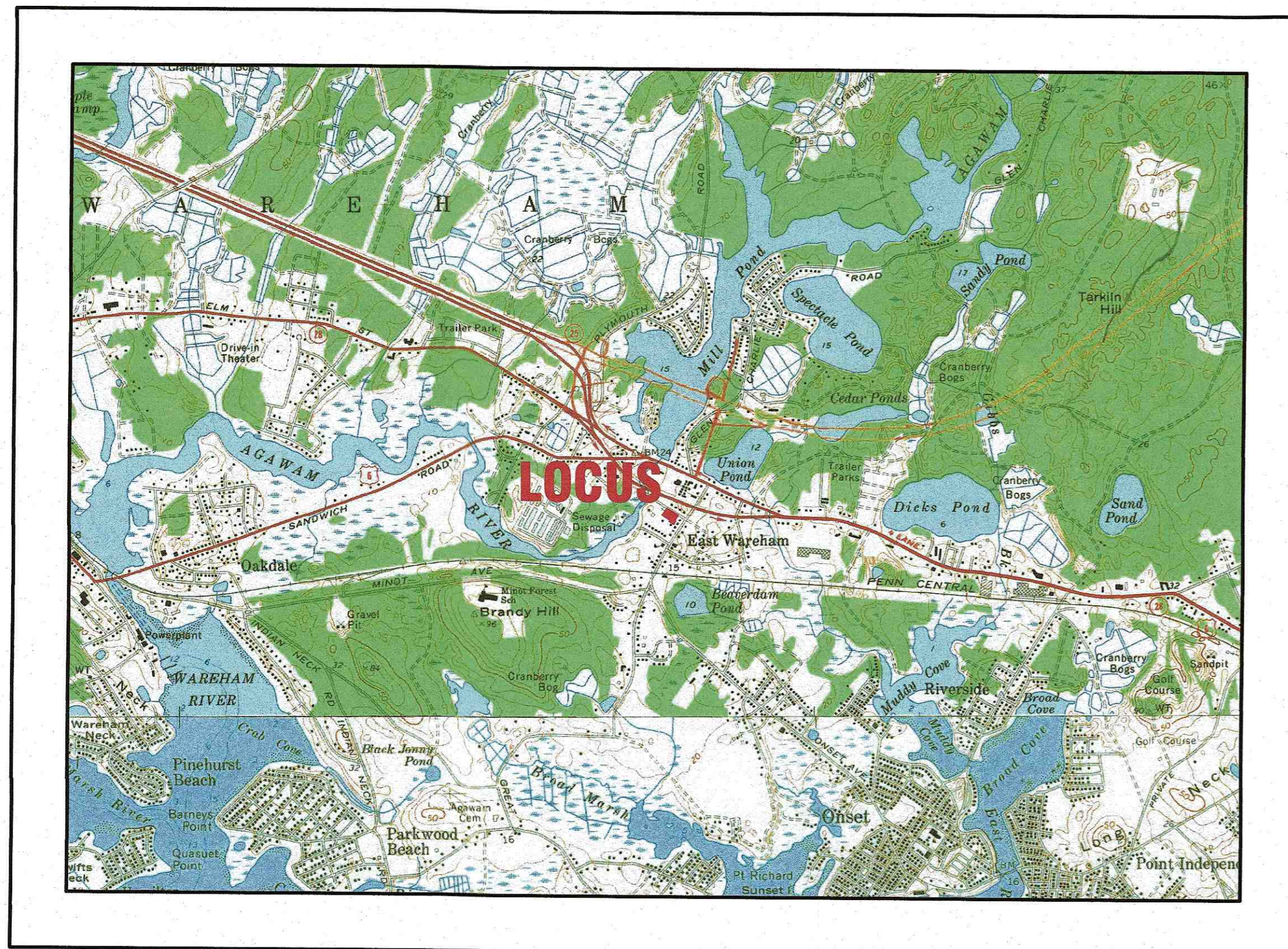


SITE DEVELOPMENT PLAN

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

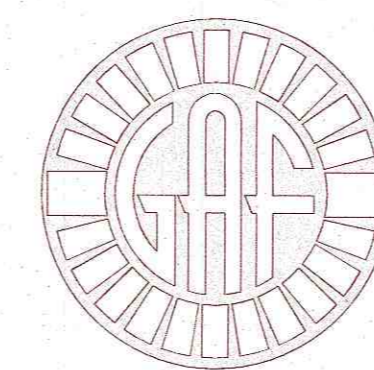
ZONING DISTRICT: MULTIPLE RESIDENCE 30
ASSESSOR'S MAP: 43
ASSESSOR'S LOTS: 1036, 1037.A, 1039,
1040.A & 1041.A
MIN. LOT AREA (2-FAMILY): 45,000 S.F.*
MIN. ROAD FRONTAGE: 250'
MIN. FRONT SETBACK: 30'
MIN. SIDE & REAR SETBACK: 20'
MAX. PRINCIPAL BUILDING HEIGHT: 35'
MAX. BUILDING COVERAGE: 25%
MAX. LOT COVERAGE: NR
WATER SUPPLY: TOWN WATER
SANITARY SEWER: TOWN SEWER

ZONING DATA:

ZONING TABLE	ALLOWED	PROVIDED
LOT AREA:	165,000 S.F.*	36,180± S.F. (EXISTING)
FRONTAGE:	250'	233.93 (EXISTING)
FRONT SETBACK:	30'	62.9'
SIDE SETBACK:	20'	28.4'
REAR SETBACK:	20'	23.6'
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=12 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	LANDSCAPING PLAN
9	DETAIL SHEET 1
10	DETAIL SHEET 2
11	DETAIL SHEET 3

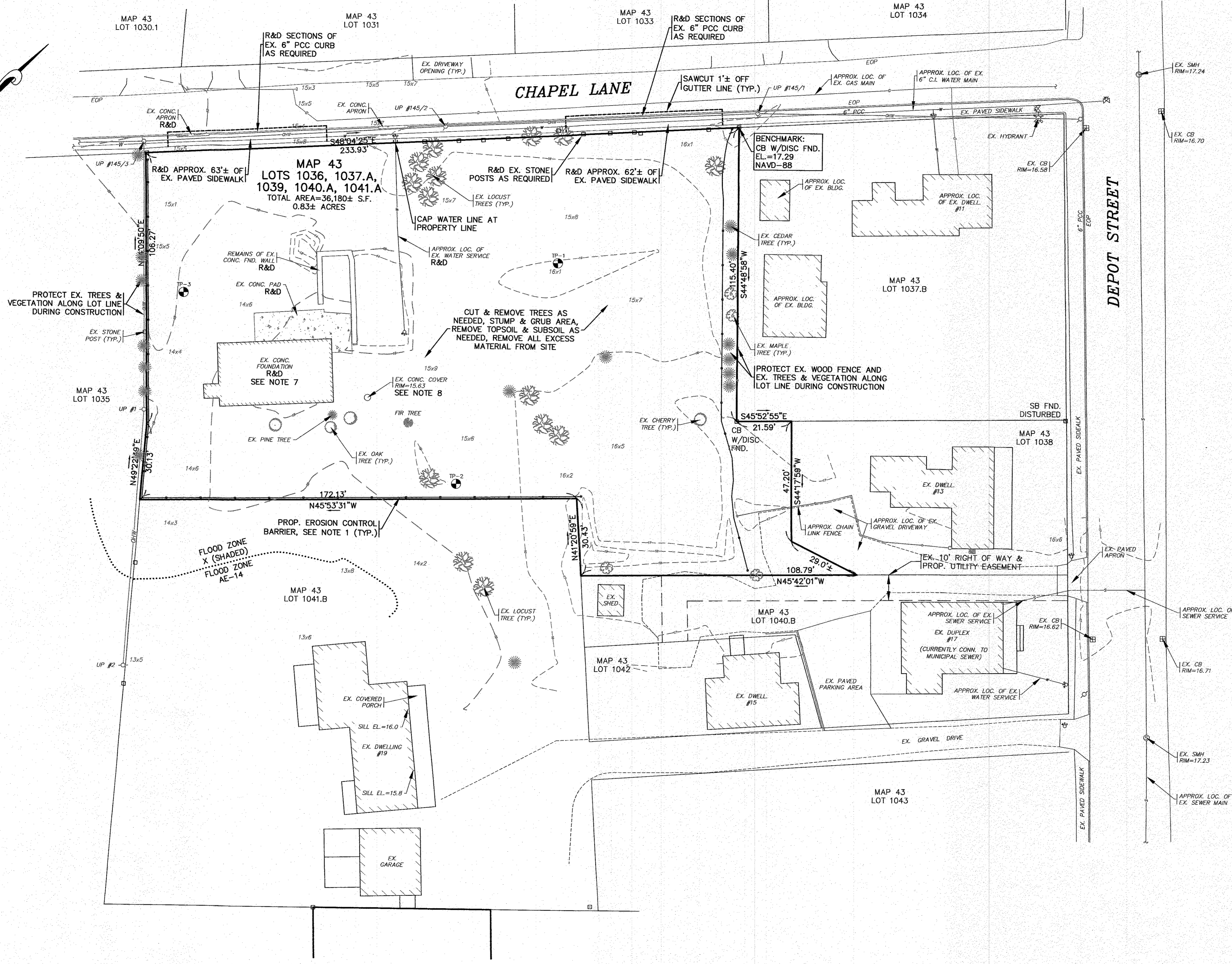
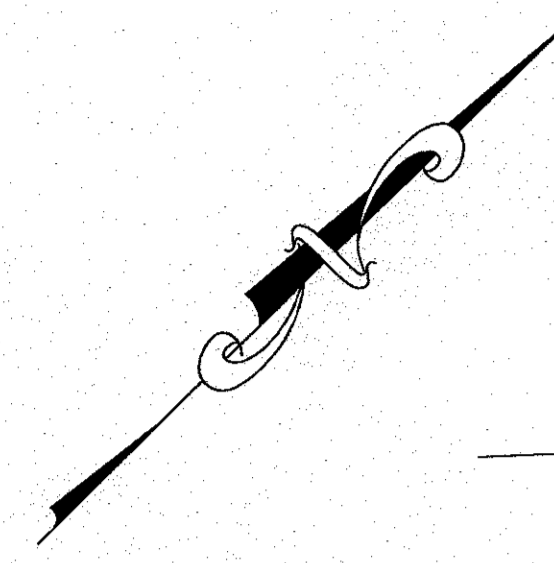
FLOOD ZONE DATE:

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.

* 45,000 S.F. MIN. AND AN ADDITIONAL
30,000 S.F. FOR EACH ADDITIONAL UNIT

DATE	REV.	DATE	BY	APP'D	DESCRIPTION
NOV. 14, 2022	1	3/14/23	JMP	WFM	PER INITIAL PEER REVIEW
DRAWN BY: JMP					
CHECKED BY: WFM					
JOB NO.: 20-9499					
SCALE: AS NOTED					
APPROVED BY: [Signature]					
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 6 CHAPEL LANE WAREHAM, MA PREPARED FOR: 6 CHAPEL LANE, LLC WAREHAM, MA 19 DEPOT STREET					
JOB NO.: 20-9499					
DWG. 1 OF 11					

PERMIT SET
(NOT FOR CONSTRUCTION)



- 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 REFILLED 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.
 - AFTER SIDEWALK REMOVAL THE CONTRACTOR SHALL PROVIDE A 3' MIN. WIDE TEMPORARY PEDESTRIAN DETOUR IF REQUIRED. CONTRACTOR SHALL COORDINATE WITH OWNER. WHENEVER POSSIBLE, WORK SHOULD BE DONE IN A MANNER THAT DOES NOT CREATE A NEED TO DETOUR PEDESTRIANS FROM EXISTING ROUTES OR CROSSINGS.

DATE	BY	DESCRIPTION
NOV. 14, 2022	JMP	DRAWN BY
	WFM	CHECKED BY
		JOB NO.: 20-9499
		SCALE: 1" = 20'
		REV. DATE
		1 3/14/23
		JMP WFM
		PER INITIAL PEER REVIEW
		APP'D

APPROVED BY:

DATE: 11/29/22

WILIAM MADSEN

REGISTERED PROFESSIONAL ENGINEER

MASSACHUSETTS

NO. 10088

NAME: William Madson

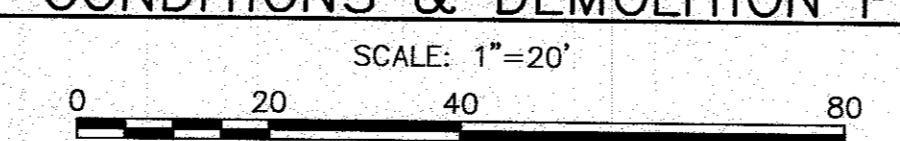
G.A.F. ENGINEERING, INC.
 PROFESSIONAL ENGINEERS & LAND SURVEYORS
 266 MAIN STREET - WAREHAM, MA 02571
 TEL: (508) 295-6600 FAX: (508) 295-6634
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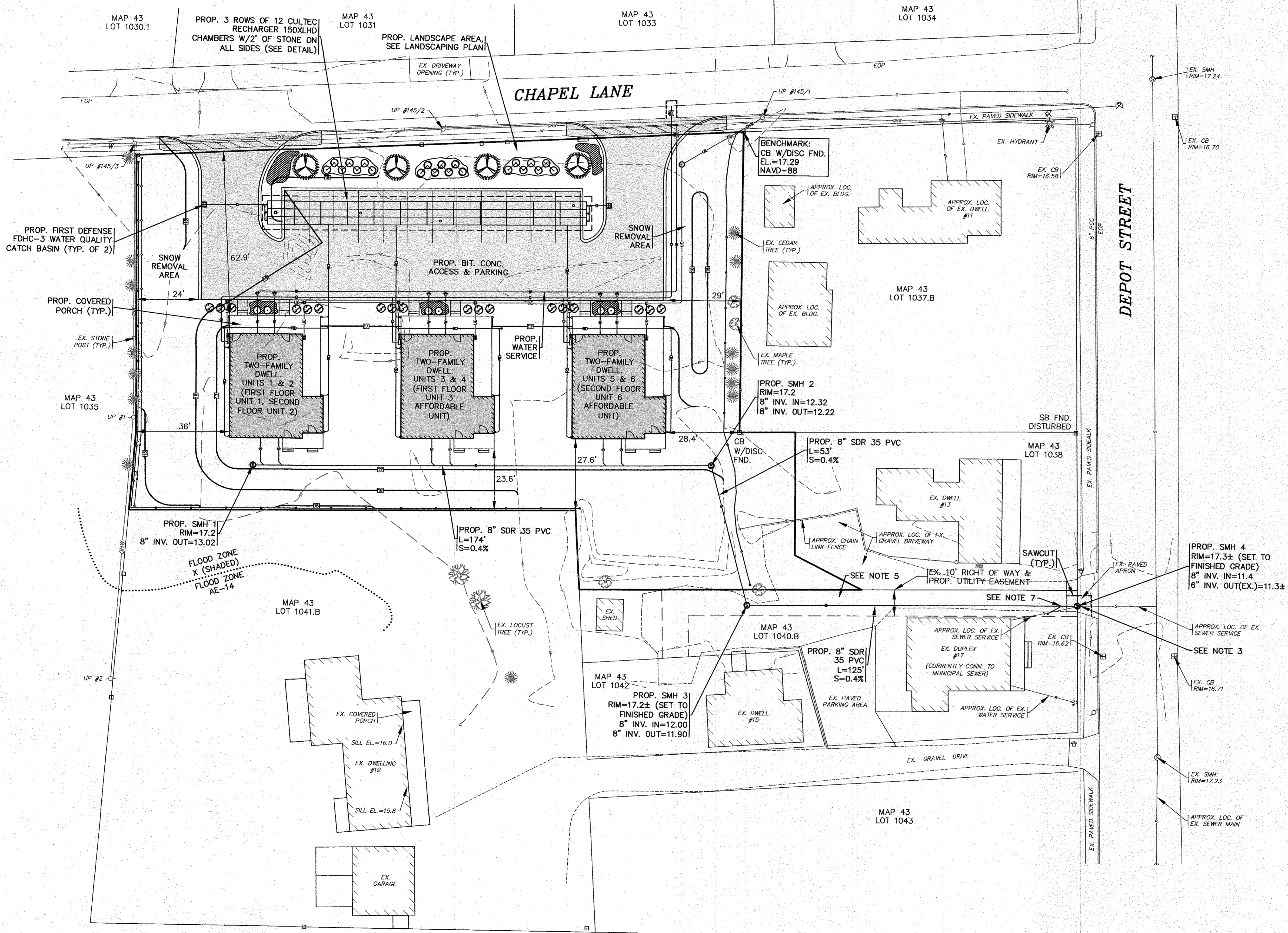
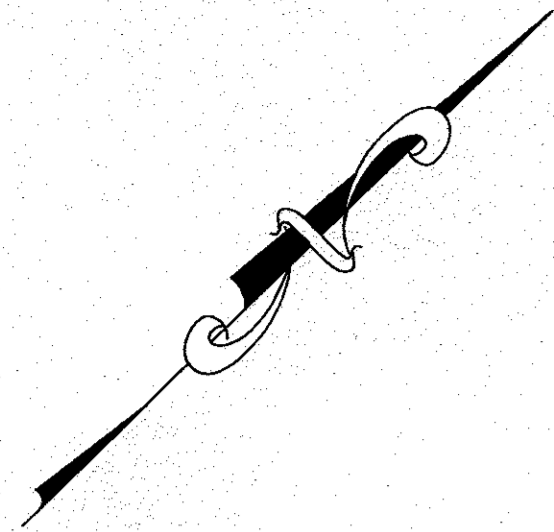
REPRODUCING OR TRANSMITTING IN ANY FORM OR BY ANY MEANS WITHOUT THE EXPRESS WRITTEN CONSENT OF G.A.F. ENGINEERING, INC. WITH THE EXCEPTION OF ANY REGULATORY AUTHORITY WHICH MAY REPRODUCE IT IN CONNECTION WITH THE PERFORMANCE OF ANY SERVICE PROVIDED BY G.A.F. ENGINEERING, INC. SHALL BE SUBJECT TO LITIGATION.

SITE DEVELOPMENT PLAN
EX. CONDITIONS & DEMOLITION
 6 CHAPEL LANE
 WAREHAM, MA

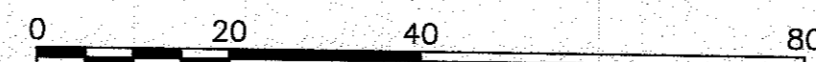
PREPARED FOR:
6 CHAPEL LANE, LLC
 WAREHAM, MA

EX. CONDITIONS & DEMOLITION PLAN





SCALE: 1"=20'

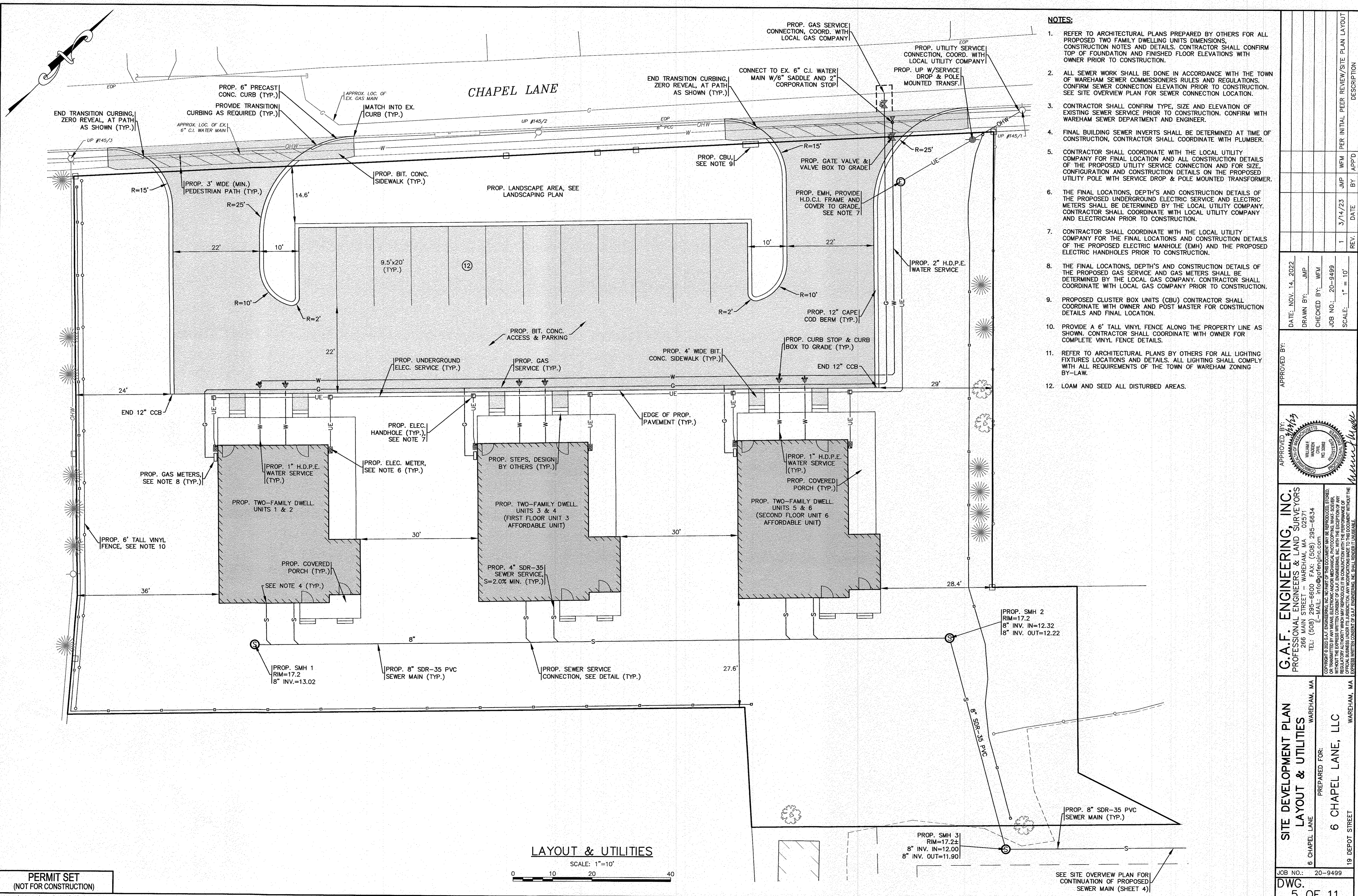


NOTES:

- 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.

DATE: NOV. 8, 2022		DRAWN BY: JMP		CHECKED BY: WFM		JOB NO.: 20-9499		SCALE: 1" = 20'	
APPROVED BY:		APPROVED BY:		APPROVED BY:		APPROVED BY:		APPROVED BY:	
<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@gafeng.com</p>									
<p>SITE DEVELOPMENT PLAN SITE OVERVIEW PLAN</p>					<p>WAREHAM, MA PREPARED FOR: 6 CHAPEL LANE, LLC 19 DEPOT STREET WAREHAM, MA</p>				
<p>JOB NO.: 20-9499</p>					<p>DATE: 3/14/23</p>				
<p>PERMIT SET (NOT FOR CONSTRUCTION)</p>					<p>DWG. 4 OF 11</p>				

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- 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 AND FOR SIZE, CONFIGURATION AND CONSTRUCTION DETAILS ON THE PROPOSED UTILITY POLE WITH SERVICE DROP & POLE MOUNTED TRANSFORMER.
 - 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.
 - CONTRACTOR SHALL COORDINATE WITH THE LOCAL UTILITY COMPANY FOR THE FINAL LOCATIONS AND CONSTRUCTION DETAILS OF THE PROPOSED ELECTRIC MANHOLE (EMH) AND THE PROPOSED ELECTRIC HANDHOLES 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.
 - 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 COMPLETE VINYL FENCE DETAILS.
 - REFER TO ARCHITECTURAL PLANS BY OTHERS FOR ALL LIGHTING FIXTURES LOCATIONS AND DETAILS. ALL LIGHTING SHALL COMPLY WITH ALL REQUIREMENTS OF THE TOWN OF WAREHAM ZONING BY-LAW.
 - LOAM AND SEED ALL DISTURBED AREAS.

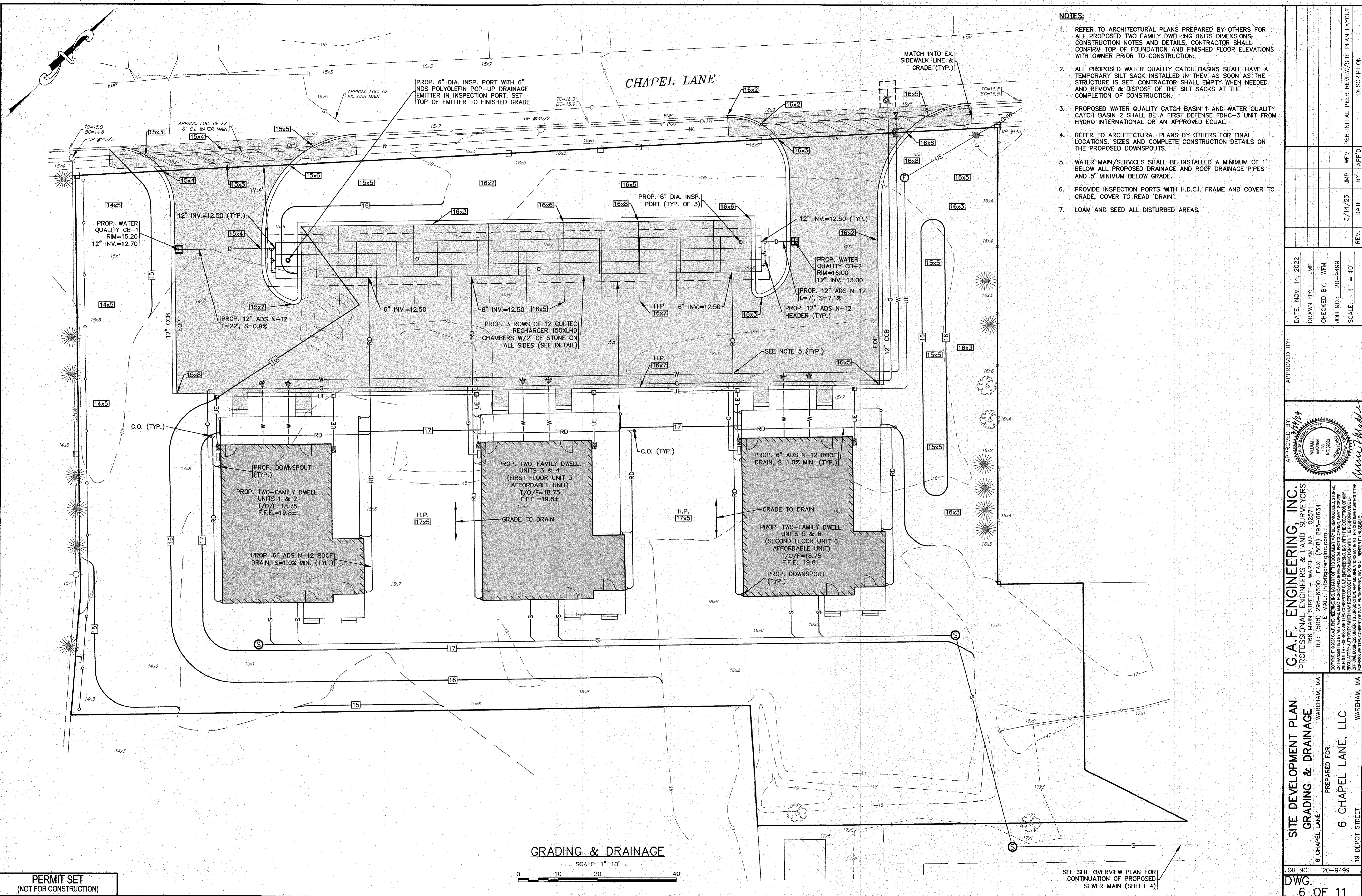
DATE: NOV. 14, 2022		DRAWN BY: JMP		CHECKED BY: WEM		JOB NO.: 20-9499		SCALE: 1" = 10'	
APPROVED BY: <i>[Signature]</i>		APPROVED BY: <i>[Signature]</i>		APPROVED BY: <i>[Signature]</i>		APPROVED BY: <i>[Signature]</i>		APPROVED BY: <i>[Signature]</i>	
G.A.F. ENGINEERING, INC. PROFESSIONAL ENGINEERS & LAND SURVEYORS 268 MAIN STREET - WAREHAM, MA 02571 TEL: (508) 295-6800 FAX: (508) 295-6634 E-MAIL: info@gafeng.com		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		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		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		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	
SITE DEVELOPMENT PLAN LAYOUT & UTILITIES		LAYOUT & UTILITIES		LAYOUT & UTILITIES		LAYOUT & UTILITIES		LAYOUT & UTILITIES	
WAREHAM, MA		WAREHAM, MA		WAREHAM, MA		WAREHAM, MA		WAREHAM, MA	
PREPARED FOR: 6 CHAPEL LANE		PREPARED FOR: 6 CHAPEL LANE, LLC		PREPARED FOR: 6 CHAPEL LANE, LLC		PREPARED FOR: 6 CHAPEL LANE, LLC		PREPARED FOR: 6 CHAPEL LANE, LLC	
19 DEPOT STREET		19 DEPOT STREET		19 DEPOT STREET		19 DEPOT STREET		19 DEPOT STREET	
JOB NO.: 20-9499		JOB NO.: 20-9499		JOB NO.: 20-9499		JOB NO.: 20-9499		JOB NO.: 20-9499	
DWG.		DWG.		DWG.		DWG.		DWG.	
5 OF 11		5 OF 11		5 OF 11		5 OF 11		5 OF 11	

PERMIT SET
(NOT FOR CONSTRUCTION)

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

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

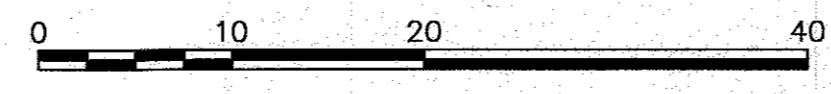
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- NOTES:**
- REFER TO ARCHITECTURAL PLANS PREPARED BY OTHERS FOR ALL PROPOSED TWO FAMILY DWELLING UNITS DIMENSIONS, CONSTRUCTION NOTES AND DETAILS. CONTRACTOR SHALL CONFIRM TOP OF FOUNDATION AND FINISHED FLOOR ELEVATIONS WITH OWNER PRIOR TO CONSTRUCTION.
 - ALL PROPOSED WATER QUALITY 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.
 - PROPOSED WATER QUALITY CATCH BASIN 1 AND WATER QUALITY CATCH BASIN 2 SHALL BE A FIRST DEFENSE FDHC-3 UNIT FROM HYDRO INTERNATIONAL OR AN APPROVED EQUAL.
 - REFER TO ARCHITECTURAL PLANS BY OTHERS FOR FINAL LOCATIONS, SIZES AND COMPLETE CONSTRUCTION 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'.
 - LOAM AND SEED ALL DISTURBED AREAS.

GRADING & DRAINAGE

SCALE: 1"=10'

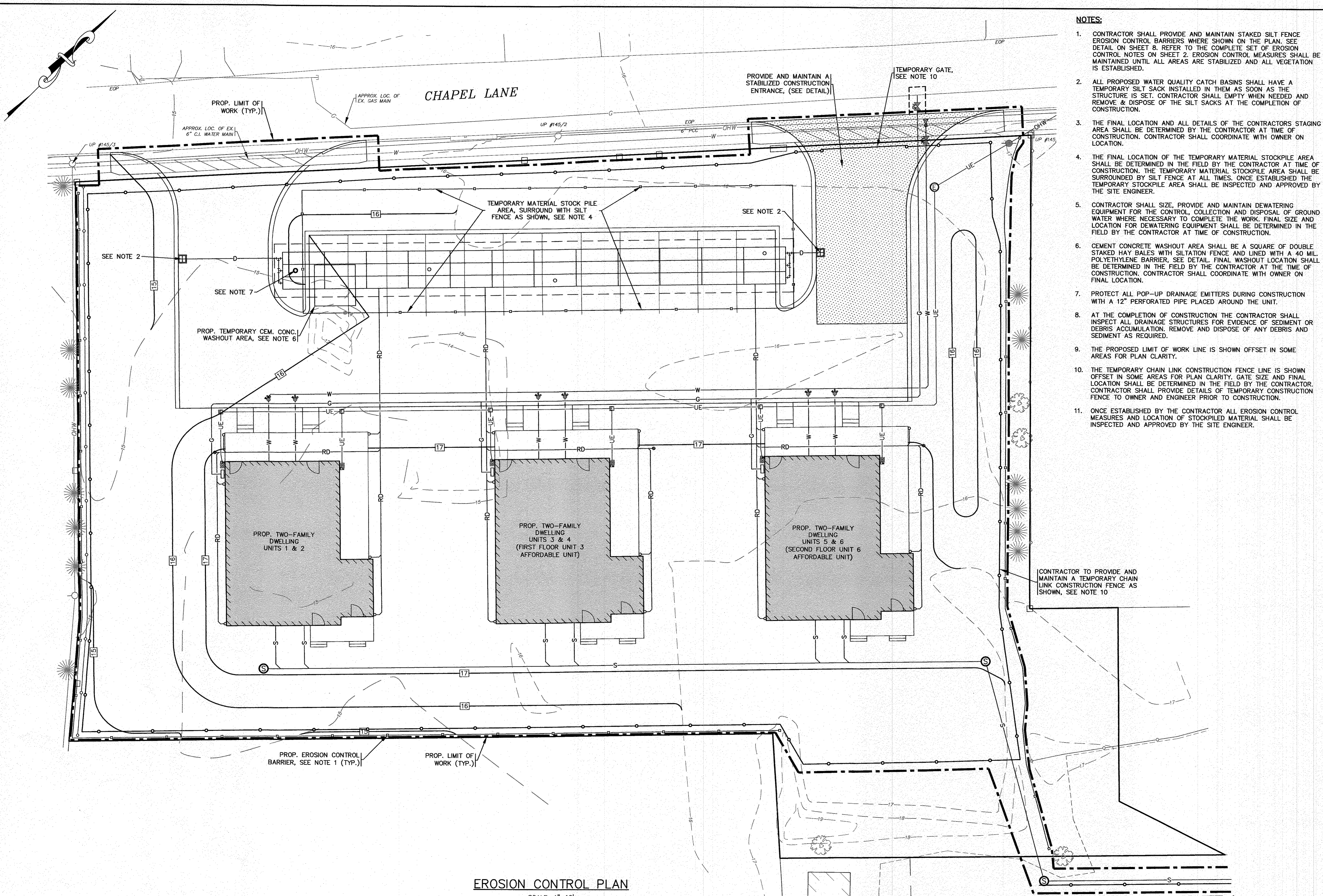


SEE SITE OVERVIEW PLAN FOR CONTINUATION OF PROPOSED SEWER MAIN (SHEET 4)

PERMIT SET
(NOT FOR CONSTRUCTION)

DATE: NOV. 14, 2022		DRAWN BY: JMP		CHECKED BY: WFM		JOB NO.: 20-9499		SCALE: 1" = 10'	
APPROVED BY:		APPROVED BY:		APPROVED BY:		APPROVED BY:		APPROVED BY:	
G.A.F. ENGINEERING, INC. PROFESSIONAL ENGINEERS & LAND SURVEYORS 286 MAIN STREET - WAREHAM, MA 02571 TEL: (508) 295-6600 FAX: (508) 295-6634 E-MAIL: info@gafeng.com		G.A.F. ENGINEERING, INC. PROFESSIONAL ENGINEERS & LAND SURVEYORS 286 MAIN STREET - WAREHAM, MA 02571 TEL: (508) 295-6600 FAX: (508) 295-6634 E-MAIL: info@gafeng.com		G.A.F. ENGINEERING, INC. PROFESSIONAL ENGINEERS & LAND SURVEYORS 286 MAIN STREET - WAREHAM, MA 02571 TEL: (508) 295-6600 FAX: (508) 295-6634 E-MAIL: info@gafeng.com		G.A.F. ENGINEERING, INC. PROFESSIONAL ENGINEERS & LAND SURVEYORS 286 MAIN STREET - WAREHAM, MA 02571 TEL: (508) 295-6600 FAX: (508) 295-6634 E-MAIL: info@gafeng.com		G.A.F. ENGINEERING, INC. PROFESSIONAL ENGINEERS & LAND SURVEYORS 286 MAIN STREET - WAREHAM, MA 02571 TEL: (508) 295-6600 FAX: (508) 295-6634 E-MAIL: info@gafeng.com	
SITE DEVELOPMENT PLAN GRADING & DRAINAGE 6 CHAPEL LANE WAREHAM, MA		PREPARED FOR: 6 CHAPEL LANE, LLC WAREHAM, MA		JOB NO.: 20-9499		DWG. 6 OF 11		REV. DATE BY APP'D DESCRIPTION	
				1		3/14/23		JMP WFM PER INITIAL PEER REVIEW/SITE PLAN LAYOUT	

1: (W/ DOWNS) 2022 DOWNS) 20-9499 (EXCISE) (9/6/23) (9/6/23) (9/6/23) (9/6/23) (9/6/23) (9/6/23) (9/6/23) (9/6/23) (9/6/23)



- 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 WATER QUALITY 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 THE 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 FINAL 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 SOME AREAS FOR PLAN 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.

DATE: NOV. 14, 2022
 DRAWN BY: JMP
 CHECKED BY: WFM
 JOB NO.: 20-9499
 SCALE: 1" = 10'

APPROVED BY: [Signature]

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

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

PERMIT SET (NOT FOR CONSTRUCTION)

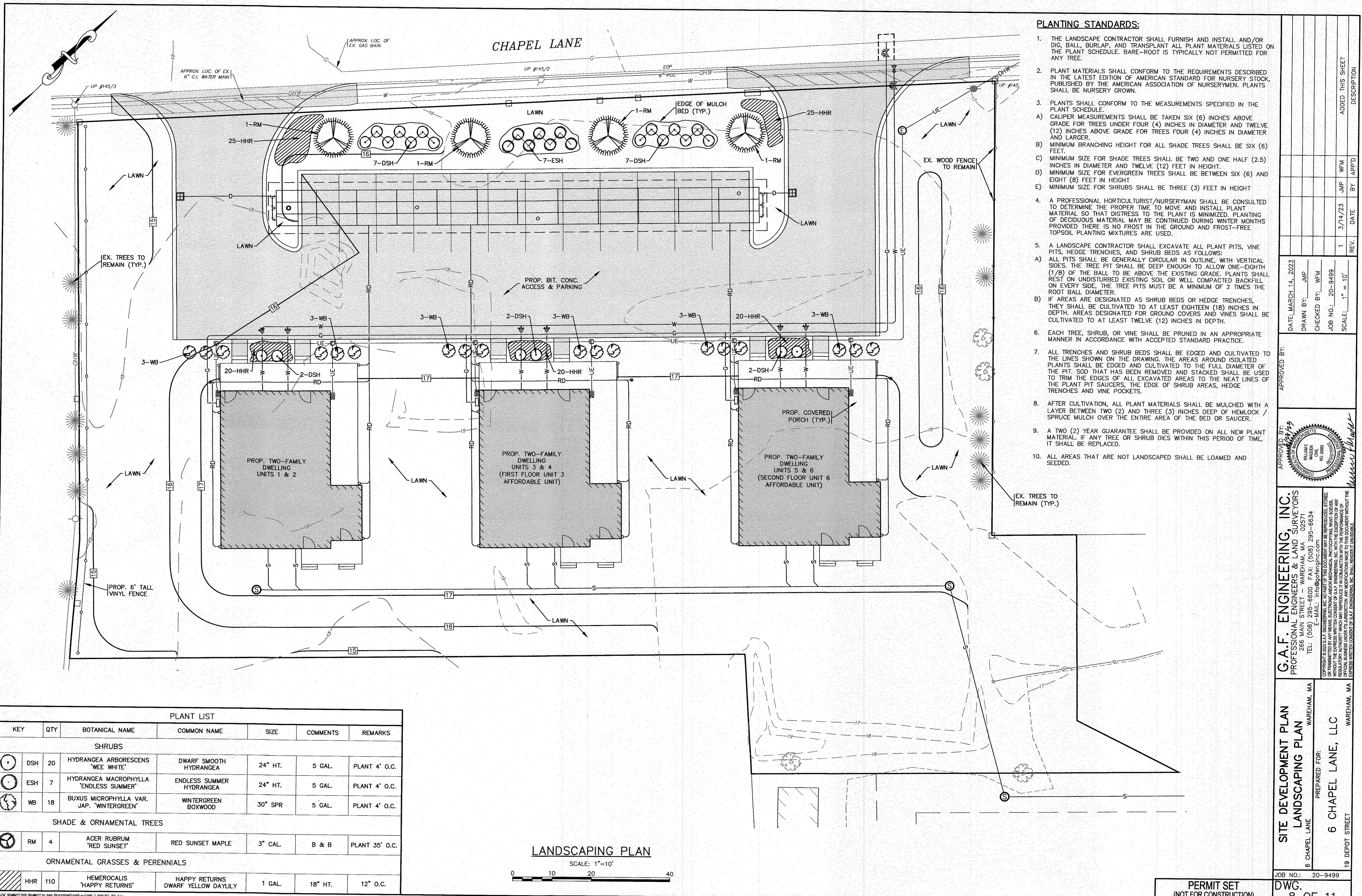
19 DEPOT STREET WAREHAM, MA

JOB NO.: 20-9499
 DWG. 7 OF 11

DATE	REV.	DATE	BY	APP'D	DESCRIPTION
3/14/23	1	JMP	WFM		PER INITIAL PEER REVIEW/SITE PLAN LAYOUT

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

H:\DWG\EROSION\2020\EROSION\20-9499 (6 CHAPEL LANE)\0499.dwg (9/19/23) 3-DUPLEX-REV-2.dwg



- PLANTING STANDARDS:**
- 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.
 - 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.
 - PLANTS SHALL CONFORM TO THE MEASUREMENTS SPECIFIED IN THE PLANT SCHEDULE.
 - 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.
 - MINIMUM BRANCHING HEIGHT FOR ALL SHADE TREES SHALL BE SIX (6) FEET.
 - MINIMUM SIZE FOR SHADE TREES SHALL BE TWO AND ONE HALF (2.5) INCHES IN DIAMETER AND TWELVE (12) FEET IN HEIGHT.
 - MINIMUM SIZE FOR EVERGREEN TREES SHALL BE BETWEEN SIX (6) AND EIGHT (8) FEET IN HEIGHT
 - MINIMUM SIZE FOR SHRUBS SHALL BE THREE (3) FEET IN HEIGHT
 - 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.
 - A LANDSCAPE CONTRACTOR SHALL EXCAVATE ALL PLANT PITS, VINE PITS, HEDGE TRENCHES, AND SHRUB BEDS AS FOLLOWS:
 - 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.
 - 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.
 - EACH TREE, SHRUB, OR VINE SHALL BE PRUNED IN AN APPROPRIATE MANNER IN ACCORDANCE WITH ACCEPTED STANDARD PRACTICE.
 - 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.
 - 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.
 - 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.
 - ALL AREAS THAT ARE NOT LANDSCAPED SHALL BE LOAMED AND SEEDED.

PLANT LIST						
KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	COMMENTS	REMARKS
SHRUBS						
DSH	20	HYDRANGEA ARBORESCENS 'WEE WHITE'	DWARF SMOOTH HYDRANGEA	24" HT.	5 GAL.	PLANT 4' O.C.
ESH	7	HYDRANGEA MACROPHYLLA 'ENDLESS SUMMER'	ENDLESS SUMMER HYDRANGEA	24" HT.	5 GAL.	PLANT 4' O.C.
WB	18	BUXUS MICROPHYLLA VAR. JAP. 'WINTERGREEN'	WINTERGREEN BOXWOOD	30" SPR	5 GAL.	PLANT 4' O.C.
SHADE & ORNAMENTAL TREES						
RM	4	ACER RUBRUM 'RED SUNSET'	RED SUNSET MAPLE	3" CAL.	B & B	PLANT 35' O.C.
ORNAMENTAL GRASSES & PERENNIALS						
HHR	110	HEMEROCALIS 'HAPPY RETURNS'	HAPPY RETURNS DWARF YELLOW DAYLILY	1 GAL.	18" HT.	12" O.C.

LANDSCAPING PLAN
SCALE: 1"=10'
0 10 20 40

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SITE DEVELOPMENT PLAN
LANDSCAPING PLAN
6 CHAPEL LANE WAREHAM, MA

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

DATE: MARCH 14, 2023
DRAWN BY: JMP
CHECKED BY: WFM
JOB NO.: 20-9499
SCALE: 1" = 10'

APPROVED BY: *Murray Helder*

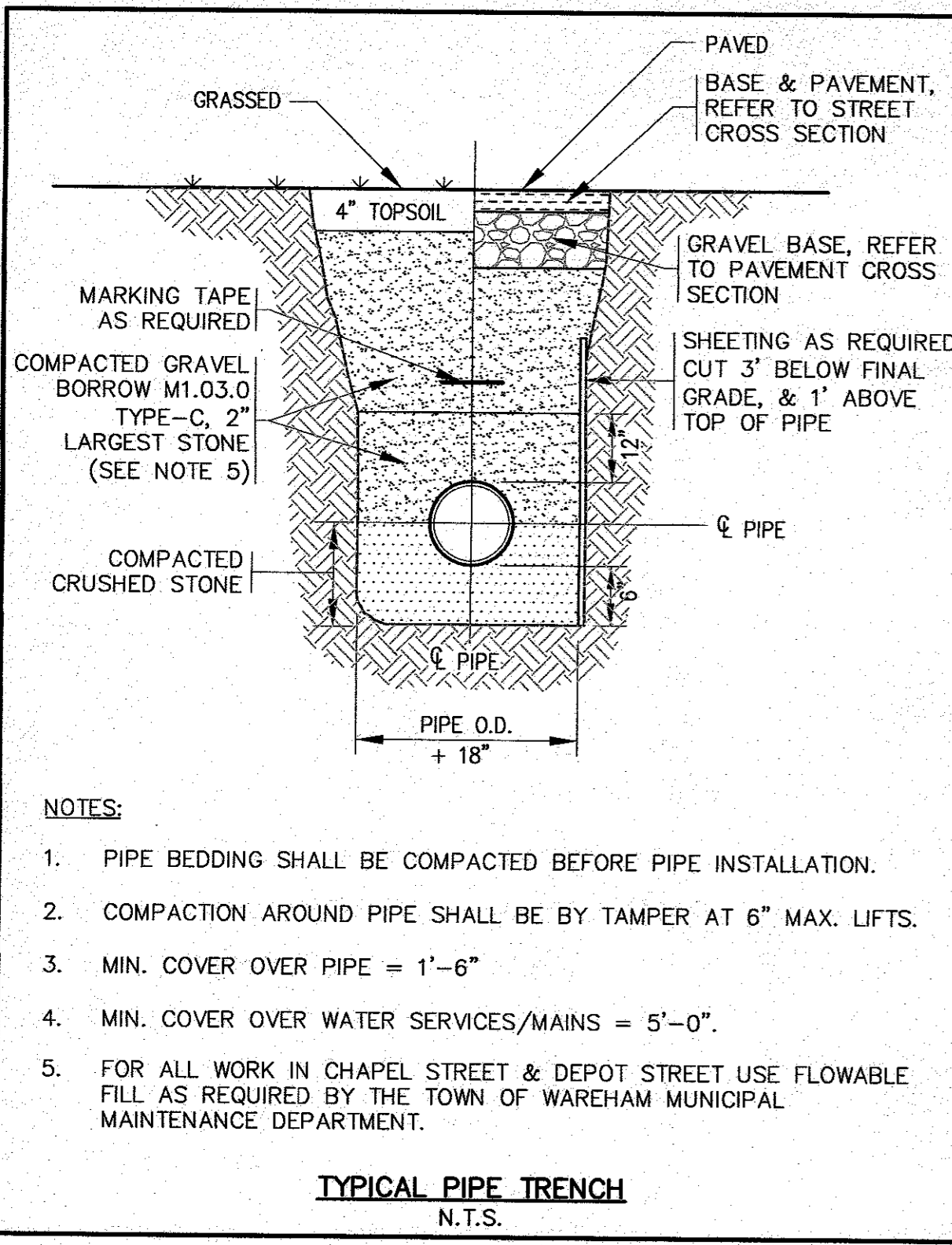
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1	3/14/23	JMP	WFM	ADDED THIS SHEET

DATE: MARCH 14, 2023
JOB NO.: 20-9499

PERMIT SET
(NOT FOR CONSTRUCTION)

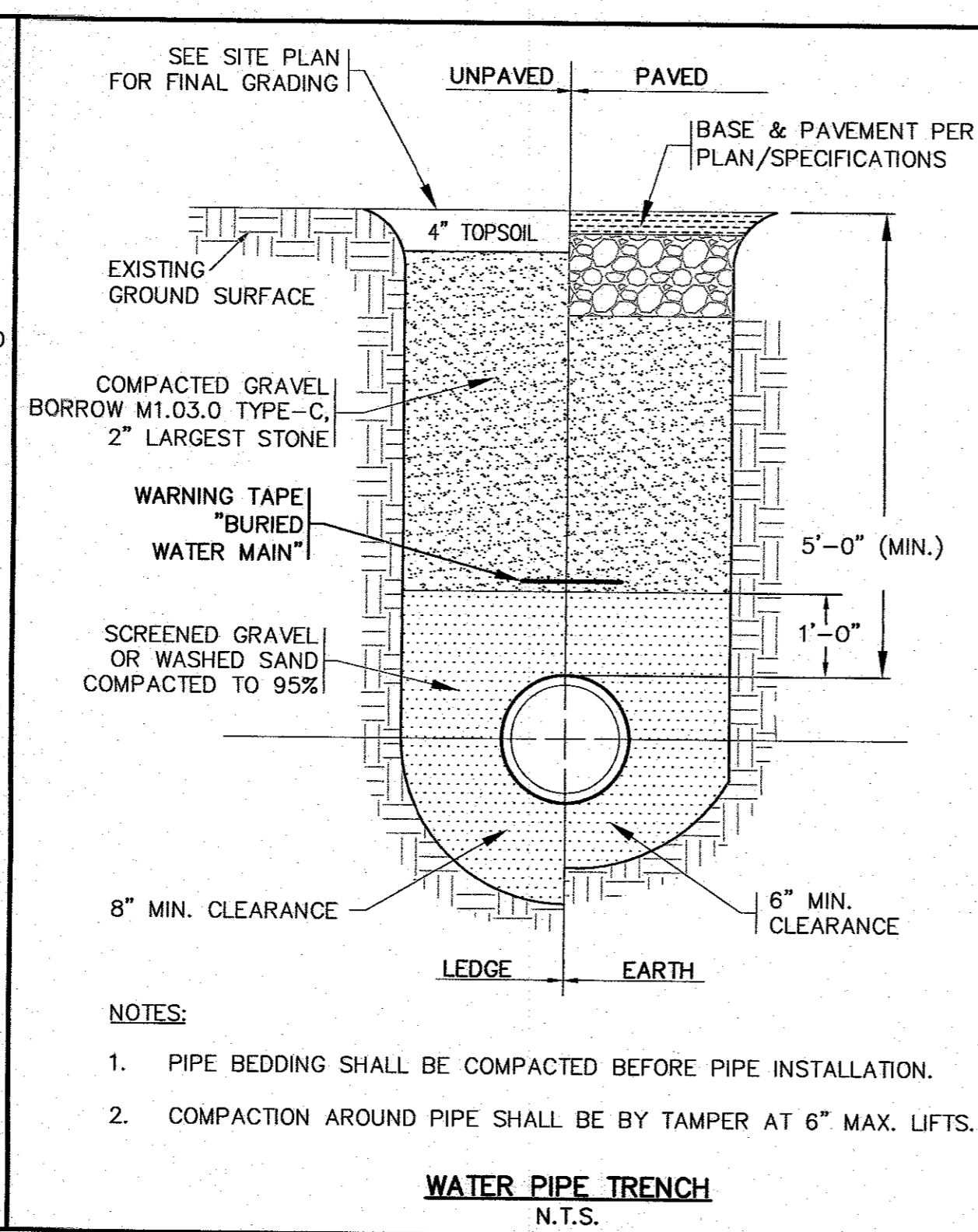
DWG.
8 OF 11

H:\GAF DRAWINGS\2020 DRAWINGS\20-9499 (REACHING)\9499_3-01PDS-REV-2.dwg



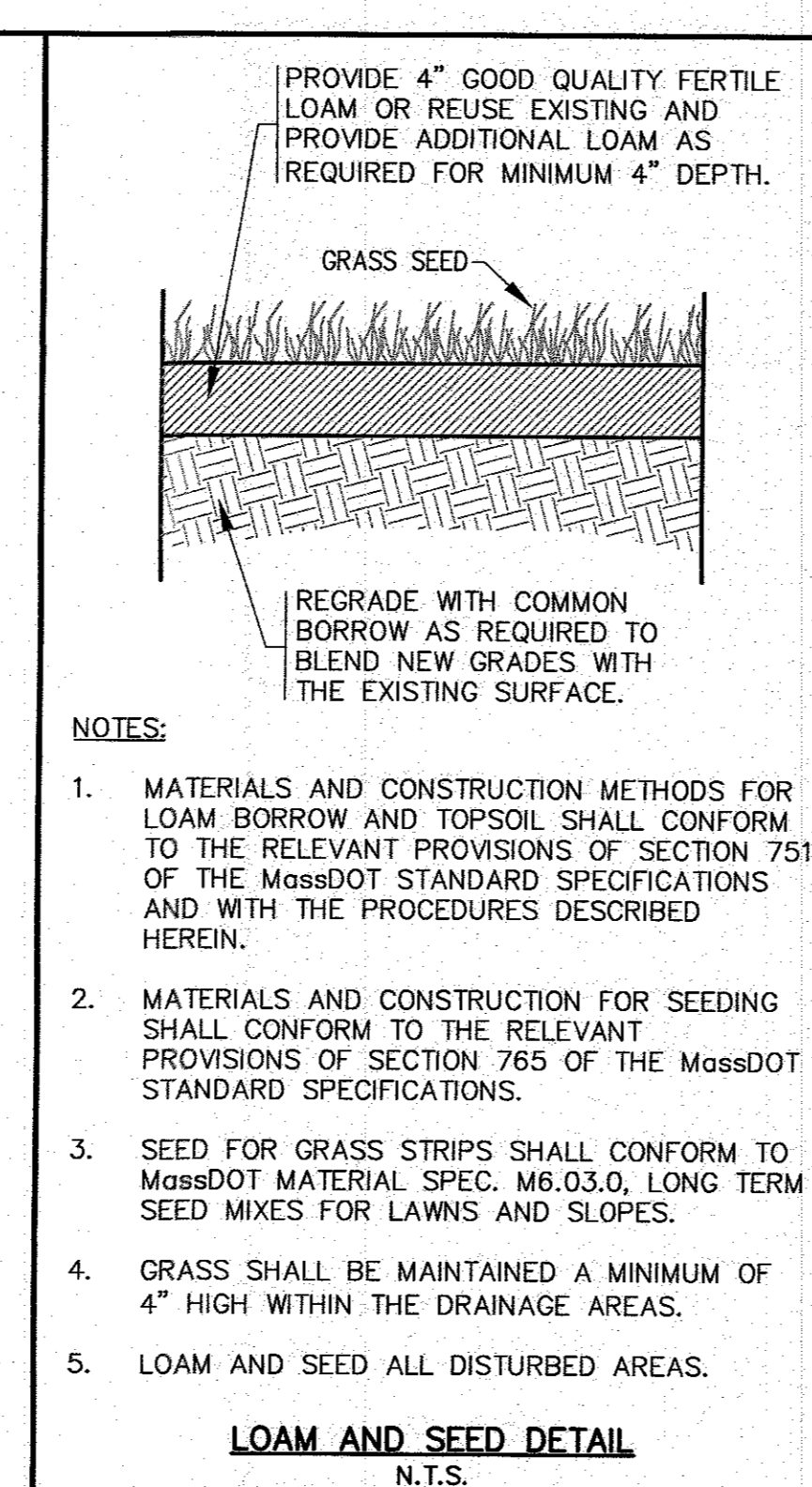
- NOTES:**
- PIPE BEDDING SHALL BE COMPACTED BEFORE PIPE INSTALLATION.
 - COMPACTION AROUND PIPE SHALL BE BY TAMPER AT 6" MAX. LIFTS.
 - MIN. COVER OVER PIPE = 1'-6"
 - MIN. COVER OVER WATER SERVICES/MAINS = 5'-0"
 - FOR ALL WORK IN CHAPEL STREET & DEPOT STREET USE FLOWABLE FILL AS REQUIRED BY THE TOWN OF WAREHAM MUNICIPAL MAINTENANCE DEPARTMENT.

TYPICAL PIPE TRENCH
N.T.S.



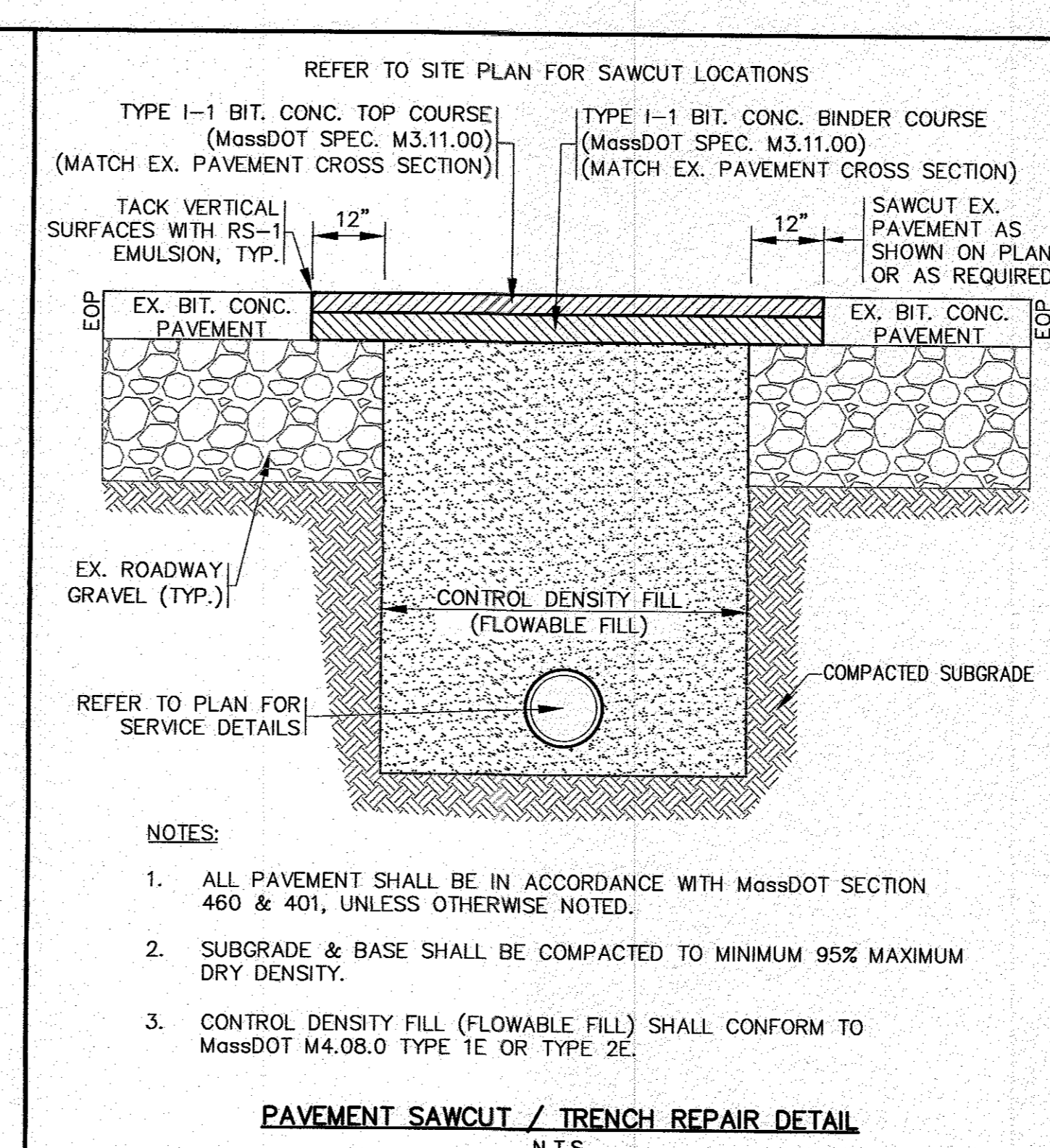
- NOTES:**
- PIPE BEDDING SHALL BE COMPACTED BEFORE PIPE INSTALLATION.
 - COMPACTION AROUND PIPE SHALL BE BY TAMPER AT 6" MAX. LIFTS.

WATER PIPE TRENCH
N.T.S.



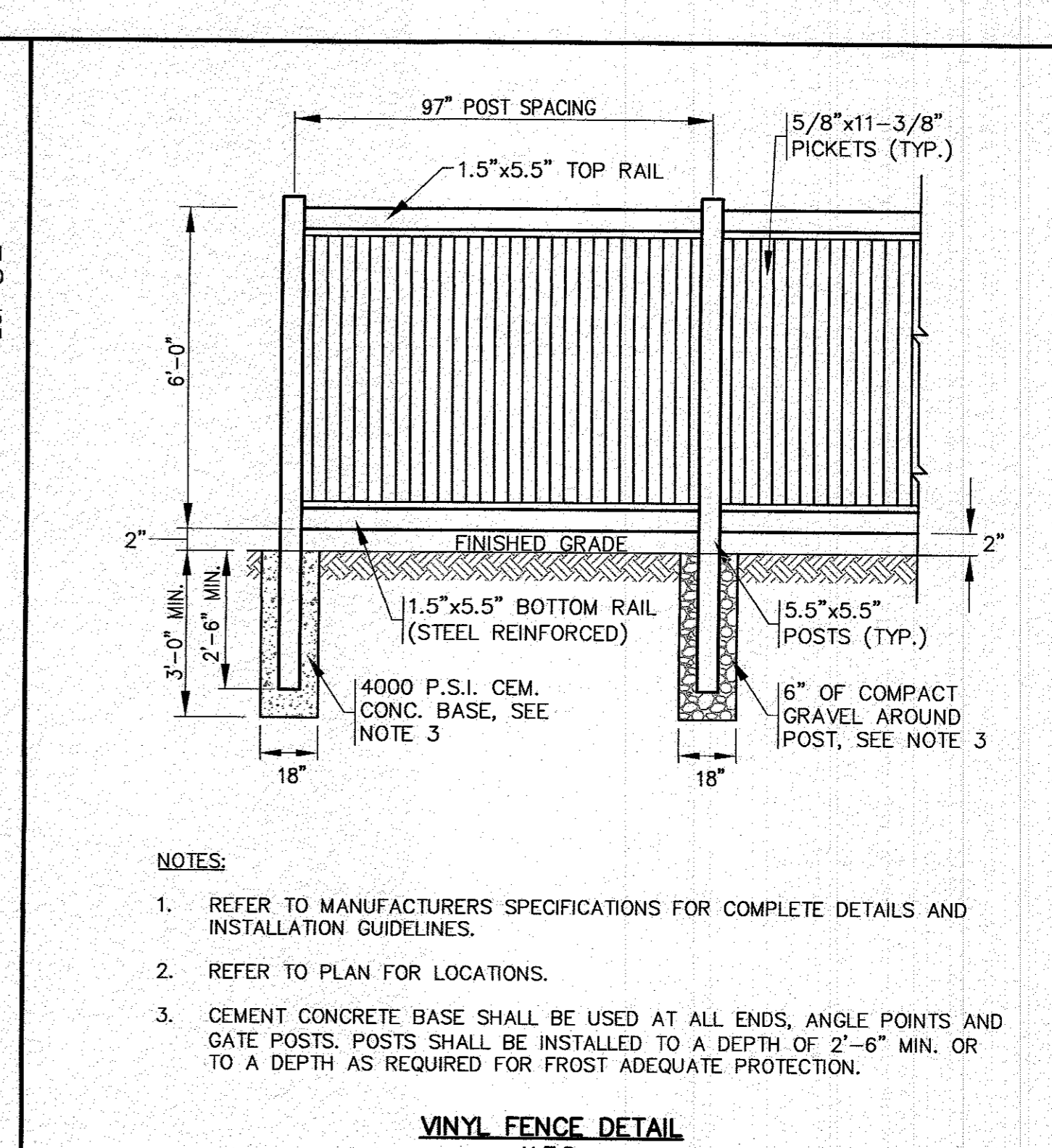
- NOTES:**
- MATERIALS AND CONSTRUCTION METHODS FOR LOAM BORROW AND TOPSOIL SHALL CONFORM TO THE RELEVANT PROVISIONS OF SECTION 751 OF THE MassDOT STANDARD SPECIFICATIONS AND WITH THE PROCEDURES DESCRIBED HEREIN.
 - MATERIALS AND CONSTRUCTION FOR SEEDING SHALL CONFORM TO THE RELEVANT PROVISIONS OF SECTION 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.

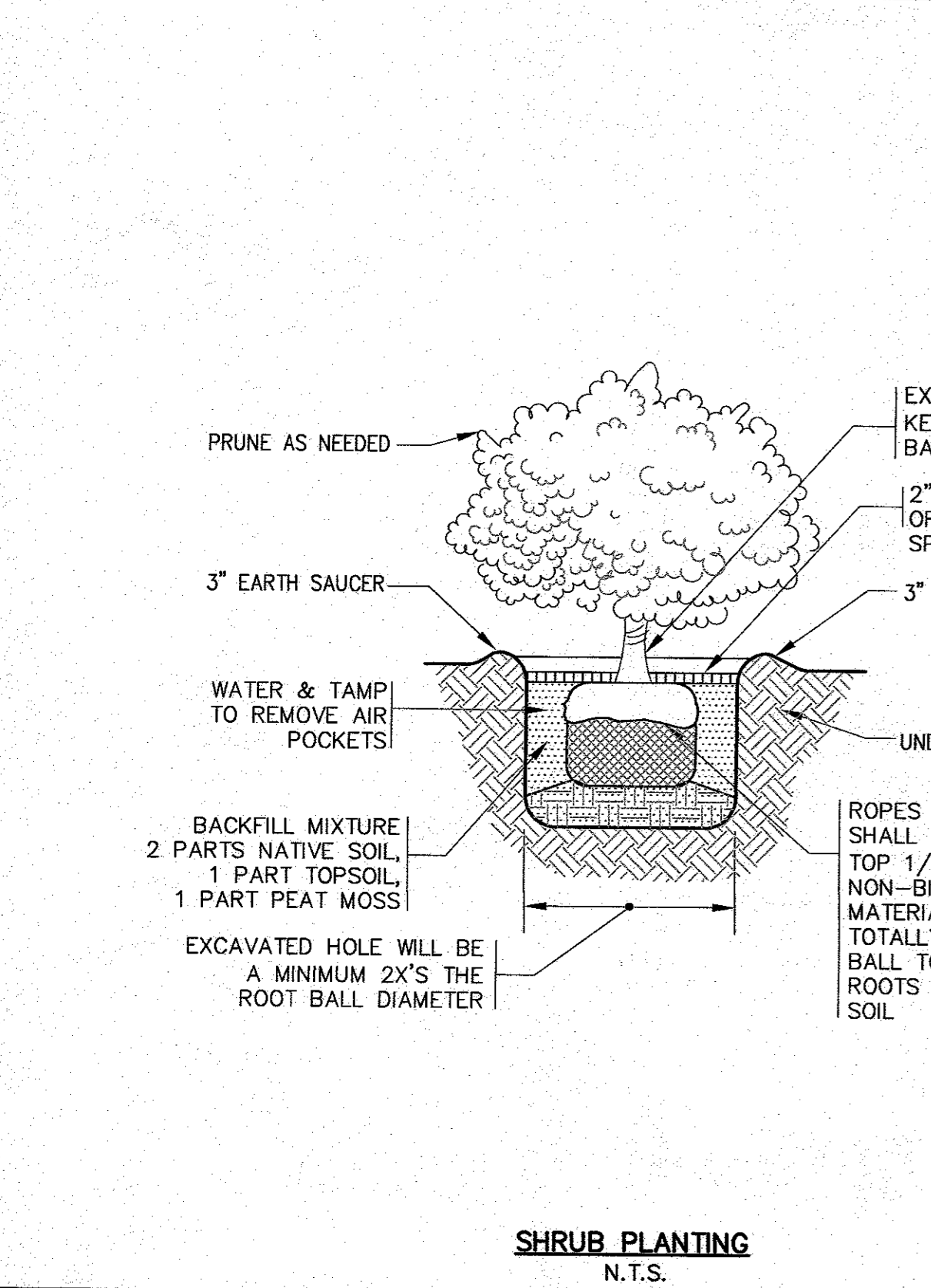
PAVEMENT SAWCUT / TRENCH REPAIR DETAIL
N.T.S.



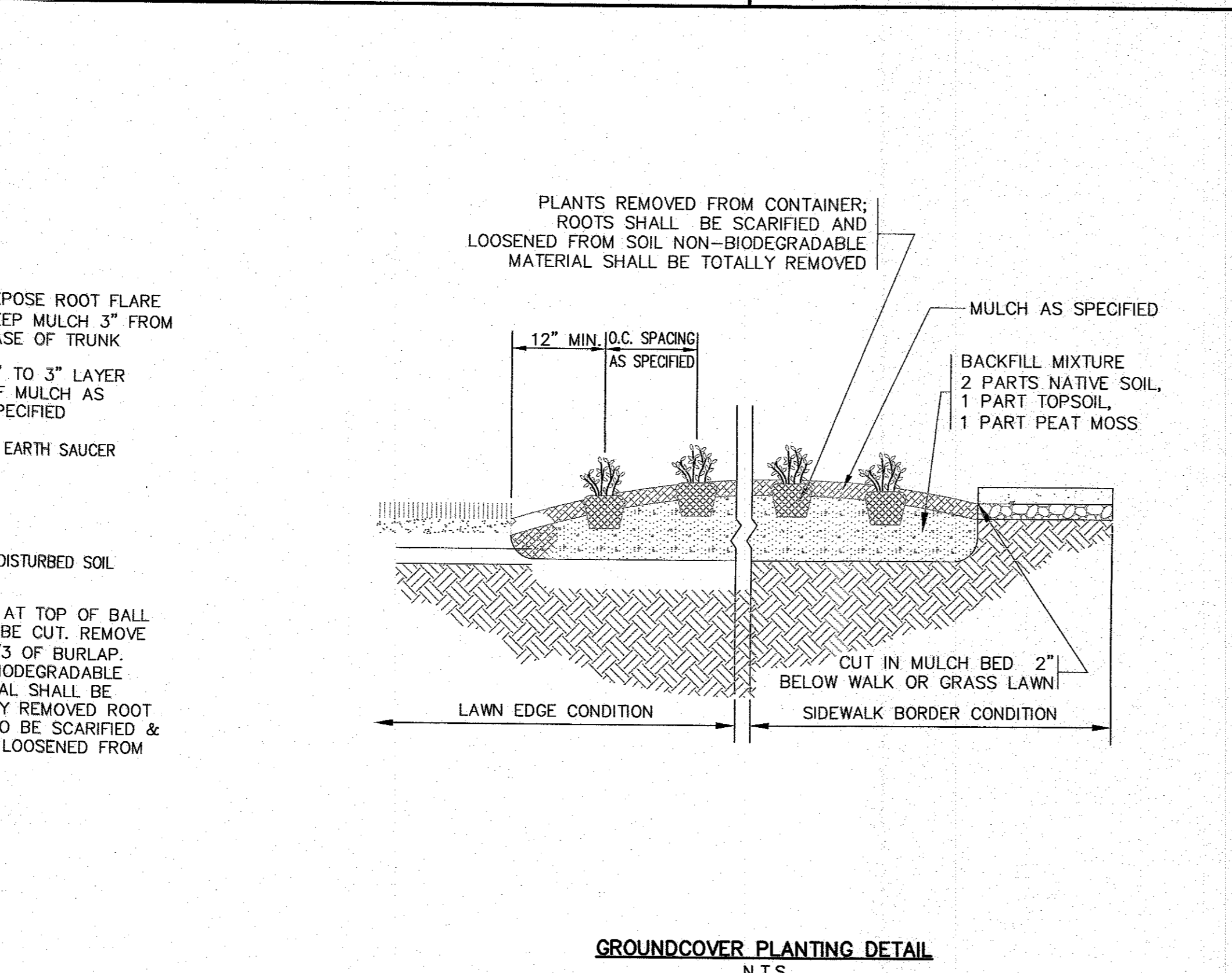
- NOTES:**
- REFER TO MANUFACTURERS SPECIFICATIONS FOR COMPLETE DETAILS AND INSTALLATION GUIDELINES.
 - REFER TO PLAN FOR LOCATIONS.
 - CEMENT CONCRETE BASE SHALL BE USED AT ALL ENDS, ANGLE POINTS AND GATE POSTS. POSTS SHALL BE INSTALLED TO A DEPTH OF 2'-6" MIN. OR TO A DEPTH AS REQUIRED FOR FROST ADEQUATE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

VINYL FENCE DETAIL
N.T.S.

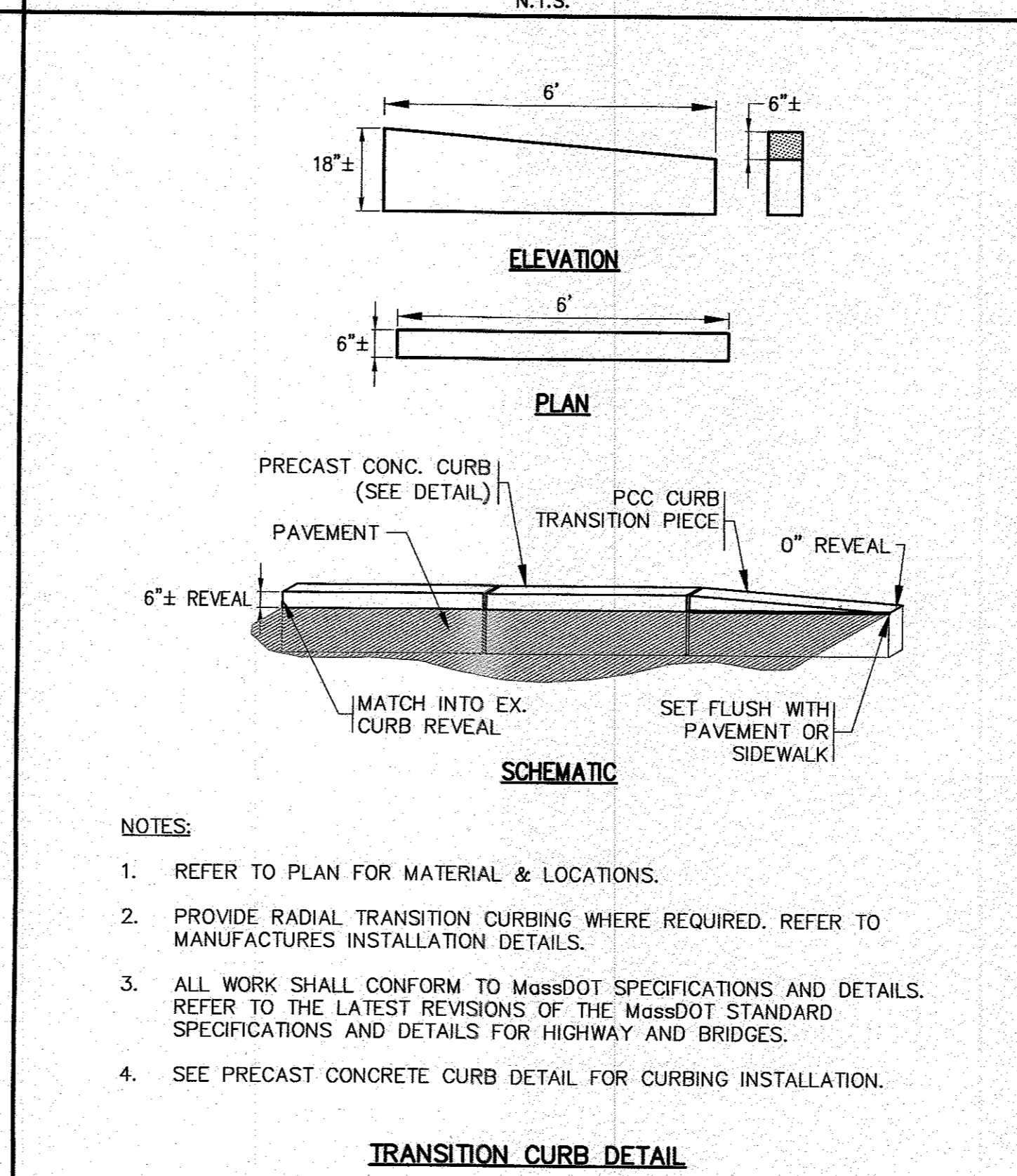
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DRAWN BY:	JMP	CHECKED BY:	WFM	PER INITIAL PEER REVIEW
JOB NO.:	20-9499	SCALE:	N.T.S.	
REV.	1	DATE	3/14/23	BY
				WFM
				JMP
				WFM



SHRUB PLANTING
N.T.S.

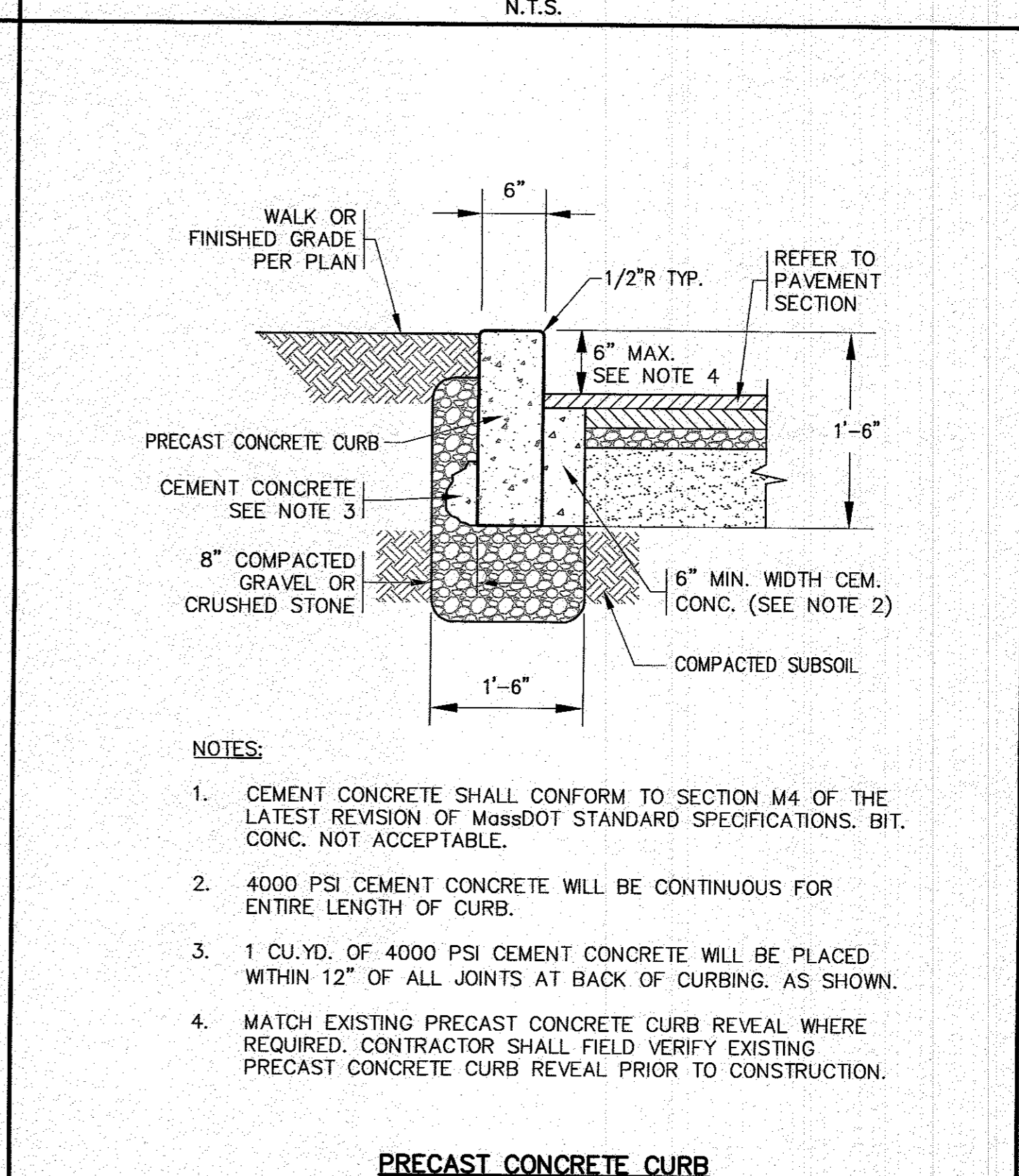


GROUND COVER PLANTING DETAIL
N.T.S.



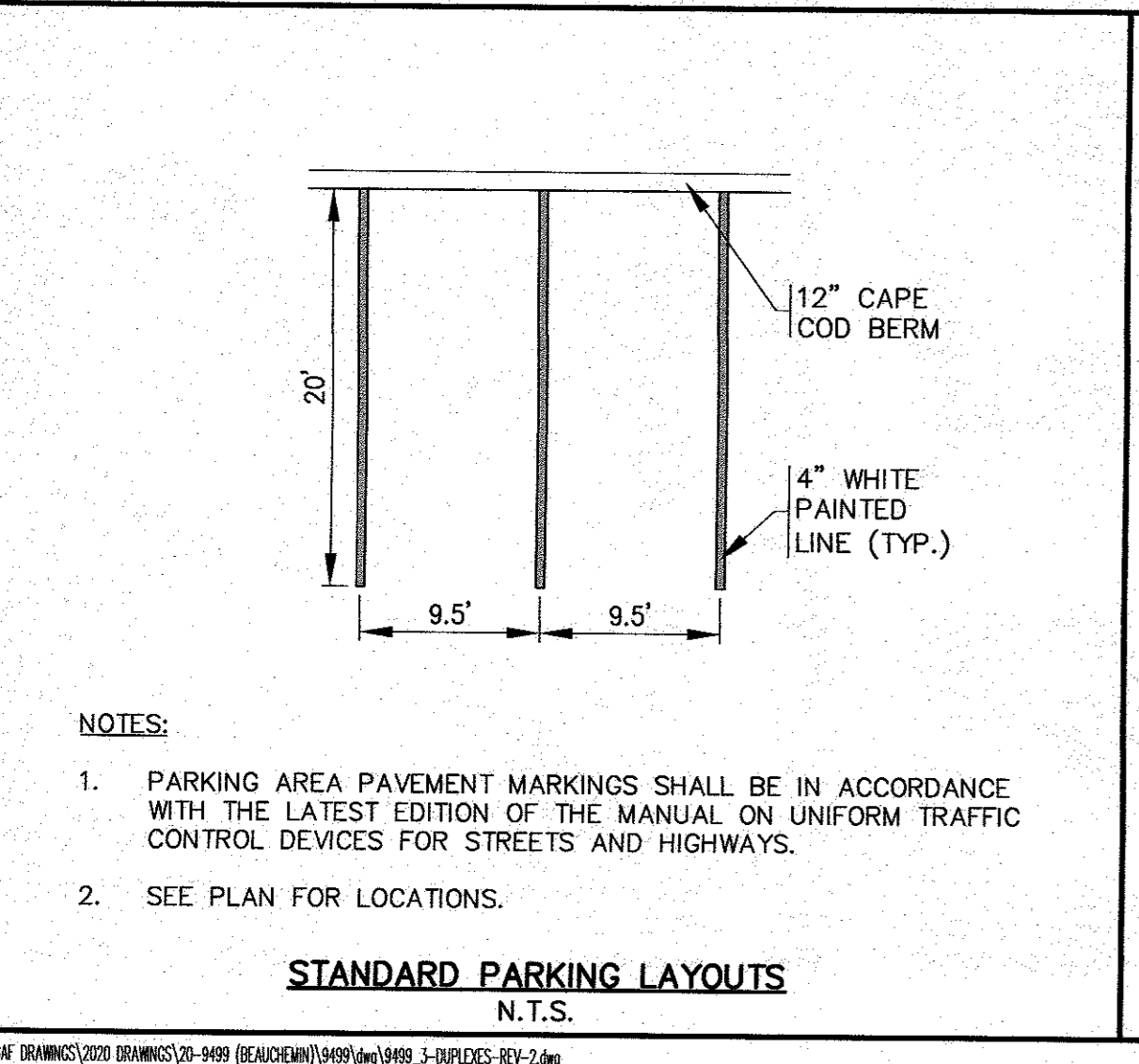
- NOTES:**
- REFER TO PLAN FOR MATERIAL & LOCATIONS.
 - PROVIDE RADIAL TRANSITION CURBING WHERE REQUIRED. REFER TO MANUFACTURERS INSTALLATION DETAILS.
 - ALL WORK SHALL CONFORM TO MassDOT SPECIFICATIONS AND DETAILS. REFER TO THE LATEST REVISIONS OF THE MassDOT STANDARD SPECIFICATIONS AND DETAILS FOR HIGHWAY AND BRIDGES.
 - SEE PRECAST CONCRETE CURB DETAIL FOR CURBING INSTALLATION.

TRANSITION CURB DETAIL
N.T.S.



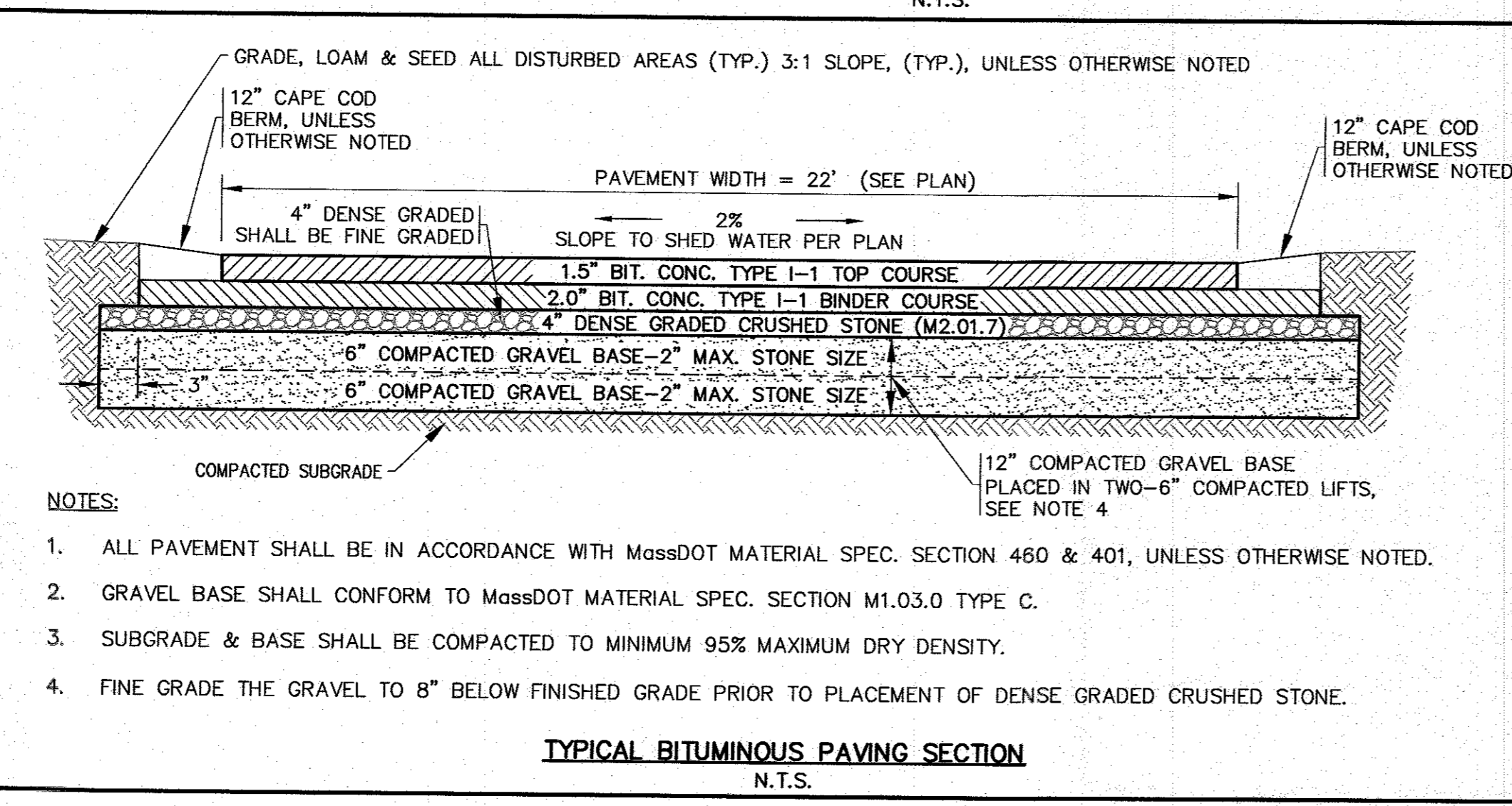
- NOTES:**
- CEMENT CONCRETE SHALL CONFORM TO SECTION M4 OF THE LATEST REVISION OF MassDOT STANDARD SPECIFICATIONS. BIT. CONC. NOT ACCEPTABLE.
 - 4000 PSI CEMENT CONCRETE WILL BE CONTINUOUS FOR ENTIRE LENGTH OF CURB.
 - 1 CU.YD. OF 4000 PSI CEMENT CONCRETE WILL BE PLACED WITHIN 12" OF ALL JOINTS AT BACK 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.



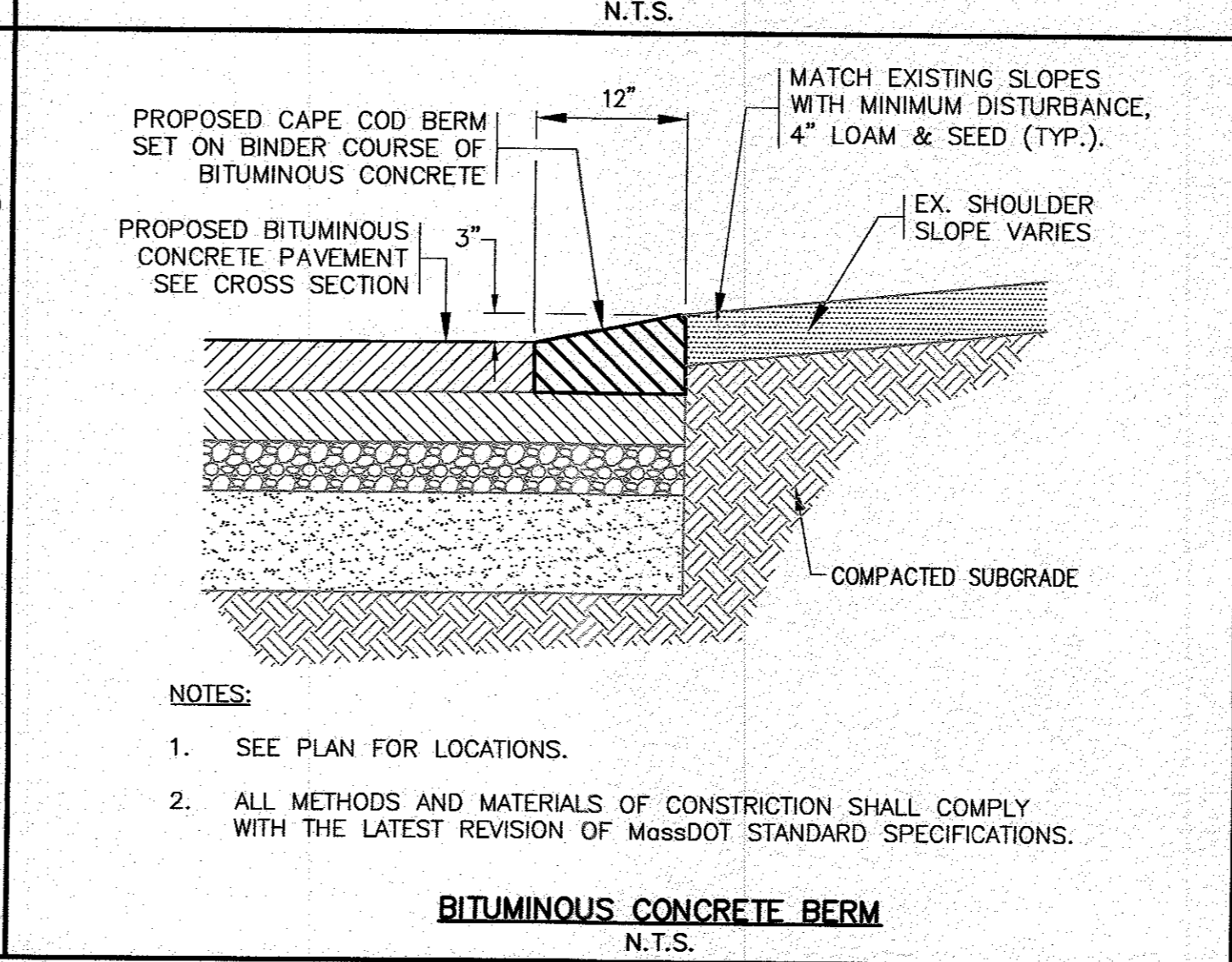
- NOTES:**
- PARKING AREA PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
 - SEE PLAN FOR LOCATIONS.

STANDARD PARKING LAYOUTS
N.T.S.



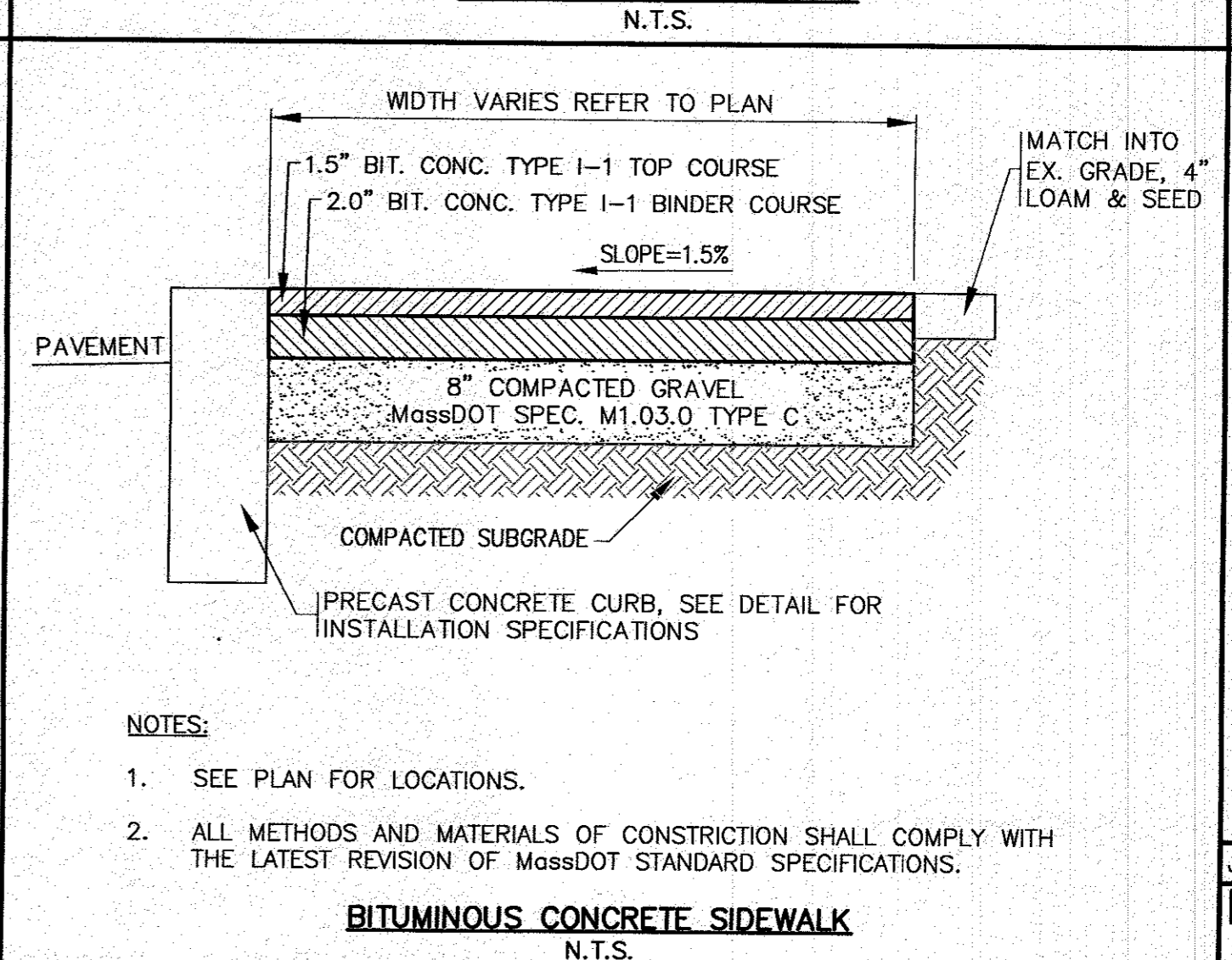
- NOTES:**
- ALL PAVEMENT SHALL BE IN ACCORDANCE WITH MassDOT MATERIAL SPEC. SECTION 460 & 401, UNLESS OTHERWISE NOTED.
 - GRAVEL BASE SHALL CONFORM TO MassDOT MATERIAL SPEC. SECTION M1.03.0 TYPE C.
 - SUBGRADE & BASE SHALL BE COMPACTED TO MINIMUM 95% MAXIMUM DRY DENSITY.
 - FINE GRADE THE GRAVEL TO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

TYPICAL BITUMINOUS PAVING SECTION
N.T.S.



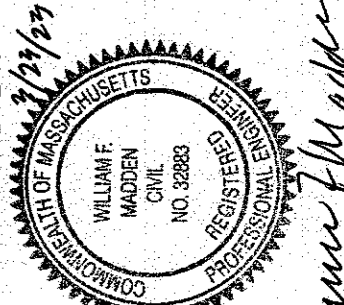
- NOTES:**
- SEE PLAN FOR LOCATIONS.
 - ALL METHODS AND MATERIALS OF CONSTRUCTION SHALL COMPLY WITH THE LATEST REVISION OF MassDOT STANDARD SPECIFICATIONS.

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.

APPROVED BY: 

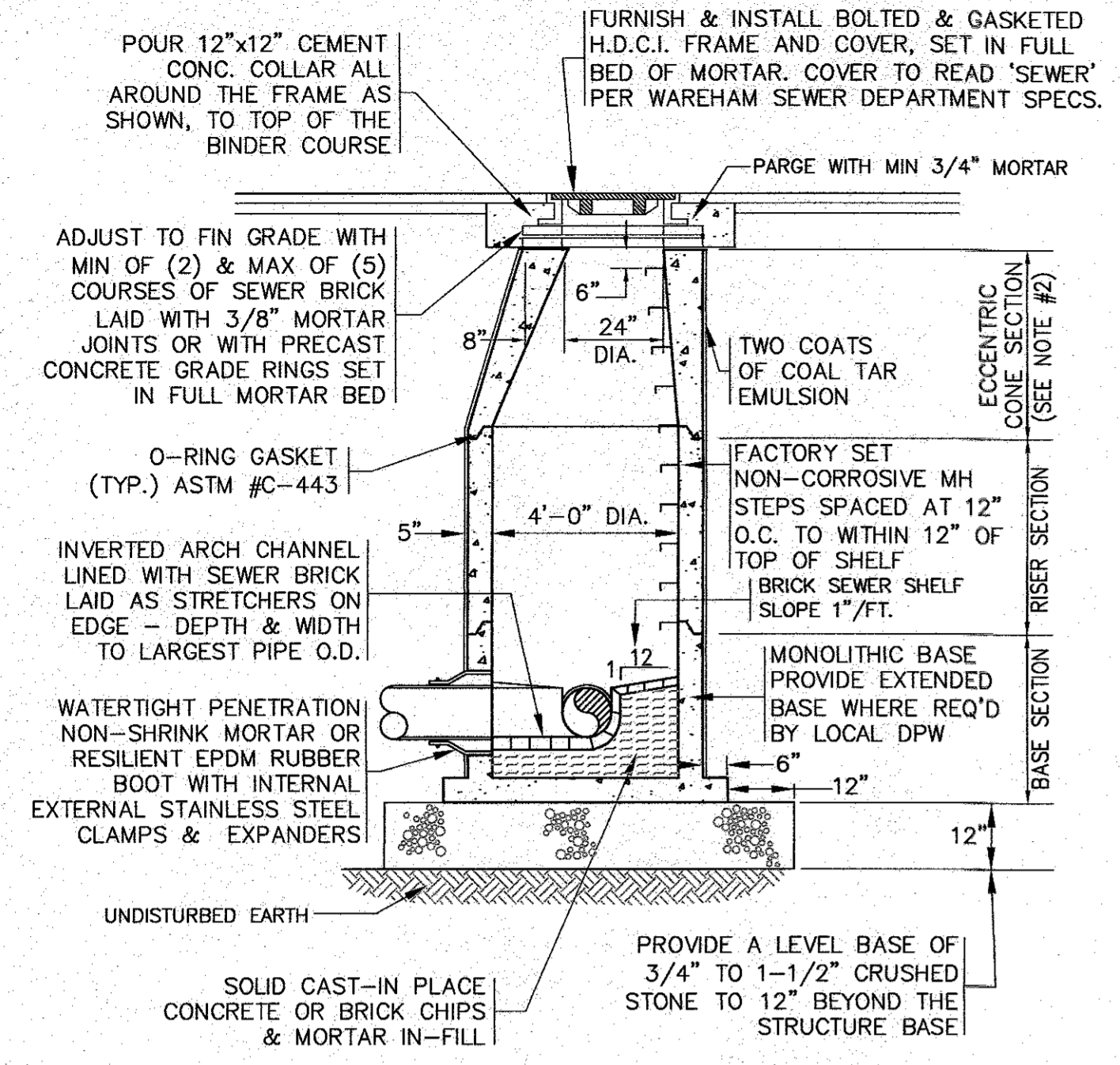
G.A.F. ENGINEERING, INC.
PROFESSIONAL ENGINEERS & LAND SURVEYORS
286 MAIN STREET - WAREHAM, MA 02571
TEL: (508) 295-6600 FAX: (508) 295-6634
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DATE: NOV. 14, 2022
DRAWN BY: JMP
CHECKED BY: WFM
JOB NO.: 20-9499
SCALE: N.T.S.

SITE DEVELOPMENT PLAN
DETAIL SHEET 1

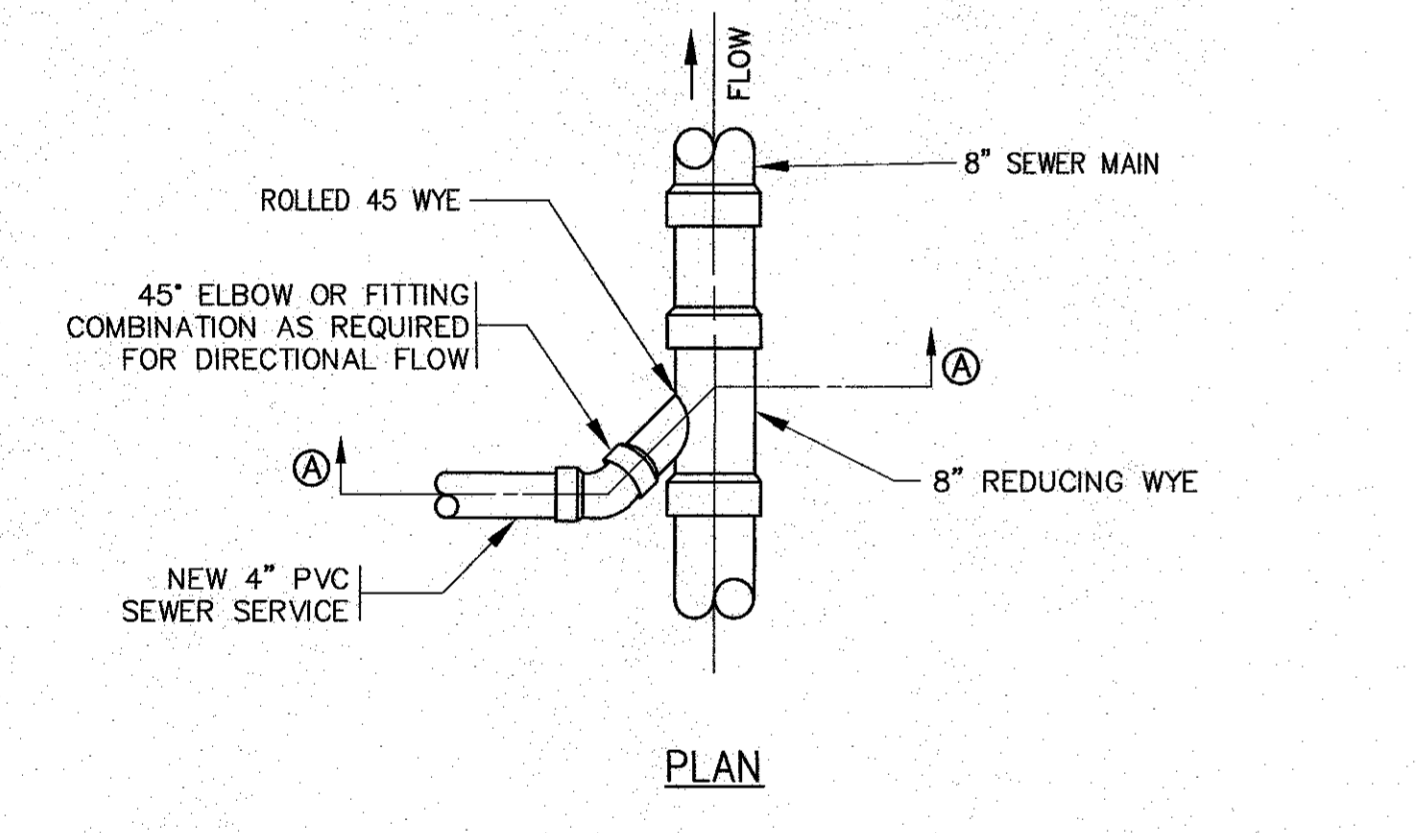
PREPARED FOR:
6 CHAPEL LANE, LLC
19 DEPOT STREET
WAREHAM, MA

JOB NO.: 20-9499
DWG. 9 OF 11



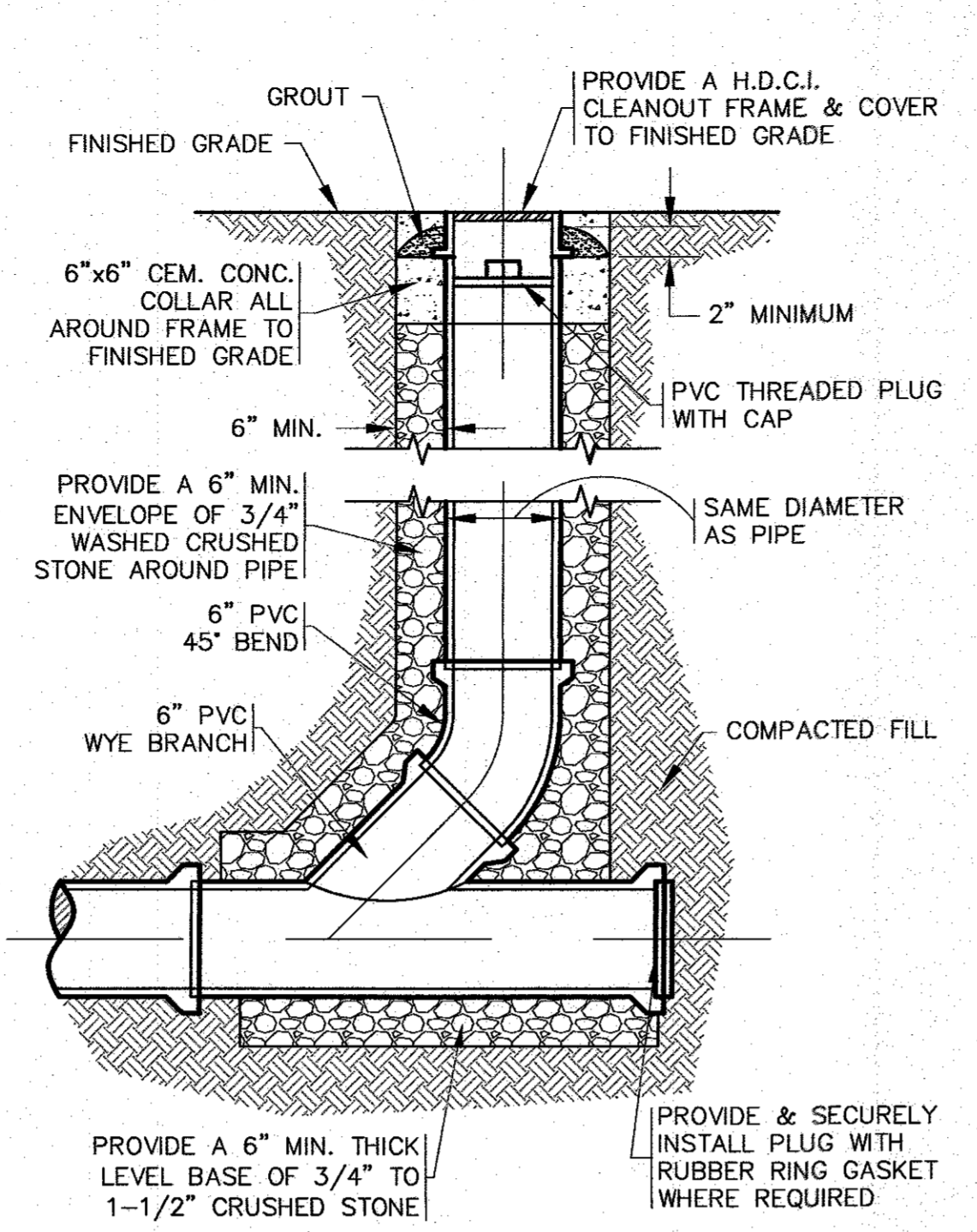
- ALL STRUCTURES SHALL BE PRECAST CONC. IN ACCORDANCE WITH ASTM C-478 WITH H-20 LOADING. SECTION HEIGHTS VARY.
- FOR SHALLOW INSTALLATION AND WHEN APPROVED BY THE ENGINEER, FLAT TOP H-20 SLAB ALLOWED, SUBMIT SHOP DWGS.
- ALL STRUCTURE JOINTS AND PENETRATIONS SHALL BE WATER TIGHT. JOINT SEALANT BETWEEN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

SEWER MANHOLE
N.T.S.



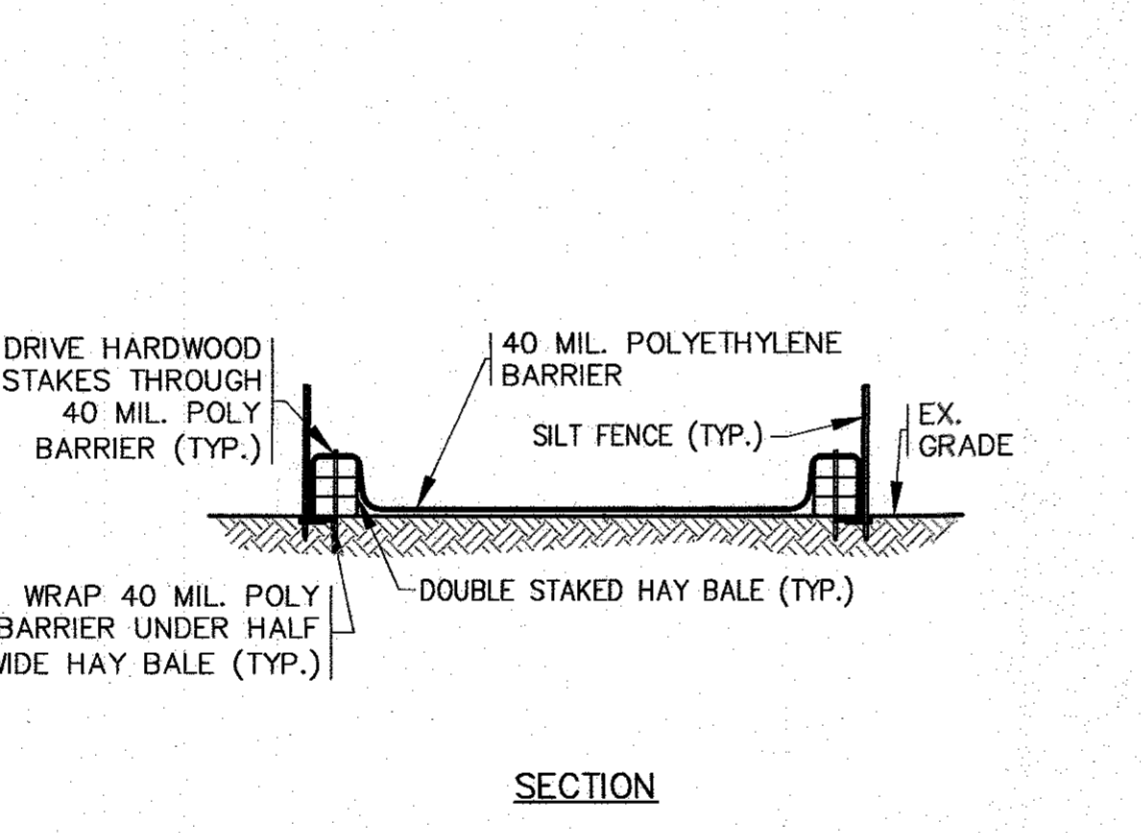
- REFER TO PLAN FOR LOCATIONS.
- EXISTING SANITARY SEWER MAIN SHALL BE SAWOUT AND REDUCING WYE SHALL BE INSTALLED AT PROPER ANGLE TO ALLOW 1% OR GREATER SLOPE TO THE NEW SANITARY SEWER SERVICE PIPE.
- ALL SEWER WORK SHALL BE DONE IN ACCORDANCE WITH THE TOWN OF WAREHAM SEWER COMMISSIONERS RULES AND REGULATIONS.
- 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.



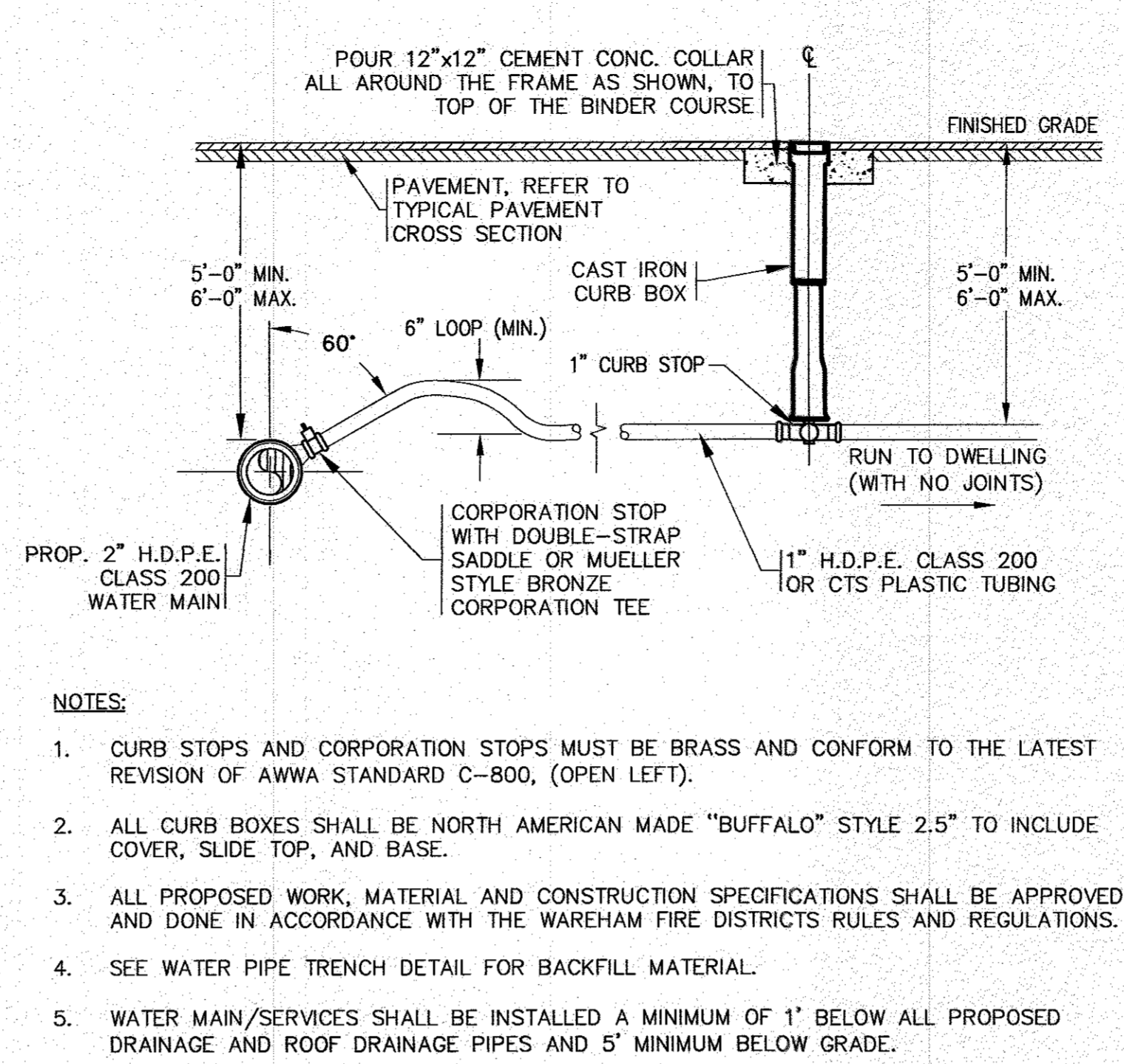
- REFER TO PLAN FOR LOCATIONS.

STANDARD CLEANOUT
N.T.S.

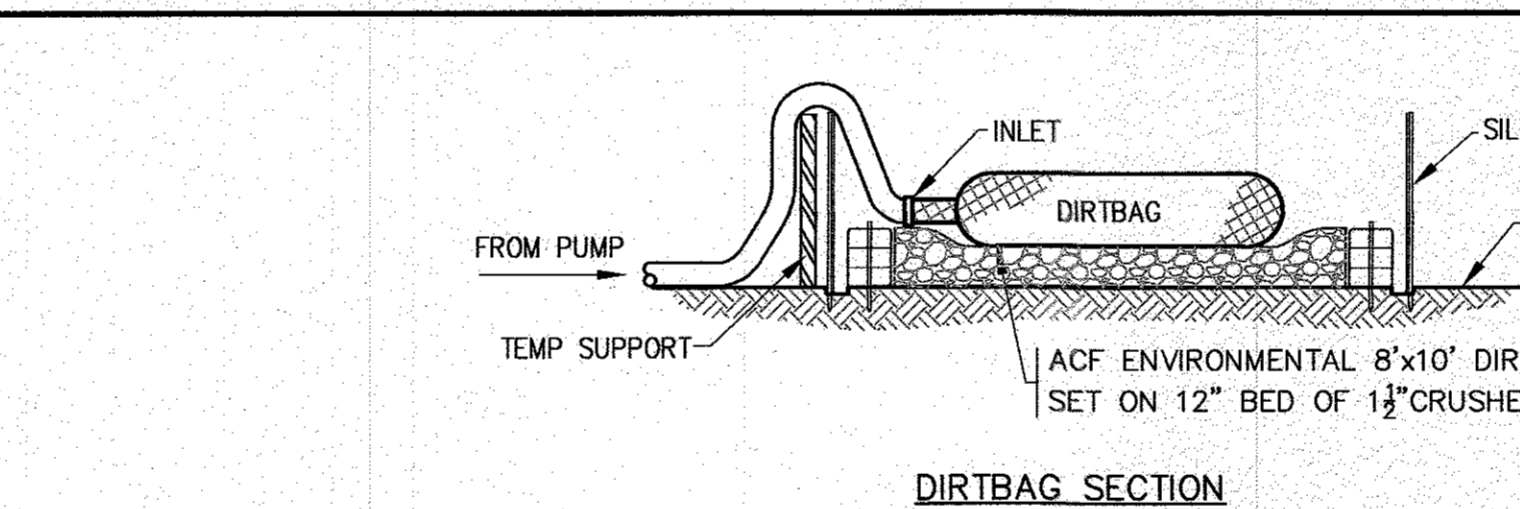
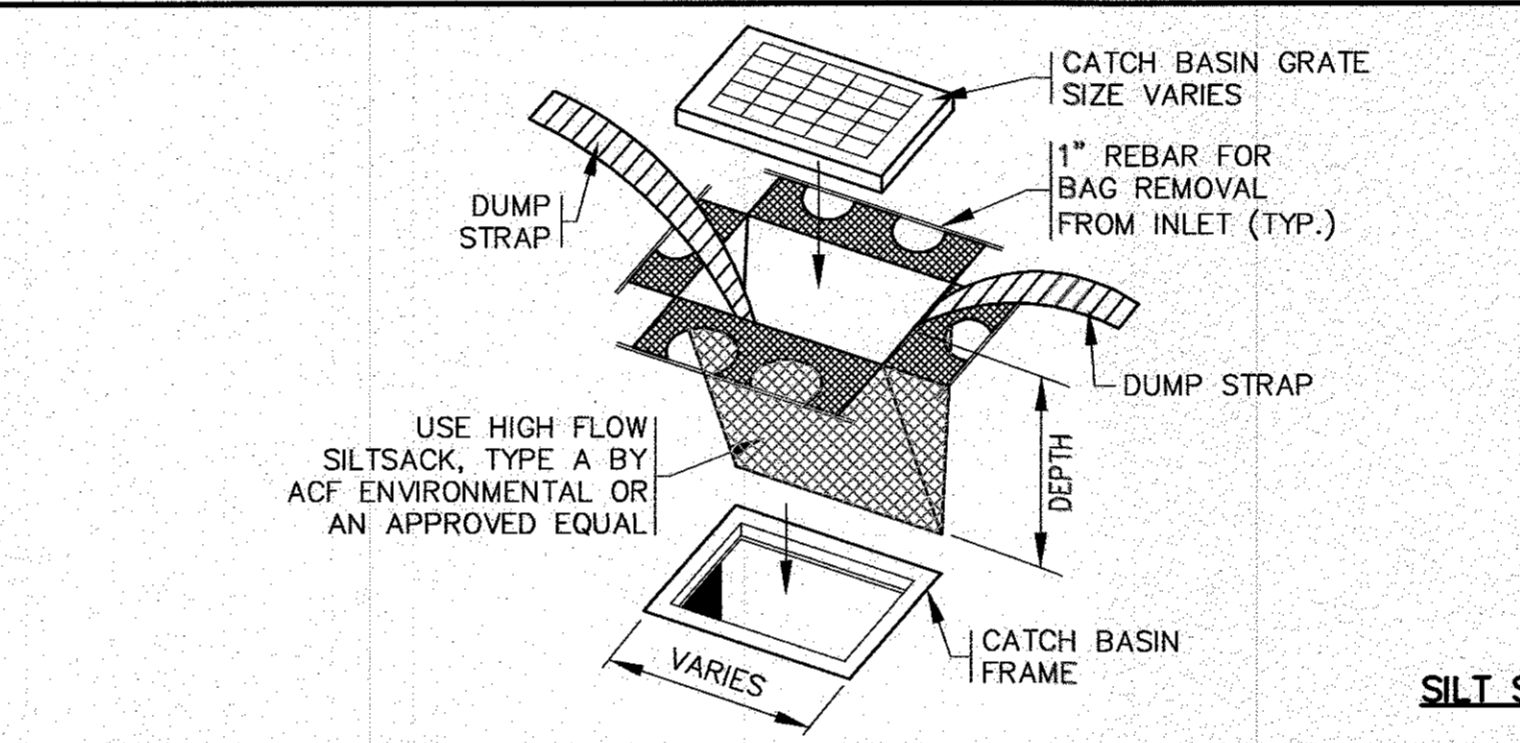


- CONTRACTOR SHALL PROVIDE AND MAINTAIN CONCRETE WASHOUT AREA WHERE NECESSARY TO COMPLETE THE WORK.
- FINAL LOCATION FOR CONCRETE WASHOUT SHALL BE FIELD DETERMINED BY CONTRACTOR AT TIME OF CONSTRUCTION.
- CONTRACTOR SHALL REPAIR OR REPLACE 40 MIL. POLY BARRIER OR STAKED HAY BALES AS REQUIRED.

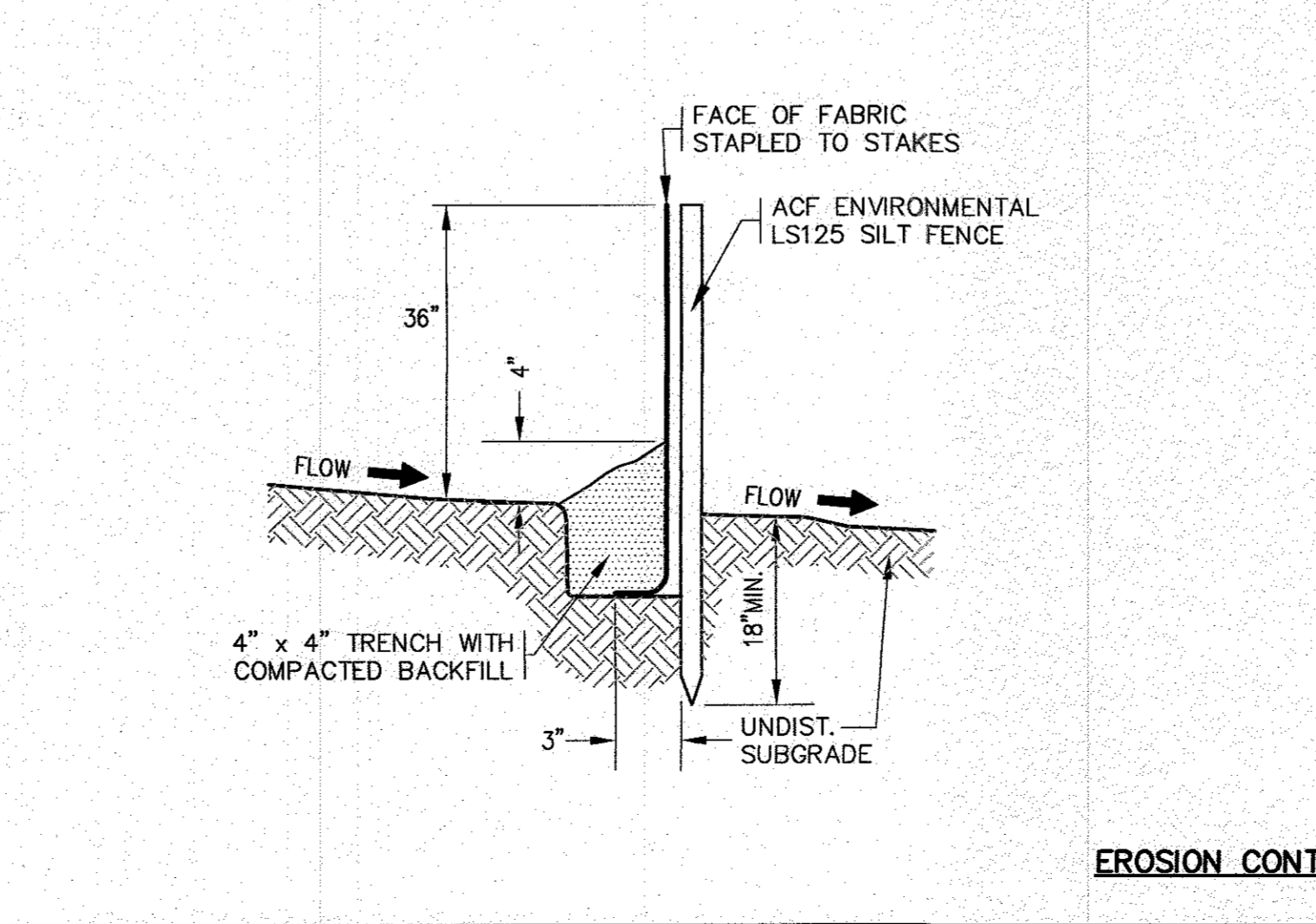
CONCRETE WASHOUT DETAIL
N.T.S.



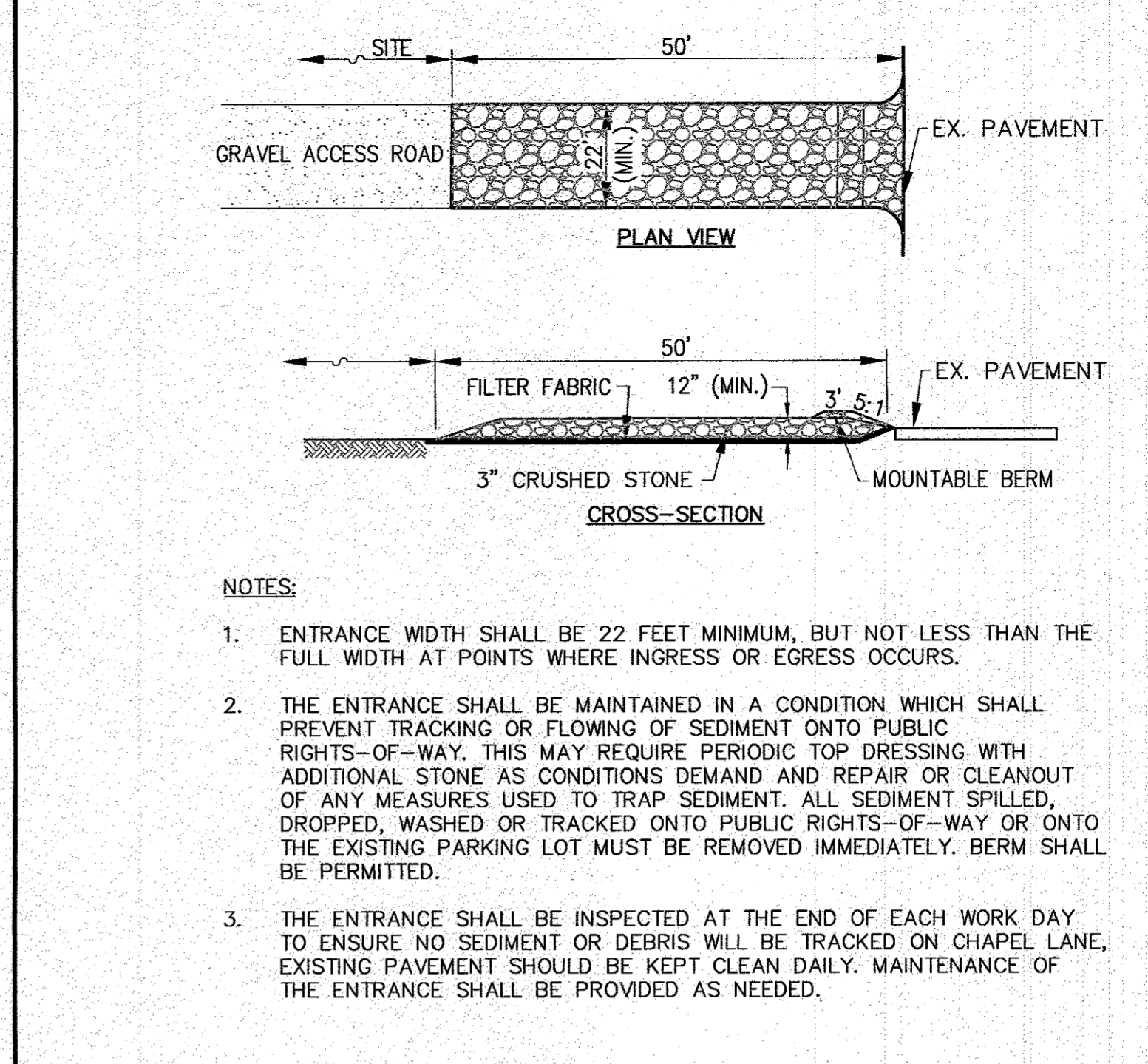
WATER SERVICE CONNECTION / CURB STOP
N.T.S.



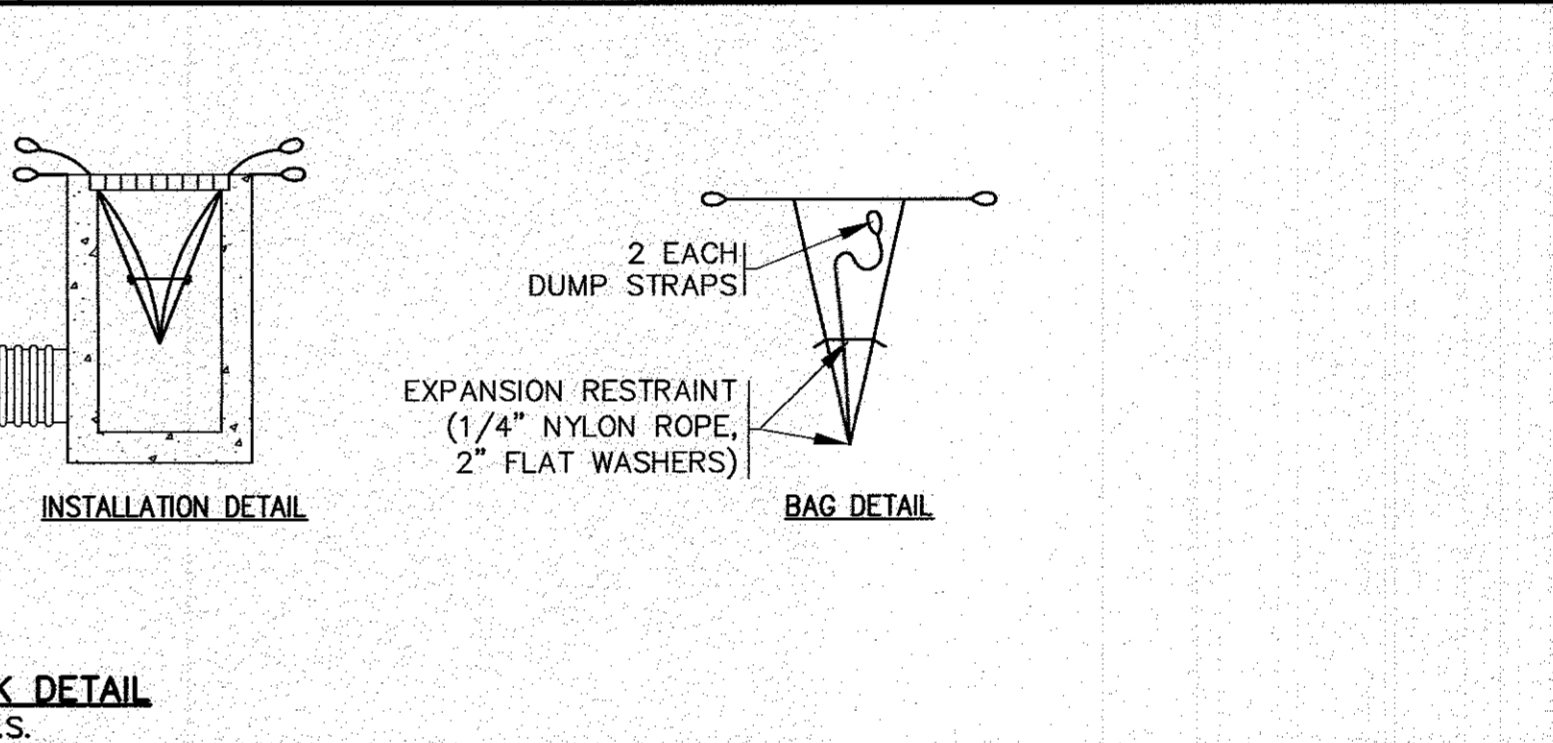
- CONTRACTOR SHALL SIZE, PROVIDE AND MAINTAIN DEWATERING EQUIPMENT FOR THE CONTROL, COLLECTION AND DISPOSAL OF GROUND AND SURFACE WATER WHERE NECESSARY TO COMPLETE THE WORK.
- FINAL LOCATION AND SIZE FOR DEWATERING EQUIPMENT SHALL BE FIELD DETERMINED BY CONTRACTOR AT TIME OF CONSTRUCTION.



EROSION CONTROL BARRIER DETAIL
N.T.S.



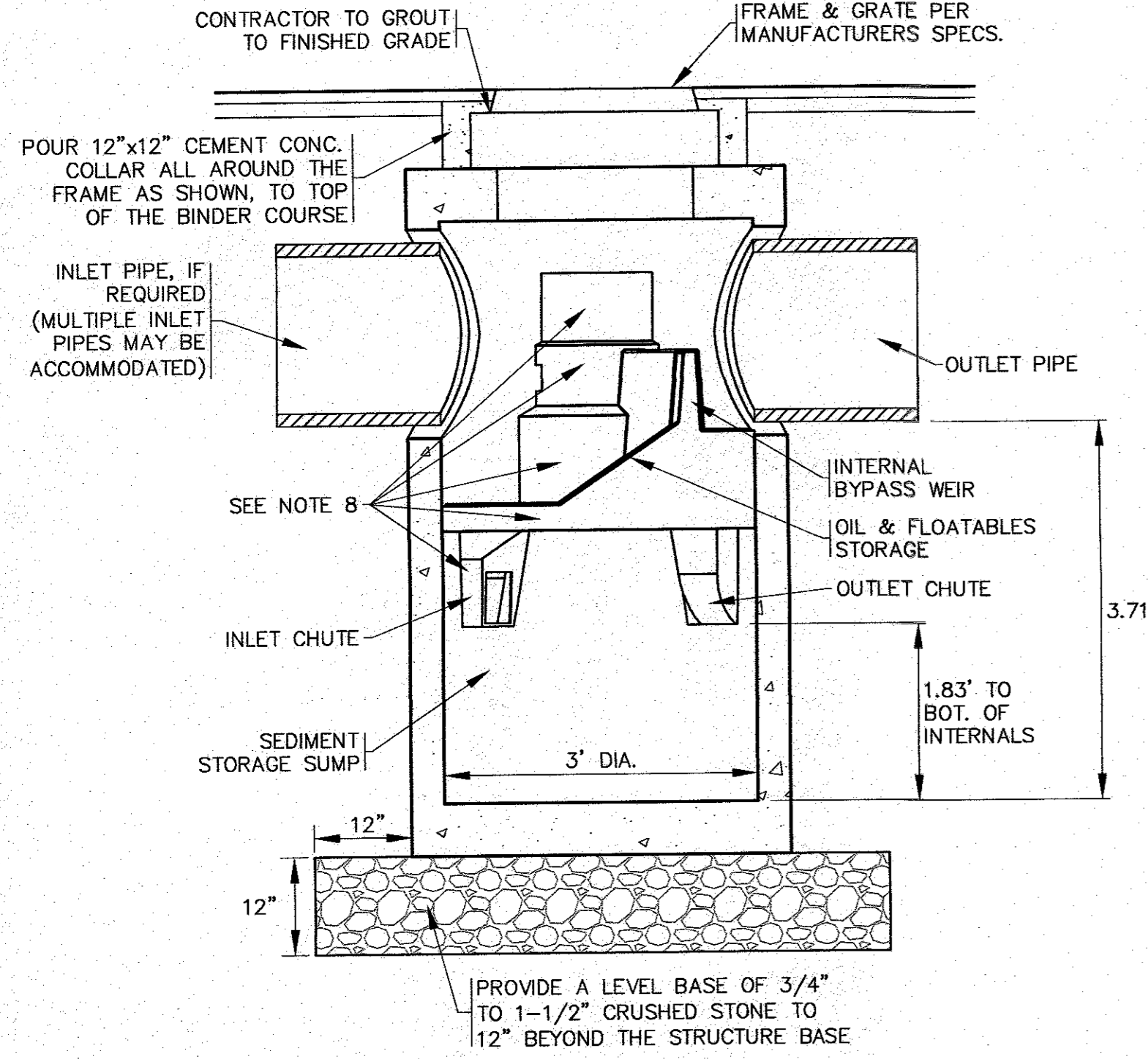
TEMPORARY CONSTRUCTION ENTRANCE
N.T.S.



- 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.

ONSITE DEWATERING BASIN
N.T.S.

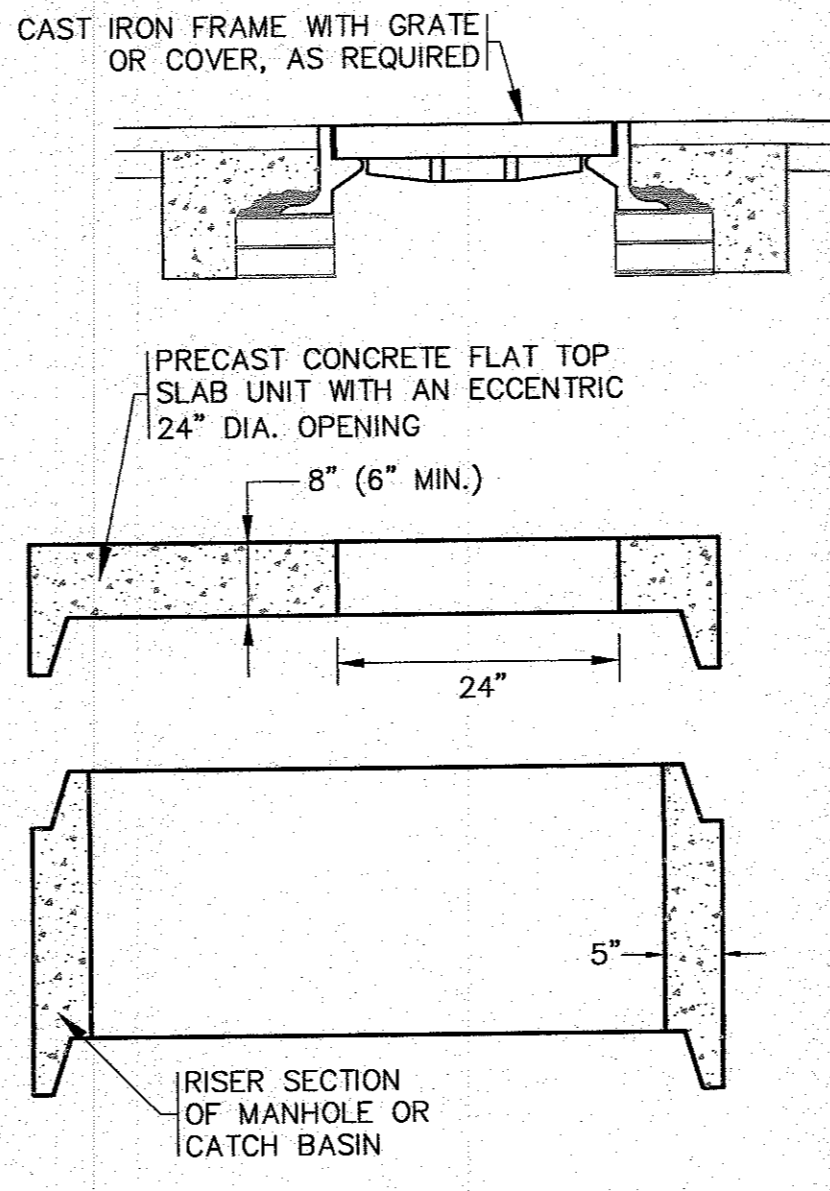
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					1	3/14/23	JMP	PER INITIAL PEER REVIEW
APPROVED BY:								
G.A.F. ENGINEERING, INC. PROFESSIONAL ENGINEERS & LAND SURVEYORS 286 MAIN STREET - WAREHAM, MA 02571 TEL: (508) 295-6600 FAX: (508) 295-6634 E-MAIL: info@gafengr.com					JOB NO.: 20-9499			
SITE DEVELOPMENT PLAN DETAIL SHEET 2					PREPARED FOR: 6 CHAPEL LANE, LLC 19 DEPOT STREET WAREHAM, MA			
WYE SANITARY SEWER CONNECTION DETAIL N.T.S.					DWG. 10 OF 11			



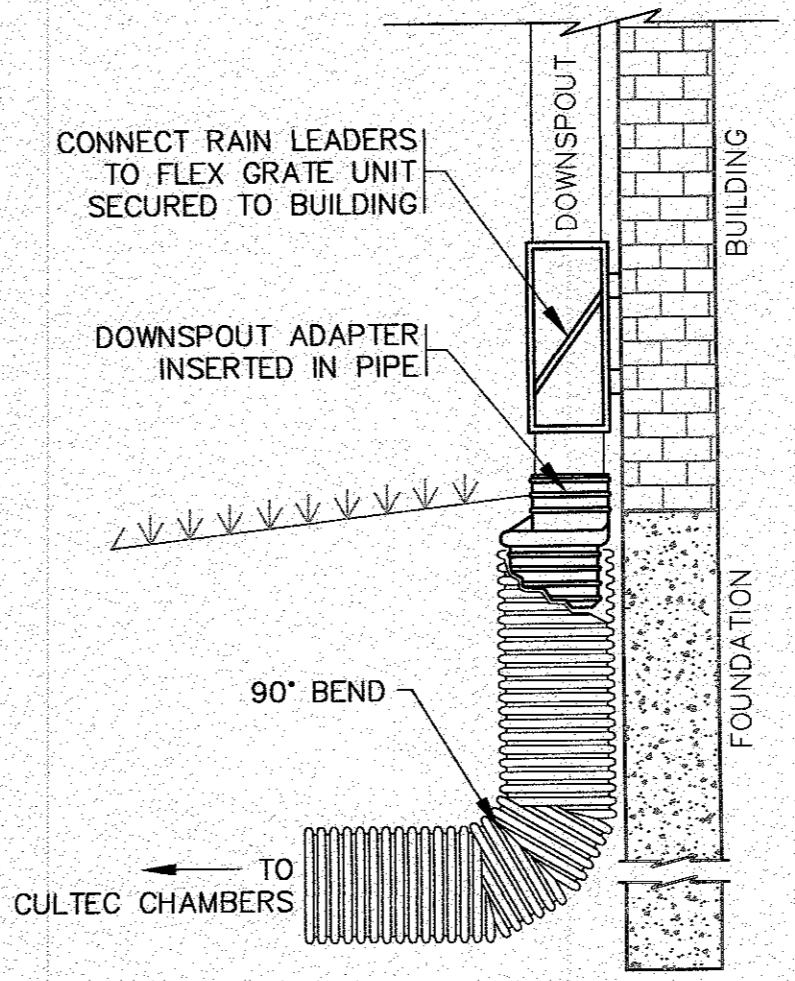
- GENERAL NOTES:**
1. GENERAL ARRANGEMENT DRAWINGS ONLY. CONTACT HYDRO INTERNATIONAL FOR SITE SPECIFIC DRAWINGS.
 2. THE DIAMETER OF THE INLET AND OUTLET PIPES MAY BE NO MORE THAN 18". REFER TO PLAN FOR PIPE SIZES.
 3. MULTIPLE INLET PIPES POSSIBLE (REFER TO PROJECT PLAN).
 4. INLET/OUTLET PIPE ANGLE CAN VARY TO ALIGN WITH DRAINAGE NETWORK (REFER TO PROJECT PLANS).
 5. PEAK FLOW RATE AND MINIMUM HEIGHT LIMITED BY AVAILABLE COVER AND PIPE DIAMETER.
 6. LARGER SEDIMENT STORAGE CAPACITY MAY BE PROVIDED WITH DEEPER SUMP DEPTH.
 7. THE TREATMENT SYSTEM SHALL USE AN INDUCED VORTEX TO SEPARATE POLLUTANTS FROM STORMWATER RUNOFF.
 8. REFER TO MANUFACTURERS SHOP DRAWINGS FOR COMPLETE DETAILS, DIMENSIONS AND SYSTEM PARTS.
 9. FIRST DEFENSE STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING. ALL CASTINGS SHALL MEET AASHTO M306 AND HYDRO INTERNATIONAL SPECIFICATIONS.
 10. FIRST DEFENSE UNIT SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.
- INSTALLATION NOTES:**
1. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
 2. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
 3. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.
 4. FOR COMPLETE INSTALLATION DETAILS REFER TO THE MANUFACTURERS INSTALLATION SPECIFICATIONS.
 5. REFER TO GRADING & DRAINAGE PLAN FOR LOCATION, ELEVATIONS AND INVERTS.

FIRST DEFENSE FDHC-3 UNIT (WATER QUALITY CATCH BASIN-1 & 2)
N.T.S.

NOTE:
CONTRACTOR SHALL OBTAIN SHOP DRAWINGS FROM MANUFACTURER PRIOR TO CONSTRUCTION.

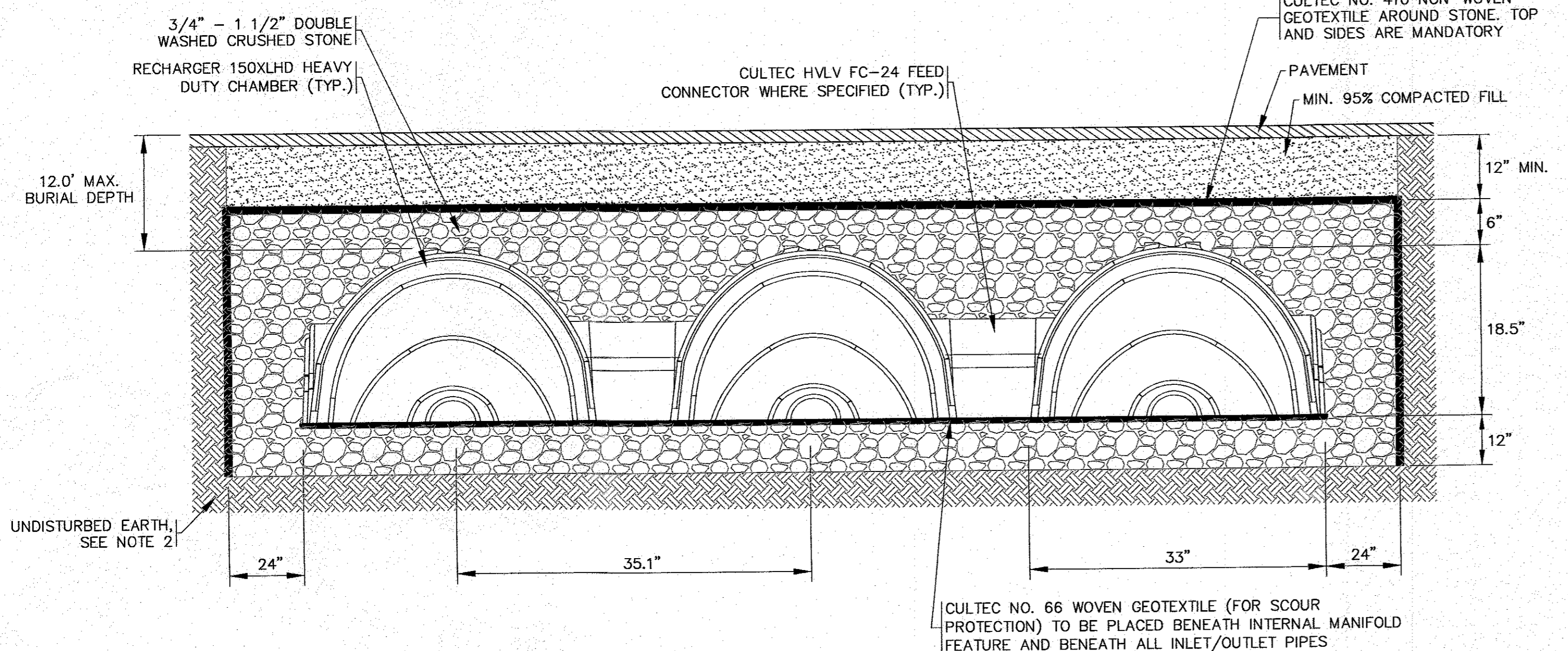


FLAT TOP SLAB
N.T.S.



DOWNSPOUT DETAIL
N.T.S.

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

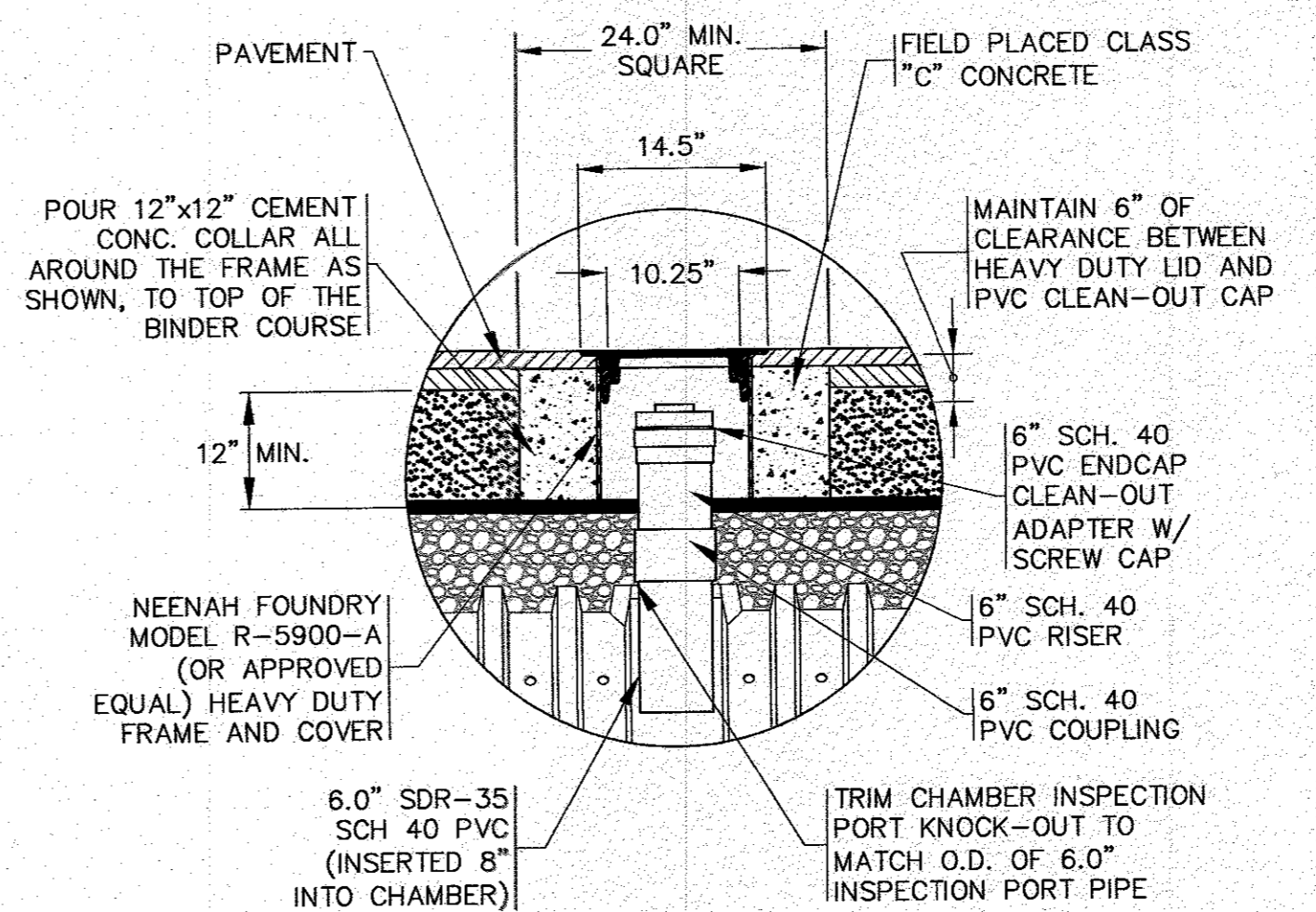


SYSTEM ELEVATIONS:

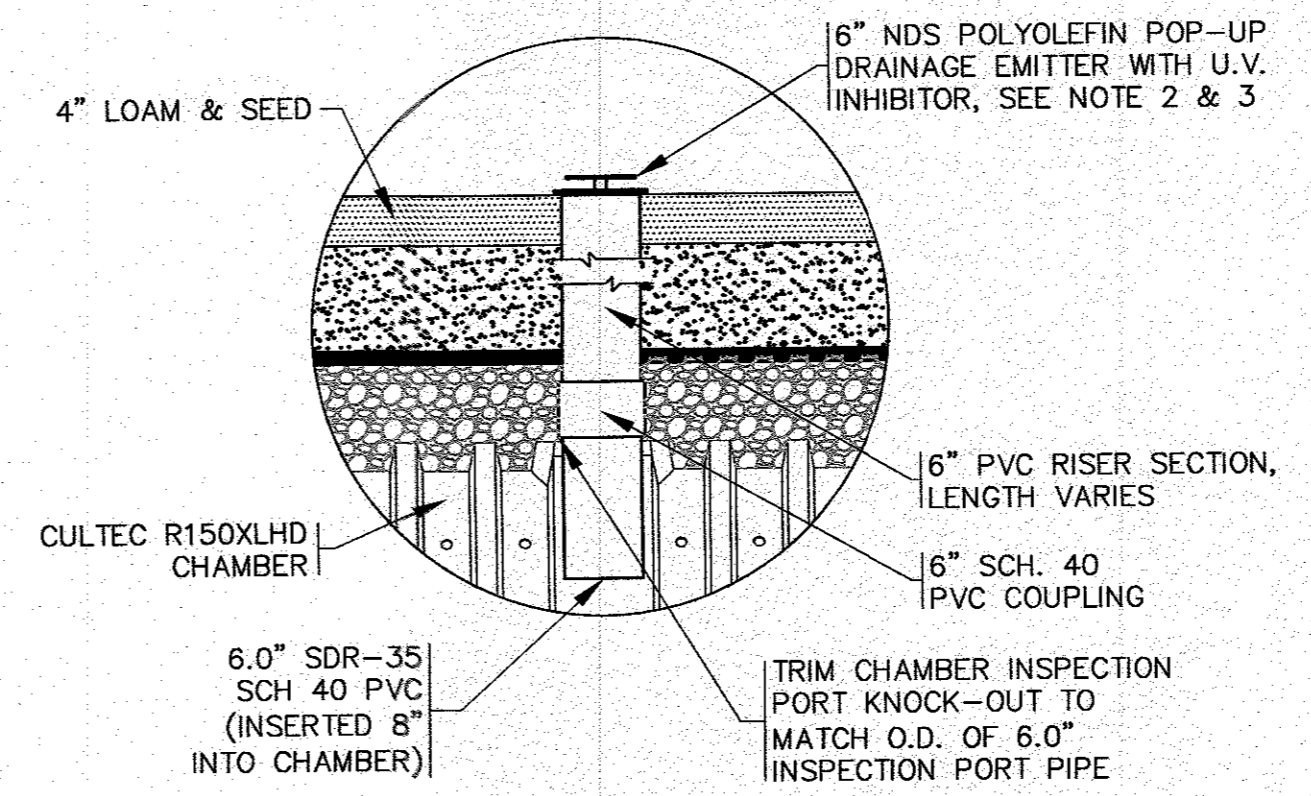
BOTTOM OF STONE	BOTTOM 150XLHD'S	TOP 150XLHD'S	TOP OF STONE
11.50	12.50	14.00	14.50

- NOTES:**
1. REFER TO PLAN FOR LOCATIONS.
 2. 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.
 3. FOR COMPLETE INSTALLATION DETAILS REFER TO CULTEC SPECIFICATIONS.

CULTEC R150XLHD DETAIL
N.T.S.



CULTEC INSPECTION PORT DETAIL
N.T.S.



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

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

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

APPROVED BY: [Signature]

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REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MASSACHUSETTS
 LICENSE NO. 10100
 REGISTERED LAND SURVEYOR IN THE STATE OF MASSACHUSETTS
 LICENSE NO. 10100

SITE DEVELOPMENT PLAN
DETAIL SHEET 3

WAREHAM, MA
 6 CHAPEL LANE
 19 DEPOT STREET

PREPARED FOR:
6 CHAPEL LANE, LLC
 WAREHAM, MA

PER INITIAL PEER REVIEW
 WFM
 DATE: 3/14/23
 REV. 1

JOB NO.: 20-9499
 DWG. 11 OF 11