DEFINITIVE RESIDENTIAL SUBDIVISION

OFF FISHER ROAD

WESTPORT, MASSACHUSETTS

SITE NOTES:

1. THE SITE IS LISTED ON THE TOWN OF WESTPORT ASSESSORS PROPERTY RECORD CARDS AS PARCEL ID 41-22.
2. PROPERTY LINE AND EXISTING CONDITIONS INFORMATION WAS TAKEN FROM A FIELD SURVEY BY ZENITH LAND SURVEYORS, LLC.
3. BRISTOL COUNTY REGISTRY OF DEEDS:
   DEED REFERENCE: BOOK 13051 PAGE 330
   PLAN REFERENCE: BOOK 179 PAGE 51
4. THE SUBJECT PROPERTY IS LOCATED IN ZONE X, AS SHOWN ON THE FLOOD INSURANCE RATE MAP (F.I.R.M.) OF BRISTOL COUNTY, MASSACHUSETTS, MAP NUMBER 25005C0456F, MAP REVISED 7-7-09.
5. THE SITE IS NOT LOCATED IN A PRIORITY HABITAT AND ESTIMATED HABITAT AS SHOWN ON THE MASSACHUSETTS NATURAL HERITAGE ATLAS 14TH EDITION EFFECTIVE DATE AUGUST, 2017.
6. WETLANDS WERE FLAGGED BY STEPHEN CHMIEL.
7. THE PROJECT IS NOT LOCATED WITHIN AN AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC).
8. THE SITE IS NOT LOCATED IN A ZONE II TO A PUBLIC WATER SUPPLY WELL.
9. THE SITE IS NOT IN A ZONE A TO A SURFACE WATER SUPPLY AREA.
10. THE SITE IS NOT LOCATED IN AN OUTSTANDING RESOURCE WATER AREA (ORW).
11. ALL UNDERGROUND UTILITIES ARE TO BE CONSIDERED APPROXIMATE. LOCATIONS WERE TAKEN FROM PLANS OF RECORD WITH THE MUNICIPALITY, DIG SAFE LOCATIONS OR FIELD EVIDENCE. IT IS THE CONTRACTORS' RESPONSIBILITY TO CONTACT DIG SAFE (1-888-DIG SAFE) AND ALL UTILITY COMPANIES TO CONFIRM LOCATIONS AND ELEVATIONS PRIOR TO THE START OF WORK.

CONSTRUCTION NOTES:

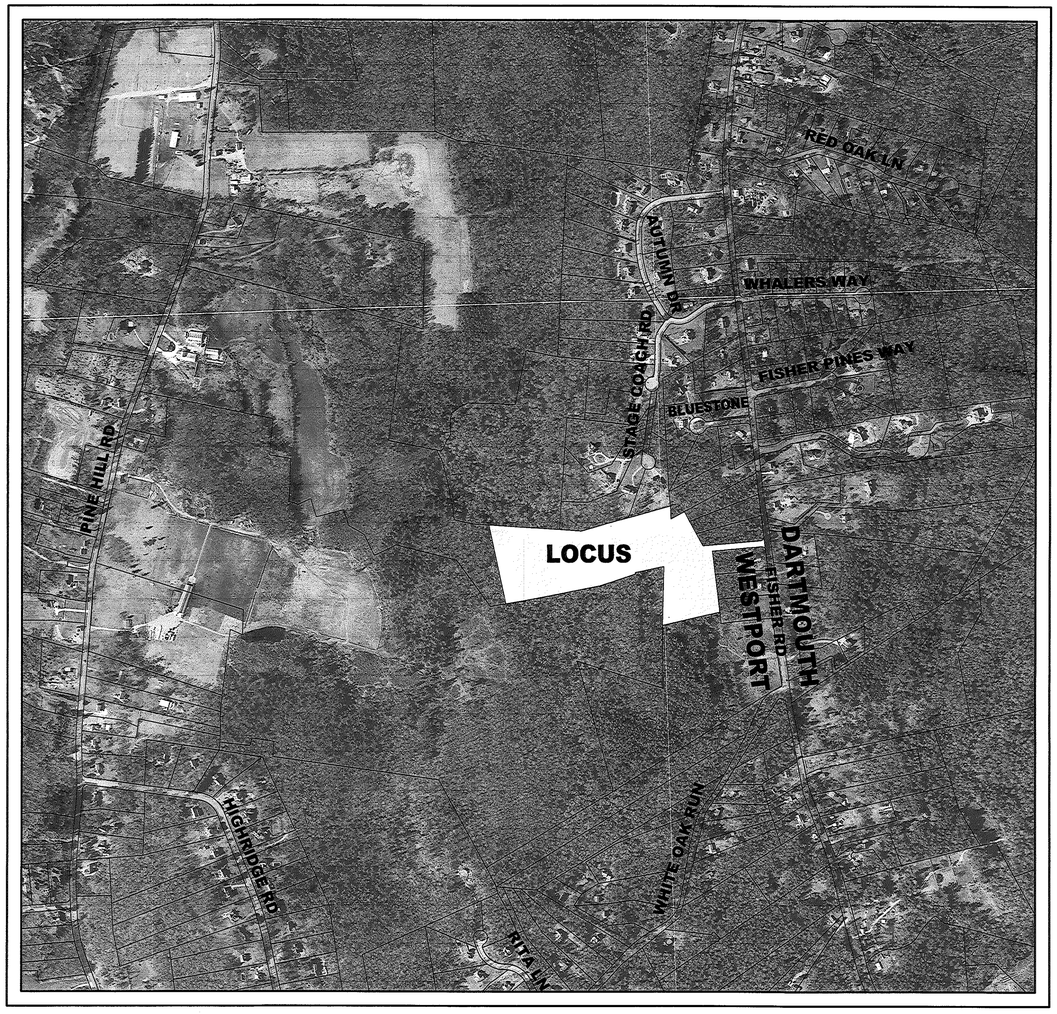
1. A NPDES FILING MUST BE SUBMITTED FOR THIS PROJECT PRIOR TO CONSTRUCTION.
2. CONTRACTOR TO VERIFY BENCHMARKS FOR CONSISTENCY PRIOR TO CONSTRUCTION AND SHALL NOTIFY ZENITH CONSULTING ENGINEERS, LLC. OF ANY DISCREPANCIES.
3. CONTRACTOR SHALL VERIFY WATER TABLE ELEVATIONS AND NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCIES FROM THE PLAN.
4. IT IS THE CONTRACTORS' RESPONSIBILITY TO CONTACT DIG SAFE (1-888-DIG SAFE) PRIOR TO THE COMMENCEMENT OF WORK AND ALL UNDERGROUND UTILITY COMPANIES TO CONFIRM LOCATIONS AND ELEVATIONS.
5. SITE IS TO BE SERVICED BY PRIVATE WELLS AND PRIVATE SEPTIC SYSTEMS.
6. ALL PAVEMENT MARKING AND SIGNAGE SHALL CONFORM TO MUTCD STANDARDS.
7. PROPOSED UTILITIES AND CONSTRUCTION METHODS UNDER AREAS SUBJECT TO TRAFFIC LOADING SHALL BE INSTALLED TO WITHSTAND H-20 LOADING TRAFFIC STANDARDS. CONTRACTOR SHALL VERIFY THAT ALL STRUCTURES COMPLY TO THIS STANDARD.
8. WHERE ALL CONCRETE STRUCTURES INTERCEPT THE SEASONAL HIGH GROUNDWATER TABLE, THE CONTRACTOR SHALL SEAL THE ENTIRE STRUCTURE WITH WATERPROOF SEALER.
9. IF APPLICABLE, ANY RETAINING WALLS SHALL BE DESIGNED BY A MASSACHUSETTS REGISTERED PROFESSIONAL STRUCTURAL ENGINEER.
10. ALL WORK SHALL CONFORM TO THE TOWN OF WESTPORT RULES AND REGULATIONS AND THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR HIGHWAY AND BRIDGES, MOST CURRENT VERSION OF PLAN SET.

ZONING SUMMARY TABLE (RESIDENCE & AGRICULTURE DISTRICT)

CRITERIA	REQUIRED
LOT AREA	60,000 S.F.
CONTIGUOUS UPLAND	30,000 S.F.
FRONTAGE	150'
MINIMUM WIDTH	50'
FRONT BUILDING SETBACK	25'
SIDE BUILDING SETBACK	10'
REAR BUILDING SETBACK	6'
BUILDING HEIGHT	2.5 STORIES OR 40'
IMPERVIOUS COVER	50%

SCHEDULE OF DRAWINGS

SHEET ID	PLAN TITLE	LATEST REVISION DATE
C	COVER SHEET	–
X	EXISTING CONDITIONS PLAN	–
L	LOTTING PLAN	–
G	GRADING AND DRAINAGE PLAN	–
P	ROADWAY PROFILE PLAN	–
E	EROSION CONTROL PLAN	–
D1-2	DETAILS	–



LOCUS PLAN
SCALE: 1"=500'

OWNER
431 FISHER ROAD LLC
5 LEONARD AVENUE NORTH
DARTMOUTH, MA 02747

APPLICANT
RONALD OLIVEIRA
5 ARCHERS WAY
ACUSHNET, MA 02743

LEGEND

EXISTING	DESCRIPTION	PROPOSED
	BUILDING	
99 / 100	CONTOUR	100
100X0	SPOT GRADE	100X0
	SILT SOCK	
	CHAINLINK FENCE	
	STOCKADE FENCE	
	SIGN	
	TEST PIT	
	DRAINAGE PIPE	D D
	CATCH BASIN	
	DOUBLE GRATE CATCH BASIN	
	DRAIN MANHOLE	D
	FLARED END	
	ELEC/TELE/CABLE	ETC
OHW	OVERHEAD WIRES	OHW
	TRANSFORMER	T
	UTILITY POLE	
	LIGHT POLE	
W	WELL	W
	TREELINE	
	WETLAND LINE	
50'B	50' BUFFER	
100'B	100' BUFFER	
100'RA	100' RIPARIAN ZONE	
200'RA	200' RIPARIAN ZONE	
WF10	WETLAND FLAG	
	BENCHMARK	
	DRILLHOLE	
	CONCRETE BOUND	
	REBAR	

SURVEY COMPANY OF RECORD:

ZLS
ZENITH LAND SURVEYORS, LLC
1162 ROCKDALE AVENUE
NEW BEDFORD, MA 02740
(508) 995-0100

RECEIVED
DEC 15 2020
WESTPORT PLANNING BOARD

COMMONWEALTH OF MASSACHUSETTS
JONATHAN J. PINK
NO. 41787
REGISTERED PROFESSIONAL LAND SURVEYOR
12-7-2020

NOVEMBER 23, 2020

COMMONWEALTH OF MASSACHUSETTS
THOMAS MORRIS CHMIEL
No. 55382
REGISTERED PROFESSIONAL ENGINEER
P.E. STAMP 12-7-2020

ZCE
ZENITH CONSULTING ENGINEERS, LLC
3 MAIN STREET LAKEVILLE, MA 02347
PHONE: (508) 947-4208

REV.	DATE	DESCRIPTION	BY	APP.

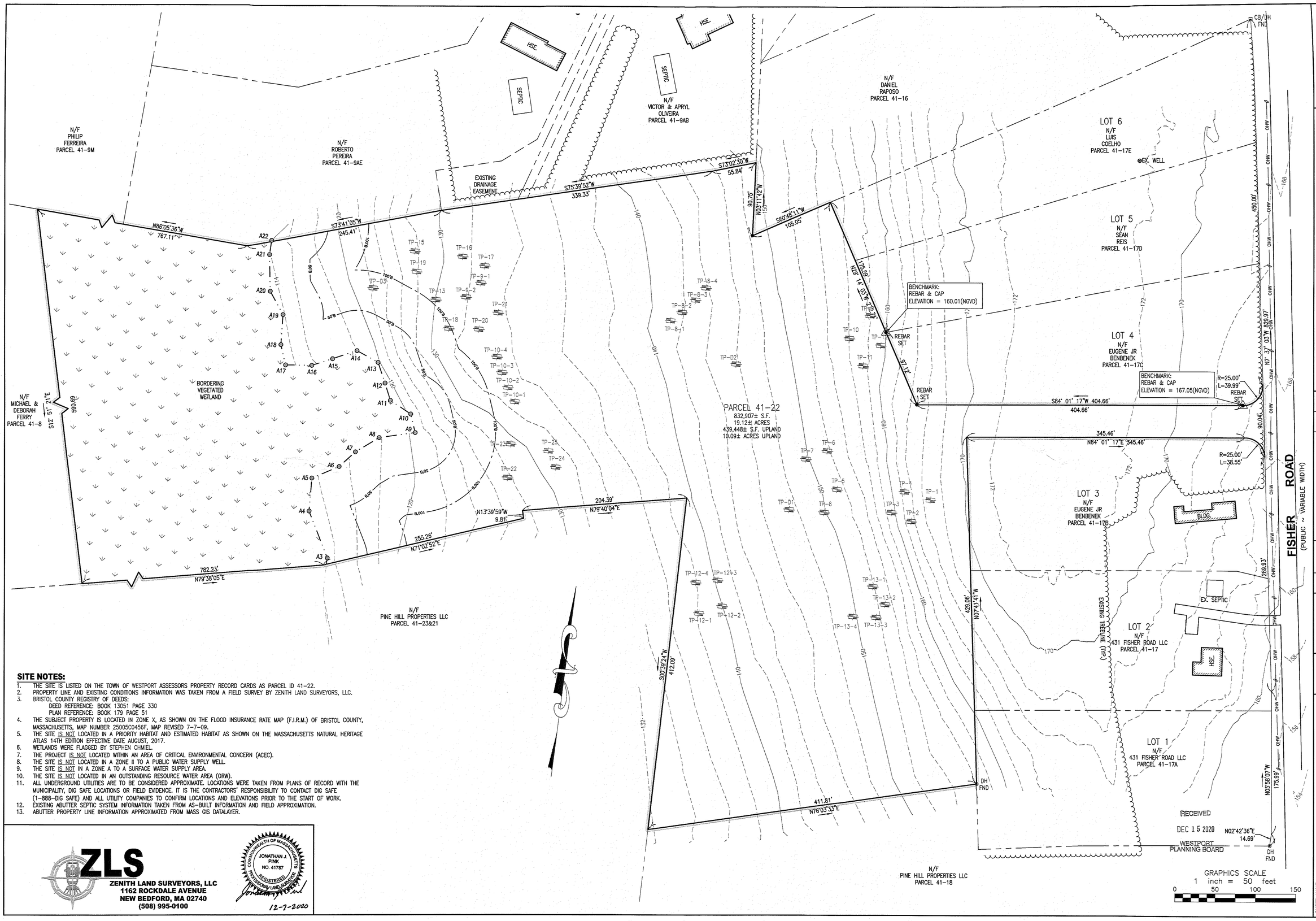
DATE: 11-23-2020
DRAWN BY: TEM
DESIGNED BY: TEM
CHECKED BY: JLB
APPROVED BY: JLB
PROJECT NUMBER: 0222-08-02
DRAWING SCALE: AS NOTED
SHEET ID: C

SHEET NAME: **DEFINITIVE RESIDENTIAL SUBDIVISION COVER SHEET**
PROJECT SITE: **OFF FISHER ROAD WESTPORT, MASSACHUSETTS**
CLIENT INFO: **RONALD OLIVEIRA 5 ARCHERS WAY ACUSHNET, MA 02743**

S:\Civil Engineering Projects\Westport\Fisher Road\43 Fisher Rd\DWG\Fisher Rd - Westport - Subdivision Plan.dwg

2D-002C

5



SITE NOTES:

1. THE SITE IS LISTED ON THE TOWN OF WESTPORT ASSESSORS PROPERTY RECORD CARDS AS PARCEL ID 41-22.
2. PROPERTY LINE AND EXISTING CONDITIONS INFORMATION WAS TAKEN FROM A FIELD SURVEY BY ZENITH LAND SURVEYORS, LLC.
3. BRISTOL COUNTY REGISTRY OF DEEDS:
   DEED REFERENCE: BOOK 13051 PAGE 330
   PLAN REFERENCE: BOOK 179 PAGE 51
4. THE SUBJECT PROPERTY IS LOCATED IN ZONE X, AS SHOWN ON THE FLOOD INSURANCE RATE MAP (F.I.R.M.) OF BRISTOL COUNTY, MASSACHUSETTS, MAP NUMBER 25005C0456F, MAP REVISED 7-7-09.
5. THE SITE IS NOT LOCATED IN A PRIORITY HABITAT AND ESTIMATED HABITAT AS SHOWN ON THE MASSACHUSETTS NATURAL HERITAGE ATLAS 14TH EDITION EFFECTIVE DATE AUGUST, 2017.
6. WETLANDS WERE FLAGGED BY STEPHEN CHMIEL.
7. THE PROJECT IS NOT LOCATED WITHIN AN AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC).
8. THE SITE IS NOT LOCATED IN A ZONE II TO A PUBLIC WATER SUPPLY WELL.
9. THE SITE IS NOT IN A ZONE A TO A SURFACE WATER SUPPLY AREA.
10. THE SITE IS NOT LOCATED IN AN OUTSTANDING RESOURCE WATER AREA (ORW).
11. ALL UNDERGROUND UTILITIES ARE TO BE CONSIDERED APPROXIMATE. LOCATIONS WERE TAKEN FROM PLANS OF RECORD WITH THE MUNICIPALITY, DIG SAFE LOCATIONS OR FIELD EVIDENCE. IT IS THE CONTRACTORS' RESPONSIBILITY TO CONTACT DIG SAFE (1-888-DIG SAFE) AND ALL UTILITY COMPANIES TO CONFIRM LOCATIONS AND ELEVATIONS PRIOR TO THE START OF WORK.
12. EXISTING ABUTTER SEPTIC SYSTEM INFORMATION TAKEN FROM AS-BUILT INFORMATION AND FIELD APPROXIMATION.
13. ABUTTER PROPERTY LINE INFORMATION APPROXIMATED FROM MASS GIS DATALAYER.

ZLS
ZENITH LAND SURVEYORS, LLC
1162 ROCKDALE AVENUE
NEW BEDFORD, MA 02740
(508) 995-0100

COMMONWEALTH OF MASSACHUSETTS
JONATHAN J. PINK
NO. 41787
REGISTERED PROFESSIONAL LAND SURVEYOR

12-7-2020

COMMONWEALTH OF MASSACHUSETTS
THOMAS MORRIS CIVIL No. 55382
REGISTERED PROFESSIONAL ENGINEER

12-7-2020

P.E. STAMP

ZCE
ZENITH CONSULTING ENGINEERS, LLC
3 MAIN STREET LAKEVILLE, MA 02347
PHONE: (508) 947-4208

REV.	DATE	DESCRIPTION	BY	APP.

DRAWN BY: TEM	DATE: 11-23-2020
DESIGNED BY: TEM	PROJECT NUMBER 0222-08-02
CHECKED BY: JLB	DRAWING SCALE 1" = 50'
APPROVED BY JLB	SHEET ID X

SHEET NAME: **DEFINITIVE RESIDENTIAL SUBDIVISION EXISTING CONDITIONS PLAN**

PROJECT SITE: **OFF FISHER ROAD WESTPORT, MASSACHUSETTS**

CLIENT INFO: **RONALD OLIVEIRA 5 ARCHERS WAY ACUSHNET, MA 02743**

S:\Civil Engineering Projects\Westport\Fisher Road\A31 Fisher Rd\DWG\Fisher Rd - Westport - Subdivision Plan.dwg

N/F
PHILIP
FERREIRA
PARCEL 41-9M

N/F
ROBERTO
PEREIRA
PARCEL 41-9AE

N/F
VICTOR & APRYL
OLIVEIRA
PARCEL 41-9AB

N/F
DANIEL
RAPOSO
PARCEL 41-16

LOT 6
N/F
LUIS
COELHO
PARCEL 41-17E

LOT 5
N/F
SEAN
REIS
PARCEL 41-17D

LOT 4
N/F
EUGENE JR
BENBENEK
PARCEL 41-17C

LOT 3
N/F
EUGENE JR
BENBENEK
PARCEL 41-17B

LOT 2
N/F
431 FISHER ROAD LLC
PARCEL 41-17

LOT 1
N/F
431 FISHER ROAD LLC
PARCEL 41-17A

N/F
MICHAEL &
DEBORAH
FERRY
PARCEL 41-8

N/F
PINE HILL PROPERTIES LLC
PARCEL 41-23&21

N/F
PINE HILL PROPERTIES LLC
PARCEL 41-18

EXISTING
DRAINAGE
EASEMENT

DRAINAGE EASEMENT
34,011± S.F. TOTAL
30,925± S.F. LOT 9
3,086± S.F. LOT 10

BORDERING
VEGETATED
WETLAND

LOT 9
183,693± S.F.
4.22± ACRES
49,403± S.F. UPLAND

LOT 8
60,102± S.F.
1.38± ACRES
NO WETLANDS

LOT 7
60,312± S.F.
1.38± ACRES
NO WETLANDS

LOT 10
192,349± S.F.
4.42± ACRES
32,716± S.F. UPLAND

20'W DRAINAGE EASEMENT
(SEE DETAIL BELOW)

LOT 11
152,289± S.F.
3.50± ACRES
52,752± S.F. UPLAND

DRAINAGE
EASEMENT
43,837± S.F. TOTAL
21,189± S.F. LOT 7
22,648± S.F. LOT 8

LOT 12
60,629± S.F.
1.39± ACRES
NO WETLANDS

LOT 13
65,514± S.F.
1.50± ACRES
NO WETLANDS

PROPOSED ROAD

FISHER ROAD
(PUBLIC ~ VARIABLE WIDTH)

5" X 5" X 3'
CONCRETE BOUND
W/ DRILL HOLE
TO BE SET
(TYP. OF 16)

REBAR
SET

CB/DH
FND

DH
FND

N86°05'36"W
767.11'

S73°41'05"W
245.41'

S75° 39' 52"W 339.33'

140.00'

S73°02'30"W
55.84'

N03°11'42"W
90.75'

S60°48'11"W
105.05'

N29° 14' 03"W 277.71'

97.12'

S84° 01' 17"W 404.66'
342.89'

N84° 01' 17"E 345.46'
345.46'

N67° 37' 03"W 829.97'

450.00'

289.93'

90.04'

S12° 51' 21"E 590.69'

195.00'

120.00'

1030.00'
S78°39'05"W

782.23'
N79°38'05"E

255.26'
N71°02'52"E

N13°39'59"W
9.81'

N79°40'04"E
204.39'

S35° 16' 17"E 211.10'

N35°16'17"W
211.10'

59.53'

N73°53'16"W
25.00'

R=80.00' L=182.37'

L=183.56'

R=120.00' L=273.56'

L=90.00'

S16°06'44"W
75.00'

N16°06'44"E
75.00'

429.06'
N07°41'41"W

412.09'
S00°39'24"W

N00°08'26"W
275.71'

205.81'

206.00'
N76° 03' 33"E 411.81'

N02°42'36"E
14.69'

N05°58'07"W
175.99'

S81°01'16"W
40.00'

S57°19'00"W
146.35'

L=35.09'

L=20.00'

R=30.00'
L=23.87'

R=30.00'
L=50.10'

R=120.00'
L=55.09'

L=139.84'

130.00'
S49°47'31"W

R=70.00' L=360.39'

L=134.97'

L=80.39'

N03°24'12"W
121.51'

N01°34'15"E
134.82'

S89°36'22"W
75.00'

N89° 36' 22"E 280.00'

S89° 36' 22"W 337.53'

715.33'
N79° 26' 30"E 772.00'

N00°30'43"E
65.44'

56.67'

275.69'

29.00'

170.33'

90.75'

89.93'

397.43'

307.50'

R=25.00'
L=39.99'

R=25.00'
L=38.55'

R=120.00'
L=142.23'

61.77'

L=94.82'
R=80.00'

L=55.00'

L=127.37'

40'W

L=55.09'

R=25.00'
L=39.99'

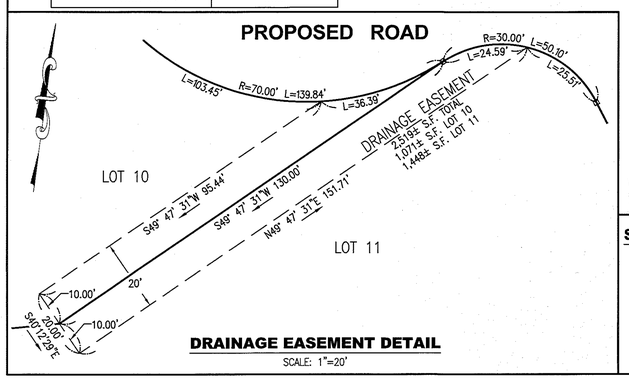
REBAR
SET

REBAR
1 SET

A1 A2 A3 A4 A5 A6 A7 A8 A9 A10 A11 A12 A13 A14 A15 A16 A17 A18 A19 A20 A21 A22

ZONING SUMMARY TABLE
(RESIDENCE & AGRICULTURE DISTRICT)

CRITERIA	REQUIRED
LOT AREA	60,000 S.F.
CONTIGUOUS UPLAND	30,000 S.F.
FRONTAGE	150'
MINIMUM WIDTH	50'
FRONT BUILDING SETBACK	25'
SIDE BUILDING SETBACK	10'
REAR BUILDING SETBACK	6'
BUILIDNG HEIGHT	2.5 STORIES OR 40'
IMPERVIOUS COVER	50%



DRAINAGE EASEMENT DETAIL

SCALE: 1"=20'

WAIVER REQUIREMENT:
TO ALLOW A 40' WIDE RIGHT OF WAY

SURVEY COMPANY OF RECORD:

ZLS
ZENITH LAND SURVEYORS, LLC
1162 ROCKDALE AVENUE
NEW BEDFORD, MA 02740
(508) 995-0100

COMMONWEALTH OF MASSACHUSETTS
JONATHAN J. PINK
NO. 41787
REGISTERED PROFESSIONAL LAND SURVEYOR
12-7-2020

RECEIVED
DEC 15 2020
WESTPORT
PLANNING BOARD

GRAPHICS SCALE
1 inch = 50 feet
0 50 100 150

COMMONWEALTH OF MASSACHUSETTS
THOMAS MORRIS
CIVIL
No. 55382
REGISTERED PROFESSIONAL ENGINEER
12-7-2020
P.E. STAMP

ZCE
ZENITH CONSULTING ENGINEERS, LLC
3 MAIN STREET LAKEVILLE, MA 02347
PHONE: (508) 947-4208

REV.	DATE	DESCRIPTION	BY	APP.

DATE:	11-23-2020
PROJECT NUMBER	0222-08-02
DRAWING SCALE	1" = 50'
SHEET ID	L
DRAWN BY:	TEM
DESIGNED BY:	TEM
CHECKED BY:	JLB
APPROVED BY	JLB

SHEET NAME: **DEFINITIVE RESIDENTIAL SUBDIVISION LOTTING PLAN**

PROJECT SITE: **OFF FISHER ROAD**
WESTPORT, MASSACHUSETTS

CLIENT INFO: **RONALD OLIVEIRA**
5 ARCHERS WAY
ACUSHNET, MA 02743

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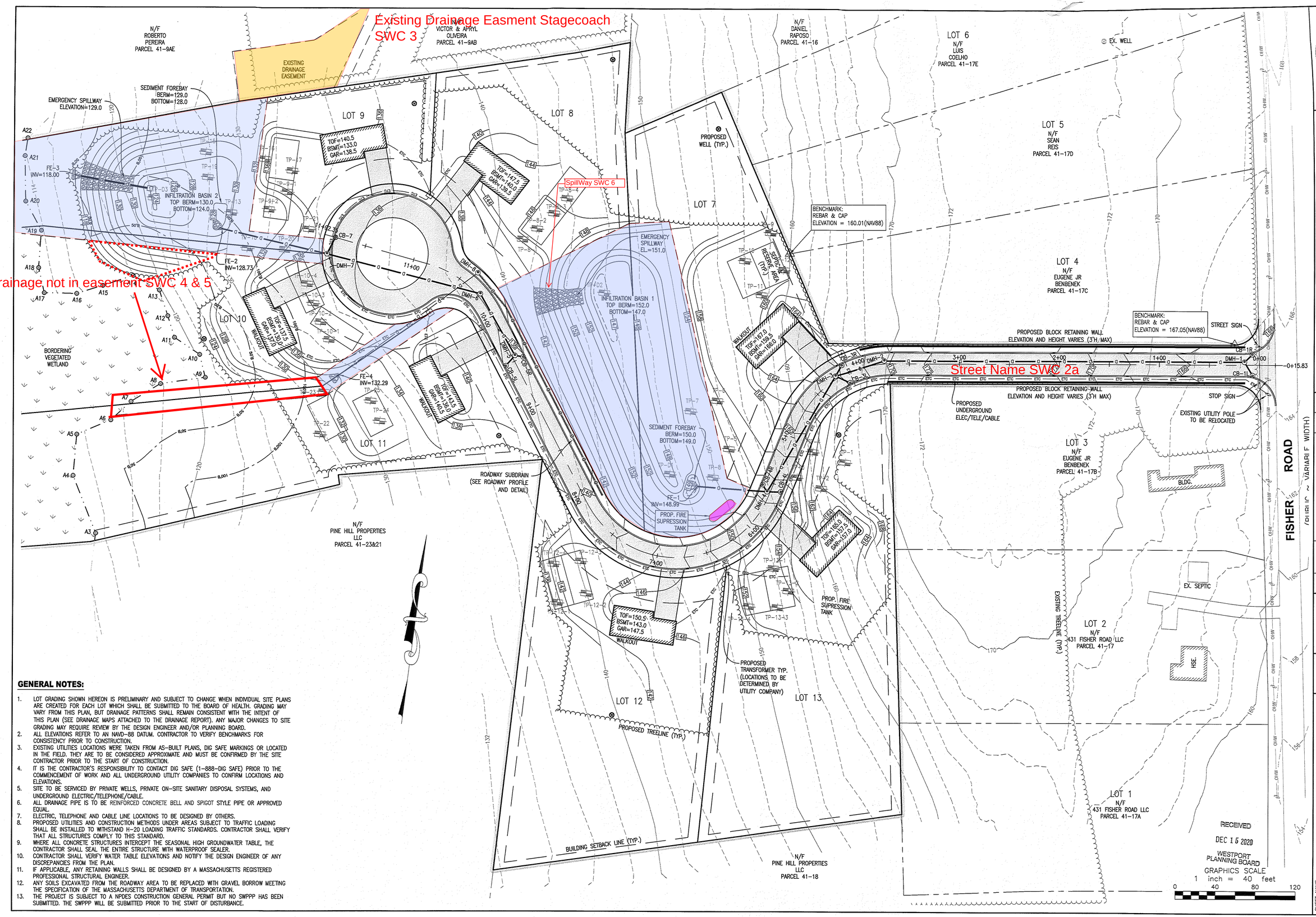


GENERAL NOTES:

1. LOT GRADING SHOWN HEREON IS PRELIMINARY AND SUBJECT TO CHANGE WHEN INDIVIDUAL SITE PLANS ARE CREATED FOR EACH LOT WHICH SHALL BE SUBMITTED TO THE BOARD OF HEALTH. GRADING MAY VARY FROM THIS PLAN, BUT DRAINAGE PATTERNS SHALL REMAIN CONSISTENT WITH THE INTENT OF THIS PLAN (SEE DRAINAGE MAPS ATTACHED TO THE DRAINAGE REPORT). ANY MAJOR CHANGES TO SITE GRADING MAY REQUIRE REVIEW BY THE DESIGN ENGINEER AND/OR PLANNING BOARD.
2. ALL ELEVATIONS REFER TO AN NAVD-88 DATUM. CONTRACTOR TO VERIFY BENCHMARKS FOR CONSISTENCY PRIOR TO CONSTRUCTION.
3. EXISTING UTILITIES LOCATIONS WERE TAKEN FROM AS-BUILT PLANS, DIG SAFE MARKINGS OR LOCATED IN THE FIELD. THEY ARE TO BE CONSIDERED APPROXIMATE AND MUST BE CONFIRMED BY THE SITE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT DIG SAFE (1-888-DIG SAFE) PRIOR TO THE COMMENCEMENT OF WORK AND ALL UNDERGROUND UTILITY COMPANIES TO CONFIRM LOCATIONS AND ELEVATIONS.
5. SITE TO BE SERVICED BY PRIVATE WELLS, PRIVATE ON-SITE SANITARY DISPOSAL SYSTEMS, AND UNDERGROUND ELECTRIC/TELEPHONE/CABLE.
6. ALL DRAINAGE PIPE IS TO BE REINFORCED CONCRETE BELL AND SPIGOT STYLE PIPE OR APPROVED EQUAL.
7. ELECTRIC, TELEPHONE AND CABLE LINE LOCATIONS TO BE DESIGNED BY OTHERS.
8. PROPOSED UTILITIES AND CONSTRUCTION METHODS UNDER AREAS SUBJECT TO TRAFFIC LOADING SHALL BE INSTALLED TO WITHSTAND H-20 LOADING TRAFFIC STANDARDS. CONTRACTOR SHALL VERIFY THAT ALL STRUCTURES COMPLY TO THIS STANDARD.
9. WHERE ALL CONCRETE STRUCTURES INTERCEPT THE SEASONAL HIGH GROUNDWATER TABLE, THE CONTRACTOR SHALL SEAL THE ENTIRE STRUCTURE WITH WATERPROOF SEALER.
10. CONTRACTOR SHALL VERIFY WATER TABLE ELEVATIONS AND NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCIES FROM THE PLAN.
11. IF APPLICABLE, ANY RETAINING WALLS SHALL BE DESIGNED BY A MASSACHUSETTS REGISTERED PROFESSIONAL STRUCTURAL ENGINEER.
12. ANY SOILS EXCAVATED FROM THE ROADWAY AREA TO BE REPLACED WITH GRAVEL BORROW MEETING THE SPECIFICATION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION.
13. THE PROJECT IS SUBJECT TO A NPDES CONSTRUCTION GENERAL PERMIT BUT NO SWPPP HAS BEEN SUBMITTED. THE SWPPP WILL BE SUBMITTED PRIOR TO THE START OF DISTURBANCE.

COMMONWEALTH OF MASSACHUSETTS THOMAS MORRIS WOLFF No. 053082 PROFESSIONAL ENGINEER

P.E. STAMP 12-1-2020

ZCE
ZENITH CONSULTING ENGINEERS, LLC
3 MAIN STREET LAKEVILLE, MA 02347
PHONE: (508) 947-4208

REV.	DATE	DESCRIPTION	BY	APP.

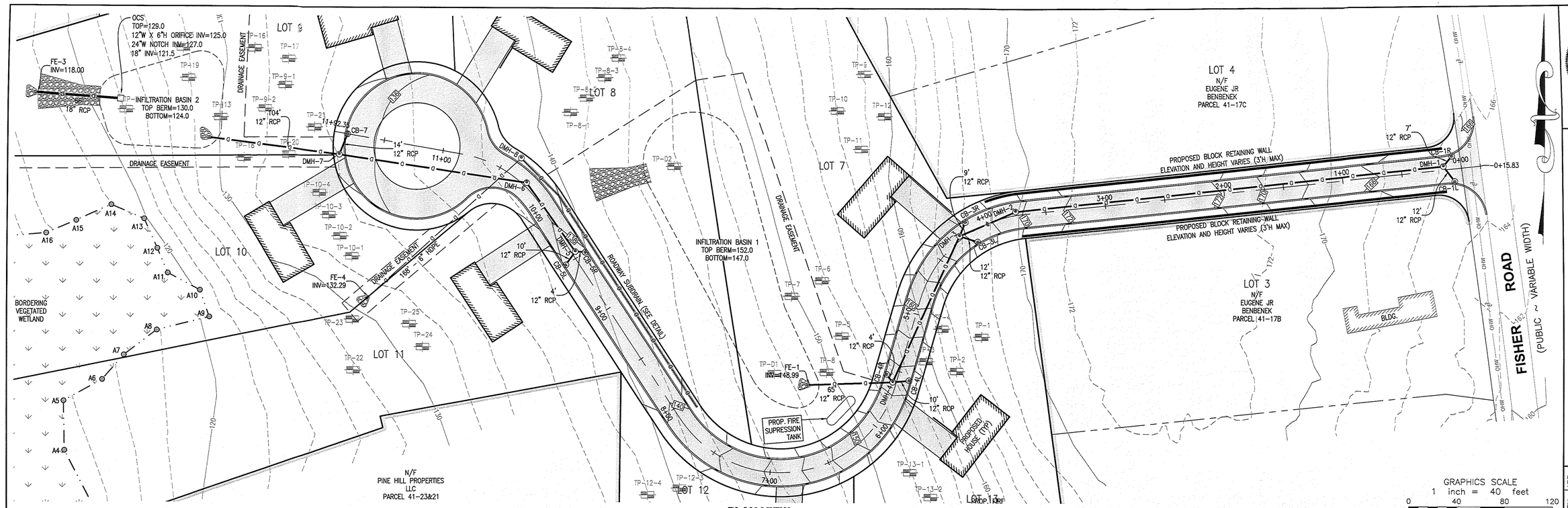
SHEET NAME: **DEFINITIVE RESIDENTIAL SUBDIVISION GRADING AND DRAINAGE PLAN**

PROJECT SITE: **OFF FISHER ROAD WESTPORT, MASSACHUSETTS**

CLIENT INFO: **RONALD OLIVEIRA 5 ARCHERS WAY ACUSHNET, MA 02743**

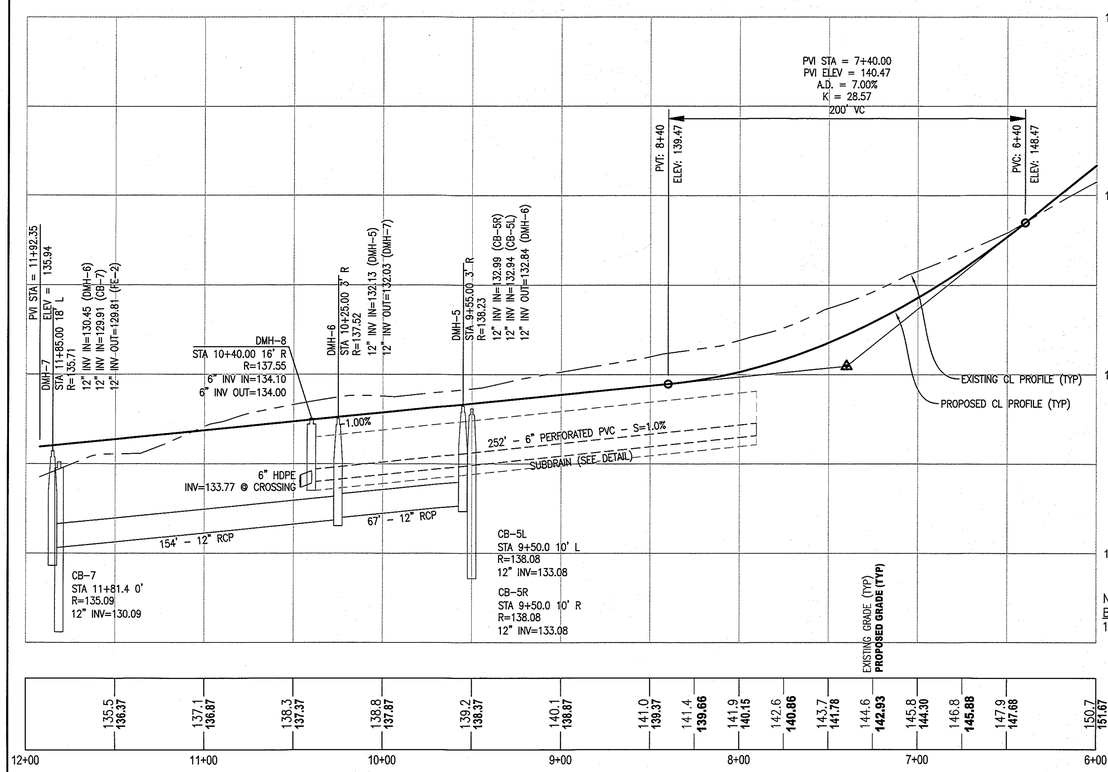
DRAWN BY: TEM | DATE: 11-23-2020
DESIGNED BY: TEM | PROJECT NUMBER: 0222-08-02
CHECKED BY: JLB | DRAWING SCALE: 1" = 40'
APPROVED BY: JLB | SHEET ID: G

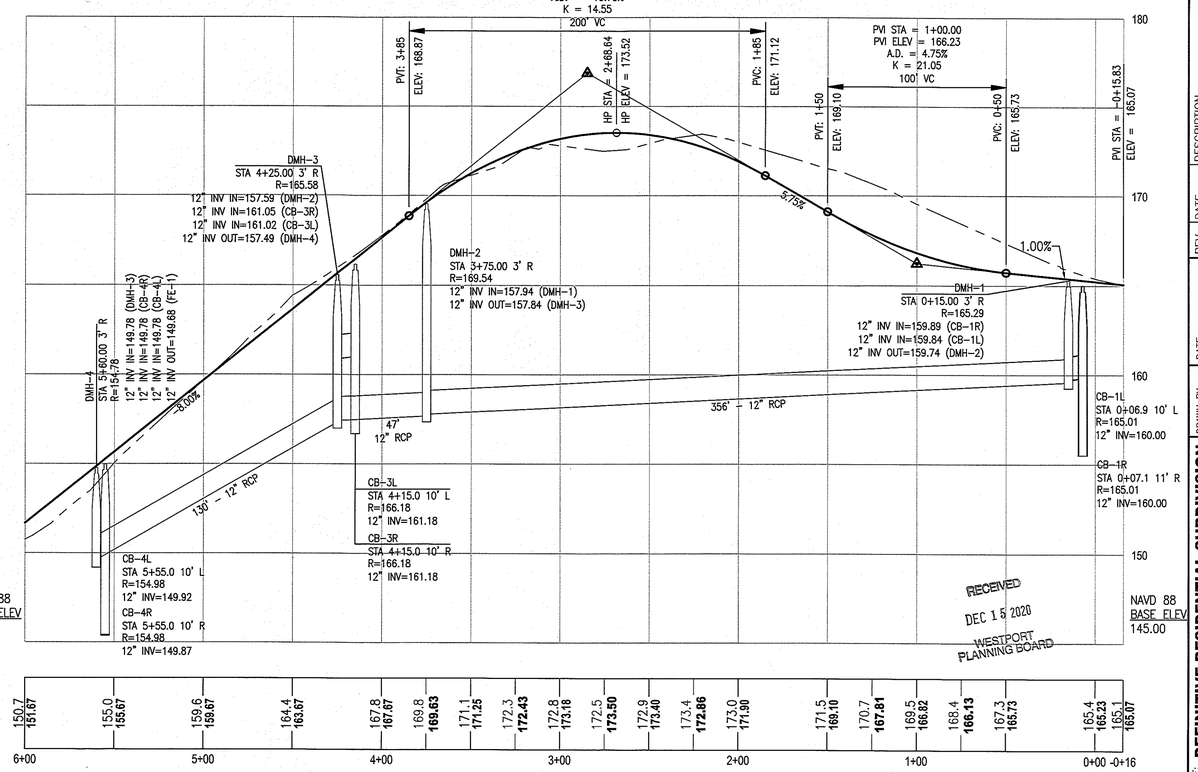
S:\Civil Engineering Projects\Westport\Fisher Rd - Westport - Subdivision Plan.dwg



PLAN VIEW

SCALE: 1"=40'





PROFILE VIEW

HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=4'

COMMONWEALTH OF MASSACHUSETTS
THOMAS MORRIS CRAWFORD
No. 053502
REGISTERED PROFESSIONAL ENGINEER
2020-7-21

P.E. STAMP

ZCE
ZENITH CONSULTING ENGINEERS, LLC
3 MAIN STREET LAKEVILLE, MA 02347
PHONE: (508) 947-4208

BY	APP.	REV.	DATE	DESCRIPTION

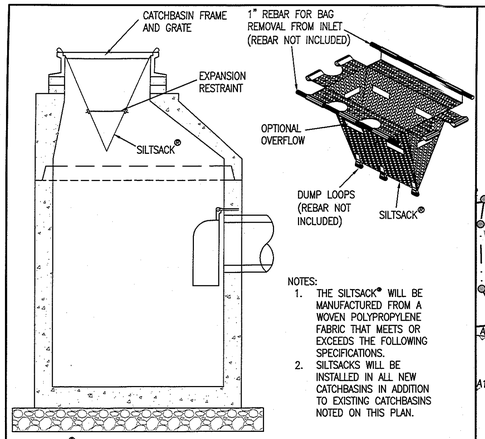
DATE:	11-23-2020
PROJECT NUMBER	0222-08-02
DRAWING SCALE	1" = 40'
SHEET ID	P
DRAWN BY:	TEM
DESIGNED BY:	TEM
CHECKED BY:	JLB
APPROVED BY	JLB

SHEET NAME: **DEFINITIVE RESIDENTIAL SUBDIVISION ROADWAY PROFILE PLAN**

PROJECT SITE: **OFF FISHER ROAD WESTPORT, MASSACHUSETTS**

CLIENT INFO: **RONALD OLIVEIRA 5 ARCHERS WAY ACUSHNET, MA 02743**

S:\Civil Engineering Projects\Westport\Fisher Road\A31 Fisher Rd - Westport - Subdivision Plan.dwg



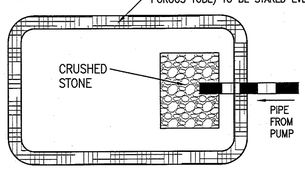
NOTES:
1. THE SILTSACK® WILL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS.
2. SILTSACKS WILL BE INSTALLED IN ALL NEW CATCHBASINS IN ADDITION TO EXISTING CATCHBASINS NOTED ON THIS PLAN.

SILTSACK® REGULAR FLOW

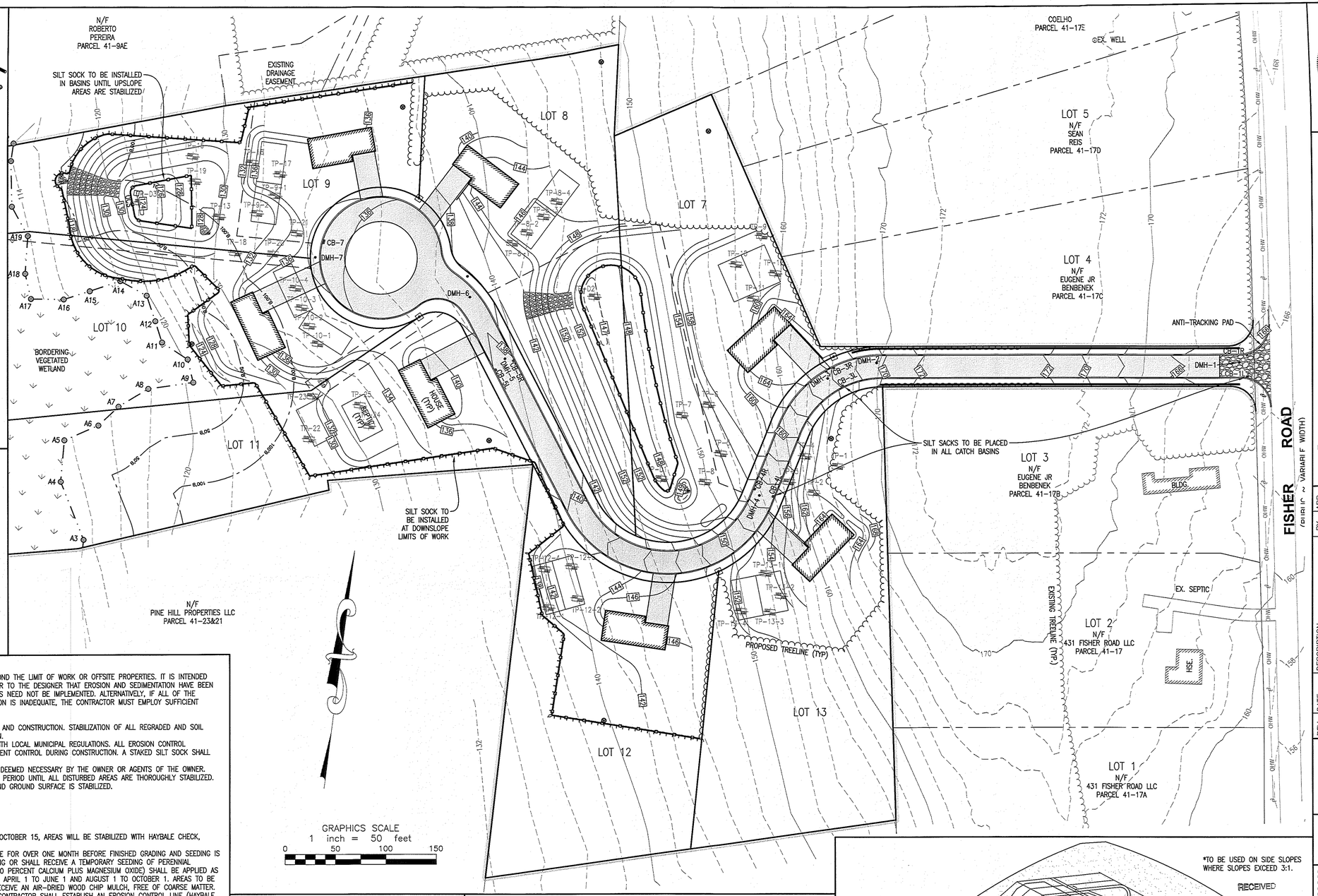
PROPERTIES	TEST METHOD	UNITS	TEST RESULTS
GRAB TENSILE	ASTM D-4632	LBS	167.5X300
GRAB ELONGATION	ASTM D-4632	%	10X15
PUNCTURE STRENGTH	ASTM D-4533	LBS.	900
TRAPEZOID TEAR	ASTM D-4533	LBS,	65X90
UV RESISTANCE (@500 HRS)	ASTM D-4355	%	96
AOS	ASTM D-4751	US SIEVE	30
FLOW RATE	ASTM D-4491	GAL/MIN/FT²	66
PERMITTIVITY	ASTM D-4491	SEC-1	0.862

INLET SEDIMENT CONTROL DEVICE ("SILT SACK")
NOT TO SCALE

* TO BE USED IF NECESSARY, LOCATION TO BE DETERMINED AT TIME OF CONSTRUCTION



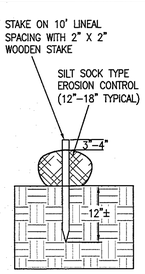
DEWATERING BASIN
NOT TO SCALE



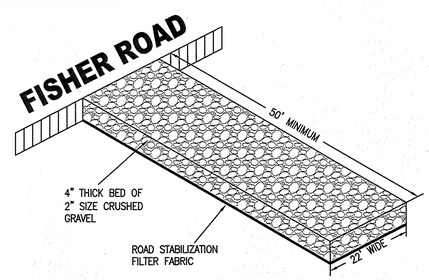
EROSION & SEDIMENT CONTROL NOTES:

IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTROL EROSION AND PREVENT SEDIMENTATION BEYOND THE LIMIT OF WORK OR OFFSITE PROPERTIES. IT IS INTENDED THAT THE IMPLEMENTATION OF THE FOLLOWING MEASURES WILL MEET THIS GOAL. WHEN IT IS CLEAR TO THE DESIGNER THAT EROSION AND SEDIMENTATION HAVE BEEN ADEQUATELY CONTROLLED WITHOUT THE IMPLEMENTATION OF EVERY MEASURE, ADDITIONAL MEASURES NEED NOT BE IMPLEMENTED. ALTERNATIVELY, IF ALL OF THE FOLLOWING MEASURES HAVE BEEN IMPLEMENTED AND THE CONTROL OF EROSION AND SEDIMENTATION IS INADEQUATE, THE CONTRACTOR MUST EMPLOY SUFFICIENT SUPPLEMENTAL MEASURES BEYOND THE SCOPE OF THIS PLAN.

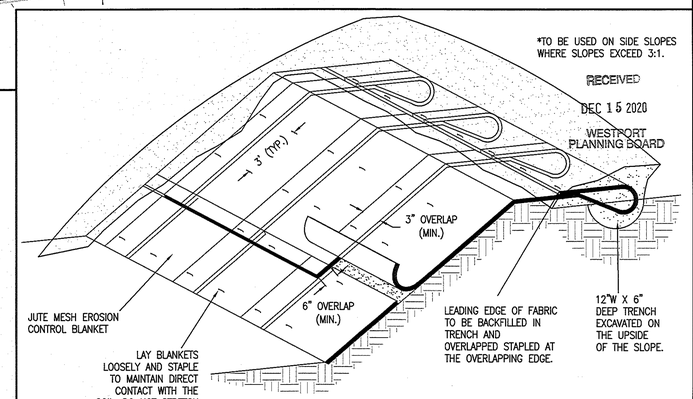
1. EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED PRIOR TO STUMP REMOVAL AND CONSTRUCTION. STABILIZATION OF ALL REGRADED AND SOIL STOCKPILE AREAS WILL BE INITIATED AND MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CONSTRUCTED IN ACCORDANCE WITH LOCAL MUNICIPAL REGULATIONS. ALL EROSION CONTROL MEASURES ARE TO BE MAINTAINED AND UPGRADED AS REQUIRED TO ACHIEVE PROPER SEDIMENT CONTROL DURING CONSTRUCTION. A STAKED SILT SOCK SHALL BE INSTALLED DOWN GRADIENT OF ALL DRAINAGE OUTFALLS.
3. ADDITIONAL CONTROL MEASURES WILL BE INSTALLED DURING THE CONSTRUCTION PERIOD, IF DEEMED NECESSARY BY THE OWNER OR AGENTS OF THE OWNER.
4. CATCH BASINS WILL BE PROTECTED WITH HAYBALE FILTERS THROUGHOUT THE CONSTRUCTION PERIOD UNTIL ALL DISTURBED AREAS ARE THOROUGHLY STABILIZED. SILT SOCKS SHOULD BE INSTALLED UNDER GRATE OPENING UNTIL PAVEMENT IS IN PLACE AND GROUND SURFACE IS STABILIZED.
5. SEEDING MIXTURE FOR FINISHED GRASSED AREAS WILL BE AS FOLLOWS:
   KENTUCKY BLUE GRASS 45%
   CREEPING RED FESCUE 45%
   PERENNIAL RYEGRASS 10%
   SEED TO BE APPLIED AT A RATE OF 4 LBS./1000 SQ. FT.
   PLANTING SEASONS SHALL BE APRIL 1 TO JUNE 1 AND AUGUST 1 TO OCTOBER 15. AFTER OCTOBER 15, AREAS WILL BE STABILIZED WITH HAYBALE CHECK, FILTER FABRIC, OR WOODCHIP MULCH, AS REQUIRED, TO CONTROL EROSION.
6. AREAS THAT ARE NOT THE LOCATION OF ACTIVE CONSTRUCTION WHICH ARE TO BE LEFT BARE FOR OVER ONE MONTH BEFORE FINISHED GRADING AND SEEDING IS ACHIEVED, SHALL BE MULCHED OR RECEIVE TEMPORARY STABILIZATION SUCH AS JUTE NETTING OR SHALL RECEIVE A TEMPORARY SEEDING OF PERENNIAL RYEGRASS APPLIED TO A RATE OF 2 LBS./1,000 SQ. FT. LIMESTONE (EQUIVALENT TO BE 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) SHALL BE APPLIED AS SEEDBED PREPARATION AT A RATE OF 90 LBS./1,000 SQ. FT. PLANTING SEASONS SHALL BE APRIL 1 TO JUNE 1 AND AUGUST 1 TO OCTOBER 1. AREAS TO BE LEFT BARE BEFORE FINISH GRADING AND SEEDING OUTSIDE OF PLANTING SEASONS SHALL RECEIVE AN AIR-DRIED WOOD CHIP MULCH, FREE OF COARSE MATTER.
7. AT ALL PROPOSED FILL AREAS WHICH ARE NOT CURRENTLY SHOWN ON THESE PLANS, THE CONTRACTOR SHALL ESTABLISH AN EROSION CONTROL LINE (HAYBALE CHECK OR FILTER FABRIC) ABOUT TEN (10') FEET FROM TOE TO SLOPE OF PROPOSED FILL AREAS PRIOR TO BEGINNING FILL INSTALLATION. STABILIZATION OF SLOPES IN FILL AREAS (USING MULCH OR GRASS) SHALL BE INITIATED WITHIN THIRTY (30) DAYS OF COMMENCEMENT OF FILL INSTALLATION.
8. STABILIZATION OF SLOPES IN CUT AREAS (USING MULCH OR GRASS) AND THE INSTALLATION OF CONTROL LINE (HAYBALE CHECK OR FILTER FABRIC) AT THE TOE OF SLOPE SHALL BE INITIATED WITHIN THIRTY (30) DAYS OF COMPLETION.
9. SEDIMENT REMOVED FROM CONTROL STRUCTURES WILL BE DISPOSED IN A MANNER WHICH IS CONSISTENT WITH THE INTENT OF THE PLAN. ALL HAYBALES OR SILT FENCE RETAINING SEDIMENT OVER 1/2 THEIR HEIGHT SHALL HAVE THE SEDIMENT REMOVED AND ALL DAMAGED EROSION CONTROLS SHALL BE REPAIRED OR REPLACED.
10. CONTRACTOR WILL BE ASSIGNED THE RESPONSIBILITY FOR IMPLEMENTING THIS EROSION AND SEDIMENT CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE INSTALLATION AND MAINTENANCE OF CONTROL MEASURES, INFORMING ALL PARTIES ENGAGED ON THE CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN. THE OWNER SHALL BE RESPONSIBLE FOR CONVEYING A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN IF THE TITLE TO THE LAND IS TRANSFERRED.
11. THE CONTRACTOR SHALL SECURE THE SERVICES OF A PROFESSIONAL ENGINEER, WHO SHALL VERIFY IN THE FIELD THAT THE CONTROLS REQUIRED BY THIS PLAN ARE PROPERLY INSTALLED, SHALL MAKE INSPECTION OF SUCH FACILITIES NOT LESS FREQUENTLY THAN EVERY 14 DAYS OR AFTER A RAINFALL IN EXCESS OF 1/2 INCH, WHICHEVER OCCURS FIRST.
12. STOCKPILES OF SOIL SHALL BE SURROUNDED BY A SEDIMENT BARRIER. SOIL STOCKPILES TO BE LEFT BARE FOR MORE THAN THIRTY (30) DAYS SHALL BE STABILIZED WITH TEMPORARY VEGETATION OR MULCH. IF SOIL STOCKPILES ARE TO REMAIN FOR MORE THAN SIXTY (60) DAYS, SILT FENCING SHALL BE USED. SIDE SLOPES SHALL NOT EXCEED 2:1.
13. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST AND WIND EROSION THROUGHOUT THE LIFE OF HIS CONTRACT. DUST CONTROL SHALL INCLUDE, BUT IS NOT LIMITED TO SPRINKLING OF WATER ON EXPOSED SOILS AND HAUL ROADS. CONTRACTOR SHALL CONTROL DUST TO PREVENT A HAZARD TO TRAFFIC.
14. IF FINAL GRADING IS TO BE DELAYED FOR MORE THAN THIRTY (30) DAYS AFTER LAND DISTURBANCES CEASE, TEMPORARY VEGETATION OR MULCH SHALL BE USED TO STABILIZE SOILS.
15. SILT SOCK SHALL BE USED ONLY AS A TEMPORARY MEASURE. WHERE CONTROL MEASURES WILL BE REQUIRED FOR LONGER THAN SIXTY (60) DAYS, FILTER FABRIC SHALL BE USED.
16. WHERE DEWATERING IS NECESSARY, THERE SHALL NOT BE A DISCHARGE DIRECTLY INTO WETLANDS OR WATERCOURSES. PROPER METHODS AND DEVICES SHALL BE UTILIZED TO THE EXTENT PERMITTED BY LAW, SUCH AS PUMPING WATER INTO A TEMPORARY SEDIMENTATION BOWL, PROVIDING SURGE PROTECTION AT THE INLET AND THE OUTLET OF PUMPS, OR FLOATING THE INTAKE OF THE PUMP, OR OTHER METHODS TO MINIMIZE AND RETAIN THE SUSPENDED SOLIDS. IF A PUMPING OPERATION IS CAUSING TURBIDITY PROBLEMS, SAID OPERATION SHALL CEASE UNTIL SUCH TIME AS FEASIBLE MEANS OF CONTROLLING TURBIDITY ARE DETERMINED AND IMPLEMENTED. SAID DISCHARGE POINTS SHALL BE LOCATED OVER 100 FEET FROM THE DELINEATED WETLANDS AS INDICATED ON THIS PLAN.



SILT SOCK
NOT TO SCALE



ANTI-TRACKING PAD
NOT TO SCALE



JUTE MESH EROSION CONTROL BLANKET
NOT TO SCALE

COMMONWEALTH OF MASSACHUSETTS THOMAS MORRIS CIVIL No. 53382 REGISTERED PROFESSIONAL ENGINEER
P.E. STAMP

ZCE
ZENITH CONSULTING ENGINEERS, LLC
3 MAIN STREET LAKEVILLE, MA 02347
PHONE: (508) 947-4208

REV.	DATE	DESCRIPTION	BY	APP.

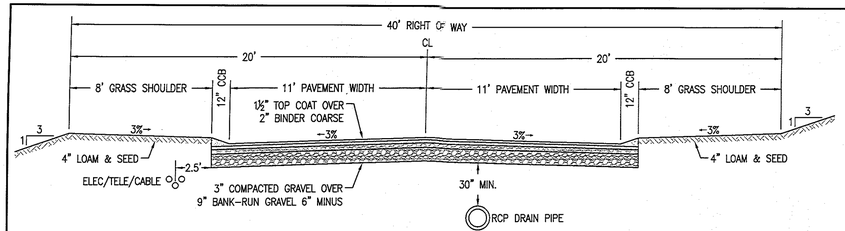
DRAWN BY: TEM	DATE: 11-23-2020		
DESIGNED BY: TEM	PROJECT NUMBER 0222-08-02		
CHECKED BY: JLB	DRAWING SCALE 1" = 50'		
APPROVED BY JLB	SHEET ID E		

SHEET NAME: **DEFINITIVE RESIDENTIAL SUBDIVISION EROSION CONTROL PLAN**

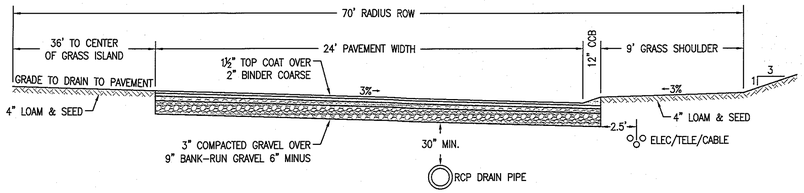
PROJECT SITE: **OFF FISHER ROAD WESTPORT, MASSACHUSETTS**

CLIENT INFO: **RONALD OLIVEIRA 5 ARCHERS WAY ACUSHNET, MA 02743**

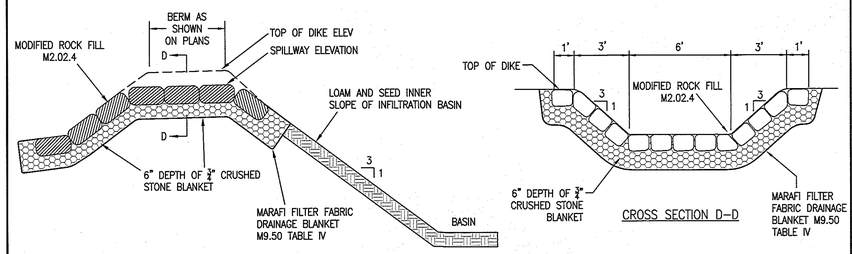
S:\Civil Engineering Projects\Westport\Fisher Road\DWG\Fisher Rd - Westport - Subdivision Plan.dwg



ROADWAY CROSS-SECTION
NOT TO SCALE

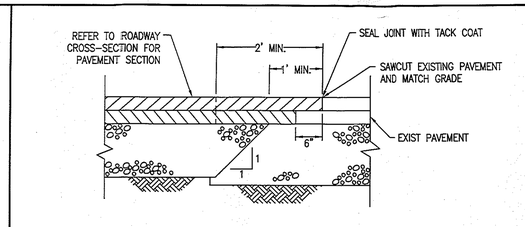


ROADWAY CROSS-SECTION THROUGH CUL-DE-SAC
NOT TO SCALE

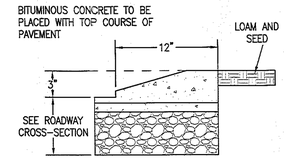


NOTE:
A 6" THICK CRUSHED STONE DRAINAGE BLANKET SHALL UNDERLAY ALL RIP RAP ALONG WITH A GEOTEXTILE FABRIC, M9.50, TABLE IV

INFILTRATION BASIN SPILLWAY
NOT TO SCALE



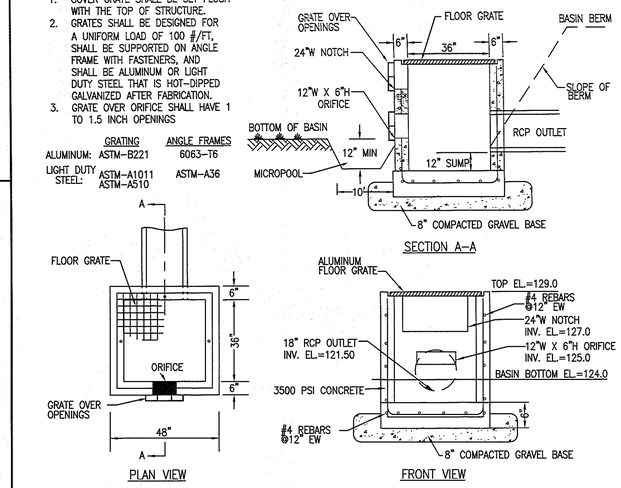
PAVEMENT MATCHING DETAIL
NOT TO SCALE



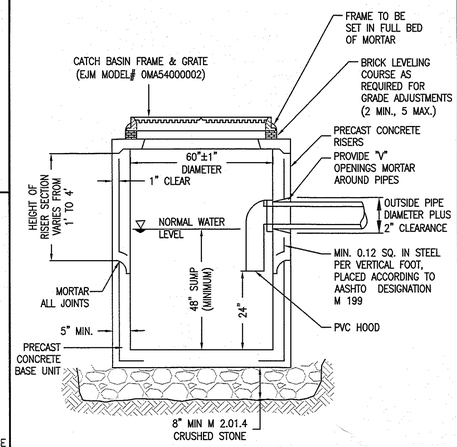
CAPE COD BERM DETAIL
NOT TO SCALE

NOTES:
1. COVER GRATE SHALL BE SET FLUSH WITH THE TOP OF STRUCTURE.
2. GRATES SHALL BE DESIGNED FOR A UNIFORM LOAD OF 100 #/FT, SHALL BE SUPPORTED ON ANGLE FRAME WITH FASTENERS, AND SHALL BE ALUMINUM OR LIGHT DUTY STEEL THAT IS HOT-DIPPED GALVANIZED AFTER FABRICATION.
3. GRATE OVER ORIFICE SHALL HAVE 1 TO 1.5 INCH OPENINGS

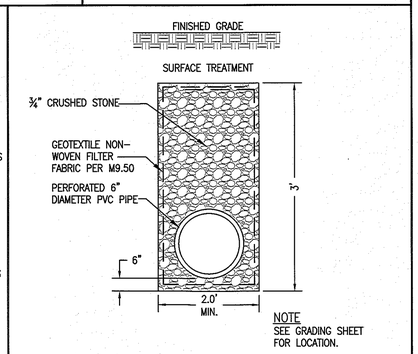
	GRATING	ANGLE FRAMES
ALUMINUM:	ASTM-B221	6063-T6
LIGHT DUTY STEEL:	ASTM-A1011 ASTM-A510	ASTM-A36



OUTLET CONTROL STRUCTURE AT BASIN #2
NOT TO SCALE

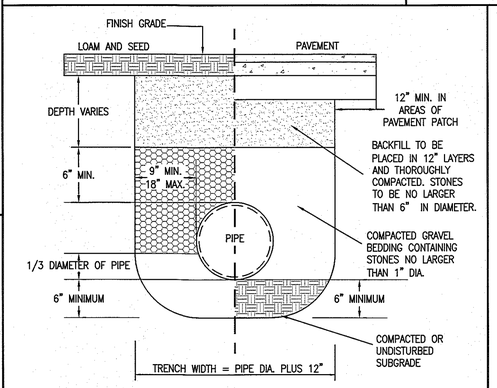


DOUBLE GRATE FLAT TOP CATCH BASIN
NOT TO SCALE

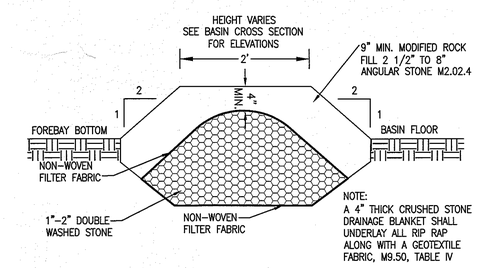


NOTE
SEE GRADING SHEET FOR LOCATION.

ROADWAY SUBDRAIN
NOT TO SCALE



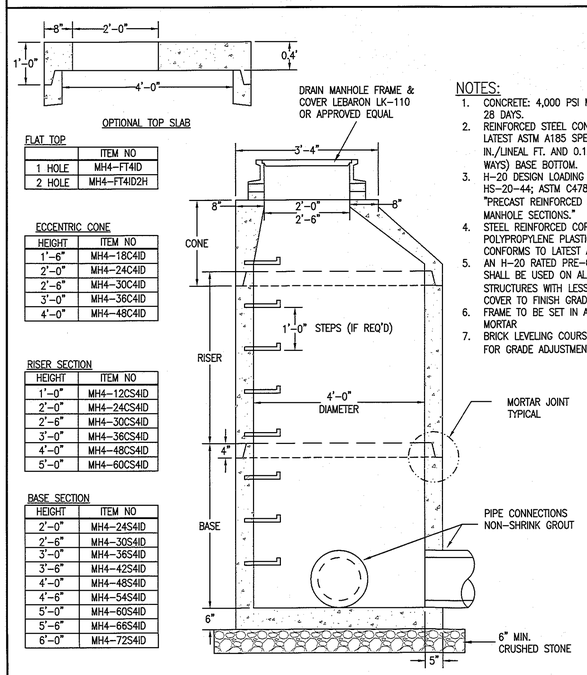
DRAIN PIPE TRENCH
NOT TO SCALE



NOTE:
A 4" THICK CRUSHED STONE DRAINAGE BLANKET SHALL UNDERLAY ALL RIP RAP ALONG WITH A GEOTEXTILE FABRIC, M9.50, TABLE IV

FOREBAY GRAVEL FILTER
NOT TO SCALE

RECEIVED
DEC 15 2020
WESTPORT
PLANNING BOARD



FLAT TOP

	ITEM NO
1 HOLE	MH4-FT4ID
2 HOLE	MH4-FT4ID2H

ECCENTRIC CONE

HEIGHT	ITEM NO
1'-6"	MH4-18C4ID
2'-0"	MH4-24C4ID
2'-6"	MH4-30C4ID
3'-0"	MH4-36C4ID
4'-0"	MH4-48C4ID

RISER SECTION

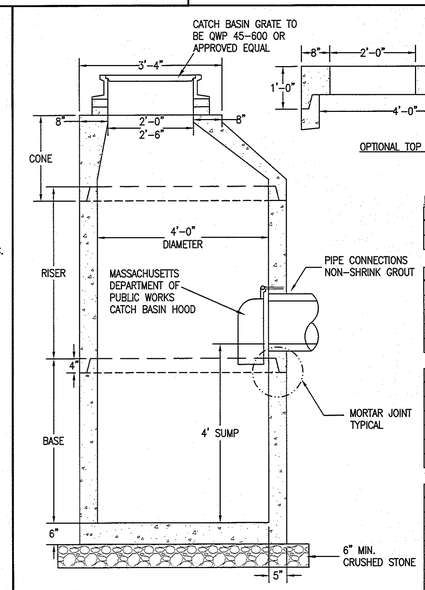
HEIGHT	ITEM NO
1'-0"	MH4-12CS4ID
2'-0"	MH4-24CS4ID
2'-6"	MH4-30CS4ID
3'-0"	MH4-36CS4ID
4'-0"	MH4-48CS4ID
5'-0"	MH4-60CS4ID

BASE SECTION

HEIGHT	ITEM NO
2'-0"	MH4-24S4ID
2'-6"	MH4-30S4ID
3'-0"	MH4-36S4ID
3'-6"	MH4-42S4ID
4'-0"	MH4-48S4ID
4'-6"	MH4-54S4ID
5'-0"	MH4-60S4ID
5'-6"	MH4-66S4ID
6'-0"	MH4-72S4ID

NOTES:
1. CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
2. REINFORCED STEEL CONFORMS TO LATEST ASTM A185 SPEC. 0.12 SQ. IN./LINEAL FT. AND 0.12 SQ. IN. (BOTH WAYS) BASE BOTTOM.
3. H-20 DESIGN LOADING PER AASHTO HS-20-44; ASTM C478 SPEC FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS."
4. STEEL REINFORCED COPOLYMER POLYPROPYLENE PLASTIC STEP CONFORMS TO LATEST ASTM C478 SPEC.
5. AN H-20 RATED PRE-CAST FLAT TOP SHALL BE USED ON ALL DRAINAGE STRUCTURES WITH LESS THAN 3' OF COVER TO FINISH GRADE.
6. FRAME TO BE SET IN A FULL BED OF MORTAR
7. BRICK LEVELING COURSE AS REQUIRED FOR GRADE ADJUSTMENTS (5 MAXIMUM)

PRECAST CONCRETE DRAIN MANHOLE
NOT TO SCALE



FLAT TOP

	ITEM NO
1 HOLE	MH4-FT4ID
2 HOLE	MH4-FT4ID2H

ECCENTRIC CONE

HEIGHT	ITEM NO
1'-6"	MH4-18C4ID
2'-0"	MH4-24C4ID
2'-6"	MH4-30C4ID
3'-0"	MH4-36C4ID
4'-0"	MH4-48C4ID

RISER SECTION

HEIGHT	ITEM NO
1'-0"	MH4-12CS4ID
2'-0"	MH4-24CS4ID
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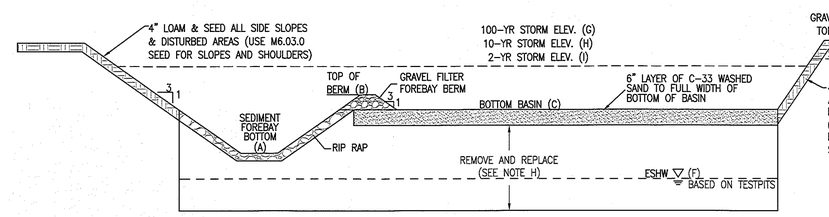
4'-0"	MH4-48CS4ID
5'-0"	MH4-60CS4ID

BASE SECTION

HEIGHT	ITEM NO
2'-0"	MH4-24S4ID
2'-6"	MH4-30S4ID
3'-0"	MH4-36S4ID
3'-6"	MH4-42S4ID
4'-0"	MH4-48S4ID
4'-6"	MH4-54S4ID
5'-0"	MH4-60S4ID
5'-6"	MH4-66S4ID
6'-0"	MH4-72S4ID

NOTES:
1. CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
2. REINFORCED STEEL: ASTM A185 SPEC. 0.12 SQ. IN./LINEAL FT. AND 0.12 SQ. IN. (BOTH WAYS) BASE BOTTOM.
3. H-20 DESIGN LOADING PER AASHTO HS-20-44; ASTM C478 SPEC FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS."
4. H-20 RATED PRE-CAST FLAT TOP SHALL BE USED ON DRAINAGE STRUCTURES WITH LESS THAN 3' OF COVER TO FINISH GRADE.
5. FRAME TO BE SET IN A FULL BED OF MORTAR
6. BRICK LEVELING COURSE AS REQUIRED FOR GRADE ADJUSTMENTS (5 MAXIMUM)
7. MASSACHUSETTS STANDARD CATCH BASIN HOOD SHALL BE INSTALLED ON OUTLET PIPE.

PRECAST CONCRETE CATCH BASIN
NOT TO SCALE



INFILTRATION BASIN CROSS SECTION
NOT TO SCALE

INFILTRATION BASIN NOTES:

THE CONTRACTOR IS CAUTIONED THAT THE DETENTION BASIN IS DESIGNED TO INFILTRATE/RECHARGE STORMWATER PRIMARILY THROUGH THE BOTTOM AND SIDES OF THE BASIN. CONSTRUCTION TECHNIQUES THAT WOULD POTENTIALLY DIMINISH THE FILTRATION CAPACITY OF THE UNDERLYING SOILS ARE TO BE AVOIDED. COMPACTION AND SILTATION OF THE BASIN DURING CONSTRUCTION IS PROHIBITED.

A. DO NOT UTILIZE ANY PORTION OF THE BASIN FLOOR AS A HAUL ROAD FOR MATERIAL AND HEAVY EQUIPMENT.
B. DO NOT COMPACT SOILS IN THE BASIN FLOOR.
C. DO NOT PLACE GRAVEL OR OTHER MATERIALS TO STABILIZE THE BASIN FLOOR FOR CONSTRUCTION VEHICULAR TRAVEL ACCESS.
D. STRICT COMPLIANCE WITH THE EROSION CONTROL PLAN AND THE STORMWATER OPERATIONS AND MAINTENANCE PLAN IS NECESSARY.
E. BASIN CONSTRUCTION SHALL OCCUR AT THE EARLY STAGES OF THE PROJECT CONSTRUCTION SO THAT THEY ARE FULLY VEGETATED AND STABILIZED PRIOR TO RECEIVING STORMWATER.
F. RIP-RAP IN THE FOREBAYS TO BE PLACED, NOT DUMPED. DO NOT COMPACT.
G. DO NOT USE THE INFILTRATION BASIN AS A TEMPORARY SEDIMENT BASIN OR DE-WATERING BASIN.
H. AS PART OF THE INFILTRATION BASIN CONSTRUCTION, THE CONTRACTOR SHALL REMOVE TOPSOIL, SUBSOIL, AND OTHER UNSUITABLE SOIL THAT MAY BE ENCOUNTERED DOWN TO THE "LOAMY SAND / C" LAYER REFERENCED IN TEST PITS D-1, D-2, AND D-3. THE REMOVED MATERIAL SHALL BE REPLACED BY CLEAN SAND WHICH MEETS TITLE V (310 CMR 15.255) REQUIREMENTS. AFTER THE REMOVAL OF UNSUITABLE MATERIAL AND PRIOR TO THE PLACEMENT OF THE CLEAN SAND, AN INSPECTION BY THE DESIGN ENGINEER SHALL BE COMPLETED TO CONFIRM CONDITIONS. SIEVE ANALYSIS OF THE CLEAN SAND SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR APPROVAL PRIOR TO PLACEMENT AND SAMPLED ONSITE BY THE DESIGN ENGINEER.

ELEVATION TABLE

	BASIN 1	BASIN 2
A	149.0	128.0
B	150.0	129.0
C	147.0	124.0
D	152.0	130.0
E	151.0	129.0
F	142.5	118.9
G	150.35	128.90
H	148.85	127.88
I	148.13	127.16

COMMONWEALTH OF MASSACHUSETTS
THOMAS MORRIS PAYNE
No. 53362
PROFESSIONAL ENGINEER
12-7-2020
P.E. STAMP

ZCE
ZENITH CONSULTING ENGINEERS, LLC
3 MAIN STREET LAKEVILLE, MA 02347
PHONE: (508) 947-4208

REV.	DATE	DESCRIPTION	BY	APP.

DATE:	11-23-2020
PROJECT NUMBER	0222-08-02
DRAWING SCALE	AS NOTED
SHEET ID	D1
DRAWN BY:	TEM
DESIGNED BY:	TEM
CHECKED BY:	JLB
APPROVED BY	JLB

SHEET NAME: **DEFINITIVE RESIDENTIAL SUBDIVISION DETAILS**

PROJECT SITE: **OFF FISHER ROAD**
WESTPORT, MASSACHUSETTS

CLIENT INFO: **RONALD OLIVEIRA**
5 ARCHERS WAY
ACUSHNET, MA 02743

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SOIL LOGS BY OTHERS

DATE: 12-27-19, 1-9-20, 1-10-20, 1-29-20
PERFORMED BY: ALAN EWING, ALAN EWING ENGINEERING
WITNESSED BY: JOHN SWARTZ, WESTPORT BOARD OF HEALTH

TP	DEPTH (INCHES)	ELEV. (FEET)	HORIZON	MOTTLING @	WEEPING @	STANDING @	ESHW EL=	PERC DEPTH	PERC RATE
TP 1	0	166.8	ORGANIC	77"	108"	NONE	160.4	33"-51"	8 MPI
	2		A LOAMY SAND 10YR 5/2						
	5	166.4	B LOAMY SAND 10YR 5/8						
	24	164.8	C SANDY LOAM 2.5Y 6/3						
	108	157.8							
TP 2	0	163.5	ORGANIC	108"	NONE	NONE	154.5	36"-52"	7 MPI
	2		A LOAMY SAND 10YR 5/2						
	6	163.0	B LOAMY SAND 10YR 5/8						
	24	161.5	C SANDY LOAM 2.5Y 6/3						
	120	153.5							
TP 3	0	159.2	ORGANIC	93"	NONE	NONE	151.5	NONE	NONE
	2		A LOAMY SAND 10YR 5/2						
	5	158.8	B LOAMY SAND 10YR 5/8						
	33	156.5	C SANDY LOAM 2.5Y 6/3						
	108	150.2							
TP 4	0	162.6	ORGANIC	90"	NONE	NONE	155.1	NONE	NONE
	2		A LOAMY SAND 10YR 5/2						
	4	162.3	B LOAMY SAND 10YR 5/8						
	20	160.9	C1 SANDY LOAM 2.5Y 6/6						
	39	159.4	C2 SANDY LOAM 2.5Y 6/3						
	108	153.6							
TP 5	0	151.1	ORGANIC	44"	81"	81"	147.4	36"-54"	2 MPI
	2		A SANDY LOAM 10YR 4/2						
	5	150.7	B SANDY LOAM 10YR 5/8						
	29	148.7	C1 SANDY LOAM 2.5Y 6/3						
	44	147.4	C2 SAND 2.5Y 6/3						
	90	143.6							
TP 6	0	151.7	ORGANIC	42"	88"	88"	148.2	33"-51"	29 MPI
	2		A SANDY LOAM 10YR 4/2						
	5	151.3	B SANDY LOAM 10YR 5/8						
	18	150.2	C SANDY LOAM 2.5Y 6/3						
	96	143.7							
TP 7	0	149.8	ORGANIC	43"	NONE	NONE	146.2	NONE	NONE
	2		A SANDY LOAM 10YR 4/2						
	5	149.4	B SANDY LOAM 10YR 5/8						
	30	147.3	C SANDY LOAM 2.5Y 6/3						
	90	142.3							
TP 8	0	149.9	ORGANIC	44"	NONE	NONE	146.2	NONE	NONE
	2		A SANDY LOAM 10YR 4/2						
	6	149.4	B SANDY LOAM 10YR 5/8						
	24	147.9	C1 SANDY LOAM 2.5Y 6/3						
	36	146.9	C2 SAND 2.5Y 6/3						
	90	142.4							
TP 9	0	158.5	ORGANIC	42"	84"	84"	155.0	33"-51"	20 MPI
	2		A SANDY LOAM 10YR 3/3						
	6	158.0	B SANDY LOAM 10YR 5/8						
	26	156.3	C SANDY LOAM 2.5Y 6/3						
	96	150.5							
TP 10	0	156.1	ORGANIC	46"	72"	NONE	152.3	35"-53"	19 MPI
	2		A SANDY LOAM 10YR 3/3						
	5	155.7	B SANDY LOAM 10YR 5/8						
	32	153.4	C SANDY LOAM 2.5Y 6/3						
	90	148.6							
TP 11	0	157.3	ORGANIC	44"	NONE	NONE	153.6	NONE	NONE
	2		A SANDY LOAM 10YR 3/3						
	5	156.9	B SANDY LOAM 10YR 5/8						
	29	154.9	C SANDY LOAM 2.5Y 6/3						
	90	149.8							
TP 12	0	159.4	ORGANIC	46"	NONE	NONE	155.6	NONE	NONE
	2		A SANDY LOAM 10YR 3/3						
	5	159.0	B SANDY LOAM 10YR 5/8						
	32	156.7	C SANDY LOAM 2.5Y 6/3						
	90	151.9							
TP 13	0	130.1	ORGANIC	30"	85"	NONE	127.6	30"-48"	11 MPI
	2		A LOAMY SAND 10YR 4/4						
	12	129.1	B LOAMY SAND 10YR 5/6						
	27	127.9	C FINE SAND 2.5Y 6/4						
	90	122.6							
TP 15	0	127.8	ORGANIC	30"	60"	NONE	125.3	27"-45"	9 MPI
	2		A LOAMY SAND 10YR 4/2						
	11	126.9	B LOAMY SAND 10YR 5/8						
	22	126.0	C1 FINE SAND 2.5Y 6/4						
	45	124.1	C2 LOAMY SAND 2.5Y 6/3						
	90	120.3							
TP 16	0	131.5	ORGANIC	30"	53"	NONE	129.0	NONE	NONE
	2		A LOAMY SAND 10YR 4/2						
	10	130.7	B LOAMY SAND 10YR 5/8						
	27	129.3	C1 SANDY LOAM 2.5Y 6/3						
	46	127.7	C2 LOAMY SAND 2.5Y 6/3						
	90	124.0							
TP 17	0	132.7	ORGANIC	30"	40"	NONE	130.2	NONE	NONE
	2		A LOAMY SAND 10YR 4/2						
	12	131.7	B LOAMY SAND 10YR 5/8						
	32	130.0	C LOAMY SAND 2.5Y 6/3						
	90	125.2							
TP 18	0	131.1	ORGANIC	30"	76"	NONE	128.6	30"-48"	19 MPI
	2		A LOAMY SAND 10YR 4/2						
	12	130.1	B LOAMY SAND 10YR 5/8						
	30	128.6	C LOAMY SAND 2.5Y 6/3						
	90	123.6							
TP 19	0	127.9	ORGANIC	36"	54"	NONE	124.9	24"-42"	15 MPI
	2		A LOAMY SAND 10YR 4/2						
	12	126.9	B LOAMY SAND 10YR 5/8						
	24	125.9	C1 FINE SAND 2.5Y 6/4						
	36	124.9	C2 LOAMY SAND 2.5Y 6/3						
	90	120.4							
TP 20	0	132.9	ORGANIC	36"	60"	NONE	129.9	NONE	NONE
	2		A LOAMY SAND 10YR 4/2						
	12	131.9	B LOAMY SAND 10YR 5/8						
	24	130.9	C1 FINE SAND 2.5Y 6/4						
	44	129.2	C2 LOAMY SAND 2.5Y 6/3						
	90	125.4							
TP 21	0	133.6	ORGANIC	32"	48"	NONE	130.9	NONE	NONE
	2		A LOAMY SAND 10YR 4/2						
	12	132.6	B LOAMY SAND 10YR 5/8						
	24	131.6	C LOAMY SAND 2.5Y 6/3						
	90	126.1							
TP 22	0	127.7	ORGANIC	33"	42"	58"	125.0	30"-48"	27 MPI
	2		A LOAMY SAND 10YR 3/2						
	12	126.7	B LOAMY SAND 10YR 5/8						
	33	125.0	C LOAMY SAND 2.5Y 6/3						
	96	119.7							
TP 23	0	129.4	ORGANIC	36"	60"	90"	126.4	30"-48"	15 MPI
	2		A LOAMY SAND 10YR 3/2						
	9	128.7	B LOAMY SAND 10YR 5/8						
	30	126.9	C LOAMY SAND 2.5Y 6/3						
	96	121.4							
TP 24	0	130.3	ORGANIC	40"	48"	NONE	127.0	NONE	NONE
	2		A LOAMY SAND 10YR 3/2						
	10	129.5	B LOAMY SAND 10YR 5/8						
	40	127.0	C LOAMY SAND 2.5Y 6/3						
	96	122.3							
TP 25	0	130.9	ORGANIC	40"	50"	NONE	127.6	NONE	NONE
	2		A LOAMY SAND 10YR 3/2						
	12	129.9	B LOAMY SAND 10YR 5/8						
	40	127.6	C LOAMY SAND 2.5Y 6/3						
	96	122.9							

SOIL LOGS BY ZCE

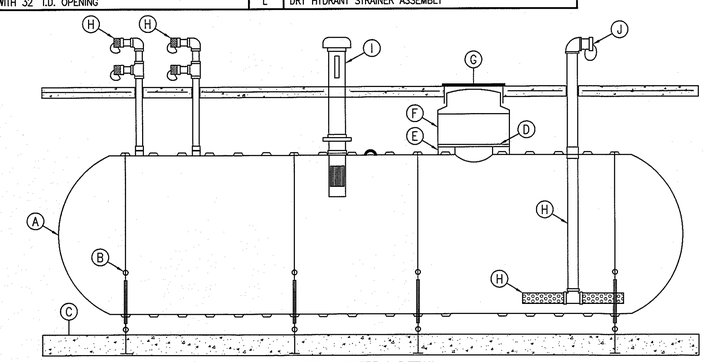
DATE: 11-16-2020 & [11-18-2020]
PERFORMED BY: NYLES ZAGER & [TOM MORRIS], ZENITH CONSULTING ENGINEERS
WITNESSED BY: JOHN SWARTZ, WESTPORT BOARD OF HEALTH (D1, D2 & D3 WERE NOT WITNESSED)

TP	DEPTH (INCHES)	ELEV. (FEET)	HORIZON	MOTTLING @	WEEPING @	STANDING @	ESHW EL=	PERC DEPTH	PERC RATE
[8-1]	0	141.3	O/A SANDY LOAM 10YR 3/2	30"	NONE	NONE	138.8	30"-48"	10 MPI
	12	140.3	B SANDY LOAM 10YR 5/6						
	30	138.8	C LOAMY SAND 2.5Y 7/4						
	108	132.3							
[8-2]	0	141.9	O/A SANDY LOAM 10YR 3/2	34"	NONE	NONE	139.1	NONE	NONE
	10	141.1	B SANDY LOAM 10YR 5/6						
	30	139.4	C LOAMY SAND 2.5Y 7/4						
	96	133.9							
[8-3]	0	142.9	O/A SANDY LOAM 10YR 3/2	32"	NONE	NONE	140.2	32"-50"	10 MPI
	10	142.1	B SANDY LOAM 10YR 5/6						
	32	140.2	C LOAMY SAND 2.5Y 7/4						
	100	134.6							
[8-4]	0	143.9	O/A SANDY LOAM 10YR 3/2	32"	NONE	NONE	141.2	NONE	NONE
	10	143.1	B SANDY LOAM 10YR 5/6						
	32	141.2	C LOAMY SAND 2.5Y 7/4						
	108	134.9							
[9-1]	0	132.7	O/A SANDY LOAM 10YR 3/2	38"	NONE	NONE	129.5	32"-50"	28 MPI
	12	131.7	B SANDY LOAM 10YR 5/6						
	32	130.0	C LOAMY SAND 2.5Y 7/4						
	100	124.4							
[9-2]	0	131.9	O/A SANDY LOAM 10YR 3/2	36"	NONE	NONE	128.9	30"-48"	15 MPI
	12	130.9	B SANDY LOAM 10YR 5/6						
	30	129.4	C LOAMY SAND 2.5Y 7/4						
	102	123.4							
10-1	0	132.8	O/A SANDY LOAM 10YR 3/2	40"	NONE	NONE	129.5	36"-54"	10 MPI
	8	132.1	B SANDY LOAM 10YR 5/6						
	36	129.8	C LOAMY SAND 2.5Y 7/4						
	108	123.8							
10-2	0	133.3	O/A SANDY LOAM 10YR 3/2	40"	NONE	NONE	130.0	NONE	NONE
	10	132.5	B SANDY LOAM 10YR 5/6						
	38	130.1	C LOAMY SAND 2.5Y 7/4						
	108	124.3							
10-3	0	133.3	O/A SANDY LOAM 10YR 3/2	38"	NONE	NONE	130.1	NONE	NONE
	8	132.6	B SANDY LOAM 10YR 5/6						
	32	130.6	C LOAMY SAND 2.5Y 7/4						
	108	124.3							
10-4	0	133.3	O/A SANDY LOAM 10YR 3/2	40"	NONE	NONE	130.0	38"-56"	12 MPI
	10	132.5	B SANDY LOAM 10YR 5/6						
	38	130.1	C LOAMY SAND 2.5Y 7/4						
	108	124.3							
12-1	0	138.2	O/A SANDY LOAM 10YR 3/2	34"	NONE	NONE	135.4	30"-48"	11 MPI
	8	137.5	B SANDY LOAM 10YR 5/6						
	30	135.7	C LOAMY SAND 2.5Y 7/4						
	100	129.9							
12-2	0	140.0	O/A SANDY LOAM 10YR 3/2	34"	NONE	NONE	137.2	30"-48"	18 MPI
	10	139.2	B SANDY LOAM 10YR 5/6						
	30	137.5	C LOAMY SAND 2.5Y 7/4						
	108	131.0							
12-3	0	140.4	O/A SANDY LOAM 10YR 3/2	36"	NONE	NONE	137.4	NONE	NONE
	10	139.6	B SANDY LOAM 10YR 5/6						
	34	137.6	C LOAMY SAND 2.5Y 7/4						
	110	131.2							
12-4	0	138.0	O/A SANDY LOAM 10YR 3/2	34"	NONE	NONE	135.2	NONE	NONE
	8	137.3	B SANDY LOAM 10YR 5/6						
	32	135.3	C LOAMY SAND 2.5Y 7/4						
	106	129.2							
13-1	0	151.9	O/A SANDY LOAM 10YR 3/2	108"	NONE	NONE	142.9	32"-50"	2 MPI
	8	151.2	B SANDY LOAM 10YR 5/6						
	26	149.7	C LOAMY SAND 2.5Y 7/4						
	108	142.9							
13-2	0	153.0	O/A SANDY LOAM 10YR 3/2	108"	NONE	NONE	144.0	28"-46"	< 2 MPI
	8	152.3	B SANDY LOAM 10YR 5/6						
	28	150.7	C LOAMY SAND 2.5Y 7/4						
	108	144.0							
13-3	0	151.7	O/A SANDY LOAM 10YR 3/2	108"	NONE	NONE	142.7	NONE	NONE
	10	150.9	B SANDY LOAM 10YR 5/6						
	26	149.5	C LOAMY SAND 2.5Y 7/4						
	108	142.7							
13-4	0	149.7	O/A SANDY LOAM 10YR 3/2	108"	NONE	NONE	140.7	NONE	NONE
	8	149.0	B SANDY LOAM 10YR 5/6						
	28	147.4	C LOAMY SAND 2.5Y 7/4						
	108	140.7							
[D1]	0	147.5	O/A SANDY LOAM 10YR 3/2	72"	NONE	NONE	141.5	NONE	NONE
	10	146.7	B SANDY LOAM 10YR 5/6						
	26	145.3	C LOAMY SAND 2.5Y 7/4						
	96	139.5							
[D2]	0	145.8	O/A SANDY LOAM 10YR 3/2	40"	NONE	NONE	142.5	NONE	NONE
	10	145.0	B SANDY LOAM 10YR 5/6						
	32	143.1	C LOAMY SAND 2.5Y 7/4						
	100	137.5							
[D3]	0	122.2	O/A SANDY LOAM 10YR 3/2	40"	NONE	NONE	118.9	NONE	NONE
	14	121.0	B SANDY LOAM 10YR 5/6						
	36	119.2	C LOAMY SAND 2.5Y 7/4						
	120	112.2							

MARK	EQUIPMENT LISTING AND SUPPLIER	MARK	EQUIPMENT LISTING AND SUPPLIER
A	C.S.I. SINGLE WALL FIBERGLASS TANK	G	36" DIAMETER MANHOLE AND COVER
B	C.S.I. FRP HOLD DOWN STRAP & TURNBUCKLE ASSEMBLY	H	4" NPT FTG W/ DUAL NST FILL OR RECIRCULATING POINTS
C	C.S.I. PRECAST DEADMAN ANCHOR WITH EYEBOLTS	I	10" NPT FITTING WITH VENT/LEVEL INDICATOR ASSEMBLY
D	22" FRP FLANGED MANWAY	J	6" DRY HYDRANT CONNECTION ASSEMBLY
E	42" ATTACHED CONTAINMENT COLLAR	K	6" FULL NPT FTG W/ 6" FRP SUCTION TUBE
F	42" TANK SUMP WITH 32" I.D. OPENING	L	DRY HYDRANT STRAINER ASSEMBLY

NOTES

1. TANK TO BE A MINIMUM OF 10,000 GALLONS.
2. THIS DRAWING IS FOR ILLUSTRATIVE PURPOSES ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ASSURE THE SYSTEM IS IN COMPLIANCE WITH ALL WESTPORT RULES AND REGULATIONS.



FIRE CISTERN DETAIL
NOT TO SCALE

RECEIVED
DEC 15 2020
WESTPORT PLANNING BOARD

COMMONWEALTH OF MASSACHUSETTS
THOMAS MORRIS CIVIL No. 45382 REGISTERED PROFESSIONAL ENGINEER
12-7-2020
P.E. STAMP

ZCE
ZENITH CONSULTING ENGINEERS, LLC
3 MAIN STREET LAKEVILLE, MA 02347
PHONE: (508) 947-4208

REV.	DATE	DESCRIPTION	BY	APP.

DATE: 11-23-2020
DRAWN BY: TEM
PROJECT NUMBER: 0222-08-02
DESIGNED BY: TEM
DRAWING SCALE: AS NOTED
CHECKED BY: JLB
SHEET ID: D2
APPROVED BY: JLB

SHEET NAME: DEFINITIVE RESIDENTIAL SUBDIVISION DETAILS

PROJECT SITE: OFF FISHER ROAD
WESTPORT, MASSACHUSETTS

CLIENT INFO: RONALD OLIVEIRA
5 ARCHERS WAY
ACUSHNET, MA 02743

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