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LEGAL DESCRIPTION

(AS CREATED BY MARK DOWST & ASSOCIATES, INC.)
A PORTION OF SECTIONS 7, 8, 17 AND 18, TOWNSHIP 18 SOUTH, RANGE 34 EAST, VOLUSIA COUNTY, FLORIDA, DESCRIBED AS FOLLOWS:

FOR A POINT OF REFERENCE, COMMENCE AT THE NORTHWEST CORNER OF SAID SECTION 7, THENCE S89°45'01"E, ALONG THE NORTH LINE OF SAID SECTION 7, A DISTANCE OF 2225.20 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE S89°45'01"E ALONG SAID NORTH LINE, A DISTANCE OF 300.00 FEET TO THE NORTHWEST CORNER OF WELL SITE NO. 4, AS DESCRIBED IN OFFICIAL RECORDS BOOK 3224, PAGE 463, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE RUN ALONG THE BOUNDARY OF SAID WELL SITE NO. 4 THE FOLLOWING THREE (3) COURSES AND DISTANCES: S00°14'59"W, A DISTANCE OF 49.98 FEET; THENCE S89°42'33"E, A DISTANCE OF 40.13 FEET; THENCE N00°14'59"E, A DISTANCE OF 49.99 FEET TO A POINT ON THE NORTH LINE OF SAID SECTION 7; THENCE S89°45'01"E, ALONG SAID NORTH LINE, A DISTANCE OF 417.07 FEET TO THE NORTH 1/4 CORNER OF SAID SECTION 7; THENCE S89°44'56"E, ALONG THE NORTH LINE OF SAID SECTION 7, A DISTANCE OF 18.17 FEET TO THE NORTHWEST CORNER OF WELL SITE NO. 3, AS DESCRIBED IN SAID OFFICIAL RECORDS BOOK 3224, PAGE 463; THENCE RUN ALONG THE BOUNDARY OF SAID WELL SITE NO. 3 THE FOLLOWING THREE (3) COURSES AND DISTANCES: S00°15'04"W, A DISTANCE OF 48.00 FEET; THENCE S89°18'56"E, A DISTANCE OF 39.35 FEET; THENCE N00°15'04"E, A DISTANCE OF 48.32 FEET TO A POINT ON THE NORTH LINE OF SAID SECTION 7; THENCE S89°44'56"E, ALONG SAID NORTH LINE, A DISTANCE OF 516.81 FEET TO THE NORTHWEST CORNER OF WELL SITE NO. 2, AS DESCRIBED IN OFFICIAL RECORDS BOOK 3224, PAGE 461, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE RUN ALONG THE BOUNDARY OF SAID WELL SITE NO. 2 THE FOLLOWING THREE (3) COURSES AND DISTANCES: S00°15'04"W, A DISTANCE OF 48.96 FEET; THENCE S89°48'33"E, A DISTANCE OF 39.63 FEET; THENCE N00°15'04"E, A DISTANCE OF 48.92 FEET TO A POINT ON THE NORTH LINE OF SAID SECTION 7; THENCE S89°44'56"E, ALONG SAID NORTH LINE, A DISTANCE OF 320.17 FEET TO THE NORTHWEST CORNER OF WELL SITE NO. 1, AS DESCRIBED IN AFORESAID OFFICIAL RECORDS BOOK 3224, PAGE 461; THENCE RUN ALONG THE BOUNDARY OF SAID WELL SITE NO. 1 THE FOLLOWING THREE (3) COURSES AND DISTANCES: S00°15'04"W, A DISTANCE OF 45.92 FEET; THENCE S89°39'08"E, A DISTANCE OF 40.04 FEET; THENCE N00°15'04"E, A DISTANCE OF 45.86 FEET TO A POINT ON THE NORTH LINE OF SAID SECTION 7; THENCE S89°44'56"E, ALONG SAID NORTH LINE, A DISTANCE OF 382.47 FEET TO A POINT ON THE EXISTING SOUTH RIGHT-OF-WAY LINE OF OPOSSUM CAMP ROAD, A 200' RIGHT-OF-WAY ACCORDING TO OFFICIAL RECORDS BOOK 7406, PAGE 1820, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE S84°27'27"E, ALONG SAID RIGHT-OF-WAY LINE, A DISTANCE OF 541.52 FEET TO A POINT ON THE WEST RIGHT-OF-WAY LINE OF STATE ROAD NO. 442, A 200 FOOT RIGHT-OF-WAY; THENCE RUN ALONG SAID WEST RIGHT-OF-WAY LINE AND ALONG THE SOUTH RIGHT-OF-WAY LINE OF STATE ROAD NO. 442 AND THE WESTERLY LIMITED ACCESS RIGHT-OF-WAY OF INTERSTATE NO. 95 (STATE ROAD NO. 9) A VARIABLE WIDTH RIGHT-OF-WAY, THE FOLLOWING TEN (10) COURSES AND DISTANCES: S20°16'07"E, A DISTANCE OF 43.47 FEET; THENCE N69°42'00"E, A DISTANCE OF 75S.06 FEET; THENCE S76°03'36"E, A DISTANCE OF 269.91 FEET; THENCE S82°03'45"E, A DISTANCE OF 148.14 FEET; THENCE S31°55'20"E, A DISTANCE OF 1420.66 FEET; THENCE S22°12'36"E, A DISTANCE OF 608.94 FEET; THENCE S22°11'26"E, A DISTANCE OF 1395.38 FEET; THENCE S22°12'32"E, A DISTANCE OF 995.72 FEET; THENCE S22°11'16"E, A DISTANCE OF 959.80 FEET; THENCE S22°11'56"E, A DISTANCE OF 1190.47 FEET; THENCE DEPARTING SAID LIMITED ACCESS RIGHT-OF-WAY LINE, RUN ALONG THE BOUNDARY OF THE LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 5738, PAGE 2349, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, S79°26'18"W, A DISTANCE OF 2782.89 FEET TO A POINT ON THE WEST LINE OF SECTION 17, TOWNSHIP 14 SOUTH, RANGE 34 EAST, VOLUSIA COUNTY; FLORIDA; THENCE ALONG SAID WEST LINE AND SAID BOUNDARY, S00°19'17"W, A DISTANCE OF 515.91 FEET; THENCE DEPARTING SAID WEST LINE AND SAID BOUNDARY, ALONG THE BOUNDARY OF NORTH GREEN AREA 1, A CONSERVATION EASEMENT RECORDED IN OFFICIAL RECORDS BOOK 6934, PAGE 812, SAID PUBLIC RECORDS THE FOLLOWING FOUR (4) COURSES AND DISTANCES: N79°47'47"W, A DISTANCE OF 696.29 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHERLY, HAVING A RADIUS OF 1150.00 FEET, A CENTRAL ANGLE OF 71°48'39", A CHORD BEARING OF S85°71'47"W AND A CHORD DISTANCE OF 1348.82 FEET; THENCE RUN WESTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 1441.45 FEET TO THE POINT OF TANGENCY; THENCE S31°23'14"W, A DISTANCE OF 837.05 FEET; THENCE S83°31'21"W, A DISTANCE OF 643.53 FEET TO A POINT ON THE BOUNDARY OF N11, A CONSERVATION EASEMENT RECORDED IN OFFICIAL RECORDS BOOK 6934, PAGE 812, SAID PUBLIC RECORDS; SAID POINT BEING A POINT ON A NON-TANGENT CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 7368.00 FEET, A CENTRAL ANGLE OF 06°28'10", A CHORD BEARING OF N39°00'39"W AND A CHORD DISTANCE OF 831.51 FEET; THENCE RUN NORTHWESTERLY ALONG THE ARC OF SAID CURVE AND ALONG SAID BOUNDARY OF N11, A DISTANCE OF 831.85 FEET TO THE POINT OF TANGENCY; THENCE CONTINUE ALONG THE BOUNDARY OF SAID N11 THE FOLLOWING SIXTEEN (16) COURSES AND DISTANCES: N35°46'34"W, A DISTANCE OF 407.06 FEET; THENCE N38°57'06"W, A DISTANCE OF 365.34 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 273.00 FEET, A CENTRAL ANGLE OF 52°20'34", A CHORD BEARING OF N12°42'33"W AND A CHORD DISTANCE OF 240.84 FEET; THENCE RUN NORTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 248.43 FEET TO THE POINT OF TANGENCY; THENCE N13°27'54"E, A DISTANCE OF 277.65 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 2033.00 FEET, A CENTRAL ANGLE OF 07°10'08", A CHORD BEARING OF N17°02'58"E AND A CHORD DISTANCE OF 254.20 FEET; THENCE RUN NORTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 254.37 FEET TO THE POINT OF TANGENCY; THENCE N20°38'02"E, A DISTANCE OF 75.16 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 1917.00 FEET, A CENTRAL ANGLE OF 18°22'56", A CHORD BEARING OF N12°26'34"E AND A CHORD DISTANCE OF 546.25 FEET; THENCE RUN NORTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 548.11 FEET TO THE POINT OF COMPOUND CURVATURE OF A CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 392.00 FEET, A CENTRAL ANGLE OF 31°31'14", A CHORD BEARING OF N11°30'31"W AND A CHORD DISTANCE OF 212.94 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 215.65 FEET TO THE POINT OF TANGENCY; THENCE N27°16'09"W, A DISTANCE OF 63.47 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 517.00 FEET, A CENTRAL ANGLE OF 30°29'45", A CHORD BEARING OF N42°26'31"W AND A CHORD DISTANCE OF 270.63 FEET; THENCE RUN NORTHWESTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 275.83 FEET TO THE POINT OF TANGENCY; THENCE N57°36'53"W, A DISTANCE OF 129.45 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHERLY, HAVING A RADIUS OF 317.00 FEET, A CENTRAL ANGLE OF 42°02'14", A CHORD BEARING OF N78°38'00"W AND A CHORD DISTANCE OF 227.40 FEET; THENCE RUN WESTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 232.58 FEET TO THE POINT OF TANGENCY; THENCE S89°20'52"W, A DISTANCE OF 333.76 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 5033.00 FEET, A CHORD BEARING OF S84°32'15"W AND A CHORD DISTANCE OF 793.79 FEET; THENCE WESTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 794.61 FEET TO THE POINT OF TANGENCY; THENCE S89°23'38"W, A DISTANCE OF 344.84 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHERLY, HAVING A RADIUS OF 742.00 FEET, A CENTRAL ANGLE OF 15°36'44", A CHORD BEARING OF S81°35'15"W AND A CHORD DISTANCE OF 201.56 FEET; THENCE RUN WESTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 202.18 FEET TO A POINT ON THE WEST LINE OF SECTION 18, TOWNSHIP 18 SOUTH, RANGE 34 EAST, VOLUSIA COUNTY; FLORIDA; THENCE DEPARTING SAID CURVE, RUN N00°18'53"W ALONG SAID WEST LINE AND THE BOUNDARY OF N13, A CONSERVATION EASEMENT RECORDED IN OFFICIAL RECORDS BOOK 6934, PAGE 812, SAID PUBLIC RECORDS, A DISTANCE OF 283.49 FEET TO THE SOUTHWEST CORNER OF AFORESAID SECTION 7; THENCE N01°28'45"W, ALONG THE WEST LINE OF SAID SECTION 7 AND ALONG THE BOUNDARY OF SAID N13, A DISTANCE OF 5100.85 FEET TO A POINT ON THE SOUTH RIGHT-OF-WAY LINE OF OPOSSUM CAMP ROAD AS DESCRIBED IN SAID OFFICIAL RECORDS BOOK 7406, PAGE 1820; THENCE DEPARTING THE WEST LINE OF SAID SECTION 7 AND SAID BOUNDARY OF N13, RUN N85°06'06"E, ALONG SAID SOUTH RIGHT-OF-WAY LINE, A DISTANCE OF 2228.15 TO THE POINT OF BEGINNING.

SAID LANDS CONTAINING 1154.72 ACRES, MORE OR LESS.

OWNER:	FARMTON NORTH, LLC 410 N MICHIGAN AVE RM #590 CHICAGO, IL 60611
DEVELOPER:	DEERING PARK 1, LLC 14025 RIVEREDGE DRIVE, SUITE 175 TAMPA, FLORIDA 33637 770-203-9355
SURVEYOR:	MARK DOWST & ASSOCIATES, INC. 536 NORTH HALIFAX AVENUE DAYTONA BEACH, FLORIDA 32118 (386) 258-7999
ARCHITECT (BOUNDARY)	GEOPOINT SURVEYING, INC. 528 NORTHLAKE BLVD. SUITE 1040 ALTAMONTE SPRINGS, FLORIDA 32701 (321) 270-0440
LANDSCAPE ARCHITECT:	MARQUIS LATIMER + HALBACK, INC. 34 CORDOVA STREET, SUITE A ST. AUGUSTINE, FL 32084 (904) 825-6747
ENGINEER:	ENGLAND, THIMS & MILLER, INC. 1411 EDGEWATER DRIVE, SUITE 200 ROAD ORLANDO, FL 32804 (407) 536-5379

UTILITY SERVICE PROVIDERS

POTABLE & RECLAIMED WATER:	CITY OF EDGEWATER 104 NORTH RIVERSIDE EDGEWATER, FLORIDA 32132 (386) 424-2400
SANITARY SEWER:	CITY OF EDGEWATER 104 NORTH RIVERSIDE EDGEWATER, FLORIDA 32132 (386) 424-2400
TELEPHONE:	AT&T CONTACT: KIRBY SPENCER (386) 281-6957
ELECTRIC:	FLORIDA POWER & LIGHT 700 UNIVERSE BOULEVARD JUNO BEACH, FLORIDA 33408 (321) 453-2489
GAS:	FLORIDA PUBLIC UTILITIES CO. CONTACT: COLIN DUNN (386) 785-4554

DEERING PARK CENTER TOWNHOMES

CITY OF EDGEWATER, FLORIDA

PREPARED FOR

DEERING PARK 1, LLC

14025 RIVEREDGE DRIVE, SUITE 175
TAMPA, FLORIDA 33637
770-203-9355

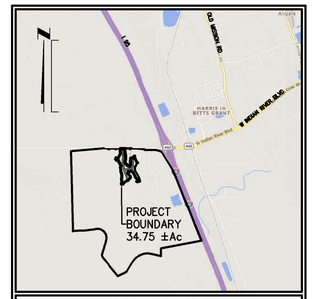
PROJECT NO. SD-2403

ETM
ENGLAND-THIMS & MILLER
Trusted Advisors, Creating Community.
1411 Edgewater Drive, Suite 200
Orlando, FL 32804
(407) 536-5379
CA - 00002584 LC - 0000316

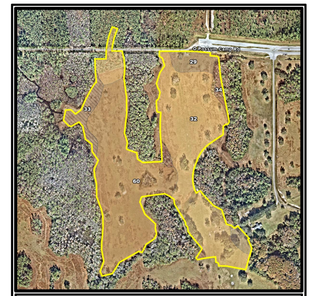
DRAWING INDEX			
PDF SHEET NUMBER	DRAWING NUMBER	DRAWING TITLE	REVISION
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4	4	TYPICAL LOT LAYOUTS	
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11-12	5G-5H	TRUCK AUTOTURN PLAN	
13	6	POST DEVELOPMENT PLAN	
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20	7G	STORM STRUCTURE TABLE	
21	8	MASTER UTILITY PLAN	
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62	3	MASTER LIFT STATION (LS-M01) SITE PLAN	
63-65	4A-4C	CITY OF EDGEWATER DETAILS	

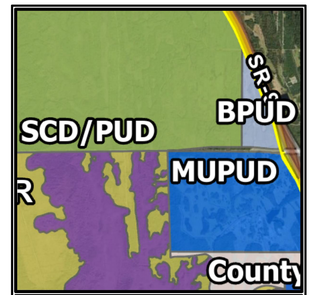
NOTE:
IF YOU DIG IN FLORIDA, YOU ARE REQUIRED TO CALL SUNSHINE STATE ONE-CALL OF FLORIDA, INC. 1-800-432-4770 FOR LOCATES. IT'S THE LAW.

VERTICAL DATUM USED FOR THIS PROJECT: NAVD 88

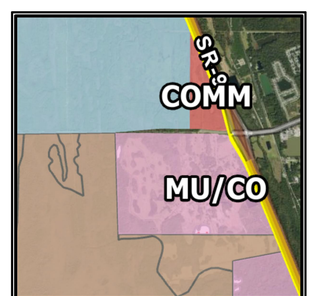


VICINITY MAP
N.T.S.


SOILS MAP
N.T.S.



ZONING MAP
N.T.S.



FUTURE LAND USE MAP
N.T.S.

CHRISTOPHER B. WATSHAWSKY LICENSE NO. 80867 STATE OF FLORIDA PROFESSIONAL ENGINEER
Digitally signed by Christopher Watshawsky
Date: 2025.08.12 08:52:55-04'00'

PLOTTED: August 8, 2025 - 5:36 PM By: Christopher Watshawsky
P:\2022\22-213\22-213-09\LandDev\Design\Plots\COVER-22-213-09.dwg

REVISIONS:

ETM NO. 22-213-09	DRAWN BY: KJJ	DESIGNED BY: CBW	CHECKED BY: CBW	DATE: 01.27.2025

1411 Edgewater Drive, Ste. 200
Orlando, Florida 32804
(407) 536-5379
www.etminc.com
CA- 00002584 LC-0000316

Trusted Advisors, Creating Community.
ENGLAND-THIMS & MILLER

COVER

DEERING PARK CENTER TOWNHOMES
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
1

GENERAL SITE NOTES:

1. ALL WORK SHALL BE PERFORMED IN A SAFE MANNER. ALL SAFETY RULES AND GUIDELINES OF O.S.H.A. SHALL BE FOLLOWED. THE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR ANY INJURIES TO HIS EMPLOYEES, AND FOR ANY DAMAGE TO PRIVATE PROPERTY OR PERSONS DURING THE COURSE OF THIS PROJECT. ALL COSTS ASSOCIATED WITH COMPLYING WITH OSHA REGULATIONS AND THE FLORIDA TRENCH SAFETY ACT MUST BE INCLUDED IN THE CONTRACTORS BID.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE JOB SITE PRIOR TO PREPARING THE BID FOR THE PURPOSE OF FAMILIARIZING HIMSELF WITH THE NATURE AND THE EXTENT OF THE WORK AND LOCAL CONDITIONS, EITHER SURFACE OR SUB-SURFACE, WHICH MAY AFFECT THE WORK TO BE PERFORMED, AND THE EQUIPMENT, LABOR AND MATERIALS REQUIRED. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF COMPLETE PERFORMANCE UNDER THE CONSTRUCTION CONTRACT. THE CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE CALL OF FLORIDA (811) FOR UTILITY LOCATES IN ACCORDANCE WITH STATE LAW PRIOR TO EXCAVATING. THE CONTRACTOR IS ALSO URGED TO TAKE COLOR PHOTOGRAPHS ALONG THE ROUTE OF OR WITHIN THE PROJECT TO RECORD EXISTING CONDITIONS PRIOR TO CONSTRUCTION, AND TO AID IN RESOLVING POSSIBLE FUTURE ISSUES THAT MAY OCCUR DUE TO THE CONSTRUCTION OF THE PROJECT.

3. THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING STRUCTURES, IMPROVEMENTS, UTILITIES, PROPERTY LINES, AND CONFIRM ALL PROPOSED DIMENSIONS AND ELEVATIONS PRIOR TO COMMENCING ANY CONSTRUCTION OR ORDERING ANY MATERIALS.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING A PERMANENT STAND OF SOD AND/OR GRASS PER CITY OF EDGEWATER STANDARDS AND MEETING THE NPDES FINAL STABILIZATION REQUIREMENTS.

5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO EITHER CONDUCT ANY FIELD EXPLORATION OR ACQUIRE ANY GEOTECHNICAL ASSISTANCE REQUIRED TO ESTIMATE THE AMOUNT OF UNSUITABLE MATERIAL THAT WILL REQUIRE REMOVAL AND/OR TO ESTIMATE THE AMOUNT OF OFF SITE BORROW THAT WILL BE REQUIRED. FAILURE OF THE CONTRACTOR TO IDENTIFY/QUANTIFY THE AMOUNT OF UNSUITABLE MATERIAL TO BE REMOVED AND REPLACED DURING THE BID PROCESS WILL NOT RELIEVE THE CONTRACTOR OF COMPLETE PERFORMANCE UNDER THE CONSTRUCTION CONTRACT.

6. ALL MATERIALS AND WORKMANSHIP ARE TO BE WARRANTED BY THE CONTRACTOR TO THE OWNER AND THE CITY OF EDGEWATER FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE BY THE OWNER AND THE CITY OF EDGEWATER.

7. THE LOCATION OF ALL EXISTING UTILITIES, STRUCTURES AND IMPROVEMENTS SHOWN ON THE DRAWINGS IS BASED ON AVAILABLE INFORMATION AND MAY NOT HAVE BEEN FIELD VERIFIED. THE LOCATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL NOTIFY RESPECTIVE UTILITY OWNERS AND FIELD VERIFY LOCATIONS OF EXISTING UTILITIES AND OTHER IMPROVEMENTS PRIOR TO COMMENCING ANY CONSTRUCTION. IF THE LOCATIONS SHOWN ARE CONTRARY TO THE ACTUAL LOCATIONS, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF THE DISCREPANCY. THIS DISCREPANCY SHOULD BE RESOLVED PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN WORKING IN AREAS NEAR EXISTING UTILITIES AND IMPROVEMENTS AND SHALL BE RESPONSIBLE FOR AND SHALL REPAIR OR PAY FOR ALL DAMAGE MADE TO EXISTING UTILITIES OR OTHER IMPROVEMENTS. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL GRADES, INVERTS AND TYPE OF MATERIAL OF EXISTING UTILITIES TO WHICH HE SHALL CONNECT, AND NOTIFY THE OWNER AND ENGINEER OF ANY DISCREPANCIES.

8. UNLESS DIRECTED OTHERWISE BY THE OWNER OR THE ENGINEER, THE CONTRACTOR WILL CONTRACT WITH AN INDEPENDENT TESTING LABORATORY TO PERFORM MATERIAL TESTING AND SOIL TESTING IN ACCORDANCE WITH CITY REQUIREMENTS.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSURANCE REQUIRED FOR THE PROJECT INCLUDING CITY OF EDGEWATER RIGHT-OF-WAY PERMITS FOR WORK IN THE CITY RIGHT-OF-WAY OR EASEMENT. CONTRACTOR IS RESPONSIBLE FOR CONTROL OF SEDIMENTATION AND RUNOFF RESULTING FROM RAINFALL EVENTS DURING THE CONSTRUCTION OF THE PROJECT. CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH REGULATORY PERMITS ISSUED FOR THE PROJECT.

10. THE CONTRACTOR SHALL COORDINATE THE WORK WITHIN CITY OR STATE RIGHT-OF-WAY WITH THE APPROPRIATE AGENCIES FOR MAINTENANCE OF TRAFFIC AND METHOD OF CONSTRUCTION & REPAIR.

11. IF DEWATERING CAPACITY REQUIRES A CONSUMPTIVE USE PERMIT (C.U.P.) IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE PERMIT THROUGH THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER AND THE ENGINEER FOR APPROVAL OF ALL DEWATERING OPERATIONS PRIOR TO COMMENCEMENT.

GENERAL SITE NOTES:

12. PRIOR TO ANY DISCHARGE OF GROUND WATER (DEWATERING) FROM CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT TO WATERS OF THE STATE (INCLUDING, BUT NOT LIMITED TO, WETLANDS, SWALES AND MUNICIPAL STORM SEWERS), THE CONTRACTOR SHALL TEST THE EFFLUENT (WATER TO BE DISCHARGED) IN ACCORDANCE WITH RULE 62-621.300(2), F.A.C. IF THE TEST RESULTS ON THE EFFLUENT ARE BELOW THE SCREENING VALUES OF RULE 62-621.300(2), F.A.C., THE CONTRACTOR SHALL SUBMIT A SUMMARY OF THE PROPOSED CONSTRUCTION ACTIVITY AND THE TEST RESULTS TO THE DEPARTMENT OF ENVIRONMENTAL PROTECTION DISTRICT OFFICE, WITHIN ONE (1) WEEK AFTER DISCHARGE BEGINS. THE CONTRACTOR SHALL CONTINUE TO SAMPLE THE EFFLUENT AS REQUIRED THROUGHOUT THE PROJECT AND COMPLY WITH ALL CONDITIONS OF RULE 62-621.300(2), F.A.C. IF THE GROUND WATER EXCEEDS THE SCREENING VALUES OF RULE 62-621.300(2), F.A.C., THE CONTRACTOR SHALL COMPLY WITH OTHER APPLICABLE RULES AND REGULATIONS PRIOR TO DISCHARGE OF THE EFFLUENT (GROUND WATER) TO SURFACE WATERS OF THE STATE.

13. ALL AREAS SHOWN TO BE FILLED SHALL BE CLEARED AND GRUBBED IN ACCORDANCE WITH CITY OF EDGEWATER STANDARDS AND SHALL BE FILLED WITH CLEAN STRUCTURAL FILL COMPACTED AND TESTED IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION REPORT.

14. CLEARING AND GRUBBING REQUIRED FOR ALL ROADWAY, UTILITIES, DITCHES, BERMS, RIGHTS-OF-WAYS AND EASEMENTS (INCLUDING ELECTRIC EASEMENTS) ARE INCLUDED IN THIS PROJECT.

15 ALL ACCESS EASEMENTS ARE TO BE STABILIZED AND DRIVABLE.

16. ALL DEBRIS SHALL BE CONTAINED IN ONE OR MORE DUMPSTER WHICH ARE REQUIRED TO BE ONSITE DURING ALL PHASES OF CONSTRUCTION, BEING EMPTIED AT AN APPROPRIATELY PERMITTED LANDFILL AND RETURNED TO THE SITE AS OFTEN AS NEEDED TO AVOID SPILLS AND CONTAMINATION.

17. BURNING OF TREES, BRUSH AND OTHER MATERIAL SHALL BE APPROVED, PERMITTED AND COORDINATED WITH CITY OF EDGEWATER FIRE MARSHAL AND ALL OTHER PERMITTING AUTHORITIES BY THE CONTRACTOR.

18. UNSUITABLE MATERIALS UNDER UTILITY OR STORM PIPE, STRUCTURES, PAVEMENT, BUILDING PADS, OR HARDSCAPE ELEMENTS SHALL BE REMOVED AND REPLACED WITH SELECTED BACKFILL, PROPERLY COMPACTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.

19. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL SURVEY AND PROPERTY MONUMENTS. IF A MONUMENT IS DISTURBED, THE CONTRACTOR SHALL CONTRACT WITH THE SURVEYOR OF RECORD FOR REINSTALLATION OF THE MONUMENT.

20. ALL UNDERGROUND UTILITIES TO BE INSTALLED UNDER PAVEMENT MUST BE INSTALLED PRIOR TO PREPARATION OF SUBGRADE FOR PAVEMENT.

21. THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION WITH ALL OTHER CONTRACTORS. IN THE EVENT OF ANY CONFLICT WHATSOEVER, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND OWNER PRIOR TO PROCEEDING WITH CONSTRUCTION.

22. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL MATERIALS TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PURCHASE OR CONSTRUCTION OF ANY UTILITY OR STORM PIPE OR STRUCTURE.

23. AUGER BORINGS PROVIDED BY UNIVERSAL ENGINEERING SERVICES, DATED: APRIL 19, 2023.

24. FLOOD ZONE BASED UPON FEMA INSURANCE RATE MAPS PANEL NOS. 12127C0700J, DATED: SEPTEMBER 29, 2017,

25. FOR SEDIMENT AND EROSION CONTROL PLANS, DETAILS AND NOTES REFER TO DRAWINGS 16-17. CONTRACTOR TO COORDINATE WITH AUTHORITY FOR INSPECTIONS PRIOR TO CLEARING OPERATIONS.

26. ELEVATIONS ARE BASED ON NAVD 88.

27. TOPOGRAPHIC INFORMATION BASED ON SURVEY PROVIDED BY MARK DOWST & ASSOCIATES, INC., DATED: AUGUST, 2023.

28. BOUNDARY INFORMATION BASED ON SURVEY PROVIDED BY GEOPOINT SURVEYING, INC., DATED: AUGUST, 2023.

29. ALL WORK AND MATERIALS SHALL BE IN COMPLETE ACCORDANCE WITH ALL RELATIVE SECTIONS OF "LAND DEVELOPEMENT CODE FOR CITY OF EDGEWATER, FLORIDA", (LATEST REVISION) AND ALL CURRENT CITY STANDARD DETAILS. THE WORK SHALL ALSO BE PERFORMED AND TESTED IN ACCORDANCE WITH THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL INVESTIGATION REPORT PROVIDED BY UNIVERSAL ENGINEERING SERVICES, DATED: APRIL 19, 2023, IF MORE STRINGENT THAN CITY REQUIREMENTS.

30. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE CIVIL ENGINEER TO DETERMINE IF THIS PROJECT IS WITHIN THE CITY'S JURISDICTION FOR INSPECTION. IF SO THEN, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE CITY FOR PRE-CONSTRUCTION MEETING AND INSPECTIONS.

31. FOR BOUNDARY, ROADWAY AND LOT GEOMETRY INFORMATION SEE PLAT.

32. PROJECT LOCATION: CITY OF EDGEWATER, FLORIDA.

33. THESE PLANS WERE GENERATED UTILIZING AUTOCAD CIVIL 3D 2022.

34. THESE PLANS ARE PREPARED IN GENERAL COMPLIANCE WITH THE LAND DEVELOPMENT CODE OF THE CITY OF EDGEWATER, FLORIDA, DATED APRIL 2017.

PAVING AND DRAINAGE NOTES:

1. ALL DRAINAGE STRUCTURES TO HAVE TRAFFIC BEARING GRATES.
2. ALL DRAINAGE PIPE JOINTS ARE TO BE FILTER FABRIC WRAPPED.
3. ALL INVERTS IN DRAINAGE STRUCTURES TO BE PRECAST OR BRICK WITH LAYER OF MORTAR BETWEEN EACH LAYER OF BRICK, OR REDDI-MIX CONCRETE WITH #57 STONE.
4. ALL PIPE LENGTHS ARE SCALED DIMENSIONS. ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED TO CONFORM WITH CITY REQUIREMENTS AND SHALL BE CONSTRUCTED TO CONFORM WITH CURBING, PROPERTY LINES AND LOW POINTS AS SHOWN ON THE PLANS.
5. CONTRACTOR SHALL ENSURE THAT ALL DRAINAGE STRUCTURES, PIPES, ETC. ARE CLEAN AND FUNCTIONING PROPERLY AT TIME OF ACCEPTANCE.
6. "AS-BUILT" DRAWINGS - DRAINAGE AS-BUILTS PROVIDED TO CITY OF EDGEWATER AND THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT ARE REQUIRED TO BE SIGNED AND SEALED BY A FLORIDA REGISTERED LAND SURVEYOR. THEREFORE, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTRACT WITH A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA FOR THE PREPARATION, FIELD LOCATIONS, CERTIFICATION AND SUBMITTAL OF "AS-BUILT" DRAWINGS IN ACCORDANCE WITH CURRENT CITY OF EDGEWATER STANDARDS AND SPECIFICATIONS AND S.J.R.W.M.D REGULATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROCESS THE AS-BUILT DRAWINGS FOR APPROVAL BY THE CITY OF EDGEWATER. IN ADDITION TO THE DRAINAGE SYSTEM THE "AS-BUILTS" SHALL SHOW THE ELEVATIONS AND LOCATION OF THE TOP OF BANK, WATER LEVEL, ANY POINTS OF CHANGE IN SLOPE, TOE OF SLOPE AND POND BOTTOM AT 100' MAXIMUM INTERVALS ALONG POND BANK FOR ALL POND CONSTRUCTION. ALL DIMENSIONS AND ELEVATIONS ON THE CONTROL STRUCTURE DETAILS SHALL BE SHOWN ON AS-BUILT DRAWINGS. ALL DEVIATIONS FROM PLANS SHALL BE CLEARLY INDICATED ON THE AS-BUILT DRAWINGS.
7. THE CONTRACTOR SHALL PROVIDE ACCESSIBLE CURB RAMPS AT ALL SIDEWALK AND CURB CONNECTIONS. RAMPS SHALL MEET ALL APPLICABLE ADA REQUIREMENTS.
8. FOR SPECIAL PAVING AND DRAINAGE DETAILS SEE DRAWING NO. 6A-6F. FOR ALL STANDARD DETAILS SEE THE CITY OF EDGEWATER SITE DEVLOPMENT CONSTRUCTION DETAILS.
9. ALL EROSION AND SEDIMENT CONTROL MEASURES, INCLUDING SILT FENCE, COIR BALES. AND FILTER FABRIC INSIDE DRAINAGE STRUCTURES SHALL BE REMOVED PRIOR TO FINAL INSPECTION, UNLESS OTHERWISE DIRECTED BY THE OWNER OR THE ENGINEER.
10. PAVEMENT MARKINGS SHOULD BE PLACED AS SHOWN ON THE PLANS AND DETAIL SHEETS.
11. ANY REQUIRED TEMPORARY MARKINGS MUST BE IN PLACE BEFORE OPENING LANES OF TRAFFIC. PAY ITEMS FOR TEMPORARY PAVEMENT MARKINGS ARE TO BE INCLUDED IN THE TABULATION OF QUANTITIES.
12. THE REMOVAL OF EXISTING PAVEMENT MARKINGS WILL BE CONSIDERED AN INCIDENTAL ITEM WITH NO ADDITIONAL COMPENSATION PROVIDED.
13. ALL PERMANENT PAVEMENT MARKINGS IN RIGHT-OF-WAY SHALL BE EXTRUDED THERMOPLASTIC AND MEET CURRENT CITY OF EDGEWATER SPECIFICATIONS AND/OR FDOT STANDARD SPECIFICATIONS, LATEST EDITION.
14. THERMOPLASTIC PAVEMENT MARKINGS ARE TO BE PLACED NO SOONER THAN 30 CALENDAR DAYS AFTER THE COMPLETION OF THE FINAL PAVEMENT LAYER.
15. A BITUMINOUS REFLECTIVE PAVEMENT MARKER (RPM) ADHESIVE MEETING CURRENT CITY OF EDGEWATER AND/OR FDOT SPECIFICATIONS SHALL BE USED ON ASPHALT ROADWAYS.
16. THE CONTRACTOR SHALL USE CLASS-B REFLECTIVE PAVEMENT MARKERS (RPM'S) INSTALLED TO MEET CURRENT CITY OF EDGEWATER SPECIFICATIONS AND/OR FDOT STANDARD SPECIFICATIONS.
17. REFLECTIVE PAVEMENT MARKERS THAT DO NOT CONFLICT WITH PERMANENT (THERMOPLASTIC) MARKINGS SHALL BE PLACED ON ALL FINAL ASPHALTIC CONCRETE SURFACES IMMEDIATELY AFTER THE TEMPORARY PERMANENT STRIPING IS IN PLACE.
18. PAVEMENT MARKINGS REMOVAL:
    - 18.a. PAINT BLACKOUT METHOD OF PAVEMENT MARKINGS REMOVAL IS NOT ACCEPTED.
    - 18.b. GRINDING OR HYDRO BLAST METHODS SHALL BE USED ON WEATHERED ASPHALT SURFACES.
    - 18.c. REMOVAL ON NEW ASPHALT SURFACES SHALL BE BY HYDRO BLAST METHOD ONLY.
19. 48 HOURS PRIOR TO INSTALLING ANY PAVEMENT MARKINGS ON ANY CITY OF EDGEWATER ROADWAY OR STREET, THE CONTRACTOR SHALL CONTACT THE PAVEMENT MARKING INSPECTOR AT PHONE NUMBER (386) 427-3279.
20. IN THE EVENT OF A CONFLICT BETWEEN THE SPECIFICATIONS OF THE CITY OF EDGEWATER AND THE SPECIFICATIONS OF THE FDOT, THE CITY OF EDGEWATER WILL PREVAIL.

WATER, REUSE, & SEWER REQUIREMENTS

1. ALL WATER, REUSE WATER, SANITARY SEWER AND STORM SEWER CONSTRUCTION SHALL BE ACCOMPLISHED BY AN UNDERGROUND UTILITY CONTRACTOR, LICENSED UNDER THE PROVISIONS OF CHAPTER 489 FLORIDA STATUTES. THE CONTRACTOR SHALL FURNISH A COPY OF THE CURRENT LICENSE AND QUALIFIERS TO THE DESIGN ENGINEER PRIOR TO START OF CONSTRUCTION. ALL WATER, REUSE WATER AND SEWER CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF EDGEWATER SITE DEVELOPMENT CONSTRUCTION DETAILS (LATEST REVISIONS) UNLESS MORE STRINGENT STANDARDS ARE SPECIFIED.
2. FIRE PROTECTION MAINS (NON-CITY OF EDGEWATER OWNED WATER SYSTEMS) SHALL BE C-900 PVC DR18 PIPE AND SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH NFPA REQUIREMENTS BY A FLORIDA LICENSED CONTRACTOR QUALIFIED TO INSTALL FIRE PROTECTION MAINS. LOCAL PERMITTING AND INSPECTION OF FIRE PROTECTION SYSTEM INSTALLATION, FLUSHING AND TESTING IS REQUIRED. CONTRACTOR IS RESPONSIBLE FOR LOCAL PERMIT, NOTICE, AND COMPLIANCE WITH PERMIT.
3. FINAL CONNECTION TO THE CITY OF EDGEWATER SYSTEM MAY BE CONTINGENT UPON THE CONSTRUCTION, DEDICATION, AND FINAL ACCEPTANCE OF OFF-SITE SYSTEMS.
4. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER (AND THE CITY OF EDGEWATER IF REQUIRED) ON ALL STRUCTURES AND MATERIALS, FOR REVIEW AND APPROVAL PRIOR TO PURCHASE OR FABRICATION OF ANY UTILITY PIPE OR STRUCTURE.
5. UNSUITABLE MATERIALS UNDER UTILITY PIPES AND STRUCTURES SHALL BE REMOVED AND REPLACED WITH SELECTED BACKFILL, PROPERLY COMPACTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
6. MECHANICALLY RESTRAINED JOINTS ARE REQUIRED ON PRESSURE MAINS AT VALVES, FITTINGS AND DEAD ENDS IN ACCORDANCE WITH CITY OF EDGEWATER SITE DEVELOPMENT CONSTRUCTION DETAILS.
7. CONTRACTOR SHALL FURNISH AND INSTALL LOCATE WIRING ON ALL PVC WATER MAINS, REUSE MAINS, FORCE MAINS, POLYETHYLENE AND PVC WATER SERVICES. INSTALLATION SHALL BE IN ACCORDANCE WITH CITY OF EDGEWATER SITE DEVELOPMENT CONSTRUCTION DETAILS.
8. ALL POINTS OF CONNECTION FOR WATER, REUSE WATER AND SEWER MUST BE IN ACCORDANCE WITH THE AVAILABILITY RESPONSE FROM CITY OF EDGEWATER.
9. F.D.E.P. PERMITS SUBMITTED THROUGH THE DEPARTMENT FOR PROCESSING SHALL BE IN CONFORMANCE WITH BOTH THE DESIGN PLANS AND THE WATER AND SEWER AVAILABILITY RESPONSE. ANY MINOR OR MAJOR DEVIATIONS BETWEEN THE PRELIMINARY DESIGN AND FINAL DESIGN SUBMITTAL SHALL REQUIRE REVISED F.D.E.P. PERMITS REFLECTING THESE CHANGES.
10. THE CONTRACTOR SHALL MINIMIZE SERVICE INTERRUPTIONS AND MAINTAIN ANY EXISTING WATER AND SEWER SERVICE TO MEET THE SYSTEM DEMANDS AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF AFFECTED CUSTOMERS AND UTILITY A MINIMUM OF 48 HOURS IN ADVANCE OF ANY INTERRUPTION OF SERVICE.
11. CONTRACTOR SHALL OBTAIN A COPY OF THE F.D.E.P. OR CITY OF EDGEWATER WATER AND SEWER PERMITS FROM THE ENGINEER PRIOR TO START OF CONSTRUCTION AND MUST COMPLY WITH ALL CONDITIONS OF PERMIT(S).
12. ALL CITY OF EDGEWATER ELECTRICAL CONDUIT WORK SHALL BE COMPLETED PRIOR TO THE PRESSURE TESTING OF WATER MAINS, REUSE MAINS AND SEWAGE FORCE MAINS. ALL PRESSURE TESTING AND PUMP TESTING SHALL BE WITNESSED BY CITY OF EDGEWATER AND THE ENGINEER.

WATER AND REUSE MAINS

13. UNLESS OTHERWISE INDICATED, ALL WATER MAINS AND REUSE MAINS WILL BE PVC DR18, C-900/C-905 (AS APPROPRIATE) PIPE. ALL 2" MAINS SHALL BE HDPE CTS SDR 9.
14. WATER MAINS AND REUSE MAINS SHALL HAVE A MINIMUM OF 30" COVER UNDER UNPAVED AREAS AND 36" MINIMUM COVER FROM FINISHED GRADE UNDER PAVED AREAS UNLESS OTHERWISE SHOWN. ADDITIONAL COVER IS REQUIRED FOR VALVE INSTALLATION CLEARANCE FOR PIPE GREATER THAN 8 INCHES IN DIAMETER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT INSTALLED PIPING UNTIL FINAL ACCEPTANCE BY F.D.E.P AND CITY OF EDGEWATER.
15. ALL WATER MAINS AND REUSE MAINS SHALL BE FLUSHED IN ACCORDANCE WITH, AND UNDER THE DIRECTION OF THE CITY OF EDGEWATER.
16. HORIZONTAL AND VERTICAL SEPARATION BETWEEN WATER MAINS AND REUSE MAINS AND HORIZONTAL AND VERTICAL SEPARATION BETWEEN WATER MAINS AND REUSE MAINS TO OTHER UTILITIES SHALL BE IN ACCORDANCE WITH CITY OF EDGEWATER AND F.D.E.P. REQUIREMENTS.
17. ALL GATE VALVES SHALL BE CITY OF EDGEWATER STANDARD. VALVES SHALL BE MECHANICAL JOINT, CAST IRON, BRONZE FITTED WITH RESILIENT SEAT. ALL VALVES SHALL OPEN BY TURNING TO THE LEFT. VALVES SHALL BE RATED AT 250 PSI WORKING PRESSURE AND 500 PSI TEST PRESSURE.
18. ALL NEW AND / OR RELOCATED WATER MAIN AND REUSE MAIN PIPE AND FITTINGS SHALL NOT CONTAIN MORE THAN EIGHT PERCENT LEAD, AND ALL PACKING AND JOINT MATERIALS USED IN THE JOINTS SHALL CONFORM WITH ALL APPLICABLE AWWA STANDARDS. ALL NEW AND / OR RELOCATED SERVICES AND PLUMBING SHALL CONTAIN NO MORE THAN EIGHT PERCENT LEAD AND ALL SOLDERS AND FLUX SHALL CONTAIN NO MORE THAN 0.2 PERCENT LEAD.

WATER, REUSE, & SEWER REQUIREMENTS

21. ALL FIRE HYDRANTS SHALL BE CITY OF EDGEWATER STANDARD. FIRE HYDRANTS LOCATED WITHIN CITY OF EDGEWATER RIGHT OF WAYS OR EASEMENTS SHALL BE PAINTED YELLOW. ALL PRIVATE FIRE HYDRANTS SHALL BE PAINTED RED, OR IN ACCORDANCE WITH LOCAL REQUIREMENTS.
22. ALL FIRE HYDRANTS THAT ARE SUPPLIED BY A FIRE PUMP AND SUBJECT TO HIGH PRESSURE (IN EXCESS OF 60 P.S.I.) SHALL BE PAINTED GREEN WITH RED LETTERS "H.P." APPROXIMATELY 2" HIGH. THESE LETTERS SHALL BE STENCILED ON THE HYDRANT IN A CONSPICUOUS/ VISIBLE AREA.
23. ALL NEW FIRE HYDRANT INSTALLATIONS, PUBLIC AND PRIVATE, SHALL HAVE A BLUE F.D.O.T. TYPE REFLECTIVE PAVEMENT MARKER INSTALLED IN THE CENTER OF THE TRAFFIC LANE NEAREST THE NEW FIRE HYDRANT.
24. ALL WATER MAINS SHALL BE BACTERIOLOGICAL AND PRESSURE TESTED AT 150 PSI FOR 2 HOURS IN ACCORDANCE WITH AWWA STANDARDS AND JEA STANDARD REQUIREMENTS. NO CONNECTION TO THE EXISTING POTABLE WATER SYSTEM SHALL BE ALLOWED UNTIL ALL PROPOSED WATER LINES HAVE BEEN PRESSURE TESTED, DISINFECTED, AND CLEARED FOR SERVICE. THE ENGINEER MUST BE NOTIFIED 48 HOURS PRIOR TO PERFORMING THE PRESSURE TEST. DISINFECTION SHALL BE IN ACCORDANCE WITH AWWA-C-651. REUSE MAINS REQUIRE PRESSURE TEST ONLY.
25. ALL BACKFLOW PREVENTORS SHALL BE IN ACCORDANCE WITH THE CITY OF EDGEWATER (HAVING JURISDICTION) CROSS CONNECTION CONTROL PROGRAM. BACKFLOW PREVENTORS MUST BE TESTED AFTER INSTALLATION BY A CERTIFIED TESTER AND ANNUALLY THEREAFTER.
26. THE WATER TAPS DEPICTED ON THESE DESIGN PLANS SHALL BE CONSTRUCTED AS FOLLOWS: ALL POTABLE, REUSE, AND IRRIGATION WATER TAPS, FIRE LINE SERVICES AND FIRE HYDRANT INSTALLATIONS SHALL BE PERFORMED BY A LICENSED MASTER PLUMBER OR UNDERGROUND UTILITY CONTRACTOR UNDER THE FOLLOWING CONDITIONS:
    1.) THE TAPS ARE TO BE SCHEDULED 48 HOURS IN ADVANCE WITH CITY OF EDGEWATER.
    2.) TAPS REQUIRING METER INSTALLATIONS OF SIZE 2" AND BELOW MUST INCLUDE THE SERVICE PIPE, METER BOX, AND CORP. STOP SIZED READY TO ACCEPT THE METER INSTALLATION BY CITY OF EDGEWATER FORCES.
    3.) CITY OF EDGEWATER FORCES WILL INSTALL THE METER UPON APPLICATION AND PAYMENT BY LICENSED MASTER PLUMBER OR UTILITY CONTRACTOR AT CITY OF EDGEWATER WATER AND SEWER.
    4.) ALL TAPS REQUIRING METER INSTALLATIONS OF SIZE 3" AND ABOVE SHALL TERMINATE SIZED READY FOR VAULT, METER AND BYPASS INSTALLATION. VAULT FURNISHED BY CONTRACTOR. INSTALLATION BY CITY OF EDGEWATER FORCES. SPECIAL ESTIMATE REQUIRED.
27. WATER METERS SHALL NOT BE LOCATED WITHIN PAVEMENT, CURB AND GUTTER OR DRIVEWAYS.
28. IF SOLVENT CONTAMINATION IS FOUND IN THE PIPE TRENCH, WORK SHALL BE STOPPED AND THE PROPER AUTHORITIES NOTIFIED. WITH APPROVAL OF THE PERMITTING AGENCY, DUCTILE IRON PIPE, FITTINGS AND SOLVENT RESISTANT GASKET MATERIAL SUCH AS FLUOROCARBON ELASTOMER SHALL BE USED IN THE CONTAMINATED AREA. THE LINE PIPE SHALL EXTEND AT LEAST 100 FEET BEYOND ANY SOLVENT NOTED. ANY CONTAMINATED SOIL THAT IS EXCAVATED SHALL BE PLACED ON AN IMPERMEABLE MAT AND COVERED WITH A WATERPROOF COVERING. THE PROPER AUTHORITIES WILL BE NOTIFIED AND THE CONTAMINATED SOIL HELD FOR PROPER DISPOSAL.

SEWER

29. ALL SEWER MAINS, SERVICES, AND FITTINGS SHALL BE PVC (ASTM-3034) SDR 26 UNLESS OTHERWISE INDICATED. FORCE MAINS SHALL BE PVC DR 18 PIPE UNLESS OTHERWISE INDICATED. FORCE MAINS SHALL BE PRESSURE TESTED THE SAME AS WATER AND REUSE MAINS.
30. SANITARY SEWER SERVICES SHALL BE SINGLE 4" PVC WITH A MINIMUM SLOPE OF 0.02 FEET PER FOOT AND SHALL BE TERMINATED AT THE RIGHT-OF-WAY LINE WITH A DEPTH OF 30" TO 60" UNLESS OTHERWISE DETAILED OR RESTRICTED DUE TO DEPTH OF SEWER MAIN. FORCE MAINS SHALL HAVE A MINIMUM COVER OF 30 INCHES IN UNPAVED AREAS AND 36 INCHES IN PAVED AREAS UNLESS OTHERWISE INDICATED. SEE FORCE MAIN PROFILE SHEET(S).
31. SEWER LINES AND FORCE MAINS ARE DESIGNED TO FINISHED GRADES AND SHALL BE PROTECTED UNTIL WORK IS COMPLETED AND ACCEPTED BY F.D.E.P. AND CITY OF EDGEWATER.
32. PRIOR TO THE PLACEMENT OF THE LIMEROCK BASE COURSE, THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER A SCHEDULE OF INVERT ELEVATIONS OF ALL SANITARY MANHOLES. THIS SCHEDULE SHALL BE PROVIDED BY THE REGISTERED LAND SURVEYOR SUBMITTING THE "AS-BUILT" DRAWINGS FOR THIS PROJECT.
33. THE CONTRACTOR SHALL INSTALL ANY ADDITIONAL AIR RELEASE VALVES AT CHANGES IN ELEVATION OF 2 FT. DUE TO ACTUAL FIELD CONDITIONS OR CONFLICTS NOT IDENTIFIED ON THESE DESIGN PLANS.
34. TELEVISION INSPECTION SHALL BE REQUIRED ON ALL GRAVITY SEWER MAINS. INSPECTION SHALL BE RECORDED ON VIDEO TAPE OR DVD. ALL LINES ARE TO BE CLEANED AND FLUSHED PRIOR TO INSPECTION. A FULL WRITTEN REPORT AS TO THE CONDITION OF THE PIPE WITH PERTINENT DATA SUCH AS DISTANCE BETWEEN MANHOLES, LOCATION OF SERVICES, ETC. SHALL BE SUBMITTED TO THE OWNER AND ENGINEER PRIOR TO ACCEPTANCE AND ONE COPY OF THE VIDEO INSPECTION SHALL BE SUBMITTED TO THE CITY OF EDGEWATER. ALL DEFECTIVE AREAS AND ITEMS SHALL BE REPLACED OR REPAIRED PRIOR TO FINAL ACCEPTANCE. ALL REPAIRED SECTIONS MUST BE REINSPECTED PRIOR TO ACCEPTANCE. THE MAXIMUM DEFLECTION SHALL NOT EXCEED 7.5% OF THE NOMINAL DIAMETER IN ACCORDANCE WITH CITY OF EDGEWATER STANDARDS. INFILTRATION AND/OR EXFILTRATION TESTING OF GRAVITY SEWERS MAY BE REQUIRED IF DEEMED NECESSARY BY THE ENGINEER. THE MAXIMUM ALLOWABLE INFILTRATION-EXFILTRATION RATE WILL BE 50 GALLONS PER INCH DIAMETER PER MILE PER DAY.

PAVING AND DRAINAGE LEGEND

EXISTING	PROPOSED	
25	25.5	SPOT ELEVATION
10	10	CONTOURS
	S 45°34'23" E	BOUNDARY
		DRAINAGE DIVIDE
ST	ST	STORM SEWER AND SIZE
ST	ST	STORM SEWER INLET
ST	ST	STORM SEWER MANHOLE
ST	ST	MITERED END SECTION
		DRAINAGE FLOW ARROWS
		DITCH FLOW ARROWS
S-10	S-10	STRUCTURE NUMBERS
1.8 AC.±	1.8 AC.±	DRAINAGE AREA
A1	A1	SOIL BORING LOCATION
UD	UD	UNDERDRAIN
		CONCRETE SIDEWALK
		CONCRETE CURB AND GUTTER
		JURISDICTIONAL WETLANDS
		SILT FENCE
		HAY BALES

WATER AND SEWER LEGEND

EXISTING	PROPOSED	
SAN 8"		SANITARY SEWER LINE
SAN 8"

LOT TOTALS	
LOT SIZES	TOTAL
20'x110' MIN. REAR	76
24'x110' MIN. FRONT	60
20'x110' MIN. FRONT	122
	258

TRACT AREA TABLE		
PARCEL NAME	DESCRIPTION	AREA (ACRES)

Development Summary	
1. Project Name:	DEERING PARK CENTER TOWNHOMES
VOLUSIA COUNTY, FLORIDA	
SECTION 7 TOWNSHIP 18 SOUTH RANGE 34 EAST	
SECTION 8 TOWNSHIP 18 SOUTH RANGE 34 EAST	
2. Area Summary:	
Total Site Area =	92.91 ACs
Total Conservation Easements	41.12 ACs
Total Wetlands =	16.02 ACs
Total Wetalnd Buffers =	3.04 ACs
Total Developable Area =	32.28 ACs
Open Space =	3.49 ACs
Total Residential Area =	258 UNITS
Density (Lots/Developable Area) =	7.21 DU/ACRE
3. STANDARD LOT AND SETBACK FRONT LOAD:	
MINIMUM LOT AREA =	N/A
MINIMUM LOT WIDTH =	N/A
MINIMUM FRONT SETBACK (NON GARAGE) =	10 FT.
MINIMUM FRONT SETBACK (GARAGE) =	24 FT.
MINIMUM REAR SETBACK =	20 FT.
MINIMUM SIDE SETBACK =	10 FT.
MAXIMUM LOT COVERAGE BY BLDG =	N/A
MINIMUM BUILDING SEPERATION =	10 FT.
4. STANDARD LOT AND SETBACKS ALLEY LOAD:	
MINIMUM LOT AREA =	N/A
MINIMUM LOT WIDTH =	N/A
MINIMUM FRONT SETBACK =	5 FT.
MINIMUM REAR SETBACK =	15 FT.
MINIMUM SIDE SETBACK =	10 FT.
MAXIMUM LOT COVERAGE BY BLDG =	N/A
MINIMUM BUILDING SEPERATION =	10 FT.
5. FEMA FLOOD INSURANCE:	
BASED ON FEMA FIRM MAPS FOR THE SITE HAS AREA THAT ARE IN FLOOD ZONE A (FEMA MAPS 12127C0700J DATED: 09-29-2017)	
ACREAGE IN FLOOD HAZARD AREAS =	53.15 ACs
6. PARCEL NO.:	8407000000010 , 8407000000014
7. PARKING	
REQUIRED	
RESIDENTIAL	2 SPACES / UNIT
	258 UNITS * 2 SPACES / UNIT
	= 462 REQUIRED
PROVIDED	
GARAGE	258 (ASSUMES 1 CAR GARAGE)
DRIVEWAY	258 (ASSUMES 1 CAR DRIVEWAY)
ON-STREET	36
STANDARD	46
ACCESSIBLE	3
TOTAL	601 PROVIDED*

* RESIDENTIAL UNITS MAY HAVE 2 CAR GARAGES/ 2 CAR DRIVEWAYS

LEGEND

- ASPHALT PAVEMENT
- WETLAND BUFFERS
- WETLANDS
- CONSERVATION EASEMENT
- CONCRETE PAVEMENT

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW
P.E. NUMBER: 86967

REVISIONS:

ETM NO.	22-213-39
DRAWN BY:	KJJ
DESIGNED BY:	CBW
CHECKED BY:	CBW
DATE:	01.27.2025

1411 Edgewater Drive, Ste. 200
Orlando, Florida 32804
(407) 536-5379
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CA- 00002584 LC-0000316

ENGLAND-THIMS & MILLER

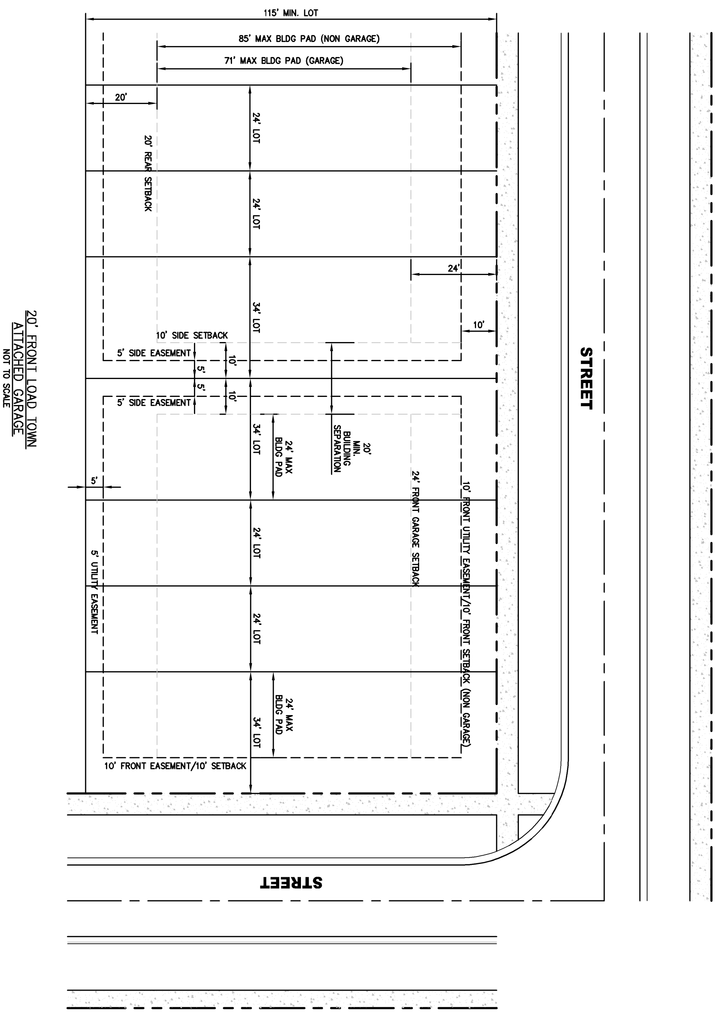
MASTER SITE PLAN

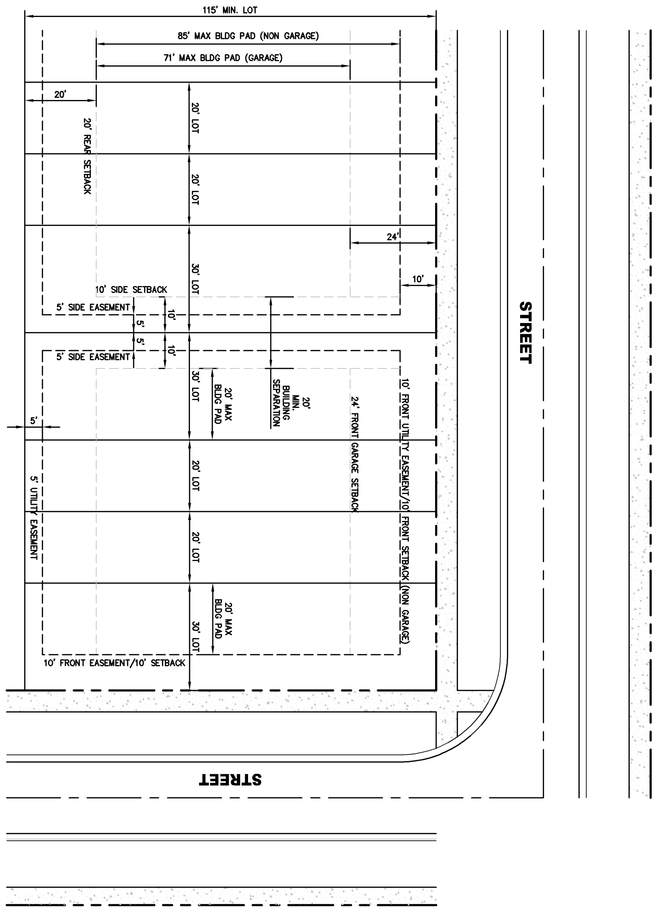
DEERING PARK CENTER TOWNHOMES FOR DEERING PARK 1, LLC

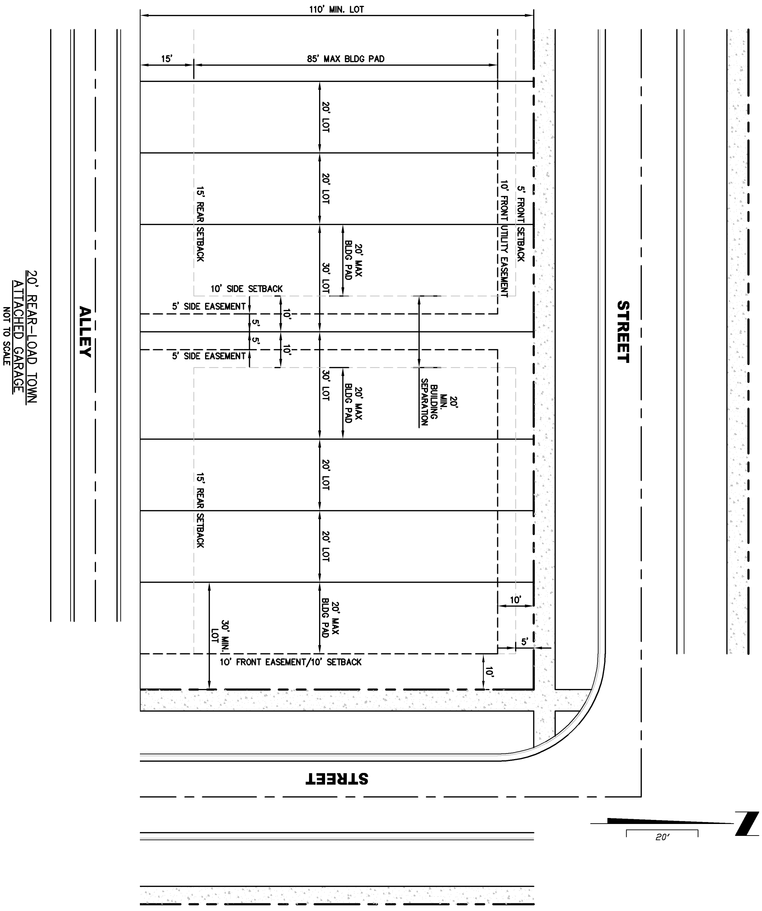
DRAWING NUMBER
3

PLOTTED: August 8, 2025 – 5:37 PM, BY: Cheroky Williams

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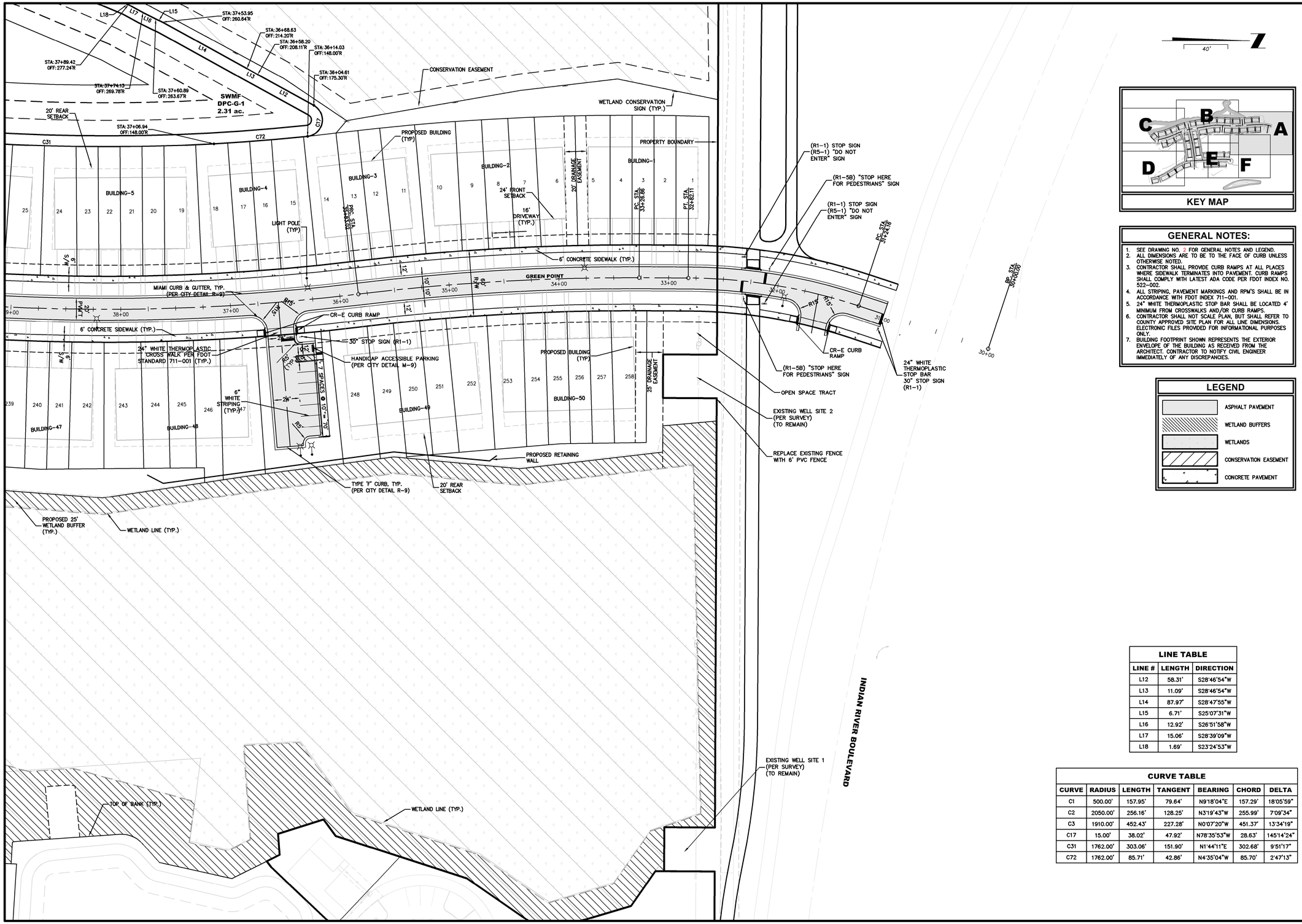


DRAWING NUMBER 4	**TYPICAL LOT LAYOUTS** **DEERING PARK CENTER TOWNHOMES FOR DEERING PARK 1, LLC**	ETM ENGLAND-THIMS & MILLER Trusted Advisors, Creating Community.	1411 Edgewater Drive, Ste. 200 Orlando, Florida 32804 (407) 536-5379 www.etminc.com REG-00002584 LC-0000316	ETM NO. 22-213-39 DRAWN BY: KAJ DESIGNED BY: CBW CHECKED BY: CBW DATE: 01.27.2025	REVISIONS:

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW
P.E. NUMBER: 80867

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PLOTTED: August 8, 2025 – 5:37 PM, BY: Cheroky Williams



KEY MAP

GENERAL NOTES:

1. SEE DRAWING NO. 2 FOR GENERAL NOTES AND LEGEND.
2. ALL DIMENSIONS ARE TO BE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
3. CONTRACTOR SHALL PROVIDE CURB RAMPS AT ALL PLACES WHERE SIDEWALK TERMINATES INTO PAVEMENT. CURB RAMPS SHALL COMPLY WITH LATEST ADA CODE PER FDOT INDEX NO. 522-002.
4. ALL STRIPING, PAVEMENT MARKINGS AND RPM'S SHALL BE IN ACCORDANCE WITH FDOT INDEX 711-001.
5. 24" WHITE THERMOPLASTIC STOP BAR SHALL BE LOCATED 4' MINIMUM FROM CROSSWALKS AND/OR CURB RAMPS.
6. CONTRACTOR SHALL NOT SCALE PLAN, BUT SHALL REFER TO COUNTY APPROVED SITE PLAN FOR ALL LINE DIMENSIONS. ELECTRONIC FILES PROVIDED FOR INFORMATIONAL PURPOSES ONLY.
7. BUILDING FOOTPRINT SHOWN REPRESENTS THE EXTERIOR ENVELOPE OF THE BUILDING AS RECEIVED FROM THE ARCHITECT. CONTRACTOR TO NOTIFY CIVIL ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

LEGEND

- ASPHALT PAVEMENT
- WETLAND BUFFERS
- WETLANDS
- CONSERVATION EASEMENT
- CONCRETE PAVEMENT

LINE TABLE

LINE #	LENGTH	DIRECTION
L12	58.31'	S28°46'54"W
L13	11.09'	S28°46'54"W
L14	87.97'	S28°47'55"W
L15	6.71'	S25°07'31"W
L16	12.92'	S26°51'58"W
L17	15.06'	S28°39'09"W
L18	1.69'	S23°24'53"W

CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	BEARING	CHORD	DELTA
C1	500.00'	157.95'	79.64'	N9°18'04"E	157.29'	18°05'59"
C2	2050.00'	256.16'	128.25'	N3°19'43"W	255.99'	7°09'34"
C3	1910.00'	452.43'	227.28'	N0°07'20"W	451.37'	13°34'19"
C17	15.00'	38.02'	47.92'	N78°35'53"W	28.63'	145°14'24"
C31	1762.00'	303.06'	151.90'	N1°44'11"E	302.68'	9°51'17"
C72	1762.00'	85.71'	42.86'	N4°35'04"W	85.70'	2°47'13"

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW
P.E. NUMBER: 86967

REVISIONS:

ETM NO. 22-213-39
DRAWN BY: KJJ
DESIGNED BY: CBW
CHECKED BY: CBW
DATE: 01.27.2025

Trusted Advisors, Creating Community.
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Orlando, Florida 32804
(407) 536-5379
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ENGLAND-THIMS & MILLER

SITE GEOMETRY PLAN

DEERING PARK CENTER TOWNHOMES
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
5A

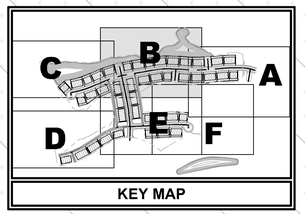
PLOTTED: August 8, 2025 - 5:38 PM, BY: Cheroky Williams

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CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	BEARING	CHORD	DELTA
C4	900.00'	292.75'	147.68'	N2°39'18"W	291.46'	18°38'14"
C5	3000.00'	250.39'	125.27'	N9°34'58"W	250.32'	4°46'55"
C6	1305.00'	433.41'	218.72'	N16°42'22"W	431.42'	19°01'43"
C8	3483.50'	497.41'	249.13'	S81°28'43"W	496.99'	8°10'53"
C9	3330.00'	416.10'	208.32'	N80°58'04"E	415.83'	7°09'34"
C11	500.00'	74.46'	37.30'	S74°01'55"W	74.39'	8°31'57"
C18	8.31'	4.49'	2.30'	S38°31'41"W	4.43'	30°56'36"
C19	8.53'	11.77'	7.04'	N86°26'36"W	10.86'	79°06'51"
C20	30.00'	23.79'	12.56'	N71°03'03"W	23.17'	45°26'02"
C21	30.00'	38.69'	22.57'	S49°16'53"W	36.07'	73°54'06"
C22	30.00'	28.67'	15.54'	S15°02'52"E	27.59'	54°45'24"
C23	30.00'	14.06'	7.16'	S55°51'17"E	13.93'	26°51'24"
C24	30.00'	25.97'	13.86'	N85°55'04"E	25.17'	49°35'55"
C25	8.51'	11.80'	7.07'	S79°39'16"E	10.88'	79°27'44"
C26	8.41'	4.24'	2.17'	S25°28'55"E	4.19'	28°52'57"
C27	15.00'	10.02'	5.20'	S32°09'29"E	9.83'	38°15'42"
C28	15.00'	12.30'	6.52'	S27°14'55"E	11.96'	46°59'30"
C29	15.00'	41.09'	73.57'	N66°40'53"E	29.40'	156°57'06"
C30	1048.00'	337.62'	170.28'	N2°33'56"W	336.16'	18°27'29"
C31	1762.00'	303.06'	151.90'	N1°44'11"E	302.68'	9°51'17"
C32	15.00'	38.09'	48.29'	S82°21'44"E	28.65'	145°29'21"
C33	30.00'	15.72'	8.04'	N9°52'54"E	15.54'	30°01'23"
C34	30.00'	4.23'	2.12'	N9°10'09"W	4.23'	8°04'42"
C35	30.00'	6.47'	3.25'	N7°01'39"W	6.46'	12°21'42"
C36	30.00'	10.26'	5.18'	N10°38'37"W	10.21'	19°35'39"
C49	1453.00'	482.56'	243.52'	S16°42'22"E	480.35'	19°01'43"
C50	2852.00'	71.33'	35.67'	S7°54'29"E	71.33'	1°25'59"
C51	2852.00'	49.43'	24.72'	S9°07'16"E	49.43'	0°59'35"

LINE TABLE		
LINE #	LENGTH	DIRECTION
L12	58.31'	S28°46'54"W
L13	11.09'	S28°46'54"W
L14	87.97'	S28°47'55"W
L15	6.71'	S25°07'31"W
L16	12.92'	S26°51'58"W
L17	15.06'	S28°39'09"W
L18	1.69'	S23°24'53"W
L19	102.83'	S22°55'34"W
L21	20.07'	S52°25'18"W
L22	54.26'	S54°21'00"W
L23	48.93'	N48°20'03"W
L24	8.52'	S86°13'56"W
L25	58.37'	S12°19'50"W
L26	44.35'	S42°25'34"E
L27	4.03'	S69°16'59"E
L28	10.16'	N61°07'06"E
L29	68.18'	N62°25'03"E
L30	12.81'	S40°52'46"E
L31	42.50'	S39°23'14"E
L32	8.04'	S40°31'19"E
L33	71.72'	S12°11'50"E
L34	17.35'	S10°54'28"E
L35	16.10'	S11°52'30"E
L36	27.94'	S13°01'38"E
L37	42.28'	S51°17'20"E
L38	33.00'	S50°44'40"E

LINE TABLE		
LINE #	LENGTH	DIRECTION
L39	71.92'	S3°45'10"E
L40	43.22'	S34°50'34"E
L41	53.13'	N24°53'35"E
L42	58.99'	N5°07'48"W
L43	78.58'	N13°12'30"W
L44	132.17'	N0°50'48"W
L45	137.36'	N20°26'27"W



KEY MAP

GENERAL NOTES:

1. SEE DRAWING NO. 2 FOR GENERAL NOTES AND LEGEND.
2. ALL DIMENSIONS ARE TO BE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
3. CONTRACTOR SHALL PROVIDE CURB RAMPS AT ALL PLACES WHERE SIDEWALK TERMINATES INTO PAVEMENT. CURB RAMPS SHALL COMPLY WITH LATEST ADA CODE PER FDOT INDEX NO. 522-002.
4. ALL STRIPING, PAVEMENT MARKINGS AND RPM'S SHALL BE IN ACCORDANCE WITH FDOT INDEX 711-001.
5. 24" WHITE THERMOPLASTIC STOP BAR SHALL BE LOCATED 4' MINIMUM FROM CROSSWALKS AND/OR CURB RAMPS.
6. CONTRACTOR SHALL NOT SCALE PLAN, BUT SHALL REFER TO COUNTY APPROVED SITE PLAN FOR ALL LINE DIMENSIONS. ELECTRONIC FILES PROVIDED FOR INFORMATIONAL PURPOSES ONLY.
7. BUILDING FOOTPRINT SHOWN REPRESENTS THE EXTERIOR ENVELOPE OF THE BUILDING AS RECEIVED FROM THE ARCHITECT. CONTRACTOR TO NOTIFY CIVIL ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

LEGEND

- ASPHALT PAVEMENT
- WETLAND BUFFERS
- WETLANDS
- CONSERVATION EASEMENT
- CONCRETE PAVEMENT

SWMF
DPC-G-1
2.31 ac.

PROPOSED BUILDING (TYP)

WETLAND CONSERVATION SIGN (TYP.)

CONSERVATION EASEMENT

TOP OF BANK (TYP.)

20' REAR SETBACK

24' FRONT SETBACK

20' DRAINAGE EASEMENT

MAIL KIOSK (BY OTHERS)

HANDICAP ACCESSIBLE PARKING (PER CITY DETAIL M-9)

TYPE 'F' CURB, TYP. (PER CITY DETAIL R-9)

6" WHITE STRIPING (TYP.)

24" WHITE THERMOPLASTIC 30" STOP SIGN (R1-1) (TYP.)

MIAMI CURB & GUTTER, TYP. (PER CITY DETAIL R-9)

8' CONCRETE SIDEWALK (TYP.)

6' CONCRETE SIDEWALK (TYP.)

CR-E CURB RAMP

CR-F CURB RAMP

24" WHITE THERMOPLASTIC STOP BAR, 30" STOP SIGN (R1-1) (TYP.)

24" WHITE THERMOPLASTIC STOP BAR 30" STOP SIGN (R1-1) (TYP.)

2' MIAMI CURB & GUTTER, TYP. (PER CITY DETAIL R-9)

12" CONCRETE RIBBON CURB, (TYP.)

PROPOSED RETAINING WALL (TYP.)

8'x22' PARALLEL PARKING SPACE (TYP.)

PROPOSED 25' WETLAND BUFFER (TYP.)

WETLAND LINE (TYP.)

GREEN POINT CIRCLE

SAINT CLOUD DRIVE

BERM

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E. NUMBER: 86967

PLOTTED: August 8, 2025 - 5:38 PM, BY: Cheroky Williams

REVISIONS:

ETM NO. 22-213-39	DRAWN BY: KJJ	DESIGNED BY: CBW	CHECKED BY: CBW	DATE: 01.27.2025

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ENGLAND-THIMS & MILLER

SITE GEOMETRY PLAN

DEERING PARK CENTER TOWNHOMES
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
5B

n:\2022\22-213\22-213-09\Land\Design\Plots\GEO-22-213-09.dwg

GENERAL NOTES:

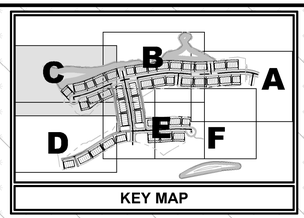
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LINE TABLE

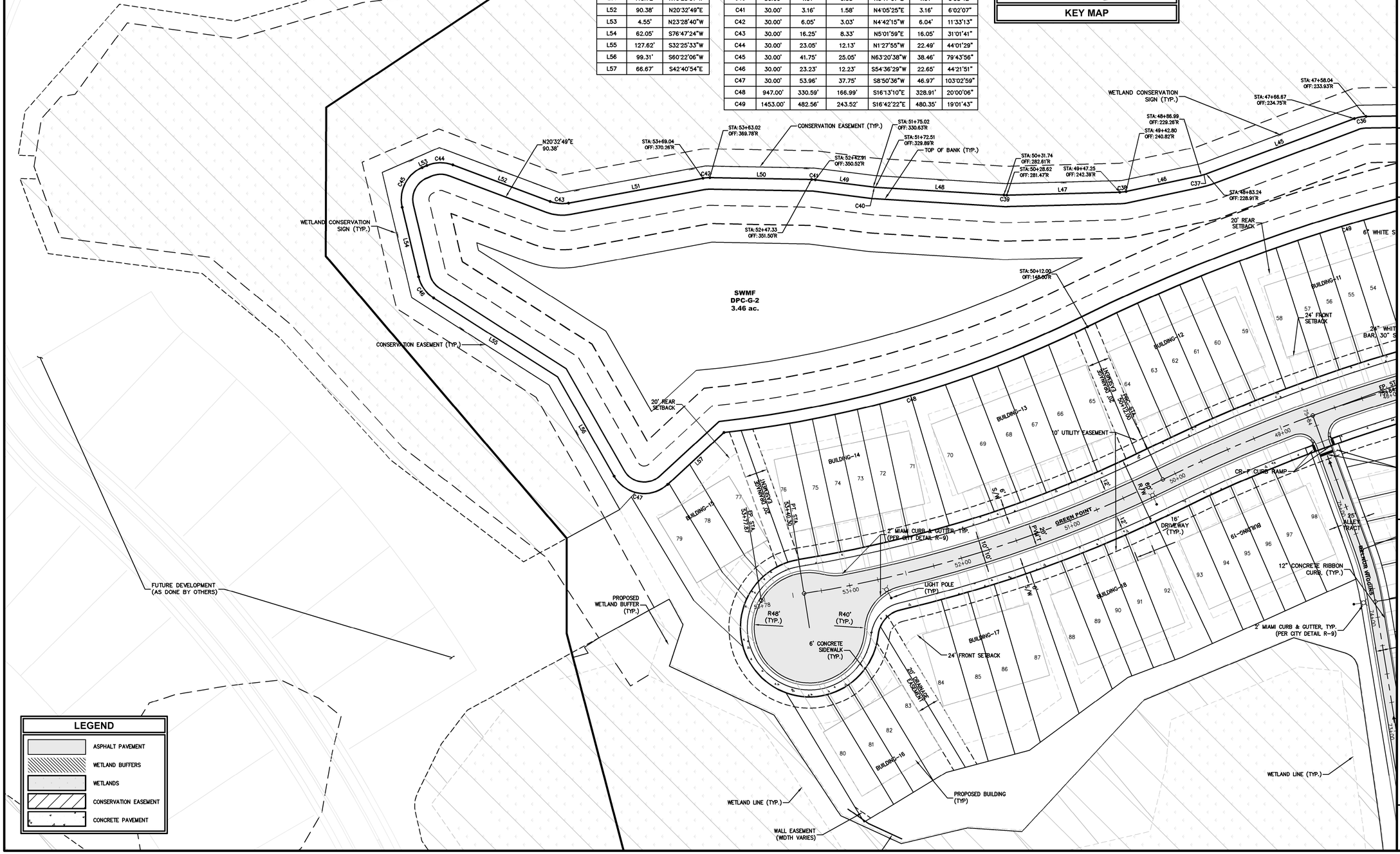
LINE #	LENGTH	DIRECTION
L45	137.36'	N20°26'27"W
L46	66.86'	N11°59'59"W
L47	98.10'	N1°28'04"W
L48	111.78'	N3°27'46"E
L49	50.82'	N7°06'28"E
L50	88.40'	N1°04'21"E
L51	118.72'	N10°28'51"W
L52	90.38'	N20°32'49"E
L53	4.55'	N23°28'40"W
L54	62.05'	S76°47'24"W
L55	127.62'	S32°25'33"W
L56	99.31'	S60°22'06"W
L57	66.67'	S42°40'54"E

CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	BEARING	CHORD	DELTA
C7	1095.00'	328.30'	165.39'	N17°37'52"W	327.07'	17°10'41"
C11	500.00'	74.46'	37.30'	S74°01'55"W	74.39'	8°31'57"
C36	30.00'	10.26'	5.18'	N10°38'37"W	10.21'	19°35'39"
C37	30.00'	4.42'	2.21'	N16°13'13"W	4.42'	8°26'28"
C38	30.00'	5.51'	2.77'	N6°44'02"W	5.51'	10°31'55"
C39	30.00'	2.58'	1.29'	N0°59'51"E	2.58'	4°55'50"
C40	30.00'	1.91'	0.95'	N5°17'07"E	1.91'	3°38'42"
C41	30.00'	3.16'	1.58'	N4°05'25"E	3.16'	6°02'07"
C42	30.00'	6.05'	3.03'	N4°42'15"W	6.04'	11°33'13"
C43	30.00'	16.25'	8.33'	N5°01'59"E	16.05'	31°01'41"
C44	30.00'	23.05'	12.13'	N1°27'55"W	22.49'	44°01'29"
C45	30.00'	41.75'	25.05'	N63°20'38"W	38.46'	79°43'56"
C46	30.00'	23.23'	12.23'	S54°36'29"W	22.65'	44°21'51"
C47	30.00'	53.96'	37.75'	S8°50'36"W	46.97'	103°02'59"
C48	947.00'	330.59'	166.99'	S16°13'10"E	328.91'	20°00'06"
C49	1453.00'	482.56'	243.52'	S16°42'22"E	480.35'	19°01'43"



KEY MAP



LEGEND

- ASPHALT PAVEMENT
- WETLAND BUFFERS
- WETLANDS
- CONSERVATION EASEMENT
- CONCRETE PAVEMENT

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E. NUMBER: 86967

PLOTTED: August 8, 2025 - 5:38 PM, BY: Cheroky Williams

REVISIONS:

ETM NO. 22-213-39	DRAWN BY: KJJ	DESIGNED BY: CBW	CHECKED BY: CBW	DATE: 01.27.2025

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ENGLAND-THIMS & MILLER

SITE GEOMETRY PLAN

DEERING PARK CENTER TOWNHOMES FOR DEERING PARK 1, LLC

DRAWING NUMBER
5C

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CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	BEARING	CHORD	DELTA
C15	400.00'	208.78'	106.82'	S17°19'14"E	206.41'	29°54'18"
C16	800.00'	330.33'	167.55'	N20°26'38"W	327.99'	23°39'29"

LINE TABLE		
LINE #	LENGTH	DIRECTION
L10	295.28'	S32°16'23"E

LEGEND

- ASPHALT PAVEMENT
- WETLAND BUFFERS
- WETLANDS
- CONSERVATION EASEMENT
- CONCRETE PAVEMENT

KEY MAP

GENERAL NOTES:

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5. 24" WHITE THERMOPLASTIC STOP BAR SHALL BE LOCATED 4' MINIMUM FROM CROSSWALKS AND/OR CURB RAMPS.
6. CONTRACTOR SHALL NOT SCALE PLAN, BUT SHALL REFER TO COUNTY APPROVED SITE PLAN FOR ALL LINE DIMENSIONS. ELECTRONIC FILES PROVIDED FOR INFORMATIONAL PURPOSES ONLY.
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FUTURE DEVELOPMENT (AS DONE BY OTHERS)

OS WL-9 (7.53 ACRES)

WETLAND

WETLAND LINE (TYP.)

WALL EASEMENT (WIDTH VARIES)

PROPOSED RETAINING WALL

PROPOSED BUILDING (TYP)

BUILDING-16

20' DRAINAGE EASEMENT

PROPOSED WETLAND BUFFER (TYP.)

EP STA 95+38.68

89+38

130.9'

15' REAR SETBACK

10' UTILITY EASEMENT

EP STA 46+48.03

12" CONCRETE RIBBON CURB, TYP.

BP STA 100+00.00

24" WHITE THERMOPLASTIC STOP BAR, 30" STOP SIGN (R1-1) (TYP.)

CURVE TABLE

PC STA 100+87.54

PT STA 100+25.92

PC STA 100+02.36

PC STA 41+18.74

24' FRONT SETBACK

2' MIAMI CURB & GUTTER, TYP. (PER CITY DETAIL R-9)

DAONY JOHNSON

BUILDING-27

BUILDING-28

LIGHT POLE (TYP)

EXISTING TREE TO BE PROTECTED (TYP.)

PT STA 39+19.72

HAMMOCK PARK

AMENITY TRACT

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P.E. NUMBER: 86967

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SITE GEOMETRY PLAN

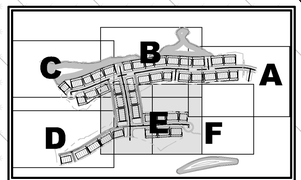
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LEGEND

- ASPHALT PAVEMENT
- WETLAND BUFFERS
- WETLANDS
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KEY MAP

CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	BEARING	CHORD	DELTA
C8	3483.50'	497.41'	249.13'	S81°28'43"W	496.99'	8°10'53"
C9	3330.00'	416.10'	208.32'	N80°58'04"E	415.83'	7°09'34"
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C12	3176.50'	397.23'	198.87'	S81°52'51"W	396.97'	7°09'54"
C13	1000.00'	157.07'	78.70'	S0°55'28"E	156.91'	8°59'59"
C14	2500.00'	133.35'	66.69'	N3°53'46"W	133.33'	3°03'22"
C15	400.00'	208.78'	106.82'	S17°19'14"E	206.41'	29°54'18"

PROPOSED 25' WETLAND BUFFER (TYP.)
WETLAND LINE (TYP.)
40'
60' R/W
PT. STA. 16+32.37
2' MIAMI CURB & GUTTER, TYP. (PER CITY DETAIL R-9)
12" CONCRETE RIBBON CURB, (TYP.)
PROPOSED RETAINING WALL (TYP.)
12" CONCRETE RIBBON CURB, (TYP.)
25' ALLEY TRACT
DELMON WIGGINS
PC STA. 14+60.45
8'x22' PARALLEL PARKING SPACE (TYP.)
PC STA. 74+13.69
TYPE 'F' CURB, TYP. (PER CITY DETAIL R-9)
2' MIAMI CURB & GUTTER, TYP. (PER CITY DETAIL R-9)
12' PVM'T
8' (TYP.)
22' (TYP.)
BUILDING-20
BUILDING-21
BUILDING-22
BUILDING-25
BUILDING-40
BUILDING-39
BUILDING-38
20' DRAINAGE EASEMENT
PT. STA. 72+82.84
WETLAND LINE (TYP.)
6" WHITE STRIPING (TYP.)
15' REAR SETBACK
TYPE 'F' CURB, TYP. (PER CITY DETAIL R-9)
10' UTILITY EASEMENT
TIERGARTEN
SAINT CYRUS
MIAMI CURB & GUTTER, TYP. (PER CITY DETAIL R-9)
WETLAND
15' REAR SETBACK
WETLAND LINE (TYP.)
PROPOSED WETLAND BUFFER (TYP.)
TOP OF BANK (TYP.)
PROPOSED BUILDING (TYP)
12" CONCRETE RIBBON CURB, TYP.
PROPOSED 6' CONCRETE SIDEWALK (TYP.)
PC STA. 193 12+16.27
CR-E CURB RAMP
CR-F CURB RAMP
PC STA. 80+84.00
BP STA. 70+00.00
PROPOSED WETLAND BUFFER (TYP.)
PET WASTE STATION TO BE PLACED WITHIN OPEN SPACE TRACT, CONFIRM FINAL LOCATION WITH OWNER PRIOR TO PLACEMENT
WETLAND LINE (TYP.)
10' UTILITY EASEMENT
EXISTING TREE TO BE PROTECTED (TYP.)
24" WHITE THERMOPLASTIC STOP BAR
30" STOP SIGN (R1-1)
BP STA. 10+00.00
LIGHT POLE (TYP)
15' REAR SETBACK
12" WHITE THERMOPLASTIC CROSS WALK PER FDOT STANDARD 711-001 (TYP.)
EXISTING TREE TO BE PROTECTED (TYP.)
PC STA. 10+74.70
PC STA. 34+64.74
PT STA. 34+11.88
PT STA. 30+53.14
UTILITY EASEMENT
20' DRAINAGE EASEMENT
SWMF DPC-G-8 0.93 ac. (DESIGNED UNDER LILY HAMMOCK PLANS)
MIXED USE TRACT
PC STA. 25+09.24
PC STA. 25+42.59
PT STA. 25+99.67
FP STA. 27+28.28
BUILDING-35
BUILDING-36
BUILDING-37
BUILDING-34
BUILDING-33
BUILDING-32
BUILDING-31
BUILDING-30
BUILDING-29
BUILDING-28
24' FRONT SETBACK
PROPOSED BUILDING (TYP)
RAGNY JOHNSON
UTILITY EASEMENT
16' DRIVEWAY (TYP.)
LIGHT POLE (TYP)
PROPOSED 6' CONCRETE SIDEWALK (TYP.)
R40'
R48' (TYP.)
SWMF DPC-G-7 0.97 ac. (DESIGNED UNDER LILY HAMMOCK PLANS)
PC STA. 80+93.68
PT STA. 82+43.68
BP STA. 70+00.00
R15'
R20'
R30'
R60'
65' R/W
60' R/W
5.5'
4.5'
5' S/W
6' S/W
20' DRAINAGE EASEMENT
037
030
031
013
015

PLANS PREPARED UNDER THE DIRECTION OF:
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DESIGNED BY: CBW
CHECKED BY: CBW
DATE: 01.27.2025

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Orlando, Florida 32804
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ENGLAND-THIMS & MILLER

SITE GEOMETRY PLAN

DEERING PARK CENTER TOWNHOMES FOR DEERING PARK 1, LLC

DRAWING NUMBER
5E

PLOTTED: August 8, 2025 – 5:38 PM, BY: Cheroky Williams

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PROPOSED 25' WETLAND BUFFER (TYP.)

WETLAND LINE (TYP.)

CE W-6 (9.53 ACRES)

PROPOSED WETLAND BUFFER (TYP.)

TOP OF BANK (TYP.)

WETLAND LINE (TYP.)

EXISTING WELL SITE 1 (PER SURVEY) (TO REMAIN)

SWMF DPC-G-7 0.97 ac. (DESIGNED UNDER LILY HAMMOCK PLANS)

BUILDING-36

BUILDING-35

BUILDING-34

BUILDING-33

BUILDING-32

BUILDING-31

188 187 186 185 184 183 182 181 180 179 178 177 176 175 174 173

158 159 160 161 162 163 164 165 166 167 168 169 170 171 172

P.C. STA. 23+09.24

P.R.C. STA. 24+42.59

P.T. STA. 25+99.67

P.R.C. STA. 26+42.59

P.T. STA. 27+25.28

24' FRONT SETBACK

PROPOSED BUILDING (TYP)

DAGNY JOHNSON

UTILITY EASEMENT

23+00 24+00 25+00 26+00 27+00 27+32

R40'

R48' (TYP.)

18' DRIVEWAY (TYP.)

LIGHT POLE (TYP.)

PROPOSED 6' CONCRETE SIDEWALK (TYP.)

20' DRAINAGE EASEMENT

SWMF DPC-G-8 0.93 ac. (DESIGNED UNDER LILY HAMMOCK PLANS)

22.5 25.5 26.5

MIXED USE TRACT

WELCOME CENTER TRACT

SEE WELCOME CENTER PLANS (BY OTHERS)

P.C. STA. 33+85.42

33+00

KEY MAP

LEGEND

- ASPHALT PAVEMENT
- WETLAND BUFFERS
- WETLANDS
- CONCRETE PAVEMENT

CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	BEARING	CHORD	DELTA
C13	1000.00'	157.07'	78.70'	S0°55'28"E	156.91'	8°59'59"
C14	2500.00'	133.35'	66.69'	N3°53'46"W	133.33'	3°03'22"

40'

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E. NUMBER: 86967

PLOTTED: August 8, 2025 – 5:38 PM, BY: Cheroky Williams

REVISIONS:

ETM NO. 22-213-39
DRAWN BY: KJJ
DESIGNED BY: CBW
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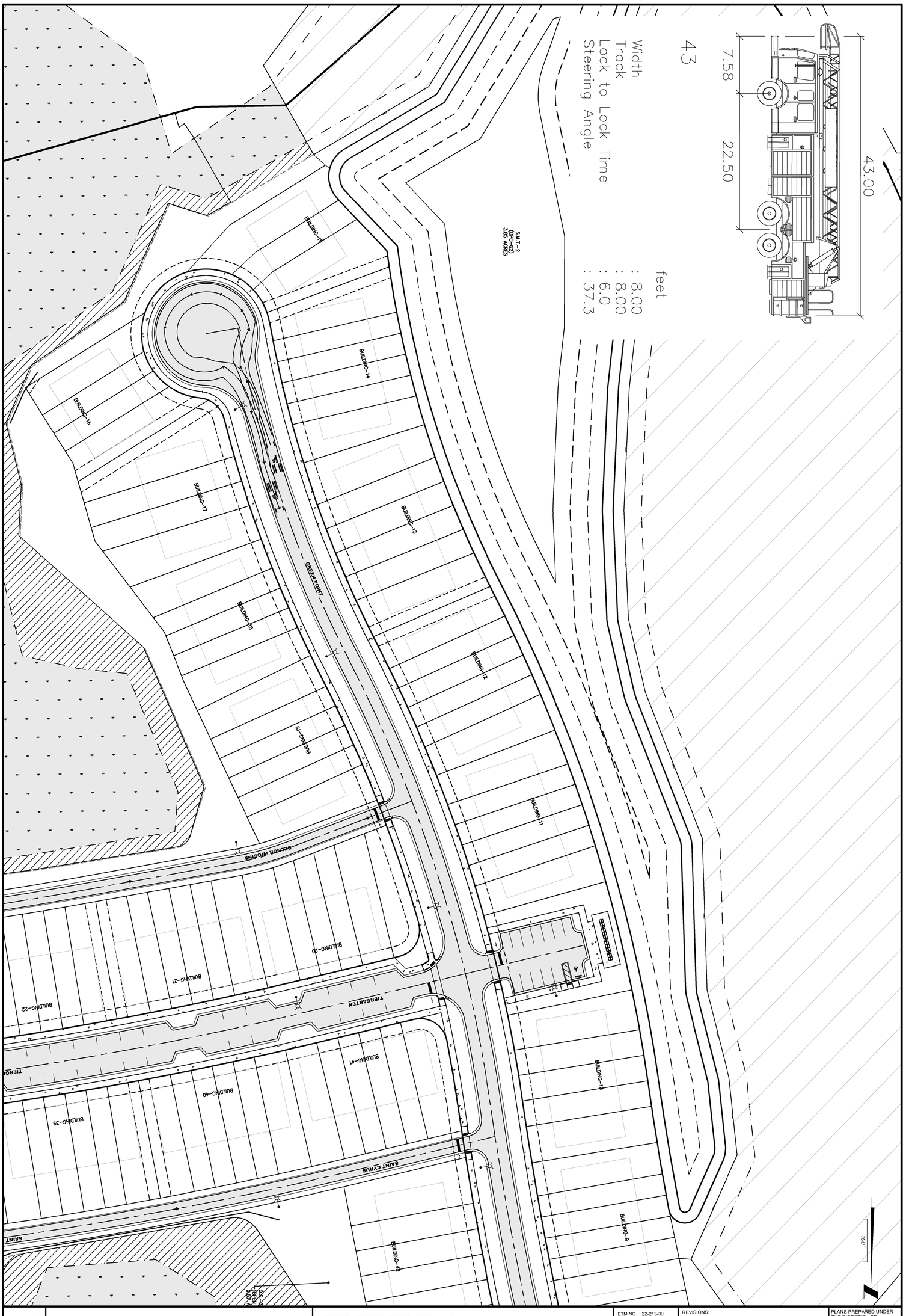
ENGLAND-THIMS & MILLER

SITE GEOMETRY PLAN

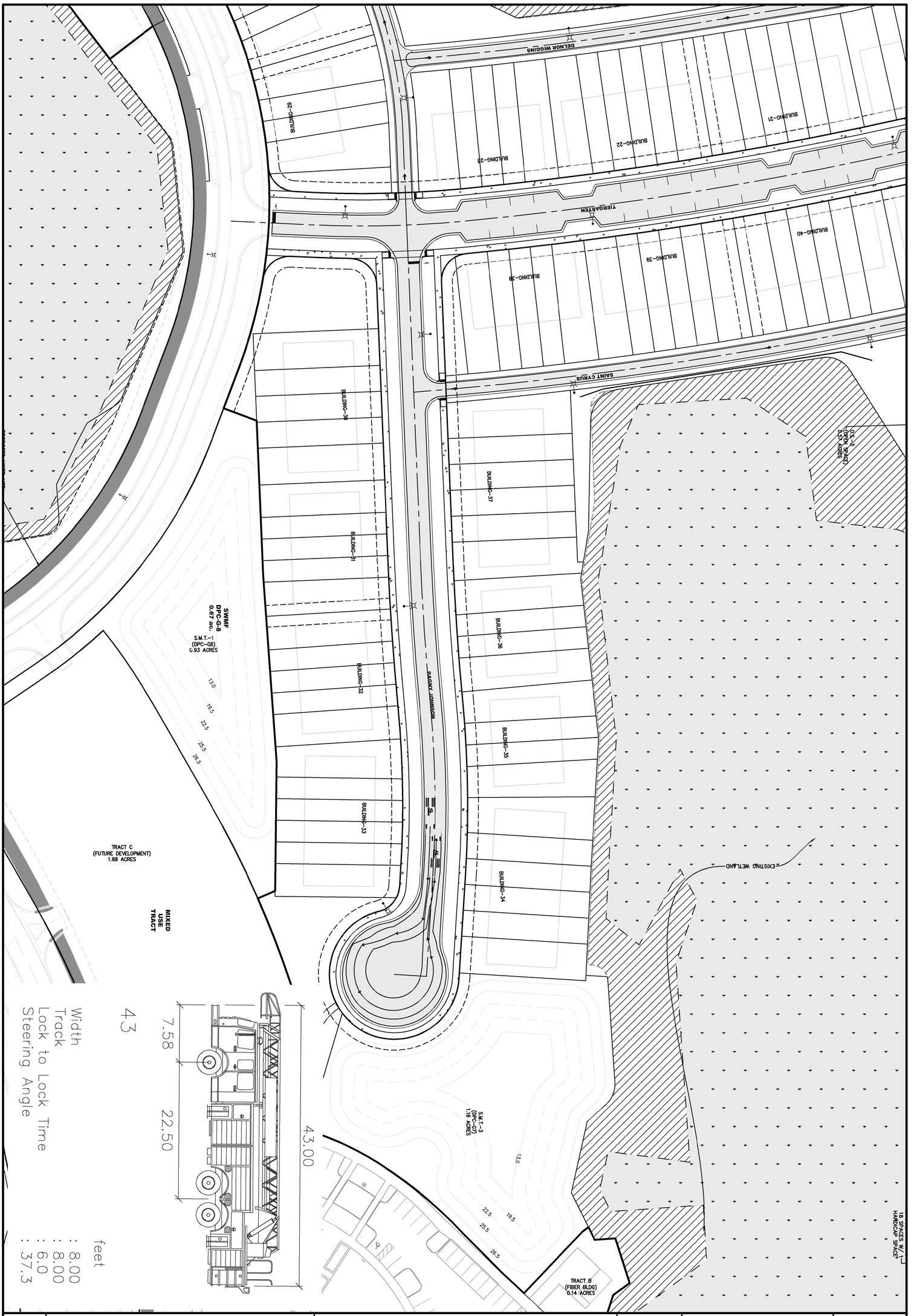
DEERING PARK CENTER TOWNHOMES
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
5F

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DRAWING NUMBER 5G	**TRUCK AUTOTURN PLAN** **DEERING PARK CENTER TOWNHOMES FOR DEERING PARK 1, LLC**	ETM ENGLAND-THIMS & MILLER	Trusted Advisors, Creating Community.	1411 Edgewater Drive, Ste. 200 Orlando, Florida 32804 (407) 536-5379 www.etminc.com CA- 00002584 LC-0000316	ETM NO. 22-213-09 DRAWN BY: KAJ DESIGNED BY: CBW CHECKED BY: CBW DATE: 01.27.2025	REVISIONS:	PLANS PREPARED UNDER THE DIRECTION OF: CHRISTOPHER WARSHAW P.E. NUMBER: 80867



TRUCK AUTOTURN PLAN

DEERING PARK CENTER TOWNHOMES FOR DEERING PARK 1, LLC

DRAWING NUMBER **5H**

ENGLAND-THIMS & MILLER

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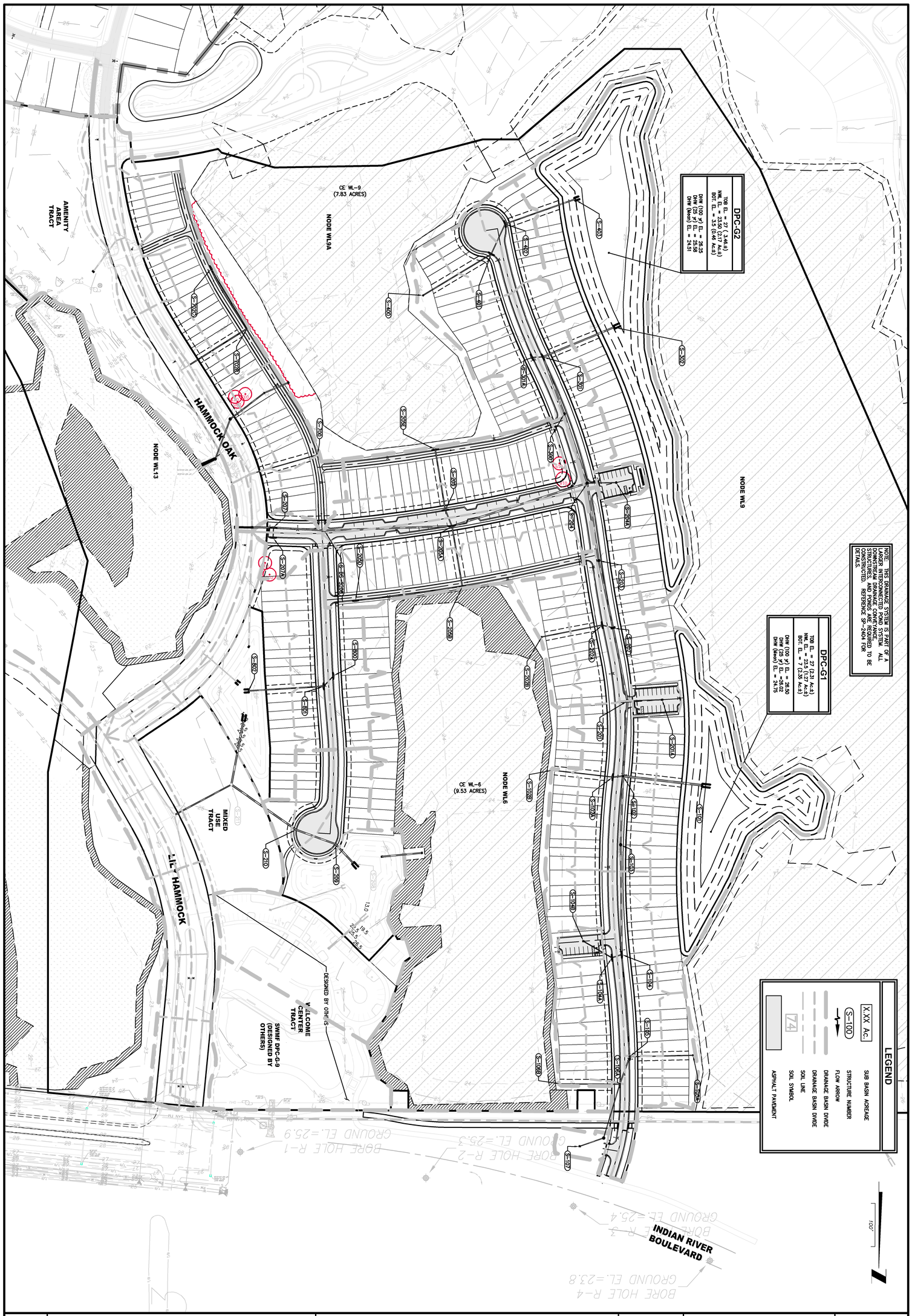
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ETM NO.	22-213-09
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REVISIONS:

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW
P.E. NUMBER: 80867



DRAWING NUMBER 6

POST DEVELOPMENT PLAN

DEERING PARK CENTER TOWNHOMES FOR DEERING PARK 1, LLC

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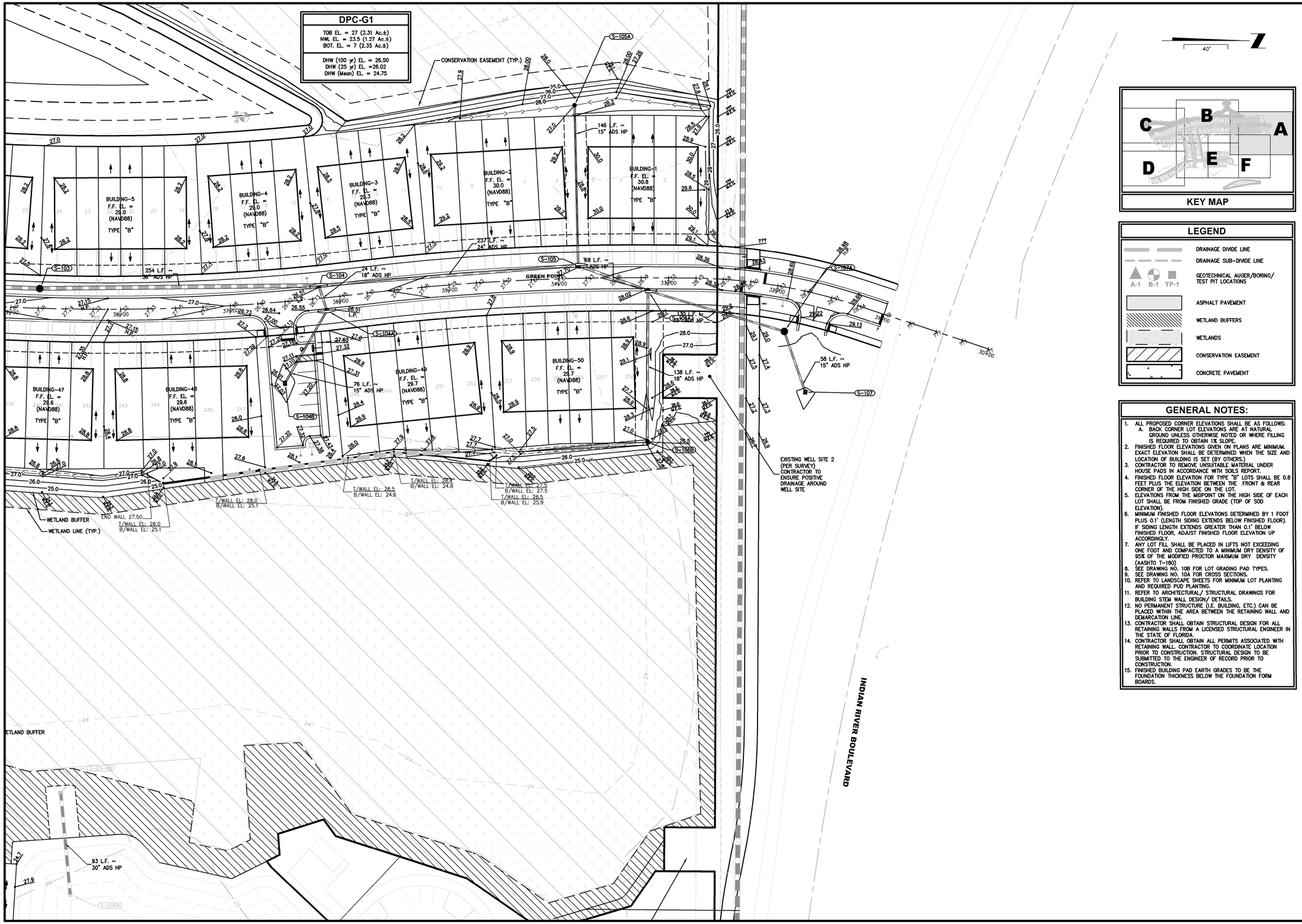
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PLOTTED: August 8, 2025 – 5:39 PM, BY: Cheroky Williams



KEY MAP

LEGEND

- DRAINAGE DIVIDE LINE
- DRAINAGE SUB-DIVIDE LINE
- A-1 B-1 TP-1 GEOTECHNICAL AUGER/BORING/ TEST PIT LOCATIONS
- ASPHALT PAVEMENT
- WETLAND BUFFERS
- WETLANDS
- CONSERVATION EASEMENT
- CONCRETE PAVEMENT

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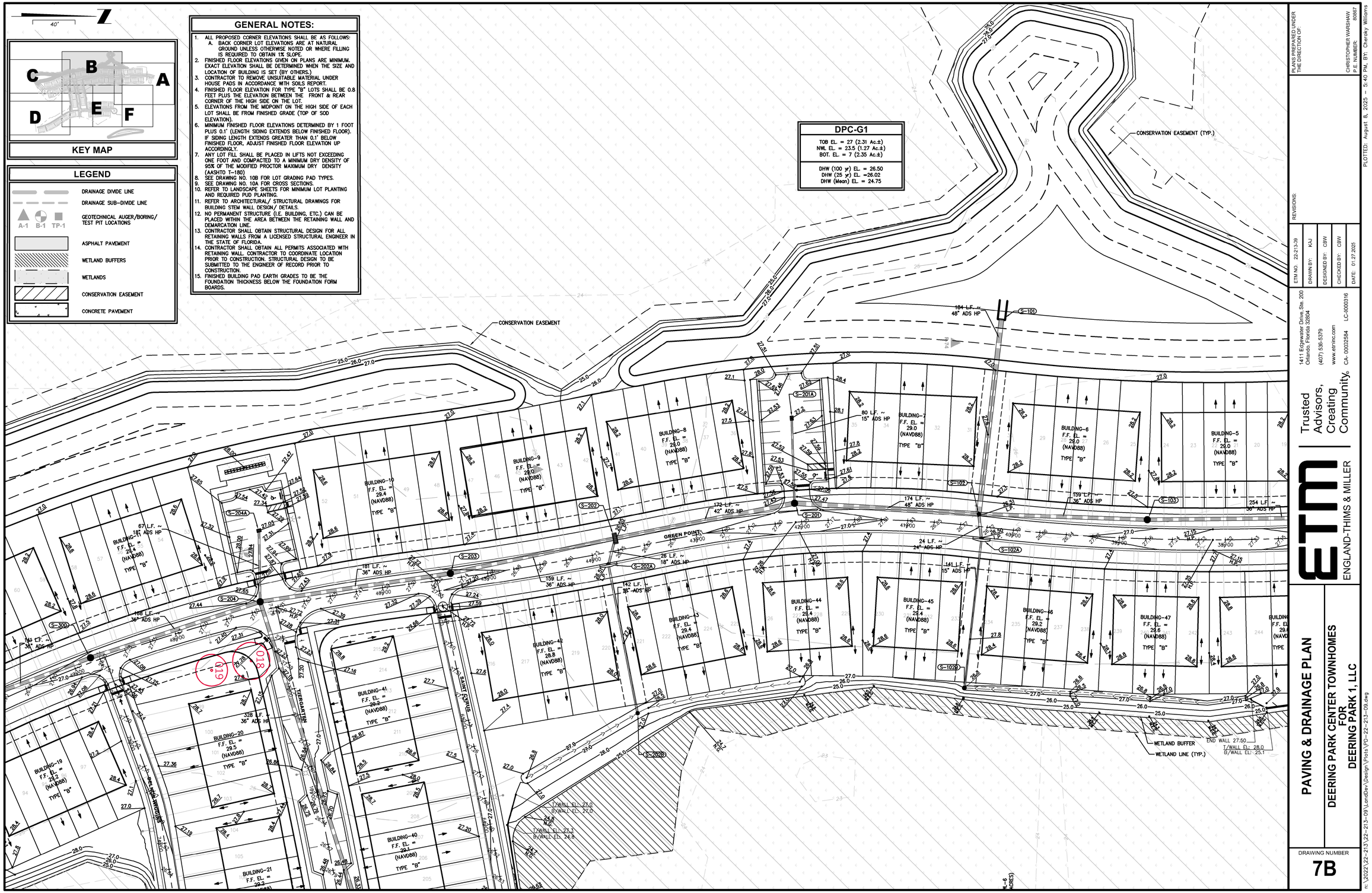
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PAVING & DRAINAGE PLAN

DEERING PARK CENTER TOWNHOMES FOR DEERING PARK 1, LLC

DRAWING NUMBER
7A

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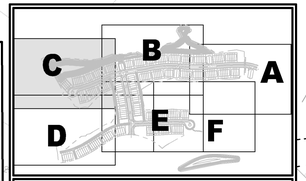
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40'

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KEY MAP

LEGEND

- DRAINAGE DIVIDE LINE
- DRAINAGE SUB-DIVIDE LINE
- A-1 B-1 TP-1 — GEOTECHNICAL AUGER/BORING/ TEST PIT LOCATIONS
- ASPHALT PAVEMENT
- WETLAND BUFFERS
- WETLANDS
- CONSERVATION EASEMENT
- CONCRETE PAVEMENT

DPC-G2

TOB EL. = 27 (3.46.±)
NWL EL. = 23.50 (2.17 Ac.±)
BOT. EL. = 3.5 (0.46 Ac.±)

DHW (100 yr) EL. = 26.25
DHW (25 yr) EL. = 25.58
DHW (Mean) EL. = 24.51

CONSERVATION EASEMENT (TYP.)

FUTURE DEVELOPMENT

S-402 — 171 L.F. ~ 24" ADS HP

S-403 — 178 L.F. ~ 36" ADS HP

S-401 — 77 L.F. ~ 18" ADS HP

S-400 — 184 L.F. ~ 18" ADS HP

S-205E — 67 L.F. ~ 18" ADS HP

S-300 — 108 L.F. ~ 36" ADS HP

S-301 — 44 L.F. ~ 24" ADS HP

S-301A — 26 L.F. ~ 15" ADS HP

GREENPOINT DR

BUILDING-12 F.F. EL. = 29.0 (NAVD88) TYPE "B"

BUILDING-13 F.F. EL. = 29.0 (NAVD88) TYPE "B"

BUILDING-14 F.F. EL. = 29.0 (NAVD88) TYPE "B"

BUILDING-15 F.F. EL. = 29.0 (NAVD88) TYPE "B"

BUILDING-16 F.F. EL. = 29.4 (NAVD88) TYPE "B"

BUILDING-17 F.F. EL. = 29.4 (NAVD88) TYPE "B"

BUILDING-18 F.F. EL. = 29.2 (NAVD88) TYPE "B"

BUILDING-19 F.F. EL. = 29.2 (NAVD88) TYPE "B"

BUILDING-11 F.F. EL. = 29.4 (NAVD88) TYPE "B"

WETLAND LINE (TYP.)

T/WALL EL: 26.0
B/WALL EL: 25.8

T/WALL EL: 26.0
B/WALL EL: 24.0

T/WALL EL: 23.9
B/WALL EL: 23.5

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW
P.E. NUMBER: 86967

PLOTTED: August 8, 2025 - 5:40 PM, BY: Cheroky Williams

REVISIONS:

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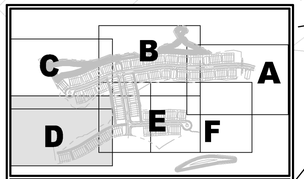
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PAVING & DRAINAGE PLAN

DEERING PARK CENTER TOWNHOMES FOR DEERING PARK 1, LLC

DRAWING NUMBER
7C

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W-2
(PRESERVATION AREA)
0.63 ACRES

OS WL-9
(7.53 ACRES)

SMT
(STORMWATER POND BY OTHERS)

FUTURE DEVELOPMENT

FUTURE DEVLOPMENT

WETLAND LINE (TYP.)

WETLAND BUFFER

HAMMOCK PARK

ANCHY JOHNSON

S-205E

S-400

S-700

S-603

S-603A

S-702B

S-702C

S-702

184 L.F. ~ 18" ADS HP

162 L.F. ~ 15" ADS HP

156 L.F. ~ 24" ADS HP

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B/WALL EL: 25.5

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BUILDING-26 F.F. EL. = 27.8 (NAVD88) TYPE "B"

BUILDING-27 F.F. EL. = 27.8 (NAVD88) TYPE "B"

BUILDING-28 F.F. EL. = 28.1 (NAVD88) TYPE "B"

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REVISIONS:

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW
P.E. NUMBER: 89567

PLOTTED: August 8, 2025 – 5:40 PM, BY: Cheroky Williams

PAVING & DRAINAGE PLAN

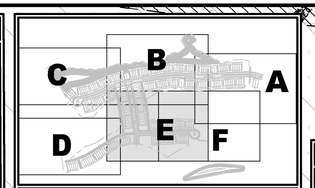
DEERING PARK CENTER TOWNHOMES
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
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OE WL-6 (9.53 ACRES)

MIXED USE TRACT

PACKY JOHNSON

Trusted Advisors, Creating Community,

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Orlando, Florida 32804
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ENGLAND-THIMS & MILLER

ETM NO. 22-213-39
DRAWN BY: KJJ
DESIGNED BY: CBW
CHECKED BY: CBW
DATE: 01.27.2025

REVISIONS:

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW
P.E. NUMBER: 86967

PLOTTED: August 8, 2025 - 5:40 PM, BY: Cheroky Williams

PAVING & DRAINAGE PLAN

DEERING PARK CENTER TOWNHOMES FOR DEERING PARK 1, LLC

DRAWING NUMBER
7E

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GENERAL NOTES:

1. ALL PROPOSED CORNER ELEVATIONS SHALL BE AS FOLLOWS:
   A. BACK CORNER LOT ELEVATIONS ARE AT NATURAL GROUND UNLESS OTHERWISE NOTED OR WHERE FILLING IS REQUIRED TO OBTAIN 1% SLOPE.
2. FINISHED FLOOR ELEVATIONS GIVEN ON PLANS ARE MINIMUM. EXACT ELEVATION SHALL BE DETERMINED WHEN THE SIZE AND LOCATION OF BUILDING IS SET (BY OTHERS.)
3. CONTRACTOR TO REMOVE UNSUITABLE MATERIAL UNDER HOUSE PADS IN ACCORDANCE WITH SOILS REPORT.
4. FINISHED FLOOR ELEVATION FOR TYPE "B" LOTS SHALL BE 0.8 FEET PLUS THE ELEVATION BETWEEN THE FRONT & REAR CORNER OF THE HIGH SIDE ON THE LOT.
5. ELEVATIONS FROM THE MIDPOINT ON THE HIGH SIDE OF EACH LOT SHALL BE FROM FINISHED GRADE (TOP OF SOD ELEVATION).
6. MINIMUM FINISHED FLOOR ELEVATIONS DETERMINED BY 1 FOOT PLUS 0.1' (LENGTH SIDING EXTENDS BELOW FINISHED FLOOR). IF SIDING LENGTH EXTENDS GREATER THAN 0.1' BELOW FINISHED FLOOR, ADJUST FINISHED FLOOR ELEVATION UP ACCORDINGLY.
7. ANY LOT FILL SHALL BE PLACED IN LIFTS NOT EXCEEDING ONE FOOT AND COMPACTED TO A MINIMUM DRY DENSITY OF 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (AASHTO T-180)
8. SEE DRAWING NO. 10B FOR LOT GRADING PAD TYPES.
9. SEE DRAWING NO. 10A FOR CROSS SECTIONS.
10. REFER TO LANDSCAPE SHEETS FOR MINIMUM LOT PLANTING AND REQUIRED PUD PLANTING.
11. REFER TO ARCHITECTURAL/ STRUCTURAL DRAWINGS FOR BUILDING STEM WALL DESIGN/ DETAILS.
12. NO PERMANENT STRUCTURE (I.E. BUILDING, ETC.) CAN BE PLACED WITHIN THE AREA BETWEEN THE RETAINING WALL AND DEMARCATION LINE.
13. CONTRACTOR SHALL OBTAIN STRUCTURAL DESIGN FOR ALL RETAINING WALLS FROM A LICENSED STRUCTURAL ENGINEER IN THE STATE OF FLORIDA.
14. CONTRACTOR SHALL OBTAIN ALL PERMITS ASSOCIATED WITH RETAINING WALL. CONTRACTOR TO COORDINATE LOCATION PRIOR TO CONSTRUCTION. STRUCTURAL DESIGN TO BE SUBMITTED TO THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION.
15. FINISHED BUILDING PAD EARTH GRADES TO BE THE FOUNDATION THICKNESS BELOW THE FOUNDATION FORM BOARDS.

KEY MAP

LEGEND

- DRAINAGE DIVIDE LINE
- DRAINAGE SUB-DIVIDE LINE
- A-1 B-1 TP-1 — GEOTECHNICAL AUGER/BORING/ TEST PIT LOCATIONS
- ASPHALT PAVEMENT
- WETLAND BUFFERS
- WETLANDS
- CONSERVATION EASEMENT
- CONCRETE PAVEMENT

WETLAND BUFFER
WETLAND LINE (TYP.)
END WALL 27:50
T/WALL EL: 28.0
B/WALL EL: 25.1
T/WALL EL: 28.5
B/WALL EL: 25.9
93 L.F. ~ 30" ADS HP
60 L.F. ~ 36" ADS HP
97 L.F. ~ 36" ADS HP
182 L.F. ~ 36" ADS HP
33 L.F. ~ 15" ADS HP
174 L.F. ~ 24" ADS HP
DAGNY JOHNSON
BUILDING-36 F.F. EL. = 28.8 (NAVD88) TYPE "B"
BUILDING-35 F.F. EL. = 28.9 (NAVD88) TYPE "B"
BUILDING-34 F.F. EL. = 28.9 (NAVD88) TYPE "B"
BUILDING-33 F.F. EL. = 29.2 (NAVD88) TYPE "B"
BUILDING-32 F.F. EL. = 29.2 (NAVD88) TYPE "B"
BUILDING-31 F.F. EL. = 28.9 (NAVD88) TYPE "B"
S-DS-DPOG8
MIXED USE TRACT
WELCOME CENTER TRACT
DESIGNED BY OTHERS
EXISTING WELCOME CENTER POND (DESIGNED BY OTHERS)
EXISTING WELL SITE 1 (PER SURVEY)
EXISTING LIFT STATION
INDIAN RIVER BOULEVARD

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E. NUMBER: 86967

REVISIONS:

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ENGLAND-THMS & MILLER

PAVING & DRAINAGE PLAN

DEERING PARK CENTER TOWNHOMES
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
7F

PLOTTED: August 8, 2025 - 5:41 PM, BY: Cheroky Williams

n: \2022\22-213\22-213-09\LandDev\Design\Plots\PD-22-213-09.dwg

DRAINAGE STRUCTURE TABLE

STR. NO.	STRUCTURE TYPE	TOP/ GRATE EL.	INVERT EL.
101	48" MES		48" ADS HP – 10.50 (E)
102	FDOT TYPE 6	26.62	36" ADS HP – 17.80 (N) 24" ADS HP – 20.60 (E) 48" ADS HP – 10.70 (S) 48" ADS HP – 10.70 (W)
102A	FDOT TYPE 6	26.61	15" ADS HP – 21.40 (E) 24" ADS HP – 20.80 (W)
102B	YARD DRAIN	26.30	15" ADS HP – 21.80 (W)
103	MANHOLE TYPE J–1	27.25	36" ADS HP – 18.00 (N) 36" ADS HP – 18.00 (S)
104	FDOT TYPE 6	26.61	18" ADS HP – 20.90 (E) 24" ADS HP – 19.40 (N) 36" ADS HP – 18.40 (S)
104A	FDOT TYPE 6	26.61	15" ADS HP – 21.40 (SE) 18" ADS HP – 21.10 (W)
104B	TYPE "C" INLET	26.91	15" ADS HP – 21.80 (NW)
105	FDOT TYPE 5 (R)	27.80	15" ADS HP – 22.20 (W) 24" ADS HP – 20.20 (N) 24" ADS HP – 20.20 (S)
105A	YARD DRAIN	27.00	15" ADS HP – 22.50 (E)
106A	FDOT TYPE 5 (L)	28.13	18" ADS HP – 21.20 (E) 15" ADS HP – 22.10 (N) 24" ADS HP – 20.60 (S)
106B	YARD DRAIN	26.50	18" ADS HP – 21.50 (W)
107	TYPE "C" INLET	27.92	15" ADS HP – 23.40 (W)
107A	MANHOLE TYPE J–1	29.30	15" ADS HP – 23.00 (E) 15" ADS HP – 23.00 (S)
201	MANHOLE TYPE J–1	27.35	42" ADS HP – 11.50 (S) 15" ADS HP – 22.10 (W) 48" ADS HP – 11.00 (N)
201A	TYPE "C" INLET	27.25	15" ADS HP – 22.40 (E)
202	FDOT TYPE 6	26.65	18" ADS HP – 21.40 (E) 36" ADS HP – 12.60 (S) 42" ADS HP – 12.10 (N)
202A	FDOT TYPE 6	26.62	18" ADS HP – 21.60 (E) 18" ADS HP – 21.60 (W)
202B	YARD DRAIN	26.50	18" ADS HP – 22.30 (W)
203	MANHOLE TYPE J–1	27.07	36" ADS HP – 12.80 (S) 36" ADS HP – 12.80 (N)

DRAINAGE STRUCTURE TABLE

STR. NO.	STRUCTURE TYPE	TOP/ GRATE EL.	INVERT EL.
204	MANHOLE TYPE J–1	27.51	36" ADS HP – 13.00 (E) 18" ADS HP – 21.70 (W) 36" ADS HP – 21.50 (S) 36" ADS HP – 13.00 (N)
204A	TYPE "C" INLET	27.03	18" ADS HP – 22.00 (E)
205	FDOT TYPE 6	26.66	24" ADS HP – 20.50 (S) 24" ADS HP – 18.40 (N)
205A	FDOT TYPE 6	26.68	24" ADS HP – 19.40 (N) 24" ADS HP – 18.20 (S) 36" ADS HP – 15.00 (E) 36" ADS HP – 14.00 (W)
205D	FDOT TYPE 6	26.81	18" ADS HP – 22.50 (W)
205E	FDOT TYPE 6	26.57	24" ADS HP – 20.80 (N)
207	FDOT TYPE 6	27.10	15" ADS HP – 22.20 (N) 36" ADS HP – 19.50 (E) 36" ADS HP – 16.00 (W)
207A	FDOT TYPE 6	27.10	15" ADS HP – 22.50 (S)
208	36" MES		36" ADS HP – 15.50 (SE)
209	FDOT TYPE 6	26.53	36" ADS HP – 17.70 (E) 36" ADS HP – 15.00 (NW)
210	FDOT TYPE 6	26.69	36" ADS HP – 17.90 (W) 36" ADS HP – 17.90 (SE)
211	MANHOLE TYPE J–1	27.00	24" ADS HP – 17.80 (NE) 36" ADS HP – 16.80 (NW) 36" ADS HP – 16.80 (S)
211A	36" MES		36" ADS HP – 15.50 (N)
300	MANHOLE TYPE J–1	27.09	36" ADS HP – 21.00 (N) 36" ADS HP – 21.00 (S)
301	FDOT TYPE 6	26.66	15" ADS HP – 17.80 (E) 36" ADS HP – 20.50 (N) 36" ADS HP – 16.80 (SW)
301A	FDOT TYPE 6	26.63	15" ADS HP – 18.00 (W)
302	36" MES		36" ADS HP – 15.60 (NE)
400	YARD DRAIN	26.60	18" ADS HP – 21.90 (SW)
401	FDOT TYPE 6	26.73	18" ADS HP – 20.90 (NE) 18" ADS HP – 18.90 (SW)
402	FDOT TYPE 6	26.44	18" ADS HP – 18.70 (NE) 24" ADS HP – 18.20 (W)

DRAINAGE STRUCTURE TABLE

STR. NO.	STRUCTURE TYPE	TOP/ GRATE EL.	INVERT EL.
403	24" MES		24" ADS HP – 17.00 (E)
603	TYPE "B" INLET 12" HOLE IN BOTTOM PER FDOT STD PLAN 425–001	23.50	24" ADS HP – 16.50 (NE)
603A	YARD DRAIN	21.60	24" ADS HP – 18.89 (SW) 24" ADS HP – 18.89 (NE)
700	FDOT TYPE 6	26.71	15" ADS HP – 21.40 (E)
701	FDOT TYPE 5 (L)	27.25	15" ADS HP – 21.40 (NE) 15" ADS HP – 20.90 (W) 36" ADS HP – 16.20 (N) 36" ADS HP – 16.20 (SE)
702B	FDOT TYPE 5 (R)	26.28	15" ADS HP – 20.00 (SE) 24" ADS HP – 16.20 (NE)
702C	FDOT TYPE 6	25.80	15" ADS HP – 20.67 (NW)
800	FDOT TYPE 6	26.84	15" ADS HP – 22.00 (NE)
801	FDOT TYPE 6	26.91	15" ADS HP – 21.80 (SW) 24" ADS HP – 21.00 (E)
802	24" MES		24" ADS HP – 16.50 (W)
DS–S206	MANHOLE TYPE J–1 W/ INTERNAL WEIR INV. 23.50	27.45	36" ADS HP – 15.60 (E) 36" ADS HP – 15.60 (W)
W–DPCG	TYPE "D" INLET	24.60	24" ADS HP – 20.00 (W)

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-39
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DESIGNED BY: CBW
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DATE: 01.27.2025

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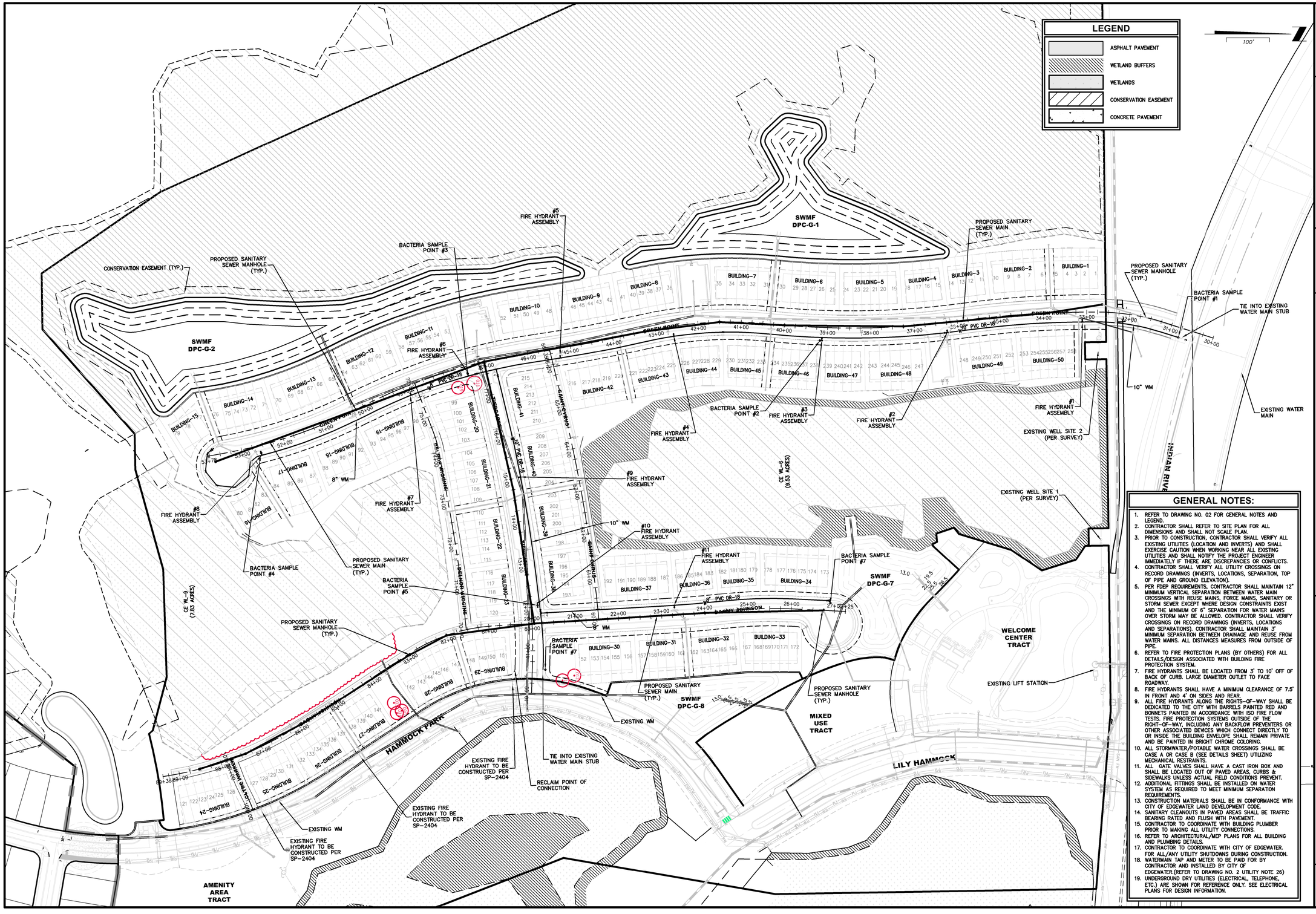
STORM STRUCTURE TABLE

DEERING PARK CENTER TOWNHOMES
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
7G

PLOTTED: August 8, 2025 – 5:41 PM, BY: Cheroky Williams

n: \2022\22-213\22-213-09 Landdev\Design\Plots\PD-22-213-09.dwg



GENERAL NOTES:

1. REFER TO DRAWING NO. 02 FOR GENERAL NOTES AND LEGEND.
2. CONTRACTOR SHALL REFER TO SITE PLAN FOR ALL DIMENSIONS AND SHALL NOT SCALE PLAN.
3. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES (LOCATION AND INVERTS) AND SHALL EXERCISE CAUTION WHEN WORKING NEAR ALL EXISTING UTILITIES AND SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY IF THERE ARE DISCREPANCIES OR CONFLICTS.
4. CONTRACTOR SHALL VERIFY ALL UTILITY CROSSINGS ON RECORD DRAWINGS (INVERTS, LOCATIONS, SEPARATION, TOP OF PIPE AND GROUND ELEVATION).
5. PER FDEP REQUIREMENTS, CONTRACTOR SHALL MAINTAIN 12" MINIMUM VERTICAL SEPARATION BETWEEN WATER MAIN CROSSINGS WITH REUSE MAINS, FORCE MAINS, SANITARY OR STORM SEWER EXCEPT WHERE DESIGN CONSTRAINTS EXIST AND THE MINIMUM OF 6" SEPARATION FOR WATER MAINS OVER STORM MAY BE ALLOWED. CONTRACTOR SHALL VERIFY CROSSINGS ON RECORD DRAWINGS (INVERTS, LOCATIONS AND SEPARATIONS). CONTRACTOR SHALL MAINTAIN 3' MINIMUM SEPARATION BETWEEN DRAINAGE AND REUSE FROM WATER MAINS. ALL DISTANCES MEASURES FROM OUTSIDE OF PIPE.
6. REFER TO FIRE PROTECTION PLANS (BY OTHERS) FOR ALL DETAILS/DESIGN ASSOCIATED WITH BUILDING FIRE PROTECTION SYSTEM.
7. FIRE HYDRANTS SHALL BE LOCATED FROM 3' TO 10' OFF OF BACK OF CURB. LARGE DIAMETER OUTLET TO FACE ROADWAY.
8. FIRE HYDRANTS SHALL HAVE A MINIMUM CLEARANCE OF 7.5' IN FRONT AND 4' ON SIDES AND REAR.
9. ALL FIRE HYDRANTS ALONG THE RIGHTS-OF-WAY SHALL BE DEDICATED TO THE CITY WITH BARRELS PAINTED RED AND BONNETS PAINTED IN ACCORDANCE WITH ISO FIRE FLOW TESTS. FIRE PROTECTION SYSTEMS OUTSIDE OF THE RIGHT-OF-WAY, INCLUDING ANY BACKFLOW PREVENTERS OR OTHER ASSOCIATED DEVICES WHICH CONNECT DIRECTLY TO OR INSIDE THE BUILDING ENVELOPE SHALL REMAIN PRIVATE AND BE PAINTED IN BRIGHT CHROME COLORING.
10. ALL STORMWATER/POTABLE WATER CROSSINGS SHALL BE CASE A OR CASE B (SEE DETAILS SHEET) UTILIZING MECHANICAL RESTRAINTS.
11. ALL GATE VALVES SHALL HAVE A CAST IRON BOX AND SHALL BE LOCATED OUT OF PAVED AREAS, CURBS & SIDEWALKS UNLESS ACTUAL FIELD CONDITIONS PREVENT.
12. ADDITIONAL FITTINGS SHALL BE INSTALLED ON WATER SYSTEM AS REQUIRED TO MEET MINIMUM SEPARATION REQUIREMENTS.
13. CONSTRUCTION MATERIALS SHALL BE IN CONFORMANCE WITH CITY OF EDGEWATER LAND DEVELOPMENT CODE.
14. SANITARY CLEANOUTS IN PAVED AREAS SHALL BE TRAFFIC BEARING RATED AND FLUSH WITH PAVEMENT.
15. CONTRACTOR TO COORDINATE WITH BUILDING PLUMBER PRIOR TO MAKING ALL UTILITY CONNECTIONS.
16. REFER TO ARCHITECTURAL/MEP PLANS FOR ALL BUILDING AND PLUMBING DETAILS.
17. CONTRACTOR TO COORDINATE WITH CITY OF EDGEWATER. FOR ALL/ANY UTILITY SHUTDOWNS DURING CONSTRUCTION.
18. WATERMAIN TAP AND METER TO BE PAID FOR BY CONTRACTOR AND INSTALLED BY CITY OF EDGEWATER.(REFER TO DRAWING NO. 2 UTILITY NOTE 26)
19. UNDERGROUND DRY UTILITIES (ELECTRICAL, TELEPHONE, ETC.) ARE SHOWN FOR REFERENCE ONLY. SEE ELECTRICAL PLANS FOR DESIGN INFORMATION.

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW
P.E. NUMBER: 86967

REVISIONS:

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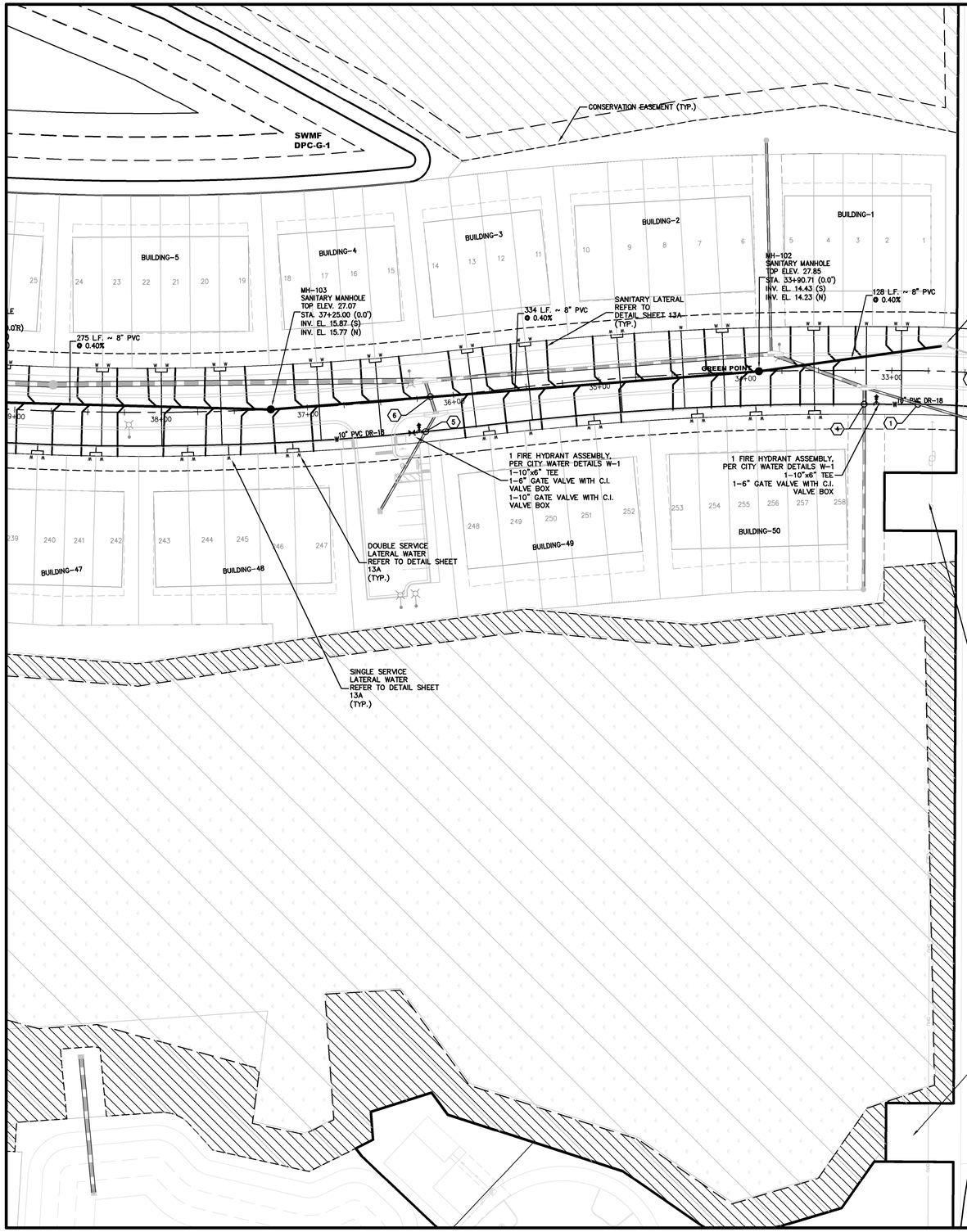
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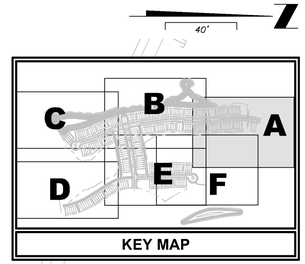
MASTER UTILITY PLAN

DEERING PARK CENTER TOWNHOMES
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
8

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KEY MAP

CROSSING TYPE TABLE

1	WATERMAIN OVER STORM MIN. 1.5' CLEAR
2	STORM OVER SANITARY MIN. 4.0' CLEAR
3	STORM OVER SANITARY MIN. 4.0' CLEAR
4	WATERMAIN OVER STORM MIN. 1.5' CLEAR
5	WATERMAIN OVER STORM MIN. 1.5' CLEAR
6	STORM OVER SANITARY MIN. 4.0' CLEAR
7	STORM OVER SANITARY MIN. 4.0' CLEAR
8	STORM OVER SANITARY MIN. 4.0' CLEAR
9	WATERMAIN OVER SANITARY MIN. 1.5' CLEAR
10	SANITARY OVER STORM MIN. 1.0' CLEAR
11	SANITARY OVER STORM MIN. 1.0' CLEAR
12	STORM OVER SANITARY MIN. 4.0' CLEAR
13	SANITARY OVER STORM MIN. 1.0' CLEAR
14	STORM OVER SANITARY MIN. 1.5' CLEAR
15	STORM OVER SANITARY MIN. 1.5' CLEAR
16	WATERMAIN OVER SANITARY MIN. 1.5' CLEAR
17	STORM OVER SANITARY MIN. 1.5' CLEAR
18	STORM OVER SANITARY MIN. 1.5' CLEAR

GENERAL NOTES:

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2. CONTRACTOR SHALL REFER TO SITE PLAN FOR ALL DIMENSIONS AND SHALL NOT SCALE PLAN.
3. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES (LOCATION AND INVERTS) AND SHALL EXERCISE CAUTION WHEN WORKING NEAR ALL EXISTING UTILITIES AND SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY IF THERE ARE DISCREPANCIES OR CONFLICTS.
4. CONTRACTOR SHALL VERIFY ALL UTILITY CROSSINGS ON RECORD DRAWINGS (INVERTS, LOCATIONS, SEPARATION, TOP OF PIPE AND GROUND ELEVATION).
5. PER FDEP REQUIREMENTS, CONTRACTOR SHALL MAINTAIN 12" MINIMUM VERTICAL SEPARATION BETWEEN WATER MAIN CROSSINGS WITH REUSE MAINS, FORCE MAINS, SANITARY OR STORM SEWER EXCEPT WHERE DESIGN CONSTRAINTS EXIST AND THE MINIMUM OF 6" SEPARATION FOR WATER MAINS OVER STORM MAY BE ALLOWED. CONTRACTOR SHALL VERIFY CROSSINGS ON RECORD DRAWINGS (INVERTS, LOCATIONS AND SEPARATIONS). CONTRACTOR SHALL MAINTAIN 3' MINIMUM SEPARATION BETWEEN DRAINAGE AND REUSE FROM WATER MAINS. ALL DISTANCES MEASURES FROM OUTSIDE OF PIPE.
6. REFER TO FIRE PROTECTION PLANS (BY OTHERS) FOR ALL DETAILS/DESIGN ASSOCIATED WITH BUILDING FIRE PROTECTION SYSTEM.
7. FIRE HYDRANTS SHALL BE LOCATED FROM 3' TO 10' OFF OF BACK OF CURB. LARGE DIAMETER OUTLET TO FACE ROADWAY.
8. FIRE HYDRANTS SHALL HAVE A MINIMUM CLEARANCE OF 7.5' IN FRONT AND 4' ON SIDES AND REAR.
9. ALL FIRE HYDRANTS ALONG THE RIGHTS-OF-WAY SHALL BE DEDICATED TO THE CITY WITH BARRELS PAINTED RED AND BONNETS PAINTED IN ACCORDANCE WITH ISO FIRE FLOW TESTS. FIRE PROTECTION SYSTEMS OUTSIDE OF THE RIGHT-OF-WAY, INCLUDING ANY BACKFLOW PREVENTERS OR OTHER ASSOCIATED DEVICES WHICH CONNECT DIRECTLY TO OR INSIDE THE BUILDING ENVELOPE SHALL REMAIN PRIVATE AND BE PAINTED IN BRIGHT CHROME COLORING.
10. ALL STORMWATER/POTABLE WATER CROSSINGS SHALL BE CASE A OR CASE B (SEE DETAILS SHEET) UTILIZING MECHANICAL RESTRAINTS.
11. ALL GATE VALVES SHALL HAVE A CAST IRON BOX AND SHALL BE LOCATED OUT OF PAVED AREAS, CURBS & SIDEWALKS UNLESS ACTUAL FIELD CONDITIONS PREVENT.
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PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW
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ETM
ENGLAND-THIMS & MILLER

WATER & SEWER PLAN

DEERING PARK CENTER TOWNHOMES
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
9A

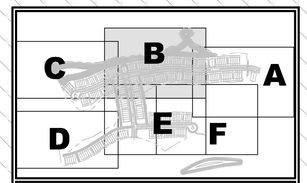
PLOTTED: August 8, 2025 - 5:42 PM, BY: Cheroky Williams

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40'

GENERAL NOTES:

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KEY MAP

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2	STORM OVER SANITARY MIN. 4.0' CLEAR
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17	STORM OVER SANITARY MIN. 1.5' CLEAR
18	STORM OVER SANITARY MIN. 1.5' CLEAR

CONSERVATION EASEMENT (TYP.)

SWMF
DPC-G-1

CONSERVATION EASEMENT

BUILDING-8
BUILDING-9
BUILDING-10
BUILDING-11
BUILDING-7
BUILDING-6
BUILDING-5
BUILDING-44
BUILDING-45
BUILDING-46
BUILDING-47
BUILDING-43
BUILDING-42
BUILDING-41
BUILDING-40
BUILDING-20
BUILDING-19

175 L.F. ~ 8" PVC
@ 0.40%

MH-105
SANITARY MANHOLE
TOP ELEV. 27.09
STA. 41+49.98 (0.0')
INV. EL. 17.77 (S)
INV. EL. 17.67 (N)

MH-106
SANITARY MANHOLE
TOP ELEV. 26.90
STA. 43+25.00 (0.0')
INV. EL. 18.57 (S)
INV. EL. 18.47 (N)

MH-104
SANITARY MANHOLE
TOP ELEV. 26.79
STA. 39+99.81 (0.0'R)
INV. EL. 17.07 (S)
INV. EL. 16.97 (N)

150 L.F. ~ 8" PVC
@ 0.40%

275 L.F. ~ 8" PVC
@ 0.40%

1 FIRE HYDRANT ASSEMBLY,
PER CITY WATER DETAILS W-1
1-8"x6" TEE
1-6" GATE VALVE WITH C.I. VALVE BOX
BACTERIOLOGICAL SAMPLE #3

MH-107
SANITARY MANHOLE
TOP ELEV. 27.72
STA. 47+02.31 (0.0')
INV. EL. 20.18 (S)
INV. EL. 20.18 (E)
INV. EL. 20.08 (N)

377 L.F. ~ 8" PVC
@ 0.40%

1-10" GATE VALVE WITH C.I. VALVE BOX

10" PVC DR-18

1 FIRE HYDRANT ASSEMBLY,
PER CITY WATER DETAILS W-1
1-10"x6" TEE
1-6" GATE VALVE WITH C.I. VALVE BOX
BACTERIOLOGICAL SAMPLE #2

1-10"x10" TEE
1-10" GATE VALVE WITH C.I. VALVE BOX

8" PVC DR-18

316 L.F. ~ 8" PVC
@ 0.40%

1-8" GATE VALVE WITH C.I. VALVE BOX
1-10"x8" REDUCER

018
019

FIREHOUSE

8" PVC DR-18

304 L.F. ~ 8" PVC
@ 0.45%

1 FIRE HYDRANT ASSEMBLY,
PER CITY WATER DETAIL W-1
1-8"x6" TEE
1-6" GATE VALVE WITH C.I. VALVE BOX

1 FIRE HYDRANT ASSEMBLY,
PER CITY WATER DETAIL W-1
1 10"x6" TEE
1 6" GATE VALVE WITH C.I. VALVE BOX

1 FIRE HYDRANT ASSEMBLY,
PER CITY WATER DETAIL W-1
1 10"x6" TEE
1 6" GATE VALVE WITH C.I. VALVE BOX

GREEN POINT

SAINT CLOUD

DELMAR WEDGWAY

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW
P.E. NUMBER: 86967

REVISIONS:

ETM NO.	22-213-39
DRAWN BY:	KJJ
DESIGNED BY:	CBW
CHECKED BY:	CBW
DATE:	01.27.2025

PLOTTED: August 8, 2025 - 5:42 PM, BY: Cheroky Williams

Trusted Advisors, Creating Community.
1411 Edgewater Drive, Ste. 200
Orlando, Florida 32804
(407) 536-5379
www.etminc.com
CA- 00002584 LC-0000316
ENGLAND-THIMS & MILLER

WATER & SEWER PLAN

DEERING PARK CENTER TOWNHOMES FOR DEERING PARK 1, LLC

DRAWING NUMBER
9B

n: \2022 \22-213 \22-213-09 \Land\Dev \Design \Plots \WS-22-213-09.dwg

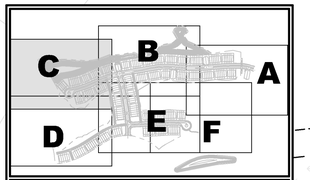
40'

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KEY MAP

CONSERVATION EASEMENT (TYP.)

SWMF
DPC-G-2

CONSERVATION EASEMENT (TYP.)

FUTURE DEVLOPMENT

MH-109
SANITARY MANHOLE
SHALLOW MANHOLE
(PER DETAIL S-3)
TOP ELEV. 26.77
STA. 53+63.57 (-15.8'L)
INV. EL. 22.92 (N)

CUL DE SAC BLOW-OFF
ASSEMBLY PER CITY DETAIL
REF: W-6

346 L.F. ~ 8" PVC (C-900)
@ 0.40%

8" PVC DR-18

MH-108
SANITARY MANHOLE
TOP ELEV. 26.76
STA. 50+18.74 (-0.7'L)
INV. EL. 21.54 (S)
INV. EL. 21.44 (N)

316 L.F. ~ 8" P
@ 0.40%

1 FIRE HYDRANT ASSEMBLY,
PER CITY WATER DETAILS W-1
1-8"x6" TEE
1-6" GATE VALVE WITH C.I. VALVE BOX

BACTERIOLOGICAL SAMPLE #4

1 FIRE HYDRANT ASSEMBLY,
PER CITY WATER DETAIL W-1
1-8"x6" TEE
1-6" GATE VALVE WITH C.I.
VALVE BOX

BUILDING-11
BUILDING-12
BUILDING-13
BUILDING-14
BUILDING-15
BUILDING-16
BUILDING-17
BUILDING-18
BUILDING-19

DELAWARE WIGGINS

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW
P.E. NUMBER: 86967

REVISIONS:

ETM NO. 22-213-39
DRAWN BY: KJJ
DESIGNED BY: CBW
CHECKED BY: CBW
DATE: 01.27.2025

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Orlando, Florida 32804
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Trusted Advisors, Creating Community.

ENGLAND-THIMS & MILLER

WATER & SEWER PLAN

DEERING PARK CENTER TOWNHOMES
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
9C

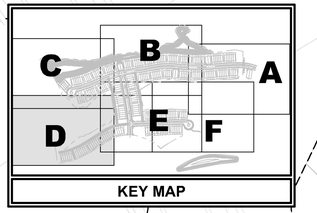
PLOTTED: August 8, 2025 - 5:42 PM, BY: Cheroky Williams

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MH-109
SANITARY MANHOLE
SHALLOW MANHOLE
(PER DETAIL S-3)
TOP ELEV. 26.77
STA. 53+63.57 (-15.8'L)
INV. EL. 22.92 (N)

1 FIRE HYDRANT ASSEMBLY, PER CITY WATER DETAILS W-1
1-8"x6" TEE
1-6" GATE VALVE WITH C.I. VALVE BOX

BACTERIOLOGICAL SAMPLE #4

BUILDING-16

OF WL-9
(7.33 ACRES)

FUTURE DEVLOPMENT

MH-112
SANITARY MANHOLE
TOP ELEV. 26.78
STA. 82+00.06 (0.0'R)
INV. EL. 19.94 (SE)
INV. EL. 19.84 (N)

MH-113
SANITARY MANHOLE
TOP ELEV. 27.01
STA. 82+96.90 (-2.7'L)
INV. EL. 20.43 (SE)
INV. EL. 20.33 (NW)

MH-114
SANITARY MANHOLE
SHALLOW MANHOLE
(PER DETAIL S-3)
TOP ELEV. 26.06
STA. 85+92.37 (0.0')
INV. EL. 21.71 (SE)
INV. EL. 21.61 (NW)

295 L.F. ~ 8" PVC (C-900) @ 0.40%

OPEN SPACE

BUILDING-28

MH-115
SANITARY MANHOLE
SHALLOW MANHOLE
(PER DETAIL S-3)
TOP ELEV. 26.07
STA. 87+40.04 (-0.1'L)
INV. EL. 22.40 (S)
INV. EL. 22.30 (NW)

147 L.F. ~ 8" PVC (C-900) @ 0.40%

113 L.F. ~ 8" PVC (C-900) @ 0.40%

BAILEY JOHNSON

BUILDING-27

MH-116
SANITARY MANHOLE
SHALLOW MANHOLE
(PER DETAIL S-3)
TOP ELEV. 26.52
STA. 88+52.82 (0.0')
INV. EL. 22.85 (N)

BUILDING-26

BUILDING-25

BUILDING-24

CLYDE WARREN

HAMMOCK PARK

FIRE HYDRANT LOCATION (PER PERMIT #SP-2404)

EXISTING 10" PVC WM

EXISTING WM SERVICES CONSTRUCTED AS PART OF LILY HAMMOCK PLANS

FIRE HYDRANT LOCATION (PER PERMIT #SP-2404)

FUTURE DEVLOPMENT

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW
P.E. NUMBER: 86967

PLOTTED: August 8, 2025 - 5:42 PM, BY: Cheroky Williams

REVISIONS:

ETM NO.	22-213-39
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WATER & SEWER PLAN

DEERING PARK CENTER TOWNHOMES FOR DEERING PARK 1, LLC

DRAWING NUMBER
9D

n:\2022\22-213\22-213-09\LandDev\Design\Plots\WS-22-213-09.dwg

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1-6" GATE VALVE WITH C.I. VALVE BOX

304 L.F. ~ 8" PVC @ 0.45%

MH-110
SANITARY MANHOLE
TOP ELEV. 26.64
STA. 14+75.00 (0.0')
INV. EL. 21.54 (W)
INV. EL. 21.54 (E)

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1-10"x6" TEE
1-6" GATE VALVE WITH C.I. VALVE BOX

1 FIRE HYDRANT ASSEMBLY, PER CITY WATER DETAIL W-1
1-10"x6" TEE
1-6" GATE VALVE WITH C.I. VALVE BOX
BACTERIA SAMPLE #5

1 FIRE HYDRANT ASSEMBLY, PER CITY WATER DETAIL W-1
1 8"x6" TEE
1 6" GATE VALVE WITH C.I. VALVE BOX

MH-117
SANITARY MANHOLE
TOP ELEV. 27.15
STA. 24+00.00 (0.0')
INV. EL. 17.34 (S)
INV. EL. 17.24 (N)

MH-112
SANITARY MANHOLE
TOP ELEV. 26.78
STA. 82+00.06 (0.0'R)
INV. EL. 19.94 (SE)
INV. EL. 19.84 (N)

MH-113
SANITARY MANHOLE
TOP ELEV. 27.01
STA. 82+96.90 (~2.7'L)
INV. EL. 20.43 (SE)
INV. EL. 20.33 (NW)

MH-111
SANITARY MANHOLE
TOP ELEV. 27.49
STA. 11+62.44 (5.0'R)
INV. EL. 19.02 (S)
INV. EL. 19.02 (W)
INV. EL. 18.92 (N)

MH-118
SANITARY MANHOLE
TOP ELEV. 26.93
STA. 26+75.00 (0.0')
INV. EL. 16.14 (S)
INV. EL. 16.04 (E)

CUL DE SAC BLOW-OFF ASSEMBLY PER CITY DETAIL REF: W-6
BACTERIA SAMPLE #6

INVERT ELEVATION TO BE FIELD VERIFIED BEFORE CONSTRUCTION AND EOR TO BE NOTIFIED IF THERE ARE ANY DISCREPANCIES

TO BE CONNECTED TO EXISTING LILY HAMMOCK SANITARY SYSTEM (PROJECT # SD-2404)

204 L.F. ~ 8" PVC @ 0.40%

395 L.F. ~ 8" PVC @ 0.40%

275 L.F. ~ 8" PVC @ 0.40%

177 L.F. ~ 8" PVC @ 0.40%

126 L.F. ~ 8" PVC @ 0.40%

1-10"x8" TEE
1-10" GATE VALVE WITH C.I. VALVE BOX
1-8" GATE VALVE WITH C.I. VALVE BOX

BACTERIOLOGICAL SAMPLE #7

REMOVE CAP AND TIE IN PROPOSED WM TO EXISTING WM

IRRIGATION POINT OF CONNECTION

FIRE HYDRANT LOCATION (PER PERMIT #SP-2404)

EXISTING 10" PVC WM

EXISTING WM SERVICES CONSTRUCTED AS PART OF LILY HAMMOCK PLANS

MH-119
TYPE "A"
TOP ELEV. 27.59
INV. EL. 15.33 (W)
INV. EL. 15.23 (N)

SWMF
DPC-G-7

SWMF
DPC-G-8

MIXED USE TRACT

OPEN SPACE

CE W-6
(9.53 ACRES)

BUILDING-19 BUILDING-20 BUILDING-21 BUILDING-22 BUILDING-23 BUILDING-28 BUILDING-29 BUILDING-30 BUILDING-31 BUILDING-32 BUILDING-33 BUILDING-34 BUILDING-35 BUILDING-36 BUILDING-37 BUILDING-38 BUILDING-39 BUILDING-40

DELMOR WIGGINS TIBERIUS TRL BRADY CIR DISNEY JOHNSON

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Orlando, Florida 32804
(407) 538-5379
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CA- 00002584 LC-0000316

ENGLAND-THIMS & MILLER

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E. NUMBER: 86967

REVISIONS:

ETM NO. 22-213-39
DRAWN BY: KAJ
DESIGNED BY: CBW
CHECKED BY: CBW
DATE: 01.27.2025

PLOTTED: August 8, 2025 - 5:42 PM, BY: Cheroky Williams

WATER & SEWER PLAN

DEERING PARK CENTER TOWNHOMES FOR DEERING PARK 1, LLC

DRAWING NUMBER
9E

n: \2022 \22-213 \22-213-09 \Landdev \Design \Plots \WS-22-213-09.dwg

CROSSING TYPE TABLE

1	WATERMAIN OVER STORM MIN. 1.5' CLEAR
2	STORM OVER SANITARY MIN. 4.0' CLEAR
3	STORM OVER SANITARY MIN. 4.0' CLEAR
4	WATERMAIN OVER STORM MIN. 1.5' CLEAR
5	WATERMAIN OVER STORM MIN. 1.5' CLEAR
6	STORM OVER SANITARY MIN. 4.0' CLEAR
7	STORM OVER SANITARY MIN. 4.0' CLEAR
8	STORM OVER SANITARY MIN. 4.0' CLEAR
9	WATERMAIN OVER SANITARY MIN. 1.5' CLEAR
10	SANITARY OVER STORM MIN. 1.0' CLEAR
11	SANITARY OVER STORM MIN. 1.0' CLEAR
12	STORM OVER SANITARY MIN. 4.0' CLEAR
13	SANITARY OVER STORM MIN. 1.0' CLEAR
14	STORM OVER SANITARY MIN. 1.5' CLEAR
15	STORM OVER SANITARY MIN. 1.5' CLEAR
16	WATERMAIN OVER SANITARY MIN. 1.5' CLEAR
17	STORM OVER SANITARY MIN. 1.5' CLEAR
18	STORM OVER SANITARY MIN. 1.5' CLEAR

SINGLE SER
LATERAL W
REFER TO D
13A
(TYP.)

KEY MAP

GENERAL NOTES:

1. REFER TO DRAWING NO. 02 FOR GENERAL NOTES AND LEGEND.
2. CONTRACTOR SHALL REFER TO SITE PLAN FOR ALL DIMENSIONS AND SHALL NOT SCALE PLAN.
3. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES (LOCATION AND INVERTS) AND SHALL EXERCISE CAUTION WHEN WORKING NEAR ALL EXISTING UTILITIES AND SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY IF THERE ARE DISCREPANCIES OR CONFLICTS.
4. CONTRACTOR SHALL VERIFY ALL UTILITY CROSSINGS ON RECORD DRAWINGS (INVERTS, LOCATIONS, SEPARATION, TOP OF PIPE AND GROUND ELEVATION).
5. PER FDEP REQUIREMENTS, CONTRACTOR SHALL MAINTAIN 12" MINIMUM VERTICAL SEPARATION BETWEEN WATER MAIN CROSSINGS WITH REUSE MAINS, FORCE MAINS, SANITARY OR STORM SEWER EXCEPT WHERE DESIGN CONSTRAINTS EXIST AND THE MINIMUM OF 6" SEPARATION FOR WATER MAINS OVER STORM MAY BE ALLOWED. CONTRACTOR SHALL VERIFY CROSSINGS ON RECORD DRAWINGS (INVERTS, LOCATIONS AND SEPARATIONS). CONTRACTOR SHALL MAINTAIN 3' MINIMUM SEPARATION BETWEEN DRAINAGE AND REUSE FROM WATER MAINS. ALL DISTANCES MEASURES FROM OUTSIDE OF PIPE.
6. REFER TO FIRE PROTECTION PLANS (BY OTHERS) FOR ALL DETAILS/DESIGN ASSOCIATED WITH BUILDING FIRE PROTECTION SYSTEM.
7. FIRE HYDRANTS SHALL BE LOCATED FROM 3' TO 10' OFF OF BACK OF CURB. LARGE DIAMETER OUTLET TO FACE ROADWAY.
8. FIRE HYDRANTS SHALL HAVE A MINIMUM CLEARANCE OF 7.5' IN FRONT AND 4' ON SIDES AND REAR.
9. ALL FIRE HYDRANTS ALONG THE RIGHTS-OF-WAY SHALL BE DEDICATED TO THE CITY WITH BARRELS PAINTED RED AND BONNETS PAINTED IN ACCORDANCE WITH ISO FIRE FLOW TESTS. FIRE PROTECTION SYSTEMS OUTSIDE OF THE RIGHT-OF-WAY, INCLUDING ANY BACKFLOW PREVENTERS OR OTHER ASSOCIATED DEVICES WHICH CONNECT DIRECTLY TO OR INSIDE THE BUILDING ENVELOPE SHALL REMAIN PRIVATE AND BE PAINTED IN BRIGHT CHROME COLORING.
10. ALL STORMWATER/POTABLE WATER CROSSINGS SHALL BE CASE A OR CASE B (SEE DETAILS SHEET) UTILIZING MECHANICAL RESTRAINTS.
11. ALL GATE VALVES SHALL HAVE A CAST IRON BOX AND SHALL BE LOCATED OUT OF PAVED AREAS, CURBS & SIDEWALKS UNLESS ACTUAL FIELD CONDITIONS PREVENT.
12. ADDITIONAL FITTINGS SHALL BE INSTALLED ON WATER SYSTEM AS REQUIRED TO MEET MINIMUM SEPARATION REQUIREMENTS.
13. CONSTRUCTION MATERIALS SHALL BE IN CONFORMANCE WITH CITY OF EDGEWATER LAND DEVELOPMENT CODE.
14. SANITARY CLEANOUTS IN PAVED AREAS SHALL BE TRAFFIC BEARING RATED AND FLUSH WITH PAVEMENT.
15. CONTRACTOR TO COORDINATE WITH BUILDING PLUMBER PRIOR TO MAKING ALL UTILITY CONNECTIONS.
16. REFER TO ARCHITECTURAL/MEP PLANS FOR ALL BUILDING AND PLUMBING DETAILS.
17. CONTRACTOR TO COORDINATE WITH CITY OF EDGEWATER. FOR ALL/ANY UTILITY SHUTDOWNS DURING CONSTRUCTION.
18. WATERMAIN TAP AND METER TO BE PAID FOR BY CONTRACTOR AND INSTALLED BY CITY OF EDGEWATER.(REFER TO DRAWING NO. 2 UTILITY NOTE 26)
19. UNDERGROUND DRY UTILITIES (ELECTRICAL, TELEPHONE, ETC.) ARE SHOWN FOR REFERENCE ONLY. SEE ELECTRICAL PLANS FOR DESIGN INFORMATION.

SE W-6
(9.53 ACRES)

MH-117
SANITARY MANHOLE
TOP ELEV. 27.15
STA. 24+00.00 (0.0')
INV. EL. 17.34 (S)
INV. EL. 17.24 (N)

HYDRANT ASSEMBLY,
Y WATER DETAIL W-1
1 8"x6" TEE
GATE VALVE WITH C.I.
VALVE BOX

BUILDING-36
BUILDING-35
BUILDING-34
BUILDING-31
BUILDING-32
BUILDING-33

MH-118
SANITARY MANHOLE
TOP ELEV. 26.93
STA. 26+75.00 (0.0')
INV. EL. 16.14 (S)
INV. EL. 16.04 (E)

CUL DE SAC BLOW-OFF
ASSEMBLY PER CITY DETAIL
REF: W-6
BACTERIA SAMPLE #6

SWMF
DPC-G-7

8" PVC DR-18

DANNY JOHNSON

INVERT ELEVATION TO BE FIELD VERIFIED BEFORE CONSTRUCTION AND EOR TO BE NOTIFIED IF THERE ARE ANY DISCREPANCIES

TO BE CONNECTED TO EXISTING LILY HAMMOCK SANITARY SYSTEM (PROJECT # SD-2404)

275 L.F. ~ 8" PVC
@ 0.40%

177 L.F. ~ 8" PVC
@ 0.40%

MH-119
TYPE "A"
TOP ELEV. 27.59
INV. EL. 15.33 (W)
INV. EL. 15.23 (N)

126 L.F. ~ 8" PVC
@ 0.40%

SWMF
DPC-G-8

MIXED
USE
TRACT

WELCOME
CENTER
TRACT

DESIGNED BY OTHERS

EXISTING WELCOME
CENTER POND
(DESIGNED BY OTHERS)

EXISTING LIFT STATION

MH-EX-PS-40

MH-EX-SAN

EXISTING WELL SITE 2
(PER SURVEY)

EXISTING WELL SITE 1
(PER SURVEY)

40'

INDIAN RIVER BOULEVARD

13.0
19.5
22.5
25.5
28.5

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PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW
P.E. NUMBER: 86967

PLOTTED: August 8, 2025 - 5:42 PM, BY: Cheroky Williams

ETM NO.	22-213-39
DRAWN BY:	KJJ
DESIGNED BY:	CBW
CHECKED BY:	CBW
DATE:	01.27.2025

REVISIONS:

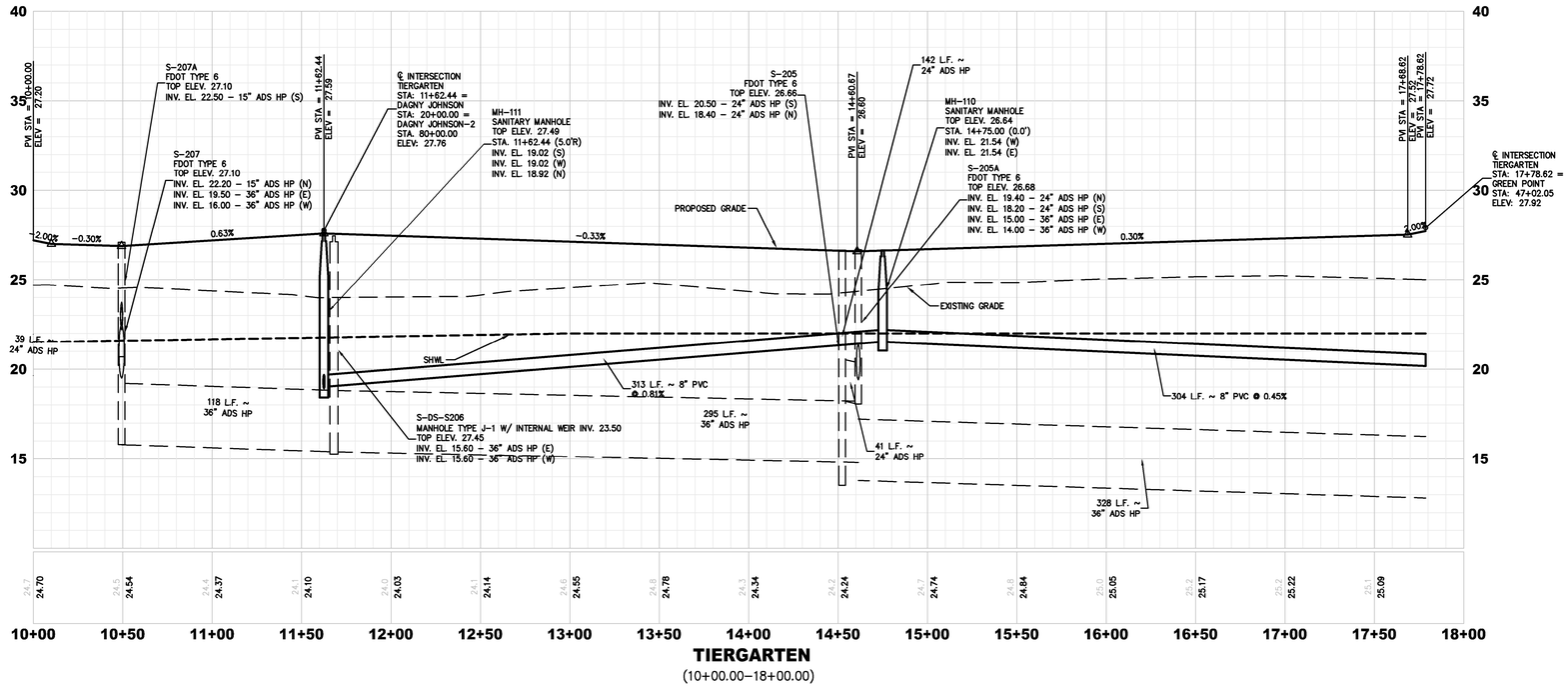
ETM
ENGLAND-THIMS & MILLER

WATER & SEWER PLAN

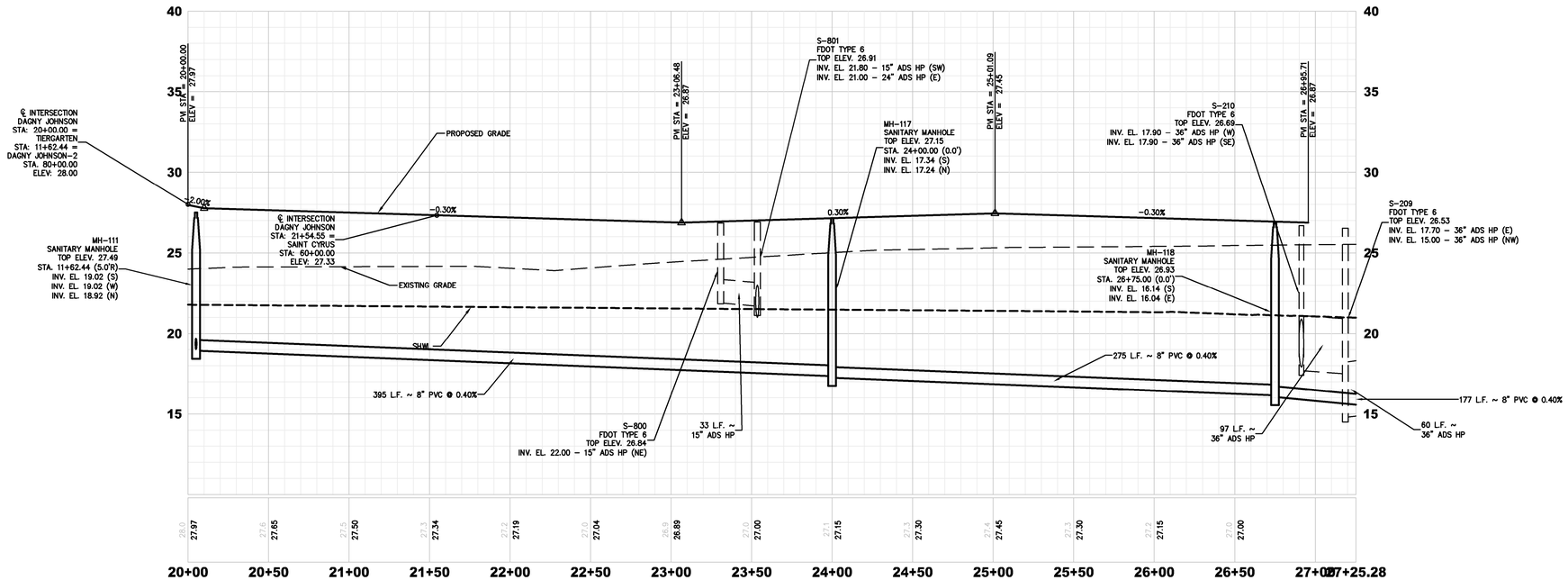
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DRAWING NUMBER
9F

n: \2022\22-213 \22-213-09\LandDev\Design\Plots\WS-22-213-09.dwg



TIERGARTEN
(10+00.00–18+00.00)



DAGNY JOHNSON
(20+00.00–27+25.28)

H. SCALE: 1" = 40'
V. SCALE: 1" = 10'

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ROADWAY PROFILE

DEERING PARK CENTER TOWNHOMES
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
10A

PLOTTED: August 8, 2025 – 5:43 PM, BY: Cheroky Williams

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GREEN POINT
(30+00.00–40+50.00)

H. SCALE: 1" = 40'
V. SCALE: 1" = 10'

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW
P.E. NUMBER: 86967

REVISIONS:

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DRAWN BY:	KJJ
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ROADWAY PROFILE

DEERING PARK CENTER TOWNHOMES
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
10B

PLOTTED: August 8, 2025 – 5:43 PM, BY: Cheroky Williams

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GREEN POINT
(40+00.00–50+00.00)

GREEN POINT
(50+00.00–53+80.00)

H. SCALE: 1" = 40'
V. SCALE: 1" = 10'

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW
P.E. NUMBER: 86967

REVISIONS:

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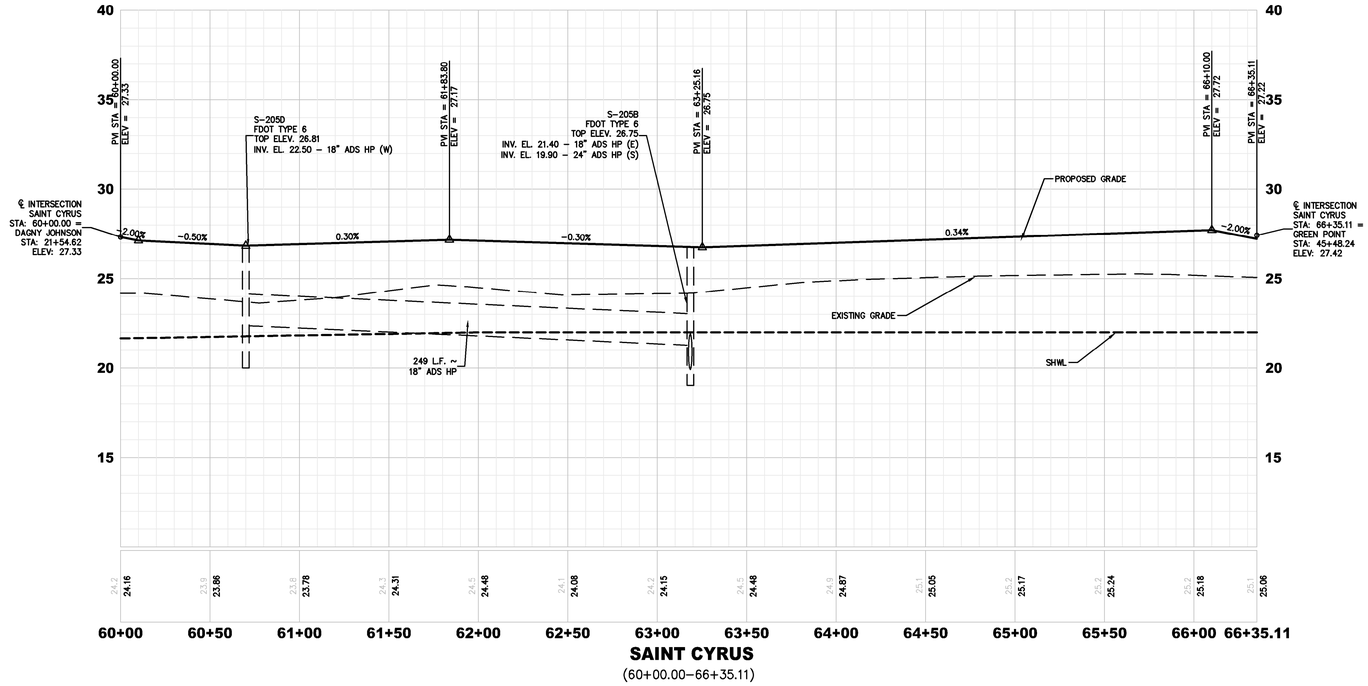
ENGLAND-THIMS & MILLER

ROADWAY PROFILE

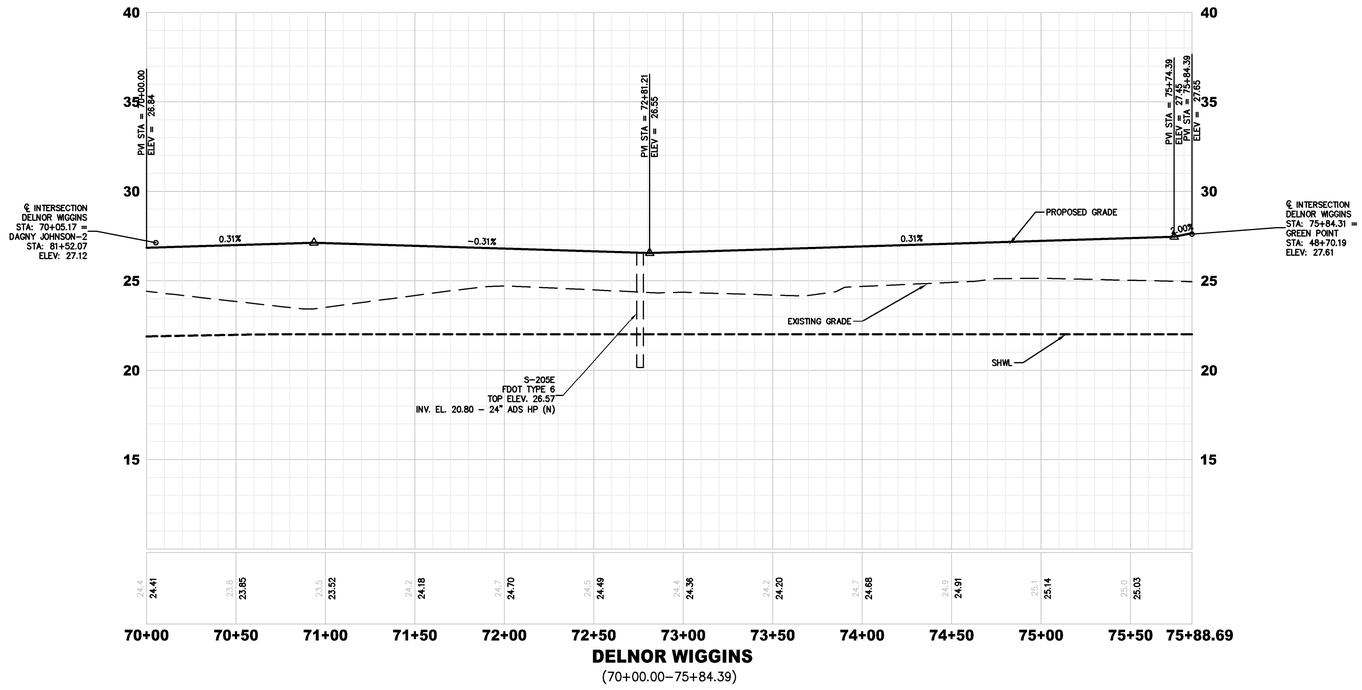
DEERING PARK CENTER TOWNHOMES
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
10C

n:\2022\22-213\22-213-09\LandDev\Design\Plots\PROF-22-213-09.dwg



SAINT CYRUS
(60+00.00–66+35.11)



DELNOR WIGGINS
(70+00.00–75+84.39)

H. SCALE: 1" = 40'
V. SCALE: 1" = 10'

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW
P.E. NUMBER: 86967

REVISIONS:

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DRAWN BY:	KAJ
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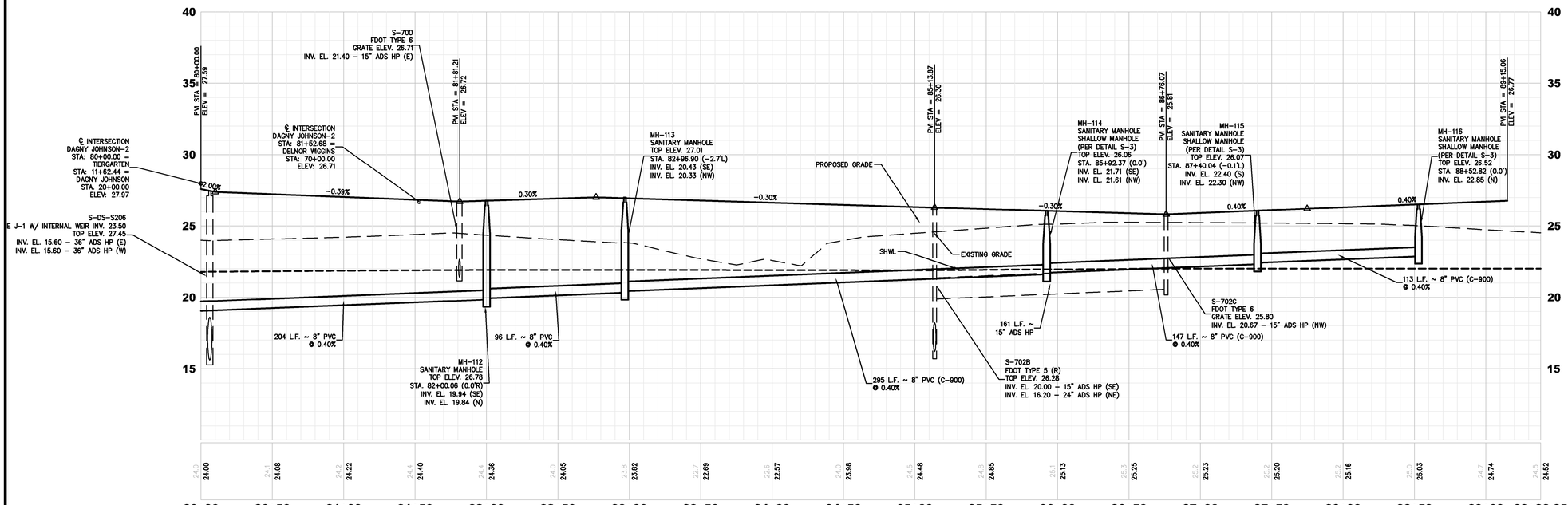
ROADWAY PROFILE

DEERING PARK CENTER TOWNHOMES
FOR
DEERING PARK 1, LLC

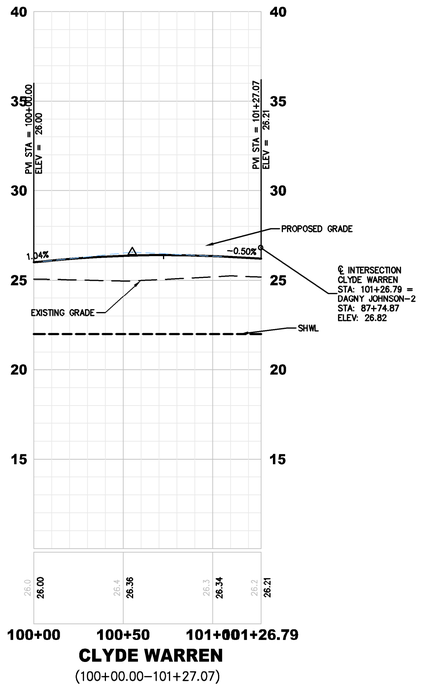
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10D

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DAGNY JOHNSON-2
(80+00.00–89+38.35)



CLYDE WARREN
(100+00.00–101+27.07)

H. SCALE: 1" = 40'
V. SCALE: 1" = 10'

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW
P.E. NUMBER: 86967

REVISIONS:

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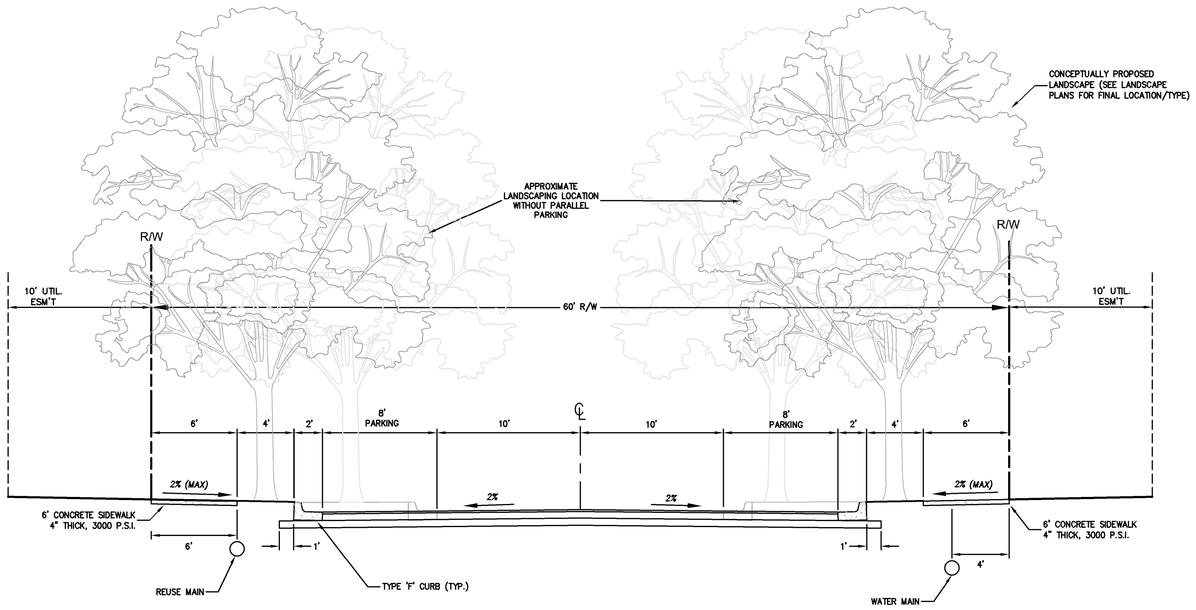
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ROADWAY PROFILE

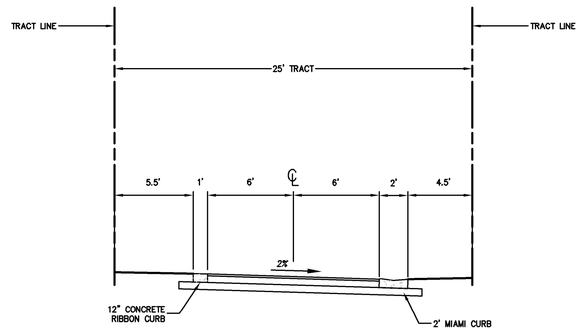
DEERING PARK CENTER TOWNHOMES
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
10E

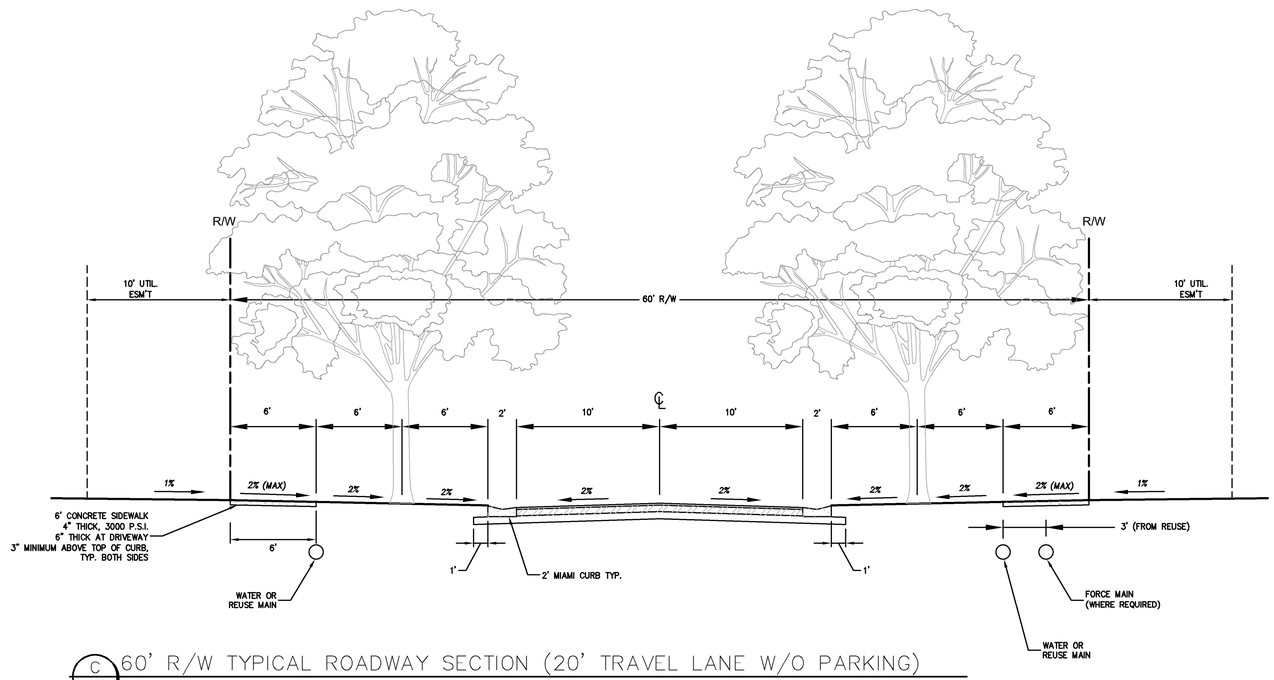
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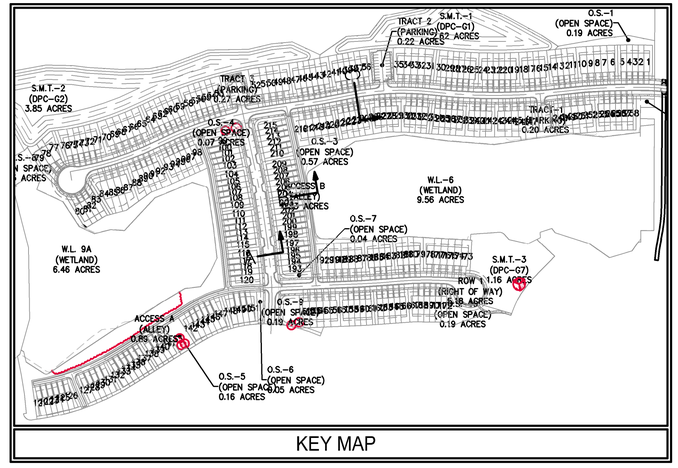
A 60' R/W TYPICAL ROADWAY SECTION (20' TRAVEL LANES, WITH PARKING)
N.T.S.



B 25' ALLEY TRACT TYPICAL SECTION
N.T.S.



C 60' R/W TYPICAL ROADWAY SECTION (20' TRAVEL LANE W/O PARKING)
N.T.S.



NOTE: LANDSCAPING LOCATIONS/TYPES SHOWN ARE GRAPHICAL REPRESENTATIONS AND ARE SUBJECT TO CHANGE. SEE LANDSCAPE PLANS FOR FINAL LOCATIONS/TYPES.

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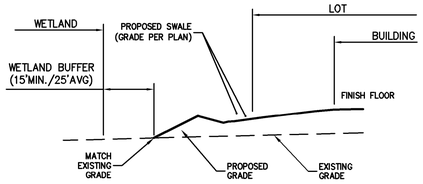
TYPICAL ROADWAY SECTIONS

DEERING PARK CENTER TOWNHOMES FOR DEERING PARK 1, LLC

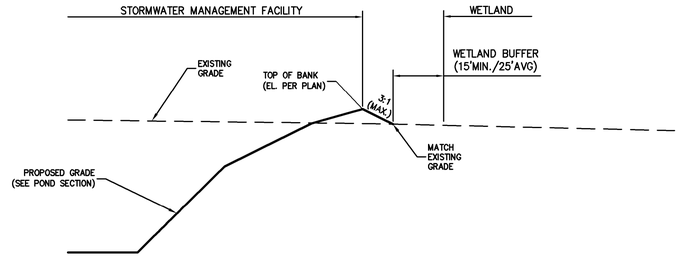
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11A

PLOTTED: August 8, 2025 - 5:43 PM, BY: Cheroky Williams

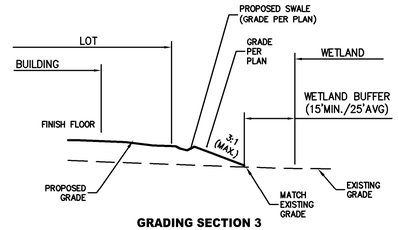
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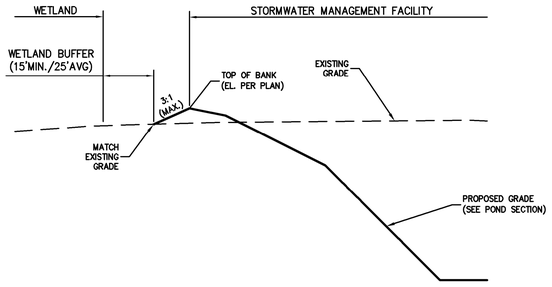
GRADING SECTION 1



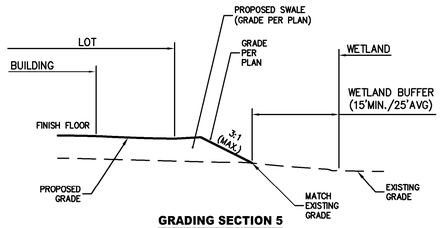
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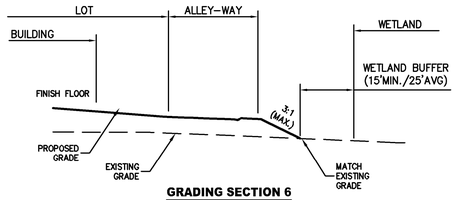
GRADING SECTION 3



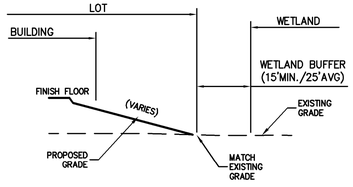
GRADING SECTION 4



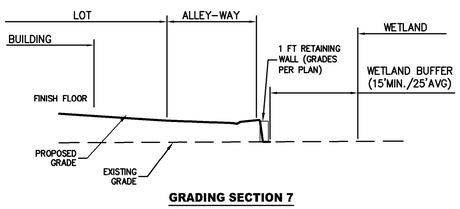
GRADING SECTION 5



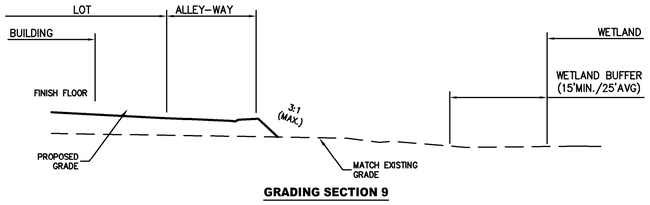
GRADING SECTION 6



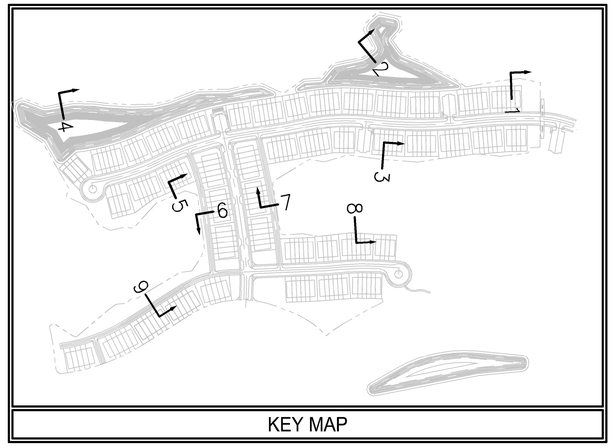
GRADING SECTION 8



GRADING SECTION 7



GRADING SECTION 9



KEY MAP

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW
P.E. NUMBER: 89567

PLOTTED: August 8, 2025 – 5:44 PM, BY: Cheroky Williams

REVISIONS:

ETM NO. 22-213-39	DRAWN BY: KJJ	DESIGNED BY: CBW	CHECKED BY: CBW	DATE: 01.27.2025

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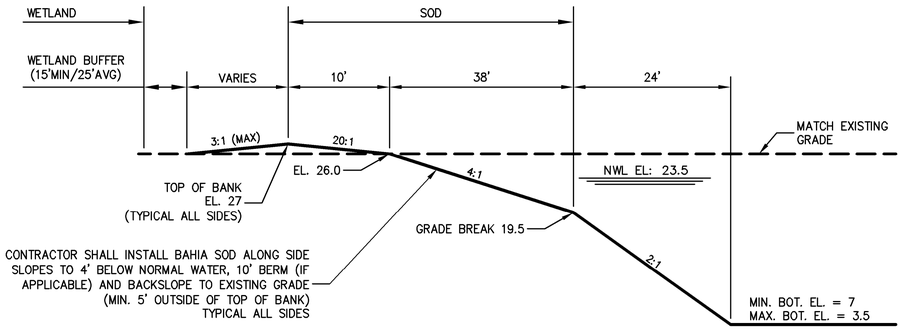
ENGLAND-THIMS & MILLER

GRADING SECTIONS AND DETAILS

DEERING PARK CENTER TOWNHOMES
FOR
DEERING PARK 1, LLC

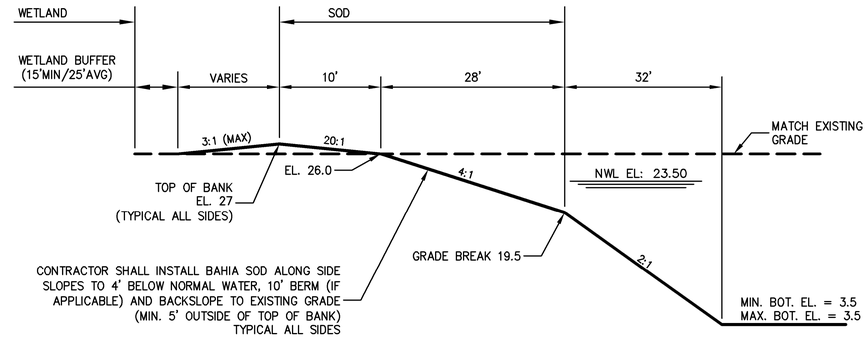
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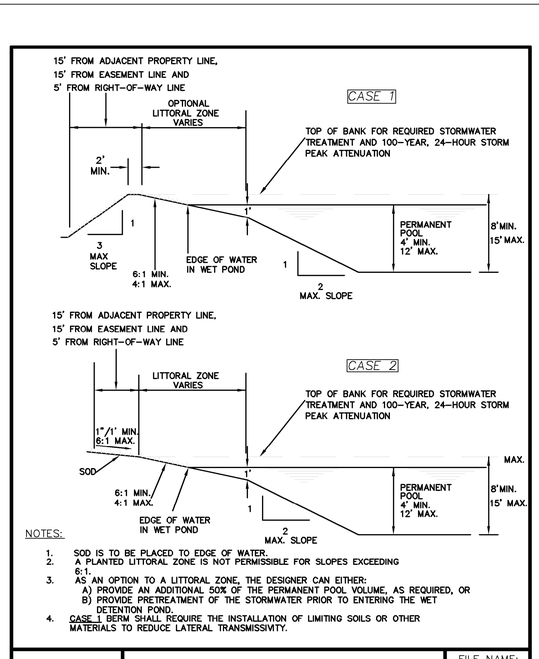
DPC-G1 STORMWATER MANAGEMENT FACILITY TYPICAL SECTION

N.T.S.



DPC-G2 STORMWATER MANAGEMENT FACILITY TYPICAL SECTION

N.T.S.



NOTES:

1. SOD IS TO BE PLACED TO EDGE OF WATER.
2. A PLANTED LITTORAL ZONE IS NOT PERMISSIBLE FOR SLOPES EXCEEDING 6:1.
3. AS AN OPTION TO A LITTORAL ZONE, THE DESIGNER CAN EITHER:
   A) PROVIDE AN ADDITIONAL 50% OF THE PERMANENT POOL VOLUME, AS REQUIRED, OR
   B) PROVIDE PRETREATMENT OF THE STORMWATER PRIOR TO ENTERING THE WET DETENTION POND.
4. CASE 1 BERM SHALL REQUIRE THE INSTALLATION OF LIMITING SOILS OR OTHER MATERIALS TO REDUCE LATERAL TRANSMISSIVITY.

STANDARD CONSTRUCTION DETAIL
WET RETENTION POND
PLACEMENT BY R/W AND EASEMENT LINES

FILE NAME: EW_ST10.DWG

DETAIL REF: ST-10

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW
P.E. NUMBER: 86967

REVISIONS:

ETM NO. 22-213-39	DRAWN BY: KJJ	DESIGNED BY: CBW	CHECKED BY: CBW	DATE: 01.27.2025

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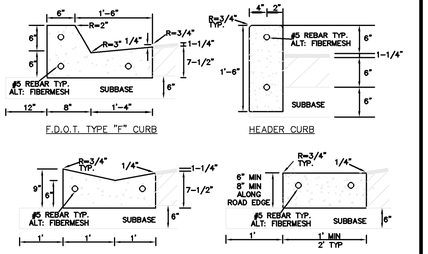
PAVING & DRAINAGE DETAILS

DEERING PARK CENTER TOWNHOMES FOR DEERING PARK 1, LLC

DRAWING NUMBER
12A

PLOTTED: August 8, 2025 - 5:44 PM, BY: Cheroky Williams

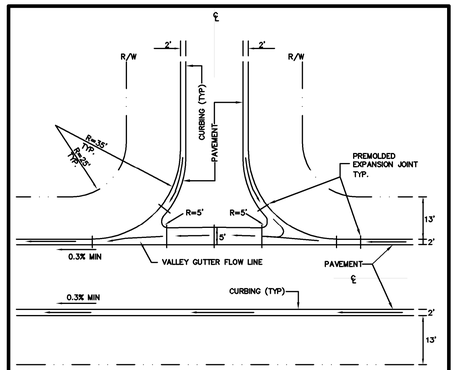
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NOTES:

1. ALL CURBS TO BE CONSTRUCTED OF 28 DAY, 3000 P.S.I. CONCRETE REINFORCED W/ #5 REBAR OR FIBERMESH
2. 1/2" PRE-MOLDED EXPANSION JOINT REQUIRED EVERY 500', CONSTRUCTION JOINT REQUIRED EVERY 10' MAXIMUM (4" MINIMUM).
3. 1/2" PRE-MOLDED EXPANSION JOINT REQUIRED AT EACH SIDE OF ALL STORM INLET STRUCTURES AND AT ALL RADIUS POINTS.
4. THE SUBBASE TO BE COMPACTED AND TESTED TO 98% DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST AND SHALL BE STABILIZED TO A MINIMUM L.B.R. 40.
5. EXPANSION JOINT MATERIAL MUST COVER THE ENTIRE CROSS SECTION OF CURB.
6. IN NO INSTANCE SHALL EXTRUDED CURBS (DEFINED AS HEADER-TYPE CURBS INSTALLED DIRECTLY ON TOP OF PAVEMENT) BE PERMITTED.
7. ALL ASPHALT AND/OR PAVER DRIVEWAY APRONS LOCATED IN PUBLIC RIGHT-OF-WAY, SHALL INCLUDE CURBING

	STANDARD CONSTRUCTION DETAIL STANDARD CURB CONSTRUCTION	FILE NAME: EW_R9.DWG
2016-03-21		DETAIL REF: R-9



NOTES:

1. VALLEY GUTTER TO HAVE A STANDARD MINIMUM LONGITUDINAL SLOPE OF 0.30%
2. VALLEY GUTTER TO BE CONSTRUCTED OF 28 DAY, 3000 P.S.I. CONCRETE
3. 6" SUBBASE TO BE COMPACTED AND TESTED TO 98% DENSITY WITH MINIMUM L.B.R. 40 BASED ON AASHTO T-180 MODIFIED PROCTOR TEST.
4. VALLEY GUTTERS ARE REQUIRED WHEN STORMWATER CROSSES THE INTERSECTION OF ROADWAYS AND DRIVEWAY CONNECTIONS.
5. REFER TO F.D.O.T. STANDARD INDEX No. 300

	STANDARD CONSTRUCTION DETAIL ROADWAY INTERSECTION VALLEY GUTTER	FILE NAME: EW_R10.DWG
		DETAIL REF: R-10

ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES

ALL MATERIALS AND INSTALLATION METHODS USED FOR LAND DEVELOPMENT CODE REQUIRED IMPROVEMENTS FOR SUBDIVISIONS AND SITE PLANS SHALL BE IN CONFORMANCE WITH THE CITY, FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), AND THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS (LATEST EDITION).

1. ALL RIGHT-OF-WAY OTHER THAN ROADWAY AREAS SHALL BE SODDED. ALL SLOPES STEEPER THAN 6:1 SHALL REQUIRE SODDING. THE CITY RESERVES THE RIGHT TO REQUIRE SODDING IN SPECIAL AREAS WHERE EROSION IS A CONCERN.
2. THE FOLLOWING WILL BE THE STANDARD PROTECTION FOR DITCHES UNLESS DRAINAGE CALCULATIONS INDICATE OTHERWISE:

SWALE PROFILE GRADES	PROTECTION REQUIRED
0.2%- 1.0%	GRASSING AND MULCHING
1.0%-4.0%	SODDING
4.0% AND GREATER	DITCH PAVING

3. THE PAVEMENT, BASE, AND SUBBASE THICKNESS PRESENTED ON DETAILS REPRESENTS THE MINIMUM REQUIREMENTS FOR LOCAL PUBLIC STREETS AND PRIVATE PARKING LOTS. THE CITY RESERVES THE RIGHT AT IT'S DISCRETION TO INCREASE THESE REQUIREMENTS FOR COLLECTOR AND ARTERIAL ROADWAYS AND PRIVATE PARKING LOTS SUBJECTED TO HEAVY VEHICULAR COMMERCIAL TRAFFIC.
4. THE DEVELOPER SHALL PROVIDE AT THEIR OWN EXPENSE A CERTIFIED SOILS ENGINEERING LABORATORY TO PERFORM ALL FIELD AND LABORATORY TESTING REQUIRED TO VERIFY THAT THE CONSTRUCTION IS IN COMPLIANCE WITH THE CITY'S MINIMUM STANDARDS. IT IS THE RESPONSIBILITY OF THE DEVELOPER TO ENSURE THAT COPIES OF ALL TEST REPORTS ARE PROVIDED TO THE CITY'S DESIGNATED SITE INSPECTOR PRIOR TO THE PROJECT FINAL INSPECTION IN ORDER TO ALLOW PROJECT ACCEPTANCE BY THE CITY.
5. THE LIMITS OF STABILIZED SUBBASE SHALL EXTEND TO A DEPTH OF SIX INCHES (6") BELOW THE BOTTOM OF THE BASE AND OUTWARD TO TWELVE INCHES (12") BEYOND THE CURB.
6. THE STABILIZING MATERIAL, IF REQUIRED, SHOULD BE A HIGH BEARING VALUE SOIL, SAND-CLAY, LIMEROCK, RECYCLED CONCRETE, SHELL, OR OTHER MATERIAL AS APPROVED BY THE CITY'S DESIGNATED SITE INSPECTOR AND A LICENSED SOILS ENGINEER.
7. THE SUBBASE SHALL BE STABILIZED NOT LESS THAN FORTY (40) POUNDS LIMEROCK BEARING RATIO (LBR) TO A 6" MINIMUM DEPTH. A COMPACTION OF NO LESS THAN NINETY-EIGHT (98%) PERCENT DENSITY BASED ON AASHTO T-180 SHALL BE REQUIRED.
8. FOR ROADWAYS, TESTS FOR SUBBASE BEARING CAPACITY AND COMPACTION SHALL BE DONE AT A MINIMUM OF EVERY 300 FEET AND SHALL BE STAGGERED TO THE LEFT, RIGHT, AND AT CENTER LINE OF THE ROADWAY. FOR SITE PLANS, TEST SHALL BE PERFORMED FOR EVERY 600 SQUARE YARDS OF STABILIZED AREA, OR PORTIONS THEREOF.
9. BASES FOR ALL STREETS SHALL HAVE A MINIMUM SIX INCH (6") DEPTH. SOIL CEMENT BASES SHALL HAVE A STRENGTH OF 350 POUNDS PER SQUARE INCH AT 7 DAYS COMPACTED TO 98% DENSITY PER AASHTO T-99 STANDARD PROCTOR TEST IN CONFORMANCE WITH SECTION 270 OF STANDARD F.D.O.T. SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION). RECYCLED CONCRETE OR LIMEROCK BASES SHALL BE COMPACTED TO 98% MAXIMUM DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST.
9. ROADWAY DEFINITIONS
   a. ARTERIALS: PROVIDE REGIONAL MOBILITY VIA BOTH UNINTERRUPTED FLOW AND INTERRUPTED FLOW SEGMENTS. MATERIALS PROVIDE MOBILITY AROUND AND THROUGH URBAN AND COMMUNITY CORES, AND ACCOMMODATE RELATIVELY LONG TRIP LENGTHS AS OPPOSED TO PROVIDING ACCESS TO ADJACENT PROPERTIES. ARTERIAL ROADS ARE U.S. #1 AND S.R. #442.
   b. COLLECTORS: PROVIDE FOR MOVEMENT BETWEEN LOCAL STREETS AND THE ARTERIAL NETWORK. COLLECTORS SERVE RESIDENTIAL, COMMERCIAL AND INDUSTRIAL AREAS.
   c. LOCAL ROADS: PROVIDE DIRECT ACCESS TO ABUTTING PROPERTIES. LOCAL ROADS ACCOMMODATE TRAFFIC ORIGINATING IN OR TRAVELING TO PROPERTIES WITHIN A NEIGHBORHOOD, COMMERCIAL OR INDUSTRIAL DEVELOPMENT. LOCAL ROADS ARE NOT CONSIDERED PART OF THE MAJOR THOROUGHFARE SYSTEM.

	STANDARD CONSTRUCTION DETAIL ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_R12.DWG
		DETAIL REF: R-12

ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES (CONTD.)

10. SOIL CEMENT AND RECYCLED CONCRETE MIX DESIGNS SHALL BE SUBMITTED BY A LICENSED SOILS ENGINEER TO THE CITY'S DESIGNATED SITE INSPECTOR PRIOR TO THE START OF SUBBASE PREPARATION. ALL MIX DESIGNS SHALL BE SUBJECT TO THE APPROVAL OF THE CITY.
11. CEMENT DELIVERY TICKETS SHALL BE PROVIDED TO THE CITY'S DESIGNATED SITE INSPECTOR AT THE TIME OF PLACEMENT. IF THE INSPECTOR IS NOT ON SITE THROUGHOUT THE ENTIRE INSTALLATION, ACCUMULATED DELIVERY TICKETS CAN BE PROVIDED TO THE INSPECTOR BY THE CONTRACTOR ON THE FOLLOWING DAY.
12. TESTING OF THE IN-PLACE BASE SHALL BE DONE AT INTERVALS EQUIVALENT TO SUBGRADE TESTING AND SHALL CONSIST OF, AS A MINIMUM, A MOISTURE CONTENT AND COMPACTION TEST.
13. PORTLAND CEMENT CONCRETE, LIMEROCK, RECYCLED CONCRETE, OR FULL DEPTH ASPHALT PAVEMENT MAY BE USED IN PLACE OF SOIL CEMENT BASE. ALL BASE AND ROADWAY DESIGNS SHALL BE SUBJECT TO THE APPROVAL OF THE CITY.
14. SOIL CEMENT BASE MATERIAL CONSTRUCTION SHALL BE CONTINUOUSLY SUPERVISED BY A SOILS TESTING LABORATORY AT THE DEVELOPER'S EXPENSE. THE TESTING LABORATORY SHALL PROVIDE AN ON-SITE TECHNICIAN CERTIFIED IN THE INSTALLATION OF SOIL CEMENT WITH THE CERTIFICATION RECOGNIZED BY F.D.O.T.
15. SOIL CEMENT PAVEMENT BASES WITH THE CURE COAT APPLIED SHALL BE ALLOWED TO CURE A MINIMUM OF SEVEN (7) DAYS UNDER NO TRAFFIC PRIOR TO PLACING ANY ASPHALT SURFACE. (TEST REPORTS ARE REQUIRED TO BE DELIVERED TO THE CITY'S DESIGNATED SITE INSPECTOR PRIOR TO TRAFFIC USAGE.)
16. RECYCLED CONCRETE CAN BE USED AS AN ALTERNATIVE BASE MATERIAL PROVIDED THE MATERIAL IS A MINIMUM OF 60% CARBONATE OF CALCIUM AND MAGNESIUM. THE MATERIAL SHALL BE LIMITED TO MAXIMUM OF 3% OF WATER SENSITIVE CLAY MATERIAL. LIQUID LIMIT SHALL NOT EXCEED 35 AND BE NON-PLASTIC, AND THE PLASTICITY INDEX SHALL NOT EXCEED 10. THE MATERIAL SHALL NOT CONTAIN ORGANIC MATERIAL, CHERTY OR OTHER EXTREMELY HARD PIECES, LUMPS, BALLS OR POCKETS OF SAND SIZE MATERIAL OF A QUANTITY AS TO BE DETRIMENTAL TO THE PROPER BONDING, FINISHING, OR STRENGTH OF THE RECYCLED CONCRETE BASE. FOR BASE APPLICATIONS, AT LEAST 97% (BY WEIGHT) OF THE MATERIAL SHALL PASS A 1" SIEVE AND FOR SUBBASE APPLICATIONS, AT LEAST 97% (BY WEIGHT) OF THE MATERIAL SHALL PASS A 1-1/2" SIEVE. FOR BOTH APPLICATIONS, THE MATERIAL SHALL BE GRADED UNIFORMLY DOWN TO DUST AND THE MINIMUM LBR VALUES ARE TO BE NOT LESS THAN 130. COARSE AGGREGATE USED IN THE RECYCLED CONCRETE SHALL HAVE A MAXIMUM LOSS OF 45% PER LOS ANGELES ABRASION TEST. ALL MATERIALS SHALL BE WELL GRADED IN ACCORDANCE WITH REQUIREMENTS SET FORTH IN SECTION 204, F.D.O.T., STANDARD SPEC. FOR ROAD AND BRIDGE CONSTRUCTION., (LATEST EDITION).
17. RECYCLED CONCRETE OR LIMEROCK FOR BASE OR SUBBASE APPLICATIONS SHALL BE ALLOWED ON CITY ROADWAYS ONLY WHERE THE LOWEST ELEVATION OF THE ROADWAY SUBBASE IS A MINIMUM OF 6" ABOVE THE SEASONAL HIGH GROUNDWATER TABLE AS CERTIFIED BY A FLORIDA LICENSED PROFESSIONAL SOILS ENGINEER AND SUBSEQUENTLY APPROVED FOR BY THE CITY. IN AREAS NOT MEETING THESE STANDARDS A SOIL CEMENT BASE WILL BE REQUIRED. ALL CRUSHING OF RECYCLED CONCRETE SHALL BE DONE PRIOR TO THE MATERIAL BEING PLACED IN THE ROADWAY. TESTING SHALL HAVE THE SAME REQUIREMENTS AND BE PERFORMED AT THE SAME LOCATION AND INTERVALS AS REQUIRED FOR LIMEROCK.

	STANDARD CONSTRUCTION DETAIL ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_R13.DWG
		DETAIL REF: R-13

ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES (CONTD.)

18. DESIGN MIXES AND PRODUCT GRADATION INFORMATION FOR ALL MATERIALS TO BE INSTALLED AS PART OF THE LAND DEVELOPMENT CODE REQUIRED IMPROVEMENTS SHALL BE SUBMITTED TO THE CITY'S DESIGNATED SITE INSPECTOR FOR ACCEPTANCE BY THE CITY. THE INFORMATION SHALL BE SUBMITTED NO LESS THAN THREE (3) WORKING DAYS PRIOR TO ANY CONSTRUCTION. SUBMITTALS SHALL INCLUDE, BUT NOT BE LIMITED TO, INFORMATION TO EVALUATE THE MATERIALS PROPOSED FOR INSTALLATION AS SUBBASE, BASE, AND PAVEMENT FOR ALL ROADWAY AND PARKING AREA SURFACES AS WELL AS SIMILAR INFORMATION FOR ALL OTHER CONCRETE SIDEWALKS, CURBING, AND COMPARABLE STRUCTURES AND APPLICATIONS.
19. PRIOR TO PLACEMENT FLORIDA STATE CERTIFIED BATCH PLANTS MUST CERTIFY TO THE CITY'S RESIDENT PROJECT INSPECTOR THAT THE ASPHALT DELIVERED TO THE SITE IS IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.
20. EXTRACTION AND GRADATION TESTS ON ASPHALT MIXES SHALL BE PROVIDED TO THE CITY'S DESIGNATED SITE INSPECTOR FOR EVERY 2500 SQUARE YARDS OF ASPHALT, OR PART THEREOF, TO ENSURE THAT DESIGN MIXES MEET THE CITY STANDARD SPECIFICATIONS.
21. FIELD TESTING OF THE ASPHALT PAVEMENT SHALL BE DONE AT INTERVALS EQUIVALENT TO SUBGRADE TESTING AND SHALL CONSIST OF, AS A MINIMUM, A COMPACTION TEST. ASPHALT PAVEMENT SHALL BE COMPACTED TO 98% DENSITY PER FM 1-T238 (METHOD B), NUCLEAR DENSITY TEST, "BACKSCATTER METHOD".
22. IN ADDITION TO THE FIELD DENSITY TESTS NOTED, THE CITY RESERVES THE RIGHT TO REQUIRE CORE SAMPLES OF PAVEMENT SECTIONS EXTRACTED AND TESTED BY A CERTIFIED SOILS ENGINEERING LABORATORY AT THE DEVELOPER'S EXPENSE. THE CITY'S DESIGNATED SITE INSPECTOR SHALL DESIGNATE THE LOCATIONS OF THE TEST CORE LOCATIONS.
23. THE ROADWAY CROWN SHALL HAVE A STANDARD ONE QUARTER INCH (1/4") PER FOOT SLOPE.
24. ALL ROADWAYS WITH CURB AND GUTTER SECTIONS SHALL HAVE AS A STANDARD A MINIMUM LONGITUDINAL SLOPE OF 0.30%. THE ROADWAY CENTERLINE SHALL BE CLEARLY MARKED ON THE DESIGN PLANS. AT A MINIMUM, DESIGN ROADWAY CENTERLINE ELEVATIONS SHALL BE NOTED AT ALL GRADE CHANGES AND AT 100' INTERVALS ALONG THE ROADWAY PROFILE ON BOTH THE DESIGN PLANS AND AS-BUILT DRAWINGS.
25. THE FINISHED PAVEMENT EDGE SHALL BE WITHIN ONE QUARTER INCH (1/4") ABOVE THE ADJACENT CONCRETE CURB FOR CURBS COLLECTING AND CONVEYING STORMWATER.
26. CONCRETE CURBS SHALL BE PROVIDED ON BOTH SIDES OF ALL STREETS AND ALL CONCRETE CURBS SHALL BE CONSTRUCTED WITH 3000 P.S.I. CONCRETE AT 28 DAYS.

	STANDARD CONSTRUCTION DETAIL ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_R14.DWG
		DETAIL REF: R-14

ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES (CONTD.)

27. CONCRETE CURBING, SIDEWALKS, PAVEMENT AND SIMILAR CONCRETE AREAS SHALL BE SAW CUT WITHIN 4 TO 18 HOURS OF PLACEMENT. SAW CUTS SHALL BE 1/4" IN WIDTH TO A DEPTH OF 1/4 OF THE TOTAL DEPTH OF CONCRETE OR 1-1/2", WHICHEVER IS LESS. SAW CUTS SHALL BE LOCATED AT INTERVALS OF TEN FEET (10') WITH EXPANSION JOINTS AT STREET INTERSECTIONS, RADIUS POINTS, STRUCTURES, AND ALONG CURVES AT SIXTY FEET (60') INTERVALS. ALL EXPANSION JOINT MATERIAL IS REQUIRED TO BE INSTALLED THROUGH THE ENTIRE DEPTH OF THE CONCRETE CURB. FOR LINEAL SECTIONS OF CURBS, EXPANSION JOINTS SHALL BE LOCATED AT A MAXIMUM SPACING OF FIVE-HUNDRED FEET (500') AND SHALL BE 1/2" IN WIDTH.
28. AN "X" SHALL BE CUT IN THE CURB TO MARK THE LOCATION OF WATER DISTRIBUTION SYSTEM VALVE.
29. A "V" SHALL BE CUT IN THE CURB TO MARK THE LOCATION OF ALL SEWER SERVICES.
30. A "-" SHALL BE CUT IN THE CURB TO MARK THE LOCATION OF ALL RECLAIMED WATER SERVICES.
31. A "A" SHALL BE CUT IN THE CURB TO MARK THE LOCATION OF ALL POTABLE WATER SERVICES.
32. BLUE REFLECTORS SHALL BE PLACED IN THE MIDDLE OF THE DRIVING LANE ON THE SIDE OF THE ROADWAY AND IN FRONT OF WHERE FIRE HYDRANTS ARE LOCATED.
33. THREE (3) CONCRETE CYLINDERS SHALL BE TAKEN AND TESTED (1 IN 14 DAYS AND 1 IN 28 DAYS) FOR EVERY SEVENTY-FIVE (75) CUBIC YARDS OF CONCRETE OR LESS PLACED. TEST RESULTS SHALL THEN BE PROVIDED TO THE CITY'S DESIGNATED SITE INSPECTOR AS THEY BECOME AVAILABLE.
34. A CONCRETE SLUMP TEST SHALL BE REQUIRED WITHIN THE FIRST 30 CUBIC YARDS OF CONCRETE. THEREAFTER, SLUMP TESTS SHALL BE REQUIRED FOR EVERY THIRTY (30) CUBIC YARDS OF CONCRETE, OR FRACTION THEREOF, WITH COPIES OF THE RESULTS PROVIDED TO THE CITY'S DESIGNATED SITE INSPECTOR. THE SLUMP TEST SHALL MEET THE REQUIRED MIX DESIGN ON EACH LOAD DELIVERED.
35. THE DEVELOPER SHALL PROVIDE ALL REQUIRED PAVEMENT MARKINGS ON ALL ROADWAYS PER CITY, COUNTY, AND STATE REQUIREMENTS. CENTERLINE STRIPES SHALL BE PROVIDED ON EXTENSIONS OF CITY COLLECTOR OR ARTERIAL ROADS, COUNTY ROADS, STATE HIGHWAYS, AND ALONG LOCAL STREETS IN THE VICINITY OF THEIR INTERSECTION WITH THE ABOVE MENTIONED ROADWAYS.
36. A FDOT APPROVED STOP SIGN AND A 24"-WIDE WHITE THERMOPLASTIC STOP BAR ARE REQUIRED AT ALL ROADWAY INTERSECTIONS.
37. ALL TRAFFIC CONTROL DEVICES PLACED AT INTERSECTIONS, PRIVATE STREETS, PUBLIC STREETS, COUNTY ROADS, AND STATE HIGHWAYS WITHIN THE CITY LIMITS SHALL BE INSTALLED ACCORDING TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. THE MAINTENANCE-OF-TRAFFIC (MOT) INSTALLATION AND SUBSEQUENT OPERATION SHALL BE OVERSEEN BY A CONTRACTOR CERTIFIED BY THE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION, OR EQUIVALENT CERTIFICATION RECOGNIZED BY FDOT.

	STANDARD CONSTRUCTION DETAIL ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_R15.DWG
		DETAIL REF: R-15

ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES (CONTD.)

38. THE DEVELOPER IS RESPONSIBLE FOR PAYING FEES FOR TRAFFIC CONTROL DEVICES TO THE CITY FOR INSTALLATION. STREET SIGNS AND STOP SIGNS SHALL BE PLACED AT ALL INTERSECTIONS, INCLUDING BUT NOT LIMITED TO PRIVATE STREETS, PUBLIC STREETS, COUNTY ROADS, AND STATE HIGHWAYS WITHIN THE CITY LIMITS.
39. THE DEVELOPER IS RESPONSIBLE FOR PAYING FEES FOR ALL STREET LIGHTS PRIOR TO ACCEPTANCE OF THE PROJECT BY THE CITY.
40. FOUR FOOT (4') WIDE SIDEWALKS SHALL BE PROVIDED ON BOTH SIDES OF ALL RESIDENTIAL STREETS. (SEE DETAIL, INDEXES M-2 AND M-3)
41. BIKE PATHS SHALL BE CONSTRUCTED AT A MINIMUM OF SIX-FOOT WIDTH, PREFERABLY EIGHT-FOOT WIDTH AS DIRECTED BY THE CITY IN ACCORDANCE WITH THE BICYCLE AND PEDESTRIAN TRAIL MASTER PLAN.
42. STANDARD TURNING RADII FOR INTERSECTIONS:

RESIDENTIAL STREETS WITH STATE & COUNTY ROADWAYS OR MAJOR THOROUGHFARES WITHIN THE CITY	35-50 FT.
ENTRANCES TO COMMERCIAL SITES OFF OF CITY STREETS	35 FT.
INTERSECTIONS INTERIOR IN SUBDIVISIONS	35 FT.

SHOULD VOLUSIA COUNTY OR THE FLORIDA DEPARTMENT OF TRANSPORTATION (F.D.O.T.) DETERMINE THAT LARGER RADII ARE WARRANTED WITHIN THEIR RIGHT-OF-WAY, THE LARGER RADII SHALL PREVAIL.

43. CONSTRUCTION METHODS AND DESIGN FOR CONCRETE PAVEMENT SHALL CONFORM TO FDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
44. ALL CONTRACTORS THAT ARE PERFORMING THE CONSTRUCTION OF LAND DEVELOPMENT CODE REQUIRED IMPROVEMENTS (INCLUDING WATER MAINS, SANITARY SEWER MAINS, RECLAIMED WATER MAINS, STORM WATER PIPES AND INLETS, ROADWAYS, AND PARKING FACILITIES) SHALL BE CERTIFIED WITH THE STATE OF FLORIDA BOARD OF PROFESSIONAL REGULATIONS (BPR) FOR THE TYPE OF WORK THAT THEY PERFORM.
45. ALL CONTRACTORS THAT ARE PERFORMING THE CONSTRUCTION WORK OF LAND DEVELOPMENT CODE REQUIRED IMPROVEMENTS SHALL BE LICENSED BY THE STATE OF FLORIDA AND REGISTERED WITH THE CITY. THE LICENSE AND REGISTRATION SHALL PERTAIN DIRECTLY TO THE TYPE OF WORK BEING PERFORMED.
46. EXCEPT AS PROVIDED IN THE LAND DEVELOPMENT CODE, ALL ELECTRIC, TELEPHONE, TELEVISION LINES AND SIMILAR UTILITIES ARE REQUIRED TO BE INSTALLED UNDERGROUND AT THE EXPENSE OF THE OWNER, DEVELOPER, AND BUILDER.

	STANDARD CONSTRUCTION DETAIL ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_R16.DWG
		DETAIL REF: R-16

ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES (CONTD.)

47. UTILITY DEPTH:
   A. HIGH VOLTAGE UTILITIES SUCH AS POWER (FEEDER, SERVICE, AND DROPS) SHALL BE BURIED A MINIMUM OF 30 INCHES IN DEPTH.
   B. LOW VOLTAGE UTILITIES SUCH AS PHONE AND CABLE TV SHALL BE BURIED A MINIMUM OF 24 INCHES IN DEPTH FOR FEEDER AND SERVICES. SERVICE DROPS SHALL BE BURIED A MINIMUM OF 18 INCHES IN DEPTH.
   C. IN NO INSTANCE SHALL THE DEPTH OF COVER BE LESS THAN 30" FROM FINISHED GRADE TO THE TOP OF PIPE FOR POTABLE WATER MAINS, SANITARY SEWER MAINS, AND RECLAIMED WATER MAINS. HOWEVER, IN THE EVENT THAT THIS CONDITION CANNOT BE MET DUE TO UNANTICIPATED CONFLICTS DURING THE CONSTRUCTION PROCESS, DUCTILE IRON PRESSURE CLASS 350 OR CONCRETE ENCASEMENT MAY BE USED AS APPROVED BY THE CITY PUBLIC UTILITIES DEPARTMENT.
48. LANDSCAPE PLANS SHALL CLEARLY DEPICT THE DESIGN LOCATION OF PLANTINGS RELATIVE TO THE LOCATION OF UNDERGROUND AND OVERHEAD PUBLIC UTILITIES AND STORMWATER INFRASTRUCTURE IN ORDER TO EVALUATE POTENTIAL CONFLICTS.

	STANDARD CONSTRUCTION DETAIL ROADWAY AND PARKING AREA DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_R17.DWG
		DETAIL REF: R-17

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E. NUMBER: 86967

REVISIONS:

ETM NO. 22-213-39
DRAWN BY: KJJ
DESIGNED BY: CBW
CHECKED BY: CBW
DATE: 01.27.2025

PLOTTED: August 8, 2025 - 5:44 PM, BY: Cheroky Williams

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ENGLAND-THIMS & MILLER

PAVING & DRAINAGE DETAILS

DEERING PARK CENTER TOWNHOMES
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
12B

n: \2022\22-213\22-213-09\Landdev\Design\Plots\FDOT-EW-22-213-09.dwg

TECHNICAL SPECIFICATIONS
FOR SITE PLANS AND SUBDIVISIONS TESTING

A. MATERIALS

THE INSPECTION AND TESTING OF MATERIALS AND FINISHED ARTICLES TO BE INCORPORATED IN THE WORK SHALL BE MADE BY BUREAUS, LABORATORIES, OR AGENCIES APPROVED BY THE ENGINEER OF RECORD. THE CONTRACTOR SHALL SUBMIT SUCH SAMPLES, OR SUCH SPECIAL OR TEST PIECES OF MATERIALS AS THE ENGINEER OF RECORD MAY REQUIRE. THE CONTRACTOR SHALL NOT INCORPORATE ANY MATERIAL OR FINISHED ARTICLE INTO THE WORK UNTIL THE RESULTS OF THE INSPECTIONS OR TESTS ARE KNOWN AND THE CONTRACTOR HAS BEEN NOTIFIED BY THE ENGINEER OF RECORD THAT THE MATERIAL OR FINISHED ARTICLE IS ACCEPTED. ALL MATERIALS MUST BE OF THE SPECIFIED QUALITY AND BE EQUAL TO THE APPROVED SAMPLE IF A SAMPLE HAS BEEN SUBMITTED. CERTIFIED COPIES OF ALL TESTS MADE SHALL BE SUBMITTED TO THE ENGINEER OF RECORD AS WELL AS TO THE CITY'S DESIGNATED SITE INSPECTOR.
THE CITY'S DESIGNATED SITE INSPECTOR MUST RECEIVE COPIES OF ALL TESTING REPORTS AND CERTIFICATES PRIOR TO THE ENGINEER OF RECORD REQUESTING A FINAL PROJECT INSPECTION FROM THE CITY.

B. LABORATORY CONTROL AND CERTIFICATES

1. SPECIFICATIONS . SAMPLING, TESTING, AND LABORATORY METHODS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE AASHTO OR ASTM, WHERE AASHTO OR ASTM SPECIFICATIONS ARE USED, THE REFERENCE SHALL BE CONSTRUED TO BE THE MOST RECENT STANDARD SPECIFICATIONS OR TENTATIVE SPECIFICATIONS OF THE AASHTO OR ASTM IN FORCE ON THE DATE OF THE TEST.

2. TEST & CERTIFICATES. THE CONTRACTOR SHALL ENGAGE AN APPROVED TESTING LABORATORY TO PROVIDE THE FOLLOWING TESTS AND CERTIFICATIONS SIGNED BY A REGISTERED ENGINEER OF THE STATE OF FLORIDA. ALL TECHNICIANS PERFORMING THE TESTS SHALL BE STATE CERTIFIED FOR THE TESTING PERFORMED. ADDITIONAL TESTS THAT MAY BE REQUIRED BY EITHER THE ENGINEER OF RECORD OR THE CITY SHALL ALSO BE PROVIDED BY THE CONTRACTOR, AND THE FOLLOWING SHALL NOT BE TAKEN AS A COMPLETE AND EXHAUSTIVE LIST OF THE CONTRACTOR'S TESTING RESPONSIBILITIES.

A. SOIL ANALYSIS FOR STRUCTURAL FILL MATERIAL PRIOR TO INSTALLATION.
B. PROCTOR DENSITIES, MOISTURE CONTENT, COMPACTED FIELD DENSITIES, AND ATTERBERG LIMITS.
C. SOIL CEMENT MIX DESIGNS AND COMPRESSIVE STRENGTH TESTS (FOR SOIL CEMENT ROAD BASE ONLY).
D. SUPERVISION OF ALL SOIL CEMENT BASE CONSTRUCTION.
E. ANALYSIS OF RECYCLED CONCRETE BASE MATERIAL PRIOR TO INSTALLATION.
F. ASPHALT MIX DESIGN, BITUMEN CONTENT, SIEVE ANALYSIS, HUBBARD FIELD STABILITY TESTS, NUCLEAR DENSITY TESTS (BACKSCATTER METHOD), AND ANALYSIS OF CORE SAMPLES.
G. CONCRETE MIX DESIGNS FOR ALL APPLICATIONS INCLUDING PAVEMENT, CAST-IN-PLACE STRUCTURES, CURBING, GUTTERS, SIDEWALKS, BIKE PATHS, APRONS AND DRIVEWAYS.
H. COMPRESSIVE TEST CYLINDERS AND SLUMP TESTS FOR ALL APPLICATIONS OF CONCRETE, INCLUDING PAVEMENT, CAST-IN-PLACE STRUCTURES, CURBING, GUTTERS, SIDEWALKS, BIKE PATHS, APRONS, AND DRIVEWAYS.
I. CHLORINE RESIDUAL AND BACTERIOLOGICAL TESTING OF WATER MAINS.
J. PRESSURIZED LEAK TESTING OF WATER MAINS, FORCE MAINS, AND RECLAIMED WATER MAINS.

	STANDARD CONSTRUCTION DETAIL TECHNICAL SPECIFICATIONS FOR SITE PLANS AND SUBDIVISIONS TESTING	FILE NAME: EW_R18.DWG DETAIL REF: R-18

SUBDIVISION TECHNICAL SPECIFICATIONS:
SODDING, SEEDING AND MULCHING

A. SCOPE OF WORK THE WORK IN THIS SECTION CONSISTS OF FURNISHING AND COMPLETELY INSTALLING SOD, OR SEED AND MULCH OVER THE LIMITS CALLED FOR ON THE CONSTRUCTION DRAWINGS. AT A MINIMUM, ALL WORK SHALL MEET THE MINIMUM SPECIFICATIONS OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, AS OUTLINED IN SECTIONS 570 (GRASSING BY SEEDING) AND 575 (SODDING). IN ADDITION, ALL WORK SHALL MEET THE MINIMUM REQUIREMENTS OF THE CITY.

B. MATERIALS GRASS SEED SHALL BE A MIXTURE OF:

PENSACOLA BAHIA	50%
(USE 50 % SCARIFIED SEED)	25%
HULLED BERMUDA	25%
BROWN TOP MILLET	

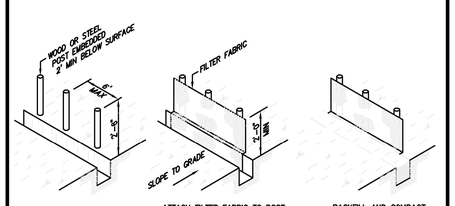
IN THE FALL AND WINTER MONTHS, AND WITH THE APPROVAL OF THE CITY, ANNUAL RYE GRASS SHALL BE SUBSTITUTED IN EQUAL AMOUNTS FOR THE BROWN TOP MILLET. SEED SHALL BE PRE-MIXED BY A SEED COMPANY TO THE PERCENTAGES DESCRIBED ABOVE, WITH CERTIFICATION FROM THE SUPPLIER PROVIDED TO THE CITY'S DESIGNATED PROJECT LANDSCAPE INSPECTOR PRIOR TO USE.

MULCH USED SHALL BE STRAW OR HAY CONSISTING OF OATS, RYE, OR WHEAT STRAW, OR OF PANGOLA, PEANUT, COASTAL BERMUDA, OR BAHIA GRASS HAY. MULCH SHALL BE FREE FROM UNDESIRABLE WEED AND OTHER UNDESIRABLE GRASS.

C. METHODS. GRASSING SHALL BE DONE IMMEDIATELY UPON COMPLETION OF THE FINE GRADING OPERATION. HOWEVER, NO SEEDING SHALL BE DONE WHEN THE GROUND IS FROZEN OR UNDULY WET, THE RATE OF SPREAD FOR THE SEED MATERIAL SHALL BE ONE HUNDRED AND THIRTY (130) POUNDS PER ACRE.

APPROXIMATELY ONE INCH (1"), LOOSE THICKNESS, OF MULCH MATERIAL SHALL BE APPLIED UNIFORMLY OVER THE SEEDED AREAS (APPROXIMATELY ONE AND ONE-HALF (1-1/2) BALES PER 1000 SQUARE FEET). THE MULCH MATERIAL SHALL BE CUT INTO THE SOIL WITH A DISC HARROW OR OTHERWISE ANCHORED DOWN. UNDER PROPER CIRCUMSTANCES, CONTRACTOR MAY REQUEST OPTION TO INSTALL HYDRO-SEEDING SUBJECT TO THE APPROVAL OF THE PROJECT LANDSCAPE ARCHITECT AND THE CITY

	STANDARD CONSTRUCTION DETAIL SUBDIVISION TECHNICAL SPECIFICATIONS: SODDING, SEEDING AND MULCHING	FILE NAME: EW_R20.DWG DETAIL REF: R-20



SET POST AND EXCAVATE A TRENCH

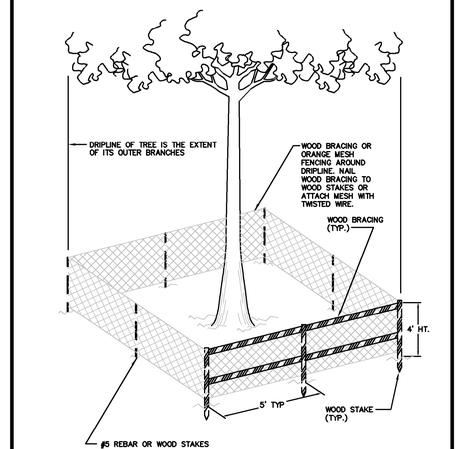
ATTACH FILTER FABRIC TO POST ALLOWING 1 FT EXTENSION INTO THE TRENCH AS SHOWN

BACKFILL AND COMPACT EXCAVATED SOIL

SILT FENCE DETAIL
F.D.O.T. INDEX NO. 102

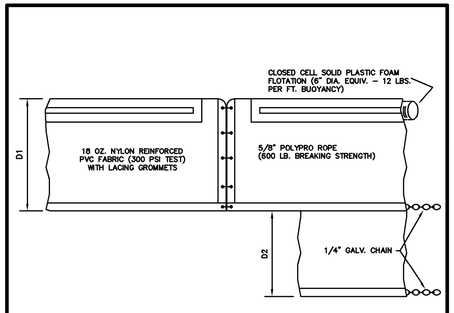
NOTES:
1. MATERIALS, CONSTRUCTION METHODS AND MAINTENANCE SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND DESIGN STANDARDS CURRENT EDITION.
2. CONTRACTOR SHALL PROVIDE SILT FENCES AND HAY BALES AT ALL STORMWATER DISCHARGE POINTS FOR EROSION CONTROL AND SEDIMENT CONTROL DURING CONST.
3. CONTRACTOR SHALL ROUGH GRADE STORM-WATER SWALES AND RETENTION AREAS PRIOR TO CONSTRUCTION OF SITE IMPROVEMENTS.
4. CONTRACTOR SHALL MEET ALL PERMIT CONDITIONS AS ESTABLISHED BY THE CITY AND ALL OTHER APPLICABLE AGENCIES, INCLUDING BUT NOT LIMITED TO COUNTY, FDOT, AND THE SJRWMD.

	STANDARD CONSTRUCTION DETAIL SILT FENCE TURBIDITY BARRIER	FILE NAME: EW_R22.DWG DETAIL REF: R-22



NOTE: BARBED WIRE FENCING IS NOT PERMISSIBLE

	STANDARD CONSTRUCTION DETAIL TREE PROTECTION BARRICADE	FILE NAME: EW_R23.DWG DETAIL REF: R-23



FLOATING TURBIDITY BARRIER
F.D.O.T. INDEX NO. 103

D1 – 5 FT. STD. SINGLE PANEL FOR DEPTHS 5 FT. OR LESS

D2 – 5 FT. STD. ADDITIONAL PANEL FOR DEPTHS GREATER THAN 5 FT.

CURTAIN TO REACH BOTTOM UP TO DEPTHS OF 10 FT.
TWO PANELS TO BE USED FOR DEPTHS GREATER THAN 10 FT.

	STANDARD CONSTRUCTION DETAIL FLOATING TURBIDITY BARRIER	FILE NAME: EW_R24.DWG DETAIL REF: R-24

CONTRACTOR REQUIREMENTS FOR SITE CLEARING, GRADING, AND EROSION CONTROL DESIGN AND CONSTRUCTION NOTES

THE FOLLOWING MEASURES REPRESENT MINIMUM STANDARDS TO BE ADHERED TO BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION OF A PROJECT. THE CITY RESERVES THE RIGHT TO REQUIRE ADDITIONAL MEASURES TO BE EMPLOYED WHEN WARRANTED BY EXTREME CONDITIONS AND/OR THE FAILURE OF THE CONTRACTOR TO EMPLOY THE APPROPRIATE EROSION CONTROL BEST MANAGEMENT PRACTICES. FAILURE TO COMPLY WITH THESE PROVISIONS SHALL RESULT IN THE ISSUANCE OF A "STOP WORK ORDER".

1. NO DISTURBANCE OF PROPOSED CONSERVATION EASEMENTS, NATURAL BUFFERS, OR WATER BODIES IS PERMITTED. THE CONTRACTOR SHALL LOCATE THESE AREAS ON SITE AND BARRICADE THEM TO AVOID ANY UNAUTHORIZED CLEARING. BARRICADES AND OTHER PROTECTIVE FENCING ARE TO BE LOCATED AT THE DRIP LINE OF EXISTING NATIVE TREES OR AT THE EDGE OF THE NATIVE UNDER-STORY HABITAT, WHICHEVER IS NEAREST TO THE CONSTRUCTION ACTIVITY.

2. SPECIMEN AND HISTORIC TREES, CONSERVATION EASEMENTS, NATURAL VEGETATION BUFFERS, AND SIMILAR AREAS MUST BE PROTECTED BY BARRICADES OR FENCING PRIOR TO CLEARING. BARRICADES ARE TO BE SET AT THE DRIP LINE OF THE TREES AND MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. BARBED WIRE IS NOT PERMITTED AS A PROTECTIVE BARRIER.

3. WHERE A CHANGE OF GRADE OCCURS AT THE DRIP LINE OF A SPECIMEN TREE, SILT FENCES WILL BE REQUIRED DURING CONSTRUCTION AND RETAINING WALLS MUST BE INSTALLED PRIOR TO FINAL ACCEPTANCE BY THE CITY.

4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL PROTECTIVE VEGETATION BARRICADES AND EROSION CONTROL STRUCTURES AND MEASURES IN PLACE PRIOR TO THE COMMENCEMENT OF ANY EARTHWORK, INCLUDING PRELIMINARY GRUBBING. THESE MEASURES INCLUDE, BUT ARE NOT LIMITED TO, TEMPORARY CONSTRUCTION FENCES, HAY BALES, SILT FENCES, AND FLOATING TURBIDITY BARRIERS. FURTHER, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL EROSION CONTROL DEVICES THROUGHOUT THE DURATION OF THE ENTIRE PROJECT. MAINTENANCE SHALL INCLUDE PERIODIC INSPECTION AND REMOVAL OF DEBRIS ABUTTING EROSION CONTROL DEVICES.

5. PRIOR TO THE INSTALLATION OF ANY FILL MATERIALS ON SUBJECT SITE, SILT FENCES SHALL BE INSTALLED (1) ALONG SUBJECT SITE BOUNDARY AND PROPERTY LINES, (2) AT THE EDGE OF CONSERVATION EASEMENTS AND WETLANDS, (3) ADJACENT TO NATURAL LANDSCAPE BUFFERS, (4) AROUND THE PERIMETER OF EXISTING STORM WATER TREATMENT FACILITIES, AND (5) AT ANY ADDITIONAL AREAS THAT THE CITY DEEMS NECESSARY TO BE PROTECTED FROM POTENTIAL EROSION AND SEDIMENT CONTROL CONCERNS. THESE CONDITIONS SHALL APPLY IN ALL INSTANCES WHERE FILL MATERIAL IS BEING INSTALLED WITHIN 25 FEET OF ANY OF THE AFOREMENTIONED LOCATIONS. WHILE THESE ITEMS REPRESENT THE MINIMUM REQUIREMENTS, THE CITY RESERVES THE RIGHT TO IMPOSE ADDITIONAL PROTECTIVE MEASURES, AS DETERMINED DURING ACTUAL SITE VISITS CONDUCTED AS PART OF THE STANDARD REVIEW OF THE SITE-SPECIFIC CLEARING PERMIT APPLICATION AND THROUGHOUT PROJECT CONSTRUCTION.

6. WHERE FILL MATERIAL IS INTENDED TO BE INSTALLED ADJACENT TO EXISTING VEGETATION WHICH IS INTENDED TO REMAIN NATURAL, THE CONTRACTOR MAY INSTALL SILT FENCING AS A TREE PROTECTION MEASURE, IN LIEU OF INSTALLING EITHER WOOD BRACING OR ORANGE MESH FENCING. THIS PRACTICE IS ENCOURAGED BY THE CITY. IF THE SILT FENCE FAILS TO PROVIDE ADEQUATE PROTECTION FROM IMPACT DUE TO CONSTRUCTION, THEN ADDITIONAL CONSTRUCTION FENCING OR WOOD BRACING SHALL BE REQUIRED.

7. AT A MINIMUM, THE CONTRACTOR SHALL SEED AND MULCH ALL DISTURBED AREAS. SUFFICIENT GRASS COVERAGE IS TO BE ESTABLISHED WITHIN THIRTY DAYS. – DISTURBED AREAS IN CITY RIGHT-OF-WAYS OR CITY PROPERTY SHALL BE SODDED.

8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR THROUGH SCHEDULING, TO MINIMIZE THE DISTURBANCE OF SITE AREAS THAT HAVE BEEN BROUGHT TO THEIR PROPOSED FINAL GRADE. WITHIN TWENTY DAYS OF BRINGING A SUBJECT AREA TO ITS FINAL GRADE, THE CONTRACTOR SHALL INSTALL SEED AND MULCH OR SOD, AS REQUIRED.

	STANDARD CONSTRUCTION DETAIL CONTRACTOR REQUIREMENTS FOR SITE CLEARING, GRADING, AND EROSION CONTROL DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_R25.DWG DETAIL REF: R-25

CONTRACTOR REQUIREMENTS FOR SITE CLEARING, GRADING, AND EROSION CONTROL DESIGN AND CONSTRUCTION NOTES (CONTD.)

9. FOR INDIVIDUAL CONSTRUCTION PROJECTS INVOLVING MULTIPLE PHASES, UPON COMPLETION OF EACH PHASE OF THE PROJECT, SEEDING AND MULCHING AND OR/ SODDING IS TO BE PERFORMED PRIOR TO COMMENCING THE NEXT PHASE OF CONSTRUCTION.

10. ONCE AN AREA IS SEEDED OR SODDED, IT MUST BE MAINTAINED BY THE CONTRACTOR TO ALLOW THE GRASS TO BECOME ESTABLISHED.

11. ANY BURNING OF CLEARED MATERIALS MUST BE INSPECTED AND PERMITTED ON A DAILY BASIS. CONTACT THE CITY FIRE MARSHALL AT 424-2412 PRIOR TO EACH DAY OF DESIRED BURNING.

12. ABSOLUTELY NO BURYING OF CLEARED MATERIALS IS PERMITTED.

13. THE REMOVAL OF ALL VEGETATION AND TOPSOIL ON THE FUTURE ROADWAY, PARKING AND BUILDING LOT AREAS IS REQUIRED TO BE COMPLETED PRIOR TO THE PLACEMENT OF FILL ON THOSE AREAS. THE TOPSOIL MAY BE TEMPORARILY STOCKPILED AND USED AS TOPSOIL OVER OVER PROPOSED GREEN AREAS SUCH AS PLANT BEDS, SODDED AREAS, AND WHERE TREES ARE TO BE INSTALLED OR RELOCATED.

14. A SIGNED, DATED, AND SEALED LETTER FROM A SOILS ENGINEER OR THE ENGINEER OF RECORD CERTIFYING THAT THE AREAS TO BE FILLED HAVE BEEN STRIPPED OF ORGANIC MATERIALS, MUST BE SUBMITTED TO THE CITY PRIOR TO FILLING.

15. FILL MATERIAL IS TO BE PLACED IN ONE FOOT LIFTS AND COMPACTED TO THE APPROPRIATE DENSITY (98% FOR PAVED AREAS AND 95% FOR BUILDING PADS AND ALL OTHER AREAS AS PER AASHTO T-180).

16. DURING SUBDIVISION DEVELOPMENT WHEN FUTURE BUILDING LOTS ARE FILLED AS PART OF THE OVERALL SUBDIVISION IMPROVEMENTS, COMPACTION TEST REPORTS MUST BE PERFORMED ON THE BUILDING LOTS AT 300 FOOT INTERVALS. THESE TESTS ARE TO BE PERFORMED IN ONE-FOOT VERTICAL INCREMENTS. THE RESULTS OF THESE TESTS ARE TO BE SUBMITTED TO THE CITY UPON COMPLETION OF THE TESTS.

17. IF ANY MUCK MATERIAL IS DISCOVERED, IT SHALL BE REQUIRED TO BE REMOVED AND REPLACED WITH A SUITABLE MATERIAL THAT IS PROPERLY BACKFILLED, COMPACTED AND TESTED USING AASHTO T-180 MODIFIED PROCTOR METHOD.

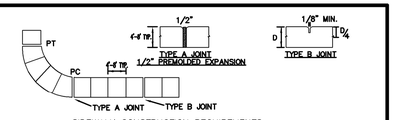
18. STOCKPILING IS NOT GENERALLY PERMITTED BY THE CITY. WHEN ALLOWED, STOCKPILES SHALL NOT EXCEED SIX FEET IN HEIGHT MEASURED FROM THE ORIGINAL GRADE AT A MINIMUM. STOCK PILES THAT WILL REMAIN IN PLACE IN EXCESS OF TWENTY DAYS SHOULD BE SEEDED AND MULCHED IMMEDIATELY UPON PLACEMENT OF THE FINAL LIFT.

19. SOILS ARE TO BE STABILIZED BY WATER OR OTHER MEANS DURING CONSTRUCTION. THIS IS INTENDED TO REDUCE SOIL EROSION AND THE IMPACT TO NEIGHBORING COMMUNITIES. ADEQUATE WATERING METHODS SHOULD BE EMPLOYED TO ALLOW DAILY COVERAGE OF THE ENTIRE LIMITS OF ALL AREAS THAT DO NOT HAVE AN ESTABLISHED VEGETATIVE COVER. METHODS TO BE EMPLOYED INCLUDE, BUT ARE NOT LIMITED TO, WATER TRUCKS, PERMANENT IRRIGATION SYSTEMS, TEMPORARY SPRINKLER SYSTEMS OPERATED BY PUMPING UNITS CONNECTED TO WET RETENTION PONDS, WATER CANNONS, TEMPORARY IRRIGATION SYSTEMS MOUNTED ATOP STOCKPILE AREAS, AND OTHER METHODS AS DEEMED NECESSARY BY THE CITY.

20. ALL FILL MATERIALS LOCATED BENEATH STRUCTURES AND PAVEMENT SHALL CONSIST OF CLEAN GRANULAR SAND FREE FROM ORGANICS AND SIMILAR MATERIAL THAT COULD DECOMPOSE.

21. ALL FILL TO BE PLACED IN LANDSCAPED AREAS SHALL HAVE A Ph RANGE BETWEEN 5.5 AND 7.5, BE ORGANIC IN NATURE, FREE OF ROCKS AND DEBRIS, OR MATCH NATIVE EXISTING SOILS.

	STANDARD CONSTRUCTION DETAIL CONTRACTOR REQUIREMENTS FOR SITE CLEARING, GRADING, AND EROSION CONTROL DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_R26.DWG DETAIL REF: R-26



SIDEWALK CONSTRUCTION REQUIREMENTS

1. SIDEWALKS, BIKEPATHS, RAMPS, AND DRIVEWAY APRONS SHALL BE CONSTRUCTED OF PLAIN PORTLAND CEMENT CONCRETE WITH A MAXIMUM SLUMP OF 3 INCHES, A MINIMUM DEVELOPED COMPRESSIVE STRENGTH OF 2500 P.S.I. IN 28 DAYS, AND A MINIMUM UNIFORM THICKNESS OF 4 INCHES WHERE INTENDED SOLELY FOR PEDESTRIAN TRAFFIC, AND 6 INCHES THICK WHERE MOTOR VEHICLES ARE LIKELY TO CROSS.
2. SIDEWALKS AND BIKEPATHS SHALL BE PLACED PARALLEL TO, AND ONE FOOT WITHIN THE RIGHT-OF-WAY LINE EXCEPT THAT THE CITY MAY APPROVE DEVIATIONS TO SAVE SPECIMEN TREES PROVIDED THAT THE SIDEWALK REMAINS WITHIN THE RIGHT-OF-WAY OR AN APPROVED SIDEWALK EASEMENT ABUTTING THE RIGHT OF WAY. SIDEWALKS AND BIKE PATHS SHOULD BE LOCATED AT LEAST 4 FEET FROM THE EDGE OF THE STREET PAVEMENT UNLESS OTHERWISE APPROVED BY THE CITY.
3. THE TOP OF THE CONCRETE SHALL BE AT AN ELEVATION NO LOWER THAN THE CROWN OF THE ADJACENT ROADWAY, AND NO HIGHER THAN 8 INCHES ABOVE THE CROWN UNLESS APPROVED BY THE CITY TO MAKE A MORE NATURAL TRANSITION WITH THE ADJACENT LAND.
4. ISOLATION JOINTS (TYPE A JOINTS) SHALL BE INSTALLED SO END PRODUCT IS FLUSH WITH EXISTING AND NEW CONCRETE AS TO PREVENT TRIP HAZARDS , TO SEPARATE PEDESTRIAN SECTIONS FROM SECTIONS WHICH WILL ENCOUNTER VEHICLE TRAFFIC, TO SEPARATE FRESH PLACEMENT FROM CONCRETE WHICH HAS SET, FOR MORE THAN 60 MINUTES, AND NO FARTHER APART THAN 100 FEET IN SIDEWALKS AND BIKEPATHS. JOINT MATERIAL SHALL BE AS SPECIFIED IN F.D.O.T. STANDARDS AND SPECIFICATIONS AND SHALL BE RUBBER, PLASTIC OR OTHER APPROVED NON-BIODEGRADABLE ELASTOMERIC MATERIAL. WOOD AND DECCA-DRAIN STYLE POOL DRAINS ARE STRICTLY PROHIBITED.
5. CONTROL JOINTS (TYPE B JOINTS) SHALL BE TOOLED INTO THE FRESH CONCRETE TO A DEPTH EQUAL TO 1/4 THE SLAB THICKNESS AND SPACED APART A DISTANCE EQUAL TO THE WIDTH OF THE SLAB OR 5 FEET WHICHEVER IS GREATEST.
6. THE SLAB SURFACE SHALL BE BROOM FINISHED TO BE SLIP RESISTANT, AND SHALL MATCH AS CLOSELY AS POSSIBLE THE FINISH OF EXISTING ADJACENT SLABS AND ALL EDGES SHALL BE TOOLED TO ELIMINATE SHARP CORNERS.
7. THE BEARING SUBSURFACE SHALL HAVE ALL ORGANIC, LOOSE, AND DELETERIOUS MATTER REMOVED, AND THE REMAINING CLEAN SOIL SHALL BE SMOOTH, SOUND, AND SOLID. ANY FILL MATERIAL SHALL BE COMPACTED WITH A VIBRATORY OR IMPACT COMPACTION MACHINE IN MAXIMUM 12 INCH LIFTS OR COMPACTED WITH A HAND TAMPER IN MAXIMUM 4 INCH LIFTS THE CITY SHALL REQUIRE A COMPACTION TEST FOR EACH LIFT IF THE TOTAL FILLED SECTION IS MORE THAN 12 INCHES DEEP OR IF THE SUBSURFACE HAS BEEN DISTURBED MORE THAN 12 INCHES DEEP. WHERE SUCH TEST IS REQUIRED, THE RESULTS SHALL SHOW A MINIMUM PROCTOR FIELD DENSITY OF 95 PERCENT.
8. ALL CONCRETE WORK IN THE RIGHT-OF-WAY SHALL BE INSPECTED BY THE CITY AFTER THE SUBSOIL IS PREPARED AND THE FORMS ARE SET, BUT BEFORE THE CONCRETE PLACEMENT BEGINS.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE FINISHED SLAB FROM ALL DAMAGE AND VANDALISM UNTIL THE CITY ACCEPTS OR APPROVES THE SLAB, AFTER WHICH TIME THE OWNER OF THE ABUTTING LAND SHALL BE RESPONSIBLE FOR THE SLAB IN ACCORDANCE WITH THE CITY CODE. ANY SLAB SECTION DAMAGED OR VANDALIZED PRIOR TO ACCEPTANCE OR APPROVAL SHALL BE CUT OUT BETWEEN JOINTS AND REPLACED. REPAIRS ARE NOT ACCEPTABLE.
10. SIDEWALKS LOCATED WITHIN THE RIGHT-OF-WAY SHALL NOT BE TINTED, STAINED, COLORED, OR COATED.
11. ALL FORMS SHALL BE REMOVED PRIOR TO ACCEPTANCE OR APPROVAL AND THE DISTURBED GROUND SHALL BE BACKFILLED, REGRADED, AND SODDED SO THAT THE WEAR SURFACE OF THE CONCRETE IS REASONABLY FLUSH WITH THE ADJACENT GRADE.

	STANDARD CONSTRUCTION DETAIL SIDEWALK CONSTRUCTION REQUIREMENTS	FILE NAME: EW_M2.DWG DETAIL REF: M-2

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E. NUMBER: 86967

REVISIONS:

ETM NO. 22-213-39
DRAWN BY: KAJ
DESIGNED BY: CBW
CHECKED BY: CBW
DATE: 01.27.2025

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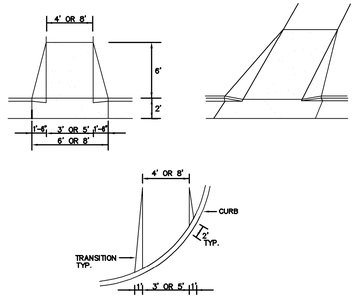
PAVING & DRAINAGE DETAILS

DEERING PARK CENTER TOWNHOMES
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
12C

PLOTTED: August 8, 2025 - 5:44 PM, BY: Cheroky Williams

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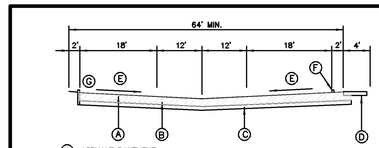


NOTES:

1. RAMP LOCATIONS ARE TO BE COORDINATED WITH AND IN COMFORMANCE WITH CROSSWALK MARKING DETAILS SHOWN IN THE PLANS.
2. CURBED RAMPS SHALL HAVE FLARED SIDES WITH A MAXIMUM SLOPE OF 12:1.
3. RAMPS SHALL HAVE A TACTILIKE SURFACE, TEXTURED TO A DEPTH NOT EXCEEDING 1/8".
4. RAMPS ARE TO BE CONSTRUCTED AT ALL LOCATIONS SHOWN IN THE PLANS EVEN WHEN A SIDEWALK IS NOT CONSTRUCTED CONCURRENTLY.
5. NO CURB TRANSITION IS NEEDED FOR MIAMI CURBS.
6. ALL RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FDOT INDEX NO. 304 AND HANDICAPPED ACCESSIBILITY REQUIREMENTS IN ACCORDANCE WITH THE AMERICAN DISABLITIES ACT.

STANDARD CONSTRUCTION DETAIL
SIDEWALK AND BIKEPATH RAMP

FILE NAME: EW_M3.DWG
DETAIL REF: M-3



(A) ASPHALT PAVEMENT:
1-1/4" ASPHALT BITUMINOUS CONCRETE TYPE S-III; MINIMUM MARSHALL FIELD STABILITY 1500, COMPACTED TO 98% DENSITY PER FM 1-T238 (METHOD B), NUCLEAR DENSITY TEST, "BACK SCATTER METHOD".

(B) BASE:
6" SOIL CEMENT BASE MINIMUM BEARING STRUCTURE OF 350 P.S.I. SHALL BE OBTAINED WITHIN 7 DAYS AND COMPACTED TO 98% DENSITY PER AASHTO T-99 STANDARD PROCTOR TEST; CONSTRUCTION METHODS SHALL CONFORM TO SECTION 270 OF STANDARD F.D.O.T. SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.

ALTERNATE:
6" LIMEROCK BASE (LBR 100) OR RECYCLED CONCRETE BASE (LBR 130) COMPACTED TO 98% DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST.

(C) SUB-BASE:
6" SUB-BASE COMPACTED TO 98% DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST WITH MINIMUM LBR 40.

(D) 4'-0" WIDE, 4" THICK, CONCRETE SIDEWALK, 3000 P.S.I.

(E) THE MINIMUM ALLOWABLE PARKING LOT PAVEMENT SLOPE FOR ASPHALT SHALL BE NO LESS THAN 0.75% MEASURED FROM THE RECEIVING INLET OR FLUME TO ANY PAVEMENT. (NOTE THAT THE MINIMUM SLOPE MAY BE REDUCED TO 0.50% FOR CONCRETE PAVEMENT.)

(F) CONCRETE WHEEL STOP.

(G) 6" HEADER CURB WITH 1'-6" OF SODDED OVERHANG

NOTES:

1. ALL MATERIALS ARE TO BE APPROVED BY THE CITY'S DESIGNATED SITE INSPECTOR AND THE DEVELOPER'S LICENSED SOILS ENGINEER PRIOR TO PLACEMENT.
2. A REPRESENTATIVE OF A CERTIFIED SOIL LABORATORY SHALL BE PRESENT DURING ALL CONSTRUCTION PHASES UTILIZING A SOIL CEMENT BASE. THE REPRESENTATIVE SHALL BE CERTIFIED BY F.D.O.T. IN THE INSTALLATION OF SOIL CEMENT.

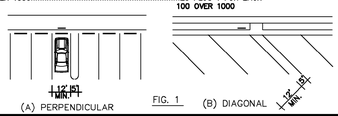
STANDARD CONSTRUCTION DETAIL
PRIVATE PARKING LOT

FILE NAME: EW_M5.DWG
DETAIL REF: M-5

HANDICAP ACCESSIBLE PARKING SPACES SHALL BE PROVIDED IN ACCORDANCE WITH CURRENT FLORIDA STATUTES, INCLUDING THE FOLLOWING DETAILS:

1. ANY COMMERCIAL REAL ESTATE PROPERTY OWNER OFFERING PARKING FOR THE GENERAL PUBLIC SHALL PROVIDE SPECIALLY DESIGNED AND MARKED MOTOR VEHICLE PARKING SPACES FOR THE EXCLUSIVE USE OF PHYSICALLY DISABLED PERSONS WHO HAVE BEEN ISSUED PARKING PERMITS PURSUANT TO STATE LAW.
2. DIAGONAL OR PERPENDICULAR PARKING SPACES SHALL BE A MINIMUM OF 12 FEET WIDE (SEE FIGURE 1).
3. PARALLEL PARKING SPACES SHALL BE LOCATED EITHER AT THE BEGINNING OR END OF A BLOCK OR ADJACENT TO ALLEY ENTRANCES (SEE FIGURE 2). CURBS ADJACENT TO SUCH SPACES SHALL BE OF A HEIGHT WHICH WILL NOT INTERFERE WITH THE OPENING AND CLOSING OF MOTOR VEHICLE DOORS.
4. EACH SUCH PARKING SPACE SHALL BE CONSPICUOUSLY OUTLINED IN BLUE PAINT AND SHALL BE POSTED AND MAINTAINED WITH A PERMANENT, ABOVE-GRADE SIGN BEARING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY AND THE CAPTION PARKING BY DISABLED PERMIT ONLY, AND AN ADDITIONAL SIGN STATING THE PENALTY FOR ILLEGAL USE OF THE SPACE (SEE FIGURE 2). SUCH SIGNS SHALL NOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE. ALL HANDICAP ACCESSIBLE PARKING MUST BE SIGNED AND MARKED IN ACCORDANCE WITH THE STANDARDS ADOPTED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION.
5. ALL SPACES SHALL HAVE A SIXTY INCH (60") WIDE ADJACENT ACCESS AISLE (SEE FIGURE 2). PARKING ACCESS AISLES SHALL BE PART OF THE ACCESSIBLE ROUTE TO THE BUILDING OR FACILITY ENTRANCE. TWO ACCESSIBLE PARKING SPACES MAY SHARE A COMMON ACCESS AISLE. PARKED VEHICLE OVERHANGS SHALL NOT REDUCE THE CLEAR WIDTH OF AN ACCESSIBLE CIRCULATION ROUTE.
6. ALL SPACES SHALL HAVE AN ACCESSIBLE CURB-RAMP OR CURB-CUT TO ALLOW ACCESS TO THE BUILDING SERVED. IT SHALL BE LOCATED SO THAT USERS WILL NOT BE COMPELLED TO WHEEL BEHIND PARKED VEHICLES.
7. THE MINIMUM NUMBER OF SUCH PARKING SPACES SHALL COMPLY WITH THE FOLLOWING TABLE:

TOTAL PARKING IN LOT	REQUIRED NUMBER OF ACCESSIBLE SPACES
UP TO 25	1
26 TO 50	2
51 TO 75	3
76 TO 100	4
101 TO 150	5
151 TO 200	6
201 TO 300	7
301 TO 400	8
401 TO 500	9
501 TO 1000	2% OF TOTAL
OVER 1000	20 PLUS 1 FOR EACH 100 OVER 1000

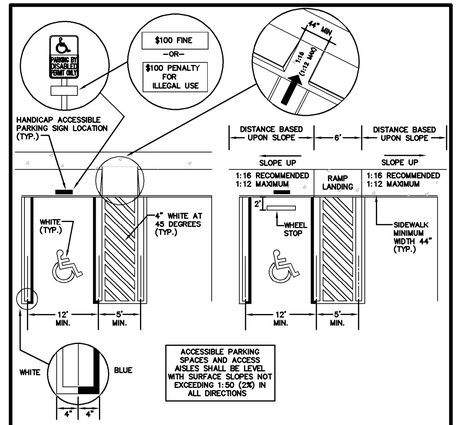


(A) PERPENDICULAR (B) DIAGONAL

FIG. 1

STANDARD CONSTRUCTION DETAIL
HANDICAP ACCESSIBLE PARKING SPACES

FILE NAME: EW_M8.DWG
DETAIL REF: M-8



SIDEWALK RAMP DETAIL

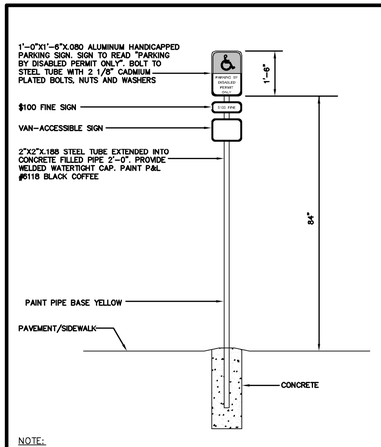
SIDEWALK ABUTTING PARKING LOT DETAIL

NOTE:

1. WHEN HEADER CURB IS USED IN LIEU OF WHEEL STOPS, SIDEWALK ABUTTING CURB MUST BE WIDENED BY 18" SO THAT THE TOTAL SIDEWALK WIDTH IS 62", ALLOWING FOR 44" MINIMUM CLEAR ACCESSIBLE ROUTE.
2. FOR COMPLETE DETAIL OF HANDICAPPED SIGN, REFER TO DETAIL M-10.

STANDARD CONSTRUCTION DETAIL
HANDICAP ACCESSIBLE PARKING SPACES

FILE NAME: EW_M9.DWG
DETAIL REF: M-9



NOTE:

1. HANDICAPPED PARKING SIGN SHALL CONFORM WITH CURRENT STATE AND LOCAL AND FEDERAL CODES AND REGULATIONS.
2. ALL SIGNS SHALL BE DESIGNED TO WITHSTAND 100 M.P.H. WINDLOAD.

STANDARD CONSTRUCTION DETAIL
HANDICAP SIGN

FILE NAME: EW_M10.DWG
DETAIL REF: M-10

REQUIREMENTS FOR AS-BUILT DRAWINGS

IN ORDER TO ENSURE THAT NEW SUBDIVISIONS AND SITE PLANS ARE CONSTRUCTED SUBSTANTIALLY IN ACCORDANCE WITH CITY REGULATIONS AND THE APPROVED DRAWINGS, THE FOLLOWING INFORMATION IS REQUIRED ON ALL SUBDIVISION AS-BUILT DRAWINGS.

1. PAVEMENT AND CURB WIDTHS SHALL BE VERIFIED AND DIMENSIONED FOR EACH STREET AT EACH BLOCK. (FOR SUBDIVISIONS) AND AS APPROPRIATE TO CONFIRM PAVING LIMITS (ON SITE PLANS).
2. ALL RADII AT INTERSECTIONS SHALL BE VERIFIED AND DIMENSIONED. THIS INFORMATION IS TO BE CLEARLY INDICATED ON THE AS-BUILT.
3. ROADWAY ELEVATIONS SHALL BE RECORDED AT ALL GRADE CHANGES, 100' INTERVALS ALONG ROADWAY, AND OTHER INTERVALS AS NEEDED ALONG ALL STREETS, STREET CENTERLINE AND CURB INVERT ELEVATIONS SHALL BE RECORDED AS NOTED. THE AS-BUILT CENTERLINE PROFILE OF ALL STREETS SHALL ALSO BE SHOWN ON THE PLAN AND PROFILE SO IT MAY BE COMPARED TO THE DESIGN PROFILE GRADE LINES. IN THE EVENT THAT THE AS-BUILT CENTERLINE LONGITUDINAL GRADE DOES NOT MEET THE CITY MINIMUM STANDARDS, ADDITIONAL LONGITUDINAL GRADES OF THE ADJACENT CURBING AND SIMILAR ROADWAY CROSS-SECTION SURVEYS TO VERIFY THE CORRECT CROSS SLOPE, SHALL BE REQUIRED TO VERIFY THAT THE SYSTEM WILL FUNCTION AS ORIGINALLY DESIGNED.
4. STORM DRAINAGE STRUCTURES SHALL BE LOCATED AND / OR DIMENSIONED FROM CENTERLINES OR LOT LINES AS APPROPRIATE.
5. STORM DRAINAGE PIPE INVERT AND INLET ELEVATIONS SHALL BE RECORDED AND CLEARLY DENOTED AS AS-BUILT INFORMATION. DESIGN ELEVATIONS SHALL BE CROSSED OUT AND AS-BUILT INFORMATION WRITTEN NEXT TO IT.
6. STORM DRAINAGE PIPE MATERIAL, LENGTH, AND SIZE SHALL BE MEASURED AND / OR VERIFIED. THIS INFORMATION IS TO BE CLEARLY INDICATED AS BEING AS-BUILT INFORMATION .
7. ALL APPLICABLE TOPOGRAPHIC INFORMATION PERTINENT TO THE ON-SITE DRAINAGE SYSTEM, SUCH AS DITCHES, SWALES, LAKES, CANALS, ETC. THAT ARE DEEMED NECESSARY BY THE CITY TO VERIFY THE FUNCTIONAL PERFORMANCE OF THE STORMWATER SYSTEM, SHALL BE NOTED. NORMALLY, RECORDING ELEVATIONS EVERY 100 FEET AT THE TOP OF BANK AND TOE OF SLOPE WILL BE REQUIRED. MEASUREMENTS SHALL BE TAKEN AND RECORDED IN ORDER TO ACCURATELY TIE DOWN THESE FEATURES TO THE ROADWAY CENTERLINES AND TO PLAT LINES. WHENEVER POSSIBLE, CONTOUR LINES SHALL BE UTILIZED TO GRAPHICALLY DESCRIBE THESE TOPOGRAPHIC FEATURES .
8. RETENTION AREAS SHALL HAVE THEIR TOP-OF BANK AND BOTTOM ELEVATIONS RECORDED. ACTUAL MEASUREMENTS SHALL BE TAKEN AND DIMENSIONS RECORDED OF THE SIZE OF ALL RETENTION AREAS. MEASUREMENTS SHALL BE DONE FROM TOP-OF-BANK TO TOP-OF-BANK WITH SIDE SLOPES INDICATED. SEPARATE CALCULATIONS SHALL BE SUBMITTED TO INDICATE REQUIRED AND PROVIDED RETENTION VOLUMES.
9. ACTUAL MATERIALS USED AND ELEVATIONS AND DIMENSIONS OF OVERFLOW WEIR STRUCTURES AND SKIMMERS SHALL BE NOTED ON THE AS-BUILT.
10. STORM DRAINAGE SWALE CENTERLINES SHALL BE LOCATED AND ELEVATIONS OF FLOW LINE AND TOP OF BANK SHALL BE RECORDED EVERY 100 FEET. SIDE SLOPES SHALL ALSO BE INDICATED.
11. SANITARY SEWER MANHOLES SHALL BE VERIFIED AND DIMENSIONED FROM STREET CENTERLINES OR LOT LINES AS APPROPRIATE. ALL RIM AND INVERT ELEVATIONS SHALL BE VERIFIED AND RECORDED. THIS INFORMATION SHALL BE CLEARLY INDICATED AS BEING AS-BUILT INFORMATION. DESIGN ELEVATIONS SHALL BE CROSSED OUT AND AS-BUILT INFORMATION WRITTEN NEXT TO IT.
12. FOR SUBDIVISIONS, PROPOSED DESIGN FINISHED FLOOR ELEVATIONS SHALL APPEAR ON ALL SUBDIVISION LOTS ON THE APPROPRIATE PLAN AND PROFILE SHEET AS WELL AS ON THE MASTER DRAINAGE PLAN.

STANDARD CONSTRUCTION DETAIL
REQUIREMENTS FOR AS-BUILT DRAWINGS

FILE NAME: EW_M11.DWG
DETAIL REF: M-11

REQUIREMENTS FOR AS-BUILT DRAWINGS
(CONTD.)

13. SANITARY SEWER LINE LENGTHS, SIZES, MATERIAL, ETC., SHALL BE VERIFIED AND RECORDED. THIS INFORMATION IS TO BE CLEARLY INDICATED AS BEING AS-BUILT INFORMATION.
14. SEWER LATERALS SHALL BE VERIFIED AND RECORDED AT THEIR CLEAN-OUT LOCATIONS. STATIONING AND OFFSET DISTANCES SHALL BE MEASURED FROM DOWNSTREAM MANHOLES TOWARDS UPSTREAM MANHOLES.
15. LIFT STATIONS AND FORCE MAINS SHALL BE VERIFIED AND DIMENSIONED FROM STREET CENTERLINES OR LOT LINES AS APPROPRIATE. FORCE MAIN DEPTH AND LOCATION INCLUDING VALVES WILL BE PROVIDED AND TIED TO PERMANENT ABOVE GRADE FEATURES. DIMENSIONAL AND ELEVATION INFORMATION INDICATED ON THE APPROVED PLAN SHALL BE VERIFIED AND RECORDED. THIS INFORMATION SHALL BE CLEARLY INDICATED AS BEING AS-BUILT INFORMATION. BURIED ELECTRICAL SERVICE LINE SHALL BE CLEARLY DIMENSIONED, LOCATED, AND LABELED.
16. CURB CUTS OR METAL TABS, USED TO MARK SEWER LATERALS, WATER SERVICES AND WATER VALVES, SHALL BE VERIFIED FOR PRESENCE AND ACCURACY OF LOCATION.
17. POTABLE AND RECLAIMED WATER MAIN LINES SHALL BE DIMENSIONED OFF THE BACK OF CURB, OR EDGE OF PAVEMENT IF NO CURB IS PRESENT. WATER MAIN LINE MATERIAL SIZE, LENGTH AND DEPTH PLACED SHALL ALSO BE NOTED. LOCATIONS OF VALVES SHALL BE TIED TO PERMANENT ABOVE GRADE FEATURES. THIS INFORMATION SHALL BE CLEARLY INDICATED AS BEING AS-BUILT INFORMATION.
18. POTABLE AND RECLAIMED WATER VALVES, TEES, BENDS, ALL SERVICES, AND FIRE HYDRANTS SHALL BE LOCATED BY TYING THEM TO SANITARY SEWER MANHOLES. SIMILARLY, FORCE MAIN VALVES, TEES, AND BENDS SHALL BE LOCATED IN THE SAME MANNER. STATIONING AND OFFSET DISTANCES SHALL BE MEASURED FROM DOWNSTREAM MANHOLES TO UPSTREAM MANHOLES.
19. FOR PERPENDICULAR CROSSINGS OF STORMWATER, SANITARY SEWER, POTABLE WATER, OR RECLAIMED WATER, THE AS-BUILT PLANS SHALL CLEARLY INDICATE WHICH UTILITIES ARE LOCATED OVER OR UNDER OTHER UTILITIES, AS NECESSARY.
20. ANY SPECIAL FEATURES SUCH AS, CONCRETE FLUMES, LAKE BANKS, WALLS, FENCING, ETC., WHICH WERE A PART OF THE APPROVED CONSTRUCTION DRAWINGS SHOULD ALSO BE LOCATED AND DIMENSIONED.
21. IF AN APPROVED SUBDIVISION PLAT OR SITE PLAN SHOWS A CONSERVATION EASEMENT, THE PROJECT SURVEYOR SHOULD PROVIDE THE EXACT LOCATION OF THE SPECIMEN TREE(S) FROM THE RIGHT-OF-WAY OR PROPERTY LINES AND PROPOSED EASEMENT BOUNDARIES ON THE AS-BUILT DRAWING. THE AS-BUILT LOCATION OF THESE TREES WILL HELP VERIFY THE SUFFICIENCY OF THE CONSERVATION EASEMENT PRIOR TO PLAT RECORDING OR CERTIFICATE OF OCCUPANCY.
22. WHEN STORMWATER, POTABLE WATER, RECLAIMED WATER, OR SANITARY SEWER IMPROVEMENTS ARE ARE LOCATED WITHIN AN EASEMENT, THE AS-BUILT DRAWING SHALL ACCURATELY DEPICT THE LOCATION OF THE EASEMENT ITSELF AS WELL AS THE EXACT LOCATION OF THE IMPROVEMENTS WITHIN THE EASEMENT. THIS IS REQUIRED IN ORDER TO VERIFY THAT THE IMPROVEMENTS HAVE BEEN PROPERLY LOCATED AND TO ENSURE THAT FUTURE SUBSURFACE EXCAVATION TO PERFORM REMEDIAL REPAIR CAN BE ACCOMPLISHED WITHOUT DISTURBANCE BEYOND THE EASEMENT.

NOTE:

1. REFERENCES TO WATER SHALL MEAN BOTH POTABLE AND RECLAIMED WATER.

STANDARD CONSTRUCTION DETAIL
REQUIREMENTS FOR AS-BUILT DRAWINGS

FILE NAME: EW_M12.DWG
DETAIL REF: M-12

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW
P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-39
DRAWN BY: KJJ
DESIGNED BY: CBW
CHECKED BY: CBW
DATE: 01.27.2025

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PAVING & DRAINAGE DETAILS

DEERING PARK CENTER TOWNHOMES
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
12D

PLOTTED: August 8, 2025 - 5:44 PM, BY: Cheroky Williams

n: \2022\22-213\22-213-09\Landdev\Design\Plots\PD01-EW-22-213-09.dwg

STORM DRAINAGE DESIGN AND CONSTRUCTION NOTES

ALL MATERIALS AND INSTALLATION METHODS USED FOR LAND DEVELOPMENT CODE REQUIRED IMPROVEMENTS FOR SUBDIVISIONS AND SITE PLANS SHALL BE IN CONFORMANCE WITH THE CITY, FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), AND THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS (LATEST EDITION).

1. ALL STORM SEWERS AND CULVERTS LOCATED IN ROADWAY RIGHTS-OF-WAY AND ROADWAY EASEMENTS SHALL BE A MINIMUM OF CLASS III REINFORCED CONCRETE PIPE. PRIVATE SITES AND AREAS OUTSIDE OF ROADWAY EASEMENTS AND R.O.W., PIPE MAY BE MADE OF ALTERNATE MATERIALS INCLUDING:
   A. SMOOTH INNER WALL HIGH DENSITY POLYETHYLENE (HDPE) IN ACCORDANCE WITH AASHTO M-294, AASHTO MP7, ASTM D3350 AND ASTM D2412 FOR SIZES UP TO 42" IN DIAMETER OR
   B. PVC IN ACCORDANCE WITH THE PROVISION NOTED IN THE "SEWER DETAILS" OF THESE SPECIFICATIONS.
2. ALL STORM SEWER PIPE JOINTS LOCATED IN ROADWAY RIGHTS-OF-WAY AND ROADWAY EASEMENTS SHALL BE ENTIRELY WRAPPED WITH FILTER FABRIC WITH A MINIMUM WIDTH OF 24" AND A MINIMUM OF 24" OVERLAP SECURED WITH PLASTIC OR STAINLESS BANDS. GASKETS ARE NOT PERMITTED AS AN EQUIVALENT SUBSTITUTE FOR MEETING THIS REQUIREMENT. THIS PRACTICE IS REQUIRED ON PRIVATE SITES ADDITIONALLY, ALL JOINTS SHALL BE RUBBER GASKETED FOR BOTH ROUND AND ELLIPTICAL PIPE.
3. DEPTH OF COVER MEASURED TO THE TOP OF PIPE (NOT INCLUDING THE BELL JOINT) SHALL BE A MINIMUM OF 1 FOOT. DEVIATION FROM THIS REQUIREMENT MAY BE ALLOWED BY INCREASING THE PIPE'S STRUCTURAL CAPACITY. THIS DEVIATION MUST BE SPECIFIED ON THE PLANS APPROVED FOR CONSTRUCTION AND SUBSEQUENTLY REFLECTED ON THE SHOP DRAWINGS AND AS-BUILT PLANS.
4. ALL STORM DRAINAGE PIPES LOCATED IN ROADWAY RIGHTS-OF-WAY AND ROADWAY EASEMENTS SHALL BE A MINIMUM OF TWELVE INCH (12") DIAMETER OR EQUIVALENT AND BE DESIGNED FOR A MINIMUM OF A TWENTY-FIVE (25) YEAR STORM OF TWENTY-FOUR (24) HOUR DURATION. STORM DRAINAGE PIPES SMALLER THAN 12" ARE PERMITTED ON PRIVATE SITE PLANS PROVIDING THAT MAINTENANCE SHALL BE PERFORMED BY THE OWNER.
5. STORM INLETS, MANHOLES, AND CATCH BASINS SHALL BE EITHER POURED IN PLACE OR PRECAST REINFORCED CONCRETE. STRUCTURES SHALL BE REQUIRED AT EACH CHANGE OF PIPE SIZE OR CHANGE IN PIPE DIRECTION. ALL STRUCTURES SHALL BE IN COMPLIANCE WITH ASTM C-478 AND SHALL HAVE 8" THICK WALLS. 6" THICK WALLS MAY BE PERMITTED PROVIDING THAT THE PLANS SPECIFY INCREASED REINFORCEMENT IN ACCORDANCE WITH FDOT STANDARD INDEX NO. 201 IN ADDITION, THIS REQUIREMENT MUST BE REFLECTED ON BOTH THE SHOP DRAWING AND AS-BUILT PLANS. NOTE: INLET APRONS MAY REQUIRE EXPANSION JOINTS AROUND THE STRUCTURE AS DICTATED BY THE CITY.
6. STORM INLETS SHALL BE SPACED IN SUCH A MANNER AS TO ACCEPT ONE HUNDRED (100) PERCENT OF THE DESIGN STORM RUNOFF WITHOUT IMPEDING THE FLOW OF TRAFFIC. FOR ROADWAY SECTIONS WITH DESIGN SPEEDS OF 45 MPH AND LESS AND WITHOUT FULL WIDTH SHOULDERS, SPREAD RESULTING FROM A RAINFALL INTENSITY OF FOUR INCHES (4 ") PER HOUR SHALL NOT EXCEED ONE-HALF OF THE TRAVEL LANE ADJACENT TO THE GUTTER. FOR SITE PLANS, INLET SPACING SHALL BE DESIGNED TO ACCEPT ONE HUNDRED (100) PERCENT OF THE RUNOFF FROM A RAINFALL INTENSITY OF FOUR INCHES (4 ") PER HOUR WITHOUT RESULTING IN PONDING OF WATER AROUND THE INLET.
7. LAKE DEPTHS SHALL BE EIGHT FEET (8') MINIMUM TO TWELVE FEET (12') MAXIMUM, AS MEASURED FROM HIGH WATER MARK. DEEPER MAXIMUM DEPTHS MAY BE APPROVED BY THE CITY ENGINEER.

2024-07-20	STANDARD CONSTRUCTION DETAIL STORM DRAINAGE DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_ST4.DWG DETAIL REF: ST-4

STORM DRAINAGE DESIGN AND CONSTRUCTION NOTES (CONTD.)

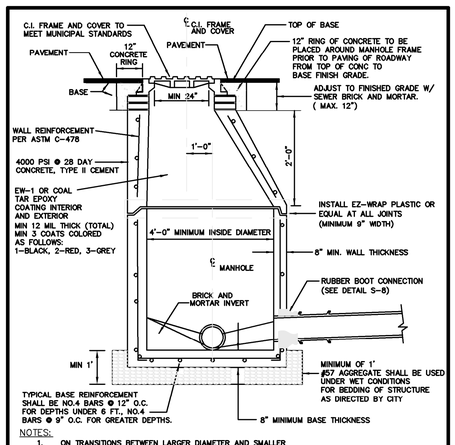
8. FOR CONNECTIONS BETWEEN INLETS WITH PIPING 15" IN DIAMETER AND LARGER, THE MAXIMUM DISTANCES BETWEEN INLETS AND / OR CLEAN-OUT JUNCTION BOXES SHALL BE 300 FEET. CULVERTS SHALL BE SLOPED TO MAINTAIN A MINIMUM SELF-CLEANING VELOCITY OF 3 FEET PER SECOND USING A MANNING'S 'n' OF 0.012. SPACING FOR CLEAN-OUTS AND INLETS FOR SMALLER PIPING SHALL BE REDUCED AND EVALUATED ON A CASE BY CASE BASIS.
9. THE MAXIMUM PERMISSIBLE SLOPE OF ANY NEW SITE GRADING IS 4:1 (HORIZONTAL:VERTICAL). THIS LIMIT SHALL BE APPLIED TO ALL AREAS EXCEPT STORMWATER CONVEYANCE AND TREATMENT SYSTEMS WHICH MAY HAVE A MAXIMUM SLOPE OF 4:1. PERMANENTLY WETTED SOILS 2FT BELOW THE WATER NORMAL WATER TABLE MAY BE SLOPED NO STEEPER THAN 2:1 (H:V).
10. ALL DEVELOPMENT SHALL CONTINUE TO ACCOMMODATE EXISTING OFFSITE CONTRIBUTING FLOW AND PASS SUCH QUANTITY TO AN APPROPRIATE DOWNSTREAM PUBLIC CONVEYANCE WITH NO INCREASE IN UPSTREAM STAGE DURING ALL DESIGN STORM EVENTS. ALL FILL SLOPES IN PROXIMITY TO PROPERTY BOUNDARIES SHALL INCLUDE AN INTERCEPTING SWALE AT THE TOE OF SLOPE.
11. SWALES THAT ARE NORMALLY DRY AND INTENDED FOR CONVEYANCE OF STORMWATER RUNOFF AND ARE NOT INTENDED FOR RETENTION SHALL HAVE A MINIMUM DRAINAGE MAINTENANCE EASEMENT WIDTH MEASURING 15 FEET. SWALED AREAS INTENDED FOR RETENTION SHALL PROVIDE APPROPRIATE EASEMENT AREAS FOR ACCESS AND MAINTENANCE MEASURED UPLAND FROM THE TOP OF BANK. AT A MINIMUM, THE SAID EASEMENT SHALL MEASURE 10' FEET IN WIDTH FROM THE TOP OF THE SWALE.
12. PIPED STORMWATER SYSTEMS SHALL HAVE A MINIMUM DRAINAGE MAINTENANCE EASEMENT WIDTH OF 20 FEET, AND MAY BE INCREASED DEPENDING UPON THE SIZE AND DEPTH OF PIPE.
13. NORMAL ROADSIDE SWALES ARE PERMITTED TO BE CONSTRUCTED TO A MAXIMUM DEPTH OF 18" BELOW THE OUTSIDE EDGE OF PAVEMENT OR CONCRETE CURB.
14. CONCRETE EROSION CONTROL MUST BE PROVIDED WHERE SWALES OR CULVERTS INTERCEPT DRAINAGE DITCHES.
15. WHEN A LAKE IS INCORPORATED WITHIN A SUBDIVISION AND IS ABUTTED BY LOTS, SUCH ABUTTING LOT LINES SHALL BE EXTENDED INTO THE LAKE PROPORTIONATELY ENCOMPASSING ALL OF THE LAKE AREA.
16. LAKE INFLOW AND OUTLET STRUCTURES SHALL GENERALLY BE CONSTRUCTED WITH REINFORCED CONCRETE AND SHALL BE SUBJECT TO THE APPROVAL OF THE CITY. SKIMMERS FOR WET PONDS SHALL BE CONSTRUCTED SUCH THAT THE BOTTOM EXTENDS 6" BELOW THE NORMAL WATER LEVEL AND 6" ABOVE THE OVERFLOW. FOR DRY PONDS, THE SKIMMER BOTTOM SHALL BE SET 6" BELOW THE LOWEST OVERFLOW ELEVATION AND 6" ABOVE THE HIGHEST POINT OF OVERFLOW. ALL SKIMMERS SHALL BE CONSTRUCTED OF MINIMUM 1/4" THICK ALUMINUM OR FIBERGLASS ADEQUATELY SUPPORTED TO PREVENT DEFLECTION.

2024-07-20	STANDARD CONSTRUCTION DETAIL STORM DRAINAGE DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_ST5.DWG DETAIL REF: ST-5

STORM DRAINAGE DESIGN AND CONSTRUCTION NOTES (CONTD.)

17. EROSION AND SEDIMENT CONTROL PLANS AS APPROVED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION SHALL BE EMPLOYED AT ALL TIMES. AT A MINIMUM, BEST MANAGEMENT PRACTICES (BMP'S) SHALL BE UTILIZED.
18. THE CITY MAY REQUEST THAT THE DEVELOPER SUBMIT A REPORT BY A QUALIFIED HYDROLOGIST ON THE IMPACT THE LAKE WILL HAVE ON NEIGHBORING WATER TABLE ELEVATIONS BOTH DURING CONSTRUCTION AND AFTER LAKE COMPLETION. THE CITY MAY REQUIRE GROUNDWATER MONITORING DURING THE LAKE EXCAVATION.
19. ADEQUATE MAINTENANCE EASEMENTS OR RIGHTS-OF-WAY AS APPROVED BY THE CITY SHALL BE PROVIDED AROUND THE ENTIRE PERIMETER OF ALL LAKES AND ASSOCIATED OUTFALLS DISCHARGING INTO AND OUT OF LAKES. APPLICABLE CROSS SECTIONS SHALL BE INCLUDED ON ALL FINAL DEVELOPMENT PLANS.
20. DEVELOPMENT PLANS FOR ALL STORMWATER MANAGEMENT SYSTEMS SHALL CONTAIN POP-OFF DATA (OVERFLOW), BOTTOM ELEVATION, NORMAL WATER LEVELS, MEAN ANNUAL SEASONAL HIGH WATER TABLE ELEVATION, TREATMENT VOLUME AND CORRESPONDING ELEVATION, 100 YEAR HIGH WATER LEVELS, AND THE DESIGN TAILWATER ELEVATION (IF APPLICABLE).
21. IN GENERAL, ALL RETENTION / DETENTION SITES MUST BE CONSTRUCTED ON ALL PROJECTS PRIOR TO ANY ROAD, PARKING LOT, OR BUILDING CONSTRUCTION COMMENCING OR AS CURRENT PERMIT CONDITIONS DICTATE. SEWER AND WATER MAINS MAY BE INSTALLED PRIOR TO RETENTION/DETENTION SITE CONSTRUCTION IF DEWATERING IS NOT REQUIRED.
22. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ANY AND ALL DEWATERING PERMITS THAT MAY BE REQUIRED.
23. WHEN CULVERTS ARE INSTALLED TO MAINTAIN THE FLOW OF EXISTING DRAINAGE WAYS WHERE NEWLY PROPOSED ROADS WOULD OTHERWISE SEVER THE DRAINAGE WAY, THEN CULVERTS CROSSING RIGHTS-OF-WAY SHALL EXTEND FROM RIGHT-OF-WAY LINE TO RIGHT-OF-WAY LINE UNDER THE ROADWAY. CULVERTS SHALL BE DESIGNED TO ACCOMODATE THE FLOW FROM THE 100 YEAR – 24 HOUR STORM EVENT WITHOUT FLOODING ADJACENT PROPERTY OR SURCHARGING THE SAID ROADWAY.
24. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW AND MAINTAIN A COPY OF THE SJRWMD PERMIT AND/ OR NPDES CONSTRUCTION PERMIT AT THE CONSTRUCTION SITE, AND ABIDE BY ALL CONDITIONS OF THE PERMIT.
25. LANDSCAPE PLANS SHALL CLEARLY DEPICT THE DESIGN LOCATION OF PLANTINGS RELATIVE TO THE LOCATION OF PUBLIC UTILITIES AND STORMWATER INFRASTRUCTURE IN ORDER TO EVALUATE POTENTIAL CONFLICTS.
26. ALL STRUCTURES SHALL BE GRADED TO HAVE POSITIVE RUNOFF PATTERNS TOWARD A STORMWATER COLLECTION AND MANAGEMENT SYSTEM. ALL NEW BUILDING SHALL BE TYPE "A" OR TYPE "B" GRADING. TYPES "C" & "D" GRADING SHALL ONLY BE APPROVED FOR RETROFITS. SEE DETAIL ST-14 FOR TYPICAL LOT GRADING.

2024-07-20	STANDARD CONSTRUCTION DETAIL STORM DRAINAGE DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_ST6.DWG DETAIL REF: ST-6



NOTES:
1. ON TRANSITIONS BETWEEN LARGER DIAMETER AND SMALLER SEWER COLLECTORS, OUTVERTS OF SEWERS SHALL BE MATCHED.
2. NON-PENETRATING PICK-HOLES IN ALL CONCRETE SECTIONS.
3. USE FARBERTITE BITUMASTIC SEALER BETWEEN SECTIONS OF MANHOLES.
4. 0.1' – DROP ACROSS MANHOLE TYP.
5. ALL MANHOLE TROUGHS AND BENCHES ARE TO BE EPOXY PAINTED BEFORE FINAL INSPECTION.
6. LAST MANHOLE UPSTREAM OF A LIFT STATION MUST BE LINED W/ SPECTRA SHIELD OR EQUAL.

CitySeal_2015.jpg 2023-01-25	STANDARD CONSTRUCTION DETAIL STANDARD MANHOLE DETAIL	FILE NAME: EW_S1.DWG DETAIL REF: S-1

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E. NUMBER: 86967

REVISIONS:

ETM NO.	22-213-09
DRAWN BY:	KAJ
DESIGNED BY:	CBW
CHECKED BY:	CBW
DATE:	01.27.2025

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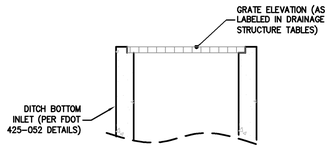
PAVING & DRAINAGE DETAILS

DEERING PARK CENTER TOWNHOMES
FOR
DEERING PARK 1, LLC

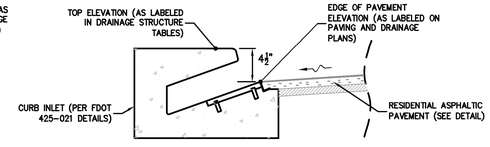
DRAWING NUMBER
12E

PLOTTED: August 8, 2025 - 5:44 PM, BY: Cheroky Williams

n: \2022\22-213\22-213-09\LandDev\Design\Plots\PDD1-EW-22-213-09.dwg

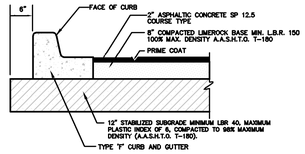


DITCH BOTTOM INLET DETAIL
TYPES C, D, E, AND H

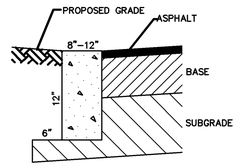


CURB INLET
TYPES 3-6

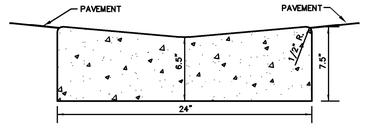
TOP / GRATE ELEVATION DETAIL
N.T.S.



TYPICAL PAVEMENT SECTION
N.T.S.

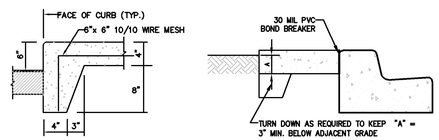


RIBBON CURB
N.T.S.



CURB AND CURB & GUTTER NOTES:
1. MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE LATEST FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. CONCRETE SHALL BE CLASS 1 CONCRETE WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 PSI UNLESS OTHERWISE APPROVED BY THE ENGINEER OF RECORD.
3. 1/4" CRACK CONTROL JOINTS TO BE CUT AT 10' O.C.
4. 1/2" EXPANSION JOINTS TO BE AT 50' O.C. (MAX.)

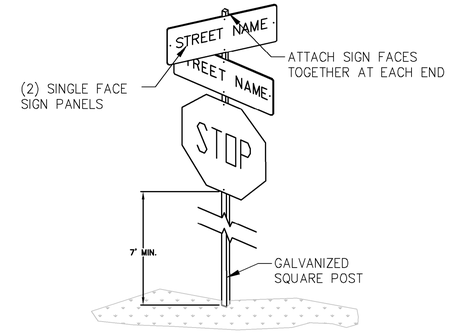
DROP CURB
N.T.S.



AT ASPHALT PAVEMENT
AT CURB AND GUTTER
AT GRADE

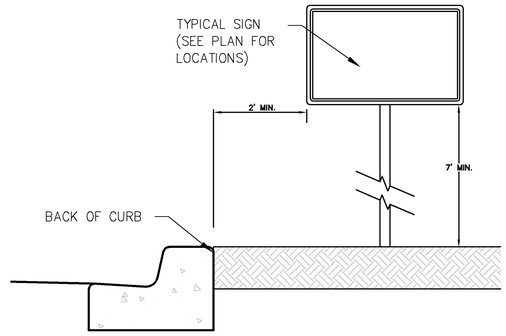
NOTES:
1. CONSTRUCT STRAIGHT JOINTS WITH FACE PERPENDICULAR TO SURFACE OF CONCRETE. TRAVERSE JOINTS SHALL BE AT RIGHT ANGLES TO CENTERLINE UNLESS OTHERWISE INDICATED ON PLANS.
2. PROVIDE EXPANSION JOINTS AT 100' INTERVAL MAXIMUM SPACING ON CENTER.
3. PROVIDE EXPANSION JOINTS FILLER FOR JOINTS ABUTTING CURBS, CATCH BASINS, MANHOLES, INLETS STRUCTURES, WALKS AND OTHER FIXED OBJECTS UNLESS OTHERWISE INDICATED ON PLANS.
4. EXTEND JOINTS FILLER FULL WIDTH AND DEPTH OF JOINT, AND 1/2" BELOW FINISHED SURFACE. PLACE SEALANT OVER JOINT FILLER PER MANUFACTURERS RECOMMENDATIONS.
5. USE PREMOLDED ASPHALT-IMPREGNATED FIBERBOARD, 1/2" THICK CONFORMING TO ASTM D1751. CONTRACTION JOINT SHALL BE SAW CUT (1/4" WIDE BY 1" DEEP).
6. FINISHED SURFACE FOR CONCRETE SIDEWALK SHALL BE GRAY CONCRETE WITH LIGHT BROOM FINISH PERPENDICULAR TO LINE OF TRAFFIC (UNLESS OTHERWISE INDICATED ON PLANS).
7. PROVIDE CRACK CONTROL JOINTS @ (SAME AS WIDTH) O.C.
8. PROVIDE 16" STRIP SOD ADJACENT TO ALL EDGES OF SIDEWALK, CURB AND PAVEMENT AREAS.
9. CONCRETE COMPRESSION STRENGTH 3000 P.S.I. @ 28 DAYS UNLESS OTHERWISE APPROVED BY ENGINEER OF RECORD.
10. SIDEWALK TO BE CONSTRUCTED WITH SLOPES COMPLYING TO WITH LATEST ADA CODE AND FDOT INDEX 522-001. SIDEWALK MAX. VERTICAL SLOPE OF 5.0% AND MAX CROSS SLOPE OF 2.0%

CONCRETE WALK
N.T.S.

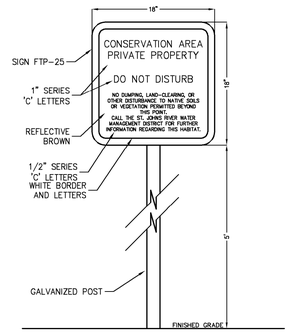


NOTES:
1. SEE FDOT STANDARD INDEX 17349 FOR FURTHER INFO.
2. SIGNS TO BE PLACED AT 8' O.C.

STREET SIGN
N.T.S.



TYPICAL SIGN PLACEMENT
N.T.S.



SIGN NOTES:
SIGN CONSTRUCTION, DESIGN AND PLACEMENT SHALL COMPLY WITH STATE AND LOCAL STATUTES.

CONSERVATION EASEMENT POSTED SIGN DETAIL
N.T.S.

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW
P.E. NUMBER: 86967

REVISIONS:

ETM NO. 22-213-39
DRAWN BY: KJJ
DESIGNED BY: CBW
CHECKED BY: CBW
DATE: 01.27.2025

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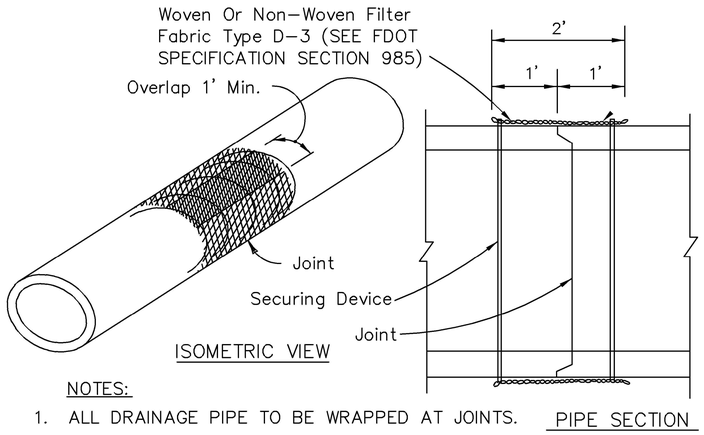
PAVING & DRAINAGE DETAILS

DEERING PARK CENTER TOWNHOMES FOR DEERING PARK 1, LLC

DRAWING NUMBER
12F

PLOTTED: August 8, 2025 - 5:44 PM, BY: Cheroky Williams

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NOTES:

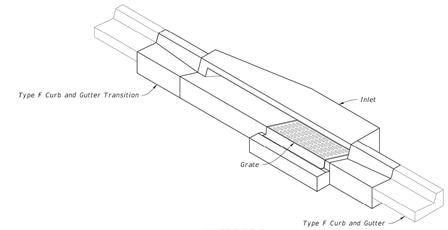
1. ALL DRAINAGE PIPE TO BE WRAPPED AT JOINTS.
2. COST OF FILTER FABRIC JACKET TO BE INCLUDED IN COST OF PIPE CULVERTS.

FILTER FABRIC JACKET

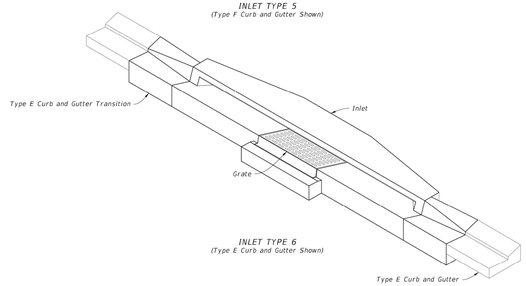
N.T.S.

GENERAL NOTES:

1. *Work this Index with Index 425-001 and Index 425-010.*
2. *Conform the finished grade and slope of the inlet tops with the finished cross slope and grade of the proposed sidewalk and/or border.*
3. *For inlets constructed on a curve, refer to the plans to determine the radius. Bend steel when necessary.*
4. *Use Grade 60 reinforcing bars with 1½" minimum cover unless otherwise shown, see Sheet 6 for equivalent area Welded Wire Reinforcement details.*
5. *Inlet tops may be either cast-in-place or precast concrete. Conform precast units to the dimensions shown or in accordance with approved shop drawings.*
6. *Corner fillets are required at inlet opening for precast units or C-I-P units used in conjunction with circular inlet bottoms or skewed rectangular inlet boxes. Finish top of fillets flush with drain throat bottom and match slope.*
7. *For Type E curb and gutter, transition the shape of the curb over the gutter transition length to match the face of the inlet (Type F1).*
8. *Meet the requirements of ASTM A36/A36M with steel used for frames and grates.*
9. *Use either cast iron grates or steel grates.*



INLET TYPE 5
(Type F Curb and Gutter Shown)



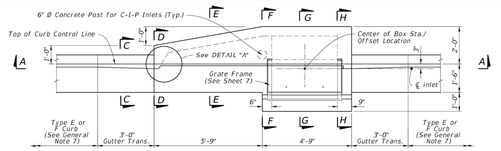
INLET TYPE 6
(Type E Curb and Gutter Shown)

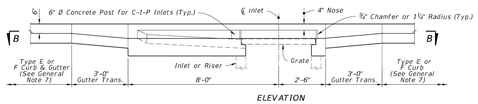
CURB INLETS TOPS

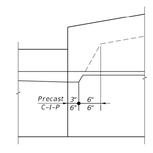
TABLE OF CONTENTS:

Sheet	Description
1	General Notes and Contents
2	Type 5 and 6 Dimensional Details
3	Type 5 and 6 Reinforcing and Bar Bending Details
4	Precast Dimensional and Reinforcing Details
5	Cast-In-Place Dimensional and Reinforcing Details
6	Alternate Welded Wire Reinforcing (WWR) Details
7	Grate, Anchor, and Grouting Details

LAST REVISION	DESCRIPTION:	FY 2023-24 STANDARD PLANS	CURB INLET TOP TYPES 5 AND 6	INDEX	SHEET
11/01/20				425-021	1 of 7

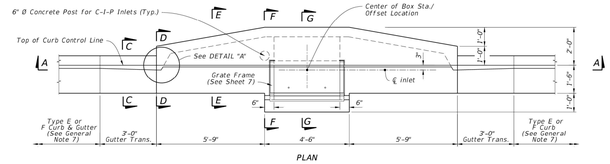


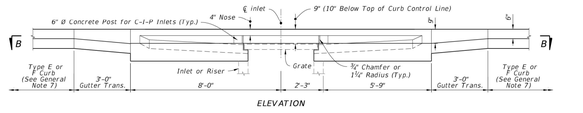




DETAIL "A"

TYPE 5 DIMENSIONAL DETAILS





TYPE 6 DIMENSIONAL DETAILS

TYPE 5 AND 6 DIMENSIONAL DETAILS

LAST REVISION	DESCRIPTION:	FY 2023-24 STANDARD PLANS	CURB INLET TOP TYPES 5 AND 6	INDEX	SHEET
11/01/20				425-021	2 of 7

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW
P.E. NUMBER: 86967

REVISIONS:

ETM NO. 22-213-39
DRAWN BY: KAJ
DESIGNED BY: CBW
CHECKED BY: CBW
DATE: 01.27.2025

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PAVING & DRAINAGE DETAILS

DEERING PARK CENTER TOWNHOMES FOR DEERING PARK 1, LLC

DRAWING NUMBER
12G

PLOTTED: August 8, 2025 – 5:44 PM, BY: Cheroky Williams

n: \2022\22-213\22-213-09\LandDev\Design\Plots\FDOT-EW-22-213-09.dwg

Technical Note

TN 2.04 Minimum and Maximum Cover Heights for HP Storm Pipe for Storm Drainage

Introduction

The information in this document is designed to provide answers to general cover height questions; the data provided is not intended to be used for project design. The design procedure described in the *Structures* section (Section 2) of the Drainage Handbook provides detailed information for analyzing most common installation conditions. This procedure should be utilized for project specific designs.

The two common cover height concerns are minimum cover in areas exposed to vehicular traffic and maximum cover heights. Either may be considered "worst case" scenario from a loading perspective, depending on the project conditions.

Minimum Cover in Traffic Applications

Pipe diameters from 12- through 48-inch (300-1200 mm) installed in traffic areas (AASHTO H-20, H-25, or HL-93 loads) must have at least one foot (0.3m) of cover over the pipe crown, while 60-inch (1500 mm) pipes must have at least 24 inches (0.6m) of cover. The backfill envelope must be constructed in accordance with the *Installation* section (Section 5) of the Drainage Handbook and the requirements of ASTM D2321. The backfill envelope must be of the type and compaction listed in Appendix A-5, Table A-5-2 of the Drainage Handbook. In Table 1 below, this condition is represented by a Class III material compacted to 95% standard Proctor density or a Class II material compacted to 90% standard proctor density, although other material can provide similar strength at slightly lower levels of compaction. Structural backfill material should extend to the crown of the pipe; the remaining cover should be appropriate for the installation and as specified by the design engineer. If settlement or rutting is a concern, it may be appropriate to extend the structural backfill to grade. Where pavement is involved, sub-base material can be considered in the minimum burial depth. While rigid pavements can be included in the minimum cover, the thickness of flexible pavements should not be included in the minimum cover.

Additional information that may affect the cover requirements is included in the *Installation* section (Section 5) of the Drainage Handbook. Some examples of what may need to be considered are temporary heavy equipment, construction loading , paving equipment and similar loads that are less than the design load, the potential of pipe flotation, and the type of surface treatment which will be installed over the pipe zone.

Table 1
Minimum Cover Requirements for ADS HP Storm with AASHTO H-25, H-20, or HL-93 Load

Inside Diameter, ID, in.(mm)	Minimum Cover ft. (m)	Inside Diameter, ID, in.(mm)	Minimum Cover ft. (m)
12 (300)	1 (0.3)	36 (900)	1 (0.3)
15 (375)	1 (0.3)	42 (1050)	1 (0.3)
18 (450)	1 (0.3)	48 (1200)	1 (0.3)
24 (600)	1 (0.3)	60 (1500)	2 (0.6)

Notes:
1. *Minimum covers presented here were calculated assuming Class III backfill material compacted to 95% standard Proctor density or Class II backfill material compacted to 90% standard Proctor density around the pipe, as recommended in Section 5 of the Drainage Handbook, with an additional layer of compacted traffic lane sub-base for a total cover as required. In shallow traffic installations, especially where pavement is involved, a good quality compacted material to grade is required to prevent surface settlement and rutting.*
2. *The minimum covers specified do not include pavement thickness. A pavement section of 0.4' is typical.*
3. *Backfill materials and compaction levels not shown in the table may also be acceptable. Contact ADS for further detail.*
4. *Calculations assume no hydrostatic pressure and native soils that are as strong as the specified minimum backfill recommendations.*

Maximum Cover

Wall thrust generally governs the maximum cover a pipe can withstand and conservative maximum cover heights will result when using the information presented in the *Structures* section (Section 2) of the Drainage Handbook. Table 2 below shows the material properties consistent with the expected performance characteristics for HP Storm materials for a 100-year design life.

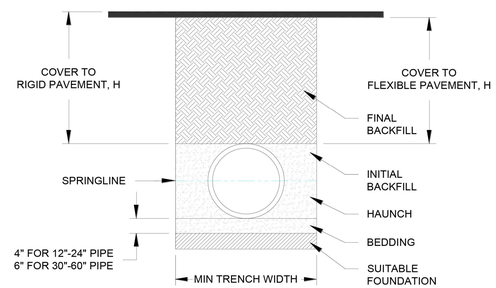
The maximum burial depth is highly influenced by the type of backfill and level of compaction around the pipe. General maximum cover limits for ADS HP Storm use in storm drainage applications are shown in Tables 3 for a variety of backfill conditions.

Table 3 was developed assuming pipe is installed in accordance with ASTM D2321 and the *Installation* section (Section 5) of the Drainage handbook. Additionally, the calculations assume no hydrostatic load around the pipe, incorporate the maximum conservative AASHTO LRFD design factors represented in *Structures* section of the Drainage Handbook, use material properties consistent with the expected performance characteristics for HP Storm materials, as shown in Table 2, and assume the native (in-situ) soil is of adequate strength and suitable for installation. For applications requiring fill heights greater than those shown in Table 3 or where hydrostatic pressure due to groundwater is expected, contact an ADS Engineer.

Table 2
ADS HP Storm Mechanical Properties

Resin	ASTM Specification	Allowable Long Term Strain %	Initial		75-Year	
			Fu (psi)	E (psi)	Fu (psi)	E (psi)
Polypropylene, Impact-modified copolymer	ASTM F2881	3.7	3,500	175,000	1,000	28,000

Figure 1
ADS HP Storm Pipe Trench Detail with Uniform Backfill
(Traffic and Non-Traffic Applications)



140°

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW
P.E. NUMBER: 86967

REVISIONS:

ETM NO. 22-213-39
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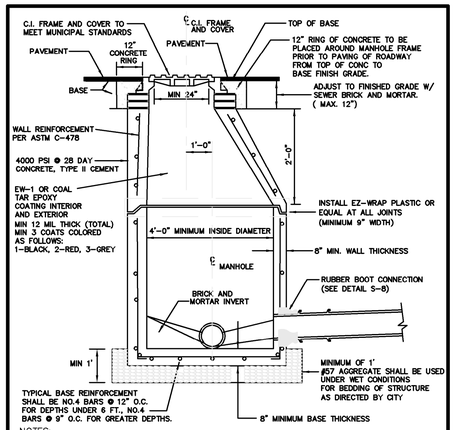
PAVING & DRAINAGE DETAILS

DEERING PARK CENTER TOWNHOMES
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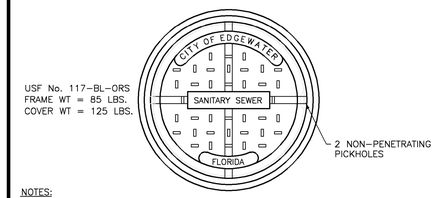
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NOTES:

1. ON TRANSITIONS BETWEEN LARGER DIAMETER AND SMALLER SEWER COLLECTORS, OUTVERTS OF SEWERS SHALL BE MATCHED.
2. NON-PENETRATING PICK-HOLES IN ALL CONCRETE SECTIONS.
3. USE FARBERTITE BITUMASTIC SEALER BETWEEN SECTIONS OF MANHOLES.
4. 0.1' - DROP ACROSS MANHOLE TYP.
5. ALL MANHOLE TROUGHS AND BENCHES ARE TO BE EPOXY PAINTED BEFORE FINAL INSPECTION.
6. LAST MANHOLE UPSTREAM OF A LIFT STATION MUST BE LINED W/ SPECTRA SHIELD OR EQUAL.

CitySeal_2015.jpg	STANDARD CONSTRUCTION DETAIL STANDARD MANHOLE DETAIL	FILE NAME: EW_S1.DWG
2023-01-25		DETAIL REF: S-1



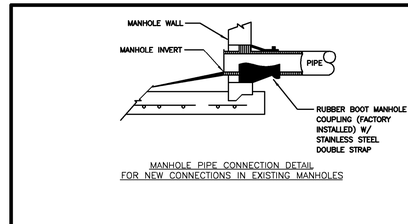
USF No. 117-BL-ORS
FRAME WT = 85 LBS.
COVER WT = 125 LBS.

2 NON-PENETRATING PICKHOLES

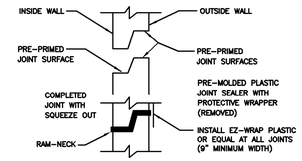
NOTES:

1. CEMENT USED IN PRECAST CONCRETE MIX SHALL BE TYPE II, ACID RESISTANT AND SULFIDE RESISTANT CONCRETE.
2. MORTAR TO CONTAIN "HYDRATITE", OR APPROVED EQUAL, TO PREVENT SHRINKAGE.
3. SUB-GRADE BENEATH MANHOLES SHALL BE UNDISTURBED GRANULAR UNSATURATED SOIL. No. 57 AGGREGATE STONE SHALL BE USED IN WET CONDITIONS AND/OR WHERE UNSUITABLE MATERIAL IS ENCOUNTERED.
4. ALL SEWER LINES SHALL BE VIDEOTAPED WITH "PAN AND TILT" CAMERA AND COPIES OF VIDEOS SUPPLIED TO THE ENVIRONMENTAL SERVICES DEPT. THE CITY MAY REQUIRE ADDITIONAL VIDEO TAPING, VIDEO TAPING OF LATERALS, AND/OR INFILTRATION/EXFILTRATION TESTS IF DEFECTS ARE APPARENT OR WORKMANSHIP IS QUESTIONABLE.
5. UNLESS DETAILED PLANS SHOW OTHERWISE, ALL MANHOLE RING AND COVER CASTINGS IN PAVED AREAS ARE TO BE ADJUSTED TO FINAL GRADE, SEALED AND SECURED IN PLACE WITH A CONCRETE COLLAR AFTER THE ROAD BASE IS PLACED AND JUST PRIOR TO PLACEMENT OF ASHPALT WEARING SURFACE.
6. CONTRACTOR SHALL PROVIDE THICKER MANHOLE WALLS AND BASES AS REQUIRED TO PREVENT FLOTATION BASED ON HISTORIC HIGH GROUND WATER TABLE ELEVATIONS AS DETERMINED USING ACCEPTED ENGINEERING PRACTICES AND/OR APPROVED BY ENVIRONMENTAL SERVICES DEPT.
7. CONCRETE COLLAR AROUND MANHOLE FRAME IS REQUIRED IN PAVED AREAS ONLY.
8. SHOP DRAWINGS FOR ALL STRUCTURES SHALL BE SUBMITTED TO AND APPROVED BY THE DESIGN ENGINEER PRIOR TO INSTALLATION WITH TWO COPIES FORWARDED BY THE DESIGN ENGINEER TO THE CITY.
9. TWO (2) COATS OF BITUMASTIC COATING INSIDE: 16 MIL
10. ONE (1) COAT OF BITUMASTIC COATING OUTSIDE: 8 MIL
11. FRAME AND COVER TO BE USF #117-BL-ORS .
12. NO BUG HOLES OR HONEYCOMB WILL BE ACCEPTED.
13. ENDS OF SECTION SHALL FIT FLUSH TOGETHER
14. SEDIMENTATION BOWLS REQUIRED FOR ALL NEW MANHOLES AND REHABILITATION STRUCTURES. RAINGUARD OR APPROVED EQUAL.

CitySeal_2015.jpg	STANDARD CONSTRUCTION DETAIL SANITARY SEWER COVER & GENERAL NOTES	FILE NAME: EW_S2.DWG
2023-01-25		DETAIL REF: S-2



MANHOLE PIPE CONNECTION DETAIL
FOR NEW CONNECTIONS IN EXISTING MANHOLES

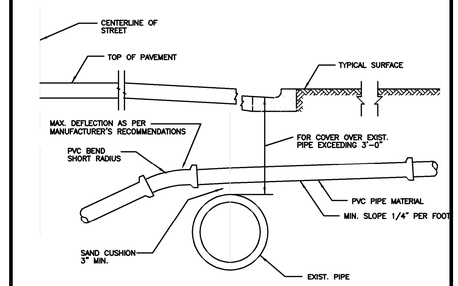


PRECAST JOINT
CONNECTION

NOTES:

1. ALL NEW CONNECTIONS TO EXISTING SANITARY SEWER MANHOLES SHALL UTILIZE A CORING METHOD AND THE IN-FIELD INSTALLATION OF A RUBBER BOOT INTO THE MANHOLE.

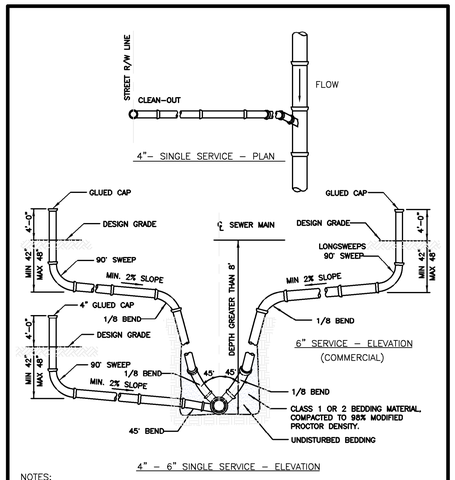
CitySeal_2015.jpg	STANDARD CONSTRUCTION DETAIL RUBBER BOOT AND PRECAST JOINT CONNECTION DETAIL	FILE NAME: EW_S8.DWG
2023-01-25		DETAIL REF: S-8



ALTERNATE GRADIENT FOR HOUSE SERVICE
SEWERS AT CONFLICTS WITH EXISTING STORM
SEWERS & OTHER EXISTING CONDUITS

APPROVED PIPE MATERIALS-PVC (SDR 26)

CitySeal_2015.jpg	STANDARD CONSTRUCTION DETAIL SEWER LINE UTILITY CROSSING DETAIL	FILE NAME: EW_S9.DWG
2023-01-25		DETAIL REF: S-9



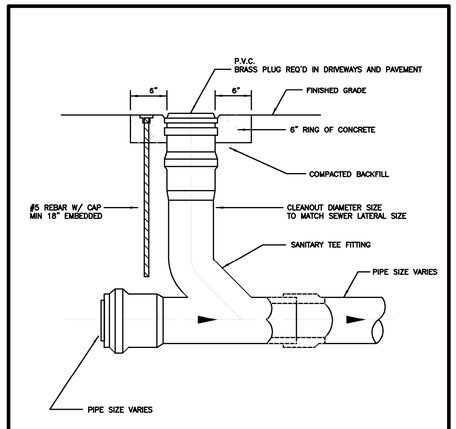
4" - 6" SINGLE SERVICE - ELEVATION

NOTES:

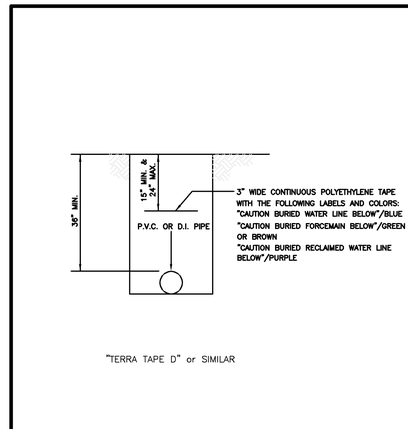
1. USE OF STYRENE MATERIAL WILL NOT BE PERMITTED.
2. ALL JOINTS TO BE RUBBER GASKET (NO GLUED FITTINGS) TYPICAL.
3. USE ALL HARCO SDR-26 FITTINGS OR CITY APPROVED EQUAL.

4" - RESIDENTIAL
6" - COMMERCIAL

CitySeal_2015.jpg	STANDARD CONSTRUCTION DETAIL SEWER LATERAL DETAIL (SINGLE 4" RESIDENTIAL) (SINGLE 6" COMMERCIAL)	FILE NAME: EW_S10.DWG
2023-01-25		DETAIL REF: S-10



CitySeal_2015.jpg	STANDARD CONSTRUCTION DETAIL CLEANOUT DETAIL	FILE NAME: EW_S12.DWG
2023-01-25		DETAIL REF: S-12



"TERRA TAPE D" or SIMILAR

CitySeal_2015.jpg	STANDARD CONSTRUCTION DETAIL LOCATOR TAPE INSTALLATION FOR SEWER, WATER AND RECLAIMED WATER PIPELINES	FILE NAME: EW_S13.DWG
2023-01-25		DETAIL REF: S-13

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW
P.E. NUMBER: 86967

PLOTTED: August 8, 2025 - 5:44 PM, BY: Cheroky Williams

REVISIONS:

ETM NO. 22-213-39
DRAWN BY: KJJ
DESIGNED BY: CBW
CHECKED BY: CBW
DATE: 01.27.2025

Trusted Advisors, Creating Community,
1411 Edgewater Drive, Ste. 200
Orlando, Florida 32804
(407) 536-5379
www.etminc.com
REG-00102584 LC-0000316

ETM | ENGLAND-THIMS & MILLER

WATER & SEWER DETAILS

DEERING PARK CENTER TOWNHOMES
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
13A

n:\2022\22-213\22-213-09\LandDev\Design\Plots\UTILDT-22-213-09.dwg

SANITARY SEWER DESIGN AND CONSTRUCTION NOTES: (CONTD.)

13. ALL TESTING REQUIRED BY THE CITY SHALL BE PAID FOR BY THE CONTRACTOR / DEVELOPER.
14. ALL LOCAL COLLECTION SANITARY SEWER MANHOLES SHALL BE PRECAST WITH A MINIMUM INSIDE DIAMETER OF 4 FEET.
15. STANDARD MANHOLES SHALL BE LOCATED AT INTERVALS NOT EXCEEDING 400 FEET.
16. ALL SEWER FITTINGS TO BE "HARCO" OR CITY APPROVED EQUAL.
17. MANHOLE RIMS SHALL MATCH FLUSH WITH THE FINISH GRADE ELEVATION IN PAVED AREAS AND A MINIMUM OF 0.2 FEET AND MAXIMUM OF 0.5 FEET ABOVE GRADE GENERALLY IN UNPAVED AREAS.
18. THE CONTRACTOR SHALL CONSTRUCT SANITARY SEWER MANHOLES IN SUCH A WAY THAT SEWER LINES DO NOT INTERSECT SEALED JOINTS BETWEEN SECTIONS OF THE MANHOLE.
19. RUBBER BOOTS AND STAINLESS STEEL BANDS SHALL BE UTILIZED IN THE CONNECTION OF THE SEWER MAIN TO THE MANHOLES (SEE STANDARD MANHOLE AND BOOT DETAIL).
20. INDIVIDUAL SANITARY SERVICE CONNECTORS ON NEW CONSTRUCTION SHALL NOT BE CONNECTED DIRECTLY INTO MANHOLES, AND MUST CONNECT TO SEWER MAIN LINES BY USE OF WYE CONNECTIONS, UNLESS OTHERWISE BE APPROVED BY THE CITY.
21. FOR SINGLE FAMILY HOMES, SINGLE OR DOUBLE FOUR INCH SEWER SERVICES LATERALS SHALL BE CONSTRUCTED SINGLES AT EACH LOT OR UNIT AND LOCATED ON THE DOWNSTREAM SIDE OF THE LOT CENTER LINE. DOUBLES LOCATED ON THE LOT LINES THESE SERVICES SHALL BE EXTENDED 4 FEET ABOVE GROUND AT THE PROPERTY LINE WITH A PVC RISER AND PLUG BEING EASILY VISIBLE FROM THE ROAD. RUBBER SEAL FITTINGS SHALL BE USED ON ALL LINES. NO GLUED JOINTS ARE PERMITTED ON LATERALS, INCLUDING DOUBLES.
22. FOR MULTI-FAMILY AND COMMERCIAL SITES, SIX INCH MINIMUM SEWER SERVICES AND CLEANOUTS SHALL BE PROVIDED AS APPROVED BY THE CITY.
23. SANITARY SEWER LIFT STATIONS AND FORCE MAINS, SIZE, MATERIAL, AND DESIGNS SHALL BE APPROVED BY THE CITY. LIFT STATIONS SHALL BE CONSTRUCTED WITH A MINIMUM WET WELL INTERIOR DIAMETER OF 6 FEET. FORCE MAINS SHALL BE A MINIMUM 6 INCH DIAMETER.
24. IT SHALL BE THE RESPONSIBILITY OF THE DESIGN ENGINEER TO PREPARE AND SUBMIT FLOTATION CALCULATIONS TO SIZE THE BASE OF THE WET WELL, AND ANY MANHOLES AS DEEMED NECESSARY BY THE CITY.
25. SANITARY SEWER DROP MANHOLES SHALL ONLY BE USED UNDER SPECIAL CONDITIONS AS APPROVED BY THE CITY. DROPS LESS THAN 2.0' SHALL NOT BE ALLOWED.
26. ALL SANITARY SEWER MANHOLE COVERS SHALL HAVE THE WORDS "EDGEWATER, FLORIDA SANITARY SEWER" CAST INTO THEM.
27. ALL SANITARY SEWER FORCE MAINS, SHALL BE PVC AWWA C-900, OR C-905 (COLOR "GREEN") (PRESSURE FITTINGS, PRESSURE CLASS 150 OR 250 EPOXY LINED DIP. THE FORCE MAIN MINIMUM DEPTH OF COVER SHALL BE 36".
28. ALL SANITARY SEWER FORCE MAINS SHALL USE A THRUST RESTRAINT JOINT METHOD IN COMPLIANCE WITH THE DUCTILE IRON PIPE RESEARCH ASSOCIATION GUIDELINES MODIFIED TO ACCOMMODATE PVC PIPE BY FOLLOWING THE RECOMMENDED INCREASE IN RESTRAINT LENGTH CORRESPONDING TO THE INSTALLATION OF POLYETHYLENE WRAP. IN NO INSTANCE SHALL THRUST BLOCKS BE PERMITTED.

	STANDARD CONSTRUCTION DETAIL SANITARY SEWER DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_S24.DWG DETAIL REF: S-24
2023-01-25		

SANITARY SEWER DESIGN AND CONSTRUCTION NOTES (CONTD.)

29. SANITARY SEWER MANHOLES WHICH HAVE SEWER FORCE MAINS DISCHARGING DIRECTLY INTO THEM SHALL BE FIBERGLASS OR POLY-ETHYLENE LINED. RETRO-FITTING OF MANHOLES WITH LINERS SHALL BE REQUIRED WHEN NEW CONNECTIONS SUCH AS THIS ARE MADE. FIBERGLASS SHALL BE A MINIMUM 1/2" THICKNESS UNLESS APPROVED OTHERWISE BY THE CITY. OTHER TYPES OF LINING METHODS AND MATERIALS MAY BE CONSIDERED ON A CASE BY CASE BASIS. UNDER SPECIAL CIRCUMSTANCES WHERE HYDROGEN SULFIDE IS A MAJOR CONCERN MANHOLES UPSTREAM AND/OR DOWNSTREAM OF THE FORCE MAIN TIE-IN OR WET WELL MAY ALSO BE REQUIRED TO HAVE LININGS INSTALLED.
30. THE CITY RESERVES THE RIGHT TO REQUIRE THE DEVELOPER TO PERFORM VACUUM TESTING OF ALL SANITARY MANHOLES, AIR TEST SEWER MAINS, AND REQUIRES THAT ALL SANITARY SEWER MAIN LINES BE TELEVISED PRIOR TO FINAL ACCEPTANCE. LATERALS SHALL BE TELEVISED UPON DEMAND BY THE CITY PRIOR TO FINAL ACCEPTANCE WHEN IT IS SUSPECTED THAT A PROBLEM EXISTS.
31. ALL SEWER MAINS, PRIOR TO ACCEPTANCE BY THE CITY AND PRIOR TO ANY FINAL PAVING OPERATIONS, SHALL BE CLEANED FLUSHED AND TELEVISED USING A "PAN AND TILT" CAMERA BY A CITY APPROVED CONTRACTOR. THE VIDEO SHALL BE NON-STOP WITH AUDIO DESCRIBING WHAT IS BEING REVIEWED. WRITTEN VIDEO LOGS DESCRIBING THE CONDITION OF THE LINES SHALL ACCOMPANY THE TAPE SUBMISSION TO THE CITY PRIOR TO COMMENCING ANY INSTALLATION OF ASPHALT OR CONCRETE PAVEMENT. RE-TAPING MAY BE REQUIRED BY THE CITY IF ADDITIONAL CLEARING OR CORRECTIVE ACTIONS ARE NECESSARY.
32. ALL MANHOLES WITH FORCE MAIN CONNECTIONS SHALL BE OUTFITTED WITH EORU LINERS OR OTHER TYPES OF LINERS APPROVED BY THE VITY. IN ADDITION, THE CITY MAY REQUIRE LINES TO BE INSTALLED IN AREAS WHERE THE ENVIRONMENTAL SERVICES DEPARTMENT BELIEVES THE NEED IS JUSTIFIED.
33. ALL SEWER LINES WHICH ARE CONSTRUCTED OUTSIDE OF PUBLIC RIGHTS-OF-WAY WITHIN SIDE YARDS, BACKYARDS, AND OTHER POORLY ACCESSIBLE AREAS SHALL BE CONSTRUCTED OF C-900 PVC. ABSOLUTELY NO USE OF PLASTIC STYRENE FITTINGS SHALL BE ALLOWED.
34. SEWER LATERAL LOCATIONS SHALL BE MARKED ALONG THE OUTSIDE OF THE CURB WITH A SAW CUT "V", OR BY A METAL TAB SET INTO THE PAVEMENT.
35. CONTEC A-2000 PVC PIPE SHALL NOT BE ALLOWED FOR USE.
36. EZ-WRAP PLASTIC, AS MANUFACTURED BY PRESS SEAL GASKET CORPORATION, SHALL BE USED ON THE OUTSIDE OF ALL MANHOLE AND WETWELL JOINTS. APPLY ONE LAYER OF 9" WRAP CENTERED ON EACH JOINT. A CITY INSPECTOR SHALL PERSONALLY INSPECT ALL JOINT SEALS PRIOR TO BACKFILLING OPERATIONS.
37. ALL PROPOSED SEWER FORCE MAINS SHALL BE FLUSHED, PRESSURE TESTED AND CLEARED FOR SERVICE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS. THE CONTRACTOR SHALL NOTIFY THE CITY'S DESIGNATED SITE INSPECTOR WHO SHALL COORDINATE WITH CITY PERSONNEL AT THE ENVIRONMENTAL SERVICES DEPARTMENT (AS APPROPRIATE) AT LEAST 24 HOURS PRIOR TO BEGINNING A FULL-DIAMETER FLUSH OF THE MAINS PRIOR TO THE COMMENCEMENT OF PRESSURE TESTING (SUBJECT TO AVAILABILITY).
38. THE CITY MAY REQUIRE THE CONTRACTOR TO PIG FORCE MAINS IN EXCESS OF 6" IN DIAMETER AND PRIMARY TRANSMISSION MAINS LOCATED ON COLLECTOR AND ARTERIAL ROADWAYS. LAUNCHING AND EXTRACTION POINTS SHALL BE DETERMINED BY THE CONTRACTOR.

	STANDARD CONSTRUCTION DETAIL SANITARY SEWER DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_S25.DWG DETAIL REF: S-25
2023-01-25		

SANITARY SEWER DESIGN AND CONSTRUCTION NOTES (CONTD.)

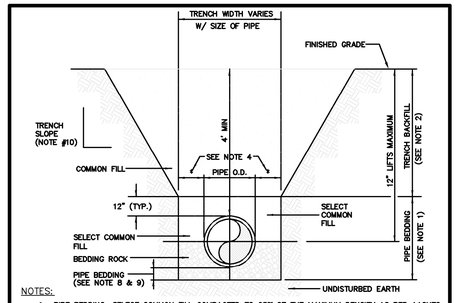
39. ANY TIE INTO AN EXISTING MANHOLE WILL BE COORDINATED WITH THE CITY, AND ALL CONFINED SPACE HAZARDS AND PROCEDURES WILL BE FOLLOWED.
40. ANY TIE INTO AN EXISTING SYSTEM WILL BE SWEPT IN THE DIRECTION OF FLOW.
41. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL OSHA, DOT, OR ANY OTHER RULES & REGULATIONS THAT MAY APPLY.
42. AS A GENERAL RULE, THE NUMBER OF JOINTS SHALL BE LIMITED WHENEVER POSSIBLE. IN SPECIAL CASES WHERE A POINT REPAIR TO AN 8"TO 12" PVC SEWER MAIN IS REQUIRED, THE PROPER RIGID WRAP AROUND SLEEVE SUCH AS A JCM-210 OVERSIZED DUCTILE IRON COUPLING OR AN APPROVED EQUAL MAY BE ALLOWED BY SPECIAL APPROVAL BY THE CITY.
43. ALL IN-LINE SANITARY SEWER FORCE MAIN VALVES SHALL BE RESILIENT SEAT (AWWA C-509) VALVES FEATURING A LINED DUCTILE IRON BODY.
44. ALL TAPPING OF MAINS AND CORING OF MANHOLES SHALL BE COORDINATED WITH THE CITY BY AN APPROVED CONTRACTOR AND BILLED IN ACCORDANCE WITH THE ADOPTED FEE RESOLUTION. SCHEDULING OF THESE CONNECTIONS SHALL REQUIRE A MINIMUM 48 HOUR NOTIFICATION (MEASURED ON NORMAL WORK DAYS) DIRECTED TO THE CITY'S DESIGNATED SITE INSPECTOR WHO SHALL COORDINATE THE WORK DIRECTLY WITH THE ENVIRONMENTAL SERVICE DEPARTMENT. SUBSEQUENTLY, THE CONNECTION SHALL BE SCHEDULED TO COMMENCE ON THE APPROPRIATE DAY AND TIME ESTABLISHED BY CITY.
45. WITH RESPECT TO TIE-IN CONNECTIONS AND CORING OPERATIONS, THE CITY RESERVES THE RIGHT TO REQUIRE CONNECTIONS TO BE PERFORMED DURING PERIODS OF LOW FLOW (MIDNIGHT TO 6:00 A.M.) IN ORDER TO MINIMIZE SERVICE DISRUPTION TO EXISTING CUSTOMERS.
46. ALL WORK PERFORMED UPON SANITARY SEWER FACILITIES OWNED OR PROPOSED TO BE OWNED BY THE CITY SHALL BE CONSTRUCTED BY A LICENSED UNDERGROUND UTILITY CONTRACTOR, OR LICENSED GENERAL CONTRACTOR, WHO IS LICENSED IN THE STATE OF FLORIDA AND REGISTERED WITH THE CITY.
47. UPON CONSTRUCTION COMPLETION AND ACCEPTANCE OF THE SYSTEM, IT SHALL BE THE DESIGN ENGINEER'S RESPONSIBILITY TO ENSURE THAT THE SYSTEM IS PROPERLY CERTIFIED AND ACCEPTED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND AS-BUILTS ARE PROVIDED TO THE CITY PRIOR TO ANY USE OF THE SYSTEM.
48. FOR CONSTRUCTION PURPOSES, THE PLANS SHALL DIMENSION THE LOCATION, OF ALL FORCE MAINS MEASURED FROM THE BACK OF CURB (OR EDGE OF PAVEMENT, IF NO CURBING EXISTS.)
49. ALL HDPE PIPE INSTALLED FOR SEWAGE FORCE MAINS SHALL BE SDR 11 UNLESS SPECIFICALLY NOTED OTHERWISE. THE HDPE PIPE SHALL BE SIZED TO MATCH THE EXTERNAL DIAMETER OF THE PVC OR DIP TO WHICH IT IS ATTACHED.
50. LANDSCAPE PLANS SHALL CLEARLY DEPICT THE DESIGN LOCATION OF PLANTINGS RELATIVE TO THE LOCATION OF PUBLIC UTILITIES AND STORMWATER INFRASTRUCTURE IN ORDER TO EVALUATE POTENTIAL CONFLICTS.
51. ALL UTILITY INSTALLATIONS ARE SUBJECT TO REVIEW AND APPEAL BY THE CITY OF EDGEWATER. ALL STRUCTURES AND EQUIPMENT SUPPLIED AND / OR INSTALLED SHALL MEET QUALITY AND PERFORMANCE STANDARDS PRIOR TO ACCEPTANCE. SUBSTANDARD INSTALLATIONS MAY BE REJECTED, REMEMBER MEASURES ARE SUBJECT TO CITY APPROVAL.

	STANDARD CONSTRUCTION DETAIL SANITARY SEWER DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_S26.DWG DETAIL REF: S-26
2023-01-25		

SANITARY SEWER DESIGN AND CONSTRUCTION NOTES

1. THE CITY'S ENVIRONMENTAL SERVICES DEPT. (424-2478) SHALL BE GIVEN A MINIMUM OF 48 HOURS ADVANCE NOTICE (NOT INCLUDING HOLIDAYS OR WEEKENDS) PRIOR TO BEGINNING ANY SANITARY SEWER CONSTRUCTION.
2. ALL GRAVITY SANITARY SEWER MAIN LINES SHALL BE 8" DIAMETER MINIMUM. COMMERCIAL SERVICE LATERALS WITH MULTIPLE CONNECTIONS SHALL BE GREEN 6" DIA. OR LARGER. ALL SINGLE FAMILY RESIDENTIAL SERVICE LATERALS SHALL BE 4" - SINGLE SERVICES.
3. ALL GRAVITY SANITARY SEWER LINES SHALL BE GREEN PVC SDR 26, ASTM D-3034. IN PLACES WHERE A MINIMUM COVER OF 4.0' CANNOT BE MAINTAINED, AWWA C-900 OR C-905 GREEN PVC DR-25, CLASS 100 OR CONCRETE ENCASEMENT SHALL BE USED. WATER LINES, RECLAIMED LINES, AND STORM DRAINAGE CROSSINGS SHALL ALSO FOLLOW THE CONCRETE ENCASEMENT REQUIREMENT PER THESE STANDARDS AND AS PER REGULATORY REQUIREMENTS.
4. MINIMUM GRAVITY SANITARY SEWER SLOPES ARE AS FOLLOWS:
   8" PIPE 0.40 %
   10" PIPE 0.30%
   12" PIPE 0.22%
5. GRAVITY SANITARY SEWER LINES SHALL BE INSTALLED WHENEVER POSSIBLE UNDER PAVED AREAS WITHIN PUBLIC RIGHTS-OF-WAY. UTILITY EASEMENTS SHALL BE PROVIDED WHENEVER PUBLICLY-OWNED SEWER LINES ARE CONSTRUCTED OUTSIDE OF A PUBLIC RIGHT-OF-WAY.
6. GRAVITY SANITARY SEWER LINE CONSTRUCTION SHALL BE ACCOMPLISHED BY THE USE OF A LASER INSTRUMENT UNLESS ANOTHER METHOD IS PREVIOUSLY APPROVED BY THE CITY.
7. THE CONTRACTOR SHALL AT ALL TIMES, DURING PIPE LAYING OPERATIONS, DEWATER THE GROUND SUFFICIENTLY TO KEEP THE GROUNDWATER ELEVATION A MINIMUM OF 6" BELOW THE PIPE BEING LAID WITHIN THE AREA OF THE TRENCH.
8. ALL PIPES SHALL BE LAID ON A FIRM FOUNDATION. SOFT OR SPONGY BEDDING FOR PIPES IS NOT ACCEPTABLE. ANY UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH A DRY, COMPACTED, GRANULAR MATERIAL SATISFACTORY TO THE CITY.
9. ON ALL EXCAVATION AND BACKFILLING THE CONTRACTOR SHALL PROVIDE ADEQUATE SHEETING AND BRACING IN ORDER TO PROVIDE FOR THE SAFETY OF WORKMEN, AS WELL AS REPRESENTATIVES OF THE CITY, THE DESIGN ENGINEER, AND THE DEVELOPER.
10. ALL TRENCHES SHALL BE BACKFILLED WITH ACCEPTABLE MATERIAL AND COMPACTED TO THE SPECIFIED MINIMUM COMPACTION (95% IN UNPAVED AREAS AND 98% IN PAVED AREAS) OF THE OPTIMUM DENSITY OF THAT MATERIAL BASED ON THE AASHTO T-180 MODIFIED PROCTOR TEST.
11. THE CONTRACTOR SHALL EMPLOY AN INDEPENDENT TESTING LABORATORY AT HIS OWN EXPENSE TO INSURE THAT COMPACTION OF ALL FILL MATERIAL IS COMPLETED PROPERLY. TESTS SHALL BE DONE ONE FOOT ABOVE THE PIPE AND THEN AT ONE FOOT VERTICAL INTERVALS UNTIL FINAL GRADE IS REACHED. TESTING SHALL BE COMPLETED AND TEST DOCUMENTS SUBMITTED TO THE CITY AT A MINIMUM FREQUENCY OF ONE SET OF TESTS BETWEEN EACH MANHOLE AND ONE ADDITIONAL SET OF TESTS AT EVERY MANHOLE. IDENTIFICATION OF TEST LOCATIONS SHALL BE CLEARLY INDICATED ON TEST REPORTS. TEST RESULTS SHALL BE FORWARDED PROMPTLY TO THE CITY'S DESIGNATED SITE INSPECTOR.
12. THE CONTRACTOR SHALL INSTALL A METALLIZED FOIL LOCATOR TAPE, OR SIMILAR DEVICE AS MAY BE APPROVED BY THE CITY, FOR THE FULL LENGTH OF ALL PVC SEWAGE FORCE MAINS. THIS PIPE LOCATOR AID SHALL BE INSTALLED BETWEEN 15" AND 24" BELOW FINISHED GRADE OR AS DIRECTED BY THE MANUFACTURER. TAPE SHALL BE COLOR CODED GREEN FOR SANITARY SEWER AND FORCE MAIN. INSTALL 12 GUAGE TRACING WIRE IN TRENCH.

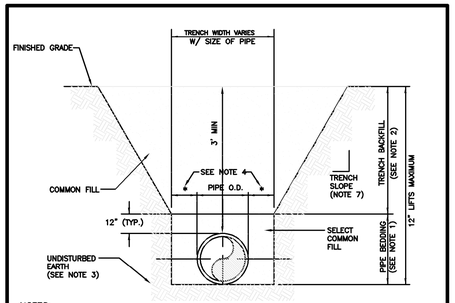
	STANDARD CONSTRUCTION DETAIL SANITARY SEWER DESIGN AND CONSTRUCTION NOTES	FILE NAME: EW_S23.DWG DETAIL REF: S-23
2023-01-25		



NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180. (98% DENSITY REQUIRED UNDER PAVEMENT, DRIVEWAYS AND STRUCTURES.)
3. USE TYPE "A" BEDDING TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CITY.
4. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF FLOW.
7. REFER TO SECTION 32.5 OF THE MANUAL FOR SHEETING AND BRACING IN EXCAVATIONS.
8. GRAVITY SEWERS SHALL UTILIZE TYPE "A" BEDDING, WHERE UNSUITABLE MATERIAL EXISTS. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER LESS THAN 15", AND 6" MINIMUM FOR PIPE DIAMETER 18" AND LARGER.
9. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. CITY SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.
10. REFER TO OSHA REQMTS. FOR SLOPING, SHEETING AND BRACING IN EXCAVATIONS.

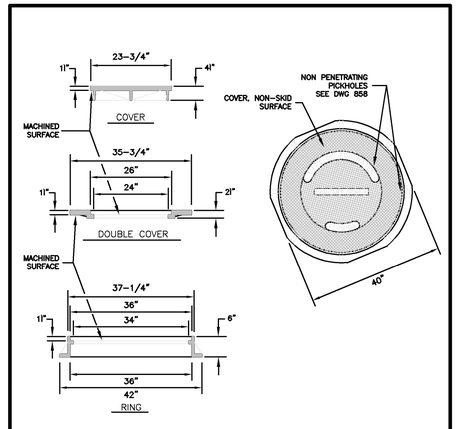
	STANDARD CONSTRUCTION DETAIL TYPE "A" BEDDING AND TRENCH DETAIL (SPECIAL GRAVITY SEWER INSTALLATIONS)	FILE NAME: EW_S28.DWG DETAIL REF: S-28
2023-01-25		



NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180, (98% DENSITY REQUIRED UNDER DRIVEWAYS, PAVEMENT AND STRUCTURES).
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE "A" BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY THE CITY.
4. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF FLOW.
7. REFER TO OSHA REQUIREMENTS FOR SLOPING, SHEETING AND BRACING IN EXCAVATIONS.
8. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

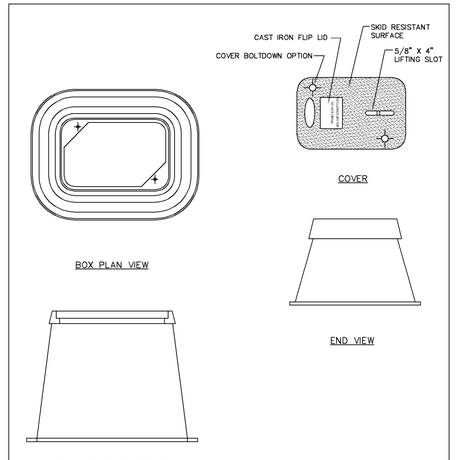
	STANDARD CONSTRUCTION DETAIL TYPE "B" BEDDING AND TRENCH DETAIL (TYPICAL FOR WATER, SEWER, FORCE MAIN, STORM DRAIN AND RECLAIMED WATER MAIN INSTALLATIONS)	FILE NAME: EW_S29.DWG DETAIL REF: S-29
2023-01-25		



NOTES:

1. U.S. FOUNDRY 666 RING & CR-ORS & XB-ORS COVERS
2. COVER WT.: 212 LBS. APP. (185 LBS. ACTUAL)
3. DOUBLE COVER WT.: 215 LBS. APP.
4. RING WT.: 225 LBS. APP.
5. MATERIAL: ASTM-A48 CLASS 30B GRAY IRON

	STANDARD CONSTRUCTION DETAIL SANITARY SEWER DOUBLE MANHOLE COVER	FILE NAME: EW_S30.DWG DETAIL REF: S-30
2023-01-25		



NOTES:

1. ALL BOXES AND COVERS TO BE PURPLE.

	STANDARD CONSTRUCTION DETAIL RECLAIMED WATER SERVICE: SINGLE SERVICE METER BOX	FILE NAME: EW_RW2.DWG DETAIL REF: RW-2

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW, P.E. NUMBER: 86967

PLOTTED: August 8, 2025 - 5:45 PM, BY: Cheroky Williams

REVISIONS:

ETM NO. 22-213-39 | DRAWN BY: KJJ | DESIGNED BY: CBW | CHECKED BY: CBW | DATE: 01.27.2025

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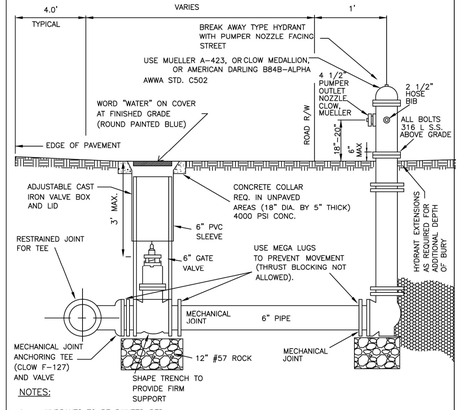
ETM | ENGLAND-THIMS & MILLER

WATER & SEWER DETAILS

DEERING PARK CENTER TOWNHOMES FOR DEERING PARK 1, LLC

DRAWING NUMBER **13B**

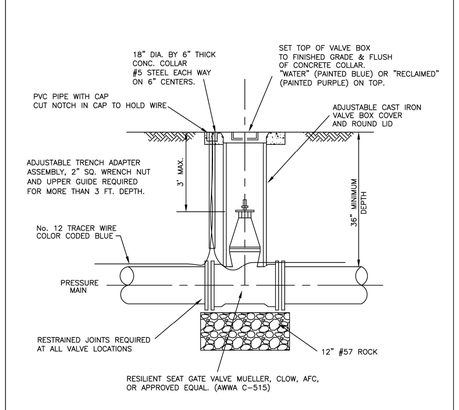
n: \2022\22-213\22-213-09\Landdev\Design\Plots\UTILDT-22-213-09.dwg



NOTES:

1. HYDRANTS TO BE PAINTED RED.
2. HOSE BIBS TO BE AMERICAN STANDARD THREADS. (FIRE THREAD)
3. RESTRAINED JOINTS REQUIRED. THRUST BLOCKS ARE NOT PERMITTED.
4. ADJUSTABLE TRENCH ADAPTOR ASSY. REQUIRED FOR ALL VALVES GREATER THAN 3' DEEP.
5. INSTALL AT SIDE LOT LINES OR AT CORNERS OF ROADWAY INTERSECTIONS, (TYPICAL)
6. BLUE REFLECTORS TO BE PLACED IN MIDDLE OF TRAVEL LANE ON SIDE OF ROAD THE HYDRANT IS ON.

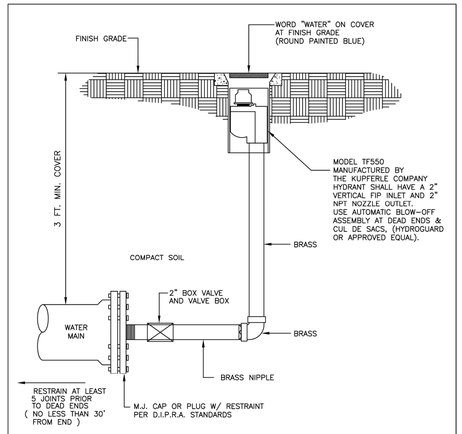
EDGEWATER 2017-10-24	STANDARD CONSTRUCTION DETAIL FIRE HYDRANT ASSEMBLY	FILE NAME: EW_W1.DWG DETAIL REF: W-1



NOTE:

1. ROD OR BOLT TEE WHERE APPLICABLE.
2. VALVE BOX EXTENSIONS SHALL BE ONE CONTINUOUS PIECE OF PIPE.

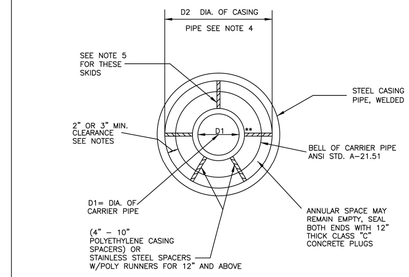
EDGEWATER 2017-10-24	STANDARD CONSTRUCTION DETAIL POTABLE WATER AND/OR RECLAIMED WATER VALVE AND VALVE BOX (2" - 16" VALVE SIZES)	FILE NAME: EW_W2.DWG DETAIL REF: W-2



NOTES:

1. NO GALVANIZED FITTINGS PERMITTED.

EDGEWATER 2011-06-30	STANDARD CONSTRUCTION DETAIL POTABLE WATER BLOW-OFF ASSEMBLY	FILE NAME: EW_W6.DWG DETAIL REF: W-6

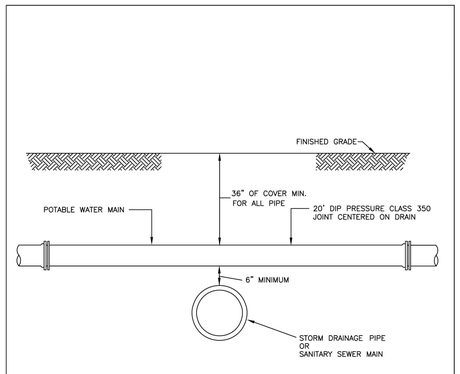


CARRIER PIPE AND CASING PIPE SIZES (MIN.)													
CARRIER PIPE NOM. DIA. (D1)	4	6	8	10	12	14	16	18	20	24	30	36	42	48
CASING PIPE NOM. DIA. (D2)	14	16	18	22	24	30	30	30	36	36	48	54	60	66
WALL THICKNESS-INCHES (NOTES 4&5)	PER AUTHORITY HAVING JURISDICTION													

NOTES:

1. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF CASING INSTALLATION TO ENGINEER FOR REVIEW PRIOR TO INSTALLATION
2. SEAL BOTH ENDS OF CASING W/ 12" BRICK AND NON-SHRINK GROUT (MINIMUM)
3. ROTATION OF CARRIER PIPE INSIDE THE CASING WILL NOT BE PERMITTED
4. WITHIN EDGEWATER R/W USE CURRENT FDOT STANDARDS
5. SPECIALLY DESIGNED SPACERS MAY BE USED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

EDGEWATER 2011-06-30	STANDARD CONSTRUCTION DETAIL CONDUIT CROSSING R.R. OR ROADWAY	FILE NAME: EW_W13.DWG DETAIL REF: W-13

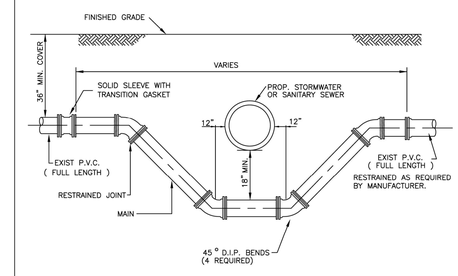


NOTE:

1. CONCRETE ENCASEMENT OF A SANITARY SEWER MAIN IS AN ALTERNATIVE METHOD OF ADDRESSING A CONFLICT WHEN 18" VERTICAL SEPARATION DISTANCE CANNOT BE MAINTAINED. IN SUCH INSTANCES, THE MINIMUM PIPE VERTICAL SEPARATION SHALL BE 6".

EDGEWATER 2011-06-30	STANDARD CONSTRUCTION DETAIL STORM DRAINAGE PIPE OR SANITARY SEWER MAIN CONFLICT	FILE NAME: EW_W14.DWG DETAIL REF: W-14

CONCRETE ENCASEMENT OF SANITARY SEWER IS AN ALTERNATIVE METHOD OF ADDRESSING A CONFLICT WHEN UNABLE TO MAINTAIN 18" VERTICAL SEPARATION DISTANCE. IN SUCH INSTANCES, THE MINIMUM PIPE VERTICAL SEPARATION SHALL BE 6".



NOTES:

1. LOWERING OF EXISTING WATER MAIN & FORCE MAIN BY DEFLECTION METHOD ACCEPTABLE IF EXISTING FIELD CONDITIONS PERMIT.
2. LENGTH OF SECTION BASED ON MINIMUM LENGTH AS DETERMINED BY DIPRA RESTRAINED JOINT MANUAL.
3. INSTALL RESTRAINED JOINTS, AS REQUIRED, FROM DEFLECTION POINT IN BOTH DIRECTIONS.

EDGEWATER 2011-06-30	STANDARD CONSTRUCTION DETAIL STORM DRAINAGE PIPE OR SANITARY SEWER MAIN CONFLICT	FILE NAME: EW_W15.DWG DETAIL REF: W-15

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E. NUMBER: 86967

REVISIONS:

ETM NO. 22-213-39
DRAWN BY: KJJ
DESIGNED BY: CBW
CHECKED BY: CBW
DATE: 01.27.2025

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WATER & SEWER DETAILS

DEERING PARK CENTER TOWNHOMES FOR DEERING PARK 1, LLC

DRAWING NUMBER
13C

PLOTTED: August 8, 2025 - 5:45 PM, BY: Cheroky Williams

n: \2022\22-213\22-213-09\LandDev\Design\Plots\UTILDT-22-213-09.dwg

100'

NOTES

1. SEE DRAWING NO. 02 FOR GENERAL NOTES.
2. REFER TO SEDIMENT AND EROSION CONTROL NOTES AND DETAILS
3. COIR BALES TO BE INSTALLED AROUND EACH INLET STRUCTURE BY CONTRACTOR.
4. CONTRACTOR SHALL PROVIDE COIR BALES AT ALL DEWATERING SUMPS.
5. FILTER BARRIER TO BE PLACED A MINIMUM OF 6' FROM ANY TREE TO REMAIN.
6. FILTER BARRIER SHOWN IS FOR GRAPHICAL PURPOSES ONLY. CONTRACTOR SHALL COORDINATE INSTALLATION OF FILTER BARRIER TO ENSURE PAVING AND DRAINAGE PLAN CAN BE COMPLETED IN ITS ENTIRETY.
7. COIR BALES TO BE REMOVED AFTER CONSTRUCTION AND STABILIZATION COMPLETE.
8. IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STORMWATER POLLUTION PREVENTION PLAN TEMPLATE, CONTRACTOR SHALL DEVELOP A SITE MAP THE CONTAINS, AT A MINIMUM, ALL OF THE FOLLOWING INFORMATION:
   - DRAINAGE PATTERNS
   - APPROXIMATE SLOPES AFTER MAJOR GRADING ACTIVITIES
   - AREAS OF SOIL DISTURBANCE
   - AN OUTLINE OF ALL AREAS THAT ARE NOT TO BE DISTURBED
   - THE LOCATIONS OF ALL MAJOR STRUCTURAL AND NON-STRUCTURAL CONTROLS
   - THE LOCATIONS OF EXPECTED STABILIZATION PRACTICES
   - WETLANDS AND SURFACE WATERS
   - LOCATION WHERE STORMWATER MAY DISCHARGE TO A SURFACE OR MS4.
9. CONTRACTOR TO PUT IN PLACE SUPPLEMENTAL SEDIMENT AND EROSION CONTROL MEASURES DEPENDENT ON ADDITIONAL CONTRACTOR ACTIVITIES.

LEGEND

- COIR BALES OR SEDIMENT FILTER AROUND EACH INLET STRUCTURE
- FILTER BARRIER (TO BE INSTALLED BY CONTRACTOR)
- TREE PROTECTION FENCING
- FLOATING TURBIDITY BOUNDARY
- WETLAND LINE
- TREE TO REMAIN

INSTALL DOUBLE FILTER BARRIER ALONG ALL WETLANDS (TYP.)

SWMF DPC-G-1

PROPERTY BOUNDARY

INDIAN RIVER BOULEVARD

CONSTRUCTION ENTRANCE (TYP.)

GREEN POINT

SWMF DPC-G-2

TREE PROTECTION FENCE (TYP.)

TIERRA POINT

SAINT CYRUS

EXISTING WELL TO BE PROTECTED DURING CONSTRUCTION. CONTRACTOR TO ENSURE STORMWATER RUNOFF IS DIRECTED AWAY FROM WELL SITE.

INSTALL DOUBLE FILTER BARRIER ALONG ALL WETLANDS (TYP.)

INSTALL COIR BALES OR SEDIMENT FILTER AROUND EACH INLET STRUCTURE (SEE NOTES) (TYP.)

PROPOSED WETLAND BUFFER (TYP.)

EXISTING WETLAND

CE WL-6 (9.53 ACRES)

WETLAND IMPACT PER MASS GRADING PLANS SJRWMD PERMIT NUMBER 193985-2

FUTURE DEVLOPMENT

CE WL-9 (7.83 ACRES)

DELNOR WIGGINS

DAGNY JOHNSON

CONSTRUCTION ENTRANCE (TYP.)

TREE PROTECTION FENCE (TYP.)

WELCOME CENTER TRACT

INSTALL FILTER BARRIER (SEE NOTES) (TYP.)

MIXED USE TRACT

CLOSE HERREN

HAMMOCK PARK

LILY HAMMOCK

WETLAND IMPACT PER MASS GRADING PLANS SJRWMD PERMIT NUMBER 193985-2

TREE PROTECTION FENCE (TYP.)

AMENITY AREA TRACT

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E. NUMBER: 86967

REVISIONS:

ETM NO.	22-213-39
DRAWN BY:	KJJ
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SEDIMENT EROSION CONTROL PLAN

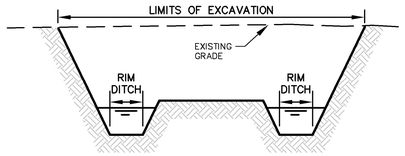
DEERING PARK CENTER TOWNHOMES
FOR
DEERING PARK 1, LLC

DRAWING NUMBER
14

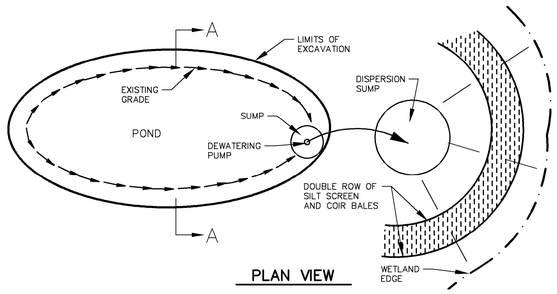
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SEDIMENT AND EROSION CONTROL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SILT FROM SITE IF NOT REUSABLE ON-SITE AND ASSURING PLAN ALIGNMENT AND GRADE IN ALL DITCHES AND SWALES AT COMPLETION OF CONSTRUCTION.
2. THE SITE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED.
3. ADDITIONAL PROTECTION – ON-SITE PROTECTION IN ADDITION TO THE ABOVE MUST BE PROVIDED THAT WILL NOT PERMIT SILT TO LEAVE THE PROJECT CONFINES DUE TO UNSEEN CONDITIONS OR ACCIDENTS.
4. CONTRACTOR SHALL INSURE THAT ALL DRAINAGE STRUCTURES, PIPES, ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.
5. WIRE MESH SHALL BE LAID OVER THE DROP INLET SO THAT THE WIRE EXTENDS A MINIMUM OF 1 FOOT BEYOND EACH SIDE OF THE INLET STRUCTURE. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS SHALL BE USED. IF MORE THAN ONE STRIP OF MESH IS REQUIRED, THE STRIPS SHALL BE OVERLAPPED.
6. FDOT NO. 1 COARSE AGGREGATE SHALL BE PLACED OVER THE WIRE MESH AS INDICATED ON SEDIMENT FILTER DETAIL (SEE DETAIL THIS SHEET). THE DEPTH OF STONE SHALL BE AT LEAST 12 INCHES OVER THE ENTIRE INLET OPENING. THE STONE SHALL EXTEND BEYOND THE INLET OPENING AT LEAST 18 INCHES ON ALL SIDES.
7. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONES MUST BE PULLED AWAY FROM THE INLET, CLEANED AND REPLACED.
8. BALES SHALL BE EITHER WIRE-BOUND OR STRING-TIED WITH THE BINDINGS ORIENTED AROUND THE SIDES RATHER THAN OVER AND UNDER THE BALES.
9. BALES SHALL BE PLACED LENGTHWISE IN A SINGLE ROW SURROUNDING THE INLET, WITH THE ENDS OF ADJACENT BALES PRESSED TOGETHER.
10. THE FILTER BARRIER SHALL BE ENTRENCHED AND BACKFILLED. A TRENCH SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 4 INCHES. AFTER THE BALES ARE STAKED, THE EXCAVATED SOIL SHALL BE BACKFILLED AND COMPACTED AGAINST THE FILTER BARRIER.
11. EACH BALE SHALL BE SECURELY ANCHORED AND HELD IN PLACE BY AT LEAST TWO STAKES OR REBARS DRIVEN THROUGH THE BALE.
12. LOOSE COIR SHOULD BE WEDGED BETWEEN BALES TO PREVENT WATER FROM ENTERING BETWEEN BALES.
13. COIR BALE BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
14. CLOSE ATTENTION SHALL BE GIVEN TO THE REPAIR OF DAMAGED BALES, END RUNS AND UNDERCUTTING BENEATH BALES.
15. NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BALES SHALL BE ACCOMPLISHED PROMPTLY.
16. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. IT MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
17. ANY SEDIMENT DEPOSITS REMAINING IN PLACE, AFTER THE COIR BALE OR FILTER BARRIERS, AND OR SILT FENCES ARE NO LONGER REQUIRED, SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
18. SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
19. SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED IMMEDIATELY.
20. STRUCTURES SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS REQUIRED.
21. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
22. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING THE BEST EROSION AND SEDIMENT CONTROL PRACTICES AS OUTLINED IN THE PLANS, SPECIFICATIONS AND ST. JOHNS RIVER WATER MANAGEMENT DISTRICT RULES AND REGULATIONS.
23. FOR ADDITIONAL INFORMATION ON SEDIMENT AND EROSION CONTROL REFER TO "THE FLORIDA DEVELOPMENT MANUAL – A GUIDE TO SOUND LAND AND WATER MANAGEMENT" FROM THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION (F.D.E.P.) CHAPTER 6.
24. EROSION AND SEDIMENT CONTROL BARRIERS SHALL BE PLACED ADJACENT TO ALL WETLAND AREAS WHERE THERE IS POTENTIAL FOR DOWNSTREAM WATER QUALITY DEGRADATION. SEE DETAILS (THIS SHEET) FOR TYPICAL CONSTRUCTION.
25. SOD SHALL BE PLACED IN AREAS WHICH MAY REQUIRE IMMEDIATE EROSION PROTECTION TO ENSURE WATER QUALITY STANDARDS ARE MAINTAINED.
26. ANY DISCHARGE FROM DEWATERING ACTIVITY SHALL BE FILTERED AND CONVEYED TO THE OUTFALL IN A MANNER WHICH PREVENTS EROSION AND TRANSPORTATION OF SUSPENDED SOLIDS TO THE RECEIVING OUTFALL.
27. DEWATERING PUMPS SHALL NOT EXCEED THE CAPACITY OF THAT WHICH REQUIRES A CONSUMPTIVE USE PERMIT FROM THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT.
28. ALL DISTURBED AREAS SHALL BE GRASSED, FERTILIZED AND MULCHED UNTIL A PERMANENT VEGETATIVE COVER IS ESTABLISHED. CONTRACTOR SHALL USE ADDITIONAL MEASURES TO STABILIZE DISTURBED AREAS THROUGH COMPACTION, SILT SCREENS, COIR BALES, AND GRASSING. ALL FILL SLOPES 3:1 OR STEEPER TO RECEIVE STAKED SOLID SOD.
29. ALL DEWATERING, EROSION, AND SEDIMENT CONTROL SHALL REMAIN IN PLACE UNTIL AFTER COMPLETION OF CONSTRUCTION, AND REMOVED ONLY WHEN AREAS HAVE BEEN STABILIZED.
30. THIS PLAN INDICATES THE MINIMUM EROSION AND SEDIMENT MEASURES REQUIRED FOR THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL APPLICABLE RULES, REGULATIONS AND WATER QUALITY GUIDELINES AND MAY NEED TO INSTALL ADDITIONAL CONTROLS.
31. THE CONTRACTOR SHALL BE REQUIRED TO RESPOND TO ALL WATER MANAGEMENT DISTRICT INQUIRIES, RELATIVE TO COMPLIANCE OF SJRWMD FOR EROSION AND SEDIMENTATION CONTROL. THE COST OF THIS COMPLIANCE SHALL BE PART OF THE CONTRACT.
32. EROSION AND SEDIMENT CONTROL BARRIERS SHALL BE PLACED ADJACENT TO ALL WETLAND AREAS AND PRESERVATION EASEMENTS WHERE THERE IS POTENTIAL FOR DOWNSTREAM WATER QUALITY DEGRADATION.
33. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING A PERMANENT STAND OF SOD AND/OR GRASS PER THE CONTRACT DOCUMENTS AND MEETING THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT, CITY OF EDGWATER AND NPDES FINAL STABILIZATION REQUIREMENTS.
34. THESE PLANS INCLUDING THE POLLUTION PREVENTION PLAN INDICATE THE MINIMUM EROSION & SEDIMENT CONTROL MEASURES REQUIRED FOR THIS PROJECT. FOR ADDITIONAL INFORMATION ON SEDIMENT AND EROSION CONTROL REFER TO "THE FLORIDA DEVELOPMENT MANUAL – A GUIDE TO SOUND LAND AND WATER MANAGEMENT" FROM THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (F.D.E.P.) CHAPTER 6. CONTRACTOR SHALL PROVIDE EROSION PROTECTION AND TURBIDITY CONTROL AS REQUIRED TO INSURE CONFORMANCE TO STATE AND FEDERAL WATER QUALITY STANDARDS AND MAY NEED TO INSTALL ADDITIONAL CONTROLS TO CONFORM TO AGENCIES REQUIREMENTS. IF A WATER QUALITY VIOLATION OCCURS, THE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR ALL DAMAGE AND ALL COSTS WHICH MAY RESULT INCLUDING LEGAL FEES, CONSULTANT FEES, CONSTRUCTION COSTS, AND FINES.
35. 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR WILL SUBMIT A "NOTICE OF INTENT" TO THE EPA IN ACCORDANCE WITH NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM RULES AND REGULATIONS. (FOR ANY CONSTRUCTION NOT COVERED BY THE OWNER'S "NOTICE OF INTENT" PERMIT)



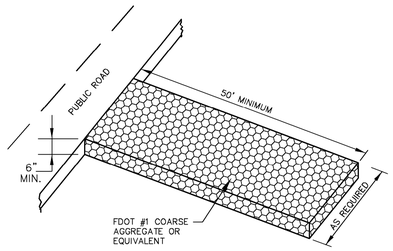
SECTION A–A



PLAN VIEW

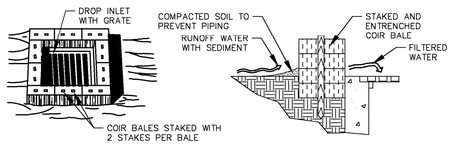
TEMPORARY DEWATERING DETAIL

N.T.S.



STABILIZED CONSTRUCTION ENTRANCE

N.T.S.

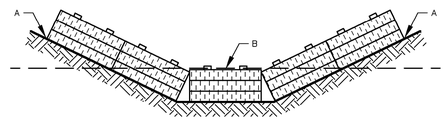


SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NO GREATER THAN 5 PERCENT) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 cfs) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

COIR BALE DROP INLET SEDIMENT FILTER

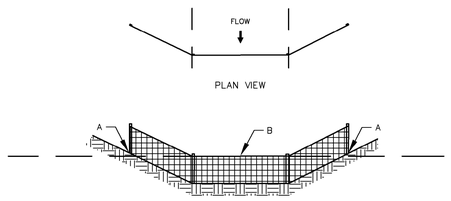
N.T.S.



POINTS A SHOULD BE HIGHER THAN POINT B

PROPER PLACEMENT OF COIR BALE IN A DRAINAGE WAY

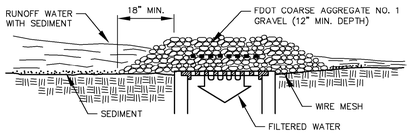
N.T.S.



SECTION VIEW
POINTS A SHOULD BE HIGHER THAN POINT B

PROPER PLACEMENT OF A FILTER BARRIER IN DRAINAGE WAY

N.T.S.

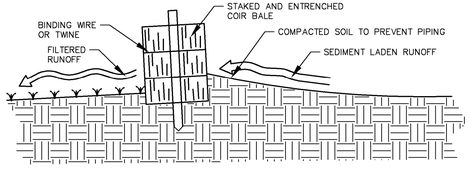


SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

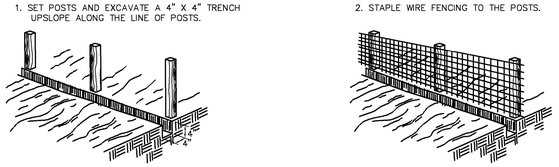
GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER

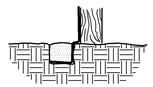
N.T.S.



CROSS-SECTION OF A PROPERLY INSTALLED COIR BALE

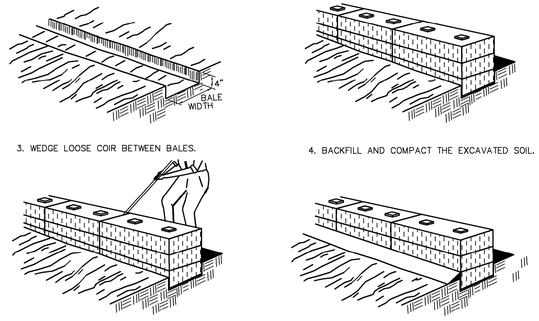
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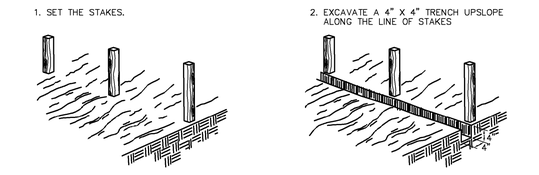
CONSTRUCTION OF SILT FENCE

N.T.S.



CONSTRUCTION OF A COIR BALE BARRIER

N.T.S.



CONSTRUCTION OF A FILTER BARRIER

N.T.S.

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW, P.E. NUMBER: 89967

REVISIONS:

ETM NO. 22-213-39
DRAWN BY: KJJ
DESIGNED BY: CBW
CHECKED BY: CBW
DATE: 01.27.2025

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SEDIMENT EROSION CONTROL DETAILS

DEERING PARK CENTER TOWNHOMES FOR DEERING PARK 1, LLC

DRAWING NUMBER
15

PLOTTED: August 8, 2025 – 5:45 PM, BY: Cheroky Williams

n:\2022\22-213\22-213-09\Land\Design\Plots\SECDT-22-213-09.dwg

OWNER'S REQUIREMENTS

SITE DESCRIPTION

PROJECT NAME AND LOCATION:
DEERING PARK CENTER TOWNHOMES
CITY OF EDGEWATER, FLORIDA

OWNER/DEVELOPER NAME AND ADDRESS:

DEERING PARK 1, LLC
14025 RIVEREDGE DRIVE, SUITE 175
TAMPA, FLORIDA 33637
770-203-9355

DESCRIPTION:

THIS PROJECT WILL CONSIST OF:

CONSTRUCTION OF A TOWNHOME DEVELOPMENT DEVELOPMENT. CONSTRUCTION WILL CONSIST OF INSTALLATION OF UNDERGROUND UTILITIES, CLEARING, GRADING, STORMWATER MANAGEMENT FACILITIES ROADWAYS, PARKING AREAS, AND. ASSOCIATED CONSTRUCTION.

SOIL DISTURBING ACTIVITIES WILL INCLUDE:
CLEARING AND GRUBBING; INSTALLING A STABILIZED CONSTRUCTION ENTRANCE, PERIMETER, AND OTHER EROSION AND SEDIMENT CONTROLS; GRADING; EXCAVATION FOR THE SEDIMENTATION POND, STORM SEWER, UTILITIES, AND BUILDING FOUNDATION; CONSTRUCTION OF CURB AND GUTTER, ROAD, AND PARKING AREAS; AND PREPARATION FOR FINAL PLANTING AND SEEDING.

GENERALIZED RUNOFF CURVE NUMBERS (REFER TO DRAINAGE CALCULATIONS FOR ACTUAL CURVE NUMBER FOR EACH BASIN)

1. PRE-CONSTRUCTION = 80±
2. DURING CONSTRUCTION = 92±
3. POST-CONSTRUCTION = 92±

SOILS:
* SEE ATTACHED FOR SOILS DATA

SITE MAPS:
* SEE ATTACHED DWG. No. 7A - 7F FOR POST DEVELOPMENT GRADES, AREAS OF SOILS, DISTURBANCE, LOCATION OF SURFACE WATERS, WETLANDS, PROTECTED AREAS, MAJOR STRUCTURAL AND NONSTRUCTURAL CONTROLS AND STORM WATER DISCHARGE POINTS.

* SEE ATTACHED DWG. No. 14 FOR LOCATION OF TEMPORARY STABILIZATION PRACTICES, AND TURBIDITY BARRIERS

SITE AREA:
1. TOTAL AREA OF SITE = 92.9 AC±
2. TOTAL AREA TO BE DISTURBED = 34.75 AC±

NAME OF RECEIVING WATERS: HEADWATERS OF TURNBULL HAMMOCK

CONTROLS

THIS PLAN UTILIZES BEST MANAGEMENT PRACTICES TO CONTROL EROSION AND TURBIDITY CAUSED BY STORM WATER RUN OFF. DWG. No. XX AND XX HAVE BEEN PREPARED TO INSTRUCT THE CONTRACTOR ON PLACEMENT OF THESE CONTROLS. IT IS THE CONTRACTORS RESPONSIBILITY TO INSTALL AND MAINTAIN THE CONTROLS AS PER PLAN AS WELL AS ENSURING THE PLAN IS PROVIDING THE PROPER PROTECTION AS REQUIRED BY FEDERAL, STATE AND LOCAL LAWS. REFER TO "CONTRACTORS REQUIREMENTS" FOR A VERBAL DESCRIPTION OF THE CONTROLS THAT MAY BE IMPLEMENTED.

AREAS WHICH ARE NOT DEVELOPED BUT WILL BE REGRADED SHALL BE STABILIZED IMMEDIATELY AFTER GRADING IS COMPLETE.

REFER TO " CONTRACTORS REQUIREMENTS" FOR THE TIMING OF CONTROL/MEASURES.

CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS

IN AN EFFORT TO ENSURE COMPLIANCE WITH FEDERAL, STATE AND LOCAL LAWS REGARDING EROSION AND TURBIDITY CONTROLS, THE FOLLOWING PERMITS HAVE BEEN OBTAINED.

D.E.P. DREDGE/FILL PERMIT #_____
C.O.E. DREDGE/FILL PERMIT #_____
S.J.R.W.M.D. M.S.S.W. PERMIT #_____

POLLUTION PREVENTION PLAN CERTIFICATION

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

SIGNED: _____

TITLE: _____
CORPORATE OFFICER, GENERAL PARTNER, PROPRIETOR, EXECUTIVE OFFICER, OR RANKING ELECTED OFFICIAL

DATE: _____

GENERAL

THE CONTRACTOR SHALL AT A MINIMUM IMPLEMENT THE CONTRACTOR'S REQUIREMENTS OUTLINED BELOW AND THOSE MEASURES SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN. IN ADDITION THE CONTRACTOR SHALL UNDERTAKE ADDITIONAL MEASURES REQUIRED TO BE IN COMPLIANCE WITH APPLICABLE PERMIT CONDITIONS AND STATE WATER QUALITY STANDARDS. DEPENDING ON THE NATURE OF MATERIALS AND METHODS OF CONSTRUCTION THE CONTRACTOR MAY BE REQUIRED TO ADD FLOCCULANTS TO THE RETENTION SYSTEM PRIOR TO PLACING THE SYSTEM INTO OPERATION.

SEQUENCE OF MAJOR ACTIVITIES:

THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE
2. INSTALL SILT FENCES AND COIR BALES AS REQUIRED
3. CLEAR AND GRUB FOR DIVERSION SWALES/DIKES AND SEDIMENT BASIN
4. CONSTRUCT SEDIMENTATION BASIN
5. CONTINUE CLEARING AND GRUBBING
6. STOCK PILE TOP SOIL IF REQUIRED
7. PERFORM PRELIMINARY GRADING ON SITE AS REQUIRED
8. STABILIZE DENUDED AREAS AND STOCKPILES AS SOON AS PRACTICABLE
9. INSTALL UTILITIES, STORM SEWER, CURBS & GUTTER.
10. APPLY BASE TO PARKING AREAS
11. COMPLETE GRADING AND INSTALL PERMANENT SEEDING/SOD AND PLANTING
12. COMPLETE FINAL PAVING
13. REMOVE ACCUMULATED SEDIMENT FROM BASINS
14. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE ANY TEMPORARY DIVERSION SWALES/DIKES AND RESEED/SOD AS REQUIRED

NOTE: VERTICAL CONSTRUCTION OF THE BUILDING WILL BE TAKING PLACE DURING ALL THE SEQUENCE STEPS LISTED ABOVE

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, THE SILT FENCES AND COIR BALES, STABILIZED CONSTRUCTION ENTRANCE AND SEDIMENT BASIN WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED PERMANENTLY IN ACCORDANCE WITH THE PLANS. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE SEDIMENT TRAPS AND THE EARTH DIKE/SWALES WILL BE REGRADED/REMOVED AND STABILIZED IN ACCORDANCE WITH THE SEDIMENT EROSION CONTROL PLAN (DRAWING NO. 14)

CONTROLS

IT IS THE CONTRACTORS RESPONSIBILITY TO IMPLEMENT THE EROSION AND TURBIDITY CONTROLS AS SHOWN ON THE SEDIMENT AND EROSION CONTROL PLAN. IT IS ALSO THE CONTRACTORS RESPONSIBILITY TO ENSURE THESE CONTROLS ARE PROPERLY INSTALLED , MAINTAINED AND FUNCTIONING PROPERLY TO PREVENT TURBID OR POLLUTED WATER FROM LEAVING THE PROJECT SITE. THE CONTRACTOR WILL ADJUST THE EROSION AND TURBIDITY CONTROLS SHOWN ON THE SEDIMENT AND EROSION CONTROL PLAN AND ADD ADDITIONAL CONTROL MEASURES, AS REQUIRED,TO ENSURE THE SITE MEETS ALL FEDERAL, STATE AND LOCAL EROSION AND TURBIDITY CONTROL REQUIREMENTS. THE FOLLOWING BEST MANAGEMENT PRACTICES WILL BE IMPLEMENTED BY THE CONTRACTOR AS REQUIRED BY THE EROSION AND SEDIMENT CONTROL PLAN AND AS REQUIRED TO MEET THE SEDIMENT AND TURBIDITY REQUIREMENTS IMPOSED ON THE PROJECT SITE BY THE REGULATORY AGENCIES.

EROSION AND SEDIMENT CONTROLS
STABILIZATION PRACTICES

1. COIR BALE BARRIER: COIR BALE BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:
   A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.
   B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES.
   C. WHERE EFFECTIVENESS IS REQUIRED FOR LESS THAN 3 MONTHS.
   D. EVERY EFFORT SHOULD BE MADE TO LIMIT THE USE OF COIR BALE BARRIERS CONSTRUCTED IN LIVE STREAMS OR IN SWALES WHERE THERE IS THE POSSIBILITY OF A WASHOUT. IF NECESSARY, MEASURES SHALL BE TAKEN TO PROPERLY ANCHOR BALES TO INSURE AGAINST WASHOUT.
2. FILTER FABRIC BARRIER: FILTER FABRIC BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:
   A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.
   B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES.
3. BRUSH BARRIER WITH FILTER FABRIC: BRUSH BARRIER MAY BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WHERE ENOUGH RESIDUE MATERIAL IS AVAILABLE ON SITE.
4. LEVEL SPREADER: A LEVEL SPREADER MAY BE USED WHERE SEDIMENT-FREE STORM RUNOFF IS INTERCEPTED AND DIVERTED AWAY FROM THE GRADED AREAS ONTO UNDISTURBED STABILIZED AREAS. THIS PRACTICE APPLIES ONLY IN THOSE SITUATIONS WHERE THE SPREADER CAN BE CONSTRUCTED ON UNDISTURBED SOIL AND THE AREA BELOW THE LEVEL LIP IS STABILIZED. THE WATER SHOULD NOT BE ALLOWED TO RECONCENTRATE AFTER RELEASE.
5. STOCKPILING MATERIAL: NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE INTO ANY ADJACENT WATER BODY OR STORM WATER COLLECTION FACILITY.
6. EXPOSED AREA LIMITATION: THE SURFACE AREA OF OPEN, RAW ERODIBLE SOIL EXPOSED BY CLEARING AND GRUBBING OPERATIONS OR EXCAVATION AND FILLING OPERATIONS SHALL NOT EXCEED 10 ACRES. THIS REQUIREMENT MAY BE WAIVED FOR LARGE PROJECTS WITH AN EROSION CONTROL PLAN WHICH DEMONSTRATES THAT OPENING OF ADDITIONAL AREAS WILL NOT SIGNIFICANTLY AFFECT OFF-SITE DEPOSIT OF SEDIMENTS.

CONTRACTOR'S REQUIREMENTS

7. INLET PROTECTION: INLETS AND CATCH BASINS WHICH DISCHARGE DIRECTLY OFF-SITE SHALL BE PROTECTED FROM SEDIMENT -LADEN STORM RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT TO THE INLET.

8. TEMPORARY SEEDING: AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE RE-EXCAVATED OR DRESSED AND RECEIVE FINAL GRASSING TREATMENT WITHIN 7 DAYS SHALL BE SEEDED WITH A QUICK GROWING GRASS SPECIES WHICH WILL PROVIDE AN EARLY COVER DURING THE SEASON IN WHICH IT IS PLANTED AND WILL NOT LATER COMPETE WITH THE PERMANENT GRASSING.

9. TEMPORARY SEEDING AND MULCHING: SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CATEGORY ESTABLISHED IN PARAGRAPH 8 ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF THE SEEDED AREA ADEQUATE TO PREVENT MOVEMENT OF SEED AND MULCH.

10. TEMPORARY GRASSING: THE SEEDED OR SEEDED AND MULCHED AREA(S) SHALL BE ROLLED AND WATERED OR HYDROMULCHED OR OTHER SUITABLE METHODS IF REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER.

11. TEMPORARY REGRASSING : IF, AFTER 14 DAYS FROM SEEDING, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM OF 75 PERCENT GOOD GRASS COVER, THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED SUFFICIENT TO ESTABLISH THE DESIRED VEGETATIVE COVER.

12. MAINTENANCE: ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.

13. PERMANENT EROSION CONTROL: THE EROSION CONTROL FACILITIES OF THE PROJECT SHOULD BE DESIGNED TO MINIMIZE THE IMPACT ON THE OFFSITE FACILITIES.

14. PERMANENT SEEDING: ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL, AS A MINIMUM, BE SEEDED. THE SEEDING MIX MUST PROVIDE BOTH LONG-TERM VEGETATION AND RAPID GROWTH SEASONAL VEGETATION. SLOPES STEEPER THAN 4:1 SHALL BE SEEDED AND MULCHED OR SODDED.

STRUCTURAL PRACTICES

1. TEMPORARY DIVERSION DIKE: TEMPORARY DIVERSION DIKES MAY BE USED TO DIVERT RUNOFF THROUGH A SEDIMENT-TRAPPING FACILITY.

2. TEMPORARY SEDIMENT TRAP: A SEDIMENT TRAP IS USUALLY INSTALLED IN AN DRAINAGEWAY AT A STORM DRAIN INLET OR AT OTHER POINTS OF DISCHARGE FROM A DISTURBED AREA WITH THE FOLLOWING LIMITATIONS:
   A. THE SEDIMENT TRAP MAY BE CONSTRUCTED EITHER INDEPENDENTLY OR IN CONJUNCTION WITH A TEMPORARY DIVERSION DIKE.

3. OUTLET PROTECTION: APPLICABLE TO THE OUTLETS OF ALL PIPES AND PAVED CHANNEL SECTIONS WHERE THE VELOCITY OF FLOW AT DESIGN CAPACITY OF THE OUTLET WILL EXCEED THE PERMISSIBLE VELOCITY OF THE RECEIVING CHANNEL OR AREA.

4. SEDIMENT BASIN: WILL BE CONSTRUCTED AT THE COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH 10 OR MORE DISTURBED ACRES AT ONE TIME, THE PROPOSED STORM WATER PONDS (OR TEMPORARY PONDS) WILL BE CONSTRUCTED FOR USE AS SEDIMENT BASINS. THESE SEDIMENT BASINS MUST PROVIDE A MINIMUM OF 3,600 CUBIC FEET OF STORAGE PER ACRE DRAINED UNTIL FINAL STABILIZATION OF THE SITE. THE 3,600 CUBIC FEET OF STORAGE AREA PER ACRE DRAINED DOES NOT APPLY TO FLOWS FROM OFFSITE AREAS AND FLOWS FROM ONSITE AREAS THAT ARE EITHER UNDISTURBED OR HAVE UNDERGONE FINAL STABILIZATION WHERE SUCH FLOWS ARE DIVERTED AROUND BOTH THE DISTURBED AREA AND THE SEDIMENT BASIN. ANY TEMPORARY SEDIMENT BASINS CONSTRUCTED MUST BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS FOR STRUCTURAL FILL. ALL SEDIMENT COLLECTED IN PERMANENT OR TEMPORARY SEDIMENT TRAPS MUST BE REMOVED UPON FINAL STABILIZATION.

OTHER CONTROLS

WASTE DISPOSAL

WASTE MATERIALS
ALL WASTE MATERIALS EXCEPT LAND CLEARING DEBRIS SHALL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. THE DUMPSTER WILL BE EMPTIED AS NEEDED AND THE TRASH WILL BE HAULED TO A STATE APPROVED LANDFILL. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES WILL BE POSTED AT THE CONSTRUCTION SITE BY THE CONSTRUCTION SUPERINTENDENT, THE INDIVIDUAL WHO MANAGES THE DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

HAZARDOUS WASTE
ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES AND THE SITE SUPERINTENDENT, THE INDIVIDUAL WHO MANAGES DAY-TO-DAY SITE OPERATIONS,WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.

SANITARY WASTE
ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS AS NEEDED TO PREVENT POSSIBLE SPILLAGE. THE WASTE WILL BE COLLECTED AND DISPOSED OF IN ACCORDANCE WITH STATE AND LOCAL WASTE DISPOSAL REGULATIONS FOR SANITARY SEWER OR SEPTIC SYSTEMS.

OFFSITE VEHICLE TRACKING
A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREET ADJACENT TO THE SITE ENTRANCE WILL BE SWEPT DAILY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARPAULIN.

INVENTORY FOR POLLUTION PREVENTION PLAN

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION:

Concrete	Fertilizers	Wood
Asphalt	Petroleum Based Products	Masonry Blocks
Tar	Cleaning Solvents	Roofing Materials
Detergents	Paints	Metal Studs

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES
THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

GOOD HOUSEKEEPING
THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION PROJECT.

* AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.
* ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
* PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
* SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
* WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
* MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
* THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE MATERIALS ONSITE RECEIVE PROPER USE AND DISPOSAL.

HAZARDOUS PRODUCTS
THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.
* PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
* ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION.
* IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

PRODUCT SPECIFIC PRACTICES
THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ONSITE:

PETROLEUM PRODUCTS
ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS
FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED AREA. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

PAINTS
ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE TRUCKS
CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.

SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED ON SITE AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.

MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL

INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, LIQUID ABSORBENT (i.e. KITTY LITTER OR EQUAL), SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.

ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

SPILL OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE OF THE SPILL.

THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.

THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE/SHE WILL DESIGNATE AT LEAST ONE OTHER SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IF APPLICABLE, IN THE OFFICE TRAILER ONSITE.

MAINTENANCE/INSPECTION PROCEDURES

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES

THE FOLLOWING ARE INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS.

* NO MORE THAN 10 ACRES OF THE SITE WILL BE DENUDED AT ONE TIME WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.
* ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY SITE OPERATION OR SOMEONE APPOINTED BY THE SUPERINTENDENT, AT LEAST ONCE A WEEK AND FOLLOWING ANY STORM EVENT OF 0.50 INCHES OR GREATER.
* ALL TURBIDITY CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.
* BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.
* SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.
* THE SEDIMENT BASINS WILL BE INSPECTED FOR THE DEPTH OF SEDIMENT, AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 10 PERCENT OF THE DESIGN CAPACITY OR AT THE END OF THE JOB.
* DIVERSION DIKES/SWALES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.
* TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.
* A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM SHALL BE COMPLETED BY THE INSPECTOR
  THE REPORTS WILL BE KEPT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER OR ANY FEDERAL, STATE OR LOCAL AGENCY APPROVING SEDIMENT AND AND EROSION PLANS, OR STORM WATER MANAGEMENT PLANS.
  THE REPORTS SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED AND THE NOTICE OF TERMINATION IS SUBMITTED. THE REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE.
* THE SITE SUPERINTENDENT WILL SELECT UP TO THREE INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.
* PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE. SUPERINTENDENT. THEY WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER.

NON-STORM WATER DISCHARGES

* IT IS EXPECTED THAT THE FOLLOWING NON-STORM WATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:
* WATER FROM WATER LINE FLUSHING
* PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).
* UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION).

ALL NON-STORM WATER DISCHARGES WILL BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE.

CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

DEWATERING

PRIOR TO ANY DISCHARGE OF GROUND WATER (DEWATERING) FROM CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT TO WATERS OF THE STATE (INCLUDING, BUT NOT LIMITED TO, WETLANDS, SWALES AND MUNICIPAL STORM SEWERS), THE CONTRACTOR SHALL TEST THE EFFLUENT (WATER TO BE DISCHARGED) IN ACCORDANCE WITH RULE 62-621.300(2), F.A.C. IF THE TEST RESULTS ON THE EFFLUENT ARE BELOW THE SCREENING VALUES OF RULE 62-621.300(2), F.A.C., THE CONTRACTOR SHALL SUBMIT A SUMMARY OF THE PROPOSED CONSTRUCTION ACTIVITY AND THE TEST RESULTS TO THE DEPARTMENT OF ENVIRONMENTAL PROTECTION DISTRICT OFFICE, WITHIN ONE (1) WEEK AFTER DISCHARGE BEGINS. THE CONTRACTOR SHALL CONTINUE TO SAMPLE THE EFFLUENT AS REQUIRED THROUGHOUT THE PROJECT AND COMPLY WITH ALL CONDITIONS OF RULE 62-621.300(2), F.A.C. IF THE GROUND WATER EXCEEDS THE SCREENING VALUES OF RULE 62-621.300(2), F.A.C., THE CONTRACTOR SHALL COMPLY WITH OTHER APPLICABLE RULES AND REGULATIONS PRIOR TO DISCHARGE OF THE EFFLUENT (GROUND WATER) TO SURFACE WATERS OF THE STATE.

SIGNATURE	BUSINESS NAME AND ADDRESS OF CONTRACTOR & ALL SUBS	RESPONSIBLE FOR/DUTIES
		GENERAL CONTRACTOR
		SUB-CONTRACTOR
		SUB-CONTRACTOR
		SUB-CONTRACTOR
		SUB-CONTRACTOR

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTOPHER WARSHAW
P.E. NUMBER: 86967

REVISIONS:

PLOTTED: August 8, 2025 - 5:45 PM, BY: Cheroky Williams

ETM NO. 22-213-39
DRAWN BY: KJJ
DESIGNED BY: CBW
CHECKED BY: CBW
DATE: 01.27.2025

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Orlando, Florida 32804
(407) 538-5379
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Trusted Advisors, Creating Community.

ETM | ENGLAND-THIMS & MILLER

STORMWATER POLLUTION PREVENTION PLAN

DEERING PARK CENTER TOWNHOMES FOR DEERING PARK 1, LLC

DRAWING NUMBER
16

n: \2022\22-213\22-213-09 Landdev\Design\Plots\SWPP-22-213-09.dwg

DEERING PARK CENTER TOWNHOMES

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM

THIS IS THE CONTRACTORS CERTIFICATION REQUIRED BY THE EPA'S NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES), STORM WATER POLLUTION PREVENTION PLAN FOR CONSTRUCTION SITES OVER 1.0 ACRES. THIS CERTIFICATION MUST BE COMPLETED WEEKLY AND AFTER EVERY RAINFALL EVENT OF 0.50 INCHES OR GREATER.

INSPECTOR: _____

INSPECTOR'S QUALIFICATIONS:

_____

_____

_____

_____

DAYS SINCE LAST RAINFALL: _____ AMOUNT OF LAST RAINFALL _____ INCHES

STABILIZATION MEASURES

INSPECTION AREA (DESCRIPTION OF LOCATION)	DATE SINCE LAST DISTURBED	DATE OF NEXT DISTURBANCE	STABILIZED ? (YES/NO)	STABILIZED WITH	CONDITION

STABILIZATION REQUIRED:

_____

_____

_____

_____

TO BE PERFORMED BY: _____ ON OR BEFORE _____

PAGE 1 OF 4

DEERING PARK CENTER TOWNHOMES

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM

STRUCTURAL CONTROLS

DATE: _____

EARTH DIKES/SWALES

DIKE OR SWALE	FROM	TO	IS DIKE/SWALE STABILIZED ?	IS THERE EVIDENCE OF WASHOUT OR OVERTOPPING

MAINTENANCE REQUIRED FOR EARTH DIKE/SWALE:

_____

_____

_____

_____

TO BE PERFORMED BY: _____ ON OR BEFORE _____

CATCH BASIN/CURB INLET/OUTFALL TURBIDITY CONTROLS

STRUCTURE/ OUTFALL	ARE TURBIDITY CONTROLS IN PLACE	ANY EVIDENCE OF CLOGGING/WASHOUT OR BYPASSING ?	ARE TURBIDITY CONTROLS IN NEED OF REPLACING	DOES SILT NEED TO BE REMOVED FROM AROUND CONTROL

MAINTENANCE REQUIRED FOR CATCH BASIN/CURB INLETS/OUTFALLS TURBIDITY CONTROLS:

_____

_____

_____

_____

TO BE PERFORMED BY: _____ ON OR BEFORE _____

PAGE 2 OF 4

DEERING PARK CENTER TOWNHOMES

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM

SEDIMENT BASIN

DEPTH OF SEDIMENT IN BASIN	DEPTH OF SEDIMENT SIDE BASIN	ANY EVIDENCE OF OVERTOPPING OF THE EMBANKMENT ?	CONDITION OF OUTFALL FROM SEDIMENT BASIN

MAINTENANCE REQUIRED FOR SEDIMENT BASIN:

_____

_____

_____

_____

TO BE PERFORMED BY: _____ ON OR BEFORE _____

OTHER CONTROLS

STABILIZED CONSTRUCTION ENTRANCE

DOES MUCH SEDIMENT GET TRACKED ON TO ROAD ?	IS THE GRAVEL CLEAN OR IS IT FILLED WITH SEDIMENT?	DOES ALL TRAFFIC USE THE STABILIZED ENTRANCE TO LEAVE THE SITE ?	IS THE CULVERT BENEATH THE ENTRANCE WORKING? (IF APPLICABLE)

MAINTENANCE REQUIRED FOR STABILIZED CONSTRUCTION ENTRANCE:

_____

_____

_____

_____

TO BE PERFORMED BY: _____ ON OR BEFORE _____

PAGE 3 OF 4

DEERING PARK CENTER TOWNHOMES

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM

CHANGES REQUIRED TO THE POLLUTION PREVENTION PLAN:

_____

_____

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_____

_____

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_____

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_____

REASONS FOR CHANGES:

_____

_____

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_____

_____

_____

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

SIGNATURE: _____

DATE: _____

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DRAWING NUMBER **17**

SWPP CONTRACTOR'S CERTIFICATION

DEERING PARK CENTER TOWNHOMES FOR DEERING PARK 1, LLC

ENGLAND-THIMS & MILLER

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ETM NO.	22-213-09
DRAWN BY:	KAJ
DESIGNED BY:	CBW
CHECKED BY:	CBW
DATE:	01.27.2025

REVISIONS:

PLANS PREPARED UNDER THE DIRECTION OF:

CHRISTOPHER WARSHAW
P.E. NUMBER: 80867