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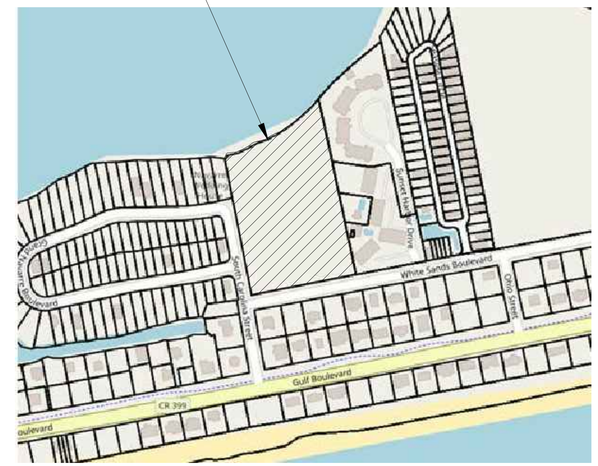
CONSTRUCTION PLANS FOR

MER SEA ON NAVARRE BEACH

A 47 LOT SUBDIVISION

PROPERTY I.D. 28-2S-26-0000-00800-0000
SITUS: WHITE SANDS BOULEVARD
NAVARRE, FLORIDA 32566
SECTION 28, TOWNSHIP 2S, RANGE 26W
SANTA ROSA COUNTY, FLORIDA
ZONED: NB-MD FLU: NB-MDR
OCT 2023

PROJECT SITE



VICINITY MAP
SCALE: 1" = 50'

LEGAL DESCRIPTION: (PREPARED PER 360 SURVEYING)

COMMENCING AT THE INTERSECTION OF THE WEST LINE OF NAVARRE BEACH, RESIDENTIAL SECTION NUMBER 1, AND THE NORTH RIGHT OF WAY LINE OF GULF BOULEVARD (120' R/W); THENCE EASTERLY ALONG SAID NORTH RIGHT OF WAY LINE, BEING ON A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 17,270.80 FEET (PER O.R. BOOK 2444, PAGE 1571), AN ARC DISTANCE OF 604.02 FEET (PER O.R. BOOK 2444, PAGE 1571) AND A CENTRAL ANGLE OF 2 DEGREES 00 MINUTES 14 SECONDS TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE NORTHERLY AND HAVING A RADIUS OF 17,106.08 FEET (PER O.R. BOOK 2444, PAGE 1571); THENCE CONTINUE EASTERLY ALONG THE ARC OF SAID CURVE AND SAID RIGHT OF WAY LINE AN ARC DISTANCE OF 612.06 FEET (PER O.R. BOOK 2444, PAGE 1571) AND A CENTRAL ANGLE OF 2 DEGREES 03 MINUTES 00 SECONDS TO THE POINT OF TANGENCY OF SAID CURVE; THENCE CONTINUE ALONG SAID RIGHT OF WAY LINE, NORTH 76 DEGREES 01 MINUTES 14 SECONDS EAST, 204.54 FEET (BEING NORTH 78 DEGREES 11 MINUTES 30 SECONDS EAST, 204.54 FEET PER O.R. BOOK 2444, PAGE 1571); THENCE LEAVING SAID NORTH RIGHT OF WAY LINE OF GULF BOULEVARD, NORTH 13 DEGREES 58 MINUTES 46 SECONDS WEST, 316.00 FEET (BEING NORTH 11 DEGREES 48 MINUTES 30 SECONDS WEST, 316.00 FEET PER O.R. BOOK 2444, PAGE 1571) TO THE NORTH RIGHT OF WAY LINE OF WHITE SANDS BOULEVARD (FORMERLY SANTA ROSA BOULEVARD) (66' R/W); THENCE ALONG SAID NORTH RIGHT OF WAY LINE, NORTH 80 DEGREES 21 MINUTES 46 SECONDS EAST, 166.00 FEET (BEING NORTH 78 DEGREES 11 MINUTES 30 SECONDS EAST, 166.00 FEET PER O.R. BOOK 2444, PAGE 1571) TO THE ***POINT OF BEGINNING*** AND THE INTERSECTION OF THE EAST RIGHT OF WAY LINE OF SOUTH CAROLINA STREET (FORMERLY SANTA ROSA BOULEVARD) (66' R/W) AND THE NORTH RIGHT OF WAY LINE OF WHITE SANDS BOULEVARD (66' R/W) ALSO BEING THE SOUTHEAST CORNER OF GRAND NAVARRE, A SUBDIVISION OF A PORTION OF SANTA ROSA ISLAND, AS RECORDED IN PLAT BOOK F, AT PAGE 52 OF THE PUBLIC RECORDS SANTA ROSA COUNTY, FLORIDA; THENCE LEAVING SAID NORTH RIGHT OF WAY LINE ALONG THE EAST RIGHT OF WAY LINE OF SOUTH CAROLINA STREET ALSO BEING THE EAST LINE OF SAID GRAND NAVARRE, NORTH 09 DEGREES 35 MINUTES 18 SECONDS WEST, 603.83 FEET TO THE SOUTHERLY MEAN HIGH WATER LINE (MHWL) OF SANTA ROSA SOUND AND PASSING THROUGH A 1/2" CAPPED IRON ROD #6259, BEING POINT "A", AT 597.65 FEET (BEING NORTH 11 DEGREES 48 MINUTES 30 SECONDS WEST, 610 FEET, MORE OR LESS, PER O.R. BOOK 2444, PAGE 1571); THENCE ALONG SAID MHWL THE FOLLOWING 11 COURSES AND DISTANCES: NORTH 79 DEGREES 35 MINUTES 07 SECONDS EAST, 24.76 FEET; THENCE NORTH 72 DEGREES 27 MINUTES 07 SECONDS EAST, 43.88 FEET; THENCE NORTH 70 DEGREES 11 MINUTES 37 SECONDS EAST, 32.92 FEET; THENCE NORTH 64 DEGREES 44 MINUTES 13 SECONDS EAST, 84.85 FEET; THENCE NORTH 62 DEGREES 35 MINUTES 14 SECONDS EAST, 44.45 FEET; THENCE NORTH 58 DEGREES 09 MINUTES 06 SECONDS EAST, 44.07 FEET; THENCE NORTH 55 DEGREES 07 MINUTES 14 SECONDS EAST, 41.65 FEET; THENCE NORTH 51 DEGREES 46 MINUTES 02 SECONDS EAST, 41.86 FEET; THENCE NORTH 48 DEGREES 28 MINUTES 51 SECONDS EAST, 43.89 FEET; THENCE NORTH 44 DEGREES 57 MINUTES 17 SECONDS EAST, 87.96 FEET; THENCE NORTH 41 DEGREES 48 MINUTES 54 SECONDS EAST, 13.17 FEET TO THE NORTHWESTERLY CORNER OF SUNSET HARBOR VILLAS (ALSO KNOWN AS SUNSET HARBOUR VILLAS), A CONDOMINIUM, AS RECORDED IN O.R. BOOK 2030, PAGES 776 TO 829, AND AMENDED IN O.R. BOOK 2661, PAGES 495 TO 516, AND O.R. BOOK 2820, PAGES 238 AND 239, ALL IN THE PUBLIC RECORDS OF ESCAMBIA COUNTY, FLORIDA AND AMENDED IN O.R. BOOK 1515, PAGES 456 TO 458, OF THE PUBLIC RECORDS OF SANTA ROSA COUNTY, FLORIDA; THENCE DEPARTING SAID MHWL ALONG THE WEST LINE OF SAID SUNSET HARBOR, SOUTH 09 DEGREES 38 MINUTES 26 SECONDS EAST, 789.25 FEET TO THE SOUTHWESTERLY CORNER OF SAID SUNSET HARBOR VILLAS AND AFORESAID NORTHERLY RIGHT OF WAY LINE OF WHITE SANDS BOULEVARD AND PASSING THROUGH A 1/2" CAPPED IRON ROD #5802, BEING POINT "B", AT 36.93 FEET (BEING SOUTH 11 DEGREES 48 MINUTES 30 SECONDS EAST, 800 FEET, MORE OR LESS, PER O.R. BOOK 2444, PAGE 1571) THENCE DEPARTING SAID WEST LINE ALONG SAID NORTHERLY RIGHT OF WAY LINE, SOUTH 80 DEGREES 21 MINUTES 46 SECONDS WEST, 459.70 FEET; (SOUTH 78 DEGREES 11 MINUTES 30 SECONDS WEST, 459.75 FEET PER O.R. BOOK 2444, PAGE 1571) TO THE ***POINT OF BEGINNING.***

ALL LYING AND BEING IN SANTA ROSA ISLAND, TOWNSHIP 2 SOUTH, RANGE 27 WEST, SANTA ROSA COUNTY, FLORIDA. SAID TRACT OR PARCEL OF LAND CONTAINING 7.05 ACRES (307,131 SQUARE FEET) MORE OR LESS.

TOTAL SITE ACREAGE: 7.05 ACRES - 307,098 SQ.FT.

IMPERVIOUS and PERVIOUS AREA

	EXISTING	PROPOSED
HOUSES	0.00 SQ.FT.	124,550 SQ.FT.
ASPHALT	9,074 SQ.FT.	29,532 SQ.FT.
CONCRETE	0.00 SQ.FT.	4,453 SQ. FT.
TOTAL IMPERVIOUS AREA	9,074 SQ.FT.	196,030 SQ.FT.
LANDSCAPE AREA	298,024 SQ.FT.	114,035 SQ.FT.
PERCENTAGE OF LANDSCAPE	97.04%	37.137 %
POND AREA	0.00 SQ.FT.	34,528 SQ.FT.

FLOODPLAIN MANAGEMENT STATEMENT:
THE PARCEL SHOWN HEREON IS LOCATED IN FLOOD ZONE "AE" (ELEVATION 11'), BASE FLOOD ELEVATIONS DETERMINED AND FLOOD ZONE "VE" (ELEVATION 12'), COASTAL FOOD WITH VELOCITY HAZARD (WAVE ACTION); BASE FLOOD ELEVATIONS DETERMINED WITH SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD, ACCORDING TO MAPS PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, COMMUNITY-PANEL NUMBER 120274 0656 G, DATED DECEMBER 19, 2006.

PERMIT NOTE:
NO CONSTRUCTION ACTIVITIES MAY COMMENCE PRIOR TO SUBMISSION OF APPROVED COPIES OF ALL REQUIRED LOCATE, STATE AND FEDERAL PERMITS TO THE SANTA ROSA COUNTY ENGINEERING OFFICE.

UTILITY PROVIDERS

ITEM	COMPANY NAME
SANITARY SEWER	NAVARRE BEACH
WATER	NAVARRE BEACH
POWER	NEXTERA
TELEPHONE	BELLSOUTH
CABLE TV	MEDIACOM
GAS	OKALOOSA GAS

OWNER
MER SEA ON NAVARRE BEACH
STEVE & ANN HERING
2575 CYPRESS POINT CIRCLE
NAVARRE, FLORIDA 32566
SBAHERING@AOL.COM
850-225-6465

Know what's below Call before you dig

PREPARED BY

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Gerald W. McGuire-P.E. # 39572
Engineering Business #00008435

This item has been digitally signed and sealed by Gerald W. McGuire, P.E. on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

PROJECT NUMBER: 2022.MERSEA

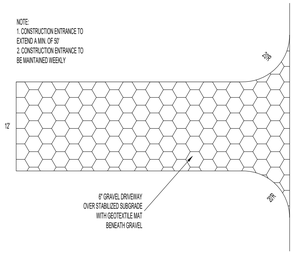
0 50 100 Feet

ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF NAVARRE BEACH & SEWER WATER SYSTEM SPECIFICATIONS.

ALL WORK WITHIN THE RIGHT-OF-WAY OR FOR OWNERSHIP BY NAVARRE BEACHSHALL BE PERFORMED BY AN CERTIFIED UNDERGROUND UTILITY CONTRACTOR.

ALL WORK PERFORMED ON THE INSTALLATION OF THE POTABLE WATER, SANITARY SEWER SYSTEM AND REUSE SYSTEM MUST BE DONE BY A FLORIDA CERTIFIED UNDERGROUND UTILITY CONTRACTOR.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH SANTA ROSA COUNTY DESIGN STANDARDS AND LATEST EDITION OF FDOT DESIGN STANDARDS.



TEMPORARY CONSTRUCTION ENTRANCE DETAIL

N.T.S.

SANITARY SEWER MANHOLES:

SANITARY SEWER MANHOLE #1
TOP ELEVATION = 5.56'
10" PVC PIPE
INVERT(S) = −2.77'
INVERT(W) = −2.76'

SANITARY SEWER MANHOLE #2
TOP ELEVATION = 5.63'
10" PVC PIPE
INVERT(N) = −3.72'
INVERT(S) = −3.64'
INVERT(W) = −3.65'

SANITARY SEWER MANHOLE #3
TOP ELEVATION = 4.99'
10" PVC PIPE
INVERT(N) = −4.28'
INVERT(E) = −4.37'
INVERT(W) = −4.36'
6" PVC PIPE
INVERT(S) = −3.91'

SANITARY SEWER MANHOLE #4
TOP ELEVATION = 5.48'
10" PVC PIPE
INVERT(S) = −4.99'
INVERT(W) = −4.96'

SANITARY SEWER MANHOLE #5
TOP ELEVATION = 5.51'
10" PVC PIPE
INVERT(N) = −5.22'
INVERT(E) = −5.02'
INVERT(W) = −2.54'

SANITARY SEWER MANHOLE #6
TOP ELEVATION = 5.29'
10" PVC PIPE
INVERT(E) = −2.41'
6" PVC PIPE
INVERT(S) = +1.84'

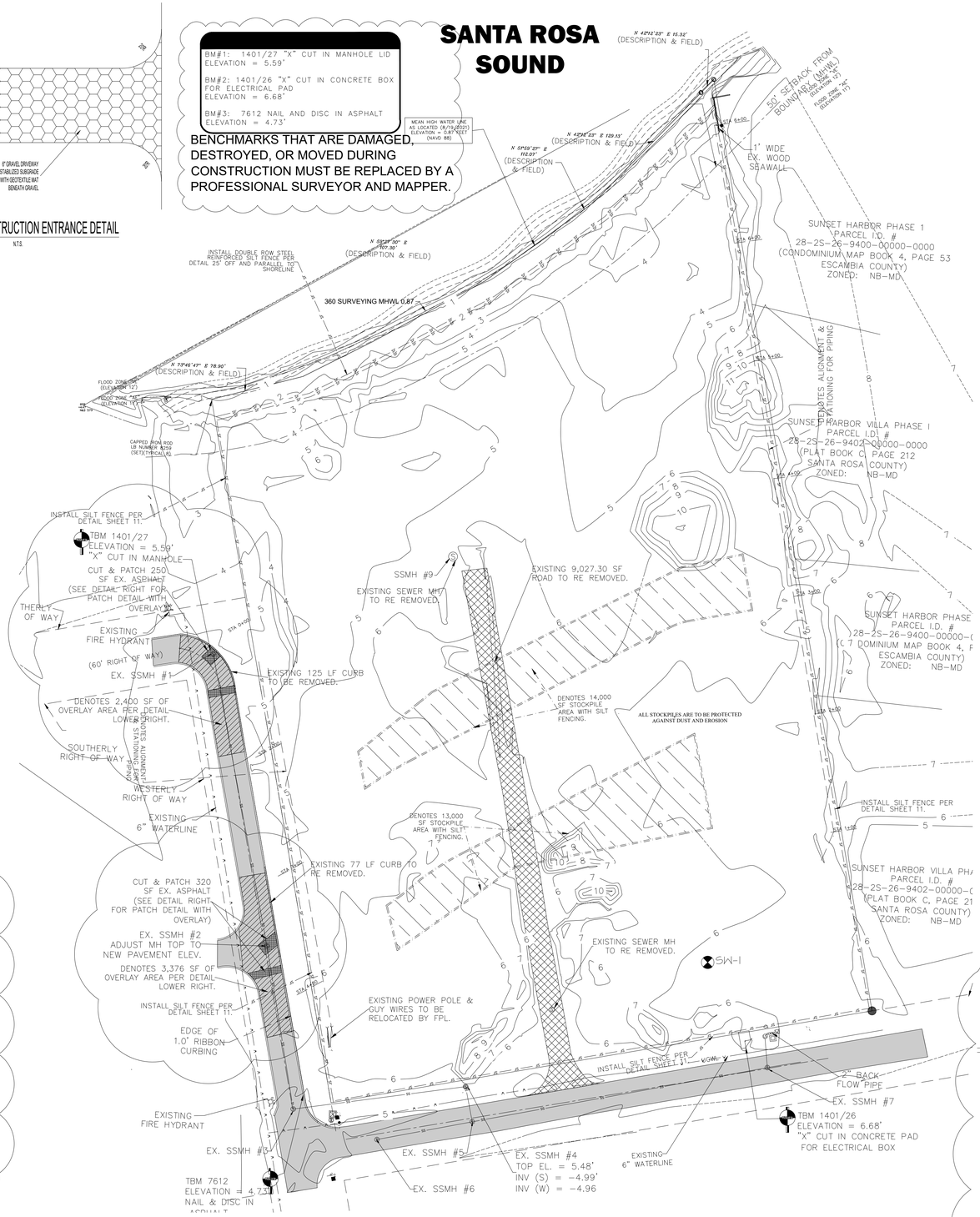
SANITARY SEWER MANHOLE #7
TOP ELEVATION = 5.81'
18" RCP PIPE
INVERT(N) = −6.68'
10" PVC PIPE
INVERT(E) = −6.28'
INVERT(W) = −6.09'

SANITARY SEWER MANHOLE #9
TOP ELEVATION = 5.87'
4" PVC PIPE
INVERT(NE) = 3.05'
INVERT(NW) = 3.07'
8" PVC PIPE
INVERT(S) = 3.03'

EROSION CONTROL NOTES:

1) AT ALL TIMES DURING AND AFTER DEVELOPMENT, CLEARED AREAS SHALL BE STABILIZED. FINAL STABILIZATION METHODS SHALL BE IN PLACE WITHIN FOURTEEN DAYS OF FINAL GRADING.
2) ALL CONTROL MEASURES SHALL COMPLY WITH THE MANAGEMENT PRACTICES CONTAINED IN THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S "EROSION & SEDIMENT CONTROL DESIGNER AND REVIEWERS MANUAL" LATEST EDITION.
3) EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPS) THAT ARE SHOWN ON THE SITE PLAN ARE FOR REFERENCE. THE CONTRACTOR PULLING THE NPDES PERMIT SHALL SUPPLY A COPY OF THE BMP PLAN TO THE COUNTY AND THE ENGINEER OF RECORD.
4) SEDIMENT ACCUMULATION IN THE STORMWATER SYSTEM FROM CONSTRUCTION ACTIVITIES MUST BE REMOVED PRIOR TO FINAL CERTIFICATION OF THE SYSTEM TO ENSURE THAT THE DESIGNED AND PERMITTED STORAGE VOLUME IS AVAILABLE.
5) IT IS THE CONTRACTOR'S RESPONSIBILITY TO MANAGE ALL SEDIMENT AND EROSION CONTROL MEASURES AS REQUIRED BY COUNTY AND STATE REGULATORY AGENCIES.
6) THE APPROVED ERP NO. IND-113-308791-1 PERMIT WILL BE SUBMITTED PRIOR TO CONSTRUCTION.
7) NO CLEARING, GRADING, EXCAVATING, FILLING, OR OTHER DISTURBANCE OF THE NATURAL TERRAIN SHALL OCCUR UNTIL EROSION AND SEDIMENTATION CONTROL MEASURES HAVE BEEN INSTALLED, EXCEPT THOSE OPERATIONS NEEDED TO IMPLEMENT THESE MEASURES.
8) THE CONTRACTOR SHALL PROVIDE THE COUNTY ENGINEER A COPY OF THE NPDES PERMIT PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES AS REQUIRED BY FDEP'S NPDES PROGRAM.

PERMIT NOTE:
NO CONSTRUCTION ACTIVITIES MAY COMMENCE PRIOR TO SUBMISSION OF APPROVED COPIES OF ALL REQUIRED LOCATE, STATE AND FEDERAL PERMITS TO THE SANTA ROSA COUNTY ENGINEERING OFFICE.



BLACK BEAR PROTECTION NOTES:

SANTA ROSA COUNTY ORDINANCE NO. 2016-22

GARBAGE CART RULES, USE OF GARBAGE CARTS, AND SET-OUT PROCEDURES ARE AS FOLLOWS:

(A) ALL CUSTOMERS IN THE BEAR WISE AREA OF SANTA ROSA COUNTY SHALL PLACE ALL OF THEIR GARBAGE AND RUBBISH IN THEIR GARBAGE CART IN ORDER TO RECEIVE RESIDENTIAL COLLECTION SERVICE. CUSTOMERS SHALL NOT PUT YARD TRASH IN THEIR GARBAGE CART AND SHALL PLACE RECYCLING IN THEIR RECYCLING CART.

(B) CUSTOMERS SHALL PLACE THEIR GARBAGE CART AT THE CURBSIDE, UNLESS AN ALTERNATIVE LOCATION IS AGREED UPON BY THE CUSTOMER AND THE FRANCHISEE, ON THE SCHEDULED COLLECTION DAY PRIOR TO SIX O'CLOCK (6:00) A.M.

(C) ALL GARBAGE MUST BE PLACED INSIDE THE GARBAGE CART, AND NO GARBAGE PLACED OUTSIDE THE GARBAGE CART WILL BE PICKED UP.

(D) A CUSTOMER SHALL NOT PLACE THEIR GARBAGE AND RUBBISH IN ANOTHER PERSON'S GARBAGE CART OR DISPOSAL CONTAINER OR SET OUT GARBAGE AND RUBBISH FOR COLLECTION ON PROPERTY NOT OWNED OR OCCUPIED BY THE CUSTOMER.

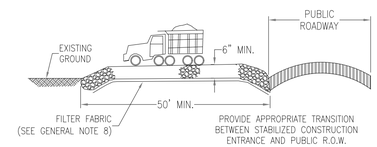
(E) A CUSTOMER SHALL ONLY SET OUT FOR COLLECTION THE GARBAGE AND RUBBISH THAT IS GENERATED AT THE CUSTOMER'S DWELLING.

(F) CUSTOMERS ARE RESPONSIBLE FOR REMOVING THEIR GARBAGE CARTS FROM THE RIGHT-OF-WAY, REPLACING THEM ON THEIR PROPERTY AND PROPERLY SECURING THEM BY TEN O'CLOCK (10:00) P.M. ON THE DAY OF COLLECTION SERVICE.

(G) CUSTOMERS SHALL HAVE THE OPTION OF USING A COUNTY APPROVED, BEAR RESISTANT GARBAGE CART, IF AVAILABLE. NON-BEAR RESISTANT GARBAGE CARTS CONTAINING HOUSEHOLD GARBAGE SHALL BE SECURED FROM BEAR INTRUSION UNTIL THE CART IS PERMITTED TO BE PLACED CURBSIDE FOR COLLECTION.

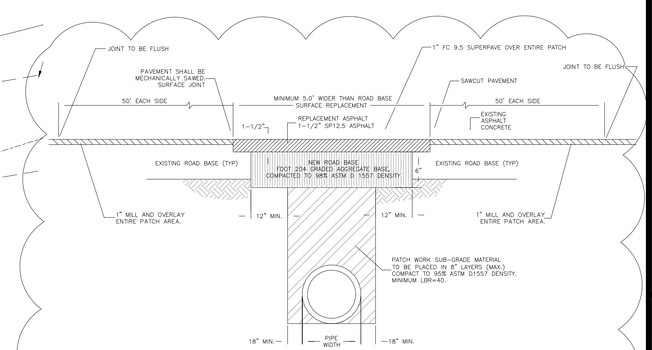
FLORIDA BLACK BEAR MANAGEMENT PLAN (APPROVED JUNE 27, 2012)

FOR STATE GUIDELINES ON BLACK BEAR MANAGEMENT SEE ABOVE DOCUMENT AT http://myfwc.com/media/2612908/bear-management-plan.pdf.



STABILIZED CONSTRUCTION ENTRANCE DETAIL

N.T.S.



OTES:
WHERE STANDARD COMPACTION METHODS ARE NABLE TO BE USED, EXCAVATABLE FLOWABLE LL MAY BE SUBSTITUTED FOR PATCHWORK UB-GRADE MATERIAL. MIX DESIGN SHALL MEET DOT STANDARD 121 AND BE PROVIDED TO ANTA ROSA COUNTY PUBLIC WORKS FOR PPROVAL PRIOR TO PLACING.

GRADED AGGREGATE BASE MAY BE OMITTED HEN FLOWABLE FILL IS USED.

STANDARD PATCH DETAIL

NOT TO SCALE
UPDATED: 01-11-2023

REVISIONS		
NO.	DATE	
1	5-16-2023	STOCKPILES ADD, NOTES ADDED
2	10-5-2023	REV. ASPHALT PATCH DETAIL
3		
4		

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Engineering Business #00006435

MER SEA ON NAVARRE BEACH
DEMOLITION PLAN
STOCKPILE AREAS

SANTA ROSA COUNTY FLORIDA

DRAWN BY: HAH
DESIGNED BY: GWM
CHECKED BY: GWM
DATE: MAY 2022
SCALE: 1"=50'
NOT RELEASED FOR CONSTRUCTION
BY: GWM DATE:

PROJECT NO: 2022.MERSEA
FILE NO: 2022.MERSEA
SHEET: 4 OF 23

RIBBON CURBING NOTES:

a. (SRC LDC 4.03.07.B.4) CONCRETE RIBBON – ALL ROADS WITH A MINIMUM LOT WIDTH OF 200 FEET MAY BE CONSTRUCTED UTILIZING RIBBON CURB. THESE LOTS SHALL ALSO HAVE A MINIMUM LOT SIZE OF 1–ACRE AND HAVE A MINIMUM 70–FOOT RIGHT–OF–WAY. SUBDIVISIONS NOT MEETING THESE CRITERIA WILL BE REQUIRED TO INSTALL CURB AND GUTTER AS INDICATED.

b. B. RIBBON CURB REQUIRED AT THE CONNECTION WITH EXISTING RURAL ROADWAY SECTIONS.

c. C. ALL SUBDIVISION SHALL HAVE RIBBON CURB, AT A MINIMUM.

d. D. RIBBON CURB SHALL BE INSTALLED UTILIZING THE SAME REQUIREMENTS AS THE CONCRETE CURB AND GUTTER.

INSPECTION REQUIRED NOTES:

8. INSPECTION – DURING THE CONSTRUCTION, A FIELD INSPECTION OF EACH PHASE WILL BE MADE BY THE COUNTY ENGINEER, OR THEIR DESIGNEE. IT IS THE DEVELOPER'S RESPONSIBILITY TO NOTIFY THE COUNTY ENGINEER TWENTY–FOUR (24) HOURS BEFORE A PHASE OF CONSTRUCTION WILL BE READY FOR INSPECTION AND TESTING.
9. REQUIRED INSPECTION NOTIFICATIONS
A. EROSION CONTROL MEASURES
B. SUBGRADE
C. POND BERM/CLAY CORES
D. ANTI–SEEP COLLARS
E. BASE AND PRIME
F. CURBING AND PAVEMENT
G. PIPE AFTER JOINTS ARE CEMENTED OR SECURED
H. PIPES AT BACKFILL
I. HEADWALL – FOOTINGS
J. FINAL

SUBGRADE NOTES:

(SRC LDC 4.03.07.B) ALL SIDEWALKS CONSTRUCTED IN SANTA ROSA COUNTY SHALL MEET THE FOLLOWING REQUIREMENTS:

A. 1. UNSUITABLE MATERIALS SUCH AS STUMPS, ROOTS, MUCK, ETC., WILL BE REMOVED TO AT LEAST A DEPTH OF TWO (2) FEET BELOW THE SUBGRADE.

B. THE SUBGRADE AND SHOULDERS SHALL BE STABILIZED TO A DEPTH OF SIX (6) INCHES FOR RESIDENTIAL AND TWELVE (12) INCHES FOR NON–RESIDENTIAL AND TO THE WIDTH OF THREE (3) FEET BEYOND THE CURB OR PAVEMENT EDGE AS APPROPRIATE.

C. THE SUBGRADE AND THE CURB PAD SHALL BE PREPARED AT THE SAME TIME.

D. THE STABILIZED AREA SHALL BE FREE OF MUCK, ROOTS AND OTHER OBJECTIONABLE MATERIALS.

E. THE SUBGRADE AND SHOULDERS SHALL BE STABILIZED TO OBTAIN A MINIMUM LIMEROCK BEARING RATIO OF FORTY (40) AND COMPACTED TO A MINIMUM OF NINETY–EIGHT (98) PERCENT OF MAXIMUM DENSITY AS DETERMINED BY MODIFIED AASHO T 180 UNLESS GREATER STANDARDS ARE RECOMMENDED IN THE GEOTECHNICAL REPORT.

GENERAL ROADWAY/CURB/SIDEWALK NOTES:

1. CONCRETE CURB AND GUTTERS OR LAY BACK CURB AND GUTTER SHALL BE REQUIRED IN SUBDIVISIONS WITH LOT WIDTHS LESS THAN 110 FEET. MINIMUM WIDTH OF THE CURB AND GUTTER IS 2.5 FEET. TYPE 'F' CURB MAY BE USED FOR MEDIANS ONLY. RIBBON CURB IS REQUIRED AT CONNECTION WITH EXISTING RURAL SECTION ROADWAY.
2. PROVIDE 1.5" – TYPE SP12.5 ASPHALT. NOTE: THE ASPHALT MUST BE 0.25" ABOVE CURB LIP AFTER COMPACTION.
3. MINIMUM BASE THICKNESS IS TO BE 6 INCHES OF AN ACCEPTABLE MATERIAL RECOMMENDED IN THE GEOTECHNICAL REPORT.
4. STABILIZED SUB–GRADE IS TO BE A MINIMUM OF 6" INCHES THICK AND MUST EXTEND 3 FEET BEYOND EDGE OF ASPHALT/CURB INTERFACE, UNLESS GREATER STANDARDS ARE RECOMMENDED IN THE GEOTECHNICAL REPORT.
5. STABILIZED SUBGRADE IS TO BE COMPACTED TO A MINIMUM OF 96% AND AN AVERAGE OF 98% WITH A MINIMUM LBR OF 40, UNLESS GREATER STANDARDS ARE RECOMMENDED IN THE GEOTECHNICAL REPORT.
6. THE BASE MUST BE COMPACTED TO A MINIMUM OF 98%.
7. MINIMUM PAVEMENT WIDTH IS 24 FEET.
8. PREPARE CURB PAD & SUBGRADE AT THE SAME TIME.
9. SANTA ROSA COUNTY LAND DEVELOPMENT CODE DOES NOT ALLOW TOLERANCE FOR LESS THAN 1–1/2" ASPHALT THICKNESS.
10. SEE SANTA ROSA COUNTY TESTING FREQUENCY SCHEDULE.
11. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A UTILITY PERMIT FROM THE COUNTY ROAD & BRIDGE DEPARTMENT PRIOR TO COMMENCING ANY WORK WITH THE COUNTY'S RIGHT OF WAY.

CURBING NOTES:

(SRC LDC 4.03.07.B.3) CONCRETE CURB AND GUTTER – ALL ROADS SHALL BE CONSTRUCTED WITH CONCRETE CURBS. CONCRETE CURB AND GUTTERS OR LAY BACK CURB AND GUTTER SHALL BE REQUIRED IN SUBDIVISIONS WITH LOT WIDTHS LESS THAN 110 FEET. CONCRETE CURB AND/OR GUTTER SHALL BE OF A BARRIER, MOUNTABLE OR HEADER TYPE, AS PER DETAIL PROVIDED BY THE CE.

a. FORMS MAY BE WOOD OR METAL HAVING A DEPTH OF NOT LESS THAN SIX (6) INCHES. THESE SHALL BE SET USING SUFFICIENT SUPPORTS TO HOLD THE CONCRETE WITHOUT MOVING.

b. CONTRACTION JOINTS SHALL BE CONSTRUCTED EVERY TEN (10) FEET BUT NO SECTION SHALL BE LESS THAN FOUR (4) FEET LONG. STEEL TEMPLATES SHALL BE USED FOR THESE JOINTS AND WITHDRAWN AFTER THE INITIAL SET. AT INTERVALS NOT TO EXCEED FIFTY (50) FEET AND AT ALL STRUCTURES AND INLETS AND AT ALL RADIUS POINTS, A ONE–HALF (1/2) INCH FULL–DEPTH EXPANSION JOINT SHALL BE CONSTRUCTED OF AN APPROVED MATERIAL. EXPANSION JOINTS SHALL BE CONSTRUCTED WITH PREFORMED EXPANSION JOINT MATERIALS CUT AND SHAPED TO THE CROSS–SECTION OF THE CURB.

c. COMPRESSIVE STRENGTH FOR THE CONCRETE SHALL NOT BE LESS THAN TWO THOUSAND, FIVE HUNDRED (2,500) POUNDS PER SQUARE INCH (PSI) AT THE END OF TWENTY–EIGHT (28) DAYS. NO CONCRETE SHALL BE PLACED WHEN THE AIR TEMPERATURE IS FORTY (40) DEGREES FAHRENHEIT AND FALLING. CURING METHODS SHALL CONFORM TO THE APPROPRIATE SECTION OF THE STANDARD SPECIFICATIONS.

d. MACHINE PLACEMENT OF CONCRETE CURB AND GUTTER MAY BE ALLOWED WITH THE APPROVAL OF THE CE, PROVIDED THAT AN ACCEPTABLE FINISHED PRODUCT, TRUE TO LINE, GRADE, AND CROSS SECTION, IS CONSISTENTLY PRODUCED.

SIDEWALK NOTE:
SIDEWALKS SHALL BE REGULATED BY SECTION 4.03.03.B.3G THE SANTA ROSA COUNTY LAND DEVELOPMENT CODE.

SANTA ROSA COUNTY ENGINEERING
TESTING FREQUENCIES (1 PAGE – UPDATED 1/26/11)

CURBPAD—TEST AT 300 FEET INTERVALS, ALTERNATING FROM CURBPAD TO CURBPAD AND OTHER LOCATIONS AS DIRECTED BY THE COUNTY ENGINEERING DEPARTMENT.

SUBGRADE—TEST AT 300 FEET INTERVALS, ALTERNATING FROM LEFT SIDE TO CENTERLINE TO RIGHT SIDE WITH ADDITIONAL TESTS AT ALL INTERSECTIONS, CUL–DE–SACS, AND OTHER LOCATIONS AS DIRECTED BY THE COUNTY ENGINEERING DEPARTMENT.

BASE—TEST AT 200 FEET INTERVALS, ALTERNATING FROM LEFT SIDE TO CENTERLINE TO RIGHT SIDE WITH ADDITIONAL TESTS AT ALL INTERSECTIONS, CUL–DE–SACS, AND OTHER LOCATIONS AS DIRECTED BY THE COUNTY ENGINEERING DEPARTMENT.

ASPHALT—TEST AT 300 FEET INTERVALS, ALTERNATING FROM LEFT SIDE TO CENTERLINE TO RIGHT SIDE WITH ADDITIONAL TESTS AT ALL INTERSECTIONS, CUL–DE–SACS, AND OTHER LOCATIONS AS DIRECTED BY THE COUNTY ENGINEERING DEPARTMENT.

NOTES:

–ALL TESTS ARE TO BE TAKEN IMMEDIATELY BEFORE THE NEXT LAYER OF THE ROAD CROSS SECTION IS INSTALLED.

–SANTA ROSA COUNTY HAS THE AUTHORITY TO REQUIRE ADDITIONAL TESTING DUE TO WEATHER CONDITIONS.

–IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY SANTA ROSA COUNTY OF THE TIME AND DATE THAT THE TESTING WILL OCCUR AND PROVIDE SRC WITH A COPY OF ALL OF THE TEST RESULTS.

–ADJACENT STREET PAVING (TURN LANES, ROAD EXTENSIONS, ETC) SHALL BE TESTED WITH THE SAME FREQUENCY AS ABOVE

STORM SEWER AND MANHOLE NOTES:

1) 4.03.07.E.3 Storm Sewers and manholes

(a) The contractor must perform video pipe inspection for all pipe systems to be dedicated to the County. Prior to conducting the inspection, submit to the County Engineer a video recording schedule for videoing, dewater installed pipe, and remove all silt, debris and obstructions. Submit pipe videoing and reports to the County for review prior to the continuation of paving.

(ii) The video pipe inspection submittal must include a digital video along with a pipe observation summary report for each pipe run.

(iii) The report must include:

1. Rigid Pipes:
   a. Actual recorded length and width measurements of all cracks within the pipe.
   b.Actual recordeds separation measurement of all rigid pipe joints.
   c.Detailed written observations of leaks, debris, or other damage or defects.
2. Flexible Pipes:
   a. Actual recorded length
   b.Representative diameter of the pipe.
   c.Pipe deformation/deflections measurements with the County requirements and/or manufactures recommendation.
   d. Detailed written observations of leaks, debris, or other damage or defects.

(b) Manholes and Inlets

(i) Material:

a. Concrete – Minimum compressive strength required at twenty–eight (28) days is two thousand, five hundred (2,500) pounds per square inch (PSI).

b.Reinforcing Steel – shall be Billet–Steel Bars for Concrete Reinforcement (ASTM Designation A615) of intermediate or hard grades, or equivalent.

c.Brick – shall be hard, solid, burned brick meeting AASHTO Specification No. M– 114, GradeMW.

d. Other approved materials as approved by the County Engineer.

(ii) Frames, covers and Grates – Cast iron frames, covers and grates shall conform to the drawings in all essentials of design. All castings shall be made of clean, even grain, tough, gray cast iron. The quality of iron in the castings shall conform to the current ASTM Specifications for Class 20 Gray Iron Castings. The castings shall be smooth, true to pattern and free from projections, sand holes or defects. The portion of the frame, cover or grates which are in contact shall be machined so that no rocking is possible. The castings shall be coated with coal tar pitch varnish.

(iii) Steps – Manhole steps shall be Clow–National Cast Iron Manhole Steps No. A–1483, or other approved material.

REVISIONS		
NO.	DATE	
1	5-26-2023	CREATED SHEET FOR NOTES
2		
3		
4		

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MER SEA ON NAVARRE BEACH
GENERAL NOTES, SIDEWALK NOTES
CURBING, PAVEMENT & TESTING NOTES
SANTA ROSA COUNTY FLORIDA

DRAWN BY: HAH
DESIGNED BY: GWM
CHECKED BY: GWM
DATE: MAY 2022
SCALE: 1"=110'
NOT RELEASED FOR CONSTRUCTION
BY: GWM **DATE:**

PROJECT NO: 2022.MERSEA
FILE NO: 2022.MERSEA
SHEET: 3 OF 23

0 50 100 Feet

ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF NAVARRE BEACH & SEWER WATER SYSTEM SPECIFICATIONS.

ALL WORK WITHIN THE RIGHT-OF-WAY OR FOR OWNERSHIP BY NAVARRE BEACHSHALL BE PERFORMED BY AN CERTIFIED UNDERGROUND UTILITY CONTRACTOR.

ALL WORK PERFORMED ON THE INSTALLATION OF THE POTABLE WATER, SANITARY SEWER SYSTEM AND REUSE SYSTEM MUST BE DONE BY A FLORIDA CERTIFIED UNDERGROUND UTILITY CONTRACTOR.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH SANTA ROSA COUNTY DESIGN STANDARDS AND LATEST EDITION OF FDOT DESIGN STANDARDS.

NOTE:
1. CONSTRUCTION ENTRANCE TO EXTEND A MIN. OF 50'
2. CONSTRUCTION ENTRANCE TO BE MAINTAINED WEEKLY

8" GRAVEL DRIVEWAY OVER STABILIZED SUBGRADE WITH GEOTEXTILE MAT BENEATH GRAVEL

TEMPORARY CONSTRUCTION ENTRANCE DETAIL

N.T.S.

SANITARY SEWER MANHOLES:

SANITARY SEWER MANHOLE #1
TOP ELEVATION = 5.56'
10" PVC PIPE
INVERT(S) = −2.77'
INVERT(W) = −2.76'

SANITARY SEWER MANHOLE #2
TOP ELEVATION = 5.63'
10" PVC PIPE
INVERT(N) = −3.72'
INVERT(S) = −3.64'
INVERT(W) = −3.65'

SANITARY SEWER MANHOLE #3
TOP ELEVATION = 4.99'
10" PVC PIPE
INVERT(N) = −4.28'
INVERT(E) = −4.37'
INVERT(W) = −4.36'
6" PVC PIPE
INVERT(S) = −3.91'

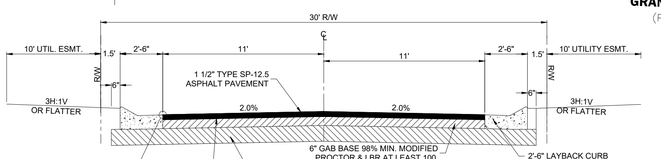
SANITARY SEWER MANHOLE #4
TOP ELEVATION = 5.48'
10" PVC PIPE
INVERT(S) = −4.99'
INVERT(W) = −4.96'

SANITARY SEWER MANHOLE #5
TOP ELEVATION = 5.51'
10" PVC PIPE
INVERT(N) = −5.22'
INVERT(E) = −5.02'
INVERT(W) = −2.54'

SANITARY SEWER MANHOLE #6
TOP ELEVATION = 5.29'
10" PVC PIPE
INVERT(E) = −2.41'
6" PVC PIPE
INVERT(S) = +1.84'

SANITARY SEWER MANHOLE #7
TOP ELEVATION = 5.81'
18" RCP PIPE
INVERT(N) = −6.68'
10" PVC PIPE
INVERT(E) = −6.28'
INVERT(W) = −6.09'

SANITARY SEWER MANHOLE #9
TOP ELEVATION = 5.87'
4" PVC PIPE
INVERT(NE) = 3.05'
INVERT(NW) = 3.07'
8" PVC PIPE
INVERT(S) = 3.03'



NOTE:
1. MIN. 6.0' WIDE SIDEWALK IF ADJACENT TO CURB. USE APPROPRIATE DRIVEWAY CURB CUTS.
2. CONTRACTOR TO CONSTRUCT ANY SIDEWALK IN FRONT OF ALL NON-RESIDENTIAL AREAS (BOULEVARD, COMMON AREAS, PONDS).

TYPICAL PRIVATE URBAN RESIDENTIAL STREET TYPICAL 30' ROAD CROSS SECTION

N.T.S.

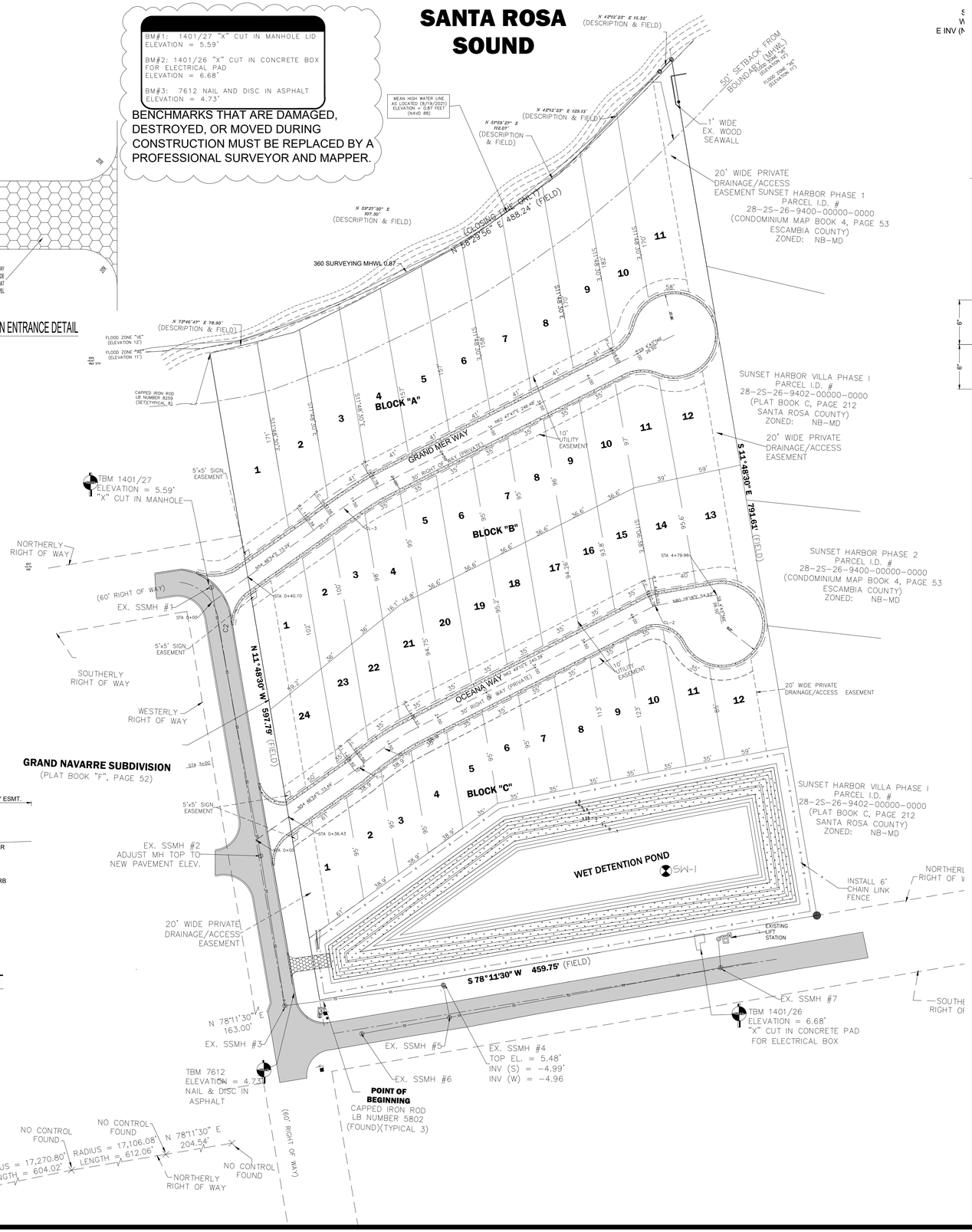
SIDEWALK NOTE:
SIDEWALKS SHALL BE REGULATED BY SECTION 4.03.03.B.3G THE SANTA ROSA COUNTY LAND DEVELOPMENT CODE.

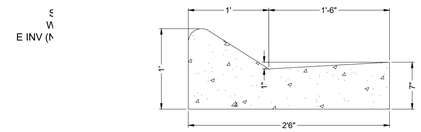
BM#1: 1401/27 "X" CUT IN MANHOLE LID
ELEVATION = 5.59'

BM#2: 1401/26 "X" CUT IN CONCRETE BOX FOR ELECTRICAL PAD
ELEVATION = 6.68'

BM#3: 7612 NAIL AND DISC IN ASPHALT
ELEVATION = 4.73'

BENCHMARKS THAT ARE DAMAGED, DESTROYED, OR MOVED DURING CONSTRUCTION MUST BE REPLACED BY A PROFESSIONAL SURVEYOR AND MAPPER.

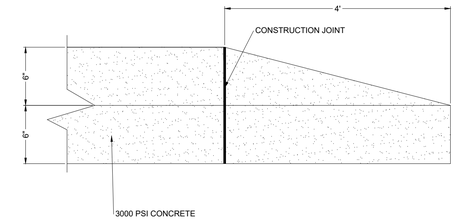




NOTES:
1. ALL CURB TO HAVE DUMMY JOINT AT 10' ON CENTER MIN. DEPTH OF JOINT TO BE 2".
2. EXPANSION JOINTS ARE TO BE 60' ON CENTER
3. CONCRETE TO BE 3000 PSI

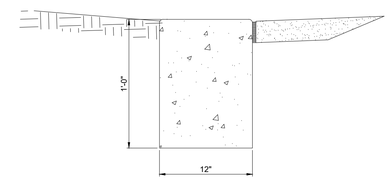
STANDARD COUNTY CURB & GUTTER

N.T.S.



4' CURB TRANSITION DETAIL

N.T.S.



12" RIBBON CURB DETAIL

N.T.S.

Centerline Line Table		
Line #	Length	Direction
L1	10.64'	N50°33'49"E
L2	20.17'	N50°30'13"E

Centerline Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
CL-1	59.81'	279.63'	12°15'21"	N56°41'29"E	59.70'
CL-2	4.27'	14.00'	17°29'08"	N71°33'44"E	4.26'
CL-3	49.22'	279.63'	10°05'10"	N57°45'12"E	49.16'

CENTERLINE ROAD DATA

PERMIT NOTE:
NO CONSTRUCTION ACTIVITIES MAY COMMENCE PRIOR TO SUBMISSION OF APPROVED COPIES OF ALL REQUIRED LOCATE, STATE AND FEDERAL PERMITS TO THE SANTA ROSA COUNTY ENGINEERING OFFICE.

REVISIONS		
NO.	DATE	
1	9-21-2023	REV. TO ADD BENCHMARK & SIDEWALK NOTE
2		REV. TO ADD CENTERLINE DATAPATCH DETAIL
3		
4		

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MER SEA ON NAVARRE BEACH
KEY SHEET & PAVEMENT SECTIONS
CURBING, PAVEMENT & TESTING NOTES

SANTA ROSA COUNTY FLORIDA

DRAWN BY: HAH
DESIGNED BY: GWM
CHECKED BY: GWM
DATE: MAY 2022
SCALE: 1"=50'
NOT RELEASED FOR CONSTRUCTION
BY: GWM DATE:

PROJECT NO: 2022.MERSEA
FILE NO: 2022.MERSEA
SHEET: 4 OF 23

GENERAL NOTES FOR SOIL EROSION AND SEDIMENT CONTROL:

1. ALL EROSION AND SEDIMENT CONTROL PRACTICES TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.

2. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN 30 DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO STATE STANDARDS.

3. PERMANENT VEGETATION TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER GRADING. MULCH TO BE USED AS NECESSARY FOR PROTECTION UNTIL SEEDING IS ESTABLISHED.

4. ALL WORK AND MATERIALS TO BE IN ACCORDANCE WITH THE FDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION, SECTIONS 104, 570, 575 AND 980 TO 986.

*5. A BITUMINOUS CONCRETE BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS IN ORDER TO STABILIZE STREETS, ROADS, DRIVEWAYS AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE BITUMINOUS CONCRETE BASE SHALL BE INSTALLED WITHIN 15 DAYS OF THE PRELIMINARY GRADING.

*6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A THICKNESS OF TWO (2) TO FOUR (4) INCHES MIXED WITH THE TOP TWO (2) INCHES OF SOIL, ACCORDING TO STATE STANDARDS.

*7. ANY STEEP SLOPES RECEIVING PIPELINE INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION PROCEEDS (I.E. SLOPES GREATER THAN 3:1).

*8. A CRUSHED LIMEROCK, VEHICLE WHEEL-CLEANING BLANKET SHALL BE INSTALLED AT THE CONTRACTOR'S STAGING YARD AND/OR STOCKPILE AREAS TO PREVENT OFF-SITE TRACKING OF SEDIMENT BY CONSTRUCTION VEHICLES ONTO PUBLIC ROADS. BLANKET SHALL BE 15FT. X 50FT. X 6IN. (MINIMUM), CRUSHED LIMEROCK 2 1/2 INCHES IN DIAMETER. SAID BLANKET SHALL BE UNDERLAIN WITH A FDOT CLASS 3 SYNTHETIC FILTER FABRIC AND MAINTAINED IN GOOD ORDER.

9. AT THE TIME WHEN THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER, SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.

*10. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.

11. UNFILTERED DEWATERING IS NOT PERMITTED. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER.

12. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SURFACE IS WET, TEMPORARY VEGETATION COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED IN ACCORDANCE WITH STATE STANDARDS FOR EROSION CONTROL.

13. ALL SOIL WASHED, DROPPED, SPILLED OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHTS-OF-WAY WILL BE REMOVED IMMEDIATELY.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFFSITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.

15. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH SOIL EROSION AND SEDIMENT CONTROL NOTE NUMBER 2 (ABOVE).

16. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORM WATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.

17. ALL SEDIMENTATION STRUCTURES SHALL BE INSPECTED AND MAINTAINED REGULARLY.

18. ALL CATCH BASIN INLETS SHALL BE PROTECTED WITH HAY BALES AS SHOWN ON DETAIL.

19. THE CONTRACTOR SHALL PREPARE A PLAN FOR THE PROPER DEWATERING AND DOWNSTREAM SILTATION PROTECTION OF EACH STREAM CROSSING PRIOR TO EXCAVATING THE STREAM BED. PLAN SHALL BE FORWARDED TO THE ENGINEER FOR APPROVAL. THE ENGINEER SHALL BE NOTIFIED FOR INSPECTION PRIOR TO EACH STREAM CROSSING CONSTRUCTION.

20. ANY AREAS USED FOR THE CONTRACTOR'S STAGING, INCLUDING BUT NOT LIMITED TO, TEMPORARY STORAGE OF STOCKPILED MATERIALS (E.G. CRUSHED STONE, QUARRY PROCESS STONE, SELECT FILL, EXCAVATED MATERIALS, ETC.), SHALL BE ENTIRELY PROTECTED BY A SILT FENCE ALONG THE LOW ELEVATION SIDE TO CONTROL SEDIMENT RUNOFF.

* WHERE APPLICABLE

TEMPORARY SEEDING DETAILS:

SEED BED PREPARATION:

SOIL TO BE THOROUGHLY PULVERIZED BY DISK-HARROWING AND BE LOOSE AND REASONABLY SMOOTH. APPLY FERTILIZER AT A RATE OF 260 LBS/ACRE OF 16-16-16 OR EQUIVALENT, APPLY DOLOMITIC LIMESTONE AT A RATE OF 800 TO 1000 LBS./ACRE TO PROVIDE A SOIL pH OF 5.5 TO 6.5, LIME & FERTILIZER TO BE WORKED INTO THE TOPSOIL TO A DEPTH OF 4". ADD SANDY LOAM TOPSOIL TO A MINIMUM OF TWO (2) INCHES WHERE REQUIRED.

SEED MIXTURE

CONSISTING OF ANNUAL RYE (LOLIUM MULTIFLORUM) AT A RATE OF 174 LBS/ACRE.

PERMANENT SEEDING DETAILS:

SEED BED PREPARATION:

SOIL TO BE THOROUGHLY PULVERIZED BY DISK-HARROWING AND BE LOOSE AND REASONABLY SMOOTH. APPLY FERTILIZER AT A RATE OF 260 LBS/ACRE OF 16-16-16 OR EQUIVALENT, APPLY DOLOMITIC LIMESTONE AT A RATE OF 800 TO 1000 LBS./ACRE TO PROVIDE A SOIL pH OF 5.5 TO 6.5, LIME & FERTILIZER TO BE WORKED INTO THE TOPSOIL TO A DEPTH OF 4". ADD SANDY LOAM TOPSOIL TO A MINIMUM OF TWO (2) INCHES WHERE REQUIRED.

SEED MIXTURE CONSISTING OF	RATE	PURITY	GERMINATION
ARGENTINE BAHIA	260 LBS/AC.	95%	80%
PENSACOLA BAHIA	260 LBS/AC.	95%	40%(MIN.)-80%(TOTAL)

SODDING:

SOD SHALL BE WELL ROOT MATTED CENTIPEDE OR BAHIA GRASS COMMERCIALLY CUT TO A MINIMUM DIMENSIO OF 12" x 24" A MAXIMUM OF 72 HOURS PRIOR TO PLACEMENT. SOD SHALL BE LIVE, FRESH AND UNINJURED, REASONABLY FREE OF WEEDS AND OTHER GRASSES, WITH A HEAVY SOIL MAT ADHERING TO THE ROOT SYSTEM. SOD SHALL BE GROWN, CUT, AND SUPPLIED BY A STATE CERTIFIED GROWER.

TRAFFIC CONTROL STANDARDS:

1. CONSTRUCTION TRAFFIC SHALL BE RESTRICTED TO ONSITE ACCESS BY MEANS SO DESIGNATED BY THE ENGINEER, POLICE/SHERIFF DEPARTMENT, ESCAMBIA COUNTY HIGHWAY DEPARTMENT, AND/OR THE FLORIDA DEPARTMENT OF TRANSPORTATION.
2. TRAFFIC DURING WET WEATHER SHALL BE MINIMIZED AND APPROPRIATE ROADWAY AND SITE CLEAN-UP SHALL BE PROVIDED BY THE CONTRACTOR AS SOON AS WEATHER CONDITIONS PERMIT.

TREE PROTECTION:

1. DAMAGED TRUNKS OR EXPOSED ROOTS WILL BE PAINTED IMMEDIATELY WITH A GOOD GRADE OF "TREE PAINT".

2. TREE LIMB REMOVAL, WHERE NECESSARY, WILL BE DONE FLUSH TO TRUNK OR MAIN BRANCH AND THAT AREA PAINTED IMMEDIATELY WITH A GOOD GRADE OF TREE PAINT.

DUST CONTROL:

1. ALL AREAS OF CLEARING AND EMBANKMENT AS WELL AS CONSTRUCTION HAUL ROADS SHALL BE TREATED AND MAINTAINED IN SUCH A MANNER AS TO MINIMIZE ANY DUST GENERATION.

2. DISTURBED AREAS SHALL BE MAINTAINED IN A ROUGH GRADED CONDITION AND TEMPORARILY SEEDED AND/OR MULCHED UNTIL PROPER WEATHER CONDITIONS EXIST FOR THE ESTABLISHMENT OF PERMANENT VEGETATION COVER.

3. IN EVENT OF EMERGENCY CONDITIONS, TILLAGE WILL BE SATISFACTORY FREE BEFORE SOIL BLOWING STARTS.

4. CALCIUM CHLORIDE MAY BE APPLIED TO UNPAVED ROADWAY AREAS, ONLY, SUBJECT TO THE ENGINEER'S APPROVAL AND CONFORMANCE WITH FDOT STANDARD SPECIFICATIONS, SECTION 102-5, LATEST EDITION.

PROPOSED SEQUENCE OF CONSTRUCTION:

1. THE INSTALLATION OF ALL SEDIMENT AND EROSION CONTROL DEVICES THAT CAN BE PLACED PRIOR TO ANY MAJOR SOIL DISTURBANCES.

2. CLEAR AND REMOVE ALL EXISTING VEGETATION IN THOSE AREAS WHERE NECESSARY. ALL REMAINING VEGETATION IS TO BE PROPERLY PROTECTED AND IS TO REMAIN IN ITS NATURAL STATE. TOPSOIL IN AREAS TO BE DISTURBED IS TO BE STRIPPED TO A MINIMUM DEPTH OF SIX (6) INCHES AND STOCKPILED SEPARATELY FROM FROM OTHER EXCAVATED SOIL(S)

3. THE IMMEDIATE INSTALLATION OF ALL REMAINING SEDIMENT AND EROSION CONTROL DEVICES.

4. PERFORM ALL DEMOLITION WORK.

5. CONSTRUCT ALL UNDERGROUND UTILITIES AND STORM DRAIN SYSTEMS.

6. CONSTRUCT ROADS (SUBGRADE, CURB & GUTTER, BASE, PAVEMENT, SIDEWALKS AND LANDSCAPING).

7. COMPLETE STORMWATER PONDS.

8. UPON THE COMPLETION OF THE CONSTRUCTION ACTIVITIES, PROVIDE RESTORATION, FINE GRADE REMAINDER OF SITE, RESPREAD STOCKPILED TOPSOIL AND STABILIZE WITH PERMANENT VEGETATIVE COVER AND LANDSCAPING.

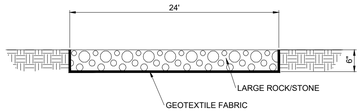
9 THE REMOVAL OF APPROPRIATE TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES.

DESCRIPTION:
FILTER BAGS WILL BE USED AS AN EFFECTIVE FILTER MEDIUM TO CONTAIN SAND, SILT AND FINES WHEN TRENCH DEWATERING. THE WETLAND FILTER BAG CONTAINS THESE MATERIALS WHILE ALLOWING THE WATER TO FLOW THROUGH THE FABRIC.

INSTALLATION:
WETLAND FILTER BAGS MAY REPLACE HAY BALE CORRALS DURING TRENCH DEWATERING, AT THE DISCRETION OF THE ENGINEER INSPECTOR. TO INSURE PROPER INSTALLATION, FILTER BAGS WILL BE PLACED ON RELATIVELY FLAT TERRAIN FREE OF BRUSH AND STUMPS TO AVOID RUPTURES AND PUNCTURES. PROPER INSTALLATION REQUIRES CUTTING A SMALL HOLE IN THE CORNER OF THE BAG, INSERTING THE PUMP DISCHARGE HOSE, AND THEN SECURING THE DISCHARGE HOSE TO THE BAG WITH A HOSE CLAMP. FILTER BAGS WILL BE PLACED AS FAR AWAY FROM FLOWING STREAMS AND WETLANDS AS POSSIBLE.

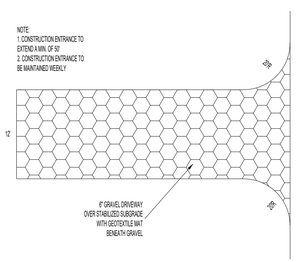
MAINTENANCE:
PRIOR TO REMOVING A BAG FROM THE HOSE, THE BAG WILL BE TIED OFF BELOW THE END OF THE HOSE ALLOWING THE BAG TO DRAIN. DRAINAGE WILL NOT BE ALLOWED THROUGH THE INLET HOLE. TO AVOID RUPTURE, THE BAGS WILL BE ATTENDED AND PUMPING RATES MONITORED. ONCE THE BAG IS INFLATED TO A HEIGHT OF 4 FEET, PUMPING WILL STOP TO AVOID RUPTURE. FILTER BAGS USED DURING CONSTRUCTION WILL BE BUNDLED AND REMOVED FOR PROPER DISPOSAL.

SPECIFICATION:
FILTER BAGS ARE CONSTRUCTED OF NON-WOVEN GEOTEXTILE FABRIC. A MAXIMUM OF ONE SIX INCH DISCHARGE HOSE WILL BE ALLOWED PER FILTER BAG. BAG CAPACITY WILL BE EXCEEDED BEYOND 2,000 GALLONS PER MINUTE. TYPICAL BAG DIMENSIONS ARE 15 FEET BY 13.25 FEET. TO HELP PREVENT PUNCTURES, GEOTEXTILE FABRIC WILL BE PLACED BENEATH THE FILTER BAG WHEN USED IN WOODED LOCATIONS. UNATTENDED FILTER BAGS WILL BE ENCIRCLED WITH A HAY BALE OR SILT FENCE CORRAL. HOSE CLAMPS WILL BE USED TO SECURE THE DISCHARGE HOSE, WIRE OR STRING WILL NOT BE USED.



EROSION CONTROL PAD SECTION

N.T.S.



TEMPORARY CONSTRUCTION ENTRANCE DETAIL

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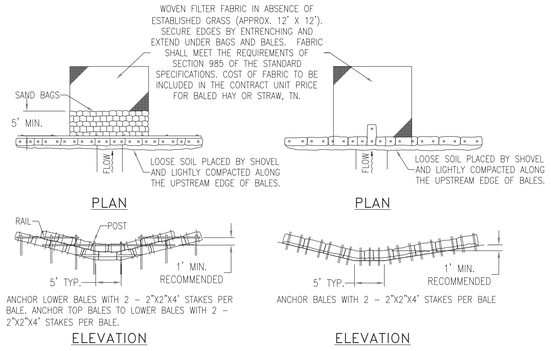
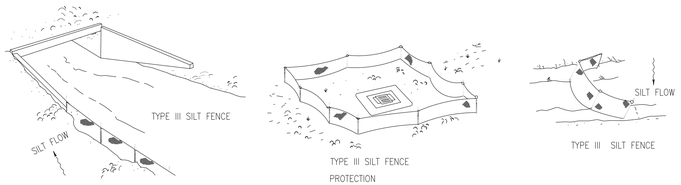


APPLICATION AND SPACING: THE USE OF TYPES I & II BALE BARRIERS SHOULD BE LIMITED TO THE CONDITIONS OUTLINED IN CHART I, SHEET 1 OF 3, INDEX NO. 102

TYPE II TYPE I

BARRIER FOR UNPAVED DITCH

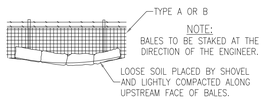
N.T.S.



SILT FENCE APPLICATIONS

N.T.S.

DO NOT DEPLOY IN A MANNER THAT SILT FENCES WILL ACT AS A DAM ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE USED AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.



STRAW BALES BACKED BY FENCE

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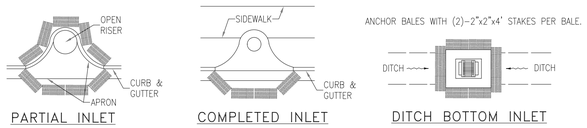

PROTECTION AROUND INLETS OR SIMILAR STRUCTURES

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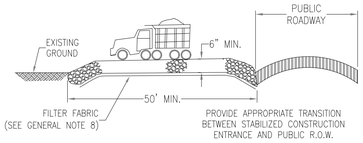

STABILIZED CONSTRUCTION ENTRANCE DETAIL

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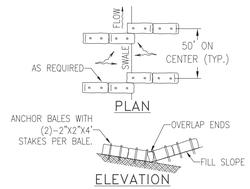
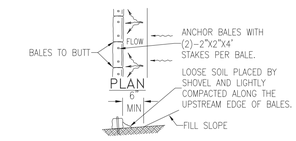


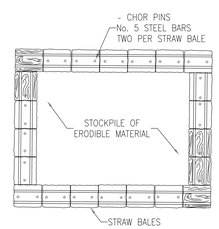
TO BE USED AT SELECTED SITES WHERE THE NATURAL GROUND SLOPES TOWARD THE TOE OF SLOPE



TO BE USED AT SELECTED SITES WHERE THE NATURAL GROUND SLOPES AWAY FROM THE TOE OF SLOPE

BARRIERS FOR FILL SLOPES

N.T.S.



MATERIAL STOCKPILE DETAIL

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Gerald W. McGuire-P.E. # 39572
Engineering Business #00006435

MER SEA ON NAVARRE BEACH
NPDES PLAN
SANTA ROSA COUNTY FLORIDA

DRAWN BY: HAH
DESIGNED BY: GWM
CHECKED BY: GWM
DATE: MAY 2022
SCALE: N.T.S.
NOT RELEASED FOR CONSTRUCTION
BY: GWM DATE:

PROJECT NO: 2022.MERSEA
FILE NO: 2022.MERSEA
SHEET: 5A OF 23

STORM WATER POLLUTION PREVENTION PLAN

1.0 BACKGROUND & REQUIREMENTS:

1.1 INTRODUCTION:

THE REFERENCED SUPPORT DOCUMENTATION FOR THIS STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY'S (EPA) STORM WATER MANAGEMENT FOR CONSTRUCTION ACTIVITIES, DEVELOPING POLLUTION PREVENTION PLANS AND BEST MANAGEMENT PRACTICES SUMMARY GUIDANCE (EPA 833-R-92-001) AND STORM WATER MANAGEMENT FOR CONSTRUCTION ACTIVITIES, DEVELOPING POLLUTION PREVENTION PLANS AND BEST MANAGEMENT PRACTICES (EPA 832-R-92-005). THIS SWPPP IS DESIGNED TO PROTECT ONSITE AND ADJACENT NATURAL RESOURCES, INCLUDING BUT NOT LIMITED TO, WETLANDS, MARSHES, BAYOUS AND BAYS, WHILE PRESERVING WILDLIFE AND ARCHEOLOGICAL RESOURCES.

AN ENVIRONMENTAL RESOURCE PERMIT APPLICATION HAS BEEN SUBMITTED TO THE NWFWMD NOVEMBER 2023

1.2 NOTICE OF INTENT (NOI):

RULE 62-621.300(4), FAC REQUIRES THE CONSTRUCTION OPERATOR OF A SITE THAT DISTURBS ONE OR MORE ACRES TO OBTAIN COVERAGE FROM THE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES. THE CONTRACTOR IS REQUIRED TO SUBMIT A NOTICE OF INTENT TO USE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES (FDEP FORM 62-621.300(4)(B)) ALONG WITH THE APPROPRIATE APPLICATION FEE TO THE FOLLOWING ADDRESS 48 HOURS PRIOR TO COMMENCING CONSTRUCTION:

NPDES STORMWATER NOTICES CENTER, MS # 2510
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

THIS FORM CAN BE OBTAINED FROM FDEP'S WEBSITE (WWW.DEP.STATE.FL.US) OR BY CONTACTING FDEP. PLEASE NOTE THAT THE CURRENT APPLICATION FEE IS $300; HOWEVER, THIS FEE IS SUBJECT TO CHANGE WITHOUT NOTICE. ALWAYS REFER TO THE MOST CURRENT VERSION OF RULE 62-4.050(4)(D), FAC TO CONFIRM THE AMOUNT BEFORE SUBMITTING PAYMENT. IF CONSTRUCTION ACTIVITY EXCEEDS FIVE YEARS, THE CONTRACTOR MUST RE-APPLY FOR COVERAGE.

1.3 STORMWATER POLLUTION PREVENTION PLAN (SWPPP):

THE CONTRACTOR IS REQUIRED TO CERTIFY THIS STORMWATER POLLUTION PREVENTION PLAN (SWPPP) BELOW PRIOR TO SUBMITTING THE NOI. THIS SWPPP IS NOT REQUIRED TO BE SUBMITTED WITH THE NOI, BUT IS REQUIRED TO BE KEPT ON SITE DURING ALL PHASES OF CONSTRUCTION. BECAUSE EROSION AND SEDIMENT CONTROLS AND CONSTRUCTION METHODS VARY SIGNIFICANTLY FROM CONTRACTOR TO CONTRACTOR, THE CONTRACTOR CAN PROPOSE ALTERNATIVE METHODS TO THIS SWPPP THAT ARE EQUAL OR BETTER AT CONTROLLING EROSION AND SEDIMENTATION. AT A MINIMUM, THE CONTRACTOR MUST FOLLOW THE EROSION CONTROL PLAN SPECIFIED IN THE CONSTRUCTION PLANS AND DOCUMENTS. ANY MODIFICATIONS TO THIS SWPPP MUST BE DOCUMENTED AND KEPT WITH THE PLAN AS PART OF THE RECORDS KEEPING PROCESS TO BE IN FULL COMPLIANCE WITH THE CGP.

1.4 CONTRACTOR'S / SUBCONTRACTOR CERTIFICATION:

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND, AND SHALL COMPLY WITH, THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STROMWATER POLLUTION PREVENTION PLAN PREPARED THEREUNDER.

PRINT & SIGN NAME — COMPANY & ADDRESS

NAME & TITLE (PRINT)

SIGNATURE — DATE

1.5 RESPONSIBLE AUTHORITY CERTIFICATION:

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

PRINT & SIGN NAME — COMPANY & ADDRESS

NAME & TITLE (PRINT)

SIGNATURE — DATE

1.6 NOTICE OF TERMINATION (NOT):

THE CONTRACTOR IS REQUIRED TO SUBMIT A NOTICE OF TERMINATION OF GENERIC PERMIT COVERAGE (FDEP FORM 62-621.300(6)) UPON CONSTRUCTION COMPLETION TO DISCONTINUE PERMIT COVERAGE. THE NOT IS TO BE SUBMITTED TO THE FOLLOWING ADDRESS:

NPDES STORMWATER NOTICES CENTER, MS # 2510
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

THIS FORM CAN BE OBTAINED FROM FDEP'S WEBSITE (WWW.DEP.STATE.FL.US) OR BY CONTACTING FDEP. THE NOT CAN NOT BE SUBMITTED UNTIL ALL DISTURBED SOILS AT THE CONSTRUCTION SITE HAVE BEEN FINALLY STABILIZED AND TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN REMOVED OR WILL BE REMOVED AT AN APPROPRIATE TIME. FINAL STABILIZATION MEANS THAT ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED AND THAT A UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70 PERCENT OF THE COVER FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES HAS BEEN ESTABLISHED, OR EQUIVALENT STABILIZATION MEASURES HAVE BEEN EMPLOYED. IF CONSTRUCTION ACTIVITY EXCEEDS FIVE YEARS, THE CONTRACTOR MUST RE-APPLY FOR COVERAGE.

1.7 APPLICATION INFORMATION:

PROJECT ADDRESS:	WHITE SANDS BLVD. NAVARRE, FL 32567
LATITUDE: LONGITUDE:	N 30°23'25" W 86°54'48.30"
WATER MANAGEMENT DISTRICT:	NORTHWEST FLORIDA (NWFWMD)
MS4 OPERATOR NAME:	COUNTY
RECEIVING WATER NAME:	N/A

2.0 SITE DESCRIPTION:

2.1 NATURE OF CONSTRUCTION ACTIVITIES:

THE PROJECT CONSISTS OF CONSTRUCTION OF A 47 LOT SINGLE FAMILY SUBDIVISION WITH WET DETENTION POND.

2.2 SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES:

THE FOLLOWING SEQUENCE OF MAJOR ACTIVITIES SHALL BE FOLLOWED UNLESS THE CONTRACTOR CAN PROPOSE AN ALTERNATIVE THAT IS EQUAL TO OR BETTER AT CONTROLLING EROSION AND SEDIMENTATION. THE DETAILED SEQUENCE FOR THE ENTIRE PROJECT CAN VARY SIGNIFICANTLY FROM CONTRACTOR TO CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING ANY CHANGES.

1. CLEAR, GRUB AND PERFORM ALL DEMOLITION WORK.
2. COMPLETE ROUGH GRADING OF THE POND AND DIRECT ALL STORMWATER RUNOFF TO THE POND(S).
3. CONSTRUCT ALL UNDERGROUND UTILITIES AND STORM DRAIN SYSTEM.
4. CONSTRUCT ROADS (SUBGRADE, CURB & GUTTER, BASE, PAVEMENT, SIDEWALKS, AND LANDSCAPING).
5. COMPLETE STORMWATER PONDS.

2.3 AREA ESTIMATES:

ONSITE AREA:	7.05 ACRES
OFFSITE AREA:	7.05 ACRES
TOTAL AREA:	7.05 ACRES
AREA TO BE DISTURBED:	7.05 ACRES

2.4 RUNOFF DATA:

RUNOFF COEFFICIENTS (C):

RUNOFF COEFFICIENTS (C):

BEFORE: TOTAL COMPOSITE C = 0.30 & 0.90

DURING: VARIES BETWEEN = 0.30 & 0.90

AFTER: VARIES BETWEEN = 0.30 & 0.90

COMPOSITE C: =0.68

SOILS DATA:

THE SOILS LOCATED AT THE SITE ARE PREDOMINANTLY URBAN LAND/NEWHAN-CORDLLA COMPLEX. GROUNDWATER AT THE SITE WAS NOT ENCOUNTERED AT 35' IN THE TEST BORINGS. FOR MORE DETAILED SOILS INFORMATION SEE REPORT BY UNIVERSAL ENGINEERING SCIENCES, INC., PROJECT NO. 1730.1600070.000.

DRAINAGE BASINS FOR OUTFALL:

PROPOSED ON SITE COLLECTION SYSTEM IS A SERIES OF ROOF GUTTERS, INLETS AND PIPING TO WET DETENTION POND ON THE SOUTH PART OF THE SITE TO HANDLE THE 7.05 ACRE SITE. ALL RUNOFF IS COLLECTED AND TREATED IN THE WET POND. OVERFLOW DISCHARGE FROM THE WET DETENTION POND IS NORTH TO SANTA ROSA SOUND.

2.5 SITE MAP:

THE CONSTRUCTION PLANS ARE TO BE USED AS THE SITE MAPS. THE LOCATION OF THE REQUIRED INFORMATION IS DESCRIBED BELOW. THE SHEET NUMBERS FOR ALL THE ITEMS DISCUSSED BELOW ARE IDENTIFIED ON THE KEY SHEET OF THE CONSTRUCTION PLANS.

- DRAINAGE PATTERNS: ALL DRAINAGE PATTERNS ARE SHOWN ON THE GRADING & DRAINAGE PLANS.
- APPROXIMATE SLOPES: APPROXIMATE SLOPES ARE SHOWN ON THE GRADING & DRAINAGE POND SIDE SLOPES ARE SHOWN ON THE POND CROSS-SECTIONS.
- AREAS OF SOIL DISTURBANCE: ALL DEMOLITION IS SHOWN ON THE EXISTING SITE CONDITIONS AND DEMOLITION AND EROSION CONTROL PLAN SHEET. ALL PROPOSED CONSTRUCTION IS SHOWN ON THE REMAINING PLANS. ANY AREAS WHERE DEMOLITION WORK OR PERMANENT FEATURES ARE SHOWN ABOVE OR BELOW GROUND WILL BE DISTURBED.
- AREAS NOT TO BE DISTURBED: ANY AREAS NOT SHOWING DEMOLITION WORK OR PERMANENT FEATURES ARE ASSUMED NOT TO BE DISTURBED. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO INDICATE ON THE PLANS ANY OF THESE AREAS THAT DO GET DISTURBED AS WELL AS ANY AREAS USED FOR STAGING AND MATERIALS STORAGE.

- LOCATIONS OF CONTROLS: ALL PROPOSED TEMPORARY CONTROLS AND EXISTING PERMANENT CONTROLS ARE SHOWN ON THE EXISTING SITE, DEMOLITION AND EROSION CONTROL PLAN. ALL PROPOSED PERMANENT CONTROLS ARE SHOWN ON THE REMAINING PLANS. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO INDICATE THE LOCATION OF ANY OTHER CONTROLS ON THE PLANS THAT ARE USED DURING CONSTRUCTION.
- PERMANENT STABILIZATION IS SHOWN ON THE PLANS. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO INDICATE THE LOCATION ON THE PLANS OF ALL TEMPORARY STABILIZATION PRACTICES USED DURING CONSTRUCTION.
- SURFACE WATERS: N/A
- DISCHARGE POINT: SANTA ROSA SOUND.

2.6 RECEIVING WATERS:

SANTA ROSA SOUND.

3.0 CONTROLS:

3.1 EROSION AND SEDIMENT CONTROLS:

ALL EROSION AND SEDIMENT CONTROLS SPECIFIED ON THE DEMOLITION AND EROSION CONTROL PLAN SHEETS, AND THE EROSION CONTROL DETAILS SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION OR DEMOLITION. SILT FENCING AND STAKED HAY BALES SHALL BE INSTALLED ALONG DOWN-GRADIENT LIMITS.

TEMPORARY SEEDING AND MULCHING SHALL BE APPLIED AFTER 14-DAY INTERVALS OF CEASED DISTURBANCE ACTIVITIES THAT WILL EXCEED 20-DAY PERIODS. GRADED AREAS SHALL BE STABILIZED WITH PERMANENT SEEDING, MULCHING, AND FERTILIZING, OR SODDING WITHIN FIVE DAYS OF FINAL GRADING. LANDSCAPING, INCLUDING SODDING, SHALL BE INSTALLED BY AN EXPERIENCED LANDSCAPE CONTRACTOR. PROPOSED DISTURBED AREAS WILL NOT EXCEED 8 ACRES IN ANY DRAINAGE AREA.

3.2 STORMWATER MANAGEMENT:

THE PROPOSED STORMWATER MANAGEMENT SYSTEM FOR THE SITE IS A WET DETENTION POND TO SERVE THE ENTIRE PROPERTY.

THE PROPOSED STORMWATER MANAGEMENT SYSTEM MEET ALL THE REQUIREMENTS OF LOCAL AND STATE AGENCIES.

3.3 OTHER CONTROLS:

WASTE DISPOSAL: THE CONTRACTOR IS RESPONSIBLE FOR ALL WASTE DISPOSAL FROM THE SITE. THE CONTRACTOR SHALL EMPLOY WASTE DISPOSAL PRACTICES THAT MEET ALL LOCAL, STATE, AND FEDERAL GUIDELINES AND PREVENT DISCHARGE OF SOLID MATERIALS TO WATERS OF THE UNITED STATES. THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE SWPPP.

OFFSITE VEHICLE TRACKING: IF OFF SITE TRACKING OF SEDIMENTS BY CONSTRUCTION VEHICLES OCCURS, THE CONTRACTOR IS REQUIRED TO INSTALL A SOIL TRACKING PREVENTION DEVICE (STPD) AS PER FDOT STANDARD INDEX 106 AT ALL EXITS TO THE SITE WHERE SEDIMENT TRACKING IS OCCURRING. THE CONTRACTOR IS ALSO RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE SWPPP.

HAZARDOUS MATERIALS: ALL POLLUTANTS AND HAZARDOUS MATERIALS INCLUDING BUT NOT LIMITED TO FERTILIZERS, HERBICIDES, PESTICIDES, SOLVENTS, OILS AND OIL FILTERS, PETROLEUM PRODUCTS, PAINT, AND EQUIPMENT MAINTENANCE FLUIDS, SHALL BE STORED INDOORS OR UNDER COVER IN AREAS WITH SECONDARY CONTAINMENT. SECONDARY CONTAINMENT PREVENTS A SPILL FROM SPREADING ACROSS THE SITE AND INCLUDES DIKES, BERMS, CURBING, OR OTHER CONTAINMENT METHODS. HAZARDOUS MATERIAL STORAGE AREAS SHALL BE INSPECTED WEEKLY AND AFTER STORM EVENTS. STORAGE AREAS SHALL BE KEPT CLEAN, WELL ORGANIZED, AND EQUIPPED WITH AMPLE CLEANUP SUPPLIES/SPILL KITS AS APPROPRIATE FOR THE MATERIALS BEING STORED. MATERIAL SAFETY DATA SHEETS, MATERIAL INVENTORY, AND EMERGENCY CONTACT INFORMATION SHALL BE MAINTAINED ON-SITE. ALL PERSONNEL SHALL RECEIVE INSTRUCTION REGARDING PROPER PROCEDURES FOR HAZARDOUS MATERIAL HANDLING AND DISPOSAL. HAZARDOUS MATERIALS SHALL NOT BE DISPOSED OF INTO ON-SITE DUMPSTERS; HAZARDOUS MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE, AND MUNICIPAL REGULATIONS. VEHICLES AND EQUIPMENT WILL BE MAINTAINED OFF-SITE. ALL VEHICLES AND EQUIPMENT INCLUDING SUBCONTRACTOR VEHICLES WILL BE CHECKED FOR LEAKING OIL AND FLUIDS. VEHICLES LEAKING FLUIDS WILL NOT BE ALLOWED ON-SITE. DRIP PANS SHALL BE PLACED UNDER ALL VEHICLES AND EQUIPMENT THAT ARE PARKED OVERNIGHT.

APPLICATION OF FERTILIZERS, HERBICIDES, AND PESTICIDES: FERTILIZERS, HERBICIDES, AND PESTICIDES SHALL BE DELIVERED TO THE SITE IN ORIGINAL, UNOPENED CONTAINERS BEARING MANUFACTURER'S CHEMICAL ANALYSIS, NAME, TRADE NAME, TRADEMARK, AND INDICATION OF CONFORMANCE TO STATE AND FEDERAL LAWS. FERTILIZERS, HERBICIDES, AND PESTICIDES SHALL BE IN APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S SUGGESTED RATE.

5.0 INSPECTIONS:

QUALIFIED PERSONNEL SHALL INSPECT THE FOLLOWING ITEMS, BUT NOT LIMITED TO, AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.25 INCHES OR GREATER. WHERE SITES HAVE BEEN FINALLY STABILIZED, INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH.

- POINTS OF DISCHARGE TO WATERS OF THE UNITED STATES.
- POINTS OF DISCHARGE TO MUNICIPAL SEPARATE STORM SEWER SYSTEMS.
- DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED.
- AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.
- STRUCTURAL CONTROLS.
- STORMWATER MANAGEMENT SYSTEMS.
- LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.

6.0 NON-STORMWATER DISCHARGES:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPORTING ANY HAZARDOUS SUBSTANCE SPILLS THAT MAY EQUAL OR EXCEED A REPORTABLE QUANTITY (RQ). REFER TO EPA'S LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES (EPA 40 CFR 302.4 & 117). V THIS LIST CAN BE OBTAINED FROM EPA'S WEBSITE (WWW.EPA.GO) OR BY CONTACTING EPA. IF AN RQ RELEASE DOES OCCUR THE CONTRACTOR SHALL PERFORM THE FOLLOWING PROCEDURES:

- NOTIFY THE NATIONAL RESPONSE CENTER IMMEDIATELY AT 800-424-8802.
- PROVIDE WRITTEN DESCRIPTION OF THE RELEASE WITHIN 14 DAYS PROVIDING DATES, CAUSE AND PREVENTION METHODS TO THE REGIONAL EPA OFFICE.
- MODIFY THE SWPPP AS NECESSARY TO ADDRESS ADDED PREVENTION METHODS.

7.0 IMPLEMENTATION CHECKLIST:

7.1 RECORDS:

THE CONTRACTOR SHALL MAINTAIN RECORDS OF CONSTRUCTION ACTIVITIES INCLUDING, BUT NOT LIMITED TO:

- DATES WHEN MAJOR GRADING ACTIVITIES OCCUR.
- DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY CEASE ON A PORTION OF THE SITE.
- DATES WHEN CONSTRUCTION ACTIVITIES PERMANENTLY CEASE ON A PORTION OF THE SITE.
- DATES WHEN STABILIZATION MEASURES ARE INITIATED ON THE SITE.

7.2 INSPECTION REPORTS:

THE CONTRACTOR SHALL PREPARE INSPECTION REPORTS SUMMARIZING THE FOLLOWING, BUT NOT LIMITED TO:

- NAME OF INSPECTOR.
- QUALIFICATIONS OF INSPECTOR.
- MEASURES/AREAS INSPECTED.
- OBSERVED CONDITIONS.
- CHANGES NECESSARY TO THE SWPPP.

7.3 RELEASES OF REPORTABLE QUANTITIES OF OIL OR HAZARDOUS MATERIALS:

THE CONTRACTOR SHALL REPORT ANY RELEASES OF REPORTABLE QUANTITIES OF OIL OR HAZARDOUS MATERIALS IF THEY OCCUR AS PER THE MEASURES OUTLINED IN SECTION 6.0 OF THE SWPPP.

7.4 SWPPP MODIFICATION:

THE CONTRACTOR SHALL MODIFY THE SWPPP AS NECESSARY TO:

- COMPLY WITH MINIMUM PERMIT REQUIREMENTS WHEN NOTIFIED BY FDEP THAT THE PLAN DOES NOT COMPLY.
- ADDRESS ANY CHANGES IN DESIGN, CONSTRUCTION OPERATIONS OR MAINTENANCE, WHICH HAS AN EFFECT ON THE POTENTIAL FOR DISCHARGE OF POLLUTANTS.
- PREVENT REOCCURRENCE OF REPORTABLE QUANTITY RELEASES OF HAZARDOUS MATERIAL OR OIL.

8.0 TERMINATION CHECKLIST:

THE FOLLOWING ITEMS SHALL BE COMPLETE BEFORE SUBMITTING THE NOT:

- ALL SOIL DISTURBING ACTIVITIES ARE COMPLETE.
- TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN REMOVED OR WILL BE REMOVED AT AN APPROPRIATE TIME.
- ALL AREAS OF THE CONSTRUCTION SITE NOT OTHERWISE COVERED BY PERMANENT PAVEMENT OR STRUCTURE HAVE BEEN STABILIZED WITH UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70% OR EQUIVALENT MEASURES HAVE BEEN EMPLOYED.

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Gerald W. McGuire-P.E. # 39572
Engineering Business #00006435

MER SEA ON NAVARRE BEACH
CONSTRUCTION SWPPP PLAN
SANTA ROSA COUNTY FLORIDA

DRAWN BY: HAH
DESIGNED BY: GWM
CHECKED BY: GWM
DATE: MAY 2022
SCALE: N.T.S.
NOT RELEASED FOR CONSTRUCTION
BY: GWM DATE:

PROJECT NO: 2022.MERSEA
FILE NO: 2022.MERSEA
SHEET: 5B OF 23

SEWER NOTES:

1. SERVICES SHALL BE RUN TO THE PROPERTY LINES AND ARE TO BE STUBBED UP FOR INSPECTION DURING THE CONSTRUCTION PERIOD. SERVICES SHALL BE STAKED FOR FIELD LOCATION, AND THEY SHALL BE FIELD MEASURED FROM THE BACK OF CURB AND NEAREST DOWNSTREAM MANHOLE AND MADE PART OF THE RECORD DRAWINGS.
2. SERVICES SHALL BE CONSTRUCTED AS SHOWN ON PLANS TO BUILDINGS TO BE SERVED.
3. ALL SEWER COLLECTION SYSTEMS TO BE ACCEPTED FOR MAINTENANCE ARE TO BE TV RECORDED AND MEASURED. THE MAIN LINES SHALL BE INSPECTED WITH A PAN-AND-TILT TYPE CAMERA. A FULL CIRCLE VIEW OF ALL SERVICES SHALL BE MADE AS PART OF THE MAIN LINE INSPECTION. THE UTILITY SHALL WITNESS ALL MAIN AND SERVICE INSPECTIONS. THE CONTRACTOR SHALL PROVIDE A MINIMUM 48 HOUR NOTICE FOR ALL INSPECTIONS. ALL LINES ARE TO BE FLUSHED WITH WATER JUST PRIOR TO THESE INSPECTIONS WITH THE UTILITY PRESENT. SERVICES HOLDING WATER AT THE TIME OF INSPECTION MAY NOT BE ACCEPTED BY THE UTILITY.
4. CURB CUTS ARE REQUIRED FOR ALL SEWER SERVICES. CUTS SHALL BE APPROXIMATELY 3" LONG AND 1/8" DEEP, PARALLEL, AND CUT INTO THE RIBBON PORTION OF THE CURB. THEY SHALL MARK THE AREA AND DIRECTION WHERE THE SERVICE EXITS THE PAVEMENT.
5. ALL SEWER SERVICES WILL BE CONSTRUCTED TO RUN PERPENDICULAR TO THE MAIN. ALL SERVICES THAT CAN NOT BE CONSTRUCTED IN THIS MANNER WILL BE TIED DIRECTLY INTO THE MAN HOLES, WITHOUT ANY CHANGE IN DIRECTION. A TEE-WYE (G X S X G) IS REQUIRED FOR ALL SERVICES. NO ADDITIONAL FITTINGS WILL BE ALLOWED BETWEEN THE MAIN AND THE PROPERTY LINE TO BE SERVED. EXCEPT FOR A SINGLE 45 DEGREE FITTING WHERE THE DEPTH OF THE MAIN LINE WOULD DICTATE. ALL 45 DEGREE FITTINGS SHALL BE (G X G) TYPE.
6. INFILTRATION OR EXFILTRATION TESTING WHEN REQUIRED BY EITHER THE ENGINEER OR THE UTILITY, SHALL NOT EXCEED 50 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY.
7. NO STEPS WILL BE ALLOWED IN THE MANHOLES.
8. SERVICES SHALL BE RUN TO THE PROPERTY LINES AND ARE TO BE STUBBED UP FOR INSPECTION DURING THE CONSTRUCTION PERIOD. ONCE INSPECTED AND ACCEPTED BY THE UTILITY, THEY SHALL BE CAPPED AND FIELD MEASURED FROM THE BACK OF CURB AND MADE PART OF THE RECORD DRAWINGS.
9. ALL SEWER COLLECTION SYSTEMS TO BE ACCEPTED FOR MAINTENANCE ARE TO BE TV RECORDED AND MEASURED. THE MAIN LINES SHALL BE INSPECTED WITH A PAN-AND-TILT TYPE CAMERA. A FULL CIRCLE VIEW OF ALL SERVICES SHALL BE MADE AS PART OF THE MAIN LINE INSPECTION. ALL (100%) OF THE SEWER SERVICES WILL BE INSPECTED WITH A PUSH TYPE CAMERA. THE UTILITY SHALL WITNESS ALL MAIN AND SERVICE INSPECTIONS. THE CONTRACTOR SHALL PROVIDE A MINIMUM 48 HOUR NOTICE FOR ALL INSPECTIONS. ALL LINES ARE TO BE FLUSHED WITH WATER JUST PRIOR TO THESE INSPECTIONS WITH THE UTILITY PRESENT. SERVICES OR MAINS HOLDING WATER AT THE TIME OF INSPECTION MAY NOT BE ACCEPTED BY THE UTILITY.
10. NO CONCRETE BLOCK IS ALLOWED FOR MANHOLES AND INLETS.

ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF NAVARRE BEACH & SEWER WATER SYSTEM SPECIFICATIONS.

ALL WORK WITHIN THE RIGHT-OF-WAY OR FOR OWNERSHIP BY NAVARRE BEACHSHALL BE PERFORMED BY AN CERTIFIED UNDERGROUND UTILITY CONTRACTOR.

ALL WORK PERFORMED ON THE INSTALLATION OF THE POTABLE WATER, SANITARY SEWER SYSTEM AND REUSE SYSTEM MUST BE DONE BY A FLORIDA CERTIFIED UNDERGROUND UTILITY CONTRACTOR.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH SANTA ROSA COUNTY DESIGN STANDARDS AND LATEST EDITION OF FDOT DESIGN STANDARDS.

POTABLE WATER NOTES:

1. NO WORK CAN BEGIN UNTIL THE APPROVED GENERAL USE PERMIT FROM THE F.D.E.P. AND AT THE END OF THE POTABLE WATER PROJECT A CERTIFICATION AND AS-BUILTS WILL BE REQUIRED.
2. THE CERTIFICATION OF COMPLETION DOES NOT MEAN PROJECT ACCEPTANCE, IT JUST CONFIRMS THAT THE F.D.E.P. REQUIREMENTS FOR A NEW POTABLE WATER DISTRIBUTION FACILITY FOR THIS SUBDIVISION.
3. NO VALVES MAY BE TURNED ON FOR ANY REASON OTHER THAN FLUSHING AND PRESSURE TESTING.
4. NAVARRE BEACH WATER SYSTEM WILL ONLY PROVIDE THE WATER SERVICE AFTER ALL ISSUES, IF ANY, HAVE BEEN ADDRESSED AND CORRECTED, FOLLOWING THE INSPECTION BY THE NAVARRE BEACH WATER SYSTEM REPRESENTATIVE.
5. ALL WATER MAINS WILL BE 4" C-900 PVC OR LARGER.
6. FOR MATERIALS EACH POTABLE WATER SERVICE TO BE 1" REDUCED AT THE CURB STOP WITH A FORD BRASS 1" GRIP BY¾ METER SWIVEL AND ALL WATER SERVICES WILL BE INDIVIDUALLY TAPPED OFF OF THE WATER MAIN.
7. ALL SADDLES WILL BE FORD BRASS SINGLE HINGED, SINGLE SCREW SADDLE. NO DOUBLE BAND SADDLES ALLOWED.
8. SERVICES WILL BE LOCATED WITHIN 2' OF PROPERTY CORNERS, CLEARLY VISIBLE, MARKED AND STAKED ALL WATER SERVICES UNDER ROADWAYS WILL BE SLEEVED IN PVC FROM CURB TO CURB. THE CONTRACTOR MUST SUPPLY PLASTIC METER BOXES, WITH A HOLE IN THE LID FOR THE ELECTRONIC READER, FOR ALL WATER SERVICES.
9. RETAINER FLANGES TO BE USED ON ALL DUCTILE IRON FITTINGS. ANCHOR COUPLINGS ON HYDRANT AND HYDRANT VALVES. IF ANCHOR COUPLINGS ARE NOT LONG ENOUGH TO GET THE HYDRANT UP TO THE PROPERTY LINE, THEN DUCTILE IRON WILL BE INSTALLED BETWEEN THE HYDRANT AND VALVE.
10. ALL LARGE TAPPING SADDLES WILL BE PRESSURE TESTED TO HOLD 150 PSI FOR 2 HOURS BEFORE MAKING ANY TAPS WITH NO DROP IN PRESSURE. A NAVARRE BEACH WATER SYSTEM REPRESENTATIVE MUST BE PRESENT TO WITNESS PRESSURE TEST BEFORE TAPPING THE MAIN. WE REQUIRE A 48-HOUR NOTICE PRIOR TO DOING THE PRESSURE TEST.
11. NO BENDING OF ANY MAINS. YOU MUST USE PROPER DUCTILE IRON FITTINGS WITH RESTRAINING FLANGES AROUND CURVES AND CUL-DE-SACS.
12. ALL VALVES WILL HAVE A CONCRETE RING INSTALLED AND WILL BE VISIBLE AT TIME OF INSPECTION.
13. ALL FIRE HYDRANTS WILL BE INSTALLED TO THE PROPER HEIGHT AT FINISHED GRADE. NO LOW SET HYDRANTS WILL BE ALLOWED TO REMAIN AND WILL BE REQUIRED TO BE RAISED TO CODE HEIGHT ABOVE FINISHED GRADE. AREAS THAT REQUIRE FILL DIRT WILL BE DONE AT THE DEVELOPER'S EXPENSE.
14. ALL WORK MUST BE DONE BY A FLORIDA LICENSED UNDERGROUND UTILITY CONTRACTOR. A COPY OF THE LICENSE WILL BE REQUIRE LICENSE BEFORE WORK BEGINS.
15. AFTER THE POTABLE WATER INSTALLATION IS COMPLETED, NAVARRE BEACH WATER SYSTEM WILL REQUIRE A SET OF AS-BUILT PLANS SHOWING LOCATION OF ALL SERVICES, HYDRANTS, FITTINGS, VALVES AND MEASUREMENTS FROM BACK OF CURD TO THE WATER MAINS. AFTER THE INSPECTION IS COMPLETE, A DISC WITH THE AS-BUILT PLANS WILL BE PROVIDED.
16. PULLING WATER FROM HYDRANTS FOR SERVICES WITHOUT HAVING THE PROPER METER AND BACKFLOW DEVICE INSTALLED OR TURNING ON VALVES WITHOUT PERMISSION WILL RESULT IN A TAMPERING FINE TO THE CONTRACTOR OF THE PROJECT.
17. A "W" WILL BE ETCHED INTO THE CONCRETE CURB IN FRONT OF EACH WATER SERVICE.
18. A 3" FLUSH HYDRANT WILL BE INSTALLED AT THE END OF ANY WATER MAIN OR CUL-DE-SAC WITH A VALVE INCLUDED.
19. ALL WATER SAMPLING FOR THE HEALTH DEPARTMENT AND D.E.P. WILL BE DONE AT THE OWNER'S EXPENSE.

BM#1: 1401/27 "X" CUT IN MANHOLE LID
ELEVATION = 5.59'

BM#2: 1401/26 "X" CUT IN CONCRETE BOX FOR ELECTRICAL PAD
ELEVATION = 6.68'

BM#3: 7612 NAIL AND DISC IN ASPHALT
ELEVATION = 4.73'

BENCHMARKS THAT ARE DAMAGED, DESTROYED, OR MOVED DURING CONSTRUCTION MUST BE REPLACED BY A PROFESSIONAL SURVEYOR AND MAPPER.

Centerline Line Table		
Line #	Length	Direction
L1	10.64'	N50°33'49"E
L2	20.17'	N50°30'13"E

Centerline Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
CL-1	59.81'	279.63'	12°15'21"	N56°41'29"E	59.70'
CL-2	4.27'	14.00'	17°29'08"	N71°33'44"E	4.26'
CL-3	49.22'	279.63'	10°05'10"	N57°45'12"E	49.16'

CENTERLINE ROAD DATA

SANITARY SEWER
MANHOLE #1
TOP ELEVATION = 5.56'
10" PVC PIPE
INVERT(S) = −2.77'
INVERT(W) = −2.76'

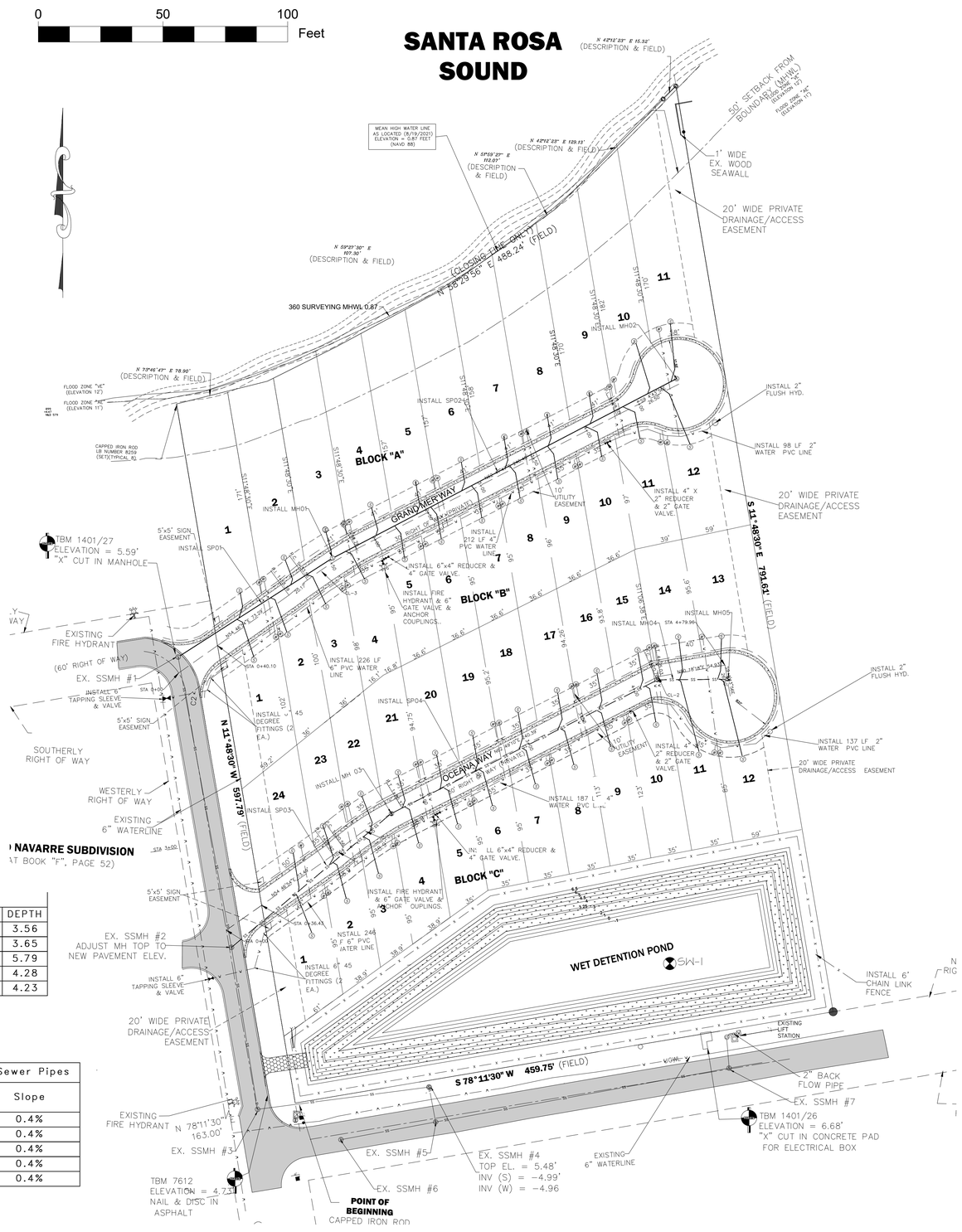
SANITARY SEWER
MANHOLE #2
TOP ELEVATION = 5.63'
10" PVC PIPE
INVERT(N) = −3.72'
INVERT(S) = −3.64'
INVERT(W) = −3.65'

MER SEA ON NAVARRE BEACH – SS MH

Manhole #	Street	Top	INV. (E)	INV. (W)	DEPTH
MH01	GRAND MER WAY	6.18		2.62	3.56
MH02	GRAND MER WAY	7.55	–	3.90	3.65
MH03	OCEANA WAY	6.72	1.43	0.93	5.79
MH04	OCEANA WAY	7.46	3.18	3.18	4.28
MH05	OCEANA WAY	7.63	–	3.40	4.23

MER SEA ON NAVARRE BEACH Subdivision – Gravity Sewer Pipes

Sewer Pipe #	From MH#	Invert	To MH#	Invert	Size	Length	Slope
SP01	EXMH01	−0.43	MH01	0.19	8"	155	0.4%
SP02	MH01	2.62	MH02	3.90	8"	321	0.4%
SP03	EXMH04	0.24	MH03	0.93	8"	173	0.4%
SP04	MH04	3.18	MH03	2.19	8"	248	0.4%
SP05	MH05	3.40	MH04	3.18	8"	56	0.4%
						798	



REVISIONS		
NO.	DATE	
1	6-25-2023	REV. PER COUNTY UTILITY DEPT. COMMENTS
2	8-31-2023	REV. WATERLINE PER FDEP COMMENT
3	9-21-2023	REV. TO ADD BENCHMARK NOTE/CLEAN UP TEXT
4		

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WEBSITE: www.mcguire-assoc.com
Gerald W. McGuire-P.E. # 39572
Engineering Business #00006435

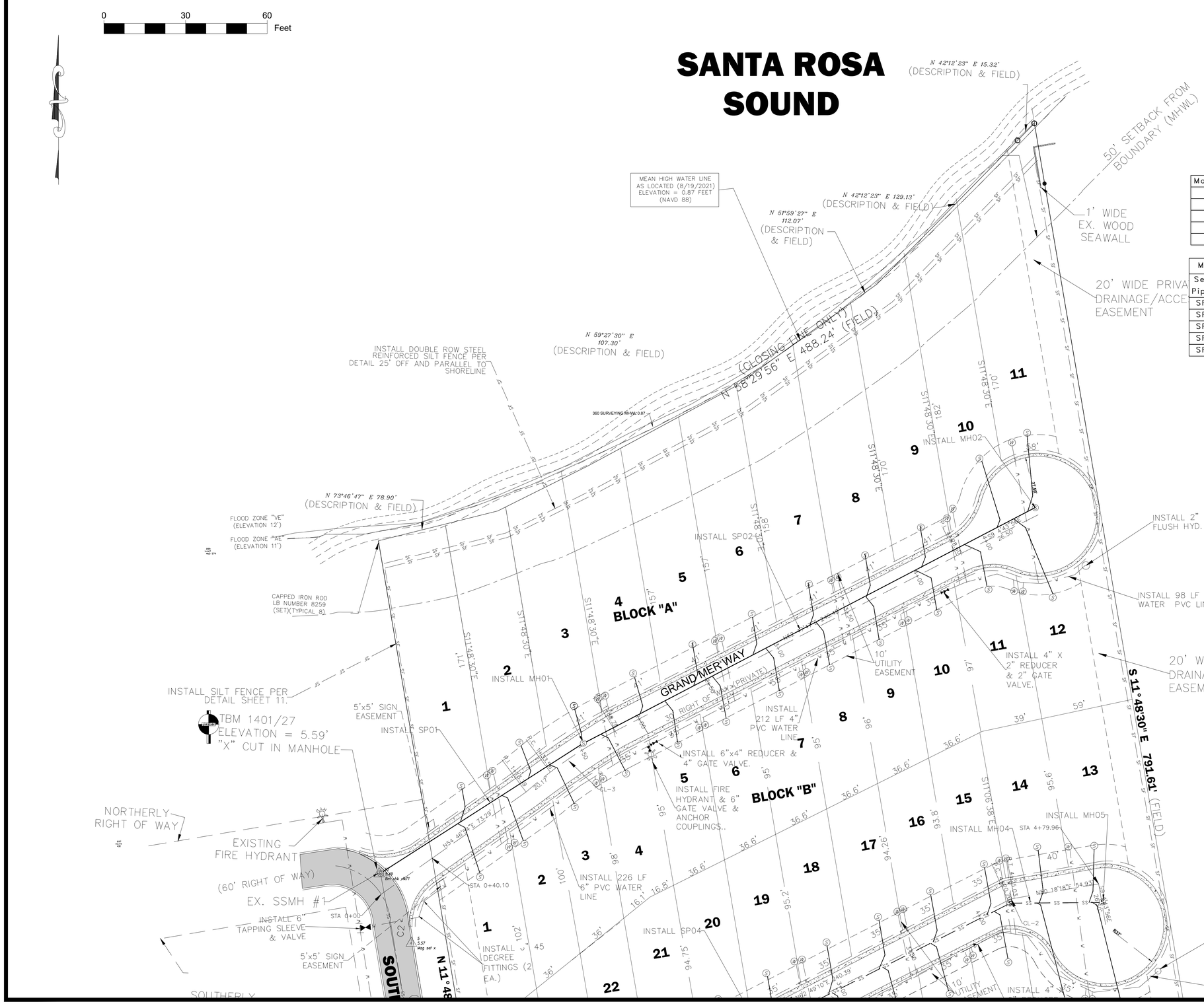
MER SEA ON NAVARRE BEACH

OVERALL UTILITY PLAN

SANTA ROSA COUNTY FLORIDA

DRAWN BY: HAH
DESIGNED BY: GWM
CHECKED BY: GWM
DATE: MAY 2022
SCALE: 1"=50'
NOT RELEASED FOR CONSTRUCTION
BY: GWM DATE:

PROJECT NO: 2022.MERSEA
FILE NO: 2022.MERSEA
SHEET: 6 OF 23



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CENTERLINE ROAD DATA

NO.	DATE	REVISIONS
1		
2		
3		
4		

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MER SEA ON NAVARRE BEACH
GRAND MER WAY UTILITIES
UTILITY PLAN (1 OF 2)

SANTA ROSA COUNTY FLORIDA

DRAWN BY: HAH
DESIGNED BY: GWM
CHECKED BY: GWM
DATE: MAY 2022
SCALE: 1"=30'
NOT RELEASED FOR CONSTRUCTION
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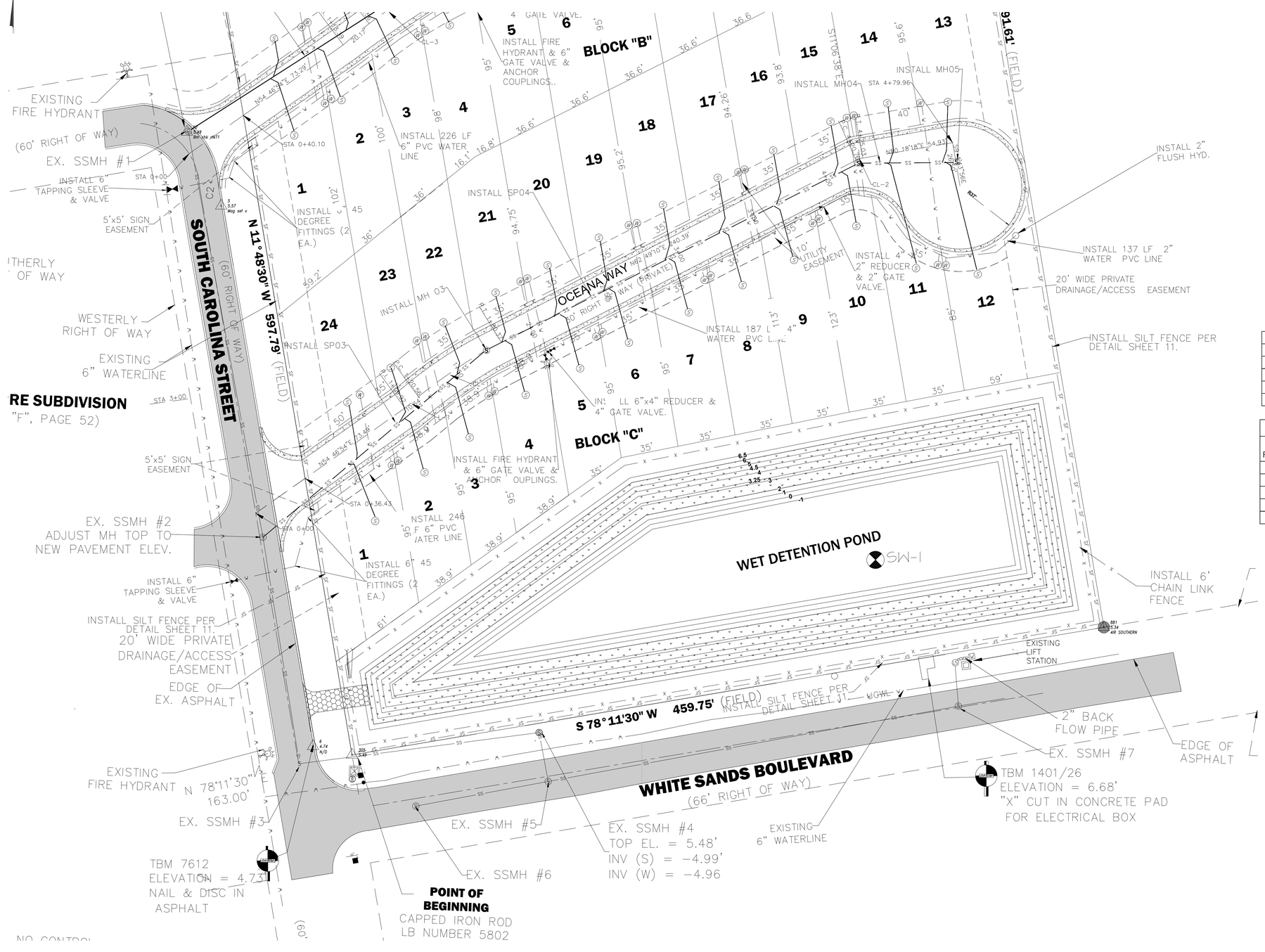

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MER SEA ON NAVARRE BEACH
OCEANA WAY UTILITIES
UTILITY PLAN (2 OF 2)

SANTA ROSA COUNTY FLORIDA

DRAWN BY: HAH
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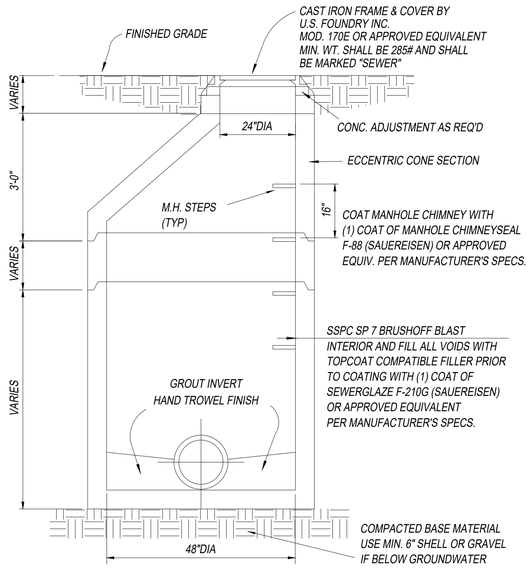
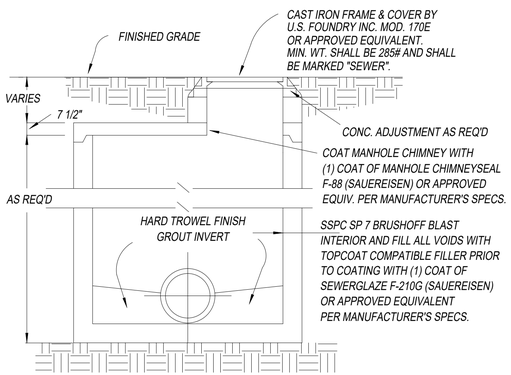


MANHOLE `A' (STANDARD)

DEPTH 5'-0" OR GREATER
NOT TO SCALE



MANHOLE (SHALLOW)

NOT TO SCALE

LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH RULE 62-555.314, F.A.C.

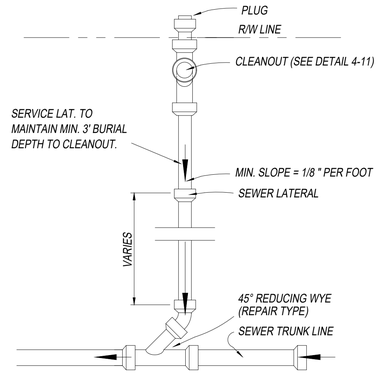
The following table summarizes the required separation distances from public water mains to other pipes as provided in Rule 62-(-)-555.314, F.A.C. Exceptions to these required distances are addressed on the second page.

Separation Requirements for Public Water System Mains:

Other Pipe	Horizontal Separation (X)	Crossings Vertical Separation (Y)	Joint Spacing (Z) @ Crossings (Full Joint Centered)
• **Storm Sewers** • **Stormwater Force Mains** • **Reclaimed Water Pipelines regulated under Part III of Chapter 62-610, F.A.C.**	3 ft. minimum	For water main installed above other pipe (preferred), 12 inches is the minimum except for storm sewer, then 6 inches is the minimum and 12 inches is preferred 12 inches minimum if water main is below other pipe	Alternate 3 ft. minimum
• **Vacuum Sanitary Sewer**	10 ft. preferred 3 ft. minimum	For water main installed above other pipe, 12 inches preferred and 6 inches minimum 12 inches minimum if water main is below other pipe	Alternate 3 ft. minimum
• **Gravity or Pressure Sanitary Sewer** • **Sanitary Sewer Force Main** • **Reclaimed Water Pipelines not regulated under Part III of Chapter 62-610, F.A.C.**	10 ft. preferred 6 ft. minimum (note - 3 ft. minimum for gravity sanitary sewer where the bottom of the water main is laid at least 6 inches above the top of the gravity sanitary sewer)	For water main installed above other pipe (preferred), 12 inches is the minimum except for gravity sewer, then 6 inches is the minimum and 12 inches is preferred 12 inches minimum if water main is below other pipe	Alternate 6 ft. minimum
• **On-Site Sewage** Treatment & Disposal **System**	10 ft. minimum	NA	NA

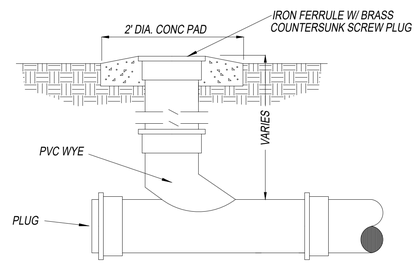
Refer to the next page for exceptions to the minimum separation requirements provided above.

Disclaimer – This document is provided for your convenience only. Please refer to Rule 62-555.314, F.A.C., for additional construction requirements.



SANITARY SERVICE CONNECTION

NOT TO SCALE

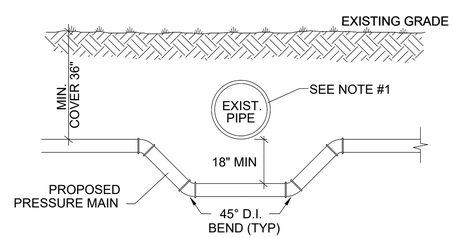


CLEAN-OUT DETAIL

NOTES:

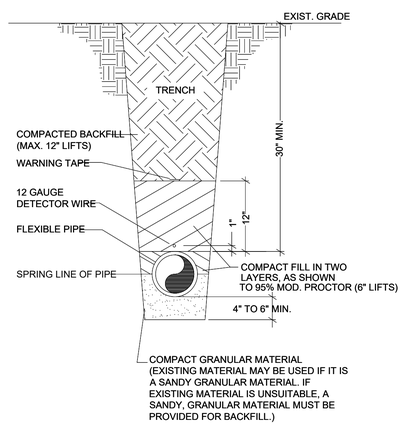
1. IF EXISTING PIPE IS WATER OR SEWER MAIN, REFER TO ENCASEMENT DETAIL FOR ADDITIONAL SPECIFICATIONS.

2. ALL FITTINGS ARE TO BE C.I. RETAINING JOINT TYPE.



CONFLICT DETAIL

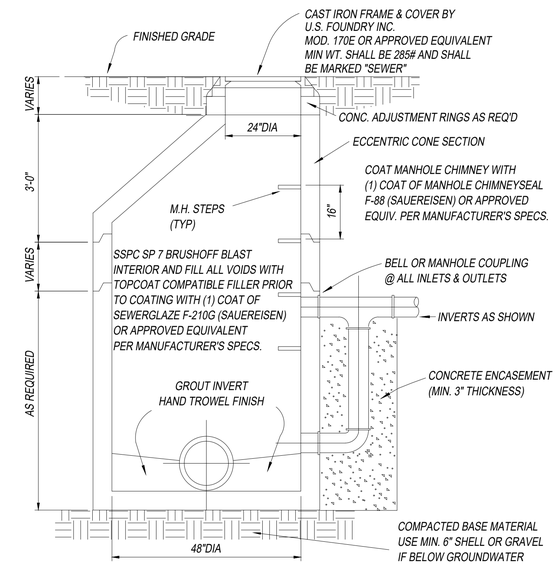
DELIVERED TO C.of G.B.



B1 TYPICAL PIPE BEDDING DETAIL

SCALE: NO SCALE

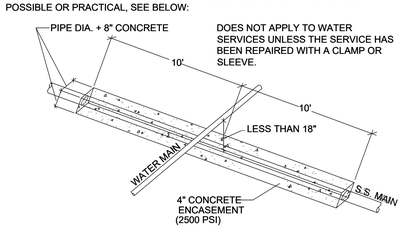
NOTES:
1. MANHOLE SHALL CONFORM TO A.S.T.M. C 478 SPECIFICATIONS.
2. DIAMETER OF OPENING FOR PIPE SHALL BE 1" LARGER DIAMETER THAN BELL OF THE PIPE BEING USED.
3. JOINTING COMPOUND SHALL BE RAM NEOX, TYPE 1, ROPE FORM PLASTIC GASKET OR EQUAL.
4. ALL PATCHING TO BE DONE WITH HYDRAULIC CEMENT. NO MORTAR REPAIRS PERMITTED.
5. CONCRETE TO BE 2500 P.S.I., REINFORCING STEEL TO BE A.S.T.M. A 615 GRADE 60.
6. SEAL WITH A-LOK, KORE-N-SEAL OR LOCK-JOINT PER SPECIFICATIONS.
7. CAST IN PLACE MANHOLE MAY BE ALLOWED IN PRE-APPROVED LOCATIONS.
8. ALL NEW LINE TIE-INS SHALL BE CORE-DRILLED WITH RUBBER BOOT ADDED.
9. BITUMASTIC COATING SHALL BE FACTORY APPLIED.
10. FRAME AND COVER SHALL BE VULCAN 1337-2 (ASTM SPEC. A-48, CLASS 30 CAST IRON) OR APPROVED EQUAL. REFER TO SPECIFICATIONS



DROP MANHOLE TYPE `B'

"DROP MANHOLE" DEPTH 5'-0" OR GREATER
NOT TO SCALE

SANITARY SEWER LINES (GRAVITY OR PRESSURE) SHALL HAVE 18" OR GREATER VERTICAL CLEARANCE BELOW ANY POTABLE WATER LINE WHEN CROSSING. A MINIMUM OF 6" VERTICAL CLEARANCE IS REQUIRED FOR OTHER UTILITIES. HORIZONTAL CLEARANCE BETWEEN SANITARY SEWER LINE THAT IS PARALLEL TO AND LESS THAN 18" BELOW A POTABLE WATER LINE SHALL BE 10' OR GREATER. A MINIMUM OF 30" IS REQUIRED FOR OTHER UTILITIES. IF THIS IS NOT POSSIBLE OR PRACTICAL, SEE BELOW:



FOR CROSSING: ENCASE AS ABOVE SO THAT THE ENDS OF ENCASEMENT ARE AT LEAST 12' FROM ANY WATER LINE JOINT. WATER LINE JOINT MUST NOT BE CLOSER THAN 5' TO THE POINT OF CROSSING, OR IT MUST ALSO BE ENCASED.

ALTERNATE 1: USE EQUALLY (OR HIGHER) RATED PRESSURE PIPE FOR SEWER WITH NO JOINTS CLOSER THAN 12' APART AND 6" VERTICAL.

ALTERNATE 2: PLACE SEWER LINE INTO STEEL CASING AND CENTER 20' PIECE WITH 4' VERTICAL CLEARANCE AND SEAL ENDS.

FOR PARALLEL: AND 6' TO 10' APART USE ALTERNATE 2, BUT IF MORE THAN 40' IN LENGTH, ALTERNATE 1 MUST BE USED AND JOINTS ARE TO BE STAGGERED. IF LINES MUST BE 3' TO 6' APART, ALTERNATE 1 MUST BE USED WITH A HIGHER RATED PRESSURE PIPE FOR SEWER (i.e., WATER LINE IS DR25 THEN USE DR18 OR 21 FOR SEWER).

A2 WATER/SEWER SEPARATION DETAIL

NO.	DATE	REVISIONS
1		
2		
3		
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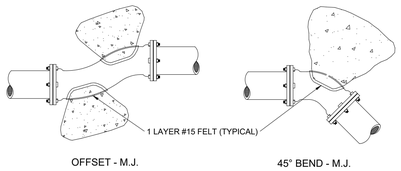
MER SEA ON NAVARRE BEACH

SANITARY SEWER DETAILS

SANTA ROSA COUNTY FLORIDA

DRAWN BY: HAH
DESIGNED BY: GWM
CHECKED BY: GWM
DATE: MAY 2022
SCALE: N.T.S.
NOT RELEASED FOR CONSTRUCTION
BY: GWM DATE:

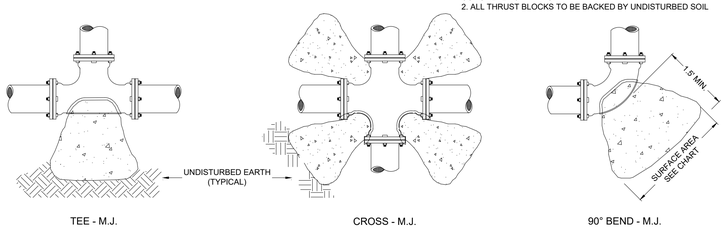
PROJECT NO: 2022.MERSEA
FILE NO: 2022.MERSEA
SHEET: 9 OF 23



MINIMUM THRUST BLOCK DIMENSIONS:
SURFACE AREA AGAINST UNDISTURBED SOIL

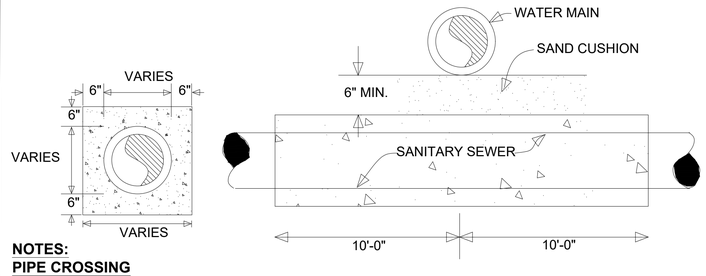
FITTING / PIPE SIZE	DEAD END OR TEE	90° BEND	45° BEND	22.5° BEND
4"	1' X 2'	1.5' X 1.5'	1' X 1.5'	1' X 1'
6"	2' X 2'	2.5' X 2.5'	2' X 1.5'	1' X 1.5'
8"	2.25' X 3'	3' X 3'	2' X 2.5'	1.5' X 1.5'
10"	3.5' X 3'	4' X 3.75'	2.75' X 3'	2' X 2'
12"	4' X 4'	4' X 5'	3' X 4'	2' X 3'
16"	5' X 5.5'	6' X 6.5'	4' X 5'	3' X 3.5'

NOTES:
1. ONE LAYER OF #15 FELT TO BE USED TO PREVENT ADHESION OF CONCRETE TO FITTING.
2. ALL THRUST BLOCKS TO BE BACKED BY UNDISTURBED SOIL



THRUST BLOCK DETAILS

N.T.S.



NOTES:

PIPE CROSSING

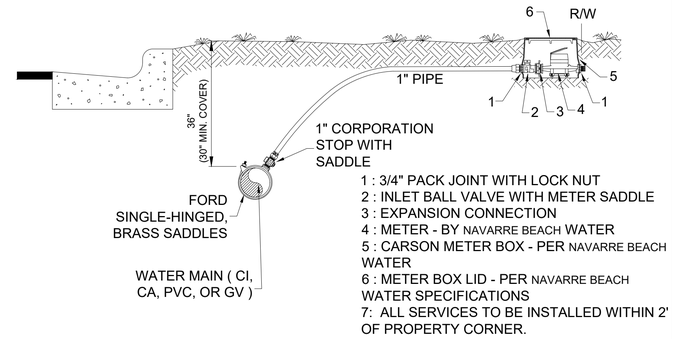
USE CONCRETE ENCASEMENT WHERE A SEWER MAIN CROSSES OVER A WATER MAIN OR WHERE A WATER MAIN CROSSES OVER A SEWER MAIN WITH LESS THAN 18" OF VERTICAL CLEARANCE BETWEEN THE BOTTOM OF THE WATER MAIN AND THE TOP OF THE SEWER MAIN. CENTERING A 20' SECTION OF SANITARY SEWER PIPE AT CROSSING MAY BE USED IN LIEU OF ENCASEMENT.

PARALLEL MAINS

CONTACT ENGINEER IN LOCATIONS WHERE WATER AND SEWER MAINS ARE PLACED WITH LESS THAN 10' HORIZONTAL SEPARATION AND LESS THAN 18" VERTICAL SEPARATION FOR INSTRUCTION ON REQUIRED ENCASEMENT.

CONCRETE ENCASEMENT DETAIL

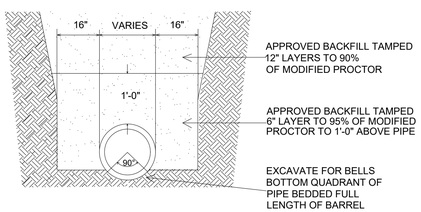
NOT TO SCALE



TYPICAL SINGLE SERVICE
1" - 20' TO 75' MAX.
2" - 75' TO 100' MAX.

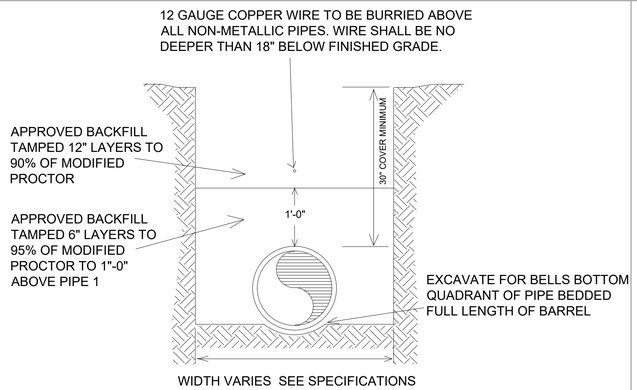
TYPICAL WATER SERVICE DETAIL

N.T.S.



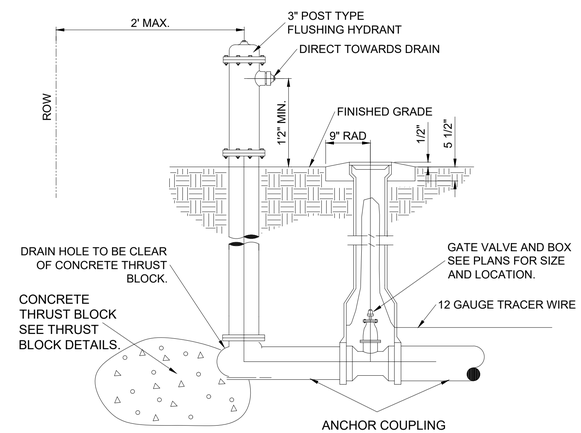
PIPE BEDDING DETAIL

NOT TO SCALE



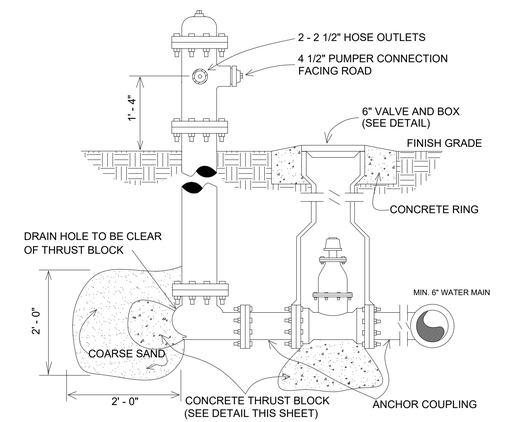
TYPICAL PRESSURE PIPE INSTALLATION DETAIL

NOT TO SCALE



TYPICAL FLUSHING HYDRANT ASSEMBLY

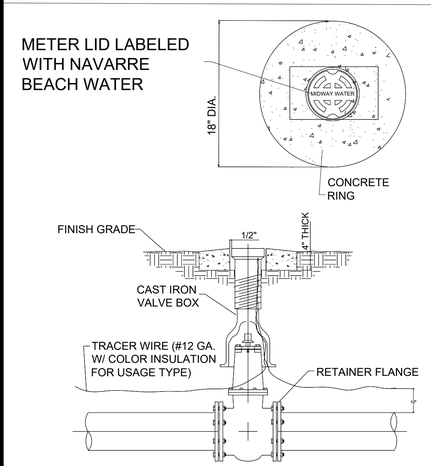
N.T.S.



NOTE:
1. HYDRANT, VALVE AND TEE WILL BE ATTACHED BY ALL THREAD ROD, MEGA LUGS OR BOTH.
2. HYDRANTS TO BE LOCATED A MINIMUM 7.5' FROM BUIDLINGS AND PARKED VEHICLES..

TYPICAL FIRE HYDRANT ASSEMBLY

NOT TO SCALE



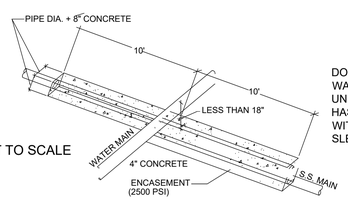
GATE VALVE DETAIL

NOT TO SCALE

SANITARY SEWER LINES (GRAVITY OR PRESSURE) SHALL HAVE 18" OR GREATER VERTICAL CLEARANCE BELOW ANY POTABLE WATER LINE WHEN CROSSING. A MINIMUM OF 6" VERTICAL CLEARANCE IS REQUIRED FOR OTHER UTILITIES.

WHEN UNDERGROUND POTABLE WATER MAIN IS BEING LAID LESS THAN 3' HORIZONTALLY FROM ANOTHER PIPELINE, OR WHERE AN UNDERGROUND WATER MAIN IS CROSSING ANOTHER PIPELINE AND IS BEING LAID LESS THAT THE REQUIRED MINIMUM VERTICAL CLEARANCE, THEN THE CONTRACTOR HAS THE OPTION TO ENCASE BOTH WATER AND SEWER IN CONCRETE.

HORIZONTAL CLEARANCE BETWEEN SANITARY SEWER LINE THAT IS PARALLEL TO AND LESS THAN 18" BELOW A POTABLE WATER LINE SHALL BE 10' OR GREATER. A MINIMUM OF 30" IS REQUIRED FOR OTHER UTILITIES. IF THIS IS NOT POSSIBLE OR PRACTICAL, SEE BELOW:



NOT TO SCALE

DOES NOT APPLY TO WATER SERVICES UNLESS THE SERVICE HAS BEEN REPAIRED WITH A CLAMP OR SLEEVE.

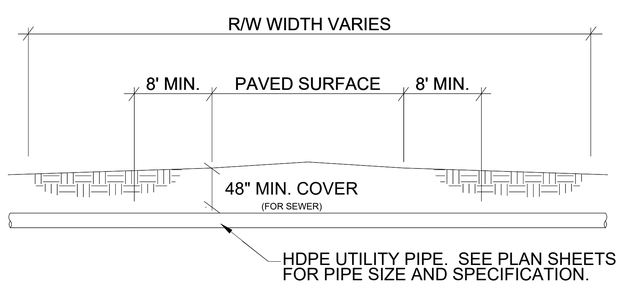
FOR CROSSING: ENCASE AS ABOVE SO THAT THE ENDS OF ENCASEMENT ARE AT LEAST 12' FROM ANY WATER LINE JOINT. WATER LINE JOINT MUST NOT BE CLOSER THAN 6' TO THE POINT OF CROSSING, OR IT MUST ALSO BE ENCASED.

ALTERNATE 1: USE EQUALLY (OR HIGHER) RATED PRESSURE PIPE FOR SEWER WITH NO JOINTS CLOSER THAN 12' APART AND 6" VERTICAL.

ALTERNATE 2: PLACE SEWER LINE INTO STEEL CASING AND CENTER 20' PIECE WITH 4' VERTICAL CLEARANCE AND SEAL ENDS.

FOR PARALLEL: AND 6' TO 10' APART USE ALTERNATE 2, BUT IF MORE THAN 40' IN LENGTH, ALTERNATE 1 MUST BE USED AND JOINTS ARE TO BE STAGGERED. IF LINES MUST BE 3' TO 6' APART, ALTERNATE 1 MUST BE USED WITH A HIGHER RATED PRESSURE PIPE FOR SEWER (i.e., WATER LINE IS DR25 THEN USE DR18 OR 21 FOR SEWER).

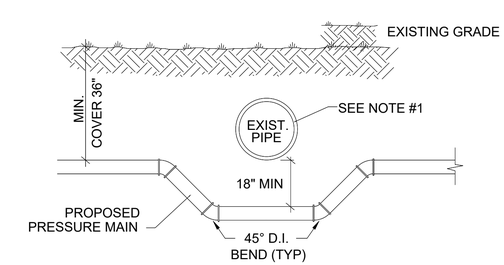
WATER/SEWER SEPARATION DETAIL



DIRECTIONAL BORE DETAIL

NOT TO SCALE

NOTES:
1. IF EXISTING PIPE IS WATER OR SEWER MAIN, REFER TO ENCASEMENT DETAIL FOR ADDITIONAL SPECIFICATIONS.
2. ALL FITTINGS ARE TO BE C.I. RETAINING JOINT TYPE.



CONFLICT DETAIL

NOT TO SCALE

NO.	DATE	REVISIONS
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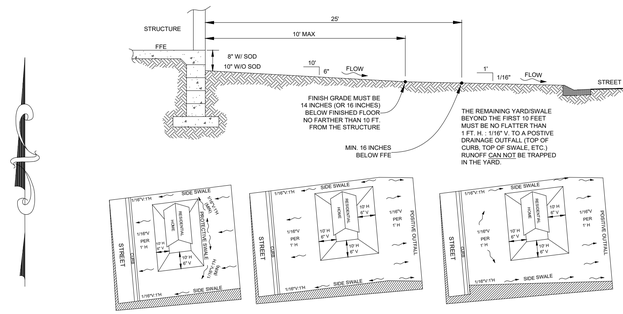
MER SEA ON NAVARRE BEACH
POTABLE WATER DETAILS
SANTA ROSA COUNTY FLORIDA

DRAWN BY: HAH
DESIGNED BY: GWM
CHECKED BY: GWM
DATE: MAY 2022
SCALE: N.T.S.
NOT RELEASED FOR CONSTRUCTION
BY: GWM DATE:

PROJECT NO: 2022.MERSEA
FILE NO: 2022.MERSEA
SHEET: 10 OF 23



TYPICAL YARD GRADING GUIDELINES

NOT TO SCALE

TYPICAL FFE CALCULATION: TOP OF CURB ELEVATION + (DISTANCE FROM CURB TO MOST UPSTREAM POINT OF YARD SWALE X 1/16") + 14 INCHES = FFE

NOTES:
1. A POSITIVE OUTFALL IS A CONVEYANCE SYSTEM (DRAINAGE EASEMENT, ROADWAY WITH A DRAINAGE SYSTEM – CURB/GUTTER OR DITCH) WHICH CONTAINS, CONTROLS, AND TRANSMITS STORMWATER RUNOFF TO A CREEK, STREAM, RIVER, BAY, GULF, OCEAN OR OTHER WATERS OF THE STATE, OR WATERS OF THE U.S., OR FUNCTIONING SANTA ROSA COUNTY OR STATE DRAINAGE SYSTEM.

2. FINISH FLOOR ELEVATION (FFE) MUST BE 8" - 10" (MINIMUM) ABOVE FINISH GRADE ELEVATION (FGE).

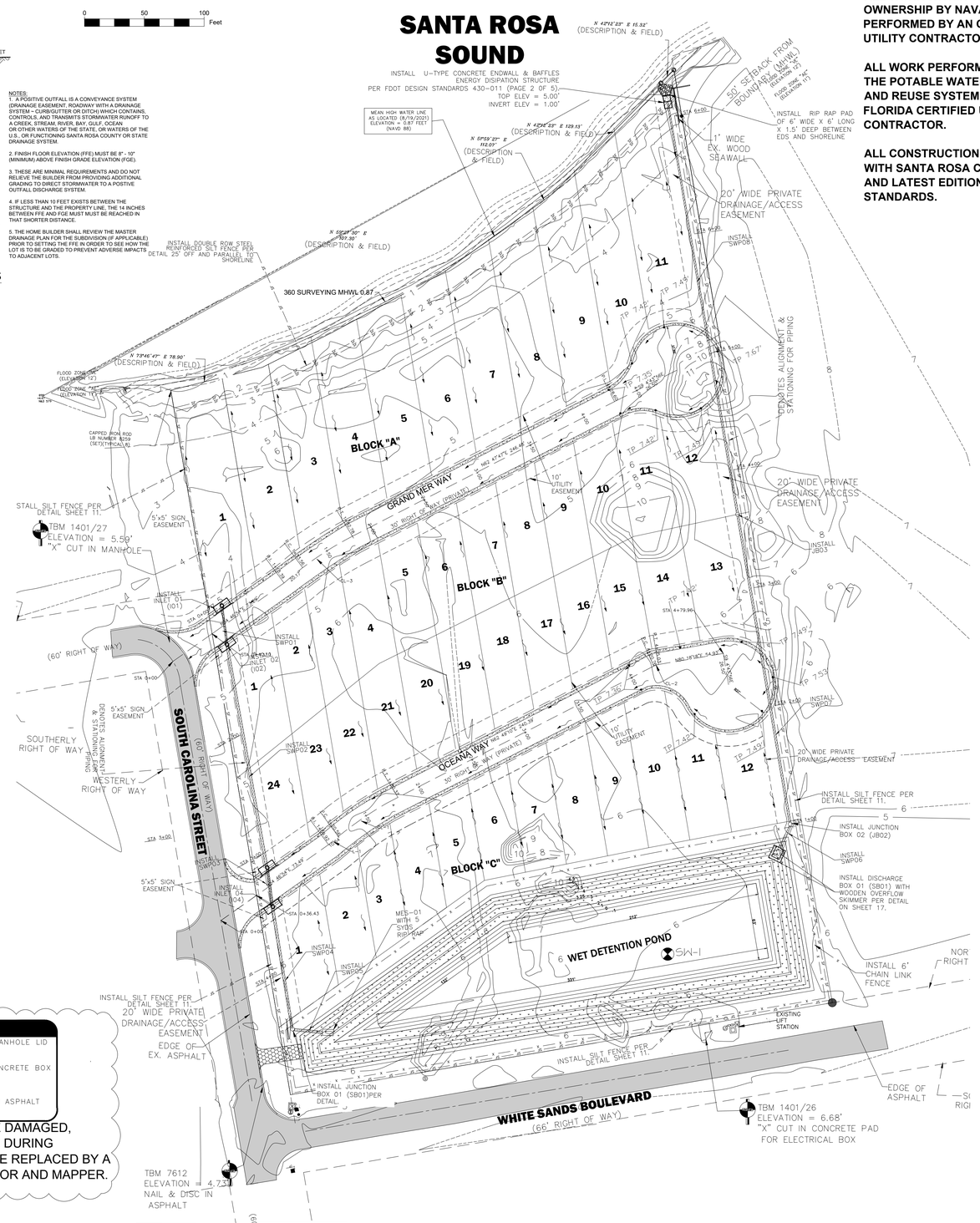
3. THESE ARE MINIMAL REQUIREMENTS AND DO NOT RELIEVE THE BUILDER FROM PROVIDING ADDITIONAL GRADING TO DIRECT STORMWATER TO A POSITIVE OUTFALL DISCHARGE SYSTEM.

4. IF LESS THAN 10 FEET EXISTS BETWEEN THE STRUCTURE AND THE PROPERTY LINE, THE 14 INCHES BETWEEN FFE AND FGE MUST MUST BE REACHED IN THAT SHORTER DISTANCE.

5. THE HOME BUILDER SHALL REVIEW THE MASTER DRAINAGE PLAN FOR THE SUBDIVISION (IF APPLICABLE) PRIOR TO SETTING THE FFE IN ORDER TO SEE HOW THE LOT IS TO BE GRADED TO PREVENT ADVERSE IMPACTS TO ADJACENT LOTS.

HOMEBUILDER LOT GRADING, STORMWATER & EROSION CONTROL PLAN

1. NO CONSTRUCTION ACTIVITIES MAY COMMENCE PRIOR TO SUBMISSION OF APPROVED COPIES OF ALL REQUIRED LOCAL, STATE AND FEDERAL PERMITS TO THE SANTA ROSA COUNTY ENGINEERING OFFICE.
2. HOMEBUILDER IS REQUIRED TO CONSTRUCT AND MAINTAIN, AT ALL TIMES DURING CONSTRUCTION, APPROPRIATE EROSION CONTROL MEASURES (SILT FENCE, HAY BALES, ETC) TO ENSURE THAT NO SEDIMENTS LEAVE THE LOT UNDER CONSTRUCTION OR THE RIGHT-OF-WAY ADJACENT TO THE LOT UNDER CONSTRUCTION. ANY VIOLATIONS COULD RESULT IN CODE ENFORCEMENT ACTION FROM SANTA ROSA COUNTY, FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION OR ENVIRONMENTAL PROTECTION AGENCY.
3. HOMEBUILDER SHALL COMPLY WITH STATE PERMITTING REQUIREMENTS FOR CONSTRUCTION ACTIVITIES. WITHIN THE FIRST 6" OF THE FIRST 10' OF THE HOME SHALL COMPLY WITH CURRENT BUILDING CODES. HOMEBUILDER MUST PROVIDE PROOF OF APPLICATION OF THE NPDES PERMIT WHICH REQUIRES A DETAILED STORMWATER POLLUTION PREVENTION PLAN (SWPPP) BEING AVAILABLE ON-SITE DURING ALL PHASES OF CONSTRUCTION.
4. HOMEBUILDER IS TO ENSURE THAT, AT ALL TIMES DURING CONSTRUCTION, STORMWATER FLOWS FROM AREAS UPSTREAM OF THE LOT UNDER CONSTRUCTION ARE NOT IMPEDED IN ANY WAY. CONSTRUCTION OF SWALES WITHIN THE FRONT, REAR AND SIDE YARDS MAY BE REQUIRED TO ENSURE PRE-DEVELOPMENT DRAINAGE PATTERNS ARE NOT ALTERED. THE CONVEYANCE SWALES SHALL BE BUILT BY THE CONTRACTOR AND TREATMENT OR SIDE YARD SWALES SHALL BE BUILT BY THE HOMEBUILDER. BOTTOM OF SIDE SWALE SHALL BE MINIMUM OF 6" BELOW ADJACENT GRADE.
5. A POSITIVE OUTFALL IS A CONVEYANCE SYSTEM WHICH CONTAINS, CONTROLS AND TRANSMITS STORMWATER RUNOFF TO A CREEK, STREAM, RIVER, BAY, GULF, OCEAN, OTHER WATERS OF THE STATE, WATERS OF THE UNITED STATES OR TO ANY APPROVED SANTA ROSA COUNTY OR FLORIDA DEPARTMENT OF TRANSPORTATION DRAINAGE SYSTEM. OUTFALL DRAINAGE SYSTEM ELIMINATES NEGATIVE IMPACTS TO ADJACENT LOTS AND PROPERTIES.
6. LOT CLEARING ACTIVITIES SHALL NOT PROCEED WITHOUT BUILDING PERMITS FOR THOSE LOTS EXCLUDING CLEARING REQUIRED FOR CONSTRUCTION OF CONVEYANCE SWALES OR DRAINAGE FEATURES DESIGNATED AS THE DEVELOPER'S RESPONSIBILITY.
7. UNTREATED STORMWATER RUNOFF DIRECTLY INTO WATER BODIES OR JURISDICTIONAL WETLANDS IS PROHIBITED.
8. ALL FINISHED FLOOR ELEVATIONS MUST BE A MINIMUM OF 2.5 FEET ABOVE GROUND WATER ELEVATION. AS A GUIDELINE, THE MINIMUM FINISHED HABITABLE FLOOR ELEVATION (FFE) FOR LOTS SHALL TYPICALLY BE 8" (SODDED AROUND BUILDING) OR 10" (UNSODDED) ABOVE FINISHED GRADES OF LOTS, UNLESS OTHERWISE DICTATED BY FLOOD ZONE. FINISHED GRADES SHALL SLOPE FROM THE FOUNDATION 6" WITHIN 10' (5% GRADE), INCLUDING SIDEWALKS, PATIOS AND DRIVEWAYS AND THEN SLOPED AT A MINIMUM 1/16" PER FOOT (0.5% GRADE) TO A POSITIVE OUTFALL (FFE EXCLUDES BASEMENT ELEVATIONS).
9. DISTURBED R/W AREAS NOT PAVED SHALL BE STABILIZED WITH A HEALTHY GROWTH OF BAHIA SOD PRIOR TO RECEIVING CERTIFICATE OF OCCUPANCY. DISTURBED LOT AREAS NOT PAVED SHALL BE STABILIZED WITH SOD PRIOR TO RECEIVING CERTIFICATE OF OCCUPANCY.
10. THESE ARE MINIMUM REQUIREMENTS AND DO NOT RELIEVE THE BUILDER FROM PROVIDING ADDITIONAL GRADING TO DIRECT STORMWATER TO POSITIVE OUTFALL DRAINAGE SYSTEM AND ELIMINATE NEGATIVE IMPACTS TO ADJACENT LOTS AND PROPERTIES.
11. THE HOMEBUILDER SHALL COMPLY WITH STATE PERMITTING REQUIREMENTS FOR LARGE & SMALL CONSTRUCTION SITES,
SPECIFICALLY THE NPDES PERMIT WHICH REQUIRES A DETAILED STORMWATER POLLUTION PREVENTION PLAN (SWPPP) BEING
AVAILABLE ONSITE FOR REVIEW DURING ALL PHASES OF CONSTRUCTION.
12. LOT CLEARING ACTIVITIES SHALL NOT PROCEED WITHOUT BUILDING PERMITS FOR THOSE LOTS EXCLUDING CLEARING REQUIRED FOR CONSTRUCTION OF CONVEYANCE SWALES OR DRAINAGE FEATURES DESIGNATED AS THE DEVELOPER'S RESPONSIBILITY.
13. FENCES SHALL BE INSTALLED NOT TO IMPEDE STORMWATER FLOW.
14. HOME EQUIPMENT (I.E. AC UNITS) SHALL NOT IMPEDE STORMWATER FLOW.
15. LOTS WILL NOT UTILIZE RETAINING WALLS OR OTHER METHODS OR FILL IN THE REAR THAT WILL BLOCK OFFSITE DRAINAGE
16. ALL SWALES ON SITE ARE FOR INDIVIDUAL LOT DRAINAGE. NO COMMON SWALES ARE ANTICIPATED. BUILDING CONTRACTOR IS CONSTRUCT SIDE YARD AND REAR YARD SWALES AS PART OF HOME CONSTRUCTION.
17. FOR ANY RCP (CLASS III) AND A-2000 (DOUBLE GASKET) PIPES THAT ARE LOCATED UNDER STREETS:
A. ONLY RCP (CLASS III) AND A-2000 (DOUBLE GASKET), HPSTORM POLYPROPYLENE ARE ALLOWED UNDER STREETS.
B. NO ADS (HDPE) PIPE WILL BE ALLOWED WITH A DIAMETER GREATER THAN 36 INCHES. (APPLIES TO ALL PIPE.)
C. BACKFILL IN 6 INCH LIFTS.
D. MINIMUM COVER OF 12 INCHES.
E. DENSITY TESTING IS REQUIRED EVERY 2 VERTICAL FEET UP TO THE BOTTOM OF THE SUBGRADE.
F. DENSITY IS TO BE A MINIMUM OF 95% PER AASHTO T180.
G. ALL JOINTS ARE TO BE WRAPPED IN WOVEN FILTER FABRIC.
18. FOR ANY ADS (HDPE) PIPE USED THAT ARE NOT UNDER THE ROADWAYS:
A. ALL ADS (HDPE) PIPE MUST BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS.
B. THE CONTRACTOR MUST PROVIDE PROOF TO THE COUNTY THAT HE IS CERTIFIED BY THE
MANUFACTURER TO INSTALL ADS PIPE.
C. THE COUNTY DOES NOT ALLOW ANY DEFLECTIONS IN THE ADS PIPE ONCE INSTALLED.
19. ALL PIPE JOINTS MUST BE WRAPPED WITH WOVEN FILTER CLOTH.
20. PIPE CONNECTIONS TO STRUCTURES INCLUDE CONCRETE COLLARS.
21. PROVIDE FILTER CLOTH UNDER RIP-RAP.
22. NO CONCRETE BLOCK IS ALLOWED FOR MANHOLES AND INLETS.
23. NO METAL PIPES ALLOWED ON THE SOUTH END OF THE COUNTY.
24. ALL PIPES ARE TO EXTEND TO THE BOTTOM OF THE POND. NO FLUMES ARE ALLOWED.



BENCHMARKS THAT ARE DAMAGED, DESTROYED, OR MOVED DURING CONSTRUCTION MUST BE REPLACED BY A PROFESSIONAL SURVEYOR AND MAPPER.

SEE SHEETS 12-13 FOR ENLARGED LOT GRADING PLANS

NOTE: NO CONCRETE BLOCK ALLOWED FOR MANHOLES AND INLETS.

SEE SHEETS 18 & 19 FOR PROFILES OF PIPES ALONG PROPERTY LINE AND EASEMENTS.

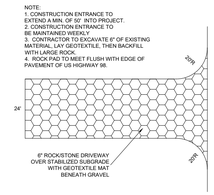
ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF NAVARRE BEACH & SEWER WATER SYSTEM SPECIFICATIONS.

ALL WORK WITHIN THE RIGHT-OF-WAY OR FOR OWNERSHIP BY NAVARRE BEACHSHALL BE PERFORMED BY AN CERTIFIED UNDERGROUND UTILITY CONTRACTOR.

ALL WORK PERFORMED ON THE INSTALLATION OF THE POTABLE WATER, SANITARY SEWER SYSTEM AND REUSE SYSTEM MUST BE DONE BY A FLORIDA CERTIFIED UNDERGROUND UTILITY CONTRACTOR.

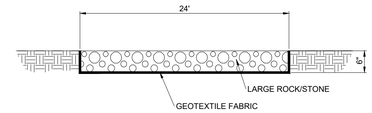
ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH SANTA ROSA COUNTY DESIGN STANDARDS AND LATEST EDITION OF FDOT DESIGN STANDARDS.

NOTE:
1. CONSTRUCTION ENTRANCE TO EXTEND A MIN. OF 50' INTO PROJECT.
2. CONSTRUCTION ENTRANCE TO BE MAINTAINED WEEKLY
3. CONTRACTOR TO EXCAVATE 6" OF EXISTING MATERIAL, LAY GEOTEXTILE, THEN BACKFILL WITH LARGE ROCK
4. ROCK PAD TO MEET FLUSH WITH EDGE OF PAVEMENT OF US HIGHWAY 98.



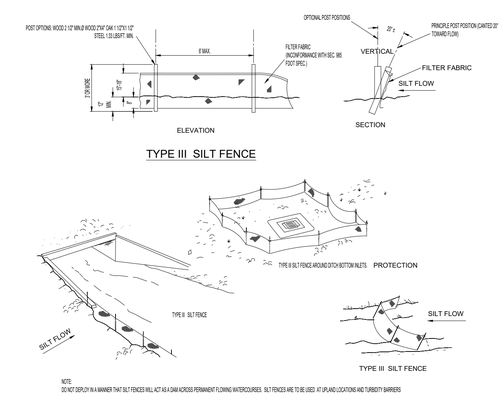
TEMPORARY CONSTRUCTION ENTRANCE DETAIL AT LEWIS PIT

N.T.S.



EROSION CONTROL PAD SECTION

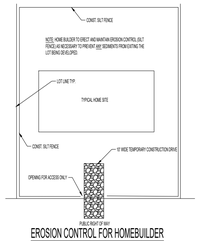
N.T.S.



NOTE:
DO NOT DEPLOY IN A MANNER THAT SILT FENCES WILL ACT AS A DAM ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE USED AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.

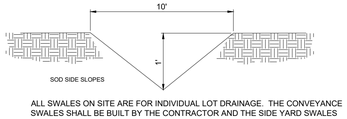
SILT FENCE APPLICATIONS DETAIL

N.T.S.



EROSION CONTROL FOR HOMEBUILDER

N.T.S.



ALL SWALES ON SITE ARE FOR INDIVIDUAL LOT DRAINAGE. THE CONVEYANCE SWALES SHALL BE BUILT BY THE CONTRACTOR AND THE SIDE YARD SWALES SHALL BE BUILT BY THE HOMEBUILDER. CONCRETE SWALES IN DRAINAGE EASEMENTS MUST HAVE A HEAVY RAKED FINISH.

PRIVATE DRAINAGE EASEMENT SWALE DETAIL

N.T.S.

NO.	DATE	REVISIONS
1		
2		
3		
4		

THIS DRAWING IS THE PROPERTY OF JMA ENGINEERING SERVICES, INC. AND IS NOT TO BE REPRODUCED IN WHOLE OR IN PART. IT IS NOT TO BE USED ON ANY OTHER PROJECT AND IS TO BE RETURNED UPON REQUEST.

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WEBSITE: www.mcguire-assoc.com
Gerald W. McGuire-P.E. # 39572
Engineering Business #00006435

MER SEA ON NAVARRE BEACH
STORMWATER PIPING & INLETS
LOT GRADING PLAN (OVERALL)

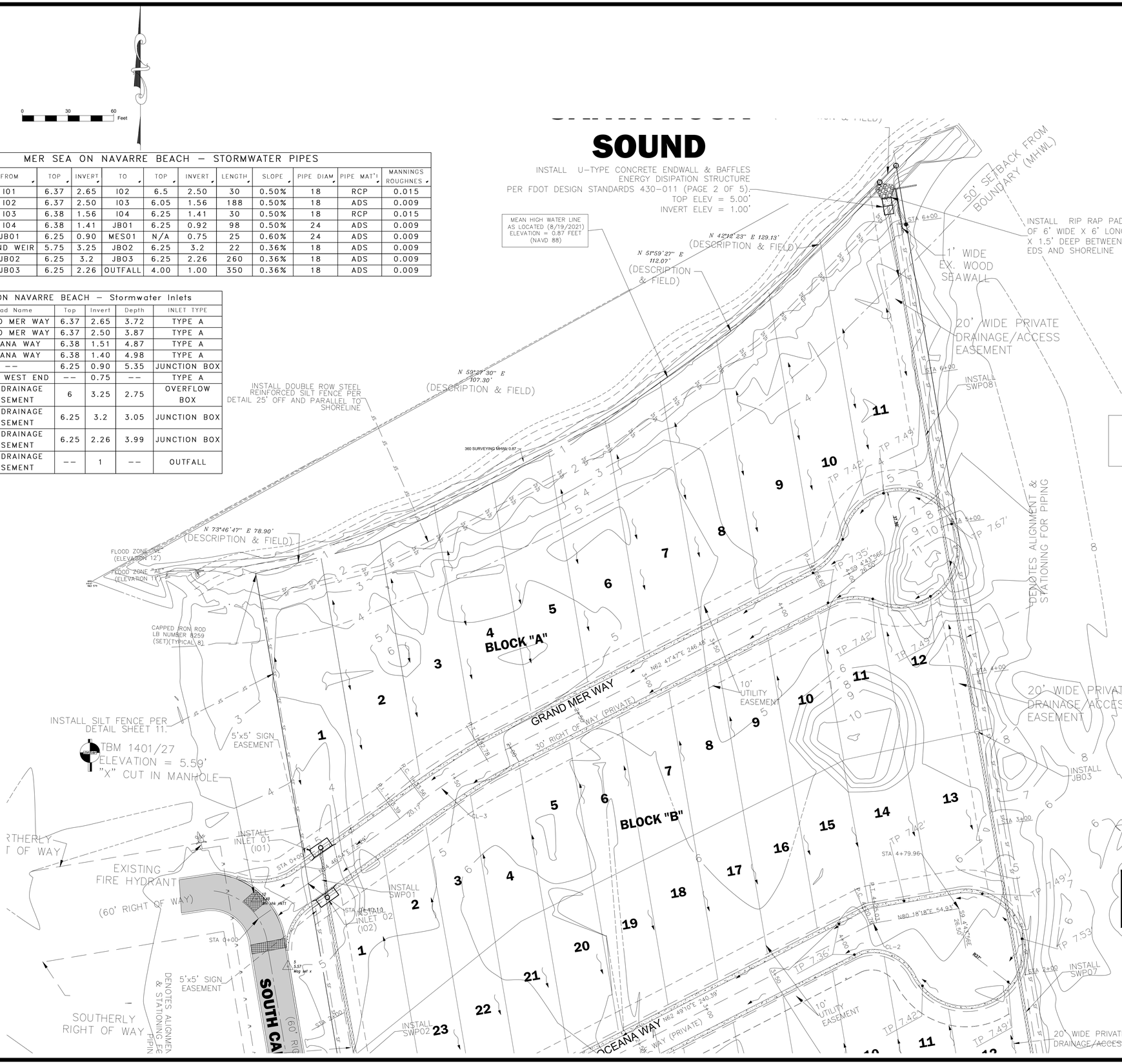
SANTA ROSA COUNTY FLORIDA

DRAWN BY: HAH
DESIGNED BY: GWM
CHECKED BY: GWM
DATE: MAY 2022
SCALE: 1"=50'
NOT RELEASED FOR CONSTRUCTION
BY: GWM DATE:

PROJECT NO: 2022.MERSEA
FILE NO: 2022.MERSEA
SHEET: 11 OF 23

MER SEA ON NAVARRE BEACH – STORMWATER PIPES												
PIPE #	cfs	FROM	TOP	INVERT	TO	TOP	INVERT	LENGTH	SLOPE	PIPE DIAM	PIPE MAT'L	MANNINGS ROUGHNES
SWP01	3.30	I01	6.37	2.65	I02	6.5	2.50	30	0.50%	18	RCP	0.015
SWP02	7.46	I02	6.37	2.50	I03	6.05	1.56	188	0.50%	18	ADS	0.009
SWP03	11.74	I03	6.38	1.56	I04	6.25	1.41	30	0.50%	18	RCP	0.015
SWP04	14.50	I04	6.38	1.41	JB01	6.25	0.92	98	0.50%	24	ADS	0.009
SWP05	14.50	JB01	6.25	0.90	MES01	N/A	0.75	25	0.60%	24	ADS	0.009
SWP06	4.90	POND WEIR	5.75	3.25	JB02	6.25	3.2	22	0.36%	18	ADS	0.009
SWP07	4.90	JB02	6.25	3.2	JB03	6.25	2.26	260	0.36%	18	ADS	0.009
SWP08	4.90	JB03	6.25	2.26	OUTFALL	4.00	1.00	350	0.36%	18	ADS	0.009

MER SEA ON NAVARRE BEACH – Stormwater Inlets					
Inlet #	Road Name	Top	Invert	Depth	INLET TYPE
I01	GRAND MER WAY	6.37	2.65	3.72	TYPE A
I02	GRAND MER WAY	6.37	2.50	3.87	TYPE A
I03	OCEANA WAY	6.38	1.51	4.87	TYPE A
I04	OCEANA WAY	6.38	1.40	4.98	TYPE A
JB01	--	6.25	0.90	5.35	JUNCTION BOX
MES01	POND WEST END	--	0.75	--	TYPE A
OVERFLOW BOX	20' DRAINAGE EASEMENT	6	3.25	2.75	OVERFLOW BOX
JB02	20' DRAINAGE EASEMENT	6.25	3.2	3.05	JUNCTION BOX
JB03	20' DRAINAGE EASEMENT	6.25	2.26	3.99	JUNCTION BOX
OUTFALL	20' DRAINAGE EASEMENT	--	1	--	OUTFALL



ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF NAVARRE BEACH & SEWER WATER SYSTEM SPECIFICATIONS.

ALL WORK WITHIN THE RIGHT-OF-WAY OR FOR OWNERSHIP BY NAVARRE BEACHSHALL BE PERFORMED BY AN CERTIFIED UNDERGROUND UTILITY CONTRACTOR.

ALL WORK PERFORMED ON THE INSTALLATION OF THE POTABLE WATER, SANITARY SEWER SYSTEM AND REUSE SYSTEM MUST BE DONE BY A FLORIDA CERTIFIED UNDERGROUND UTILITY CONTRACTOR.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH SANTA ROSA COUNTY DESIGN STANDARDS AND LATEST EDITION OF FDOT DESIGN STANDARDS.

NOTE: NO CONCRETE BLOCK ALLOWED FOR MANHOLES AND INLETS.

SEE SHEETS 18 & 19 FOR PROFILE OF PIPES ALONG EAST AND WEST PROPERTY LINES AND EASEMENTS.

BM#1: 1401/27 "X" CUT IN MANHOLE LID ELEVATION = 5.59'

BM#2: 1401/26 "X" CUT IN CONCRETE BOX FOR ELECTRICAL PAD ELEVATION = 6.68'

BM#3: 7612 NAIL AND DISC IN ASPHALT ELEVATION = 4.73'

BENCHMARKS THAT ARE DAMAGED, DESTROYED, OR MOVED DURING CONSTRUCTION MUST BE REPLACED BY A PROFESSIONAL SURVEYOR AND MAPPER.

Centerline Line Table		
Line #	Length	Direction
L1	10.64'	N50°33'49"E
L2	20.17'	N50°30'13"E

Centerline Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
CL-1	59.81'	279.63'	12°15'21"	N56°41'29"E	59.70'
CL-2	4.27'	14.00'	17°29'08"	N71°33'44"E	4.26'
CL-3	49.22'	279.63'	10°05'10"	N57°45'12"E	49.16'

CENTERLINE ROAD DATA

SIDEWALK NOTE:
SIDEWALKS SHALL BE REGULATED BY SECTION 4.03.03.B.3G THE SANTA ROSA COUNTY LAND DEVELOPMENT CODE.

NO.	DATE	REVISIONS
1	5-26-2023	REV. PER WMD & COUNTY COMMENT
2		
3		
4		

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WEBSITE: www.mcguire-assoc.com
Gerald W. McGuire-P.E. # 39572
Engineering Business #00006435

MER SEA ON NAVARRE BEACH

STORMWATER DRAINAGE (1 OF 2)

SANTA ROSA COUNTY FLORIDA

DRAWN BY: HAH
DESIGNED BY: GWM
CHECKED BY: GWM
DATE: MAY 2022
SCALE: 1"=30'
NOT RELEASED FOR CONSTRUCTION
BY: GWM DATE:

PROJECT NO: 2022.MERSEA
FILE NO: 2022.MERSEA
SHEET: 12 OF 23

MER SEA ON NAVARRE BEACH – Stormwater Inlets					
Inlet #	Road Name	Top	Invert	Depth	INLET TYPE
I01	GRAND MER WAY	6.37	2.65	3.72	TYPE A
I02	GRAND MER WAY	6.37	2.50	3.87	TYPE A
I03	OCEANA WAY	6.38	1.51	4.87	TYPE A
I04	OCEANA WAY	6.38	1.40	4.98	TYPE A
JB01	--	6.25	0.90	5.35	JUNCTION BOX
MES01	POND WEST END	--	0.75	--	TYPE A
OVERFLOW BOX	20' DRAINAGE EASEMENT	6	3.25	2.75	OVERFLOW BOX
JB02	20' DRAINAGE EASEMENT	6.25	3.2	3.05	JUNCTION BOX
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OUTFALL	20' DRAINAGE EASEMENT	--	1	--	OUTFALL

MER SEA ON NAVARRE BEACH – STORMWATER PIPES												
PIPE #	cfs	FROM	TOP	INVERT	TO	TOP	INVERT	LENGTH	SLOPE	PIPE DIAM	PIPE MAT'L	MANNINGS ROUGHNES
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SWP02	7.46	I02	6.37	2.50	I03	6.05	1.56	188	0.50%	18	ADS	0.009
SWP03	11.74	I03	6.38	1.56	I04	6.25	1.41	30	0.50%	18	RCP	0.015
SWP04	14.50	I04	6.38	1.41	JB01	6.25	0.92	98	0.50%	24	ADS	0.009
SWP05	14.50	JB01	6.25	0.90	MES01	N/A	0.75	25	0.60%	24	ADS	0.009
SWP06	4.90	POND WEIR	5.75	3.25	JB02	6.25	3.2	22	0.36%	18	ADS	0.009
SWP07	4.90	JB02	6.25	3.2	JB03	6.25	2.26	260	0.36%	18	ADS	0.009
SWP08	4.90	JB03	6.25	2.26	OUTFALL	4.00	1.00	350	0.36%	18	ADS	0.009

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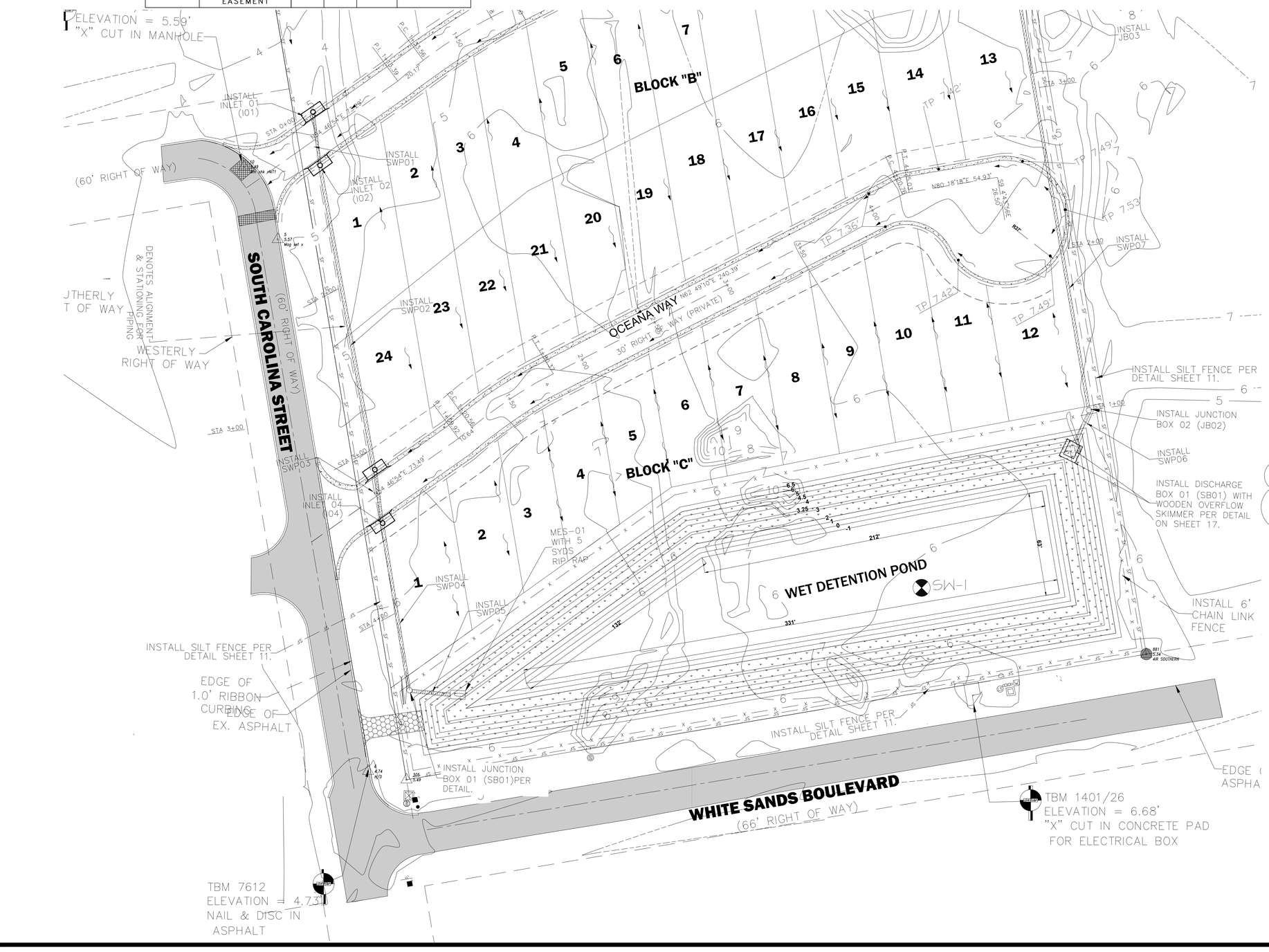

BM#1: 1401/27 "X" CUT IN MANHOLE LID
ELEVATION = 5.59'

BM#2: 1401/26 "X" CUT IN CONCRETE BOX FOR ELECTRICAL PAD
ELEVATION = 6.68'

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SIDEWALK NOTE:
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Centerline Line Table		
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Centerline Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
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CL-3	49.22'	279.63'	10°05'10"	N57°45'12"E	49.16'

CENTERLINE ROAD DATA

NO.	DATE	REVISIONS
1	5-26-2023	REV. PER WMD & COUNTY COMMENTS
2		
3		
4		

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Gerald W. McGuire-P.E. # 39572
Engineering Business #00006435

MER SEA ON NAVARRE BEACH

STORMWATER DRAINAGE PLAN (2 OF 2)

SANTA ROSA COUNTY FLORIDA

DRAWN BY: HAH
DESIGNED BY: GWM
CHECKED BY: GWM
DATE: MAY 2022
SCALE: 1"=30'
NOT RELEASED FOR CONSTRUCTION
BY: GWM **DATE:**

PROJECT NO: 2022.MERSEA
FILE NO: 2022.MERSEA
SHEET: 13 OF 23

DIMENSIONS & QUANTITIES

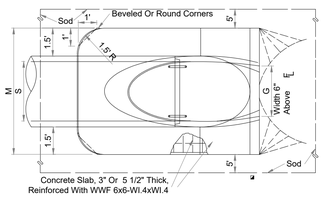
	Rise R	Span S	X	A	B	C	E	F	G	M Single Pipe	M Double Pipe	M Triple Pipe	M Quad. Pipe	N	3" CONC. SLAB (CY) Single Pipe	3" CONC. SLAB (CY) Double Pipe	3" CONC. SLAB (CY) Triple Pipe	3" CONC. SLAB (CY) Quad. Pipe	SODDING (SQ. YDS.) Single Pipe	SODDING (SQ. YDS.) Double Pipe	SODDING (SQ. YDS.) Triple Pipe	SODDING (SQ. YDS.) Quad. Pipe
2:1 Slope	12"	18"	2'-10"	1.97'	1.62'	3.59'	1.56'	4'	1.50'	4.92'	7.75'	10.58'	13.42'	1.21'	0.19	0.33	0.45	0.57	21	24	27	30
	14"	23"	3'-4"	2.01'	1.99'	4.00'	1.89'	5'	1.90'	5.38'	8.71'	12.04'	15.38'	1.23'	0.25	0.40	0.55	0.69	22	26	29	33
	19"	30"	4'-0"	2.11'	2.92'	5.03'	2.73'	6'	2.37'	6.04'	10.04'	14.04'	18.04'	1.27'	0.34	0.55	0.75	0.95	24	28	33	37
	24"	38"	5'-0"	2.20'	3.85'	6.05'	3.56'	7'	2.85'	6.79'	11.79'	16.79'	21.79'	1.31'	0.43	0.71	1.00	1.28	26	31	37	42
	29"	45"	5'-11"	2.34'	4.79'	7.13'	4.39'	8'	3.19'	7.50'	13.42'	19.33'	25.25'	1.38'	0.52	0.90	1.27	1.65	28	34	41	47
	34"	53"	7'-0"	2.43'	5.72'	8.15'	5.23'	9'	3.57'	8.25'	15.25'	22.25'	29.25'	1.42'	0.62	1.11	1.60	2.09	30	37	45	53
	38"	60"	7'-10"	2.52'	6.46'	8.98'	5.89'	9'	3.95'	8.92'	16.75'	24.58'	32.42'	1.46'	0.70	1.29	1.87	2.46	31	40	49	57
	43"	68"	8'-11"	2.62'	7.39'	10.01'	6.73'	10'	4.28'	9.67'	18.58'	27.50'	36.42'	1.50'	0.81	1.54	2.26	2.99	33	43	53	63
	48"	76"	9'-11"	2.71'	8.33'	11.04'	7.56'	11'	4.59'	10.42'	20.33'	30.25'	40.17'	1.54'	0.93	1.79	2.66	3.53	35	46	57	68
	53"	83"	10'-8"	2.80'	9.26'	12.06'	8.39'	12'	4.77'	11.08'	21.75'	32.42'	43.08'	1.58'	1.04	2.04	3.03	4.02	37	49	61	73
	58"	91"	11'-6"	2.90'	10.19'	13.09'	9.23'	13'	5.01'	11.83'	23.50'	35.17'	46.83'	1.63'	1.17	2.33	3.49	4.66	39	52	65	78
4:1 Slope	12"	18"	2'-10"	2.36'	3.06'	5.42'	3.03'	5'	1.50'	4.92'	7.75'	10.58'	13.42'	1.21'	0.30	0.45	0.61	0.76	23	26	29	32
	14"	23"	3'-4"	2.44'	3.75'	6.19'	3.70'	6'	1.90'	5.38'	8.71'	12.04'	15.38'	1.23'	0.36	0.56	0.76	0.95	24	28	32	35
	19"	30"	4'-0"	2.62'	5.47'	8.09'	5.36'	8'	2.37'	6.04'	10.04'	14.04'	18.04'	1.27'	0.51	0.79	1.08	1.36	27	32	36	40
	24"	38"	5'-0"	2.79'	7.18'	9.97'	7.03'	10'	2.85'	6.79'	11.79'	16.79'	21.79'	1.31'	0.68	1.10	1.53	1.96	30	36	41	47
	29"	45"	5'-11"	3.05'	8.90'	11.95'	8.70'	12'	3.19'	7.50'	13.42'	19.33'	25.25'	1.38'	0.86	1.45	2.04	2.63	33	40	46	53
	34"	53"	7'-0"	3.22'	10.62'	13.84'	10.36'	13'	3.57'	8.25'	15.25'	22.25'	29.25'	1.42'	1.02	1.81	2.60	3.39	36	44	52	59
	38"	60"	7'-10"	3.39'	11.99'	15.38'	11.70'	15'	3.95'	8.92'	16.75'	24.58'	32.42'	1.46'	1.18	2.14	3.10	4.05	38	47	56	65
	43"	68"	8'-11"	3.56'	13.71'	17.27'	13.36'	17'	4.28'	9.67'	18.58'	27.50'	36.42'	1.50'	1.38	2.58	3.79	4.99	41	51	61	71
	48"	76"	9'-11"	3.73'	15.43'	19.16'	15.03'	19'	4.59'	10.42'	20.33'	30.25'	40.17'	1.54'	1.59	3.05	4.51	5.97	44	55	66	77
	53"	83"	10'-8"	3.91'	17.15'	21.06'	16.70'	20'	4.77'	11.08'	21.75'	32.42'	43.08'	1.58'	1.80	3.50	5.19	6.88	47	59	71	83
	58"	91"	11'-8"	4.08'	18.87'	22.95'	18.36'	22'	5.01'	11.83'	23.50'	35.17'	46.83'	1.63'	2.04	4.04	6.05	8.05	50	63	76	89

◪ See General Note No. 3.
◪ See Sheet 5 Of 6 For 5 1/2" Slab Quantities

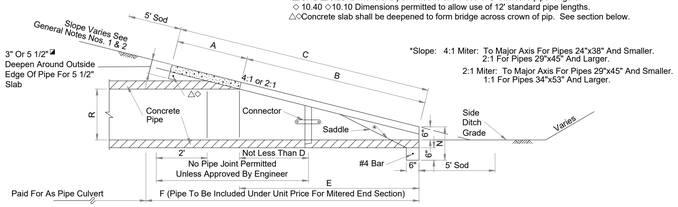
NOTE: See Sheet 6 For Details And Notes.

△6.42 △6.25 Dimensions permitted to allow use of 8' standard pipe lengths.
◇10.40 ◇10.10 Dimensions permitted to allow use of 12' standard pipe lengths.
△◇Concrete slab shall be deepened to form bridge across crown of pip. See section below.

*Slope: 4:1 Miter: To Major Axis For Pipes 24"x38" And Smaller.
2:1 For Pipes 29"x45" And Larger.
2:1 Miter: To Major Axis For Pipes 29"x45" And Smaller.
1:1 For Pipes 34"x53" And Larger.



TOP VIEW-SINGLE PIPE

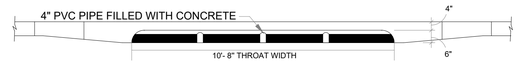


SECTION

CROSS DRAIN MITERED END SECTION

N.T.S.

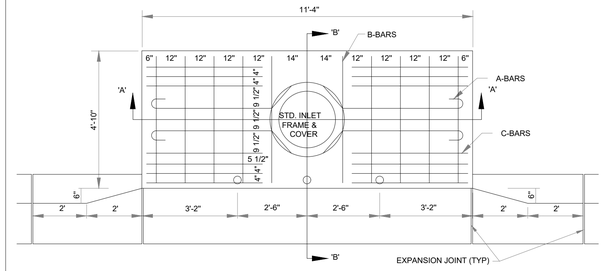
NO CONCRETE BLOCK ALLOWED FOR MANHOLES AND INLETS.



TYPE 'A' INLET THROAT ELEVATION

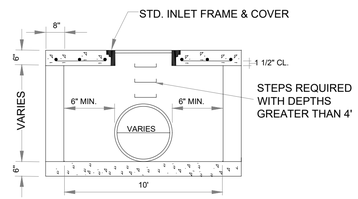
N.T.S.

ALL STORM INLETS, MANHOLES AND JUNCTION BOXES DEEPER THAN 4' SHALL HAVE STEPS IN ACCORDANCE WITH THE LATEST ESCAMBIA COUNTY TECHNICAL STANDARDS.



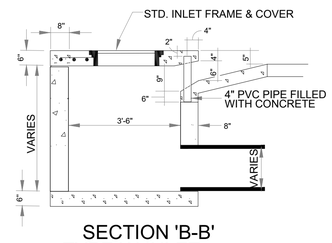
TYPE 'A' INLET PLAN VIEW

N.T.S.



SECTION 'A-A' TYPE 'A' INLET

N.T.S.



SECTION 'B-B' TYPE 'A' INLET

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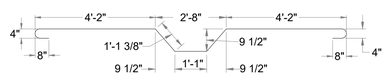
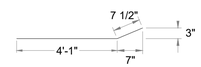


A-BAR BENDING DETAIL

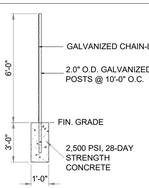
N.T.S.



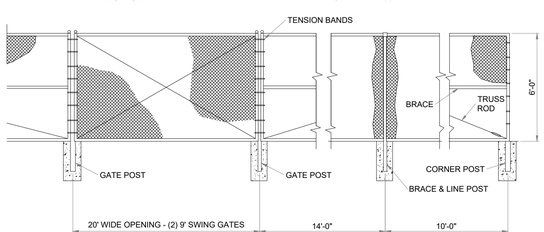
B-BAR BENDING DETAIL

N.T.S.

PIPE CONNECTIONS TO STRUCTURES INCLUDE CONCRETE COLLARS.



FENCE SPECIFICATIONS:
FABRIC: K & K, 2" X 9 GUAGE, 2 OZ. G.A.W.
TOP RAIL: 1-5/8" O.D. SS20
LINE POST: 2" O.D. SS20
TERM POST: 3" O.D. SS20
GATE POST: 3" O.D. SS20
DRIVE GATE POST: 4" O.D. SS20
GATEGRAME: 1-5/8" O.D. W/ CENTER BRACE SS20
DRIVE GATEFRAME: 2" O.D. SS20
TIES: 9 GUAGE ALUMINUM
TENSION WIRE: 7 GUAGE SPRING STEEL
ALL CAPS AND HARDWARE: GALVANIZED STEEL
POST SETTING: 10' ON CENTER AND FULL DEPTH IN CONCRETE OF 2500 PSI
CORNER BRACING AND TIES: 18" ON CENTER
POST DEPTH: LINEPOST 6" X 36", CORNERS 8" X 36", GATES 12" X 36"

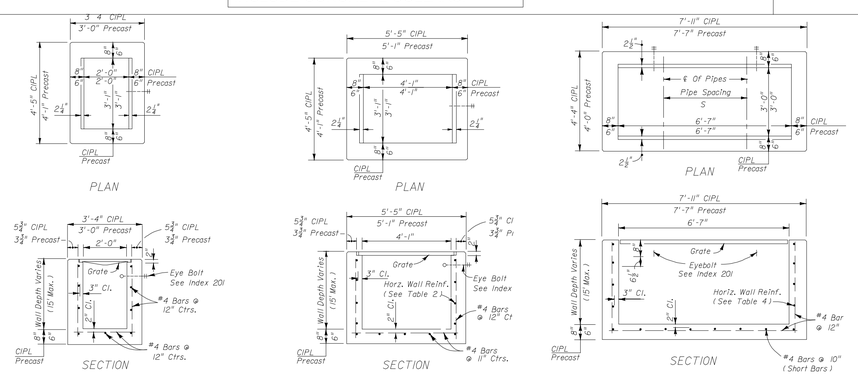


STRAIGHT RUNS REQUIRED WITH TERMINAL POSTS AT ALL TURNS

NOTES:
-CHAINLINK FENCE SHALL SATISFY ALL APPLICABLE SANTA ROSA COUNTY SPECIFICATIONS.
-DEVELOPER TO PROVIDE LOCK AND CHAIN. COUNTY WILL SWAP LOCK AT ACCEPTANCE.

CHAIN LINK FENCE DETAIL

N.T.S.



HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 1)

WALL DEPTH	SCHEDULE	AREA (in^2/ft)	MAX. SPACING BARS	MAX. SPACING WWF
0'-15'	A12	0.20	12"	8"

TYPE C

Recommended Maximum Pipe Size:
2'-0" Wall - 18" Pipe
3'-1" Wall - 24" Pipe (18" where an 18" pipe enters a 2'-0" wall)

HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 2)

WALL DEPTH	SCHEDULE	AREA (in^2/ft)	MAX. SPACING BARS	MAX. SPACING WWF
0'-6'	A12	0.20	12"	8"
6'-10'	A6	0.20	6"	5"
10'-13'	A4	0.20	4"	3"
10'-15'	B5.5	0.24	$5\frac{1}{2}$"	5"

TYPE D

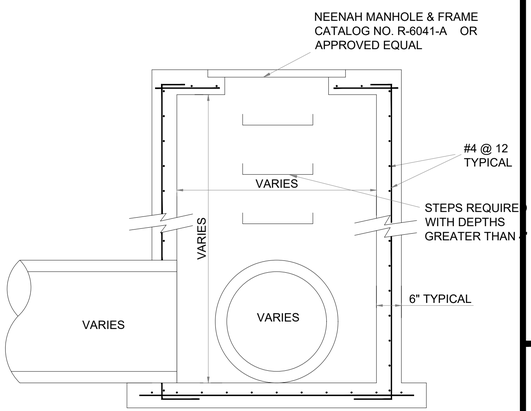
Recommended Maximum Pipe Size:
3'-1" Wall - 24" Pipe
4'-1" Wall - 36" Pipe

HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 4)

WALL DEPTH	SCHEDULE	AREA (in^2/ft)	MAX. SPACING BARS	MAX. SPACING WWF
0'-5'	B5.5	0.24	$5\frac{1}{2}$"	5"
5'-7'	C6.5	0.37	$6\frac{1}{2}$"	6"
7'-15'	D4.5	0.53	$4\frac{1}{2}$"	4"

TYPE H (2 & 3-GRATE INLET)

Recommended Maximum Pipe Size:
3'-0" Wall - 24" Pipe
6'-7" Wall - 1-60" Pipe
Or 2-24" Pipe (S=3'-5")



TYPICAL JUNCTION BOX DETAIL

N.T.S.

NO.	DATE	REVISIONS
1		
2		
3		
4		

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WEBSITE: www.mcguire-assoc.com
Gerald W. McGuire-P.E. # 39572
Engineering Business #00006435

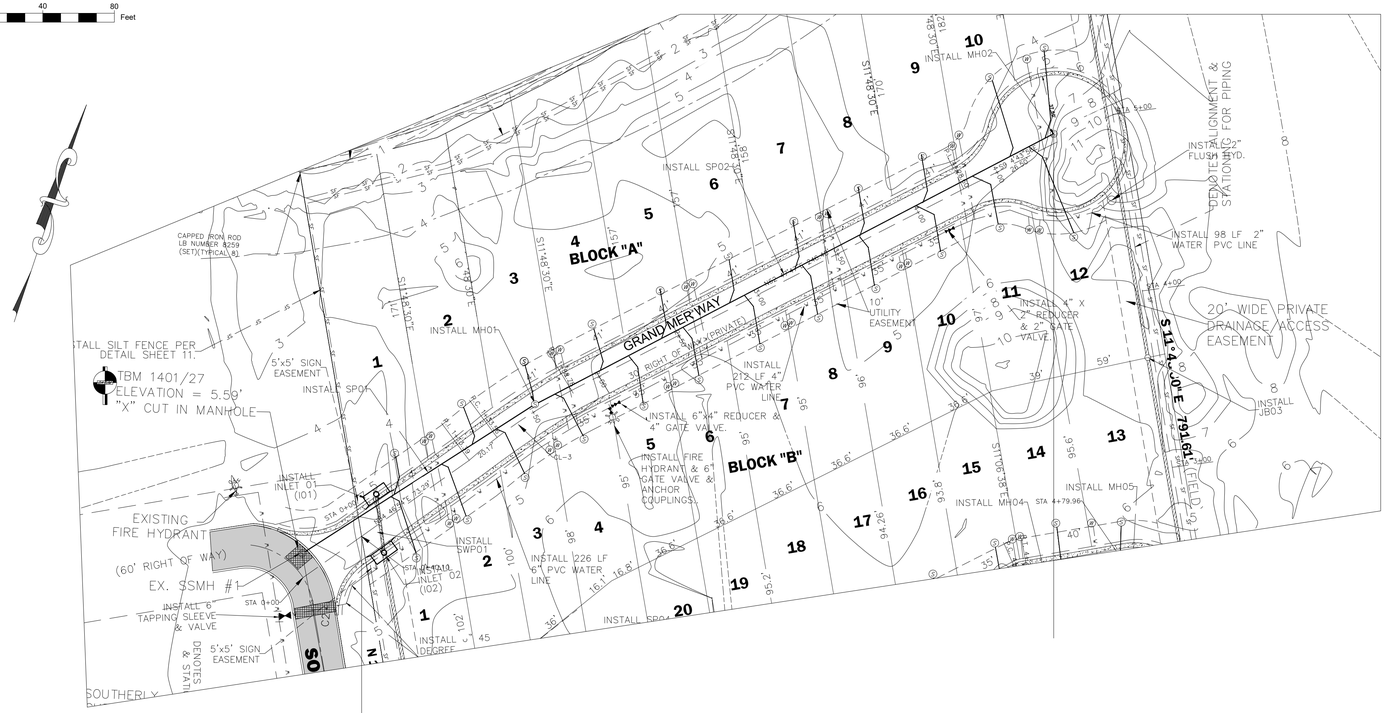
MER SEA ON NAVARRE BEACH

STORMWATER DETAILS

SANTA ROSA COUNTY FLORIDA

DRAWN BY: HAH
DESIGNED BY: GWM
CHECKED BY: GWM
DATE: MAY 2022
SCALE: N.T.S.
NOT RELEASED FOR CONSTRUCTION
BY: GWM DATE:

PROJECT NO: 2022.MERSEA
FILE NO: 2022.MERSEA
SHEET: 14 OF 23



ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF NAVARRE BEACH & SEWER WATER SYSTEM SPECIFICATIONS.

ALL WORK WITHIN THE RIGHT-OF-WAY OR FOR OWNERSHIP BY NAVARRE BEACHSHALL BE PERFORMED BY AN CERTIFIED UNDERGROUND UTILITY CONTRACTOR.

ALL WORK PERFORMED ON THE INSTALLATION OF THE POTABLE WATER, SANITARY SEWER SYSTEM AND REUSE SYSTEM MUST BE DONE BY A FLORIDA CERTIFIED UNDERGROUND UTILITY CONTRACTOR.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH SANTA ROSA COUNTY DESIGN STANDARDS AND LATEST EDITION OF FDOT DESIGN STANDARDS.

BM#1: 1401/27 "X" CUT IN MANHOLE LID
ELEVATION = 5.59'

BM#2: 1401/26 "X" CUT IN CONCRETE BOX FOR ELECTRICAL PAD
ELEVATION = 6.68'

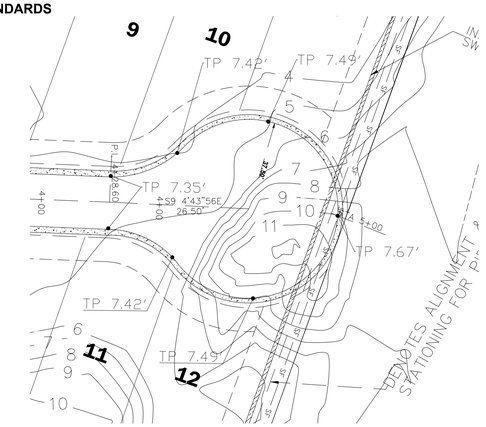
BM#3: 7612 NAIL AND DISC IN ASPHALT
ELEVATION = 4.73'

BENCHMARKS THAT ARE DAMAGED, DESTROYED, OR MOVED DURING CONSTRUCTION MUST BE REPLACED BY A PROFESSIONAL SURVEYOR AND MAPPER.

Centerline Line Table		
Line #	Length	Direction
L1	10.64'	N50°33'49"E
L2	20.17'	N50°30'13"E

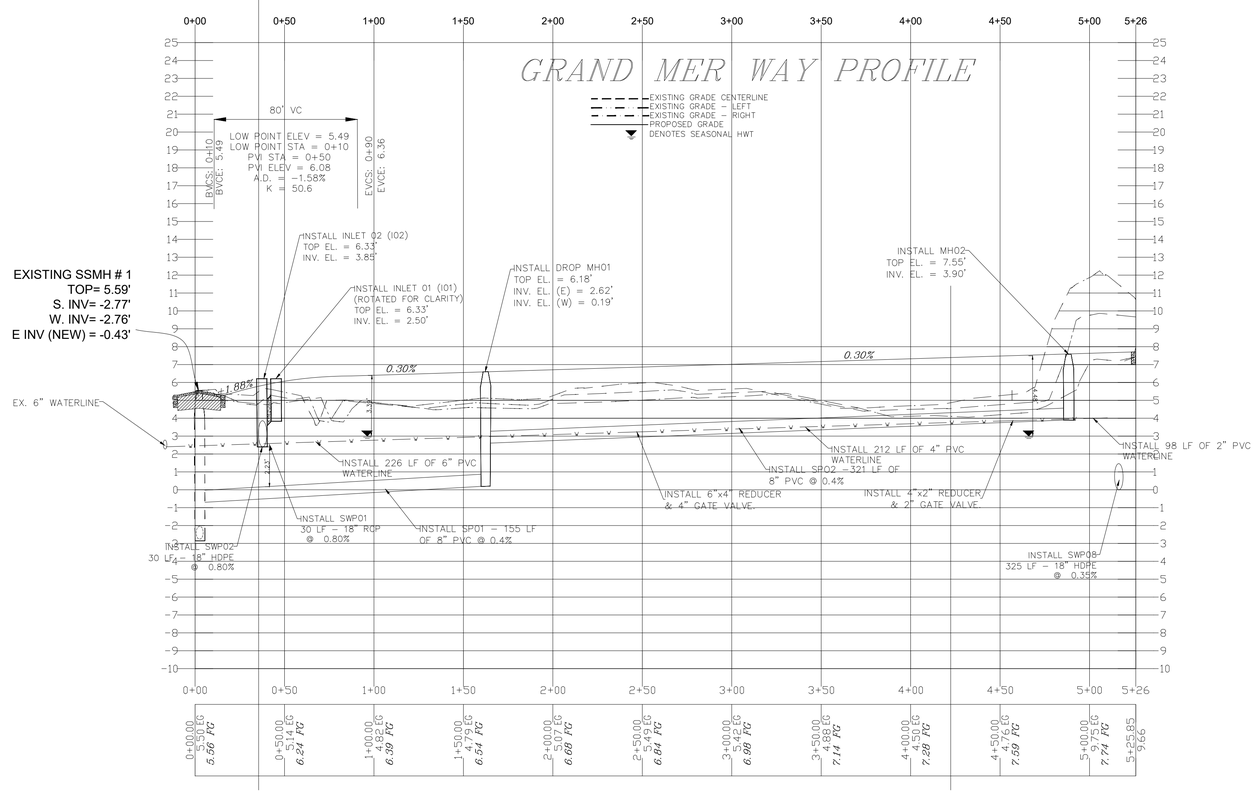
Centerline Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
CL-1	59.81'	279.63'	12°15'21"	N56°41'29"E	59.70'
CL-2	4.27'	14.00'	17°29'08"	N71°33'44"E	4.26'
CL-3	49.22'	279.63'	10°05'10"	N57°45'12"E	49.16'

CENTERLINE ROAD DATA



CUL-DE-SAC SPOT ELEVATIONS

SCALE: 1" 30'



MER SEA ON NAVARRE BEACH – STORMWATER PIPES												
PIPE #	cfs	FROM	TOP	INVERT	TO	TOP	INVERT	LENGTH	SLOPE	PIPE DIAM	PIPE MAT'l	MANNINGS ROUGHNES
SWP01	3.30	I01	6.37	2.65	I02	6.5	2.50	30	0.50%	18	RCP	0.015
SWP02	7.46	I02	6.37	2.50	I03	6.05	1.56	188	0.50%	18	ADS	0.009
SWP03	11.74	I03	6.38	1.56	I04	6.25	1.41	30	0.50%	18	RCP	0.015
SWP04	14.50	I04	6.38	1.41	JB01	6.25	0.92	98	0.50%	24	ADS	0.009
SWP05	14.50	JB01	6.25	0.90	MES01	N/A	0.75	25	0.60%	24	ADS	0.009
SWP06	4.90	POND WEIR	5.75	3.25	JB02	6.25	3.2	22	0.36%	18	ADS	0.009
SWP07	4.90	JB02	6.25	3.2	JB03	6.25	2.26	260	0.36%	18	ADS	0.009
SWP08	4.90	JB03	6.25	2.26	OUTFALL	4.00	1.00	350	0.36%	18	ADS	0.009

MER SEA ON NAVARRE BEACH – Stormwater Inlets					
Inlet #	Road Name	Top	Invert	Depth	INLET TYPE
I01	GRAND MER WAY	6.37	2.65	3.72	TYPE A
I02	GRAND MER WAY	6.37	2.50	3.87	TYPE A
I03	OCEANA WAY	6.38	1.51	4.87	TYPE A
I04	OCEANA WAY	6.38	1.40	4.98	TYPE A
JB01	--	6.25	0.90	5.35	JUNCTION BOX
MES01	POND WEST END	--	0.75	--	TYPE A
OVERFLOW BOX	20' DRAINAGE EASEMENT	6	3.25	2.75	OVERFLOW BOX
JB02	20' DRAINAGE EASEMENT	6.25	3.2	3.05	JUNCTION BOX
JB03	20' DRAINAGE EASEMENT	6.25	2.26	3.99	JUNCTION BOX
OUTFALL	20' DRAINAGE EASEMENT	--	1	--	OUTFALL

MER SEA ON NAVARRE BEACH Subdivision – Gravity Sewer Pipes							
Sewer Pipe #	From MH#	Invert	To MH#	Invert	Size	Length	Slope
SP01	MH01	0.19	EXMH01	–0.43	8"	155	0.4%
SP02	MH02	3.90	MH01	2.62	8"	321	0.4%
SP03	MH03	0.93	EXMH02	0.24	8"	173	0.4%
SP04	MH04	3.18	MH03	2.19	8"	248	0.4%
SP05	MH05	3.40	MH04	3.18	8"	56	0.4%
						798	

MER SEA ON NAVARRE BEACH – SS MH					
Manhole #	Street	Top	INV. (E)	INV. (W)	DEPTH
MH01	GRAND MER WAY	6.18		2.62	3.56
MH02	GRAND MER WAY	7.55	–	3.90	3.65
MH03	OCEANA WAY	6.72	1.43	0.93	5.79
MH04	OCEANA WAY	7.46	3.18	3.18	4.28
MH05	OCEANA WAY	7.63	–	3.40	4.23

NO.	DATE	REVISIONS
1	5-26-2023	REV. PER VMD & COUNTY COMMENT
2		
3		
4		

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Gerald W. McGuire-P.E. # 39572
Engineering Business #00006435

MER SEA ON NAVARRE BEACH
GRAND MER WAY
STA 0+00 TO STA 5+26

SANTA ROSA COUNTY FLORIDA

DRAWN BY: HAH
DESIGNED BY: GWM
CHECKED BY: GWM
DATE: MAY 2022
SCALE: 1"=40'
NOT RELEASED FOR CONSTRUCTION
BY: GWM DATE:

PROJECT NO: 2022.MERSEA
FILE NO: 2022.MERSEA
SHEET: 15 OF 23

0 40 80 Feet

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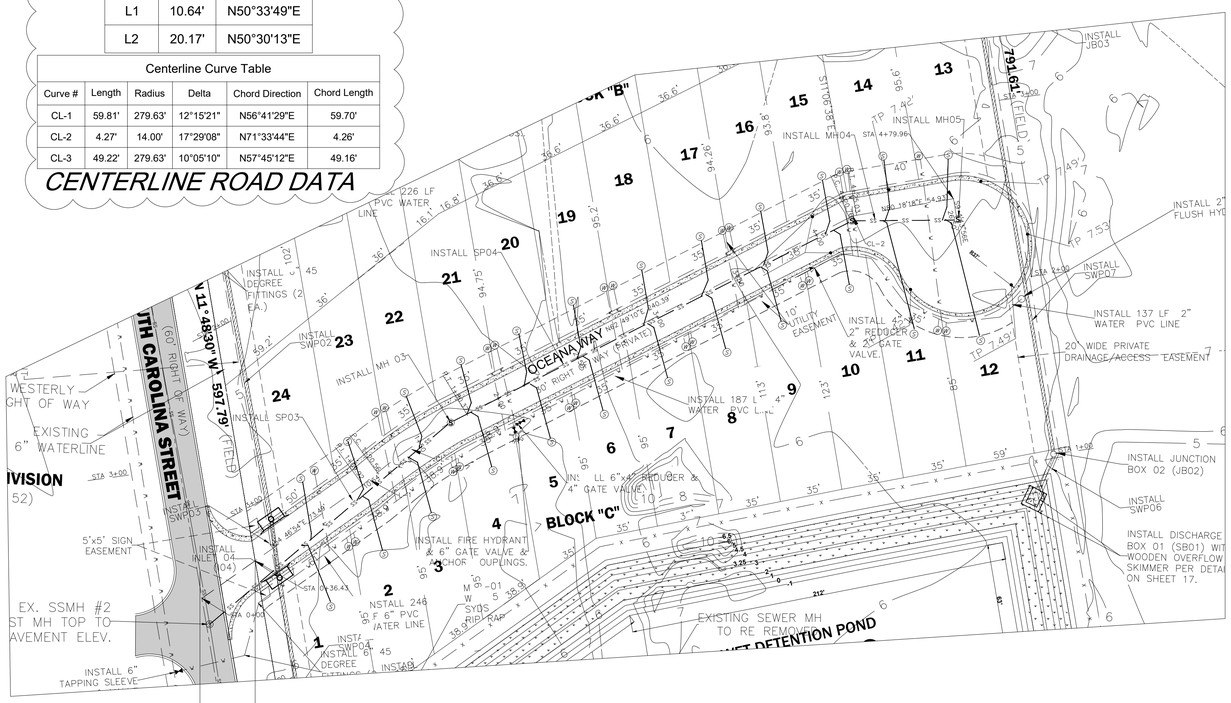

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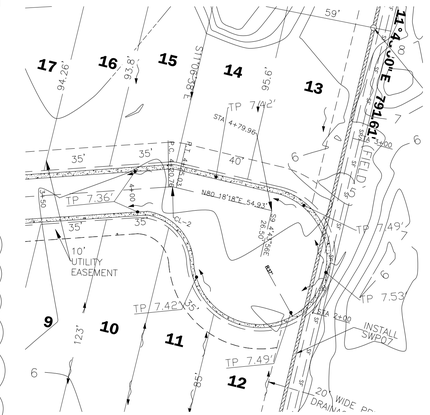

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SCALE: 1" 30'

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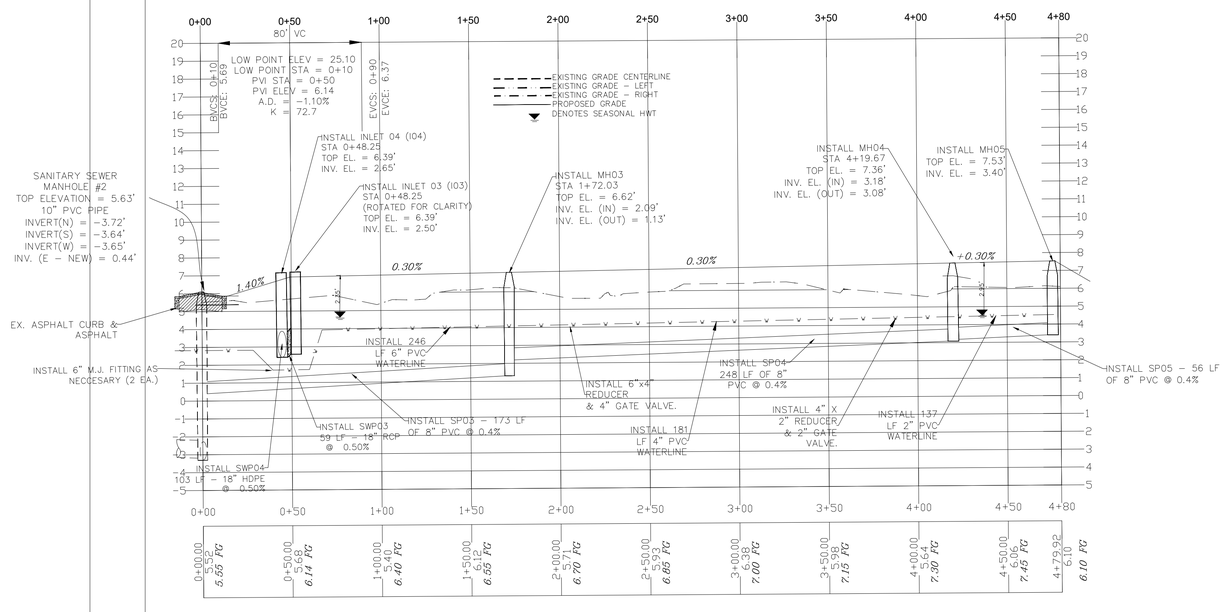
OUTFALL	20' DRAINAGE EASEMENT	--	1	--	OUTFALL



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MH05	OCEANA WAY	7.63	–	3.40	4.23

REVISIONS		
NO.	DATE	
1	5-24-2023	REV. PER COUNTY & VIMD COMMENT
2		
3		
4		

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Gerald W. McGuire-P.E. # 39572
Engineering Business #00006435

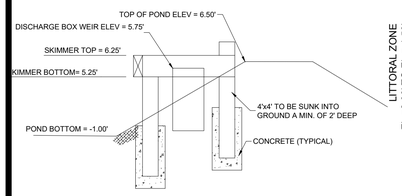
MER SEA ON NAVARRE BEACH
SUMMER ISLE LANE
STA 0+00 TO STA 5+41

SANTA ROSA COUNTY FLORIDA

DRAWN BY: HAH
DESIGNED BY: GWM
CHECKED BY: GWM
DATE: MAY 2022
SCALE: 1"=40'
NOT RELEASED FOR CONSTRUCTION
BY: GWM DATE:

PROJECT NO: 2022.MERSEA
FILE NO: 2022.MERSEA
SHEET: 16 OF 23

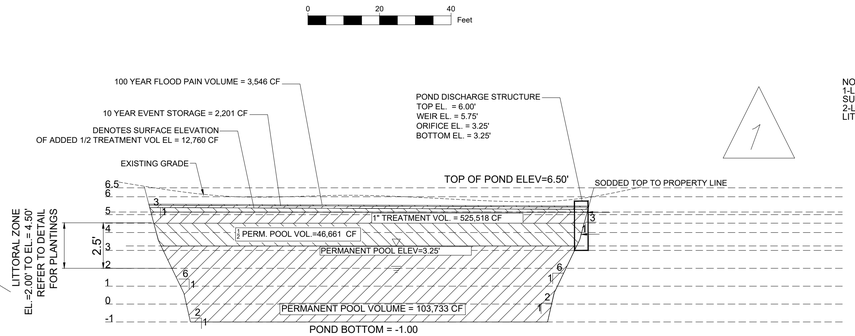
NOTE:
1. ALL WOOD MATERIALS SHALL BE PRESSURE TREATED.
2. ALL CONNECTIONS TO BE MADE WITH 5/8" GALVANIZED HARDWARE.
3. PROVIDE BOARDS ON TOP OF SKIMMER FOR STAND PIPE.



SIDE VIEW

OIL SKIMMER DETAIL

N.T.S.

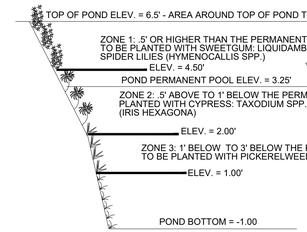


NOTE:
1. REFER TO LITTORAL ZONE PLANTING DETAIL FOR PROPOSED SIDE SLOPE PLANTINGS
2. CONTRACTOR TO PROVIDE 6:1 SIDE SLOPE TO 2' BELOW PERMANENT POOL ELEVATION IN ACCORDANCE WITH DETAIL.
3.ALL BERMS MUST HAVE A MINIMUM TOP WIDTH OF 5 FEET.
4. ALL BERMS GREATER THAN 3 FEET HIGH MUST HAVE A TOP WIDTH EQUAL TO THE HEIGHT OF THE BERM.

PRIVATE WET DETENTION POND CROSS SECTION

N.T.S.

NOTE:
1-LITTORAL ZONE PLANTING REQUIRES AN 85% SURVIVORSHIP TO THE FIRST 24 MONTHS. REPLANTING IS REQUIRED IF SURVIVAL FALLS BELOW 85%.
2-LITTORAL ZONE PLANTS ARE TO BE PLANTED @ 3' O.C.
LITTORAL ZONE TREES ARE TO BE PLANTED IN ACCORDANCE WITH BIOLOGISTS RECOMENDATIONS

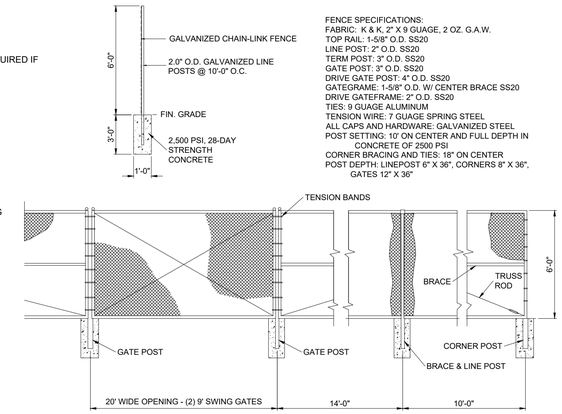


POND LITTORAL ZONE PLANTING TABLE:
ELEVATION PLANTING ZONE/PLANTING REQUIRED

6.50 - 4.00'	BAHIA SOD TO BE PROVIDED
5.00 - 4.50'	ZONE 1: SEE PLANTINGS ABOVE
4.50 - 2.00'	ZONE 2: SEE PLANTINGS ABOVE
2.00 - 1.00'	ZONE 3: SEE PLANTINGS ABOVE

LITTORAL ZONE PLANTING DETAIL

N.T.S.



FENCE SPECIFICATIONS:
FABRIC: K & K, 2" X 9 GUAGE, 2 OZ. G.A.W.
TOP RAIL: 1-5/8" O.D. SS20
LINE POST: 2" O.D. SS20
TERM POST: 3" O.D. SS20
GATE POST: 3" O.D. SS20
DRIVE GATE POST: 4" O.D. SS20
GATEGRAME: 1-5/8" O.D. W/ CENTER BRACE SS20
DRIVE GATEFRAME: 2" O.D. SS20
TIES: 9 GUAGE ALUMINUM
TENSION WIRE: 7 GUAGE SPRING STEEL
ALL CAPS AND HARDWARE: GALVANIZED STEEL
POST SETTING: 10' ON CENTER AND FULL DEPTH IN CONCRETE OF 2500 PSI
CORNER BRACING AND TIES: 18" ON CENTER
POST DEPTH: LINEPOST 6" X 36", CORNERS 8" X 36", GATES 12" X 36"

STRAIGHT RUNS REQUIRED WITH TERMINAL POSTS AT ALL TURNS

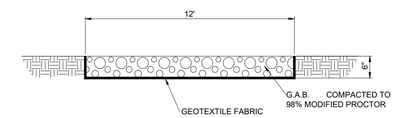
NOTES:
-CHAINLINK FENCE SHALL SATISFY ALL APPLICABLE SANTA ROSA COUNTY SPECIFICATIONS.
-DEVELOPER TO PROVIDE LOCK AND CHAIN. COUNTY WILL SWAP LOCK AT ACCEPTANCE.

CHAIN LINK FENCE DETAIL

N.T.S.

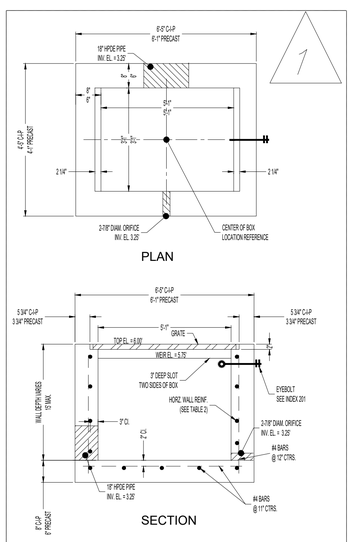
RETENTION AREA WARNING SIGN

N.T.S.



GRAVEL ACCESS ROAD SECTION

N.T.S.



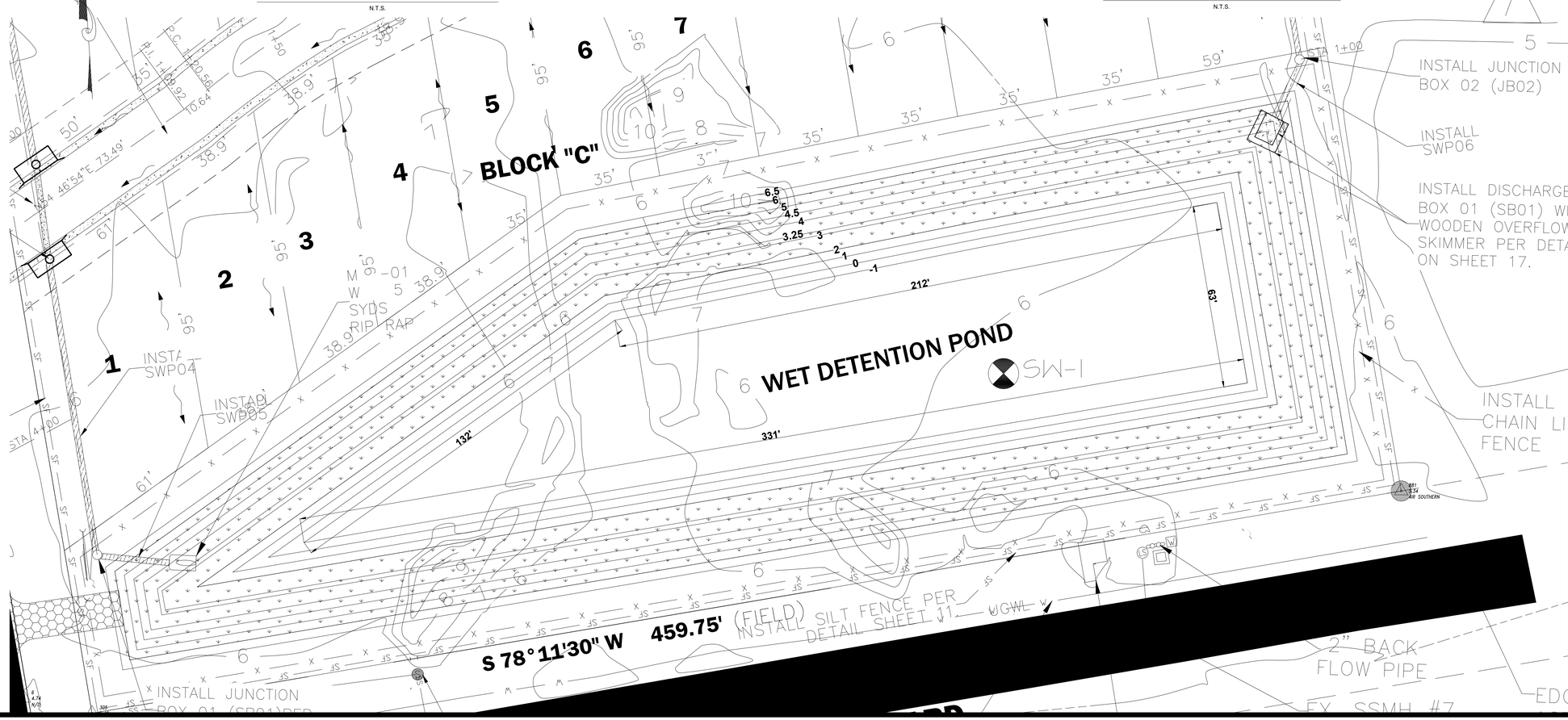
HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 2)

WALL DEPTH	SCHEDULE	AREA (IN. 2/FT.)	MAX. SPACING	
			BARS	WWF
0'-6'	A12	0.20	12"	8"
6'-10'	A6	0.20	6"	5"
10'-13'	A4	0.20	4"	3"
10'-15'	B5.5	0.24	5 1/2"	5"

RECOMMENDED MAXIMUM PIPE SIZE:
3'-1" WALL - 18-24" PIPE
4'-1" WALL - 36" PIPE

DISCHARGE BOX DETAIL

N.T.S.



NO.	DATE	REVISIONS
1	5-10-2023	REV. PER COUNTY/WMD COMMENTS
2		
3		
4		

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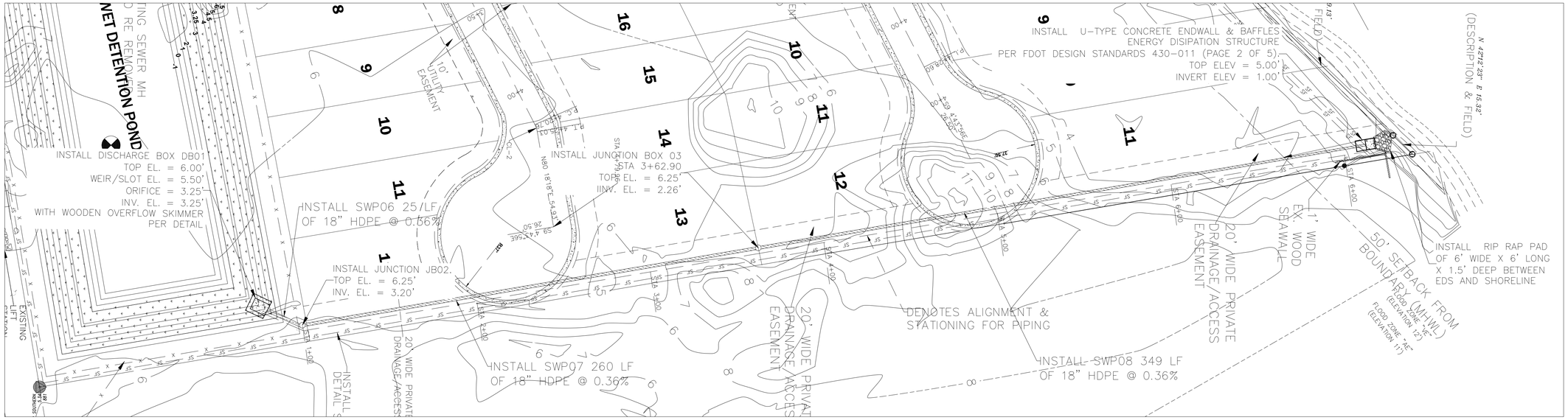
WEBSITE: www.mcguire-assoc.com
Gerald W. McGuire-P.E. # 39572
Engineering Business #00000435

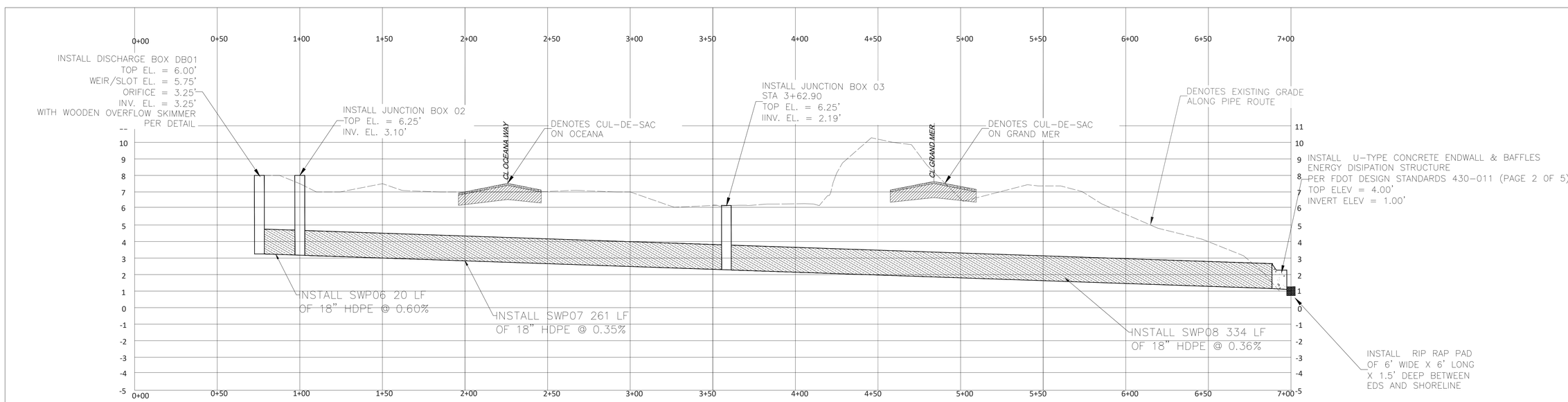
MER SEA ON NAVARRE BEACH
DETENTION POND DETAILS
WET DETENTION CROSS SECTIONS
SANTA ROSA COUNTY FLORIDA

DRAWN BY: HAH
DESIGNED BY: GWM
CHECKED BY: GWM
DATE: MAY 2022
SCALE: 1" = 20'
NOT RELEASED FOR CONSTRUCTION
BY: GWM DATE:

PROJECT NO: 2022.MERSEA
FILE NO: 2022.MERSEA
SHEET: 17 OF 23

GRAPHIC SCALE 1 inch = 30 ft. (IN FEET)





EAST DRAINAGE ESMT - POND TO SOUND

MER SEA ON NAVARRE BEACH – Stormwater Inlets

Inlet #	Road Name	Top	Invert	Depth	INLET TYPE
I01	GRAND MER WAY	6.37	2.65	3.72	TYPE A
I02	GRAND MER WAY	6.37	2.50	3.87	TYPE A
I03	OCEANA WAY	6.38	1.51	4.87	TYPE A
I04	OCEANA WAY	6.38	1.40	4.98	TYPE A
JB01	--	6.25	0.90	5.35	JUNCTION BOX
MES01	POND WEST END	--	0.75	--	TYPE A
OVERFLOW BOX	20' DRAINAGE EASEMENT	6	3.25	2.75	OVERFLOW BOX
JB02	20' DRAINAGE EASEMENT	6.25	3.14	3.11	JUNCTION BOX
JB03	20' DRAINAGE EASEMENT	6.25	2.2	4.05	JUNCTION BOX
OUTFALL	20' DRAINAGE EASEMENT	--	1	--	OUTFALL

MER SEA ON NAVARRE BEACH – STORMWATER PIPES

PIPE #	cfs	FROM	TOP	INVERT	TO	TOP	INVERT	LENGTH	SLOPE	PIPE DIAM	PIPE MAT'l	MANNINGS ROUGHNES
SWP01	3.30	I01	6.37	2.65	I02	6.5	2.50	30	0.50%	18	RCP	0.015
SWP02	7.46	I02	6.37	2.50	I03	6.05	1.56	188	0.50%	18	ADS	0.009
SWP03	11.74	I03	6.38	1.56	I04	6.25	1.41	30	0.50%	18	RCP	0.015
SWP04	14.50	I04	6.38	1.41	JB01	6.25	0.92	98	0.50%	24	ADS	0.009
SWP05	14.50	JB01	6.25	0.90	MES01	N/A	0.75	25	0.60%	24	ADS	0.009
SWP06	4.90	POND WEIR	5.75	3.25	JB02	6.25	3.14	20	0.35%	18	ADS	0.009
SWP07	4.90	JB02	6.25	3.2	JB03	6.25	2.2	261	0.35%	18	ADS	0.009
SWP08	4.90	JB03	6.25	2.26	OUTFALL	4.00	1.00	334	0.35%	18	ADS	0.009

BM#1: 1401/27 "X" CUT IN MANHOLE LID
ELEVATION = 5.59'

BM#2: 1401/26 "X" CUT IN CONCRETE BOX
FOR ELECTRICAL PAD
ELEVATION = 6.68'

BM#3: 7612 NAIL AND DISC IN ASPHALT
ELEVATION = 4.73'

BENCHMARKS THAT ARE DAMAGED, DESTROYED, OR MOVED DURING CONSTRUCTION MUST BE REPLACED BY A PROFESSIONAL SURVEYOR AND MAPPER.

REVISIONS

NO.	DATE	
1	5-19-2023	REV. PER COUNTY/WMD COMMENT
2	9-28-2023	REV. TO ADD STATIONING EASEMENT
3		
4		

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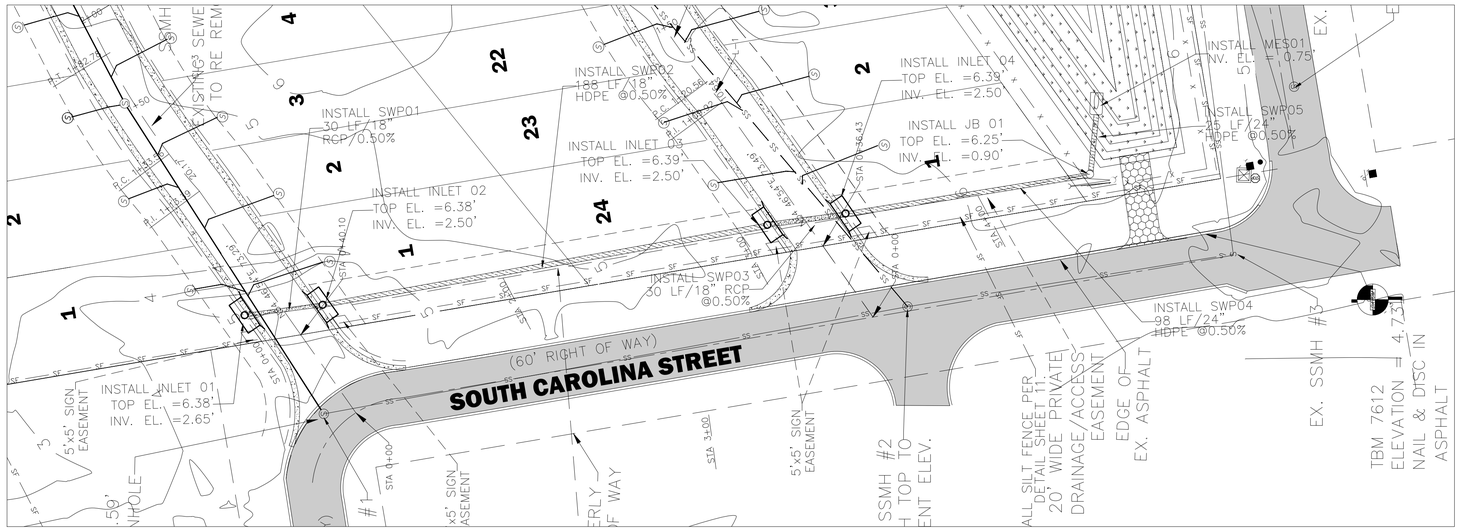
Gerald W. McGuire-P.E. # 39572
Engineering Business #00000435

MER SEA ON NAVARRE BEACH
DRAINAGE PROFILE
INLET 1 TO POND
SANTA ROSA COUNTY FLORIDA

DRAWN BY: HAH
DESIGNED BY: GWM
CHECKED BY: GWM
DATE: MAY 2022
SCALE: 1" = 30'
NOT RELEASED FOR CONSTRUCTION
BY: GWM DATE:

PROJECT NO: 2022.MERSEA
FILE NO: 2022.MERSEA
SHEET: 18 OF 23

GRAPHIC SCALE 1 inch = 30 ft. (IN FEET)



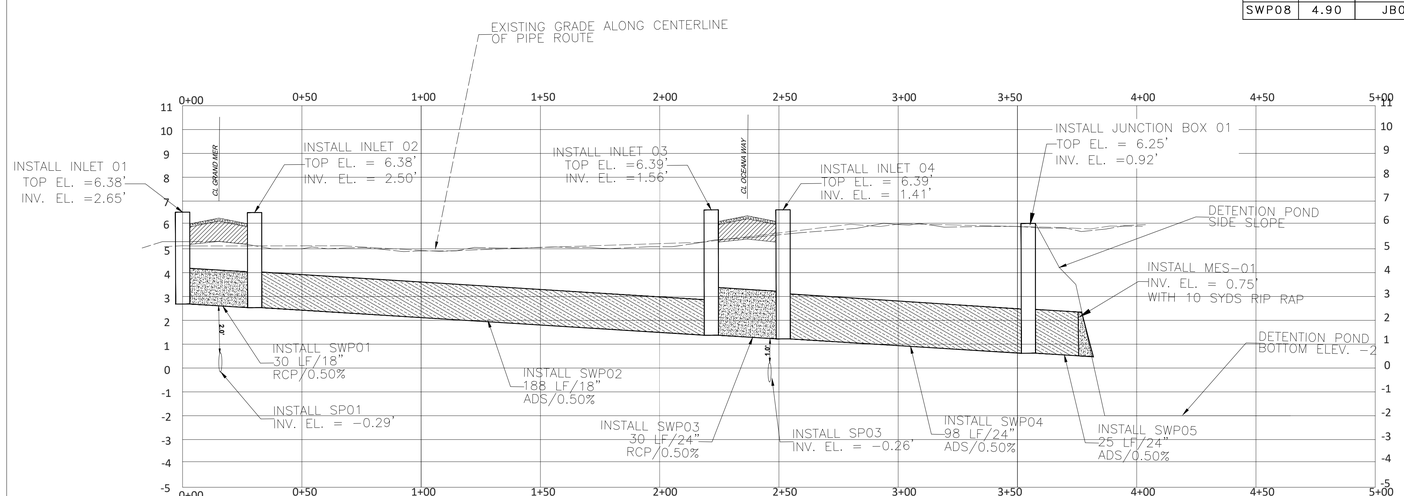
BM#1: 1401/27 "X" CUT IN MANHOLE LID
ELEVATION = 5.59'

BM#2: 1401/26 "X" CUT IN CONCRETE BOX FOR ELECTRICAL PAD
ELEVATION = 6.68'

BM#3: 7612 NAIL AND DISC IN ASPHALT
ELEVATION = 4.73'

BENCHMARKS THAT ARE DAMAGED, DESTROYED, OR MOVED DURING CONSTRUCTION MUST BE REPLACED BY A PROFESSIONAL SURVEYOR AND MAPPER.

MER SEA ON NAVARRE BEACH – STORMWATER PIPES												
PIPE #	cfs	FROM	TOP	INVERT	TO	TOP	INVERT	LENGTH	SLOPE	PIPE DIAM	PIPE MAT'L	MANNINGS ROUGHNES
SWP01	3.30	I01	6.37	2.65	I02	6.5	2.50	30	0.50%	18	RCP	0.015
SWP02	7.46	I02	6.37	2.50	I03	6.05	1.56	188	0.50%	18	ADS	0.009
SWP03	11.74	I03	6.38	1.56	I04	6.25	1.41	30	0.50%	18	RCP	0.015
SWP04	14.50	I04	6.38	1.41	JB01	6.25	0.92	98	0.50%	24	ADS	0.009
SWP05	14.50	JB01	6.25	0.90	MES01	N/A	0.75	25	0.60%	24	ADS	0.009
SWP06	4.90	POND WEIR	5.75	3.25	JB02	6.25	3.2	22	0.36%	18	ADS	0.009
SWP07	4.90	JB02	6.25	3.2	JB03	6.25	2.26	260	0.36%	18	ADS	0.009
SWP08	4.90	JB03	6.25	2.26	OUTFALL	4.00	1.00	350	0.36%	18	ADS	0.009



WEST DRAINAGE EASEMENT
GRAND MER WAY TO POND

MER SEA ON NAVARRE BEACH – Stormwater Inlets					
Inlet #	Road Name	Top	Invert	Depth	INLET TYPE
I01	GRAND MER WAY	6.37	2.65	3.72	TYPE A
I02	GRAND MER WAY	6.37	2.50	3.87	TYPE A
I03	OCEANA WAY	6.38	1.51	4.87	TYPE A
I04	OCEANA WAY	6.38	1.40	4.98	TYPE A
JB01	--	6.25	0.90	5.35	JUNCTION BOX
MES01	POND WEST END	--	0.75	--	TYPE A
OVERFLOW BOX	20' DRAINAGE EASEMENT	6	3.25	2.75	OVERFLOW BOX
JB02	20' DRAINAGE EASEMENT	6.25	3.2	3.05	JUNCTION BOX
JB03	20' DRAINAGE EASEMENT	6.25	2.26	3.99	JUNCTION BOX
OUTFALL	20' DRAINAGE EASEMENT	--	1	--	OUTFALL

REVISIONS

NO.	DATE	
1	5-14-2023	REV. PER COUNTY/WMD COMMENT
2	9-23-2023	REV. TO ADD EASEMENT STATIONING
3		
4		

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Gerald W. McGuire-P.E. # 39572
Engineering Business #00000435

MER SEA ON NAVARRE BEACH
DRAINAGE PROFILE
INLET 1 TO POND

SANTA ROSA COUNTY FLORIDA

DRAWN BY: HAH
DESIGNED BY: GWM
CHECKED BY: GWM
DATE: MAY 2022
SCALE: 1" = 30'
NOT RELEASED FOR CONSTRUCTION
BY: GWM DATE:

PROJECT NO: 2022.MERSEA
FILE NO: 2022.MERSEA
SHEET: 19 OF 23

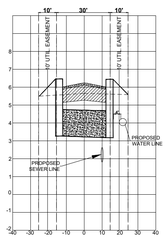
BM#1: 1401/27 "X" CUT IN MANHOLE LID
ELEVATION = 5.59'

BM#2: 1401/26 "X" CUT IN CONCRETE BOX
FOR ELECTRICAL PAD
ELEVATION = 6.68'

BM#3: 7612 NAIL AND DISC IN ASPHALT
ELEVATION = 4.73'

BENCHMARKS THAT ARE DAMAGED, DESTROYED, OR MOVED DURING CONSTRUCTION MUST BE REPLACED BY A PROFESSIONAL SURVEYOR AND MAPPER.

CROSS SECTIONS - Oceana Way



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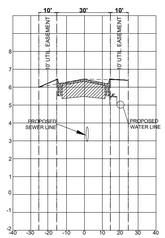

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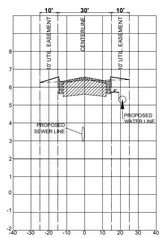

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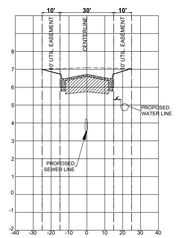
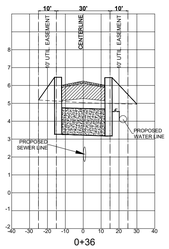


3+00

CROSS SECTIONS - Grand Mer Boulevard



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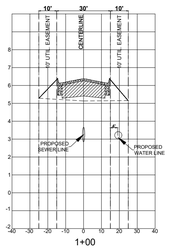

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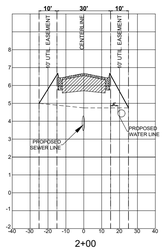

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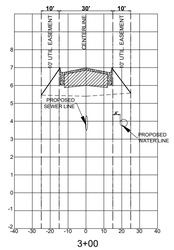

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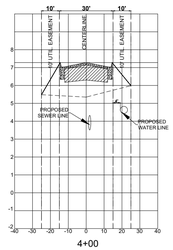

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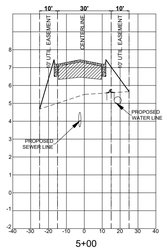

5+00

ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF NAVARRE BEACH & SEWER WATER SYSTEM SPECIFICATIONS.

ALL WORK WITHIN THE RIGHT-OF-WAY OR FOR OWNERSHIP BY NAVARRE BEACHSHALL BE PERFORMED BY AN CERTIFIED UNDERGROUND UTILITY CONTRACTOR.

ALL WORK PERFORMED ON THE INSTALLATION OF THE POTABLE WATER, SANITARY SEWER SYSTEM AND REUSE SYSTEM MUST BE DONE BY A FLORIDA CERTIFIED UNDERGROUND UTILITY CONTRACTOR.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH SANTA ROSA COUNTY DESIGN STANDARDS AND LATEST EDITION OF FDOT DESIGN STANDARDS.

NO.	DATE	REVISIONS
1		
2		
3		
4		

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WEBSITE: www.mcguire-assoc.com
Gerald W. McGuire-P.E. # 39572
Engineering Business #00006435

MER SEA ON NAVARRE BEACH
CROSS SECTIONS
CROSS SECTIONS
SANTA ROSA COUNTY FLORIDA

DRAWN BY: HAH
DESIGNED BY: GWM
CHECKED BY: GWM
DATE: MAY 2022
SCALE: 1"=40'
NOT RELEASED FOR CONSTRUCTION
BY: GWM **DATE:**

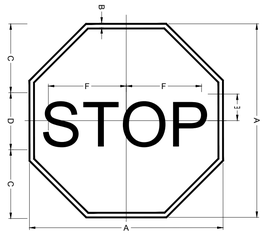
PROJECT NO: 2022.MERSEA
FILE NO: 2022.MERSEA
SHEET: 20 OF 23

SIGNAGE NOTES:

1. THE STREET SIGNS WITH THE APPROVED ADDRESS RANGES ASSIGNED BY THE SRC ADDRESSING DEPARTMENT SHALL BE IN PLACE PRIOR TO APPROVAL OF THE FINAL PLAT.
2. ALL PROPOSED SUBDIVISION SIGNS SHALL BE CONSTRUCTED IN ACCORDANCE WITH LDC ARTICLE 8.
3. ALL STRIPING MUST BE THERMOPLASTIC PAINT. NO PRE-MANUFACTURED STRIPING (TAPE) APPLICATION ALLOWED.
4. ALL STOP BARS ARE TO BE 24 INCHES.
5. SIGN LETTERING HEIGHTS AND RETROREFLECTIVITY SHALL BE IN ACCORDANCE WITH THE 2009 EDITION OF THE MUTCD.
6. FOR ALL OFF-SITE ROADWAY IMPROVEMENTS, THERMOPLASTIC STRIPING AND REFLECTORS ARE REQUIRED PER FDOT INDEX 17346.

W14-2P NO OUTLET SIGN DETAIL

N.T.S.



A	B	C	D	E	F
30"	.75"	10"	10C	5"	12.5"

R1-1 STOP SIGN DETAIL

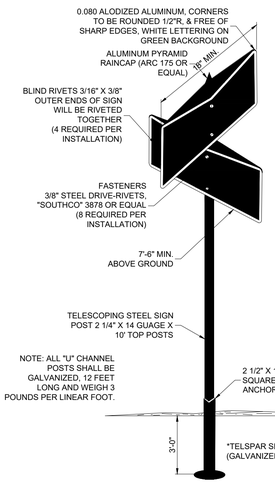
N.T.S.

STOP BAR DETAIL

N.T.S.

R2-1 SPEED LIMIT SIGN DETAIL

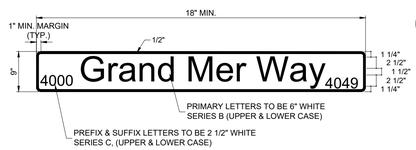
N.T.S.



STREET NAME SIGN LAYOUT
(USE 1/2" WHITE BORDER)

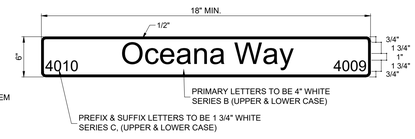
9" BLADES WITH 6" PRIMARY LETTERING
TO BE USED ON ALL COLLECTOR & ARTERIAL ROADWAYS.

F.D.O.T. TYPE III REFLECTIVE SHEETING TO BE USED ON 9" BLADES



6" BLADES WITH 4" PRIMARY LETTERING
TO BE USED ON LOCAL (RESIDENTIAL) ROADWAYS.

F.D.O.T. TYPE II REFLECTIVE SHEETING TO BE USED ON 6" BLADES

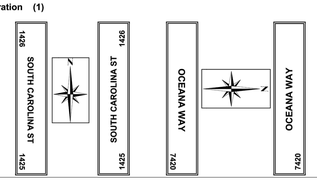


STREET SIGN CONFIGURATION NO. 1 DETAIL

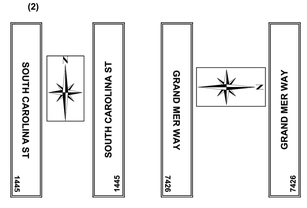
N.T.S.

Santa Rosa County, Florida
ITIGIS Dept
850-983-1850
GISTeam@santarosa.fl.gov
Created On: 10/17/2023

Sign Configuration (1)



Sign Location (2)



REVISIONS

NO.	DATE	
1	11-8-19	REMOVED INTERNAL H/C RAMPS & CROSSWALKS
2	9-24-2023	REV. SPEED LIMIT SIGN
3		
4		

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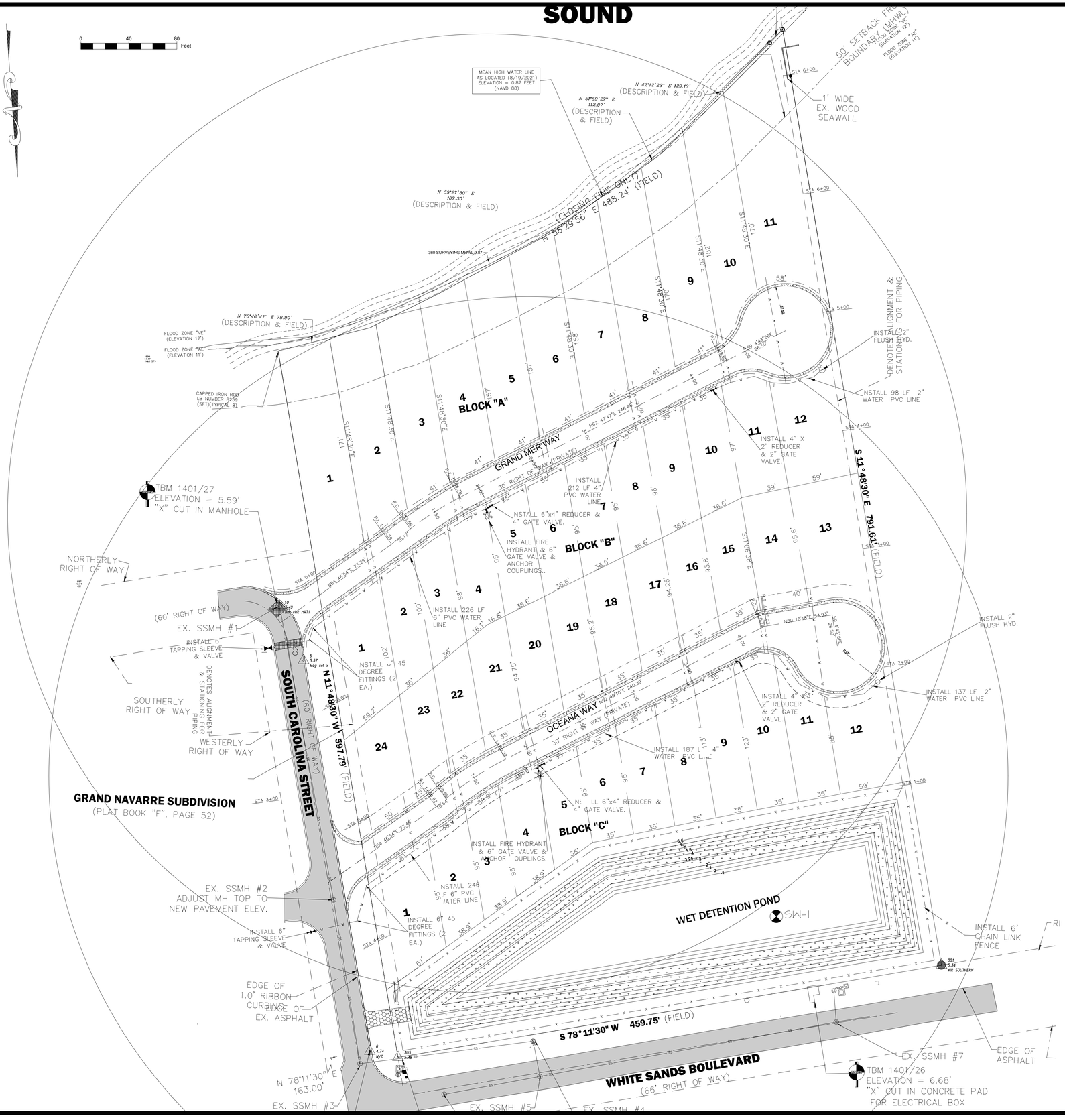
Gerald W. McGuire-P.E. # 39572
Engineering Business #00006435

MER SEA ON NAVARRE BEACH
SIGNAGE & PAVEMENT MARKINGS

SANTA ROSA COUNTY FLORIDA

DRAWN BY: HAH
DESIGNED BY: GWM
CHECKED BY: GWM
DATE: MAY 2022
SCALE: VARIES
NOT RELEASED FOR CONSTRUCTION
BY: GWM **DATE:**

PROJECT NO: 2022.MERSEA
FILE NO: 2022.MERSEA
SHEET: 21 OF 23



NO.	DATE	REVISIONS
1		
2		
3		
4		

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Engineering Business #00000435

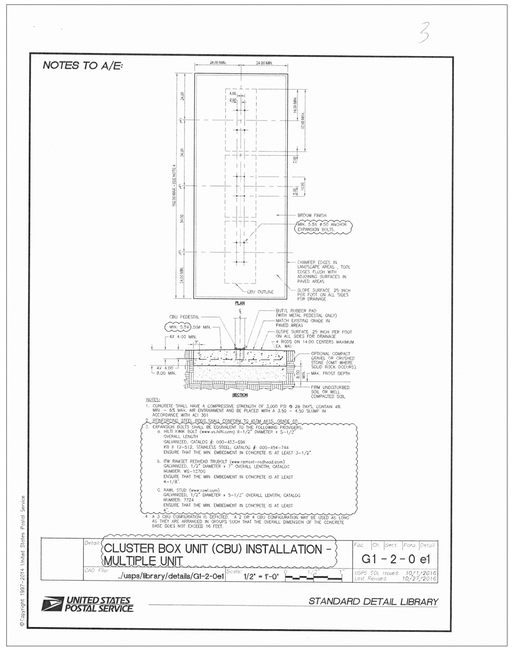
MER SEA ON NAVARRE BEACH

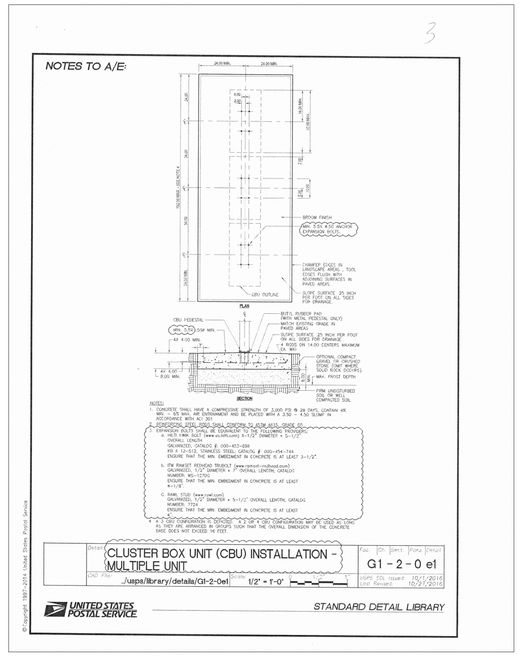
Fire Hydrant Coverage

SANTA ROSA COUNTY FLORIDA

DRAWN BY: HAH
DESIGNED BY: GWM
CHECKED BY: GWM
DATE: MAY 2022
SCALE: 1"=40'
NOT RELEASED FOR CONSTRUCTION
BY: GWM DATE:

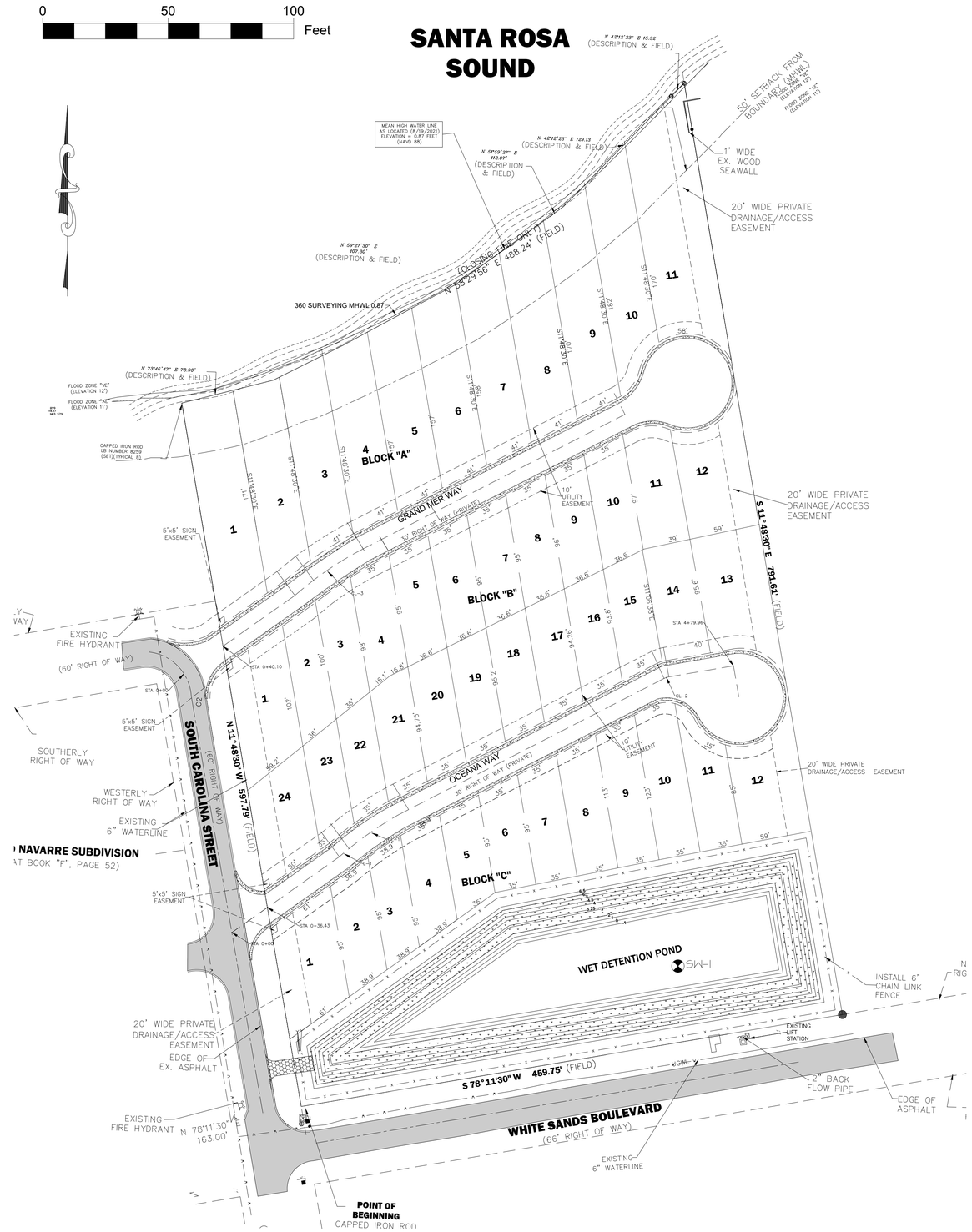
PROJECT NO: 2022.MERSEA
FILE NO: 2022.MERSEA
SHEET: 22 OF 23





USPS INSTALLATION NOTES:

1. ALL WORK DONE ON CENTRALIZED CLUSTER BOX UNITS (CBU) INSTALLATION SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE USPS POST OFFICE DEVELOPMENT MANUAL, PUBLICATIONS 265-A.
2. CLUSTER BOX UNIT INSTALLATION SHALL FOLLOW THE GUIDELINES FOR UNIT INSTALLATION BASED ON DETAILS ABOVE.
3. CONCRETE FOR SLABS TO BE 3000 PSI COMPRESSIVE STRENGTH.
4. STEEL REINFORCING FOR SLABS PER DETAILS ABOVE.
5. ALL HARDWARE USED IN INSTALLATION SHALL BE PER ABOVE DETAILS.
6. PARKING FOR CLUSTER BOXES TO BE ADA COMPLIANT WITH REGARD TO SLOPES AND UNIT ACCESS.
7. PARKING LOT CURBING IS TO BE A FLAT RIBBON CURB FLUSH WITH PAVEMENT GRADE AND MAIL BOX SLAB GRADE.
8. SLABS FOR CLUSTER UNIT BOXES SHALL PROVIDE POSITIVE DRAINAGE.
9. ALL CBU's SHALL BE USPS-APPROVED. SEE USPS POSTAL BULLETIN 22493 (5-10-18).



NO.	DATE	REVISIONS
1		
2		
3		
4		

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Engineering Business #00006435

MER SEA ON NAVARRE BEACH

USPS PLAN & DETAILS

SANTA ROSA COUNTY FLORIDA

DRAWN BY: HAH
DESIGNED BY: GWM
CHECKED BY: GWM
DATE: MAY 2022
SCALE: 1"=50'
NOT RELEASED FOR CONSTRUCTION
BY: GWM DATE:

PROJECT NO: 2022.MERSEA
FILE NO: 2022.MERSEA
SHEET: 23 OF 23