MARCH 1, 2021

SUBJECT: **RESUBMITTAL COMMENTS LETTER**
PROJECT NAME: GOLDEN OCALA WORLD EQUESTRIAN CENTER FLEX BARNS 3, 4, & 5
PROJECT #2020110042
APPLICATION: MAJOR SITE PLAN #25828

Did not meet with staff. DRC 3/8/21.

1. DEPARTMENT: ENGDRN - STORMWATER REVIEW
   REVIEW ITEM: 6.13.10.B - Copy of NPDES Permit or NOI
   STATUS OF REVIEW: INFO
   REMARKS: Please provide a copy of the NPDES permit or NOI prior to construction.

2. DEPARTMENT: ENGDRN - STORMWATER REVIEW
   REVIEW ITEM: Copy of District Permit (County Interest)
   STATUS OF REVIEW: INFO
   REMARKS: Please provide a copy of the District permit prior to construction.

3. DEPARTMENT: ENGDRN - STORMWATER REVIEW
   REVIEW ITEM: Additional Stormwater comments
   STATUS OF REVIEW: INFO
   REMARKS: Review and approval is limited to Basins 8A, FB3 and SF2 only.

4. DEPARTMENT: ENGIN - DEVELOPMENT REVIEW
   REVIEW ITEM: Additional Development Review Comments
   STATUS OF REVIEW: INFO
   REMARKS: DRC 8/31/20 - Granted OVERALL WEC waiver #24943 for Landscaping as follows:

   WAIVED THE FINAL APPROVAL OF LANDSCAPING PRIOR TO CONSTRUCTION FINALS OR COS SUBJECT TO IT BEING COMPLETED BY AUGUST 31, 2021. THIS IS A BLANKET WAIVER FOR THE WORLD EQUESTRIAN CENTER.

   INFO: 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.

5. DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
   REVIEW ITEM: Additional Landscape comments
   STATUS OF REVIEW: INFO
   REMARKS: Blanket waiver approved by DRC 8/31/20 for World Equestrian Center site to defer Landscape and Irrigation approval until final inspection, to be completed by 8/31/21

6. DEPARTMENT: ZONE - ZONING DEPARTMENT
REVIEW ITEM: 2.12.4.L(1) - Parcel number
STATUS OF REVIEW: INFO
REMARKS: Project area includes portion of PID 12674-001-04, mostly for the DRA.

7. DEPARTMENT: ENGDRN - STORMWATER REVIEW
REVIEW ITEM: 6.13.6 - Stormwater Quality Criteria
STATUS OF REVIEW: WAIVER REQUESTED. FURTHER DISCUSSION NEEDED
REMARKS: Pond 8A is shown deeper than previously permitted, which will require a waiver from Marion County LDC for 8' depth.

LDC 6.13.6.A(3)(c) - Stormwater Quality Criteria Vegetative Cover
CODE states dry retention systems that have a depth of six feet or less, measured from top of bank to pond bottom, with side slopes that are no steeper than 4:1 shall have sodded side slopes and bottoms.
APPLICANT requests waiver to exceed 6 foot pond depth in Pond 8A. Pond 8A was previously constructed under the Flex Barns 1 & 2 project #23973. Additional storage is available within this pond by increasing the allowable storage depth to 8 feet.

8. DEPARTMENT: ENGDRN - STORMWATER REVIEW
REVIEW ITEM: Please provide a final signed and sealed hard copy signature page with references to the stormwater analysis or final hard copy of the full stormwater analysis.
STATUS OF REVIEW: NO
REMARKS: Please provide a final signed and sealed hard copy signature page with references to the stormwater analysis or final hard copy of the full stormwater analysis.

9. DEPARTMENT: ZONE - ZONING DEPARTMENT
REVIEW ITEM: 2.12.4.L(4) - Zoning requirements: lot width, area , setbacks , coverage (floor area ratios) and parking
STATUS OF REVIEW: WAIVER REQUESTED
REMARKS: Project Boundary as shown on sheet 03.01 is a portion of the boundary survey from Rogers Engineering. Aerial sheet shows barn #5 crossing the north property line of parcel ID 21068-002-00. Will the survey provided be used to adjust the current parcel configurations? If so, when? Or will the project boundary (as shown) become a separate parcel? If so, a separate legal description for the project area will be required. Please advise.

2/20/21: Applicant requests Waiver to provide separate legal description for project area prior to CO for final flex barn. Defer to DRC.

LDC 2.12.4.L(4) - Data Block: Zoning Information
CODE states the following zoning information is required and shall be listed in order as shown in the data block: (a) zoning classification; (b) list of approved variances, their conditions, and the date of approval; (c) Special Use Permit case number and resolution; (d) zoning requirements including lot area, width, setbacks, and building height.
APPLICANT requests waiver to provide sketch of description for final project boundary prior to the final request for certificate of occupancy.

ADDITIONAL WAIVERS REQUESTED:

STATUS OF REVIEW: WAIVER REQUESTED. STAFF SUPPORTS WAIVER

LDC 6.19.1 - Outdoor Lighting

CODE states the purpose of this division is to provide for effective and efficient nighttime lighting while minimizing light pollution, glare, and light trespass to conserve energy and resources while maintaining nighttime safety, utility, security, and productivity.
APPLICANT requests waiver to provide Photometric Plans for review and approval prior to the final request for certificate of occupancy.

STATUS OF REVIEW: WAIVER REQUESTED

LDC 2.21.3.C - Commence Improvements Prior Plan Approval

CODE states upon approval by DRC, a Building Permit may be issued and such approval is authority for applicant to proceed with the site improvements shown on the approved Major Site Plan.
APPLICANT requests waiver to start construction of concrete generator pads and trash compactor pads prior to major site plan approval at the owner's own risk.

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 COMMITTEE WAIVER REQUEST FORM

Date: 3/3/2021 Parcel Number(s): 21068-002-00 & 12674-001-04 Permit Number: AR 25828

A. PROJECT INFORMATION: Fill in below as applicable:

Project Name: WEC Flex Barns 3, 4, 5 Commercial ☑ or Residential ☐
Subdivision Name (if applicable): _____
Unit _____ Block _____ Lot _____

B. PROPERTY OWNER'S AUTHORIZATION: Attach a letter from the owner(s), or the owner(s) may sign below, authorizing the applicant to act on the owner's behalf for this waiver request:

Property Owner's Name (print): Equestrian Operations, LLC c/o Ralph L. Roberts, Sr., CEO
Property Owner's Signature: _____
Property Owner's Mailing Address: 7340 N. Hwy 27
City: Ocala State: FL Zip Code: 34482 Phone # 402-4369

C. APPLICANT INFORMATION: The applicant will be the point of contact during this waiver process. Letters will be faxed or emailed to the applicant.

Firm Name (if applicable): Equestrian Operations, LLC Contact Name: Ralph L. Roberts, Sr.
Mailing Address: 7340 N. Hwy 27 City: Ocala State: FL Zip Code: 34482
Phone # 402-4369 Alternate Phone # _____
FAX Number or Email address: SRVIP@RLCarriers.com & Dustin.Owen@paramount-gc.com

D. WAIVER INFORMATION:

Section & Title of Code: Other Items
Reason/Justification for Waiver Request: Request waiver to start construction of concrete generator pads and trash compactor pads prior to major site plan approval, at the Owner's own risk.

(Attach sheet 3 for additional waivers)

FOR STAFF USE ONLY:
Received By: _____ Date Processed: _____ Project # _____ AR # _____

Zoning Use: Parcel of record: Yes ☐ No ☐ Eligible to apply for Family Division: Yes ☐ No ☐
Zoned: _____ ESOZ: _____ Must Vacate Plat: Yes ☐ No ☐ Date: _____ Verified by: _____
Land Use: _____ Date: _____ Verified by: _____

"Meeting Needs by Exceeding Expectations"

DEVELOPMENT REVIEW COMMITTEE
WAIVER REQUEST FORM CONTINUED

Section & Title of Code: 6.19.1 Outdoor lighting plan requirements
Reason/Justification for Waiver Request:
Request waiver to provide Photometric Plans for review and approval prior to the final request for certificate of occupancy

Section & Title of Code: 6.19.4 Exterior lighting design standards
Reason/Justification for Waiver Request:
Request waiver to provide Photometric Plans for review and approval prior to the final request for certificate of occupancy

Section & Title of Code: 2.12.4.L(4) - Sketch of Description for Project Boundaries
Reason/Justification for Waiver Request: Request waiver to provide sketch of description for final project boundary prior to the final request for certificate of occupancy

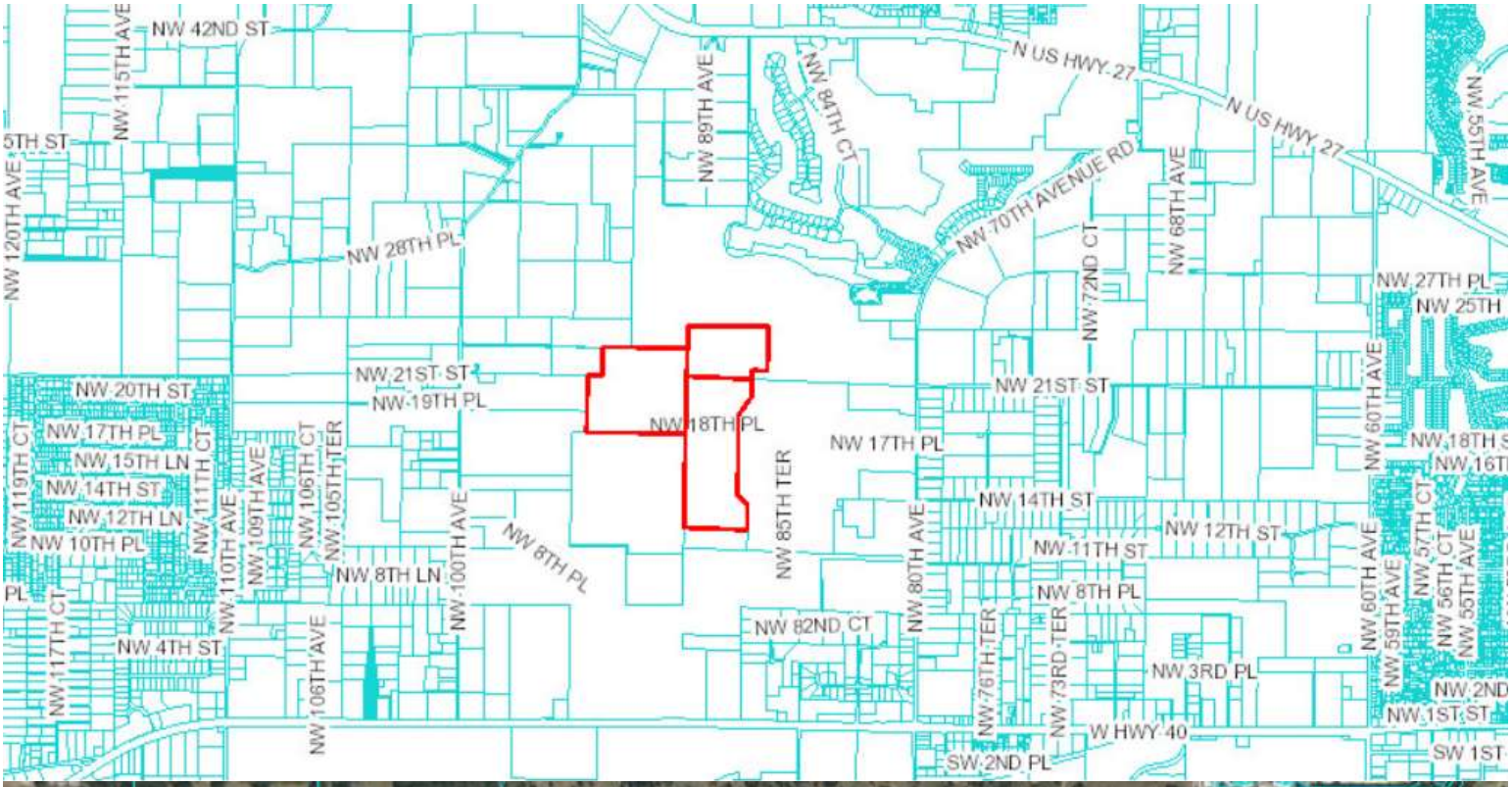
Section & Title of Code: 6.13.6 - Stormwater Quality Criteria
Reason/Justification for Waiver Request: Waiver reqeusted to exceed 6-ft pond depth in pond 8A. Pond 8A previously constructed under Flex Barns 1 & 2 project. Additional storage is available within this pond by increasing the allowable storage depth to 8-ft.

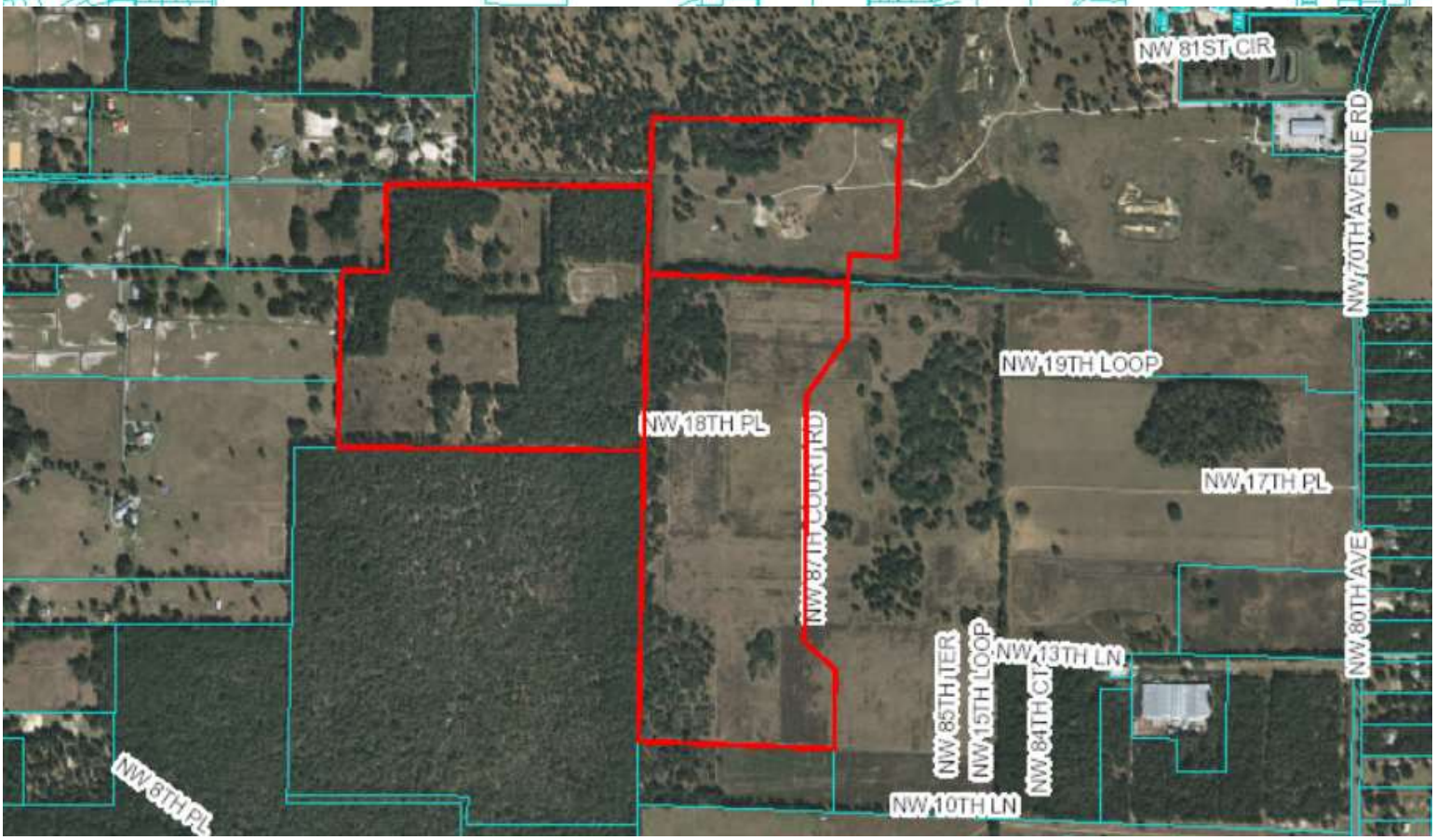
Section & Title of Code:
Reason/Justification for Waiver Request:

Section & Title of Code:
Reason/Justification for Waiver Request:

Section & Title of Code:
Reason/Justification for Waiver Request:

GOLDEN OCALA WORLD EQUESTRIAN CENTER FLEX BARNS 3, 4, & 5 - MAJOR SITE PLAN
1598 NW 87TH COURT RD OCALA
Project #2020110042 #25828 Parcel ##21068-002-00, 12674-001-04, & 21056-000-00
TILLMAN & ASSOCIATES ENGINEERING





MAJOR SITE PLAN
PROJECT NO. #2020110042
APPLICATION NO. #25828
DATE APPROVED: -

REGULATORY PERMITS

MARION COUNTY	(PENDING)
FDEP WATER	(PENDING)
FDEP SEWER	(PENDING)
SWFWMD ERP	(PENDING)
NPDES	(BY OTHERS)

DRC APPROVED WAIVERS:
REPLACE WITH APPROVED WAIVERS

MAJOR SITE PLAN
GOLDEN OCALA
WEC - FLEX BARNS 3,4 & 5

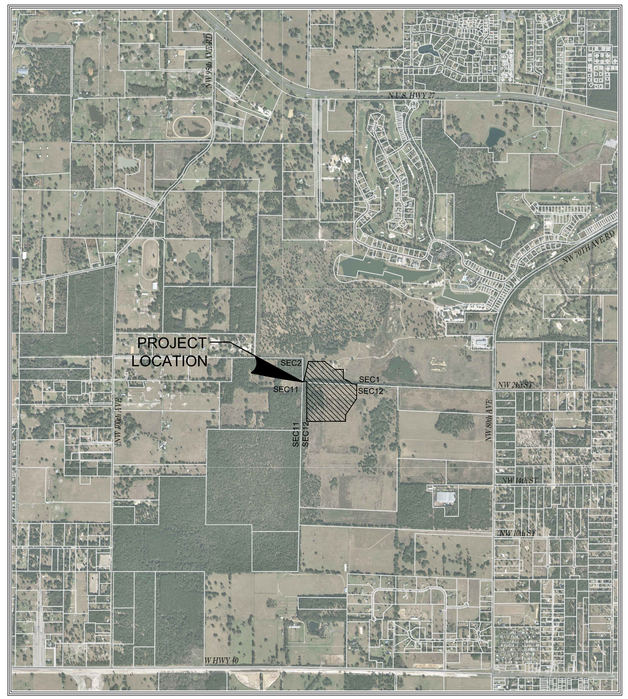
A PORTION OF SECTIONS 1, 11 & 12, TOWNSHIP 15 SOUTH, RANGE 20 EAST
MARION COUNTY, FLORIDA

811 Know what's below. Call before you dig.

Call 48 Hours before you dig. It's the Law! 1-800-432-4770 Sunshine State One Call of Florida, Inc.

Marion County Approval Stamp

THIS SITE CONTAINS:
PROJECT BOUNDARY AREA = 44.28 ac
TOTAL IMPERVIOUS AREA = 26.21 ac (On-site)
LOCATED IN A PORTION OF PARCEL #12674-001-04, #21068-002-00 & #21056-000-00
DESCRIPTION OF PURPOSE - EQUESTRIAN FACILITIES
LAND USE: - MEDIUM DENSITY RESIDENTIAL
ZONING: PUD



VICINITY MAP
SCALE: 1" = 2,000'

INDEX OF SHEETS

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02.01	GENERAL NOTES
03.01	AERIAL PHOTOGRAPH
04.01	OVERALL SITE PLAN & KEY MAP
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06.01	MASTER DRAINAGE PLAN
06.02 - 06.03	DRAINAGE RETENTION AREA DETAIL
07.01 - 07.05	SITE GRADING PLAN
08.01 - 08.04	UTILITY PLAN
09.01 - 09.02	ROADWAY AND PAVEMENT DETAILS
10.01 - 10.02	DRAINAGE DETAILS
11.01 - 11.02	UTILITY DETAILS
12.01 - 12.02	LIFT STATION DETAILS
13.01 - 13.02	EROSION CONTROL PLAN & DETAILS
14.01 - 14.02	SOIL BORINGS
S1-S5	BOUNDARY & TOPOGRAPHIC SURVEY (PROVIDED BY ROGERS ENGINEERING, LLC)

NOTES:
1. ALL CONSTRUCTION COVERED BY THESE PLANS SHALL COMPLY WITH THE MATERIAL REQUIREMENTS AND QUALITY CONTROL STANDARDS CONTAINED IN THE MARION COUNTY LAND DEVELOPMENT CODE AND THE MARION COUNTY UTILITY MANUAL AS APPLICABLE.
2. NW 80th AVENUE IS DESIGNATED A "RURAL COLLECTOR". NW 21st STREET IS A "SECTION/QUARTER-SECTION COLLECTOR."
3. A PORTION OF THE PROPERTY DESCRIBED ON THIS SURVEY DOES LIE WITHIN A SPECIAL FLOOD HAZARD AREA ("SFHA") AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA); SAID PROPERTY IS LOCATED WITHIN AN AREA HAVING ZONE DESIGNATIONS "X" AND "AE" BY FEMA, ON FLOOD INSURANCE RATE MAP NUMBER 12803C0484E WITH A DATE OF IDENTIFICATION OF APRIL 19, 2017, FOR COMMUNITY PANEL NUMBER 484 OF 960, IN MARION COUNTY, STATE OF FLORIDA, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PREMISES IS SITUATED.
4. DEVELOPMENT OF THE PROPERTY AS SHOWN ON THIS SITE PLAN IS SUBJECT TO THE TERMS AND CONDITIONS OF THE "GOLDEN OCALA DEVELOPMENT OF REGIONAL IMPACT (DRI)" SCALE PROJECT PER MARION COUNTY COMPREHENSIVE PLAN FUTURE LAND USE ELEMENT POLICY 10.6.1, AS MAY BE AMENDED FROM TIME TO TIME, INCLUDING PROVISIONS REGARDING THE CONCURRENCY OF PUBLIC FACILITIES AS MAY BE APPLICABLE; REFERENCE MARION COUNTY OR BOOK 6791, PAGES 105-163.
5. THIS PROJECT HAS NOT BEEN GRANTED CONCURRENCY APPROVAL AND/OR GRANTED AND/OR RESERVED ANY PUBLIC FACILITY CAPACITIES. FUTURE RIGHTS TO DEVELOP THE PROPERTY ARE SUBJECT TO A DEFERRED CONCURRENCY DETERMINATION AND FINAL APPROVAL TO DEVELOP THE PROPERTY HAS NOT BEEN OBTAINED. THE COMPLETION OF CONCURRENCY REVIEW AND/OR APPROVAL HAS BEEN DEFERRED TO LATER DEVELOPMENT REVIEW STAGES, SUCH AS, BUT NOT LIMITED TO, BUILDING PERMIT REVIEW.
6. ALL UTILITIES UNDER EXISTING OR PROPOSED PAVEMENT SHALL BE SLEEVED IN ACCORDANCE WITH SECTION B.2.6a OF THE MARION COUNTY LAND DEVELOPMENT CODE CRITERIA.
7. THIS PROJECT IS LOCATED IN THE SECONDARY SPRINGS PROTECTION ZONE.
8. SIGHT DISTANCE AT DRIVEWAYS COMPLIES WITH FDOT REQUIREMENTS.
9. VERTICAL DATUM IS BASED ON CONTROL POINTS "COED 0005 RESET", PUBLISHED ELEV. = 76.16 AND "COED 0010", PUBLISHED ELEV.=79.13, NAVD-88.
10. STATE PLANE COORDINATES ARE BASED ON "COED 0005 RESET", PUBLISHED ELEV. = 76.16 AND "COED 0010" AND "COED 0011", NAD-83 (1990 ADJUSTMENT)
11. NO CHANGE TO THE WORK AS SHOWN ON THE APPROVED PLANS SHALL BE MADE WITHOUT NOTIFICATION TO AND APPROVAL BY THE OFFICE OF THE COUNTY ENGINEER.
12. FOR EXTERNAL SIGNAGE, PLEASE REFER TO MASTER SIGN PLAN SUBMITTED AS PART OF THE MASTER PLAN PUD DEVELOPED FOR THE GOLDEN OCALA ESTATES AND WEC AREA.
13. FIELD MEASURED BEARINGS DEPICTED HEREON ARE BASED ON THE NORTH BOUNDARY OF THE N.W. ¼ OF SECTION 12, TOWNSHIP 15 SOUTH , RANGE 20 EAST; TO BEAR N.87°26'52"W.
14. ALL TREES 10" DBH AND LARGER SHALL BE LOCATED AND SHOWN ON THE DEFERRED LANDSCAPE PLAN.

DESCRIPTION:

A PARCEL OF LAND LYING IN SECTION 12, TOWNSHIP 15 SOUTH, RANGE 20 EAST, MARION COUNTY, FLORIDA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF THE SOUTHWEST 1/4 OF SECTION 1, TOWNSHIP 15 SOUTH, RANGE 20 EAST, MARION COUNTY, FLORIDA; THENCE N01°55'34"E, ALONG THE WEST LINE OF SAID SOUTHWEST 1/4, A DISTANCE OF 1.65 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE ALONG SAID WEST LINE, PROCEED N01°55'34"E, 495.08 FEET; THENCE DEPARTING SAID WEST LINE, PROCEED EAST, 1030.95 FEET; THENCE SOUTH, 422.14 FEET; THENCE EAST, 81.46 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTH, HAVING A RADIUS OF 230.00 FEET AND A CENTRAL ANGLE OF 39°13'00"; THENCE EASTERLY ALONG THE ARC OF SAID CURVE 157.43 FEET (CHORD BEARING AND DISTANCE OF S70°23'30"E, 154.37 FEET); THENCE S50°47'00"E, 124.50 FEET; THENCE S52°25'24"E, 9.73 FEET; THENCE S87°26'46"E, 133.31 FEET; THENCE S00°25'07"W, 408.22 FEET; THENCE S35°07'45"W, 536.29 FEET; THENCE S00°25'07"W, 192.79 FEET; THENCE WEST, 1460.64 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHEAST, HAVING A RADIUS OF 25.00 FEET AND A CENTRAL ANGLE OF 103°52'22"; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE 45.32 FEET (CHORD BEARING AND DISTANCE OF N38°03'49"W, 39.37 FEET) TO A POINT ON THE ARC OF A CURVE CONCAVE EAST, HAVING A RADIUS OF 1916.87 FEET AND A CENTRAL ANGLE OF 08°29'02"; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE 283.83 FEET (CHORD BEARING AND DISTANCE OF N18°06'53"E, 283.57 FEET); THENCE N22°21'21"E, 175.97 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE WEST, HAVING A RADIUS OF 730.00 FEET AND A CENTRAL ANGLE OF 11°01'49"; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE 140.53 FEET (CHORD BEARING AND DISTANCE OF N16°50'27"E, 140.32 FEET); THENCE N11°19'32"E, 437.58 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHEAST, HAVING A RADIUS OF 25.00 FEET AND A CENTRAL ANGLE OF 81°14'16"; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE 35.45 FEET (CHORD BEARING AND DISTANCE OF N51°56'40"E, 32.55 FEET); THENCE N03°35'05"E, 60.06 FEET; THENCE N83°47'43"W, 25.15 FEET TO THE POINT OF BEGINNING.

CONTAINING 50.50 ACRES, MORE OR LESS.

PROJECT REPRESENTATIVE:
GOLDEN OCALA GOLF & EQUESTRIAN CLUB
CONTACT: DUSTIN OWEN
7340 NORTH U.S. HIGHWAY 27
OCALA FL, 34482
PHONE: (352) 282-4593

OWNER/APPLICANT:
EQUESTRIAN OPERATIONS, LLC
CONTACT: RALPH L. ROBERTS, SR., CEO
600 GILLAM ROAD
WILMINGTON, OH 45177
PHONE: (352) 402-4368

PREPARED BY:
TILLMAN & ASSOCIATES ENGINEERING, LLC
CONTACT: GEORGE S. HORTON, P.E.
1720 SE 16th AVE, BLDG. 100
OCALA, FLORIDA 34471
PHONE: (352) 387-4540, FAX (352) 387-4545

GEOTECH (BUILDINGS):
GEO-TECH, INC.
CONTACT: JONNY HEATH
1016 S.E. 3RD AVE
OCALA, FLORIDA 34471
PHONE: (352) 694-7711

GEOTECH (DRA/NORTH):
UNIVERSAL ENGINEERING SCIENCES
CONTACT: EDUARDO SUAREZ
4475 SW 35th TERRACE
GAINESVILLE, FLORIDA 32608
PHONE: (352) 372-3392

ENVIRONMENTAL:
MODICA & ASSOCIATES, INC.
CONTACT: ELAINE IMBURGLIA, PRESIDENT
302 MOHAWK ROAD
CLERMONT, FL 34715
PHONE: (352) 394-2000

Utility Companies

Water	Marion County Utilities	Josh Kramer, (352) 438-2383
Sewer	Marion County Utilities	Josh Kramer, (352) 438-2383
Electric	SECO Energy	Jerry Bolduc, (352) 569-9633
Cable/Phone/Internet	Digital Communication Media	Jorge Santiago, (352) 873-4817
Gas	Teco	Chuck Humphrey, (352) 401-3409

SURVEYOR'S CERTIFICATION
I HEREBY CERTIFY THAT THE SURVEY REPRESENTED HEREON IS IN ACCORDANCE WITH ALL APPLICABLE REQUIREMENTS OF THE MARION COUNTY LAND DEVELOPMENT CODE (LDC) AND MEETS THE STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS.

RODNEY K. ROGERS, P.S.M.
CERTIFICATE NO. LS 5274
STATE OF FLORIDA

DEVELOPER'S STATEMENT
P.U.D. CONDITIONS FOR THE WEC PROJECT REQUIRE ENROLLMENT IN BEST MANAGEMENT PRACTICES IDENTIFIED BY A NOTICE OF INTENT, FILED WITH THE DEPARTMENT OF AGRICULTURAL AND CONSUMER SERVICES, AS PERIODICALLY REVISED OR, COMPLIANCE WITH A NUTRIENT MANAGEMENT PLAN PREPARED BY A PROFESSIONAL ENGINEER THAT IS A NRCS APPROVED TECHNICAL SERVICE PROVIDER (IF BMP ENROLLMENT IS NOT REQUIRED BY FDACS).

RALPH L. ROBERTS, SR., CEO

APPLICANT'S/ OWNER'S CERTIFICATION
I HEREBY CERTIFY THAT I, MY SUCCESSORS AND ASSIGNS SHALL PERPETUALLY MAINTAIN THE IMPROVEMENTS AS SHOWN ON THIS PLAN.

RALPH L. ROBERTS, SR., CEO

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

GEORGE S. HORTON, P.E.
REGISTERED ENGINEER NO. 62585
STATE OF FLORIDA

Tillman & Associates ENGINEERING, LLC
CIVIL ENGINEERING - PLANNING - LANDSCAPE ARCHITECTURE - ENVIRONMENTAL
1720 SE 16th Ave. Bldg 100, Ocala, FL 34471
Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #26755

REVISIONS
DATE

MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3, 4 & 5
MARION COUNTY, FLORIDA

COVER SHEET

DATE 02/13/21
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

SHT. 01.01

NOT VALID UNLESS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER

GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF SIZE AND LOCATION OF ALL EXISTING UTILITIES AND RELATED CONSTRUCTION PRIOR TO COMMENCEMENT OR WORK.CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE CALL OF FLORIDA, INC. AT 1-800-432-4770, IN ACCORDANCE WITH CHAPTER 556, FLORIDA STATUTES.
2. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE LATEST STANDARDS OF MARION COUNTY AND FDOT, (INCLUDING BUT NOT LIMITED TO: FDOT FY 2019-20 STANDARD PLANS, FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2019, FDOT 2017 UTILITY ACCOMMODATION MANUAL .
3. PAVEMENT STRIPING TO BE IN ACCORDANCE WITH MARION COUNTY SPECIFICATIONS AND WITH THE FLORIDA D.O.T. ROADWAY & TRAFFIC STANDARDS, INDEX 17346.
4. ALL TRAFFIC CONTROL SIGNS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
5. WHERE MUCK OR OTHER ORGANIC MATERIAL IS FOUND, IT SHALL BE REMOVED AND REPLACED BY GOOD QUALITY BACKFILL MATERIAL OBTAINED FROM THE GRADING OPERATIONS OR OTHER SOURCE APPROVED BY THE ENGINEER. THE ORGANIC MATERIAL SHALL BE THEN USED AS TOP DRESSING WHEN MIXED WITH CLEAN SANDY SOIL.
6. ALL FINISHED GRADES AND ELEVATIONS ARE AS DENOTED BY THE APPLICABLE LEGEND.
7. AS PART OF THE CLEARING AND GRUBBING OPERATION, THE CONTRACTOR IS TO REMOVE EXISTING FACILITIES AND / OR FENCING FROM THE SITE AS SHOWN ON PLANS.
8. THE CONTRACTOR SHALL NOTIFY MARION COUNTY ENGINEERING DIVISION AND TILLMAN AND ASSOCIATES ENGINEERING, LLC AT LEAST ONE WEEK BEFORE COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR SHALL OBTAIN A MARION COUNTY R/W PERMIT PRIOR TO COMMENCING WORK WITHIN MARION COUNTY R/W's.
9. A MINIMUM SEPARATION OF 1.5 FEET BETWEEN THE LIMEROCK BASE AND THE HIGHEST GROUNDWATER ELEVATION SHALL BE MAINTAINED WITHIN THE RIGHT-OF-WAY. CONTRACTOR TO NOTIFY ENGINEER IF 1.5 FEET OF SEPARATION IS NOT ACHIEVED.
10. A PRE-CONSTRUCTION MEETING IS REQUIRED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
11. PER SECTION 82-371, CODE OF ORDINANCES: FOR ANY WORK WITHIN PUBLIC RIGHT OF WAYS, A RIGHT OF WAY UTILIZATION PERMIT MUST BE OBTAINED FROM THE ENGINEERING DEPARTMENT A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
12. THE CONTRACTOR SHALL SUBMIT THREE (3) SETS OF STANDARD SHOP DRAWINGS AND MANUFACTURER'S CATALOGS WITH THE MODEL NUMBER OR TYPE OF THE ITEM ENCIRCLED OR OTHERWISE DESIGNATED. THE SUBMITTALS SHALL BEAR THE APPROVAL OF THE UNDERGROUND UTILITY CONTRACTOR. ALL UTILITY SHOP DRAWINGS AND MANUFACTURER'S CATALOGS SHALL BE APPROVED BY THE ENGINEER OF RECORD AND BLCCDD PRIOR TO CONSTRUCTION.
13. THE CONTRACTOR SHALL SUBMIT THREE (3) SETS OF COMPLETE DETAILED SHOP DRAWINGS FOR ALL SANITARY MANHOLES, WET WELLS, OTHER CASTINGS, AND PUMPS. THE SUBMITTALS SHALL BEAR THE APPROVAL OF THE UNDERGROUND UTILITY CONTRACTOR ON EACH SHEET. A COMPLETE SET OF THE LIFT STATION ELECTRICAL SHOP DRAWINGS IS ALSO REQUIRED IF APPLICABLE. ALL UTILITY SHOP DRAWINGS SHALL BE APPROVED BY THE ENGINEER OF RECORD AND BLCCDD PRIOR TO CONSTRUCTION.

PAVING AND DRAINAGE NOTES

1. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCE BETWEEN CENTERLINES OF DRAINAGE STRUCTURES.
2. ALL PAVEMENT RETURN RADII SHALL BE 28' AND MEASURED FROM THE INTERFACE OF THE CONCRETE CURB AND PAVEMENT SURFACE UNLESS OTHERWISE NOTED.
3. DITCH BOTTOM AND CONTROL STRUCTURE INLET GRATES SHALL BE SECURED WITH CHAIN AND EYEBOLT.
4. FIVE (5) FEET OF SOD IS REQUIRED AROUND ALL DITCH BOTTOM INLETS, MANHOLES, HEADWALLS AND MITERED END SECTIONS.
5. TOP ELEVATIONS OF MANHOLES IN GRASSED AREAS SHALL BE LOCATED AT FINISHED GRADE ELEVATION.
6. AS AN ALTERNATIVE, CONTRACTOR MAY USE ALTERNATIVE PIPE MATERIALS IN LIEU OF RCP. HOWEVER, CONTRACTOR MUST RECEIVE APPROVAL OF ALTERNATIVE PIPE MATERIALS IN WRITING BY MARION COUNTY AND TILLMAN & ASSOCIATES ENGINEERING, LLC PRIOR TO CONSTRUCTION. ALL PIPE MATERIALS AND INSTALLATIONS SHALL MEET THE REQUIREMENTS OF FDOT.
7. TOP SOIL WHICH HAS BEEN STRIPPED AND STOCK PILED DURING THE COURSE OF CONSTRUCTION SHALL BE REDISTRIBUTED ON ALL REGRADED SURFACES SO AS TO PROVIDE AT LEAST FOUR INCHES OF EVEN COVER TO ALL DISTURBED AREAS OF THE DEVELOPMENT AND SHALL BE STABILIZED BY SEEDING OR PLANTING
8. ALL DISTURBED AREAS WITH SLOPES UP TO 6:1 SHALL BE SEEDED AND MULCHED. SLOPES STEEPER THAN 6:1 SHALL BE SODDED AND SLOPES 3:1 OR STEEPER SHALL HAVE THE SOD PEGGED.
9. SEE TABLE 2.0 FOR REQUIRED STORM PIPE COVER BENEATH AN UNPAVED SECTION.
10. SEE TABLE 3.0 FOR REQUIRED STORM PIPE COVER BENEATH RIGID PAVEMENT.
11. SEE TABLE 4.0 FOR REQUIRED STORM PIPE COVER BENEATH FLEXIBLE PAVEMENT
12. THE TABULATED VALUES ARE RECOMMENDED MINIMUM DIMENSIONS TO WITHSTAND ANTICIPATED HIGHWAY TRAFFIC LOADS. ADDITIONAL COVER MAY BE REQUIRED TO SUPPORT CONSTRUCTION EQUIPMENT LOADS OR HIGHWAY TRAFFIC LOADS BEFORE PAVEMENT IS COMPLETED. SOME SIZE THICKNESS COMBINATIONS MAY REQUIRE MINIMUM COVER GREATER THAN THOSE LISTED ABOVE. SEE FDOT INDEX 205, SHEETS 1-6.
13. ALL STORM WATER PIPE SHALL MEET THE COVER & CLASS CRITERIA AS OUTLINED IN FDOT SPECIFICATIONS.
14. ALL STORM PIPE JOINTS SHALL BE WRAPPED AS SPECIFIED IN FDOT INDEX 280.
15. THE LAST FOOT OF STORM WATER POND SHALL NOT BE EXCAVATED UNTIL ALL DISTURBED AREAS ARE STABILIZED.
16. ANY FILL MATERIAL MUST BE APPROVED BY ENGINEER IN WRITING PRIOR TO PLACEMENT.
17. SIGNIFICANT CARE MUST BE TAKEN WHEN GRADING RETENTION PONDS TO ENSURE THAT POND BOTTOMS DO NOT BECOME COMPACTED DURING CONSTRUCTION OR SEALED BY CONSTRUCTION SEDIMENT. IF SEDIMENTATION OR COMPACTION OF A POND BOTTOM OCCURS, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RESTORE THE DESIGN HYDRAULIC CONDUCTIVITY.

SANITARY SEWER NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE ***MARION COUNTY*** MANUAL OF STANDARD SPECIFICATIONS FOR WASTEWATER CONSTRUCTION.
2. ALL SANITARY SEWER CONSTRUCTION AND MATERIALS TO BE PRIVATELY OWNED AND MAINTAINED.
3. ALL MANHOLES SHALL BE 4 FT. INSIDE DIAMETER.
4. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES BETWEEN MANHOLE CENTERLINE.
5. ALL SANITARY SERVICE LATERALS SHALL BE 6 INCH DIAMETER, UNLESS SPECIFIED OTHERWISE ON PLANS.
6. INVERTS OF SANITARY SERVICE LATERALS AT THEIR CONNECTION TO SANITARY MANHOLES SHALL BE NO MORE THAN ONE (1) FOOT ABOVE THE MANHOLE INVERT.
7. MINIMUM AS BUILT 8" PVC SEWER LINE SLOPE WILL BE 0.40% MINIMUM SLOPE OR WILL BE RELAID BY CONTRACTOR TO MEET THE MINIMUM SLOPE REQUIREMENT AT NO ADDITIONAL COST.
8. MARK LATERALS WITH 4" X 4" X 8' PT POST PAINTED GREEN ON END.
9. PIPE MATERIAL IS ASTM D3034, SDR-26 UNLESS OTHERWISE NOTED.
10. A MINIMUM 1.04% SLOPE SHALL BE MAINTAINED ON THE SANITARY SEWER SERVICE LATERALS. AT NO TIME SHALL A SANITARY SEWER LATERAL HAVE A SLOPE OF 15% OR GREATER.
11. SANITARY SEWER GRAVITY MAINS ARE TO BE UPGRADED IN MATERIAL TO WATER MAIN STANDARDS AND HYDROSTATICALLY PRESSURE TESTED WITH WATER TO ENSURE JOINT TIGHTNESS IF EITHER OF THE HORIZONTAL OR VERTICAL MINIMUM REQUIRED CLEARANCE FROM A WATER MAIN CANNOT BE MAINTAINED OR IF THE SEWER MAIN IS ABOVE THE WATER MAIN. UPGRADE TO MATERIAL CANNOT BE MADE WITHOUT PRIOR APPROVAL FROM FDEP.
12. LEAKAGE TEST ARE SPECIFIED REQUIRING THAT
    A) THE LEAKAGE EXFILTRATION OR INFILTRATION DOES NOT EXCEED 200 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE SYSTEM.
    B) EXFILTRATION OR INFILTRATION TESTS BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET.
    C) AIR TESTS, AS MINIMUM, CONFORM TO THE TEST PROCEDURE DESCRIBED IN ASTM C-924 FOR CONCRETE PIPE, ASTM F-1417 FOR PLASTIC PIPE AND FOR OTHER MATERIALS APPROPRIATE TEST PROCEDURES, AIR TESTING, IF SPECIFIED FOR CONCRETE SEWER MANHOLES, CONFORMS TO THE TEST PROCEDURES DESCRIBED IN ASTM C-1244.
13. DEFLECTION TESTS SHALL BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES, CHAPTER 33.85, FOR ALL GRAVITY SANITARY SEWER LINES. TESTING IS REQUIRED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS TO PERMIT STABILIZATION OF THE SOIL-PIPE SYSTEM.TESTING REQUIREMENTS SPECIFY:
    1) NO PIPE SHALL EXCEED A DEFLECTION OF 5%.
    2) USING A RIGID BALL OR MANDREL FOR THE PIPE DEFLECTION TESTS WITH A DIAMETER NOT LESS THAN 95% OF THE BASE INSIDE DIAMETER OR AVERAGE INSIDE DIAMETER OF THE PIPE, DEPENDING ON WHICH IS SPECIFIED IN THE ASTM SPECIFICATION, INCLUDING THE APPENDIX, TO WHICH THE PIPE IS MANUFACTURED.
    3) PERFORMING THE TEST WITHOUT MECHANICAL PULLING DEVICES.
14. TESTING OF THE SEWAGE COLLECTION SYSTEM IS AS FOLLOWS:
    A. ALL GRAVITY SEWER MAINS REQUIRE LOW PRESSURE AIR TESTING IN ACCORDANCE WITH THE LATEST UNI-BELL STANDARD FOR LOW PRESSURE AIR TESTS. AIR TEST, AS A MINIMUM, SHALL CONFORM TO THE TEST PROCEDURES DESCRIBED IN ASTM SPECIFICATIONS, ASTM F1417 FOR PLASTIC PIPE.
    B. ALL SEWER MAINS SHALL BE LAMPED BY IN THE PRESENCE OF A MARION COUNTY UTILITIES REPRESENTATIVE.
    C. ALL MANHOLES SHALL BE INSPECTED FOR INFILTRATION, ALIGNMENT, FLOW CHANNEL CONSTRUCTION AND COAL TAR EPOXY PAINT THROUGHOUT.
    D. HYDRO-STATIC TESTS CONSISTING OF A HYDROSTATIC PRESSURE TEST AND HYDROSTATIC LEAKAGE TEST SHALL BE CONDUCTED ON ALL NEWLY INSTALLED SEWER FORCE MAIN SYSTEM PRESSURE PIPES AND APPURTENANCES IN ACCORDANCE WITH AWWA C600 OR M23 AS APPLICABLE. THE PRESSURE SHALL BE 150 PSI FOR TWO (2) HOURS.
    E. DEFLECTION TEST ARE REQUIRED FOR ALL FLEXIBLE PIPE EXCLUDING FORCE MAINS. TESTS SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES.D MEASURED FROM THE INTERFACE TO THE CONCRETE CURB AND PAVEMENT SURFACE UNLESS OTHERWISE NOTED.

WATER MAIN CONSTRUCTION NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN COMPLIANCE WITH AWWA STANDARDS AS WELL AS THE MARION COUNTY MANUAL OF STANDARDS AND SPECIFICATIONS FOR WATER MAIN CONSTRUCTION.
2. ALL WATER MAIN CONSTRUCTION AND MATERIALS TO BE PRIVATELY OWNED AND MAINTAINED
3. SEPARATION REQUIREMENTS (SEE TABLE 1.0-UTILITY SEPARATIONS)
   - 3.1. HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS, SANITARY OR STORM SEWERS, WASTEWATER OR STORM WATER FORCE MAINS, RECLAIMED WATER PIPELINES AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS:
   - 3.1.1. NEW OR RELOCATED UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST 3' BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORM WATER FORCE MAIN OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
   - 3.1.2. NEW OR RELOCATED UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST 3' AND PREFERABLY 10' BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
   - 3.1.3. NEW OR RELOCATED UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST 6' AND PREFERABLY 10' BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610 F.A.C.. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO 3' WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6" ABOVE THE TOP OF THE SEWER.
   - 3.2. VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORM WATER FORCE MAINS OR RECLAIMED WATER PIPELINES:
   - 3.2.1. NEW OR RELOCATED UNDERGROUND WATER MAINS CROSSING ANY GRAVITY OR VACUUM-TYPE SANITARY SEWER PIPE SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 6" AND PREFERABLY 12" ABOVE OR AT LEAST 12" BELOW THE OUTSIDE OF THE OTHER PIPE. IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
   - 3.2.2. NEW OR RELOCATED UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORM WATER FORCE MAIN OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12" ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
   - 3.2.3. AT THE UTILITY CROSSINGS DESCRIBED IN THE ABOVE PARAGRAPHS, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST 3' FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORM WATER FORCE MAINS OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST 6' FROM ALL JOINTS IN GRAVITY OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C..
   - 3.3. NO WATER MAIN SHALL PASS THROUGH OR COME INTO CONTACT WITH ANY PART OF A SANITARY SEWER MANHOLE OR A STORM SEWER MANHOLE.
   - 3.4. NEW OR RELOCATED FIRE HYDRANTS WITH UNDERGROUND DRAINS SHALL BE LOCATED SO THAT THE DRAINS ARE AT LEAST 3' FROM ANY EXISTING OR PROPOSED STORM SEWER, STORM WATER FORCE MAIN OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AT LEAST 3' BUT PREFERABLY 10' FROM ANY EXISTING OR PROPOSED GRAVITY OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. AND AT LEAST 10' FROM ANY EXISTING OR PROPOSED ON-SITE SEWAGE TREATMENT OR DISPOSAL SYSTEM AS DEFINED IN SECTION 381.0065(2), F.S. AND RULE 64E-6.002, F.A.C..
   - 3.5. EXCEPTIONS / MITIGATION: ADHERENCE TO THE ABOVE CONSTRAINTS AND SEPARATIONS IN THE ABOVE ITEMS SHALL BE COMPLIED WITHOUT EXCEPTION. IF FOR SOME REASON WHERE IT IS NOT TECHNICALLY FEASIBLE OR ECONOMICALLY SENSIBLE THAT THE ABOVE ITEMS CANNOT BE COMPLIED WITH, CONTRACTOR IS TO STOP WORK AND NOTIFY THE ENGINEER OF RECORD FOR THE APPROPRIATE SOLUTION. THE SOLUTION WILL BE SUBMITTED TO THE DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR APPROVAL PRIOR TO WORK COMMENCEMENT.
4. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES BETWEEN FITTINGS OF BRANCHES AND MAINS.
5. DEFLECTIONS AT PIPE JOINTS SHALL NOT EXCEED THOSE RECOMMENDED BY THE PIPE MANUFACTURER.
6. ALL GATE VALVES SHALL BE EQUIPPED WITH AN ADJUSTABLE CAST IRON VALVE BOX WITH COVER, WITH THREADED EXTENSION WHERE NEEDED.
7. ALL PUBLIC WATER SYSTEMS COMPONENTS, EXCLUDING FIRE HYDRANTS, THAT SHALL BE INSTALLED UNDER THIS PROJECT, AND THAT SHALL COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF INTERNATIONAL STANDARD 61 AND SHALL BE MARKED WITH NSF SEAL OF APPROVAL.
8. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT SHALL BE COLOR CODED MARKED IN ACCORDANCE WITH SUBPARAGRAPH 62-555.320(21)(b)3, F.A.C., USING BLUE AS A PREDOMINANT COLOR. ALL DUCTILE IRON WATER MAINS SHALL BE MARKED WITH A CONTINUOUS STRIPE LOCATED WITHIN THE TOP 90 DEGREES OF THE PIPE. SAID STRIPE SHALL BE A MINIMUM 2 INCHES IN WIDTH AND SHALL BE BLUE IN COLOR IF PAINT IS USED INSTEAD OF TAPE. BACKFILL SHALL NOT BE PLACED FOR 30 MINUTES FOLLOWING PAINT APPLICATION. FOR PIPE WITH AN INTERNAL DIAMETER OF 24" OR GREATER, TAPE OR PAINT SHALL BE APPLIED IN CONTINUOUS LINES A LONG EACH SIDE OF THE PIPE AS WELL AS A LONG THE TOP OF THE PIPE.
9. ALL NON-METALLIC WATER MAINS SHALL BE INSTALLED WITH A CONTINUOUS, INSULATED 14 GAUGE COPPER WIRE INSTALLED DIRECTLY ON TOP OF THE PIPE FOR LOCATION PURPOSES. SEE STANDARD DRAWINGS. IN ADDITION, ALL PVC WATER MAINS SHALL BE A SOLID BLUE COLOR.
10. MARK DRINKING WATER SERVICES WITH 4" x 4" x 8' PT POST PAINTED BLUE ON END.
11. PIPE MATERIALS: ALL PIPES, PIPE FITTINGS, PIPE JOINT PACKING AND JOINTING MATERIALS, VALVES, FIRE HYDRANTS, AND METERS INSTALLED UNDER THIS PROJECT SHALL CONFORM TO APPLICABLE AWWA STANDARDS.
    A. PVC WATER MAINS 4 INCHES TO 12 INCHES SHALL BE IN ACCORDANCE WITH AWWA C900, LATEST EDITION AND SHALL BE DR18. PVC WATER MAINS 14 INCHES TO 36 INCHES SHALL BE IN ACCORDANCE WITH AWWA C905, LATEST EDITION AND SHALL BE DR18. PVC PIPES LESS THAN 4 INCHES ARE NOT ALLOWED IN MARION COUNTY. IN OTHER JURISDICTIONS, THEY SHALL BE IN ACCORDANCE WITH ASTM D1785 (SCHEDULE 40, 80, 120) OR ASTM D2241 SDR 21. MINIMUM WORKING PRESSURE FOR ALL PVC SHALL BE 150 PSI. ALL PVC PIPE SHALL HAVE THE SAME O.D. AS DUCTILE IRON PIPE. PVC PIPE JOINTS SHALL BE IN ACCORDANCE WITH ASTM D3139 AND AWWA STANDARDS.
    B. DUCTILE IRON PIPE SHALL CONFORM TO ANSI A21.51/AWWA C151 AND SHALL BE A MINIMUM OF CLASS 50. DUCTILE IRON JOINTS SHALL BE IN ACCORDANCE WITH ANSI A21.11 AND AWWA C111.
    C. ALL SERVICES SHALL BE POLYETHYLENE TUBING, CLASS 160 AND SHALL BE IN ACCORDANCE WITH AWWA C901.
12. WATER MAIN CONNECTION SHALL BE MADE UNDER THE SUPERVISION OF THE MARION COUNTY. ALL VALVES SHALL BE OPERATED BY MARION COUNTY PERSONNEL ONLY. WATER MAINS ARE TO BE DISINFECTED PER ANSIWWA C651-92 AND MARION COUNTY LAND DEVELOPMENT CODE OF STANDARDS AND SPECIFICATIONS FOR WASTEWATER AND WATER MAIN CONSTRUCTION SECTION 51.6 WHICH INCLUDES A FULL FLUSH.
13. ALL VALVES SHALL BE LOCATED IN NON PAVED AREAS, UNLESS SPECIFIED ON PLANS.
14. FIRE HYDRANT LEADS SHALL HAVE A MINIMUM INSIDE DIAMETER OF 6" AND SHALL INCLUDE AN AUXILIARY VALVE.
15. IF AGGRESSIVE SOIL CONDITIONS ARE FOUND DURING CONSTRUCTION, WATER MAINS SHALL BE PROTECTED THROUGH THE USE OF CORROSION RESISTANT MATERIALS, THROUGH ENCASEMENT OF THE WATER MAINS IN POLYETHYLENE, OR THROUGH PROVISION OF CATHODIC PROTECTION.
16. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT SHAL BE "LEAD FREE" AS DEFINED IN THE LATEST VERSION OF THE SAFE WATER DRINKING ACT.
17. WHERE NEW OR ALTERED DEAD-END WATER MAINS INCLUDED IN THIS PROJECT CANNOT BE AVOIDED, THEY SHALL BE PROVIDED WITH A FIRE FLUSHING HYDRANT OR BLOW-OFF FOR FLUSHING PURPOSES.
18. ALL FIRE HYDRANTS THAT WILL BE INSTALLED UNDER THIS PROJECT SHALL BE LOCATED AT LEAST THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORM WATER FORCE MAIN, PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., OR VACUUM - TYPE SANITARY SEWER; AT LEAST SIX FEET FROM ANY EXISTING OR PROPOSED GRAVITY - OR PRESSURE - TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
19. WATER SERVICES ARE TO TERMINATE 1' OUTSIDE ROW ALONG THE PROPERTY LINE.
20. PROPOSED FIRE HYDRANTS CONNECTED TO THE POTABLE WATER MAIN, FOR THIS PROJECT, SHALL BE PAINTED PER NFPA AND AWWA STANDARDS. FIRE HYDRANTS CONNECTED TO THE DESIGNATED FIRE LINE SHALL BE PAINTED PER JURISDICTION.
21. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT WILL BE COLOR CODED OR MARKED IN ACCORDANCE WITH SUBPARAGRAPH 62-555.320(21)(b)3,F.A.C, USING BLUE AS A PREDOMINANT COLOR. (UNDERGROUND PLASTIC PIPE WILL BE SOLID-WALL BLUE PIPE, WILL HAVE A CO-EXTRUDED BLUE EXTERNAL SKIN, OR WILL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; AND UNDERGROUND METAL OR CONCRETE PIPE WILL HAVE BLUE STRIPED APPLIED TO THE PIPE WALL. PIPE STRIPED DURING MANUFACTURING OF THE PIPE WILL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT WILL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE; FOR PIPE WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT WILL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE. ABOVEGROUND PIPE WILL BE PAINTED BLUE OR WILL BE COLOR CODED OR MARKED LIKE UNDERGROUND PIPE.) [FAC 62-555.320(21)(b)3]
22. THE OPEN END OF THE AIR RELIEF PIPE FROM ALL AUTOMATIC AIR RELIEF VALVES WILL BE EXTENDED TO AT LEAST ONE FOOT ABOVE GRADE AND WILL BE PROVIDED WITH A SCREENED, DOWNWARD-FACING ELBOW. [FAC 62-555.320(21)(b)3, AND RSWW 8.4.2]
23. A CONTINUOUS AND UNIFORM BEDDING WILL BE PROVIDED IN TRENCHES FOR UNDERGROUND PIPE; BACKFILL MATERIAL WILL BE TAMPED IN LAYERS AROUND UNDERGROUND PIPE TO ADEQUATELY SUPPORT AND PROTECT THE PIPE; AND UNSUITABLY SIZED STONES (AS DESCRIBED IN APPLICABLE AWWA STANDARDS OR MANUFACTURERS' RECOMMENDED INSTALLATION PROCEDURES) FOUND IN TRENCHES WILL BE REMOVED FOR A DEPTH OF AT LEAST SIX INCHES BELOW THE BOTTOM OF UNDERGROUND PIPE. [FAC 62-555.320(21)(b)3, AND RSWW 8.5.2]
24. ALL WATER MAIN TEES, BENDS, PLUGS, AND HYDRANTS WILL BE PROVIDED WITH THRUST BLOCKS OR RESTRAINED JOINTS TO PREVENT MOVEMENT. [FAC 62-555.320(21)(b)3, AND RSWW 8.5.4]
25. NEW OR ALTERED WATER MAIN INSTALLATION AND PRESSURE AND LEAKAGE TESTING, SHALL BE PROVIDED IN ACCORDANCE WITH APPLICABLE AWWA STANDARDS. PVC WATER MAIN INSTALLATION AND TESTING SHALL CONFORM TO AWWA C605. DUCTILE IRON WATER MAIN INSTALLATION AND TESTING SHALL CONFORM TO AWWA C600.
26. NEW OR ALTERED WATERMAINS, INCLUDING FIRE HYDRANT LEADS AND SERVICE LINES THAT WILL BE UNDER THE CONTROL OF A PUBLIC WATER SYSTEM AND THAT HAVE AN INSIDE DIAMETER OF THREE INCHES OR GREATER, SHALL BE DISINFECTED AND BACTERIOLOGICALLY TESTED IN ACCORDANCE WITH AWWA C651.
27. THE MINIMUM COVER TO BE PROVIDED OVER POTABLE WATER LINES SHALL BE 3'. RSWW 8.7.3
28. PROPER BACKFLOW PROTECTION IS REQUIRED. [FAC 62-555-360 AND AWWA MANUAL M14]

FORCE MAIN NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN COMPLIANCE WITH THE ***MARION COUNTY*** MANUAL OF STANDARDS AND SPECIFICATIONS FOR FORCE MAIN CONSTRUCTION.
2. ALL FORCE MAIN CONSTRUCTION AND MATERIALS TO BE PRIVATELY OWNED AND MAINTAINED.
3. PIPE LENGTHS SHOWN IN REPRESENT SCALED DISTANCES BETWEEN FITTINGS OF BRANCHES AND MAINS.
4. DEFLECTIONS AT PIPE JOINTS SHALL NOT EXCEED THOSE RECOMMENDED BY THE PIPE MANUFACTURER.
5. VALVES SHALL BE EQUIPPED WITH AN ADJUSTABLE CAST IRON VALVE BOX WITH COVER, WITH THREADED EXTENSIONS WHERE NEEDED, UNLESS OTHERWISE NOTED.
6. ALL PVC FORCE MAIN SHALL BE AS SPECIFIED IN THE CONTRACT DOCUMENTS, MARKED WITH THE SEAL OF APPROVAL OF THE NATIONAL SANITATION FOUNDATION (NSF).
7. ALL NON-METALLIC FORCE MAINS SHALL BE INSTALLED WITH A CONTINUOUS, INSULATED 14 GAUGE COPPER WIRE INSTALLED DIRECTLY ON TOP OF THE PIPE FOR LOCATION PURPOSES. SEE STANDARD DRAWINGS. IN ADDITION, ALL PVC FORCE MAINS SHALL BE EITHER A SOLID GREEN COLOR OR WHITE WITH GREEN LETTERING. ALL LETTERING SHALL APPEAR LEGIBLY ON PIPE AND SHALL RUN THE ENTIRE LENGTH OF THE PIPE. LETTERING SHALL READ AS IS ACCEPTABLE FOR THE INTENDED USE.
8. HYDROSTATIC & LEAKAGE TESTING OF THE FORCE MAIN SHALL BE DONE IN ACCORDANCE WITH THE AWWA STANDARDS. HYDROSTATIC TESTING TO BE DONE IN ACCORDANCE WITH AWWA C-600.
9. PIPE MATERIALS:
   PVC - SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C900, LATEST EDITION. THE PVC SHALL HAVE A MINIMUM WORKING PRESSURE OF 100 PSI AND SHALL HAVE A DIMENSION RATIO (DR) OF 18 UNLESS OTHERWISE NOTED. PIPE SHALL BE THE SAME O.D. AS DUCTILE IRON PIPE. PVC JOINT - SHALL BE IN ACCORDANCE WITH ASTM D3139. DUCTILE IRON JOINT - SHALL BE IN ACCORDANCE WITH ANSI A21.11 AND AWWA C111.
10. AIR RELEASE VALVES SHALL BE REQUIRED AT ALL HIGH POINTS IN THE PROPOSED FORCE MAIN, AS SHOWN ON PLANS. HIGH POINTS IN THE FORCE MAIN ARE DEFINED AS A CHANGE IN ELEVATION TWICE THE DIAMETER OF THE PIPE.
11. ALL FORCE MAINS TO BE CONSTRUCTED WITH A MINIMUM OF 3' FEET OF COVER.
12. TESTING OF THE SEWAGE COLLECTION SYSTEM IS AS FOLLOWS:
    HYDRO-STATIC TESTS CONSISTING OF A HYDROSTATIC PRESSURE TEST AND HYDROSTATIC LEAKAGE TEST SHALL BE CONDUCTED ON ALL NEWLY INSTALLED SEWER FORCE MAIN SYSTEM PRESSURE PIPES AND APPURTENANCES IN ACCORDANCE WITH AWWA C600 OR M23 AS APPLICABLE. THE PRESSURE SHALL BE 150 PSI FOR TWO (2) HOURS.

FIRE DEPARTMENT

1. ALL STRUCTURES SHALL BE CONSTRUCTED UNDER THE SIXTH EDITION OF THE FLORIDA FIRE PREVENTION CODE (2015 EDITION OF NFPA 1 AND NFPA 101).
2. PER ***MARION COUNTY*** CRITERIA:
   FIRE HYDRANTS MUST BE LOCATED SO AS NOT TO REQUIRE THE LAYING OF MORE THAN FOUR-HUNDRED (400) FEET OF HOSE CONNECTED TO SUCH HYDRANT, ALONG THE NEAREST PUBLIC RIGHT-OF-WAY, TO THE CENTER OF ANY BUILDABLE LOT OR PARCEL IN THE DEVELOPMENT.
3. ANY NEW HYDRANTS MUST BE ABLE TO SUPPLY 1000 G.P.M. OF WATER AT 20 P.S.I. AT ANY TIME OF THE DAY. ANY NEW HYDRANTS SHALL BE TESTED BY THE CONTRACTOR IN THE PRESENCE OF THE FIRE DEPARTMENT PRIOR TO APPROVAL OF THE FIRE HYDRANTS BY THE FIRE DEPARTMENT. (18.3, 2015 EDITION OF NFPA 1 IN THE FLORIDA FIRE PREVENTION CODE SIXTH EDITION)
4. EACH NEW FIRE HYDRANT SHALL BE FLOWED AND THE CAPS AND BONNETS PAINTED ACCORDING TO THE FLOW RATES OBTAINED, ALL WITNESSED BY MCFR FIRE PREVENTION. ALL FIRE HYDRANTS SUPPLIED BY THE COUNTY WATER SHALL BE PAINTED RED. HYDRANTS ON THE PRIVATE SYSTEM SHALL BE PAINTED YELLOW.
5. WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK. (16.4.3.1.3, 2015 EDITION OF NFPA 1 IN THE FLORIDA FIRE PREVENTION CODE SIXTH EDITION)
6. THE ACCESS ROADS SHALL REMAIN CLEAR OF VEHICULAR OBSTRUCTIONS TO ALLOW ACCESS OF FIRE DEPARTMENT UNITS WHILE THE BUILDINGS ARE BEING CONSTRUCTED. (16.4, 2015 EDITION OF NFPA 1 IN THE FLORIDA FIRE PREVENTION CODE SIXTH EDITION)
7. IF LAND CLEARING OPERATIONS REQUIRE BURNING, A BURN PERMIT MUST BE OBTAINED FROM THE DIVISION OF FORESTRY PRIOR TO BURNING ANY MATERIAL.
8. EACH FIRE DEPARTMENT CONNECTION (FDC) SHALL CONTAIN A SIGN THAT INDICATES FDC AND THE BUILDING IT PROTECTS. SIGN SHALL BE WHITE WITH RED LETTERS OR RED WITH WHITE LETTERS AND BE ON A FREE STANDING POST BEHIND THE FDC.
9. ANY BUILDING IN EXCESS OF 20,000 SQUARE FEET SHALL HAVE THE BUILDING TESTED FOR MINIMUM RADIO SIGNAL STRENGTH. IF UNABLE TO OBTAIN, THEN MUST PROVIDE FIRE DEPARTMENT PUBLIC SAFETY ENHANCEMENTS TO THE RAIDO SYSTEM.
10. FIRE LANES AND NO PARKING SIGNS SHALL BE INSTALLED ACCORDING TO NFPA 1, CHAPTER 18.
11. FIRE HYDRANTS SHALL BE SPACED NO MORE THAN 400 FEET FROM THE CLOSEST POINT OF THE STRUCTURE USING THE FIRE DEPARTMENT ACCESS ROAD. PER NFPA 1 CHAPTER 18.
12. MARION COUNTY DOES NOT ISSUE FIRE BURN PERMITS. THE FLORIDA FOREST SERVICES ISSUE ALL PERMITS..

REUSE NOTES

1. ALL IRRIGATION, REUSE AND EFFLUENT REUSE PIPING TO BE PRIVATELY OWNED AND MAINTAINED SHALL BE A SOLID PURPLE COLOR.
2. REUSE AND EFFLUENT REUSE MAINS SHALL BE PVC CONFORMING TO AWWA C-900, DR 18 FOR PIPE SIZES 4"-12". pipes 14" & LARGER SHALL BE AWWA C-905, DR 18. ALL COUPLINGS, CLEANING COMPOUNDS, SOLVENTS, LUBRICANTS, AND PIPE PREPARATION, FOR LAYING SHALL BE IN ACCORDANCE WITH THE PIPE MANUFACTURERS LATEST RECOMMENDATIONS.
3. DEPTH OF REUSE AND EFFLUENT REUSE LINES TO BE 36" BELOW FINISHED GRADE.
4. REUSE AND EFFLUENT REUSE MAINS TO BE LOCATED 5' FROM BACK OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
5. ALL REUSE AND EFFLUENT REUSE MAINS UNDER PAVEMENT SHALL BE DUCTILE IRON PIPE AND SHALL EXTEND 5' BEYOND THE EDGE OF PAVEMENT OR BACK OF CURB.
6. ALL IRRIGATION SLEEVING UNDER PAVEMENT SHALL EXTEND 5' BEYOND THE EDGE OF PAVEMENT OR BACK OF CURB.

EROSION CONTROL NOTES

1. DURING CONSTRUCTION, THE CONTRACTORS SHALL TAKE ALL REASONABLE MEASURES TO INSURE AGAINST POLLUTING, SILTING OR DISTURBING TO SUCH AN EXTENT AS TO CAUSE AN INCREASE IN TURBIDITY TO THE EXISTING SURFACE WATERS. SUCH MEASURES SHALL BE APPROVED BY THE PROJECT ENGINEER AND MAY INCLUDE, BUT NOT LIMITED TO, CONSTRUCTION OF TEMPORARY EROSION CONTROL STRUCTURES SUCH AS SEDIMENT BASINS, SEDIMENT CHECKS, OR SILT BARRIERS.
2. CONTRACTOR IS RESPONSIBLE TO COMPLY WITH ALL EROSION CONTROL MEASURES AS SHOWN ON THE EROSION CONTROL PLAN.
3. SODDING OF DETENTION PONDS SHOULD BE ACCOMPLISHED WITHIN 14 DAYS OF POND GRADING TO MINIMIZE EROSION POTENTIAL.
4. AT A MINIMUM, THE RETENTION/DETENTION STORAGE AREA MUST BE EXCAVATED WITHIN ONE FOOT PRIOR TO BUILDING CONSTRUCTION OR PLACEMENT OF IMPERVIOUS SURFACE WITHIN THE AREA TO BE SERVED BY THOSE FACILITIES. TO PREVENT REDUCTION IN STORAGE VOLUME AND PERCOLATION RATES. ALL ACCUMULATED SEDIMENT MUST BE REMOVED FROM THE STORAGE AREA PRIOR TO FINAL GRADING AND STABILIZATION.
5. IF DURING CONSTRUCTION, THE PROPOSED EROSION SYSTEM DOES NOT PERFORM SATISFACTORILY, ALTERNATIVES AND ADDITIONAL METHODS OF PROTECTION SHALL BE IMPLEMENTED BY THE CONTRACTOR IN ORDER TO COMPLY WITH ***S.W.F.W.M.D.*** AND ***MARION COUNTY*** EROSION CONTROL COSTS INCLUDING ANY COSTS ASSOCIATED WITH COMPLIANCE ISSUES AND ENFORCEMENT ACTIONS.
6. A 2' STRIP OF SOD SHALL BE PLACED BEHIND BACK OF CURB.
7. ALL SODDED AND/OR SEEDED AREAS MUST BE WATERED AS NECESSARY DURING CONSTRUCTION AND 2 MONTHS AFTER COMPLETION OF CONSTRUCTION IN ORDER TO ENSURE STABILIZATION AND SURVIVAL.

LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314

OTHER PIPE	HORIZONTAL SEPARATION	CROSSINGS (1)	JOINT SPACING @ CROSSINGS (FULL JOINT CENTERED)
STORM SEWER, STORMWATER FORCE MAIN, RECLAIMED WATER (2)	Water Main; 3 ft. minimum	Water Main; 12 inches is the minimum, except for storm sewer, then 6 inches is the minimum and 12 inches is preferred	ALTERNATE 3 FT. MINIMUM; Water Main
VACUUM SANITARY SEWER	Water Main; 10 ft. preferred 3 ft. minimum	Water Main; 12 inches is preferred 6 inches minimum	ALTERNATE 3 FT. MINIMUM; Water Main
GRAVITY OR PRESSURE SANITARY SEWER, SANITARY SEWER FORCE MAIN, RECLAIMED WATER (2)	Water Main; 10 ft. preferred 6 ft. minimum (3)	Water Main; 12 inches is the minimum, except for gravity sewer, then 6 inches is the minimum and 12 inches is preferred	ALTERNATE 6 FT. MINIMUM; Water Main
ON-SITE SEWAGE TREATMENT & DISPOSAL SYSTEM	10 ft. minimum	—	—

1. WATER MAIN SHOULD CROSS ABOVE OTHER PIPE. WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MINIMUM SEPARATION IS 12 INCHES.
2. RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
3. 3 FT. FOR GRAVITY SANITARY SEWER WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF THE GRAVITY SANITARY SEWER.
4. RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

Disclaimer - This document is provided for your convenience only. Please refer to F.A.C. Rule 62-555.314 for additional construction requirements.

AS-BUILT NOTES

1. THE CONTRACTOR SHALL SUBMIT A CERTIFIED SET OF RECORD DRAWINGS TO THE ENGINEER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING INFORMATION ON THE APPROVED PLANS CONCURRENTLY WITH CONSTRUCTION PROGRESS. RECORD DRAWINGS SUBMITTED TO THE ENGINEER AS PART OF THE PROJECT ACCEPTANCE SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS.
   A. DRAWINGS SHALL BE LEGIBLY MARKED TO RECORD ACTUAL CONSTRUCTION.
   B. DRAWINGS SHALL SHOW ACTUAL LOCATION OF ALL UNDERGROUND AND ABOVE GROUND STORM DRAINAGE, WATER, REUSE AND WASTEWATER PIPING AND RELATED APPURTENANCES. ALL PIPING LOCATIONS INCLUDING HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES AND APPURTENANCES SHALL BE CLEARLY SHOWN AND REFERENCED TO PERMANENT SURFACE IMPROVEMENTS. DRAWINGS SHALL ALSO SHOW ACTUAL INSTALLED PIPE MATERIAL, CLASS, ETC.
   C. DRAWINGS SHALL CLEARLY SHOW ALL FIELD CHANGES OF DIMENSION AND DETAIL INCLUDING CHANGES MADE BY FIELD ORDER OR BY CHANGE ORDER.
   D. DRAWINGS SHALL CLEARLY SHOW ALL DETAILS NOT ON ORIGINAL CONTRACT DRAWINGS, BUT CONSTRUCTED IN THE FIELD. ALL EQUIPMENT AND PIPING RELOCATION SHALL BE CLEARLY SHOWN.
   E. LOCATION OF ALL INLETS AND MANHOLES, HYDRANTS, VALVES AND VALVE BOXES SHALL BE SHOWN. ALL VALVES SHALL BE REFERENCED FROM AT LEAST TWO PREFERABLY THREE PERMANENT POINTS.
   F. DIMENSIONS BETWEEN ALL INLETS AND MANHOLES SHALL BE VERIFIED AND SHOWN. THE INVERTS AND GRADE ELEVATIONS OF ALL INLETS, CONTROL STRUCTURES AND MANHOLES SHALL BE SHOWN.
   G. CONTRACTOR SHALL PROVIDE AS-BUILT SURVEY FOR POND GRADING. SPOT ELEVATIONS SHALL BE TAKEN AT TOP OF BANK, POND BOTTOM, AND ALL GRADE BREAKS AT 50' INTERVALS.
   H. DRAWINGS SHALL CLEARLY INDICATE VERTICAL AND HORIZONTAL SEPARATION BETWEEN WATER MAIN AND STORM DRAINAGE/SANITARY SEWER/RECLAIM WATER MAINS AT POINTS OF CROSSING IN ACCORDANCE WITH FDEP CRITERIA.
   I. WHERE THE WATER MAIN CROSSES OTHER UTILITIES (STORM, GRAVITY SEWER, FORCE MAIN AND RECLAIMED WATER), THE CERTIFIED AS-BUILT DRAWINGS SHALL CLEARLY INDICATE THE CONSTRUCTED ELEVATIONS IN SUCH A WAY THAT THE VERTICAL SEPARATION BETWEEN THE WATER MAIN AND OTHER UTILITIES MAY BE VERIFIED BY THE ENGINEER. FAILURE TO PROVIDE THIS INFORMATION WILL RESULT IN THE CONTRACTOR EXCAVATING AND SURVEYING THE UTILITIES AT NO ADDITIONAL COST TO THE OWNER.
   J. WHERE THE WATER MAIN CROSSES OTHER UTILITIES (STORM, GRAVITY SEWER, FORCE MAIN AND RECLAIMED WATER), THE CERTIFIED AS-BUILT DRAWINGS SHALL CLEARLY INDICATED THE LOCATIONS OF PIPE JOINTS IN SUCH A MANNER AS TO DEMONSTRATE THE PIPE IS CENTERED AT ALL THE CROSSING. FAILURE TO PROVIDE THIS INFORMATION WILL RESULT IN THE CONTRACTOR EXCAVATING AND SURVEYING THE UTILITIES AT NO ADDITIONAL COST TO THE OWNER.
2. EACH SHEET OF THE PLANS SHALL BE SIGNED, SEALED AND DATED BY REGISTERED SURVEYOR WITH A NOTE READING "THESE AS-BUILT DRAWINGS ACCURATELY DEPICT THE ACTUAL IMPROVEMENTS AS CONSTRUCTED".
3. AUTOCAD AS-BUILT LAYERS WILL BE REQUIRED TO BE FORMATTED WITH THE FOLLOWING LAYERS:

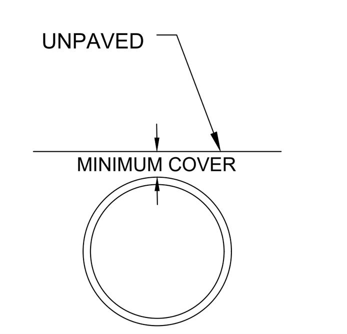
WATER

- SYSTEM VALVES (MAIN VALVES - PLUG, etc...)
- CONTROL VALVES (ARV's, PRV's, etc...)
- FITTINGS
- HYDRANTS
- WATER SERVICE (SIZES: 3/4", 1', 1-1/2", 2', etc.../MATERIAL, etc...)
- WATER MAIN (SIZES: 3/4", 1', 1-1/2", 2", etc.../MATERIAL, etc...)

WASTEWATER

- CLEAN OUTS
- SYSTEM VALVES (MAIN VALVES - PLUG, etc...)
- CONTROL VALVES (ARV's, PRV's, etc...)
- FITTINGS
- MANHOLES (INVERT ELEVATIONS, RIM ELEVATIONS, etc...)
- SEWER LATERALS (SIZES: 3/4", 1', 1-1/2", 2", etc.../MATERIAL, etc...)
- GRAVITY SEWER MAIN (SIZES: 3/4", 1', 1-1/2", 2", etc.../MATERIAL, etc...)
- FORCE MAINS (SIZES: 3/4", 1', 1-1/2", 2", etc.../MATERIAL, etc...)

TABLE 2.0 - STORM PIPE COVER (UNPAVED)



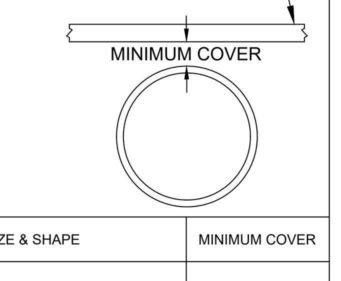
PIPE TYPE/SIZE & SHAPE	COMMERCIAL	NON-COMMERCIAL
CONCRETE *		
ROUND & ELLIPTICAL	12"	3"
CORRUGATED STEEL		
12" - 30" ROUND	18" [15"]	12" [12"]
36"- 48" ROUND	18" (12") [15"]	12" (12") [12"]
54" - 72" ROUND	18" (12") [15"]	15" (12") [12"]
78" - 96" ROUND	(18") [27"]	(12") [12"]
102" & LARGER ROUND	24" [33"]	18" [21"]
15" - 30" ARCH EQUIVALENT	18" [18"]	12" [12"]
36" - 48" ARCH EQUIVALENT	24" (12") [21"]	18" (12") [15"]
54" - 72" ARCH EQUIVALENT	30" (18") [24"]	24" (12") [18"]
78" - 96" ARCH EQUIVALENT	(24") [27"]	(18") [21"]
102" & LARGER ARCH EQUIVALENT	(30")	(24")
CORRUGATED ALUMINUM		
12" - 24" ROUND	21" [21"]	15" [15"]
30" - 48" ROUND	24" (18") [21"]	18" (12") [15"]
54" - 72" ROUND	30" (24") [27"]	24" (18") [21"]
78" - 102" ROUND	(30") [33"]	(24") [27"]
108" & LARGER ROUND	36"	30"
15" - 24" ARCH EQUIVALENT	27" [24"]	24" [21"]
30" - 48" ARCH EQUIVALENT	33" (21") [27"]	27" (15") [21"]
54" - 72" ARCH EQUIVALENT	36" (24") [30"]	30" (18") [24"]
78" - 90" ARCH EQUIVALENT	(30") [36"]	(24") [30"]
96" - 102" ARCH EQUIVALENT	(36")	(30")
CORRUGATED POLYETHYLENE		
15" - 48" ROUND	21"	15"
POLYVINYL CHLORIDE		
15" - 48" ROUND	21"	15"

VALUES SHOWN IN PARENTHESIS ( ) ARE FOR 3" X 1" CORRUGATIONS WHICH MUST BE SPECIFIED TO UTILIZE THE LESSER COVER.
VALUES SHOWN IN BRACKETS [ ] APPLY TO TYPE 1-R (SPIRAL RIB) PIPE WHICH MUST BE SPECIFIED TO UTILIZE THE LESSER COVER.
*FOR PIPE CLASS "S" WITH DIAMETERS OF 12" TO 30", THE MINIMUM HEIGHT OF FILL IS 3'.

CLEARANCES

1. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING 90 DAYS PRIOR TO THE ANTICIPATED COMPLETION OF CONSTRUCTION AND/OR CERTIFICATION OF COMPLETION APPROVAL DATE.
2. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH SIGNED AND SEALED AS-BUILTS OF ALL UTILITY IMPROVEMENTS, PRESSURE TESTS, BACTERIOLOGICAL TESTS, AND ANY OTHER INFORMATION NECESSARY FOR THE CLEARANCE APPROVALS WITH ***F.D.E.P.*** AND THE LOCAL UTILITY PROVIDER. THIS INFORMATION SHALL BE PROVIDED TO THE ENGINEER 60 DAYS PRIOR TO THE ANTICIPATED COMPLETION OF CONSTRUCTION AND/OR CERTIFICATION OF COMPLETION APPROVAL DATE.
3. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH SIGNED AND SEALED AS-BUILTS OF ALL STORM WATER SYSTEM IMPROVEMENTS AND ANY OTHER INFORMATION NECESSARY FOR THE CLEARANCE APPROVALS WITH ***S.W.F.W.M.D.*** AND THE LOCAL UTILITY PROVIDER. THIS INFORMATION SHALL BE PROVIDED TO THE ENGINEER 60 DAYS PRIOR TO THE ANTICIPATED COMPLETION OF CONSTRUCTION AND/OR CERTIFICATION OF COMPLETION APPROVAL DATE.

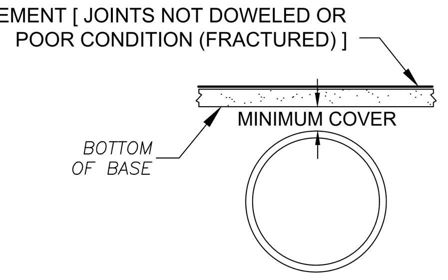
TABLE 3.0 -STORM PIPE COVER (RIGID PAVEMENT)



PIPE TYPE/SIZE & SHAPE	MINIMUM COVER
CONCRETE *	
ROUND & ELLIPTICAL	9"
CORRUGATED STEEL *	
15"-72" ROUND & ARCH EQUIVALENT	9"
78" & LARGER ROUND AND ARCH EQUIVALENT	15"
CORRUGATED ALUMINUM	
15" - 72" ROUND AND ARCH EQUIVALENT	9"
78" - 102" ROUND AND ARCH EQUIVALENT	15"
108" & LARGER ROUND	18"
CORRUGATED POLYETHYLENE	
15" - 48" ROUND	9"
POLYVINYL CHLORIDE	
15" - 48" ROUND	9"

*FOR PIPE CLASS "S" WITH DIAMETERS OF 12" TO 30", THE MINIMUM HEIGHT OF FILL IS 3'.

TABLE 4.0 -STORM PIPE COVER (FLEXIBLE PAVEMENT)



PIPE TYPE/SIZE & SHAPE	MINIMUM COVER
CONCRETE *	
ROUND & ELLIPTICAL	7"
CORRUGATED STEEL *	
12"-30" ROUND	12" [12"]
36"-48" ROUND	18" (12") [15"]
54"-72" ROUND	21" (15") [18"]
78"-96" ROUND	(18") [27"]
102 & LARGER ROUND	(24") [33"]
15"-30" ARCH EQUIVALENT	18" [18"]
36"-48" ARCH EQUIVALENT	24" (12") [18"]
54"-72" ARCH EQUIVALENT	27" (15") [24"]
78"-96" ARCH EQUIVALENT	(18") [30"]
102" & LARGER ARCH EQUIVALENT	(24")
CORRUGATED ALUMINUM	
12"-24" ROUND	15" [12"]
30"-48" ROUND	18" (12") [18"]
54"-72" ROUND	24" (18") [24"]
78"-102" ROUND	(24") [30"]
108" & LARGER	(30")
15"-24" ARCH EQUIVALENT	24" [21"]
30"-48" ARCH EQUIVALENT	27" (15") [24"]
54"-72" ARCH EQUIVALENT	30" (18") [27"]
78"-90" ARCH EQUIVALENT	(24") [30"]
96"-102" ARCH EQUIVALENT	(30")
CORRUGATED POLYETHYLENE	
15" - 30" ROUND	15"
POLYVINYL CHLORIDE	
15" - 30" ROUND	15"

VALUES SHOWN IN PARENTHESIS ( ) ARE FOR 3" X 1" CORRUGATIONS WHICH MUST BE SPECIFIED TO UTILIZE THE LESSER COVER.
VALUES SHOWN IN BRACKETS [ ] APPLY TO TYPE 1-R (SPIRAL RIB) PIPE WHICH MUST BE SPECIFIED TO UTILIZE THE LESSER COVER.
*FOR PIPE CLASS "S" WITH DIAMETERS OF 12" TO 30", THE MINIMUM HEIGHT OF FILL IS 3'.

Tillman & Associates
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CIVIL ENGINEERING - PLANNING - LANDSCAPE ARCHITECTURE - ENVIRONMENTAL
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Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #26756

REVISIONS

DATE

MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3, 4 & 5
MARION COUNTY, FLORIDA

GENERAL NOTES

DATE 02/15/21
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

SHT. 02.01

NOT VALID UNLESS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER

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REVISIONS

DATE

MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3, 4 & 5
MARION COUNTY, FLORIDA

AERIAL PHOTOGRAPH

DATE 02/13/21
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

SHT. 03.01

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LEGEND

- 05.01 SHEET NO. - GEOMETRY PLANS
- 06.02 SHEET NO. - DRAINAGE RETENTION AREA DETAIL
- 07.01 SHEET NO. - SITE GRADING PLANS
- 08.01 SHEET NO. - UTILITY PLANS

100′ 50′ 0 100′ 200′

SCALE IN FEET
1″ = 100′

153

152

151

150

GOLDEN OCALA EQUESTRIAN ESTATES PHASE 3

GOLDEN OCALA EQUESTRIAN ESTATES PHASE 2

FUTURE CROSS COUNTRY COURSE

DRAINAGE RETENTION AREA SF-2

06.02

08.03
07.03
05.03

08.04
07.04
05.04

MATCH LINE (TYP.)

FLEX ARENA #5

FLEX ARENA #4

FLEX ARENA #3

08.01
07.01
05.01

05.02
07.02
08.02

NW 92nd Ave Rd

NW 87th Ct Rd

GOLDEN OCALA WORLD EQUESTRIAN CENTER

NW 18th PL

MATCH LINE (TYP.)

FOR CONTINUATION, SEE VIEW TO RIGHT

07.05
08.04

FLEX BARN 2

NW 17th Ln

DRAINAGE RETENTION AREA 8A

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REVISIONS

DATE

MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3, 4 & 5
MARION COUNTY, FLORIDA

OVERALL SITE PLAN & KEY MAP

DATE 02/13/21
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

SHT. 04.01

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SITE DATA

ZONING	=	PUD
LAND USE	=	MDR
PROPOSED USE	=	EQUESTRIAN EVENTS CENTER FLEX SPACE (3 ARENAS)
F.A.R. RATIO (442,419/43,560)/50.60 = 0.20	=	PROPOSED 0.20
PROPOSED BUILDING AREA	=	442,419 Sq.Ft. (138,703 x 3) + (8770 x 3 Kitchen Add's)
PROPOSED BUILDING HEIGHT	=	53 FEET (MAX. ALLOWED 75 FEET)
PROJECT BOUNDARY AREA	=	44.28 Ac (1,928,790 Sq.Ft.)
OPEN SPACE (40.8%)	=	18.07 Ac (787,145 Sq.Ft.)
IMPERVIOUS AREA - ONSITE (59.2%)	=	26.21 Ac (1,141,645 Sq.Ft.)
IMPERVIOUS AREA - OFFSITE (NW 18th LN)	=	0.625 Ac (27,231 Sq.Ft.)
WATER SUPPLY (PUBLIC)	=	MARION COUNTY UTILITIES
SEWAGE SYSTEM (LIFT STA TO W.E.C. FM)	=	MARION COUNTY UTILITIES
MIN. FRONT BUILDING SETBACK (FB3-S)	=	124' FB3 (R/W NW 18th PL)
MIN. REAR BUILDING SETBACK (FB5-N)	=	111.74' FB5 (TO PROJECT BOUNDARY-N)
MIN. SIDE BUILDING SETBACK (FB3/4/5-W) MIN. SIDE BUILDING SETBACK (FB3/4/5-E)	=	321.17' FB3/FB4/FB5 136.78' FB3, 284.57' FB4, 447.38' FB5 (W.E.C. Orig. Boundary)
MIN. PARKING REQUIRED (See Table)	=	875 SPACES (3500/4)
MIN. HANDICAP REQUIRED	=	18 SPACES
PROPOSED PARKING	=	780 SPACES + 30 HANDICAP SPACES + 67 GRASS SPACES
	=	877 TOTAL SPACES
PROPOSED LOADING ZONE	=	LOADING DOCK AND LOADING AREA (3)
PROPOSED TRAILER PARKING	=	27 TRAILER PARKING SPACES
PROPOSED PAVED PARKING & DRIVES	=	12.59 Ac (Onsite=548,630 Sq.Ft.)
PROPOSED CONC. S/W, CURB, DRIVES, PADS	=	3.29 Ac (Onsite=143,446 Sq.Ft.)
PROPOSED DRA TOP OF BANK AREA (EL=77)	=	6.21 Ac (270,619 Sq.Ft.)

NOTES:
1. Riding Arena/Event Center Seating Totals for Indoor Use:
   Flex Barn 3: 1166 seats (Max.) - Horse Stalls = 500 (Max.)
   Flex Barn 4: 1166 seats (Max.) - Horse Stalls = 0 (Footing/No Stalls)
   Flex Barn 5: 1166 seats (Max.) - Horse Stalls = 500 (Max.)
2. Max allowed building height for fire fighting apparatus = 65-feet from parking grade to roof deck. Max overall height to top of cupola, spire, etc. = 75-feet.
3. Florida Building Code Construction Type = IIB.
4. Number of Building Stories = 1.
5. Sidewalks shall be firm, stable, and slip resistant. Finish shall be by brooming. Sidewalks construction shall be per FDOT index 304 and 310. All accessible routes shall meet A.D.A. standards.
6. Vertical surface discontinuities shall be 0.5-inches maximum. Discontinuities between 0.25-inches and 0.5-inches shall be beveled with a slope not steeper than 50%. The bevel shall be applied across the entire vertical surface discontinuity.
7. The maximum cross-slope on all accessible routes shall be 2%.
8. The maximum slope in the direction of travel along an accessible route shall be less than 5%
9. All accessible exterior doors shall have a concrete pad per Florida Building Code with a maximum cross-slope of 2% in all directions.
10. The minimum accessible sidewalk width shall be 6-ft.
11. Changes in direction along an accessible route shall meet A.D.A. standards.
12. Ramps with handrails along accessible routes shall meet A.D.A. standards.

DRA SF-2

DRA SF-2 (SEE SHEET 06.02)

FUTURE CROSS COUNTRY COURSE

FLEX BARN #5 (138,703 SQ.FT.)

CHILLER YARD

CHILLER YARD ACCESS DRIVE

LIFT STATION

GENERATOR PAD

TRANSFORMER

TRASH COMPACTOR

LOADING DOCK

(RAMP)

(KITCHEN)

A/C UNITS

MAIN ENTRY DOUBLE DOORS

HANDICAP PARKING SIGNAGE AND STRIPING PER MARION COUNTY STANDARDS (TYP.)

PROJECT BOUNDARY (TYP.)

CAUTION: WATCH FOR PEDESTRIANS SIGN

NOTE:
EQUESTRIAN & PEDESTRIAN TRAILS TO BE FIELD ADJUSTED TO AVOID TREES.

SCALE IN FEET
1"=40'

LEGEND:

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE PAVEMENT

MATCHLINE SHEET 05.03

MATCHLINE SHEET 05.04

MATCHLINE SHEET 05.02

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REVISIONS

DATE:

MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3, 4 & 5
MARION COUNTY, FLORIDA

GEOMETRY PLAN

DATE 02/12/21
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

SHT. 05.01

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S:\Marion County\Golden Ocala Equestrian Center (2020) - Flex Barns 3\CIVIL\CONSTRUCTION\05 Geometry Plan.dwg, 2/12/2021 5:45:32 PM, DWG To PDF.pc3

MATCHLINE SHEET 05.01

MATCHLINE SHEET 05.03

MATCHLINE SHEET 05.04

FLEX BARN #4
(138,703 SQ.FT.)
550.33' × 250.33'

FLEX BARN #3
(138,703 SQ.FT.)
550.33' × 250.33'

(KITCHEN)

PROPOSED ASPHALT

GOLDEN OCALA WORLD EQUESTRIAN CENTER FLEX BARNS

NW 87th Ct Rd

NW 18th PL

SCALE IN FEET
1"=40'

LEGEND:
- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE PAVEMENT

NOTE:
EQUESTRIAN & PEDESTRIAN TRAILS TO BE FIELD ADJUSTED TO AVOID TREES.

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REVISIONS

DATE:

MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3, 4 & 5
MARION COUNTY, FLORIDA

GEOMETRY PLAN

DATE 02/12/21
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

SHT. 05.02

NOT VALID UNLESS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER

S:\Marion County\Golden Ocala Equestrian Center (2020) - Flex Barns 3\CIVIL\CONSTRUCTION\05 Geometry Plan.dwg, 2/12/2021 5:46:30 PM, DWG To PDF.pc3

150

GOLDEN OCALA
EQUESTRIAN ESTATES
PHASE 3
(PERMITTED BY OTHERS)

MATCHLINE SEE BELOW RIGHT

GOLDEN OCALA
EQUESTRIAN ESTATES
PHASE 2
(PERMITTED BY OTHERS)

FUTURE CROSS
COUNTRY COURSE

NW 92nd AVE RD

NW 18th PL

DRAINAGE EASEMENT
UTILITY EASEMENT

179+00
178+00
177+00
176+00
1100+00
1101+00
1102+00
1103+00
1104+00
1105+00

N0°00'00"E 1102.69'

S0°00'00"E 680.67'

HORSE CROSSING SIGN (W11-7)

HORSE PATH (TYP.)

R5' (TYP.)

L=50.37
R=30.00

FDOT MEDIAN FLUME PER INDEX 520-010
FDOT TYPE 'F' FLARED END PER INDEX 520-001

6' TRANSITION DROP CURB TO TYPE 'F' CURB
3' TRANSITION MIAMI CURB TO DROP CURB

FUTURE 5' PAVED SHOULDER (G.O.E.E.)

HORSE CROSSING SIGN (W11-7)(24")

FUTURE PAVEMENT GOLDEN OCALA EQUESTRIAN ESTATES PHASE 2

C/L STA 1104+26.01
END PAVEMENT

R11'

MATCHLINE SEE SHEET 05.01

152

GOLDEN OCALA
EQUESTRIAN ESTATES
PHASE 3
(PERMITTED BY OTHERS)

N0°33'05"E 389.04'

HORSE CROSSING SIGN (W11-7)

REMOVABLE BOLLARDS (TYP.)

L=26.70
R=17.00

129.72'

N87°26'12"W 86.81'

HORSE CROSSING "NO PARKING STRIPING" (4" WHITE @ 45°, 6' O.C.)

HORSE CROSSING SIGN (W11-7)

90.48'

43'

N0°00'00"E 1105.69'

S0°00'00"E 389.39'

MATCHLINE SEE SHEET 05.01

NW 92nd AVE RD

GOLDEN OCALA
EQUESTRIAN ESTATES
PHASE 3
(PERMITTED BY OTHERS)

FUTURE
CROSS
COUNTRY
COURSE

MATCHLINE SEE ABOVE LEFT

40' 20' 0 40' 80'

SCALE IN FEET
1"=40'

LEGEND:

PROPOSED ASPHALT PAVEMENT

PROPOSED CONCRETE PAVEMENT

NOTE:
EQUESTRIAN & PEDESTRIAN TRAILS TO BE FIELD ADJUSTED TO AVOID TREES.

Tillman & Associates
ENGINEERING, LLC.
CIVIL ENGINEERING - PLANNING - LANDSCAPE ARCHITECTURE - ENVIRONMENTAL
1720 SE 16th Ave. Bldg 100, Ocala, FL 34471
Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #26756

REVISIONS

DATE:

MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3, 4 & 5
MARION COUNTY, FLORIDA

GEOMETRY PLAN

DATE 02/12/21
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

SHT. 05.03

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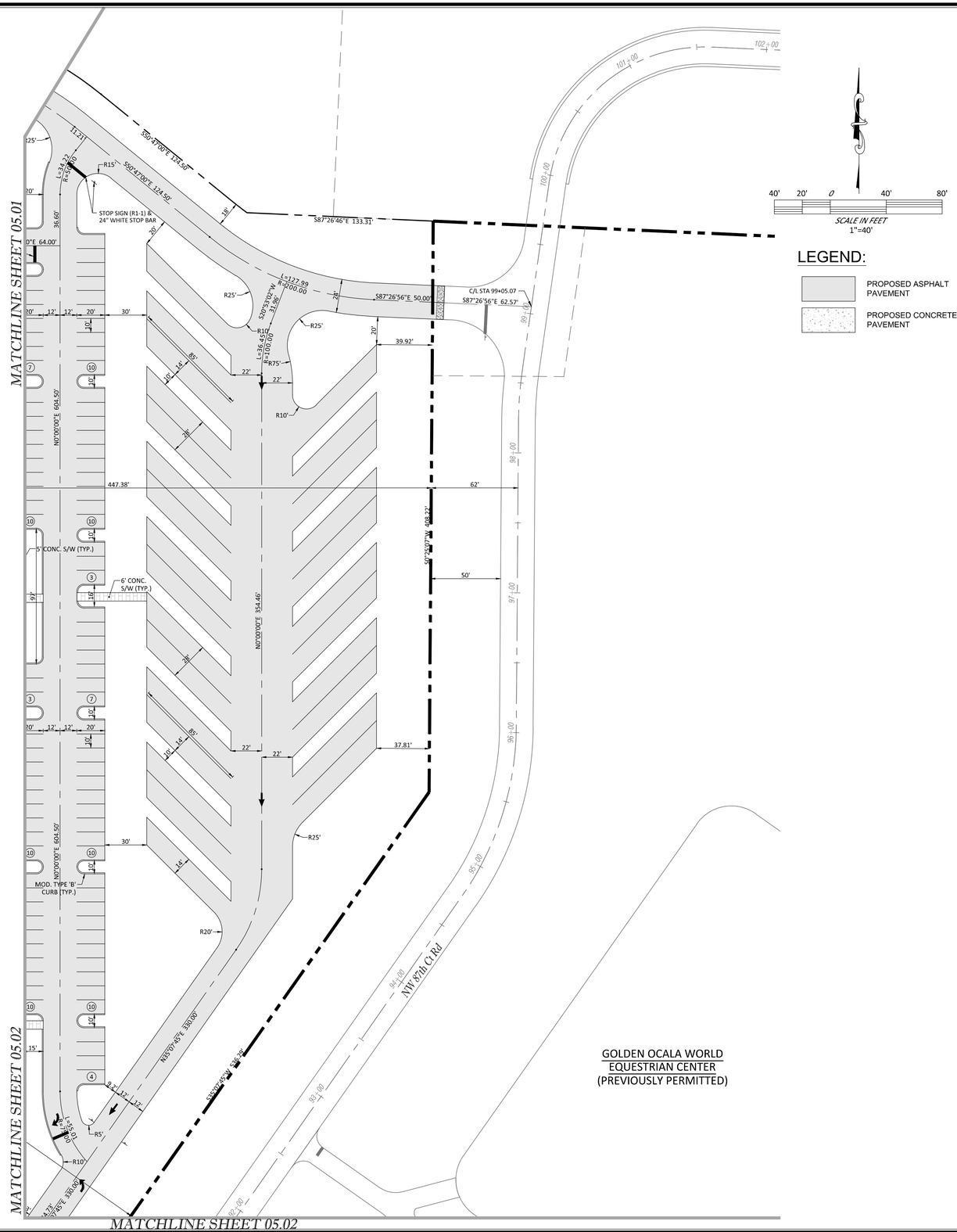
S:\Marion County\Golden Ocala Equestrian Center (2020) - Flex Barns 3\CIVIL\CONSTRUCTION\05 Geometry Plan.dwg, 2/12/2021 5:47:52 PM, DWG To PDF.pc3



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REVISIONS

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MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3, 4 & 5
MARION COUNTY, FLORIDA

GEOMETRY PLAN

DATE 02/12/21
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

SHT. 05.04

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CERTIFICATE OF AUTHORIZATION #26756

REVISIONS

DATE

MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3, 4 & 5
MARION COUNTY, FLORIDA

MASTER DRAINAGE PLAN (POST-DEV. BASIN MAP)

DATE 02/13/21
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

SHT. 06.01

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1720 SE 16th Ave. Bldg 100, Ocala, FL 34471
Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #26756

REVISIONS

DATE

N90°00'00"E 450.00'

N: 1772926.8624
E: 571145.9582

N: 1772923.7685
E: 571021.3757

N: 1772901.3360
E: 570958.2921

N: 1772859.3677
E: 570914.1278

N: 1772848.6115
E: 570909.6732

N: 1772831.2961
E: 570890.3762

N: 1772805.5134
E: 570802.2074

N: 1772797.5065
E: 570749.6668

N: 1772768.9988
E: 570715.9020

N: 1772854.0725
E: 571261.7060

S51°59'23"E 367.69'

N: 1772800.8066
E: 571319.3491

N: 1772782.6360
E: 571349.0891

N: 1772772.2782
E: 571368.7751

N90°00'00"E 235.00'

N: 1772709.1533
E: 571396.2332

N: 1772655.0680
E: 571410.8867

N: 1772635.6899
E: 571450.2909

N: 1772563.9011
E: 571494.9869

N: 1772526.8237
E: 571494.9869

N: 1772491.8237
E: 571459.9869

N: 1772545.1637
E: 570673.6867

N: 1772491.8237
E: 570717.9071

N13°35'06"E 589.04'

R275'

R300'

R335'

R200'

R230'

R55'

R35'

R45'

690.88'

443.5'

305.68'

290.81'

143.87'

822.08'

SCALE IN FEET
1"=30'

SF-2
top=76
btm=73

DRA SF-2
TOB=77.0
BOT=71.0

top=76 btm=74.5

PROJECT BOUNDARY (TYP.)

SOIL BORING (TYP.)

SB-1 SB-2 SB-3 SB-4 SB-5 SB-6 SB-7 SB-8 SB-9 SB-10 SB-20 SB-27 SB-28 SB-29 SB-50 SB-51

MAINTENANCE BERM

EXISTING DRA SF-2 CONTOURS (NOT SHOWN IN SURVEY) TO BE EXPANDED TO PROPOSED DRA CONTOUR ELEVATIONS AND SHAPE

MES w/DISSIPATOR (5:1)
OSF2-4
INV:71.00 (30"S)

MES w/DISSIPATOR (5:1)
OSF2-3
INV:70.00 (36"S)

MES w/DISSIPATOR (5:1)
OSF2-2
INV:71.00 (24"S)

MES w/DISSIPATOR (5:1)
OSF2-5
INV:69.00 (42"NE)

MES w/DISSIPATOR (5:1)
OSF2-1
INV:70.00 (42"SE)

30" RCP

36" RCP

42" RCP

42" RCP

10"Ø CHWS/R

FLEX BARN #5
(FF=79.00)

SEC 1
SEC 12

MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3, 4 & 5
MARION COUNTY, FLORIDA

DRAINAGE RETENTION AREA DETAIL

DATE 02/13/21
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

SHT. 06.02

NOT VALID UNLESS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER

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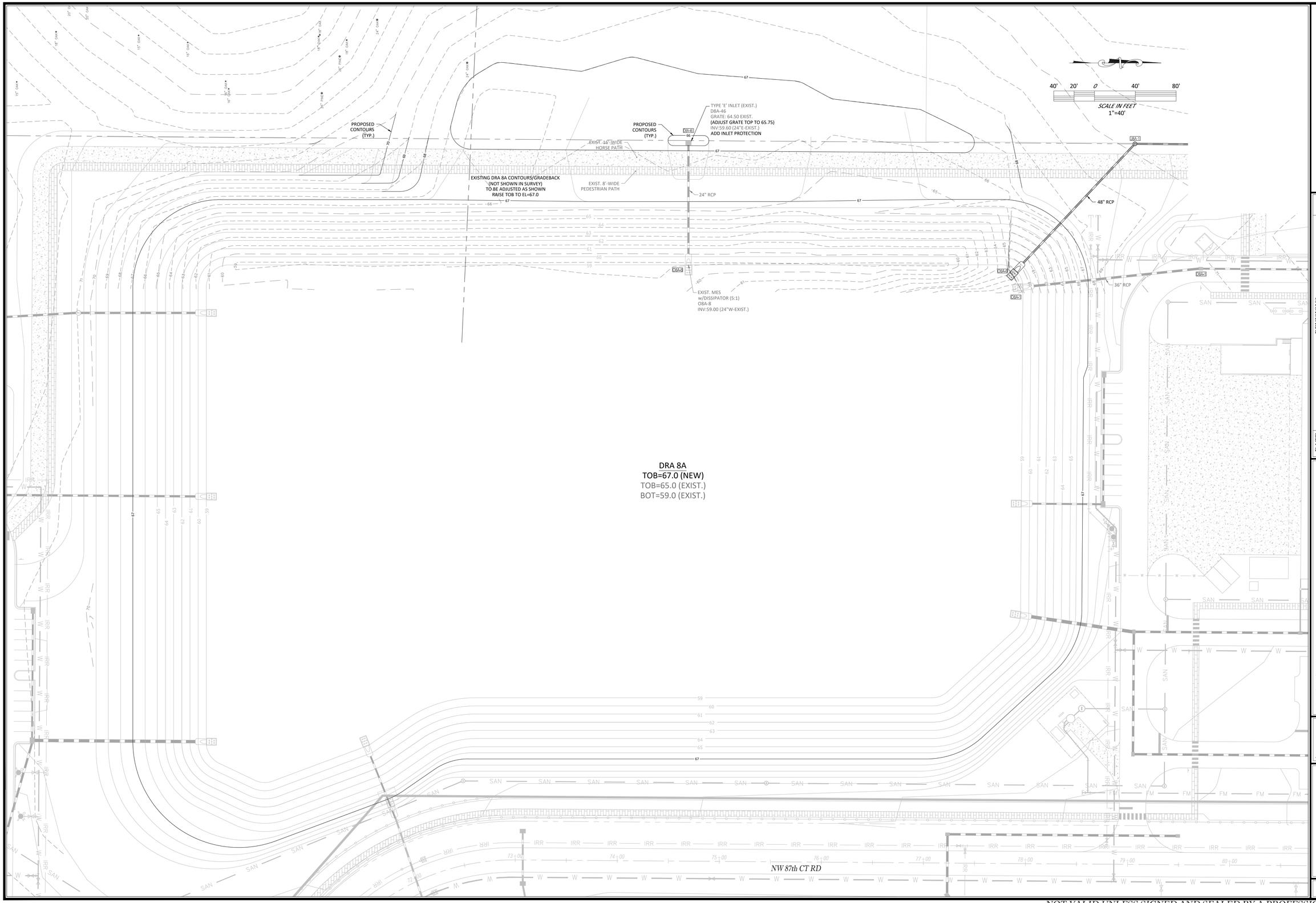

DRA 8A
TOB=67.0 (NEW)
TOB=65.0 (EXIST.)
BOT=59.0 (EXIST.)

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Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #26756

REVISIONS

DATE

MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3
MARION COUNTY, FLORIDA

DRAINAGE RETENTION AREA DETAIL

DATE 12/09/20
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

SHT. 06.03

S:\Marion County\Golden Ocala Equestrian Center (2020) - Flex Barns 3\CIVIL\CONSTRUCTION\06a DRA Detail.dwg, 02, 12/9/2020 3:16:33 PM

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*BUILDING UNDERDRAIN NOTES (DESIGNED & PERMITTED BY OTHERS):

1. STORM MANHOLE w/FOUNDATION DRAIN SUMP PUMP, LOCATED AT NW & NE BUILDING CORNERS, STRUCTURES AND PUMP DESIGNED AND PERMITTED BY OTHERS.
2. FOUNDATION UNDERDRAIN LOCATED 1-FOOT MIN. OFF OUTSIDE EDGE OF BUILDING FOOTER AND 24" MIN. BELOW BOTTOM OF FOOTER. UNDERDRAIN PIPE TO BE 4" MIN. PERFORATED PIPE WITH FILTER FABRIC SHEATHING TO A POSITIVE GRAVITY OUTFALL.
3. UNDERDRAIN PIPE TO BE ENVELOPED WITH 12" OF #57 WASHED STONE BED ON TOP AND SIDES WITH FILTER FABRIC PLACED ON THE TOP OF THE #57 STONE.
4. BACKFILLED SOILS IN COMPLIANCE WITH GEO-TECH REPORT #20-6684.16 DATED 08/21/2020, AS AMENDED.
5. SEE GEOTECHNICAL REPORT FOR DESIGN PARAMETERS.

NOTE:
EQUESTRIAN & PEDESTRIAN TRAILS TO BE FIELD ADJUSTED TO AVOID TREES.

40' 20' 0 40' 80'
SCALE IN FEET
1"=40'

DRA SF-2
TOB=77.0
BOT=71.0

SF-2
top=76
btm=73

top=76 btm=74.5

PROJECT BOUNDARY (TYP.)

STORM MANHOLE JSF2-7 RIM: 81.60 INV:69.30 (42"E) INV:69.30 (42"SW)

196 LF 42" RCP @ 0.20%

STORM MANHOLE JSF2-6 RIM: 83.50 INV:69.69 (42"W) INV:69.69 (36"S)

135 LF 42" RCP @ 0.22%

GENERATOR SLAB 82.00

TOP OF SLABS 82.00

MES w/DISSIPATOR (5:1) OSF2-5 INV:69.00 (42"NE)

18" Y.D. 12" N12 @ 0.5%

MES w/DISSIPATOR (5:1) @ OSF2-1 INV:70.00 (42"SE)

ENKAMAT SLOPE AND SWALE

TYPE 'E' INLET DSF2-7 RIM: 77.30 INV:70.85 (18"S)

STORM MANHOLE JSF2-1 RIM: 77.49 @ INV:72.49 (18"SE) INV:70.55 (36"S) INV:70.55 (36"W) INV:70.55 (18"N)

258 LF 36" RCP @ 0.20%

TYPE 'V' INLET (MOD.) DSF2-2 GRATE: 77.20 INV:73.20 (15"W) INV:70.65 (36"S) INV:70.65 (36"N)

68 LF 18" RCP @ 1.03% (REMOVE, PLUG OR GROUT EACH END)

60 LF 18" RCP @ 0.50%

STORM MANHOLE JSF2-5 (w/ECCENTRIC TOP) RIM: 79.00 INV:73.19 (18"SE) INV:70.21 (30"S) INV:70.21 (36"N)

TYPE 'V' INLET (MOD.) DSF2-6 GRATE: 80.50 INV:74.00 (18"SE) INV:74.00 (18"NW)

MES w/DISSIPATOR (5:1) OSF2-4 INV:71.00 (30"S)

MES w/DISSIPATOR (5:1) OSF2-3 INV:70.00 (36"S)

MES w/DISSIPATOR (5:1) OSF2-2 INV:71.00 (24"S)

TYPE 'V' INLET (MOD.) DSF2-15 GRATE: 77.42 INV:72.88 (18"W)

77 LF 30" RCP @ 0.30%

STORM MANHOLE JSF2-2 RIM: 78.06 INV:72.68 (18"W) INV:72.68 (18"E) INV:70.17 (36"S) INV:70.17 (36"N)

82 LF 36" RCP @ 0.21%

155 LF 18" RCP @ 0.36%

106 LF 18" RCP @ 0.30%

TYPE 'V' INLET (MOD.) DSF2-9 GRATE: 77.00 INV:73.00 (18"W)

77 LF 24" RCP @ 0.30%

91 LF 42" RCP @ 0.22%

15" N12 @ 1% MIN.

C.O. INV:73.15

C.O. INV:70.23

C.O. INV:75.00

12" N12 @ 1% MIN.

A/C UNITS

C.O. INV:73.25

C.O. INV:75.00

C.O. INV:73.75

C.O. INV:70.35

29 LF 36" RCP @ 0.34%

78 LF 18" RCP @ 5.03% (TO REMAIN)

27 LF 30" RCP @ 0.37%

12" HDPE

B-20

B-15

STORMWATER FORCEMAIN

LOADING DOCK

STORM MANHOLE* w/SUMP PUMP STORMWATER FORCEMAIN FROM LOADING DOCK PUMP

TYPE 'E' INLET GRATE: 74.64 BOTTOM: 71.64

4" PVC FLOOR DRAIN LINE INV:72.00

TYPE 'V' INLET (MOD.) DSF2-8 GRATE: 77.00 INV:72.65 (15"S) INV:72.65 (15"W) INV:71.23 (24"N)

8" ROOF DRAIN LEADER (TYP.)

HIGH POINT IN FOUNDATION DRAIN SYSTEM

DIRECTION OF FLOW FOR FOUNDATION DRAIN SYSTEM (TYP.)

4" FOUNDATION UNDERDRAIN* (TYP.)

TYPE 'V' INLET (MOD.) DSF2-1 GRATE: 77.41 INV:70.20 (36"E) INV:70.20 (42"NW)

*STORM MANHOLE w/SUMP PUMP STORMWATER FORCEMAIN

MAN DOOR (TYP.)

ROLL-UP DOOR (TYP.)

TYPE 'V' INLET (MOD.) DSF2-10 GRATE: 77.00 INV:70.37 (36"S) INV:70.37 (36"N)

134 LF 24" RCP @ 0.30%

106 LF 18" RCP @ 0.20%

128 LF 18" RCP @ 0.31%

TYPE 'V' INLET (MOD.) DSF2-17 GRATE: 77.06 INV:72.66 (18"E) INV:71.63 (24"S) INV:71.63 (24"N)

TYPE 'V' INLET (MOD.) DSF2-18 GRATE: 77.06 INV:73.06 (18"W)

KITCHEN (FF=79.00)

DIRECTION OF FLOW FOR FOUNDATION DRAIN SYSTEM (TYP.)

FLEX BARN #5
(FF=79.00)

B-19 B-18 B-17

TYPE 'V' INLET (MOD.) DSF2-3 GRATE: 77.70 INV:70.96 (24"E) INV:70.96 (30"S) INV:70.96 (36"N)

154 LF 36" RCP @ 0.20%

58 LF 24" RCP w/MAS. PLUG INV:71.16 (REMOVE)

TYPE 'V' INLET (MOD.) DSF2-27 GRATE: 77.72 INV:70.71 (30"N) INV:70.71 (30"S)

174 LF 30" RCP @ 0.31%

160 LF 30" RCP @ 0.28%

TYPE 'V' INLET (MOD.) DSF2-28 GRATE: 77.02 INV:71.19 (24"S) INV:71.19 (30"N)

TYPE 'V' INLET (MOD.) DSF2-13 GRATE: 77.66 INV:71.10 (30"E) INV:71.10 (30"W)

TYPE 'V' INLET (MOD.) DSF2-14 GRATE: 77.00 INV:73.00 (15"NE) INV:73.00 (15"SE) INV:71.70 (30"W) INV:71.70 (18"E)

3" CONDENSATE

TYPE 'V' INLET (MOD.) DSF2-5 GRATE: 77.00 INV:73.00 (15"NW) INV:73.00 (15"SW) INV:72.23 (24"E) INV:72.23 (18"W)

TYPE 'V' INLET (MOD.) DSF2-4 GRATE: 77.00 INV:71.31 (24"W) INV:71.31 (30"N)

DIRECTION OF FLOW FOR FOUNDATION DRAIN SYSTEM (TYP.)

B-21

STORM MANHOLE JSF2-9 RIM:77.79 INV:72.25 (18"S) INV:70.88 (30"E) INV:70.88 (30"N)

TYPE 'V' INLET (MOD.) DSF2-19 GRATE: 77.06 INV:72.70 (18"S) INV:72.70 (18"E) INV:72.20 (24"N)

TYPE 'V' INLET (MOD.) DSF2-21 GRATE: 77.06 INV:73.08 (18"S) INV:73.08 (18"W)

128 LF 18" RCP @ 0.30%

541 LF 18" RCP @ 0.37%

54 LF 18" RCP

TYPE 'V' INLET (MOD.) DSF2-20 GRATE: 77.06 INV:72.90 (18"N)

TYPE 'V' INLET (MOD.) DSF2-22 GRATE: 77.06 INV:73.28 (18"N)

109 LF 30" RCP @ 0.20%

200 LF 30" RCP @ 0.30%

199 LF 24" RCP @ 0.44%

3" CONDENSATE

C.O. INV:73.50

C.O. INV:75.00

12" N12 @ 1% MIN.

15" N12 @ 1% MIN.

258 LF 18" RCP @ 0.20%

MATCHLINE SHEET 07.03

MATCHLINE SHEET 07.04

MATCHLINE SHEET 07.02

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Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #26755

REVISIONS

DATE

MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3, 4 & 5
MARION COUNTY, FLORIDA

SITE GRADING PLAN

DATE 02/15/21
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

SHT. 07.01

NOT VALID UNLESS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER

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MATCHLINE SHEET 07.01

MATCHLINE SHEET 07.03

MATCHLINE SHEET 07.04

MATCHLINE SHEET 07.05

NOTE:
EQUESTRIAN & PEDESTRIAN TRAILS TO BE FIELD ADJUSTED TO AVOID TREES.

FLEX BARN #4
(FF=79.00)

FLEX BARN #3
(FF=79.00)

KITCHEN
(FF=79.00)

*BUILDING UNDERDRAIN NOTES (DESIGNED & PERMITTED BY OTHERS):

1. STORM MANHOLE w/FOUNDATION DRAIN SUMP PUMP, LOCATED AT NW & NE BUILDING CORNERS, STRUCTURES AND PUMP DESIGNED AND PERMITTED BY OTHERS.
2. FOUNDATION UNDERDRAIN LOCATED 1-FOOT MIN. OFF OUTSIDE EDGE OF BUILDING FOOTER AND 24" MIN. BELOW BOTTOM OF FOOTER. UNDERDRAIN PIPE TO BE 4" MIN. PERFORATED PIPE WITH FILTER FABRIC SHEATHING TO A POSITIVE GRAVITY OUTFALL.
3. UNDERDRAIN PIPE TO BE ENVELOPED WITH 12" OF #57 WASHED STONE BED ON TOP AND SIDES WITH FILTER FABRIC PLACED ON THE TOP OF THE #57 STONE.
4. BACKFILLED SOILS IN COMPLIANCE WITH GEO-TECH REPORT #20-6684.16 DATED 08/21/2020, AS AMENDED.
5. SEE GEOTECHNICAL REPORT FOR DESIGN PARAMETERS.

SCALE IN FEET
1"=40'

LOADING DOCK

LOADING DOCK

6' TRANSITION DROP CURB TO TYPE 'F' CURB
3' TRANSITION MIAMI CURB TO DROP CURB

MIAMI CURB (TYP.)

PROJECT BOUNDARY (TYP.)

NW 87th COURT RD

NW 18th PL

Tillman & Associates
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REVISIONS

DATE

MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3, 4 & 5
MARION COUNTY, FLORIDA

SITE GRADING PLAN

DATE 02/15/21
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

SHT. 07.02

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MATCHLINE (SEE BELOW RIGHT)

150

GOLDEN OCALA
EQUESTRIAN ESTATES
PHASE 3
(PERMITTED BY OTHERS)

MATCHLINE SHEET 07.01

TYPE 'V' INLET (MOD.)
DSF2-20
GRATE: 77.06
INV:72.90 (18"N)

TYPE 'V' INLET (MOD.)
D8A-7
GRATE: 77.06
INV:72.06 (18"E).

TYPE 'V' INLET (MOD.)
D8A-5
GRATE: 77.18
INV:72.68 (18"E)

TYPE 'V' INLET (MOD.)
D8A-2
GRATE: 76.73
INV:72.23 (18"E)

GOLDEN OCALA
EQUESTRIAN ESTATES
PHASE 2
(PERMITTED BY OTHERS)

FUTURE CROSS
COUNTRY COURSE

NW 92nd AVE RD

NW 18th PL

SEC 11
SEC 12

SODDED CONNECTION
TO G.O.E.E. SWALE

FDOT MEDIAN FLUME
PER INDEX 520-010 &
TYPE 'F' FLARED END
PER INDEX 520-001

6' TRANSITION DROP
CURB TO TYPE 'F' CURB
3' TRANSITION MIAMI
CURB TO DROP CURB

1.00%

PVI +97.62

MIAMI CURB
(TYP.)

END PAVEMENT
(TEMP. 10' LIMEROCK BASE)

152

GOLDEN OCALA
EQUESTRIAN ESTATES
PHASE 3
(PERMITTED BY OTHERS)

MES w/DISSIPATOR
(S-1)
OSF2-4
INV:71.00 (30"S)

TYPE 'V' INLET (MOD.)
DSF3-16
GRATE: 77.10
INV: 71.23 (24"S)
INV:71.23 (30"N)

77 LF 30" RCP
@ 0.30%

128 LF 18" RCP @ 0.30%

TYPE 'V' INLET (MOD.)
DSF3-17
GRATE: 77.06
INV:72.66 (18"E)
INV:71.63 (24"S)
INV:71.63 (24"N)

194 LF 24" RCP @ 0.30%

TYPE 'V' INLET (MOD.)
DSF2-19
GRATE: 77.06
INV:72.70 (18"S)
INV:72.70 (18"E)
INV:72.20 (24"N)

128 LF 18" RCP

54 LF 18" RCP
@ 0.37%

TYPE 'V' INLET (MOD.)
DSF2-20

FUTURE CROSS
COUNTRY COURSE

GOLDEN OCALA
EQUESTRIAN ESTATES
PHASE 3
(PERMITTED BY OTHERS)

NW 92nd AVE RD

SEC 1
SEC 12

SCALE IN FEET
1"=40'
40' 20' 0 40' 80'

NOTE:
EQUESTRIAN & PEDESTRIAN
TRAILS TO BE FIELD
ADJUSTED TO AVOID TREES.

MATCHLINE (SEE ABOVE LEFT)

Tillman & Associates
ENGINEERING, LLC.
CIVIL ENGINEERING - PLANNING - LANDSCAPE ARCHITECTURE - ENVIRONMENTAL
1720 SE 16th Ave. Bldg 100, Ocala, FL 34471
Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #26755

REVISIONS

DATE

MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3, 4 & 5
MARION COUNTY, FLORIDA

SITE GRADING PLAN

DATE 02/15/21
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

SHT. 07.03

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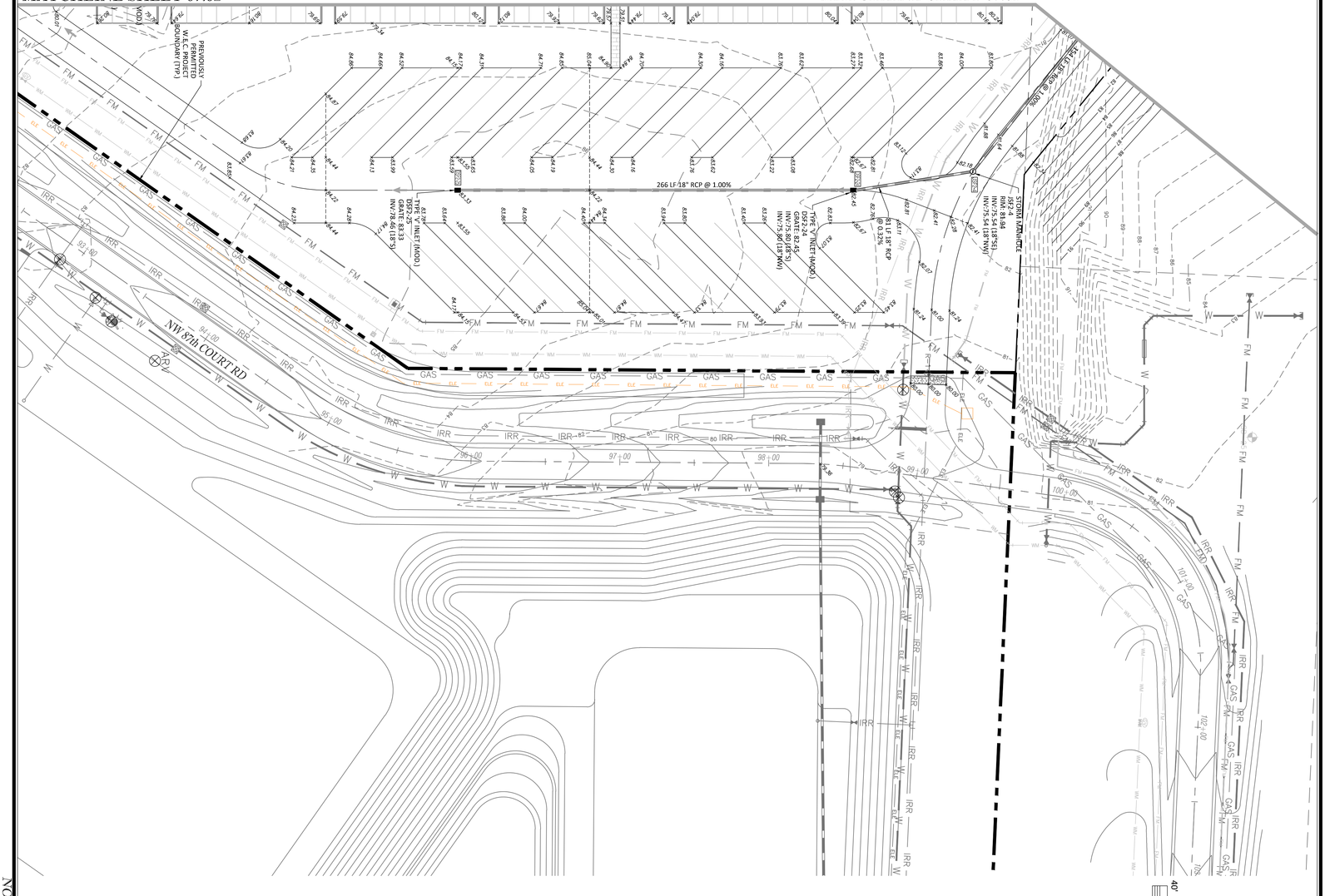
S:\Marion County\Golden Ocala Equestrian Center\2020\ - Flex Barns 3\CAD\CONSTRUCTION\07 Site Grading Plan.dwg, 2/19/2021 4:17:35 PM, DWG To PDF.pc3

MATCHLINE SHEET 07.02

MATCHLINE SHEET 07.01



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SHT. 07.04

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MARION COUNTY, FLORIDA

SITE GRADING PLAN

DATE	REVISIONS

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SITE GRADING PLAN

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MARION COUNTY, FLORIDA

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MATCHLINE SHEET 07.02

HUNTER GRASS FIELD

FLEX BARN #2

STORM MANHOLE J8A-1 RIM: 70.20 INV:62.15 (48"N) INV:59.26 (48"SE)

300 LF 48" RCP @ 0.35%

STORM MANHOLE J8A-2 RIM: 75.20 INV:63.20 (48"N) INV:63.20 (48"S)

300 LF 48" RCP @ 0.35%

STORM MANHOLE J8A-3 RIM: 81.00 INV:64.25 (48"N) INV:64.25 (48"S)

295 LF 48" RCP @ 0.23%

171 LF 48" RCP @ 0.15%

MES w/DISSIPATOR (8:1) DBA-9 INV:59.00 (48"NW)

SODDED CONNECTION TO SIDE OF E SWALE

FDOT INTERSECTION TYPE 'F' FLARED ENDS TO MATCH EXISTING PER INDEX 520-001

6' TRANSITION DROP CURB TO MIAMI TRANSITION MIAMI CURB TO DROP CURB

MIAMI CURB (TYP.)

END PAVEMENT (TEMP. 10' LIMEROCK BASE)

PVI 1+67.00 100'

PVC 10+33.01 L=55'

PVT 13+33.01 L=55'

PVC 14+17.36 L=55'

PVT 17+17.36

PROJECT BOUNDARY (TYP.)

TYPE 'F' INLET (MIAMI) DBA-10 GRATE: 77.12 INV:65.55 (48"S) INV:65.57 (36"W)

TYPE 'F' INLET (MIAMI) DBA-11 GRATE: 77.12 INV:65.55 (48"N) INV:67.05 (36"E) INV:67.05 (36"W)

STORM MANHOLE J8A-4 RIM: 83.07 INV:69.53 (48"S) INV:69.53 (48"NW)

NW 18th PL

@ 0.58%

@ 2.32%

SAN SAN SAN SAN SAN SAN SAN SAN SAN SAN SAN SAN SAN SAN

IRR IRR IRR IRR IRR IRR IRR IRR IRR IRR IRR IRR IRR IRR

GAS GAS GAS GAS GAS GAS GAS GAS GAS GAS GAS GAS GAS GAS

40' 20' 0 40' 80'
SCALE IN FEET
1"=40'

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UTILITY LEGEND	
	GREASE TRAP
	SANITARY CLEANOUT
	D.D.C.V. w/F.D.C.
	STUB-OUT
	BENDS (90°,45°,22.5°,11.25°)
	CROSS & TEE
	AIR RELEASE VALVE (ARV)
	GATE/BUTTERFLY/ VALVE
	PLUG VALVE
	SANITARY SEWER MANHOLE
	PVC SDR26 GRAVITY SEWER
	TELEPHONE LINE
	UNDERGROUND ELECTRIC
	IRRIGATION MAIN
W	WATER MAIN AWWA C-900 DR18
F	FIRE MAIN AWWA C-900 DR14
	SEWER FORCE MAIN DR18
	MUNICIPAL FIRE HYDRANT
	PRIVATE FIRE HYDRANT

FOLLOW FDEP MIN. HORIZONTAL AND VERTICAL SEPARATION REQUIREMENTS FROM POTABLE WMS. SEE DETAIL SHEET 02.01 (TYP.)

NOTES:
1. EACH BUILDING WITH A FIRE SPRINKLER OR FIRE ALARM SHALL HAVE A KNOX BOX INSTALLED AT A LOCATION DETERMINED BY MARION COUNTY FIRE RESCUE (MCFR).
2. ANY NEW GATES SHALL BE SIREN ACTIVATED PER MARION COUNTY LDC.
3. EACH FIRE DEPT. CONNECTION (FDC) SHALL CONTAIN A SIGN THAT INDICATES FDC AND THE BUILDING IT PROTECTS. SIGN SHALL BE WHITE WITH RED LETTERS OR RED WITH WHITE LETTERS AND BE ON A FREE STANDING POST BEHIND THE FDC.
4. CONCESSIONS WILL COMPLY WITH NFPA STANDARDS FOR COMMERCIAL COOKING.
5. REQUIRED SITE FIRE FLOW IS 2,000-GPM FOR A 2-HOUR DURATION (1,000-GPM FROM POTABLE AND 1,000-GPM FROM ALTERNATE SOURCES)
6. ANY WATER WELLS DISCOVERED WITHIN THE PROJECT AREA SHALL BE ABANDON PROPERLY BY A FLORIDA LICENSED WELL CONTRACTOR.
7. UTILITY INSTALLATION PROJECTS SHALL BE INSPECTED BY MCUD. A PRE-CONSTRUCTION MEETING IS TO BE ORGANIZED NO LATER THAN 72 HOURS IN ADVANCE OF SCHEDULED CONSTRUCTION WITH MCUD CONSTRUCTION OFFICER MARK RUDOWSKE (352)843-0476 OR MARK.RUDOWSKE@MARIONCOUNTYFL.ORG; FAILURE TO CONDUCT A PRE-CON MAY RESULT IN A STOP-WORK ORDER.

NOTE:
1. ALL WM SHALL BE PRIVATELY OWNED AND MAINTAINED UNLESS OTHERWISE DENOTED.
2. BRICK PAVER SURFACE IS SUFFICIENT FOR EMERGENCY VEHICLE WHEEL LOADS.
3. ALL FDC'S MUST HAVE SIGN INDICATING THE BUILDING THAT IT SERVES.
4. ALL BACKFLOW DEVICES MUST BE INSULATED.
5. CHILLER LINE LOCATION IS APPROXIMATE. CHILLER LINES AND INFRASTRUCTURE DESIGNED AND PERMITTED BY OTHERS.

DRA SF-2
(TOB=77.0)

FLEX BARN #5
(FF=79.00)

KITCHEN
(FF=79.00)

LOADING DOCK

CHILLER YARD

PROJECT BOUNDARY (TYP.)

A/C UNITS

FUR TRAP (TYP.)

(5) 2000 GAL GREASE TRAPS

OUTDOOR BOILERS

(2) MIFAB LIL-50-FUR DOG FUR TRAPS

S-1 (6' DIA.) HDPE LINED
RIM: 78.25
INV:65.20 (12"W)
INV:65.20 (15"S)
INV:65.10 (15"E)

8 LF 15" PVC @ 1.25%

LS-12
RIM: 78.50
INV: 65.00 (15"W)

27 LF 12" PVC @ 1.00%

S-1A
RIM: 78.00
INV:65.47 (12"E)

66 LF 15" PVC @ 0.50%

S-1
RIM: 78.25
INV:65.12 (15"S)
INV:65.02 (15"N)

S-2
RIM: 78.25
INV:66.12 (10"W)
INV:65.63 (12"E)
INV:65.53 (15"N)

S-3
RIM: 77.71
INV:68.45 (10"W)
INV:68.35 (10"E)

S-4
RIM: 77.64
INV:66.17 (12"S)
INV:66.07 (12"W)

S-5
RIM: 77.32
INV:67.74 (10"W)
INV:67.74 (10"S)
INV:67.64 (12"N)

S-6
RIM: 78.15
INV:68.92 (10"W)
INV:68.82 (10"E)

S-7
RIM: 78.40
INV:70.12 (10"E)

S-14
RIM: 77.40
INV:71.40 (10"E)

295 LF 10" PVC @ 1.00%

223 LF 10" PVC @ 1.00%

110 LF 12" PVC @ 0.40%

367 LF 12" PVC @ 0.40%

277 LF 10" PVC @ 0.40%

300 LF 10" PVC @ 0.40%

6" PVC @ 1.04% MIN.

10"-90° BEND

10"x6" TEE
6" G.V. (N)

10"x6" TEE
6" G.V. (S)

10"x6" TEE
6" G.V. (W)

10" TEE
10" G.V. (S,E)

10" PVC WM

10" PVC IRR

1" P.E.T. WATER SERVICE w/RPZ

1-1/4" NATURAL GAS LINE C.O

1" PE SERVICE w/HOSE BIBB & VACUUM BREAKER

HYDRANT SUPPLIED BY IRRIGATION MAIN

FHA

C.O.

8" SEWER SERVICE
4" SEWER SERVICE @2.08% MIN.

6" SEWER SERVICE @1.04% MIN.

8" SEWER SERVICE

SOLIDS INTERCEPTOR (TYP.)

6" SEWER SERVICE @1.04% MIN.

4" SEWER SERVICE @2.08% MIN.

4" PVC IRR SERVICE

8" PVC FIRE

GAS METER

1/2" NATURAL GAS LINE

GAS MAIN

12" TEE
12"x10" REDUCER (N,S)
10" G.V. (N,S)

12"-45° BEND

10"-45° BEND

10"x4" CROSS
4" G.V. (W)
10" G.V. (N,S)

APPROXIMATE CHILLER LINE LOCATION (TYP.)

4" PVC WATER SERVICE w/RPZ

10"x4" TEE
4" G.V. (W)

FIRE PUMP HOUSE

(1)-8" D.D.C.V.

10"x8" TEE
8" G.V. (N)

10" TEE
10" G.V. (S,W)

10"x6" TEE
6" G.V. (W)

10" TEE
10" G.V. (N,W)

8" D.D.C.V.

10"x8" TEE
8" G.V. (W)

10"x4" TEE
4" G.V. (W)

8"-11.25° BEND

10"-90° BEND

8"-22.5° BEND

8" PVC FM (48" MIN. COVER)

TRASH COMPACTOR

GENERATOR PAD

TRANSFORMER PAD

F.D.C.

40' 20' 0 40' 80'
SCALE IN FEET
1"=40'

NOTE:
EQUESTRIAN & PEDESTRIAN TRAILS TO BE FIELD ADJUSTED TO AVOID TREES.

MATCHLINE SHEET 08.03

MATCHLINE SHEET 08.02

MATCHLINE SHEET 08.04

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CERTIFICATE OF AUTHORIZATION #26755

REVISIONS

DATE

MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3, 4 & 5
MARION COUNTY, FLORIDA

UTILITY PLAN

DATE 12/3/2020
DRAWN BY KD, AT
CHKD. BY GH
JOB NO. 20-6079

SHT. 08.01

NOT VALID UNLESS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER

MATCHLINE SHEET 08.01

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MATCHLINE SHEET 08.04

FLEX BARN #4
(FF=79.00)

FLEX BARN #3
(FF=79.00)

SCALE IN FEET
1"=40'

KITCHEN
(FF=79.00)

TRANSFORMER PAD
GENERATOR PAD
TRASH COMPACTOR
1" PE SERVICE w/HOSE BIBB & VACUUM BREAKER
S-7
RIM: 78.40
INV:70.12 (10"E)
1/2" NATURAL GAS LINE
4" SEWER SERVICE @2.08% MIN.
6" SEWER SERVICE @1.04% MIN.
300 LF 10" PVC @ 0.40%
S-6
RIM: 78.15
INV:68.92 (10"W)
INV:68.82 (10'E)
S-5
RIM: 77.32
INV:67.74 (10"W)
INV:67.74 (10"S)
INV:67.64 (12"N)
4" PVC WATER SERVICE w/RPZ
8" PVC FIRE
F.D.C.
HYDRANT SUPPLIED BY IRRIGATION MAIN
10"x8" TEE
8" G.V. (W)
FIRE PUMP HOUSE
10"x4" TEE
4" G.V. (W)
10" G.V. (N,W)
HYDRANT SUPPLIED BY IRRIGATION MAIN
10"x6" TEE
6" G.V. (W)
FHA
10" TEE
10" G.V. (S,E)
LOADING DOCK
GAS METER
3/4" NATURAL GAS LINE
8" SEWER SERVICE
SOLIDS INTERCEPTOR (TYP.)
FUR TRAP (TYP.)
1" P.E.T. WATER SERVICE w/RPZ
OUTDOOR BOILERS
A/C UNITS
1-1/4" NATURAL GAS LINE
4" PVC IRR SERVICE
10" PVC IRR
10" PVC WM
GAS MAIN
10"x6" TEE
6" G.V. (S)
10"x6" TEE
6" G.V. (N)
S-10
RIM: 77.42
INV:71.89 (10"E)
315 LF 10" PVC @ 0.40%
317 LF 10" PVC @ 0.40%
(5) 2000 GAL GREASE TRAPS
6" PVC @ 1.04% MIN.
(2) MIFAB LIL-50-FUR DOG FUR TRAPS
S-8
RIM: 77.02
INV:69.26 (10"W)
INV:69.26 (10"S)
INV:69.16 (10"N)
S-9
RIM: 78.58
INV:70.63 (10"W)
INV:70.53 (10"E)
APPROXIMATE CHILLER LINE LOCATION (TYP.)
10"x4" TEE
4" G.V. (W)
10"x8" TEE
8" G.V. (W)
10"x10" WET-TAP EXIST. 10" PVC IRR
(1)-8" D.D.C.V.
(2) 10"-45° BENDS
S-11
RIM: 77.68
INV:70.62 (10"W)
INV:70.52 (10"N)
S-12
RIM: 77.55
INV:71.41 (10"W)
INV:71.31 (10"E)
395 LF 10" PVC @ 0.40%
173 LF 10" PVC @ 0.40%
356 LF 10" PVC @ 0.40%
S-13
RIM: 77.55
INV:73.00 (10"E)
12"x10" TEE
12"x10" REDUCER (N)
10" G.V. (N,E)
10"-90° BEND
CONTRACTOR TO DEFLECT PROPOSED 12" PVC WM UNDER EXISTING 12" WM & 8" FM (12" MIN CLEARANCE)
8" PVC FM (PER GOEE PH.2 PLANS)
PROJECT BOUNDARY (TYP.)
10' UTILITY EASEMENT
20' DRAINAGE EASEMENT
R/W
8" PVC FM MOD. 1 (PER FLEX BARNS PLANS)
CONNECT TO EXIST. GAS MAIN
GAS MAIN EXT. (PER FLEX BARNS PLANS)
12" PVC FM (PER WEC PLANS)
PROJECT BOUNDARY (PER WEC PLANS)
10" PVC IRR (PER WEC PLANS)
10" PVC WM (PER WEC PLANS)
NW 87th CT RD
NW 18th PL
12" PVC WM (PER GOEE PH.2 PLANS)
12" PVC WM (36" MIN. COVER)
12"-90° BEND
FOR 12" PVC WM CONTINUATION TO CONNECTION, SEE SHEET 08.04
12" PVC WM MOD. 1 (PER FLEX BARNS PLANS)
1105+00
1106+00
1107+00
1108+00
1109+00
1110+00
1111+00
1112+00
1113+00
1114+00
1115+00

NOTE:
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MATCHLINE SEE BELOW RIGHT

150

GOLDEN OCALA
EQUESTRIAN ESTATES
PHASE 3
(PERMITTED BY OTHERS)

GOLDEN OCALA
EQUESTRIAN ESTATES
PHASE 2
(PERMITTED BY OTHERS)

NW 92nd AVE RD

FUTURE CROSS
COUNTRY COURSE

NW 18th PL

MATCHLINE SHEET 08.01

MATCHLINE SHEET 08.02

152

GOLDEN OCALA
EQUESTRIAN ESTATES
PHASE 3
(PERMITTED BY OTHERS)

FUTURE
CROSS
COUNTRY
COURSE

GOLDEN OCALA
EQUESTRIAN ESTATES
PHASE 3
(PERMITTED BY OTHERS)

NW 92nd AVE RD

MATCHLINE SHEET 08.01

MATCHLINE SEE ABOVE LEFT

40' 20' 0 40' 80'

SCALE IN FEET
1"=40'

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MATCHLINE SHEET 08.01

8"-11.25° BEND
8" PVC FM
(48" MIN. COVER)
CONTRACTOR TO DEFLECT PROPOSED 12" PVC WM UNDER EXISTING 12" FM (12" MIN CLEARANCE)
8"-22.5° BEND
PH-2 COMBINATION AIR RELIEF VALVE
12"x8" WET-TAP
8"-11.25° BEND
REMOVE 12" CAP
CONNECT PROPOSED 12" PVC WM
12"x10" TEE
12" B.V. (E)
10" G.V. (S)
12" PVC WM
12"-22.5° BEND
10"-22.5° BEND
10" PVC IRR
12"-22.5° BEND
12" CAP
12" B.V.
PH-2 12" P.V.
12" PVC IRR
10" WET-TAP
10" G.V. (W)
10"-22.5° BEND
NW 98th Ct Rd
FM & WM DESIGNED & PERMITTED SEPARATELY BY OTHERS.
(WATER 0237204-006-DSGP)
(SEWER 0371932-001-DWC/CG)
PH-2 12" PVC FM
10" PVC IRR
PH-2 COMBINATION AIR RELIEF VALVE
MATCHLINE SHEET 08.02

40' 20' 0 40' 80'
SCALE IN FEET
1"=40'

MATCHLINE SHEET 08.02

8" PVC FM
(PER GOEE PH.2 PLANS)
PROJECT BOUNDARY (TYP.)
20' DRAINAGE EASEMENT
R/W
8" PVC FM MOD. 1
(PER FLEX BARNS PLANS)
12" PVC WM
(PER GOEE PH.2 PLANS)
12" PVC WM
12" PVC WM
(36" MIN. COVER)
NW 18th PL
12"-90° BEND
12"-90° BEND
R/W
12" PVC WM MOD. 1
(PER FLEX BARNS PLANS)
CONTRACTOR TO DEFLECT PROPOSED 12" PVC WM UNDER EXISTING 12" WM & 8" FM (12" MIN CLEARANCE)
10" IRR (PER FLEX BARN PLANS)
12"-45° BEND
10" WM (PER FLEX BARN PLANS)
WELL #5-10"
NEW WELL FOR IRRIGATION AND SUPPLEMENTAL FIRE PROTECTION. CONSTRUCTION SHALL MEET OR EXCEED N.F.P.A. AND FLORIDA FIRE PREVENTION CODE REGULATIONS. (2) 10" WELL SYSTEM SHALL PRODUCE A MIN. OF 2,000 GPM @ MIN. PRESSURE OF 55 PSI. ALL PUBLIC & PRIVATE HYDRANTS SHALL PRODUCE A MIN. OF 1,000 GPM @ 20PSI (BY OTHERS)
LAT: N 29° 12' 18.7987"
LON: W 82° 16' 00.5602"
10" WET-TAP
12"x10" REDUCER (NW)
10" G.V. (NW)
REMOVE EXIST. 10" CAP & EXTEND LINE TO WELL
10" PVC IRR
FLEX BARN #2
(PREVIOUSLY PERMITTED)

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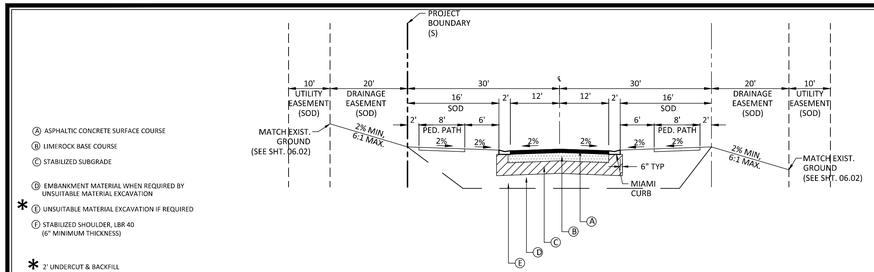
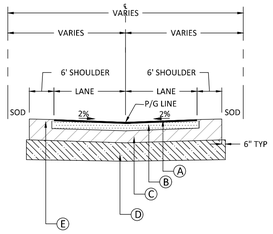


PRIVATE NW 18th LANE SECTION

SEE PAVEMENT SECTION BELOW
N.T.S.

LEGEND

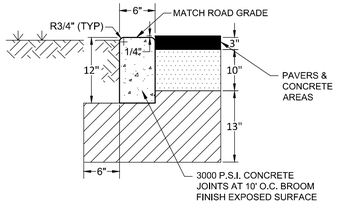
℄ CENTERLINE
TYP TYPICAL



A ASPHALTIC CONCRETE SURFACE COURSE
B LIMEROCK BASE COURSE
C STABILIZED SUBGRADE
D 2' UNDERCUT & BACKFILL
E STABILIZED SHOULDER, LBR 40 (6" MINIMUM THICKNESS)

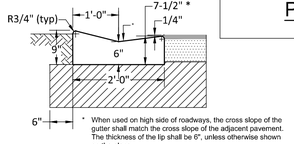
TYPICAL DRIVE AISLE SECTION INVERTED CROWN

SEE PAVEMENT SECTION BELOW
N.T.S.



RIBBON CURB DETAIL

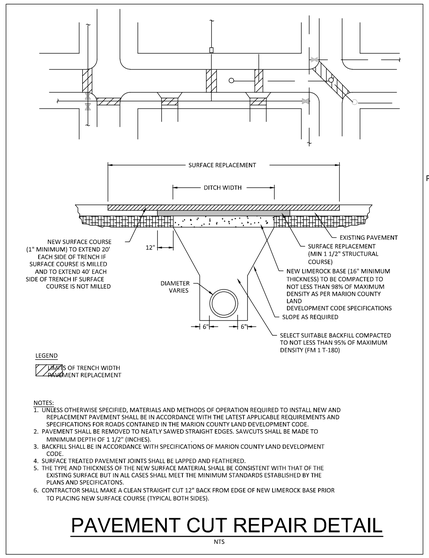
NO SCALE



* When used on high side of roadways, the cross slope of the gutter shall match the cross slope of the adjacent pavement. The thickness of the lip shall be 6", unless otherwise shown on the plans.

MIAMI CURB DETAIL

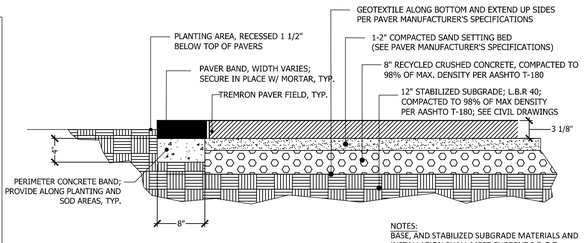
NO SCALE



NOTES:
1. UNLESS OTHERWISE SPECIFIED, MATERIALS AND METHODS OF OPERATION REQUIRED TO INSTALL NEW AND REPLACEMENT PAVEMENT SHALL BE IN ACCORDANCE WITH THE LATEST APPLICABLE REQUIREMENTS AND SPECIFICATIONS FOR ROADS CONTAINED IN THE MARION COUNTY LAND DEVELOPMENT CODE.
2. PAVEMENT SHALL BE REMOVED TO NEATLY SAWED STRAIGHT EDGES. SAWCUTS SHALL BE MADE TO MINIMUM DEPTH OF 1 1/2" (INCHES).
3. BACKFILL SHALL BE IN ACCORDANCE WITH SPECIFICATIONS OF MARION COUNTY LAND DEVELOPMENT CODE.
4. SURFACE TREATED PAVEMENT JOINTS SHALL BE LAPPED AND FEATHERED.
5. THE TYPE AND THICKNESS OF THE NEW SURFACE MATERIAL SHALL BE CONSISTENT WITH THAT OF THE EXISTING SURFACE BUT IN ALL CASES SHALL MEET THE MINIMUM STANDARDS ESTABLISHED BY THE PLANS AND SPECIFICATIONS.
6. CONTRACTOR SHALL MAKE A CLEAN STRAIGHT CUT 12" BACK FROM EDGE OF NEW LIMEROCK BASE PRIOR TO PLACING NEW SURFACE COURSE (TYPICAL BOTH SIDES).

PAVEMENT CUT REPAIR DETAIL

NTS

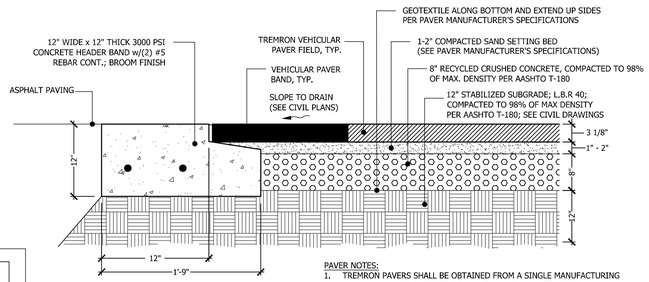


NOTES:
BASE AND STABILIZED SUBGRADE MATERIALS AND INSTALLATION SHALL MEET CURRENT F.D.O.T. SPECIFICATIONS

Pedestrian Trail Paver Section

NOT TO SCALE

"ALL CONSTRUCTION COVERED BY THESE PLANS SHALL COMPLY WITH THE MATERIAL REQUIREMENTS AND QUALITY CONTROL STANDARDS CONTAINED IN THE MARION COUNTY LAND DEVELOPMENT CODE."

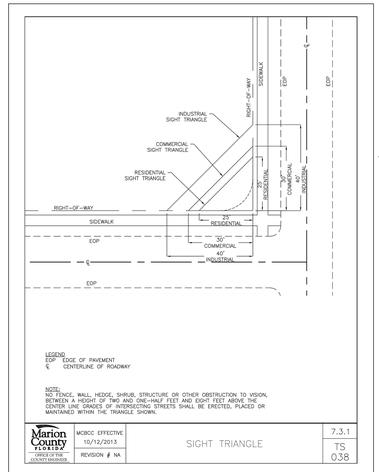


NOTES:
BASE, AND STABILIZED SUBGRADE MATERIALS AND INSTALLATION SHALL MEET CURRENT F.D.O.T. SPECIFICATIONS

PAVER NOTES:
1. TREMRON PAVERS SHALL BE OBTAINED FROM A SINGLE MANUFACTURING PLANT TO MAINTAIN COLOR CONTINUITY. COLOR/TYPE TO BE DETERMINED BY OWNER.
2. INSTALL AND SEAL PAVERS PER MANUFACTURER'S SPECIFICATIONS.
3. CONTRACTOR SHALL LAYOUT A SAMPLE AREA TO CONFIRM PAVING COLOR AND PATTERN ARRANGEMENT, AND OBTAIN OWNER APPROVAL, PRIOR TO INSTALLATION.
4. IN THE ABSENCE OF A CONCRETE HEADER BAND OR CURB, THE PERIMETER VEHICULAR PAVER BAND SHALL BE MORTARED TO 8" WIDE x 8" THICK REINFORCED CONCRETE EDGE RESTRAINT.

Vehicular/Pedestrian Trail Paver Section

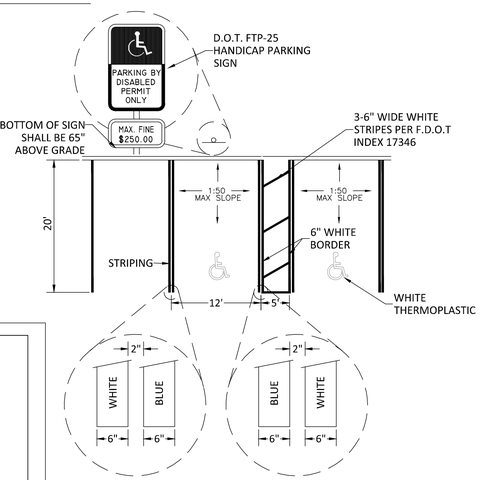
NOT TO SCALE



24"x30"

SPECIAL SIGN

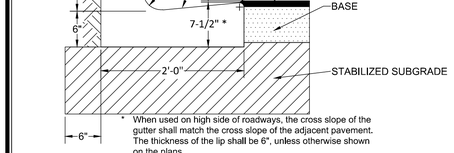
NO SCALE



HANDICAP PARKING DETAILS

NO SCALE

NOTES:
1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN FROM THE ENGINEER OR OWNER A COPY OF ALL PERTINENT PERMITS RELATED TO THIS PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASSURE THAT ALL CONSTRUCTION ACTIVITIES ARE IN COMPLIANCE WITH THE CONDITIONS OF ALL PERMITS AND APPROVALS.
2. GRASS AND MULCH, OR SOLID SOD, ALL AREAS IN EXISTING RIGHTS-OF-WAY DISTURBED BY CONSTRUCTION.
3. CONTRACTOR IS TO COORDINATE ALL WORK WITHIN, BUT NOT LIMITED TO, MARION COUNTY RIGHTS-OF-WAY WITH UTILITY COMPANIES IN ORDER TO PREVENT DAMAGE TO UTILITY LINES AND THE MAKING OF ADJUSTMENTS TO SAME, IF REQUIRED.
4. CONTRACTOR SHALL CONTACT THE ENGINEER AND/OR THE OWNER PRIOR TO ANY CONSTRUCTION THAT MAY DAMAGE TREES.
5. VALLEY GUTTER & TYPE F CURB & GUTTER SHALL BE PER FDOT INDEX 300.
6. SIDEWALK AND SIDEWALK RAMPS SHALL BE ADA ACCESSIBLE AND CONSTRUCTED PER FDOT INDEX 304 & 310.
7. DITCH BOTTOM INLETS PER FDOT INDEX 232 TYPE C,D,E, & H AND INDEX 233 TYPE F,G.
8. STORM MANHOLES & STRUCTURAL BOTTOMS PER FDOT INDEX 200 &201.
9. TYPE S&G CURB INLETS PER FDOT INDEX 211.
10. CONTROL STRUCTURE OUTLET SKIMMER PER FDOT INDEX 240.
11. U-TYPE CONCRETE ENDWALLS W/ BAFFLES & ENERGY DISSIPATER PER FDOT INDEX 260 & 261.
12. SIDEDRAIN & CROSDRAIN MITERED END SECTION PER FDOT INDEX 272 & 273.
13. DITCH PAVING & SODDING PER FDOT INDEX 281.
14. MISCELLANEOUS DRAINAGE DETAILS PER FDOT INDEX 280.
15. RAISED CONCRETE MEDIAN PER FDOT INDEX 302.
16. SHOULDER SODDING PER FDOT INDEX 105.



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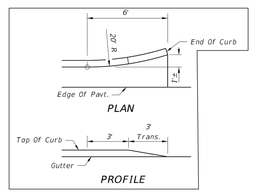
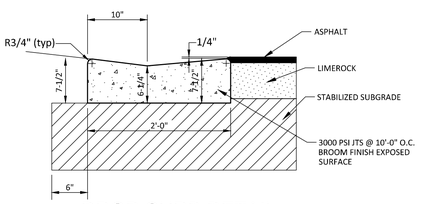
TYPE F CURB

NO SCALE



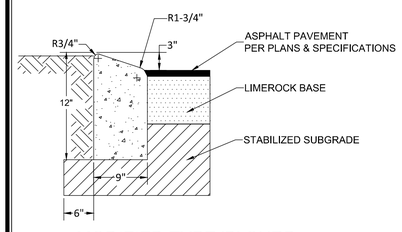
TYPE F FLARED END

FDOT INDEX 520-001



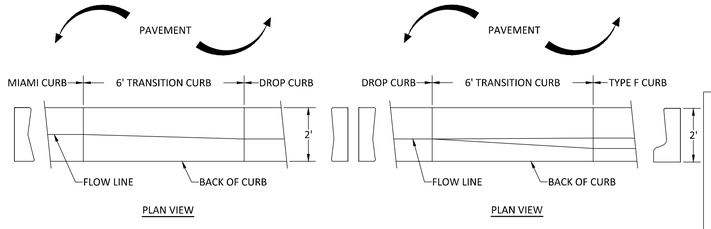
DROP CURB DETAIL

N.T.S



MODIFIED TYPE 'B' CURB

NO SCALE



PLAN VIEW

TRANSITION CURB MIAMI CURB TO DROP CURB

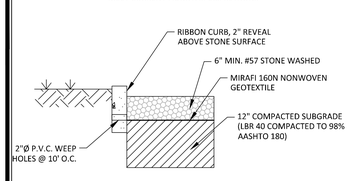
NO SCALE

PLAN VIEW

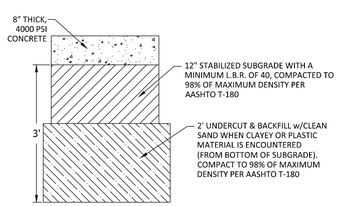
TRANSITION CURB DROP CURB TO TYPE F

NO SCALE

NOTES:
ASPHALT, LIMEROCK BASE, AND STABILIZED SUBGRADE MATERIALS AND INSTALLATION SHALL MEET CURRENT F.D.O.T. SPECIFICATIONS

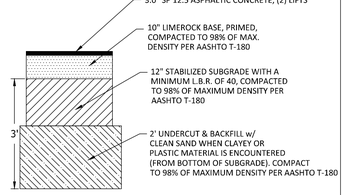


UTILITY YARD GRAVEL SECTION NON-TRAFFIC



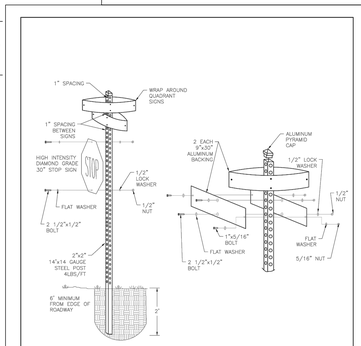
CONCRETE PAVEMENT SECTION

NO SCALE

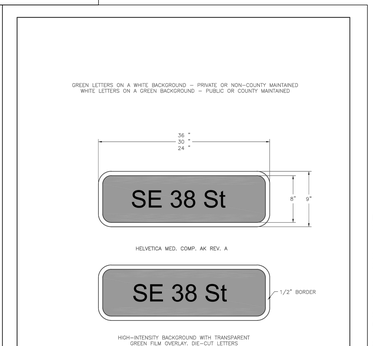


ASPHALT PAVEMENT SECTION

NO SCALE



Marion County FLORIDA OFFICE OF THE COUNTY ENGINEER
MCBCC EFFECTIVE 10/12/2013
REVISION # NA
COMBINED STREET NAME & STOP SIGN INSTALLATION
7.3.1
TS 0.31



Marion County FLORIDA OFFICE OF THE COUNTY ENGINEER
MCBCC EFFECTIVE 10/12/2013
REVISION # NA
STREET SIGN
7.3.1
TS 0.32

Tillman & Associates
ENGINEERING, LLC.
CIVIL ENGINEERING - PLANNING - LANDSCAPE ARCHITECTURE - ENVIRONMENTAL
1720 SE 16th Ave. Bldg 100, Ocala, FL 34471
Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #26756

REVISIONS

DATE

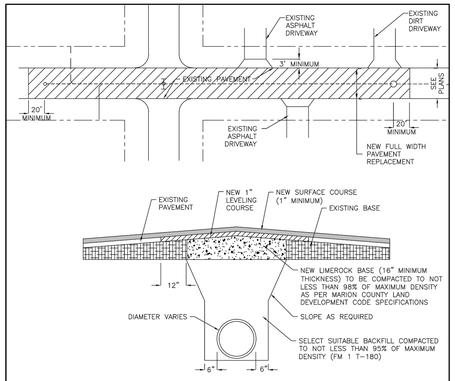
MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3
MARION COUNTY, FLORIDA

ROADWAY AND PAVEMENT DETAILS

DATE 11/13/20
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

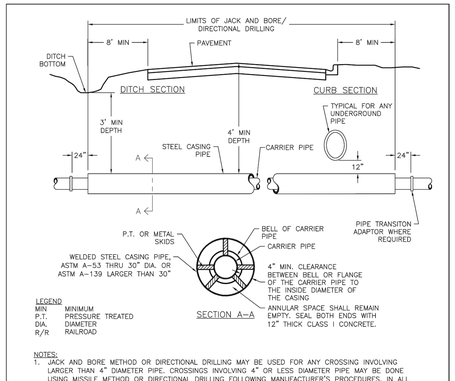
SHT. 09.01

NOT VALID UNLESS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER



NOTES:
1. UNLESS OTHERWISE SPECIFIED, MATERIALS AND METHODS OF OPERATION REQUIRED TO INSTALL NEW AND REPLACEMENT PAVEMENT SHALL BE IN ACCORDANCE WITH THE LATEST APPLICABLE REQUIREMENTS AND SPECIFICATIONS FOR ROADS CONTAINED IN THE MARION COUNTY LAND DEVELOPMENT CODE.
2. BACKFILL MATERIAL ABOVE ONE FOOT OVER TOP OF PIPE SHALL BE PLACED IN LAYERS NOT TO EXCEED 8" AND COMPACTED TO 95% OF MAXIMUM DENSITY AT +/- 2% OF OPTIMUM MOISTURE CONTENT AS DETERMINED BY LABORATORY STANDARD PROCTOR TEST (AASHTO T-180).
3. TYPICAL SECTION SHALL BE CONSISTENT WITH AND GOVERNED BY EXISTING ROADWAY SECTION WITH MINIMUM ROADWAY REQUIREMENT TO BE AS SHOWN.
4. ALL EXISTING DRIVEWAY AND ROADWAYS SHALL HAVE PAVEMENT RETURNS PAVED DURING THE ROAD PAVING OPERATION.
5. IF IN THE OPINION OF THE ENGINEER, THE EXISTING ROADWAY IS DAMAGED TO THE EXTENT THAT THE EXISTING PAVEMENT SHOULD BE REMOVED OR IF THE ENTIRE PAVEMENT IS REMOVED DURING PIPELINE INSTALLATION, THE STABILIZED SUBGRADE AND LIMEROCK BASE SHALL BE CONSTRUCTED AS DESCRIBED ABOVE. THE BASE SHALL THEN BE PRIMED AND A NEW SURFACE COURSE 1" THICK, PLACED.
6. CONTRACTOR SHALL MAKE A CLEAN STRAIGHT CUT 6" BACK FROM EDGE OF NEW LIMEROCK BASE PRIOR TO PLACING NEW SURFACE COURSE (TYPICAL BOTH SIDES).

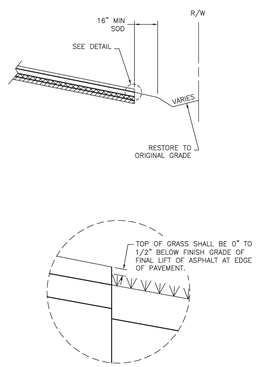
Marion County FLORIDA — OFFICE OF THE COUNTY ENGINEER	MCBCC EFFECTIVE 10/12/2013	ROADWAY RECONSTRUCTION	7.3.1 TS 008
	REVISION # NA		



LEGEND
MIN MINIMUM
P.T. PRESSURE TREATED
DIA. DIAMETER
R/R RAILROAD

NOTES:
1. JACK AND BORE METHOD OR DIRECTIONAL DRILLING MAY BE USED FOR ANY CROSSING INVOLVING LARGER THAN 4" DIAMETER PIPE. CROSSINGS INVOLVING 4" OR LESS DIAMETER PIPE MAY BE DONE USING MISSILE METHOD OR DIRECTIONAL DRILLING FOLLOWING MANUFACTURER'S PROCEDURES. IN ALL CASES A PERMIT MUST BE ISSUED BY THE OFFICE OF THE COUNTY ENGINEER PRIOR TO THE WORK BEING PERFORMED AND A COUNTY INSPECTOR SHALL BE ON SITE WHILE SAID WORK IS BEING PERFORMED.
2. ROTATION OF CARRIER PIPE INSIDE THE CASING PIPE WILL NOT BE PERMITTED. MECHANICAL OR FLANGED JOINT PIPE SHALL BE USED TO HELP PREVENT SUCH ROTATION.
3. ALL REQUIREMENTS OF FDOT AS SPECIFIED IN THE FDOT "UTILITY ACCOMMODATION MANUAL" SHALL BE ADHERED TO WHEN CROSSING HIGHWAYS. THE MORE STRINGENT REQUIREMENTS BETWEEN THE FDOT AND MARION COUNTY SHALL GOVERN IN ALL CASES OF CONFLICT.
4. THE INSIDE DIAMETER OF THE CASING SHALL BE A MINIMUM OF 4" GREATER THAN THE OUTSIDE DIAMETER OF THE CARRIER PIPE BELL OR COUPLING.
5. IN ADDITION TO THE SUPPORT ARRANGEMENT OF TIMBER OR METAL SKIDS, THE CONTRACTOR SHALL PROVIDE 4" LONG SKIDS FOR EACH LENGTH OF CARRIER PIPE AT THE SPRING LINE AND ON TOP ADJACENT TO THE BELL END OF THE PIPE DESIGNED TO PREVENT LATERAL OR VERTICAL REPLACEMENT.
6. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF CASING OR TUNNEL LINER PIPE INSTALLATION FOR THE ENGINEER'S APPROVAL PRIOR TO FABRICATION OF PIPING, CASING, AND APPURTENANCES.
7. ALL REQUIREMENTS OF THE RAILROAD AS SPECIFIED BY THE AMERICAN RAILWAY ENGINEERING ASSOCIATION AND THE RAILROAD COMPANY SHALL BE ADHERED TO WHEN CROSSING RAILROADS. THE MORE STRINGENT REQUIREMENTS BETWEEN THE R/R AND MARION COUNTY SHALL GOVERN IN ALL CASES OF CONFLICT.

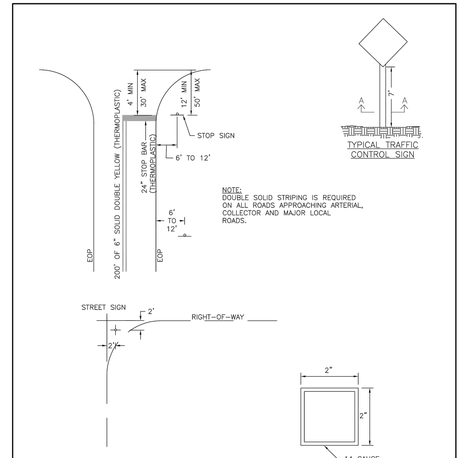
Marion County FLORIDA — OFFICE OF THE COUNTY ENGINEER	MCBCC EFFECTIVE 10/12/2013	JACK AND BORE	7.3.1 TS 009
	REVISION # NA		



LEGEND
℄ CENTERLINE
R/W RIGHT-OF-WAY
MIN MINIMUM

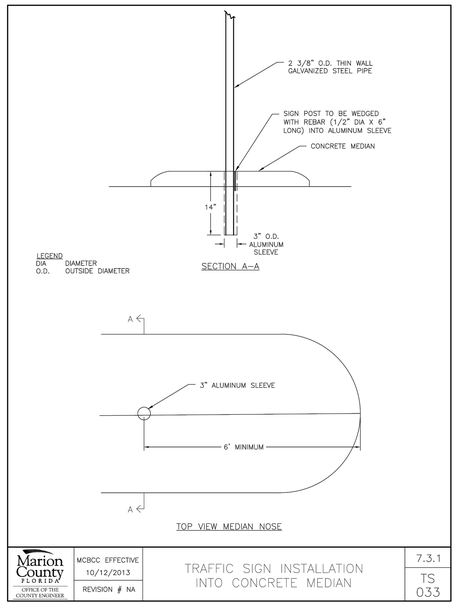
NOTE:
SHOULDERS SHALL BE MAINTAINED DURING CONSTRUCTION AND UP TO FINAL ACCEPTANCE OF PROJECT, INCLUDING ANY REGRADING, REPAIR OF DROPOFFS, REPLACEMENT OF SOD AND SEED AND MULCH.

Marion County FLORIDA — OFFICE OF THE COUNTY ENGINEER	MCBCC EFFECTIVE 10/12/2013	SHOULDER SODDING	7.3.1 TS 022
	REVISION # NA		

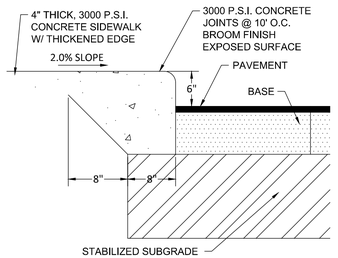


LEGEND
EOP EDGE OF PAVEMENT
MIN MINIMUM
MAX MAXIMUM
TRAFFIC SIGN

Marion County FLORIDA — OFFICE OF THE COUNTY ENGINEER	MCBCC EFFECTIVE 10/12/2013	INTERSECTION SIGN AND STRIPING DETAIL	7.3.1 TS 030
	REVISION # NA		



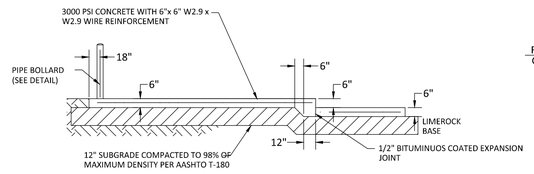
Marion County FLORIDA — OFFICE OF THE COUNTY ENGINEER	MCBCC EFFECTIVE 10/12/2013	TRAFFIC SIGN INSTALLATION INTO CONCRETE MEDIAN	7.3.1 TS 033
	REVISION # NA		



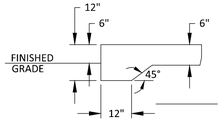
INTEGRAL SIDEWALK DETAIL
NO SCALE

* - 1% MIN. UNLESS OTHERWISE INDICATED ON PLANS (SEE PLAN SHEETS FOR FLOW DIRECTION)

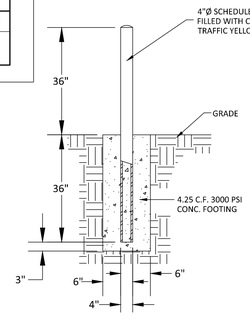
CART PATH DETAIL



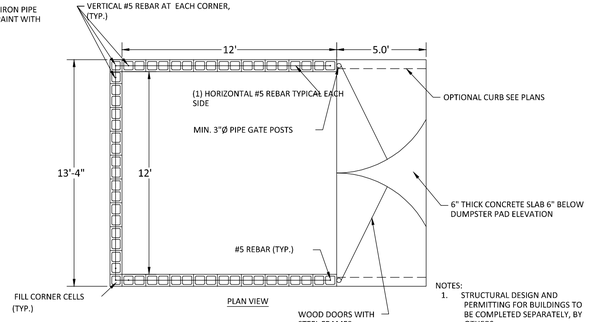
PAD SECTION



THICKENED EDGE DETAIL

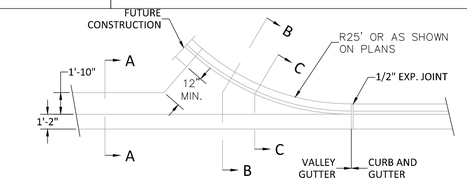


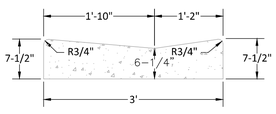
PIPE BOLLARD DETAIL
N.T.S

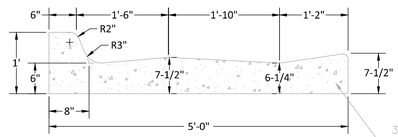


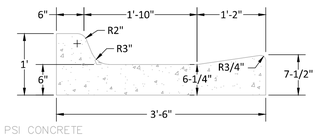
NOTES:
1. STRUCTURAL DESIGN AND PERMITTING FOR BUILDINGS TO BE COMPLETED SEPARATELY, BY OTHERS.

DUMPSTER ENCLOSURE DETAIL
N.T.S



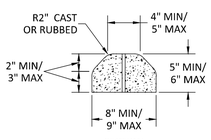




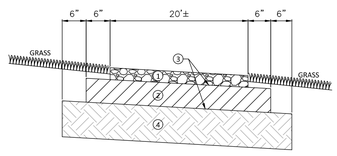


3000 PSI CONCRETE JOINTS AT 10'-0" O.C. BROOM FINISH EXPOSED SURFACE

VALLEY GUTTER
NO SCALE



CONCRETE WHEEL STOP DETAIL
NO SCALE



1. 5" FOOTING MATERIAL / CLEAN, WELL DRAINING
2. 8" FREE DRAINING, WELL GRADED CRUSHED AGGREGATE, MAX PARTICLE SIZE 1-1/2" AND < 10% PASSING No. 200. COMPACT UNTIL STABLE AND UNYIELDING.
3. 1 LAYER OF TENSAR BX1200 GEOGRID. GEOGRID SHALL OVERLAP 12" AT ALL SEAMS. TENSAR BX1200 SHALL BE INSTALLED ACCORDING TO MANUFACTURER SPECIFICATIONS.
4. 12" THICK STABILIZED SUBGRADE, MIN LBR 40 98% COMPACTION DENSITY PER AASHTO T-180

EQUESTRIAN TRAIL TYPICAL SECTION
N.T.S.

Tillman & Associates ENGINEERING, LLC.
CIVIL ENGINEERING - PLANNING - LANDSCAPE ARCHITECTURE - ENVIRONMENTAL
1720 SE 16th Ave. Bldg 100, Ocala, FL 34471
Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #26756

REVISIONS

DATE

MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3
MARION COUNTY, FLORIDA

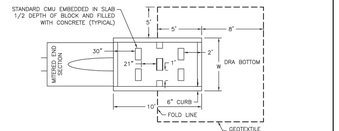
ROADWAY AND PAVEMENT DETAILS

DATE 11/13/20
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

SHT. 09.02

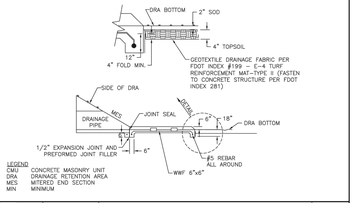
NOT VALID UNLESS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER

S:\Marion County\Golden Ocala Equestrian Center (2020) - Flex Barns 3\CIVIL\CONSTRUCTION\09 Roadway and Pavement Details.dwg, 02, 11/13/2020 9:56:28 AM



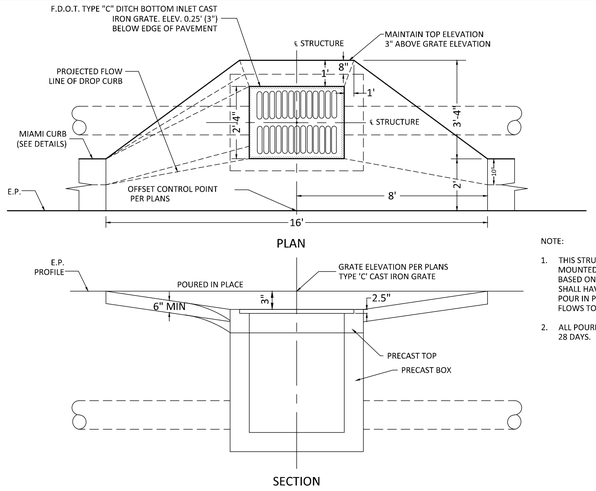
PIPE SIZE	WIDTH	CMU 8 x 16	CMU 8 x 8
15"	6'	3	2
18"	7'	5	0
24"	7'	5	0
30"	8'	5	2
36"	9'	7	0
42"	9'	7	0

NOTES:
1. BLOCK CONFIGURATION VARIES ACCORDING TO PIPE SIZE.
2. GEOTEXTILE, WHEN REQUIRED, SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. FASTEN FABRIC TO CONCRETE STRUCTURE PER FDOT INDEX 281.
3. SPLASH PADS WITH ELLIPTICAL PIPE SHALL BE PAID UNDER THE CONTRACT UNIT PRICE FOR THE EQUIVALENT WIDTH OF CIRCULAR SIZE IN TABLE.



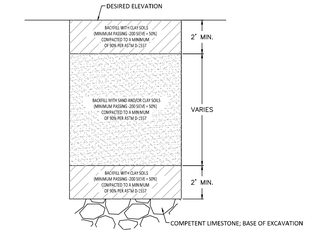
LEGEND
CMU CONCRETE MASONRY UNIT
DRA DRAINAGE RETENTION AREA
MES MITERED END SECTION
MIN MINIMUM

Marion County FLORIDA	MCBCC EFFECTIVE 10/12/2013	TYPICAL SPLASH PAD WITH DISSIPATER	7.3.1 TS 035
OFFICE OF THE COUNTY ENGINEER	REVISION # NA		



NOTE:
1. THIS STRUCTURE SHALL BE A TYPE "C" GRATE INLET MOUNTED ON A BOX SIZED BY THE PRECAST COMPANY BASED ON THE SIZE OF THE PIPES SERVED. THE BASE SHALL HAVE A COMPLETE CONCRETE PRECAST CAP WITH POUR IN PLACE CONCRETE PROVIDED TO DIVERT ALL FLOWS TO THE GRATE OPENING.
2. ALL POURED-IN-PLACE CONCRETE SHALL BE 3000 PSI AT 28 DAYS.

MIAMI CURB INLET
N.T.S



REMEDIATION DETAIL

NOTES

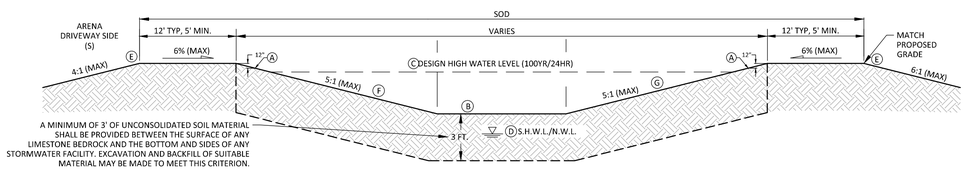
IN THE EVENT THAT ANY KARST FEATURES SUCH AS SINKHOLES, SOLUTION CAVITIES, CHIMNEYS, ETC. ARE DISCOVERED DURING ROUTINE INSPECTIONS OF THE STORMWATER BASINS, THE FOLLOWING REMEDIATION PROCEDURE SHALL BE PROFORMED

REPAIR (SEE DETAIL ABOVE):
GEO-TECH RECOMMENDS EACH DEPRESSIONAL FEATURE IS EXCAVATED AND BACKFILLED. THE EXCAVATION SHOULD CONTINUE UNTIL FIRM SOILS ARE FOUND. A MINIMUM OF TWO (2) FEET OF SANDY CLAY SOILS SHOULD BE UTILIZED AS A CAP OVER THE LIMESTONE AT THE BOTTOM AT THE EXCAVATION. IN ADDITION, A MINIMUM OF TWO (2) FEET OF SANDY CLAY SOILS SHOULD BE UTILIZED AS A CAP AT THE GROUND SURFACE. INTERMEDIATE SOILS BETWEEN THE AFOREMENTIONED SANDY CLAY CAPS MAY CONSIST OF SANDY SOILS. IN ADDITION, ANY LIMESTONE OUTCROPPINGS OBSERVED ADJACENT TO THE AFFECTED AREA SHOULD BE REMOVED AND CAPPED WITH A MINIMUM OF TWO (2) FEET OF SANDY CLAY SOILS. GEO-TECH SHOULD BE ON SITE TO SUPERVISE THE REMEDIATION.

SANDY CLAY SOILS SHOULD HAVE A MINIMUM PLASTICITY INDEX OF TWENTY-FIVE (25) WITH A MINIMUM OF FIFTY (50) PERCENT PASSING A U.S. STANDARD NO. 200 SIEVE. COMPACTION OF THE SOILS SHOULD OBTAIN A MINIMUM OF NINETY (90) PERCENT OF THE MODIFIED PROCTER (ASTM D-1557) MAXIMUM DRY DENSITY VALUE. UNCOMPACTED LIFTS SHALL BE NO THICKER THAN SIX (6) INCHES. ALL FILL SOILS SHOULD BE PRE-QUALIFIED PRIOR TO IMPORTING AND PLACING.

NOTIFICATION:
THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT (SWFWMD) SHALL BE NOTIFIED OF ANY SINKHOLE DEVELOPMENT WITHIN 48 HOURS OF DISCOVERY AND THE PROPOSED METHOD BY WHICH THE SINKHOLE WILL BE REPAIRED SHALL BE SUBMITTED TO THE SWFWMD FOR APPROVAL WITHIN 30 DAYS. THE SWFWMD WILL THEN NOTIFY THE RESPONSIBLE PARTY AS TO THE ACCEPTANCE, DENIAL OR NEED FOR MODIFICATION OF THE REPAIR METHOD.

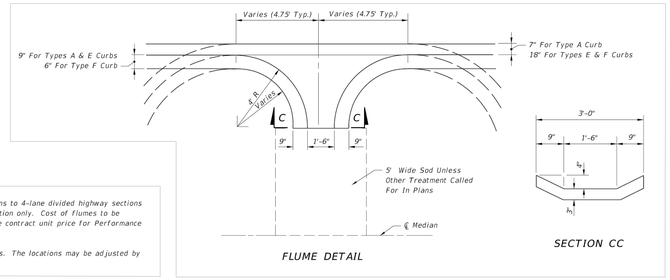
SINKHOLE/CAVITY MAINTENANCE REPAIR DETAIL
N.T.S.



POND	T.O.B.(FT) (A)	BOTTOM(FT) (B)	DHWL(FT) (C) 100-YR 24-HR	SHWL*(FT) (D)	(E)	SIDE SLOPE (F)	SIDE SLOPE (G)
SF-2	77.0	71.0	74.56	68.8	MATCH PROPOSED GRADE	5:1 (MAX)	5:1 (MAX)
EX. 8A	67.0	59.0	63.80	57.6	N/A	8:1 (EXIST.)	8:1 (EXIST.)

SOD ALL SLOPES AND BOTTOM WITH FLORIDA FRIENDLY NON-MUCK GROWN SOD

DRA SF-2 CROSS-SECTION
N.T.S



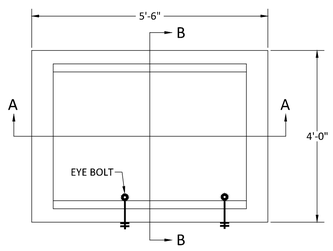
FLUME DETAIL

SECTION CC

GENERAL NOTES

1. These details are to apply to projects which provide for the conversion of 2-lane sections to 4-lane divided highway sections and for superelevated sections of new 4-lane divided highways. Layout above is illustration only. Cost of flumes to be included in the contract price for Curb or Curb and Gutter. Sod to be paid for under the contract unit price for Performance Turf, SY.
2. Flumes to be located in low point of noses and at other points as designated in the plans. The locations may be adjusted by the Engineer during construction.

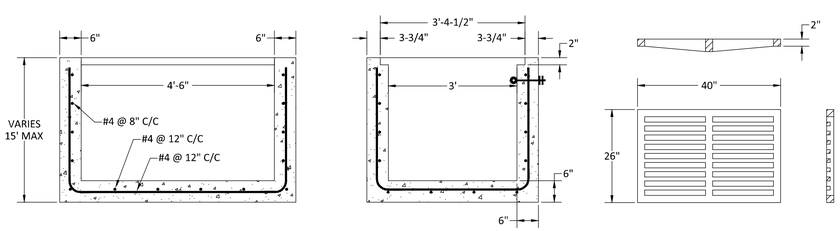
FLUME DETAIL
FDOT INDEX 520-010



TOP VIEW

GENERAL NOTES

1. INLET TO BE PRECAST CONSTRUCTION. THIS InLET CAn BE USED WITH ALT. "B" STRUCTURE BOTTOMS, FLORIDA DOT INDEX NO. 200.
2. CONCRETE WHICH MEETS THE REQUIREMENTS OF ASTM C-478 SHALL BE USED FOR PRECAST UNITS, MANUFACTURED IN PLANTS WHICH ARE UNDER STANDARD OPERATING PROCEDURES FOR THE INSPECTION OF PRECAST CONCRETE PRODUCTS.
3. CAST IRON DITCH BOTTOM INLET GRATE SET SHALL BE US FOUNDRY NO. 6300 OR EQUAL. GRATES SHALL BE SUPPLIED WITH EYEBOLTS, CHAINS, AND COLD SHUTS IN ACCORDANCE WITH FLORIDA DOT INDEX NO. 201, SHEET 2 OF 6.
4. ALL EXPOSED CORNERS AND EDGES OF CONCRETE ARE TO BE CHAMFERED 3/4".
5. REFER TO FLORIDA DOT INDEX NO. 200 FOR USE WITH ALT "B" STRUCTURE BOTTOMS.
6. REINFORCEMENT SHALL COMPLY WITH FLORIDA DOT INDEX NO. 201, SHEET 4 OF 6.

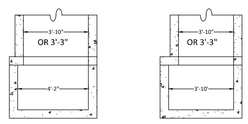


SECTION A-A

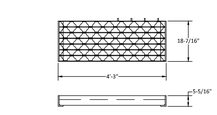
SECTION B-B

DITCH BOTTOM INLET GRATE
TWO REQUIRED PER INLET

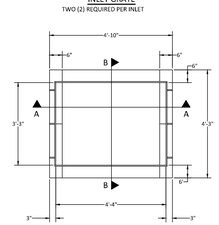
DITCH BOTTOM INLET TYPE E



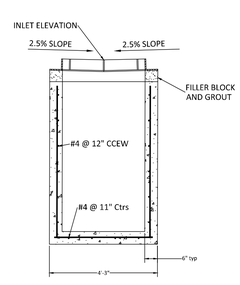
INLET WITH STRUCTURE BOTTOM



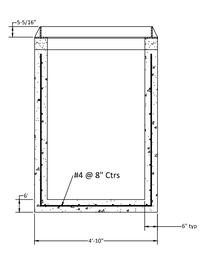
INLET GRATE
TWO (2) REQUIRED PER INLET



INLET GRATE FRAME



SECTION B-B

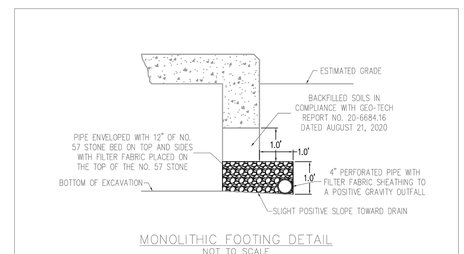


SECTION A-A

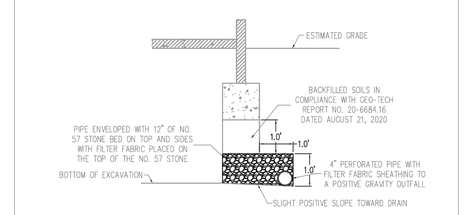
GENERAL NOTES

1. THIS INLET IS DESIGNED FOR SWALES, DITCHES, OR OTHER AREAS SUBJECT TO HEAVY WHEEL LOADS, MINIMUM DEBRIS AND SUBJECT TO PEDESTRIAN AND/OR BICYCLE TRAFFIC. PRECAST STRUCTURE SHOWN. CAST IN PLACE STRUCTURE MUST ADHERE TO FLORIDA DOT INDEX NO. 221.
2. REINFORCING - #4 BARS AT 12" CTRS. BOTH WAYS IN WALLS. SLAB TO HAVE #4 BARS AT 8" CTRS BY #4 BAR AT 11" CTRS. AS SHOWN IN THE DETAIL DRAWINGS.
3. ALL EXPOSED EDGES AND CORNERS SHALL BE TOOLED TO 1/4" RADIUS.
4. RECOMMENDED PIPE SIZES ARE FOR CONCRETE PIPE; 24" FOR THE 3'-3" WALL AND 36" FOR THE 3'-10" WALL.
5. GRATE FRAME SHALL BE FABRICATED FROM 1/2" STEEL PLATE WITH ALL SEAMS WELDED CLOSED. FRAME SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
6. GRATE SET SHALL BE U.S. FOUNDRY #6651 OR EQUAL. GRATING SHALL BE HOT DIP GALVANIZED AFTER FABRICATION AND SHALL BE SUPPLIED WITH CHAIN, COLD SHUT AND EYE BOLT.
7. FOR SUPPLEMENTARY DETAILS SEE FLORIDA DOT INDEX 201 AND 221.

MODIFIED TYPE "V" INLET DETAIL
N.T.S



MONOLITHIC FOOTING DETAIL
NOT TO SCALE



STEM WALL FOOTING DETAIL
NOT TO SCALE

*DESIGNED, CONSTRUCTED AND PERMITTED BY OTHERS.

FLEX BARNS UNDERDRAIN DETAIL	GEO-TECH, INC. ENGINEERING ■ ENVIRONMENTAL ■ CONSTRUCTION MATERIALS TESTING ■ GEOTECHNICAL EXPLORATION 1514 SE 3rd AVENUE, OCALA, FLORIDA 34471 ■ (352) 694-7701	Figure 1

Tillman & Associates ENGINEERING, LLC.
CIVIL ENGINEERING - PLANNING - LANDSCAPE ARCHITECTURE - ENVIRONMENTAL
1720 SE 16th Ave. Bldg 100, Ocala, FL 34471
Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #26756

REVISIONS

DATE

MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3, 4 & 5
MARION COUNTY, FLORIDA

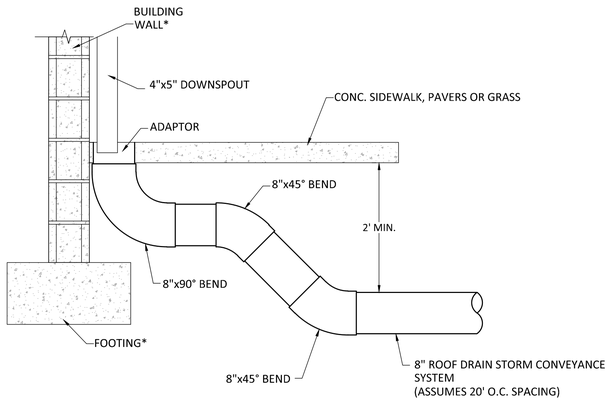
DRAINAGE DETAILS

DATE 02/11/21
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

SHT. 10.01

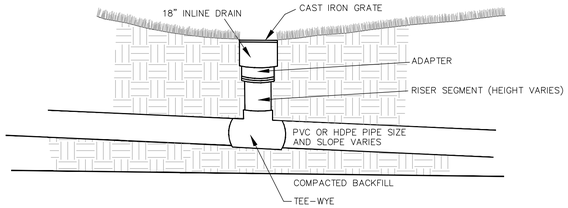
S:\Marion County\Golden Ocala Equestrian Center (2020) - Flex Barns 3\CIVIL\CONSTRUCTION\10 Drainage Details.dwg, 2/11/2021 2:07:00 PM, DWG To PDF.pc3

*SEE ARCHITECTURAL PLANS FOR BUILDING SECTION AND FOOTINGS



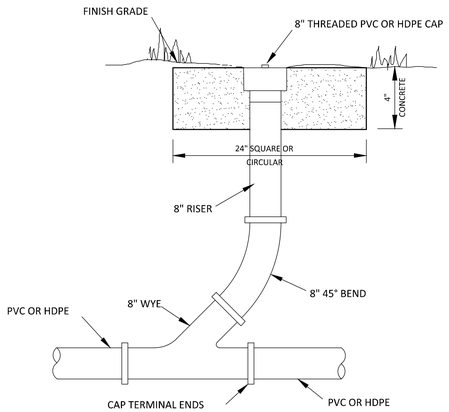
ROOF DRAIN DOWNSPOUT CONNECTION

N.T.S.



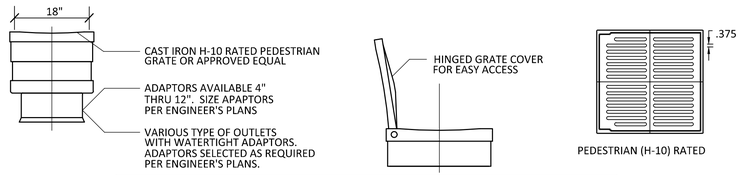
YARD DRAIN

N.T.S.



ROOFDRAIN CLEANOUT

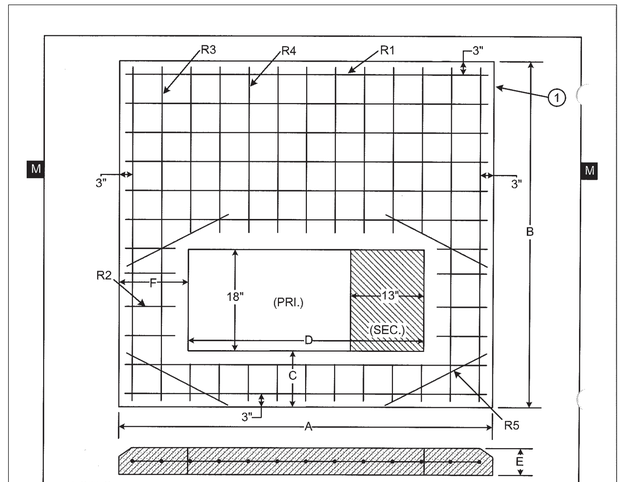
N.T.S.



TO BE INSTALLED PER MANUFACTURE'S SPECIFICATIONS

TYPICAL 18" NYLOPLAST INLINE DRAIN AND GRATE DETAIL

OR APPROVED EQUAL
N.T.S



NOTES:
1. Concrete testing, 4000 pounds per square inch: 4% to 6% entrained air, 3/4" maximum size aggregate.
2. Reinforcing steel, ASTM-A615 Grade 60, place approx. 6" O.C. each way and securely tied together.
3. Minimum concrete cover over reinforcing steel 3" unless noted.

	DIMENSIONS IN INCHES						REINFORCING BARS				
	A	B	C	D	E	F	R1	R2	R3	R4	R5
UM1-6C1	76	62	10	42	6	17	7 #4 70"	4 #4 10"	6 #4 57"	6 #4 28"	4 #4 26"
UM1-6C2	104	100	10	54	8	25	12 #4 98"	6 #4 19"	6 #4 94"	7 #4 66"	4 #4 29"

SECO — SUMTER ELECTRIC CO-OP, INC.

THREE PHASE TRANSFORMER CONCRETE PADS

REVISED: -

UM1-6C1, UM1-6C2

TRANSFORMER CONCRETE PAD DETAIL

STRUCTURAL DESIGN BY OTHERS
N.T.S

Tillman & Associates ENGINEERING, LLC.
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1720 SE 16th Ave. Bldg 100, Ocala, FL 34471
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CERTIFICATE OF AUTHORIZATION #26756

REVISIONS

DATE

MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3
MARION COUNTY, FLORIDA

DRAINAGE DETAILS

DATE 11/13/20
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

SHT. 10.02

NOTES:
1. INITIAL BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. BEDDING MATERIAL SHALL CONFORM TO FDOT NO. 57 AGGREGATE.
4. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER UP TO 12" AND 6" MINIMUM FOR PIPE DIAMETER 16" AND LARGER.
8. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. UTILITIES SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH FIRM BEARING SOIL.
9. 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.

Marion County FLORIDA | MCBCC EFFECTIVE 04/27/2018 | REVISION # 1 | TYPE "A" BEDDING AND TRENCHING | 7.3.2 UT 102

NOTES:
1. INITIAL BACKFILL AND HAUNCHING: SELECT COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY MCU.
4. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. 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.

Marion County FLORIDA | MCBCC EFFECTIVE 04/27/2018 | REVISION # 1 | TYPE "B" BEDDING AND TRENCHING | 7.3.2 UT 103

NOTES:
1. PVC PIPE SHALL REQUIRE INSULATED METALLIC LOCATING WIRE (10 GAUGE COPPER) CAPABLE OF DETECTION BY A CABLE LOCATOR AND SHALL BE BURIED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE.
2. LOCATING WIRE SHALL TERMINATE AT EACH VALVE BOX AND BE CAPABLE OF EXTENDING 12" ABOVE TOP OF VALVE BOX. LOCATING WIRE SHALL BE LOOPED AT EACH VALVE BOX.
3. USE DUCT TAPE AS NECESSARY TO HOLD WIRE DIRECTLY ON THE TOP OF THE PIPE.
4. ALL WIRE CONNECTIONS IN VALVE BOXES SHALL BE SPLICED TOGETHER AND TAPED.
5. FOR HORIZONTAL DIRECTIONAL DRILLING, UTILIZE 2 LOCATING WIRES WITH ALUMINUM TENSILE STRENGTH OF 1800 PSI.

Marion County FLORIDA | MCBCC EFFECTIVE 04/27/2018 | REVISION # 1 | PIPE LOCATING WIRE | 7.3.2 UT 104

Marion County FLORIDA | MCBCC EFFECTIVE 10/12/2013 | REVISION # NA | MJ TAPPING SLEEVE AND GATE VALVE ASSEMBLY FOR WATER AND RECLAIMED WATER | 7.3.2 UT 108

NOTES:
1. MARKERS ARE REQUIRED WHEN UTILITY MAIN IS LOCATED OVER 30 FEET FROM EDGE OF PAVEMENT OR PRIVATE EASEMENT AND ADJACENTS TO THE RIGHT-OF-WAY.
2. MARKERS SHALL BE 4" DIAMETER SCH 80 OR DR18 PVC; BLUE FOR WATER; GREEN FOR WASTEWATER; AND PANTONE PURPLE 522C FOR RECLAIMED WATER.
3. MARKERS SHALL BE PLACED AT ALL DIRECTIONAL CHANGES AND AT ALL VALVES EXCEPT WATER VALVES NEAR FIRE HYDRANTS.
4. ADDITIONAL MARKERS SHALL BE INSTALLED AS NEEDED SO THAT THE DISTANCE BETWEEN MARKERS DOES NOT EXCEED 1,000 FEET.

Marion County FLORIDA | MCBCC EFFECTIVE 04/27/2018 | REVISION # 1 | UTILITY MAIN MARKER | 7.3.2 UT 109

Marion County FLORIDA | MCBCC EFFECTIVE 10/12/2013 | REVISION # NA | TYPICAL VALVE BOX COVER | 7.3.2 UT 110

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

Marion County FLORIDA | MCBCC EFFECTIVE 04/27/2018 | REVISION # 1 | SEALED VALVE BOX, ADJUSTABLE | 7.3.2 UT 111

NOTES:
1. BRONZE (OR STAINLESS STEEL) IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES, EXCEPT HYDRANT VALVES.

Marion County FLORIDA | MCBCC EFFECTIVE 10/12/2013 | REVISION # NA | VALVE BOX PAD | 7.3.2 UT 112

MINIMUM DESIGN CRITERIA
BEDDING TYPE: 4 DESIGN PRESSURE: 150 PSI.
SAFTEY FACTOR: 1.5
DEPTH OF COVER: 3.0 ft.
SOIL: SAND-SILT

MINIMUM RESTRAINED LENGTH (FT)
EACH SIDE OF FITTING
A=BARE DIP
B=PCL'WRAPPED DIP OR BARE PVC
H=HORIZONTAL
V=VERTICAL—UP
VD=VERTICAL—DOWN

NOTES:
1. FOR LENGTH OF PIPE AND NUMBER OF JOINTS TO BE RESTRAINED, SEE TABLE.
2. ONLY DUCTILE IRON FITTINGS SHALL BE USED AT JOINTS TO BE RESTRAINED UNLESS OTHERWISE SPECIFIED BY THE MCU.
3. IN-LINE VALVES SHALL BE RESTRAINED BOTH WAYS.

Marion County FLORIDA | MCBCC EFFECTIVE 04/27/2018 | REVISION # 1 | RESTRAINED PIPE TABLE WATER AND RECLAIMED MAINS | 7.3.2 UT 200

SCHEDULE OF DIMENSIONS AND MATERIALS

PIPE SIZE (INCHES)	DIMENSIONS (FT.) A	B	C	D	TIE RODS REQ'D DIA.	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 AREAS TO BE COMPUTED ON BASIS OF 2000 LBS/SF SOIL RESTRAINT BEARING.

NOTES:
1. ADDITIONAL REINFORCEMENTS SHALL BE AS SPECIFIED BY THE ENGINEER.
2. MINIMUM COMPRESSIVE STRENGTH FOR CONCRETE SHALL BE 3000 PSI.
3. BEDDING, BACKFILL AND COMPACTION SHALL BE AS SPECIFIED ELSEWHERE IN THE LAND DEVELOPMENT CODE.
4. ALL FORM BOARDS SHALL BE REMOVED PRIOR TO BACKFILL.
5. NO ALLOWANCE SHALL BE MADE FOR FRICTION BETWEEN THE PIPE WALL AND THE THRUST COLLAR.
6. DESIGN PRESSURE: 150 PSI.

Marion County FLORIDA | MCBCC EFFECTIVE 10/12/2013 | REVISION # NA | THRUST COLLAR WATER MAINS | 7.3.2 UT 201

NOTES:
1. 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 MCU.
2. THE 2" CORP VALVES USED FOR FILLING ANY NEW WATER MAIN OF ANY SIZE FOR EXISTING ACTIVE WATER MAINS AND FOR FLUSHING OF NEW MAINS, AND FOR FILLING BACTERIOLOGICAL SAMPLES FROM ANY NEW 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 FDEP 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 FDEP 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.
3. THE TAPPING SLEEVE AND THE EXTERIOR OF THE MAIN TO BE TAPPED SHALL BE DISINFECTED BY SPRAYING OR SWABBING PER SECTION 9 OF AWWA C651, LATEST EDITION.
4. UPON RECEIPT OF CLEARANCE FOR USE FROM FDEP AND MCU, THE CONTRACTOR SHALL REMOVE THE TEMPORARY JUMPER CONNECTION. THE 2" CORP VALVES ARE TO BE CLOSED AND PLUGGED WITH 2" BRASS PLUGS. THE MAINS CAN NOW BE CONNECTED BY SLEEVE OR FLANGED CONNECTIONS.
5. ALL INSTALLATION AND MAINTENANCE OF THE TEMPORARY JUMPER CONNECTION AND ASSOCIATED BACK FLOW PREVENTION DEVICE, FITTINGS, VALVE, ETC., SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
6. WATER FOR TESTING AND DISINFECTION OF THE NEW WATER MAIN MAY BE OBTAINED FROM ANY OTHER USES SHALL BE AT THE CONTRACTOR'S EXPENSE.
7. ALL PIPING AND APPURTENANCES TO BE 2" FOR 8" AND BELOW WATER MAINS; 4" FOR 12" WATER MAINS; 8" FOR 16" WATER MAINS; 12" FOR 24" WATER MAINS.

Marion County FLORIDA | MCBCC EFFECTIVE 04/27/2018 | REVISION # 1 | TEMPORARY JUMPER CONNECTION | 7.3.2 UT 203

NOTES:
1. PVC EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
2. VALVES ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO COME UP TO 4 FOOT DEPTH BELOW FINISHED GRADE.
3. GATE VALVES SHALL BE USED WITH ALL WATER MAINS THROUGH TWELVE (12) INCHES. BUTTERFLY VALVES SHALL BE USED FOR ALL LARGER SIZES, UNLESS STATED OTHERWISE.
4. WHEN VALVE BOX IS TO BE INSTALLED IN ROADWAY OR OTHER TRAFFIC AREAS SET VALVE BOX ON FIVE (5) SOLID COMMON BRICKS.
5. VALVE BOX LID TO BE LETTERED WITH THE WORD "WATER" OR "RECLAIMED".
6. INSTALL BRASS ID TAG IN CONCRETE.

Marion County FLORIDA | MCBCC EFFECTIVE 04/27/2018 | REVISION # 1 | GATE VALVE WATER AND RECLAIMED MAINS | 7.3.2 UT 204

NOTES:
1. PVC PIPE EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
2. THE VALVE ACTUATING NUT SHALL BE EXTENDED TO BE WITHIN 3' OF FINISHED GRADE.
3. PROVIDE A PLASTIC DEBRIS SHIELD / ALIGNMENT RING WHICH INSTALLS BELOW THE VALVE ACTUATING NUT. THIS SHIELD SHALL CENTER THE RISER PIPE BOX OVER THE ACTUATING NUT AND MINIMIZE INFILTRATION.
4. LOCATING WIRE SHALL BE CONTINUOUS WITH NO SPLICES AND SHALL EXTEND 12" ABOVE TOP OF COLLAR. WIRE SHALL BE COLOR CODED TO MATCH THE UTILITY INSTALLED.
5. FOR NEW CONSTRUCTION, THE VALVE BOX SHALL BE ADJUSTED TO MIDRANGE TO ALLOW FOR FUTURE BOX ADJUSTMENTS.
6. INSTALL BRASS ID TAG IN CONCRETE.
7. VALVE BOX LID TO BE LETTERED WITH THE WORDS "WATER" OR "RECLAIMED".

Marion County FLORIDA | MCBCC EFFECTIVE 10/12/2013 | REVISION # NA | BUTTERFLY VALVE AND BOX WATER AND RECLAIMED MAINS | 7.3.2 UT 205

NOTES:
1. FOR WATER OR RECLAIM USE ONLY.
2. OFFSET DISTANCE TO BE FIELD DETERMINED AND AS CLOSE TO THE RIGHT-OF-WAY AS POSSIBLE.
3. ADJUST HORIZONTAL POSITION OF SIDEWALK AS REQUIRED TO AVOID ARV ENCLOSURE.
4. LOCATE ARV ENCLOSURE WITHIN 6" OF RIGHT-OF-WAY.

Marion County FLORIDA | MCBCC EFFECTIVE 04/27/2018 | REVISION # 1 | ABOVEGROUND OFFSET WATER OR RECLAIM AIR RELEASE VALVE | 7.3.2 UT 206

NOTE: AUTOMATIC BLOW-OFF VALVES TO BE PROVIDED ON AN AS-NEEDED BASIS AS DETERMINED BY MCU.

Marion County FLORIDA | MCBCC EFFECTIVE 04/27/2018 | REVISION # 1 | AUTOMATIC BLOW OFF VALVE WATER MAIN | 7.3.2 UT 207

NOTES:
1. REQUIRED FOR SITES WITH SEPARATE DOMESTIC AND FIRE SYSTEM SUPPLY PIPING.
2. BACKFLOW ASSEMBLY SHALL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER.
3. MCU SHALL OWN AND MAINTAIN THE METER.
4. 10'-0" CLEARANCE REQUIRED FOR BY-PASS METER READING. MINIMUM EASEMENT SIZE IS 10 FEET BY 15 FEET.
5. 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 2-INCHES SHALL REQUIRE AN RPZ AND SHALL BE METERED. METER AND TAP SIZE SHALL BE DETERMINED BY A FLORIDA LICENSED SPRINKLER CONTRACTOR, ARCHITECT, OR ENGINEER. SEE DETAIL 7.3.2 UT 209.
6. SERVICES 2-INCH AND LARGER SHALL BE DP FROM THE POINT OF CONNECTION AT THE MAIN TO THE FIRE LINE DOUBLE DETECTOR CHECK VALVE ASSEMBLY IF THE MAIN IS ON THE SAME SIDE OF THE STREET AS THE ASSEMBLY. IF THE MAIN IS ON THE OPPOSITE SIDE OF THE STREET AS THE ASSEMBLY, A MINIMUM OF ONE SEGMENT OF PIPE IMMEDIATELY UPSTREAM FROM THE FIRE LINE DOUBLE DETECTOR CHECK VALVE ASSEMBLY SHALL BE DP.
7. FREEZE PROTECTION SHALL BE PROVIDED IN ACCORDANCE WITH THE FIRE MARSHALL.

Marion County FLORIDA | MCBCC EFFECTIVE 04/27/2018 | REVISION # 1 | FIRE LINE DOUBLE DETECTOR CHECK VALVE ASSEMBLY | 7.3.2 UT 208

NOTE: THIS SHALL BE MAINTAINED AS PER MARION COUNTY CROSS CONNECTION CONTROL ORDINANCE. PIPES LARGER THAN 4" SHALL BE DUCTILE IRON.

Marion County FLORIDA | MCBCC EFFECTIVE 10/12/2013 | REVISION # NA | REDUCED PRESSURE BACKFLOW PREVENTER | 7.3.2 UT 209

STANDARD CONFIGURATION

ALTERNATE CONFIGURATION

NOTES:
1. BONNET COLORS SHALL BE IN ACCORDANCE WITH SEC. 6.18.2-G.
2. HYDRANT SHALL BE 1' INSIDE OF RIGHT-OF-WAY, WHEN POSSIBLE.
3. BLUE REFLECTOR SHALL BE PLACED IN THE MIDDLE OF THE ADJACENT TRAVEL LANE.
4. 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 FLORIDA | MCBCC EFFECTIVE 04/27/2018 | REVISION # 1 | FIRE HYDRANT ASSEMBLY | 7.3.2 UT 210

Tillman & Associates
ENGINEERING, LLC.
CIVIL ENGINEERING - PLANNING - LANDSCAPE ARCHITECTURE - ENVIRONMENTAL
1720 SE 16th Ave. Bldg 100, Ocala, FL 34471
Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #26756

REVISIONS

DATE

MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3
MARION COUNTY, FLORIDA

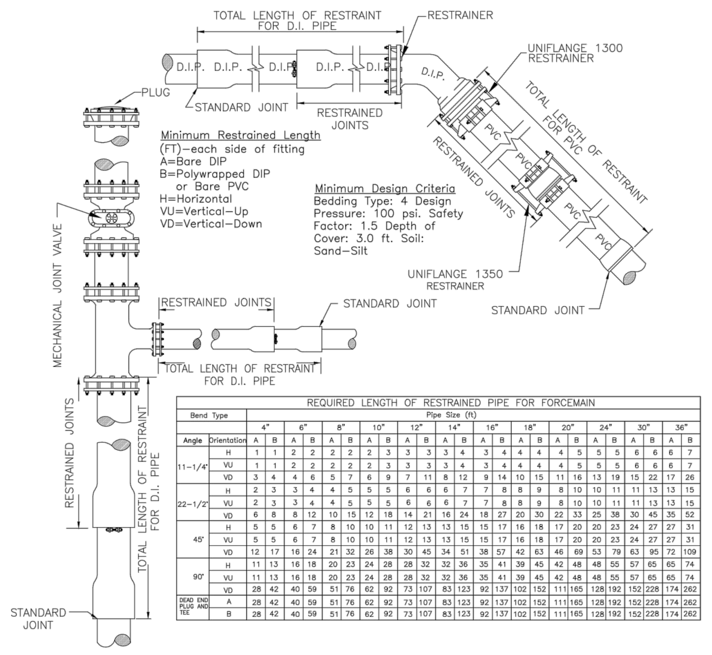
UTILITY DETAILS

DATE 11/13/20
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

SHT. 11.01

NOT VALID UNLESS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER

S:\Marion County\Golden Ocala Equestrian Center (2020) - Flex Barns 3\CIVIL\CONSTRUCTION\11 Utility Details.dwg, 01, 11/13/2020 10:04:26 AM

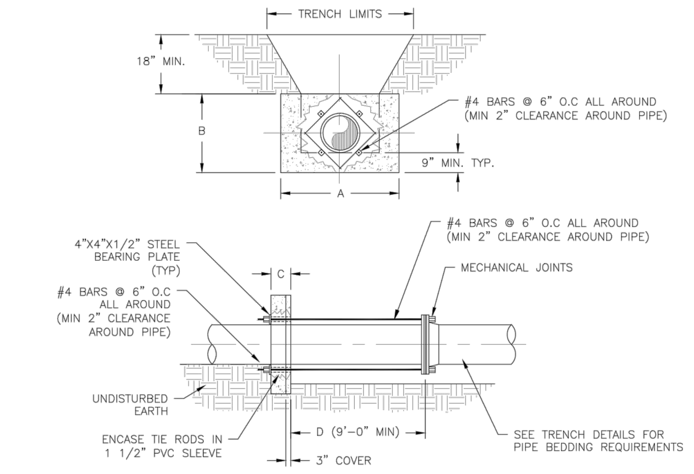


REQUIRED LENGTH OF RESTRAINED PIPE FOR FORCEMAIN

Bend Type		4" A	4" B	6" A	6" B	8" A	8" B	10" A	10" B	12" A	12" B	14" A	14" B	16" A	16" B	18" A	18" B	20" A	20" B	24" A	24" B	30" A	30" B	36" A	36" B
Angle	Orientation																								
11-1/4°	H	1	1	2	2	2	2	2	2	3	3	3	3	3	4	3	4	4	4	4	5	5	5	6	6
11-1/4°	VU	1	1	2	2	2	2	2	2	3	3	3	3	3	4	3	4	4	4	4	5	5	6	6	7
11-1/4°	VD	3	4	4	6	5	7	6	9	7	11	8	12	9	14	10	15	11	16	13	19	15	22	17	26
22-1/2°	H	2	1	3	3	4	4	5	5	5	6	6	6	7	7	8	8	8	9	10	11	11	13	13	15
22-1/2°	VU	2	3	3	4	4	5	5	5	6	6	6	7	7	7	8	8	9	8	10	11	11	13	13	15
22-1/2°	VD	6	8	8	12	10	15	12	18	14	21	16	24	18	27	20	30	22	33	25	38	30	45	35	52
45°	H	5	5	6	7	8	10	10	11	12	13	13	15	15	17	16	18	17	20	20	23	24	27	27	31
45°	VU	5	5	6	7	8	10	10	11	12	13	13	15	15	17	16	18	17	20	20	23	24	27	27	31
45°	VD	12	17	16	24	21	32	26	38	30	45	34	51	38	57	42	63	46	69	53	79	63	95	72	109
90°	H	11	13	16	18	20	23	24	28	28	32	32	36	35	41	39	45	42	48	48	55	57	65	65	74
90°	VU	11	13	16	18	20	23	24	28	28	32	32	36	35	41	39	45	42	48	48	55	57	65	65	74
90°	VD	28	42	40	59	51	76	62	92	73	107	83	123	92	137	102	152	111	165	128	192	152	228	174	262
DEAD END PLUG AND TEE	A	28	42	40	59	51	76	62	92	73	107	83	123	92	137	102	152	111	165	128	192	152	228	174	262
DEAD END PLUG AND TEE	B	28	42	40	59	51	76	62	92	73	107	83	123	92	137	102	152	111	165	128	192	152	228	174	262

NOTES:
1. FITTINGS SHALL HAVE RESTRAINED JOINTS UNLESS OTHERWISE INDICATED.
2. INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO OR GREATER THAN LENGTH SHOWN IN THE TABLE.
3. WHERE TWO OR MORE FITTINGS ARE IN SERIES, SELECT FITTING RESTRAINT LENGTH THAT YIELDS THE LONGEST RESTRAINT DISTANCE.
4. ALL IN-LINE VALVES SHALL BE RESTRAINED.
5. WHERE INTERNAL RESTRAINED JOINTS ARE USED, THE ENTIRE BELL SHALL BE PAINTED RED.
6. LENGTHS SHOWN IN THE TABLE WERE CALCULATED IN ACCORDANCE WITH PROCEDURES OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" GUIDELINES PUBLISHED BY DIPRA.
7. THE DESIGN ENGINEER SHALL INCREASE THE VALUES IN THE TABLE AS WARRANTED BY SITE-SPECIFIC PARAMETERS, SUCH AS SOIL DESIGNATIONS AND LAYING CONDITIONS.
8. FOR LENGTH OF PIPE AND NUMBER OF JOINTS TO BE RESTRAINED SEE TABLE.
9. ONLY DUCTILE IRON FITTINGS SHALL BE USED AT JOINTS TO BE RESTRAINED UNLESS OTHERWISE SPECIFIED BY THE MCU.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/27/2018 | REVISION # 1 | RESTRAINED PIPE TABLE WASTEWATER FORCE MAINS | 7.3.2 UT 300



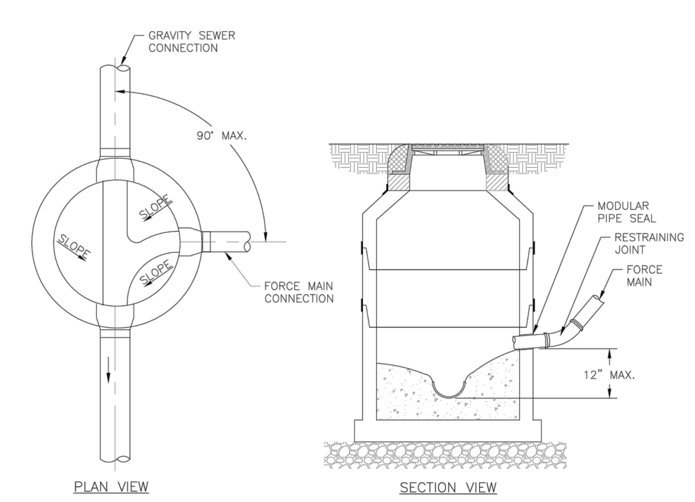
SCHEDULE OF DIMENSIONS AND MATERIALS

PIPE SIZE (INCHES)	DIMENSIONS (FT.) A	B	C	D	TIE RODS REQ'D DIA.	NO.
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.

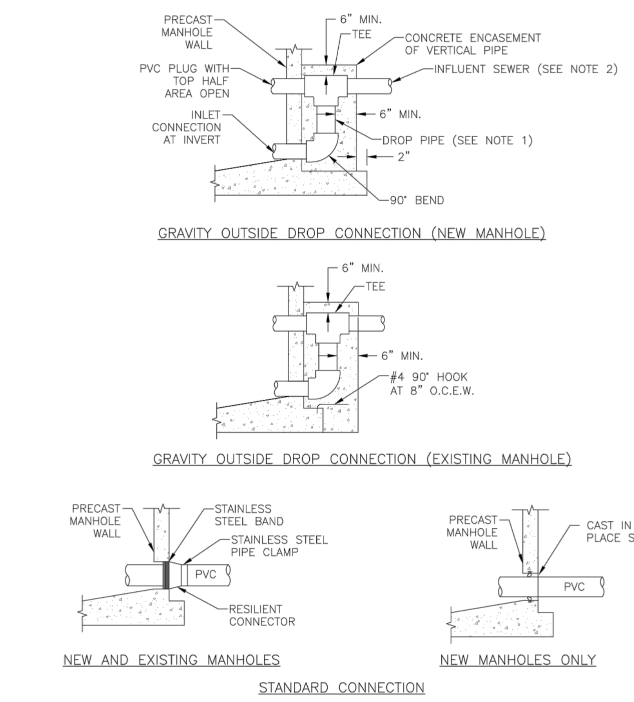
NOTES:
1. ADDITIONAL REINFORCEMENTS SHALL BE AS SPECIFIED BY THE ENGINEER.
2. MINIMUM COMPRESSIVE STRENGTH FOR CONCRETE SHALL BE 3000 PSI.
3. BEDDING, BACKFILL, AND COMPACTION SHALL BE AS SPECIFIED ELSEWHERE IN THE STANDARD DRAWINGS.
4. ALL FORM BOARDS SHALL BE REMOVED PRIOR TO BACKFILL.
5. NO ALLOWANCE SHALL BE MADE FOR FRICTION BETWEEN THE PIPE WALL AND THE THRUST COLLAR.
6. DESIGN PRESSURE: 100 PSI.
7. REQUIRED FOR LINE STOPS.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 10/12/2013 | REVISION # NA | THRUST COLLAR WASTEWATER FORCE MAINS | 7.3.2 UT 301



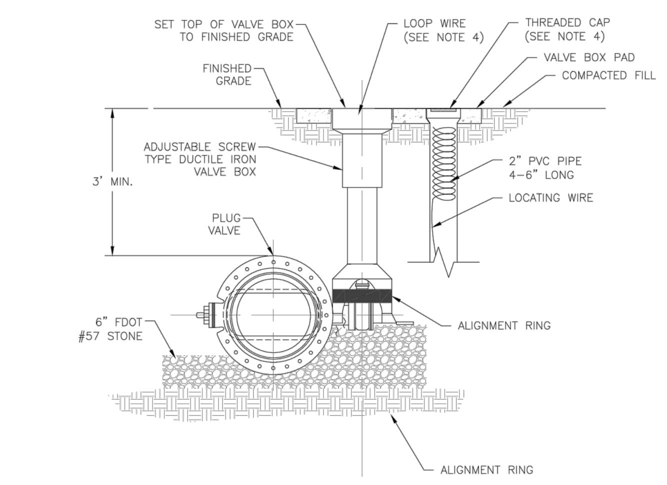
NOTES:
1. FORCE MAIN ORIENTED TO FACILITATE FLOW AND SHALL ENTER MANHOLE WITHIN 1' ABOVE INVERT OF THE EFFLUENT PIPE.
2. BENCH AS REQUIRED FOR NEW FORCE MAIN.
3. MANHOLE RECEIVING FORCE MAIN AND NEXT MANHOLE SHALL BE LINED PER MARION COUNTY LAND DEVELOPMENT CODE. FOR CONNECTIONS TO EXISTING MANHOLES, MANHOLE RECEIVING FORCE MAIN AND NEXT MANHOLE SHALL BE COATED OR LINED PER MARION COUNTY LAND DEVELOPMENT CODE.
4. CONTRACTOR TO COORDINATE THE PRESENCE OF MCU INSPECTOR DURING CORING AND CONNECTIONS TO EXISTING MANHOLES.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/27/2018 | REVISION # 1 | FORCE MAIN TO GRAVITY SEWER CONNECTION | 7.3.2 UT 302



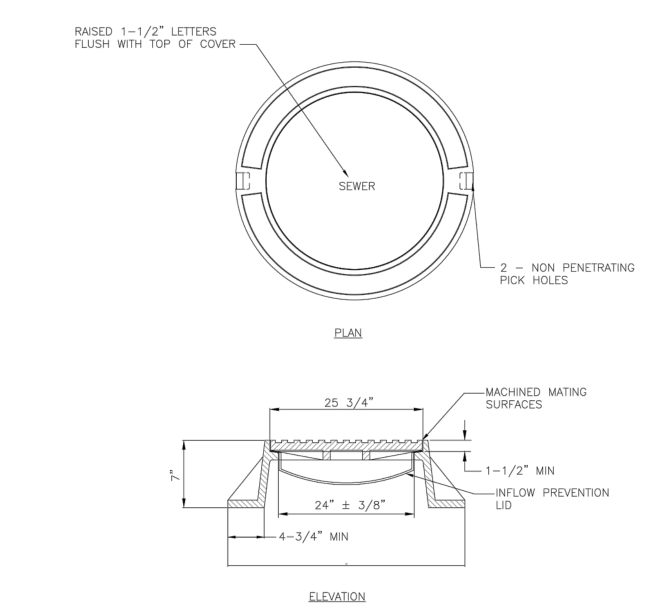
NOTES:
1. DROP PIPE AND FITTINGS SHALL BE OF EQUAL SIZE AND MATERIAL AS THE INFLUENT SEWER.
2. AN OUTSIDE DROP CONNECTION SHALL BE REQUIRED FOR ALL INFLUENT LINES WHICH HAVE AN INVERT 2' OR MORE ABOVE THE MANHOLE INVERT.
3. CONTRACTOR TO COORDINATE THE PRESENCE OF MCU INSPECTOR DURING CORING AND CONNECTIONS TO EXISTING MANHOLES.
4. POUR NEW BENCH FOR CONNECTION.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/27/2018 | REVISION # 1 | GRAVITY MANHOLE CONNECTION | 7.3.2 UT 303

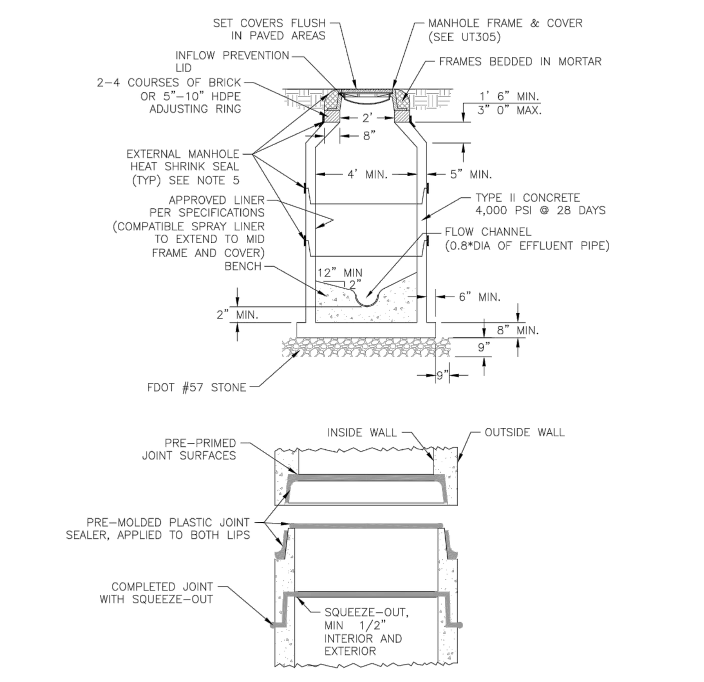


NOTES:
1. PVC PIPE EXTENSIONS SHALL BE USED ON VALVE BOX INSTALLATION.
2. THE VALVE ACTUATING NUT SHALL BE EXTENDED TO BE WITHIN 3' OF FINISHED GRADE.
3. PROVIDE A PLASTIC DEBRIS SHIELD / ALIGNMENT RING WHICH INSTALLS BELOW THE VALVE ACTUATING NUT. THIS SHIELD SHALL CENTER THE RISER PIPE BOX OVER THE ACTUATING NUT AND MINIMIZE INFILTRATION.
4. LOCATING WIRE SHALL BE CONTINUOUS WITH NO SPLICES AND SHALL EXTEND 12" ABOVE TOP OF COLLAR. WIRE SHALL BE COLOR CODED TO MATCH THE UTILITY INSTALLED.
5. FOR NEW CONSTRUCTION, THE VALVE BOX SHALL BE ADJUSTED TO MIDRANGE TO ALLOW FOR FUTURE BOX ADJUSTMENTS.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/27/2018 | REVISION # 1 | PLUG VALVE AND BOX | 7.3.2 UT 304

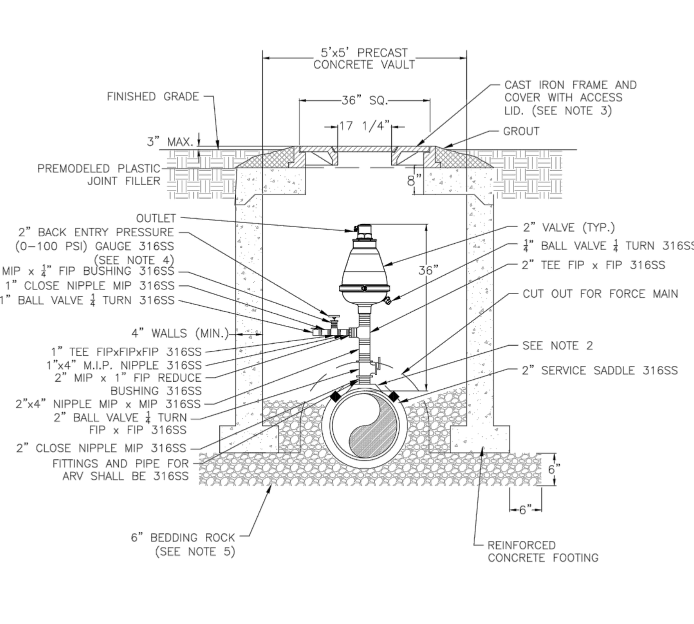


Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/27/2018 | REVISION # 1 | STANDARD SEWER MANHOLE FRAME AND COVER | 7.3.2 UT 305



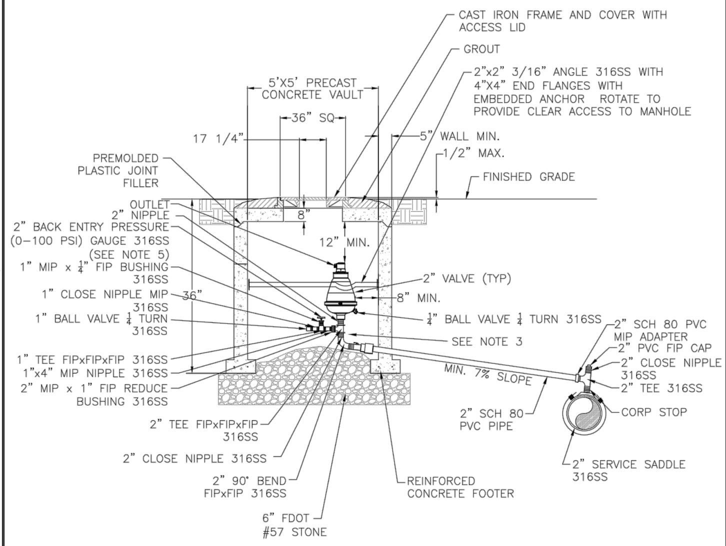
NOTES:
1. DROP CONNECTIONS ARE REQUIRED WHENEVER INVERT OF INFLUENT SEWER IS 24" OR MORE ABOVE THE INVERT OF THE MANHOLE. SEE GRAVITY MANHOLE CONNECTION DETAIL UT303.
2. ECCENTRIC CONE DESIGN MAY BE USED FOR CONFLICT RESOLUTION WITH MCU APPROVAL.
3. A FLOW CHANNEL SHALL BE CONSTRUCTED INSIDE MANHOLE TO DIRECT INFLUENT INTO FLOW STREAM.
4. LIFT HOLES THROUGH STRUCTURE ARE NOT PERMITTED.
5. USE EXTERNAL WRAP TO TIGHTLY WRAP MANHOLE AROUND CASTING JOINTS AND APPLY HIGH INTENSITY PROPANE TORCH TO EFFECTIVELY SEAL THEM FROM GROUND WATER INFILTRATION. ALL EXTERNAL HEAT SHRINK WRAPS SHALL BE INSPECTED IN PERSON, OR THROUGH A MCU APPROVED METHOD, BY A MCU CONSTRUCTION REPRESENTATIVE.
6. INFLOW PREVENTION LIDS SHALL BE REQUIRED FOR ALL MANHOLES.
7. HDPE ADJUSTING RINGS MAY BE SUBSTITUTED FOR BRICK RISERS.
8. SECTION HEIGHTS VARY AS REQUIRED, AND AS AVAILABLE.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/27/2018 | REVISION # 1 | PRECAST CONCRETE MANHOLE | 7.3.2 UT 306



NOTES:
1. ABOVE DETAIL IS BASED ON 2" COMBINATION AIR/VACUUM RELEASE VALVE. CHANGE PIPE AND FITTINGS ACCORDINGLY FOR OTHER VALVE SIZES AND TYPES. VALVE SIZES TO BE DETERMINED BY THE ENGINEER AND APPROVED BY MCU PRIOR TO INSTALLATION.
2. THE MINIMUM DIMENSION FROM TOP OF PIPE TO FINISHED GRADE SHALL BE 4.0 FEET.
3. LID TO BE LETTERED WITH THE APPROPRIATE WORD "SEWER".
4. PRESSURE GAUGE SHALL BE ASHCROFT TYPE 1009SW STAINLESS CASE WITH STAINLESS STEEL SYSTEM (GAUGE MODEL #25-1009-SWL-02B-100 AND DIAPHRAM MODEL #25-310SS-02T-CG).
5. COMPACT BEDDING AROUND THE PIPE.
6. ALL AIR RELEASE VALVE VAULTS SHALL BE TRAFFIC RATED (H20 LOADING).
7. AIR RELEASE VALVE VAULTS SHALL BE LINED ON THE INSIDE AND LINER SHALL EXTEND UP TO MID FRAME AND COVER.

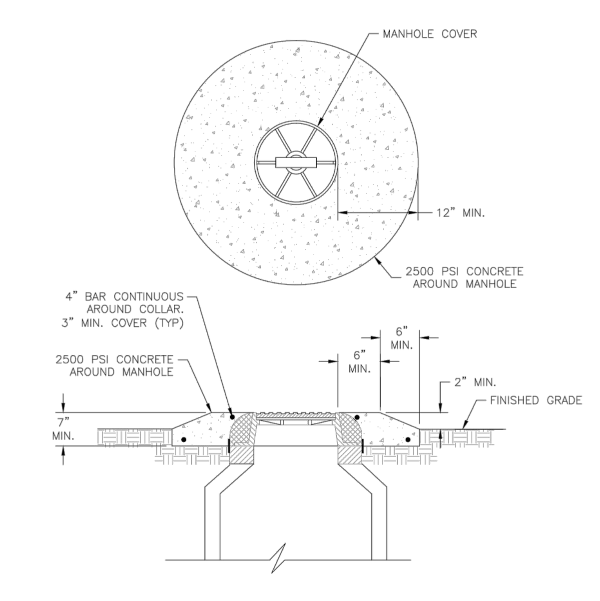
Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/27/2018 | REVISION # 1 | AIR RELEASE VALVE SEWER AND RECLAIMED | 7.3.2 UT 307



MAIN DIAMETER	ARV (AIR RELEASE VALVE)
12" AND SMALLER	2"
16"	3"
20", 24"	4"
30", 36"	6"

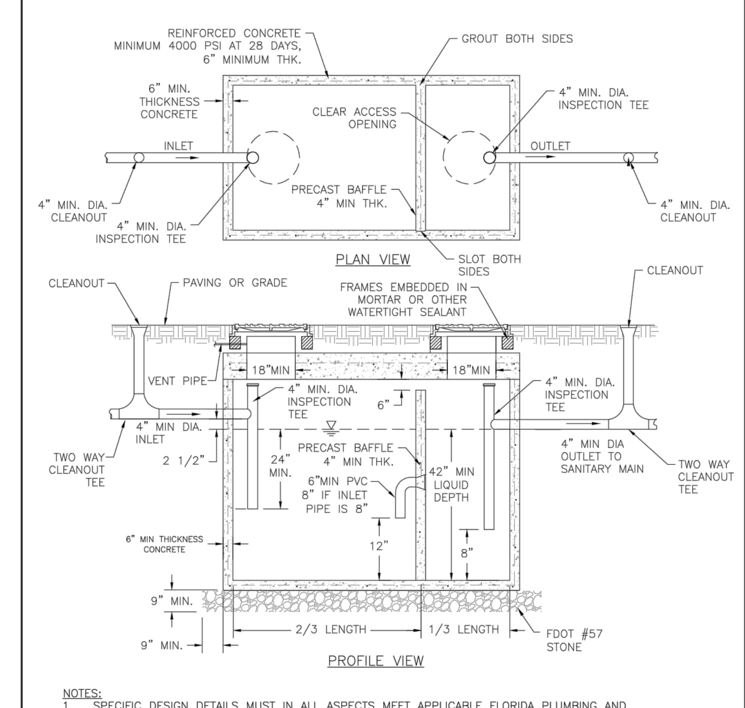
NOTES:
1. ABOVE DETAIL APPLIES TO A 2" ARV. FOR LARGER ARVS, PIPE DIAMETER SHALL BE EQUAL TO THE SIZE OF THE ARV.
2. THE MINIMUM DIMENSION FROM TOP OF PIPE TO FINISHED GRADE SHALL BE 4.0 FEET.
3. ALL VAULT INTERNAL PIPING, VALVES, AND APPURTENANCES TO BE BRASS OR 316SS EXCEPT WHERE SPECIFIED OTHERWISE.
4. 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.
5. PRESSURE GAUGE SHALL BE ASHCROFT TYPE 1009SW STAINLESS CASE WITH STAINLESS STEEL SYSTEM (GAUGE MODEL #25-1009-SWL-02B-100 AND DIAPHRAM MODEL #25-310SS-02T-CG).
6. ALL AIR RELEASE VALVE VAULTS SHALL BE TRAFFIC RATED (H20 LOADING).
7. AIR RELEASE VALVE VAULTS SHALL BE LINED ON THE INSIDE AND LINER SHALL EXTEND UP TO MID FRAME AND COVER.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/27/2018 | REVISION # 1 | AIR OR COMBINATION AIR RELEASE VALVE IN VAULT, WASTEWATER | 7.3.2 UT 308



NOTES:
1. CLEARANCE OF 30" FREE FROM OBSTRUCTIONS IN ALL DIRECTIONS.
2. AREAS SUPPORTING CONCRETE COLLAR OR SLAB SHALL BE PROPERLY COMPACTED.
3. TOP OF MANHOLE SHALL BE 2" ABOVE FINISHED GRADE, CROWN OF ADJACENT ROADWAY, OR 100 YEAR FLOOD ELEVATION, WHICHEVER IS GREATER.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 10/12/2013 | REVISION # NA | MANHOLE IN NON-PAVED AREA | 7.3.2 UT 309



NOTES:
1. SPECIFIC DESIGN DETAILS MUST IN ALL ASPECTS MEET APPLICABLE FLORIDA PLUMBING AND ADMINISTRATIVE CODE.
2. SIZE GREASE INTERCEPTOR PER MARION COUNTY LAND DEVELOPMENT CODE.
3. INTERCEPTORS SHALL BE WATER AND GAS TIGHT.
4. ALL FIXTURES LOCATED IN FOOD AND BEVERAGE PREPARATION AREAS SHALL BE ROUTED THROUGH GREASE INTERCEPTOR. RESTROOM WASTE SHALL NOT BE ROUTED THROUGH INTERCEPTOR.
5. BAFFLE REQUIRED; ALTERNATIVE DESIGNS ARE ACCEPTABLE. DESIGN MUST MEET FLORIDA PLUMBING AND ADMINISTRATIVE CODE.
6. LOADS: H-20 TRUCK WHEELS WITH 30% IMPACT PER AASHTO. TRAFFIC BEARING FRAME AND COVER TO MEET FDOT STANDARDS IF APPLICABLE.

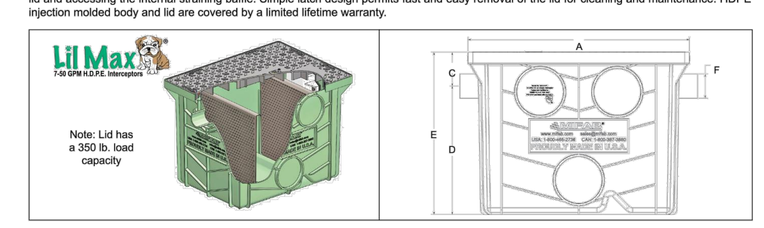
Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/27/2018 | REVISION # 1 | GREASE INTERCEPTOR | 7.3.2 UT 310

Location: ____

MIFAB® | Lil-FUR | Lil Max® – 7 to 50 GPM Fur Interceptors

Speci ication: MIFAB® Series LIL-FUR ____ HDPE injection molded fur interceptor with flow rating of ____ (indicate) and liquid holding capacity of ____ (indicate). Unit shall include: two internal straining baffles with 1/4" diameter holes spaced 1/2" apart, internal deep seal trap and HDPE injection molded, non skid, rectangular gasketed lid with securing latches. For indoor/outdoor use.

Function: Used in drain lines at animal cleaning and maintaining areas where animal fur and pet hair drains with the waste water. Typically installed either on or recessed in the floor. Regular maintenance is required to keep the interceptors functioning. The fur interceptor will filter out fur and pet hair from the fixture waste line before entering the pipe system to reduce clogging. Interceptor is cleaned by removing the top gasketed lid and accessing the internal straining baffle. Simple latch design permits fast and easy removal of the lid for cleaning and maintenance. HDPE injection molded body and lid are covered by a limited lifetime warranty.



MODEL NO.	FLOW RATE (GPM)	LIQUID CAP. (Gallons/ Cu. Ft.)	SOLIDS CAP. (Gallons/Cu. Ft.)	A (IN)	B (IN) WIDTH	C (IN)	D (IN)	E (IN)	F (IN)	Shipping Weight (lbs.) (in box)	Box Dimensions (L x W x H)
Lil-7-FUR	7	5.8 / .75	3 / .40	19.5	15.5	3.5	9	12.5	2	21	22" x 16" x 13"
Lil-10-FUR	10	9.2 / 1.2	4.5 / .61	23	17.5	3.5	9.75	13.25	2	30	25" x 18" x 14"
Lil-15-FUR	15	13 / 1.7	6.5 / .87	23	17.5	3.5	13.25	16.75	2	33	25" x 18" x 17.5"
Lil-20-FUR	20	16 / 2.1	8 / 1.10	29.5	20.5	3.5	10.75	14.25	3	41	32" x 21" x 15"
Lil-25-FUR	25	23 / 3.1	11.5 / 1.54	29.5	20.5	3.5	14.75	18.25	3	44	32" x 21" x 19"
Lil-35-FUR	35	39 / 5.2	20 / 2.70	33	25.5	5.5	16.75	22.25	3	57	35" x 26" x 23"
Lil-50-FUR	50	44 / 5.9	22 / 2.95	33	25.5	5.5	18.75	24.25	3	71	35" x 26" x 25"

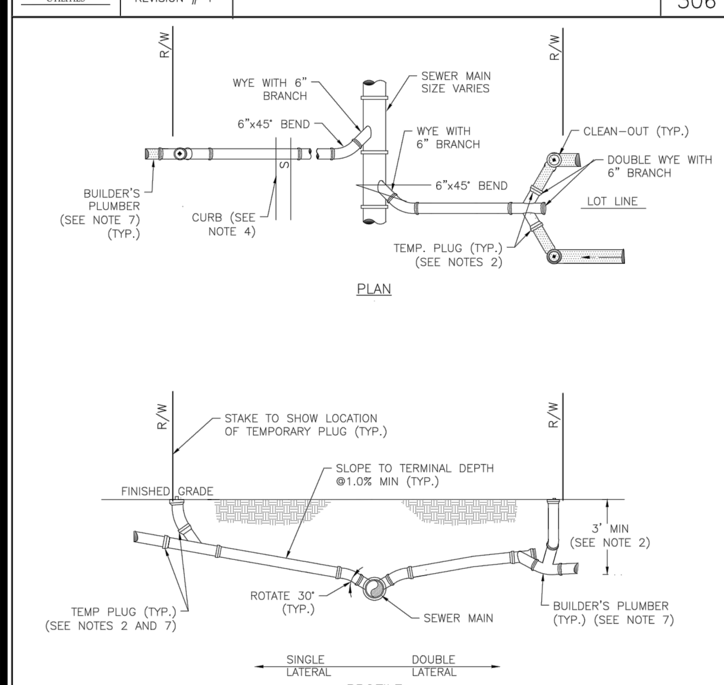
SUFFIX	OPTIONAL VARIATIONS	PART NO.
☐ -C	Extension "C" as required (up to 9" increments) (for models Lil-20-FUR and Lil-25-FUR) (contact MIFAB for other model extensions)	Lil-25-EXT
☑ -C	Extension "C" as required (up to 9" increments) (for models Lil-35-FUR and Lil-50-FUR)	Lil-50-EXT
☑ -F	Connection sizes different from standard (specify size) (up to 4" with No Hub and up to 3" with F.I.P. connection)	Contact MIFAB
☐ -FSCR	Stainless steel fine screen sediment bucket for Lil-7-FUR	MI-G-1-PL-PSB-FSCR
☐ -FSCR	Stainless steel fine screen sediment bucket for Lil-10-FUR	MI-G-2-PL-PSB-FSCR
☐ -FSCR	Stainless steel fine screen sediment bucket for Lil-15-FUR	MI-G-3-PL-PSB-FSCR
☐ -FSCR	Stainless steel fine screen sediment bucket for Lil-20-FUR	MI-G-4-PL-PSB-FSCR
☐ -FSCR	Stainless steel fine screen sediment bucket for Lil-25-FUR	MI-G-5-PL-PSB-FSCR
☐ -FSCR	Stainless steel fine screen sediment bucket for Lil-35-FUR	MI-G-6-PL-PSB-FSCR
☑ -FSCR	Stainless steel fine screen sediment bucket for Lil-50-FUR	MI-G-7-PL-PSB-FSCR
☑ -HD	Heavy duty 10 gauge stainless steel re-enforced lid - 2,000 lbs. load rating. (see pg. 26 for image)	Contact MIFAB
☐ -LHSI	No hub inlet on left hand side (not available with sediment bucket) (for Lil Max, Big Max, SuperMax)	MI-G-PL-PF4
☐ -LHSO	No hub outlet on left hand side (not available with sediment bucket) (for Lil Max, Big Max, SuperMax)	MI-G-PL-PF4
☐ -RHSI	No hub inlet on right hand side (not available with sediment bucket) (for Lil Max, Big Max, SuperMax)	MI-G-PL-PF4
☐ -RHSO	No hub outlet on right hand side (not available with sediment bucket) (for Lil Max, Big Max, SuperMax)	MI-G-PL-PF4
☐ -SP-IN	External sampling port - inline	Lil-SP
☐ -SP-OF	External sampling port - offset	Lil-SP-OF
☐ -T	Female threaded connections (for Lil Max, Big Max, SuperMax - two pieces required)	MI-G-PL-PF4T

CALIFORNIA PROPOSITION 65 WARNING. This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Job Name: ____ Page No: ____
Section No: ____ Contractor: ____
Schedule No: ____ Purchase Order No: ____

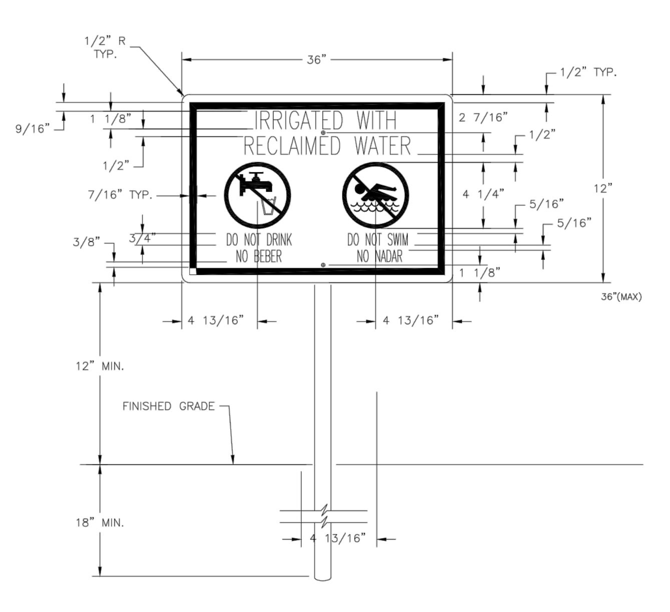
MIFAB® reserves the right to make changes in material and design without formal notice and obligation. USA: 1-800-465-2736 www.mifab.com CAN: 1-800-387-3880

2020-03-13



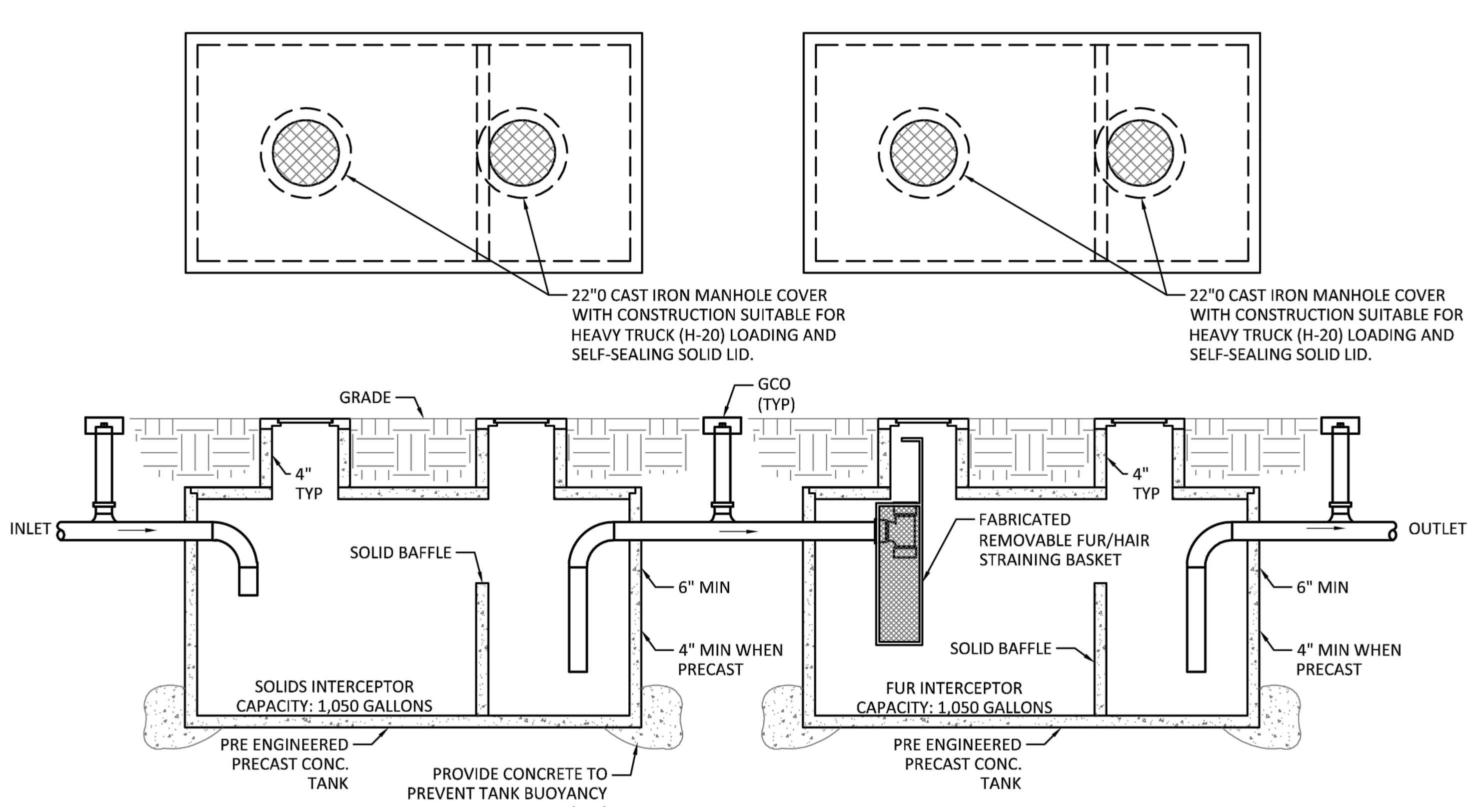
NOTES:
1. INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
2. WYE TO BE NO SHALLOWER THAN 3-FEET AND NO DEEPER THAN 5-FEET.
3. ALL FITTINGS SHOWN ARE TO BE INSTALLED.
4. SERVICE CONNECTIONS SHALL BE PERMANENTLY MARKED BY ETCHING OR STAMPING AN "S" IN THE CURB DIRECTLY OVER THE LATERAL. WHERE NO CURB EXISTS, LOCATION SHALL BE MARKED BY PLACEMENT OF ADHESIVE REFLECTIVE MARKERS AS SPECIFIED BY MCU.
5. BUILDER'S PLUMBER WILL REMOVE PLUG, INSTALL CLEANOUT, AND CONNECT SERVICE LATERAL TO HOUSE.
6. CLEANOUT SHALL BE INSTALLED AT THE PROPERTY LINE AND SET A MINIMUM OF 2" ABOVE THE FINISHED GRADE.
7. DURING CONSTRUCTION SERVICE LATERAL AND CLEANOUTS SHALL BE STUBBED OUT A MINIMUM OF 1' AND SHALL BE CAPPED BY DEVELOPER'S SITE-WORK CONTRACTOR UNTIL PROPERTY IS DEVELOPED AND CONNECTION TO CENTRAL SEWER IS MADE.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/27/2018 | REVISION # 1 | SEWER SERVICE LATERAL | 7.3.2 UT 312

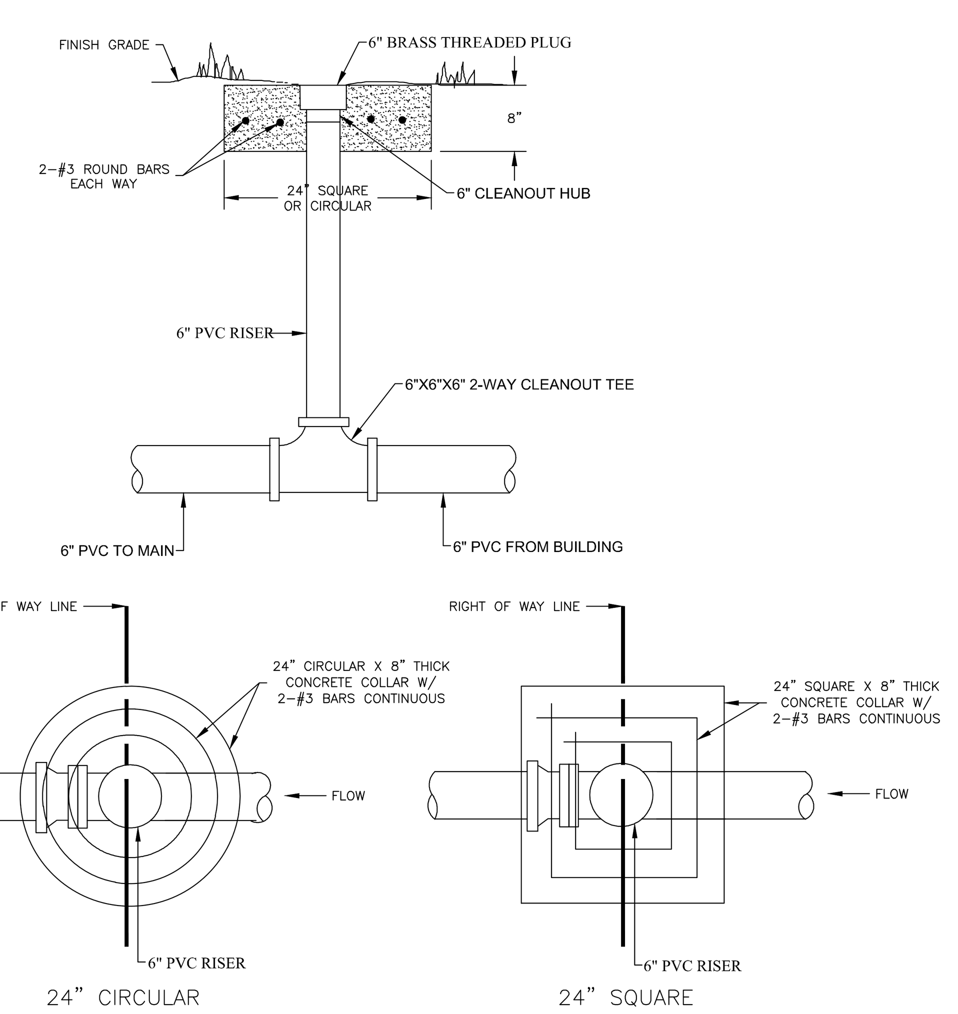


NOTES:
1. SIGN TO BE PROVIDED BY CONTRACTOR.
2. HEIGHT OF SIGN WILL DEPEND ON LOCATION AND SURROUNDING LANDSCAPE PLANT TYPES. IN ALL CASES, THE SIGN SHALL BE VISIBLE TO THE PUBLIC.
3. BACKGROUND SHALL BE WHITE, LETTERS SHALL BE BLACK (HELVETICA, SWISS 721 COREL OR ACCEPTABLE EQUAL) AND BORDER SHALL BE PANTONE PURPLE 522C.
4. ENGINEERING GRADE REFLECTIVE MATERIALS SHALL BE USED.
5. SIGN MATERIAL SHALL BE OF 0.040 GAUGE METAL.
6. POST SHALL BE 2-3/8" OD STEEL PIPE, HOT DIP GALVANIZED PER ASTM A-123. POST TO BE PROVIDED BY CUSTOMER.
7. MOUNTING HARDWARE SHALL BE STAINLESS STEEL.
8. SIGNS SHALL BE PLACED BY THE CONTRACTOR IN ACCORDANCE WITH CHAPTER 62-610 "ACCESS CONTROL AND ADVISORY SIGNS", FAC, MCU APPROVED ENGINEERING PLANS AND/OR AS APPROVED BY MCU.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/27/2018 | REVISION # 1 | RECLAIMED WATER SIGNAGE "DO NOT DRINK OR SWIM" | 7.3.2 UT 400



SOLIDS/FUR INTERCEPTOR DETAIL NTS



SEWER CLEANOUT COLLAR DETAIL
N.T.S.

Tillman & Associates
ENGINEERING, LLC.
CIVIL ENGINEERING - PLANNING - LANDSCAPE ARCHITECTURE - ENVIRONMENTAL
1720 SE 16th Ave. Bldg 100, Ocala, FL 34471
Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #26756

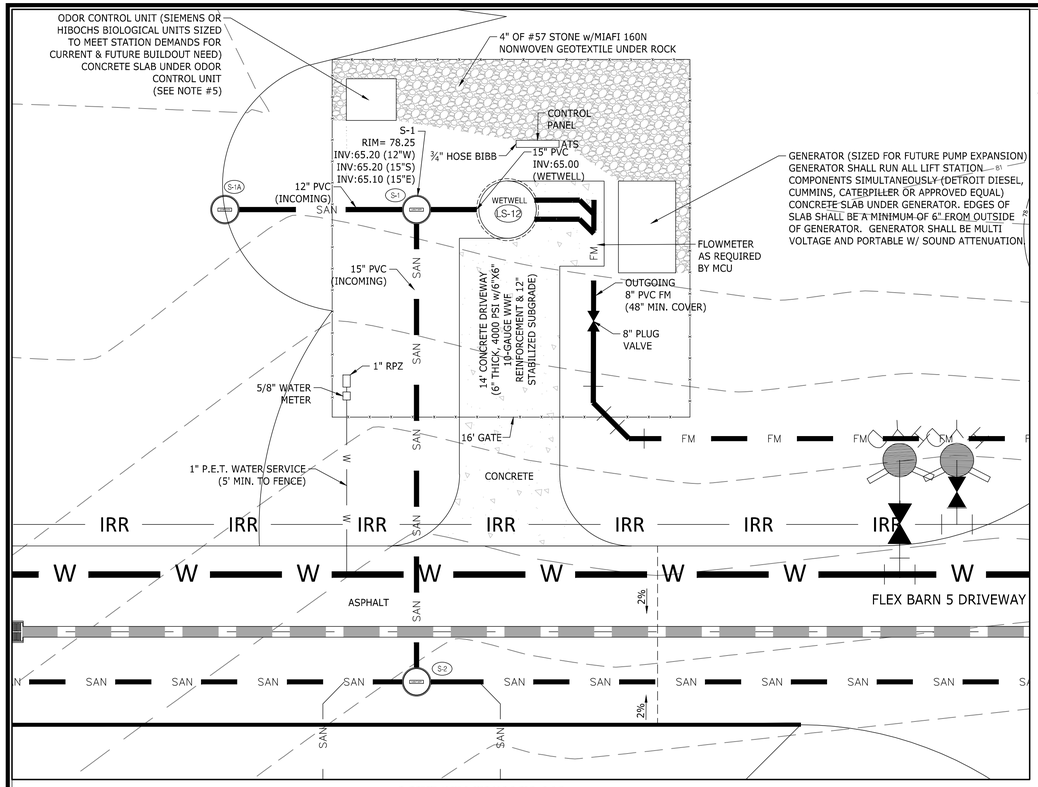
REVISIONS | DATE

MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3, 4 & 5
MARION COUNTY, FLORIDA

UTILITY DETAILS

DATE 01/05/21
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

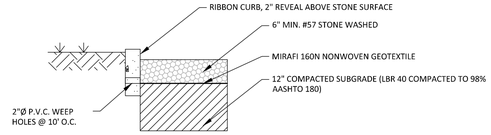
SHT. 11.02



LIFT STATION PLAN

LIFT STATION AND ABOVE-GROUND VALVE ARRAY
SCALE: 1"=10'

NOTES:
1. ENGINEER SHALL PROVIDE A SCALED (1"=20' MIN.) SITE SPECIFIC DETAIL.
2. MINIMUM DISTANCE BETWEEN FENCE AND ALL INSTALLED EQUIPMENT SHALL BE 5'.
3. MANHOLE AND WETWELL SHALL HAVE HDPE LINING.
4. AIR RELEASE VALVE DISCHARGE LINE SHALL BE A MINIMUM OF 2" SCHEDULE 80 PVC PIPE.
5. ALL EDGES OF CONCRETE SLAB SHALL BE A MINIMUM OF 6" FROM OUTSIDE EDGE OF GENERATOR OR ODOR CONTROL UNIT.
6. CONDUITS FROM CONTROL PANEL SHALL BE 2" DIAMETER MINIMUM. PRECAST PENETRATIONS SHALL BE 3" MINIMUM. THERE SHALL BE A MINIMUM OF ONE CONDUIT FOR LEVEL CONTROLS. THE NUMBER OF CONDUITS REQUIRED FOR PUMP LEADS WILL BE AS REQUIRED BY THE PUMP MANUFACTURER. CONDUIT PENETRATIONS SHALL BE A MAXIMUM OF 24" FROM THE TOP SLAB OF THE LIFT STATION.
7. PROVIDE FLYGT PUMP STANDARD PACKAGE.
8. 24-HOUR ACCESS TO LIFT STATION SHALL BE PROVIDED TO M.C.U.D.
9. ALL EQUIPMENT PLACEMENT SHALL BE COORDINATED WITH M.C.U.D. IN THE FIELD, THE MAXIMUM NUMBER OF CONDUIT BENDS SHALL BE LESS THAN 270-DEGREES OF TOTAL TURNS.



UTILITY YARD
GRAVEL SECTION
NON-TRAFFIC

MANUFACTURER: GRUNDFOS
MODEL: SEV.30.A30.300.2.52H.C.EX.61G

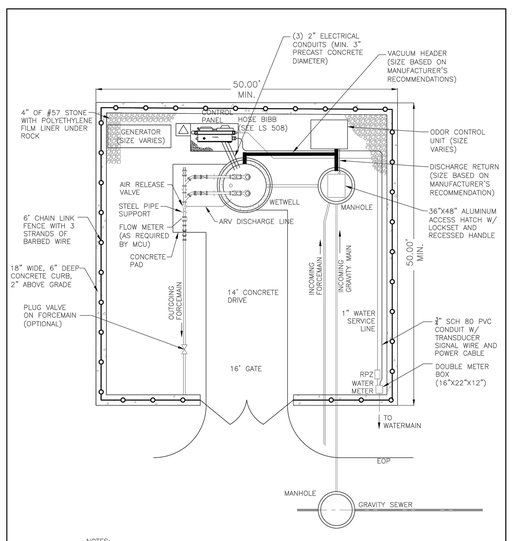
SPEED: 3,557 RPM
DISCHARGE SIZE: 3-15/16" IN
SHUT OFF HEAD: 200 FEET TDH
HIGH HEAD CONDITION: 299-GPM @ 142-TDH
LOW HEAD CONDITION: 534-GPM @ 71-TDH

VOLTAGE: 460 HZ
PHASE: 3
H.P.: 30
MAX. SOLID SIZE (3 IN MIN): 3 IN
CURVE NUMBER: 98249247

DESCRIPTION	SYMBOL	DIMENSION	ELEVATION
THICKNESS OF WALL	A	12" (MIN)	—
DIAMETER OF WET WELL	B	10'	—
WIDTH OF BOTTOM FILLET	C	SEE NOTE 1	—
C/L OF WET WELL TO C/L OF PIPES	D	SEE NOTE 1	—
LENGTH OF PUMP ACCESS OPENING	E	SEE NOTE 1	—
WIDTH OF PUMP ACCESS OPENING	F	SEE NOTE 1	—
CENTER OF WET WELL TO EDGE OF HATCH	G	SEE NOTE 1	—
LIP WIDTH OF WETWELL BASE	R	24" (MIN)	—
THICKNESS OF WETWELL BASE	S	12" (MIN)	—
TOP OF WET WELL	T	—	78.50
FINISHED GRADE	U	—	78.00
HIGH LEVEL ALARMS	V	—	64.50
LAG PUMP ON	W	—	64.00
LEAD PUMP ON	X	—	63.50
PUMPS OFF (TOP OF PUMP VOLUTE)	Y	—	60.50
BOTTOM OF PUMP TO FLOOR OF WET WELL	P	4-1/2"	—
STEP HEIGHT (IF REQUIRED)	Q		—
FLOOR OF WET WELL	Z	—	58.50

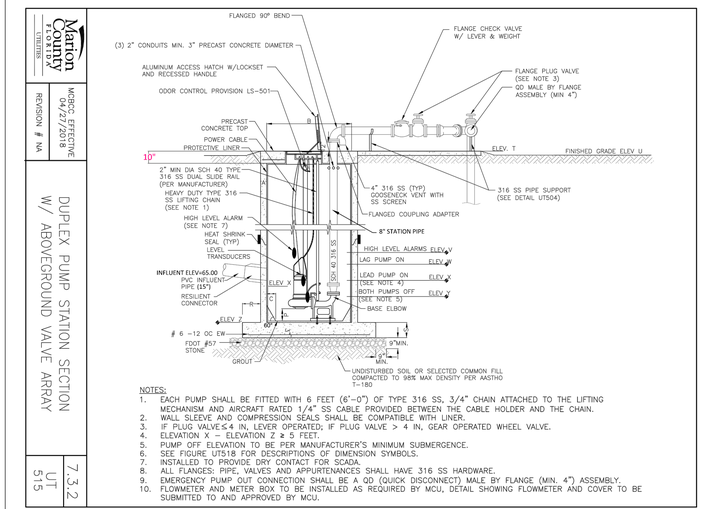
NOTES:
1. PER PUMP MANUFACTURER'S REQUIREMENTS.
2. DIMENSION P AND ELEVATIONS Y AND Z MUST MEET MANUFACTURER'S REQUIREMENTS.
3. ELEVATION X - ELEVATION Z ≥ 5'
4. TOP ELEVATION OF WET WELL SHALL BE A MINIMUM OF 1' ABOVE THE 100 YEAR FLOOD ELEVATION AND THE ELEVATION OF THE CROWN OF THE ROAD.
5. SYMBOLS SHOWN IN TABLE ARE USED IN DETAILS UT520 AND UT521.

REQUIREMENTS:
1. SEPARATE BUILDING AND ELECTRICAL PERMIT IS REQUIRED FOR THE SANITARY LIFT STATION AND COMPONENTS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL SIGNED AND SEALED DRAWINGS AND PULLING ALL PERMITS.
2. ALL ELECTRICAL COMPONENTS SHALL BE DESIGNED BY A FLORIDA LICENSED ELECTRICAL ENGINEER. CONTRACTOR TO PROVIDE OFFICIAL COPIES OF SIGNED AN SEALED ELECTRICAL DRAWINGS TO OWNER, UTILITY PROVIDER, AND THE CIVIL SITE PLAN E.O.R. FOR REVIEW AND APPROVAL (PROVIDE PRIOR TO SHOP DRAWING).
3. CONTRACTOR TO PROVIDE SHOP DRAWINGS TO M.C.U.D. AND E.O.R. FOR REVIEW AND APPROVAL PRIOR TO PRODUCTION AND INSTALLATION.
4. AUTO DIALER CELLULAR UNIT IS REQUIRED TO NOTIFY A GUARDHOUSE MANNED 24-HOURS A DAY OF ANY CAUSE OF PUMP STATION MALFUNCTION.
5. SIGN SHALL BE POSTED IN PROMINENT AREA VISIBLE FROM OUTSIDE THE FENCE WITH EMERGENCY CONTACT NAME AND TELEPHONE NUMBER.
6. ALL LIFT STATION PARTS AND COMPONENTS SHALL BE SIZED TO ACCOMMODATE A FUTURE SCADA SYSTEM MEETING M.C.U.D. REQUIREMENTS.
7. LIGHTNING ARRESTOR REQUIRED.
8. BACKUP GENERATOR SHALL RUN ALL LIFT STATION COMPONENTS SIMULTANEOUSLY.
9. ODOR CONTROL UNIT IS REQUIRED.
10. LIGHTNING ARRESTOR IS REQUIRED FOR CONTROL PANEL.
11. CONTRACTOR TO PROVIDE 10 CY OF CONCRETE FOR BALLAST.



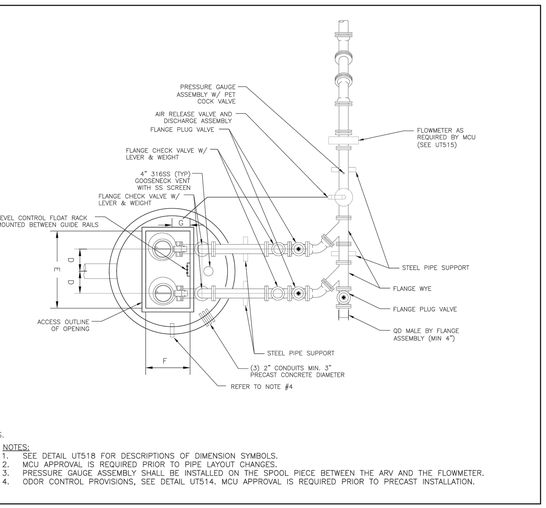
NOTES:
1. ENGINEER SHALL PROVIDE A SCALED (1" = 20' MIN.) SITE SPECIFIC DETAIL.
2. MINIMUM DISTANCE BETWEEN FENCE AND ALL INSTALLED EQUIPMENT SHALL BE 5'.
3. MANHOLE & WETWELL SHALL HAVE HDPE LINING.
4. AIR RELEASE VALVE DISCHARGE LINE SHALL BE A MINIMUM OF 2" SCHEDULE 80 PVC PIPE.
5. **FLOW METER REQUIRED AND SHALL BE McCROMETER ULTRA-MAG, INCLUDE NEPTUNE RADIO READ TRANSMITTER.**

Marion County FLORIDA UTILITIES	MCBCC EFFECTIVE 04/27/2018	DUPLEX PUMP STATION SITE PLAN WITH ABOVEGROUND VALVE ARRAY	7.3.2
	REVISION # NA		UT 514



NOTES:
1. EACH PUMP SHALL BE FITTED WITH 6 FEET (6'-0") OF TYPE 316 SS, 3/4" CHAIN ATTACHED TO THE LIFTING MECHANISM AND AIRCRAFT RATED 1/4" SS CABLE PROVIDED BETWEEN THE CABLE HOLDER AND THE CHAIN.
2. WALL SLEEVE AND COMPRESSION SEALS SHALL BE COMPATIBLE WITH LINER.
3. IF PLUG VALVE ≤ 4 IN, LEVER OPERATED; IF PLUG VALVE > 4 IN, GEAR OPERATED WHEEL VALVE.
4. ELEVATION X = ELEVATION Z ≥ 5 FEET.
5. PUMP OFF ELEVATION TO BE PER MANUFACTURER'S MINIMUM SUBMERGENCE.
6. SEE FIGURE UT518 FOR DESCRIPTIONS OF DIMENSION SYMBOLS.
7. INSTALLED TO PROVIDE DRY CONTACT FOR SCADA.
8. ALL FLANGES: PIPE, VALVES AND APPURTENANCES SHALL HAVE 316 SS HARDWARE.
9. EMERGENCY PUMP OUT CONNECTION SHALL BE A QD (QUICK DISCONNECT) MALE BY FLANGE (MIN. 4") ASSEMBLY.
10. FLOWMETER AND METER BOX TO BE INSTALLED AS REQUIRED BY MCU, DETAIL SHOWING FLOWMETER AND COVER TO BE SUBMITTED TO AND APPROVED BY MCU.

Marion County FLORIDA UTILITIES	MCBCC EFFECTIVE 04/27/2018	DUPLEX PUMP STATION SECTION W/ ABOVEGROUND VALVE ARRAY	7.3.2
	REVISION # NA		UT 515



N.T.S.

NOTES:
1. SEE DETAIL UT518 FOR DESCRIPTIONS OF DIMENSION SYMBOLS.
2. MCU APPROVAL IS REQUIRED PRIOR TO PIPE LAYOUT CHANGES.
3. PRESSURE GAUGE ASSEMBLY SHALL BE INSTALLED ON THE SPOOL PIECE BETWEEN THE ARV AND THE FLOWMETER.
4. ODOR CONTROL PROVISIONS, SEE DETAIL UT514. MCU APPROVAL IS REQUIRED PRIOR TO PRECAST INSTALLATION.

Marion County FLORIDA UTILITIES	MCBCC EFFECTIVE 04/27/2018	DUPLEX PUMP STATION PLAN W/ ABOVEGROUND VALVE ARRAY	7.3.2
	REVISION # NA		UT 516

Tillman & Associates ENGINEERING, LLC.
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Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #26756

REVISIONS

DATE

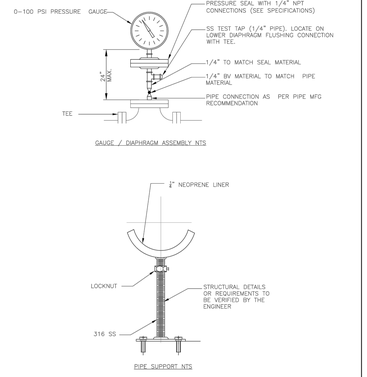
MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3, 4 & 5
MARION COUNTY, FLORIDA

LIFT STATION PLAN AND DETAILS

DATE 02/13/21
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

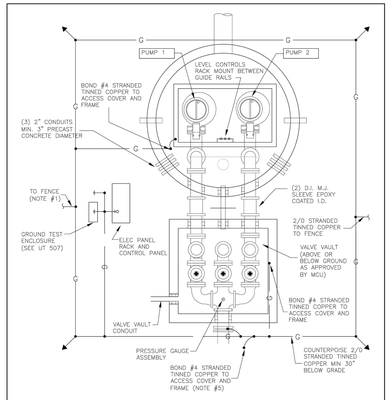
SHT. 12.01

NOT VALID UNLESS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER



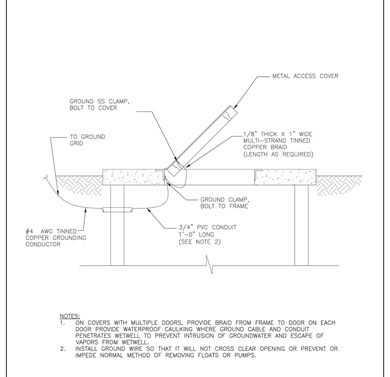
NOTES:
1. FOR PUMP STATIONS WITH VALVE VAULTS, PRESSURE GAUGE ASSEMBLY SHALL BE INSTALLED ON A 4-WAY CROSS.
2. FOR PUMP STATIONS WITH ABOVEGROUND VALVE ARRAYS, PRESSURE GAUGE ASSEMBLY SHALL BE INSTALLED ON THE SPOOL PIECE BETWEEN THE ARV AND THE FLOWMETER.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/27/2018 | REVISION # NA | PIPE SUPPORT AND GAUGE DIAPHRAGM ASSEMBLY | 7.3.2 UT 504



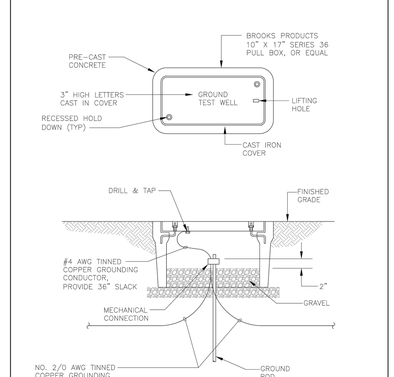
NOTES:
1. TIE TO FENCE, MINIMUM TWO (2) LOCATIONS, NOT REQUIRED WHERE PVC COATED, BLOCK, OR WOOD FENCE IS INSTALLED.
2. PROVIDE EXOTHERMIC WELDS UNLESS NOTED OTHERWISE.
3. DOOR CONTROL RETURN OPTIONAL PER MCU APPROVAL.
4. DOOR CONTROL VACUUM OPTIONAL PER MCU APPROVAL.
5. GROUND STRAP TO OPTIONAL FLOW METER VAULT COVER ASSEMBLY.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/27/2018 | REVISION # NA | PUMP STATION GROUNDING W/ VALVE VAULT (TYPICAL) | 7.3.2 UT 505

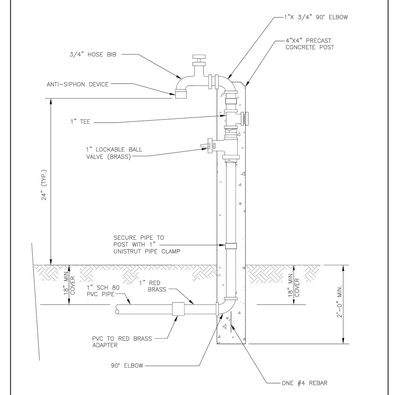


NOTES:
1. ON COVERS WITH MULTIPLE DOORS, PROVIDE BRAID FROM FRAME TO DOOR ON EACH DOOR PROVIDE WATERPROOF CAULKING WHERE GROUND CABLE AND CONDUIT PENETRATES WETWELL TO PREVENT INTRUSION OF GROUNDWATER AND ESCAPE OF VAPORS FROM WETWELL. INSTALL GROUND WIRE SO THAT IT WILL NOT CROSS CLEAR OPENING OR PREVENT OR IMPEDE NORMAL METHOD OF REMOVING FLOATS OR PUMPS.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/27/2018 | REVISION # NA | COVER AND DOOR GROUNDING | 7.3.2 UT 506



Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/27/2018 | REVISION # NA | GROUND TEST ENCLOSURE | 7.3.2 UT 507



Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/27/2018 | REVISION # NA | HOSE BIBB ASSEMBLY | 7.3.2 UT 508

TABLE 1

PANEL SIZE HEIGHT	PANEL HEIGHT ABOVE GRADE	SEAL OFF DISTANCE BELOW PANEL
36"	36"	18"
42"	24"	15"
48"	24"	12"
60"	12"	6"

NOTES:
1. SET COVERS FLUSH IN PAVED AREAS, 0.1' ABOVE IN UNPAVED AREAS, AND 0.75' BELOW GRADE IN GRADED ROADS.
2. TRIPLEX PUMP STATIONS REQUIRE ADDITIONAL SPECIFICATIONS. CONTACT MCU FOR INFORMATION.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/27/2018 | REVISION # NA | SERVICE PEDESTAL 1 OF 3 | 7.3.2 UT 509

NOTES:
1. A NEW EQUIPMENT MOUNTING STAND CONSISTS OF THREE (3) EACH CONCRETE POSTS AND ALUMINUM OR STAINLESS STEEL STRUT TO BE CONSTRUCTED BY THE CONTRACTOR FOR CONTROL PANELS THAT ARE 64"-HIGH x 36"-WIDE x 12"-DEEP (OR SMALLER). THE STAND SHALL BE CONSTRUCTED WITH (2) CONCRETE POSTS AND ONE (1) EQUIPMENT MOUNTING STAND. FOR ENCLOSURES LARGER THAN 44"-HIGH x 30"-WIDE x 12"-DEEP, 6x6 BY 12'-0" CONCRETE POSTS WILL BE USED.
2. THE CONCRETE POSTS WILL BE STABILIZED USING TWO (2) EACH 80 lb. BAGS OF CONCRETE MIX PER POST, ONE (1) BAG AROUND THE BASE OF THE POST AND THE SECOND BAG APPROXIMATELY 3" BELOW GRADE. THE CONCRETE WILL BE ALLOWED TO SET A MINIMUM OF 18 HOURS PRIOR TO MOUNTING THE CONTROL PANEL. CARE IS TO BE TAKEN TO ENSURE ALL POSTS ARE PLUMB AND IN LINE WITH EACH OTHER.
3. THE CONTROL PANEL WILL BE MOUNTED ON 12 GAUGE, 1-5/8" ALUMINUM OR STAINLESS STEEL STRUT, WHICH SPANS ALL THREE (3) POSTS, AS NEEDED. THE NEW CONTROL PANEL WILL BE MOUNTED TO THE RIGHT SIDE (DEPENDING ON SITE CONFIGURATION) OF THE EQUIPMENT MOUNTING STAND, LEAVING ROOM ON THE LEFT HALF OF THE STAND FOR FUTURE EQUIPMENT.
4. THE MOUNTING STRUT WILL BE 8'-0" LONG WITH ONE (1) CENTER POST FOR A THREE POST CONFIGURATION. THE CONTROL PANEL MOUNTING STRUT WILL BE FASTENED TO THE 6" POSTS USING 3/8"x3" STAINLESS STEEL SLEEVE ANCHORS. ALL CUT ENDS, STRUTS AND DRILLED HOLES WILL BE DE-BURRED. ALL BOLTS, NUTS AND WASHERS SHALL BE STAINLESS STEEL. STRUT SHALL BE SUPPLIED WITH END CAPS AND HARDWARE.
5. THE PANEL MOUNTING HEIGHT WILL BE NOTED IN UT 509, TABLE 1.
6. MCU REQUIRES THE USE OF CROUSE HINDS (EYSR83) SPLIT CONDUIT SEAL OFFS AT DISTANCE NOTED IN TABLE 1. USE ALUMINUM NIPPLES WITH INTERNAL PVC COATING BETWEEN PANEL & SEAL OFFS.
7. ROUTING OF THE MAIN POWER CORDS AND CONTROL CORDS WILL BE THRU A MINIMUM OF THREE (3) 2" SCH 80 PVC CONDUITS FROM THE TCU MOUNTED ON THE CONTROL PANEL TO THE WET WELL. THE CONTRACTOR SHALL INSURE THAT THE TWO FLOAT SWITCH CORDS AND THE PRESSURE TRANSDUCER CABLE. THE CONTRACTOR WILL PULL STRINGS IN ALL CONDUITS. MCU PERSONNEL WILL INSTALL THE CONTROL CORDS. ANY CORING OF HOLES INTO THE WET-WELL IS THE RESPONSIBILITY OF THE CONTRACTOR, AS IS THE SEALING OF THE CONDUITS AFTER THE CORDS ARE INSTALLED. CORING SHALL BE DONE UNDER THE SUPERVISION OF MCU INSPECTOR.
8. EQUIP THE FACILITY WITH A SCADA SYSTEM TO MONITOR POWER USAGE, PUMP OPERATION, FLUID LEVEL, ETC.
9. GENERATOR RECEPTACLE SHALL BE ON THE OUTSIDE OF THE CONTROL PANEL ON THE SIDE OPPOSITE FROM THE AUDIBLE ALARM (SEE UT509).

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/27/2018 | REVISION # NA | SERVICE PEDESTAL 2 OF 3 | 7.3.2 UT 510

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/27/2018 | REVISION # NA | SERVICE PEDESTAL – PANEL RACK 3 OF 3 | 7.3.2 UT 511

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/27/2018 | REVISION # NA | WATER SERVICE AND PRESSURE TRANSDUCER ASSEMBLY | 7.3.2 UT 513

Tillman & Associates ENGINEERING, LLC.
CIVIL ENGINEERING · PLANNING · LANDSCAPE ARCHITECTURE · ENVIRONMENTAL
1720 SE 16th Ave. Bldg 100, Ocala, FL 34471
Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #26756

REVISIONS

DATE	

MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3
MARION COUNTY, FLORIDA

LIFT STATION PLAN AND DETAILS

DATE 11/13/20
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

SHT. 12.02

S:\Marion County\Golden Ocala Equestrian Center (2020) - Flex Barns 3\CIVIL\CONSTRUCTION\12 Lift Station Details.dwg, 02, 11/13/2020 10:22:32 AM

GOLDEN OCALA
EQUESTRIAN ESTATES
PHASE 2

NW 92nd Ave Rd

150

151

GOLDEN OCALA
EQUESTRIAN ESTATES
PHASE 3

153

152

PROPOSED
SILT FENCE
(SEE DETAIL)

PROPOSED DANDY BAG
INLET PROTECTION (TYP.)
(SEE DETAIL)

PROPOSED
SILT FENCE
(SEE DETAIL)

100' 50' 0 100' 200'

SCALE IN FEET
1" = 100'

CONSTRUCTION ENTRANCE
INSTALL 24' x 100' SOIL TRACKING PREVENTION DEVICE.
UTILIZE 6" MIN OF FDOT #1 COURSE AGGREGATE
(1.5" to 3.5" STONE OR CRUSHED CONCRETE)

NW 18th PL

PROPOSED
SILT FENCE
(SEE DETAIL)

DRA SF-2

PROPOSED
SILT FENCE
(SEE DETAIL)

FLEX BARN
#3

FLEX BARN
#4

FLEX BARN
#5

DRA 8A

GOLDEN OCALA
WORLD EQUESTRIAN CENTER
FLEX BARN 2

NW 87th Ct Rd

PROPOSED
SILT FENCE
(SEE DETAIL)

PROPOSED DANDY BAG
INLET PROTECTION (TYP.)
(SEE DETAIL)

CONSTRUCTION ENTRANCE INSTALL
24' x 100' SOIL TRACKING PREVENTION
DEVICE. UTILIZE 6" MIN OF FDOT #1
COURSE AGGREGATE
(1.5" to 3.5" STONE OR CRUSHED
CONCRETE)

NW 17th Ln

GOLDEN OCALA
WORLD EQUESTRIAN CENTER

NOTES:

1. THE EROSION CONTROL MEASURES SHOWN ON THIS PLAN ARE, IN THE OPINION OF THE ENGINEER, THE MINIMUM THAT MAY BE REQUIRED. ACTUAL FIELD CONDITIONS MAY REQUIRE EITHER ADDITIONAL OR REDUCED EROSION CONTROL MEASURES TO BE IMPLEMENTED. THE CONTRACTOR IS DIRECTED TO FOLLOW STANDARD BEST MANAGEMENT PRACTICES IN IMPLEMENTING A SUCCESSFUL EROSION CONTROL PLAN.
2. ALL DISTURBED AREAS TO BE SODDED OR SEEDED AND MULCHED WITHIN 7 DAYS AFTER FINAL GRADING.

TOTAL SILT FENCE
8,550± LF

AREA ENCOMPASSING SILT FENCE
47.92± ACRES

Tillman & Associates
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Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #26756

REVISIONS

DATE

MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3, 4 & 5
MARION COUNTY, FLORIDA

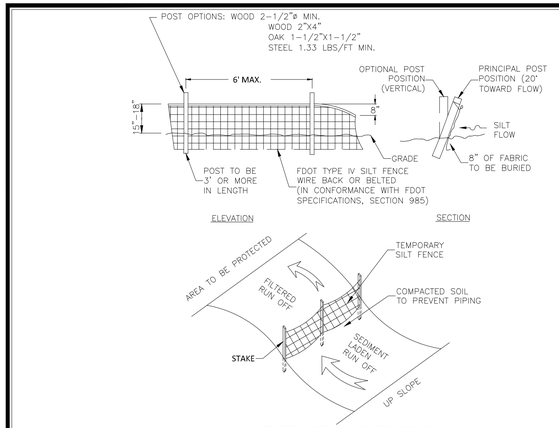
EROSION CONTROL PLAN AND DETAILS

DATE 02/13/21
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

SHT. 13.01

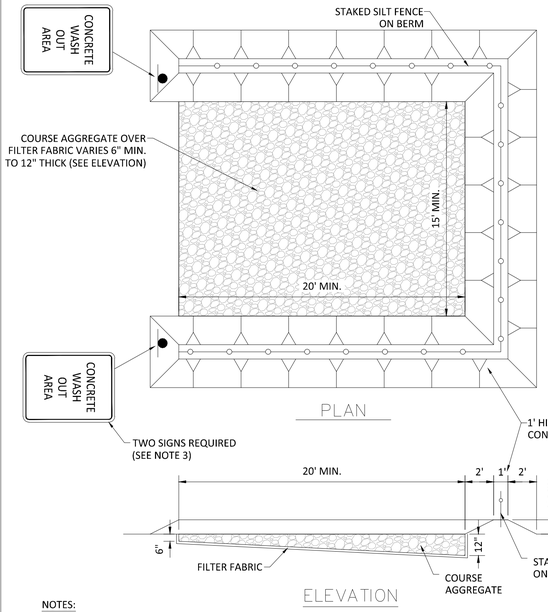
NOT VALID UNLESS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER

S:\Marion County\Golden Ocala Equestrian Center (2020) - Flex Barns 3\CIVIL\CONSTRUCTION\13 Erosion Control Plan.dwg, 2/13/2021 6:27:14 PM, DWG To PDF.pc3



SILT FENCE AND EROSION CONTROL DETAIL

NO SCALE

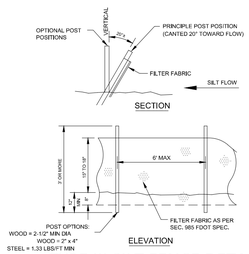


NOTES:

1. ALL MATERIAL SHALL BE REMOVED FROM THE SITE AT THE END OF THE PROJECT.
2. AGGREGATE SHALL BE REPLACED AS DIRECTED BY THE ENGINEER OF RECORD AND/OR THE CITY WHEN EXCESSIVE MATERIALS BUILDUP RENDERS THE WASH OUT AREA NO LONGER FUNCTIONAL.
3. SIGNS SHALL BE 18" X 12" MIN. SIZE WITH 2" BLACK LETTERING ON A WHITE BACKGROUND AND MOUNTED A MINIMUM OF 7 FEET ABOVE GRADE FROM THE LOWEST EDGE OF THE SIGN FACE.

CONCRETE TRUCK WASH OUT AREA

NO SCALE



TYPE III SILT FENCE DETAIL

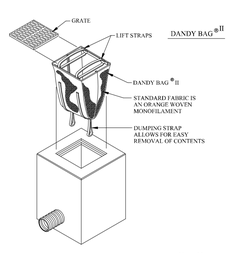
FDOT INDEX #102

DANDY BAG ®II

Installation and Maintenance Guidelines

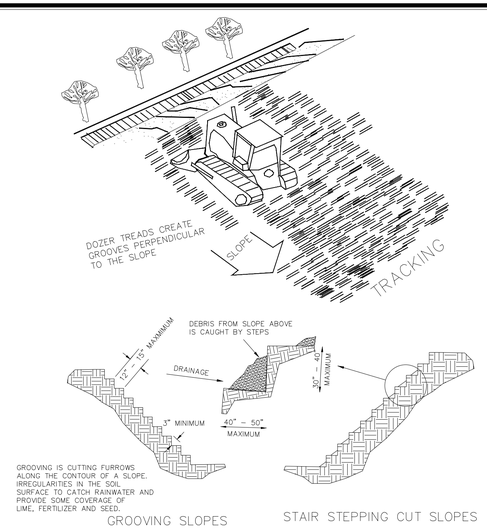
Installation: Remove the grate from catch basin. If using optional oil absorbents; place absorbent pillow in unit. Stand the grate on end. Move the top lifting straps out of the way and place the grate into the Dandy Bag® II so that the grate is below the top straps and above the lower straps. Holding the lifting devices, insert the grate into the inlet.

Maintenance: Remove all accumulated sediment and debris from vicinity of unit after each storm event. After each storm event and at regular intervals, look into the Dandy Bag® II. If the containment area is more than 1/3 full of sediment, the unit must be emptied. To empty unit, lift the unit out of the inlet using the lifting straps and remove the grate. If using optional oil absorbents; replace absorbent when near saturation.



DANDY BAG DETAIL "B"

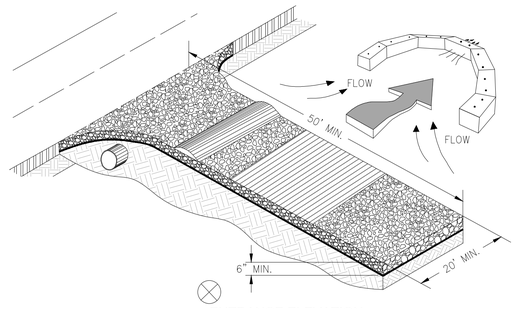
N.T.S.



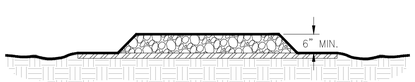
FILL SLOPE TREATMENT

SURFACE ROUGHENING

NO SCALE



ENTRANCE ELEVATION



NOTES:

1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH FDOT #1 COURSE AGGREGATE.
4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6" AND BE INSTALLED IN ACCORDANCE WITH FDEP SPECIFICATIONS.
5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 12'.
6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%.
7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.
8. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).
9. WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL SUITABLE FOR TRUCK TRAFFIC THAT REMOVES MUD AND DIRT.
10. MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

CRUSHED STONE CONSTRUCTION EXIT

EXIT DIAGRAM

EROSION CONTROL NOTES:

1. CONTRACTOR SHALL MAINTAIN EROSION CONTROL FACILITIES DURING THE ENTIRE CONSTRUCTION PERIOD. FACILITIES ARE NOT TO BE REMOVED UNTIL COMPLETION OF THE PROJECT AND THE SITE IS STABILIZED.
2. ADDITIONAL DEVICES MAY BE REQUIRED AS DEEMED NECESSARY BY GOVERNING AUTHORITIES.
3. SILT FENCES SHALL BE CLEANED OR REPLACED WHEN TRAPPED SEDIMENT REACHES 50 PERCENT OF THE ABOVE GROUND FENCE HEIGHT OR A LOWER HEIGHT BASED ON MANUFACTURER'S SPECIFICATIONS.
4. SEDIMENT AND EROSION CONTROL MEASURES WILL BE INSPECTED ON A DAILY BASIS AND REPAIRED, ADJUSTED AND MAINTAINED AS NEEDED OR REQUIRED BY GOVERNING AGENCIES AT NO ADDITIONAL EXPENSE TO THE OWNER TO PROVIDE EROSION AND SEDIMENT CONTROL FOR THE DURATION OF CONSTRUCTION AND UNTIL ALL DISTURBED AREAS ARE STABILIZED.
5. ALL GRADED AREAS SHALL BE STABILIZED WITH A PERMANENT FAST GROWING COVER AND/OR MULCH UPON COMPLETION OF GRADING OPERATIONS. COMPLETION OF GRADING OPERATIONS DOES NOT MEAN AT THE END OF THE PROJECT. AS SOON AS FINAL GRADES ARE ESTABLISHED IN AN UNPAVED AREA, THE CONTRACTOR SHALL STABILIZE WITH A TEMPORARY GRASS OR PERMANENT SOD. IF A TEMPORARY GRASS IS APPLIED, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO APPLY A PERMANENT SEED OR SOD AT THE PROPER TIME OF YEAR.
6. FILL SLOPES SHOULD BE PLANTED AS SOON AS AN AREA OF THE SITE IS BROUGHT TO FINAL GRADE. SURFACE RUNOFF SHALL BE INTERCEPTED AT THE TOP OF TEMPORARY AND PERMANENT SLOPES DURING CONSTRUCTION SO THAT WATER IS NOT ALLOWED TO FLOW OVER THE SLOPE FACE.
7. THE GENERAL CONTRACTOR AND THE GRADING CONTRACTOR SHALL REVIEW THEIR PROPOSED GRADING SEQUENCE TO INSURE THAT THE LEAST AMOUNT OF LAND POSSIBLE AT ANY ONE TIME IS DISTURBED WITHOUT PERMANENT STABILIZATION.
8. CONTRACTOR SHALL INSTALL TEMPORARY CONSTRUCTION ENTRANCES PRIOR TO ANY EARTHWORK OPERATIONS.
9. CONTRACTOR SHALL MAINTAIN SILT FENCES FOR THE DURATION OF THE PROJECT UNTIL ACCEPTED BY THE OWNER AT NO EXPENSE TO OWNER.
10. LAND DISTURBING ACTIVITIES BE KEPT TO A MINIMUM AND WILL NOT EXTEND BEYOND THE LIMITS SHOWN.
11. THE CONTRACTOR SHALL CONSTRUCT THE SILT FENCING AS SHOWN AT THE PERIMETER OF THE SITE PLAN PRIOR TO LAND CLEARING ACTIVITIES.
12. CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE COMPLIANCE WITH THE NPDES STORMWATER REQUIREMENTS. THIS INCLUDES, BUT IS NOT LIMITED TO, INSPECTION REQUIREMENTS.
13. ALL EROSION CONTROL MEASURES EXCEPT THE REQUIRED RIP RAP ARE TEMPORARY DEVICES. THESE TEMPORARY DEVICES SHALL BE REMOVED PRIOR TO COMPLETION OF CONSTRUCTION ONCE STABILIZATION OF ALL GRASSED AREAS ARE COMPLETE.
14. PRIOR TO CONSTRUCTION, THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN HEREON SHALL BE IN PLACE. CLEARING AND GRUBBING OPERATIONS WILL BE ENGAGED IN ONLY AS NECESSARY TO ALLOW THE PLACEMENT OF EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN HEREON UNTIL ALL SUCH MEASURES ARE IN PLACE.
15. CONTRACTOR IS RESPONSIBLE FOR REPAIRS OR DAMAGE TO ANY EXISTING IMPROVEMENTS DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC., REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
16. FOR SILT FENCE DETAIL SEE TYPE III SILT FENCE IN FDOT INDEX 103. SILT FENCE LOCATION SHOWN FOR AESTHETICS ONLY, ACTUAL FENCE TO BE INSTALLED ON THE PROPERTY LINE.
17. ALL EXISTING STORM WATER DRAINAGE PATTERNS AND CHANNELS OUTSIDE THE CONSTRUCTION AREAS SHOWN ON THESE PLANS ARE TO BE MAINTAINED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF THE WORK APPEARS TO INTERRUPT AN EXISTING STORM WATER DRAINAGE PATTERN. THE CONTRACTOR SHALL MAINTAIN A CLEAR PATH FOR ALL SURFACE WATER DRAINAGE STRUCTURES AND DITCHES DURING ALL PHASES OF CONSTRUCTION SUCH THAT IMPACT TO CONSTRUCTION AND/OR SURROUNDING FACILITIES IS MINIMIZED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY EROSION, SEDIMENT TRANSPORT, DISTURBED FOUNDATIONS, IMPACT TO STRUCTURES, AND ANY OTHER DAMAGE CAUSED DURING CONSTRUCTION.
18. THE CONTRACTOR SHALL PREVENT THE DISCHARGE OF SEDIMENT DUE TO CONSTRUCTION OPERATIONS. APPROVED EROSION CONTROL DEVICES SHALL BE INSTALLED TO PREVENT DISCHARGE OF SEDIMENT INTO A DRY OR WET WATERCOURSE. EROSION CONTROL SHALL CONSIST OF ANCHORED HAY BALES, SILT FENCE, OR OTHER EROSION CONTROL METHODS APPROVED BY THE PROJECT ENGINEER. ALL NEW AND EXISTING DRAIN PIPES AND STRUCTURES SHALL BE FLUSHED CLEAN AFTER CONSTRUCTION.
19. PROVIDE EROSION CONTROL BLANKET FOR ALL SLOPES 2:1 (HORIZONTAL TO VERTICAL) OR STEEPER.
20. SWALES AND DISTURBED AREAS SHALL BE SODDED OR SEEDED AND MULCHED AS SOON AS PRACTICAL.
21. SEE PLAN SHEETS FOR MORE DETAILED LOCATION OF SILT FENCE.
22. THIS PLAN PROVIDES REASONABLE ASSURANCE THAT THE PROPOSED CONSTRUCTION ACTIVITIES WILL NOT RESULT IN EROSION AND SEDIMENT DEPOSITION IN STORMWATER FACILITIES, WETLANDS OR OFF-SITE AREAS.

GENERAL NOTES:

1. PROPERTY LINE AND RIGHT-OF-WAY MONUMENTS SHALL NOT BE DISTURBED BY CONSTRUCTION. IF DISTURBED, THEY SHALL BE RESET TO THEIR ORIGINAL LOCATIONS AT THE CONTRACTOR'S EXPENSE BY A REGISTERED LAND SURVEYOR.
2. PROOF ROLL BUILDING AND ALL PARKING AREAS. NOTIFY PROJECT ENGINEER OF ANY UNACCEPTABLE AREAS.
3. BUILDING DIMENSIONS SHOWN ON THE CIVIL ENGINEERING PLANS ARE FOR REFERENCE PURPOSES ONLY, CONTRACTOR SHALL USE THE ARCHITECTURAL AND STRUCTURAL PLANS FOR EXACT BUILDING DIMENSIONS.
4. ALL SITE DIMENSIONS ARE REFERENCED TO THE FACE OF CURBS OR EDGE OF PAVING UNLESS OTHERWISE NOTED.
5. ALL SIDEWALKS, CURB AND GUTTER, STREET PAVING, CURB CUTS, DRIVEWAY APPROACHES, HANDICAP RAMPS, ETC. CONSTRUCTED OUTSIDE THE PROPERTY LINE IN THE RIGHT-OF-WAY SHALL CONFORM TO ALL MUNICIPAL AND/OR STATE SPECIFICATIONS AND REQUIREMENTS.
6. ALL DISTURBANCE INCURRED TO ANY ADJOINING PROPERTY DUE TO CONSTRUCTION OR DEMOLITION SHALL BE RESTORED TO THE PREVIOUS CONDITION OR BETTER, AND TO THE SATISFACTION OF THE APPROPRIATE GOVERNMENTAL AGENCIES.

NOTE TO CONTRACTOR:

1. ALL MATERIALS, MACHINERY, AND VEHICLES SHALL BE STORED ON-SITE IN AN ORDERLY ORGANIZED FASHION.
2. CONTRACTOR SHALL PERIODICALLY SWEEP EXISTING ON-SITE PAVED SURFACES AS WELL AS ALL ABUTTING CITY STREETS, COUNTY ROADS AND STATE HIGHWAYS (AS APPROPRIATE FOR THE PARTICULAR PROJECT) TO KEEP THOSE SURFACES IN A SUBSTANTIALLY SEDIMENT-FREE CONDITION. SWEEPING SHALL BE DONE ON A PERIODIC, AS-NEEDED BASIS THROUGHOUT THE WORK WEEK INCLUDING, MOST IMPORTANTLY, AFTER EVERY RAIN EVENT AND EVERY FRIDAY AFTERNOON PRIOR TO CEASING WORK FOR THE WEEK
3. A PRE-SITE MEETING IS REQUIRED PRIOR TO CONSTRUCTION. NO SITE WORK SHALL BE CONDUCTED PRIOR TO OBTAINING A SITE PERMIT FROM THE CITY. CALL THE CITY GROWTH MANAGEMENT DEPARTMENT @ 352-629-8421 TO SCHEDULE THE PRE-CONSTRUCTION MEETING WHICH MUST BE HELD BEFORE INSTALLING ANY REQUIRED EROSION CONTROLS OR OBTAINING ANY SITE PERMITS.
4. THE CONTRACTOR MUST VERIFY/LOCATE HORIZONTAL AND VERTICAL DISPOSITION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
5. CONTRACTOR MUST CONTACT ALL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
6. ALL PROPOSED UTILITIES TO BE UNDERGROUND.
7. CONTRACTOR MUST VERIFY THE LOCATION OF THE EXISTING SANITARY SEWER SERVICE TO THE SITE AND CONTACT PROJECT ENGINEER PRIOR TO CONSTRUCTION.
8. EXISTING WATER AND SEWER APPURTENANCES AFFECTED BY THIS SITE REDEVELOPMENT ARE TO BE ADJUSTED TO THE PROPOSED FINISHED GRADE, MEETING CITY OF OCALA WATER AND SEWER REQUIREMENTS, PRIOR TO ISSUANCE OF THE C.O.
9. ALL AREAS DISTURBED BY THE CONSTRUCTION OF THIS PROJECT WHICH ARE NOT OTHERWISE PAVED SHALL BE IMMEDIATELY SODDED FOLLOWING FINAL GRADING. ALLOW FOR THICKNESS OF SOD WITH A 2-INCH UNDERCUT. SOD SHALL BE ARGENTINE BAHIA, AND SHALL BE REGULARLY WATERED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION DURATION.
10. ALL STORMWATER MANAGEMENT SYSTEMS SHALL BE COMPLETED PRIOR TO THE CONSTRUCTION OF IMPERVIOUS AREAS.
11. CONTRACTOR SHALL DEVELOP AND IMPLEMENT A PLAN TO ASSURE THAT ALL WASTE, SUCH AS DISCARDED BUILDING MATERIALS, CONCRETE TRUCK WASH-OUT, CHEMICALS, LITTER AND SANITARY WASTE, ARE PROPERLY CONTROLLED WHILE ON-SITE AND TRANSPORTED AND DISPOSED OF (OFF-SITE) IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS. NO WASTE MATERIALS OF ANY KIND ARE PERMITTED TO BE BURIED ON-SITE OR DISCHARGED TO SURFACE WATERS OF THE STATE OR TO THE CITY'S STORMWATER SYSTEM.

FLORIDA DOT TYPE III SILT FENCE AND EROSION CONTROL

1. THE FOLLOWING LIST REPRESENTS A BASIC EROSION AND SEDIMENT CONTROL PROGRAM WHICH IS TO BE IMPLEMENTED TO HELP PREVENT OFF SITE SEDIMENTATION DURING AND AFTER CONSTRUCTION OF THE PROJECT.
2. TEMPORARY EROSION CONTROL TO BE UTILIZED DURING CONSTRUCTION AT AREAS DESIGNATED BY THE ENGINEER OR AREAS ON SITE WHERE UNSTABILIZED GRADES MAY CAUSE EROSION PROBLEMS. EROSION CONTROL MAY BE REMOVED AFTER UPSLOPE AREA HAS BEEN STABILIZED BY SOD, OR COMPACTED AS DETERMINED BY THE OWNER.
3. PERMANENT EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AT THE EARLIEST PRACTICAL TIME CONSISTENT WITH GOOD CONSTRUCTION PRACTICES. ONE OF THE FIRST CONSTRUCTION ACTIVITIES SHOULD BE THE PLACEMENT OF PERMANENT AND TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AROUND THE PERIMETER OF THE PROJECT OR THE INITIAL WORK AREA TO PROTECT THE PROJECT, ADJACENT PROPERTIES AND WATER RESOURCES.
4. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE COORDINATED WITH PERMANENT MEASURES TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL THROUGHOUT THE CONSTRUCTION PHASE. TEMPORARY MEASURES SHALL NOT BE CONSTRUCTED FOR EXPEDIENCY IN LIEU OF PERMANENT MEASURES.
5. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE ADEQUATELY MAINTAINED TO PERFORM THEIR INTENDED FUNCTION DURING CONSTRUCTION OF THE PROJECT.
6. NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BARRIERS SHALL BE ACCOMPLISHED PROMPTLY.
7. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER.
8. MATERIAL FROM SEDIMENT TRAPS SHALL NOT BE STOCKPILED OR DISPOSED OF IN A MANNER WHICH MAKES THEM READILY SUSCEPTIBLE TO BEING WASHED INTO ANY WATERCOURSE BY RUNOFF OR HIGH WATER.
9. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE BARRIERS ARE NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
10. SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE (LF).
11. ALL INLETS TO BE PROTECTED BY DETAILS AS OUTLINED IN F.D.O.T. 2008 INDEX NO. 102

Tillman & Associates
ENGINEERING, LLC.
CIVIL ENGINEERING - PLANNING - LANDSCAPE ARCHITECTURE - ENVIRONMENTAL
1720 SE 16th Ave. Bldg 100, Ocala, FL 34471
Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #26756

REVISIONS

DATE

MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3
MARION COUNTY, FLORIDA

EROSION CONTROL PLAN AND DETAILS

DATE 11/13/20
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

SHT. 13.02

NOT VALID UNLESS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER

Log of Borehole: B-1

Project: PROPOSED FLEX BARNS 3, 4 AND 5, WEC, OCALA FLORIDA — Project No: 20-6684.16
Boring Location: (SEE SITE PLAN) — Engineer: NJH/DAC
Client: PARAMOUNT CONSTRUCTION — Enclosure: SITE PLAN

GEO-TECH, INC. ENGINEERING CONSULTANTS 1016 SE 3rd Avenue Ocala, FL 34471 352.894.7711 WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Type	Blows/ft	Standard Penetration Test N-Values 0 20 40 60 80 100
0		Ground Surface		0.0				
1–3		CLAYEY SAND — BROWN AND GREY CLAYEY SAND (SC)	HAND AUGER / POSSIBLE UTILITIES					
3–13.5		FINE SAND — BROWN TO LIGHT BROWN FINE SAND (SP)	DENSE	3.0	1		30	30
			MEDIUM DENSE		2		12	12
			MEDIUM DENSE		3		15	15
13.5–20		CLAYEY SAND — GREY AND BROWN TO GREY CLAYEY SAND (SC)	MEDIUM DENSE	13.5	4		27	27
20		End of Borehole	MEDIUM DENSE	20.0	5		28	28

Ground Water Depth: GREATER THAN 10.0 FEET — Drilled By: CCJ/H
Drill Date: AUGUST 15, 2020 — Drill Method: ASTM D-1586
Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW — Soil Profile : 1 OF 21

Log of Borehole: B-2

Project: PROPOSED FLEX BARNS 3, 4 AND 5, WEC, OCALA FLORIDA — Project No: 20-6684.16
Boring Location: (SEE SITE PLAN) — Engineer: NJH/DAC
Client: PARAMOUNT CONSTRUCTION — Enclosure: SITE PLAN

GEO-TECH, INC. ENGINEERING CONSULTANTS 1016 SE 3rd Avenue Ocala, FL 34471 352.894.7711 WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Type	Blows/ft	Standard Penetration Test N-Values 0 20 40 60 80 100
0		Ground Surface		0.0				
1		CLAYEY SAND — BROWN CLAYEY SAND (SC)	HAND AUGER	1.0				
1–6		FINE SAND — LIGHT BROWN TO BROWN FINE SAND (SP)	POSSIBLE UTILITIES					
6–13.5		CLAYEY SAND — BROWN TO GREY AND BROWN CLAYEY SAND (SC)	LOOSE	6.0	1		6	6
			MEDIUM DENSE		2		12	12
			LOOSE		3		8	8
13.5–20			DENSE	13.5	4		30	30
20		End of Borehole	MEDIUM DENSE	20.0	5		26	26

Ground Water Depth: GREATER THAN 10.0 FEET — Drilled By: CCJ/H
Drill Date: AUGUST 15, 2020 — Drill Method: ASTM D-1586
Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW — Soil Profile : 2 OF 21

Log of Borehole: B-3

Project: PROPOSED FLEX BARNS 3, 4 AND 5, WEC, OCALA FLORIDA — Project No: 20-6684.16
Boring Location: (SEE SITE PLAN) — Engineer: NJH/DAC
Client: PARAMOUNT CONSTRUCTION — Enclosure: SITE PLAN

GEO-TECH, INC. ENGINEERING CONSULTANTS 1016 SE 3rd Avenue Ocala, FL 34471 352.894.7711 WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Type	Blows/ft	Standard Penetration Test N-Values 0 20 40 60 80 100
0		Ground Surface		0.0				
1–5		FINE SAND — LIGHT BROWN FINE SAND (SP)	HAND AUGER / POSSIBLE UTILITIES					
5–9		CLAYEY SAND — BROWN AND GREY CLAYEY SAND (SC) WITH LIMESTONE	LOOSE	5.0	1		8	8
9–13.5		BLIGHTLY CLAYEY SAND — BROWN SLIGHTLY CLAYEY SAND (SP-SC)	MEDIUM DENSE		2		18	18
			DENSE	9.0	3		46	46
13.5–20		SLIGHTLY SANDY CLAY — BROWN TO BROWN AND LIGHT GREEN SLIGHTLY SANDY CLAY (CH)	MEDIUM STIFF	13.5	4		5	5
20		End of Borehole	STIFF	20.0	5		11	11

Ground Water Depth: GREATER THAN 10.0 FEET — Drilled By: CM/WH/CC
Drill Date: AUGUST 18, 2020 — Drill Method: ASTM D-1586
Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW — Soil Profile : 3 OF 21

Log of Borehole: B-4

Project: PROPOSED FLEX BARNS 3, 4 AND 5, WEC, OCALA FLORIDA — Project No: 20-6684.16
Boring Location: (SEE SITE PLAN) — Engineer: NJH/DAC
Client: PARAMOUNT CONSTRUCTION — Enclosure: SITE PLAN

GEO-TECH, INC. ENGINEERING CONSULTANTS 1016 SE 3rd Avenue Ocala, FL 34471 352.894.7711 WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Type	Blows/ft	Standard Penetration Test N-Values 0 20 40 60 80 100
0		Ground Surface		0.0				
1–2		FINE SAND — LIGHT BROWN FINE SAND (SP)	HAND AUGER / POSSIBLE UTILITIES	2.0				
2–3.5		SLIGHTLY CLAYEY SAND — BROWN SLIGHTLY CLAYEY SAND (SP-SC)	MEDIUM DENSE	3.5	1		12	12
3.5–8		CLAYEY SAND — BROWN AND GREY CLAYEY SAND (SC)	MEDIUM DENSE		2		16	16
8–13.5		SLIGHTLY SANDY CLAY — GREY TO GREY AND BROWN SLIGHTLY SANDY CLAY (CH) WITH LIMESTONE	VERY STIFF	8.0	3		25	25
			VERY STIFF		4		18	18
13.5–20			STIFF	20.0	5		9	9
20		End of Borehole						

Ground Water Depth: GREATER THAN 10.0 FEET — Drilled By: CM/WH/CC
Drill Date: AUGUST 18, 2020 — Drill Method: ASTM D-1586
Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW — Soil Profile : 4 OF 21

Log of Borehole: B-5

Project: PROPOSED FLEX BARNS 3, 4 AND 5, WEC, OCALA FLORIDA — Project No: 20-6684.16
Boring Location: (SEE SITE PLAN) — Engineer: NJH/DAC
Client: PARAMOUNT CONSTRUCTION — Enclosure: SITE PLAN

GEO-TECH, INC. ENGINEERING CONSULTANTS 1016 SE 3rd Avenue Ocala, FL 34471 352.894.7711 WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Type	Blows/ft	Standard Penetration Test N-Values 0 20 40 60 80 100
0		Ground Surface		0.0				
1–2		FINE SAND — LIGHT BROWN FINE SAND (SP)	HAND AUGER / POSSIBLE UTILITIES	2.0				
2–3.5		SLIGHTLY CLAYEY SAND — BROWN SLIGHTLY CLAYEY SAND (SP-SC)	LOOSE	3.5	1		7	7
3.5–13.5		CLAYEY SAND — BROWN AND REDDISH BROWN TO BROWN CLAYEY SAND (SC)	DENSE		2		31	31
			MEDIUM DENSE		3		24	24
13.5–18.5		SLIGHTLY CLAYEY SAND — REDDISH BROWN AND GREY SLIGHTLY CLAYEY SAND (SP-SC)	VERY DENSE	13.5	4		60	60
18.5–20		CLAYEY SAND — GREY AND BROWN CLAYEY SAND (SC)	MEDIUM DENSE	18.5	5		27	27
20		End of Borehole		20.0				

Ground Water Depth: GREATER THAN 10.0 FEET — Drilled By: CM/WH/CC
Drill Date: AUGUST 18, 2020 — Drill Method: ASTM D-1586
Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW — Soil Profile : 5 OF 21

Log of Borehole: B-6

Project: PROPOSED FLEX BARNS 3, 4 AND 5, WEC, OCALA FLORIDA — Project No: 20-6684.16
Boring Location: (SEE SITE PLAN) — Engineer: NJH/DAC
Client: PARAMOUNT CONSTRUCTION — Enclosure: SITE PLAN

GEO-TECH, INC. ENGINEERING CONSULTANTS 1016 SE 3rd Avenue Ocala, FL 34471 352.894.7711 WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Type	Blows/ft	Standard Penetration Test N-Values 0 20 40 60 80 100
0		Ground Surface		0.0				
1–4		FINE SAND — BROWN FINE SAND (SP)	HAND AUGER / POSSIBLE UTILITIES	4.0				
4–13.5		CLAYEY SAND — REDDISH BROWN AND GREY CLAYEY SAND (SC)	MEDIUM DENSE		1		10	10
			DENSE		2		30	30
			MEDIUM DENSE		3		26	26
13.5–18.5		SLIGHTLY CLAYEY SAND — GREY SLIGHTLY CLAYEY SAND (SP-SC)	DENSE	13.5	4		47	47
18.5–20		CLAYEY SAND — LIGHT GREY AND BROWN CLAYEY SAND (SC)	MEDIUM DENSE	18.5	5		18	18
20		End of Borehole		20.0				

Ground Water Depth: GREATER THAN 10.0 FEET — Drilled By: CM/WH/CC
Drill Date: AUGUST 18, 2020 — Drill Method: ASTM D-1586
Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW — Soil Profile : 6 OF 21

Log of Borehole: B-7

Project: PROPOSED FLEX BARNS 3, 4 AND 5, WEC, OCALA FLORIDA — Project No: 20-6684.16
Boring Location: (SEE SITE PLAN) — Engineer: NJH/DAC
Client: PARAMOUNT CONSTRUCTION — Enclosure: SITE PLAN

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Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Type	Blows/ft	Standard Penetration Test N-Values 0 20 40 60 80 100
0		Ground Surface		0.0				
1–2		FINE SAND — BROWN FINE SAND (SP)	HAND AUGER / POSSIBLE UTILITIES	2.0				
2–20		BLIGHTLY CLAYEY SAND — BROWN AND GREY TO LIGHT GREY SLIGHTLY CLAYEY SAND (SP-SC)	MEDIUM DENSE		1		12	12
			MEDIUM DENSE		2		22	22
			MEDIUM DENSE		3		24	24
			MEDIUM DENSE		4		25	25
20		End of Borehole	MEDIUM DENSE	20.0	5		26	26

Ground Water Depth: GREATER THAN 10.0 FEET — Drilled By: CM/WH/CC
Drill Date: AUGUST 19, 2020 — Drill Method: ASTM D-1586
Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW — Soil Profile : 7 OF 21

Log of Borehole: B-8

Project: PROPOSED FLEX BARNS 3, 4 AND 5, WEC, OCALA FLORIDA — Project No: 20-6684.16
Boring Location: (SEE SITE PLAN) — Engineer: NJH/DAC
Client: PARAMOUNT CONSTRUCTION — Enclosure: SITE PLAN

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Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Type	Blows/ft	Standard Penetration Test N-Values 0 20 40 60 80 100
0		Ground Surface		0.0				
1–4		FINE SAND — LIGHT BROWN FINE SAND (SP)	HAND AUGER / POSSIBLE UTILITIES					
4–13.5		CLAYEY SAND — BROWN AND GREY CLAYEY SAND (SC)	MEDIUM DENSE	4.0	1		11	11
			MEDIUM DENSE		2		23	23
			DENSE		3		40	40
13.5–18.5			MEDIUM DENSE	13.5	4		27	27
18.5–20		SLIGHTLY SANDY CLAY — BROWN AND GREY TO REDDISH BROWN AND LIGHT GREEN SLIGHTLY SANDY CLAY (CH)	HARD	18.5	5		30	30
20		End of Borehole		20.0				

Ground Water Depth: GREATER THAN 10.0 FEET — Drilled By: CM/WH/CCJJE
Drill Date: AUGUST 19, 2020 — Drill Method: ASTM D-1586
Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW — Soil Profile : 8 OF 21

Log of Borehole: B-9

Project: PROPOSED FLEX BARNS 3, 4 AND 5, WEC, OCALA FLORIDA — Project No: 20-6684.16
Boring Location: (SEE SITE PLAN) — Engineer: NJH/DAC
Client: PARAMOUNT CONSTRUCTION — Enclosure: SITE PLAN

GEO-TECH, INC. ENGINEERING CONSULTANTS 1016 SE 3rd Avenue Ocala, FL 34471 352.894.7711 WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Type	Blows/ft	Standard Penetration Test N-Values 0 20 40 60 80 100
0		Ground Surface		0.0				
1–4		FINE SAND — LIGHT BROWN TO BROWN FINE SAND (SP)	HAND AUGER / POSSIBLE UTILITIES					
4–13.5		CLAYEY SAND — BROWN AND GREY TO LIGHT GREY CLAYEY SAND (SC)	MEDIUM DENSE	4.0	1		14	14
			DENSE		2		44	44
			DENSE		3		44	44
13.5–20			DENSE	13.5	4		45	45
20		End of Borehole	DENSE	20.0	5		48	48

Ground Water Depth: GREATER THAN 10.0 FEET — Drilled By: CM/WH/CCJJE
Drill Date: AUGUST 19, 2020 — Drill Method: ASTM D-1586
Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW — Soil Profile : 9 OF 21

Log of Borehole: B-10

Project: PROPOSED FLEX BARNS 3, 4 AND 5, WEC, OCALA FLORIDA — Project No: 20-6684.16
Boring Location: (SEE SITE PLAN) — Engineer: NJH/DAC
Client: PARAMOUNT CONSTRUCTION — Enclosure: SITE PLAN

GEO-TECH, INC. ENGINEERING CONSULTANTS 1016 SE 3rd Avenue Ocala, FL 34471 352.894.7711 WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Type	Blows/ft	Standard Penetration Test N-Values 0 20 40 60 80 100
0		Ground Surface		0.0				
1–2		FINE SAND — BROWN FINE SAND (SP)	HAND AUGER / POSSIBLE UTILITIES	2.0				
2–4		CLAYEY SAND — BROWN CLAYEY SAND (SC)	HARD	4.0	1		37	37
4–13.5		SLIGHTLY SANDY CLAY — GREY AND BROWN TO LIGHT GREEN AND BROWN SLIGHTLY SANDY CLAY (CH)	HARD		2		54	54
			HARD		3		37	37
13.5–18.5			HARD	13.5	4		55	55
18.5–20		LIMESTONE — LIGHT BROWN LIMESTONE	26 BLOWS -12"	18.5	5		26	26
20		End of Borehole		20.0				

Ground Water Depth: GREATER THAN 10.0 FEET — Drilled By: CM/WH/CCJJE
Drill Date: AUGUST 19, 2020 — Drill Method: ASTM D-1586
Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW — Soil Profile : 10 OF 21

Log of Borehole: B-11

Project: PROPOSED FLEX BARNS 3, 4 AND 5, WEC, OCALA FLORIDA — Project No: 20-6684.16
Boring Location: (SEE SITE PLAN) — Engineer: NJH/DAC
Client: PARAMOUNT CONSTRUCTION — Enclosure: SITE PLAN

GEO-TECH, INC. ENGINEERING CONSULTANTS 1016 SE 3rd Avenue Ocala, FL 34471 352.894.7711 WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Type	Blows/ft	Standard Penetration Test N-Values 0 20 40 60 80 100
0		Ground Surface		0.0				
1–4.5		FINE SAND — LIGHT BROWN FINE SAND (SP)	HAND AUGER / POSSIBLE UTILITIES					
4.5–18.5		CLAYEY SAND — BROWN TO LIGHT BROWN CLAYEY SAND (SC)	LOOSE	4.5	1		8	8
			MEDIUM DENSE		2		27	27
			MEDIUM DENSE		3		26	26
18.5–20		SLIGHTLY SANDY CLAY — GREY AND BROWN SLIGHTLY SANDY CLAY (CH)	DENSE	18.5	4		44	44
20		End of Borehole	MEDIUM STIFF	20.0	5		7	7

Ground Water Depth: GREATER THAN 10.0 FEET — Drilled By: CM/WH/CC
Drill Date: AUGUST 19, 2020 — Drill Method: ASTM D-1586
Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW — Soil Profile : 11 OF 21

Log of Borehole: B-12

Project: PROPOSED FLEX BARNS 3, 4 AND 5, WEC, OCALA FLORIDA — Project No: 20-6684.16
Boring Location: (SEE SITE PLAN) — Engineer: NJH/DAC
Client: PARAMOUNT CONSTRUCTION — Enclosure: SITE PLAN

GEO-TECH, INC. ENGINEERING CONSULTANTS 1016 SE 3rd Avenue Ocala, FL 34471 352.894.7711 WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Type	Blows/ft	Standard Penetration Test N-Values 0 20 40 60 80 100
0		Ground Surface		0.0				
1–5.5		FINE SAND — LIGHT BROWN FINE SAND (SP)	HAND AUGER / POSSIBLE UTILITIES					
5.5–20		CLAYEY SAND — BROWN TO GREY AND BROWN CLAYEY SAND (SC)	MEDIUM DENSE	5.5	1		14	14
			MEDIUM DENSE		2		16	16
			MEDIUM DENSE		3		16	16
			MEDIUM DENSE		4		20	20
20		End of Borehole	MEDIUM DENSE	20.0	5		12	12

Ground Water Depth: GREATER THAN 10.0 FEET — Drilled By: CM/WH/CC
Drill Date: AUGUST 18, 2020 — Drill Method: ASTM D-1586
Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW — Soil Profile : 12 OF 21

Log of Borehole: B-13

Project: PROPOSED FLEX BARNS 3, 4 AND 5, WEC, OCALA FLORIDA — Project No: 20-6684.16
Boring Location: (SEE SITE PLAN) — Engineer: NJH/DAC
Client: PARAMOUNT CONSTRUCTION — Enclosure: SITE PLAN

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Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Type	Blows/ft	Standard Penetration Test N-Values 0 20 40 60 80 100
0		Ground Surface		0.0				
1–2		FINE SAND — LIGHT BROWN FINE SAND (SP)	VERY LOOSE	2.0	1		1	1
2–13.5		CLAYEY SAND — BROWN TO GREY AND BROWN CLAYEY SAND (SC)	MEDIUM DENSE		2		10	10
			MEDIUM DENSE		3		21	21
			MEDIUM DENSE		4		13	13
			MEDIUM DENSE		5		14	14
13.5–20		SLIGHTLY SANDY CLAY — GREY AND BROWN SLIGHTLY SANDY CLAY (CH)	STIFF	13.5	6		13	13
20		End of Borehole	STIFF	20.0	7		13	13

Ground Water Depth: GREATER THAN 10.0 FEET — Drilled By: RW/JH
Drill Date: AUGUST 19, 2020 — Drill Method: ASTM D-1586
Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW — Soil Profile : 13 OF 21

Log of Borehole: B-14

Project: PROPOSED FLEX BARNS 3, 4 AND 5, WEC, OCALA FLORIDA — Project No: 20-6684.16
Boring Location: (SEE SITE PLAN) — Engineer: NJH/DAC
Client: PARAMOUNT CONSTRUCTION — Enclosure: SITE PLAN

GEO-TECH, INC. ENGINEERING CONSULTANTS 1016 SE 3rd Avenue Ocala, FL 34471 352.894.7711 WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Type	Blows/ft	Standard Penetration Test N-Values 0 20 40 60 80 100
0		Ground Surface		0.0				
1–2		FINE SAND — LIGHT BROWN FINE SAND (SP)	VERY LOOSE	2.0	1		2	2
2–20		CLAYEY SAND — BROWN TO BROWN AND GREY CLAYEY SAND (SC)	LOOSE		2		9	9
			DENSE		3		49	49
			DENSE		4		39	39
			MEDIUM DENSE		5		17	17
			DENSE		6		44	44
20		End of Borehole	VERY DENSE	20.0	7		55	55

Ground Water Depth: GREATER THAN 10.0 FEET — Drilled By: RW/JH
Drill Date: AUGUST 19, 2020 — Drill Method: ASTM D-1586
Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW — Soil Profile : 14 OF 21

Log of Borehole: B-15

Project: PROPOSED FLEX BARNS 3, 4 AND 5, WEC, OCALA FLORIDA — Project No: 20-6684.16
Boring Location: (SEE SITE PLAN) — Engineer: NJH/DAC
Client: PARAMOUNT CONSTRUCTION — Enclosure: SITE PLAN

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Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Type	Blows/ft	Standard Penetration Test N-Values 0 20 40 60 80 100
0		Ground Surface		0.0				
1–8.0		FINE SAND — BROWN TO LIGHT BROWN FINE SAND (SP)	HAND AUGER / POSSIBLE UTILITIES					
8.0–20		CLAYEY SAND — BROWN AND GREY TO GREY CLAYEY SAND (SC)	LOOSE		1		7	7
			MEDIUM DENSE	8.0	2		11	11
			DENSE		3		41	41
			DENSE		4		40	40
20		End of Borehole	MEDIUM DENSE	20.0	5		28	28

Ground Water Depth: GREATER THAN 10.0 FEET — Drilled By: CC/CM/WH/JE
Drill Date: AUGUST 19, 2020 — Drill Method: ASTM D-1586
Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW — Soil Profile : 15 OF 21

Log of Borehole: B-16

Project: PROPOSED FLEX BARNS 3, 4 AND 5, WEC, OCALA FLORIDA — Project No: 20-6684.16
Boring Location: (SEE SITE PLAN) — Engineer: NJH/DAC
Client: PARAMOUNT CONSTRUCTION — Enclosure: SITE PLAN

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Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Type	Blows/ft	Standard Penetration Test N-Values 0 20 40 60 80 100
0		Ground Surface		0.0				
1–6.5		FINE SAND — BROWN FINE SAND (SP)	HAND AUGER / POSSIBLE UTILITIES					
6.5–8.0		CLAYEY SAND — BROWN CLAYEY SAND (SC)	VERY LOOSE	6.5	1		3	3
8.0–20		SLIGHTLY SANDY CLAY — GREY AND REDDISH BROWN TO BROWN AND GREY SLIGHTLY SANDY CLAY (CH)	LOOSE	8.0	2		9	9
			VERY STIFF		3		23	23
			VERY STIFF		4		23	23
20		End of Borehole	VERY STIFF	20.0	5		19	19

Ground Water Depth: GREATER THAN 10.0 FEET — Drilled By: CC/CM/WH/JE
Drill Date: AUGUST 19, 2020 — Drill Method: ASTM D-1586
Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW — Soil Profile : 16 OF 21

Log of Borehole: B-17

Project: PROPOSED FLEX BARNS 3, 4 AND 5, WEC, OCALA FLORIDA — Project No: 20-6684.16
Boring Location: (SEE SITE PLAN) — Engineer: NJH/DAC
Client: PARAMOUNT CONSTRUCTION — Enclosure: SITE PLAN

GEO-TECH, INC. ENGINEERING CONSULTANTS 1016 SE 3rd Avenue Ocala, FL 34471 352.894.7711 WWW.GEOTECHFL.COM

Depth (ft)	Symbol	Description	Consistency	Depth/Elev.	Number	Type	Blows/ft	Standard Penetration Test N-Values 0 20 40 60 80 100
0		Ground Surface		0.0				
1–6.0		FINE SAND — BROWN FINE SAND (SP)	HAND AUGER / POSSIBLE UTILITIES					
6.0–18.5		CLAYEY SAND — BROWN TO GREY CLAYEY SAND (SC)	LOOSE	6.0	1		5	5
			LOOSE		2		9	9
			MEDIUM DENSE		3		12	12
			MEDIUM DENSE		4		18	18
18.5–20		SLIGHTLY SANDY CLAY — GREY SLIGHTLY SANDY CLAY (CH)	STIFF	18.5	5		15	15
20		End of Borehole		20.0				

Ground Water Depth: GREATER THAN 10.0 FEET — Drilled By: CC/CM/WH/JE
Drill Date: AUGUST 19, 2020 — Drill Method: ASTM D-1586
Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW — Soil Profile : 17 OF 21

Tillman & Associates
ENGINEERING, LLC.
CIVIL ENGINEERING - PLANNING - LANDSCAPE ARCHITECTURE - ENVIRONMENTAL
1720 SE 16th Ave. Bldg 100, Ocala, FL 34471
Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #27955

REVISIONS

DATE

MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3
MARION COUNTY, FLORIDA

SOIL BORINGS

DATE 11/13/20
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

SHT. 14.01

S:\Marion County\Golden Ocala Equestrian Center (2020) - Flex Barns 3\CIVIL\CONSTRUCTION\14 Soil Borings.dwg, 01, 11/13/2020 10:30:41 AM

Log of Borehole: B-18

Project: PROPOSED FLEX BARNS 3, 4 AND 5, WEC, OCALA FLORIDA — Project No: 20-6684.16
Boring Location: (SEE SITE PLAN) — Engineer: NJH/DAC
Client: PARAMOUNT CONSTRUCTION — Enclosure: SITE PLAN

GEO-TECH, INC. ENGINEERING CONSULTANTS 1016 SE 3rd Avenue Ocala, FL 34471 352.864.7711 WWW.GEOTECHFL.COM

Ground Water Depth: GREATER THAN 10.0 FEET — Drilled By: CC/CMWH
Drill Date: AUGUST 19, 2020 — Drill Method: ASTM D-1586
Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW — Soil Profile : 18 OF 21

Log of Borehole: B-19

Project: PROPOSED FLEX BARNS 3, 4 AND 5, WEC, OCALA FLORIDA — Project No: 20-6684.16
Boring Location: (SEE SITE PLAN) — Engineer: NJH/DAC
Client: PARAMOUNT CONSTRUCTION — Enclosure: SITE PLAN

GEO-TECH, INC. ENGINEERING CONSULTANTS 1016 SE 3rd Avenue Ocala, FL 34471 352.864.7711 WWW.GEOTECHFL.COM

Ground Water Depth: GREATER THAN 10.0 FEET — Drilled By: CC/CMWH
Drill Date: AUGUST 19, 2020 — Drill Method: ASTM D-1586
Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW — Soil Profile : 19 OF 21

Log of Borehole: B-20

Project: PROPOSED FLEX BARNS 3, 4 AND 5, WEC, OCALA FLORIDA — Project No: 20-6684.16
Boring Location: (SEE SITE PLAN) — Engineer: NJH/DAC
Client: PARAMOUNT CONSTRUCTION — Enclosure: SITE PLAN

GEO-TECH, INC. ENGINEERING CONSULTANTS 1016 SE 3rd Avenue Ocala, FL 34471 352.864.7711 WWW.GEOTECHFL.COM

Ground Water Depth: GREATER THAN 10.0 FEET — Drilled By: RW/JH
Drill Date: AUGUST 19, 2020 — Drill Method: ASTM D-1586
Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW — Soil Profile : 20 OF 21

Log of Borehole: B-21

Project: PROPOSED FLEX BARNS 3, 4 AND 5, WEC, OCALA FLORIDA — Project No: 20-6684.16
Boring Location: (SEE SITE PLAN) — Engineer: NJH/DAC
Client: PARAMOUNT CONSTRUCTION — Enclosure: SITE PLAN

GEO-TECH, INC. ENGINEERING CONSULTANTS 1016 SE 3rd Avenue Ocala, FL 34471 352.864.7711 WWW.GEOTECHFL.COM

Ground Water Depth: GREATER THAN 10.0 FEET — Drilled By: RW/JH
Drill Date: AUGUST 19, 2020 — Drill Method: ASTM D-1586
Remarks: (SP) UNIFIED SOIL CLASSIFICATION SYMBOL AS DETERMINED BY VISUAL REVIEW — Soil Profile : 21 OF 21

UNIVERSAL ENGINEERING SCIENCES BORING LOG

PROJECT NO.: 0230.1900095.0000 — REPORT NO.: 1709156 — PAGE: A-2

PROJECT: SOUTH FORK, TAX PARCEL 12674-001-00, OCALA, FLORIDA — BORING NO: SB-2 — SHEET: 1 of 1
CLIENT: RLR INVESTMENTS, LLC — SECTION: — TOWNSHIP: — RANGE:
LOCATION: SEE BORING LOCATION PLAN — GS ELEVATION(ft): — DATE STARTED: 2/14/19
REMARKS: PERCHED WATER TABLE — WATER TABLE (ft): 4.5 — DATE FINISHED: 2/14/19
DATE OF READING: 2/14/19 — DRILLED BY: R. PEREZ
EST. WSWT (ft): 3.5 — TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SYMBOL	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT/ DAY)	ORG CONT (%)
0						Brown SAND, with silt [SP-SM]						
1		2-2-2	4			Loose orange fine SAND, with silt [SP-SM]	9	6				12
2		1-2-2	4	WT		Loose to medium dense orange and gray clayey SAND [SC]						
3												
4		2-3-4	7									
5		2-4-8	12									
6												
7		3-5-8	11			Stiff orange and gray slightly sandy CLAY [CH]						
8		4-6-8	14									
9												
10												
11												
12												
13						Firm orange and gray CLAY [CH], with limestone fragments						
14												
15		1-2-4	6			Boring Terminated at 15'						

UNIVERSAL ENGINEERING SCIENCES BORING LOG

PROJECT NO.: 0230.1900095.0000 — REPORT NO.: 1709156 — PAGE: A-3

PROJECT: SOUTH FORK, TAX PARCEL 12674-001-00, OCALA, FLORIDA — BORING NO: SB-3 — SHEET: 1 of 1
CLIENT: RLR INVESTMENTS, LLC — SECTION: — TOWNSHIP: — RANGE:
LOCATION: SEE BORING LOCATION PLAN — GS ELEVATION(ft): — DATE STARTED: 2/14/19
REMARKS: — WATER TABLE (ft): NE — DATE FINISHED: 2/14/19
DATE OF READING: NA — DRILLED BY: R. PEREZ
EST. WSWT (ft): 4.5 — TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SYMBOL	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT/ DAY)	ORG CONT (%)
0						Dark brown SAND, with silt [SP-SM]						
1		1-1-1	2			Very loose to loose tan to orange SAND, with silt [SP-SM]						
2		1-1-1	2	WT			8	5				13
3						Loose to medium dense orange and gray slightly clayey SAND [SC]						
4		1-2-2	4									
5		2-3-4	7									
6												
7		5-6-6	12									
8												
9		5-6-8	14									
10												
11												
12												
13												
14												
15		2-2-3	5			Boring Terminated at 15'						

UNIVERSAL ENGINEERING SCIENCES BORING LOG

PROJECT NO.: 0230.1900095.0000 — REPORT NO.: 1709156 — PAGE: A-4

PROJECT: SOUTH FORK, TAX PARCEL 12674-001-00, OCALA, FLORIDA — BORING NO: SB-50 — SHEET: 1 of 1
CLIENT: RLR INVESTMENTS, LLC — SECTION: — TOWNSHIP: — RANGE:
LOCATION: SEE BORING LOCATION PLAN — GS ELEVATION(ft): — DATE STARTED: 9/3/19
REMARKS: — WATER TABLE (ft): NE — DATE FINISHED: 9/3/19
DATE OF READING: NA — DRILLED BY: M. BOATRIGHT
EST. WSWT (ft): — TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SYMBOL	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT/ DAY)	ORG CONT (%)
0						Brown SAND [SP]						
1		3-3-3	6			Loose brown and light brown SAND [SP], with trace of ash						
2		2-2-2	4			Loose light brown and orange SAND, with silt [SP-SM]						
3												
4		1-2-2	4									
5		2-2-3	5			Loose orange clayey SAND [SC]	5	6				
6		2-3-3	6									
7												
8		2-1-3	4			Firm orange and light gray sandy CLAY [CH]						0.6
9												
10												
11												
12												
13												
14												
15		2-2-3	5			Boring Terminated at 15'						

UNIVERSAL ENGINEERING SCIENCES BORING LOG

PROJECT NO.: 0230.1900095.0000 — REPORT NO.: 1709156 — PAGE: A-5

PROJECT: SOUTH FORK, TAX PARCEL 12674-001-00, OCALA, FLORIDA — BORING NO: SB-51 — SHEET: 1 of 1
CLIENT: RLR INVESTMENTS, LLC — SECTION: — TOWNSHIP: — RANGE:
LOCATION: SEE BORING LOCATION PLAN — GS ELEVATION(ft): — DATE STARTED: 9/3/19
REMARKS: — WATER TABLE (ft): NE — DATE FINISHED: 9/3/19
DATE OF READING: NA — DRILLED BY: M. BOATRIGHT
EST. WSWT (ft): — TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SYMBOL	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT/ DAY)	ORG CONT (%)
0						Very loose brown SAND [SP]						
1		1-2-1	3			Very loose light brown and orange SAND, with silt [SP-SM]						
2		WOH	WOH									
3		WOH	WOH									
4		WOH	WOH				10	12				6
5		WOH	WOH									
6		WOH	WOH			Very loose brown and orange clayey SAND [SC]						
7		WOH-3	3									
8						Soft gray and orange CLAY [CH], with trace of sand						
9												
10												
11						Very soft green and orange sandy CLAY [CH]						
12												
13												
14						LIMESTONE						
15		WOH	WOH			Boring Terminated at 15.5'						

UNIVERSAL ENGINEERING SCIENCES BORING LOG

PROJECT NO.: 0230.1900095.0000 — REPORT NO.: 1709156 — PAGE: A-6

PROJECT: SOUTH FORK, TAX PARCEL 12674-001-00, OCALA, FLORIDA — BORING NO: SB-52 — SHEET: 1 of 1
CLIENT: RLR INVESTMENTS, LLC — SECTION: — TOWNSHIP: — RANGE:
LOCATION: SEE BORING LOCATION PLAN — GS ELEVATION(ft): — DATE STARTED: 9/3/19
REMARKS: — WATER TABLE (ft): NE — DATE FINISHED: 9/3/19
DATE OF READING: NA — DRILLED BY: M. BOATRIGHT
EST. WSWT (ft): — TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SYMBOL	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT/ DAY)	ORG CONT (%)
0						Brown SAND [SP]						
1		1-1-1	2			Very loose light brown and tan SAND, with silt [SP-SM]						
2		1-1-1	2									
3						Loose to medium dense light gray and orange clayey SAND [SC]						
4		WOH-1-4	5									
5												
6		7-10-12	22				32	17				<0.01
7						Dense to medium dense orange and tan clayey SAND [SC]						
8		7-12-19	31									
9												
10		11-19-21	40									
11												
12						Stiff green and orange sandy CLAY [CH]						
13												
14												
15		5-6-6	12			Boring Terminated at 15'						

UNIVERSAL ENGINEERING SCIENCES BORING LOG

PROJECT NO.: 0230.1900095.0000 — REPORT NO.: 1709156 — PAGE: A-7

PROJECT: SOUTH FORK, TAX PARCEL 12674-001-00, OCALA, FLORIDA — BORING NO: SB-53 — SHEET: 1 of 1
CLIENT: RLR INVESTMENTS, LLC — SECTION: — TOWNSHIP: — RANGE:
LOCATION: SEE BORING LOCATION PLAN — GS ELEVATION(ft): — DATE STARTED: 9/3/19
REMARKS: — WATER TABLE (ft): NE — DATE FINISHED: 8/30/19
DATE OF READING: NA — DRILLED BY: M. BOATRIGHT
EST. WSWT (ft): — TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SYMBOL	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT/ DAY)	ORG CONT (%)
0						Brown SAND [SP]						
1		1-1-1	2			Very loose brown and tan SAND, with silt [SP-SM]						
2		2-1-2	3									
3		3-6-7	13			Medium dense light brown and orange clayey SAND [SC]	8	7				12
4		7-9-10	19									
5		3-5-9	14									
6		11-12-12	24									
7												
8						Medium dense light brown clayey SAND [SC], with lenses of clay						
9												
10												
11												
12												
13												
14												
15		8-9-10	19			Boring Terminated at 15'						

UNIVERSAL ENGINEERING SCIENCES BORING LOG

PROJECT NO.: 0230.1900095.0000 — REPORT NO.: 1709156 — PAGE: A-8

PROJECT: SOUTH FORK, TAX PARCEL 12674-001-00, OCALA, FLORIDA — BORING NO: SB-54 — SHEET: 1 of 1
CLIENT: RLR INVESTMENTS, LLC — SECTION: — TOWNSHIP: — RANGE:
LOCATION: SEE BORING LOCATION PLAN — GS ELEVATION(ft): — DATE STARTED: 8/30/19
REMARKS: — WATER TABLE (ft): NE — DATE FINISHED: 8/30/19
DATE OF READING: NA — DRILLED BY: M. BOATRIGHT
EST. WSWT (ft): — TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SYMBOL	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT/ DAY)	ORG CONT (%)
0						Brown SAND, with silt [SP-SM]						
1		3-5-6	11			Medium dense to loose tan fine SAND [SP]						
2												
3		3-3-3	6									
4												
5		2-3-3	6				9	7				22
6		2-3-4	7			Loose to medium dense orange clayey SAND [SC]						
7		3-3-3	6									
8												
9		3-4-3	7									
10												
11												
12												
13												
14												
15		5-6-8	14			Boring Terminated at 15'						

UNIVERSAL ENGINEERING SCIENCES BORING LOG

PROJECT NO.: 0230.1900095.0000 — REPORT NO.: 1709156 — PAGE: A-9

PROJECT: SOUTH FORK, TAX PARCEL 12674-001-00, OCALA, FLORIDA — BORING NO: SB-55 — SHEET: 1 of 1
CLIENT: RLR INVESTMENTS, LLC — SECTION: — TOWNSHIP: — RANGE:
LOCATION: SEE BORING LOCATION PLAN — GS ELEVATION(ft): — DATE STARTED: 8/30/19
REMARKS: — WATER TABLE (ft): NE — DATE FINISHED: 8/30/19
DATE OF READING: NA — DRILLED BY: M. BOATRIGHT
EST. WSWT (ft): — TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SYMBOL	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT/ DAY)	ORG CONT (%)
0						Very loose brown SAND, with silt [SP-SM]						
1		1-1-1	2			Very loose tan fine SAND, with silt [SP-SM]						
2		1-1-1	2									
3						Very loose orange silty clayey SAND [SM-SC]						
4		1-1-2	3									
5						Firm to stiff gray and orange slightly sandy CLAY [CH]						
6		3-3-4	7									
7												
8		3-4-5	9									
9		4-4-8	12									
10												
11												
12												
13						Medium dense orange and gray clayey SAND [SC]						
14												
15		6-8-9	18			Boring Terminated at 15'						

UNIVERSAL ENGINEERING SCIENCES BORING LOG

PROJECT NO.: 0230.1900095.0000 — REPORT NO.: 1709156 — PAGE: A-10

PROJECT: SOUTH FORK, TAX PARCEL 12674-001-00, OCALA, FLORIDA — BORING NO: SB-56 — SHEET: 1 of 1
CLIENT: RLR INVESTMENTS, LLC — SECTION: — TOWNSHIP: — RANGE:
LOCATION: SEE BORING LOCATION PLAN — GS ELEVATION(ft): — DATE STARTED: 9/3/19
REMARKS: — WATER TABLE (ft): NE — DATE FINISHED: 9/3/19
DATE OF READING: NA — DRILLED BY: M. BOATRIGHT
EST. WSWT (ft): — TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SYMBOL	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT/ DAY)	ORG CONT (%)
0						Loose brown SAND, with silt [SP-SM]						
1		2-4-4	8									
2						Loose to very loose tan and light orange SAND, with silt [SP-SM]						
3		4-4-4	8									
4												
5		2-2-3	5				7	3				6
6												
7		1-2-1	3			Very loose to loose orange and light brown clayey SAND [SC]						
8		3-3-6	9									
9												
10		7-6-7	13			Medium dense orange and light gray clayey SAND [SC]						
11												
12												
13												
14												
15		3-5-5	10			Boring Terminated at 15'						

UNIVERSAL ENGINEERING SCIENCES BORING LOG

PROJECT NO.: 0230.1900095.0000 — REPORT NO.: 1709156 — PAGE: A-11

PROJECT: SOUTH FORK, TAX PARCEL 12674-001-00, OCALA, FLORIDA — BORING NO: SB-57 — SHEET: 1 of 1
CLIENT: RLR INVESTMENTS, LLC — SECTION: — TOWNSHIP: — RANGE:
LOCATION: SEE BORING LOCATION PLAN — GS ELEVATION(ft): — DATE STARTED: 9/3/19
REMARKS: — WATER TABLE (ft): NE — DATE FINISHED: 9/3/19
DATE OF READING: NA — DRILLED BY: M. BOATRIGHT
EST. WSWT (ft): — TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SYMBOL	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT/ DAY)	ORG CONT (%)
0						Brown SAND, with silt [SP-SM]						
1		3-4-4	8			Loose light brown and tan SAND [SP]						
2		4-4-4	8				5	4				22
3												
4		3-7-50/3"	50/3"			Hard Rock / Boulder (Auger Refusal)						
5		1-3-4	7			Firm to stiff orange and gray sandy CLAY [CH]						
6		4-5-5	10									
7												
8		3-5-6	11			Medium dense light green and orange very clayey SAND [SC]						
9												
10												
11						Stiff light green and orange CLAY [CH]						
12												
13												
14												
15		7-4-6	10			Boring Terminated at 15'						

= APPROXIMATE STANDARD PENETRATION TEST (SPT) BORING LOCATION

Tillman & Associates
ENGINEERING, LLC.
CIVIL ENGINEERING - PLANNING - LANDSCAPE ARCHITECTURE - ENVIRONMENTAL
1720 SE 16th Ave. Bldg 100, Ocala, FL 34471
Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #27955

REVISIONS

DATE

MAJOR SITE PLAN
GOLDEN OCALA - WEC FLEX BARNS 3
MARION COUNTY, FLORIDA

SOIL BORINGS

DATE 11/13/YY
DRAWN BY KD
CHKD. BY GH
JOB NO. 20-6079

SHT. 14.02

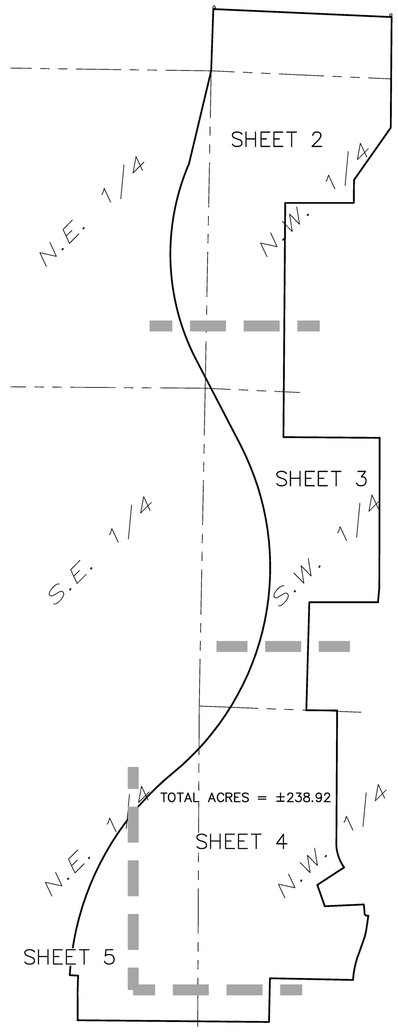
S:\Marion County\Golden Ocala Equestrian Center (2020) - Flex Barns 3\CIVIL\CONSTRUCTION\14 Soil Borings.dwg, 02, 11/13/2020 10:30:15 AM

TREE TABLES

TREE #	SIZE/TYPE	TREE #	SIZE/TYPE	TREE #	SIZE/TYPE	TREE #	SIZE/TYPE	TREE #	SIZE/TYPE	TREE #	SIZE/TYPE	TREE #	SIZE/TYPE	TREE #	SIZE/TYPE	TREE #	SIZE/TYPE	TREE #	SIZE/TYPE
2247	24" PINE	16924	36" OAK	28172	12" OAK	28272	24" OAK	28374	10" OAK	28477	16" PINE	28581	16" PINE	28682	16" PINE	116811	30" OAK	116915	24" OAK
2248	30" PINE	16925	38" OAK	28173	14" TREE	28273	20" PINE	28375	10" PINE	28478	20" PINE	28582	16" PINE	28683	16" PINE	116812	24" OAK	116916	24" OAK
2249	24" OAK	16926	36" OAK	28174	20" OAK	28274	16" OAK	28376	10" PINE	28479	16" PINE	28583	16" PINE	28684	16" PINE	116813	36" OAK	116917	24" OAK
2250	18" OAK	16927	42" OAK	28175	20" OAK	28275	18" OAK	28377	10" PINE	28480	16" PINE	28584	16" PINE	28685	15" OAK	116814	24" OAK	116919	24" OAK
2251	12" OAK	16928	45" OAK	28176	20" OAK	28276	18" OAK	28378	10" OAK	28481	16" PINE	28585	20" PINE	28686	15" OAK	116815	24" OAK	116920	24" OAK
2252	12" OAK	16929	45" OAK	28177	16" OAK	28277	16" PINE	28379	16" PINE	28482	20" PINE	28586	20" PINE	28687	15" PINE	116816	30" OAK	116921	24" OAK
2253	24" PINE	27859	15" OAK	28178	20" PINE	28278	16" PINE	28380	16" PINE	28483	16" PINE	28587	20" PINE	28688	15" PINE	116817	18" OAK	116922	24" OAK
2254	24" CHERRY	27860	20" OAK	28179	20" PINE	28279	20" OAK	28381	24" PINE	28484	16" PINE	28588	10" PINE	28689	15" OAK	116818	28" OAK	116923	20" OAK
2255	24" OAK	27861	20" OAK	28180	20" PINE	28280	20" OAK	28382	16" PINE	28485	16" PINE	28589	10" PINE	28690	15" OAK	116819	20" OAK	116925	24" OAK
2256	18" PINE	27862	15" OAK	28181	26" PINE	28281	20" OAK	28383	16" PINE	28486	16" PINE	28590	16" PINE	28691	20" OAK	116820	36" OAK	116926	24" OAK
2257	15" OAK	27863	15" OAK	28182	20" PINE	28282	15" OAK	28384	20" PINE	28487	16" PINE	28591	20" PINE	28692	15" OAK	116821	24" OAK	116927	30" OAK
2258	24" OAK	27864	15" OAK	28183	20" PINE	28283	15" OAK	28385	20" PINE	28488	16" PINE	28592	20" PINE	28693	15" OAK	116823	24" OAK	116928	24" OAK
2259	15" OAK	27865	20" OAK	28184	20" PINE	28284	12" PINE	28386	16" PINE	28489	16" PINE	28593	24" OAK	28694	15" OAK	116824	24" OAK	116929	24" OAK
2260	20" PINE	27990	36" OAK	28185	20" PINE	28285	10" OAK	28387	16" PINE	28490	16" PINE	28594	16" PINE	28695	15" OAK	116825	24" OAK	116930	36" OAK
2261	20" PINE	27991	36" OAK	28186	24" OAK	28286	10" OAK	28388	12" PINE	28491	20" PINE	28595	24" PINE	28696	20" OAK	116826	24" OAK	116931	30" OAK
2262	24" OAK	27992	36" OAK	28187	16" OAK	28287	18" OAK	28389	16" PINE	28492	20" PINE	28596	16" PINE	28697	15" OAK	116827	24" OAK	116932	30" OAK
2263	24" OAK	27993	36" OAK	28188	14" OAK	28288	15" OAK	28390	10" PINE	28493	16" PINE	28597	16" PINE	28698	15" OAK	116828	24" OAK		
2264	36" OAK	27994	24" OAK	28189	16" OAK	28289	15" OAK	28391	24" OAK	28494	20" PINE	28598	16" OAK	28699	24" OAK	116829	24" OAK		
2265	40" OAK	27995	24" OAK	28190	16" OAK	28290	15" OAK	28392	20" OAK	28495	20" PINE	28599	16" OAK	28700	15" OAK	116830	24" OAK		
2266	30" OAK	27996	24" OAK	28191	12" OAK	28291	10" PINE	28393	20" OAK	28496	20" PINE	28600	16" OAK	28701	20" OAK	116831	24" OAK		
2267	36" OAK	27997	30" OAK	28192	16" PINE	28292	15" OAK	28394	12" OAK	28497	16" PINE	28601	20" PINE	28702	24" PINE	116832	24" OAK		
2268	40" OAK	27998	24" OAK	28193	20" OAK	28293	10" PINE	28395	12" OAK	28498	20" PINE	28602	12" OAK	28703	15" OAK	116833	28" OAK		
12381	24" PINE	27999	30" OAK	28194	24" OAK	28294	10" OAK	28396	16" PINE	28499	18" PINE	28603	12" PINE	28704	15" OAK	116834	24" OAK		
12382	24" CEDAR	28000	60" OAK	28195	16" OAK	28295	10" OAK	28397	12" PINE	28500	20" PINE	28604	18" OAK	28705	15" OAK	116835	28" OAK		
12383	14" CEDAR	28001	24" OAK	28196	20" PINE	28296	10" PINE	28398	12" PINE	28501	20" PINE	28605	20" PINE	28706	24" OAK	116836	24" OAK		
12384	34" CEDAR	28002	24" OAK	28197	20" OAK	28297	12" OAK	28399	10" PINE	28502	24" OAK	28606	12" TREE	28707	24" OAK	116837	24" OAK		
12385	16" CEDAR	28003	24" OAK	28198	18" OAK	28298	12" OAK	28400	10" OAK	28503	12" OAK	28607	12" OAK	28708	48" OAK	116838	24" OAK		
12386	20" OAK	28004	48" OAK	28199	18" OAK	28299	12" PINE	28401	24" OAK	28504	12" OAK	28609	16" OAK	28709	20" OAK	116839	18" OAK		
12387	10" OAK	28005	18" OAK	28200	28" OAK	28300	18" OAK	28402	18" OAK	28505	12" PINE	28610	10" OAK	28710	16" PINE	116840	36" OAK		
12388	30" OAK	28006	24" OAK	28201	16" PINE	28301	18" OAK	28403	12" OAK	28506	20" OAK	28611	26" OAK	28711	15" OAK	116841	16" OAK		
12389	14" OAK	28007	24" OAK	28202	16" OAK	28302	12" OAK	28404	12" PINE	28507	20" OAK	28612	20" PINE	28712	20" PINE	116842	18" OAK		
12390	25" OAK	28008	24" OAK	28203	16" OAK	28303	18" PINE	28405	12" OAK	28508	60" OAK	28613	20" OAK	28713	20" PINE	116843	20" OAK		
12391	10" OAK	28009	18" OAK	28204	16" OAK	28304	18" PINE	28406	20" OAK	28509	20" PINE	28614	20" OAK	28714	15" OAK	116844	28" OAK		
12392	12" OAK	28010	18" OAK	28205	18" OAK	28305	18" PINE	28407	20" OAK	28511	20" PINE	28615	30" PINE	28715	15" OAK	116845	20" OAK		
12393	8" OAK	28011	24" OAK	28206	24" OAK	28306	15" OAK	28408	20" OAK	28512	10" PINE	28616	15" OAK	28716	20" PINE	116846	20" OAK		
12394	8" OAK	28092	48" OAK	28207	16" OAK	28307	15" OAK	28410	20" OAK	28513	20" PINE	28617	15" OAK	28717	20" PINE	116847	24" OAK		
12395	8" OAK	28093	36" OAK	28208	12" OAK	28308	15" OAK	28411	24" OAK	28514	20" PINE	28618	15" OAK	28718	20" OAK	116848	30" OAK		
12396	8" OAK	28094	18" OAK	28209	16" OAK	28309	20" PINE	28412	18" OAK	28515	16" PINE	28619	20" PINE	28719	15" PINE	116849	24" OAK		
12397	10" OAK	28095	18" OAK	28210	24" OAK	28310	14" PINE	28413	16" PINE	28516	20" PINE	28620	40" OAK	28720	15" OAK	116850	18" OAK		
12398	12" OAK	28096	18" OAK	28211	16" OAK	28311	20" PINE	28414	10" PINE	28517	16" PINE	28621	30" OAK	28721	20" PINE	116851	24" OAK		
12399	10" OAK	28097	15" OAK	28212	10" OAK	28312	20" PINE	28415	16" PINE	28518	16" PINE	28622	20" PINE	28722	20" OAK	116852	20" OAK		
12400	8" OAK	28098	15" OAK	28213	10" OAK	28313	14" PINE	28416	16" PINE	28519	16" PINE	28623	20" PINE	28723	15" PINE	116853	24" OAK		
12401	10" OAK	28099	15" OAK	28214	28" OAK	28314	20" OAK	28417	16" PINE	28520	20" PINE	28624	20" PINE	28724	12" PINE	116854	20" OAK		
12402	12" OAK	28100	24" OAK	28215	10" OAK	28315	10" PINE	28418	16" PINE	28521	16" PINE	28625	24" TREE	28725	20" OAK	116855	48" OAK		
12403	10" OAK	28101	16" OAK	28216	14" OAK	28316	15" OAK	28419	16" PINE	28522	28" OAK	28626	16" PINE	28726	12" PINE	116856	48" OAK		
12404	15" OAK	28102	16" OAK	28217	20" PINE	28317	10" OAK	28420	16" PINE	28523	15" OAK	28627	15" OAK	28727	36" OAK	116857	48" OAK		
12405	13" OAK	28103	20" OAK	28218	14" PINE	28318	10" OAK	28421	20" PINE	28524	20" PINE	28628	20" OAK	28729	15" PINE	116858	30" OAK		
12406	6" OAK	28104	20" OAK	28219	14" PINE	28319	10" OAK	28422	20" PINE	28525	16" PINE	28629	20" OAK	28730	15" PINE	116859	36" OAK		
12407	6" OAK	28105	16" OAK	28220	16" PINE	28320	10" OAK	28423	16" PINE	28526	20" PINE	28630	16" PINE	28731	20" OAK	116860	36" OAK		
12408	12" OAK	28106	20" OAK	28221	18" OAK	28322	16" PINE	28424	16" PINE	28527	16" PINE	28631	16" PINE	28732	12" OAK	116861	30" OAK		
12409	6" OAK	28107	20" OAK	28222	12" OAK	28323	16" OAK	28425	26" OAK	28528	10" PINE	28632	16" OAK	28733	15" OAK	116862	36" OAK		
12410	16" OAK	28108	18" OAK	28223	16" OAK	28324	18" OAK	28426	20" OAK	28529	10" PINE	28633	16" PINE	28734	20" OAK	116863	48" OAK		
12411	14" OAK	28109	20" OAK	28224	26" OAK	28325	16" PINE	28427	16" OAK	28530	20" PINE	28634	16" PINE	28735	12" OAK	116864	36" OAK		
12412	26" OAK	28110	20" OAK	28225	16" PINE	28326	16" PINE	28428	16" OAK	28531	25" PINE	28635	16" PINE	28736	12" PINE	116865	50" OAK		
12413	12" OAK	28111	18" OAK	28226	16" OAK	28327	16" PINE	28429	18" OAK	28532	20" PINE	28636	16" OAK	28737	12" PINE	116866	60" OAK		
12414	8" OAK	28112	15" OAK	28227	16" OAK	28328	16" PINE	28430	20" OAK	28533	16" PINE	28637	16" PINE	116766	24" OAK	116867	48" OAK		
12415	8" OAK	28113	15" OAK	28228	16" OAK	28329	10" PINE	28431	18" OAK	28534	20" PINE	28638	16" PINE	116767	20" OAK	116868	48" OAK		
12416	8" OAK	28114	16" OAK	28229	16" PINE	28330	10" PINE	28432	16" OAK	28535	16" PINE	28639	20" PINE	116768	20" OAK	116869	48" OAK		
12417	12" OAK	28115	16" OAK	28230	16" OAK	28331	10" PINE	28433	20" OAK	28536	24" PINE	28640	20" PINE	116769	20" OAK	116870	50" OAK		
12418	18" OAK	28116	16" OAK	28231	16" OAK	28332	14" PINE	28434	15" OAK	28537	30" PINE	28641	20" OAK	116770	20" OAK	116871	50" OAK		
12424	10" OAK	28117	48" OAK	28232	16" OAK	28333	18" OAK	28435	15" OAK	28538	20" PINE	28642	20" OAK	116771	20" OAK	116872	48" OAK		
12425	26" CEDAR	28118	15" OAK	28233	16" PINE	28334	12" OAK	28436	15" OAK	28539	20" PINE	28643	20" OAK	116772	18" OAK	116873	48" OAK		
12426	26" CEDAR	28119	24" OAK	28234	20" OAK	28335	12" OAK	28437	26" PINE	28540	20" PINE	28644	20" OAK	116773	24" OAK	116874	48" OAK		
12427	27" CEDAR	28120	20" OAK	28235	18" OAK	28336	15" OAK	28438	12" OAK	28541	20" PINE	28645	20" OAK	116774	36" OAK	116875	48" OAK		
12428	16" OAK	28121	20" OAK	28236	18" OAK	28337	20" PINE	28439	40" OAK	28543	20" PINE	28646	20" PINE	116775	24" OAK	116876	36" OAK		
12429	18" CEDAR	28122	20" OAK	28237	16" PINE	28338	16" PINE	28440	12" OAK	28544	24" PINE	28647	20" PINE	116776	24" OAK	116877	40" OAK		
12430	16" OAK	28123	24" OAK	28238	12" OAK	28339	16" PINE	28441	12" OAK	28545	16" PINE	28648	15" OAK	116777	24" OAK	116878	40" OAK		
12431	26" OAK	28124	15" OAK	28239	14" OAK	28340	20" PINE	28442	12" OAK	28546	24" PINE	28649	20" OAK	116778	24" OAK	116879	40" OAK		
12432	18" CEDAR	28125	15" OAK	28240	20" PINE	28341	20" OAK	28443	24" OAK	28547	24" PINE	28650	20" PINE	116779	24" OAK	116880	36" OAK		
12437	40" OAK	28126	15" OAK	28241	16" OAK	28342	24" OAK	28444	16" OAK	28548	16" PINE	28651	20" PINE	116780	24" OAK	116881	40" OAK		
12445	15" OAK	28127	12" OAK	28242	16" OAK	28343	20" PINE	28445	10" OAK	28549	16" PINE	28652	20" PINE	116781	20" OAK	116882	48" OAK		
12446	10" OAK	28128	12" OAK	28243	20" OAK	28344	24" OAK	28446	10" OAK	28550	20" PINE	28653	20" PINE	116782	24" OAK	116883	40" OAK		
12447	24" CEDAR	28129	18" OAK	28244	16" PINE	28345	16" PINE	28447	10" OAK	28551	20" PINE	28654	20" PINE	116783	36" OAK	116884	36" OAK		
12448	12" OAK	28130	18" OAK	28245	18" OAK	28346	16" PINE	28448	16" PINE	28552	24" PINE	28655	15" OAK	116784	20" OAK	116885	42" OAK		
12449	16" OAK	28131	26" PINE	28246	18" OAK	28347	20" OAK	28449	10" OAK	28553	16" PINE	28656	20" PINE	116785	20" OAK	116886	46 OAK		
12450	20" CEDAR	28132	26" PINE	28247	18" PINE	28348	18" OAK	28450	10" PINE	28554	16" PINE	28657	20" PINE	116786	20" OAK	116887	36" OAK		
12451	12" OAK	28133	18" OAK	28248	16" OAK	28349	24" PINE	28451	15" OAK	28555	16" PINE	28658	20" OAK	116787	20" OAK	116888	42" OAK		
12452	12" OAK	28134	24" OAK	28249	20" PINE	28350	18" PINE	28452	20" PINE	28556	24" PINE	28659	20" OAK	116788	24" OAK	116890	40" OAK		
12453	15" OAK	28135	15" OAK	28250	20" OAK	28351	16" PINE	28453	20" PINE	28557	16" OAK	28660	20" PINE	116789	28" OAK	116891	36" OAK		
12454	30" OAK	28136	15" OAK	28251	16" OAK	28352	18" OAK	28454	20" PINE	28558	16" OAK	28661	20" PINE	116790	20" OAK	116892	48" OAK		
12455	8" OAK	28137	15" OAK	28252	24" OAK	28353	18" OAK	28455	16" PINE	28559	16" PINE	28662	20" PINE	116791	36" OAK	116893	30" OAK		
12456	6" OAK	28138	12" OAK	28253	16" OAK	28354	12" PINE	28456	16" PINE	28560	16" PINE	28663	20" PINE	116792	24" OAK	116894	48" OAK		
12457	24" OAK	28139	15" OAK	28254	12" OAK	28355	10" PINE	28457	16" PINE	28561	24" PINE	28664	15" OAK	116793	30" OAK	116895	60" OAK		
12458	28" OAK	28140	20" OAK	28255	12" OAK	28356	10" PINE	28460	20" PINE	28562	16" PINE	28665	20" PINE	116794	24" OAK	116896	48" OAK		
12459	24" OAK	28141	20" OAK	28256	12" PINE	28357	10" PINE	28461	20" PINE	28563	16" PINE	28666	20" PINE	116795	20" OAK	116897	36" OAK		
12521	12" OAK	28142	24" OAK	28257	15" OAK	28358	12" PINE	28462	20" PINE	28564	20" PINE	28667	20" PINE	116796	24" OAK	116898	48" OAK		
12545	36" OAK	28143	24" PINE	28258	10" OAK	28359	10" PINE	28463	20" PINE	28565	20" PINE	28668	20" PINE	116797	24" OAK	116899	50" OAK		
		28144	12" OAK	28259	10" OAK	28360	10" OAK	28464	20" OAK	28566	20" PINE	28669	20" PINE	116798	24" OAK	116900	40" OAK		
		28145	12" OAK	28260	16" OAK	28361	10" PINE	28465	15" OAK	28567	16" OAK	28670	20" PINE	116799	30" OAK	116901	36" OAK		
		28146	15" OAK	28261	12" OAK	28362	10" OAK	28466	10" OAK	28568	20" OAK	28671	20" PINE	116800	36" OAK	116903	36" OAK		
		28147	24" OAK	28262	12" OAK	28363	10" PINE	28467	18" OAK	28569	12" PINE	28672	20" PINE	116801	24" OAK	116904	24" OAK		
		28148	15" OAK	28263	15" OAK	28364	12" PINE	28468	16" PINE	28570	12" PINE	28673	20" PINE	116802	24" OAK	116905	24" OAK		
		28149	20" PINE	28264	12" PINE	28366	12" OAK	28469	16" PINE	28571	20" PINE	28674	20" PINE	116803	24" OAK	116906	48" OAK		
		28150	24" OAK	28265	12" PINE	28367	12" PINE	28470	10" OAK	28572	20" PINE	28675	20" PINE	116804	18" OAK	116907	30" OAK		
		28151	24" OAK	28266	15" OAK	28368	15" OAK	28471	10" OAK	28573	20" PINE	28676	20" PINE	116805	18" OAK	116909	36" OAK		
		28152	24" OAK	28267	20" OAK	28369	16" PINE	28472	16" PINE	28574	20" PINE	28677	20" PINE	116806	24" OAK	116910	24" OAK		
		28171	12" OAK	28268	20" PINE	28370	10" OAK	28473	16" PINE	28575	20" PINE	28678	20" PINE	116807	20" OAK	116911	20" OAK		
				28269	14" PINE	28371	12" PINE	28474	12" OAK	28576	20" PINE	28679	24" OAK	116808	36" OAK	116912	24" OAK		
				28270	14" PINE	28372	12" OAK	28475	18" OAK	28577	20" PINE	28680	20" OAK	116809	24" OAK	116913	24" OAK		
				28271	18" OAK	28373	12" PINE	28476	18" PINE	28578	20" PINE	28681	16" PINE	116810	20" OAK	116914	24" OAK		

LEGEND

C.M.	CONCRETE MONUMENT
I.R.	IRON ROD
●	SET IRON ROD & CAP (ROGERS ENG)
N&D	NAIL & DISC
R/W	RIGHT OF WAY
E/P	EDGE OF PAVEMENT
C/L	CENTERLINE
SEC.	SECTION
TWP.	TOWNSHIP
RGE.	RANGE
	UTILITY POLE AND GUY ANCHOR
	OVERHEAD WIRES
	FENCE
CONC.	CONCRETE
2 ●	TREE (SEE TREE SCHEDULE)
75	GROUND CONTOUR
T.B.M.	TEMPORARY BENCHMARK
	PROPERTY CORNER W/ STATE PLANE COORDINATES
ELEV.	ELEVATION
INV.	INVERT
Ø ●	WATER METER
	FIRE HYDRANT
CONC.	CONCRETE
	CONCRETE
	ASPHALT



LEGAL DESCRIPTION:

A PORTION OF SECTIONS 1, 2, 11, 12, 13 & 14, TOWNSHIP 15 SOUTH, RANGE 20 EAST, MARION COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
BEGIN AT THE INTERSECTION OF THE NORTH RIGHT OF WAY LINE OF WEST HIGHWAY 40 WITH THE EAST LINE OF THE NORTHEAST 1/4 OF SAID SECTION 14; THENCE N89°30'13"W, ALONG SAID NORTH RIGHT OF WAY LINE OF WEST HIGHWAY 40, A DISTANCE OF 1005.95 FEET; THENCE DEPARTING SAID NORTH RIGHT OF WAY LINE, PROCEED N00°09'17"W, 234.03 FEET TO A POINT ON THE ARC OF A NON TANGENT CURVE CONCAVE EAST, HAVING A RADIUS OF 2300.00 FEET AND A CENTRAL ANGLE OF 03°29'25"; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE 140.11 FEET (CHORD BEARING AND DISTANCE OF N01°35'27"E, 140.09 FEET); THENCE N86°48'33"W, 70.00 FEET TO A POINT ON THE ARC OF A NON TANGENT CURVE CONCAVE SOUTHEAST, HAVING A RADIUS OF 2370.00 FEET AND A CENTRAL ANGLE OF 47°20'13"; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE 1958.06 FEET (CHORD BEARING AND DISTANCE OF N27°00'02"E, 1902.85 FEET) TO A POINT ON THE ARC OF A NON TANGENT CURVE CONCAVE WEST, HAVING A RADIUS OF 2230.00 FEET AND A CENTRAL ANGLE OF 78°08'37"; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE 3041.42 FEET (CHORD BEARING AND DISTANCE OF N11°35'55"E, 2811.11 FEET); THENCE N27°28'18"W, 800.24 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE EAST, HAVING A RADIUS OF 1920.15 FEET AND A CENTRAL ANGLE OF 49°49'29"; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE 1669.77 FEET (CHORD BEARING AND DISTANCE OF N02°33'34"W, 1617.65 FEET); THENCE N22°21'11"E, 30.00 FEET; THENCE N13°27'08"E, 801.43 FEET; THENCE N01°55'34"E, 518.37 FEET; THENCE S87°26'12"E, 1496.56 FEET; THENCE S00°25'07"W, 927.48 FEET; THENCE S35°07'45"W, 536.29 FEET; THENCE S00°25'07"W, 192.96 FEET; THENCE N89°58'59"W, 575.28 FEET; THENCE S00°25'07"W, 1963.86 FEET; THENCE S89°32'55"E, 806.27 FEET; THENCE S00°08'31"W, 1254.73 FEET; THENCE S04°58'55"W, 121.97 FEET; THENCE WEST, 575.92 FEET; THENCE S01°33'43"W, 906.25 FEET; THENCE S89°33'27"E, 257.73 FEET; THENCE S00°18'48"W, 1108.92 FEET TO A POINT ON THE ARC OF A NON TANGENT CURVE CONCAVE EAST, HAVING A RADIUS OF 355.96 FEET AND A CENTRAL ANGLE OF 35°33'41"; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE 220.93 FEET (CHORD BEARING AND DISTANCE OF S17°27'09"E, 217.40 FEET); THENCE S56°55'23"W, 268.75 FEET; THENCE S19°26'26"E, 189.91 FEET; THENCE N87°20'18"E, 327.04 FEET TO A POINT ON THE ARC OF A NON TANGENT CURVE CONCAVE WEST, HAVING A RADIUS OF 524.50 FEET AND A CENTRAL ANGLE OF 08°09'39"; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE 74.71 FEET (CHORD BEARING AND DISTANCE OF S05°17'09"E, 74.64 FEET) TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE NORTHEAST, HAVING A RADIUS OF 20.00 FEET AND A CENTRAL ANGLE OF 88°28'27"; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE 30.88 FEET (CHORD BEARING AND DISTANCE OF S45°26'32"E, 27.91 FEET); THENCE S89°43'03"E, 11.30 FEET; THENCE S08°32'27"W, 125.57 FEET; THENCE S12°25'02"W, 53.16 FEET; THENCE S19°25'57"W, 169.01 FEET TO A POINT ON THE ARC OF A NON TANGENT CURVE CONCAVE EAST, HAVING A RADIUS OF 764.00 FEET AND A CENTRAL ANGLE OF 15°36'54"; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE 208.22 FEET (CHORD BEARING AND DISTANCE OF S11°37'31"W, 207.57 FEET); THENCE N88°52'18"W, 697.44 FEET; THENCE S01°07'42"W, 367.00 FEET TO A POINT ON THE AFORESAID NORTH RIGHT OF WAY LINE OF WEST HIGHWAY 40; THENCE N88°52'18"W, ALONG SAID NORTH RIGHT OF WAY LINE, A DISTANCE OF 50.80 FEET; THENCE CONTINUE ALONG SAID NORTH RIGHT OF WAY LINE, PROCEED N89°30'13"W, 547.17 FEET TO THE POINT OF BEGINNING.
CONTAINING 238.92 ACRES, MORE OR LESS.

SURVEY REPORT:

1. BEARINGS ARE BASED ON FLORIDA STATE PLANE COORDINATES, WEST MERCATOR.
2. VERTICAL DATA IS BASED ON CONTROL POINTS "COED 005 RESET", PUBLISHED ELEVATION = 76.16 AND "COED 0010", PUBLISHED ELEVATION = 79.13, NAVD–88.
3. FIELD SURVEY DATE: SEPTEMBER 8, 2020.
4. THE LEGAL DESCRIPTION SHOWN HEREON WAS WRITTEN BY THE SURVEYOR BASED ON DEEDS OF RECORD AND INSTRUCTIONS FROM THE CLIENT.
5. ALL RIGHTS OF WAY SHOWN HEREON ARE PHYSICALLY OPEN UNLESS OTHERWISE STATED.
6. UNDERGROUND IMPROVEMENTS OR UTILITIES WERE NOT LOCATED.
7. THIS PROPERTY APPEARS TO BE IN A ZONE "X" (AREA OF MINIMAL FLOOD HAZARD) AND A ZONE "AE (EL 45.4')" (SPECIAL FLOOD HAZARD AREA) ACCORDING TO THE FEMA FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY NUMBER 120160, PANEL 0484, SUFFIX E, WITH AN EFFECTIVE DATE OF 4/19/2017. THE LIMITS OF ZONE "AE" SHOWN HEREON WERE INTERPOLATED FROM THE FIRM.
8. THIS PROPERTY THIS SURVEY MEETS THE STANDARDS OF PRACTICE CONTAINED IN CHAPTER 5J–17.050 THROUGH .052, FLORIDA ADMINISTRATIVE CODE AND THE ACCURACY OBTAINED BY MEASUREMENT AND CALCULATION OF A CLOSED GEOMETRIC FIGURE WAS FOUND TO EXCEED THE MINIMUM RELATIVE DISTANCE ACCURACY FOR COMMERCIAL/HIGH RISK LAND USE.
9. UNLESS IT BEARS THE DIGITAL SIGNATURE AND CERTIFICATION OR THE PHYSICAL SIGNATURE AND SEAL OF THE LICENSED SURVEYOR AND MAPPER, THIS MAP IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT VALID.

SURVEYORS CERTIFICATION:

I HEREBY CERTIFY THAT THE SURVEY REPRESENTED HEREON IS IN ACCORDANCE WITH ALL APPLICABLE REQUIREMENTS OF THE MARION COUNTY L.D.C. AND MEETS THE STANDARDS OF PRACTICE PER CHAPTER 2014–147 SECTION 1. SECTION 472.027, FLORIDA STATUES.

RODNEY K. ROGERS DATE
PROFESSIONAL SURVEYOR & MAPPER
REGISTRATION NO. 5274
STATE OF FLORIDA

REVISION	DATE

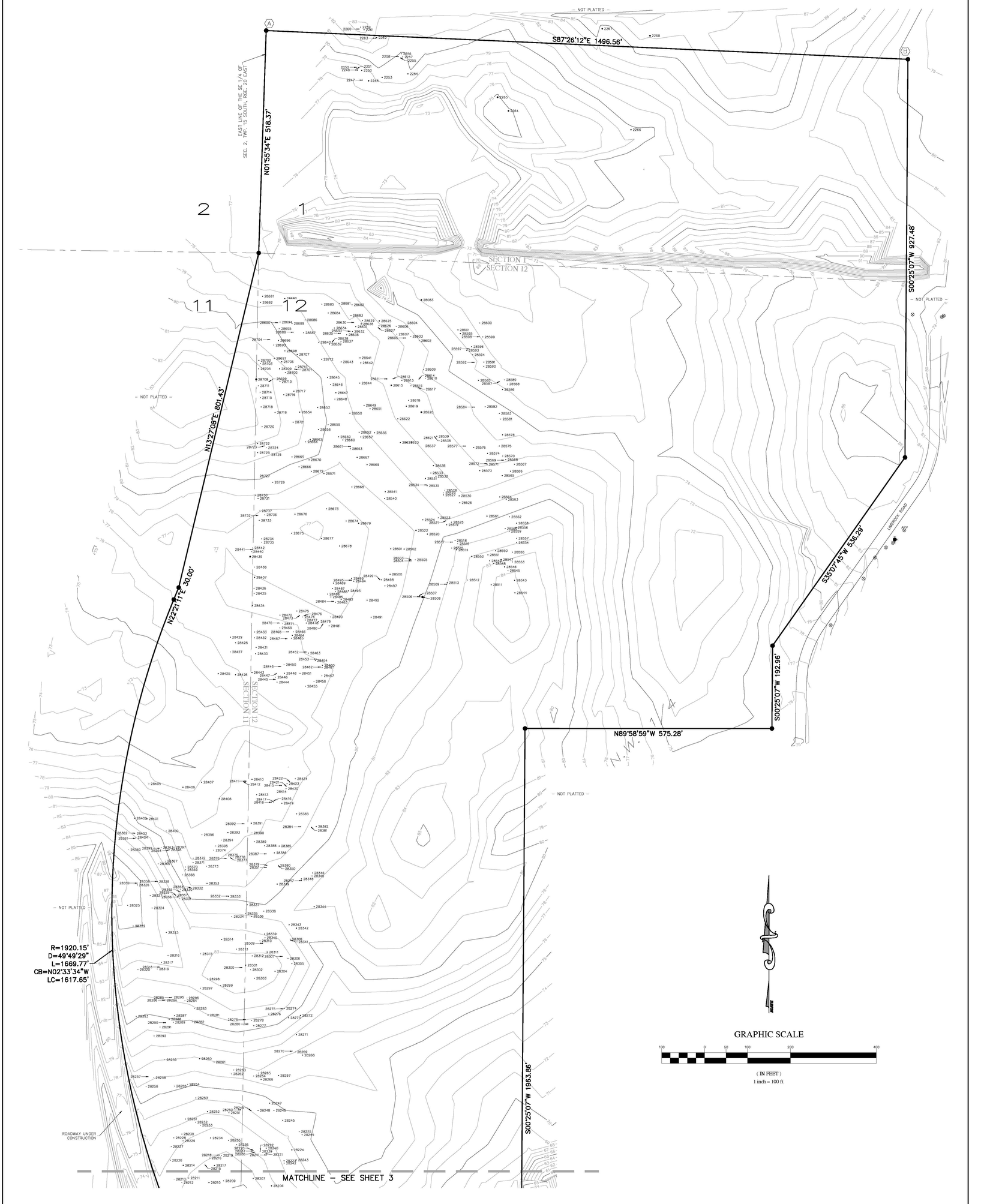
Robert L. Rogers, PE
Fl. Reg. No. 62202
rrogers@rogerseng.com

Rodney K. Rogers, PSM
Fl. Reg. No. 5274
rkrogers@rogerseng.com

ROGERS ENGINEERING, LLC
Civil Engineering & Land Surveying
1105 S.E. 3rd Avenue • Ocala, Florida 34471 • Ph. (352) 622-9214 • Lic. Bus. #4074

A BOUNDARY & TOPOGRAPHIC SURVEY
FOR
GOLDEN OCALA EQUESTRIAN LAND, LLC
Cross Country Course Parcel

JOB No.	20_WEC CCC TOPO
DATE	9–16–2020
SCALE	1" = 100'
SHEET	1 OF 5



GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

Ⓐ NORTHING: 1772918.601729
EASTING: 570572.610551

Ⓑ NORTHING: 1772851.669836
EASTING: 572067.670797

SEE SHEET 1 FOR LEGAL DESCRIPTION AND SURVEY REPORT

SHEET 2 OF 5

SCALE 1" = 100'

DATE 9-16-2020

JOB No. 20-MC-CCC-10P0

A BOUNDARY & TOPOGRAPHIC SURVEY
FOR
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Cross Country Course Parcel

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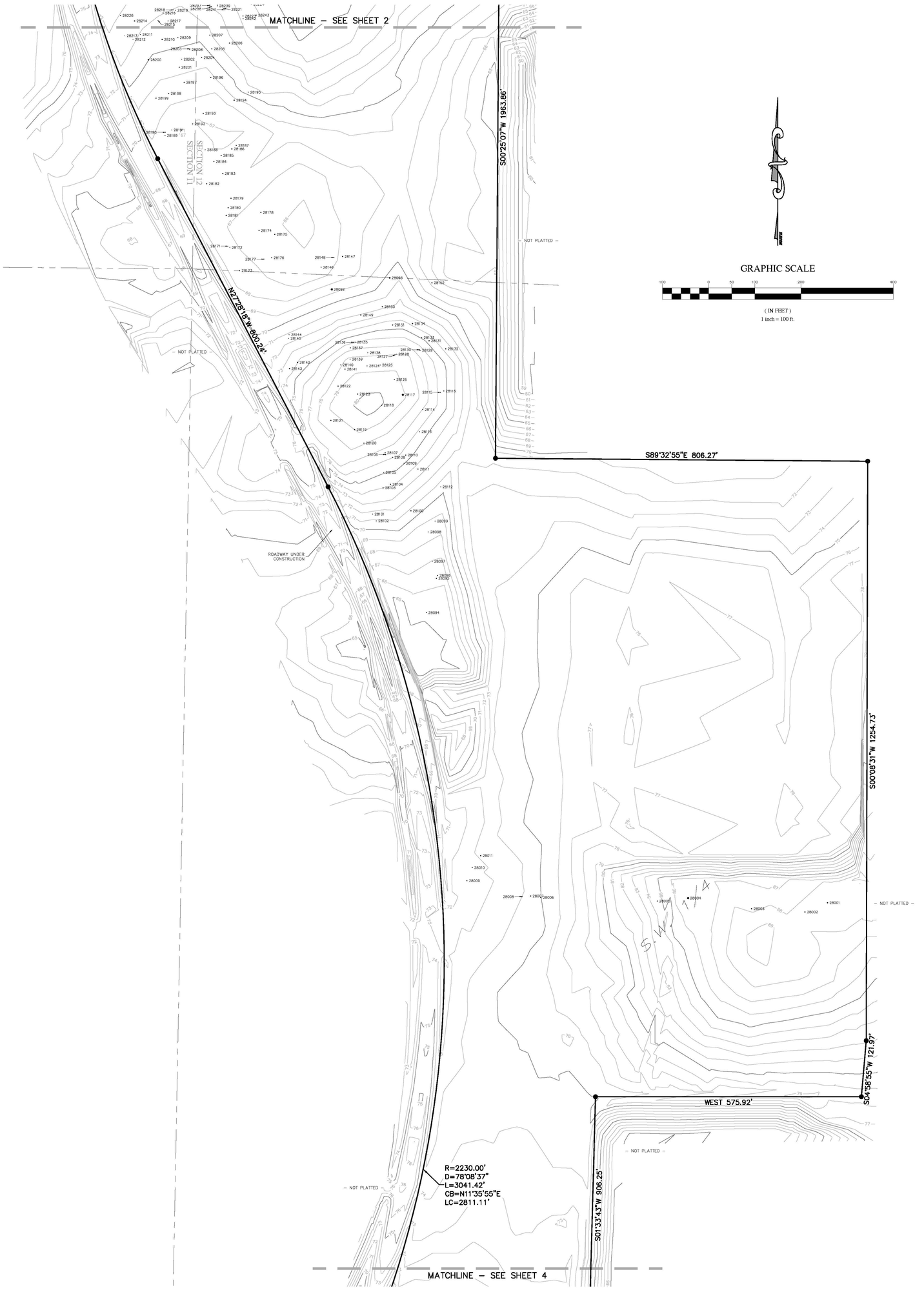
DATE	REVISION



SEE SHEET 1 FOR LEGAL DESCRIPTION AND SURVEY REPORT

SHEET 3 OF 5

SCALE 1" = 100'

DATE 9-16-2020

JOB No. 20_MEC_OCC_TOPO

A BOUNDARY & TOPOGRAPHIC SURVEY
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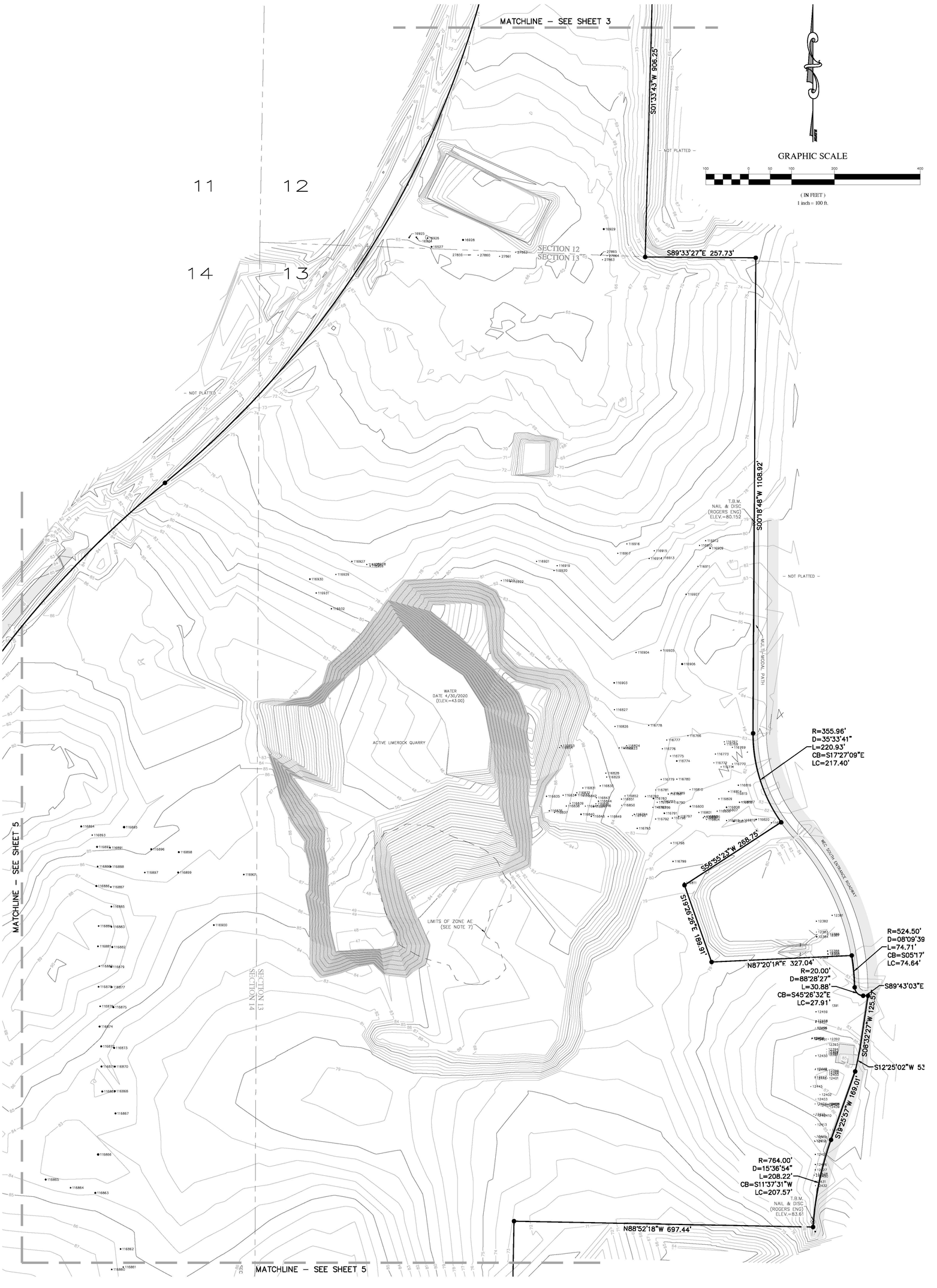
DATE	REVISION



SEE SHEET 1 FOR LEGAL DESCRIPTION AND SURVEY REPORT

SHEET 4 OF 5

1" = 100'

DATE 6-15-2020

JOB No. 20-MEC OCC. DPRO

A BOUNDARY & TOPOGRAPHIC SURVEY
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Cross Country Course Parcel

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DATE	REVISION

SEE SHEET 1 FOR LEGAL DESCRIPTION AND SURVEY REPORT

		REVISION
		DATE

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GOLDEN OCALA EQUESTRIAN LAND, LLC
Cross Country Course Parcel

JOB No.
20_WEC CCC TOPO

DATE
9-16-2020

SCALE
1" = 100'

SHEET
5 OF 5