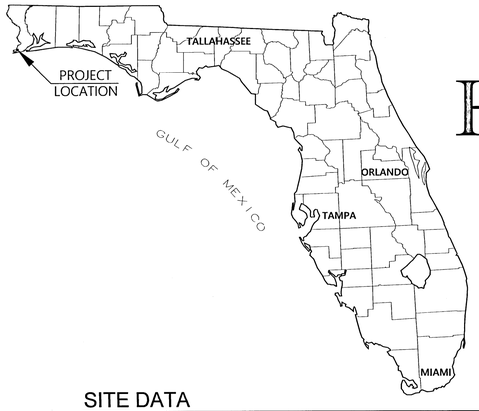


CONSTRUCTION PLANS FOR
HERON'S LANDING TOWNHOMES

A 142 LOT SUBDIVISION BEING A PORTION OF SECTION 25 TOWNSHIP 2 SOUTH RANGE 31 WEST
ESCAMBIA COUNTY, FLORIDA

ZONED: HDMU - HC/LI FUTURE LAND USE: MU-U

DEVELOPER:
HERON'S LANDING DEVELOPMENT LLC
1843 COMMERCE BLVD.
MIDWAY, FL 32343

DRAINAGE FEE

Imperv. Surf. 90257.0 Sq ft
Stormwater Ret. 0.56 % (F)
Total Drainage Fee $ 2527.20
Pond Maint. Fee: MSBU

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 in utility easement; not to be applied to private water/sewer facilities on private property (see Building Code)*

A. ECUA Engineering Manual Incorporated by Reference

The ECUA Engineering Manual, dated December 18, 2014, along with Update # 1 dated September 1, 2016 (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? ☐YES NO☐. If YES, Contractor shall construct Project in accordance with said documents as listed/located below:

Document Name	Document Type		Location	
	Specification	Detail	Plans	Project Manual*
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐

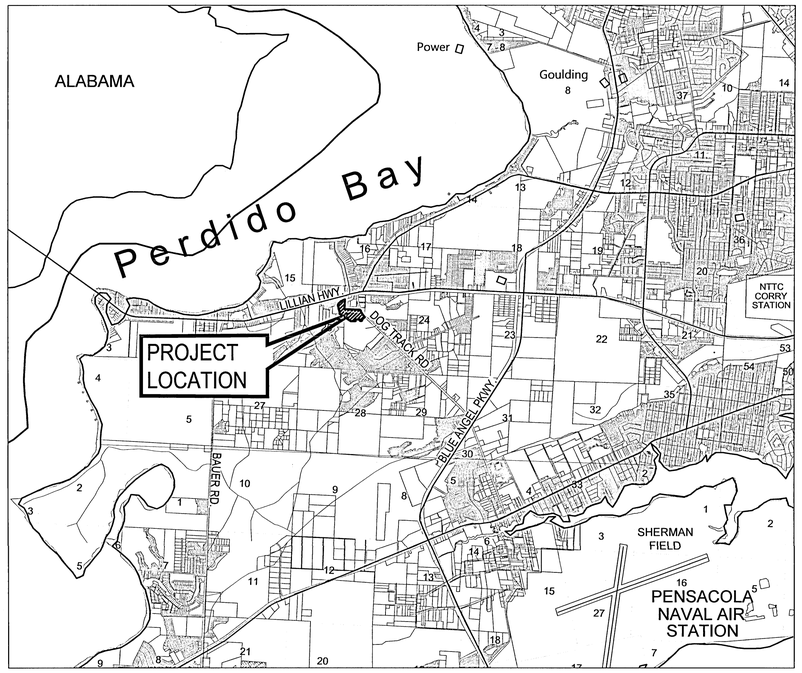
**Project Manuals used only with ECUA CIP Projects*

C. Engineer of Record Responsibilities

The Engineers of Record (EORs) that have affixed their seals and signatures on these plans warrant their 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.

SITE DATA

Property Owner:	Heron's Landing Development LLC 1843 Commerce Blvd. Midway, FL 32343
Developer:	Heron's Landing Development LLC 1843 Commerce Blvd. Midway, FL 32343
Surveyor:	Mullins, LLC 801 W. Romana St. Suite A Pensacola, FL 32502 (251) 263-3513 - kevin@mullinsllc.net Kevin J. Gardner, PLS - FL License # 7258
Engineer:	Mullins, LLC 801 W. Romana St. Suite A Pensacola, FL 32502 (256) 975-0653 - eric@mullinsllc.net Eric Lane, P.E. - FL License # 86920
Gross Project Area:	23.94 Acres (18.21 Buildable)
Wetland Area:	5.73 Acres
Gross Density:	5.93 Units / Acre (Residential)
Current Zoning:	HDMU - HC/LI
Type of Subdivision:	Single Family Attached
Number of Lots:	142 Lots
Contour Interval:	One-Foot
Datum:	Florida North NAD1983 & NGVD88
Street Length:	3,223 LF
Type of Streets:	Public
R/W Width:	50' - 80'
Pavement Width:	Min. 26' B.O.C. To B.O.C.
Street Maintenance:	Public
Stormwater Maintenance:	Public
Max. Building Height (feet):	45 feet
Min. Lot Width at Building Line:	20.00 feet
Required Min. Depth of Front/Rear Yard:	HDMU: 20'/15' - HC/LI: 15'/15'
Min. Width of Each Side Yard:	HDMU: 10' on each side of a grouped of attached townhouses. On each side of all other structures, 10 feet or 10 percent of the lot width at the street right-of-way, whichever is less, but at least five feet. For structures exceeding 35 feet above the highest adjacent grade, an additional two feet for each additional 10 feet in height, but not required to exceed 15 feet. HC/LI: On each side of a single-family detached dwelling, 10 feet or 10 percent of the lot width at the street right-of-way, whichever is less, but at least five feet. For all other structures, including any group of attached townhouses, ten feet on each side. for structures exceeding 35 feet above highest adjacent grade, an additional two feet for each additional 10 feet in height.



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HERONS LANDING TOWNHOMES LEGAL DESCRIPTION

BEGINNING AT A 5/8" REBAR FOUND(RUBEN), SAID POINT IS LOCATED N 04°00'27" E A DISTANCE OF 161.73' FROM THE NORTHWEST CORNER OF THE SOUTH ½ OF THE NORTH ½ OF THE SOUTHWEST ¼ OF THE NORTHEAST ¼ OF SECTION 25, TOWNSHIP 2 SOUTH, RANGE 31 WEST, ESCAMBIA COUNTY, FLORIDA;
THENCE FROM THE POINT OF BEGINNING S 87°22'50" E A DISTANCE OF 971.54' TO A 5/8" REBAR FOUND(RUBEN) ON THE SOUTHWESTERLY RIGHT OF WAY OF DOG TRACK ROAD;
THENCE ALONG SAID SOUTHWESTERLY RIGHT OF WAY AND WITH A CURVE TURNING TO THE LEFT HAVING AN ARC LENGTH OF 547.16', A RADIUS OF 1,940.43', A CHORD BEARING OF S 33°33'09" E, AND A CHORD LENGTH OF 545.35';
THENCE LEAVING SAID SOUTHWESTERLY RIGHT OF WAY S 49°33'01" W A DISTANCE OF 117.83';
THENCE WITH A CURVE TURNING TO THE LEFT HAVING AN ARC LENGTH OF 57.05', A RADIUS OF 460.00', A CHORD BEARING OF S 45°59'50" W, AND A CHORD LENGTH OF 57.02';
THENCE S 42°26'39" W A DISTANCE OF 36.94';
THENCE WITH A CURVE TURNING TO THE LEFT HAVING AN ARC LENGTH OF 21.58', A RADIUS OF 25.00', A CHORD BEARING OF S 17°42'54" W, AND A CHORD LENGTH OF 20.92';
THENCE CONTINUING WITH A REVERSE CURVE TURNING TO THE RIGHT HAVING AN ARC LENGTH OF 271.58', A RADIUS OF 75.00', A CHORD BEARING OF N 83°16'41" W, AND A CHORD LENGTH OF 145.71';
THENCE S 88°34'43" W A DISTANCE OF 270.20';
THENCE S 01°25'17" E A DISTANCE OF 90.02';
THENCE S 88°34'43" W A DISTANCE OF 286.66';
THENCE N 57°24'37" W A DISTANCE OF 825.90' TO THE CENTERLINE OF A MEANDER LINE FOR BAYOU HERON;
THENCE ALONG SAID MEANDER LINE THE FOLLOWING:
N 00°33'50" E A DISTANCE OF 50.19';
THENCE N 08°14'07" W A DISTANCE OF 106.39';
THENCE N 21°18'07" W A DISTANCE OF 151.55';
THENCE N 04°43'31" W A DISTANCE OF 199.81';
THENCE N 17°49'11" W A DISTANCE OF 114.74';
THENCE N 06°55'36" E A DISTANCE OF 81.63';
THENCE N 32°36'49" E A DISTANCE OF 96.80';
THENCE N 47°05'51" E A DISTANCE OF 155.01';
THENCE N 60°24'09" E A DISTANCE OF 202.21';
THENCE N 76°08'40" E A DISTANCE OF 75.30';
THENCE LEAVING SAID MEANDER LINE S 02°34'23" W A DISTANCE OF 444.38' TO A 1" IRON PIPE FOUND;
THENCE S 01°35'04" W A DISTANCE OF 163.44' TO THE POINT OF BEGINNING,
CONTAINING 23.94 ACRES, MORE OR LESS.
THE SURVEY SHOWN HEREON IS TRUE AND CORRECT AND IN COMPLIANCE WITH THE MINIMUM TECHNICAL STANDARDS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17.050, 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.

PREPARED BY:
J. KEVIN GARDNER, PLS
FLORIDA LICENSE NO. 7258

WETLAND NOTES:

THERE IS NO PROPOSED IMPACTS TO THE WETLANDS OR OTHER "ENVIRONMENTALLY SENSITIVE LANDS" (ESLs) THAT WILL REQUIRE AVOIDANCE & IMPACT MINIMIZATION EFFORTS TO BE DEMONSTRATED.

FLOODPLAIN NOTE

THE SUBJECT PROPERTIES AS SHOWN HEREON IS LOCATED IN FLOOD ZONE AE, BASE FLOOD ELEVATION 6 AND 7. (AREAS SUBJECT INUNDATION BY THE 1-PERCENT-ANNUAL-CHANCE FLOOD EVENT DETERMINED BY DETERMINED BY DETAILED METHODS. BFEs ARE SHOWN WITHIN THESE ZONES), AND FLOOD ZONE X, AS DETERMINED FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP OF ESCAMBIA COUNTY, FLORIDA, COMMUNITY 120080, FIRM MAP PANEL NUMBERS 12033C0345G AND 12033C0365G, MAP REVISION DATED SEPTEMBER 29, 2006.
ESCAMBIA COUNTY HAS A 3-FOOT FREEBOARD REQUIREMENT IN ADDITION TO FEMA's MINIMUM STANDARDS.

48 HOURS
BEFORE YOU DIG
CALL SUNSHINE ONE
1-800-432-4770
www.callsunshine.com

****ISSUED FOR REVIEW****
NOVEMBER 2021

SHOP DRAWINGS
TO BE SUBMITTED TO:
MULLINS, LLC
ATTN: TODD M WHEELER, P.E.
801 W. ROMANA ST. STE. A
PENSACOLA, FL. 32502

Approved [signature] 12-15-21
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.

TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

PLANS PREPARED BY:
MULLINS, LLC
CIVIL ENGINEERING, DEVELOPMENT DESIGN
SURVEYING
801 W. Romana Street, Suite A, Pensacola, FL 32502
(850) 462-8412

Mullins Project No. 21-112P

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION.

CONSTRUCTION PLAN SET
NOVEMBER 2021

ENGINEERING STATEMENT

ALL PROPOSED ROADWAYS, DRAINAGE, AND OTHER IMPROVEMENTS ARE DESIGNED TO COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL DEVELOPMENT REQUIREMENTS.

ENGINEER OF RECORD: TODD M WHEELER, P.E.
P.E. NO. 92378

GENERAL NOTES:

1. THE CONTRACTORS SHALL NOTIFY THE COUNTY DESIGNEE AND/OR COUNTY INSPECTOR 48 HOURS PRIOR TO INITIATION OF CONSTRUCTION.
2. ALL CONDITIONS AND STIPULATIONS OF THE CONSTRUCTION PERMITS AND THE APPROVALS ISSUED BY THE ESCAMBIA COUNTY ENGINEER AND ECUA SHALL BE COMPLIED WITH IN EVERY DETAIL.
3. ALL ROADS DAMAGED BY CONSTRUCTION OPERATIONS ARE TO BE PATCHED OR RECONSTRUCTED AS DIRECTED BY THE COUNTY ENGINEER OR DESIGNEE.
4. THE CONTRACTOR SHALL TAKE STEPS NECESSARY TO PREVENT EROSION AND ANY OFF SITE SEDIMENT TRANSPORT RESULTING FROM INCREASED RUNOFF DURING CONSTRUCTION BY PROVIDING SILT FENCE AND/OR STAKED HAY BALES AS REQUIRED BY FDOT SPECIFICATION 104, THE FLORIDA STORMWATER, EROSION, AND SEDIMENT CONTROL INSPECTOR'S MANUAL, LATEST EDITION, OR AS INDICATED ON THE PLANS. ALL EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL ASSOCIATED DISTURBED AREAS ARE STABILIZED AS TO REDUCE SEDIMENT RUNOFF, UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR DESIGNEE.
5. ANY NECESSARY PERMITS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. ESCAMBIA COUNTY OR ITS DESIGNEE WILL ASSIST THE CONTRACTOR WITH REQUIRED PERMITS.
6. THE CONTRACTOR IS CAUTIONED TO VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH THE PROJECT PRIOR TO BIDDING AND/OR CONSTRUCTION.
7. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PRESERVE OR RELOCATE ALL BENCHMARKS (VERTICAL CONTROL) AS NEEDED DURING CONSTRUCTION. ALL PUBLIC OR PRIVATE CORNER MONUMENTATION SHALL BE PROTECTED. IF A PUBLIC OR PRIVATE CORNER MONUMENTATION IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR DESIGNEE IMMEDIATELY. ANY ESCAMBIA COUNTY HARN/GPS NETWORK MONUMENTS OR BUREAU OF SURVEY AND MAPPING GPS NETWORK MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED. IF ANY HARN/GPS NETWORK MONUMENTS OR BUREAU OF SURVEY AND MAPPING GPS NETWORK MONUMENTS ARE DISTURBED OR DESTROYED THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF THE MONUMENTS AND HAVE THE MONUMENTS POSITION DETERMINED BY A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER USING GUIDELINES AS ESTABLISHED BY NATIONAL GEODETIC SURVEY FOR BLUE BOOKING AND APPROVAL.
8. EXISTING DRAINAGE FEATURES WITHIN CONSTRUCTION LIMITS SHALL REMAIN UNLESS OTHERWISE NOTED.
9. THE CONTRACTOR SHALL MATCH EXISTING CONDITIONS AT THE BEGINNING AND END OF CONSTRUCTION AS DIRECTED BY THE COUNTY ENGINEER OR DESIGNEE.
10. EXISTING STREETS AND DRIVES SHALL BE MAINTAINED TO LOCAL TRAFFIC AND PROPERTY OWNERS.
11. ALL ROADWAY CONSTRUCTION SHALL COMPLY WITH THE ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS, LATEST EDITION.
12. ALL MATERIALS, TESTING AND CONSTRUCTION METHODS SHALL CONFORM TO THE ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS, LATEST EDITION AND ECUA.
13. ANY REFERENCE TO FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, DIVISION I, GENERAL REQUIREMENTS AND COVENANTS, SHALL BE EXCLUDED AND NOT APPLICABLE TO ANY SPECIFICATION REFERRED HEREIN OR OTHERWISE LISTED IN THESE PLANS OR RELATED DOCUMENTS OR THE ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS.
14. EXISTING STREET AND ROAD NAME SIGNS ON THE PROJECT SHALL BE KEPT VISIBLE AT ALL TIMES FOR THE FACILITATION OF ACCESS BY EMERGENCY VEHICLES. ALL OTHER EXISTING SIGNS THAT CONFLICT WITH CONSTRUCTION OPERATIONS SHALL BE TAKEN DOWN AND STOCKPILED WITHIN THE R/W LIMITS BY THE CONTRACTOR, AS DIRECTED BY THE COUNTY ENGINEER OR DESIGNEE. ANY EXISTING SIGNS THAT ARE TO BE RELOCATED AND ARE DAMAGED BEYOND USE BY THE CONTRACTOR, SHALL BE REPLACED BY THE CONTRACTOR AT HIS/HER EXPENSE.
15. CONTRACTOR SHALL COMPLY WITH ALL F.D.E.P. AND ARMY CORP. OF ENGINEERS REQUIREMENTS.
16. IN THE EVENT THAT SURVEY MONUMENTATION OR REFERENCE POINTS ARE MISSING OR HAVE BEEN DESTROYED, PLEASE CONTACT:

    ESCAMBIA COUNTY SURVEYOR
    3363 WEST PARK PLACE
    PENSACOLA, FLORIDA 32505
    PH (850) 595-3427

17. GRADED AGGREGATE BASE SHALL BE REQUIRED WHERE THE SEASONAL HIGH GROUND WATER ENCROACHES WITHIN TWO (2) FEET OF THE BOTTOM OF BASE.
18. TREES WITHIN LIMITS OF CONSTRUCTION SHALL BE REMOVED UNLESS OTHERWISE NOTED IN PLANS.
19. ALL COMPACTED FILL SHALL BE PLACED IN FOUR INCH (4") LIFTS FOR HAND POWERED TAMPERS AND EIGHT INCH (8") LIFTS FOR HEAVY EQUIPMENT OPERATED TAMPERS.
20. MAINTENANCE OF TRAFFIC AS PER FDOT INDEX 600.
21. THE CONTRACTOR SHALL, AT A MINIMUM, MATCH EXISTING SIGNING AND PAVEMENT MARKINGS. ALL SIGNING AND PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH THE LATEST FDOT DESIGN STANDARDS. THE CONTRACTOR SHALL CONTACT THE COUNTY TRAFFIC DEPARTMENT PRIOR TO INSTALLATION OF ANY SIGNING AND PAVEMENT MARKINGS.
22. 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.
23. TEMPORARY BENCHMARKS HAVE BEEN ESTABLISHED ON THIS PROPERTY WHICH SHOULD BE USED BY THE CONTRACTOR DURING CONSTRUCTION. DESCRIPTIONS OF THE BENCHMARKS CAN BE FOUND IN THESE PLANS.
24. CLEARING AND GRUBBING SHALL BE LIMITED TO THE ROADWAY RIGHT-OF-WAY, DRAINAGE EASEMENTS AND DETENTION PONDS. NO ADDITIONAL CLEARING OTHER THAN SPECIFIED ON THE PLANS SHALL BE ALLOWED, UNLESS PROPER PERMITS ARE OBTAINED THROUGH THE COUNTY.
25. ALL UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES SHALL BE INSTALLED PRIOR TO CURB AND BASE CONSTRUCTION.
26. THE CONTRACTOR SHALL COORDINATE ALL REQUIRED TESTING WITH THE SOILS ENGINEER. PAYMENT FOR TESTING WILL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
27. THE CONTRACTOR AND ECUA SHALL ADJUST ALL VALVE BOX AND MANHOLE CASTINGS TO MATCH FINAL SURFACE ELEVATIONS.
28. 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 OR THE "AS-BUILT" RECORD DRAWINGS MUST BE SIGNED, SEALED AND DATED BY THE REGISTERED FLORIDA PROFESSIONAL ENGINEER.
29. CONTRACTOR SHALL MAINTAIN RECORD DRAWINGS DURING CONSTRUCTION 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 AND ECUA PRIOR TO REQUESTING FINAL INSPECTION.
30. THE OWNER OR HIS AGENT SHALL ARRANGE/SCHEDULE WITH THE COUNTY AND ECUA A FINAL INSPECTION OF THE DEVELOPMENT UPON COMPLETION AND ANY INTERMEDIATE INSPECTIONS AT (850) 595-3434. AS-BUILT PLANS AND CERTIFICATION ARE REQUIRED PRIOR TO REQUEST FOR FINAL INSPECTION/APPROVAL.
31. NOTIFY SUNSHINE UTILITIES 48 HOURS IN ADVANCE PRIOR TO DIGGING WITHIN R/W, 1-800-432-4770.
32. ALL ASPECTS OF THE STORMWATER/DRAINAGE COMPONENTS AND/OR TRANSPORTATION COMPONENTS AND/OR WATER AND SEWER COMPONENTS SHALL BE COMPLETED PRIOR TO REQUESTING A FINAL INSPECTION.
33. NO DEVIATIONS OR REVISIONS FROM THESE PLANS BY THE CONTRACTOR SHALL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL FROM BOTH THE DESIGN ENGINEER AND ESCAMBIA COUNTY. ANY DEVIATIONS MAY RESULT IN DELAYS IN COUNTY ACCEPTANCE OF IMPROVEMENTS.

DRAINAGE NOTES:

1. CONSTRUCT THE STORMWATER MANAGEMENT FACILITY INCLUDING INLET STRUCTURE, FILTER SYSTEM (TEMP. OR FINAL), AND OUTFALL SYSTEM AND STABILIZE WITH SOD. DO NOT CLEAR ANY OTHER AREAS OF THE SITE UNTIL POND IS STABILIZED.
2. CLEAR THE REMAINING PORTION OF THE SITE AND CREATE DIVERSION CHANNELS TO DIRECT STORMWATER FLOW TO THE POND. WHERE NEEDED, CHECK DAMS CONSTRUCTED OF HAY BALES, DAMS SHALL BE USED TO TRAP SEDIMENT BEFORE IT REACHES THE POND.
3. ENDWALL DIMENSIONS, LOCATIONS AND POSITIONS ARE FOR ROUND AND ELLIPTICAL CONCRETE PIPE AND FOR ROUND AND PIPE -ARCH CORRUGATED METAL PIPE. ROUND CONCRETE PIPE SHOWN.
4. FRONT SLOPE AND DITCH TRANSITIONS SHALL BE IN ACCORDANCE WITH FDOT INDEX NO. 280.
5. ENDWALLS MAY BE CAST IN PLACE OR PRECAST CONCRETE. REINFORCING STEEL SHALL BE GRADES 40 OR 60. ADDITIONAL REINFORCEMENT NECESSARY FOR HANDLING PRECAST UNITS SHALL BE DETERMINED BY THE CONTRACTOR OR THE SUPPLIER. COST OF REINFORCEMENT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR CONCRETE, (ENDWALLS).
6. ALL EXPOSED CORNERS AND EDGES OF CONCRETE ARE TO BE CHAMFERED 3/4".
7. CONSTRUCTION OF THE ROADWAY AND DRAINAGE SYSTEMS SHALL CONFORM TO THE MOST RECENT FDOT ROAD AND BRIDGE MANUAL AND SUPPLEMENTS.
8. CONCRETE MEETING THE REQUIREMENTS OF ASTM C-478 (4000 PSI) MAY BE USED IN LIEU OF CLASS 1 CONCRETE IN PRECAST ITEMS MANUFACTURED IN PLANTS WHICH ARE UNDER THE STANDARD OPERATING PROCEDURES FOR THE INSPECTION OF PRECAST DRAINAGE PRODUCTS.
9. ON OUTFALL DITCHES WITH SIDE SLOPES FLATTER THAN 1½" : 1, PROVIDE 20' TRANSITIONS FROM THE ENDWALL TO THE FLATTER SIDE SLOPES, RIGHT OF WAY PERMITTING.
10. FOR SODDING AROUND ENDWALLS SEE INDEX NO. 281.
11. PIPE LENGTH PLAN QUANTITIES SHALL BE BASED ON THE PIPE END LOCATIONS SHOWN IN THE STANDARD LOCATION CONTROL END VIEW, OR LENGTHS BASED ON SPECIAL ENDWALL LOCATIONS CALLED FOR IN THE PLANS.

CONSTRUCTION SEQUENCE:

1. THE FOLLOWING SEQUENCE OF CONSTRUCTION SHALL BE FOLLOWED:
    - A) CONSTRUCT TREE PROTECTION BARRICADES AND SEDIMENTATION/EROSION CONTRILS AND CLEARLY FLAG THE LIMITS OF CONSTUCTION. DO NOT BEGIN CONSTRUCTION UNTIL EROSION CONTROL DEVICES HAVE BEEN INSPECTED AND APPROVED BY THE LOCAL PERMITTING AUTHORITY.
    - B) CONSTRUCT ALL STORMWATER MANAGEMENT FACILITIES. DO NOT CLEAR ANY OTHER AREAS OF THE SITE UNTIL THE POND/SWALE IS STABILIZED.
    - C) CLEAR THE REMAINING PORTION OF THE SITE AND CREATE DIVISION BERMS OR CHANNELS TO DIRECT RUNOFF TO THE STORMWATER FACILITES WHERE NEEDED, CHECK DAMS CONSISTING OF HAY BALES OR OTHER MATERIALS SHALL BE USED TO TRAP ANY SEDIMENTS BEFORE THEY REACH THE POND/SWALE.
    - D) CONSTRUCT UTILITIES AND OTHER IMPROVEMENTS IN ACCORDANCE WITH THE APPROVED DRAWINGS.
    - E) SEED/SOD AND LANDSCAPE IN ACCORDANCE WITH THE APPROVED DRAWINGS.
    - F) OBTAIN A STORMWATER OPERATION AND MAINTENANCE PERMIT. RECORD DRAWINGS SHALL BE FILED WITH THE LOCAL PERMITTING AUTHORITY.

LAYOUT NOTES:

1. THE ELEVATIONS AS SHOWN HEREON ARE REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM.
2. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE EXACT LOCATION OF EXISTING UTILITIES AND TO DETERMINE IF OTHER UTILITIES WILL BE ENCOUNTERED DURING THE COURSE OF THE WORK AND TAKE ALL NECESSARY STEPS TO PROVIDE FOR UTILITY PROTECTION.
3. REFERENCE BENCHMARKS EXISTS ON THIS PROPERTY AS SHOWN HEREON.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FINAL LAYOUT AND ALIGNMENT OF ALL BUILDINGS, DRIVEWAYS, PARKING AREAS, ROADS AND OTHER FACILITIES. CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY UPON ANY APPARENT CONFLICTS, AND PRIOR TO CONSTRUCTING SAID IMPROVEMENTS.
5. CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY REGARDING ANY APPARENT CONFLICTS IN THE PROPOSED IMPROVEMENTS ENCOUNTERED DURING THE COURSE OF CONSTRUCTION.

EARTHWORK NOTE:

1. **NO REPRESENTATION IS MADE REGARDING A BALANCED SITE. THE CONTRACTOR SHALL DETERMINE IF ANY ADDITIONAL FILL IS REQUIRED AND PROVIDE SAME AT NO ADDITIONAL COST TO THE OWNER. LIKEWISE, ANY EXCESS MATERIAL SHALL BE HAULED FROM THE SITE AND PROPERLY DISPOSED OF AT NO ADDITIONAL COST.**

UTILITY NOTES:

1. THE LOCATION SHOWN FOR EXISTING UNDERGROUND UTILITIES IS APPROXIMATE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK IN EACH AREA. THE CONTRACTOR AGREES TO BE COMPLETELY RESPONSIBLE FOR ALL DAMAGES WHICH MIGHT OCCUR BY HIS/HER FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UTILITIES.
2. UTILITY OWNERS SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO ANY CONSTRUCTION SO THAT THE UTILITY OWNER CAN SPOT VERIFY AND/OR EXPOSE THEIR UTILITIES.

    KNOWN UTILITIES OWNERS INCLUDE:

    SANITARY SEWER/WATER - ECUA
    MR. TOMMY TAYLOR
    P.O. BOX 15311
    PENSACOLA, FL. 32514
    PH: (850) 698-4677

    NATURAL GAS - ENERGY SERVICES OF PENSACOLA
    MRS. DIANE MOORE
    1625 ATWOOD DRIVE
    PENSACOLA, FL. 32514
    PH: (850) 474-5310

    TELEPHONE - AT&T FLORIDA
    MR. STEVE KENNINGTON
    6689 MAGNOLIA STREET
    MILTON, FL. 32570
    PH: (850) 623-3811

    TRAFFIC DEPARTMENT - ESCAMBIA COUNTY PUBLIC WORKS
    MR. JOHNNY COX
    3363 WEST PARK PLACE
    PENSACOLA, FL. 32505
    PH: (850) 595-3404

    ELECTRIC - GULF POWER
    MR. CHAD SWAILS
    5120 DOGWOOD DRIVE
    MILTON, FL. 32570
    PH: (850) 429-2446

    CABLE - COX CABLE
    MR. TROY YOUNG
    2421 EXECUTIVE PLAZA
    PENSACOLA, FL. 32504
    PH: (850) 857-4564

    SUNSHINE STATE ONE-CALL
    7200 LAKE ELLENOR DRIVE, SUITE
    ORLANDO, FL. 32809
    PH: (800) 432-4770

3. AT&T FLORIDA WILL COMPLETE ALL WORK DURING THE HOURS OF 7:30 AM - 4:30 PM, MONDAY THRU FRIDAY. NO NIGHT OR WEEKEND WORK.
4. ALL CABLE DAMAGE MUST BE REPORTED TO THE AT&T FLORIDA REPAIR SERVICE DEPARTMENT AT 611 FROM A LAND LINE OR 877-737-2478 IF USING A CELL PHONE.
5. CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS OF OVERHEAD TRANSMISSION LINES AND UNDERGROUND UTILITIES.
6. UTILITIES ARE TO REMAIN AND BE PROTECTED DURING CONSTRUCTION. NECESSARY REPAIRS SHALL BE CONSIDERED INCIDENTAL TO OTHER PAY ITEMS AND SHALL BE TO THE SATISFACTION OF THE UTILITY OWNERS.
7. WORK PROPOSED NEXT TO THE R/W WITH EXISTING SWALES MAY REQUIRE ADDITIONAL PROVISIONS TO REPAIR/RESTORE EXISTING DRAINAGE SWALES AS NEEDED TO ENSURE ADEQUATE DRAINAGE. R/W SHOULDER STABILIZATION SHOULD BE IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION LATEST EDITION.
8. 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 WILL 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.
9. ROUGH GRADE OF RIGHT-OF-WAY MUST BE ESTABLISHED PRIOR TO COMMON TRENCH UTILITY INSTALLATION TO ENSURE UTILITIES ARE INSTALLED AT PROPER DEPTHS. THIS NOTE SHOULD ALSO INDICATE 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.
10. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD AT LEAST TWO WEEKS PRIOR TO PLACEMENT OF BASE MATERIAL TO ASSIST IN THE COORDINATION OF ALL OTHER UNDERGROUND UTILITIES.
11. 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.
12. ALL TRANSITIONS BETWEEN DUCTILE IRON AND PVC SHALL HAVE SOLID SLEEVE COUPLINGS.
13. ALL WATER CROSSINGS UNDER ASPHALT NEED TO BE IN A CASING OR DUCTILE IRON PIPE.

EROSION NOTES:

1. EROSION PROTECTION: SOIL EROSION SEDIMENTATION MUST BE CONTROLLED AND RETAINED ON SITE DURING CONSTRUCTION. THEREFORE, EROSION PROTECTION, SUCH AS STAKED BALED HAY AND SILT FENCE BARRIERS, MUST BE INSTALLED PRIOR TO START OF CONSTRUCTION.
2. SILT FENCE BARRIER SHALL BE INSTALLED AS SHOWN ON PLANS, AND IN ALL AREAS SUBJECT TO SOIL EROSION SEDIMENTATION.
3. POND SLOPES SHALL BE SODDED.
4. GRADES AT CURBS ARE AT FLOWLINE.
5. EROSION CONTROL MATTING SHALL BE BONTERRA CF9 OR EQUAL APPROVED BY THE ENGINEER. INLET FILTER SYSTEMS SHALL BE SILT-SAVER, INC. OR EQUAL APPROVED BY THE ENGINEER.
6. CONTRACTOR SHALL RETAIN ALL SOIL EROSION SEDIMENTATION ON-SITE. (BUT NOT IN THE WETLANDS)
7. ALL DISTURBED AREAS NOT SPECIFICALLY SHOWN TO BE SODDED SHALL BE GRASSED AND MULCHED. THE GRASS SEED SHALL BE 20 PARTS BERMUDA AND 80 PARTS PENSACOLA BAHIA. APPLICATION SHALL BE 100 POUNDS PER ACRE. IF CONSTRUCTION OCCURS DURING THE MONTHS OF OCTOBER THROUGH JANUARY, SEEDING SHALL BE 50 PARTS WINTER RYE AND 50 PARTS PENSACOLA BAHIA AT 100 POUNDS PER ACRE. SEEDED AREAS SHALL BE FERTILIZED WITH 8-8-8 NPK DRY FERTILIZER AT THE RATE OF 800 POUNDS PER ACRE.
8. ALL AREAS TO BE GRASSED AND MULCHED SHALL HAVE A MINIMUM OF ONE INCH OF TOPSOIL DISTRIBUTED PRIOR TO SEEDING.
9. FUNCTIONAL EROSION AND SILTATION CONTROLS SHALL BE INSTALLED AS NEEDED THROUGHOUT THE CLEARED AREAS AND AS SHOWN ON THE CONSTRUCTION PLANS IMMEDIATELY SUBSEQUENT TO ESTABLISHED ROUGH GRADE.
10. ALL EROSION CONTROL STRUCTURES SHALL BE IN PLACE BEFORE DEMOLITION BEGINS.
11. CONSTRUCT FILTER FENCES, HAY BALES AND TREE BARRICADES.
12. STRIP THE TOP SOIL AND STOCK PILE FOR USE IN LANDSCAPED AREAS.
13. STABILIZE CONSTRUCTION DRIVEWAYS WITH GRAVEL AS REQUIRED TO PREVENT SILT FROM LEAVING THE SITE.
14. INSTALL UTILITIES AND DRAINAGE PIPES PROTECTING INLETS w/STAKED HAY BALES OR FILTER FENCE TO PREVENT EROSION FORM ENTERING THE DRAINAGE SYSTEMS. CONSTRUCT STORMWATER MANAGEMENT CONTROL STRUCTURES. (FILTRATION, RATE CONTROL, ETC.)
15. CONSTRUCT BUILDINGS, PARKING AND OTHER IMPROVEMENTS AS SHOWN ON THE PLANS; MAINTAIN SEDIMENTATION, EROSION AND TREE PROTECTION MEASURES.
16. FINAL GRADE THE SITE AND LANDSCAPE AS PER PLANS AND SPECIFICATIONS, STABILIZING ALL DISTURBED AREAS.
17. USE RAIL FENCE AROUND PROTECTED TREES.
18. NO HEAVY EQUIPMENT IN NATURAL AREAS, ALL PLANTING TO BE DONE BY HAND.
19. ALL DISTURBED AREAS SHALL BE SATISFACTORILY STABILIZED. UNLESS OTHERWISE SPECIFIED, SOD SHALL BE PROVIDED IN THE FOLLOWING AREAS:
    - A) ALL SLOPES 3:1 AND STEEPER.
    - B) ENTIRE AREA BETWEEN SIDEWALKS AND BACK OF ROAD CURB.
    - C) INTERIOR SLOPES OF PONDS AND SWALES, AND IN A THREE-FOOT WIDE STRIP ALONG THE TOP-OF BANK OF ALL PONDS AND SWALES.
    - D) IN A TWO-FEET WIDE STRIP ALONG ALL BUILDINGS, STRUCTURES, ROADS WHERE NO SIDEWALKS RUN PARALLEL, AND OUTER EDGES OF ALL SIDEWALKS. OTHER AREAS MAY BE SEEDED AND MULCH, UNLESS OTHERWISE SPECIFIED. CONTRACTOR SHALL MAINTAIN GRASSED AREAS UNTIL PLANTS HAVE TAKEN ROOT AND THE AREA IS SATISFACTORILY STABILIZED.
    - E) CONSTRUCTION ENTRANCE TO BE CONSTRUCTED OF 6 INCHES (MIN.) #57 STONE TO PREVENT TRACKING ONTO STREETS.
20. 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.
21. 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
22. 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 ACCORDANCE WITH FDOT SECTION 570 AND STANDARD INDEX 105
23. DEVELOPER/CONTRACTOR/HOMEOWNERS ASSOCIATION SHALL RESHAPE PER PLAN SPECIFICATIONS, CLEAN OUT ACCUMULATED SILT, AND STABILIZE RETENTION/DETENTION POND(S) AT THE END OF CONSTRUCTION WHEN ALL DISTURBED AREAS HAVE BEEN STABILIZED AND AT THE END OF THE 2-YEAR WARRANTY PERIOD.
24. ON SITES > 1 ACRE, IF > 1 CONTIGUOUS ACRE IS CLEARED, A GROUND COVER SUFFICIENT TO PREVENT EROSION SHOULD BE PLANTED OR OTHERWISE STABILIZED WITHIN 10 WORKING DAYS ON THAT PORTION OF THE SITE UPON WHICH FURTHER ACTIVE CONSTRUCTION WILL NOT BE UNDERTAKEN WITHIN 90 DAYS.
25. TO COMPLY WITH NPDES REQUIREMENTS, 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 PERMIT APPLICANT FOR PROPER REPORTING TO FDEP/NWFWMD.
26. A HEALTHY GROWTH OF GRASS WITHIN DISTURBED RIGHT-OF-WAY AREAS IS REQUIRED PRIOR TO COUNTY APPROVAL. 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/FERTILIZED WILL BE ACCEPTABLE.
27. SAG FILTERS IN CURB THROATS ARE NOT AN ALLOWABLE SEDIMENT CONTROL METHOD.

REVISIONS
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MULLINS, LLC
CIVIL ENGINEERING, DEVELOPMENT DESIGN
SURVEYING
801 W. Romana Street, Suite A, Pensacola, FL. 32502
(850) 462-8412

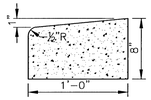
TODD M WHEELER LICENSE No 92378 STATE OF FLORIDA PROFESSIONAL ENGINEER 11/19/2021
TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

Construction Plans for
HERON'S LANDING TOWNHOMES
Escambia County, FL
PREPARED FOR: Heron's Landing Development LLC

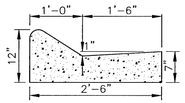
Notes

Job No. 21-112P
Date: 10/6/2021
Drawn By: CAB
Checked By: ENL

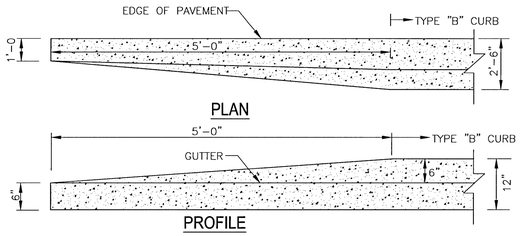
SHEET NUMBER
2



COUNTY CONCRETE RIBBON CURB
NOT TO SCALE

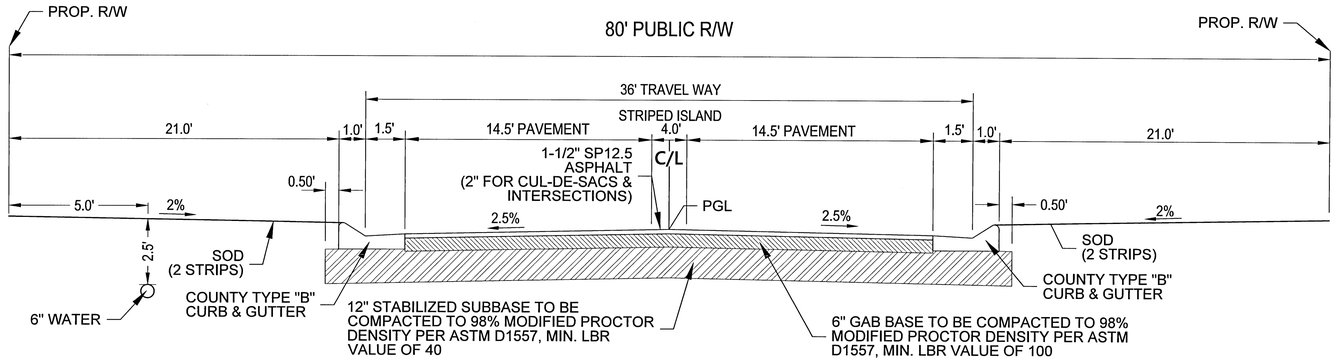


TYPE 'B' CURB & GUTTER FOR CURB MACHINE
NOT TO SCALE

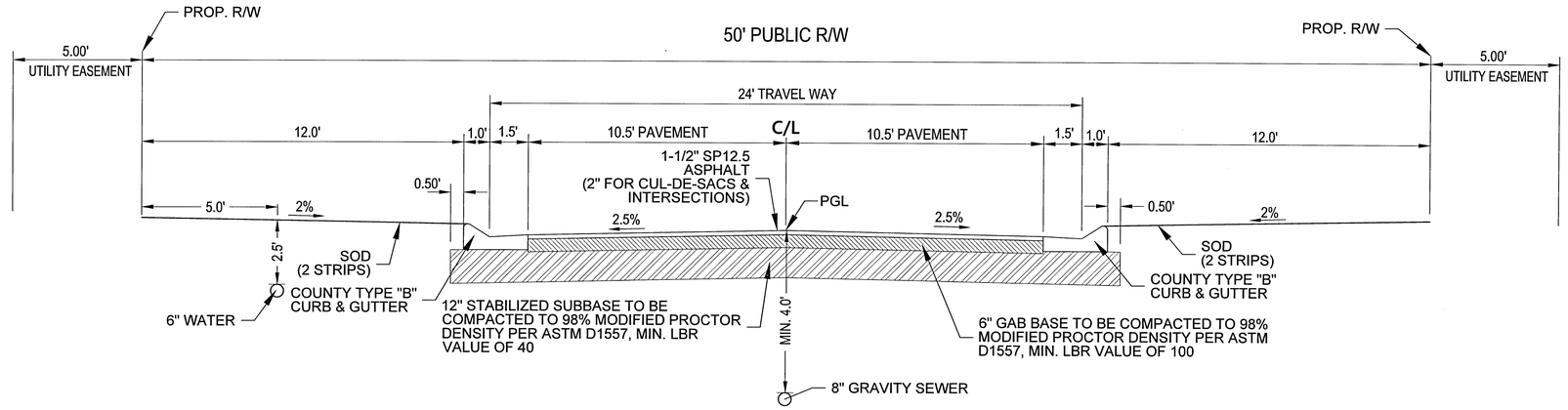


TYPICAL 5' CURB TRANSITION
NOT TO SCALE

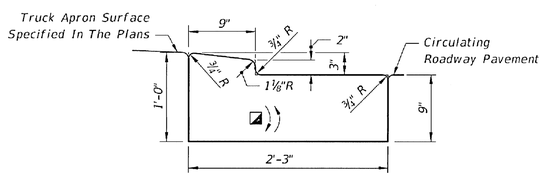
NOTES:
1. ALL CURB TO HAVE DUMMY JOINT AT 10' ON CENTER. MIN. DEPTH OF JOINT TO BE 2".
2. EXPANSION JOINTS ARE TO BE 60' ON CENTER. TYPICAL FOR ALL CURB.
3. CONCRETE TO BE 3000 PSI.



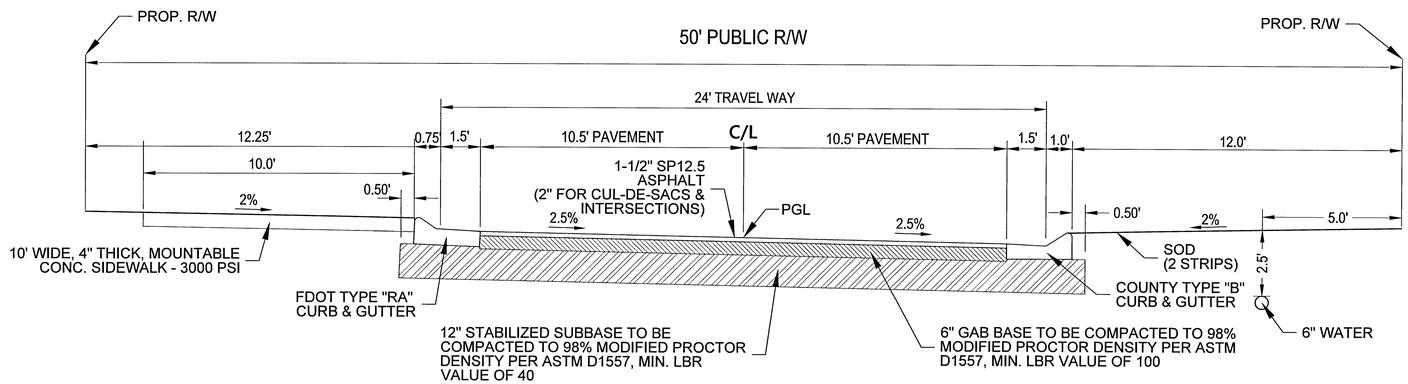
TYPICAL ROADWAY SECTION FOR 80' R/W
NOT TO SCALE



TYPICAL ROADWAY SECTION FOR 50' R/W
NOT TO SCALE



TRAFFIC BEARING SECTION FOR USE IN ROUNDABOUT CENTRAL ISLAND CONSTRUCTION
TYPE RA
NOT TO SCALE



TYPICAL ROADWAY SECTION ROUNDABOUT
NOT TO SCALE

REVISIONS
Date: ---

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SURVEYING
801 W. Romana Street, Suite A, Pensacola, FL 32502
(850) 462-8412

TODD M WHEELER LICENSE No 92378 STATE OF FLORIDA PROFESSIONAL ENGINEER 11/19/2021

TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

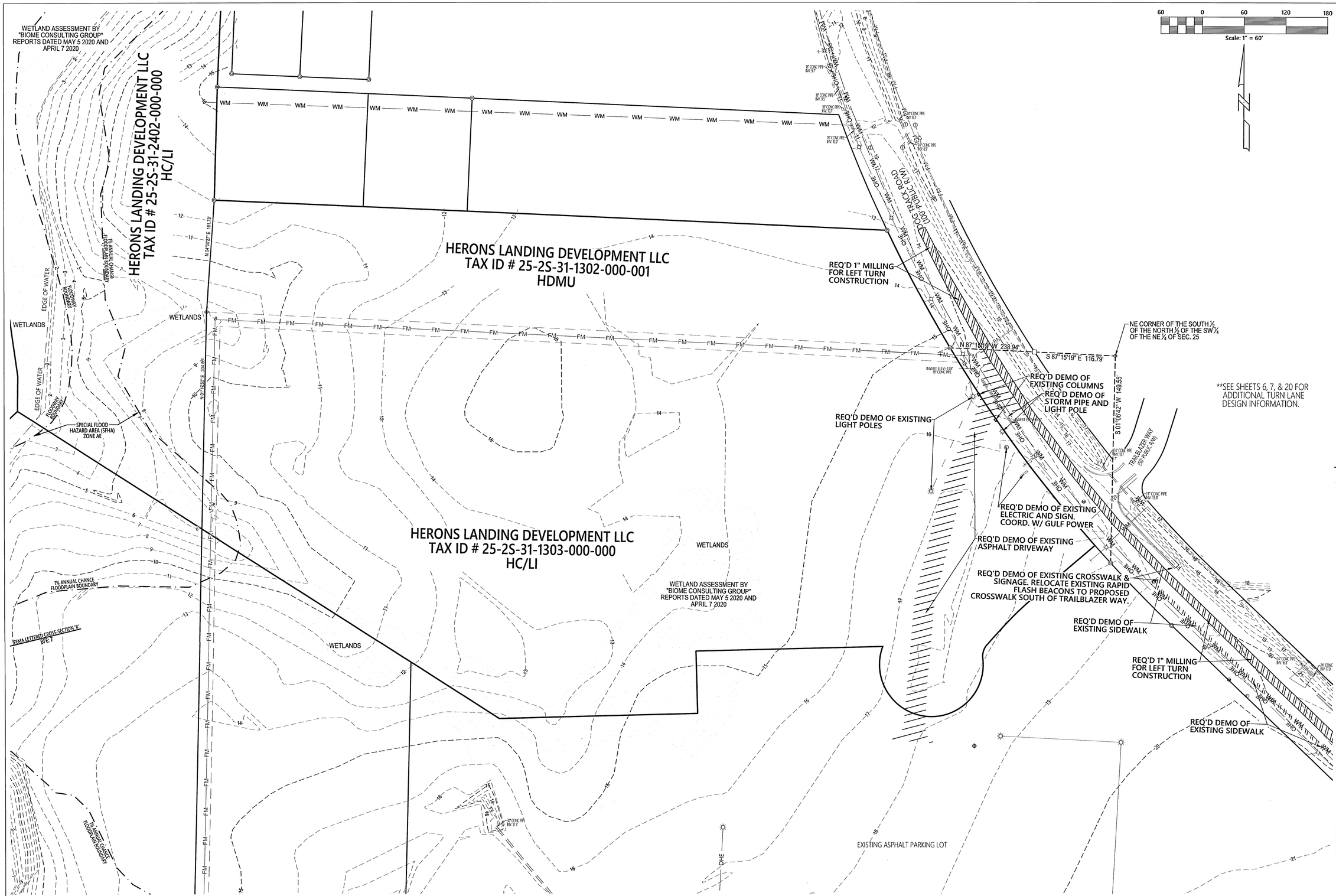
Construction Plans for
HERON'S LANDING TOWNHOMES
Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

Typical Sections

Job No. 21-112P
Date: 10/6/2021
Drawn By: CAB
Checked By: ENL

SHEET NUMBER
3



**SEE SHEETS 6, 7, & 20 FOR ADDITIONAL TURN LANE DESIGN INFORMATION.

REVISIONS

Date: ---	
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MULLINS, LLC
CIVIL ENGINEERING, DEVELOPMENT DESIGN
SURVEYING
801 W. Romana Street, Suite A, Pensacola, FL 32502
(850) 462-8412

TODD M WHEELER LICENSE No 92378 STATE OF FLORIDA PROFESSIONAL ENGINEER 10/6/2021

TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

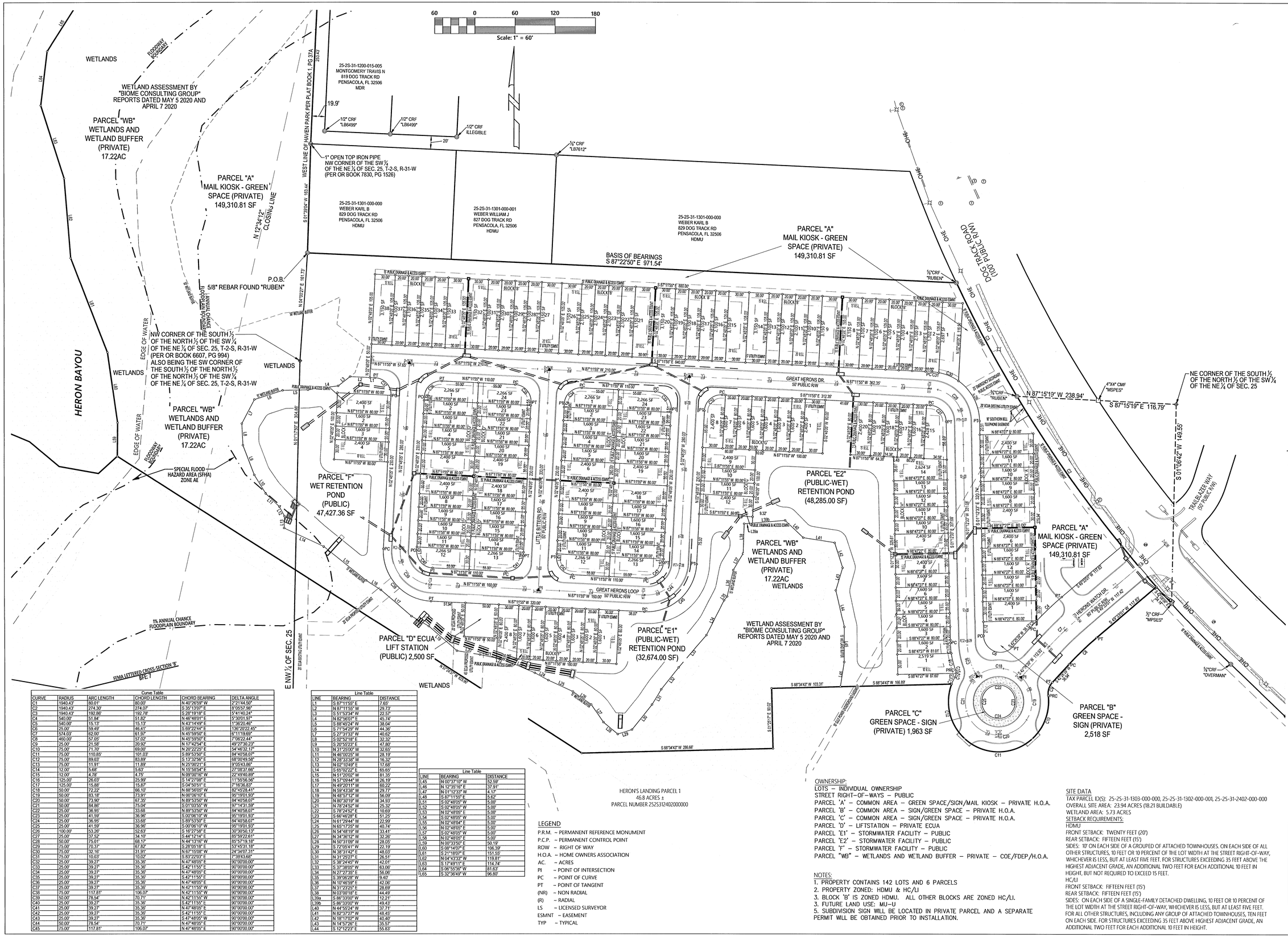
Construction Plans for
HERON'S LANDING TOWNHOMES
Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

Existing Conditions and Demo Plan

Job No.	21-112P
Date:	10/6/2021
Drawn By:	CAB
Checked By:	ENL

SHEET NUMBER
4


60 0 60 120 180
Scale: 1" = 60'
WETLANDS
FLOODWAY BOUNDARY
WETLAND ASSESSMENT BY "BIOME CONSULTING GROUP" REPORTS DATED MAY 5 2020 AND APRIL 7 2020
PARCEL "WB" WETLANDS AND WETLAND BUFFER (PRIVATE) 17.22AC
PARCEL "A" MAIL KIOSK - GREEN SPACE (PRIVATE) 149,310.81 SF
N 12°34'12" CLOSING LINE
25-2S-31-1200-015-005 MONTGOMERY TRAVIS N 819 DOG TRACK RD PENSACOLA, FL 32506 MDR
19.9'
1/2" CRF "LB6499"
1/2" CRF "LB6499"
1/2" CRF ILLEGIBLE
20'
5/8" CRF "LB7612"
1" OPEN TOP IRON PIPE NW CORNER OF THE SW¼ OF THE NE¼ OF SEC. 25, T-2-S, R-31-W (PER OR BOOK 7830, PG 1526)
WEST LINE OF HAVEN PARK PER PLAT BOOK 1, PG 37A
S 01°35'04" W 183.44'
253.43'
25-2S-31-1301-000-000 WEBER KARL B 829 DOG TRACK RD PENSACOLA, FL 32506 HDMU
25-2S-31-1301-000-001 WEBER WILLIAM J 827 DOG TRACK RD PENSACOLA, FL 32506 HDMU
25-2S-31-1301-000-000 WEBER KARL B 829 DOG TRACK RD PENSACOLA, FL 32506 HDMU
BASIS OF BEARINGS S 87°22'50" E 971.54'
P.O.B. 5/8" REBAR FOUND "RUBEN"
N 04°09'27" E 181.73'
15' RIPARIAN BUFFER
50' WETLAND BUFFER
NW CORNER OF THE SOUTH ½ OF THE NORTH ½ OF THE SW ¼ OF THE NE ¼ OF SEC. 25, T-2-S, R-31-W (PER OR BOOK 6607, PG 994) ALSO BEING THE SW CORNER OF THE SOUTH ½ OF THE NORTH ½ OF THE NORTH ½ OF THE SW ¼ OF THE NE ¼ OF SEC. 25, T-2-S, R-31-W
EDGE OF WATER
HERON BAYOU
PARCEL "WB" WETLANDS AND WETLAND BUFFER (PRIVATE) 17.22AC
SPECIAL FLOOD HAZARD AREA (SFHA) ZONE AE
1% ANNUAL CHANCE FLOODPLAIN BOUNDARY
FEMA LETTERED CROSS-SECTION 'B'
E.NW¼ OF SEC. 25
PARCEL "F" WET RETENTION POND (PUBLIC) 47,427.36 SF
PARCEL "D" ECUA LIFT STATION (PUBLIC) 2,500 SF
PARCEL "E1" (PUBLIC-WET) RETENTION POND (32,674.00 SF)
PARCEL "E2" (PUBLIC-WET) RETENTION POND (48,285.00 SF)
PARCEL "WB" WETLANDS AND WETLAND BUFFER (PRIVATE) 17.22AC WETLANDS
WETLAND ASSESSMENT BY "BIOME CONSULTING GROUP" REPORTS DATED MAY 5 2020 AND APRIL 7 2020
PARCEL "C" GREEN SPACE - SIGN (PRIVATE) 1,963 SF
PARCEL "B" GREEN SPACE - SIGN (PRIVATE) 2,518 SF
PARCEL "A" MAIL KIOSK - GREEN SPACE (PRIVATE) 149,310.81 SF
DOG TRACK ROAD (100' PUBLIC R/W)
GREAT HERONS DR. 50' PUBLIC R/W
GREAT HERONS LOOP 50' PUBLIC R/W
LITTLE PATTERN RD 50' PUBLIC R/W
HERON'S WATCH DR 60' PUBLIC R/W
TRAILBLAZER WAY (50' PUBLIC R/W)
½"CRF "RUBEN"
4"X4" CMF "MSPES"
NE CORNER OF THE SOUTH ½ OF THE NORTH ½ OF THE SW¼ OF THE NE¼ OF SEC. 25
N 87°15'19" W 238.94'
S 87°15'19" E 116.79'
S 01°06'42" W 149.55'
½" CRF "MPSES"
½"CRF "OVERMAN"
S 88°34'43" W 286.66'
S 88°34'43" W 103.31'
S 88°34'43" W 166.89'
S 01°25'17" E 80.02'
N 87°15'19" W 382.35'
S 87°15'19" E 312.35'
N 87°15'19" W 100.00'
N 87°15'19" W 64.38'
S 87°15'19" E 840.00'
N 87°15'19" W 840.00'
N 87°15'19" W 210.00'
N 87°15'19" W 110.00'
N 87°15'19" W 160.00'
N 87°15'19" W 320.00'
N 87°15'19" W 180.00'
N 87°15'19" W 57.65'
S 87°15'19" E 880.00'
S 87°15'19" E 840.00'
S 87°15'19" E 80.00'
N 87°15'19" W 80.00'
S 87°15'19" E 80.00'
S 87°15'19" E 100.00'
S 87°15'19" E 80.00'
S 87°15'19" E 80.00'
N 87°15'19" W 87.60'
S 87°15'19" E 87.60'
N 87°15'19" W 87.60'
S 87°15'19" E 87.60'
N 87°15'19" W 87.61'
S 87°15'19" E 87.61

SIGN LEGEND

R1-1 (1) | D3-1(SEE DETAIL) (2) | SPEED LIMIT 25 R2-1 (3) | R1-2 YIELD R6-5P (4) | OM4-3 (5) | W11-2 W16-7P (6)

60 0 60 120 180
Scale: 1" = 60'

PRIVATE EASEMENT NOTE:
1) UNLESS OTHERWISE SHOWN, THERE IS A 5' PRIVATE DRAINAGE EASEMENT ON BOTH SIDES OF EACH SIDE LOT LINE.

CONDUIT NOTES:
1) CONTRACTOR IS REQUIRED TO MARK THE LOCATION OF INSTALLED 2" PVC CONDUIT.
2) ALL UTILITY PROVIDERS SHALL USE ONLY CONDUITS SHOWN ON THIS PLAN FOR STREET CROSSINGS. NO STREETS OR ROADS UNDER THE TWO-YEAR WARRANTY WILL BE ALLOWED TO BE OPEN CUT, OR JACK-AND-BORE.
3) EXISTING RAPID FLASH MARKERS (SIGN 6) WILL BE RELOCATED TO NEW CROSSING NEAR TRAILBLAZER WAY.

**SEE SHEETS 4, 7, & 20 FOR ADDITIONAL TURN LANE DESIGN INFORMATION.

WETLANDS
EDGE OF WATER
FLOODWAY BOUNDARY
1% ANNUAL CHANCE FLOODPLAIN BOUNDARY
SPECIAL FLOOD HAZARD AREA (SHA) ZONE AE
50' WETLAND BUFFER
REQ'D SHRUBS
REQ'D 12' WIDE POND ACCESS ROAD @ MAX. 6:1 GRADE
REQ'D CONC. APRON WITHIN R/W
REQ'D 24 LF OF RIBBON CURB
5' UTILITY EASEMENT
5' PUBLIC DRAINAGE & ACCESS EASEMENT
REQ'D 5' WIDE CONC. SIDEWALK 2% MAX CROSS SLOPE
REQ'D 5' WIDE, SOLID WHITE THERMOPLASTIC STRIPING
REQ'D CONC. APRON WITHIN R/W
GREAT HERONS DR. 50' PUBLIC R/W
REQ'D FOUR (4) 2" PVC CONDUITS UNDER ROAD FOR COMMUNICATION SERVICES
REQ'D 5' WIDE CONC. SIDEWALK 2% MAX CROSS SLOPE
REQ'D WHITE THERMOPLASTIC TRAFFIC CONTROL MARKINGS
REQ'D 5' WIDE, SOLID DOUBLE YELLOW THERMOPLASTIC STRIPING AND 1.5' WIDE YELLOW THERMOPLASTIC HATCHING AT 30' SPACING, 45° TO TRAFFIC
REQ'D ADA ACCESSIBILITY RAMP & LANDING PER FDOT INDEX 304
REQ'D 44 LF OF RIBBON CURB, RADIUS 38.5'
TRAILBLAZER WAY 50' PUBLIC R/W
REQ'D 5' WIDE, SOLID WHITE THERMOPLASTIC STRIPING
REQ'D 12' WIDE POND ACCESS ROAD @ MAX. 6:1 GRADE
LITTLE BITTERN RD. 50' PUBLIC R/W
REQ'D CONC. APRON WITHIN R/W
GREAT HERONS LOOP 50' PUBLIC R/W
REQ'D 14' WIDE ALUMINUM CANTILEVER SLIDE GATE
REQ'D FENCING PER ECUA SPEC. SECTION 2830
SEE SHEETS 34 & 35 FOR LIFTSTATION DETAILS
REQ'D 12' WIDE ACCESS, 8" GAB WITH 12" STABILIZED SUBGRADE
REQ'D SHRUBS
WETLAND ASSESSMENT BY "BIOME CONSULTING GROUP" REPORTS DATED MAY 5 2020 AND APRIL 7 2020
DOG TRACK ROAD (100' PUBLIC R/W)
OHE
FM
SS
W
REQ'D 10' WIDE, WHITE THERMOPLASTIC CROSSWALK STRIPING
REQ'D 24' WIDE WHITE THERMOPLASTIC STOP BAR
REQ'D 2' WIDE CONCRETE VALLEY GUTTER
REQ'D 24' WIDE, WHITE THERMOPLASTIC STOP BAR
HERONS WATCH DR. 60' PUBLIC R/W
REQ'D 3.0' TRANSITION FROM LAYBACK CURB TO 1.0' RIBBON CURB
REQ'D ADA ACCESSIBILITY RAMP & LANDING PER FDOT INDEX 304
REQ'D 12' WIDE, WHITE THERMOPLASTIC CROSSWALK STRIPING & 2' WIDE HATCHING AS SHOWN
REQ'D 5' WIDE, SOLID WHITE THERMOPLASTIC STRIPING
REQ'D 42 LF OF RIBBON CURB, RADIUS 38.5'
REQ'D 5' WIDE, SOLID WHITE THERMOPLASTIC STRIPING
REQ'D 5' WIDE, SOLID DOUBLE YELLOW THERMOPLASTIC STRIPING
REQ'D WHITE THERMOPLASTIC TRAFFIC CONTROL MARKING
REQ'D 5' WIDE CONC. SIDEWALK 2% MAX CROSS SLOPE
REQ'D 5' WIDE, SOLID DOUBLE YELLOW THERMOPLASTIC STRIPING AND 1.5' WIDE YELLOW THERMOPLASTIC HATCHING AT 5' SPACING, 45° TO TRAFFIC
REQ'D FOUR (4) 2" PVC CONDUITS UNDER ROAD FOR COMMUNICATION SERVICES
REQ'D 5' WIDE, WHITE THERMOPLASTIC STRIPING
REQ'D 5' WIDE, DASHED (2' LONG, 4' SPACING) WHITE THERMOPLASTIC STRIPING
REQ'D 5' WIDE, SOLID WHITE THERMOPLASTIC STRIPING
REQ'D 5' WIDE, SOLID DOUBLE YELLOW THERMOPLASTIC STRIPING AND 1.5' WIDE YELLOW THERMOPLASTIC HATCHING AT 30' SPACING, 45° TO TRAFFIC
REQ'D 5' WIDE, SOLID WHITE THERMOPLASTIC STRIPING
REQ'D 5' WIDE CONC. SIDEWALK 2% MAX CROSS SLOPE
REQ'D 5' WIDE, DASHED (2' LONG, 4' SPACING) WHITE THERMOPLASTIC STRIPING
REQ'D FDOT TYPE "RA" CURB & GUTTER
REQ'D 10' WIDE, MOUNTABLE CONC. SIDEWALK
REQ'D 5' WIDE, SOLID DOUBLE YELLOW THERMOPLASTIC STRIPING AND 1.5' WIDE YELLOW THERMOPLASTIC HATCHING AT 5' SPACING, 45° TO TRAFFIC
REQ'D 5' WIDE, SOLID WHITE THERMOPLASTIC STRIPING
REQ'D 5' WIDE CONC. SIDEWALK 2% MAX CROSS SLOPE
FEMA LETTERED CROSS-SECTION 'B' BFE: 7
1% ANNUAL CHANCE FLOODPLAIN BOUNDARY

40 0 40 80 120
Scale: 1" = 40'

MAIL KIOSK
REQ'D 3' WIDE CONC. FLUME
REQ'D 5' WIDE WHITE THERMOPLASTIC STRIPING
REQ'D 3.0' TRANSITION FROM LAYBACK CURB TO 1.0' RIBBON CURB
REQ'D ADA ACCESSIBILITY RAMP & LANDING PER FDOT INDEX 304
REQ'D MAIL KIOSKS, PER U.S. POSTAL SERVICE
REQ'D 9'x45.5' CONCRETE PAD
REQ'D 5' WIDE BLUE THERMOPLASTIC STRIPING, HC SYMBOL, HC SIGN, & 5' WIDE HATCHING (2' SPACING AT 45°)
REQ'D 46.0 LF OF RIBBON CURB
REQ'D WHEEL STOPS, TYP.
REQ'D 3.0' TRANSITION FROM LAYBACK CURB TO 1.0' RIBBON CURB
HERONS WATCH DR. 60' PUBLIC R/W

REVISIONS
Date: ---

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MULLINS, LLC
CIVIL ENGINEERING, DEVELOPMENT DESIGN, SURVEYING
801 W. Romana Street, Suite A, Pensacola, FL 32502
(850) 462-8412

TODD M WHEELER LICENSE No 92378 STATE OF FLORIDA PROFESSIONAL ENGINEER 10/6/2021
TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

Construction Plans for
HERON'S LANDING TOWNHOMES
Escambia County, FL
PREPARED FOR: Heron's Landing Development LLC

Site Plan

Job No. 21-112P
Date: 10/6/2021
Drawn By: CAB
Checked By: ENL

SHEET NUMBER
6

SITE BENCHMARK TABLE

DESCRIPTION	EASTING	NORTHING	ELEVATION
BENCHMARK 1 - IPS MULLINS TBM	1061865.817	519338.981	17.350
BENCHMARK 2 - PKNS REFCHECK	1062789.020	519756.800	18.680
BENCHMARK 3 - IPS MULLINS TBM	1063494.176	519556.134	22.228
BENCHMARK 4 - IPS MULLINS TBM	1062875.742	519121.728	23.509

PRIVATE EASEMENT NOTE:
1) UNLESS OTHERWISE SHOWN, THERE IS A 5' PRIVATE DRAINAGE EASEMENT ON BOTH SIDES OF EACH SIDE LOT LINE.

GRADING NOTE
ALL PROPOSED GRADES SHOWN OUTSIDE OF ROAD R/W, DRAINAGE R/W, DRAINAGE EASEMENTS, AND POND PARCEL IS FOR VISUALIZATION PURPOSES FOR THE HOME BUILDER ONLY. THE CONTRACTOR SHALL ONLY GRADE ROAD R/W, DRAINAGE R/W, DRAINAGE EASEMENTS AND POND PARCEL.

60 0 60 120 180
Scale: 1" = 60'

STORM PIPE AND INLET QUANTITIES

DESCRIPTION	QUANTITY
14"x23" ARCP	98.5 LF
18" RCP	958.3 LF
18" ADS HP	1,181.8 LF
24" RCP	224.4 LF
24" ADS HP	223.4 LF
30" RCP	41.6 LF
30" ADS HP	272.1 LF
TYPE 'A' SINGLE INLET	11
TYPE 'A' DOUBLE INLET	6
TYPE 'C' INLET	7
STANDARD STORM MH	7
14"x23" MITERED END SEC.	1
18" MITERED END SEC.	5
24" MITERED END SEC.	2
30" MITERED END SEC.	3
OUTFALL STR.	2
SPILLWAY	2

**SEE SHEETS 6, 4, & 20 FOR ADDITIONAL TURN LANE DESIGN INFORMATION.

WETLAND ASSESSMENT BY "BIOME CONSULTING GROUP" REPORTS DATED MAY 5 2020 AND APRIL 7 2020

EARTHWORK GENERAL NOTES

1) SITE TOPOGRAPHY MAPS AND OTHER TOPOGRAPHIC DATA SHOWN ON THE PLANS OR INCLUDED IN THE SPECIFICATIONS ARE FOR THE INFORMATION OF THE CONTRACTOR.THE CONTRACTOR SHALL MAKE SUCH ADDITIONAL INVESTIGATIONS AS REQUIRED TO ACQUAINT HIMSELF ADEQUATELY WITH THE SITE TOPOGRAPHY, AND THE SUBSURFACE SOIL CONDITIONS FOR PREPARATION OF HIS BID, AND FOR THE SUCCESSFUL EXECUTION OF THE WORK.

2) ALL PROPOSED CONTOUR ELEVATIONS SHOWN ARE FINISH GRADE.

3) PROTECTION OF WORK: THE CONTRACTOR IS TO BE SOLELY RESPONSIBLE FOR THE PROTECTION OF HIS WORK. SUCH GRADING IS THE RESPONSIBILITY OF THE CONTRACTOR AND WILL BE AT NO ADDITIONAL COST TO THE OWNER. THE OWNER MAY DIRECT THE CONTRACTOR TO PERFORM NECESSARY GRADING AND DRAINAGE TO PREVENT SURFACE RUN OFF FROM DAMAGING THE WORK OR ADJACENT PROPERTY.

4) CONTRACTOR SHALL BE REQUIRED TO INSTALL SILT FENCES, HAY BALES, ETC., TO PREVENT EROSION OF DISTURBED EARTH AND FILL AREAS. SILT FENCES SHALL REQUIRED, IF NECESSARY TO PREVENT LOOSE DIRT FROM WASHING ONTO STREETS AND ADJACENT PROPERTY. CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION CONTROL UNTIL FINAL INSPECTION BY THE COUNTY.

5) EARTH FILL SHALL BE PLACED IN UNIFORM LAYERS OR LIFTS NOT TO EXCEED 6 INCHES COMPACTED THICKNESS.

6) NO SLOPE SHALL BE GREATER THAN 3:1.

7) ALL LOTS SHALL BE GRADED SO THAT RUN-OFF WILL BE DIRECTED TO THE STREET OR TO DRAINAGE WAYS IN A DEDICATED EASEMENT.

8) RIGHT-OF-WAY SHOULDER STABILIZATION SHOULD BE IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION LATEST EDITION.

9) ALL STORM PIPES SHALL HAVE A MINIMUM OF 1 FOOT OF COVER.

10) THE CONTRACTOR SHALL NOTIFY FDOT 48 HOURS IN ADVANCE, PRIOR TO INITIATING ANY WORK IN THE STATE RIGHTS-OF-WAY.
11) ALL STORMWATER NETWORKS IN CONFLICT WITH THE EXISTING FORCEMAIN WILL NEED TO BE INSTALLED ONCE THE EXISTING FORCEMAIN HAS BEEN TAKEN OFFLINE.

REVISIONS

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PROFESSIONAL ENGINEER
11/8/2021

TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

Construction Plans for
HERON'S LANDING TOWNHOMES
Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

Grading & Drainage Plan

Job No. 21-112P
Date: 10/6/2021
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SHEET NUMBER
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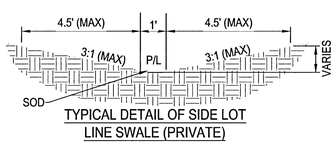
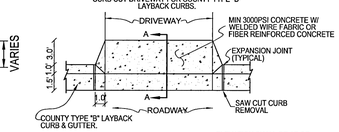
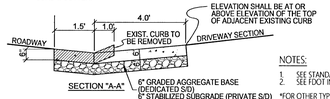


TYPICAL DETAIL OF SIDE LOT LINE SWALE (PRIVATE)

SCALE: N.T.S.





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" - 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 THE DRIVEWAY.
4. IF NECESSARY, REFER TO FDOT INDEX DETAILS AS REFERENCED ABOVE.
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.

NOTES:
1. SEE STANDARD COUNTY CURB DETAILS FOR REFERENCE.
2. SEE FDOT INDEX NO. 515 FOR OTHER CONNECTIONS.

*FOR OTHER TYPES OF CURBS, DIMENSIONS MAY BE ADJUSTED TO FIT.

MAXIMUM IMPERVIOUS EACH LOT
BUILDING = 1,400 SF
DRIVEWAY = 400 SF
SIDEWALK = 125 SF
TOTAL = 1,925 SF

IMPERVIOUS AREA SITE PLAN	
EXISTING IMPERVIOUS (TO BE DEMO'D)	
12,688 SF	0.29 AC
PROPOSED LOTS ONLY IMPERVIOUS	
173,350 SF	6.28 AC
PROPOSED ROADWAYS ONLY IMPERVIOUS	
90,257 SF	2.07 AC
TOTAL	8.64 AC

SITE BENCHMARK TABLE

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BENCHMARK 3 - IPS MULLINS TBM	1063494.176	519556.134	22.228
BENCHMARK 4 - IPS MULLINS TBM	1062875.742	519121.728	23.509

LEGEND
= SILT FENCE
= FLOW ARROW

60 0 60 120 180
Scale: 1" = 60'

GRADING NOTE
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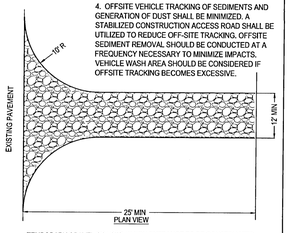
PRIVATE EASEMENT NOTE:
1. UNLESS OTHERWISE SHOWN, THERE IS A 5' PRIVATE DRAINAGE EASEMENT ON BOTH SIDES OF EACH SIDE LOT LINE.

FLOODPLAIN NOTE:
THE SUBJECT PROPERTIES AS SHOWN HEREON IS LOCATED IN FLOOD ZONE AE, BASE FLOOD ELEVATION 6 AND 7, (AREAS SUBJECT INUNDATION BY THE 1-PERCENT-ANNUAL-CHANCE FLOOD EVENT DETERMINED BY DETERMINED BY DETAILED METHODS. BFEs ARE SHOWN WITHIN THESE ZONES), AND FLOOD ZONE X, AS DETERMINED FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP OF ESCAMBIA COUNTY, FLORIDA, (COMMUNITY 120080, FIRM MAP PANEL NUMBERS 12033C0345G AND 12033C0365G, MAP REVISION DATED SEPTEMBER 29, 2006.
ESCAMBIA COUNTY HAS A 3-FOOT FREEBOARD REQUIREMENT IN ADDITION TO FEMA'S MINIMUM STANDARDS.

GENERAL NOTES:
1. HOUSE EQUIPMENT (ie AC UNITS) SHALL NOT HINDER THE PROPER INSTALLATION AND/OR FUNCTION OF THE SIDE YARD SWALES.
2. CONVEYANCE SWALES SHALL BE BUILT BY THE CONTRACTOR AND TYPICAL SIDE YARD SWALES SHALL BE INSTALLED BY THE HOME BUILDER.
3. NO FENCES SHALL BE INSTALLED IN PUBLIC DRAINAGE EASEMENTS.

CONSTRUCTION ENTRANCE 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 STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
4. OFFSITE VEHICLE TRACKING OF SEDIMENTS AND GENERATION OF DUST SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION ACCESS ROAD SHALL BE UTILIZED TO REDUCE OFF-SITE TRACKING. OFFSITE SEDIMENT REMOVAL SHOULD BE CONDUCTED AT A FREQUENCY NECESSARY TO MINIMIZE IMPACTS. VEHICLE WASH AREA SHOULD BE CONSIDERED IF OFFSITE TRACKING BECOMES EXCESSIVE.

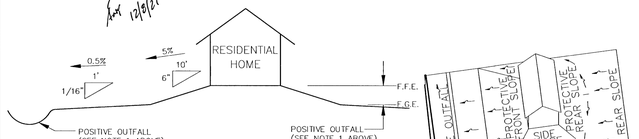


TEMPORARY GRAVEL CONSTRUCTION ENTRANCE TO BE CONSTRUCTED ON EACH LOT PRIOR TO COMMENCEMENT OF HOUSE CONSTRUCTION.

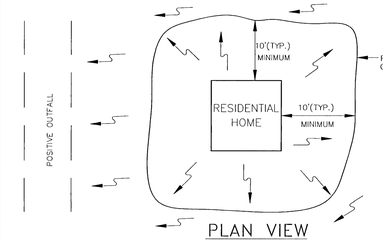
NOTES:
1. A POSITIVE DRAINAGE OUTFALL IS A CONVEYANCE SYSTEM (DRAINAGE EASEMENT, ROADWAY WITH A DRAINAGE SYSTEM, CURB AND GUTTER, OR DITCH) WHICH CONTAINS, CONTROLS, AND TRANSMITS STORMWATER RUNOFF TO A CREEK, STREAM, RIVER, BAY, GULF, OCEAN, OR OTHER WATERS OF THE STATE, OR WATERS OF THE UNITED STATES, 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 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 FOR 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. PROPER EROSION CONTROL MEASURES TO ENSURE ALL SEDIMENTS SHALL BE RETAINED ON EACH INDIVIDUAL LOT.
9. ~~NO WETLANDS ARE LOCATED ON THIS PROPERTY~~

HOMEBUILDERS 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. FOR RESIDENTIAL LOTS, TREE REMOVAL PRIOR TO CONSTRUCTION OF THE DWELLING, SHALL ONLY BE ALLOWED AFTER COUNTY ISSUANCE OF A BUILDING PERMIT FOR THE DWELLING.
4. NO HERITAGE TREES ARE LOCATED ON THE SITE.
5. WITHIN APPROVED LIMITS OF NO PROTECTED TREES THAT ARE NOT LOCATED ROADS), CONSTRUCTION (INFRASTRUCTURE AREAS, PONDS, MAY BE REMOVED WITHOUT APPROVAL FROM ESCAMBIA COUNTY. RESIDENTIAL LOTS AND ANY OTHER AREA OUTSIDE OF THE APPROVED LIMITS OF CLEARING SHALL REMAIN VEGETATED AND/OR IN IT'S CURRENT STATE.

12/9/21

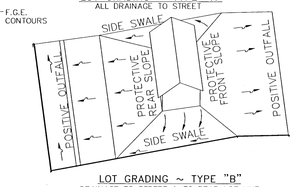


ELEVATION VIEW



PLAN VIEW

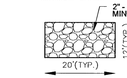
LOT GRADING ~ TYPE "A"
ALL DRAINAGE TO STREET



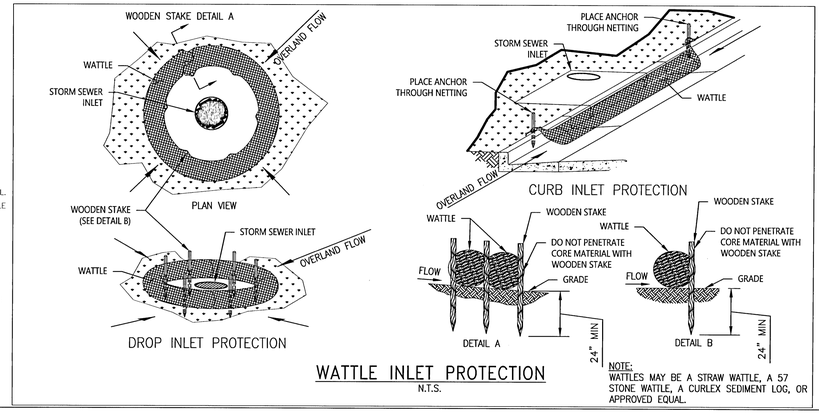
LOT GRADING ~ TYPE "B"
DRAINAGE TO STREET & TO REAR LOT LINE

NOTE: GRADING DRAINS TO A POSITIVE OUTFALL. VARIATIONS IN GRADING ARE ACCEPTABLE

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

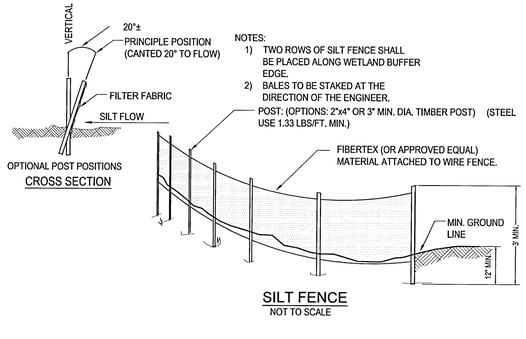


LOT CONSTRUCTION ENTRANCE



WATTLE INLET PROTECTION
N.T.S.

NOTE:
WATTLES MAY BE A STRAW WATTLE, A 57 STONE WATTLE, A CURLEX SEDIMENT LOG, OR APPROVED EQUAL.



SILT FENCE
NOT TO SCALE

REVISIONS

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TODD M WHEELER LICENSE No 92378 STATE OF FLORIDA PROFESSIONAL ENGINEER 11/19/2021

TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

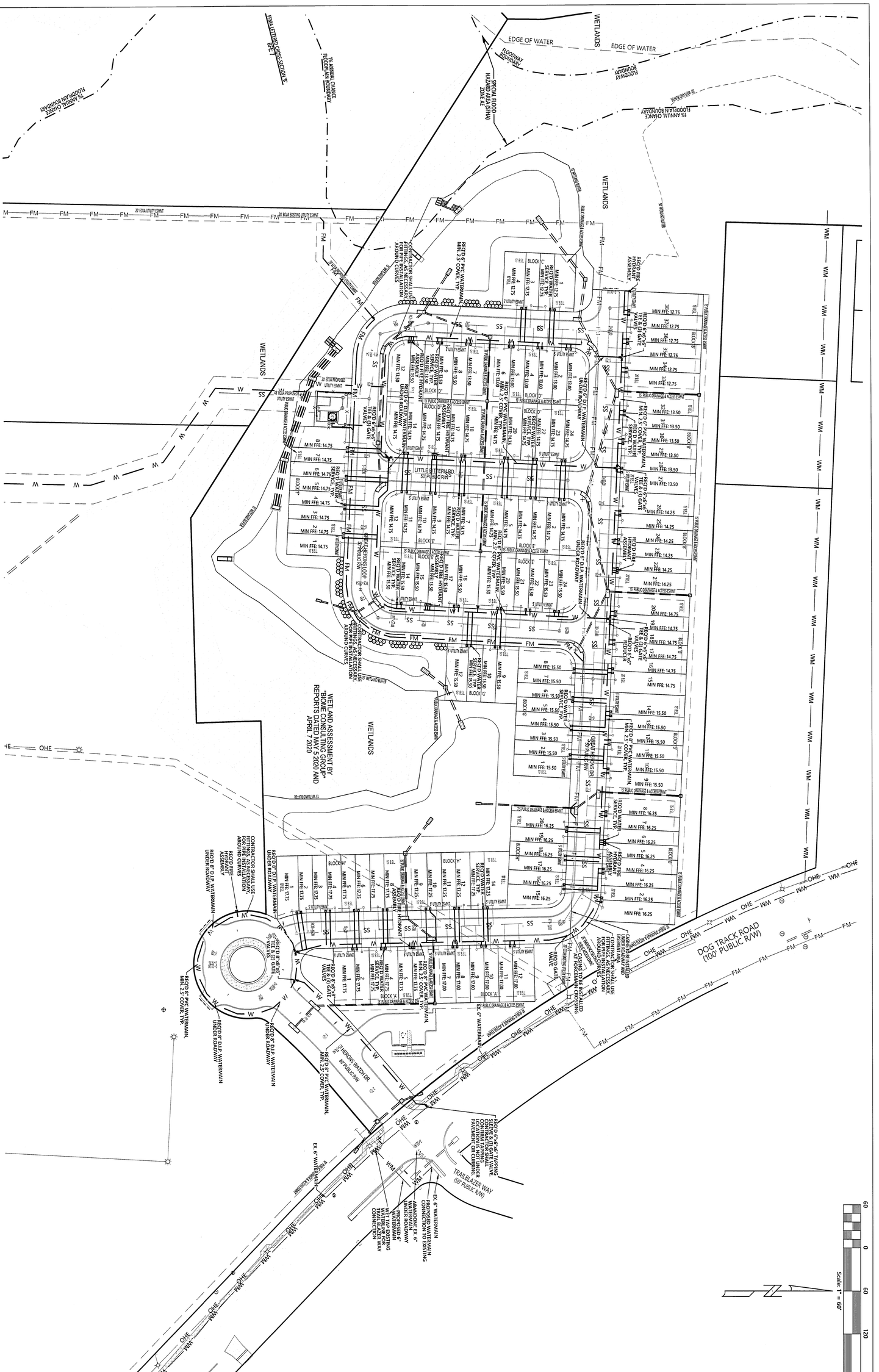
Construction Plans for
HERON'S LANDING TOWNHOMES
Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

Lot Grading Plan

Job No.	21-112P
Date:	10/6/2021
Drawn By:	CAB
Checked By:	ENL

SHEET NUMBER
8



Construction Plans for

HERON'S LANDING TOWNHOMES

Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

Water Distribution Plan

SHEET NUMBER

Job No: 21-112P
Date: 10/6/2021
Drawn By: CAB
Checked By: ENL

TODD M. WHEELER
FL PE No. 92278
FLORIDA
CERTIFICATE OF AUTHORIZATION
COA#32669

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NOTES:
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60 0 60 120 180
Scale: 1" = 60'

WETLAND ASSESSMENT BY "BIOME CONSULTING GROUP" REPORTS DATED MAY 5 2020 AND APRIL 7 2020

REVISIONS

1	Date: ---
2	Date: ---
3	Date: ---
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FL. PE No. 92378 COA#32689

Construction Plans for
HERON'S LANDING TOWNHOMES
Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

Sanitary Sewer Plan

Job No: 21-112P
Date: 10/6/2021
Drawn By: CAB
Checked By: ENL

SHEET NUMBER
10

Post - Developed Weighted Curve Number

Project	Heron's Landing	Designed By	CAB	
Locations	Pond 1	Checked	ENL	

Soil Name*	Hydrologic Group	Description	CN	Area (Ac.)	Product CNxArea
		Impervious	98	4.00	392.00
		Pond	100	0.43	43.00
19	A	Grass	39	1.87	72.93
49	B	Grass	61	0.86	52.46
		Total		7.16	560.39

*For use with SCS stormwater modeling

Disturbed Area (Ac.) $\frac{\text{Total Product}}{\text{Total Area}}$ = 78

Post -Developed Weighted Coefficient

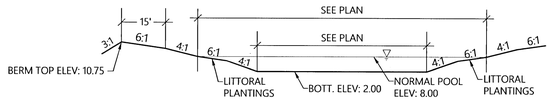
Project	Heron's Landing	Designed By	CAB	
Locations	Pond 1	Checked	ENL	

Soil Name*	Hydrologic Group	Type	C	Area (Ac.)	Product CNxArea
		Impervious	0.90	4.00	3.60
		Pond	1.00	0.43	0.43
19	A	Grass	0.25	1.87	0.47
49	B	Grass	0.33	0.86	0.28
		Total		7.16	4.78

*For use with Rational Method stormwater modeling

Disturbed Area (Ac.) $\frac{\text{Total Product}}{\text{Total Area}}$ = 0.67

Notes:
1) Side slopes above water line shall be sodded.
2) Littoral plantings to be provided per NWFWMD Specs. between elevations 8.00-6.00. This surface area of the littoral zone is 7,358 SF, which is 39% the total normal pool surface area (18,945 SF).

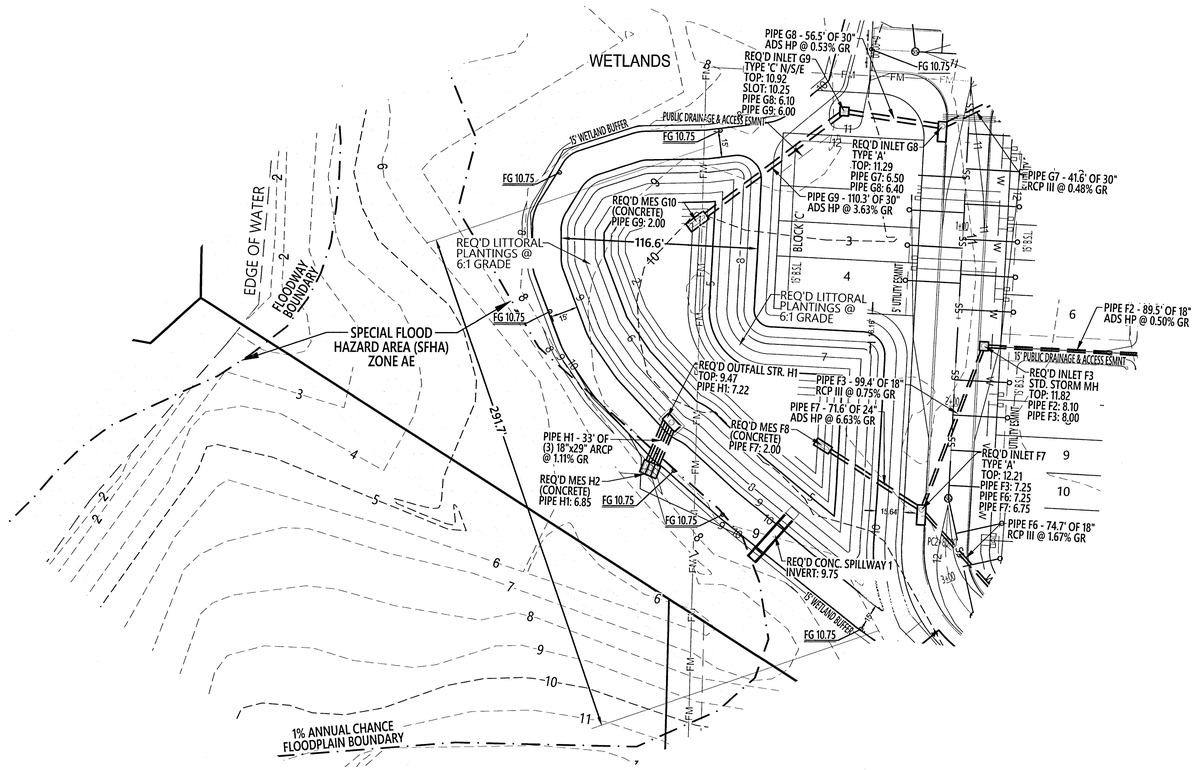


TYPICAL SECTION THROUGH POND
NOT TO SCALE

GRADING NOTE
ALL PROPOSED GRADES SHOWN OUTSIDE OF ROAD R/W, DRAINAGE R/W, DRAINAGE EASEMENTS, AND POND PARCEL IS FOR VISUALIZATION PURPOSES FOR THE HOME BUILDER ONLY. THE CONTRACTOR SHALL ONLY GRADE ROAD R/W, DRAINAGE R/W, DRAINAGE EASEMENTS AND POND PARCEL.

40 0 40 80 120
Scale: 1" = 40'

SPOT ELEVATION LEGEND
HP - HIGH POINT
FG - FINISHED GRADE



SUMMARY TABLE OF STORM EVENTS
for West Outfall

SCS TR-20 METHOD - STORM EVENT: FDOT-CRITICAL DURATION

DURATION	100 YEAR EVENT			
	PRE (CFS) TOTAL	POST (CFS) POND 1	POST (CFS) TOTAL	PEAK POND ELV. (FT)
1 HR	9.81	17.79	19.53	9.84
2 HR	16.59	25.01	33.88	9.93
4 HR	23.70	22.16	39.36	9.89
8 HR	28.71	26.16	45.71	9.94
24 HR	12.53	8.79	18.04	9.70

SCS TR-20 METHOD - STORM EVENT: TYPE III-24HR

YEAR EVENT	PRE (CFS) TOTAL	POST (CFS) POND 1	POST (CFS) TOTAL	PEAK POND ELEVATION (FT)
1	4.75	4.15	7.75	9.61
2	8.95	12.55	18.62	9.77
5	16.51	25.44	36.32	9.93
10	23.11	33.43	49.21	10.02
25	29.07	39.62	58.41	10.08
50	35.77	45.61	67.31	10.14
100	48.08	53.25	79.69	10.71

*TOP OF POND ELEV: 10.75

POND 1 - PERMANENT POOL VOLUME CALCULATIONS:
DRAINAGE AREA (DA) = 7.16 AC
RUNOFF COEFFICIENT (C) = 0.67
WET SEASON RAINFALL DEPTH (R) = 28 INCHES
LENGTH OF WET SEASON (WS) = 122 DAYS
RESIDENCE TIME (RT) = 14 DAYS (LITTORAL PLANTINGS REQ'D)

PPV = RT x FR
PPV = (DA x C x R x RT)/(WS x CF)

REQ'D PPV = (7.16 AC x 0.67 x 28 INCHES x 14 DAYS)/(122 DAYS x 12) = 1.284 AC-FT = 55,932 CF

PROVIDED PERMANENT POOL VOLUME = 1.363 AC-FT = 59,363 CF
POND VOLUME BETWEEN ELEVATIONS 2.00 AND 8.00

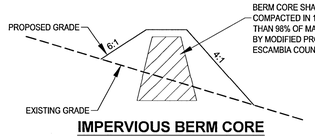
*SEE STAGE-STORAGE TABLE IN PART (V) OF THE STORMWATER REPORT FOR POND VOLUME BETWEEN ELEVATIONS 1.00 AND 8.00

POND 1 - TREATMENT VOLUME CALCULATIONS:
REQUIRED TREATMENT VOLUME:
7.16 AC(43,560)(1 INCH/12) = 25,991 CF

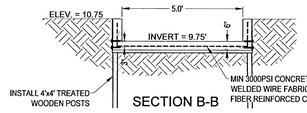
TREATMENT VOLUME PROVIDED = 31,602 CF
POND VOLUME BETWEEN ELEVATIONS 8.00 AND 9.50

*SEE STAGE-STORAGE TABLE IN PART (V) OF THE STORMWATER REPORT FOR POND VOLUME BETWEEN ELEVATIONS 8.00 AND 9.50

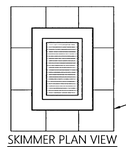
GENERAL NOTES:
1. IN THE EVENT THAT A STRUCTURAL FAILURE (SINK FEATURE) OCCURS DURING CONSTRUCTION, ALL CONSTRUCTION ACTIVITY SHALL CEASE AND A FLORIDA REGISTERED GEOTECHNICAL ENGINEER SHALL BE CONTACTED IMMEDIATELY. A CORRECTIVE MEASURES PLAN MUST BE APPROVED BY THE NWFWMD AND IMPLEMENTED PRIOR TO RESUMING CONSTRUCTION.
2. SLOPES SHALL BE STABILIZED WITH SOD IMMEDIATELY UPON CONSTRUCTION.
3. STRIP PROPOSED BERM AREAS PLUS A MARGIN OF 3' OUTSIDE THE BERM FOOTPRINT (BUT DO NOT EXTEND WORK ONTO ADJACENT PROPERTY OR WETLAND BUFFER) OF ALL SURFACE VEGETATION AND ROOT MAT (LARGE ROOTS AND SMALL ROOTS IN HIGH DENSITY).
4. BERM SOILS SHALL CONSIST OF SILTY TO CLAYEY SANDS WITH NO MORE THAN 50% PASSING THE US NO. 200 SIEVE (SILT AND CLAY FINES). DO NOT USE "PIPE CLAY", A MARBLED SANDY FAT CLAY TO FAT CLAY WITH HIGH PLASTICITY AND MORE THAT 50% SOIL FINES.
5. BERM CORE SHALL BE CLAY ROAD BASE. MATERIAL COMPACTED IN 12" LIFTS TO A DENSITY NOT LESS THAN 98% OF MAXIMUM DENSITY AS DETERMINED BY MODIFIED PROCTOR TEST ASTM 1557. PER ESCAMBIA COUNTY SPECIFICATIONS.
6. TEST THE DENSITY OF THE SOILS TO DETERMINE IF THE REQUIRED COMPACTION DENSITY HAS BEEN ACHIEVED. PERFORM AT LEAST ONE FIELD DENSITY TEST IN EACH COMPACTED LIFT FOR EVERY 50' TO 75' OF BERM LENGTH, ALTERNATING THE TESTS INSIDE AND OUTSIDE OF CENTERLINE BERM. PERFORM FURTHER MOISTURE CONDITIONING AND RE-COMPACTION AS NECESSARY IN LIFT AREAS WITH FAILING DENSITY, AND RETEST.
7. PROVIDE TOPSOIL AND SOD COVER ON THE FINISHED BERM SLOPES TO PREVENT EROSION.
8. SLOPES 4:1 OR STEEPER SHALL BE SODDED AND PINNED.



IMPERVIOUS BERM CORE
NOT TO SCALE

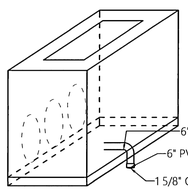


SECTION B-B

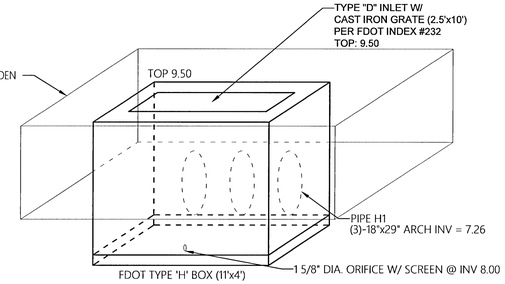


SKIMMER PLAN VIEW
NOTE TO SCALE

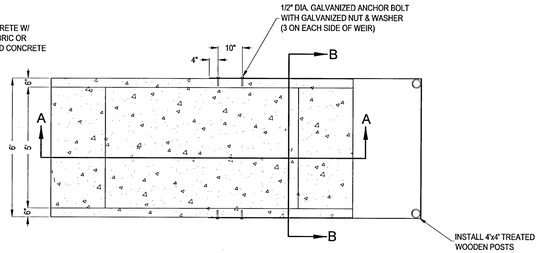
18" MINIMUM SPACING FROM SKIMMER TO STRUCTURE (TYP.)

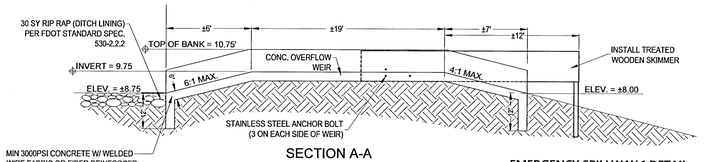


ORIFICE DETAIL
NOTE TO SCALE



OUTFALL STRUCTURE H1
NOTE TO SCALE





SECTION A-A

EMERGENCY SPILLWAY 1 DETAIL
NOT TO SCALE

Orifice Sizing

Orifice size= 1.625 Inches

Orifice equation $Q = CA\sqrt{2gh}$

Q= Rate of Discharge Rate (cfs)	Provided	
A=Area of orifice (sf)		
G=Gravitational Constant		32.2
H=Depth of Water above the flow line (center) of orifice (ft)		
C=Orifice Coefficient		0.6
Q=Average Discharge Rate $Q = \frac{TV}{2 \times t \times CF}$	Min.	
TV=Treatment Volume (cf)		25,991.00
t=Recovery time (hr)		60
CF=Conversion Factor= 3600sec/hr		3600
Q=Average Discharge Rate	Max.	
TV=Treatment Volume (cf)		25,991.00
t=Recovery time (hr)		48
CF=Conversion Factor= 3600sec/hr		3600
Depth of Water (h) $h = \frac{h_1 + h_2}{2}$		
h1=Depth of water between the top of the treatment Volume and the flow line (ft)		1.3
h2=Depth of the water between the stage when half treament volume has been released and the flow line of the orifice		0.7

REVISIONS
Date: ---

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TODD N. WHEELER LICENSE No 92378 STATE OF FLORIDA PROFESSIONAL ENGINEER 11/19/2021
TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

Construction Plans for
HERON'S LANDING TOWNHOMES
Escambia County, FL
PREPARED FOR: Heron's Landing Development LLC

Stormwater Management Facility 1

Job No. 21-112P
Date: 10/6/2021
Drawn By: CAB
Checked By: ENL

SHEET NUMBER
11

Post - Developed Weighted Curve Number

Project	Heron's Landing	Designed By	CAB	
Locations	Pond 2	Checked	ENL	

Soil Name*	Hydrologic Group	Description	CN	Area (Ac.)	Product CNxArea
		Impervious	98	0.42	41.16
		Pond	100	0.29	29
19	A	Grass	39	0.04	1.56
49	B	Grass	61	0.48	29.28
		Total		**1.23**	**101.10**

*For use with SCS stormwater modeling

Disturbed Area (Ac.) $\frac{\text{Total Product}}{\text{Total Area}}$ = **82**

Post - Developed Weighted Curve Number

Project	Heron's Landing	Designed By	CAB	
Locations	Pond 3	Checked	ENL	

Soil Name*	Hydrologic Group	Description	CN	Area (Ac.)	Product CNxArea
		Impervious	98	2.71	265.58
		Pond	100	0.49	49
19	A	Grass	39	4.18	163.02
49	B	Grass	61	0.79	48.19
		Total		**8.17**	**525.79**

*For use with SCS stormwater modeling

Disturbed Area (Ac.) $\frac{\text{Total Product}}{\text{Total Area}}$ = **64**

Post -Developed Weighted Coefficient

Project	Heron's Landing	Designed By	CAB	
Locations	Pond 2	Checked	ENL	

Soil Name*	Hydrologic Group	Type	C	Area (Ac.)	Product CNxArea
		Impervious	0.90	0.42	0.38
		Pond	1.00	0.29	0.29
19	A	Grass	0.25	0.04	0.01
49	B	Grass	0.33	0.48	0.16
		Total		**1.23**	**0.84**

*For use with Rational Method stormwater modeling

Disturbed Area (Ac.) $\frac{\text{Total Product}}{\text{Total Area}}$ = **0.68**

Post -Developed Weighted Coefficient

Project	Heron's Landing	Designed By	CAB	
Locations	Pond 3	Checked	ENL	

Soil Name*	Hydrologic Group	Type	C	Area (Ac.)	Product CNxArea
		Impervious	0.90	2.71	2.44
		Pond	1.00	0.49	0.49
19	A	Grass	0.25	4.18	1.05
49	B	Grass	0.33	0.79	0.26
		Total		**8.17**	**4.24**

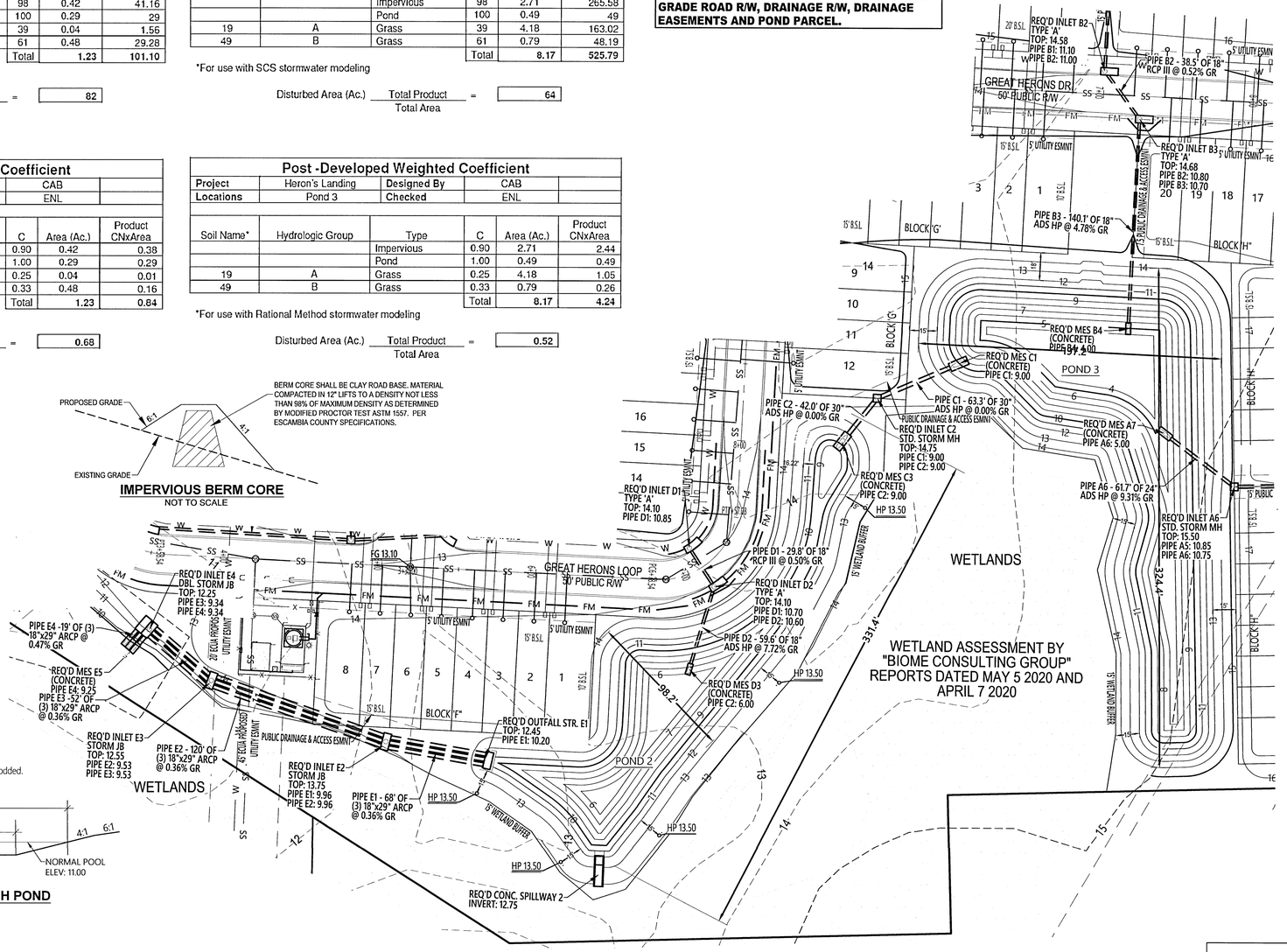
*For use with Rational Method stormwater modeling

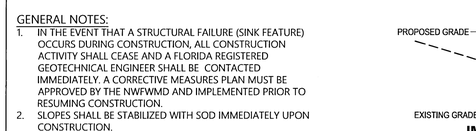
Disturbed Area (Ac.) $\frac{\text{Total Product}}{\text{Total Area}}$ = **0.52**

GRADING NOTE
ALL PROPOSED GRADES SHOWN OUTSIDE OF ROAD R/W, DRAINAGE R/W, DRAINAGE EASEMENTS, AND POND PARCEL IS FOR VISUALIZATION PURPOSES FOR THE HOME BUILDER ONLY. THE CONTRACTOR SHALL ONLY GRADE ROAD R/W, DRAINAGE R/W, DRAINAGE EASEMENTS AND POND PARCEL.

SPOT ELEVATION LEGEND

HP - HIGH POINT
FG - FINISHED GRADE





IMPERVIOUS BERM CORE
NOT TO SCALE

GENERAL NOTES:
1. IN THE EVENT THAT A STRUCTURAL FAILURE (SINK FEATURE) OCCURS DURING CONSTRUCTION, ALL CONSTRUCTION ACTIVITY SHALL CEASE AND A FLORIDA REGISTERED GEOTECHNICAL ENGINEER SHALL BE CONTACTED IMMEDIATELY. A CORRECTIVE MEASURES PLAN MUST BE APPROVED BY THE NWFWMD AND IMPLEMENTED PRIOR TO RESUMING CONSTRUCTION.
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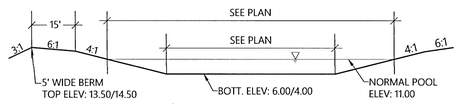
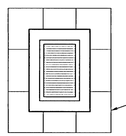
3. STRIP PROPOSED BERM AREAS PLUS A MARGIN OF 3' OUTSIDE THE BERM FOOTPRINT (BUT DO NOT EXTEND WORK ONTO ADJACENT PROPERTY OR WETLAND BUFFER) OF ALL SURFACE VEGETATION AND ROOT MAT (LARGE ROOTS AND SMALL ROOTS IN HIGH DENSITY).
4. BERM SOILS SHALL CONSIST OF SILTY TO CLAYEY SANDS WITH NO MORE THAN 50% PASSING THE US NO. 200 SIEVE (SILT AND CLAY FINES). DO NOT USE "PIPE CLAY", A MARBLED SANDY FAT CLAY TO FAT CLAY WITH HIGH PLASTICITY AND MORE THAT 50% SOIL FINES.
5. BERM CORE SHALL BE CLAY ROAD BASE. MATERIAL COMPACTED IN 12" LIFTS TO A DENSITY NOT LESS THAN 98% OF MAXIMUM DENSITY AS DETERMINED BY MODIFIED PROCTOR TEST ASTM 1557. PER ESCAMBIA COUNTY SPECIFICATIONS.
6. TEST THE DENSITY OF THE SOILS TO DETERMINE IF THE REQUIRED COMPACTION DENSITY HAS BEEN ACHIEVED. PERFORM AT LEAST ONE FIELD DENSITY TEST IN EACH COMPACTED LIFT FOR EVERY 50' TO 75' OF BERM LENGTH, ALTERNATING THE TESTS INSIDE AND OUTSIDE OF CENTERLINE BERM. PERFORM FURTHER MOISTURE CONDITIONING AND RE-COMPACTION AS NECESSARY IN LIFT AREAS WITH FAILING DENSITY, AND RETEST.
7. PROVIDE TOPSOIL AND SOD COVER ON THE FINISHED BERM SLOPES TO PREVENT EROSION.
8. SLOPES 4:1 OR STEEPER SHALL BE SODDED AND PINNED.

Notes:
1) Side slopes above water line shall be sodded.
2) No littoral plantings to be provided.

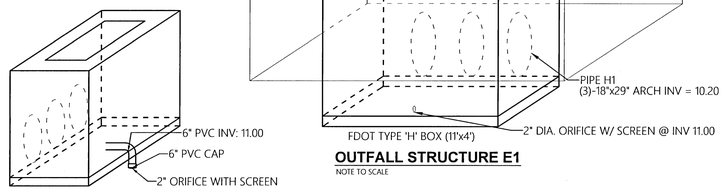


TYPICAL SECTION THROUGH POND
NOT TO SCALE



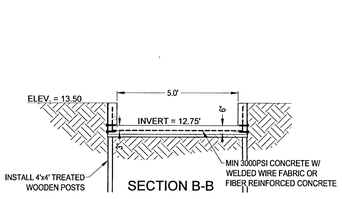
SKIMMER PLAN VIEW
NOTE TO SCALE

18" MINIMUM SPACING FROM SKIMMER TO STRUCTURE (TYP.)

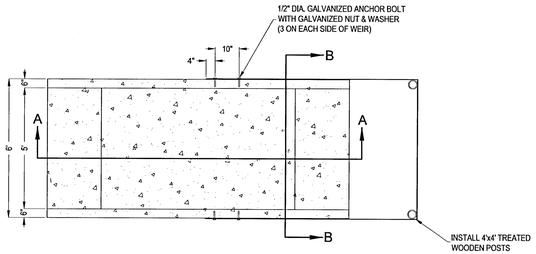


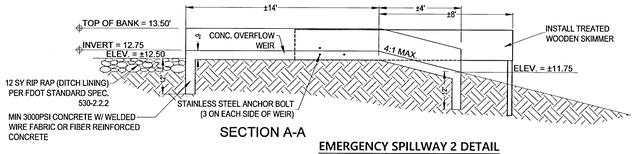
ORIFICE DETAIL
NOTE TO SCALE

OUTFALL STRUCTURE E1
NOTE TO SCALE



SECTION B-B





SECTION A-A

EMERGENCY SPILLWAY 2 DETAIL
NOT TO SCALE

Orifice Sizing

Orifice size= 2 Inches

Orifice equation $Q = CA\sqrt{2gh}$

Q= Rate of Discharge Rate (cfs)	Provided	
A=Area of orifice (sf)		
G=Gravitational Constant	32.2	
H=Depth of Water above the flow line (center) of orifice (ft)		
C=Orifice Coefficient	0.6	
$Q = \frac{TV}{2 \times t \times CF}$	Min.	
Q=Average Discharge Rate		
TV=Treatment Volume (cf)	34,122.00	
t=Recovery time	60	
CF=Conversion Factor= 3600sec/hr	3600	
Q=Average Discharge Rate	Max.	
TV=Treatment Volume (cf)	34,122.00	
t=Recovery time	48	
CF=Conversion Factor= 3600sec/hr	3600	
Depth of Water (h) $h = \frac{h_1 + h_2}{2}$		
h1=Depth of water between the top of the treatment Volume and the flow line (ft)	1	
h2=Depth of the water between the stage when half treament volume has been released and the flow line of the orifice	0.52	

40 0 40 80 120
Scale: 1" = 40'

SUMMARY TABLE OF STORM EVENTS

for West Outfall
SCS TR-20 METHOD - STORM EVENT: FDOT-CRITICAL DURATION

DURATION	100 YEAR EVENT					
	PRE (CFS) TOTAL	POST (CFS) POND 2	POST (CFS) POND 3	POST (CFS) TOTAL	PEAK ELEVATION POND 2 (FT)	PEAK ELEVATION POND 3 (FT)
1 HR	9.81	0.09	12.26	10.76	12.72	11.41
2 HR	16.59	0.11	14.78	16.35	12.80	11.53
4 HR	23.70	1.25	16.53	19.29	12.84	11.63
8 HR	28.71	2.36	18.88	21.80	12.87	11.82
24 HR	12.53	1.13	8.00	9.37	12.69	11.21

SCS TR-20 METHOD - STORM EVENT: TYPE III-24HR

YEAR EVENT	PRE (CFS) TOTAL	POST (CFS) POND 2	POST (CFS) POND 3	POST (CFS) TOTAL	PEAK ELEVATION POND 2 (FT)	PEAK ELEVATION POND 3 (FT)
1	4.75	0.08	6.32	4.32	12.59	11.14
2	8.95	0.10	9.28	9.45	12.69	11.27
5	16.51	0.12	14.16	15.39	12.79	11.50
10	23.11	0.46	17.62	19.20	12.84	11.71
25	29.07	0.98	19.98	21.75	12.87	11.95
50	35.77	2.59	21.82	23.98	12.90	12.24
100	48.08	6.19	26.33	27.98	12.94	12.72

*TOP OF POND 2 ELEV: 13.50
**TOP OF POND 3 ELEV: 14.00

POND 2 - PERMANENT POOL VOLUME CALCULATIONS:
DRAINAGE AREA (DA) = 1.23 AC
RUNOFF COEFFICIENT (C) = 0.68
WET SEASON RAINFALL DEPTH (R) = 28 INCHES
LENGTH OF WET SEASON (WS) = 122 DAYS
RESIDENCE TIME (RT) = 21 DAYS (NO LITTORAL PLANTING)

PPV = RT x FR
PPV = (DA x C x R x RT)/(WS x CF)

REQ'D PPV = (1.23 AC x 0.68 x 28 INCHES x 21 DAYS)/(122 DAYS x 12)
= 0.336 AC-FT = 14,637 CF

PROVIDED PERMANENT POOL VOLUME = 0.680 AC-FT = 29,623 CF
POND VOLUME BETWEEN ELEVATIONS 6.00 AND 11.00

*SEE STAGE-STORAGE TABLE IN PART (V) OF THE STORMWATER REPORT FOR POND VOLUME BETWEEN ELEVATIONS 6.00 AND 11.00

POND 3 - PERMANENT POOL VOLUME CALCULATIONS:
DRAINAGE AREA (DA) = 8.17 AC
RUNOFF COEFFICIENT (C) = 0.52
WET SEASON RAINFALL DEPTH (R) = 28 INCHES
LENGTH OF WET SEASON (WS) = 122 DAYS
RESIDENCE TIME (RT) = 21 DAYS (NO LITTORAL PLANTING)

PPV = RT x FR
PPV = (DA x C x R x RT)/(WS x CF)

REQ'D PPV = (8.17 AC x 0.52 x 28 INCHES x 21 DAYS)/(122 DAYS x 12)
= 1.706 AC-FT = 74,314 CF

PROVIDED PERMANENT POOL VOLUME = 1.743 AC-FT = 75,930 CF
POND VOLUME BETWEEN ELEVATIONS 4.00 AND 11.00

*SEE STAGE-STORAGE TABLE IN PART (V) OF THE STORMWATER REPORT FOR POND VOLUME BETWEEN ELEVATIONS 4.00 AND 11.00

POND 2 & POND 3 - TREATMENT VOLUME CALCULATIONS:
REQUIRED TREATMENT VOLUME:
9.40 AC(43,560)(1 INCH/12) = 34,122 CF

TREATMENT VOLUME PROVIDED = 57292 CF
POND VOLUME BETWEEN ELEVATIONS 11.00 AND 12.45 FOR BOTH PONDS

*SEE STAGE-STORAGE TABLE IN PART (V) OF THE STORMWATER REPORT FOR POND VOLUME BETWEEN ELEVATIONS 11.00 AND 12.45 FOR PONDS 2 AND 3.

REVISIONS
Date: ---
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MULLINS, LLC
CIVIL ENGINEERING, DEVELOPMENT DESIGN
SURVEYING
801 W. Romana Street, Suite A, Pensacola, FL 32502
(850) 462-8412

TODD M WHEELER LICENSE No 92378 STATE OF FLORIDA PROFESSIONAL ENGINEER 10/6/2021

TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

Construction Plans for
HERON'S LANDING TOWNHOMES
Escambia County, FL

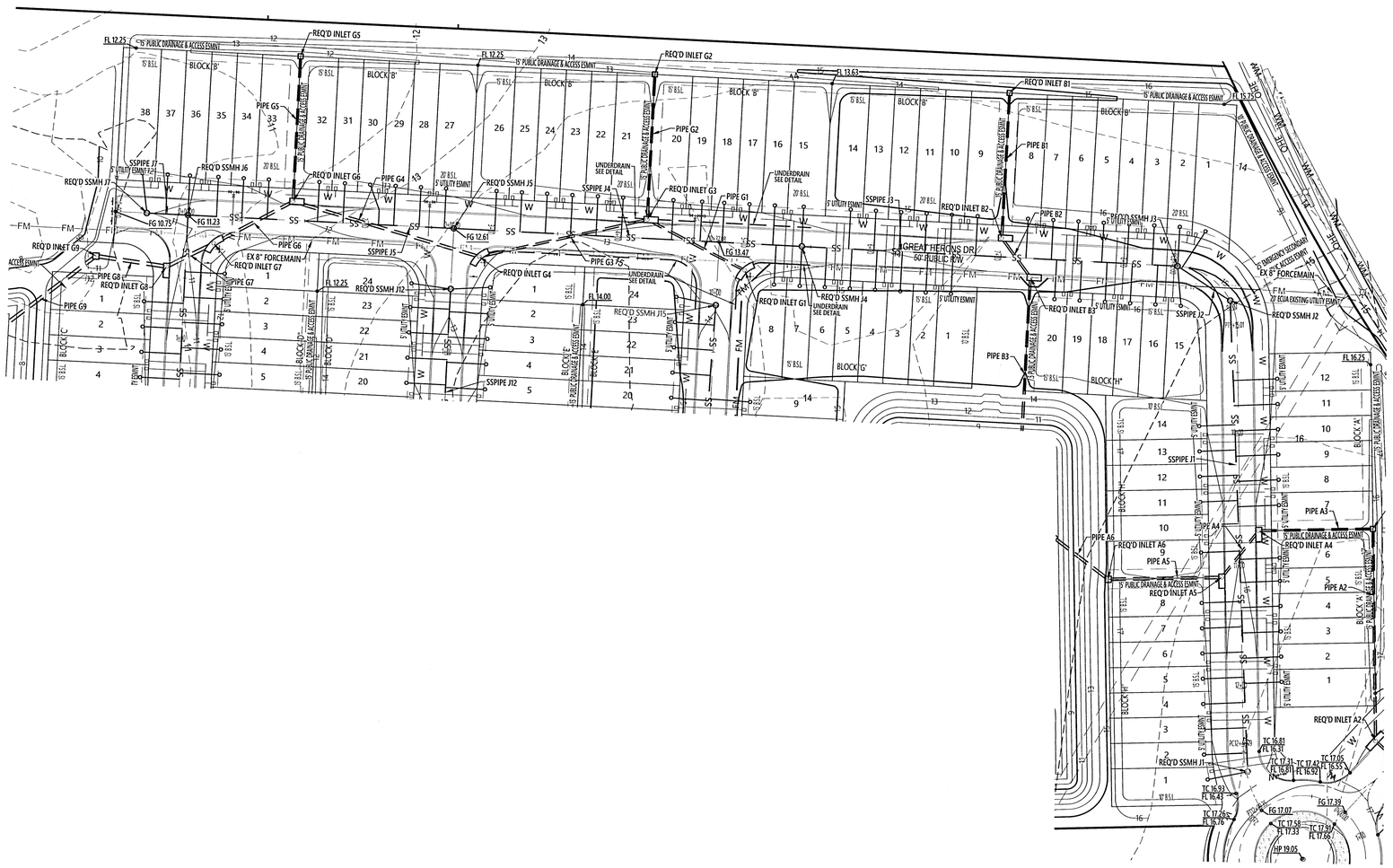
PREPARED FOR: Heron's Landing Development LLC

Stormwater Management Facility 2

Job No. 21-112P
Date: 10/6/2021
Drawn By: CAB
Checked By: ENL

SHEET NUMBER
12

GRADING NOTE
ALL PROPOSED GRADES SHOWN OUTSIDE OF ROAD R/W, DRAINAGE R/W, DRAINAGE EASEMENTS, AND POND PARCEL IS FOR VISUALIZATION PURPOSES FOR THE HOME BUILDER ONLY. THE CONTRACTOR SHALL ONLY GRADE ROAD R/W, DRAINAGE R/W, DRAINAGE EASEMENTS AND POND PARCEL.


GREAT HERONS DR
50' PUBLIC R/W
BLOCK 'B'
BLOCK 'C'
BLOCK 'D'
BLOCK 'E'
BLOCK 'F'
BLOCK 'G'
BLOCK 'H'
BLOCK 'I'
BLOCK 'J'
BLOCK 'K'
BLOCK 'L'
BLOCK 'M'
15' PUBLIC DRAINAGE & ACCESS ESMNT
5' UTILITY ESMNT
REQ'D INLET G5
REQ'D INLET G2
REQ'D INLET B1
REQ'D INLET G6
REQ'D INLET G3
REQ'D INLET B2
REQ'D INLET G7
REQ'D INLET G4
REQ'D INLET G1
REQ'D INLET B3
REQ'D INLET G8
REQ'D INLET A6
REQ'D INLET A4
REQ'D INLET A5
REQ'D INLET A2
REQ'D INLET G9
REQ'D SSMH J6
REQ'D SSMH J5
REQ'D SSMH J4
REQ'D SSMH J3
REQ'D SSMH J2
REQ'D SSMH J7
REQ'D SSMH J12
REQ'D SSMH J15
REQ'D SSMH J1
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SSPIPE J4
SSPIPE J3
SSPIPE J2
SSPIPE J1
SSPIPE J12
PIPE G5
PIPE G4
PIPE G1
PIPE B1
PIPE B2
PIPE B3
PIPE G6
PIPE G7
PIPE G8
PIPE G9
PIPE A6
PIPE A5
PIPE A4
PIPE A3
PIPE A2
EX 8" FORCEMAIN
EX 6" FORCEMAIN
EX EGIA EXISTING UTILITY ESMNT
EMERGENCY ACCESS ESMNT
UNDERDRAIN SEE DETAIL
ACCESS ESMNT
FL 12.25
FL 12.25
FL 13.63
FL 13.25
FL 14.00
FL 16.25
FG 10.75
FG 11.23
FG 12.61
FG 13.47
FG 17.39
FG 17.07
TC 16.93
FL 16.43
TC 17.25
FL 16.76
TC 16.81
FL 16.31
TC 17.31
FL 16.81
TC 17.42
FL 16.92
TC 17.06
FL 16.55
TC 17.58
FL 17.33
TC 17.91
FL 17.66
HP 19.05
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PCU-250
PCU-250

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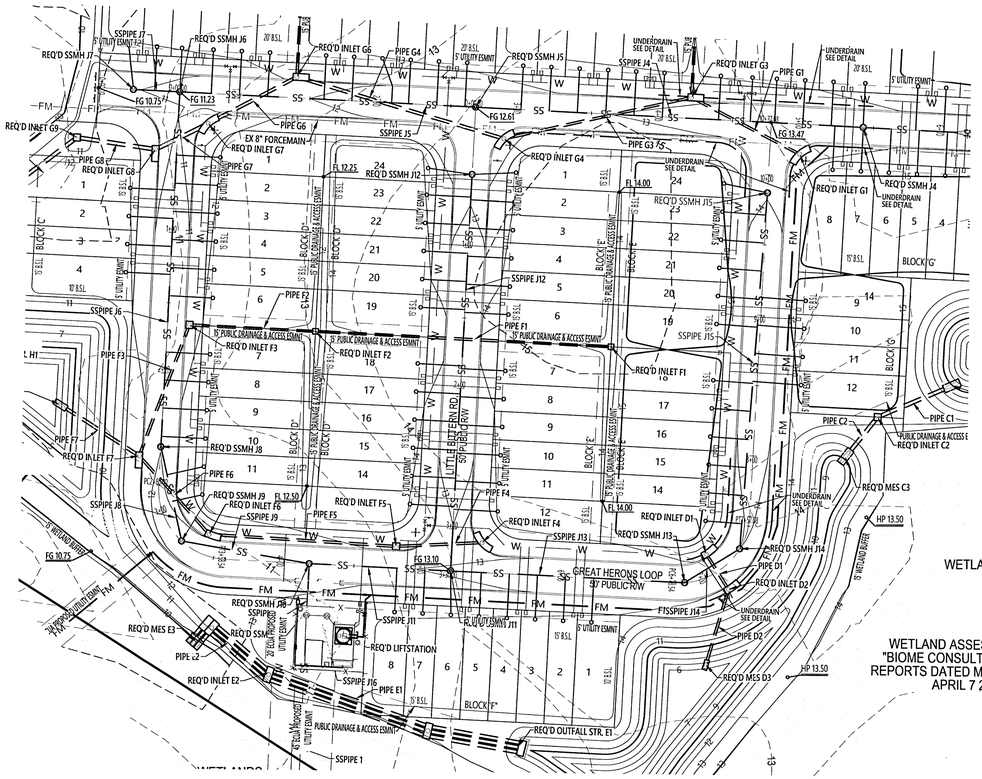

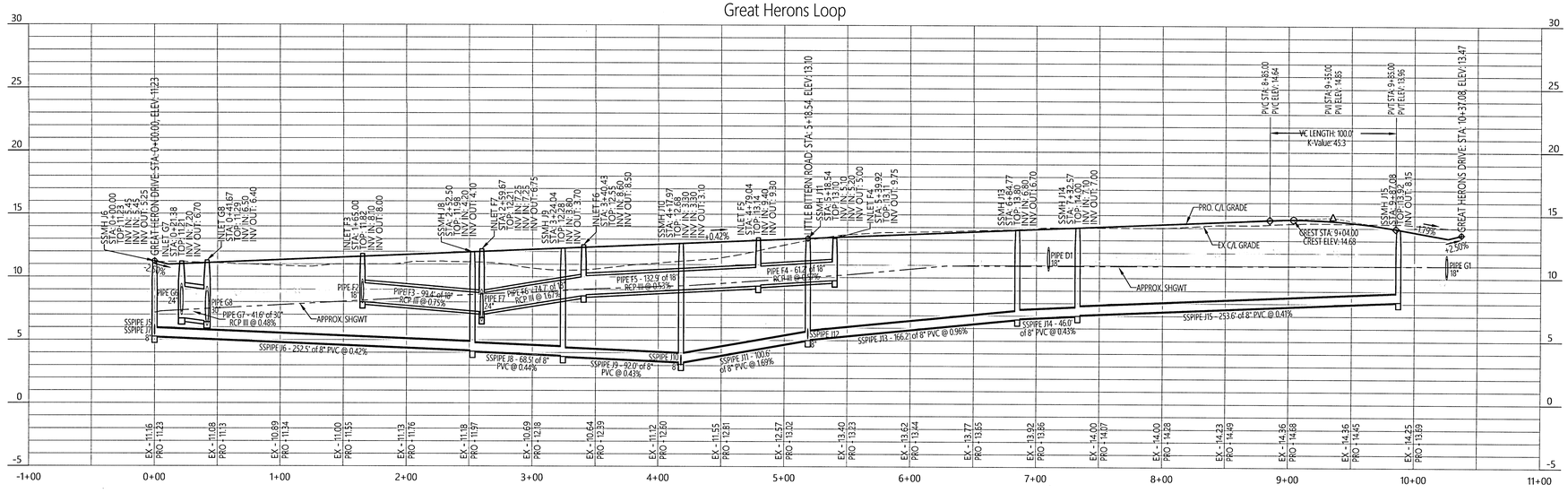

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TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

Construction Plans for
HERON'S LANDING TOWNHOMES
Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

Great Herons Loop
Plan & Profile

Job No. 21-112P
Date: 10/6/2021
Drawn By: CAB
Checked By: ENL

SHEET NUMBER
14

GRADING NOTE
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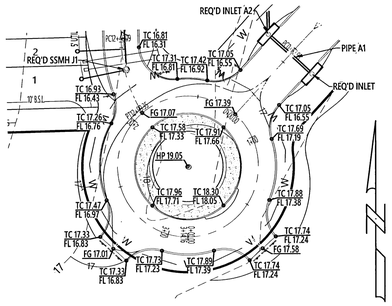
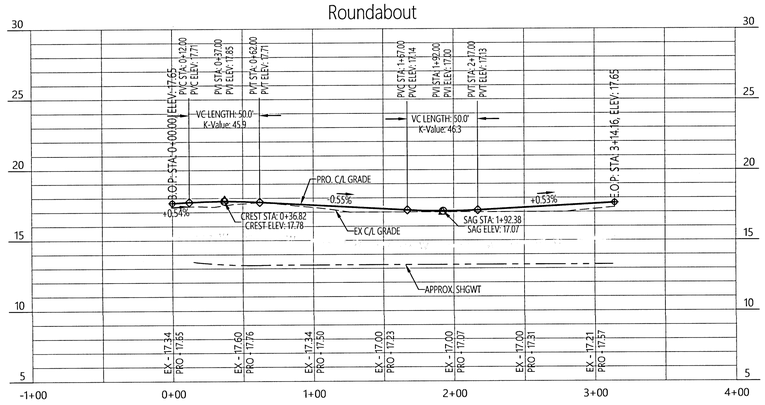
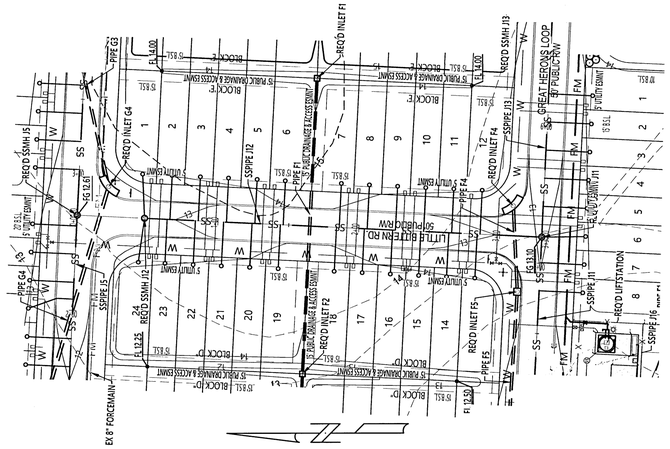


Roundabout





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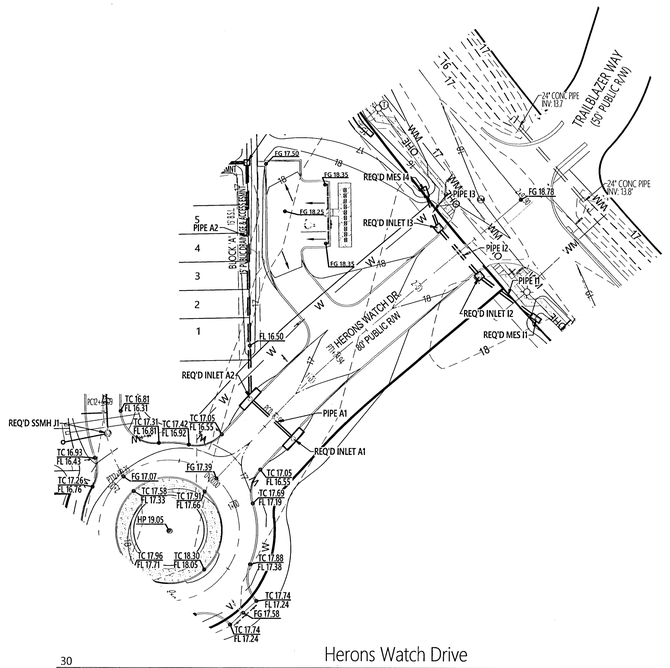
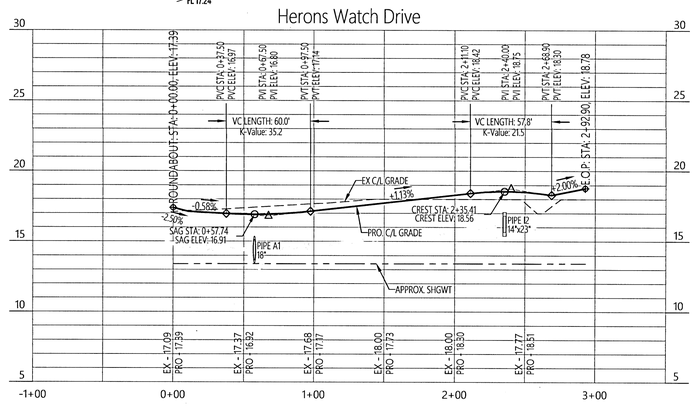
50 0 50 100 150

Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'





REVISIONS

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TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

Construction Plans for

HERON'S LANDING TOWNHOMES

Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

Herons Watch Drive
Plan & Profile

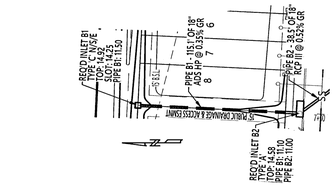
Job No. 21-112P
Date: 10/6/2021
Drawn By: CAB
Checked By: ENL

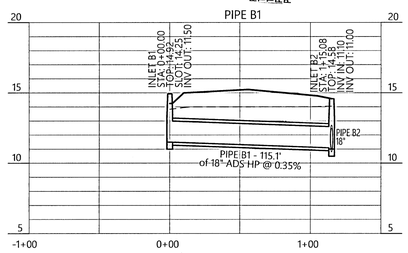
SHEET NUMBER

16

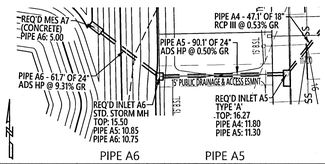
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'

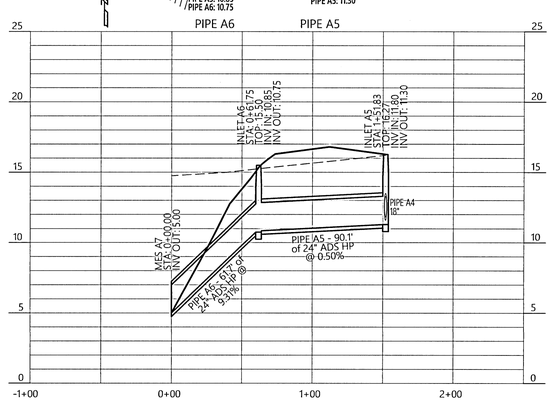
Storm Sewer



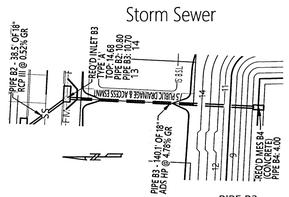


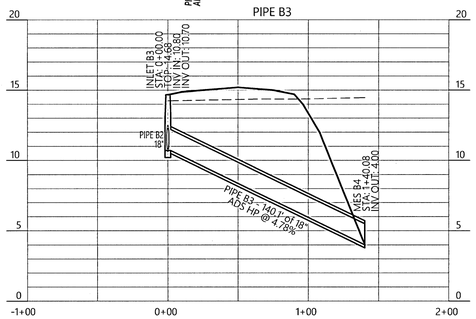
Storm Sewer



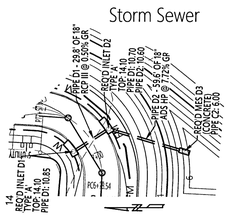


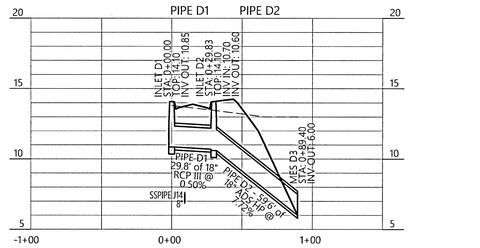
Storm Sewer



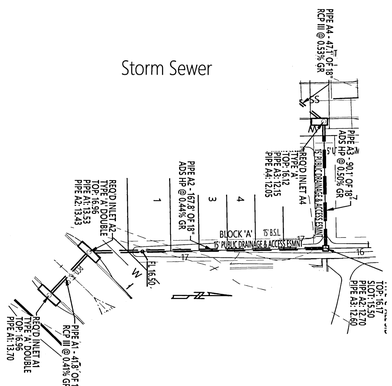


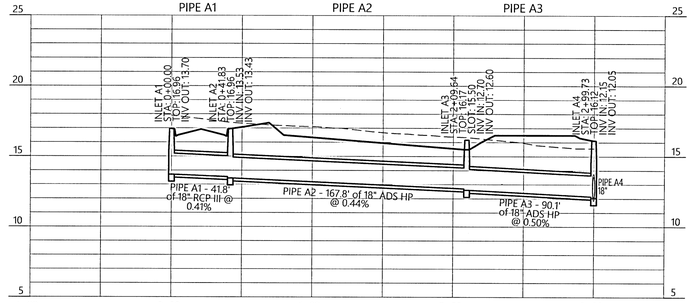
Storm Sewer





Storm Sewer





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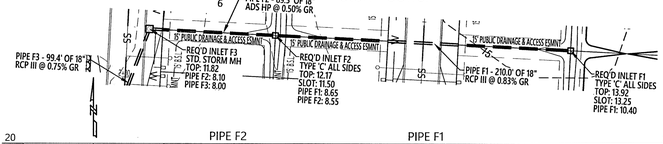
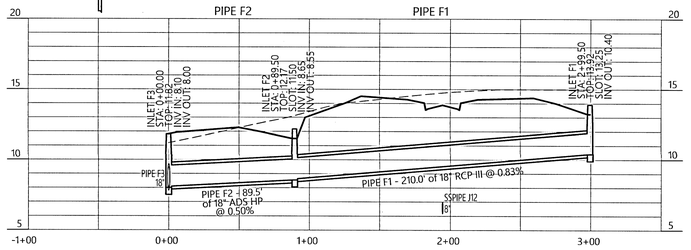
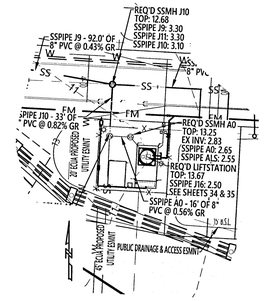
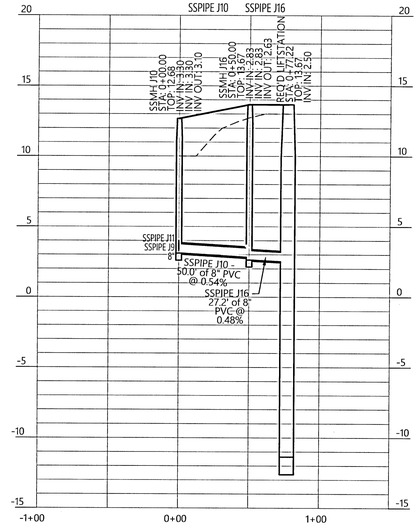




Sanitary Sewer





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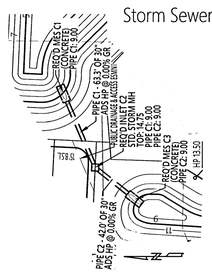

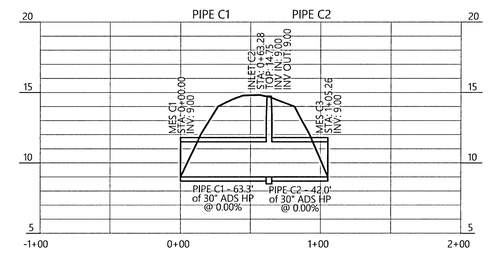

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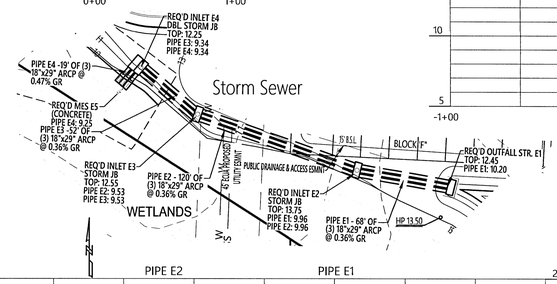

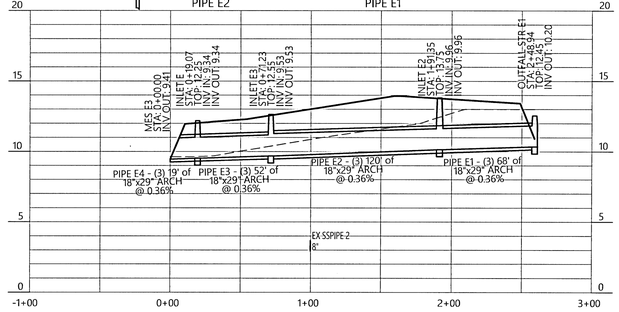

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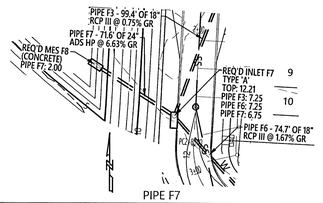

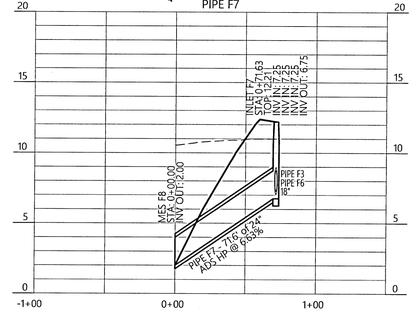

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TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

Construction Plans for
HERON'S LANDING TOWNHOMES
Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

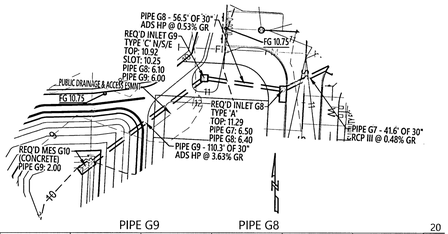
Additional Pipe Profiles

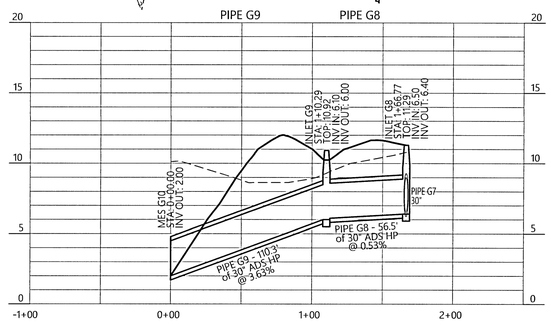
Job No. 21-112P
Date: 10/6/2021
Drawn By: CAB
Checked By: ENL

SHEET NUMBER
17

Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'

Storm Sewer





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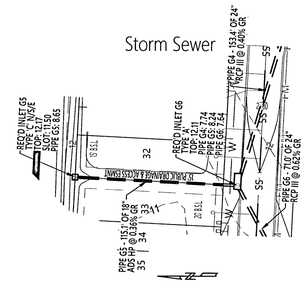

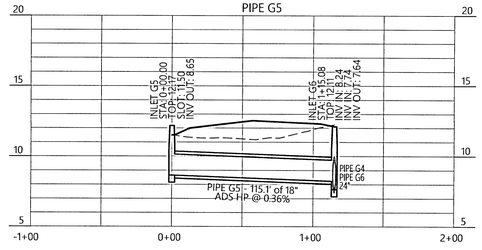

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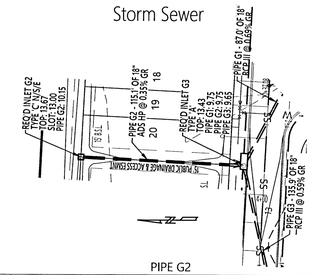
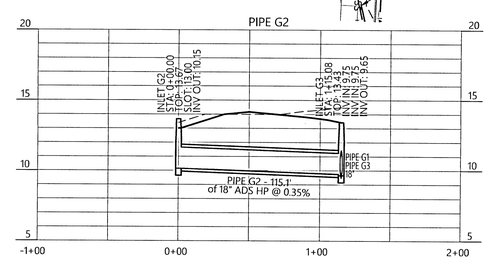
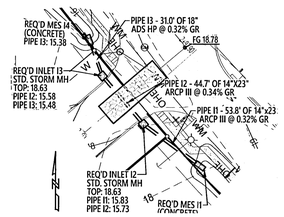
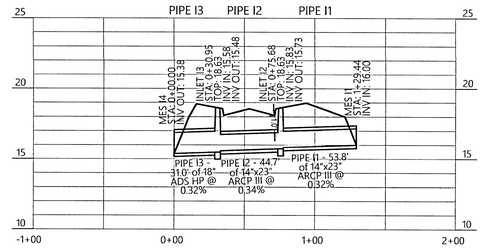




Storm Sewer





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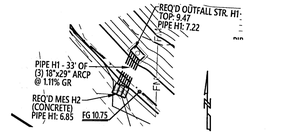

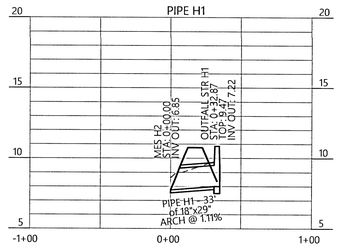

GRADING NOTE
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TODD M WHEELER LICENSE No 92378 STATE OF FLORIDA PROFESSIONAL ENGINEER 11/19/2021
TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

Construction Plans for
HERON'S LANDING TOWNHOMES
Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

Additional Pipe Profiles

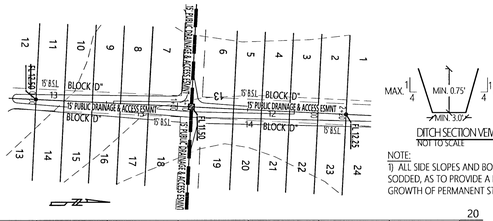
Job No. 21-112P
Date: 10/6/2021
Drawn By: CAB
Checked By: ENL

SHEET NUMBER
18

50 0 50 100 150

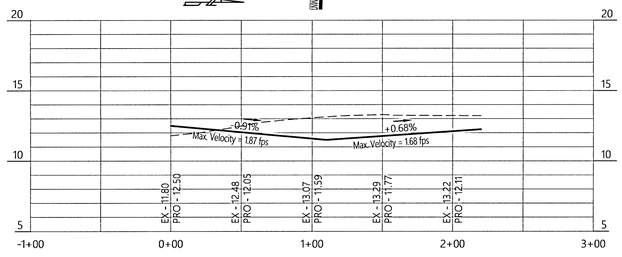
Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 5'

Ditch 3



DITCH SECTION VIEW
NOT TO SCALE

NOTE:
1) ALL SIDE SLOPES AND BOTTOM SHALL BE SODDED, AS TO PROVIDE A HEALTHY GROWTH OF PERMANENT STABILIZATION.



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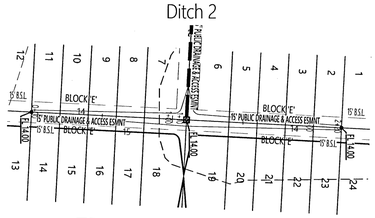

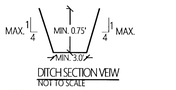

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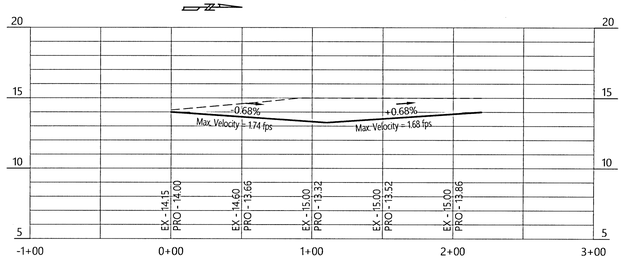
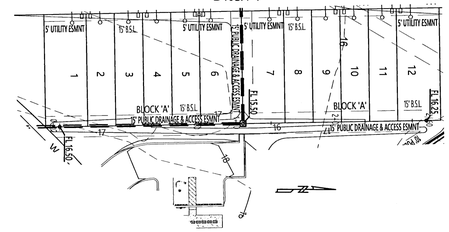


Ditch 1





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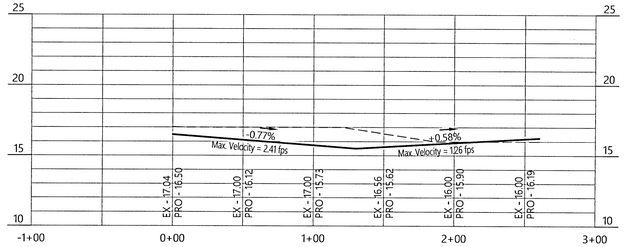

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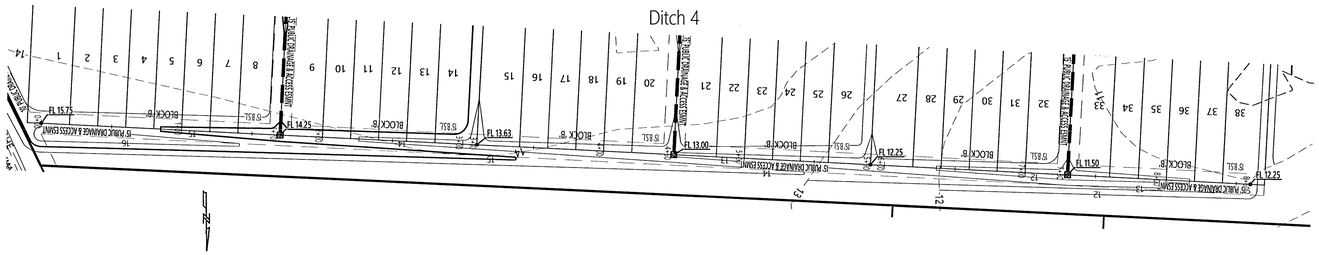

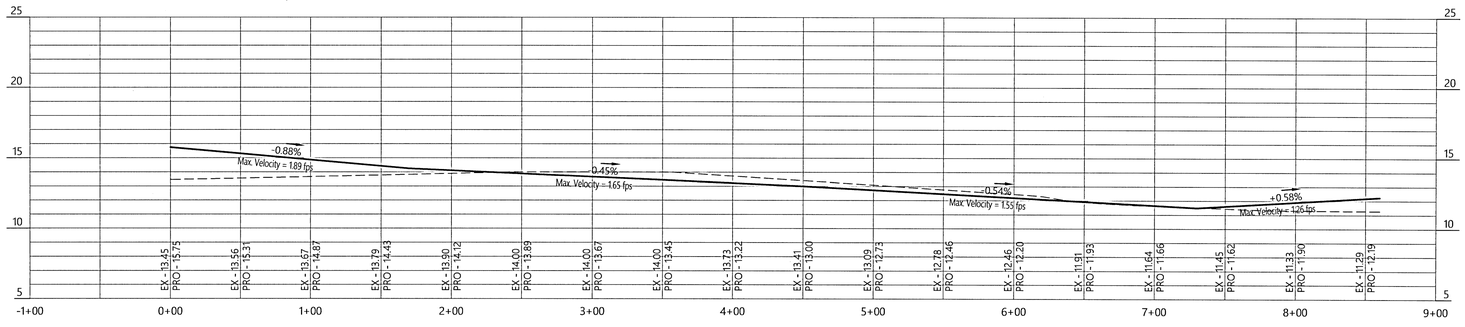



DITCH SECTION VIEW
NOT TO SCALE

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TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

Construction Plans for

HERON'S LANDING TOWNHOMES

Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

Ditch Profiles

Job No.	21-112P
Date:	10/6/2021
Drawn By:	CAB
Checked By:	ENL

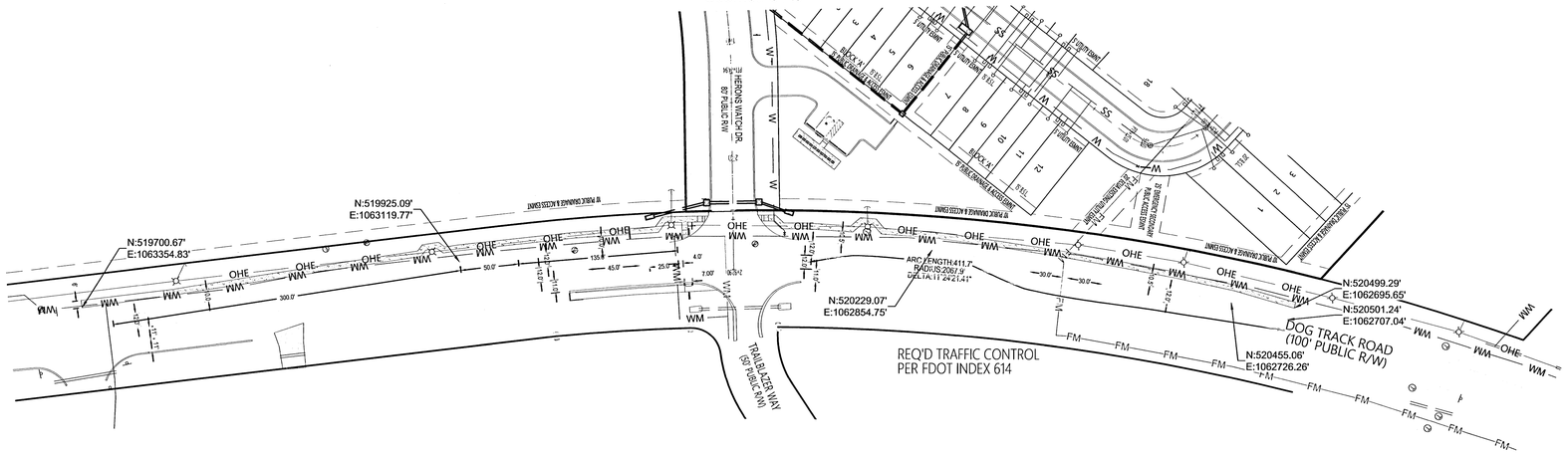
SHEET NUMBER

19

60 0 60 120 180

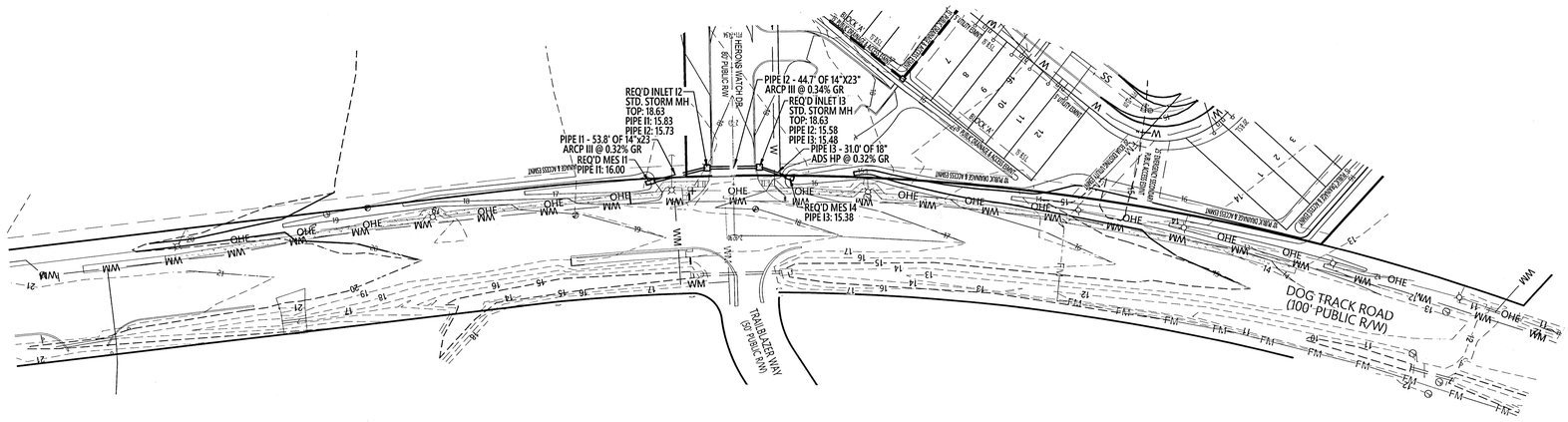
Scale: 1" = 60'

Geometric Plan



**SEE SHEETS 4, 6, & 7 FOR ADDITIONAL TURN LANE DESIGN INFORMATION.

Grading Plan



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STATE OF FLORIDA
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11/19/2021

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Construction Plans for

HERON'S LANDING TOWNHOMES

Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

Left Turn Lane Plan

Job No. 21-112P
Date: 10/6/2021
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SHEET NUMBER

20

EROSION & SEDIMENT CONTROL LEGEND:

SB SILT FENCE

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HATCHING DENOTES CLEARING & GRUBBING LIMITS

60 0 60 120 180
Scale: 1" = 60'

REQ'D INLET PROTECTION
REQ'D HAYDAM
REQ'D SILT FENCE
REQ'D DOUBLE ROW SILT FENCE
REQ'D CL II RIP-RAP @ A DEPTH OF 1.5' BELOW FINISH GRADE, APPROX. 10 SY
REQ'D CL II RIP-RAP @ A DEPTH OF 1.5' BELOW FINISH GRADE, APPROX. 30 SY
REQ'D CL II RIP-RAP @ A DEPTH OF 1.5' BELOW FINISH GRADE, APPROX. 12 SY
REQ'D CONSTRUCTION ENTRANCE
REQ'D INLET PROTECTION
WETLANDS
EDGE OF WATER
FLOODWAY BOUNDARY
1% ANNUAL CHANCE FLOODPLAIN BOUNDARY
SPECIAL FLOOD HAZARD AREA (SFHA) ZONE AE
50' WETLAND BUFFER
DOG TRACK ROAD (100' PUBLIC R/W)
TRAILBLAZER WAY (50' PUBLIC R/W)
GREAT HERONS DR (50' PUBLIC R/W)
GREAT HERONS LOOP (50' PUBLIC R/W)
LITTLE BITTERN RD (50' PUBLIC R/W)
HERONS WATCH DR (50' PUBLIC R/W)
WETLAND ASSESSMENT BY "BIOME CONSULTING GROUP" REPORTS DATED MAY 5 2020 AND APRIL 7 2020

TOE OF FILTER FABRIC
TO RUN 8" BELOW GRADE
AND TOP EDGE OF FABRIC
TO RUN 15" TO 18" ABOVE GRADE.

EXISTING PAVED ROADWAY — 2% OR GREATER — 12" RCP — FILTER FABRIC

SECTION A-A

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 STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

EXISTING PAVEMENT — 10' R — 2" - 3" COURSE AGGREGATE MIN 6" THICK — 12' MIN — 12" RCP — 50' MIN

PLAN VIEW

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

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

TEMPORARY CONSTRUCTION ENTRANCE
NOT TO SCALE

VERTICAL — 20'± — PRINCIPLE POSITION (CANTED 20° TO FLOW) — FILTER FABRIC — SILT FLOW

OPTIONAL POST POSITIONS

CROSS SECTION

NOTES:
1) TWO ROWS OF SILT FENCE SHALL BE PLACED ALONG WETLAND EDGE.
2) BALES TO BE STAKED AT THE DIRECTION OF THE ENGINEER.

POST: (OPTIONS: 2"x4" OR 3" MIN. DIA. TIMBER POST) (STEEL USE 1.33 LBS/FT. MIN.)
FIBERTEX (OR APPROVED EQUAL) MATERIAL ATTACHED TO WIRE FENCE.
MIN. GROUND LINE — MIN. 3' — MIN. 12"

SILT FENCE
NOT TO SCALE

NOTES:
1. SILT FENCE SHALL BE PLACED PRIOR TO ANY CONSTRUCTION ACTIVITY AND REMAIN UNTIL ALL DISTURBED MATERIAL HAS BEEN STABILIZED AND CONSTRUCTION HAS BEEN COMPLETED.
2. THE CONSTRUCTION ENTRANCE SHALL BE SWEPT WEEKLY DURING CONSTRUCTION IN ORDER TO REMOVE ANY SEDIMENT TRACKED ONTO THE ROADWAY. THE SILT FENCE SHALL BE CHECKED DAILY FOR PROPER OPERATION AND REPLACED AS NECESSARY.
3. ANY EXCAVATED MATERIAL SHALL BE PROPERLY STORED OR DISPOSED OF OFF SITE BY THE CONTRACTOR. IT SHALL BE THE RESPONSIBILITY OF THE PERMITTEE TO DETERMINE THE LOCATION OF MATERIAL DISPOSAL PRIOR TO BIDDING THE PROJECT. EXCAVATED MATERIAL REMOVED FROM SITE SHALL BE DONE SO PER STATE AND COUNTY REGULATIONS.
4. IF DURING CONSTRUCTION OR OPERATION OF THE STORMWATER MANAGEMENT FACILITY A STRUCTURAL FAILURE IS OBSERVED THAT HAS THE POTENTIAL TO CAUSE THE DIRECT DISCHARGE OF SURFACE WATER INTO THE FLORIDAN AQUIFER SYSTEM, CORRECTIVE ACTIONS DESIGNED OR APPROVED BY A REGISTERED PROFESSIONAL MUST BE PROVIDED AS SOON AS PRACTICAL TO THE NWFWMD FOR REVIEW AND APPROVAL THAT PROVIDES REASONABLE ASSURANCE THAT THE BREACH WILL BE PERMANENTLY CORRECTED.
5. ALL INLETS ARE TO BE FITTED WITH A SEDIMENTATION FILTER DEVICE AS MANUFACTURED BY SILT-SAVER, INC. OR EQUAL. INLET FILTERS ARE TO BE INSPECTED AND MAINTAINED DAILY DURING CONSTRUCTION AND REMOVED AT PROJECT COMPLETION (FINAL BUILD-OUT). CONTRACTOR SHALL REMOVE SEDIMENT AND DISPOSE OF IN A PROPER MANNER.
6. THE RESIDENTIAL LOTS SHALL REMAIN IN THEIR NATURAL, VEGETATED STATE UNTIL SUCH TIME AS A BUILDING PERMIT IS ISSUED FOR THE DWELLING, PER LAND DEVELOPMENT CODE.
7. ALL ADEQUATE TREE PROTECTION MEASURES AND BARRICADES SHALL BE INSTALLED PRIOR TO SITE DISTURBANCE AND REMAIN IN GOOD WORKING ORDER UNTIL SITE IS STABILIZED
8. 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.
9. 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
10. 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 ACCORDANCE WITH FDOT SECTION 570 AND STANDARD INDEX 105.

** NOTE: INLET PROTECTION IS RECOMMENDED TO BE SILT SAVER FRAME AND FILTER ASSEMBLY.

EROSION CONTROL

A. "DEVELOPER/CONTRACTOR/HOME OWNERS ASSOCIATION SHALL RESHAPE PER PLAN SPECIFICATIONS, CLEAN OUT ACCUMULATED SILT, AND STABILIZE RETENTION/DETENTION POND(S) AT THE END OF CONSTRUCTION WHEN ALL DISTURBED AREAS HAVE BEEN STABILIZED AND AT THE END OF THE 2 YEAR WARRANTY PERIOD."
B. "ON SITES > 1 ACRE, IF > 1 CONTIGUOUS ACRE IS CLEARED, A GROUND COVER SUFFICIENT TO PREVENT EROSION SHOULD BE PLANTED OR OTHERWISE STABILIZED WITHIN 10 WORKING DAYS ON THAT PORTION OF THE SITE UPON WHICH FURTHER ACTIVE CONSTRUCTION WILL NOT BE UNDERTAKEN WITHIN 90 DAYS."
C. "TO COMPLY WITH NPDES REQUIREMENTS, 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 PERMIT APPLICANT FOR PROPER REPORTING TO FDEP/NWFWMD."
D. "A HEALTHY GROWTH OF GRASS WITHIN 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/FERTILIZED WILL BE ACCEPTABLE."
E. SAG FILTERS IN CURB THROATS ARE NOT AN ALLOWABLE SEDIMENT CONTROL METHOD.
UTILITY
F. "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 WILL BE ALLOWED TO BE OPEN-CUT, OR JACK-AND-BORED, UNLESS SPECIFICALLY APPROVED BY THE COUNTY ENGINEER. 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."
G. "ROUGH GRADE OF RIGHT-OF-WAY MUST BE ESTABLISHED PRIOR TO COMMON TRENCH UTILITY INSTALLATION TO ENSURE UTILITIES ARE INSTALLED AT PROPER DEPTHS. THIS NOTE SHOULD ALSO INDICATE 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."
H. "THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD AT LEAST TWO WEEKS PRIOR TO PLACEMENT OF BASE MATERIAL TO ASSIST IN THE COORDINATION OF ALL OTHER UNDERGROUND UTILITIES."
I. "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."

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HERON'S LANDING TOWNHOMES
Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

Erosion Control Plan

Job No. 21-112P
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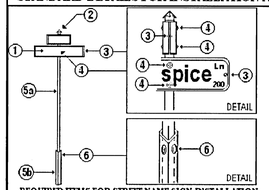
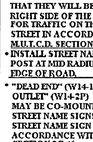
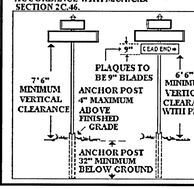
STANDARD DETAILS FOR INSTALLATION AND LOCATION OF STREET NAME SIGNS



- INSTALL STREET NAME SIGNS ON CORNERS OF INTERSECTION SO THAT THEY WILL BE ON THE FAR RIGHT SIDE OF THE INTERSECTION FOR TRAFFIC ON THE MAJOR STREET IN ACCORDANCE WITH I M.U.T.C.D. SECTION 2D.38
- INSTALL STREET NAME SIGN POST AT MID RADIUS, 18" OFF EDGE OF ROAD.
- "DEAD END" (W14-1P) OR "NO OUTLET" (W14-2P) PLAQUES MAY BE CO-MOUNTED TO STREET NAME SIGNS BENEATH STREET NAME SIGN BLADES IN ACCORDANCE WITH MUT.C.D. SECTION 2C.46.



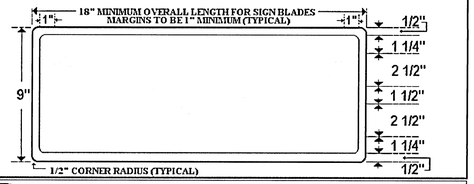


REQUIRED ITEMS FOR STREET NAME SIGN INSTALLATION

1	SIGN BLADE - .080" ALODIZED ALUMINUM CORNERS ROUNDED (1/2" RADIUS) FREE OF SHARP EDGES
2	ALUMINUM PYRAMID RAINCAP (ARC 175 OR EQUIVALENT)
3	3/16"X3/8" BLIND RIVETS (ENDS OF SIGN BLADES WILL BE RIVETED TO GETHER) (4 REQUIRED PER INSTALLATION)
4	3/8" STEEL DRIVE RIVETS ("SOUTHCO" 3878 OR EQUIVALENT) (8 REQUIRED PER INSTALLATION)
5	TELSPAR SIGN POST SYSTEM (GALVANIZED) OR EQUIVALENT (COMPRISED OF PARTS 5a AND 5b.)
5a	1 3/4"X 1 3/4"X 10' - 14 GAUGE TELESCOPING TOP POST
5b	2"X 2"X 36" - 12 GAUGE SQUARE FIT ANCHOR POST
6	5/16"X 2 1/4" CORNER BOLT

STANDARD DETAILS FOR STREET NAME SIGN BLADE LAYOUT

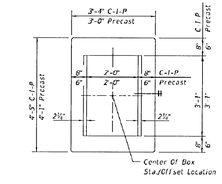
- F.D.O.T. TYPE III-A REFLECTIVE SHEETING TO BE USED ON ALL STREET NAME SIGN BLADES.
- STREET NAME SIGN BLADES TO HAVE WHITE LEGENDS. 1/2" WHITE BORDERS AND GREEN BACKGROUND.
- PRIMARY LETTERING TO SERIES B, 6" UPPER CASE AND 4 1/2" LOWER CASE.
- PREFIX AND SUFFIX LETTERING TO BE SERIES C, 2 1/2" UPPER CASE AND 1 3/4" LOWER CASE.



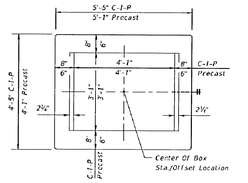
ESCAMBIA COUNTY STANDARD DETAILS
FOR STREET NAME SIGNS

DEPARTMENT OF ENGINEERING - TRAFFIC ENGINEERING DIVISION
Suite 1, 1190 West Leonard Street, Pensacola, Florida 32501-1116

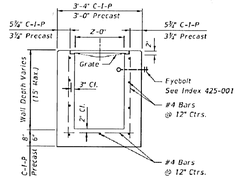
BY: Alan Thedford, Engineering Technician III Revised 6-2002 * NOT TO SCALE *



PLAN



PLAN



SECTION

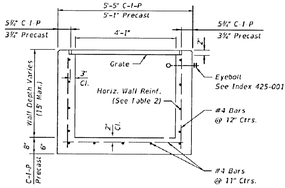
HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 1)

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

TYPE C

Recommended Maximum Pipe Size:

3'-0" Wall - 18" Pipe
3'-1" Wall - 24" Pipe (18" where an 18" pipe enters a 3'-0" wall)



SECTION

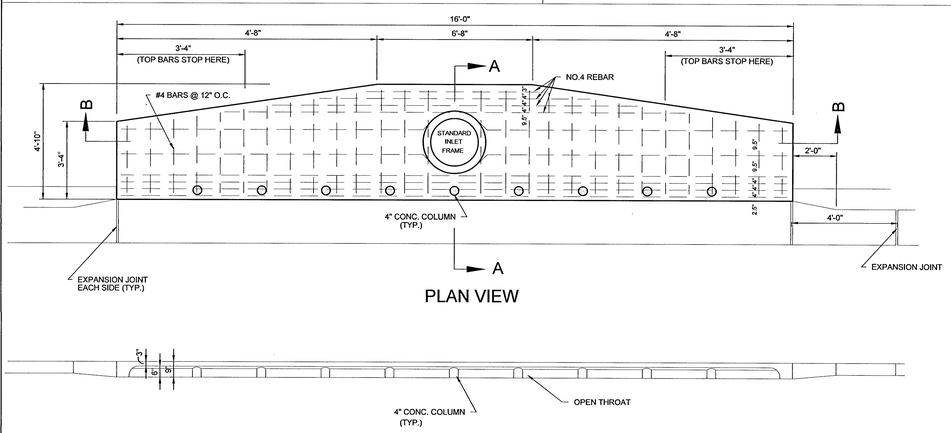
HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 2)

WALL DEPTH	SCHEDULE	AREA (in.²/ft.)	MAX. SPACING BARS	MAX. SPACING WWF
0'-6'	A12	0.20	12"	8"
6'-10'	A6	0.20	6"	5"
10'-13'	A4	0.20	4"	3"
10'-15'	B5.5	0.24	5½"	5"

TYPE D

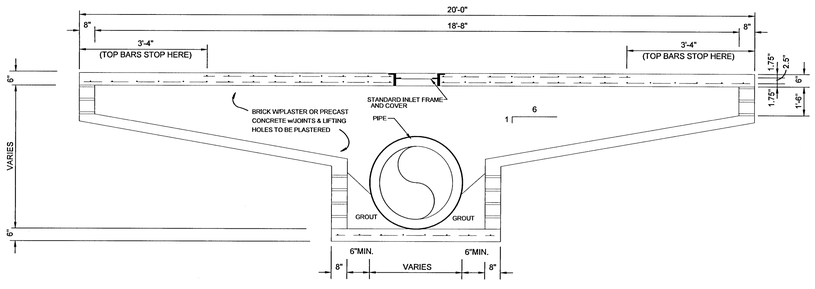
Recommended Maximum Pipe Size:

3'-1" Wall - 24" Pipe
4'-1" Wall - 36" Pipe

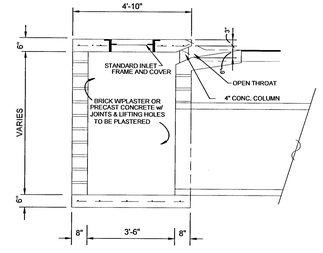


PLAN VIEW

THROAT ELEVATION



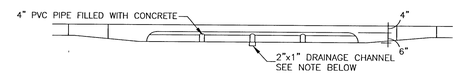
SECTION B-B



SECTION A-A

TYPE DOUBLE "A" DROP INLET DETAIL

N.T.S.

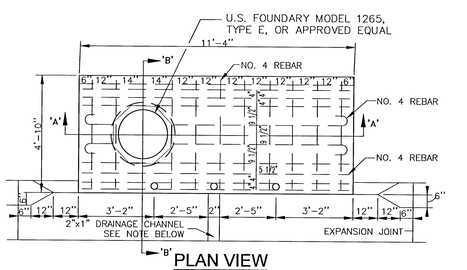


COUNTY TYPE "A" & "A-1" INLET THROAT ELEVATION

NOT TO SCALE

NOTE: CONTRACTOR SHALL CONSTRUCT DRAINAGE CHANNEL PRIOR TO CONCRETE POUR.

NOTE: CONTRACTOR SHALL COORDINATE STEPS IN ALL INLETS AND STRUCTURES DEEPER THAN 4'

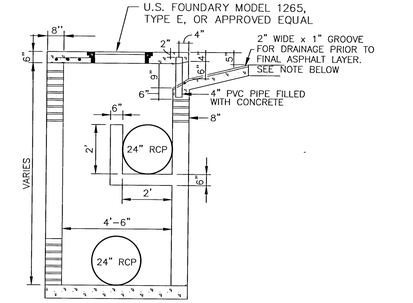


PLAN VIEW

COUNTY TYPE "A" CURB INLET DETAIL

NOT TO SCALE

NOTE: CONTRACTOR SHALL CONSTRUCT DRAINAGE CHANNEL PRIOR TO CONCRETE POUR.

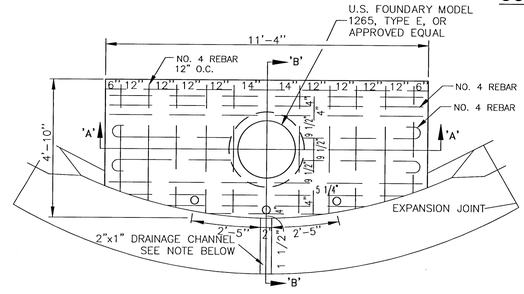


SECTION 'B'-'B'

COUNTY TYPE "A & A-1" MODIFIED INLET

NOT TO SCALE

CONTRACTOR SHALL CONSTRUCT DRAINAGE CHANNEL PRIOR TO CONCRETE POUR.

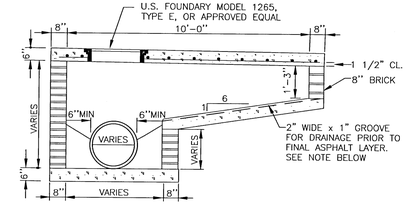


PLAN VIEW

COUNTY TYPE "A-1" CURB INLET DETAIL

NOT TO SCALE

NOTE: CONTRACTOR SHALL CONSTRUCT DRAINAGE CHANNEL PRIOR TO CONCRETE POUR.

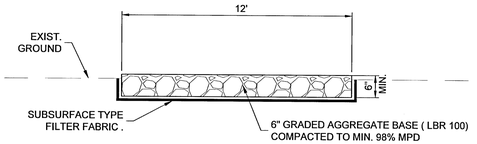


SECTION 'A'-'A'

COUNTY TYPE "A" WITH END BOX

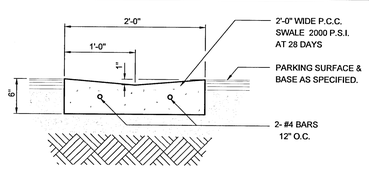
NOT TO SCALE

NOTE: CONTRACTOR SHALL CONSTRUCT DRAINAGE CHANNEL PRIOR TO CONCRETE POUR.



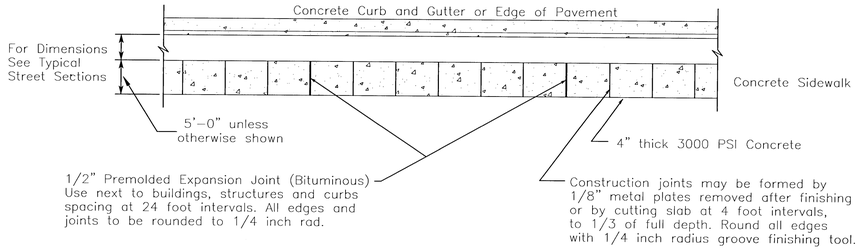
POND ACCESS ROAD TYPICAL SECTION

NOT TO SCALE



CONCRETE VALLEY GUTTER

NOT TO SCALE



STANDARD CONCRETE SIDEWALK

NOT TO SCALE

REVISIONS

Date: ---	
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All documents, including Drawings and Bid Specifications, prepared or furnished by Firms listed on face, are instruments of service in respect of the client and Firms listed on face, shall retain an ownership and property interest therein whether or not the Project is constructed. Any use which any third party makes of said documents is the responsibility of such third party. Such documents are not to be suitable for reuse by the Client or others on extensions of the Project or on any other project. Any reuse without written verification by Firms listed on face will entitle Firms listed on face to further compensation at rates to be agreed upon by Firms listed on face and the Client.

MULLINS, LLC
CIVIL ENGINEERING, DEVELOPMENT DESIGN
SURVEYING
801 W. Romana Street, Suite A, Pensacola, FL 32502
(850) 462-8412

TODD M WHEELER LICENSE No 92378 STATE OF FLORIDA PROFESSIONAL ENGINEER 11/9/2021

TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

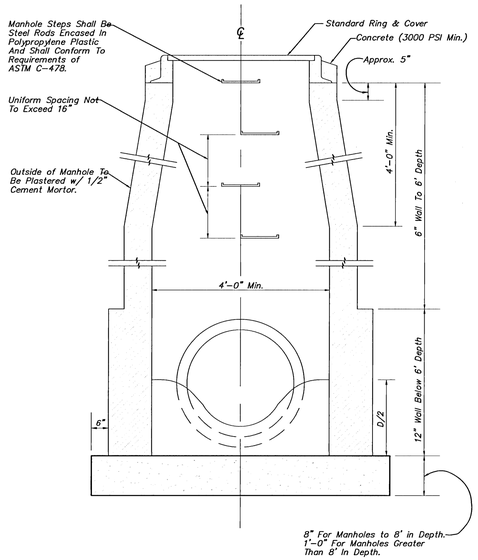
Construction Plans for
HERON'S LANDING TOWNHOMES
Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

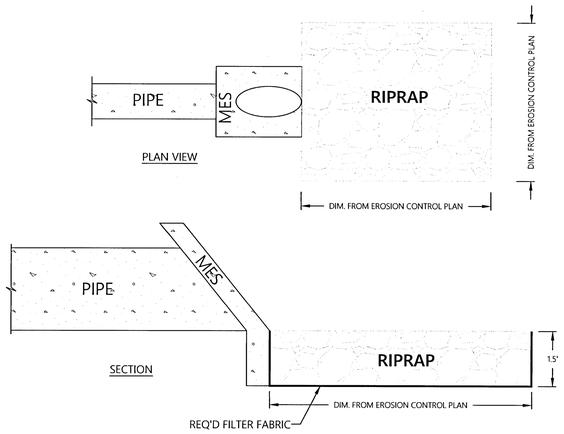
Details

Job No. 21-112P
Date: 10/6/2021
Drawn By: CAB
Checked By: ENL

SHEET NUMBER
22



STANDARD STORM SEWER MANHOLE



RIPRAP (CLASS II) INSTALLATION DETAIL

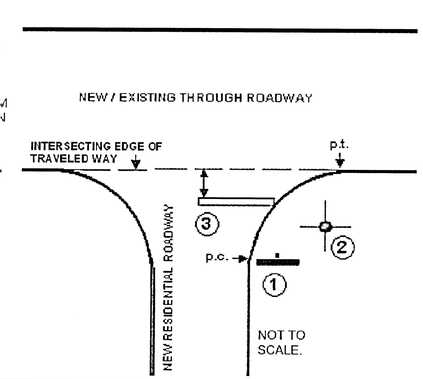
NOT TO SCALE

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

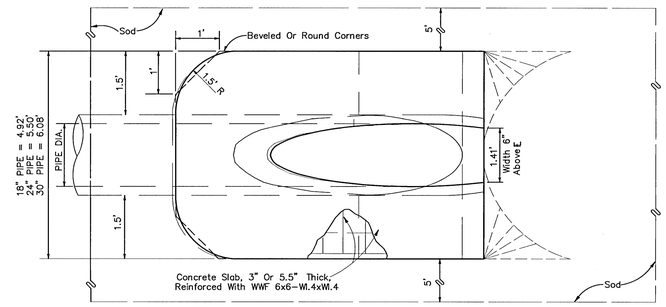
SIGN PLACEMENT: LOCATE STREET NAME SIGN AT MID-RADIUS POINT OF TURN OUT ON SAME SIDE OF STREET AS STOP SIGN.
NOTE: SEE *ESCAMBIA COUNTY STANDARD DETAILS FOR STREET NAME SIGNS* FOR FURTHER FABRICATION, LOCATION AND INSTALLATION REQUIREMENTS.

(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



NOTE:

1. MES SHALL NOT BE CONSTRUCTED OF PVC (AKA A2000) OR HDPE (AKA ADS) PIPE. USE ONLY CONCRETE OR METAL MITERED END SECTIONS, AS INDICATED IN FDOT STANDARD SPECIFICATIONS 430-4.6. WHEN USE IN CONJUNCTION WITH CORRUGATED MES, CONNECTION SHALL BE BY EITHER A FORMED METAL BAND SPECIFICALLY DESIGNED TO JOIN HDPE OR PVC PIPE. WHEN USED IN CONJUNCTION WITH A CONCRETE MES, CONNECTION SHALL BE BY CONCRETE JACKET CONSTRUCTED IN ACCORDANCE WITH INDEX NO 280 (FDOT).

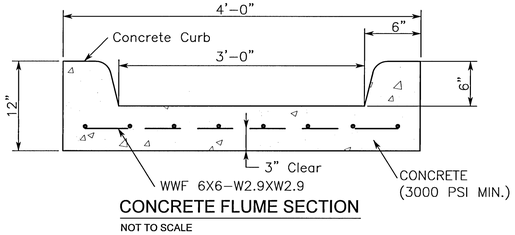
*General Notes:

1. Mitered end sections for pipe sizes 15", 18" and 24" round or equivalent pipe arch or elliptical pipe are permitted within the clear zone. When the slope intersection permits, the mitered end section may be located with the culvert opening as close as 8' beyond the outside edge of the shoulder.
2. Slope and ditch transitions shall be used when the normal roadway slope must be flattened to place end section outside clear zone.
3. See FDOT Index 430 for additional information.

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

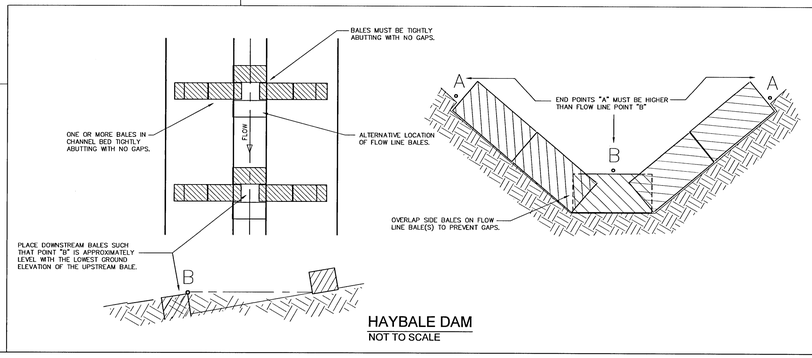
MITERED END SECTION

NOT TO SCALE



CONCRETE FLUME SECTION

NOT TO SCALE



HAYBALE DAM

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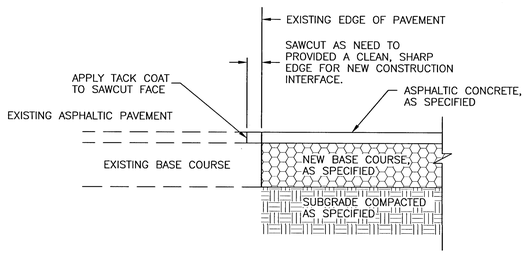
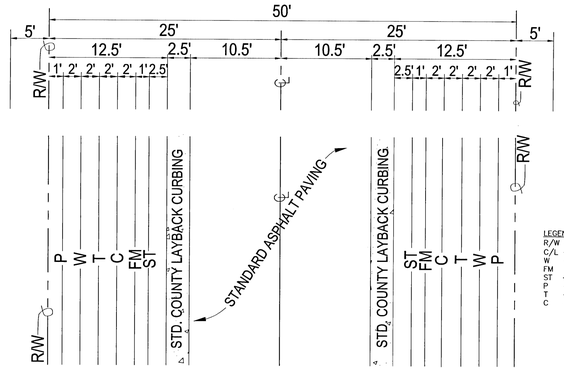


NEW/EXISTING PAVEMENT INTERFACE

NOT TO SCALE



COMMON TRENCH & UTILITY LOCATIONS
TYPICAL ROAD PLAN VIEW

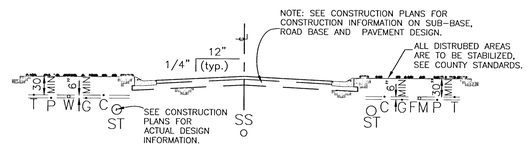
NOT TO SCALE

NOTES:
1) THIS IS A TYPICAL LOCATION PLAN. SEE CONSTRUCTION PLANS TO DETERMINE WHICH SIDE OF THE R/W ACTUALLY RECEIVES UTILITIES. SOME UTILITIES MAY ONLY BE ON ONE SIDE (I.E. WATER, FORCE MAIN AND STORM SEWER).

2) 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 WILL BE ALLOWED TO BE OPEN CUT, OR JACK-AND-BORED. TO ACCOMPLISH THIS REQUIREMENT, COMMON TRENCHING IS REQUIRED WHENEVER POSSIBLE. IF COMMON IS NOT FEASIBLE OPTION, THE DEVELOPER SHALL INSTALL CONDUIT FOR THE UTILITY NOT PARTICIPATING IN THE COMMON TRENCHING FOR ALL ROAD CROSSINGS AND THE UTILITY COMPANY SHALL BE REQUIRED TO USE THE CONDUIT.

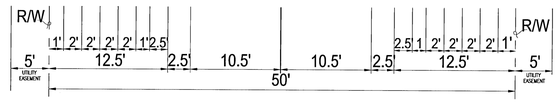
3) ALL R/W CONSTRUCTION WORK SHALL COMPLY WITH ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS.

4) CONTRACTORS SHALL INSTALL EACH UTILITY SERVICE IN THE LOCATION AS SHOWN IN THE COMMON TRENCH DETAIL.



COMMON TRENCH & UTILITY LOCATIONS
TYPICAL ROAD CROSS SECTION

NOT TO SCALE



REVISIONS

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All documents, including Drawings and Bid Specifications, prepared or furnished by Firms listed on face, are instruments of service in respect of the Client and Firms listed on face, shall retain an exclusive common law property interest therein whether or not the Project is completed. Such documents are not to be used in whole or in part or altered by the Client or others on extensions of the Project or on any other project. Any reuse without written verification by Firms listed on face will entitle Firms listed on face to further compensation at rates to be agreed upon by Firms listed on face and the Client.

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TODD M WHEELER LICENSE No 92378 STATE OF FLORIDA PROFESSIONAL ENGINEER 11/19/2021

TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

Construction Plans for
HERON'S LANDING TOWNHOMES
Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

Details

Job No.	21-112P
Date:	10/6/2021
Drawn By:	CAB
Checked By:	ENL

SHEET NUMBER

23

EXISTING POSTED SPEED	PROPOSED WORK ZONE SPEED	REMARKS
MPH	MPH	The "Proposed Work Zone Speeds" are recommended speeds for the traffic control plan detailed below; however, where the Engineer deems other speeds are appropriate, the applicable speeds are to be shown on the plans.
65	55	
55	45	
45	35	

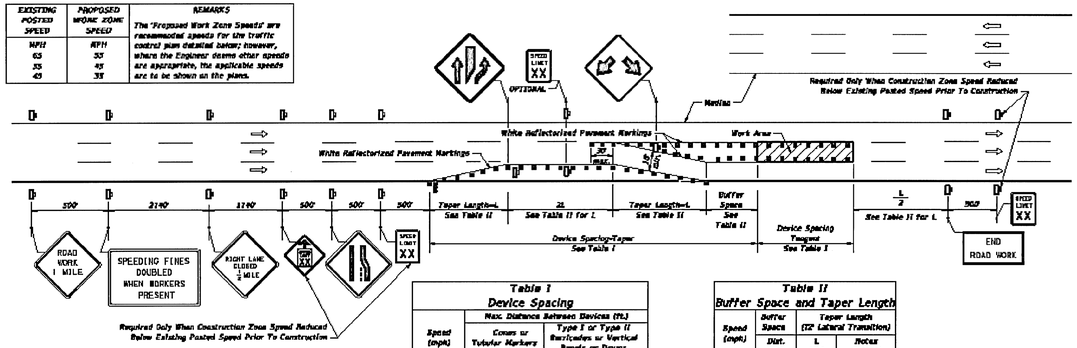


Table I
Device Spacing

Speed (mph)	Max. Distance Between Devices (ft.)			
	Cones or Tubular Markers		Type I or Type II Barricades or Vertical Panels or Drums	
	Taper	Tangent	Taper	Tangent
25	25	50	25	30
30 to 45	25	50	80	90
50 to 70	25	50	50	100

Table II
Buffer Space and Taper Length

Speed (mph)	Buffer Space	Taper Length (12' Lateral Transition)	
	Dist. (ft.)	L (ft.)	Notes (Merge)
25	155	125	
30	200	180	L = WS²/60
35	250	245	
40	305	320	
45	360	540	
50	425	600	
55	495	660	L = WS
60	570	720	
65	645	780	
70	730	840	

When Buffer Space cannot be attained due to geometric constraints, the greatest attainable length shall be used, but not less than 250 ft.

For lateral transitions other than 12, use formula for L shown in the notes column.
Where:
L = Length of taper in feet
W = Width of lateral transition in feet
S = Posted speed limit (mph)

SYMBOLS

- Work Area
- Channelizing Device (See Index No. 600)
- Work Zone Sign
- Advance Warning Arrow Board
- Lane Identification + Direction of Traffic

CONDITION NOTES

1. The RIGHT LANE CLOSED and lane reduction signs are to be removed or fully covered when no work is being performed and the center lane is opened to traffic.
2. For work performed in the median or outside lane, refer to Index No. 613.
3. When the lane closure exceeds a continuous 24 hour period, all existing pavement markings within the realignment which conflict with the revised traffic pattern are to be removed and removable pavement marking used for marking new edge lines and centerlines.

GENERAL NOTES

1. When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed in accordance with other applicable TCZ indexes.
2. For general TCZ requirements and additional information, refer to Index No. 600.

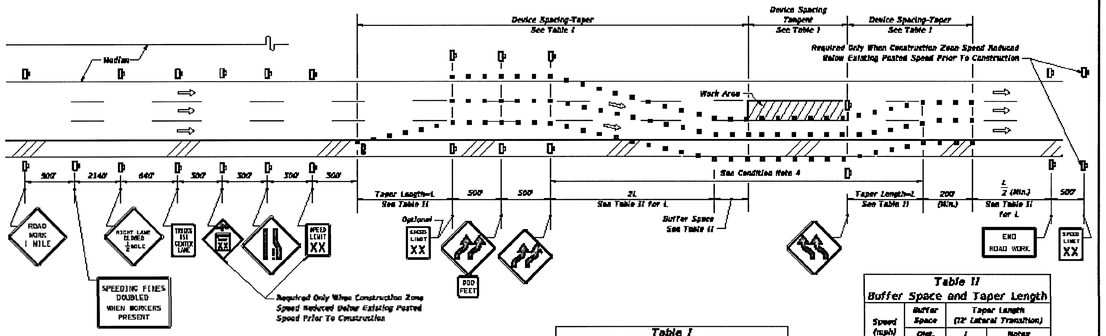
DURATION NOTES

1. Temporary pavement markings may be omitted for work operations less than 3 days.

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH ON ANY PORTION OF A CENTER LANE OF A MULTILANE HIGHWAY, AND TWO DRIVING LANES ARE MAINTAINED ON THE TRAVEL WAY.

LAST REVISION 07/01/15	SYSTEM	DESCRIPTION:	FDOT FY 2017-18 DESIGN STANDARDS	MULTILANE, WORK WITHIN TRAVEL WAY, CENTER LANE	INDEX NO. 614	SHEET NO. 1 of 2



EXISTING POSTED SPEED	PROPOSED WORK ZONE SPEED	REMARKS
MPH	MPH	The "Proposed Work Zone Speeds are recommended speeds for the traffic control plan detailed below; however, where the Engineer deems other speeds are appropriate, the applicable speeds.
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55	45	
45	35	

Table I
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	Cones or Tubular Markers		Type I or Type II Barricades or Vertical Panels or Drums	
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30 to 45	25	50	80	90
50 to 70	25	50	50	100

Table II
Buffer Space and Taper Length

Speed (mph)	Buffer Space	Taper Length (12' Lateral Transition)	
	Dist. (ft.)	L (ft.)	Notes (Merge)
25	155	125	
30	200	180	L = WS²/60
35	250	245	
40	305	320	
45	360	540	
50	425	600	
55	495	660	L = WS
60	570	720	
65	645	780	
70	730	840	

When Buffer Space cannot be attained due to geometric constraints, the greatest attainable length shall be used, but not less than 200 ft.

For lateral transitions other than 12, use formula for L shown in the notes column.
Where:
L = Length of taper in feet
W = Width of lateral transition in feet
S = Posted speed limit (mph)

SYMBOLS

- Work Area
- Channelizing Device (See Index No. 600)
- Work Zone Sign
- Advance Warning Arrow Board

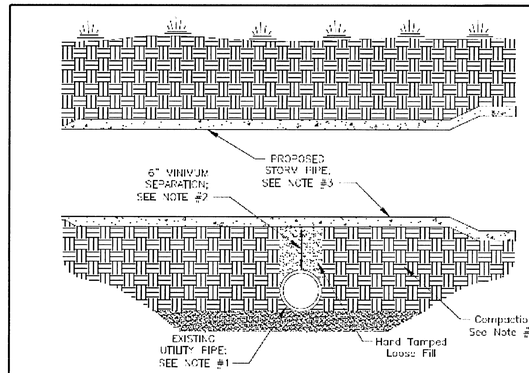
CONDITION NOTES

1. See General Notes, Sheet 1.
2. Length of time that traffic is using shoulder should be minimized. For example, remove lane closure and lane shift at night (unless performing night work) if practical.
3. The RIGHT LANE CLOSED, lane reduction and reverse curve signs are to be covered or fully covered when no work is being performed and the travel way is open to traffic.
4. When the lane closure exceeds a continuous 24 hour period, all existing pavement markings within the realignment which conflict with the revised traffic pattern are to be removed and removable pavement markings used for marking new edge lines and centerlines.
5. For general TCZ requirements and additional information, refer to Index No. 600.

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH ON ANY PORTION OF A CENTER LANE OF A MULTILANE HIGHWAY, AND TWO DRIVING LANES ARE MAINTAINED, AND, THE OUTSIDE SHOULDER PAVEMENT IS TEMPORARILY USED AS A TRAVEL LANE.

LAST REVISION 07/01/15	SYSTEM	DESCRIPTION:	FDOT FY 2017-18 DESIGN STANDARDS	MULTILANE, WORK WITHIN TRAVEL WAY, CENTER LANE	INDEX NO. 614	SHEET NO. 2 of 2



NOTES FOR STORM SYTEM INSTALLATION:

1. The first step in avoiding any potential conflict between a proposed storm system design and an existing utility pipe is confirmation of the exact horizontal and vertical location of the existing utility pipe. Per industry standard best management practices, the storm system designer should have the existing utility pipe exposed and survey the exact horizontal location and vertical elevation prior to designing the storm system, thus allowing conflicts to be avoided as much as possible, or, when needed, utility relocations designed into contract.
2. Maintain at least 6" of vertical separation as shown from the exterior of the storm pipe to the exterior of the utility pipe. In situations where 6" cannot be provided, then E.C.U.A. will determine if less than 6" will be allowed. Separations less than 3" are generally not allowed.
3. Contractor shall layout storm system piping such that midpoint of storm pipe segment is centered over utility pipe as much as practical. Bell and spigot ends of storm pipe shall be kept as far away from utility pipe as possible.
4. In order to 'bridge' utility pipe, Contractor shall compact soil under entire segment of storm pipe that is over utility pipe to 98% modified Proctor for a depth of 12" below storm pipe, while taking care not to damage utility pipe. Fill space between utility pipe and storm pipe with loose fill and hand tamp.

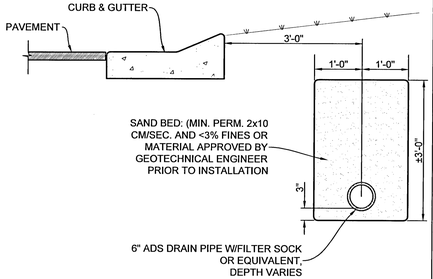
ESCAMBIA COUNTY UTILITIES AUTHORITY

SCALE: N.T.S.
DATE: 9/01/2016

STORM SEWER VERTICAL SEPARATION

DETAIL D-66

STORM SEWER VERTICAL CLEARANCES



UNDERDRAIN DETAIL

NOT TO SCALE

GENERAL NOTES:

1. Install underdrain pipe that is either 4" smooth or 5" corrugated tubing unless otherwise shown in the Plans. The size to be furnished will be based on the nominal internal diameter of a pipe with a smooth interior wall. Except when prohibited by the Plans, the special provisions or this standard, pipe with a corrugated interior wall may be provided based on the following size equivalency.

   4" smooth interior equivalent to 5" corrugated interior
   5" smooth interior equivalent to 6" corrugated interior
   6" smooth interior equivalent to 8" corrugated interior
   8" smooth interior equivalent to 10" corrugated interior

2. Fine aggregate is quartz sand meeting the requirements of Specifications 902-4.
3. Coarse aggregate is gravel or stone meeting the requirements of Specification 901-2 or 901-3. The gradation is in accordance with Specifications 901, Grades 4, 467, 5, 56 or 57 stone unless otherwise shown restricted in the Plans.
4. Install Underdrain Type I, II, III and V in accordance with Specification 440.
5. Install Filter Fabric Type D-3 in accordance with Specifications 985. The internal filter fabric of Type V underdrain has a permittivity of 0.7 /sec. and an AOS of #40 sieve.
6. When Type I is used, use a filter fabric sock in accordance with Specification 948.
7. See Index 120-002 for the standard location of Type I, II, and III underdrain. The location of Type V underdrain and nonstandard locations of Type I, II, and III underdrain will be as detailed in the plans.
8. Install filter fabric joints with a overlap a minimum of 1'. Install the internal filter fabric of Type V underdrain with an overlap into the coarse aggregate or the fine aggregate a minimum of 1'.
9. Use nonperforated pipes for underdrain outlet and make all bends using ⅛ (45 deg.) elbows. Construct 90 deg. bends with two ⅛ elbows separated by at least 1' of straight pipe. Outlet pipes stubbed into inlets or other drainage structures must be a minimum 6" above the structure flow line. Install concrete aprons, hardware cloth, and sod for outlet pipes discharging to grassed areas as shown in Index 446-001 for Edgedrain Outlets.

ESCAMBIA COUNTY UTILITIES AUTHORITY

SCALE: N.T.S.
DATE: 9/01/2016

WATER / SEWER SEPARATION

DETAIL D-64

WATER/SEWER SEPARATION

OTHER PIPE	HORIZONTAL SEPARATION	CROSSINGS (1)	JOINT SPACING & CROSSINGS (FULL JOINT CENTERED)
STORM SEWER, STORMWATER FORCE MAIN	WATER MAIN; 3 FT. MINIMUM; OTHER PIPE	WATER MAIN; 12 INCHES IS THE MINIMUM, EXCEPT FOR STORM SEWER, THEN 6 INCHES IS THE MINIMUM AND 12 INCHES IS PREFERRED; OTHER PIPE	ALTERNATE 3 FT. MINIMUM; WATER MAIN
GRAVITY OR PRESSURE SANITARY SEWER, SANITARY SEWER FORCE MAIN	WATER MAIN; 10 FT. PREFERRED 6 FT. MINIMUM (2); OTHER PIPE	WATER MAIN; 12 INCHES IS THE MINIMUM, EXCEPT FOR GRAVITY SEWER, THEN 6 INCHES IS THE MINIMUM AND 12 INCHES IS PREFERRED; OTHER PIPE	ALTERNATE 6 FT MINIMUM; WATER MAIN

(1) WATER MAIN SHOULD CROSS ABOVE OTHER PIPE. WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MINIMUM SEPARATION IS 12 INCHES.
(2) 3 FT. GRAVITY SANITARY SEWER WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF THE GRAVITY SANITARY SEWER.

NOTES:

A. INFORMATION PROVIDED FROM FDEP RULE 62-555. IF OTHER FDEP RULES CONFLICT, THEN USE THE MOST STRINGENT RULE.
B. IF THERE ARE CONFLICTS IN THE SEPARATION REQUIREMENTS BETWEEN COLLECTION SYSTEMS AND DRINKING WATER FACILITIES ESTABLISHED IN FOOTNOTES (1) AND (2) ABOVE AND THOSE ESTABLISHED IN CHAPTER 62-532 OR 62-555, F.A.C., THEN THE REQUIREMENTS IN CHAPTER 62-532 OR 62-555, F.A.C., SHALL APPLY.

REVISIONS	
Date: ---	Date: ---
Date: ---	Date: ---
Date: ---	Date: ---
Date: ---	Date: ---
Date: ---	Date: ---
Date: ---	Date: ---

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TODD M WHEELER LICENSE No 92378 STATE OF FLORIDA PROFESSIONAL ENGINEER 10/6/2021

TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

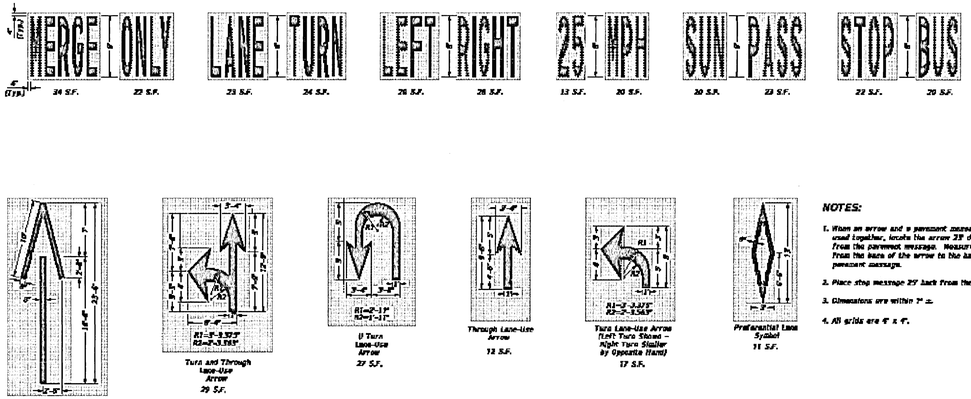
Construction Plans for
HERON'S LANDING TOWNHOMES
Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

Details

Job No. 21-112P
Date: 10/6/2021
Drawn By: CAB
Checked By: ENL

SHEET NUMBER 24

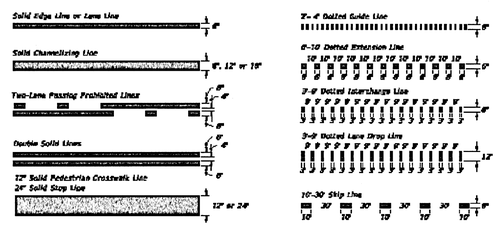


NOTES:

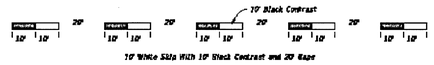
1. When an arrow and a pavement message are used together, locate the arrow 25' downstream from the pavement message. Measure the distance from the base of the arrow to the base of the pavement message.
2. Place stop message 25' back from the stop line.
3. Dimensions are within 7" ±.
4. All grids are 4' x 4'.

PAVEMENT ARROW AND MESSAGE DETAILS

LAST REVISION 11/01/16	DESCRIPTION:	FY 2017-18 DESIGN STANDARDS	PAVEMENT MARKINGS	INDEX NO. 17346	SHEET NO. 1 of 17

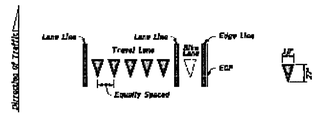


PAVEMENT MARKING LINES



10' White Slits With 10' Black Contrast and 20' Gaps

CONTRAST MARKINGS



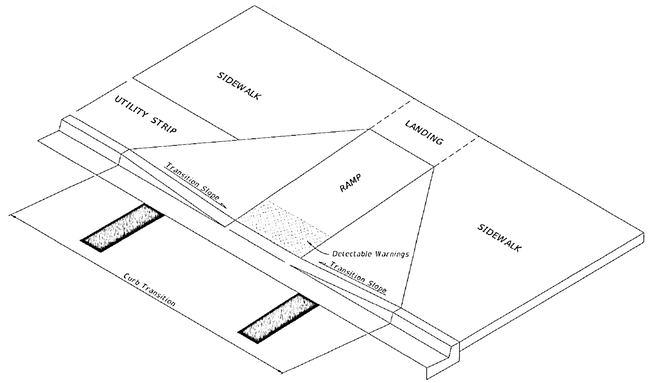
Yield lines consist of five - 12" x 32" white triangles which face traffic. Equally space triangles within traffic lane. When a bike lane is present, add one additional triangle in the center of the bike lane.

YIELD LINES

LAST REVISION 11/01/16	DESCRIPTION:	FY 2017-18 DESIGN STANDARDS	PAVEMENT MARKINGS	INDEX NO. 17346	SHEET NO. 2 of 17

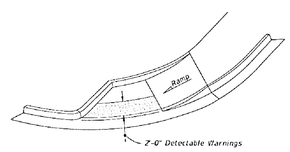
GENERAL NOTES

1. Cross Slopes and Grades:
   - A. Sidewalk, ramp, and landing slopes (i.e. 0.02, 0.05, and 1:12) shown in this index are maximums. Steeper slopes are not permitted unless otherwise detailed in the Plans.
   - B. Landings must have slopes less than or equal to 0.02 in any direction.
   - C. Install ramp slopes along a single linear plane (i.e. no warps or varying slope)
2. Grade Breaks:
   Grade breaks at the top and bottom of ramps must be parallel to each other and perpendicular to the direction of the ramp slope.
3. Existing Curb, Curb and Gutter and/or Sidewalk:
   - A. Remove any existing curb or curb and gutter to the nearest joint beyond the curb transition or to the extent that no remaining section of curb or curb and gutter is less than 5 feet long. Remove any existing sidewalk to the nearest joint beyond the transition slope or to the extent that no remaining section of sidewalk is less than 5 feet long.
   - B. Refer to Index 310 for Concrete Sidewalk details.
4. Curb Ramp Alpha-Identification:
   - A. Sidewalk curb ramp alpha-identifications (e.g. CR-A) are provided for reference purposes in the Plans.
   - B. Alpha-identifications CR-I and CR-J are intentionally omitted.
5. Detectable Warnings:
   - A. Install detectable warnings in accordance with Specification Section 527.
   - B. Place detectable warnings across the full width of the ramp or landing, to a depth of 2 feet measured perpendicular to the curb line and no greater than 5 feet from the back of the curb or edge of pavement.
   - C. If detectable warnings are shown in the Plans on slopes greater than 5%, align the truncated domes with the centerline of the ramp; otherwise, the truncated domes are not required to be aligned.
6. Detectable Warnings - Acceptance Criteria:
   - A. Color and texture shall be complete and uniform.
   - B. 90% of individual truncated domes shall be in accordance with the Americans with Disabilities Act Standards for Transportation Facilities, Section 705.
   - C. There shall be no more than 4 non-compliant domes in any one square foot.
   - D. Non-compliant domes shall not be adjacent to other non-compliant domes.
   - E. Surfaces shall not deviate more than 0.10" from a true plane.

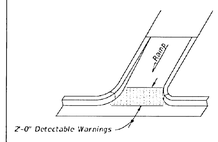


CURB RAMP NOMENCLATURE

LAST REVISION 11/01/16	DESCRIPTION:	FY 2017-18 DESIGN STANDARDS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX NO. 304	SHEET NO. 1 of 8



ISOMETRIC VIEW



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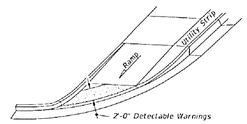
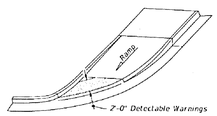


OPTION A



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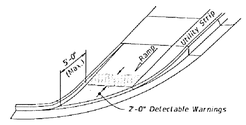
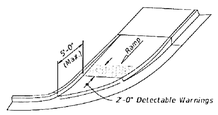


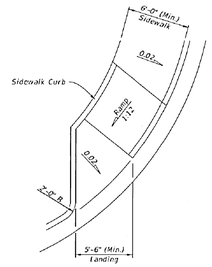
OPTION B

ISOMETRIC VIEW



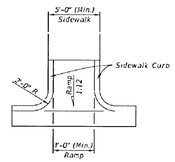
OPTION B

ISOMETRIC VIEW



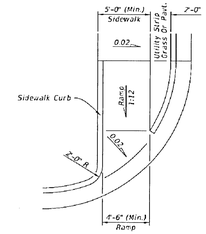
PLAN VIEW

CR-D



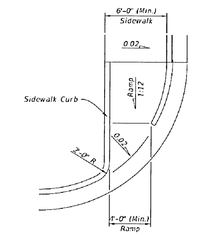
PLAN VIEW

CR-E



PLAN VIEW

CR-F



PLAN VIEW

CR-G

SIDEWALK CURB RAMPS CR-D, CR-E, CR-F & CR-G

LAST REVISION 11/01/16	DESCRIPTION:	FY 2017-18 DESIGN STANDARDS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX NO. 304	SHEET NO. 4 of 8

REVISIONS

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TODD M WHEELER LICENSE No 92378 STATE OF FLORIDA PROFESSIONAL ENGINEER 11/19/2021

TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

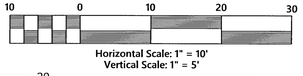
Construction Plans for
HERON'S LANDING TOWNHOMES
Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

Details

Job No. 21-112P
Date: 10/6/2021
Drawn By: CAB
Checked By: ENL

SHEET NUMBER
25



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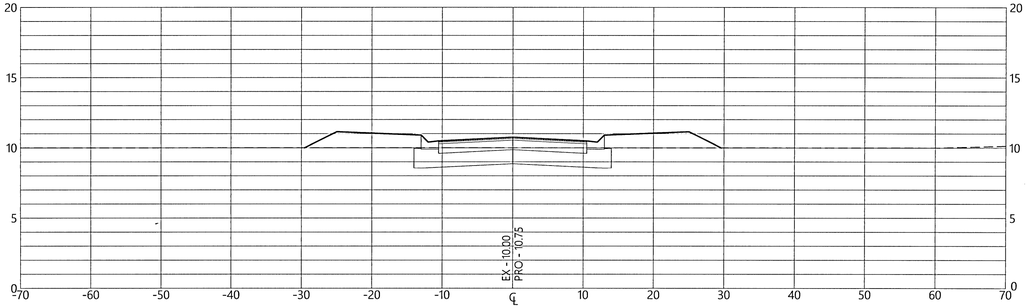

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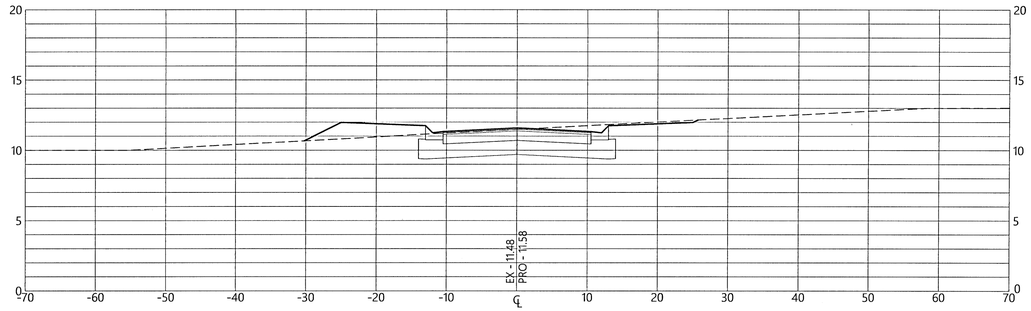

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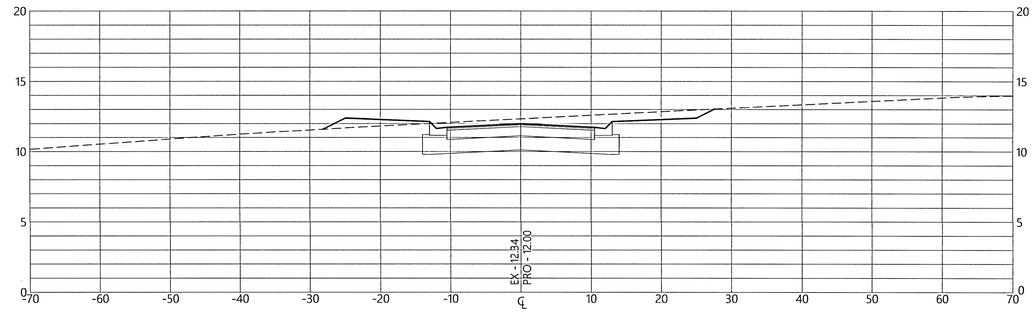

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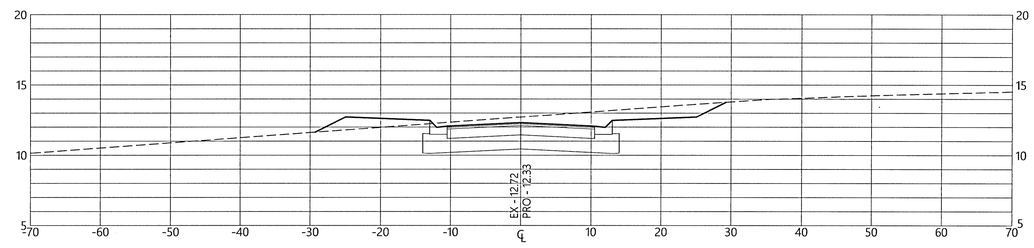

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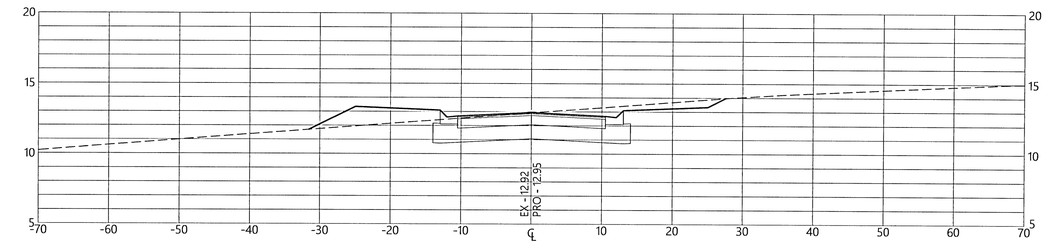

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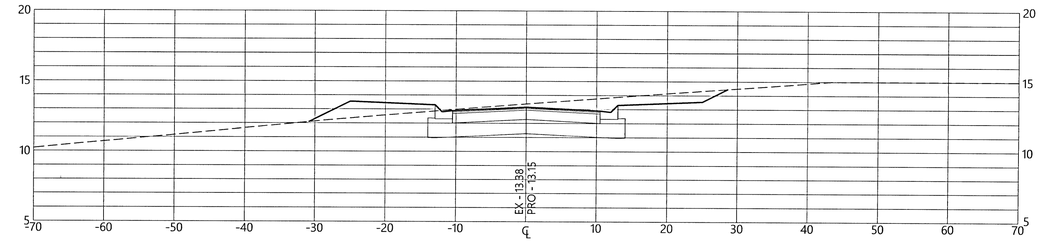

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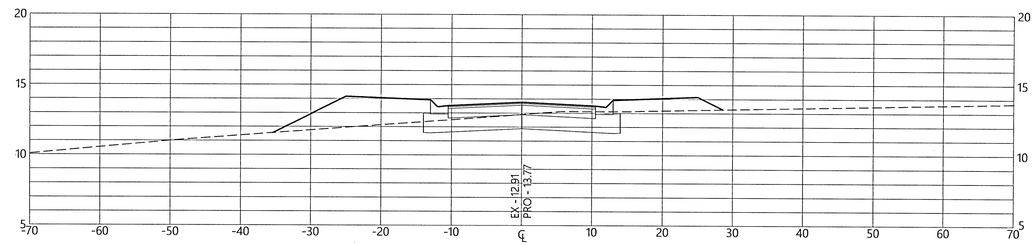

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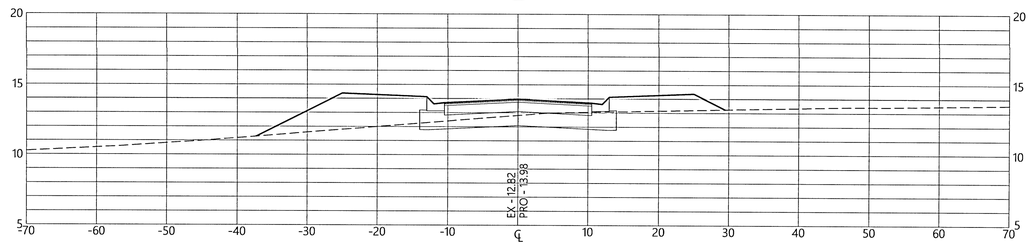

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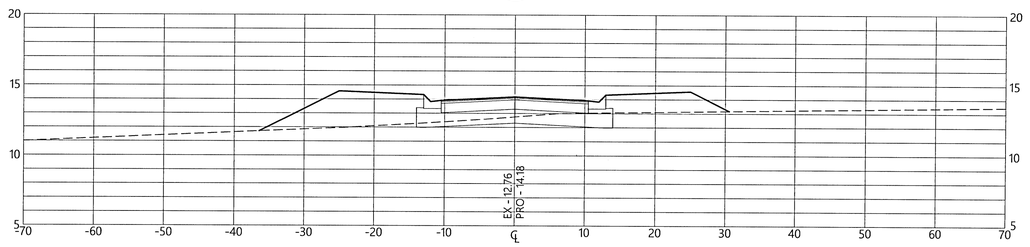

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FL. PE No. 92378 COA#32689

Construction Plans for
HERON'S LANDING TOWNHOMES
Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

Great Herons Drive
Cross-Sections

Job No.	21-112P
Date:	10/6/2021
Drawn By:	CAB
Checked By:	ENL

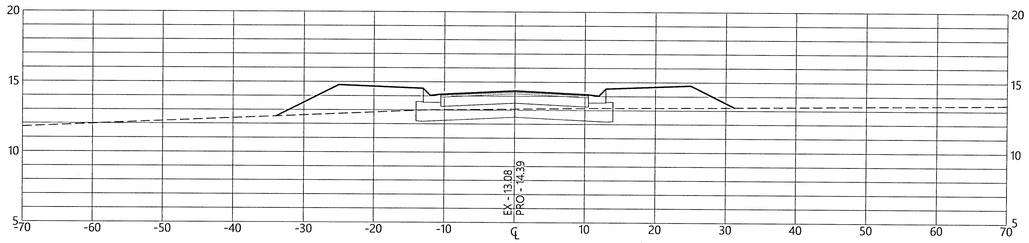
SHEET NUMBER

26

10 0 10 20 30

Horizontal Scale: 1" = 10'
Vertical Scale: 1" = 5'

7 + 00



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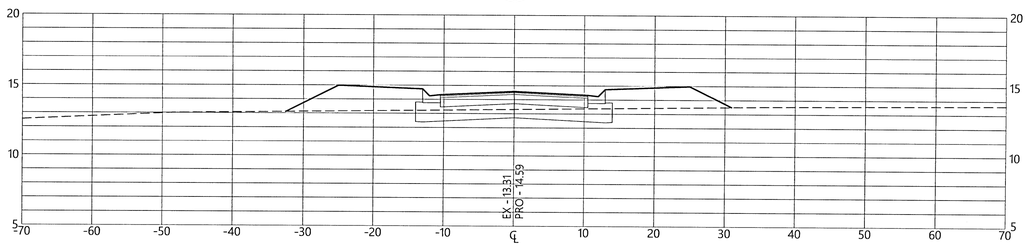

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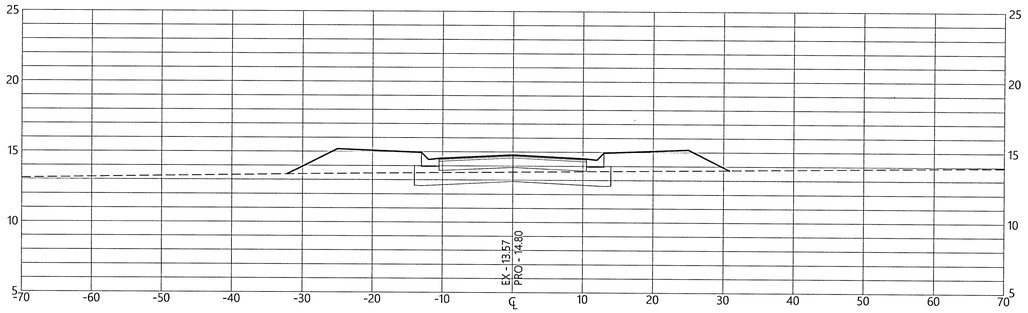

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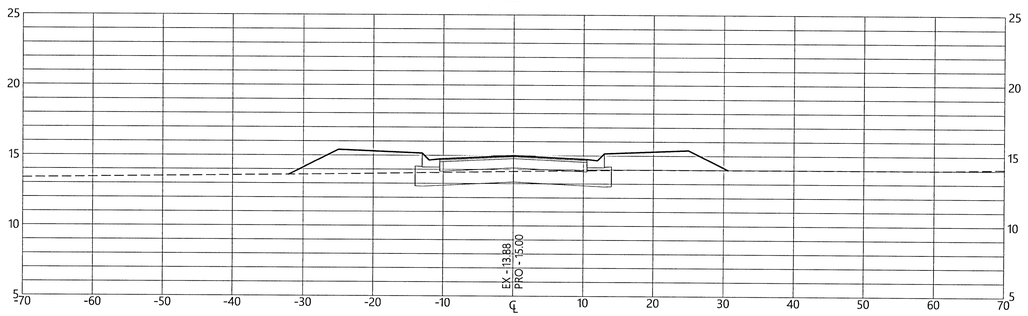

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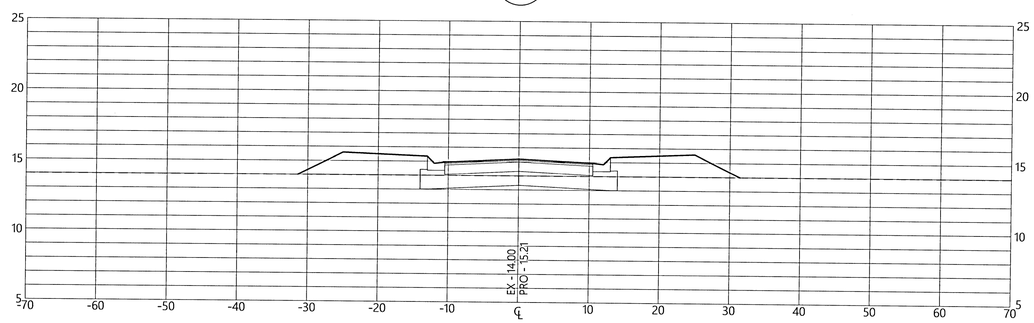

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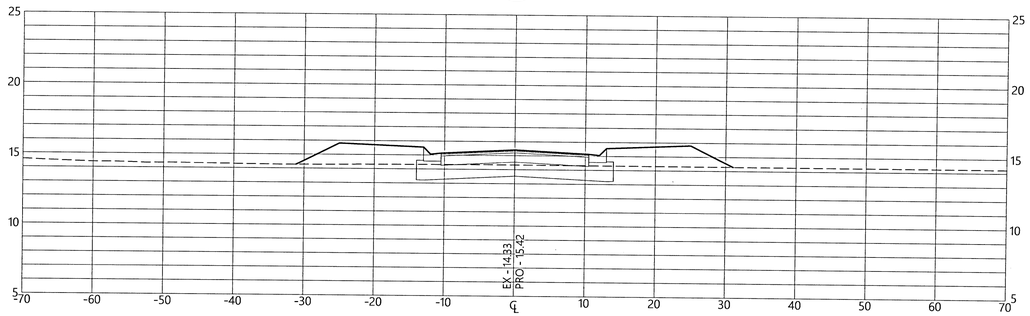

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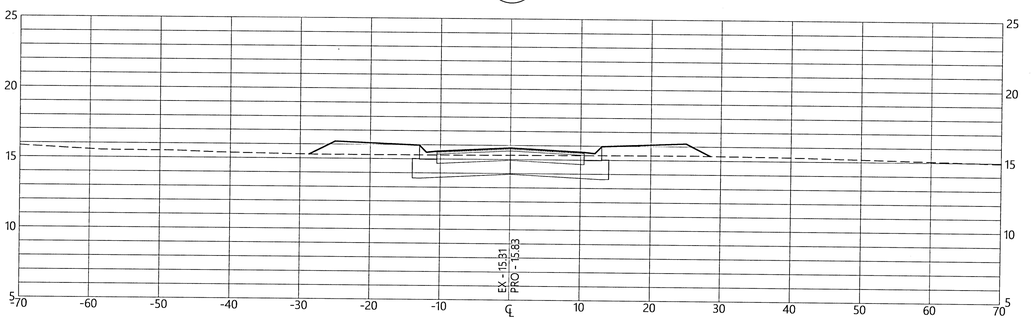

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801 W. Romana Street, Suite A, Pensacola, FL 32502
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TODD M WHEELER LICENSE No 92378 STATE OF FLORIDA PROFESSIONAL ENGINEER 11/19/2021

TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

Construction Plans for

HERON'S LANDING TOWNHOMES

Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

Great Herons Drive
Cross-Sections

Job No. 21-112P
Date: 10/6/2021
Drawn By: CAB
Checked By: ENL

SHEET NUMBER

27

Horizontal Scale: 1" = 10'
Vertical Scale: 1" = 5'

12 + 50

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11 + 50

11 + 00

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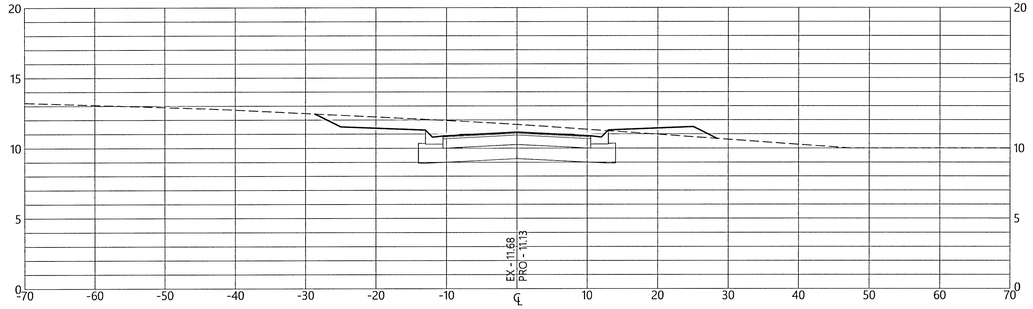

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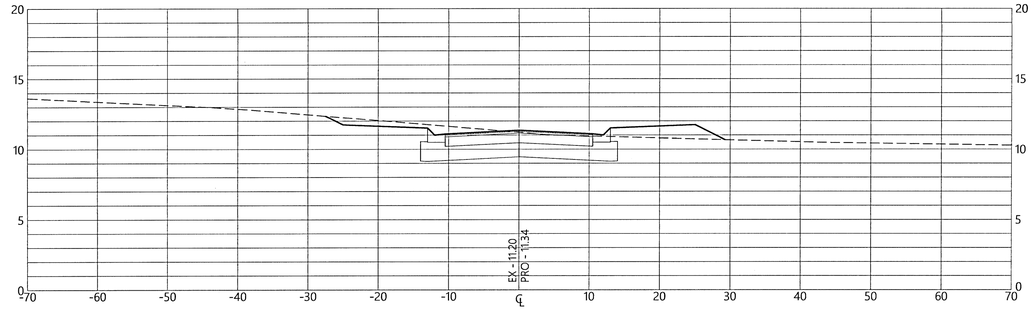

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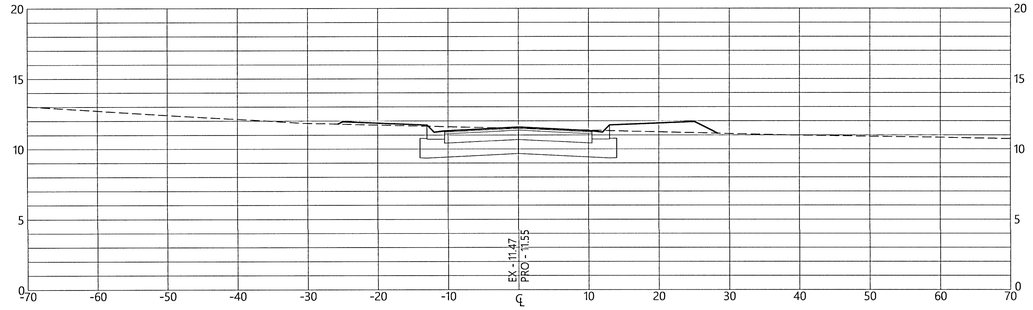

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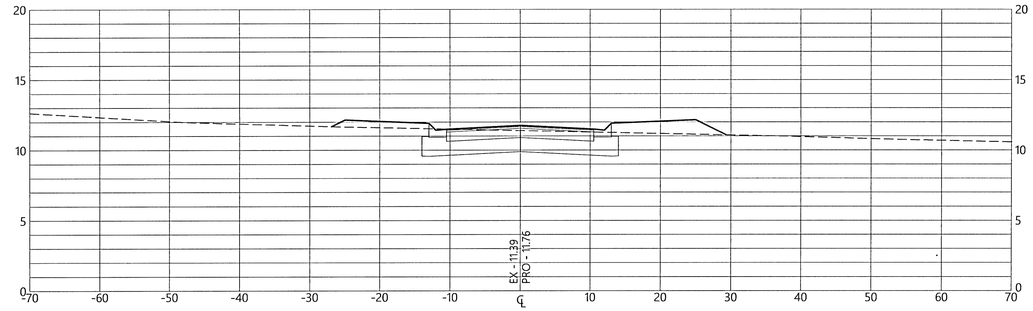

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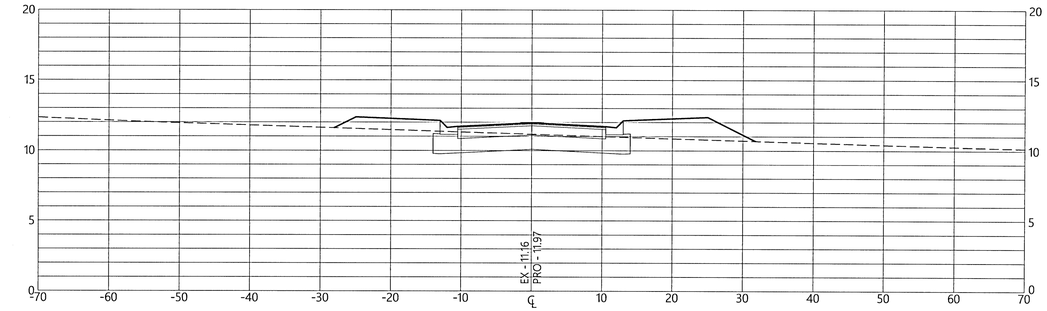

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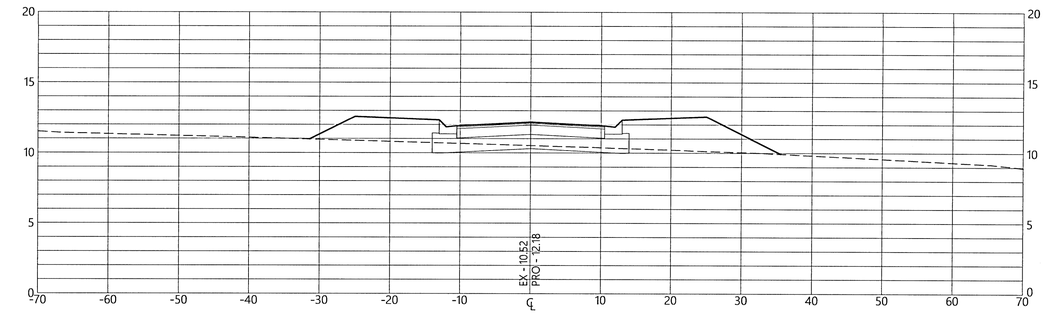

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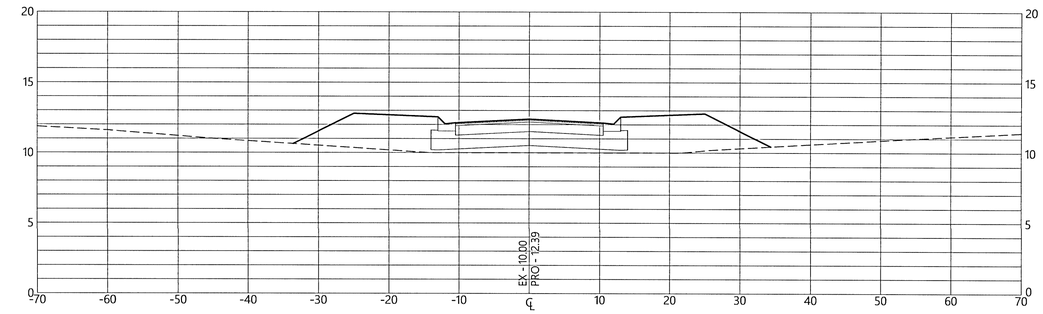

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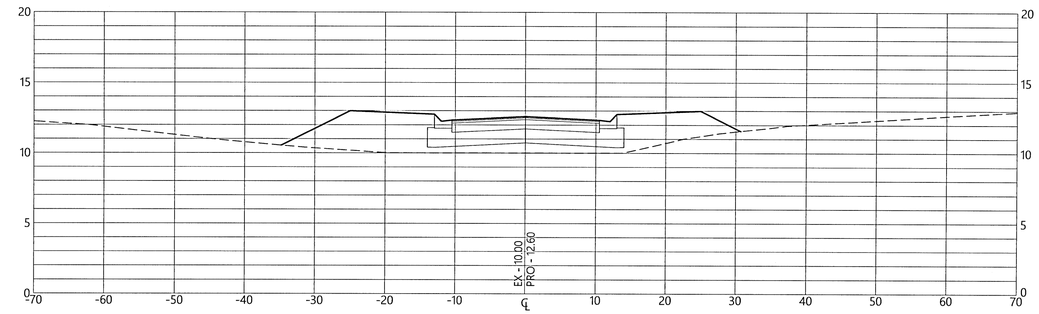

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HERON'S LANDING TOWNHOMES

Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

Great Herons Loop
Cross-Sections

Job No. 21-112P
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Drawn By: CAB
Checked By: ENL

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29

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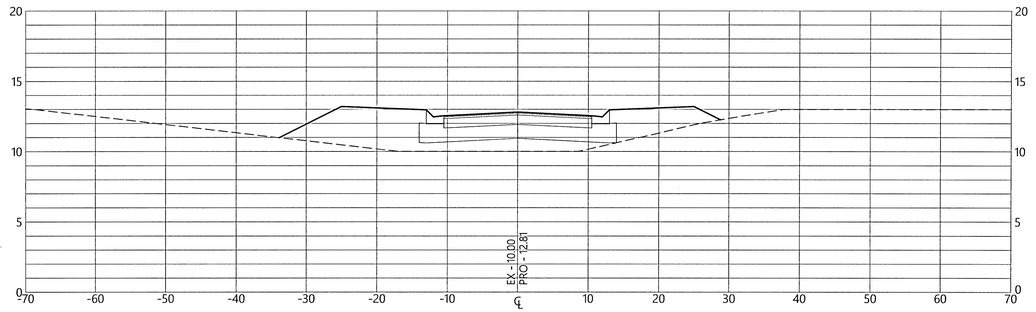
4 + 50



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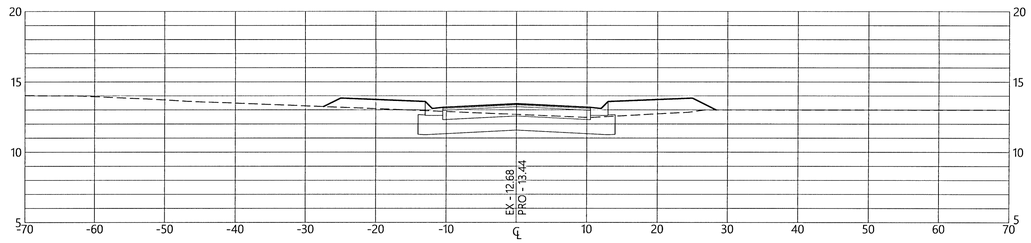

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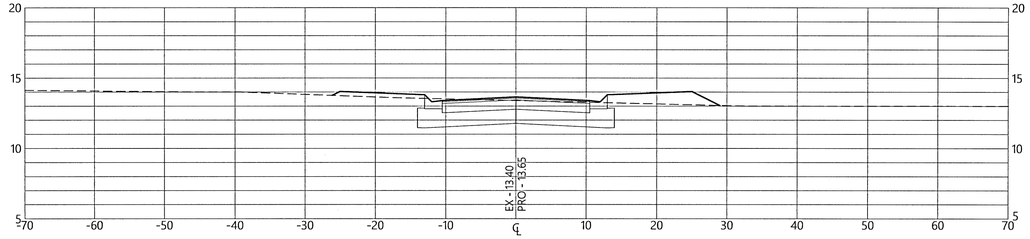

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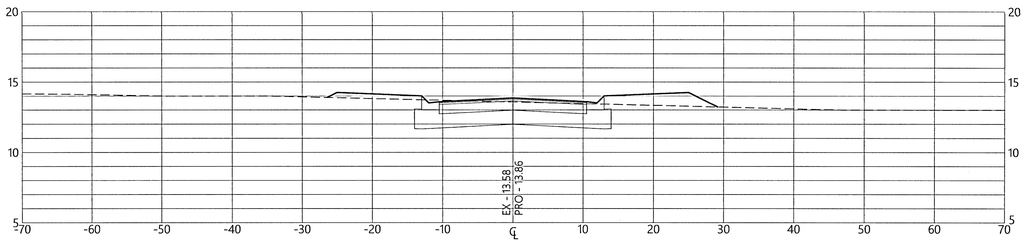

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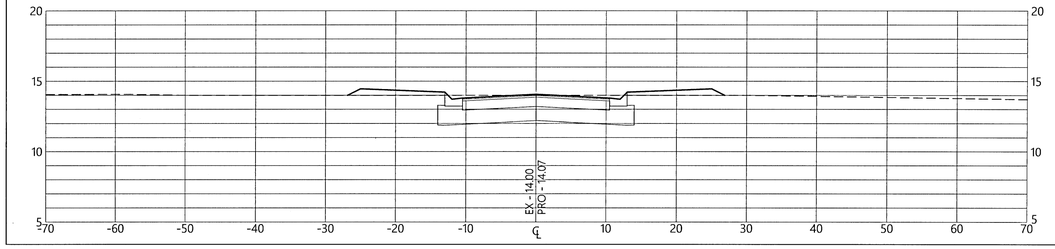

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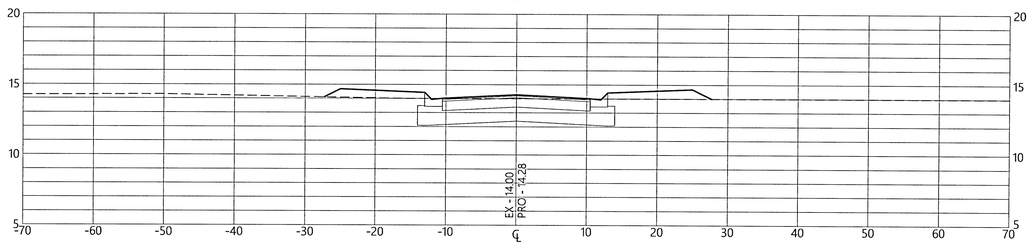

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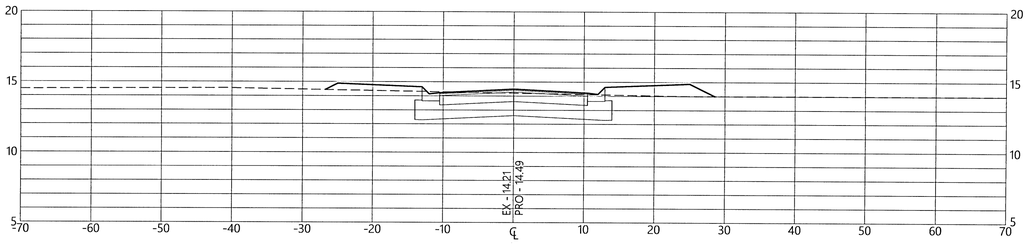

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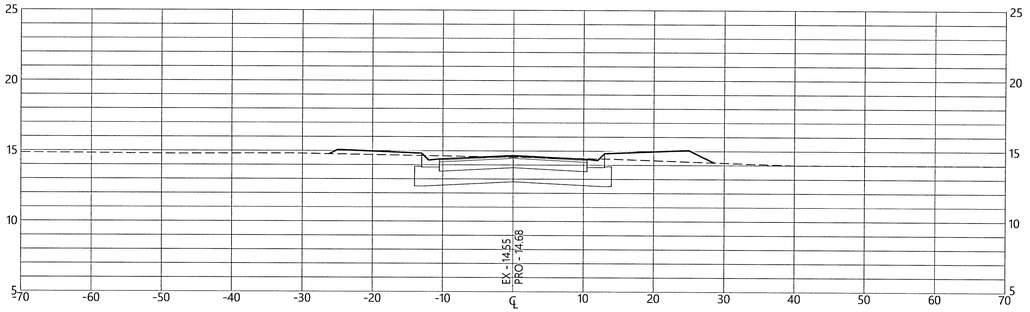

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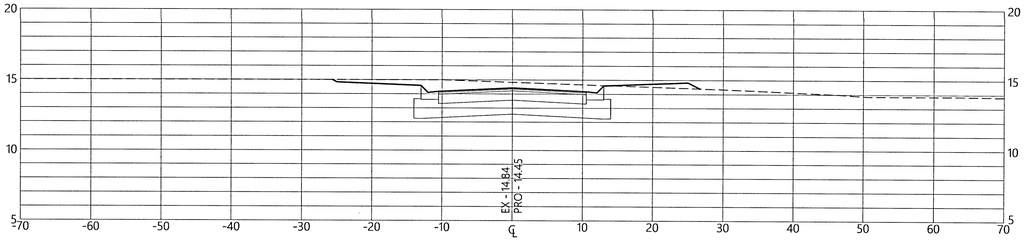

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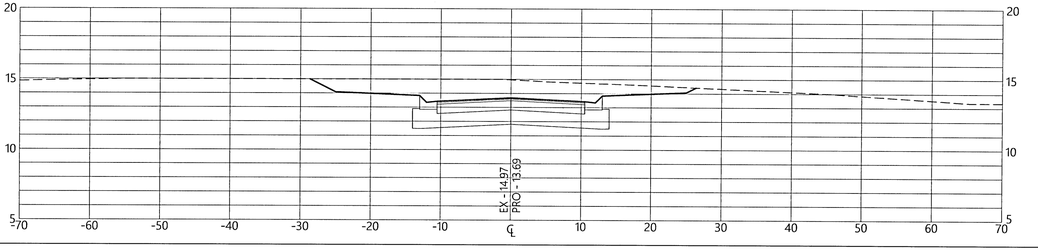

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TODD M. WHEELER LICENSE No 92378 STATE OF FLORIDA PROFESSIONAL ENGINEER 11/19/2021

TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

Construction Plans for
HERON'S LANDING TOWNHOMES
Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

Great Herons Loop
Cross-Sections

Job No.	21-112P
Date:	10/6/2021
Drawn By:	CAB
Checked By:	ENL

SHEET NUMBER
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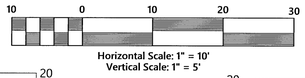

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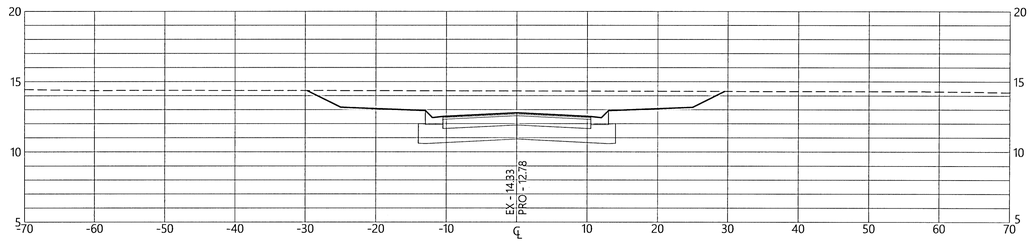

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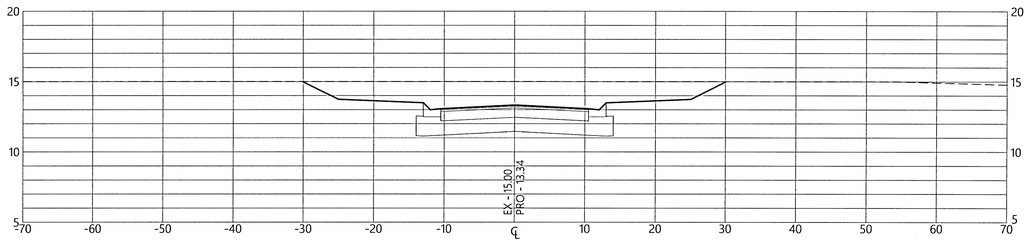

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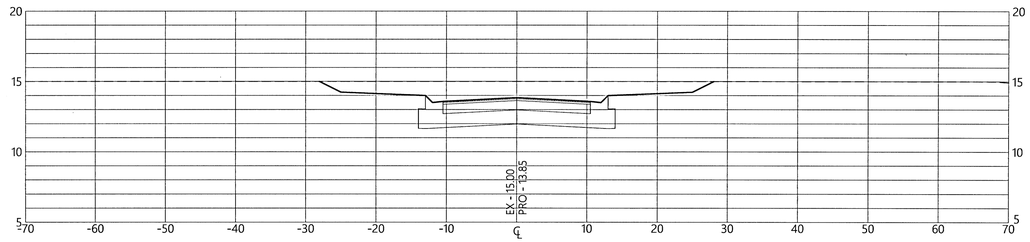

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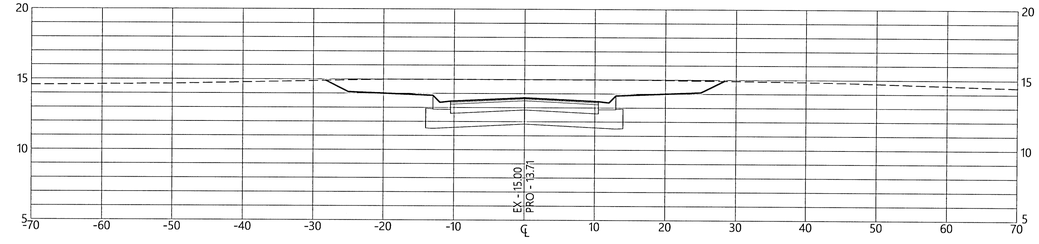

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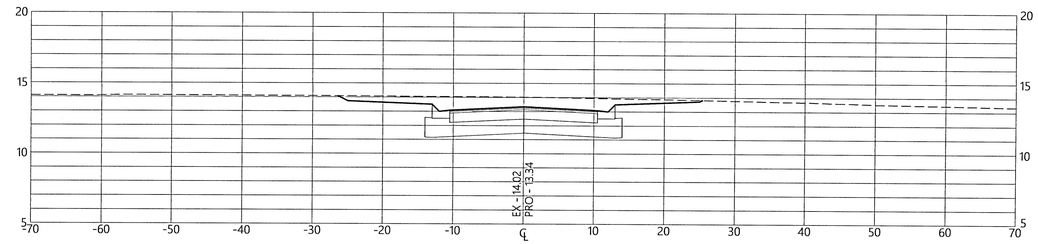

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Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

Little Bittern Road
Cross-Sections

Job No.	21-112P
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Drawn By:	CAB
Checked By:	ENL

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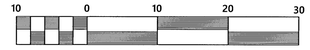

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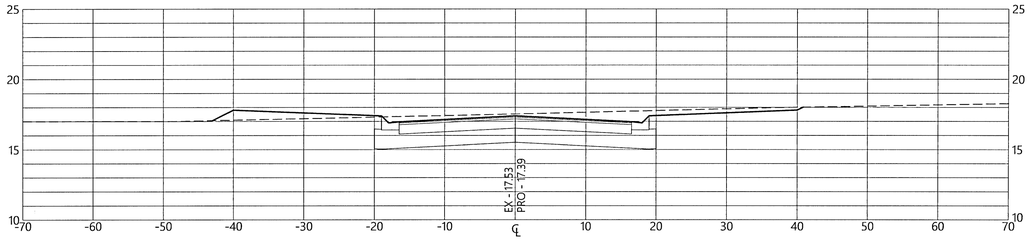

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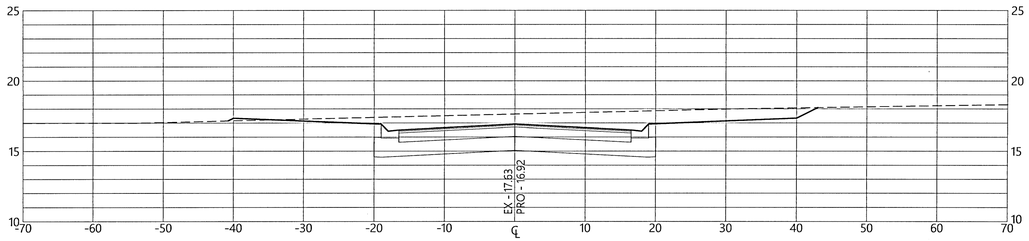

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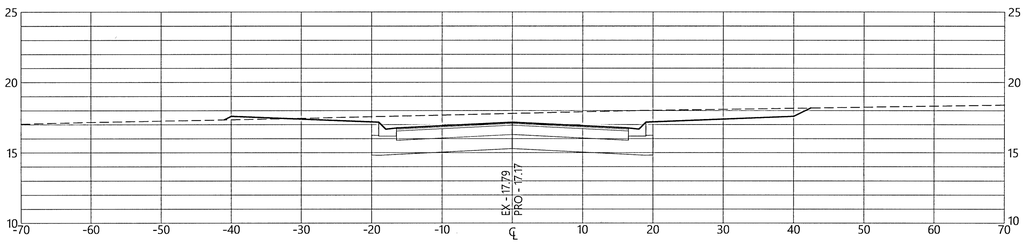

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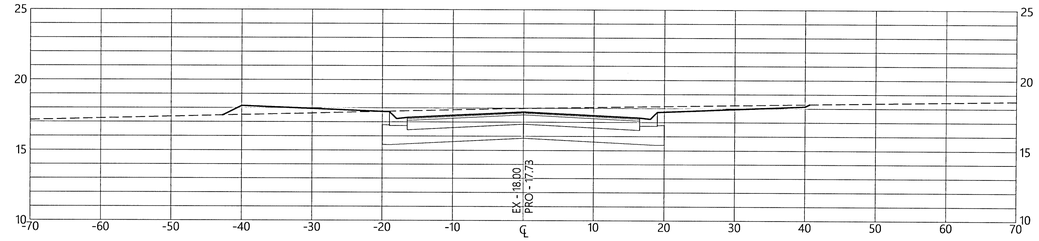

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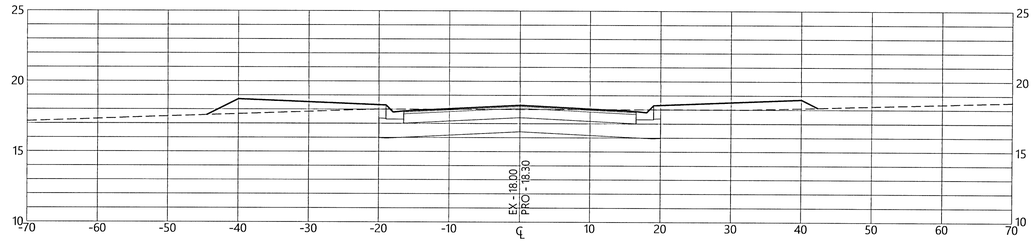

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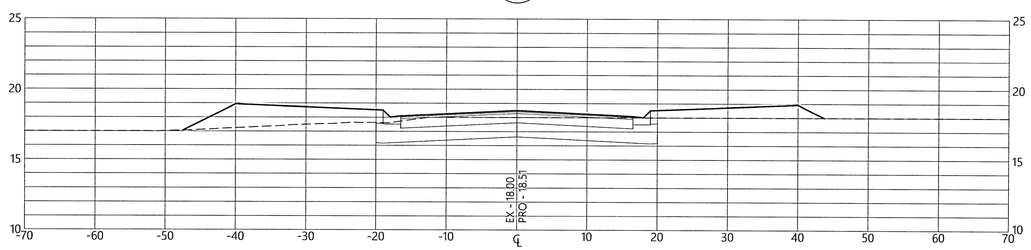

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Cross-Sections

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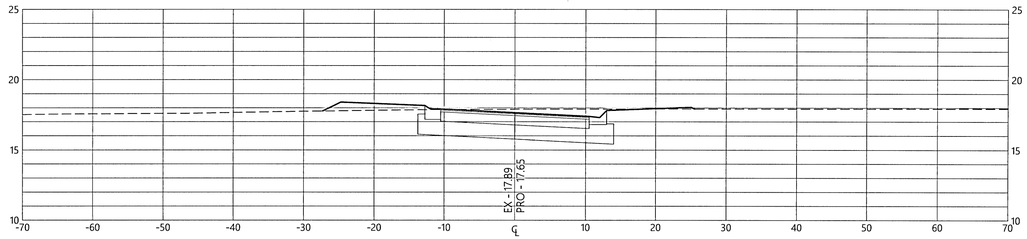

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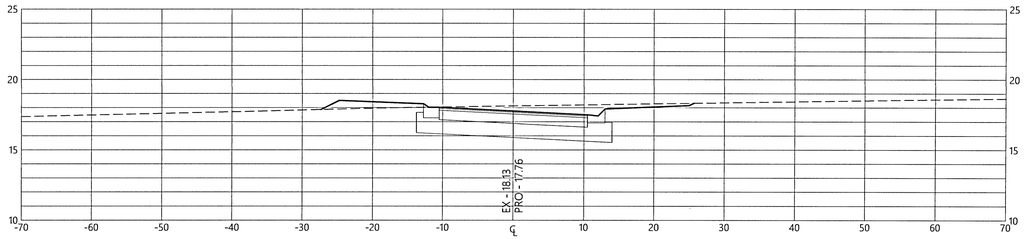

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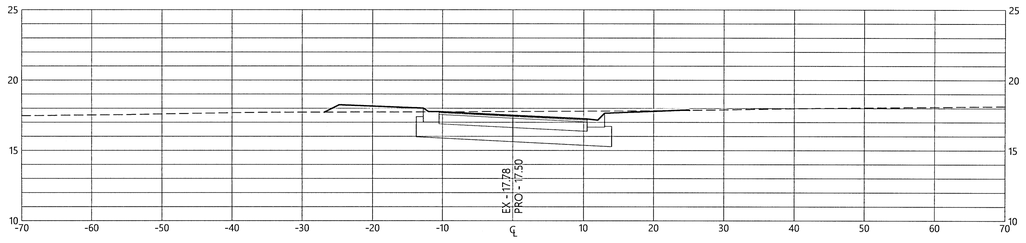

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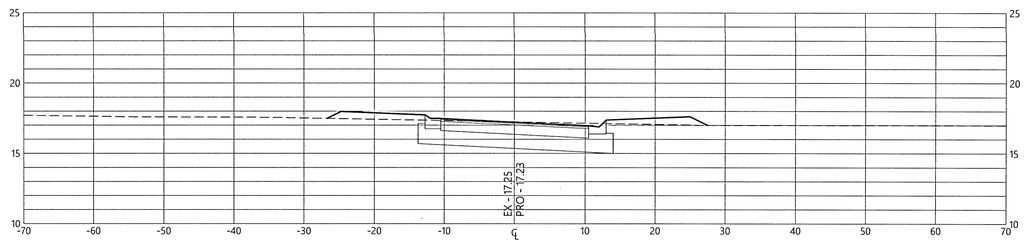

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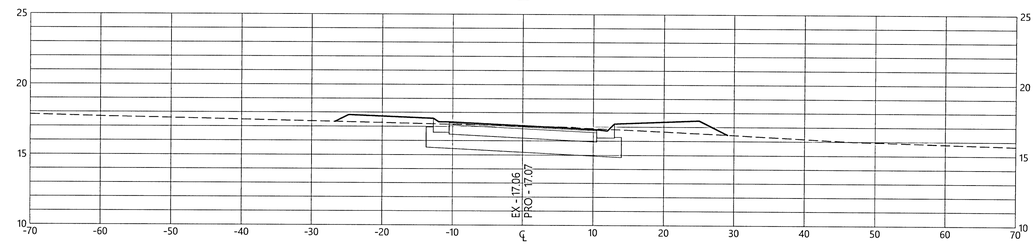

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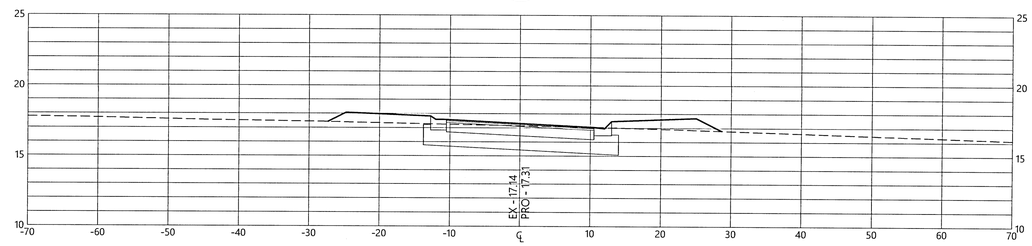

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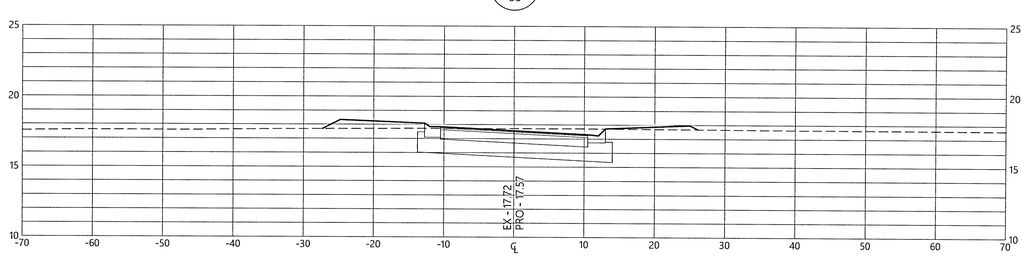

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MULLINS, LLC
CIVIL ENGINEERING, DEVELOPMENT DESIGN
SURVEYING
801 W. Romana Street, Suite A, Pensacola, FL 32502
(850) 462-8412

TODD M WHEELER LICENSE No 92378 STATE OF FLORIDA PROFESSIONAL ENGINEER 11/19/2021

TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

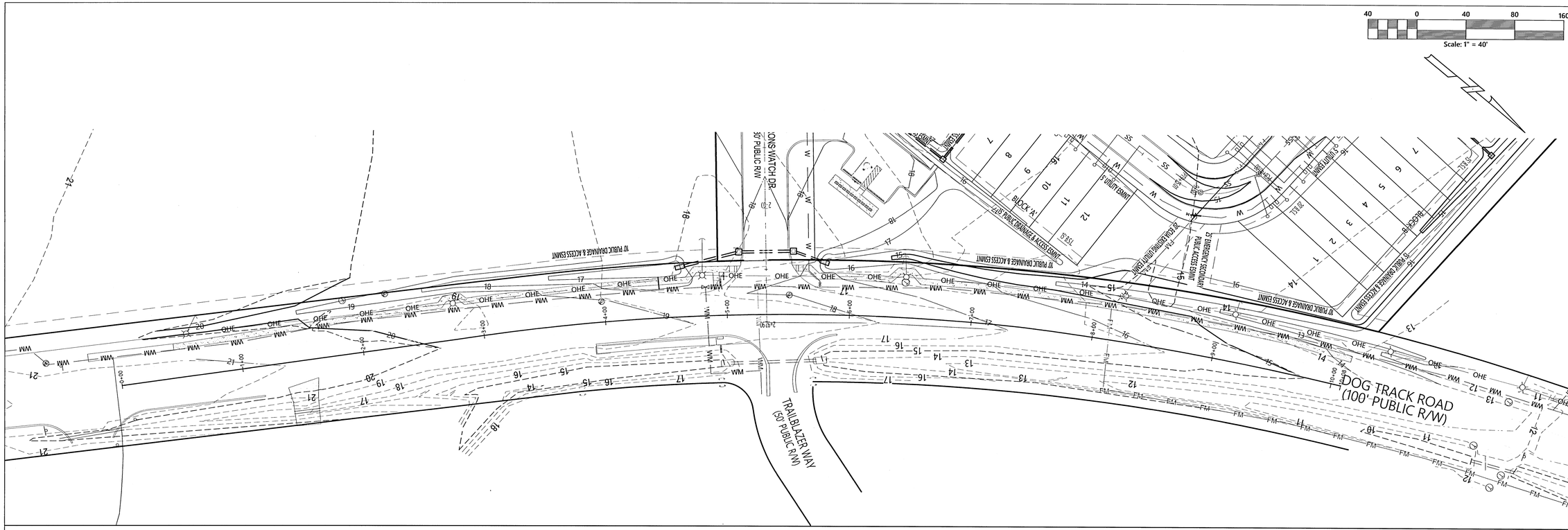
Construction Plans for
HERON'S LANDING TOWNHOMES
Escambia County, FL

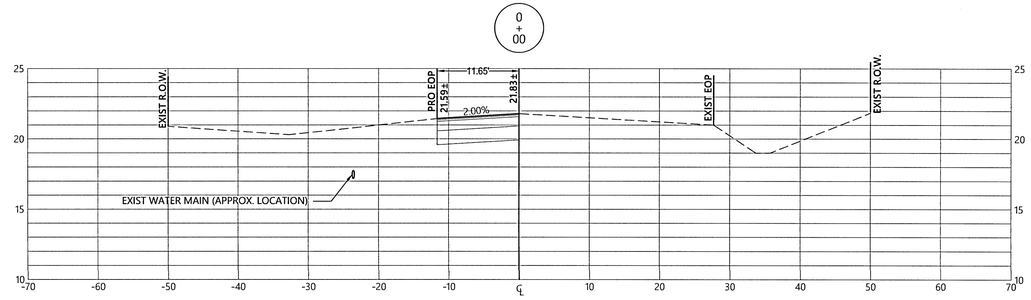
PREPARED FOR: Heron's Landing Development LLC

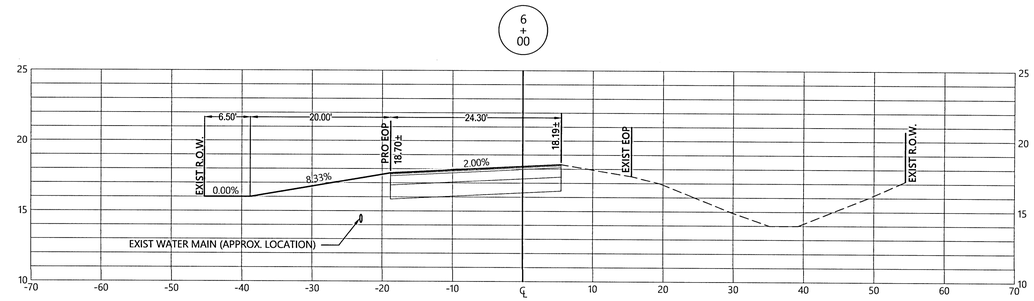
Roundabout
Cross-Sections

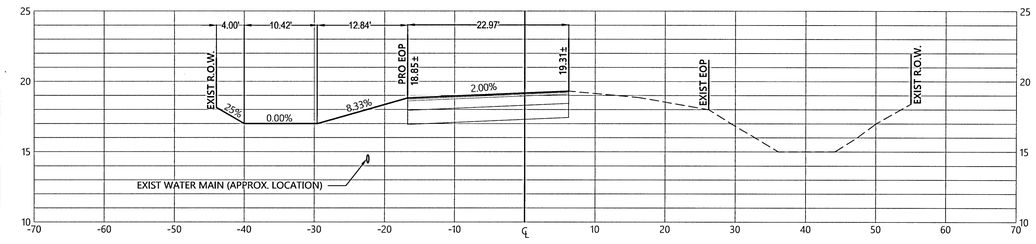
Job No. 21-112P
Date: 10/6/2021
Drawn By: CAB
Checked By: ENL

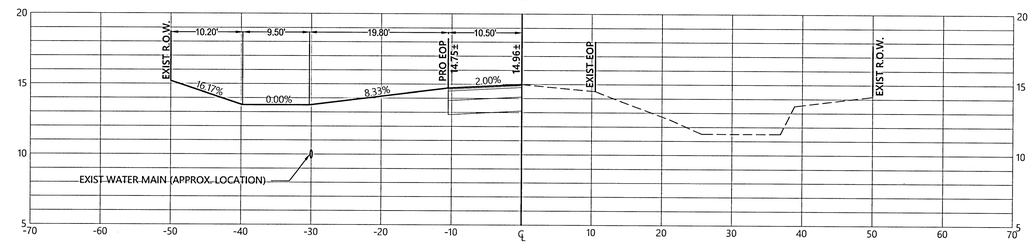
SHEET NUMBER
33











10 0 10
Horizontal Scale: 1" = 10'
Vertical Scale: 1" = 5'

REVISIONS

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TODD M WHEELER LICENSE No 92378 STATE OF FLORIDA PROFESSIONAL ENGINEER 11/18/2021

TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

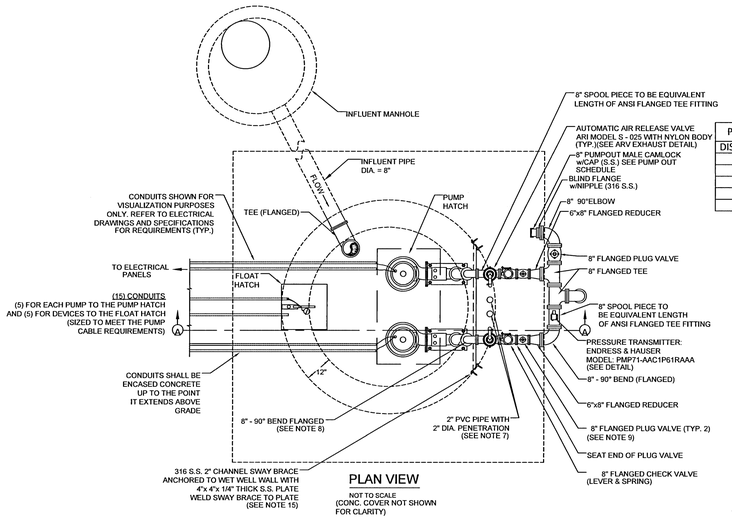
Construction Plans for
HERON'S LANDING TOWNHOMES
Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

DOG TRACK ROAD CROSS-SECTIONS

Job No. 21-112P
Date: 10/6/2021
Drawn By: CAB
Checked By: ENL

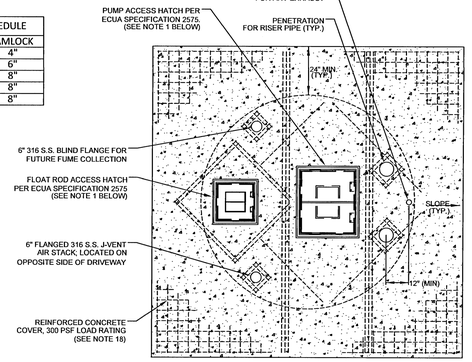
SHEET NUMBER
34



PLAN VIEW

NOT TO SCALE
(CONC. COVER NOT SHOWN FOR CLARITY)

PUMP OUT SCHEDULE	
DISCHARGE	CAMLOCK
4"	4"
6"	6"
8"	8"
10"	8"
12"+	8"

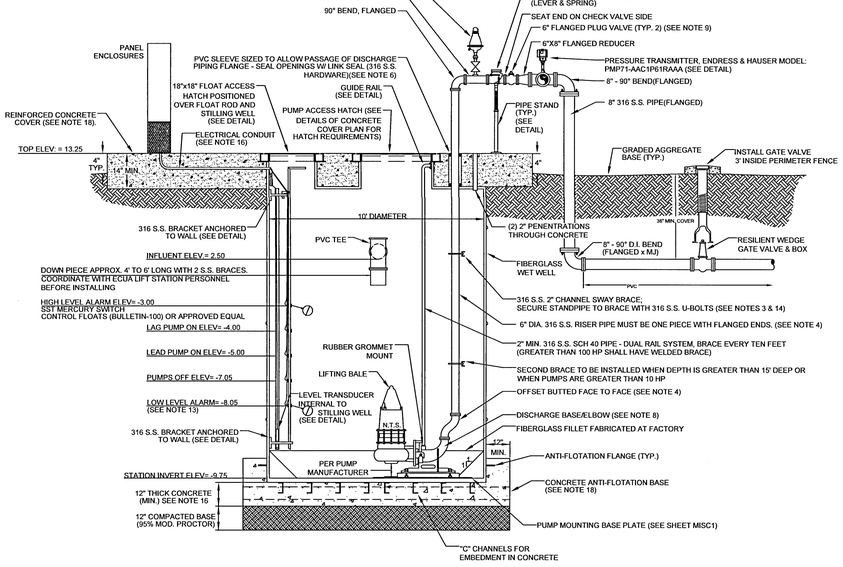


NOTES:

1. FAILURE TO PROVIDE HATCHES AS SPECIFIED IN SECTION 2575 WILL RESULT IN ECUA'S REJECTION OF ACCESS HATCH AND/OR WET WELL.
2. ALL ALUMINUM SURFACES IN CONTACT WITH CONCRETE SHALL BE COATED WITH A BITUMASTIC PAINT.

CONCRETE COVER PLAN

NOT TO SCALE



WET WELL
CROSS SECTION A-A

NOT TO SCALE

GENERAL LIFT STATION NOTES

1. THE LOCATION OF INFLUENT LINES, WATER SUPPLY, ETC. ARE DRAWN OUT OF ORIENTATION ON SECTIONAL VIEW FOR CLARITY. SEE PLAN VIEW FOR PROPER ORIENTATION.
2. ALL PENETRATIONS IN WET WELL WALL FOR PIPING, ELECTRICAL, ETC. SHALL BE SEALED & SLEEVED.
3. TO PROTECT RISER PIPE FROM SWAY BRACE, EITHER WRAP PIPE WITH RUBBER SHEETING OR INSERT ALL U-BOLTS THROUGH RUBBER HOSE.
4. PIPING WITHIN THE WET WELL SHALL BE FLANGED SCHEDULE 10 316 STAINLESS STEEL. INTERMEDIATE JOINTS SHALL BE WELDED. FITTINGS WITHIN THE WET WELL SHALL BE FLANGED 316 STAINLESS STEEL. ALL NUTS, BOLTS & ACCESSORIES WITHIN THE WET WELL SHALL BE 316 STAINLESS STEEL.
5. PIPE AND FITTINGS OUTSIDE OF THE WET WELL AND ABOVE GROUND SHALL BE 316 STAINLESS STEEL (FLANGED, SCHEDULE 10). ALL WELD-ON FLANGES SHALL BE 125# RF SOCKET- WELD FLANGE OR RF WELD NECK FLANGE (TYPE). ALL BOLTS, WASHERS AND NUTS SHALL BE 316 STAINLESS STEEL AND SHALL BE COATED WITH "NEVER SEIZE" COMPOUND.
6. THE ANNULAR SPACE BETWEEN CONCRETE COVER AND RISER PIPE SHALL BE SEALED VIA LINK SEAL.
7. PROVIDE TWO (2) - 2" PIPE PENETRATIONS THROUGH CONCRETE WITH 316 STAINLESS STEEL FEMALE THREADED HALF-COUPLINGS AT TOP AND CAPPED FLUSH WITH TOP OF SLAB. BOTTOM OF PENETRATION SHALL BE OPEN-ENDED.
8. THE PUMP IMPELLER, VOLUTE, AND BACKPLATE SHALL BE COATED WITH BELZONA 1321 CERAMIC S-METAL. (UNLESS OTHERWISE SPECIFIED BY OWNER)
9. PLUG VALVES SHALL HAVE AN ALLOWABLE FLOW CAPACITY EQUAL TO 100% OF THE ADJACENT PIPE AREA, AND SHALL ALLOW "PIGGING".
10. THE INTERIOR OF ALL VALVES SHALL BE COATED.
11. CONTRACTOR SHALL PROVIDE 2-1" CONDUITS (ONE FOR POWER AND ONE FOR SIGNAL) FOR FLOW METER (IF REQUIRED). CONTRACTOR SHALL TERMINATE WIRES IN OWNER PROVIDED ELECTRICAL CONTROL CABINET.
12. ALL SPOOL PIECES SHALL BE EQUIVALENT LENGTH OF ANSI TEE-LENGTH FITTING.
13. LOW LEVEL ALARM ELEV. TO BE SET IN COORDINATION WITH ECUA AND PUMP MANUFACTURER.
14. CONNECTION OF SWAY BRACE MOUNTING PLATE SHALL BE COORDINATED WITH PUMP MANUFACTURER.
15. A SECOND BRACE IS TO BE INSTALLED WHEN THE DEPTH OF WET WELL IS GREATER THAN 10' DEEP OR WHEN THE PUMPS ARE GREATER THAN 10 HP.
16. UNDERGROUND ELECTRICAL CONDUIT SHALL BE RIGID PER ELECTRICAL CODE. CONTRACTOR SHALL ACHIEVE THIS VIA THE USE OF METAL CONDUIT, OR PVC ENCASED IN CONCRETE, OR ALTERNATE METHOD AT THE ECUA'S APPROVAL TO MEET CODE.
17. FOR ALL SYSTEMS REQUIRING BRACES: PROVIDE MINIMUM OF THREE (3) 316 STAINLESS STEEL BRACES, EVENLY SPACED. ADD ADDITIONAL BRACES IF BRACE SPACING EXCEEDS 10'.
18. CONTRACTOR SHALL PROVIDE DESIGN PERFORMED BY FLORIDA LICENSED P.E. AND SHALL INCLUDE DESIGN IN DELEGATED ENGINEERING DOCUMENTS.

SHEET BASED ON DS-3.1

REVISIONS

Date:	---
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(850) 462-8412

TODD M WHEELER LICENSE No 92378 STATE OF FLORIDA PROFESSIONAL ENGINEER 11/16/2021

TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

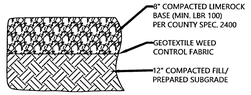
Construction Plans for
HERON'S LANDING TOWNHOMES
Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

Liftstation Details

Job No.	21-112P
Date:	10/6/2021
Drawn By:	CAB
Checked By:	ENL

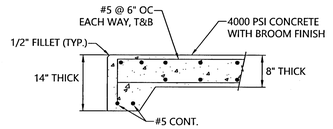
SHEET NUMBER
35



NOTES:

1. ALL DEPTHS ARE COMPACTED DEPTHS.
2. PREPARE SUBGRADE BY CLEARING AND GRUBBING, STRIPPING TOPSOIL AND PLACING GEOTEXTILE FABRIC.
3. FILL FOR LIFT STATION SITE SHALL BE SAND MECHANICALLY COMPACTED TO 95% MODIFIED PROCTOR DENSITY IN MAXIMUM 12-INCH LIFTS LOOSE MEASUREMENT TO ACHIEVE CORRECT GRADE.

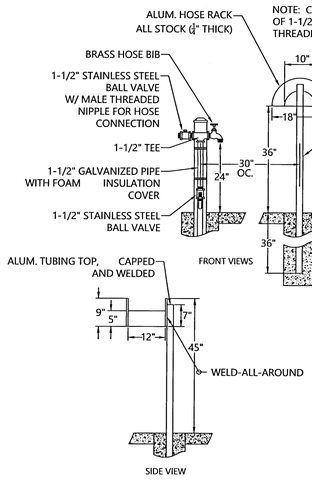
DS-4 / 1 **GRADED AGGREGATE BASE DETAIL**
NOT TO SCALE

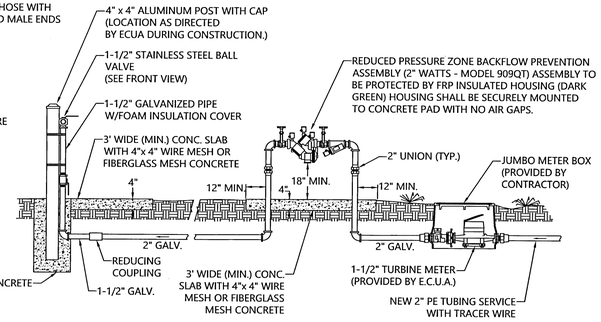


NOTES

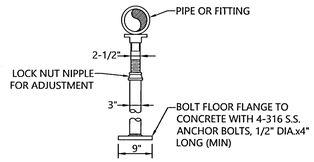
1. PAD DIMENSIONS PER PLANS.
2. PROVIDE EXPANSION JOINTS AND CRACK RELIEF JOINTS PER ACI STANDARDS.

DS-4 / 2 **GENERATOR PAD DETAIL**
NOT TO SCALE





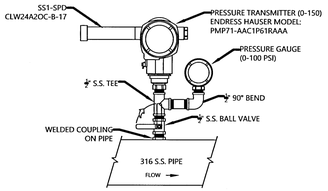
DS-4 / 3 **WASHDOWN STATION AND METER DETAIL**
NOT TO SCALE



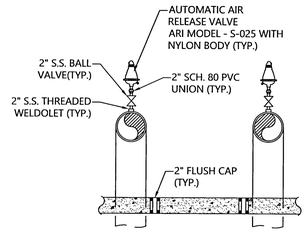
NOTES

1. ADJUSTABLE PIPE SUPPORT "ANVIL FIGURE 265" OR EQUAL
2. ALL SUPPORT MATERIALS SHALL BE 316 S.S.
3. THE COMPONENTS OF THE VALVE SUPPORT SHALL BE ENLARGED AS APPROVED BY ECUA.
4. FIT A PIPE STAND FOR EACH DISCHARGE PIPE; WET WELLS WITH A FLOW METER SHALL ALSO HAVE A PIPE STAND ON EACH SIDE OF THE FLOW METER.

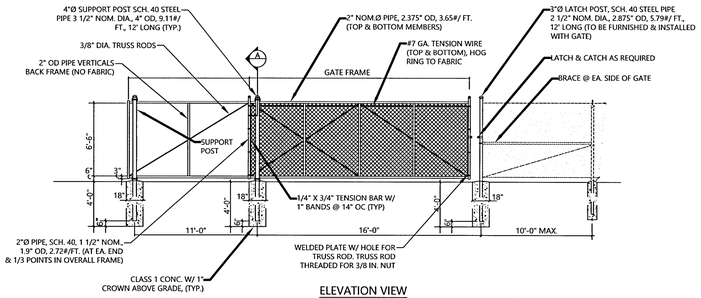
DS-4 / 4 **ADJUSTABLE PIPE STAND DETAIL**
NOT TO SCALE



DS-4 / 5 **PRESSURE TRANSMITTER DETAIL**
NOT TO SCALE



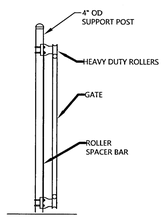
DS-4 / 6 **ARV EXHAUST DETAIL**
NOT TO SCALE



ELEVATION VIEW
CANTILEVERED SLIDE GATE
TYP. FRAME @ SINGLE 16' GATES

NOTE:

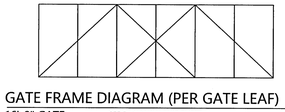
NO FABRIC SHOWN IN FRONT OF BACK FRAME FOR CLARITY. PROVIDE BRACE @ MID-POINT EACH SIDE OF GATE WITH 3/8" DIA. TRUSS ROD IN BOTTOM HALF (NOT SHOWN FOR CLARITY)



FENCE POST SCHEDULE	
TYPE SIZE	
LINE POST	2-1/2" Ø
BRACE POST**	3" Ø
CORNER POST	3" Ø
GATE POST	4" Ø

** EVERY 100'

A SIDEVIEW OF GATE POST
NTS

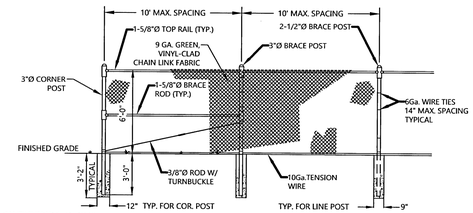


GATE FRAME DIAGRAM (PER GATE LEAF)
16'-0" GATE

SEE ELEVATION THIS SHEET FOR ADDITIONAL NOTES.
SEE PLANS FOR LOCATION.

GATE OPENING	GATE FRAME	BACK FRAME
16'-0"	16'-3"	11'-0"

CANTILEVERED SLIDE GATE DIMENSIONS PER GATE LEAF



NOTE:

ALL FENCING ELEMENTS TO BE MANUFACTURER'S FACTORY-APPLIED DARK GREEN COLOR.

6' CHAINLINK FENCE DETAIL
NTS

DS-4 / 7 **CANTILEVERED GATE + FENCING DETAIL**
NOT TO SCALE

SHEET BASED ON DS-4

REVISIONS

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Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

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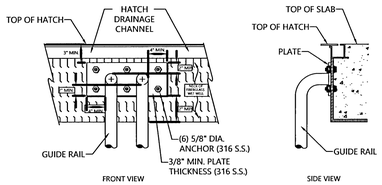
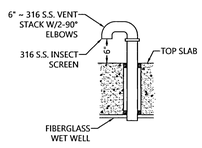


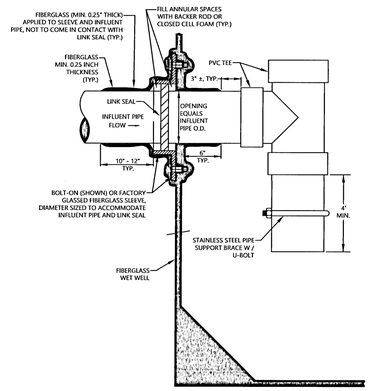
NOTES

1. REQUIRE SUBMITTAL FOR "STYLE" OF RAIL ATTACHMENT.
2. GUIDE RAILS TO BE 2" MIN. 316 S.S. WELDED OR BOLTED TO PLATE IN A MANNER ACCEPTABLE TO ECUA.

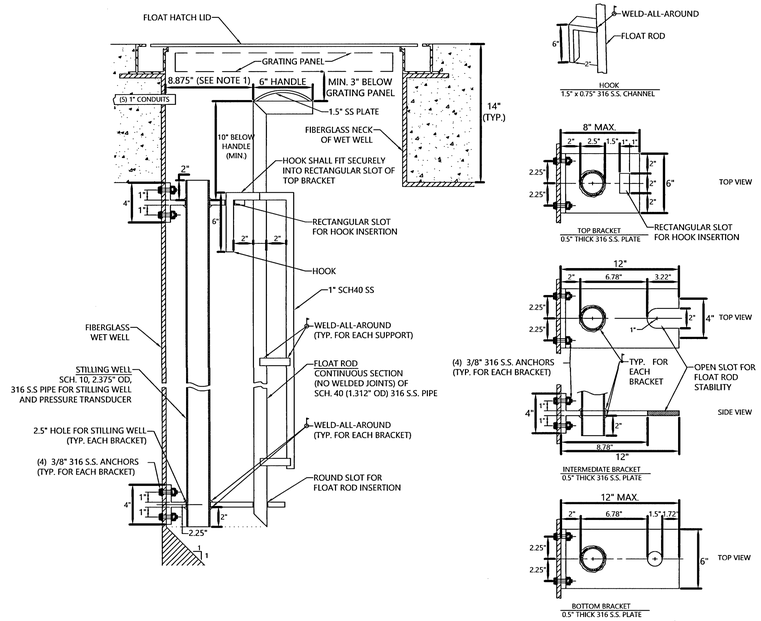
DS-5 / 1 **GUIDE RAIL DETAIL**
NOT TO SCALE



DS-5 / 3 **J-VENT DETAIL**
NOT TO SCALE



DS-5 / 4 **INFLUENT PIPE CONNECTION DETAIL**
NOT TO SCALE



NOTES

1. THE BRACKET DIMENSIONS PROVIDED WITH THIS DETAIL REQUIRE THE FIBERGLASS NECK (FOR HATCH) AND FLOAT ROD PLACEMENT TO BE POSITIONED PER THE DIMENSIONS SHOWN. SHOULD THE CONTRACTOR ALTER THE FIBERGLASS NECK AND FLOAT ROD PLACEMENT DIMENSIONS FROM WHAT IS SHOWN IN THIS DETAIL, THEN CONTRACTOR SHALL SUPPLY NEW BRACKET DRAWINGS WITH NEW DIMENSIONS AS PART OF SHOP DRAWING SUBMITTAL.

2. SPACING BETWEEN BRACKETS SHALL NOT BE MORE THAN 10 FEET.

DS-5 / 2 **MOUNTING BRACKETS FOR STILLING WELL AND FLOAT ROD**
NOT TO SCALE

SHEET BASED ON DS-5

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801 W. Romana Street, Suite A Pensacola, FL 32502
(850) 462-8412

TODD M WHEELER LICENSE No 92378 STATE OF FLORIDA PROFESSIONAL ENGINEER 11/19/2021

TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

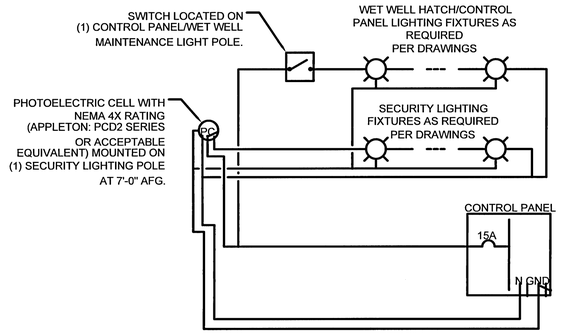
Construction Plans for
HERON'S LANDING TOWNHOMES
Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

Liftstation Details

Job No.	21-112P
Date:	10/6/2021
Drawn By:	CAB
Checked By:	ENL

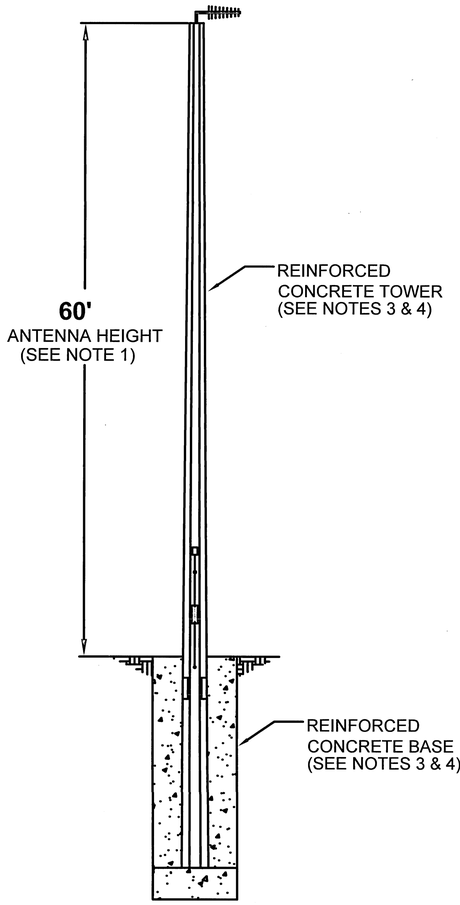
SHEET NUMBER
37



DS-7 / 1 TYPICAL LIGHTING CONTROL DIAGRAM

NOT TO SCALE

SHEET BASED ON DS-7

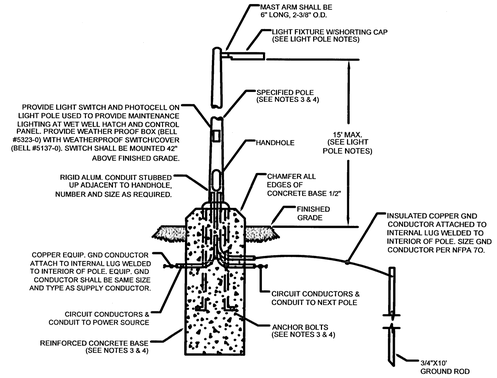


DS-6 / 2 CONCRETE TOWER/BASE FOR SCADA ANTENNA

NOT TO SCALE

NOTES:

1. ANTENNA HEIGHT PER RADIO PATH STUDY.
2. CONTRACTOR CAN SELECT FROM EITHER ANTENNA TOWER OPTION. ROHN TOWER/BASE SHALL BE CONSTRUCTED PER DETAIL THIS SHEET, CONCRETE TOWER/BASE SHALL BE CONSTRUCTED PER DELEGATED ENGINEERING DOCUMENTS.
3. CONTRACTOR SHALL PROVIDE DESIGN PERFORMED BY FLORIDA LICENSED P.E. AND SHALL INCLUDE DESIGN IN DELEGATED ENGINEERING DOCUMENT.
4. FOR WIND LOAD CALCULATIONS, ASSUME WIND SPEED OF 164 MPH, EXPOSURE "D" PER ASCE 7-10/FBC 2010 WIND DATA, AS WELL AS LOOSE, SANDY SOILS.



DS-6 / 3 SECURITY LIGHT AND WORK LIGHT DETAIL

NOT TO SCALE

LIGHT POLE NOTES:

A. FIXTURE SHALL BE LED, (RAB - ALED-13Y FOR GATE & ALED 18Y FOR WET WELL), 120V, WITH PHOTOCONTROL & SWITCH, POLE MOUNTED @ 42" (OR ENGINEER APPROVED EQUAL)

B. REFER TO SPECIFICATIONS SECTION 16521 "EXTERIOR LIGHTING" FOR ADDITIONAL REQUIREMENTS.

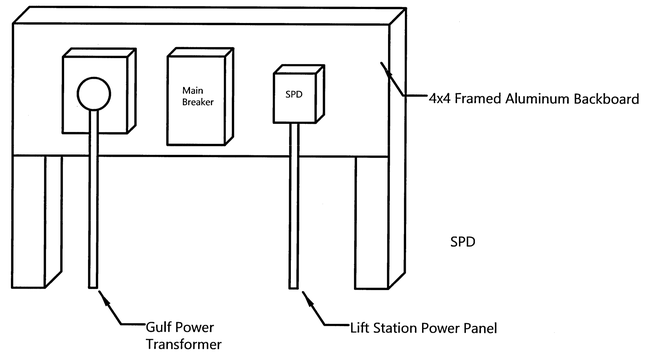
C. LIGHT FIXTURES SHALL BE MOUNTED AT 15'-0" (MAXIMUM) ABOVE FINISHED GRADE.

D. LIGHTING FIXTURE LAYOUT SHALL BE BASED UPON ACHIEVING 1 FOOT CANDLES (+/- 20%) AT THE FRONT OF THE CONTROL PANEL (WORK-PLANE OF 24" AFG) AND AT THE WET WELL ACCESS HATCH (WORKPLANE OF 0" AFG).

E. GENERAL SECURITY LIGHTING SHALL ENCOMPASS ACCESS GATE AND ALL PIPING/EQUIPMENT AT A MIN: AVERAGE 1 FOOT-CANDLE (+/- 20%, AT WORKPLANE OF 0" AFG).

F. REFER TO LIGHTING CONTROL DIAGRAM ON SHEET DS-7 FOR ADDITIONAL REQUIREMENTS.

G. ELECTRICAL SERVICE FOR POWER METER AND MAIN DISCONNECT WILL BE PLACED UNDERGROUND.



POWER METER AND MAIN DISCONNECT BACKBORAD

NOT TO SCALE

SHEET BASED ON DS-6

REVISIONS

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TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

Construction Plans for
HERON'S LANDING TOWNHOMES
Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

Liftstation Details

Job No.	21-112P
Date:	10/6/2021
Drawn By:	CAB
Checked By:	ENL

SHEET NUMBER

38

EOR's Summary of Performance and Design Criteria for Contractor's Delegated Engineering Documents

This sheet acts as a summary only. Contractor is required to thoroughly examine the remainder of these plans as well as ECUA's Engineering Manual for all performance and design criteria, which as a whole, is considered sufficient for Contractor's use in bidding and coordinating professional design sevices for the development of Contractor's Delegated Engineering Documents.

Delegated Engineering Design	EOR Supplied Design Criteria	Applicable Design Standards
Fiberglass Wet Well	Diameter (feet): 10' Depth (feet): 23.00'	Plans, ECUA Engineering Manual, ASTM D3753, Fiberglass Manufacturer's Recomendations
Pump Mounting Baseplate	See Wet Well dimensions above and List of Allowable Pumps on Pump Selection Worksheet	Plans and ECUA Engineering Manual
Anti-flotation Concrete Base	See Wet Well dimensions above	Plans and ECUA Engineering Manual
Concrete Cover	See Site Plan for cover dimensions	Plans and ECUA Engineering Manual
Control Panel Base	See Control Panel information above and Site Plan for location	Plans and ECUA Engineering Manual
Electrical Control Panels	Panel Layout: ☐ Abutting ☒ Linear Service Voltage: ☒ 480V ☐ 240V Starter Type: ☐ FVNR ☐ RVSS ☒ VFD	Plans, ECUA Engineering Manual, and ECUA Design Standard Drawings DS-xx through DS-xx
Work/Security Light Poles and Bases	See Plans	Plans and ECUA Engineering Manual
Concrete Pole and Base for SCADA Antenna (if applicable)	Antenna Height (feet): 60'	Plans and ECUA Engineering Manual

SHEET BASED ON DS-8

REVISIONS
Date: ---
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Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

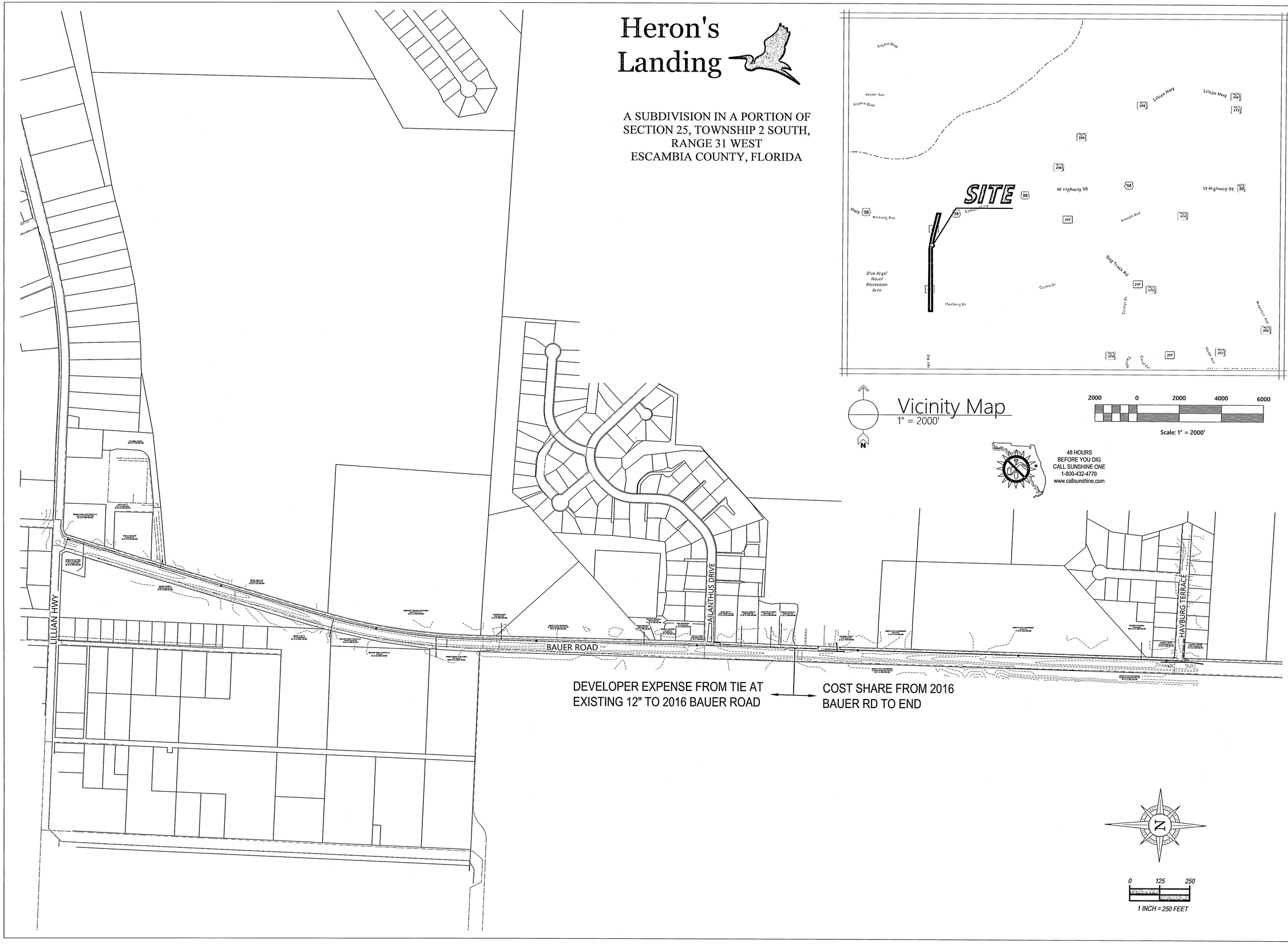
Liftstation Details

Job No. 21-112P
Date: 10/6/2021
Drawn By: CAB
Checked By: ENL

SHEET NUMBER
39

Heron's Landing

A SUBDIVISION IN A PORTION OF
SECTION 25, TOWNSHIP 2 SOUTH,
RANGE 31 WEST
ESCAMBIA COUNTY, FLORIDA



DEVELOPER EXPENSE FROM TIE AT EXISTING 12" TO 2016 BAUER ROAD

COST SHARE FROM 2016 BAUER RD TO END

Vicinity Map
1" = 2000'

2000 0 2000 4000 6000

Scale: 1" = 2000'

48 HOURS
BEFORE YOU DIG
CALL SUNSHINE ONE
1-800-432-4770
www.callsunshine.com

0 125 250

1 INCH = 250 FEET

Date:	
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LICENSE
No 92378
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
11/9/2021

TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

Master Plan

HERON'S LANDING TOWNHOMES
Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

OFF-SITE SANITARY FORCEMAIN

Job No. 20-123P
Date: 9/24/2021
Drawn By: CAB
Checked By: JWM

SHEET NUMBER
40

NOTE:
1. ALL 4" BORING MUST BE INSIDE A 12" CASING ACCORDING TO ECUA GUIDELINES.
2. CONTRACTOR TO FIELD VERIFIY PIPE SIZE AND LOCATION AND CONNECT PER ECUA STANDARDS.
3. PROPOSED FORCEMAIN BORINGS MUST BE PER ECUA STANDARDS AND SPECIFICATIONS.

BENDER FAMILY INVESTMENTS LLC
12275 LILLIAN HWY HWY
26-2S-31-3200-000-040

TIE TO 12" FM
SEE NOTE 2.

CONSTRUCT 222 LF
4" PVC FORCEMAIN

TIE TO 4" FM
SEE NOTE 2.

WAFFLE HOUSE INC
50 BAUER RD
26-2S-31-3200-000-030

100.0'
DRIVE

CONSTRUCT 207 LF
4" PVC FORCEMAIN

4" CHECK VALVE
(SEE DETAIL)

EXISTING 4" FORCEMAIN

TIE TO 4" FM
SEE NOTE 2.

75.0'
DRIVE

LILLIAN HWY

JUNIOR FOOD STORES
OF WEST FLORIDA INC
12311 LILLIAN HWY
26-2S-31-1000-006-001

BAUER ROAD

WARNER BOBBY L
1000 BLK BAUER RD
26-2S-31-1000-003-001

MARKS JAMES J JR
LILLIAN HWY (OFF)
25-2S-31-2202-000-001

INLINE FLUSHING STATION PER
DETAIL (EVERY 1000±) TYPICAL

MARKS JAMES J JR
LILLIAN HWY (OFF)
25-2S-31-2202-000-001

CONSTRUCT 2120 LF
4" PVC FORCEMAIN

TIE TO 4" FM
SEE NOTE 2.

UNIVERSITY PARKWAY DEVELOPERS
BAUER RD OFF OF
26-2S-31-3100-000-000

INLINE FLUSHING
STATION PER DETAIL
(EVERY 1000±) TYPICAL

TIE TO 4" FM
SEE NOTE 2.

BAUER ROAD

EXISTING 1.5" SERVICE

DROESE SCOTT C
1171 JOAQUIN RD
02-2S-32-6000-140-004

BRELAND HOMES COASTAL LLC
1100 BLK BAUER RD
26-2S-31-1000-001-001

BRELAND HOMES COASTAL LLC
JUAN RD
02-2S-32-6000-150-004

EXISTING 1.5" SERVICE

PARRIS EDWARD W JR & KIM R
1001 BAUER
RD02-2S-32-6000-170-004

N

0 25 50

1 INCH = 50 FEET

Date:
Date:
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PROFESSIONAL ENGINEER
12/01/2021

TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

Master Plan
HERON'S LANDING TOWNHOMES
Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

OFF-SITE SANITARY FORCEMAIN

Job No. 20-123P
Date: 12/01/2021
Drawn By: CAB
Checked By: JWM

SHEET NUMBER
41

TAVERNITI JOSEPH
1110 BAUER RD
27-2S-31-1000-000-000

40.0'
DRIVE

EXISTING 1.5" SERVICE

TIE TO 4" FM
SEE NOTE 2.

INLINE FLUSHING STATION PER
DETAIL (EVERY 1000+) TYPICAL

UNITED STATES GOVERNME
US 98W & BAUER RD HWY 293
04-2S-32-1000-000-000

CONSTRUCT 955 LF
4" PVC FORCEMAIN

BAUER ROAD

ADAMS WILLIAM L
1400 BAUER RD
27-2S-31-1100-004-001

EXISTING 1.5" SERVICE

TIE TO 4" FM
SEE NOTE 2.

FRANZEN DOUGLAS J
1406 BAUER RD
27-2S-31-1100-002-001

30.0'
DRIVE

BEUMER THEODORE
H & ALICE H
1412 BAUER RD
27-2S-31-1100-003-001

SEAR SHANNON P
1418 BAUER RD
27-2S-31-1100-005-001

CONSTRUCT 181 LF
4" PVC FORCEMAIN

30.0'
DRIVE

TROSTLE DAVID L II
12398 AILANTHUS DR
27-2S-31-1100-009-001

EXISTING 4"
FORCEMAIN

TIE TO 4" FM
SEE NOTE 2.

AILANTHUS DRIVE

MYERS
12395 AIL
27-2S-31-

4"
(SE

4"
(S

115.0'
DRIVE

CONSTRUCT 66 LF
4" PVC FORCEMAIN

INLINE FLUSHING
STATION PER
DETAIL (EVERY
1000+) TYPICAL

TIE TO 4" FM
SEE NOTE 2.

NOTE:
1. ALL 4" BORING MUST BE INSIDE A 12" CASING ACCORDING TO ECUA GUIDELINES.
2. CONTRACTOR TO FIELD VERIFIY PIPE SIZE AND LOCATION AND CONNECT PER ECUA STANDARDS.
3. PROPOSED FORCEMAIN BORINGS MUST BE PER ECUA STANDARDS AND SPECIFICATIONS.

EXISTING 4"
FORCEMAIN

TIE TO 4" FM
SEE NOTE 2.

SEAR SHANNON P
1418 BAUER RD
27-2S-31-1100-005-001

CONSTRUCT 181 LF
4" PVC FORCEMAIN

30.0'
DRIVE

TROSTLE DAVID L II
12398 AILANTHUS DR
27-2S-31-1100-009-001

115.0'
DRIVE

CONSTRUCT 66 LF
FORCEMAIN

INLINE FLUSHING
STATION PER
DETAIL (EVERY
1000+) TYPICAL

TIE TO 4" FM
SEE NOTE 2.

AILANTHUS DRIVE

MYERS BETTY J
12395 AILANTHUS DR
27-2S-31-2303-000-000

SCRUGGS HARRY W
2000 BAUER RD
27-2S-31-2304-000-000

EVANS DYLAN JOSEPH
2012 BAUER RD
27-2S-31-2300-000-001

FRANZEN DOUGLAS J
2016 BAUER RD
27-2S-31-2300-000-002

4" CHECK VALVE
(SEE DETAIL)

4" GATE VALVE
(SEE DETAIL)

TIE TO 4" FM
SEE NOTE 2.

CONSTRUCT 176 LF
4" PVC FORCEMAIN

EXISTING 1.5" SERVICE

EXISTING 1.5" SERVICE

EXISTING 1.5"
SERVICE

30.0'
DRIVE

25.0'
DRIVE

CONSTRUCT 42 LF
4" PVC FORCEMAIN

20.0'
DRIVE

CONSTRUCT 142 LF
4" PVC FORCEMAIN

TIE TO 4" FM
SEE NOTE 2.

TIE TO 4" FM
SEE NOTE 2.

BAUER ROAD

DEVELOPER EXPENSE FROM TIE AT
EXISTING 12" TO 2016 BAUER ROAD

COST SHARE FROM 2016
BAURER RD TO END

CONSTRUCT 143 LF
4" PVC FORCEMAIN

170.0'
DRIVE

ESCAMBIA COUNTY
2020 BAUER RD
27-2S-31-1100-000-002

UNITED STATES GOVERNMENT
BAUER RD
27-2S-31-2301-000-000

INLINE FLUSHING
STATION PER DETAIL
(EVERY 1000+) TYPICAL

WATERLINE CROSSING
DETERMINED BY PAINT MARKINGS

UNITED STATES GOVERNMENT
US 98W & BAUER RD HWY 293
04-2S-32-1000-000-000

0 50 100
1 INCH = 100 FEET

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12/01/2021

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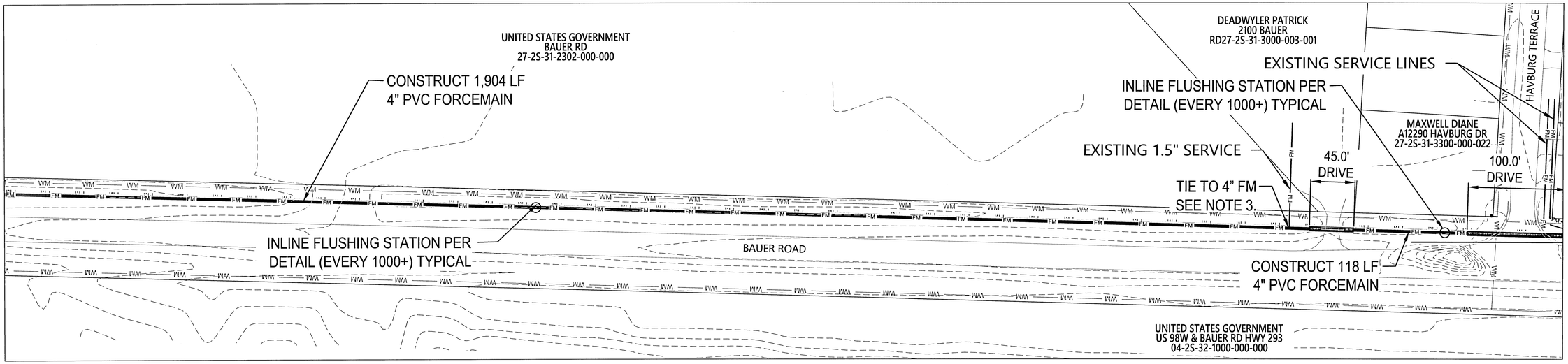
Master Plan
HERON'S LANDING TOWNHOMES
Escambia County, FL
PREPARED FOR: Heron's Landing Development LLC

OFF-SITE SANITARY
FORCEMAIN

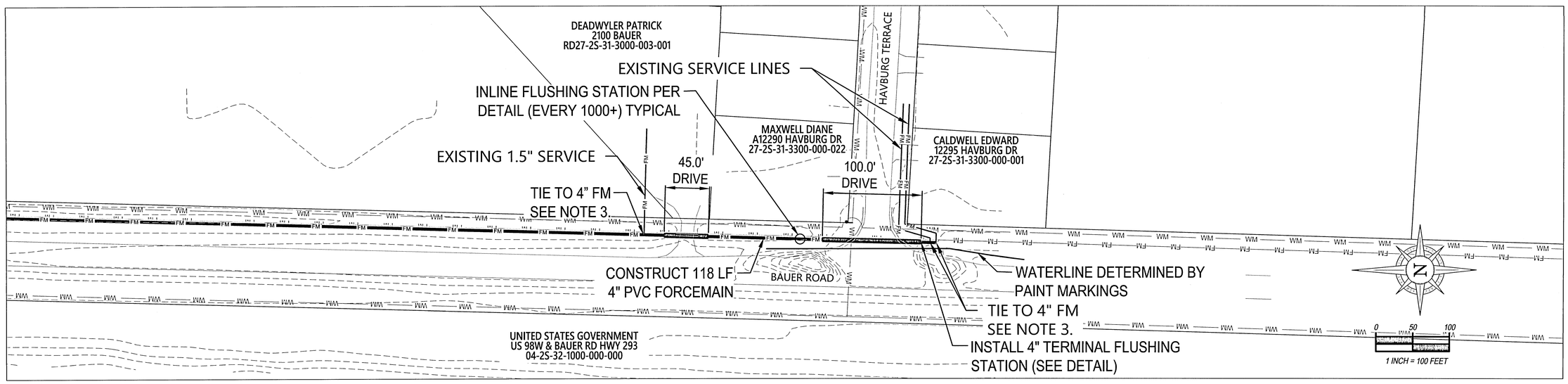
Job No. 20-123P
Date: 12/01/2021
Drawn By: CAB
Checked By: JWM

SHEET NUMBER
42



NOTE:

1. ALL 4" BORING MUST BE INSIDE A 12" CASING ACCORDING TO ECUA GUIDELINES.
2. THERE ARE TWO (2) EXISTING FORCEMAIN LINES ALONG HAVEBURG TERRACE. CONTRACTOR TO LOCATE AND TIE TO PROPOSED 4" FORCEMAIN ACCORDANLY.
2. CONTRACTOR TO FIELD VERIFIY PIPE SIZE AND LOCATION AND CONNECT PER ECUA STANDARDS.
3. PROPOSED FORCEMAIN BORINGS MUST BE PER ECUA STANDARDS AND SPECIFICATIONS.



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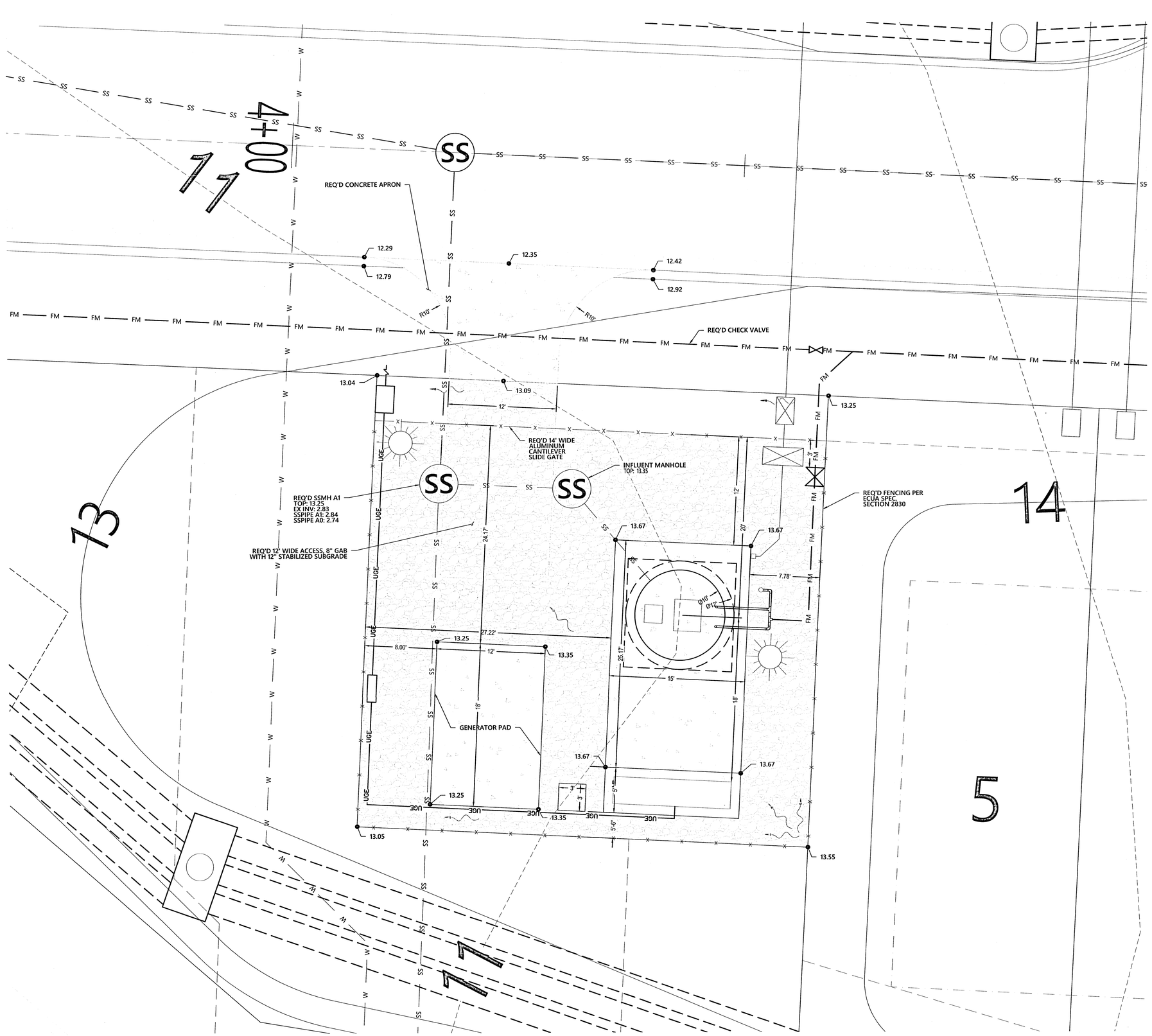

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TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

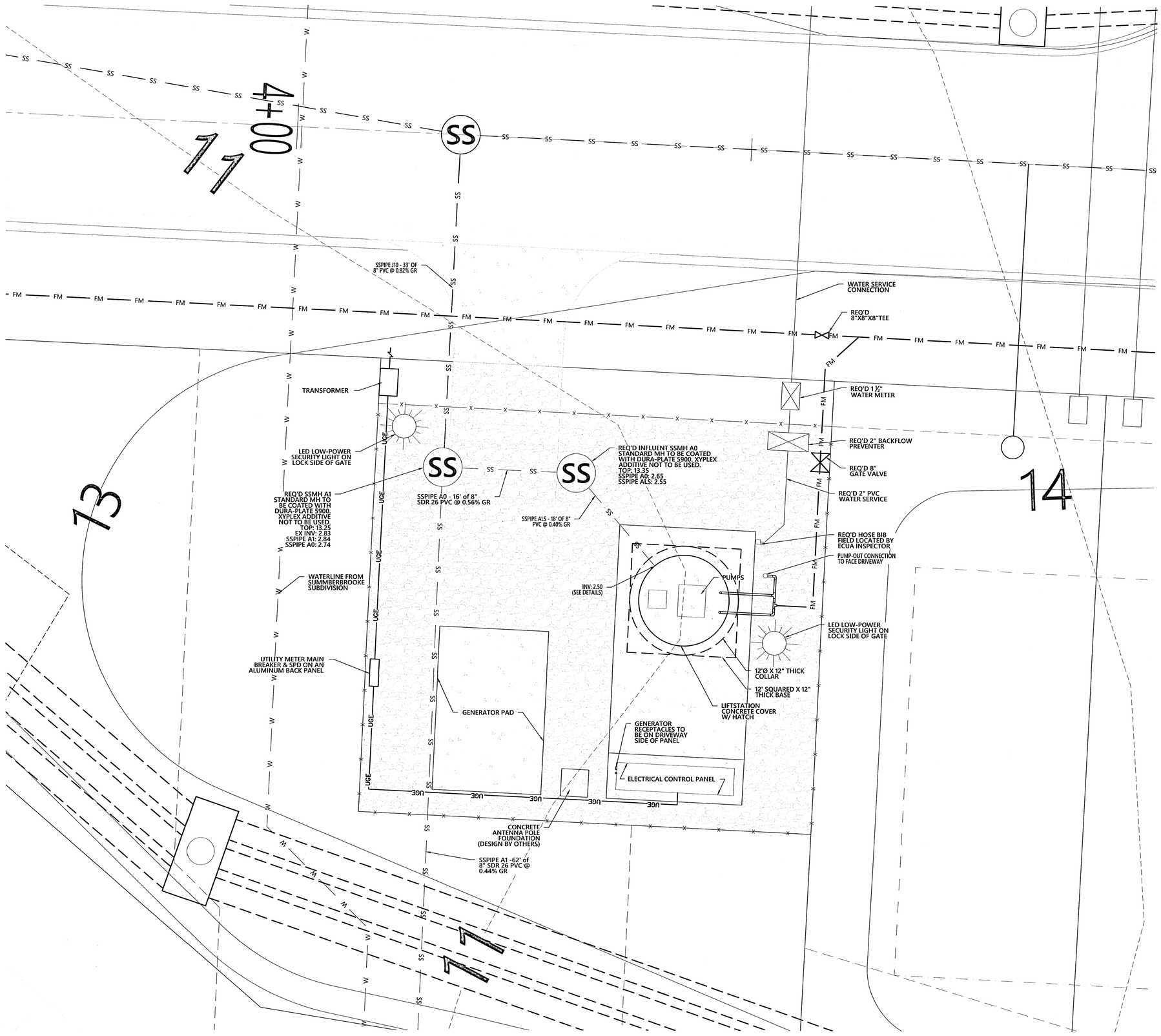
Construction Plans for
HERON'S LANDING TOWNHOMES
Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

Lift Station Site & Grading Plan

Job No. 21-112P
Date: 8/31/2021
Drawn By: CAB
Checked By: ENL

SHEET NUMBER
44



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Scale: 1" = 5'

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REVISIONS
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TODD M WHEELER, P.E.
FL. PE No. 92378 COA#32689

Construction Plans for
HERON'S LANDING TOWNHOMES
Escambia County, FL

PREPARED FOR: Heron's Landing Development LLC

Lift Station Utility Plan

Job No.	21-112P
Date:	8/31/2021
Drawn By:	CAB
Checked By:	ENL

SHEET NUMBER

45