

VILLAGE GREEN

RESIDENTIAL DEVELOPMENT

M.G.L. C. 40B COMPREHENSIVE PERMIT PROJECT

76 ROUTE 130 & 55 PIMLICO POND RD

SANDWICH, MASSACHUSETTS

MAY 10, 2024

INDEX	
SHEET	DESCRIPTION
C1.1	COVER AND INDEX
C1.2	KEY PLAN
C2.1-2.4	EXISTING CONDITIONS PLAN
C3.1-3.4	SITE LAYOUT PLAN
C4.1-4.4	GRADING & DRAINAGE PLAN
C5.1-5.4	UTILITY PLAN
C6.1-6.4	LANDSCAPE PLAN
C7.1-7.6	CONSTRUCTION DETAILS

M.G.L.c. 40A § 3, Note:
SUBJECTS WHICH ZONING MAY NOT REGULATE; EXEMPTIONS; PUBLIC HEARINGS;
TEMPORARY MANUFACTURED HOME RESIDENCES.

PARAGRAPH 9:
NO ZONING ORDINANCE OR BY-LAW SHALL PROHIBIT OR UNREASONABLY REGULATE
THE INSTALLATION OF SOLAR ENERGY SYSTEMS OR THE BUILDING OF STRUCTURES
THAT FACILITATE THE COLLECTION OF SOLAR ENERGY, EXCEPT WHERE NECESSARY
TO PROTECT THE PUBLIC HEALTH, SAFETY OR WELFARE.



VICINITY MAP

SCALE: 1"=250'

250 0 250 500 750

SCALE IN FEET

APPLICANT:
NSG VILLAGE GREEN-1, LLC
897 MAIN STREET, ROUTE 28
SOUTH YARMOUTH, MA 02664

OWNER:
MAP #11-271 - #76 FALMOUTH ROAD (ROUTE 130)
ROUTE 130 LAND DEVELOPMENT, LLC
344 JOHN DIETSCH BOULEVARD, #4
NORTH ATTLEBORO, MA 02763

MAP #12-319 - #55 PIMLICO POND ROAD
RUHAN & STINSON REALTY TRUST
39 DISCOVERY HILL ROAD
EAST SANDWICH, MA 02537

OWNER LEGAL REPRESENTATIVE:
JONATHAN FITCH, ESQ.
88 ROUTE 6A
SANDWICH, MA 02563

CIVIL ENGINEER/SURVEYOR:
MERRILL ENGINEERS AND LAND SURVEYORS
427 COLUMBIA ROAD
HANOVER, MA 02339

ENERGY SYSTEM ENGINEERING:
CATALYZE-ACRE 55 PIMLICO POND RD MICROGRID, LLC
33 BOSTON POST ROAD, SUITE 220
MARLBOROUGH, MA 01752

MODULAR DESIGN ARCHITECT:
GRENNSTAXX
84 SHERMAN STREET
CAMBRIDGE, MA 02140

ARCHITECT:
BRUCE RONAYNE HAMILTON ARCHITECTS
833 TURNPIKE ROAD
NEW IPSWICH, NH 03071

DRAWING TITLE

COVER & INDEX PLAN
C1.1

PROJECT TITLE

VILLAGE GREEN
SITE DEVELOPMENT
PLAN

DATE	MAY 10, 2024
SCALE	1"=250'
DRAWN	TRT
REVISION	—

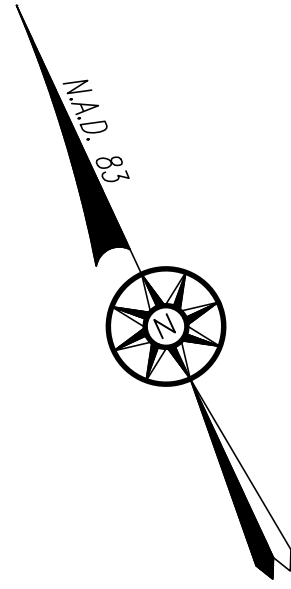
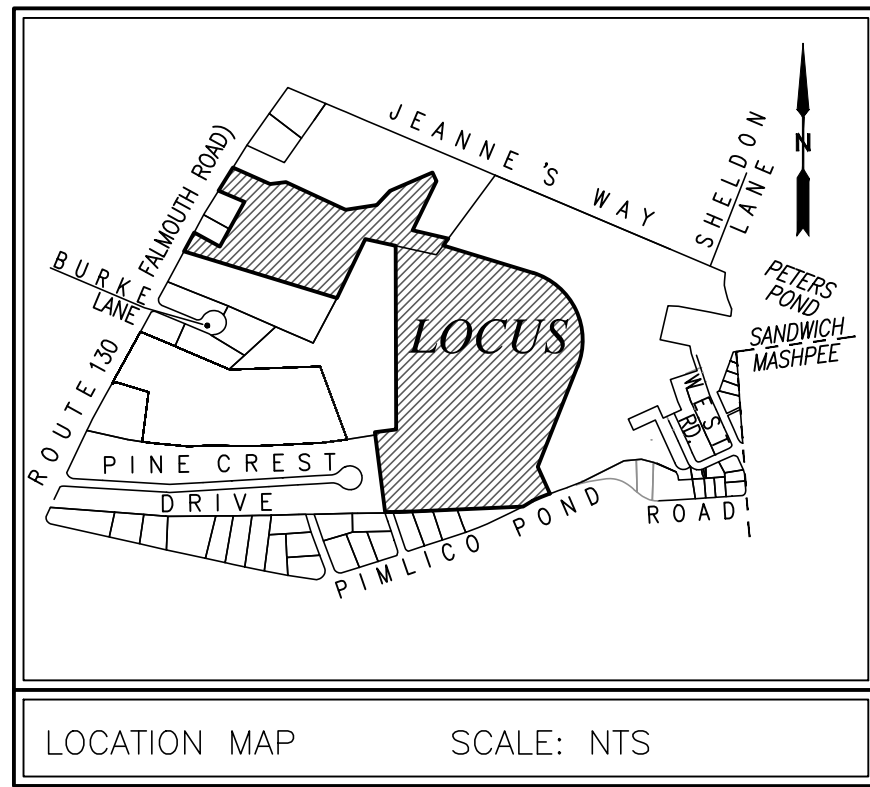
NSG VILLAGE GREEN - 1, LLC

76 ROUTE 130 &
55 PIMLICO POND ROAD
SANDWICH
BARNSTABLE COUNTY, MA



Merrill
Engineers and Land Surveyors
427 COLUMBIA ROAD, HANOVER, MA 02339 / T: (781) 826-9200
26 UNION STREET, PLYMOUTH MA 02360 / T: (508) 746-6060
WWW.MERRILLINC.COM

COPYRIGHT ©2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.



LEGEND

EXISTING

DESCRIPTION

PROPOSED

30	1' CONTOUR	30
+30.5	SPOT ELEVATION	+30.5
EDGE OF PAVEMENT	PROPERTY LINE	EOP
VGC	EDGE OF PAVEMENT	VGC
SGC	VERTICAL GRANITE CURB	SGC
CCB	SLOPE GRANITE CURB	CCB
EDGE OF GRAVEL	CAPE COD BERM	
BRICK WALKWAY	EDGE OF GRAVEL	
RET WALL	BRICK WALK	RET WALL
WATER LINE W	RETAINING WALL	
T&C TEL & CABLE	WATER LINE	W W
ETC TEL & CABLE		
ETC		
ELECTRIC LINE E	TELEPHONE & CABLE	T&C T&C
UNDERGROUND ELECTRIC LINE UEL	ELECTRIC & TELEPHONE CABLE	ETC ETC
OVERHEAD WIRE OHW		
OVERHEAD ELECTRIC OHE		
SEWER LINE S	ELECTRIC SERVICE	E E
D 12"RCP	UNDERGROUND ELECTRIC SERVICE	UEL UEL
EXIST STONEWALL	OVERHEAD WIRE	OHW OHW
100' WETLAND BUFFER	OVERHEAD ELECTRIC WIRE	OHE OHE
IBB5	SEWER LINE	S S
IBB6	DRAIN LINE	D D
WEA5	STONE WALL	
WEA6	FENCE	
	GUARDRAIL	
	100 FT WETLAND BUFFER	
	LIMIT OF INLAND BANK	
	LIMIT OF BORDERING VEGETATED WETLAND	

HYD	HYDRANT	HYD
WG	WATER GATE	WG
GG	GAS GATE	GG
GM	GAS METER	GM
EM	ELECTRICAL METER	EM
AREA LIGHT	LIGHT	AREA LIGHT
UP	UTILITY POLE	UP
GUY	GUY WIRE	
SEPTIC TANK	SEPTIC TANK	
SEWER MANHOLE	SEWER MANHOLE	
TEST HOLE	TEST HOLE	
MONITORING WELL	MONITORING WELL	
UNIDENTIFIED MANHOLE	UNIDENTIFIED MANHOLE	
TELEPHONE MANHOLE	TELEPHONE MANHOLE	
ELECTRICAL MANHOLE	ELECTRICAL MANHOLE	
DRAIN MANHOLE	DRAIN MANHOLE	
CATCH BASIN	CATCH BASIN	

SHEET C2.1, C3.1,
C4.1, C5.1, 6.1

SHEET C2.2, C3.2,
C4.2, C5.2, 6.2

SHEET C2.3, C3.3,
C4.3, C5.3, 6.3

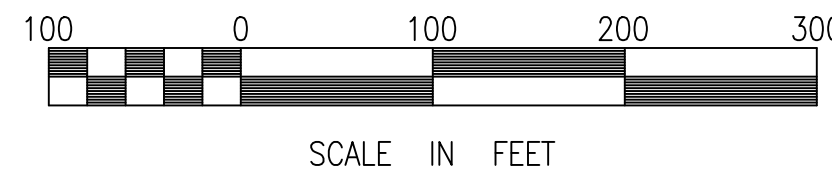
SHEET C2.4, C3.4,
C4.4, C5.4, 6.4

EXISTING

DESCRIPTION

PROPOSED

RD	ROOF DRAIN	RD
FES	FLARED END SECTION	FES
AC	AIR CONDITIONER UNITS	AC
FLAG POLE	FLAG POLE	FLAG POLE
SIGN	SIGN	SIGN
BOLLARD	BOLLARD	BOLLARD
MAILBOX	MAILBOX	MAILBOX
WELL	WELL	WELL
ELECTRICAL HAND HOLE	ELECTRICAL HAND HOLE	ELECTRICAL HAND HOLE
TELEPHONE ACCESS BOX	TELEPHONE ACCESS BOX	TELEPHONE ACCESS BOX
CABLE TV ACCESS BOX	CABLE TV ACCESS BOX	CABLE TV ACCESS BOX
IRRIGATION CONTROL VALVE	IRRIGATION CONTROL VALVE	IRRIGATION CONTROL VALVE
BOULDER/ROCK	BOULDER/ROCK	BOULDER/ROCK
TREES	TREES	TREES



ABBREVIATIONS

ABAN	ABANDONED	RR	RAILROAD
AC	AIR CONDITIONING UNIT	R&R	REMOVE AND RESET
ACR	ACCESSIBLE CURB RAMP	R&S	REMOVE AND STACK
ADJ	ADJUST	S	SEWER
APPROX	APPROXIMATE	SB	STONE BOUND
B	BOLLARD	SB/DH	STONE BOUND/DRILL HOLE
BD	BOUND	SSE	SLOPED GRANITE EDGING
BIT CONC	BITUMINOUS CONCRETE	SMH	SEWER MANHOLE
BLDG	BUILDING	STA	STATION
BH	BULKHEAD	SS	SEWER SERVICE
BRW	BRICK RETAINING WALL	SW	SIDEWALK
BS	BOTTOM OF SLOPE	SRW	STONE RETAINING WALL
CB	CATCH BASIN	T	TRAFFIC CONTROL BOX
C&C	CUT AND CAPPED	TL	TRAFFIC LIGHT
CB/DH	CONC. BOUND/DRILL HOLE	TMH	TELEPHONE MANHOLE
CCB	CAPE COD BERM	TOF	TOP OF FOUNDATION
C.I.	CAST IRON	TRANS	TRANSFORMER
C.L.D.I.	CEMENT LINED DUCTILE IRON	TS	TOP OF SLOPE
CH	CHANGE IN TYPE	TSV	TAPPING SLEEVE, VALVE AND BOX
CLF	CENTERLINE	TYP	TYPICAL
CO	CHAIN LINK FENCE	UP	UTILITY POLE
CONC	CLEAN OUT	VCP	VITRIFIED CLAY PIPE
CRW	CONCRETE	VERT	VERTICAL
COND	CONCRETE RETAINING WALL	VGC	VERTICAL GRANITE CURB
CMP	CONDUIT	W	WATER MAIN
CPP	CORRUGATED METAL PIPE	WF	WETLAND FLAG
	CORRUGATED POLYETHYLENE PIPE		

CTV	CABLE TELEVISION	EM	ELECTRIC METER
CULV	CULVERT	EOP	EDGE OF PAVEMENT
A	DELTA ANGLE	EXIST	EXISTING
WG	WATER GATE	FAB	FIRE ALARM BOX
WM	WATER MAIN	FES	FLARED END SECTION
WRW	WOOD RETAINING WALL	FND	FOUND
DCB	DOUBLE CATCH BASIN	FND	FOUNDATION
D.I.	DUCTILE IRON	F.O.S.	FULL OF SAND
DMH	DRAIN MANHOLE	F.O.W.	FULL OF WATER
DYCL	DOUBLE YELLOW CENTERLINE	F&C	FRAME AND COVER
E	ELECTRIC	F&G	FRAME AND GRATE
ECC	EXTRUDED CONCRETE CURB	G	GAS
EL	ELEVATION	GG	GAS GATE
EMH	ELECTRIC MANHOLE	GM	GAS METER
E/T/C	ELECTRIC, TELEPHONE, & CABLE TV	GS	GAS SERVICE
EHH	ELECTRIC HANDHOLE	GR	GUARD RAIL
		GRAN	GRANITE
		GUY	GUY WIRE

HOPE	HIGH DENSITY POLYETHYLENE	NIC	NOT IN CONTRACT
HH	HANDHOLE	NTS	NOT TO SCALE
HOR	HORIZONTAL	OHW	OVERHEAD WIRE
HP	HIGH PRESSURE	PB	PULL BOX
HWL	HEADWALL	PE	POLYETHYLENE PIPE
HYD	HYDRANT	PL	PROPERTY LINE
INV	INVERT	PROP	PROPOSED
I.P.	IRON PIN	PVC	POLYVINYL CHLORIDE PIPE
I.R.	IRON ROD	PWMT	PAVEMENT
LD	LANDSCAPE	PWW	PAVED WATER WAY
LP	LIGHT POLE	R	REINFORCED CONCRETE PIPE
MAX	MAXIMUM	RCP	REMOVE
MB	MAILBOX	RET	RETAIN
MH	MANHOLE	ROW	RIGHT OF WAY
MHB	MASS. HIGHWAY BOUND		
MIN	MINIMUM		
NAVD	NORTH AMERICAN VERTICAL DATUM		
NHESP	NATURAL HERITAGE ENDANGERED SPECIES PROGRAM		

DRAWING TITLE

KEY PLAN
C1.2

PROJECT TITLE

VILLAGE GREEN
SITE DEVELOPMENT
PLAN

DATE

MAY 10, 2024

SCALE

1"=100'

DRAWN

TRT

REVISION

—

NSG VILLAGE GREEN - 1, LLC

76 ROUTE 130 &
55 PIMLICO POND ROAD
SANDWICH
BARNSTABLE COUNTY, MA



Merrill
Engineers and Land Surveyors
427 COLUMBIA ROAD, HANOVER, MA 02339 / T: (781) 826-9200
26 UNION STREET, PLYMOUTH MA 02360 / T: (508) 746-6060
WWW.MERRILLINC.COM

COPYRIGHT ©2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.

RECORD OWNER:
PARCEL ID No. 12-319
55 PIMLICO POND ROAD
RUHAN AND STINSON REALTY TRUST
39 DISCOVERY HILL ROAD
EAST SANDWICH, MA 02537
DEED BOOK 28756 PAGE 283

RECORD OWNER:
PARCEL ID No. 11-271
76 FALMOUTH ROAD (ROUTE 130)
ROUTE 130 LAND DEVELOPMENT, LLC
344 JOHN DIETSCH BOULEVARD, #4
NORTH ATTLEBORO, MA 02763
DEED BOOK 29066 PAGE 208

PLAN REFERENCES:
1. PLAN BOOK 694 PAGE 90
2. PLAN BOOK 678 PAGE 91
3. PLAN BOOK 693 PAGE 46

NOTES:

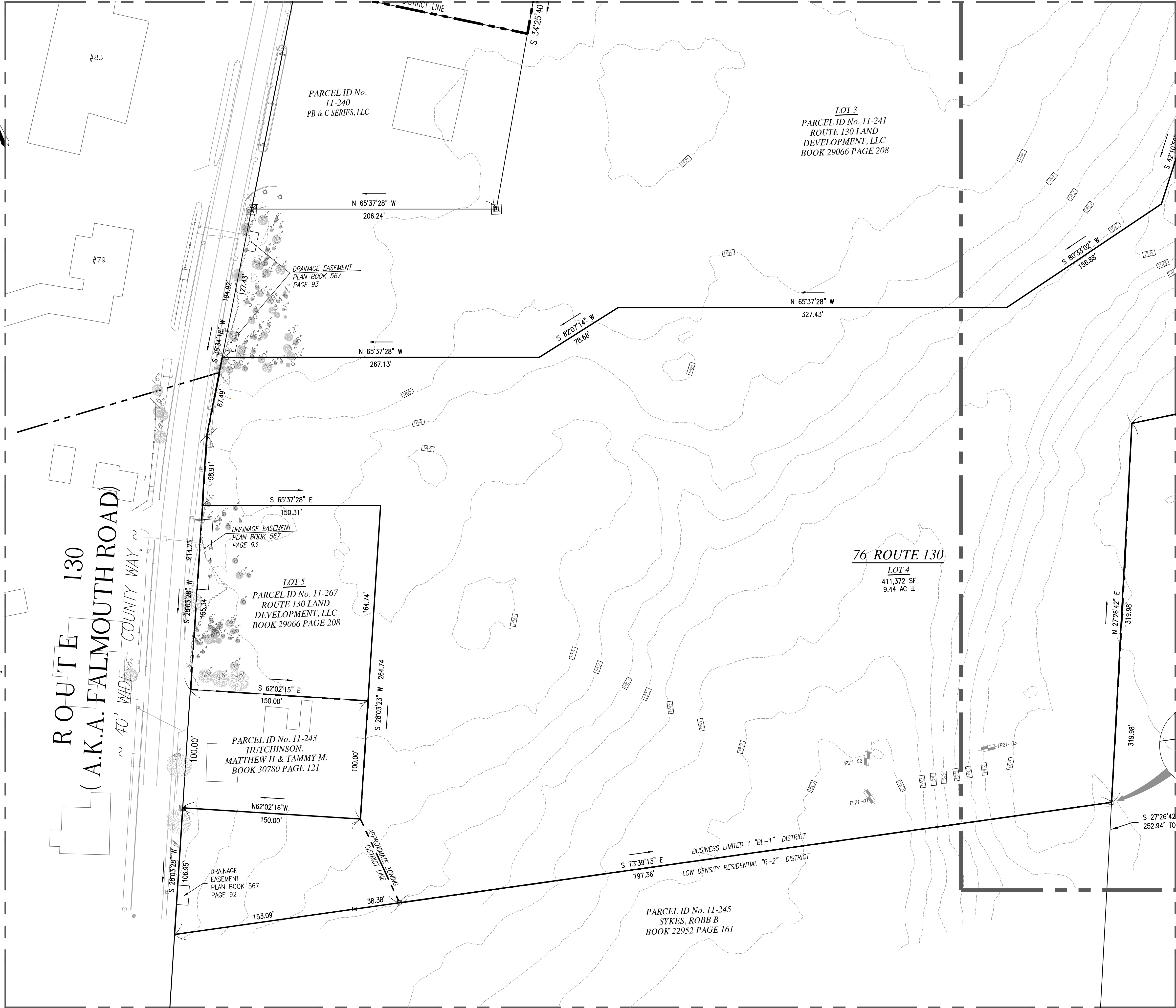
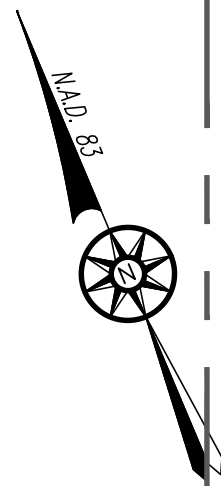
1. PROPERTY LINE, STREET LINE AND OWNER INFORMATION WAS COMPILED FROM RECORDS ON FILE AT THE BARNSTABLE COUNTY REGISTRY OF DEEDS AND THE TOWN OF SANDWICH ASSESSORS DEPARTMENT.
2. TOPOGRAPHIC AND DETAIL INFORMATION SHOWN HEREON IS BASED UPON AN ON THE GROUND SURVEY PERFORMED BY MERRILL ENGINEERS AND LAND SURVEYORS DURING NOVEMBER OF 2019. AND APRIL OF 2020.
3. ALL ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988.
4. SUBJECT SITE IS IN THE "BUSINESS LIMITED 1 BL-1" AND "LOW DENSITY RESIDENTIAL R-2 DISTRICT", AS DEPICTED ON THE TOWN OF SANDWICH ZONING MAP.
6. EXISTING UTILITIES, WHERE SHOWN, HAVE BEEN COMPILED BASED ON OBSERVED ABOVE GROUND EVIDENCE AND AVAILABLE RECORD PLANS AND ARE TO BE CONSIDERED APPROXIMATE. MERRILL ENGINEERS AND LAND SURVEYORS DOES NOT GUARANTEE THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN OR THAT ALL EXISTING UTILITIES AND/OR SUBSURFACE STRUCTURES ARE SHOWN.

ENVIRONMENTAL NOTES:

1. SITE IS NOT WITHIN AN A.C.E.C. (AREA OF CRITICAL ENVIRONMENTAL CONCERN).
2. SITE IS NOT WITHIN AN AREA OF ESTIMATED HABITAT OF RARE WILDLIFE PER NHESP MAP AUGUST 1, 2017 "ESTIMATED HABITATS OF RARE WILDLIFE" FOR USE WITH THE MA WETLANDS PROTECTION ACT REGULATIONS (310 CMR 10)."
3. SITE DOES NOT CONTAIN A CERTIFIED VERNAL POOL PER NHESP MAP AUGUST 1, 2017 "CERTIFIED VERNAL POOLS."
4. SITE IS NOT WITHIN A PRIORITY HABITAT PER NHESP MAP AUGUST 1, 2017 "PRIORITY HABITATS OF RARE SPECIES" FOR SPECIES UNDER THE MASSACHUSETTS ENDANGERED SPECIES ACT, REGULATIONS (321 CMR10).
5. SITE IS NOT LOCATED WITHIN A STATE APPROVED ZONE II GROUND WATER RECHARGE PROTECTION AREA.
6. NO WETLAND RESOURCE AREAS WERE LOCATED ON SITE.

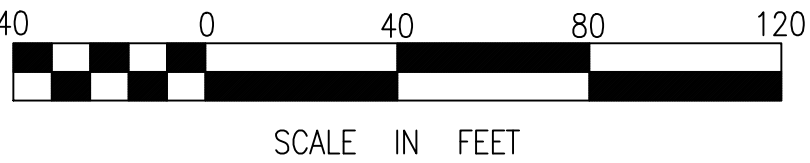
FLOOD NOTE:

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS LOCATED IN ZONE "X" OF THE FLOOD INSURANCE RATE MAP, AS SHOWN ON COMMUNITY MAP No. 25001C0536J, AND COMMUNITY MAP No. 25001C0517J WHICH BEARS AN EFFECTIVE DATE OF JULY 16, 2014, AND IS NOT IN A SPECIAL FLOOD HAZARD AREA.



LEGEND

EXISTING	DESCRIPTION
	APPROXIMATE ZONING LINE
	APPROXIMATE TOWN LINE
	100' WETLAND BUFFER
	WETLAND LINE
	EXISTING PATH
	2' CONTOUR
	PROPERTY LINE
	EDGE OF PAVEMENT
	4"PL GAS LINE (RECORD)
	WATER MAIN MARKED IN FIELD
	CAPE COD BERM
	CATCH BASIN
	HYDRANT
	GUY WIRE
	WATER GATE
	SURVEY MONUMENTS FOUND
	BUILDING/STRUCTURE



DRAWING TITLE

EXISTING CONDITIONS
PLAN
C2.1

PROJECT TITLE

VILLAGE GREEN
SITE DEVELOPMENT
PLAN

DATE

MAY 10, 2024

SCALE

1"=40'

DRAWN

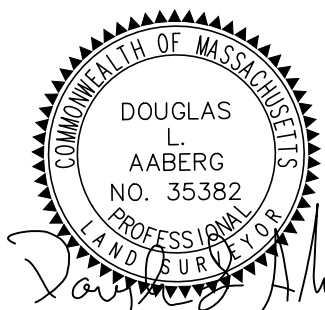
PAL

REVISION

-

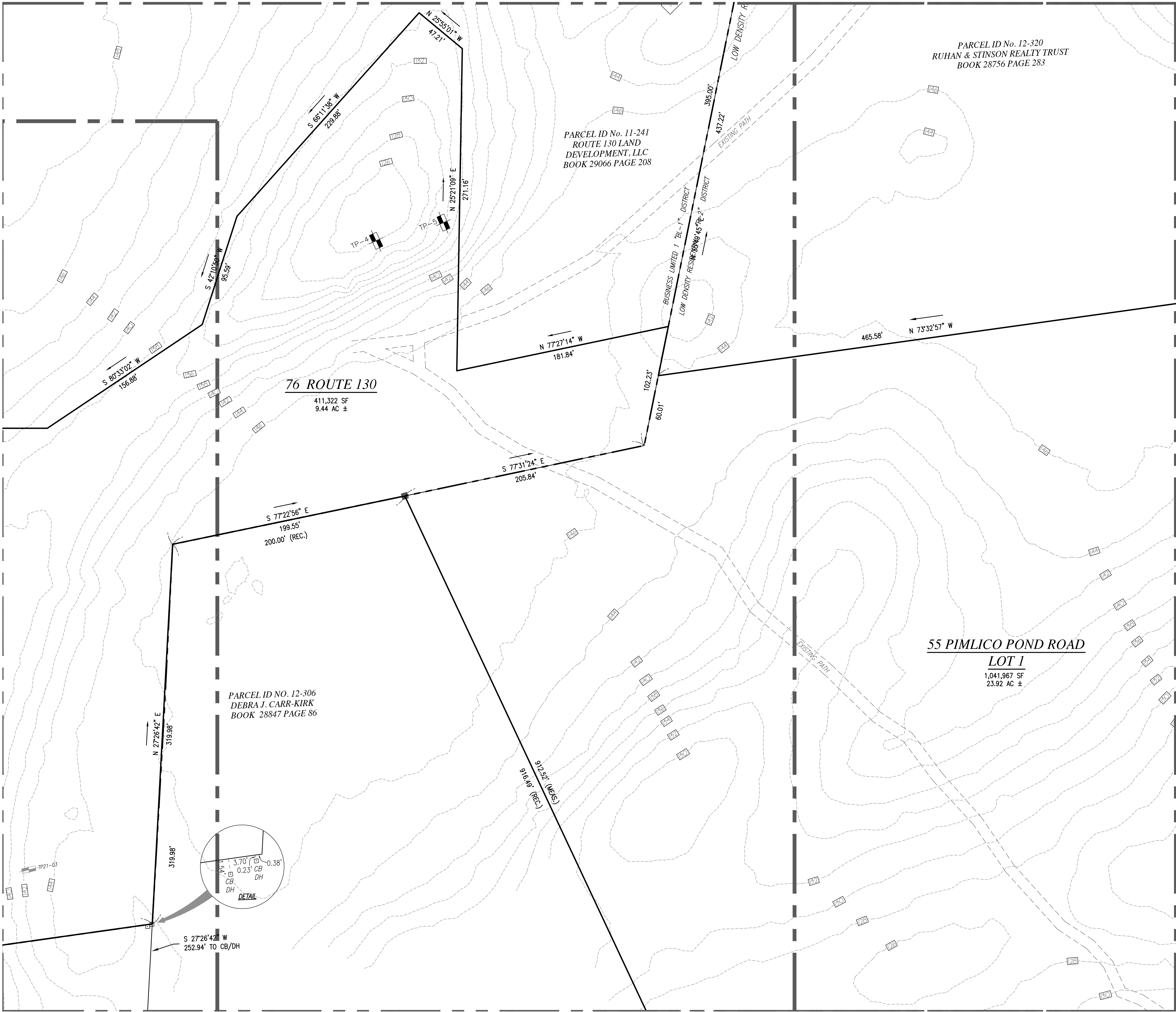
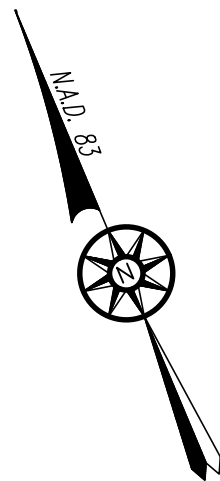
NSG VILLAGE GREEN - 1, LLC

76 ROUTE 130 &
55 PIMLICO POND ROAD
SANDWICH
BARNSTABLE COUNTY, MA

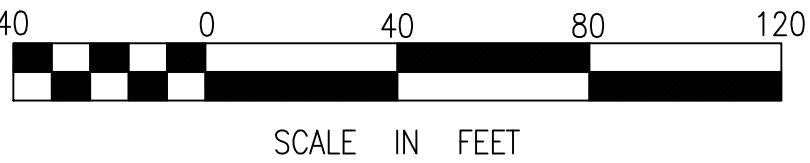


Merrill
Engineers and Land Surveyors
427 COLUMBIA ROAD, HANOVER, MA 02339 / T: (781) 826-9200
26 UNION STREET, PLYMOUTH MA 02360 / T: (508) 746-6060
WWW.MERRILLINC.COM

COPYRIGHT ©2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.



LEGEND	
EXISTING	DESCRIPTION
	APPROXIMATE ZONING LINE
	APPROXIMATE TOWN LINE
	100' WETLAND BUFFER
	WETLAND LINE
	EXISTING PATH
	2' CONTOUR
	PROPERTY LINE
	EDGE OF PAVEMENT
	4\"PL GAS LINE (RECORD)
	WATER MAIN MARKED IN FIELD
	CAPE COD BERM
	CATCH BASIN
	HYDRANT
	GUY WIRE
	WATER GATE
	SURVEY MONUMENTS FOUND
	BUILDING/STRUCTURE



DRAWING TITLE

EXISTING CONDITIONS
PLAN

C2.2

PROJECT TITLE

VILLAGE GREEN
SITE DEVELOPMENT
PLAN

DATE
MAY 10, 2024

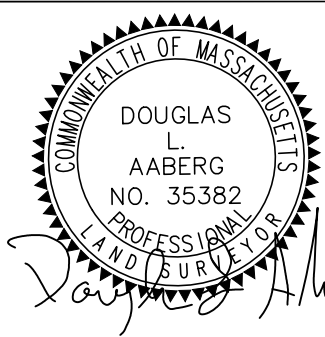
SCALE
1"=40'

DRAWN
PAL

REVISION
—

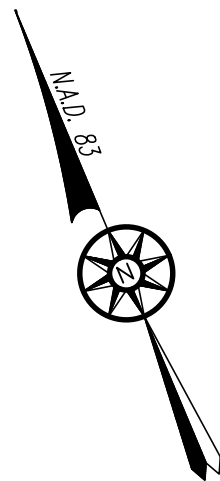
NSG VILLAGE GREEN - 1, LLC

76 ROUTE 130 &
55 PIMLICO POND ROAD
SANDWICH
BARNSTABLE COUNTY, MA



Merrill
Engineers and Land Surveyors
427 COLUMBIA ROAD, HANOVER, MA 02339 / T: (781) 826-9200
26 UNION STREET, PLYMOUTH MA 02360 / T: (508) 746-6060
WWW.MERRILLINC.COM

COPYRIGHT ©2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.



PARCEL ID No. 12-320
RUHAN & STINSON REALTY TRUST
BOOK 28756 PAGE 283



55 PIMLICO POND ROAD

LOT 1

1,041,967 SF
23.92 AC ±

LEGEND	
EXISTING	DESCRIPTION
	APPROXIMATE ZONING LINE
	APPROXIMATE TOWN LINE
	100 FT WETLAND BUFFER
	WETLAND LINE
	EXISTING PATH
	2' CONTOUR
	PROPERTY LINE
	EDGE OF PAVEMENT
	4" PL GAS LINE (RECORD)
	WATER MAIN MARKED IN FIELD
	CAPE COD BERM
	CATCH BASIN
	HYDRANT
	GUY WIRE
	WATER GATE
	SURVEY MONUMENTS FOUND
	BUILDING/STRUCTURE



DRAWING TITLE

EXISTING CONDITIONS
PLAN
C2.3

PROJECT TITLE

VILLAGE GREEN
SITE DEVELOPMENT
PLAN

DATE

MAY 10, 2024

SCALE

1"=40'

DRAWN

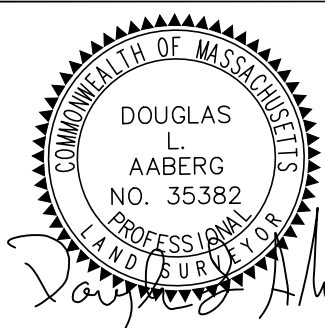
PAL

REVISION

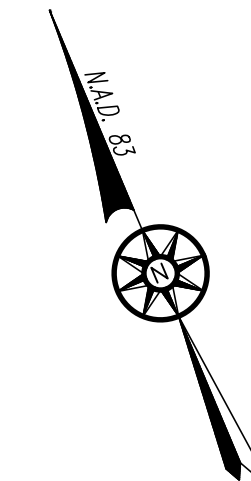
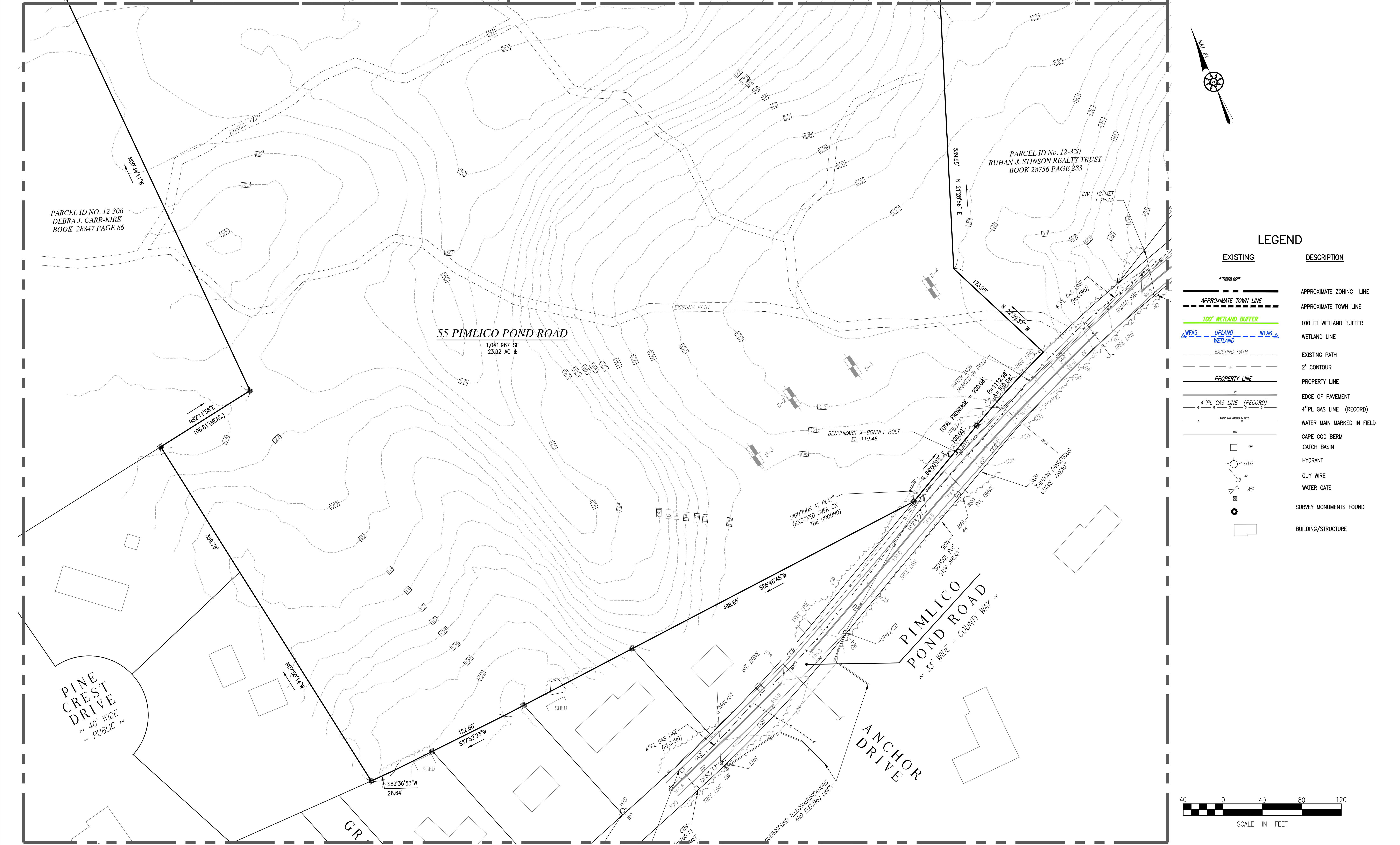
—

NSG VILLAGE GREEN - 1, LLC

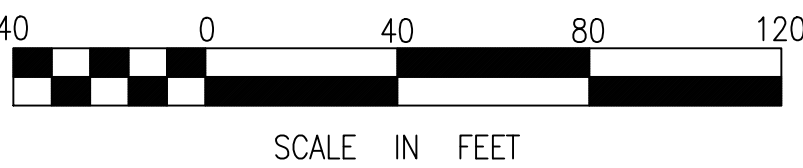
76 ROUTE 130 &
55 PIMLICO POND ROAD
SANDWICH
BARNSTABLE COUNTY, MA



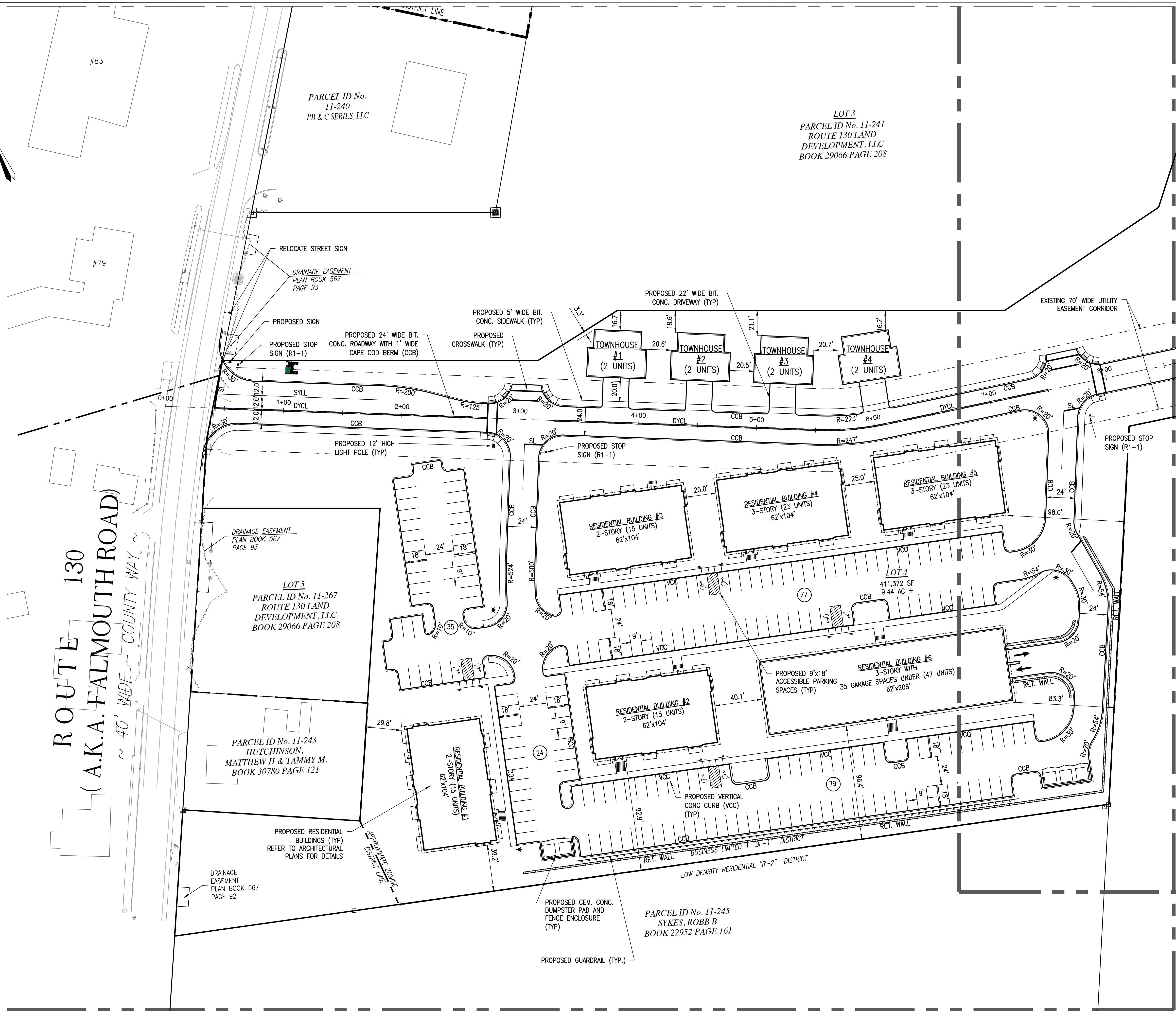
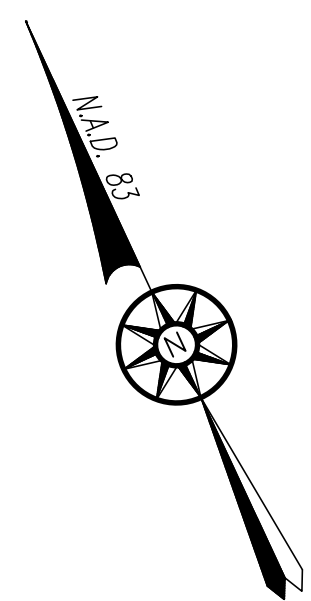
COPYRIGHT ©2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.



LEGEND	
EXISTING	DESCRIPTION
	APPROXIMATE ZONING LINE
	APPROXIMATE TOWN LINE
	100 FT WETLAND BUFFER
	WETLAND LINE
	EXISTING PATH
	2' CONTOUR
	PROPERTY LINE
	EDGE OF PAVEMENT
	4"PL GAS LINE (RECORD)
	WATER MAIN MARKED IN FIELD
	CAPE COD BERM
	CATCH BASIN
	HYDRANT
	GUY WIRE
	WATER GATE
	SURVEY MONUMENTS FOUND
	BUILDING/STRUCTURE

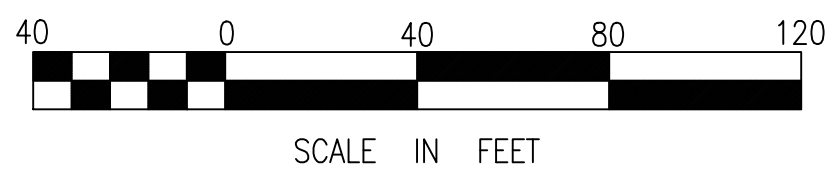


DRAWING TITLE EXISTING CONDITIONS PLAN C2.4	PROJECT TITLE VILLAGE GREEN SITE DEVELOPMENT PLAN	DATE MAY 10, 2024 SCALE 1"=40' DRAWN PAL REVISION —	NSG VILLAGE GREEN - 1, LLC 76 ROUTE 130 & 55 PIMLICO POND ROAD SANDWICH BARNSTABLE COUNTY, MA	 Merrill Engineers and Land Surveyors 427 COLUMBIA ROAD, HANOVER, MA 02339 / T: (781) 826-9200 26 UNION STREET, PLYMOUTH MA 02360 / T: (508) 746-6060 WWW.MERRILLINC.COM	COPYRIGHT ©2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.
--	---	--	--	--	--



<u>ZONING REQUIREMENTS</u>			
1. <u>TOTAL PARCEL SIZE:</u>	76 ROUTE 130 9.44± ACRES (411,372± S.F.) (ALL UPLAND) 55 PIMLICO POND ROAD 23.92± ACRES (1,041,967± S.F.) (ALL UPLAND) TOTAL AREA: 33.36± ACRES (1,453,339± S.F.)		
2. <u>ZONE:</u>	76 ROUTE 130 – BUSINESS LIMITED 1 BL-1 55 PIMLICO POND RD – LOW DENSITY RESIDENCE R-2		
3. <u>USE:</u>	EXISTING: PROPOSED:	UNDEVELOPED RESIDENTIAL	
4. <u>LOT COVERAGE:</u>	BUSINES LIMITED 1 BL-1 – MAX. ALLOWED N/A RESIDENTIAL R-2 – MAX. ALLOWED 25% EXISTING: 0± S.F. (0.0% OF UPLAND) PROPOSED: 256,119± S.F. (17.6% OF UPLAND)		
6. <u>DIMENSIONAL REQUIREMENTS:</u>			
DISTRICT: R-2/BL-1	REQUIRED:	EXISTING:	PROPOSED:
MIN. LOT AREA		1,453,339± S.F. (33.36± AC)	NO CHANGE
R-2	60,000 S.F.		
BL-1	20,000 S.F.		
LGM SOLAR	15 ACRES		
MIN. LOT FRONTAGE &	200' (R-2)	200.08' PIMLICO POND RD	NO CHANGE
MIN. LOT WIDTH	125' (BL-1)	200.08' LOT WIDTH 127.40' ROUTE 130 125.0' LOT WIDTH	NO CHANGE
MIN. FRONT YARD	50' (R-2) 30' (BL-1)	-- PIMLICO POND RD -- ROUTE 130	>1125.0' >189.0'
MIN. SIDE & REAR YARD	45' (R-2) 0' (BL-1)	-- PIMLICO POND RD -- ROUTE 130	52.3' 3.3'
BUILDING HEIGHT	35 FEET	--	XX FEET
SHAPE FACTOR (K) K=P ² /A < 22	22	16.5 ROUTE 130 <22 PIMLICO POND RD	NO CHANGE NO CHANGE

PARKING CALCULATIONS	
RESIDENTIAL BUILDINGS	SPACES
BUILDING 1 (15 UNITS)	= 27
BUILDING 2 (15 UNITS)	= 27
BUILDING 3 (15 UNITS)	= 27
BUILDING 4 (23 UNITS)	= 42
BUILDING 5 (23 UNITS)	= 42
BUILDING 6 (47 UNITS)	= 85
TOWNHOUSE 1 (2 UNITS)	= 4
TOWNHOUSE 2 (2 UNITS)	= 4
TOWNHOUSE 3 (2 UNITS)	= 4
TOWNHOUSE 4 (2 UNITS)	= 4
TOTAL UNITS = 146	
TOTAL SPACES	=266 SPACES
	(BUILDINGS 1 -6: 1.8 SPACES PER UNIT) (TOWNHOUSE 1-4: 2 SPACES PER UNIT)
EXISTING: NO SPACES	ACCESSIBLE SPACES REQUIRED: 9 SPACES PROPOSED: 11 SPACES
PROPOSED: UNIT GARAGE SPACES 43 UNIT DRIVEWAY SPACES 8 SURFACE SPACES 215 EV SURFACE SPACES 54 TOTAL PARKING SPACES 442	



DRAWING TITLE
SITE LAYOUT PLAN
C3.1

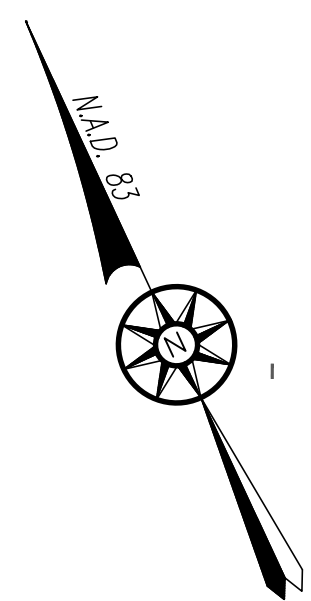
PROJECT TITLE
VILLAGE GREEN SITE DEVELOPMENT PLAN

DATE
MAY 10, 2024
SCALE
1" = 40'
DRAWN
PAL/NC
REVISION
-

NSG VILLAGE GREEN - 1, LLC
76 ROUTE 130 &
55 PIMLICO POND ROAD
SANDWICH
BARNSTABLE COUNTY, MA

Merrill
Engineers and Land Surveyors
427 COLUMBIA ROAD, HANOVER, MA 02339 / T: (781) 826-9200
26 UNION STREET, PLYMOUTH MA 02360 / T: (508) 746-6060
WWW.MERRILLINC.COM

COPYRIGHT ©2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.



PARCEL ID No. 11-241
ROUTE 130 LAND
DEVELOPMENT, LLC
BOOK 29066 PAGE 208

LOT 2
PARCEL ID No. 12-320
RUHAN & STINSON REALTY TRUST
BOOK 28756 PAGE 283

EXISTING NATURAL DEPRESSION
STORMWATER BASIN

BUSINESS LIMITED 1 "BL-1" DISTRICT
LOW DENSITY RESIDENTIAL "R-2" DISTRICT

PROPOSED BATTERY ENERGY STORAGE
SYSTEM AND INVERTER ON
CEMENT CONCRETE PAD
(44' WIDE X 97' LONG)(TYP)

PROPOSED ACCESS
GATE

PROPOSED 9'x18'
ACCESSIBLE PARKING
SPACES (TYP)

PROPOSED CHAIN
LINK FENCE (TYP)

EXISTING 70' WIDE UTILITY
EASEMENT CORRIDOR

PROPOSED 24' WIDE BIT.
CONC. DRIVEWAY WITH 1' WIDE
CAPE COD BERM (CCB)

PROPOSED STOP
SIGN (R1-1)

PROPOSED PAD MOUNTED EV
CHARGING STATIONS WITH
BOLLARDS (TYP)
PROPOSED 10-12'
HIGH LIGHT POLE (TYP)

PROPOSED BIT CONC
PAVEMENT (TYP)

PROPOSED 1' WIDE
CAPE COD BERM
(CCB) (TYP)

PROPOSED SOLAR
CANOPY
45' SIDE AND REAR
SETBACK (TYP)

COLUMN AND FOOTING (TYP)
REFER TO ARCHITECTURAL PLANS
FOR DETAILS

PROPOSED 10' WIDE
GRAVEL ACCESS DRIVE

PROPOSED
SOLAR ARRAY
(TYP)

PROPOSED VERTICAL
CONC CURB (VCC) (TYP)

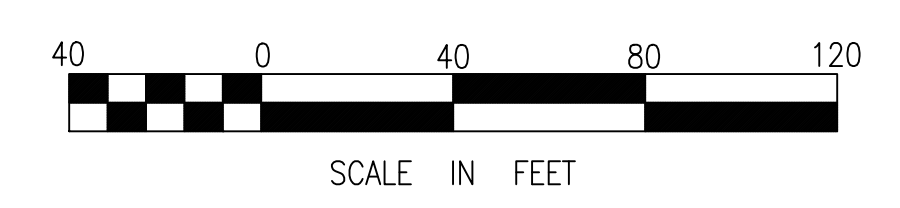
PROPOSED CEM
CONC PATIO AREA
AND WALKWAY



PROPOSED 10'x20'
CEM CONC BATTERY
STORAGE PAD

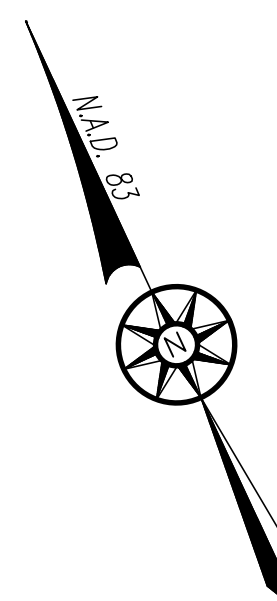
PROPOSED
BOLLARDS (TYP)

PROPOSED 15'x15'
CEM CONC DUMPSTER
PAD WITH FENCE
ENCLOSURE

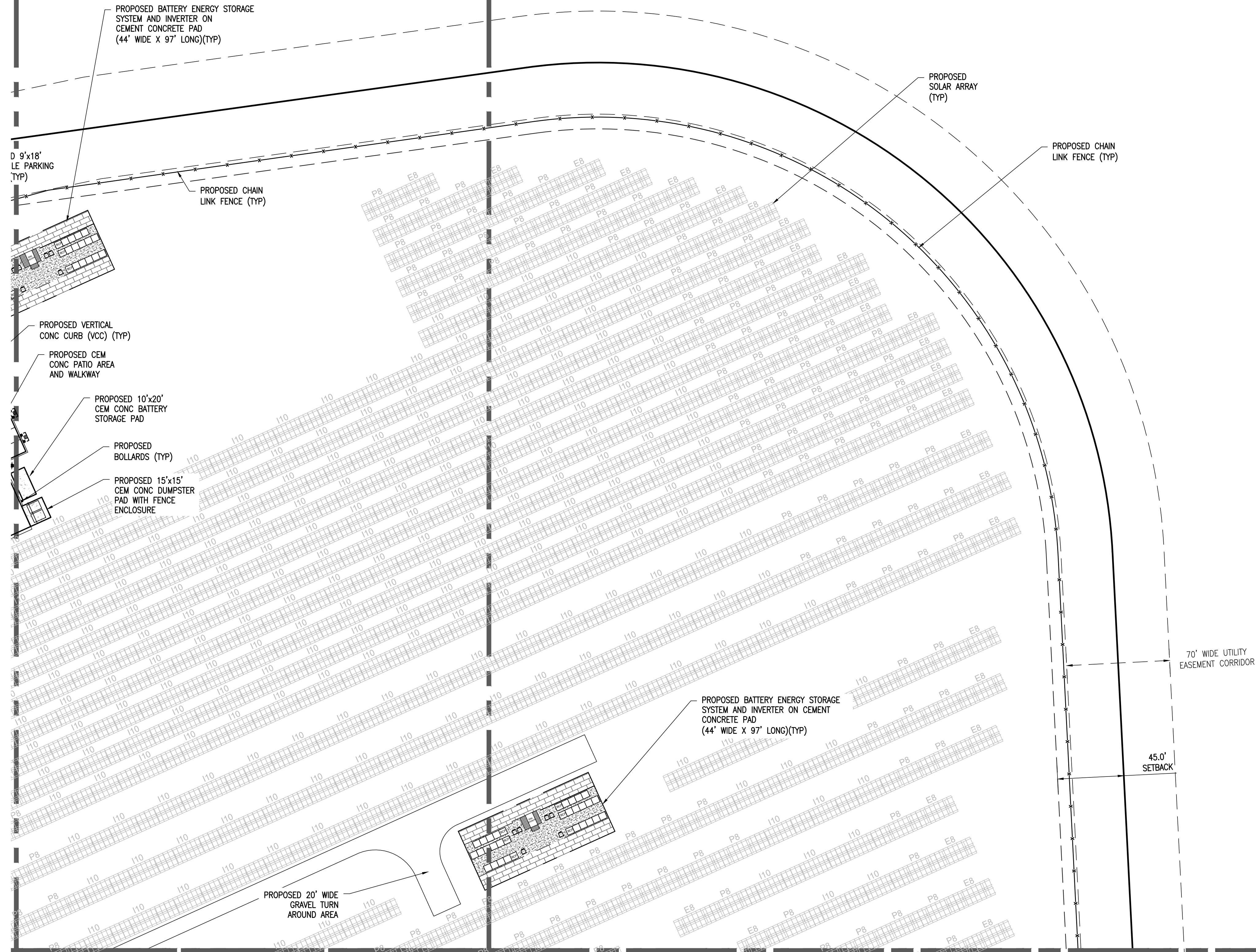
PARCEL ID NO. 12-306
DEBRA J. CARR-KIRK
BOOK 28847 PAGE 86



DRAWING TITLE SITE LAYOUT PLAN C3.2	PROJECT TITLE VILLAGE GREEN SITE DEVELOPMENT PLAN	DATE MAY 10, 2024	NSG VILLAGE GREEN - 1, LLC 76 ROUTE 130 & 55 PIMLICO POND ROAD SANDWICH BARNSTABLE COUNTY, MA			COPYRIGHT ©2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.
		SCALE 1" = 40'				
		DRAWN PAL/NC				
		REVISION —				



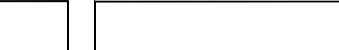
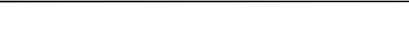
PARCEL ID No. 12-320
RUHAN & STINSON REALTY TRUST
BOOK 28756 PAGE 283

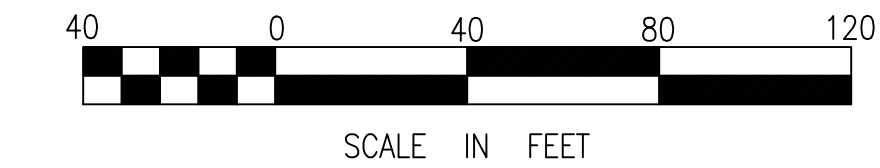
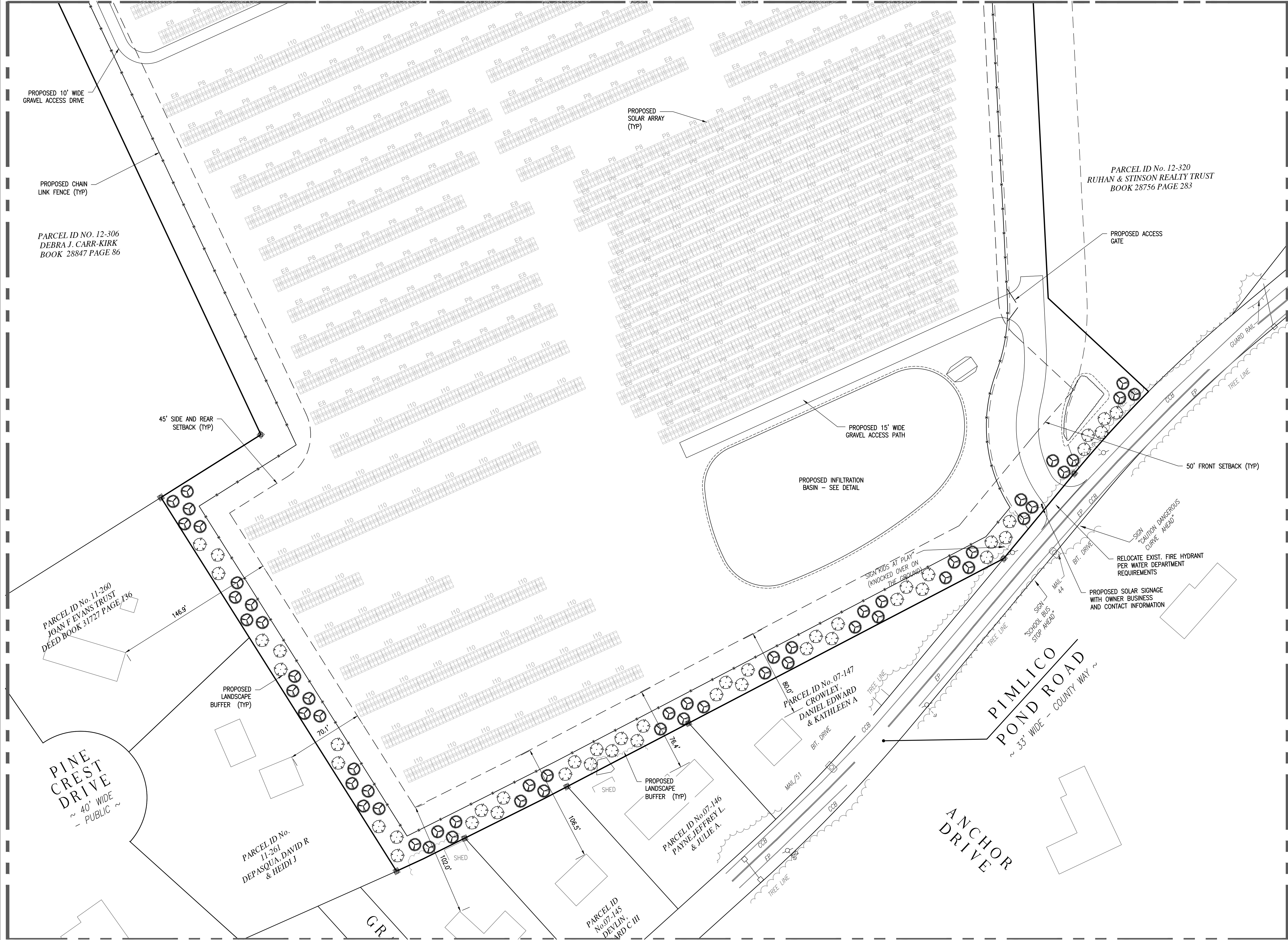


PARCEL ID N
WILEY, NA
& JENNII



SCALE IN FEET

DRAWING TITLE	PROJECT TITLE	DATE	NSG VILLAGE GREEN - 1, LLC		 Merrill Engineers and Land Surveyors 427 COLUMBIA ROAD, HANOVER, MA 02339 / T: (781) 826-9200 26 UNION STREET, PLYMOUTH MA 02360 / T: (508) 746-6060 WWW.MERRILLINC.COM	COPYRIGHT ©2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.
SITE LAYOUT PLAN C3.3	VILLAGE GREEN SITE DEVELOPMENT PLAN	MAY 10, 2024	76 ROUTE 130 & 55 PIMLICO POND ROAD SANDWICH BARNSTABLE COUNTY, MA			
		SCALE 1" = 40'				
		DRAWN PAL/NC				
REVISION —						



DRAWING TITLE

SITE LAYOUT
PLAN

C3.4

PROJECT TITLE

VILLAGE GREEN
SITE DEVELOPMENT
PLAN

DATE

MAY 10, 2024

SCALE

1" = 40'

DRAWN

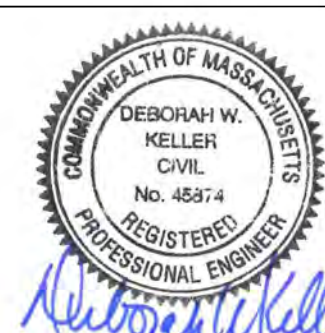
PAL/NC

REVISION

—

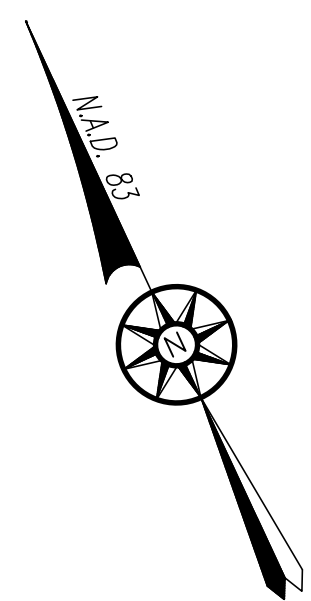
NSG VILLAGE GREEN - 1, LLC

76 ROUTE 130 &
55 PIMLICO POND ROAD
SANDWICH
BARNSTABLE COUNTY, MA



Merrill
Engineers and Land Surveyors
427 COLUMBIA ROAD, HANOVER, MA 02339 / T: (781) 826-9200
26 UNION STREET, PLYMOUTH MA 02360 / T: (508) 746-6060
WWW.MERRILLINC.COM

COPYRIGHT ©2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.



ROUTE 130
(A.K.A. FALMOUTH ROAD)
~ 40' WIDE COUNTY WAY ~

PARCEL ID No. 11-240
PB & C SERIES, LLC

PARCEL ID No. 11-241
ROUTE 130 LAND
DEVELOPMENT, LLC
BOOK 29066 PAGE 208

DRAINAGE EASEMENT
PLAN BOOK 567
PAGE 93

PROPOSED EROSION
CONTROL - SILT SOCK
(TYP.)

STABILIZED CONSTRUCTION
ENTRANCE (SEE DETAIL)

DRAINAGE EASEMENT
PLAN BOOK 567
PAGE 93

PARCEL ID No. 11-267
ROUTE 130 LAND
DEVELOPMENT, LLC
BOOK 29066 PAGE 208

DRAINAGE
EASEMENT
PLAN BOOK 567
PAGE 92

PROPOSED SILT
SOCK (SEE
DETAIL) (TYP.)

PROPOSED RETAINING WALL
TOW=138-139.5
BOW=130-137.5

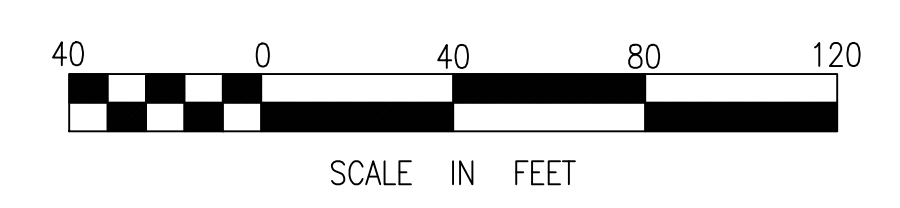
SUBSURFACE INFILTRATION SYS. #1
ADS STORMTECH MC-7200 W/ CAP
5 ROWS OF 17 CHAMBERS (85 CHAMBERS)
INV IN = 132.67
BOTTOM OF CHAMBERS = 130.25
BOTTOM OF STONE = 129.50

SUBSURFACE INFILTRATION SYS. #2
ADS STORMTECH MC-7200 W/ CAP
5 ROWS OF 17 CHAMBERS (85 CHAMBERS)
INV IN = 130.45
BOTTOM OF CHAMBERS = 128.03
BOTTOM OF STONE = 127.28

SOIL LOGS

PERFORMED BY: JOSHUA GREEN, E.I.T.
WITNESSED BY: SANDWICH BOARD OF HEALTH

T.H.	21-01	T.H.	21-02	T.H.	21-03
DATE:	7/14/21	DATE:	7/14/21	DATE:	7/14/21
EL.	130.4±	EL.	130.8±	EL.	133.2±
REMOVE AND REPLACE	0"-8" Ap HORIZON LOAMY SAND 10YR 3/2	REMOVE AND REPLACE	0"-10" Ap HORIZON LOAMY SAND 10YR 3/2	REMOVE AND REPLACE	0"-6" Ap HORIZON LOAMY SAND 10YR 3/2
	128.7		130.0		132.7
	8"-18" Bw LAYER LOAMY SAND 10YR 5/6		10"-30" Bw LAYER LOAMY SAND 10YR 5/6		6"-30" Bw LAYER LOAMY SAND 10YR 5/6
	128.9		128.3		130.7
	18"-168" C LAYER MED. SAND 2.5Y 6/3		30"-168" C LAYER MED. SAND 2.5Y 6/3		30"-132" C LAYER MED. SAND 2.5Y 6/3
	116.4		116.8		122.2
	D=168"		D=168"		D=132"
	NO REDOX ENCOUNTERED		NO REDOX ENCOUNTERED		NO REDOX ENCOUNTERED



DRAWING TITLE
GRADING & DRAINAGE
PLAN
C4.1

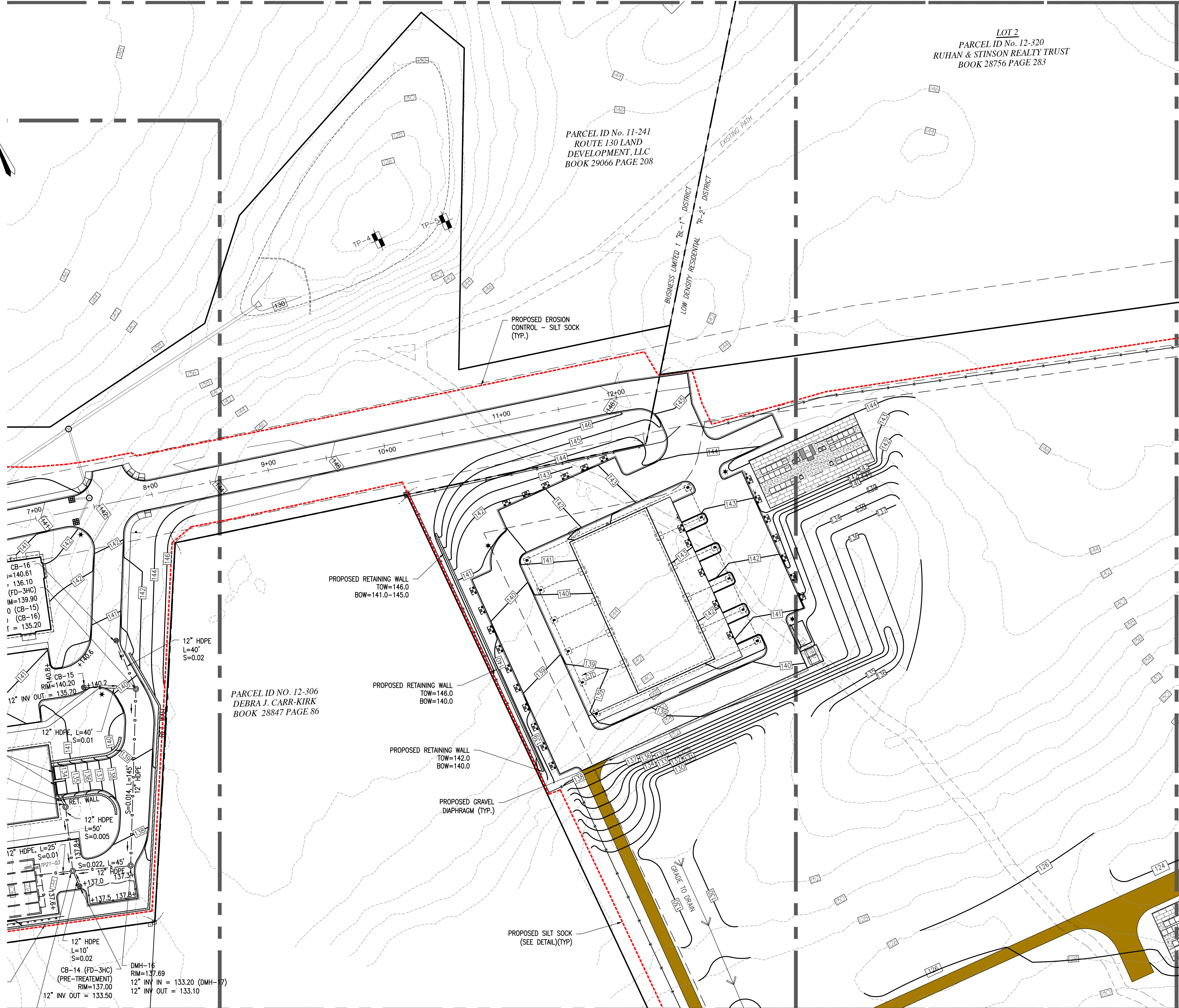
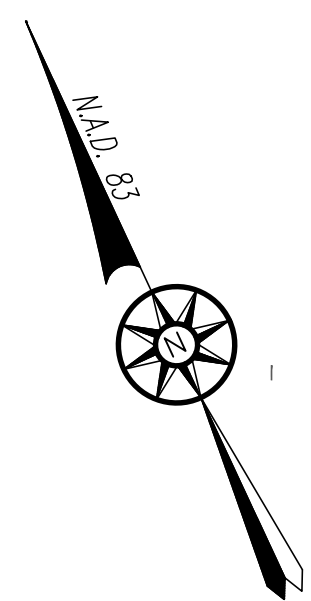
PROJECT TITLE
VILLAGE GREEN
SITE DEVELOPMENT
PLAN

DATE
MAY 10, 2024
SCALE
1" = 40'
DRAWN
PAL/NC
REVISION
-

NSG VILLAGE GREEN - 1, LLC
76 ROUTE 130 &
55 PIMLICO POND ROAD
SANDWICH
BARNSTABLE COUNTY, MA

Merrill
Engineers and Land Surveyors
427 COLUMBIA ROAD, HANOVER, MA 02339 / T: (781) 826-9200
26 UNION STREET, PLYMOUTH MA 02360 / T: (508) 746-6060
WWW.MERRILLINC.COM

COPYRIGHT ©2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.



PARCEL ID No. 11-241
ROUTE 130 LAND
DEVELOPMENT, LLC
BOOK 29066 PAGE 208

LOT 2
PARCEL ID No. 12-320
RUHAN & STINSON REALTY TRUST
BOOK 28756 PAGE 283

PARCEL ID No. 12-306
DEBRA J. CARR-KIRK
BOOK 28847 PAGE 86

CB-16
I=140.61
= 136.10
(FD-3HC)
IM=139.90
O (CB-15)
(CB-16)
r = 135.20

CB-15
RIM=140.20
12" INV OUT = 135.70

12" HDPE, L=40'
S=0.01

12" HDPE, L=50'
S=0.005

12" HDPE, L=25'
S=0.01

12" HDPE, L=10'
S=0.02

CB-14 (FD-3HC)
(PRE-TREATMENT)
RIM=137.00
12" INV OUT = 133.50

DMH-16
RIM=137.69
12" INV IN = 133.20 (DMH-7)
12" INV OUT = 133.10

PROPOSED RETAINING WALL
TOW=146.0
BOW=141.0-145.0

PROPOSED RETAINING WALL
TOW=146.0
BOW=140.0

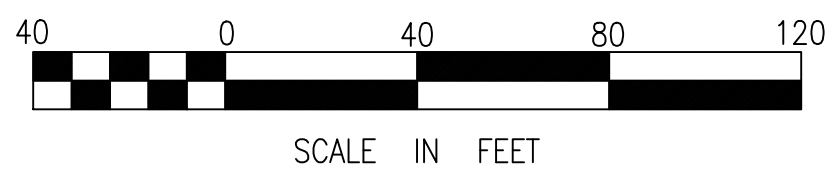
PROPOSED RETAINING WALL
TOW=142.0
BOW=140.0

PROPOSED GRAVEL
DIAPHRAGM (TYP.)

PROPOSED SILT SOCK
(SEE DETAIL)(TYP)

BUSINESS LIMITED 1 "B1-1" DISTRICT
LOW DENSITY RESIDENTIAL "R-2" DISTRICT

EXISTING PATH



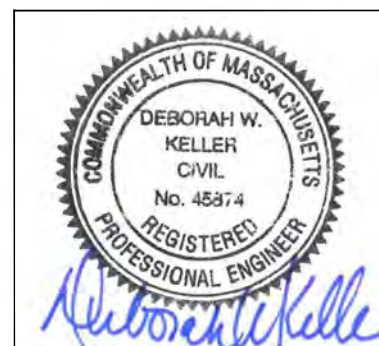
DRAWING TITLE
**GRADING & DRAINAGE
PLAN**
C4.2

PROJECT TITLE
**VILLAGE GREEN
SITE DEVELOPMENT
PLAN**

DATE
MAY 10, 2024
SCALE
1" = 40'
DRAWN
PAL/NC
REVISION
—

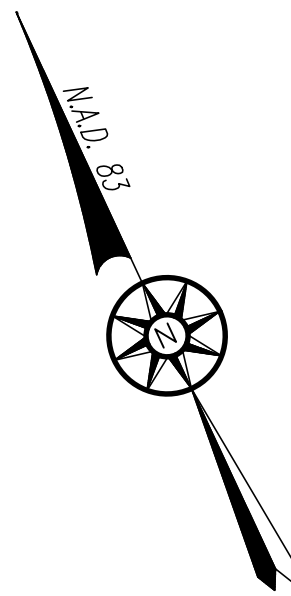
NSG VILLAGE GREEN - 1, LLC

76 ROUTE 130 &
55 PIMLICO POND ROAD
SANDWICH
BARNSTABLE COUNTY, MA

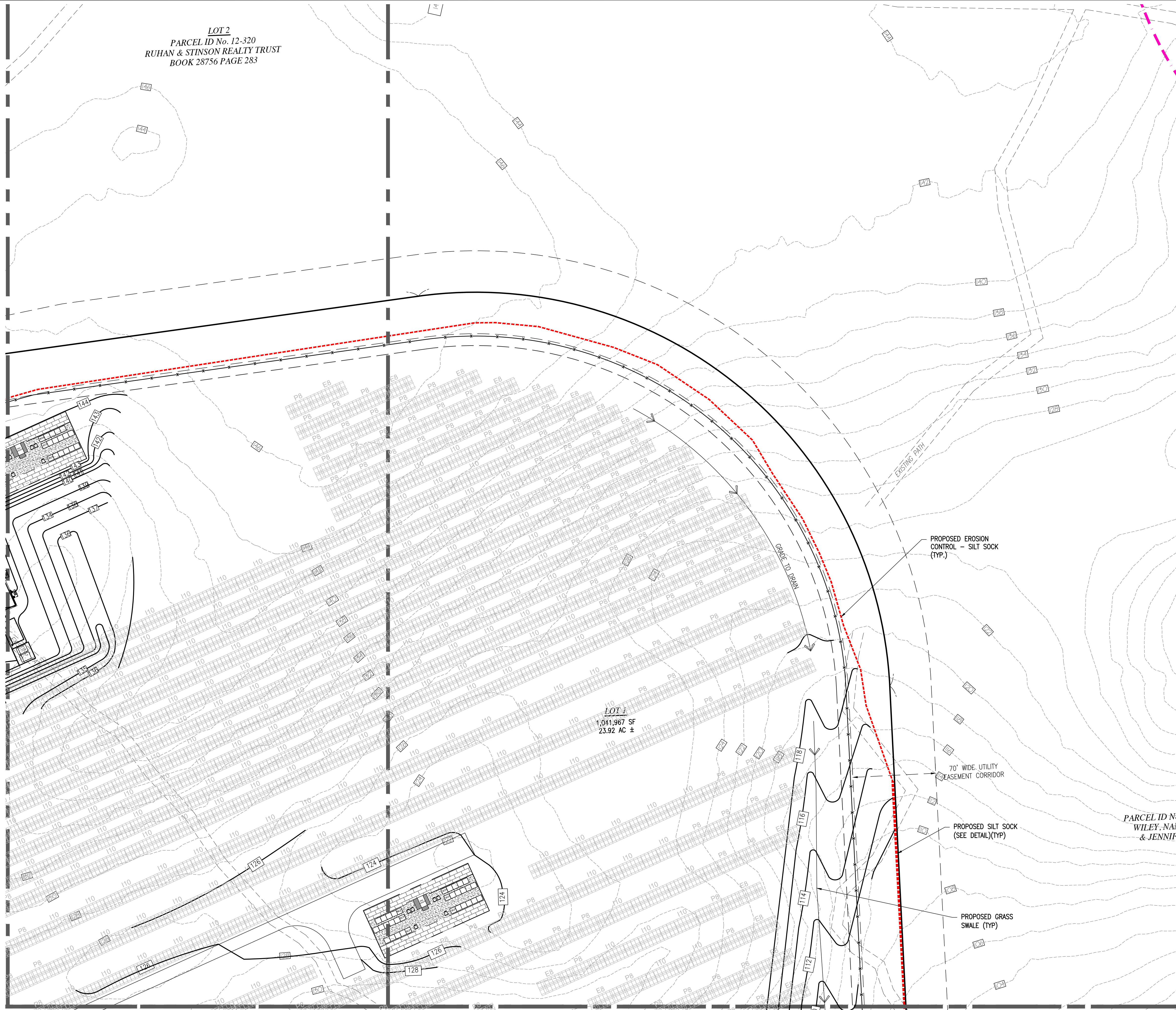


Merrill
Engineers and Land Surveyors
427 COLUMBIA ROAD, HANOVER, MA 02339 / T: (781) 826-9200
26 UNION STREET, PLYMOUTH MA 02360 / T: (508) 746-6060
WWW.MERRILLINC.COM

COPYRIGHT ©2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.



LOT 2
PARCEL ID No. 12-320
RUHAN & STINSON REALTY TRUST
BOOK 28756 PAGE 283



SCALE IN FEET

DRAWING TITLE
**GRADING & DRAINAGE
PLAN**
C4.3

PROJECT TITLE
**VILLAGE GREEN
SITE DEVELOPMENT
PLAN**

DATE
MAY 10, 2024
SCALE
1" = 40'
DRAWN
PAL/NC
REVISION
—

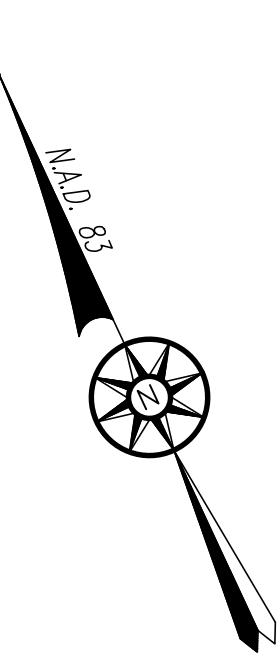
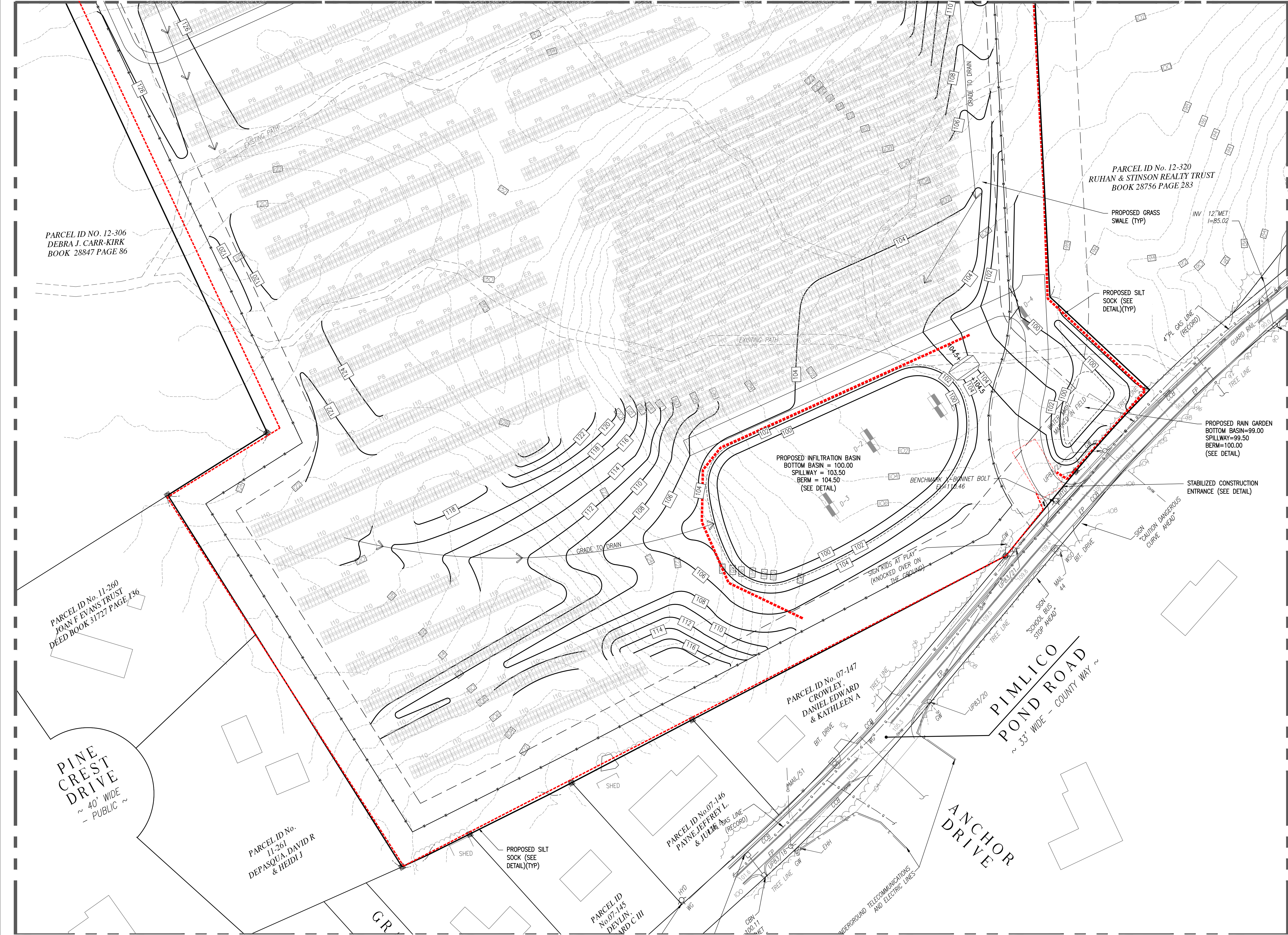
NSG VILLAGE GREEN - 1, LLC

76 ROUTE 130 &
55 PIMLICO POND ROAD
SANDWICH
BARNSTABLE COUNTY, MA



Merrill
Engineers and Land Surveyors
427 COLUMBIA ROAD, HANOVER, MA 02339 / T: (781) 826-9200
26 UNION STREET, PLYMOUTH MA 02360 / T: (508) 746-6060
WWW.MERRILLINC.COM

COPYRIGHT ©2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.



SOIL LOGS

PERFORMED BY: JOSHUA GREEN, E.I.T.
WITNESSED BY: N/A - DRAINAGE

T.H. 22-01
DATE: 6/8/22
EL. 101.5±

REMOVE AND REPLACE	0'-7" A HORIZON SANDY LOAM 10YR 3/2	100.9
	7'-18" Bw LAYER SANDY LOAM 10YR 5/6	100.0
	18'-50" C ₁ LAYER SILT LOAM 2.5Y 5/3	97.3
	50'-112" C ₂ LAYER MED. SAND 2.5Y 6/3	92.2
	D=112"	
	NO REDOX ENCOUNTERED	

T.H. 22-D2
DATE: 6/8/22
EL. 102.0±

REMOVE AND REPLACE	0'-7" A HORIZON SANDY LOAM 10YR 3/2	101.4
	7'-26" Bw LAYER SANDY LOAM 10YR 5/6	99.8
	26'-46" C ₁ LAYER SILT LOAM 2.5Y 5/3	98.2
	46'-108" C ₂ LAYER MED. SAND 2.5Y 6/3	93.7
	D=108"	
	NO REDOX ENCOUNTERED	

T.H. 22-D3
DATE: 6/8/22
EL. 106.0±

REMOVE AND REPLACE	0'-10" A HORIZON SANDY LOAM 10YR 3/2	105.2
	10'-34" Bw LAYER SANDY LOAM 10YR 5/6	103.2
	34'-78" C ₁ LAYER SILT LOAM 2.5Y 5/3	99.5
	78'-124" C ₂ LAYER MED. SAND 2.5Y 6/3	95.7
	D=124"	
	NO REDOX ENCOUNTERED	

T.H. 22-D4
DATE: 6/8/22
EL. 98.5±

REMOVE AND REPLACE	0'-8" A HORIZON SANDY LOAM 10YR 3/2	97.8
	8'-32" Bw LAYER SANDY LOAM 10YR 5/6	95.8
	32'-55" C ₁ LAYER SILT LOAM 2.5Y 5/3	93.9
	55'-110" C ₂ LAYER MED. SAND 2.5Y 6/3	89.3
	D=110"	
	NO REDOX ENCOUNTERED	



DRAWING TITLE
GRADING & DRAINAGE PLAN
C4.4

PROJECT TITLE
VILLAGE GREEN SITE DEVELOPMENT PLAN

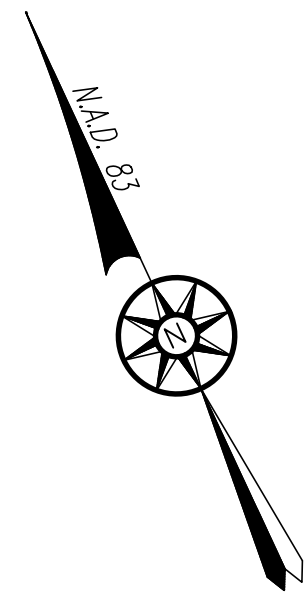
DATE
MAY 10, 2024
SCALE
1" = 40'
DRAWN
PAL/NC
REVISION
—

NSG VILLAGE GREEN - 1, LLC
76 ROUTE 130 &
55 PIMLICO POND ROAD
SANDWICH
BARNSTABLE COUNTY, MA



Merrill
Engineers and Land Surveyors
427 COLUMBIA ROAD, HANOVER, MA 02339 / T: (781) 826-9200
26 UNION STREET, PLYMOUTH MA 02360 / T: (508) 746-6060
WWW.MERRILLINC.COM

COPYRIGHT ©2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.



#83

PARCEL ID No.
11-240
PB & C SERIES, LLC

PARCEL ID No. 11-241
ROUTE 130 LAND
DEVELOPMENT, LLC
BOOK 29066 PAGE 208

PROPOSED UTILITY POLE WITH
UTILITY GOAB
REFER TO ELECTRICAL PLANS

EXISTING UTILITY
POLE #24/60
POINT OF
INTERCONNECTION

EXISTING UTILITY
POLE #24/60
POINT OF
INTERCONNECTION

DRAINAGE EASEMENT
PLAN BOOK 567
PAGE 93

PROPOSED EQUIPMENT PAD
REFER TO ELECTRICAL PLANS

PROPOSED FIRE PROTECTION AND
DOMESTIC WATER SERVICE (TYP.)

PROPOSED CONCRETE ENCASED UTILITY CONDUIT TO
CONNECT TO UTILITY POLE UP24/60 AT ROUTE 130
(4-5" PVC CONDUITS AND 3-4" PVC COMMUNICATION
CONDUITS)

PROPOSED GAS SERVICE LINE.
SIZE AND LOCATION TO BE
VERIFIED BY GAS COMPANY

PROPOSED CONCRETE ENCASED UTILITY CONDUIT TO CONNECT TO
UTILITY POLE UP24/60 AT ROUTE 130
(4-5" PVC CONDUITS AND 3-4" PVC COMMUNICATION CONDUITS)
FINAL LOCATION OF CONDUITS TO BE CONFIRMED BY THE
APPROPRIATE UTILITY COMPANIES.

PROPOSED SEWER MANHOLE
(TYP.)

PROPOSED DOMESTIC WATER
SERVICE (TYP.)

TOWNHOUSE
#1
(2 UNITS)

TOWNHOUSE
#2
(2 UNITS)

TOWNHOUSE
#3
(2 UNITS)

TOWNHOUSE
#4
(2 UNITS)

PROPOSED 12" PVC WATERMAIN
CONNECT TO EXISTING 12"
WATERMAIN AT ROUTE 130 WITH
12"x12" TS&G

PROPOSED UTILITY POLE
(TELCO)
REFER TO ELECTRICAL PLANS

PROP. 12" C.L.D.I.
WATER MAIN

DRAINAGE EASEMENT
PLAN BOOK 567
PAGE 93

PROP. 8" PVC
WATER MAIN
CONNECT TO
PROP. 12" PVC
WATER MAIN WITH
12"x8" TEE AND
GATE VALVES

PROPOSED 12"x6" D.I. TEE,
6" GATE VALVE, 6" D.I.
PIPE AND HYDRANT (TYP.)

RESIDENTIAL BUILDING #3
2-STORY (15 UNITS)
62'x104'

RESIDENTIAL BUILDING #4
3-STORY (23 UNITS)
62'x104'

RESIDENTIAL BUILDING #5
3-STORY (23 UNITS)
62'x104'

PARCEL ID No. 11-267
ROUTE 130 LAND
DEVELOPMENT, LLC
BOOK 29066 PAGE 208

#70

DRAINAGE
EASEMENT
PLAN BOOK 567
PAGE 92

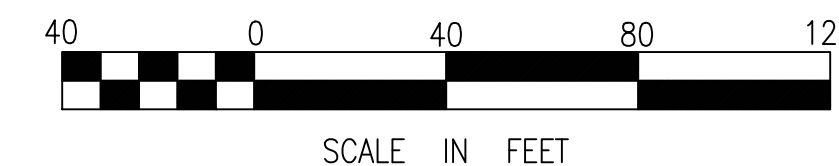
RESIDENTIAL BUILDING #1
2-STORY (15 UNITS)
62'x104'

RESIDENTIAL BUILDING #2
2-STORY (15 UNITS)
62'x104'

RESIDENTIAL BUILDING #6
3-STORY WITH
35 GARAGE SPACES UNDER (47 UNITS)
62'x208'

SUBSURFACE INFILTRATION SYS. #1
ADS STORMTECH MC-7200 W/ CAP
5 ROWS OF 17 CHAMBERS (85 CHAMBERS)
INV IN = 132.67
BOTTOM OF CHAMBERS = 130.25
BOTTOM OF STONE = 129.50

SUBSURFACE INFILTRATION SYS. #2
ADS STORMTECH MC-7200 W/ CAP
5 ROWS OF 17 CHAMBERS (85 CHAMBERS)
INV IN = 130.45
BOTTOM OF CHAMBERS = 128.03
BOTTOM OF STONE = 127.28



SCALE IN FEET

DRAWING TITLE

UTILITY PLAN
C5.1

PROJECT TITLE

VILLAGE GREEN
SITE DEVELOPMENT
PLAN

DATE

MAY 10, 2024

SCALE

1" = 40'

DRAWN

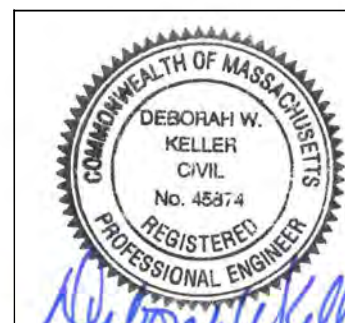
PAL/NC

REVISION

-

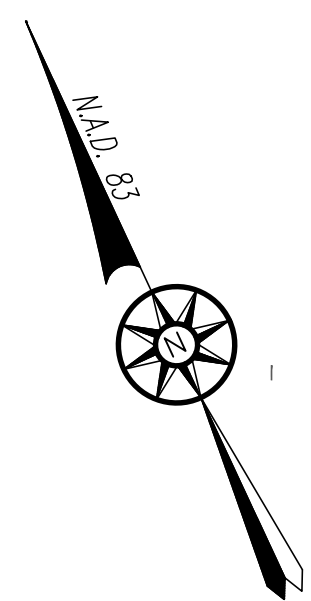
NSG VILLAGE GREEN - 1, LLC

76 ROUTE 130 &
55 PIMLICO POND ROAD
SANDWICH
BARNSTABLE COUNTY, MA



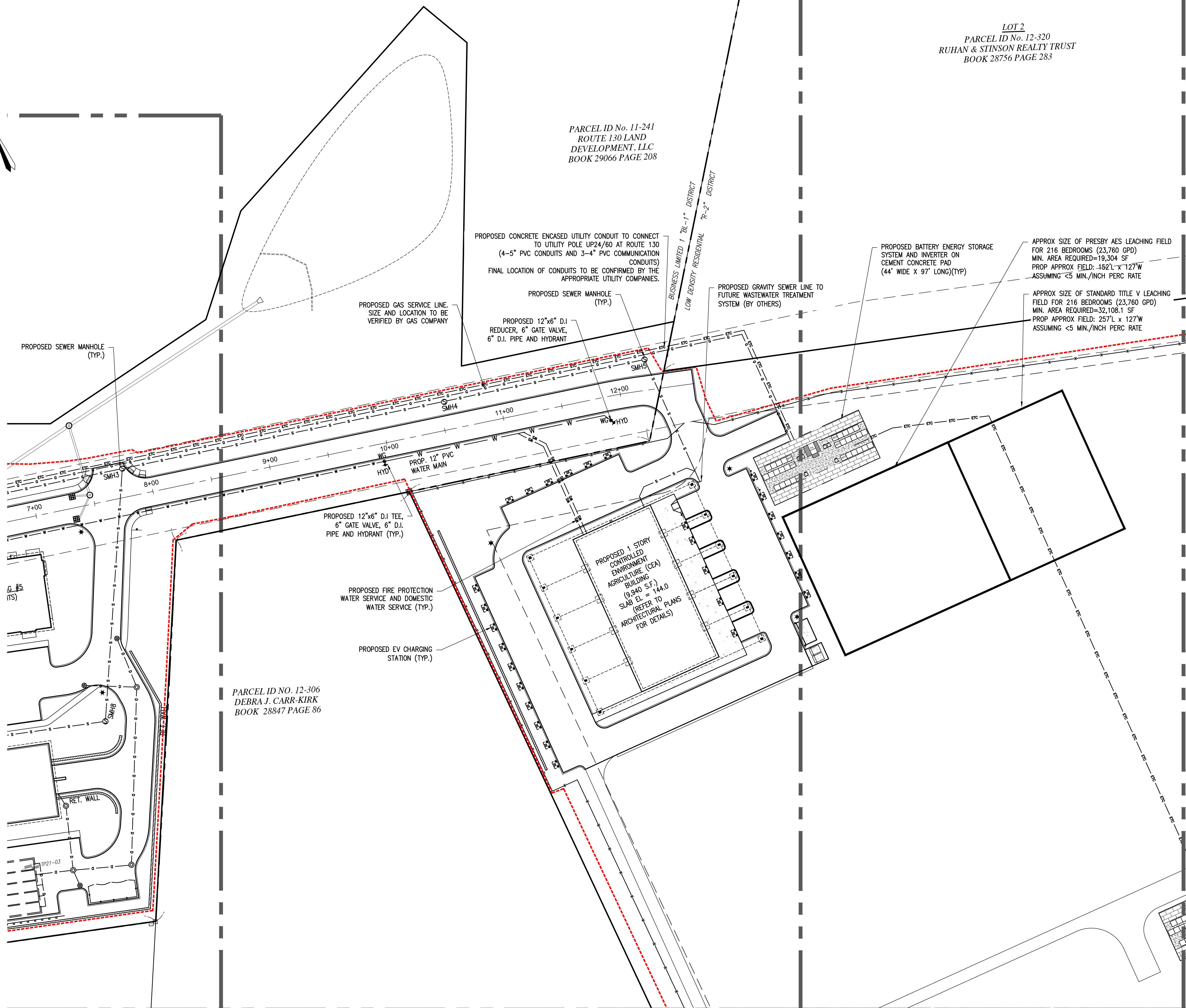
Merrill
Engineers and Land Surveyors
427 COLUMBIA ROAD, HANOVER, MA 02339 / T: (781) 826-9200
26 UNION STREET, PLYMOUTH MA 02360 / T: (508) 746-6060
WWW.MERRILLINC.COM

COPYRIGHT ©2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.

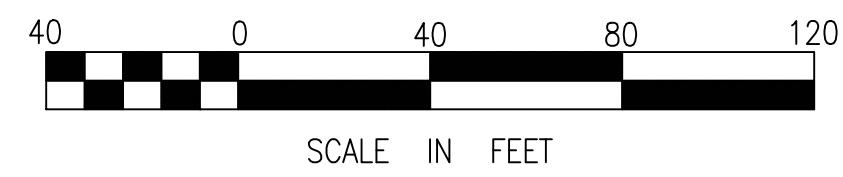


PARCEL ID No. 11-241
ROUTE 130 LAND
DEVELOPMENT, LLC
BOOK 29066 PAGE 208

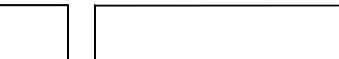
LOT 2
PARCEL ID No. 12-320
RUHAN & STINSON REALTY TRUST
BOOK 28756 PAGE 283

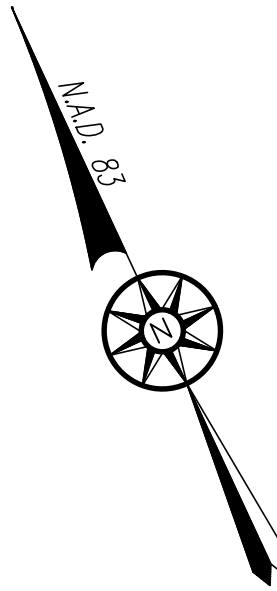


PARCEL ID NO. 12-306
DEBRA J. CARR-KIRK
BOOK 28847 PAGE 86

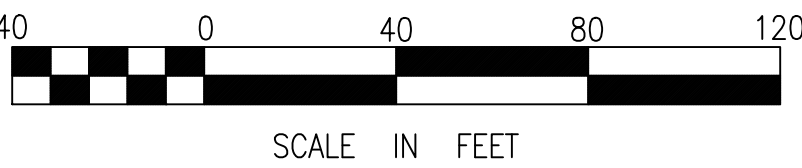
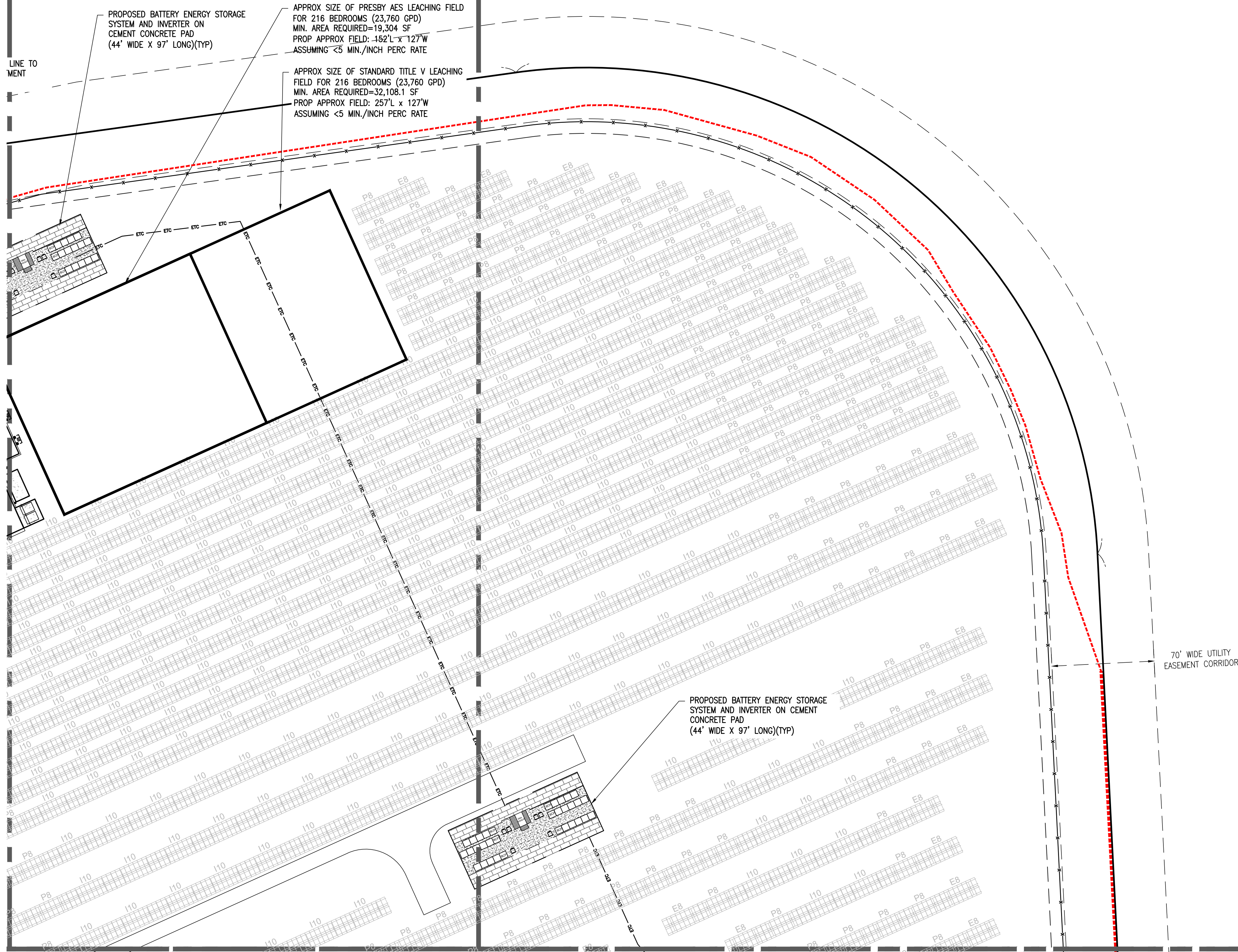


SCALE IN FEET

DRAWING TITLE	PROJECT TITLE	DATE	<div>NSG VILLAGE GREEN - 1, LLC</div> <div>76 ROUTE 130 & 55 PIMLICO POND ROAD SANDWICH BARNSTABLE COUNTY, MA</div>	<div><div><div>Merrill</div><div>Engineers and Land Surveyors</div><div>427 COLUMBIA ROAD, HANOVER, MA 02339 / T: (781) 826-9200</div><div>26 UNION STREET, PLYMOUTH MA 02360 / T: (508) 746-6060</div><div>WWW.MERRILLINC.COM</div></div></div>	<div>COPYRIGHT ©2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.</div>
UTILITY PLAN	VILLAGE GREEN SITE DEVELOPMENT PLAN	MAY 10, 2024			
C5.2		SCALE 1" = 40'			
		DRAWN PAL/NC			
		REVISION —			



PARCEL ID No. 12-320
RUHAN & STINSON REALTY TRUST
BOOK 28756 PAGE 283



SCALE IN FEET

DRAWING TITLE

UTILITY PLAN
C5.3

PROJECT TITLE

VILLAGE GREEN
SITE DEVELOPMENT
PLAN

DATE

MAY 10, 2024

SCALE

1" = 40'

DRAWN

PAL/NC

REVISION

—

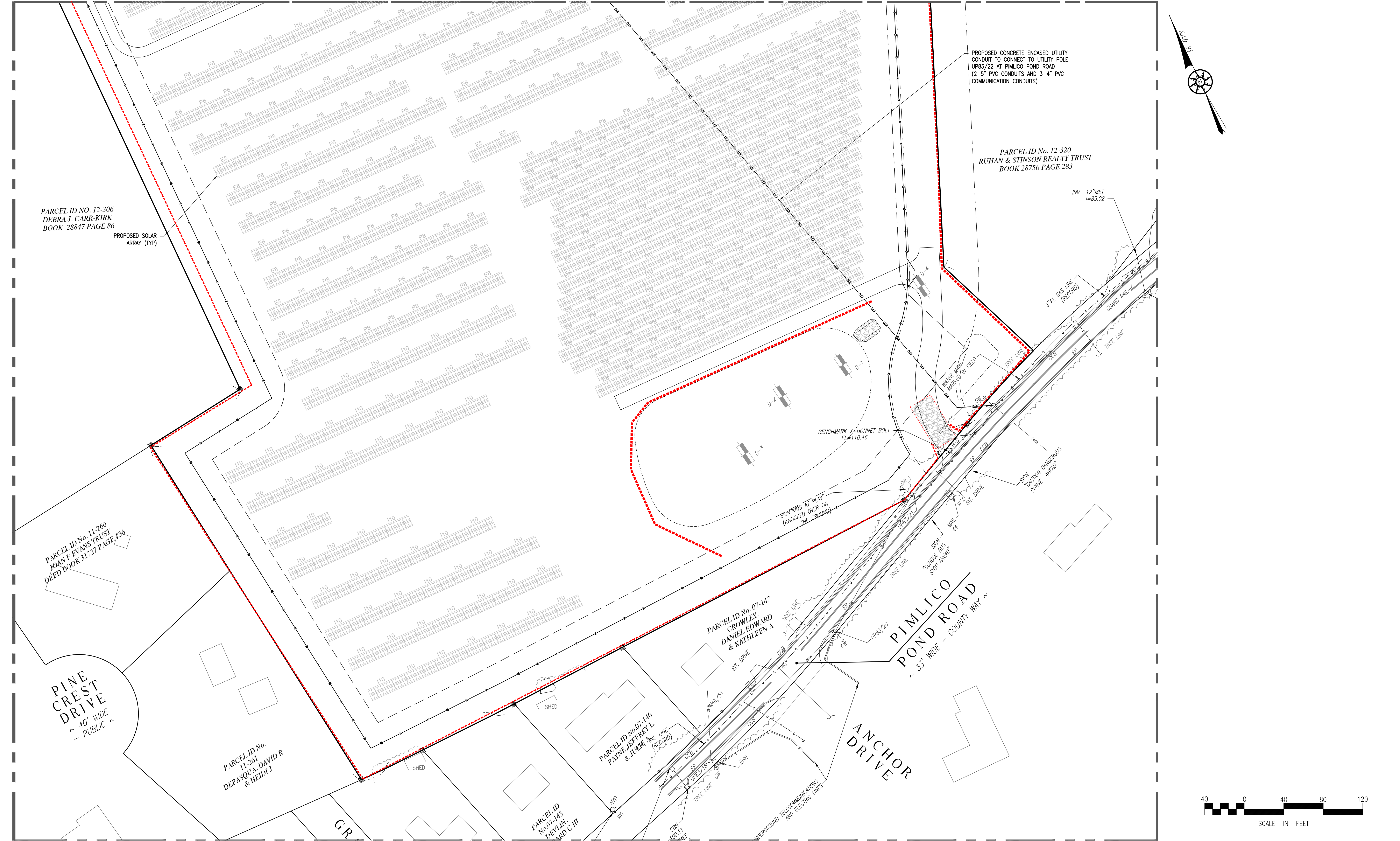
NSG VILLAGE GREEN - 1, LLC

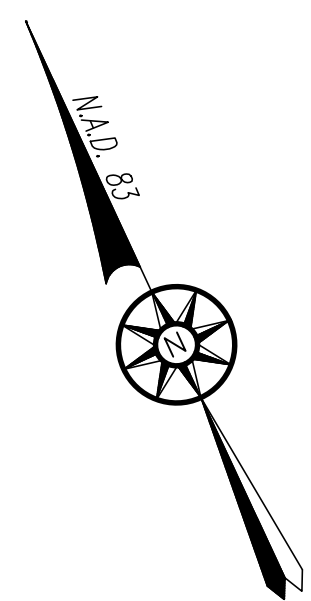
76 ROUTE 130 &
55 PIMLICO POND ROAD
SANDWICH
BARNSTABLE COUNTY, MA



Merrill
Engineers and Land Surveyors
427 COLUMBIA ROAD, HANOVER, MA 02339 / T: (781) 826-9200
26 UNION STREET, PLYMOUTH MA 02360 / T: (508) 746-6060
WWW.MERRILLINC.COM

COPYRIGHT ©2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.

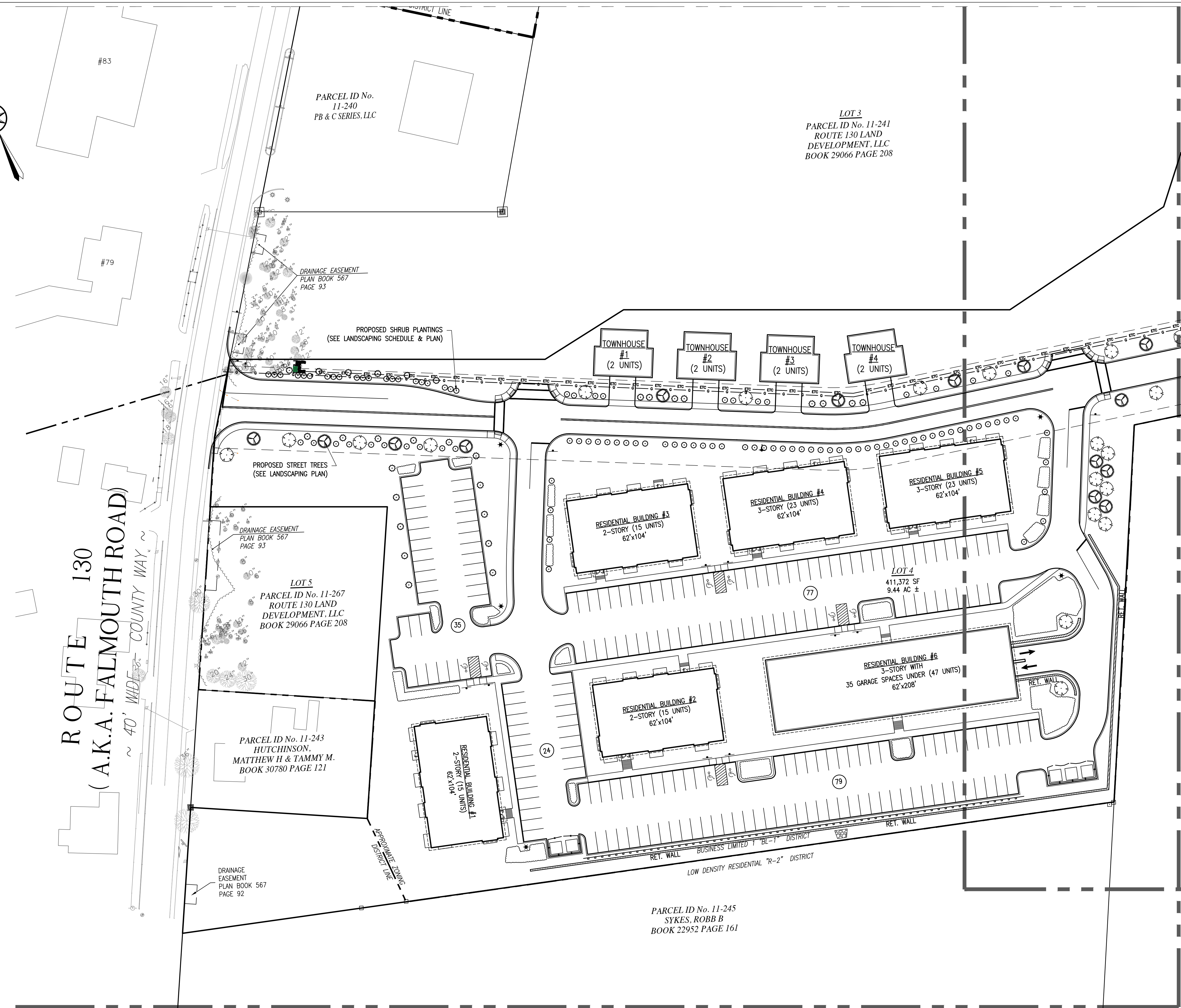
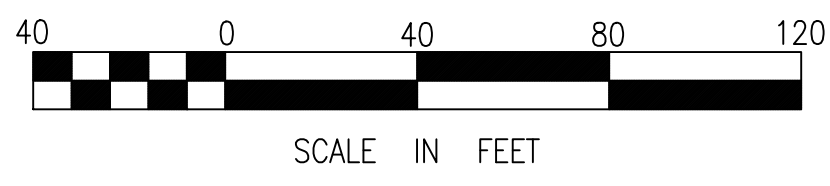




CONCEPTUAL LANDSCAPE PLAN KEY**:			
SYMBOL	BOTINICAL NAME	COMMON NAME	SIZE*
SHRUBS:			
	CORYLUS CORNUTA	BEAKED HAZELNUT	3'-8'H
	KALIA ANGUSTIFOLIA	SHEEP LAUREL	1'-3'H
	GAYLUSASIA BACATA	BLACK HUCKLEBERRY	1'-2'H
	VACCINIUM ANGUSTIFOLIUM	LOWBUSH BLUEBERRY	1'-2'H, 1'-3'W
	PRUNUS MARITIMA	BEACH PLUM	3'-6'H, 3'-6'W
	CEANOTHUS AMERICANUS	NEW JERSEY TEA	2'-3'H, 2'-3'W
	VACCINIUM CORYMBOSUM	HIGHBUSH BLUEBERRY	3'-12'H, 3'-7'W
	COMPTONIA PEREGRINA	SWEET FERN	1'-3'H, 4'-8'W
TREES:			
	SASSAFRAS ALBIDUM	SASSAFRAS	6'-15'H, 6'-15'W
	PINUS STROBUS	WHITE PINE	60'-90'H, 25'-40'W
	PINUS RIGIDA	PITCH PINE	30'-60'H, 15'-25'W
	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	15'-30'H, 3'-10'W
	QUERCUS ALBA	WHITE OAK	60'-80'H, 30'-40'W
	OXYDENDRUM ARBOREUM	SOURWOOD	15'-30'H, 12'W
	ACER RUBRUM	RED MAPLE	TALL
	PRUNUS VIRGINIANA	VIRGINIA BIRD-CHERRY	30'H
	NYSSA SYLVATICA	TUPELO/BLACK GUM	20'-50'H
	PERENNIAL (GROUND COVER AREA):		
	SISYRINCHIUM ANGUSTIFOLIUM	BLUE-EYED GRASS	8"-10'H
	SYMPHYOTHRISCHUM ERICOIDES	HEATH ASTER	1'-3'H, 1.5'W
	EURYBIA DIVARICATA	WHITE WOOD ASTER	1'-2'H
	HELIANTHUS HELIANTHOIDES	OX-EYE SUNFLOWER	3'-5'H, 1'-3'W
	EURYBIA SPECIOSA	SHOWY ASTER	1'-2'H, 2'W
	ANAPHALIS MARGARITACEA	PEARLY EVERLASTING	1'-3'H, 1'-2'W
	HELIENIUM AUTUMNNALE	COMMON SNEEZEWEED	1'-3'H, 2'-3'W
	FRAGARIA VIRGINIA	WILD STRAWBERRY	2'-5'H, 12'-24'W

* PLANT SIZE NOTATION: W = WIDTH OR SPREAD OF PLANT, H = HEIGHT OF PLANT
** THIS CONCEPTUAL LANDSCAPING PLAN KEY REFERENCES PLANTS LISTED WITHIN CAPECODNATIVEPLANTS.ORG

- LANDSCAPING NOTES:
- ALL PLANT MATERIALS SHALL CONFORM TO THE MINIMUM GUIDELINES ESTABLISHED BY THE AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.
 - ALL PLANTS SHALL BE NATIVE TO NEW ENGLAND AND HEALTHY, VIGOROUS, FREE OF DISEASE, INSECTS AND PESTS.
 - PLANT VARIETIES ARE SUBJECT TO CHANGE DUE TO AVAILABILITY. COORDINATION WITH THE LANDSCAPE ARCHITECT FOR ALL PLANT VARIETY SUBSTITUTIONS.
 - FINAL LANDSCAPE LAYOUT TO BE PREPARED BY A REGISTERED LANDSCAPE ARCHITECT.



DRAWING TITLE
LANDSCAPING PLAN
C6.1

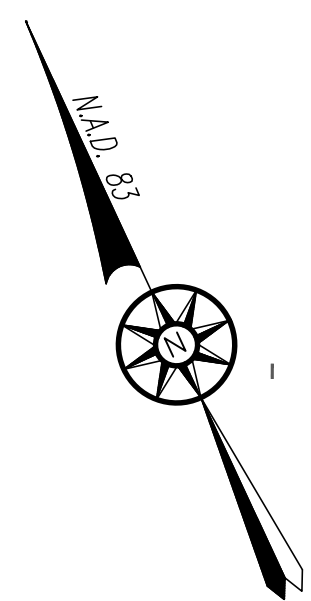
PROJECT TITLE
VILLAGE GREEN
SITE DEVELOPMENT PLAN

DATE
MAY 10, 2024
SCALE
1" = 40'
DRAWN
PAL/NC
REVISION
—

NSG VILLAGE GREEN - 1, LLC
76 ROUTE 130 &
55 PIMLICO POND ROAD
SANDWICH
BARNSTABLE COUNTY, MA

Merrill
Engineers and Land Surveyors
427 COLUMBIA ROAD, HANOVER, MA 02339 / T: (781) 826-9200
26 UNION STREET, PLYMOUTH MA 02360 / T: (508) 746-6060
WWW.MERRILLINC.COM

COPYRIGHT ©2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.



PARCEL ID No. 11-241
ROUTE 130 LAND
DEVELOPMENT, LLC
BOOK 29066 PAGE 208

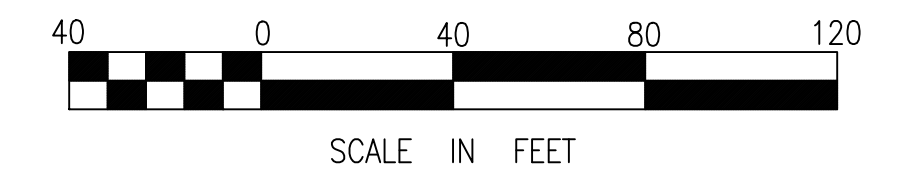
LOT 2
PARCEL ID No. 12-320
RUHAN & STINSON REALTY TRUST
BOOK 28756 PAGE 283


BUSINESS LIMITED 1 "BL-1" DISTRICT
LOW DENSITY RESIDENTIAL "R-2" DISTRICT

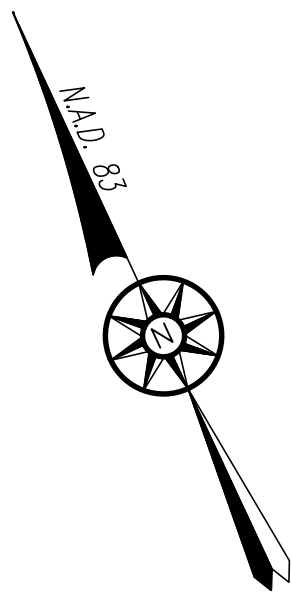
PROPOSED STREET TREES
(SEE LANDSCAPING SCHEDULE & PLAN)

PARCEL ID NO. 12-306
DEBRA J. CARR-KIRK
BOOK 28847 PAGE 86

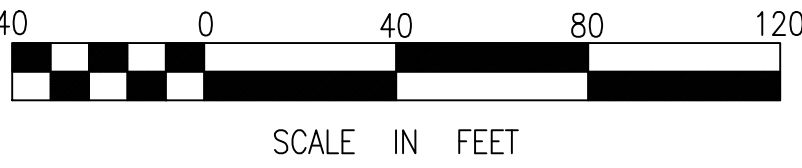
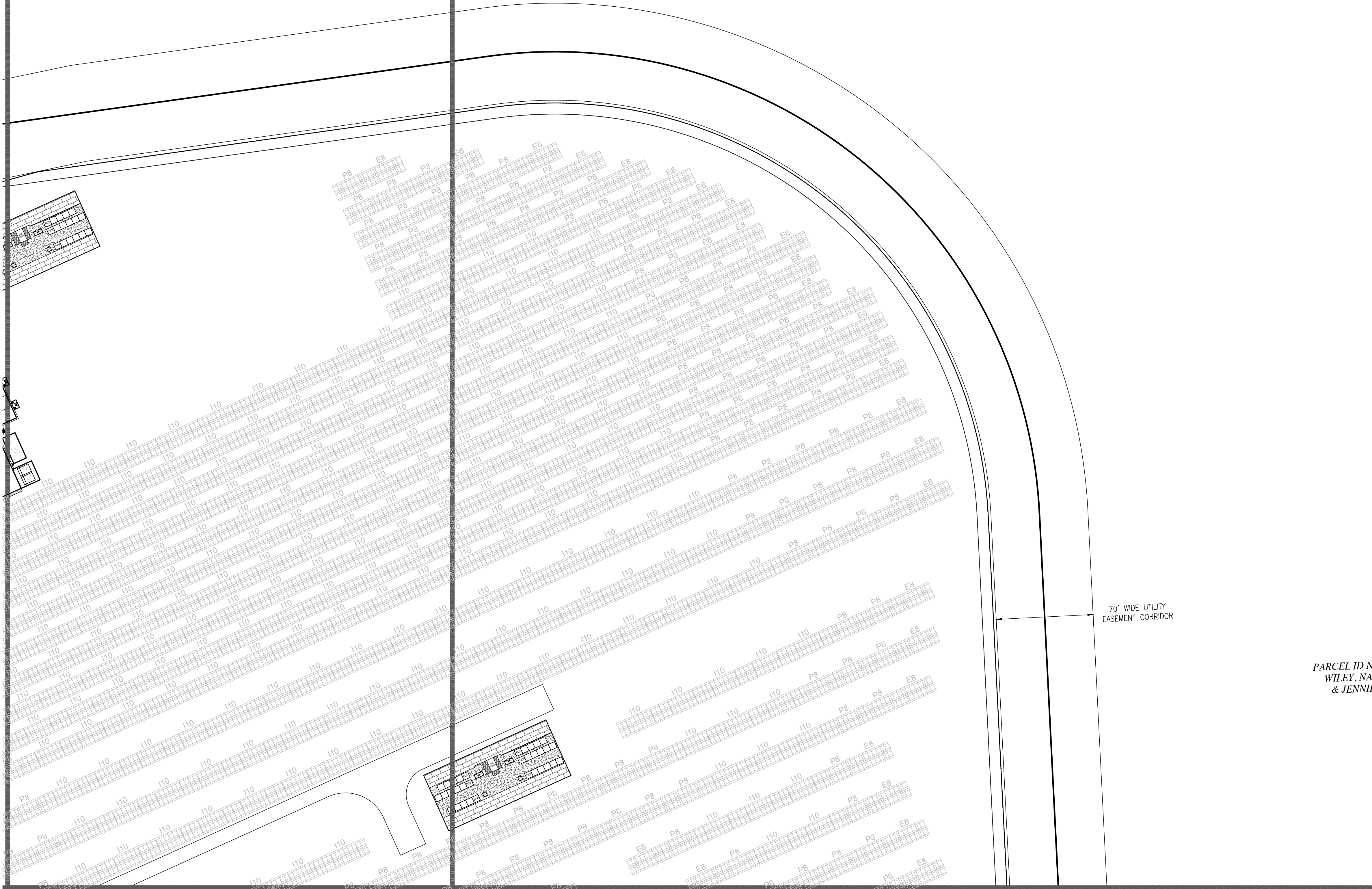
PROPOSED 1 STORY
CONTROLLED
ENVIRONMENT
AGRICULTURE (CEA)
BUILDING
(9,940 S.F.)
SUB EL = 144.0
(REFER TO
ARCHITECTURAL PLANS
FOR DETAILS)



<div>DRAWING TITLE</div> <div>LANDSCAPING PLAN</div> <div>C6.2</div>	<div>PROJECT TITLE</div> <div>VILLAGE GREEN SITE DEVELOPMENT PLAN</div>	<table><tr><td>DATE</td><td>MAY 10, 2024</td></tr><tr><td>SCALE</td><td>1" = 40'</td></tr><tr><td>DRAWN</td><td>PAL/NC</td></tr><tr><td>REVISION</td><td>—</td></tr></table>	DATE	MAY 10, 2024	SCALE	1" = 40'	DRAWN	PAL/NC	REVISION	—	<div>NSG VILLAGE GREEN - 1, LLC</div> <div>76 ROUTE 130 & 55 PIMLICO POND ROAD SANDWICH BARNSTABLE COUNTY, MA</div>	<div><div>Merrill Engineers and Land Surveyors 427 COLUMBIA ROAD, HANOVER, MA 02339 / T: (781) 826-9200 26 UNION STREET, PLYMOUTH MA 02360 / T: (508) 746-6060 WWW.MERRILLINC.COM</div></div>	<div>COPYRIGHT ©2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.</div>
DATE	MAY 10, 2024												
SCALE	1" = 40'												
DRAWN	PAL/NC												
REVISION	—												



PARCEL ID No. 12-320
RUHAN & STINSON REALTY TRUST
BOOK 28756 PAGE 283



DRAWING TITLE

LANDSCAPING
PLAN
C6.3

PROJECT TITLE

VILLAGE GREEN
SITE DEVELOPMENT
PLAN

DATE

MAY 10, 2024

SCALE

1" = 40'

DRAWN

PAL/NC

REVISION

—

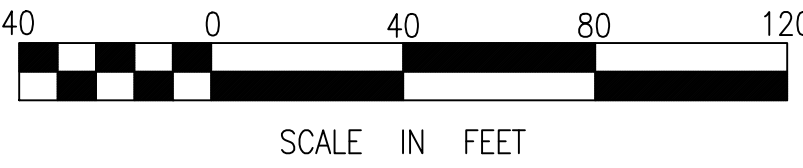
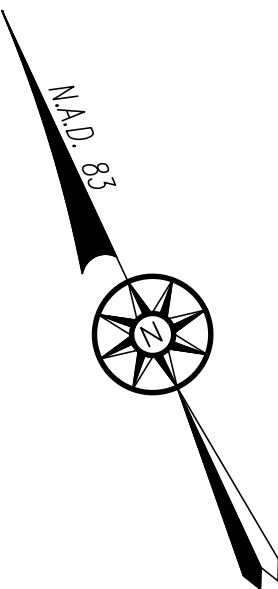
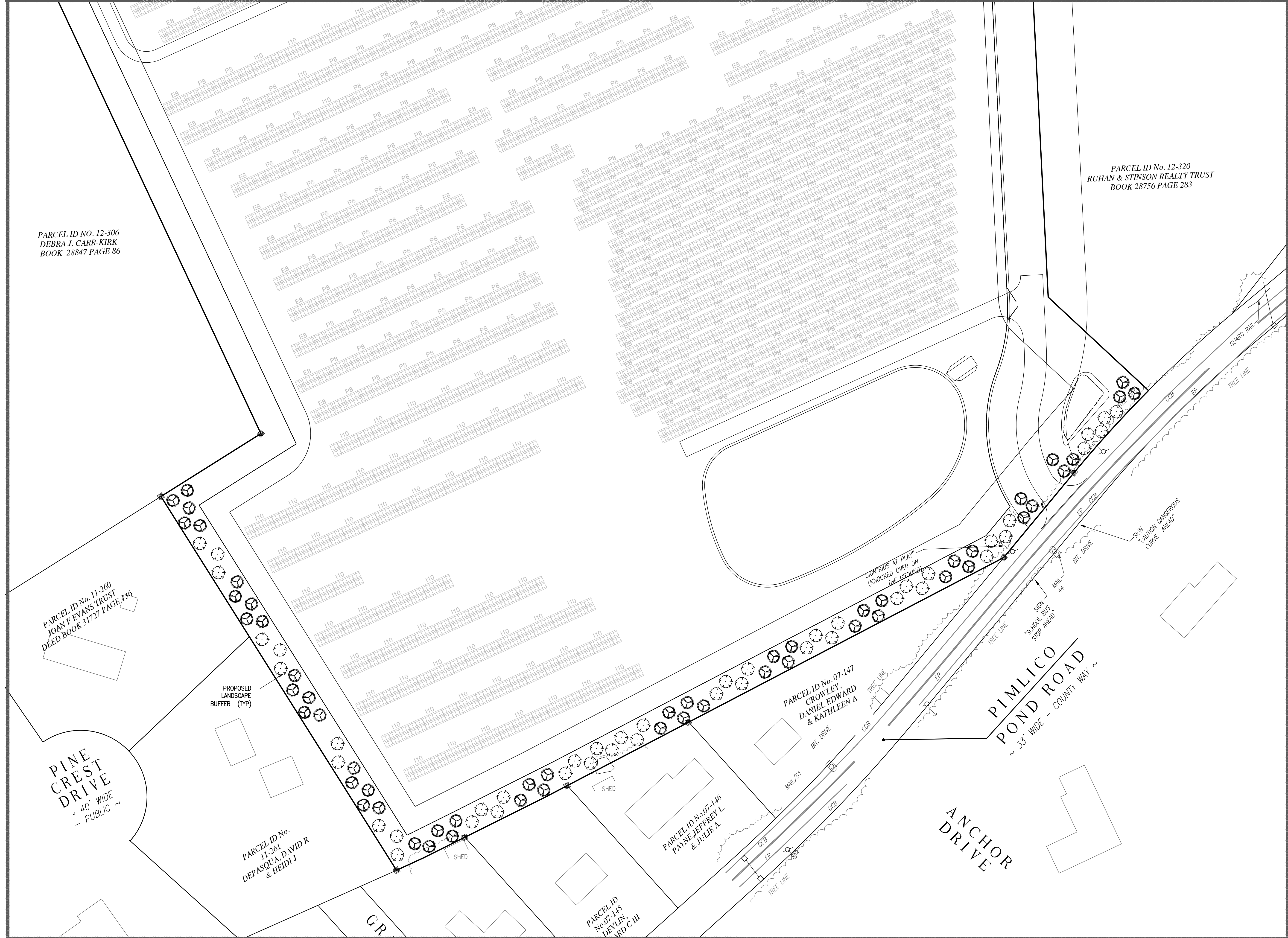
NSG VILLAGE GREEN - 1, LLC

76 ROUTE 130 &
55 PIMLICO POND ROAD
SANDWICH
BARNSTABLE COUNTY, MA



Merrill
Engineers and Land Surveyors
427 COLUMBIA ROAD, HANOVER, MA 02339 / T: (781) 826-9200
26 UNION STREET, PLYMOUTH MA 02360 / T: (508) 746-6060
WWW.MERRILLINC.COM

COPYRIGHT ©2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.



DRAWING TITLE

LANDSCAPING PLAN

C6.4

PROJECT TITLE

VILLAGE GREEN SITE DEVELOPMENT PLAN

DATE
MAY 10, 2024

SCALE
1" = 40'

DRAWN
PAL/NC

REVISION
—

NSG VILLAGE GREEN - 1, LLC

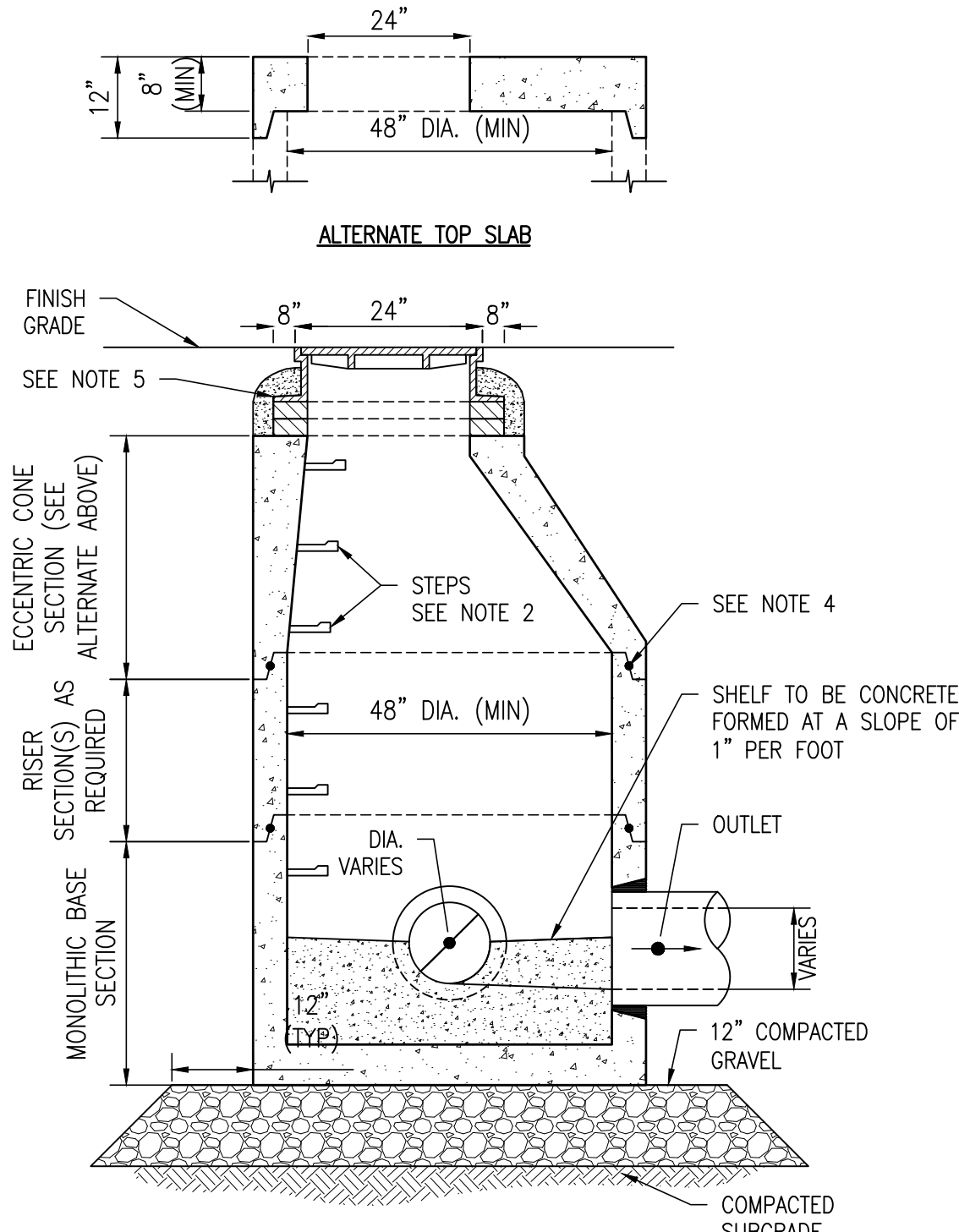
76 ROUTE 130 &
55 PIMLICO POND ROAD
SANDWICH
BARNSTABLE COUNTY, MA



Merrill

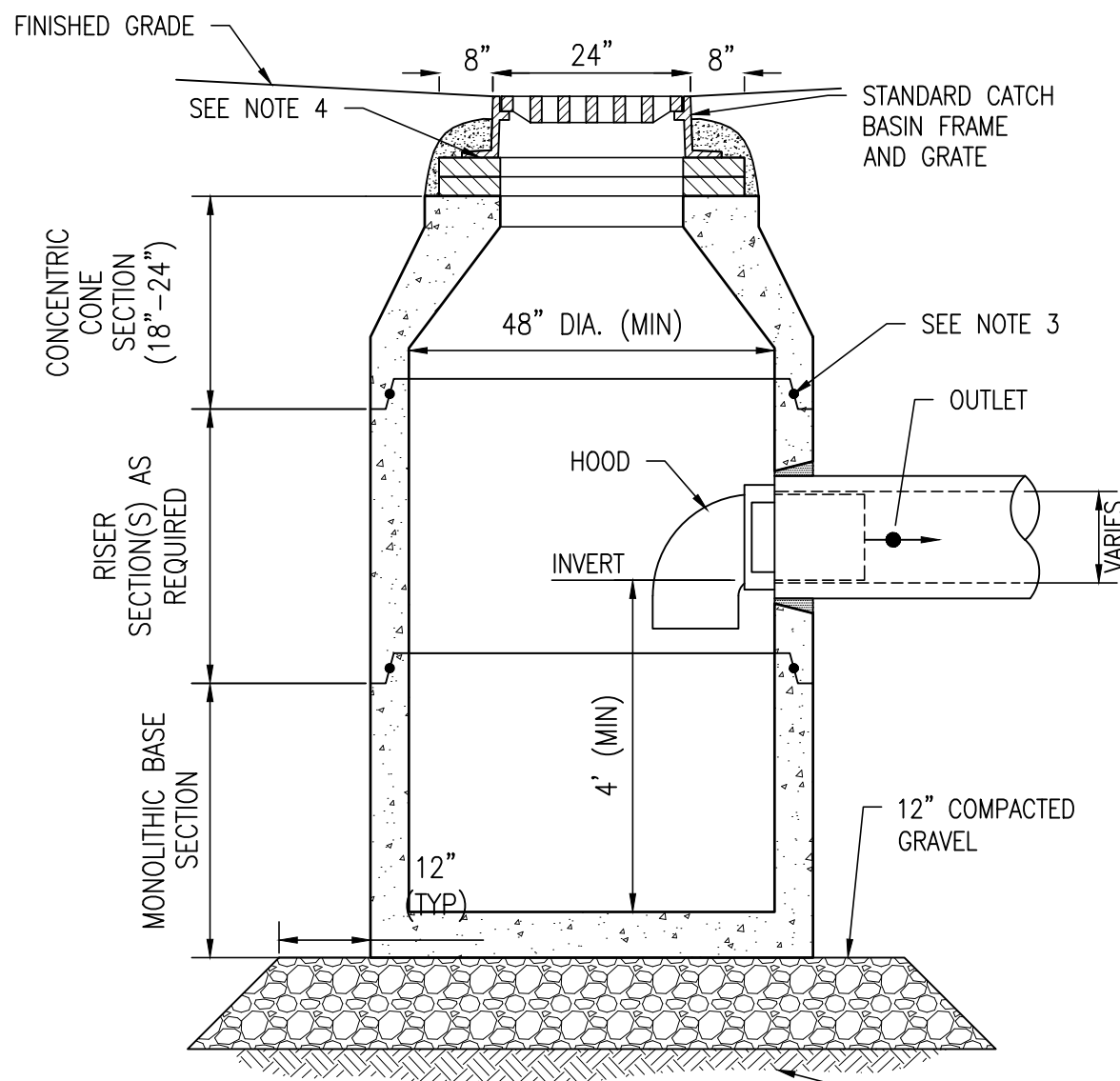
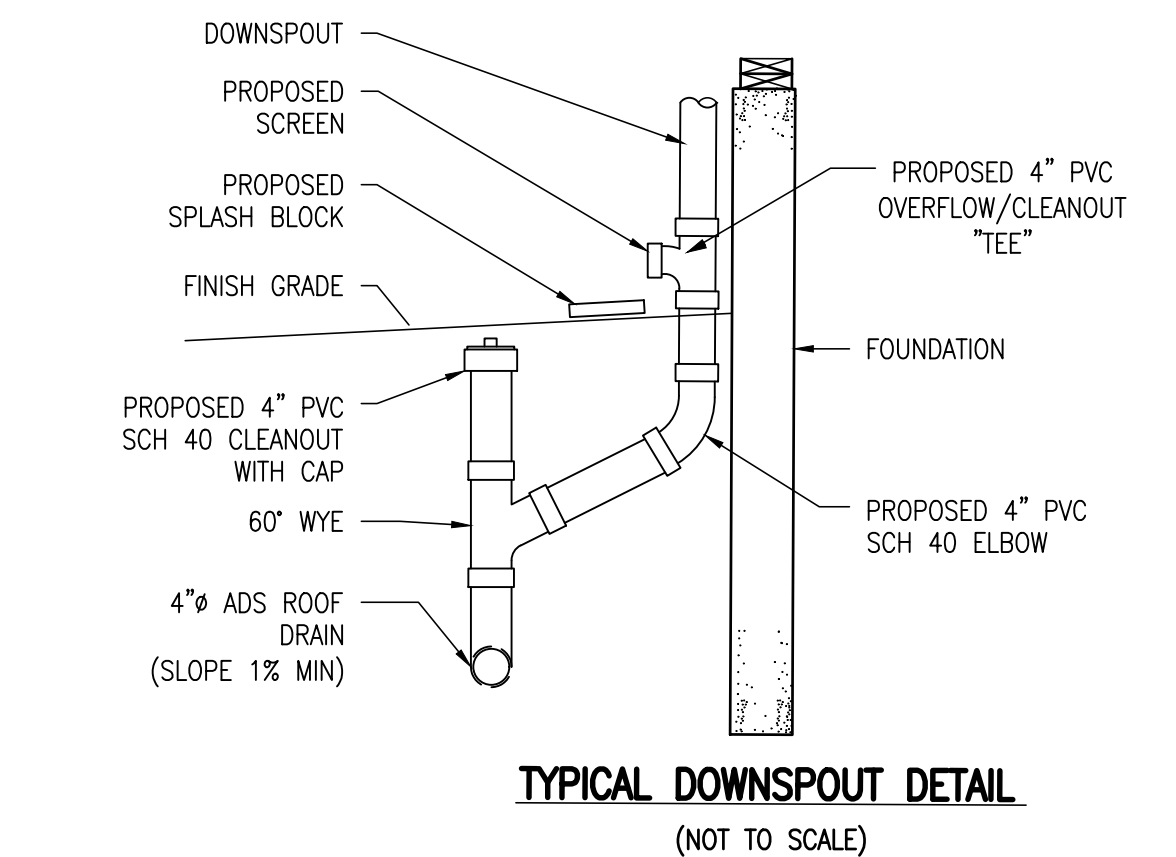
Engineers and Land Surveyors
427 COLUMBIA ROAD, HANOVER, MA 02339 / T: (781) 826-9200
26 UNION STREET, PLYMOUTH MA 02360 / T: (508) 746-6060
WWW.MERRILLINC.COM

COPYRIGHT ©2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.



- NOTES:**
- ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
 - COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
 - PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
 - JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
 - DRAIN MANHOLE FRAME AND GRATE SHALL BE SET IN FULL MORTAR BED, ADJUST TO GRADE WITH CLAY BRICK AND MORTAR. (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM)

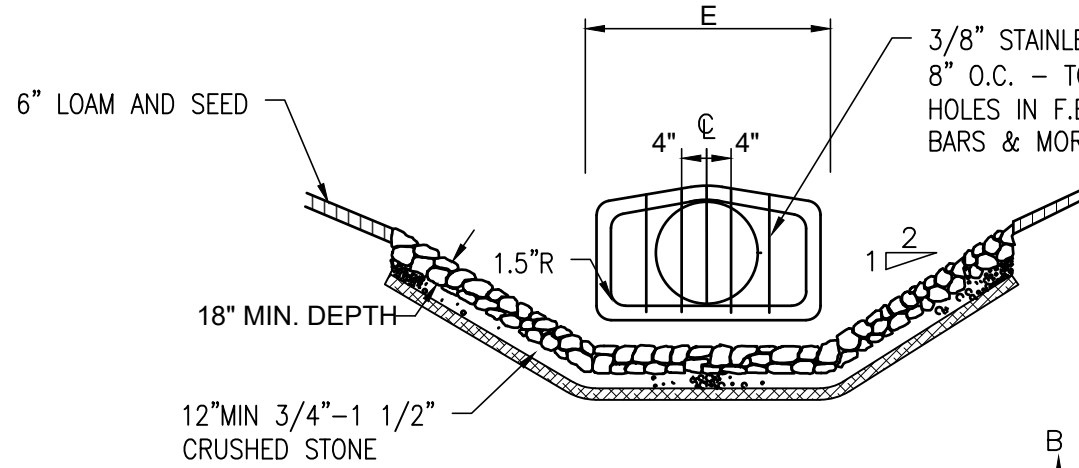
PRECAST CONCRETE MANHOLE DETAIL
(NOT TO SCALE)



- NOTES:**
- ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
 - PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
 - JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
 - CATCH BASIN FRAME AND GRATE SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR. (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM)

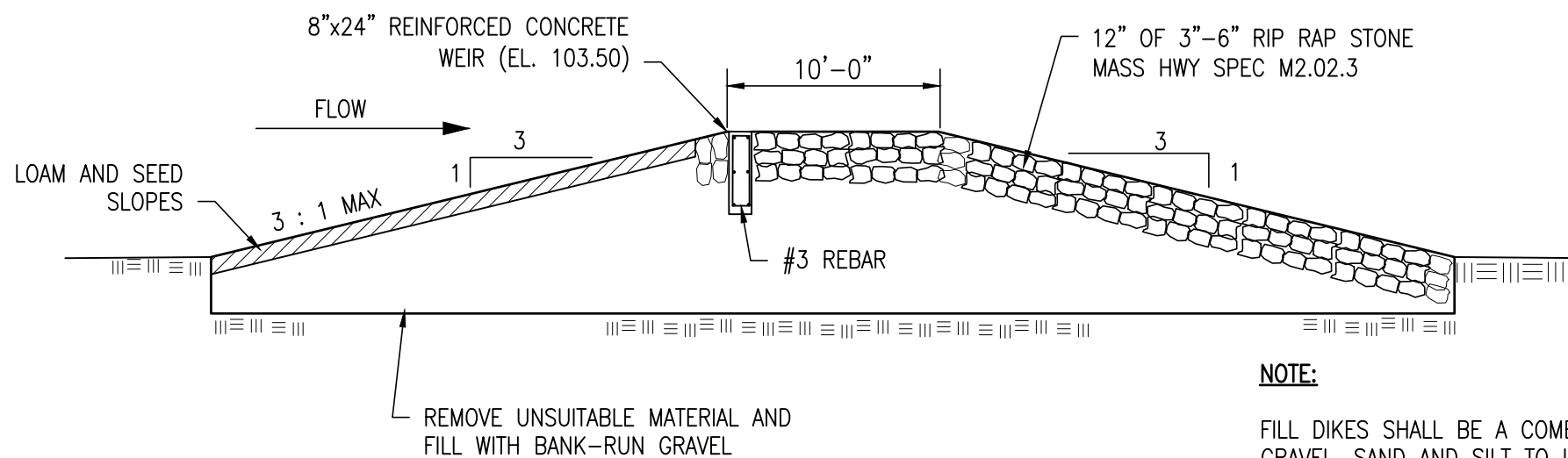
PRECAST CATCH BASIN DETAIL
(NOT TO SCALE)

PIPE DIA.	12"	15"	18"	24"	27"
A	10'-0"	12'-6"	15'-0"	20'-0"	22'-6"
B	7'-6"	9'-6"	11'-3"	15'-0"	18'-6"
C	2'-6"	3'-0"	3'-9"	5'-0"	4'-0"
D	3'-0"	4'-0"	4'-6"	6'-0"	8'-0"
E	4'-0"	5'-0"	6'-0"	8'-0"	9'-0"

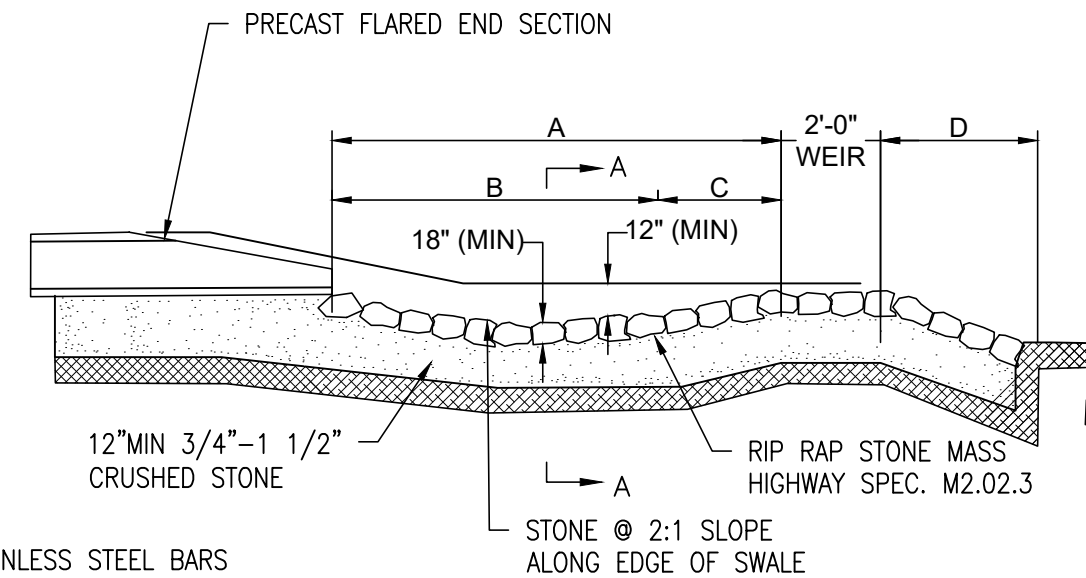


- NOTES:**
- STONE FOR EROSION CONTROL PADS SHALL COMPLY WITH MDPW MATERIAL SPEC M 2.02.3
 - STONE BERM FOR SILT TRAP SHALL BE CONSTRUCTED AROUND SIDES OF EROSION CONTROL PADS

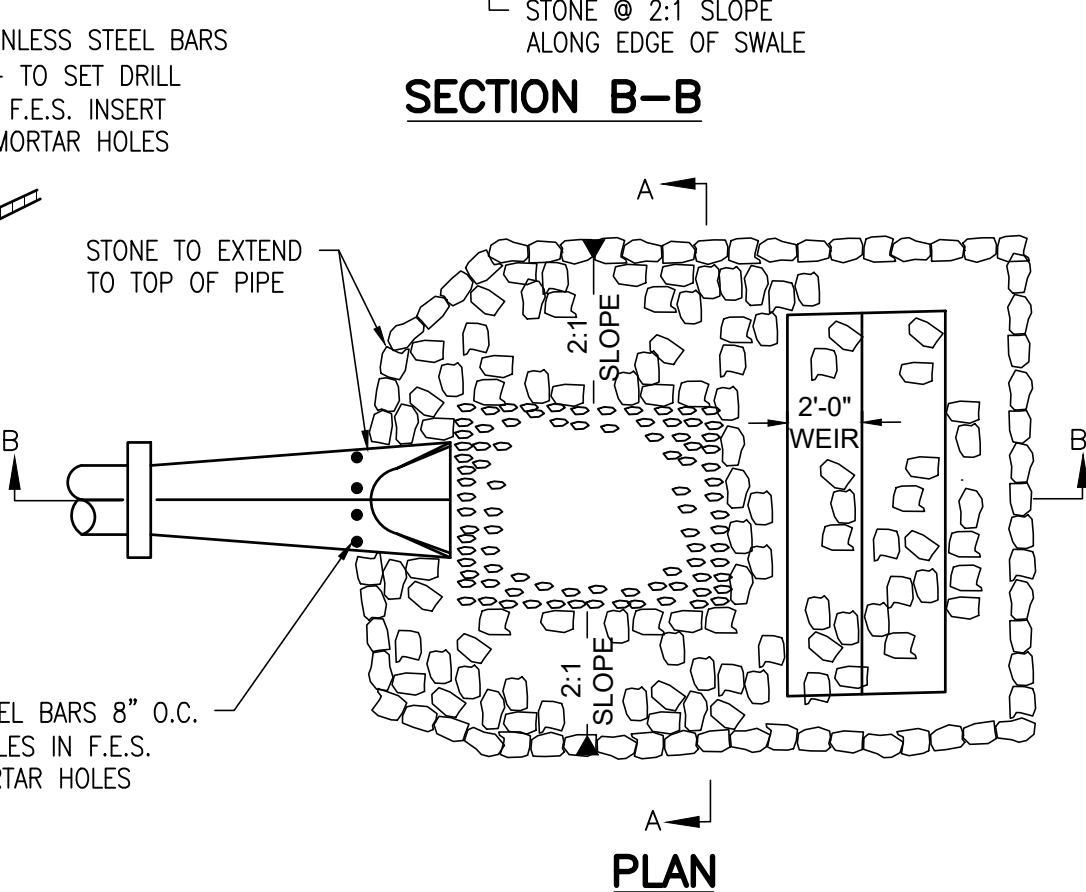
DETAIL - SILT TRAP EROSION CONTROL PAD
(NOT TO SCALE)



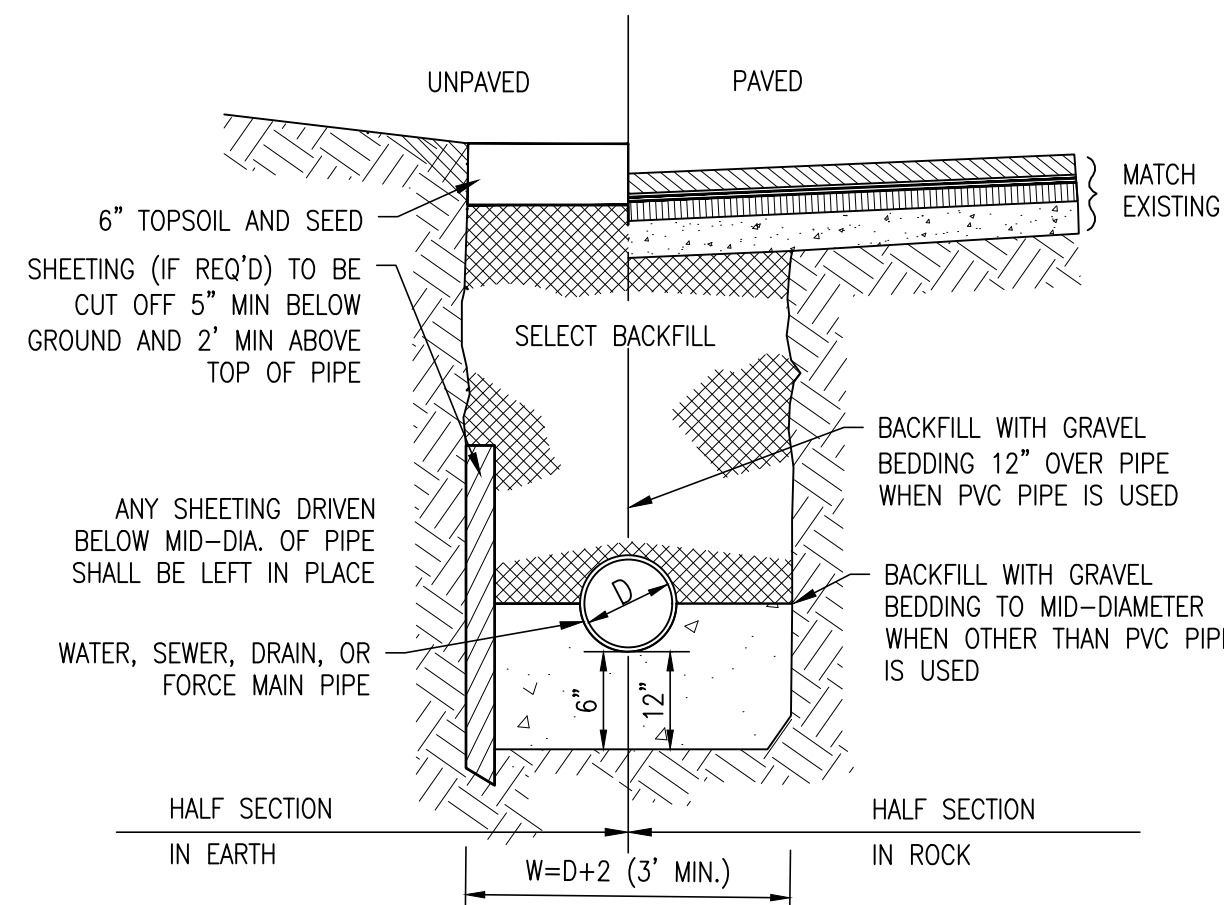
OVERFLOW SPILLWAY DETAIL
(NOT TO SCALE)



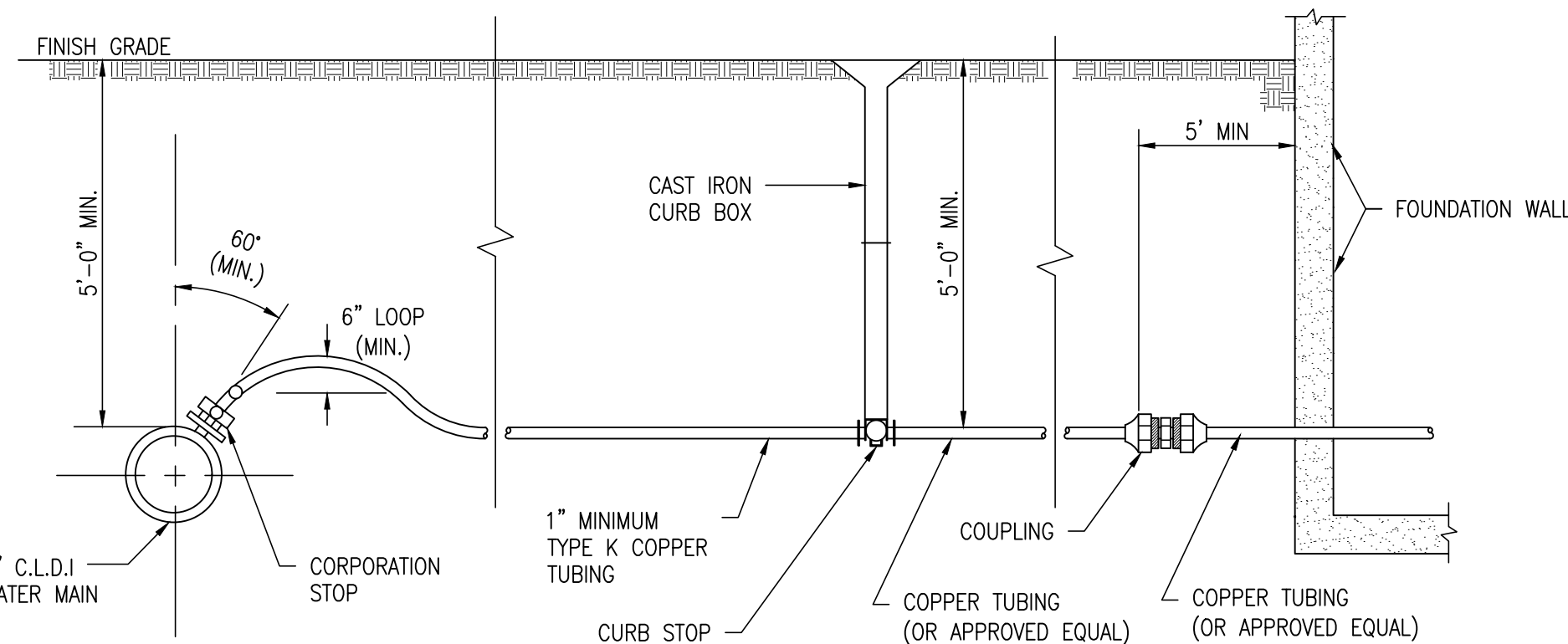
SECTION B-B



PLAN

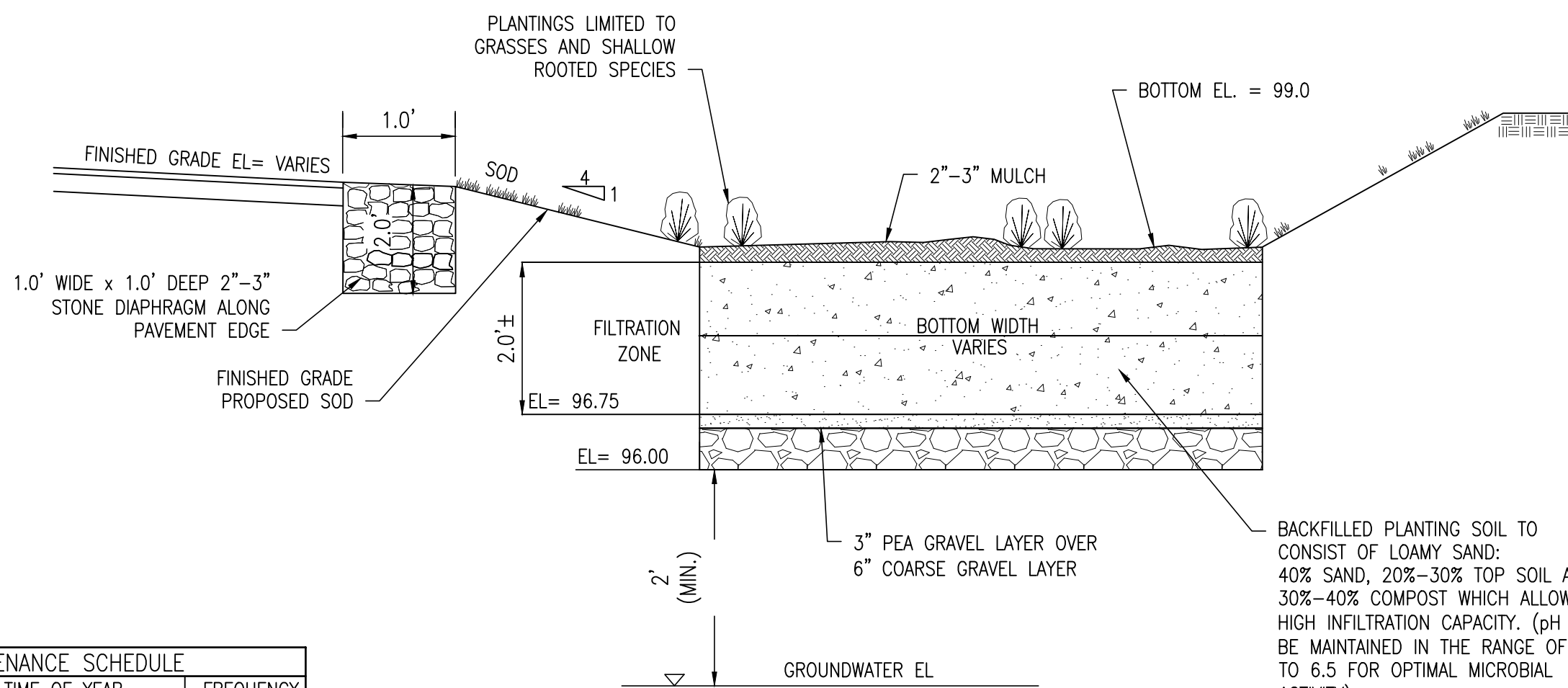


TYPICAL UTILITY TRENCH
(NOT TO SCALE)



- NOTE:**
- VERIFY MATERIALS AND TAPPING AND INSTALLATION REQUIREMENTS WITH THE TOWN WATER DEPARTMENT

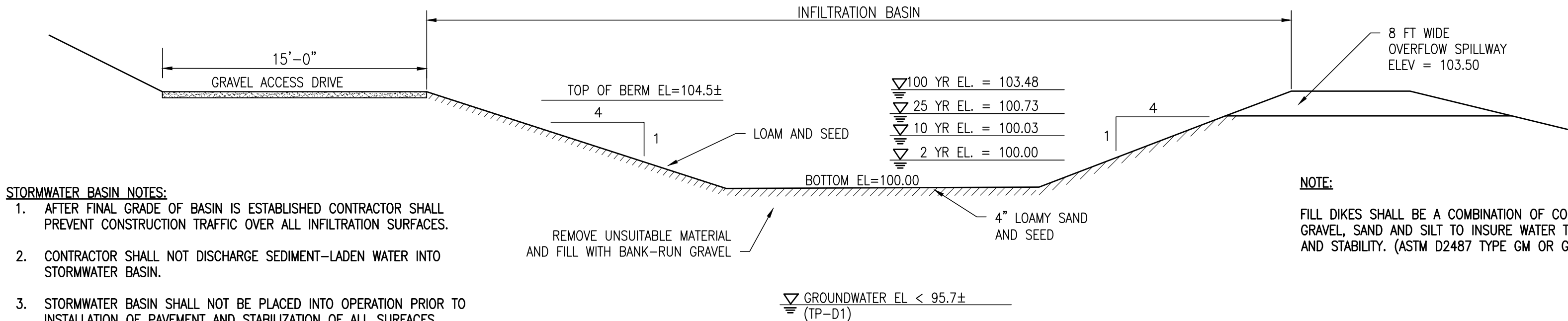
WATER SERVICE DETAIL
(NOT TO SCALE)



OPERATIONS AND MAINTENANCE

- PRE CONSTRUCTION:**
- CONTRACTOR TO PREVENT SEDIMENT FROM CLOGGING ANY EXPOSED SUBGRADE TO MINIMIZE COMP ACTION BY CONSTRUCTION VEHICLES IN AREA OF STORMWATER MANAGEMENT. NO DISCHARGE FROM DEWATERING ACTIVITIES SHALL ENTER STORMWATER MANAGEMENT AREAS. NO STORMWATER DISCHARGE SHALL BE DIRECTED ONTO INFILTRATIVE SURFACES UNTIL CONTRIBUTING AREAS ARE STABILIZED.
- POST CONSTRUCTION:**
- UNTIL VEGETATION HAS BEEN ESTABLISHED, MONTHLY INSPECTIONS ARE RECOMMENDED. ONCE VEGETATION HAS BEEN ESTABLISHED, THE RAIN GARDEN BASE SHALL BE INSPECTED ON AN ANNUAL BASIS. MAINTENANCE SHOULD CONSIST NORMALLY OF REMOVAL OF DEBRIS (PRIMARILY AT THE INFLOW POINT) AND ACCUMULATED SEDIMENT. DURING THE GROWTH SEASON THE GRASS SIDE SLOPES SHALL BE MOWED AT LEAST ONCE A MONTH. OTHER MAINTENANCE TASKS INCLUDE REPLACEMENT OF DEAD VEGETATION, EROSION REPAIR AND pH REGULATION (USUALLY ADDING LIME).

RAIN GARDEN DETAIL
(NOT TO SCALE)



- STORMWATER BASIN NOTES:**
- AFTER FINAL GRADE OF BASIN IS ESTABLISHED CONTRACTOR SHALL PREVENT CONSTRUCTION TRAFFIC OVER ALL INFILTRATION SURFACES.
 - CONTRACTOR SHALL NOT DISCHARGE SEDIMENT-LADEN WATER INTO STORMWATER BASIN.
 - STORMWATER BASIN SHALL NOT BE PLACED INTO OPERATION PRIOR TO INSTALLATION OF PAVEMENT AND STABILIZATION OF ALL SURFACES CONTRIBUTING TO CLOSED DRAINAGE SYSTEM.
 - EXCAVATE ALL MATERIAL BELOW INFILTRATION BASIN TO SAND LAYER (SEE SOIL LOGS) AND REPLACE WITH CLEAN COARSE SAND IN ACCORDANCE WITH 310 CMR 15.255.

SECTION THRU PROPOSED INFILTRATION BASIN
(NOT TO SCALE)

- NOTE:**
- FILL DIKES SHALL BE A COMBINATION OF COMPACTED GRAVEL, SAND AND SILT TO INSURE WATER TIGHTNESS AND STABILITY. (ASTM D2487 TYPE GM OR GC)

RAIN GARDEN MAINTENANCE SCHEDULE		
ACTIVITY	TIME OF YEAR	FREQUENCY
INSPECTION & REMOVE TRASH	YEAR ROUND	MONTHLY
MULCH	SPRING	ANNUALLY
REMOVE DEAD VEGETATION	FALL OR SPRING	ANNUALLY
REPLACE DEAD VEGETATION	SPRING	ANNUALLY
PRUNE	SPRING OR FALL	ANNUALLY
REPLACE ENTIRE MEDIA & ALL VEGETATION	LATE SPRING/EARLY SUMMER	ANNUALLY

RAIN GARDEN PLANTING SCHEDULE				
BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE	COMMENTS
HAMAMELIS VIRGINIANA	WITCH HAZEL	3	4'-6'	
JUNIPERUS COMMUNIS	COMMON JUNIPER	3	3'-6'	EVERGREEN
ANDROPOGON VIRGINICUS	BROOMSEDGE	3	1'-3'	
NOTE: QUANTITY AND AVAILABILITY OF PLANTINGS TO BE DETERMINED AT THE TIME OF PLANTING				

DRAWING TITLE

CONSTRUCTION DETAILS
SHEET C7.1

PROJECT TITLE

VILLAGE GREEN
SITE DEVELOPMENT
PLAN

DATE

MAY 10, 2024

SCALE

AS NOTED

DRAWN

PAL

REVISION

—

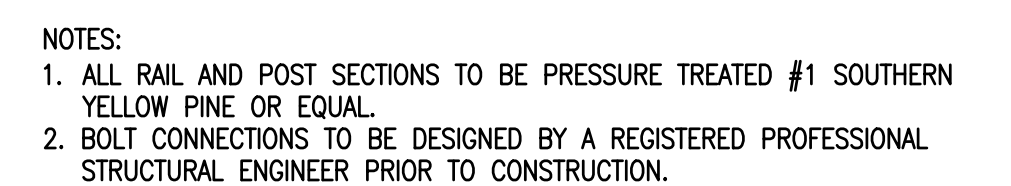
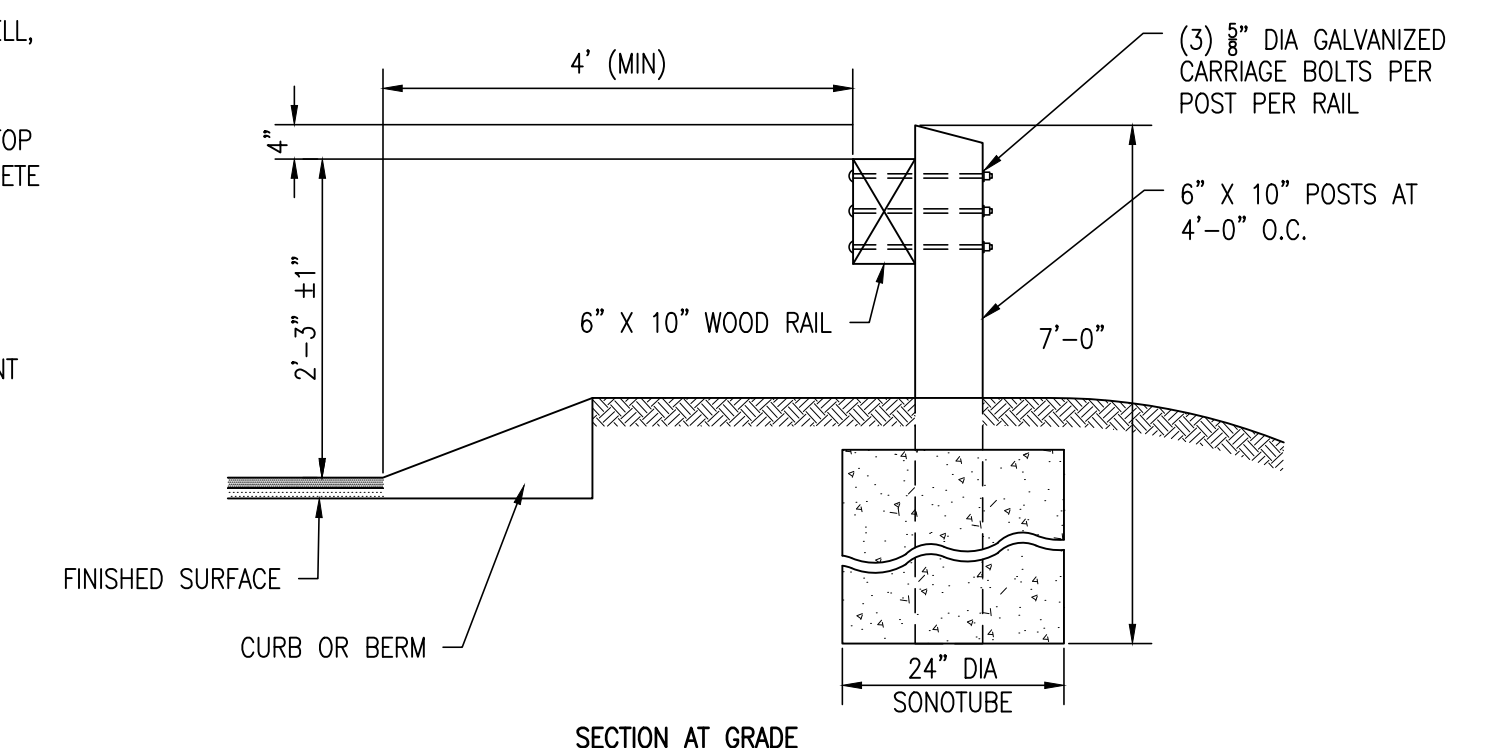
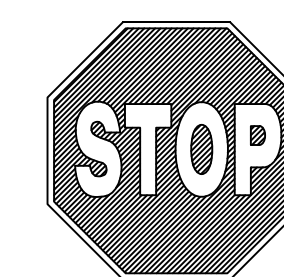
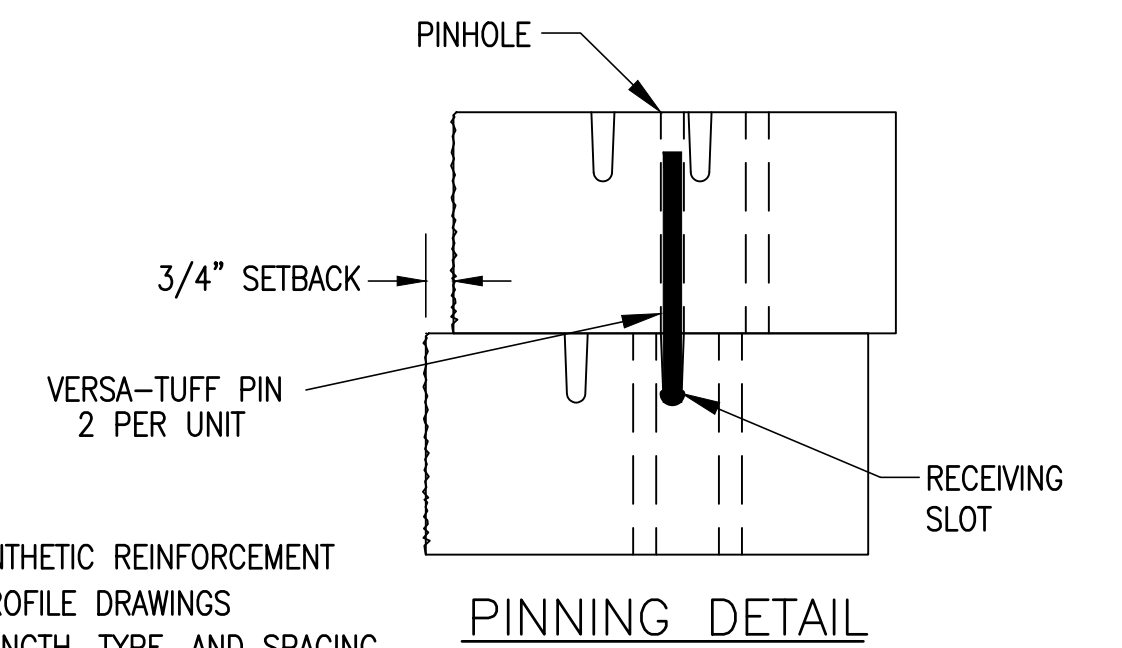
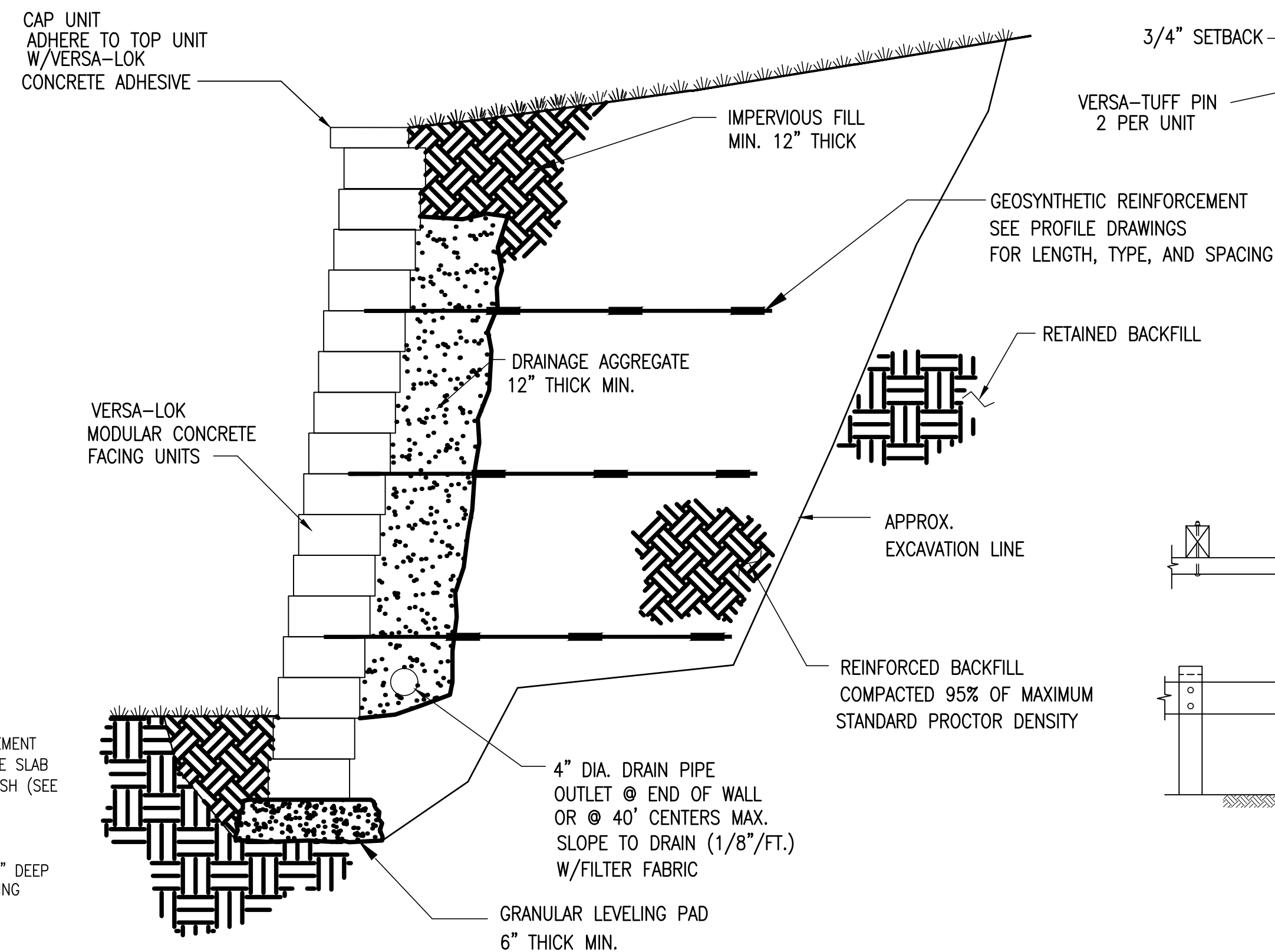
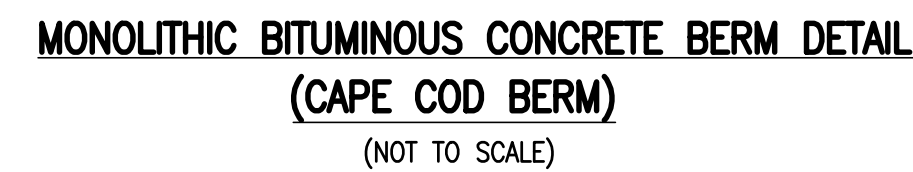
NSG VILLAGE GREEN - 1, LLC

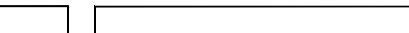

76 ROUTE 130 &
55 PIMLICO POND ROAD
SANDWICH
BARNSTABLE COUNTY, MA



Merrill
Engineers and Land Surveyors
427 COLUMBIA ROAD, HANOVER, MA 02339 / T: (781) 826-9200
26 UNION STREET, PLYMOUTH MA 02360 / T: (508) 746-6060
WWW.MERRILLINC.COM

COPYRIGHT ©2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.



DRAWING TITLE	PROJECT TITLE	DATE	<p>NSG VILLAGE GREEN - 1, LLC</p> <p>76 ROUTE 130 & 55 PIMICO POND ROAD SANDWICH BARNSTABLE COUNTY, MA</p>			<p>COPYRIGHT © 2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.</p>
CONSTRUCTION DETAILS	VILLAGE GREEN SITE DEVELOPMENT PLAN	MAY 10, 2024				
SHEET C7.2		DRAWN				
		REVISION —				



EXISTING BIT. CONC. PAVEMENT (TR)

SAWCUT JOINT FOR CLEAN EDGE

12" THICK COMPACTED GRAVEL SUBBASE* MASS HIGHWAY SPEC. M1.03.0 TYPEB OR M2.01.7

NEW BIT. CONC. PAVEMENT (TWO COURSES):
1.5" FINISHED COURSE
2.5" BINDER COURSE

HOT APPLIED ASPHALT JOINT SEALER

12" MIN.

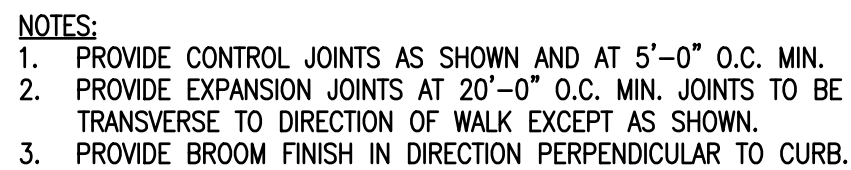
UNDISTURBED GRAVEL BASE

COMPACTED AS REQUIRED

COMPACTED SUBGRADE

EXISTING GRAVEL BASE

Diagram illustrating the required vertical clearance and radius for a driveway apron. The diagram shows a vertical line representing the "EDGE OF PAVEMENT" and a horizontal line representing the "DRIVEWAY APRON". A curved line indicates the transition between them, with a minimum radius of $R=3'$ (TYP.). A vertical dimension line indicates a minimum clearance of $10'$ (MIN.) from the edge of the pavement to the top of the apron.



PAVEMENT & JOINTING DETAIL
(NOT TO SCALE)

EDGE OF PAVEMENT

MIN. R=3'
(TYP.)

VARIABLES
(10' MIN)

DRIVEWAY APRON

GRASS

EXISTING GRAVEL BASE

COMPACTED AS REQUIRED

COMPACTED SUBGRADE

NOTE:
INTERMEDIATE RAILING POST SHALL BE MIDWAY OF TOTAL SPAN AND CENTERED ON STEP

1 1/2" OD HANDRAIL

CHEEK WALL 1'-0" WIDE

SET POST IN NON-SHRINK GROUT 6" MIN FROM JOINT OR EDGE

EXPANSION JOINT

CONC. WALK (OR AS NOTED)

PITCH TO DRAIN 2% MAX SLOPE

NOSING DETAIL TROWEL NOSING WITH SLIP RESISTANT GROOVES

1" CHAMFER ALL EDGES

NO. 4 REBARS 16" O/C EW

NO. 4 REBARS AT 12" O/C T & B (TYP)

NO. 4 REBARS AT 12" O/C T & B/EW

COMPACTED GRAVEL

POURED CONCRETE CHEEK WALLS NO. 4 REBARS AT 12" O/C EW/EF (MIN 2" CLEAR)

Diagram illustrating the cross-section of a concrete driveway apron and handrail. The driveway apron is 6'-0" wide and has a 1"/FT. slope. The handrail is 6" high and has a 12" gravel base. The driveway apron is 3 1/2" bituminous concrete pavement (1 1/2" top course, 2" binder course) on a 12" gravel base. The handrail is 6" high and has a 12" gravel base. The diagram is labeled "CONCRETE STAIRS AND HANDRAIL" and "(NOT TO SCALE)".

NOTES:

1. SLOPES OF ALL DRIVEWAYS SHALL NOT EXCEED 10% WITHIN 75 FEET OF STREET LINE.

[illegible]

RIM: VARIES

T.O.S.: 6.46 ft [1.969 m] (MINIMUM)

NOTE: ADDITIONAL HEIGHT MAY BE REQUIRED DEPENDING ON PIPE SIZE

PIPE INVERTS: 3.71 ft [1.131 m] (MINIMUM)

PREASSEMBLY REFERENCE: 2.67 ft [.813 m]

BOTTOM OF INTERNALS: 1.83 ft [.559 m]

SUMP: .00 ft [.000 m]

1. MANHOLE WALL AND SLAB THICKNESSES ARE NOT TO SCALE.
2. CONTACT HYDRO INTERNATIONAL FOR A BOTTOM OF STRUCTURE ELEVATION PRIOR TO SETTING FIRST DEFENSE MANHOLE.
3. CONTRACTOR TO CONFIRM RIM, PIPE INVERTS, PIPE DIA. AND PIPE ORIENTATION PRIOR TO RELEASE OF UNIT TO FABRICATION.



IF IN DOUBT ASK

DATE: 11/2/2021		SCALE: 1:30	
DRAWN BY: ER		CHECKED BY: MRJ	APPROVED BY

Title
3-ft DIAMETER
FIRST DEFENSE

GENERAL ARRANGEMENT

Hydro
International 
hydro-int.com
HYDRO INTERNATIONAL

WEIGHT:	MATERIAL:
STOCK NUMBER:	

DRAWING NO.: FD GA-3		
SHEET SIZE: B	SHEET: 1 OF 1	Rev -

Rev
-

FIRST DEFENSE HIGH CAPACITY PRETREATMENT UNIT (FD-3HC)

(DESIGNED FOR H-20 LOADING)
(NOT TO SCALE)

CONSTRUCTION DETAILS
SHEET C6.3

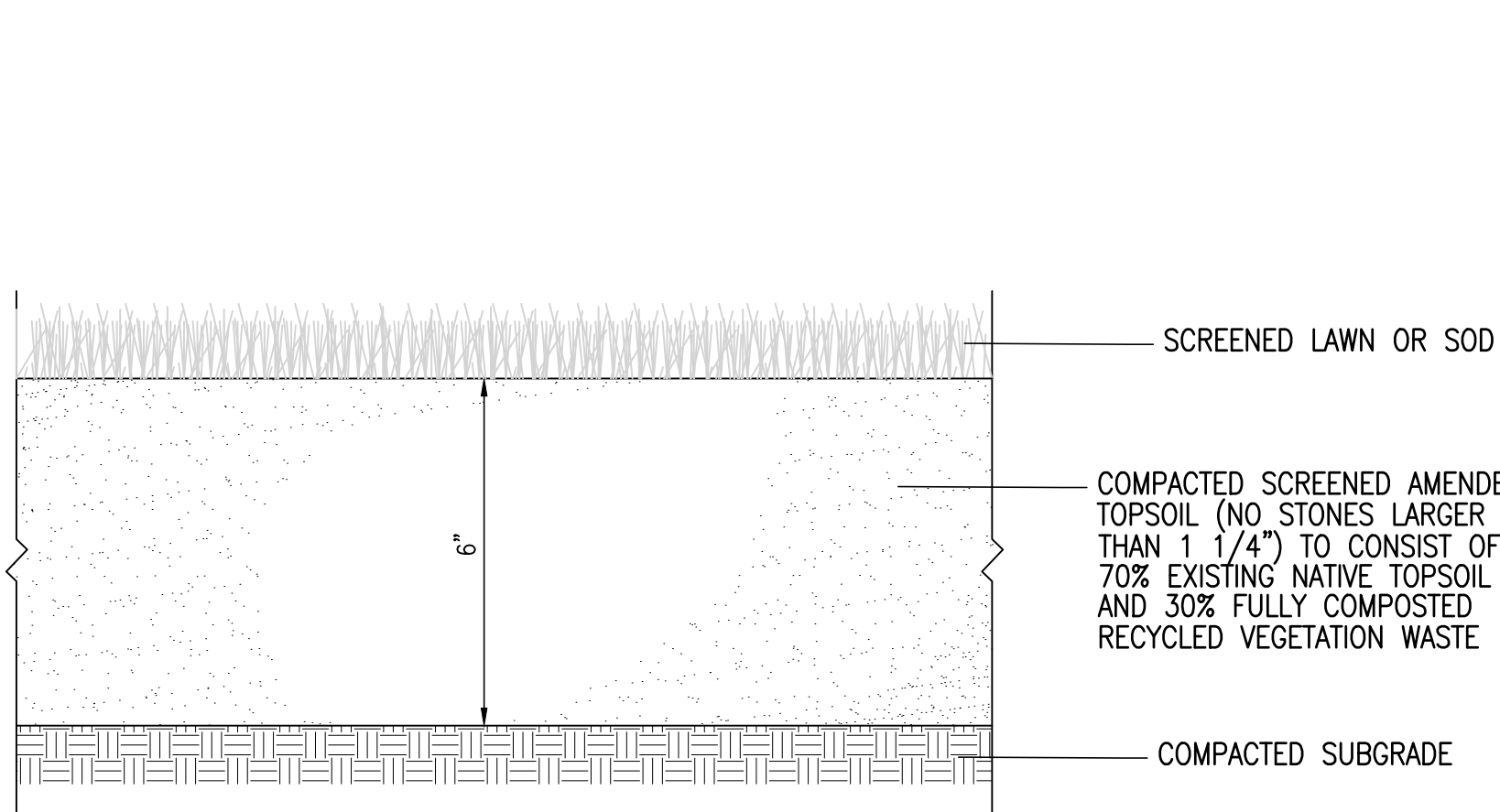
VILLAGE GREEN SITE DEVELOPMENT PLAN

NSG VILLAGE GREEN - 1, LLC

76 ROUTE 130 &
55 PIMLICO POND ROAD
SANDWICH
BARNSTABLE COUNTY, MA



COPYRIGHT ©2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.

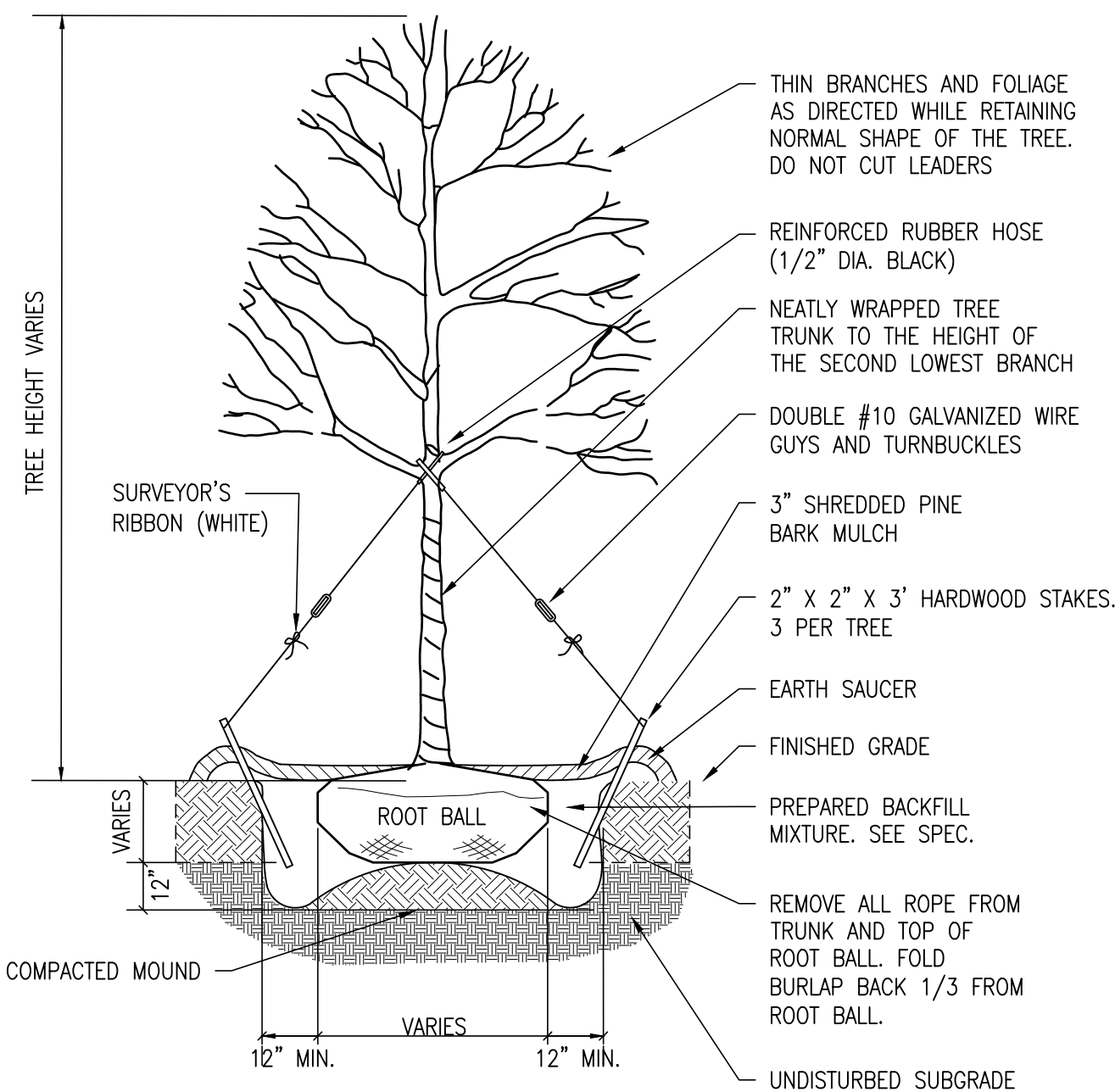


NOTE:

1. TOP OF LOAM (TOPSOIL) IS FINISHED GRADE.
2. TOPSOIL SHALL HAVE A MAXIMUM STONE SIZE OF 1 1/4" AND SHALL CONFORM TO THE FOLLOWING GRADATION:

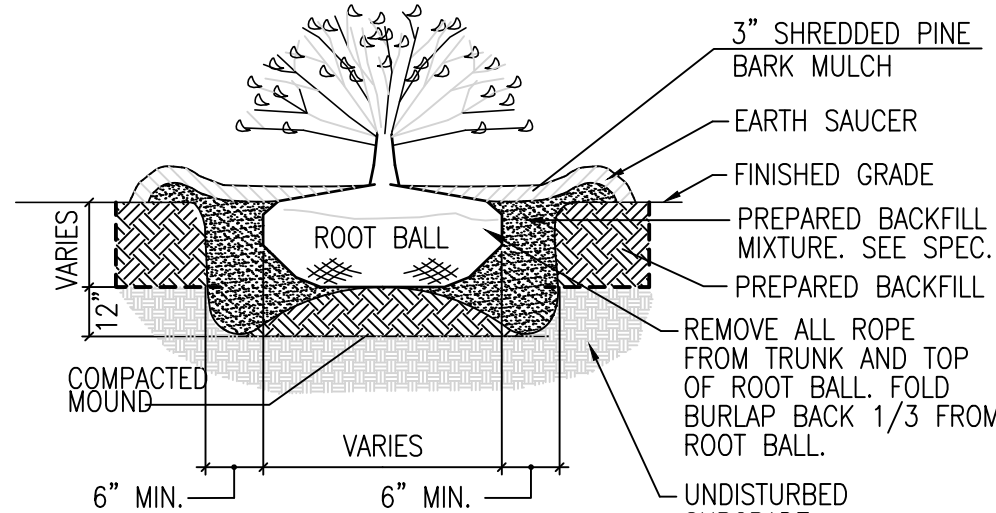
SIEVE	PASSING
1 1/4 INCH	100
NO.4	85-100
NO.40	80-100
NO.100	38-80
NO.200	28-40

SEED AND LAWN DETAIL
(NOT TO SCALE)



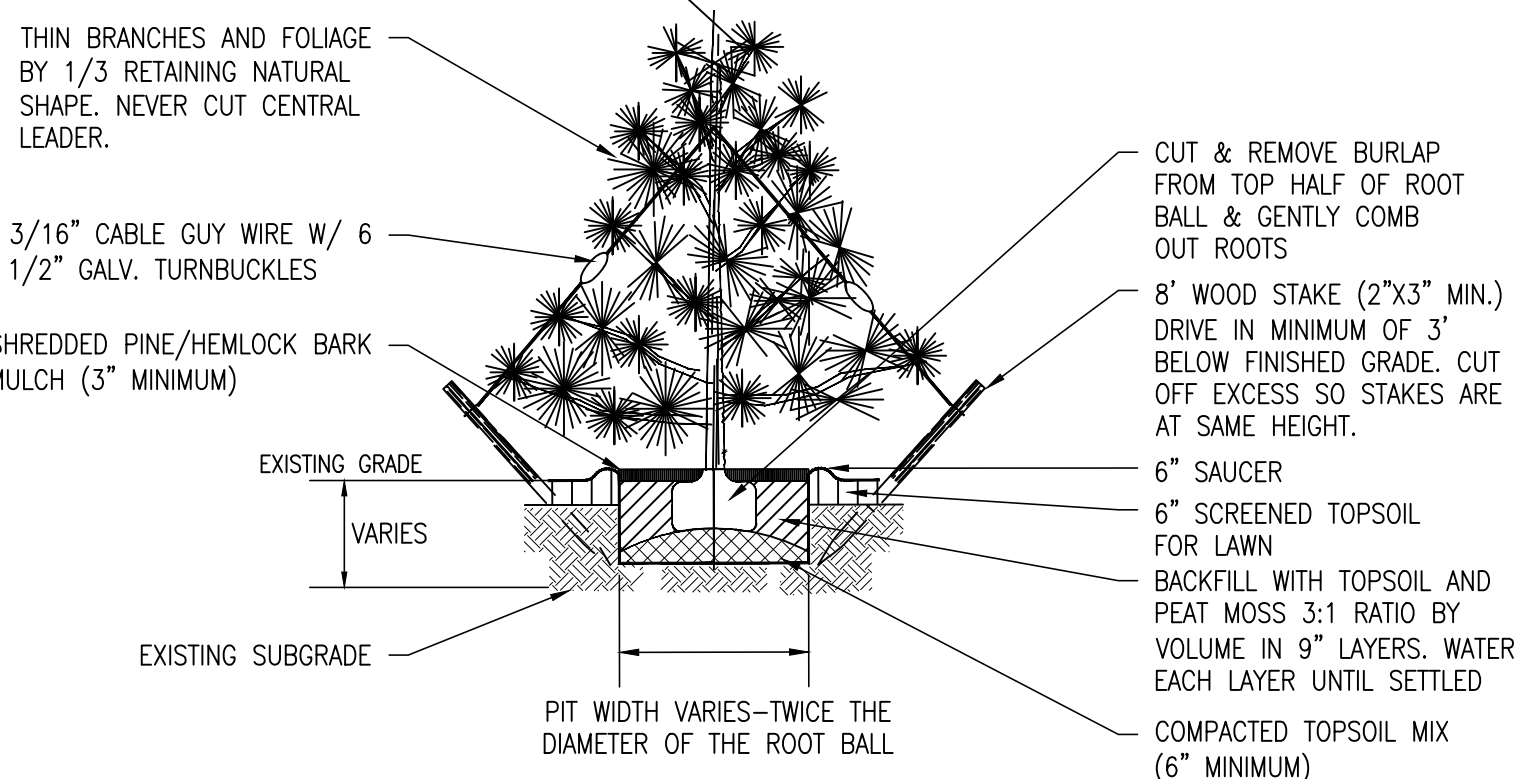
DECIDUOUS TREE PLANTING
NOT TO SCALE

- NOTES:
1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
 2. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.

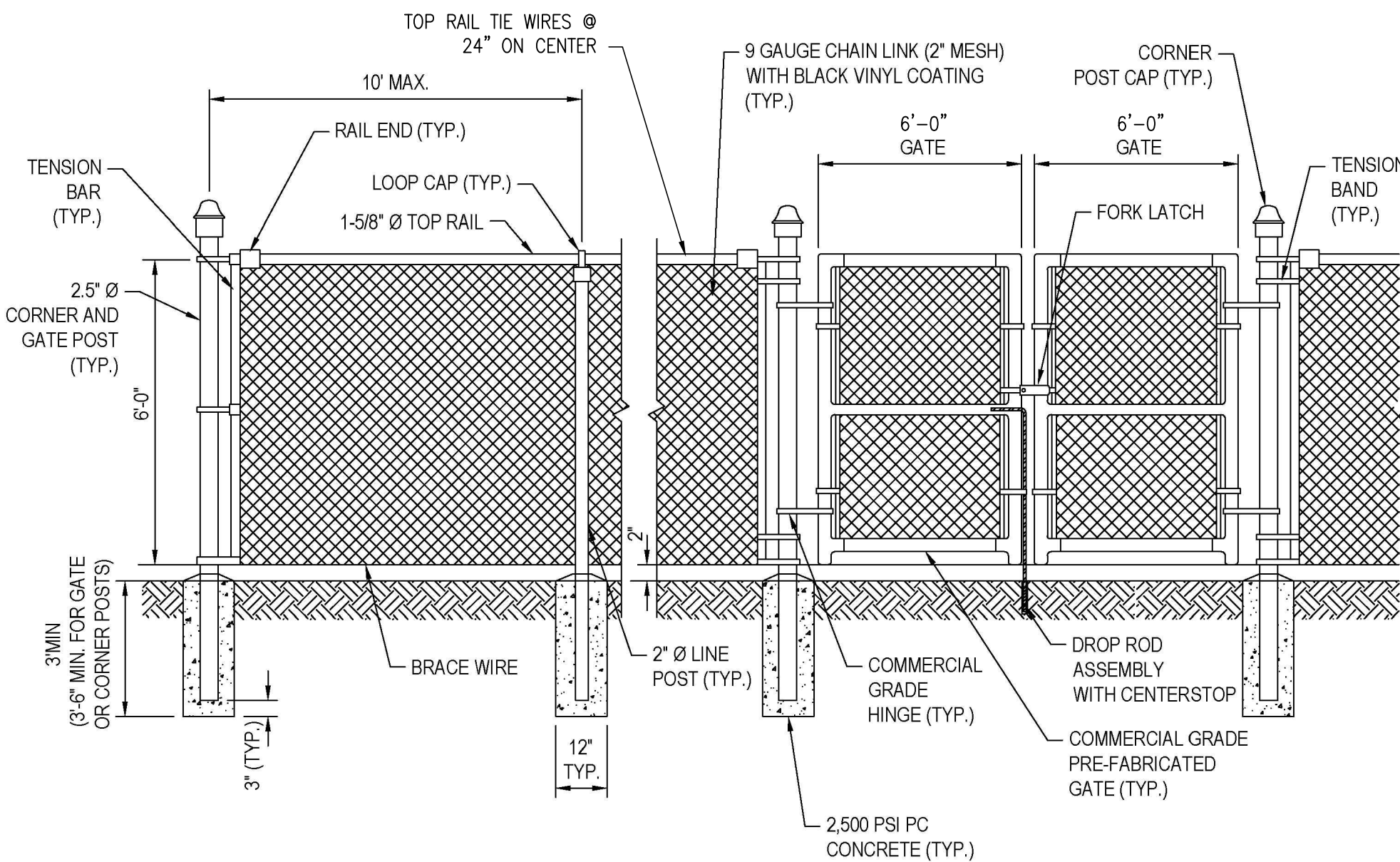


SHRUB PLANTING
NOT TO SCALE

- NOTES:
1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
 2. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.

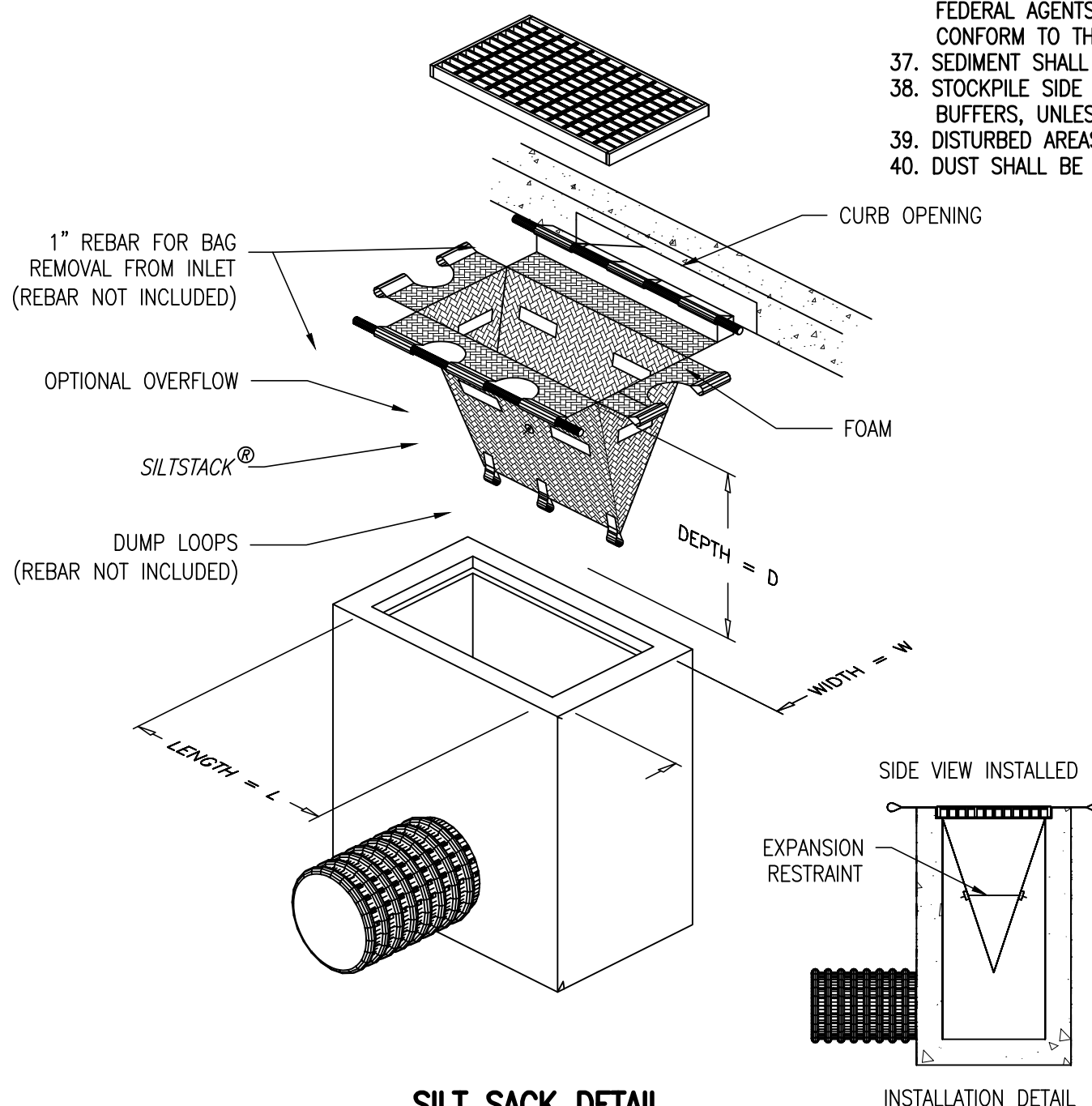


EVERGREEN TREE PLANTING
NOT TO SCALE

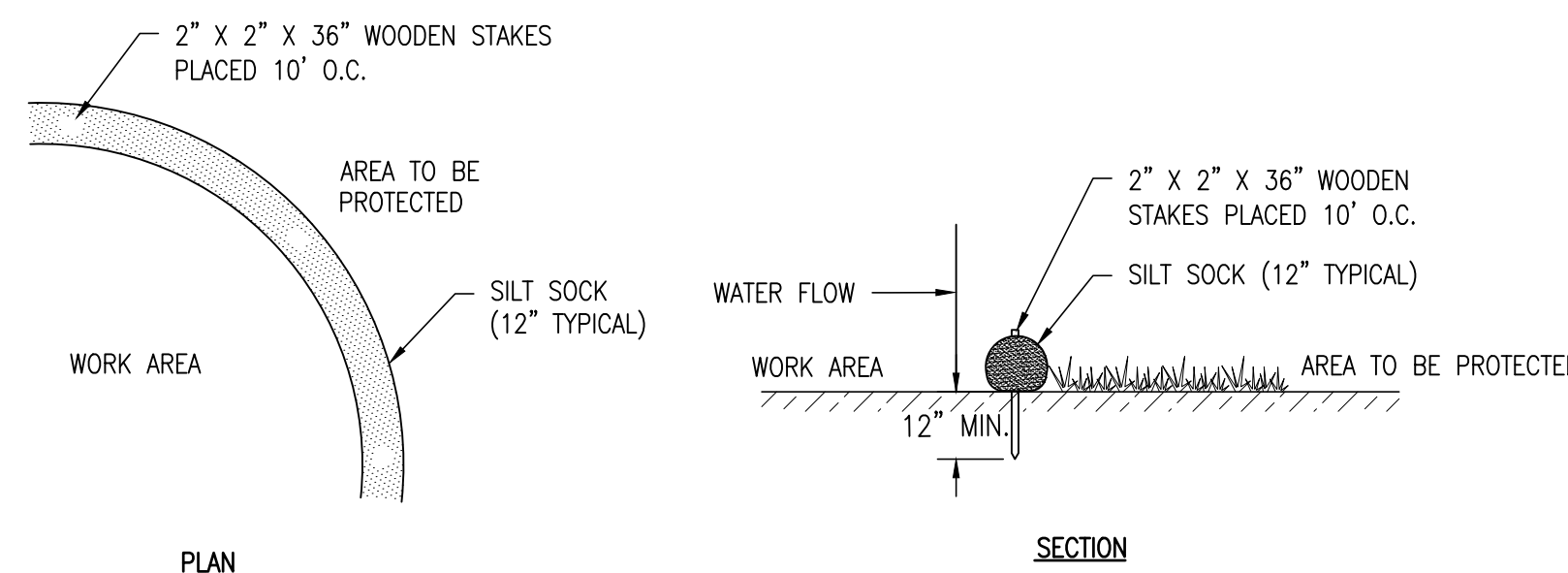


NOTE:
ALL POSTS AND HARDWARE TO BE BLACK.

SOLAR FIELD FENCE DETAIL
(NOT TO SCALE)

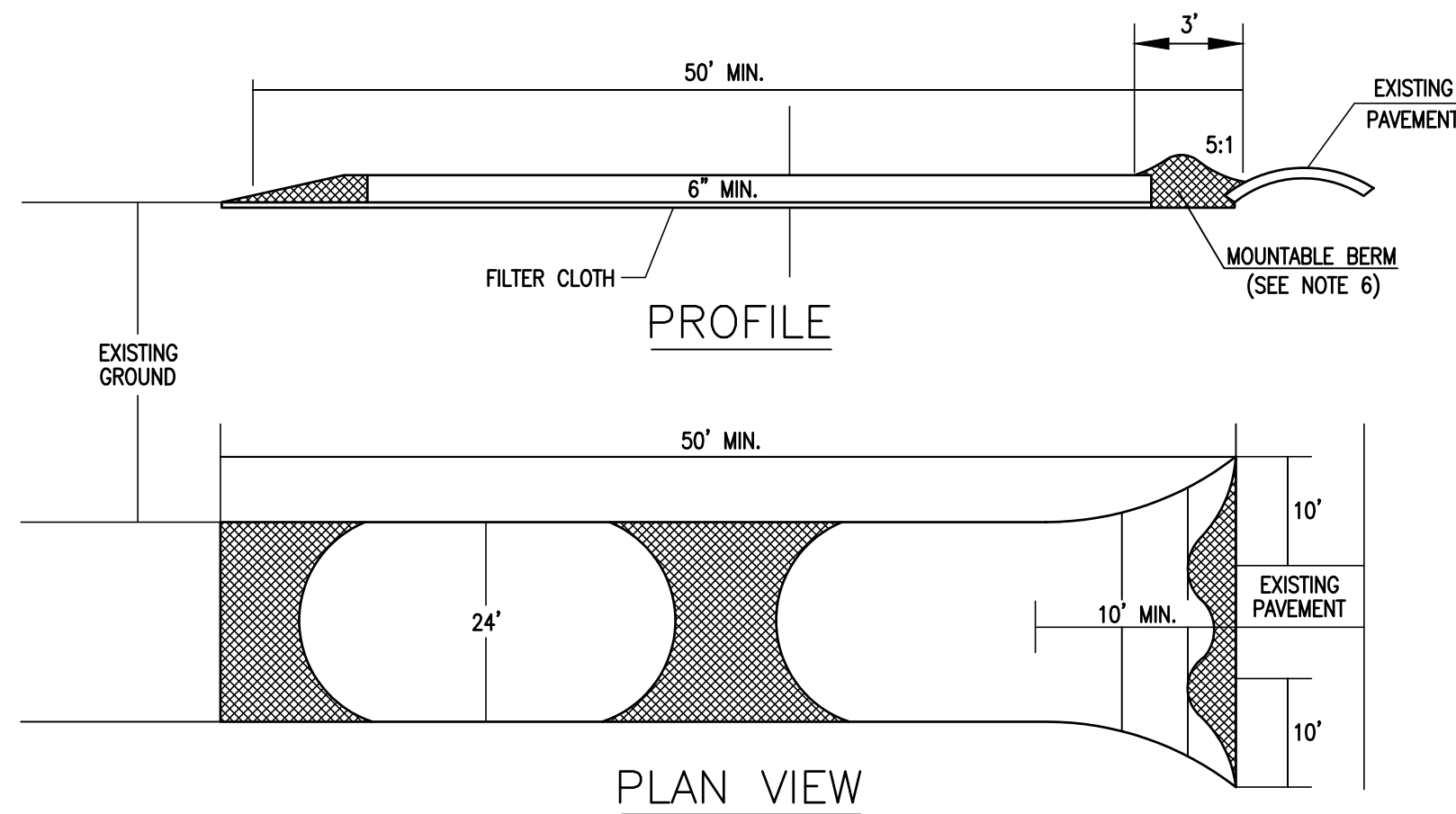


SILT SACK DETAIL
(NOT TO SCALE)



NOTE: REFER TO THE PLAN FOR PROPOSED LOCATION.

SILT SOCK DETAIL
(NOT TO SCALE)



SPECIFICATIONS

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FT.
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAYS MUST BE REMOVED IMMEDIATELY.
8. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT OF WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE
(NOT TO SCALE)

DRAWING TITLE

CONSTRUCTION DETAILS
SHEET C7.4

PROJECT TITLE

VILLAGE GREEN
SITE DEVELOPMENT
PLAN

DATE

MAY 10, 2024

SCALE

AS NOTED

DRAWN

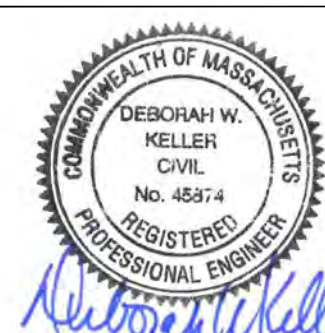
PAL

REVISION

—

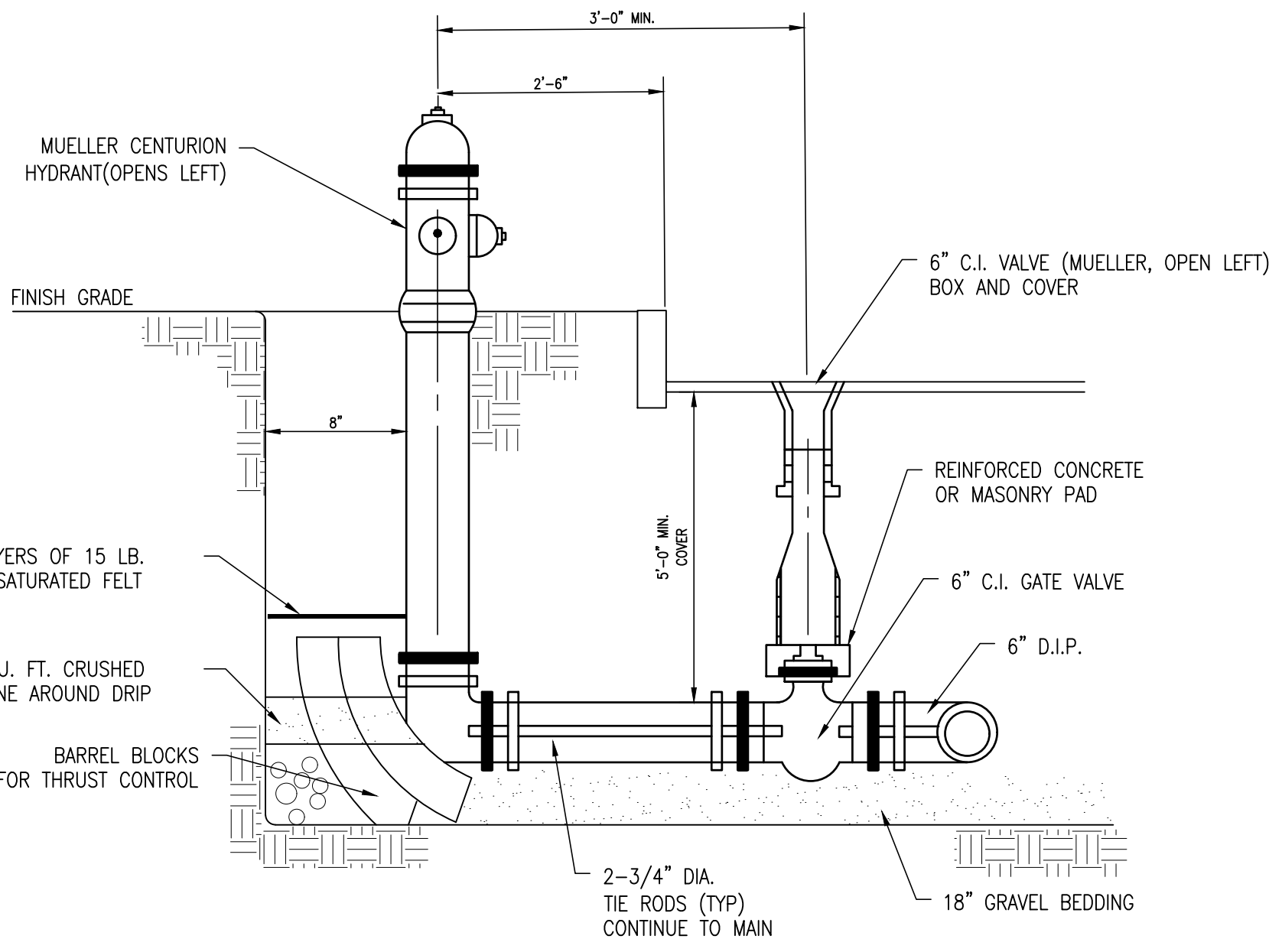
NSG VILLAGE GREEN - 1, LLC

76 ROUTE 130 &
55 PIMLICO POND ROAD
SANDWICH
BARNSTABLE COUNTY, MA

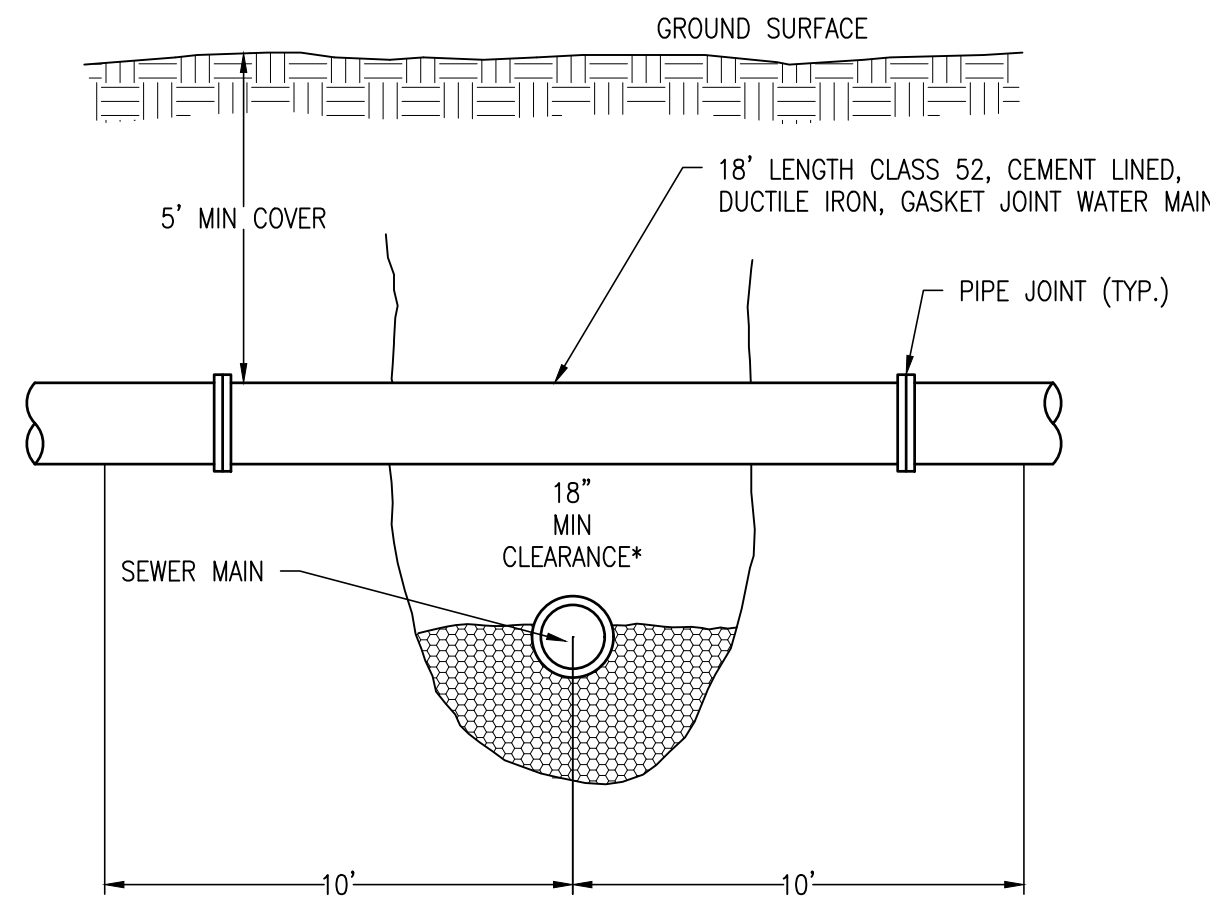


Merrill
Engineers and Land Surveyors
427 COLUMBIA ROAD, HANOVER, MA 02339 / T: (781) 826-9200
26 UNION STREET, PLYMOUTH MA 02360 / T: (508) 746-6060
WWW.MERRILLINC.COM

COPYRIGHT ©2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.

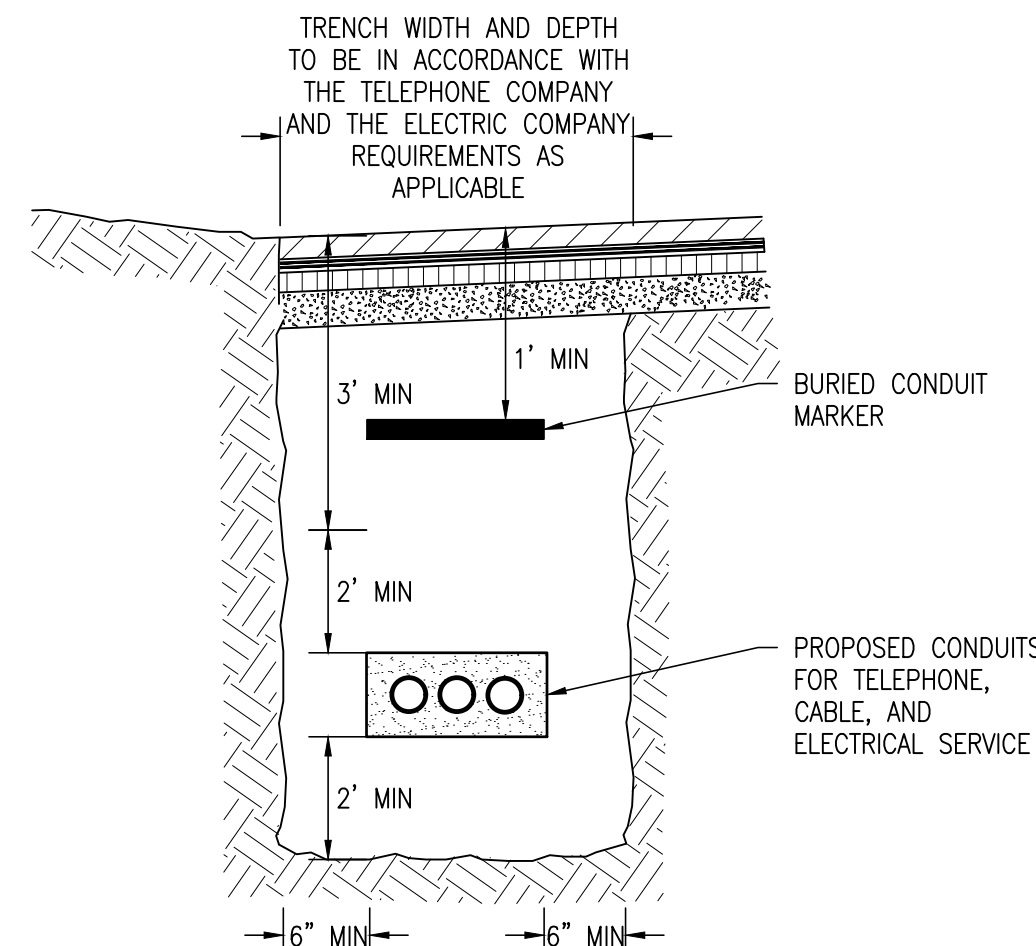


HYDRANT DETAIL
(NOT TO SCALE)



NOTES:
* WHEN THE CROSSING AS SHOWN IS LESS THAN 18" VERTICAL CLEARANCE THE SEWER MAIN OR SERVICE MUST BE ENCASED 10' ON BOTH SIDES OF CROSSING WITH 6" OF 3000 PSI CONCRETE IF THE SEWER MAIN OR SERVICE CROSSES ABOVE THE WATERMAIN OR SERVICE TOTAL ENCASEMENT, BOTH SIDES OF THE CROSSING IS REQUIRED, REGARDLESS OF SEPARATION.

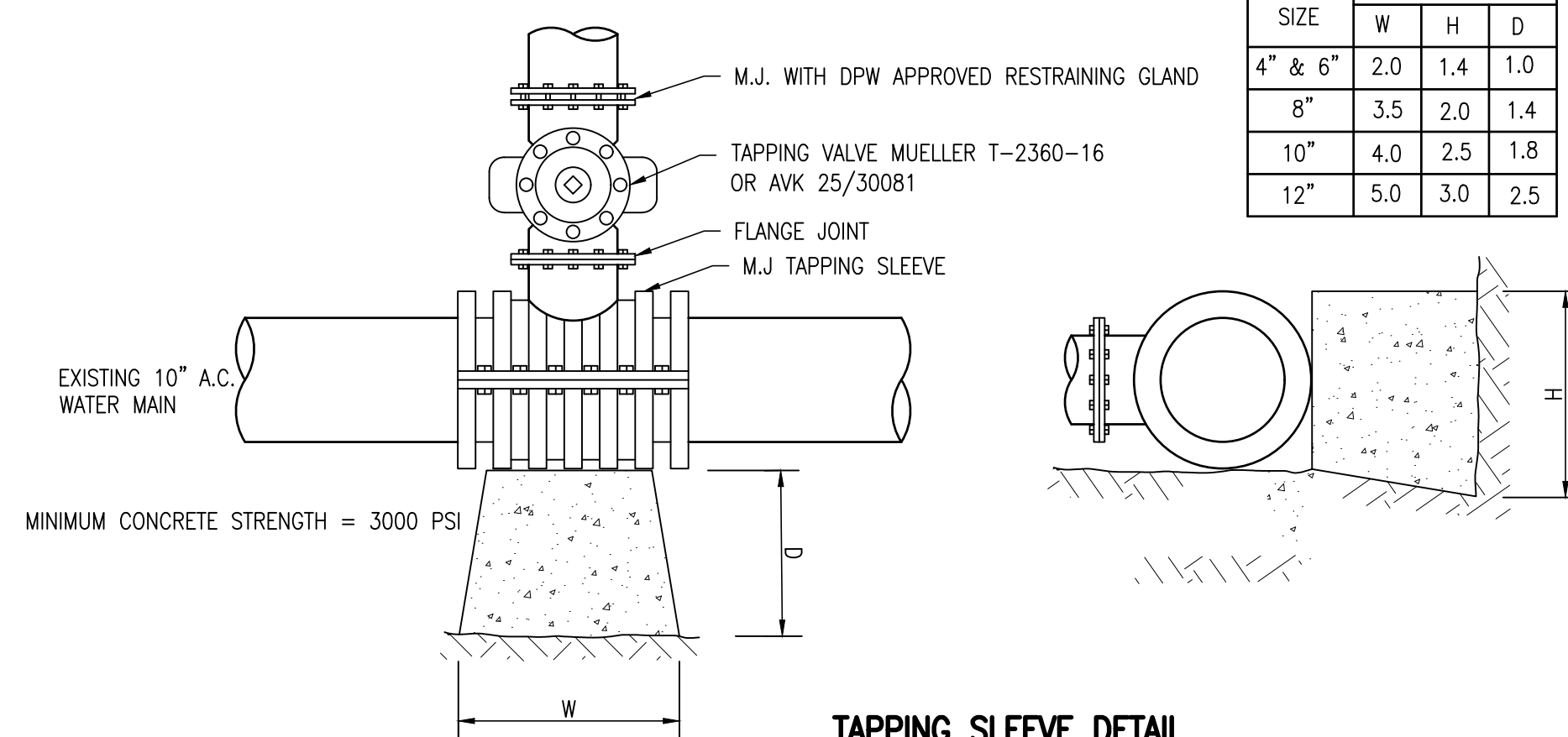
TYPICAL WATER CROSSING DETAIL
(NOT TO SCALE)



TYPICAL ELECTRIC/TELEPHONE/CABLE CONDUIT (US-UTILITY SERVICE) DETAIL
(NOT TO SCALE)

NOTES

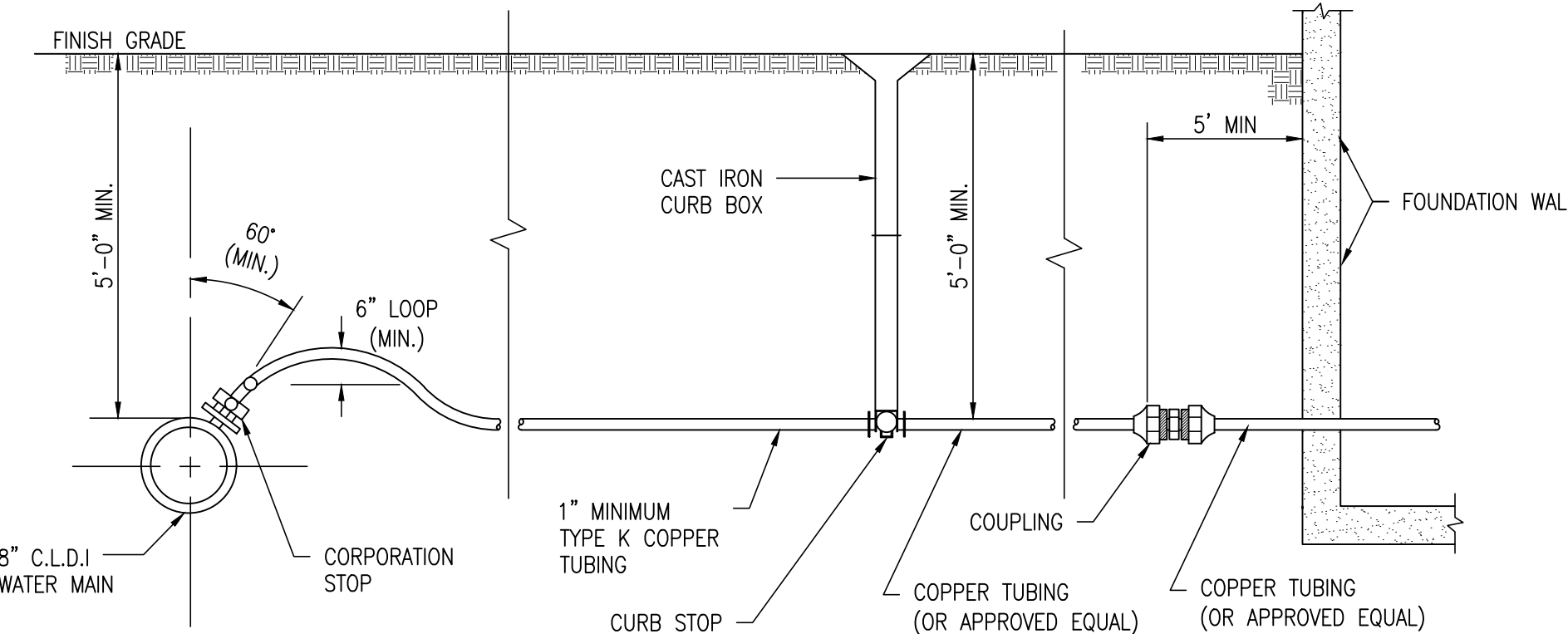
1. TAPPING SADDLES ARE NOT ALLOWED FOR MAIN-ON-MAIN TAPS.
2. USE MUELLER OR AMERICAN DARLING DUCTILE IRON OR 316 STAINLESS STEEL TAPPING SLEEVES FOR TAP SIZES 4"-24".
3. USE 316 STAINLESS STEEL TAPPING SLEEVES BY DRESSER OR CASCADE FOR TAPS ON MAINS 30" AND GREATER.
4. BOLTS AND NUTS FOR ALL TAPPING SLEEVES SHALL BE 316 SS.
5. USE THRUST BLOCKING ONLY FOR WET TAPS UNLESS OTHERWISE APPROVED BY CPW.
6. DEPTH FROM GROUND SURFACE TO TOP OF BLOCKING SHALL BE GREATER THAN HEIGHT OF BLOCKING.
7. THE END OF THE TAPPING SLEEVE SHALL BE NO CLOSER THAN 4 FEET TO A JOINT.



TAP SIZE	DIMENSIONS IN FT		
	W	H	D
4" & 6"	2.0	1.4	1.0
8"	3.5	2.0	1.4
10"	4.0	2.5	1.8
12"	5.0	3.0	2.5

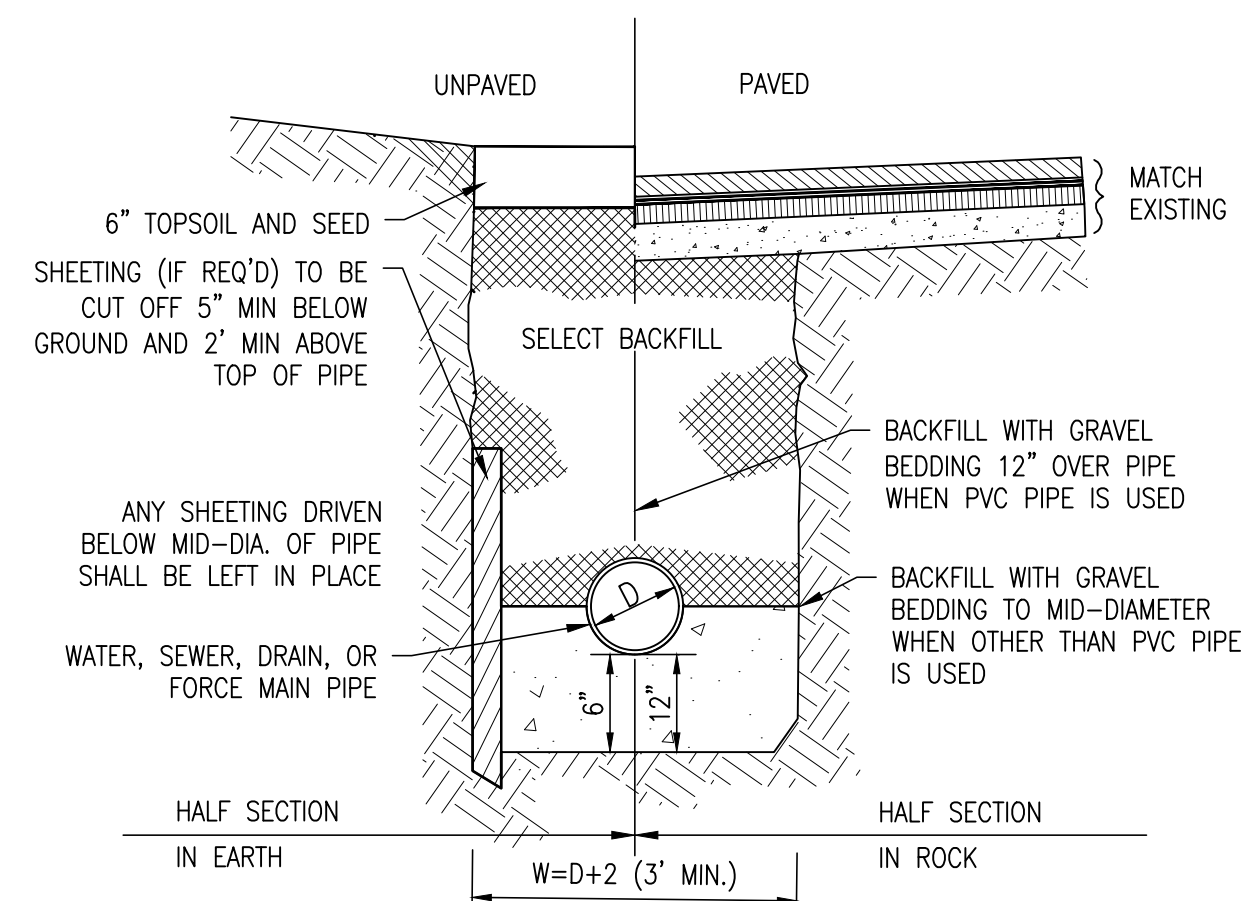
TAPPING SLEEVE DETAIL
(NOT TO SCALE)

* CONSULT DPW PRIOR TO PURCHASING ANY WATER MAIN MATERIALS.
COMPLETE INSTALLATION IN ACCORDANCE TO DPW REQUIREMENTS

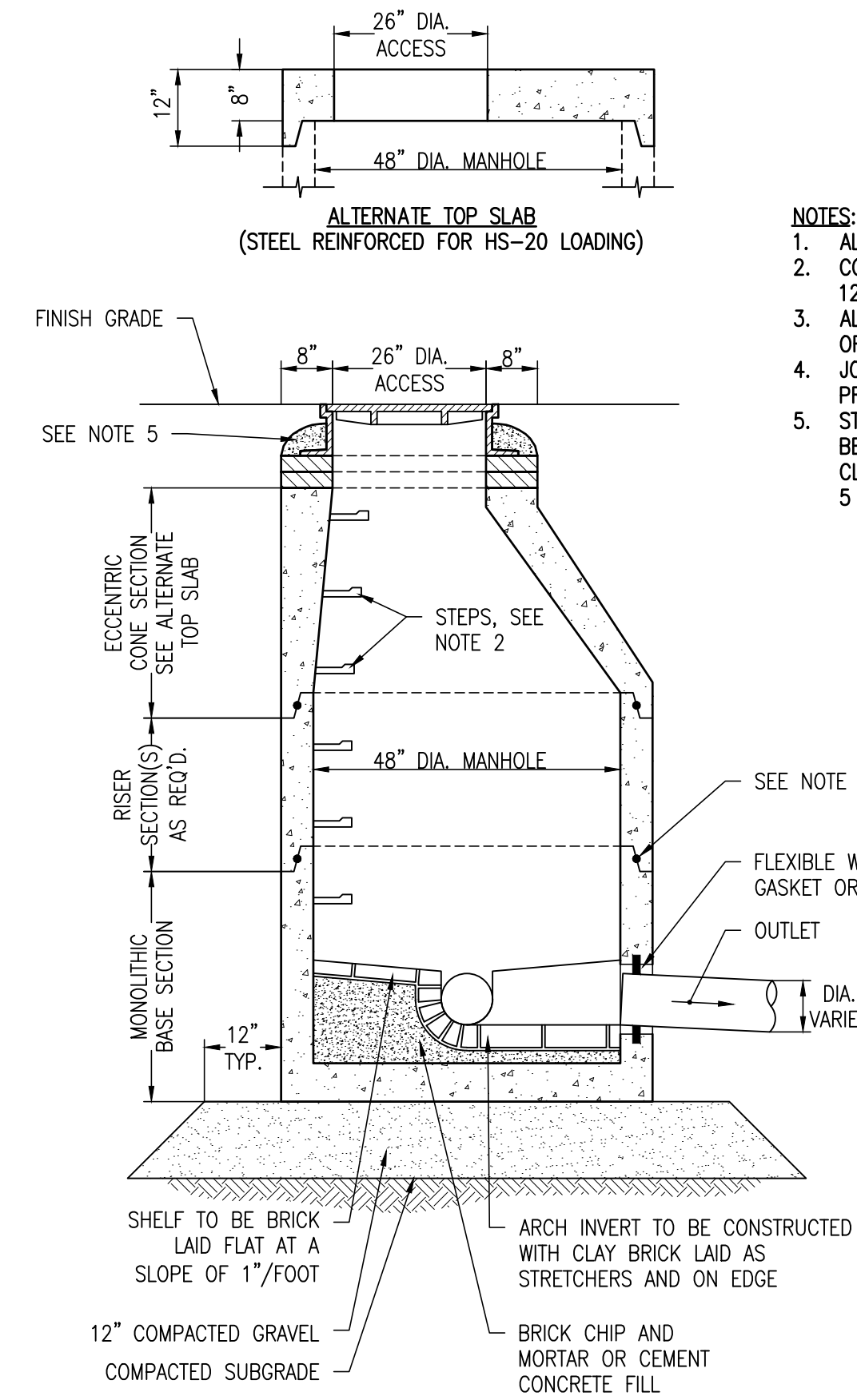


NOTE:
VERIFY MATERIALS AND TAPPING AND INSTALLATION REQUIREMENTS WITH THE TOWN WATER DEPARTMENT

WATER SERVICE DETAIL
(NOT TO SCALE)

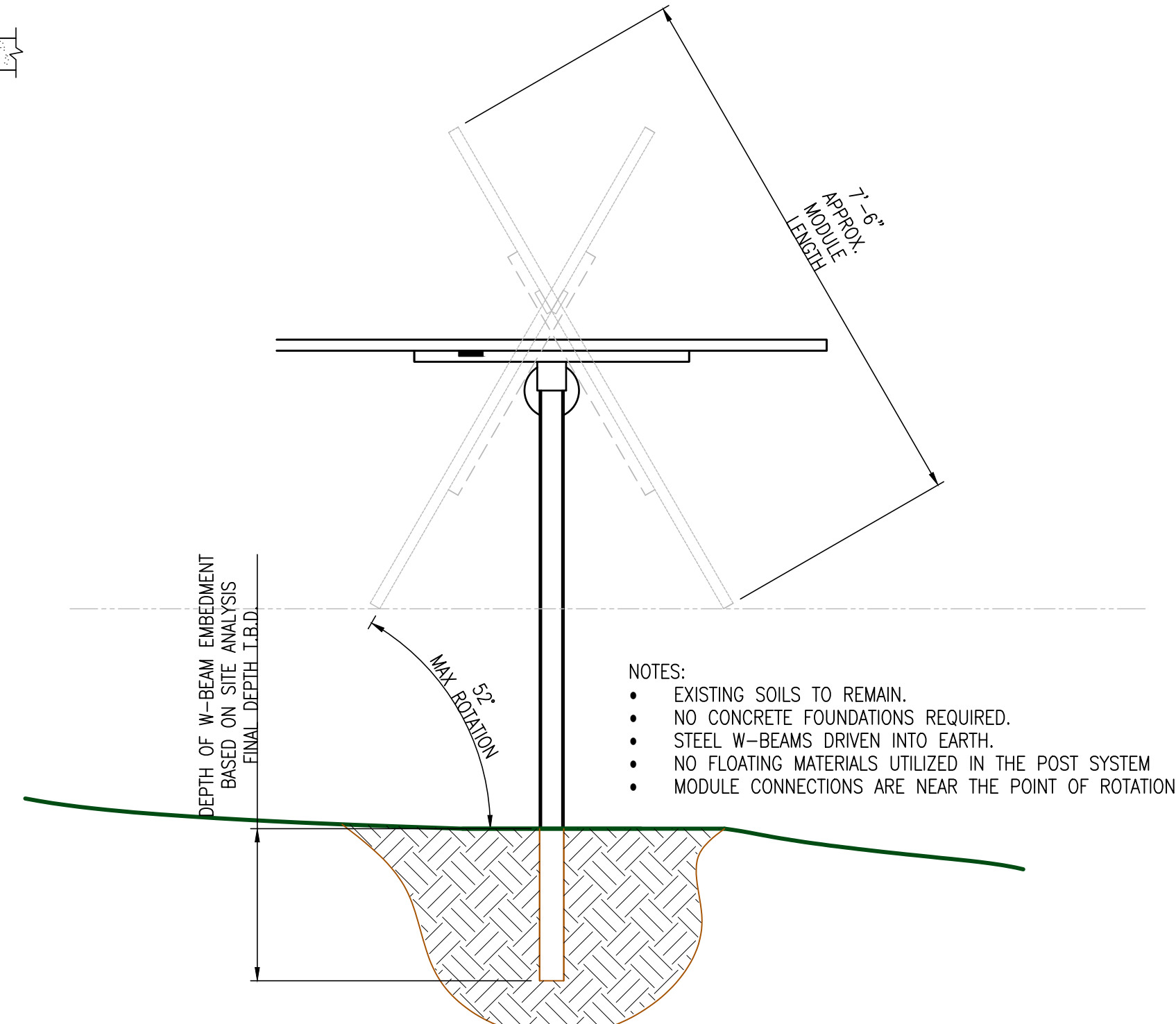


TYPICAL UTILITY TRENCH
(NOT TO SCALE)



- NOTES:
1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
 2. COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
 3. ALL EXTERIOR SURFACES SHALL BE GIVEN TWO COATS OF BITUMINOUS WATER-PROOFING MATERIAL.
 4. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
 5. STANDARD SEWER MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM)

SEWER MANHOLE DETAIL
(NOT TO SCALE)



- NOTES:
- EXISTING SOILS TO REMAIN.
 - NO CONCRETE FOUNDATIONS REQUIRED.
 - STEEL W-BEAMS DRIVEN INTO EARTH.
 - NO FLOATING MATERIALS UTILIZED IN THE POST SYSTEM
 - MODULE CONNECTIONS ARE NEAR THE POINT OF ROTATION

SOLAR PANEL DETAIL
(NOT TO SCALE)

DRAWING TITLE
CONSTRUCTION DETAILS
SHEET C7.5

PROJECT TITLE
VILLAGE GREEN
SITE DEVELOPMENT
PLAN

DATE
MAY 10, 2024
SCALE
AS NOTED
DRAWN
PAL
REVISION
—

NSG VILLAGE GREEN - 1, LLC

76 ROUTE 130 &
55 PIMLICO POND ROAD
SANDWICH
BARNSTABLE COUNTY, MA



Merrill
Engineers and Land Surveyors
427 COLUMBIA ROAD, HANOVER, MA 02339 / T: (781) 826-9200
26 UNION STREET, PLYMOUTH MA 02360 / T: (508) 746-6060
WWW.MERRILLINC.COM

COPYRIGHT ©2023 BY NSG VILLAGE GREEN-1, LLC ALL RIGHTS RESERVED. THIS DRAWING OR SPECIFICATION IS PROTECTED BY U.S. COPYRIGHT LAW AND INTERNATIONAL TREATIES. IT HAS BEEN PREPARED EXPRESSLY FOR THE CLIENT NAMED IN THE PROJECT TITLE BOX HEREIN, TO BE USED ONLY IN CONNECTION WITH THE NSG VILLAGE GREEN-1, LLC PROJECT FOR WHICH IT WAS CREATED. NO OTHER USE, DISSEMINATION OR DUPLICATION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF NSG VILLAGE GREEN-1, LLC.



MC-7200 STORMTECH CHAMBER SPECIFICATIONS

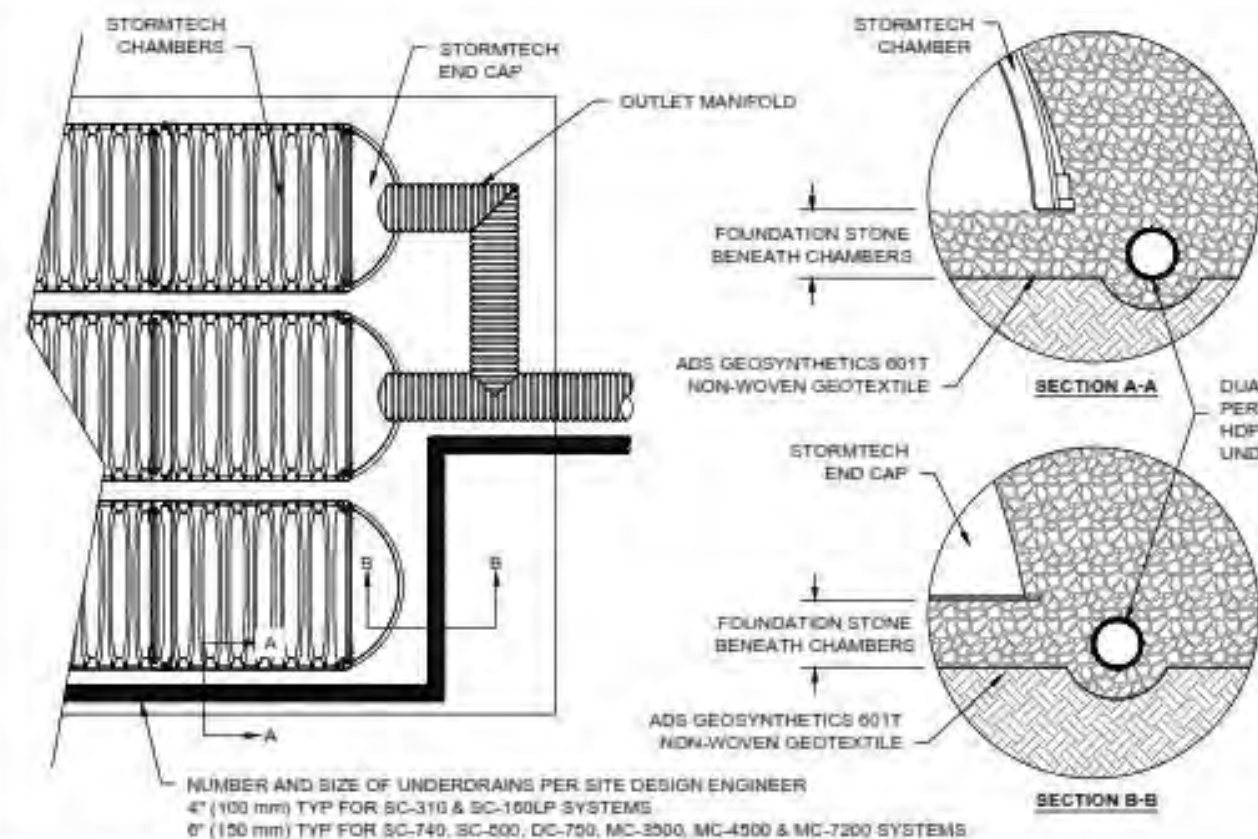
- CHAMBERS SHALL BE STORMTECH MC-7200
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS[®] CHAMBER CLASSIFICATION 60x101
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2415-15a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPIDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12 ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2757, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER; 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 9".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 400 LBS/IN. THE AISI IS DEFINED IN SECTION 6.2.5 OF ASTM F2415 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
 - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2415 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-7200 CHAMBER SYSTEM

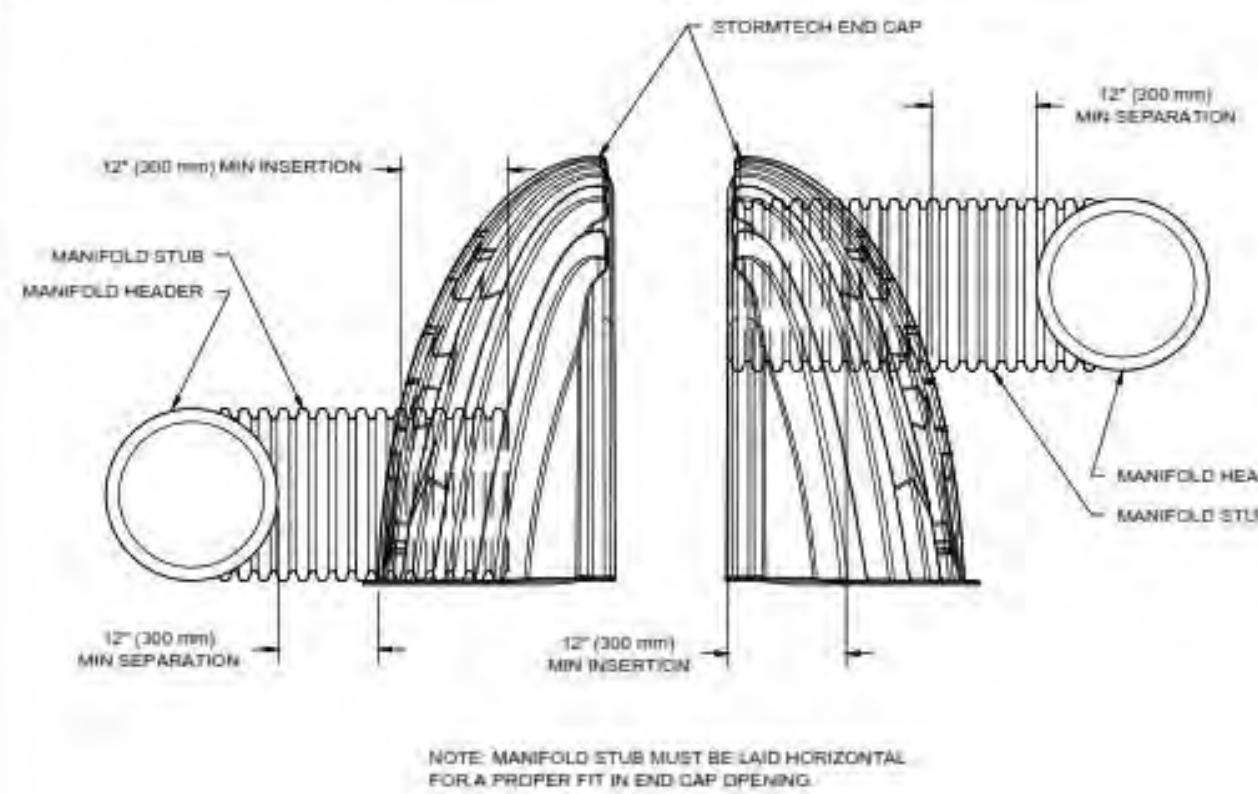
- STORMTECH MC-7200 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH MC-7200 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONESHOOTER LOCATED OFF THE CHAMBER BED.
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELLED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM - 9" (230 mm) SPACING BETWEEN THE CHAMBER ROWS.
- INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M33 DESIGNATION OF #3 OR #4.
- STONE SHALL BE BROUGHT UP EVENLY AROUND CHAMBERS SO AS NOT TO DISTORT THE CHAMBER SHAPE. STONE DEFECTS SHOULD NEVER EXCEED MORE THAN 12" (300 mm) BETWEEN ADJACENT CHAMBER ROWS.
- STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIAL BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH MC-7200 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
 - THE USE OF EQUIPMENT OVER MC-7200 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BANK CHAMBERS.
 - NO RUBBER Tired LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNITS, PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
 - PULL 30" (900 mm) OR STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR CLIMBING.
- USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.
- CONTACT STORMTECH AT 1-888-392-2094 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



5 UNDERDRAIN DETAIL

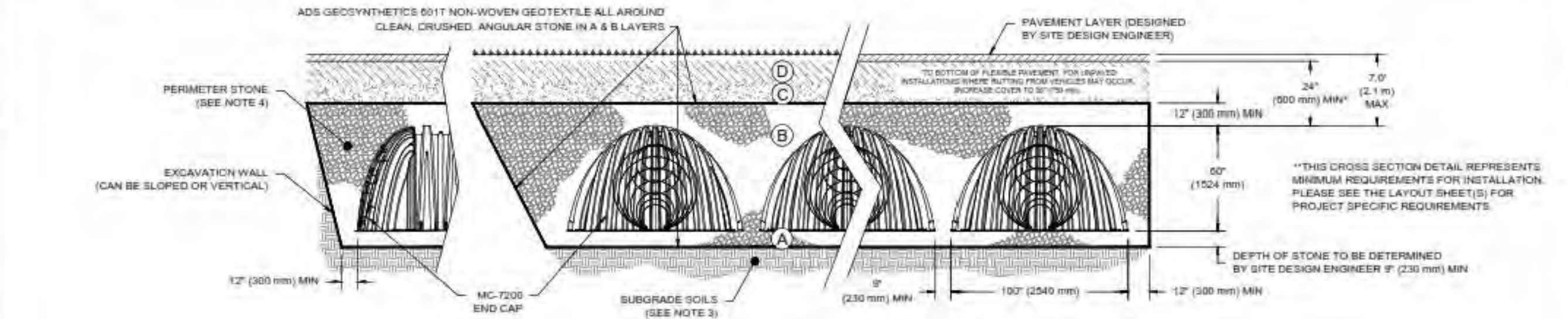


6 MC-SERIES END CAP INSERTION DETAIL

ACCEPTABLE FILL MATERIALS: STORMTECH MC-7200 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <5% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THE LAYER.	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL-GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE ²	NO COMPACTION REQUIRED
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE ²	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE ^{2,3}

- PLEASE NOTE:
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M33) STONE".
 - STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED 9" (230 mm) MAX LIFTS USING TWO FULL COVERS WITH A VIBRATORY COMPACTOR. WHERE INFLATON SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAMPING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
 - ONCE LAYER 'C' IS PLACED, ANY SOLID MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'D' OR 'C' AT THE SITE DESIGN ENGINEER'S DISCRETION.
 - WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 5.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".

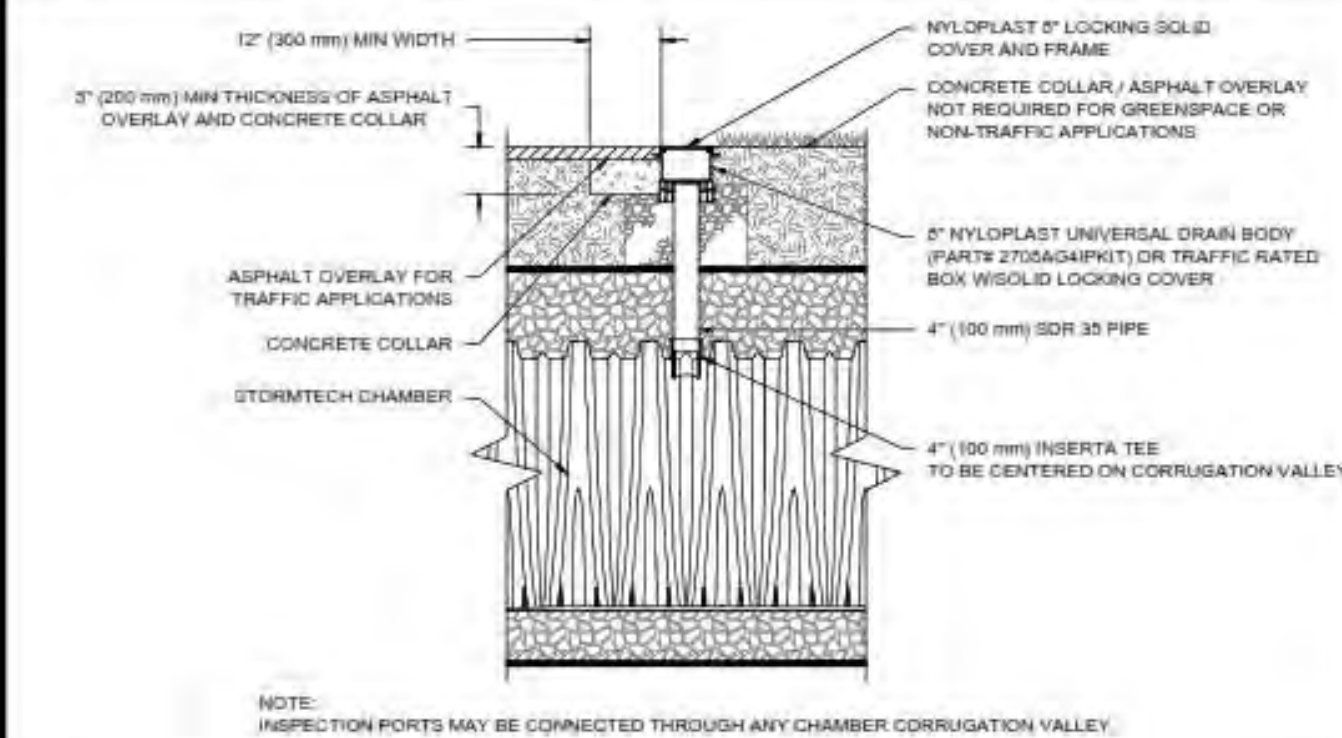


NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2415, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101
- MC-7200 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2757, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 9".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.5 OF ASTM F2415 SHALL BE GREATER THAN OR EQUAL TO 300 LBS/IN³ AND 1) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

1 MC-7200 CROSS SECTION DETAIL

3 MC-7200 ISOLATOR ROW PLUS DETAIL



INSPECTION & MAINTENANCE

- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- INSPECTION PORTS (IF PRESENT)
 - REMOVE OPEN LID ON NYLOPLAST INLINE DRAIN
 - REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
 - USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
 - LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
 - IF SEDIMENT IS AT, OR ABOVE, 2" (50 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- ALL ISOLATOR PLUS ROWS
- REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
 - USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
 - MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
 - FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
 - IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A FIXED CURVED CLEANING NOZZLE WITH REAR FACING SPRAY OF 40° (1.1 m) OR MORE IS PREFERRED
 - APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
 - VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

- INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- CONDUCT JETTING AND VACUUMING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

4 4" PVC INSPECTION PORT DETAIL (MC SERIES CHAMBER)