSTALLATION AND WHEN APPROVED BY THE ENGINEER, A FLAT TOP H-20 SLAB WITH A 24" OPENING CAST ECCENTRICALLY MAY BE USED. CONTRACTOR TO SUBMIT SHOP DRAWINGS.
 - ALL STRUCTURE JOINTS AND PENETRATIONS SHALL BE WATER TIGHT.
 - REFER TO PLANS FOR PIPE SIZES, INVERTS, RIMS AND LOCATIONS.
 - IF THE TOP COURSE OF PAVEMENT IS NOT INSTALLED IMMEDIATELY AFTER THE BASE COURSE, CATCH BASIN RIMS SHALL BE SET TO THE BASE COURSE OF PAVEMENT AND THEN RAISED WHEN THE TOP COURSE OF PAVEMENT IS INSTALLED.

PRECAST CONCRETE CATCH BASIN
N.T.S.



- NOTES:**
- STRUCTURES SHALL BE PRECAST CONCRETE IN ACCORDANCE WITH ASTM C478, WITH H-20 LOADING, SECTION HEIGHTS VARY. CONCRETE STRENGTH 4000 PSI @ 28 DAYS.
 - FOR SHALLOW INSTALLATION AND WHEN APPROVED BY THE ENGINEER, A FLAT TOP H-20 SLAB WITH A 24" OPENING CAST ECCENTRICALLY MAY BE USED, REFER TO MANUFACTURERS DETAILS.
 - ALL STRUCTURE JOINTS AND PENETRATIONS SHALL BE WATER TIGHT.
 - REFER TO PLANS FOR PIPE SIZES, INVERTS, RIMS AND LOCATIONS.
 - ALL STEPS SHALL BE STEEL REINFORCED COPOLYMER POLYPROPYLENE PLASTIC STEP AND CONFORM TO ASTM C478 SPEC.

PRECAST CONCRETE DEEP SUMP DRAIN MANHOLE
N.T.S.

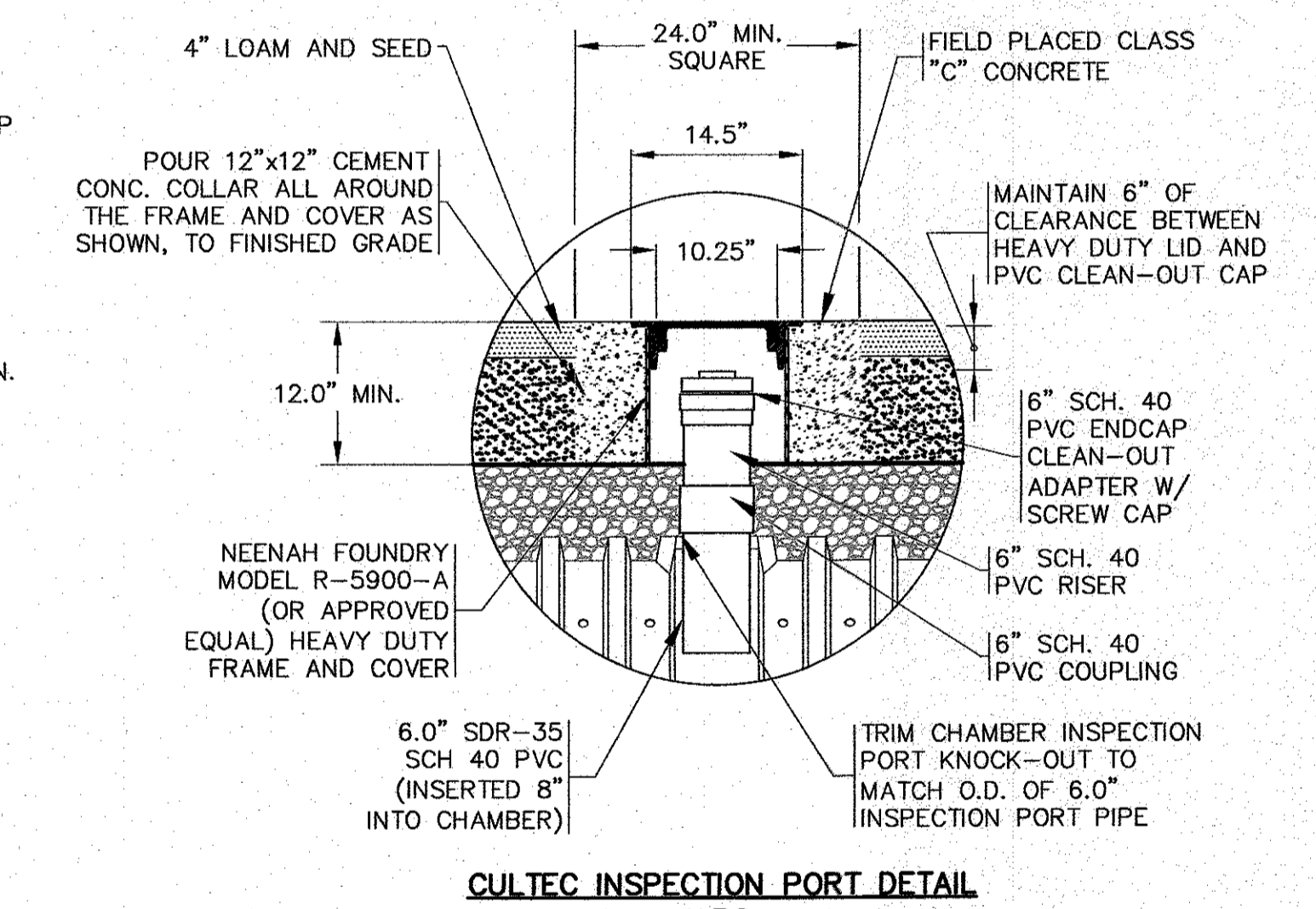


SYSTEM ELEVATIONS:

BOTTOM OF STONE	BOTTOM 150XLHD'S	TOP 150XLHD'S	TOP OF STONE
12.30	13.30	14.80	15.30

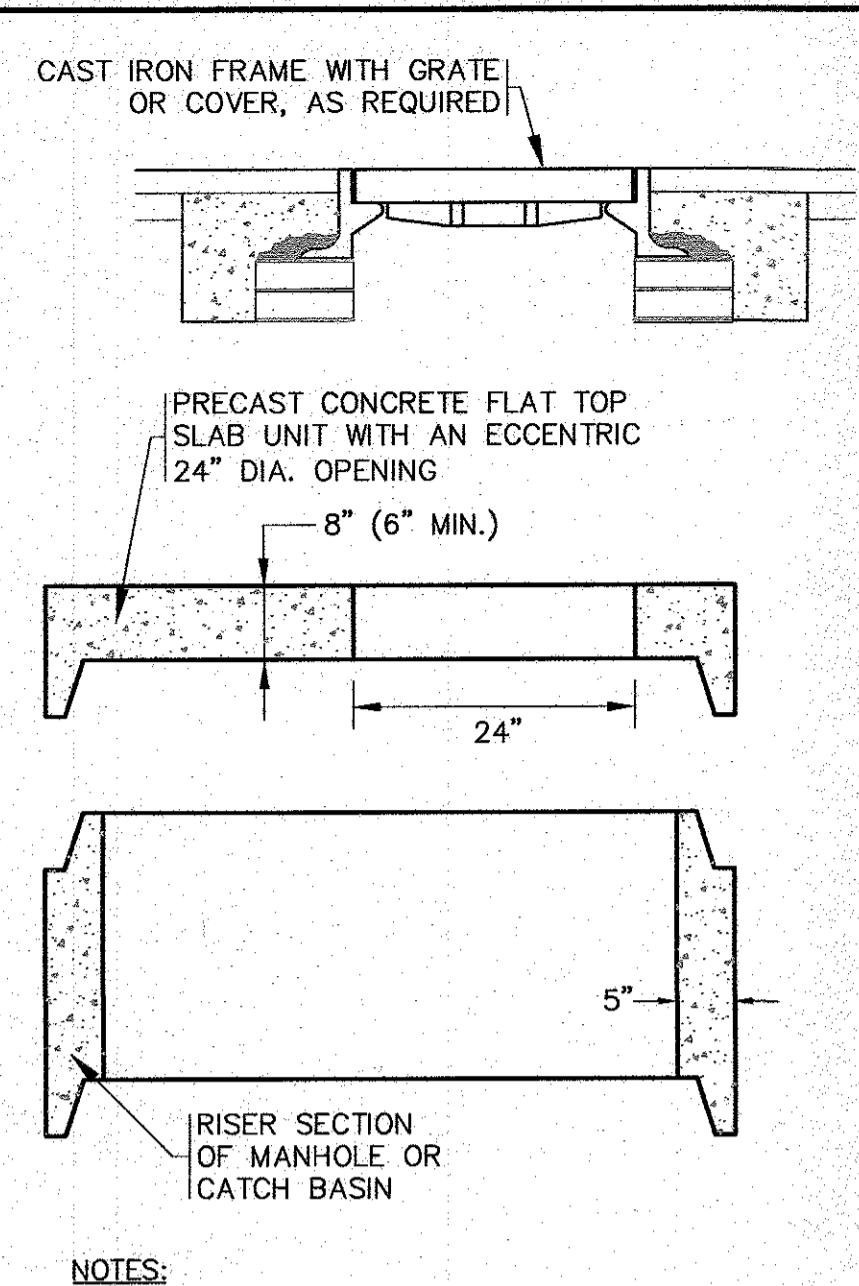
- NOTES:**
- REFER TO PLAN FOR LOCATIONS.
 - REMOVE ALL UNSUITABLE SOIL 2' MINIMUM BENEATH AND AROUND ALL SIDES OF THE PROPOSED LEACHING CHAMBERS & CRUSHED STONE. THIS INCLUDES ORGANICS, TOPSOIL, ROOTS AND OTHER UNSUITABLE SOILS REPLACE WITH CLEAN SAND AND GRAVEL APPROVED BY DESIGN ENGINEER.
 - FOR COMPLETE INSTALLATION DETAILS REFER TO CULTEC SPECIFICATIONS.

CULTEC R150XLHD DETAIL
N.T.S.



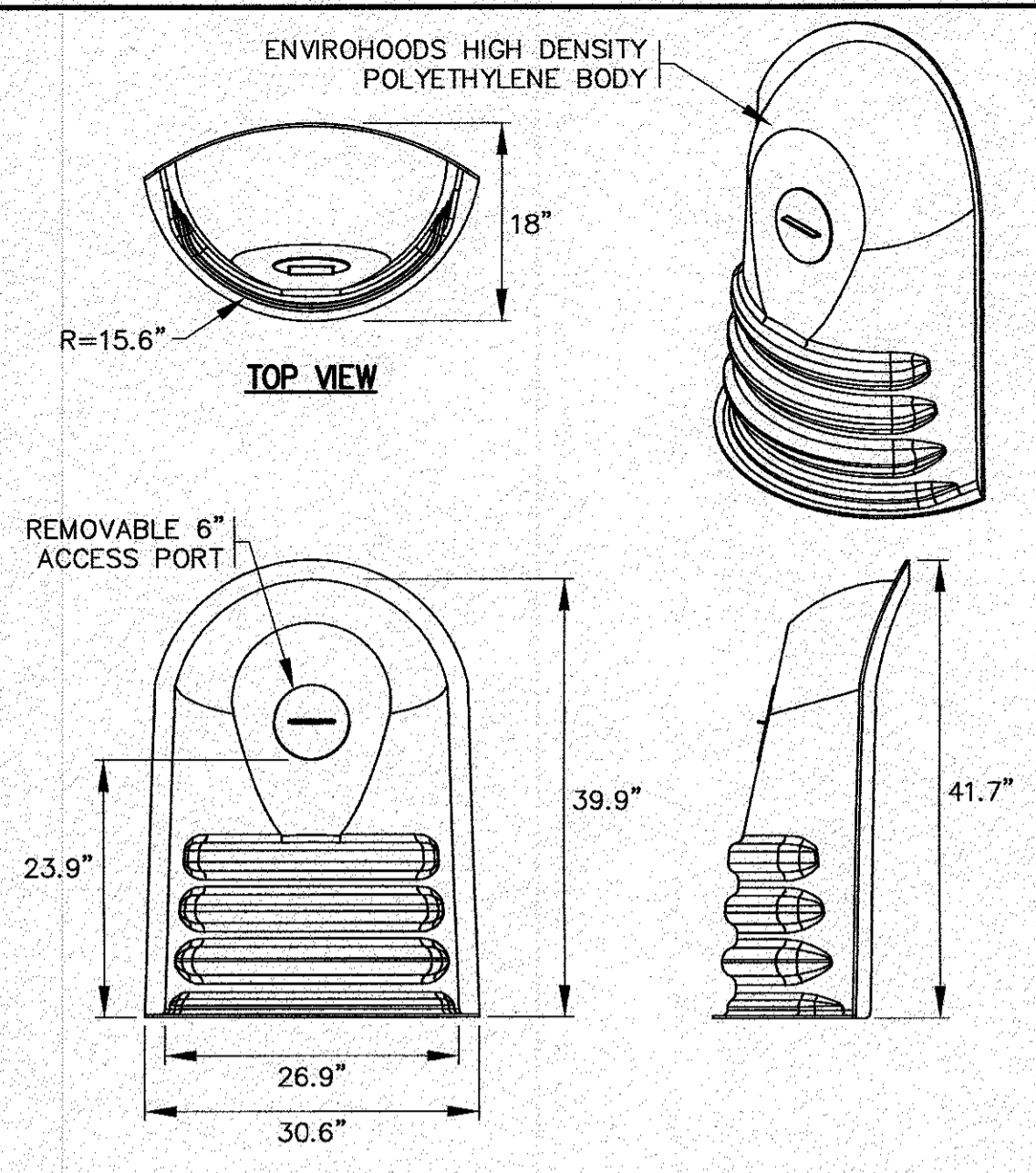
- NOTES:**
- REFER TO PLAN FOR LOCATIONS.
 - PROTECT THE POP-UP DRAINAGE EMITTER DURING CONSTRUCTION WITH A 12" PERFORATED PIPE PLACE AROUND THE UNIT.
 - FOR COMPLETE DETAILS AND INSTALLATION GUIDELINES REFER TO THE MANUFACTURER'S SPECIFICATIONS.

DRAINAGE EMITTER IN INSPECTION PORT DETAIL
N.T.S.



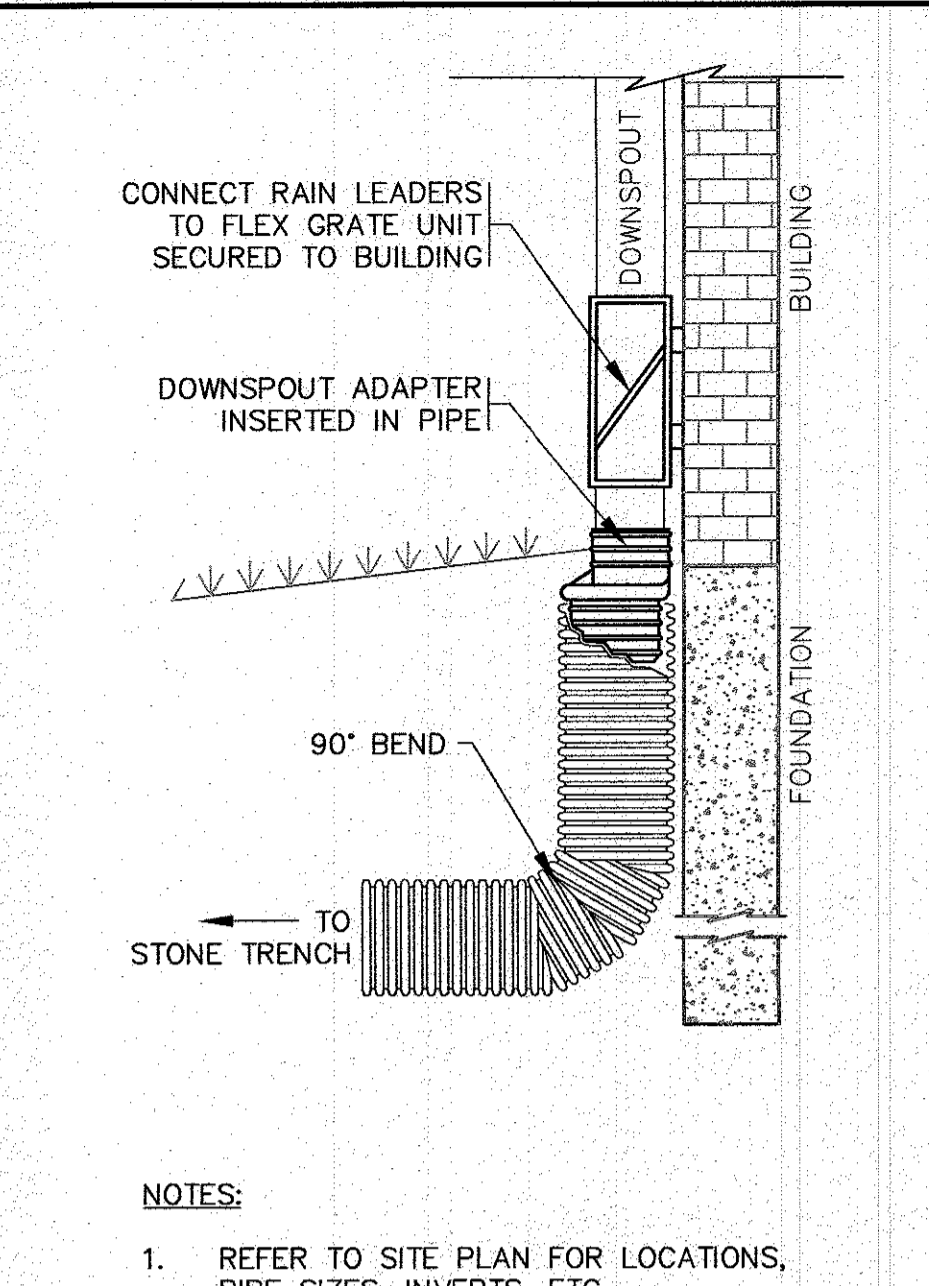
- NOTES:**
- FOR COMPLETE DETAILS REFER TO MANUFACTURERS SPECIFICATIONS.
 - CONTRACTOR TO SUBMIT SHOP DRAWINGS.

FLAT TOP SLAB
N.T.S.



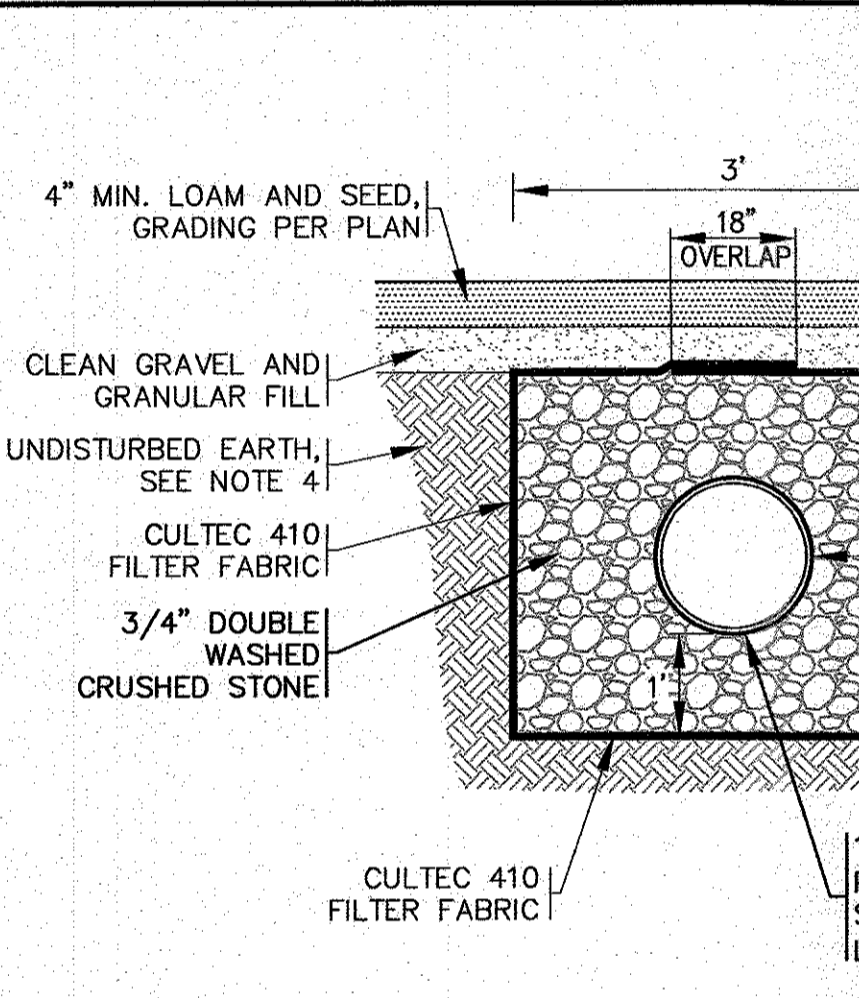
- NOTES:**
- FOR COMPLETE DETAILS REFER TO MANUFACTURERS SPECIFICATIONS.
 - CONTRACTOR TO SUBMIT SHOP DRAWINGS.

NYLOPLAST ENVIROHOOD
N.T.S.



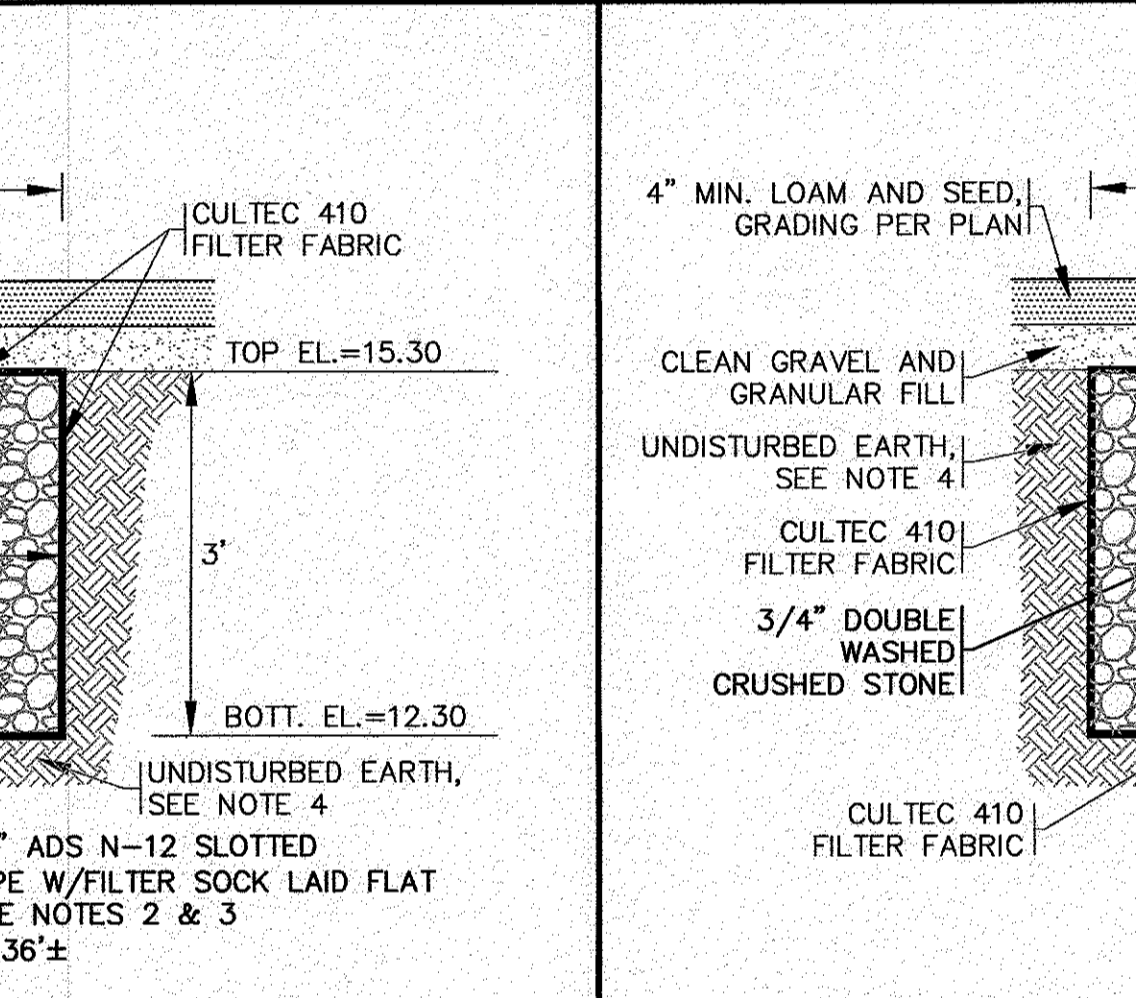
- NOTES:**
- REFER TO SITE PLAN FOR LOCATIONS, PIPE SIZES, INVERTS, ETC.
 - REFER TO ARCHITECTURAL PLANS FOR DOWNSPOUT SIZES AND LOCATIONS.

DOWNSPOUT DETAIL
N.T.S.



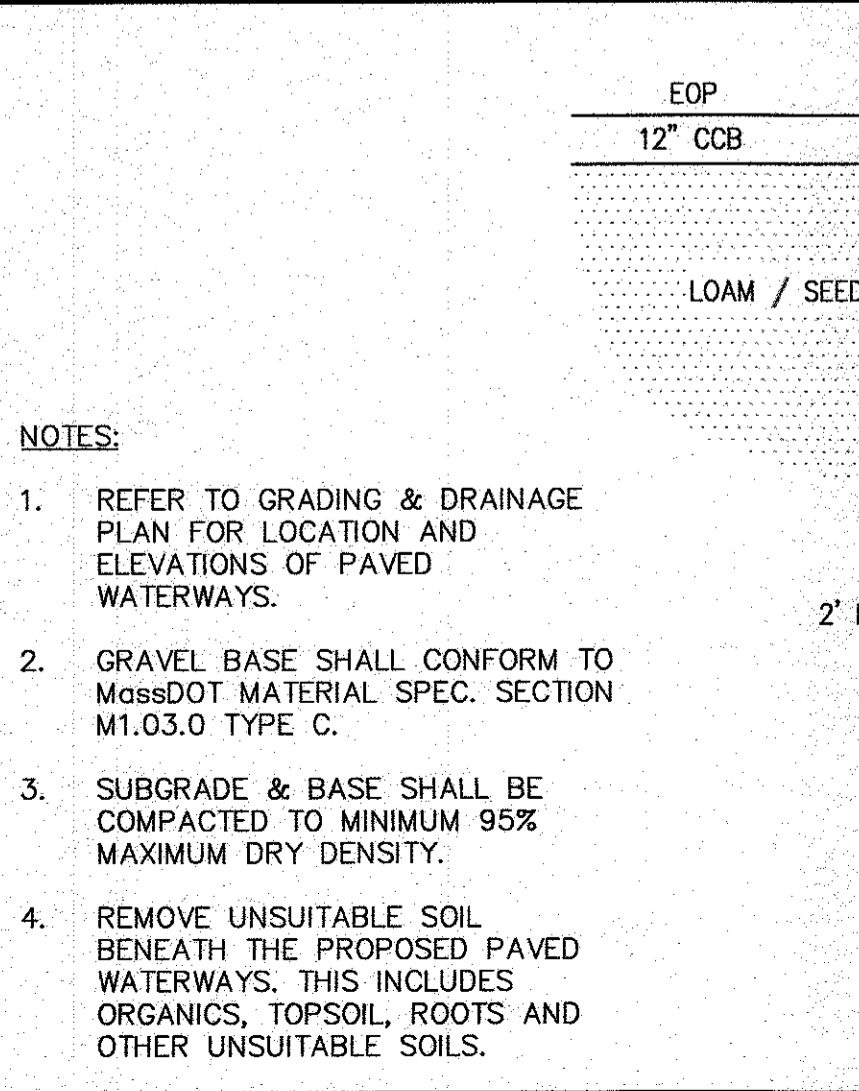
- NOTES:**
- REFER TO PLAN FOR LOCATIONS AND ELEVATIONS.
 - ALL PIPES SHALL HAVE SOIL TIGHT JOINTS AND FITTINGS.
 - PIPE PERFORMANCE PATTERN SHALL BE AASHTO CLASS II.
 - REMOVE ALL UNSUITABLE SOIL 2' MINIMUM BENEATH AND AROUND ALL SIDES OF THE PROPOSED STONE FILLED TRENCH. THIS INCLUDES ORGANICS, TOPSOIL, ROOTS AND OTHER UNSUITABLE SOILS REPLACE WITH CLEAN SAND AND GRAVEL APPROVED BY DESIGN ENGINEER.
 - INSTALL 6" SCH. 40 PVC INSPECTION PORT AT EACH END OF PERFORATED PIPE. A 6" NDS POLYOLEFIN POP-UP DRAINAGE EMITTER SHALL BE INSTALLED IN ONE (1) INSPECTION PORT. SEE PLAN FOR LOCATIONS.

3'x3' STONE FILLED TRENCH
N.T.S.



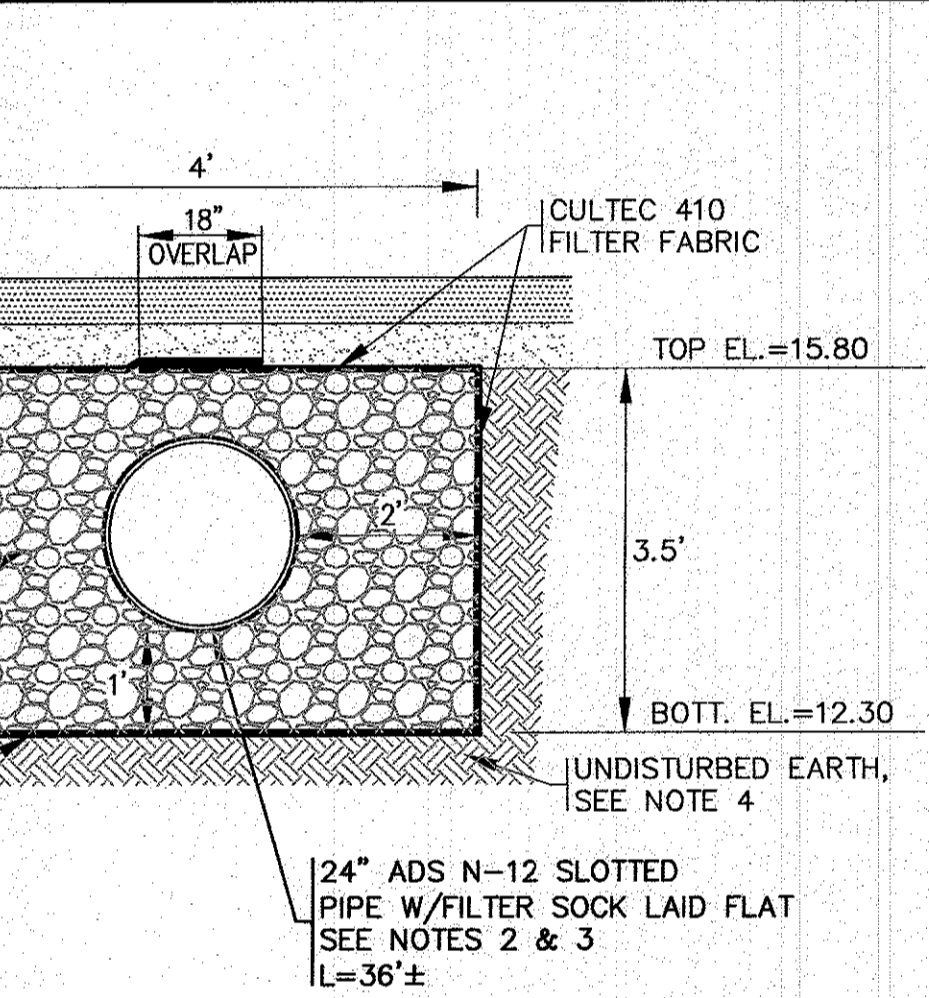
- NOTES:**
- REFER TO PLAN FOR LOCATIONS AND ELEVATIONS.
 - ALL PIPES SHALL HAVE SOIL TIGHT JOINTS AND FITTINGS.
 - PIPE PERFORMANCE PATTERN SHALL BE AASHTO CLASS II.
 - REMOVE ALL UNSUITABLE SOIL 2' MINIMUM BENEATH AND AROUND ALL SIDES OF THE PROPOSED STONE FILLED TRENCH. THIS INCLUDES ORGANICS, TOPSOIL, ROOTS AND OTHER UNSUITABLE SOILS REPLACE WITH CLEAN SAND AND GRAVEL APPROVED BY DESIGN ENGINEER.
 - INSTALL 6" SCH. 40 PVC INSPECTION PORT AT EACH END OF PERFORATED PIPE. A 6" NDS POLYOLEFIN POP-UP DRAINAGE EMITTER SHALL BE INSTALLED IN ONE (1) INSPECTION PORT. SEE PLAN FOR LOCATIONS.

3.5x4' STONE FILLED TRENCH
N.T.S.



- NOTES:**
- REFER TO GRADING & DRAINAGE PLAN FOR LOCATION AND ELEVATIONS OF PAVED WATERWAYS.
 - GRAVEL BASE SHALL CONFORM TO MassDOT MATERIAL SPEC. SECTION M1.03.0 TYPE C.
 - SUBGRADE & BASE SHALL BE COMPACTED TO MINIMUM 95% MAXIMUM DRY DENSITY.
 - REMOVE UNSUITABLE SOIL BENEATH THE PROPOSED PAVED WATERWAYS. THIS INCLUDES ORGANICS, TOPSOIL, ROOTS AND OTHER UNSUITABLE SOILS.

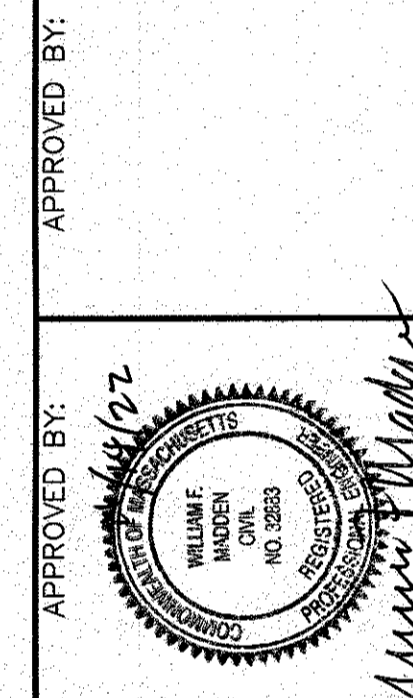
PAVED WATERWAY
N.T.S.



- NOTES:**
- REFER TO PLAN FOR LOCATIONS AND ELEVATIONS.
 - ALL PIPES SHALL HAVE SOIL TIGHT JOINTS AND FITTINGS.
 - PIPE PERFORMANCE PATTERN SHALL BE AASHTO CLASS II.
 - REMOVE ALL 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.
 - INSTALL 6" SCH. 40 PVC INSPECTION PORT AT EACH END OF PERFORATED PIPE. A 6" NDS POLYOLEFIN POP-UP DRAINAGE EMITTER SHALL BE INSTALLED IN ONE (1) INSPECTION PORT. SEE PLAN FOR LOCATIONS.

PAVED WATERWAY
N.T.S.

DATE	NOV. 14, 2022	DESCRIPTION
DRAWN BY	JMP	
CHECKED BY	WFM	
JOB NO.	20-9499	
SCALE	N.T.S.	
REV.		
DATE		
BY		
APP'D		



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PREPARED FOR:
6 CHAPEL LANE
WAREHAM, MA
6 CHAPEL LANE, LLC
19 DEPOT STREET
WAREHAM, MA