# Out Parcel Mass Grading Plans

City of Orlando, FL

THE NORTH 1/2 OF THE NORTHEAST 1/4 LESS THE SOUTH 30 FEET OF THE WEST 2519.04 FEET OF SECTION 30, TOWNSHIP 23 SOUTH, RANGE 29 EAST, ORANGE COUNTY, FLORIDA.

LESS AND EXCEPT THEREFROM, THAT PORTION OF INTERNATIONAL DRIVE EXTENSION AS DESCRIBED IN THAT CERTAIN WARRANTY DEED FROM THACKERAY CORPORATION TO THE CITY OF ORLANDO, IN WARRANTY DEED DATED AUGUST 30, 1983, RECORDED MARCH 12, 1985M IN OFFICIAL RECORDS BOOK 3616, PAGE 1420, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF SECTION 30, TOWNSHIP 23 SOUTH, RANGE 29 EAST, ORANGE COUNTY, FLORIDA; THENCE SOUTH 00°13'18" EAST ALONG THE EAST LINE OF SAID NORTHEAST 1/4, A DISTANCE OF 1308.14 FEET TO A POINT AT THE NORTHEAST CORNER OF BLOCK 6, TANGELO PARK SECTION FIVE AS RECORDED IN PLAT BOOK Y, PAGE 61, OF THE OFFICIAL RECORDS OF ORANGE COUNTY, FLORIDA; THENCE LEAVING THE EAST LINE OF SAID NORTHEAST 1/4, NORTH 89°42'06" WEST ALONG THE NORTHERLY LINE OF SAID BLOCK 6, A DISTANCE OF 135.05 FEET TO THE NORTHWEST CORNER OF SAID BLOCK 6, SAID POINT ALSO BEING ON THE EASTERLY RIGHT-OF-WAY LINE OF POMELO DRIVE AS RECORDED ON THE PLAT OF SAID TANGELO PARK SECTION FIVE; THENCE LEAVING THE NORTHERLY LINE OF SAID BLOCK 6, NORTH 00°07'50" WEST ALONG THE EASTERLY RIGHT-OF-WAY LINE OF SAID POMELO DRIVE A DISTANCE OF 30.00 FEET TO ITS INTERSECTION WITH THE NORTHERLY RIGHT-OF-WAY LINE OF VANGUARD STREET AS RECORDED ON THE PLAT OF SAID TANGELO PARK SECTION FIVE; THENCE LEAVING THE EASTERLY RIGHT-OF-WAY LINE OF SAID POMELO DRIVE, SOUTH 89°52'10" WEST ALONG THE NORTHERLY RIGHT-OF-WAY LINE OF VANGUARD STREET A DISTANCE OF 1344.60 FEET TO A POINT; THENCE CONTINUING ALONG THE NORTHERLY RIGHT-OF-WAY LINE OF SAID VANGUARD STREET, SOUTH 89°55'18" WEST A DISTANCE OF 1174.60 FEET TO A POINT ON THE WEST LINE OF THE NORTHEAST 1/4 OF SAID SECTION 30, SAID POINT ALSO BEING THE NORTHWEST CORNER OF SAID TANGELO PARK SECTION FIVE: THENCE LEAVING THE NORTHERLY LINE OF SAID VANGUARD STREET, NORTH 00°09'49" WEST ALONG THE WEST LINE OF SAID NORTHEAST 1/4, A DISTANCE OF 791.55 FEET TO ITS INTERSECTION WITH THE EASTERLY RIGHT-OF-WAY LINE ON INTERNATIONAL DRIVE AS RECORDED IN OFFICIAL RECORDS BOOK 3616, PAGE 1420, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA; THENCE LEAVING THE WEST LINE OF SAID NORTHEAST 1/4 ALONG A NON-TANGENT CURVE TO THE LEFT, ALSO BEING ALONG THE EASTERLY RIGHT-OF-WAY LINE OF SAID INTERNATIONAL DRIVE, AN ARC DISTANCE OF 279.31 FEET (SAID CURVE HAVING A RADIUS OF 662.53 FEET, A DELTA OF 24°09'16" AND A CHORD BEARING AND DISTANCE OF NORTH 11"54'49" EAST, 277.24 FEET) TO A POINT; THENCE CONTINUING ALONG THE EASTERLY RIGHT-OF-WAY LINE OF SAID INTERNATIONAL DRIVE, NORTH 00°05'18" WEST, A DISTANCE OF 160.84 FEET TO A POINT ON THE NORTH LINE OF SAID NORTHEAST 1/4; THENCE LEAVING THE EASTERLY RIGHT-OF-WAY LINE OF SAID INTERNATIONAL DRIVE, SOUTH 89°55'22" EAST, ALONG THE NORTHERLY LINE OF SAID NORTHEAST CORNER A DISTANCE OF 2594.93 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT THAT PORTION CONVEYED TO THE CITY OF ORLANDO BY THAT WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 10665, PAGE 606, OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

LESS AND EXCEPT THAT PORTION TO BE PROVIDED:

THE ABOVE DESCRIBED TRACT OF LAND CONTAINS 2,955,246 SQUARE FEET, OR 67.84 ACRES MORE

## Consultants

Civil Engineer: Poulos & Bennett, LLC 2602 E. Livingston St. Orlando, FL 32803

Surveyor: Allen & Company, Inc. 16 East Plant St. Winter Garden, FL 34787

407.487.2594

813.621.8168

407.654.5355 Geotechnical Engineer: Modica & Associates

302 Mohawk Rd. Clermont, FL 34715 352.394.2000

Landscape Architect: Michael Redd & Associates 2655 North Ocean Drive, Suite 400 Singer Island, FL 33404 561.863.2500

Faulkner Engineering Services, Inc. 2374 Causeway Drive Tampa, FL 33619

## Environmental:

Orlando Utilities Commission 100 W. Anderson St. Orlando, FL 32801 407.423.9018

Water:

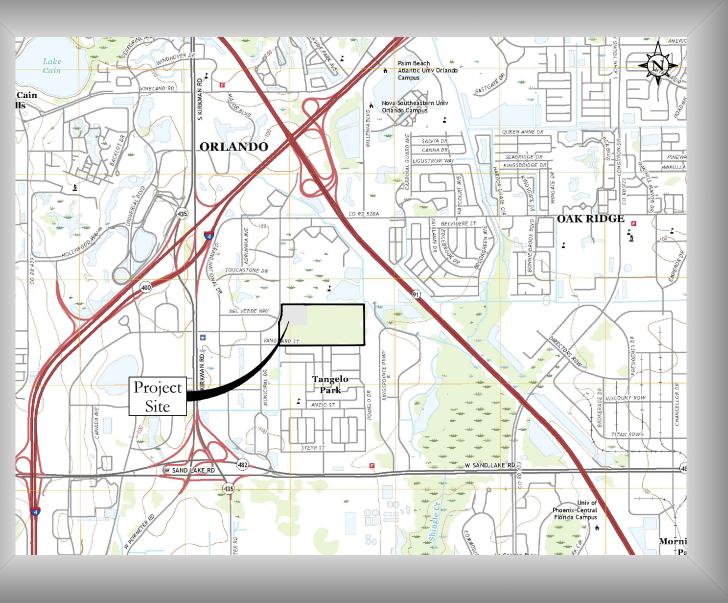
Wastewater: Orange County Utilities 9150 Curry Ford Rd. Orlando, FL 32825 407.836.5515

**Utility Providers** 

Parcel Id. No.: 30-23-29-0000-00-005

## Owner/Developer/Applicant:

Lennar Homes, LLC. 6750 Forum Dr., Suite 100 Orlando, FL



Vicinity Map Scale: 1'' = 3,000'

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C0.00	Cover Sheet							
C0.01	Construction Notes	•						
C0.10	Erosion Control Plan	•						
C1.00	Master Site Plan	•						
C3.00	Typical Road Sections & Details	•						
C4.00	Grading & Drainage Plan	•						
C4.05	Grading Sections & Details	-						
C4.10	CMP Culvert Details	•						
C6.00	Plan & Profile	•						
	Survey Reference Drawings							

Topography Survey

Description 3/29/2021 Submit to SFWMD

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This item has been electronically signed and sealed by Darin Alex Lockwood on the date adjacent to the seal using a SHA authentication code. Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.



2602 E. Livingston St., Orlando, FL 32803 Tel. 407.487.2594 www.poulosandbennett.com Eng. Bus. No. 28567 P&B Job No.: 19-060

CONSTRUCTION PLANS WERE PREPARED IN ACCORDANCE WITH THE LATEST MANUAL OF UNIFORM STANDARDS FOR DESIGN, CONSTRUCTION, AND MAINTENANCE FOR STREETS AND HIGHWAYS, FDOT GREEN BOOK, CITY OF ORLANDO, AND ORANGE COUNTY REGULATIONS AND SPECIFICATIONS.

- 1.1. WATER MANAGEMENT DISTRICT CONSUMPTIVE USE (WATER USE) FOR CONSTRUCTION DEWATERING (CUP) 1.2. WATER MANAGEMENT DISTRICT ENVIRONMENTAL RESOURCE PERMIT (ERP) OR LETTER MODIFICATION
- 1.3. FDEP WATER DISTRIBUTION
- 1.4. LOCAL RIGHT OF WAY USE 1.5. LOCAL UNDERGROUND UTILITIES
- 1.6. FDOT DRAINAGE CONNECTION OR EXCEPTION 1.7. FDEP & EPA NPDES STORMWATER
- 1.8. CITY OF ORLANDO 1.9. ORLANDO UTILITIES COMMISSIONERS 1.10. ORANGE COUNTY UTILITIES
- 2. CONTRACTOR IS ADVISED THAT THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REQUIRES THAT OPERATORS FILE A NOTICE OF INTENT (NOI) FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT PRIOR TO BEGINNING WORK. IT IS CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN SAME. A COPY SHALL BE SENT TO OWNER.
- 3. FLORIDA LAW (F.S. 553.851) PROTECTION OF UNDERGROUND PIPELINES MANDATES THAT "NO EXCAVATOR SHALL COMMENCE OR PERFORM ANY EXCAVATION IN ANY PUBLIC OR PRIVATE STREET, ALLEY, RIGHT-OF-WAY DEDICATED TO THE PUBLIC USE, OR GAS UTILITY EASEMENT WITHOUT FIRST OBTAINING INFORMATION CONCERNING THE POSSIBLE LOCATION OF GAS PIPELINES IN THE AREA OF THE PROPOSED EXCAVATION." THIS INCLUDES ANY OPERATION UTILIZING HAND TOOLS OR POWER TOOLS WHICH MOVES OR REMOVES ANY STRUCTURE, EARTH, ROCK, OR OTHER MASS OF MATERIAL BY SUCH METHODS AS DIGGING, BACKEILLING. DEMOLITION, GRADING, DITCHING, DRILLING, BORING AND CABLE PLOWING, THE EXCAVATOR MUST NOTIFY THE GAS UTILITY A MINIMUM OF 48 HOURS AND A MAXIMUM OF 5 DAYS PRIOR TO EXCAVATING (EXCLUDING SATURDAYS, SUNDAYS, AND LEGAL
- 4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROJECT SITE DURING CONSTRUCTION. TO PREVENT TRESPASSING OF LINALITHORIZED PEDESTRIANS AND/OR VEHICLES IN ALL WORK AREAS. THE CONTRACTOR SHALL POST SIGNS, CONSTRUCT BARRIERS OR IMPLEMENT OTHER METHODS NECESSARY TO CONTROL ACCESS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR TRESPASSING ON THE CONSTRUCTION SITE OR DAMAGES TO ANY WORK RELATED THERETO.
- 5. CONTRACTOR SHALL NOTIFY ALL APPROPRIATE UTILITY COMPANIES OF PROPOSED START OF WORK IN ACCORDANCE WITH THEIR STANDARD REQUIREMENTS; INCLUDING BUT NOT LIMITED TO WATER, SEWER, POWER, TELEPHONE, GAS AND CABLE TV
- 6. PRIOR TO COMMENCEMENT, CONTRACTOR SHALL PROVIDE POULOS & BENNETT WITH CONSTRUCTION SCHEDULE(S) FOR VARIOUS SITE WORK ELEMENTS SO THAT PERIODIC SITE VISITS MAY BE COORDINATED TO ENSURE TIMELY CERTIFICATION OF COMPLETION TO AGENCIES AND AVOID DELAYS IN ISSUANCE OF CERTIFICATES OF OCCUPANCY/COMPLETION.
- 7. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE LATEST STANDARDS OF ALL APPLICABLE AGENCIES.
- 8 ALL EXISTING UTILITIES HAVE BEEN FIELD VERIFIED AT ALL AREAS OF CONNECTION AND ALL AREAS OF CONFLICT AS SHOWN ON THE EXISTING CONDITIONS PLAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD RE-VERIFICATION OF SIZE AND LOCATION OF ALL EXISTING LITH THES AND RELATED CONSTRUCTION PRIOR TO COMMENCEMENT OF WORK SHOULD THE CONTRACTOR ORSERVE ANY DEVIATIONS FROM WHAT IS SHOWN ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF SAID PRIOR TO COMMENCEMENT OF WORK, ANY WORK THAT MUST BE REDONE DUE TO FAILURE OF CONTRACTOR TO NOTIFY THE ENGINEER OF DEVIATIONS PRIOR TO CONSTRUCTION WILL BE AT THE CONTRACTORS SOLE EXPENSE
- 9. ANY DIFFERING SITE CONDITION(S) FROM THAT WHICH IS REPRESENTED HEREON, WHETHER ABOVE, ON, OR BELOW THE SURFACE OF THE GROUND, SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER AND OWNER IN WRITING. NO CLAIM FOR EXPENSES INCURRED BY THE CONTRACTOR DUE TO DIFFERING SITE CONDITIONS WILL BE ALLOWED IF CONTRACTOR FAILS TO PROVIDE THE REQUIRED WRITTEN NOTIFICATION OF SUCH CONDITIONS FOR REVIEW BY THE ENGINEER AND OWNER.
- 10. CONTRACTOR SHALL PROTECT AREAS ADJACENT TO PROJECT AREA AND ALL ADJACENT PROPERTIES FROM DAMAGE BY SEDIMENTATION OR OTHER POTENTIAL CONSTRUCTION RELATED CAUSES.
- 11. ALL EXISTING UTILITIES AT POINTS OF CONNECTION AND CONFLICT SHOWN ON THE CONSTRUCTION PLANS HAVE BEEN FIELD VERIFIED BY THE SURVEYOR. PRIOR TO ANY CONSTRUCTION WITHIN RIGHTS-OF-WAY OR EASEMENTS KNOWN TO CONTAIN UNDERGROUND UTILITIES, THE CONTRACTOR SHALL RE-VERIFY LOCATIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER
- 12. THE CONTRACTOR SHALL INSTALL, AS PART OF THE INFRASTRUCTURE AND PRIOR TO CERTIFICATE OF COMPLETION, DROP CURBS AND/OR HANDICAP RAMPS AT ALL INTERSECTIONS OF SIDEWALK WITH THE PROPOSED PAVEMENT TO MEET STATE OF FLORIDA ACCESSIBILITY CODE AND FEDERAL A.D.A. SPECIFICATIONS.
- 13. CONTRACTOR IS RESPONSIBLE FOR OBTAINING FDEP GENERIC PERMIT FOR THE DISCHARGE OF PRODUCED GROUND WATER FROM ANY NON-CONTAMINATED SITE ACTIVITY IN ACCORDANCE OF FLORIDA ADMINISTRATIVE CODE 62-621.300 (2), 62-620, AND
- 14. DURING CONSTRUCTION, WHEN COMBUSTIBLES ARE BROUGHT ON TO THE SITE, ACCESS ROADS AND A SUITABLE TEMPORARY OR PERMANENT SUPPLY OF WATER ACCEPTABLE TO THE FIRE DEPARTMENT SHALL BE PROVIDED AND MAINTAINED IN ACCORDANCE WITH CHAPTER 16, NFPA 1 2009 EDITION (FFPC 2010 EDITION).
- 15. ALL RECOMMENDATIONS AND REQUIREMENTS OF INSPECTION PERSONNEL OTHER THAN OWNER'S REPRESENTATIVE(S) SHALL BE REPORTED TO ENGINEER/OWNER PRIOR TO IMPLEMENTATION. COMPENSATION WILL NOT BE ALLOWED FOR WORK WHICH IS NOT AUTHORIZED BY ENGINEER/OWNER.
- 16. ALL WORK SHALL BE OPEN TO AND SUBJECT TO INSPECTION BY AUTHORIZED PERSONNEL OF THE CITY, COUNTY, OWNER, INVOLVED UTILITY COMPANIES, PROJECT ENGINEER AND REGULATORY AGENCIES.
- 17. CONTRACTOR SHALL STAKE ALL IMPROVEMENTS USING THE ROAD CENTERLINE GEOMETRY AND BUILDING COORDINATES PROVIDED IN THESE PLANS. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO COMPLETELY STAKE AND CHECK ALL IMPROVEMENTS TO ENSURE ADEQUATE POSITIONING, BOTH HORIZONTAL AND VERTICAL, INCLUDING MINIMUM BUILDING SETBACKS PRIOR TO THE INSTALLATION OF ANY IMPROVEMENT.
- 18. NO EXISTING MATERIAL SHALL BE USED IN NEW CONSTRUCTION UNLESS APPROVED DURING THE SHOP DRAWING APPROVAL PROCESS. OR AS APPROVED IN WRITING BY THE ENGINEER.
- 19 ALL FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) DESIGN INDICES ARE HERERY INCORPORATED AS PLAN REFERENCES HEREIN. CONTRACTOR IS RESPONSIBLE FOR OBTAINING COMPLETE COPIES OF ALL APPLICABLE INDEX DRAWINGS AND CONSTRUCTING ALL WORKS IN CONFORMANCE WITH THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS, LATEST EDITION
- MARKING AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", LATEST EDITION.
- 21. ALL HANDICAPPED PARKING SPACES SHALL BE DESIGNATED BY APPROPRIATE PAVEMENT MARKINGS AND SIGN.
- 22. BLUE REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED OPPOSITE FIRE HYDRANTS IN THE CENTER OF THE NEAREST TRAVEL LANE TO MARK THEIR LOCATIONS.
- 23. REGULATORY SIGNS (STOP, ETC.) SHALL BE IN PLACE PRIOR TO FINAL INSPECTION OF PAVING IMPROVEMENTS.
- 24. ALL EXCESS FILL MATERIAL WILL BE HAULED OFFSITE.

## AS-BUILT NOTES:

- 1. THE CONTRACTOR SHALL SUBMIT A CERTIFIED SET OF RECORD DRAWINGS TO THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING INFORMATION ON THE APPROVED PLANS CONCURRENTLY WITH CONSTRUCTION PROGRESS. RECORD DRAWINGS SUBMITTED TO THE ENGINEER AS PART OF THE PROJECT ACCEPTANCE SHALL COMPLY WITH MUNICIPALITY REQUIREMENTS AND THE FOLLOWING REQUIREMENTS:
- A. THE VERTICAL AND HORIZONTAL DATUMS USED SHALL BE CLEARED STATED ON THE DRAWINGS.
- B. DRAWINGS SHALL BE LEGIBLY MARKED TO RECORD ACTUAL CONSTRUCTION.
- C. DRAWINGS SHALL SHOW ACTUAL LOCATION OF ALL UNDERGROUND AND ABOVE GROUND STORM DRAINAGE, POTABLE WATER AND WASTEWATER PIPING, AND RELATED APPURTENANCES. ALL CHANGES TO PIPING LOCATION INCLUDING HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES AND APPURTENANCES SHALL BE CLEARLY SHOWN AND REFERENCED TO PERMANENT SURFACE IMPROVEMENTS. DRAWINGS SHALL ALSO SHOW ACTUAL INSTALLED PIPE MATERIAL, CLASS, ETC.
- D. DRAWINGS SHALL CLEARLY INDICATE VERTICAL AND HORIZONTAL SEPARATION BETWEEN POTABLE WATER MAIN AND STORM DRAINAGE/SANITARY SEWER/RECLAIMED WATER MAINS AT POINTS OF CROSSING IN ACCORDANCE WITH THE MORE STRINGENT OF FDEP CRITERIA OR UTILITY PROVIDER REGULATIONS.
- E. DRAWINGS SHALL CLEARLY SHOW ALL DETAILS NOT ON ORIGINAL CONTRACT DRAWINGS, BUT CONSTRUCTED IN THE FIELD. ALL EQUIPMENT AND PIPING RELOCATION SHALL BE CLEARLY SHOWN.
- F. LOCATION OF ALL INLETS, MANHOLES, HYDRANTS, VALVES, AND VALVE BOXES SHALL BE SHOWN AND REFERENCED FROM AT LEAST TWO (PREFERABLY THREE) PERMANENT POINTS OR BY STATE PLANE COORDINATES.
- G. DIMENSIONS BETWEEN ALL INLETS AND MANHOLES SHALL BE FIELD VERIFIED AND THE INVERTS. AND GRADE ELEVATIONS OF ALL INLETS AND MANHOLES SHALL BE SHOWN.
- H. CONTRACTOR SHALL PROVIDE AS-BUILT SURVEY FOR POND GRADING. AS-BUILT POND CONTOURS SHALL BE PROVIDED AT TOP OF BANK, POND BOTTOM, AND ALL GRADE BREAKS AND ELEVATIONS SPECIFIED ON THE PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR RE-GRADING POND SLOPES THAT ARE STEEPER THAN REQUIRED PER PLAN TO A DEPTH OF 2 FT BELOW THE SEASONAL LOW WATER TABLE (SLWT).
- I. EACH SHEET OF THE PLANS SHALL BE SIGNED, SEALED AND DATED BY REGISTERED SURVEYOR WITH A NOTE READING "THESE AS-BUILT DRAWINGS ACCURATELY DEPICT THE ACTUAL IMPROVEMENTS AS CONSTRUCTED"
- J. WHERE THE POTABLE WATER MAIN CROSSES OTHER UTILITIES (STORM, GRAVITY SEWER, FORCEMAIN AND RECLAIMED WATER), THE CERTIFIED AS-BUILT DRAWINGS SHALL CLEARLY INDICATE THE CONSTRUCTED ELEVATIONS, ALONG WITH PHOTOGRAPHS OF EACH CROSSING. IN SUCH A WAY THAT THE VERTICAL SEPARATION BETWEEN THE WATER MAIN AND OTHER UTILITIES MAY BE VERIFIED BY THE ENGINEER. FAILURE TO PROVIDE THIS INFORMATION WILL RESULT IN THE CONTRACTOR EXCAVATING AND SURVEYING THE UTILITIES AT NO ADDITIONAL COST TO THE OWNER.
- K. WHERE THE POTABLE WATER MAIN CROSSES OTHER UTILITIES (STORM, GRAVITY SEWER, FORCEMAIN AND RECLAIMED WATER). THE CERTIFIED AS-BUILT DRAWINGS SHALL CLEARLY INDICATE THE LOCATIONS OF PIPE JOINTS IN SUCH A MANNER AS TO DEMONSTRATE THE PIPE IS CENTERED AT ALL THE CROSSING. FAILURE TO PROVIDE THIS INFORMATION WILL RESULT IN THE CONTRACTOR EXCAVATING AND SURVEYING THE UTILITIES AT NO ADDITIONAL COST TO THE OWNER.
- L. WHERE UPGRADED PIPE MATERIALS ARE SHOWN IN THE PLANS OR ARE DIRECTED IN THE FIELD BY THE ENGINEER, IN LIEU OF ROVIDING THE VERTICAL SEPARATIONS REQUIRED BY FDEP, THE LENGTH, LOCATIONS, FITTINGS, ETC. FOR UPGRADED PIPE SHALL BE SHOWN ON THE (AS-BUILT DRAWINGS) (RECORD DRAWINGS OR PHOTOS).
- 2. CERTIFIED AS-BULT DRAWINGS SHALL BE PROVIDED TO THE ENGINEER PRIOR TO BACTERIOLOGICAL TESTING. FAILURE TO PROVIDE ACCURATE DRAWINGS MAY RESULT IN EXPIRED TEST RESULTS AND REQUIRE ADDITIONAL TESTING AT THE CONTRACTOR'S EXPENSE.

- 3. IN THE CITY OF ORLANDO, COMPLETE AS-BUILTS AND ASSET TABLES SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW AND APPROVAL, AS-BUILTS SHALL BE PREPARED IN ACCORDANCE WITH CHAPTER 5 OF THE ENGINEERING STANDARDS MANUAL (5TH EDITION) AND PROVIDE GPS COORDINATES FOR SANITARY STRUCTURES. PAY APPLICATIONS REQUESTING PAYMENT REYOND 80% OF CONTRACT AMOUNT. PER SYSTEM, MAY BE HELD AT THE DISCRETION OF THE OWNER UNTIL THE AS-BUILTS AND ASSET TABLES ARE DEEMED COMPLETE BY THE ENGINEER.
- 4. AS-BUILT DRAWINGS SHALL BE PREPARED IN ACCORDANCE WITH POULOS & BENNETT CAD STANDARDS.
- 5. POTABLE WATER CROSSINGS POULOS & BENNETT REQUIRES THAT AT LEAST TEN PERCENT (10%) OF THE POTABLE WATER CROSSINGS AND INSTALLATIONS, REFERENCE IN PARAGRAPH 1.J. ABOVE, BE FIELD VERIFIED BY POULOS & BENNETT STAFF. THE 10% TO BE FIELD VERIFIED WILL BE IDENTIFIED BY POULOS & BENNETT PRIOR TO CONSTRUCTION AND PROVIDED TO THE SITE
- 6. CONTRACTOR SHALL PROVIDE A RECORDING OF THE VIDEO INSPECTION OF THE PRIVATE GRAVITY SEWER SYSTEM ON DVD TO THE CITY OF ORLANDO WASTEWATER DIVISION FOR REVIEW PRIOR TO FINAL ACCEPTANCE.

- 1. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND DISPOSING ALL WASTE MATERIALS CONSISTENT WITH ALL RULES AND REGULATIONS APPLICABLE TO THE SPECIFIC MATERIAL FOUND
- 2 ANY MATERIALS CLAIMED AS SALVAGE BY OWNER FITHER IN THE FIELD OR IN THE DRAWINGS SHALL BE STOCKPILED FOR OWNER'S
- 3. CONTRACTOR SHALL BE KNOWLEDGEABLE OF THE CONSTRUCTION DOCUMENTS AND BE RESPONSIBLE FOR PROTECTING ANY EXISTING FACILITY SO DESIGNATED OR DESIGNATED TO BE UTILIZED IN THE WORK
- 4. CONTRACTOR SHALL REMOVE ALL FOUNDATIONS, CONCRETE SLABS AND UNDERGROUND STRUCTURES, EXISTING ON THE SITE AT
- 5. CONTRACTOR SHALL COORDINATE WITH APPLICABLE UTILITY COMPANIES AND BE RESPONSIBLE FOR THE TERMINATION CAPPING-OFF AND REMOVAL OF ALL UNDERGROUND AND ABOVE-GROUND UTILITY SERVICES EXISTING AT THE TIME OF BIDDING UNLESS DIRECTED TO BID OTHERWISE.

### **EARTHWORK NOTES**

- 1. GEOTECHNICAL SERVICES HAVE BEEN PROVIDED AS REFERENCED BELOW. GEOTECHNICAL RECOMMENDATIONS ARE NOT THE RESPONSIBILITY OF POULOS & BENNETT. POULOS & BENNETT HAS RELIED ON THE BELOW REFERENCED GEOTECHNICAL REPORT(S) IN PREPARATION OF THE DRAWINGS. ANY CONFLICT BETWEEN INFORMATION WITHIN THE REPORT AND THESE DRAWINGS SHALL BE REPORTED TO ENGINEER/OWNER. POULOS & BENNETT ASSUMES NO RESPONSIBILITY FOR THE CORRECTNESS, COMPLETENESS OR ACCURACY OF GEOTECHNICAL INFORMATION.
- 2. GEOTECHNICAL ENGINEER: FAULKNER ENGINEERING SERVICES, INC.

THE TIME OF BIDDING UNLESS OTHERWISE DIRECTED.

- REPORT NO(S).: 19-4296 DATE: 7/11/10, REVISED 6/26/20
- 3. EARTHWORK TO BE DONE IN ACCORDANCE WITH THE ABOVE REFERENCED GEOTECHNICAL ENGINEERING EVALUATION REPORT.
- 1 CONTRACTOR SHALL INSTRUCT THE GEOTECHNICAL TESTING LABORATORY PROVIDING CONSTRUCTION TESTING TO PROVIDE POULOS & BENNETT WITH COPIES OF ALL SITE-WORK TEST REPORTS AS THEY ARE GENERATED. CONTRACTOR SHALL MAINTAIN THE RESPONSIBILITY OF CONSTRUCTING THE PROJECT IN STRICT ACCORDANCE WITH THE PROJECT PLANS. SPECIFICATIONS AND REQUIREMENTS, RECEIPT OF COPIES OF GEOTECHNICAL REPORTS BY POULOS & BENNETT IN NO WAY OBLIGATES POULOS & RENNETT TO ANY REVIEW COMMENTS OR ACTIONS REGARDING THE WORK
- 2. ALL SIGNAGE. PAVEMENT MARKING AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH FDOT "DESIGN STANDARDS" AND FEDERAL HIGHWAY ADMINISTRATION (FHA) "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES": LATEST EDITIONS.
- 3. REGULATORY SIGNS (STOP. ETC.) SHALL BE IN PLACE PRIOR TO FINAL INSPECTION OF PAVING AND DRAINAGE IMPROVEMENTS
- 4. CONTRACTOR SHALL NOT COMPACT, STABILIZE, OR CONSTRUCT BASE COURSE WITHIN LANDSCAPE ISLANDS, TRACTS OR MEDIANS. WHERE SUCH TREATMENT DOES OCCUR, IT SHALL BE REMOVED AND REPLACED WITH SUITABLE PLANTING SOILS ACCEPTABLE TO
- 5. SITE GRADING, PAVING AND DRAINAGE MATERIALS, AND CONSTRUCTION ACTIVITIES SHALL CONFORM TO FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND TO CITY OF ORLANDO ESM STANDARD SPECIFICATIONS; LATEST
- 6. MINIMUM LONGITUDINAL SLOPE OF CURB SHALL BE 0.24%.
- 7. CONTRACTOR IS RESPONSIBLE FOR GRADING ALL PAVEMENTS TO DRAIN POSITIVELY. INTERSECTIONS SHALL BE TRANSITIONED TO PROVIDE A SMOOTH DRIVING SURFACE WHILE MAINTAINING POSITIVE DRAINAGE. SHOULD AREAS OF POOR DRAINAGE BE OBSERVED, CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO PLACEMENT OF CURBS OR PAVEMENT COURSES, SO THAT RECOMMENDATIONS FOR CORRECTION MAY BE MADE.
- 8. PAVEMENT GRADES OVER HANDICAPPED PARKING SPACES SHALL NOT EXCEED 2% IN ANY DIRECTION EXCEPT AT RAMPS. (NOTE: RAMP LENGTHS MAY EXCEED 6 FEET.)
- 9. PROPOSED AND EXISTING SIDEWALKS SHALL BE RAMPED FLUSH WITH PAVEMENT. RAMPS SHALL NOT EXCEED SLOPES OF 12 HORIZONTAL TO 1 VERTICAL. (NOTE: RAMP LENGTHS REQUIRED MAY EXCEED 6 FT.)
- 10. SIDEWALK RAMPS SHALL INCLUDE DETECTABLE WARNINGS THAT ARE TEXTURED IN CONFORMANCE WITH FDOT STANDARD EXCEPT WHERE LOCAL CODES DICTATE OTHERWISE. CONTRACTOR SHALL COORDINATE WITH LOCAL AUTHORITY FOR PRE-POUR INSPECTION PRIOR TO ANY SIDEWALK AND/OR RAMP CONCRETE POURS. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO ENSURE THAT ALL RAMP TEXTURED SURFACES AND SIDEWALK LONGITUDINAL AND CROSS SLOPES ARE IN CONFORMANCE WITH LOCAL, STATE, AND FEDERAL A.D.A. AND FAIR HOUSING ACT STANDARDS.
- 11. ALL DISTURBED FDOT, CITY AND COUNTY RIGHTS OF WAY SHALL BE RESTORED TO EXISTING OR BETTER CONDITION. SOD SHALL BE PLACED FROM EDGE OF PAVEMENT TO THE TOE OF BANK AND ALL AREAS SHALL MATCH OR EXCEED PRE-CONSTRUCTION
- 12. ALL OFF-SITE DISTURBED AREAS SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITION. OR BETTER
- 13. ENGINEER RESERVES THE RIGHT TO WITHHOLD AUTHORIZATION FOR PAYMENT FOR ANY ROADWORK WHICH HAS NOT BEEN

## **HAUL ROUTE NOTES:**

- 1. CONTRACTOR SHALL PREPARE AND SUBMIT A HAUL ROUTE PLAN TO THE CITY OF ORLANDO CHIEF ENGINEERING INSPECTOR FOR APPROVAL PRIOR TO BEGINNING FILL OPERATIONS 1.1. CHIEF ENGINEERING INSPECTOR:
- MS. OLIVIA BOYKIN (407) 246-3223
- 2. THE HAUL ROUTE PLAN MUST BE PREPARED IN ACCORDANCE WITH THE LATEST STANDARDS OF THE CITY OF ORLANDO AND ALL OTHER APPLICABLE AGENCIES

## RECLAIMED WATER NOTES

1. ALL RECLAIMED WATER PIPES SHALL BE INSTALLED USING WATER PIPE CRITERIA. MAINS SHALL BE CLASS 52 DIP IF 24"-30" OF COVER IS PROVIDED AND CLASS 51 IF 30"-36" COVER IS PROVIDED.

2. PROVIDE 6" MINIMUM SEPARATION BETWEEN RECLAIMED WATER AND STORM PIPES AND A MINIMUM OF 3' OF COVER OVER THE RECLAIMED WATER MAIN. RECLAIMED WATER WHEN LESS THAN 3' OF COVER IS ACHIEVED SHALL BE D.I.P. (COVER LESS THAN 3' IS ONLY ALLOWED AT SPECIFIC CROSSINGS APPROVED BY O.C.U.) PROVIDE MECHANICAL JOINTS AND FITTINGS AS NECESSARY FOR THE VERTICAL TRANSITIONS.

3 EXCEPT FOR PVC PIPE MAXIMUM DEFLECTIONS AT PIPE IOINTS FITTINGS AND LAYING RADIUS FOR THE VARIOUS PIPE LENGTHS SHALL NOT EXCEED 75% OF THE PIPE MANUFACTURER'S RECOMMENDATION. A MINIMUM VERTICAL CLEARANCE OF 18" SHALL BE MAINTAINED. WHERE 18" CLEARANCE IS NOT POSSIBLE, WATER AND RECLAIMED WATER WILL BE UPGRADED TO D.I.P.

4. MARK LATERALS WITH 6' HIGH PIECE OF 2" X 4" PLANK PAINTED PURPLE, AND AN R IMPRESSED IN THE CURB.

5. CASINGS WILL BE PROVIDED FOR SERVICES LOCATED UNDER LANDSCAPE MEDIAN

6. ALL PVC RECLAIMED WATER PIPE SHALL BE AS SPECIFIED IN THE CONTRACT DOCUMENTS, MARKED WITH THE SEAL OF APPROVAL OF THE NATIONAL SANITATION FOUNDATION (NSF) AND BE PURPLE IN COLOR.

7. ALL DUCTILE IRON RECLAIMED WATER MAINS SHALL BE MARKED WITH A CONTINUOUS STRIPE LOCATED WITHIN THE TOP 90 DEGREES OF THE PIPE. SAID STRIPE SHALL BE A MINIMUM 2 INCHES IN WIDTH AND SHALL BE PURPLE IN COLOR. BACKFILL SHALL NOT BE PLACED FOR 30 MINUTES FOLLOWING PAINT APPLICATION.

8. ALL NON-METALLIC RECLAIMED WATER MAINS SHALL BE INSTALLED WITH A CONTINUOUS. INSULATED 10 GAUGE COPPER WIRE INSTALLED DIRECTLY ON TOP OF THE PIPE FOR LOCATION PURPOSES. SEE STANDARD DRAWINGS, IN ADDITION, ALL PVC RECLAIMED. WATER MAINS SHALL BE SOLID. PANTONE PURPLE COLOR.

9. HYDROSTATIC TESTING OF THE RECLAIMED WATER DISTRIBUTION SYSTEM SHALL BE DONE IN ACCORDANCE WITH THE AWWA STANDARDS. HYDROSTATIC TESTING TO BE DONE IN ACCORDANCE WITH AWWA C-600 FOR DUCTILE IRON PIPE AND M23 FOR PVC PIPE. DISINFECTING TO BE DONE IN ACCORDANCE WITH AWWA C-651.

## POTABLE WATER NOTES:

- 1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN COMPLIANCE WITH AWWA STANDARDS AND IN ACCORDANCE WITH ORLANDO UTILITIES COMMISSION REGULATIONS.
- 2. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES BETWEEN FITTINGS OF BRANCHES AND MAINS
- 3. DEFLECTIONS AT PIPE JOINTS SHALL NOT EXCEED THOSE RECOMMENDED BY THE PIPE MANUFACTURER.

4. ALL GATE VALVES SHALL BE EQUIPPED WITH AN ADJUSTABLE CAST IRON VALVE BOX WITH COVER, WITH THREADED CAST BRONZE EXTENSIONS

5. ALL PUBLIC WATER SYSTEM COMPONENTS, EXCLUDING FIRE HYDRANTS, THAT WILL BE INSTALLED UNDER THIS PROJECT AND THAT WILL COME INTO CONTACT WITH DRINKING WATER WILL U CONFORM TO NSF INTERNATIONAL STANDARD 61 AND WILL BE MARKED WITH THE NSF SEAL OF

6. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT SHALL BE COLOR CODED IN ACCORDANCE WITH SUB PARAGRAPH 62-555.320(21)(B)3, F.A.C. USING BLUE AS A PREDOMINANT COLOR. ALL DUCTILE IRON WATER MAINS SHALL BE MARKED WITH A CONTINUOUS STRIPE LOCATED WITHIN THE TOP 90 DEGREES OF THE PIPE. SAID STRIPE SHALL BE A MINIMUM 2 INCHES IN WIDTH AND SHALL BE BLUE IN COLOR BACKFILL SHALL NOT BE PLACED FOR 30 MINUTES FOLLOWING PAINT APPLICATION. FOR PIPE WITH AN INTERNAL DIAMETER OF 24" OR GREATER, TAPE OR PAINT SHALL BE APPLIED IN CONTINUOUS LINES A LONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE.

7. ALL NON-METALLIC WATER MAINS SHALL BE INSTALLED WITH A CONTINUOUS, INSULATED 10 GAUGE COPPER WIRE INSTALLED DIRECTLY ON TOP OF THE PIPE FOR LOCATION PURPOSES. SEE STANDARD DRAWINGS. IN ADDITION, ALL PVC WATER MAINS SHALL BE A SOLID BLUE COLOR. AL LETTERING SHALL APPEAR LEGIBLY ON PIPE AND SHALL RUN THE ENTIRE LENGTH OF THE PIPE. LETTERING SHALL READ AS IS ACCEPTABLE FOR THE

8. HYDROSTATIC TESTING AND THE DISINFECTION OF THE WATER DISTRIBUTION SYSTEM SHALL BE DONE IN ACCORDANCE WITH THE AWWA STANDARDS. HYDROSTATIC TESTING TO BE DONE IN ACCORDANCE WITH AWWA C-600 FOR DUCTILE IRON PIPE AND C-605 FOR PVC PIPE. DISINFECTING AND BACTERIOLOGICAL EVALUATION TO BE DONE IN ACCORDANCE WITH AWWA C-651 AND RULE 62-555.340 F.A.C.

IT IS THE INTENT THAT EVERY LOT IS CONSISTENT WITH A WATER SERVICE; THEREFORE IT IS THE CONTRACTORS RESPONSIBILITY TO INSTALL A C - ALL PIPE, PIPE FITTINGS, PIPE JOINT PACKING AND JOINTING MATERIALS, VALVES, FIRE HYDRANTS, AND METERS INSTALLED UNDER THIS

PROJECT SHALL CONFORM TO APPLICABLE AWWA STANDARDS AND SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C900,

LATEST EDITION. PVC SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C900. THE PVC SHALL HAVE A MINIMUM WORKING

9. MARK SERVICES WITH 6' HIGH PIECE OF 2" X 4" PLANK PAINTED BLUE WITH LOT NUMBER CLEARLY MARKED AND A 'W' IMPRESSED IN THE CURB.

- PRESSURE OF 150 P.S.I. AND SHALL HAVE A DIMENSION RATIO (DR) OF 18. PIPE SHALL BE THE SAME O.D. AS DUCTILE IRON PIPE. PVC JOINT - SHALL BE IN ACCORDANCE WITH ASTM D3139.
- <u>DUCTILE\_IRON</u> SHALL CONFORM TO ANSI/AWWA C150/C151. A MINIMUM OF CLASS 50 PIPE SHALL BE SUPPLIED.
- <u>DUCTILE IRON JOINT</u> SHALL BE IN ACCORDANCE WITH ANSI A21.11 AND AWWA C111.
- SERVICES SHALL BE IN ACCORDANCE WITH AWWA C901/C800 STANDARDS FOR POLYETHYLENE TUBING, CLASS 160.

11. WATER MAIN CONNECTION SHALL BE MADE UNDER THE SUPERVISION OF ORLANDO UTILITIES COMMISSION. ALL VALVES SHALL BE OPERATED BY ORLANDO UTILITIES COMMISSION PERSONNEL ONLY. WATERMAINS ARE TO BE DISINFECTED PER ANSI/AWWA C651-92 AND ORLANDO UTILITIES COMMISSION REGULATIONS.

12. VERTICAL SEPARATION BETWEEN UNDERGROUND POTABLE WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECIAIMED WATER PIPELINES:

A. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE. B. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE C. AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT

SUCH CROSSING. THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE

SANITARY SEWERS. STORM SEWERS. STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF

MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. 13. HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER

CHAPTER 62-610. F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY-OR PRESSURE-TYPE SANITARY SEWERS. WASTEWATER FORCE

A. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610. F.A.C. B. NEW OR RELOCATED. UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET. AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY

C. NEW OR RELOCATED. UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET. AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER. D. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.

14. A MINIMUM OF 3 FEET OF COVER SHALL BE MAINTAINED OVER WATERMAINS, UNLESS OTHERWISE NOTED.

FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS:

15. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT SHALL CONTAIN NO MORE 8.0% LEAD, AND ANY SOLDER OR FLUX USED IN THIS PROJECT SHALL CONTAIN NO MORE THAN 0.2% LEAD

16. NEW OR ALTERED DEAD-END WATER MAINS INCLUDED IN THIS PROJECT SHALL BE PROVIDED WITH A FIRE OR FLUSHING HYDRANT OR BLOW-OFF FOR FLUSHING PURPOSES.

18. IF AGGRESSIVE SOIL CONDITIONS ARE FOUND DURING CONSTRUCTION, WATER MAINS SHALL BE PROTECTED THROUGH THE USE OF CORROSION RESISTANT MATERIALS, THROUGH ENCASEMENT OF THE WATER MAINS IN POLYETHYLENE, OR THROUGH PROVISION OF CATHODIC

19. A CONTINUOUS AND UNIFORM BEDDING WILL BE PROVIDED IN TRENCHES FOR UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT; BACKELL MATERIAL WILL BE TAMPED IN LAYERS AROUND UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT AND TO A SUFFICIENT HEIGHT. ABOVE THE PIPE TO ADEQUATELY SUPPORT AND PROTECT THE PIPE: AND UNSUITABLY SIZED STONES (AS DESCRIBED IN APPLICABLE AWWA STANDARDS OR MANUFACTURERS' RECOMMENDED INSTALLATION PROCEDURES) FOUND IN TRENCHES WILL BE REMOVED FOR A DEPTH OF A LEAST SIX INCHES BELOW THE BOTTOM OF UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT

## SURVEY AND GEOMETRY:

1. BOUNDARY, TOPOGRAPHY, AND CONTOURS BASED ON THE FOLLOWING:

SURVEYOR: ALLAN & COMPANY 16 FAST PLANT STREET WINTER GARDEN, FL 34787 (407) 654-5355

2. FOR BENCHMARKS CONTACT ALLAN & COMPANY SURVEYING AND MAPPING. 16 EAST PLANT STREET OWINTER GARDEN, FL 34787. (407)

3. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SURVEY MONUMENTATION. DISTURBED MONUMENTATION SHALL BE RESTORED BY A FLORIDA-LICENSED LAND SURVEYOR SELECTED BY THE OWNER AT THE CONTRACTOR'S EXPENSE

## FIRE HYDRANT NOTES

HYDRANTS FOLLOWING 500 - 999 GPM: ORANGE

HYDRANTS FOLLOWING 499 GPM OR LESS: RED.

- 1. FIRE HYDRANT COLOR CODING SHALL BE IN ACCORDANCE WITH THE CITY OF ORLANDO ENGINEERING STANDARD MANUAL (ESM) AND NFPA 291
- 2. THE BARREL OF A PUBLIC HYDRANT SHALL BE SILVER, AND THE BARREL OF A PRIVATE HYDRANT SHALL BE CHROME YELLOW.

3. THE TOP AND CAPS OF THE HYDRANTS SHALL BE PAINTED ACCORDING TO THE AVAILABLE FIRE FLOW AS FOLLOWS: HYDRANTS FOLLOWING 1500 GPM OR GREATER: LIGHT BLUE. HYDRANTS FOLLOWING 1000 - 1499 GPM: GREEN.

4. HYDRANTS WILL BE REPAINTED AS NECESSARY TO READILY IDENTIFY THE GPM FLOW CODING COLOR.

5. FLOW AND COLOR WILL BE BASED ON ACTUAL FLOW TEST WITNESSED BY THE FIRE INSPECTOR. 6. THE ABOVE COLORS APPLY TO THE HYDRANTS BARREL ONLY. THE BONNET COLORS ARE TO BE IN ACCORDANCE WITH NFPA REQUIREMENTS BASED ON THE FOLLOWING HYDRANT GPM FLOW CAPABILITIES, (1) 155 OR GREATER, LIGHT BLUE, (2) 1000-1499, GREEN, (3) 500-999. ORANGE. (4) LESS THAN 500. RED.

### SANITARY SEWER NOTES:

8. LEAKAGE TESTS ARE SPECIFIED REQUIRING THAT:

1. ALL MATERIALS AND CONSTRUCTION SHALL BE IN COMPLIANCE WITH ORANGE COUNTY MANUAL OF STANDARD SPECIFICATIONS FOR WASTEWATER AND WATERMAIN CONSTRUCTION.

2. ALL MANHOLES SHALL HAVE A MINIMUM DIAMETER OF 48 INCHES AND A MINIMUM ACCESS DIAMETER OF 22 INCHES.

3. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES BETWEEN MANHOLE CENTERLINE.

4. ALL SANITARY SERVICE LATERALS SHALL BE 6 INCH DIAMETER PVC. LATERALS SHALL END WITH A CLEAN OUT AT RIGHT-OF-WAY LINE.

5. INVERTS OF SANITARY SERVICE LATERALS AT THEIR CONNECTION TO SANITARY MANHOLES SHALL BE NO MORE THAN ONE (1) FOOT ABOVE THE MANHOLE

6. PRIOR TO PAVING, CONTRACTOR SHALL VERIFY THE AS-BUILT SANITARY SEWER PIPE SLOPES. MINIMUM AS BUILT FOR 8" PVC SEWER LINE SLOPE WILL BE 0.32%. ANY LINE NOT MEETING MINIMUM SLOPE WILL BE RELAID BY CONTRACTOR TO MEET THE MINIMUM SLOPE REQUIREMENT AT NO ADDITIONAL COST.

7. MARK LATERALS WITH 6' HIGH PIECE OF 2" X 4" PLANK PAINTED ORANGE W/ LOT NUMBER CLEARLY MARKED AND A 'S' IMPRESSED IN THE CURB.

A) THE LEAKAGE EXFILTRATION OR INFILTRATION DOES NOT EXCEED 200 GALLONS PER INCH OF PIPE DIAMTETER PER MILE PER DAY FOR ANY SECTION OF

B) EXFILTRATION OR INFILTRATION TESTS BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET.

C) AIR TESTS, AS A MINIMUM, CONFORM TO THE TEST PROCEDURE DESCRIBED IN ASTM C-828 FOR CLAY PIPE, ASTM C924 FOR CONCRETE PIPE, ASTM F-1417 FOR PLASTIC PIPE, AND FOR OTHER MATERIALS APPROPRIATE TEST PROCEDURES. AIR TESTING, IF SPECIFIED FOR CONCRETE SEWER MANHOLES, CONFORMS TO THE TEST PROCEDURES DESCRIBED IN ASTM C-1244.

- 1) MANHOLE LIFT HOLES AND GRADE ADJUSTMENT RINGS BE SEALED WITH NON-SHRINKING MORTAR OR OTHER APPROPRIATE MATERIAL.
- 2) INLET AND OUTLET PIPES BE JOINED TO THE MANHOLE WITH A GASKETED FLEXIBLE WATER-TIGHT CONNECTION OR ANOTHER WATER-TIGHT CONNECTION ARRANGEMENT THAT ALLOWS DIFFERENTIAL SETTLEMENT OF THE PIPE AND MANHOLE WALL.
- 3) WATER-TIGHT MANHOLE COVERS BE USED WHEREVER THE MANHOLE TOPS MAY BE FLOODED BY STREET RUNOFF OF HIGH WATER.

10. MINIMUM SEPARATION RETWEEN POTARIE WATER LINES AND SANITARY HAZARDS (SANITARY SEWER FORCE MAIN STORM SEWER RELISE WATER) SHALL BE MAINTAINED A HORIZONTAL CLEARANCE OF TEN (10) EFET IN PARALLEL INSTALLATION AND 12 INCHES VERTICALLY AT CROSSINGS. SHOULD A VERTICAL SEPARATION OF LESS THAN THAT STIPLILATED BE REQUIRED. THE WATER LINE SHALL BE CONSTRUCTED OF 20 FFFT OF PRESSURE TIGHT JOINT DUCTILE IRON. PIPE. IF THE REQUIRED 10 FT. HORIZONTAL CLEARANCE CANNOT BE MAINTAINED. THE SEWER MAIN SHALL BE PLACED IN A D.I.P. SLEEVE OR ENCASED IN CONCRETE IN ACCORDANCE WITH FDEP SPECIFICATIONS.

- 11. PVC GRAVITY SEWER PIPE SHALL MEET ASTM D3034, SDR35.
- 12. ALL SANITARY SEWER PIPE SHALL BE COLORED GREEN.
- 13. FIBERGLASS LINE ALL MANHOLES WHICH RECEIVE DISCHARGE FROM A FORCEMAIN.

14. CONTRACTOR IS RESPONSIBLE FOR PROVIDING SERVICES AT EACH LOT. SERVICES SHALL HAVE 3' MIN. AND 4' MAX. COVER AT LOT CLEAN OUT.

DESIGN REQUIRES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN COMPLIANCE WITH ORANGE COUNTY MANUAL OF STANDARDS AND SPECIFICATIONS FOR FORCE

2 CONSTRUCTION MATERIALS ARE REQUIRED TO WITHSTAND CONDITIONS OF EXPOSURE TO HYDROGEN SUI FIDE AND OTHER CORROSIVE GASES. GREASES, OILS AND OTHER CONSTITUENTS FREQUENTLY PRESENT IN WASTEWATER.

ARRESTORS, SURGE CAPACITORS, OR OTHER SIMILAR PROTECTION DEVICES AND PHASE PROTECTION. 4. ELECTRICAL SYSTEMS AND COMPONENTS (E.G., MOTORS, LIGHTS, CABLES, CONDUITS, SWITCH BOXES, CONTROL CIRCUITS, ETC.) IN RAW WASTEWATER

WET WELLS, OR IN ENCLOSED OR PARTIALLY ENCLOSED SPACES WHERE HAZARDOUS CONCENTRATIONS OF FLAMMABLE GASES OR VAPORS MAY BE PRESENT SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE REQUIREMENTS FOR CLASS I GROUP D, DIVISION 1 LOCATIONS. ELECTRICAL EQUIPMENT LOCATED IN WET WELL SHALL BE SUITABLE FOR USE UNDER CORROSIVE CONDITIONS. EACH FLEXIBLE CABLE SHALL BE PROVIDED WITH A WATERTIGHT SEAL AND SEPARATE STRAIN RELIEF. A FUSED DISCONNECT SWITCH LOCATED ABOVE GROUND SHALL BE PROVIDED FOR THE MAIN POWER FEED FOR ALL PUMP STATIONS. ELECTRICAL EQUIPMENT EXPOSED TO WEATHER SHALL MEET THE REQUIREMENTS OF WEATHERPROOF EQUIPMENT NEMA 3R OR 4 A 110 VOLT POWER RECEPTACLE TO FACILITATE MAINTENANCE SHALL BE PROVIDED INSIDE THE CONTROL PANEL FOR PUMP STATIONS THAT HAVE CONTROL PANELS OUTDOORS. GROUND FAULT INTERRUPTION PROTECTION SHALL BE PROVIDED FOR ALL OUTDOOR OUTLETS.

3 PUMP STATIONS SHALL BE PROTECTED FROM LIGHTNING AND TRANSIENT VOLTAGE SURGES. PUMP STATIONS SHALL BE EQUIPPED WITH LIGHTNING

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN COMPLIANCE WITH ORANGE COUNTY MANUAL OF STANDARDS AND SPECIFICATIONS FOR FORCE MAIN

2. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES BETWEEN FITTINGS OF BRANCHES AND MAINS.

UNLESS OTHERWISE NOTED. 4. ALL PVC FORCE MAIN SHALL BE AS SPECIFIED IN THE CONTRACT DOCUMENTS, MARKED WITH THE SEAL OF APPROVAL OF THE NATIONAL SANITATION FOUNDATION (NSF).

3. ALL VALVES SHALL BE EQUIPPED WITH AN ADJUSTABLE CAST IRON VALVE BOX WITH COVER, WITH THREADED CAST BRONZE EXTENSIONS WHERE NEEDED.

GREEN LETTERING. ALL LETTERING SHALL APPEAR LEGIBLY ON PIPE AND SHALL RUN THE ENTIRE LENGTH OF THE PIPE. LETTERING SHALL READ AS IS 6. HYDROSTATIC & LEAKAGE TESTING OF THE FORCE MAIN SHALL BE DONE IN ACCORDANCE WITH THE AWWA STANDARDS. HYDROSTATIC TESTING TO BE

5. ALL NON-METALLIC FORCE MAINS SHALL BE INSTALLED WITH A CONTINUOUS, INSULATED 10 GAUGE COPPER WIRE INSTALLED DIRECTLY ON TOP OF THE

PIPE FOR LOCATION PURPOSES. SEE STANDARD DRAWINGS. IN ADDITION, ALL PVC FORCE MAINS SHALL BE EITHER A SOLID GREEN COLOR OR WHITE WITH

DONE IN ACCORDANCE WITH AWWA C-600. 7. PIPE MATERIALS PVC - SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C900 LATEST EDITION. THE PVC SHALL HAVE A MINIMUM WORKING

PRESSURE OF 100 PSI AND SHALL HAVE A DIMENSION RATIO (DR) OF 25 UNLESS OTHERWISE NOTED. PIPE SHALL BE THE SAME O.D. AS DUCTILE IRON

PVC JOINT - SHALL BE IN ACCORDANCE WITH ASTM D3139.

DUCTILE IRON JOINT - SHALL BE IN ACCORDANCE WITH ANSI A21.11 AND AWWA C111.

8. AIR RELEASE VALVES SHALL BE REQUIRED AT ALL HIGH POINTS IN THE PROPOSED FORCE MAIN. HIGH POINTS IN THE FORCEMAIN ARE DEFINED AS A CHANGE IN ELEVATION TWICE THE DIAMETER OF THE PIPE

COUNTY UTILITIES STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL.

RECLAIMED WATER OR FORCEMAIN SHALL ALSO BE FOUIPPED WITH A BACKELOW PREVENTER.

9. ALL FORCE MAINS TO BE CONSTRUCTED WITH A MINIMUM OF 3' FEET OF COVER.

ORANGE COUNTY UTILITIES STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

FIGURE GN APPENDIX A

## OCU GENERAL NOTES:

DATE: February 11, 2011

- L. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN EXCAVATING IN PROXIMITY OF WATER MAINS, WASTEWATER FORCE MAINS, GRAVITY MAINS AND RECLAIMED WATER MAINS. MAIN LOCATIONS SHOWN ON PLANS MAY NOT BE EXACT. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING
- 2. SHOULD A PIPE EMERGENCY OCCUR, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OCU DISPATCH OPERATOR (407-836-2777) AND THE OCU INSPECTOR. 3 THE CONTRACTOR SHALL NOTIFY THE OCU CONSTRUCTION DIVISION AT LEAST SEVEN DAYS PRIOR TO COMMENCEMENT. OF THE CONSTRUCTION PROJECT BY CALLING (407) 254-9798
- 4. THE CONTRACTOR SHALL NOTIFY THE OCU CONSTRUCTION DIVISION AT LEAST 48 HOURS PRIOR TO ANY UTILITIES CONSTRUCTION BY CALLING (407) 254-9798. 5. THE MATERIALS, PRODUCTS, AND CONSTRUCTION OF ALL UTILITIES CONNECTING TO THE OCU SYSTEM SHALL BE IN CONFORMANCE WITH THE ORANGE
- . THE CONTRACTOR, AT THE CONTRACTOR'S EXPENSE, SHALL IMMEDIATELY REPAIR ALL DAMAGES TO OCU MAINS AND FACILITIES. IF THE REPAIR IS NOT MADE IN A TIMELY MANNER, AS DETERMINED BY OCU, OCU MAY PERFORM REQUIRED REPAIRS AND CLEANUP. THE CONTRACTOR WILL BE CHARGED FOR ALL EXPENSES ASSOCIATED WITH THE REPAIR

6. ALL OCU MAINS AND FACILITIES WITHIN THE LIMITS OF THE PROJECT SHALL BE SUPPORTED AND PROTECTED AGAINST DAMAGE DURING CONSTRUCTION.

DRIVEWAYS, OR STORM WATER IMPROVEMENTS. OCU FACILITIES TO BE ADJUSTED INCLUDE, BUT ARE NOT LIMITED TO PIPELINES, PUMP STATIONS, VALVE BOXES, AIR RELEASE VALVES, FIRE HYDRANTS, MANHOLE COVERS, AND METERS. 9. ONLY OCU SHALL OPERATE OCU WATER, WASTEWATER, AND RECLAIMED WATER VALVES. THE CONTRACTOR SHALL COORDINATE VALVE OPERATION WITH THE

OCU INSPECTOR. FOR OPERATION OF MAINS NOT OWNED BY OCU, IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE APPROPRIATE UTILITY

8. THE CONTRACTOR SHALL ADJUST ALL EXISTING OCU MAINS AND FACILITIES IN CONFLICT WITH NEW GRADE, NEW OR ALTERED ROADWAYS, SIDEWALKS,

- 10. CONSTRUCTION ACTIVITIES SHALL NOT CAUSE INTERRUPTIONS IN WATER, WASTEWATER, OR RECLAIMED WATER SERVICE. THE CONTRACTOR SHALL
- DORDINATE PRE-APPROVED INTERRUPTIONS OF SERVICE WITH THE OCU INSPECTOR 7 WORKING DAYS IN ADVANCE 11. THE CONTRACTOR SHALL PROVIDE FOR BYPASSING AND/OR HAULING WASTEWATER DURING APPROVED INTERRUPTIONS OF WASTEWATER FLOWS AND CONNECTIONS. THE CONTRACTOR SHALL SUBMIT A BYPASS PLAN SIGNED AND SEALED BY A PROFESSIONAL ENGINEER TO OCU DEVELOPMENT ENGINEERING FOR APPROVAL PRIOR TO IMPLEMENTATION BY CONTRACTOR.

12. ALL VALVES INSTALLED AS PART OF THIS CONSTRUCTION PROJECT SHALL REMAIN CLOSED DURING CONSTRUCTION. KEEP VALVES ON ALL WET TAPS CLOSED

- UNTIL CLEARED BY FDEP. DO NOT CONNECT NEWLY CONSTRUCTED WATER MAINS TO ANY EXISTING WATER MAINS UNLESS CLEARED BY FDEP AND OCU. 13. THE CONTRACTOR SHALL PROVIDE A JUMPER ASSEMBLY WITH A BACKFLOW PREVENTER FOR MAKING TEMPORARY CONNECTIONS TO AN EXISTING POTABLE WATER SOURCE IN ORDER TO CHLORINATE AND FLUSH NEW WATER MAINS WITH POTABLE WATER. ANY TEMPORARY POTABLE WATER CONNECTIONS TO
- 14.FOR PVC PIPE THAT WILL BE OWNED AND MAINTAINED BY OCU, NO PIPE BENDING IS ALLOWED. THE MAXIMUM ALLOWABLE TOLERANCE FOR JOINT DEFLECTION IS 0.75 DEGREES (3-INCHES PER JOINT PER 20 FT STICK OF PIPE.) ALIGNMENT CHANGE SHALL BE MADE ONLY WITH SLEEVES AND FITTINGS.
- 15.FOR NON-PVC PIPE THAT WILL BE OWNED AND MAINTAINED BY OCU, LONG RADIUS CURVES, EITHER HORIZONTAL OR VERTICAL, MAY BE INSTALLED WITH STANDARD PIPE BY DEFLECTIONS AT THE JOINTS. MAXIMUM DEFLECTIONS AT PIPE JOINTS, FITTINGS AND LAYING RADIUS FOR THE VARIOUS PIPE LENGTHS SHALL NOT EXCEED 75 PERCENT OF THE PIPE MANUFACTURER'S RECOMMENDATION.

Consultant:

NO. DATE: DESCRIPTIONS: SUBMISSIONS/REVISIONS NAVD 88 VERTICAL DATUM: 19-060 JOB NO.: DMDESIGNED BY: DMDRAWN BY:

DAL

DAL

N.T.S.

03/29/2021 SUBMIT TO SFWMD

SCALE IN FEET: Project Name:

CHECKED BY:

APPROVED BY:

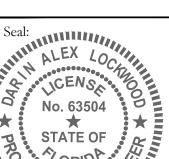
**OUTPARCEL** MASS GRADING

Jurisdiction:

SFWMD

Sheet Title: CONSTRUCTION **NOTES** 

Sheet No.:



ockwood on the date adjacent to the seal using a SHA authentication code.

ted copies of this document are not considered signed and sealed and

the SHA authentication code must be verified on any electronic copies.

Poulos & Bennett, LLC 2602 E. Livingston St., Orlando, FL 32803

Eng. Bus. No. 28567

This item has been electronically signed and sealed by Darin Alex

Tel. 407.487.2594 www.poulosandbennett.com

IF DURING CONSTRUCTION, THE PROPOSED EROSION CONTROL SYSTEM DOES NOT PERFORM SATISFACTORILY ALTERNATIVES AND ADDITIONAL METHODS OF PROTECTION SHALL BE IMPLEMENTED BY THE CONTRACTOR IN ORDER TO COMPLY WITH S.F.W.M.D, AND CITY OF ORLANDO EROSION PROTECTION STANDARDS. CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR ALL EROSION CONTROL COSTS INCLUDING ANY COSTS ASSOCIATED WITH COMPLIANCE ISSUES AND ENFORCEMENT ACTIONS.

THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT A DETAILED EROSION CONTROL PLAN TO CITY OF ORLANDO FOR REVIEW AND APPROVAL A MINIMUM OF TWO WORKING DAYS PRIOR TO THE PRE-CONSTRUCTION MEETING. AT A MINIMUM, THE EROSION CONTROL PLAN SHALL PROPOSE SILT SCREEN AND TURBIDITY BARRIERS, IN ACCORDANCE WITH NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS.

ALL PERMANENT EROSION CONTROL MEASURES SHALL BE COMPLETED WITHIN 7 DAYS OF FINAL GRADING. ALL TEMPORARY EROSION CONTROL SHALL BE MAINTAINED UNTIL PERMANENT MEASURES ARE COMPLETED AND

5. ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH NPDES REQUIREMENTS.

CONTRACTOR SHALL RETAIN COPIES OF DATA USED TO COMPLETE THE NOTICE OF INTENT TO CONSTRUCT (NOI), THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP), AND ALL REPORTS REQUIRED BY THE NPDES GENERIC PERMIT FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED. SUCH REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE.

CONTRACTOR AND SUBCONTRACTOR(S) IDENTIFIED IN THE SWPPP SHALL SIGN THE CERTIFICATION STATEMENT CONTAINED IN PART V.E.2 OF THE GENERIC PERMIT BEFORE CONDUCTING ANY WORK IDENTIFIED IN THE SWPPP.

CONTRACTOR SHALL MAINTAIN A COPY OF THE SWPPP AT THE SITE FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

. CONTRACTOR SHALL AMEND THE SWPPP WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION OR MAINTENANCE THAT MAY HAVE A SIGNIFICANT EFFECT ON THE POTENTIAL FOR OFF-SITE DISCHARGE OF POLLUTANTS, INCLUDING THE ADDITION OF OR CHANGE IN LOCATION OF DISCHARGE POINTS AND REVISION TO CONTROLS WHICH MAY HAVE PROVED TO BE INEFFECTIVE.

10. AMENDMENTS TO THE SWPPP SHALL INCLUDE IDENTIFYING ANY NEW CONTRACTOR AND/OR SUBCONTRACTOR THAT WILL IMPLEMENT A POLLUTION PREVENTION MEASURE.

11. AMENDMENTS TO THE SWPPP SHALL BE PREPARED, DATED AND KEPT AS ATTACHMENTS TO THE ORIGINAL PLAN.

12. THE SWPPP SHALL BE AMENDED TO REFLECT ANY CHANGE APPLICABLE TO PROTECTING SURFACE WATER RESOURCES IN SITE PERMITS APPROVED BY STATE, REGIONAL OR LOCAL OFFICIALS FOR WHICH CONTRACTOR RECEIVES WRITTEN NOTICE AND CONTRACTOR SHALL RE-CERTIFY THAT SUCH CHANGES RELATED TO SUCH WRITTEN

13. CONTRACTOR SHALL REMAIN RESPONSIBLE FOR OPERATION AND MAINTENANCE OF POLLUTION PROTECTION MEASURES UNTIL CONSTRUCTION HAS BEEN COMPLETED IN SUBSTANTIAL CONFORMANCE WITH THE CONTRACT PLANS AND CERTIFIED AS SUCH BY POULOS & BENNETT, WHETHER OR NOT CONTRACTOR HAS SUBMITTED A NOTICE OF TERMINATION (NOT) TO FDEP.

14. THE SCHEDULING, SEQUENCING AND CONTROL MEASURES, WHICH ARE OUTLINED HEREIN, ARE SUBJECT TO FINAL DEFINITION BY THE CONTRACTOR WHO WILL BE RESPONSIBLE FOR IMPLEMENTATION AND COMPLIANCE.

15. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT A CONSTRUCTION SCHEDULE DEPICTING EACH PHASE OF THE WORK. THE CONTRACTOR SHALL ALSO BE REQUIRED TO SUBMIT AN EROSION AND SEDIMENT CONTROL PLAN TO THE OWNER, THE ENGINEER AND THE CITY OF ORLANDO ENCOMPASSING THE CONTRACTOR'S EXACT PLAN OF IMPLEMENTING THE PRINCIPLES AND THE REQUIREMENTS DESCRIBED HEREIN. NO CONSTRUCTION CAN BEGIN UNTIL SAID PLAN HAS BEEN APPROVED BY THE CITY OF ORLANDO.

THROUGHOUT THE CONSTRUCTION PERIOD, THE CONTRACTOR SHALL DAILY INSPECT PROTECTIVE INSTALLATIONS FOR FAILURES OR SIGNS OF FAILURE OR MALFUNCTION AND EFFECT REPAIRS OR REPLACEMENT IMMEDIATELY **UPON DISCOVERY** 

17. THE RECOMMENDED GENERAL SEQUENCE OF CONSTRUCTION FOR ALL BASINS IS AS FOLLOWS:

17.1. PLACEMENT OF PERIMETER PROTECTIVE MEASURES (SILT FENCE, HAY BALES, ETC...) AROUND ONSITE, LAKES, AT POINTS OF OFFSITE DISCHARGE, AND AROUND WORK AREAS.

17.2. REROUTE RUNOFF FROM AREAS OUTSIDE OF THE DEVELOPMENT AREA TO MINIMIZE FLOW THROUGH AREAS TO BE DISTRIBUTED BY CONSTRUCTION, BERMS, SWALES AND OTHER MEANS USED FOR SUCH CONVEYANCE SHALL BE VEGETATED AND MEASURES TAKEN TO PROVIDE PROTECTION UNTIL STABILIZATION HAS BEEN ESTABLISHED.

17.3. SELECT LOCATIONS FOR PLACEMENT OF MATERIAL, WETHER SUITABLE FOR FILL OR UNSUITABLE, AND CONSTRUCT CONTAINMENT BERMS AROUND THE AREA. THE USE OF STRIPPINGS FOR THIS PURPOSE MAY ACCELERATE BERM REVEGETATION. CONSTRUCT TEMPORARY OUTLETS FROM CONTAINMENT AREAS WITH SCREENS, SYNTHETIC HAY BALES, SETTLING BASINS OR OTHER MEASURES TO PREVENT SILT TRANSPORTATION.

17.4. SELECT/ DESIGNATE ACCESS ROUTING FOR CONSTRUCTION EQUIPMENT AND VEHICLES AND PROVIDE PERIMETER PROTECTIVE MEASURES WHERE EXISTING TERRAIN WILL BE SUBJECT TO DISRUPTION BY SUCH

17.5. IF REQUIRED, CONSTRUCT ABOVE GROUND OR OTHER CONTAINMENT AREAS FOR CONSTRUCTION AREA KUNOFF. PROVIDE SCREENS, HAT BALES ETC..., TO FILTER DISCHARGE THESE AREAS

17.6. GRASSING, SODDING, ETC. SHALL BE IN PLACE IMMEDIATELY UPON COMPLETION OF WORK IN DISTURBED AREAS

19. THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY HAS AUTHORIZED THE STATE OF FLORIDA TO ADMINISTER THE NATIONAL POLLUTANTS DISCHARGE ELIMINATION SYSTEM (N.P.D.E.S.). CONTRACTOR IS ADVISED THAT OPERATORS ARE REQUIRED TO FILE WITH F.D.E.P., A NOTICE OF INTENT TO USE THE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM CONSTRUCTION ACTIVITIES THAT DISTURB ONE OR MORE ACRES OF LAND. IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO SUBMIT THE NOTICE OF INTENT (N.O.L.) TO E.D. E.P. WITH A COPY TO

PLAN (S.W.P.P.P.) PURSUANT TO ALL REQUIREMENTS OF THE GENERIC PERMIT.

BY CONSTRUCTION, ON-SITE AND OFF-SITE.

ACCESS LOCATIONS, AND PROVIDE INSPECTION TO DETERMINE THE EFFECTIVENESS OF EROSION/SEDIMENT CONTROL EFFORTS. INSPECTIONS SHALL CONDUCTED DAILY AND WITHIN 24 HOUR AFTER EACH 0.50 INCH OR

DESCRIBE THE NATURE OF CONSTRUCTION ACTIVITY. \*MULTI-FAMILY RESIDENTIAL, STRUCTURAL FILL, INSTALLATION OF UTILITIES AND DRAINAGE USING CONVENTIONAL CONSTRUCTION TECHNIQUES AND BEST MANAGEMENT PRACTICES.

DESCRIBE THE INTENDED SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES. \*CLEAR AND GRUB, SPREAD AND COMPACT FILL, INSTALL DRAINAGE & UTILITIES, CONSTRUCT PARKING LOT, AND

MULTI-FAMILY APARTMENTS.

3. TOTAL AREA OF THE SITE IS APPROXIMATELY 44.92 ACRES.

4. TOTAL PROJECT AREA OF THE SITE TO BE DISTURBED IS ±18.37 ACRES

EXISTING DATA DESCRIBING THE SOIL OR QUALITY OF ANY STORM WATER DISCHARGE FROM THE SITE. \*CONTRACTOR TO REFER TO THE GEOTECHNICAL REPORT FOR ONSITE SOIL. \*STORM WATER THAT DISCHARGES FROM THE SITE SHALL BE MONITORED FOR TURBIDITY.

ESTIMATE THE DRAINAGE AREA SIZE FOR EACH DISCHARGE POINT. \*THE DRAINAGE AREAS AT THE DISCHARGE POINTS ARE SHOWN ON THE PLAN.

LATITUDE AND LONGITUDE OF EACH DISCHARGE POINT AND IDENTIFY THE RECEIVING WATER FOR MS4 FOR EACH DISCHARGE POINT.

\*THE LATITUDE AND LONGITUDE AT THE DISCHARGE POINT: DISCHARGE POINT No. 1: LATITUDE: 28°23'34.09"N, LONGITUDE: 81°14'20.78"W.

A DETAILED DESCRIPTION OF ALL CONTROLS. BEST MANAGEMENT PRACTICES (BMP'S) AND MEASURES THAT WILL BE IMPLEMENTED AT THE CONSTRUCTION SITE FOR EACH ACTIVITY IDENTIFIED IN THE INTENDED SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES SECTION. \*SEE ADDITIONAL EROSION CONTROL NOTES.

9. DESCRIBE ALL TEMPORARY AND PERMANENT STABILIZATION PRACTICES. \*SEE EROSION CONTROL NOTES.

10. DESCRIBE ALL STRUCTURAL CONTROLS TO BE IMPLEMENTED TO DIVERT STORM WATER FLOW FROM EXPOSED SOILS AND STRUCTURAL PRACTICES TO STORE FLOWS, RETAIN SEDIMENT ON-SITE OR IN OTHER WAY LIMIT STORM WATER RUNOFF. \*SEE EROSION CONTROL NOTES.

11. DESCRIBE ALL SEDIMENT BASINS TO BE IMPLEMENTED FOR AREAS THAT WILL DISTURB 10 OR MORE ACRES AT ONE \* ONSITE WET DETENTION POND.

12. DESCRIBE ALL PERMANENT STORM WATER MANAGEMENT CONTROLS SUCH AS, BUT NOT LIMITED TO, DETENTION OR RETENTION SYSTEMS OR VEGETATED SWALES THAT WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS. \*THE PROJECT IS PART OF AN EXISTING MASTER STORMWATER SYSTEM.

13. DESCRIBE IN DETAIL CONTROLS FOR THE FOLLOWING POTENTIAL POLLUTANTS: WASTE DISPOSAL, OFFSITE VEHICLE TRACKING FROM CONSTRUCTION ENTRACES/EXITS; THE PROPER APPLICATION RATES OF FERTILIZERS, HERBICIDES AND PESTICIDES USED AT THE CONSTRUCTION SITE; THE STORAGE, APPLICATION, GENERATION AND MIGRATION OF ALL TOXIC SUBSTANCES. \*THE WASTE DISPOSAL SHALL BE PROVIDED BY THE GENERAL CONTRACTOR IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL GUIDELINES. SOIL TRACKING PREVENTION DEVICES WILL BE INSTALLED AT ALL CONSTRUCTION

14. PROVIDE A DETAILED DESCRIPTION OF THE MAINTENANCE PLAN FOR ALL STRUCTURAL AND NON-STRUCTURAL CONTROLS TO ASSURE THAT THEY REMAIN IN EFFECTIVE OPERATING CONDITION. \*SEE EROSION CONTROL NOTES.

15. DESCRIBE THE INSPECTION AND INSPECTION DOCUMENTATION PROCEDURES. \*INSPECTIONS MUST OCCUR AT LEASE ONCE DAILY AND WITHIN 24 HOURS OF THE END OF A STORM EVENT THAT IS

16. IDENTIFY AND DESCRIBE ALL SOURCES OF NON-STORMWATER DISCHARGES.

ENTRANCES/EXITS (SEE THIS SHEET FOR DETAIL).

\*EXCAVATE CAUTIOUSLY: THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN EXCAVATING IN PROXIMITY OF GRAVITY SEWERS. SEWER LOCATIONS SHOWN ON PLANS ARE NOT EXACT OR GUARANTEED. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING UTILITY LOCATIONS.

\*REPAIR IMMEDIATELY: ALL DAMAGE TO EXISTING SEWER/WATER/RECLAIM MAINS SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

17. AT ANY PROJECT CONNECTION TO PUBLIC OR PRIVATE ROADWAYS THAT ARE TO BE USED BY CONSTRUCTION TRAFFIC, CONTRACTOR SHALL PROVIDE A SOIL TRACKING PREVENTION DEVICE.

18. THE CITY OF ORLANDO "EROSION AND SEDIMENTATION CONTROL FOR CONSTRUCTION SITES" SHEET (COMMONLY KNOWN AS THE BLUE SHEET) WILL BE USED AS GUIDELINE TO EROSION CONTROL MEASURES. FOR PROJECTS GREATER THAN ONE ACRE, PLEASE PROVIDE THE NPDES NOI PERMIT PRIOR TO BEGINNING CONSTRUCTION.

19. CONTRACTOR SHALL STOCKPILE ANY & ALL EXCAVATED MATERIAL IN A MANNER THAT PROHIBITS RUNOFF FROM SAID STOCKPILE FROM FLOWING DIRECTLY OFFSITE, INTO ANY ADJACENT WATER BODY, OR INTO A STORMWATER COLLECTION FACILITY.

20. SEDIMENTATION CONTROLS/BMPs SHALL PREVENT STORMWATER RUNOFF WITH TURBIDITY GREATER THAN 29 NTUs, FROM LEAVING THE CONSTRUCTION SITE.

21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL DEWATERING PERMITS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DEWATERING METHOD: WELL POINTS HORIZONTAL SOCK DRAINS OR PUMPING FROM INTERIOR PUMPS. WHERE PUMPS ARE USED TO REMOVE HIGHLY TURBID WATERS FROM CONSTRUCTION AREAS THE WATER SHALL BE TREATED BY ONE OR MORE OF THE FOLLOWING METHODS PRIOR TO DISCHARGING INTO RECEIVING WATERS TO ENSURE WATER WITH TURBIDITY GREATER THAN 29 NTUS DOES NOT LEAVE THE SITE. PUMPING INTO GRASS SWALES, APPROPRIATE VEGETATED AREAS, OR SEDIMENTS BASINS SHALL HAVE APPROPRIATE ENCLOSURE SUCH AS TURBIDITY BARRIERS.

1. CONSTRUCTION ACTIVITY PERTAINS TO CONSTRUCTION OF A COMMERCIAL PARCELS AND MULTI-FAMILY RESIDENTIAL AT LATITUDE 28°23'28.17"N & LONGITUDE 81°14'36.71"W.

2. EXISTING ON-SITE SOILS CONSIST OF NO. 3, 'SMYRNA-SMYRNA WET', NO. 34, 'POMELLO FINE SAND', NO. 42, 'SANIBEL MUCK', NO. 44, 'SMYRNA-SMYRNA WET' AND NO. 54 'ZOLFO FINE SAND' PER WEB SOIL SURVEY, ORANGE COUNTY. FLORIDA, BY THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE WITH ESTIMATED NORMAL SEASONAL HIGH GROUNDWATER LEVEL TO BE ENCOUNTERED BETWEEN DEPTHS OF 2.5-15 FEET BELOW THE EXISTING GROUND SURFACE PER GEOTECHNICAL REPORT BY ECS FLORIDA, LLC ECS PROJECT NO. 24:4923-C, OCTOBER 20,

3. ALL PROPOSED INLETS/OUTFALLS, ONCE INSTALLED, SHALL BE PROTECTED FROM EROSION AND SEDIMENT RUNOFF USING PROPERLY INSTALLED FILTER FABRICS. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED SHALL BE STABILIZED WITH SOD, SILT FENCE SHALL BE INSTALLED AROUND PERIMETER. OF THE SITE. A DOUBLE ROW OF SILT FENCE. REINFORCED WITH FIELD FENCING. SHALL BE PLACED AROUND VEGETATIVE BUFFERS AND WETLAND AREAS. ALL AREAS DISTURBED MORE THAN 7 DAYS SHALL BE STABILIZED WITH RYE GRASS OR OTHER APPROPRIATE TEMPORARY VEGETATION APPLIED AT MANUFACTURER'S RECOMMENDATION.

4. THE TEMPORARY AND PERMANENT STABILIZATION PRACTICES INCLUDE SODDING ALL DISTURBED AREAS FOR STABILIZATION

5. SILT FENCE AND INLET/OUTLET PROTECTION SHALL BE INSTALLED PER BEST MANAGEMENT PRACTICES, SEE SECTION

6. CONTROL DETAILS OF POTENTIAL POLLUTANTS AS FOLLOWS:

6.1. WASTE DISPOSAL - ALL CONSTRUCTION MATERIALS AND DEBRIS WILL BE PLACED IN DUMPSTER AND HAULED OFF SITE TO A LANDFILL OR OTHER DISPOSAL SITE. NO MATERIALS SHALL BE BURIED ON SITE.

6.2. PROPER APPLICATION RATES OF ALL FERTILIZERS, HERBICIDES AND PESTICIDES AT CONSTRUCTION SITE FLORIDA FRIENDLY FERTILIZERS AND PESTICIDES WILL BE USED AT A MINIMUM AND IN ACCORDANCE WITH MANUFACTURER'S SUGGESTED APPLICATION RATES. THE FERTILIZERS AND PESTICIDES WILL BE STORED IN A

6.3. STORAGE, APPLICATION, GENERATION AND MIGRATION OF ALL TOXIC SUBSTANCES - ALL PAINTS AND OTHER

6.3. OTHER - PORT-O-LETS WILL BE PLACED AWAY FROM STORM SEWER SYSTEMS, STORM INLETS, SURFACE WATER AND WETLANDS. NO VEHICLE MAINTENANCE SHALL BE CONDUCTED ON-SITE. A WASHDOWN AREA SHALL BE DESIGNATED AT ALL TIMES AND WILL NOT BE LOCATED IN ANY AREA ALLOWING FOR DISCHARGE OF POLLUTED

7.1. SILT FENCE SHALL BE INSPECTED AT LEAST WEEKLY. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE

7.2. MAINTENANCE SHALL BE PERFORMED ON THE ROCK ENTRANCE WHEN ANY VOID SPACES ARE FULL OF

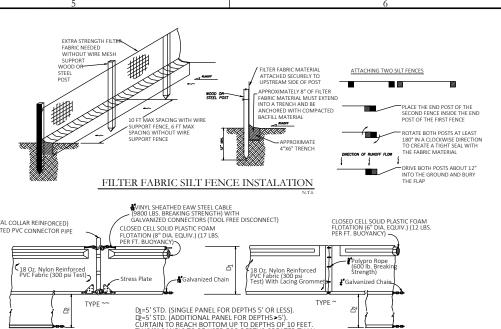
7.4. BARE AREAS OF THE SITE THAT WERE PREVIOUSLY SEEDED SHALL BE RE-SEEDED PER MANUFACTURER'S

8. QUALIFIED PERSONNEL WILL INSPECT ALL POINTS OF DISCHARGES, ALL DISTURBED AREAS OF CONSTRUCTION NOT STABILIZED, CONSTRUCTION AREAS, INGRESS/EGRESS AND ALL BMPs DAILY AND WITHIN 24 HOURS OF A RAINFALL EVENT THAT IS 0.5 INCHES OR GREATER. WHERE SITES HAVE BEEN FINALLY STABILIZED, SAID INSPECTIONS SHALL BE

CONDUCTED AT LEAST ONCE A MONTH UNTIL NOTICE OF TERMINATION IS FILED.

9. NON-STORMWATER DISCHARGES MAY OCCUR FROM CONSTRUCTION ACTIVITIES SUCH AS WATERLINE FLUSHING. PAVEMENT WASH WATER (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED) AND UNCONTAMINATED GROUNDWATER (DEWATERING EXCAVATION). DEWATERING SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE DEP GENERIC PERMIT FOR THE DISCHARGE OF PRODUCED GROUND WATER FROM ANY NON-CONTAMINATED SITE ACTIVITY. IF SAID DISCHARGES DO OCCUR, THEY WILL BE DIRECTED TO THE TEMPORARY SEDIMENT BASIN PRIOR TO DISCHARGE. TURBID WATER FROM STORMWATER POND SHALL NOT BE PUMPED DIRECTLY INTO ANY RECEIVING WATERS. TREATMENT CAN INCLUDE SILT FENCES, SETTLING PONDS, PROPER USE OF FLOCCULATING AGENTS OR OTHER APPROPRIATE MEANS.

CONTRACTOR SHALL BE RESPONSIBLE FOR ANY PENALTIES OR FINES FDEP MAY LEVY FOR FAILURE TO COMPLY WITH THE PERMITTING REQUIREMENTS.



E- COMPONENTS OF TYPES ~ AND ~~ MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETAR RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES ~ AND ~~ SHALL BE AS APPROVED BY THE ENGINEER.

FLOATING TURBIDITY

SEE DETAIL THIS SHEET

BARRIER( TYPICAL)

FLOATING TURBIDITY BARRIER

SILT FENCE (TYP.)

SEE DETAIL SHEET C1.11

WOVEN GEOTEXTILE FABRIC IN FILTER FARRIC

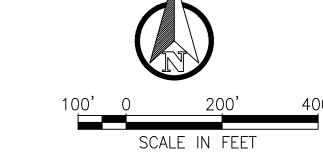
1. PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREET SEGMENTS, WHERE WATER CAN

2. SANDBAGS OF EITHER BURLAP OR WOVEN GEOTEXTILE FABRIC ARE FILLED WITH GRAVEL LAYERED AND

3. LEAVE A ONE SANDBAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY FOR OVERFLOW.

4. INSPECT BARRIERS AND REMOVED SEDIMENT AFTER EACH STORM EVENT. SEDIMENT AND GRAVEI MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

5. AT THE END OF EACH WORKDAY, SWEEP OR SCRAPE UP SOIL TRACKED ONTO THE STREET.



## **DEMOLITION LEGEND**

—⊙——⊙—— SILT FENCE (TYPICAL) CLEAR & GRUB EXISTING

GROUND

**CURB INLET PROTECTION** 

FLOATING TURBIDITY BARRIER  $\infty$ 

> FLOATING TURBIDITY -BARRIER(TYPICAL) SEE DETAIL THIS SHEET

> > 03/29/2021 SUBMIT TO SFWMD SUBMISSIONS/REVISIONS NAVD 88 VERTICAL DATUM: 19-060 DMDESIGNED BY DMDRAWN BY: DAL CHECKED BY DAL APPROVED BY: 1'' = 200'SCALE IN FEET: Project Name:

Consultant:

CALL BEFORE YOU EXCAVATE

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L STATUE 553 351(1979) REQUIRES

MIN. 2 DAYS AND MAX. 5 DAYS

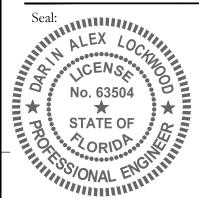
NOTICE BEFORE YOU EXCAVATE

**OUTPARCEL** MASS GRADING **PLAN** 

Jurisdiction: SFWMD

Sheet Title:

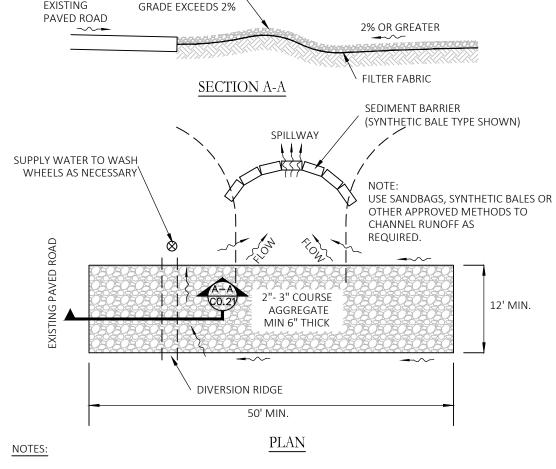
**EROSION CONTROL PLAN** 



This item has been electronically signed and sealed by Darin Alex cockwood on the date adjacent to the seal using a SHA authentication code Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.



Poulos & Bennett, LLC 2602 E. Livingston St., Orlando, FL 32803 Tel. 407.487.2594 www.poulosandbennett.com Eng. Bus. No. 28567



**DIVERSION RIDGE** 

REQUIRED WHERE

1. CONSTRUCTION ENTRANCE SHALL BE MAINTAINED AND UTILIZED DURING CONSTRUCTION.

2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

3. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY.

4. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAIN INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

TEMPORARY GRAVEL CONSTRUCTION ACCESS

5. TEMPORARY ACCESS TO BE CONSTRUCTED TO SUPPORT THE LOAD OF A FIRE APPARATUS.

WITHIN PROJECT AREA 17.7. IN ANY EVENT, CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING ANY AND ALL MEASURES ARE TAKEN TO COMPLY WITH LOCAL, STATE, FEDERAL AND OWNER REQUIREMENTS FOR EROSION AND SEDIMENT CONTROL 18. BAHIA SOD OR OTHER STABILIZATION IS REQUIRED AROUND ALL STORM INLETS IN UNPAVED AREAS. CHEMICALS WILL BE STORED IN A LOCKED COVERED SHED. RUNOFF. A SMALL VEGETATED BERM SHALL BE PLACED AROUND THE WASHDOWN AREA. 7. MAINTENANCE FOR ALL STRUCTURAL AND NON-STRUCTURAL CONTROLS SHALL BE AS FOLLOWS THE OWNER, THE ENGINEER AND THE CITY AT LEASE 48 HOURS BEFORE INITIATING CONSTRUCTION. 20. AS REQUIRED BY THE GENERIC PERMIT, CONTRACTOR SHALL PREPARE A STORMWATER POLLUTION PREVENTION 21. PURSUANT TO THE N.P.D.E.S., CONTRACTOR SHALL MAINTAIN RECORDS OF DATES WHEN MAJOR GRADING ACTIVITIES TEMPORARILY OF PERMANENTLY CEASE AND SHALL INITIATE STABILIZATION MEASURES WITHIN 14 DAYS 7.3. INLETS/OUTLETS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAIN EVENT AND ANY REQUIRED REPAIRS TO AFTER SUCH TEMPORARY OR PERMANENT CESSATION OF CONSTRUCTION ACTIVITY. STABILIZATION REQUIREMENTS THE FILTER FABRIC ON INLETS AND SILT FENCE SHALL BE PERFORMED IMMEDIATELY. (SODDING WHERE SHOWN ON THE PLANS, SEEDING AND MULCHING ELSEWHERE) APPLY TO ALL AREAS DISTURBED INSTRUCTIONS. 22. CONTRACTOR SHALL PROVIDE INSPECTIONS BY QUALIFIED PERSONNEL OF ALL POINTS OF DISCHARGE, DISTURBED 7.5. MULCH AND SOD THAT HAS BEEN WASHED OUT SHALL BE REPLACED IMMEDIATELY. AREAS NOT YET FINALLY STABILIZED, STORAGE AREAS EXPOSED TO RAINFALL, STRUCTURAL CONTROLS VEHICULAR 7.6. MAINTAIN ALL OTHER AREAS OF THE SITE WITH PROPER CONTROLS AS NECESSARY. GREATER RAINFALL EVENT AND ANY NECESSARY REMEDIES SHALL BE PERFORMED IMMEDIATELY.

CONTRACTOR SHALL PREPARE AND SUBMIT TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION THE "NOTICE OF INTENT" AND "NOTICE OF TERMINATION" FOR "STORMWATER DISCHARGE FROM CONSTRUCTION ACTIVITIES," PER FLORIDA ADMINISTRATIVE CODE 62-621.300(4) IN ACCORDANCE WITH FDEP REQUIREMENTS. THE CONTRACTOR SHALL PREPARE AND SUBMIT WITH THE APPLICATION, AN APPROVED "STORMWATER POLLUTION PREVENTION PLAN" AND PERFORM/CERTIFY ALL INSPECTIONS AND RETAIN ALL. INSPECTION REPORTS AND DOCUMENTATION ON FILE AS REQUIRED FOR FDEP REVIEW. ALL FEES SHALL BE PAID BY THE CONTRACTOR, AND THE

# DUST CONTROL PROVISIONS

CONSTRUCTION ENTRANCE

SEE DETAIL THIS SHEET

1. CONTRACTOR SHALL PRE-WATERE SITE AND ALL WORK WILL BE PHASED TO REDUCED THE AMOUNT OF DISTURBED SURFACE AREA AT ANY ONE TIME ACTIVE OPERATIONS. 1.1. WATER TO BE APPLIED TO DRY AREAS DURING LEVELING, GRADING, TRENCHING, AND EARTHMOVING ACTIVITIES.

1.2. WATER TO BE APPLIED ON DISTURBED SURFACE AREAS TO FORM A VISIBLE CRUST. 1.3. VEHICULAR ACCESS TO BE RESTRICTED AND WATER OR DUST SUPPRESSANTS TO BE APPLIED AND MAINTAINED AT ALL UN-VEGETATED

REMOVE 72 LF OF TYPE 'F

CURB

2. CONTRACTOR SHALL PREVENT DUST FROM WIND EVENTS. 2.1. WATER TO BE APPLIED TO VEHICULAR TRAFFIC AND EQUIPMENT STORAGE AREAS. 2.2. WATER APPLICATION EQUIPMENT WILL APPLY WATER TO CONTROL FUGITIVE DUST DURING WIND EVENTS, UNLESS UNSAFE TO DO SO.

2.3. OUTDOOR CONSTRUCTION ACTIVITIES THAT DISTURB THE SOIL TO BE CEASE WHENEVER VISIBLE DUST EMISSIONS CANNOT BE

3. CONTRACTOR SHALL HANDLE BULK MATERIAL.

3.1. WATER TO BE APPLIED WHEN HANDLING BULK MATERIALS.

3.2. WATER TO BE APPLIED TO STORAGE PILES. 3.3. VEHICLE SPEED TO BE LIMITED ON THE WORK SITE

3.4. ALL HAUL TRUCKS TO BE LOADED SUCH THAT THE FREEBOARD IS NOT LESS THAN SIX INCHES WHEN TRANSPORT USING A CHUTE OR CONVEYOR.

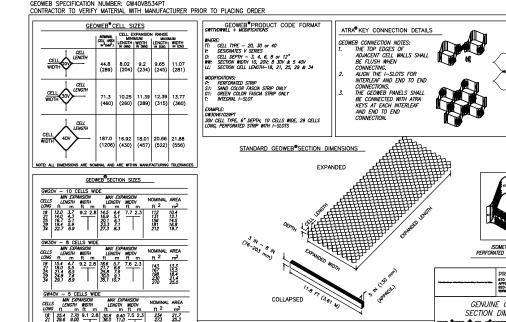
4. CONTRACTOR SHALL DO DAILY CLEANUPS: 4.1. MINIMUM CLEANUP FREQUENCY TO BE DONE AT THE END OF THE WORK DAY AND REMOVED IMMEDIATELY IF CARRYOUT AND TRACK OUT EXTENDS BEYOND 50 FEET.

4.2. CLEAN UP METHODS:

4.2.1. MANUALLY SWEEPING AND PICKING UP. 4.2.2. MECHANICAL SWEEPING WITH A ROTARY BRUSH OR BROOM ACCOMPANIED BY WATER SPRAYER ON BROOM.

30V CELL TYPE, 6" DEPTH, 10 CELLS WIDE, 29 CELLS LONG, PERFORATED STRIP WITH I-SLOTS STANDARD GEOWER®SECTION DIMENSIONS NOTE: ALL DIMENSIONS ARE NOMINAL AND ARE WITHIN MANUFACTURING TOLERANCE GEOWER SECTION SIZES ISOMETRIC VIEW OF PERFORATED STRIP WITH I-SLOT 8" GEOWEB SPECIFIED PER PRESTO PRODUCT
670 NORTH PERKINS STREET
APPLETON, WI 54914
920-738-1328
WWW.PRESTOGEO.COM GENUINE GEOWEB D PROCTOR (ASTM D-1557, AASHTO T-180)
BY DENSITY VALUE

GEOWEB DETAIL



Project Name:

**OUTPARCEL** MASS GRADING **PLAN** 

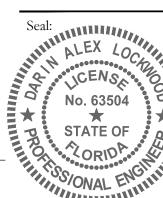
Jurisdiction:

SFWMD

MASTER SITE **PLAN** 

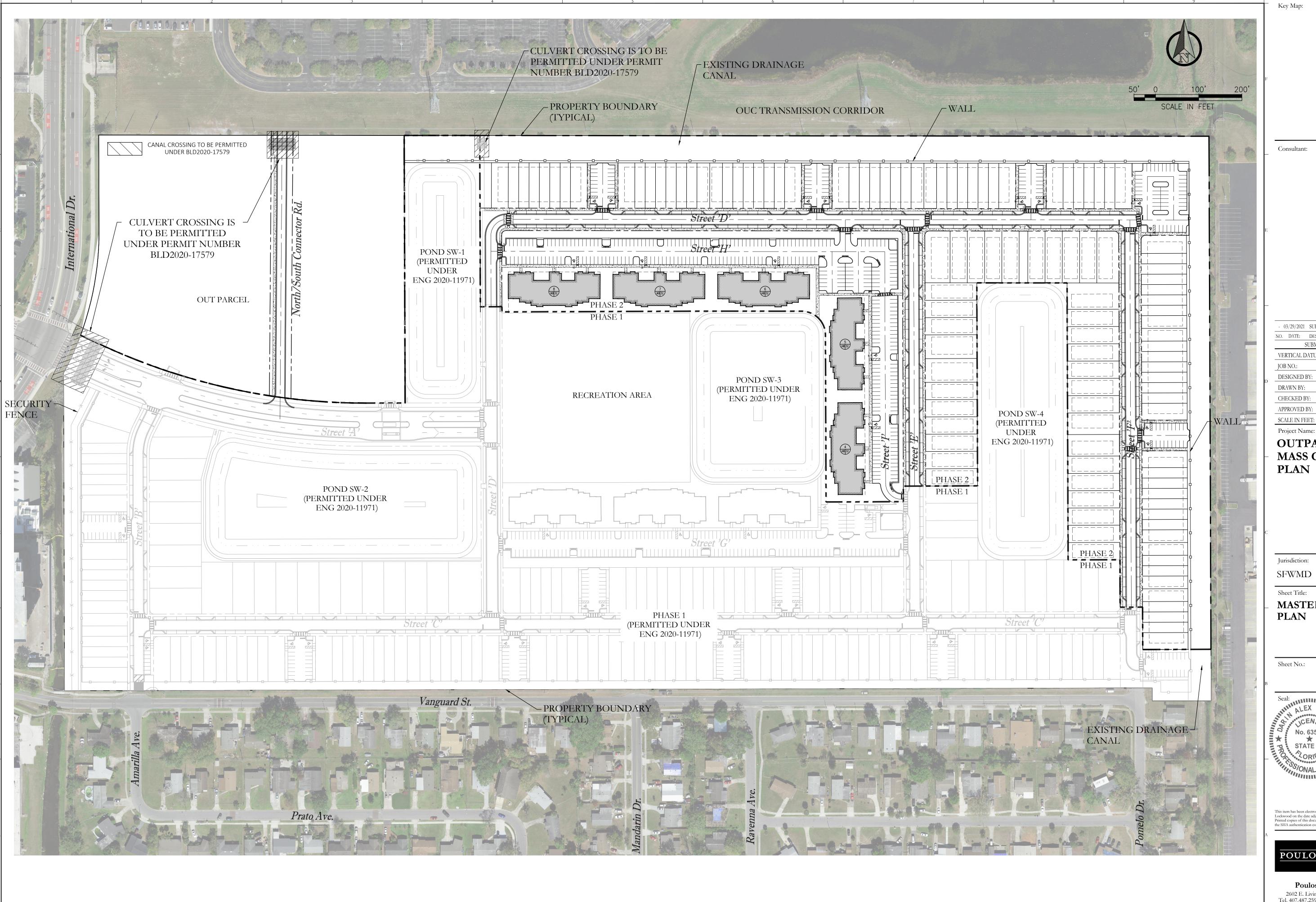
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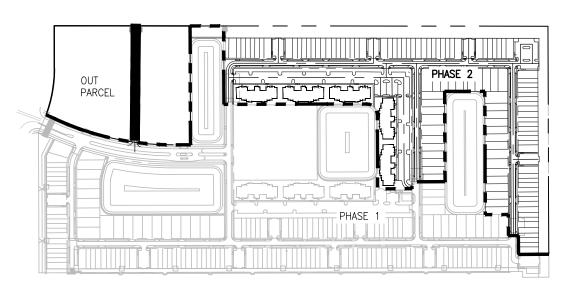
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POULOS BENNETT





KEY MAP

N.T.S.

### <u>LEGEND:</u>

- 1.5" (IN.) TYPE SP 9.5 ASPHALTIC (SECTION 334 FDOT) COMPACTED TO AT LEAST 95% OF THE MAXIMUM LABORATORY MARSHALL.
- 10" (IN.) LIMEROCK (SECTION 911, FDOT) HAVING A MINIMUM LBR AOF 100 AND COMPACTED TO AT LEAST 98% OF ITS MODIFIED PROCTOR MAXIMUM DRY DENSITY WITH A MOISTURE CONTENT 2% OF THE OPTIMUM MOISTURE CONTENT (ASTM D1557).
- 6" (IN.) LIMEROCK (SECTION 911, FDOT) HAVING A MINIMUM LBR AOF 100 AND COMPACTED TO AT LEAST 98% OF ITS MODIFIED PROCTOR MAXIMUM DRY DENSITY WITH A MOISTURE CONTENT 2% OF THE OPTIMUM MOISTURE CONTENT (ASTM D1557).
- 12" (IN.) A MINIMUM LBR OF 40 AND COMPACTED TO AT LEAST 95% OF THEMODIFIED PROCTOR MAXIMUM DRY DENSITY WTH MOISTURE CONTENT WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT (ASTM D1557). THE TOP 6" SHALL BE STABILIZED TO A MINIMUM FLORIDA BEARING VALUE OF 50 UNDER CURB AND LIMEROCK BASE.
- TYPE 'A' CONC. CURB PER FDOT STANDARD PLANS INDEX 520-001
- 6) TYPE 'F' CONC. CURB PER FDOT STANDARD PLANS INDEX 520-001
- 7) TYPE "D" CONC. CURB PER FDOT STANDARD PLANS INDEX 520-001
- (8) MIAMI CURB PER FDOT STANDARD PLANS INDEX 520-001
- 9) 4" (IN.) CONCRETE @ MIN 3000 PSI
- 10) 4" (IN.) MONOLITHIC SIDEWALK @ MIN 3000 PSI

SOURCE: GEOTECHNICAL REPORT FES NO. 19-4296 PREPARED BY FAULKNER, DATED DECEMBER 01, 2020, AND CITY OF ORLANDO SPECIFICATIONS

C 1
Consultant:

- 03/29/2021 SUBMIT TO SFWMD

NO. DATE: DESCRIPTIONS:

SUBMISSIONS/REVISIONS

VERTICAL DATUM: NAVD 88

JOB NO.: 19-060

DESIGNED BY: DM

DRAWN BY: DM

DAL

DAL

N.T.S.

SCALE IN FEET:
Project Name:

CHECKED BY:

APPROVED BY:

## OUTPARCEL MASS GRADING PLAN

Jurisdiction:

SFWMD

Sheet Title:

## TYPICAL SECTIONS & DETAILS

Sheet No.:

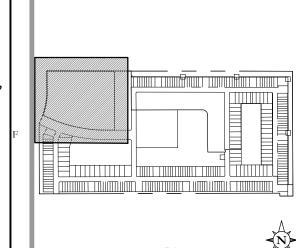
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Consultant:

PROPOSED CURB INLET STRUCTURES

- 1. CONTRACTOR TO COORDINATE THE LOCATION OF THE A/C PADS WITH MEP, ARCHITECTURAL AND LANDSCAPE PLANS TO AVOID CONFLICT WITH
- 2. ORGANIC SOIL DEPOSIT MUST BE EXCAVATED AND REPLACED WITH

Storm Structure Table					
Structure Number	Structure Type	Top Elev.	Inverts	Northing	Easting
1-6	'4' C.I.	96.86	88.48 - 30" (W) 88.48 - 30" (E)	1501507.5	511937.6
1-7	'4' C.I.	96.86	88.44 - 30" (W) 88.44 - 30" (E)	1501507.4	511968.0
1-11	'4' C.I.	97.93	88.44 - 30" (W) 88.44 - 30" (E)	1501773.8	511970.1
1-10	'4' C.I.	97.93	88.48 - 30" (W) 88.48 - 30" (E)	1501774.0	511939.3
1-8	'C' D.B.I.	96.00	88.42 - 30" (W)	1501507.2	511981.7
1-12	'C' D.B.I.	97.50	87.88 - 30" (W)	1501773.6	511983.7
1-5	'C' D.B.I.	96.50	88.50 - 30" (E)	1501507.7	511923.7
1.0	ICI D D I	07.50	00 50 20" (5)	15017741	F1102C 2

NO. DATE: DESCRIPTIONS:

- 03/29/2021 SUBMIT TO SFWMD

SUBMISSIONS/REVISIONS	,
VERTICAL DATUM:	NAVD 88
JOB NO.:	19-060
DESIGNED BY:	DM
DRAWN BY:	DM
CHECKED BY:	DAL
APPROVED BY:	DAL
SCALE IN FEET:	1" = 50'

Project Name:

## **OUTPARCEL** MASS GRADING **PLAN**

Jurisdiction:

SFWMD

Sheet Title: **GRADING &** DRAINAGE PLAN

C4.00

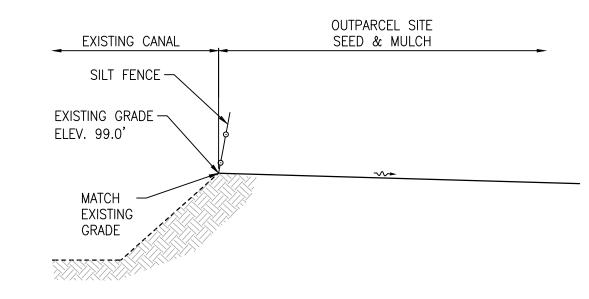


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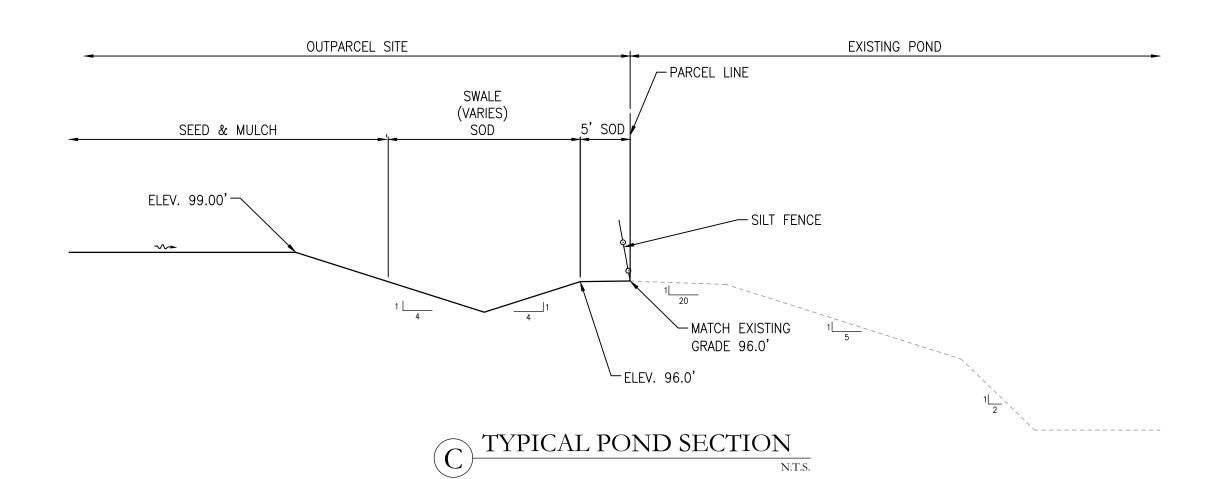


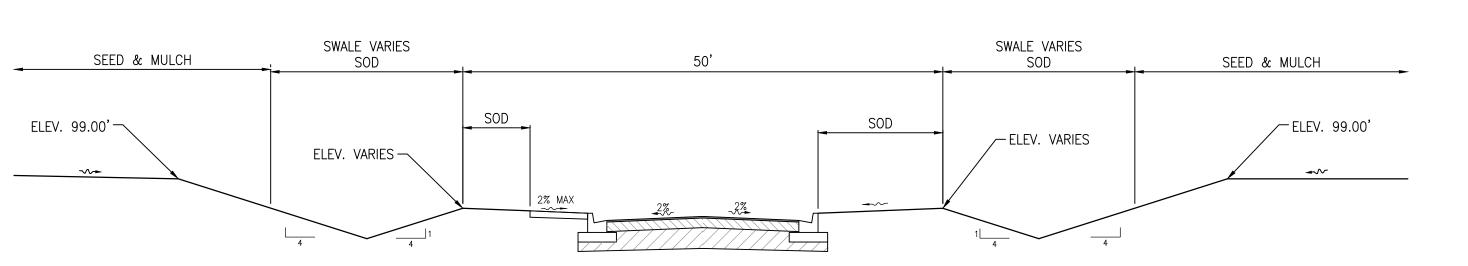
Consultant:

# A TYPICAL GRADING SECTION N.T.S.



## B TYPICAL GRADING SECTION N.T.S.





D TYPICAL GRADING SECTION N.T.S.

- (	3/29/2021	SUBMIT TO SFWMD			
NO.	DATE:	DESCRIPTIONS:			
	S	UBMISSIONS/REVISION	NS		
VE	RTICAL D	ATUM:	NAVD 88		
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СН	ECKED B	Y:	DAL		
AP	PROVED I	BY:	DAL		
SCA	ALE IN FE	ET:	N.T.S.		

Project Name:

## OUTPARCEL MASS GRADING PLAN

Jurisdiction:

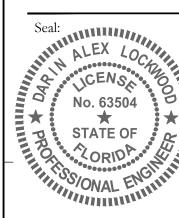
SFWMD

Sheet Title:

GRADING SECTIONS & DETAILS

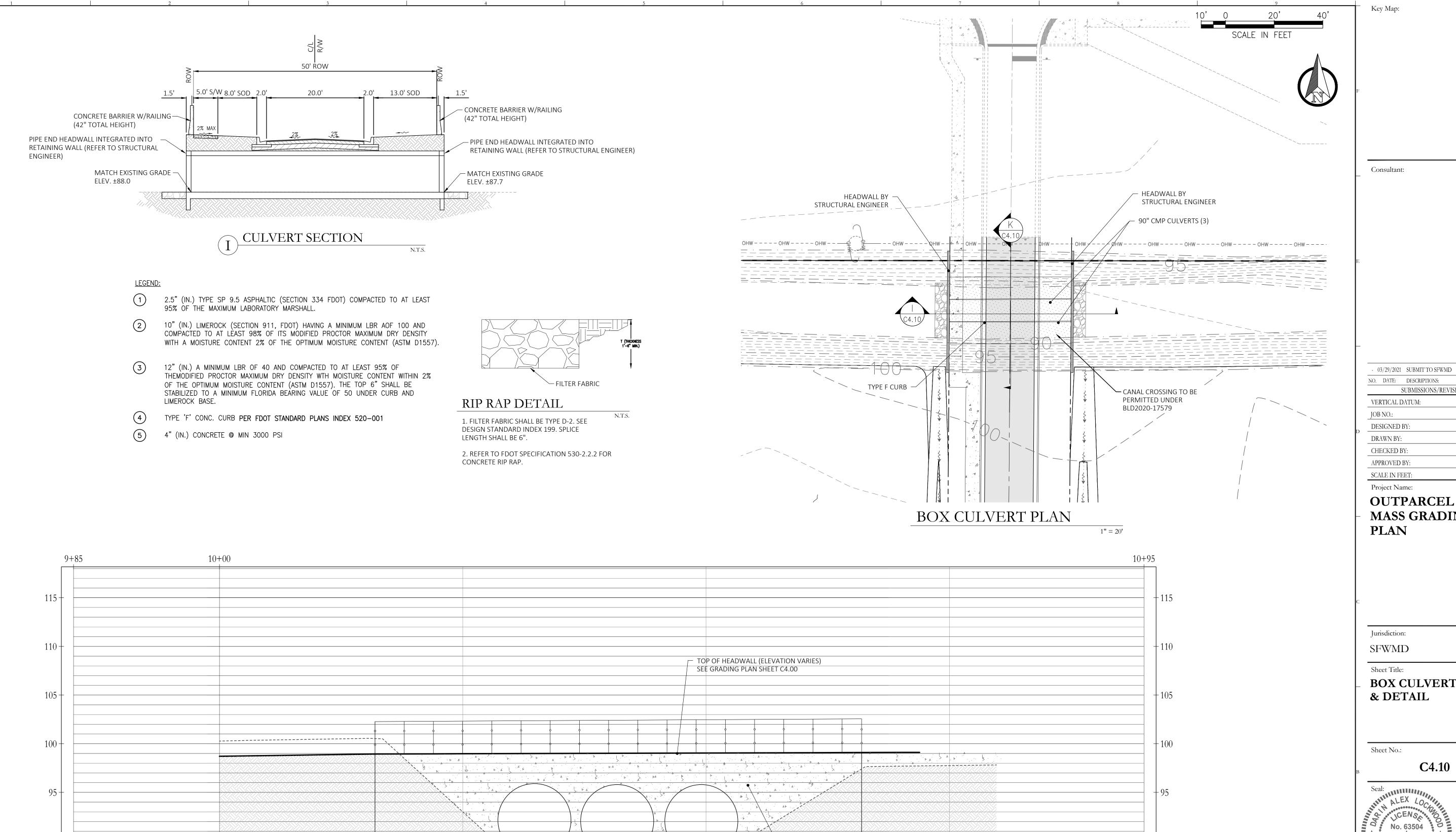
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NO. DATE: DESCRIPTIONS: SUBMISSIONS/REVISIONS NAVD 88 VERTICAL DATUM: 19-060 JOB NO.: DMDESIGNED BY: DMDRAWN BY: DAL CHECKED BY:

DAL

1'' = 20'

Project Name:

**OUTPARCEL** MASS GRADING **PLAN** 

Jurisdiction:

SFWMD

Sheet Title:

**BOX CULVERT PLAN** & DETAIL

Sheet No.:

10+95

C4.10



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Tel. 407.487.2594 www.poulosandbennett.com Eng. Bus. No. 28567

10+00

TYPICAL BOX CULVERT ELEVATION

90" CMP CULVERT (3)

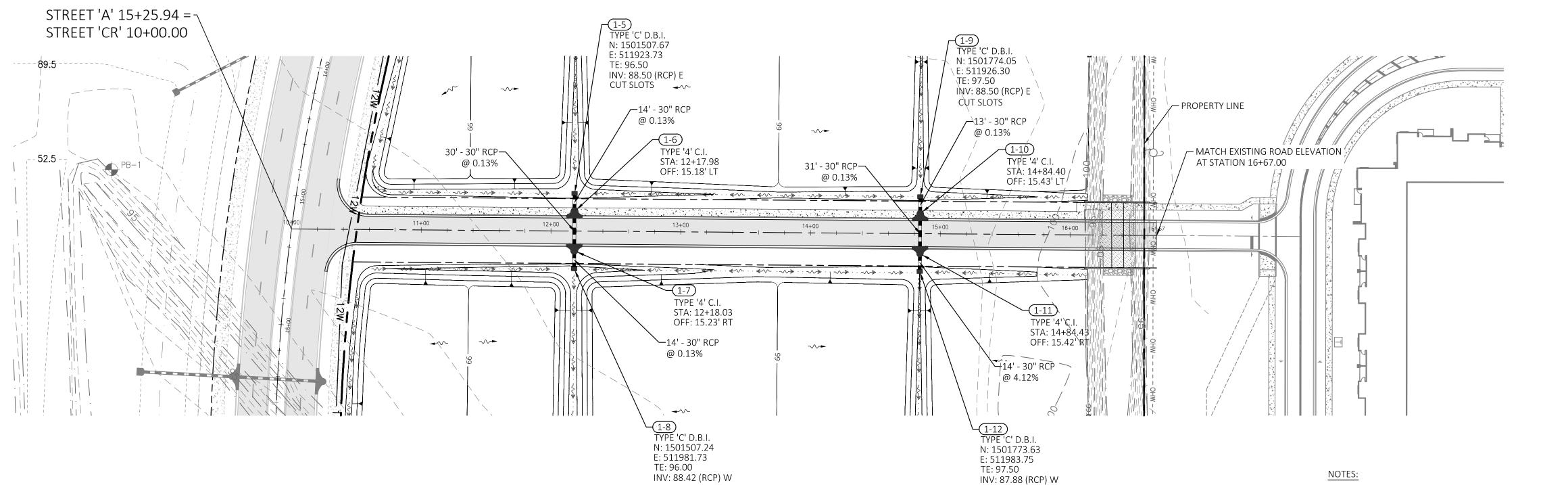
 HEADWALL BY STRUCTURAL ENGINEER (SEE PLANS UNDER SEPARATE COVER)





Key Map:

Consultant:



1. HORIZONTAL SEPARATION BETWEEN WATER MAINS, WASTEWATER MAINS, REUSE MAINS, AND STORM PIPING SHALL BE 36" MINIMUM.

2. DEPTH OF COVER FOR ALL UTILITY MAINS SHALL BE 36-INCHES.

3. PROVIDE 10' UTILITY EASEMENT ALONG ALL PROPOSED RIGHT-OF-WAY.

SUBMISSIONS/REVISIONS NAVD 88 VERTICAL DATUM: 19-060 JOB NO.: DMDESIGNED BY: DM DRAWN BY: DAL CHECKED BY: DAL APPROVED BY: 1'' = 50'SCALE IN FEET: Project Name: **OUTPARCEL** 

- 03/29/2021 SUBMIT TO SFWMD

NO. DATE: DESCRIPTIONS:

MASS GRADING **PLAN** 

Jurisdiction:

SFWMD

Sheet Title: **CONNECTOR ROAD** 

Sheet No.:

C6.00



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