# SATERBO CONSULTING INC CONSTRUCTION PLANS

LOCATION MAP

# LEGAL DESCRIPTION

LOT 1

PEDIATRIC GASTROENTEROLOGY SERVICES, AS RECORDED IN PLAT 41, PAGE 43,



1600 E MARKS ST.
PARCEL ID: 19-22-30-6873-00-010

# PREPARED FOR:

# SATERBO CONSULTING INC.

CONTACT: KEITH TANNER 3107 PAYNE STEWART DRIVE WINDERMERE, FL 34786 PHONE: (407) 383-8903

# TRETAKED DT



# CIVILCORP ENGINEERING, INC.

CERTIFICATE OF AUTHORIZATION #29390 630 N WYMORE RD, STE 310 MAITLAND, FL 32751 PHONE: (407) 516-0437

# PLAN SET INDEX

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C-4	SITE PLAN
C-5	GRADING & DRAINAGE PLAN
C-6	UTILITY PLAN
C-7	GENERAL CIVIL NOTES
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# SITE DATA

PROPERTY LOCATION: 1600 E MARKS STREET ORLANDO, FL		
PARCEL ID: 19-22-30-6873-00-010		
LAND OWNER: SATERBO CONSULTING INC 6107 PAYNE STEWART DR WINDERMERE FL 34786		
PROPERTY ZONING: O-1/T/SP/AN		
FUTURE LAND USE: URBAN ACTIVITY CENTER		
EXISTING PROPERTY USE: OFFICE ONE STORY		
PROPOSED PROPERTY USE: MULTIFAMILY RESIDENTIAL		
BUILDING HEIGHT: THREE STORIES		
FLOOR AREA: 15,612 SF		
LOT COVERAGE CALCULATIONS (EXISTING) IMPERVIOUS PERVIOUS	7,401 SF 6,374 SF	53.73% 46.27%
TOTAL SITE AREA	$\frac{0,374 \text{ SI}}{13,775 \text{ SF}}$	$\frac{40.2770}{100.00\%}$
LOT COVERAGE CALCULATIONS (PROPOSED) IMPERVIOUS PERVIOUS TOTAL SITE AREA	9,573 SF 4,202 SF 13,775 SF	69.49% 30.51% 100.00%
PARKING REQUIRED: TOWNHOMES = 6 UNITS		
FIRE PROTECTION (NFPA 1, 2018 EDITION): BUILDING TO BE FIRE SPRINKLED. CONSTRUCTION TYPE: TYPE V (000) ALARM SYSTEM: COMBINATION SMOKE INSTALLED IN ALL DWELLING UNITS	E/CARBON MO	NOXIDE SHALL BE

# CONSULTING, SATERBO ATRIUM ON MARKS TOWNHOMES 1600 E MARKS ST, ORLANDO, FL PROJECT NAME SHEET NAME

SHEET NO.

C-1

# PROJECT CONSULTANTS

CIVIL ENGINEERS
CIVILCORP ENGINEERING, INC.
630 N WYMORE RD, STE 310
MAITLAND, FL 32751
PHONE: (407) 516-0437

SURVEYORS
H&H SURVEY CONSULTANTS
131 WEST BROADWAT STE 1001
OVIEDO,FL 32765

PHONE: 407-542-4977

ARCHITECT KEESEE ASSOCIATES 258 SOUTHHALL LANE STE 200 MAITLAND, FL 32751 PHONE: (407)880-2333

LANDSCAPE ARCHITECT INNOVATIONS DESIGN GROUP 1200 HILLCREST ST., STE 305 ORLANDO, FL 32803 PHONE: (407) 441-3574

PREPARED BY:

CERTIFICATION

I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF,

CITY OF ORLANDO

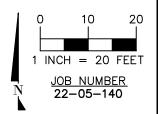
THE DESIGN OF THE STORMWATER MANAGEMENT SYSTEM FOR THE PROJECT KNOWN AS: ATRIUM ON MARKS MEETS ALL OF THE REQUIREMENTS AND HAS BEEN DESIGNED SUBSTANTIALLY IN ACCORDANCE WITH THE CITY OF ORLANDO STORMWATER MANAGEMENT CRITERIA.

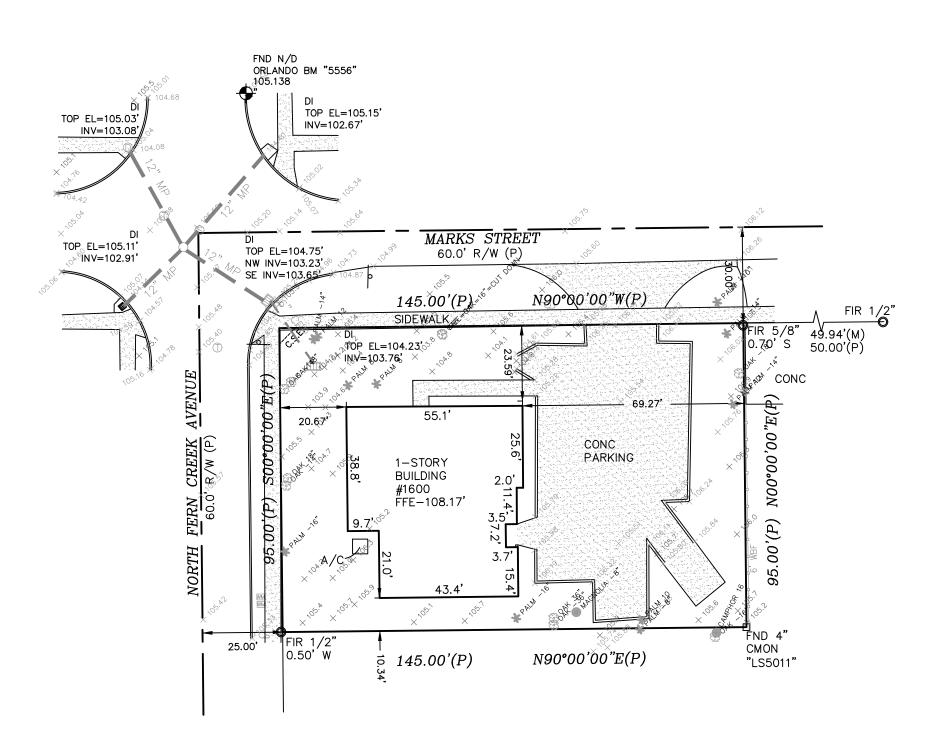
# CONSULTANTS

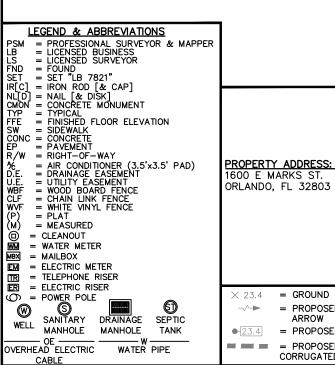
#### LEGAL DESCRIPTION

LOT 1,

PEDIATRIC GASTROENTEROLOGY SERVICES, AS RECORDED IN PLAT BOOK 41, PAGES 43, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.







SURVEYOR'S NOTES

1. BASIS OF BEARING — THE NORTHERLY LINE OF LOT 1, PEDIATRIC GASTROENTEROLOGY SERVICES, AS RECORDED IN PLAT BOOK 41, PAGE 43, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA, AS BEING N90°00'00"W PER PLAT.

2. DATE OF FIELD SURVEY: 4/11/19; ADD TOPO 8/5/19; rRECERT ONLY (NO FIELD WORK) 4/28/21

3. ADDITIONS OR DELETIONS TO SURVEY MAPS OR REPORTS BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING SURVEYOR.

4. PROPERTY LINES SHOULD NOT BE ESTABLISHED USING FENCE OR BUILDING TIES. 5. NO UNDERGROUND INSTALLATIONS OR IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO, BURIED UTILITIES, FOUNDATIONS AND FOOTERS WERE LOCATED.

6. BASED UPON MY REVIEW OF THE "FLOOD INSURANCE RATE MAP" OF ORLANDO, FLORIDA, COMMUNITY PANEL NO. 12095C0265F, EFFECTIVE DATE SEPTEMBER 25, 2009, THIS PROPERTY IS LOCATED WITHIN FLOOD ZONE "X", DEFINED AS AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN.

7. NO INSTRUMENTS OF RECORD REFLECTING OWNERSHIP OR ENCUMBRANCES WERE PROVIDED, EXCEPT AS NOTED, NOR DID THIS SURVEYOR ABSTRACT THESE LANDS.

SURVEY FILE NUMBER: 22-05-140 (9-08-005, 19-04-057)

9. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), AND MORE SPECIFICALLY TO THE CITY OF ORLANDO BENCHMARK 5556 HAVING AN ELEVATION OF 105.138 FEET.

I HEREBY CERTIFY THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE, AND THAT THIS SURVEY MEETS THE STANDARDS OF PRACTICE AS REQUIRED BY CHAPTER 5J-17 FLORIDA BOARD OF LAND SURVEYORS PURSUANT TO SECTION 472.027 FLORIDA STATUTES.

This item has been electronically signed and sealed by Faun M. Hoffmeier, PSM on Date/Time Stamp shown using a digital signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

FAUN M. HOFFMEIER, P.S.M. LS 6552 H&H SURVEY CONSULTANTS, LLC LB 7821

131 W Broadway, Suite 1001, Oviedo, FL 32765

= GROUND ELEVATION

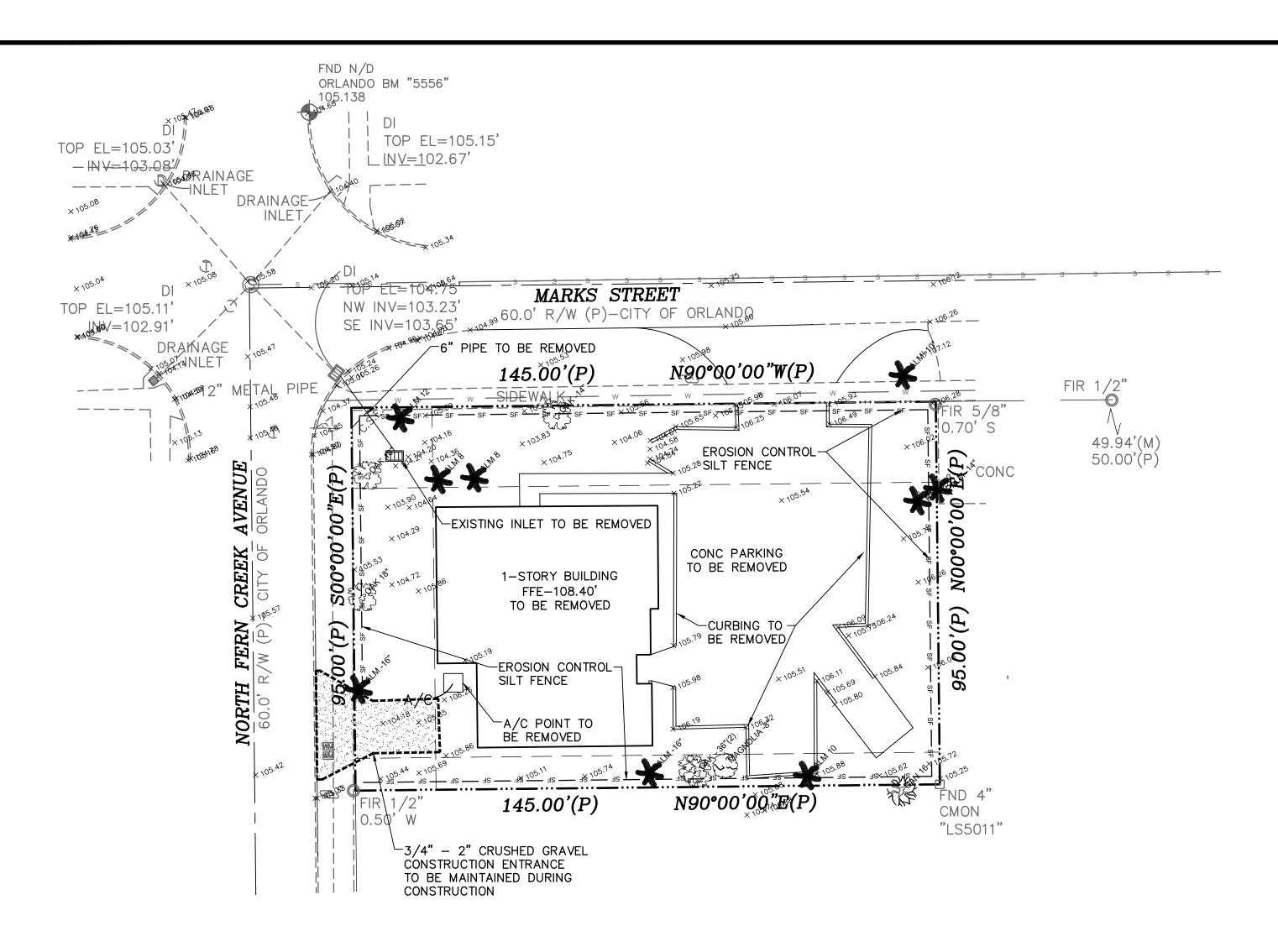
ARROW

 $\sqrt{}$ 

= PROPOSED DRAINAGE

= PROPOSED ELEVATION

= PROPOSED 12"X18" CORRUGATED METAL PIPE



# 50-URBAN LAND

GREATER.

# **INSPECTIONS**

THE HEIGHT OF THE FENCE.

WASHOUTS, AND HEALTHY GROWTH.

1. CONSTRUCTION SITE WILL BE INSPECTED FOR EROSION PROBLEMS DAILY AND AFTER EACH

RESPONSIBLE FOR THE DAY TO DAY SITE OPERATIONS OR SOMEONE APPOINTED BY THE

SUPERINTENDENT AT LEAST ONCE AND FOLLOWING ANY STORM EVEN OF 0.25 INCHES OR

3. ALL TURBIDITY CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER: IF A REPAIR

4. BUILT UP SEDIMENT WILL BE REMOVED FROM THE SILT FENCE WHEN IT HAS REACHED ON-THIRD

5. THE SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS

6. TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS,

7. A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE

OR ANY FEDERAL, STATE OR LOCAL AGENCY APPROVING SEDIMENT AND EROSION CONTROL

8. PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE

ON-SITE IN GOOD WORKING ORDER AND FILLING OUT THE INSPECTION AND MAINTENANCE

SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY

REPORT FORM TO BE COMPLETED CAN BE OBTAINED BY THE ENGINEER. THE REPORTS WILL BE

KEPT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER

PLANS OR STORMWATER MANAGEMENT PLANS. THE REPORTS SHALL BE MADE AND RETAINED AS

PART OF THE STORMWATER POLLUTION PREVENTION PLAN FOR AT LEAST TREE YEARS FROM THE

TRAINING FORM THE SITE SUPERINTENDENT. THEY WILL BE TRAINED IN ALL THE INSPECTION AND

MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED

DATE THAT THE SITE IS FINALLY STABILIZED AND THE NOTICE OF TERMINATION IS SUBMITTED.

RAINFALL. A RAIN GAGE WILL BE ON SITE TO MEASURE THE RAINFALL AMOUNTS.

2. ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON

IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS.

THE REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE.

- 3. STOCKPILE TOPSOIL IF REQUIRED
- 4. PERFORM PRELIMINARY GRADING ON SITE AS REQUIRED 5. STABILIZE DENUDED AREAS AND STOCKPILES AS SOON AS PRACTICAL
- 6. INSTALL STORM SEWER

CONSTRUCTION SEQUENCE

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE

- CONSTRUCT BUILDING AND OTHER UNDERGROUND UTILITIES
- 8. INSTALL PAVEMENT AND CURBING
- 9. INSTALL LANDSCAPE AND SOD
- 10. REMOVE ACCUMULATED SEDIMENT FROM BASINS
- 11. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE ANY TEMPORARY BMP MEASURES.

2. INSTALL SILT FENCES (STAKED EVERY 100' MAX) AND SYNTHETIC BALES AS

**NOTES** 

REQUIRED

OF CONSTRUCTION CLOSEST TO THE GRAVITY MAIN. ANY MODIFICATION TO THE LATERALS SHALL BE DOCUMENTED ON THE AS-BUILT DRAWINGS FOR THIS PROJECT. THIS IS TYPICAL FOR ALL BUILDINGS TO BE REMOVED.

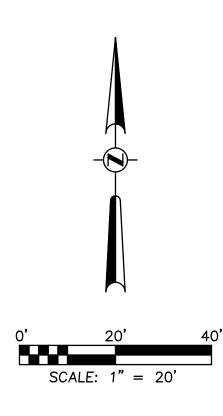
2.ALL DESIGNATED ENTRANCES AND EXITS FOR THE CONSTRUCTION SITE SHALL BE STABILIZED USING FILTER FABRIC AND GRAVEL OR OTHER PRE-APPROVED METHODS TO PREVENT OFF-SITE TRACKING OF TO BE USED BY CONSTRUCTION VEHICLES

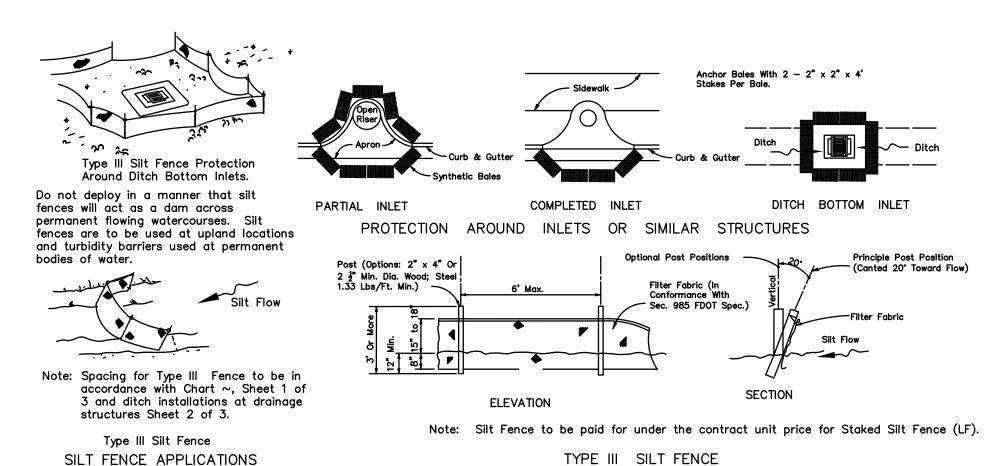
WITH TURBIDITY GREATER THAN 29 NTUS FROM LEAVING THE CONSTRUCTION SITE

- 1.IT IS REQUIRED THAT THE LATERAL BE CUT AND CAPPED AT THE LIMITS
- SEDIMENTS. IF ONLY ONE CONSTRUCTION ENTRANCE IS PROPOSED, PLEASE MAKE NOTE ON THE PLANS THAT THE OTHER EXISTING ENTRANCE IS NOT
- 3.SEDIMENTATION CONTROLS/BMPS SHALL PREVENT STORMWATER RUNOFF
- CITY NOTES
- 1. BEFORE ANY OPEN CUTS WITHIN THE CITY'S ROADWAY, THE CONTRACTOR/OWNER SHALL CONTACT OWEN BLAKELY AT (407)280-0279 OR RUSSELL.BLAKELY@CITYOFORLANDO.NET AND JOHNNIE MILLER, PERMITTING SERVICES INSPECTOR AT (407)246-2793 JOHNNIE.MILLER@CITYOFORLANDO.NET FOR THE RESTORATION METHOD. EDGE OF PAVEMENT TO EDGE OF PAVEMENT RESTORATION WOULD BE REQUIRED UNLESS OTHER METHOD IS APPROVED BY CITY'S INSPECTOR. PROVIDED RESTORATION METHOD SHALL BE INCLUDED IN THE PLAN SUBMITTAL.
- 2. THE CITY OF ORLANDO'S GUIDELINES FOR EROSION SEDIMENT CONTROL (AKA THE BLUE SHEET) WILL SERVE AS A GUIDE FOR THE IMPLEMENTATION FO EROSION SEDIMENT CONTROL MEASURES.

## **BORING NOTES**

- BORING LOGS SHOWN ARE FROM UNIVERSAL ENGINEERING SCIENCES REPORT NO. 1634978 DATED DECEMBER 31,2018.
- 2. PER SECTION 7.2.2 OF THE REPORT, SHALLOW WOOD FRAGMENTS WERE ENCOUNTERED AT BORING B-01 AND WILL NEED TO BE REMOVED DURING SITE WORK.





# INLET EROSION CONTROL DETAILS

# PERMANENT EROSION CONTROL MEASURES (BMP'S)

- 1. PERMANENT SODDING: ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL, AT A MINIMUM, BE SODDED. THE SEEDING MIX MUST PROVIDE BOTH LONG-TERM VEGETATION AND RAPID GROWTH SEASONAL VEGETATION. SLOPES STEEPER THAN 4:1 SHALL BE SEED AND MULCHED OR SODDED.
- 2. MAINTENANCE OF STORMWATER MANAGEMENT SYSTEM: THE PERMITTED STORMWATER MANAGEMENT SYSTEM SHALL BE MAINTAINED, CLEANED AND INSPECTED IN ACCORDANCE WITH THE WATER MANAGEMENT DISTRICT PERMIT.

## **DEWATERING METHODS AND LOCATIONS**

DEWATERING SHALL BE UTILIZED ONLY IF NECESSARY BY MEANS OF WELL POINT SYSTEM. DISCHARGE FROM THE WELL POINT SYSTEM SHALL BE DIRECTED TO THE PROPOSED DRAINAGE STRUCTURES. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR WELL POINT SYSTEM PRIOR TO CONSTRUCTION.

DEWATERING ACTIVITES WILL COMPLY WITH ENGINEERING STANDARDS MANUAL SECTION

# **EROSION TEMPORARY MEASURES (BMP'S)**

- 1. SYNTHETIC BALE BARRIERS SHALL BE USED TO PROTECT PROPOSED INLETS PER DETAILS 2. FILTER FABRIC BARRIERS SHALL BE USED AT THE PERIMETER/LIMITS OF PROPOSED CONSTRUCTION TO PREVENT SEDIMENT FORM
- LEAVING THE PROJECT BOUNDARIES OR DISCHARGING INTO OFF-SITE DRAINAGE FACILITIES 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 STORMWATER COLLECTION FACILITY
- 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 TEMPORARY SEEDING AND MULCHING: AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT AREA NOT ANTICIPATED TO BE RE-EXCAVATED OR DRESSED AND RECEIVE FINAL GRASSING TREATMENT WITHIN 30 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. SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CATEGORY ESTABLISHED IN PARAGRAPH NUMBER 2 ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF SEEDED AREA ADEQUATE TO PREVENT MOVEMENT OF SEED AND MULCH
- MAINTENANCE: ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT CONTROL SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.
- DUST CONTROL: THE CONTRACTOR SHALL CONTROL DUST WITHIN PROJECT SITE FOR CLEARED OR UNSURFACED AREAS BY APPLYING WATER
- EROSION CONTROL IS PERFORMANCE BASED, SO MEASURES ADDITIONAL TO WHAT IS INDICATED ON APPROVED PLANS MAY BE NEEDED AS REQUIRED TO PREVENT OFF-SITE IMPACTS, PROVIDE NOTE THAT THE CONTRACTOR SHALL PROMPTLY REMOVE ALL MUD, DIRT OR OTHER MATERIALS TRACKED OR SPILLED ONTO EXISTING PUBLIC ROADS AND FACILITIES, DUE TO CONSTRUCTION

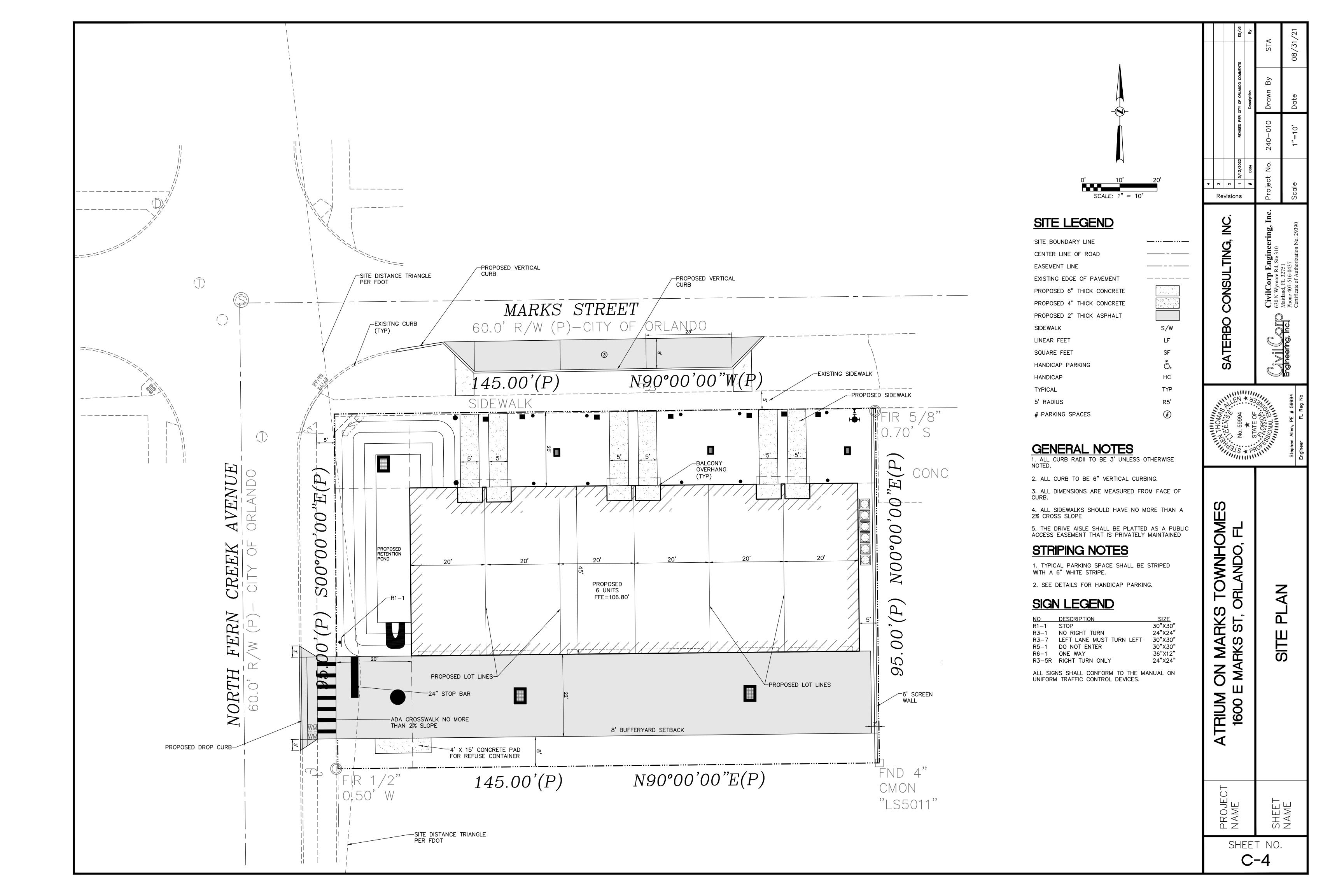
OWNER CERTIFICATION  CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND, AND SHALL COMPLY WITH THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERIC PERMIT FOR TORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STOMRWATER POLLUTION PREVENTION PLAN THEREUNDER."	"I CERTIFY UNDER PENALTY OF LAW TO THE TERMS AND CONDITIONS OF TH STORMWATER DISCHARGE FROM LARGE	R CERTIFICATION  THAT I UNDERSTAND, AND SHALL COMPLY WITH HE STATE OF FLORIDA GENERIC PERMIT FOR E AND SMALL CONSTRUCTION ACTIVITIES AND ON PREVENTION PLAN THEREUNDER."
NAME: TITLE:	NAME:	TITLE:
CONTRACTING FIRM: ADDRESS:	CONTRACTING FIRM:	ADDRESS:

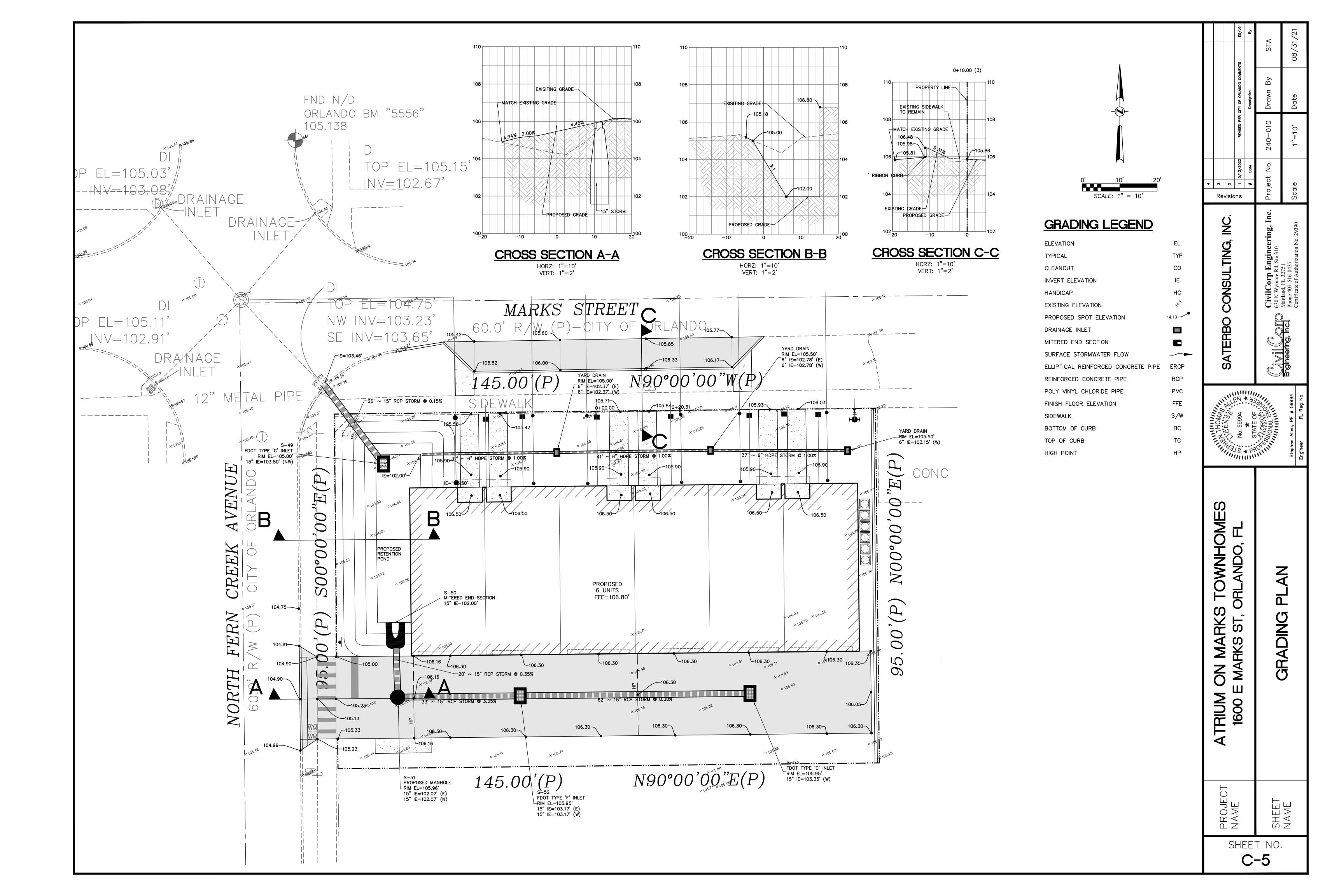
SATERBC SATERBC SATERBC SATERBC SATERBC SATERBC	CivilCor  Saon Wymo Maitland, FL Phone 407-51	8 succisions 2 1 5/12/2022 4 Project No.	5/12/2022 Date Ct No.	REWSED PER 240-010	REVISED PER CITY OF ORLANDO COMMENTS  Description  — 010 Drawn By	ST ST ST
. Reg No	Certificate of Authorization No. 29390	ט ס ס		07= -	במות	) ) )

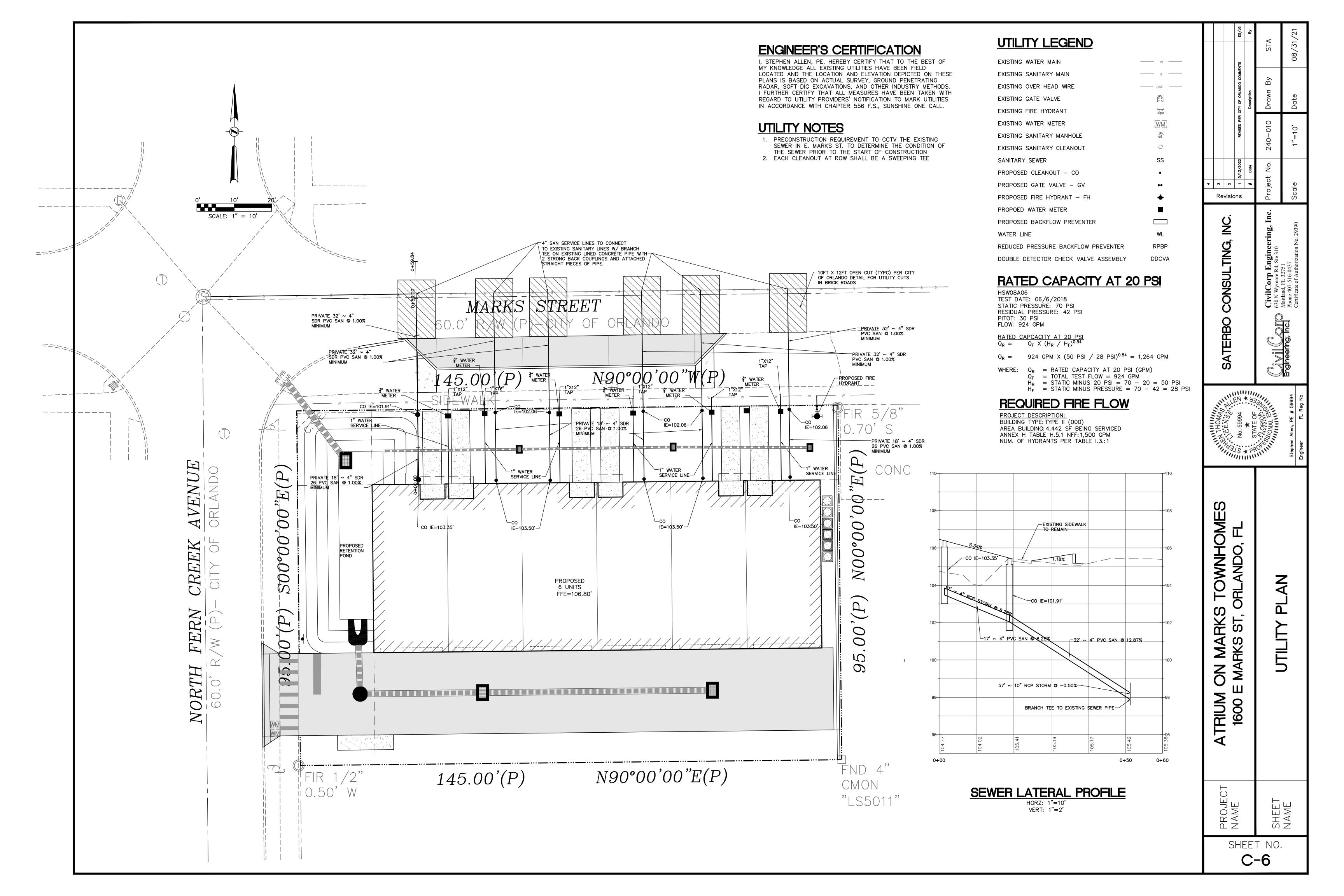


OWNHOM ARK S ST TRIUM 4

ROJE AME , ME SHI SHEET NO. C-3







#### GENERAL CONSTRUCTION NOTES

- 1. ALL ELEVATION REFER TO VERTICAL DATUM AS INDICTED ON THE SURVEY PROVIDED HEREIN.
- 2. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES AFFECTING THIS WORK PRIOR TO CONSTRUCTION, AND NOTIFY ENGINEER
- 3. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES, AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE VARIOUS UTILITY COMPANIES, IN ORDER TO PERMIT MARKING THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES, IN ADVANCE OF CONSTRUCTION, BY CALLING "SUNSHINE" AT 1-800-432-4770. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITIES NOT INCLUDED IN THE "SUNSHINE" PROGRAM.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED BY THIS CONTRACTOR.
- 5. ALL UNDERGROUND UTILITIES MUST BE IN PLACE AND TESTED OR INSPECTED PRIOR TO PAVEMENT AND STRUCTURE CONSTRUCTION.
- 6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS OF THE VARIOUS GOVERNMENTAL AGENCIES. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PROPERTY OF THE CONSTRUCTION, AND SCHEDULE INSPECTIONS ACCORDING TO AGENCY DECLINERATION.
- 7. ALL SPECIFICATIONS AND DOCUMENTS REFERENCED BY THE PLANS AND PERMITS SHALL BE OF LATEST REVISIONS AND/OR LATEST EDITION.
- 8. ALL WORK BY CONTRACTOR/SUBCONTRACTOR SHALL COMPLY WITH THE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK.
- 9. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE OWNER'S ENGINEER, SHOP DRAWINGS ON ALL PROPOSED PRECAST AND MANUFACTURES STRUCTURES. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE. ALL SHOP DRAWINGS ARE TO BE REVIEWED AND APPROVED BY CONTRACTOR SIGNATURE PRIOR TO SUBMITTAL TO THE OWNER'S ENGINEER
- 10. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND APPROPRIATE AGENCIES, AND PROVIDE THEM WITH ALL REQUIRED SHOP DRAWINGS, THE CONTRACTOR'S NAME, STARTING DATE, PROJECTED SCHEDULE, AND OTHER INFORMATION AS REQUIRED, AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION. ANY WORK PERFORMED PRIOR TO NOTIFYING THE ENGINEER, OR WITHOUT AGENCY INSPECTOR PRESENT, MAY BE DEEMED NON-COMPLIANT AND WILL BE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S
- 11. WORK PERFORMED UNDER THIS CONTRACT SHALL BE COORDINATED WITH OTHER WORK BEING PERFORMED ON SITE BY OTHER CONTRACTORS AND UTILITY COMPANIES. IT WILL BE NECESSARY FOR THE CONTRACTOR TO COORDINATE AND SCHEDULE HIS ACTIVITIES, WITH OTHER CONTRACTORS AND UTILITY COMPANIES.
- 12. BACKFILL MATERIAL SHALL BE COMPACTED AROUND PIPES IN 6" LAYERS UP TO A LEVEL OF AT LEAST ONE FOOT ABOVE THE TOP AND BELOW BOTTOM OF THE PIPE. IN AREAS TO BE PAVED, BACKFILL SHALL BE COMPACTED TO 100% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.
- 13. SITE WORK CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF AT LEAST 4,000 P.S.I. IN 28 DAYS, UNLESS OTHERWISE NOTED.
- 14. CONCRETE REINFORCING SHALL CONFORM TO ASTM A615 GRADE OR BETTER, UNLESS OTHER WISE INDICATED ON STRUCTURE PLANS.
- 15. ALL PRIVATE AND PUBLIC PROPERTY AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN EXISTING CONDITIONS. ADDITIONAL COSTS SHALL BE COORDINATED BETWEEN CONTRACTOR AND VENDOR.
- 16. ALL DISTURBED AREAS WHICH ARE NOT TO BE SODDED, ARE TO BE SEEDED AND MULCHED TO FDOT STANDARDS, AND MAINTAINED UNTIL, ACCEPTABLE TO THE REGULATORY AGENCY AND EGINEER OF RECORD, HAVE BEEN OBTAINED. ANY WASHOUTS, REGRADING, RESEEDING, AND GRASSING WORK, AND OTHER EROSION WORK REQUIRED, WILL BE PERFORMED BY THE CONTRACTOR, UNTIL THE SYSTEM IS ACCEPTED, BY THE OWNER, REGULATORY AGENCY AND ENGINEER OF RECORD.
- 17. CHAPTER77-153 OF THE FLORIDA STATUES REQUIRES THAT AN EXCAVATOR NOTIFY ALL GAS UTILITIES A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO EXCAVATING. THESE PLANS SHOW ONLY THE APPROXIMATE LOCATION OF GAS MAINS. AN ON-SITE INSPECTION BY THE RESPECTIVE GAS PERSONNEL, OF THE RESPECTIVE GAS COMPANY SHALL BE CALLED FOR BY THE CONTRACTOR TWO (2) WORKING DAYS BEFORE ENTERING A CONSTRUCTION AREA.
- 18. THE CONTRACTOR SHALL UTILIZE THE "DESIGN SURVEYOR" TO LOCATE AND FLAG ALL PROPERTY CORNERS PRIOR TO CONSTRUCTION AND FINAL ENGINEERING INSPECTION AND CERTIFICATION. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO HAVE PROPERTY CORNERS, WHICH HAVE BEEN LOST DURING CONSTRUCTION, REESTABLISHED BY A PROFESSIONAL LAND SURVEYOR, PREFERABLY THE "DESIGN SURVEYOR"
- 19. THE SOILS ENGINEER IS TO SUPPLY THE ENGINEER WITH A PHOTOCOPY OF ALL COMPACTION TESTS, AND ASPHALT RESULTS. THE SOILS ENGINEER IS TO CERTIFY TO THE ENGINEER OF RECORD, IN WRITING, THAT ALL TESTING REQUIREMENTS, REQUIRED BY THE OWNER, LOCAL REGULATORY AGENCY, AND THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT), FOR THE IMPROVEMENTS, AS REQUIRED BY THE SOILS REPORT, ENGINEERING CONSTRUCTION DRAWINGS AND PERMITS, HAVE BEEN SATISFIED.
- 20. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPLICABLE TESTING WITH THE SOILS ENGINEER. TESTS WILL BE REQUIRED PURSUANT WITH THE TESTING REQUIREMENTS AS SHOWN ON THE ENGINEERING CONSTRUCTION DRAWINGS AND IN THE SOILS REPORT. UPON COMPLETION OF THE WORK, THE SOILS ENGINEER IS TO SUBMIT CERTIFICATIONS TO THE OWNER'S ENGINEER, STATION THAT ALL REQUIREMENTS HAVE BEEN MET.
- 21. THE CONTRACTOR IS TO REVIEW THE DESIGN SOIL REPORTS AND BORINGS PRIOR TO BIDDING THE PROJECT AND PRIOR TO COMMENCING CONSTRUCTION.
- 22. THE 100% IRRIGATION SYSTEM SHALL BE DIFFERENTIATED FROM POTABLE WATER PIPING.
- 23. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE APPROVED PLANS AND PERMITS AT THE CONSTRUCTION
- 24. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR INSTRUCTION OF THE CONTRACTOR REGARDING CONSTRUCTION SAFETY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MEANS AND METHODS
- 25. ALL SODDING, SEEDING AND MULCHING SHALL INCLUDE WATER AND FERTILIZATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THESE AREAS UNTIL THE PROJECT IS COMPLETED AND ACCEPTED BY OTHERS

#### WORK IN FDOT RIGHTS-OF-WAY

FOR CONSTRUCTION SITE SAFETY.

UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

- 1. ALL STRIPING SHALL BE THERMOPLASTIC AND SHALL MEET THE REQUIREMENTS OF FDOT SPECIFICATIONS AND SUPPLEMENTS.
- 2. REFLECTIVE PAVEMENT MARKERS SHALL MEET THE REQUIREMENTS OF FDOT SPECIFICATIONS AND SUPPLEMENTS
- 3. ALL SIGNS WITHIN FDOT RIGH-OF-WAY SHALL MEET THE REQUIREMENTS OF FDOT SPECIFICATION AND SUPPLEMENTS
- 4. REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH FDOT STANDARD INDEX NO. 17352.
- 5. STRIPING WITHIN FDOT RIGHT-OF-WAY SHALL BE PLACED IN ACCORDANCE WITH FDOT STANDARD INDEX NO.
- 6. SIGNS WITHIN FDOT RIGHT-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH FDOT STANDARD INDEX
- NO. 11860 AND SHALL BE PLACED IN ACCORDANCE WITH FDOT STANDARD INDEX NO. 17302.

  7. SIGNING AND STRIPING WITHIN FDOT RIGHT—OF—WAY SHALL BE IN ACCORDANCE WITH THE MANUAL ON
- 8. ALL WORK PERFORMED WITHIN THE FLORIDA DEPARTMENT OF TRANSPORTATION RIGHTS-OF-WAY SHALL CONFORM TO:
- A. FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE SPECIFICATION 2010 MANUAL.
- B. FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN 2010 MANUAL (A.K.A STANDARD INDEX). COMPLIANCE WITH ALL APPLICABLE INDICES IS REQUIRED.

#### CLEARING AND EROSION CONTROL NOTES

- 1. PRIOR TO ANY SITE CLEARING, ALL TREES SHOWN TO REMAIN ON THE CONSTRUCTION PLANS SHALL BE PROTECTED IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY' TREE ORDINANCE AND DETAILS CONTAINED IN THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THESE TREES IN GOOD CONDITION. NO TREES SHOWN TO REMAIN SHALL BE REMOVED WITHOUT WRITTEN APPROVAL FROM THE
- 2. THE CONTRACTOR IS TO PREPARE THE SITE PRIOR TO BEGINNING ACTUAL CONSTRUCTION IN ACCORDANCE, WITH THE SOILS TESTING REPORT, COPIES OF THE SOILS REPORT AREA AVAILABLE THROUGH THE OWNER OR THE SOILS TESTING COMPANY. QUESTIONS REGARDING SITE PREPARATION REQUIREMENTS DESCRIBED IN THE SOILS REPORT ARE TO BE DIRECTED TO THE SOILS TESTING COMPANY.
- 3. THE CONTRACTOR SHALL CLEAR AND GRUB, ONLY THOSE PORTIONS OF THE SITE, NECESSARY FOR CONSTRUCTION. DISTURBED AREAS WILL BE SEEDED, MULCHED, OR PLANTED WITH OTHER APPROVED

LANDSCAPE MATERIAL IMMEDIATELY FOLLOWING CONSTRUCTION.

- 4. THE TOP 4" TO 6" OF GRAND REMOVED DURING CLEARING AND GRUBBING SHALL BE STOCKPILED AT A SITE DESIGNATED BY THE OWNER TO BE USED FOR LANDSCAPING PURPOSES, UNLESS OTHERWISE DIRECTED BY THE OWNER.
- 5. ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH APPLICABLE REGULATIONS. ONLY "GRADING BY HAND" IS PERMITTED WITHIN THE CANOPY LINE OF TREES THAT ARE TO REMAIN
- 6. THE CONTRACTOR IS TO OBTAIN ALL NECESSARY PERMITS FOR REMOVING ANY EXISTING STRUCTURES.
- 7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES TO DISCONNECT OR REMOVE THEIR FACILITIES PRIOR TO REMOVING OR DEMOLISHING ANY EXISTING STRUCTURES FROM THE SITE.
- 8. THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ACCURACY. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITIES AND TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATIONS OF THE THESE UTILITIES WITH THE OWNER OF THE UTILITY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING ANY UNDERGROUND UTILITY, WHETHER SHOWN ON THE PLANS OR LOCATED BY THE UTILITY COMPANY. ALL UTILITIES WHICH INTERFACE WITH THE PROPOSED CONSTRUCTION SHALL BE RELOCATED BY THE RESPECTIVE UTILITY COMPANIES, AND THE CONTRACTOR SHALL COOPERATE WITH THE UTILITY COMPANIES DURING RELOCATION OPERATIONS. ANY DELAY OR INCONVENIENCE CAUSED TO THE CONTRACTOR BY THE VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED.
- 9. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAKING A VISUAL INSPECTION OF THE SITE AND WILL BE RESPONSIBLE FOR THE DEMOLITION AND REMOVAL OF ALL UNDERGROUND AND ABOVE GROUND STRUCTURES THAT WILL NOT BE INCORPORATED WITH THE NEW FACILITIES. SHOULD ANY DISCREPANCIES EXIST WITH THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING THE OWNER AND REQUESTING A CLARIFICATION OF THE PLANS PRIOR TO DEMOLITION.
- 10. DURING CONSTRUCTION, ALL STORM SEWER INLETS IN THE VICINITY OF THE PROJECT SHALL BE PROTECTED BY SEDIMENT TRAPS SUCH AS SECURED SYNTHETIC BALES, SOD, STONE, ETC., WHICH SHALL BE MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION PROGRESS.
- 11. ALL EROSION AND SILTATION CONTROL METHODS SHALL BE IMPLEMENTED PRIOR TO THE START OF CONSTRUCTION AND MAINTAINED UNTIL CONSTRUCTION IS COMPLETE.
- 12. WHEN CONSTRUCTION IS COMPLETED, THE RETENTION/DETENTION AREAS WILL BE RESHAPED, CLEANED OF SILT, MUD AND DEBRIS, AND RE-SODDED IN ACCORDANCE TO THE PLANS.
- 13. CONTRACTOR IS TO PROVIDE EROSION CONTROL/SEDIMENTATION BARRIER (SYNTHETIC BALES OR SILTATION CURTAIN) TO PREVENT SITUATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS, WATERWAYS, AND EXISTING WETLANDS. IN ADDITION, THE CONTRACTOR SHALL PLACE STRAW, MULCH, OR OTHER SUITABLE MATERIAL ON THE GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT THE SITE. IF, IN THE OPINION OF THE ENGINEER AND/OR LOCAL AUTHORITIES, EXCESSIVE QUANTITIES OF EARTH ARE TRANSPORTED OFF—SITE EITHER BY NATURAL DRAINAGE OR BY VEHICULAR TRAFFIC, THE CONTRACTOR IS TO REMOVE SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR AUTHORITIES.
- 14. IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION, OR OTHER ACCEPTABLE METHODS.
- 15. THERE IS TO BE NO DISCHARGE (I.E. PUMPING, SHEET FLOW, SWALE, DITCH, ETC.) INTO EXISTING LAKE SYSTEM, WETLAND, OR RIVER, WITHOUT THE USE OF SETTLING PONDS. IF THE CONTRACTOR DESIRES TO DISCHARGE INTO THE EXISTING LAKE SYSTEM OR RIVER, A SETTLING POND PLAN MUST BE SUBMITTED AND APPROVED BY THE ENGINEER OF RECORD AND LOCAL REGULATORY AGENCY PRIOR TO CONSTRUCTION.

#### PAVING. GRADING AND DRAINAGE NOTES

- 1. ALL DELETERIOUS SUBSTANCE MATERIAL, (I.E. MUCH, PEAT, BURIED DEBRIS), IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS, OR AS DIRECTED BY THE OWNER'S ENGINEER, OR OWNER'S SOIL TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER. EXCAVATED AREAS ARE TO BE BACKFILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHEETING, OR SHORING, AS NECESSARY. TRENCHES SHALL BE KEPT DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED. DEWATERING SHALL BE USED AS REQUIRED.
- 3. IT MAY BE NECESSARY TO FIELD ADJUST PAVEMENT ELEVATIONS TO PRESERVE THE ROOT SYSTEMS OF TREES SHOWN TO BE SAVED. THE CONTRACTOR IS TO COORDINATE WITH OWNER'S ENGINEER PRIOR TO ANY ELEVATION CHANGES.
- 4. PRIOR TO CONSTRUCTION CONCRETE PAVEMENT, THE CONTRACTOR IS TO SUBMIT A PROPOSED JOINTING PATTERN TO THE OWNER'S ENGINEER FOR APPROVAL.

5. THE CONTRACTOR IS TO PROVIDE A 1 BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER, AT ABUTMENT

- OF CONCRETE AND ANY STRUCTURE.

  6. ALL PAVEMENT MARKINGS SHALL BE MADE WITH TRAFFIC PAINT IN ACCORDANCE TO FDOT STANDARD
- SPECIFICATIONS 971-12 OR 971-13. PARKING STALL STRIPING TO BE 4" WIDE PAINTED WHITE STRIPES, UNLESS OTHERWISE SPECIFIED BY AGENCIES.
- 7. THE CONTRACTOR IS TO INSTALL EXTRA BASE MATERIAL WHEN THE DISTANCE BETWEEN THE PAVEMENT ELEVATION AND THE TOP OF THE PIPE OR BELL IS LESS THAN TWELVE (12) INCHES.
- 8. STANDARD INDICES REFER TO THE LATEST EDITION OF FDOT "ROADWAY AND TRAFFIC DESIGN STANDARDS".
- 9. ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE CLASS IV (ASTM C-76) UNLESS OTHERWISE NOTED ON PLANS.
- 10. PVC STORM PIPE, 12" AND SMALLER SHALL CONFORM TO AWWA C-900, CLASS 150 STANDARDS, UNLESS OTHERWISE NOTED.
- 11. PIPE LENGTHS SHOWN ARE APPROXIMATE AND TO THE CENTER OF DRAINAGE STRUCTURES. PIPE LENGTH FOR MITERED ENG AND FLARED END SECTIONS ARE TO END OF PIPE.
- 12. ALL DRAINAGE STRUCTURE GRATES AND COVERS WITHIN TRAFFIC AREAS SHALL BE TRAFFIC RATED FOR AND CAPABLE OF WITHSTANDING H-20 LOADINGS.
- 13. THE CONTRACTOR IS TO SOD THE RETENTION/DETIENTION POND AS INDICATED ON PLANS WITHIN ONE WEEK FOLLOWING CONSTRUCTION OF THE POND.
- 14. MATERIALS AND CONSTRUCTION METHODS FOR STREETS AND STORM DRAINAGE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY AND THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 1991, OR LATEST REVISION THEREOF AND SUPPLEMENTAL SPECIFICATIONS THERETO.
- 15. UNDERCUTTING AND/OR OVER EXCAVATING THE RETENTION/DETENTION AREAS WILL NOT BE ALLOWED.
- 16. THE CONTRACTOR SHALL PROVIDE CERTIFIED RECORD DRAWINGS, SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR. THE RECORD DRAWINGS SHALL SHOW FINAL GRADES, INVERTS, AND LOCATIONS OF ALL STORMWATER FACILITIES INCLUDING THE STORMWATER POND, DRAINAGE STRUCTURES, BERMS & SWALES. THE CONTRACTOR SHALL PROVIDE TEN COPIES OF THE CERTIFIED RECORD DRAWINGS TO THE ENGINEER FOR THE PURPOSE OF CERTIFYING THE STROMWATER MANAGEMENT SYSTEM.

#### PAVING, GRADING AND DRAINAGE TESTING AND INSPECTION REQUIREMENTS

- 1. THE STORM DRAINAGE PIPING AND FILTRATION SYSTEM SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL. THE CONTRACTOR IS TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE AN INSPECTION.
- 2. THE CONTRACTOR SHALL MAINTAIN THE STORM DRAINAGE SYSTEMS UNTIL FINAL ACCEPTANCE OF THE PROJECT.
- 3. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE APPLICABLE TESTING WITH THE SOILS ENGINEER. TESTS WILL BE REQUIRED PURSUANT WITH THE TESTING SCHEDULE FOUND IN THE ENGINEERING CONSTRUCTION DRAWINGS. UPON COMPLETION OF THE WORK, THE SOILS ENGINEER MUST SUBMIT CERTIFICATION TO THE OWNER'S ENGINEER STATING THAT ALL REQUIREMENTS HAVE BEEN MET.

#### WATER/SEWER CLEARANCE REQUIREMENTS

VERTICAL CLEARANCE AT CROSSINGS:
GRAVITY SEWERS OR FORCE MAINS CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE. THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER JOINTS AND WATER JOINTS WILL BE EQUALLY SPACED FROM THE POINT OF CROSSING WITH NO LESS THAN 10 FEET BETWEEN ANY TWO JOINTS. WHERE THE MINIMUM 18 INCH SEPARATION CANNOT BE MAINTAINED, THE SEWER SHALL BE PLACED IN A SLEEVE OR ENCASED IN CONCRETE FOR 20 FEET CENTERED ON THE POINT OF CROSSING. WHERE THERE IS NO ALTERNATIVE TO SEWER PIPES CROSSING OVER WATER MAINS, THE PIPES SHALL BE CENTERED AT THE CROSSING AS INDICATED ABOVE, AND THE WATER MAIN SHALL BE PLACED IN A SLEEVE OR ENCASED IN CONCRETE FOR 20 FEET CENTERED ON THE POINT OF CROSSING. ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO PREVENT DAMAGE TO THE WATER MAIN.

HORIZONTAL SEPARATION BETWEEN PARALLEL LINES:
GRAVITY SEWERS SHALL BE INSTALLED AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED
WATER MAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT PRACTICAL TO
MAINTAIN A 10 FOOT SEPARATION, THE WATER MAIN SHALL BE INSTALLED IN A SEPARATE TRENCH OR ON AN
UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER AND AT AN ELEVATION SO THAT THE
BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER, AND THE WATER AND
SEWER JOINTS SHALL BE STAGGERED.

FORCE MAINS SHALL BE INSTALLED AT LEAST 10 FEET HORIZONTALLY FORM ANY EXISTING OR PROPOSED WATER

#### SANITARY SEWER/RECLAIMED WATER AND POTABLE WATER/RECLEAMINED WATER SEPARATIONS.

WHEN THE RECLAIMED WATER LINE IS TRANSPORTING WATER FOR PUBLIC ACCESS IRRIGATION:
MAXIMUM OBTAINABLE SEPARATION FOR RECLAIMED WATER LINES AND DOMESTIC WATER LINES SHALL BE
PRACTICED. A MINIMUM HORIZONTAL SEPARATION OF 5 FEET (CENTER TO CENTER) OR 3 FEET (OUTSIDE TO
OUTSIDE) SHALL BE MAINTAINED BETWEEN RECLAIMED WATER LINES AND EITHER POTABLE WATER MAINS OR
SEWAGE COLLECTION LINES. AN 18 INCH VERTICAL SEPARATION SHALL BE MAINTAINED AT CROSSINGS.

WHEN THE RECLAIMED WATER LINE IS TRANSPORTING WATER FOR NON-PUBLIC ACCESS IRRIGATION:
THE RECLAIMED WATER MAIN SHALL BE TREATED LIKE A SANITARY SEWER. A 10 FOOT HORIZONTAL AND 18
INCH VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN THE RECLAIMED WATER MAIN AND ALL EXISTING OR
PROPOSED POTABLE WATER MAINS. NO MINIMUM SEPARATION IS REQUIRED BETWEEN THE RECLAIMED WATER
MAIN AND SANITARY SEWERS, OTHER THAN THAT NECESSARY TO ENSURE STRUCTURAL INTEGRITY AND
PROTECTION OF THE LINES THEMSELVES.

NOTE: WHEN IT IS IMPOSSIBLE TO OBTAIN PROPERTY HORIZONTAL AND VERTICAL SEPARATION AS STIPULATED ABOVE, THE DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) MAY ALLOW DEVIATION ON A CASE—BY—CASE BASIS IF SUPPORTED BY DATA FROM THE DESIGN ENGINEER. APPROVAL FOR THE DEVIATION MUST BE OBTAINED PRIOR TO CONSTRUCTION.

#### WATER SYSTEM NOTES

- 1. ALL WATER MAINS SHALL HAVE A MINIMUM OF 36 INCHES OF COVER.
- 2. ALL WATER SYSTEM WORK SHALL CONFORM WITH LOCAL REGULATORY STANDARDS AND SPECIFICATIONS.
- 3. CONFLICTS BETWEEN WATER AND STORM OR SANITARY SEWER TO BE RESOLVED BY ADJUSTING THE WATER LINES AS NECESSARY.
- 4. ALL DUCTILE IRON PIPE SHALL BE CLASS 52 IN ACCORDANCE WITH ANSI A 21.50 (AWWA C 150) AND ANSI A 21.31 (AWWA C 151) AND PIPE SHALL RECEIVE EXTERIOR BITUMINOUS COATING IN ACCORDANCE WITH ANSI A 21.6, A 21.8, OR A 21.51 AND SHALL BE MORTAR LINED, STANDARD THICKNESS, AND BITUMINOUS SEALED IN ACCORDANCE WITH ANSI A (AWWA C 104-71).
- 5. ALL FITTINGS LARGER THAN 2" SHALL BE DUCTILE IRON CLASS 53 IN ACCORDANCE WITH AWWA C-110 WITH A PRESSURE RATING OF 350 PSI. JOINTS SHALL BE MECHANICAL JOINTS IN ACCORDANCE WITH AWWA
- C-111. FITTINGS SHALL BE CEMENT MORTAR LINED AND COATED IN ACCORDANCE WITH AWWA C-104.

  6. THE CONTACTOR IS TO INSTALL TEMPORARY BLO-OFFS AT THE END OF WATER SERVICE LATERALS TO
- 7. THRUST BLOCKING SHALL BE PROVIDED AT ALL FITTINGS AND HYDRANTS AS SHOWN ON DETAILS.
- 8. ALL PVC WATER MAINS 4" THROUGH 12" SHALL BE IN ACCORDANCE WITH AWWA C-900. PIPE SHALL BE CLASS 150 AND MEET THE REQUIREMENTS OF SDR 18 IN ACCORDANCE WITH ASTM D-2241.
- 9. WATER MAIN PIPE OF LESS THAN 4" SHALL BE PER ASTM D2241-89.

ASSURE ADEQUATE FLUSHING AND DISINFECTION.

- 10. ALL FITTINGS 2" AND SMALLER SHALL BE SCHEDULE 40 PVC WITH SOLVENT WELDED SLEEVE TYPE JOINTS.
- 11. ALL GATE VALVES 2" OR LARGER SHALL BE RESILIENT SEAT OR RESILIENT WEDGE MEETING THE REQUIREMENTS OF AWWA C509.
- 12. ALL FIRE HYDRANTS SHALL MEET THE REQUIREMENTS OF AWWA C502 AND SHALL BE APPROVED BY THE LOCAL UTILITY AND FIRE MARSHAL.
- 13. MATERIALS AND CONSTRUCTION METHODS FOR WATER DISTRIBUTION SYSTEM SHALL BE IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY CODES, PLANS, AND SPECIFICATIONS FOR CONSTRUCTION, LATEST REVISION THEREOF, AND SUPPLEMENTAL SPECIFICATIONS THERETO. APPROVAL AND CONSTRUCTION OF ALL POTABLE WATER SERVICE MAIN EXTENSIONS AND CONNECTIONS MUST BE COORDINATED THROUGH THE LOCAL REGULATORY AGENCY.
- 14. THE CONTRACTOR SHALL PROVIDE CERTIFIED UTILITY RECORD DRAWINGS, SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR. THE RECORD DRAWINGS SHALL SHOW THE LOCATION ON ALL WATER MAINS AND SERVICES. THE CONTRACTOR SHALL PROVIDE TEN COPIES OF THE CERTIFIED RECORD DRAWINGS TO THE ENGINEER.

#### WATER SYSTEM TESTING AND INSPECTION REQUIREMENTS

- 1. ALL COMPONENTS OF THE WATER SYSTEM, INCLUDING FITTINGS, HYDRANTS, CONNECTIONS, AND VALVES SHALL REMAIN UNCOVERED UNTIL PROPERLY PRESSURE TESTED AND ACCEPTED BY THE OWNER'S ENGINEER. PRESSURE TESTS TO BE IN ACCORDANCE WITH WATER DEPARTMENT SPECIFICATIONS. CONTRACTOR TO NOTIFY OWNER'S ENGINEER AND WATER DEPARTMENT INSPECTORS 48 HOURS IN ADVANCE OF PERFORMING TESTS.
- 2. CONTRACTOR TO PERFORM CHLORINATION AND BACTERIOLOGICAL SAMPLING IN ACCORDANCE WITH ALL PERMIT REQUIREMENTS. BACTERIOLOGICAL SAMPLING SHALL BE BY THE LOCAL PUBLIC HEALTH UNIT AND/OR LOCAL UTILITY. CONTRACTOR SHALL OBTAIN CLEARANCE OF DOMESTIC WATER SYSTEM. COPIES OF ALL BACTERIOLOGICAL TESTS TO BE SUBMITTED TO OWNER'S ENGINEER.

#### SANITARY SEWER NOTES

- 1. ALL SANITARY SEWER MAINS & LATERALS SHALL HAVE A MINIMUM OF 36 INCHES OF COVER.
- 2. ALL SANITARY SEWER MAINS & SERVICE LATERALS SHALL BE CONSTRUCTED OF POLYVINYL CHLORIDE PIPE AND FITTINGS GREEN IN COLOR SHALL BE ASTM D3034 SDR 26 PER SECTION 9.03.01A, ESM #5
- 3. ALL SANITARY SEWER WORK SHALL CONFORM WITH LOCAL REGULATORY STANDARDS AND SPECIFICATIONS.
- 4. PRIOR TO COMMENCING WORK WHICH REQUIRES CONNECTING NEW WORK TO EXISTING LINES OR APPURTENANCES, THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF EXISTING CONNECTION POINT AND NOTIFY OWNER'S ENGINEER OF ANY CONFLICTS OR DISCREPANCIES. (SEWER PIPE SHALL BE ASTM D3034 SDR 26 PER SECTION 9.03.01A, ESM #5) IF CONFLICT EXIST BETWEEN THE ESM AND THE REFERENCES ASTM D2321, THE ESM SHALL PREVAIL. FOR GASKETS COMPLY WITH ASTM D3212
- 5. PVC PIPE AND FITTINGS SHALL CONFORM TO ASTM SPECIFICATIONS D3034 SDR 26 PER SECTION 9.03.01.A IF THERE IS A CONFLICT BETWEEN THE ESM AND THE REFERENCED ASTM D2321, THE ESM SHALL PREVAIL. SEWER PIPE SHALL COMPLY WITH ASTEM D3212 FOR GASKETS. ALL SANITARY SEWER PIPELINES SHALL BE SOLID GREEN IN COLOR.

6. ALL PVC FORCE MAINS SHALL BE AWWA C900 DR18 SECTION 9.04.3 5TH ED., COLOR GREEN, WITH A GREEN

MAGNETIC TAPE A MINIMUM OF 2" WIDE, PLACED 1 FOOT BELOW THE PROPOSED GRADE. THE PRINTING ON

- THE MAGNETIC TAPE SHOULD READ "FORCEMAIN". ESM ALSO REQUIRES MAGNETIC LOCATE BALLS AND TRACE WIRE FOR NON-METALLIC FORCE MAIN IDENTIFICATION.

  7. ALL DUCTILE IRON PIPE SHALL BE CLASS 52 IN ACCORDANCE WITH ANSI A 21.50 (AWWA C 150) AND ANSI A21.51 (AWWA C 151). DUCTILE IRON PIPE SHALL RECEIVE INTERIOR AND EXTERIOR BITUMINOUS COATING IN
- ACCORDANCE WITH ANSI A 21.6, A 21.8, OR A 21.51.

  8. ALL SANITARY SEWER GRAVITY MAINS OR SANITARY SEWER FORCEMAINS THAT REQUIRE DUCTILE IRON PIPE.
- 9. ALL SANITARY SEWER COVERS SHALL BE TRAFFIC RATED FOR H-20 LEADING. PUBLIC MANHOLES WILL HAVE COVERS PROVIDED IN THE DETAILS. PRIVATE MANHOLES WILL HAVE PRIVATE SANITARY COVER
- 10. THE CONTRACTOR SHALL PROVIDE CERTIFIED UTILITY RECORD DRAWINGS "AS BULIT" THAT COMPLIES WITH CHPT. 5 OF ESM 5TH ED., SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR. THE RECORD DRAWINGS SHALL SHOW FINAL GRADES AND LOCATIONS ON ALL SANITARY SEWER MAINS AND SERVICES. THE CONTRACTOR SHALL PROVIDE TEN COPIES OF THE CERTIFIED RECORD DRAWINGS TO THE ENGINEER.

ARE TO BE CERAMIC EPOXY LINED AND COATING SHALL COMPLY WITH SECTION 9.04A, 5TH ED.

- 11. ALL SANITARY FORCEMANS AND GRAVITY MAINS SHALL BE SEPARATED A MINIMUM OF 10 FEET HORIZONTALLY AND 1.5 FEET VERTICALLY FORM ADJACENT WATER MAINS. WHEN THESE SEPARATION DISTANCES ARE NOT POSSIBLE, CONTRACTOR SHALL CONSULT ENGINEER AND AGENCY HAVING JURISDICTION FOR PIPE MATERIAL AND/OR ENCASEMENT ALTERNATIVES.
- 12. SEWER WORK SHALL ALSO REFERENCE COMPLIANCE WITH CHPT. 9 OF THE CITY'S ENGINEERING STANDARDS MANUAL (ESM)

#### SANITARY SEWER TESTING AND INSPECTION REQUIREMENTS

- 1. ALL GRAVITY SEWER PIPING SHALL BE SUBJECT TO VISUAL INSPECTION BY THE OWNER'S ENGINEER. CONTRACTOR TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE INSPECTION.
- 2. CONTRACTOR SHALL PROVIDE A DVD RECORDING OF VIDEO INSPECTION OF THE PRIVATE GRAVITY SANITARY SEWER SYSTEM IN ACCORDANCE WITH CHPT. 9 (SECTION 9.03.05) OF THE CITY OF ORLANDO'S ENGINEERING STANDARDS MANUAL (ESM) TO THE CITY FOR WASTEWATER DIVISION REVIEW PRIOR TO ACCEPTANCE.
- 3. ALL FORCE MAINS SHALL BE SUBJECT TO HYDROSTATIC PRESSURE TEST IN ACCORDANCE WITH THE REGULATORY AGENCY HAVING JURISDICTION. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER OF RECORD AND SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL. COORDINATION AND NOTIFICATION OF ALL PARTIES IS THE CONTRACTOR'S REASONABILITY.

#### GENERAL SAFETY NOTES

- 1. DURING THE CONSTRUCTION AND/OR MAINTENANCE OF THIS PROJECT, ALL SAFETY REGULATIONS ARE TO BE ENFORCED BY THE CONTRACTOR. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF HIS PERSONNEL.
- 2. THE MINIMUM STANDARDS AS SET FORTH IN THE CURRENT EDITION OF THE STATE OF FLORIDA, MANUAL ON TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS SHALL BE FOLLOWED IN THE DESIGN APPLICATION, INSTALLATION, MAINTENANCE, AND REMOVAL OF THE TRAFFIC CONTROL DEVICES, WARNING DEVICES, AND BARRIERS NECESSARY TO PROTECT THE PUBLIC AND WORKMEN FROM HAZARDS WITHIN THE PROJECT LIMITS.
- 3. ALL TRAFFIC CONTROL MARKINGS AND DEVICES SHALL CONFORM TO THE PROVISIONS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PREPARED BY THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION.
- 4. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER AND THE FLORIDA DEPARTMENT OF TRANSPORTATION REGULATIONS.
- 5. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS. THE ABOVE INFORMATION HAS BEEN PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT AND/OR ENFORCE SAFETY
- 6. ALL MAINTENANCE OF TRAFFIC SHALL ADHERE TO THE REQUIREMENTS OF THE DESIGN STANDARDS 600

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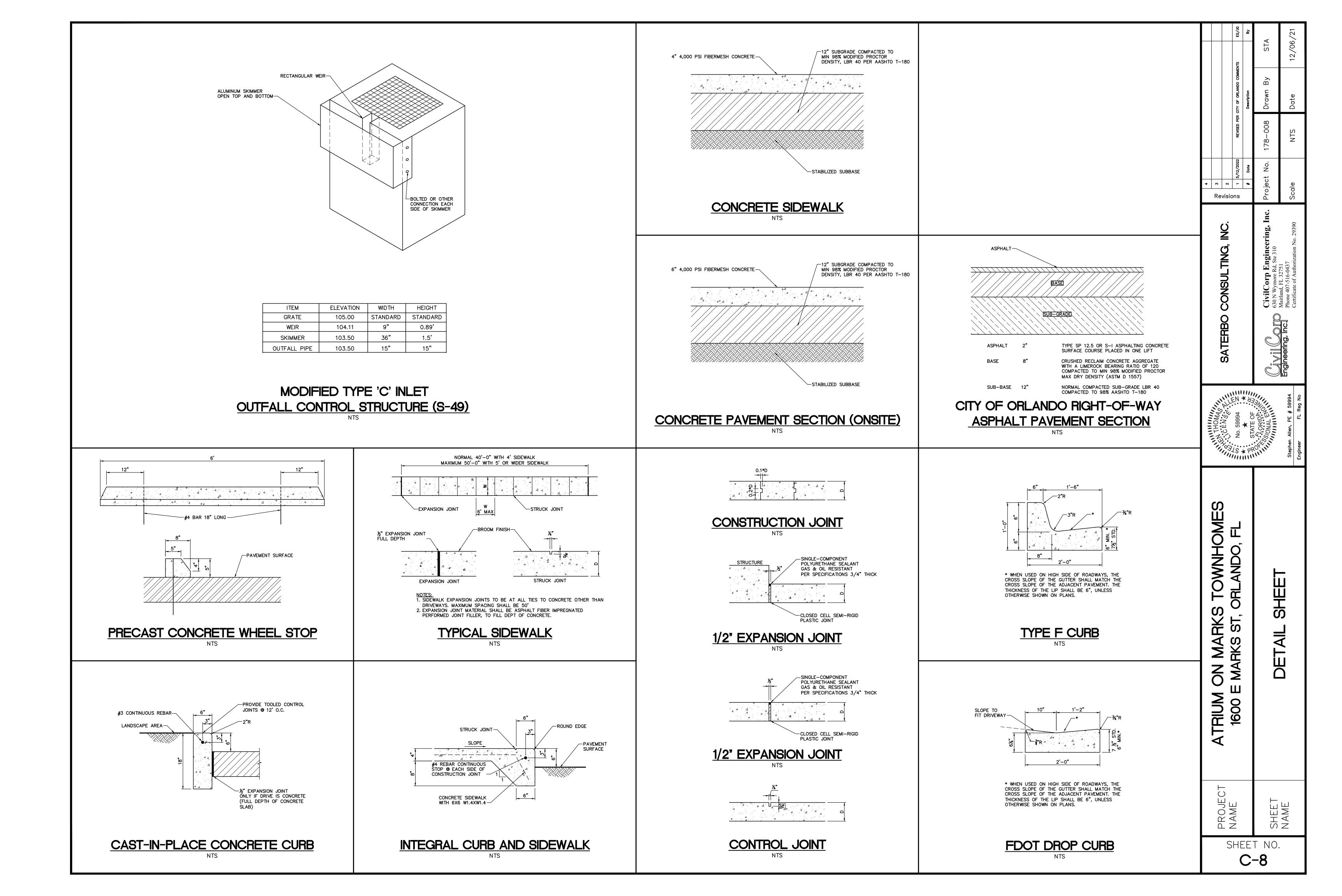
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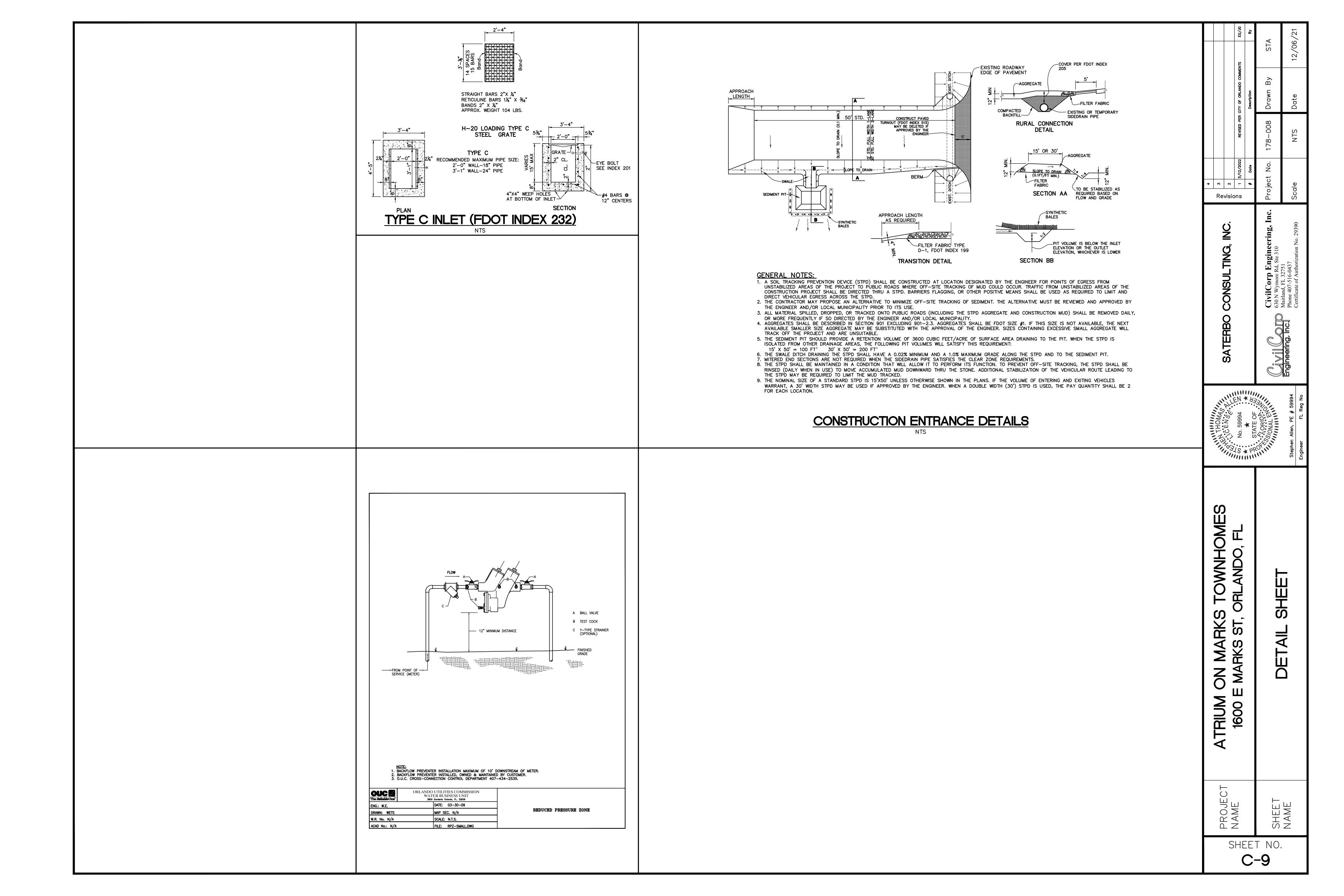
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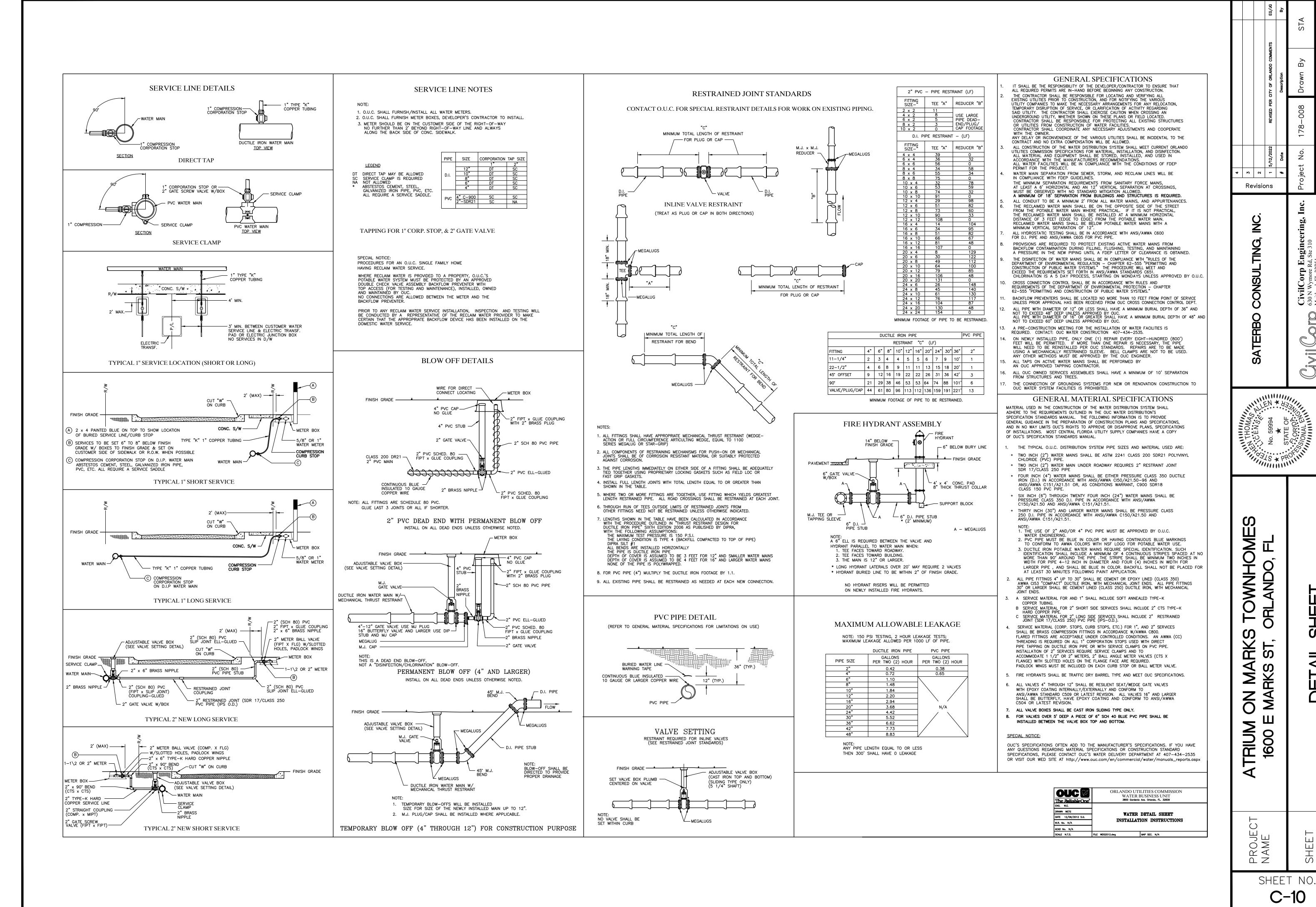
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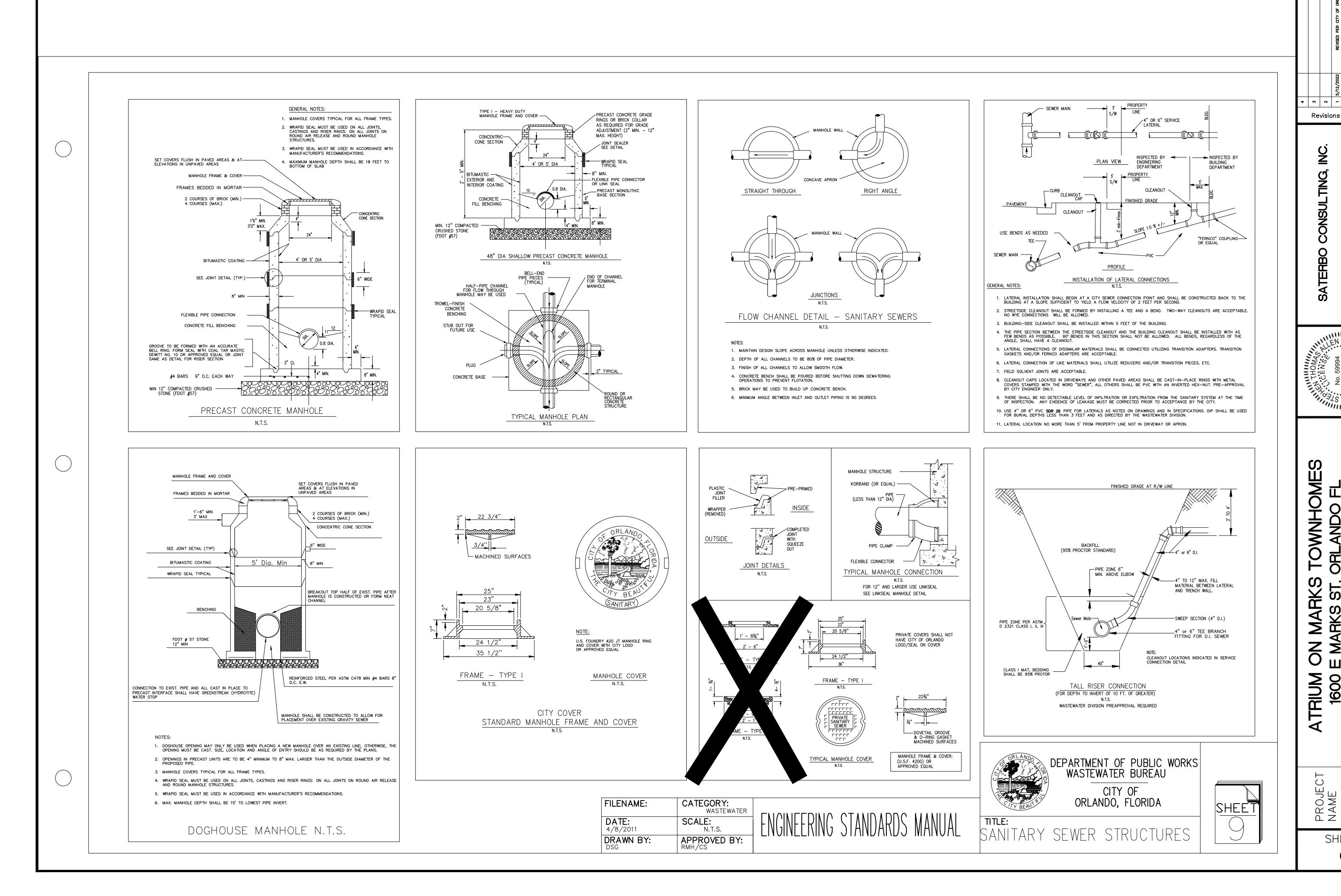






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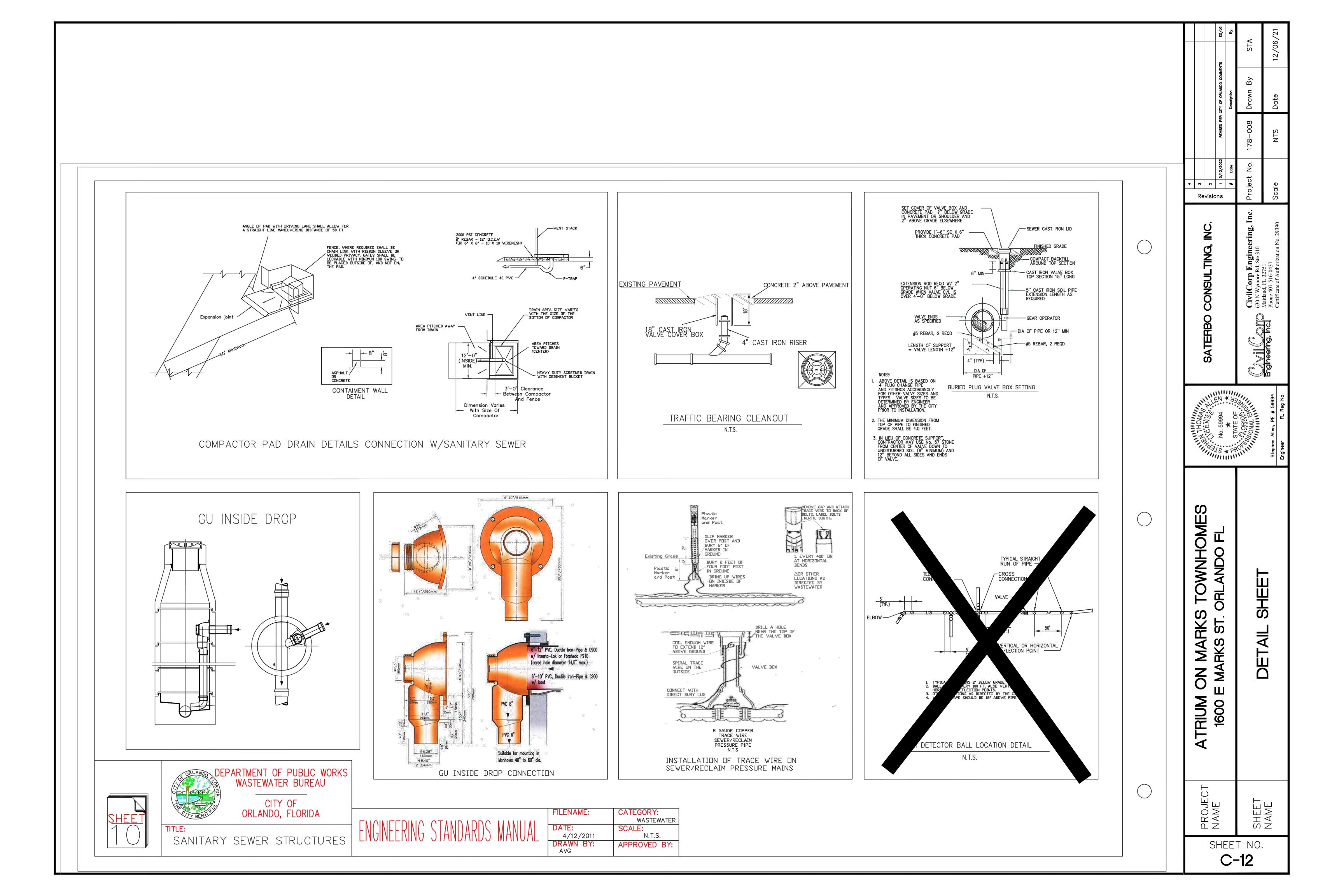
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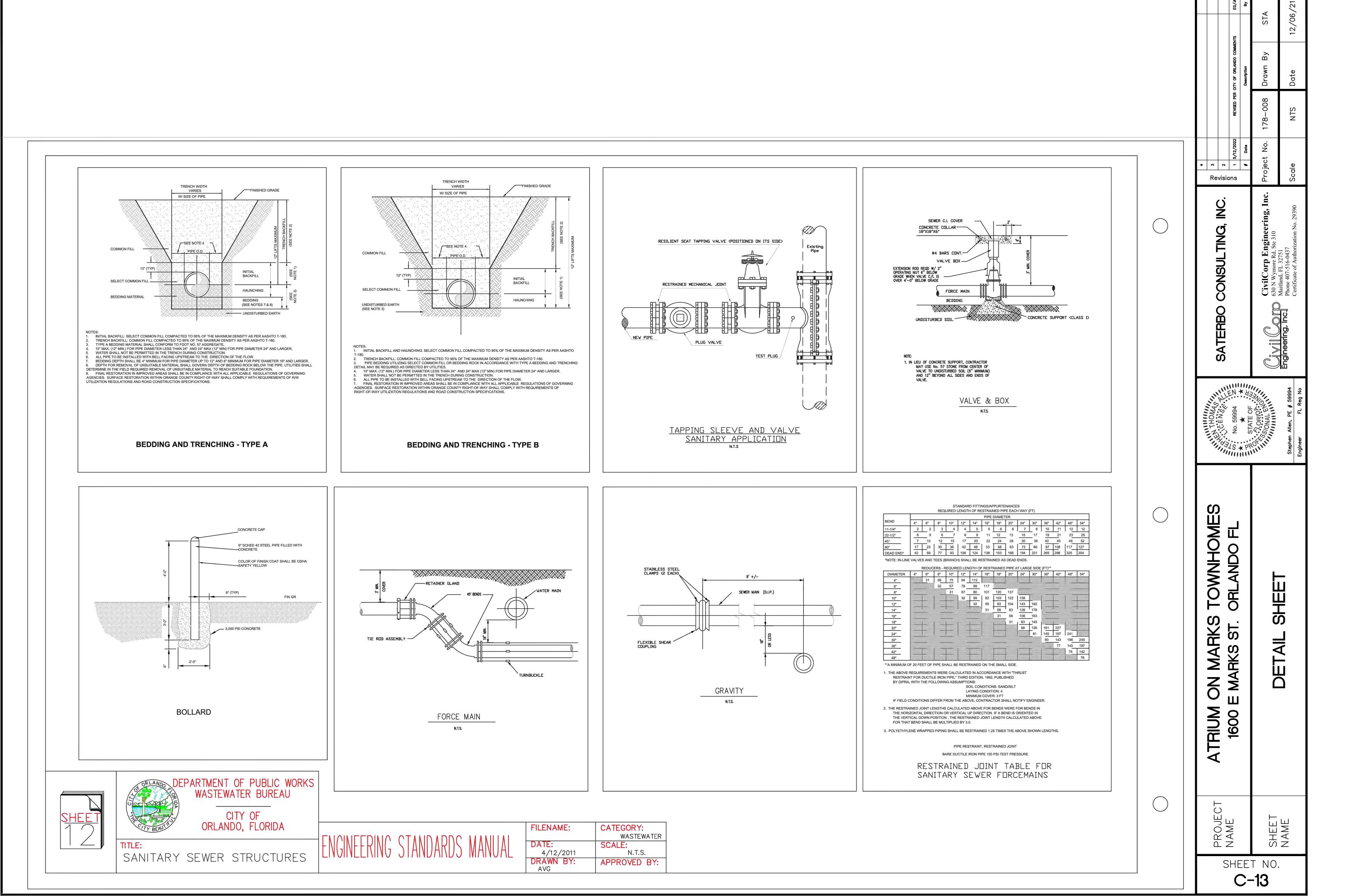


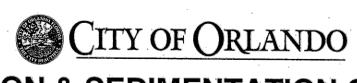
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# **EROSION & SEDIMENTATION CONTROL** FOR CONSTRUCTION SITES

Ways to help keep Orlando "The City Beautiful"

HOME / OFFICE

STREET NAME

costs, and/or action by the City of Orlando Code Board.

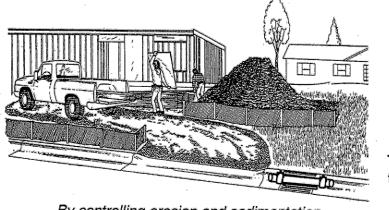
sediment and construction debris) into lakes, stormwater drains, or any part of the stormwater

Manual: A Guide to Sound Land and Water Management, and the FDEP Erosion, Sediment, and

conveyance system (ex. streets, gutters, alleyways, ditches, canals, parking lots, and retention/detention

ponds, etc.). For more information about erosion and sediment control, refer to the Florida Development

Stormwater Inspector Manual. Violators may be subject to civil penalties, citations, pollution abatement



By controlling erosion and sedimentation, Orlando builders keep our streets and waterways clean.

SAMPLE EROSION

CONTROL PLAN

FOR SMALL

DEVELOPMENT

AREA TO BE TOPSOILED,

SEEDED AND MULCHED BY OWNER AT THE

COMPLETION OF CONSTRUCTION

## **Erosion Is a Costly Problem**

Eroding construction sites are a leading cause of water quality problems in Florida. For every acre under construction, about 1 1/2 dump truck loads of soil wash into the stormwater system and into a nearby lake unless builders use proper erosion control measures.

# **Controlling Erosion Can Be Easy**

Erosion control is important and necessary for all development sites. The materials needed are easy to find and relatively inexpensive - silt fencing, synthetic these materials to use is a straightforward process. Maintenance to those Best Management Practices (BMP's) is key to staying in compliance.

This fact sheet includes shows step-by-step instructions that can be used by builders. Additional controls will be needed for sites that are adjacent to lakes, wetlands, and streams, have steep slopes, receive runoff from adjacent land, or are larger than one acre.

When areas are stabilized and not endanger of eroding, the temporary erosion control measures can be removed. BMP's should not be left on finished sites.

For more information on erosion and sediment control issues and how you can help save our lakes, please contact the City of Orlando Streets and Stormwater Hotline at 407-246-2370.

EROSION

CONTROL PLAN

LEGEND

---- PROPERTY LINE

TEMPORARY

DIVERSION

DRAINAGE

SPECIFICATION

PRESERVATION

1 VEGETATION

SILT FENCE

SYNTHETIC BALES

STOCKPILED

TOPSOIL

TREE

← — Construction

Entrance

EXISTING CURB

---> EXISTING DRAINAGE

# COMMONLY USED EROSION CONTROL MEASURES

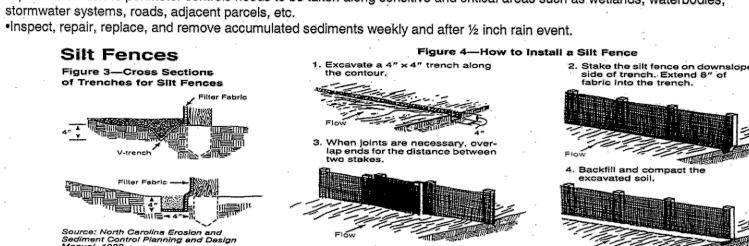
#### PERIMETER CONTROLS

•Examples may include trenched-in silt fence, trenched-in synthetic bales, berms, sod buffers, waddles, turbidity barrier, etc. •Install within 24 hours of land disturbance.

•Ensure that perimeter controls are installed properly (trenched-in, no gaps, appropriate BMP for conditions) and maintained until area is stabilized.

·Special attention to perimeter controls needs to be taken along sensitive and critical areas such as wetlands, waterbodies

Inspect, repair, replace, and remove accumulated sediments weekly and after ½ inch rain event.



#### STORMWATER SYSTEM PROTECTION

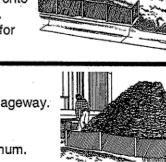
Prevent Flooding when using Inlet Protection: Slotted Cover > •Examples of stormwater systems may include stormwater inlets and grates, ditches, swales, Spacer Block / retention/detention ponds, canals, lakes, etc. Method of protecting on-site and off-site stormwater systems include properly installed synthetic

bales, silt fence fabric, filter fabric, sock-covered perforated pipe, or other inlet protection devices. •In problem flood-prone areas (such as streets), ensure that floodwaters can be alleviated through •Floating turbidity curtain may need to be installed for added protection to the receiving waterbody. •Inspect, repair, replace, and remove accumulated sediments weekly and after ½ inch rain event.

#### •Inlet Protection covering the entire curb inlet opening Anchors (ex. sand/rock bags) to hold ends down

#### OFFSITE TRACKING

•Prevent offsite tracking of sediment onto streets by stabilizing the site entrance. •Examples include at least 50 foot of gravel with geo-fabric underlay, tire wash area, etc. At the end of each workday, remove sediment by sweeping and scraping up soil tracked onto the street. Frequent sweeping of street and curb line will prevent sediment accumulation. Sediment in the streets and curbs can become major safety and environmental hazards for



#### SOIL STOCKPILES

•Locate away from any down-slope street, driveway, stream, lake, wetland, ditch, or drainageway. •If stockpiles are located near a perimeter, cover stockpiles with plastic sheeting. Add perimeter controls at the toe of stockpile.

your site. Sediment can impede traffic, cause flooding, and degrade lakes.

•Wet down exposed soil with a light spray or sprinkler to keep dust and erosion at a minimum.

#### STABILIZE AREAS

•Wherever possible, preserve existing trees, shrubs, and other vegetation to minimize exposed areas. •Stabilize exposed areas immediately. Do not wait till end of project.

•Stabilization can be achieved with sod, seeding, mulch, erosion control blankets, etc. Hard armor (ex. rip-rap, netting, concrete, rock, etc.) may be more appropriate in channels, flumes, steep slopes, swift moving water, etc. Revegetate exposed areas with seed, sod, or mulch as soon as possible.

•To prevent root damage to existing trees, do not grade, place soil stockpiles, or park near trees marked for preservation. •Mulch may need to be anchored down by disking, crimping, or nets. Sod may need to be anchored down with staples especially on side slopes.

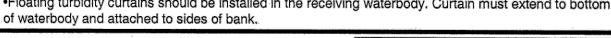
•Seed and sod must be watered and maintained to establish effective cover per City Engineering Standards Manual specs.

#### **DEWATERING OPERATIONS**

•Dewatering a site to install underground utilities will require a permit through the Water Management District (St Johns River WMD 407-659-4800 or South Florida WMD 407-858-6100).

 Dewatering methods include well-points, sock filters, sump pumps, etc. •Directing the water offsite will require the discharge to meet FDEP Surface Water Quality Classifications (62-302.530). The water will need to be tested for pollutants. •Turbidity levels on the discharge water shall not exceed 29 N.T.U.'s above the receiving waterbody. This

can be achieved through well-point and sock filter methods, velocity controls, armored spillways, sediment basins, use of chemical clarifiers, etc. Under the Stormwater Utility Code, Section 31.19, the City prohibits the discharge of pollutants (including •Floating turbidity curtains should be installed in the receiving waterbody. Curtain must extend to bottom



#### MAINTENANCE TO BMP's

•Inspect BMP's at least weekly and after ½ inch rain event. •Remove sediment and repair spots of erosion immediately. •If site is subject to NPDES permitting (1+ acres disturbed), keep a weekly log of erosion control efforts.

For more information on Erosion and Sediment Control Issues and how you can help save our lakes, please contact the City of Orlando Streets and Stormwater Hotline at 407-246-2370.

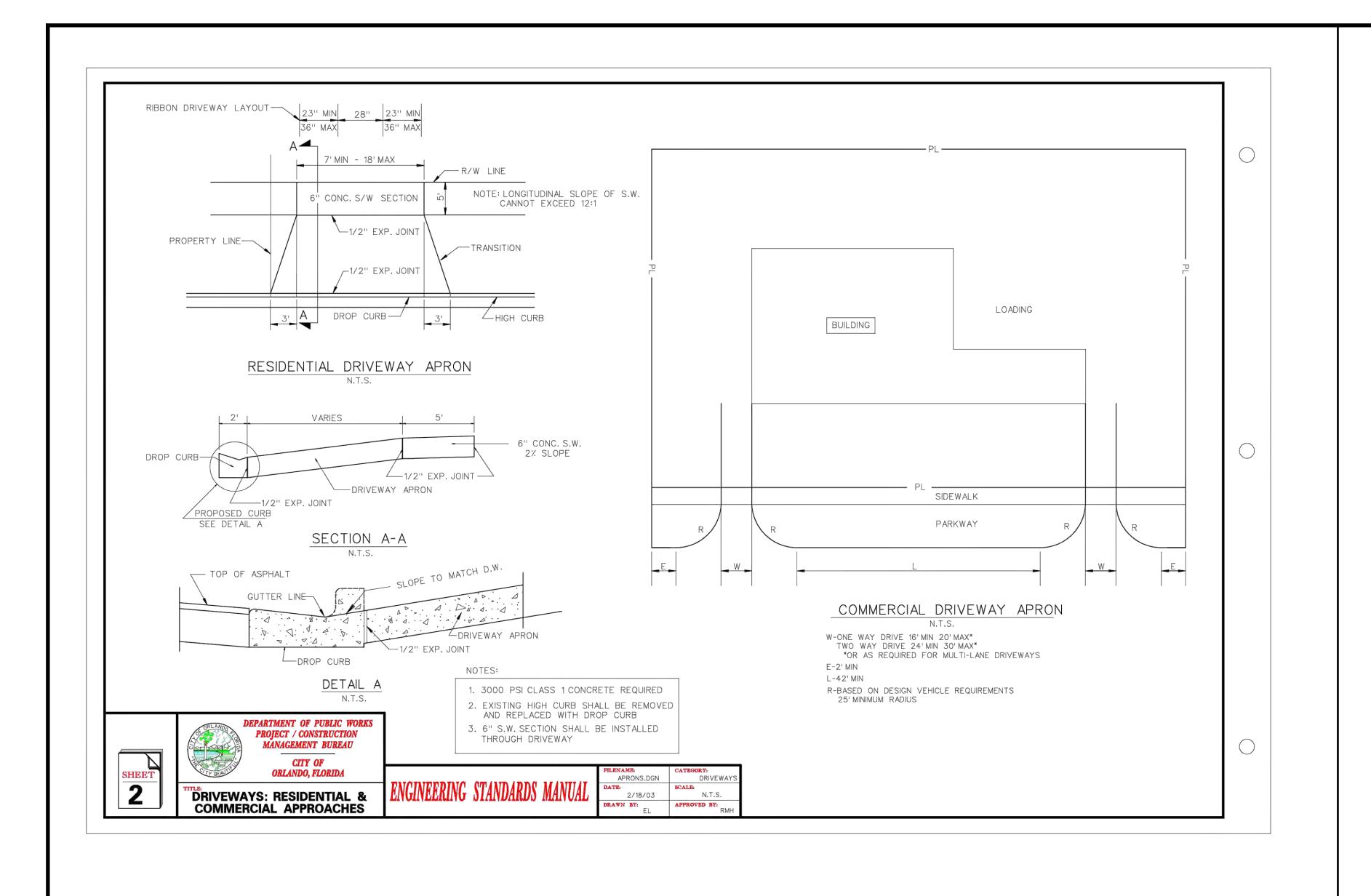
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SHEET NO.

C-14



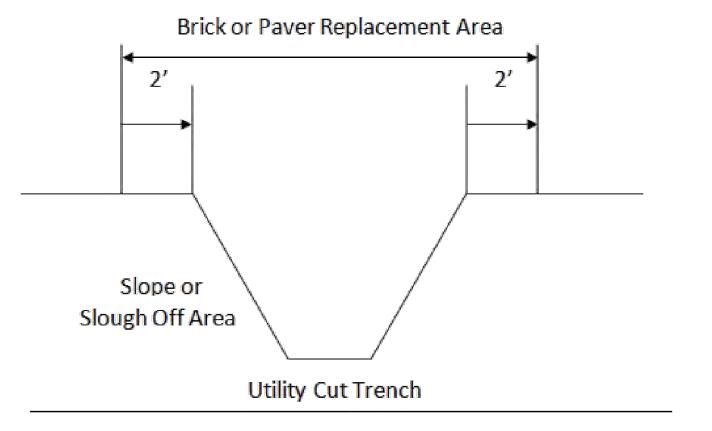
For Utility work in Brick or Paver areas, the disturbed soil, subgrade, and base will need to be compacted in the area 2 feet from the edge of the sloped trench wall or the area of any slough off during excavation (as shown in the figure below) on all sides of the cut.

The brick, subbase, base, and setting bed shall comply with Pages 67 through 69 of the City of Orlando ESM

An 8" crushed concrete base will be required for utility cuts where bricks will be re-installed.

Any disturbed soil in the cut or fill areas will need to be compacted in 1 foot lifts and meet a minimum density of 98% as required by AASHTO T-180. The base will need to meet a 98% density.

For utility cuts where pavers are present, a 6" in concrete base will be required, along with grout to hold the pavers in place.



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11.	CivilCol	CivilCorp Engineering, Inc. 630 N Wymore Rd, Ste 310	Proj	Project No.	178-008	Drawn By	STA	
•	ng, Inc.	Maitland, FL 32751 Phone 407-516-0437 Certificate of Authorization No. 29390	Scale	9	NTS	Date	12/06/21	/21

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ATRIUM ON MARKS TOWNHOMES 1600 E MARKS ST, ORLANDO FL PROJECT NAME

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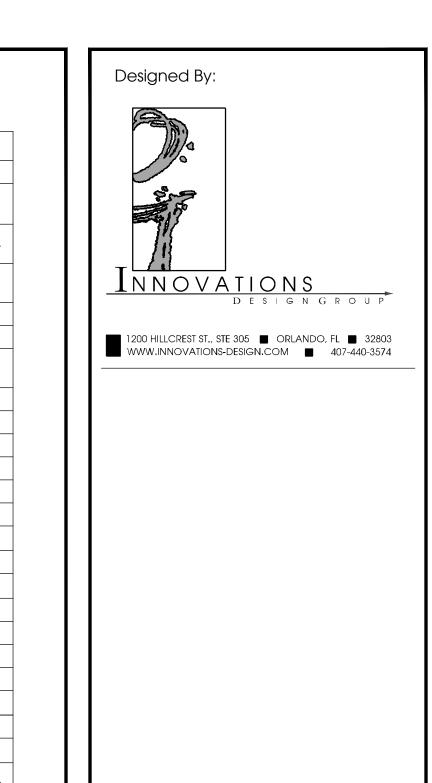
SHEET NAME

#### LANDSCAPE INSTALLATION NOTES:

- 1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND BASE INFORMATION PRIOR TO INITIATING PLANTING INSTALLATION. ALL EXISTING PLANTING SHALL REMAIN INTACT AND UNDISTURBED UNLESS OTHERWISE NOTED ON THE PLANS.
- 2. CONTRACTOR SHALL NOTIFY ALL NECESSARY UTILITY COMPANIES 48 HOURS MINIMUM PRIOR TO DIGGING FOR VERIFICATION OF ALL UNDERGROUND UTILITIES, IRRIGATION AND ALL OTHER OBSTRUCTIONS AND COORDINATE WITH OWNER'S REPRESENTATIVE PRIOR TO INITIATING OPERATIONS. DRAWINGS ARE PREPARED ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARING THESE DOCUMENTS.
- 3. CONTRACTOR SHALL FAMILIARIZE HIMSELF/HERSELF WITH EXISTING SITE CONDITIONS PRIOR TO INITIATING PLANTING. ALL EXISTING SITE FURNISHINGS, PAVING, LANDSCAPE AND OTHER ELEMENTS TO REMAIN SHALL BE PROTECTED FROM ANY DAMAGE UNLESS OTHERWISE NOTED.
- 4. UNLESS OTHERWISE NOTED, THE LIMITS OF CONSTRUCTION ARE THE CLEARING LIMITS NOTED ON THE DRAWINGS. (REFER TO CIVIL ENGINEERING DRAWINGS).
- 5. REPORT ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DRAWINGS AND FIELD CONDITIONS TO THE OWNER'S REPRESENTATIVE IMMEDIATELY.
- 6. LANDSCAPE CONTRACTOR SHALL COORDINATE ALL WORK WITH RELATED CONTRACTORS AND WITH THE GENERAL CONSTRUCTION OF THE PROJECT IN ORDER NOT TO IMPEDE THE PROGRESS OF THE WORK OF OTHERS OR THE CONTRACTOR'S OWN WORK.
- 7. CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE EXISTING GROUND COVER FOR ALL PLANTING BEDS AS SPECIFIED PRIOR TO PLANTING INSTALLATION. CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ALL PORTIONS OF EXISTING LAWN AREAS DAMAGED WHILE COMPLETING PLANTING INSTALLATION WITH THE SAME GRASS SPECIES TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
- 8. CONTRACTOR SHALL PERFORM SOIL TESTING PRIOR TO INSTALLATION TO DETERMINE NUTRIENTS PRESENT IN SOIL, PH OF SOIL, AND SOIL TEXTURE OF TOP 12" OF SOIL. BASED ON THE RESULTS OF THE TESTS THE CONTRACT SHALL MAKE THE NECESSARY AMENDMENTS TO SUPPORT THE HEALTH OF THE NEWLY INSTALLED PLANTS.
- 9. ALL PLANT MATERIAL SHALL BE IN FULL AND STRICT ACCORDANCE WITH THE "AMERICAN STANDARD FOR NURSERY STOCK" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN (AAN) AND THE PROJECT MANUAL AND SPECIFICATIONS. PLANT MATERIALS SHALL EXCEED IN SOME INSTANCES SOME SPECIFICATIONS IF NECESSARY TO MEET THE MINIMUM REQUIREMENTS OF OTHERS.
- 10. ALL PLANT MATERIAL SHALL BE IN FULL AND STRICT ACCORDANCE WITH THE FLORIDA GRADES AND STANDARDS FOR NURSERY PLANTS AS PUBLISHED BY THE STATE OF FLORIDA DEPARTMENT OF AGRICULTURE. ALL PLANT MATERIAL SHALL MEET FLORIDA #1 OR BETTER.
- 11. ALL TREES SHALL HAVE SIX FEET (6') CLEAR TRUNK UNLESS OTHERWISE SPECIFIED.
- 12. ALL CONTAINER SIZES NOTED ON PLANT LIST ARE MINIMUM. INCREASE SIZE IF NECESSARY TO CONFORM TO PLANT SIZE AND SPECIFICATIONS. ANY MATERIAL NOT MEETING THE SPECIFIED SIZE SHALL BE REMOVED AND REPLACED AT CONTRACTOR'S EXPENSE.
- 13. ALL TREE CALIPER SIZES NOTED ON PLANT LIST ARE MINIMUM. INCREASE SIZE IF NECESSARY TO CONFORM TO PLANT SIZE AND SPECIFICATIONS.ANY MATERIAL NOT MEETING THE SPECIFIED SIZE SHALL BE REMOVED AND REPLACED AT CONTRACTOR'S EXPENSE.
- 14. ANY TREES WITH A TRUNK FORMED "V" SHAPE CROTCH WILL BE REJECTED.
- 15. EROSION CONTROL FABRIC SHALL BE INSTALLED IN ALL SHRUB AND GROUND COVER PLANTING AREAS AS PER SPECIFICATIONS FOR ALL SLOPES THAT EXCEED 3:1. SEE GRADING PLANS FOR LOCATION OF SLOPES GREATER THAN 3:1 AND ADJACENT TO ANY WETLAND AREAS.
- 16. TYPICALLY, SHRUB AND GROUND COVER PLANTINGS ARE SHOWN AS MASS PLANTING BEDS. PLANTS SHALL BE PLACED ON A TRIANGULAR SPACING CONFIGURATION (STAGGERED SPACING). PLANT CENTER TO CENTER DIMENSIONS (O.C.) ARE LISTED UNDER "SPACING" ON THE PLANT LIST.
- 17. LANDSCAPE CONTRACTOR SHALL FIELD STAKE THE LOCATION OF ALL PLANT MATERIAL PRIOR TO INITIATING INSTALLATION FOR THE REVIEW AND APPROVAL OF THE OWNER'S REPRESENTATIVE AND/OR LANDSCAPE ARCHITECT. ANY MATERIAL INSTALLED WITHOUT APPROVAL IS SUBJECT TO BEING RELOCATED AT THE CONTRACTOR'S EXPENSE.
- 18. LANDSCAPE CONTRACTOR SHALL FIELD ADJUST LOCATION OF PLANT MATERIAL AS NECESSARY TO AVOID DAMAGE TO ALL EXISTING UNDERGROUND UTILITIES AND/OR EXISTING ABOVE GROUND ELEMENTS. ALL CHANGES REQUIRED SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE AND SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT.
- 19. CONTRACTOR SHALL MULCH ALL NEW PLANT MATERIAL THROUGHOUT AND COMPLETELY TO DEPTH OF 3" UTILIZING HARDWOOD MULCH UNLESS OTHERWISE
- 20. ANY SUBSTITUTIONS IN SIZE AND/OR PLANT MATERIAL MUST BE APPROVED BY LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE BEFORE PLANTING CAN BEGIN.
- 21. CONTRACTOR SHALL REFER TO THE LANDSCAPE PLANTING DETAILS, PLANT LIST, GENERAL NOTES AND THE PROJECT MANUAL (IF AVAILABLE) AND SPECIFICATIONS FOR FURTHER AND COMPLETE LANDSCAPE PLANTING INSTRUCTIONS.
- 22. LANDSCAPE CONTRACTOR SHALL COORDINATE ALL LANDSCAPE PLANTING WORK WITH IRRIGATION WORK. LANDSCAPE WATERING AS REQUIRED BY OWNER'S REPRESENTATIVE TO SUPPLEMENT IRRIGATION WATERING AND RAINFALL. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR HAND WATERING IN ALL PLANTING AREAS, REGARDLESS OF THE STATUS OF EXISTING OR PROPOSED IRRIGATION.
- 23. LANDSCAPE CONTRACTOR SHALL CLEAN THE WORK AREAS AT THE END OF EACH WORKING DAY. RUBBISH AND DEBRIS SHALL BE COLLECTED AND DEPOSITED OFF-SITE DAILY. ALL MATERIALS, PRODUCTS AND EQUIPMENT SHALL BE STORED IN AN ORGANIZED FASHION AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
- 24. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR FINE GRADING OF ALL AREAS INCLUDING CREATING POSITIVE DRAINAGE AWAY FROM BUILDINGS.
- 25. LANDSCAPE CONTRACTOR SHALL RE-GRADE ALL AREAS DISTURBED BY PLANT REMOVAL, RELOCATION AND/OR INSTALLATION WORK. LANDSCAPE CONTRACTOR SHALL REPLACE (BY EQUAL SIZE AND QUALITY) ANY AND ALL EXISTING PLANT MATERIAL DISTURBED OR DAMAGED BY PLANT REMOVAL, RELOCATION AND/OR INSTALLATION.
- 26. CONTRACTORS SHALL COMPLY WITH ALL NPDES REQUIREMENTS.

PLANT_SCHE	DULE						
CANOPY TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT.	SIZE	NATIVE	REMARKS
МВ	2	Magnolia grandiflora `Brackens Brown Beauty`	Bracken`s Beauty Southern Magnolia	30 Gal.	2" Cal., 10` Ht. x 4` Spr.	Yes	Full. 6' C.T. Plant as shown.
QV	3	Quercus virginiana	Live Oak	45 Gal.	2.5" Cal., 12` Ht. x 4` Spr.		Single, straight trunk. Full. Plant as show
TD	2	Taxodium distichum	Bald Cypress	30 Gal.	2" Cal., 10` Ht. x 4` Spr.	Yes	Full. Plant as shown.
FLOWERING UNDERSTORY TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT.	SIZE	NATIVE	REMARKS
LIT	5	Lagerstroemia indica `Tuskegee`	Tuskegee Crape Myrtle Std	30 Gal.	2" Cal., 9` Ht. x 4` Spr.	No	Full. Standard. Plant as shown.
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	CONT.	SIZE	NATIVE	REMARKS
HP	21	Hamelia patens	Fire Bush	3 Gal.	30"-36" O.A.	Yes	Full. Plant at 36" O.C.
VO	16	Viburnum odoratissimum	Sweet Viburnum	7 Gal.	30" Ht. Min.	No	Full. Plant as shown.
SHRUB AREAS	QTY	BOTANICAL NAME	COMMON NAME	CONT.	SIZE	NATIVE	REMARKS
DE	28	Duranta erecta `Gold Mound`	Gold Mound Duranta	3 Gal.	12" Ht. x 12" Spr.	Yes	Full. Plant at 30" O.C.
MC	6	Muhlenbergia capillaris	Pink Muhly	3 Gal.	20"-24" Ht.	Yes	Full. Plant at 30" O.C.
RI	99	Rhaphiolepis indica `Alba`	White Indian Hawthorn	3 Gal.	12" Ht. x 14" Spr.	No	Full. Plant at 24" O.C.
ZF	29	Zamia floridana	Coontie	3 Gal.	12" O.A.	Yes	Full. Plant at 24" O.C.
GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	CONT.	SIZE	NATIVE	REMARKS
DT	17	Dianella tasmanica	Flax Lily	1 Gal.	16" O.A.	No	Full. Plant at 24" O.C.
LS	95	Liriope muscari 'Big Blue'	Big Blue Lilyturf	1 Gal.	16" O.A.	No	Full. Plant at 18" O.C.
MULCH / SOD		BOTANICAL NAME	COMMON NAME			RE	MARKS
MULCH		MULCH - Pine Bark	Pine Bark Mulch	Mulch			t associated with other plant installation. dressed as specified in notes and details.
SOD		Stenotaphrium secundatum	St. Augustine 'Floratam'			Solid sod. No	o gaps and rolled
SOD-1		Paspalum notatum	Bahia Grass			Solid sod. No	o gaps and rolled

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 20 21 22 23 24 25 26 27 28 29 30



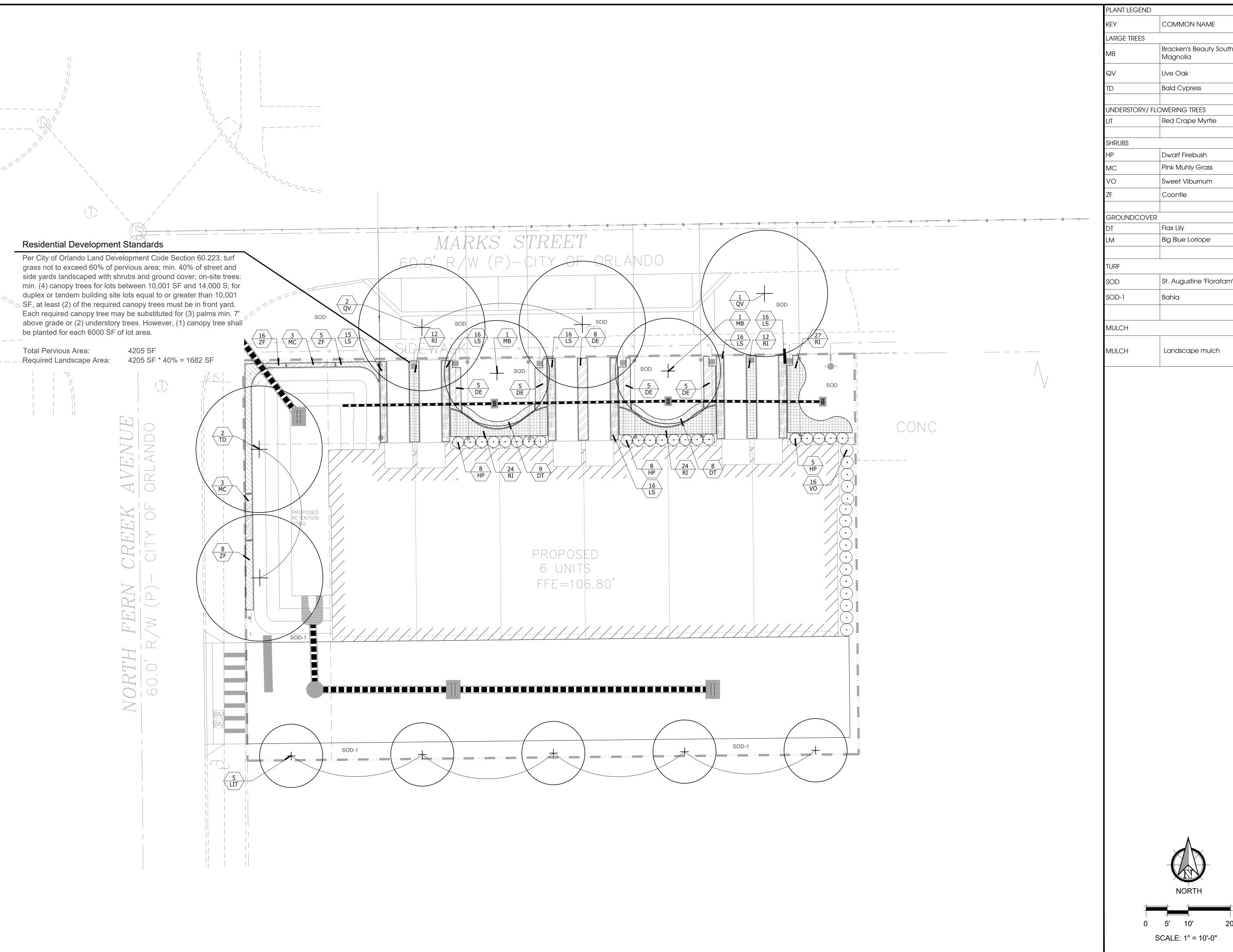
ATRIUM ON MARKS
ORLANDO, FLORIDA
LANDSCAPE NOTES

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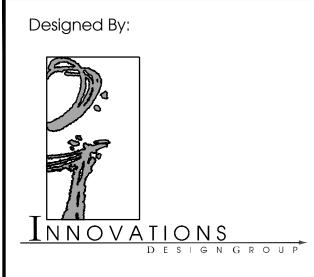
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Drawn By: CWY	Designed By: CWY
Approved By: MM	Project No: 22047
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Sheet Number:



Bracken's Beauty Southern St. Augustine 'Floratam'



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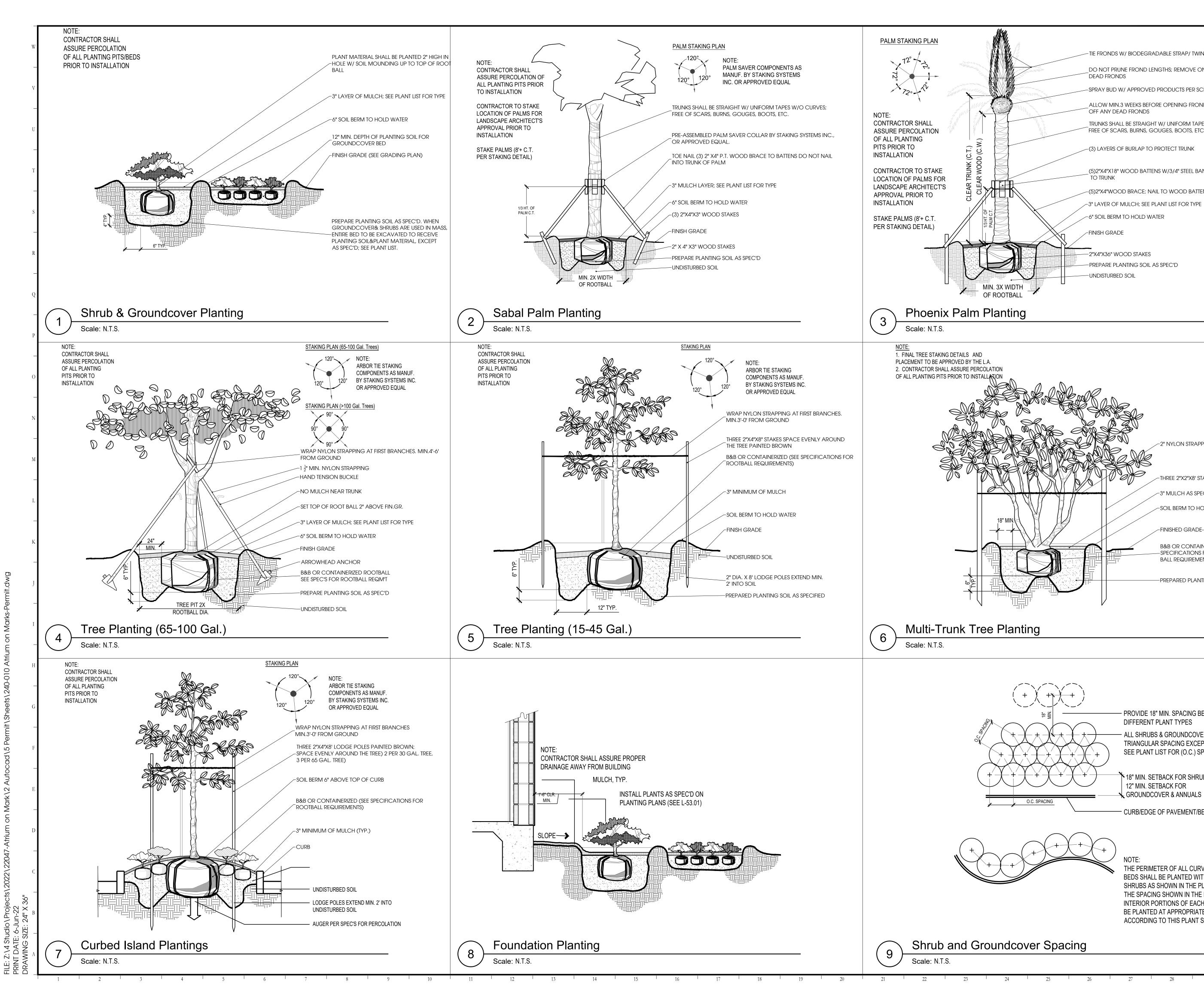
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PERMIT LANDSCAPE PLAN

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Date: 06/06/22	Scale: SEE PLAN
Drawn By: CWY	Designed By: CWY
Approved By: MM	Project No: 22047
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	LS-01



Designed By: -SPRAY BUD W/ APPROVED PRODUCTS PER SCHEDULE (SEE SPEC'S) ALLOW MIN.3 WEEKS BEFORE OPENING FRONDS UNTIL AND CUT TRUNKS SHALL BE STRAIGHT W/ UNIFORM TAPER & WITHOUT CURVES; <u>Innovations</u> 1200 HILLCREST ST., STE 305 ■ ORLANDO, FL ■ 32803 WWW.INNOVATIONS-DESIGN.COM ■ 407-440-3574 (5)2"X4"X18" WOOD BATTENS W/3/4" STEEL BANDS T&B TO SECURE

-TIE FRONDS W/ BIODEGRADABLE STRAP/ TWINE

DO NOT PRUNE FROND LENGTHS; REMOVE ONLY

FREE OF SCARS, BURNS, GOUGES, BOOTS, ETC.

-(5)2"X4"WOOD BRACE; NAIL TO WOOD BATTENS

~2" NYLON STRAPPING

THREE 2"X2"X8' STAKES

√3" MULCH AS SPECIFIED

SOIL BERM TO HOLD WATER

**B&B OR CONTAINERIZED (SEE** -SPECIFICATIONS FORROOT

BALL REQUIREMENTS)

- PROVIDE 18" MIN. SPACING BETWEEN

ALL SHRUBS & GROUNDCOVER TO USE

SEE PLANT LIST FOR (O.C.) SPACING

18" MIN. SETBACK FOR SHRUBS

- CURB/EDGE OF PAVEMENT/BEDLINE

THE PERIMETER OF ALL CURVED PLANTING BEDS SHALL BE PLANTED WITH A ROW OF SHRUBS AS SHOWN IN THE PLANS AND AT

THE SPACING SHOWN IN THE PLANT LIST.

INTERIOR PORTIONS OF EACH BED SHALL

BE PLANTED AT APPROPRIATE SPACING ACCORDING TO THIS PLANT SPACING DETAIL

12" MIN. SETBACK FOR GROUNDCOVER & ANNUALS

TRIANGULAR SPACING EXCEPT WHERE NOTED;

DIFFERENT PLANT TYPES

FINISHED GRADE-SOD CONDITION

-PREPARED PLANTING SOIL AS SPECIFIED

(3) LAYERS OF BURLAP TO PROTECT TRUNK

-PREPARE PLANTING SOIL AS SPEC'D

DEAD FRONDS

-FINISH GRADE

-UNDISTURBED SOIL

OFF ANY DEAD FRONDS

2KS S PERMIT DSCAPE DETAILS ATRIUM ON MAI ORLANDO, FLORIDA

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Date: 06/06/22	Scale: SEE PLAN	
Drawn By: CWY	Designed By: CWY	
Approved By: MM	Project No: 22047	
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Sheet Number: LS-02

(5) Turfgrass and Ground Covers	Met/Unmet	Sq Ft	
Requirement: Turfgrass shall not exceed 60% of the landscaped areas, excluding stormwater management areas, ball fields, and park space.	Met		
a. Argentine Bahiagrass		721	0.1 72
b. Other turfgrass		660	0.05 33
c. Ground Cover Plants (see Fig. 12, Approved Plant List)		112	0.4 44.8
(6) Shrubs (see Fig. 12, Approved Plant List)	# of Plants	Sq Ft	Factor Total
a. Small Shrubs - calculated at 5 sq ft per plant	134	670	0.4 268
b. Medium and Large Shrubs - calculated at 16 sq ft per plant.	65	1,040	0.4 416
Ground covers and shrubs calculated above may also utilize categories d - f below  c. Drought-Tolerant or Native Plants - calculated at 10 sq ft per plant.  Enter # of Drought-Tolerant or Native Plants (do not count trees).	311	3,110	0.3 933
d. Enter # of Flowering Plants and Butterfly/Hummingbird Plants -calculated at 10 sq ft per plant.	276	2,760	0.1 276
<ul> <li>e. Plant Diversity</li> <li>Enter # species of groundcover, small shrubs, medium shrubs, large shrubs, grasses, vines, and aquatic plants.</li> </ul>	112	add:	0.25% 1157
(7) Green Roofs - potted plants will not be considered a green roof -requires growth medium greater than 4". Qualifying plantings may also qualify for points	in (3) - (6) above	Sq Ft	Factor Total 0.8 0
(8) Vegetative Screens and Walls - measured in vertical area			0.5 0
(9) Landscaping of Water Bodies and Storm Water Management Ponds	Met/Unmet	Sq Ft	Factor Total
	met since		, , , , , , , , , , , , , , , , , , , ,
<ul> <li>a. Provide an upland buffer area of non-turf grass landscaping that is a minimum</li> <li>25 ft. in width along 75% of the length of a natural water body.</li> </ul>		add:	2% 0
b. Provide landscaping of dry detention ponds.	Area of Pond		
Area of non-turfgrass planted along bases or banks (not to exceed	d 3:1 slope) of stormwater ponds		0.3 0
Wet Detention Ponds	<u></u>		
c. Requirement: For new wet detention ponds, meet Florida Code 40C-42			
<ul> <li>d. For existing ponds, landscape at least 75% of the linear wet detention edge with native aquatic plants and trees (min. 6' width band).</li> </ul>			2% 0
Underground Stormwater Management  e. Provide at least 75% of stormwater management underground.		add:	5% 0
f. Provide 75% stormwater detention/retention storage in offsite shared retention area.		add:	
Rain gardens			
g. Provide depressions to collect and store stormwater, and landscaped	Language and the second		25
with appropriate plantings (do not calculate stormwater ponds).	Area of Bioretention zone	100.000	0.5 0
(10) Hardscape  2. Provide permeable pavement that allows percolation to the soil below		Sq Ft	Factor Total
<ul> <li>a. Provide permeable pavement that allows percolation to the soil below.</li> </ul>	Total Pervious Paved Surface		0.6 0
		Sq Ft	Factor Total
(11) Food Cultivation - (calculate plantings in Sections (3)-(6) above)			0.1 0
(11) Food Cultivation - (calculate plantings in Sections (3)-(6) above)  -Provide dedicated areas for food production			0.1

Designed By:

INNOVATIONS

DESIGNGROUP

1200 HILLCREST ST., STE 305 ORLANDO, FL 32803

WWW.INNOVATIONS-DESIGN.COM 407-440-3574

ATRIUM ON MARKS ORLANDO, FLORIDA

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PERMIT MRLS WORKSH

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Approved By: MM	Project No: 22047	
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	LS-03	

SYB	KEY	PATTERN	GPM	SPECIFICATIONS
000	A B C	15' FULL 15' HALF 15' QUARTER	3.75 1.86 .97	PROS-12-PRS30-CV-R-15F PROS-12-PRS30-CV-R-15H PROS-12-PRS30-CV-R-15Q
•	D E F	12' FULL 12' HALF 12' QUARTER	2.7 1.3 .67	PROS-12-PRS30-CV-R-15F PROS-12-PRS30-CV-R-15H PROS-12-PRS30-CV-R-15Q
<b>9</b>	G H I	10' FULL 10' HALF 10' QUARTER	1.59 .88 .42	PROS-12-PRS30-CV-R-15F PROS-12-PRS30-CV-R-15H PROS-12-PRS30-CV-R-15Q
<del></del>	JKL	8' FULL 8' HALF 8' QUARTER	.97 .47 .24	PROS-12-PRS30-CV-R-15F PROS-12-PRS30-CV-R-15H PROS-12-PRS30-CV-R-15Q
•	M N	5' FULL 5' HALF 5' QUARTER	.47 .23 .12	PROS-12-PRS30-CV-R-15F PROS-12-PRS30-CV-R-15H PROS-12-PRS30-CV-R-15Q
	P Q R	5'X30' SIDE 5'X30' CENTER 5'X15' END	1.3 1.3 .65	PROS-12-PRS30-CV-R-SS530 PROS-12-PRS30-CV-R-CS530 PROS-12-PRS30-CV-R-EC515
	S	9'X18' SIDE	1.72	PROS-12-PRS30-CV-R-SS918
0	Т	BUBBLER	.5	PCN50 ON FLEX PIPE

#### HUNTER ROTOR AND MATCHED ROTATORS IRRIGATION

SYB	KEY	PATTERN	GPM	SPECIFICATIONS
$\Diamond\Diamond\Diamond$	AR BR CR	44' FULL 40' HALF 34' QUARTER	8.0 4.0 2.0	PGP-04-CV-R-8 PGP-04-CV-R-4 PGP-04-CV-R-2
<b>44</b>	DR ER FR	25' FULL 25' HALF 25' QUARTER	3.0 1.5 .75	PGP-04-CV-R-3.0SR PGP-04-CV-R-1.5SR PGP-04-CV-R75SR
	GR HR IR	15'-20' FULL 15'-20' HALF 15'-20' QUARTER	1.47 .74 .4	PROS-12-PRS40-CV-R-MP2RED PROS-12-PRS40-CV-R-MP2BLACK PROS-12-PRS40-CV-R-MP2BLACK
	JR KR LR	8'-13' FULL 8'-13' HALF 8'-13' QUARTER	.75 .37 .19	PROS-12-PRS40-CV-R-MP1OLIVE PROS-12-PRS40-CV-R-MP1RED PROS-12-PRS40-CV-R-MP1RED
	MR NR	5'-30' SIDE 5'-15' END	.44 .22	PROS-12-PRS40-CV-R-MPSS550 PROS-12-PRS40-CV-R-MPLCS515
•	□R	BUBBLER	.25	PCN25 ON FLEX PIPE

#### MISCELLANEOUS IRRIGATION ITEMS

	Ć	CONTROLLER	I-CORE STATION CONTROLLER WITH RFC RAIN & FREEZE SENSOR
	M	METER	3/4" IRRIGATION METER - BY OTHERS
	<b>3</b>	VALVE	ICV-151G-FS-R-AS-30
-	-	MAINLINE	2" MAINLINE
	V	D.C.V.A.	3/4" DOUBLE CHECK VALVE ASSEMBLY
-	•••	SLEEVE	SCH40 PVC SLEEVE 2 TIMES SIZE OF PIPE

-ALL IRRIGATION HEADS WITHIN SHRUBS SHALL BE ON RISERS. DO NOT USE METAL REBAR OR ANGLE IRON FOR STAKING (SEE IRRIGATION DETAIL SHEET FOR PROPER INSTALLATION).

-SPRAYS WITHIN BEDS SHALL BE 12" POP-UPS. -SPRAYS IN LAWN LAWN AREAS SHALL BE 6" POP-UPS. -ADJUST HEADS TO AVOID OVER SPRAY.

-USE PURPLE HEADS, PIPES, & VALVES ONLY. -FIELD ADJUST IRRIGATION PLAN TO ACCOMMODATE SITE CHANGES.

-VELOCITY SHALL NOT EXCEED 5' PER SEC. IN ALL PIPELINES -ALL POTS SHALL BE IRRIGATED WITH DRIP BUBBLER AND ATTACHED TO LAND

IRRIGATION ZONE

IRRIGATION INSTALLATION GENERAL NOTES SECTION 02810

PART DNE - GENERAL

A. All portions of Division I - General Requirements are included with this section.

B. Furnish all transportation, materials, labor, equipment, and services to complete all work shown on the drawings and as specified.

1.1 RELATED SECTIONS: section 02900 landscape planting

1.2 TOLERANCE

A. Install sprinkler heads where indicated by symbol.

B. Drawings are schematic. Adjust pipe and locations to conform to site conditions and to avoid obstructions. Conceal components behind walls of shrubbery where possible. Verify questionable locations before installation.

1.3 SUBMITTAL

A. Submit two bound folders containing:

1. Written operating instructions for all components.

2. Complete parts līst and manufacturer's data.

3. Copy of well completion report. 4. Written maintenance instructions.

5. Provide 2 sets as-built record drawings with the following

items dimensioned to the nearest foot:

a. Sprinkler main lines b. Water source

c. Control valves

d. Gate valve

e. Electric control wire path

(Red-line prints). B. Products furnished but not installed:

2 extra heads of each type and size

2 extra nozzles of each type and size 2 extra head wrenches for each type of head

4. 1 extra valve box with lid

1.4 COORDINATE WORK WITH OWNER AND OTHER TRADES A. A Licensed electrician will install/provide power to the controller, pump, or fountain if utilized on project.

1,5 QUALITY ASSURANCE

A. Contractor is expected to participate in preconstruction meeting with Dwner and landscape architect to coordinate schedule, clarify questions, and discuss acceptable performance criteria for payment.

B. Contractor is expected to participate in contract closeout meeting with Owner and landscape architect to verify proper completion of the work, establish "Date of Substantial Completion", and advise Owner as to system operation.

1.6. WARRANTIES

A. Contractor will be fully responsible for system operation until Date of Substantial Completion.

B. Contractor is fully responsible for all parts and workmanship for one year after Date of Substantial Completion of each specific phase or portion of the project.

C. See to the fulfillment of all manufacturer's warranties.

PART TWO - PRODUCTS

2.0 MATERIALS Backfill shall be free from stone, trash, or other debris.

2.1 MANUFACTURED UNITS

A. Automatic electro-mechanical controller fully installed and

operating.

B. Electric valve installed in valve box.

C. Valve box with lid manufactured by "Amtek" or "Brooks". D. Connection for control wires manufactured by "Pentite" or

"3M" installed as per manufacturer's directions, and above grade in valve boxes.

E. Gate valves shall be brass and installed in valve box. F. Automatic drain valves shall be installed in 1 cubic foot gravel.

2.2 COMPONENTS

A. Control wire shall be direct burial # 14, type UF. Tape to underside of main every 10 feet. Install spare ground. wire + 5 extra wires. B. Main line shall be class 200 PVC (ANSI/ASTM D2241).

C. Lateral lines shall be class 160 PVC minimum (ANSI/ASTM 02241).

D. Sleeve at all road and drive crossings shall be class 200 PVC. E. All pipe, connectors and misc. fittings for the meter and check

valve assembly will be galvanized. F. all electrical work will conform to year construction N.E.C.

PART THREE - EXECUTION

3.0 EXAMINATION

Examine surfaces to which work will be applied and immediately notify landscape architect in writing if site is not in proper condition for Contractor to perform his duties under the terms of this contract.

3.1 PROTECTION

A. Locate identify, and mark all known utilities in area of the work.

Take reasonable care to avoid damages or hazards.

B. Damage caused by Contractor's work will be repaired to Owner's satisfaction at Contractor's expense.

C. Document any damage to work caused by other trades. Immediately bring costs to Owner's attention and quickly repair at Owner's expense, as directed.

3.2 PREPARATION

A. Surface Preparation. Stake out each run of pipes, each head, and

B. Test control wire for continuity before unreeling for installation.

3.3 INSTALLATION A. Keep pipe interior clean and dry at all times.

B. Ensure a square cut at all joints and ream ends to a smooth finish,

inside and out.

C. Lay all runs greater than 100 feet from side to side on trench bottom in serpentine pattern.

D. Support all pipe with clean, compact soil.

. Backfill and compact to original soil.

F. Set heads plumb and flush with top of sod or mulch. G. For lateral lines flush all debris from lines. Open valve and screw on one head at a time, starting at valve and continuing to

3.4 TOLERANCES A. Main line and drive crossings shall have 18 inches minimum cover.

Lateral lines shall have 12 inches minimum cover.

the end. Ensure that lines are watertight.

All heads shall be 4 inches minimum from walks, drives, or curbs. D. All pop-up heads and valve boxes shall be installed with top flush

with grade. E. All heads shall be installed plumb.

Apply 100 psi hydrostatic pressure to main lines for 120 minutes. If a leak is found, repair and retest until satisfactory.

3.6 ADJUSTMENTS

A. Adjust sprinkler patterns and radius. Ensure uniform and

sufficient coverage for optimum plant growth. B. No heads shall be allowed to spray walls, fences, walks, or drives. C. Set times to operate as appropriate for season, soil type,

drainage, and plant requirements.

3.7 FIELD QUALITY CONTROL

A. Landscape architect or Owner may conduct periodic inspections to

determine that the terms of this contract are fulfilled. B. Contractor will be expected to participate with Owner in final inspection to review project for conformance to the contract. Items to be reviewed include, type, quantities, sizes, locations,

dimensions, and quality of materials and workmanship. C. The Contractor shall keep the premises free from accumulations of waste materials or rubbish caused by his employees or work at all times.

END OF SECTION

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Designed By:

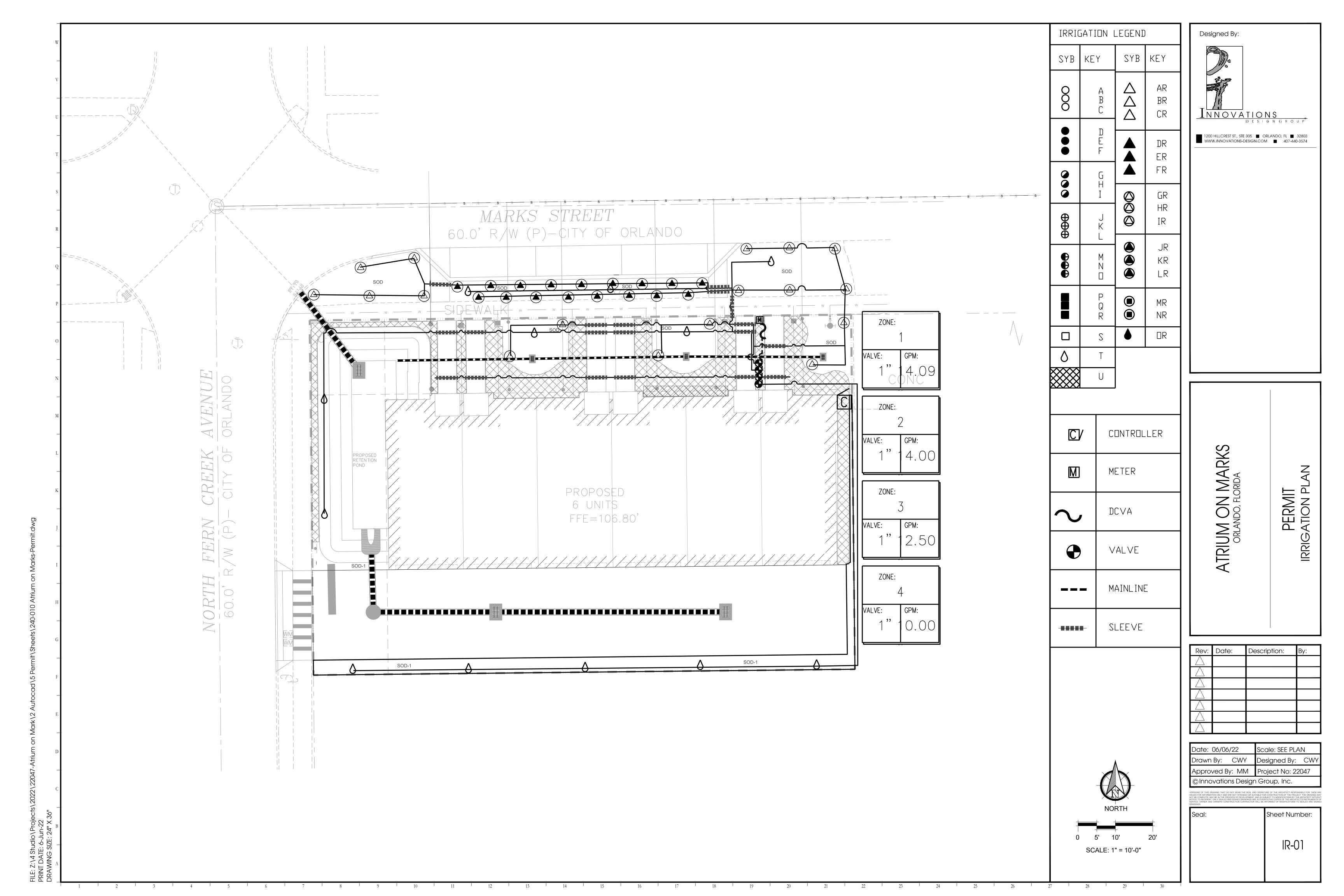
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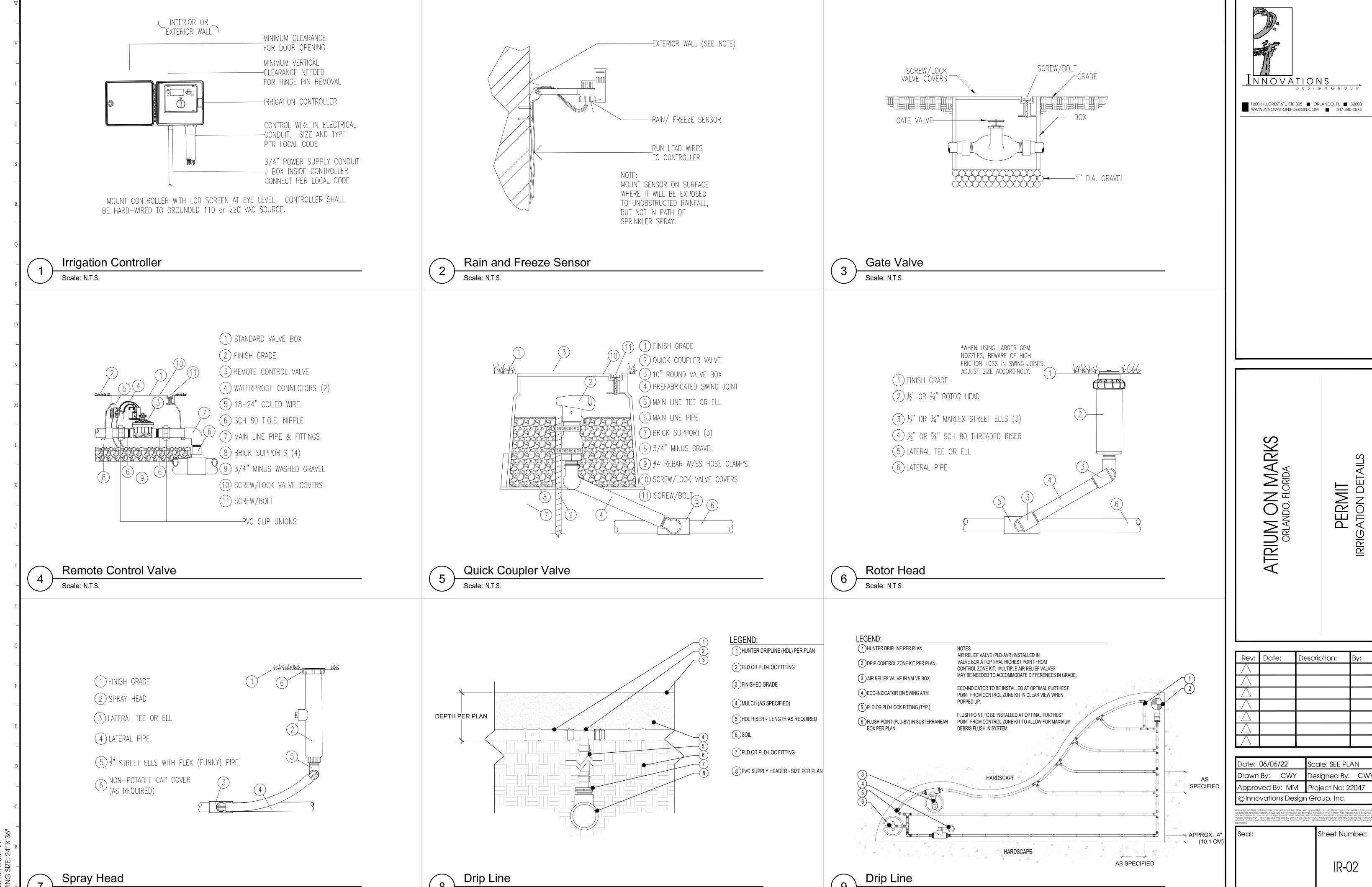
PERMIT IRRIGATION NOTES

Rev:	Date:	Description:	By:

Date: 06/06/22	Scale: SEE PLAN
Drawn By: CWY	Designed By: CWY
Approved By: MM	Project No: 22047
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Designed By:

2:\4 Studio\Projects\2022\22047-Atrium on Mark\2 Autocad\5 Permit\Sheets\240-010 Atrium on Marks FDATE: 6- Inp-22





designer contact:

Keesee Associates

258 Southhall Lane, Suite 200, Maitland, Florida 32751 (407) 880-2333 Office (407) 880-2304 Fax

Marks Street Townhome

DESIGN PHASE: 1600 East Marks Street, Orlando, Florida 32803

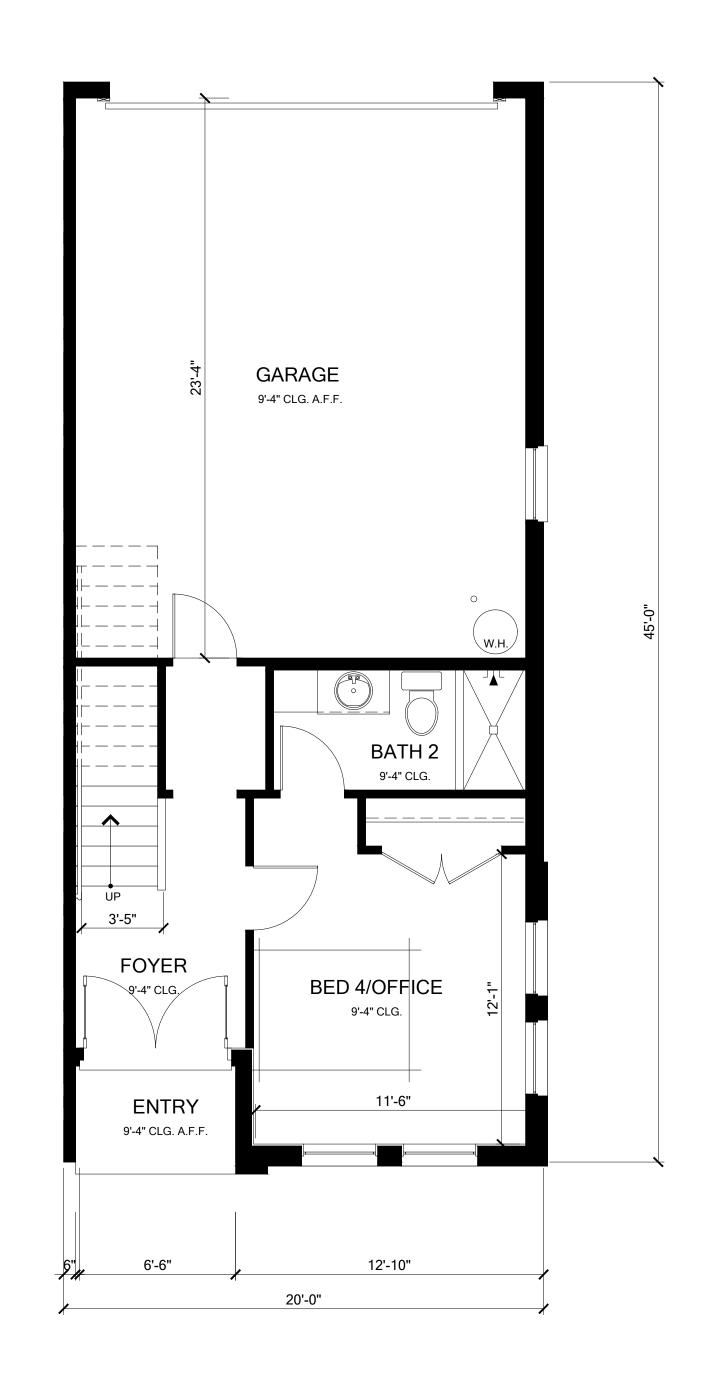
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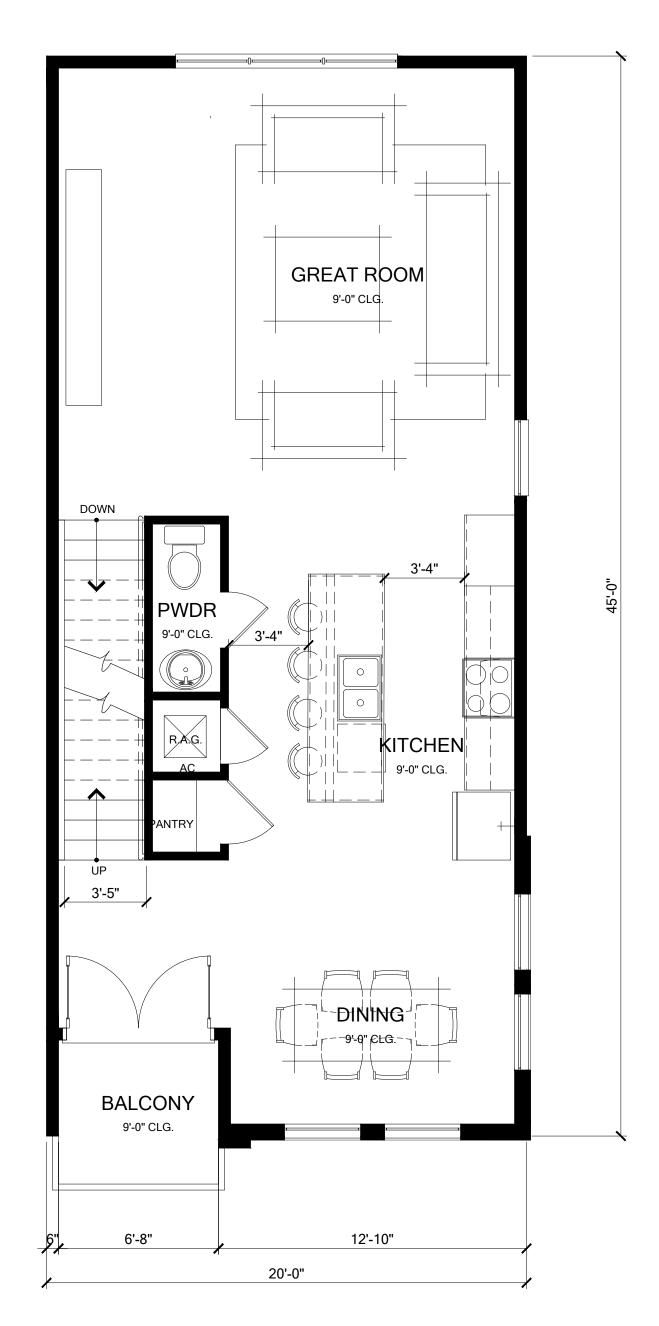
Keith Tanner Client Address

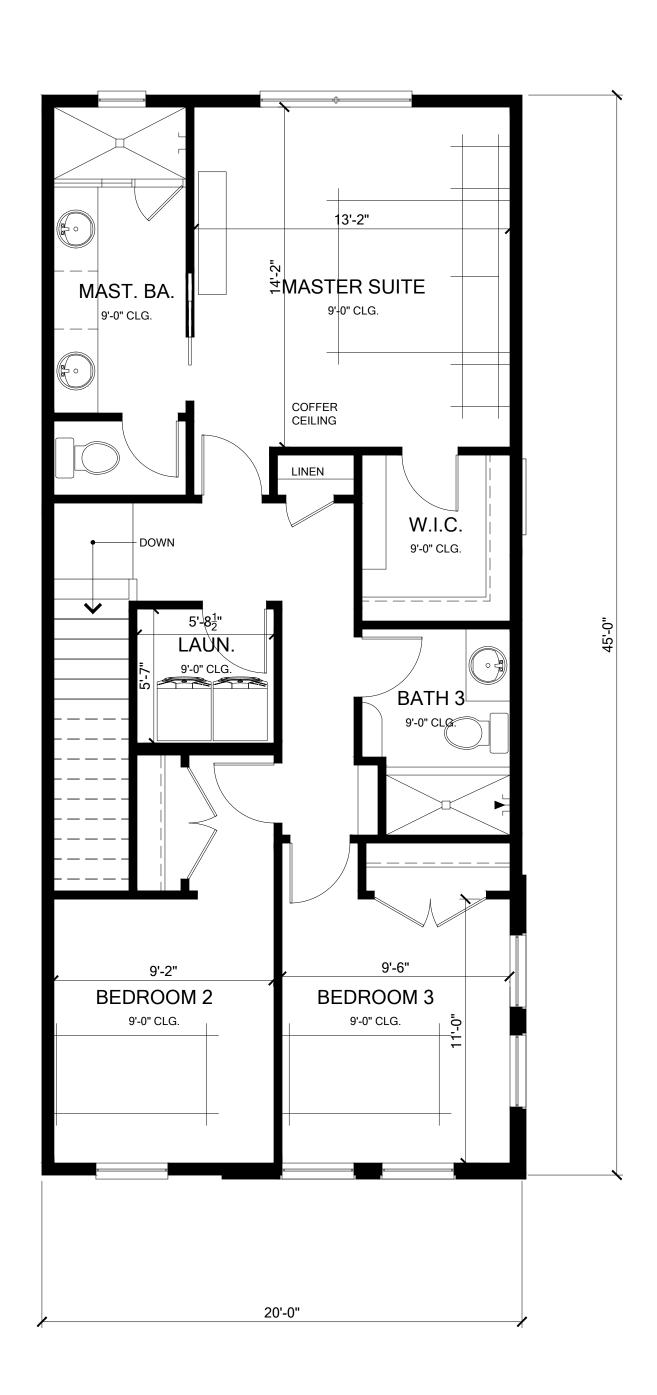
July 26, 2022

21-2615

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3-STORY, END UNIT

2,048 SF : 3 BED/3.5 BATH WITH OPT. 4TH BED/OFFICE

Client Signature: Date:
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Mark Street Townhomes

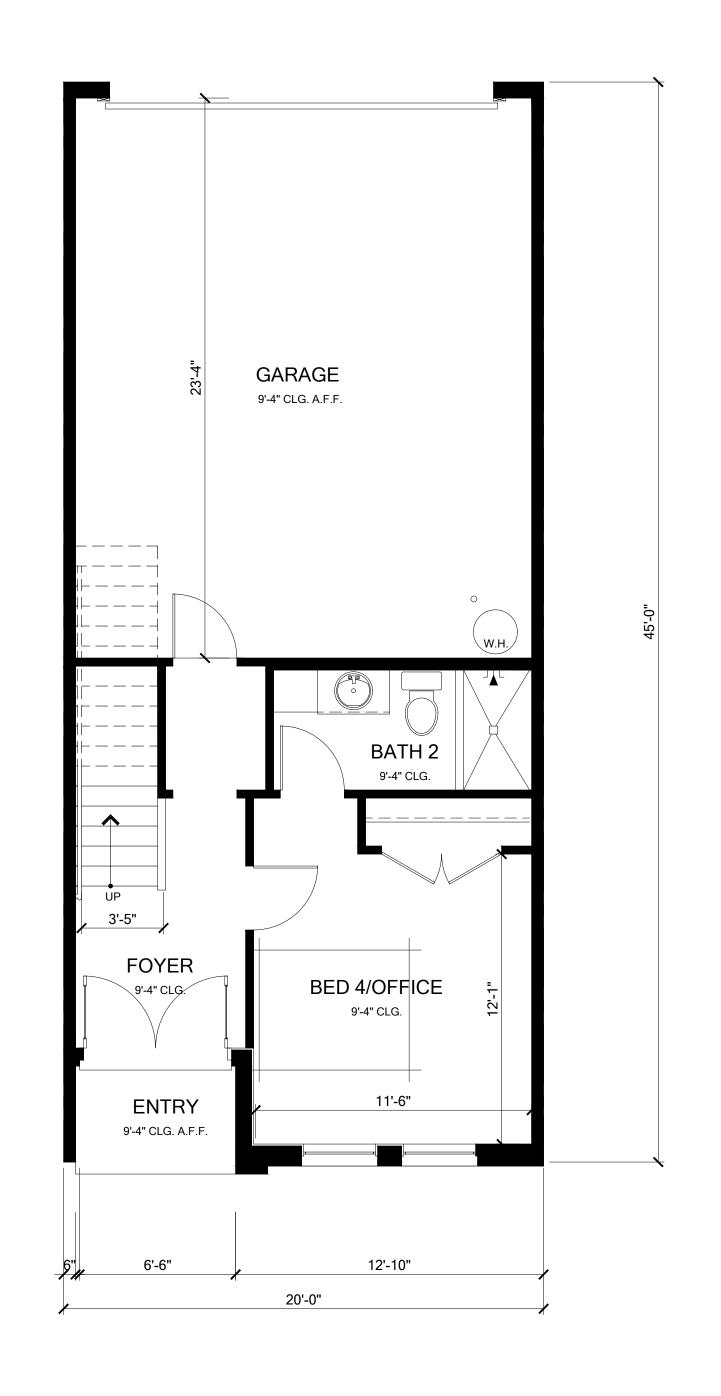
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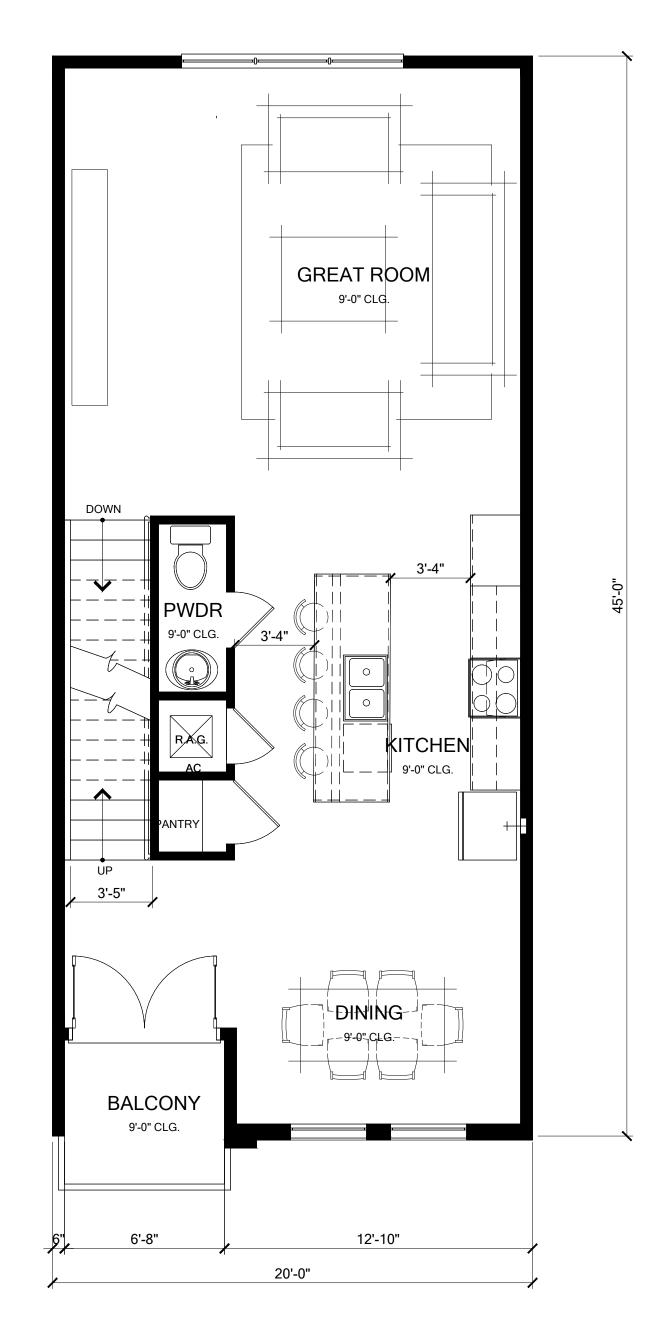
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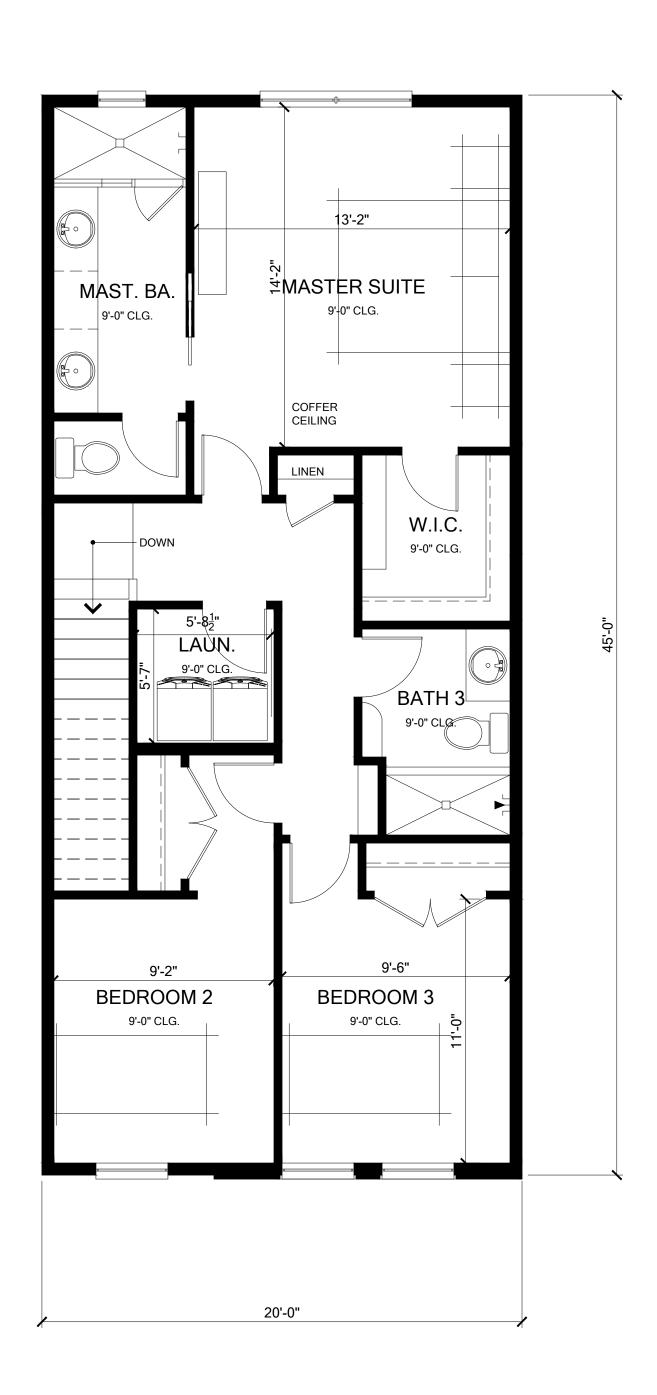
FLOOR PLANS

Keith Tanner
2226 FOSGATE DR. WINTER PARK, FL 32789

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3-STORY, INTERIOR UNIT-1

2,048 SF: 3 BED/3.5 BATH WITH OPT. 4TH BED/OFFICE

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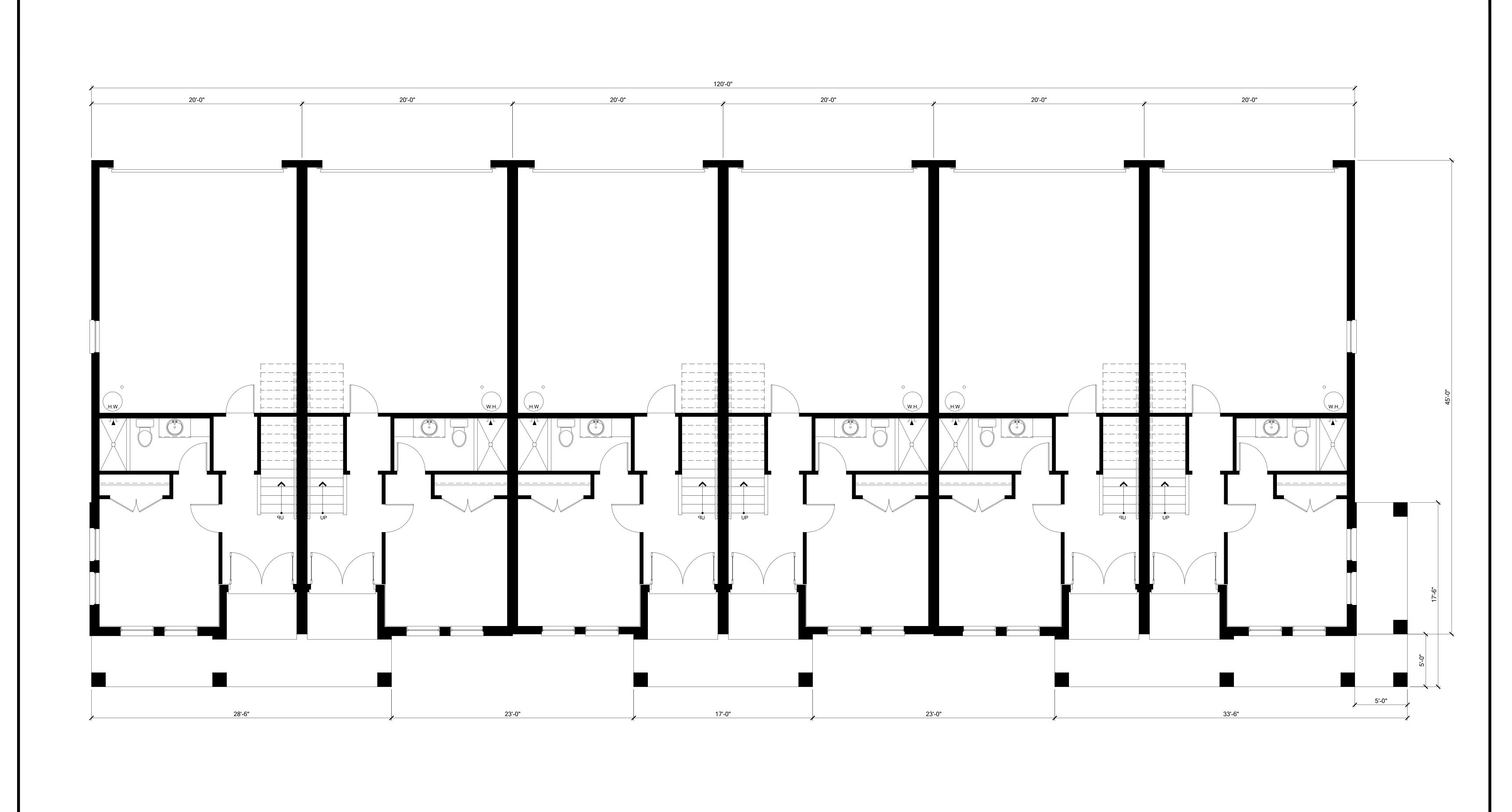
Mark Street Townhomes

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FLOOR PLAN OPT. B

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ARCHITECTURE	DESIGN	PLANNING

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Mark Street Townhomes

| DATE: May 25, 2021 |
| DESIGN PHASE: SD4 |
| CLIENT:

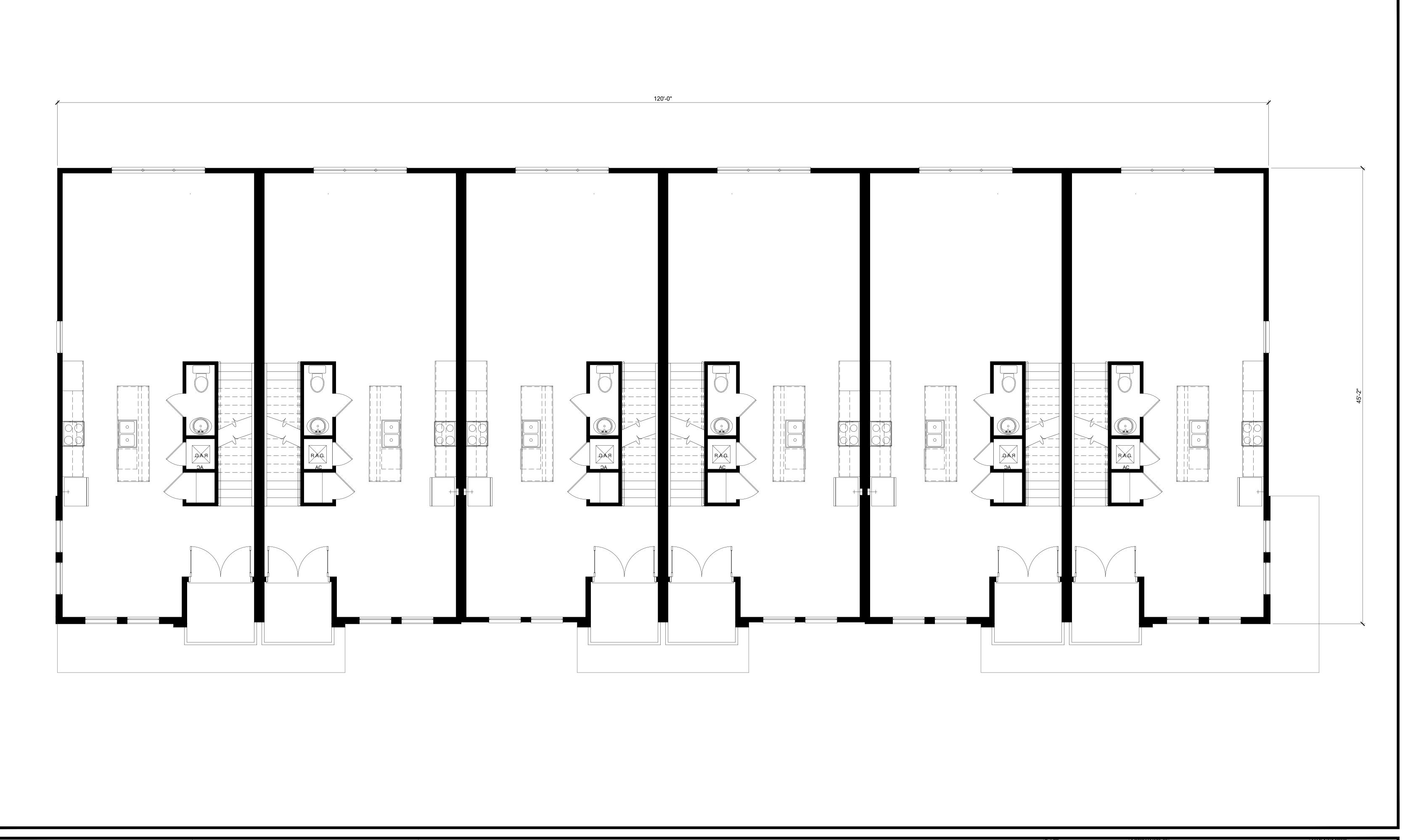
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BUILDING PLAN 1

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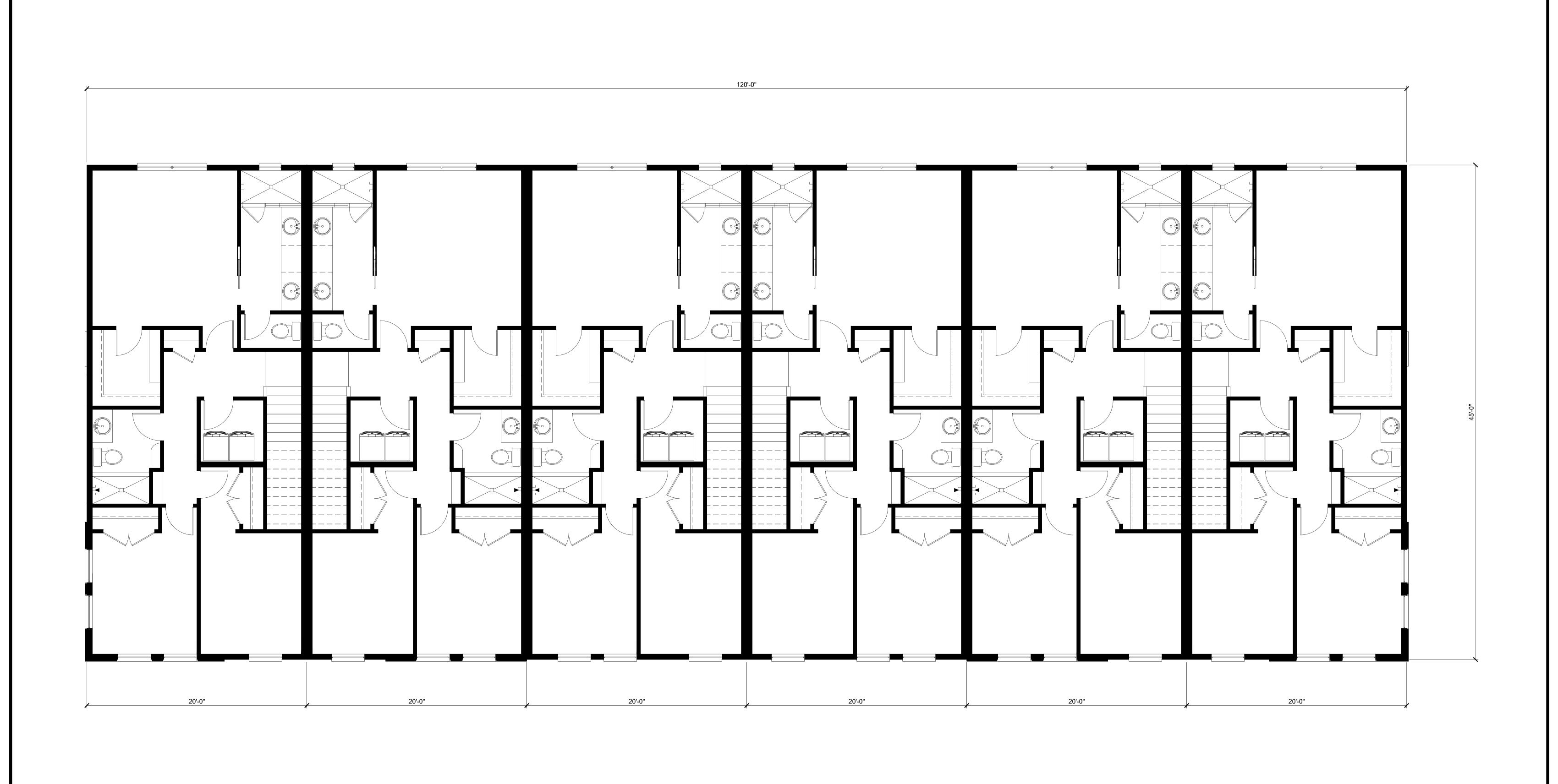
Mark Street Townhomes

| DATE: May 25, 2021 | May 25, 2021 | DESIGN PHASE: SD4 | CLIENT:

**BUILDING PLAN 2** 

SD4 SIGNATURE: 21-2615

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Keesee associates
ARCHITECTURE   DESIGN   PLANNING

DESIGNER CONTACT:  Keesee Associates  258 Southhall Lane, Maitland, FL 32751 Suite 200 (407) 880-2333 Office	Mark Street Townhomes   DATE: May 25, 2021   May 25, 2021   DESIGN PHASE: SD4   SIGNATURE: SD4   CLIENT:	JOB NUMBER:  21-2615  PAGE:
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Marks Street Townhome 1600 East Marks Street, Orlando, Florida 32803

July 26, 2022 21-2615 Keith Tanner

Front, Left, and Right Sides Client Address



REAR

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**Marks Street Townhome** 

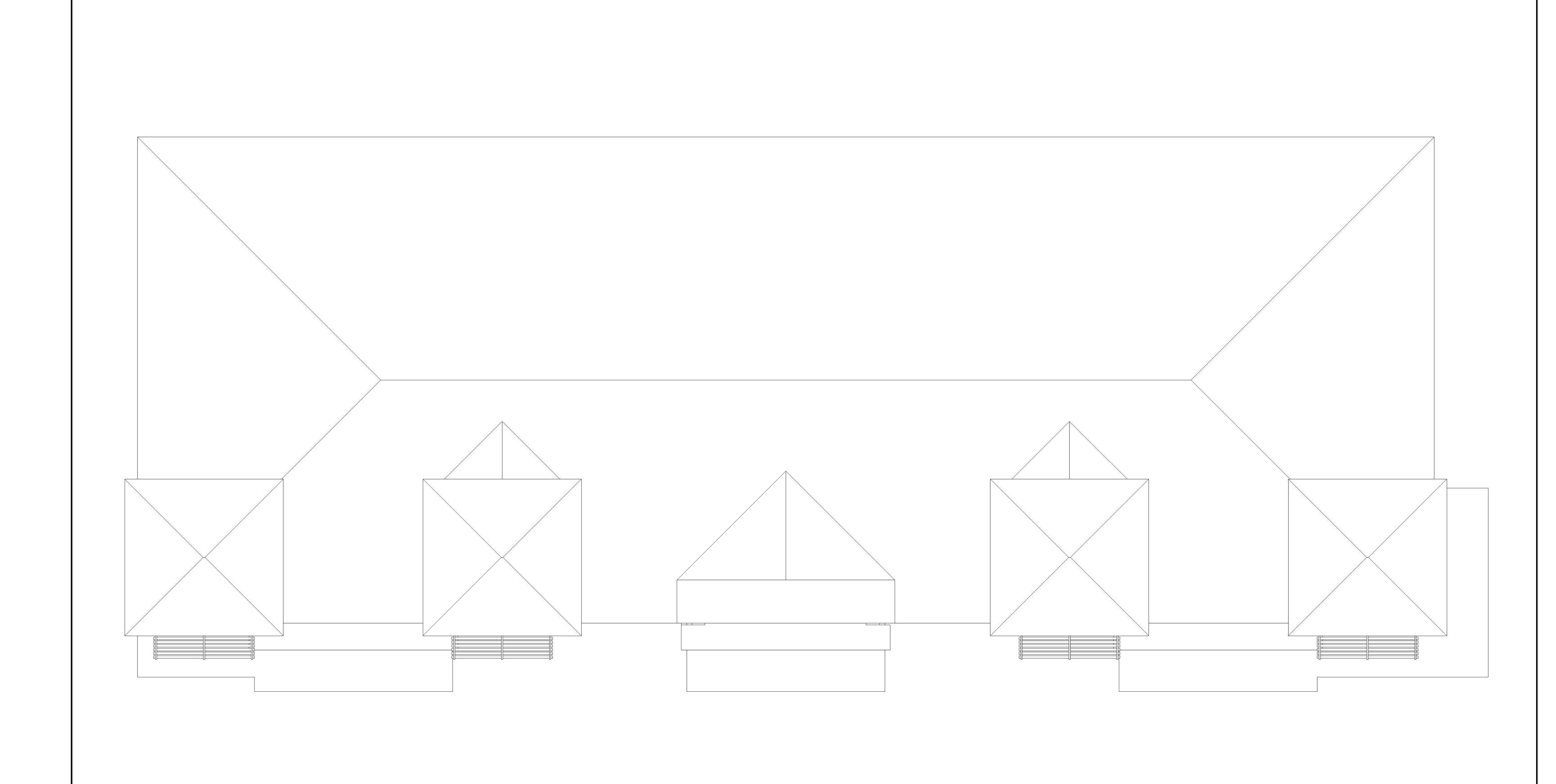
Rear Elevation

1600 East Marks Street, Orlando, Florida 32803

July 26, 2022

Keith Tanner Client Address

21-2615



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Marks Street Townhome DESIGN

1600 East Marks Street, Orlando, Florida 32803 CLIENT:

: lulv	26, 2022	APPROVED BY:	JOB NUMBER:
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