"SURFSIDE CROSSING"

A

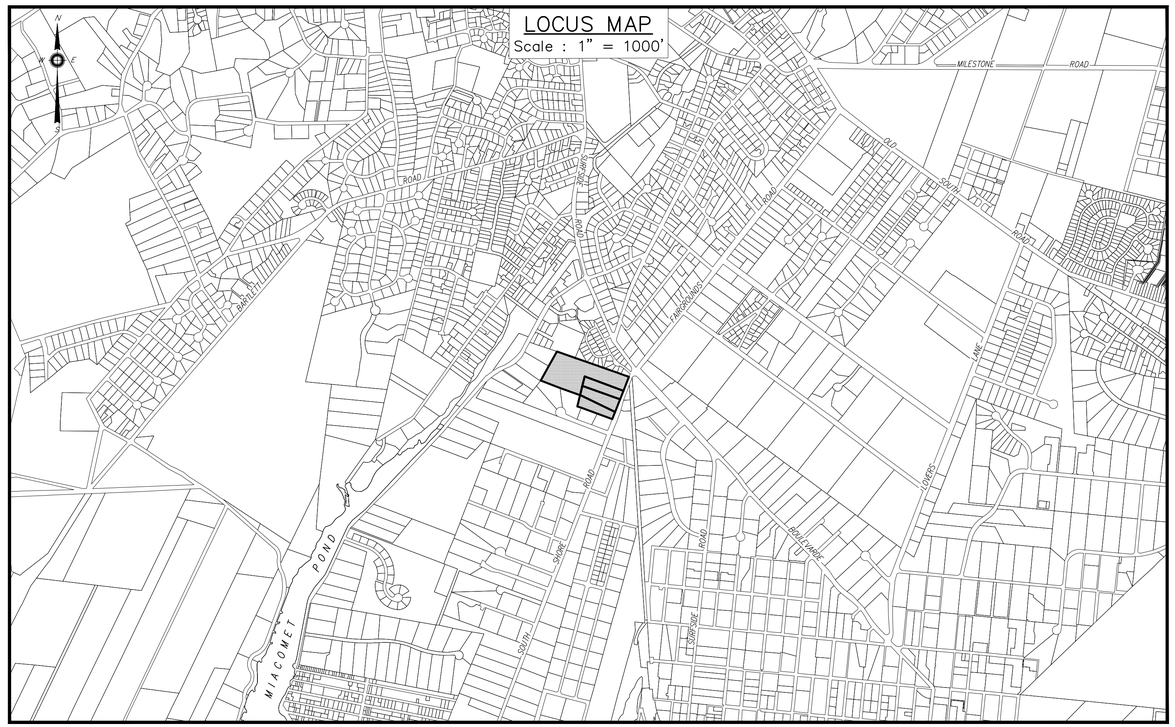
PROPOSED 40B DEVELOPMENT

IN

NANTUCKET, MASSACHUSETTS

PERMITTING SET
FEBRUARY 15, 2018
REVISED: OCTOBER 25, 2018
REVISED: MARCH 19, 2019

PAGE	DESCRIPTION
1	COVER SHEET
2	EXISTING CONDITIONS
3	LOTTING PLAN
4	LAYOUT PLAN MULTI–FAMILY PARCEL
5	GRADING & UTILITIES MULTI–FAMILY PARCEL
6	GRADING & DRAINAGE SUBDIVISION PARCELS
7	PLAN AND PROFILE ROAD A & ROAD B
8	PLAN AND PROFILE ROAD B
9	PLAN AND PROFILE ROAD C & ROAD D
10	PLAN AND PROFILE SOUTH SHORE ROAD & CONSTRUCTION NOTES
11	EROSION & SEDIMENTATION CONTROL PLAN
12	CONSTRUCTION DETAILS & VEHICLE TURNING ANALYSIS
13	CONSTRUCTION DETAILS
14	CONSTRUCTION DETAILS



NO.	DATE	DESCRIPTION	BY
2	3/19/19	GENERAL REDESIGN	RMM
1	10/25/18	GENERAL REDESIGN	RMM

CIVIL ENGINEER / LAND SURVEYOR:

BRACKEN ENGINEERING, INC.
49 HERRING POND ROAD
BUZZARDS BAY, MA 02532
(Tel) 508.833.0070
(Fax) 508.833.2282
19 OLD SOUTH ROAD
NANTUCKET, MA 02554
(Tel) 508.325.0044
www.brackeneng.com

ARCHITECT:

DESIGN ASSOCIATES INC.
1035 CAMBRIDGE STREET
CAMBRIDGE, MA 02141
TEL: 617–661–9082
FAX: 617–6661–2550

LANDSCAPE DESIGNER:

AHERN LLC
LANDSCAPE DESIGN STUDIO
PO Box 2213, Nantucket MA 02584
T (508) 333–5138 F (508) 325–4616
design@ahernllc.com

TRAFFIC CONSULTANT:

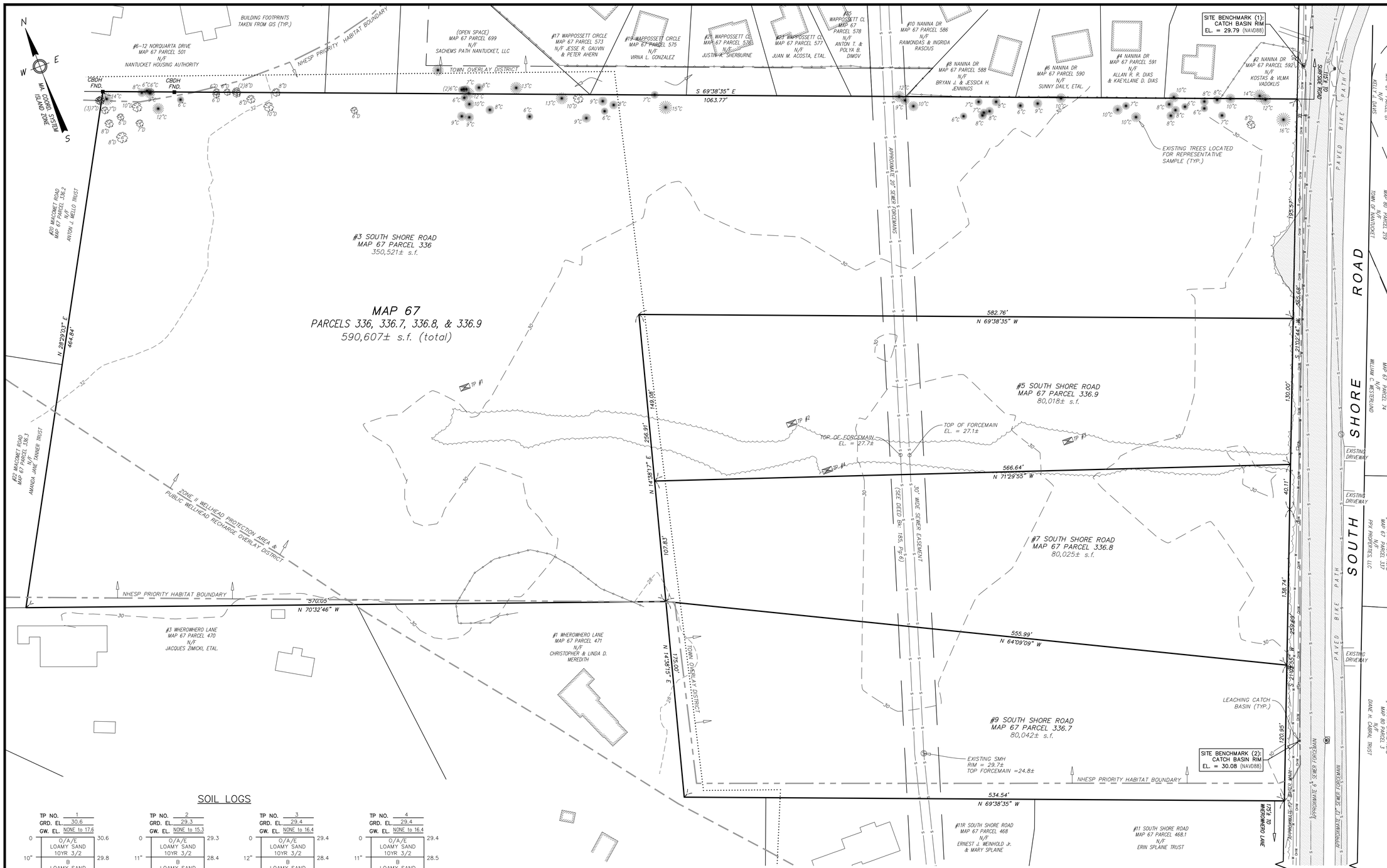
MDM TRANSPORTATION CONSULTANTS, INC.
PLANNERS & ENGINEERS
28 Lord Road, Suite 280
Marlborough, MA 01752
Tel: (508) 303-0370
Fax: (508) 303-0371

APPLICANT:

SURFSIDE CROSSING LLC
c/o JAMIE FEELEY & JOSH POSNER
37 OLD SOUTH ROAD, UNIT #6
NANTUCKET, MA 02554

COPYRIGHT (C) BY BRACKEN ENGINEERING INC. ALL RIGHTS RESERVED
THIS DOCUMENT IS THE PROPERTY OF BRACKEN ENGINEERING INC. AND MAY NOT BE REPRODUCED IN ANY FORM OR BY ANY MEANS, ELECTRONIC, MECHANICAL, PHOTOCOPYING, RECORDING OR OTHERWISE, WITHOUT THE EXPRESS WRITTEN CONSENT OF BRACKEN ENGINEERING INC. SHALL BE DEEMED VOID AND UNUSABLE. ANY MODIFICATIONS MADE TO THIS DOCUMENT WITHOUT THE WRITTEN PERMISSION OF BRACKEN ENGINEERING INC. SHALL BE DEEMED VOID AND UNUSABLE.

S:\Autocad Drawings\Nantucket\South Shore Rd\3–9 South Shore Road\CAD Files\Surfside Crossing – Site Development (rev7).dwg Mar 20, 2019 – 10:11am



SOIL LOGS

TP NO. 1		TP NO. 2		TP NO. 3		TP NO. 4	
GRD. EL. 30.6		GRD. EL. 29.3		GRD. EL. 29.4		GRD. EL. 29.4	
GW. EL. NONE to 17.6		GW. EL. NONE to 15.3		GW. EL. NONE to 16.4		GW. EL. NONE to 16.4	
0	O/A/E LOAMY SAND 10YR 3/2	0	O/A/E LOAMY SAND 10YR 3/2	0	O/A/E LOAMY SAND 10YR 3/2	0	O/A/E LOAMY SAND 10YR 3/2
10"	B LOAMY SAND 10YR 3/3	11"	B LOAMY SAND 10YR 3/3	12"	B LOAMY SAND 10YR 3/3	11"	B LOAMY SAND 10YR 3/3
28"	C1 VERY FINE to FINE SAND 2.5Y 6/3	24"	C1 FINE LOAMY SAND 2.5Y 5/6	30"	C1 VERY FINE to FINE SAND 2.5Y 6/3	30"	C1 LOAMY SAND 2.5Y 6/2
78"	C2 MEDIUM to COARSE SAND 2.5Y 6/6 (TRACE GRAVEL)	45"	C2 VERY FINE to FINE SAND 2.5Y 6/3	92"	C2 MEDIUM to COARSE SAND 2.5Y 6/6	60"	C2 FINE to MEDIUM SAND 2.5Y 6/3
156"		90"	C3 MEDIUM to COARSE SAND 2.5Y 6/6 (TRACE GRAVEL)	156"		156"	
	30.6		29.3		29.4		29.4
	29.8		28.4		28.4		28.5
	28.3		27.3		26.9		26.9
	24.1		25.6		21.7		24.4
	17.6		21.8		16.4		16.4
		168"	15.3				

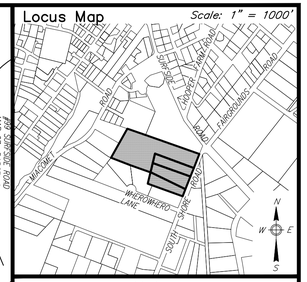
DATE: MARCH 13, 2017
SOIL EVALUATOR: DONALD F. BRACKEN, Jr., P.E.
WITNESSED BY: EDWARD PESCE, P.E. (REVIEW ENGINEER)

COMMONWEALTH OF MASSACHUSETTS
ALAN M. GRADY
No. 37732
REGISTERED PROFESSIONAL LAND SURVEYOR

Alan M. Grady

Locus Map

Scale: 1" = 1000'



Notes

1. LOCUS: #3, #5, #7, & #9 SOUTH SHORE ROAD MAP 67 PARCELS 336, 336.7, 336.8, & 336.9
2. OWNER: SURFSIDE CROSSING LLC c/o JAMIE FEELEY & JOSH POSNER 37 OLD SOUTH ROAD, UNIT #6 NANTUCKET, MA 02554
3. DEED REF: Bk: 1612 Pg: 62
4. PLAN REF: Bk: 25 Pg:50 (LOTS 1–4)
5. LOCUS DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP No. 25019C–0151–G dated 06/09/2014.
6. LOCUS DOES FALL WITHIN THE NATURAL HERITAGE and ENDANGERED SPECIES PROGRAM (NHESP) AREAS OF PRIORITY HABITATS OF RARE SPECIES, BUT NOT ESTIMATED HABITATS OF RARE WILDLIFE.
7. LOCUS PARTIALLY FALLS WITHIN THE TOWN OVERLAY DISTRICT.
8. LOCUS FALLS WITHIN THE CORE SEWER DISTRICT.
9. LOCUS PARTIALLY FALLS WITHIN A ZONE II WELLHEAD PROTECTION AREA.
10. LOCUS PARTIALLY FALLS WITHIN THE PUBLIC WELLHEAD RECHARGE OVERLAY DISTRICT.
11. AN ON THE GROUND SURVEY WAS PERFORMED BY THIS FIRM BETWEEN 9/22/17 AND 10/18/18.
12. EXISTING SEWER FORCE MAIN LOCATIONS AND SIZES TO BE CONFIRMED WITH THE NANTUCKET SEWER DEPARTMENT.

PLAN SCALE

0 8 16 24 32 40 60 80 120

1 inch = 40 feet

ZONE: LUG–2

	REQUIRED
LOT AREA:	80,000 s.f.
FRONTAGE:	150'
FRONT YARD:	35'
SIDE/REAR YARD:	15'
GROUND COVER:	4% (MAX)

Prepared By:

BRACKEN ENGINEERING, INC.

49 HERRING POND ROAD
BUZZARDS BAY, MA 02532
(tel) 508.833.0070
(fax) 508.833.2282

19 OLD SOUTH ROAD
NANTUCKET, MA 02554
(tel) 508.325.0044
www.brackeneng.com

Sheet Title:

EXISTING CONDITIONS

"SURFSIDE CROSSING"

A

PROPOSED 40B DEVELOPMENT IN NANTUCKET, MASSACHUSETTS

Prepared For:

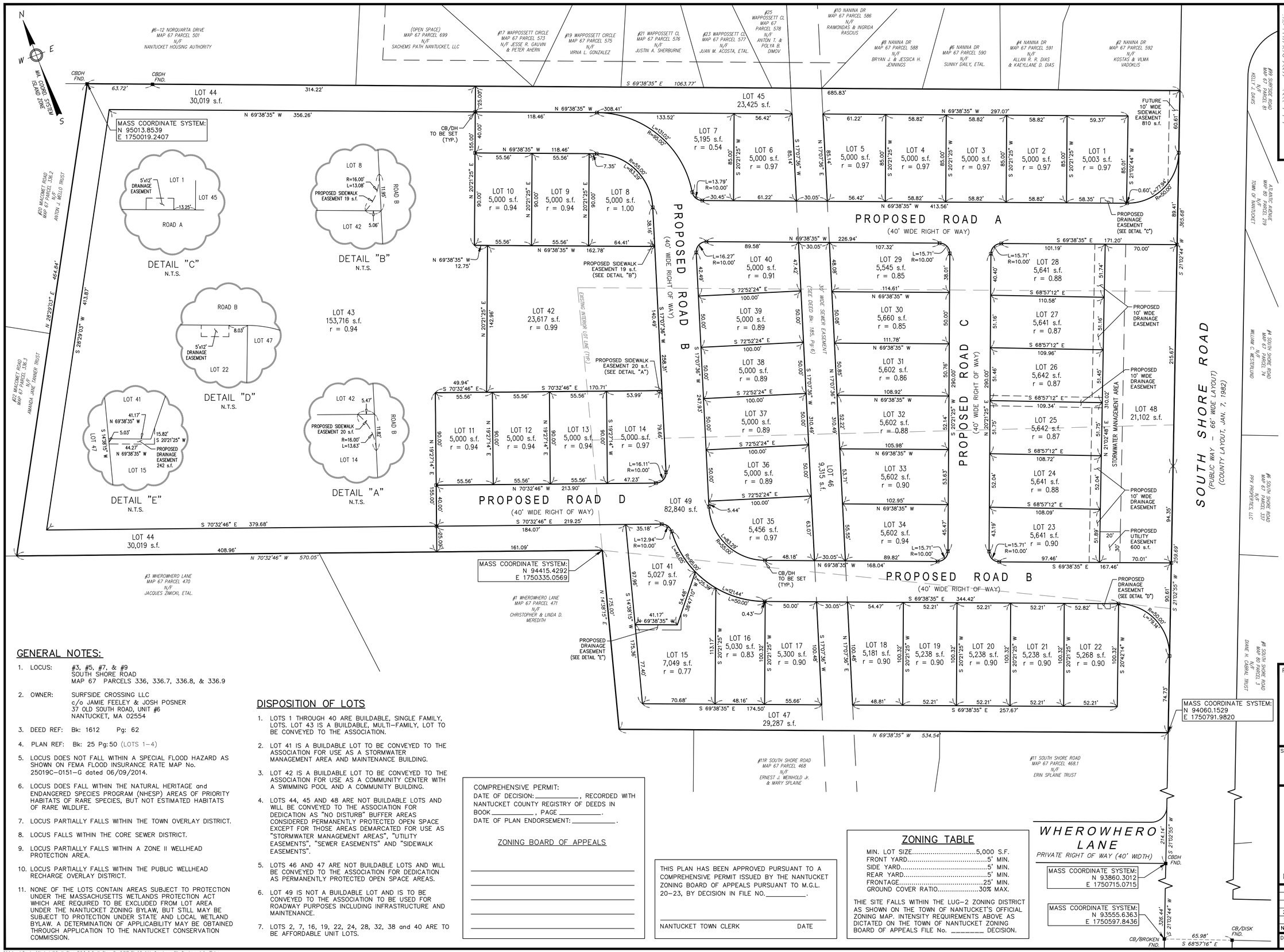
SURFSIDE CROSSING, LLC

#3, 5, 7 & 9 SOUTH SHORE ROAD
MAP 67 PARCELS 336, 336.7, 336.8 & 336.9

No.	Date	Revision Description	By
2	3/19/19	GENERAL REDESIGN	RMM
1	10/25/18	GENERAL REDESIGN	RMM

Date:	Drawn:	Checked:	Sheet:
FEBRUARY 15, 2018	RMM/ERC/BEI	DFB/AMG	2 of 14

S:\Autocad Drawings\Nantucket\South Shore Rd\3-9 South Shore Road\CAD Files\Surfside Crossing - Existing Conditions (rev1).dwg



GENERAL NOTES:

1. LOCUS: #3, #5, #7, & #9 SOUTH SHORE ROAD MAP 67 PARCELS 336, 336.7, 336.8, & 336.9
2. OWNER: SURFSIDE CROSSING LLC c/o JAMIE FEELEY & JOSH POSNER 37 OLD SOUTH ROAD, UNIT #6 NANTUCKET, MA 02554
3. DEED REF: Bk: 1612 Pg: 62
4. PLAN REF: Bk: 25 Pg:50 (LOTS 1–4)
5. LOCUS DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP No. 25019C–0151–G dated 06/09/2014.
6. LOCUS DOES FALL WITHIN THE NATURAL HERITAGE and ENDANGERED SPECIES PROGRAM (NHESP) AREAS OF PRIORITY HABITATS OF RARE SPECIES, BUT NOT ESTIMATED HABITATS OF RARE WILDLIFE.
7. LOCUS PARTIALLY FALLS WITHIN THE TOWN OVERLAY DISTRICT.
8. LOCUS FALLS WITHIN THE CORE SEWER DISTRICT.
9. LOCUS PARTIALLY FALLS WITHIN A ZONE II WELLHEAD PROTECTION AREA.
10. LOCUS PARTIALLY FALLS WITHIN THE PUBLIC WELLHEAD RECHARGE OVERLAY DISTRICT.
11. NONE OF THE LOTS CONTAIN AREAS SUBJECT TO PROTECTION UNDER THE MASSACHUSETTS WETLANDS PROTECTION ACT WHICH ARE REQUIRED TO BE EXCLUDED FROM LOT AREA UNDER THE NANTUCKET ZONING BYLAW, BUT STILL MAY BE SUBJECT TO PROTECTION UNDER STATE AND LOCAL WETLAND BYLAW. A DETERMINATION OF APPLICABILITY MAY BE OBTAINED THROUGH APPLICATION TO THE NANTUCKET CONSERVATION COMMISSION.

DISPOSITION OF LOTS

1. LOTS 1 THROUGH 40 ARE BUILDABLE, SINGLE FAMILY, LOTS. LOT 43 IS A BUILDABLE, MULTI–FAMILY, LOT TO BE CONVEYED TO THE ASSOCIATION.
2. LOT 41 IS A BUILDABLE LOT TO BE CONVEYED TO THE ASSOCIATION FOR USE AS A STORMWATER MANAGEMENT AREA AND MAINTENANCE BUILDING.
3. LOT 42 IS A BUILDABLE LOT TO BE CONVEYED TO THE ASSOCIATION FOR USE AS A COMMUNITY CENTER WITH A SWIMMING POOL AND A COMMUNITY BUILDING.
4. LOTS 44, 45 AND 48 ARE NOT BUILDABLE LOTS AND WILL BE CONVEYED TO THE ASSOCIATION FOR DEDICATION AS "NO DISTURB" BUFFER AREAS CONSIDERED PERMANENTLY PROTECTED OPEN SPACE EXCEPT FOR THOSE AREAS DEMARCATED FOR USE AS "STORMWATER MANAGEMENT AREAS", "UTILITY EASEMENTS", "SEWER EASEMENTS" AND "SIDEWALK EASEMENTS".
5. LOTS 46 AND 47 ARE NOT BUILDABLE LOTS AND WILL BE CONVEYED TO THE ASSOCIATION FOR DEDICATION AS PERMANENTLY PROTECTED OPEN SPACE AREAS.
6. LOT 49 IS NOT A BUILDABLE LOT AND IS TO BE CONVEYED TO THE ASSOCIATION TO BE USED FOR ROADWAY PURPOSES INCLUDING INFRASTRUCTURE AND MAINTENANCE.
7. LOTS 2, 7, 16, 19, 22, 24, 28, 32, 38 and 40 ARE TO BE AFFORDABLE UNIT LOTS.

COMPREHENSIVE PERMIT:
DATE OF DECISION: _____, RECORDED WITH NANTUCKET COUNTY REGISTRY OF DEEDS IN BOOK _____, PAGE _____.
DATE OF PLAN ENDORSEMENT: _____.

ZONING BOARD OF APPEALS

_____
_____
_____
_____
_____

THIS PLAN HAS BEEN APPROVED PURSUANT TO A COMPREHENSIVE PERMIT ISSUED BY THE NANTUCKET ZONING BOARD OF APPEALS PURSUANT TO M.G.L. 20–23, BY DECISION IN FILE NO._____.

_____
NANTUCKET TOWN CLERK DATE

ZONING TABLE

MIN. LOT SIZE	5,000 S.F.
FRONT YARD	5' MIN.
SIDE YARD	5' MIN.
REAR YARD	5' MIN.
FRONTAGE	25' MIN.
GROUND COVER RATIO	30% MAX.

THE SITE FALLS WITHIN THE LUG–2 ZONING DISTRICT AS SHOWN ON THE TOWN OF NANTUCKET'S OFFICIAL ZONING MAP. INTENSITY REQUIREMENTS ABOVE AS DICTATED ON THE TOWN OF NANTUCKET ZONING BOARD OF APPEALS FILE No. _____ DECISION.

Locus Map Scale: 1" = 1000'

RESERVED FOR REGISTRY USE

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

COMMONWEALTH OF MASSACHUSETTS ALAN M. GRADY No. 37732 REGISTERED PROFESSIONAL LAND SURVEYOR

ALAN M. GRADY, PLS
MASSACHUSETTS REG.
No. 37732

PLAN SCALE
0 8 16 24 32 40 60 80 120
1 inch = 40 feet

Prepared By:
BRACKEN ENGINEERING, INC.
49 HERRING POND ROAD BUZZARDS BAY, MA 02532 (tel) 508.833.0070 (fax) 508.833.2282
19 OLD SOUTH ROAD NANTUCKET, MA 02554 (tel) 508.325.0044 www.brackeneng.com

Sheet Title:

LOTTING PLAN

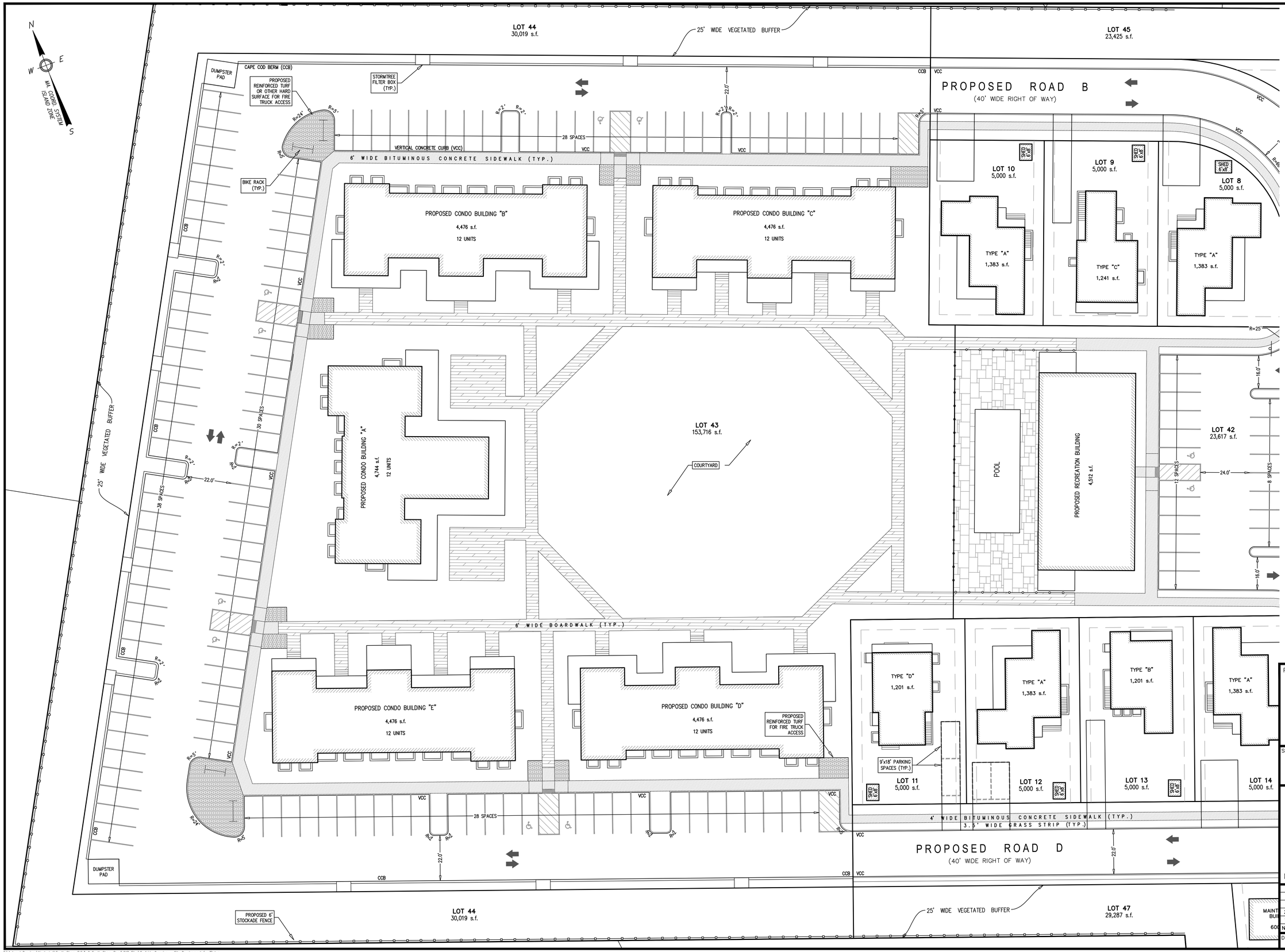
"SURFSIDE CROSSING"
A
PROPOSED 40B DEVELOPMENT IN NANTUCKET, MASSACHUSETTS
Prepared For:
SURFSIDE CROSSING, LLC
#3, 5, 7 & 9 SOUTH SHORE ROAD
MAP 67 PARCELS 336, 336.7, 336.8 & 336.9

No.	Date	Revision Description	By
2	3/19/19	GENERAL REDESIGN	RMM
1	10/25/18	GENERAL REDESIGN	RMM

Date:	Drawn:	Checked:	Sheet:
FEBRUARY 15, 2018	RMM/ERC/BEI	DFB/AMG	3 of 14

S:\Autocad Drawings\Nantucket\South Shore Rd\3-9 South Shore Road\CAD Files\Surfside Crossing - Site Development (rev7).dwg

ISSUED FOR PERMIT REVIEW



PARKING SUMMARY
per §139-18

REQUIRED PARKING:

1 SPACE PER CONDOMINIUM BEDROOM:
(BASED UPON GARAGE APARTMENT PARKING REQ.)
120 BEDROOMS PROPOSED = 120 SPACES REQUIRED

2 SPACES PER SINGLE FAMILY DWELLING:
40 DWELLINGS PROPOSED = 80 SPACES REQUIRED

TOTAL REQUIRED PARKING: = 200 SPACES

PROVIDED PARKING:

124 SPACES (CONDO AREA)
20 SPACES (COMMUNITY BUILDING)
20 SPACES (OVERFLOW/ON-STREET)
80 SPACES (INDIVIDUAL SINGLE FAMILY LOTS)

TOTAL PROVIDED PARKING: = 244 SPACES

ADA PARKING SUMMARY
per §521 CMR 23.2.1

REQUIRED:
TOTAL CONDO PARKING SPACES = 120
MIN. ACCESSIBLE SPACES REQUIRED = 5
(MIN. of 1 VAN ACCESSIBLE)

PROVIDED:
(8) ACCESSIBLE SPACES TOTAL
(4) VAN ACCESSIBLE SPACE

COMMONWEALTH OF MASSACHUSETTS
DONALD F. BRACKEN, JR.
CIVIL
No. 37071
REGISTERED PROFESSIONAL ENGINEER

COMMONWEALTH OF MASSACHUSETTS
ALAN M. GRADY
No. 37732
REGISTERED PROFESSIONAL SURVEYOR

PLAN SCALE
0 4 8 12 16 20 30 40 60
1 inch = 20 feet

Prepared By:
BRACKEN ENGINEERING, INC.
49 HERRING POND ROAD
BUZZARDS BAY, MA 02532
(tel) 508.833.0070
(fax) 508.833.2282
19 OLD SOUTH ROAD
NANTUCKET, MA 02554
(tel) 508.325.0044
www.brackeneng.com

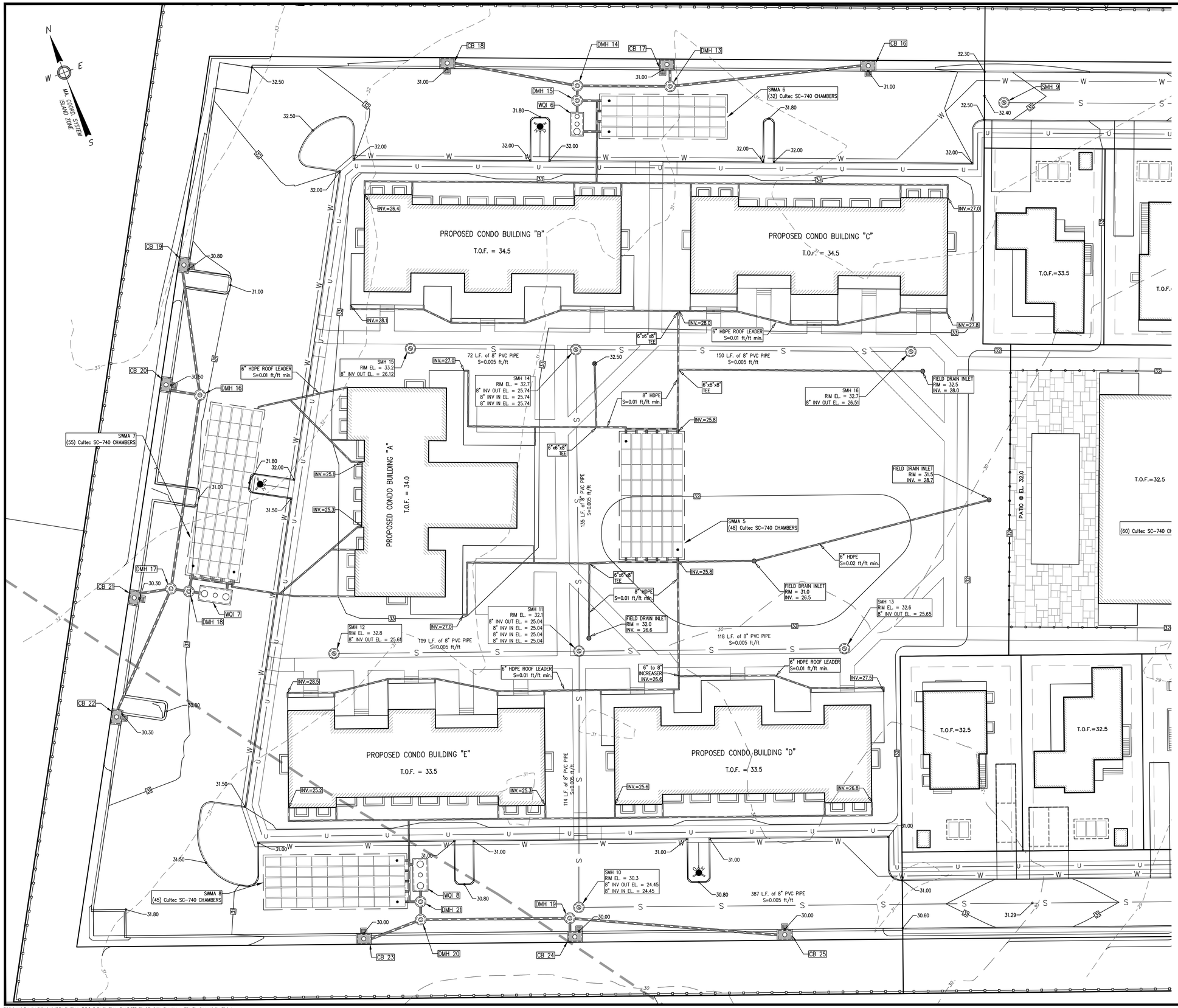
Sheet Title:
LAYOUT PLAN
MULTI-FAMILY PARCEL

"SURFSIDE CROSSING"
A
PROPOSED 40B DEVELOPMENT
IN NANTUCKET, MASSACHUSETTS
Prepared For:
SURFSIDE CROSSING, LLC
#3, 5, 7 & 9 SOUTH SHORE ROAD
MAP 67 PARCELS 336, 336.7, 336.8 & 336.9

No.	Date	Revision Description	By
2	3/19/19	GENERAL REDESIGN	RMM
1	10/25/18	GENERAL REDESIGN	RMM

Date:	Drawn:	Checked:	Sheet:
FEBRUARY 15, 2018	RMM/ERC/BEI	DFB/AMG	4 of 14

S:\Autocad Drawings\Nantucket\South Shore Rd\3-9 South Shore Road\CAD Files\Surfside Crossing - Site Development (rev7).dwg



DRAINAGE STRUCTURE TABLE	
STRUCTURE NAME	STRUCTURE DETAILS
CB 16	RIM = 31.0 INV OUT (DMH 13) = 27.30
CB 17	RIM = 31.0 INV OUT (DMH 13) = 26.50
CB 18	RIM = 31.0 INV OUT (DMH 14) = 27.30
CB 19	RIM = 30.8 INV OUT (DMH 16) = 27.00
CB 20	RIM = 30.5 INV OUT (DMH 16) = 26.60
CB 21	RIM = 30.3 INV OUT (DMH 17) = 25.60
CB 22	RIM = 30.3 INV OUT (DMH 17) = 26.50
CB 23	RIM = 30.0 INV OUT (DMH 20) = 25.00
CB 24	RIM = 30.0 INV OUT (DMH 19) = 25.70
CB 25	RIM = 30.0 INV OUT (DMH 19) = 26.40
DMH 13	RIM = 31.2 INV IN (CB 16) = 26.40 INV IN (CB 17) = 26.40 INV OUT (DMH 14) = 26.30
DMH 14	RIM = 31.5 INV IN (DMH 13) = 25.85 INV IN (CB 18) = 25.85 INV OUT (DMH 15) = 25.75
DMH 15	RIM = 31.6 INV IN (DMH 14) = 25.60 INV OUT (WQI 6) = 25.60 INV OUT (SWMA 6) = 24.80
DMH 16	RIM = 30.9 INV IN (CB 20) = 26.40 INV IN (CB 19) = 26.40 INV OUT (DMH 17) = 26.30
DMH 17	RIM = 30.7 INV IN (CB 22) = 25.40 INV IN (CB 21) = 25.40 INV IN (DMH 16) = 25.40 INV OUT (DMH 18) = 25.30
DMH 18	RIM = 31.0 INV IN (DMH 17) = 25.00 INV OUT (WQI 7) = 25.00 INV OUT (SWMA 7) = 24.20
DMH 19	RIM = 30.1 INV IN (CB 25) = 25.50 INV IN (CB 24) = 25.50 INV OUT (DMH 20) = 25.40
DMH 20	RIM = 30.4 INV IN (CB 23) = 24.70 INV IN (DMH 19) = 24.70 INV OUT (DMH 21) = 24.60
DMH 21	RIM = 30.5 INV IN (DMH 20) = 24.40 INV OUT (WQI 8) = 24.40 INV OUT (SWMA 8) = 23.60
WQI 6	RIM = 31.7 INV IN (DMH 15) = 25.30 INV OUT (SWMA 6) = 24.80
WQI 7	RIM = 31.2 INV IN (DMH 18) = 24.70 INV OUT (SWMA 7) = 24.20
WQI 8	RIM = 30.6 INV IN (DMH 21) = 24.30 INV OUT (SWMA 8) = 23.80

DRAINAGE PIPE TABLE					
PIPE NAME	SIZE	LENGTH	SLOPE	INV. UP	INV. DOWN
CB 16 to DMH 13	10"	88.1'	1.02%	27.30	26.40
CB 17 to DMH 13	10"	7.6'	1.32%	26.50	26.40
CB 18 to DMH 14	10"	57.2'	2.53%	27.30	25.85
CB 19 to DMH 16	10"	56.8'	1.06%	27.00	26.40
CB 20 to DMH 16	10"	13.6'	1.47%	26.60	26.40
CB 21 to DMH 17	10"	14.3'	1.40%	25.60	25.40
CB 22 to DMH 17	10"	60.7'	1.81%	26.50	25.40
CB 23 to DMH 20	10"	24.4'	1.23%	25.00	24.70
CB 24 to DMH 19	10"	6.1'	3.30%	25.70	25.50
CB 25 to DMH 19	10"	95.6'	0.94%	26.40	25.50
DMH 13 to DMH 14	10"	42.7'	1.05%	26.30	25.85
DMH 14 to DMH 15	10"	6.8'	2.21%	25.75	25.60
DMH 15 to SWMA 6	10"	9.3'	2.14%	24.80	24.60
DMH 15 to WQI 6	10"	7.3'	4.11%	25.60	25.30
DMH 16 to DMH 17	10"	90.0'	1.00%	26.30	25.40
DMH 17 to DMH 18	10"	8.3'	3.64%	25.30	25.00
DMH 18 to SWMA 7	10"	6.6'	4.55%	24.20	23.90
DMH 18 to WQI 7	10"	7.3'	4.10%	25.00	24.70
DMH 19 to DMH 20	10"	68.5'	1.02%	25.40	24.70
DMH 20 to DMH 21	10"	8.3'	2.42%	24.60	24.40
DMH 21 to SWMA 8	10"	4.7'	4.24%	23.60	23.40
DMH 21 WQI 8	10"	7.3'	1.37%	24.40	24.30
WQI 6 to SWMA 6	10"	9.2'	2.18%	24.80	24.60
WQI 7 to SWMA 7	10"	6.3'	4.77%	24.20	23.90
WQI 8 to SWMA 8	10"	4.7'	8.43%	23.80	23.40

COMMONWEALTH OF MASSACHUSETTS
DONALD F. BRACKEN, JR.
CIVIL
No. 37073
REGISTERED PROFESSIONAL ENGINEER

PLAN SCALE

0 4 8 12 16 20 30 40 60

1 inch = 20 feet

Prepared By:

BRACKEN ENGINEERING, INC.

49 HERRING POND ROAD
BUZZARDS BAY, MA 02532

19 OLD SOUTH ROAD
NANTUCKET, MA 02554

(tel) 508.833.0070
(fax) 508.833.2282

(tel) 508.325.0044
www.brackeneng.com

Sheet Title:

GRADING & UTILITIES
MULTI-FAMILY PARCEL

"SURFSIDE CROSSING"

A

PROPOSED 40B DEVELOPMENT
IN NANTUCKET, MASSACHUSETTS

Prepared For:

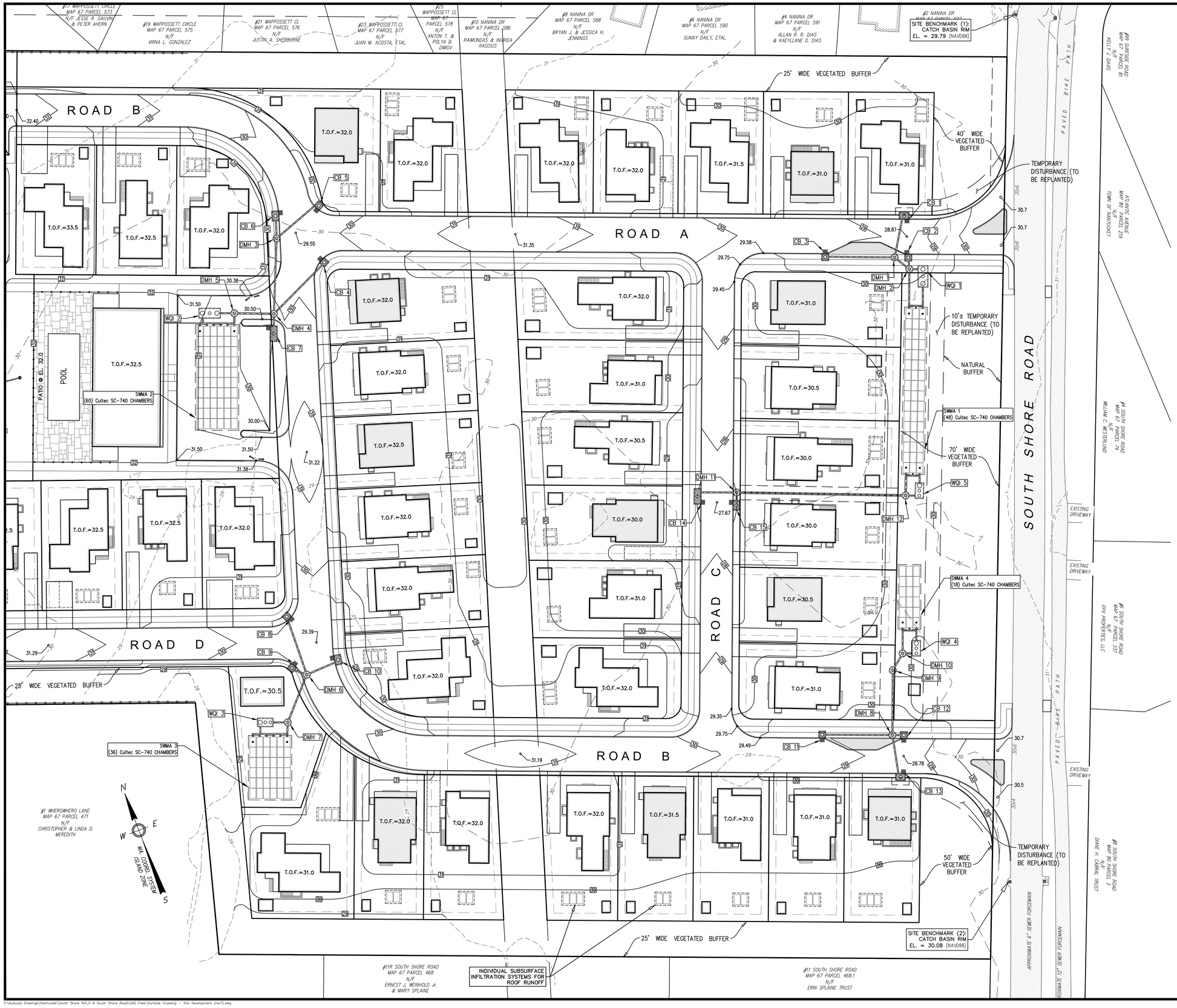
SURFSIDE CROSSING, LLC

#3, 5, 7 & 9 SOUTH SHORE ROAD
MAP 67 PARCELS 336, 336.7, 336.8 & 336.9

No.	Date	Revision Description	By
2	3/19/19	GENERAL REDESIGN	RMM
1	10/25/18	GENERAL REDESIGN	RMM

Date:	Drawn:	Checked:	Sheet:
FEBRUARY 15, 2018	RMM/ERC/BEI	DFB/AMG	5 of 14

S:\Autocad Drawings\Nantucket\South Shore Rd\3-9 South Shore Road\CAD Files\Surfside Crossing - Site Development (rev7).dwg



DRAINAGE STRUCTURE TABLE	
STRUCTURE NAME	STRUCTURE DETAILS
CB 1	RIM = 28.6 INV OUT (DMH 1) = 25.00
CB 2	RIM = 28.6 INV OUT (DMH 2) = 22.70
CB 3	RIM = 29.2 INV OUT (DMH 1) = 25.60
CB 4	RIM = 29.5 INV OUT (DMH 4) = 25.90
CB 5	RIM = 29.3 INV OUT (DMH 3) = 25.70
CB 6	RIM = 29.3 INV OUT (DMH 3) = 25.70
CB 7	RIM = 29.3 INV OUT (DMH 4) = 24.75
CB 8	RIM = 29.3 INV OUT (DMH 6) = 25.00
CB 9	RIM = 29.3 INV OUT (DMH 6) = 25.00
CB 10	RIM = 29.2 INV OUT (DMH 6) = 25.00
CB 11	RIM = 29.1 INV OUT (DMH 8) = 25.00
CB 12	RIM = 28.6 INV OUT (DMH 8) = 24.77
CB 13	RIM = 28.6 INV OUT (DMH 8) = 24.77
CB 14	RIM = 27.5 INV OUT (DMH 11) = 23.90
CB 15	RIM = 27.5 INV OUT (DMH 11) = 23.90
DMH 1	RIM = 29.3 INV IN (CB 1) = 24.46 INV IN (CB 3) = 24.46 INV OUT (DMH 2) = 24.36
DMH 2	RIM = 29.9 INV IN (DMH 1) = 22.40 INV IN (CB 2) = 22.40 INV OUT (SWMA 1) = 21.60 INV OUT (WQI 1) = 22.40
DMH 3	RIM = 29.9 INV IN (CB 6) = 25.30 INV IN (CB 5) = 25.30 INV OUT (DMH 4) = 25.20
DMH 4	RIM = 30.2 INV IN (CB 4) = 24.65 INV IN (CB 7) = 24.65 INV IN (DMH 3) = 24.65 INV OUT (DMH 5) = 24.30
DMH 5	RIM = 30.3 INV IN (DMH 4) = 23.80 INV OUT (SWMA 2) = 23.00 INV OUT (WQI 2) = 23.80
DMH 6	RIM = 29.4 INV IN (CB 8) = 24.60 INV IN (CB 9) = 24.60 INV IN (CB 10) = 24.60 INV OUT (DMH 7) = 24.50
DMH 7	RIM = 28.6 INV IN (DMH 6) = 23.80 INV OUT (SWMA 3) = 23.00 INV OUT (WQI 3) = 23.80
DMH 8	RIM = 29.1 INV IN (CB 13) = 24.49 INV IN (CB 12) = 24.49 INV IN (CB 11) = 24.49 INV OUT (DMH 9) = 24.40
DMH 9	RIM = 29.9 INV IN (DMH 8) = 23.90 INV OUT (DMH 10) = 23.80
DMH 10	RIM = 29.9 INV IN (DMH 9) = 23.60 INV OUT (SWMA 4) = 22.80 INV OUT (WQI 4) = 23.60
DMH 11	RIM = 28.0 INV IN (CB 14) = 23.60 INV IN (CB 15) = 23.60 INV OUT (DMH 12) = 23.10
DMH 12	RIM = 29.9 INV IN (DMH 11) = 22.30 INV OUT (SWMA 1) = 21.50 INV OUT (WQI 5) = 22.39
WQI 1	RIM = 29.9 INV IN (DMH 2) = 22.20 INV OUT (SWMA 1) = 21.70
WQI 2	RIM = 30.7 INV IN (DMH 5) = 23.40 INV OUT (SWMA 2) = 22.90
WQI 3	RIM = 28.5 INV IN (DMH 7) = 23.70 INV OUT (SWMA 3) = 23.20
WQI 4	RIM = 29.9 INV IN (DMH 10) = 23.50 INV OUT (SWMA 4) = 23.00
WQI 5	RIM = 29.9 INV IN (DMH 12) = 22.10 INV OUT (SWMA 1) = 21.60

DRAINAGE PIPE TABLE					
PIPE NAME	SIZE	LENGTH	SLOPE	INV. UP	INV. DOWN
CB 1 to DMH 1	10"	26.9'	2.01%	25.00	24.46
CB 2 to DMH 2	10"	8.0'	3.73%	22.70	22.40
CB 3 to DMH 1	10"	48.1'	2.37%	25.60	24.46
CB 4 to DMH 4	10"	48.9'	2.56%	25.90	24.65
CB 5 to DMH 3	10"	34.8'	1.15%	25.70	25.30
CB 6 to DMH 3	10"	12.0'	3.33%	25.70	25.30
CB 7 to DMH 4	10"	8.2'	1.21%	24.75	24.65
CB 8 to DMH 6	10"	39.8'	1.01%	25.00	24.60
CB 9 to DMH 6	10"	8.9'	4.48%	25.00	24.60
CB 10 to DMH 6	10"	21.2'	1.89%	25.00	24.60
CB 11 to DMH 8	10"	48.6'	1.05%	25.00	24.49
CB 12 to DMH 8	10"	7.9'	3.53%	24.77	24.49
CB 13 to DMH 8	10"	27.5'	1.02%	24.77	24.49
CB 14 to DMH 11	10"	24.6'	1.22%	23.90	23.60
CB 15 to DMH 11	10"	5.4'	5.60%	23.90	23.60
DMH 1 to DMH 2	10"	13.0'	15.06%	24.36	22.40
DMH 2 to SWMA 1	10"	25.2'	1.19%	21.60	21.30
DMH 2 to WQI 1	10"	9.5'	2.11%	22.40	22.20
DMH 3 TO DMH 4	10"	52.3'	1.05%	25.20	24.65
DMH 4 to DMH 5	12"	27.5'	1.82%	24.30	23.80
DMH 5 to SWMA 2	12"	6.9'	5.79%	23.00	22.60
DMH 5 to WQI 2	10"	10.1'	3.96%	23.80	23.40
DMH 6 to DMH 7	10"	35.6'	1.97%	24.50	23.80
DMH 7 to SWMA 3	10"	10.0'	2.00%	23.00	22.80
DMH 7 to WQI 3	10"	10.1'	0.99%	23.80	23.70
DMH 8 to DMH 9	10"	44.9'	1.11%	24.40	23.90
DMH 9 to DMH 10	10"	13.5'	1.48%	23.80	23.60
DMH 10 to SWMA 4	10"	17.8'	1.12%	22.80	22.60
DMH 10 to WQI 4	10"	9.5'	1.05%	23.60	23.50
DMH 11 to DMH 12	15"	117.1'	0.68%	23.10	22.30
DMH 12 to SWMA 1	15"	13.3'	1.50%	21.50	21.30
DMH 12 to WQI 5	10"	9.5'	3.05%	22.39	22.10
WQI 1 to SWMA 1	10"	16.8'	2.38%	21.70	21.30
WQI 2 to SWMA 2	10"	6.9'	4.35%	22.90	22.60
WQI 3 to SWMA 3	10"	10.0'	3.99%	23.20	22.80
WQI 4 to SWMA 4	10"	8.7'	4.59%	23.00	22.60
WQI 5 to SWMA 1	10"	4.3'	7.02%	21.60	21.30

COMMONWEALTH OF MASSACHUSETTS
DONALD F. BRACKEN, JR.
CIVIL
No. 37071
REGISTERED PROFESSIONAL ENGINEER

PLAN SCALE

0 6 12 18 24 30 45 60 90

1 inch = 30 feet

Prepared By:

BRACKEN ENGINEERING, INC.

49 HERRING POND ROAD
BUZZARDS BAY, MA 02532
(tel) 508.833.0070
(fax) 508.833.2282

19 OLD SOUTH ROAD
NANTUCKET, MA 02554
(tel) 508.325.0044
www.brackeneng.com

Sheet Title:

GRADING & DRAINAGE SUBDIVISION PARCELS

"SURFSIDE CROSSING"

A

PROPOSED 40B DEVELOPMENT IN NANTUCKET, MASSACHUSETTS

Prepared For:

SURFSIDE CROSSING, LLC

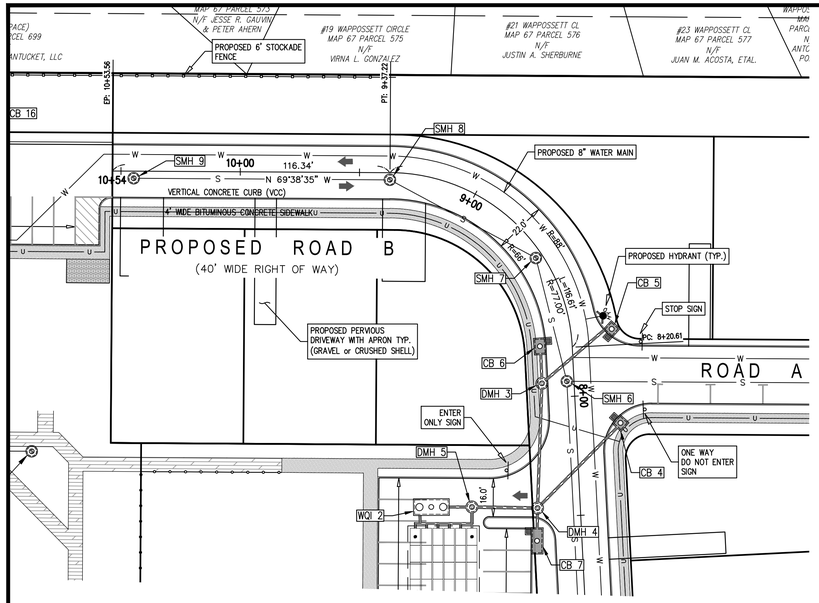
#3, 5, 7 & 9 SOUTH SHORE ROAD

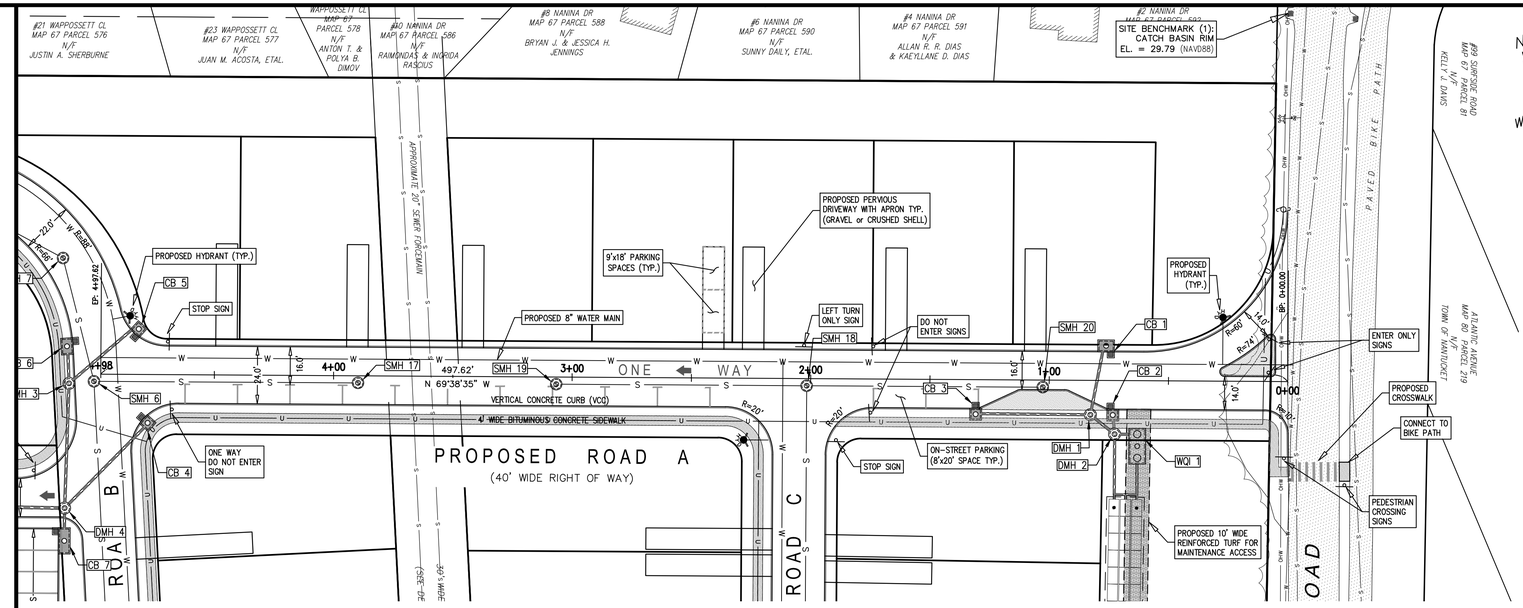
MAP 67 PARCELS 336, 336.7, 336.8 & 336.9

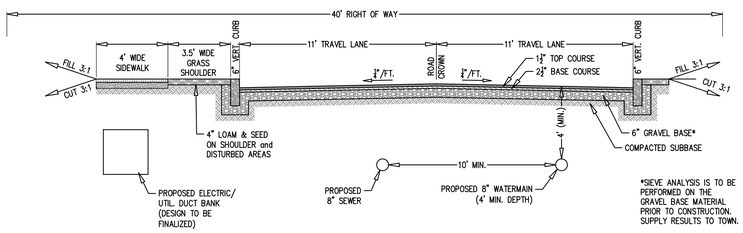
No.	Date	Revision Description	By
2	3/19/19	GENERAL REDESIGN	RMM
1	10/25/18	GENERAL REDESIGN	RMM

Date:	Drawn:	Checked:	Sheet:
FEBRUARY 15, 2018	RMM/ERC/BEI	DFB/AMG	6 of 14

S:\Autocad Drawings\Nantucket\South Shore Rd\3-9 South Shore Road\CAD Files\Surfside Crossing - Site Development (rev7).dwg

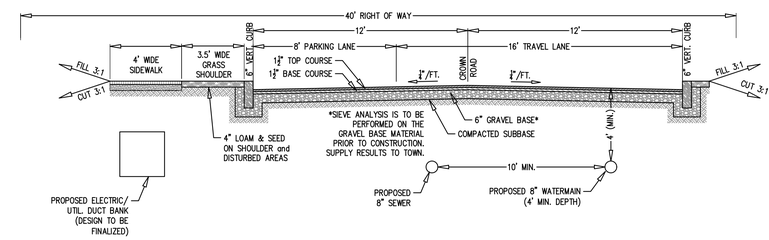






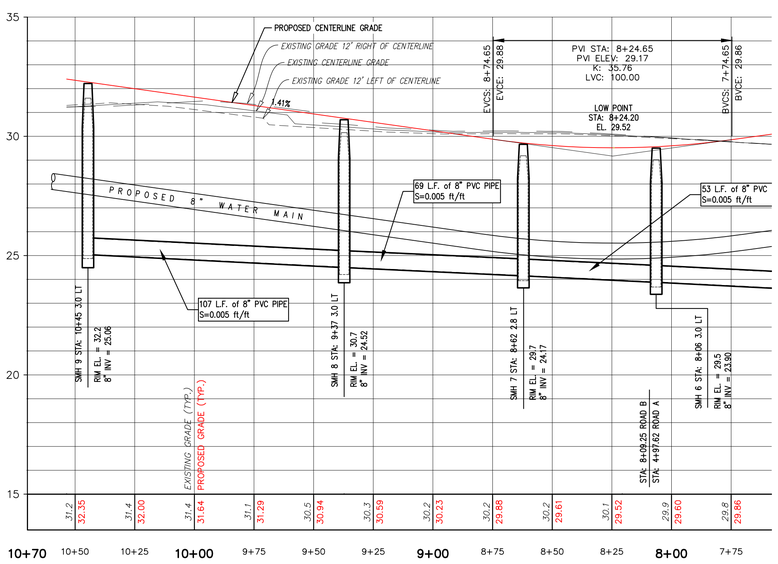
ROAD B CROSS-SECTION – STA: 7+75.45 TO 10+53.56

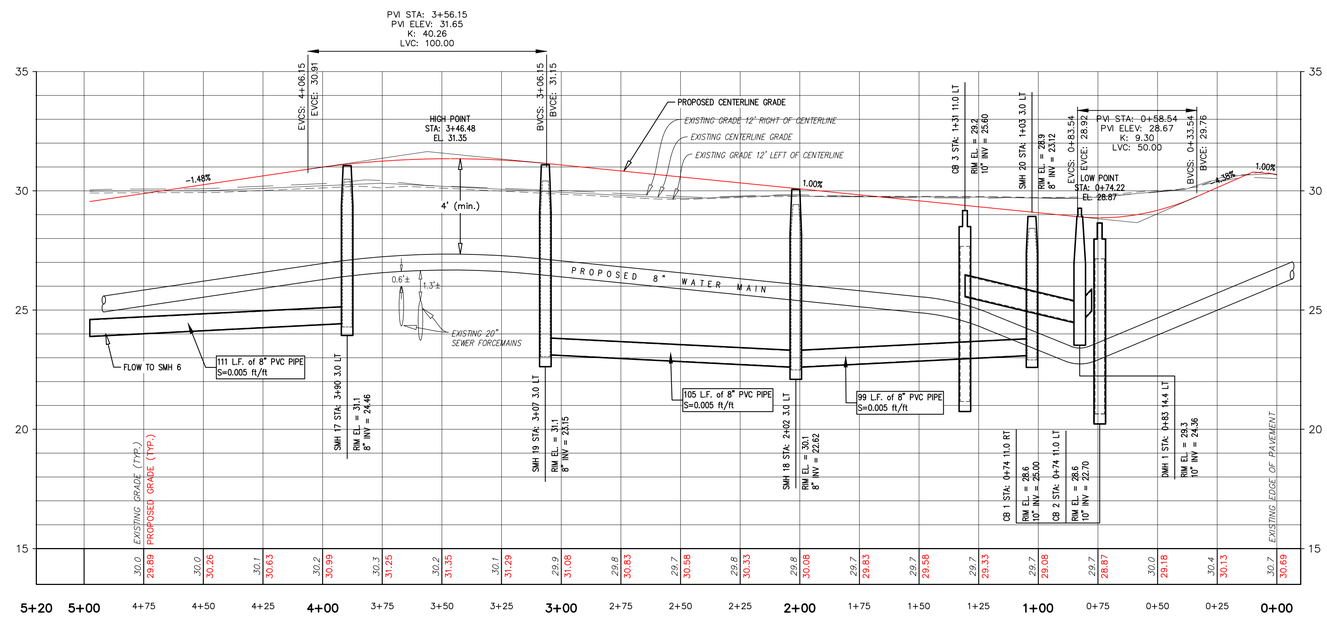
NOT TO SCALE



ROAD A CROSS-SECTION

NOT TO SCALE





PROFILE SCALE

1 inch = 3 feet (vertical)

0 0.75 1.5 2.25 3 6 9

0 7.5 15 22.5 30 45 60 90

1 inch = 30 feet (horizontal)

PLAN SCALE

COMMONWEALTH OF MASSACHUSETTS
DONALD F. BRACKEN, JR.
CIVIL
No. 37071
REGISTERED PROFESSIONAL ENGINEER

Prepared By:

BRACKEN ENGINEERING, INC
49 HERRING POND ROAD
BUZZARDS BAY, MA 02532
(tel) 508.833.0070
(fax) 508.833.2282
19 OLD SOUTH ROAD
NANTUCKET, MA 02554
(tel) 508.325.0044
www.brackeneng.com

Sheet Title:

PLAN AND PROFILE
ROAD A & ROAD B

"SURFSIDE CROSSING"

A

PROPOSED 40B DEVELOPMENT
IN NANTUCKET, MASSACHUSETTS

Prepared For:

SURFSIDE CROSSING, LLC

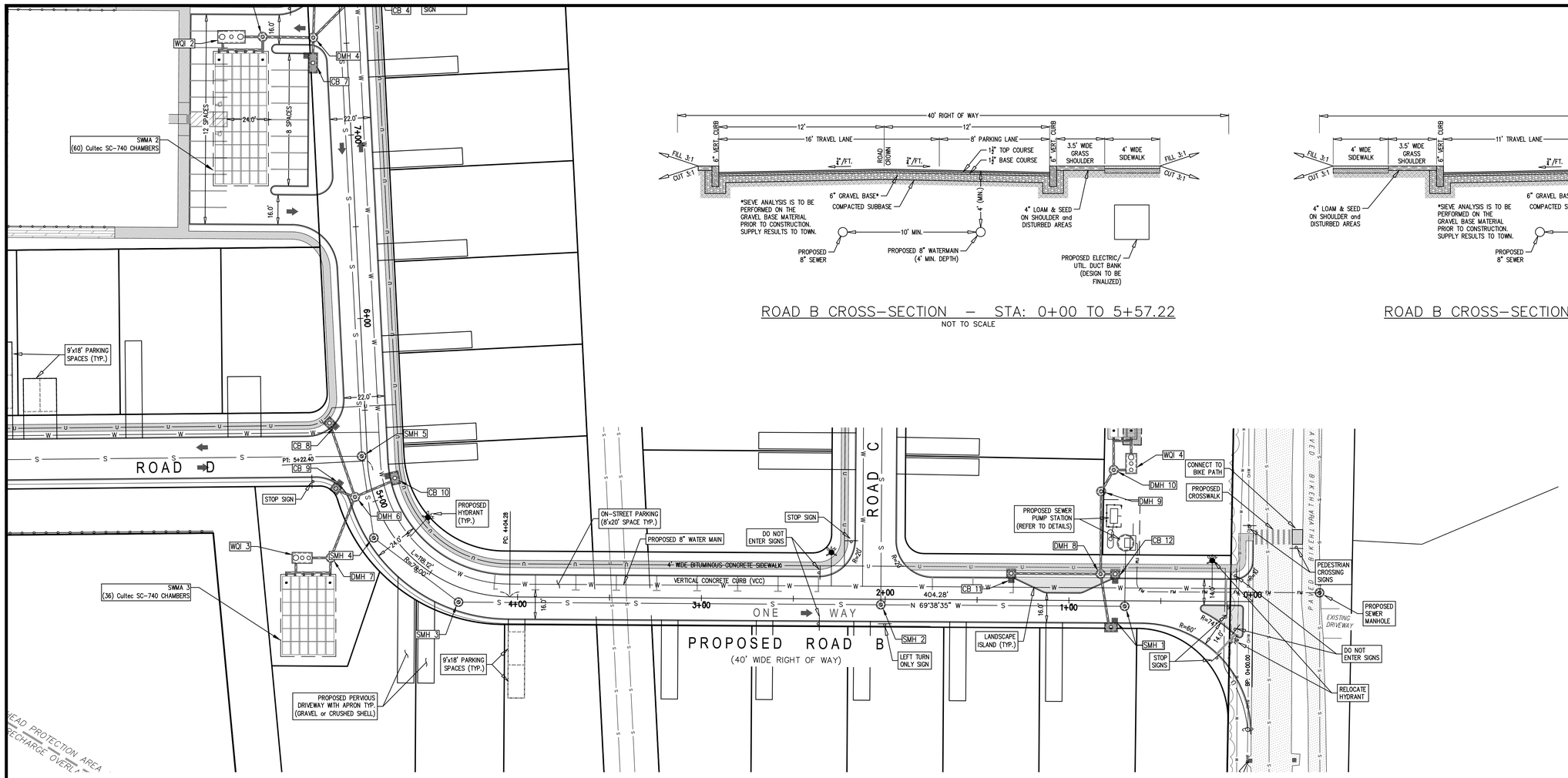
#3, 5, 7 & 9 SOUTH SHORE ROAD

MAP 67 PARCELS 336, 336.7, 336.8 & 336.9

No.	Date	Revision Description	By
2	3/19/19	GENERAL REDESIGN	RMM
1	10/25/18	GENERAL REDESIGN	RMM

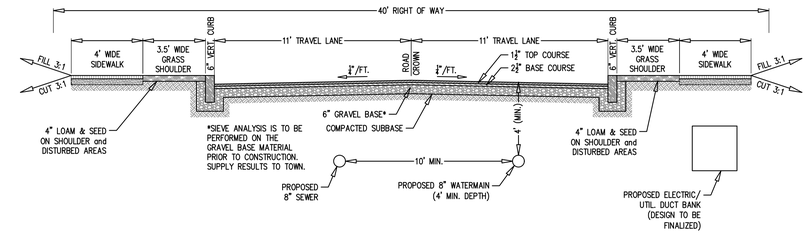
Date:	Drawn:	Checked:	Sheet:
FEBRUARY 15, 2018	RMM/ERC/BEI	DFB/AMG	7 of 14

S:\Autocad Drawings\Nantucket\South Shore Rd\3-9 South Shore Road\CAD Files\Surfside Crossing – Site Development (rev7).dwg



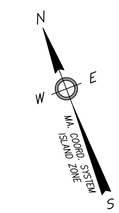
ROAD B CROSS-SECTION – STA: 0+00 TO 5+57.22

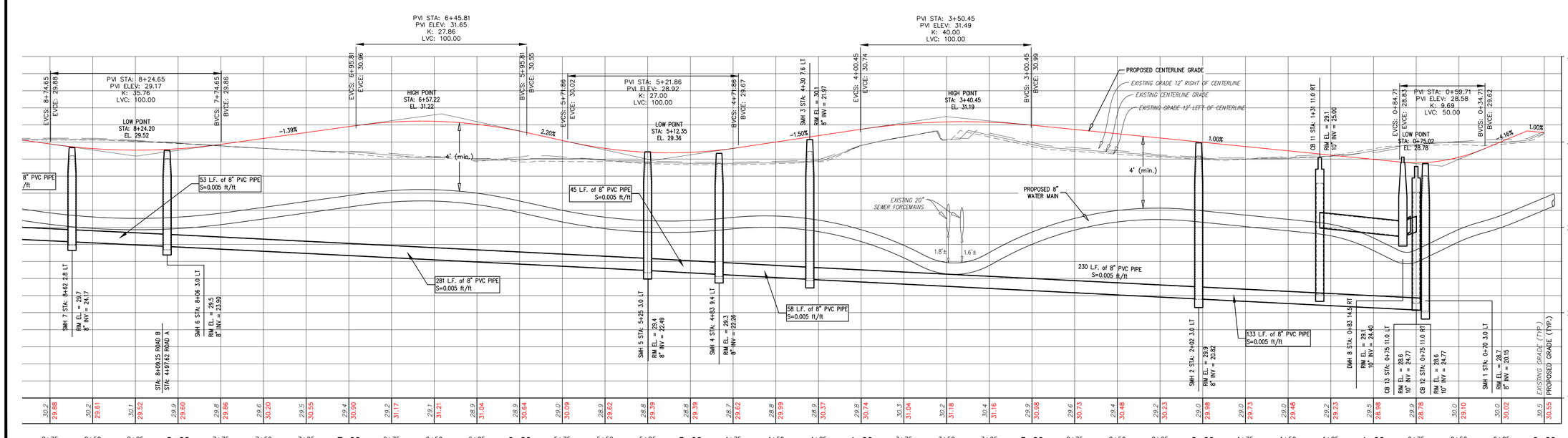
NOT TO SCALE



ROAD B CROSS-SECTION – STA: 5+57.22 TO 7+75.45

NOT TO SCALE





PROFILE SCALE
1 inch = 3 feet (vertical)
0 0.75 1.5 2.25 3 6 9
0 7.5 15 22.5 30 45 60 90
1 inch = 30 feet (horizontal)
PLAN SCALE

Prepared By:
BRACKEN ENGINEERING, INC.
49 HERRING POND ROAD
BUZZARDS BAY, MA 02532
(tel) 508.833.0070
(fax) 508.833.2282
19 OLD SOUTH ROAD
NANTUCKET, MA 02554
(tel) 508.325.0044
www.brackeneng.com

Sheet Title:

PLAN AND PROFILE
ROAD B

"SURFSIDE CROSSING"

A

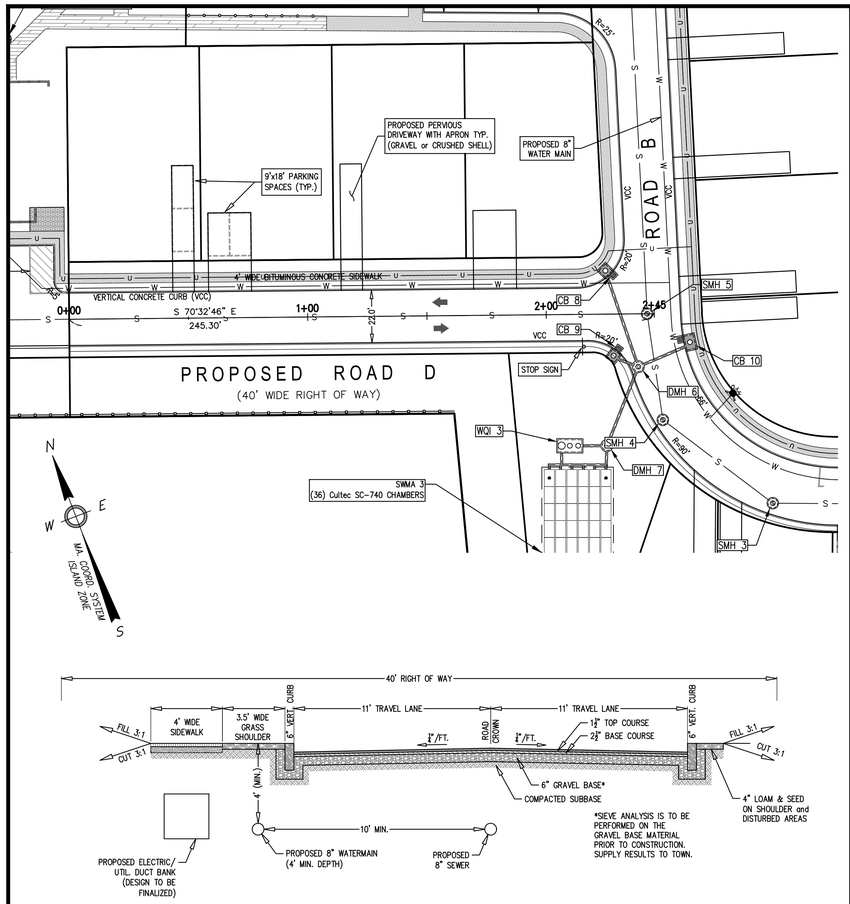
PROPOSED 40B DEVELOPMENT
IN NANTUCKET, MASSACHUSETTS

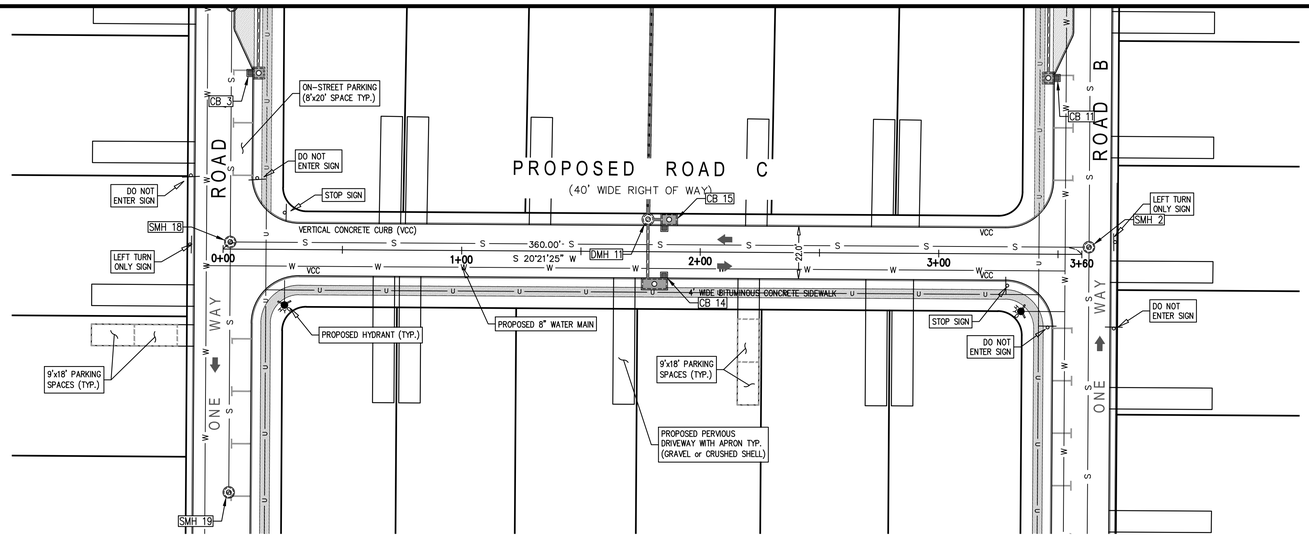
Prepared For:

SURFSIDE CROSSING, LLC
#3, 5, 7 & 9 SOUTH SHORE ROAD
MAP 67 PARCELS 336, 336.7, 336.8 & 336.9

No.	Date	Revision Description	By
2	3/19/19	GENERAL REDESIGN	RMM
1	10/25/18	GENERAL REDESIGN	RMM

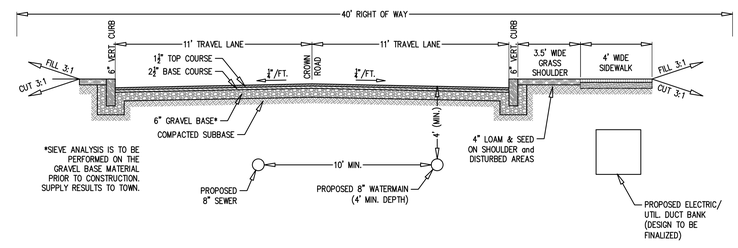
Date:	Drawn:	Checked:	Sheet:
FEBRUARY 15, 2018	RMM/ERC/BEI	DFB/AMG	8 of 14





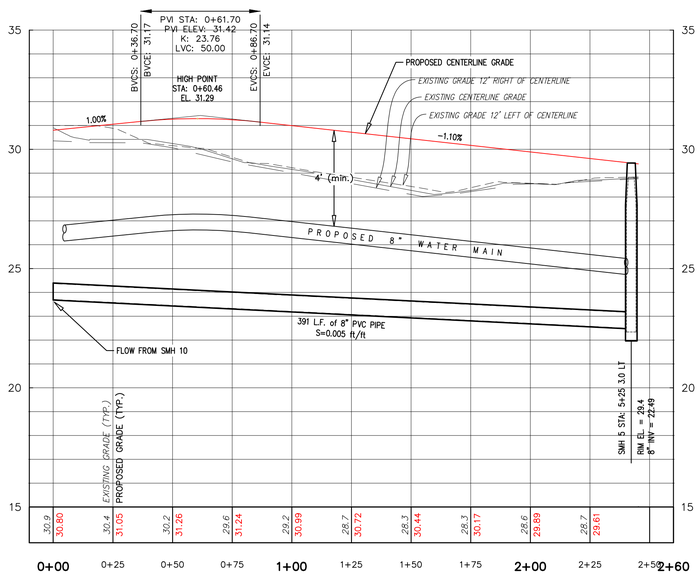
ROAD D CROSS-SECTION

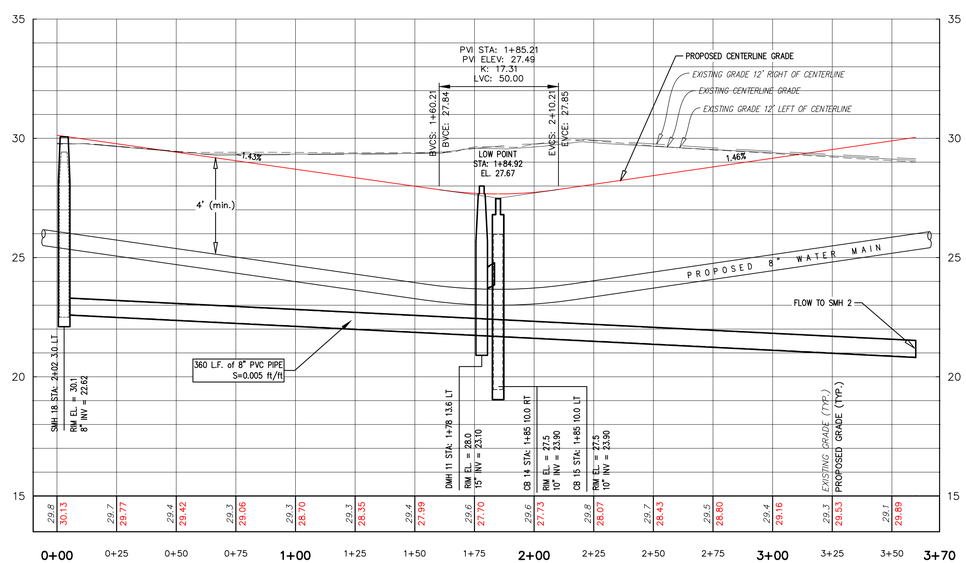
NOT TO SCALE



ROAD C CROSS-SECTION

NOT TO SCALE





COMMONWEALTH OF MASSACHUSETTS
DONALD F. BRACKEN, JR.
CIVIL
No. 37071
REGISTERED PROFESSIONAL ENGINEER

PROFILE SCALE
1 inch = 3 feet (vertical)
0 0.75 1.5 2.25 3 6 9

0 7.5 15 22.5 30 45 60 90
1 inch = 30 feet (horizontal)
PLAN SCALE

Prepared By:
BRACKEN ENGINEERING, INC
49 HERRING POND ROAD
BUZZARDS BAY, MA 02532
(tel) 508.833.0070
(fax) 508.833.2282
19 OLD SOUTH ROAD
NANTUCKET, MA 02554
(tel) 508.325.0044
www.brackeneng.com

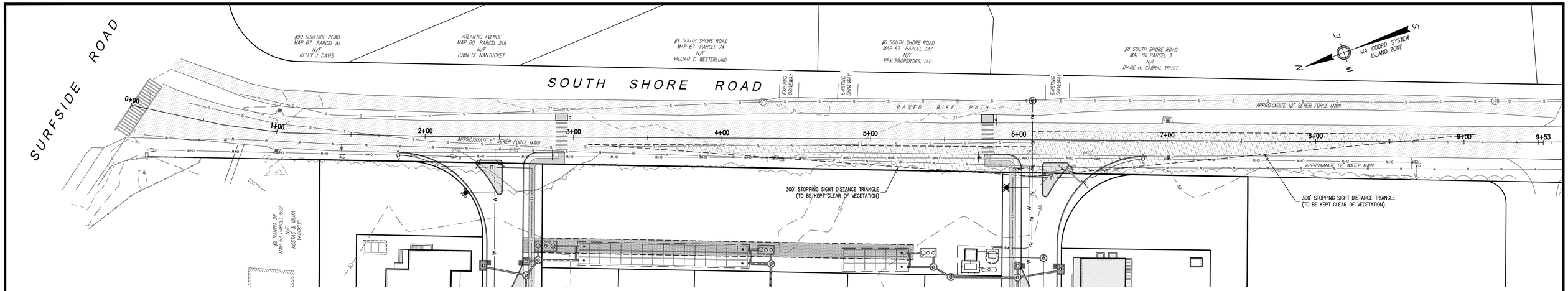
Sheet Title:
PLAN AND PROFILE
ROAD C & ROAD D

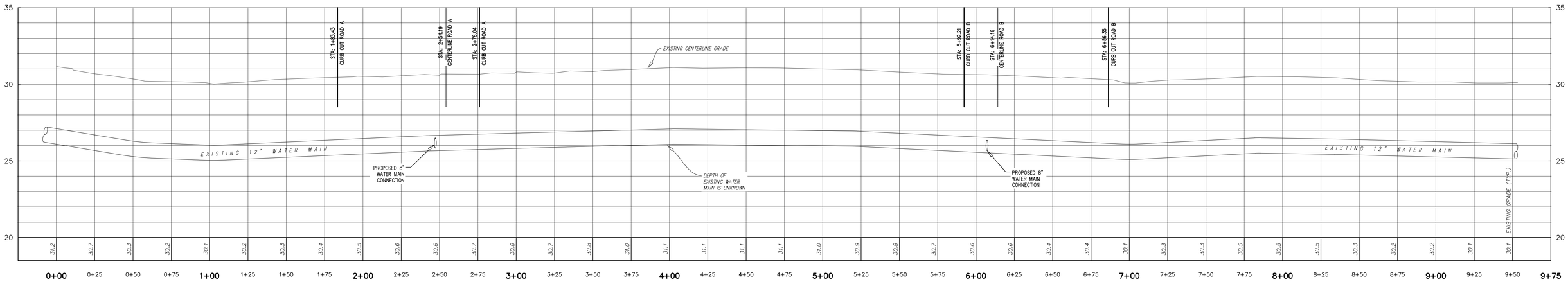
"SURFSIDE CROSSING"
A
PROPOSED 40B DEVELOPMENT
IN NANTUCKET, MASSACHUSETTS
Prepared For:
SURFSIDE CROSSING, LLC
#3, 5, 7 & 9 SOUTH SHORE ROAD
MAP 67 PARCELS 336, 336.7, 336.8 & 336.9

No.	Date	Revision Description	By
2	3/19/19	GENERAL REDESIGN	RMM
1	10/25/18	GENERAL REDESIGN	RMM

Date:	Drawn:	Checked:	Sheet:
FEBRUARY 15, 2018	RMM/ERC/BEI	DFB/AMG	9 of 14

S:\Autocad Drawings\Nantucket\South Shore Rd\3-9 South Shore Road\CAD Files\Surfside Crossing - Site Development (rev7).dwg





GENERAL CONSTRUCTION NOTES:

1. ALL SITE PREPARATION NECESSARY TO COMPLETE THIS PROJECT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
2. ALL NECESSARY POLICE DETAIL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL COORDINATE WITH THE LOCAL POLICE DEPARTMENT.
3. THE CONTRACTOR SHALL MAKE ALL NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN ALL NECESSARY CONSTRUCTION PERMITS, PAY ALL FEES INCLUDING POLICE DETAILS AND POST ALL BONDS, IF NECESSARY, ASSOCIATED WITH THE SAME, AND COORDINATE WITH THE OWNER AND THE ENGINEER.
4. ALL EXISTING CONDITIONS SHOWN SHALL BE CONSIDERED APPROXIMATE AND ARE BASED ON THE BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOW EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ENGINEER PRIOR TO INSTALLING ANY PORTION OF THE SITE WORK WHICH WOULD BE AFFECTED.
5. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOW ON THESE PLANS ARE BASED ON RECORDS OF VARIOUS UTILITY COMPANIES, AND WHEREVER POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY IN THE TOWN, AND "DIGSAFE" (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK IN PREVIOUSLY UNALTERED AREAS TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RESOLVE CONFLICTS BETWEEN THE PROPOSED UTILITIES AND FIELD LOCATED UTILITIES AND SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED, INCOMPLETELY OR INACCURATELY SHOW. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACCURATE RECORDS OF THE LOCATION AND ELEVATION OF ALL WORK INSTALLED AND EXISTING UTILITIES FOUND DURING CONSTRUCTION FOR THE PREPARATION OF THE AS-BUILT PLAN.
6. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL EXISTING UTILITIES IN WORKING ORDER AND FREE FROM DAMAGE DURING THE ENTIRE DURATION OF THE PROJECT. ALL COST RELATED TO THE REPAIR OF UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. EXCAVATION REQUIRED WITHIN THE PROXIMITY OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER.
7. THE CONTRACTOR SHALL UTILIZE ALL PRECAUTIONS AND MEASURES TO ENSURE THE SAFETY OF THE PUBLIC, ALL PERSONNEL, AND PROPERTY DURING CONSTRUCTION IN ACCORDANCE WITH OSHA STANDARDS, INCLUDING BARRICADES, SAFETY LIGHTING, CONES, POLICE DETAIL AND/OR FLAGMEN AS DETERMINED NECESSARY BY THE ENGINEER AND/OR TOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF POLICE DETAIL AND FOR COORDINATING WITH THE LOCAL OR STATE POLICE DEPARTMENT FOR ALL REQUIRED POLICE DETAIL.
8. ALL TRENCHING WORK WITHIN A ROADWAY SHALL BE COORDINATED WITH THE PROPER LOCAL & STATE AGENCY. TRENCH SAFETY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR INCLUDING ANY LOCAL AND/OR STATE PERMITS REQUIRED FOR THE TRENCHWORK. THIS WORK MAY BE REQUIRED TO TAKE PLACE OUTSIDE OF NORMAL HOURS OF OPERATION FOR THE FACILITY, THE CONTRACTOR SHALL PLAN ACCORDINGLY.
9. ALL TRENCH WORK WITHIN EXISTING PAVEMENT SHALL BE SAWCUT PER THE APPLICABLE DETAILS. TRENCHWORK BACKFILL AND COMPACTION SHALL HAVE MAX 8-INCH LIFTS. CONTRACTOR SHALL BE REQUIRED TO REMOVE PATCH AND REPAVE AFTER ONE COMPLETE 12-MONTH CYCLE IF SETTLEMENT OCCURS DUE TO INADEQUATE COMPACTION AS DETERMINED BY THE ENGINEER WITHIN THE WARRANTY PERIOD.
10. THE CONTRACTOR SHALL MAKE ALL CONNECTION ARRANGEMENTS WITH UTILITY COMPANIES, AS REQUIRED.
11. ALL IMPORTED MATERIAL SHALL BE CLEAN. NO MATERIAL WILL BE ACCEPTED FROM AN EXISTING OR FORMER 21E SITE AS DEFINED BY THE MASSACHUSETTS CONTINGENCY PLAN 310 CMR 40.0000.
12. SITE LAYOUT SURVEY REQUIRED FOR CONSTRUCTION WILL BE PROVIDED BY THE CONTRACTOR AND SHALL BE CONDUCTED BY A MASSACHUSETTS REGISTERED PROFESSIONAL LAND SURVEYOR. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE SURVEYOR FOR ALL SITE SURVEY WORK.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCHMARKS DURING CONSTRUCTION INCLUDING BENCHMARK LOCATIONS AND ELEVATIONS AT CRITICAL AREAS. THE LOCATION OF ALL CONTROL POINTS AND BENCHMARKS SHALL BE COORDINATED WITH THE ENGINEER.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL GRADE STAKES SET BY THE SURVEYOR. GRADE STAKES SHALL REMAIN UNTIL A FINAL INSPECTION OF THE ITEM HAS BEEN COMPLETED BY THE ENGINEER. ANY RE-STAKING OF PREVIOUSLY SURVEYED SITE FEATURES SHALL BE THE RESPONSIBILITY (INCLUDING COSTS) OF THE CONTRACTOR.
15. UNLESS OTHERWISE SPECIFIED ON THE PLANS AND DETAILS/SPECIFICATIONS, ALL SITE CONSTRUCTION MATERIALS AND METHODOLOGIES ARE TO CONFORM TO THE MOST RECENT VERSION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (THE MASSACHUSETTS HIGHWAY DEPARTMENT 1988 STANDARD SPECIFICATION FOR HIGHWAYS AND BRIDGES, THE 2002 SUPPLEMENTAL SPECIFICATIONS AND THE 2006 SPECIAL PROVISIONS).
16. CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS REGARDING NOISE, VIBRATION, DUST, SEDIMENTATION CONTAINMENT, AND TRENCH WORK.
17. SOLID WASTES SHALL BE COLLECTED AND STORED IN A SECURED DUMPSTER. THE DUMPSTER SHALL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS.
18. THE CONTRACTOR SHALL RESTORE ALL SURFACES EQUAL TO THEIR ORIGINAL CONDITION AFTER CONSTRUCTION IS COMPLETE. AREAS NOT DISTURBED BY CONSTRUCTION SHALL BE LEFT NATURAL. THE CONTRACTOR SHALL TAKE CARE TO PREVENT DAMAGE TO SHRUBS, TREES, OTHER LANDSCAPING, AND/OR NATURAL FEATURES. WHEREAS THE PLANS DO NOT SHOW ALL LANDSCAPE FEATURES, EXISTING CONDITIONS MUST BE VERIFIED BY THE CONTRACTOR IN ADVANCE OF THE WORK.
19. ALL UNPAVED AREAS DISTURBED BY THE WORK SHALL HAVE A MINIMUM OF 4-INCHES OF LOAM INSTALLED AND BE SEEDED WITH GRASS SEED AS SHOWN ON THE PLAN AND/OR DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING ANY LOAM AND SEEDED AREAS UNTIL LAWN GROWTH IS ESTABLISHED AND APPROVED BY THE ENGINEER AND/OR OWNER.
20. ALL PROPOSED STRUCTURES SHALL BE DESIGNED BY THEIR MANUFACTURERS FOR AASHTO H-20 LOADING, PRECAST CONCRETE SHALL HAVE A MINIMUM 28-DAY STRENGTH OF 4000 PSI UNLESS OTHERWISE NOTED HEREIN.
21. ALL WHEELCHAIR RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATION AND CONSTRUCTION AND TRAFFIC STANDARD DETAILS (1998) DRAWING NUMBER 107.1.0 AND 107.2.0 RAMPS SHALL HAVE AN 8% MAX. SLOPE AND 2% CROSS SLOPE.
22. THE CONTRACTOR SHALL REGULARLY INSPECT THE PERIMETER OF THE PROPERTY TO CLEAN UP AND REMOVE LOOSE CONSTRUCTION DEBRIS BEFORE IT LEAVES THE SITE. ALL DEMOLITION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE SITE TO AN APPROVED DUMP SITE. ALL TRUCKS LEAVING THE SITE SHALL BE COVERED.
23. CONCRETE TRUCKS SHALL NOT BE WASHED ONSITE. ANY CEMENT OR CONCRETE DEBRIS LEFT IN THE DISTURBED AREA SHALL BE REMOVED BY HAND AT THE CONTRACTOR'S EXPENSE.
24. BURIAL OF ANY STUMPS, SOLID DEBRIS, AND/OR STONES/BOULDERS ONSITE IS PROHIBITED AND SHALL BE TAKEN OFF SITE IMMEDIATELY. NO STOCKPILING OF MATERIALS ON SITE IS ALLOWED.
25. IF ANY DEVIATION OR ALTERATION OF THE WORK PROPOSED ON THESE DRAWINGS IS REQUIRED, THE CONTRACTOR IS TO IMMEDIATELY CONTACT AND COORDINATE WITH THE ENGINEER AND OWNER.
26. AT THE END OF CONSTRUCTION, THE CONTRACTOR SHALL REMOVE ALL CONSTRUCTION DEBRIS AND SURPLUS MATERIALS FROM THE SITE. A THOROUGH INSPECTION OF ALL THE WORK PERIMETER IS TO BE MADE AND ALL DISCARDED MATERIALS, BLOWN OR WATER CARRIED DEBRIS, SHALL BE COLLECTED AND REMOVED FROM THE SITE.

LEGEND

EXISTING		PROPOSED	
100	MINOR CONTOUR	100	MAJOR/MINOR CONTOUR
99	MAJOR CONTOUR	99.99	SPOT ELEVATION
100x1	SPOT ELEVATION		LIMIT OF WORK/
TP #1	TEST PITS		EDGE OF CLEARING
	EDGE OF CLEARING	x x x	SILT FENCE
W	WATER SERVICE	W	WATER SERVICE
WV	WATER GATE		WATER GATE
	HYDRANT		HYDRANT
	UTILITY POLE		UTILITY POLE
OHW	OVERHEAD WIRES	E	UNDERGROUND ELECTRIC
D D	DRAIN LINE		TRANSFORMER
	DRAIN MANHOLE	E	ELECTRIC MANHOLE
	CATCH BASIN		DRAIN LINE
S	SEWER MAIN		DRAIN MANHOLE
			CATCH BASIN
			STORMTREE SYSTEM
		12" CCB	12" WIDE CAPE COD BERM
		6" VGC	6" WIDE VERTICAL GRANITE CURB

COMMONWEALTH OF MASSACHUSETTS
DONALD F. BRACKEN, JR.
CIVIL
No. 37071
REGISTERED PROFESSIONAL ENGINEER

PROFILE SCALE
1 inch = 3 feet (vertical)
0 0.75 1.5 2.25 3 6 9

0 7.5 15 22.5 30 45 60 90
1 inch = 30 feet (horizontal)
PLAN SCALE

Prepared By:
BRACKEN ENGINEERING, INC.
49 HERRING POND ROAD
BUZZARDS BAY, MA 02532
(tel) 508.833.0070
(fax) 508.833.2282
19 OLD SOUTH ROAD
NANTUCKET, MA 02554
(tel) 508.325.0044
www.brackeneng.com

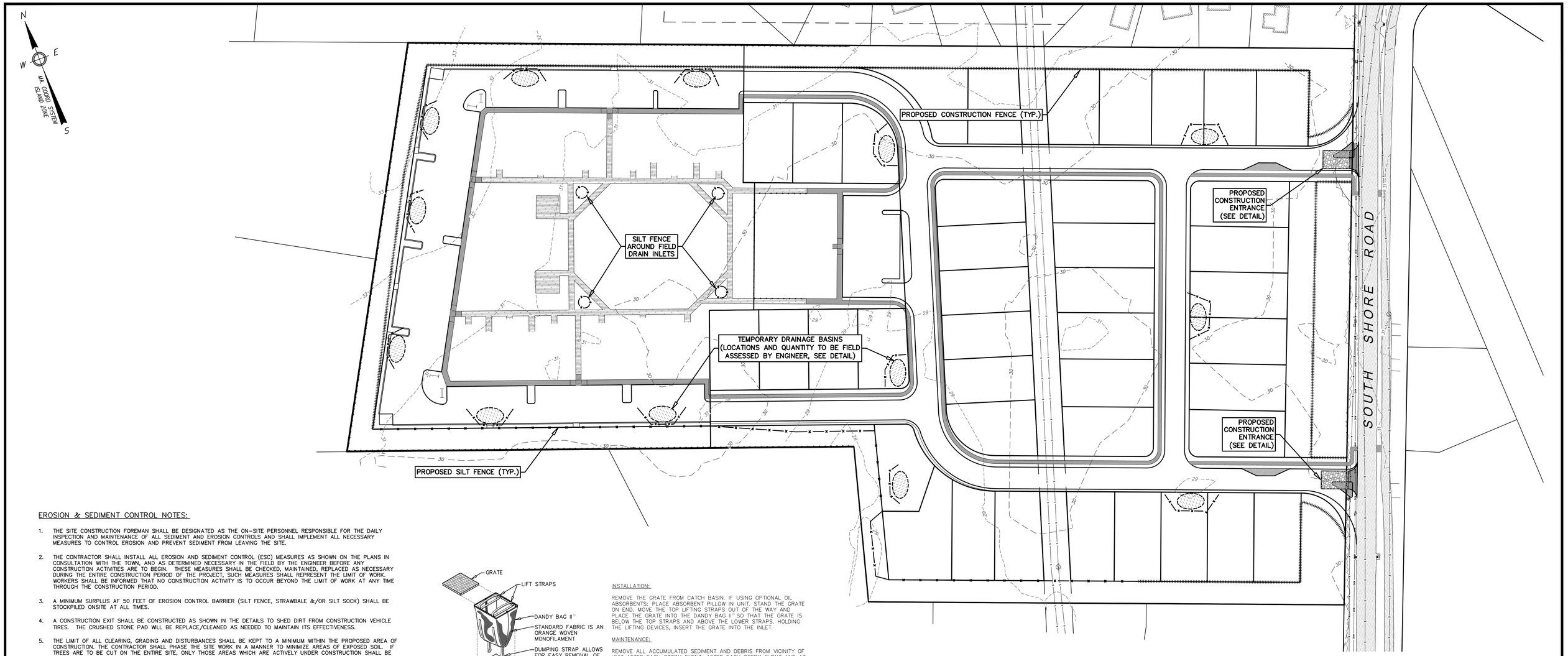
Sheet Title:
PLAN AND PROFILE SOUTH SHORE ROAD & CONSTRUCTION NOTES

"SURFSIDE CROSSING"
A
PROPOSED 40B DEVELOPMENT
IN NANTUCKET, MASSACHUSETTS
Prepared For:
SURFSIDE CROSSING, LLC
#3, 5, 7 & 9 SOUTH SHORE ROAD
MAP 67 PARCELS 336, 336.7, 336.8 & 336.9

No.	Date	Revision Description	By
2	3/19/19	GENERAL REDESIGN	RMM
1	10/25/18	GENERAL REDESIGN	RMM

Date:	Drawn:	Checked:	Sheet:
FEBRUARY 15, 2018	RMM/ERC/BEI	DFB/AMG	10 of 14

S:\Autocad Drawings\Nantucket\South Shore Rd\3-9 South Shore Road\CAD Files\Surfside Crossing - Site Development (rev7).dwg



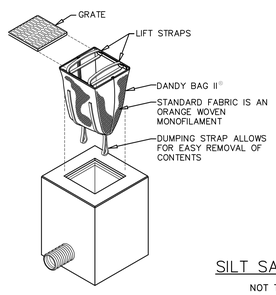
PLAN SCALE

0 8 16 24 32 40 60 80 120

1 inch = 40 feet

EROSION & SEDIMENT CONTROL NOTES:

1. THE SITE CONSTRUCTION FOREMAN SHALL BE DESIGNATED AS THE ON-SITE PERSONNEL RESPONSIBLE FOR THE DAILY INSPECTION AND MAINTENANCE OF ALL SEDIMENT AND EROSION CONTROLS AND SHALL IMPLEMENT ALL NECESSARY MEASURES TO CONTROL EROSION AND PREVENT SEDIMENT FROM LEAVING THE SITE.
2. THE CONTRACTOR SHALL INSTALL ALL EROSION AND SEDIMENT CONTROL (ESC) MEASURES AS SHOWN ON THE PLANS IN CONSULTATION WITH THE TOWN, AND AS DETERMINED NECESSARY IN THE FIELD BY THE ENGINEER BEFORE ANY CONSTRUCTION ACTIVITIES ARE TO BEGIN. THESE MEASURES SHALL BE CHECKED, MAINTAINED, REPLACED AS NECESSARY DURING THE ENTIRE CONSTRUCTION PERIOD OF THE PROJECT, SUCH MEASURES SHALL REPRESENT THE LIMIT OF WORK. WORKERS SHALL BE INFORMED THAT NO CONSTRUCTION ACTIVITY IS TO OCCUR BEYOND THE LIMIT OF WORK AT ANY TIME THROUGH THE CONSTRUCTION PERIOD.
3. A MINIMUM SURPLUS AF 50 FEET OF EROSION CONTROL BARRIER (SILT FENCE, STRAWBALE &/OR SILT SOCK) SHALL BE STOCKPILED ONSITE AT ALL TIMES.
4. A CONSTRUCTION EXIT SHALL BE CONSTRUCTED AS SHOWN IN THE DETAILS TO SHED DIRT FROM CONSTRUCTION VEHICLE TIRES. THE CRUSHED STONE PAD WILL BE REPLACE/CLEANED AS NEEDED TO MAINTAIN ITS EFFECTIVENESS.
5. THE LIMIT OF ALL CLEARING, GRADING AND DISTURBANCES SHALL BE KEPT TO A MINIMUM WITHIN THE PROPOSED AREA OF CONSTRUCTION. THE CONTRACTOR SHALL PHASE THE SITE WORK IN A MANNER TO MINIMIZE AREAS OF EXPOSED SOIL. IF TREES ARE TO BE CUT ON THE ENTIRE SITE, ONLY THOSE AREAS WHICH ARE ACTIVELY UNDER CONSTRUCTION SHALL BE GRUBBED. THE REQUIRED SEDIMENTATION CONTROL FACILITIES MUST BE PROPERLY ESTABLISHED, CLEARLY VISIBLE AND IN OPERATION PRIOR TO INITIATING ANY LAND CLEARING ACTIVITY AND/OR OTHER CONSTRUCTION RELATED WORK.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MONITOR LOCAL WEATHER REPORTS DURING CONSTRUCTION AND PRIOR TO SCHEDULING EARTHMOVING OR OTHER CONSTRUCTION ACTIVITIES WHICH WILL LEAVE LARGE DISTURBED AREAS UN-STABILIZED. IF INCLEMENT WEATHER IS PREDICTED, THE CONTRACTOR SHALL USE THEIR BEST PROFESSIONAL JUDGEMENT WHEN SCHEDULING CONSTRUCTION ACTIVITIES AND SHALL BE RESPONSIBLE FOR ENSURING THE NECESSARY EROSION CONTROL DEVICES ARE INSTALLED AND FUNCTIONING PROPERTY TO MINIMIZE EROSION FROM ANY IMPENDING WEATHER EVENTS.
7. ESC MEASURES SHALL BE INSPECTED AND MAINTAINED ON A WEEKLY BASIS AND AFTER EACH RAINFALL EVENT OF 0.25 INCH OR GREATER DURING CONSTRUCTION TO ENSURE THAT THE EROSION AND SEDIMENTATION CONTROL MEASURES ARE INTACT AND FUNCTIONING PROPERLY. IDENTIFIED DEFICIENCIES SHALL BE CORRECTED IMMEDIATELY NO LATER THAN 24 HOURS AFTER IDENTIFICATION.
8. SOIL STOCKPILES LEFT OVERNIGHT SHALL BE SURROUNDED ON THEIR PERIMETERS WITH SILT SOCK, SILT FENCE, STRAWBALES OR A COMBINATION OF SILT FENCE WITH STRAWBALE, AS DETERMINED NECESSARY.
9. DISTURBED AREAS AND SLOPES SHALL NOT BE LEFT UNATTENDED OR EXPOSED FOR EXCESSIVE PERIODS OF TIME SUCH AS THE INACTIVE WINTER SEASON. THE CONTRACTOR SHOULD PROVIDE APPROPRIATE STABILIZATION PRACTICES ON ALL DISTURBED AREAS AS SOON AS POSSIBLE BUT NOT MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY AREAS HAVING A SLOPE GREATER THAN 3:1 SHALL BE REINFORCED WITH EROSION BLANKETS OR APPROVED EQUAL UNTIL THE SITE IS PROPERTY STABILIZED. TEMPORARY SWALES MAY ALSO BE REQUIRED IF DETERMINED NECESSARY IN THE FIELD BY THE ENGINEER.
10. THE CONTRACTOR SHALL INSTALL A SILT SACK OR APPROVED EQUIVALENT IN EACH EXISTING CATCH BASIN RECEIVING RUNOFF FROM THE SITE. UPON THE INSTALLATION OF EACH CATCH BASIN, THE CONTRACTOR SHALL INSTALL A SILT SACK OR APPROVED EQUIVALENT. THESE ARE TO BE INSPECTED AFTER EACH SIGNIFICANT STORM EVENT AND REMOVED AND EMPTIED AS NEEDED DURING THE ENTIRE CONSTRUCTION PERIOD.
11. SMALL SEDIMENTATION BASINS MAY BE CONSTRUCTED ON AN AS-NEEDED BASIS DURING CONSTRUCTION TO AND IN THE CAPTURE OF SITE RUNOFF AND SEDIMENT. IT WILL BE THE RESPONSIBILITY OF THE SITE CONTRACTOR, IN CONSULTATION WITH THE ENGINEER, TO SIZE AND CREATE THESE BASINS IN APPROPRIATE LOCATIONS.
12. THE CONTRACTOR SHALL CONTAIN ALL SEDIMENT ONSITE. ALL EXITS FROM THE SITE WILL BE SWEPT AS NECESSARY INCLUDING ANY SEDIMENT TRACKING. PAVED AREAS SHALL BE SWEPT AS NEEDED TO REMOVE SEDIMENT AND POTENTIAL POLLUTANTS WHICH MAY ACCUMULATE DURING SITE WORK.
13. ACCUMULATED SEDIMENT SHALL BE REMOVED FROM ALL TEMPORARY PRACTICES AND DISPOSED OF IN A PRE-APPROVED LOCATION BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER.
14. THE CONTRACTOR SHALL PROVIDE ONSITE OR MAKE READILY AVAILABLE THE NECESSARY EQUIPMENT AND SITE PERSONNEL DURING CONSTRUCTION HOURS FOR THE DURATION OF THE PROJECT TO ENSURE ALL ESC DEVICES ARE PROPERLY MAINTAINED AND REPAIRED IN A TIMELY AND RESPONSIBLE MANNER. IF SITE WORK IS SUSPENDED DURING THE WINTER MONTHS, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE PERSONNEL AND EQUIPMENT EITHER ONSITE OR MAKE READILY AVAILABLE TO ENSURE ALL ESC DEVICES ARE PROPERLY MAINTAINED AND REPAIRED IN A TIMELY AND RESPONSIBLE MANNER.
15. DUST SHALL BE CONTROLLED BY WATERING OR OTHER APPROVED METHODS AS NECESSARY, OR AS DIRECTED BY THE ENGINEER.
16. THE CONTRACTOR IS RESPONSIBLE FOR THE INSPECTION AND MAINTENANCE DURING CONSTRUCTION OF ALL STORMWATER FACILITIES INSTALLED OR AFFECTED BY THE PROJECT. ANY SEDIMENT OR DEBRIS COLLECTED WITHIN THESE FACILITIES FROM THE PROJECT WORK SHALL BE REMOVED PRIOR TO THE OWNER'S ACCEPTANCE.



DANDY BAG II®
INSTALLATION AND MAINTENANCE GUIDELINES

INSTALLATION:

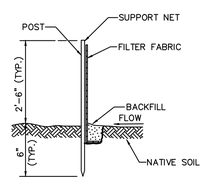
REMOVE THE GRATE FROM CATCH BASIN. IF USING OPTIONAL OIL ABSORBENTS; PLACE ABSORBENT PILLOW IN UNIT. STAND THE GRATE ON END. MOVE THE TOP LIFTING STRAPS OUT OF THE WAY AND PLACE THE GRATE INTO THE DANDY BAG II® SO THAT THE GRATE IS BELOW THE TOP STRAPS AND ABOVE THE LOWER STRAPS. HOLDING THE LIFTING DEVICES, INSERT THE GRATE INTO THE INLET.

MAINTENANCE:

REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM VICINITY OF UNIT AFTER EACH STORM EVENT. AFTER EACH STORM EVENT AND AT REGULAR INTERVALS, LOOK INTO THE DANDY BAG II®. IF THE CONTAINMENT AREA IS MORE THAN ½ FULL OF SEDIMENT, THE UNIT MUST BE EMPTIED. TO EMPTY UNIT, LIFT THE UNIT OUT OF THE INLET USING THE LIFTING STRAPS AND REMOVE THE GRATE. IF USING OPTIONAL OIL ABSORBENTS; REPLACE ABSORBENT WHEN NEAR SATURATION.

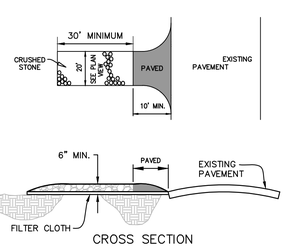
SILT SACK DETAIL

NOT TO SCALE



SILTATION FENCE DETAIL

NOT TO SCALE



TRACKING PAD NOTES:

STONE SIZE – USE 2" CRUSHED STONE

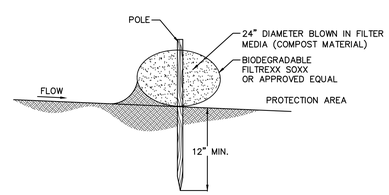
FILTER CLOTH – SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. STONE USED SHALL BE LARGE ENOUGH SO THAT IT DOES NOT GET PICKED UP AND TRACKED OFF THE SITE BY THE VEHICLE TRAFFIC.

SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHOULD BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM SHOULD BE PERMITTED.

MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH PREVENTS TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANING OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.

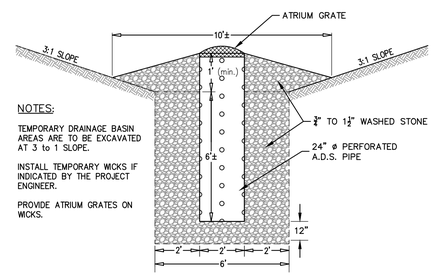
TEMPORARY TRACKING PAD DETAIL

NOT TO SCALE



FILTREXX SOXX BARRIER DETAIL

NOT TO SCALE



NOTES:

TEMPORARY DRAINAGE BASIN AREAS ARE TO BE EXCAVATED AT 3 TO 1 SLOPE.

INSTALL TEMPORARY WICKS IF INDICATED BY THE PROJECT ENGINEER.

PROVIDE ATRIUM GRATES ON WICKS.

TEMPORARY DRAINAGE BASIN DETAIL

NOT TO SCALE

COMMONWEALTH OF MASSACHUSETTS
DONALD F. BRACKEN, JR.
CIVIL
No. 37071
REGISTERED PROFESSIONAL ENGINEER

Prepared By:
BRACKEN ENGINEERING, INC.
49 HERRING POND ROAD
BUZZARDS BAY, MA 02532
(tel) 508.833.0070
(fax) 508.833.2282
19 OLD SOUTH ROAD
NANTUCKET, MA 02554
(tel) 508.325.0044
www.brackeneng.com

Sheet Title:

EROSION & SEDIMENTATION CONTROL PLAN

"SURFSIDE CROSSING"

A

PROPOSED 40B DEVELOPMENT IN NANTUCKET, MASSACHUSETTS

Prepared For:

SURFSIDE CROSSING, LLC

#3, 5, 7 & 9 SOUTH SHORE ROAD

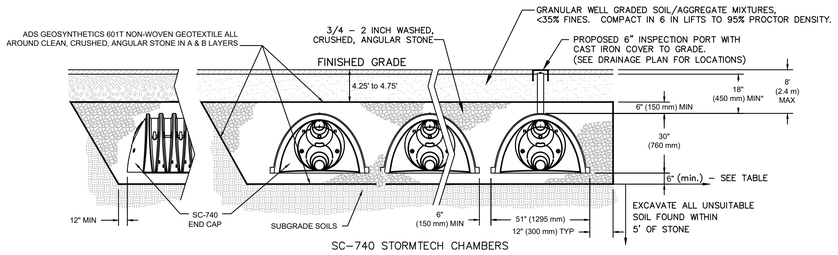
MAP 67 PARCELS 336, 336.7, 336.8 & 336.9

No.	Date	Revision Description	By
2	3/19/19	GENERAL REDESIGN	RMM
1	10/25/18	GENERAL REDESIGN	RMM

Date:	Drawn:	Checked:	Sheet:
FEBRUARY 15, 2018	RMM/ERC/BEI	DFB/AMG	11 of 14

ISSUED FOR PERMIT REVIEW

S:\Autocad Drawings\Nantucket\South Shore Rd\3-9 South Shore Road\CAD Files\Surfside Crossing - Site Development (rev7).dwg



SC–740 STORMTECH CHAMBERS

NOTES:

CHAMBERS SHALL MEET ASTM F 2418–05 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".

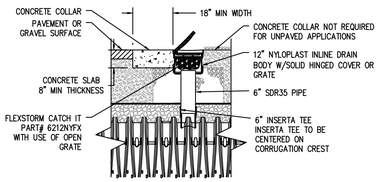
THE INSTALLED CHAMBER SYSTEM SHALL PROVIDE THE SAFETY FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12 FOR EARTH AND LIVE LOADS, WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.

THIS CROSS SECTION DETAILS THE REQUIREMENTS NECESSARY TO SATISFY THE SAFETY FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12 FOR EARTH AND LIVE LOADS USING STORMTECH CHAMBERS.

UNSUITABLE SOILS : SURFICIAL ORGANICS, SURFICIAL OR BURIED TOP SOIL/SUB SOIL, OLD FOUNDATION, UTILITIES, PAVEMENT, FILL AND ALL OTHER DELETERIOUS MATERIAL.

SOIL INSPECTION: THE DESIGN ENGINEER SHALL CONDUCT A BOTTOM OF EXCAVATION TEST, TO VERIFY THE UNSUITABLE MATERIALS HAVE BEEN REMOVED PRIOR TO BACKFILL OF SAND AND PRIOR TO THE INSTALLATION OF THE CRUSHED STONE BASE.

PROTECTION: INFILTRATION AREAS ARE TO BE PROTECTED DURING CONSTRUCTION AND AVOID OVER COMPACTION TO INSURE THE INFILTRATION CAPACITY IS MAINTAINED.



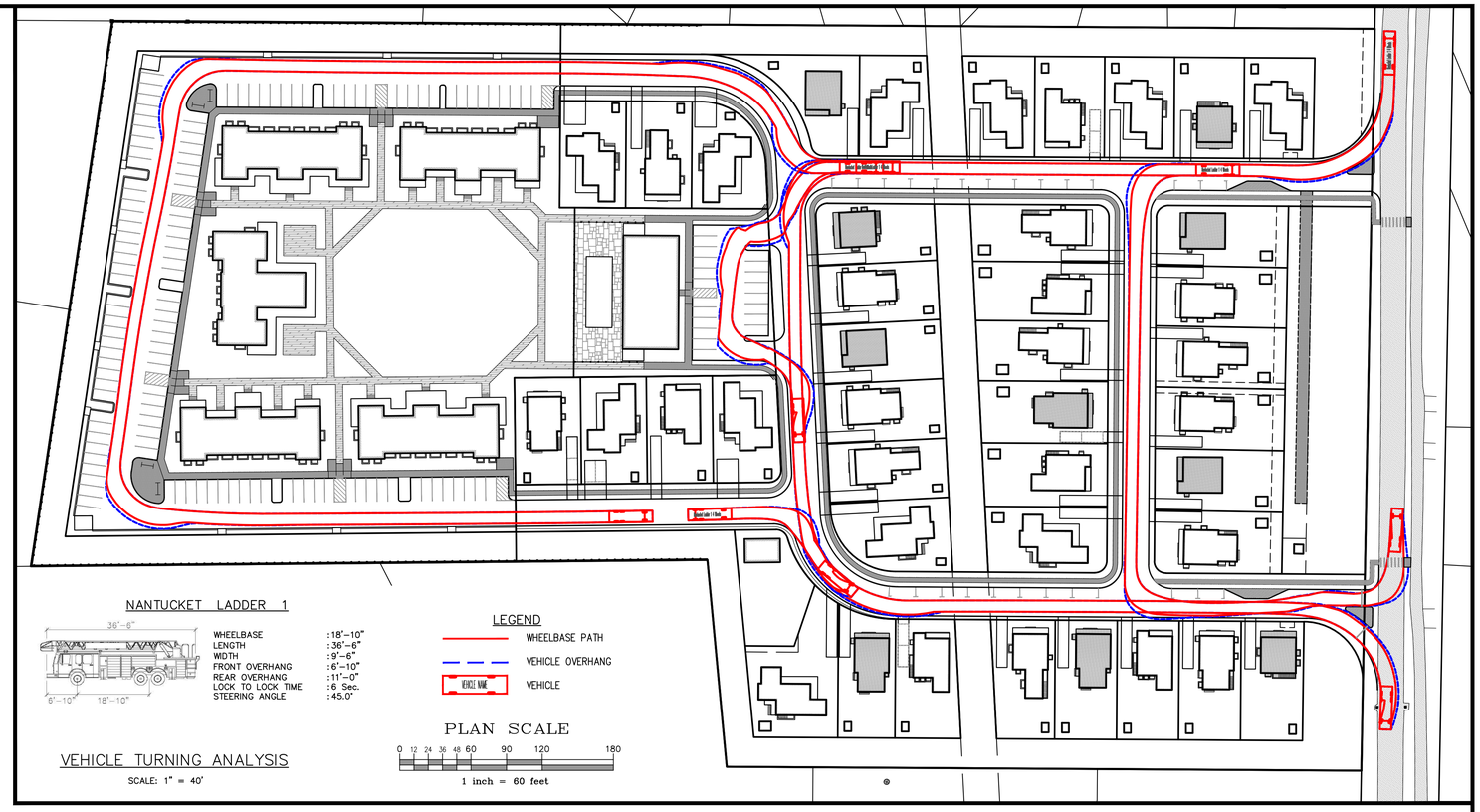
STORMTECH INSPECTION PORT DETAIL

NOT TO SCALE

SWMA #	SYSTEM SIZE	# OF UNITS	# OF ROWS	TOP OF STONE	TOP OF CHAMBER	INVERT IN	INLET DIA.	BOTTOM CHAMBER	BOTTOM STONE	FINISHED GRADE
#1	15.75' x 115.92' x 3.5'	48	3	23.10	22.60	21.3 / 20.9	10" & 15"	20.10	18.10	30.0±
#2	30.00' x 73.20' x 3.5'	60	6	24.40	23.90	22.60	12"	21.40	19.40	29.6± to 30.4±
#3	30.00' x 44.72' x 3.5'	36	6	24.30	23.80	22.50	10"	21.30	19.80	29.3±
#4	15.75' x 44.72' x 3.5'	18	3	24.40	23.90	22.60	10"	21.40	19.90	30.0±
#5	20.50' x 58.96' x 3.5'	48	6	27.60	27.10	25.80	10"	24.60	22.60	33.0±
#6	20.50' x 58.96' x 3.5'	32	4	26.40	25.90	24.60	10"	23.40	21.40	31.2± to 31.7±
#7	25.25' x 80.32' x 3.5'	55	5	25.50	25.00	23.70	10"	22.50	21.00	31.0± to 31.8±
#8	26.25' x 66.08' x 3.5'	45	5	25.20	24.70	23.40	10"	22.20	20.20	30.4± to 31.0±

STORMWATER MANAGEMENT AREA DETAIL

NOT TO SCALE



NANTUCKET LADDER 1

WHEELBASE	:18'–10"
LENGTH	:36'–6"
WIDTH	:9'–6"
FRONT OVERHANG	:6'–10"
REAR OVERHANG	:11'–0"
LOCK TO LOCK TIME	:6 Sec.
STEERING ANGLE	:45.0"

LEGEND

WHEELBASE PATH

VEHICLE OVERHANG

VEHICLE NAME — VEHICLE

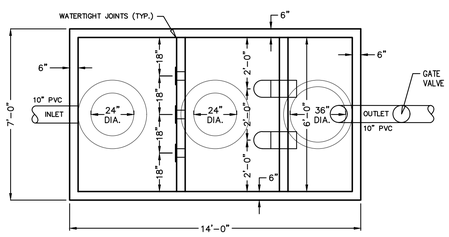
PLAN SCALE

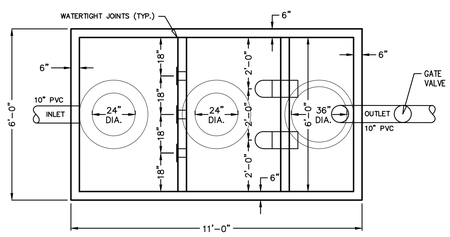
0 12 24 36 48 60 90 120 180

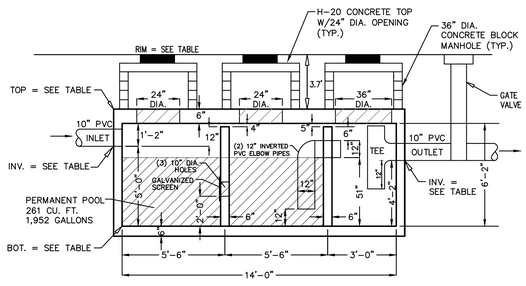
1 inch = 60 feet

VEHICLE TURNING ANALYSIS

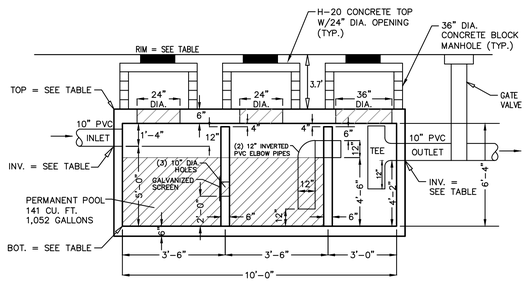
SCALE: 1" = 40'







USE 3,000 GALLON TANK



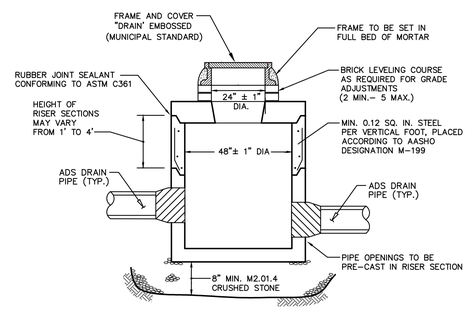
USE 2,000 GALLON TANK

WQI #	RIM	INVERT IN	INVERT OUT	TOP OF CHAMBER	BOTTOM INTERIOR
#1	29.5	22.20	21.70	24.03	17.20
#2	30.8	23.40	22.90	25.23	18.40
#7	31.3	24.70	24.20	26.53	19.70
#8	30.6	24.30	23.80	26.13	19.20

WQI #	RIM	INVERT IN	INVERT OUT	TOP OF CHAMBER	BOTTOM INTERIOR
#3	29.4	23.70	23.20	25.53	18.70
#4	29.9	23.50	23.00	25.33	18.50
#5	29.9	22.10	21.60	23.93	17.10
#6	31.7	25.30	24.80	27.13	20.30

3 CHAMBER WATER QUALITY INLET DETAILS

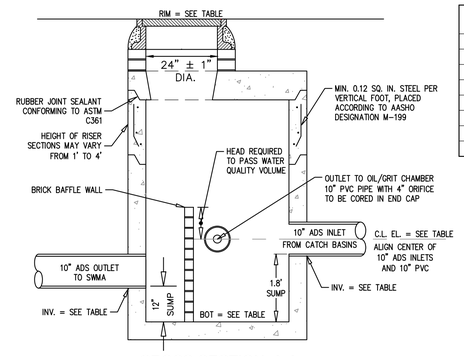
NOT TO SCALE



PRE–CAST TO CONFORM TO ASTM C478
9 FEET OR LESS IN DEPTH

PRE–CAST CONCRETE DRAIN MANHOLE

NOT TO SCALE



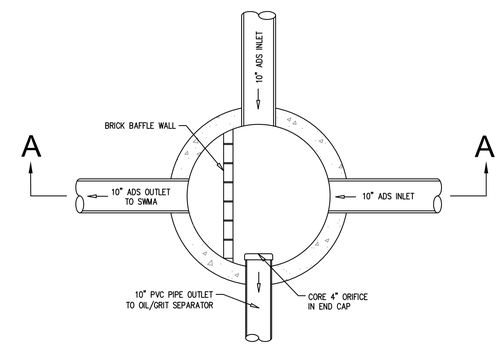
CROSS-SECTION A-A

DIVERTER MANHOLE TABLE

DIVERTER DMH #	RIM	10" INV. IN	℄ 10" INVERT	10" INV. OUT
#2	29.3	22.40	22.82	21.60
#5	30.3	23.80 (12")	24.22	23.00 (12")
#7	29.5	23.80	24.22	23.00
#10	30.1	23.60	24.02	22.80
#12	30.1	22.30 (15")	22.80	21.50 (15")
#15	31.6	25.60	26.02	24.80
#18	31.0	25.00	25.42	24.20
#21	30.5	24.40	24.82	23.6

NOTE:

DETAILS SHOWN FOR PLANNING AND PERMITTING PURPOSES ONLY, FINAL DETAILS, SPECIFICATIONS, AND CONSTRUCTION NOTES TO BE INCLUDED ON FINAL CONSTRUCTION DRAWINGS.



DIVERTER MANHOLE DETAIL

NOT TO SCALE – USE DIMENSIONS

COMMONWEALTH OF MASSACHUSETTS
DONALD F. BRACKEN, JR.
CIVIL
No. 37071
REGISTERED PROFESSIONAL ENGINEER

Prepared By:

BRACKEN ENGINEERING, INC

49 HERRING POND ROAD
BUZZARDS BAY, MA 02532

19 OLD SOUTH ROAD
NANTUCKET, MA 02554

(tel) 508.833.0070
(fax) 508.833.2282

(tel) 508.325.0044
www.brackeneng.com

Sheet Title:

CONSTRUCTION DETAILS & VEHICLE TURNING ANALYSIS

"SURFSIDE CROSSING"

A

PROPOSED 40B DEVELOPMENT IN NANTUCKET, MASSACHUSETTS

Prepared For:

SURFSIDE CROSSING, LLC

#3, 5, 7 & 9 SOUTH SHORE ROAD

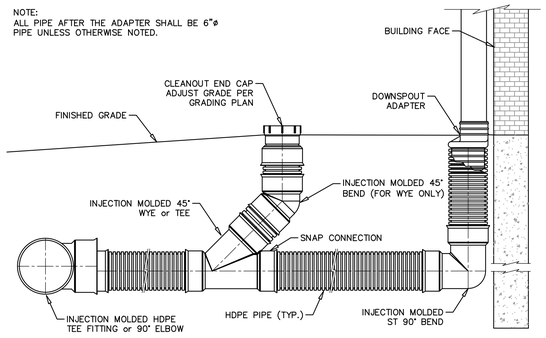
MAP 67 PARCELS 336, 336.7, 336.8 & 336.9

No.	Date	Revision Description	By
2	3/19/19	GENERAL REDESIGN	RMM
1	10/25/18	GENERAL REDESIGN	RMM

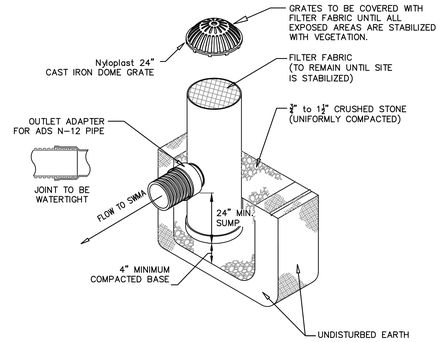
Date:	Drawn:	Checked:	Sheet:
FEBRUARY 15, 2018	RMM/ERC/BEI	DFB/AMG	12 of 14

S:\Autocad Drawings\Nantucket\South Shore Rd\3-9 South Shore Road\CAD Files\Surfside Crossing - Site Development (rev7).dwg

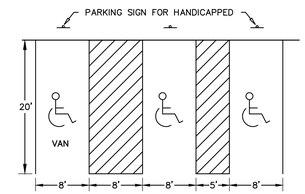
NOTE:
ALL PIPE AFTER THE ADAPTER SHALL BE 6"ø PIPE UNLESS OTHERWISE NOTED.



TYPICAL ROOF DRAIN DETAIL
NOT TO SCALE

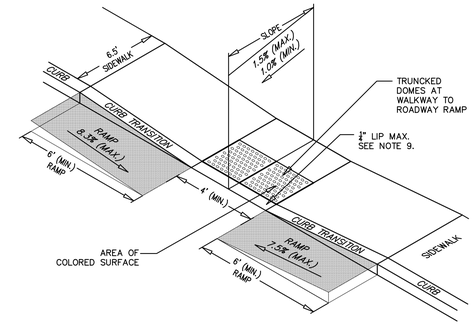


DRAIN BASIN WITH GRATE DETAIL
NOT TO SCALE



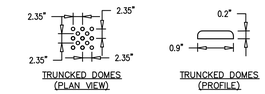
NOTE:
GRADE TO BE 2% MAXIMUM IN ANY DIRECTION ACROSS HANDICAP STALLS AND LOADING AREAS.

HANDICAP PARKING DETAIL
NOT TO SCALE



NOTES:
1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5% (1.0% MIN.).
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURB RAMPS SHALL BE 7.5%.
4. A MINIMUM DISTANCE OF 3' CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN THE ACCESSIBLE ROUTE (I.E.,HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
6. RAMP, CURB, AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
7. TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200'.
9. ELIMINATE CURBING AT RAMP WHERE IT ABUTS ROADWAY, EXCEPT WHERE VERTICAL CURBING IS INDICATED ON THE DRAWING TO BE INSTALLED AND SET FLUSH.
10. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY AND AUDIBLY WITH ADJOINING SURFACES.

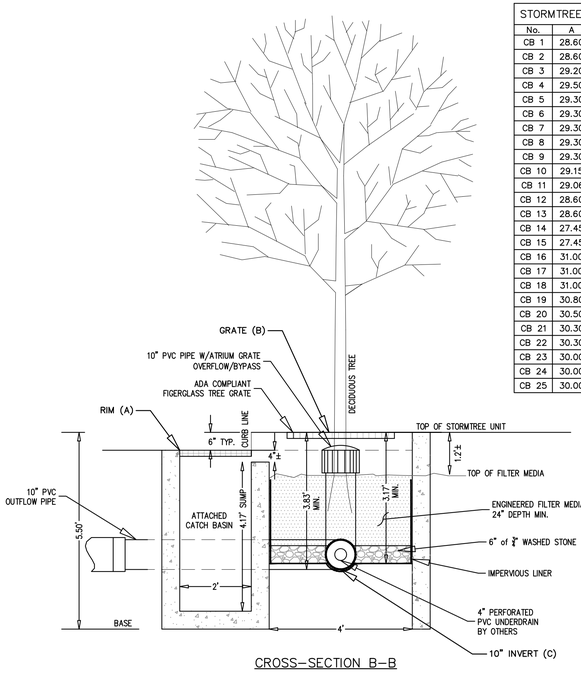
HANDICAP RAMP DETAIL
NOT TO SCALE



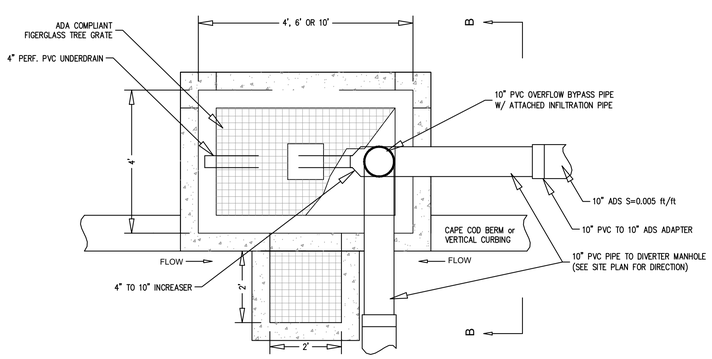
TRUNCKED DOMES (PLAN VIEW)

TRUNCKED DOMES (PROFILE)

STORMTREE CATCH BASIN			
No.	A	B	C
CB 1	28.60	29.10	25.00
CB 2	28.60	29.10	22.70
CB 3	29.20	29.70	25.60
CB 4	29.50	30.00	25.90
CB 5	29.30	29.80	25.70
CB 6	29.30	29.80	25.70
CB 7	29.30	29.80	24.75
CB 8	29.30	29.80	25.00
CB 9	29.30	29.80	25.00
CB 10	29.15	29.65	25.00
CB 11	29.06	29.56	25.00
CB 12	28.60	29.10	24.77
CB 13	28.60	29.10	24.77
CB 14	27.45	27.95	23.90
CB 15	27.45	27.95	23.90
CB 16	31.00	31.50	27.30
CB 17	31.00	31.50	26.50
CB 18	31.00	31.50	27.30
CB 19	30.80	31.30	27.00
CB 20	30.50	31.00	26.60
CB 21	30.30	30.80	25.60
CB 22	30.30	30.80	26.50
CB 23	30.00	30.50	25.00
CB 24	30.00	30.50	25.70
CB 25	30.00	30.50	26.40

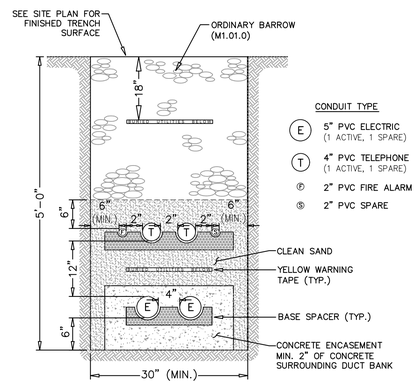


CROSS-SECTION B-B



PLAN VIEW

STORMTREE CATCH BASIN SERIES BIO-FILTER DETAIL
NOT TO SCALE

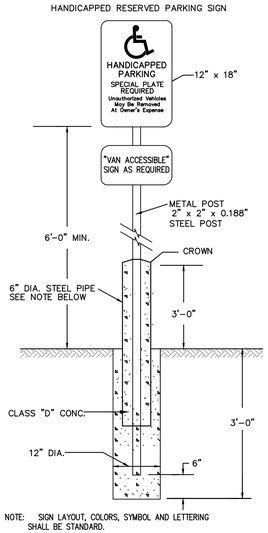


CONDUIT TYPE
- (E) 5" PVC ELECTRIC (1 ACTIVE, 1 SPARE)
- (T) 4" PVC TELEPHONE (1 ACTIVE, 1 SPARE)
- (F) 2" PVC FIRE ALARM
- (S) 2" PVC SPARE

ALL TRENCH CONDUITS SHALL BE SCHEDULE 40 PVC, UNLESSUTHERWISE NOTED

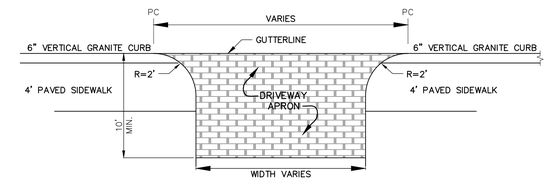
COMMON TRENCH DETAIL
ELECTRIC/TELEPHONE/FIRE ALARM/CABLE
NOT TO SCALE

HANDICAPPED RESERVED PARKING SIGN



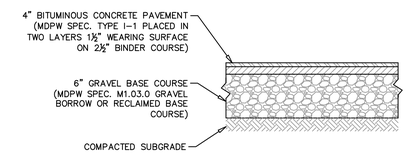
NOTE: SIGN LAYOUT, COLORS, SYMBOL AND LETTERING SHALL BE STANDARD.

HANDICAP PARKING SIGN
NOT TO SCALE



NOTE:
ALL DRIVEWAYS TO PITCH TOWARDS ROADWAY

DRIVEWAY ENTRANCE DETAIL
NOT TO SCALE



NOTE:
1. SANDY LOAM and/or LOAMY SAND TOPSOIL MATERIAL SHALL BE EXCAVATED FROM ALL PAVED AREAS PRIOR TO SUB-BASE INSTALLATION.
2. SUB-GRADE (EXISTING 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 FEET BELOW THE FINISH PAVEMENT SURFACE.
3. SUBGRADE FILL SHALL BE COMPACTED TO 95% COMPACTION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
4. SEE SITE LAYOUT PLAN FOR PAVEMENT WIDTH and LOCATION.
5. SEE GRADING PLAN FOR PAVEMENT SLOPE and CROSS SLOPE.
6. PRIOR TO INSTALLING THE WEARING COURSE, THE EXISTING BINDER COURSE SURFACE SHALL BE SWEPT COMPLETELY CLEAN BY A STREET SWEEPING MACHINE AND A TACK COAT SHALL BE INSTALLED TO A LEVEL APPROVED BY THE ENGINEER.

PARKING AREA PAVEMENT SECTION
NOT TO SCALE

NOTES:

1. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH A FOUNDATION OF CLASS I OR II MATERIAL AS DEFINED IN ASTM D2321, "STANDARD PRACTICE FOR INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS," LATEST EDITION; AS AN ALTERNATIVE AND AT THE DISCRETION OF THE ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A WOVEN GEOTEXTILE FABRIC.

2. BEDDING, HAUNCHING & INITITAL BACKFILL: SUITABLE MATERIAL SHALL CONSIST OF CLEAN, HARD, PARTICLES OF GRAVEL MEETING THE FOLLOWING:

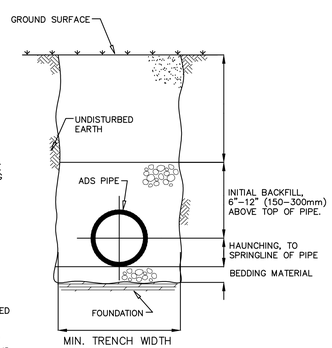
SIEVE SIZES	PASSING
⅜"	85-95%
NO. 4	5-15%
NO. 8	0-2%

MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

MINIMUM BEDDING THICKNESS SHALL BE 4" (100MM) FOR 4"-24" (100-600MM) AND 42"-48" (1050-1200MM) CORRUGATED POLYETHYLENE PIPE (CPEP); 6" (150MM) FOR 30"-36" (750-900MM) CPEP.

3. MINIMUM TRENCH WIDTHS SHALL BE AS FOLLOWS:

NOMINAL ø in (mm)	MIN. RECOMMENDED TRENCH WIDTH, in (mm)
8 (200)	25 (630)
10 (250)	28 (710)
12 (300)	31 (790)
15 (375)	34 (860)
18 (450)	39 (990)

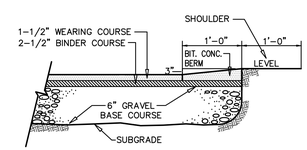


4. MINIMUM COVER: MINIMUM RECOMMENDED DEPTHS OF COVER FOR VARIOUS LIVE LOADING CONDITIONS ARE SUMMARIZED IN THE FOLLOWING TABLE. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TAKEN FROM THE TOP OF PIPE TO THE GROUND SURFACE.

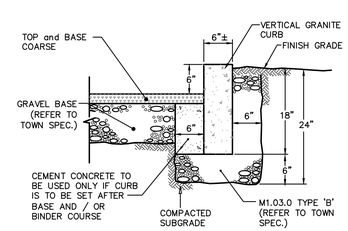
SURFACE LIVE LOADING CONDITION	MINIMUM RECOMMENDED COVER, in (mm)
H25 (FLEXIBLE PAVEMENT)	12 (300)*
H25 (RIGID PAVEMENT)	12 (300)
E80 RAILWAY	24 (610)
HEAVY CONSTRUCTION	48 (1220)

*TOP OF PIPE TO BOTTOM OF BITUMINOUS PAVEMENT SECTION

TRENCH CROSS-SECTION & A.D.S. PIPE INSTALLATION DETAIL
NOT TO SCALE



CAPE COD BERM
NOT TO SCALE



VERTICAL GRANITE CURB
NOT TO SCALE

COMMONWEALTH OF MASSACHUSETTS
DONALD F. BRACKEN, JR.
CIVIL
No. 37071
REGISTERED PROFESSIONAL ENGINEER

NOTE:
DETAILS SHOWN FOR PLANNING AND PERMITTING PURPOSES ONLY, FINAL DETAILS, SPECIFICATIONS, AND CONSTRUCTION NOTES TO BE INCLUDED ON FINAL CONSTRUCTION DRAWINGS.

Prepared By:
BRACKEN ENGINEERING, INC
49 HERRING POND ROAD
BUZZARDS BAY, MA 02532
(tel) 508.833.0070
(fax) 508.833.2282
19 OLD SOUTH ROAD
NANTUCKET, MA 02554
(tel) 508.325.0044
www.brackeneng.com

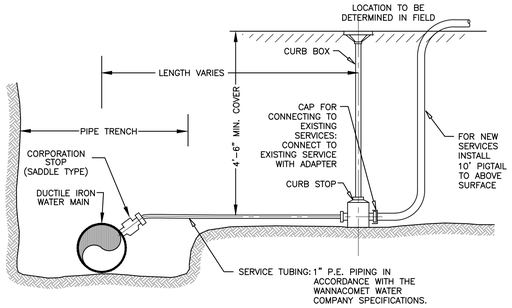
Sheet Title:

CONSTRUCTION DETAILS

"SURFSIDE CROSSING"
A
PROPOSED 40B DEVELOPMENT
IN NANTUCKET, MASSACHUSETTS
Prepared For:
SURFSIDE CROSSING, LLC
#3, 5, 7 & 9 SOUTH SHORE ROAD
MAP 67 PARCELS 336, 336.7, 336.8 & 336.9

No.	Date	Revision Description	By
2	3/19/19	GENERAL REDESIGN	RMM
1	10/25/18	GENERAL REDESIGN	RMM

Date:	Drawn:	Checked:	Sheet:
FEBRUARY 15, 2018	RMM/ERC/BEI	DFB/AMG	13 of 14

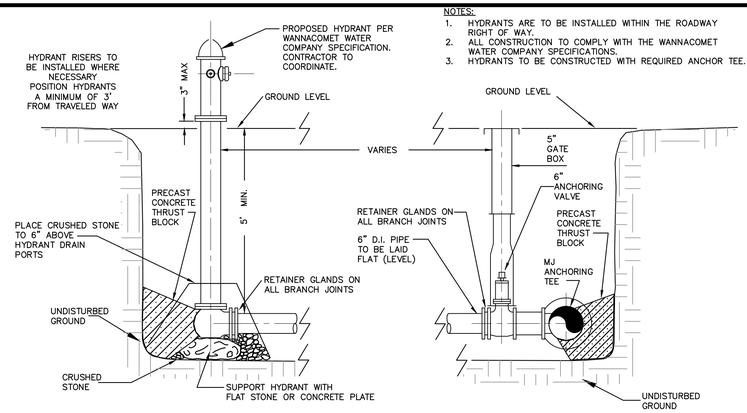


TYPICAL SERVICE CONNECTION

NOT TO SCALE

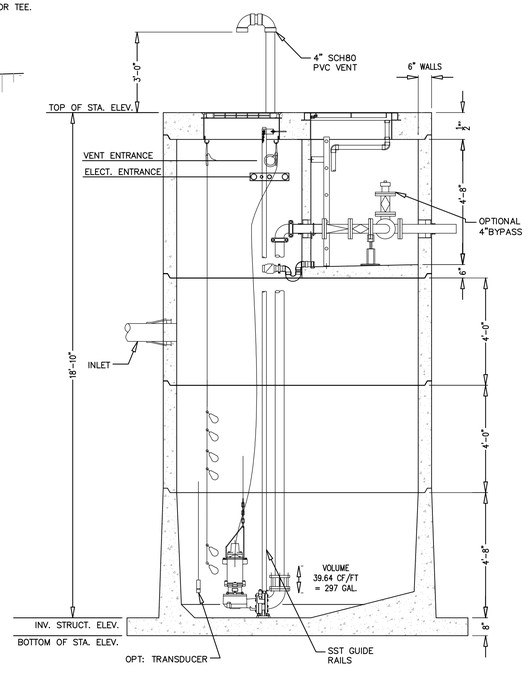
NOTES:

1. HYDRANTS ARE TO BE INSTALLED WITHIN THE ROADWAY RIGHT OF WAY.
2. ALL CONSTRUCTION TO COMPLY WITH THE WANNACOMET WATER COMPANY SPECIFICATIONS.
3. HYDRANTS TO BE CONSTRUCTED WITH REQUIRED ANCHOR TEE.

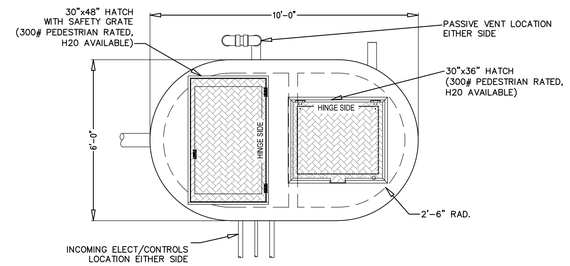


TYPICAL HYDRANT ASSEMBLY INSTALLATION

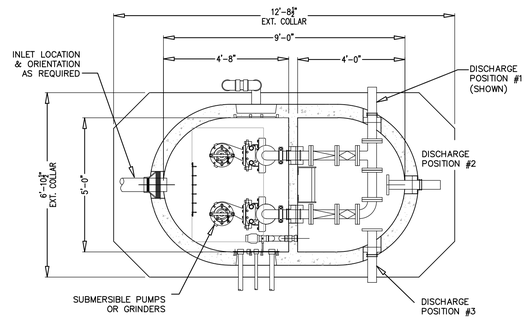
NOT TO SCALE



INTERIOR ELEVATION VIEW
RC509 x 18'-10"



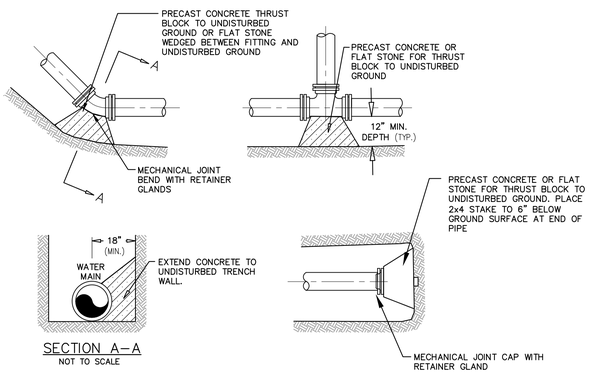
COVER



VAULT SECTION

TYPICAL SEWER PUMP STATION DETAIL

NOT TO SCALE

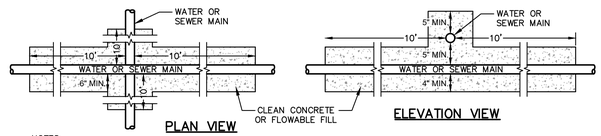


SECTION A–A

NOT TO SCALE

TYPICAL THRUST BLOCK DETAILS

NOT TO SCALE

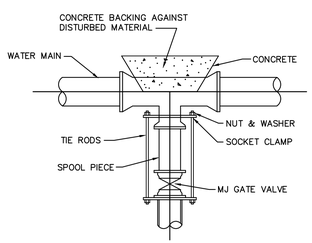


NOTES:

1. PROVIDE WHEN SEWER CROSSES OVER WATER OR SEPARATION IS LESS THAN 18" BETWEEN WATER AND SEWER.
2. CONTRACTOR TO NOTIFY & COORDINATE ANY ENCASEMENTS WITH THE WATER DEPARTMENT PRIOR TO INSTALLATION.

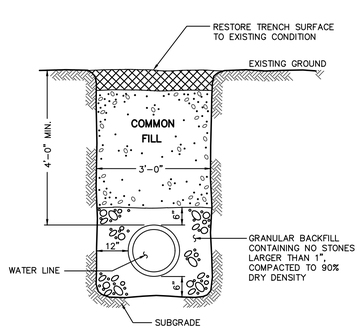
TYPICAL ENCASED SEWER AND WATER MAIN CROSSING

NOT TO SCALE



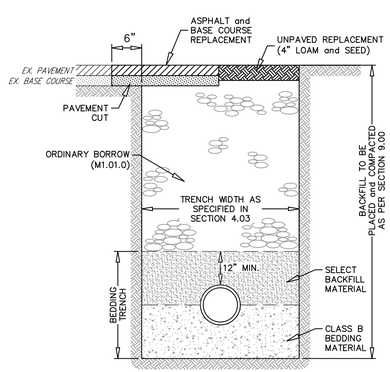
TYPICAL VALVE CONNECTION

NOT TO SCALE



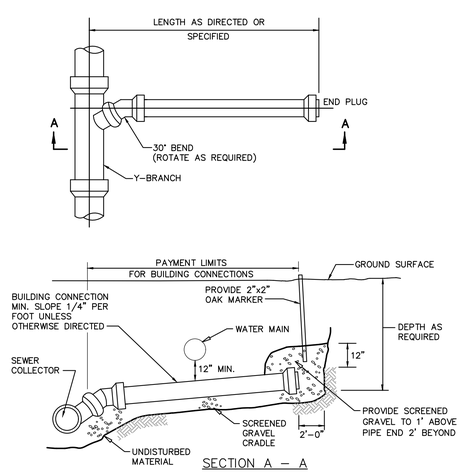
WATER MAIN TRENCH DETAIL

NOT TO SCALE



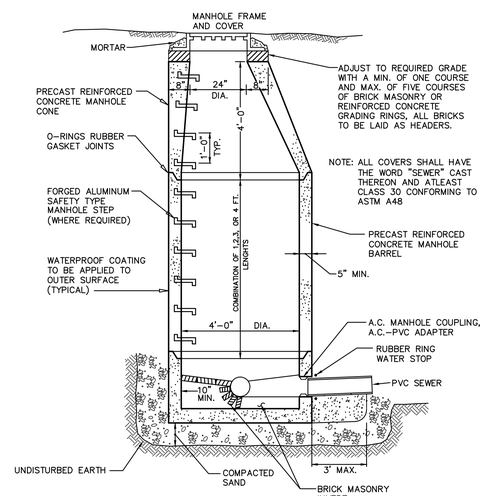
TYPICAL SEWER TRENCH DETAIL

NOT TO SCALE



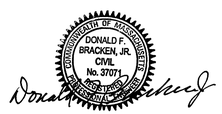
BUILDING SEWER CONNECTION

NOT TO SCALE



STANDARD SEWER MANHOLE SECTION

NOT TO SCALE



NOTE:

DETAILS SHOWN FOR PLANNING AND PERMITTING PURPOSES ONLY, FINAL DETAILS, SPECIFICATIONS, AND CONSTRUCTION NOTES TO BE INCLUDED ON FINAL CONSTRUCTION DRAWINGS.

Prepared By:

BRACKEN ENGINEERING, INC.

49 HERRING POND ROAD
BUZZARDS BAY, MA 02532

(tel) 508.833.0070
(fax) 508.833.2282

19 OLD SOUTH ROAD
NANTUCKET, MA 02554

(tel) 508.325.0044
www.brackeneng.com

Sheet Title:

CONSTRUCTION DETAILS

"SURFSIDE CROSSING"

A

PROPOSED 40B DEVELOPMENT IN NANTUCKET, MASSACHUSETTS

Prepared For:

SURFSIDE CROSSING, LLC

#3, 5, 7 & 9 SOUTH SHORE ROAD

MAP 67 PARCELS 336, 336.7, 336.8 & 336.9

No.	Date	Revision Description	By
2	3/19/19	GENERAL REDESIGN	RMM
1	10/25/18	GENERAL REDESIGN	RMM

Date:	Drawn:	Checked:	Sheet:
FEBRUARY 15, 2018	RMM/ERC/BEI	DFB/AMG	14 of 14