CONSTRUCTION PLANS FOR

THE PRESERVE AT DEER RUN PHASE V

A 8 LOT PRIVATE RESIDENTIAL SUBDIVISION DEVELOPMENT IN SECTION 33, TOWNSHIP 1 NORTH, RANGE 31 WEST
ESCAMBIA COUNTY, FLORIDA
ZONED: LDR FLU: MU-S

JULY 2021

OWNER/DEVELOPER:
D.R. HORTON, INC.
25366 PROFIT DRIVE
DAPHNE, AL 36526
P: (251)-316-5424

SURVEYOR:
MERRILL PARKER SHAW, INC.
4928 N. DAVIS HWY
PENSACOLA, FL 32503
P: (850)-478-4923
F: (850)-478-4924

ENGINEER:
HAMMOND ENGINEERING, INC.
3802 NORTH "S" STREET
PENSACOLA, FL 32505
P: (850) 434-2603
F: (850) 434-4650

1. ALL DISTURBED AREAS WHICH ARE NOT PAVED ARE TO BE STABILIZED WITH SEEDING, FERTILIZER AND MULCH, HYDROSEED AND/OR SOD. PONDS AND AND SWALES TOPS AND SIDES SHALL BE SODDED. SEEDED AREAS SHALL INCLUDE A BAHIA MIX TO ENSURE GROWTH DURING WINTER MONTHS. SEED IN ACCORDANCE WITH FDOT SECTION 570 AND STANDARD INDEX 105.
2. SEDIMENT SHALL BE RETAINED ON THE SITE OF DEVELOPMENT.
3. CONTRACTOR SHALL CLEAN OUT ACCUMULATED SILT, AND STABILIZE POND(S) AT END OF CONSTRUCTION WHEN ALL DISTURBED AREAS HAVE BEEN STABILIZED.
4. EROSION SHALL BE CONTROLLED BY THE USE OF SYNTHETIC (IN STATE R/W) HAY BALE BARRIER/SILT FENCE AS SHOWN ON PLANS AND SHALL BE SETUP PRIOR TO COMMENCING CONSTRUCTION. THE EROSION CONTROL BARRIER SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION BY THE CONTRACTOR. AFTER PLACEMENT OF THE EROSION CONTROL BARRIER, THE RETENTION AREA IS TO BE CONSTRUCTED. UPON COMPLETION OF THE PROJECT, THE RETENTION AREA SHALL BE CLEANED OF SILT, STABILIZATION OF ALL DISTURBED AREAS SHALL BE ACCOMPLISHED, AND THE RETENTION AREA IS TO BE RECONFIGURED TO DESIGN CROSS-SECTION, AND GRASSED.

SITE WORK

GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH SPECIFICATIONS AND APPLICABLE STANDARDS ESTABLISHED BY ESCAMBIA COUNTY, ECUA AND FDEP. WHERE THESE SPECIFICATIONS AND COUNTY STANDARDS DEVIATE, THE MORE STRINGENT REQUIREMENTS SHALL PREVAIL UNLESS APPROVED BY THE ENGINEER.
2. THE GENERAL CONTRACTOR SHALL COORDINATE THE WORK OF THE UTILITY SUBCONTRACTORS TO INSURE THAT ALL UTILITY INSTALLATIONS PROCEED IN A TIMELY MANNER AND TO PREVENT CONFLICTS IN THE INSTALLATION OF THE WATER, SEWER, GAS, ELECTRICAL POWER, CABLE, AND TELEPHONE LINES.
3. ALL CONDITIONS AND STIPULATIONS OF THE CONSTRUCTION PERMITS AND APPROVALS ISSUED BY ESCAMBIA COUNTY, THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ECUA SHALL BE COMPLIED IN EVERY WAY.

UTILITY WORK

1. ALL WORK SHALL COMPLY WITH APPLICABLE STANDARDS AND CODES ESTABLISHED BY THE ECUA, ESCAMBIA COUNTY AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND WRITTEN SPECIFICATIONS.
2. THE UTILITY CONTRACTOR SHALL MAKE CONNECTIONS TO THE SANITARY SEWER AND STORM DRAINAGE SYSTEM AS SHOWN AND SHALL VERIFY LOCATIONS AND ELEVATIONS OF ALL UTILITY LINES PRIOR TO BEGINNING WORK. THE UTILITY CONTRACTOR SHALL INCLUDE THE COST OF PROTECTION AND/OR RELOCATION OF OTHER UTILITIES IN HIS BID AND SHALL COORDINATE HIS WORK WITH OTHER UTILITY SUB-CONTRACTORS TO PREVENT CONFLICTS WITH OTHER UTILITY LINES.
3. "AS-BUILT" DRAWINGS SHOWING WATERLINES AND FORCEMAINS, FITTINGS, VALVES, METERS, SERVICE LATERAL TAPS AND STUB-OUTS, MANHOLES, FIRE HYDRANTS, ETC. LOCATIONS WITH MEASUREMENTS IN ACCORDANCE WITH THE LATEST ECUA ENGINEERING MANUAL (SECTION 4000) SHALL BE FURNISHED TO THE ENGINEER PRIOR TO ACCEPTANCE.
4. ECUA PERMIT SHALL BE REQUIRED PRIOR TO CP APPROVAL.

THE USE OF THESE LOW PRESSURE SYSTEMS HAS TO BE APPROVED BY THE COUNTY ENGINEER.

1. THE PROJECT ENGINEER (ENGINEER OF RECORD) SHALL PROVIDE TO ESCAMBIA COUNTY "AS-BUILT" RECORD DRAWINGS FOR VERIFICATION AND APPROVAL BY ESCAMBIA COUNTY ONE WEEK PRIOR TO REQUESTING A FINAL INSPECTION, AND PROVIDE "AS-BUILT" CERTIFICATION THAT THE PROJECT CONSTRUCTION ADHERES TO THE PERMITTED PLANS AND SPECIFICATIONS. THE "AS-BUILT" CERTIFICATION AND THE "AS-BUILT" RECORD DRAWINGS MUST BE SIGNED, SEALED AND DATED BY A REGISTERED FLORIDA PROFESSIONAL ENGINEER.
2. THE DEVELOPER/CONTRACTOR SHALL INSTALL PRIOR TO THE START OF CONSTRUCTION AND MAINTAIN DURING CONSTRUCTION ALL SEDIMENT CONTROL MEASURES AS REQUIRED TO RETAIN ALL SEDIMENTS ON THE SITE. IMPROPER SEDIMENT CONTROL MEASURES MAY RESULT IN CODE ENFORCEMENT VIOLATION.
3. RETENTION/DETENTION AREAS SHALL BE SUBSTANTIALLY COMPLETE PRIOR TO ANY CONSTRUCTION ACTIVITIES THAT MAY INCREASE STORMWATER RUNOFF RATES. THE CONTRACTOR SHALL CONTROL STORMWATER DURING ALL PHASES OF CONSTRUCTION AND TAKE ADEQUATE MEASURES TO PREVENT THE EXCAVATED POND FROM BLINDING DUE TO SEDIMENTS.
4. DEVELOPER/CONTRACTOR/HOME OWNERS ASSOCIATION SHALL RESHAPE PER PLAN SPECIFICATIONS, CLEAN OUT ACCUMULATED SILT, AND STABILIZE POND(S) AT THE END OF CONSTRUCTION WHEN ALL DISTURBED AREAS HAVE BEEN STABILIZED AND AT THE END OF THE 2 YEAR COMPLIANCE PERIOD.
5. CONTRACTOR SHALL MAINTAIN RECORD DRAWINGS DURING CONTRUCTION WHICH SHOW "AS-BUILT" CONDITIONS OF ALL WORK INCLUDING PIPING, DRAINAGE STRUCTURES, TOPO OF POND(S), OUTLET STRUCTURES, DIMENSIONS, ELEVATIONS, GRADING ETC. RECORD DRAWINGS SHALL BE PROVIDED TO THE ENGINEER OF RECORD PRIOR TO REQUESTING FINAL INSPECTION.
6. THE OWNER OR HIS AGENT SHALL ARRANGE/SCHEDULE WITH THE COUNTY A FINAL INSPECTION OF THE DEVELOPMENT UPON COMPLETION AND ANY INTERMEDIATE INSPECTIONS AT (850) 595-3434. AS-BUILT CERTIFICATION IS REQUIRED PRIOR TO REQUEST FOR FINAL INSPECTION/APPROVAL.
7. CONTRACTOR TO NOTIFY SUNSHINE ONE UTILITIES TWO FULL BUSINESS DAYS IN ADVANCE (EXCLUDING WEEKENDS AND HOLIDAYS) PRIOR TO DIGGING WITHIN R/W; 1-800-432-4770.
8. ALL ASPECTS OF THE STORMWATER/DRAINAGE COMPONENTS AND/OR TRANSPORTATION COMPONENTS SHALL BE COMPLETED PRIOR TO REQUESTING A FINAL INSPECTION.
9. NO DEVIATIONS OR REVISIONS FROM THESE PLANS BY THE CONTRACTOR SHALL BE ALLOWED WITHOUT PRIOR APPROVAL FROM BOTH THE DESIGN ENGINEER AND THE ESCAMBIA COUNTY. ANY DEVIATIONS MAY RESULT IN DELAYS IN COUNTY ACCEPTANCE OF IMPROVEMENTS.
10. TO COMPLY WITH NPDES/NWFWMD REQUIRMENTS, ALL EROSION CONTROL MEASURES SHALL BE INSPECTED AFTER EACH 1/2" RAINFALL EVENT OR AT LEAST WEEKLY. THE CONTRACTOR SHALL DOCUMENT SUCH INSPECTIONS AND EROSION CONTROL MAINTENANCE EFFORTS; INSPECTION RECORDS SHALL BE PROVIDED TO THE NPDES/NWFWMD PERMIT APPLICANT FOR PROPER REPORTING TO FDEP.
11. CONTRACTOR IS REQUIRED TO VISIT THE SITE AND FAMILIARIZE HIM/HERSELF WITH THE PROJECT PRIOR TO BIDDING.
12. CONTRACTOR BIDS SHOULD INCLUDE CLEARING AND GRUBBING OF THE PROPOSED R/W (AS WELL AS ANY OFFSITE AREAS NECESSARY FOR CONSTRUCTION OF PROPOSED IMPROVEMENTS) INCLUDING REMOVAL OF NON-HERITAGE TREES.

INDEX OF DRAWINGS:

1. EXISTING UTILITIES HAVE BEEN SHOWN ON PLANS FROM BEST AVAILABLE INFORMATION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION & PROTECTING ALL UTILITIES INCLUDING THOSE NOT SHOWN.
2. GULF POWER CO. MANHOLES AND VAULTS, SOUTHERN BELL MANHOLES TO BE ADJUSTED BY THE APPROPRIATE UTILITY, AND THIS WORK SHALL BE COORDINATED BY THE CONTRACTOR.
3. FLORIDA STATE STATUTE 553.851 REQUIRES THAT ALL EXCAVATORS NOTIFY GAS COMPANIES OF THEIR INTENTION TO PERFORM ANY EXCAVATION AT LEAST FORTY-EIGHT (48) HOURS (EXCLUDING SAT.,SUN. & HOLIDAYS) PRIOR TO BEGINNING WORK.

ECUA Engineering Manual Reference Note*

Note shall be inserted in the upper right corner of title sheet

*Applicable only to ECUA infrastructure to be constructed in public ROW or utility easement, not to be applied to private water/sewer facilities on private property (see Plumbing Code)

A. ECUA Engineering Manual Incorporated by Reference

The ECUA Engineering Manual dated December 18, 2014, along with Update # 1 dated September 1, 2015 (hereinafter "Manual"), located at www.ecua.fl.gov, is hereby incorporated by reference into this Project's official contract documents as if fully set forth therein. It is the Contractor's responsibility to be knowledgeable of the Manual's contents and to construct the Project in accordance with the Manual. The Contractor shall provide its employees access to the Manual at all times, via Project site or office, via digital or paper format. In the event of a conflict between the Manual and Plans, Contractor shall consult Engineer of Record for proper resolution.

B. Additional Documents (to be completed by the Engineer of Record)

Does this Project have additional technical specifications or construction details that supplement and/or supersede the Manual listed above? X YES ☐ NO ☐. If yes, Contractor shall construct Project in accordance with said documents as listed and located below:

Document Name	Document Type: Specification	Document Type: Detail	Location: Plans	Location: Project Manual *
D-20 1-1/2" LOW PRESSURE SEWER SERVICE	☐	X	X	☐
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐

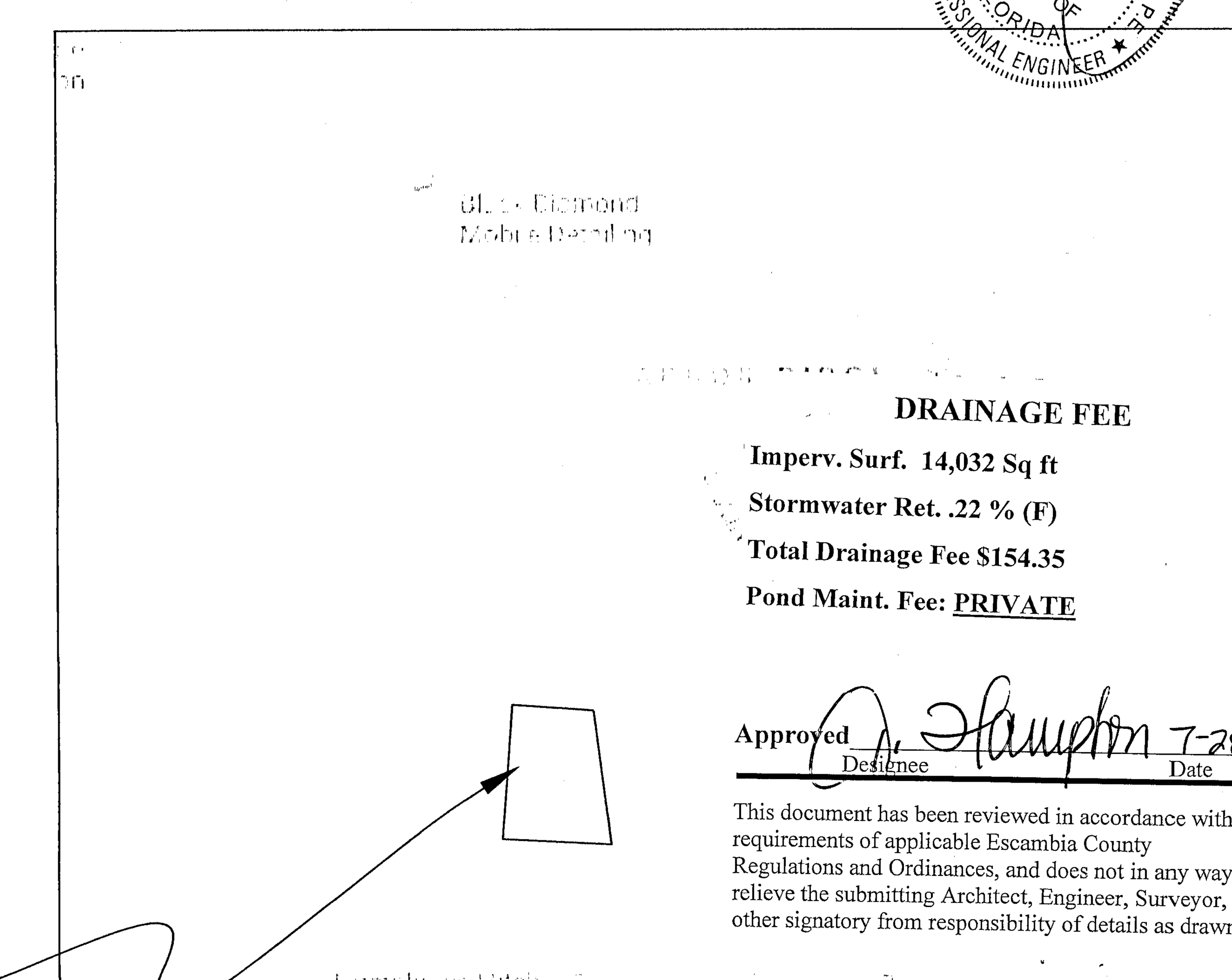
*Project Manuals used only with ECUA CIP Projects

C. Engineer of Record Responsibilities

The Engineers of Record (EORs) that have affixed their seals and signatures on these plans warrant that portions of the plans have been designed in accordance with the Manual (unless otherwise directed by the ECUA Project Engineer). The EORs shall be knowledgeable of the Manual's contents and shall assume responsibility for its use on this Project.

1. CONTRACTOR SHALL NOTIFY THE ECUA, FDOT, NWFWMD, THE ESCAMBIA COUNTY ENGINEER AND PROJECT ENGINEER OF RECORD AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF THIS PROJECT.
2. PROPERTY OBSTRUCTIONS WHICH ARE TO REMAIN IN PLACE, SUCH AS BUILDINGS, SEWER, STORM DRAINS, WATER OR GAS PIPES, ELECTRICAL CONDUITS, POLES, WALLS, POSTS, ETC., ARE TO BE CAREFULLY PROTECTED AND ARE NOT TO BE DISPLACED, UNLESS NOTED.
3. THE CONTRACTOR SHALL NOTIFY THE SUPERINTENDENTS OF THE WATER, GAS, SEWER, CABLE TV, TELEPHONE AND POWER COMPANIES 10 DAYS IN ADVANCE, THAT HE INTENDS TO START WORK IN A SPECIFIC AREA. THE OWNER DISCLAIMS ANY RESPONSIBILITY FOR THE SUPPORT AND PROTECTION OF SEWERS, DRAINS, WATER PIPES, GAS PIPES, CONDUITS OF ANY KIND, UTILITIES OR OTHER STRUCTURES OWNED BY THE CITY, COUNTY, STATE OR BY PRIVATE OR PUBLIC UTILITIES LEGALLY OCCUPYING ANY STREET, ALLEY, PUBLIC PLACE OR RIGHT-OF-WAY.
4. LOCATION OF EXISTING UTILITIES SHOWN ON PLANS ARE APPROXIMATE ONLY AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION BEFORE CONSTRUCTION. FAILURE OF THE PLANS TO SHOW THE EXISTENCE OF ANY UNDERGROUND UTILITIES, STRUCTURES, ETC., SHALL NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY OF LOCATING, PRESERVING AND PROTECTING SAID UTILITY OR STRUCTURES.
5. CONTRACTOR SHALL DISPOSE OF BY HAULING AWAY ALL EXCESS MATERIAL.
6. CONTROL OF SEDIMENTATION AND EROSION SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
7. P.V.C. PIPE FOR WATER TO BE AWWA C 900, DR 25.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SEEDING AND MULCHING AND/OR SODDING OF STREET AND ROAD SHOULDER AREAS IN ACCORDANCE WITH REQUIREMENTS OF FDOT SPECIFICATIONS AND APPLICABLE COUNTY STANDARDS.
9. WATER SUPPLY FACILITIES, INCLUDING MAINS, SHALL BE INSTALLED, CLEANED, DISINFECTED AND BACTERIOLOGICALLY CLEARED FOR SERVICE IN ACCORDANCE WITH THE LATEST APPLICABLE AWWA STANDARDS AND COORDINATED WITH ECUA.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR AND COMPLY WITH ANY TESTING REQUIRED BY THE LOCAL GOVERNING AGENCY IN ADDITION TO THE TESTING REQUIREMENTS OUTLINED IN THE SPECIFICATIONS.
11. GRADING AROUND TREES WHICH ARE TO REMAIN SHALL BE AWAY FROM THE TREE IN A MANNER TO CAUSE NO DAMAGE TO THE TREE.
12. RELOCATION OF THE OBSTRUCTIONS OWNED BY PRIVATE PROPERTY OWNER, SUCH AS MAILBOXES, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WHO MUST COORDINATE WITH THE PROPERTY OWNER.
13. AS PER ESCAMBIA COUNTY LDC DSM 2-1/6(d), NO STREETS OR ROADS UNDER THE TWO YEAR WARRANTY WILL BE ALLOWED TO BE OPEN CUT, OR JACK-AND-BORE. CONDUITS ARE TO BE INSTALLED FOR ALL UTILITY ROADWAY CROSSINGS PRIOR TO FINAL PLAT APPROVAL.

THOMAS GRANT HAMMOND, P.E. LICENSE No. ... STATE OF FLORIDA PROFESSIONAL ENGINEER
7/28/21



PROJECT LOCATION

DRAINAGE FEE
Imperv. Surf. 14,032 Sq ft
Stormwater Ret. .22 % (F)
Total Drainage Fee $154.35
Pond Maint. Fee: PRIVATE

Approved ____ 7-28-21
Designee Date

This document has been reviewed in accordance with requirements of applicable Escambia County Regulations and Ordinances, and does not in any way relieve the submitting Architect, Engineer, Surveyor, or other signatory from responsibility of details as drawn.

GRAPHIC SCALE
1000 0 500 1000
(IN FEET)
1 inch = 1000 ft.

GRAPHIC SCALE

22"x34" SCALE 1 inch = 60 ft.

60 0 30 60 120 240

11"x17" SCALE 1 inch = 120 ft.

DENOTES:

- ⊗ – 1/2" CAPPED IRON ROD, NUMBERED 7174 (PLACED)
- ◐ – 1/2" CAPPED IRON ROD, NUMBERED 7174 (FOUND)
- ● – 1/2" CAPPED IRON ROD, NUMBERED 7277 (FOUND)
- ⊛ – 1/2" CAPPED IRON ROD, NUMBERED 2892 (FOUND)
- ⊠ – 4"X4" CONCRETE MONUMENT, NUMBERED 7174 (FOUND)

R/W – RIGHT-OF-WAY
(D) – DEED INFORMATION
(F) – FIELD INFORMATION
–o–o–o– – OLD FENCE LINE, POST ONLY
PC – POINT OF CURVATURE
PT – POINT OF TANGENCY

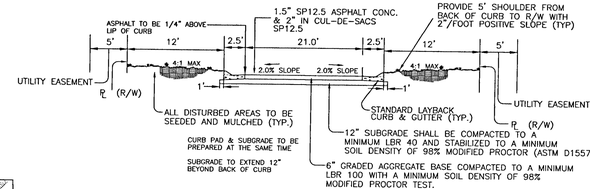
Curve Table			
Curve #	Length	Radius	Delta
C1	39.81	25.00	091
C2	45.10	35.50	073

DEVELOPMENT DATA:

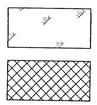
PARCEL ID #'S: 33-1N-31-1301-000-000
ADDRESS: 10700 BLK BEULAH RD 32526
TOTAL BOUNDARY AREA = 15 ACRES +/-
TOTAL PROPOSED RETENTION AREA = 83,106 SF (1.91 AC) +/-
TOTAL LOTS IN OVERALL BOUNDARY = 8 LOTS
PROPOSED DENSITY OF OVERALL SITE = 0.53 LOTS PER ACRE
ZONED: LDR
FLU: MU-S

BUILDING REQUIREMENTS FOR LDR ZONE:

-DENSITY: A MAXIMUM DENSITY OF FOUR DWELLING UNITS PER ACRE.
-FLOOR AREA RATIO: A MAXIMUM FLOOR AREA RATIO OF 1.0 FOR ALL USES.
-STRUCTURE HEIGHT: A MAXIMUM STRUCTURE HEIGHT OF 45 FEET.
-LOT WIDTH: FOR A NEW LOT WITH A MAJORITY OF ITS FRONTAGE ALONG THE OUTSIDE OF A STREET RIGHT-OF-WAY CURVE WHOSE RADIUS IS 100 FEET OR LESS, THE MINIMUM LOT WIDTH AT THE RIGHT-OF-WAY IS 40 PERCENT OF THE RADIUS LENGTH, BUT NOT LESS THAN 20 FEET. THE MINIMUM WIDTH FOR ALL OTHER NEW LOTS IS 60 FEET AT THE RIGHT-OF-WAY.
-LOT COVERAGE: MINIMUM PERVIOUS LOT COVERAGE OF 30 PERCENT (70 PERCENT MAXIMUM SEMI-IMPERVIOUS AND IMPERVIOUS COVER) FOR ALL USES.
-STRUCTURE SETBACKS:
FRONT AND REAR: TWENTY-FIVE FEET IN THE FRONT AND REAR.
-SIDES: ON EACH SIDE, FIVE FEET OR TEN PERCENT OF THE LOT WIDTH AT THE STREET RIGHT-OF-WAY, WHICHEVER IS GREATER, BUT NOT REQUIRED TO EXCEED 15 FEET.
-CORNER LOTS: THE FRONT SETBACK SHALL APPLY TO THE FRONTAGE OF THE ASSIGNED STREET ADDRESS AND THE SIDE SETBACK SHALL APPLY TO ANY STREET FRONTAGE THAT ADJOINS THE ADDRESSED FRONTAGE.



TYPICAL STREET AND GUTTER STREET
CROSS-SECTION
NTS



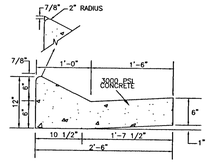
CORPS/FDEP/ESC. CO. WETLANDS
433,440 SF (9.95 AC)

WETLAND BUFFER
40,372 SF (0.93 AC)

BUFFER CALCULATION:
1,604 LF DILINEATED WETLAND LINE
40,372 SF WETLAND BUFFER/1,604 LF
= 25.16' AVERAGE BUFFER WIDTH

NOTE: ALL SIDEWALK, RAMPS AND DRIVEWAYS MUST BE BUILT TO THE LATEST EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS, ADA, AND PROWAG.

NOTE: NO EXISTING HERITAGE TREES ON-SITE



LAYBACK CURB DETAIL
NTS

Wetland Line Table		
Line #	Length	Direction
L1	10.11'	S75° 53' 45"W
L2	38.63'	S36° 21' 57"W
L3	44.31'	S56° 02' 31"W
L4	45.96'	N54° 04' 13"W
L5	44.33'	N35° 02' 51"W
L6	32.76'	N00° 57' 25"E
L7	24.26'	N34° 36' 50"E
L8	37.64'	N46° 59' 18"E
L9	42.33'	S83° 29' 39"E
L10	27.35'	N09° 00' 24"W
L11	57.49'	S24° 11' 17"W
L12	47.54'	S02° 01' 40"E
L13	37.03'	S02° 50' 11"E
L14	59.12'	S16° 43' 52"E
L15	52.84'	S32° 23' 23"E
L16	47.19'	S80° 42' 17"E
L17	37.13'	S39° 32' 07"E
L18	48.06'	N73° 21' 04"E
L19	42.95'	N88° 55' 53"E
L20	69.40'	N75° 53' 36"E

Wetland Line Table		
Line #	Length	Direction
L21	48.86'	N78° 04' 20"E
L22	29.17'	S59° 20' 57"E
L23	37.35'	N63° 22' 41"E
L24	39.49'	N83° 27' 34"E
L25	17.41'	S71° 46' 42"E
L26	40.10'	S01° 11' 25"E
L27	50.34'	S09° 00' 13"W
L28	34.00'	S01° 19' 59"W
L29	26.09'	S07° 05' 17"W
L30	48.13'	S00° 10' 39"E
L31	27.91'	S14° 42' 02"E
L32	43.12'	S38° 41' 28"E
L33	51.74'	S51° 41' 11"E
L34	31.52'	S09° 17' 53"E
L35	24.51'	S76° 15' 19"E
L36	16.70'	N18° 41' 27"E
L37	38.14'	N75° 06' 31"E
L38	34.14'	S79° 11' 10"E
L39	30.75'	S56° 54' 57"E
L40	40.06'	S62° 55' 05"E
L41	23.99'	S80° 09' 19"E
L42	24.16'	S24° 55' 12"E

Buffer Line Table		
Line #	Length	Direction
L43	27.35'	S75° 53' 45"W
L44	43.28'	S36° 21' 57"W
L45	22.51'	S56° 02' 31"W
L46	24.30'	N54° 04' 13"W
L47	32.02'	N35° 02' 51"W
L48	17.07'	N00° 57' 25"E
L49	13.54'	N34° 36' 50"E
L50	23.49'	N48° 59' 18"E
L51	31.32'	S83° 29' 39"E
L52	20.61'	N06° 00' 24"W
L53	56.57'	N24° 11' 17"E
L54	53.54'	N02° 01' 40"W
L55	40.25'	N02° 50' 11"W
L56	65.60'	N16° 43' 52"W
L57	67.49'	N32° 23' 23"W
L58	49.02'	N80° 42' 17"W
L59	27.74'	N39° 32' 07"W
L60	44.64'	S73° 21' 04"W
L61	42.39'	S88° 55' 53"W
L62	71.78'	S75° 53' 36"W

Buffer Line Table		
Line #	Length	Direction
L63	38.64'	S78° 04' 20"W
L64	33.08'	N59° 20' 57"W
L65	46.58'	S63° 22' 41"W
L66	24.10'	S83° 27' 34"W
L67	17.75'	N01° 11' 25"W
L68	49.79'	N09° 00' 13"E
L69	34.42'	N01° 19' 59"E
L70	26.33'	N07° 05' 17"E
L71	25.10'	N23° 39' 32"W
L72	15.02'	N00° 10' 39"W
L73	20.22'	N14° 42' 02"W
L74	53.20'	S09° 17' 53"E
L75	63.98'	S76° 15' 19"E
L76	26.22'	N18° 41' 27"E
L77	19.02'	N75° 06' 31"E
L78	23.97'	S79° 11' 10"E
L79	8.48'	S56° 54' 57"E
L80	43.92'	S02° 56' 26"E
L81	10.01'	N00° 10' 39"W

Buffer Curve Table			
Curve #	Length	Radius	Delta
C3	44.73	25.00	103
C4	29.28	25.00	067

DESCRIPTION: (AS PREPARED BY MERRILL PARKER SHAW, INC.)

COMMENCE AT THE SOUTHWEST CORNER OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 33, TOWNSHIP-1-NORTH, RANGE-31-WEST, ESCAMBIA COUNTY, FLORIDA; THENCE GO SOUTH 04 DEGREES 10 MINUTES 58 SECONDS WEST ALONG THE EAST LINE OF THE WEST HALF OF SAID SECTION 33, FOR A DISTANCE OF 1657.35 FEET FOR THE POINT OF BEGINNING; THENCE DEPARTING THE EAST LINE OF THE WEST HALF OF SAID SECTION 33, GO SOUTH 85 DEGREES 49 MINUTES 02 SECONDS EAST, FOR A DISTANCE OF 585.75 FEET; THENCE GO SOUTH 07 DEGREES 24 MINUTES 50 SECONDS EAST, FOR A DISTANCE OF 966.71 FEET TO THE INTERSECTION WITH THE NORTH LINE OF THE SOUTH HALF OF THE SOUTH HALF OF SAID SECTION 33; THENCE GO NORTH 87 DEGREES 03 MINUTES 34 SECONDS WEST ALONG THE NORTH LINE OF THE SOUTH HALF OF THE SOUTH HALF OF SAID SECTION 33, FOR A DISTANCE OF 780.26 FEET TO THE EAST LINE OF THE WEST HALF OF SAID SECTION 33; THENCE GO NORTH 04 DEGREES 10 MINUTES 58 SECONDS EAST ALONG THE EAST LINE OF THE WEST HALF OF SAID SECTION 33, FOR A DISTANCE OF 963.89 FEET TO THE POINT OF BEGINNING.

THE ABOVE PARCEL OF LAND IS SITUATED IN SECTION 33, TOWNSHIP-1-NORTH, RANGE-31-WEST, ESCAMBIA COUNTY, FLORIDA AND CONTAINS 15.00 ACRES.

GENERAL NOTES:

1. THE BEARINGS AS SHOWN HEREON ARE REFERENCED TO THE ASSUMED BEARING OF NORTH 04 DEGREES 10 MINUTES 58 SECONDS EAST ALONG THE EAST LINE OF THE WEST HALF OF SECTION 33, TOWNSHIP-1-NORTH, RANGE-31-WEST ACCORDING TO THE FLORIDA STATE PLANE COORDINATE SYSTEM, NAD-83(07).

2. THE SURVEY DATUM AS SHOWN HEREON IS REFERENCED TO THE DEEDS OF RECORD, A PREVIOUS SURVEY BY NORTHWEST FLORIDA LAND SURVEYING, PROJECT NUMBER 17044-06, DATED 07/14/06 AND LAST BEING REVISED ON 7/27/06 AND TO EXISTING FIELD MONUMENTATION.

3. A TITLE SEARCH WAS PROVIDED TO MERRILL PARKER SHAW, INC., FOR THE SUBJECT PROPERTY BY DHI TITLE OF FLORIDA, INC., DATED NOVEMBER 4, 2020. THERE MAY BE UNRECORDED DEEDS, EASEMENTS, RIGHTS-OF-WAY, STATE AND/OR FEDERAL JURISDICTIONAL AREAS OR OTHER INSTRUMENTS WHICH COULD AFFECT THE SUBJECT PROPERTY.

4. THIS SURVEY DOES NOT DETERMINE OWNERSHIP.

5. THIS SURVEY MEETS MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 5J-17.051 AND 5J-17.052 FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES, TO THE BEST OF MY KNOWLEDGE AND BELIEF.

6. THE MEASUREMENTS AS SHOWN HEREON WERE MADE TO UNITED STATES STANDARDS.

7. FEDERAL AND STATE COPYRIGHT ACTS PROTECT THIS MAP FROM UNAUTHORIZED USE. THIS MAP IS NOT TO BE COPIED OR REPRODUCED IN WHOLE OR PART AND IS NOT TO BE USED FOR ANY OTHER TRANSACTIONS. THIS DRAWING CANNOT BE USED FOR THE BENEFIT OF ANY OTHER PERSON, COMPANY OR FIRM WITHOUT PRIOR WRITTEN CONSENT OF THE COPYRIGHT OWNER AND IS TO BE RETURNED UPON REQUEST.

8. ONLY THE ABOVE GROUND VISIBLE ENCROACHMENTS AND IMPROVEMENTS WERE FIELD LOCATED AS SHOWN HEREON, UNLESS OTHERWISE NOTED, UNDER GROUND ENCROACHMENTS AND IMPROVEMENTS, IF ANY, WERE NOT FIELD LOCATED OR VERIFIED, UNLESS OTHERWISE NOTED.

9. THE WETLAND JURISDICTION LINES AS SHOWN HEREON WERE DELINEATED BY WETLAND SCIENCES, INC., DATED 11/11/2020. LOCATION DATA OF SAID LINES WAS PROVIDED TO MERRILL PARKER SHAW, INC., BY WETLAND SCIENCES, INC. AND WAS NOT FIELD VERIFIED.

10. THE ELEVATIONS AS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 FROM THE FLORIDA DEPARTMENT OF TRANSPORTATION BENCHMARK I10 V 8, HAVING A PUBLISHED ELEVATION OF 120.08 FEET.

11. THE CONTOURS AS SHOWN HEREON ARE AT 1.0 FOOT INTERVALS.

B2 TITLE EXCEPTION NOTES:

1-9) NOT SURVEY RELATED.

10) A ROAD EASEMENT AS RECORDED IN OFFICIAL RECORDS BOOK 2463 AT PAGE 309 OF THE PUBLIC RECORDS OF ESCAMBIA COUNTY, FLORIDA, AFFECTS THE SUBJECT PROPERTY AND IS PLOTTED HEREON.

11) A TREE TRIM, CUT AND REMOVAL EASEMENT AS RECORDED IN OFFICIAL RECORDS BOOK 7668 AT PAGE 460 OF THE PUBLIC RECORDS OF ESCAMBIA COUNTY, FLORIDA, DOES NOT AFFECTS THE SUBJECT PROPERTY AND IS NOT PLOTTED HEREON.

12) NOT SURVEY RELATED.

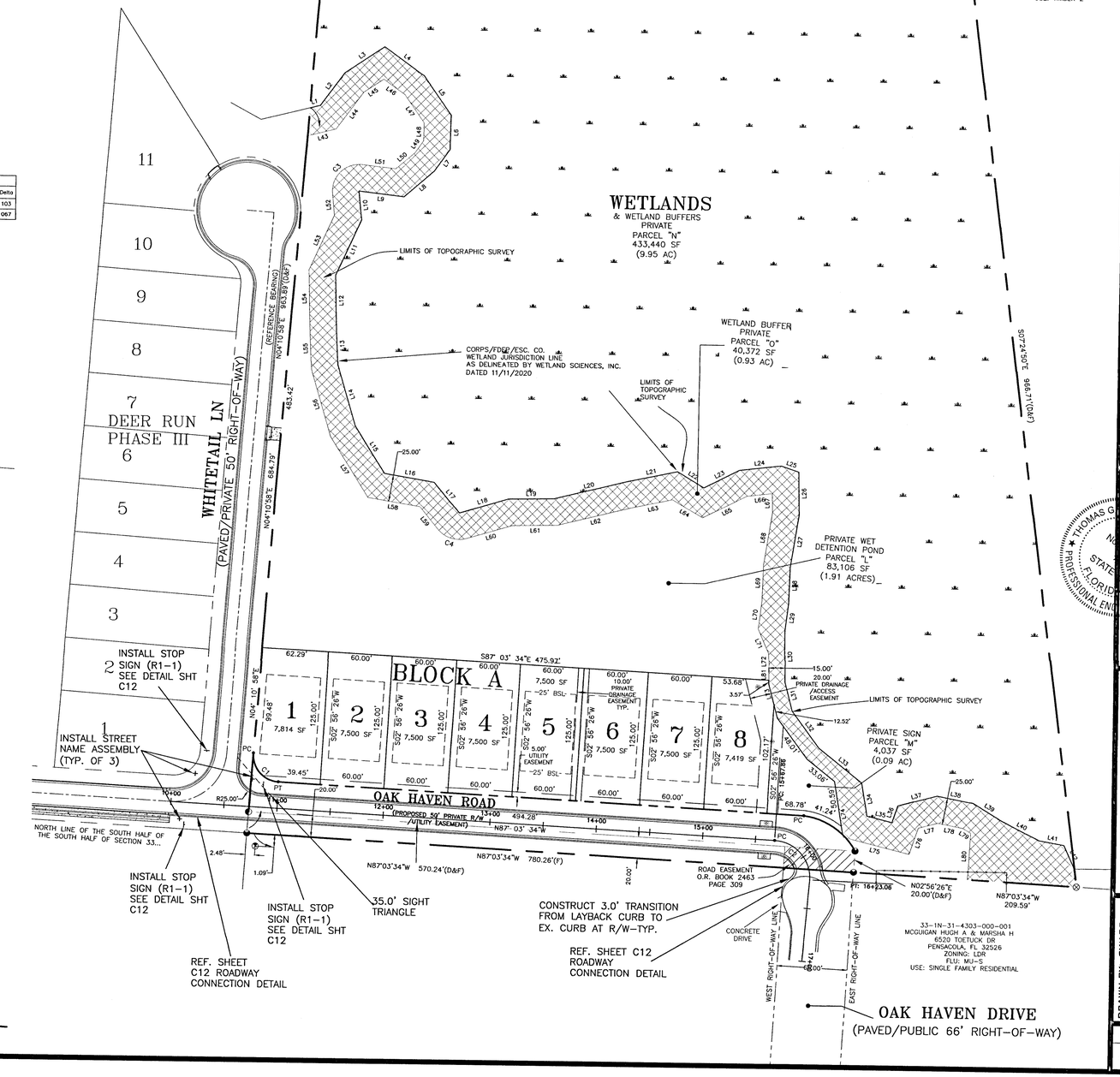
MATCH LINE

POINT OF COMMENCEMENT
SOUTHWEST CORNER OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 33...

EAST LINE OF THE WEST HALF OF SECTION 33...
S04°10'58"W 1657.35'(D&F)

POINT OF BEGINNING

MATCH LINE



NO.	DATE	REVISIONS
1.	6/3/2021	AS PER ESCAMBIA COUNTY DRC REVIEW
2.	6/3/2021	AS PER ECUA REVIEW COMMENTS
3.	6/10/2021	AS PER NWFWMD RAI
4.	7/13/2021	AS PER ECUA REVIEW COMMENTS
5.	7/13/2021	AS PER ESCAMBIA COUNTY DRC REVIEW

HAMMOND ENGINEERING, INC.
FLORIDA AUTHORIZATION NO. 9130
ALABAMA AUTHORIZATION NO. 32775
3802 NORTH 51ST STREET
PENSACOLA, FLORIDA 32505
850 434-2603
FAX 850-434-2650
TOM@SELANDDESIGN.COM

THOMAS GRANT HAMMOND
LICENSED
No. 6674
STATE OF FLORIDA
PROFESSIONAL ENGINEER

CONSTRUCTION PLANS FOR
THE PRESERVE AT DEER RUN PHASE V
DIMENSION AND STAKING PLAN
ESCAMBIA COUNTY FLORIDA

DRAWN BY: GY/ARS
DESIGNED BY: TGH/ARS
CHECKED BY: TGH
DATE: JULY 2021
SCALE: AS SHOWN
NOT RELEASED FOR CONSTRUCTION
BY: DATE:

PROJECT NO: 13-006

SHEET: C2

GRAPHIC SCALE

22"x34" SCALE 1 inch = 60 ft.

60 0 30 60 120 240

11"x17" SCALE 1 inch = 120 ft.

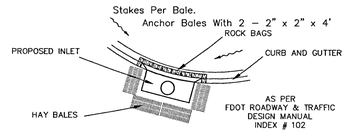
DENOTES:

- ⊗ – 1/2" CAPPED IRON ROD, NUMBERED 7174 (PLACED)
- ◐ – 1/2" CAPPED IRON ROD, NUMBERED 7174 (FOUND)
- ● – 1/2" CAPPED IRON ROD, NUMBERED 7277 (FOUND)
- ◉ – 1/2" CAPPED IRON ROD, NUMBERED 2892 (FOUND)
- ⊠ – 4"X4" CONCRETE MONUMENT, NUMBERED 7174 (FOUND)

R/W – RIGHT-OF-WAY
(D) – DEED INFORMATION
(F) – FIELD INFORMATION
–x–x–x– – OLD FENCE LINE, POST ONLY

CORPS/FDEP/ESC. CO. WETLANDS 433,440 SF (9.95 AC)

WETLAND BUFFER 40,372 SF (0.93 AC)



SILT SAVER FRAME AND FILTER ASSEMBLY

NTS

TYPICAL ALL ROADSIDE INLETS (DOUBLE A & TYPE A)

NOTE: ON SITES > 1 ACRE, IF > 1 CONTIGUOUS ACRE IS DECLARED, A GROUND COVER SUFFICIENT TO PREVENT EROSION SHOULD BE PLANTED OR OTHERWISE STABILIZED WITHIN 10 WORKING DAYS ON THE PORTION OF THE SITE UPON WHICH FURTHER ACTIVE CONSTRUCTION WILL NOT BE UNDERTAKEN WITHIN 90 DAYS.

NOTE: ALL WORK SHALL BE DONE IN ACCORDANCE TO THE PROJECT SPECIFICATIONS. WHERE SPECIFICATIONS OVERLAP (WATER, SEWER, ETC.), THE CONTRACTOR SHALL COMPLY WITH THE MOST STRINGENT SPECIFICATION.

NOTE: TO COMPLY WITH NPDES REQUIREMENTS, EROSION CONTROL MEASURES SHALL BE INSPECTED AFTER EACH 1/2" RAINFALL EVENT OR AT LEAST WEEKLY. THE CONTRACTOR SHALL DOCUMENT SUCH INSPECTIONS AND EROSION CONTROL MAINTENANCE EFFORTS; INSPECTION RECORDS SHALL BE PROVIDED TO THE NPDES PERMIT APPLICANT FOR PROPER REPORTING TO FDEP.

NOTES:
1. CONTRACTOR SHALL MAINTAIN AND INSPECT EROSION CONTROL DEVICES IN ACCORDANCE TO THE STORMWATER POLLUTION PREVENTION PLAN.
2. CONSTRUCTION ACTIVITIES ARE LIMITED TO ROADS, PONDS, AND EASEMENTS.
3. THE PROPOSED PONDS SHALL BE UTILIZED FOR STORMWATER DETENTION AND TEMPORARY SEDIMENT
4. THE PROPOSED PONDS SHALL BE CONSTRUCTED FOLLOWING CLEARING AND GRUBBING OF R/W'S EASEMENTS ETC. AND PRIOR TO UTILITY INSTALLATION.
5. ALL DRAINAGE EASMENTS, PUBLIC AND PRIVATE, SHALL REMAIN UNOBSTRUCTED.

EROSION CONTROL NOTES

A HEALTHY GROWTH OF GRASS WITHIN THE DISTURBED RIGHT-OF-WAY AREAS IS REQUIRED PRIOR TO COUNTY APPROVAL/ACCEPTANCE. IF TIME CONSTRAINTS EXIST DURING THE FINAL PLAT APPROVAL AND ACCEPTANCE PROCESS, A MINIMUM OF TWO STRIPS OF SOD (MINIMUM 2' WIDE) BEHIND THE BACK OF CURB WITH ALL OTHER DISTURBED AREAS SEEDED/MULCHED/FERTILZED WILL BE ACCEPTABLE.

SAG FILTERS IN CURB THROATS ARE NOT AN ALLOWABLE SEDIMENT CONTROL METHOD.

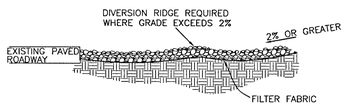
NOTE: NO EXISTING HERITAGE TREES ON-SITE

NOTES:
- CONTRACTOR RESPONSIBLE FOR OBTAINING AND IMPLEMENTING A STORMWATER POLLUTION PREVENTION PLAN (SWPP) AS PER FDEP STANDARDS.
- THE EROSION AND SEDIMENT CONTROL RULES ARE PERFORMANCE ORIENTED. THAT IS, THE MEASURES USED AT A CONSTRUCTION SITE MUST BE EFFECTIVE IN CONTROLLING EROSION AND PREVENTING OFF-SITE SEDIMENTATION FOR THE SITE TO BE IN COMPLIANCE. FOLLOWING AN APPROVED PLAN AND INSTALLING THE CONTROL MEASURES MAY NOT BE ENOUGH FOR A SITE TO BE IN COMPLIANCE WITH THE RULES. IF EROSION AND OFF-SITE SEDIMENTATION OCCUR, THE CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING ADDITIONAL MEASURES TO CORRECT ANY PROBLEM ASSOCIATED WITH COMPLIANCE OF THE NPDES PERMIT OR ANY OTHER PERMIT REQUIRED FOR THE SITE CONSTRUCTION. THE CONTRACTOR WILL ALSO BE COMPLETELY RESPONSIBLE FOR ANY FINES LEVIED BY ANY GOVERNING AGENCY ON THE PROJECT DURING CONSTRUCTION.
- EROSION CONTROL MEASURES SHOWN ARE MINIMUM REQUIREMENTS ONLY. CONTRACTOR SHALL REINFORCE AND/OR ADD ADDITIONAL MEASURES AS CONDITIONS WARRANT AND/OR AS DIRECTED BY THE PROPER REGULATORY AUTHORITIES.

PLAN VIEW

NTS

NOTE:
USE SANDBAGS, STRAW BALES OR OTHER APPROVED METHODS TO CHANNELIZE RUNOFF TO BASIN AS REQUIRED.



SECTION A-A

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE

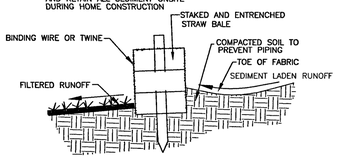
NTS

NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABLIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

Offsite vehicle tracking of sediments and the geration of dust shall be minimized. A stabilized construction access road shall be utilized to reduce off-site tracking. Off-site sediment removal should be conducted at a frequency necessary to minimize impacts. Vehicle wash area should be considered if off-site tracking becomes excessive.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE TO BE CONSTRUCTED AT ALL DESIGNATED CONSTRUCTION ENTRANCES AND EXITS.

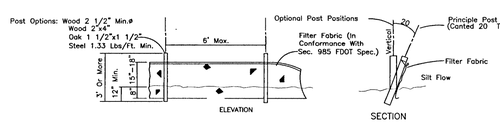
NOTE: HOMEBUILDER SHALL CONTROL SEDIMENT AND RETAIN ALL SEDIMENT ONSITE DURING HOME CONSTRUCTION



NOTE: INSTALL SILT FENCE AS DETAILED. INSTALL HAYBALES ALONG UPSTREAM SIDE OF SILT FENCE WITH BINDING STRINGS OR WIRE RUNNING PARALLEL TO THE GROUND.

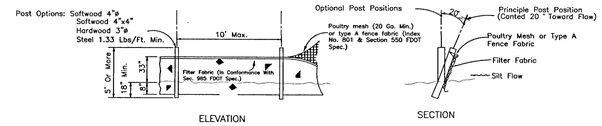
DETAIL OF PROPERLY INSTALLED STRAW BALE

NTS



TYPE III SILT FENCE

NTS



TYPE IV SILT FENCE

NTS

REVISIONS		
NO.	DATE	
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ALABAMA AUTHORIZATION NO. 32777
3802 NORTH "S" STREET
PENSACOLA, FLORIDA 32505
850 434-2603
FAX 850-434-2650
TOM@SELANDDESIGN.COM

THOMAS GRANT HAMMOND JR. LICENSED PROFESSIONAL ENGINEER STATE OF FLORIDA No. 45771

11/3/21

CONSTRUCTION PLANS FOR
THE PRESERVE AT DEER RUN PHASE V
EROSION CONTROL PLAN
ESCAMBIA COUNTY FLORIDA

DRAWN BY: CVARS
DESIGNED BY: TGH/ARS
CHECKED BY: TGH
DATE: JULY 2021
SCALE: AS SHOWN
NOT RELEASED FOR CONSTRUCTION
BY: DATE:

PROJECT NO: 13-006

SHEET: C3

Site Description

The proposed The Preserve at Deer Run Phase V Subdivision is located on the west side of Beulah Road just south of the Interstate 10/Beulah Road intersection in Escambia, Florida, directly east of Phase III. The site is in section 33, Township 1 North, Range 31 West, Escambia County, Florida.

The site is 15 acres in size and currently stands vacant and undeveloped. There are approximately 9.95 acres of jurisdictional wetlands located on the site. The area to be disturbed by the construction of this project encompasses approximately 2.87+/− acres. Currently, runoff flows from the northeast side of the site.

The approximate latitude and longitude of the site discharge point are: 30°33'16.92"N, 87°23'12.72"W. The proposed improvements include the construction of paved roads, a stormwater pond, stormwater piping, potable water piping, and sanitary sewer improvements.

Erosion and Sedimentation Controls

Erosion and sedimentation from the construction site shall be controlled at all times using Best Management Practices (BMPs). Perimeter controls shall be installed prior to clearing activities or any construction activity that disturbs soils. Installation of those controls may be staged to correspond with the clearing and construction schedule. Immediate after clearing activities appropriate controls shall be installed to limit and minimize the velocity of stormwater runoff over unprotected soils. Temporary BMPs shall be used as necessary inside the the perimeter controls as the construction progresses. Perimeter controls shall be actively maintained until final stabilization of those portions of the site uphill of the perimeter controls. Temporary controls shall be removed when stabilization is achieved or when necessary for the next stage of construction. Controls shall be consistent with the performance standards for erosion and sedimentation control as set forth in Section 62−40.432 F.A.C.

Stabilization and Structural Practices

Stabilization practices may include, but not limited to, temporary seeding, mulching, geotextiles, permanent sod and preservation of existing vegetation. Preservation of the existing vegetation should always be the first choice BMP. Where disturbed soils are to remain for extended periods, temporary seeding should be considered prior to final sod stabilization. A record shall be maintained of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site and when stabilization measures are initiated. Stabilization measures shall be initiated as soon as practicable, but in no case more than 14 days, in those areas of the site where construction activities have temporarily or permanently ceased.

Structural practices shall divert flows from exposed soils, store flows, retain sediment on−site, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include, but not limited to, silt fences, earth dikes, diversion swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock oultet protection, reinforced soil retaining systems and temporary or permanent sediment basins.

Stormwater Management

A double row of type IV silt fence and hay bales shall be installed along the wetland buffer boundary. Additionally, a single row of type III silt fence shall be installed along the proposed boundary of stormwater pond parcel and the downhill side of the proposed R/W prior to any activity that disturbs soils.

After clearing activities, silt fences and hay bales shall be installed, as necessary, uphill of the perimeter controls to reduce runoff velocities and the potential for excessive erosion. Prior to any major grading activity, the stormwater detention basin shall be constructed.

As the grading activities progress, a depressed area shall be constructed around inlets surrounded by hay bales for inlet protection. These depressed areas shall act as sediment basins. Runoff from uphill areas shall be directed to these inlets, where feasible, by diversion swales.

These swales may require temporary seeding and check dams to minimize velocities and avoid excessive erosion. As the construction progresses, each installed storm inlet shall be protected by hay bales.

Rip−rap or similar velocity control is to be used, as neccessary, at the outfalls from the stormwater management system for velocity dissipation prior to discharge off−site. Silt fences, and haybales if neccessary, shall be installed across the outfalls until final stabilization is achieved. Erosion control facilities shall actively maintained throughout the course of construction and shall remain until final stabilization is achieved and acceptance by the owner.

Controls for Other Potential Pollutants

A materials management area shall be designated on−site for protected storage of chemicals, solvents, fertilizers and other potentially toxic materials. Storage areas can become a major source of risk due to possible mishandling of materials and accidental spills. An inventory should be compiled and maintained of the storage area and the site. Special care should be taken to identify any materials that have the potential to come into contact with stormwater.

Petroleum products such as oil gasoline, lubricants and asphaltic substances should be handled carefully to minimize their exposure to stormwater. These management practices should be used to reduce the risks of using petroleum products:

* Have equipment available to contain and clean up petroleum spills in fuel storage areas or on board maintenance and fueling vehicles.
* Where possible, store petroleum products and fuel vehicles in covered areas and construct dikes to contain any spills. * Contain and clean up petroleum spills immediately.
* Perform preventative maintenance for on−site equipment to prevent leakage.
* Apply asphaltic substances properly according to the manufacturer's instructions.

Hazardous products including, but not limited to, paints, acids for cleaning masonry surfaces, cleaning solvents, chemical additives used for soil stabilization, and concrete curing compounds should be properly handled. These practices will help avoid pollution of stormwater by these materials:

* Keep equipment to contain and clean up spills of hazardous materials in the areas where the materials are stored.
* Contain and clean up spills immediately after they occur.
* Keep materials in a dry, covered area.
* Store materials in the original manufacturer's containers whenever possible, because special handling instructions usually are printed on the containers.

Pesticides include insecticides, rodenticides, and herbicides that are commonly used on construction sites. These management practices will reduce the amounts of pesticides that could contact stormwater:

* Handle pesticides as infrequently as possible.
* Store materials in the original manufacturer's containers whenever possible, because special handling instructions usually are printed on the containers.
* Observe all applicable federal, state and local regulations when using, handling, or disposing of pesticides.
* Store pesticides in a dry, covered area.
* Provide curbs or dikes to contain spills.
* Have measures on site to contain and clean up spills.
* Strictly follow recommended application rates and methods.

Fertilizers and detergents usually contain nutrients that can be a major source of pollution in stormwater. These practices should be used to reduce the risks of nutrient pollution:

* Limit the application of fertilizers to the minimum area and the minimum recommended amounts.
* Reduce exposure of nutrients to stormwater runoff by working the fertilizer into the soil to a depth of 4 to 6 inches.
* Apply fertilizer more frequently, but at lower application rates.
* Limit hydroseeding in which lime and fertilizers are applied to the ground surface in one application.
* Implement good erosion and sediment control to help reduce the amount of fertilizer lost as a result of erosion.
* Limit the use of detergents on the site. Wash water containing detergents hould not be discharged to the stormwater management system.
* Apply fertilizer and use detergents only in the recommended manner and amounts.

Proper management and disposal of building materials and other construction site wastes are an essential part of pollution prevention. Construction wastes include surplus or refuse building materials as well as hazardous wastes. Management practices for these wastes include trash disposal, recycling, material handling, and spill prevention and clean up. These practices should provide for proper disposal of construction wastes:

* Designate a waste disposal area on the site.
* Provide an adequate number of containers with lids or covers that can be placed over the container prior to rainfall. Locate containers in covered areas, where possible.
* Arrange for scheduled waste pick up. Adjust waste collection schedule as necessary to prevent overflow of the containers.
* Ensure that construction waste is collected, removed, and disposed of only at authorized disposal areas in compliance with applicable State and/or local waste disposal regulations.

Offsite vehicle tracking of sediments and the geration of dust shall be minimized. A stabilized construction access road shall be utilized to reduce off−site tracking. Off−site sediment removal should be conducted at a frequency necessary to minimize impacts. Vehicle wash area should be considered if off−site tracking becomes excessive.

The construction site must have temporary sanitary sewer facilities for on−site personnel. Portable facilities may be utilized throughout the site. Licensed domestic waste haulers must be contracted to regularly remove the sanitary wastes and to maintain the facilities in good working order. The temporary construction trailer may have sanitary sewer facilities with a holding tank. A licensed domestic waste hauler shall also service this facility. An on−site septic system for the construction trailer in not allowed. Temporary sanitary sewer facilities shall be permitted by the local building department in accordance with applicable State and local regulations.

Controls of pollutants shall be maintained throughout construction period and until final stabilization is achieved. Qualified personnel shall inspect all points of discharge and all disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, structural controls, and locations where vehicles enter or exit the site at least once every seven calendar days and within 24 hours of the end of every storm event that produces at least 0.25 inches of rainfall. Where sites have been finally stabilized, such inspection shall be conducted at least once every month until a Notice of Termination has been submitted.

* Stabilization Measures − Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of or the potential for, pollutants leaving the site. The inspection should reveal whether the area was stabilized correctly, whether there has been damage to the area since it was stabilized, and what should be done to correct any problems.
* Structural Controls − Silt fences, hay bales and other erosion control measures shall be inspected regularly for proper positioning, anchoring, and effectiveness in trapping sediments. The inspection should reveal whether the control was installed correctly, whether there has been damage to the control since installation, and what should be done to correct any problems. Sediment should be removed from the uphill side of the silt fence and the fence should be reconstructed as necessary. Hay bales shall be added or replaced as necessary to provide effective control.
* Discharge Points − Discharge points shall be inspected to determine whether erosion control measures are effective in preventing significant amounts of pollutants from leaving the site. Silt fences and hay bales shall be maintained or replaced as necessary. The inspection should reveal whether the on− site BMPs are effective, and what should be done to increase the effectiveness.
* Construction Entrances − Locations where vehicles enter or exit the site shall be inspected for evidence of off−site sediment tracking. The inspection should reveal whether the stabilization of the construction entrance is effective, and what should be done to increase the effectiveness.
* Areas Used for Storage of exposed Materials − These are locations where construction materials (including excavated soils) are stored. The inspection should reveal the potential for excessive erosion and sedimentation, and what actions should be implemented to reduce the risks of pollution.

Based on the result of the inspection, all maintenance operations needed to assure proper function of all controls, BMPs, practices or measures identified in this Plan shall be done in a timely manner, but in no case later than 7 calendar days following the inspection.

A Report summarizing the scope of each inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations related to the implementation of the stormwater pollution prevention plan, and modifications to the stormwater pollution prevention plan shall be prepared and retained as part of the stormwater pollution prevention plan for at least three years from the date that the site is finally stabilized. Such report shall identify any incidence of non−compliance.

Contractor Requirements

The contractor must have technical expertise in erosion prevention and sediment control. The contractor must at all time maintain erosion control methods that prevent any violation of the NPDES program.

Faulty Installation and/or Poor Maintenance

Most noncompliance occurs because measures were not installed correctly or maintained properly, or both. Determining the reason why the measures are failing requires technical knowledge about the devices and how to construct them properly. Contractors failure to control erosion, sedimentation or turbidity both onsite and offsite is not acceptable. Failure to do so may result in possible fines and/or termination from the site without payment for construction progress.

Compliance

Remember that the goal of the program is to prevent accelerated erosion and off−site sedimentation. As the contractor, you are the first person to determine if the performance standards and intent of the rule are being met. You are the key person in ensuring that the construction site is evaluated fairly and consistently and that you keep the site in compliance.

The erosion and sediment control rules are performance oriented. That is, the measures used at a construction site must be effective in controlling erosion and preventing off−site sedimentation for the site to be in compliance. Following an approved plan and installing the control measures may not be enough for a site to be in compliance with the rules. If erosion and off−site sedimentation occur, the contractor will be responsible for installing additional measures to correct any problem associated with compliance of the NPDES permit or any other permit required for the site construction. The contractor will also be completely responsible for any fines levied by any governing agency on the project during construction.

The rules are also flexible, allowing the contractor to decide the most economical and effective means of erosion control. This encourages the use of innovative techniques and specifically designed erosion control systems. The contractor is the key individual in making this kind of performance based rule work because the contractor is the first person to recognize performance failures and remedy the problems.

The contractor's job is to:
1. Determine that an erosion and sediment control plan for the site has been approved.
2. Determine that all specified practices have been installed and are being maintained according to the plan.
3. Determine that both on−site and off−site sedimentation, erosion or turbidity is being prevented. If the contractor finds deficiencies, appropriate action must be taken to attain compliance.

Control of non−stormwater discharges

It is expected that the following non−stormwater discharges may occur from the site during construction period: water from water line flushing, pavement wash water (where no spills or leaks of toxic or hazardous materials have occurred), and uncontaminated groundwater (from dewatering excavation). If said discharges do occur, they will be directed to the temporary sediment basin prior to discharge. Turbid water from the stormwater pond shall not be pumped directly into either of the receiving waters. Any pumped water from the stormwater pond shall be treated so as to not allow a discharge of polluted stormwater. Treatment can include silt fences, settling ponds, the proper use of flocculating agents or other appropriate means.

NO.	DATE	REVISIONS
1.	6/3/2021	AS PER ESCAMBIA COUNTY DRC REVIEW
2.	6/3/2021	AS PER ECUA REVIEW COMMENTS
3.	6/10/2021	AS PER NWFWMD RAI
4.	7/13/2021	AS PER ECUA REVIEW COMMENTS
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ALABAMA AUTHORIZATION NO. 32777
3802 NORTH 'S' STREET
PENSACOLA, FLORIDA 32505
850 434-2603
FAX 850-434-2650
TOM@SELANDDESIGN.COM

GRANT THOMAS HAMMOND JR. LICENSED No. 45474 STATE OF FLORIDA PROFESSIONAL ENGINEER

CONSTRUCTION PLANS FOR
THE PRESERVE AT DEER RUN PHASE V
EROSION CONTROL NOTES
ESCAMBIA COUNTY FLORIDA

DRAWN BY: DY/ARS
DESIGNED BY: TGH/ARS
CHECKED BY: TGH
DATE: JULY 2021
SCALE: AS SHOWN
NOT RELEASED FOR CONSTRUCTION
BY: DATE:

PROJECT NO: 13-006

SHEET: C4

GRAPHIC SCALE

22"x34" SCALE 1 inch = 60 ft.

60 0 30 60 120 240

11"x17" SCALE 1 inch = 120 ft.

DENOTES:

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- ● – 1/2" CAPPED IRON ROD, NUMBERED 7174 (FOUND)
- ⊕ – 1/2" CAPPED IRON ROD, NUMBERED 7277 (FOUND)
- ⊛ – 1/2" CAPPED IRON ROD, NUMBERED 2892 (FOUND)
- ⊠ – 4"X4" CONCRETE MONUMENT, NUMBERED 7174 (FOUND)

R/W – RIGHT-OF-WAY
(D) – DEED INFORMATION
(F) – FIELD INFORMATION
– OLD FENCE LINE, POST ONLY
– CONTOUR LINE
– BENCHMARK
X – EXISTING ELEV.
– PROP. ELEV.

DRAINAGE STRUCTURES	
STRUCTURE #	DESCRIPTION
S-101	TYPE A CURB INLET W/ 4' DIA. BOTTOM
S-102	TYPE A CURB INLET W/ 4' DIA. BOTTOM
S-102A	4' DIA. JUNCTION BOX
S-102B	4' DIA. JUNCTION BOX
S-103	TYPE C OVERFLOW STRUCTURE

STORMWATER INFRASTRUCTURE TABLE	
STORMWATER PIPE	268
JUNCTION BOXES	2
STORMWATER CURB INLETS	2
STORMWATER POND STRUCTURES	1

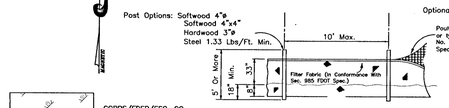
IMPERVIOUS AREA	
	NET
LOTS (HOMES AND DRIVEWAYS, MAX OF 3500 EACH)	28,000 SF – 0.64 AC
ASPHALT ROADWAY AND CURBING	14,032 SF – 0.32 AC
TOTAL IMPERVIOUS AREA	42,032 SF – 0.96 AC

FLOOD ZONE DATA

THE SUBJECT PROPERTY SHOWN HEREON IS LOCATED IN FLOOD ZONE A, (SPECIAL FLOOD HAZARD AREAS WITHOUT BASE FLOOD ELEVATION), AND FLOOD ZONE X (MINIMAL RISK AREAS OUTSIDE THE 1-PERCENT AND 2-PERCENT-ANNUAL-CHANCE FLOODPLAINS. NO BFE'S OR BASE FLOOD DEPTHS ARE SHOWN WITHIN THESE ZONES), AS DETERMINED FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP OF ESCAMBIA COUNTY, FLORIDA, COMMUNITY 120080, FIRM MAP PANEL NUMBER 12033C0270G, MAP REVISION DATED SEPTEMBER 29, 2006.

FLOOD ZONE(S)	NFIP COMMUNITY NUMBER	MAP NUMBER	PANEL NUMBER(S)	SUFFIX	MAP REVISION DATE
A, X	120080	12033C	0270	G	SEPTEMBER 29, 2006

Post Options: Softwood 4"ø, Softwood 4"x4", Hardwood 3"ø, Steel 1.33 Lbs/Ft. Min.



ELEVATION SECTION

TYPE IV SILT FENCE

NTS

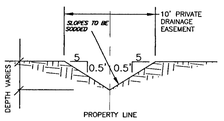
CORPS/FDEP/ESC. CO. WETLANDS 433,440 SF (9.95 AC)

WETLAND BUFFER 40,372 SF (0.93 AC)

BUFFER CALCULATION:
1,604 LF DILINEATED WETLAND LINE
40,372 SF WETLAND BUFFER/1,604 LF
= 25.16' AVERAGE BUFFER WIDTH

NOTE: FOR TREES REMAINING, ALL ADEQUATE TREE PROTECTION MEASURES AND BARRICADES SHALL BE INSTALLED PRIOR TO SITE DISTURBANCE AND MAINTAINED IN GOOD WORKING ORDER UNTIL PROJECT IS COMPLETE AND SITE BECOMES STABILIZED.

NOTE: ALL WETLAND AREAS & REMAINING WETLAND BUFFER AREAS SHALL REMAIN IN THEIR NATURAL, VEGETATED STATES AT ALL TIMES.



TYPICAL SWALE X-SECTION

NTS

NOTE: DRAINAGE CONVEYANCE SWALES ARE TO BE BUILT BY THE CONTRACTOR. SIDE YARD SWALES ARE TO BE BUILT BY THE HOMEBUILDER.

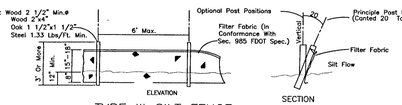
NOTE: PRIVATE SIDE YARD EASEMENTS SHALL NOT BE BLOCKED BY ANYTHING THAT MAY HINDER THE FLOW OF STORMWATER (i.e A/C UNITS, ETC.).

NOTE: DISTURBED RIGHT-OF-WAY AREAS SHALL BE STABILIZED WITH A HEALTHY GROWTH OF GRASSPRIOR TO RECIEVING COUNTY ACCEPTANCE.

NOTE: A MINIMUM ONE (1) FOOT GROUND COVER IS REQUIRED FOR ALL UNDERGROUND PIPES.

NOTE: AS PER ESCAMBIA COUNTY LDC DSM 2-1.6(d), NO STREETS OR ROADS UNDER THE TWO YEAR WARRANTY WILL BE ALLOWED TO BE OPEN CUT, OR JACK-AND-BORED. IT IS THE DEVELOPERS RESPONSIBILITY TO PROVIDE CONDUITS FOR ALL UTILITY CROSSINGS.

Post Options: Wood 2 1/2" Min.ø, Wood 2"x4", Oak 1 1/2"x1 1/2", Steel 1.33 Lbs/Ft. Min.



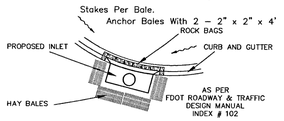
TYPE III SILT FENCE

NTS

NOTE: NO FENCES SHALL BE INSTALLED WITHIN PRIVATE OR PUBLIC DRAINAGE/ACCESS EASEMENTS FOR CONVEYANCE SYSTEMS. THESE EASEMENTS SHALL BE ACCESSIBLE AT ALL TIMES.

NOTE: LOT OWNERS WILL NOT BE ALLOWED TO LOCATE FENCES OR OTHER STRUCTURES WITHIN DRAINAGE/ACCESS EASEMENTS FOR CONVEYANCE SYSTEMS, THESE EASEMENTS SHALL BE ACCESSIBLE AT ALL TIMES.

NOTE: FENCES AND OTHER STRUCTURES IN 10' PRIVATE DRAINAGE EASEMENTS ALONG EACH LOT PROPERTY LINES SHALL NOT IMPEDE STORMWATER FLOW.



SILT SAVER FRAME AND FILTER ASSEMBLY

NTS

TYPICAL ALL ROADSIDE INLETS
(DOUBLE A & TYPE A)

APPROX FLOOD ZONE LINES
SILT FENCE
APPROX SOIL LINES

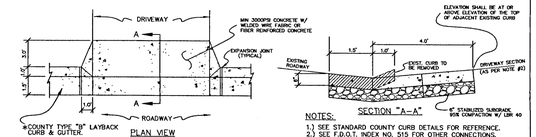
SOIL INFO:
38: BONIFAY LOAMY SAND, 0 TO 5 PERCENT SLOPES
48: PELHAM-YEMASSEE COMPLEX, OCCASIONALLY FLOODED
49: DOROVAN MUCK AND FLUVAQUENTS, FREQUENTLY FLOODED
54: TROUP-POARCH COMPLEX, 8 TO 12 PERCENT SLOPES

TYPICAL DRIVEWAY CONNECTION STANDARDS FOR EXISTING ROADWAY CONDITIONS

NOTES:

1. ALL MATERIALS AND LABOR FOR INSTALLATION WILL BE THE RESPONSIBILITY OF THE PROPERTY OWNER.
2. DRIVEWAYS ABUTTING PAVED ROADS SHALL BE 1-1/2" ASPHALT WITH 6" STABILIZED SUBGRADE OR 4" TO 6" CONCRETE WITH 4" STABILIZED SUBGRADE ~ 95% COMPACTION (MODIFIED PROCTOR) WITH LBR 40 BETWEEN EDGE OF ROADWAY AND R/W LINE.
3. DRIVEWAYS ABUTTING A DIRT ROAD SHALL BE MILLED ASPHALT, GRADED AGGREGATE BASE, OR WASHED CONCRETE (4" IN DEPTH) ON THE COUNTY MAINTAINED PORTION OF DRIVEWAY.
4. IF NECESSARY, REFER TO F.D.O.T. INDEX DETAILS AS REFERENCED BELOW.
5. RADIUS OR FLARE IS ACCEPTABLE FOR TYPE II OR TYPE III CONNECTIONS.
6. DRIVEWAYS WITHIN PROPERTY BOUNDARY SHALL PROVIDE A MINIMUM OF 2 PARKING SPACES.
7. TYPICAL DRIVEWAY SECTIONS ARE TO BE 12' WIDE MINIMUM.

TYPE I CURB CUT DRIVEWAY FOR COUNTY TYPE "B" LAYBACK CURBS.



NOTES:
1.) SEE STANDARD COUNTY CURB DETAILS FOR REFERENCE.
2.) SEE F.D.O.T. INDEX NO. 515 FOR OTHER CONNECTIONS.
* FOR OTHER TYPE CURBS, DIMENSIONS MAY BE ADJUSTED TO FIT.

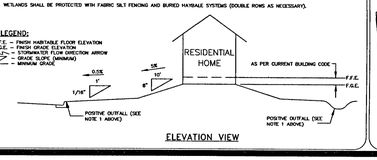
HOMEBUILDER NOTES:
1. INSTALL SILT FENCE ALONG ALL DOWN GRADIENT LOT BOUNDARY LINES.
2. PROVIDE 12' WIDE, 4" THICK, FDOT #1 AGGREGATE CONSTRUCTION ACCESS DRIVE ON EACH LOT PRIOR TO COMMENCEMENT OF HOUSE CONSTRUCTION.
3. FENCING SHALL BE INSTALLED IN A MANNER WHICH SHALL NOT IMPEDE STORMWATER FLOW.

MINIMUM STANDARDS FOR TYPICAL RESIDENTIAL GRADING CONTROL PLAN

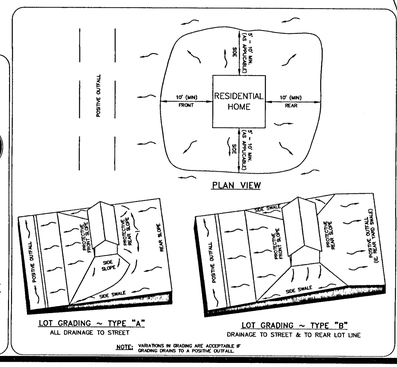
NOTES:

1. A POSITIVE DRAINAGE 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 UNITED STATES, OR TO ANY FUNCTIONING ESCAMBIA COUNTY OR STATE DRAINAGE SYSTEM.
2. FINISH FLOOR ELEVATION SHALL BE AS SPECIFIED BY BUILDING CODE.
3. THESE ARE MINIMAL REQUIREMENTS AND DO NOT RELIEVE THE BUILDER FROM PROVIDING ADDITIONAL GRADING TO DIRECT STORMWATER TO A POSITIVE OUTFALL DRAINAGE SYSTEM AND ELIMINATE NEGATIVE IMPACTS TO ADJACENT LOTS AND PROPERTIES.
4. DISTURBED LOT AREAS SHALL BE COMPLETELY STABILIZED WITH SOD IF THE HOME IS CONSTRUCTED. STABILIZE THE FIRST 10' WITH SOD AND SOD AND/OR SEED AND MULCH THE REMAINDER OF THE LOT.
5. THE HOMEBUILDER SHALL COMPLY WITH STATE PERMITTING REQUIREMENTS FOR LARGE AND SMALL CONSTRUCTION SITES, SPECIFICALLY THE NPDES'S PERMITS WHICH REQUIRES A DETAILED STORMWATER POLLUTION PREVENTION PLAN (SWPPP) BEING AVAILABLE ONSITE FOR REVIEW DURING ALL PHASES OF CONSTRUCTION.
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. ALL NEW RUNOFF, DOWNSPOUTS, AND GUTTERS SHALL BE ROUTED TO CARRY ALL STORMWATER TO THE ROADS OR SWALES THAT LEAD TO THE RETENTION POND OR APPROVED DRAINAGE SYSTEM.
8. PROVIDE EROSION CONTROL MEASURES TO ENSURE ALL SEDIMENTS SHALL BE RETAINED ON EACH INDIVIDUAL LOT.
9. WETLANDS SHALL BE PROTECTED WITH FABRIC SILT FENCING AND BURIED HAYBALE SYSTEMS (DOUBLE ROWS AS NECESSARY).

LEGEND:
F.F.E. – FINISH HABITABLE FLOOR ELEVATION
F.G.E. – FINISH GRADE ELEVATION
– STORMWATER FLOW DIRECTION ARROW
– GRADE SLOPE (MINIMUM)
– MINIMUM GRADE



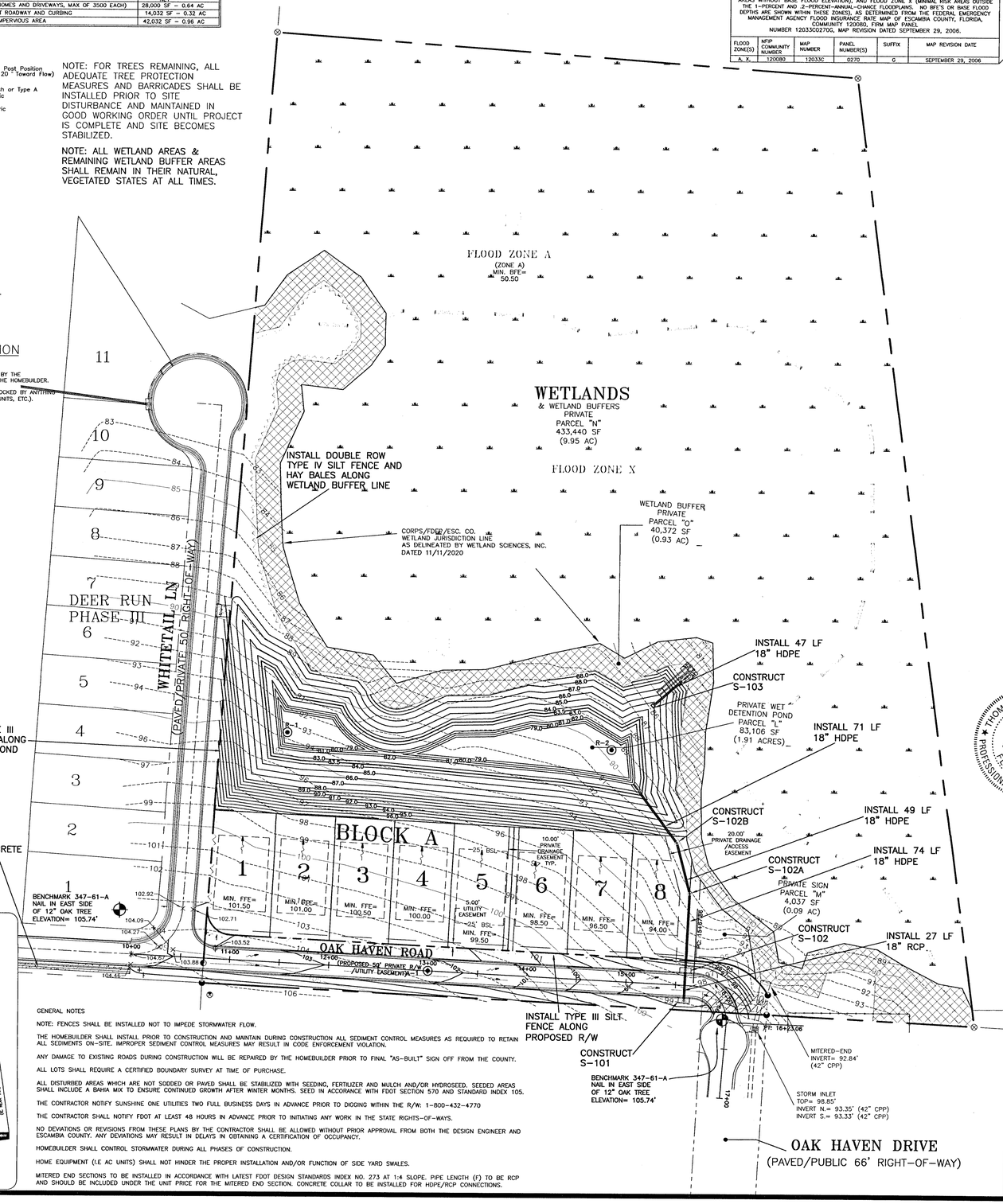
ELEVATION VIEW



LOT GRADING ~ TYPE "A"
ALL DRAINAGE TO STREET

LOT GRADING ~ TYPE "B"
DRAINAGE TO STREET & TO REAR LOT LINE

NOTE: VARIATIONS IN GRADING ARE ACCEPTABLE IF DRAINING GRADE TO A POSITIVE OUTFALL



GENERAL NOTES

NOTE: FENCES SHALL BE INSTALLED NOT TO IMPEDE STORMWATER FLOW.

THE HOMEBUILDER SHALL INSTALL PRIOR TO CONSTRUCTION AND MAINTAIN DURING CONSTRUCTION ALL SEDIMENT CONTROL MEASURES AS REQUIRED TO RETAIN ALL SEDIMENTS ON-SITE. IMPROPER SEDIMENT CONTROL MEASURES MAY RESULT IN CODE ENFORCEMENT VIOLATION.

ANY DAMAGE TO EXISTING ROADS DURING CONSTRUCTION WILL BE REPAIRED BY THE HOMEBUILDER PRIOR TO FINAL "AS-BUILT" SIGN OFF FROM THE COUNTY.

ALL LOTS SHALL REQUIRE A CERTIFIED BOUNDARY SURVEY AT TIME OF PURCHASE.

ALL DISTURBED AREAS WHICH ARE NOT SODDED OR PAVED SHALL BE STABILIZED WITH SEEDING, FERTILIZER AND MULCH AND/OR HYDROSEED. SEEDED AREAS SHALL INCLUDE A BAHIA MIX TO ENSURE CONTINUED GROWTH AFTER WINTER MONTHS. SEED IN ACCORANCE WITH FDOT SECTION 570 AND STANDARD INDEX 105.

THE CONTRACTOR NOTIFY SUNSHINE ONE UTILITIES TWO FULL BUSINESS DAYS IN ADVANCE PRIOR TO DIGGING WITHIN THE R/W: 1-800-432-4770

THE CONTRACTOR SHALL NOTIFY FDOT AT LEAST 48 HOURS IN ADVANCE PRIOR TO INITIATING ANY WORK IN THE STATE RIGHTS-OF-WAYS.

NO DEVIATIONS OR REVISIONS FROM THESE PLANS BY THE CONTRACTOR SHALL BE ALLOWED WITHOUT PRIOR APPROVAL FROM BOTH THE DESIGN ENGINEER AND ESCAMBIA COUNTY. ANY DEVIATIONS MAY RESULT IN DELAYS IN OBTAINING A CERTIFICATION OF OCCUPANCY.

HOMEBUILDER SHALL CONTROL STORMWATER DURING ALL PHASES OF CONSTRUCTION.

HOME EQUIPMENT (I.E AC UNITS) SHALL NOT HINDER THE PROPER INSTALLATION AND/OR FUNCTION OF SIDE YARD SWALES.

MITERED END SECTIONS TO BE INSTALLED IN ACCORDANCE WITH LATEST FDOT DESIGN STANDARDS INDEX NO. 273 AT 1:4 SLOPE. PIPE LENGTH (F) TO BE RCP AND SHOULD BE INCLUDED UNDER THE UNIT PRICE FOR THE MITERED END SECTION. CONCRETE COLLAR TO BE INSTALLED FOR HDPE/RCP CONNECTIONS.

REVISIONS		
NO.	DATE	
1.	6/3/2021	AS PER ESCAMBIA COUNTY DRC REVIEW
2.	6/3/2021	AS PER ECUA REVIEW COMMENTS
3.	6/10/2021	AS PER NWFWMD RAI
4.	7/13/2021	AS PER ECUA REVIEW COMMENTS
5.	7/13/2021	AS PER ESCAMBIA COUNTY DRC REVIEW

HAMMOND ENGINEERING, INC.
FLORIDA AUTHORIZATION NO. 9130
ALABAMA AUTHORIZATION NO. 3277
3802 NORTH "S" STREET
PENSACOLA, FLORIDA 32505
850 434-2603
FAX 850-434-2650
TOM@SELANDDESIGN.COM

THOMAS GRANT HAMMOND LICENSE NO. 58874 STATE OF FLORIDA PROFESSIONAL ENGINEER

CONSTRUCTION PLANS FOR THE PRESERVE AT DEER RUN PHASE V

GRADING PLAN

ESCAMBIA COUNTY FLORIDA

DRAWN BY: CYARS
DESIGNED BY: TGH/ARS
CHECKED BY: TGH
DATE: JULY 2021
SCALE: AS SHOWN
NOT RELEASED FOR CONSTRUCTION
BY: DATE:

PROJECT NO: 13-006

SHEET: C5

GRAPHIC SCALE

22"x34" SCALE 1 inch = 60 ft.

60 0 30 60 120 240

11"x17" SCALE 1 inch = 120 ft.

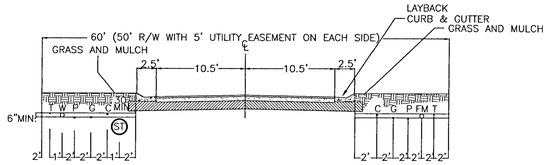
DENOTES:

- ⊗ – 1/2" CAPPED IRON ROD, NUMBERED 7174 (PLACED)
- ◐ – 1/2" CAPPED IRON ROD, NUMBERED 7174 (FOUND)
- ● – 1/2" CAPPED IRON ROD, NUMBERED 7277 (FOUND)
- ⊕ – 1/2" CAPPED IRON ROD, NUMBERED 2892 (FOUND)
- ⊠ – 4"X4" CONCRETE MONUMENT, NUMBERED 7174 (FOUND)

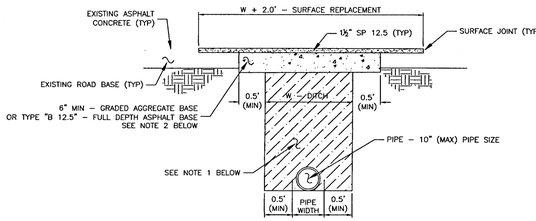
R/W – RIGHT-OF-WAY
(D) – DEED INFORMATION
(F) – FIELD INFORMATION
—w— – WATERLINE
—— – FORCEMAIN
—o—o— – OLD FENCE LINE, POST ONLY

CORPS/FDEP/ESC. CO. WETLANDS 433,440 SF (9.95 AC)

WETLAND BUFFER 40,372 SF (0.93 AC)



COMMON TRENCH
(50' R/W~21' ASPH.)



PAVED ROAD (SMALL PATCH) DETAIL

FOR PATCHES LESS THAN 24" WIDE

NOT TO SCALE

NOTES:

1. DIRT ROAD PATCH WORK SUB BASE MATERIAL SHALL BE PLACED IN NOT MORE THAN 8" LIFTS. EACH LAYER TO BE TAMPED TO A MINIMUM OF 40 LBR.
2. GRADED AGGREGATE BASE SHALL BE COMPACTED TO A MIN LBR 100.
3. ROAD CUTS SHALL BE MECHANICALLY SAW CUT TO FORM A SURFACE PAVEMENT JOINT AND TACK COATED ALONG THE FACE OF CUT JOINTS PRIOR TO ASPHALT PLACEMENT.
4. LONGITUDINAL ROAD CUTS THAT AFFECT ONE TRAVEL LANE SHALL REQUIRE MILLING AND REPAVING OF THE AFFECTED TRAVEL LANE 5.0' BEYOND THE CUT AND PATCHED WITH THE SAME BASE MATERIAL. LONGITUDINAL ROAD CUTS THAT AFFECT BOTH TRAVEL LANES SHALL REQUIRE MILLING AND REPAVING OF THE ENTIRE ROADWAY 5.0' BEYOND THE CUT AND PATCHED WITH THE SAME BASE MATERIAL.

NOTE: WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER. REFERENCE ECUA DETAIL D-64 (WATER/SEWER SEPARATION)

NOTES:

ALL PROPOSED UNDERGROUND UTILITIES WITHIN R/W'S OR UTILITY CONDUIT FOR ROAD CROSSINGS SHALL BE INSTALLED PRIOR TO PAVING. NO STREETS OR ROADS UNDER THE TWO (2) YEAR WARRANTY SHALL BE ALLOWED TO BE OPEN-CUT, OR JACK-AND-BORED. TO ACCOMPLISH THIS REQUIREMENT, COMMON TRENCHING IS REQUIRED WHENEVER POSSIBLE. IF COMMON TRENCHING IS NOT A FEASIBLE OPTION, THE DEVELOPER SHALL INSTALL CONDUIT FOR THE UTILITY NOT PARTICIPATING IN THE COMMON TRENCHING FOR ALL ROAD CROSSINGS AND THE UTILITY COMPANY WILL BE REQUIRED TO USE THE CONDUIT. THIS SHALL REQUIRE PLANNING BETWEEN THE DEVELOPER AND THE UTILITY.

ROUGH GRADE OF RIGHT-OF-WAY MUST BE ESTABLISHED PRIOR TO COMMON TRENCH UTILITY INSTALLATION TO ENSURE UTILITIES ARE INSTALLED AT MINIMUM AND MAXIMUM DEPTHS. A MINIMUM 30" OF COVER IS REQUIRED OVER ALL UTILITIES. THIS DIMENSION SHALL BE MEASURED FROM PROPOSED GRADE IF ROAD IS IN FILL AND MEASURED FROM TOP OF CURB IF ROAD IS IN CUT.

THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR RECORD AT LEAST TWO WEEKS PRIOR TO PLACEMENT OF BASE MATERIAL TO ASSIST IN THE COORDINATION OF ALL OTHER UNDERGROUND UTILITIES.

CONTRACTOR TO INSTALL WATER SERVICES FOR EACH LOT, OPPOSITE THE PROPERTY CORNER THAT GULF POWER HAS PROPOSED POWER TRANSFORMERS.

PROPOSED WATERLINES AND FORCE MAIN SHALL HAVE A MINIMUM COVER OF 30" AND A MAXIMUM COVER OF 36" BELOW PROPOSED FINISHED GRADE UNLESS NOTED OTHERWISE

CONTRACTOR SHALL INSTALL EACH UTILITY SERVICE IN THE LOCATION AS SHOWN IN THE COMMON TRENCH DETAIL.

ELECTRIC/PHONE/CABLE/GAS STRUCTURES INSTALLED WITHIN DRAINAGE/ACCESS EASEMENTS SHALL BE LOCATED ALONG THE BOUNDARY OF THE EASEMENT TO MAXIMIZE CLEAR ACCESS FOR MAINTENANCE EQUIPMENT.

NOTE: NEXT DOWNSTREAM MANHOLE TO BE COATED WITH ECUA APPROVED MATERIALS, DURAPLATE 5900 OR HDPE LINED.

UTILITIES NARRATIVE:

POTABLE WATER:
AFTER RECEIVING ERP, ECUA AND ESCAMBIA COUNTY APPROVALS, THE DEVELOPER PLANS TO CONNECT TO EXISTING, ADJACENT SYSTEM OF ECUA, CONSTRUCTING ALL NECESSARY UNDERGROUND WATER MAINS, VALVES AND FIRE HYDRANTS TO SERVE THIS DEVELOPMENT, UPON COMPLETION, THE ENTIRE SYSTEM WILL THEN BE TURNED OVER TO ECUA FOR ACCEPTANCE AND MAINTENANCE.

SANITARY SEWER:
AFTER RECEIVING ERP, ECUA AND ESCAMBIA COUNTY APPROVALS, THE DEVELOPER PLANS TO CONNECT TO THE EXISTING, ADJACENT SYSTEM OF ECUA, CONSTRUCTION OF PRIVATE LOW PRESSURE SYSTEMS TO SERVE THIS DEVELOPMENT. UPON COMPLETION, THE ENTIRE SYSTEM LOCATED WITHIN THE RIGHTS OF WAYS AND EASEMENTS WILL BE TURNED OVER TO ECUA FOR ACCEPTANCE AND MAINTENANCE.
PRIVATE GRINDER STATIONS SHALL BE MAINTAINED BY THE HOME OWNERS.

STORM SEWER:
AFTER RECEIVING ERP AND ESCAMBIA COUNTY APPROVALS, THE DEVELOPER PLANS TO CONSTRUCT ALL NECESSARY STORMWATER MANHOLES, PIPES AND STORMWATER PONDS TO SERVE THIS DEVELOPMENT. THE ENGINEER WILL DESIGN THE STORM DRAINAGE SYSTEM TO COMPLY WITH ESCAMBIA COUNTY SUBDIVISION AND STORMWATER ORDINANCES. UPON COMPLETION, THE ENTIRE SYSTEM WILL REMAIN PRIVATELY OWNED AND MAINTAINED.

ELECTRIC, GAS, TELEPHONE & TV CABLE:
THESE SERVICES TO BE INSTALLED AND MAINTAINED BY THE APPROPRIATE UTILITY COMPANY.

NO.	DATE	REVISIONS
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3.	6/10/2021	AS PER NWFWMD RAI
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PENSACOLA, FLORIDA 32505
850 434-2603
FAX 850-434-2650
TOM@SELANDDESIGN.COM

THOMAS GRANT HAMMOND LICENSE NO. 54574 STATE OF FLORIDA PROFESSIONAL ENGINEER

CONSTRUCTION PLANS FOR
THE PRESERVE AT DEER RUN PHASE V
UTILITY MASTER PLAN
ESCAMBIA COUNTY FLORIDA

DRAWN BY: CT/ARS
DESIGNED BY: TGH/ARS
CHECKED BY: TGH
DATE: JULY 2021
SCALE: AS SHOWN
NOT RELEASED FOR CONSTRUCTION
BY: DATE:

PROJECT NO: 13-006

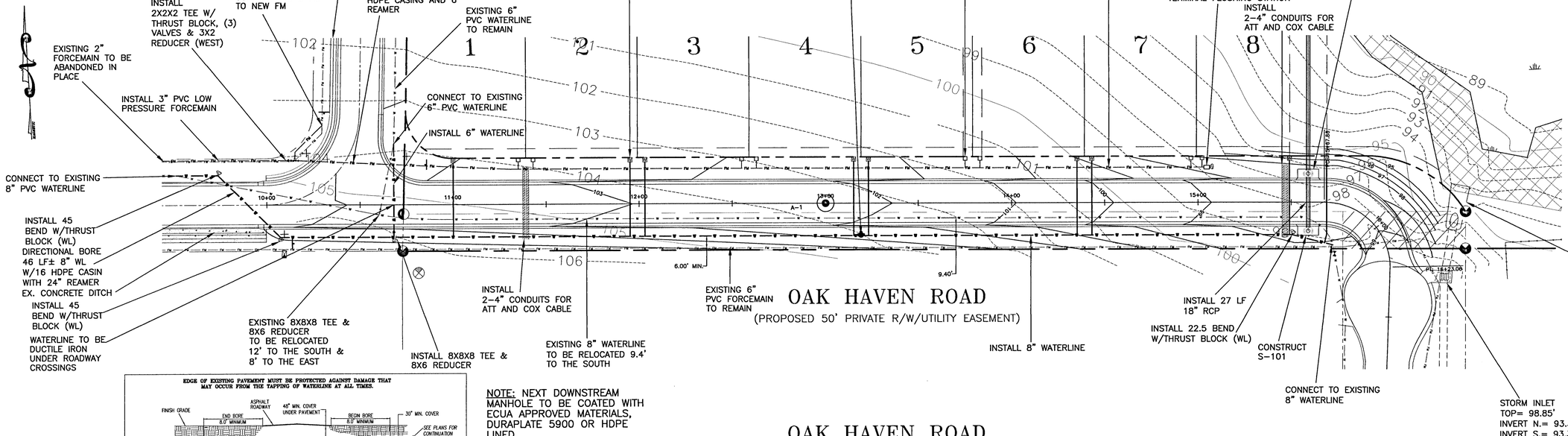
SHEET: C6

GRAPHIC SCALE

22"x34" SCALE 1 inch = 30 ft.

30 0 15 30 60 120

11"x17" SCALE 1 inch = 60 ft.



EDGE OF EXISTING PAVEMENT MUST BE PROTECTED AGAINST DAMAGE THAT MAY OCCUR FROM THE TAPPING OF WATERLINE AT ALL TIMES.

DIRECTIONAL BORE X-SECTION

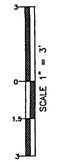
NTS

NOTE: NEXT DOWNSTREAM MANHOLE TO BE COATED WITH ECUA APPROVED MATERIALS, DURAPLATE 5900 OR HDPE LINED.

OAK HAVEN ROAD
(PROPOSED 50' PRIVATE R/W/UTILITY EASEMENT)
STA 10+00 TO STA 16+74

NOTE: LOCATIONS OF EXISTING UTILITIES SHOWN ON PLANS ARE APPROXIMATE ONLY AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION AND SIZES BEFORE CONSTRUCTION. FAILURE OF THE PLANS TO SHOW THE EXISTENCE OF ANY UNDERGROUND UTILITIES, STRUCTURES, ETC., SHALL NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY OF LOCATING, PRESERVING AND PROTECTING SAID UTILITY OR STRUCTURES.

VERTICAL SCALE



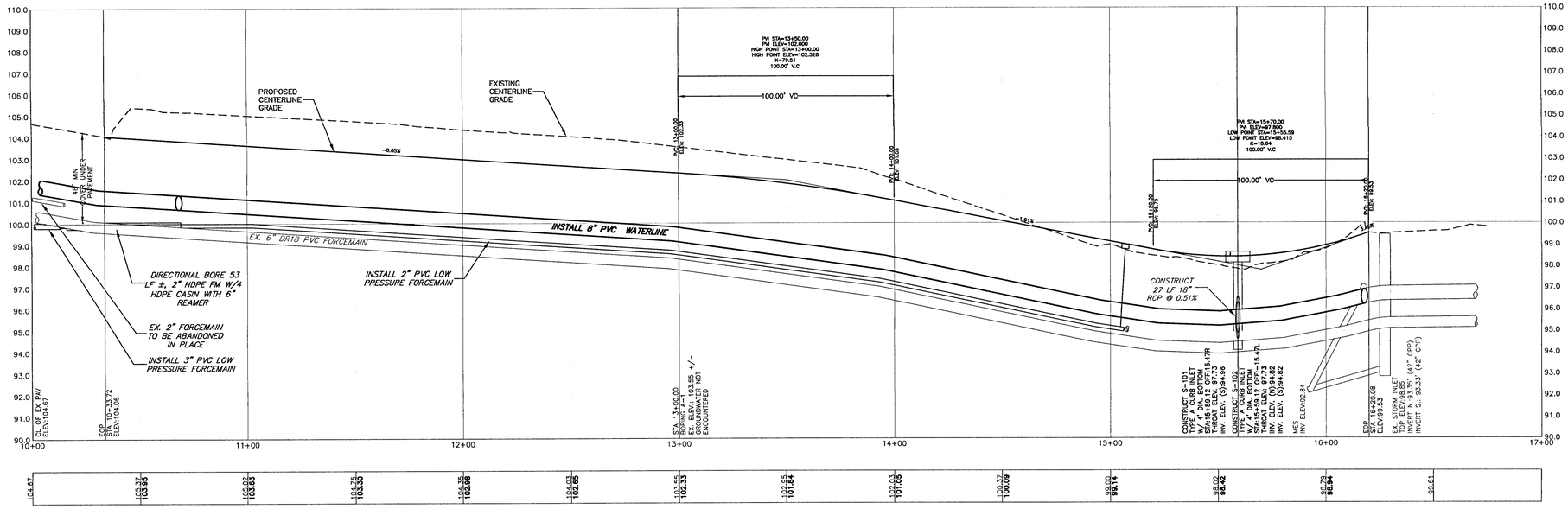
NOTE: ALL WORK SHALL BE DONE IN ACCORDANCE TO THE PROJECT SPECIFICATIONS. WATER AND SEWER TO BE DONE IN ACCORDANCE WITH ECUA SPECIFICATIONS

NOTE: ALL PROPOSED WATER SERVICES TO PLACED ON PROPERTY CORNER OPPOSITE POWER TRANSFORMER

NOTE: A MINIMUM OF TWO STRIPS OF SOD (MINIMUM 2' WIDE) ARE REQUIRED BEHIND THE BACK OF CURB WITH ALL OTHER DISTURBED AREAS SEEDED/MULCHED/FERTILIZED.

NOTE: ALL STORMWATER PIPING NOT CONSTRUCTED UNDER ROADWAYS OR CURBS SHALL BE HDPE. ALL STORMWATER PIPING CONSTRUCTED UNDER ROADWAYS OR CURBS SHALL BE RCP.

NOTE: WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER. REFERENCE ECUA DETAIL D-64 (WATER/SEWER SEPARATION).



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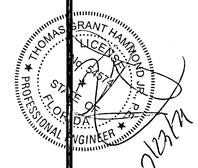
PENSACOLA, FLORIDA 32505
850 434-2603
FAX 850-434-2650
TOM@SELANDDESIGN.COM



CONSTRUCTION PLANS FOR
THE PRESERVE AT DEER RUN PHASE V
PLAN AND PROFILE
ESCAMBIA COUNTY FLORIDA

DRAWN BY: CY/ARS
DESIGNED BY: TGH/ARS
CHECKED BY: TGH
DATE: JULY 2021
SCALE: AS SHOWN

NOT RELEASED FOR CONSTRUCTION
BY: DATE:

PROJECT NO: 13-006

SHEET: C7

GRAPHIC SCALE

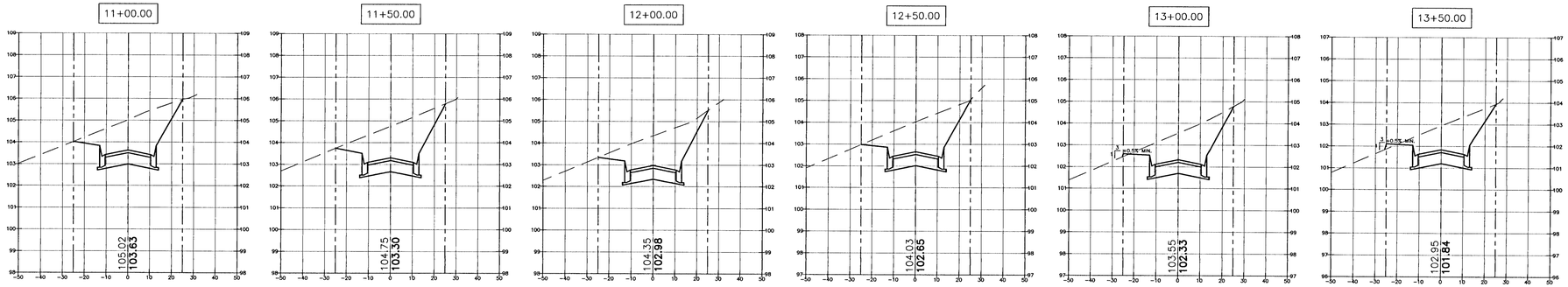
22"x34" SCALE 1 inch = 30 ft.

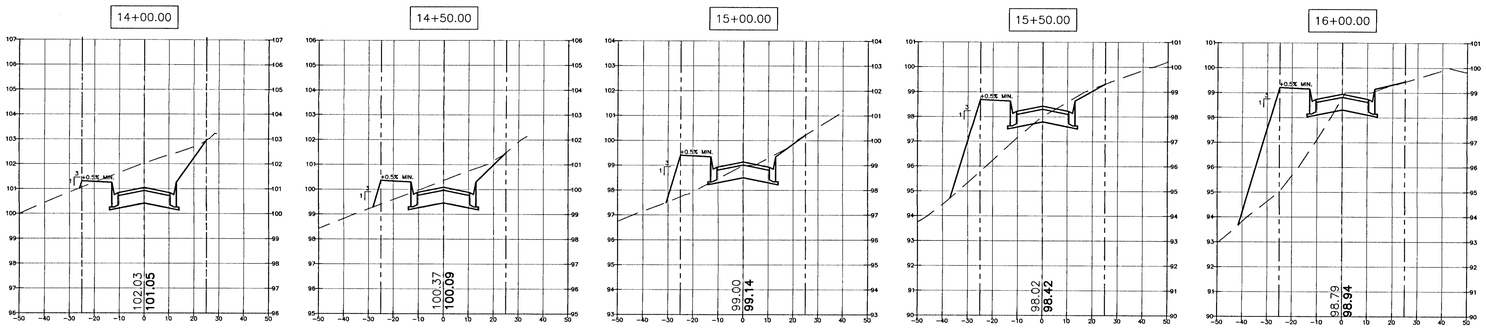
30 0 15 30 60 120

11"x17" SCALE 1 inch = 60 ft.

EXISTING GRADE

PROPOSED GRADE





VERTICAL SCALE

SCALE 1" = 3'

3 0 1.5 3

NO.	DATE	REVISIONS
1.	6/3/2021	AS PER ESCAMBIA COUNTY DRC REVIEW
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3.	6/10/2021	AS PER NWFWMD RAI
4.	7/13/2021	AS PER ECUA REVIEW COMMENTS
5.	7/13/2021	AS PER ESCAMBIA COUNTY DRC REVIEW

HAMMOND ENGINEERING, INC.
FLORIDA AUTHORIZATION NO. 9130
ALABAMA AUTHORIZATION NO. 3277
3802 NORTH "S" STREET
PENSACOLA, FLORIDA 32505
850 434-2603
FAX 850-434-2650
TOM@SELANDDESIGN.COM

THOMAS GRANT HAMMOND JR. LICENSE NO. 68154 STATE OF FLORIDA PROFESSIONAL ENGINEER

7/23/21

CONSTRUCTION PLANS FOR

THE PRESERVE AT DEER RUN PHASE V

CROSS SECTIONS

ESCAMBIA COUNTY FLORIDA

DRAWN BY: CY/ARS
DESIGNED BY: TGH/ARS
CHECKED BY: TGH
DATE: JULY 2021
SCALE: AS SHOWN
NOT RELEASED FOR CONSTRUCTION
BY: DATE:

PROJECT NO: 13-006

SHEET: C8

GRAPHIC SCALE

22"x34" SCALE 1 inch = 30 ft.

30 0 15 30 60 120

11"x17" SCALE 1 inch = 60 ft.

CORPS/FDEP/ESC. CO. WETLANDS
433,440 SF (9.95 AC)

WETLAND BUFFER
40,372 SF (0.93 AC)

SIDE SLOPES TO BE SODDED AND PINNED

ALL SIDE SLOPES TO BE SODDED AND PINNED

TOP ELEV=88.0

6'

3'

1'

2'

ELEV=VARIES
ELEVATION TO BE SET APPROX. 12" BELOW EXIST. GRADE

POND BOTTOM ELEV=79.0

CLAY CORE TO BE COMPACTED TO 95% MODIFIED PROCTOR

LITTORAL ZONE PLANTINGS

LITTORAL ZONE PLANTINGS TO BE DONE IN ACCORDANCE WITH THE FLORIDA DEVELOPMENT MANUAL AND FDEP/NWFWMD REQUIREMENTS

ZONE 1 (UPLAND)–ELEV. 86.0 TO ELEV. 85.0 ~ 6.0' WIDE ~ 1,750 SF
ZONE 2 (TRANSITIONAL)–ELEV. 85.0 TO ELEV. 84.0 ~ 6.0' WIDE ~ 1,750 SF
ZONE 3 (SHALLOW)–ELEV. 84.0 TO ELEV. 83.0 ~ 6.0' WIDE ~ 1,750 SF
ZONE 4 (MID)–ELEV. 83.0 TO ELEV. 82.0 ~ 6.0' WIDE ~ 1,750 SF

ZONE 1 PLANTINGS:
WAX MYRTLE (*MYRICA CERIFERA*) @ 10' O.C. AND/OR RED MAPLE (*ACER RUBRUM*) AT 10' O.C.

ZONE 2 PLANTINGS
FAKAHATCHEE GRASS (*TRIPSACUM DACTYLOIDES*) AND FLORIDA GAMAGRASS (*TRIPSACUM FLORIDANUM*) AT 2' O.C.

ZONE 3 PLANTINGS
SOFT RUSH (*JUNCUS EFFUSUS*) AND ARROWHEAD (*SAGITTARIA LANCIFOLIA*) AT 2' O.C.

ZONE 4 PLANTINGS:
PICKERAL WEED (*PONTEDERIA CORDATA*) AT 2' O.C. AND BLUE FLAG IRIS (*IRIS VIRGINICA*) AT 2' O.C.

DENOTES PLANTED LITTORAL ZONE
7,000 SF

DENOTES PROPOSED CLAY CORE BERM
3,294 SF

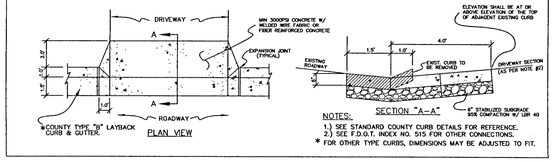
DENOTES STANDING WATER ELEVATION IN WET DETENTION POND

TYPICAL DRIVEWAY CONNECTION STANDARDS FOR EXISTING ROADWAY CONDITIONS

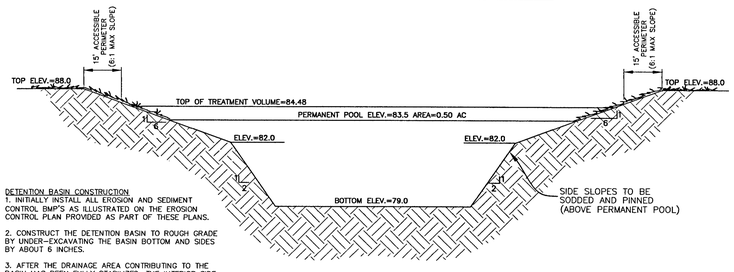
NOTES:

1. ALL MATERIALS AND LABOR FOR INSTALLATION WILL BE THE RESPONSIBILITY OF THE PROPERTY OWNER.
2. DRIVEWAYS ABUTTING PAVED ROADS SHALL BE 1-1/2" ASPHALT WITH 6" STABILIZED SUBGRADE OR 4" TO 6" CONCRETE WITH 4" STABILIZED SUBGRADE ~ 95% COMPACTION (MODIFIED PROCTOR) WITH LBR 40 BETWEEN EDGE OF ROADWAY AND R/W LINE.
3. DRIVEWAYS ABUTTING A DIRT ROAD SHALL BE MILLED ASPHALT, GRADED AGGREGATE BASE, OR WASHED CONCRETE (4" IN DEPTH) ON THE COUNTY MAINTAINED PORTION OF DRIVEWAY.
4. IF NECESSARY, REFER TO F.D.O.T. INDEX DETAILS AS REFERENCED BELOW.
5. RADIUS OR FLARE IS ACCEPTABLE FOR TYPE II OR TYPE III CONNECTIONS.
6. DRIVEWAYS WITHIN PROPERTY BOUNDARY SHALL PROVIDE A MINIMUM OF 2 PARKING SPACES.
7. TYPICAL DRIVEWAY SECTIONS ARE TO BE 12' WIDE MINIMUM.

TYPE I CURB CUT DRIVEWAY FOR COUNTY TYPE "B" LAYBACK CURBS.



NOTES:
1.) SEE STANDARD COUNTY CURB DETAILS FOR REFERENCE.
2.) SEE F.D.O.T. INDEX NO. 515 FOR OTHER CONNECTIONS.
* FOR OTHER TYPE CURBS, DIMENSIONS MAY BE ADJUSTED TO FIT.



STORMWATER DETENTION POND

TYPICAL X SECTION
NTS

DETENTION BASIN CONSTRUCTION

1. INITIALLY INSTALL ALL EROSION AND SEDIMENT CONTROL BMP'S AS ILLUSTRATED ON THE EROSION CONTROL PLAN PROVIDED AS PART OF THESE PLANS.
2. CONSTRUCT THE DETENTION BASIN TO ROUGH GRADE BY UNDER–EXCAVATING THE BASIN BOTTOM AND SIDES BY ABOUT 6 INCHES.
3. AFTER THE DRAINAGE AREA CONTRIBUTING TO THE BASIN HAS BEEN FULLY STABILIZED, THE INTERIOR SIDE SLOPES SHALL BE EXCAVATED TO FINAL DESIGN SPECIFICATIONS. THE EXCESS SOIL AND UNDESIRABLE MATERIAL MUST BE CAREFULLY EXCAVATED AND REMOVED FROM THE POND SO THAT ALL ACCUMULATED SILTS, CLAYS, ORGANICS, AND OTHER FINE SEDIMENT MATERIAL HAS BEEN REMOVED FROM THE POND AREA. THE EXCAVATED MATERIAL SHALL BE DISPOSED OF BEYOND THE LIMITS OF THE DRAINAGE AREA OF THE BASIN.
4. ONCE THE BASIN HAS BEEN EXCAVATED TO FINAL GRADE, THE ENTIRE BASIN BOTTOM MUST BE DEEP RAKED AND LOOSENED FOR OPTIMAL FILTRATION.
5. FINALLY, THE ENTIRE BANK SLOPE SHALL BE PERMANENTLY STABILIZED ABOVE PPL IN A MANNER THAT GUARANTEES HEALTHY GROWTH OF GRASS (FREE FROM NOXIOUS WEEDS) SUCH AS PANGALA, ARGENTINE BAHIA, BERMUDA, CENTIPEDE OR OTHER SUITABLE GRASS.

INSTALL 6' DOUBLE CHAIN LINK SWING GATE, (TWO 7.0' GATES) AT ACCESS RAMP

INSTALL TYPE I CONCRETE DRIVEWAY TO R/W LINE

PLANT SHRUBS @ 3' O.C (INDIAN HAWTHORN OR APPROVED EQUAL) ALONG POND FRONTAGE TO PROVIDE SCREENING. TYPICAL OF 65

CORPS/FDEP/ESC. CO. WETLAND JURISDICTION LINE AS DELINEATED BY WETLAND SCIENCES, INC. DATED 11/11/2020

PRIVATE WET DETENTION POND PARCEL "L" 83,106 SF (1.91 ACRES)

INSTALL 1258 LF–6' CHAINLINK FENCE AROUND POND TOP

CONSTRUCT EMERGENCY DISCHARGE WEIR. SEE DETAIL

CONSTRUCT 18" MITERED END SECTION W/ 18 SY RIP RAP ELEV.=82.25

INSTALL 47 LF 18" HDPE @ 1.06%

CONSTRUCT S–103

CONSTRUCT 18" MITERED END SECTION INV. ELEV.:82.0

INSTALL 71 LF 18" HDPE @ 6.60%

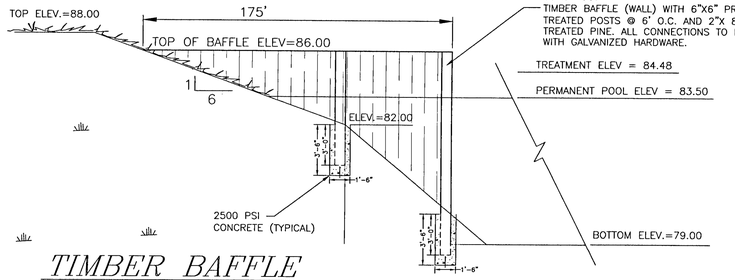
CONSTRUCT S–102B INV. ELEV.: 86.69

INSTALL 49 LF 18" HDPE @ 6.60%

CONSTRUCT S–102A INV. ELEV.: 89.93

INSTALL 74 LF 18" HDPE @ 6.60%

CONSTRUCT TIMBER BAFFLE (OR APPROVED EQUAL). SEE DETAIL



TIMBER BAFFLE

TYPICAL X–SECTION
NTS

NOTE: ALL DISTURBED AREAS UPSTREAM OF THE PERMANENT POOL AND OUTSIDE OF THE LITTORAL ZONES ARE TO BE SODDED.

NOTE: WITHIN THE SPECIFIC LITTORAL ZONES, AN 80% COVERAGE OF SUITABLE LITTORAL ZONE PLANTS ARE REQUIRED WITH 24 MONTHS OF COMPLETION OF CONSTRUCTION. NUISANCE SPECIES (e.g. CATTAILS) SHALL BE REMOVED DURING THE ESTABLISHMENT PERIOD.

NOTE: LITTORAL ZONE PLANTING SHALL OCCUR WITHIN 30 DAYS OF COMPLETION OF CONSTRUCTION.

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HAMMOND ENGINEERING, INC.
FLORIDA AUTHORIZATION NO. 9130
ALABAMA AUTHORIZATION NO. 3277
3802 NORTH "S" STREET
PENSACOLA, FLORIDA 32505
850 434-2603
FAX 850-434-2650
TOM@SELANDDESIGN.COM

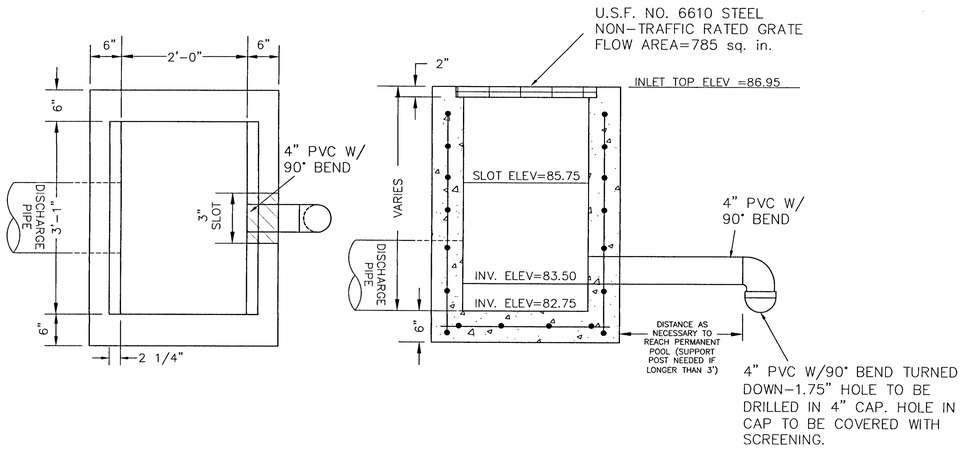
GRANT THOMAS HAMMOND LICENSED No. 54674 STATE OF FLORIDA PROFESSIONAL ENGINEER

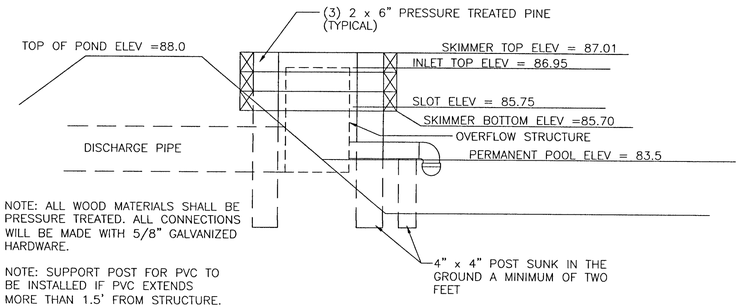
CONSTRUCTION PLANS FOR
THE PRESERVE AT DEER RUN PHASE V
STORMWATER POND DETAILS
ESCAMBIA COUNTY FLORIDA

DRAWN BY: GYABS
DESIGNED BY: TGH/ABS
CHECKED BY: TGH
DATE: JULY 2021
SCALE: AS SHOWN
NOT RELEASED FOR CONSTRUCTION
BY: DATE:

PROJECT NO: 13-006

SHEET: C9





SKIMMER DETAIL

N.T.S.

FDOT TYPE 'C' OVERFLOW STRUCTURE (S-103)

MATERIALS:

CONCRETE: 4000 PSI, TYPE II CEMENT

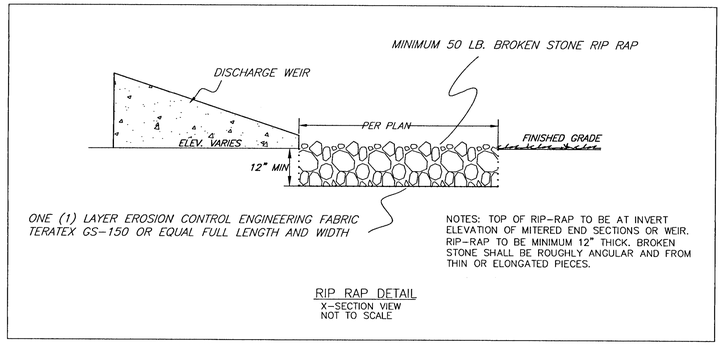
WALL REINFORCING: 3x4 W3.1/W4.1 WWF 65 K.S.I. (AS PER FDOT-INDEX 201)

BOTTOM SLAB REINFORCING: #4 @ 12" C.C.E.W. *

NOTE:

ALL EXPOSED EDGES TO HAVE 3/4" CHAMFER.

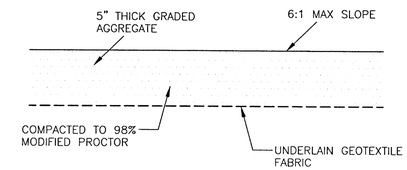
* GRADE 40, OR EQUIVALENT WELDED WIRE MESH.



RIP RAP DETAIL

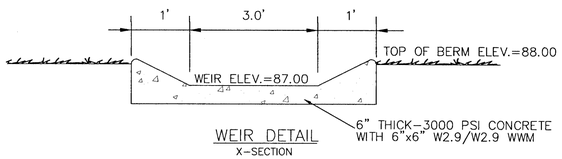
X-SECTION VIEW

NOT TO SCALE



TYPICAL GRAVEL POND ACCESS SECTION

NTS

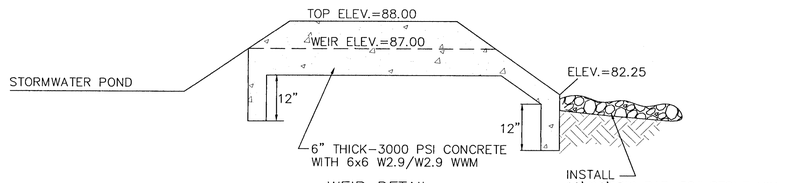


WEIR DETAIL

X-SECTION

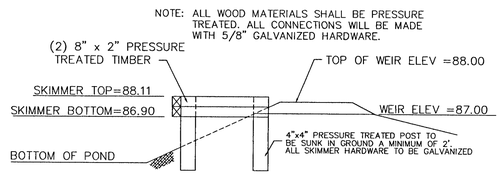
CONCRETE DISCHARGE WEIR

NTS



WEIR DETAIL

PROFILE



OIL SKIMMER DETAIL

NTS

REVISIONS

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HAMMOND ENGINEERING, INC.
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ALABAMA AUTHORIZATION NO. 3277
3802 NORTH "S" STREET
PENSACOLA, FLORIDA 32505
850 434-2603
FAX 850-434-2650
TOM@SELANDDESIGN.COM

THOMAS GRANT HAMMOND JR. LICENSE NO. 45178 STATE OF FLORIDA PROFESSIONAL ENGINEER

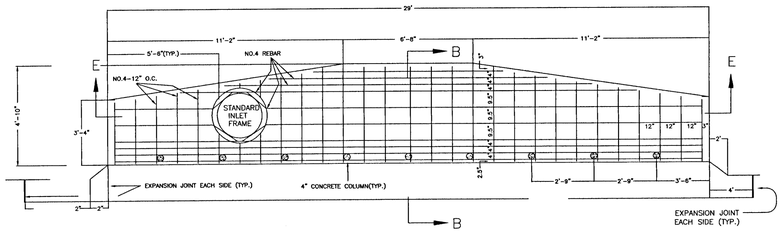
9/23/21

CONSTRUCTION PLANS FOR
THE PRESERVE AT DEER RUN PHASE V
STORMWATER POND DETAILS
ESCAMBIA COUNTY FLORIDA

DRAWN BY: CVARS
DESIGNED BY: TGH/ARS
CHECKED BY: TGH
DATE: JULY 2021
SCALE: AS SHOWN
NOT RELEASED FOR CONSTRUCTION
BY: DATE:

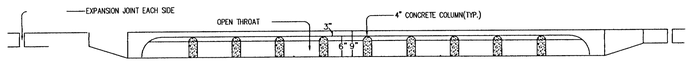
PROJECT NO: 13-006

SHEET: C10



TYPE DOUBLE 'A' DROP INLET DETAIL

NTS

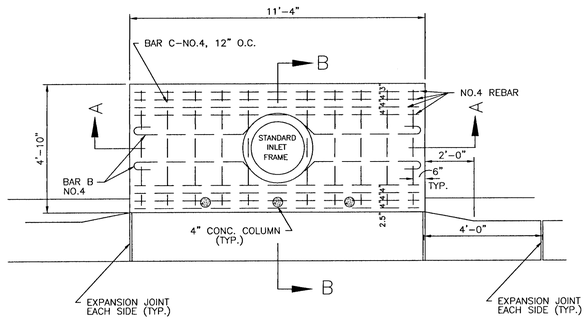


TYPE DOUBLE 'A' THROAT ELEVATION

NTS

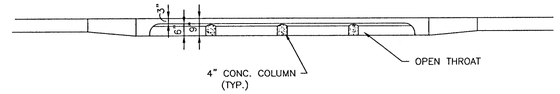
NOTE: MITERED END SECTIONS TO BE INSTALLED IN ACCORDANCE WITH LATEST FDOT DESIGN STANDARDS INDEX NO. 273 AT 1:4 SLOPE. PIPE LENGTH (F) TO BE RCP AND SHOULD BE INCLUDED UNDER THE UNIT PRICE FOR THE MITERED END SECTION. CONCRETE COLLAR TO BE INSTALLED FOR HDPE/RCP CONNECTIONS.

NOTE: ALL STORMWATER STRUCTURES DEEPER THAN 4' ARE TO HAVE STEPS 12" O.C EXTENDING TO THE BOTTOM OF THE STRUCTURE.



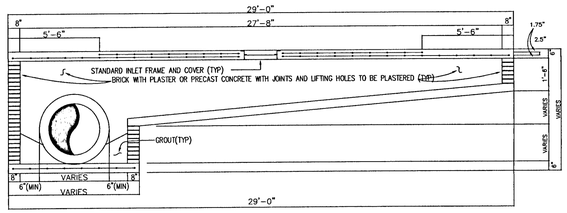
TYPE "A" DROP INLET DETAIL

NTS

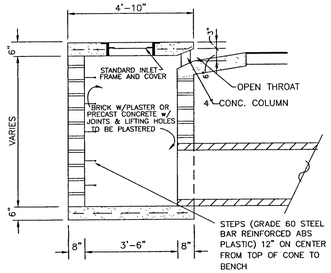


TYPE "A" DROP INLET ELEVATION

N.T.S.

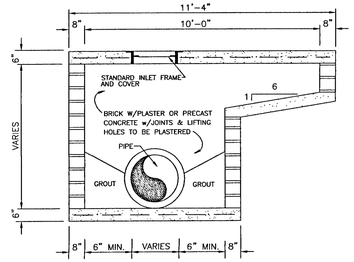


SECTION "E-E"



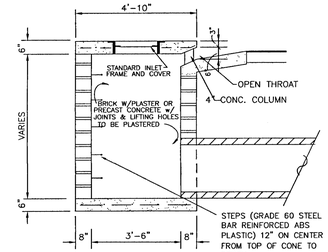
SECTION B-B

NTS



SECTION A-A

NTS



SECTION B-B

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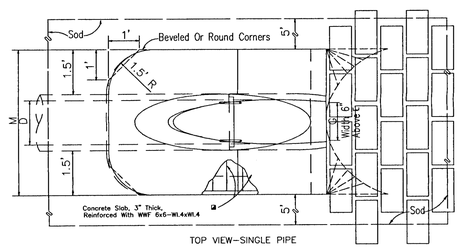
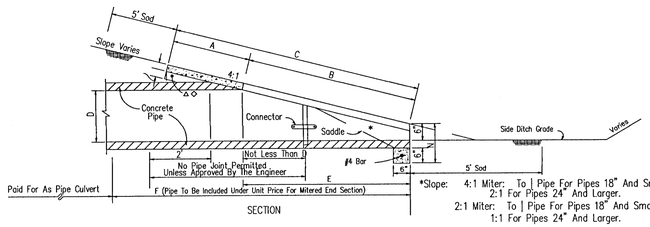


TOP VIEW-SINGLE PIPE



SECTION

*Slope: 4:1 Miter: To | Pipe For Pipes 18" And Smaller.
2:1 For Pipes 24" And Larger.
2:1 Miter: To | Pipe For Pipes 18" And Smaller.
1:1 For Pipes 24" And Larger.

	DIMENSIONS AND QUANTITIES																					
	D	X	A	B	C	E	F	G	M				N	3" CONCRETE SLAB (CY) ◪				SODDING (SQ. YDS.)			
									Single Pipe	Double Pipe	Triple Pipe	Quad. Pipe		Single Pipe	Double Pipe	Triple Pipe	Quad. Pipe	Single Pipe	Double Pipe	Triple Pipe	Quad. Pipe
4:1 Slope	18"	2'-10"	2.36'	5.12'	7.48'	5.03'	9'	1.41'	4.92'	7.75'	10.58'	13.42'	1.21'	0.47	0.69	0.91	1.14	25	28	31	35
4:1 Slope	24"	3'-5"	2.53'	7.18'	9.71'	7.03'	11'	1.73'	5.50'	8.92'	12.33'	15.75'	1.25'	0.60	0.90	1.21	1.52	28	32	36	40
4:1 Slope	30"	4'-3"	2.70'	9.25'	11.95'	9.03'	13'	2.00'	6.08'	10.33'	14.58'	18.83'	1.29'	0.76	1.19	1.63	2.07	31	36	41	46

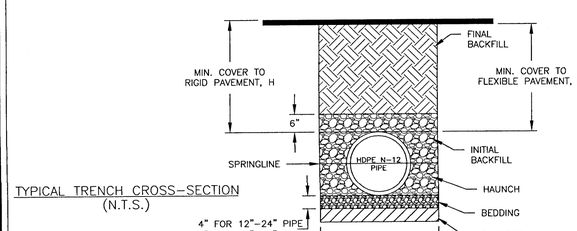
SINGLE ROUND CONCRETE PIPE

B E
△ 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 pipe. See section.

CROSS DRAIN MITERED END SECTION

NTS

NOTE: MITERED END SECTIONS TO BE INSTALLED IN ACCORDANCE WITH LATEST FDOT DESIGN STANDARDS INDEX NO. 273 AT 1:4 SLOPE. PIPE LENGTH (F) TO BE RCP AND SHOULD BE INCLUDED UNDER THE UNIT PRICE FOR THE MITERED END SECTION. CONCRETE COLLAR TO BE INSTALLED FOR HDPE/RCP CONNECTIONS.



TYPICAL TRENCH CROSS-SECTION
(N.T.S.)

NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION

2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.

3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.

4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-900mm).

5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

6. MINIMUM COVER MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIA.	MIN. TRENCH WIDTH
4"	21"
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
54"	88"
60"	96"

MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS

PIPE DIAM.	SURFACE LIVE LOADING CONDITION	
	H-25	HEAVY CONSTRUCTION (75T AXLE LOAD) *
12"-48"	12"	48"
54"-60"	24"	60"

* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER

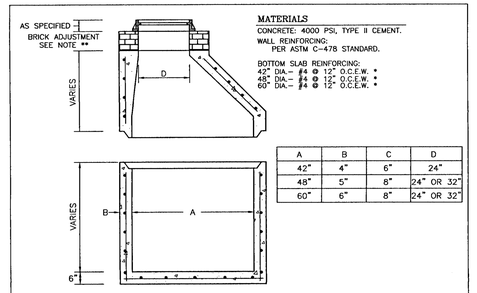
MINIMUM RECOMMENDED COVER BASED ON RAILWAY LOADING CONDITIONS

PIPE DIAM.	COOPER E-80**
UP TO 24"	24"
30"-36"	36"
42"-60"	48"

** COVER IS MEASURED FROM TOP OF PIPE TO BOTTOM OF RAILWAY TIE.
*** E-80 COVER REQUIREMENTS, ARE ONLY APPLICABLE TO ASTM F 2306 PIPE.

HDPE PIPE-TYPICAL TRENCH INSTALLATION DETAIL

NOT TO SCALE



MATERIALS
CONCRETE: 4000 PSI, TYPE II CEMENT.
WALL REINFORCING: PER ASTM C-478 STANDARD.
BOTTOM SLAB REINFORCING:
42" DIA.- #4 @ 12" O.C.E.W.
48" DIA.- #4 @ 12" O.C.E.W.
60" DIA.- #4 @ 12" O.C.E.W.

A	B	C	D
42"	4"	6"	24"
48"	5"	8"	24" OR 32"
60"	6"	8"	24" OR 32"

NOTE:
*GRADE 40, OR EQUIVALENT WELDED WIRE MESH.
**VARIABLE GRADE ADJUSTMENT BY GRADE RINGS OR BRICK AS REQUIRED.

STORM MANHOLE W/ ECCENTRIC CONE

NTS

NO.	DATE	REVISIONS
1.	6/3/2021	AS PER ESCAMBIA COUNTY DRC REVIEW
2.	6/3/2021	AS PER ECUA REVIEW COMMENTS
3.	6/10/2021	AS PER NWFWMD RAI
4.	7/13/2021	AS PER ECUA REVIEW COMMENTS
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HAMMOND ENGINEERING, INC.
FLORIDA AUTHORIZATION NO. 9130
ALABAMA AUTHORIZATION NO. 32777
3802 NORTH "S" STREET
PENSACOLA, FLORIDA 32505
850-434-2603
FAX 850-434-2650
TOM@SELANDDESIGN.COM

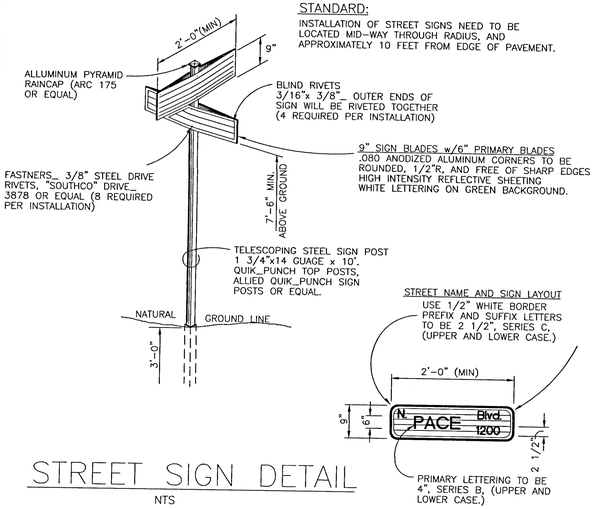
THOMAS GRANT HAMMOND JR. LICENSE NO. 54764 STATE OF FLORIDA PROFESSIONAL ENGINEER

CONSTRUCTION PLANS FOR
THE PRESERVE AT DEER RUN PHASE V
STORMWATER DETAILS
ESCAMBIA COUNTY FLORIDA

DRAWN BY: CY/ARS
DESIGNED BY: TGH/ARS
CHECKED BY: TGH
DATE: JULY 2021
SCALE: AS SHOWN
NOT RELEASED FOR CONSTRUCTION
BY: DATE:

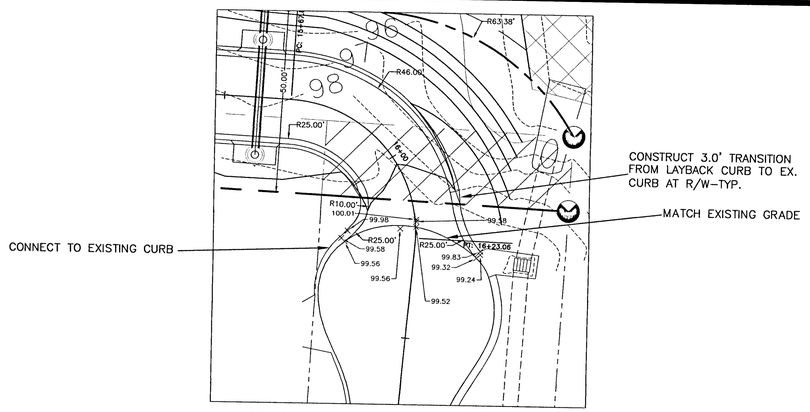
PROJECT NO: 13-006

SHEET: C11



STREET SIGN DETAIL

NTS



ROADWAY CONNECTION DETAIL

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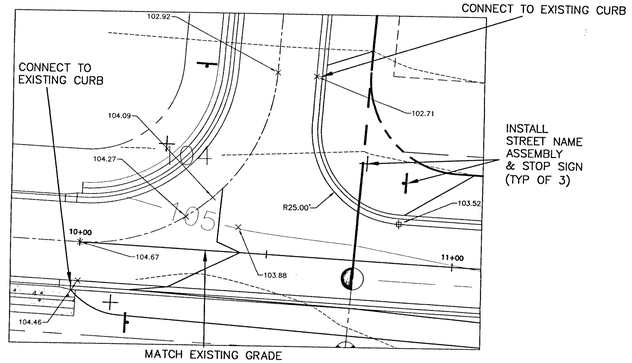

ROADWAY CONNECTION DETAIL

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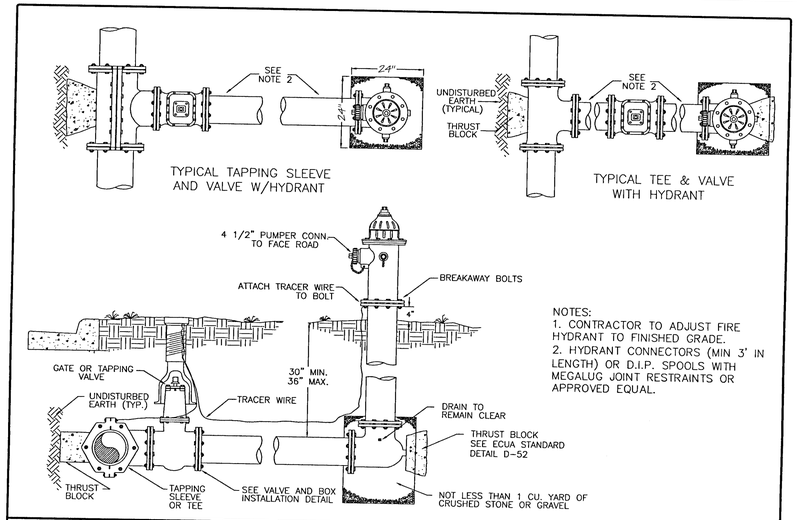
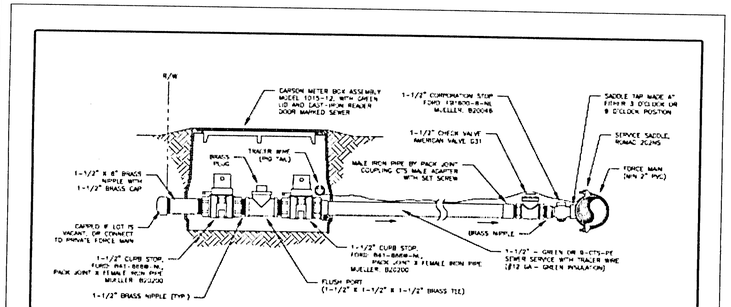


NOTES:
1. CONTRACTOR TO ADJUST FIRE HYDRANT TO FINISHED GRADE.
2. HYDRANT CONNECTORS (MIN 3' IN LENGTH) OR D.I.P. SPOOLS WITH MEGALLIC JOINT RESTRAINTS OR APPROVED EQUAL.

ECUA

TYPICAL FIRE HYDRANT INSTALLATION:
TAPPING SLEEVE & VALVE and TEE CONNECTION

DATE: 9/01/2016 N.T.S. D-50 DETAIL



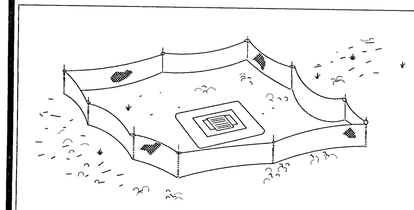
NOTES:

1. THIS DETAIL APPLIES TO ALL 1-1/2" LOW PRESSURE SEWER SERVICES, RESIDENTIAL AND COMMERCIAL.
2. EACH CUSTOMER SHALL HAVE A SEPARATE SERVICE. SERVICES SHALL BE LOCATED ON OPPOSITE LOT LINE FROM WATER METERS UNLESS OTHERWISE APPROVED BY ECUA ENGINEERING. PUMP SHALL BE SIZED AND SPECIFIED BY THE ENGINEER OF RECORD WITH SELECTION WITHIN ON ECUA APPROVED PLANS, AND PLUMBER/SUPPLIER SHALL SUPPLY PUMP THAT MEETS OR EXCEEDS SAID SELECTION BASED ON SITE CONDITIONS. A CHECK VALVE AND BALL VALVE SHALL BE SUPPLIED AT THE GRINDER STATION.
3. GRINDER STATION SHALL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER.
4. EACH GRINDER PUMP SHALL BE CAPABLE OF DELIVERING 12 GPM AT A MINIMUM HEAD CONDITION OF 115' (50 PSI) OR MORE, UNLESS OTHERWISE APPROVED BY ECUA ENGINEERING. PUMP SHALL BE SIZED AND SPECIFIED BY THE ENGINEER OF RECORD WITH SELECTION WITHIN ON ECUA APPROVED PLANS, AND PLUMBER/SUPPLIER SHALL SUPPLY PUMP THAT MEETS OR EXCEEDS SAID SELECTION BASED ON SITE CONDITIONS. A CHECK VALVE AND BALL VALVE SHALL BE SUPPLIED AT THE GRINDER STATION.
5. IF SERVICE IS INSTALLED UNDER ROAD, THEN A 3" HDPE SDR 17 GREEN, OR 3" HDPE SDR 17 GREEN-STRIPED CASING SHALL BE INSTALLED.

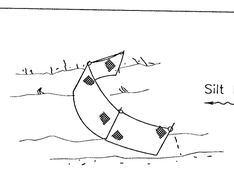
ECUA

1-1/2" LOW PRESSURE SEWER SERVICE

DETAIL D-20



Type III Silt Fence Protection Around Ditch Bottom Inlets.



Type III Silt Fence

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

NTS

GENERAL NOTES

1. ALL SIGN INSTALLATIONS MUST COMPLY WITH THE LATEST MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) SPECIFICATIONS.
2. ALL PAVEMENT MARKINGS MUST BE THERMOPLASTIC AND COMPLY WITH SECTION 711 OF F.D.O.T.'s STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
3. STOP BAR APPLICATION IS NOT REQUIRED AT THE INTERSECTION OF TWO RESIDENTIAL ROADWAYS AND/OR ROADWAYS LOCATED WITHIN INTERIORS OF A SUBDIVISION UNLESS SPECIFICALLY NOTED OTHERWISE.

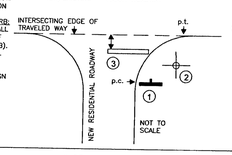
(1) STOP SIGN

SIGN PLACEMENT: LOCATE SIGN ADJACENT TO POINT OF CURVATURE (p.c.) OF CURBING OR EDGE OF ASPHALT TURN OUT.

LATERAL CLEARANCE (W/CURB): NO PART OF SIGN ASSEMBLY SHALL BE LESS THAN 1 FOOT FROM BACK OF CURB (EXCLUDES RIBBON CURB).

LATERAL CLEARANCE WITHOUT CURB: NO PART OF SIGN ASSEMBLY SHALL BE LESS THAN 6' FROM EDGE OF ASPHALT (INCLUDES RIBBON CURB).

VERTICAL CLEARANCE: SIGN SHALL DISPLAY A MINIMUM VERTICAL CLEARANCE OF 7 FEET (MEASURED FROM BOTTOM OF SIGN BLADE TO LEVEL OF ADJACENT ROADWAY).



(2) STREET NAME SIGN

SIGN PLACEMENT: LOCATE STREET NAME SIGN AT MID-RADIUS POINT OF TURN OUT ON SAME SIDE OF STREET AS STOP SIGN.

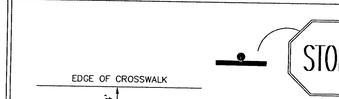
NOTE: SEE ESCAMBIA COUNTY STANDARD DETAILS FOR STREET NAME SIGNS FOR FURTHER FABRICATION, LOCATION AND INSTALLATION REQUIREMENTS.

(3) 24" STOP BAR

OPTIONAL (SEE GEN. NOTE #3).

PLACEMENT: LEADING EDGE OF STOP BAR CANNOT BE LESS THAN 4 FEET IN ADVANCE OF INTERSECTING EDGE OF TRAVELED WAY OR MARKED/UNMARKED CROSSWALK. STOP BAR MUST BE LOCATED AS TO PROVIDE ADEQUATE INTERSECTION SIGHT DISTANCE PER F.D.O.T.'s DESIGN STANDARDS INDEX #546.

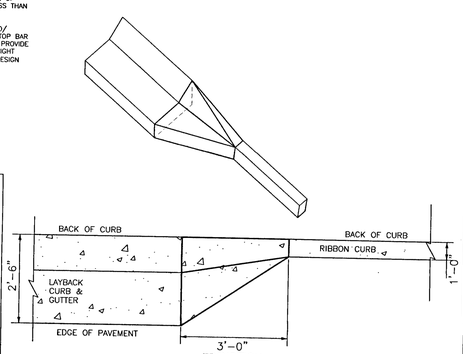
INSTALLATION DETAILS
TRAFFIC CONTROL SIGNS & MARKINGS FOR NEW RESIDENTIAL INTERSECTIONS ACCEPTABLE PER CURRENT ESCAMBIA COUNTY INSPECTION PRACTICES



STOP LINES SHOULD BE WHITE AND 600 MM (24 IN) WIDE

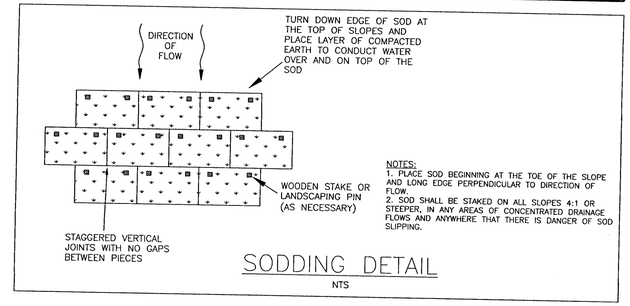
STOP SIGN & THERMOPLASTIC STRIP

NTS



TRANSITION FROM LAYBACK CURB TO RIBBON CURB

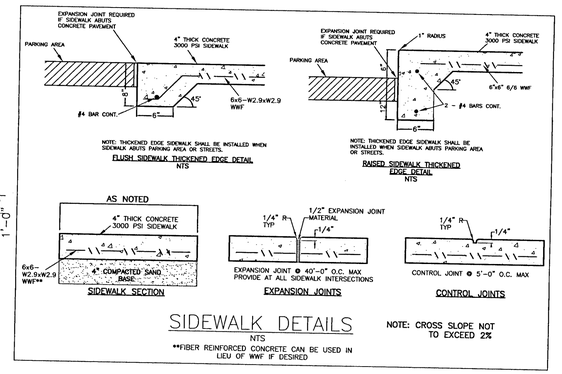
NTS



NOTES:
1. PLACE SOD BEGINNING AT THE TOE OF THE SLOPE AND LONG EDGE PERPENDICULAR TO DIRECTION OF FLOW.
2. SOD SHALL BE STAKED ON ALL SLOPES 4:1 OR STEEPER, IN ANY AREAS OF CONCENTRATED DRAINAGE FLOWS AND ANYWHERE THAT THERE IS DANGER OF SOD SLIPPING.

SODDING DETAIL

NTS



SIDEWALK DETAILS

NTS

**FIBER REINFORCED CONCRETE CAN BE USED IN LIEU OF WWF IF DESIRED

NOTE: CROSS SLOPE NOT TO EXCEED 2%

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CONSTRUCTION PLANS FOR
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ESCAMBIA COUNTY FLORIDA

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PROJECT NO: 13-006

SHEET: C12