

ASSESSORS PARCEL F9-23B
#752 WASHINGTON STREET
N/F 130 MAYNARD, LLC
DEED BOOK 50322 PAGE 276

ASSESSORS PARCEL F9-3B
#754 WASHINGTON STREET
N/F TOWN OF PEMBROKE
DEED BOOK 7202 PAGE 12

FINE GRADE LOAM AND SEED
ALL DISTURBED AREAS WITH
N.E. WARM SEASON GRASS
MIX (TYP.)

PROPOSED SILT SOCK
LOAM AND SEED
DISTURBED AREAS

NOTE:
RETAIN STONEWALL ALONG FRONTAGE (EXCEPT DRIVEWAY
ACCESS AREAS). RETAIN STONEWALLS WITHIN THE
PROPERTY TO THE MAXIMUM EXTENT FEASIBLE.

FINE GRADE LOAM AND SEED ALL DISTURBED AREAS
WITH N.E. WARM SEASON GRASS MIX.

BENCHMARK
TOP OF FOUNDATION
EL=93.63
(NAVD 88 DATUM)

FINE GRADE LOAM AND SEED
ALL DISTURBED AREAS WITH
N.E. WARM SEASON GRASS
MIX (TYP.)

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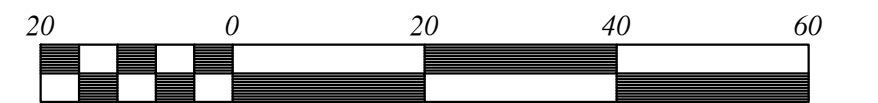
PLANT SCHEDULE

DECIDUOUS TREES	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	SP
ACE RUB	3	ACER RUBRUM 'RED SUNSET' / RED SUNSET MAPLE	B & B	25'-30" CAL.		
GLE TRI	7	GLADIOLUS TRIACANTHOS INERMIS / THORNLESS COMMON HONEYLOCUST	B & B	25'-30" CAL.		
PLA XLP	6	PLATANUS X ACERIFOLIA / LONDON PLANE TREE	B & B	25'-30" CAL.		
TIL COP	4	TILIA CORDATA / LITTLELEAF LINDEN	B & B	25'-30" CAL.		
EVERGREEN TREES	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	SP
JUN VIR	12	JUNIPERUS VIRGINIANA / EASTERN RED CEDAR	B & B	6'-8' HGT.		
PIN STR	28	PINUS STROBUS / WHITE PINE	B & B	6'-7' HGT.		
THU GRG	17	THUJA PLICATA 'GREEN GIANT' / GREEN GIANT ARBORVITAE	B & B	3'-4' HGT.	10' - O.C.	
FLOWERING TREES	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	SP
COR FLO	5	CORNUS FLORIDA / EASTERN DOGWOOD	B & B	2" CAL.		
CLUMP TREES	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	SP
BET NIG	12	BETULA NIGRA / RIVER BIRCH MULTI-TRUNK	B & B		10'-12' HGT.	
SHRUBS	QTY	BOTANICAL / COMMON NAME	SIZE	SIZE	SP	
AME CAN	5	AMELANCHIER CANADENSIS / SHADBLow SERVICEBERRY MULTITRUNK	B & B	5'-6' HGT.		
ILE GLA	13	ILEX GLABRA 'SHAMROCK' / INKBERRY	B & B	2.5'-3' HGT.		

FOR REGISTRY USE ONLY

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AND REGULATIONS OF THE REGISTERS OF
DEEDS OF THE COMMONWEALTH OF
MASSACHUSETTS.

TIMOTHY R. BENNETT P.L.S. #36856 DATE



Scale 1" = 20'

SITE PLAN

ASSESSORS MAP F9 LOT 11 & 12C
#0 & 74 CONGRESS STREET
PEMBROKE, MASSACHUSETTS

REVISIONS	
APRIL 24, 2023	BOARD OF HEALTH PEER REVIEW
MAY 10, 2023	PLANNING BOARD PEER REVIEW
JUNE 21, 2023	PLANNING BOARD PEER REVIEW

PREPARED FOR:
WHATBARN, LLC
29 DUCK HILL ROAD
DUXBURY MA 02332

MARCH 13, 2023
SCALE: AS NOTED
JOB No. 22-286

GRADY CONSULTING, L.L.C.
Civil Engineers, Land Surveyors & Landscape Architects
71 Evergreen Street, Suite 1, Kingston, MA 02364
Phone (781) 585-2300

NOTES:

ON TREES BELOW 3" CAL.
USE WOOD STAKES.

ON TREES 3" CAL. OR GREATER
USE GUYING CABLES.

IF GUYING CABLES USE 3 PER TREE

INSTALL TREE PLUMB – L.A. TO APPROVE
FACE / ORIENTATION OF TREES ON SITE

NON-GURDELING STRAP SUCH AS CHAIN
LOCK OR ARBORTIAPE

INSTALL TREE GATORS ON ALL TREES NOT
COVERED BY IRRIGATION AS PER
MANUFACTURERS SPECIFICATIONS.
CONTRACTOR TO MAINTAIN DURING PERIOD
OF WARRANTY

TREE SHALL BE PLANTED ;3" ABOVE
SURROUNDING GRADE – TREE SHALL BE
PLUMB AFTER SETTLEMENT

IF ROOTBALL IS WRAPPED IN PLASTIC OR
NON-BIODEGRADEABLE MATERIAL REMOVE ENTIRE
WRAP – IF WRAPPED IN BURLAP, CUT OPEN AT
LEAST 1/3 OF TOP

3" PINE BARK MULCH (UNLESS OTHERWISE NOTED
ON PLANS)

HAND EXCAVATE HOLE TO DIAMETER 2X WIDER
THAN ROOT BALL – PRUNE ROOT FLARE –
BACKFILL HOLE WITH PLANTING SOIL MIX AS
SPECIFIED

EARTH SAUCER TO CONTAIN 3" MULCH –
PULL MULCH 3–6" AWAY FROM TRUNK OF
TREE (KNOCKDOWN/REMOVE SAUCER AFTER
FIRST SEASON)

USE 2"x2" HARDWOOD STAKE
(FOR BELOW 3" CAL.)

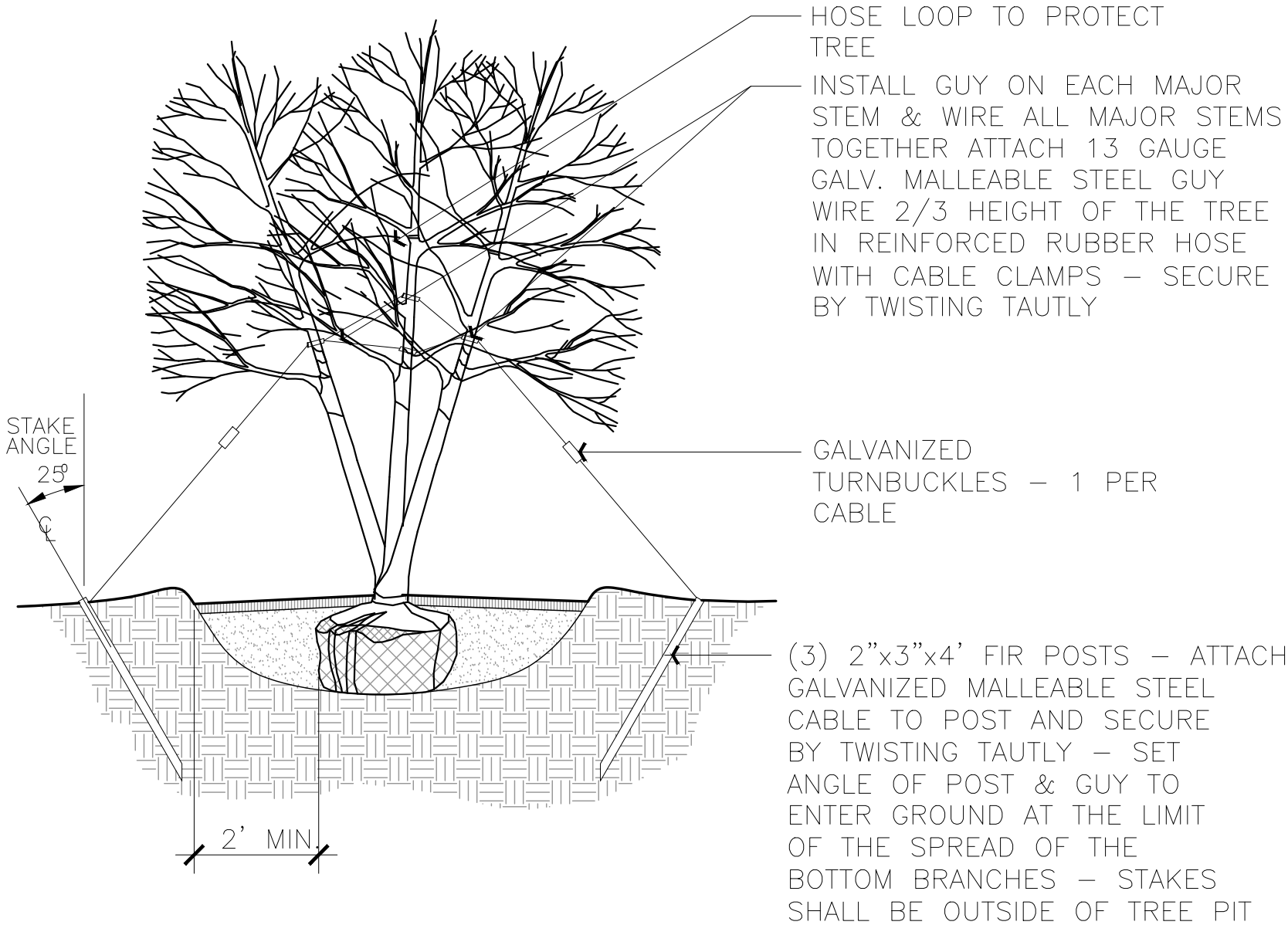
UNDISTURBED SUBGRADE

NOTE:
FOR ALL FALL PLANTING, WRAP TRUNK AS
SPECIFIED TO 2ND LOWEST BRANCH –
REMOVE THE FOLLOWING SPRING

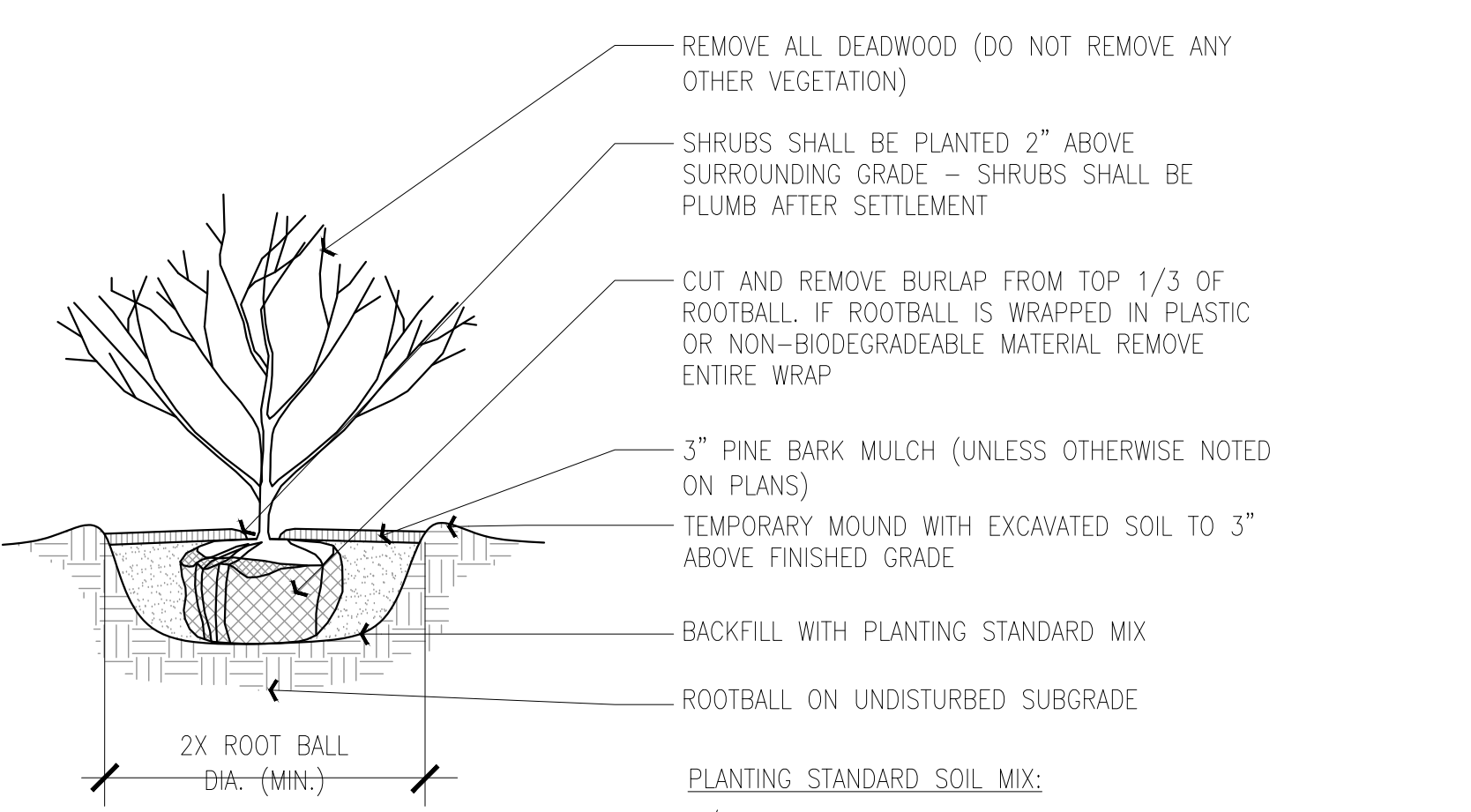
ALL TREES SHALL BE FLOODED TWICE
DURING THE FIRST 24 HOURS AFTER
PLANTING

PLANTING SOIL MIX:

1/3 PEAT – BLEND MANURE
1/3 HIGH ORGANIC LOAM
1/3 EX. SOIL



3 TREE GUYING DETAIL - MULTISTEM
1/2" = 1'-0"



4 SHRUB DETAIL
1" = 1'-0"

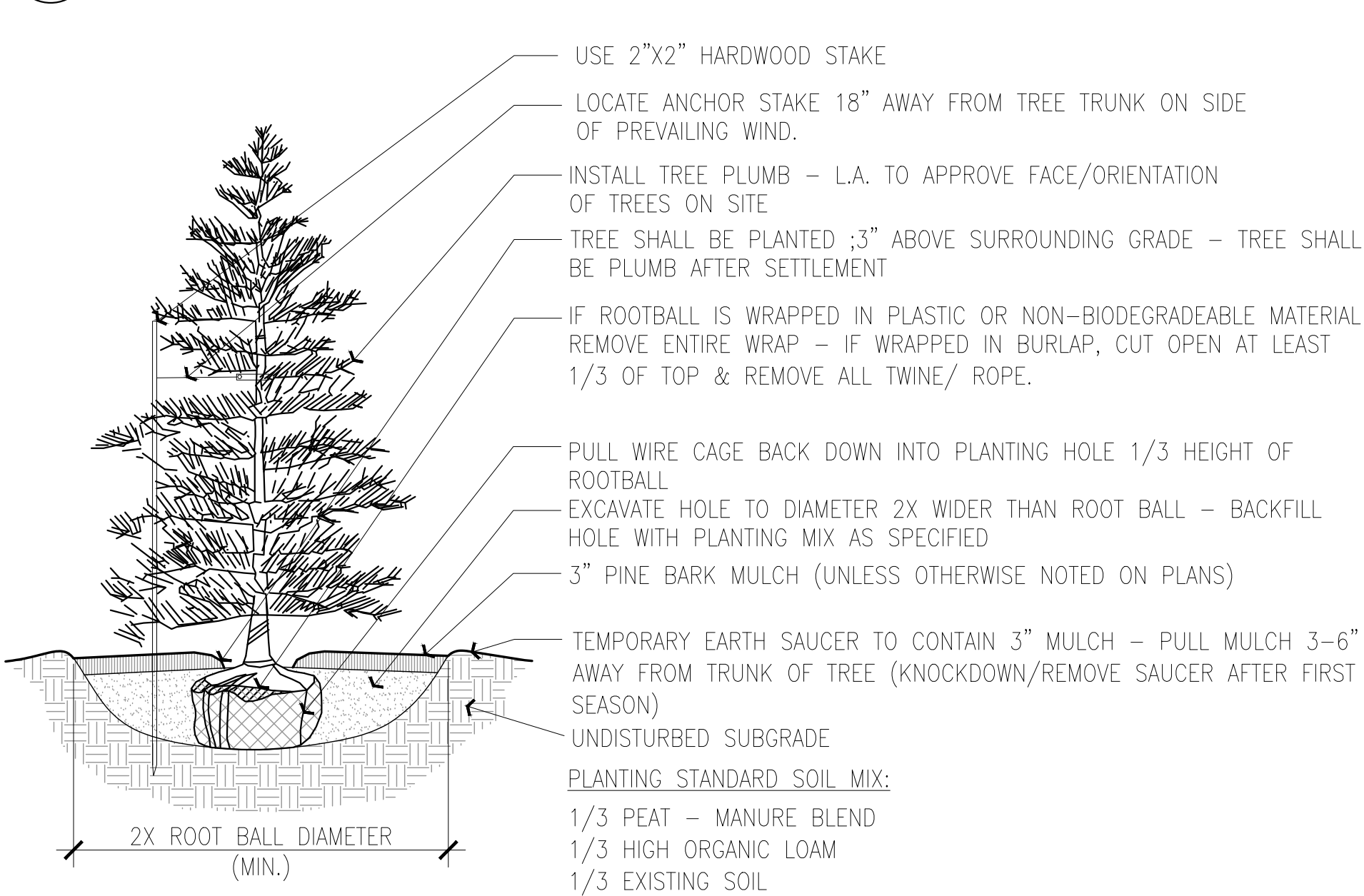
LOCATION	DEPTH	DESCRIPTION
GENERAL PLANTING BEDS	6"	1/3 PEAT – MANURE BLEND 1/3 HIGH ORGANIC LOAM 1/3 EXISTING SOIL
FLOWER BEDS	6"	SCREENED LOAM 1/3 PEAT – MANURE BLEND LIME – PELATIZED OR GROUND (50 LB. PER 100 SF.) GROUND BONE MEAL (50 LB. PER 100 SF.) 10–10–10 INORGANIC FERTILIZER (50 LB. PER 5000 SF.)
LAWNS – SOD & SEED	6"	6" SCREENED LOAM
PITS/TREE WELLS "STANDARD MIX" FOR BACKFILL	12"	SOIL MIX 'A' – 1/3 PEAT – MANURE BLEND 1/3 HIGH ORGANIC LOAM 1/3 EXISTING SOIL
PITS/TREE WELLS "LITE WEIGHT MIX"	12"	SOIL MIX 'B' – 70% LIGHT WEIGHT SHALE 20% SAND 10% COMPOST
PITS/TREE WELLS "STRUCTURAL MIX"	12"	SOIL MIX 'C' – MIX COMPOSITION TO BE SUPPLIED BY LANDSCAPE ARCHITECT.

5 SCHEDULE OF TOPSOILS & ADDITIVES
1" = 1'-0"

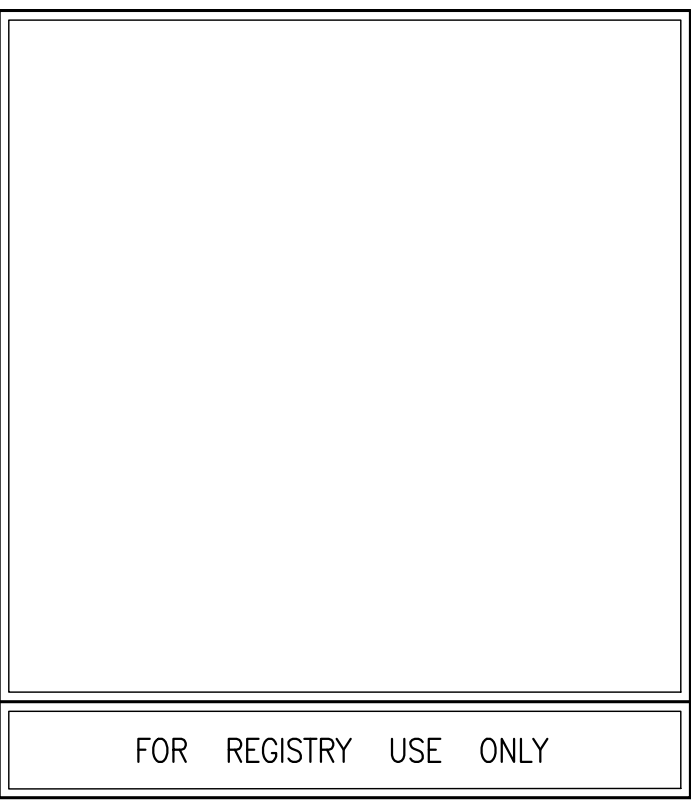
PLANTING NOTES

- 1) NOTIFY DIG-SAFE AND LOCAL AUTHORITIES PRIOR TO ANY TYPE OF SITE PREPARATION OR CONSTRUCTION
- 2) ALL PLANTS TO HAVE THE SAME RELATIONSHIP TO FINISH GRADE AFTER SETTLEMENT AS TO THEIR ORIGINAL GRADE BEFORE DIGGING. LOCATE PLANT COLLAR TWO OR THREE INCHES HIGHER THAN PLANTING SOIL MIX TO INSURE CORRECT FINAL RELATIONSHIP.
- 3) APPLY AN APPROVED ANTI-DESSICANT TO ALL PLANTS IN LEAF AT PLANTING TIME, AND TO ALL EVERGREENS BEFORE THEIR FIRST WINTER.
- 4) FLOOD ALL PLANTS WITH CLEAN WATER TWICE IN THE FIRST 24 HOURS AFTER PLANTING. CONTRACTOR TO ARRANGE FOR ALL PLANTS TO BE PLANTED WITHIN THREE DAYS AFTER DELIVERY TO THE SITE UNLESS OTHERWISE APPROVED BY THE LANDSCAPE ARCHITECT.
- 5) NEVER CUT A LEADER.
- 6) TRIM ONLY BROKEN OR DEAD BRANCHES FROM EVERGREEN PLANTS.
- 7) THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIAL AND MULCH IN SUFFICIENT QUANTITIES TO COMPLETE PLANTING AS SHOWN ON THE DRAWINGS. DRAWING QUANTITIES TAKE PRECEDENCE OVER PLANT LIST QUANTITIES.
- 8) ALL PLANT MATERIAL SHALL CONFORM TO THE GUIDELINES BY "THE AMERICAN STANDARD FOR NURSERY STOCK," PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.
- 9) ALL TREES SHALL HAVE "BEST FACE" SIDE TAGGED AT NURSERY PRIOR TO DIGGING.
- 10) ALL PLANTS SHALL BE BALLED AND BURLAPPED OR CONTAINER GROWN, UNLESS OTHERWISE APPROVED BY THE LANDSCAPE ARCHITECT.
- 11) CONTRACTOR TO STAKE TREE LOCATIONS FOR APPROVAL BY LANDSCAPE ARCHITECT.
- 12) LANDSCAPE ARCHITECT TO APPROVE IN PLACE ALL SHRUBS, PERENNIALS AND VINES PRIOR TO PLANTING.
- 13) ALL TREES TO RECEIVE A MINIMUM OF THREE INCHES OF MULCH. ALL SHRUBS, VINES AND GROUND COVERS TO RECEIVE A MINIMUM OF TWO INCHES OF MULCH.
- 14) WHERE SPECIFIED, CALIPER SIZE TO BE OVERRIDING FACTOR IN TREE SELECTION.
- 15) STAKE OR GUY ALL TREES AND LARGE EVERGREEN MATERIAL.
- 16) CONTRACTOR TO PROVIDE TWO YEAR GUARANTEE ON ALL MATERIAL. CONTRACTOR TO MAINTAIN ALL PLANTING AND LAWNS UNTIL FINAL PROJECT ACCEPTANCE. GUARANTEE PERIOD TO BEGIN AT FINAL ACCEPTANCE.
- 17) ALL PLANT MATERIAL SHALL BE INSTALLED PRIOR TO FINAL TOP-DRESSING AND SODDING/SEEDING.
- 18) COORDINATE LANDSCAPE INSTALLATION WITH INSTALLATION OF UNDERGROUND SPRINKLER SYSTEM & LANDSCAPE LIGHTING (IF APPLICABLE).
- 19) NO PLANTING BEFORE THE ACCEPTANCE OF ROUGH GRADING.
- 20) CONTRACTOR TO PROVIDE SOIL TESTS IN AREAS DESIGNATED BY LANDSCAPE ARCHITECT IN FIELD FOR EXISTING SOILS TO DETERMINE APPROPRIATE SOIL AMENDMENTS PRIOR TO THE DISTURBANCE OF SITE.
- 21) ALL PLANTING BEDS TO BE TREATED WITH PREEN AND GREEN OR APPROVED EQUAL TO PROHIBIT WEED GERMINATION AND GROWTH PRIOR TO THE SPREADING OF MULCH.
- 22) ALL PERENNIALS ARE TO BE PLANTED INTO DAMP SOIL.
- 23) PLANT LIST: A COMPLETE LIST OF PLANTS INCLUDING A SCHEDULE OF QUANTITIES, SIZES, TYPES AND NAMES IS INCLUDED IN THIS SET OF DRAWINGS. IN THE EVENT OF DISCREPANCIES BETWEEN QUANTITIES OF PLANTS IN THE PLANT LIST AND THE QUANTITIES SHOWN ON THE DRAWINGS, THE PLAN SHALL GOVERN. WHEN MULTIPLE PLANT SPECIES ARE LISTED IN ONE PLANT CATEGORY, THE GOAL IS TO PROVIDE THE BEST PLANTS AVAILABLE AT THE TIME OF INSTALLATION. THE LANDSCAPE ARCHITECT SHALL SELECT OR COORDINATE THE SELECTION OF THE APPROPRIATE PLANTS AT LOCAL NURSERIES. GRADY CONSULTING HAS THE RIGHT TO REJECT ANY PLANT THAT DOES NOT MEET THE SPECIFICATIONS LISTED IN THE PLANT TABLE.
- 24) PLANT SUBSTITUTION ARE NOT ALLOWED UNLESS APPROVED BY LANDSCAPE ARCHITECT.
- 25) ALL DISTURBED AREAS TO BE LOAMED AND SEEDDED AND BLENDED INTO EXISTING GRADE AND CONDITIONS (REFER TO ENGINEER'S SOIL STABILIZATION AND EROSION CONTROL PLAN FOR FURTHER INFORMATION).
- 26) CONTRACTOR SHALL (IF APPLICABLE) REVIEW WITH CLIENT ALL IRRIGATION PROCEDURES AND PROCESSES (i.e. TIMERS, ZONES AND ALL OTHER ITEMS INVOLVED W/ THE IRRIGATION SYSTEM).

1 SHADE / FLOWERING TREE DETAIL
1/2" = 1'-0"



2 EVERGREEN TREE DETAIL
1/2" = 1'-0"



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MASSACHUSETTS.

TIMOTHY R. BENNETT P.L.S. #36856 DATE



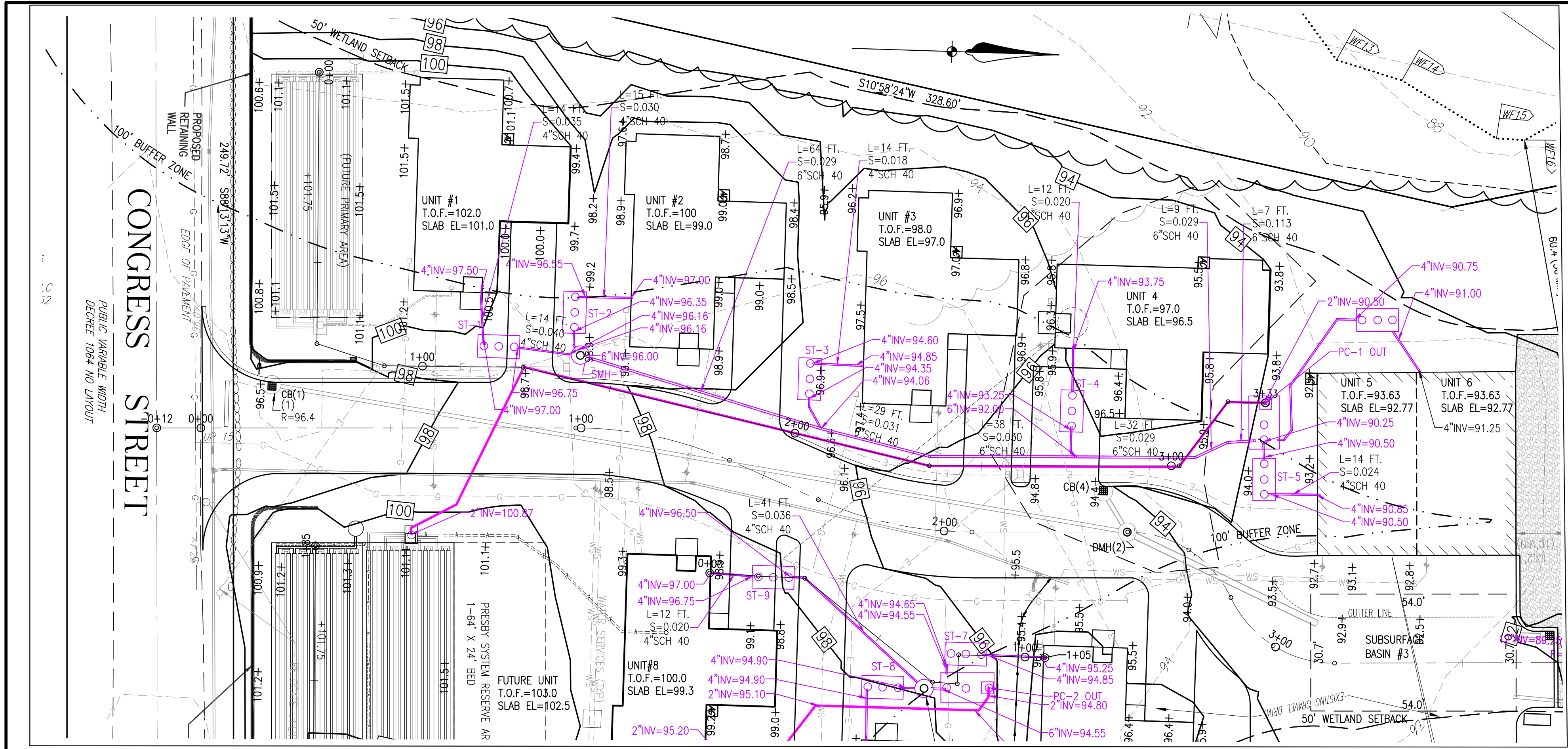
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SITE PLAN
ASSESSORS MAP F9 LOT 11 & 12C
#0 & 74 CONGRESS STREET
PEMBROKE, MASSACHUSETTS

PREPARED FOR:
WHATABARN, LLC
29 DUCK HILL ROAD
DUXBURY MA 02332

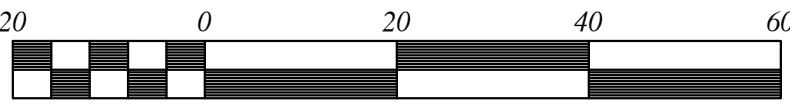
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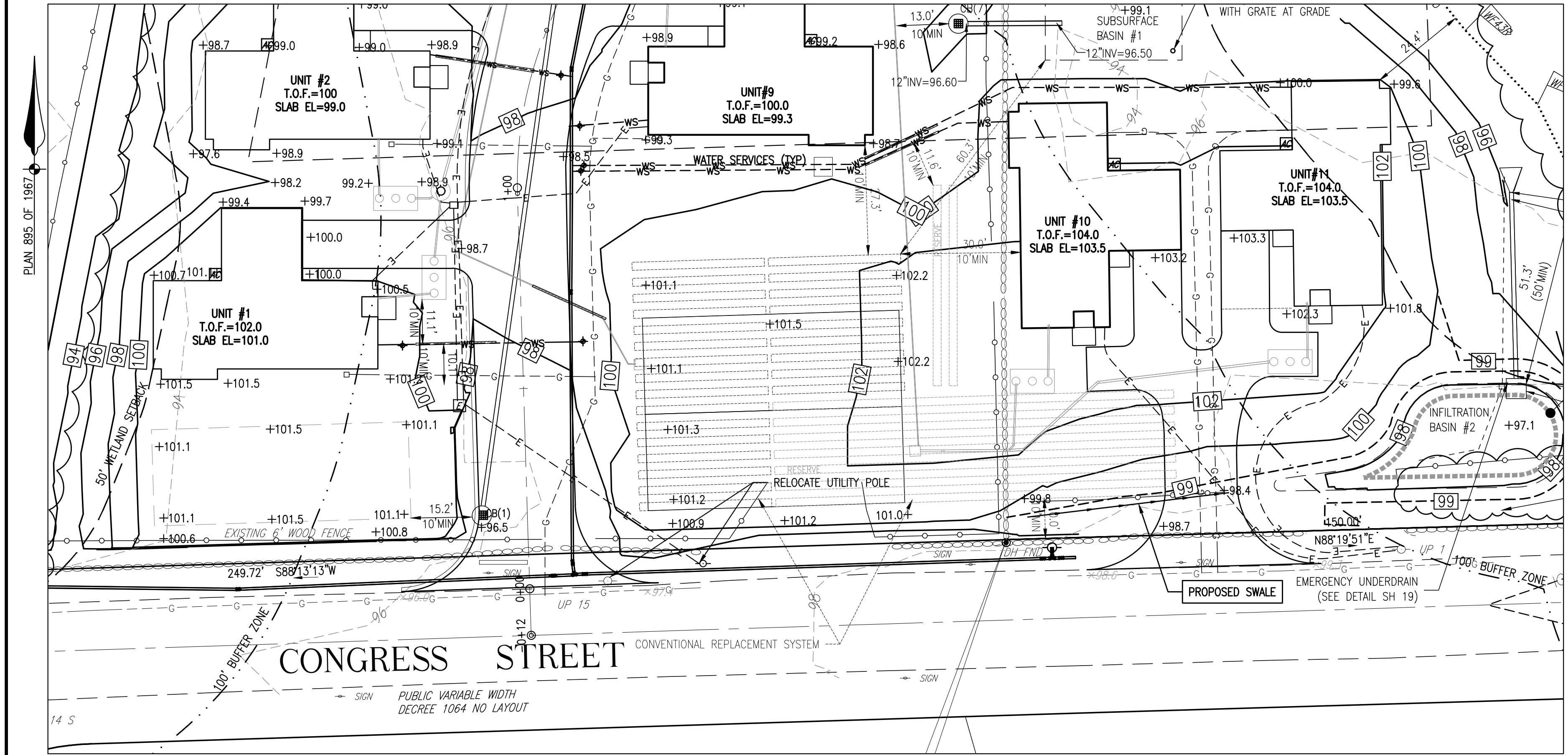


UNITS 1-5 SEPTIC COLLECTION PLAN

SCALE: 1" = 20'

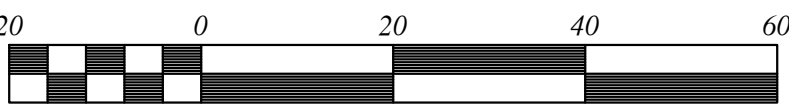


Scale 1" = 20'



CONVENTIONAL REPLACEMENT SYSTEM

SCALE: 1" = 20'



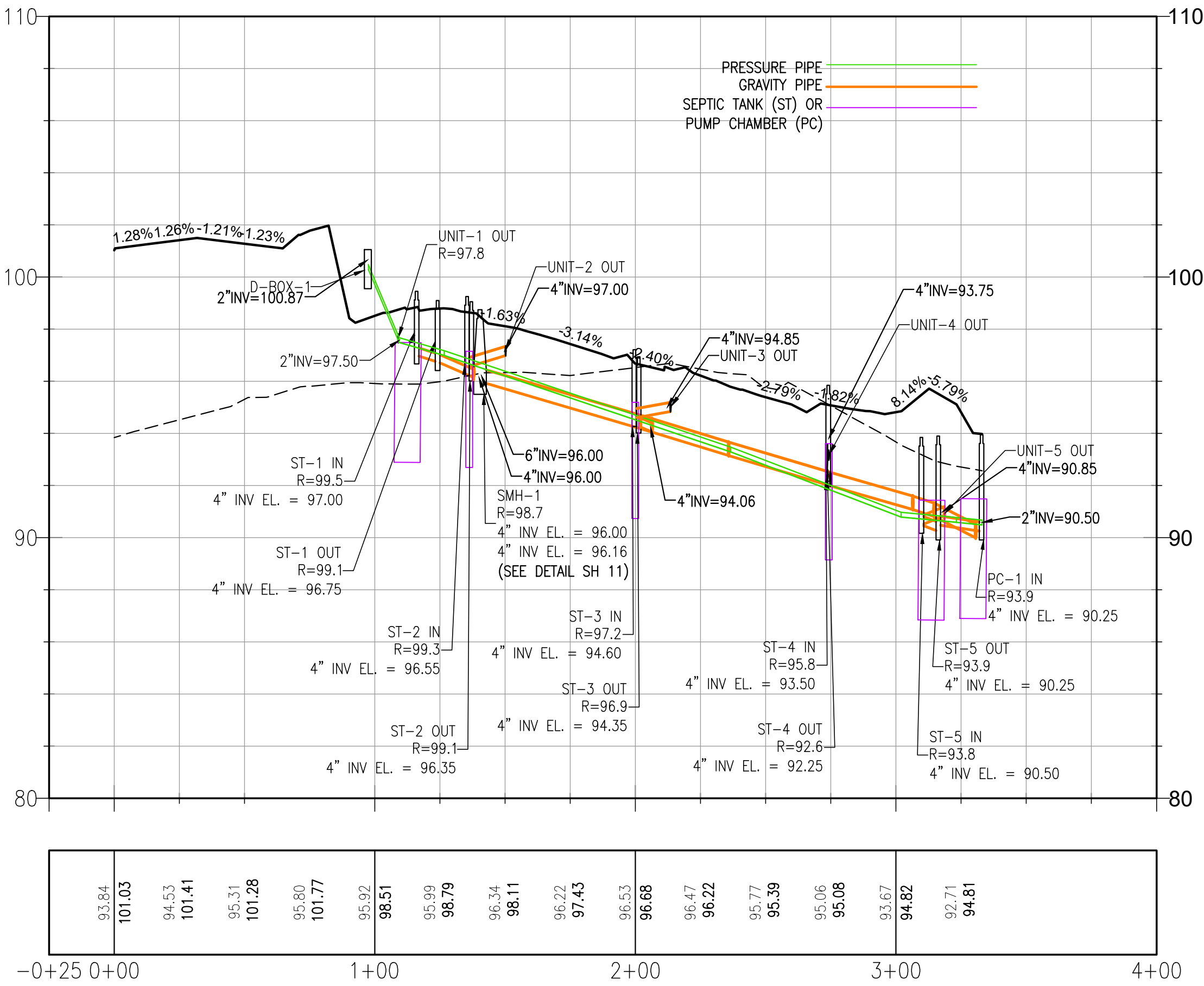
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NOTE:

1. ALL INDIVIDUAL UNIT SEPTIC TANKS TO BE 1500 GALLON TANKS (SEE DETAIL SH 14).
2. PUMP CHAMBERS TO BE 3000 GALLON TANKS (SEE DETAIL SH 14).
3. FOR PRESBY SYSTEM DETAILS (SEE SH 14).
4. SEE SHEET 13 FOR CONVENTIONAL REPLACEMENT SYSTEM AREA CALCULATIONS.

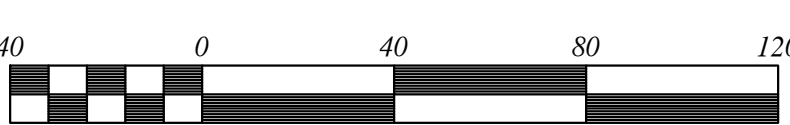
Alignment - (Septic Units 1-5) PROFILE



UNITS 1-5 SEPTIC COLLECTION PROFILE

SCALE: 1" = 20'

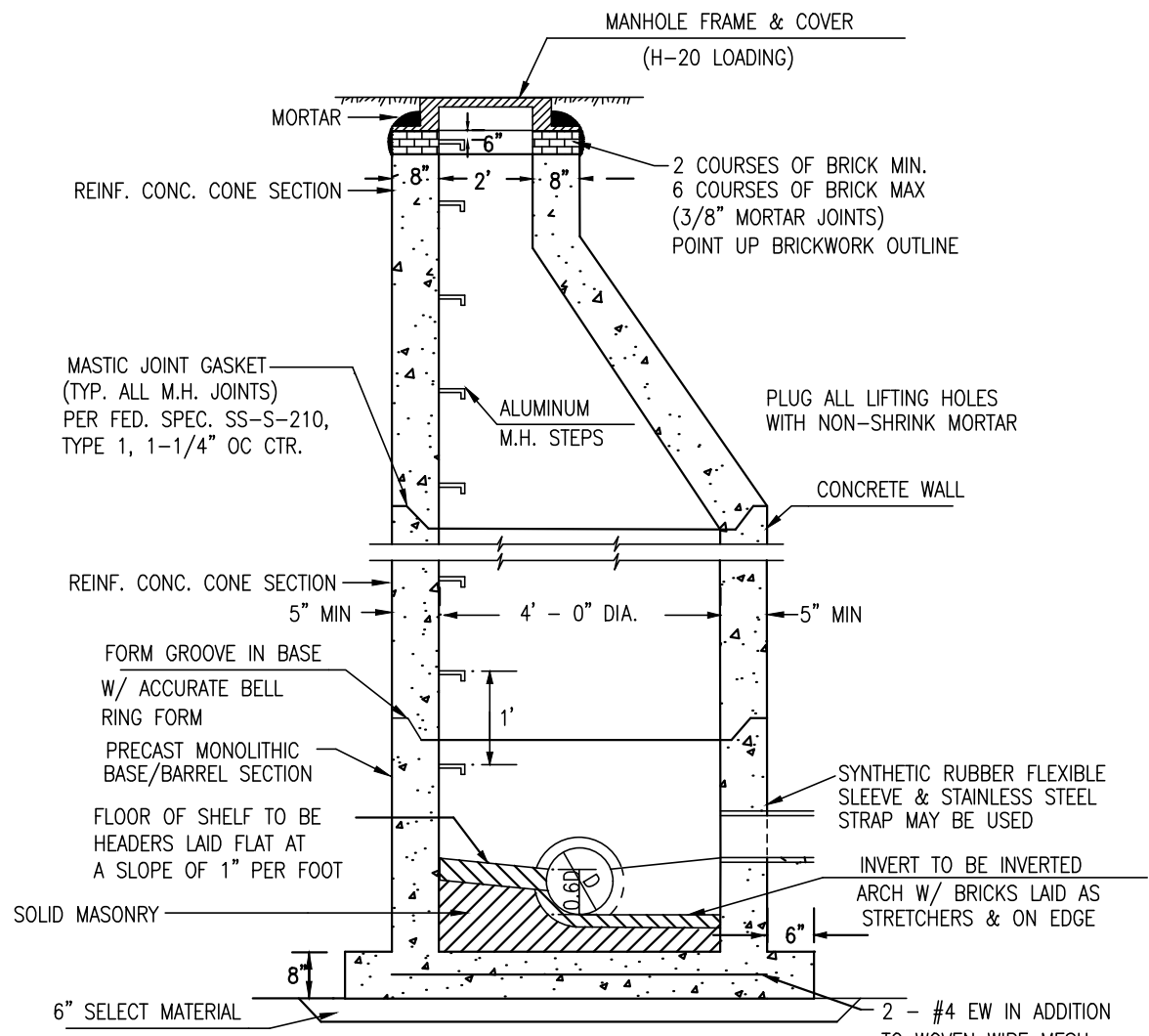
STATION
SCALE 1"=40' HORIZ
1"=4' VERT



Scale 1" = 40'

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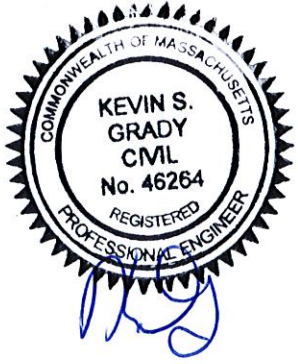
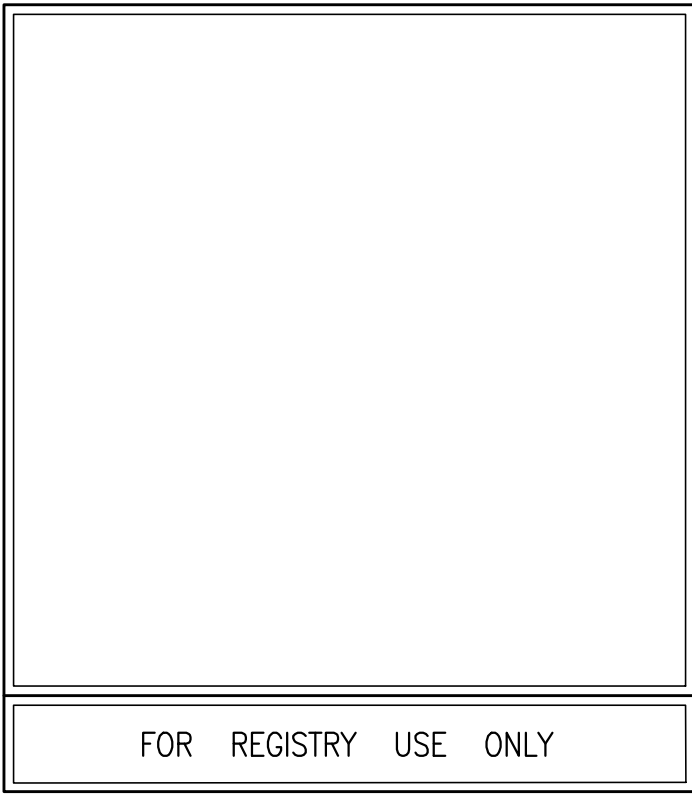
SANITARY SEWER MANHOLE

NOT TO SCALE

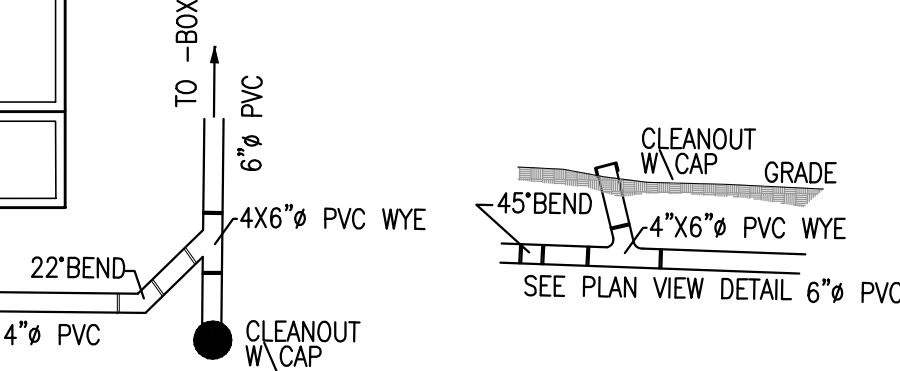
REQUIRED SETBACKS
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SEPTIC TANK SOIL ABSORPTION SYSTEM HOLDING TANK PUMP CHAMBER TREATMENT UNIT GREASE TRAPS

PROPERTY LINE	SEPTIC TANK	SOIL ABSORPTION SYSTEM
CELLAR OR CRAWL SPACE WALL	10[5]	10[5]
SWIMMING POOL (GROUND)	10	20
FOUNDATION DRAIN	10	20
SLAB FOUNDATION	10	20
WATER SUPPLY LINE (PRESSURE)	10[1]	10[1]
SURFACE WATERS (EXCEPT WETLANDS)	25	50
BORDERING VEGETATED WETLAND (BWW)	5	50
OTHER OPEN, SURFACE OR SUBSURFACE DRAIN	5	10
(EXCLUDING FOUNDATION DRAINS)		
LEACHING CATCH BASINS & DRY WELLS	10	25
DOWNHILL SLOPE NOT APPLICABLE		15

[1] DISPOSAL FACILITIES SHALL BE AT LEAST 18 INCHES BELOW WATER SUPPLY LINES. WHEREVER SEWER LINES MUST CROSS WATER SUPPLY LINES, BOTH PIPES SHALL BE CONSTRUCTED OF CLASS 150 PRESSURE PIPE AND SHALL BE PRESSURE TESTED TO ASSURE WATER TIGHTNESS.



CLEANOUT DETAIL



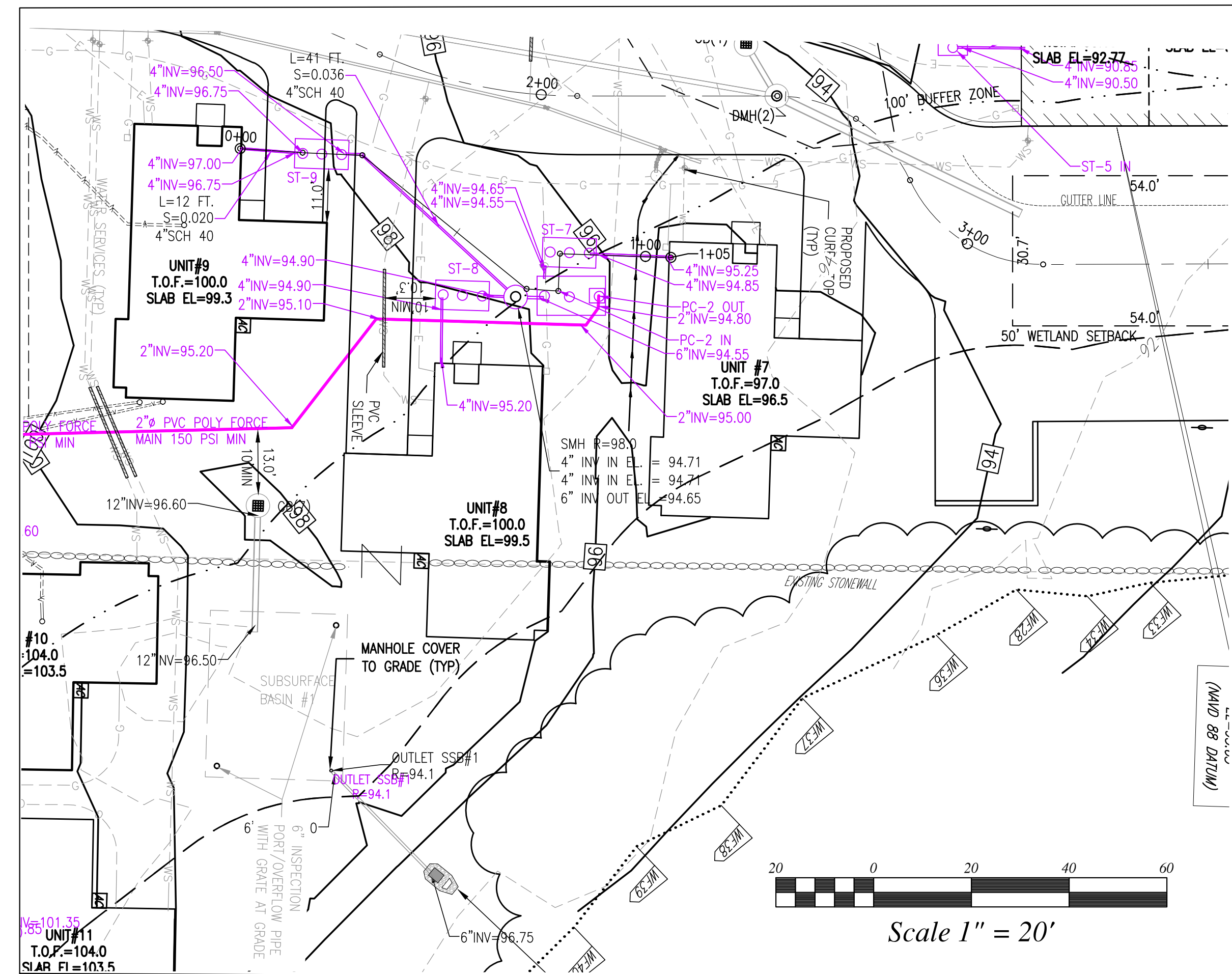
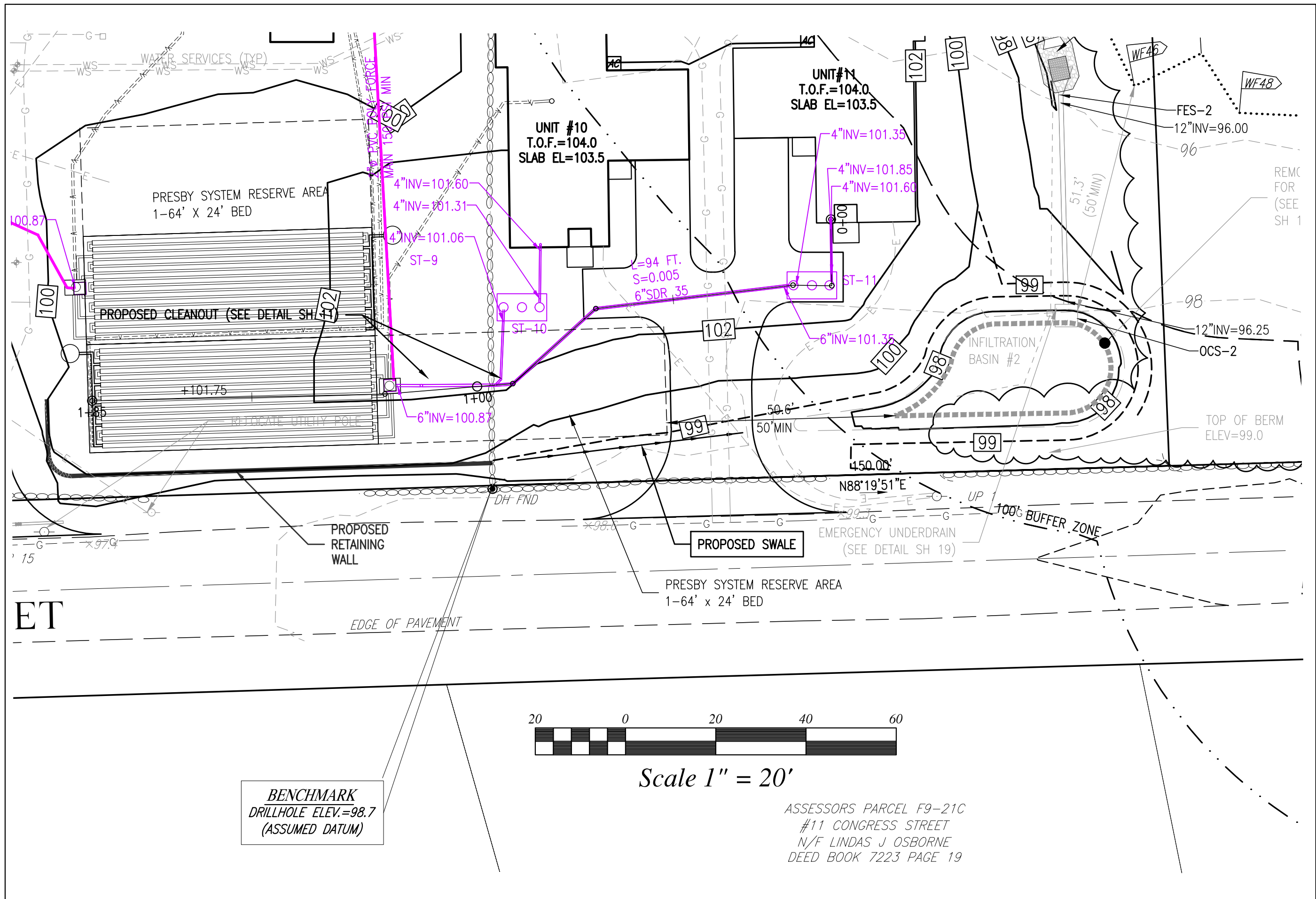
SITE PLAN

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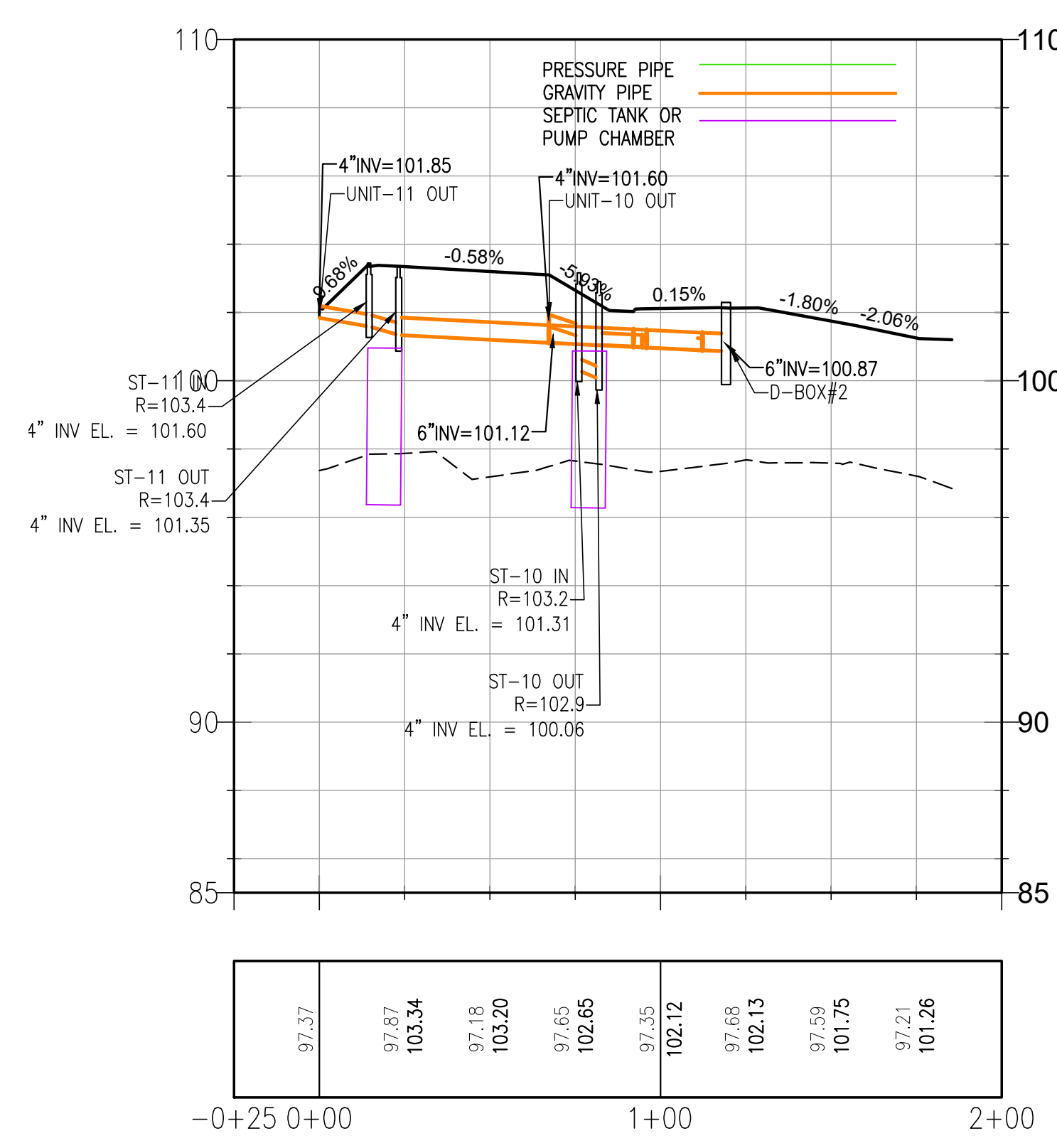


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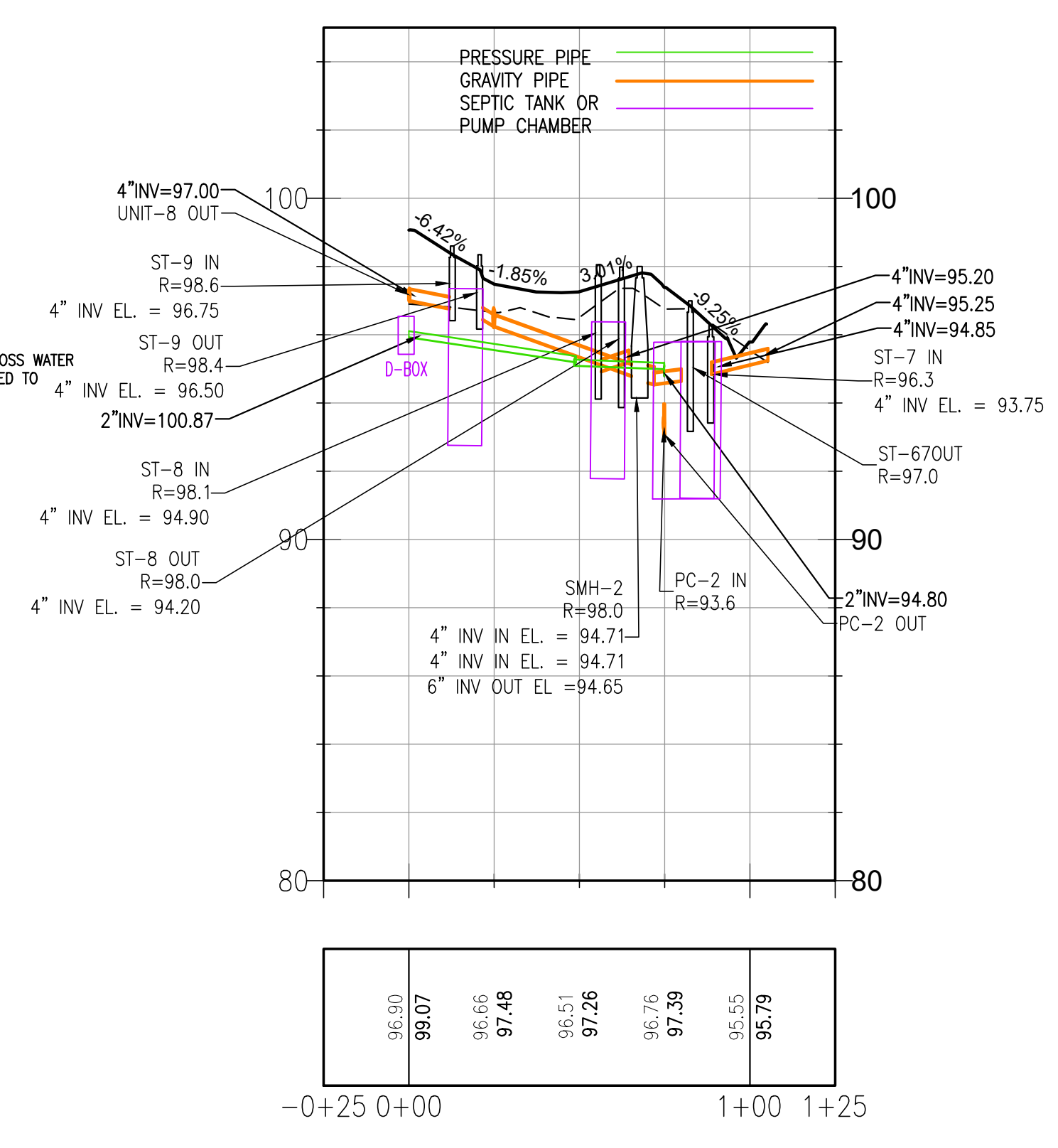
Alignment - (UNITS 10 11) PROFILE



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OTHER OPEN, SURFACE OR SUBSURFACE DRAINS (EXCLUDING FOUNDATION DRAINS)	5	10
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Alignment - (Unit 7 8 9) PROFILE



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 - FOR PRESBY SYSTEM DETAILS (SEE SH 14).
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SITE PLAN

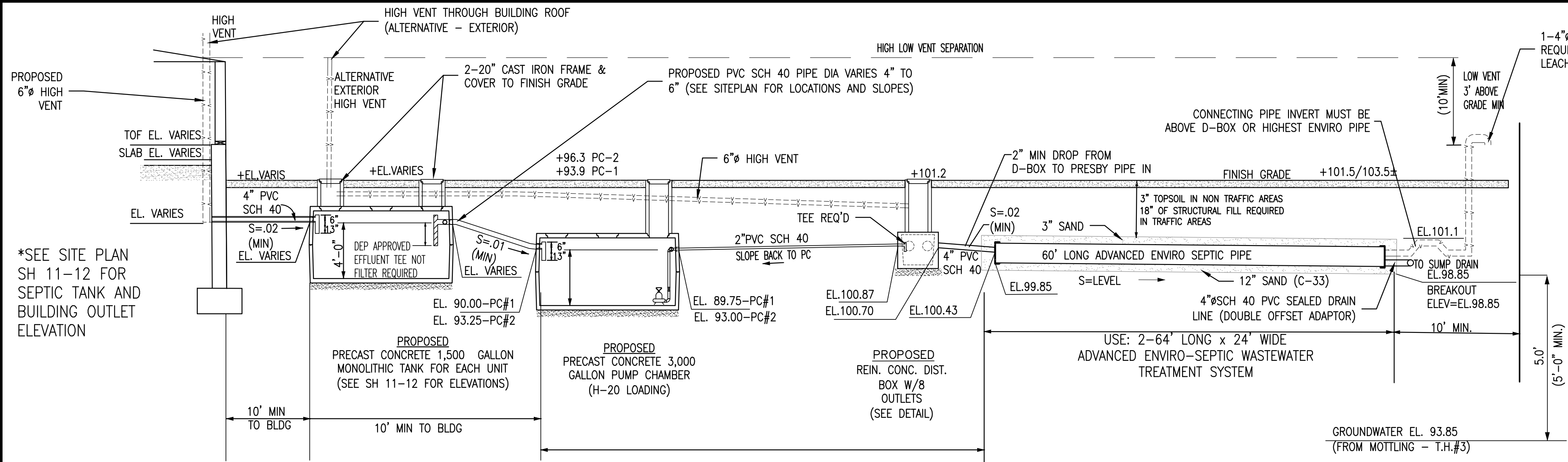
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PLAN & PROFILE - SEPTIC



NOTES:

1. SOILS TESTING BY KEVIN GRADY, GRADY CONSULTING WITNESSED BY LISA CULLITY AUGUST 11, 2022 AND MAY 15, 2023.
2. CALL DIG SAFE 1-888-344-7233 AT LEAST 4 DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
3. NOTIFY TOWN AND GRADY CONSULTING PRIOR TO BACKFILLING OF SYSTEM.
4. NO KNOWN WELLS EXIST WITHIN 200' OF THE PROPOSED SYSTEM.
5. THE SITE IS NOT LOCATED IN AN AQUIFER PROTECTION ZONE II.
6. ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE OR A COMPARABLE MEANS IN ORDER TO LOCATE THEM ONCE BURIED (310 CMR 15.221(12)).
7. THE SITE NOT IS LOCATED IN A FLOOD PLAIN DISTRICT ZONE X.
8. NO KNOWN EASEMENTS ARE IN THE AREA OF THE PROPOSED SYSTEM.
9. EXCAVATE ALL MATERIAL (A, B, LAYER) TO MEDIUM LOAMY SAND C1 LAYER (44" TH#1, 54", TH #4), 5' AROUND SYSTEM. REPLACE WITH CLEAN COURSE SAND IN ACCORDANCE WITH 310 CMR 15.255 (3). EXCAVATION TO BE INSPECTED BY GRADY CONSULTING L.L.C. AND TOWN PRIOR TO SOIL REPLACEMENT.

SYSTEM #1 (*PRESBY AES DOES NOT REQUIRE 5 FT OVER DIG)
APPROXIMATE PRESBY (C-33 SAND) SAND VOLUME = 64 X 21 SF X (2 FT DEEP) / 27 + 20% = 120± C.Y.
APPROXIMATE PERC SAND VOLUME = 64 X 21 (98.35 - 94.85±) / 27 + 20% = 210± C.Y.

SYSTEM #2
APPROXIMATE PRESBY (C-33 SAND) SAND VOLUME = 64 X 21 SF X (2 FT DEEP) / 27 + 20% = 120± C.Y.
APPROXIMATE PERC SAND VOLUME = 64 X 21 (98.35 - 94.85±) / 27 + 20% = 210± C.Y.

10. DISTANCE TO WETLANDS MUST BE OBSERVED AS REQUIRED IN THE "RULES". 75 FEET FROM HOUSE SEWAGE SYSTEM AND 100 FEET FROM COMMERCIAL OR MULTIPLE DWELLINGS OF MORE THAN TWO UNITS. IF LESS THAN 100 FEET OR ANY WORK WITHIN 100 FEET OF THE WETLANDS A NOTICE OF INTENT MUST BE FILED. ***A NOTICE OF INTENT HAS BEEN FILED***

SUBSURFACE SEWAGE DISPOSAL SYSTEM

PERC TESTS					
PERC #	PERFORMED BY:	DATE	DEPTH	RATE	
1	ROBERT CROWELL	3-24-14	29"	2 MPI	
2	ROBERT CROWELL	3-24-14	25"	2 MPI	
DEEP HOLES					
TEST PIT #	PERFORMED BY:	DATE			
1 & 2	ROBERT CROWELL	3-24-14			

TP NO. 1					
SOIL HOR.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTLING	OTHER	
0"	FILL	---	---	---	99.4
25"	A	SL	10YR3/2	FRABLE	98.3
32"	B	SL	10YR5/6	FRABLE	96.7
64"	C	LS	2.5Y 6/3	LOOSE	94.0
GND. WATER/MOTTLING = 64"					
ADJ. GROUNDWATER = 94.1					
TP NO. 2					
SOIL HOR.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTLING	OTHER	
0"	FILL/A	SL	10YR3/2	FRABLE	97.9
18"	B	SL	10YR5/6	FRABLE	96.4
27"	C	LS	10YR5/6	LOOSE	95.6
GND. WATER = 54"					
ADJ. GROUNDWATER = 93.4					

TEST PITS BY CROWELL ENGINEERING FROM PLAN TITLED "SEWAGE DISPOSAL SYSTEM REPAIR 74 CONGRESS ST" DATED JUNE 10, 2014

SOIL LOGS

T.H.1	T.H.2	T.H.3	T.H.4	T.H.5
EL. 97.04	EL. 96.61	EL. 97.69	EL. 95.68	EL. 94.20
0"-30" A FILL/LOAM C1 LOAMY SAND	0"-10" A LOAM 10"-24" B LOAMY SAND 24"-54" C1 LOAMY SAND	0"-18" A LOAM 18"-40" B LOAMY SAND 40"-120" C1 MEDIUM LOAMY SAND	0"-10" A LOAM 10"-24" B LOAMY SAND 24"-54" C1 LOAMY SAND	0"-4" A LOAM 4"-18" B SANDY LOAM 18"-66" C1 SANDY LOAM
PERC 44"-132" C1 MEDIUM SAND	PERC 40"-58" P.R.=4 MIN/IN 54"-120" C1 MEDIUM LOAMY SAND	PERC 53"-71" P.R.=4 MIN/IN 40"-120" C1 MEDIUM LOAMY SAND	PERC 42"-60" P.R.<2 MIN/IN 54"-120" C1 MEDIUM LOAMY SAND	PERC 66"-120" C2 LOAMY SAND
D=11'-0" MOTTLING 3'-4" (EL=93.70)	D=10'-0" MOTTLING 3'-4" (EL=93.27)	D=10'-0" MOTTLING 3'-10" (EL=93.85)	D=10'-0" MOTTLING 3'-4" (EL=92.34)	D=10'-0" MOTTLING 2'-6" (EL=91.70)

T.H. D-1	T.H. D-2	T.H. D-3	T.H. D-4	T.H. D-5	T.H. D-6
EL. 93.00	EL. 97.00	EL. 98.10	EL. 91.24	EL. 95.90	EL. 96.10
0"-8" FILL/LOAM	0"-120" SANDY FILL	0"-20" FILL	0"-80" FILL	0"-20" FILL	0"-9" FILL/LOAM
8"-14" A LOAM	20"-76" C1 SANDY LOAM	76"-108" C1 MEDIUM TO COARSE SAND	110"-126" C2 LOAMY SAND	20"-48" FILL SAND	9"-24" B SANDY LOAM
14"-20" B LOAMY SAND	20"-72" C1 LOAMY SAND	72"-108" C2 MEDIUM LOAMY SAND	D=10'-6" MOTTLING 9'-6" (EL=81.74)	D=10'-48" FILL SAND	24"-54" C1/FILL LOAMY SAND/PERC SAND
20"-72" C1 LOAMY SAND	D=9'-0" MOTTLING 3'-0" (EL=90.00)	D=9'-0" MOTTLING 3'-0" (EL=95.10)	D=10'-6" MOTTLING 9'-6" (EL=81.74)	D=4'-0" MOTTLING 3'-4" (EL=92.56)	D=4'-6" MOTTLING 2'-10" (EL=93.27)

SEPTIC DESIGN FLOW (NOT DESIGNED FOR GARBAGE GRINDER)				
1. DESIGN DAILY FLOW UNITS	BEDROOMS	TOTAL BR	X150 GPD/BR	DESIGN FLOW
11	2	22	X150 GPD/BR	= 3,300 GPD
CAPACITY 22 BR X 150 = 3,300 GPD				
2. PERC RATE: P.R. = 6 MIN/IN CLASS I				

ENVIRO-SEPTIC DESIGN (NOT DESIGNED FOR GARBAGE GRINDER)

*USE 3,300 GPD FOR ENVIRO-SEPTIC DESIGN CRITERIA

TITLE 5 MINIMUM AREA = 3,300 GPD / 0.70 GPD/S.F. = 4,714 S.F.
PER CERTIFICATION FOR GENERAL USE SECTION 13 TABLE B LTAR =1.4 GPD/SF

3,300 GPD / 1.4 GPD/SF = 2,357 SF MIN
USE: 2-64' LONG x 24' WIDE ENVIRO-SEPTIC PIPE LEACHING BED SYSTEM

PROPOSED AREA: 2 X 64 X 24 =3,072 GPD > 3,300 GPD

ENVIRO-SEPTIC PIPE REQUIRED

420 LF FOR FIRST 6 BR + (70 L.F. X 16 BR) = 1,540 LF REQUIRED - 1,800 LF PROPOSED
2 X 15-60 FT PIPES IN 5 COMBINATION SERIAL SECTIONS EACH

ENVIRO-SEPTIC MAX FLOW PER SERIAL SECTION = 500 GPD LOADING RATE
3,300 / 500 = 6.6 SERIAL SECTIONS EACH = 13.2, 15 PROVIDED EACH

CONVENTIONAL REPLACEMENT AREA

LEACHING FIELDS: P.R. = 6 MIN/IN

TITLE 5 MINIMUM AREA = 3,300 GPD / 0.70 GPD/S.F. = 4,714 S.F.
USE 8 -100' LONG X 2' WIDE X 2' DEEP LEACHING TRENCHES

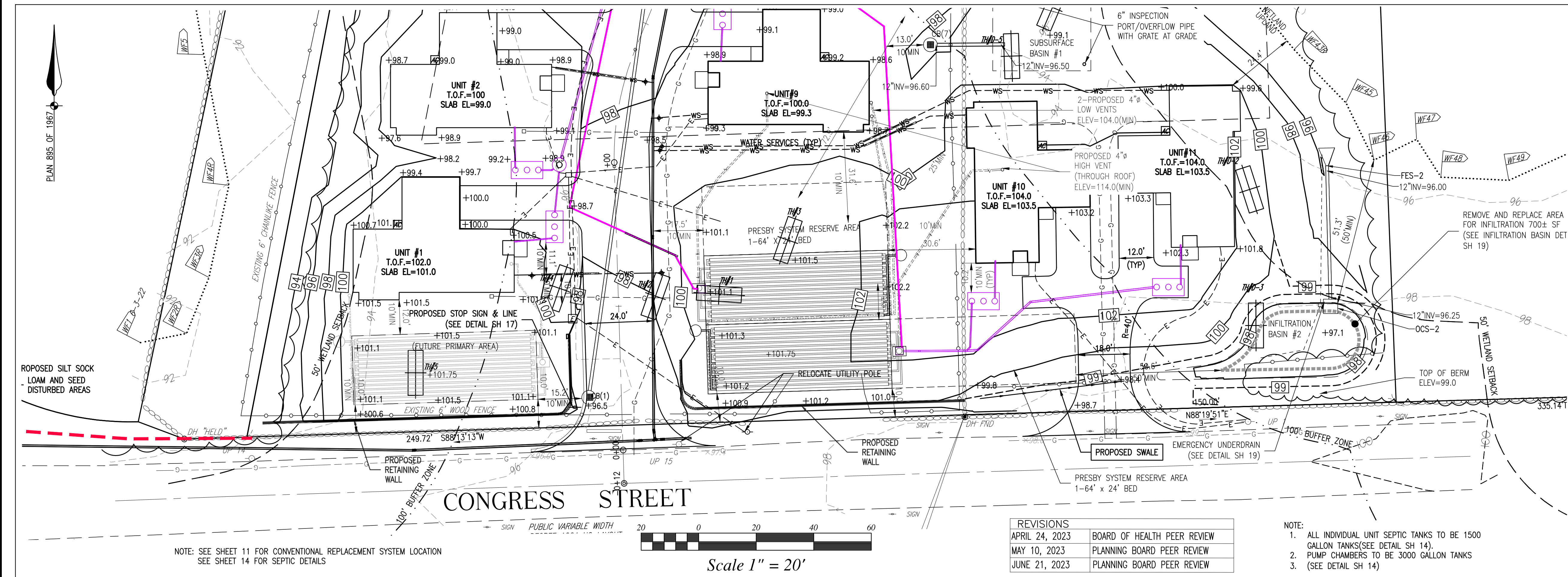
8 X 100 X 6 SF/LF = 4,800 X 0.70 = 3,360 > 3,300 GPD
24 X 33 X 6 SF/LF = 4,752 X 0.70 = 3,326 > 3,300 GPD

SEPTIC TANK DESIGN
PEMBROKE LOCAL REGULATION 15.290 SHARED SYSTEMS
REQUIRE EACH UNIT TO HAVE THEIR OWN INDIVIDUAL SEPTIC TANK

2 BR X 150 GPD/BR = 300 GPD X 2 = 600: USE 1,500 GAL (MIN)

ALTERNATIVE SYSTEM APPROVAL REFERENCE

THIS SYSTEM HAS BEEN DESIGNED IN ACCORDANCE WITH THE COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION MODIFIED CERTIFICATION FOR GENERAL USE, PURSUANT TO TITLE V, 310 CMR 15.000, REVISED DECEMBER 17, 2013, MODIFIED OCTOBER 30, 2019, MODIFIED FEBRUARY 2, 2022 AND STANDARD CONDITIONS FOR ALTERNATIVE SOIL ABSORPTION SYSTEMS WITH GENERAL USE CERTIFICATION AND/OR APPROVED FOR REMEDIAL USE REVISED MARCH 5, 2018. A DISCLOSURE NOTICE IN THE DEED TO THE PROPERTY IS REQUIRED FOR SYSTEMS INSTALLED UNDER THE REMEDIAL USE APPROVAL.



I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

TIMOTHY R. BENNETT P.L.S. #36856 DATE

SITE PLAN
ASSESSORS MAP F9 LOT 11 & 12C
#0 & 74 CONGRESS STREET
PEMBROKE, MASSACHUSETTS

PREPARED FOR:
WHATABARN, LLC
29 DUCK HILL ROAD
DUXBURY MA 02332

MARCH 13, 2023
SCALE: AS NOTED
JOB No. 22-286

GRADY CONSULTING, L.L.C.
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