

August 19, 2024

PROJECT NAME: MIDWAY TERRACE APARTMENTS 9007-0101-27

PROJECT NUMBER: 2023120072

APPLICATION: MAJOR SITE PLAN #30983

1 DEPARTMENT: ENGIN - DEVELOPMENT REVIEW

REVIEW ITEM: 2.12.4.K - List of approved waivers, their conditions, and the date of approval

STATUS OF REVIEW: INFO

REMARKS: 1/30/24 - add waivers if requested in the future

2 DEPARTMENT: ENGIN - DEVELOPMENT REVIEW

REVIEW ITEM: Additional Development Review Comments

STATUS OF REVIEW: INFO

REMARKS: After approval, plans will be electronically stamped by the County. The applicant will receive an email indicating that approved plans are available for download and are located in the ePlans project Approved folder. For Development Review submittals, with the exception of Final Plats and Minor Site Plans, applicants are required to print, obtain required signatures, and sign and seal two 24"x 36" sets of the electronically stamped approved plan and deliver them to the Office of County Engineer, Development Review Section, located at 412 SE 25th Avenue Ocala, FL 34471. Upon receipt, a development order will be issued. Until such time as that development order is issued, the project does not have final approval and construction, if applicable, shall not commence. For plans requiring As-Builts, As-Builts and associated documentation shall be submitted on paper in accordance with current county requirements.

3 DEPARTMENT: UTIL - MARION COUNTY UTILITIES

REVIEW ITEM: Utilities Plan Review Fee per Resolution 15-R-583 - payable to Marion County Utilities

STATUS OF REVIEW: INFO

REMARKS: as of 5/28/24 review, fee not paid; checklist item will not be cleared until this fee is paid, regardless of whose responsible for paying it.

\$130 to pay this by phone call 352-671-8686 and advise for plan AR# 30983 "Utility Review Fee"

4 DEPARTMENT: DOH - ENVIRONMENTAL HEALTH

REVIEW ITEM: Additional Health comments

STATUS OF REVIEW: INFO

REMARKS: Central sewer/Central water

5 DEPARTMENT: ENRAA - ACQ AGENT ENG ROW

REVIEW ITEM: Major Site Plan

STATUS OF REVIEW: INFO

REMARKS: Verified owner with Sunbiz and checked project list. HR 7.24.24

IF APPLICABLE:

Sec. 2.18.1.I - Show connections to other phases.

Sec.2.19.2.H – Legal Documents

Legal documents such as Declaration of Covenants and Restrictions, By-Laws, Articles of Incorporation, ordinances, resolutions, etc.

Sec. 6.3.1.B.1 – Required Right of Way Dedication (select as appropriate)

For Public Streets. "[All streets and rights-of-way shown on this plat or name specifically if less than all] are hereby dedicated for the use and benefit of the public."

Sec. 6.3.1.B.2 – Required Right of Way Dedication

For Non-Public Streets. "[All streets and rights-of-way shown on this plat or name specifically if less than all] are hereby dedicated privately to the [entity name]. All public authorities and their personnel providing services to the subdivision are granted an easement for access. The Board of County Commissioners of

Marion County, Florida, shall have no responsibility, duty, or liability whatsoever regarding such streets. Marion County is granted an easement for emergency maintenance in the event of a local, state, or federal state of emergency wherein the declaration includes this subdivision or an emergency wherein the health, safety, or welfare of the public is deemed to be at risk."

Sec. 6.3.1.D.3 - Cross Access Easements

For Cross Access Easements. "All parallel access easements shown on this plat are hereby dedicated for the use and benefit of the public, and maintenance of said easements is the responsibility of [entity name]."

Sec. 6.3.1.C.1 - Utility Easements (select as appropriate)

"[All utility easements shown or noted or name specifically if less than all] are dedicated [private or to the public] for the construction, installation, maintenance, and operation of utilities by any utility provider."

Sec. 6.3.1.C.2 – Utility Easements

"[All utility tracts or identify each tract as appropriate] as shown are dedicated [private or to the public] for the construction and maintenance of such facilities."

Sec.6.3.1.D(c)(1)(2)(3) - Stormwater easements and facilities, select as appropriate:

1. "[All stormwater and drainage easements as shown or noted or name specifically if less than all] are dedicated [private or to the public] for the construction and maintenance of such facilities."
2. "[All stormwater management tracts or identify each tract as appropriate] as shown are dedicated [private or to the public] for the construction and maintenance of such facilities."
3. When any stormwater easement and/or management tract is not dedicated to the public or Marion County directly, the following statement shall be added to the dedication language: "Marion County is granted the right to perform emergency maintenance on the [stormwater easement and/or management tract, complete accordingly] in the event of a local, state, or federal state of emergency wherein the declaration includes this subdivision or an emergency wherein the health, safety, or welfare of the public is deemed to be at risk."

Sec.6.3.1.D(f) –

If a Conservation Easement is required the following shall be provided: "A conservation easement [as shown or on tract and identify the tract, complete accordingly] is dedicated to [the Board of County Commissioners of Marion County, Florida or entity name, if not Marion County] for the purpose of preservation of [listed species, habitat, Karst feature and/or native vegetation, complete accordingly]."



Marion County Board of County Commissioners

Office of the County Engineer

412 SE 25th Ave.
Ocala, FL 34471
Phone: 352-671-8686
Fax: 352-671-8687

DEVELOPMENT REVIEW PLAN APPLICATION

Date: December 22, 2023

A. PROJECT INFORMATION:

Project Name: Midway Terrace Apartments
Parcel Number(s): 9007-0101-27
Section 05 Township 16S Range 23E Land Use Residential Zoning Classification Multi-Family R3
Commercial Residential Industrial Institutional Mixed Use Other _____
Type of Plan: MAJOR SITE PLAN
Property Acreage .85 Number of Lots 1 Miles of Roads _____
Location of Property with Crossroads _____
Additional information regarding this submittal: _____

B. CONTACT INFORMATION *(Check the appropriate box indicating the point for contact for this project. Add all emails to receive correspondence during this plan review.)*

Engineer:
Firm Name: Linn Engineering & Design Inc. Contact Name: Chad Linn
Mailing Address: P.O. Box 140024 City: Orlando State: FL Zip Code: 32814
Phone # 407252643 Alternate Phone # _____
Email(s) for contact via ePlans: clinn@linnengineering.com,

Surveyor:
Firm Name: Jeff Hartley Contact Name: Jeff Hartley
Mailing Address: 283TigerLilyCt City: Altamonte Springs State: FL Zip Code: 32714
Phone # 4073836978 Alternate Phone # _____
Email(s) for contact via ePlans: jhartley@cfl.rr.com

Property Owner:
Owner: Acristo Investments LLC Contact Name: Adan Ordonez
Mailing Address: 1911 Morning Dr City: Orlando State: FL Zip Code: 32809
Phone # 4079672867 Alternate Phone # _____
Email address: ordonezconstruction@adanordonezp.com

Developer:
Developer: Adan Ordonez Contact Name: Adan Ordonez
Mailing Address: 1911 Morning Dr City: Orlando State: FL Zip Code: 32809
Phone # 4079672867 Alternate Phone # _____
Email address: ordonezconstruction@adanordonezp.com

Revised 6/2021

Drawing name: Z:\Projects\36300-Adan Investments\36-600 Midway Terrace - Cover C01 Lot 27.dwg Lopsell Jul 17, 2024 11:10am by: Workstation 8

CONSTRUCTION PLANS FOR MULTI-FAMILY MIDWAY TERRACE LOT 27 OCALA, FL 34472

Legal Description:
LOT 27, BLOCK 101, SILVER SPRINGS SHORES UNIT NO. 7,
ACCORDING TO THE PLAT THEREOF, AS RECORDED IN
PLAT BOOK J, PAGES 94-102, OF THE PUBLIC RECORDS OF
MARION COUNTY, FLORIDA

PROJECT AREA: 0.85 ACRES 37,002 SF
TOTAL IMPERVIOUS AREA: 0.47 ACRES 20,584 SF (54%)
TOTAL PERVIOUS AREA: 0.38 ACRES 20,584 SF (44%)
NO OFFSITE DRAINAGE AREA

I HEREBY CERTIFY THAT I, MY SUCCESSORS, AND
ASSIGNS SHALL PERPETUALLY MAINTAIN THE
IMPROVEMENTS AS SHOWN ON THIS PLAN

Signature: ADAN ORDONEZ Date: 07/06/23

UTILITY PROVIDERS

WATER/SEWER
MARION COUNTY UTILITIES
13800 SE US HIGHWAY 441
BELLEVUE, FL 34420
(352) 307-6000

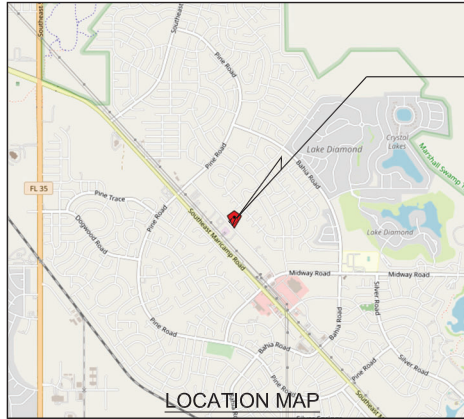
ENGINEER:
LINN ENGINEERING & DESIGN
P.O. BOX 140024
ORLANDO, FL 32814
CONTACT: GREGORY T. CHATELAIN, P.E.
PHONE: 407-775-5194
EMAIL: greg@linnengineering.com

SURVEYOR:
HARTLEY SURVEYING, INC
283 TIGERLILLY COURT
ALAMONTE SPRINGS, FL 32714
407-383-6978
407-788-9415 (FAX)
LB #7197

OWNER/APPLICANT:
ACRISTO INVESTMENTS LLC
1911 MORNING DR
ORLANDO FL 32809-7936
PHONE: ADAN ORDONEZ - (407)223-2109

PARCEL ID: # 9007-0101-27
PRIME KEY: # 1347513

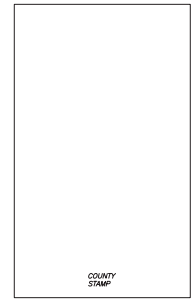
SECTION 5, TOWNSHIP 16S, RANGE 23E



LOCATION MAP
SCALE: 1:400

DRAWING INDEX

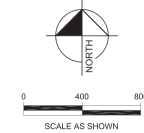
- C01 COVER PAGE
- C02 GENERAL NOTES
- C03 EXISTING CONDITIONS AND DEMOLITION PLAN
- C04 SITE PLAN
- C04A AERIAL MAP
- C05 PAVING, GRADING AND DRAINAGE PLAN
- C06 UTILITY PLAN
- C06A LIFT STATION DETAILS
- C07-C9 UTILITY DETAILS
- C10 FIRE TRUCK ROUTE
- SWPPP-1 EROSION CONTROL & STORMWATER POLLUTION PREVENTION PLAN & DETAILS
- SWPPP-2
- SL-1 SITE LIGHTING AND PHOTOMETRICS
- L-101 LANDSCAPE PLAN
- L-501 LANDSCAPE DETAILS AND NOTES PLAN
- LI-101 IRRIGATION SITE PLAN
- LI-501 IRRIGATION DETAILS AND NOTES
- S1 SURVEY



NOTE

1. CONSTRUCTION MATERIALS QUALITY AND WORKSMANSHIP SHALL BE IN ACCORDANCE WITH MARION COUNTY AND FDOT SPECIFICATIONS AND STANDARDS AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
2. THIS PROJECT IS NOT IN AN ENVIRONMENTALLY SENSITIVE OVERLAY ZONE.
3. PROJECT IS WITHIN THE PRIMARY SPRING PROTECTION OVERLAY ZONE.
4. THIS PROPERTY IS LOCATED WITHIN LAND ZONE S.
5. THIS PROPOSED PROJECT HAS NOT BEEN GRANTED CONCURRENT APPROVAL AND/OR GRANTED AND/OR RECEIVED ANY PUBLIC FACILITY CAPACITY. FUTURE RIGHTS TO DEVELOP THE PROPERTY ARE SUBJECT TO A DEFERRED CONCURRENT DETERMINATION, AND FINAL APPROVAL TO DEVELOP THE PROPERTY HAS NOT BEEN OBTAINED. THE COMPLETION OF CONCURRENT REVIEW AND/OR APPROVAL HAS BEEN DEFERRED TO LATER DEVELOPMENT REVIEW STAGES SUCH AS, BUT NOT LIMITED TO, MASTER PLAN, PRELIMINARY PLAT IMPROVEMENT PLAN, FINAL PLAT, SITE PLAN, OR BUILDING PERMIT REVIEW.
6. NOTWITHSTANDING TO THE WORK AS SHOWN ON THE APPROVED PLANS SHALL BE MADE WITHOUT NOTIFICATION TO AND APPROVAL BY THE OFFICE OF THE COUNTY ENGINEER.
7. OWNERS, ACRISTO INVESTMENTS LLC, WILL BE RESPONSIBLE FOR MAINTENANCE AND MANAGEMENT OF THE COMMON AREAS AND IMPROVEMENTS.
8. PEAK HOUR TRIPS ADDED BY PROJECT: 7 TRIPS PER HOUR.
9. APPLICATION TYPE IS MAJOR SITE PLAN.

PROJECT LOCATION



SCALE AS SHOWN

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
FLORIDA
MARION COUNTY
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

I HEREBY CERTIFY THAT THESE PLANS AND CALCULATIONS WERE COMPLETED IN ACCORDANCE WITH ALL APPLICABLE REQUIREMENTS OF THE MARION COUNTY LAND DEVELOPMENT CODES (LDC) EXCEPT AS NOTED.

APPLICATION TYPE - MAJOR SITE PLAN

COVER SHEET

MIDWAY TERRACE LOT 27 MULTIFAMILY
OCALA, FL 34472
MAJOR SITE PLAN

MARION COUNTY
FLORIDA

DATE: 3/2023
PROJECT NO. 36300-23-200
SHEET NUMBER C01

DESIGN ENGINEER: GREGORY T. CHATELAIN, P.E.
DESIGNED BY: GTC
DRAWN BY: GTC
CHECKED BY: GTC

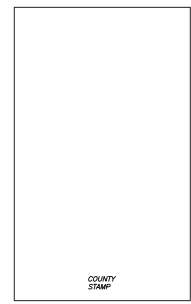
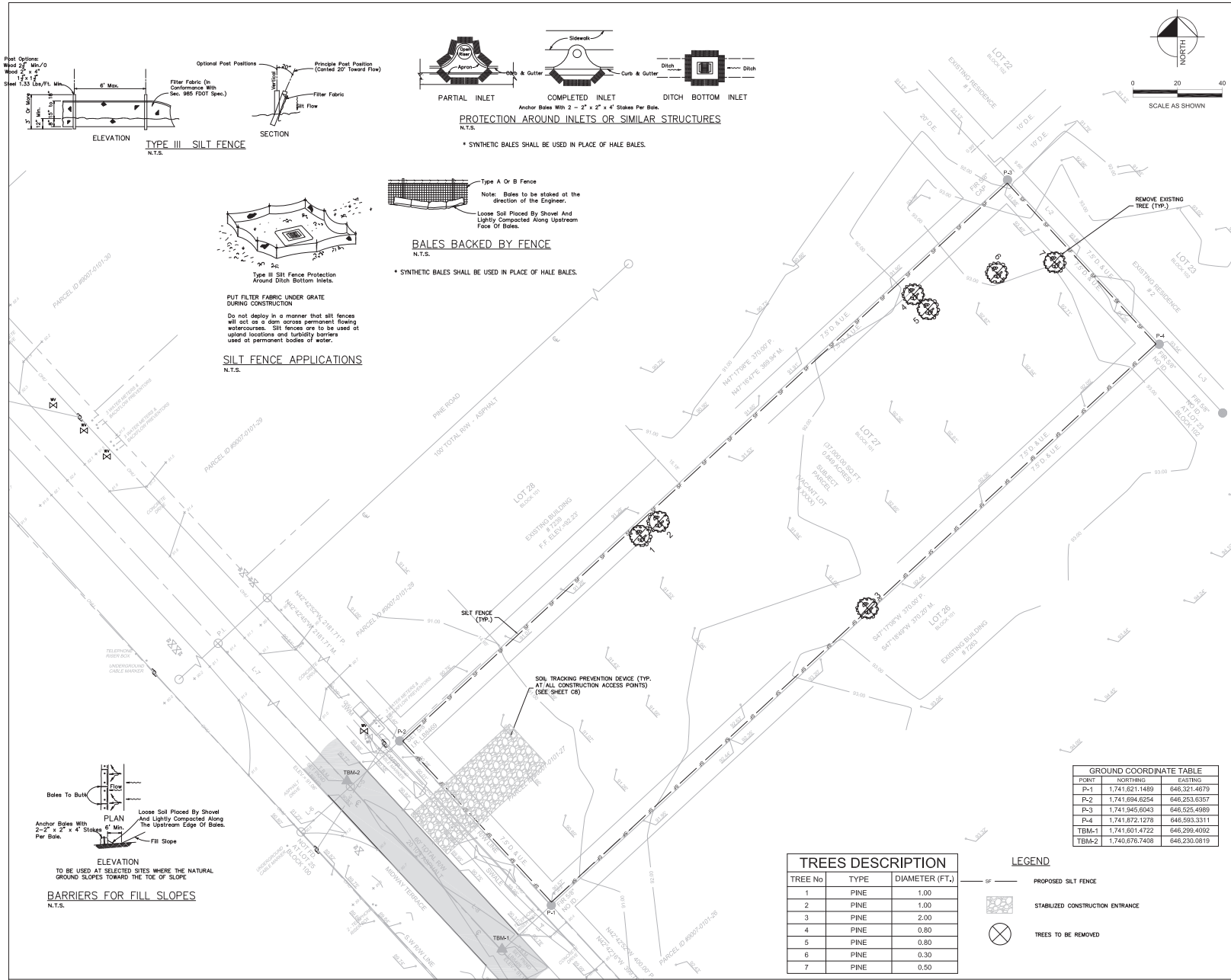
FLORIDA REGISTRATION NUMBER: 90573

SCALE: N/A

RECEIVED PER COUNTY COMMENTS: 07/22/2024 GTC

REV.	REVISIONS	DATE	BY

LINN ENGINEERING & DESIGN
ORLANDO, FL 32814
PHONE: 407-775-5194
CA LIC. NO. 31710



- LINE DETAILS:**
- L-1
N42°42'52"W 100.00' P.
N42°47'10"W 100.06' M.
 - L-2
S42°42'52"E 100.00' P.
S42°55'58"E 100.26' M.
 - L-3
S42°42'52"E 41.88' P.
S43°29'26"E 41.50' M.
 - L-4
S47°17'08"W 30.00' P.
S48°34'50"W 30.47' M.
 - L-5
N47°17'08"E 30.00' P.
N47°18'11"E 30.00' M.
 - L-6
N47°17'08"E 30.00' P.
N41°59'08"E 30.69' C.
 - L-7
N42°42'52"W 2181.69' P.
N42°42'45"W 2181.69' C.
 - L-8
N42°42'52"W 100.00' P.
N42°42'45"W 100.00' C.

DESIGNED PER COUNTY COMMENTS:	07/22/2024	DATE
REVISIONS		DATE
NO.		BY

DESIGN ENGINEER: DRAGY T. CAVILLAN, P.E.
DESIGNED BY: GTC
DRAWN BY: GTC
CHECKED BY: GTC

FLORIDA REGISTERED PROFESSIONAL ENGINEER
ORLANDO, FL 32814
PHONE: 407-761-5894
FAX: 407-761-5895
CAL. LIC. NO. 31710

SEAL

EXISTING CONDITIONS AND DEMOLITION PLAN

MIDWAY TERRACE LOT 27 MULTIFAMILY
OCALA, FL 34472
MAJOR SITE PLAN

FLORIDA
MARION COUNTY

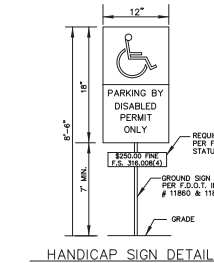
DATE: 3/2023
PROJECT NO: 36300-23-200
SHEET NUMBER: C03

Drawing name: E:\Projects\36300-Adon Investments\23-600 Midway Terrace Lot 27\Cadd-Civil\04 Midway Terrace Multi Family - Site 04.dwg Layout:1 Jul 17, 2024 11:11am by: Workstation 8

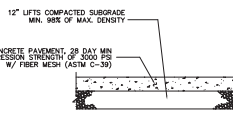
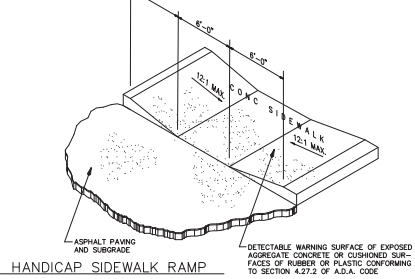
SITE DATA

PRIME REF #	1367910
PARCEL ID #	9007-0101-27
PROJECT AREA	0.85 ACRES 36,997 SF
EXISTING ZONING	R-33
PROPOSED USE	CREAN RESIDENTIAL (ORD)
BUILDING	2,800 SF
MAX BUILDING HEIGHT	40'-0"
PROPOSED BUILDING HEIGHT	26'-0"
MAXIMUM BUILDING LOT COVERAGE	NONE
PROPOSED BUILDING LOT COVERAGE	10% (5,665 SQFT)
MAXIMUM IMPERVIOUS AREA	NONE
PROPOSED IMPERVIOUS AREA	56% (20,584 SQFT)
NUMBER OF STORES	2
BUILDING CONSTRUCTION TYPE	II-B
DENSITY PER SEC 110-310(a) FOR RM-1:	MAX. 16 UNITS/AC.
HIGH-URBAN DENSITY	MIN. 8 UNITS/AC.
DENSITY ALLOWED FOR MONY TERRACE, LOT 17:	MAX. 13 UNITS MIN. 6 UNITS
PROPOSED UNITS:	
2 BEDROOM: 12 UNITS @ 833 SF EACH	
TOTAL PROPOSED UNITS: 12 UNITS	
PARKING REQUIRED:	
12 - 2 BEDROOM UNITS: 2 SPACES/D.U. = 12 X 2 = 24 SPACES	
TOTAL REQUIRED PARKING: 24 SPACES	
PARKING PROVIDED:	
HANDICAP SPACES (1/2x19')	2 SPACES
REGULAR SPACES (9'x19')	22 SPACES
TOTAL SPACES	24 SPACES
PROPOSED IMPERVIOUS AREA:	
ASPHALT AREA	13,518 SQFT (37%)
CONCRETE (SIDEWALK, ETC.):	1,401 SQFT (4%)
BUILDING (PER FLOOR):	5,665 SQFT (15%)
TOTAL IMPERVIOUS AREA	20,584 SQFT (56%)

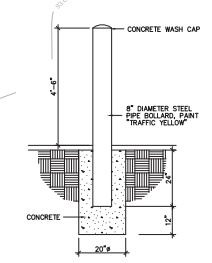
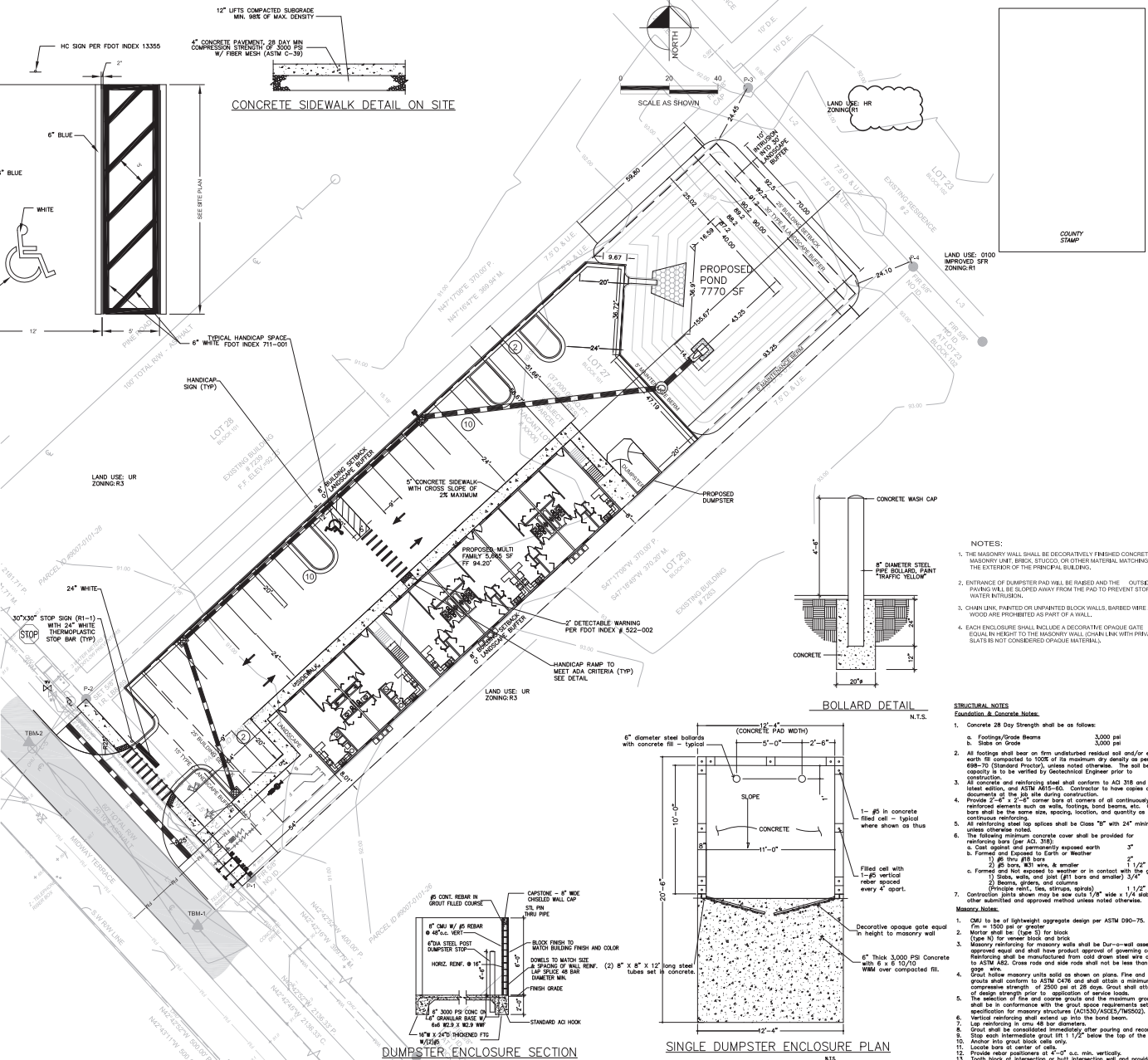
BUILDING SETBACKS: REQUIRED	PROPOSED
FRONT (SOUTH)	15 FEET
SIDE (WEST)	8 FEET
REAR (NORTH)	25 FEET
SIDE (EAST)	8 FEET
LANDSCAPE BUFFER: REQUIRED	PROPOSED
FRONT (SOUTH)	15 FEET
SIDE (WEST)	0 FEET
REAR (NORTH)	30 FEET
SIDE (EAST)	0 FEET
LOT WIDTH:	100'
FLOOR AREA RATIO:	0.30



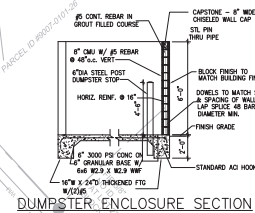
- NOTE:**
- ALL LETTERS ARE 1" SERIES "C" PER MUTCO.
 - TOP PORTION OF SIGN SHALL HAVE (ENGINEERING GRADE) BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND AND BORDER.
 - BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH WHITE OPAQUE LEGEND AND BORDER.
 - FINE NOTIFICATION SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
 - ONE (1) SIGN REQUIRED FOR EACH PARKING SPACE.
 - INSTALLATION HEIGHT OF SIGN SHALL BE IN ACCORDANCE WITH SECTION 24-23 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCO).



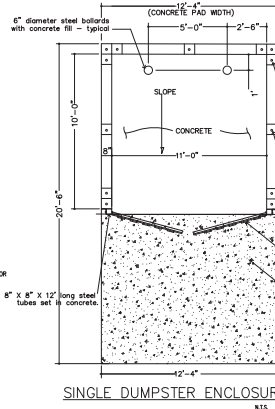
CONCRETE SIDEWALK DETAIL ON SITE



BOLLARD DETAIL



DUMPSTER ENCLOSURE SECTION



SINGLE DUMPSTER ENCLOSURE PLAN

- NOTES:**
- THE MASONRY WALL SHALL BE DECORATIVELY FINISHED CONCRETE MASONRY UNIT, BRICK, STUCCO, OR OTHER MATERIAL, WATCHING THE EXTERIOR OF THE PRINCIPAL BUILDING.
 - ENTRANCE OF DUMPSTER PAD WILL BE RAISED AND THE OUTSIDE PAVING WILL BE SLOPED AWAY FROM THE PAD TO PREVENT STORM WATER INFILTRATION.
 - CHAIN LINK, PAINTED OR UNPAINTED BLOCK WALLS, BARBED WIRE AND WOOD ARE PROHIBITED AS PART OF A WALL.
 - CHAIN LINK SHALL INCLUDE A DECORATIVE ORNADE GATE EQUAL IN HEIGHT TO THE MASONRY WALL CHAIN LINK WITH PRIVACY BLADES IS NOT CONSIDERED ORNADE MATERIALS.

- STRUCTURAL NOTES**
- Foundation & Concrete Notes:**
- Reinforcing Bars: 3,000 psi
 - Slabs on Grade: 3,000 psi
- All footings shall bear on firm undisturbed residual soil and/or engineered earth fill compacted to 100% of its maximum dry density as per ASTM D 698-10 (Standard Proctor), unless noted otherwise. The soil bearing capacity to be verified by Geotechnical Engineer prior to construction.
 - All concrete and reinforcing steel shall conform to ACI 318 and ACI 301 (latest edition, and ASTM A615-10). Contractor to have copies of the ACI documents of the job site during construction.
 - Provide Class "C" concrete at corners of all continuously reinforced elements such as walls, footings, bond beams, etc. Corner bars shall be the same size, spacing, location, and quantity as the continuous reinforcing.
 - All reinforcing steel lap splices shall be Class "B" with 24" minimum, unless otherwise noted.
 - The following minimum concrete cover shall be provided for reinforcing bars (per ACI 308):
 - Cost against and permanently exposed earth: 3"
 - Formed and Exposed to Earth or Weather: 1 1/2"
 - 1" #5 thru #8 bars: 1 1/2"
 - 2" #8 bars, #3 wire, #8 anchor: 1 1/2"
 - Slabs, walls, and joist (#11 bars and anchor): 3/4"
 - Stirrups, girders, and side rods: 1 1/2"
 - Concrete slabs shown may be one inch 1/2" wide x 1/4" slab thickness or other submitted and approved method unless otherwise.
 - Masonry Notes:
 - CMU to be of lightweight aggregate design per ASTM D90-75. $f_m = 1500$ psi or greater.
 - Mortar shall be Type S for block (Type M for veneer block and brick).
 - Masonry reinforcing for masonry walls shall be Dur-o-wall assembly or equivalent and shall have product approval of governing code. Reinforcing shall be manufactured from solid drawn steel wire conforming to ASTM A615. Concrete rods and side rods shall not be less than No. 3 gage wire.
 - Vertical reinforcing steel elements shall be placed in planes. Fine and coarse grouts shall conform to ASTM C476 and shall attain a minimum compressive strength of 2500 psi at 28 days. Grout shall attain 80% of design strength prior to application of service loads.
 - The selection of fine and coarse grouts and the maximum grout pour height shall be in conformance with the grout pour requirements set forth in the specification for masonry structures (ACI 305.2/ACI 308.2C).
 - Vertical reinforcing steel shall be placed in the bond beam.
 - Lap reinforcing in cmu 48 bar diameters.
 - Vertical reinforcing shall be placed in the bond beam.
 - Stop each intermediate grout lift 1/2" below the top of the masonry.
 - Locate bars at center of cells.
 - Provide rebar positions at 4'-0" o.c. min. vertically.
 - Tooth block at intersection or butt intersection wall and provide 1/4" x 1" bar 7' less at 4'-0" o.c. vertically.

DATE	07/25/2024	DATE	1/8/21
DESIGNED BY	GTC	REVISIONS	
DRAWN BY	GTC	NO.	
CHECKED BY	GTC	DATE	
SCALE		REVISIONS	
PROJECT NO.	36300-23-200	DATE	
SHEET NO.	C04	DATE	

REVISIONS

NO.	DESCRIPTION	DATE

SCALE

NOTES:

SCALE: AS SHOWN

PROJECT INFORMATION:

PROJECT: MIDWAY TERRACE LOT 27 MULTIFAMILY
 LOCATION: OCALA, FL 34472
 DRAWING: MAJOR SITE PLAN

DESIGNER: LINN ENGINEERING & DESIGN
 1000 W. UNIVERSITY BLVD., SUITE 100
 OCALA, FL 34472
 PHONE: 352-772-1514
 FAX: 352-772-1515
 EMAIL: info@linneng.com

CLIENT: GREGORY T. CHATELAIN, P.E.
 90573

DATE: 07/25/2024

SCALE: AS SHOWN

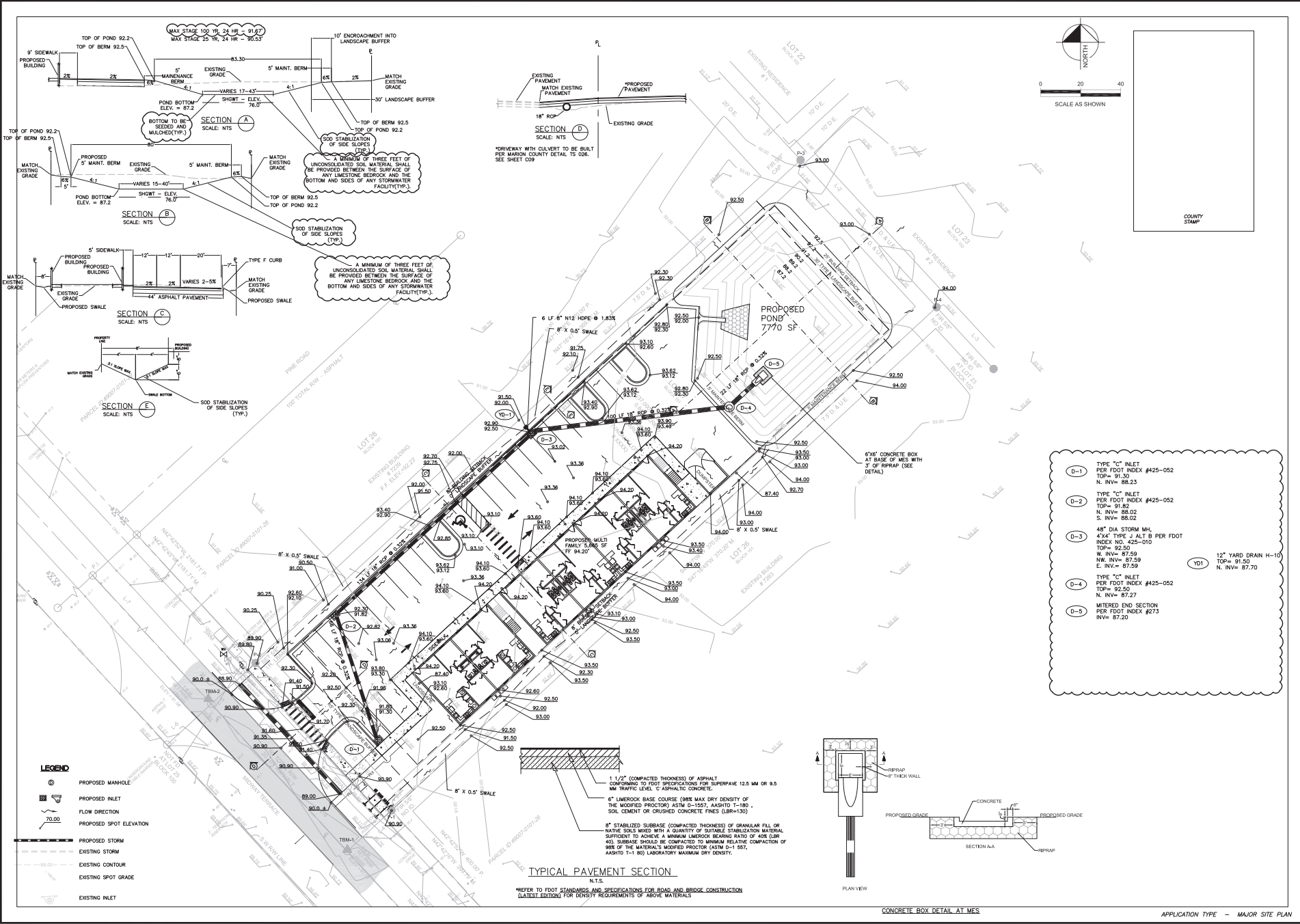
PROJECT NO.: 36300-23-200

SHEET NO.: C04

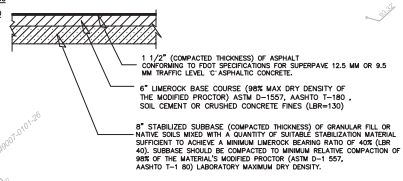


APPLICATION TYPE - MAJOR SITE PLAN

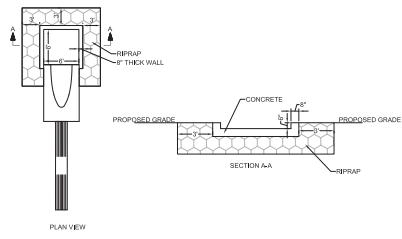
DATE 3/2023		DATE 07/20/2024	
PROJECT NO. 36300-23-200		REVISIONS	
SHEET NUMBER		No.	DATE
C04A			
MIDWAY TERRACE LOT 27 MULTIFAMILY OCALA, FL 34472 MAJOR SITE PLAN			
MARION COUNTY FLORIDA			
SCALE(S) NOTED		REVISIONS NOTED	
DESIGNED BY GTC		DESIGNED BY GTC	
DRAWN BY GTC		DRAWN BY GTC	
CHECKED BY GTC		CHECKED BY GTC	
REGION ENGINEER GREGORY T. CHATELAIN, P.E. P.O. BOX 40024 ORLANDO, FL 32842 PHONE: 407-726-1194 gchatelain@linn-engineering.com CA Lic: 162-21716		SEAL	
FLORIDA REGISTRATION NUMBER: 90673		SEAL	
LINN ENGINEERING & DESIGN			



- (D-1) TYPE "C" INLET
PER FOOT INDEX #425-052
TOP= 91.30
N. INV= 88.23
- (D-2) TYPE "C" INLET
PER FOOT INDEX #425-052
TOP= 91.82
N. INV= 88.02
S. INV= 88.02
- (D-3) 48" DIA STORM MH,
4'X4' TYPE J ALT B PER FOOT
INDEX NO. 425-010
TOP= 92.50
N. INV= 87.59
NW. INV= 87.59
E. INV= 87.59
- (D-4) TYPE "M" INLET
PER FOOT INDEX #425-052
TOP= 92.50
N. INV= 87.27
- (D-5) MITERED END SECTION
PER FOOT INDEX #273
INV= 87.20
- (VD1) 12" YARD DRAIN H-10
N. INV= 87.70

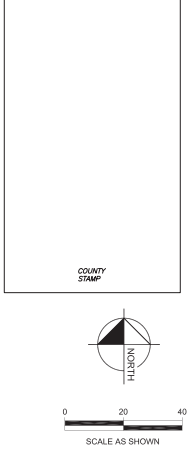
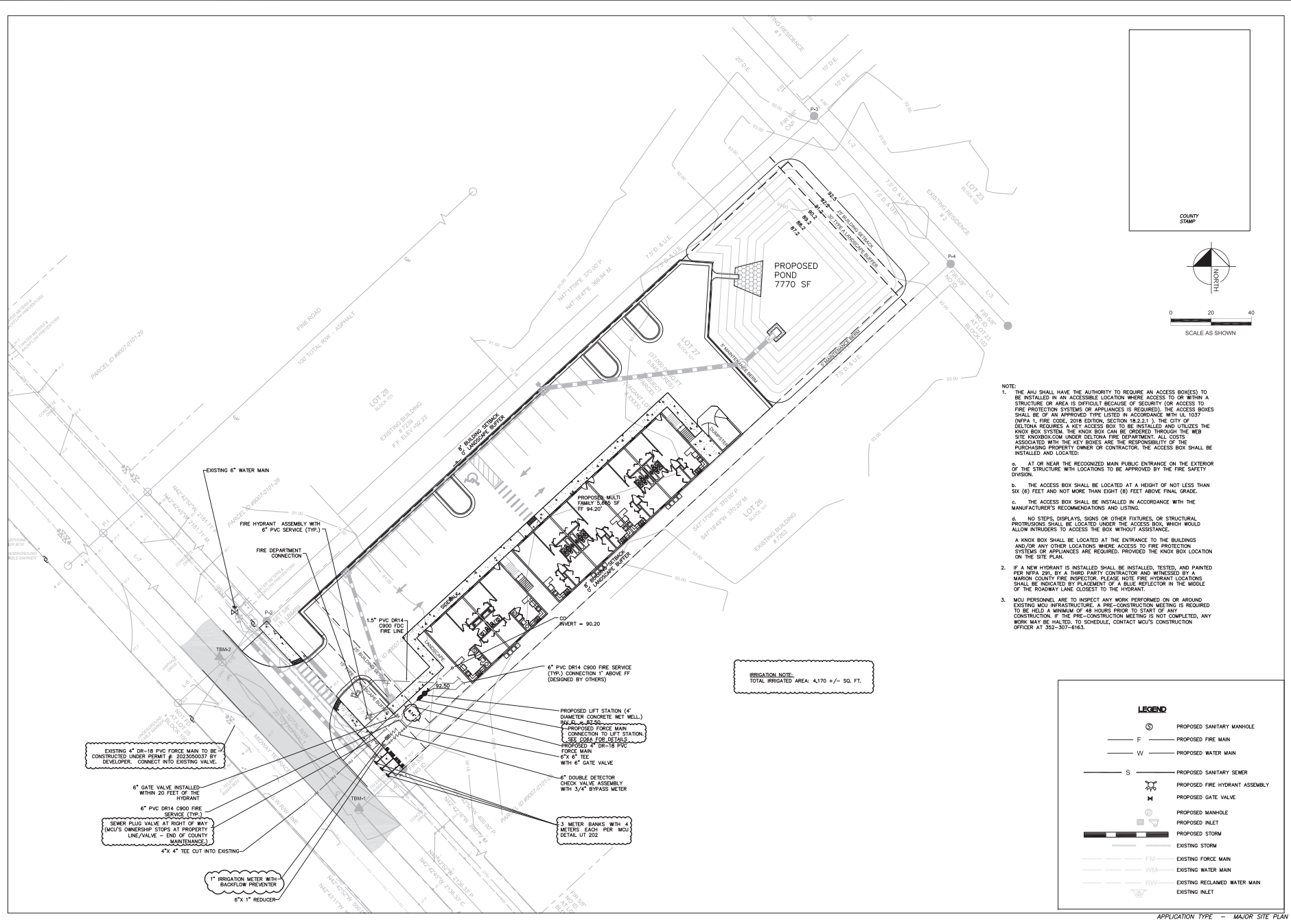


TYPICAL PAVEMENT SECTION
N.T.S.
*REFER TO FOOT STANDARDS AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION) FOR DENSITY REQUIREMENTS OF ABOVE MATERIALS



CONCRETE BOX DETAIL AT M.S.

DATE		18T
REVISIONS		
No.	DATE	
SEAL COUNTY STAMP COUNTY FLORIDA MARION COUNTY Ocala, FL 34472 MIDWAY TERRACE LOT 27 MULTIFAMILY MAJOR SITE PLAN		
SCALE AS NOTED	DESIGNED BY	GTIC
DRAWN BY	GTIC	FLORIDA REGISTRATION NUMBER: 90573
CHECKED BY	GTIC	
DESIGN ENGINEER	LINN ENGINEERING & DESIGN P.O. BOX 40024 Ocala, FL 34402 PHONE: 352-772-6154 FAX: 352-772-6155 www.linnengineering.com	
REGION ENGINEER	GREGORY T. CHATELAIN, P.E. FLORIDA REGISTRATION NUMBER: 90573	
DATE	07/25/2024	



- NOTE:
1. THE AHJ SHALL HAVE THE AUTHORITY TO REQUIRE AN ACCESS BOX(ES) TO BE INSTALLED IN AN ACCESSIBLE LOCATION WHERE ACCESS TO OR WITHIN A STRUCTURE OR AREA IS DIFFICULT BECAUSE OF SECURITY (OR ACCESS TO FIRE PROTECTION SYSTEMS OR APPLIANCES IS REQUIRED). THE ACCESS BOXES SHALL BE OF AN APPROVED TYPE LISTED IN ACCORDANCE WITH UL 1037 (NFPA 1, FIRE CODE, 2018 EDITION, SECTION 18.2.5.1). THE CITY OF DELTONA REQUIRES A KEY ACCESS BOX TO BE INSTALLED AND UTILIZES THE KNIX BOX SYSTEM. THE KNIX BOX CAN BE ORDERED THROUGH THE WEB SITE, KNIXBOX.COM UNDER DELTONA FIRE DEPARTMENT. ALL COSTS ASSOCIATED WITH THE KEY BOXES ARE THE RESPONSIBILITY OF THE PURCHASING PROPERTY OWNER OR CONTRACTOR. THE ACCESS BOX SHALL BE INSTALLED AND LOCATED:
 - a. AT OR NEAR THE RECOGNIZED MAIN PUBLIC ENTRANCE ON THE EXTERIOR OF THE STRUCTURE WITH LOCATIONS TO BE APPROVED BY THE FIRE SAFETY DIVISION.
 - b. THE ACCESS BOX SHALL BE LOCATED AT A HEIGHT OF NOT LESS THAN SIX (6) FEET AND NOT MORE THAN EIGHT (8) FEET ABOVE FINAL GRADE.
 - c. THE ACCESS BOX SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND LISTING.
 - d. NO STEPS, COMPLAINTS, SINKS OR OTHER FIXTURES, OR STRUCTURAL PROTRUSIONS SHALL BE LOCATED UNDER THE ACCESS BOX, WHICH WOULD ALLOW INTRUDERS TO ACCESS THE BOX WITHOUT ASSISTANCE.
 - e. A KNIX BOX SHALL BE LOCATED AT THE ENTRANCE TO THE BUILDINGS AND/OR ANY OTHER LOCATIONS WHERE ACCESS TO FIRE PROTECTION SYSTEMS OR APPLIANCES ARE REQUIRED, PROVIDED THE KNIX BOX LOCATION ON THE SITE PLAN.
 2. IF A NEW HYDRANT IS INSTALLED SHALL BE INSTALLED, TESTED, AND PAINTED PER NFPA 291, BY A THIRD PARTY CONTRACTOR AND WITNESSED BY A MARION COUNTY FIRE INSPECTOR. PLEASE NOTE FIRE HYDRANT LOCATIONS SHALL BE INDICATED BY PLACEMENT OF A BLUE REFLECTOR IN THE MIDDLE OF THE ROADWAY LANE CLOSEST TO THE HYDRANT.
 3. MCJ PERSONNEL ARE TO INSPECT ANY WORK PERFORMED ON OR AROUND EXISTING MCJ INFRASTRUCTURE. A PRE-CONSTRUCTION MEETING IS REQUIRED TO BE HELD A MINIMUM OF 48 HOURS PRIOR TO START OF ANY CONSTRUCTION IF THE PRE-CONSTRUCTION MEETING IS NOT COMPLETED, ANY WORK MAY BE HALTED, TO SCHEDULE, CONTACT MCJ'S CONSTRUCTION OFFICER AT 352-303-8163.

IRRIGATION NOTE:
TOTAL IRRIGATED AREA: 4,170 +/- SQ. FT.

LEGEND	
	PROPOSED SANITARY MANHOLE
	PROPOSED FIRE MAN
	PROPOSED FIRE WATER MAN
	PROPOSED SANITARY SEWER
	PROPOSED FIRE HYDRANT ASSEMBLY
	PROPOSED GATE VALVE
	PROPOSED MANHOLE
	PROPOSED INLET
	PROPOSED STORM
	EXISTING STORM
	EXISTING FORCE MAN
	EXISTING WATER MAN
	EXISTING RECLAIMED WATER MAN
	EXISTING INLET

MIDWAY TERRACE LOT 27 MULTIFAMILY
OCALA, FL 34472
MAJOR SITE PLAN

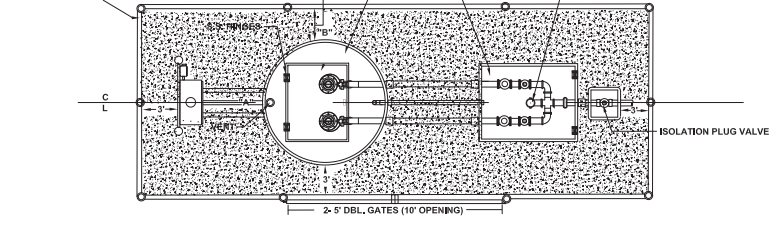
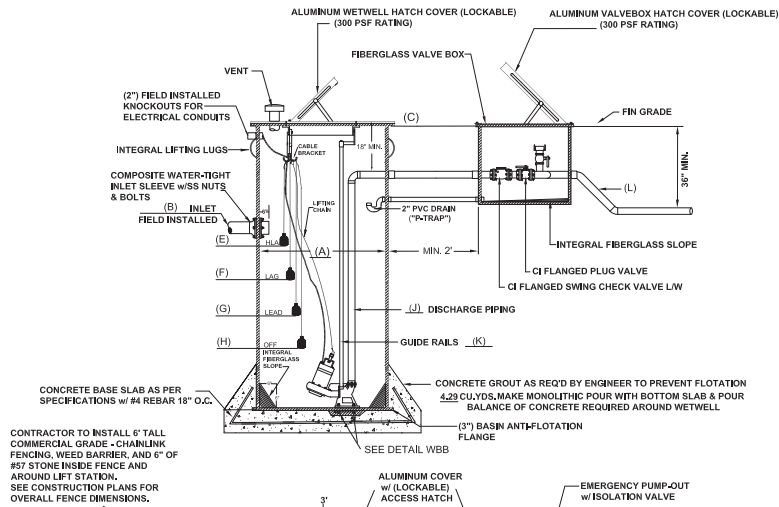
FLORIDA
MARION COUNTY

DATE	BY
3/2023	

PROJECT NO. 36300-23-200
SHEET NUMBER C06

SCALE	NOTED	DESIGN ENGINEER	DESIGNED BY	DRAWN BY	CHECKED BY
AS SHOWN		DREWARY T. CAVILLAN, P.E.	DREWARY T. CAVILLAN, P.E.	DREWARY T. CAVILLAN, P.E.	DREWARY T. CAVILLAN, P.E.
		FLORIDA REGISTRATION NUMBER 90573	FLORIDA REGISTRATION NUMBER 90573	FLORIDA REGISTRATION NUMBER 90573	FLORIDA REGISTRATION NUMBER 90573
		SEAL	SEAL	SEAL	SEAL
		REVISED PER COUNTY COMMENTS			
		REVISIONS			
		DATE			
		BY			

Drawing name: Z:\Projects\35300-Adon Investments\35-000 Midway Terrace Lot 27\Civil-Staff\C06A Midway Terrace Multi Family - Lift Station\C06A.dwg Date: Jul 17, 2024, 11:15am By: Wokstation B



NOTE: PUMP CONTROL PANEL SHALL BE LOCATED 3 FEET FROM WETWELL PERIMETER AT POINT "A" OR "B"

WETWELL: SPECIFICATION
Wet well FRP Wall Laminate must be designed to withstand wall collapse or buckling based on these assumptions and Third party specifications.

Hydrostatic Pressure 62.4 lbs. Per SQ Ft.
Saturated soil weight 120 lbs. Per Cubic Ft.
Soil Modulus of 700 lbs Per SQ Ft.
Pipe Stiffness As specified in ASTM D 3753

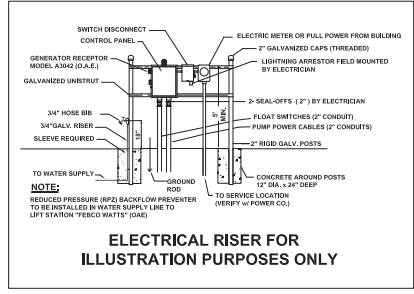
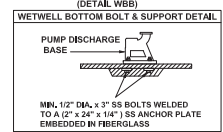
The wet well FRP laminate must be constructed to withstand or exceed two times the assumed loading on any depth of the wet well.

The cover shall be constructed of 1/4 inch thick material finish aluminum diamond plate pattern with 300 series stainless steel hardware. The hatch shall have a positive means of holding door open in the vertical position (Locking hold open arm made of non-corrosive material. The cover shall be mounted with minimum of six 300 series stainless steel fasteners. The access hatch cover shall have a lift handle and a means of locking.

The prefabricated FRP lift station manufacture shall guarantee the prefabricated lift station as approved drawings for a period of One year from the date of delivery.

EXECUTION:
Installation shall be in strict accordance with the manufacturer's recommendations in the locations shown on the drawing.

STATION DESIGN CONDITION	
PRIMARY PUMP CAPACITY	82.4 GPM
PRIMARY TDH	35.6 'TDH
RUN-OUT PUMP CAPACITY	84.1 GPM
PRIMARY TDH	31.3 'TDH
PUMP MODEL #	RC20056
R.P.M.	3450
HORSEPOWER	2.5
ELECTRICAL/ VOLTS / PHASE	230V/3
PUMP DISCHARGE SIZE	2"
STATION ELEVATIONS AND DIMENSIONS	
WETWELL DIAMETER (A)	48"
INVERT DIAMETER (B)	PER EOR
TOP OF WETWELL (C)	92.50'
INLET / INVERT (D)	87.50'
HIGH LEVEL ALARM (HLA) (E)	87.00'
2nd PUMP ON (LAG) (F)	86.50'
1st PUMP ON (LEAD) (G)	86.00'
PUMPS OFF (OFF) (H)	85.50'
BOTTOM OF WETWELL (I)	83.50'
DISCHARGE PIPE DIAMETER (J)	2"
GUIDE RAIL DIAMETER (K)	1"
F.M. PIPE DIAMETER (L)	4"
STATION MANUFACTURING MATERIALS	
DISCHARGE PIPE	HDPE
INLET PIPE	XXXXX
GUIDE RAIL	304 SS
WETWELL	FRP ASTM D-3753
WETWELL HATCH COVER	300 LBS. PSI ALUM.
CABLE BRACKET	304 SS
LIFTING CHAIN	304 SS
BALL VALVE	304 SS
SWING CHECK VALVE	304 SS
VALVEBOX	FRP
VALVEBOX HATCH COVER	300 LBS. PSI ALUM.
STATION VALVEBOX SIZES	
(32" x 30" x 24" DEEP)	FOR 2" DISCHARGE
(36" x 36" x 36" DEEP)	FOR 3" DISCHARGE
STATION HATCH OPENINGS	
WETWELL DIA.	36" 42" 48"
	27" x 20" 32" x 22" 36" x 24"



- NOTES:**
- DRAWING NOT TO SCALE
 - ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES
 - ELECTRICIAN SHALL SEAL OFF CONDUIT RUNS
 - CONTRACTOR SHALL VERIFY POWER SOURCE PRIOR TO ORDERING EQUIPMENT
 - NEUTRAL TO BE SUPPLIED FOR 230V-3 PHASE OR 230V-SINGLE PHASE POWER.

PRIVATE SANITARY SEWER PUMP STATION

NAME OF EMPLOYER OR CONTRACTOR:

NAME:

PHONE NUMBER:

FACILITY OWNED BY:

NAME:

PHONE NUMBER:

FACILITY MAINTAINED BY:

NAME:

PHONE NUMBER:

STATION NUMBER:

LIFT STATION WILL BE PRIVATELY OWNED AND MAINTAINED.

NO SUBSTITUTIONS - NO ALTERNATES

THIS IS A COPYRIGHTED DRAWING. ANY CHANGES OR MODIFICATIONS WITHOUT WRITTEN APPROVAL FROM RILEY & COMPANY, INC. IS STRICTLY PROHIBITED.

RILEY & Company, Inc. (H-20 GP)

w/ BATTERY BACK-UP FOR AUDIO AND VISUAL ALARMS

PUMPS: SPECIFICATION
Submersible grinder pumps shall be: Manufacturer HOMA - Model RC20056.
The pumps shall be installed in the FRP wetwell utilizing a dual slide rail system. The grinder system shall be capable of grinding the waste materials normally found in domestic and commercial sewage into a fine slurry which will pass through the pump and discharge piping. Stator winding shall be open type with Class H insulation and shall be heat shrink fitted into the stator housing. Shall withstand a continuous operating temperature of 155° C. A heat sensor (2) thermal switches shall be attached to the motor windings. The pump motor grinder shaft shall be EN 1.4301 / AISI 304SS connection to take the pump impeller and the grinder assembly. Semi Axial Centrifugal Impeller shall be Cast Iron EN-GJ-200 / ASTM A48 30B. Cutter/Grinder Assembly shall be Stainless Steel EN 1.4301 / AISI 304. Double mechanical cartridge shaft seals shall be provided. The seal springs located inside the oil housing should be fully protected from the pumped liquid. The mechanical seals should be able to withstand rotation on either side. Moisture sensor (2) shall be included in the motor housing assembly. Power and control cables shall be clamped against tensile loads and have a serviceable inlet to the motor, with hermetically sealed polyurethane filled, stainless steel cable plug connection. The pump and electric cables shall be capable of continuance submergence, without loss of waterproof integrity to a depth of 65 ft.

CONTROL PANEL: SPECIFICATION
The Enclosure shall be NEMA 4X, minimum 30" high x 20" wide x 10" deep with 3 point latching system. The enclosure shall have external mounting tabs to allow for wall mounting. The following components shall be mounted through the enclosure:
1- ea. Red Alarm Beacon (Light LED 360 Degree viewable range)
1- ea. Alarm Horn (minimum 95 DB) 1- ea. Generator Receptacle w/ weatherproof cover 60A Minimum. Shall meet UL 1682 and UL 1886 Configuration.

The back panel shall be fabricated from .125, 5052-H32 marine alloy aluminum. All components shall be mounted by machined stainless steel screws. The following components shall be mounted to back panel:
2- ea. IEC style Motor Contactors
1- ea. Volt Monitor (1 Ph) Phase Monitor (3 Ph) w/ N/O & 1 N/C Contacts
1- ea. Alternator
1- ea. Control Transformer (480 Volt Only) (Min. 500VA)
1- ea. Model RCBS48H Battery Back-Up w/ Smart Charger (UPS)
20- ea. Terminals For Field Connections
6- ea. Terminals For Motor Connections (Single Phase Only)
7- ea. Grounding Lugs
1- ea. Lighting and Surge Protection shall meet the UL 1449 2nd Edition

The inner door shall be fabricated from .080, 5052-H32 marine alloy aluminum. The inner door shall have a continuous aluminum piano hinge. The following components shall be mounted through the inner door:
1- ea. Main Circuit Breaker
1- ea. Emergency Circuit Breaker
1- ea. Mechanical Interlock For Emergency And Main Breakers (UL Listed)
2- ea. Short Circuit Protectors w/ Auxiliary Contacts
1- ea. Control Circuit Breaker
1- ea. GF Duplex Convenience Outlet

MISCELLANEOUS: All wiring on the back panel shall be contained within the wiring duct. All wiring between the inner door and the back panel shall be contained within in a plastic spiral wrap. Each wire shall have a wire number at each end to correspond to the as built drawing for field troubleshooting. The control panel must be manufactured in-house by lift station supplier and be a TUV (UL508A Certified) facility. **INSPECTION & TESTING:** A factory representative shall be provide for a one (1) time start-up and shall have complete knowledge of the proper operation and maintenance of complete system. Megger the motors. The pump motors shall be megged out prior to the start-up to ensure that the insulation of the pump motor/cable is intact. The pump controls and pumps shall be checked for mechanical reliability and proper operation.

10/11/23 SR

APPLICATION TYPE - MAJOR SITE PLAN

DATE: 3/2023
PROJECT NO. 36300-23-200
SHEET NUMBER C06A

DESIGN ENGINEER: DREWERY T. CAVALIAN, P.E.
DRAWN BY: GTC
CHECKED BY: GTC

DESIGNED BY: GTC
DRAWN BY: GTC
CHECKED BY: GTC

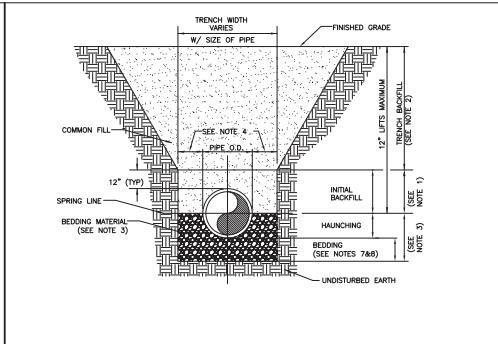
SCALE(S) NOTED:
DESIGNED BY: GTC
DRAWN BY: GTC
CHECKED BY: GTC

DESIGNER: DREWERY T. CAVALIAN, P.E.
FLORIDA REGISTRATION NUMBER: 90573

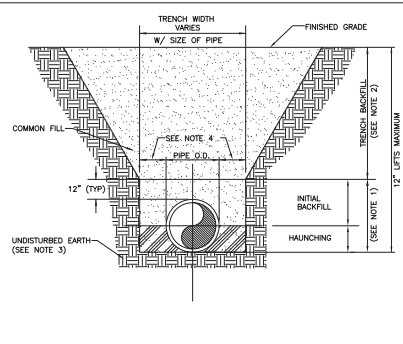
DATE: 07/22/2024
BY: [Signature]
REVISIONS: [Table]
DATE: [Table]
BY: [Table]

MIDWAY TERRACE LOT 27 MULTIFAMILY
OCALA, FL 34472
MAJOR SITE PLAN
FLORIDA
MARION COUNTY

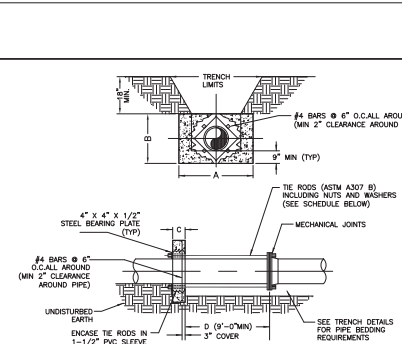
LIFT STATION DETAILS



- NOTES:**
- INITIAL BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER ASTM D 1557.
 - TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER ASTM D 1557.
 - BEDDING MATERIAL SHALL CONFORM TO FOOT NO. 57 AGGREGATE.
 - 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX. (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
 - WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
 - ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
 - BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER UP TO 12" AND 6" MINIMUM FOR PIPE DIAMETER 12" AND LARGER.
 - DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE DIAMETER 12" AND LARGER.
 - PIPE UTILITIES SHALL LOCATE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.
 - FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN MARION COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.
 - ONE COMPACTION TEST SHALL BE REQUIRED FOR EACH LIFT NOT TO EXCEED 200'.



- NOTES:**
- INITIAL BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER ASTM D 1557.
 - TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER ASTM D 1557.
 - PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH BEDDING AND TRENCHING 1 DETAIL MAY BE USED AS DIRECTED BY MCL.
 - 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX. (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
 - WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
 - ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
 - FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN MARION COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.
 - ONE COMPACTION TEST SHALL BE REQUIRED FOR EACH LIFT NOT TO EXCEED 200'.



SCHEDULE OF DIMENSIONS AND MATERIALS

PIPE SIZE (INCHES)	A	B	C	D	DIAM.	NO.
6	2.0	2.0	1.0		3/4"	2
8	2.5	2.5	1.0		3/4"	2
10	3.5	3.0	1.0		3/4"	4
12	5.0	3.0	1.0		3/4"	4
16	6.0	4.0	1.5		3/4"	4
20	8.0	5.0	1.5		3/4"	6
24	9.0	6.0	1.5		3/4"	8

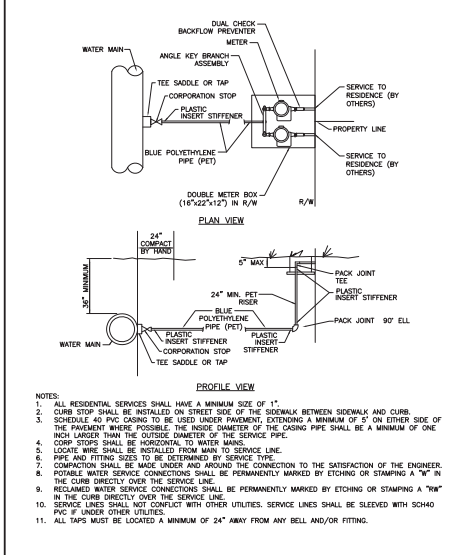
NOTE: THRUST COLLAR AREA TO BE COMPUTED ON BASIS OF 3000 LBS/SQ. YD. RESTRAINT BEARING.

- NOTES:**
- ADDITIONAL REINFORCEMENTS SHALL BE AS SPECIFIED BY THE ENGINEER.
 - MINIMUM COMPRESSIVE STRENGTH FOR CONCRETE SHALL BE 5000 PSI.
 - BEDDING, BACKFILL AND COMPACTION SHALL BE AS SPECIFIED ELSEWHERE IN THE LAND DEVELOPMENT CODE.
 - ALL FORM BRACKETS SHALL BE REMOVED PRIOR TO BACKFILL.
 - NO ALLOWANCE SHALL BE MADE FOR FRICTION BETWEEN THE PIPE WALL AND THE THURST COLLAR.
 - DESIGN PRESSURE: 150 PSI.

Marion County Utilities
 MBOC EFFECTIVE 04/13/2023
 REVISION # 2
BEDDING AND TRENCHING 1
 7.3.2
 UT 102

Marion County Utilities
 MBOC EFFECTIVE 04/13/2023
 REVISION # 2
BEDDING AND TRENCHING 2
 7.3.2
 UT 103

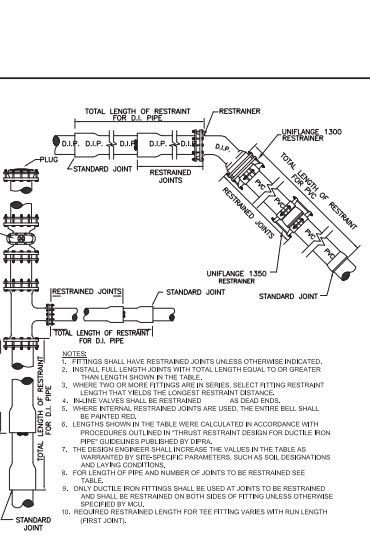
Marion County Utilities
 MBOC EFFECTIVE 04/13/2023
 REVISION # NA
THRUST COLLAR WATER MAINS
 7.3.2
 UT 201



- NOTES:**
- ALL RESIDENTIAL SERVICES SHALL HAVE A MINIMUM SIZE OF 1".
 - CURB STOP SHALL BE INSTALLED ON STREET SIDE OF THE SIDEWALK BETWEEN SIDEWALK AND CURB.
 - SCHEDULE 40 PVC CASING TO BE USED UNDER PAVEMENT, EXTENDING A MINIMUM OF 5' ON OTHER SIDE OF THE PAVEMENT WHERE POSSIBLE THE INSIDE DIAMETER OF THE CASING PIPE SHALL BE A MINIMUM OF ONE INCH LARGER THAN THE OUTSIDE DIAMETER OF THE SERVICE PIPE.
 - CURB STOPS SHALL BE HORIZONTAL TO WATER MAINS.
 - LOCATE WATER SHALL BE INSTALLED FROM MAIN TO SERVICE LINE.
 - PIPE AND FITTING SIZE TO BE DETERMINED BY SERVICE TYPE.
 - COMPACTION SHALL BE MADE UNDER AND AROUND THE CONNECTION TO THE SATISFACTION OF THE ENGINEER.
 - POTABLE WATER SERVICE CONNECTIONS SHALL BE PERMANENTLY MARKED BY ETCHING OR STAMPING A "W" IN THE CURB DIRECTLY OVER THE SERVICE LINE.
 - RECLAIMED WATER SERVICE CONNECTIONS SHALL BE PERMANENTLY MARKED BY ETCHING OR STAMPING A "RW" IN THE CURB DIRECTLY OVER THE SERVICE LINE.
 - SERVICE LINES SHALL NOT INTERFERE WITH OTHER UTILITIES. SERVICE LINES SHALL BE SERVED WITH SCHED 40 PVC IF UNDER OTHER UTILITIES.
 - ALL TAPS MUST BE LOCATED A MINIMUM OF 24" AWAY FROM ANY BELL AND/OR FITTING.

Marion County Utilities
 MBOC EFFECTIVE 04/13/2023
 REVISION # 2
WATER AND RECLAIMED WATER SERVICES (TYPICAL)
 7.3.2
 UT 107

Marion County Utilities
 MBOC EFFECTIVE 04/13/2023
 REVISION # NA
TYPICAL VALVE BOX COVER
 7.3.2
 UT 110



- NOTES:**
- FITTINGS SHALL HAVE RESTRAINED JOINTS UNLESS OTHERWISE INDICATED.
 - INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO OR GREATER THAN LENGTH SHOWN IN THE TABLE.
 - WHERE TAP OR MORE FITTINGS ARE IN SERIES, SELECT FITTING RESTRAINT LENGTH THAT HELDS THE CLOSEST RESTRAINT BEARING.
 - RAJINE VALVES SHALL BE RESTRAINED AS DEAD ENDS.
 - WHERE INTERNAL RESTRAINED JOINTS ARE USED, THE ENTIRE BELL SHALL BE PAINTED RED.
 - LENGTH SHOWN IN THE TABLE WERE CALCULATED IN ACCORDANCE WITH PROCEDURES OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" (OBERHEIM PUBLISHED BY DIPA).
 - THE DESIGN ENGINEER SHALL INCREASE THE VALUES IN THE TABLE AS WARRANTED BY FIELD PIPE PARAMETERS SUCH AS SOIL DESIGNATIONS AND LAYING CONDITIONS.
 - FOR LENGTH OF PIPE AND NUMBER OF JOINTS TO BE RESTRAINED SEE TABLE.
 - ONLY DUCTILE IRON BELL/FITTINGS SHALL BE USED AT JOINTS TO BE RESTRAINED AND SHALL BE RESTRAINED ON BOTH SIDES OF FITTING UNLESS OTHERWISE SPECIFIED BY MCL.
 - REQUIRED RESTRAINT LENGTH FOR FITTING VARIES WITH RUN LENGTH (FIRST JOINT).

Marion County Utilities
 MBOC EFFECTIVE 04/13/2023
 REVISION # NA
RESTRAINED PIPE TABLE
 7.3.2
 UT 116 A

MINIMUM RESTRAINED LENGTH (FT) - EACH SIDE OF FITTING AND VALVE FOR DIP, PE ENCASED DIP OR BARE PVC VDW=VERTICAL-DOWN

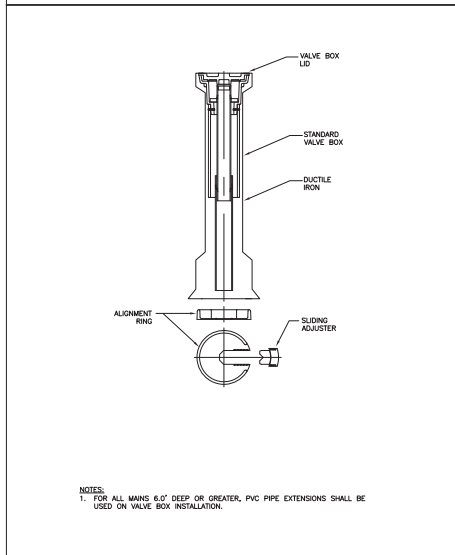
WATER MAIN: PRESSURE: 150 PSI. DEPTH OF COVER: 3.0 FT.

Pipe Size (in)	Pipe Length (ft)							Pipe Length (ft)
	2'	3'	4'	5'	6'	7'	8'	
11-1/4"	2	3	4	5	6	7	8	10
12"	2	3	4	5	6	7	8	10
16"	2	3	4	5	6	7	8	10
20"	2	3	4	5	6	7	8	10
24"	2	3	4	5	6	7	8	10

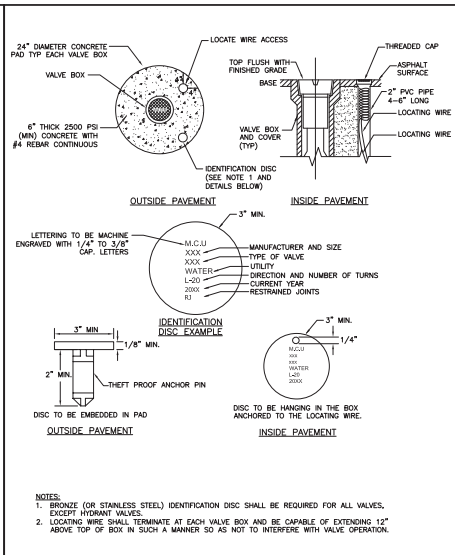
FORCE MAIN: PRESSURE: 100 PSI. DEPTH OF COVER: 4.0 FT.

Pipe Size (in)	Pipe Length (ft)							Pipe Length (ft)
	2'	3'	4'	5'	6'	7'	8'	
11-1/4"	2	3	4	5	6	7	8	10
12"	2	3	4	5	6	7	8	10
16"	2	3	4	5	6	7	8	10
20"	2	3	4	5	6	7	8	10
24"	2	3	4	5	6	7	8	10

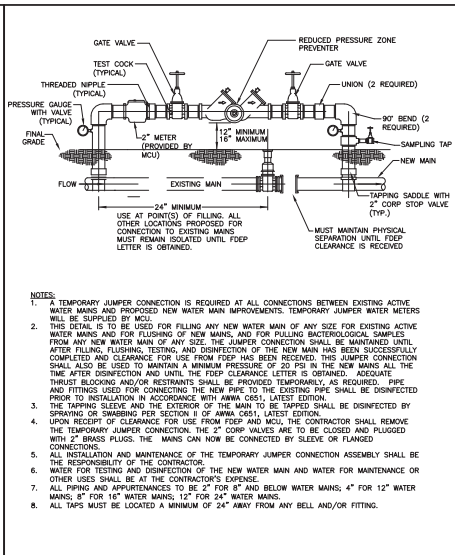
Marion County Utilities
 MBOC EFFECTIVE 04/13/2023
 REVISION # NA
RESTRAINED PIPE TABLE
 7.3.2
 UT 116 B



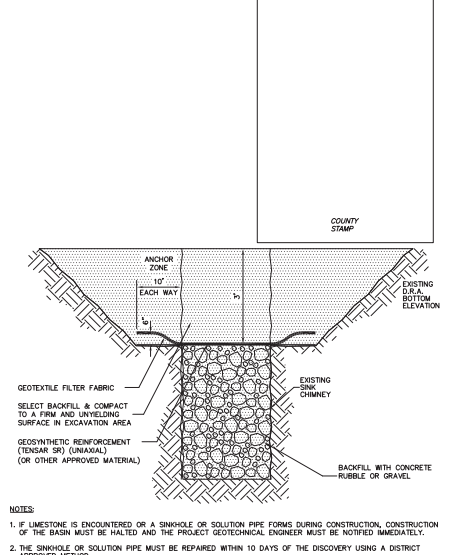
- NOTES:**
- FOR ALL MAINS 6.0' DEEP OR GREATER, PVC PIPE EXTENSIONS SHALL BE USED ON VALVE BOX INSTALLATION.



- NOTES:**
- BRONZE (OR STAINLESS STEEL) IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES, EXCEPT IRON/STEEL VALVES.
 - LOCATING WIRE SHALL TERMINATE AT EACH VALVE BOX AND BE CAPABLE OF EXTENDING 12\"/>



- NOTES:**
- A TEMPORARY JUMPER CONNECTION IS REQUIRED AT ALL CONNECTIONS BETWEEN EXISTING ACTIVE WATER MAINS AND PROPOSED NEW WATER MAIN IMPROVEMENTS. TEMPORARY JUMPER WATER METERS WILL BE SUPPLIED BY MCUI.
 - THIS DETAIL IS TO BE USED FOR FILLING ANY NEW WATER MAIN OF ANY SIZE FOR EXISTING ACTIVE WATER MAINS AND FOR FILLING OF NEW MAINS, AND FOR WAKING BACTERIOLOGICAL SAMPLES FROM ANY WATER MAIN OF ANY SIZE. THE JUMPER CONNECTION SHALL BE MAINTAINED UNTIL AFTER FILLING, FLUSHING, TESTING, AND DISINFECTION OF THE NEW MAIN HAS BEEN SUCCESSFULLY COMPLETED AND CLEARANCE FOR USE FROM TFS HAS BEEN RECEIVED. THIS JUMPER CONNECTION SHALL ALSO BE USED TO MAINTAIN A MINIMUM PRESSURE OF 20 PSI IN THE NEW MAINS ALL THE TIME AFTER DISINFECTION AND UNTIL THE FRESH CLEARANCE LETTER IS OBTAINED. ADEQUATE THRUST BLOCKING AND/OR RESTRAINTS SHALL BE PROVIDED TEMPORARILY, AS REQUIRED. PIPE AND FITTINGS USED FOR CONNECTING THE NEW PIPE TO THE EXISTING PIPE SHALL BE DISINFECTED PRIOR TO INSTALLATION IN ACCORDANCE WITH AWWA C651, LATEST EDITION.
 - THE UPPER SURFACE OF THE EXTERIOR OF THE MAIN TO WHICH THE CONNECTION SHALL REMOVE THE TEMPORARY JUMPER CONNECTION THE 2\"/>



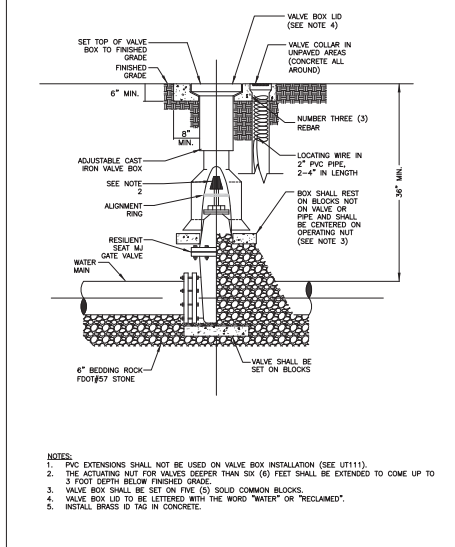
- NOTES:**
- IF LIMESTONE IS ENCOUNTERED OR A SINKHOLE OR SOLUTION PIPE FORMS DURING CONSTRUCTION, CONSTRUCTION OF THE BASH MUST BE HALTED AND THE PROJECT GEOTECHNICAL ENGINEER MUST BE NOTIFIED IMMEDIATELY.
 - THE SINKHOLE OR SOLUTION PIPE MUST BE REPAIRED WITHIN 10 DAYS OF THE DISCOVERY USING A DISTRICT APPROVED METHOD.
 - THE STORMWATER SYSTEM MUST BE INSPECTED MONTHLY FOR THE OCCURRENCE OF SINKHOLES OR SOLUTION PIPES.

	MCBC EFFECTIVE 04/15/2023	SEALED VALVE BOX, ADJUSTABLE	7.3.2		MCBC EFFECTIVE 04/15/2023	VALVE BOX PAD	7.3.2
	REVISION # 1	UT 111			UT 112		

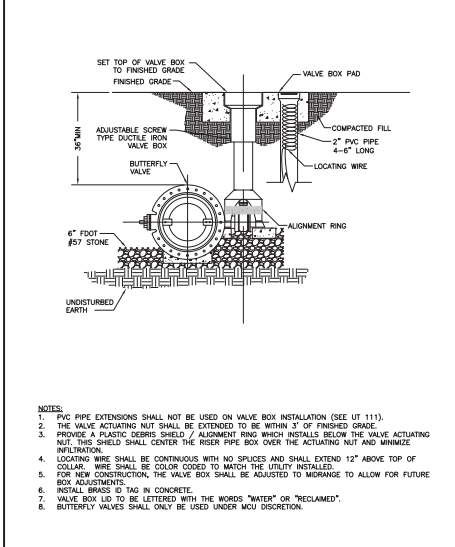
	MCBC EFFECTIVE 04/15/2023	TEMPORARY JUMPER CONNECTION	7.3.2		MCBC EFFECTIVE 04/15/2023	TYPICAL SINK CHIMNEY REPAIR DETAIL	7.3.2
	REVISION # 2	UT 203			UT 203		

	MCBC EFFECTIVE 04/15/2023	SEALED VALVE BOX, ADJUSTABLE	7.3.2		MCBC EFFECTIVE 04/15/2023	VALVE BOX PAD	7.3.2
	REVISION # 1	UT 111			UT 112		

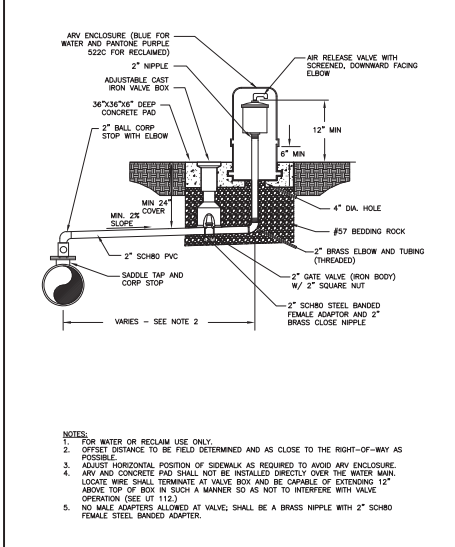
	MCBC EFFECTIVE 04/15/2023	TEMPORARY JUMPER CONNECTION	7.3.2		MCBC EFFECTIVE 04/15/2023	TYPICAL SINK CHIMNEY REPAIR DETAIL	7.3.2
	REVISION # 2	UT 203			UT 203		



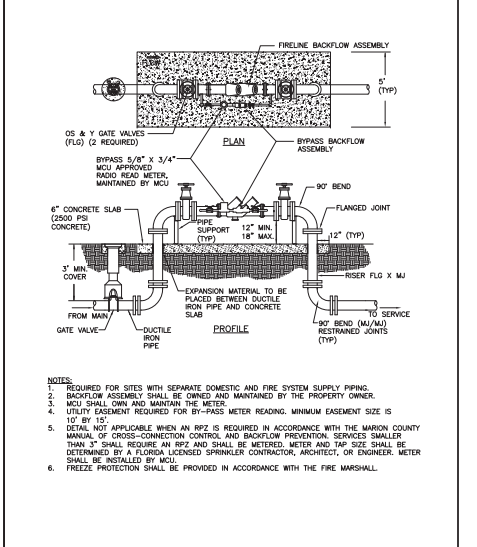
- NOTES:**
- PVC EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION (SEE UT111).
 - THE ACTUATING NUT FOR VALVES DEEPER THAN SIX (6) FEET SHALL BE EXTENDED TO COME UP TO 3 FOOT DEPTH BELOW FINISHED GRADE.
 - VALVE BOX SHALL BE SET ON FIVE (5) SOLID CONCRETE BLOCKS.
 - VALVE BOX LID TO BE LETTERED WITH THE WORD "WATER" OR "RECLAIMED".
 - INSTALL BRASS ID TAG IN CONCRETE.



- NOTES:**
- PVC PIPE EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION (SEE UT111).
 - THE VALVE ACTUATING NUT SHALL BE EXTENDED TO BE WITHIN 3\"/>



- NOTES:**
- FOR WATER OR RECLAIM USE ONLY.
 - OFFSET DISTANCE TO BE FIELD DETERMINED AND AS CLOSE TO THE RIGHT-OF-WAY AS POSSIBLE.
 - ADJUST HORIZONTAL POSITION OF SIDEWALK AS REQUIRED TO AVOID AIR ENCLOSURE.
 - ANY AND CONCRETE PAD SHALL NOT BE INSTALLED DIRECTLY OVER THE WATER MAIN.
 - LOCATE WIRE SHALL TERMINATE AT VALVE BOX AND BE CAPABLE OF EXTENDING 12\"/>



- NOTES:**
- REQUIRED FOR SITES WITH SEPARATE DOMESTIC AND FIRE SUPPLY PIPING.
 - BACKFLOW ASSEMBLY SHALL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER.
 - MCUI SHALL OWN AND MAINTAIN THE METER.
 - UTILITY EASEMENT REQUIRED FOR BY-PASS METER READING. MINIMUM EASEMENT SIZE IS 10' BY 15'.
 - DETAIL NOT APPLICABLE WHEN AN RPZ IS REQUIRED IN ACCORDANCE WITH THE MARION COUNTY MANUAL OF CROSS-CONNECTION CONTROL AND BACKFLOW PREVENTION SERVICES SMALLER THAN 3\"/>

	MCBC EFFECTIVE 04/13/2023	GATE VALVE WATER AND RECLAIMED MAINS	7.3.2		MCBC EFFECTIVE 04/13/2023	BUTTERFLY VALVE AND BOX WATER AND RECLAIMED MAINS	7.3.2
	REVISION # 2	UT 204			UT 205		

	MCBC EFFECTIVE 04/13/2023	TEMPORARY JUMPER CONNECTION	7.3.2		MCBC EFFECTIVE 04/13/2023	TYPICAL SINK CHIMNEY REPAIR DETAIL	7.3.2
	REVISION # 2	UT 203			UT 203		

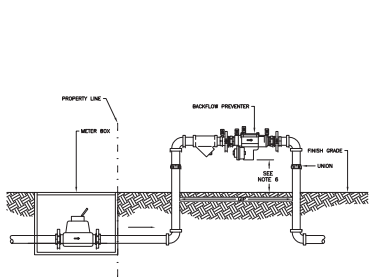
	MCBC EFFECTIVE 04/13/2023	SEALED VALVE BOX, ADJUSTABLE	7.3.2		MCBC EFFECTIVE 04/13/2023	VALVE BOX PAD	7.3.2
	REVISION # 2	UT 111			UT 112		

	MCBC EFFECTIVE 04/13/2023	TEMPORARY JUMPER CONNECTION	7.3.2		MCBC EFFECTIVE 04/13/2023	TYPICAL SINK CHIMNEY REPAIR DETAIL	7.3.2
	REVISION # 2	UT 203			UT 203		

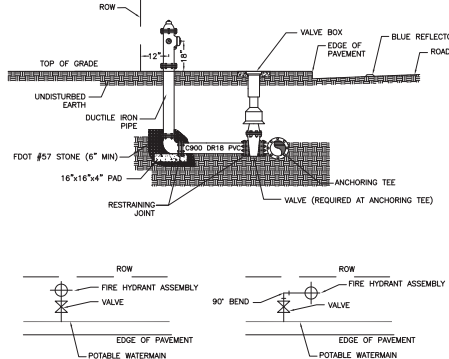
<p>DESIGN ENGINEER: DREWRY T. CAVILLAN, P.E. DESIGNER BY: DTC DRAWN BY: DTC CHECKED BY: DTC</p>	<p>SCALE(S) NOTED: DESIGNED BY: DTC DRAWN BY: DTC CHECKED BY: DTC</p>									
<p>REVISIONS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		NO.	DATE	DESCRIPTION						
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<p>PROJECT NO. 36300-23-200 SHEET NUMBER C08</p>										

<p>DESIGN ENGINEER: DREWRY T. CAVILLAN, P.E. DESIGNER BY: DTC DRAWN BY: DTC CHECKED BY: DTC</p>	<p>SCALE(S) NOTED: DESIGNED BY: DTC DRAWN BY: DTC CHECKED BY: DTC</p>									
<p>REVISIONS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		NO.	DATE	DESCRIPTION						
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<p>PROJECT NO. 36300-23-200 SHEET NUMBER C08</p>										

APPLICATION TYPE - MAJOR SITE PLAN
 UTILITY DETAILS
 MIDWAY TERRACE LOT 27 MULTIFAMILY
 OCALA, FL 34472
 MAJOR SITE PLAN
 MARION COUNTY, FLORIDA
 DATE 3/2023
 PROJECT NO. 36300-23-200
 SHEET NUMBER C08



- NOTES:**
- BACKFLOW PREVENTION ASSEMBLY SHALL BE INSTALLED AND MAINTAINED AS PER MARION COUNTY CROSS CONNECTION CONTROL ORDINANCE AND/OR PLUMBING CODE.
 - BACKFLOW PREVENTION ASSEMBLY TO BE INSTALLED LEVEL AND PLUMB.
 - MINIMUM CLEARANCE OF 24" TO BE MAINTAINED AROUND ASSEMBLY FOR TESTING.
 - ASSEMBLY MUST BE LISTED WITH THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH.
 - ALL BACKFLOW PREVENTION ASSEMBLIES MUST BE TESTED FOLLOWING INSTALLATION AND NOTATION OF WATER SERVICE THE BACKFLOW PREVENTION ASSEMBLY TESTER MUST POSSESS A CURRENT AMERICAN WATER WORKS ASSOCIATION (AWWA) AND/OR AMERICAN BACKFLOW PREVENTION ASSOCIATION (ABPA) BACKFLOW TESTER CERTIFICATE. A COPY OF THE BACKFLOW PREVENTION ASSEMBLY TEST REPORT MUST BE SUBMITTED TO THE BACKFLOW & CCC COORDINATOR AT EACH WITHIN 14 DAYS FROM THE DATE OF INSTALLATION.
 - MIN. 12" MAX 18" ABOVE FINISHED GRADE AND FLOODPLAIN.
 - METERS LARGER THAN 2" WILL REQUIRE DISCUSSION WITH MCU.

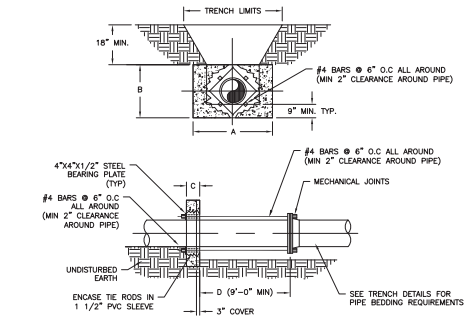


STANDARD CONFIGURATION ALTERNATE CONFIGURATION

- NOTES:**
- FINNNEY COLORS SHALL BE IN ACCORDANCE WITH SEC. 6.182-G.
 - HYDRANT SHALL BE 1" INSIDE OF RIGHT-OF-WAY, WHEN POSSIBLE.
 - BLUE REFLECTOR SHALL BE PLACED IN THE MIDDLE OF THE ADJACENT TRAVEL LANE.
 - RADIUS OF CLEAR SPACE AROUND THE FIRE HYDRANT SHALL BE IN ACCORDANCE WITH NFPA STANDARDS (NFPA 1 SEC. 18.5.7, AS AMENDED).

Marion County Utilities
 MCBCO EFFECTIVE 04/13/2023
 REVISION # 1
2" AND SMALLER REDUCED PRESSURE AND/OR DOUBLE CHECK BACKFLOW ASSEMBLY
 7.3.2 UT 209

Marion County Utilities
 MCBCO EFFECTIVE 04/13/2023
 REVISION # 2
FIRE HYDRANT ASSEMBLY
 7.3.2 UT 210



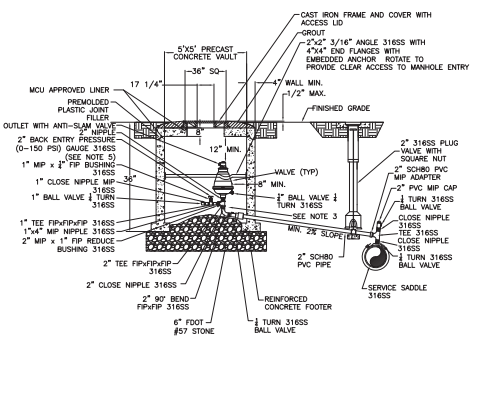
SCHEDULE OF DIMENSIONS AND MATERIALS

PIPE SIZE (INCHES)	DIMENSIONS (FT.)				THE ROOS REQ'D
	A	B	C	D	
6	2.0	2.0	1.0	3/4	2
8	2.5	2.5	1.0	3/4	2
10	3.0	2.5	1.0	3/4	4
12	4.0	3.0	1.0	3/4	4
16	5.5	3.5	1.5	3/4	4
20	7.5	4.0	1.5	3/4	4
24	8.5	5.0	1.5	3/4	6

NOTE: THRUST COLLAR AREAS TO BE COMPUTED ON BASIS OF 2000 LBS/SF SOIL RESTRAINT BEARING.

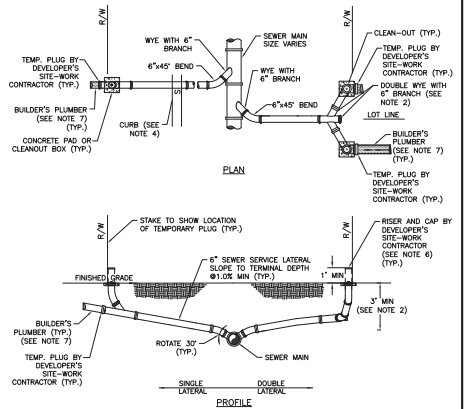
- NOTES:**
- ADDITIONAL REINFORCEMENTS SHALL BE AS SPECIFIED BY THE ENGINEER.
 - MINIMUM COMPRESSIVE STRENGTH FOR CONCRETE SHALL BE 3000 PSI.
 - REINFORCING BACKFILL AND COMPACTOR SHALL BE AS SPECIFIED ELSEWHERE IN THE STANDARD DRAWINGS.
 - ALL FORM BOARDS SHALL BE REMOVED PRIOR TO BACKFILL.
 - NO ALLOWANCE SHALL BE MADE FOR FRICTION BETWEEN THE PIPE WALL AND THE THRUST COLLAR.
 - DESIGN PRESSURE: 100 PSI.
 - REQUIRED FOR LINE STOPS, AS DETERMINED BY MCU.

Marion County Utilities
 MCBCO EFFECTIVE 04/13/2023
 REVISION # 1
THRUST COLLAR WASTEWATER FORCE MAINS
 7.3.2 UT 301



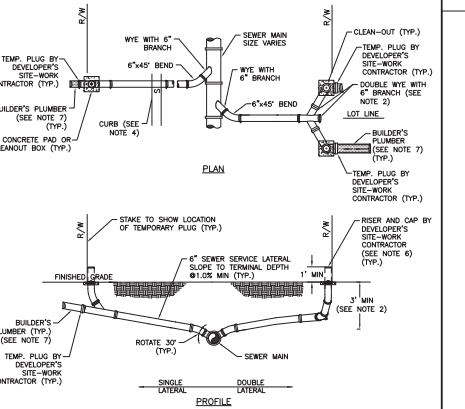
- NOTES:**
- ABOVE DETAIL APPLIES TO A 2" AIRV. FOR LARGER AIRVS, PIPE DIAMETER SHALL BE EQUAL TO THE SIZE OF THE AIRV. VALVE SIZES TO BE DETERMINED BY THE ENGINEER AND APPROVED BY MCU FROM TO INSTALLATION. ENGINEER TO PROVIDE SIZING CALCULATIONS.
 - THE MINIMUM DIMENSION FROM TOP OF PIPE TO FINISHED GRADE SHALL BE 4.0'.
 - ALL VALVE INTERNAL PIPING, VALVES, AND APPURTENANCES TO BE 316SS EXCEPT WHERE SPECIFIED OTHERWISE.
 - OFFSET DISTANCE TO BE FIELD DETERMINED AND AS CLOSE TO THE RIGHT OF WAY AS POSSIBLE AND CLEAR OF PEDESTRIAN WALKWAYS. IF PIPE AT RIGHT-OF-WAY LINE, NO OFFSET REQUIRED.
 - PRESSURE GAUGE SHALL HAVE A STAINLESS CASE WITH STAINLESS STEEL INTERNAL SYSTEM AND DAMPER.
 - ALL AIR RELEASE VALVE VAULTS SHALL BE TRAFFIC RATED (NO LOADS).
 - AIR RELEASE VALVE VAULTS SHALL BE LINED ON THE INSIDE AND LINES SHALL EXTEND UP TO MID FRAME AND COVER.
 - AIR VALVE SIZE TO BE DETERMINED BY AIRV. SIZE.
 - AIR INLET AND OUTLET SHALL BE SAME SIZE.
 - FOR FORMSING 12" AND LARGER, A 4" TAPPING SADDLE AND PLUG VALVE SHALL BE USED.

Marion County Utilities
 MCBCO EFFECTIVE 04/13/2023
 REVISION # 2
AIR OR COMBINATION AIR RELEASE VALVE IN VAULT, SEWER
 7.3.2 UT 308



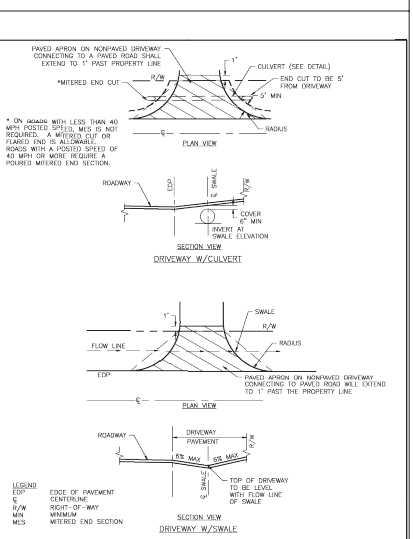
- NOTES:**
- INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
 - PIPE TO BE NO SMALLER THAN 3" AND NO DEEPER THAN 5'.
 - ALL FITTINGS SHOWN ARE TO BE INSTALLED.
 - SERVICE CONNECTIONS SHALL BE PERMANENTLY MARKED BY ETCHING OR STAMPING AN "S" IN THE CURB DIRECTLY OVER THE LATERAL WHERE NO CURB EXISTS. LOCATION SHALL BE MARKED BY PLACEMENT OF ADHESIVE REFLECTIVE MARKERS AS SPECIFIED BY MCU.
 - CLEANOUT CAP SHALL BE SET A MINIMUM OF 2" ABOVE THE FINISHED GRADE. CLEANOUTS IN RV PARKS SHALL BE SET 6" ABOVE FINISHED GRADE WITH A CONCRETE COLLAR.
 - DURING CONSTRUCTION, SERVICE LATERAL AND CLEANOUTS SHALL BE STUBBED OUT A MINIMUM OF 1' ABOVE FINISHED GRADE AND SHALL BE CAPPED BY DEVELOPER'S SITE-WORK CONTRACTOR UNTIL PROPERTY IS DEVELOPED AND CONNECTION TO CENTRAL SEWER IS MADE BY PLUMBER.
 - BUILDER'S PLUMBER SHALL CUT RISER, INSTALL CLEANOUT CAP, REMOVE TEMPORARY PLUG, CONNECT SERVICE LATERAL TO HOUSE PLUMBING AND GROUT VOID BETWEEN CLEANOUT AND PAD.
 - ALL DEVELOPMENT SHALL BE DESIGNED AND BUILT IN A MANNER WHERE THE LOWEST WASTEWATER SERVICE LATERAL DOES NOT DROP BELOW THE GRAVITY SEWER GRADE LINE.

Marion County Utilities
 MCBCO EFFECTIVE 04/13/2023
 REVISION # 2
SEWER SERVICE LATERAL
 7.3.2 UT 312



- NOTES:**
- INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
 - PIPE TO BE NO SMALLER THAN 3" AND NO DEEPER THAN 5'.
 - ALL FITTINGS SHOWN ARE TO BE INSTALLED.
 - SERVICE CONNECTIONS SHALL BE PERMANENTLY MARKED BY ETCHING OR STAMPING AN "S" IN THE CURB DIRECTLY OVER THE LATERAL WHERE NO CURB EXISTS. LOCATION SHALL BE MARKED BY PLACEMENT OF ADHESIVE REFLECTIVE MARKERS AS SPECIFIED BY MCU.
 - CLEANOUT CAP SHALL BE SET A MINIMUM OF 2" ABOVE THE FINISHED GRADE. CLEANOUTS IN RV PARKS SHALL BE SET 6" ABOVE FINISHED GRADE WITH A CONCRETE COLLAR.
 - DURING CONSTRUCTION, SERVICE LATERAL AND CLEANOUTS SHALL BE STUBBED OUT A MINIMUM OF 1' ABOVE FINISHED GRADE AND SHALL BE CAPPED BY DEVELOPER'S SITE-WORK CONTRACTOR UNTIL PROPERTY IS DEVELOPED AND CONNECTION TO CENTRAL SEWER IS MADE BY PLUMBER.
 - BUILDER'S PLUMBER SHALL CUT RISER, INSTALL CLEANOUT CAP, REMOVE TEMPORARY PLUG, CONNECT SERVICE LATERAL TO HOUSE PLUMBING AND GROUT VOID BETWEEN CLEANOUT AND PAD.
 - ALL DEVELOPMENT SHALL BE DESIGNED AND BUILT IN A MANNER WHERE THE LOWEST WASTEWATER SERVICE LATERAL DOES NOT DROP BELOW THE GRAVITY SEWER GRADE LINE.

Marion County Utilities
 MCBCO EFFECTIVE 04/13/2023
 REVISION # 2
SEWER SERVICE LATERAL
 7.3.2 UT 312

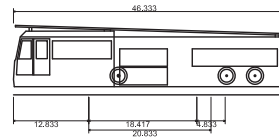
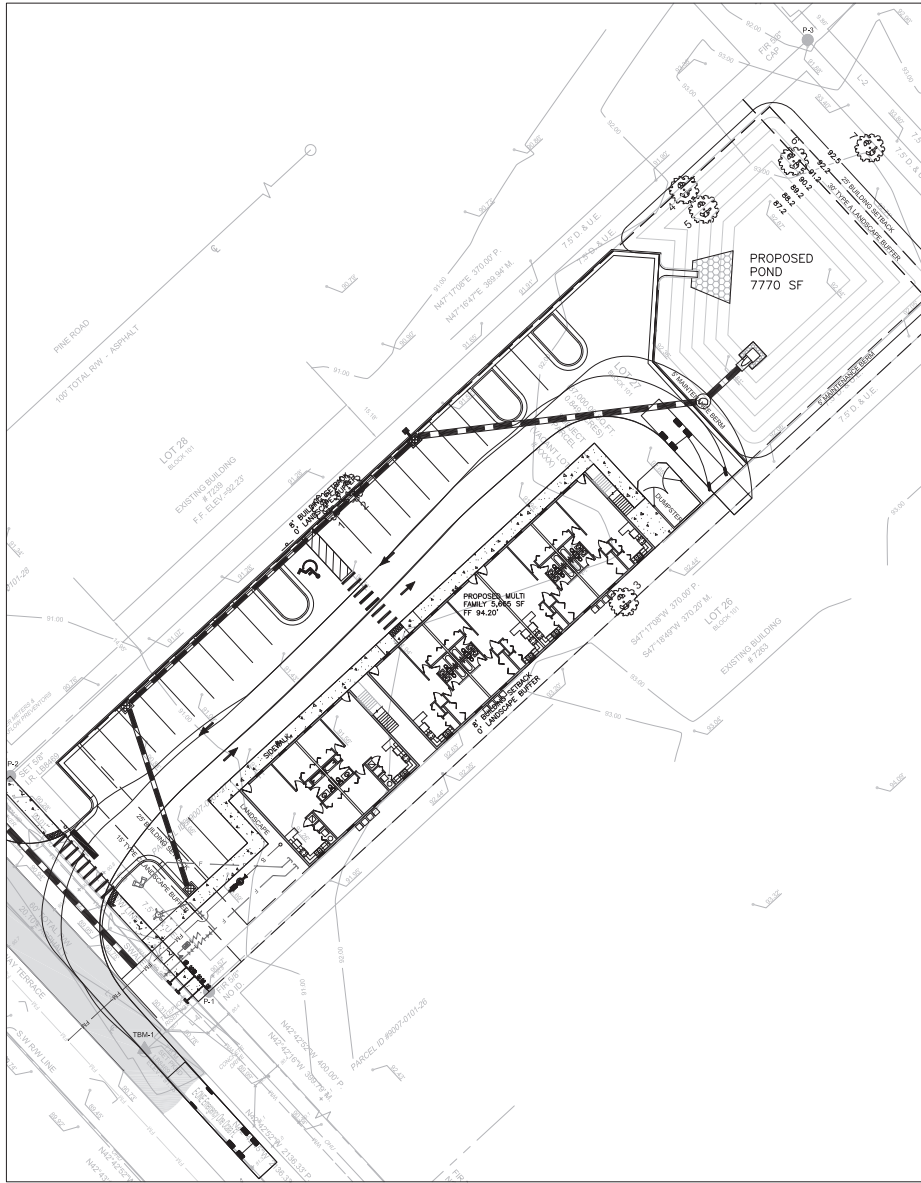


Marion County Utilities
 MCBCO EFFECTIVE 10/12/2013
 REVISION # NA
DRIVEWAY W/CULVERT & DRIVEWAY W/SWALE
 7.3.1 TS 026

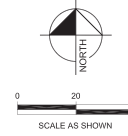
UTILITY DETAILS
 MIDWAY TERRACE LOT 27 MULTIFAMILY
 OCALA, FL 34472
 MAJOR SITE PLAN
 MARION COUNTY, FLORIDA
 DATE 3/2023
 PROJECT NO. 36300-23-200
 SHEET NUMBER C09
 DESIGN ENGINEER: DREWERY T. CANTILAN, P.E.
 DESIGNED BY: CTC
 DRAWN BY: CTC
 CHECKED BY: CTC
 FLORIDA REGISTRATION NUMBER: 90573
 SEAL
 REVISIONS
 NO. DATE
 07/22/2024 CTC
 LINN ENGINEERING & DESIGN
 1000 W. UNIVERSITY BLVD.
 OCALA, FL 32914
 PHONE: 352-767-5494
 FAX: 352-767-5494
 CAL. LIC. NO. 31710

Drawing name: Z:\Projects\36300-Adon Investments\36300-Midway Terrace Lot 27-Codes-Civil\CTD Midway Terrace Multi Family - Fire CTD.dwg Layout1 Jul 17, 2024 11:18am by: Hester@ctd.com

FIRE TRUCK ROUTE TURN TURN IN

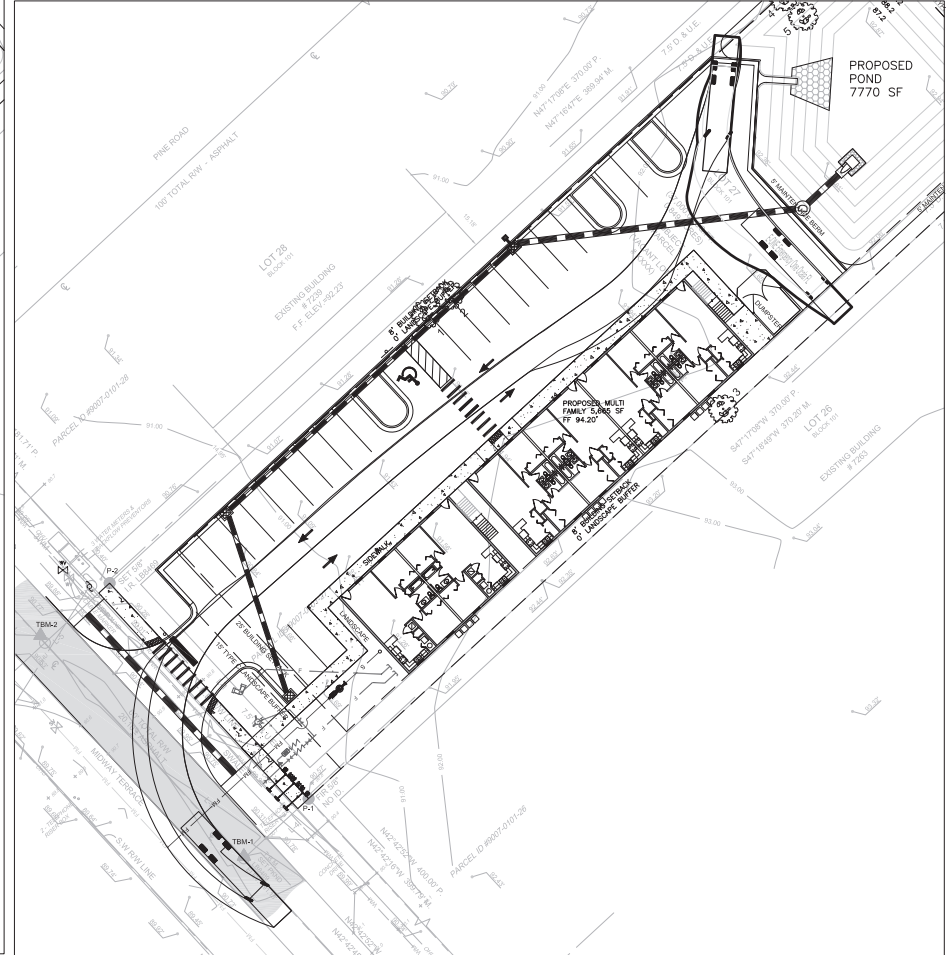


E-ONE Emergency One Ocala FL
 Overall Length 46.333ft
 Overall Width 8.333ft
 Overall Body Height 11.833ft
 Min Body Ground Clearance 1.333ft
 Track Width 8.333ft
 Lock-to-lock time 6.00s
 Max Wheel Angle 45.00°



COUNTY
 STAMP

FIRE TRUCK ROUTE BACKING OUT AND EXITING SITE



NO.	REVISIONS	DATE	BY

DESIGNED BY: DREIGHT T. CAVILLAN, P.E.
 FLORIDA REGISTRATION NUMBER: 90573
 DRAWN BY: CTC
 CHECKED BY: CTC

DESIGN ENGINEER: DREIGHT T. CAVILLAN, P.E.
 FLORIDA REGISTRATION NUMBER: 90573
 SEAL

SCALE(S) NOTED:
 DECISION BY CTC
 DRAWN BY CTC
 CHECKED BY CTC

FIRE TRUCK ROUTE

MIDWAY TERRACE LOT 27 MULTIFAMILY
 OCALA, FL 34472
 MAJOR SITE PLAN

MARION COUNTY
 FLORIDA

DATE: 3/2023
 PROJECT NO.: 36300-23-200
 SHEET NUMBER: C10

APPLICATION TYPE - MAJOR SITE PLAN



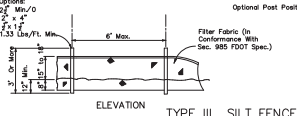
Type III Silt Fence Protection Around Ditch Bottom Inlet.

PUT FILTER FABRIC UNDER GRATE.

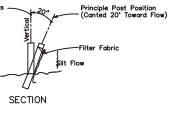
Do not deploy in a manner that silt fences will act as a dam across permanent flowing watercourses. Silt fences are to be used at upland locations and turbidity barriers used at permanent bodies of water.

SILT FENCE APPLICATIONS

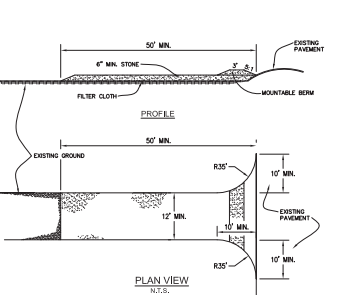
Post Options:
Wood 2" Min./0
Wood 2" x 4"
On 15'-1'
Steel 133 lbs/71 Lbs



ELEVATION TYPE III SILT FENCE NOTES.



SECTION TYPE III SILT FENCE NOTES.



STABILIZED CONSTRUCTION ENTRANCE

- 1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET.
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INCREASE OR DECREASE OCCURS.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE - IF PIPING IS IMPRACTICAL, A MOUNTABLE BEAM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKS OF FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLS, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING - INLETS SHALL BE CLEANED TO REMOVED SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

BEST MANAGEMENT PRACTICES

THIS PLAN HAS BEEN PREPARED TO ENSURE COMPLIANCE WITH APPROPRIATE CONDITIONS OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP), THE MUNICIPALITY LAND DEVELOPMENT REGULATIONS AND ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SRWMD). THE PLAN ADDRESSES THE FOLLOWING AREAS:

- 1. GENERAL EROSION CONTROL.
2. PROTECTION OF SURFACE WATER QUALITY DURING AND AFTER CONSTRUCTION.
3. CONTROL OF WIND EROSION.

SECTION 1 GENERAL EROSION CONTROL

- 1.1 GENERAL EROSION CONTROL BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED TO MINIMIZE SOIL EROSION AND POTENTIAL SLOPE FAILURES. WHILE THE VARIOUS TECHNIQUES REQUIRED WILL BE SITE AND PLAN SPECIFIC, THEY SHOULD BE EMPLOYED AS SOON AS POSSIBLE DURING CONSTRUCTION ACTIVITIES.
1.2 SLOPES OF BANKS OF RETENTION/DETENTION PONDS SHALL BE CONSTRUCTED NOT STEEPER THAN 3H:1V FROM TOP OF BANK TO POND BOTTOM.
1.3 500 SHALL BE PLACED FOR A MIN. 2'-FOOT WIDE STRIP ADJOINING ALL CURBING AND AROUND ALL INLETS 500 SHALL BE PLACED BEFORE SILT BARRIERS ARE REMOVED.
SECTION 2 PROTECTION OF SURFACE WATER QUALITY DURING AND AFTER CONSTRUCTION.
2.1 SURFACE WATER QUALITY SHALL BE MAINTAINED BY EMPLOYING THE FOLLOWING BEST MANAGEMENT PRACTICES IN THE CONSTRUCTION PLANNING AND CONSTRUCTION OF ALL IMPROVEMENTS.
2.2 WHERE PRACTICAL, STORMWATER SHALL BE CONVEYED BY SNALES.
2.3 EROSION CONTROL MEASURES SHALL BE EMPLOYED TO MINIMIZE TURBIDITY OF SURFACE WATERS LOCATED DOWNSTREAM OF ANY CONSTRUCTION ACTIVITY. WHILE THE VARIOUS MEASURES REQUIRED WILL BE SITE SPECIFIC, THEY SHALL BE EMPLOYED AS NEEDED IN ACCORDANCE WITH THE FOLLOWING:
2.3.1 IN GENERAL, EROSION SHALL BE CONTROLLED AT THE FURTHEST PRACTICAL UPSTREAM LOCATION.
2.3.2 STORMWATER INLETS SHALL BE PROTECTED DURING CONSTRUCTION AS SHOWN ON THIS SHEET. PROTECTION MEASURES SHALL BE EMPLOYED AS SOON AS PRACTICAL, DURING THE VARIOUS STAGES OF INLET CONSTRUCTION. SILT BARRIERS SHALL REMAIN IN PLACE UNTIL SODDING AROUND INLETS IS COMPLETE.
2.4 HEAVY CONSTRUCTION EQUIPMENT PARKING AND MAINTENANCE AREAS SHALL BE DESIGNED TO PREVENT OIL, GREASE, AND LUBRICANTS FROM EXTERIOR SITE DRAINAGE FEATURES INCLUDING STORMWATER COLLECTION AND TREATMENT SYSTEMS. CONTRACTORS SHALL PROVIDE BRUSH DRIPS, HAY STRIPS OR SILT SCREENS AROUND, AND SEDIMENT PANS WITH SUCH AREAS AS REQUIRED TO CONTAIN SPLASH OF OIL, GREASE OR LUBRICANTS. CONTRACTORS SHALL HAVE AVAILABLE, AND SHALL USE, ABSORBENT FIBER PADS TO CLEAN UP SPILLS AS SOON AS POSSIBLE AFTER OCCURRENCE.
2.5 SILT BARRIERS, ANY SILT WHICH ACCUMULATES BEHIND THE BARRIERS, AND ANY FILL USED TO ANCHOR THE BARRIERS SHALL BE REMOVED PROMPTLY AFTER THE END OF THE MAINTENANCE PERIOD SPECIFIED FOR THE BARRIERS.
2.6 WHERE REQUIRED TO PREVENT EROSION FROM SHEET FLOW ACROSS BARE GROUND FROM ENTERING A LAKE OR STREAM, A TEMPORARY SEDIMENT DAM SHALL BE CONSTRUCTED. THE TEMPORARY SEDIMENT DAM SHALL REMAIN IN PLACE UNTIL VEGETATION IS ESTABLISHED ON THE GROUND DRAINING TO THE DAM.
2.7 ALL PAINTS AND OTHER HAZARDOUS MATERIALS SHALL BE CONTAINED WITHIN A SINGLE ON-SITE AREA WITHIN SEALED CONTAINERS.
2.8 INSPECTION AND MAINTENANCE PROCEDURES FOR CONTROL MEASURES IDENTIFIED IN THE PLAN:
A. THE CONTRACTOR IS REQUIRED TO PROVIDE A QUALIFIED INSPECTOR TO PERFORM AND DOCUMENT REQUIRED INSPECTIONS.
B. ALL DISTURBED AREAS, STORAGE AREAS, AND CONSTRUCTION EXITS MUST BE INSPECTED. THIS INCLUDES OFF-SITE CONSTRUCTION AREAS.
C. INSPECTIONS MUST BE COMPLETED ONCE EVERY SEVEN DAYS AND/OR WITHIN 24 HOURS OF A STORM EVENT OF 0.5 INCHES OR GREATER (CONTRACTOR TO PROVIDE AN ON-SITE RAIN GAUGE AND PROVIDE DAILY RECORDS OF RAIN EVENTS).
D. ALL AREAS OF UNSATISFACTORY CONTROLS (INCLUDING EXISTING CONTROL MEASURES OR AREAS REQUIRING ADDITIONAL CONTROL MEASURES) SHALL BE REPAIRED/MAINTAINED/INSTALLED WITHIN 24 HOURS OF THE OBSERVANCE OR PRIOR TO AN ANTICIPATED RAIN EVENT IF FORECAST SOONER THAN 24 HOURS.
2.9 ALL WATER RUNOFF RESULTING FROM SOURCES OTHER THAN RAINFALL EVENTS (I.E. BLOW-OFF FROM HYDRO-STATIC TESTING PROCESS WATER FROM VEHICLE WASHDOWN, ETC.) SHALL BE DIRECTED TOWARDS THE ON-SITE SURFACE WATER MANAGEMENT SYSTEM, WHETHER IN TEMPORARY OR FINAL CONDITION, SO THAT IT HAS NO ADVERSE IMPACTS TO DOWNSTREAM WATER QUALITY CONDITIONS.

SECTION 3 CONTROL OF WIND EROSION

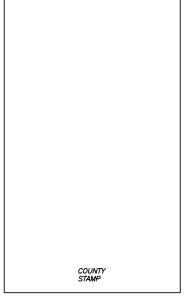
- 3.1 WIND EROSION SHALL BE CONTROLLED BY EMPLOYING THE FOLLOWING METHODS AS NECESSARY AND APPROPRIATE.
A. BARE EARTH AREAS SHALL BE WATERED DURING CONSTRUCTION AS NECESSARY TO MINIMIZE THE TRANSPORT OF FLOTTING DUST. IT MAY BE NECESSARY TO LIMIT CONSTRUCTION VEHICLE SPEED IF BARE EARTH HAS NOT BEEN EFFECTIVELY WATERED. IN NO CASE SHALL FLOTTING DUST BE ALLOWED TO LEAVE THE SITE UNDER CONSTRUCTION.
B. AS SOON AS PRACTICAL AFTER COMPLETION OF CONSTRUCTION, BARE EARTH AREAS SHALL BE VEGETATED.
C. AT ANY TIME BOTH DURING AND AFTER SITE CONSTRUCTION THAT WATERING AND/OR VEGETATION ARE NOT EFFECTIVE IN CONTROLLING WIND EROSION AND/OR TRANSPORT OF FLOTTING DUST, OTHER METHODS AS ARE NECESSARY FOR SUCH CONTROL SHALL BE EMPLOYED. THESE METHODS MAY INCLUDE DIRECTION OF DUST CONTROL FENCES. IF REQUIRED, DUST CONTROL FENCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE STANDARDS.

CLEARING AND SITE PREPARATION NOTES

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION OF THE EROSION CONTROL DEVICES AS SHOWN ON THE CONSTRUCTION PLANS, PRIOR TO ANY SITE CLEARING AND/OR DEMOLITION. REFER TO THE EROSION CONTROL NOTES SECTION CONTAINED HEREIN FOR ADDITIONAL REQUIREMENTS.
2. PRIOR TO ANY SITE CLEARING, ALL TREES SHOWN TO REMAIN, AS INDICATED ON THE CONSTRUCTION PLANS, SHALL BE PROTECTED IN ACCORDANCE WITH LOCAL TREE ORDINANCES, AND DETAILS CONTAINED IN THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THESE TREES IN GOOD CONDITION. NO TREES TO BE REMOVED SHALL BE REMOVED WITHOUT WRITTEN APPROVAL FROM THE OWNER AND THE LOCAL AGENCY HAVING JURISDICTION OVER THESE ACTIVITIES.
3. THE CONTRACTOR SHALL CLEAR AND GRUB ONLY THOSE PORTIONS OF THE SITE NECESSARY FOR CONSTRUCTION. ALL DISTURBED AREAS MUST BE SEEDED, MULCHED, SOODED OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL, IMMEDIATELY FOLLOWING CONSTRUCTION.
4. THE TOP 4" TO 6" OF GROUND REMOVED DURING CLEARING AND GRUBBING ACTIVITIES SHALL BE STOCKPILED, TO BE USED FOR LANDSCAPING PURPOSES, UNLESS OTHERWISE DIRECTED BY THE OWNER. REMAINING EARTHWORK THAT RESULTS FROM CLEARING AND GRUBBING OR SITE EXCAVATION IS TO BE UTILIZED, ON-SITE, PROVIDED THE MATERIAL IS DEEMED SUITABLE BY THE OWNER'S SOILS TESTING COMPANY. EXCESS MATERIAL IS TO EITHER BE STOCKPILED ON-SITE AS DIRECTED BY THE OWNER OR OWNER'S ENGINEER, OR REMOVED FROM THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING ANY EXCESS MATERIAL FROM THE SITE.
5. ALL EXISTING DEBRIS (ABOVE OR BELOW GROUND), CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL, SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR, IN ACCORDANCE WITH APPLICABLE REGULATORY AGENCY REQUIREMENTS.
6. THE CONTRACTOR IS TO PREPARE THE SITE IN ACCORDANCE WITH THE SOILS REPORT, COPIES OF WHICH ARE AVAILABLE THROUGH THE OWNER OR SOILS TESTING COMPANY DIRECTLY.
7. CONTRACTOR TO BE RESPONSIBLE FOR INSTALLATION OF TEMPORARY CONSTRUCTION FENCE AROUND ENTIRE PERIMETER OF PROPERTY. TYPE OF FENCE TO BE SUBMITTED BY CONTRACTOR TO ENGINEER FOR APPROVAL.
8. CONTRACTOR SHALL MAINTAIN STORMWATER MANAGEMENT SYSTEM TO REMAIN NO DAMAGE TO ADJACENT PROPERTIES OCCURS DURING STORM EVENTS.
9. DISTURBED AREA(S) WITHIN THE ROW WILL BE COMPACTED TO 98% OF MAXIMUM DENSITY AND SOODED.
10. DO NOT DISTURB EXISTING UNDERGROUND OR STORM SYSTEMS.
11. NO STOCKPILES OF MATERIAL, IN ROADWAY OR ON SIDEWALK, ALL DIRT AND DEBRIS WILL BE REMOVED FROM JOB SITE DAILY. ROADS AND SIDEWALK TO BE SWEEP DAILY AS PART OF DAILY CLEAN-UP.
12. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO EXISTING CONDITIONS OR BETTER. CONTRACTOR SHALL PROVIDE TO ENGINEER PHOTOGRAPHY OF PRE-CONSTRUCTION CONDITIONS AND POST-CONSTRUCTION CONDITIONS AS REQUESTED BY ENGINEER.
13. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT AND OTHER HAZARDS CREATED BY THE DEMOLITION OPERATION.
14. REMOVE WASTE MATERIALS AND UNSUITABLE AND EXCESS TOPSOIL FROM PROPERTY AND DISPOSE OF OFF SITE IN A LEGAL MANNER.
15. DURING PREPARATION OF THE SUB GRACE AND UNTIL THE PAVING IS IN PLACE, THE CONTRACTOR SHALL PROMPTLY TAKE REASONABLE MEASURES TO OBTAIN AND MAINTAIN A DRY SITE CONDITION. SUCH MEASURES SHALL INCLUDE PUMPING OF FREE SURFACE WATER, MINOR HAND AND/OR MACHINE SHAPING OF FACILITATE WATER REMOVAL, AND OTHER OPERATIONS TO SPEED DRYING.
16. ALL DELETERIOUS SUBSURFACE MATERIAL (I.E. MUCK, PEAT, BURED DEBRIS, ETC.) IS TO BE EXCAVATED AND REPLACED WITH SUITABLE/COMPACTED SOILS AS DIRECTED BY THE OWNER, THE OWNER'S ENGINEERS, OR OWNER'S SOILS 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. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING DELETERIOUS MATERIAL FROM THE SITE.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHIELDING OR SHORING AS NECESSARY. Dewatering methods shall be used as required to keep TRENCHES DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED.
18. THE CONTRACTOR WILL STABILIZE BY SEED AND MULCH, SOIL, OR OTHER APPROVED MATERIALS ANY DISTURBED AREAS WITHIN ONE WEEK FOLLOWING CONSTRUCTION OF THE UTILITY SYSTEMS AND PAVEMENT AREAS. CONTRACTOR SHALL MAINTAIN SUCH AREAS UNTIL FINAL ACCEPTANCE BY OWNER. CONTRACTOR TO COORDINATE WITH OWNER REGARDING TYPE OF MATERIAL, LANDSCAPING AND IRRIGATION REQUIREMENTS.

EROSION AND SILTATION CONTROL

- 1. GENERAL - ALL EROSION AND SILTATION CONTROL METHODS SHALL BE IMPLEMENTED PRIOR TO THE START OF CONSTRUCTION. DURING CONSTRUCTION, DIVIDED AREAS SHALL BE COVERED BY MULCHES SUCH AS STRAW, HAY AND FILTER FABRIC. ALL STORM SEWER INLETS IN THE VICINITY OF THE PROJECT SHALL BE PROTECTED BY SEDIMENT TRAPS OR HAY BALES. THESE SHALL BE MAINTAINED AND MONITORED DURING THE CONSTRUCTION PROCESS TO MINIMIZE DOWNSTREAM SILTATION. WHEN CONSTRUCTION IS COMPLETED, DETENTION AREAS WILL BE REPAIRED, CLEANED OF SILT AND DEBRIS, AND RE-SOODED TO PROPERLY DETAIN THE INTENDED STORM QUANTITIES.
2. PROTECTION AND STABILIZATION OF ON-SITE SOIL COVERAGES - FILL MATERIAL STOCKPILES SHALL BE PROTECTED AT ALL TIMES BY ON-SITE DRAINAGE CONTROLS WHICH PREVENT EROSION OF THE STOCKPILED MATERIAL. CONTROL OF DUST FROM SUCH STOCKPILES MAY BE REQUIRED, DEPENDING UPON THEIR LOCATION AND THE EXPECTED LENGTH OF TIME THE STOCKPILES WILL BE PRESENT. IN NO CASE SHALL ANY UNSTOCKPILED MATERIAL REMAIN MORE THAN THIRTY (30) CALENDAR DAYS AFTER SUBSTANTIAL PROJECT COMPLETION.
3. PROTECTION OF EXISTING STORM SEWER SYSTEMS DURING CONSTRUCTION, ALL STORM SEWER INLETS IN THE VICINITY OF THE PROJECT SHALL BE PROTECTED BY SEDIMENT TRAPS WHICH ARE SECURED WITH SOIL, STONE, ETC. WHICH SHALL BE MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION PROGRESS, AND WHICH MUST BE APPROVED BY THE ENGINEER BEFORE INSTALLATION.
4. SEDIMENT BASINS AND TRAPS, SEDIMENT TRAPPING MEASURES, PERIMETER BARRIERS, VEGETATIVE BUFFERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT OR PREVENT THE TRANSPORT OF SEDIMENT ONTO ADJACENT PROPERTIES, OR INTO EXISTING BODIES OF, MUST BE INSTALLED, CONSTRUCTED OR, IN THE CASE OF VEGETATIVE BUFFERS, PROTECTED FROM DISTURBANCE, AS A FIRST STEP IN THE LAND ALTERATION PROCESS, SUCH SYSTEMS SHALL BE FULLY OPERATIVE BEFORE ANY OTHER DISTURBANCE OF THE SITE BEGINS. EARTHEN STRUCTURES INCLUDING BUT NOT LIMITED TO BERMS, EARTH FILTERS, DAMS OR DIKES SHALL BE STABILIZED AND PROTECTED FROM DRAINAGE DAMAGE OR EROSION WITHIN ONE WEEK OF INSTALLATION.
5. ALL SNALES, DITCHES AND CHANNELS, CHANNELS LEADING FROM THE SITE SHALL BE SOODED WITH ARGENTINE BAHIA WITHIN THREE (3) DAYS OF EXCAVATION.
6. THE CONSTRUCTION OF UNDERGROUND UTILITY CONSTRUCTIONS, UNDERGROUND UTILITY LINES AND OTHER STRUCTURES SHALL BE DONE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
A. NO MORE THAN 500 LINEAR FEET OF TRENCH SHALL BE OPEN AT ANY ONE TIME.
B. WHEREVER CONSISTENT WITH SAFETY AND SPACE CONSIDERATION, EXCAVATED MATERIAL SHALL BE CAST TO THE UPHILL SIDE OF TRENCHES. TRENCH MATERIAL SHALL NOT BE CAST INTO OR ONTO THE SLOPE OF ANY STREAM, CHANNEL, ROAD, DITCH OR WATERWAY.
7. ALL EROSION AND SILTATION CONTROL DEVICES SHALL BE CHECKED REGULARLY, ESPECIALLY AFTER EACH RAINFALL AND WILL BE CLEANED OUT AND/OR REPAIRED AS REQUIRED.

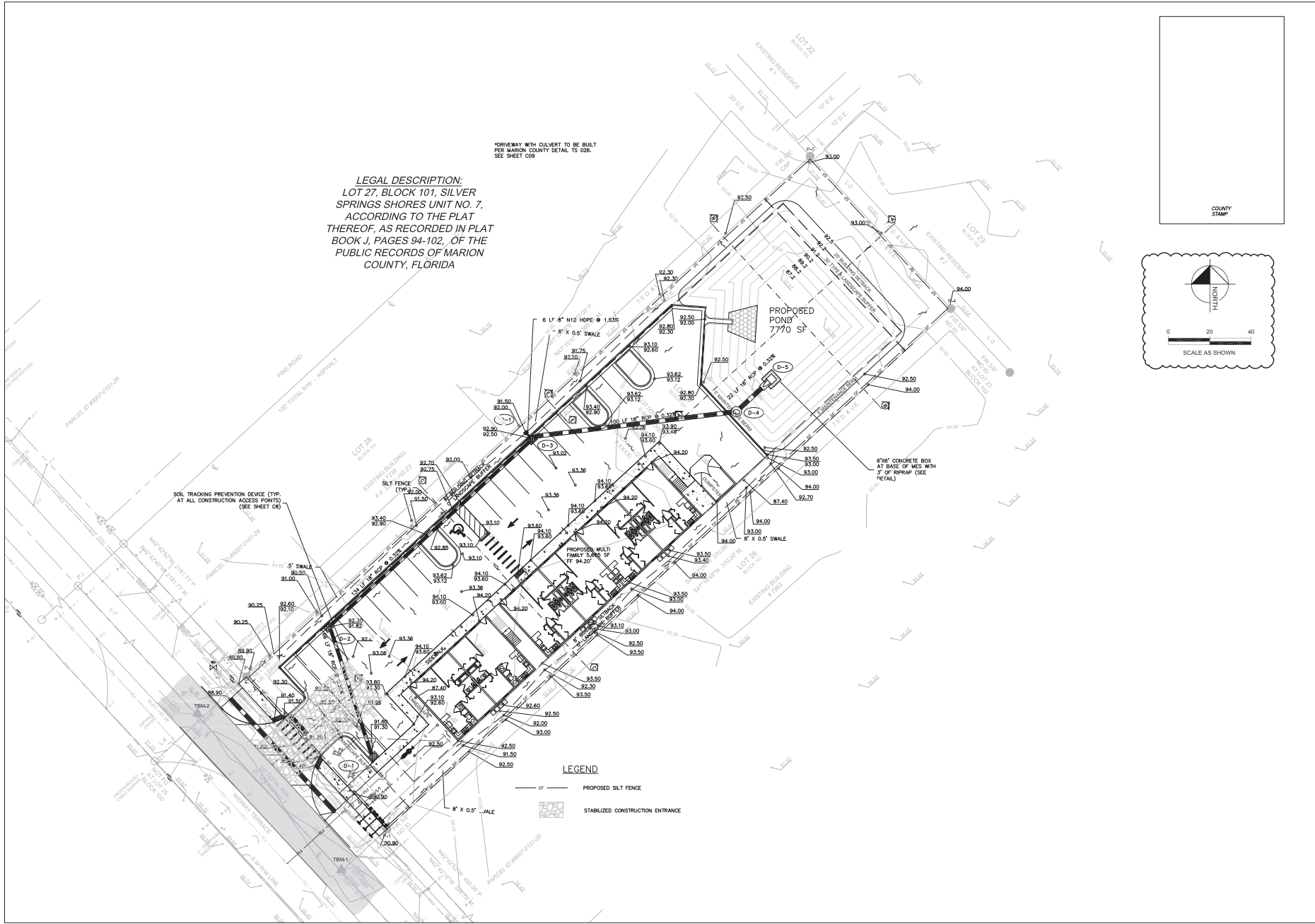


Project information including: MIDWAY TERRACE LOT 27 MULTIFAMILY, OCALA, FL 34472, MAJOR SITE PLAN, SWPPP-1, DATE 3/2023, PROJECT NO. 36300-23-200, SHEET NUMBER SWPPP-1, APPLICATION TYPE - MAJOR SITE PLAN, and various revision and approval tables.

Drawing name: Z:\Projects\36300-Adon Investments\36300-Midway Terrace Lot 27\Civil-Sub\CT1 Midway Terrace Multi Family - swppp-2.dwg swppp-2 Jul 17, 2024 11:22am by: Mckelstee 8

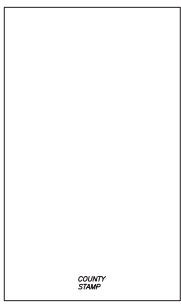
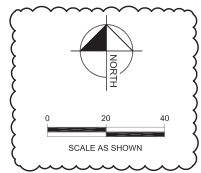
LEGAL DESCRIPTION:
 LOT 27, BLOCK 101, SILVER
 SPRINGS SHORES UNIT NO. 7,
 ACCORDING TO THE PLAT
 THEREOF, AS RECORDED IN PLAT
 BOOK J, PAGES 94-102, OF THE
 PUBLIC RECORDS OF MARION
 COUNTY, FLORIDA

DRIVEWAY WITH CULVERT TO BE BUILT
 PER MARION COUNTY DETAIL TS 026.
 SEE SHEET 026



LEGEND

- SF PROPOSED SILT FENCE
- ▣ STABILIZED CONSTRUCTION ENTRANCE

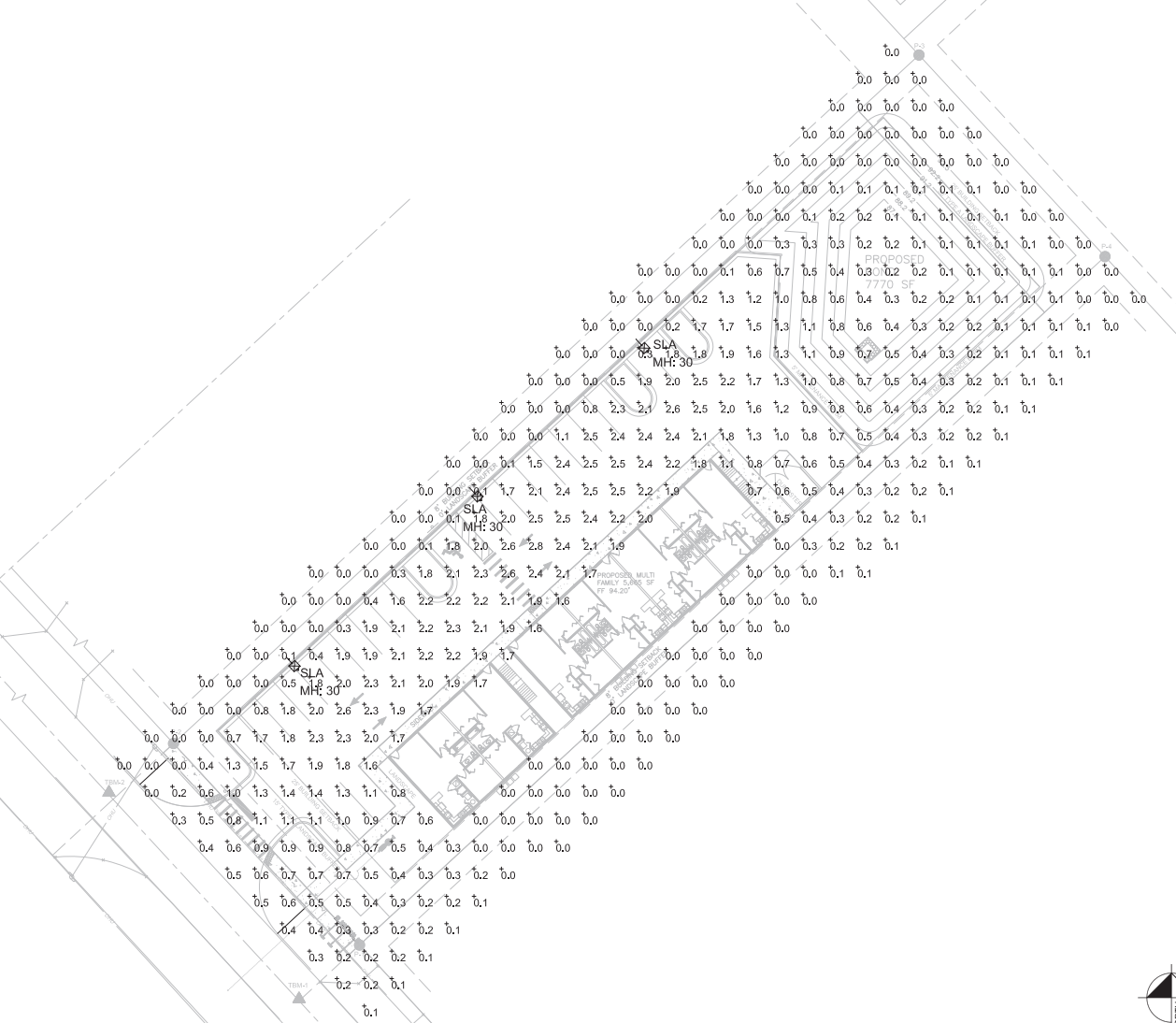


DESIGN ENGINEER: DREWERY T. CAVILLAN, P.E. FLORIDA REGISTRATION NUMBER: 90573		DESIGNER: DREWERY T. CAVILLAN, P.E. FLORIDA REGISTRATION NUMBER: 90573		SCALE(S) NOTED: DESIGNED BY: DTC DRAWN BY: DTC CHECKED BY: DTC		REVISIONS No. DATE BY	
LINN ENGINEERING & DESIGN 1000 N. UNIVERSITY BLVD. SUITE 100 Ocala, FL 34472 PHONE: 352-237-1500 FAX: 352-237-1501 CAL. LIC. NO. 31710		COUNTY STAMP		REVISIONS		REVISIONS	
EROSION CONTROL & STORMWATER POLLUTION PREVENTION PLAN		MIDWAY TERRACE LOT 27 MULTIFAMILY OCALA, FL 34472 MAJOR SITE PLAN		FLORIDA MARION COUNTY		DATE: 3/2023 PROJECT NO. 36300-23-200 SHEET NUMBER SWPPP-2	

APPLICATION TYPE - MAJOR SITE PLAN

Symbol	Manufacturer	Qty	Label	Arrangement	Description	LLF	Arranged Watts	Arranged Lumens	BUG Rating
☒	Ultratons Lighting	3	SLA	Single	DSX0 LED P7 30K 70CRI BLC4 MVOLT RPA NLTAR2 PIRH FINISH T60; MOUNTED @ 30' AFG ON A ROUND TAPERED DIRECT BURY ALUMINUM POLE	1.000	170.81	14644	B0-UG-04

Label	Calc-Type	Units	Avg	Max	Min	Avg/Min	Max/Min
Entire Site	Illuminance	Fc	0.66	2.8	0.0	N/A	N/A
Parking Lot	Illuminance	Fc	1.83	2.8	0.5	3.69	5.60



D-Series Size 0 LED Area Luminaire

Specifications

- EPA: 0.44 ft (0.13 m)
- Length: 26.18" (665 mm)
- Width: 14.96" (379 mm)
- Height HT: 2.96" (75 mm)
- Height HD: 2.96" (75 mm)
- Weight: 23.84 lbs (10.81 kg)

Introduction

The modern styling of the D-Series features a highly refined aesthetic, that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficiency, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry also in reducing the number of poles required in area lighting applications, with typical energy savings of 70% and expected service life of over 50,000 hours.

Ordering Information

EXAMPLE: DSX0 LED P6 40K 70CRI T3M MVOLT SPA NLTAR2 PIRH NDBX0

Code	Label	Color Temperature	Color Rendering	Beam Spread	Mounting	Notes
DSX0	DSX0	40K	70CRI	T3M	MVOLT	SPA
NLTAR2	NLTAR2					PIRH
NDBX0	NDBX0					

Options:

- DSX0: 40K, 50K, 60K, 70K, 80K, 90K, 100K
- 70CRI: 70, 80, 90, 95
- T3M: T3, T4, T5, T6, T7, T8, T9, T10, T11, T12, T13, T14, T15, T16, T17, T18, T19, T20, T21, T22, T23, T24, T25, T26, T27, T28, T29, T30, T31, T32, T33, T34, T35, T36, T37, T38, T39, T40, T41, T42, T43, T44, T45, T46, T47, T48, T49, T50, T51, T52, T53, T54, T55, T56, T57, T58, T59, T60, T61, T62, T63, T64, T65, T66, T67, T68, T69, T70, T71, T72, T73, T74, T75, T76, T77, T78, T79, T80, T81, T82, T83, T84, T85, T86, T87, T88, T89, T90, T91, T92, T93, T94, T95, T96, T97, T98, T99, T100
- MVOLT: 120V, 277V, 347V, 480V
- SPA: SPA, SPA1, SPA2, SPA3, SPA4, SPA5, SPA6, SPA7, SPA8, SPA9, SPA10, SPA11, SPA12, SPA13, SPA14, SPA15, SPA16, SPA17, SPA18, SPA19, SPA20, SPA21, SPA22, SPA23, SPA24, SPA25, SPA26, SPA27, SPA28, SPA29, SPA30, SPA31, SPA32, SPA33, SPA34, SPA35, SPA36, SPA37, SPA38, SPA39, SPA40, SPA41, SPA42, SPA43, SPA44, SPA45, SPA46, SPA47, SPA48, SPA49, SPA50
- PIRH: PIRH, PIRH1, PIRH2, PIRH3, PIRH4, PIRH5, PIRH6, PIRH7, PIRH8, PIRH9, PIRH10, PIRH11, PIRH12, PIRH13, PIRH14, PIRH15, PIRH16, PIRH17, PIRH18, PIRH19, PIRH20, PIRH21, PIRH22, PIRH23, PIRH24, PIRH25, PIRH26, PIRH27, PIRH28, PIRH29, PIRH30, PIRH31, PIRH32, PIRH33, PIRH34, PIRH35, PIRH36, PIRH37, PIRH38, PIRH39, PIRH40, PIRH41, PIRH42, PIRH43, PIRH44, PIRH45, PIRH46, PIRH47, PIRH48, PIRH49, PIRH50
- NDBX0: NDBX0, NDBX1, NDBX2, NDBX3, NDBX4, NDBX5, NDBX6, NDBX7, NDBX8, NDBX9, NDBX10, NDBX11, NDBX12, NDBX13, NDBX14, NDBX15, NDBX16, NDBX17, NDBX18, NDBX19, NDBX20, NDBX21, NDBX22, NDBX23, NDBX24, NDBX25, NDBX26, NDBX27, NDBX28, NDBX29, NDBX30, NDBX31, NDBX32, NDBX33, NDBX34, NDBX35, NDBX36, NDBX37, NDBX38, NDBX39, NDBX40, NDBX41, NDBX42, NDBX43, NDBX44, NDBX45, NDBX46, NDBX47, NDBX48, NDBX49, NDBX50

RTA Round Tapered Aluminum Pole

RTA30D7BE

WARNING: Do not install sign pole without foundation.

A	B	C	D	E	RTA30D7BE**
30	6.188"	7	100	13.8 [10.2]	8.2 [7.4] 6.0

Customer Name: _____ **Location:** _____ **Quantity:** _____

Notes: _____

EPA Notice: (Please Referenced Area EPA or subject list EPA) Only EPA listed products are allowed in accordance with the EPA's Clean Air Act. EPA's list of products can be found at: www.epa.gov/air-vehicles. EPA's list of products can be found at: www.epa.gov/air-vehicles. EPA's list of products can be found at: www.epa.gov/air-vehicles.

hupco 20250 Midway Highway, Suite 100, Orlando, FL 32819, USA. Phone: 407-241-1111. www.hupco.com

DATE	BY
06/2024	06/2024

REVISIONS

No.	DATE	DESCRIPTION
1	06/2024	Initial Issue

SCALE NOTED: DESIGN DIMENSIONS: 1" = 10'-0"

DESIGNED BY: GTC **CHECKED BY:** GTC

SCALE: 1" = 10'-0"

PROJECT NO.: 36300-23-200

SHEET NUMBER: SL-1

LOCATION: MARION COUNTY, FLORIDA

CLIENT: MIDWAY TERRACE LOT 27 MULTIFAMILY OCALA, FL 34472

PROJECT: MAJOR SITE PLAN

DATE: 06/2024

PROJECT NO.: 36300-23-200

SHEET NUMBER: SL-1

GENERAL NOTES

- SEE CIVIL ENGINEERING DRAWINGS FOR GENERAL GRADING OF THE SITE, INCLUDING FINISH GRADES FOR PARKING LOTS, ROADSWAYS, SIDEWALKS, AND PLANTING AREAS.
- THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE PROJECT SITE PRIOR TO BEGINNING WORK. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND LOCATION OF PROPOSED IMPROVEMENTS PRIOR TO INITIATING ANY CONSTRUCTION.
- LOCATION OF ALL UTILITIES AND BASE INFORMATION IS APPROXIMATE. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES AND OBSTRUCTIONS PRIOR TO INITIATING WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OR REPLACEMENT OF ANY DAMAGE TO EXISTING ELEMENTS ABOVE OR BELOW GROUND TO ITS ORIGINAL CONDITION AND TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
- THE OWNER'S REPRESENTATIVE SHALL HAVE THE RIGHT AT ANY STAGE OF THE OPERATIONS TO RECTIFY ANY AND ALL WORK AND MATERIAL, WHICH IN HIS OPINION, DOES NOT MEET WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS.
- ALL GRADES, DIMENSIONS, AND EXISTING CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR ON-SITE BEFORE CONSTRUCTION BEGINS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON THE JOB SITE PRIOR TO START OF CONSTRUCTION AND/OR FABRICATION. CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE OF ANY VARIATIONS FROM THE DIMENSIONS AND CONDITIONS SHOWN ON THESE DRAWINGS.
- REPORT ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DRAWINGS AND FIELD CONDITIONS TO THE OWNER'S REPRESENTATIVE.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SAFETY MEASURES DURING CONSTRUCTION OPERATIONS TO PROTECT THE PUBLIC ACCORDING TO ALL APPLICABLE CODES AND RECOGNIZED LOCAL PRACTICES.
- THE CONTRACTOR SHALL MAINTAIN ACCESS AND STAGING AREA WITH THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING EROSION AND SEDIMENTATION CONTROL MEASURES DURING CONSTRUCTION. PROVIDE ADDITIONAL MEASURES AS NECESSARY TO MINIMIZE ADVERSE IMPACTS IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES.
- NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN CONSENT OF THE OWNER'S REPRESENTATIVE. DURING THE COURSE OF THIS WORK, EXCESS WASTE MATERIAL SHALL BE REMOVED DAILY BY THE MTD.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING AND COORDINATION OF WORK WITH OTHER TRADES AND THE OWNER'S REPRESENTATIVE.
- FLORIDA LAW (S. 366) UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT Mandates that LOCALITY CONTRACTORS SHALL CONTACT FLORIDA HIGHWAY TRAIL AND STATE OFFICE OF FLORIDA BY CALLING 800-424-7700 OR 811 AT LEAST 7 FULL BUSINESS DAYS PRIOR TO THE BEGINNING AN EXCAVATION OR RELOCATION TO ALLOW MEMBERS OPERATORS AN OPPORTUNITY TO IDENTIFY AND MARK THEIR UNDERGROUND FACILITIES AND APPROPRIATELY RESPOND TO THE NOTICE RESPONSE.
- EXISTING SITE HARDWARE, UTILITIES, CURBS, AND OTHER ELEMENTS TO REMAIN SHALL BE FULLY PROTECTED FROM ANY DAMAGE UNLESS OTHERWISE NOTED.
- CONTRACTOR IS RESPONSIBLE TO INCLUDE ALL NECESSARY ITEMS TO FULLY COMPLETE AN ASSEMBLY, SYSTEM, OR ITEM OF WORK AS SHOWN IN THE DRAWINGS, ANY ITEM NOT DETECTED OR IDENTIFIED IN THESE DRAWINGS BUT REQUIRED TO COMPLETE THE WORK SHALL BE PROVIDED BY THE CONTRACTOR.
- CONTRACTOR IS RESPONSIBLE FOR PLACING ALL ITEMS OF WORK AT THE CORRECT LOCATIONS PER THE DRAWINGS. THIS MAY INCLUDE SURVEYING THE PROJECT SITE, DIGITAL DRAWING INFORMATION AND/OR NORTHING AND EASTING COORDINATES FOR USE BY THE CONTRACTOR CAN BE PROVIDED BY THE LANDSCAPE ARCHITECT UPON REQUEST. THE LANDSCAPE ARCHITECT IS NOT RESPONSIBLE FOR INACCURACIES IN THE BASE INFORMATION AND PROJECT COORDINATES PROVIDED BY THE OWN OR CONTRACTOR OR PROPERTY SURVEYOR THAT IS INCORPORATED BY REFERENCE IN THESE DRAWINGS.

LANDSCAPE NOTES

- THE CONTRACTOR SHALL REVIEW ARCHITECTURE CONSTRUCTION DOCUMENTS TO BECOME THOROUGHLY FAMILIAR WITH SURFACE AND SUBSURFACE UTILITIES.
- THE PLANT QUANTITIES SHOWN ON LANDSCAPE CONSTRUCTION DOCUMENTS ARE FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES AND REPORTING ANY DISCREPANCIES IN WRITING TO THE LANDSCAPE ARCHITECT FOR CLARIFICATION WITHIN TWO WEEKS OF CONTRACT AWARD AND PRIOR TO THE COMMENCEMENT OF WORK. ALL REQUESTS FOR SUBSTITUTION DUE TO LACK OF AVAILABILITY MUST BE MADE TO THE OWNER'S REPRESENTATIVE IN WRITING. THE PERIOD NO SUBSTITUTION SHALL BE PERMITTED WITHOUT PRIOR WRITTEN APPROVAL FROM THE OWNER'S REPRESENTATIVE. THE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING AND MAINTAINING THE SAME GENERAL APPEARANCE TO THE SPECIFIED PRIOR TO REQUESTING SUBSTITUTION. IN-GROWTH TO BE CONSIDERED BY THE OWNER'S REPRESENTATIVE AS Viable ALTERNATES PLANTS ARE LISTED IN THE SMIAT GENERAL APPEARANCE COMMON INSTALLATION SIZE, MATURE SIZE, QUALITY AND GROWTH RATING. MATERIALS MUST BE OFFERED IN 10 ADDITIONAL COSTS TO THE OWNER.
- ALL METALIZATION OF PLANT MATERIAL SHALL COMPLY WITH APPLICABLE JURISDICTIONAL CODES. THE CONTRACTOR SHALL INSURE FOR OBTAINING ALL PERMITS ASSOCIATED WITH THIS WORK. CONTRACTOR SHALL INSURE A MAINTAINED CLEARANCE OF ALL OBSTRUCTIONS IN ACCORDANCE WITH THE FLORIDA REGULATIONS (BSL 1). CONTRACTOR SHALL ENSURE SIGN TRIANGLE VISIBILITY IN ALL APPLICABLE ROADWAYS PER FOOT STANDARDS.
- PRIOR TO PLANTING INSTALLATION, THE CONTRACTOR SHALL CONVINCE THE AVAILABILITY OF ALL SPECIFIED PLANT MATERIALS. SUBMIT LATEST PHOTOPROFS OF TREE MATERIAL AND SPECIEMEN PLANT MATERIAL TO THE OWNER'S REPRESENTATIVE FOR REVIEW.
- ALL PLANT MATERIAL, SIZES SPECIFIED ARE MINIMUM SIZES. CONTAINER SIZE SHALL BE INCREASED IF NECESSARY TO PROVIDE OVERALL PLANT SIZE SPECIFIED.
- IF PLANT MATERIAL DOES NOT COMPLY WITH THE REQUIREMENTS AS SPECIFIED HEREIN, THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT SUCH MATERIAL AND INSTRUCT THE CONTRACTOR TO REPLACE REJECTED WORK AT NO ADDED COST TO THE OWNER AND CONTINUE SPECIFIED MAINTENANCE UNTIL REINSPECTED AND FOUND TO BE ACCEPTABLE.
- THE CONTRACTOR SHALL PROVIDE AN APPROVED PLANTING SOIL MIXTURE FOR ALL PLANT MATERIAL. SEE SPECIFICATIONS FOR REQUIREMENTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR STABILITY AND PLUMB CONDITION OF ALL TREES AND SHRUBS, AND SHALL BE LEGALLY LIABLE FOR ANY DAMAGE CAUSED BY INSTABILITY OF ANY PLANT MATERIALS. STAKING OF TREES OR SHRUBS SHALL BE DONE IN ACCORDANCE WITH PLANS AND REGULATIONS.
- THE CONTRACTOR SHALL INSURE ADEQUATE VERTICAL DRAINAGE IN ALL PLANT BEDS AND PLANTERS. IF INADEQUATE VERTICAL DRAINAGE IS OBSERVED, THE CONTRACTOR SHALL SUBMIT RECOMMENDATIONS FOR PROVIDING ADEQUATE DRAINAGE TO THE OWNER'S REPRESENTATIVE. IN WET OR POORLY DRAINING SITES THE CONTRACTOR SHALL MAINTAIN ALL PLANTING MATERIALS AND SUBSTRATE TO PREVENT FLOODING OF WATERS AND PLANTING. THIS MAY INCLUDE LOOSENING OF EXISTING SOLIDS AND PROVIDING SOIL AMENDMENTS TO ENSURE ADEQUATE DRAINAGE.
- PESS SOIL ON SLOPES GREATER THAN 13 (33% SLOPE).
- THE CONTRACTOR SHALL ENGAGE A QUALIFIED ARBORIST WHO HAS SUCCESSFULLY COMPLETED TREE PROTECTION AND TREE TRIMMING WITH FIVE YEARS OR MORE EXPERIENCE, TO PERFORM THE FOLLOWING WORK:
 - REMOVE BRANCHES FROM TREES THAT ARE TO REMAIN, IF REQUIRED, AS DIRECTED BY OWNER'S REPRESENTATIVE.
 - PERFORM INITIAL PRUNING OF BRANCHES TO ACCOMMODATE NEW CONSTRUCTION.
 - PERFORM TREE REPAIR WORK FOR DAMAGE INCURRED BY NEW CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE TEMPORARY IRRIGATION SYSTEM FOR TEMPORARY PLANTS.
- CONTRACTOR SHALL PROTECT EXISTING VEGETATION TO REMAIN AS SHOWN ON DRAWINGS OR BY MEANS APPROVED BY THE OWNER'S REPRESENTATIVE. ALL EXISTING PLANT BEDS TO REMAIN WITHIN THE CONSTRUCTION LIMIT LINE SHALL BE LEFT UNDISTURBED AND PROTECTED BY WOODEN BARRICADES ERRECTED AT THE PERIMETER OF THE TREE DRIP-LINE. NO VEHICLE SHALL TRAVEL THROUGH THE AREA NOR SHALL ANY STORAGE OF MATERIALS OR EQUIPMENT BE PERMITTED WITHIN THE AREA OF THE TREE DRIP-LINE(S). ANY EXISTING PLANT BEDS OR TREES DAMAGED BY CONSTRUCTION ACTIVITY SHALL BE REPLACED BY THE RESPONSIBLE PARTY AT THEIR OWN EXPENSE.
- CONTRACTOR TO CLEAN, PRUNE, AND SHAPE EDGES OF EXISTING VEGETATION AS DIRECTED BY THE OWNER'S REPRESENTATIVE. CREATE SMOOTH BEDE LINES ALONG EXISTING VEGETATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING EXISTING VEGETATION AS REQUIRED AND PREPARING PLANTING AREAS TO BE INSTALLED TO PLANT AND INSTALLING EXTERNALS.
- THE LANDSCAPE ARCHITECT IS RESPONSIBLE FOR ERADICATING WEEDS AND UNWANTED PERENNIAL VEGETATION WITHIN THE LIMITS OF ALL PLANTING AREAS PRIOR TO BEGINNING LANDSCAPE INSTALLATION. PERENNIAL WEEDS INCLUDE BUT NOT LIMITED TO: CRAB GRASS, BERMUDA GRASS, FOLIAGE GRASS, FOLIAGE WEEED, MORNING GLORY, DOG FENNEL, TORPEDO GRASS, BERMUDA GRASS, BAHIA GRASS, KHUOY GRASS, CRAB GRASS, CARPET GRASS, AND ANOVAR OR WIGWAG GRASS. THE SITE IS TO BE MAINTAINED WEED FREE THROUGHOUT PLANTING OPERATIONS.
- THE LANDSCAPE ARCHITECT IS RESPONSIBLE FOR PRE-TILLAGE TO SCARPY SOIL IN ALL PLANTING AREAS TO A MINIMUM DEPTH OF 4" AS DIRECTED BY THE ARCHITECT. THE CONTRACTOR SHALL NOT BE ALLOWED TO GO DEEPER THAN A MINIMUM OF 4" IN THE PROCESS OF TILLAGE FOR UNACCEPTABLE MATERIALS INCLUDING, BUT NOT LIMITED TO: FOREIGN DEBRIS, CONSTRUCTION WASTE, ROOTS, CONCRETE DEBRIS OR ROOTS GREATER THAN 1/2" DIAMETER OR AVERAGE. IN AREAS TO RECEIVE SOO TILL IN FERTILIZER TO A DEPTH OF 2" AT A RATE OF 12 POUNDS PER CUBIC FT.
- ALL PLANTING BEDS SHALL BE ETAKED IN ACCORDANCE WITH THE PLANS AND APPROVED BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO PLANTING. THE LANDSCAPE CONTRACTOR SHALL PROVIDE STAKES OR IRRIGATION FLAGS TO LOCATE THE EDGES OF ALL SHRUB AND GROUND/COVER PLANT BEDS AND REMOVE ALL TREES AND PALMS. ALL SHRUBS AND GROUND/COVER PLANTS SHALL BE PLANTED WITHIN THE CONTAINERS WITH THE APPROPRIATE SPACING. THE OWNER'S REPRESENTATIVE REVIEW AND APPROVAL. THE OWNER RESERVES THE RIGHT TO MAKE ANY CORRECTIONS TO PLANT LAYOUT AS PART OF THIS REVIEW. FAILURE BY THE LANDSCAPE CONTRACTOR TO OBTAIN WRITTEN APPROVAL FROM THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION MAY RESULT IN THE REMOVAL AND REINSTALLATION OF MATERIALS BY THE CONTRACTOR AT NO ADDED COST. NO TREES SHALL BE PLANTED WITHIN DESIGNATED UTILITY CORRIDORS. PUBLIC RIGHTS OF WAY NOR LOCATED WITHIN FOUR FEET (4') OF ANY VERTICAL CENTERLINE, BUILDING OR STRUCTURE CENTERLINE. NO TREES SHALL BE PLANTED IN PROTECTED AREAS. TREES SHALL BE PLANTED WITHIN 15 FEET OF EXISTING OVERHEAD POWER LINES, WITHIN 4 FEET OF ANY PAVED SURFACE, OR UNDER CANOPY TREES WITHIN 10 FEET FROM TO LIGHT AND ROOM TO GROW. FIELD ADJUST AS NECESSARY AND REVIEW ADJUSTMENTS WITH THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. TREES SHALL BE MAINTAINED AT A MINIMUM OF 1/2" VERTICAL CLEARANCE OVER ROADWAYS OR OTHER DEPARTMENT ACCESS ROADS.
- ALL PROPOSED TREES SHALL BE INSTALLED EITHER ENTRY-IN OR ENTRY-OUT OF PLANTING BEDS. PLANTING BEDS OUTLINES SHALL NOT BE OBSTRUCTED AND SHALL BE SMOOTH AND FLOWING. IF TREES ARE LOCATED OUTSIDE PLANTING BEDS IN GRASS AREAS, MAINTAIN A MINIMUM THREE FEET (3') WIDE OFFSET TO ALLOW FOR MOWERS TO MANEUVER.

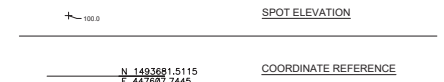
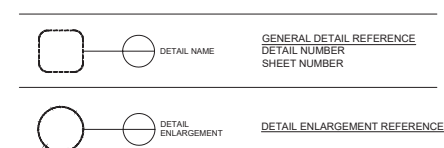
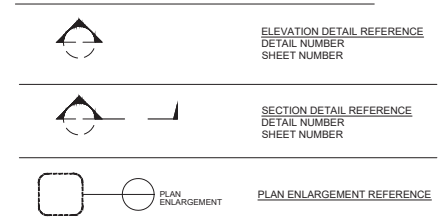
- THE LANDSCAPE CONTRACTOR SHALL VERIFY THE EXTENT OF 300+ TURF WORK IN THE FIELD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SOO TURF IN THE AREAS SHOWN ON THE PLAN IN SUFFICIENT QUANTITY TO PROVIDE FULL COVERAGE. ADDITIONAL GRASS REQUIRED WILL BE ADJUSTED BASED ON A SQUARE FOOTAGE UNIT PRICE. AREAS TO BE SODOOED SHALL BE MEASURED PER SOLS REPORT TO PROVIDE REQUIRED NUTRIENTS AND SOIL PH OF BETWEEN 6.0 AND 7.0.
- SOO SHALL BE 100% NURSERY GROWN, NON PASTURE BASED, MACHINE CUT SOO RECTANGULARS OF THE TYPE INDICATED ON THE DRAWINGS. SOO SHALL BE MAINTAINED WITH ROOTS, FREE OF EXCESSIVE WEEDS & DEBRIS, AND SHALL BE GREEN, FRESH AND UNINJURED AT THE TIME OF PLANTING.
- CONTRACTOR SHALL FIELD-ADJUST LOCATIONS OF PLANT MATERIAL FOR THE REVIEW AND APPROVAL OF THE OWNER'S REPRESENTATIVE PRIOR TO THE COMMENCEMENT OF WORK.
- ALL PLANT MATERIAL SHALL BE IN FULL AND STRICT ACCORDANCE WITH FLORIDA NO. 1 GRADE, ACCORDING TO THE "GRADES AND STANDARDS FOR NURSERY PLANTS" PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. ALL PLANTS SHALL BE GRADUATED AND GRADED.
- ALL PLANTING BEDS SHALL BE TOP-DRESSED WITH A" LAYER OF MULCH AS SPECIFIED. ALL TREES SHALL HAVE A 3" DEEP, 24" RADIUS FROM THE TRUNK. MULCH RING SHOULD AROUND THE BASE OF THE TRUNK. ON WELL DRAINED SOIL, THE MULCH RING SHALL BE MOUNDED AT ITS EDGES TO RETAIN WATER WITH THE TREE RING. ON POORLY DRAINED SOIL, THE MULCH RINGS SHALL BE FLATTED AT THE TRUNK TO SLED WATER AWAY FROM THE TREE.
- SHRUBS AND GROUND COVER BED QUANTITIES ARE INDICATED ON THE PLANT LIST. PLANT ACESNT SHRUBS AND TREES AS SHOWN ON THE LANDSCAPE PLANTING PLANS WHEN INDIVIDUAL PLANTS ARE DELINEATED.
- PALM HEIGHTS, AS INDICATED ON THE PLANS, REFER TO CLEAR TRUNK (C.T.), GRAY WOOD (W.G.) OR OVERALL HEIGHT (O.A.) AS SPECIFIED ON THE PLANT LIST.
- CONTRACTOR SHALL COORDINATE ALL PLANTING WORK WITH IRRIGATION WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HAND WATERING AS REQUIRED TO SUPPLEMENT IRRIGATION WATERING AND RAINFALL.
- CONTRACTOR SHALL BE RESPONSIBLE FOR HAND WATERING IN ALL PLANTING AREAS, REGARDLESS OF THE STATUS OF EXISTING OR PROPOSED IRRIGATION.
- CONTRACTOR SHALL REGRADE ALL AREAS DISTURBED BY PLANT REMOVAL, RELOCATION, AND/OR INSTALLATION WORK.
- CONTRACTOR SHALL REGRADE (BY EQUAL, SAME QUALITY AND) ANY AND ALL EXISTING PLANT MATERIAL DISTURBED OR DAMAGED BY PLANT REMOVAL, RELOCATION, AND/OR INSTALLATION WORK.
- MAINTENANCE SHALL BEIN AFTER EACH PLANT HAS BEEN INSTALLED AND SHALL CONTINUE UNTIL THE DATE OF SUBSTANTIAL COMPLETION. MAINTENANCE INCLUDES WATERING, PRUNING, WEEDING, MULCHING, AND WEEDING.
- CONTRACTOR SHALL PROTECT ALL DEAD PLANTS, AND ANY OTHER CARE NECESSARY FOR THE PROPER GROWTH OF THE PLANT MATERIAL.
- ON COMPLETION OF ALL LANDSCAPING, AN INSPECTION FOR SUBSTANTIAL COMPLETION OF THE WORK SHALL BE REQUIRED. THE CONTRACTOR SHALL CONSIDER THIS INSPECTION FOR SCHEDULING THE INSPECTION AT LEAST SEVEN (7) DAYS PRIOR TO THE ANTICIPATED INSPECTION DATE.
- CONTRACTOR SHALL SUBMIT WRITTEN GUARANTEE OF SURVIVABILITY OF ALL PLANT MATERIAL FOR A PERIOD OF 90 DAYS FROM DATE OF SUBSTANTIAL COMPLETION.
- CONTRACTOR MUST APPROVE ALL GRADED AREAS PRIOR TO THE COMMENCEMENT OF PLANTING.
- THE CONTRACTOR SHALL BEAR ALL COSTS OF TESTING OF SOILS, AMENDMENTS, ETC. ASSOCIATED WITH THE WORK. SEE SPECIFICATIONS FOR ADDITIONAL TESTING REQUIREMENTS.
- THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE OWNER'S REPRESENTATIVE WITH RECORD COPIES OF ALL RECEIPTS, INVOICES, AND/OR SHIPPING MANIFESTS FOR ALL MATERIALS, INCLUDING PLANTS AND SOO, DELIVERED TO THE PROJECT SITE BY THE CONTRACTOR OR A SUPPLIER TO THE CONTRACTOR. DELIVERY OF ALL FERTILIZERS AND SOO MATERIALS MUST BE IN ORIGINAL, UNOPENED, CONTAINER-BEARING MANUFACTURER'S GUARANTEED CHEMICAL ANALYSIS, NAME, TRADE MARK AND CONFORMANCE WITH STATE LAW.

LANDSCAPE NOTES

- SEE CIVIL ENGINEERING DRAWINGS FOR GENERAL GRADING OF THE SITE, INCLUDING SIDEWALK AND FINISH GRADES FOR PARKING LOTS, ROADSWAYS, SIDEWALKS, AND PLANTING AREAS.
 - ALL PAVEMENT SHALL BE STAKED IN THE FIELD FOR APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION. ALIGNMENT MAY BE ADJUSTED UPON APPROVAL TO ACCOMMODATE EXISTING SITE ELEMENTS.
 - SLOPES OF WALKS TO BE NO GREATER THAN FIVE PERCENT UNLESS EXPRESSLY NOTED OTHERWISE. CROSS-SLOPE OF WALKS NOT TO EXCEED TWO PERCENT. SEE SPECIFICATIONS FOR ADDITIONAL LAYOUT AND FINISH DETAILS. SEE HEADSCAPE DRAWINGS FOR FINISH PATTERNS.
 - ALL COLORS AND MATERIALS SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE. FOR THIS PURPOSE, THE CONTRACTOR SHALL SUBMIT COLOR CHARTS OR SUBMIT MATERIALS TO THE OWNER'S REPRESENTATIVE SPECIFYING PROPOSED FINISHES AND COLORS FOR REVIEW AND APPROVAL.
 - ALL WALLS, LAGD SCREWS, BOLTS, AND MISCELLANEOUS FASTENERS SHALL BE HOT DIPPED GALVANIZED OR A CORROSION RESISTANT ALLOY.
- ### FOUNDATIONS
- FOOTINGS SHALL BE DESIGN FOR A MAXIMUM ALLOWABLE SOIL BEARING VALUE OF 2000 PSF. IN-PLACE SOLS TO BE UNIFORM, COMPACTED AND TESTED TO EXCEED SOIL BEARING CAPACITY OF 1300 PSF.
 - PREPARATION FOR AND CONSTRUCTION OF WALL/COLUMN FOOTINGS TO BE IN COMPLIANCE WITH THE APPLICABLE CHAPTERS AND SECTIONS AC 332R.
 - ANY ADDITIONAL FILL MATERIAL REQUIRED SHALL CONSIST OF SOLS THAT CONTAIN NOT MORE THAN 12% OF FINE (SILT OR CLAY PARTICLES) PASSING A NO. 200 SIEVE AND SHALL BE PLACED IN UNIFORM LAYERS NOT EXCEEDING 6" IN THICKNESS. EACH LAYER SHALL BE STYLLICALLY (1) AND UNIFORM (1) COMPACTED IN THE MANNER AND TO THE DEGREE SPECIFIED FOR THE IN-PLACE SOLS.
- ### CONCRETE
- STRUCTURAL CONCRETE, INCLUDING FOOTINGS, SHALL CONFORM TO THE REQUIREMENTS OF ACI 301 AND SHALL AT MINIMUM A MINIMUM COMPRESSIVE STRENGTH OF 28 DAYS OF 3000 PSI UNLESS OTHERWISE NOTED. CONCRETE FOR SLABS ON GRADE SHALL ATAIN A MINIMUM COMPRESSIVE STRENGTH OF 28 DAYS OF 3000 PSI.
- CONCRETE, WHEN PLACED, SHALL HAVE A MAXIMUM SLUMP OF 6" INCHES AND A MINIMUM OF 3" INCHES.
 - ALL REINFORCING SHALL CONFORM TO ASTM #15 FOR GRADE 60 STEEL, WELDED WIRE MESH TO ASTM A-185.
 - CHECK ALL DRAWINGS AND APPLICABLE MANUFACTURER'S SHOP DRAWINGS FOR LOCATION OF ALL EMBEDDED ITEMS SUCH AS PIPE, SLEEVES, AND/OR BOLTS, ETC. PRIOR TO PLACING CONCRETE.
 - AS REINFORCEMENT FOR CONTINUOUS FOOTINGS SHALL BE CONTINUOUS AND SPLICED WITH A FULL 36-INCH LAP.
 - PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE SOO OR HOT TEMPERATURES. START CURTAIN CURING AS SOON AS FREE WATER HAS DISAPPEARED FROM THE CONCRETE SURFACE. AFTER PLACING AND FINISHING, KEEP CONTINUOUSLY MOIST FOR NOT LESS THAN 7 DAYS IN ACCORDANCE WITH ACI 301 PROCEDURES. PERFORM CURING OF THE CONCRETE BY CURING AND SEALING compounds, by WET CURING, by AUTOMATIC RETAINING COVER CURING OR BY COMBINATION THEREOF.
 - THE FOLLOWING MINIMUM COVER SHALL BE PROVIDED FOR THE REINFORCEMENT:
 - CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3 INCHES.
 - FORMED CONCRETE EXPOSED TO EARTH OR WEATHER: #5 BARS AND SMALLER, 1 1/2 INCHES; #6 BARS AND LARGER, 2 INCHES.

- ALL REINFORCING SHALL TO BE GRADE 60 PER ASTM #615. REINFORCING BARS SHALL BE PLACED IN THE MIDDLE OF THE CELLS AND TIED OR OTHERWISE SECURELY SUPPORTED AT THE TOP AND BOTTOM TO ENSURE THAT THE BARS REMAIN IN POSITION. REINFORCING BARS SHALL BE MAINTAINED AT ALL SPICES OR ROWS 5" INCHES UNLESS OTHERWISE NOTED ON THE DRAWINGS.
 - GROUNDING SHALL BE ACCOMPLISHED IN A FOOT LIFTS FOR CONCRETE MASONRY AND A FOOT LIFTS FOR BRICK MASONRY. EACH LIFT SHALL BE MECHANICALLY CONNECTED INTO THE PREVIOUS LIFT. WHEN PLACED, SO AS TO PROVIDE FULL CONTACT. RECONCILIATE AS REQUIRED. FOR CONCRETE MASONRY, A 12 SQUARE INCH CLEANOUT OPENING SHALL BE PLACED AT THE BOTTOM OF EACH CELL. FOR BRICK CELLS AND IT SHALL BE THOROUGHLY CLEANED PRIOR TO FILLING OF THE CELL. FOR BRICK MASONRY, PUDDLE GROUT DURING AND AFTER PLACING TO PROVIDE ADEQUATE FILL OF GROUT SPACE. GROUT PLACEMENT STOPPED FOR MORE THAN ONE HOUR SHALL BE STOPPED BELOW THE TOP OF THE MASONRY UNIT (1:1) TO PROVIDE A KEY FOR SUBSEQUENT GROUTING.
 - THE MINIMUM CONTINUOUS UNBUILT CELL AREA IN CELL TO RECEIVE GROUT MUST NOT BE LESS THAN "2 X 3". REINFORCING AND CONSUMER BE RESPONSIBLE FOR BLOCK PLACEMENT PROCEDURES. MORTAR DROPPINGS MUST BE KEPT OUT OF CELLS WHICH ARE TO BE GROUTED.
 - UNLESS SPECIFICALLY SHOWN OTHERWISE, PROVIDE #8 GA. "DURO-WALL" TRUSS TIE REINFORCING IN EVERY OTHER SPECIFICALLY SHOWN FOR CONCRETE MASONRY AND EVERY FOURTH COURSE FOR BRICK MASONRY. DO NOT LAJT JOINT REINFORCEMENT ACROSS EXPANSION JOINTS.
 - TEMPORARY BRACING AND SHORING OF ALL CONCRETE MASONRY CONSTRUCTION, TO PROVIDE STABILITY DURING CONSTRUCTION, UNTIL CONSTRUCTION ACHIEVES ITS PROPER STRENGTH, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- ### STRUCTURAL STEEL
- ALL STRUCTURAL STEEL SHAPES AND PLATE SHALL CONFORM TO ASTM A-36 AND THE "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDING" BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION. ALL TUBE STEEL SHALL CONFORM TO ASTM A-500, GRADE B (F_y = 45 KSI).
 - ALL SHIP CONNECTIONS TO BE WELDED (ULTRAVIOLET EXXOX LOW HYDROGEN ELECTRODES) AND FIELD CONNECTIONS TO BE BOLTED UNLESS OTHERWISE SPECIFICALLY NOTED ON THE STRUCTURAL DRAWINGS. ALL WELDING SHALL CONFORM TO THE REQUIREMENTS OF THE "STANDARD CODE FOR WELDING IN BUILDING CONSTRUCTION" OF THE AMERICAN WELDING SOCIETY.
 - ALL STEEL TO RECEIVE ONE SHIP COAT AND ONE FIELD TOUCHUP COAT OF APPROVED PAINT.
 - ALL BOLT CONNECTIONS SHALL CONSIST OF ASTM A307 HIGH STRENGTH BOLTS AND HARDENED WASHERS AS SHOWN ON THE STRUCTURAL DRAWINGS. ALL BOLTED CONNECTIONS SHALL CONFORM TO THE "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM STAINLESS STEEL BOLTS" BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
 - ALL ANCHORS TO BE CONFORM TO ASTM A307 (THREAD 8880).
 - DIRECT ALL STEEL TO CONFORM TO THE "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS," "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" AND "QUALITY CRITERIA AND INSPECTION STANDARDS" FRAME TO BE PLUMB, SQUARE AND TRUE TO LINE AND LEVEL, CHECKED BY THE CONTRACTOR AND APPROVED BY THE ARCHITECT.
 - LOCATE FINISH FLOORS PRECISELY TO INSURE PASSAGE THROUGH ASSEMBLED MATERIALS WITHOUT DEFLECTION. ENARGE HOLES BY REAMING IF NECESSARY. PORT MATCHING OF HOLES IS SUFFICIENT CAUSE FOR REJECTION.
 - GROUF FOR COLUMN BASE PLATES SHALL BE NON-SHRINK GROUT BY "EMBECCO" OR APPROVED EQUAL, 5000 PSI.

STANDARD DRAWING SYMBOLS



1516 E. HILLCREST STREET, STE. 105
ORLANDO, FL 32803, PH: 407.242.9223

Prepared For:
LNN ENGINEERING

PROJECT: MIDWAY TERRACE APTS Lot #27
MARION COUNTY, FL

REVISIONS:
DATE: 8/20/23
BY: TDCT/TFW
CHECKED BY: TDCT/TFW

PROJECT NO.: 2023-17

DESIGNED BY: TDCT/TFW
DRAWN BY: TDCT/TFW
CHECKED BY: TDCT/TFW
DATE: 8/20/23
DRAWING SCALE:

DRAWING TITLE:
INDEX SHEET

DRAWING NUMBER:
ID-01

SHEET 1 of 1

CONTRACTOR NOTES

NOT ALL ITEMS SHOWN ON THIS SHEET APPEAR IN THE CONSTRUCTION DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL INFORMATION RELATIVE TO CONNECTIONS INCLUDING, BUT NOT LIMITED TO, BUILDINGS, LANDSCAPE, IRRIGATION & RIGHT OF WAY UTILIZATION PERMITS.

CODE COMPLIANCE NOTES

- IT IS THE INTENT OF THIS DESIGN TO COMPLY WITH ALL APPLICABLE LOCAL AND STATE BUILDING CODES. ALL EDITIONS OF THE FLORIDA BUILDING CODE 2020 (7TH EDITION) NATIONAL ELECTRICAL CODE 2020.

WINDLOAD NOTES

- WIND DESIGN/LOAD INFORMATION (TO BE CONFIRMED BY ENGINEER OF RECORD): (PERF: RC20 WED 07/09/2023 CHARTER 16, REF. ASCE 7-16)
- WIND SPEED: 140 MPH (3 SECOND GUST)
- STRUCTURE CATEGORY: II (ASCE 7-16)
- WIND EXPOSURE: S (ASCE 7-16)
- CF-1.4

MAINLINE AND LATERAL LOCATION, WHERE SHOWN, IS FOR GRAPHIC CLARITY PURPOSES ONLY. INSTALL AT THE BACK OF CURB, FRONT OF WALK, BACK OF WALK, OR ADJACENT TO OTHER HARDSCAPES TO FACILITATE FUTURE LOCATION AND TO PROTECT FROM DAMAGE. ENSURE MAINLINE IS INSTALLED ACCORDING FDEP GUIDELINES AND TO IRRIGATION SPECIFICATIONS AND DETAILS.



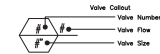
IRRIGATED AREAS:

TOTAL IRRIGATED AREA: 4,170 +/- SQ. FT.
HIGH FLOW SPRAY AREA: 0 +/- SQ. FT.
LOW FLOW DRIP AREA: 4,170 +/- SQ. FT.

NOTE: IRRIGATION SHALL BE IN ACCORDANCE WITH MARION COUNTY CODE. THE SYSTEM IS PROPOSED AS PERMANENT.

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL	QTY	ARC	PSI	GPM	RADIUS
☒	Rain Bird 1800-1400 Flood 1402	23	360	30	0.5	3'
☒	Rain Bird XCZ-150-LCDR High Flow Control Zone Kit, for Large Commercial Drip Zones. 1-1/2" PESB-R Scrubber Globe Valve with angle 1-1/2" Pressure Regulating (40psi) Quick-Check Basket Filters. Flow range: 15-62gpm.	3				
	Area to Receive Dripline Netafim TLCV-09-12 Techline Pressure Compensating Landscape Dripline with Check Valve. 0.9 GPH emitters at 12" O.C. Dripline laterals spaced at 12" apart, with emitters offset for triangular pattern. 17mm.	3,589 l.f.				
☒	Rain Bird PESBR 1", 1-1/2", and 2" Durable Chlorine-Resistant Valves for Reclaimed Water Applications. With Scrubber Mechanism Technology, and Purple Flow Control Handle.	1				
Ⓟ	Febco 825V 1" Reduced Pressure Backflow Preventer	1				
Ⓢ	Rain Bird ESPRLXMEF 8 Station Capable Commercial Controller. Mounted on a Plastic Wall Mount. Flow Sensing and Water Management Capabilities.	1				
Ⓜ	Hunter MINI-CLIK Rain Sensor, mount as noted	1				
Ⓜ	Water Meter 1"	1				
---	Irrigation Lateral Line: PVC Class 200 SDR 21-NP	1,451 l.f.				
---	Irrigation Mainline: PVC Schedule 40-NP	36.3 l.f.				
---	Pipe Sleeve: PVC Schedule 40	78.2 l.f.				

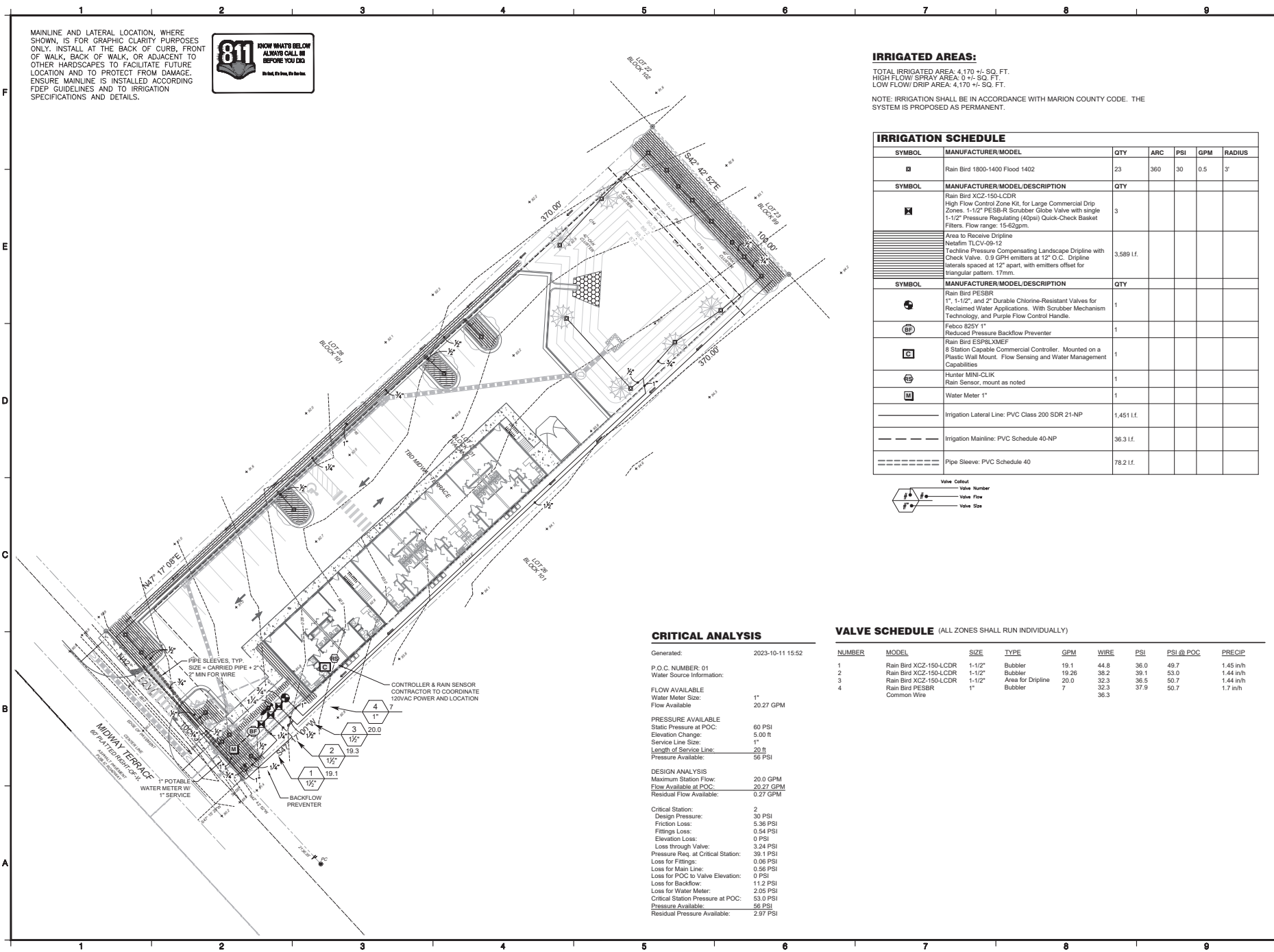


CRITICAL ANALYSIS

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P.O.C. NUMBER: 01
Water Source Information:
FLOW AVAILABLE
Water Meter Size: 1"
Flow Available: 20.27 GPM
PRESSURE AVAILABLE
Static Pressure at POC: 60 PSI
Elevation Change: 5.00 R
Service Line Size: 1"
Length of Service Line: 20 R
Pressure Available: 56 PSI
DESIGN ANALYSIS
Maximum Station Flow: 20.0 GPM
Flow Available at POC: 20.27 GPM
Residual Flow Available: 0.27 GPM
Critical Station: 2
Design Pressure: 30 PSI
Friction Loss: 5.36 PSI
Fittings Loss: 0.54 PSI
Elevation Loss: 0 PSI
Loss through Valve: 3.24 PSI
Pressure Req. at Critical Station: 39.1 PSI
Loss for Fittings: 0.06 PSI
Loss for Main Line: 0.56 PSI
Loss for POC to Valve Elevation: 0 PSI
Loss for Backflow: 11.2 PSI
Loss for Water Meter: 2.06 PSI
Critical Station Pressure at POC: 53.0 PSI
Pressure Available: 56 PSI
Residual Pressure Available: 2.97 PSI

VALVE SCHEDULE (ALL ZONES SHALL RUN INDIVIDUALLY)

NUMBER	MODEL	SIZE	TYPE	GPM	WIRE	PSI	PSI @ POC	PRECIP
1	Rain Bird XCZ-150-LCDR	1-1/2"	Bubbler	19.1	44.8	36.0	49.7	1.45 in/h
2	Rain Bird XCZ-150-LCDR	1-1/2"	Bubbler	19.26	38.2	39.1	53.0	1.44 in/h
3	Rain Bird XCZ-150-LCDR	1-1/2"	Area for Dripline	20.0	32.3	36.5	50.7	1.44 in/h
4	Rain Bird PESBR	1"	Bubbler	7	32.3	37.9	50.7	1.7 in/h
	Common Wire				36.3			



tdc DESIGN STUDIO
LANDSCAPE ARCHITECTURE
COMMUNITY PLANNING
URBAN DESIGN
1516 E. HILLCREST STREET, STE. 105
ORLANDO, FL 32803 PH: 407.258.2625

MIDWAY TERRACE APTS LOT 27
MARION COUNTY, FL
Prepared For:
LINN ENGINEERING

ISSUED FOR:	REVIEW
8/10/2023	REVIEW

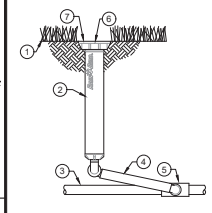
PROJECT NO: 2023-17
DRAWN BY: TFW
CHECKED BY: TDC/TFW
DATE: 8/2/2023
DRAWING SCALE: 1"=20'



DRAWING TITLE
IRRIGATION PLAN

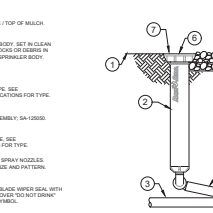
DRAWING NUMBER
IR-01
SHEET 1 OF 3

1 TURF SPRAY HEAD



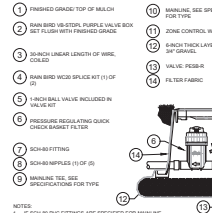
1. COMPACT SOIL AROUND POP-UP HEAD TO 50% OF SURROUNDING SOIL DENSITY.
2. INSTALL POP-UP HEAD PERPENDICULAR AND FLUSH TO FINISHED GRADE.
3. PLACE POP-UP HEAD MINIMUM 3 INCHES OFF BUILDING STRUCTURES, 4" OFF SIDE WALKS AND FINISHES OFF FENCES.

2 TREE SPRAY HEAD



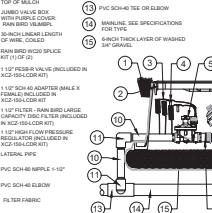
1. COMPACT SOIL AROUND POP-UP HEAD TO 50% OF SURROUNDING SOIL DENSITY.
2. INSTALL POP-UP HEAD PERPENDICULAR AND FLUSH TO FINISHED GRADE.
3. PLACE POP-UP HEAD MINIMUM 3 INCHES OFF TREE ROOT BALL.

3 CONVENTIONAL WIRING APPLICATION



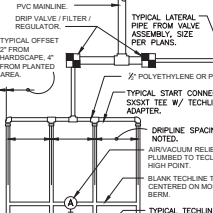
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4 CONVENTIONAL WIRING APPLICATION

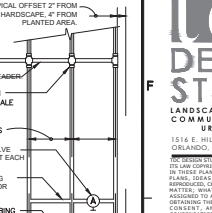


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9. BRANCH TIE TO GROUND WIRE (1/2" 1/2" OF 10)

5 END FEED EXAMPLE



6 CENTER FEED EXAMPLE



A Rain Bird RD1800 Series-RD06-S-P-45-NP-NSI

NTS Pop-Up Sprinkler W/ SA-125550 and WPR NOZZLES



1. FINISHED GRADE - TOP OF MALCH
2. MAINLINE W/ GROUND WIRE (1" 1/2" OF 10)
3. BRANCH W/ GROUND WIRE (1/2" 1/2" OF 10)
4. MAINLINE TIE TO GROUND WIRE (1" 1/2" OF 10)
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B Rain Bird RD1800 Series-RD06-S-P-45-NP-NSI

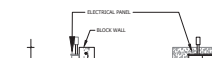
NTS Pop-Up Sprinkler W/ SA-125550 and Rubber



1. FINISHED GRADE - TOP OF MALCH
2. MAINLINE W/ GROUND WIRE (1" 1/2" OF 10)
3. BRANCH W/ GROUND WIRE (1/2" 1/2" OF 10)
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D RAIN BIRD XCZ-100-PRBR-COM

NTS



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G RAIN BIRD XCZ-150-LCDR

NTS



1. FINISHED GRADE - TOP OF MALCH
2. MAINLINE W/ GROUND WIRE (1" 1/2" OF 10)
3. BRANCH W/ GROUND WIRE (1/2" 1/2" OF 10)
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CONVENTIONAL WIRING APPLICATIONS



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7. BRANCH TIE TO GROUND WIRE (1/2" 1/2" OF 10)

L MINI-CLICK I RAIN SENSOR

NTS IN HEAVY DUTY SB-1855W STROMS BOX



1. FINISHED GRADE - TOP OF MALCH
2. MAINLINE W/ GROUND WIRE (1" 1/2" OF 10)
3. BRANCH W/ GROUND WIRE (1/2" 1/2" OF 10)
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I RAIN BIRD ESP-LXMEF WALL MOUNT CONTROLLER

NTS



1. FINISHED GRADE - TOP OF MALCH
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L METER CONNECTION

NTS



1. FINISHED GRADE - TOP OF MALCH
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H RAIN BIRD 100/150/200-PESS-R PRS-D

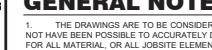
NTS WITH GATE VALVE



1. FINISHED GRADE - TOP OF MALCH
2. MAINLINE W/ GROUND WIRE (1" 1/2" OF 10)
3. BRANCH W/ GROUND WIRE (1/2" 1/2" OF 10)
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M PIPE TRENCH DETAIL

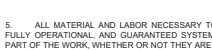
NTS



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N ROADWAY / HARDSCAPE SLEEVING

NTS



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GENERAL NOTES

1. THE DRAWINGS ARE TO BE CONSIDERED DIAGRAMMATIC. AS IT MAY NOT HAVE BEEN POSSIBLE TO ACCURATELY DEPICT THE EXACT LOCATIONS FOR ALL MATERIAL OR ALL JOBSITE ELEMENTS, THE INSTALLER SHALL BE EXPECTED TO MAKE MINOR ADJUSTMENTS ON THE SITE AS NEEDED, IN ORDER TO MAINTAIN COMPLET AND ACCURATE COVERAGE AND MAINTAIN THE INTENT OF THE DESIGN. MODIFICATIONS WHICH INCREASE THE SPACING OF HEADS, OR DECREASE THE SIZING OF PIPE, SHALL NOT BE MADE WITHOUT PRIOR CONSENT OF THE PROJECT MANAGER. THE FINAL LOCATIONS FOR ALL MAJOR EQUIPMENT, INCLUDING CONTROLLERS, VALVES, SUPPLY CONNECTIONS, MAINLINES, ETC. SHALL BE DETERMINED IN THE FIELD, STAKED OUT BY THE CONTRACTOR, USING THE DRAWINGS AS A GUIDE, AND APPROVED PRIOR TO INSTALLATION.
2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH PREVAILING CODES AND REGULATIONS. ALTHOUGH DUE DILIGENCE HAS BEEN EXERCISED IN THE PREPARATION OF THE DOCUMENTS TO AVOID CONFLICTS, IT SHALL REMAIN THE RESPONSIBILITY OF THE INSTALLER FOR VERIFICATION AND CONFORMANCE TO THE PARTICULAR CODES FOR THIS LOCATION. THE INSTALLER SHALL OBTAIN ANY NECESSARY PERMITS, LOCATES, AND INSPECTIONS.
3. ALL WORK SHALL BE CLOSELY COORDINATED WITH THAT OF OTHER TRADES, IN ORDER TO AVOID CONFLICTS. THE INSTALLATION SHALL BE COORDINATED WITH ALL NEW AND EXISTING IMPROVEMENTS, AND WITH THE ACTUAL INSTALLED BOUNDLINES, SOI LIMITS, AND PLANT LOCATIONS.
4. THE INSTALLER SHALL BE FAMILIAR WITH ALL APPLICABLE DOCUMENTS, INCLUDING ANY WRITTEN SPECIFICATIONS THAT MAY HAVE BEEN ISSUED. ANY CONFLICT FOUND BETWEEN THE VARIOUS DOCUMENTS SHALL BE SUBMITTED IN WRITING TO THE PROJECT MANAGER FOR DETERMINATION.
5. ALL MATERIAL AND LABOR NECESSARY TO PROVIDE A COMPLETE, FULLY OPERATIONAL, AND GUARANTEED SYSTEM SHALL BE CONSIDERED PART OF THE WORK, WHETHER OR NOT THEY ARE SPECIFICALLY INDICATED IN THE DOCUMENTS. THIS SHALL INCLUDE CONFORMANCE TO THE REQUIREMENTS AND RECOMMENDATIONS OF THE VARIOUS MANUFACTURERS OF THE EQUIPMENT, AND TO APPLICABLE TRAINING AND CERTIFICATION OF INSTALLATION PERSONNEL.
6. UNLESS SPECIFICALLY STATED TO THE CONTRARY, PIPING AND WIRING PASSING UNDER PARKED OR OTHER IMPERVIOUS SURFACES SHALL BE INSTALLED IN SLEEVING OF ADEQUATE SIZE AND STRENGTH. SIDEWALKS AND DECKS, AND TURF PAVERS SHALL REQUIRE SLEEVING, EVEN IF NOT SHOWN ON THE DRAWINGS. CONTROL WIRING MAY BE RUN WITHOUT A LARGER SLEEVE WITH MAINLINE PIPING, BUT ONLY IF PROTECTED BY A SMALLER CONDUIT. WIRE MAY NOT BE TAPED TO THE MAINLINE IN LIEU OF THIS CONDUIT, AS ABRASION OF THE WIRE JACKETS IS LIKELY TO OCCUR.
7. SLEEVES UNDER PARKING AND DRIVEWAYS MAY BE THE RESPONSIBILITY OF OTHER THAN THE BRIGATION CONTRACTOR (SUCH AS THE PAVING OR SITE CIVIL CONTRACTOR). CONSULT OTHER DOCUMENTS FOR ADDITIONAL INFORMATION AND REQUIREMENTS. SLEEVES UNDER SIDEWALKS, DECKS, ETC. ARE NORMALLY INSTALLED BY THE IRRIGATION CONTRACTOR.
8. CONTROL WIRING SHALL BE ROUTED WITH THE MAINLINE WHENEVER POSSIBLE. WIRE SHALL DIRECT BURIAL PER 16-GRACE.
9. ALL SPRINKLER HEADS SHALL BE OF THE PROPER SIZE AND TYPE FOR THE LOCATION AND PLANT MATERIAL. HEADS SHALL BE INSTALLED IN THE PRESCRIBED MANNER, PLUMB, AND WITH THE PROPER HEIGHT WITH RESPECT TO GRADE AND/OR PLANT MATERIAL. ALL HEADS AND OTHER EQUIPMENT SHALL BE INSTALLED WITH ADEQUATE AND UNIFORM CLEARANCES FROM ALL PAVING, CURBS, SIDEWALKS, WALLS, AND OTHER OBSTACLES, SO THAT DAMAGE TO EQUIPMENT DOES NOT OCCUR DURING NORMAL LANDSCAPE MAINTENANCE OPERATIONS. ALL SPRINKLERS SHALL BE ADJUSTED TO OBTAIN OPTIMAL COVERAGE OF PLANT MATERIAL, WHILE MINIMIZING OVERSPRAY ONTO WINDOWS, WALLS, PAVING OR OTHER IMPERVIOUS SURFACES, PARTICULARLY WOODWORK AND/OR TRIM. THE INSTALLER SHALL UTILIZE THE PROPER SPRAY NOZZLE PATTERN FOR THE LOCATION, AS WELL AS PRESSURE-COMPENSATING HEADS OR SCREENS, AND ADJUSTABLE-PATTERN NOZZLES WHERE A FIXED PATTERN IS NOT SUITABLE TO CONTROL COVERAGE OR OVERSPRAY.
10. RISER-MOUNTED HEADS SHALL BE INSTALLED WITHIN THE FIRST ROW OF PLANT MATERIAL, SO THAT THE HEAD IS PROTECTED AND CONCEALED BY THE MATERIAL. IT MAY BE REQUIRED TO RELOCATE HEADS NOT CONFORMING TO THIS STIPULATION AFTER PLANTS ARE INSTALLED. THIS SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER. RISERS SHALL BE STAKED AS SHOWN IN THE DETAILS, AND PAINTED A DURABLE FLAT COLOR, TO BE AGREED UPON BY THE PARTIES.
11. TREE BUBBLER HEADS SHALL BE CONSIDERED TEMPORARY, AND WILL BE CAPPED OFF ONCE MATERIAL IS ESTABLISHED.
12. THE CONTROLLER SHALL REQUIRE A STANDARD 120-VAC POWER FEED, WHICH SHALL BE COORDINATED BY THE INSTALLER, AND HOOKED UP BY A LICENSED ELECTRICIAN. IT IS PREFERRED THAT A DEDICATED CIRCUIT BE PROVIDED FOR THIS EQUIPMENT. A 3-WIRE POWER INPUT SURGE ARRESTOR SHALL BE PROVIDED ON THE POWER FEED, AND A DEDICATED

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1 TYPICAL NETAFIM TECHLINE REQUIREMENTS



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PROJECT NO: 2023-17
 DESIGNED BY: TTFV
 DRAWN BY: TTFV
 CHECKED BY: TDC/TTFV
 DATE: 02/20/23
 DRAWING SCALE: AS SHOWN
 DRAWING TITLE: IRRIGATION DETAILS
 DRAWING NUMBER: IR-02
 SHEET 2 OF 3

1	2	3	4	5	6	7	8	9			
IRRIGATION NOTES & SPECIFICATIONS <p>Irrigation design based on the TDC Design Studio Landscape Plan dated 7/19/2021. Contractor shall refer to these plans to coordinate sprinkler and pipe locations.</p> <p>The system has been designed to conform with the requirements of all applicable codes, laws, ordinances, rules, regulations and conventions. Should any conflict exist, the requirements of the codes shall prevail. It is the responsibility of the owner/installation contractor to ensure the entire system is installed as designed. Irrigation contractor responsible for obtaining all required permits according to federal, state and local laws.</p> <p>The scope of work is shown on the plans, notes and details. The Irrigation Contractor shall be certified as a CERTIFIED IRRIGATION CONTRACTOR by the Irrigation Association. The certification shall be current and in good standing.</p> <p>THE WORK</p> <p>The work specified in this section consists of furnishing all components necessary for the installation, testing, and delivery of a complete, fully functional automatic landscape irrigation system that complies with the irrigation plans, specifications, notes, and details. This work shall include, but not be limited to, the providing of all required material (pumps), backflows, pipes, valves, fittings, controllers, wire, primer, glue, etc.), layout, protection to the public, excavation, assembly, installation, back filling, compacting, repair of road surfaces, controller and low voltage leads to valves, cleanup, maintenance, guarantee and as-built plans.</p> <p>All irrigated areas shall provide 100% head-to-head coverage from a fully automatic irrigation system with a rain (and freeze as appropriate) shut off device. If the rain shut off device is a rain sensor, it shall be installed to prevent activation by adjacent heads. Zones are prioritized first by public safety and then by hydraulic concerns. This sequencing will be a mandatory punch list item.</p> <p>These plans have been designed to satisfy/exceed the Florida Irrigation Society Standards and Specifications for Turf and Landscape Irrigation Systems, fourth edition. All products should be installed per manufacturer's recommendation. Contractor shall verify all underground utilities 72 hours prior to commencement of work.</p> <p>It is the responsibility of the irrigation contractor to familiarize themselves with all grade differences, location of walls, retaining walls, structures and utilities. Do not willfully install the sprinkler system as shown on the drawings when it is obvious in the field that unknown obstruction, grade differences or differences in the area dimensions exist that might not have been considered in the engineering. Such obstructions, or differences, should be brought to the attention of the owner's authorized representative. In the event this notification is not performed, the irrigation contractor shall assume full responsibility for any revisions necessary.</p> <p>Irrigation contractor shall repair or replace all items damaged by their work. Irrigation contractor shall coordinate their work with other contractors for the location and installation of pipe sleeves and laterals through walls, under roadways and paving, etc.</p> <p>The contractor shall take immediate steps to repair, replace, or restore all services to any utilities which are disrupted due to their operations. All costs involved in disruption of service and repairs due to negligence on the part of the contractor shall be their responsibility.</p> <p>POINT OF CONNECTION (P.O.C.)</p> <p>There is ONE P.O.C. (s)</p> <p>#1-P.O.C. is a new 1" potable meter (by others) with a 1" service line by others. The P.O.C. must be capable of delivering a minimum of 20.3 GPM at 60 PSI downstream of the water meter.</p> <p>Contractor to verify these minimum conditions can be met prior to ordering of materials and the beginning of installation. If the conditions can not be met, the contractor must notify the designer prior to proceeding with the work. If the contractor does not do so, the contractor proceeds at their own risk and becomes responsible for any future work required to make the system perform as required.</p> <p>THE PIPE</p> <p>Pipe locations shown on a plan are schematic and shall be adjusted in the field. When laying out mainlines place a maximum of 18" away from either the back of curb, front of walk, back of walk, or other hardscape to allow for ease in locating and protection from physical damage. Install all lateral pipe near edges of pavement or against buildings whenever possible to allow space for plant root balls. Always install piping inside property boundaries.</p> <p>All pipes are to be placed in planting beds. If it is necessary to have piping under hardscapes, such as roads, walks, and patios, the pipes must be sleeved using Class 200 PVC with the sleeve diameter being twice the size of the pipe it is carrying with a minimum sleeve size of 2".</p> <p>Pipe sizes shall conform to those shown on the drawings. No substitutions of smaller pipe sizes shall be permitted, but substitutions of larger sizes may be approved. All damaged and rejected pipe shall be removed from the site at the time of said rejection.</p> <p>Mainline shall be Pantone Purple Sch 40 solvent-weld (sized per plan) PVC with Sch 40 PVC solvent-weld fittings.</p> <p>Contractor to ensure all mainline piping is properly restrained using mechanical joint fittings, restraining collars, threaded rods, thrust blocks, etc., as and where required. Contractor shall refer to pipe manufacturers recommended installation practices for further direction.</p> <p>PVC pipe joint compound and primer: The PVC cement shall be Weld-On 711 (grey, slow-drying, heavy duty) and the primer shall be Weld-On P70 (purple tinted, compatible with cement), or approved equals.</p> <p>ELECTRICAL POWER SUPPLY</p> <p>Electrical supply for irrigation pumps, controllers, sensors, relaysto be provided by irrigation contractor. Contractor to coordinate with local utilities for the installation of, and connection to, site available power supplies for required electrical components as set forth in the irrigation plans.</p> <p>All electrical work is to comply with the National Electrical Code and any, and all, other applicable electrical codes, laws and regulations. A licensed electrician shall perform all electrical hook-ups. Power for each controller/CCU shall be a dedicated 120 volt, 20 amp circuit unless otherwise specified in the plans. Power for each pump to be according to pump specifications indicated in these plans.</p>			<p>WIRING</p> <p>Irrigation control wire shall be thermoplastic solid copper, single conductor, low voltage irrigation control wire, suitable for direct burial and continuous operation at rated voltages.</p> <p>Type and bundle control wires every 10' and run alongside the mainline. At all turns in direction make a 2" coil of wire. At all valve boxes coil wire around a 3/4" piece of PVC pipe to make a coil using 30 linear inches of wire. Make electrical connections with 3MDBYR connectors.</p> <p>Number all wires, using an electrical book of numbers, according to the plans. Number wires in all valve boxes, junction boxes and at the controller.</p> <p>Wire sized, numbered and colored as follows: #14 white for common #14 spare black common #14 individual color coded hot wire #14 spare yellow hot wire</p> <p>Spare wires Leaving each controller, run six spare wires in both directions (twelve spare wires total). Install as 2 common spares (4 total) and 4 hot wires (8 total). Loop these wires into each RCV along their path and terminate in the last valve box controlled by the wires respective controller. The loop into each valve box shall extend up into the valve box a minimum of 8" and be readily accessible by opening the valve box lid. These wires must be all numbered and color coded as required in these plans.</p> <p>Controller and Pump station Control Panel grounding - Contractor to utilize 4"X8"X5/8" copper grounding plates, 5/8"X10" copper clad grounding rods, "One Strike" CAD wells at all connection points, #6 bare copper wire, and earth contact material. Install these and other required components as outlined in the detail. Contractor to verify that the earth to ground resistance does not exceed 10 ohms. Contractor shall provide a written certification, on a licensed electrical contractors letter head, showing the date of the test, controller/pump location, and test results. Each controller/pump shall be so grounded and tested. Each component must have its own separate grounding grid, unless they are sitting side by side, in which case up to two controllers can share a common grounding grid.</p> <p>LAYOUT</p> <p>Lay out irrigation system mainlines and lateral lines. Make the necessary adjustments as required to take into account all site obstructions and limitations prior to excavating trenches.</p> <p>Stake all sprinkler head locations. Adjust location and make the necessary modifications to nozzle types, etc. required to ensure 100% head to head coverage. Refer to the Edge of Pavement Detail on the Irrigation Detail Sheet.</p> <p>Spray heads shall be installed 4" from sidewalks or curbed roadways and 12" from uncurbed roadways and building foundations. Rotors shall be installed 4" from sidewalks or curbed roadways, 12" from building foundations, and 36" from uncurbed roadways.</p> <p>Shrub heads shall be installed on 3/4" Sch 40 PVC risers. The risers shall be set at a minimum of 18" off sidewalks, roadway curbing, building foundations, and/or any other hardscape areas. Shrub heads shall be installed to a standard height of 4" below maintained height of plants and shall be installed a minimum of 6" within planted masses to be less visible and offer protection. Paint all shrub risers with flat black or forest green paint, unless irrigation system will utilize reuse valves; in this case the risers shall be purple PVC and shall not be painted.</p> <p>Locate valves prior to excavation. Ensure that their location provides for easy access and that there is no interference with physical structures, plants, trees, poles, etc. Valve boxes must be placed a minimum of 12" and a maximum of 16" from the edge of pavement, curbs, etc. and the top of the box must be 2" above finish grade. No valve boxes shall be installed in turf areas without approval by the irrigation designer - only in shrub beds. Never install in surf field areas.</p> <p>VALVES</p> <p>Sequence all valves so that the farthest valve from the P.O.C. operates first and the closest to the P.O.C. operates last. The closest valve to the P.O.C. should be the last valve in the programmed sequence.</p> <p>Adjust the flow control on each RCV to ensure shut off in 10 seconds after deactivation by the irrigation controller.</p> <p>Using an electric branding iron, brand the valve I.D. letter/number on the lid of each valve box. This brand must be 2"-3" tall and easily legible.</p> <p>EQUIPMENT</p> <p>All pop-up heads and shrub risers shall be pressure compensating. All pop-up heads shall be mounted on flex-type swing joints. All rotors shall be installed with PVC triple swing joints unless otherwise detailed.</p> <p>All sprinkler equipment, not otherwise detailed or specified on these plans, shall be installed as per manufacturer's recommendations and specifications, and according to local and state laws.</p> <p>TRENCHING</p> <p>Excavate straight and vertical trenches with smooth, flat or sloping bottoms. Trench width and depth should be sufficient to allow for the proper vertical and horizontal separation between piping as shown in the pipe installation detail on the detail sheet.</p> <p>Protect existing landscaped areas. Remove and replant any damaged plant material upon job completion. The replacement material shall be of the same genus and species, and of the same size as the material it is replacing. The final determination as to what needs to be replaced and the acceptability of the replacement material shall be solely up to the owner or owner's representative.</p> <p>INSTALLATION</p> <p><u>Solvent Weld Pipe:</u> Cut all pipe square and deburr. Clean pipe and fittings of foreign material; then apply a small amount of primer while ensuring that any excess is wiped off immediately. Primer should not puddle or drip from pipe or fittings. Next apply a thin coat of PVC cement, first apply a thin layer to the pipe, next a thin layer inside the fitting, and finally another very thin layer on the pipe. Insert the pipe into the fitting. Insure that the pipe is inserted to the bottom of the fitting, then turn the pipe a 1/4 turn and hold for 10 seconds. Make sure that the pipe doesn't recede from the fitting. If the pipe isn't at the bottom of the fitting upon completion, the glue joint is unacceptable and must be discarded.</p>			<p>Pipes must cure a minimum of 30 minutes prior to handling and placing into trenches. A longer curing time may be required; refer to the manufacturer's specifications. The pipe must cure a minimum of 24 hours prior to filling with water.</p> <p><u>Gasketed Pipe:</u> With pipe in the trench, cut pipe square, deburr, and place beveled edge on male portion of pipe, if not using a piece with a factory bevel. Clean pipe and fittings of foreign material; then apply a small amount of pipe grease to the rubber gasket on the female end. Fully insert the male end of the pipe into the bell end of adjacent pipe until the bevel is fully seated into the bell. Restrain pipe as required.</p> <p>BACK FILL</p> <p>The Back fill 6" below, 6" above, and around all piping shall be of clean sand and anything beyond that in the trench can be of native material but nothing larger than 2" in diameter.</p> <p>Main line pipe depth measured to the top of pipe shall be: 24" minimum for 3/4"-2 1/2" PVC with a 30" minimum at vehicular crossings; 30" minimum for 3" & 4" PVC with a 36" minimum at vehicular crossings; 36" minimum for 6" PVC with a 36" minimum at vehicular crossings.</p> <p>Lateral line depths measured to top of pipe shall be: 18" minimum for 3/4"-3" PVC with a 30" minimum at vehicular crossings; 24" minimum for 4" PVC and above with a 30" minimum at vehicular crossings.</p> <p>Contractor shall backfill all piping, both mainline and laterals, prior to performing any pressure tests. The pipe shall be backfilled with the exception of 2' on each side of every joint (bell fittings, 90's, tees, 45's, etc.). These joints shall not be backfilled until all piping has satisfactorily passed its appropriate pressure test as outlined below.</p> <p>FLUSHING</p> <p>Prior to the placement of valves, flush all mainlines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.</p> <p>Prior to the placement of heads, flush all lateral lines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.</p> <p>Use screens in heads and adjust heads for proper coverage avoiding excess water on walls, walks and paving.</p> <p>TESTING</p> <p>Soil: At a minimum of 2 locations on the site, soil tests for Infiltration and texture shall be performed according to the USDA Soil Quality Test Kit Guide. The tests shall be documented in a USDA Soil Worksheet. (All of the above is available at http://soils.usda.gov/ses/assessment/test_kit.html) The completed worksheet shall be submitted to the owners representative for review/approval. Do not proceed without written direction from the owner/owner's representative.</p> <p>Mainline: Remove all remote control valves and cap using a threaded cap on SCH 80 nipple. Fill mainline with water and pressurize the system to 125 PSI. Monitor the system pressure at two gauge locations; the gauge locations must be at opposite ends of the mainline. With the same respective pressures, monitor the gauges for two hours. There can be no loss in pressure at either gauge for solvent-welded pipe. For HDPE pipe, see HDPE notes. For gasketed pipe, testing requires measurement of the water pumped into the mainline system, using a hydrostatic pump, to maintain 125 PSI - this water volume shall be no more than the result of the following formula: $L=(ND)(P)/7400$ where L=Allowable leakage in gallons per hour N=Number of joints in pipe tested D=Nominal diameter of pipe (in inches) P=Average Test Pressure (in PSI)</p> <p>If these parameters are exceeded, locate the problem; repair it; wait 24 hours and retry the test. This procedure must be followed until the mainline passes the test.</p> <p><u>Lateral Lines:</u> The lateral lines must be fully filled to operational pressure and visually checked for leaks. Any leaks detected must be repaired.</p> <p>Operational Testing - Once the mainline and lateral lines have passed their respective tests, and the system is completely operational, a coverage test and demonstration of the system is required. The irrigation contractor must demonstrate to the owner, or his/her representative, that proper coverage is obtained and the system works automatically from the controller. This demonstration requires each zone to be turned on, in the proper sequence as shown on the plans, from the controller. Each zone will be inspected for proper coverage and function. The determination of proper coverage and function is at the sole discretion of the owner or owner's representative.</p> <p>Upon completion of the operational test, run each zone until water begins to puddle or run off. This will allow you to determine the number of irrigation start times necessary to meet the weekly evapotranspiration requirements of the planting material in each zone. In fine sandy soils, it is possible no puddling will occur. If this is experienced, then theoretical calculations for run times will be required for controller programming.</p> <p>SUBMITTALS</p> <p><u>Pre-Construction:</u> The contractor must submit for written approval, prior to installation, five (5) copies of the manufacturer's cut sheets/specifications for all components to be used in the irrigation system.</p> <p><u>After project completion:</u> As a condition of final acceptance, the irrigation contractor shall provide the owner with: 1. Irrigations AS-builts - shall be provided utilizing a sub-foot Global Positioning System (GPS) to accurately locate all mainlines, sleeves, remote control valves, gate valves, independent wire runs, wire splice boxes, controllers, high voltage supply sources/conduit path, control mechanisms, sensors, wells and water source connections in Florida East State Plane, NAD 83, and CORS 98 format. The data collected shall be in POINT format and include an ID for each data point with Manufacturer, Type, Size, and Depth. All mainline and</p>			<p>independent runs of wire shall be located every 30' for straight runs and at every change of direction. Sleeves will be located at end points and every 20' of length. All underground items shall include depth in inch format. These POINTS once collected shall be imported into an AutoCAD DWG geo-referenced base file to be labeled accordingly. The completed AS-Built shall be a Geo-Referenced DWG file and delivered to the owner on a compact disk (CD).</p> <p>2. Controller charts - Upon completion of "as-built" prepare controller charts; one per controller. Indicate on each chart the area controlled by a remote control valve (using a different color for each zone). This chart shall be reduced to a size that will fit inside of the controller door. The reduction shall be hermetically sealed inside two 2mil pieces of clear plastic.</p> <p>3. Grounding Certification - Provide ground certification results for each controller and pump panel grounding grid installed. This must be on a licensed electrician letter head indicating location tested (using IR plan symbols), date, time, test method, and testing results.</p> <p>INSPECTIONS AND COORDINATION MEETINGS REQUIRED - Contractor is required to schedule, perform, and attend the following, and demonstrate to the owner and/or owners representative to their satisfaction, as follows:</p> <ol style="list-style-type: none"> Pre-construction meeting - Designer and contractor to review entire install process and schedule with owner/general contractor. Mainline installation inspection(s) - all mainline must be inspected for proper pipe, fittings, depth of coverage, backfill, and installation method Mainline pressure test - All mainline shall be pressure tested according to this design's requirements Flow Meter calibration - All flow meters must be calibrated, provide certified calibration report for all flow meters. USDA Soil Quality Tests for infiltration/texture Coverage and operational test Final inspection Punch list inspection <p>FINAL ACCEPTANCE</p> <p>Final acceptance of the irrigation system will be given after the following documents and conditions have been completed and approved. Final payment will not be released until these conditions are satisfied.</p> <ol style="list-style-type: none"> All above inspections are completed, documented, and approved by owner. Completion and acceptance of as-built drawings. Acceptance of required controller charts and placement inside of controllers. All other submittals have been made to the satisfaction of the owner. <p>GUARANTEE: The irrigation system shall be guaranteed for a minimum of one calendar year from the time of final acceptance.</p> <p>MINIMUM RECOMMENDED IRRIGATION MAINTENANCE PROCEDURES</p> <ol style="list-style-type: none"> Every irrigation zone should be checked monthly and written reports generated describing the date(s) each zone was inspected, problems identified, date problems repaired, and a list of materials used in the repair. At minimum, these inspections should include the following tasks: <ol style="list-style-type: none"> Turn on each zone from the controller to verify automatic operation. Check schedules to ensure they are appropriate for the season, plant and soil type, and irrigation method. Consult an I.A. certified auditor for methods used in determining proper irrigation scheduling requirements. Check remote control valves to ensure proper operation. Check setting on pressure regulator to verify proper setting, if present. Check flow control and adjust as needed; ensure valve closure within 10-15 seconds after deactivation by controller. Check for leaks - mainline, lateral lines, valves, heads, etc. Check all heads as follows: <ol style="list-style-type: none"> Proper set height (top of sprinkler is 1" below mow height) Verify head pop-up height - 6" in turf, 12" in ground cover, and pop-up on riser in shrub beds. Check wiper seal for leaks - if leaking, clean head and re-inspect. If still leaking, replace head with the appropriate head with pressure regulator and built-in check valve. All nozzles checked for proper pattern, clogging, leaks, correct make & model, etc. - replace as needed Check for proper alignment - perfectly vertical; coverage area is correct; minimize over spray onto hardscapes. Riser height raised/lowered to accommodate plant growth patterns and ensure proper coverage. Verify the pop-up riser retracts after operation. If not, repair/replace as needed. Check controller/C.C.U. grounds for resistance (10 ohms or less) once per year. Submit written reports. Check rain shut-off device monthly to ensure it functions properly. Inspect all filters monthly and clean/repair/replace as needed. Inspect backflow devices by utilizing a properly licensed backflow inspector. This should be done annually, at minimum. Inspect all valve boxes to ensure they are in good condition, lids are in place and locked. Check pump stations for proper operation, pressures, filtration, settings, etc. - refer to pump station operations manual. Check and clean intake screens on all suction lines quarterly, at minimum. Clean and/or repair, as needed. Winterize, if applicable, as weather in your area dictates. Follow manufacturer recommendations and blow out all lines and equipment using compressed air. Perform seasonal startup of system as per manufacturer recommendations. Conduct additional inspections, maintenance tasks, etc. that are particular for your site. 		



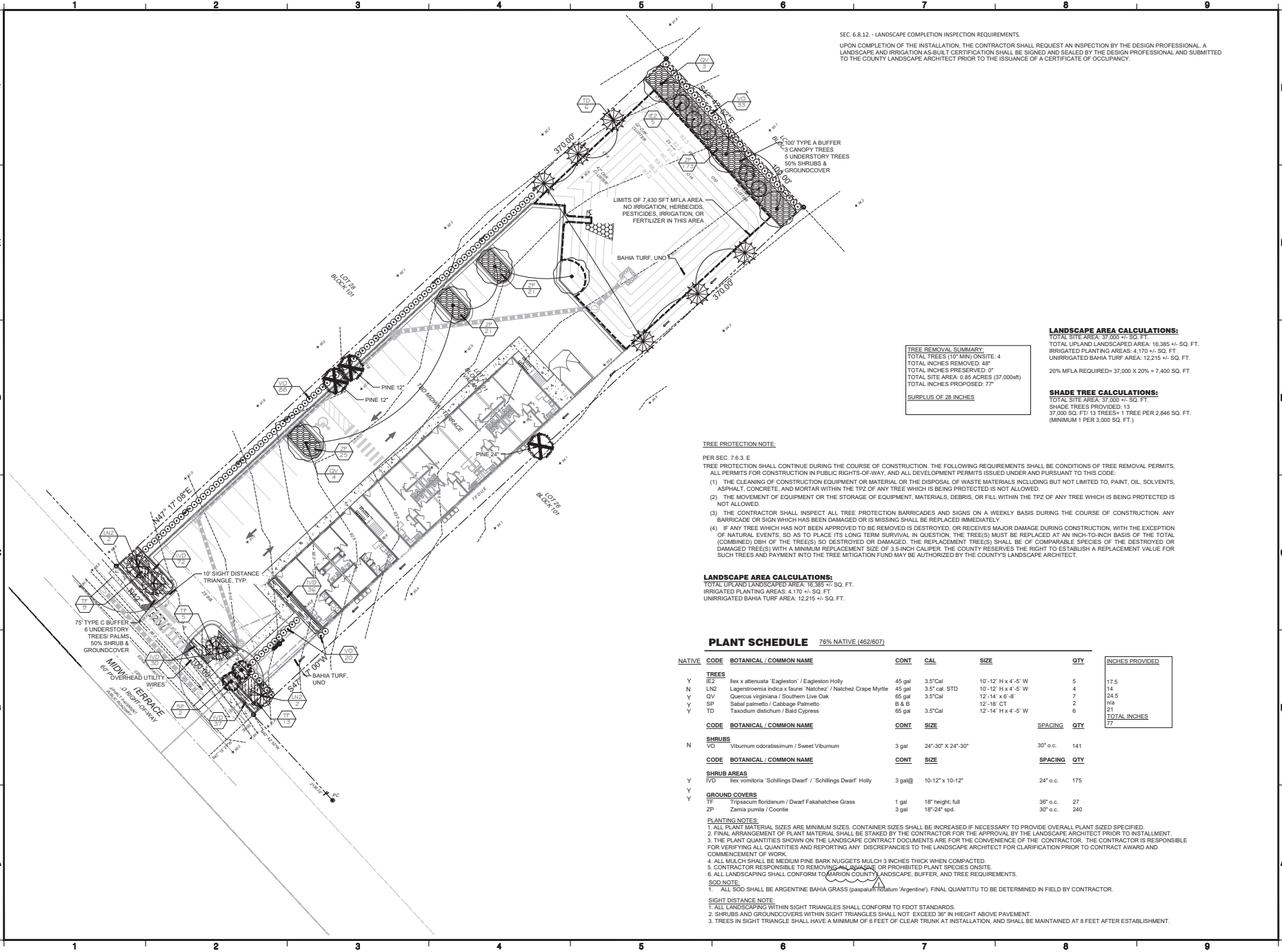
1516 E. HILLCREST STREET STE. 105
ORLANDO, FL 32809 PH: 407.256.2628

PROJECT: MIDWAY TERRACE APTS LOT 27
MARION COUNTY, FL
Prepared For: LINN ENGINEERING

DESIGNED BY: TFW
DRAWN BY: TFW
CHECKED BY: TDC/TFW
DATE: 8/2/2023
DRAWING SCALE: AS SHOWN

PROJECT NO.: 2023-17
DESIGNED BY: TFW
DRAWN BY: TFW
CHECKED BY: TDC/TFW
DATE: 8/2/2023
DRAWING SCALE: AS SHOWN

DRAWING TITLE: IRRIGATION DETAILS
DRAWING NUMBER: IR-03
SHEET 3 OF 3



SEC. 6.8.12 - LANDSCAPE COMPLETION INSPECTION REQUIREMENTS.
 UPON COMPLETION OF THE INSTALLATION, THE CONTRACTOR SHALL REQUEST AN INSPECTION BY THE DESIGN PROFESSIONAL AND A LANDSCAPE AND IRRIGATION AS-BUILT CERTIFICATION SHALL BE SIGNED AND SEALED BY THE DESIGN PROFESSIONAL AND SUBMITTED TO THE COUNTY LANDSCAPE ARCHITECT PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

TREE REMOVAL SUMMARY:
 TOTAL TREES (10" MIN) ON SITE: 4
 TOTAL INCHES REMOVED: 48"
 TOTAL INCHES PRESERVED: 0"
 TOTAL SITE AREA, 0.85 ACRES (37,000sqft)
 TOTAL INCHES PROVIDED: 77"
 SURPLUS OF 28 INCHES

LANDSCAPE AREA CALCULATIONS:
 TOTAL SITE AREA: 37,000 +/- SQ. FT.
 TOTAL UPLAND LANDSCAPED AREA: 18,385 +/- SQ. FT.
 IRRIGATED PLANTING AREAS: 4,170 +/- SQ. FT.
 UNIRRIGATED BAHIA TURF AREA: 12,215 +/- SQ. FT.
 20% MFLA REQUIRED = 37,000 X 20% = 7,400 SQ. FT.

SHADE TREE CALCULATIONS:
 TOTAL SITE AREA: 37,000 +/- SQ. FT.
 SHADE TREES PROVIDED: 13
 37,000 SQ. FT. / 13 TREES = 1 TREE PER 2,846 SQ. FT.
 (MINIMUM 1 PER 3,000 SQ. FT.)

TREE PROTECTION NOTE:
 PER SEC. 7.6.3. E
 TREE PROTECTION SHALL CONTINUE DURING THE COURSE OF CONSTRUCTION. THE FOLLOWING REQUIREMENTS SHALL BE CONDITIONS OF TREE REMOVAL PERMITS. ALL PERMITS FOR CONSTRUCTION IN PUBLIC RIGHTS-OF-WAY, AND ALL DEVELOPMENT PERMITS ISSUED UNDER AND PURSUANT TO THIS CODE:
 (1) THE CLEANING OF CONSTRUCTION EQUIPMENT OR MATERIAL OR THE DISPOSAL OF WASTE MATERIALS INCLUDING BUT NOT LIMITED TO, PAINT, OIL, SOLVENTS, ASPHALT, CONCRETE, AND MORTAR WITHIN THE TPZ OF ANY TREE WHICH IS BEING PROTECTED IS NOT ALLOWED.
 (2) THE MOVEMENT OF EQUIPMENT OR THE STORAGE OF EQUIPMENT, MATERIALS, DEBRIS, OR FILL WITHIN THE TPZ OF ANY TREE WHICH IS BEING PROTECTED IS NOT ALLOWED.
 (3) THE CONTRACTOR SHALL INSPECT ALL TREE PROTECTION BARRICADES AND SIGNS ON A WEEKLY BASIS DURING THE COURSE OF CONSTRUCTION. ANY BARRICADE OR SIGN WHICH HAS BEEN DAMAGED OR IS MISSING SHALL BE REPLACED IMMEDIATELY.
 (4) IF ANY TREE WHICH HAS NOT BEEN APPROVED TO BE REMOVED IS DESTROYED, OR RECEIVES MAJOR DAMAGE DURING CONSTRUCTION, WITH THE EXCEPTION OF NATURAL EVENTS, SO AS TO PLACE ITS LONG TERM SURVIVAL IN QUESTION, THE TREE(S) MUST BE REPLACED AT AN INCH-TO-INCH BASIS OF THE TOTAL (COMBINED) DBH OF THE TREE(S) SO DESTROYED OR DAMAGED. THE REPLACEMENT TREE(S) SHALL BE OF COMPARABLE SPECIES OF THE DESTROYED OR DAMAGED TREE(S) WITH A MINIMUM REPLACEMENT SIZE OF 3-INCH CALIPER. THE COUNTY RESERVES THE RIGHT TO ESTABLISH A REPLACEMENT VALUE FOR SUCH TREES AND PAYMENT INTO THE TREE MITIGATION FUND MAY BE AUTHORIZED BY THE COUNTY'S LANDSCAPE ARCHITECT.

LANDSCAPE AREA CALCULATIONS:
 TOTAL UPLAND LANDSCAPED AREA: 18,385 +/- SQ. FT.
 IRRIGATED PLANTING AREAS: 4,170 +/- SQ. FT.
 UNIRRIGATED BAHIA TURF AREA: 12,215 +/- SQ. FT.

PLANT SCHEDULE 76% NATIVE (462/607)

NATIVE	CODE	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	QTY	INCHES PROVIDED
TREES							
Y	EEZ	Ilex x attenuata 'Eagleston' / Eagleston Holly	45 gal	3.5" Cal	10'-12" H x 4'-5" W	5	17.5
N	LN2	Lagerstroemia indica x faurei 'Natchez' / Natchez Crape Myrtle	45 gal	3.5" cal. STD	10'-12" H x 4'-5" W	4	14
Y	QV	Quercus virginiana / Southern Live Oak	65 gal	3.5" Cal	12'-14" x 6'-8"	2	24.5
Y	SP	Sabal palmetto / Cabbage Palmetto	8.4 B		12'-18" CT	2	10.8
Y	TD	Taxodium distichum / Bald Cypress	65 gal	3.5" Cal	12'-14" H x 4'-5" W	6	21
							TOTAL INCHES
							77
SHRUBS							
N	VO	Viburnum odoratissimum / Sweet Viburnum	3 gal	24"-30" X 24"-30"		30" o.c.	141
SHRUB AREAS							
Y	VD	Ilex verticillata 'Schillings Dwarf' / Schillings Dwarf Holly	3 gal @	10'-12" x 10'-12"		24" o.c.	175
Y	Y						
GROUND COVERS							
Y	TF	Tillandsia floridanum / Dwarf Fakahatchee Grass	1 gal	18" height; full		36" o.c.	27
Y	ZP	Zamia pumila / Coontie	3 gal	18"-24" spd.		30" o.c.	240

PLANTING NOTES:
 1. ALL PLANT MATERIAL SIZES ARE MINIMUM SIZES. CONTAINER SIZES SHALL BE INCREASED IF NECESSARY TO PROVIDE OVERALL PLANT SIZE SPECIFIED.
 2. FINAL ARRANGEMENT OF PLANT MATERIAL SHALL BE STAKED BY THE CONTRACTOR FOR THE APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLMENT.
 3. THE PLANT QUANTITIES SHOWN ON THE LANDSCAPE CONTRACT DOCUMENTS ARE FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES AND REPORTING ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT FOR CLARIFICATION PRIOR TO CONTRACT AWARD AND COMMENCEMENT OF WORK.
 4. ALL MULCH SHALL BE MEDIUM PINE BARK NUGGETS MULCH 3 INCHES THICK WHEN COMPACTED.
 5. CONTRACTOR RESPONSIBLE TO REMOVING ALL UNWANTED OR PROHIBITED PLANT SPECIES ON SITE.
 6. ALL LANDSCAPING SHALL CONFORM TO MARION COUNTY LANDSCAPE, BUFFER, AND TREE REQUIREMENTS.
SOD NOTE:
 1. ALL SOD SHALL BE ARGENTINE BAHIA GRASS (Paspalum leucomum 'Argentine'). FINAL QUANTITY TO BE DETERMINED IN FIELD BY CONTRACTOR.
SIGHT DISTANCE NOTE:
 1. ALL LANDSCAPING WITHIN SIGHT TRIANGLES SHALL CONFORM TO FDOT STANDARDS.
 2. SHRUBS AND GROUNDCOVERS WITHIN SIGHT TRIANGLES SHALL NOT EXCEED 36" IN HEIGHT ABOVE PAVEMENT.
 3. TREES IN SIGHT TRIANGLE SHALL HAVE A MINIMUM OF 6 FEET OF CLEAR TRUNK AT INSTALLATION, AND SHALL BE MAINTAINED AT 8 FEET AFTER ESTABLISHMENT.

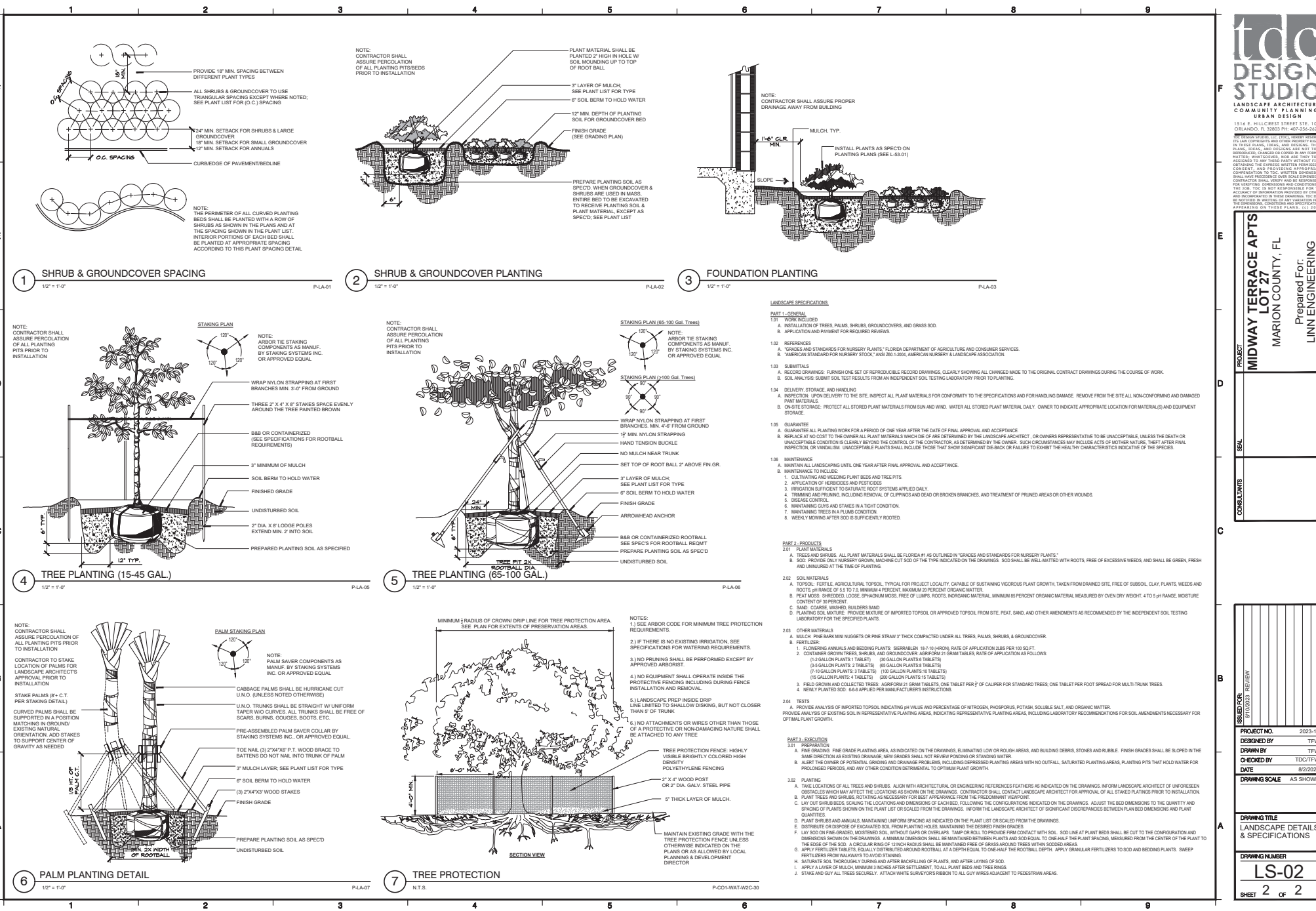
tdc DESIGN STUDIO
 LANDSCAPE ARCHITECTURE
 COMMUNITY PLANNING
 URBAN DESIGN
 1516 E. HILLCREST STREET STE. 105
 ORLANDO, FL 32803 PH: 407.254.2628

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PROJECT
 MIDWAY TERRACE APTS
 LOT 27
 MARION COUNTY, FL

PREPARED FOR:
 LINN ENGINEERING

DESIGNED BY: TFW
DRAWN BY: TDC/TFW
CHECKED BY: TDC/TFW
DATE: 8/22/2023
DRAWING SCALE: 1"=20'
DRAWING TITLE: LANDSCAPE PLAN
DRAWING NUMBER: LS-01
SHEET: 1 of 2



1 SHRUB & GROUNDCOVER SPACING
1/2" = 1'-0"

2 SHRUB & GROUNDCOVER PLANTING
1/2" = 1'-0"

3 FOUNDATION PLANTING
1/2" = 1'-0"

4 TREE PLANTING (15-45 GAL.)
1/2" = 1'-0"

5 TREE PLANTING (65-100 GAL.)
1/2" = 1'-0"

6 PALM PLANTING DETAIL
1/2" = 1'-0"

7 TREE PROTECTION
N.T.S.

LANDSCAPE SPECIFICATIONS

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. INSTALLATION OF TREES, PALMS, SHRUBS, GROUNDCOVERS, AND GRASS SODS.
- B. APPLICATION AND PAYMENT FOR REQUIRED PERMITS.

1.02 REFERENCES

- A. "GRASSES AND STANDARDS FOR NURSERY PLANTS" FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES.
- B. "AMERICAN STANDARD FOR NURSERY STOCK," ANSI Z60.1-2004, AMERICAN NURSERY LANDSCAPE ASSOCIATION.

1.03 SUBMITTALS

- A. RECORD DRAWINGS: FURNISH ONE SET OF REPRODUCIBLE RECORD DRAWINGS, CLEARLY SHOWING ALL CHANGED MADE TO THE ORIGINAL CONTRACT DRAWINGS DURING THE COURSE OF WORK.
- B. SOIL ANALYSIS: SUBMIT SOIL TEST RESULTS FROM AN INDEPENDENT LABORATORY PRIOR TO PLANTING.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. INSPECTION: UPON DELIVERY TO THE SITE, INSPECT ALL PLANT MATERIALS FOR CONFORMITY TO THE SPECIFICATIONS AND FOR HANDLING DAMAGE. REMOVE FROM THE SITE ALL NON-CONFORMING AND DAMAGED PLANT MATERIALS.
- B. ON-SITE STORAGE: PROTECT ALL STORED PLANT MATERIALS FROM SUN AND WIND. WATER ALL STORED PLANT MATERIAL DAILY. OWNER TO INDICATE APPROPRIATE LOCATION FOR MATERIAL(S) AND EQUIPMENT STORAGE.

1.05 GUARANTEE

- A. GUARANTEE ALL PLANTING WORK FOR A PERIOD OF ONE YEAR AFTER THE DATE OF FINAL APPROVAL AND ACCEPTANCE.
- B. REPLACE AT NO COST TO THE OWNER ALL PLANT MATERIALS WHICH DO NOT MEET THE SPECIFICATIONS, OR OTHERWISE UNACCEPTABLE UNLESS THE DEATH OR UNACCEPTABLE CONDITION IS CLEARLY BEYOND THE CONTROL OF THE CONTRACTOR, AS DETERMINED BY THE OWNER. SUCH CIRCUMSTANCES MAY INCLUDE ACTS OF UNLAWFUL NATURE, THEFT AFTER PLANT INSPECTION, OR VANDALISM. UNACCEPTABLE PLANTS SHALL INCLUDE THOSE THAT SHOW SIGNIFICANT DIE-BACK OR FAILURE TO EXHIBIT THE HEALTHY CHARACTERISTICS INDICATIVE OF THE SPECIES.

1.06 MAINTENANCE

- A. MAINTAIN ALL LANDSCAPING UNTIL ONE YEAR AFTER FINAL APPROVAL AND ACCEPTANCE.
- B. MAINTENANCE TO INCLUDE:
 - 1. CULTIVATING AND WEEDING PLANT BEDS AND TREE PITTS.
 - 2. APPLICATION OF HERBICIDES AND PESTICIDES.
 - 3. IRRIGATION SUFFICIENT TO SATURATE ROOT SYSTEMS APPLIED DAILY.
 - 4. TRAINING AND PRUNING, INCLUDING REMOVAL OF CLIPPINGS AND DEAD OR BROKEN BRANCHES, AND TREATMENT OF PRUNED AREAS OR OTHER WOUNDS.
 - 5. DISEASE CONTROL.
 - 6. MAINTAINING GUYS AND STAKES IN A TIGHT CONDITION.
 - 7. MAINTAINING TREES IN A PLUMB CONDITION.
 - 8. WEEKLY MONITORING AFTER SODS ARE SUFFICIENTLY ROOTED.

PART 2 - PRODUCTS

2.01 PLANT MATERIALS

- A. TREES AND SHRUBS: ALL PLANT MATERIALS SHALL BE FLORIDA #1 AS OUTLINED IN "GRASSES AND STANDARDS FOR NURSERY PLANTS."
- B. SODS: PROVIDE ONE (1) BARSBY GRASS, MACHINE CUT SOG OF SOG OF THE PATTERN INDICATED ON THE DRAWINGS. SOG SHALL BE WELL-WATERED WITH ROOTS, FREE OF EXCESSIVE WEEDS, AND SHALL BE GREEN, FRESH AND UNHURLED AT THE TIME OF PLANTING.

2.02 SOIL MATERIALS

- A. TOPSOIL: FERTILE, AGRICULTURAL TOPSOIL, TYPICAL FOR PROJECT LOCALITY, CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH, TAKEN FROM DRAINAGE SITE, FREE OF SUBSOIL, CLAY, PLANTS, WEEDS AND ROOTS, OR RANGE OF 5:1 TO 10:1 MINIMA 4 PERCENT MAXIMUM 2 PERCENT ORGANIC MATTER.
- B. PEAT Moss: SHREDED, LOOSE, SPHAGNUM MOSS, FREE OF LUMPS, ROOTS, INORGANIC MATERIAL, MINIMUM 90 PERCENT ORGANIC MATERIAL, MEASURED BY OVEN DRY WEIGHT, 4 TO 5 RANGE, MOISTURE CONTENT OF 50 PERCENT.
- C. SAND: COARSE, WASHED, BUILDERS SAND.
- D. PLANTING SOIL MIXTURE: PROVIDE MIXTURE OF IMPORTED TOPSOIL OR APPROVED TOPSOIL FROM SITE, PEAT, SAND, AND OTHER AMENDMENTS AS RECOMMENDED BY THE INDEPENDENT SOIL TESTING LABORATORY FOR THE SPECIFIED PLANTS.

2.03 OTHER MATERIALS

- A. MULCH: FINE BARK MINI NUGGETS OR PINE STRAW 2" THICK COMPACTED UNDER ALL TREES, PALMS, SHRUBS, & GROUNDCOVER.
- B. FERTILIZER:
 - 1. FLOWERING ANNUALS AND BEDDING PLANTS: SERRAVALLEN 18-10 (FOSPH). RATE OF APPLICATION 2.0LB PER 100 SQ FT.
 - 2. CONTAINER GROWN TREES, SHRUBS, AND GROUNDCOVER: AGRICOLA 21 GRAM TABLET RATE OF APPLICATION AS FOLLOWS:
 - (1-2 GALLON PLANTS) 3 TABLETS (30 GALLON PLANTS) 4 TABLETS
 - (3-4 GALLON PLANTS) 5 TABLETS (50 GALLON PLANTS) 6 TABLETS
 - (5-9 GALLON PLANTS) 8 TABLETS (100 GALLON PLANTS) 10 TABLETS
 - (10 GALLON PLANTS) 12 TABLETS (200 GALLON PLANTS) 15 TABLETS
 - 3. FIELD GROWN AND COLLECTED TREES: AGRICOLA 21 GRAM TABLET ONE TABLET PER 2" CALIPER FOR STANDARD TREES ONE TABLET PER FOOT SPREAD FOR MULTI-TRUNK TREES.
 - 4. NEWLY PLANTED SOG: 6-64 APPLIED PER MANUFACTURER'S INSTRUCTIONS.

2.04 TESTS

- A. PROVIDE ANALYSIS OF IMPORTED TOPSOIL, INDICATING NUTRIENT VALUE AND PERCENTAGE OF NITROGEN, PHOSPHORUS, POTASH, SOLUBLE SILT, AND ORGANIC MATTER.
- B. PROVIDE ANALYSIS OF EXISTING SOIL IN REPRESENTATIVE PLANTING AREAS, INDICATING REPRESENTATIVE PLANTING AREAS, INCLUDING LABORATORY RECOMMENDATIONS FOR SOIL AMENDMENTS NECESSARY FOR OPTIMAL PLANT GROWTH.

PART 3 - EXECUTION

3.01 PREPARATION

- A. FINE GRADING: FINE GRADE PLANTING AREA, AS INDICATED ON THE DRAWINGS, ELIMINATING LOW OR ROUGH AREAS, AND BUILDING DEBRIS, STONES AND RUBBLE. FINE GRASS SHALL BE SLOPED IN THE SAME DIRECTION AS EXISTING DRAINAGE; NEW GRASSES SHALL BE OPEN PONDING OR STANDING WATER.
- B. ALERT THE OWNER OF POTENTIAL DRAINAGE AND DRAINAGE PROBLEMS, INCLUDING DEPRESSED PLANTING AREAS WITH NO OUTFALL, SATURATED PLANTING AREAS, PLANTING PITTS THAT HOLD WATER FOR PROLONGED PERIODS, AND ANY OTHER CONDITIONS DETERMINED TO OPTIMIZE PLANT GROWTH.

3.02 PLANTING

- A. TAKE LOCATIONS OF ALL TREES AND SHRUBS, ALIGN WITH ARCHITECTURAL OR ENGINEERING REFERENCES FEATHERS AS INDICATED ON THE DRAWINGS. INFORM THE LANDSCAPE ARCHITECT OF UNFORESEEN DIFFERENCES WHICH MAY AFFECT THE LOCATIONS AS SHOWN ON THE DRAWINGS. CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT FOR APPROVAL OF ALL STAKED PLANTING PRIOR TO INSTALLATION.
- B. PLANT TREES AND SHRUBS, ROTATING AS NECESSARY FOR BEST APPEARANCE FROM THE PREDOMINANT VIEWPOINT.
- C. LAY OUT SHRUBS, SCALING THE LOCATIONS AND DIMENSIONS OF EACH BED, FOLLOWING THE CONFIGURATIONS INDICATED ON THE DRAWINGS. ADJUST THE BED DIMENSIONS TO THE QUANTITY AND SPACING OF PLANTS SHOWN ON THE PLANT LIST OR SCALED FROM THE DRAWINGS. INFORM THE LANDSCAPE ARCHITECT OF SIGNIFICANT DISCREPANCIES BETWEEN PLAN BED DIMENSIONS AND PLANT QUANTITIES.
- D. PLANT SHRUBS AND ANNUALS, MAINTAINING UNIFORM SPACING AS INDICATED ON THE PLANT LIST OR SCALED FROM THE DRAWINGS.
- E. DISTRIBUTE OR DISPOSE OF EXCAVATED SOIL FROM PLANTING HOLES, MAINTAINING THE DESIRED FRESH GRADES.
- F. LAY OUT THE FINE GRADED, MOISTENED SOIL, WITHOUT GAPS OR OVERLAPS, TAMP OR ROLL TO PROVIDE FIRM CONTACT WITH SOIL. SOG LINE AT PLANT BEDS SHALL BE CUT TO THE CONFIGURATION AND DIMENSIONS SHOWN ON THE DRAWINGS. A MINIMUM DIMENSION SHALL BE MAINTAINED BETWEEN PLANTS AND SOG EQUAL TO ONE-HALF THE PLANT SPACING, MEASURED FROM THE CENTER OF THE PLANT TO THE EDGE OF THE SOG. A CIRCULAR BED OF 2" THICK MULCH SHALL BE MAINTAINED FREE OF GRASS AND TREES WITH SOGDED AREAS.
- G. APPLY FERTILIZER TABLETS, EQUALLY DISTRIBUTED AROUND ROOTBALL AT A DEPTH EQUAL TO ONE-HALF THE ROOTBALL DEPTH. APPLY GRANULAR FERTILIZERS TO SOG AND BEDDING PLANTS. SWEEP FERTILIZERS FROM MULCH.
- H. SATURATE SOIL THOROUGHLY DURING AND AFTER BACKFILLING OF PLANTS, AND AFTER LAYING OF SOG.
- I. APPLY A LAYER OF MULCH, MINIMUM 2 INCHES AFTER SETTLEMENT, TO ALL PLANT BEDS AND TREES RINGS.
- J. STAKE AND GUY ALL TREES SECURELY, ATTACH WHITE SUPPLEMENTARY RIBBON TO ALL GUY WIRE ADJACENT TO PEDESTRIAN AREAS.

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PROJECT
MIDWAY TERRACE APTS
LOT 27
MARION COUNTY, FL

PREPARED FOR:
LINN ENGINEERING

SCALE
CONSULTANTS

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DRAWN BY	TFW
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DATE	8/2/2023
DRAWING SCALE	AS SHOWN

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LANDSCAPE DETAILS & SPECIFICATIONS

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SHEET
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