

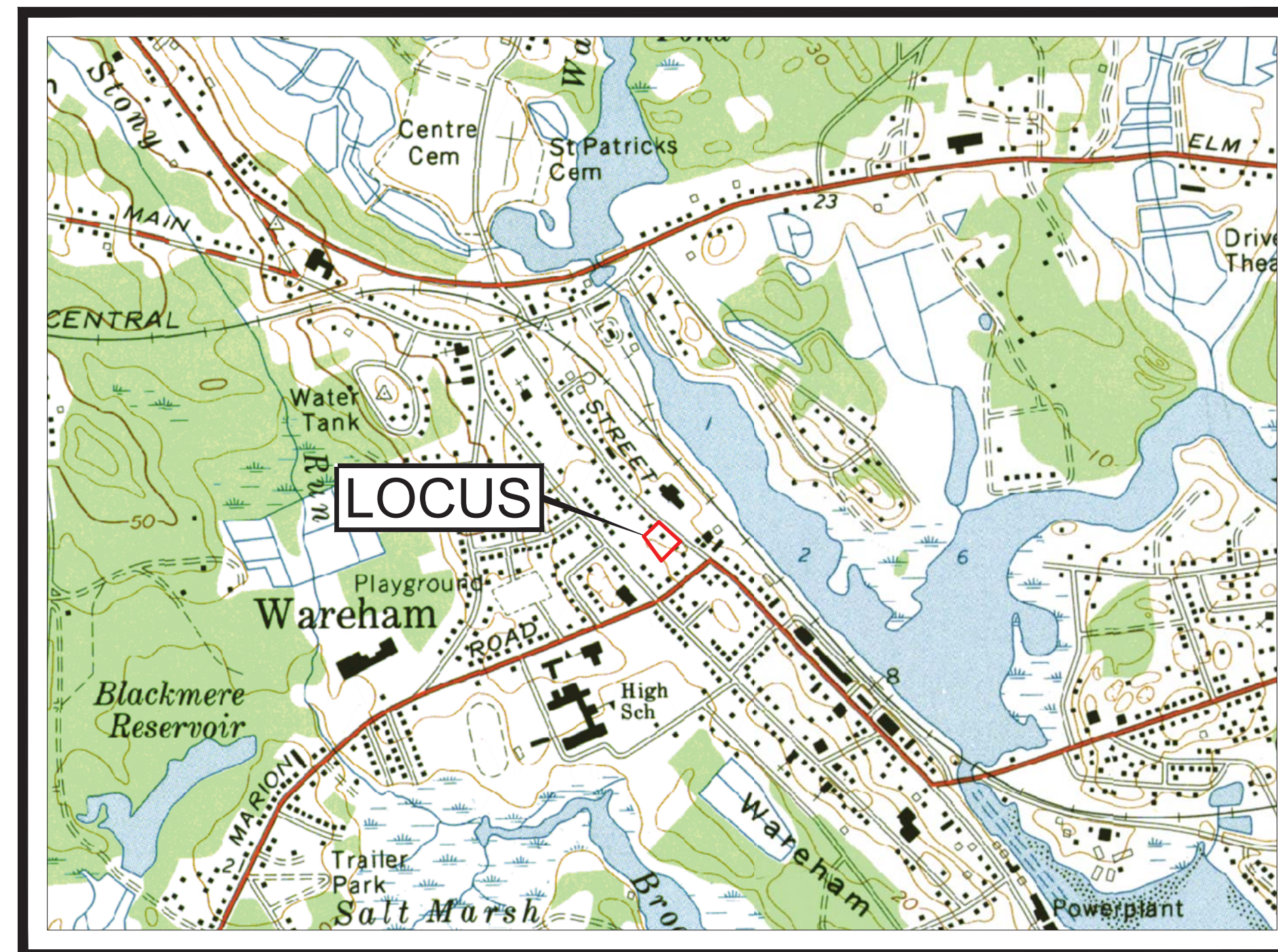
PROPOSED SITE PLAN

AT
386 MAIN STREET
WAREHAM, MASSACHUSETTS

DATE: MARCH 21, 2023
 REV 5: SEPTEMBER 25, 2023

LIST OF DRAWINGS

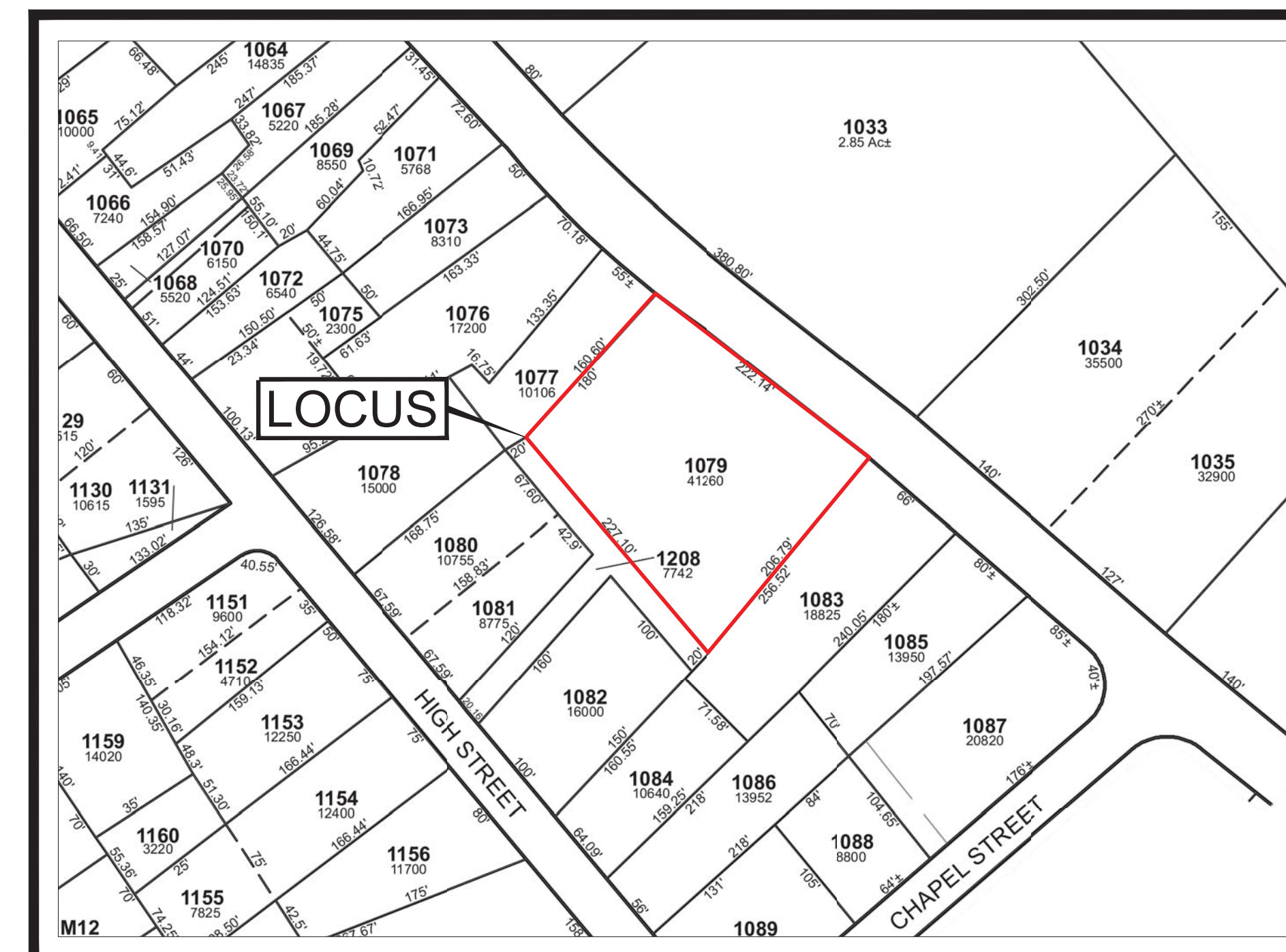
SHEET NO.	TITLE
1 OF 10	COVER SHEET
2 OF 10	EXISTING CONDITIONS / SITE PREPARATION PLAN
3 OF 10	LAYOUT PLAN
4 OF 10	UTILITIES PLAN
5 OF 10	GRADING & DRAINAGE PLAN
6 OF 10	LANDSCAPING PLAN
7 OF 10	LIGHTING PLAN
8 OF 10	EMERGENCY ACCESS PLAN
9 OF 10	DETAIL SHEET
10 OF 10	DETAIL SHEET



U.S.G.S. MAP
 SCALE 1" = 1000'



AERIAL MAP
 SCALE 1" = 500'



ASSESSORS MAP
 NTS

LEGEND

PROPOSED SPOT GRADE	27x3
EXISTING SPOT GRADE	27x5
PROPOSED CONTOUR	22
EXISTING CONTOUR	22
EXISTING WATERLINE SERVICE	W
PROPOSED WATERLINE SERVICE	W
EXISTING OVERHEAD UTILITIES	O/H/W
PROPOSED OVERHEAD UTILITIES	O/H/W
PROPOSED UNDERGROUND UTILITIES	E/T/C
EXISTING GAS LINE	GAS
PROPOSED GAS LINE	GAS
EXISTING SEWER LINE	S
PROPOSED SEWER LINE	S
PROPOSED SEWER MANHOLE	S
PROPOSED DRAINAGE LINE	D
PROPOSED ROOF DRAINAGE LINE	RD
PROPOSED WALL MOUNTED LIGHT	☐
PROPOSED POLE MOUNTED LIGHT	☀
PROPOSED DRAIN MANHOLE	D
PROPOSED CATCH BASIN	CB
PROPOSED FENCE	X-X-X
EXISTING FENCE	X-X-X

CURRENT OWNER / APPLICANT:
 ANGELA MCKEOWN, TRUSTEE
 388 MAIN STREET REALTY TRUST
 484 LIBERTY STREET
 ROCKLAND, MA 02370

CIVIL ENGINEER / SURVEYOR:
 JC ENGINEERING, INC.
 2854 CRANBERRY HIGHWAY
 EAST WAREHAM, MA 02538
 PH: 508-273-0377



JOHN L. CHURCHILL JR., P.L.S. DATE



JOHN L. CHURCHILL JR., P.E. DATE

PROPOSED SITE PLAN

AT
386 MAIN STREET
 IN
WAREHAM
MASSACHUSETTS
 (PLYMOUTH COUNTY)

COVER SHEET

REVISIONS:

No.	DATE	DESC.
1	6-28-23	MEETING COMMENTS
2	7-25-23	MEETING COMMENTS
3	8-7-23	SITE PLAN REVIEW
4	9-13-23	PEER REVIEW COMMENTS
5	9-25-23	MEETING COMMENTS

PREPARED FOR:
 ANGELA MCKEOWN
 484 LIBERTY STREET
 ROCKLAND, MA 02370

PREPARED BY:
 JC ENGINEERING, INC
 2854 CRANBERRY HIGHWAY
 EAST WAREHAM, MA 02538
 508-273-0377

DATE:	MARCH 21, 2023
FIELD:	BM/JF
CALC./DESIGN:	SJI
DRAWN:	SJI
CHECK:	JLC
JOB NO.:	6028

OWNER OF RECORD:
388 MAIN STREET REALTY TRUST
ANGELA MCKEOWN, TRUSTEE
484 LIBERTY STREET
ROCKLAND, MA 02370

FEMA FLOOD ZONE (LOT):
X

AS SHOWN ON COMMUNITY PANEL:
#25023C0488K (dated 7-6-2021)

ASSESSOR'S MAP & LOT:
MAP 61, LOT 1079

DEED REFERENCE:
BOOK 55430, PAGE 277

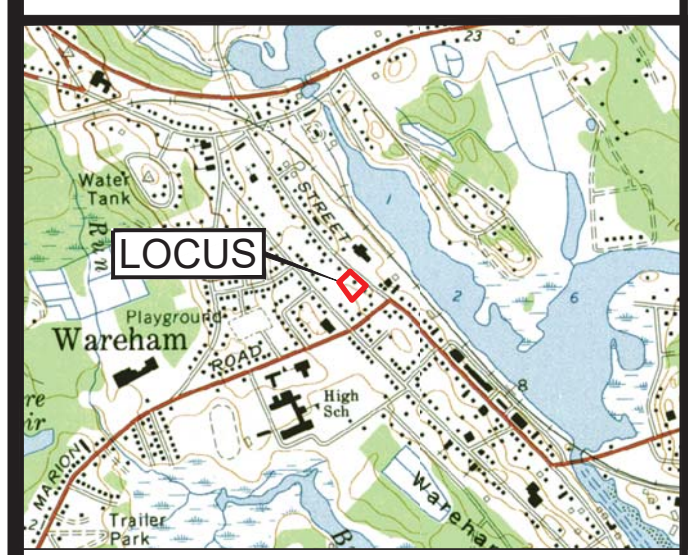
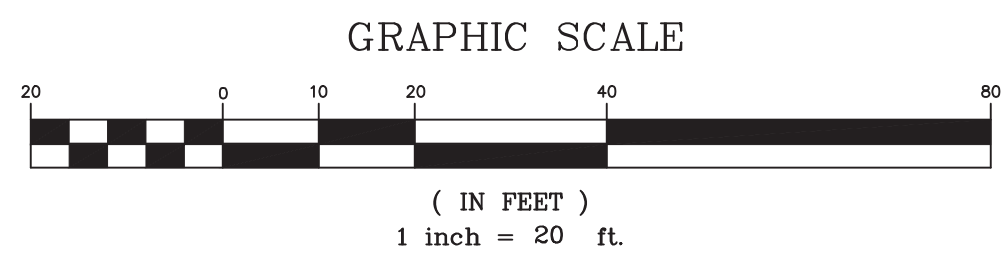
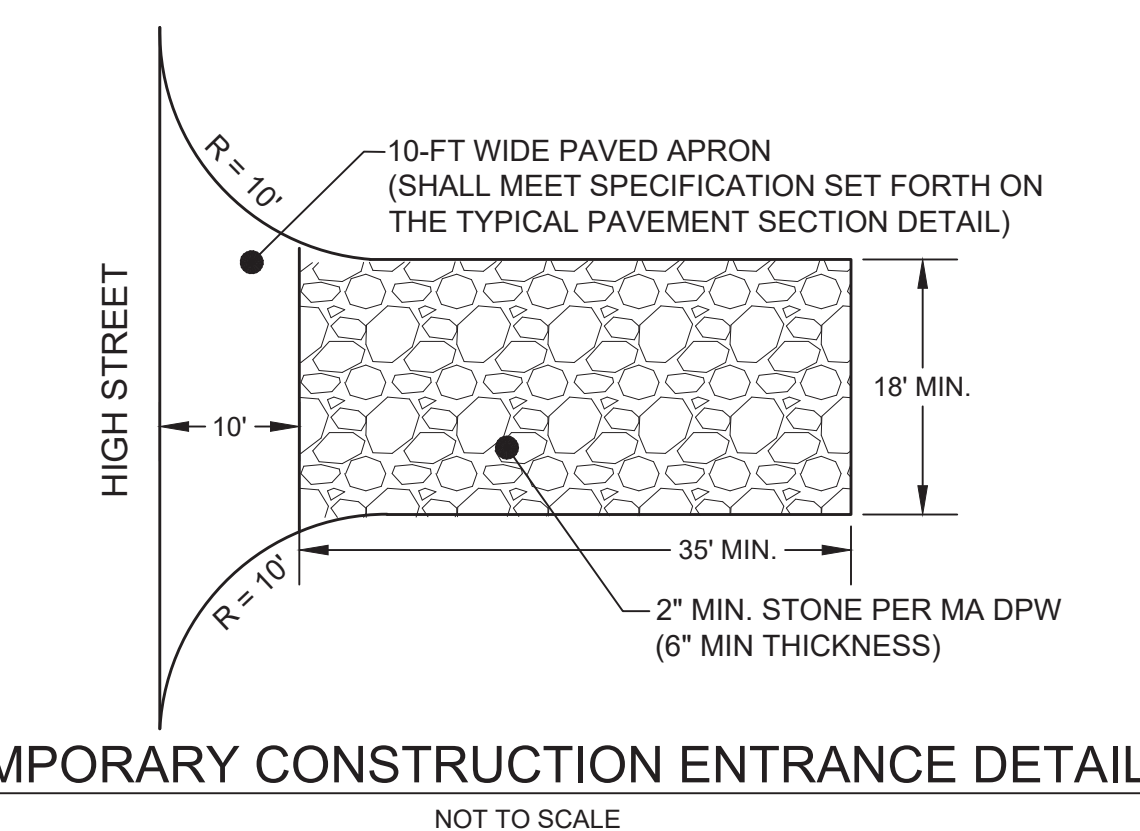
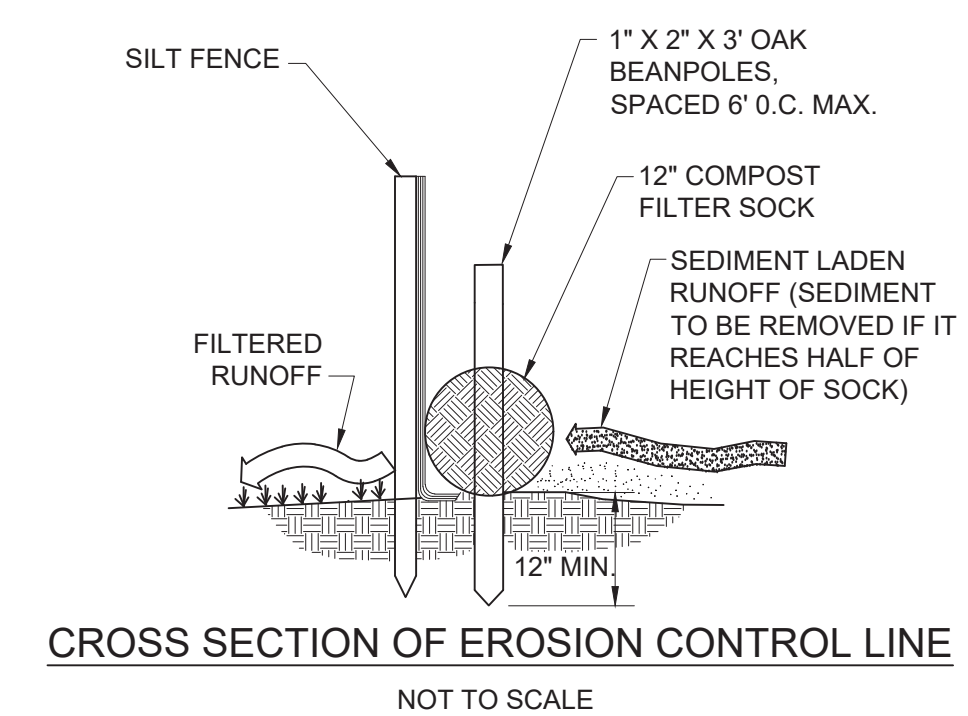
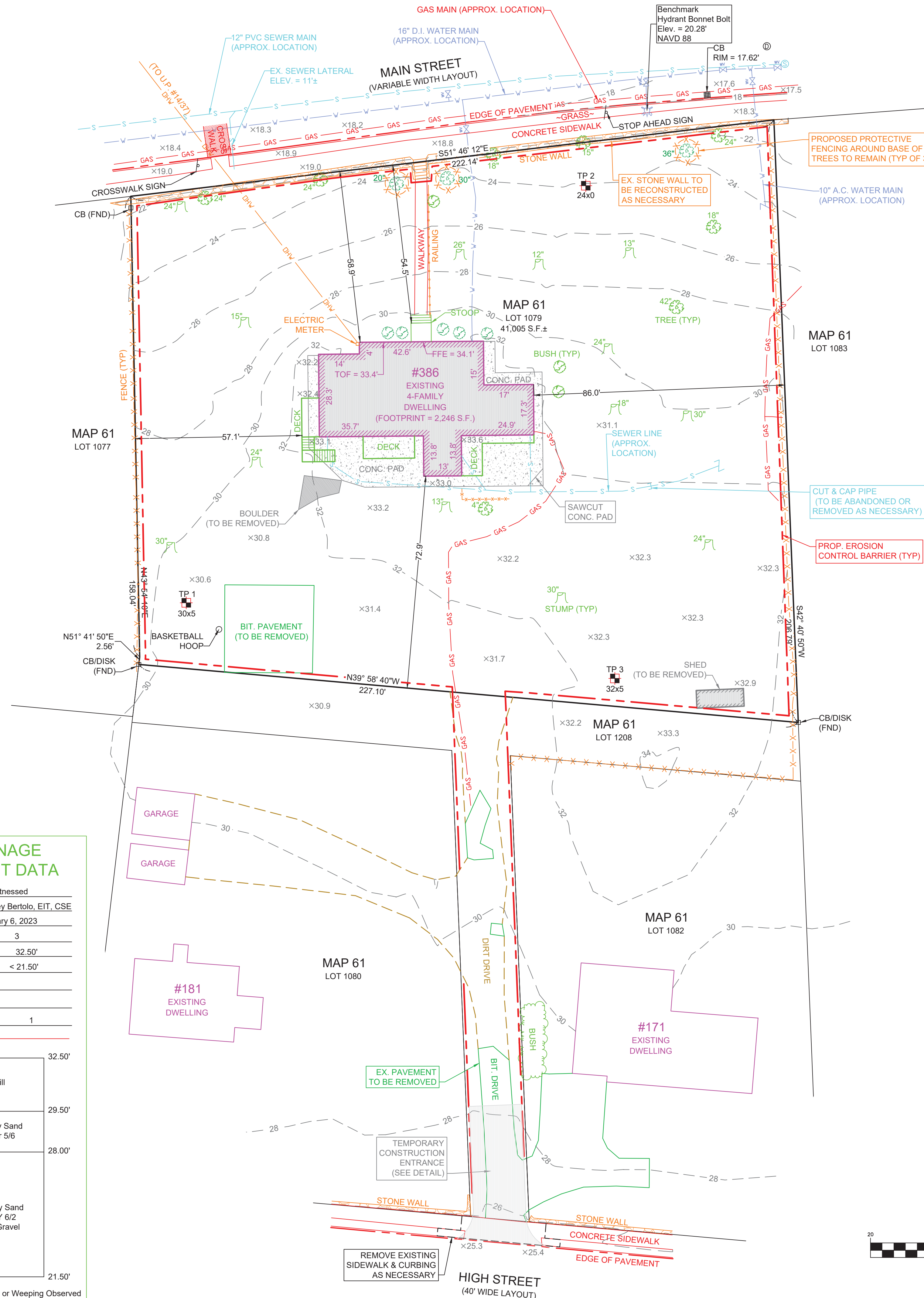
PLAN REFERENCES:
BOOK 38, PAGE 2941
BOOK 3385, PAGE 48

LEGEND:

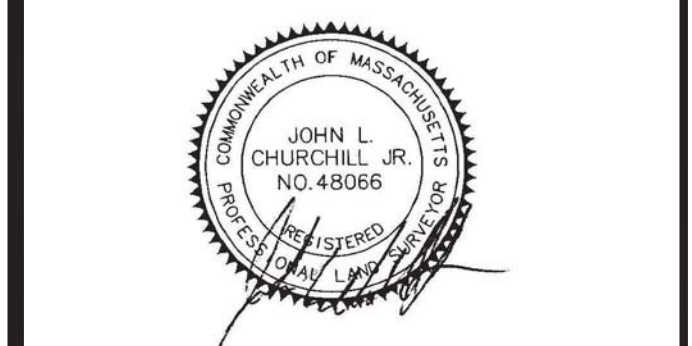
- = BUSH / TREE / STUMP TO BE REMOVED
- = BUSH / TREE TO REMAIN

DRAINAGE TEST PIT DATA		DRAINAGE TEST PIT DATA		DRAINAGE TEST PIT DATA	
INSPECTOR: Unwitnessed	INSPECTOR: Unwitnessed	INSPECTOR: Unwitnessed	INSPECTOR: Unwitnessed	INSPECTOR: Unwitnessed	INSPECTOR: Unwitnessed
EVALUATOR: Bradley Bertolo, EIT, CSE	EVALUATOR: Bradley Bertolo, EIT, CSE	EVALUATOR: Bradley Bertolo, EIT, CSE	EVALUATOR: Bradley Bertolo, EIT, CSE	EVALUATOR: Bradley Bertolo, EIT, CSE	EVALUATOR: Bradley Bertolo, EIT, CSE
DATE: January 6, 2023	DATE: January 6, 2023	DATE: January 6, 2023	DATE: January 6, 2023	DATE: January 6, 2023	DATE: January 6, 2023
TEST PIT #: 1	TEST PIT #: 2	TEST PIT #: 3	TEST PIT #: 3	TEST PIT #: 3	TEST PIT #: 3
ELEV TOP = 30.50'	ELEV TOP = 24.00'	ELEV TOP = 32.50'	ELEV TOP = 32.50'	ELEV TOP = 32.50'	ELEV TOP = 32.50'
ELEV WATER = < 21.50'	ELEV WATER = < 14.00'	ELEV WATER = < 21.50'	ELEV WATER = < 21.50'	ELEV WATER = < 21.50'	ELEV WATER = < 21.50'
PERC RATE =	PERC RATE =	PERC RATE =	PERC RATE =	PERC RATE =	PERC RATE =
DEPTH OF PERC =	DEPTH OF PERC =	DEPTH OF PERC =	DEPTH OF PERC =	DEPTH OF PERC =	DEPTH OF PERC =
TEXTURAL CLASS: 1	TEXTURAL CLASS: 1	TEXTURAL CLASS: 1	TEXTURAL CLASS: 1	TEXTURAL CLASS: 1	TEXTURAL CLASS: 1
0" - 30.50' Fill	0" - 24.00' Sandy Loam 10Yr 3/2	0" - 32.50' Fill	0" - 29.50' Loamy Sand 10Yr 5/6	0" - 28.00' Loamy Sand 2.5Y 6/3 15% Gravel & Cobbles	0" - 21.50' Loamy Sand 2.5Y 6/2 10% Gravel & Cobbles
20" - 28.83' Sandy Loam 10Yr 3/2	8" - 23.33' Sandy Loam 10Yr 3/2	36" - 29.50' Loamy Sand 10Yr 5/6	36" - 29.50' Loamy Sand 10Yr 5/6	36" - 29.50' Loamy Sand 2.5Y 6/3 15% Gravel & Cobbles	36" - 29.50' Loamy Sand 2.5Y 6/2 10% Gravel & Cobbles
26" - 28.33' Sandy Loam 10Yr 5/6	26" - 20.83' Sandy Loam 10Yr 5/6	54" - 28.00' Loamy Sand 2.5Y 6/2 5% Gravel	54" - 28.00' Loamy Sand 2.5Y 6/2 5% Gravel	54" - 28.00' Loamy Sand 2.5Y 6/2 5% Gravel	54" - 28.00' Loamy Sand 2.5Y 6/2 5% Gravel
48" - 26.50' Sandy Loam 10Yr 5/6	38" - 20.83' Sandy Loam 10Yr 5/6				
108" - 21.50' Fine Loamy Sand 2.5Y 6/2 10% Gravel & Cobbles & Boulders	120" - 14.00' Loamy Sand 2.5Y 6/3 15% Gravel & Cobbles				

No Mottling, Standing or Weeping Observed



LOCUS MAP
SCALE 1" = 2000'



JOHN L. CHURCHILL JR., P.L.S. DATE



JOHN L. CHURCHILL JR., P.E. DATE

PROPOSED SITE PLAN
AT
386 MAIN STREET
IN
WAREHAM MASSACHUSETTS
(PLYMOUTH COUNTY)
EXISTING CONDITIONS / SITE PREPARATION

REVISIONS:

No.	DATE	DESC.
1	6-28-23	MEETING COMMENTS
2	7-25-23	MEETING COMMENTS
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5	9-25-23	MEETING COMMENTS

PREPARED FOR:
ANGELA MCKEOWN
484 LIBERTY STREET
ROCKLAND, MA 02370

PREPARED BY:
JC ENGINEERING, INC
2854 CRANBERRY HIGHWAY
EAST WAREHAM, MA 02538
508-273-0377

DATE:	MARCH 21, 2023
FIELD:	BM/JF
CALC./DESIGN:	SJI
DRAWN:	SJI
CHECK:	JLC
JOB NO:	6028

OFFSTREET PARKING SCHEDULE (TABLE 921)

PROPOSED USE	NUMBER OF REQUIRED PARKING SPACES
2-FAMILY DWELLING	12 (2 SPACES PER DWELLING UNIT)
4-FAMILY DWELLING	8 (2 SPACES PER DWELLING UNIT)
REQUIRED TOTAL	20
PROVIDED TOTAL	35

DENSITY

LOT AREA = 41,005 S.F.

REQUIRED
15,000 S.F. FOR FIRST DWELLING UNIT
2,000 S.F. FOR EACH ADDITIONAL UNIT

PROVIDED
1 DWELLING UNIT = 15,000 S.F.
9 ADDITIONAL DWELLING UNITS = 9 x 2,000 S.F. = 18,000 S.F.

TOTAL: 15,000 S.F. + 19,000 S.F. = 33,000 S.F. < 41,005 S.F.

ZONING SCHEDULE (TABLE 622)
ZONING DISTRICT: WAREHAM VILLAGE 2 (MV-2)

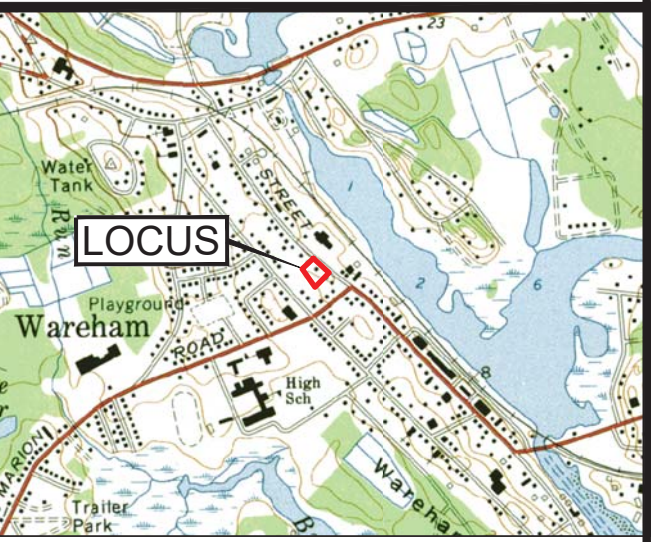
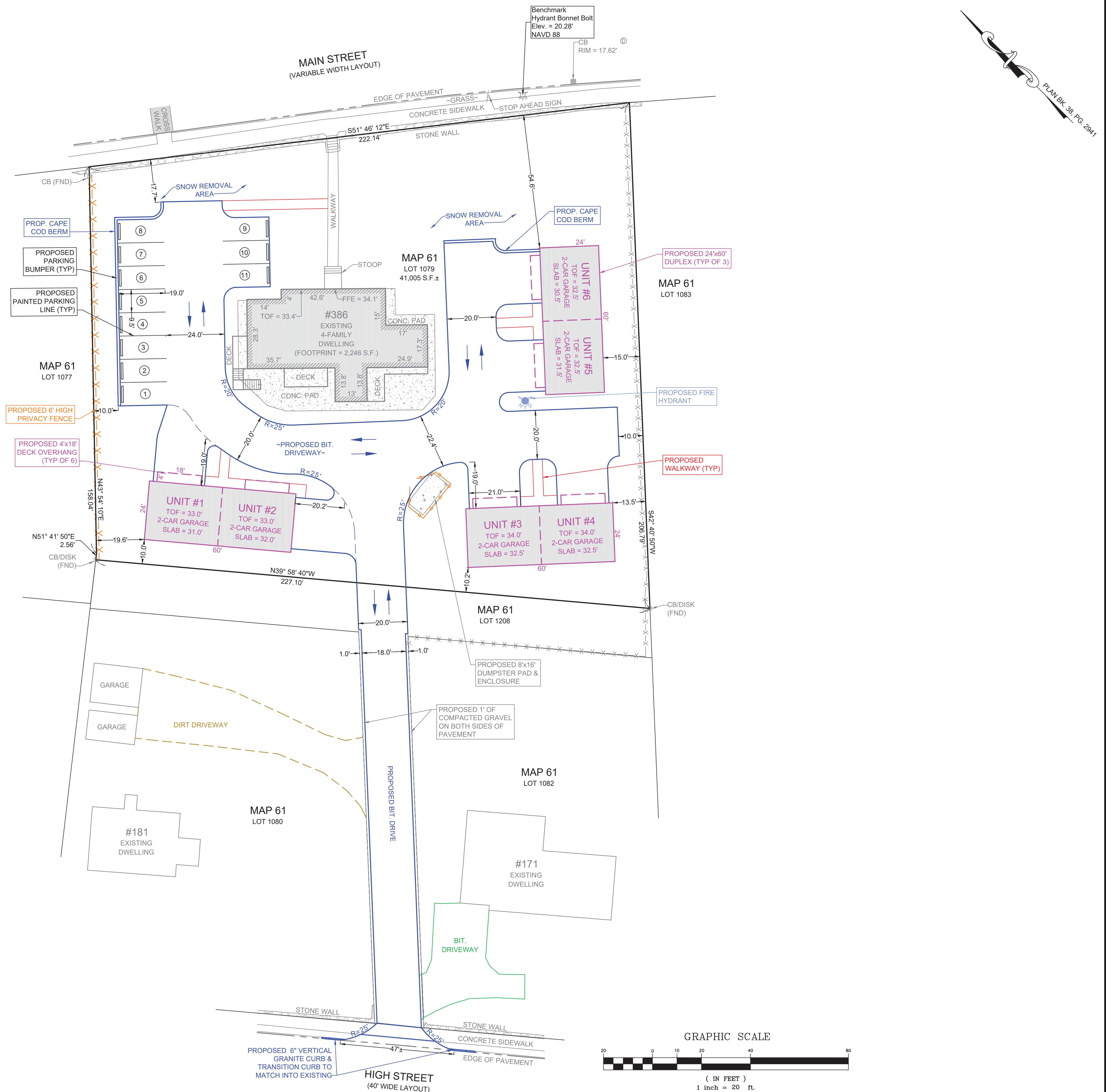
ITEM	REQUIRED	EXISTING	PROPOSED
MIN. LOT AREA	15,000 S.F.	41,005 S.F.	N/A
MIN. FRONTAGE	75'	222.14'	N/A
MIN. FRONT SETBACK	50.3'	54.5'	54.5'
MIN. SIDE SETBACK	10'	57.1'	13.5'
MIN. REAR SETBACK	10'	72.9'	10.0'
MAX. BUILDING HEIGHT	35'	< 35'	< 35'
MAX. BUILDING COVERAGE	20%	5.7%	17.1%
MAX. LOT COVERAGE	50%	11.8%	49.9%

*AVERAGE OF THE SETBACKS OF FIVE (5) RESIDENTIAL STRUCTURES ON EITHER SIDE OF THE SUBJECT PROPERTY.

FRONT SETBACK CALCULATION:

ADDRESS	FRONT SETBACK
402 MAIN STREET	48.4'
400 MAIN STREET	48.2'
398 MAIN STREET	39.6'
394 MAIN STREET	40.3'
380 MAIN STREET	74.9'

TOTAL = 251.4'
AVERAGE = 251.4' / 5 = 50.28'
USE = 50.3'



LOCUS MAP
SCALE 1" = 2000'



JOHN L. CHURCHILL JR., P.L.S. DATE



JOHN L. CHURCHILL JR., P.E. DATE

PROPOSED SITE PLAN

AT
386 MAIN STREET
IN
WAREHAM
MASSACHUSETTS
(PLYMOUTH COUNTY)
LAYOUT PLAN

REVISIONS:

No.	DATE	DESC.
1	7-11-23	MEETING COMMENTS
2	7-25-23	MEETING COMMENTS
3	8-7-23	SITE PLAN REVIEW
4	9-13-23	PEER REVIEW COMMENTS
5	9-25-23	MEETING COMMENTS

PREPARED FOR:

ANGELA MCKEOWN
484 LIBERTY STREET
ROCKLAND, MA 02370

PREPARED BY:

JC ENGINEERING, INC
2854 CRANBERRY HIGHWAY
EAST WAREHAM, MA 02538
508-273-0377

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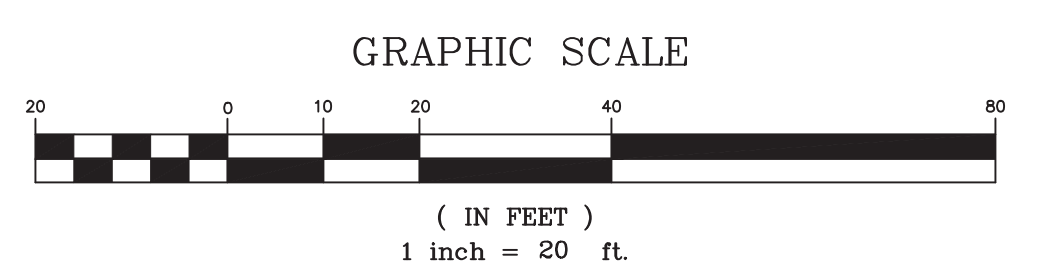
CALC./DESIGN: SJI

DRAWN: SJI

CHECK: JLC

JOB NO: 6028

SHEET 3 OF 10



NOTES:

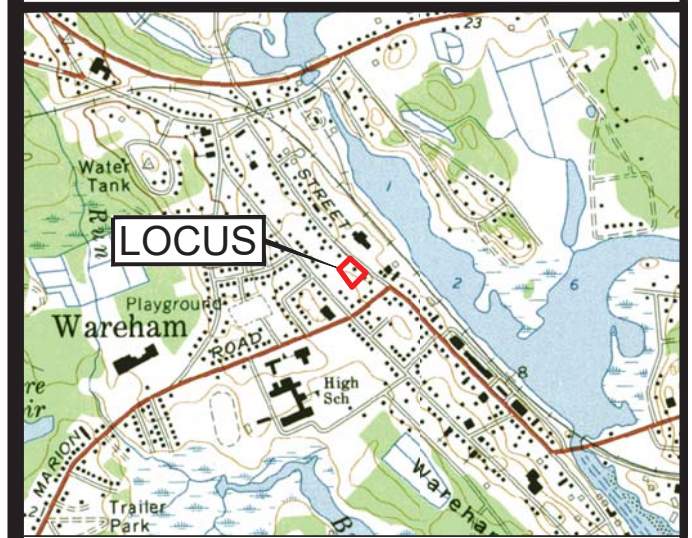
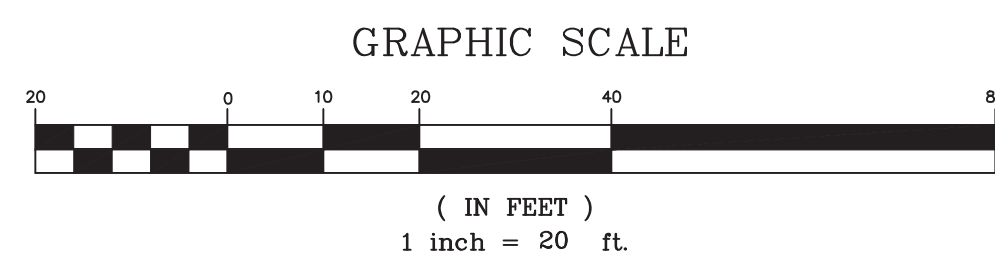
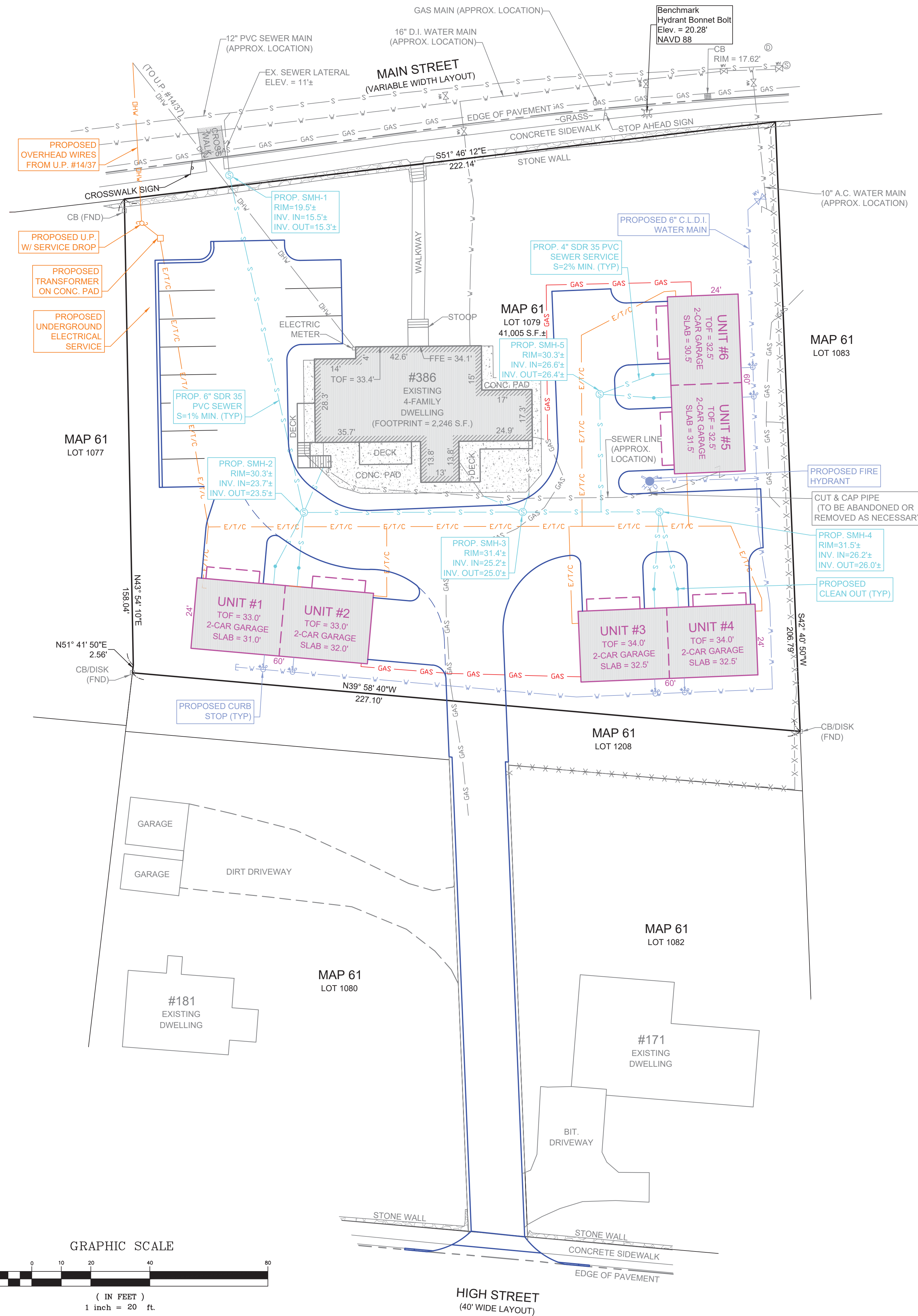
1. UTILITIES AS SHOWN ON THIS PLAN ARE BASED ON RECORD PLANS AVAILABLE AND FIELD LOCATED MARK OUTS PERFORMED BY THE RESPECTIVE UTILITY COMPANY. UTILITY LOCATIONS ON THIS PLAN SHALL BE CONSIDERED APPROXIMATE ONLY AND MAY NOT FULLY REPRESENT ALL UNDERGROUND UTILITIES LOCATED ON SITE. THE CONTRACTOR SHALL CONTACT DIG SAFE AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

2. ALL SEWER WORK SHALL COMPLY WITH THE TOWN OF WAREHAM SEWER COMMISSIONERS RULES AND REGULATIONS. CONTRACTOR TO CONFIRM SIZE & ELEVATION OF EXISTING SEWER SERVICE PRIOR TO CONSTRUCTION. FINAL BUILDING SEWER INVERTS SHALL BE DETERMINED AT TIME OF CONSTRUCTION.

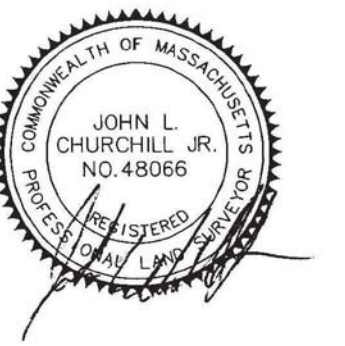
3. ALL WATER LINES AND CONNECTIONS SHALL COMPLY WITH THE WAREHAM FIRE DISTRICT RULES AND REGULATIONS. CONTRACTOR TO CONFIRM LOCATION OF EXISTING WATER SERVICE LINE PRIOR TO CONSTRUCTION.

4. CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANY & ELECTRICIAN FOR FINAL LOCATION, SIZE, & CONFIGURATION OF THE PROPOSED ELECTRICAL SERVICE.

5. CONTRACTOR SHALL COORDINATE WITH THE LOCAL GAS COMPANY FOR FINAL LOCATION, SIZE, & CONFIGURATION OF THE PROPOSED GAS SERVICE.



LOCUS MAP
SCALE 1" = 2000'



JOHN L. CHURCHILL JR., P.L.S. DATE



JOHN L. CHURCHILL JR., P.E. DATE

PROPOSED SITE PLAN
AT
386 MAIN STREET
IN
WAREHAM
MASSACHUSETTS
(PLYMOUTH COUNTY)
UTILITIES

REVISIONS:

No.	DATE	DESC.
1	6-28-23	MEETING COMMENTS
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3	8-7-23	SITE PLAN REVIEW
4	9-13-23	PEER REVIEW COMMENTS
5	9-25-23	MEETING COMMENTS

PREPARED FOR:

ANGELA MCKEOWN
484 LIBERTY STREET
ROCKLAND, MA 02370

PREPARED BY:

JC ENGINEERING, INC
2854 CRANBERRY HIGHWAY
EAST WAREHAM, MA 02538
508-273-0377

DATE: MARCH 21, 2023

FIELD: BM/JF

CALC./DESIGN: SJI

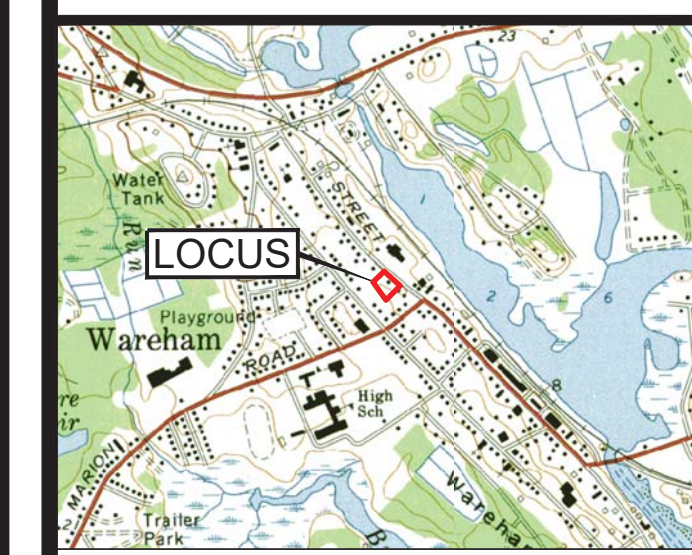
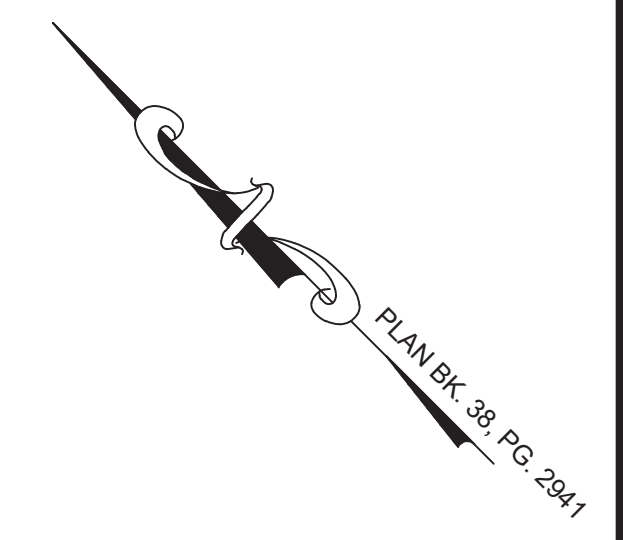
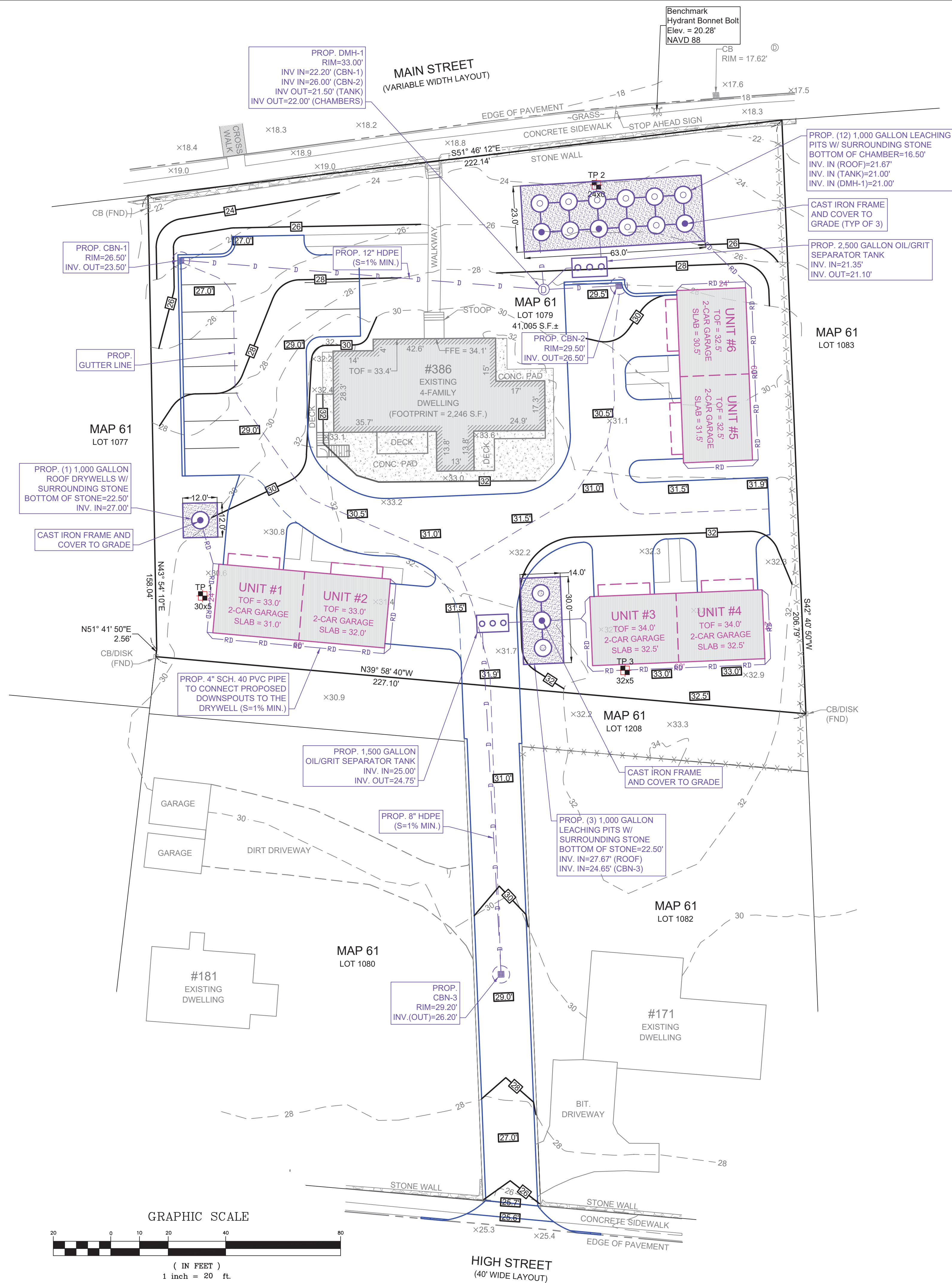
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CHECK: JLC

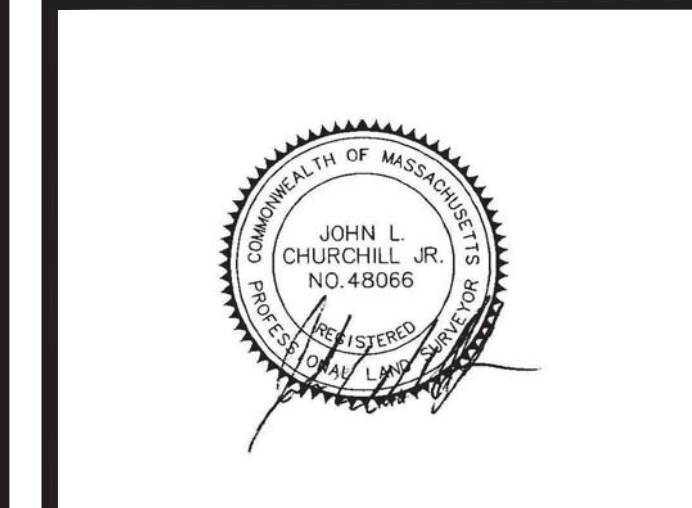
JOB NO: 6028

GRADING & DRAINAGE NOTES:

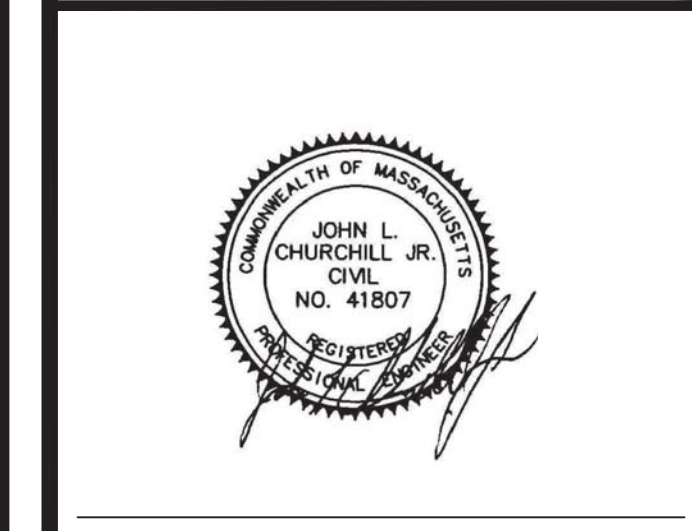
1. ALL CUT & FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED ON THIS PLAN.
2. EXISTING AND PROPOSED GRADE CONTOURS ARE SHOWN AT 2-FT INTERVALS.
3. MINIMUM COVER OVER PIPE SHALL NOT BE LESS THAN 1.0 FEET.
4. THE DRIVEWAY SHALL NOT BE PAVED UNTIL THE ENTIRE PERMANENT DRAINAGE SYSTEM HAS BEEN INSTALLED AND PIPE CONNECTIONS COMPLETE. CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO BACKFILL FOR INSPECTION.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSPECTION AND MAINTENANCE OF ALL STORMWATER MANAGEMENT FACILITIES UNTIL SUCH TIME THAT THE DRIVEWAY, BUILDINGS, AND ASSOCIATED UTILITIES ARE ACCEPTED BY THE OWNER.



LOCUS MAP
SCALE 1" = 2000'



JOHN L. CHURCHILL JR., P.L.S. DATE



JOHN L. CHURCHILL JR., P.E. DATE

PROPOSED SITE PLAN
AT
386 MAIN STREET
IN
WAREHAM MASSACHUSETTS
(PLYMOUTH COUNTY)
GRADING & DRAINAGE

REVISIONS:

No.	DATE	DESC.
1	7-11-23	MEETING COMMENTS
2	7-25-23	MEETING COMMENTS
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PREPARED FOR:
ANGELA MCKEOWN
484 LIBERTY STREET
ROCKLAND, MA 02370

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SHEET 5 OF 10	

PLANTING NOTES:

1. ALL PLANT MATERIAL SHALL CONFORM TO THE STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN ANSI Z260.1 OR THE LATEST EDITION. ALL PLANT MATERIAL SHALL BE TRUE TO SPECIES, VARIETY AND SIZE AND SHALL BE CERTIFIED DISEASE AND INSECT FREE AT THE TIME OF DELIVERY TO THE SITE. THE OWNER AND/OR LANDSCAPE ARCHITECT RESERVES THE RIGHT TO APPROVE OR REJECT THE PLANT MATERIAL ON SITE PRIOR TO INSTALLATION.
2. THE LANDSCAPE ARCHITECT SHALL SPECIFY AN ACCEPTABLE REPLACEMENT SHOULD ANY PLANT MATERIAL BE UNAVAILABLE AT TIME OF DELIVERY.
3. ALL PLANT MATERIAL SHALL BE PROPERLY PLANTED AND STAKED IN CONFORMANCE WITH THE DETAILS PROVIDED. PROVIDE THREE (3) STAKES PER TREE UNLESS OTHERWISE NOTED. INSTALL ALL PLANT MATERIAL ON UNDISTURBED GRADE OR GRADES THAT HAVE BEEN ESTABLISHED DURING CONSTRUCTION AND APPROVED BY THE LANDSCAPE ARCHITECT. FURNISH ALL PLANT MATERIAL IN APPROVED CONTAINERS OR BALLED AND BURLAPPED. CUT AND REMOVE BURLAP FROM THE TOP ONE-THIRD (1/3) OF THE ROOT BALL. ENTIRELY REMOVE ALL WIRE ROOT BALL BASKETS FROM THE PLANTING PIT PRIOR TO FINAL BACKFILLING OF PLANTING PIT.
4. PROVIDE PLANTING PITS AS INDICATED ON THE PLANTING DETAILS. BACKFILL PLANTING PITS WITH ONE PART EACH OF TOPSOIL, ONE PART PEAT MOSS OR COMPOSTED LEAF MATTER (TWO YEARS OLD), AND ONE PART EXISTING SOILS ON THE SITE. IF IN THE OPINION OF THE LANDSCAPE ARCHITECT EXCESSIVELY WET SOIL CONDITIONS EXIST, THEN PLANTING PITS SHALL BE EXCAVATED AN ADDITIONAL 12" AND FILLED WITH SAND TO THE BOTTOM OF THE PLANT PIT. A SLOW RELEASE FERTILIZER SHALL BE ADDED TO THE BACKFILL MIX IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR NEW TRANSPLANTS.
5. NEWLY INSTALLED PLANT MATERIAL SHALL BE WATERED AT THE TIME OF THE INSTALLATION AND AGAIN WITHIN 24 HOURS OF THE INSTALLATION. REGULAR WATERING SHALL BE PROVIDED BY THE LANDSCAPE CONTRACTOR TO ENSURE ESTABLISHMENT, GROWTH AND SURVIVAL OF ALL PLANTS.
6. ALL PLANT MATERIAL SHALL BE GUARANTEED FOR A PERIOD OF TWO YEARS AFTER THE DATE OF FINAL ACCEPTANCE BY THE LANDSCAPE ARCHITECT. ANY PLANT THAT DIES WITHIN THE GUARANTEE PERIOD SHALL BE REMOVED (INCLUDING THE ROOT BALL) AND REPLACED WITH A SPECIMEN OF THE SAME VARIETY AND SIZE AS THE ORIGINALLY SPECIFIED PLANT, AT THE EXPENSE OF THE LANDSCAPE CONTRACTOR.
7. THE LANDSCAPE CONTRACTOR SHALL FURNISH A MINIMUM OF 24" OF TOPSOIL IN ALL PLANTING BEDS. A COMPLETE SOIL ANALYSIS SHALL BE CONDUCTED BY THE LANDSCAPE CONTRACTOR PRIOR TO PLANTING TO DETERMINE THE EXTENT OF MODIFICATIONS NECESSARY TO THE PH AND NUTRIENT LEVELS OF THE PLANTING SOIL TO ENSURE SURVIVAL OF THE PLANTS. THE CONTRACTOR SHALL FURNISH THE TEST RESULTS TO THE LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO PLANTING.
8. ALL PLANTING BEDS AND TREE WELLS SHALL RECEIVE A 3" MINIMUM LAYER OF FINELY SHREDDED PINE BARK. THE LANDSCAPE CONTRACTOR SHALL SUBMIT A SAMPLE OF THE MULCH TO THE LANDSCAPE ARCHITECT PRIOR TO DELIVERY OF THE MULCH TO THE SITE.
9. ALL SHRUB MASSES SHALL BE PLANTED IN CONTINUOUS MULCHED BEDS.
10. IN THE CASE OF A DISCREPANCY BETWEEN THE QUANTITIES LISTED IN THE PLANT SCHEDULE AND THOSE ILLUSTRATED IN THE PLAN, THE PLAN SHALL RULE.
11. ALL LANDSCAPE AREAS NOT PLANTED WITH TREES, SHRUBS, GROUND COVER OR SOD SHALL BE RESTORED WITH 6" OF TOPSOIL AND SHALL BE SEED AS INDICATED ON THE PLANS. (T & S)
12. APPLICATION OF GRASS SEED FERTILIZER AND MULCH SHALL BE ACCOMPLISHED BY BROADCAST OR HYDRO SEEDING AT THE RATES OUTLINED BELOW:
LIMESTONE: 100 LBS / 1000 SF
FERTILIZER: USE LOW PHOSPHATE AND SLOW RELEASE NITROGEN FERTILIZER 1000 LBS/ACRE

SEEDING AT THE RATES OUTLINED BELOW:

LIMESTONE: 100 LBS / 1000 SF
FERTILIZER: USE LOW PHOSPHATE AND SLOW RELEASE NITROGEN FERTILIZER 1000 LBS/ACRE

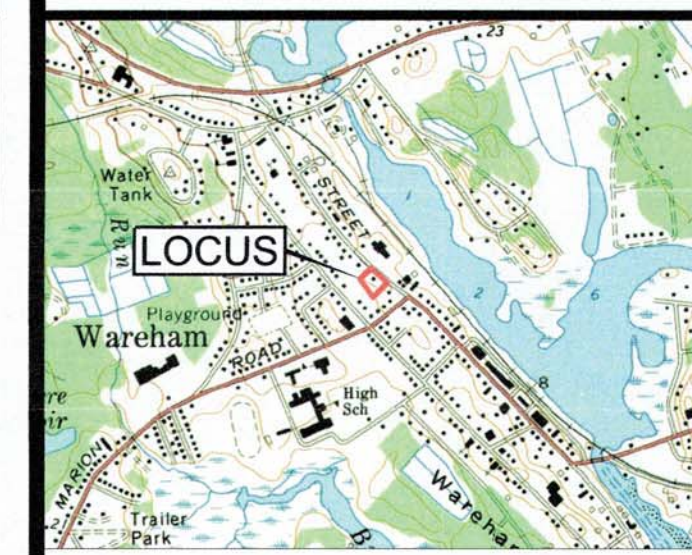
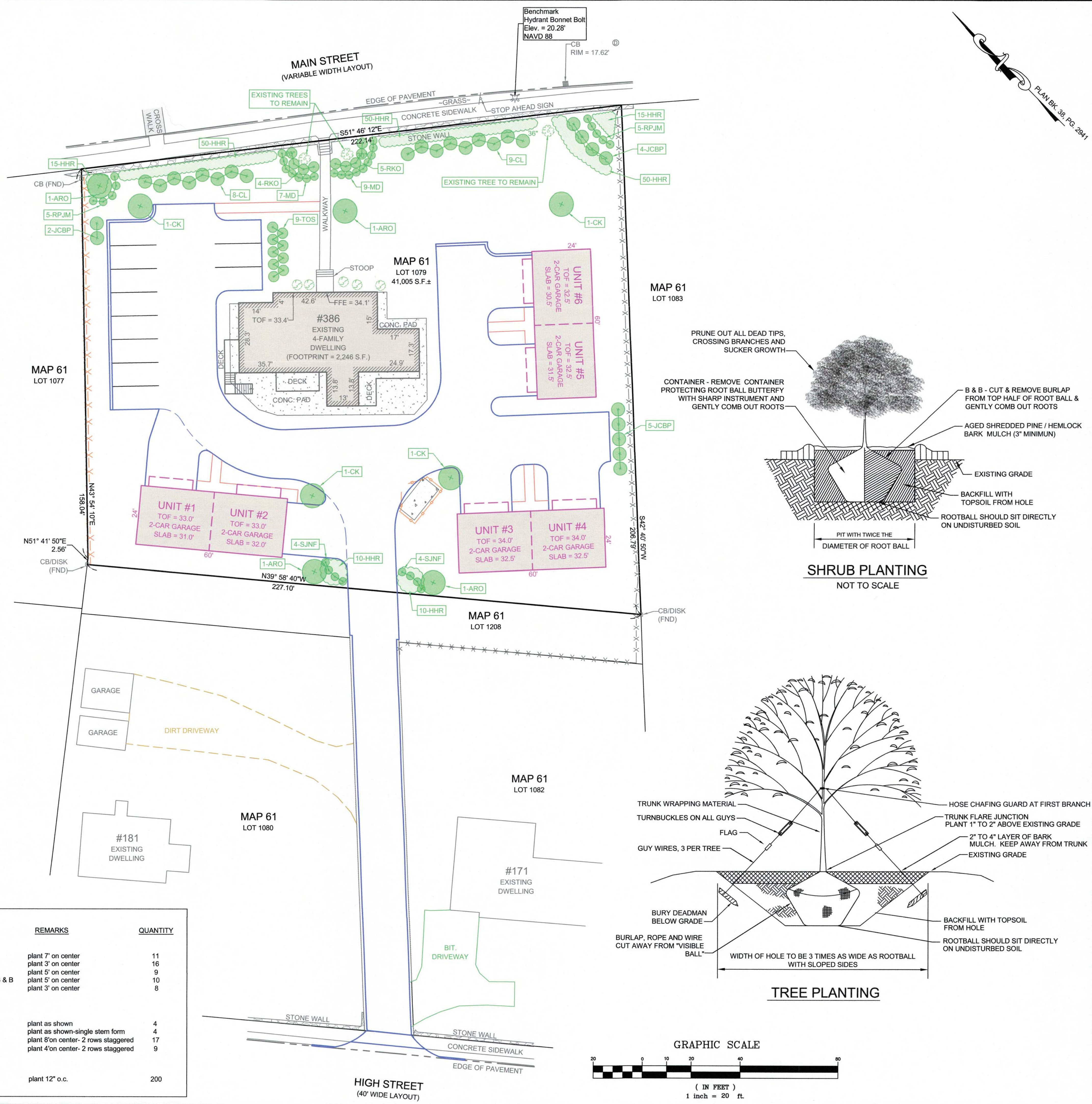
SEED MIX	LBS/ACRE
CREEPING RED FESCUE	20
TALL FESCUE	15
PERENNIAL RYE	5
RED TOP	2

NOTE:

THE LANDSCAPE ARCHITECT HAS CONDUCTED A SITE VISIT TO EXAMINE THE EXISTING TREES ALONG MAIN STREET.

PLANT SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	COMMENTS	REMARKS	QUANTITY
SHRUBS						
JCBP	Juniperus chinensis 'Blue Point'	Blue Point Chinese Upright Juniper	7'-8' ht	B & B	plant 7' on center	11
MD	Microbiota decussata	Siberian Carpet Cypress	18" - 24" spr.	3 gal.	plant 3' on center	16
RKO	Rosa 'Knock Out' Double	Double Red Knock Out Shrub Rose	24" - 30" ht	5 gallon	plant 5' on center	9
RPJM	Rhododendron 'PJM'	PJM Rhododendron	36" ht	5 gallon or B & B	plant 5' on center	10
SJNF	Spiraea japonica 'Neon Flash'	Neon Flash Spirea	18" - 24" spr.	3 gallon	plant 3' on center	8
SHADE & ORNAMENTAL TREES						
ARO	Acer rubrum 'October Glory'	October Glory Red Maple	3" cal.	B & B	plant as shown	4
CK	Cornus kousa	Kousa Dogwood	3" cal.	B & B	plant as shown-single stem form	4
CL	Cupressus x leylandii	Leyland Cypress	7' - 8' ht.	B & B	plant 8' on center- 2 rows staggered	17
TOS	Thuja Occidentalis 'Smaragd'	Emerald Arborvitae	7' - 8' ht	B & B	plant 4' on center- 2 rows staggered	9
ORNAMENTAL GRASSES & PERENNIALS						
HHR	Hemerocallis 'Happy Returns'	Happy Returns Daylily	18" ht.	1 gal	plant 12" o.c.	200



LOCUS MAP
SCALE 1" = 2000'



EDWARD A. FULLER, R.L.A. DATE

PROPOSED SITE PLAN
AT
386 MAIN STREET
IN
WAREHAM
MASSACHUSETTS
(PLYMOUTH COUNTY)
LANDSCAPING PLAN

REVISIONS:

No.	DATE	DESC.
1	7-11-23	MEETING COMMENTS
2	7-25-23	MEETING COMMENTS
3	8-7-23	SITE PLAN REVIEW
4	9-13-23	PEER REVIEW COMMENTS
5	9-25-23	MEETING COMMENTS

PREPARED FOR:
ANGELA MCKEOWN
484 LIBERTY STREET
ROCKLAND, MA 02370

PREPARED BY:
JC ENGINEERING, INC
2854 CRANBERRY HIGHWAY
EAST WAREHAM, MA 02538
508-273-0377

DATE:	MARCH 21, 2023
FIELD:	BM/JF
CALC./DESIGN:	SJI
DRAWN:	SJI
CHECK:	JLC
JOB NO:	6028
SHEET 6 OF 10	

AREA & ROADWAY LIGHTING

RAZOR SERIES - LED
LOW PROFILE AREA LUMINAIRE

Optical Housing
Heavy cast, low copper aluminum assembly (A356 alloy, < 2% copper) minimum wall thickness: 1.88". LED Module mounting area is machined to within a 0.002" surface flatness variance for maximum surface contact and thermal conductivity from the LED modules to the radiating fins. Passive radiating fins above the LED Optics provide superior thermal management and long LED life. The optical and electrical compartments are integrated with the support arm to create one assembly. Cast and hinged driver compartment cover allows access to the drivers and wiring.

Electrical Housing w/ Integrated Arm
Heavy cast, low copper aluminum (A356 alloy, < 2% copper) assembly with integral cooling ribs surrounding the electrical compartment and a flat surface on the top of the arm to accommodate a photocell receptacle. Solid barrier wall separates optical and electrical compartments. The optical compartment and electrical compartment with the integrated support arm combine to create one assembly. Minimum wall thickness is 1.88". Cast and hinged driver assembly cover is integrated with wiring compartment cover.

PLED Optics
Emitters (LED's) are arrayed on a metal core PCB panel with each emitter located on a copper thermal transfer pad and enclosed by an LED refractor. LED optics completely seal each individual emitter to meet an IP66 rating in asymmetric distributions, a micro-reflector inside the refractor re-directs the house side emitter output towards the street side and functions as a house side shielding element. Refractors are injection molded H12 acrylic. Each LED refractor is sealed to the PCB over an emitter and all refractors are retained by an aluminum frame. Any one Panel, or group of Panels in a luminaire, have the same optical pattern. LED refractors produce standard site/area distributions. Panels are field replaceable and field rotatable in 90° increments.

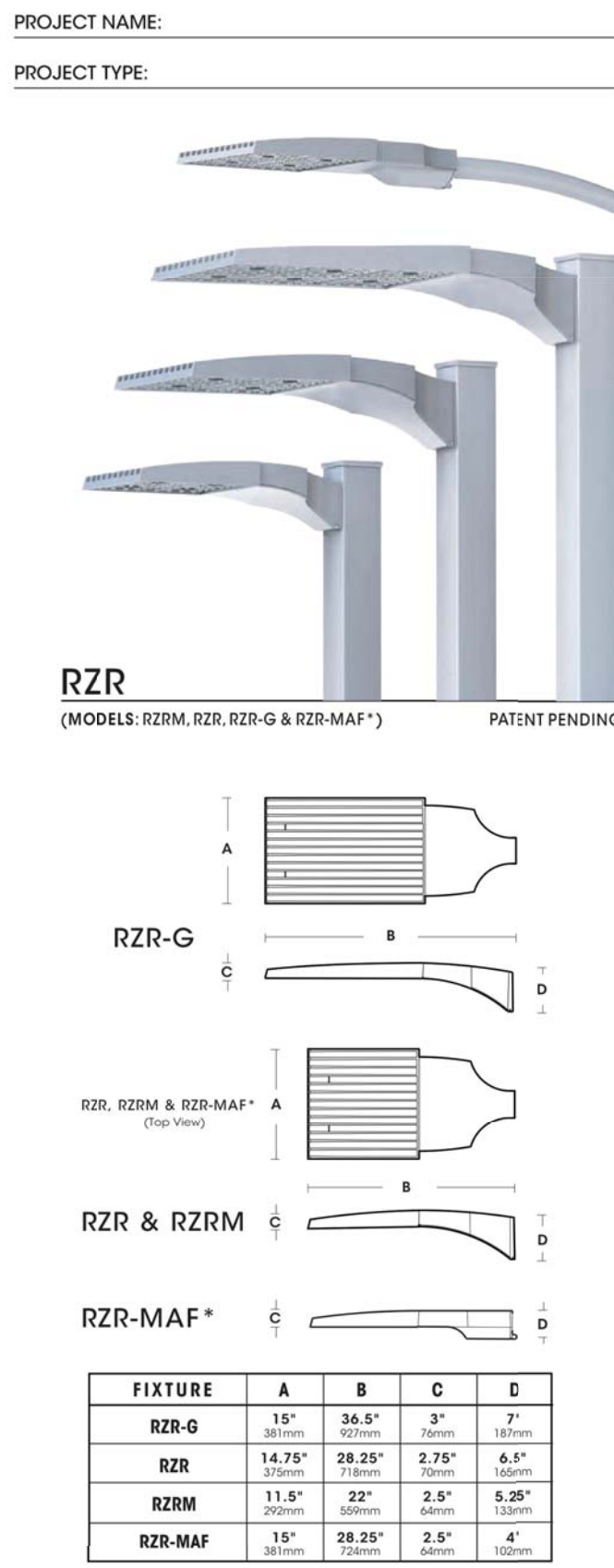
LED Driver(s)
Constant current electronic with a power factor of > 90 and a minimum operating temperature of -40°F/-40°C. Driver(s) is/are UL and cUL recognized and mounted directly against the Electrical Housing to facilitate thermal transfer, held down by universal clamps to facilitate easy removal. In-line terminal blocks facilitate wiring between the driver and optical arrays. Drivers accept an input of 120-277V, 50/60Hz or 347V-480V, 50/60Hz. 0-10V dimmable driver is standard. Driver has a minimum of 3kV internal surge protection. Luminaire supplied with 20kV surge protector for field accessible installation.)

LED Emitters
High output LED's are utilized with drive currents ranging from 350mA to 1050mA. T800 Minimum LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

Amber LED's
TRA (True Amber) LED's utilize material that emits light in the amber spectral bandwidth only without the use of phosphors.

Finish
Electrostatically applied IGIC Polyester Powder Coat on substrate prepared with 20 PSI power wash at 140°F. Four step media blast and iron phosphate pretreatment for protection and paint adhesion. 400°F bake for maximum hardness and durability.

Mount Arm/Fitter/Electrical Housing
Replaces standard Electrical Housing. Fits standard 2 3/8" O.D. horizontal tenon. Two (2) steps with two (2) bolts attach the lower half of the tenon. Upper half of the tenon rests on self-centering steps that position the angle of the luminaire at 0°, +1.5°, +1.5° or -3° up from the horizontal. All hardware is stainless steel.



UL Listed for Wet Location
2022158

U.S. Pole Company Inc. 660 West Avenue O, Palmdale, CA 93551
An Employee Owned Company Phone (661) 233-2000 www.uspoleg.com

AREA & ROADWAY LIGHTING

DEZINER
SERIES 6
Small Neoclassical, Domed Bell Luminaire

Features
The NEW Deziner Series is a flexible, configurable pedestrian scale decorative pendant luminaire with an 6.7" diameter upper housing of 0.125" thick formed aluminum with a large assortment of spun aluminum shades and ornamental collars. Each lower housing is comprised of a 0.080" thick spun aluminum reflector with an integrated LED module seat. Thermal management for long LED life and a thermally isolated solid state power supply chamber. TrueVet™ ball coupling.

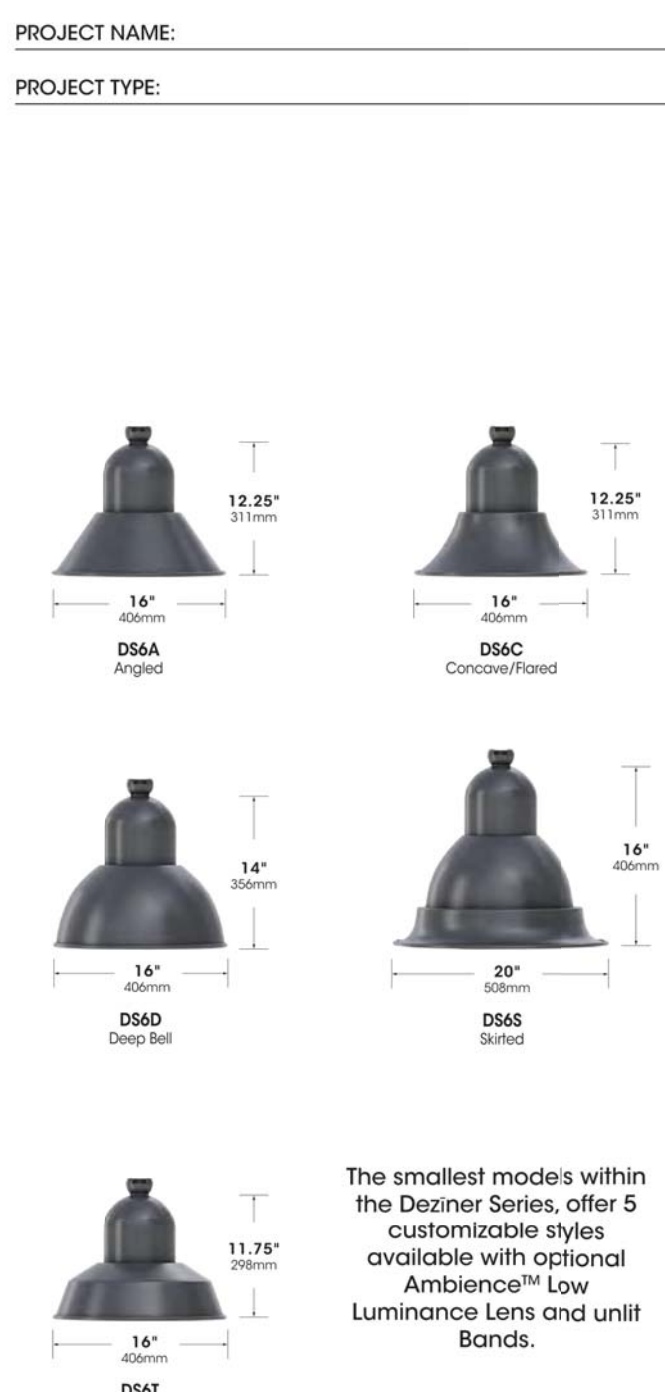
PLED Optics
Emitters (LED's) are arrayed on a metal core PCB panel with each emitter located on a copper thermal transfer pad and enclosed by an LED refractor. LED optics completely seal each individual emitter to meet an IP66 rating in asymmetric distributions, a micro-reflector inside the refractor re-directs the house side emitter output towards the street side and functions as a house side shielding element. Refractors are injection molded H12 acrylic. Each LED refractor is sealed to the PCB over an emitter and all refractors are retained by an aluminum frame. Any one Panel, or group of Panels in a luminaire, have the same optical pattern. LED refractors produce standard site/area distributions. All optics are U0, Zero Uplight and are Dark Sky compliant. Panels are field replaceable and field rotatable in 90° increments.

LED Emitters
High Power White LED's are driven between 350mA and 875mA for a maximum output of 2.5 Watts nominal. LED's are available in standard Warm White (2700K & 3000K), Neutral White (4000K), or Cool White (5000K). All Standard LED's have a minimum of 70 CRI. Consult Factory for other LED options. Lumen Maintenance of 100,000 hours (TM-21 calculated at 50 Test Time) for all LED options.

True Amber LED's
TRA True Amber LED's emit light in the amber spectral bandwidth centered on 585-590nm. True Amber has negligible blue light and is suitable for wildlife.

LED Driver
Constant current electronic with a power factor of > 90 and a minimum operating temperature of -40°F/-40°C. Driver(s) is/are UL and cUL recognized and mounted directly against the Electrical Housing to facilitate thermal transfer, held down by universal clamps to facilitate easy removal. In-line terminal blocks facilitate wiring between the driver and optical arrays. Drivers accept an input of 120-277V (UNV), 50/60Hz or 347V & 480V, 50/60Hz. 0-10V dimmable driver is standard. Driver has a minimum of 3kV internal surge protection. Luminaire supplied with 20kV surge protector for field accessible installation.)

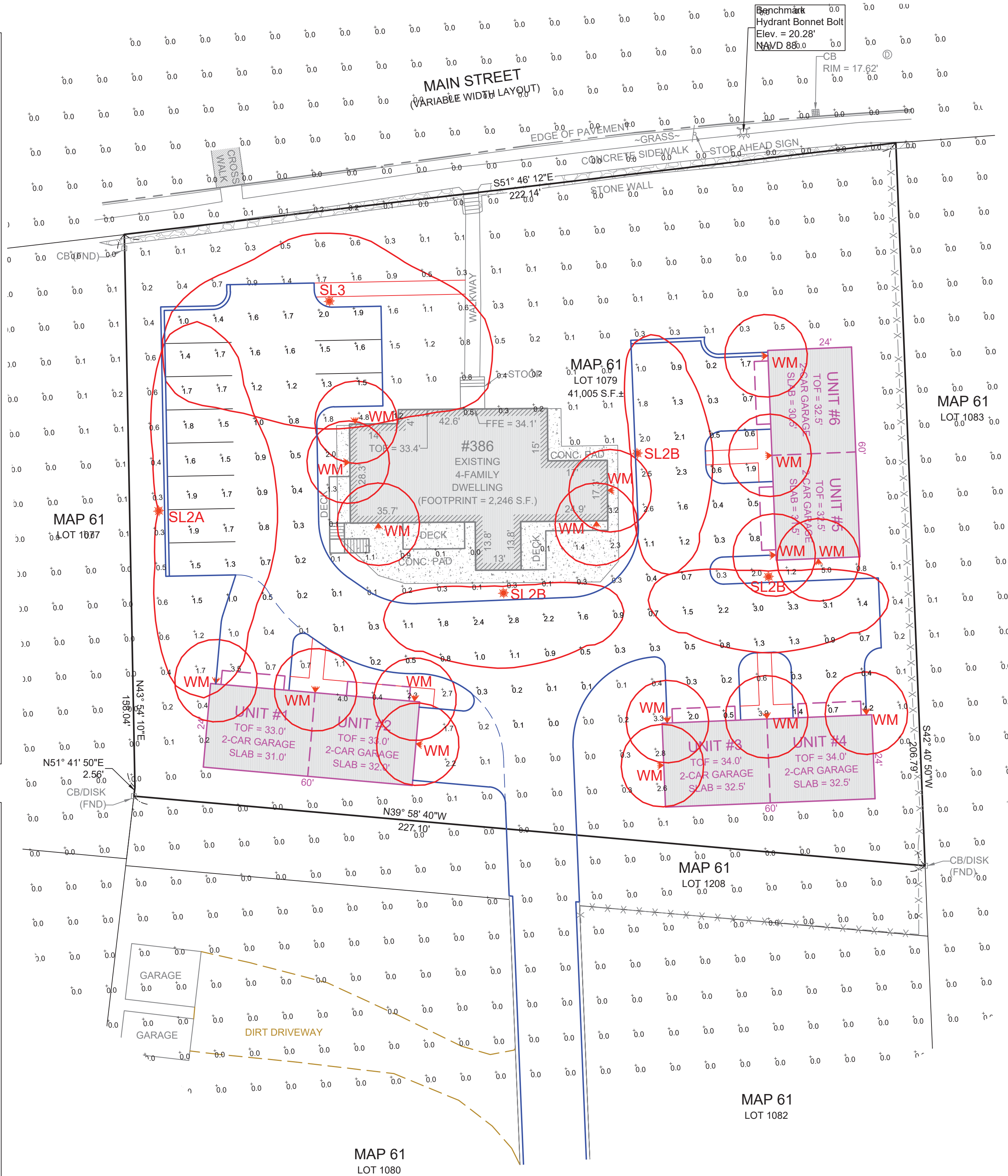
Finish
Super IGIC polyester powder coating is applied to a metal substrate this has been pretreated with a two-stage process for maximum adhesion and color retention. The top coat is baked at 400°F for maximum hardness and exterior durability.



The smallest modes within the Deziner Series, offer 5 customizable styles available with optional Ambiance™ Low Luminance Lens and unit Bands.

UL Listed for Wet Location
2023062

U.S. Pole Company Inc. 660 West Avenue O, Palmdale, CA 93551
An Employee Owned Company Phone (661) 233-2000 www.uspoleg.com



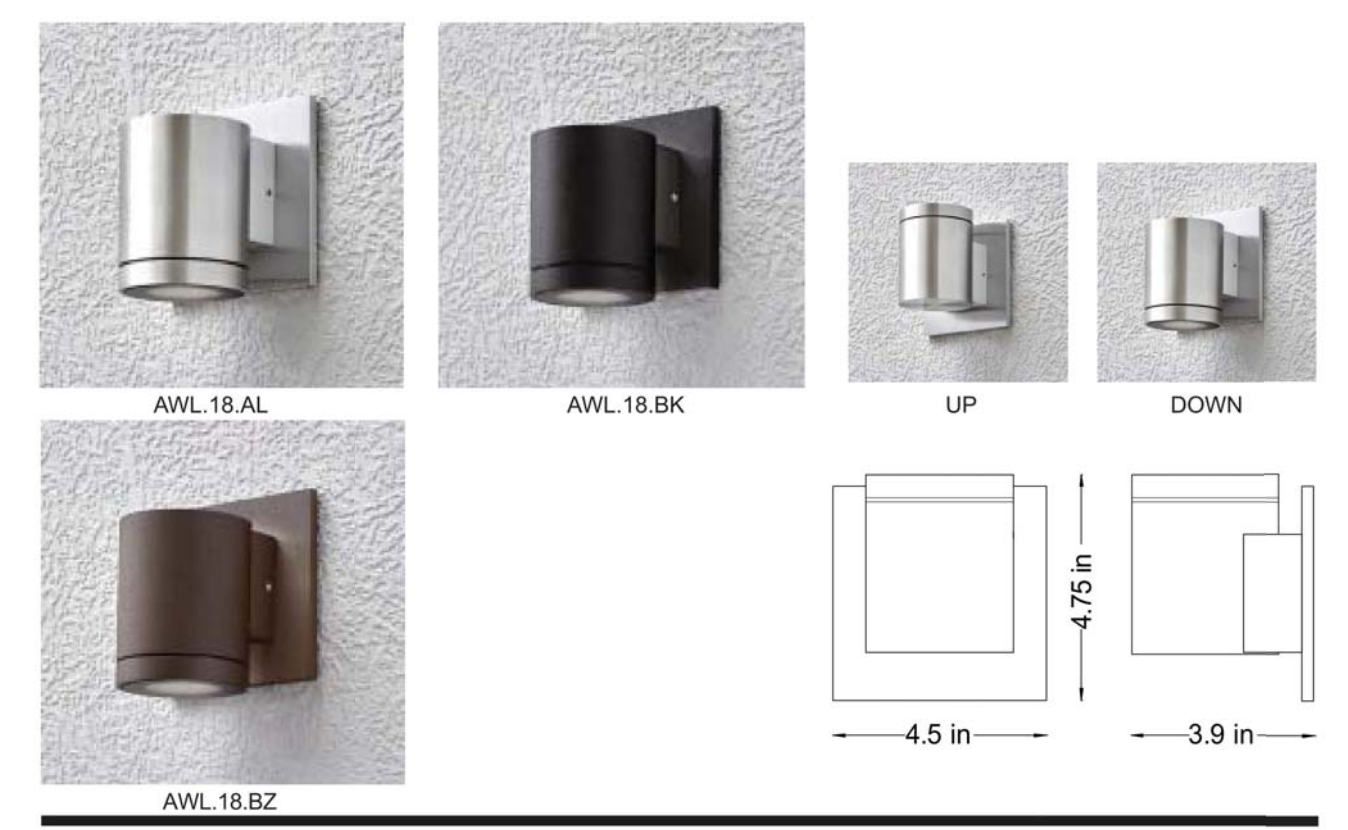
JOB NAME: 368 MAIN ST - WAREHAM
APEX LIGHTING SOLUTIONS
WORKPLANE/CALC PLANE: AT FINISH GRADE
MOUNTING HEIGHT: SEE LUMINAIRE SCHEDULE
APPS: DM
SALES: SS
SPECIFIER: JC ENGINEERING

Qty	Label	Arrangement	Lumens	Input Watts	LLF	BUG Rating	Description
1	SL2A	Single	4594	42.7	0.900	B1-U0-G1	USAL RZR-PLED-II-40LED-350mA-30K-HS-VOLT-FINISH / MOUNTED TO POLE @ 20FT
3	SL2B	Single	2406	23.6	0.900	B0-U0-G1	USAL DS6C-PLED-II-20LED-350mA-30K-HS-VOLT-FINISH / MOUNTED TO POLE @ 20FT
1	SL3	Single	6392	42.7	0.900	B2-U0-G2	USAL RZR-PLED-III-40LED-350mA-30K-VOLT-FINISH / MOUNTED TO POLE @ 20FT
17	WM	Single	964	10.5	0.900	B1-U0-G0	LUMENART AWL-18-11W LED-UNV-3000K-W-FINISH / WALL MOUNTED @ 15FT AFG TO BOF

Label	Grid Height	Avg	Max	Min	Avg/Min	Max/Min
CalcPts_1	0	0.19	5.0	0.0	N.A.	N.A.
PARKING AND DRIVE LANES	0	1.12	4.2	0.0	N.A.	N.A.

NOTES:
PHOTOMETRIC PLAN PREPARED BY APEX LIGHTING SOLUTIONS.

LumenArt
LIGHTING SOLUTIONS



AWL.18

SPECIFICATIONS

Material
CNC aluminum with stainless steel fasteners.

Finish
Brushed Aluminum or matte black or bronze powdercoat

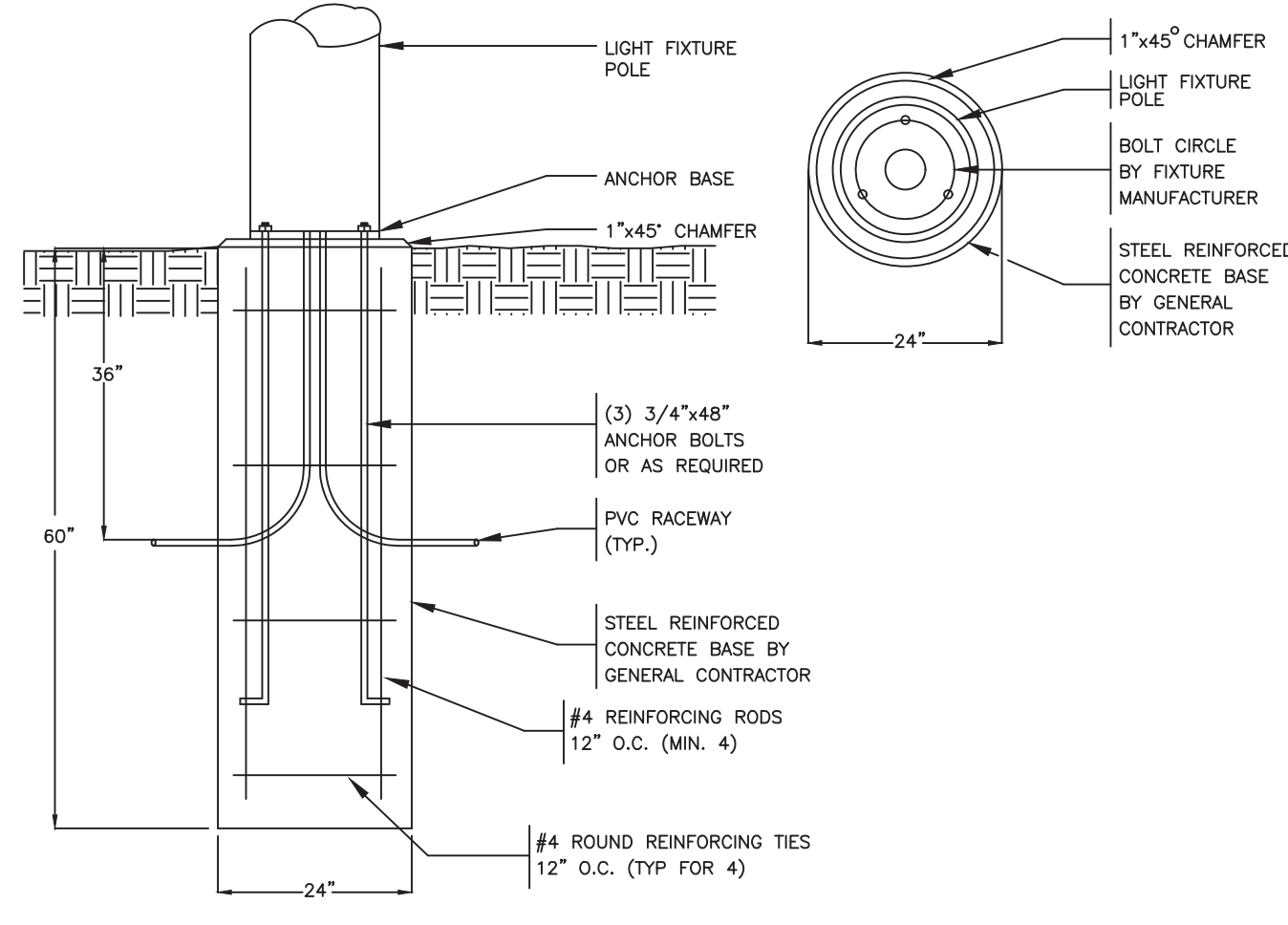
Mounting
May be mounted up or down
Requires 4" Octagon J-box

Electrical
ETL Wet location listed.
LED 90+ CRI
Driver located in J-box.
Dims with 0-10V, Triac and ELV dimmers

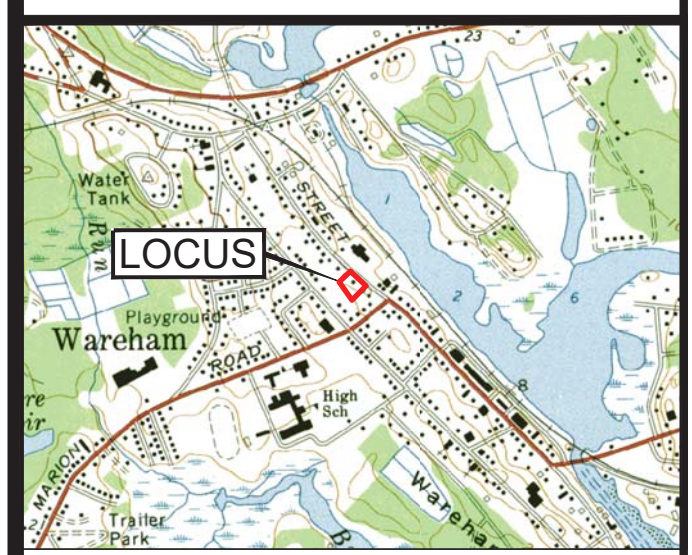
ORDERING LOGIC Use matrix below to order complete fixture

Fixture	Lamping	Voltage	Color Temp	Optics	Finish
AWL.18	11w LED series	UNV	2700k 3000k 3500k 4000k	N-24deg N-36deg W-47deg	Aluminum Bronze Black

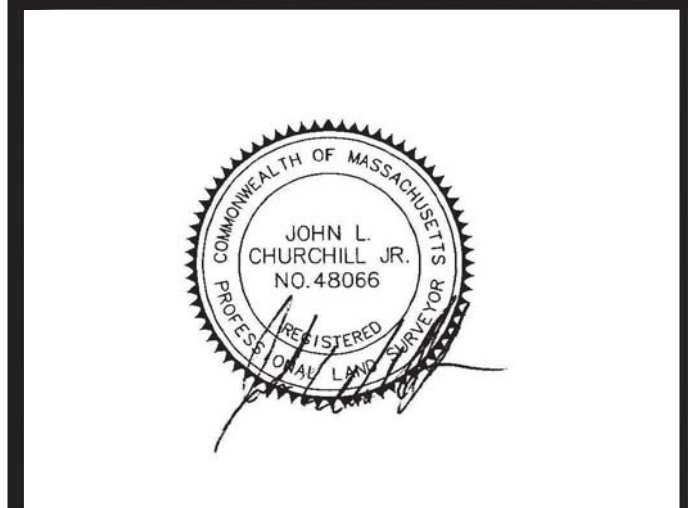
LumenArt, Ltd. 3333 W. 47th St., Chicago, IL 60632
Phone 773-254-0744 Fax 773-254-0767 www.lumenart.com



POLE BASE DETAIL FOR LIGHT FIXTURE
SCALE: N.T.S.



LOCUS MAP
SCALE 1" = 2000'



JOHN L. CHURCHILL JR., P.L.S. DATE



JOHN L. CHURCHILL JR., P.E. DATE

PROPOSED SITE PLAN

AT
386 MAIN STREET
IN
WAREHAM
MASSACHUSETTS
(PLYMOUTH COUNTY)

LIGHTING PLAN

REVISIONS:

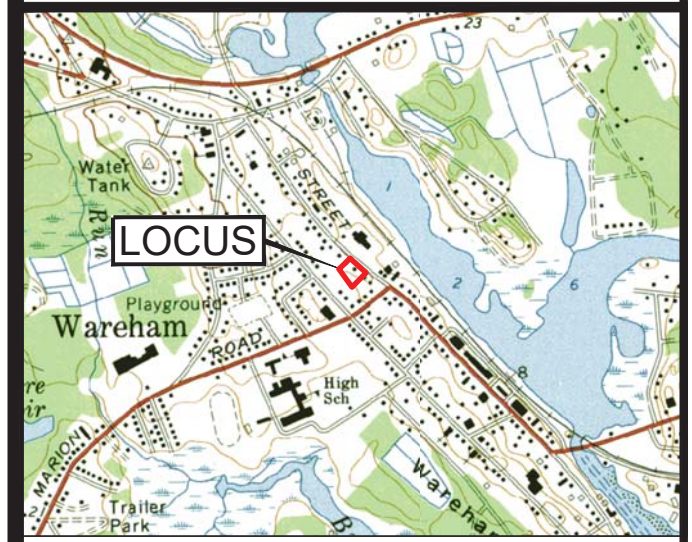
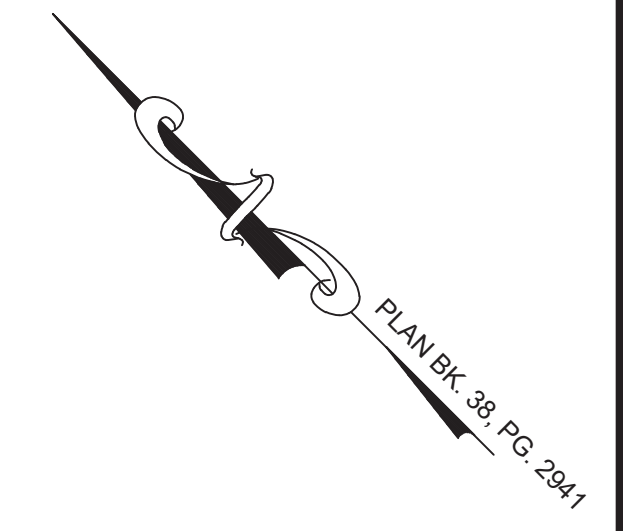
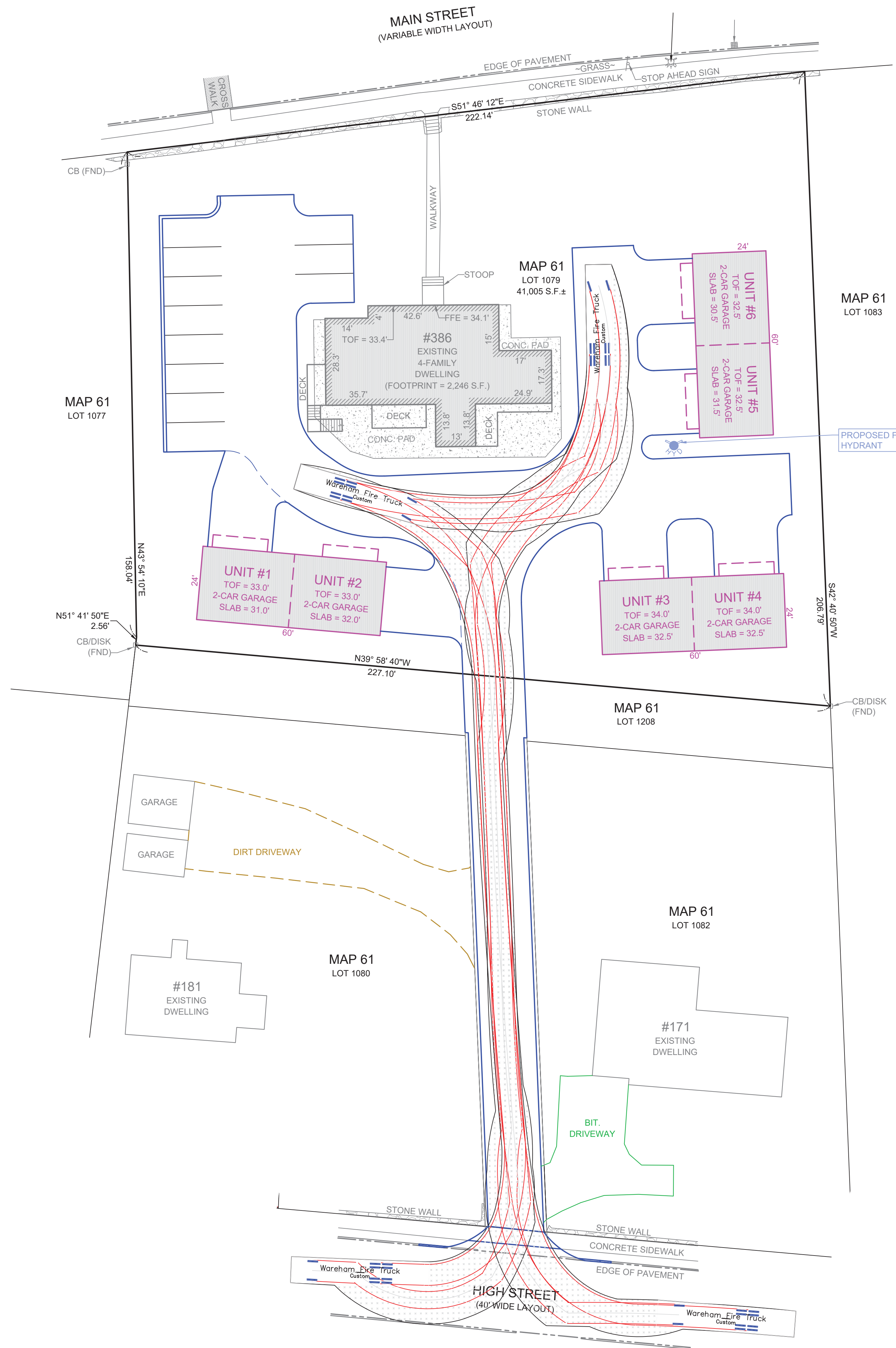
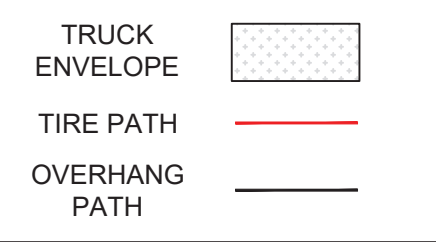
No.	DATE	DESC.
1	7-11-23	MEETING COMMENTS
2	7-25-23	MEETING COMMENTS
3	8-7-23	SITE PLAN REVIEW
4	9-13-23	PEER REVIEW COMMENTS
5	9-25-23	MEETING COMMENTS

PREPARED FOR:
ANGELA MCKEOWN
484 LIBERTY STREET
ROCKLAND, MA 02370

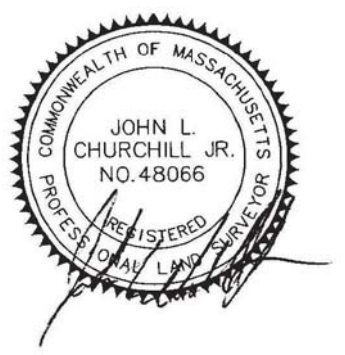
PREPARED BY:
JC ENGINEERING, INC
2854 CRANBERRY HIGHWAY
EAST WAREHAM, MA 02538
508-273-0377

DATE:	MARCH 21, 2023
FIELD:	BM/JF
CALC./DESIGN:	S/JI
DRAWN:	S/JI
CHECK:	JLC
JOB NO:	6028

LEGEND



LOCUS MAP
SCALE 1" = 2000'



JOHN L. CHURCHILL JR., P.L.S. DATE



JOHN L. CHURCHILL JR., P.E. DATE

PROPOSED SITE PLAN
AT
386 MAIN STREET
IN
WAREHAM MASSACHUSETTS
(PLYMOUTH COUNTY)
EMERGENCY ACCESS PLAN

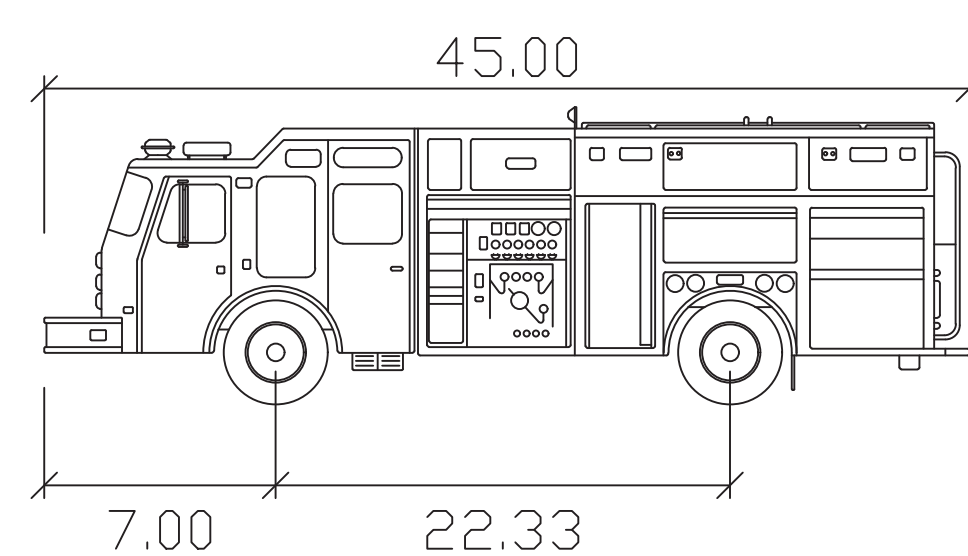
REVISIONS:

No.	DATE	DESC.
1	7-11-23	MEETING COMMENTS
2	7-25-23	MEETING COMMENTS
3	8-7-23	SITE PLAN REVIEW
4	9-13-23	PEER REVIEW COMMENTS
5	9-25-23	MEETING COMMENTS

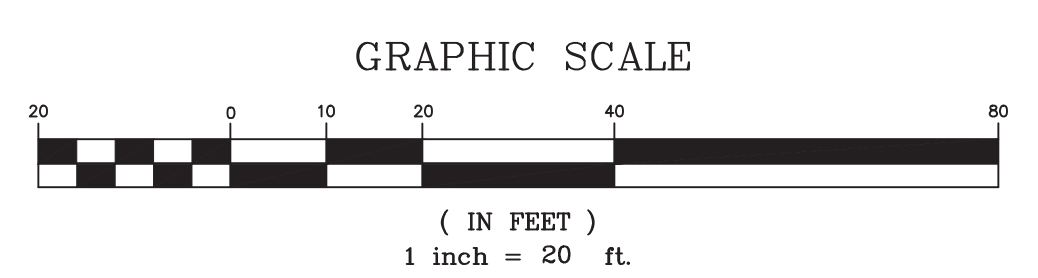
PREPARED FOR:
ANGELA MCKEOWN
484 LIBERTY STREET
ROCKLAND, MA 02370

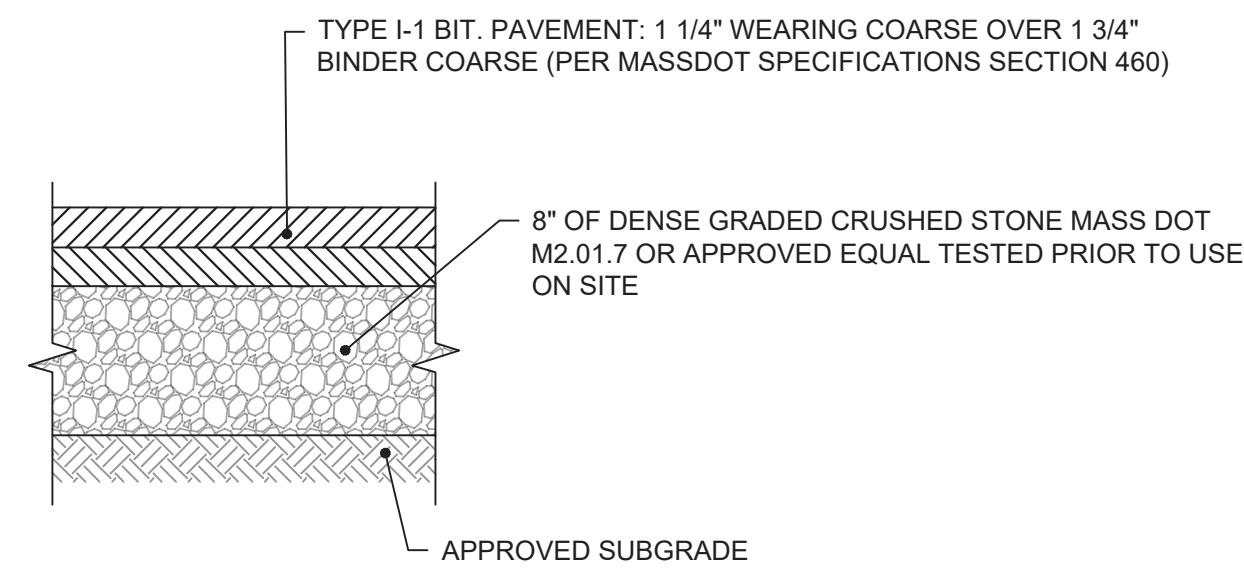
PREPARED BY:
JC ENGINEERING, INC
2854 CRANBERRY HIGHWAY
EAST WAREHAM, MA 02538
508-273-0377

DATE:	MARCH 21, 2023
FIELD:	BM/JF
CALC./DESIGN:	SJI
DRAWN:	SJI
CHECK:	JLC
JOB NO:	6028



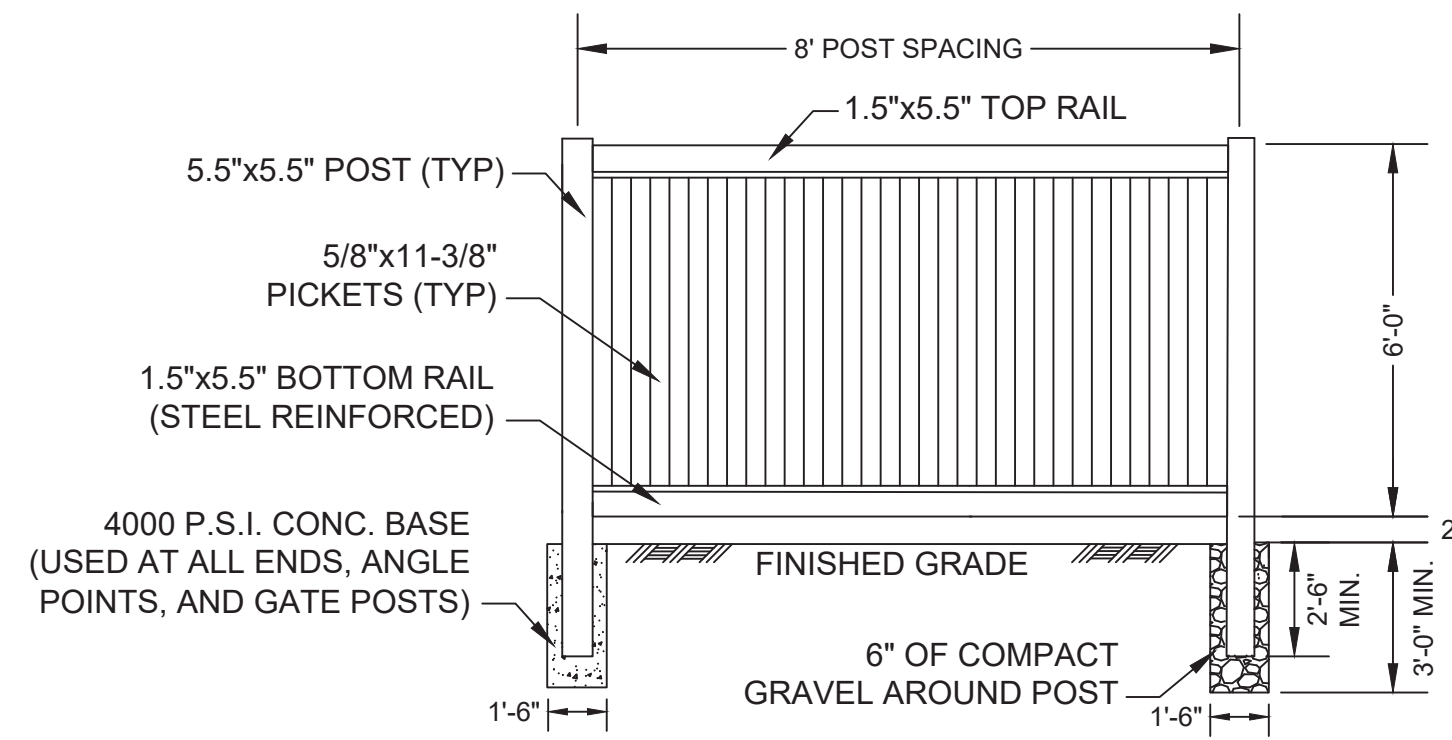
Wareham Fire Truck	feet
Width	: 8.50
Track	: 6.83
Lock to Lock Time	: 6.0
Steering Angle	: 40.0



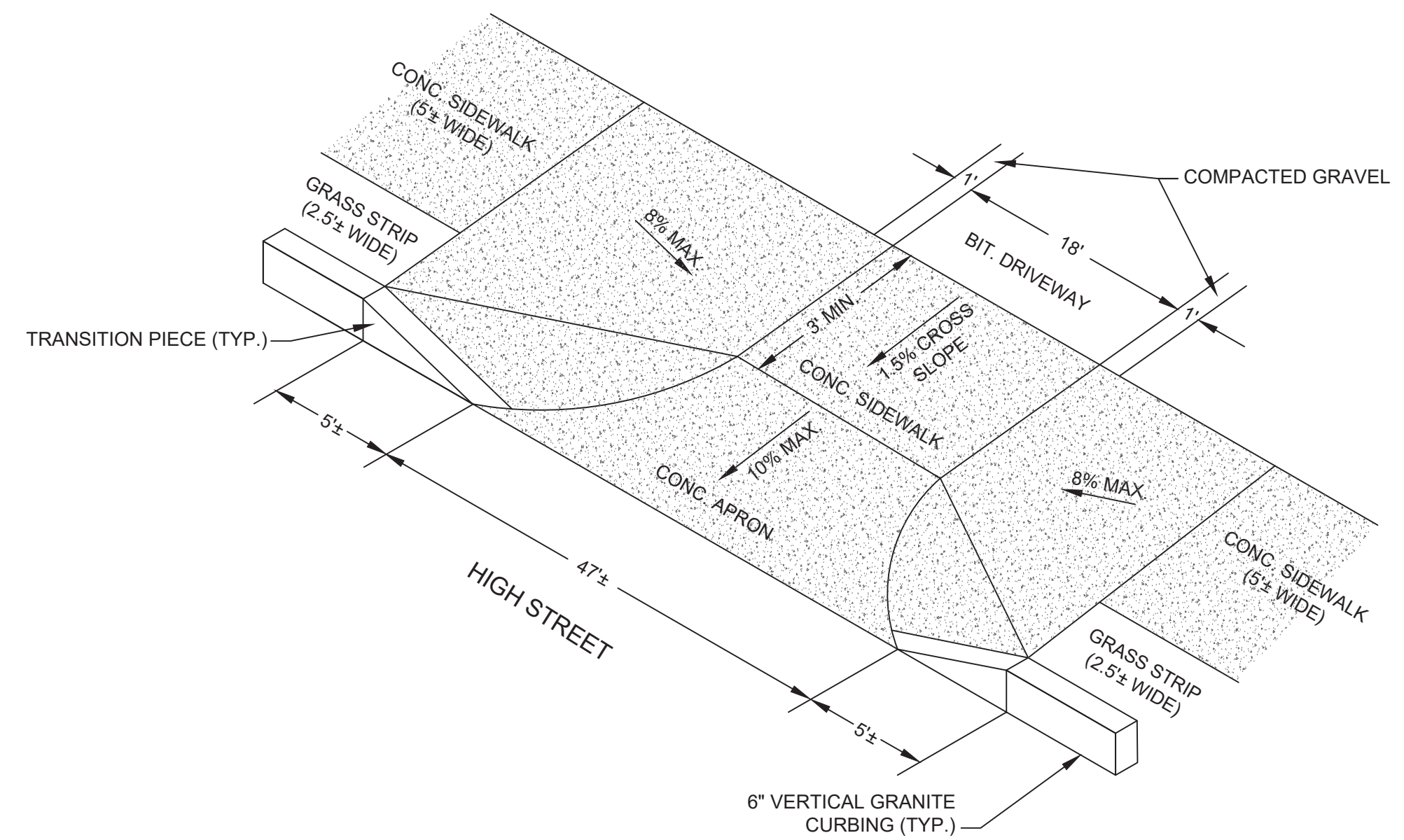


PAVEMENT NOTES:
 1. SUBGRADE MATERIAL SHALL CONSIST OF INERT MATERIAL THAT IS HARD, DURABLE STONE AND/OR COARSE SAND, FREE FROM LOAM AND CLAY TO A DEPTH NOT LESS THAN 4-FT BELOW FINISHED GRADE ELEVATION. ALL UNSUITABLE MATERIAL SHALL BE EXCAVATED AND REMOVED PRIOR TO SUBGRADE INSTALLATION.
 2. SUBGRADE SHALL BE PLACED IN MAXIMUM 8" LIFTS (COMPACTED TO 95%)
 3. REFER TO SITE PLAN FOR EXTENTS OF BIT. PAVEMENT.
 4. THE INSTALLED BINDER COARSE SHALL BE SWEEP CLEAN PRIOR TO THE INSTALLATION OF THE WEARING COARSE BY A MECHANICAL SWEEPER. TACK COAT SHALL BE APPLIED PER THE SPECIFICATIONS.

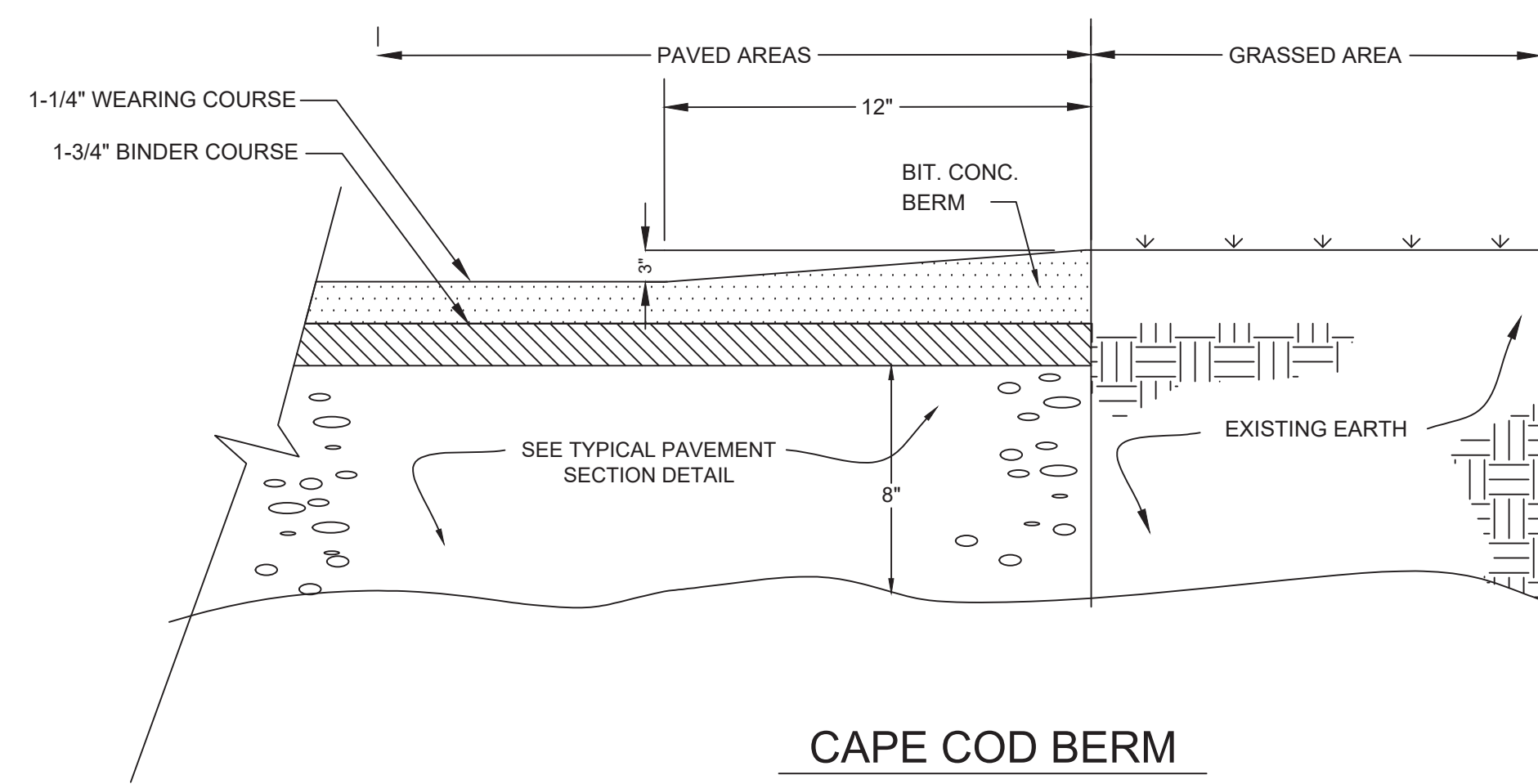
TYPICAL PAVEMENT SECTION
NOT TO SCALE



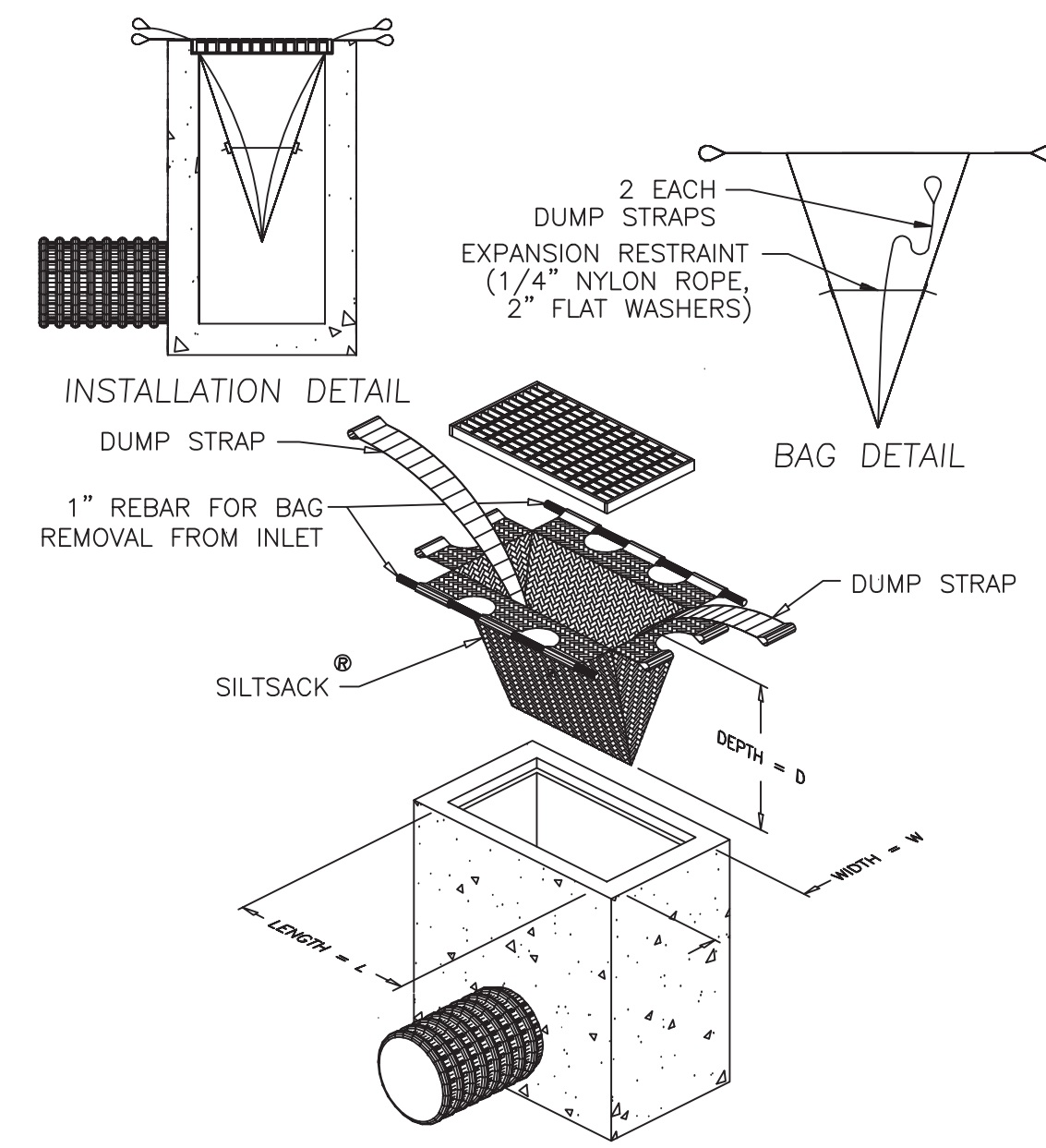
PRIVACY VINYL FENCE DETAIL
NOT TO SCALE



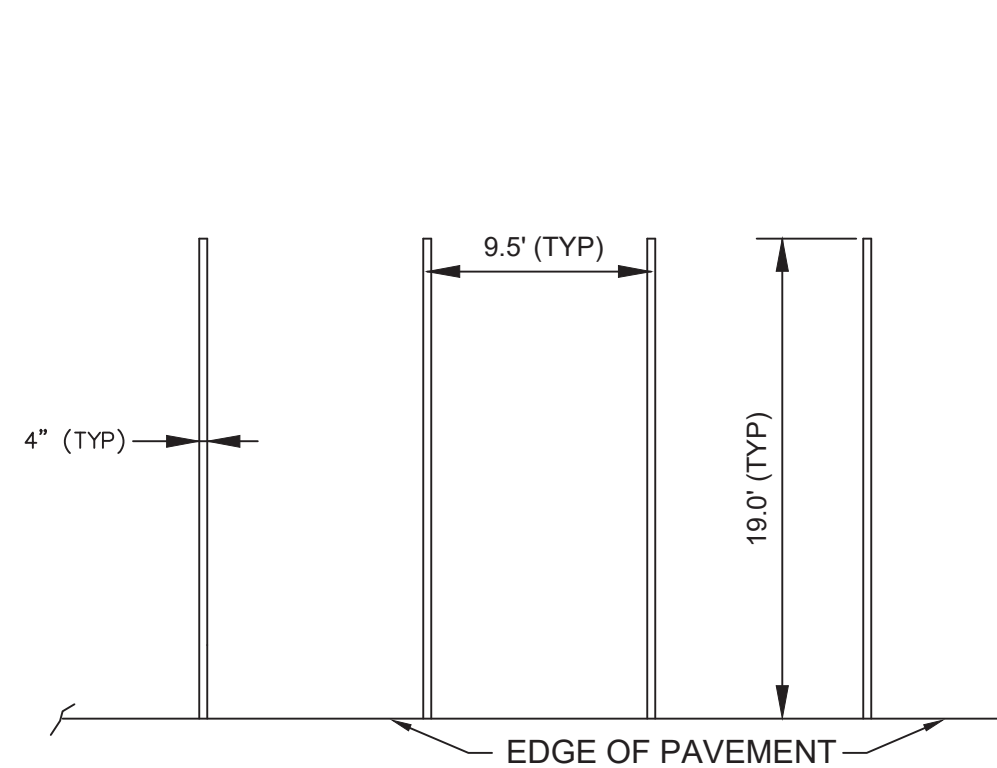
DRIVEWAY ENTRANCE
NOT TO SCALE



CAPE COD BERM
NOT TO SCALE

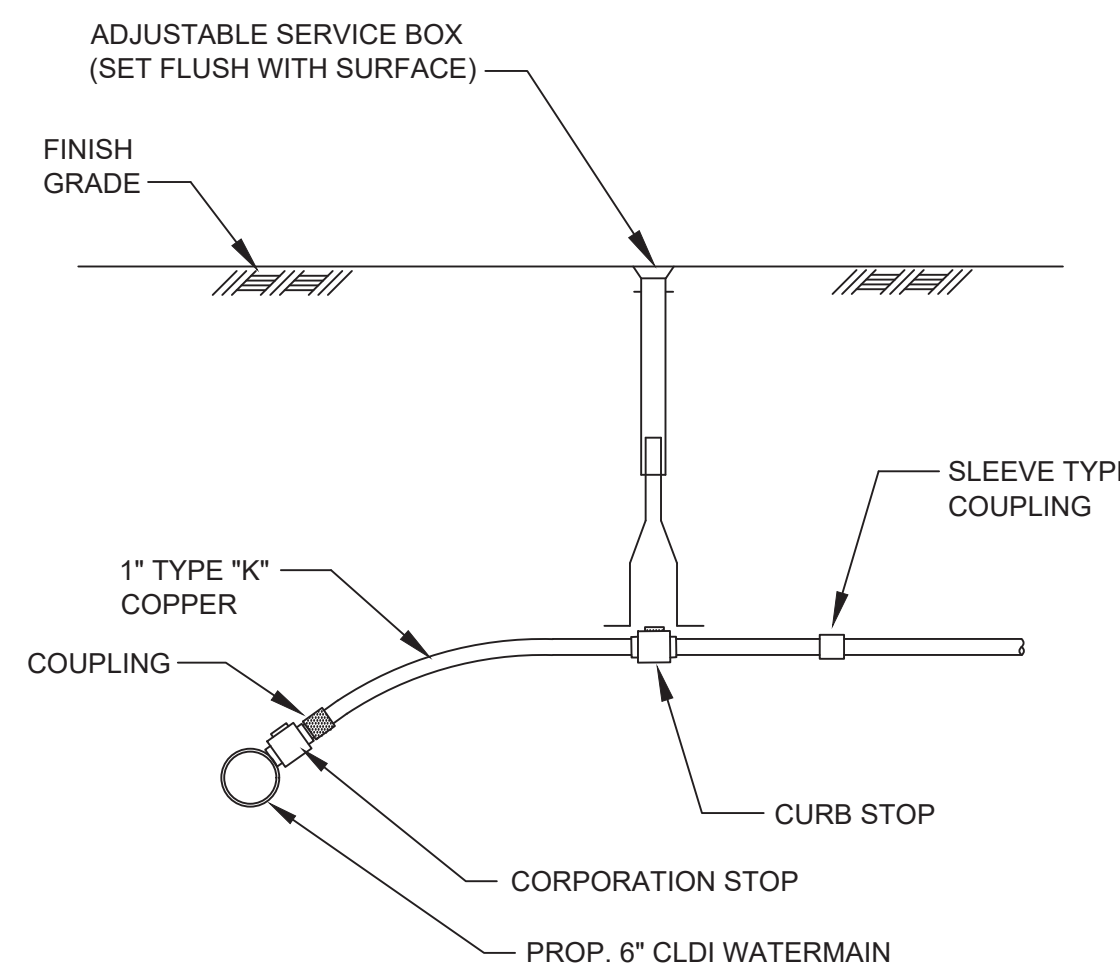


DETAIL OF SILT SACK SEDIMENT CONTROL DEVICE
NOT TO SCALE

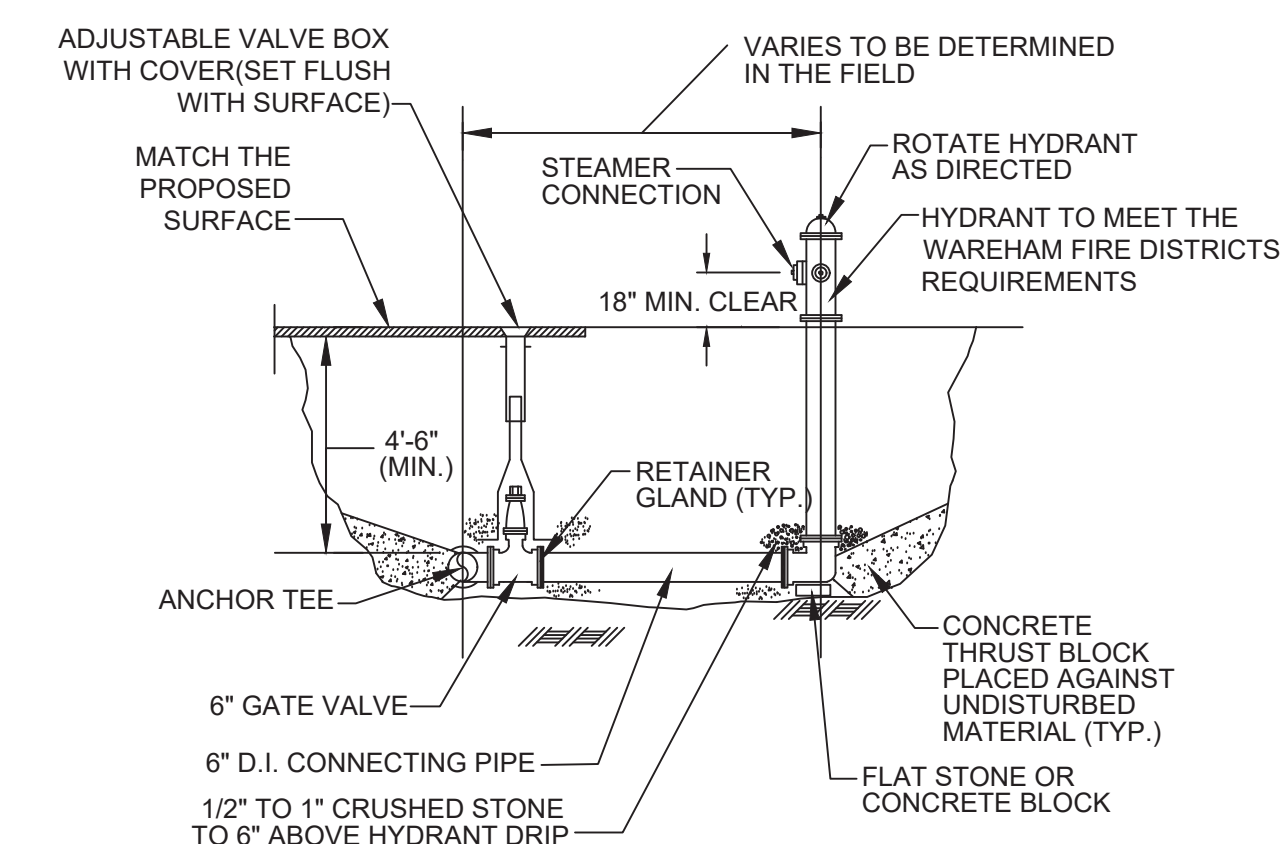


NOTES:
 (1) STRIPING SHALL BE 4" WIDE STRAIGHT LINES OF WHITE TRAFFIC PAINT, TO BE INSTALLED AS SHOWN ON LAYOUT AND PARKING PLAN.
 (2) DIMENSIONS AS SHOWN APPLY ONLY TO OUTDOOR SURFACE PARKING AREAS ONLY.

TYPICAL STRIPING DETAIL
NOT TO SCALE

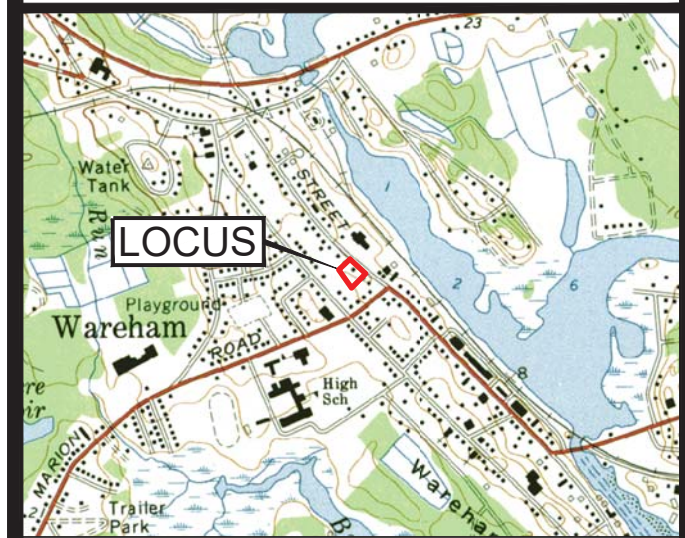


WATER SERVICE CONNECTION
NOT TO SCALE



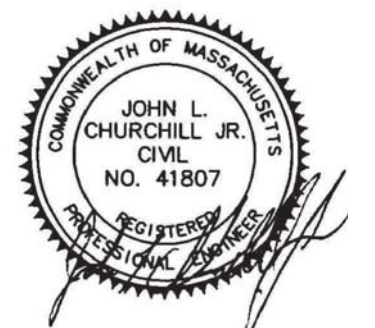
NOTE: DEPTH OF HYDRANT BURY TO SUIT INSTALLED DEPTH OF COVER OVER WATERMAIN.

HYDRANT ASSEMBLY DETAIL
NOT TO SCALE



LOCUS MAP
SCALE 1" = 2000'

JOHN L. CHURCHILL JR., P.L.S. DATE



JOHN L. CHURCHILL JR., P.E. DATE

PROPOSED SITE PLAN
 AT
386 MAIN STREET
 IN
WAREHAM
MASSACHUSETTS
 (PLYMOUTH COUNTY)
DETAIL

REVISIONS:

No.	DATE	DESC.
1	6-28-23	MEETING COMMENTS
2	7-25-23	MEETING COMMENTS
3	8-7-23	SITE PLAN REVIEW
4	9-13-23	PEER REVIEW COMMENTS
5	9-25-23	MEETING COMMENTS

PREPARED FOR:
ANGELA MCKEOWN
 484 LIBERTY STREET
 ROCKLAND, MA 02370

PREPARED BY:
JC ENGINEERING, INC
 2854 CRANBERRY HIGHWAY
 EAST WAREHAM, MA 02538
 508-273-0377

DATE: MARCH 21, 2023

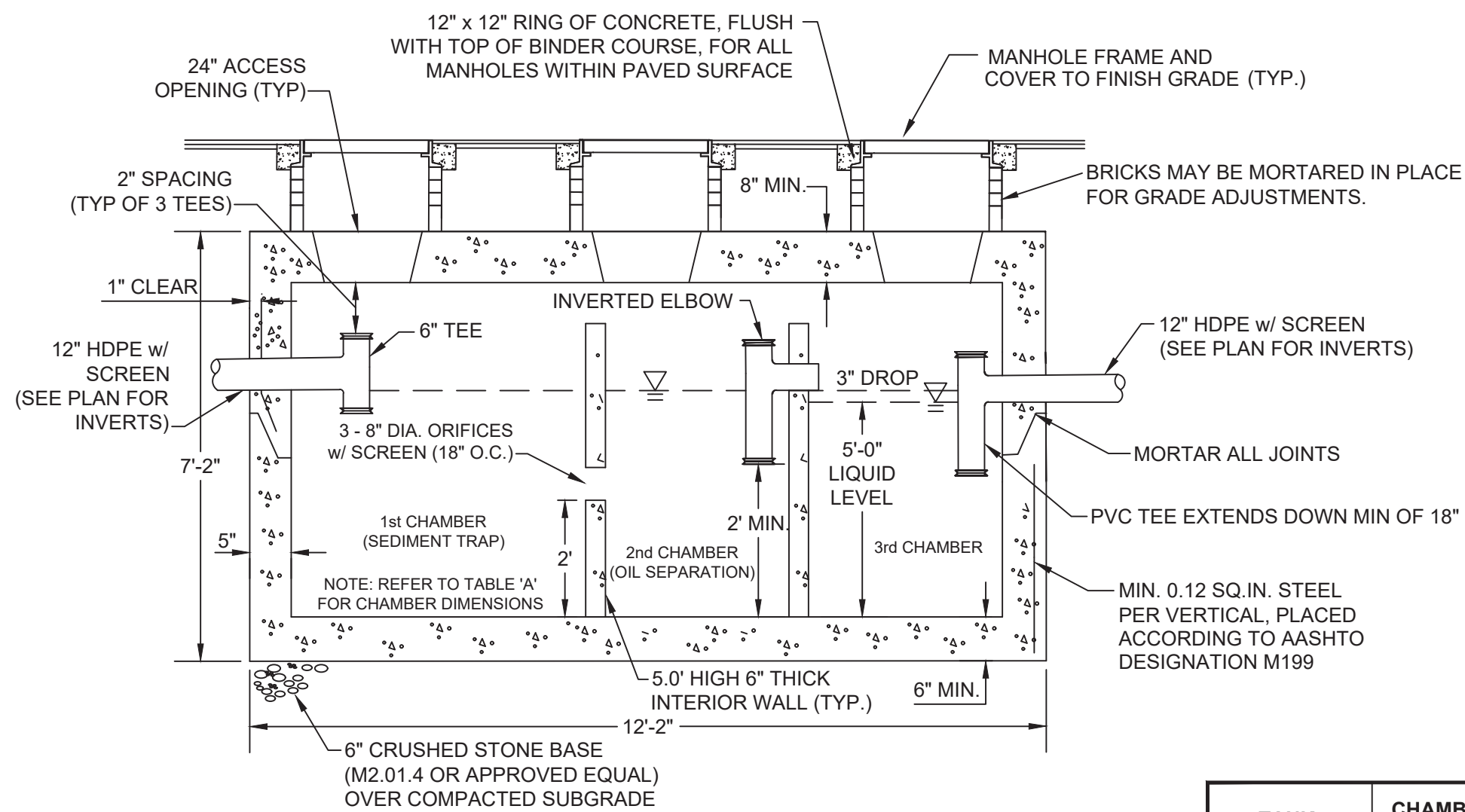
FIELD: BM/JF

CALC./DESIGN: SJI

DRAWN: SJI

CHECK: JLC

JOB NO: 6028

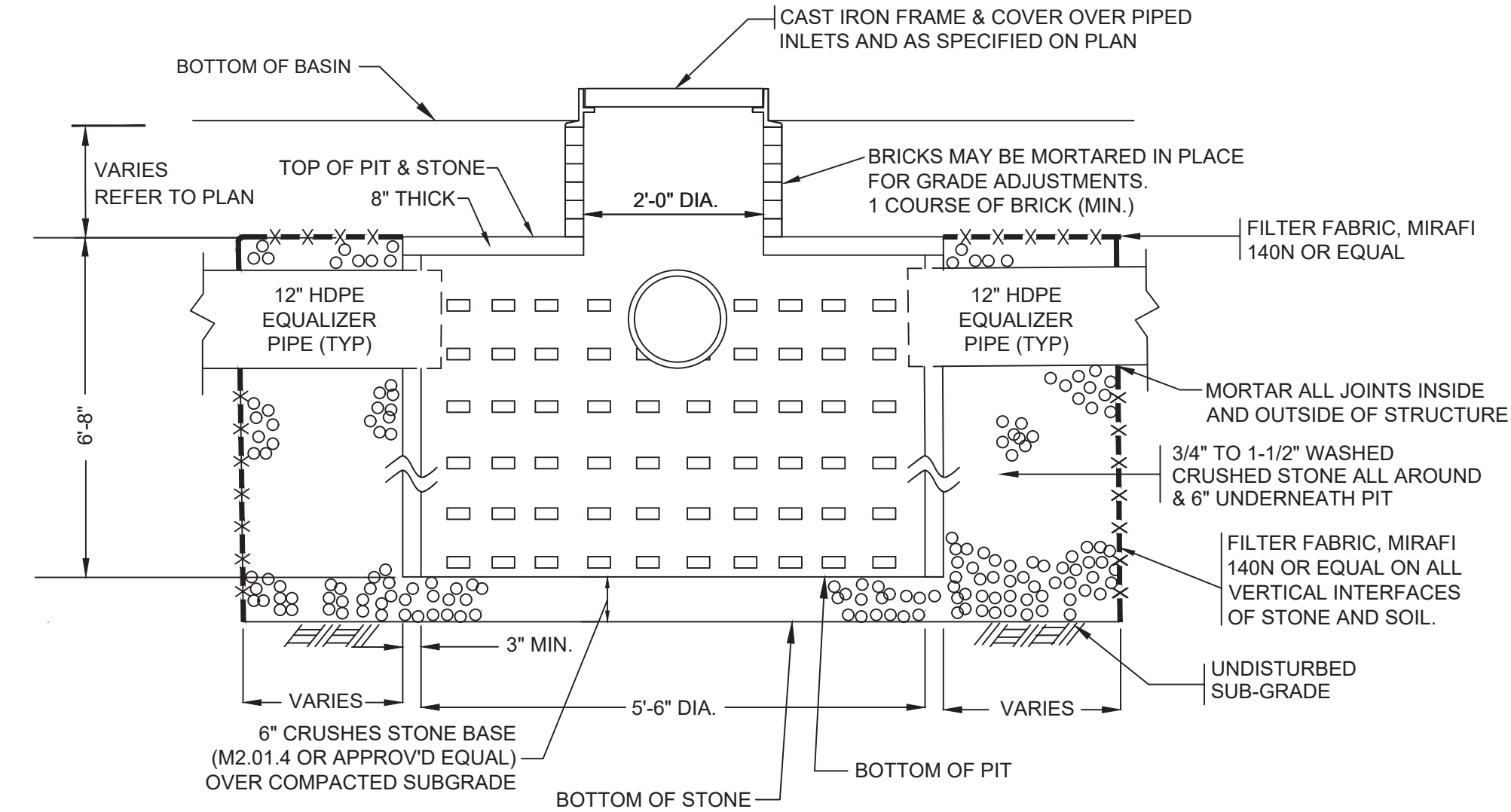


2,500 GALLON OIL / GRIT SEPARATOR TANK (H-20)

2,500 GALLON TANK = INSIDE DIMS: LENGTH = 11'-4" WIDTH = 5'-10" DEPTH = 5'-0"
 1,500 GALLON TANK = INSIDE DIMS: LENGTH = 9'-10" WIDTH = 5'-0" DEPTH = 4'-0"
 NOT TO SCALE

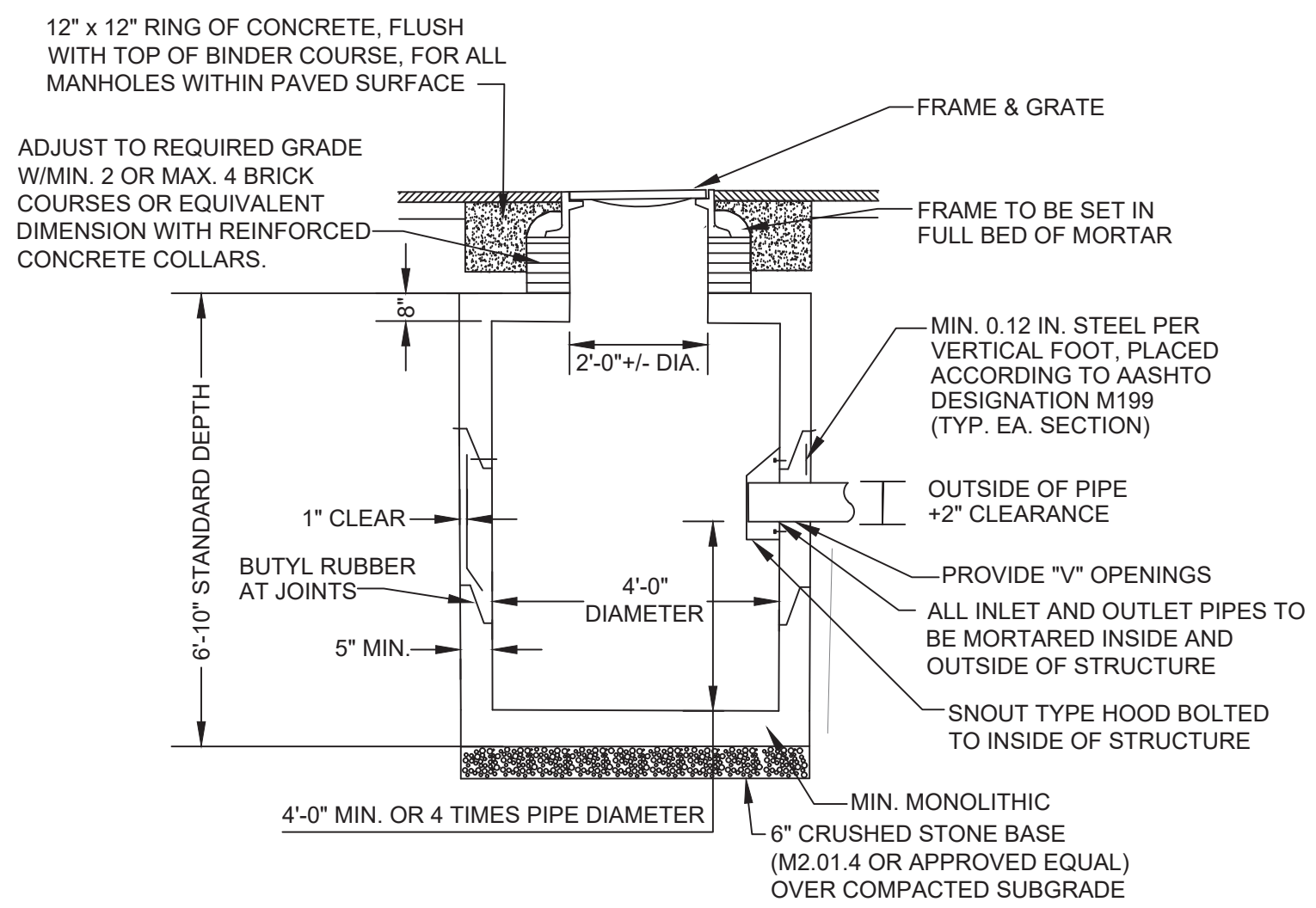
TABLE A

TANK	CHAMBER #1 LENGTH	CHAMBER #2 LENGTH	CHAMBER #3 LENGTH
2,500 GALLON	5.25'	2.54'	2.54'
1,500 GALLON	3.00'	2.92'	2.92'



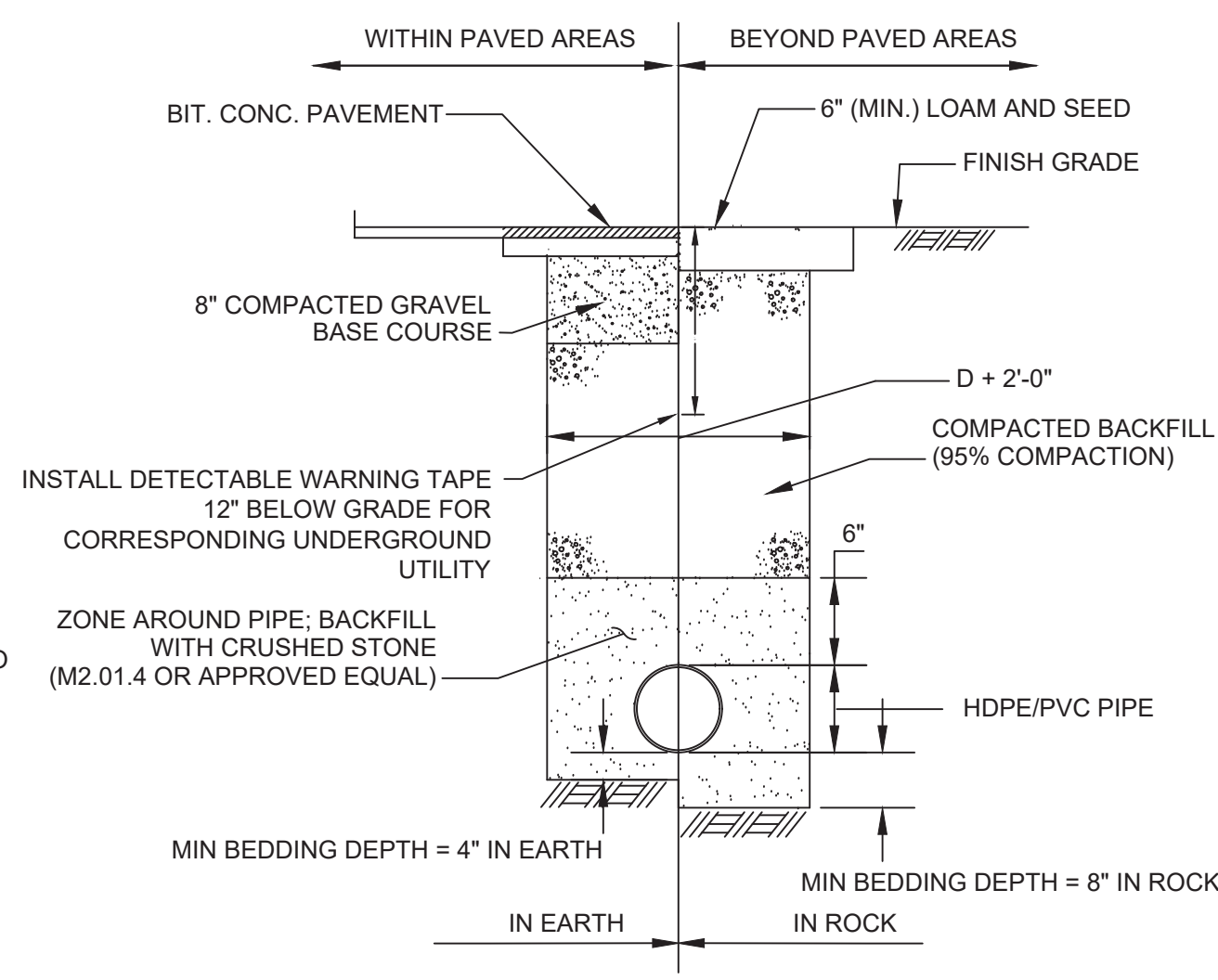
PRECAST CONCRETE 1000 GALLON H-20 LEACHING PIT IN FIELD CONFIGURATION (REFER TO PLAN)

NOT TO SCALE



PRECAST CONCRETE CATCH BASIN (H-20)

NOT TO SCALE



TRENCH DETAIL

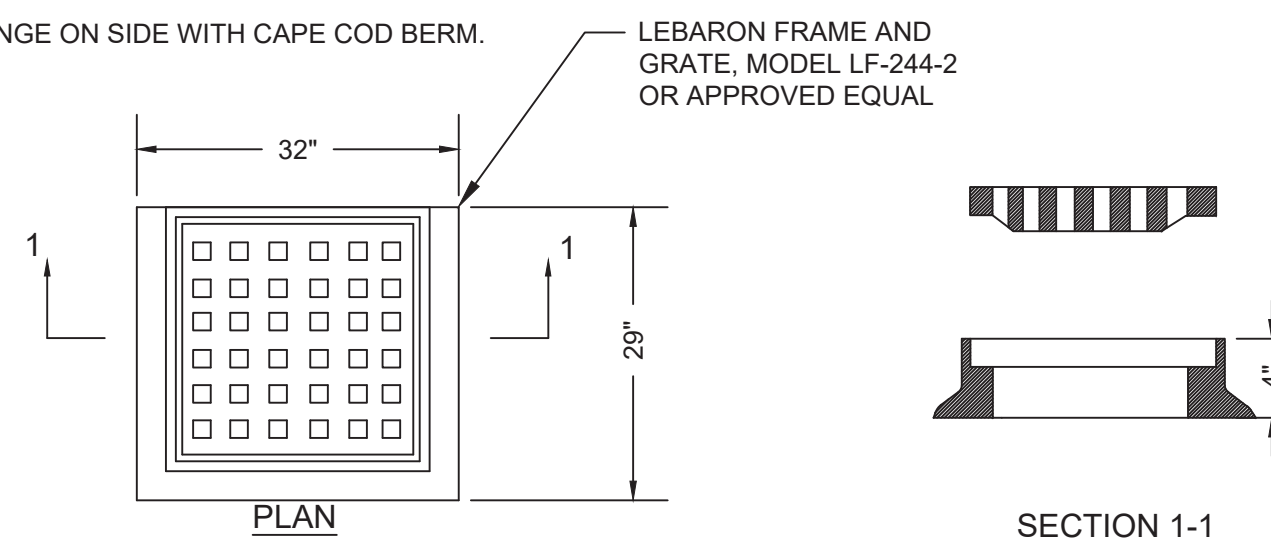
NOT TO SCALE

NOTES:

- 1.) FILTER FABRIC SHALL BE INSPECTED EVERY DAY DURING CONSTRUCTION TO ENSURE INTEGRITY OF FABRIC IS INTACT AND NO SEDIMENTATION IS COLLECTED IN CATCH-BASINS.
- 2.) CONTRACTOR SHALL REMOVE AND REPLACE FILTER FABRIC AT ANY TIME DETERIORATION IS OBSERVED.

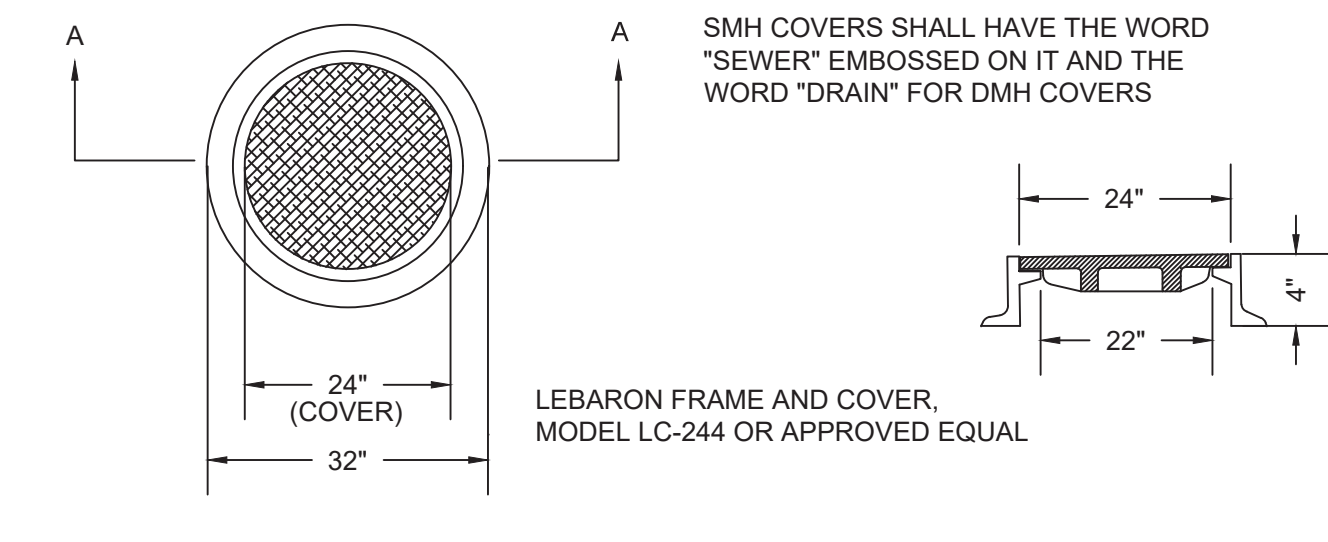
NOTE:

- 1.) 4 FLANGE ON SIDE WITH CAPE COD BERM.



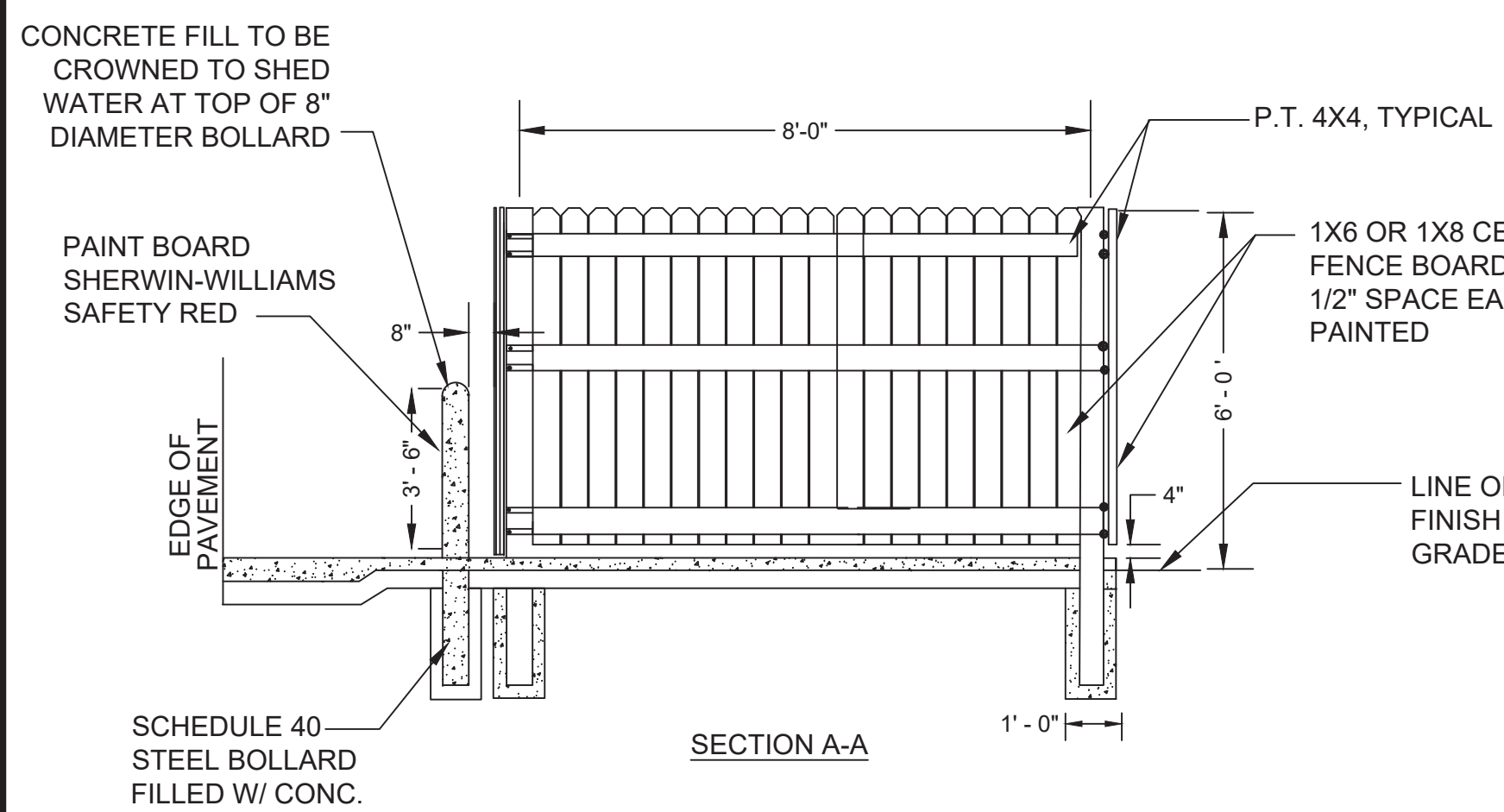
CATCH BASIN FRAME & GRATE (H-20)

NOT TO SCALE



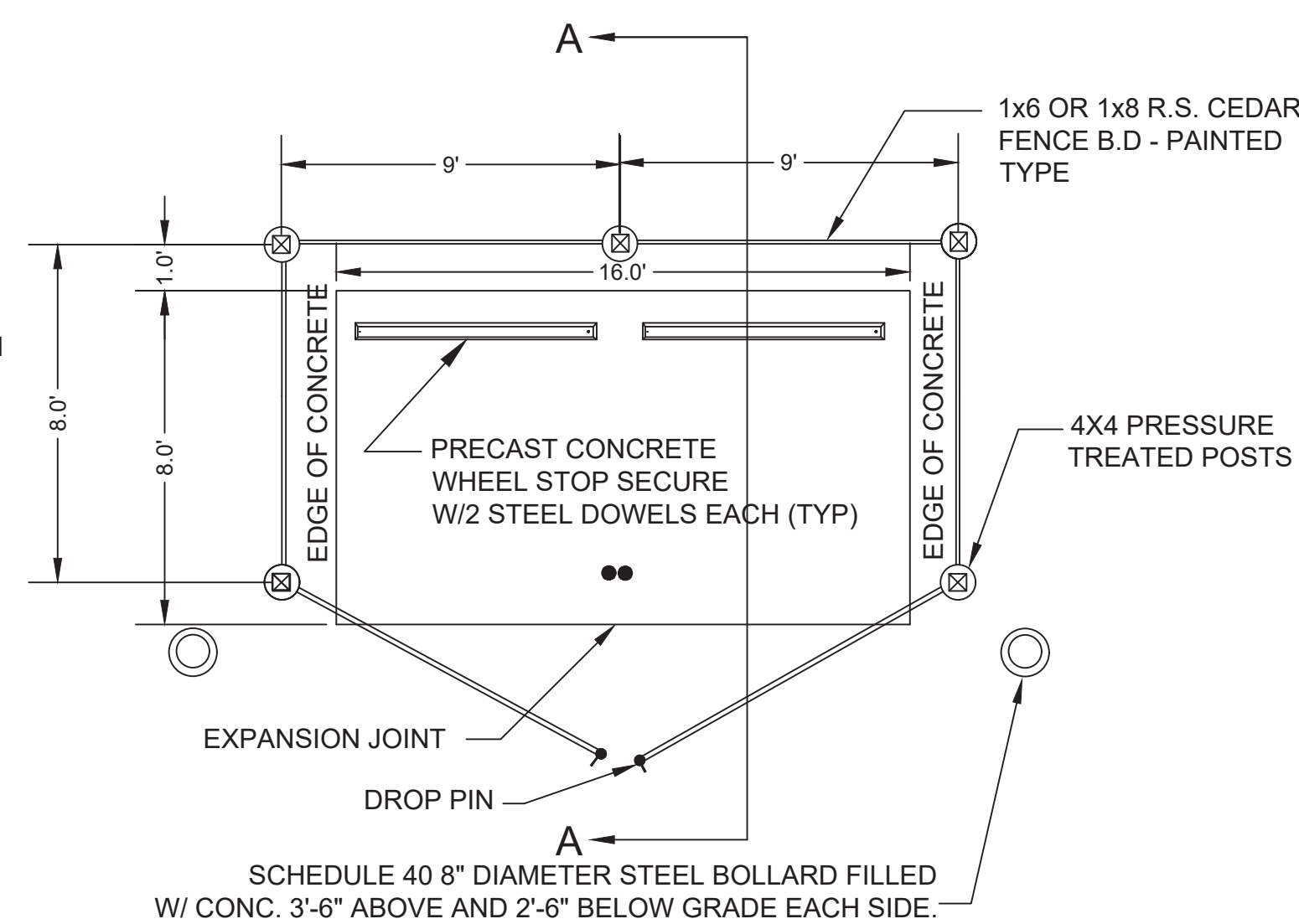
STANDARD MANHOLE FRAME & COVER (H-20)

NOT TO SCALE



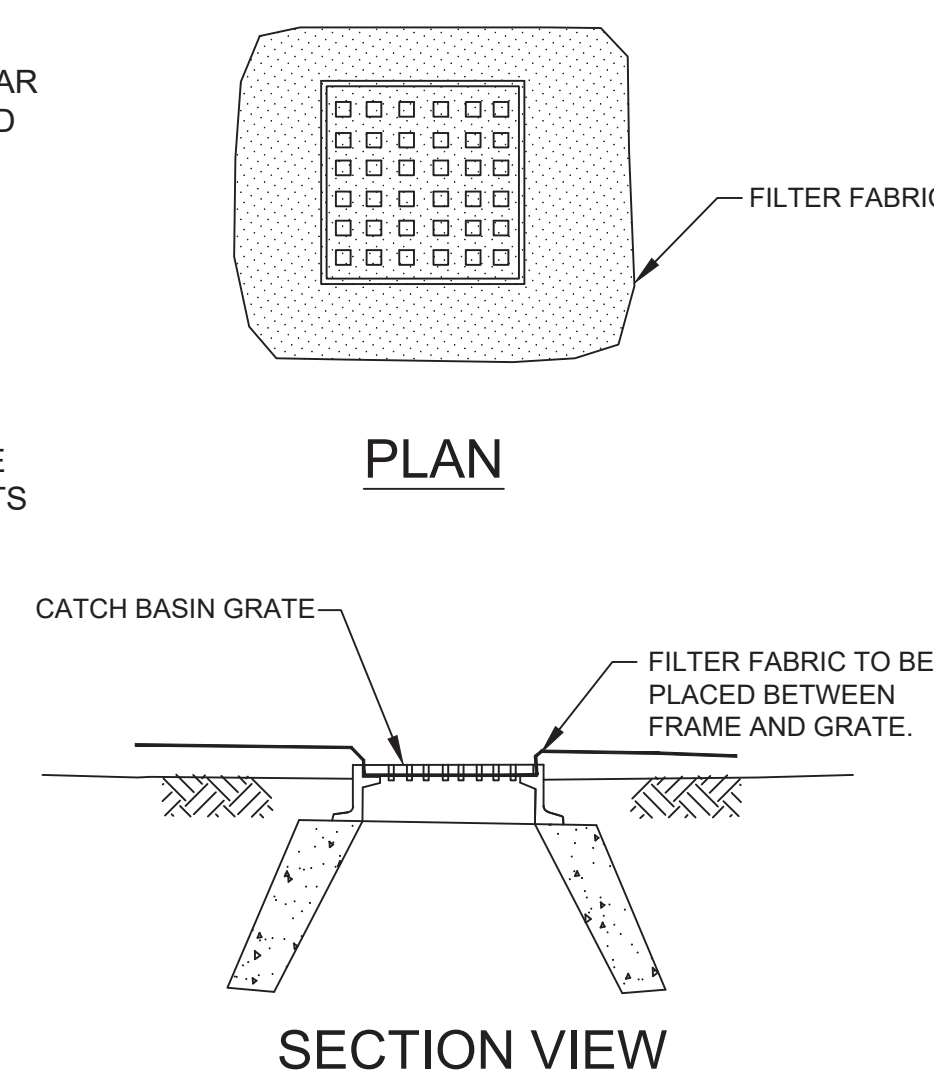
WOOD FENCE, BOLLARD, & PAD DETAIL AT DUMPSTER ENCLOSURE

NOT TO SCALE

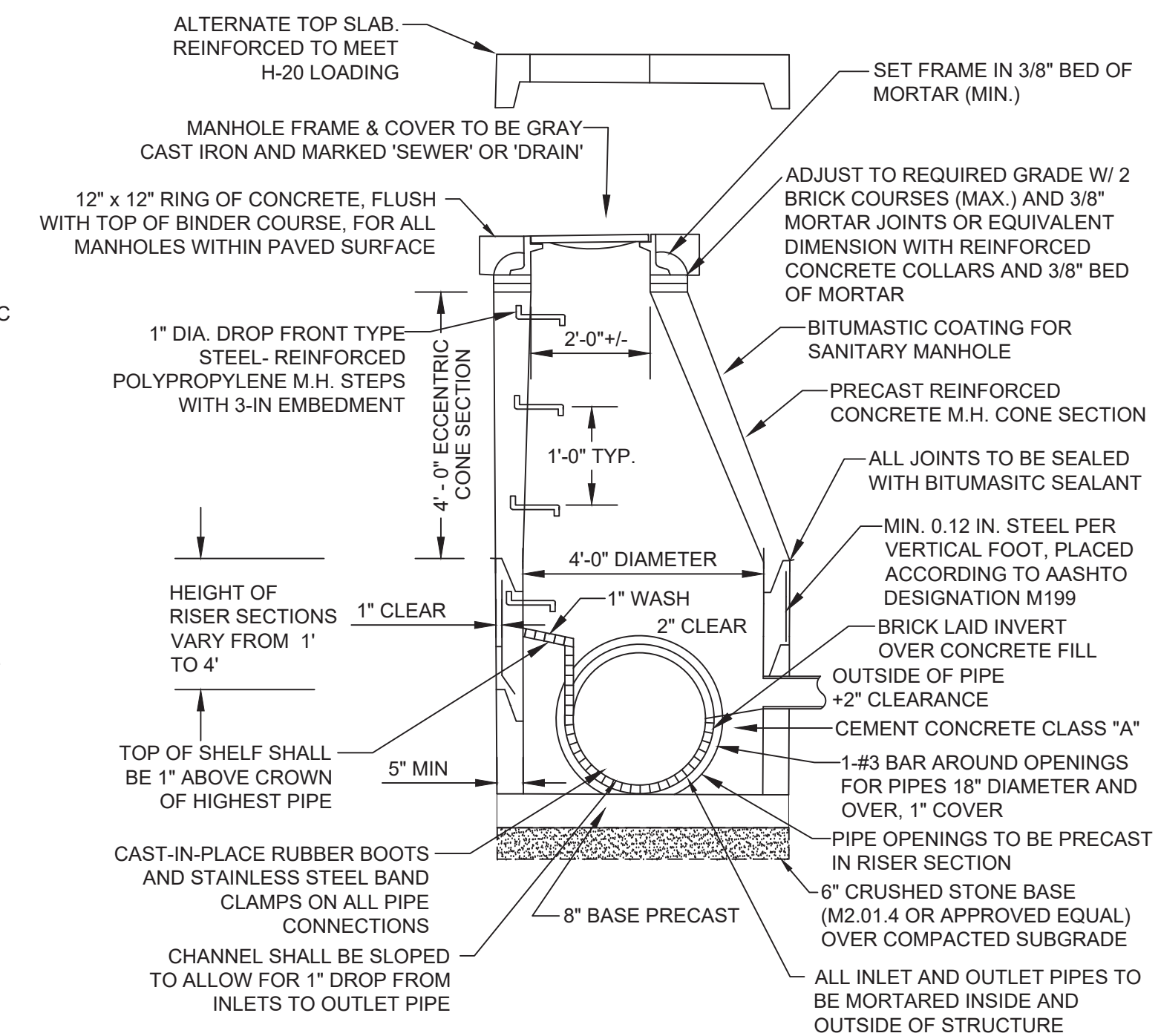


EROSION CONTROL DURING CONSTRUCTION

NOT TO SCALE

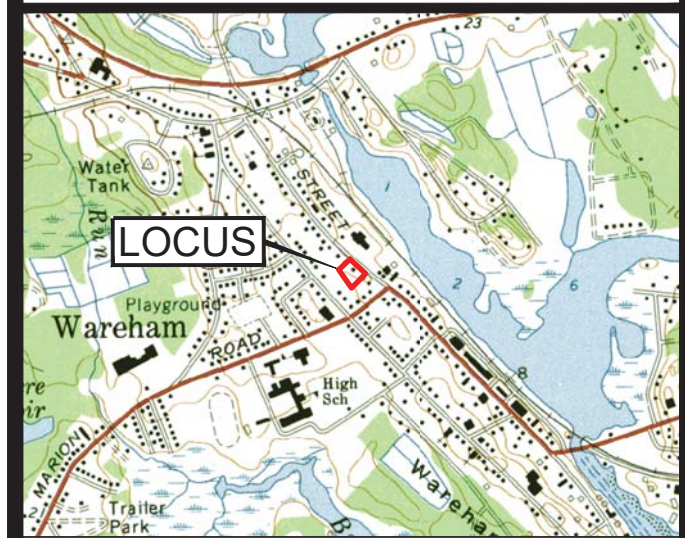


SECTION VIEW



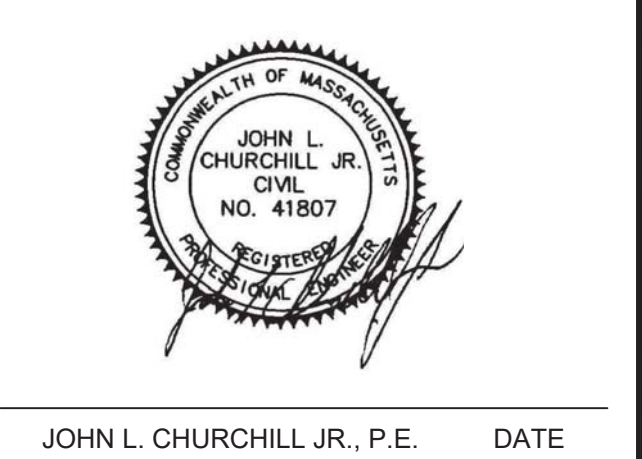
PRECAST CONCRETE MANHOLE (H-20)

NOT TO SCALE



LOCUS MAP
SCALE 1" = 2000'

JOHN L. CHURCHILL JR., P.L.S. DATE



JOHN L. CHURCHILL JR., P.E. DATE

PROPOSED SITE PLAN

AT
386 MAIN STREET
 IN
WAREHAM MASSACHUSETTS
 (PLYMOUTH COUNTY)

DETAIL

REVISIONS:

No.	DATE	DESC.
1	6-28-23	MEETING COMMENTS
2	7-25-23	MEETING COMMENTS
3	8-7-23	SITE PLAN REVIEW
4	9-13-23	PEER REVIEW COMMENTS
5	9-25-23	MEETING COMMENTS

PREPARED FOR:

ANGELA MCKEOWN
 484 LIBERTY STREET
 ROCKLAND, MA 02370

PREPARED BY:

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 2854 CRANBERRY HIGHWAY
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DATE: MARCH 21, 2023

FIELD: BM/JF

CALC./DESIGN: SJI

DRAWN: SJI

CHECK: JLC

JOB NO: 6028