Planning and Development
510 North Baker Street
Mount Dora, Florida 32757
352-735-7112
Email: plandev@cityofmountdora.com

PLANNING & ZONING COMMISSION
City Hall Board Room
July 19, 2023 at 10:00 AM

I. Call to Order

II. Roll Call with Determination of Quorum

III. Approval of Minutes

IV. Public participation/hearing for non-agenda items

V. New Business

A. **Request for Site Plan**; Inspire Donnelly Woods (Project Name); East of Donnelly Street and North of Limit Ave (Location); Liberty Senior Properties of Mt Dora, LLC (Owner); Green Consulting Group, Inc. (Applicant); Halff Associates, Inc. (Engineer).Green Consulting (Landscape Architect); Meeks Partners (Architect). Project No. SP23-03.
   1. Swearing in of witnesses by City Attorney
   2. Ex Parte Communication regarding this item
   3. Staff/Applicant presentation
   4. Public Input
   5. Commission deliberation and action

B. **Request for Site Plan**; Yardery (Project Name); 221 North Baker Street (Site Address); GC Development of Lake County, Inc. (Owner); Gaslight MDF 2, LLC (Applicant); Halff (Engineer); Green Consulting Group, Inc. (Landscape Architect); Powell Studio Architecture (Architect). Project No, SP2306Minor.
   1. Swearing in of witnesses by City Attorney
   2. Ex Parte Communication regarding this item
   3. Staff/Applicant presentation
   4. Public Input
   5. Commission deliberation and action

C. **Request for Site Plan;** Big Dan's Car Cash (Site Plan); 17580 US 441 (Location); Frat House, LLC (Owner); Brightwork Acquisitions, LLC (Applicant); Infinity Engineering Group, LLC (Engineer); Patrick D. Cunningham, LLC. (Landscape Architect); Oliveri Architects. Project No. SP23-04.
1. Swearing in of witnesses by City Attorney
2. Ex Parte Communication regarding this item
3. Staff/Applicant presentation
4. Public Input
5. Commission deliberation and action

D. **Request for Ordinance Amendment Update;** Land Development Code
1. Public Input
2. Commission deliberation and action

VI. Announcement of next scheduled meeting date

A. Next regularly scheduled meeting date: August 16, 2023

VII. Adjournment

NOTICE: For purposes of Section 286.011, *Florida Statutes*, two (2) or more members of the City Council may be present at this meeting and this meeting may be considered a City Council meeting although no decision of the City Council will be made at this meeting and the City Council shall comply with the requirements of controlling State law in every respect.

NOTICE: If any person decides to appeal any decisions made at this meeting with respect to any matter considered at this meeting, such person may need a record of these proceedings. For such purpose, a person may need to ensure that a verbatim record of the proceedings is made which record includes the testimony and evidence upon which the appeal is to be based. The City shall not make or perfect such a record. Section 286.0105, *Florida Statutes*.

NOTICE: In accordance with the Americans with Disabilities Act ("ADA") and Florida Statutes, Section 286.26, persons with disabilities needing a reasonable accommodation to participate in a public hearing or meeting should contact the City of Mount Dora's ADA Coordinator at least 48 hours prior to the proceeding. The ADA Coordinator may be contacted by phone at (352) 735-7126, ext. 1111, or by email at clerk@cityofmountdora.com.

If hearing impaired, telephone the Florida Relay Service numbers (800) 955-8771 (TDD) or (800) 955- 8770 (Voice) for assistance.

CITY OF MOUNT DORA, FLORIDA
PLANNING AND ZONING COMMISSION MINUTES
June 21, 2023

I. Call to Order

Having been duly advertised as required by law Chairman, Harmon Massey called the regular meeting of the Planning and Zoning Commission to order at 10:00 a.m. on Wednesday, June 21, 2023.

II. Roll Call with Determination of Quorum

Present: Harmon Massey, Miles Beach, Tom Dring, Kris Haukoos, Adrian Coombes, James Homich

Absent: Barbara Tietmeyer

City Staff and Attorney: Vince Sandersfeld, Planning Director; Michele Janiszewski, Senior Planner; Ryan Winkler, Senior Planner ; Whitney Scott, Administrative Coordinator; Sherry Sutphen, City Attorney

Presenters: Ms. Janiszewski

III. Approval of Minutes

Mr. Coombes motioned to approve the meeting minutes dated May 17, 2023. Mr. Homich seconded the motion and the minutes were approved unanimously with a 6- 0 vote.

IV. Public participation/hearing for non-agenda items

None

V. New Business

A. Ordinance to amend the Land Development Code

Ms. Janiszewski provided a summary of the Ordinance to amend the Land Development Code and stated that Staff recommends approval of the attached Ordinance which amends the Land Development Code in multiple sections.

Discussion regarding exploring building heights moderation/language related to PUDs.

DRAFT

Ms. Janiszewski clarified that a provision is included on page three of the ordinance, it's not specific to building height but is all encompassing for any provisions with PUD.

Mr. Coombes and Ms. Haukoos further discussed mentioning building height specifically.

Ms. Janiszewski stated that staff will review for modifications.

Discussion on section eight regarding net areas for retention ponds.

Ms. Janiszewski stated retention ponds net areas are not included because the net area of a property is considered pre-development conditions. Typically, retention ponds don't go into the definition of net acre.

Conversation on PUD Land Amendment ramifications due to prior submittal from AMCO Development.

Ms. Sutphen clarified that the Amco project was not the reason for this change, the code is still being developed and vetted.

Mr. Sandersfeld briefly discussed the performance standards. He stated that the language clearly tells PUD applicants what is required.

Mr. Homich and staff discussed section 3.5.1 on page three, regarding setbacks. Mr. Homich expressed his concerns with new development and suggested adding language to protect the front/rear setbacks in established neighborhoods.

Ms. Janiszewski recommended adding language to prevent encroachment on shoreline setbacks.

Ms. Janiszewski clarified if wanting to increase setbacks for single family districts, staff would need to examine a different section.

Further discussion on preserving setbacks in Historic area. Ms. Janiszewski stated that new construction is historic areas, must go through the Certificate of Appropriateness process and be approved by staff/Historic Board.

Ms. Janiszewski stated that if wanting to increase setbacks in the R-1 zoning district, another section of the code will need to be examined. Will be a separate provision under the single-family zoning district.

Mr. Sandersfeld stated that Staff will revise and bring back for board to review.

DRAFT

Discussion regarding lot grading, on page six. Mr. Homich suggested adding language to minimize/alter natural topography.

Ms. Janiszewski clarified that the City of Clermont does have set provisions and she will conduct more research to add language for residential vs. commercial.

Mr. Beach stated that language needs to be specific and different for residential vs. commercial. Mr. Sandersfeld recommended adding a waiver section for unique situations on topography.

Conversation concerning removing line item # 5 on page eight, pertaining to addressing.

Mr. Sandersfeld clarified that the necessity of not removing this provision because it focuses on 911 purposes and follows Lake County's standards.

Mr. Sandersfeld stated that this provision solely deals with new subdivisions, not existing.
.
Mr. Massey discussed the section 3.5.8 on page four, regarding fence heights and asked if it can be simplified.

Ms. Janiszewski stated staff will review and tweak.

Mr. Massey also addressed the section 3.5.30 on page five, pertaining the prohibition of roosters. Suggested putting Roosters in all caps to help make language specific.

Conversation regarding language relating to fly type bins. Ms. Janiszewski stated staff will clarify.

Discussion on the number of chickens being set to five. Ms. Janiszewski clarified that we matched Lake County's provisions.

Mr. Coombes asked for clarification regarding the fence provisions for setbacks.

Ms. Janiszewski stated that the intention is to not obstruct the view of driver/pedestrian street view.

Mr. Massey recommended Staff bring back language revisions proposed at next scheduled meeting for further discussion.

Discussion on progress of Rails to Trails. Mr. Sandersfeld confirmed that it is still in the concept phase.

DRAFT

VI. Announcement of next scheduled meeting date

A. Next regularly scheduled meeting date: July 19, 2023

VII. Adjournment

On a motion by Mr. Homich, seconded by Mr. Beach, the meeting was adjourned at 10:57 a.m.

Whitney Scott,
Administrative Coordinator

Harmon Massey,
Commission Chair

DRAFT

CITY OF MOUNT DORA

Planning and Development
510 N. Baker St.
Mount Dora, FL 32757
352-735-7113
plandev@cityofmountdora.com

DATE: July 19, 2023

TO: Planning and Zoning Commission

FROM: Development Review Committee
Vince Sandersfeld, Planning Director

THROUGH: Michele Janiszewski, AICP, Senior Planner

RE: **Request for Site Plan; Inspire Donnelly Woods (Senior Living); Donnelly Woods Phase 2 PUD;** 2300 N. Donnelly Street (Site Address); North of Limit Avenue and east side of Donnelly Street (General Location); Liberty Senior Living Properties of Mt. Dora LLC (Property Owner); Green Consulting Group, Inc. (Applicant); Halff Associates, Inc. (Engineer); Green Consulting Group, Inc. (Landscape Architect); Meeks Partners (Architect). Project No. SP23-03

SUMMARY OF RECOMMENDATION:

Staff recommends approval of the above-referenced site plan with conditions. Approval is subject to satisfactorily addressing engineering requirements prior to issuance of the City Development Permit. Approval conditioned the applicant to provide contribution into the City's sidewalk bank.

REFERENCES/SUPPORT:

Section 5.1 *LDC*
Final PUD 2nd Amendment Ordinance No. 2022-01 adopted on February 1, 2022

SITE SUMMARY:

Owner:	Liberty Senior Living Properties – Jay Ogelsby
Applicant:	Green Consulting Group, Inc. – Timothy W. Green, ALSA, AICP, LEED AP
Engineer:	Halff Associates, Inc. – Charles Hiott P.E
Architect:	Meeks Partners – Ryan Meeks, AIA, LEED AP
Existing Use:	Vacant Land
Proposed Use:	164 Senior Living Apartments, associated amenities and parking (surface, garage, and covered)
Future Land Use:	High Density (max 12 du/ac) & Low/Medium Density (max 4 du/ac)
Zoning:	Planned Unit Development
Overlay Zones:	None
Max. Building Height:	55 feet (Phase 2)
Proposed Building Height:	55" (5-Stories)
Proposed Building Size:	72,767-sf
Site Area:	583,268-sf (13.39-ac)
Maximum ISR:	65%
Proposed ISR :	34%

SURROUNDING PROPERTY TABLE:

Direction	City/County	FLU	Zoning	Existing Use(s)
North	City	High Density	PUD	Waterman Village (Senior Living)
South	City	Office	OP	Professional Offices
South	City	Res. Professional	PUD	Vacant, Donnelly Woods Ph. 1
East	City	Public Lands	PLI	Water Treatment Plant
West	City	Conservation	PLI	Vacant, Conservation Land

ANALYSIS:

The attached Site Plan shows the proposed project layout consisting of one primary independent living residential building complex, depicted as Inspire Donnelly Woods (Phase 2 of the 2nd PUD Amendment). The project area is presently vacant and undeveloped. Phase 1 is not included with this project. Phase 1 is slated for professional office building located along Limit Avenue. The Site Plan for Phase 2 is consistent with the PUD Master Plan and Comprehensive Plan.

The subject property is approximately 13.39 acres in size, is heavily wooded, and consists of approximately 2.32 acres of wetlands. The project area, approximately 11.07 acres, is proposed to be developed with two (2) four-story multi-family residential buildings, not exceeding 55-feet in height, parking facilities, and a courtyard with landscape and hardscape features.

Parking is provided consistent with the PUD Ordinance No. 2022-01 requires 1.2 on-site parking spaces for each residential unit, and an additional parking space for every 3 residential units for guest parking.. The site plan is consistent with this requirement and proposes 230 parking spaces consisting of 222 standard sized parking spaces and 8 ADA compliant parking spaces. The proposed off-street parking exceeds the minimum parking spaced required by code (224 spaces). The site plan proposes standard parking spaces surrounding the residential building and proposing covered parking spaces along the eastern property line.

The request includes a tree removal and mitigation plan that proposes to remove 190 trees and replace 136 of the trees removed. According to the Tree Removal and Mitigation plan, 54 of the total trees removed will not be replaced due to the inability to provide the trees within development; the Applicant has agreed to make a $22,950 contribution to the City's Tree Bank. This contribution is equal to the retail price of a canopy type specimen tree for the remaining tree replacement inches, in accordance with LDC Section 6.6.7(1)(h).

The project site for the senior living complex will be accessed for ingress/egress via Donnelly Street and Limit Avenue, through the future Phase 1 development. A new driveway connection to Donnelly Street is proposed for vehicle access only; no sidewalk is proposed for this connection to Donnelly Street. There are no sidewalks on the eastern side of Donnelley Street. A new connection will be created from the southern portion of the project site to include vehicle and pedestrian access to Limit Avenue through Donnelly Woods Phase 1.

The City is pursuing Donnelly Street right-of-way improvements. In lieu of the proposed development providing a sidewalk connection to the Donnelly Street from the project site, the Applicant has agreed to contribute to the sidewalk fund to improve pedestrian access along the western right-of-way of Donnelly Street.

The development proposes 3 storm water management facilities including two underground dry retention structures below the parking facilities located easterly of the project site and utilizing swale systems to capture on-site storm water.

An Environmental Assessment was conducted on the subject site on March 22, 2022. The Donnelly Woods project site was surveyed for the presence of flora and fauna protected by county, state, and federal government agencies as well as any protected wetland habitats, including gopher tortoises and avian species. The survey did not result in any "potentially occupied" gopher tortoises habitats and the assessment indicates the project site was not a suitable environment for sand skinks, considering location, elevation, and suitable soils.

The project site is bounded by wetlands on the northern and southern ends of the property. North of the project site is a natural landscaped buffer comprising of wetland, a 50-foot upland buffer, and a 100-foot undisturbed buffer along the northern property line. The western property line is includes a 30-foot undisturbed natural landscaped buffer and a 20-foot landscaped buffer between the project site and Donnelly right-of-way. The eastern property line includes a 20-foot landscaped buffer. South of the project site is consists of a wetlands, a 25-foot upland buffer, and an undisturbed natural buffer. These areas will be preserved for conservation in accordance with the development order.

ATTACHMENTS:
Vicinity Map
Elevations
Site Plan
Application

Inspire Donnelly Woods
Application for Site Plan Approval
13.37 acres



Map Date: 3/10/2023

Legend

- Subject Property
- Northeast Community Redevelopment Agency (NECRA)
- Joint Planning Area (JPA)
- Mount Dora CRA Boundary

Feet

990 495 0 990

CITY OF MOUNT DORA

ELEVATION KEYNOTE LEGEND	
1A	BRICK VENEER
1B	BRICK ROWLOCK
1C	CAST STONE TRIM
2A	EXTERIOR STUCCO SYSTEM
2B	STUCCO COVERED FOAM TRIM
2C	STUCCO CONTROL JOINT (RE: X/AX.XX)
3A	FIBER CEMENT HORIZ. LAP SIDING (SMOOTH FINISH)
3B	FIBER CEMENT PANEL SIDING (SMOOTH FINISH)
3C	FIBER CEMENT TRIM (SMOOTH FINISH)
4	GUARDRAIL SYSTEM 01 – 1/2" SQ. STEEL PICKET
5	WOOD COLUMN & BEAM
6	STOREFRONT GLAZING SYSTEM
7	METAL AWNING WITH STANDING SEAM METAL ROOF
8	COMPOSITION SHINGLE ROOF
9	METAL AWNING
10	DECO WOOD BRACKET



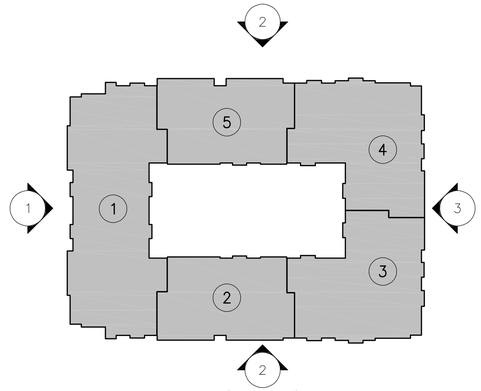
3 EAST ELEVATION
1/16"=1'-0"



2 NORTH ELEVATION & SOUTH ELEVATION (OPPOSITE HAND)
1/16"=1'-0"



1 WEST ELEVATION
1/16"=1'-0"



Date: 5/1/2023 @ 2:55 P.M. By: jboudreaux
NOT FOR CONSTRUCTION

STAMP

NO.	DATE	REVISION

NO.	DATE	REVISION
	03.24.2023	DESIGN DEVELOPMENT SUBMITTAL

MEEKS PARTNERS
16000 Memorial Drive
Suite 100
Houston, Texas 77079
281.558.8787

© 2019 Meeks + Partners, Co - All Rights Reserved
These are copyrighted and are subject to copyright protection as an "Architectural Work" under Section 102 of the copyright Act, 17 U.S.C. as amended December 1, 1990, and known as the Architectural Works Protection Act of 1990. The protection includes but is not limited to, the exact form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work, or forms represented on or in any media, and by the erection of such construction, or buildings using same or same design

INSPIRE DONNELLY WOODS
MOUNT DORA, FLORIDA
A DEVELOPMENT OF
LIBERTY SENIOR LIVING

JOB NO.: 21071

X	NOT FOR CONSTRUCTION
	ISSUED FOR PRICING
	ISSUED FOR PERMIT
	ISSUED FOR CONSTRUCTION

SHEET TITLE
EXTERIOR ELEVATIONS

DRAWING NO.
A4.00

© 2023 M+P, CO.

ELEVATION KEYNOTE LEGEND	
1A	BRICK VENEER
1B	BRICK ROWLOCK
1C	CAST STONE TRIM
2A	EXTERIOR STUCCO SYSTEM
2B	STUCCO COVERED FOAM TRIM
2C	STUCCO CONTROL JOINT (RE: X/AX.XX)
3A	FIBER CEMENT HORIZ. LAP SIDING (SMOOTH FINISH)
3B	FIBER CEMENT PANEL SIDING (SMOOTH FINISH)
3C	FIBER CEMENT TRIM (SMOOTH FINISH)
4	GUARDRAIL SYSTEM 01 – 1/2" SQ. STEEL PICKET
5	WOOD COLUMN & BEAM
6	STOREFRONT GLAZING SYSTEM
7	METAL AWNING WITH STANDING SEAM METAL ROOF
8	COMPOSITION SHINGLE ROOF
9	METAL AWNING
10	DECO WOOD BRACKET



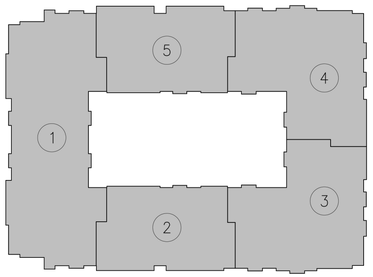
3 EAST ELEVATION
1/16"=1'-0"



2 NORTH ELEVATION & SOUTH ELEVATION (OPPOSITE HAND)
1/16"=1'-0"



1 WEST ELEVATION
1/16"=1'-0"



KEYMAP

N

NO.	DATE	REVISION
	03.24.2023	DESIGN DEVELOPMENT SUBMITTAL

NO.	DATE	REVISION

STAMP

MEEKS PARTNERS
16000 Memorial Drive
Suite 300
Houston, Texas 77079
281.558.8787

© 2018 Meeks + Partners, Co. - All Rights Reserved

INSPIRE DONNELLY WOODS
MOUNT DORA, FLORIDA
A DEVELOPMENT OF
LIBERTY SENIOR LIVING

JOB NO.: 21071

X	NOT FOR CONSTRUCTION
	ISSUED FOR PRICING
	ISSUED FOR PERMIT
	ISSUED FOR CONSTRUCTION

SHEET TITLE
EXTERIOR ELEVATIONS

DRAWING NO.
A4.00

© 2023 M+P, CO.

Date: 3/24/2023 @ 4:10 P.M. By: Jboudreaux
NOT FOR CONSTRUCTION


SIGNAGE

CIVIL SITE CONSTRUCTION PLANS

FOR

INSPIRE DONNELLY WOODS

SECTION 19, TOWNSHIP 19, RANGE 27
CITY OF MOUNT DORA, LAKE COUNTY, FLORIDA

LEGAL DESCRIPTION:

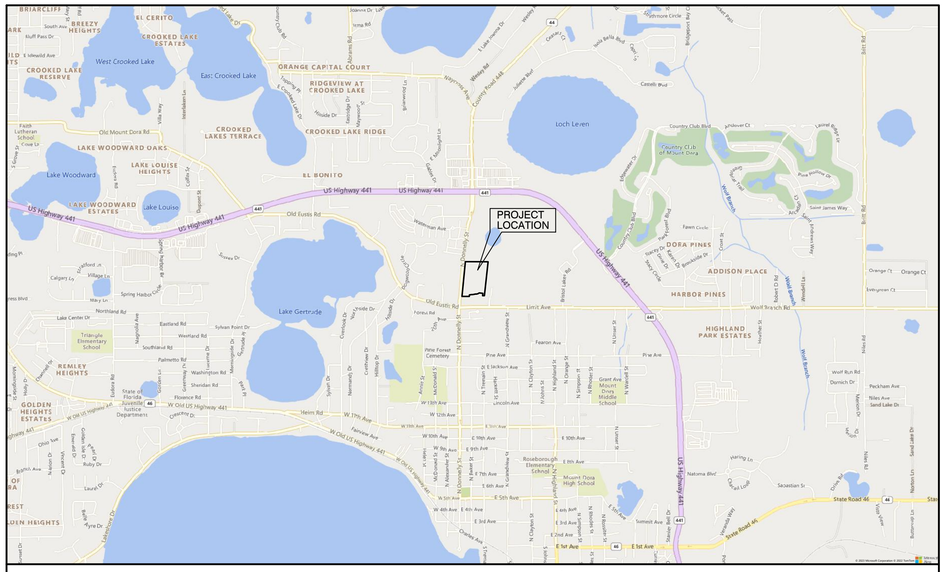
LOT 2, VICTORIA PLACE, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 59, PAGE 59, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA.

CONTAINING +/- 13.39 AC

GENERAL PROJECT INFORMATION	
CITY OF MOUNT DORA APPLICATION #	SP23-03
PARCEL NUMBER	19-19-27-0070-000-00200
PARCEL ALT KEY	3854333
PROPOSED USE	MULTI-FAMILY RESIDENTIAL / SENIOR LIVING
ZONING DESIGNATION	PUD
PUD ORDINANCE NUMBER	2022-01
FIRM-COMMUNITY-PANEL	12069C0359E
FLOOD ZONES	"X"
BASE FLOOD ELEVATION	N/A
VERTICAL DATUM USED FOR PROJECT	NAVD 88

AGENCY HAVING JURISDICTION AND PERMITTING INFORMATION		
	PROVIDER	PERMITTING AGENCY
WATER	CITY OF MOUNT DORA	FDEP
SEWER	CITY OF MOUNT DORA	FDEP
REUSE	CITY OF MOUNT DORA	N/A
ELECTRICAL	CITY OF MOUNT DORA	CITY OF MOUNT DORA ELECTRIC DEPARTMENT
ERP	N/A	SAINT JOHNS RIVER WATER MANAGEMENT DISTRICT

ANY PERMITS OBTAINED BY THE ENGINEER OF RECORD OR DEVELOPER ARE TO BE PROVIDED TO THE CITY FOR THEIR RECORDS.



VICINITY MAP
SCALE: 1" = 2,000'

SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
C-000	COVER
C-001	GENERAL NOTES
C-002	GENERAL NOTES
C-003	OVERALL SITE PLAN
C-100	SITE PLAN
C-101	EMERGENCY VEHICLE ACCESS PLAN
C-102	SITE STANDARD DETAILS
C-200	GRADING & DRAINAGE PLAN
C-201	DRIVEWAYS & OFF-SITE IMPROVEMENTS
C-202	SITE CROSS SECTIONS & OVER-EXCAVATION
C-203	SITE CROSS SECTIONS
C-204	STORMWATER PIPE & STRUCTURE TABLES
C-205	DRAINAGE STANDARD DETAILS
C-206	CONTECH DESIGN
C-207	CONTECH DESIGN
C-208	CONTECH DESIGN
C-209	CONTECH DESIGN
C-300	UTILITY PLAN
C-301	UTILITY CLOSE-UPS AND PROFILES
C-302	GENERAL UTILITY STANDARD DETAILS
C-303	GENERAL UTILITY STANDARD DETAILS
C-304	WATER DISTRIBUTION STANDARD DETAILS
C-305	WATER DISTRIBUTION STANDARD DETAILS
C-306	WATER DISTRIBUTION STANDARD DETAILS
C-307	SANITARY SEWER STANDARD DETAILS
C-308	LIFT STATION STANDARD DETAILS
C-500	EROSION CONTROL PLAN
C-501	SWPPP GENERAL NOTES AND DETAILS
C-502	SWPPP GENERAL CONDITIONS
C-503	SWPPP FORMS

OWNER / DEVELOPER

LIBERTY SENIOR PROPERTIES OF MT DORA, LLC
2234 41ST STREET
WILMINGTON, NC 28403
(205) 864-5091

ENGINEER/PLANNER

HALFF ASSOCIATES, INC.
902 NORTH SINCLAIR AVENUE
TAVARES, FL 32778
(352) 343-8481
CHARLES C. HIOTT, P.E.

SURVEYOR

SOUTHEASTERN SURVEYING AND MAPPING CORPORATION
6500 ALL AMERICAN BOULEVARD
ORLANDO, FL 32810
(407) 292-8580

PLANNER / LANDSCAPE ARCHITECT

GREEN CONSULTING GROUP, INC.
4070 UNITED AVENUE
MOUNT DORA, FL 32757
(352) 357-9241

ARCHITECT

MEEKS PARTNERS
16000 MEMORIAL DRIVE SUITE 100
HOUSTON, TX 77079
(281) 558-8787

GEOTECHNICAL

UNIVERSAL ENGINEERING SCIENCES
3532 MAGGIE BOULEVARD
ORLANDO, FL 32811
(407)423-0504

CHARLES CECIL HIOTT LICENSE NO 54813 STATE OF FLORIDA PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY CHARLES CECIL HIOTT ON 6/5/2023 USING A DIGITAL SIGNATURE.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

1:65(CM.ctb
I:\45000s\45959\901\CADD\Sheets\AXC-000 COVER.dwg
Smith, Cody
6/5/2023 2:30:18 PM

GENERAL CONSTRUCTION NOTES

A. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS SPECIFIED BY THE VARIOUS GOVERNMENTAL AGENCIES, THE ENGINEER, AND THE ARCHITECT. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, AND SCHEDULE ANY NECESSARY INSPECTIONS ACCORDING TO AGENCY INSTRUCTIONS.

B. CONTRACTOR IS RESPONSIBLE FOR PREPARING AND PERMITTING ANY REQUIRED DEWATERING PLAN.

C. ALL SPECIFICATIONS AND DOCUMENTS REFERRED TO IN THESE PLANS SHALL BE OF THE LATEST REVISION.

D. ALL WORK PERFORMED SHALL COMPLY WITH THE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK. ALL CONSTRUCTION, MATERIALS AND WORKMANSHIP ARE TO BE IN ACCORDANCE WITH THE STRICTER OF THE AGENCY HAVING JURISDICTION AND FDOT SPECIFICATIONS (LATEST EDITION).

E. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL PRE-CAST AND MANUFACTURED ITEMS TO THE OWNER'S ENGINEER FOR REVIEW AND APPROVAL, PRIOR TO SUBMITTING SHOP DRAWINGS FOR APPROVAL THE CONTRACTOR SHALL CONFIRM THAT THE MOST CURRENT PLANS WERE USED TO PREPARE THE SHOP DRAWINGS AND REVIEW THE SHOP DRAWINGS TO CONFIRM DIMENSIONS, ELEVATIONS, CONNECTIONS, AND MATERIALS. FAILURE TO OBTAIN APPROVAL BEFORE FABRICATION AND/OR INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT CONTRACTOR'S EXPENSE.

F. WORK PERFORMED UNDER THIS CONTRACT SHALL INTERFACE SMOOTHLY WITH OTHER WORK BEING PERFORMED BY OTHER CONTRACTORS AND UTILITY COMPANIES. IT WILL BE NECESSARY FOR THE CONTRACTOR TO COORDINATE AND SCHEDULE HIS ACTIVITIES, WHERE NECESSARY, WITH OTHER CONTRACTORS AND UTILITY COMPANIES (INCLUDE LIGHTING, POWER, TELEPHONE, CABLE, GAS, IRRIGATION, ETC...).

G. THE WATER, SANITARY SEWER, AND STORM DRAINAGE FACILITIES ARE SUBJECT TO THE REVIEW AND APPROVAL OF APPLICABLE AGENCIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ANY ADDITIONALLY REQUIRED PERMITS IN ORDER TO PERFORM THE PROPOSED WORK.

H. IT WILL BE NECESSARY TO EXAMINE, COORDINATE AND ADJUST ACCORDINGLY THE PROPOSED LOCATIONS OF THE VARIOUS COMPONENTS OF THE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SUBMIT COORDINATION DRAWINGS (SHOP DRAWINGS) SHOWING PIPE SIZES, STRUCTURES, AND ELEVATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SCHEDULING AND COORDINATION OF THE UNDERGROUND WORK ASSOCIATED WITH THIS PROJECT.

I. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) PERMITTING WHERE REQUIRED. THIS INCLUDES FILING A NPDES NOTICE OF INTENT OR NOTICE OF TERMINATION, IF REQUIRED.

J. ALL CONSTRUCTION SHALL CONFORM TO CURRENT ZONING REQUIREMENTS. CONTRACTOR MAY REQUEST A COPY OF THESE CONDITIONS FROM THE OWNER OR ENGINEER OF RECORD.

K. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, EITHER ABOVE OR BELOW GROUND, WHICH MAY OCCUR AS A RESULT OF THE WORK PERFORMED BY THE CONTRACTOR.

L. ALL UNDERGROUND STORMWATER INFRASTRUCTURE AND UTILITIES (INCLUDING CONDUIT & SLEEVES) MUST BE IN PLACE, TESTED, AND AS-BUILT PRIOR TO BASE AND PAVEMENT CONSTRUCTION. CONTRACTOR SHALL PROVIDE SAID AS-BUILTS TO THE ENGINEER OF RECORD FOR PRELIMINARY REVIEW PRIOR TO PAVING. FAILURE TO FOLLOW THIS PROCEDURE MAY RESULT IN REMOVAL AND REPLACEMENT OF BASE AND/OR PAVEMENT AT THE CONTRACTOR'S EXPENSE.

M. CONTRACTOR SHALL COORDINATE PRE-CONSTRUCTION CONFERENCE WITH AGENCIES HAVING JURISDICTION (AHJ) OVER WORK TO BE PERFORMED.

N. CONSTRUCTION SHALL ADHERE TO THE APPLICABLE GOVERNMENT AGENCY CRITERIA, PERMIT CONDITIONS, APPROVED PLANS, AND SUPPLEMENTAL SPECIFICATIONS PROVIDED BY OWNER. IN THE CASE OF CONFLICTS THE STRICTER REQUIREMENT WILL PREVAIL.

O. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE OWNER AND ENGINEER OF RECORD CONCERNING LIMITS OF CONSTRUCTION, TRANSITIONS, ETC. WHICH MAY NOT BE SHOWN ON THESE PLANS.

P. ANY PUBLIC LAND CORNER OR BENCH MARK WITHIN THE LIMITS OF CONSTRUCTION TO BE PROTECTED.

Q. EXISTING VERTICAL AND HORIZONTAL GEOMETRY, SUPERELEVATION RATES, TAPERS, AND TRANSITION RATES ASSOCIATED WITH EXISTING ROADWAYS SHALL BE MAINTAINED UNLESS OTHERWISE SHOWN ON THE PLANS.

R. ANY ON-SITE WELLS NOT PROPOSED TO REMAIN ARE TO BE SEALED BY A LICENSED WELL CONTRACTOR IN ACCORDANCE WITH 40D-3.517. IF WORK PERFORMED REQUIRES A PERMIT ANY PERMITS SHALL BE PROVIDED TO THE APPROPRIATE AGENCY HAVING JURISDICTION FOR THEIR RECORDS.

S. ALL PRACTICABLE AND NECESSARY EFFORT SHALL BE TAKEN DURING CONSTRUCTION TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT MATERIAL TO INLETS, SURFACE DRAINS, WETLANDS AND LAKE AREAS. CONTRACTOR IS RESPONSIBLE FOR PREPARING, IMPLEMENTING, AND MAINTAINING A STORMWATER POLLUTION PREVENTION PLAN MEETING ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RESTORATION EFFORTS THAT MAY BE REQUIRED.

T. THE CONTRACTOR IS TO CONTROL ALL FUGITIVE DUST ORIGINATING ON THIS PROJECT BY WATERING OR OTHER METHODS AS REQUIRED.

U. SEE FDOT DESIGN STANDARDS INDEX 001 FOR STANDARD ABBREVIATIONS DENOTED IN THIS PLAN SET.

V. FLORIDA LAW (F.S. 556) UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT MANDATES THAT EXCAVATORS/CONTRACTORS SHALL CONTACT SUNSHINE 811 (AKA: SUNSHINE STATE ONE-CALL OF FLORIDA) BY CALLING 800-432-4770 OR 811 AT LEAST 2 FULL BUSINESS DAYS PRIOR TO BEGINNING ANY EXCAVATION OR DEMOLITION TO ALLOW MEMBER OPERATORS AN OPPORTUNITY TO IDENTIFY AND MARK THEIR UNDERGROUND FACILITIES AND APPROPRIATELY RESPOND TO THE POSITIVE RESPONSE SYSTEM.

W. CONTRACTOR SHALL NOT STORE CONSTRUCTION MATERIALS, VEHICLES, OR HEAVY EQUIPMENT NEAR WETLAND AREAS OR TREES PROPOSED TO REMAIN.

X. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL FURNISH OWNER'S ENGINEER WITH COMPLETE "AS-BUILT" INFORMATION CERTIFIED BY A REGISTERED LAND SURVEYOR. UPON COMPLETION, THE CONTRACTOR SHALL FURNISH THE ENGINEER WITH A COMPACT DISK CONTAINING THE ELECTRONIC COPY OF THE AUTOCAD DRAWING FILE OF EACH SHEET AND FIVE SETS OF SIGNED AND SEALED PRINTS. THE ELECTRONIC FILES SHALL BE GEO-FREFERENCED (STATE PLANE COORDINATE SYSTEM) AND INCLUDE TIES TO AN ESTABLISHED LOCAL BENCHMARK. THE "AS-BUILT" SURVEY INFORMATION SHALL BE SUPPLEMENTED BY THE CONTRACTOR AS NECESSARY TO CLEARLY AND ACCURATELY REPRESENT ALL CONSTRUCTED ITEMS INCLUDING, BUT NOT LIMITED TO:

X.1. WATER/WASTEWATER/RECLAIMED WATER AND OTHER PRESSURE PIPES:
- OFFSETS FROM EDGE OF PAVEMENT AND R-O-W TO PIPE LINES SHALL BE SHOWN AT NOT GREATER THAN 100 FEET INTERVALS.
- LOCATION OF CASING PIPE, CONCRETE ENCASEMENT, AND SHEETING BY STATION AND ELEVATION. INCLUDE SIZE, LENGTH, MATERIAL TYPE AND WALL THICKNESS OF CASING.
- ELEVATIONS AT ALL CHANGES IN VERTICAL OR HORIZONTAL DIRECTION. ELEVATIONS AT ALL VALVES, BENDS AND CHANGES TO FINISHED GRADE OVER PIPE.
- ELEVATION FOR TOP OF PIPE AND GRADE SHALL OCCUR AT A MINIMUM OF 200 FEET FOR STRAIGHT RUNS OF PIPE AND AT SUFFICIENT INTERVALS TO ESTABLISH CURVATURE FOR ANY PIPE DEFLECTIONS IN A CURVED ALIGNMENT.
- ANY CHANGES IN ALIGNMENT OR ELEVATION OF OTHER UTILITIES DUE TO CONSTRUCTION.
- LOCATION OF ANY FOUND UTILITIES.
- INSTALLED PIPE DIAMETER, MATERIAL TYPE, AND AWWA/ASTM/ANSI CLASSIFICATION.
- MATERIAL TYPE AND SERIAL NUMBERS OF ALL VALVES, METERS, ASSEMBLIES
- IF ABANDONMENT OF EXISTING FACILITIES IS INCLUDED IN PROJECT, PROVIDE SIZE, TYPE, DEPTH, LOCATION, AND LIMITS OF ANY ABANDONED PIPE. ALSO INCLUDE THE METHOD OF ABANDONMENT (I.E., MORTAR FILLET, ETC.).
- ANY VERTICAL IMPROVEMENTS WITHIN EXISTING RIGHTS-OF-WAY THAT ARE IN IMMEDIATE PROXIMITY OF THE UTILITY SYSTEM (I.E. MONUMENT SIGNS ,WALLS AND BRIDGES)
- CROSS-SECTIONAL DETAILS SHALL BE PROVIDED WHERE UTILITIES CROSS.
- HORIZONTAL AND VERTICAL LOCATION AND TYPE OF ALL FITTINGS, BENDS, REDUCERS, SLEEVES, PLUGS, CAPS, TEES, CROSSES, TAPS, RESTRAINED JOINTS, VALVES, BLOW-OFFS, HYDRANTS, HIGH AND LOW POINTS, ETC.
- STATION ALL CONNECTIONS WHEN THEY ARE NOT ON PROPERTY LINES.

X.1. GRAVITY SEWER LINES:
- LOCATION AND ELEVATIONS OF ALL SANITARY SEWER STRUCTURES, TO INCLUDE TOP ELEVATIONS, BOTTOM ELEVATIONS, AND INVERTS. INCLUDING FIELD MEASURED PIPE LENGTHS, PIPE TYPES SLOPES AND PIPE SIZES.
- SHOW LOCATION OF LATERAL SERVICE CONNECTIONS BY STATION AND INCLUDE DEPTH OF COVER AT LOT LINES (CLEANOUT)
- SHOW SIZE, LENGTH INVERT ELEVATION AND GRADE OF STUB-OUTS FOR FUTURE CONNECTIONS.

X.1. STORMWATER SYSTEM:
- LOCATION AND ELEVATIONS OF ALL STORM SEWER OUTFALL STRUCTURES (AKA CONTROL STRUCTURES), TO INCLUDE ELEVATIONS, DIMENSIONS, SKIMMERS, INVERTS, WEIRS DIMENSIONS AND INVERTS, PIPE SIZES, PIPE TYPES, OPENING DIMENSIONS AND SLABS.
- LOCATION AND ELEVATIONS OF ALL STORM STRUCTURES, PIPES, CONDUITS, SLEEVES, ETC. INCLUDING CALCULATED SLOPE SIZE AND MATERIAL TYPE OF ALL PIPES.
- HORIZONTAL AND VERTICAL CONTROL OF ALL TOP OF BANKS, TOE OF SLOPES LITTORAL ZONES, DITCHES, PAVEMENT, CURB AND ALL GRADE BREAKS.

X.1. PUMP/LIFT STATIONS:
- HORIZONTAL AND VERTICAL CONTROL ELEVATIONS OF ALL ELEMENTS OF PUMP/LIFT STATIONS INCLUDING TOP AND BOTTOM ELEVATIONS, PIPE INVERTS, PIPE SIZES AND PIPE TYPES.
- LOCATION AND ELEVATION OF ANY PAVEMENT MATERIALS ASSOCIATED WITH THE STATION.
- LOCATION AND TYPE OF ANY VERTICAL ELEMENTS ASSOCIATED WITH THE STATION, TO INCLUDE, PANELS, LIGHT POLES, FENCING, BACK FLOW ASSEMBLIES, METERS, ALL VALVES AND ASSOCIATED APPURTENANCES.
- ELEVATIONS AT WHICH THE FLOAT SWITCHES ENGAGE.

X.1. BUILDING AND OTHER VERTICAL STRUCTURES:
- LOCATION OF ALL CORNERS AND FINISHED FLOOR ELEVATIONS
- OVERHANG LOCATIONS

W. NO ENGINEER'S CERTIFICATIONS CAN BE SUBMITTED TO OBTAIN A CERTIFICATE OF OCCUPANCY UNTIL THE "AS-BUILT" INFORMATION IS RECEIVED, REVIEWED, AND APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL ALLOW THE ENGINEER A MINIMUM OF FOUR WEEKS TO COMPLETE THE REVIEW OF THE "AS-BUILT" INFORMATION UPON RECEIPT, PRIOR TO SUBMITTAL TO APPLICABLE AGENCIES.

ROADWAY LIGHTING NOTES

A. ROADWAY LIGHTING SHALL CONFORM TO ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IESNA), FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT), NATIONAL ELECTRICAL CODE (NEC) AND ANY OTHER AGENCY HAVING JURISDICTION FOR ALL AREAS; THIS INCLUDES CROSSWALKS, INTERSECTIONS AND THOROUGHFARES.

B. ROADWAY LIGHTING FIXTURES, POLES, MOUNTING HEIGHT AND SPACING (LOCATION) TO BE DETERMINED UPON SELECTION OF FIXTURE.

C. DRAWINGS AND PRODUCT SAMPLE SHALL BE SUBMITTED TO OWNER AND OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL PRIOR TO ORDERING AND INSTALLATION.

ON-SITE FIRE PROTECTION NOTES

A. ALL NEW PRIVATE SERVICE MAINS SHALL BE TESTED HYDROSTATICALLY AT NOT LESS THAN 200 PSI (13.8 BARS) PRESSURE FOR TWO HOURS, OR AT 50 PSI (3.4 BARS) IN EXCESS OF THE MAXIMUM STATIC PRESSURE (WHICHEVER IS GREATER). (NFPA 24)

TESTING SCHEDULE

ITEM	TEST	TEST FREQUENCY
EMBANKMENT	OPTIMUM MOISTURE/MAXIMUM DENSITY	PER SOIL TYPE
	100% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T99-57(METHOD C) NO TOLERANCE	ONE PER 500' HORIZONTALLY, IN ONE (1) FOOT LIFTS
	GRADATION 1-T027	1/500' SECTION PER LIFT
	PROCTOR 1-T180	PER MATERIAL TYPE
	PROCTOR 5-525	PER MATERIAL TYPE
	DENSITY 1-T238	1/500' SECTION PER LIFT
UTILITY TRENCH BACKFILL-OVER PIPELINES AND AROUND STRUCTURES FROM R.O.W. LINE TO R.O.W. LINE	OPTIMUM MOISTURE/MAXIMUM DENSITY	PER SOIL TYPE
	100% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T99-57(METHOD C) NO TOLERANCE	REFER TO NOTE A & NOTE B
UTILITY TRENCH BACKFILL-OVER PIPELINES AND AROUND STRUCTURES OUTSIDE R.O.W. LINE	OPTIMUM MOISTURE/MAXIMUM DENSITY	PER SOIL TYPE
	95% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T99-57(METHOD C) NO TOLERANCE	REFER TO NOTE A
STABILIZED SUBGRADE	OPTIMUM MOISTURE/MAXIMUM DENSITY	PER SOIL TYPE
	MINIMUM 40 LBR	PER MATERIAL TYPE. REFER TO NOTE D
	MINIMUM 20 LBR (FOR SOIL CEMENT ONLY)	SAME AS FOR 40 LBR. REFER TO NOTE D
	98% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T180-57 (ASTM D1557-70) NO TOLERANCE	REFER TO NOTE C
BASE (OTHER THAN SOIL CEMENT OR CRUSHED CONCRETE)	OPTIMUM MOISTURE/MAXIMUM DENSITY	PER SOIL TYPE
	MINIMUM 100 LBR	PER SOURCE
	98% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T180-57 (ASTM D1557-70) NO TOLERANCE	REFER TO NOTE C
	GRADATION, ATTERBERG LIMITS	PER SOURCE
SOIL CEMENT BASE	MIX DESIGN	PER MATERIAL TYPE
	OPTIMUM MOISTURE/MAXIMUM DENSITY	PER MATERIAL TYPE DAILY
	PROCTOR 1-T180	PER MATERIAL TYPE
	COMPRESSIVE STRENGTH SPECIMENS	ONE SET OF THREE (3) PER MATERIAL TYPE DAILY
	TEST CORES-THICKNESS	REFER TO NOTE C
	97% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T134 - NO TOLERANCE	REFER TO NOTE C
CONCRETE	SLUMP TEST	ONE PER SET OF CYLINDERS
	COMPRESSIVE STRENGTH CYLINDERS	ONE SET OF THREE(3) CYLINDERS FOR 100 CUBIC YARDS OF FRACTION THEREOF
	AIR CONTENT	ONE PER SET OF CYLINDERS
CRUSHED CONCRETE BASE	MINIMUM LBR 130	3/STREET TO OBTAIN AN AVGERAGE OF 150
	LIQUID LIMIT (AS DETERMINED BY AASHTO T80) (LESS THAN 25)	PER MATERIAL TYPE
	PLASTICITY INDEX (AS DETERMINED BY AASHTO T90) (LESS THAN 4)	PER MATERIAL TYPE
	ABRASION	PER LOS ANGELES ABRASION (FM-1TO90) (50 MIN) PER MATERIAL TYPE
	DENSITY 100% OF MAXIMUM DENSITY (AS DETERMINED BY AASHTO T-180)	PER MATERIAL TYPE
SUPERPAVE ASPHALT	AGGREGATE ANALYSIS	PER FDOT
	DESIGN MIX	ONE PER FDOT APPROVED TYPE
	BITUMEN CONTENT	PER FDOT
	THICKNESS	REFER TO NOTE C
	MAXIMUM SPECIFIC GRAVITY (Gmm)	PER FDOT
	90% OF LAB DENSITY FOR LOCAL ONSITE ROADWAYS (REMOVE AND REPLACE IF NOT MET) 92% OF LAB DENSITY FOR COLLECTORS AND ARTERIALS (REMOVE AND REPLACE IF NOT MET)	REFER TO NOTE C

NOTES

A) TESTS SHALL BE LOCATED NO MORE THAN 500FT APART. TESTS SHALL BE PERFORMED ON EACH LIFT, EXCEPT THAT TESTS SHALL NOT BE FURTHER APART THAN ONE FOOT VERTICALLY. FIELD DENSITIES SHALL BE TAKEN OVER ALL ROAD CROSSINGS. FIELD DENSITIES FOR SANITARY LINES SHALL BE STAGGERED TO INCLUDE RESULTS OVER SERVICE LATERALS. THERE SHALL BE A MINIMUM OF ONE TEST SERIES FOR EACH ONE FOOT OF LIFT OVER PIPELINE BETWEEN MANHOLES. TESTS AROUND STRUCTURES SHALL BE SPIRALED IN ONE FOOT LIFTS. FOR ALL TYPE PIPE, FILL TO BE COMPACTED BENEATH THE HAUNCHES USING SUITABLE TAMPERS. FOR PIPE LESS THAT 24 INCHES IN DIAMETER, BACKFILL IN APPROPRIATE LIFTS AND TEST FROM THE TOP OF THE PIPE AND EVERY ONE FOOT VERTICALLY THEREAFTER. FOR PIPE 24 INCHES TO 72 INCHES IN DIAMETER, BACKFILL IN APPROPRIATE LIFTS AND TEST FROM THE SPRINGLINE AND EVERY ONE FOOT VERTICALLY THEREAFTER. FOR PIPE LARGER THAN 72 INCHES, TESTS SHALL BEGIN ONE FOOT ABOVE THE BASE OF THE TRENCH.

B) FOR FLEXIBLE PIPE (CORRUGATED STEEL OR ALUMINUM), 95% OF MAXIMUM DENSITY (AASHTO-T99) PER FDOT SPECIFICATIONS SUBARTICLE 125-9.2.1

C) TESTS SHALL BE LOCATED NO MORE THAN 500 FEET APART. THERE SHALL BE NO LESS THAN ONE TEST PER STREET. NO CORE SHALL BE LESS THAN SPECIFIED MINIMUM THICKNESS.

D) TESTING FOR THE SUBGRADE BEARING CAPACITY AND COMPACTION SHALL BE LOCATED NO MORE 500 FEET APART AND SHALL BE STAGGERED TO THE LEFT, RIGHT, AND ON THE CENTERLINE OF THE ROADWAY. THERE SHALL BE NO LESS THAN THREE TESTS PER STREET TO OBTAIN AN AVERAGE LBR 40 VALUE. THE AUTHORITY HAVING JURISDICTION (AHJ) MAY RESERVE THE RIGHT TO SAMPLE AND TEST ANY MATERIAL UTILIZED IN THE CONSTRUCTION OF THE SUBGRADE. TESTING SHALL BE IN ACCORDANCE WITH THE TESTING SCHEDULE OF THE AHJ AND APPLICABLE FDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION (EXCEPT FOR THE REQUIREMENTS OF COC). IN THE EVENT OF A CONFLICT BETWEEN SPECIFICATIONS, THE MOST STRINGENT SHALL PREVAIL. INSPECTION OF THE SUBGRADE SHALL BE CONDUCTED BY THE ENGINEER OF RECORD, THE AHJ INSPECTOR, AND SHALL BE APPROVED BY THE PROJECT MANAGER PRIOR TO BASE CONSTRUCTION.

ADDITIONAL NOTE: THE AHJ RESERVES THE RIGHT TO SAMPLE AND TEST ANY MATERIAL DURING CONSTRUCTION

DEMOLITION NOTES

A. CONTRACTOR TO REMOVE AND DISPOSE OF ALL EXISTING OCCUPATION AS NECESSARY TO CONSTRUCT PROPOSED IMPROVEMENTS.

B. CONTRACTOR TO ESTABLISH AND PROPERLY FLAG PROPERTY LINES PRIOR TO DEMOLITION.

C. THE CONTRACTOR SHALL INSTALL EROSION CONTROL PRIOR TO DEMOLITION AND MAINTAIN DURING CONSTRUCTION, REFER TO GENERAL CONSTRUCTION NOTES.

D. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIAL GENERATED FROM THE SITE CLEARING / DEMOLITION PROCESS, INCLUDING BUT NOT LIMITED TO: TREES, STUMPS, TRASH, VEGETATION, ASPHALT AND CONCRETE PAVEMENT, REINFORCED CONCRETE PAVEMENT, SITE STRUCTURES AND WALLS, PVC AND DIP PIPE. THIS MATERIAL SHALL BE DISPOSED OF OFF-SITE AT A PERMITTED SITE SELECTED BY THE CONTRACTOR. BURYING OF THESE MATERIALS ON-SITE SHALL NOT BE PERMITTED. BURNING OF VEGETATION IS ACCEPTABLE PROVIDED THE CONTRACTOR OBTAIN ALL REQUIRED STATE AND LOCAL PERMITS.

E. INFORMATION TAKEN FROM SURVEY(S) PREPARED BY PROJECT SURVEYOR (SEE SURVEY NOTES).

F. PRIVATE UTILITIES TO BE PLUGGED SHALL BE FILLED WITH A MINIMUM 1.0 CUBIC FT. OF NON SHRINK GROUT OR AS OTHERWISE APPROVED BY ENGINEER, PRESSURE MAINS SHOULD BE CAPPED OR PLUGGED AND RESTRAINED WITH A REVERSE DEADMAN. RCP SHOULD RECEIVE A BRICK AND MORTAR PLUG. ANY CONNECTIONS TO CITY OF MOUNT DORA UTILITIES TO BE TAKEN OUT OF SERVICE SHALL BE CAPPED AND RESTRAINED AS APPROVED BY THE CITY.

G. TREES SHOWN TO REMAIN SHALL MAINTAIN PROTECTIVE BARRIERS AT ALL TIMES. THESE BARRIERS SHALL BE IN ACCORDANCE WITH CURRENT GOVERNING AGENCY STANDARDS.

H. ALL TREE ROOTS EXISTING WITHIN APPROVED IMPROVEMENT AREAS AND ORIGINATING FROM A PROTECTED TREE, SHALL BE SEVERED CLEAN AT THE LIMITS OF THE PRESERVED AREA WHERE INDICATED. ROOT PRUNING TO BE CONDUCTED BY LICENSED ARBORIST IN ACCORDANCE WITH ANSI A300 STANDARDS.

I. THE CONTRACTOR SHALL COORDINATE THE REMOVAL/RELOCATION OF EXISTING UTILITIES WITH THE OWNER OF SAID UTILITY. THIS SHALL INCLUDE BUT NOT BE LIMITED TO WATER, SEWER, GAS, CABLE TV, POWER AND TELEPHONE.

J. FLORIDA LAW (F.S. 556) UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT MANDATES THAT EXCAVATORS/CONTRACTORS SHALL CONTACT SUNSHINE 811 (FKA: SUNSHINE STATE ONE-CALL OF FLORIDA) BY CALLING 800-432-4770 OR 811 AT LEAST 2 FULL BUSINESS DAYS PRIOR TO BEGINNING ANY EXCAVATION OR DEMOLITION TO ALLOW MEMBER OPERATORS AN OPPORTUNITY TO IDENTIFY AND MARK THEIR UNDERGROUND FACILITIES AND APPROPRIATELY RESPOND TO THE POSITIVE RESPONSE SYSTEM

K. THE CONTRACTOR SHALL BARRICADE THE SITE AND CONTROL TRAFFIC PER CURRENT FDOT TRAFFIC CONTROL STANDARDS.

L. ALL ABOVE GROUND IMPROVEMENTS (IE: PAVEMENT, CURBING, BUILDINGS, SIGNAGE, CONCRETE WALKS, POLES, INLETS, ETC...) AND BELOW GROUND IMPROVEMENTS (IE: SANITARY, STORM, WATER, CABLE, ELECTRIC, PHONE, ETC...) SHALL REMAIN UNLESS OTHERWISE NOTED.

M. UNSUITABLE MATERIAL IS TO BE REMOVED FROM LANDSCAPE AREAS. (SEE LANDSCAPE PLANS FOR PLANTING SOIL REQUIREMENTS).

N. THE OWNER RESERVES THE RIGHT TO RETAIN ANY ITEM FROM THE DEMOLITION OF THE SITE DEEMED VALUABLE.

O. ALL EXISTING CONCRETE/ASPHALT OCCUPATION DESIGNATED TO BE REMOVED IS TO BE SAWCUT ALONG THE LIMITS OF DEMOLITION.

NOTE:
CONTRACTOR TO REFER TO FDOT DESIGN STANDARDS FOR ADDITIONAL INDEX INFORMATION NOT SHOWN ON THESE PLANS

SIGNING AND PAVEMENT MARKING NOTES

A. ALL SIGNS AND PAVEMENT MARKING SHALL CONFORM TO THE U.S. DEPARTMENT OF TRANSPORTATION 'MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES' 2009 EDITION INCLUDING REVISION DATED MAY 2012 AND THE FLORIDA DEPARTMENT OF TRANSPORTATION 'DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE, AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM' (DATED 2017-2018).

B. ALL FLORIDA ROUTE MARKERS MUST CONFORM TO FDOT DESIGN STANDARDS INDEX NO. 700-102.

C. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LENGTH OF COLUMN (POST) SUPPORTS IN THE FIELD PRIOR TO FABRICATION. COLUMN HEIGHTS AND DIMENSION SHALL CONFORM TO FDOT STANDARDS.

D. REFER TO FDOT DESIGN STANDARDS INDEX NO. 17352 FOR RETRO-REFLECTIVE PAVEMENT MARKER PLACEMENT DETAILS.

E. PAINT ALL MEDIAN NOSES AND RAISED ISLAND NOSES REFLECTIVE WHITE OR REFLECTIVE YELLOW. COLOR IS AS INDICATED IN THE PLANS. ABSENCE OF A CALLOUT RELATED TO THIS DETAIL DOES NOT ELIMINATE THIS REQUIREMENT.

F. CAUTION MUST BE EXERCISED WHILE RELOCATING EXISTING SIGNS SO AS TO PREVENT DAMAGE TO THE SIGNS. IF THE SIGNS ARE DAMAGED BEYOND USE, AS DETERMINED BY THE ENGINEER OR AUTHORITY HAVING JURISDICTION THEN THEY SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE. IF SIGNS ARE IN POOR CONDITION PRIOR TO REMOVAL, THE ENGINEER OF RECORD AND OWNER SHALL BE NOTIFIED IN WRITING AND ADVISED OF ANY POTENTIAL CHANGE ORDER.

G. ANY EXISTING SIGN TO REMAIN THAT ARE DISTURBED DURING CONSTRUCTION OR RELOCATED SHALL BE RESET TO CURRENT FDOT STANDARDS FOR HEIGHT, OFFSET, AND METHOD OF INSTALLATION. IF THE EXISTING SIGN CANNOT BE RELOCATED DURING THE CONSTRUCTION IMPROVEMENTS, THE CONTRACTOR SHOULD TAKE CAREFUL PRECAUTION TO STORE AND PROTECT THE EXISTING SIGN UNTIL THE SIGN CAN BE INSTALLED AT ITS FINAL LOCATION. COST OF THIS WORK SHALL BE REFLECTED IN THE BID ITEM OR RELATED WORK.

H. THE SIGN LOCATIONS SHOWN ARE APPROXIMATE AND SHOULD BE INSTALLED IN ACCORDANCE WITH MUTCD PLACEMENT CRITERIA, AND MAY REQUIRE FIELD ADJUSTMENT AS DIRECTED BY THE LOCAL GOVERNMENT AGENCY OR BY THE ENGINEER OF RECORD.

I. ALL ROUTE MARKER AUXILIARIES SHALL MATCH THE COLOR COMBINATION OF THE RESPECTIVE MARKER WHICH THEY SUPPLEMENT.

J. CONTRACTOR SHALL USE W-SHAPE STEEL POSTS FOR MULTI-POST SIGNS AND ALUMINUM ROUND TUBES FOR SINGLE COLUMN / POSTS (UNLESS OTHERWISE NOTED IN THE PLANS OR REQUIRED BY THE LOCAL JURISDICTION).

K. ANY EXISTING SIGNS LOCATED WITHIN PUBLIC RIGHT-OF-WAY (WITHIN PROJECT LIMITS SHALL) SHALL REMAIN UNLESS OTHERWISE NOTED IN THE PLANS.

L. ALL SINGLE COLUMN SIGNS WITHIN THE LIMITS OF CLEARING AND GRUBBING SHALL BE REMOVED UNLESS OTHERWISE NOTED IN THE PLANS.

B. PAVEMENT MARKINGS SHALL BE PLACED AS SHOWN IN THE PLANS AND THE APPROPRIATE FDOT DESIGN STANDARDS INDEX. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IN WRITING.

C. THE CONTRACTOR SHALL APPLY THERMOPLASTIC AS THE FINAL TRAFFIC STRIPES AND MARKINGS A MINIMUM OF 14 DAYS AFTER THE FIRST APPLICATION OF PAINT BUT PRIOR TO FINAL ACCEPTANCE OF THE PROJECT. THERMOPLASTIC SHALL BE LEAD-FREE, NON-SOLVENT BASED, COMPLIANT WITH SECTION 711 OF THE STANDARD SPECIFICATIONS, AND LISTED ON QPL.

D. ON CONCRETE SURFACE, INCLUDING BRIDGE DECKS, ALL SKIP STRIPE PAVEMENT MARKINGS SHALL BE ALTERNATE WHITE (THERMOPLASTIC) AND BLACK (PAINT) (10' WHITE/10' BLACK/20' SKIP).

E. IN PARKING LOTS STRIPING AND SIGNAGE SHALL CONFORM TO FDOT STANDARDS. PAINTED OR THERMOPLASTIC STRIPING SHALL BE USED AS DESIGNATED ON THE PLANS. WHEN STRIPING WITH WHITE ON CONCRETE SURFACES THE CONTRACTOR SHALL APPLY BLACK PAINT FIRST ON THE PAVEMENT PRIOR TO PAINTING WHITE STRIPING.

F. PAINTED PAVEMENT MARKINGS SHALL COMPLY WITH SECTION 710 OF THE STANDARD SPECIFICATIONS AND BE LISTED ON QPL. (TWO COATS APPLIED 14 DAYS APART).

G. ACCESSIBLE PARKING SPACES SHALL BE MARKED AND SIGNED IN ACCORDANCE WITH FDOT INDEX 711-001 (UNLESS OTHERWISE NOTED).

H. ALL PAVEMENT MARKING TO BE REMOVED SHALL BE PERFORMED BY HYDROBLASTING (UNLESS PROHIBITED BY THE AHJ).

SAFETY NOTES

A. DURING THE CONSTRUCTION AND MAINTENANCE OF THIS PROJECT, ALL SAFETY REGULATIONS ARE TO BE ENFORCED. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF HIS PERSONNEL.

B. CONTRACTOR SHALL REMAIN IN COMPLIANCE WITH ALL OCCUPATION SAFETY AND HEALTH REGULATIONS AS WELL AS THE ENVIRONMENTAL PROTECTION LAWS.

C. NEITHER THE ENGINEER OF RECORD NOR OWNER ARE RESPONSIBLE FOR PROJECT SAFETY.

D. THE CONTRACTOR'S MAINTENANCE OF TRAFFIC (MOT) PLAN MUST BE PREPARED BY A PROFESSIONAL WITH FDOT ADVANCED MOT CERTIFICATION. THE PLAN MUST THEN BE SUBMITTED AND APPROVED BY APPLICABLE GOVERNING AGENCIES PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES WITHIN OR IMMEDIATELY ADJACENT TO THE EXISTING RIGHT-

PAVING AND GRADING NOTES

1. ALL DELETERIOUS SUBSURFACE MATERIAL (I.E. MUCK, PEAT, BURIED DEBRIS) IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS OR AS DIRECTED BY THE OWNER, THE OWNER'S ENGINEER, OR OWNER'S SOIL TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER. EXCAVATED AREAS TO BE BACK FILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING DELETERIOUS MATERIAL FROM THE SITE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND SHALL PROVIDE BRACING, SHEETING OR SHORING AS NECESSARY. DEWATERING METHODS SHALL BE USED AS REQUIRED TO KEEP TRENCHES DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED.
3. ALL NECESSARY FILL AND EMBANKMENT THAT IS PLACED DURING CONSTRUCTION SHALL CONSIST OF MATERIAL SPECIFIED BY THE OWNER'S SOIL TESTING COMPANY OR ENGINEER AND BE PLACED AND COMPACTED ACCORDING TO THESE PLANS OR THE REFERENCED SOILS REPORT. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION ACTIVITIES, WHICH INCLUDE BUT ARE NOT LIMITED TO EARTHWORK ACTIVITIES, SUB GRADE PREPARATION, ETC... CONFORM WITH THE GEOTECHNICAL REPORT.
4. PROPOSED SPOT ELEVATIONS REPRESENT FINISHED PAVEMENT OR GROUND SURFACE GRADE UNLESS OTHERWISE NOTED ON DRAWINGS.
5. CONTRACTOR SHALL TRIM, TACK AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT.
6. CURBING WILL BE PLACED AT THE EDGE OF ALL PAVEMENT, AS SHOWN ON THE PLANS.
7. REFER TO THE LATEST IMPERIAL EDITION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS" FOR DETAILS AND SPECIFICATIONS OF ALL F.D.O.T. TYPE CURBING AND GUTTERS CALLED FOR IN THESE PLANS.
8. CONTRACTOR TO PROVIDE A 1/2" TO 1" BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER AT ABUTMENT OF CONCRETE AND OTHER MATERIAL, CONTRACTOR TO PROVIDE A 1'(W) RIBBON CURB AT THE ABUTMENT OF SPECIALTY PAVEMENT AND ASPHALT; REFER TO PLANS.
9. CONTRACTOR IS TO PROVIDE EROSION CONTROL AND SEDIMENTATION BARRIER TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS AND WATERWAYS. IN ADDITION, CONTRACTOR SHALL PLACE STRAW, MULCH OR OTHER SUITABLE MATERIAL ON GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT SITE. IF, IN THE OPINION OF THE ENGINEER AND/OR LOCAL AUTHORITIES, EXCESSIVE QUANTITIES OF EARTH ARE TRANSPORTED OFF-SITE EITHER BY NATURAL DRAINAGE OR BY VEHICULAR TRAFFIC, THE CONTRACTOR IS TO REMOVE SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR AUTHORITIES.
10. IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION OR OTHER ACCEPTABLE METHODS.
11. THE CONTRACTOR WILL STABILIZE BY SEED AND MULCH, SOD OR OTHER APPROVED MATERIALS AS REQUIRED ANY DISTURBED AREAS WITHIN ONE WEEK FOLLOWING CONSTRUCTION OF THE UTILITY SYSTEMS AND PAVEMENT AREAS. CONTRACTOR SHALL MAINTAIN SUCH AREAS UNTIL FINAL ACCEPTANCE BY OWNER.
12. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPLICABLE SOILS TESTING AND SUBMITTING TESTING TO OWNER'S ENGINEER ON A WEEKLY BASIS. TESTS WILL BE REQUIRED PURSUANT WITH THE TESTING SCHEDULE REQUIRED BY THE GOVERNMENTAL AGENCY HAVING JURISDICTION OVER THIS WORK. UPON THE COMPLETION OF THIS WORK, SOILS ENGINEER WILL SUBMIT CERTIFICATIONS TO THE OWNER'S ENGINEER STATING THAT ALL REQUIREMENTS HAVE BEEN MET.
13. A QUALIFIED TESTING LABORATORY SELECTED BY THE OWNER SHALL PERFORM ALL TESTING NECESSARY TO ASSURE COMPLIANCE OF THE IN PLACE MATERIALS AS REQUIRED BY THESE PLANS AND THE VARIOUS AGENCIES. SHOULD ANY RETESTING BE REQUIRED DUE TO THE FAILURE OF ANY TESTS TO MEET THE REQUIREMENTS, THE CONTRACTOR WILL BEAR ALL COSTS OF SAID RETESTING.
14. MIXING IN PLACE OF SOIL CEMENT WILL NOT BE ALLOWED.
15. CONTRACTOR TO FINISH ALL EXPOSED BACK OF CURB.
16. COMPACTED SUB-GRADE SHALL BE MECHANICALLY MIXED TO THE SPECIFIED DEPTH PRIOR TO GRADING, COMPACTION AND TESTING.
17. DURING LAND ALTERATION AND CONSTRUCTION ACTIVITIES, IT SHALL BE UNLAWFUL TO REMOVE VEGETATION BY GRUBBING OR TO PLACE SOIL DEPOSITS, DEBRIS, SOLVENTS, CONSTRUCTION MATERIAL, MACHINERY OR OTHER EQUIPMENT OF ANY KIND WITHIN THE DRIPLINE OF A TREE TO REMAIN ON SITE UNLESS OTHERWISE APPROVED BY THE COUNTY.

DRAINAGE NOTES

1. STANDARD INDEXES REFER TO THE LATEST EDITION OF FDOT "ROADWAY AND TRAFFIC DESIGN STANDARDS" aka "DESIGN STANDARDS" AND/OR "FDOT INDEX". REFER TO THIS MANUAL FOR ADDITIONAL DETAILS AND INFORMATION NOT SHOWN OR REFERENCED ON THESE PLANS.
2. ALL STORM SEWER PIPE SHALL BE CLASS III (ASTM C-76) UNLESS OTHERWISE NOTED ON PLANS.
3. ALL DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH FDOT INDEX UNLESS OTHERWISE NOTED ON PLANS. STRUCTURE BOTTOMS SHALL BE ADJUSTED OR MODIFIED PER FDOT INDEX WHEN LARGER PIPES ARE INDICATED
4. ALTERNATIVE DRAINAGE PIPE MATERIALS AND SUBSTITUTIONS MUST BE LISTED AS A BID ALTERNATE MATERIAL DURING THE INITIAL BIDDING PHASE FOR CONSIDERATION. SUBSTITUTION OF PIPE MATERIALS DURING THE CONSTRUCTION PHASE IS NOT PERMISSIBLE WITHOUT SPECIFIC WRITTEN APPROVAL FROM THE ENGINEER OF RECORD AND OWNER. THE USE OF PLASTIC STORMWATER PIPE MATERIALS (PVC, HDPE, ETC) SHALL REQUIRE THE USE OF WATERTIGHT BOOTED CONNECTIONS AT ALL STORMWATER STRUCTURES. NO GROUTING OF STRUCTURE OPENINGS WILL BE PERMITTED WHEN USING FLEXIBLE PIPE MATERIALS.
5. PIPE LENGTHS SHOWN ARE APPROXIMATE AND MEASURED TO CENTER OF DRAINAGE STRUCTURE WITH THE EXCEPTION OF MITERED END SECTION (MES) AND FLARED END SECTION (FES) WHICH ARE NOT INCLUDED IN LENGTHS. THE CONTRACTOR SHALL VERIFY ALL QUANTITIES AS SHOWN ON THE PLANS OR BID SCHEDULE (IF PROVIDED BY OWNER) PRIOR TO FINALIZING THEIR SUBMITTAL OF BIDS/PROPOSAL, AND INFORM THE ENGINEER OF ANY DISCREPANCIES.
6. ALL STORM DRAINAGE PIPING SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER OR ENGINEER'S REPRESENTATIVE PRIOR TO THE PLACEMENT OF BACK FILL.
7. THE CONTRACTOR MUST PROVIDE CCTV VIDEO (IN DVD FORMAT) OF THE NEWLY CONSTRUCTED STORMWATER PIPELINE FOR REVIEW AND ACCEPTANCE. THE CONTRACTOR SHALL PROVIDE AT LEAST 2 BUSINESS DAYS NOTIFICATION TO THE ENGINEER AND TO THE APPLICABLE AGENCIES TO SCHEDULE INSPECTIONS. PRIOR TO SUBMITTING VIDEOS TO THE ENGINEER FOR REVIEW, THE CONTRACTOR SHALL REVIEW THE VIDEOS FIRST FOR DISCREPANCIES AND FOR COMPLETENESS TO MAKE SURE THAT ALL PIPELINE SECTIONS ARE INCLUDED.
8. THE CONTRACTOR SHALL PROVIDE EROSION CONTROL TO MAINTAIN AND PROTECT THE STORM DRAINAGE SYSTEM FROM MUD, DIRT, DEBRIS, ETC. THE SYSTEM SHALL BE PROTECTED UNTIL THE ADJACENT LAND AREAS ARE DEEMED STABLE AND WRITTEN FINAL ACCEPTANCE OF THE PROJECT HAS BEEN PROVIDED. THE CONTRACTOR MAY BE REQUIRED TO PRESSURE CLEAN PIPES AND INLETS FOR THESE PURPOSES.
9. ALL FDOT DITCH BOTTOM INLETS IN THE PROPOSED PAVEMENT AREAS AND WITHIN THE DESIGNATED EASEMENTS OR PUBLIC ROW SHALL BE MODIFIED FOR TRAFFIC BEARING WITH HOT DIPPED GALVANIZED STEEL GRATES AND METAL ANGLE FRAMES SUPPORT FOR GRATES. ANGLE FRAME SHALL BE PART OF THE PRECAST CONCRETE STRUCTURES, INDICATED ON THE SHOP DRAWINGS AND THE PRECAST SHALL BE ACCORDANCE WITH FDOT SPECIFICATIONS.
10. ALL DRAINAGE STRUCTURE STEEL GRATES AND COVERS TO BE TRAFFIC RATED FOR A MINIMUM H-20 LOADING.
11. ALL MITERED END SECTIONS FOR SIDE DRAIN PIPES AT DRIVEWAY ENTRANCES ON COUNTY OR FDOT ROADWAYS MUST BE CONSTRUCTED WITH A CONCRETE TOE FOUNDATION IN ACCORDANCE WITH FDOT INDEX 273.
12. NO POND/LAKE EXCAVATION (FOR ANY PURPOSE) SHALL EXTEND BEYOND OR BELOW THE PERMITTED DESIGN DEPTHS/ELEVATIONS SHOWN ON THE DRAWINGS. NO LOWER SEMI-CONFINING UNIT CLAYEY MATERIALS AND NO WEATHERED LIMESTONE MATERIALS SHALL BE EXCAVATED, REGARDLESS IF THESE MATERIALS ARE ENCOUNTERED WITHIN THE PERMITTED EXCAVATION DEPTHS/ELEVATIONS SHOWN ON THE PLANS. TEMPORARY DEWATERING DITCHES OR SUMPS (FOR POND/LAKE EXCAVATION) SHALL NOT EXTEND BELOW THE PERMITTED DESIGN DEPTHS/ELEVATIONS SHOWN ON THE DRAWINGS. IF ANY LOWER SEMI-CONFINING UNIT CLAYEY MATERIALS OR WEATHERED LIMESTONE MATERIALS ARE ENCOUNTERED ABOVE THE PERMITTED EXCAVATION DEPTHS/ELEVATIONS, THEN EXCAVATION OPERATIONS IN THAT POND/LAKE AREA SHALL IMMEDIATELY CEASE IN THE GENERAL AREA, AND THE GEOTECHNICAL CONSULTANT AND ENGINEER OF RECORD SHALL BE NOTIFIED TO PROVIDE SUBSEQUENT EVALUATIONS / RECOMMENDATIONS, AS APPROPRIATE, WHICH SHALL BE IMPLEMENTED BY THE CONTRACTOR. EPC (OR FDEP) MUST BE CONTACTED PRIOR TO ANY EXCAVATION OF CLAYS OR EXCEEDING THE PERMITTED EXCAVATION DEPTH.

EROSION/TURBIDITY CONTROL NOTES

1. THE INSTALLATION OF TEMPORARY EROSION CONTROL BARRIERS SHALL BE COORDINATED WITH THE CONSTRUCTION OF THE PERMANENT EROSION CONTROL FEATURES TO THE EXTENT NECESSARY TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL OF EROSION AND WATER POLLUTION THROUGHOUT THE LIFE OF THE CONSTRUCTION PHASE.
2. THE TYPE OF EROSION CONTROL BARRIERS USED SHALL BE GOVERNED BY THE NATURE OF THE CONSTRUCTION OPERATION AND SOIL TYPE THAT WILL BE EXPOSED. SILTY AND CLAYEY MATERIAL USUALLY REQUIRE SOLID SEDIMENT BARRIERS TO PREVENT TURBID WATER DISCHARGE, WHILE SANDY MATERIAL MAY NEED ONLY SILT SCREENS OR HAY BALES TO PREVENT EROSION. FLOATING TURBIDITY CURTAINS SHALL BE USED IN OPEN WATER SITUATIONS. DIVERSION DITCHES OR SWALES MAY BE REQUIRED TO PREVENT TURBID STORM WATER RUNOFF FROM BEING DISCHARGED TO WETLANDS OR OTHER WATER BODIES. IT MAY BE NECESSARY TO EMPLOY A COMBINATION OF BARRIERS, DITCHES AND OTHER EROSION/TURBIDITY CONTROL MEASURES IF CONDITIONS WARRANT.
3. THE CONTRACTOR SHALL SCHEDULE HIS OPERATIONS SUCH THAT THE AREA OF UNPROTECTED ERODIBLE EARTH EXPOSED AT ANY ONE TIME IS NOT LARGER THAN THE MINIMUM AREA NECESSARY FOR EFFICIENT CONSTRUCTION OPERATIONS, AND THE DURATION OF EXPOSED, UNCOMPLETED CONSTRUCTION TO THE ELEMENTS SHALL BE AS SHORT AS PRACTICABLE. CLEARING AND GRUBBING SHALL BE SO SCHEDULED AND PERFORMED THAT GRADING OPERATIONS CAN FOLLOW IMMEDIATELY THEREAFTER, AND GRADING OPERATIONS SHALL BE SCHEDULED AND PERFORMED THAT PERMANENT EROSION CONTROL FEATURES CAN FOLLOW IMMEDIATELY THEREAFTER IF CONDITIONS ON THE PROJECT PERMIT.
4. THE CONTRACTOR AND/OR OWNER'S REPRESENTATIVE SHALL PROVIDE ROUTINE MAINTENANCE OF PERMANENT AND TEMPORARY EROSION CONTROL FEATURES UNTIL THE PROJECT IS COMPLETE AND ALL BARED SOILS ARE STABILIZED.
5. ALL GREEN AND/OR DISTURBED AREAS TO BE SODDED/RESODDED WITH LIKE SOD.
6. ANY SOD PLACED ON SLOPES EXCEEDING 3:1 TO BE ANCHORED BY STAKES, NETS, AND/OR ENGINEER'S APPROVED METHOD.
7. REQUIRED TREE BARRICADES AND EROSION CONTROL MUST REMAIN INTACT THROUGHOUT CONSTRUCTION. ENCROACHMENT INTO OR FAILURE TO MAINTAIN THESE BARRICADES WILL RESULT IN ENFORCEMENT ACTION WHICH MAY INCLUDE CITATIONS AND/OR PERMIT REVOCATION AS PROVIDED BY LOCAL JURISDICTION
8. ROOT PRUNING SHALL BE CONDUCTED AFTER STAKING FOR, AND PRIOR TO INSTALLATION OF SILT FENCE, A CERTIFIED ARBORIST, INTERNATIONAL SOCIETY OF ARBORICULTURE-CERTIFIED, SHALL CONDUCT OR OVERSEE ROOT PRUNING ACTIVITIES. THE CERTIFIED ARBORIST SHALL DETERMINE SPECIFIC EQUIPMENT AND METHODS TO BE USED. THE CERTIFIED ARBORIST SHALL REVIEW ROOT PRUNING SHOWN ON THE PLANS, AND SHALL VERIFY OR MODIFY AS NEEDED THE LIMITS AND LOCATIONS OF ROOT PRUNING TO MINIMIZE IMPACTS TO AFFECTED TREES. THE CERTIFIED ARBORIST SHALL RECOMMEND ANY ASSOCIATED TREATMENTS SUCH AS FERTILIZERS, FUNGICIDES, PESTICIDES, ETC. TO THE OWNER FOR REVIEW AND APPROVAL

UTILITY NOTES

1. ALL UTILITY WORK, BOTH PRIVATE AND PUBLIC, SHALL BE IN ACCORDANCE WITH THE UTILITY PROVIDER'S CONSTRUCTION STANDARDS AND SPECIFICATIONS, STATE AND FEDERAL REGULATIONS, AND REGULATIONS IMPOSED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
2. ALL WATER AND SEWER CONSTRUCTION SHALL BE PERFORMED BY AN UNDERGROUND UTILITY CONTRACTOR LICENSED UNDER THE PROVISIONS OF CHAPTER 489 OF THE FLORIDA STATUTES.
3. ALL NEW PIPE SHALL HAVE A MINIMUM DEPTH OF COVER OF 36 INCHES MEASURED FROM THE TOP OF THE PIPE TO THE PROPOSED FINISHED GROUND SURFACE, EXCEPT AS OTHERWISE NOTED ON THE DRAWINGS. VERTICAL AND HORIZONTAL ALIGNMENT MAY BE ADJUSTED TO MEET ADVERSE FIELD CONDITIONS UPON APPROVAL BY THE ENGINEER AND LOCAL REGULATORY AGENCY.
4. ALL UNDERGROUND UTILITIES MUST BE INSTALLED PRIOR TO FINAL PREPARATION OF SUBGRADE FOR PAVEMENT.
5. ALL BEDDING SHALL BE CLASS B, TYPE I BEDDING UNLESS INDICATED OTHERWISE ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
6. CONTRACTOR TO EXERCISE CAUTION WHEN WORKING NEAR EXISTING FACILITIES AND/OR UTILITIES. ALL DAMAGE TO BE REPAIRED AT CONTRACTOR'S EXPENSE. ALL COSTS FOR INTERRUPTION OF GAS, ELECTRICAL, COMMUNICATIONS AND/OR WATER SERVICE DUE TO CONTRACTOR'S WORK SHALL BE BORNE BY THE CONTRACTOR.
7. INFORMATION ON EXISTING UTILITIES IS FROM BEST AVAILABLE INFORMATION OF RECORD. CONTRACTOR IS SOLELY RESPONSIBLE FOR FIELD VERIFICATION AND LOCATION OF THESE UNDERGROUND UTILITIES AS REQUIRED AT NO SEPARATE PAY. UTILITY PROVIDER PERSONNEL WILL BE MADE AVAILABLE FOR ASSISTANCE AND OPERATION OF EQUIPMENT AS REQUIRED. CONTRACTOR TO COORDINATE WITH UTILITY COMPANIES.

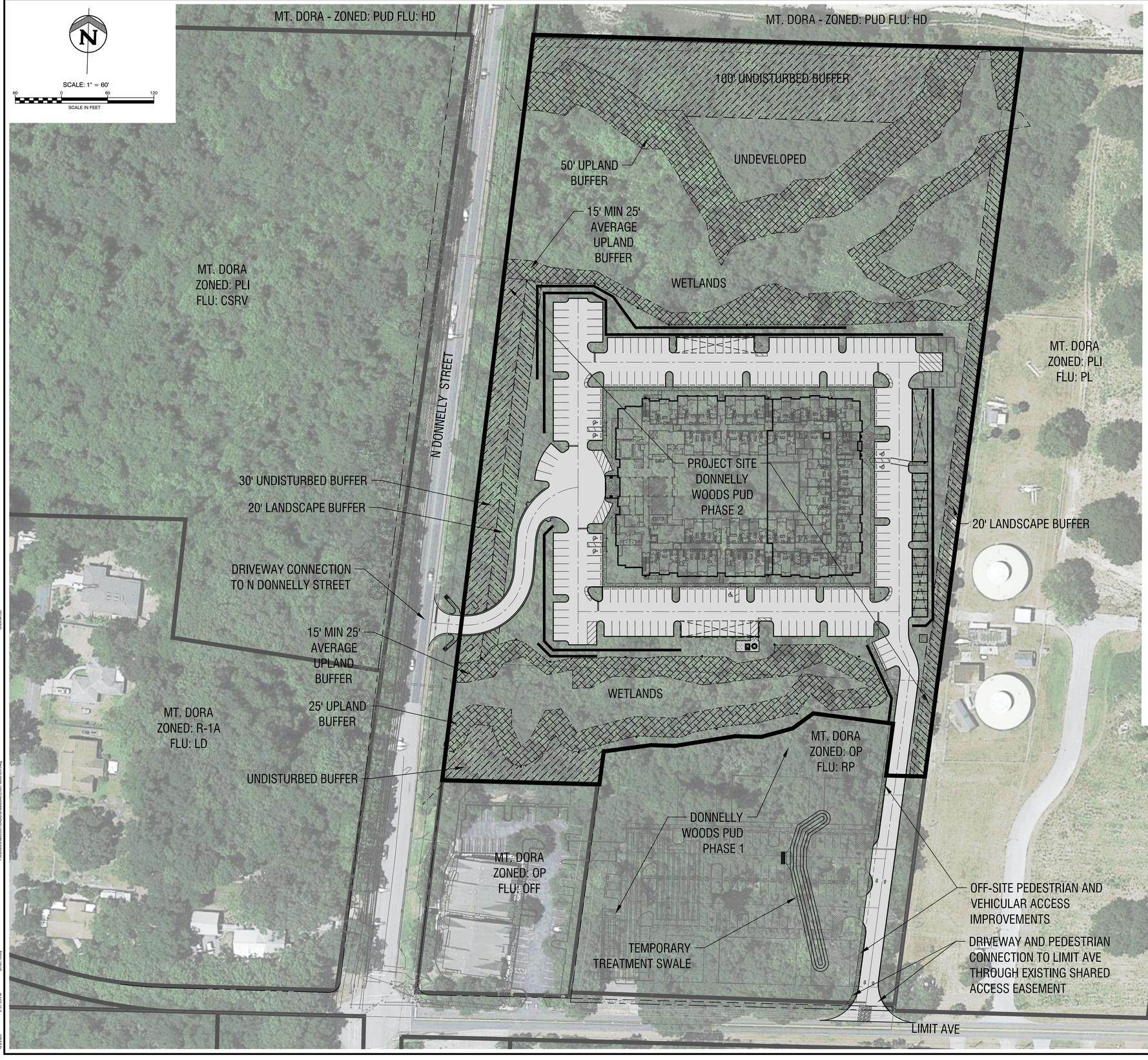
WASTEWATER NOTES

1. SANITARY SEWERS, FORCE MAINS AND STORM SEWERS SHOULD ALWAYS CROSS UNDER WATER MAINS. SANITARY SEWERS, FORCE MAINS AND STORM SEWERS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHENEVER POSSIBLE. WHERE SANITARY SEWERS, FORCE MAINS AND STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 18 INCHES VERTICAL DISTANCE, THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE LEAK FREE AND MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT THE CROSSING. ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING). WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP AND THE CROSSING SHALL BE ARRANGED TO MEET THE REQUIREMENTS ABOVE.
2. SANITARY SEWER SERVICE CONNECTION LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE. SANITARY SEWER SHOULD BE CONSTRUCTED FIRST AND PROPOSED WATER SERVICES AND STORMWATER SHOULD BE ADJUSTED AROUND THE SANITARY LATERALS AND/OR BUILDING CLEANOUTS.
3. PRIOR TO COMMENCING WORK WHICH REQUIRES CONNECTING NEW SANITARY SEWER LINES TO EXISTING LINES OR APPURTENANCES, THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES NEAR THE POINT OF CONNECTION AND NOTIFY OWNER'S ENGINEER OF ANY CONFLICTS OR DISCREPANCIES WITH DESIGN INFORMATION SHOWN IN THESE PLANS.
4. CONTRACTOR SHALL NOTIFY ENGINEER AND THE APPLICABLE AGENCIES AT LEAST 2 BUSINESS DAYS IN ADVANCE OF SCHEDULED WORK.
5. AT LEAST 3 WEEKS PRIOR TO CONNECTION TO THE EXISTING SANITARY FORCE MAIN, CONTRACTOR SHALL NOTIFY THE OWNER'S ENGINEER AND THE APPLICABLE AGENCIES AND SUPPLY THEM WITH THE CONNECTION DETAIL, THE CONTRACTOR'S NAME, STARTING DATE, PROJECTED SCHEDULE AND OTHER INFORMATION AS REQUIRED. THEY SHALL ALSO BE CONTACTED 5 DAYS PRIOR TO CONSTRUCTION TO ENSURE AVAILABILITY OF INSPECTION PERSONNEL. ANY WORK PERFORMED PRIOR TO NOTIFYING FIELD ENGINEERING OR WITHOUT A DEPARTMENT INSPECTOR PRESENT MAY BE SUBJECT TO REMOVAL AND REPLACEMENT.
6. THE CONTRACTOR SHALL PERFORM AN INFILTRATION/EXFILTRATION TEST ON ALL GRAVITY SEWERS AND A PRESSURE TEST ON ALL FORCE MAINS (AS APPLICABLE) IN ACCORDANCE TO APPLICABLE AGENCIES REGULATIONS. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER OF RECORD AND SUBMITTED TO THE APPLICABLE AGENCIES FOR APPROVAL. THE SCHEDULING, COORDINATION AND NOTIFICATION TO ALL PARTIES IS THE CONTRACTOR'S RESPONSIBILITY.
7. ONE OR MORE OF THE FOLLOWING CERTIFICATES/SHOP DRAWINGS, DEPENDING ON THE TYPE OF CONNECTION, WILL BE REQUIRED. THIS SHOULD BE REVIEWED WITH THE ENGINEER OF RECORD PRIOR TO APPROVAL FOR CONSTRUCTION.
   - DIP/PVC CERTIFICATE OF MANUFACTURE.
   - JACKING PIT DETAIL.
   - MANHOLE SHOP DRAWINGS AND STRENGTH REPORT.
   - CRUSHED STONE SUBMITTAL.
   - FRAME AND COVER SHOP DRAWINGS.
   - VALVE SHOP DRAWING.
   - FLEXIBLE COUPLING SHOP DRAWINGS.
   - MANHOLE DROP
   - CASING PIPE CERTIFICATE.
   - CONNECTION DETAIL.
8. THE CERTIFICATE OF OCCUPANCY WILL NOT BE ISSUED UNTIL THE FOLLOWING HAS BEEN COMPLETED:
   - FINAL INSPECTION IN CONJUNCTION WITH DEPARTMENT PERSONNEL COMPLETED.
   - AS-BUILTS HAVE BEEN SUBMITTED AND ACCEPTED.
   - ALL NECESSARY TESTING COMPLETED AND CERTIFIED.
   - PAYMENT OF ALL CAPACITY FEES.
   - FDEP CLEARANCE CERTIFICATION
9. THE CONTRACTOR SHALL PERFORM AT HIS OWN EXPENSE AN INFILTRATION OR EXFILTRATION TEST, A TELEVISION INSPECTION (CCTV), AND A MANDREL (GO, NO GO) TEST ON ALL GRAVITY SEWERS IN ACCORDANCE WITH THE ENGINEER OF RECORD'S REQUIREMENTS AND/OR THE REGULATORY AGENCY HAVING JURISDICTION. SAID TESTS ARE TO BE WITNESSED AND CERTIFIED BY THE ENGINEER OF RECORD AND SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL. COORDINATION OF TESTING AND NOTIFICATION OF ALL PARTIES IS THE CONTRACTOR'S RESPONSIBILITY.
10. ALL SANITARY SEWER PIPING SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER PRIOR TO THE PLACEMENT OF BACK FILL. CONTRACTOR TO NOTIFY THE ENGINEER AND APPLICABLE AGENCIES 2 BUSINESS DAYS IN ADVANCE TO SCHEDULE INSPECTIONS
11. THE SANITARY SEWER COLLECTION SYSTEM SHALL NOT BE PLACED INTO SERVICE UNTIL APPROVAL FOR CONNECTION IS OBTAINED FROM THE DEPARTMENT OF ENVIRONMENTAL PROTECTION. THE CONTRACTOR SHALL SUBMIT TO THE OWNER'S ENGINEER SANITARY SEWER SYSTEM AS-BUILT DRAWING INFORMATION AT LEAST SIX WEEKS PRIOR TO ANTICIPATED DATE OF CERTIFICATE OF COMPLETION APPLICATION. FAILURE TO OBTAIN EPC APPROVAL PRIOR TO PLACING THE SYSTEM IN OPERATION MAY RESULT IN SUBSTANTIAL FINES.
12. ALL UTILITY SEPARATIONS SHALL BE IN ACCORDANCE WITH 62-610 FAC.
13. ALL 4 INCH GRAVITY SANITARY SEWER LINES SHALL BE SCHEDULE 40 PVC AND ALL SANITARY SEWER LINES 6 INCHES AND LARGER SHALL BE SDR 26 PVC.
14. SEWER LINE DEPTHS ARE DESIGNED TO FINISHED GRADE AND SHALL BE PROTECTED FROM DAMAGE UNTIL ALL WORK IS COMPLETE.
15. AT A MINIMUM ALL SANITARY SEWER LINES 8 INCHES AND LARGER SHALL BE INSPECTED BY REMOTE VIDEO RECORDING SYSTEM AND COPES OF THE VIDEO SHALL BE PROVIDED TO THE ENGINEER FOR THEIR REVIEW AND APPROVAL. THE STATE AND / OR LOCAL REGULATORY AGENCY REGULATING THE CONSTRUCTION OF THE SYSTEM MAY REQUIRE ADDITIONAL TESTING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL TESTING REQUIRED TO THE ENGINEER FOR FINAL APPROVAL BY REGULATORY AGENCIES.
16. THE CONTRACTOR SHALL INSTALL ANY ADDITIONAL AIR RELEASE VALVES ON FORCE MAINS AT CHANGES IN ELEVATION OF 2 FEET DUE TO ACTUAL FIELD CONDITIONS OR CONFLICTS NOT IDENTIFIED ON THESE PLANS.
17. A 4 INCH PUMP-OUT MEETING LOCAL REGULATORY STANDARDS SHALL BE PROVIDED ON ALL FORCE MAINS LOCATED ADJACENT TO RIGHT-OF-WAYS ON PRIVATE PROPERTY UNLESS INDICATED OTHERWISE ON THE PLANS. PUMP-OUT MUST BE ACCESSIBLE BY LOCAL UTILITY FORCES FROM ADJACENT PUBLIC STREET OR RIGHT-OF-WAY.
18. CONTRACTOR SHALL GROUT FLOW CHANNELS IN ALL SANITARY SEWER MANHOLES.
19. CONTRACTOR SHALL PERFORM THE ON-SITE PRESSURE TEST AT THE POINT OF CONNECTION FOR MANIFOLD FORCEMAINS. THIS PRESSURE SHALL BE REPORTED TO THE ENGINEER OF RECORD FOR VERIFICATION PURPOSES, PRIOR TO THE SHOP DRAWING SUBMITTAL FOR THE PUMP EQUIPMENT.

NOTE:
CONTRACTOR TO REFER TO FDOT DESIGN STANDARDS FOR ADDITIONAL INDEX INFORMATION NOT SHOWN ON THESE PLANS

POTABLE WATER NOTES

1. WHERE WATER MAIN IS LAID UNDER DITCHES, CULVERTS OR OTHER PIPELINES WITHOUT FITTINGS, THE MAXIMUM DEFLECTION AT ANY JOINT SHALL NOT EXCEED 50% OF THE MAXIMUM DEFLECTION RECOMMENDED BY THE MANUFACTURER OF THE PIPE FURNISHED.
2. NEW OR RELOCATED, UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT WILL BE LAID TO PROVIDE:
   - 2.1. A HORIZONTAL DISTANCE OF AT LEAST THREE (3) FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE ON ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER, STORM SEWER, STORM WATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.;
   - 2.2. A HORIZONTAL DISTANCE OF AT LEAST SIX (6) FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY-TYPE SANITARY SEWER, OR A HORIZONTAL DISTANCE OF AT LEAST THREE (3) FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY-TYPE SANITARY SEWER IF THE BOTTOM OF THE WATER MAIN WILL BE LAID AT LEAST SIX (6) INCHES ABOVE THE TOP OF THE SEWER;
   - 2.3. A HORIZONTAL DISTANCE OF AT LEAST SIX (6) FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED 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
   - 2.4. A HORIZONTAL DISTANCE OF AT LEAST TEN (10) FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM."
3. CROSSINGS:
   - 3.1. WATER MAINS THAT CROSS ANY EXISTING OR PROPOSED GRAVITY OR VACUUM TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 6 INCHES BELOW THE OTHER PIPE LINE.
   - 3.2. WATER MAINS THAT CROSS ANY EXISTING OR PROPOSED PRESSURE TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCEMAIN OR PIPE LINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OTHER PIPE LINE.
4. DISINFECTION OF THE POTABLE WATER AND FIRE MAINS SHALL BE PERFORMED IN ACCORDANCE WITH AWWA C651.
5. ALL WATER MAINS SHALL BE PRESSURE TESTED AT 150 PSI FOR 2 HOURS AND FORCE MAINS SHALL BE TESTED AT 150 PSI FOR 2 HOURS IN ACCORDANCE WITH SECTION 'A' OF AWWA STANDARD C600 WITH LEAKAGE LIMITED TO THAT DETERMINED BY THE APPROPRIATE FORMULA. ALL PRESSURE TESTING SHALL BE SCHEDULED WITH THE LOCAL REGULATORY AGENCY AND ENGINEER A MINIMUM OF 2 BUSINESS DAYS IN ADVANCE.
6. ALL D.I. FITTINGS FOR WATER MAINS SHALL BE THIN CEMENT LINED. THE LINING SHALL COMPLY WITH ANSI STANDARD A21.4 (AWWA C104, LATEST "CEMENT-MORTAR LINING FOR DUCTILE IRON PIPE AND FITTINGS FOR WATER." ALL BOLTS, NUTS, STUDS AND OTHER UNCOATED PARTS OF JOINTS FOR UNDERGROUND INSTALLATION SHALL BE COATED WITH ASPHALT OR COAL-TAR PRIOR TO BACKFILLING.
7. THE CONTRACTOR SHALL FOLLOW THE PROVISIONS OF FLORIDA STATUTE 386 IF ANY WATER LINE IS BROKEN OR WATER SYSTEM IS SHUT OFF DURING CONSTRUCTION. FLORIDA STATUTE 386 STATES THAT THE DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) OR THE LOCAL REGULATORY AGENCY DESIGNATED AUTHORITY BY DEP, SHALL ISSUE A BOIL WATER / BOTTLED WATER NOTICE FOR ALL AFFECTED CUSTOMERS OF A PUBLIC WATER SUPPLY SYSTEM WHEN AN INTERRUPTION IN SERVICE OCCURS (WHICH RESULTS IN A COMPROMISE OF THE SYSTEM INTEGRITY WHEN THE HEALTH OR LIFE OF AN INDIVIDUAL OR THE HEALTH OF LIVES OF INDIVIDUALS MAY BE THREATENED OR IMPAIRED OR BY WHICH DISEASE MAY BE CAUSED) OR WHEN A HISTORY OF UNSATISFACTORY BACTERIOLOGICAL SAMPLES RESULT OR WHEN THE SYSTEM PRESSURE DROPS BELOW 20 PSI. THIS BOIL WATER / BOTTLED WATER NOTICE WILL BE LIFTED BY THE DESIGNATED REGULARITY AGENCY WHEN THE SYSTEM PRESSURE AND MICROBIOLOGICALS ARE DOCUMENTED THROUGH CERTIFIED DRINKING WATER LABORATORY ANALYSIS RESULTS. IN THE CASE WHERE THE SUPPLIER OF WATER ISSUES THE BOIL WATER / BOTTLED WATER NOTICE, LOCAL HEALTH DEPARTMENT SHALL BE NOTIFIED AS SOON AS POSSIBLE AND PREFERABLY IN ADVANCE OF THE EVENT. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SUPPLY BOTTLED WATER INDIVIDUALS AND BUSINESS AFFECTED AT THE CONTRACTORS COST.
8. ALL BACKFLOW PREVENTERS SHALL BE LOCATED ADJACENT TO RIGHT-OF-WAY ON PRIVATE PROPERTY UNLESS OTHERWISE APPROVED BY THE LOCAL REGULATORY AGENCY AND THE ENGINEER.
9. AT THE TIME OF OR PRIOR TO FINAL APPROVAL, A DETECTOR CHECK AFFIDAVIT SHALL BE PROVIDED TO THE LOCAL REGULATORY AGENCY AND THE ENGINEER.
10. AT ALL UTILITY CROSSINGS REGARDLESS OF VERTICAL SEPARATION ONE FULL LENGTH OF WATER MAIN PIPE SHALL



LEGEND

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- PROPOSED RETAINING WALL
- PROPOSED BUILDING
- WETLAND LINE
- UPLAND BUFFER
- UNDISTURBED NATURAL BUFFER
- LANDSCAPE BUFFER

PROJECT DATA TABLE					
GENERAL SITE DATA					
PARCEL NUMBER	19-19-27-0070-000-00200				
PARCEL ALT KEY	3854333				
ZONING	PUD (ORD. 2022-01)				
FUTURE LAND USE	HD, LM				
PROPOSED USE	MULTI-FAMILY RESIDENTIAL (SENIOR LIVING)				
SITE AREA SUMMARY					
GROSS SITE AREA	13.39	AC	583,268	SF	
UNDEVELOPABLE AREA (WETLANDS)	2.32	AC	101,059	SF	
BASE SITE AREA (DEVELOPABLE AREA)	11.07	AC	482,209	SF	
AREA OF WETLANDS (ON-SITE)	2.32	AC	101,059	SF	
AREA OF WETLANDS IMPACTED (ON-SITE)	0.00	AC	0	SF	
AREA OF WETLANDS PRESERVED (ON-SITE)	2.32	AC	101,059	SF	
AREA OF FLOODPLAIN (ON-SITE)	0.00	AC	0	SF	
AREA OF FLOODPLAIN IMPACTED (ON-SITE)	0.00	AC	0	SF	
SITE AREA CALCULATIONS					
CATEGORY	PROPOSED		REQUIRED / ALLOWABLE		
IMPERVIOUS AREA (ON-SITE)	197,306 SF	4.53 AC	379,124 SF	8.70 AC	MAX.
IMPERVIOUS % (ON-SITE)	34%		65%		MAX.
IMPERVIOUS AREA (OFF-SITE)	7,916 SF	0.18 AC	-	-	
SIDEWALK AREA	9,822 SF	0.23 AC	-	-	
PAVEMENT & CURB AREA	109,920 SF	2.52 AC	-	-	
BUILDING & INTERIOR COURTYARD AREA	72,767 SF	1.67 AC	-	-	
RETAINING WALL TOP AREA	4,088 SF	0.09 AC	-	-	
LIFT STATION AREA	709 SF	0.02 AC	-	-	
OPEN SPACE AREA	385,962 SF	8.86 AC	145,817 SF	3.35 AC	MIN.
OPEN SPACE %	66%		25%		MIN.
RESIDENTIAL UNITS	164	UNITS	164	UNITS	MAX.
BUILDING HEIGHT	55	FT	55	FT	MAX.
BUILDING FLOORS	5		-	-	
TOTAL FLOOR AREA	235,440	SF	-	-	
TOTAL FLOOR AREA RATIO (FAR)	0.40		-	-	
TOTAL DENSITY	12.25	DU/AC	163.25	DU/AC	MAX.
UPLAND BUFFER CALCULATIONS					
LOCATION	PROPOSED		REQUIRED		
NORTHERN WETLAND, NORTH BUFFER	50	FT	50	FT	
NORTHERN WETLAND, SOUTH BUFFER	25	FT	25	FT	
WETLAND FRONTAGE	644	FT	-	-	
UPLAND BUFFER AREA	16,938	SF	16,100	SF	
SOUTHERN WETLAND, NORTH BUFFER	25	FT	25	FT	
WETLAND FRONTAGE	603	FT	-	-	
UPLAND BUFFER AREA	15,286	SF	15,075	SF	
SOUTHERN WETLAND, SOUTH BUFFER	25	FT	25	FT	
MINIMUM BUFFER	15	FT	15	FT	

NOTES:
1. GROSS SITE AREA AND WETLAND AREA IS PER THE SITE BOUNDARY SURVEY.
2. SITE AREAS ARE CALCULATED IN ACCORDANCE WITH THE PUD ORDINANCE 2022-01 AND LDC.
3. REQUIRED / ALLOWABLE SITE AREA CALCULATIONS ARE FROM THE PUD ORDINANCE 2022-01.
4. NORTHERN WETLAND SOUTH BUFFER AND SOUTHERN WETLAND NORTH BUFFER ARE AVERAGED, 15' MIN, 25' AVERAGE, BASED ON WETLAND FRONTAGE AND TOTAL UPLAND BUFFER AREA.

REVISION	DATE
1	
2	
3	
4	
5	
6	
7	
8	

INSPIRE DONNELLY WOODS
MOUNT DORA, FL

C-003
OVERALL SITE PLAN

HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8496
Certificate of Authorization Number: 33360

DATE:	6/5/2023
DESIGNED BY:	CCH
DRAWN BY:	NTD
CHECKED BY.:	CBS
JOB NO.:	045953.001

C-003

CHARLES C. HIOTT, PE
LICENSE # 54813

CONSTRUCTION SET

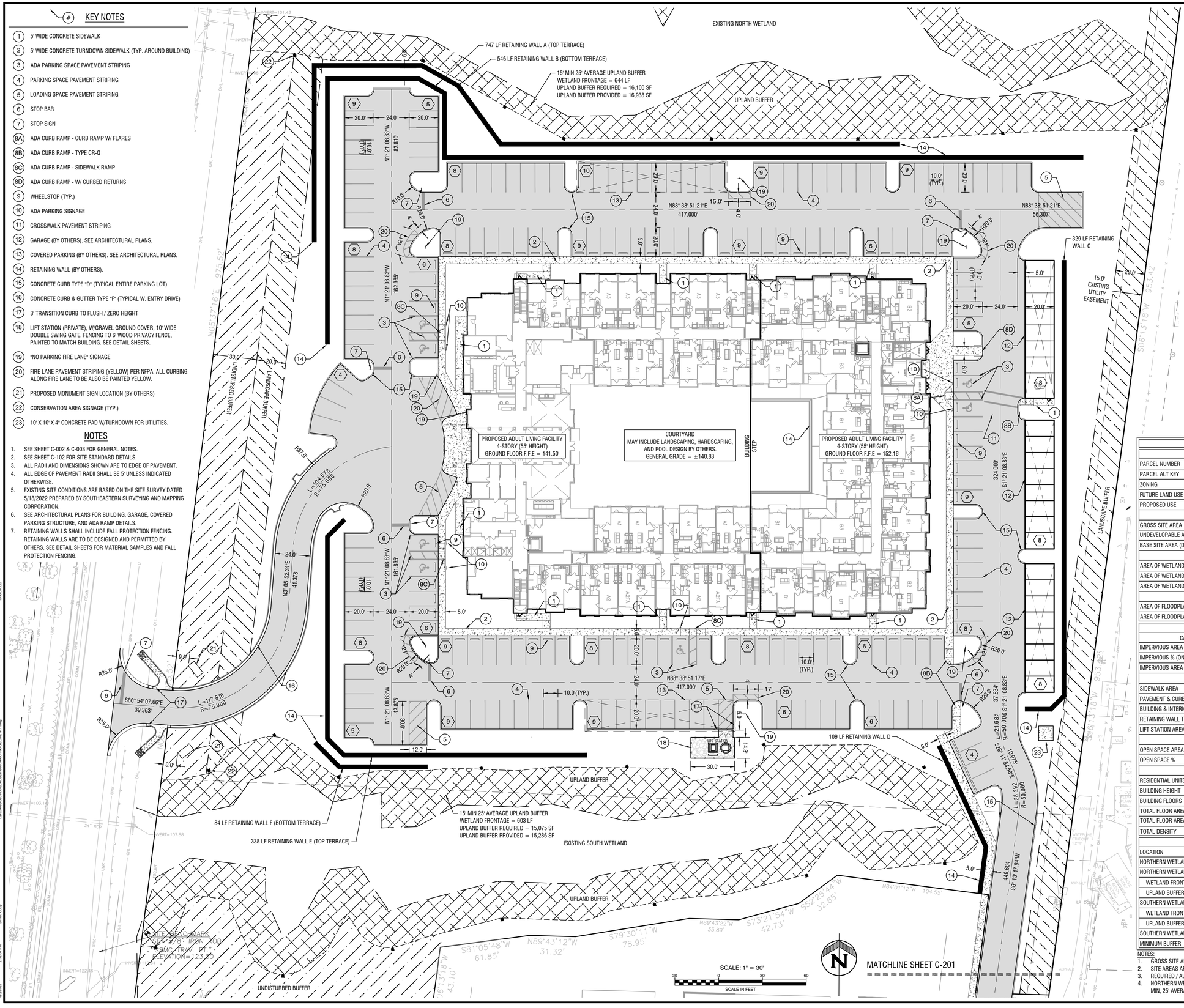
I:\45000s\45953.001\CAD\Sheets\XYC-001 MASTER.dwg
Smith, Cody
6/5/2023 2:31:31 PM

KEY NOTES

1. 5' WIDE CONCRETE SIDEWALK
2. 5' WIDE CONCRETE TURNDOWN SIDEWALK (TYP. AROUND BUILDING)
3. ADA PARKING SPACE PAVEMENT STRIPING
4. PARKING SPACE PAVEMENT STRIPING
5. LOADING SPACE PAVEMENT STRIPING
6. STOP BAR
7. STOP SIGN
8A. ADA CURB RAMP - CURB RAMP W/ FLARES
8B. ADA CURB RAMP - TYPE CR-G
8C. ADA CURB RAMP - SIDEWALK RAMP
8D. ADA CURB RAMP - W/ CURBED RETURNS
9. WHEELSTOP (TYP.)
10. ADA PARKING SIGNAGE
11. CROSSWALK PAVEMENT STRIPING
12. GARAGE (BY OTHERS). SEE ARCHITECTURAL PLANS.
13. COVERED PARKING (BY OTHERS). SEE ARCHITECTURAL PLANS.
14. RETAINING WALL (BY OTHERS).
15. CONCRETE CURB TYPE "D" (TYPICAL ENTIRE PARKING LOT)
16. CONCRETE CURB & GUTTER TYPE "F" (TYPICAL W. ENTRY DRIVE)
17. 3' TRANSITION CURB TO FLUSH / ZERO HEIGHT
18. LIFT STATION (PRIVATE), W/GRAVEL GROUND COVER, 10' WIDE DOUBLE SWING GATE. FENCING TO 6' WOOD PRIVACY FENCE, PAINTED TO MATCH BUILDING. SEE DETAIL SHEETS.
19. "NO PARKING FIRE LANE" SIGNAGE
20. FIRE LANE PAVEMENT STRIPING (YELLOW) PER NFPA. ALL CURBING ALONG FIRE LANE TO BE ALSO BE PAINTED YELLOW.
21. PROPOSED MONUMENT SIGN LOCATION (BY OTHERS)
22. CONSERVATION AREA SIGNAGE (TYP.)
23. 10' X 10' X 4" CONCRETE PAD W/TURNDOWN FOR UTILITIES.

NOTES

1. SEE SHEET C-002 & C-003 FOR GENERAL NOTES.
2. SEE SHEET C-102 FOR SITE STANDARD DETAILS.
3. ALL RADII AND DIMENSIONS SHOWN ARE TO EDGE OF PAVEMENT.
4. ALL EDGE OF PAVEMENT RADII SHALL BE 5' UNLESS INDICATED OTHERWISE.
5. EXISTING SITE CONDITIONS ARE BASED ON THE SITE SURVEY DATED 5/18/2022 PREPARED BY SOUTHEASTERN SURVEYING AND MAPPING CORPORATION.
6. SEE ARCHITECTURAL PLANS FOR BUILDING, GARAGE, COVERED PARKING STRUCTURE, AND ADA RAMP DETAILS.
7. RETAINING WALLS SHALL INCLUDE FALL PROTECTION FENCING. RETAINING WALLS ARE TO BE DESIGNED AND PERMITTED BY OTHERS. SEE DETAIL SHEETS FOR MATERIAL SAMPLES AND FALL PROTECTION FENCING.



LEGEND

- BUILDING EXTENTS
- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED UPLAND BUFFER
- PROPOSED UNDISTURBED BUFFER
- PROPOSED LANDSCAPE BUFFER
- (#) NUMBER OF PARKING SPACES
- BUILDING OVERHANG
- PROPERTY LINE

SITE PARKING DATA TABLE		
PROPOSED USE	MULTI-FAMILY RESIDENTIAL	
PROPOSED CAPACITY	164 UNITS	
PARKING	REQUIRED	PROVIDED
TOTAL VEHICLE	224	230
STANDARD	217	222
ADA	7	8
LOADING		
TOTAL LOADING	3	3

NOTES:
1. RESIDENCE PARKING 164 X 1.2 = 200, VISITOR PARKING 164 / 3 = 24, TOTAL PARKING = 224, PER PUD ORDINANCE 2022-01.

PROJECT DATA TABLE					
GENERAL SITE DATA					
PARCEL NUMBER	19-19-27-0070-000-00200				
PARCEL ALT KEY	3854333				
ZONING	PUD (ORD. 2022-01)				
FUTURE LAND USE	HD, LM				
PROPOSED USE	MULTI-FAMILY RESIDENTIAL (SENIOR LIVING)				
SITE AREA SUMMARY					
GROSS SITE AREA	13.39	AC	583,268	SF	
UNDEVELOPABLE AREA (WETLANDS)	2.32	AC	101,059	SF	
BASE SITE AREA (DEVELOPABLE AREA)	11.07	AC	482,209	SF	
AREA OF WETLANDS (ON-SITE)	2.32	AC	101,059	SF	
AREA OF WETLANDS IMPACTED (ON-SITE)	0.00	AC	0	SF	
AREA OF WETLANDS PRESERVED (ON-SITE)	2.32	AC	101,059	SF	
AREA OF FLOODPLAIN (ON-SITE)	0.00	AC	0	SF	
AREA OF FLOODPLAIN IMPACTED (ON-SITE)	0.00	AC	0	SF	

SITE AREA CALCULATIONS					
CATEGORY	PROPOSED		REQUIRED / ALLOWABLE		
IMPERVIOUS AREA (ON-SITE)	197,306 SF	4.53 AC	379,124 SF	8.70 AC	MAX.
IMPERVIOUS % (ON-SITE)	34%		65%		MAX.
IMPERVIOUS AREA (OFF-SITE)	7,916 SF	0.18 AC	-	-	
SIDEWALK AREA	9,822 SF	0.23 AC	-	-	
PAVEMENT & CURB AREA	109,920 SF	2.52 AC	-	-	
BUILDING & INTERIOR COURTYARD AREA	72,767 SF	1.67 AC	-	-	
RETAINING WALL TOP AREA	4,088 SF	0.09 AC	-	-	
LIFT STATION AREA	709 SF		-	-	
OPEN SPACE AREA	385,962 SF	8.86 AC	145,817 SF	3.35 AC	MIN.
OPEN SPACE %	66%		25%		MIN.
RESIDENTIAL UNITS	164	UNITS	164	UNITS	MAX.
BUILDING HEIGHT	55	FT	55	FT	MAX.
BUILDING FLOORS	5		-	-	
TOTAL FLOOR AREA	235,440	SF	-	-	
TOTAL FLOOR AREA RATIO (FAR)	0.40		-	-	
TOTAL DENSITY	12.25	DU/AC	163.25	DU/AC	MAX.

UPLAND BUFFER CALCULATIONS				
LOCATION	PROPOSED		REQUIRED	
NORTHERN WETLAND, NORTH BUFFER	50	FT	50	FT
NORTHERN WETLAND, SOUTH BUFFER	25	FT	25	FT
WETLAND FRONTAGE	644	FT	-	-
UPLAND BUFFER AREA	16,938	SF	16,100	SF
SOUTHERN WETLAND, NORTH BUFFER	25	FT	25	FT
WETLAND FRONTAGE	603	FT	-	-
UPLAND BUFFER AREA	15,286	SF	15,075	SF
SOUTHERN WETLAND, SOUTH BUFFER	25	FT	25	FT
MINIMUM BUFFER	15	FT	15	FT

NOTES:
1. GROSS SITE AREA AND WETLAND AREA IS PER THE SITE BOUNDARY SURVEY.
2. SITE AREAS ARE CALCULATED IN ACCORDANCE WITH THE PUD ORDINANCE 2022-01 AND LDC.
3. REQUIRED / ALLOWABLE SITE AREA CALCULATIONS ARE FROM THE PUD ORDINANCE 2022-01.
4. NORTHERN WETLAND SOUTH BUFFER AND SOUTHERN WETLAND NORTH BUFFER ARE AVERAGED, 15' MIN, 25' AVERAGE, BASED ON WETLAND FRONTAGE AND TOTAL UPLAND BUFFER AREA.

REVISION	DATE
1	
2	
3	
4	
5	
6	
7	
8	

INSPIRE DONNELLY WOODS
MOUNT DORA, FL

C-100
SITE PLAN

HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33580

DATE:	6/5/2023
DESIGNED BY:	CCH
DRAWN BY:	NTD
CHECKED BY.:	CBS
JOB NO.:	045953.001

C-100

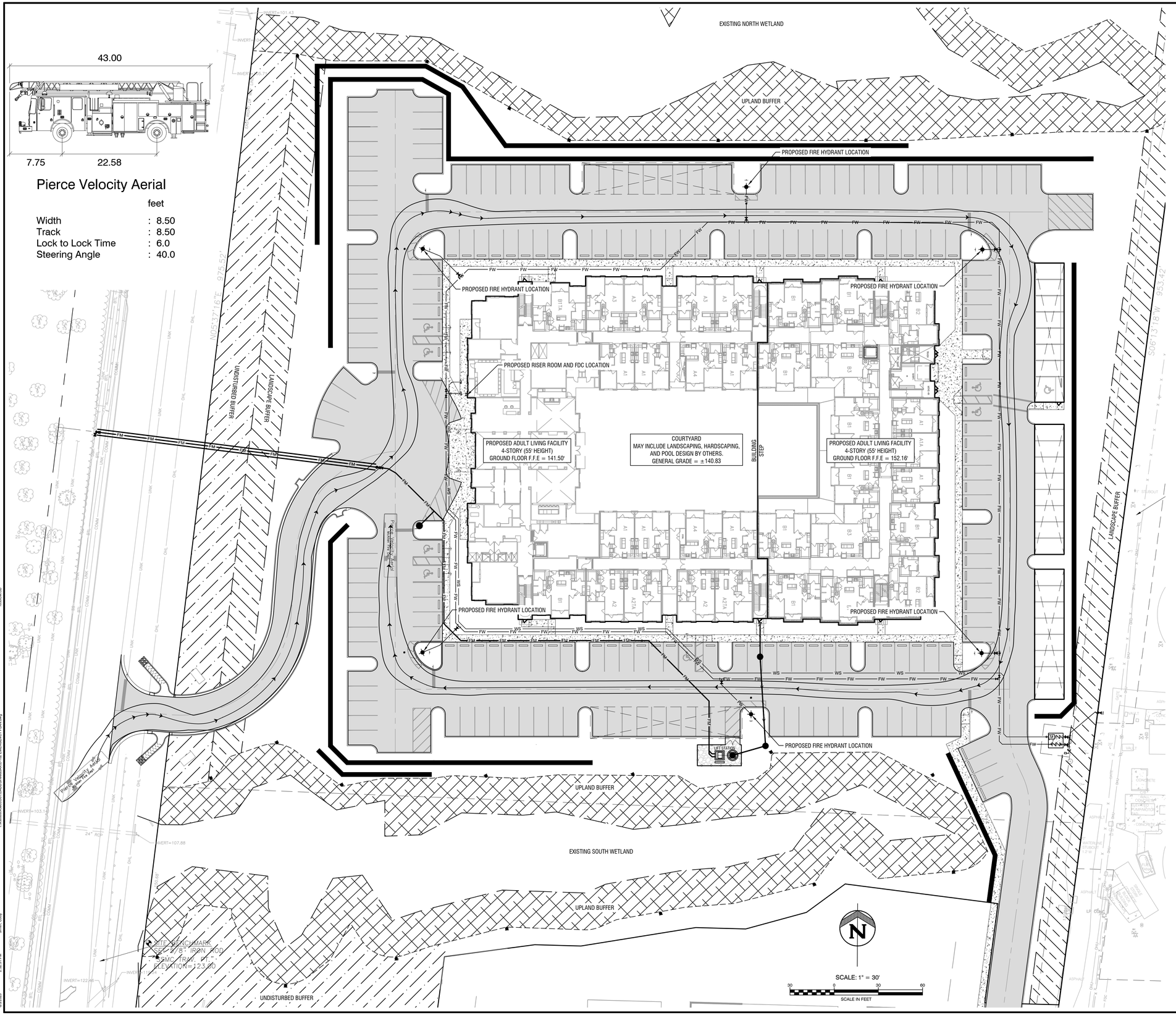
CHARLES C. HIOTT, PE
LICENSE # 54813

CONSTRUCTION SET

I:\045953\4-DESIGN\CAD\Sheets\XSC-100 GEOMETRY.dwg
Smith, Craig
2:36:14 PM
5/5/2023

Pierce Velocity Aerial

		feet
Width	:	8.50
Track	:	8.50
Lock to Lock Time	:	6.0
Steering Angle	:	40.0



LEGEND

- BUILDING EXTENTS
- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPERTY BOUNDARY

NOTES

THE FIRE CODE FOR THE CITY OF MOUNT DORA IS THE FLORIDA FIRE PREVENTION CODE 2007 EDITION, INCLUDING THE CODES AND STANDARDS REFERENCED WITHIN.

1. THE REQUIRED FIRE FLOW (RFF) THE MINIMUM FIRE FLOW SHALL BE 600 GALLONS PER MINUTE (GPM) WITH 20 POUNDS PER SQUARE INCH (PSI) RESIDUAL PRESSURE IN SINGLE-FAMILY RESIDENTIAL AREAS, AND 1,500 GALLONS PER MINUTE (GPM) WITH 20 POUNDS PER SQUARE INCH (PSI) RESIDUAL PRESSURE IN ALL OTHER AREAS. ADDITIONAL FIRE HYDRANTS MAY BE REQUIRED BASED ON FIRE FLOW CALCULATIONS USING THE INSURANCE SERVICES OFFICE (ISO) RATING SCHEDULE. REQUIREMENTS FOR ADDITIONAL HYDRANTS SHALL BE BASED ON THE FOLLOWING CRITERIA: TYPE OF CONSTRUCTION, OCCUPANCY TYPE, SQUARE FOOTAGE, AND EXPOSURES.
2. FIRE PROTECTION SYSTEM MAINS ON PRIVATE PROPERTY SHALL MEET THE REQUIREMENTS AND SHALL BE INSTALLED PER NFPA 24, STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES AND/OR NFPA 13, STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS AS ADOPTED IN THE FLORIDA FIRE PREVENTION CODE.
3. A WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OR PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ACCUMULATES PER 8.7.2.1, NFPA 241, SAFEGUARDING CONSTRUCTION, ALTERATION, AND DEMOLITION OPERATIONS AS ADOPTED IN THE FLORIDA FIRE PREVENTION CODE.
4. AS PROVIDED PER FLORIDA STATUTE 633, 633.0215 (6) AND THE FLORIDA FIRE PREVENTION CODE, THE INSTALLATION OF AN APPROVED FIRE SPRINKLER SYSTEM IS CONSIDERED AN ACCEPTABLE ALTERNATIVE TO IDENTIFIED PRESCRIPTIVE ACCESS REQUIREMENTS.
5. FIRE PROTECTION SYSTEM MAINS ON PRIVATE PROPERTY SHALL MEET THE REQUIREMENTS AND SHALL BE INSTALLED PER NFPA 13, STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS AS ADOPTED IN THE FLORIDA FIRE PREVENTION CODE.
6. PER FS 633.539 (1) (A), THE FIRE PROTECTION MAIN MUST BE INSTALLED BY A CLASS I, II, OR V CONTRACTOR FROM THE POINT OF SERVICE TO 1 FOOT ABOVE FINISHED FLOOR GRADE
7. WHERE REQUIRED BY THE AHJ, FIRE HYDRANTS SUBJECT TO VEHICULAR DAMAGE SHALL BE PROTECTED UNLESS LOCATED WITHIN A PUBLIC RIGHT OF WAY (18.5.8 PROTECTION, NFPA 1).
8. FIRE HYDRANTS SHALL BE INSTALLED SO THAT THE LARGE 4 ½ INCH (STEAMER) PORT IS FACING THE ROADWAY IT IS ACCESSED BY.
9. FIRE HYDRANTS SHALL BE LOCATED NOT LESS THAN 40 FEET FROM BUILDINGS TO BE PROTECTED, UNLESS APPROVED BY THE AHJ (7.2.3 NFPA 24).
10. FIRE HYDRANTS SHALL BE INSTALLED SO THAT THE OPERATING NUT OF THE LARGEST PORT IS NO LESS THAN 18 IN BUT NO MORE THAN 30 IN ABOVE FINAL GRADE.
11. THE NUMBER AND TYPE OF FIRE HYDRANTS AND CONNECTIONS TO OTHER APPROVED WATER SUPPLIES SHALL BE CAPABLE OF DELIVERING THE REQUIRED FIRE FLOW AND SHALL BE PROVIDED AT APPROVED LOCATIONS.
12. THE BODY OF PUBLIC FIRE HYDRANTS SHALL BE PAINTED YELLOW IN COLOR. THE BODY OF PRIVATE FIRE HYDRANTS SHALL BE PAINTED SILVER IN COLOR. COLOR CODING OF THE HYDRANTS TO ILLUSTRATE AVAILABLE FIRE FLOW AMOUNTS SHALL BE ACCOMPLISHED PER THE GUIDELINES OF NFPA 291, RECOMMENDED PRACTICES FOR FIRE FLOW TESTING AND MARKING OF HYDRANTS.
13. FIRE DEPARTMENT CONNECTIONS AND FIRE HYDRANTS SHALL NOT BE OBSTRUCTED IN ANY MANNER. NO LESS THAN 7.5FT OF CLEARANCE SHALL BE MAINTAINED FROM THE CENTERLINE OF THE HYDRANT AND SAID CLEARANCE SHALL EXTEND OUT TO THE ROADWAY. NO LESS THAN 4.0FT OF CLEARANCE SHALL BE MAINTAINED BEHIND THE CENTERLINE OF THE HYDRANT. VERTICAL CLEARANCE OF NOT LESS THAN 8FT SHALL BE MAINTAINED IN THE REQUIRED CLEARANCE AREA.
14. FIRE DEPARTMENT CONNECTIONS FOR SPRINKLER OR STANDPIPE SYSTEMS. ALL NEW BUILDINGS AND LEVEL 3 ALTERATIONS SHALL REQUIRE LOCKING CAPS FOR THE FIRE DEPARTMENT CONNECTIONS FOR WATER-BASED FIRE SUPPRESSION SYSTEMS. (CODE 1995, § 50.195; ORD. NO. 841, § 12, 1- 20-2004; ORD. NO. 2014-11 , § 2, 10-21-2014)
15. ALL FIRE DEPARTMENT CONNECTIONS SHALL HAVE SIGNAGE POSTED "NO PARKING, FIRE DEPARTMENT CONNECTION". SAID SIGNAGE SHALL INDICATE THE PHYSICAL ADDRESS OF THE BUILDING SERVED BY THE FIRE DEPARTMENT CONNECTION.
16. CLEARANCES AROUND THE PROPOSED FIRE DEPARTMENT CONNECTION MUST BE AT LEAST 3 FEET IN FRONT OF AND TO EITHER SIDE OF THE APPLIANCE PER (18.3.4.2, NFPA 1 AS ADOPTED IN THE FFPC).
17. POST INDICATOR VALVES SHALL BE LOCATED NOT LESS THAN 40 FEET FROM THE BUILDING (6.2.11 NFPA 24)
18. THE TURNING RADIUS OF A FIRE DEPARTMENT ACCESS ROAD SHALL BE AS APPROVED BY THE AHJ (AUTHORITY HAVING JURISDICTION). THE TURNING RADIUS ACCEPTABLE FOR THE CITY OF MOUNT DORA IS 40 FEET OUTSIDE AND 20 FEET INSIDE BASED UPON CURRENT VEHICLE SPECIFICATIONS.
19. FIRE DEPARTMENT ACCESS ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS AND SHALL BE PROVIDED WITH A SURFACE SUITABLE FOR ALL WEATHER DRIVING CAPABILITIES. (18.2.3.4.2, NFPA 1, AS ADOPTED IN THE FLORIDA FIRE PREVENTION CODE)
20. THE DESIGN WEIGHT TO ACCOMMODATE FIRE APPARATUS SHALL BE A MINIMUM OF 32 TONS (18.2.3.1.5, NFPA 1, AS ADOPTED IN THE FLORIDA FIRE PREVENTION CODE).
21. ACCESS ROADWAYS TO THE CONSTRUCTION SITE SHALL BE PROVIDED AND ARRANGED IN ACCORDANCE WITH SECTION 7.5.5, NFPA 241, SAFEGUARDING CONSTRUCTION, ALTERATION, AND DEMOLITION OPERATIONS AS ADOPTED IN THE FLORIDA FIRE PREVENTION CODE.

REVISION	DATE
1	
2	
3	
4	
5	
6	
7	
8	

INSPIRE DONNELLY WOODS
MOUNT DORA, FL

C-101
EMERGENCY VEHICLE ACCESS PLAN

HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33580

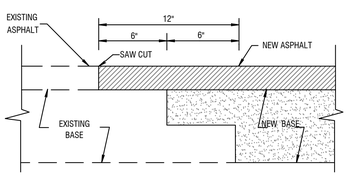
DATE:	6/5/2023
DESIGNED BY:	CCH
DRAWN BY:	NTD
CHECKED BY.:	CBS
JOB NO.:	045953.001

C-101

CHARLES C. HIOTT, PE
LICENSE # 54813

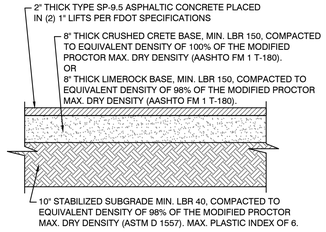
CONSTRUCTION SET

I:\045953\4-DESIGN\CADD\Sheets\ACC ISO EMERGENCY PLAN.dwg
Smith, Cody
2:36:31 PM
6/5/2023



NOTE:
THIS METHOD OF PAVEMENT JOINT SHALL BE USED FOR ANY APPLICATION OR CONSTRUCTION WHERE PROPOSED PAVEMENT AND BASE WILL BE CONNECTED TO EXISTING PAVEMENT AND BASE.

TYPICAL ASPHALT PAVEMENT JOINT



TYPICAL ASPHALT PAVEMENT SECTION

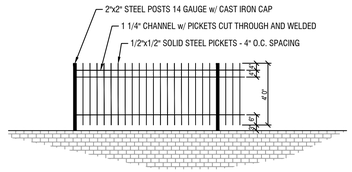
NOTES:
1. STABILIZED SUBGRADE SHALL EXTEND 12" PAST EDGE OF PAVEMENT. BASE SHALL EXTEND 6" PAST EDGE OF PAVEMENT (OR PAST BACK OF CURB IF CURBING IS INSTALLED ADJACENT TO PAVEMENT)
2. CONCRETE PAVEMENT MAY BE SUBSTITUTED FOR ASPHALT AT THE OWNER'S DISCRETION. CONSULT ENGINEER FOR REQUIRED CONCRETE PAVEMENT SECTION
3. IF EXISTING SUBGRADE CANNOT OBTAIN LBR 40, MIXING MAY BE REQUIRED.
4. MODIFICATIONS TO THE PAVEMENT SECTION MUST BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION
5. STABILIZED SUBGRADE AND BASE SHALL CONFORM TO FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. LATEST EDITION.
6. ASPHALT MIX DESIGN SHALL CONFORM TO FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
7. REFER TO GEOTECHNICAL REPORT FOR ADDITIONAL PAVEMENT REQUIREMENTS.

TYPICAL ASPHALT PAVEMENT DETAILS

(NTS)



RETAINING WALL MATERIAL SAMPLES



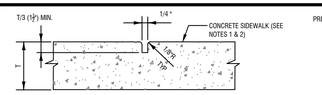
BLACK IRON ROD FENCE

RETAINING WALL FALL PROTECTION

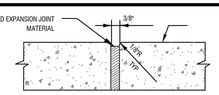
NOTES:
1. PROPOSED RETAINING WALL TO BE CONSTRUCTED WITH DECORATIVE BLOCK (EARTH TONE COLOR).
2. RETAINING WALLS TO BE PERMITTED SEPARATELY BY A STRUCTURAL ENGINEER.

TYPICAL RETAINING WALL DETAILS

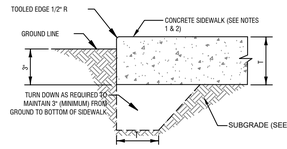
(NTS)



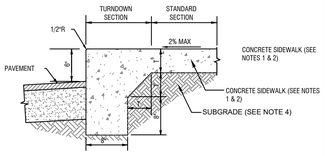
CONTRACTION JOINT Ⓒ SECTION



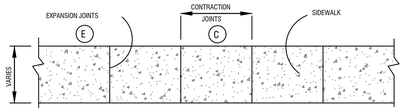
EXPANSION JOINT Ⓔ SECTION



STANDARD SIDEWALK & CONCRETE ISLAND NOSING SECTION



6" TURNDOWN SIDEWALK SECTION AT PAVEMENT



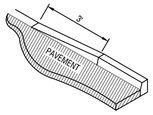
TYPICAL JOINT LAYOUT

JOINT SPACING (ON CENTER)					
SIDEWALK WIDTH	4'	5'	6'	8'	10'
CONTRACTION JT	4'	5'	6'	8'	10'
EXPANSION JOINT	48'	50'	60'	64'	80'

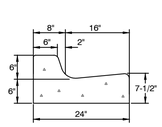
SIDEWALK NOTES:
1. SIDEWALK AND CONCRETE ISLAND NOSING SHALL BE CONSTRUCTED OF PORTLAND CEMENT CONCRETE, CLASS I, 3,000 PSI, W/FIBER MESH ADDITIVE (MIN. 5 LBS PER CUBIC YARD). MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
2. SIDEWALK AND CONCRETE ISLAND NOSING STANDARD THICKNESS (T) SHALL BE FOUR (4) INCHES.
3. EXPANSION JOINTS SHALL BE USED BETWEEN SIDEWALK/CONCRETE ISLAND NOSING AND CURBING, DRIVEWAYS, STRUCTURES AND ALL FIXED OBJECTS, AND TO SEPARATE THE NEW CONCRETE SIDEWALK FROM OTHER NEW OR EXISTING CONSTRUCTION.
4. SUBGRADE SHALL BE 12" STABILIZED SUBGRADE MIN LBR 40, COMPACTED TO EQUIVALENT DENSITY OF 98% OF THE MODIFIED PROCTOR MAX. DRY DENSITY (ASTM-D1557) AND SHALL EXTEND (1) FOOT PAST THE EDGE OF SIDEWALK/CONCRETE ISLAND NOSING.

TYPICAL CONCRETE SIDEWALK DETAILS

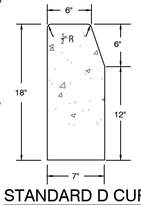
(NTS)



CURB TRANSITION TO GRADE



TYPE "F" CURB

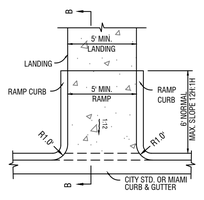


STANDARD D CURB

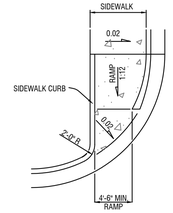
NOTES:
1. WHEN USED ON HIGH SIDE OF ROADWAYS SPILL CURB SHALL BE USED; THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT.
2. ALL CURB AND GUTTER SHALL BE 3,000 PSI CONCRETE.
3. SUBGRADE SHALL BE PREPARED AS DESCRIBED IN THE TYPICAL PAVEMENT SECTION.
4. CONTRACTION JOINTS SHALL BE SPACED AT INTERVALS OF 10 FT; WHERE CLOSER JOINT SPACING IS NECESSARY THE MINIMUM INTERVAL SHALL BE 4 FT.
5. EXPANSION JOINTS SHALL BE USED ADJACENT TO STRUCTURES AND EVERY 500 FT MAXIMUM.

TYPICAL CURB DETAILS

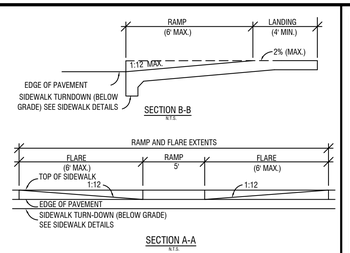
(NTS)

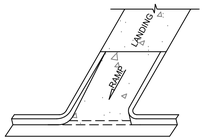


PLAN VIEW
N.T.S.



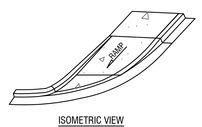
PLAN VIEW
N.T.S.





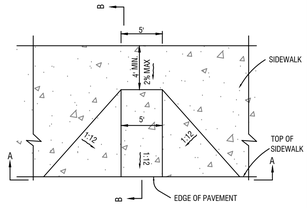
ISOMETRIC VIEW

CURB RAMP WITH CURBED RETURNS



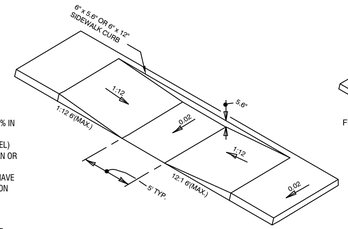
ISOMETRIC VIEW

CURB RAMP TYPE CR-G

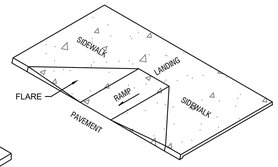


PLAN VIEW
N.T.S.

GENERAL CURB RAMP NOTES:
1. SEE SIDEWALK STANDARD DETAILS FOR CONCRETE THICKNESS AND SPECIFICATIONS.
2. THE MAXIMUM CURB RAMP RISE SHALL BE 6".
3. SIDEWALK, RAMP AND LANDING SLOPES SHOWN ARE THE MAXIMUM ALLOWED.
   3.1. LANDINGS SHALL HAVE CROSS-SLOPES LESS THAN OR EQUAL TO 2% IN ANY DIRECTION.
   3.2. RAMPS SHALL HAVE RUNNING SLOPES (IN THE DIRECTION OF TRAVEL) OF LESS THAN OR EQUAL TO 1V:12H AND CROSS SLOPES LESS THAN OR EQUAL TO 2%.
   3.3. SIDEWALKS THAT ARE NOT PART OF RAMPS OR LANDINGS SHALL HAVE RUNNING SLOPES LESS THAN OR EQUAL TO 1V:20H IN THE DIRECTION OF TRAVEL AND CROSS SLOPES LESS THAN OR EQUAL TO 2%.
4. JOINTS ARE NOT PERMITTED IN A RAMP BUT ARE PERMITTED AT SLOPE BREAKS.
5. ALL CURB RAMPS SHALL BE CONSTRUCTED PER FLORIDA BUILDING CODE (F.B.C.) SECTION 11, LATEST EDITION.
6. IF CURB RAMP IS LOCATED WITHIN PUBLIC RIGHT-OF-WAY, THE CURB RAMP SHALL BE CONSTRUCTED PER F.B.C. SECTION 11, LATEST EDITION AS WELL AS F.D.O.T. STANDARD INDEX NO. 304 AND SHALL INCLUDE A DETECTABLE WARNING 24" LONG AND FULL WIDTH OF THE RAMP. DETECTABLE WARNING SURFACE SHALL EXTEND FULL DEPTH AND WIDTH OF ALL CURB RAMPS, AND IF A WALK IS FLUSH WHERE IT CROSSES OR ADJOINS A VEHICULAR WAY THE BOUNDARY BETWEEN THE AREAS SHALL BE DEFINED BY A CONTINUOUS DETECTABLE WARNING SURFACE WHICH IS 36" WIDE.
7. SEE SITE PLAN FOR CURB RAMP LOCATION AND TYPES.
8. CONTRACTOR SHALL VERIFY FIELD CONDITIONS AND NOTIFY ENGINEER IMMEDIATELY IF F.B.C. AND/OR F.D.O.T. DESIGN CRITERIA CAN NOT BE MET, INCLUDING BUT NOT LIMITED TO LANDINGS, CURBS, LENGTHS, SLOPES, ETC.
9. ALTERNATE CURB RAMP CONFIGURATIONS SHALL BE APPROVED, IN WRITING, BY ENGINEER BEFORE CONSTRUCTION



SIDEWALK CURB RAMP

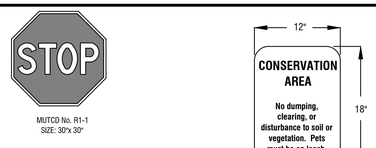


ISOMETRIC VIEW

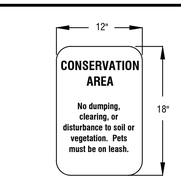
CURB RAMP WITH FLARED SIDES

TYPICAL CURB RAMP DETAILS

(NTS)

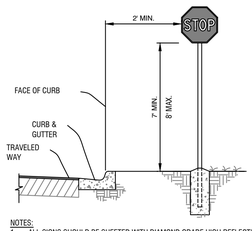


STOP SIGN



CONSERVATION AREA SIGN DETAIL

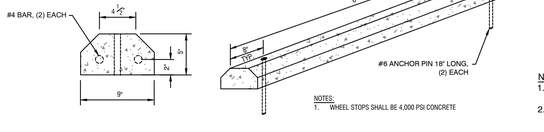
(NTS)



NOTES:
1. ALL SIGNS SHOULD BE SHEETED WITH DIAMOND GRADE HIGH REFLECTIVITY MATERIAL..
2. ALL SIGNS SHALL BE IN ACCORDANCE WITH CURRENT MUTCD GUIDELINES.
3. ALL SIGNS SHALL BE DOUBLE BOLTED TO POST W/STAINLESS STEEL HARDWARE.

TYPICAL STOP SIGN INSTALLATION

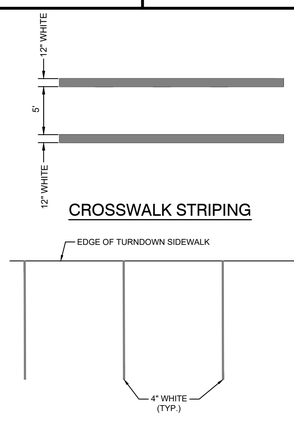
(NTS)



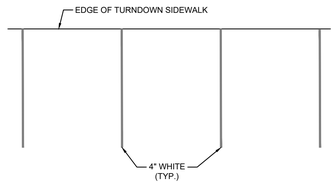
NOTES:
1. WHEEL STOPS SHALL BE 4,000 PSI CONCRETE

TYPICAL WHEELSTOP DETAIL

(NTS)



CROSSWALK STRIPING



PARKKING SPACE STRIPING

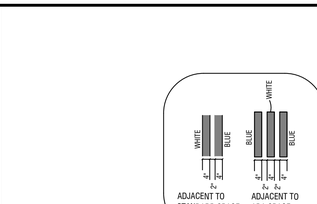


STOP BAR

NOTES:
1. ALL ON-SITE STRIPING SHALL BE REFLECTIVE WHITE UNLESS INDICATED OTHERWISE.
2. ALL STRIPING IN THE ROW SHALL BE THERMOPLASTIC AND CONFORM TO FDOT STANDARD PLANS AND SPECIFICATIONS, LATEST EDITIONS.

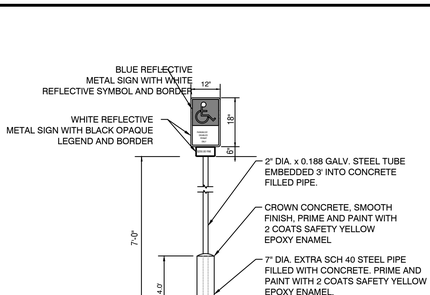
TYPICAL STRIPING DETAILS

(NTS)



NOTES:
1. DIMENSIONS ARE TO THE CENTERLINE OF WHITE MARKINGS.
2. THIS DETAIL IS FOR PAVEMENT MARKING AND SIGNAGE ONLY, NOT ADA CURB RAMPS. REFER TO GEOMETRY PLAN FOR ADA CURB RAMP TYPES AND LOCATIONS.
3. TINT BLUE PAVEMENT MARKINGS TO MATCH COLOR 15180 OF FEDERAL STANDARDS 595a.
4. REFER TO FDOT INDEX NO. 711-001 FOR ADDITIONAL DETAILS.
5. PAVEMENT SLOPES SHALL BE LESS THAN OR EQUAL TO 2% IN ANY DIRECTION IN THE EXTENT OF THE ADA PARKING SPACE AND ACCESS AISLE.

TYPICAL ADA PARKING SPACE DETAIL



DISABLED PARKING / SIGNING TYPICAL DETAIL



NOTE:
SYMBOL SHALL BE 3' OR 5' HIGH AND WHITE IN COLOR.

UNIVERSAL SYMBOL OF ACCESSIBILITY

TYPICAL ADA PARKING SPACE DETAILS

(NTS)

REVISION								
DATE								
	1	2	3	4	5	6	7	8

INSPIRE DONNELLY WOODS
MOUNT DORA, FL

C-102
SITE STANDARD DETAILS

HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33380

DATE:	6/5/2023
DESIGNED BY:	CCH
DRAWN BY:	NTD
CHECKED BY.:	CBS
JOB NO.:	045953.001

C-102

CHARLES C. HIOTT, PE
LICENSE # 54813

CONSTRUCTION SET

I:\45000s\45953\01\CAD\Sheets\ASC-400 DETAILS.dwg
Smith, Cody
6/5/2023 2:35:13 PM
1000CM.ctb

SCALE: 1" = 30'

SCALE IN FEET

EXISTING NORTH WETLAND

UPLAND BUFFER

EXISTING SOUTH WETLAND

UPLAND BUFFER

STORMWATER MANAGEMENT FACILITY SUMMARY

SWMF	SWMF Type	Bottom (ft)	Top (ft)	Normal Water Level (ft)	Weir (ft)	Peak Stage			
						25-yr 96-hr (ft)	25-yr 24-hr (ft)	10-yr 24-hr (ft)	Mean Annual (ft)
UGDRA N-1	U.G. Dry Ret.	129.00	133.50	N/A	132.40	-	133.28	132.96	-
UGDRA S-1	U.G. Dry Ret.	130.25	134.75	N/A	132.55	-	134.50	133.97	-
SWALE S-1	Dry. Ret.	155.00	157.00	N/A	156.50	-	156.57	156.54	-

NOTES: SEE SHEET C-203 FOR STORMWATER MANAGEMENT FACILITY TYPICAL SECTIONS AND OUTFALL STRUCTURE DETAILS.

LEGEND

- D-200 — DRAINAGE STRUCTURE NUMBER
- P-200 — DRAINAGE PIPE NUMBER
- PROPOSED STORM SEWER
- EXISTING STORM SEWER
- RETAINING WALL
- 100.00 — FINISHED GRADE SPOT ELEVATION
- 100.00 — EXISTING GRADE SPOT ELEVATION
- TW = 100.00 — FINISHED GRADE SPOT ELEVATION AT TOP OF RETAINING WALL
- BW = 100.00 — FINISHED GRADE SPOT ELEVATION AT BOTTOM OF RETAINING WALL
- 100 — FINISHED GRADE CONTOUR (MAJOR)
- 100 — FINISHED GRADE CONTOUR (MAJOR)
- 100 — EXISTING GRADE CONTOUR (MAJOR)
- 100 — EXISTING GRADE CONTOUR (MINOR)
- PROPOSED SURFACE FLOW DIRECTION

NOTES

1. SEE SHEET C-203 FOR PIPE AND STRUCTURE TABLES, SEE SHEET C-203 FOR SITE SECTION VIEW, SEE SHEET C-204 FOR GRADING AND DRAINAGE STANDARD DETAILS.
2. FOR DETAILS ON THE CONTECH UNDERGROUND DRY RETENTION SYSTEM SEE CONTECH PLANS PROVIDED UNDER SEPARATE COVER.
3. ALL ROOF DRAINS SHALL BE CONNECTED TO THE STORM DRAIN SYSTEM. REFER TO THE BUILDING PLANS FOR ADDITIONAL DETAILS AND EXACT LOCATIONS OF BUILDING DOWNSPOUT CONNECTIONS.
4. EXISTING SITE CONDITIONS BASED ON SITE BOUNDARY & TOPOGRAPHIC SURVEY PREPARED BY SOUTHEASTERN SURVEYING AND MAPPING CORPORATION, DATED 2/16/2023.
5. EXISTING ADJACENT WATER PLANT SITE CONDITIONS BASED ON BOUNDARY, TOPOGRAPHIC AND TREE SURVEY PREPARED BY HALFF ASSOCIATES, INC. DATED 1/12/2022.
6. THE CONTRACTOR MUST PROVIDE CCTV VIDEO (IN DVD FORMAT) OF THE NEWLY CONSTRUCTED STORMWATER PIPELINE FOR REVIEW AND ACCEPTANCE. THE CONTRACTOR SHALL PROVIDE AT LEAST 2 BUSINESS DAYS NOTIFICATION TO THE ENGINEER AND TO THE APPLICABLE AGENCIES TO SCHEDULE INSPECTIONS. PRIOR TO SUBMITTING VIDEOS TO THE ENGINEER FOR REVIEW, THE CONTRACTOR SHALL REVIEW THE VIDEOS FIRST FOR DISCREPANCIES AND FOR COMPLETENESS TO MAKE SURE THAT ALL PIPELINE SECTIONS ARE INCLUDED.
7. SEE ARCHITECTURAL PLANS FOR DETAILS OF INTERIOR FINISHED FLOOR ELEVATIONS AT ENTRANCES AND INTERIOR STAIRS AND OR RAMPS.

SEE GRADING CLOSE-UP (1)
SEE GRADING CLOSE-UP (2)
SEE GRADING CLOSE-UP (3)
SEE GRADING CLOSE-UP (4)
SEE GRADING CLOSE-UP (5)
SEE GRADING CLOSE-UP (6)
SEE GRADING CLOSE-UP (7)
SEE GRADING CLOSE-UP (8)
SEE GRADING CLOSE-UP (9)
SEE GRADING CLOSE-UP (10)
SEE GRADING CLOSE-UP (11)
SEE GRADING CLOSE-UP (12)
SEE GRADING CLOSE-UP (13)

UGDRA N-1
CONTECH UNDERGROUND RETENTION SYSTEM

UGDRA S-1
CONTECH UNDERGROUND RETENTION SYSTEM

PROPOSED ADULT LIVING FACILITY
4-STORY (55' HEIGHT)
GROUND FLOOR F.F.E = 141.50'

PROPOSED ADULT LIVING FACILITY
4-STORY (55' HEIGHT)
GROUND FLOOR F.F.E = 152.16'

COURTYARD
MAY INCLUDE LANDSCAPING, HARDSCAPING, AND POOL DESIGN BY OTHERS.
GENERAL GRADE = ±140.83

BUILDING STEP

PAD FOR WATER SERVICES
TOP EL. = 152.50
THICKENED EDGE ON EAST SIDE

EXISTING 12" STEEL PIPE CONTINUES NORTH TO REMAIN

EXISTING 12" STEEL PIPE CONTINUES WEST TO WEST SIDE OF DONNELLY STREET TO REMAIN

CAUTION, EXISTING UNDERGROUND WATER MAINS

CAUTION, EXISTING UNDERGROUND WATER MAINS

MATCHLINE SHEET C-201

SITE BENCHMARK
SET 5/8" IRON
"SSMC TRAV. PT"
ELEVATION=123.(

SITE BENC
SET 5/8"
"SSMC TRA
ELEVATION=

DONNELLY STREET
100' RIGHT OF WAY
PER PLAT OF MAP SECTION 11692-2602

LANDSCAPE BUFFER

DISTURBED BUFFER

LANDSCAPE BUFFER

NOT F
PARC
2019270
OWNER: CITY C

REVISION	DATE
1	
2	
3	
4	
5	
6	
7	
8	

INSPIRE DONNELLY WOODS
MOUNT DORA, FL

C-200
GRADING & DRAINAGE PLAN

HALFF
Office: 352.343.8481
Fax: 352.343.8495
902 North Sinclair Ave.
Tavares, Florida 32778
Certificate of Authorization Number: 33380

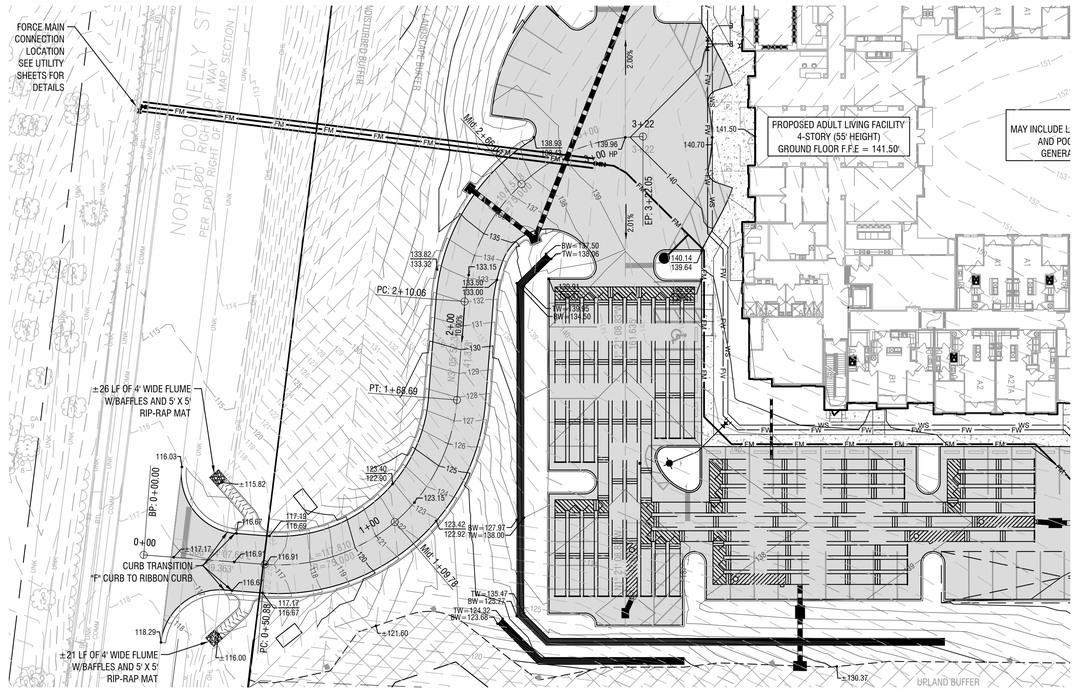
DATE:	6/5/2023
DESIGNED BY:	CCH
DRAWN BY:	NTD
CHECKED BY.:	CBS
JOB NO.:	045953.001

C-200

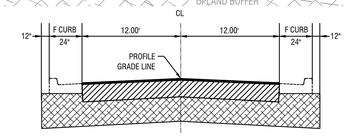
CHARLES C. HIOTT, PE
LICENSE # 54813

CONSTRUCTION SET

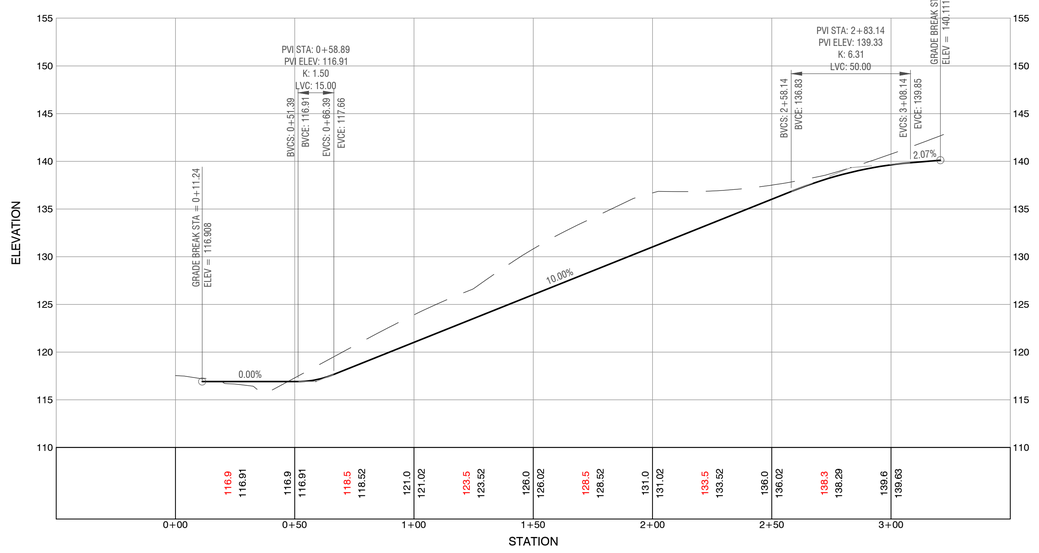
I:\045953\4-DESIGN\CIVIL\CADD\Sheets\ACC-C00 GRADING & DRAINAGE.dwg
Beth, Cody
9/5/2023 2:30:34 PM



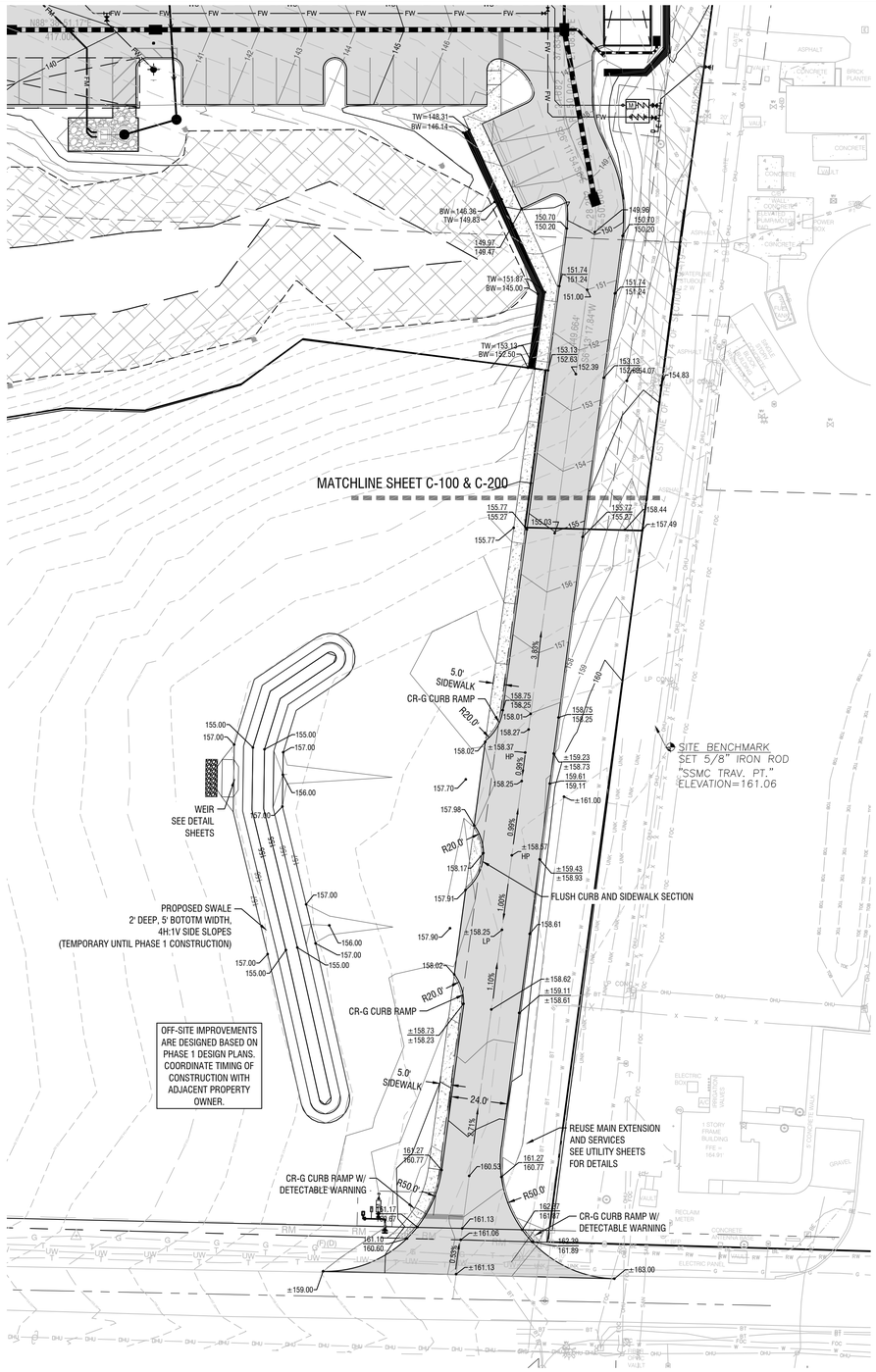
WEST DRIVEWAY PLAN

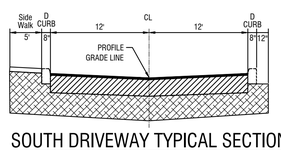


WEST DRIVEWAY TYPICAL SECTION



WEST DRIVEWAY PROFILE





SOUTH DRIVEWAY TYPICAL SECTION

SOUTHEAST DRIVEWAY PLAN

DATE	REVISION
	1
	2
	3
	4
	5
	6
	7
	8

INSPIRE DONNELLY WOODS
MOUNT DORA, FL

C-201
DRIVEWAYS & OFF-SITE IMPROVEMENTS

HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33380

DATE:	6/5/2023
DESIGNED BY:	CCH
DRAWN BY:	NTD
CHECKED BY.:	CBS
JOB NO.:	045953.001

C-201

CHARLES C. HIOTT, PE
LICENSE # 54813

CONSTRUCTION SET

I:\045xx\045953.001 (CAD)\Sheets\ACE-100 (OFF-SITE).dwg
Smith, Cody
6/5/2023 2:45:29 PM

PROPOSED ADULT LIVING FACILITY
4-STORY (55' HEIGHT)
GROUND FLOOR F.F.E = 141.50'

COURTYARD
MAY INCLUDE LANDSCAPING, HARDSCAPING, AND POOL DESIGN BY OTHERS.
GENERAL GRADE = ±140.83

BUILDING STEP

PROPOSED ADULT LIVING FACILITY
4-STORY (55' HEIGHT)
GROUND FLOOR F.F.E = 152.16'

OVER-EXCAVATION BOTTOM ELEVATIONS (TYP.)
OVER-EXCAVATION RETURN TO EXISTING CONFINING LAYER (TYP.)
17.0'
UGDRA S-1 FOOTPRINT TO BOTTOM OF OVER-EXCAVATION FOOTPRINT (TYP.)
1H:1V OVER-EXCAVATION RETURN SLOPE TO TOP OF EXISTING CONFINING LAYER
BOTTOM OF OVER-EXCAVATION FOOTPRINT
MEET EXISTING CONFINING LAYER AT APPROXIMATE ELEVATION 124.50

NORTH DONNELLY STREET
100' RIGHT OF WAY
PER FOOT RIGHT OF WAY MAP SECTION 11692-2602

NOT PLATTED
PARCEL ID
20192700030000110
OWNER: CITY OF MOUNT DORA

Scale: 1"= 1" = 30'
30 0 30 60
SCALE IN FEET

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'

REVISION	DATE
1	
2	
3	
4	
5	
6	
7	
8	

INSPIRE DONNELLY WOODS
MOUNT DORA, FL

C-202
SITE CROSS SECTIONS & OVER-EXCAVATION

HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33380

DATE:	6/5/2023
DESIGNED BY:	CCH
DRAWN BY:	NTD
CHECKED BY.:	CBS
JOB NO.:	045953.001

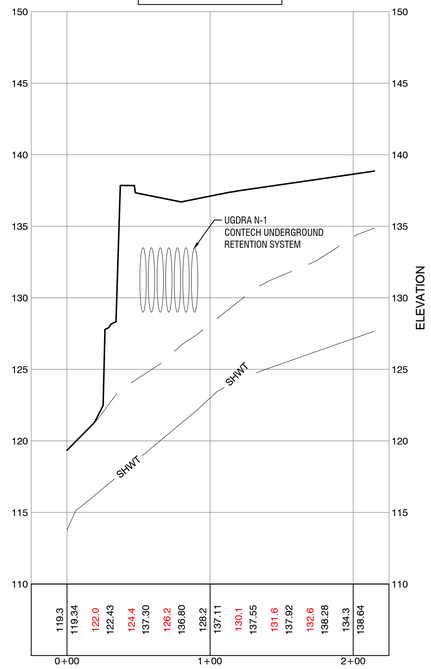
C-202

CHARLES C. HIOTT, PE
LICENSE # 54813

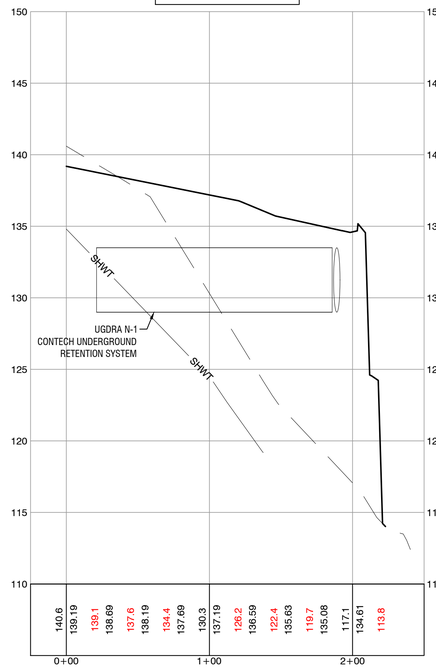
CONSTRUCTION SET

I:\045953.000\2307\CAD\Sheets\AVCC-020 SITE CROSS SECTIONS.dwg
Seth, Cody
2:36:41 PM
6/5/2023

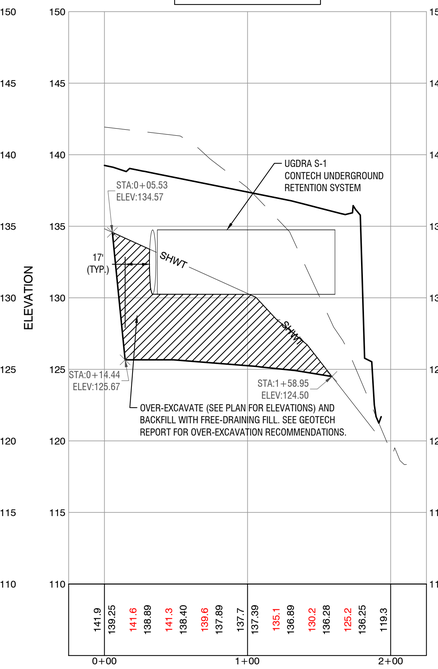
SECTION A-A



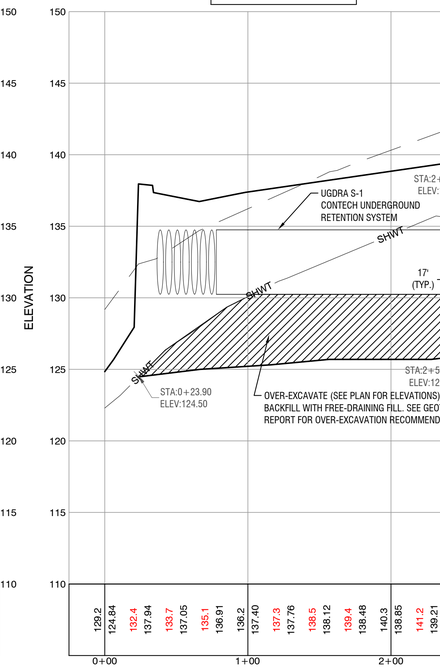
SECTION B-B



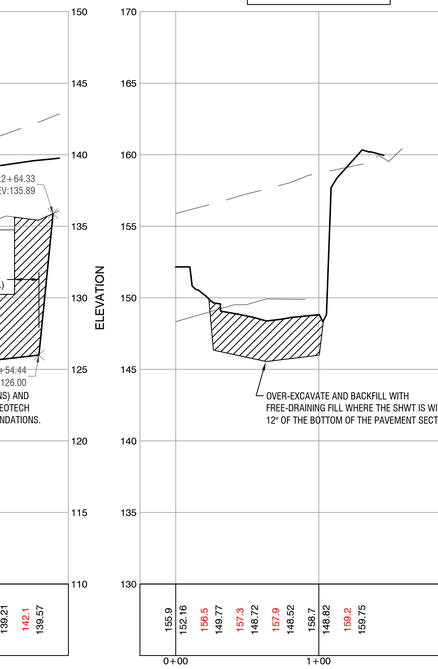
SECTION C-C

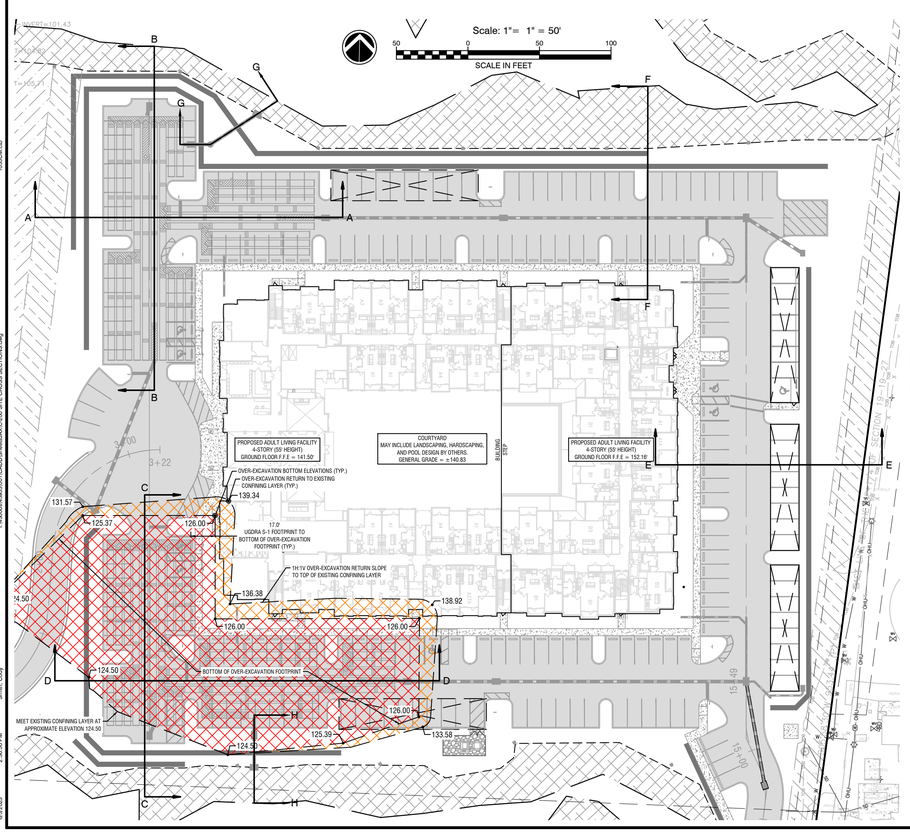


SECTION D-D

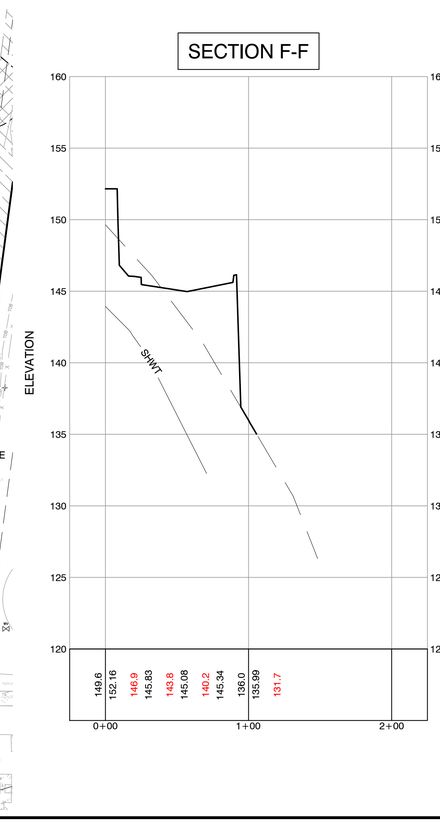


SECTION E-E

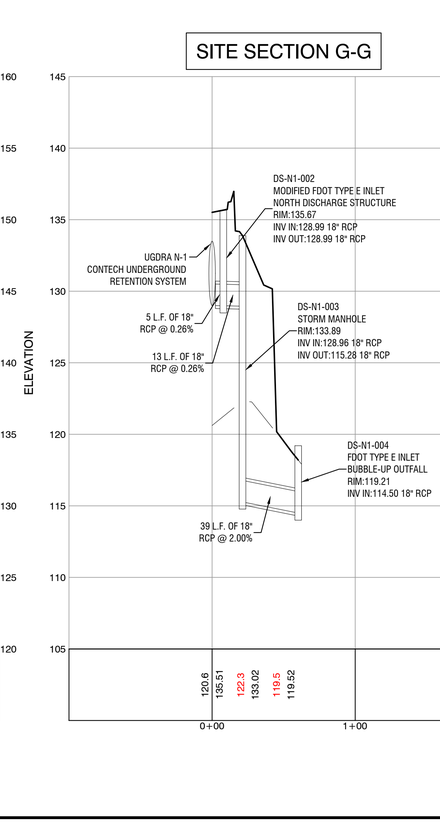




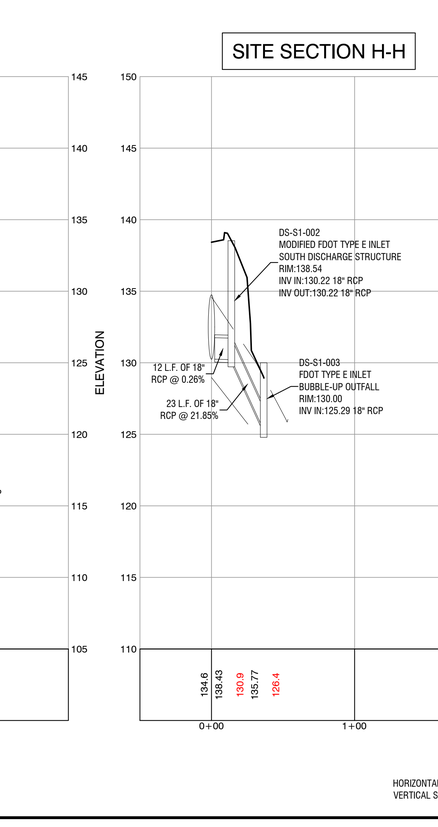
SECTION F-F



SITE SECTION G-G



SITE SECTION H-H



HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'

REVISION	DATE
1	
2	
3	
4	
5	
6	
7	
8	

INSPIRE DONNELLY WOODS
MOUNT DORA, FL

C-203
SITE CROSS SECTIONS

HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33580

DATE:	6/5/2023
DESIGNED BY:	CCH
DRAWN BY:	NTD
CHECKED BY.:	CBS
JOB NO.:	045953.001

C-203

CHARLES C. HIOTT, PE
LICENSE # 54813

CONSTRUCTION SET

I:\045953-4\SHEETS\CAD\Sheets\XXC-200 SITE CROSS SECTIONS.dwg
Smith, Cody
2:36:10 PM
5/5/2023
105DM.ctb

STRUCTURE TABLE

NAME	TYPE	DETAILS
CON-100	UNDERGROUND SYSTEM CONNECTION	RIM = 139.41' RCP INV IN = 130.25'
CON-101	UNDERGROUND SYSTEM CONNECTION	RIM = 138.47' RCP INV OUT = 130.25'
CON-102	UNDERGROUND SYSTEM CONNECTION	RIM = 135.96' RCP INV IN = 130.25'
CON-103	UNDERGROUND SYSTEM CONNECTION	RIM = 138.34' SDR-26 PVC INV IN = 132.50'
CON-200	UNDERGROUND SYSTEM CONNECTION	RIM = 138.58' RCP INV IN = 129.00'
CON-201	UNDERGROUND SYSTEM CONNECTION	RIM = 138.19' SDR-26 PVC INV IN = 131.25'
CON-203	UNDERGROUND SYSTEM CONNECTION	RIM = 134.66' RCP INV IN = 129.00'
CON-204	UNDERGROUND SYSTEM CONNECTION	RIM = 135.56' RCP INV OUT = 129.00'
DS-100	FDOT TYPE E INLET	RIM = 139.51' RCP INV IN = 132.76' RCP INV OUT = 130.27'
DS-101	FDOT TYPE E INLET	RIM = 140.14' RCP INV IN = 136.39' RCP INV OUT = 133.39'
DS-102	FDOT TYPE E INLET	RIM = 146.22' SDR-26 PVC INV IN = 140.30' SDR-26 PVC INV IN = 142.01' RCP INV IN = 140.30' RCP INV OUT = 140.30'
DS-103	FDOT TYPE E INLET	RIM = 149.37' RCP INV OUT = 141.64'
DS-108	FDOT TYPE C INLET	RIM = 146.63' SDR-26 PVC INV OUT = 143.38'
DS-114	FDOT TYPE E INLET SOUTH DISCHARGE STRUCTURE	RIM = 135.75' RCP INV OUT = 130.27'
DS-200	FDOT TYPE E INLET	RIM = 138.68' RCP INV IN = 133.05' RCP INV OUT = 129.01'
DS-201	FDOT TYPE E INLET	RIM = 140.19' RCP INV IN = 136.44' RCP INV OUT = 133.48'
DS-202	FDOT TYPE E INLET	RIM = 146.09' SDR-26 PVC INV IN = 140.65' RCP INV IN = 142.72' RCP INV OUT = 140.65'
DS-203	FDOT TYPE C INLET	RIM = 146.35' RCP INV OUT = 142.87'
DS-208	FDOT TYPE C INLET	RIM = 135.73' RCP INV IN = 132.25' RCP INV OUT = 130.85'
DS-209	FDOT TYPE C INLET	RIM = 135.91' RCP INV OUT = 132.43'
DS-210	FDOT TYPE E INLET NORTH DISCHARGE STRUCTURE	RIM = 134.50' RCP INV OUT = 129.02'
DS-N1-002	MODIFIED FDOT TYPE E INLET NORTH DISCHARGE STRUCTURE	RIM = 135.67' RCP INV IN = 128.99' RCP INV OUT = 128.99'
DS-N1-003	STORM MANHOLE	RIM = 133.89' RCP INV IN = 128.96' RCP INV OUT = 115.28'
DS-N1-004	FDOT TYPE E INLET BUBBLE-UP OUTFALL	RIM = 119.21' RCP INV IN = 114.50'
DS-S1-002	MODIFIED FDOT TYPE E INLET SOUTH DISCHARGE STRUCTURE	RIM = 138.54' RCP INV IN = 130.22' RCP INV OUT = 130.22'
DS-S1-003	FDOT TYPE E INLET BUBBLE-UP OUTFALL	RIM = 130.00' RCP INV IN = 125.29'

STORM FITTING TABLE

NAME	TYPE	CONNECTION DETAILS
DF-104	45° BEND	12" SDR-26 PVC IN 12" SDR-26 PVC OUT INV = 142.11
DF-105	WYE	12" SDR-26 PVC IN 12" SDR-26 PVC IN 12" SDR-26 PVC OUT INV = 142.53
DF-106	45° BEND	12" SDR-26 PVC IN 12" SDR-26 PVC OUT INV = 143.21
DF-107	45° BEND	12" SDR-26 PVC IN 12" SDR-26 PVC OUT INV = 143.27
DF-109	CLEANOUT	12" SDR-26 PVC OUT INV = 142.22
DF-110	WYE	12" SDR-26 PVC IN 12" SDR-26 PVC IN 12" SDR-26 PVC OUT INV = 140.48
DF-111	45° BEND	12" SDR-26 PVC IN 12" SDR-26 PVC OUT INV = 140.51
DF-112	ROOF DRAIN STUB-OUT	12" SDR-26 PVC OUT INV = 140.69
DF-113	CLEANOUT	12" SDR-26 PVC OUT INV = 140.50
DF-115	ROOF DRAIN STUB-OUT	12" SDR-26 PVC OUT INV = 132.99
DF-204	45° BEND	12" SDR-26 PVC IN 12" SDR-26 PVC OUT INV = 140.86
DF-205	ROOF DRAIN STUB-OUT	12" SDR-26 PVC OUT INV = 141.04
DF-206	CLEANOUT	12" SDR-26 PVC OUT INV = 140.85
DF-207	ROOF DRAIN STUB-OUT	12" SDR-26 PVC OUT INV = 131.81
DF-1006	WYE	12" SDR-26 PVC IN 12" SDR-26 PVC IN 12" SDR-26 PVC OUT INV = 140.83

STORM DRAINAGE PIPES

NAME	SIZE	TYPE	LENGTH	SLOPE	START STRUCTURE	END STRUCTURE
DP-100	24"	RCP	7.79'	0.28%	DS-100	CON-100
DP-101	18"	RCP	62.04'	1.02%	DS-101	DS-100
DP-102	18"	RCP	174.70'	2.24%	DS-102	DS-101
DP-103	15"	RCP	73.75'	1.82%	DS-103	DS-102
DP-104	12"	SDR-26 PVC	5.73'	1.73%	DF-104	DS-102
DP-105	12"	SDR-26 PVC	13.92'	3.00%	DF-105	DF-104
DP-106	12"	SDR-26 PVC	22.52'	3.00%	DF-106	DF-105
DP-107	12"	SDR-26 PVC	2.00'	3.00%	DF-107	DF-106
DP-108	12"	SDR-26 PVC	3.62'	3.00%	DS-108	DF-107
DP-109	12"	SDR-26 PVC	2.00'	1.10%	DF-109	DF-105
DP-110	12"	SDR-26 PVC	40.00'	0.44%	DF-110	DS-102
DP-111	12"	SDR-26 PVC	7.07'	0.44%	DF-111	DF-110
DP-112	12"	SDR-26 PVC	40.82'	0.44%	DF-112	DF-111
DP-113	12"	SDR-26 PVC	5.00'	0.44%	DF-113	DF-110
DP-114	18"	RCP	6.63'	0.26%	DS-114	CON-102
DP-115	18"	RCP	11.65'	0.26%	CON-101	DS-S1-002
DP-116	18"	RCP	22.56'	21.85%	DS-S1-002	DS-S1-003
DP-117	12"	SDR-26 PVC	24.47'	2.00%	DF-115	CON-103
DP-200	24"	RCP	6.93'	0.21%	DS-200	CON-200
DP-201	18"	RCP	124.27'	0.35%	DS-201	DS-200
DP-202	18"	RCP	169.64'	2.48%	DS-202	DS-201
DP-203	15"	RCP	46.52'	0.33%	DS-203	DS-202
DP-204	12"	SDR-26 PVC	40.00'	0.44%	DF-1006	DS-202
DP-205	12"	SDR-26 PVC	7.07'	0.44%	DF-204	DF-1006
DP-206	12"	SDR-26 PVC	40.77'	0.44%	DF-205	DF-204
DP-207	12"	SDR-26 PVC	5.00'	0.44%	DF-206	DF-1006
DP-208	12"	SDR-26 PVC	28.02'	2.00%	DF-207	CON-201
DP-209	15"	RCP	112.32'	1.65%	DS-208	CON-202
DP-210	15"	RCP	34.44'	0.52%	DS-209	DS-208
DP-211	18"	RCP	6.24'	0.26%	DS-210	CON-203
DP-N1-001	18"	RCP	5.50'	0.26%	CON-204	DS-N1-002
DP-N1-002	18"	RCP	13.42'	0.26%	DS-N1-002	DS-N1-003
DP-N1-003	18"	RCP	38.90'	2.00%	DS-N1-003	DS-N1-004

STORMWATER PIPE AND STRUCTURE NOTES

1. ALL STORMWATER PIPE UNDER 12", INCLUDING ALL ROOF DRAIN CONNECTIONS, SHALL BE SDR-26 PVC.
2. ALL STORMWATER PIPE 15" AND LARGER SHALL BE CLASS III, WALL B, AND ALL JOINTS SHALL BE FABRIC WRAPPED.
3. ALL STORM STRUCTURES IN PAVED AREAS FOR VEHICULAR TRAFFIC SHALL INCLUDE HS-20 HEAVY DUTY TRAFFIC RATED CAST IRON LIDS OR GRATES.
4. ALL CLEANOUTS IN SIDEWALK/PAVEMENT SHALL INCLUDE CAST IRON HS-20 TRAFFIC RATED LIDS INSTALLED FLUSH WITH FINISHED GRADE.
5. ALL CLEANOUTS IN LANDSCAPED AREAS SHALL INCLUDE CAST IRON LIDS INSTALLED 3" ABOVE FINISHED GRADE WITH A 12" X 12" MIN. CONCRETE PAD.

DATE	REVISION
	1
	2
	3
	4
	5
	6
	7
	8

INSPIRE DONNELLY WOODS
MOUNT DORA, FL

C-204
STORMWATER PIPE & STRUCTURE TABLES

HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33580

DATE:	6/5/2023
DESIGNED BY:	CCH
DRAWN BY:	NTD
CHECKED BY.:	CBS
JOB NO.:	045953.001

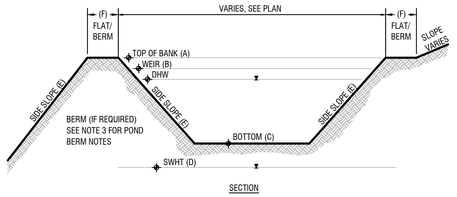
C-204

CHARLES C. HIOTT, PE
LICENSE # 54813

CONSTRUCTION SET

I:\4000\045953\01\CAD\Sheets\CIVIL\C-200 GRADING & DRAINAGE.dwg
Smith, Cody
6/5/2023 2:36:09 PM
045953.dtb

STORMWATER MANAGEMENT FACILITY SUMMARY									
SWMF	SWMF Type	Bottom (ft)	Top (ft)	Normal Water Level (ft)	Weir (ft)	Peak Stage			
						25-yr 96-hr (ft)	25-yr 24-hr (ft)	10-yr 24-hr (ft)	Mean Annual (ft)
UGDRA N-1	U.G. Dry Ret.	129.00	133.50	N/A	132.40	-	133.28	132.96	-
UGDRA S-1	U.G. Dry Ret.	130.25	134.75	N/A	132.55	-	134.50	133.97	-
SWALE S-1	Dry. Ret.	155.00	157.00	N/A	156.50	-	156.57	156.54	-

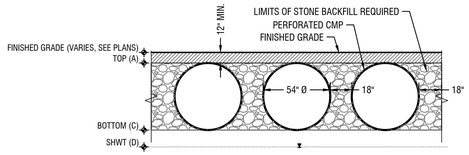


SECTION

NOTES:
1. SIDE SLOPES NOT TO EXCEED 4:1.
2. SOD ALL SIDE SLOPES & TOP OF BERMS WITH SAND-GROWN SOD. SEED & MULCH POND BOTTOMS.
3. FILL MATERIAL FOR BERMING OF PONDS TO BE CLEAN FINE SAND WITH LESS THAN 5% FINES (PASSING ASTM SIEVE NO. 200), AND HAVE MIN. IN PLACE VERTICAL PERMEABILITY RATE OF 20 FT/DAY OR GREATER.

SWMF SECTION DATA						
SWMF	(A) FT. EL.	(B) FT. EL.	(C) FT. EL.	(D) H:V	(E) FT.	(F) FT. EL
SWALE S-1	157.00	156.50	155.00	153.00	4:1	-

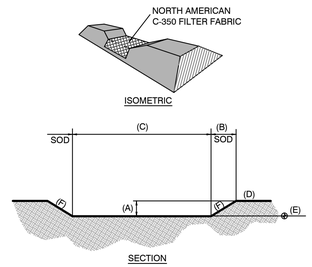
TYPICAL SWMF SECTION DETAILS
(NTS)



NOTES:
1. SEE CONTECH PLANS PROVIDED AS SHEETS C-204 THROUGH C-207 FOR ADDITIONAL DETAILS.
2. SEE SHEET C-200 FOR FINISHED GRADE ELEVATIONS.
3. UGDRA S-1 REQUIRES OVER-EXCAVATION TO ELEVATION 127.60', SEE SHEET C-202 FOR SITE CROSS SECTIONS. REFER TO GEOTECH REPORT FOR OVER-EXCAVATION AND BACKFILL RECOMMENDATIONS.

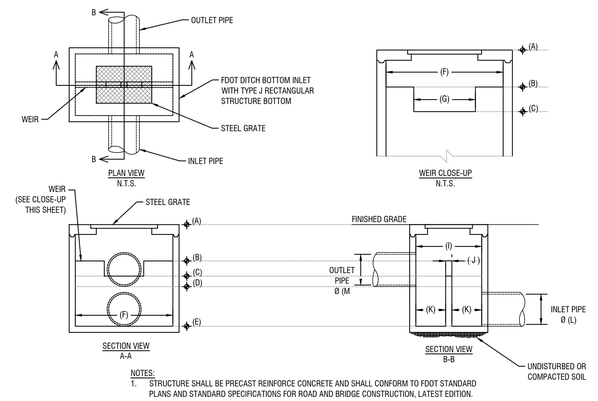
SWMF SECTION DATA					
SWMF	(A) FT. EL.	(B) FT. EL.	(C) FT. EL.	(D) FT. EL.
UGDRA N-1	133.50	132.40	129.00	124.08
UGDRA S-1	134.75	132.55	130.25	125.75

CONTECH UNDERGROUND DRY RETENTION SYSTEM DETAILS
(NTS)



SWMF	(A) FT.	(B) FT.	(C) FT.	(D) FT. EL.	(E) FT. EL.	(F) H:V
SWALE S-1	0.50	2.00	5.00	157.00	156.50	4:1

EARTHEN WEIR DETAILS
(NTS)



NOTES:
1. STRUCTURE SHALL BE PRECAST REINFORCE CONCRETE AND SHALL CONFORM TO FDOT STANDARD PLANS AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.

DISCHARGE STRUCTURE DATA														
SWMF	TYPE	(A) FT. EL.	(B) FT. EL.	(C) FT. EL.	(D) FT. EL.	(E) FT. EL.	(F) FT.	(G) IN.	(H) FT.	(I) FT.	(J) FT.	(K) FT.	(L) IN.	(M) IN.
UGDRA N-1	TYPE E	135.67	133.40	132.40	128.99	128.99	3.00	0.50	-	4.50	0.50	2.00	18	18
UGDRA S-1	TYPE E	138.54	134.65	132.55	130.22	130.22	3.00	0.17	-	4.50	0.50	2.00	18	18

DISCHARGE STRUCTURE DETAILS
(NTS)

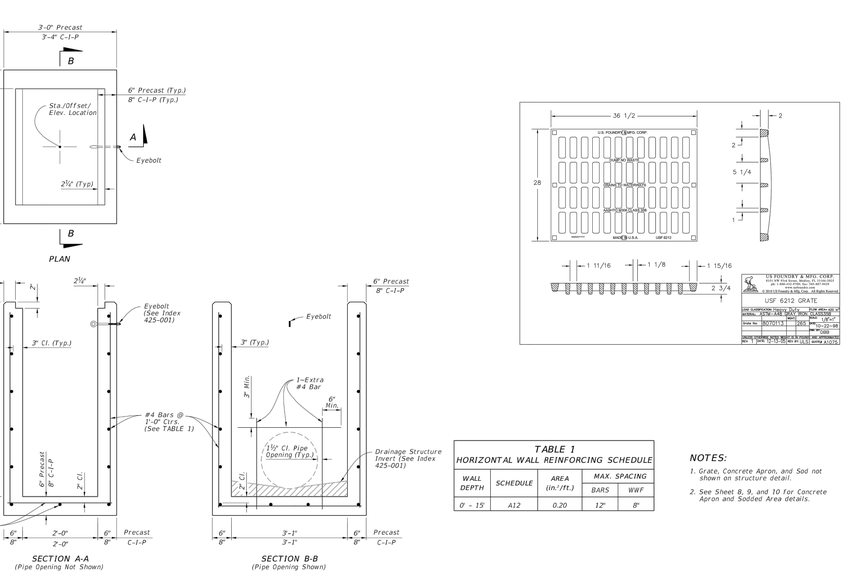


TABLE 1 HORIZONTAL WALL REINFORCING SCHEDULE				
WALL DEPTH	SCHEDULE	AREA (in.²/ft.)	MAX. SPACING	
			BARS	WWF
0' - 15'	A12	0.20	12"	8"

NOTES:
1. Grate, Concrete Apron, and Sod not shown on structure detail.
2. See Sheet 8, 9, and 10 For Concrete Apron and Sodded Area details.

DIMENSIONAL AND REINFORCING DETAILS

TYPE C - DIMENSIONAL, REINFORCING, AND STEEL GRATE DETAILS

LAST REVISION 10/01/20	REVISION	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	DITCH BOTTOM INLET TYPES C, D, E, AND H	INDEX 425-052	SHEET 2 of 14

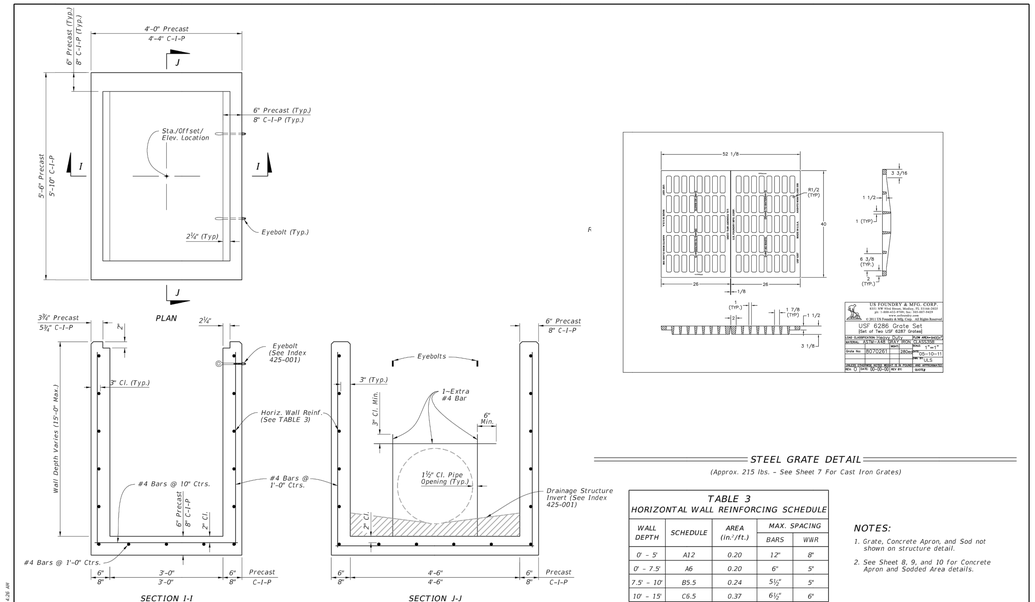


TABLE 3 HORIZONTAL WALL REINFORCING SCHEDULE				
WALL DEPTH	SCHEDULE	AREA (in.²/ft.)	MAX. SPACING	
			BARS	WWR
0' - 5'	A12	0.20	12"	8"
0' - 7.5'	A6	0.20	6"	5"
7.5' - 10'	B5.5	0.24	5½"	5"
10' - 15'	C6.5	0.37	6½"	6"

NOTES:
1. Grate, Concrete Apron, and Sod not shown on structure detail.
2. See Sheet 8, 9, and 10 For Concrete Apron and Sodded Area details.

DIMENSIONAL AND REINFORCING DETAILS

TYPE E - DIMENSIONAL, REINFORCING, AND STEEL GRATE DETAILS

LAST REVISION 10/01/20	REVISION	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	DITCH BOTTOM INLET TYPES C, D, E, AND H	INDEX 425-052	SHEET 4 of 14

REVISION	DATE
1	
2	
3	
4	
5	
6	
7	
8	

INSPIRE DONNELLY WOODS
MOUNT DORA, FL

C-205
DRAINAGE STANDARD DETAILS

HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33380

DATE:	6/5/2023
DESIGNED BY:	CCH
DRAWN BY:	NTD
CHECKED BY.:	CBS
JOB NO.:	045953.001

C-205

CHARLES C. HIOTT, PE
LICENSE # 54813

CONSTRUCTION SET

I:\45000s\45953\00\CAD\Sheets\AVC-00 DETAILS.dwg
Smith, Cody
10/20/2022 2:39:58 PM
8.5x14

PROJECT SUMMARY

CALCULATION DETAILS
- LOADING = HS20/HS25
- APPROX. LINEAR FOOTAGE = 2,216 LF

STORAGE SUMMARY
- STORAGE VOLUME REQUIRED = 46,000 CF
- PIPE STORAGE VOLUME = 35,243 CF
- BACKFILL STORAGE VOLUME = 10,923 CF
- TOTAL STORAGE PROVIDED = 46,176 CF

PIPE DETAILS
- DIAMETER = 54"
- CORRUGATION = 5x1
- BARREL SPACING = 18"
- COATING = ALT2
- WALL TYPE = PERFORATED

BACKFILL DETAILS
- WIDTH AT ENDS = 18"
- ABOVE PIPE = 0"
- WIDTH AT SIDES = 18"
- BELOW PIPE = 0"

KEY

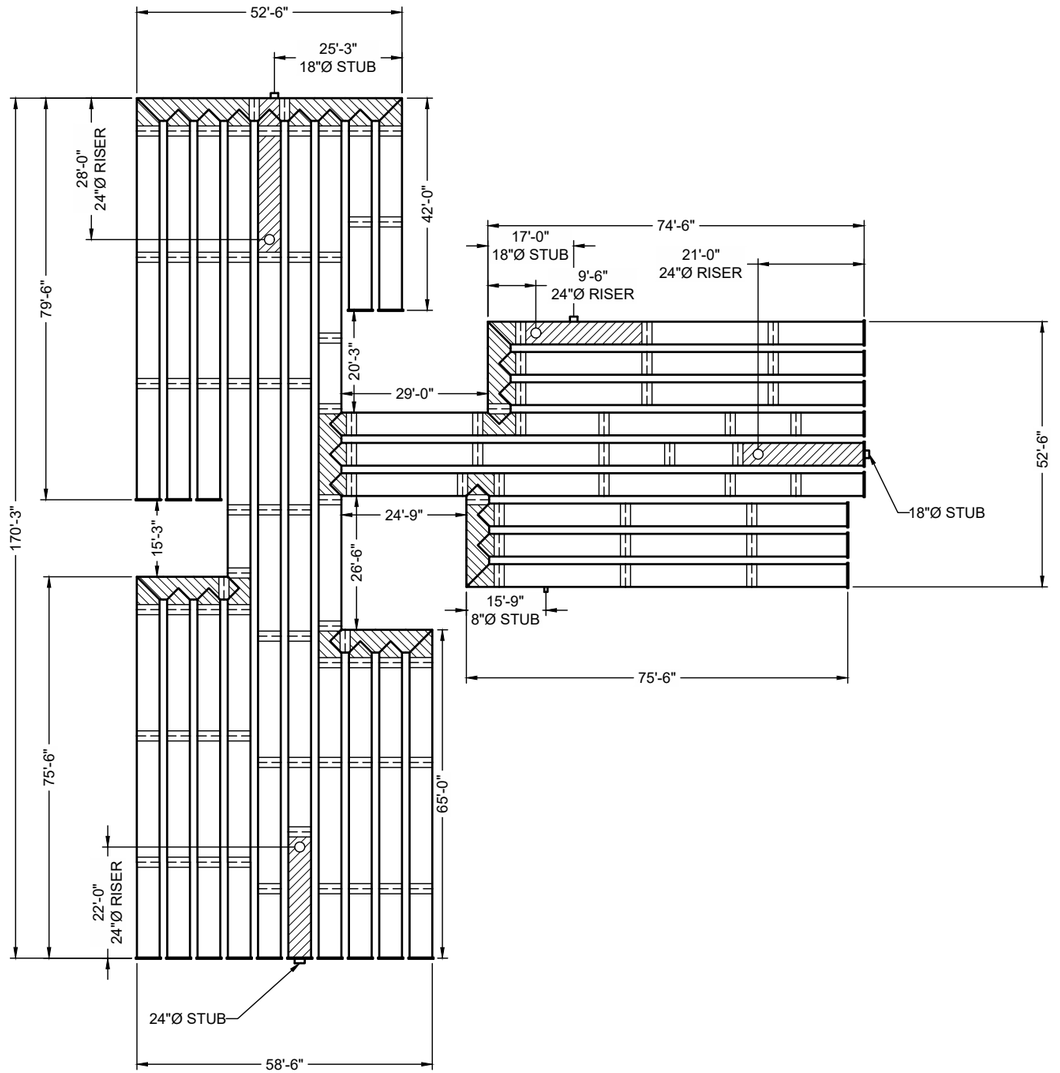
PERFORATED

CONTAINMENT ROW PRETREATMENT

SOLID MANIFOLD

NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE 2⅔" x ½" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.



ASSEMBLY

SCALE: 1" = 30'

The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither this drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.

If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech accepts no liability for designs based on missing, incomplete or inaccurate information supplied by others.

DATE	REVISION DESCRIPTION	BY

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH DYODS DRAWING

#744,967 Donnelly Woods
North System
Mount Dora, FL
54" PERFORATED RETENTION SYSTEM

PROJECT No.:	SEQ. No.:	DATE:
18651	28986	4/3/2023
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: 1		

\\PSUWOKTWCRMF01.QUIKRETE.NET\MERLIN\PROJECT\ACTIVE\744900\744967\744967-10-CMP DETENTION\DYODS\DONNELLY WOODS - NORTH WETLAND - DYO B.DWG 4/3/2023 3:21 PM

PROJECT SUMMARY

CALCULATION DETAILS
- LOADING = HS20/HS25
- APPROX. LINEAR FOOTAGE = 2,210 LF

STORAGE SUMMARY
- STORAGE VOLUME REQUIRED = 46,100 CF
- PIPE STORAGE VOLUME = 35,148 CF
- BACKFILL STORAGE VOLUME = 10,969 CF
- TOTAL STORAGE PROVIDED = 46,118 CF
- STONE VOID = 40%

PIPE DETAILS
- DIAMETER = 54"
- CORRUGATION = 5x1
- BARREL SPACING = 18"
- COATING = ALT2
- WALL TYPE = PERFORATED

BACKFILL DETAILS
- WIDTH AT ENDS = 18"
- ABOVE PIPE = 0"
- WIDTH AT SIDES = 18"
- BELOW PIPE = 0"

KEY

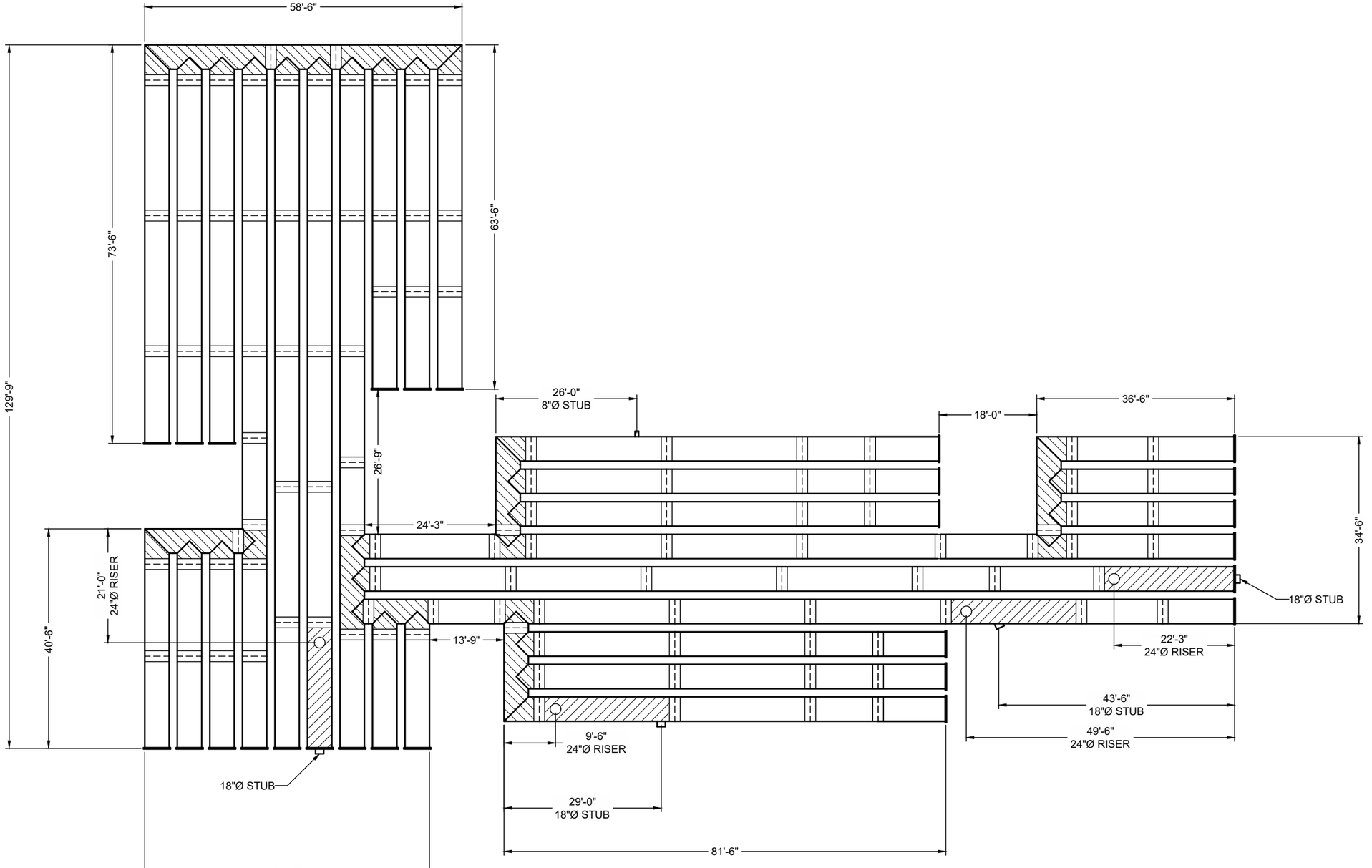
PERFORATED

CONTAINMENT ROW PRETREATMENT

SOLID MANIFOLD

NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE 2⅔" x ½" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.



ASSEMBLY
SCALE: 1" = 20'

C:\USERS\JONATHAN.ROSELL\APPDATA\LOCAL\MICROSOFT\WINDOWS\INETCACHE\CONTENT.OUTLOOK\WN0WIMC4\SOUTH SYSTEM 54 PERF 04-17-23 - 30348 (4-18-2023 15-12-10).DWG 4/18/2023 11:58 AM

The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither this drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.

If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech accepts no liability for designs based on missing, incomplete or inaccurate information supplied by others.

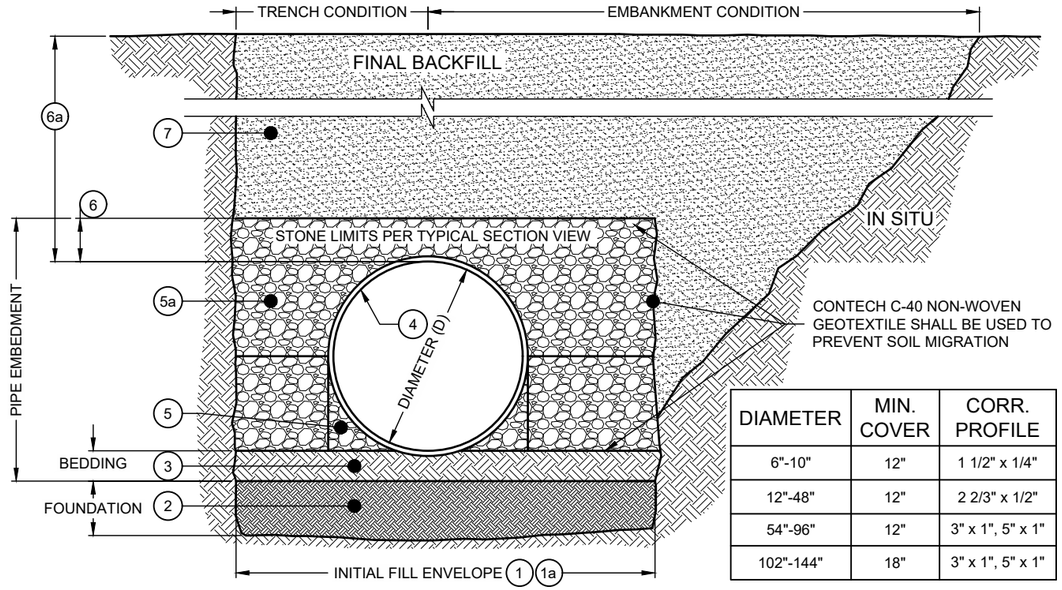
DATE	REVISION DESCRIPTION	BY

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH **DYODS** DRAWING

#744,967 Donnelly Woods South System Mount Dora, FL 54" PERFORATED RETENTION SYSTEM

PROJECT No.:	SEQ. No.:	DATE:
18651	30348	4/18/2023
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: 1		



DIAMETER	MIN. COVER	CORR. PROFILE
6"-10"	12"	1 1/2" x 1/4"
12"-48"	12"	2 2/3" x 1/2"
54"-96"	12"	3" x 1", 5" x 1"
102"-144"	18"	3" x 1", 5" x 1"

1 MINIMUM TRENCH WIDTH MUST ALLOW ROOM FOR PROPER COMPACTION OF HAUNCH MATERIALS UNDER THE PIPE. THE TRENCH WIDTH IS THE MINIMUM AMOUNT REQUIRED FOR PROPER INSTALLATION AND TO SUPPORT HORIZONTAL PRESSURE FROM THE PIPE. THE MANUFACTURER'S SUGGESTED MINIMUM VALUE IS: 1.5D + 12".

1a MINIMUM EMBANKMENT WIDTH (IN FEET) FOR INITIAL FILL ENVELOPE: 3.0D BUT NO LESS THAN D + 4'0".

2 FOUNDATION SHALL BE WELL CONSOLIDATED & STABLE, CAPABLE OF SUPPORTING FILL MATERIAL LOAD.

3 GRANULAR BEDDING MATERIAL SHALL BE A RELATIVELY LOOSE MATERIAL THAT IS ROUGHLY SHAPED TO FIT THE BOTTOM OF THE PIPE, 2" MIN DEPTH. THE BEDDING MATERIAL MAY BE SUITABLE FOUNDATION SOILS CONFORMING TO AASHTO SOIL CLASSIFCATIONS A1, A2, OR A3.

4 CORRUGATED STEEL PIPE (CSP / HEL-COR).

5 HAUNCH ZONE MATERIAL SHALL BE HAND SHOVELED OR SHOVEL SLICED INTO PLACE TO ALLOW FOR PROPER COMPACTION.

5a THE BACKFILL MATERIAL SHALL BE A VIRGIN, FREE-DRAINING, ANGULAR, WASHED STONE CONFORMING TO AN AASHTO M 43 GRADATION HAVING A PARTICLE SIZE OF ½" - 2". MATERIAL SHALL BE PLACED IN 12" MAXIMUM LIFTS AND SHALL BE WORKED INTO THE PIPE HAUNCHES BY MEANS OF SHOVEL-SLICING, RODDING, AIR-TAMPER, VIBRATORY PLATE OR OTHER EFFECTIVE METHODS. COMPACTION IS CONSIDERED ADEQUATE WHEN A DENSITY EQUIVALENT TO 90% STANDARD PROCTOR IS ACHIEVED OR WHEN NO FURTHER YIELDING OF THE MATERIAL IS OBSERVED UNDER THE COMPACTOR OR UNDER FOOT. THE PROJECT ENGINEER OR HIS REPRESENTATIVE MUST BE SATISFIED WITH THE LEVEL OF COMPACTION. INADEQUATE COMPACTION CAN LEAD TO EXCESSIVE PIPE DEFLECTIONS AND SETTLEMENT OF THE SOILS OVER THE SYSTEM. BACKFILL SHALL BE PLACED SUCH THAT THERE IS NO MORE THAN A TWO-LIFT DIFFERENTIAL BETWEEN THE SIDES OF ANY PIPE IN THE SYSTEM AT ALL TIMES DURING THE BACKFILL PROCESS. BACKFILL SHALL BE ADVANCED ALONG THE LENGTH OF THE SYSTEM AT THE SAME RATE TO AVOID DIFFERENTIAL LOADING ON ANY PIPES IN THE SYSTEM.

6 INITIAL BACKFILL MATERIAL ABOVE THE PIPE MAY INCLUDE OPEN-GRADED MATERIAL, ROAD BASE, OR STABILIZED SUB-GRADE MATERIAL ASSOCIATED WITH THE PAVEMENT SECTION, AS DESIGNED BY THE PROJECT ENGINEER OR COMPACTED SUITABLE FILL CONFORMING TO AASHTO SOIL CLASSIFICATION A1, A2, OR A3. REFER TO TYPICAL SECTION VIEW AND TABLE ABOVE.

6a TOTAL HEIGHT OF COMPACTED COVER FOR CONVENTIONAL HIGHWAY LOADS IS MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TOP OF RIGID PAVEMENT.

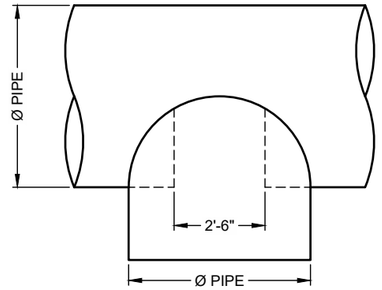
7 FINAL BACKFILL MATERIAL SELECTION AND COMPACTION REQUIREMENTS SHALL FOLLOW THE PROJECT PLANS AND SPECIFICATIONS PER THE ENGINEER OF RECORD.

NOTES:

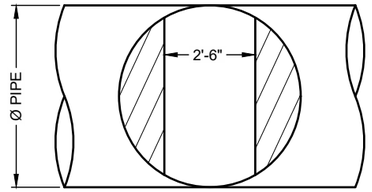
- FOR MULTIPLE BARREL INSTALLATIONS THE RECOMMENDED STANDARD SPACING BETWEEN PARALLEL PIPE RUNS SHALL BE PIPE DIA./3 BUT NO LESS THAN 12", OR 36" FOR PIPE DIAMETERS 72" AND LARGER. CONTACT YOUR CONTECH REPRESENTATIVE FOR NONSTANDARD SPACING.

TYPICAL BACKFILL DETAIL

NOT TO SCALE



PLAN

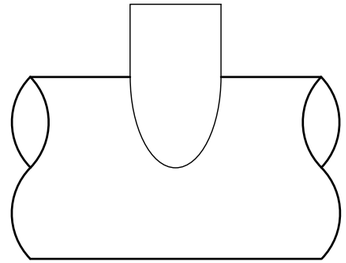


FRONT

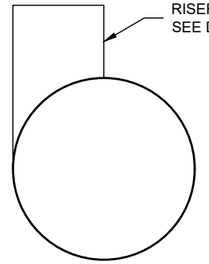
NOTE:
MANWAY DETAIL APPLICABLE FOR CMP SYSTEMS WITH DIAMETERS 48" AND LARGER. MANWAYS MAY BE REQUIRED ON SMALLER SYSTEMS DEPENDING ON ACTUAL SITE SPECIFIC CONDITIONS.

TYPICAL MANWAY DETAIL

SCALE: N.T.S.



ELEVATION

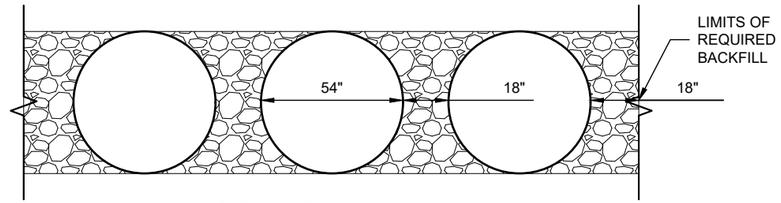


END

NOTE:
LADDERS ARE OPTIONAL AND ARE NOT REQUIRED FOR ALL SYSTEMS.

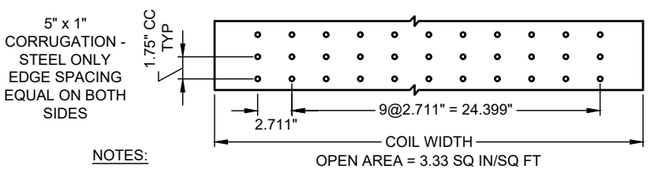
TYPICAL RISER DETAIL

SCALE: N.T.S.



TYPICAL SECTION VIEW

SCALE: N.T.S.



NOTES:

1. PERFORATIONS MEET AASHTO AND ASTM SPECIFICATIONS.
2. PERFORATION OPEN AREA PER SQUARE FOOT OF PIPE IS BASED ON THE NOMINAL DIAMETER AND LENGTH OF PIPE.
3. ALL DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
4. ALL HOLES Ø3/8".

OPEN AREA = 3.33 SQ IN/SQ FT

TYPICAL PERFORATION DETAIL

SCALE: N.T.S.

The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither this drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.

If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech accepts no liability for designs based on missing, incomplete or inaccurate information supplied by others.

DATE	REVISION DESCRIPTION	BY

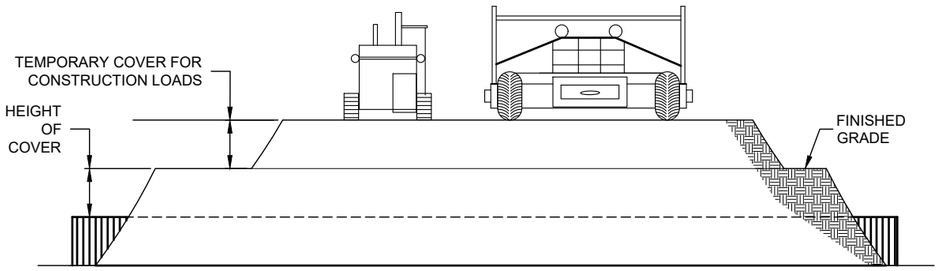
CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH DYODS DRAWING

#744,967 Donnelly Woods
South System
Mount Dora, FL
54" PERFORATED RETENTION SYSTEM

PROJECT No.:	SEQ. No.:	DATE:
18651	30348	4/18/2023
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: 2		

C:\USERS\JONATHAN.ROSELL\APPDATA\LOCAL\MICROSOFT\WINDOWS\INETCACHE\CONTENT.OUTLOOK\WN0WMC4S\SOUTH SYSTEM 54 PERF 04-17-23 - 30348 (4-18-2023 15-12-10).DWG 4/18/2023 11:58 AM



CONSTRUCTION LOADS

FOR TEMPORARY CONSTRUCTION VEHICLE LOADS, AN EXTRA AMOUNT OF COMPACTED COVER MAY BE REQUIRED OVER THE TOP OF THE PIPE. THE HEIGHT-OF-COVER SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THE TABLE BELOW. THE USE OF HEAVY CONSTRUCTION EQUIPMENT NECESSITATES GREATER PROTECTION FOR THE PIPE THAN FINISHED GRADE COVER MINIMUMS FOR NORMAL HIGHWAY TRAFFIC.

PIPE SPAN, INCHES	AXLE LOADS (kips)			
	18-50	50-75	75-110	110-150
	MINIMUM COVER (FT)			
12-42	2.0	2.5	3.0	3.0
48-72	3.0	3.0	3.5	4.0
78-120	3.0	3.5	4.0	4.0
126-144	3.5	4.0	4.5	4.5

*MINIMUM COVER MAY VARY, DEPENDING ON LOCAL CONDITIONS. THE CONTRACTOR MUST PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. MINIMUM COVER IS MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE.

CONSTRUCTION LOADING DIAGRAM

SCALE: N.T.S.

SPECIFICATION FOR DESIGNED DETENTION SYSTEM:

SCOPE
THIS SPECIFICATION COVERS THE MANUFACTURE AND INSTALLATION OF THE DESIGNED DETENTION SYSTEM DETAILED IN THE PROJECT PLANS.

MATERIAL
THE MATERIAL SHALL CONFORM TO THE APPLICABLE REQUIREMENTS LISTED BELOW:

ALUMINIZED TYPE 2 STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-274 OR ASTM A-92.

THE GALVANIZED STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-218 OR ASTM A-929.

THE POLYMER COATED STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-246 OR ASTM A-742.

THE ALUMINUM COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-197 OR ASTM B-744.

CONSTRUCTION LOADS
CONSTRUCTION LOADS MAY BE HIGHER THAN FINAL LOADS. FOLLOW THE MANUFACTURER'S OR NCSPA GUIDELINES.

NOTE:
THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

PIPE
THE PIPE SHALL BE MANUFACTURED IN ACCORDANCE TO THE APPLICABLE REQUIREMENTS LISTED BELOW:

ALUMINIZED TYPE 2: AASHTO M-36 OR ASTM A-760

GALVANIZED: AASHTO M-36 OR ASTM A-760

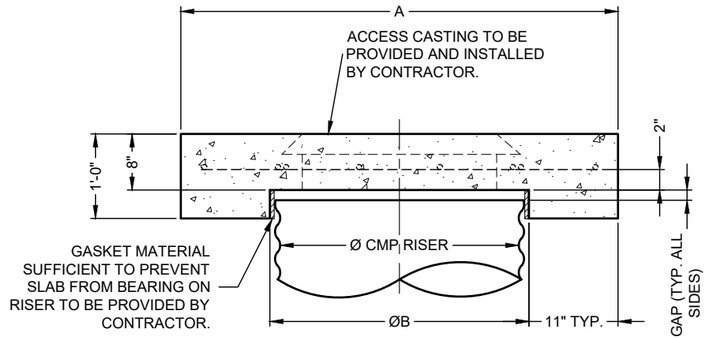
POLYMER COATED: AASHTO M-245 OR ASTM A-762

ALUMINUM: AASHTO M-196 OR ASTM B-745

HANDLING AND ASSEMBLY
SHALL BE IN ACCORDANCE WITH NCSP'S (NATIONAL CORRUGATED STEEL PIPE ASSOCIATION) FOR ALUMINIZED TYPE 2, GALVANIZED OR POLYMER COATED STEEL. SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR ALUMINUM PIPE.

INSTALLATION
SHALL BE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 26, DIVISION II DIVISION II OR ASTM A-798 (FOR ALUMINIZED TYPE 2, GALVANIZED OR POLYMER COATED STEEL) OR ASTM B-788 (FOR ALUMINUM PIPE) AND IN CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. IF THERE ARE ANY INCONSISTENCIES OR CONFLICTS THE CONTRACTOR SHOULD DISCUSS AND RESOLVE WITH THE SITE ENGINEER.

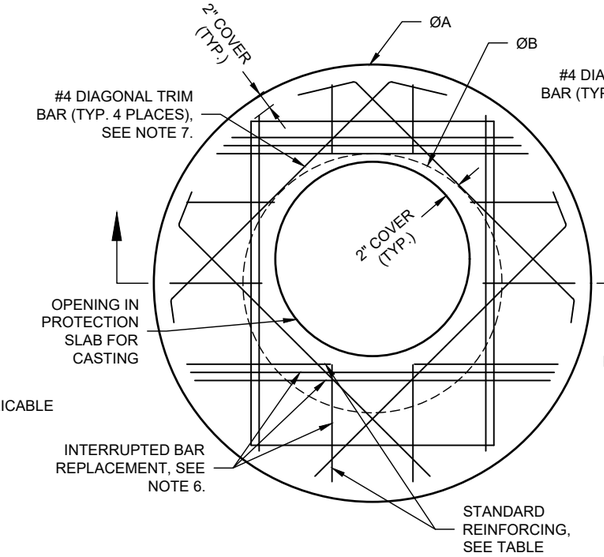
IT IS ALWAYS THE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW OSHA GUIDELINES FOR SAFE PRACTICES.



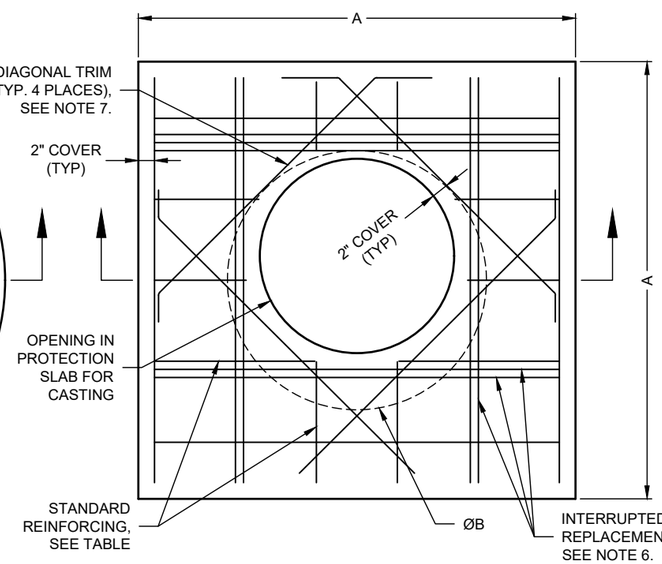
SECTION VIEW

REINFORCING TABLE				
Ø CMP RISER	A	Ø B	REINFORCING	**BEARING PRESSURE (PSF)
24"	Ø 4' 4'X4'	26"	#5 @ 12" OCEW #5 @ 12" OCEW	2,410 1,780
30"	Ø 4'-6" 4'-6" X 4'-6"	32"	#5 @ 12" OCEW #5 @ 12" OCEW	2,120 1,530
36"	Ø 5' 5' X 5'	38"	#5 @ 10" OCEW #5 @ 10" OCEW	1,890 1,350
42"	Ø 5'-6" 5'-6" X 5'-6"	44"	#5 @ 10" OCEW #5 @ 9" OCEW	1,720 1,210
48"	Ø 6' 6' X 6'	50"	#5 @ 9" OCEW #5 @ 8" OCEW	1,600 1,100

** ASSUMED SOIL BEARING CAPACITY



ROUND OPTION PLAN VIEW



SQUARE OPTION PLAN VIEW

NOTES:

1. DESIGN IN ACCORDANCE WITH AASHTO, 17th EDITION.
2. DESIGN LOAD HS25.
3. EARTH COVER = 1' MAX.
4. CONCRETE STRENGTH = 3,500 psi
5. REINFORCING STEEL = ASTM A615, GRADE 60.
6. PROVIDE ADDITIONAL REINFORCING AROUND OPENINGS EQUAL TO THE BARS INTERRUPTED, HALF EACH SIDE. ADDITIONAL BARS TO BE IN THE SAME PLANE.
7. TRIM OPENING WITH DIAGONAL #4 BARS, EXTEND BARS A MINIMUM OF 12" BEYOND OPENING, BEND BARS AS REQUIRED TO MAINTAIN BAR COVER.
8. PROTECTION SLAB AND ALL MATERIALS TO BE PROVIDED AND INSTALLED BY CONTRACTOR.
9. DETAIL DESIGN BY DELTA ENGINEERING, BINGHAMTON, NY.

MANHOLE CAP DETAIL

SCALE: N.T.S.

The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither this drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.

If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech accepts no liability for designs based on missing, incomplete or inaccurate information supplied by others.

DATE	REVISION DESCRIPTION	BY

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH **DYODS** DRAWING

#744,967 Donnelly Woods
South System
Mount Dora, FL
54" PERFORATED RETENTION SYSTEM

PROJECT No.:	SEQ. No.:	DATE:
18651	30348	4/18/2023
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: 3		

C:\USERS\JONATHAN ROSELL\APPDATA\LOCAL\MICROSOFT\WINDOWS\INETCACHE\CONTENT.OUTLOOK\WN0WMC4S\SOUTH SYSTEM 54 PERF (04-17-23 - 30348 (4-18-2023 15-12-10).DWG 4/18/2023 11:58 AM

SANITARY SEWER STRUCTURES			
STRUCTURE NAME	TYPE	RIM ELEVATION	INVERTS
LS-01	LIFT STATION 1	141.77	PVC = 133.64 (E)
SS-01	MANHOLE	141.46	PVC = 133.71 (W) PVC = 133.81 (N)
SS-02	MANHOLE	140.64	PVC = 134.10 (N) PVC = 134.00 (S)
SS-03	8" PLUG	N/A	PVC = 134.17 (S)

SCALE: 1" = 30'

30 0 30 60

SCALE IN FEET

LEGEND

- S-1 — SANITARY SEWER STRUCTURE NUMBER
- SANITARY SEWER MANHOLE
- SANITARY SEWER W/FLOW DIRECTION
- TAPPING SLEEVE/SADDLE
- M — PROPOSED METER
- W — EXITING WATER MAIN
- WM — PROPOSED WATER MAIN
- WS — PROPOSED WATER SERVICE
- FW — PROPOSED FIRE PROTECTION WATER SERVICE
- FM — PROPOSED FORCE MAIN
- VALVE
- FIRE HYDRANT

NOTE:
1. CONTRACTOR SHALL INCLUDE LINE STOPS AND/OR HAVE SPILLOVER PREVENTION/COLLECTION MEASURES IN PLACE PRIOR TO CONNECTION TO EXISTING FORCE MAIN.
2. CONTRACTOR SHALL COORDINATE CONNECTION WITH CITY OF MOUNT DORA PUBLIC WORKS. SUBMIT DETAILS OF CONNECTION AND SPILLOVER PREVENTION/COLLECTION PLAN TO CITY FOR APPROVAL PRIOR TO CONSTRUCTION. CITY PERSONNEL SHALL BE ON SITE DURING CONNECTION.

UTILITY NOTES:
1. SEE SHEET C-002 - C-003 FOR GENERAL NOTES.
2. SEE SHEET C-302 TO C-308 FOR UTILITIES STANDARD NOTES AND DETAILS.
3. SEET SHEET C-101 FOR ADDITIONAL FIRE PROTECTION REQUIREMENTS AND NOTES.
4. ALL UTILITY CONSTRUCTION, BOTH PRIVATE AND PUBLIC, SHALL CONFORM TO THE CITY OF MOUNT DORA UTILITIES STANDARD DETAILS AND SPECIFICATIONS.
5. SANITARY SYSTEM (INCLUDING LIFT STATION) IS PRIVATE AND MANHOLE LIDS SHALL FOLLOW THE CITY STANDARDS FOR A PRIVATELY OWNED SYSTEM.
6. ALL SANITARY SEWER PVC PIPE AND FITTINGS SHALL BE SDR-26 PVC, GREEN IN COLOR.
7. ALL FORCE MAIN PVC PIPE AND FITTINGS SHALL BE DR-18 PVC, GREEN IN COLOR.
8. ALL POTABLE WATER AND FIRE PROTECTION WATER MAINS AND SERVICES SHALL BE C900 DR-18 PVC, BLUE IN COLOR.
9. ALL PROPOSED FIRE HYDRANTS ARE PRIVATE AND SHALL BE INSTALLED A MINIMUM OF 3' BEHIND BACK OF CURB. BODY OF HYDRANTS TO BE PAINTED SILVER IN COLOR. BLUE REFLECTORS SHALL BE INSTALLED IN THE PAVEMENT AT ALL HYDRANT LOCATIONS.
10. REFER TO THE BUILDING PLANS FOR ADDITIONAL DETAILS AND EXACT LOCATIONS OF BUILDING SERVICE CONNECTIONS.
11. EXISTING SITE CONDITIONS BASED ON SITE BOUNDARY & TOPOGRAPHIC SURVEY PREPARED BY SOUTHEASTERN SURVEYING AND MAPPING CORPORATION, DATED 2/16/2023.
12. EXISTING ADJACENT WATER PLANT SITE CONDITIONS BASED ON BOUNDARY, TOPOGRAPHIC AND TREE SURVEY PREPARED BY HALFF ASSOCIATES, INC. DATED 1/12/2022.
13. PRIVATE UTILITIES TO BE PLUGGED SHALL BE FILLED WITH A MINIMUM 1.0 CUBIC FT. OF NON SHRINK GROUT OR AS OTHERWISE APPROVED BY ENGINEER, PRESSURE MAINS SHOULD BE CAPPED OR PLUGGED AND RESTRAINED WITH A REVERSE DEADMAN. RCP SHOULD RECEIVE A BRICK AND MORTAR PLUG. ANY CONNECTIONS TO CITY OF MOUNT DORA UTILITIES TO BE TAKEN OUT OF SERVICE SHALL BE CAPPED AND RESTRAINED AS APPROVED BY THE CITY.
14. CONTRACTOR TO FIELD VERIFY EXACT LOCATION, SIZE, MATERIAL, AND DEPTH OF EXISTING MAINS AT ALL POINTS OF CONNECTION PRIOR TO CONSTRUCTION. IF DISCREPANCIES ARE FOUND THE ENGINEER OF RECORD SHALL BE NOTIFIED IMMEDIATELY.

INSTALL ±190 LF FORCE MAIN VIA DIRECTIONAL DRILLING
UTILIZE 6" FUSABLE HDPE W/FUSED MECHANICAL JOINT ENDS
SEE PROFILE VIEW ON SHEET C-301

INSTALL:
(1) 4" PLUG VALVE
(1) PVC TO HDPE ADAPTER (MECHANICAL JOINT)
CUT-IN 4" X 4" TEE AND 4" PLUG VALVE (AT SOUTH BRANCH) AT EXISTING 4" FORCE MAIN

FORCE MAIN POINT OF CONNECTION

EXISTING 4" FORCE MAIN

INSTALL:
(1) 4" PLUG VALVE
(1) PVC TO HDPE ADAPTER (MECHANICAL JOINT)

UTILITY CROSSING
FORCE MAIN ABOVE STORM
1' SEPARATION

INSTALL 4" X 22.5° BEND
INSTALL 4" X 22.5° BEND
INSTALL 4" X 11.25° BEND

INSTALL (2) 4" X 45° BENDS

INSTALL AIR RELEASE VALVE ASSEMBLY (BELOW GROUND)
INSTALL 4" X 45° BEND
INSTALL (2) 8" X 45° BENDS

INSTALL (2) 4" X 45° BENDS
UTILITY CROSSING
WATER ABOVE STORM
1' SEPARATION

INSTALL 8" X 45° BEND
INSTALL 8" X 45° BEND
INSTALL 8" X 22.5° BEND
INSTALL 8" X 45° BEND

INSTALL
(1) 8" X 6" TEE
(1) 6" GATE VALVE
±32 LF 6" DR-18 PVC
(1) FIRE HYDRANT ASSEMBLY (PRIVATE)

INSTALL 4" X 45° BEND

INSTALL ±373 LF OF 4" DR-25 PVC FORCE MAIN

UTILITY CROSSING
FORCE MAIN OVER STORM
1' SEPARATION

INSTALL 4" X 45° BEND
INSTALL 8" X 45° BEND
INSTALL 4" X 45° BEND

UTILITY CROSSING
WATER OVER STORM
1' SEPARATION

INSTALL
(1) 8" X 6" TEE
(1) 6" GATE VALVE
(1) 6" X 45° BEND
±33 LF 6" DR-18 PVC
(1) FIRE HYDRANT ASSEMBLY (PRIVATE)

LIFT STATION SITE
SEE LIFT STATION
DETAIL SHEET

LS-01

23 L.F. OF 10" PVC @ 0.30%

SS-01

61 L.F. OF 10" PVC @ 0.31%

SS-02

UTILITY CROSSING
WATER ABOVE SANITARY
1' MIN. SEPARATION

SS-03

23 L.F. OF 10" PVC @ 0.30%

UTILITY CROSSING
SANITARY UNDER STORM
1' SEPARATION

INSTALL:
(1) 8" X 8" TEE
(2) 8" GATE VALVES

INSTALL (2) 4" X 45° BENDS

INSTALL (2) 4" X 45° BENDS
INSTALL (2) 8" X 45° BENDS

INSTALL ±630 LF OF 4" DR-18 PVC POTABLE WATER SERVICE

INSTALL ±87 LF OF 8" DR-18 PVC FIRE PROTECTION WATER MAIN (PRIVATE)

EXISTING 16" WATERMAIN

WATER MAIN POINT OF CONNECTION

WATER MAIN EXTENSION AND SERVICES
SEE CLOSE-UP AND PROFILE VIEW ON SHEET C-301

EXISTING 20" WATERMAIN

EXISTING 10" WATERMAIN

INSTALL
(1) 8" X 6" TEE
(1) 6" GATE VALVE
±9 LF 6" DR-18 PVC
(1) FIRE HYDRANT ASSEMBLY (PRIVATE)

UTILITY CROSSING
WATER ABOVE STORM
1' SEPARATION

±1,315 LF OF 8" DR-18 PVC FIRE PROTECTION WATER MAIN LOOP

UTILITY CROSSING
WATER ABOVE STORM
1' SEPARATION

INSTALL
(1) 8" X 6" TEE
(1) 6" GATE VALVE
±9 LF 6" DR-18 PVC
(1) FIRE HYDRANT ASSEMBLY (PRIVATE)

INSTALL 8" X 45° BEND
INSTALL APPROVED (BLUE) FIRE HYDRANT REFLECTOR IN PAVEMENT (TYP.)
INSTALL (2) 8" X 45° BENDS

INSTALL
(1) 8" X 6" TEE
(1) 6" GATE VALVE
±24 LF 6" DR-18 PVc
(1) FIRE HYDRANT ASSEMBLY (PRIVATE)

COURTYARD
MAY INCLUDE LANDSCAPING, HARDSCAPING, AND POOL DESIGN BY OTHERS.
GENERAL GRADE = ±140.83

PROPOSED ADULT LIVING FACILITY
4-STORY (55' HEIGHT)
GROUND FLOOR F.F.E = 141.50'

PROPOSED ADULT LIVING FACILITY
4-STORY (55' HEIGHT)
GROUND FLOOR F.F.E = 152.16'

BUILDING STEP

BUILDING SANITARY SEWER SERVICE CONNECTION
SEE BUILDING PLANS FOR CONTINUATION
INV. = 134.17

4" BUILDING POTABLE WATER SERVICE CONNECTION
SEE BUILDING PLANS FOR CONTINUATION

6" BUILDING FIRE PROTECTION WATER SERVICE CONNECTION
SEE BUILDING PLANS FOR CONTINUATION

FDC LOCATION
SEE BUILDING PLANS FOR DETAILS

SEPARATION 0.9'

8.2'

60'

EXISTING NORTH WETLAND
EXISTING SOUTH WETLAND
UPLAND BUFFER
UPLAND B
UNDISTURBED BUFFER
LANDSCAPE BUFFER

CENTERLINE OF MOUNT DORA DRAINAGE EASEMENT WIDTH NOT SPECIFIED IN DESCRIPTION PER PB 59, PG 59
DEED BOOK 186, PG 182
ORB 196, PG 182

INGRESS, EGRESS & UTILITY EASEMENT PER PB 59, PG 59

SITE BENCHMARK
SET 5/8" IRON ROD
SMC TRAV. PT.
ELEVATION=123.00

SURVEY BASELINE

MATCHLINE THIS SHEET

MATCHLINE THIS SHEET

RECLAIMED MAIN EXTENSION AND SERVICES
RECLAIMED MAIN POINT OF CONNECTION
SEE CLOSE-UP ON SHEET C-301

REVISION								
DATE	1	2	3	4	5	6	7	8

INSPIRE DONNELLY WOODS
MOUNT DORA, FL

C-300
UTILITY PLAN

HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33380

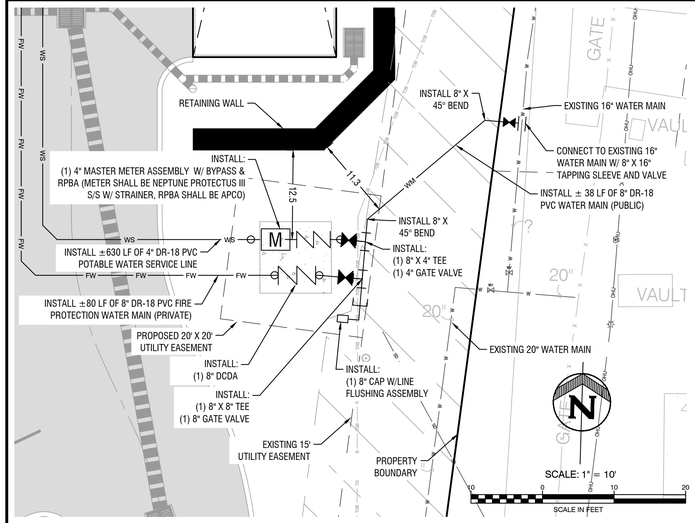
DATE:	6/5/2023
DESIGNED BY:	CCH
DRAWN BY:	NTD
CHECKED BY.:	CBS
JOB NO.:	045953.001

C-300

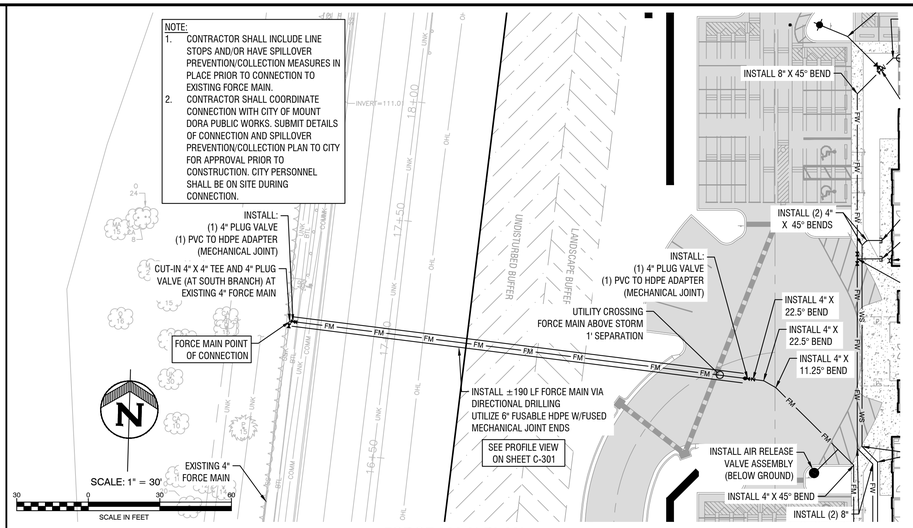
CHARLES C. HIOTT, PE
LICENSE # 54813

CONSTRUCTION SET

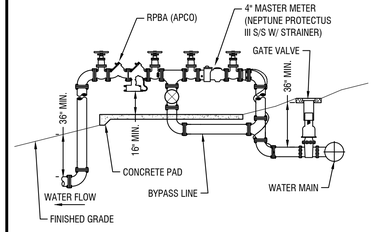
L:\45000\45953\00\CAD\Sheets\XVC300 UTILITY.dwg
Smith, Cody
6/5/2023 2:45:44 PM



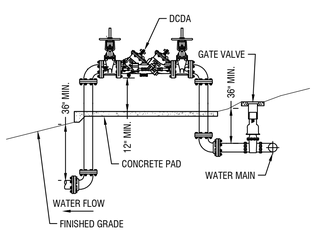
WATER CONNECTION PLAN CLOSE-UP



FORCE MAIN PLAN



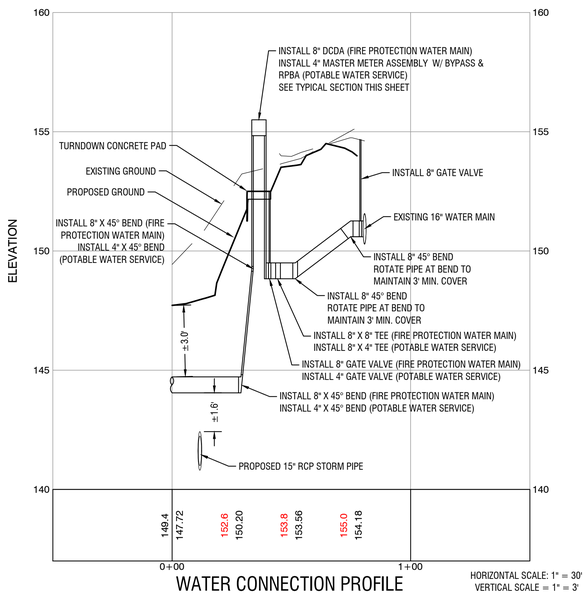
POTABLE WATER SERVICE CONNECTION



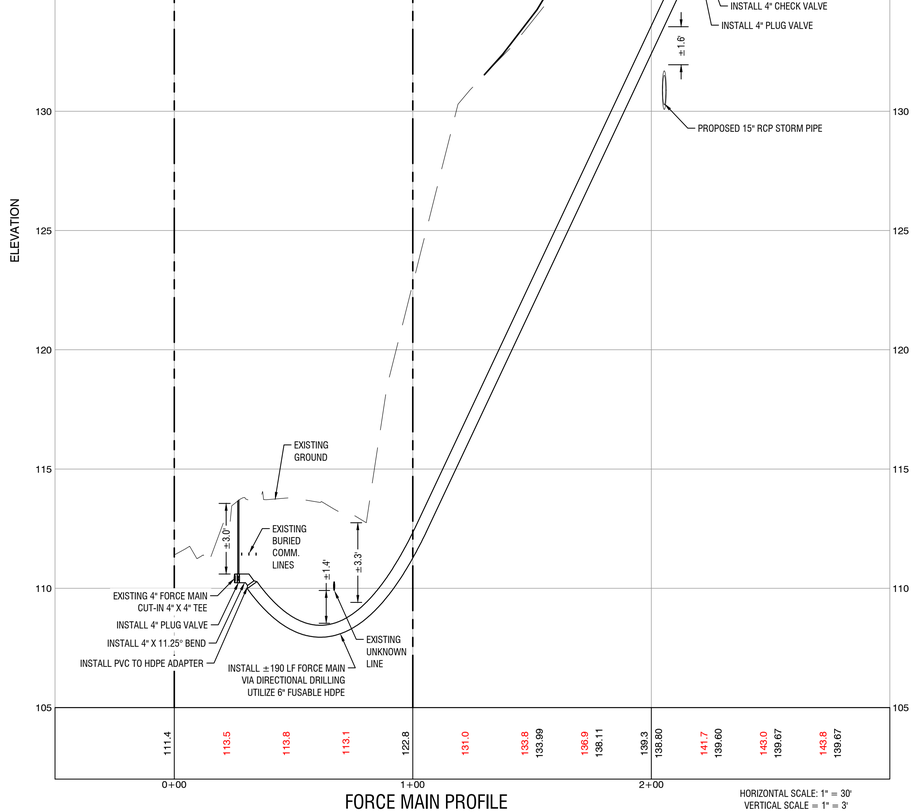
FIRE PROTECTION WATER CONNECTION

NOTES:
1. RPBA = REDUCED PRESSURE BACKFLOW ASSEMBLY
2. DCDA = DOUBLE CHECK DETECTOR ASSEMBLY
3. DETAIL FOR TYPICAL INSTALLATION ONLY. SEE DETAIL SHEETS FOR MASTER METER ASSEMBLY W/ BYPASS AND RPBA DETAILS. DCDA SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS.

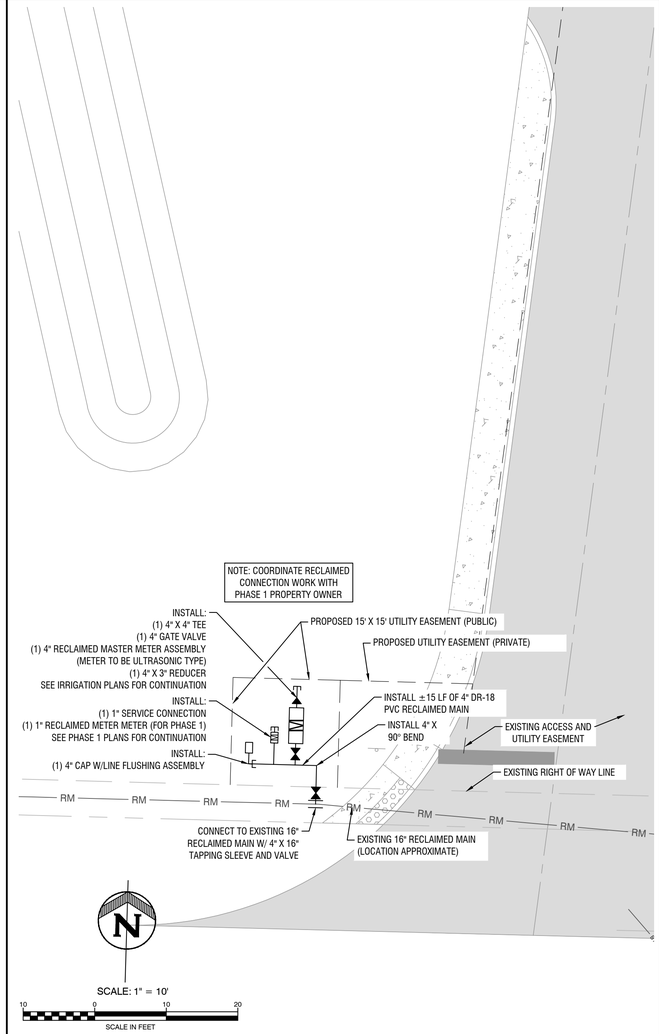
WATER SERVICES TYPICAL SECTION (NOT TO SCALE)



WATER CONNECTION PROFILE



FORCE MAIN PROFILE



RECLAIMED CONNECTION CLOSE-UP

LEGEND

S-1	SANITARY SEWER STRUCTURE NUMBER
	SANITARY SEWER MANHOLE
	SANITARY SEWER W/FLOW DIRECTION
	TAPPING SLEEVE/SADDLE
M	PROPOSED METER
W	EXITING WATER MAIN
WM	PROPOSED WATER MAIN
WS	PROPOSED WATER SERVICE
FW	PROPOSED FIRE PROTECTION WATER SERVICE
FM	PROPOSED FORCE MAIN
	VALVE
	FIRE HYDRANT

REVISION	DATE
1	
2	
3	
4	
5	
6	
7	
8	

INSPIRE DONNELLY WOODS
MOUNT DORA, FL

C-301
UTILITY CLOSE-UPS AND PROFILES

HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33380

DATE:	6/5/2023
DESIGNED BY:	CCH
DRAWN BY:	NTD
CHECKED BY.:	CBS
JOB NO.:	045953.001

C-301

CHARLES C. HIOTT, PE
LICENSE # 54813

CONSTRUCTION SET

I:\045953.45\05 - Design\CAD\Sheets\XXC-300 UTILITY.dwg
Smith, Cody
6/5/2023 2:57:37 PM

GENERAL UTILITIES CONSTRUCTION NOTES

1. THE PUBLIC SERVICES DEPARTMENT MUST BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO ANY WORK ON EXISTING CITY OF MOUNT DORA UTILITIES. THE CONTRACTOR MUST CONTACT, JOSH KRAMM, UTILITY LINE MANAGER AT HIS OFFICE (352) 735-7151 OR CELL PHONE (352) 516-3691, DISTRIBUTION SUPERVISOR - OFFICE (352) 735-7151 OR CELL PHONE (352) 460-7922, RUSSELL HOPPER, COLLECTION & LIFT STATION SUPERVISOR - OFFICE (352) 735-7151 OR CELL PHONE (352) 973-2032.
2. NO GRADING, CUTTING, OR FILLING SHALL COMMENCE UNTIL SUCH TIME AS APPROPRIATE EROSION AND SEDIMENTATION CONTROL DEVICES HAVE BEEN INSTALLED BETWEEN THE DISTURBED AREA AND WATER BODIES, WATERCOURSES OR WETLANDS.
3. CONSTRUCTION MUST BE PER THE DRC APPROVED SITE PLAN. DEVIATIONS IN ROADWAY, UTILITY OR DRAINAGE CONSTRUCTION WILL REQUIRE WRITTEN APPROVAL OF THE CITY ENGINEER OR THE DIRECTOR OF PUBLIC SERVICES. (NOTE: SIGNIFICANT CHANGES FROM THE DRC APPROVED PLAN MAY REQUIRE THE OWNER/DEVELOPER TO SUBMIT A REVISED SITE PLAN THROUGH THE DRC FOR REVIEW.)
4. CONTRACTOR SHALL PROVIDE AN EMERGENCY CONTACT NUMBER LIST FOR KEY SITE PERSONNEL.
5. ENGINEER OF RECORD REVIEWED SHOP DRAWING SUBMITTALS ARE REQUIRED FOR ALL WATER/ SEWER/ RECLAIMED AND STORMWATER SYSTEMS TO BE DEDICATED TO THE CITY OF MOUNT DORA. TWO SETS ARE REQUIRED FOR REVIEW. ONE SET WILL BE RETURNED TO THE ENGINEER OF RECORD.
6. OFF SITE OR ROADWAY RIGHT OF WAY CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL CONDITIONS OF THE APPROVED R/W PERMIT(S). A COPY OF THE APPROVED R/W PERMIT MUST BE KEPT ON-SITE AND READILY AVAILABLE DURING ALL CONSTRUCTION ACTIVITIES WITHIN THE R/W.
7. THE PUBLIC SERVICES DEPARTMENT MUST BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO UTILITY TESTING. THE CONTRACTOR MUST CONTACT JOSH KRAMM, UTILITY LINE MANAGER, AT HIS OFFICE (352) 735-7151 OR CELL (352) 516-3691, DISTRIBUTION SUPERVISOR - OFFICE (352) 735-7151 OR CELL PHONE (352) 460-7922, RUSSELL HOPPER, COLLECTION & LIFT STATION SUPERVISOR - OFFICE (352) 735-7151 OR CELL PHONE (352) 973-2032. HYDROSTATIC TESTING SHALL BE PER THE APPLICABLE PROVISIONS AS SET FORTH IN AWWA STANDARDS. (MINIMUM 150 PSI @ 2 HOURS - POTABLE/RECLAIMED AND MINIMUM 100 PSI @ 2 HOURS - FORCE MAINS).
8. GRAVITY SEWER PIPING TESTS SHALL BE IN ACCORDANCE WITH UNI-BELL PVC PIPE ASSOCIATION; "RECOMMENDED PRACTICES FOR LOW-PRESSURE AIR TESTING OF INSTALLED SEWER PIPE". THE CONTRACTOR WILL BE REQUIRED TO PROVIDE VIDEO INSPECTION OF THE ENTIRE LINE DEMONSTRATING SATISFACTORY WORKMANSHIP AND SHOWING POSITIVE FLOW WITHIN THE SANITARY SYSTEM. ANY DEFECTS IN WORKMANSHIP, AREAS OF STANDING WATER OR "BELLIES" SHALL BE CAUSE FOR REJECTION. ONE DVD FORMAT COPY OF THE VIDEO INSPECTION MUST BE PROVIDED TO THE PUBLIC SERVICES DEPARTMENT.
9. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE INSPECTION OF ALL STORM SYSTEM PIPES DEMONSTRATING SATISFACTORY WORKMANSHIP AND SHOWING POSITIVE FLOW WITHIN THE DRAINAGE SYSTEM. ANY DEFECTS IN WORKMANSHIP, AREAS OF STANDING WATER OR "BELLIES" SHALL BE CAUSE FOR REJECTION. ONE DVD FORMAT COPY OF THE VIDEO INSPECTION MUST BE PROVIDED TO THE PUBLIC SERVICES DEPARTMENT.
10. AFTER JUMPER CONNECTION IS REMOVED, WATER & RECLAIMED WATER SERVICES MUST BE LOCKED OUT AND KEY SUPPLIED TO CITY.
11. FOLLOWING SATISFACTORY PRESSURE TESTING, THE CONTRACTOR SHALL DISINFECT ALL SECTIONS OF THE WATER DISTRIBUTION SYSTEM, AND RECEIVE APPROVAL THEREOF FROM THE APPROPRIATE AGENCIES, PRIOR TO PLACING IN SERVICE. ADVANCE NOTICE SHALL BE PROVIDED TO THE CITY BEFORE DISINFECTING PROCEDURE START. THE DISINFECTION SHALL BE ACCOMPLISHED WITH THE APPLICABLE PROVISIONS OF AWWA STANDARD, "DISINFECTING WATER MAINS" AND ALL APPROPRIATE AGENCY APPROVALS.

STANDARD CONSTRUCTION DETAIL GENERAL NOTES	GU001-1A
	ISSUED: 2017
	REVISED: –

GENERAL UTILITIES CONSTRUCTION NOTES

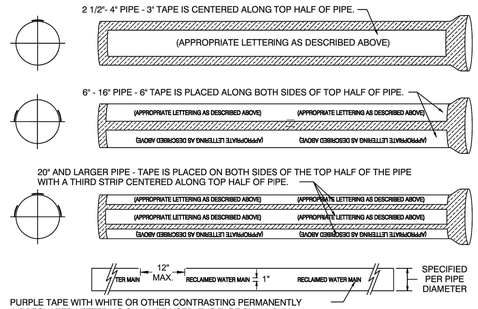
12. COPIES OF SATISFACTORY BACTERIOLOGICAL TESTING AND THE FDEP "LETTER OF RELEASE REQUEST" SIGNED BY THE ENGINEER OF RECORD MUST BE SUBMITTED TO THE CITY ENGINEER FOR PROCESSING. NO POTABLE WATER LINE SHALL BE PLACED INTO SERVICE WITHOUT RECEIPT OF FDEP AUTHORIZATION.
13. FDEP CLEARANCE REQUEST MUST BE SUBMITTED THROUGH THE PUBLIC WORKS AND UTILITY DEPARTMENT.
14. EARTHWORK, PAVEMENT AND CONCRETE CONSTRUCTION NOT SPECIFICALLY ADDRESSED BY THE CITY LDC, SHALL BE THE CURRENT FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, WHICHEVER IS MORE STRINGENT.
15. COPIES OF ALL MATERIALS AND COMPACTION TESTING PER THE CURRENT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION MUST BE PROVIDED PRIOR TO CLOSEOUT.
16. THE PUBLIC SERVICES DEPARTMENT REQUIRES A PRE-CLOSEOUT FIELD REVIEW WITH THE CONTRACTOR /SITE DEVELOPER. THE CONTRACTOR MUST CONTACT PUBLIC SERVICES -ENGINEERING AT (352) 735-7151, TO COORDINATE. ALL ISSUES IDENTIFIED AT THE FIELD REVIEW MUST BE ADDRESSED PRIOR TO PUBLIC SERVICES FINAL CLOSE OUT APPROVAL.
17. LIFT STATION START UP WILL REQUIRE A MINIMUM OF 48 HOURS PRIOR NOTIFICATION TO THE CITY. THE CONTRACTOR MUST CONTACT JOSH KRAMM, UTILITY LINE MANAGER, AT (352) 735-7151 OR (352) 551-9263 OR RUSSELL HOPPER, COLLECTION & LIFT STATION SUPERVISOR - OFFICE (352) 735-7151 OR CELL PHONE (352) 973-2032 TO COORDINATE THE START UP INSPECTION.
18. ALL MANUALS FOR LIFT STATION CONTROL PANELS, GENERATORS, AND PUMPS WILL BE REQUIRED PRIOR TO START UP. THESE MANUALS WILL BE SUBJECT TO CITY REVIEW / APPROVAL TO INCLUDE O&M MANUALS. NO LIFT STATION WILL BE ACCEPTED UNTIL SATISFACTORY DOCUMENTATION HAS BEEN PROVIDED. ANY LIFT STATION PUMP, SIZED LARGER THAN 20 HP, SHALL BE PROVIDED WITH A REBUILD KIT CONSISTING OF BEARINGS SEALS, O-RINGS AND WEAR RINGS. ALSO, A TOOL KIT WITH BOX IS REQUIRED.
19. DEDICATION OF IMPROVEMENTS TO THE PUBLIC SHALL BE IN ACCORDANCE WITH THE CITY OF MOUNT DORA LDC 4.3.4(4)(A) - BONDS, 5.3.5(1) - BONDS, AND 7.2.4 - BONDS AND WARRANTIES. THE CITY'S LAND DEVELOPMENT CODE IS AVAILABLE ONLINE AT WWW.MUNICODE.COM FOR YOUR REFERENCE.
20. AS-BUILT DRAWINGS - PER LDC 7.13.6: OWNER / DEVELOPER SHALL PROVIDE FOUR HARD COPIES AND ONE ELECTRONIC OF THE APPROVED FINAL ENGINEERING PLANS CONFORMED TO SHOW ALL AS-BUILT CONDITIONS. AS-BUILTS MUST SHOW ACCURATE MEASUREMENTS OF WATER AND SEWER LINES AND STRUCTURES FROM FIXED KNOWN LOCATIONS WITHIN THE DEVELOPMENT. CERTIFICATION OF THE PROJECT ENGINEER ATTESTING TO THE ACCURACY OF THE DRAWINGS IF REQUIRED, CITY ACCEPTANCE OF IMPROVEMENTS AND / OR ISSUANCE OF OCCUPANCY WILL BE WITHHELD UNTIL SATISFACTORY AS-BUILTS ARE PROVIDED.

STANDARD CONSTRUCTION DETAIL GENERAL NOTES	GU001-1B
	ISSUED: 2017
	REVISED: –

GENERAL NOTES:

ALL UTILITY PIPE SHALL BE INSTALLED WITH 3 INCH WIDE SELF ADHESIVE VINYL, CONTINUOUS TAPE, FOR IDENTIFICATION PURPOSES. TAPE SHALL BE COLOR CODED AND WORDED AS FOLLOWS:
(NOTE: TRACING WIRE INSULATION SHALL BE SIMILARLY COLOR CODED)

1. POTABLE WATER.
   A. COLOR: BLUE WITH BLACK LETTERING
   B. LETTERING: POTABLE WATER MAIN OR SIMILAR WORDING.
2. RECLAIMED WATER.
   A. COLOR: PURPLE WITH WHITE OR YELLOW LETTERING.
   B. LETTERING: RECLAIMED WATER OR SIMILAR WORDING.
3. FIRE LINES.
   A. COLOR: RED WITH BLACK LETTERING
   B. LETTERING: FIRE LINE OR SIMILAR WORDING.
4. GRAVITY SEWER.
   A. COLOR: BROWN OR GREEN WITH BLACK LETTERING.
   B. LETTERING: SEWER LINE OR SIMILAR WORDING.
5. SEWER FORCE MAIN.
   A. COLOR: GREEN WITH BLACK LETTERING.
   B. LETTERING: SEWER FORCE MAIN OR SIMILAR WORDING.

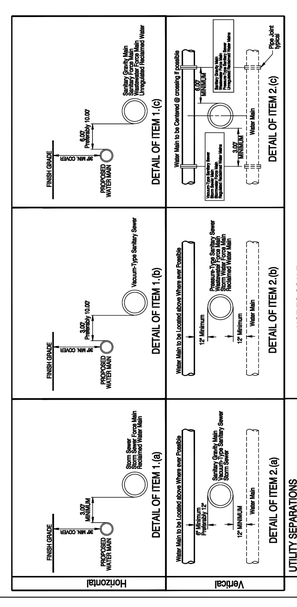


PURPLE TAPE WITH WHITE OR OTHER CONTRASTING PERMANENTLY IMPREGNATED LETTERING SHALL BE USED. THE TAPE SHALL RUN FROM JOINT TO JOINT ALONG THE LENGTH OF THE PIPE.

METAL RECLAIMED WATER MAIN WITH IDENTIFICATION TAPE

NTS

PIPE IDENTIFICATION DUCTILE IRON	GU003-1
	ISSUED: 2017
	REVISED: –



PIPE CLEARANCE	GU0016-1
	ISSUED: 2017
	REVISED: –

General Water Notes

1. Water system components shall be installed in strict accordance with all local codes and regulations, cleaned, disinfected and bacteriologically cleared for service in accordance with the latest AWWA standards and CHAPTER 62-555 Florida Administrative code.
2. All piping shall bear the "NSF" seal for potable water.
3. Water mains shall be pvc conforming to AWWA C-900, DR 18 for pipe sizes 4"-12". Pipes 14" or longer 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.
4. Depth of water lines to be 36" minimum cover from finish grade.
5. Water mains to be located 6.00' from back of curb or edge of pavement unless otherwise noted.
6. All sleeves under pavement shall extend 5' beyond the back of curb.
7. Disinfecting: following the pressure testing, the contractor shall disinfect all sections of the water distribution system. Disinfection shall be in accordance with the applicable provisions of AWWA standard C651 "Disinfecting water mains", and all appropriate agency approval.
8. All hydrostatic test shall be in accordance with AWWA C600 for ductile iron pipe and C605/M23 for pvc pipe.
9. All water mains shall be installed, pressure and leak tested in accordance with AWWA C600, (62-555.320(21)(b) 1 and 62-555.330, F.A.C. All installation, testing and field procedures must be provided and must conform to the applicable AWWA standards.
10. All piping materials and specifications covering pipes, joints and packing materials, internal coating and linings fittings, specials and appurtenances shall all be in accordance with the corresponding AWWA standards and be conforming to NSF requirements, as may be applicable, with exceptions allowed only if documentation and assurances are provided in compliance with paragraphs 62-555.320(3) (d) 62-555.320 (3) (b), and 62-555.320 (21) (c), F.A.C. The lead use prohibition in rule 62-555.322, F.A.C. shall also apply. Polyethylene tubing shall be per AWWA C901. Underground service lines, and valves shall be per AWWA C800.

COLOR Coding

All water main pipe, including fittings shall be color coded or marked blue as a predominate color to differentiate drinking water from reclaimed water or other water. Underground plastic pipe shall be solid-wall blue pipe, shall have a co-extruded blue external skin, or shall be white or black pipe with blue stripes incorporated into, or applied to, the pipe wall; and underground metal or concrete pipe shall have blue striped applied to the pipe wall. Pipe striped during manufacturing of the pipe shall have continuous stripes that run parallel to the axis of the pipe, that are located at no greater than 90°intervals around the pipe, and 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 shall 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 pipes with an internal diameter of 24 inches or greater, tape or paint shall be applied in continuous lines along each side of the pipe, as well as along the top of the pipe. Aboveground pipe as drinking water treatment plants shall be color coded and labeled in accordance with subsection 62-555.320(10), F.A.C., and all other aboveground pipe shall be painted blue or shall be color coated or marked like underground pipe.

Utility Construction Notes (DEP)

62-555.314 Location of Public Water System Mains:

For the purpose of this section, the phrase "Water Mains" shall mean Mains, including treatment Plant process piping, conveying either raw, partially treated, or finished drinking water; Fire Hydrant leads; and service lines that are under the control of a public Water System and that have an inside diameter of three (3") inches or greater.

(1) Horizontal Separation Between Underground Water Mains and Sanitary or Storm Sewers, Wastewater or Storm water Force Mains, Reclaimed Water Pipelines, and On-site Sewage Treatment and Disposal Systems:

(a) New or relocated, underground WATER MAINS shall be laid to provide a horizontal distance of at least (3) Three Feet between the outside of the WATER MAIN and the outside of any existing or proposed Storm Sewer water Force Main, or pipeline conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C.

PIPE CLEARANCE NOTES	GU0016-2
	ISSUED: 2017
	REVISED: –

Utility Construction Notes (DEP) (CONTINUED)

(b) New or relocated, underground WATER MAINS shall be laid to provide a horizontal distance of at least (3) three feet, and preferably (10) Ten Feet, between the outside of the WATER Main and the outside of any existing or proposed vacuum-type Sanitary Sewer.

(c) New or relocated, underground WATER MAINS shall be laid to provide a horizontal distance of at least (6) Six Feet and preferably (10) Ten Feet, between the outside of the WATER MAIN and the outside of any existing or proposed Gravity- or Pressure-type Sanitary Sewer Wastewater Force Main, or pipeline conveying reclaimed water not regulated under Part III of Chapter62-610 F.A.C. The minimum Horizontal Separation distance between WATER MAINS and Gravity-type Sanitary Sewers shall be reduced to (3) Three Feet where the BOTTOM of the WATER MAIN is laid at least (6) Six Inches above the Top of the Sewer.

(d) New or relocated, underground WATER MAINS shall be laid to provide a horizontal distance of at least (10) Ten Feet between the outside of the WATER MAIN and all parts of any existing or proposed "On site Sewage Treatment and Disposal System" as defined in Section 381.0065(2). F.S. and Rule 64E-6.002. F.A.C.

(2) Vertical Separation Between Underground WATER MAINS and Sanitary or Storm Sewers, Wastewater or Storm water Force Mains, and Reclaimed Water Pipelines:

(a)New or relocated underground WATER MAINS crossing any existing or proposed gravity- or vacuum-type sanitary sewer or storm sewer shall be laid so the outside of the WATER MAIN is at least (6) Six inches, and preferably 12 inches above, or at least 12 inches below the outside of the other pipeline. However, it is preferable to lay the WATER MAIN "ABOVE" the other pipeline.

(b) New or relocated, Underground WATER MAINS crossing any existing or proposed pressure-type sanitary sewer, wastewater or stormwater Force Main, or Pipeline conveying reclaimed water shall be laid so the outside of the WATER MAIN is at least (12) inches ABOVE or BELOW the Outside of the other pipeline. However, it is preferable to lay the WATER MAIN above the other pipeline.

(c) At the Utility crossings described in paragraphs (a) & (b) Above, one full length of Water Main Pipe shall be centered above or below the other pipeline so the WATER MAIN joints will be as far as possible from the other pipeline. Alternatively, at such crossings, the pipes shall be arranged so that all WATER MAIN Joints are at least (3) Three feet from all joints in Vacuum-type Sanitary Sewers, Storm Sewers, Stormwater Force Mains, or pipelines conveying reclaimed water regulated under Part III of Chapter62-610, F.A.C., and at least (6) Six Feet 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) Separation Between WATER MAINS and Sanitary or Storm Sewer Manholes:

(a)No WATER MAIN shall pass thru, or come into contact with any part of a Sanitary Manhole.

(4) Separation Between Fire Hydrant Drains and Sanitary or Storm Sewers, Wastewater or Stormwater Force Mains, reclaimed Water Pipelines, and On-Site Sewage Treatment and Disposal Systems. New or relocated Fire Hydrants with underground Drains shall be located so that the drains are at least (3) Three Feet from any existing or proposed storm sewer, Stormwater force main, or pipeline conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C.; at least (3) Three Feet, and preferably (10) Ten 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.; and at least (10) Ten Feet from any existing or proposed "on-site sewage treatment and disposal system" as defined in Section 381.0065(2), F.S. and Rule 64E-6.002, F.A.C.

(5) Exceptions/Mitigation:
Adhere to the above Constraints and Separations in items 1 through 4 shall be Complied to, "WITHOUT EXCEPTION". If for some reason where it is not technically feasible or Economically Sensible that items 1 through 4 cannot be complied with, Contractor will Stop Work and Notify the Engineer of record for the appropriate solution which will be submitted to "The Department of Environmental Protection" for APPROVAL, prior to work commencement.

PIPE CLEARANCE NOTES	GU0016-2B
	ISSUED: 2017
	REVISED: –

DATE	REVISION
	1
	2
	3
	4
	5
	6
	7
	8

INSPIRE DONNELLY WOODS
MOUNT DORA, FL

C-302
GENERAL UTILITY STANDARD DETAILS

HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33580

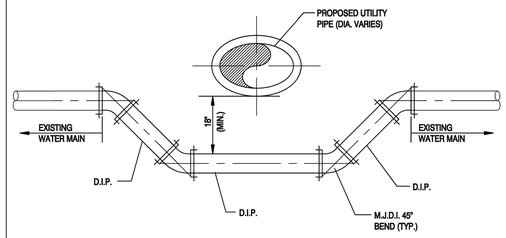
DATE:	6/5/2023
DESIGNED BY:	CCH
DRAWN BY:	NTD
CHECKED BY.:	CBS
JOB NO.:	045953.001

C-302

CHARLES C. HIOTT, PE
LICENSE # 54813

CONSTRUCTION SET

I:\000\00-4\045953\01\CADD\Sheets\XXC-X\0 DETAILS.dwg
Smith, Cody
6/5/2023
2:41:18 PM
1000CM.ctb



NOTES:

1. ALL PROPOSED JOINTS SHALL BE RESTRAINED.
2. ALL EXISTING JOINTS WITHIN 12' SHALL BE RESTRAINED.
3. ALL PIPING CLEARANCES SHALL BE IN ACCORDANCE WITH CHAPTER 62-555.314 F.A.C.

NOT TO SCALE

WATER LINE CROSSING

GU0015-1
ISSUED: 2017
REVISED: --

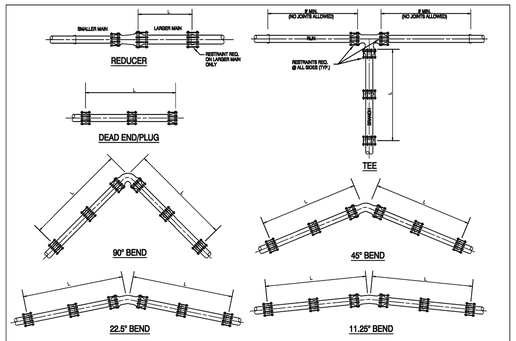


TABLE OF THRUST RESTRAINT LENGTHS

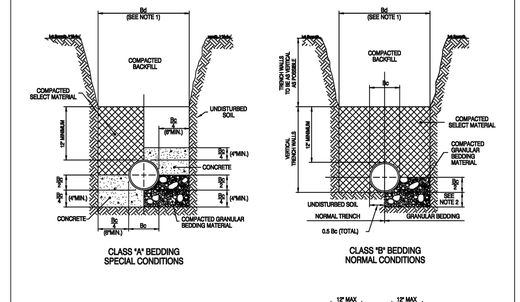
PIPE SIZE (DI/PVC)	90° BEND		45° BEND		22.5° BEND		11.25° BEND		TEES		DEAD END & PLUG		REDUCER	
	PVC GJ	MJ/FLG/ MEGALUG	PVC GJ	MJ/FLG/ MEGALUG	PVC GJ	MJ/FLG/ MEGALUG	PVC GJ	MJ/FLG/ MEGALUG	PVC GJ	MJ/FLG/ MEGALUG	PVC GJ	MJ/FLG/ MEGALUG	PIPE SIZES	PVC GJ / MJ/FLG/ MEGALUG
4	30'	18'	9'	4'	3'	2'	2'	1'	15'	10'	45'	29'	6"x4"	30' / 21'
6	39'	22'	12'	5'	4'	2'	2'	2'	22'	21'	69'	42'	8"x6"	34' / 22'
8	36'	29'	15'	12'	7'	6'	4'	3'	52'	29'	82'	52'	10"x8"	39' / 21'
10	43'	34'	18'	14'	9'	7'	4'	3'	66'	43'	98'	69'	12"x10"	34' / 22'
12	52'	42'	21'	17'	10'	8'	5'	4'	84'	54'	118'	74'	16"x12"	63' / 42'
16	69'	51'	28'	21'	13'	10'	6'	5'	118'	74'	148'	94'	18"x16"	59' / 21'
18	75'	58'	29'	22'	14'	11'	7'	6'	131'	82'	165'	102'	20"x18"	30' / 21'
20	79'	61'	31'	25'	15'	12'	7'	6'	140'	82'	179'	113'	20"x20"	62' / 39'
24	89'	70'	36'	29'	17'	14'	8'	7'	179'	110'	207'	132'		

THRUST RESTRAINT DESIGN NOTES

1. RESTRAINT JOINTS, FITTINGS, & VALVE REQUIREMENTS CALCULATED BY THE THRUST RESTRAINT DESIGN PROGRAM PROVIDED BY UNI-FLANGE.
2. DATA BASED ON MAX. PRESSURE OF 150 p.s.i., THE UNIFIED SOILS CLASSIFICATION SYSTEM (SOIL TYPE SP). THE PIPE BEDDED IN NATIVE SOIL w/ A MINIMUM OF 2.5' COMPACTED FILL OVER THE PIPE, AND USING A SAFETY FACTOR OF 1.5 FOR THE DATA.
3. ALL FITTINGS & VALVES SHALL HAVE RESTRAINED JOINTS PER SPECIFICATIONS & ALL BELL & SPIGOT JOINTS TO BE RESTRAINED WITH A RESTRAINING HARNESS WITHIN THE REQUIRED LENGTH OF RESTRAINED PIPE (L).
4. THRUST BLOCKS SHALL BE USED ONLY IN EXTRAORDINARY SITUATIONS AND MUST BE APPROVED BY THE CITY ENGINEER.

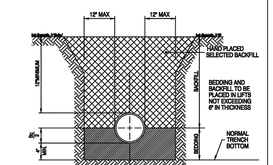
THRUST RESTRAINT DETAIL

GU0014-1
ISSUED: 2017
REVISED: --



NOTES: FOR BEDDING AND TRENCHING

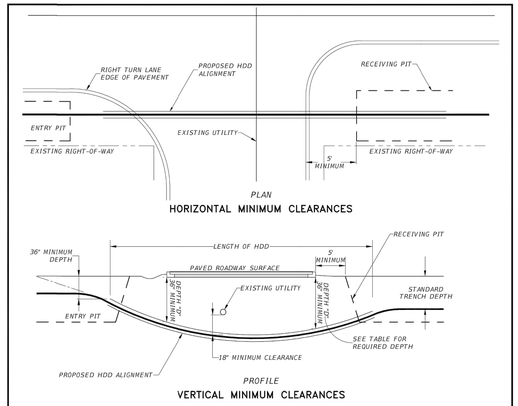
1. Dimension Bc = Pipe O.D.
   Dimension Bd = Trench Width at Top of Pipe
   Maximum Bd = Bc + 20"
   Minimum Bd = Maximum Dimension of Bell + 6" (Unsheeted Trench)
2. Depth for removal for unsuitable material shall be as required to reach suitable foundation. For rock or other non-cushioning material, depth shall be 6" below bottom of utility.
3. All backfill and select material under all roadways, drives (including dirt drives), and parking areas shall be compacted to 98% of the modified proctor maximum dry density. (AASHTO T-180). Backfill and select material under all other areas shall be compacted as follows: From bottom of trench to 12" above top of pipe - 95% of modified proctor maximum dry density (AASHTO T-180). From 12" above top of pipe to top of backfill - 90% of modified proctor maximum dry density (AASHTO T-180)



NOT TO SCALE

BEDDING DETAILS

GU0017-1
ISSUED: 2017
REVISED: --



HDD INSTALLATION NOTES:

1. ANY WORK WITHIN PUBLIC RIGHT-OF-WAY REQUIRES AN APPROVED RIGHT-OF-WAY UTILIZATION PERMIT.
2. ALL HDD INSTALLATION ACTIVITIES SHALL BE IN ACCORDANCE WITH THE FLORIDA D.O.T. UTILITY ACCOMMODATIONS MANUAL UNLESS APPROVED OTHERWISE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF AFFECTED AGENCIES AND COORDINATION WITH ALL UTILITIES PRIOR TO CONSTRUCTION.
4. ALL CONSTRUCTION MATERIALS, INCLUDING DRILLING FLUID, SHALL BE REMOVED FROM THE SITE PRIOR TO RESTORATION OF DISTURBED AREAS.
5. ALL RESTORATION WORK SHALL BE IN ACCORDANCE WITH LAKE COUNTY STANDARDS AND PERMIT REQUIREMENTS.
6. FOR PIPE DIAMETER GREATER THAN 18", DEPTH "D" WILL BE AS APPROVED BY LCPW.
7. ALL DIRECTIONAL DRILL SHALL BE INSTALLED MONDAY THROUGH THURSDAY ONLY. NO WORK PERMITTED FRIDAY, SATURDAY OR SUNDAY.
8. NO EXCAVATION IS PERMITTED WITHIN 5' OF EDGE-OF-PAVEMENT (EOP). IF NECESSARY WITHIN 5', NEED APPROVAL BY THE COUNTY & TRENCH SHEETING WITH ASSOCIATED M.O.T. PLAN REQUIRED. EXCAVATION WITHIN 2' OF EOP IS NOT PERMITTED.

DEPTH "D" (5 X REAMER DIAMETER)					
"D"	3'	4'	5'	6'	7'
PIPE DIAMETER	<6"	6"	8"	10"	12"

NOTE:
A. ANY PIPE DIAMETER GREATER THAN 12" SHALL HAVE A DEPTH "D" CALCULATED ACCORDING TO REAMER DIAMETER.
B. REAMER DIAMETER SHALL BE IN ACCORDANCE WITH CURRENT FDOT U.A.M. CRITERIA (3.16.9.1).
C. CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR ANY AND ALL DAMAGES TO COUNTY ROADWAYS, AT NO COST TO THE COUNTY, DUE TO DIRECTIONAL DRILLING OPERATION.

TYPICAL HORIZONTAL DIRECTIONAL DRILL (HDD) UNDER A ROADWAY

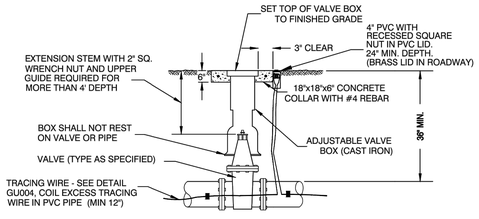
NOT TO SCALE
REV. JAN 2019

LAKE COUNTY FLORIDA	DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION 350 N. SINCLAIR AVE. - TAVARES, FLORIDA 32778	LAKE COUNTY STANDARD DIRECTIONAL DRILL DETAIL	101



TYPICAL VALVE BOX COVER DETAILS

NOTE: COVERS AND RINGS TO TRAFFIC RATED PER FDOT STANDARDS AND SPECIFICATIONS.

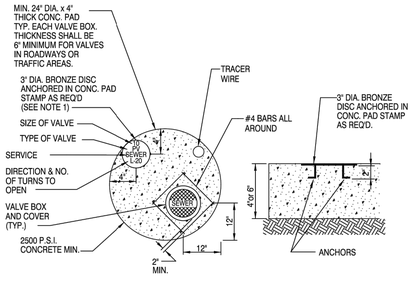


TYPICAL VALVE AND VALVE BOX DETAIL

ADDITIONAL REFERENCE: FIRE HYDRANT DETAIL PW002-4.

VALVE, VALVE BOX, AND COVER

GU005-1
ISSUED: 2017
REVISED: --



NOTES:
1. BRONZE IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES

NOT TO SCALE

VALVE COLLAR

SS010-1
ISSUED: 2017
REVISED: --

REVISION	DATE
1	
2	
3	
4	
5	
6	
7	
8	

INSPIRE DONNELLY WOODS
MOUNT DORA, FL

C-303
GENERAL UTILITY STANDARD DETAILS

HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33580

DATE:	6/5/2023
DESIGNED BY:	CCH
DRAWN BY:	NTD
CHECKED BY.:	CBS
JOB NO.:	045953.001

C-303

CHARLES C. HIOTT, PE
LICENSE # 54813

CONSTRUCTION SET

I:\45000s\45953\01\CADD\Sheets\XXC-XXX DETAILS.dwg
Smith, Cody
2:41:49 PM
5/5/2023
100CM.ctb

WATER SYSTEM CONSTRUCTION GENERAL NOTES

1. THE CITY'S PUBLIC WORKS DEPARTMENT SHALL BE NOTIFIED PRIOR TO BEGINNING ANY WATER SYSTEM CONSTRUCTION.
2. DE-WATERING SHALL BE PROVIDED TO KEEP GROUND WATER ELEVATION A MINIMUM OF 6 INCHES BELOW PROPOSED WATER MAIN.
3. ALL WATER MAINS SHALL BE INSTALLED ON A FIRM FOUNDATION WITH ALL UNSUITABLE MATERIAL (MUCK, ROCK, COQUINA, ETC.) REMOVED AND REPLACED WITH CLEAN GRANULAR MATERIAL.
4. TRENCHES SHALL BE BACK FILLED WITH MATERIAL ACCEPTABLE TO THE CITY, WITH A MINIMUM COMPACTION OF 98% (AASHTO T-180) IN PAVED AREAS AND 95% (AASHTO T-180) IN UNPAVED AREAS.
5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT TRENCH COMPACTION TESTS BE PROVIDED AT POINTS 1 FOOT ABOVE THE PIPE AND AT 2 FEET VERTICAL INTERVALS TO FINISH GRADE, AT A MINIMUM SPACING OF EVERY 300 FEET.
6. PIPE WARNING TAPE SHALL BE LOCATED 18 INCHES BELOW FINISH GRADE FOR ALL PIPES. PIPE IDENTIFICATION TAPE SHALL BE PROVIDED ON ALL PIPES.
7. ALL SINGLE RESIDENTIAL WATER SERVICES SHALL BE MINIMUM 1" AND DOUBLE RESIDENTIAL SERVICES SHALL BE MINIMUM 1-1/2" BLACK OR BLUE POLYETHYLENE TUBING. POLYBUTYLENE SHALL NOT BE USED.
8. ALL WATER SERVICE ENDINGS SHALL BE MARKED BY 2"x4" LUMBER (PRESSURE TREATED). ALL SERVICE SHALL EXTEND 6 INCHES ABOVE GRADE, SECURED TO THE BASE OF THE LUMBER. ALL SERVICES MUST BE ADJUSTED TO FINAL METER BOX LOCATION BY OWNER PRIOR TO INITIAL METER INSTALLATION.
9. WATER VALVES SHALL BE PLACED AT ALL STREET INTERSECTIONS AND AT MAXIMUM SPACING OF 1,000 FEET FOR RESIDENTIAL SERVICE (500' FOR COMMERCIAL, MULTIFAMILY AND INDUSTRIAL). AT ALL WATER TEES AND CROSSES, VALVES SHALL BE INSTALLED ON ALL BRANCHES.
10. APPROVED WATER VALVE TYPES ARE THE FOLLOWING:
    A. BRASS BALL-TYPE VALVE FOR VALVES LESS THAN 2" DIAMETER.
    B. STANDARD GATE VALVES 2" AND LARGER DIAMETER, RESILIENT WEDGE GATE VALVES (AWWA C-509)
    C. TAPPING VALVES WITH MECHANICAL TAPPING SLEEVE FOR SIZE ON SIZE STAINLESS STEEL.

POTABLE WATER GENERAL NOTES | PW001-1A | ISSUED: 2017 | REVISED: –

WATER SYSTEM CONSTRUCTION GENERAL NOTES

11. ALL POTABLE WATER VALVE BOXES SHALL BE ADJUSTED TO FINISH GRADE AND THE CAPS SHALL BE PAINTED BLUE TO MAKE THEM PLAINLY VISIBLE.
12. AS STANDARD PRACTICE, WATER MAINS SHALL BE INSTALLED 4 FEET OFF THE BACK OF THE CURB ON THE OPPOSITE SIDE OF THE RECLAIMED WATER LINES OR AS APPROVED BY THE CITY.
13. ALL WATER MAINS SHALL BE NSF APPROVED FOR POTABLE WATER USE, AND HAVE A MINIMUM COVER OF 36 INCHES. IN SPECIAL CASES WHERE IT IS IMPOSSIBLE OR INAPPROPRIATE TO PROVIDE ADEQUATE COVER, DUCTILE IRON PIPE OR ENCASEMENT MAY BE USED AS APPROVED BY THE CITY AND FDEP.
14. ALL WATER MAINS TO BE CLEARED FOR SERVICE SHALL BE FLUSHED, DISINFECTED, PRESSSURE TESTED, AND BACTERIOLOGICALLY CLEANSED FOR SERVICE, IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS.
15. WATER MAINS SHALL BE PVC AWWA CLASS C-900, MINIMUM CL-150 (DR-18) DUCTILE IRON PIPE PRESSURE RATING, STANDARD CEMENT LINED, UNLESS OTHERWISE APPROVED BY THE CITY.
16. UPON CONSTRUCTION COMPLETION AND ACCEPTANCE OF THE SYSTEM, IT SHALL BE THE DESIGN ENGINEER'S RESPONSIBILITY TO INSURE THAT THE SYSTEM IS PROPERLY CERTIFIED AND ACCEPTED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION OR THE CITY PUBLIC WORKS AND "AS-BUILTS" ARE PROVIDED TO THE CITY, PRIOR TO ANY USE OF THIS SYSTEM.
17. WATER DISTRIBUTION SYSTEM SHALL BE DESIGNED TO COMPLY WITH THE CITY'S FIRE (WATER) FLOW CODE AND NFPA 291.
18. ALL WATER SERVICES SHALL BE MARKED ALONG THE OUTSIDE EDGE OF CURB WITH UPSIDE-DOWN "W" OR BY METAL TABS SET INTO PAVEMENT. VALVES FOR WATER SHALL BE MARKED BY A "V" OR METAL TABS SET INTO THE PAVEMENT. BLOW-OFFS SHALL BE MARKED WITH A "B".
19. BLUE REFLECTORS SHALL BE SECURELY AFFIXED TO ROADWAY (CENTER LINE OF ROAD) ADJACENT TO HYDRANT LOCATION.
20. WATER SERVICES SHOULD BE DOUBLE 1-1/2" SERVICES LOCATED AT SIDE LOT LINES, ALTERNATING WITH RECLAIMED WATER SERVICE LOCATIONS. IN INSTANCES WHERE WATER SERVICES NEED TO BE OFFSET, 1" SERVICES SHALL BE SPECIFIED. THESE SERVICES MAY BE OFFSET FROM THE LOT LINE A MAXIMUM DISTANCE OF 5.0 FEET.
21. OUT-OF-SERVICE FIRE HYDRANTS MUST BE CLEARLY MARKED (RED RING ON NOZZLE, LABELED DISK ON NOZZLE) FACING ROADWAY. ALL LABELS AND DISK PROVIDED BY THE CITY OR BLACK BAGGED - NOTIFY THE FIRE DEPT. THAT THE HYDRANT IS OUT OF SERVICE.
22. PRIOR TO TAKING ANY WATER LINES OUT OF SERVICE, THE CONTRACTOR SHALL NOTIFY THE CITY AND AFFECTED CUSTOMERS, IN WRITING, 48-HOURS PRIOR TO SHUTDOWN WITH CITY APPROVAL.
23. WATER SYSTEMS WILL BE PRESSURE TESTED AT 150 PSI STATIC PRESSURE FOR A PERIOD OF 2 HOURS PER AWWA STANDARDS. PRIVATE WATER SYSTEMS SUPPLYING FIRE HYDRANTS OR FIRE SPRINKLER SYSTEMS SHALL BE TESTED AT 200 PSI FOR 2 HOURS IN ACCORDANCE WITH NFPA 13. NOTIFY FIRE AND BUILDING DEPARTMENTS PRIOR TO TESTING.

POTABLE WATER GENERAL NOTES | PW001-1B | ISSUED: 2017 | REVISED: –

WATER SYSTEM CONSTRUCTION GENERAL NOTES

24. MEGALUGS, SPLIT-RESTRAINED BOLTLESS RESTRAINED JOINTS, OR GRIPPER GASKETS SHALL BE USED ON ALL RESTRAINED JOINT INSTALLATIONS, MINIMUM DEPTH OF BURY ON ALL PIPES NOT MEETING REQUIRED COVER REQUIREMENTS SHALL FOLLOW THE MOST RECENT DIPRA THRUST RESTRAINT DESIGN GUIDELINES.
25. WATER VALVES SHALL BE COMPLETELY OPENED BY THE CITY, IN THE PRESENCE OF THE CONTRACTOR, PRIOR TO FINAL ACCEPTANCE OF ANY NEW WATER SYSTEM.
26. ALL FIRE HYDRANTS SHALL BE CONSTRUCTED TO MAKE THEM EASILY ACCESSIBLE TO FIRE PERSONNEL IN CASE OF A FIRE. THE MAIN NOZZLE SHOULD ALWAYS FACE THE STREET AND BE 18" - 22" ABOVE FINAL GRADE.
27. HYDRANT LOCATION AND SPACING SHALL BE AS PER ARTICLE 7.13.2 OF THE LAND DEVELOPMENT CODE.

7.13. - WATER DISTRIBUTION SYSTEMS.

7.13.1.

GENERAL. THIS SECTION SETS FORTH THE GENERAL REQUIREMENTS FOR DESIGN AND INSTALLATION OF WATER DISTRIBUTION SYSTEMS FOR POTABLE WATER SERVICE.

7.13.2.

DESIGN STANDARDS.

1. REFERENCE: NORMAL FLOW DEMANDS FOR DESIGN SHALL BE CALCULATED ON THE BASIS OF FULL ULTIMATE DEVELOPMENT AS KNOWN, OR PROJECTED. THE AVERAGE DAILY FLOW FOR DOMESTIC USE SHALL BE CALCULATED AT THE MINIMUM RATE OF 135 GALLONS PER DAY PER CAPITA, WITH 3.5 PERSONS PER SINGLE-FAMILY RESIDENCE, AND 2.5 PERSONS PER MULTIFAMILY OR MOBILE HOME DWELLING UNIT. MAXIMUM DAY INSTANTANEOUS DEMAND TO BE USED FOR DESIGN SHALL BE 1.0 GALLON PER MINUTE (GPM) PER SINGLE-FAMILY RESIDENCE AND 0.7 GPM PER DWELLING UNIT FOR EACH MULTIFAMILY OR MOBILE HOME UNIT. FLOW DEMANDS FOR COMMERCIAL, INDUSTRIAL OR OTHER SPECIAL DEVELOPMENTS SHALL BE ESTABLISHED FROM EXISTING RECORDS OR BY ESTIMATED PROJECTIONS, USING THE BEST AVAILABLE DATA.
2. WATER DISTRIBUTION SYSTEMS AND/OR WATER MAIN EXTENSIONS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE FIRE PROTECTION REQUIREMENTS OF THE INSURANCE SERVICES OFFICE (NATIONAL BOARD OF FIRE UNDERWRITERS), AS STATED IN THEIR PUBLICATION "GUIDE FOR THE DETERMINATION OF REQUIRED FIRE FLOWS," IF NOT IN CONFLICT WITH THE FOLLOWING:
   A. FIRE FLOWS IN SINGLE-FAMILY RESIDENTIAL AREAS SHALL PROVIDE A MINIMUM OF 600 GPM AT A 20 PSI RESIDUAL PRESSURE.

POTABLE WATER GENERAL NOTES | PW001-1C | ISSUED: 2017 | REVISED: –

B. FIRE FLOWS IN COMMERCIAL, INSTITUTIONAL, INDUSTRIAL AREAS AND APARTMENT OR MULTIUNIT COMPLEXES, SHALL PROVIDE A MINIMUM OF 1,500 GPM AT A 20 PSI RESIDUAL PRESSURE. LARGER COMMERCIAL/INDUSTRIAL, MAJOR SHOPPING CENTERS, SCHOOLS, AND SIMILAR USES SHALL HAVE A FIRE FLOW CAPACITY AS DETERMINED NECESSARY BY THE FIRE DEPARTMENT.

C. FIRE HYDRANTS: DISTANCE FROM OR SPACING OF FIRE HYDRANTS SHALL BE A MINIMUM OF 600 FEET FROM THE FURTHERMOST POINT OF ANY RESIDENTIAL STRUCTURE AND 300 FEET FROM THE FURTHERMOST POINT OF ANY COMMERCIAL STRUCTURE, AS THE FIRE DEPARTMENT WOULD LAY HOSE OR AS OTHERWISE SPECIFIED BY THE FIRE DEPARTMENT TO MEET DETERMINED WATER FLOW REQUIREMENTS FOR FIRE PROTECTION AND/OR INCREASE FIRE PROTECTION EFFECTIVENESS. FIRE HYDRANTS SHALL BE CONNECTED TO WATER MAINS OF EIGHT-INCH MAINS IN ALL AREAS. CONNECTION TO DEAD END STUBS ARE ACCEPTABLE, PROVIDED THAT SAID STUBBED WATER MAIN IS NOT LESS THAN EIGHT INCHES AND WILL PROVIDE ACCEPTABLE FLOW.

D. SYSTEM SIZE COMPUTATION: THE MINIMUM DESIGN FOR WATER DISTRIBUTION SYSTEMS SHALL PROVIDE FOR AT LEAST 100 PERCENT OF THE COMBINED MAXIMUM DAY-DEMAND RATE AND REQUIRED FIRE FLOW FOR SAID RATE, WITH SPECIAL PROVISIONS FOR PEAK FLOWS IN EXCESS THEREOF. THE ALLOWABLE MINIMUM SERVICE PRESSURE UNDER SAID DESIGN CONDITION SHALL NOT BE LESS THAN 20 POUNDS PER SQUARE INCH. DESIGN COMPUTATION SHALL BE BY THE "HARDY CROSS" PROCEDURE, OR OTHER APPLICABLE METHODS, AS DICTATED BY THE SYSTEM CONFIGURATION.

DESIGN FLOWS AND METHOD OF COMPUTATION SHALL BE SUBJECT TO REVIEW AND APPROVAL BY THE CITY.

E. VALVE LOCATIONS: VALVES SHALL BE PROVIDED FOR ALL BRANCH CONNECTIONS, LOOP ENDS, FIRE HYDRANT STUBS, OR OTHER LOCATIONS, AS REQUIRED TO PROVIDE AN OPERABLE, EASILY MAINTAINED, AND REPAIRED WATER DISTRIBUTION SYSTEM. VALVES ARE TO BE PLACED SO THAT THE MAXIMUM ALLOWABLE LENGTH OF WATER MAIN REQUIRED TO BE SHUT DOWN FOR REPAIR WORK SHALL BE 500 FEET IN COMMERCIAL, INDUSTRIAL OR HIGH-DENSITY RESIDENTIAL DISTRICTS, OR 1,000 FEET IN OTHER AREAS.

POTABLE WATER GENERAL NOTES | PW001-1D | ISSUED: 2017 | REVISED: –

7.13.3.

STANDARD REQUIREMENTS.

1. GENERAL: THE MATERIALS OF CONSTRUCTION AND GENERAL INSTALLATION PROCEDURES, WITH THE EXCEPTION OF FIRE HYDRANTS, SHALL COMPLY WITH THE SPECIFIC APPLICABLE STANDARDS SET FORTH UNDER SECTION 7.3, "UTILITY EXCAVATION, TRENCHING AND BACKFILLING," SECTION 7.4, "BORING AND JACKING," AND SECTION 7.5, "PIPE, FITTINGS, VALVES AND APPURTENANCES," AS WELL AS "STANDARD DETAILS-WATER DISTRIBUTION SYSTEMS."
2. FIRE HYDRANTS: HYDRANTS SHALL COMPLY WITH AWWA STANDARD C502, "FIRE HYDRANTS FOR ORDINARY WATER WORKS SERVICE," AND SHALL BE EQUIPPED WITH A MINIMUM OF ONE PUMPER OUTLET NOZZLE 4½ INCHES IN DIAMETER AND TWO HOSE NOZZLES 2½ INCHES IN DIAMETER. THREADS, NOZZLE CAPS, OPERATING NUTS AND COLOR SHALL CONFORM TO CITY STANDARDS. UNITS SHALL BE TRAFFIC TYPE WITH BREAKABLE SAFETY CLIPS OR FLANGE, AND STEM WITH SAFETY COUPLING LOCATED BELOW BARREL BREAK LINE TO PRECLUDE VALVE OPENING. HYDRANTS SHALL BE DRY TOP TYPE. OUTLET NOZZLES SHALL BE ON THE SAME PLANE, WITH MINIMUM DISTANCE OF 18 INCHES FROM CENTER OF NOZZLES TO GROUND LINE. VALVE SHALL BE COMPRESSION TYPE WITH 5¼ INCHES MINIMUM OPENING UNLESS OTHERWISE REQUESTED AND SHOW INLET CONNECTION TO BE SIX INCHES MINIMUM.
   A. HYDRANTS SHALL BE INSTALLED PLUMB AND IN TRUE ALIGNMENT WITH THE CONNECTION PIPES TO THE WATER MAIN. THEY SHALL BE SECURELY BRACED AGAINST THE END OF THE TRENCH (UNDISTURBED SOIL) WITH CONCRETE THRUST BLOCKS. THE GRAVEL OR CRUSHED STONE FOR THE DRAIN SUMP, FOLLOWED BY BACKFILLING, SHALL BE CAREFULLY PLACED AND COMPACTED. INSTALLED HYDRANTS SHALL BE PAINTED RED FOR THE FINAL COAT.
   B. HYDRANT PLACEMENT IS TO BE A MINIMUM OF SIX FEET AND A MAXIMUM OF NINE FEET FROM THE CURB OR PAVED ROAD SURFACE UNLESS OTHERWISE APPROVED. THE CENTER OF THE STEAMER PORT SHALL BE 18 INCHES MINIMUM AND 24 INCHES MAXIMUM ABOVE FINAL GRADE. STEAMER PORT SHALL BE CORRECTLY POSITIONED FOR THE PROPER CONNECTION, WITH THE APPROVAL OF THE CITY (WATER AND FIRE DEPARTMENT).
3. JOINT RESTRAINING: PRESSURE PIPING FITTINGS AND OTHER ITEMS REQUIRING RESTRAINT, SHALL BE BRACED WITH 2,500 PSI CONCRETE THRUST BLOCKS OR OTHER RESTRAINING ASSEMBLIES. SAID RESTRAINING DEVICES SHALL BE DESIGNED FOR THE MAXIMUM PRESSURE CONDITION (TESTING) AND THE SAFE BEARING LOADS FOR HORIZONTAL THRUST, IF THRUST BLOCKING IS USED.

POTABLE WATER GENERAL NOTES | PW001-1E | ISSUED: 2017 | REVISED: –

4. PIPE DEPTH AND PROTECTION: THE STANDARD MINIMUM COVER FOR WATER DISTRIBUTION SYSTEMS SHALL BE THREE FEET FROM THE TOP OF THE FINISH GRADE. HOWEVER, SHOULD THIS DESIGN NOT BE FEASIBLE, PROTECTIVE CONCRETE SLABS SHALL BE PROVIDED OVER THE PIPE WITHIN THE LIMITS OF THE LESSER COVER. WHERE WATERWAYS, CANALS, DITCHES OR OTHER CUTS ARE CROSSED, DUCTILE IRON PIPE SHALL BE INSTALLED ACROSS AND TO TEN FEET EACH SIDE OF THE BOTTOM. ADDITIONALLY, APPROVED UTILITY CROSSING SIGNS SHALL BE PLACED ON THE PIPE ALIGNMENT AT EACH SIDE OF THE CANAL, ETC.
5. CONNECTIONS AT STRUCTURE: WHERE PIPES ARE TO EXTEND INTO OR THROUGH STRUCTURES, FLEXIBLE JOINTS ARE TO BE PROVIDED AT THE WALL FACE.
6. SPECIAL EXTERIOR PROTECTION FOR CORROSION: EXTRA PROTECTION SHALL BE PROVIDED FOR UNDERGROUND CAST OR DUCTILE IRON PIPE AND FITTINGS WITHIN AREAS OF SEVERE CORROSIVE CONDITIONS. THIS SHALL BE ACCOMPLISHED BY THE INSTALLATION OF POLYETHYLENE ENCASEMENT, THROUGH THE AREA OF CONCERN. THE SOIL TEST EVALUATION TO DETERMINE THE NECESSITY FOR EXTRA PROTECTION IN SUSPECT AREAS SHALL BE AS SET FORTH IN ANSI STANDARD A21.5. ADDITIONALLY, WHERE OTHER EXISTING UTILITIES ARE KNOWN TO BE CATHODICALLY PROTECTED, CAST OR DUCTILE IRON PIPE CROSSING SAID UTILITY SHALL BE INSTALLED PARALLEL TO AND WITHIN TEN FEET OF, PROTECTION SHALL ALSO BE PROVIDED. STEEL PIPE SHALL NOT BE INSTALLED IN SEVERE CORROSION AREAS.
7. AIR VENTING AND BLOWOFFS: WHERE THE WATERMAIN PROFILE IS SUCH THAT AN AIR POCKET OR ENTRAPMENT COULD OCCUR, RESULTING IN FLOW BLOCKAGE, METHODS FOR AIR RELEASE SHALL BE PROVIDED. AIR VENTING CAPABILITIES SHALL BE PROVIDED FOR DISTRIBUTION MAINS BY APPROPRIATELY PLACING FIRE HYDRANTS, BLOWOFFS, OR OTHER MANUAL DEVICES. AT CRITICAL POINTS ON MAJOR MAINS, AUTOMATIC AIR RELEASE ASSEMBLIES SHALL BE INSTALLED. SPECIAL CARE SHALL BE TAKEN TO PRECLUDE ANY CROSS-CONNECTION POSSIBILITY IN THE DESIGN OF AUTOMATIC AIR RELEASE VALVE APPLICATION. ALL DEAD-END WATER MAINS, TEMPORARY OR PERMANENT, SHALL BE EQUIPPED WITH A MANUALLY OPERATED BLOWOFF AT THE TERMINAL.

POTABLE WATER GENERAL NOTES | PW001-1F | ISSUED: 2017 | REVISED: –

DATE	REVISION
	1
	2
	3
	4
	5
	6
	7
	8

INSPIRE DONNELLY WOODS
MOUNT DORA, FL

C-304
WATER DISTRIBUTION STANDARD DETAILS

HALFF
Office: 352.343.8481
Fax: 352.343.8495
902 North Sinclair Ave.
Tavares, Florida 32778
Certificate of Authorization Number: 33360

DATE:	6/5/2023
DESIGNED BY:	CCH
DRAWN BY:	NTD
CHECKED BY.:	CBS
JOB NO.:	045953.001

C-304

CHARLES C. HIOTT, PE
LICENSE # 54813

CONSTRUCTION SET

I:\2020\045953001\CAD\Sheets\XXC-00 DETAILS.dwg
Smith, Cody
6/5/2023 2:41:53 PM
050505.dlt

8.

SERVICE CONNECTIONS: CONNECTIONS TO WATER MAINS FOUR INCHES AND LARGER SHALL BE MADE BY DRILLING THE APPROPRIATE SIZE HOLE AND INSTALLATION OF SERVICE SADDLES, WITH SERVICES TO SMALLER SIZES ACCOMPLISHED BY IN-LINE FITTINGS. A FITTING WITH THE SERVICE LINE EXTENDED TO THE PROPERTY LINE OR EASEMENT LINE, PERPENDICULAR TO SAID LINE, AND TERMINATING WITH A PLUGGED CURB STOP AND METER BOX WITH STANDARD PLASTIC METER BOX WITH CAST IRON LID. CONCRETE BOXES SHALL BE USED IN HIGH TRAFFIC AREAS PENDING METER INSTALLATION. ON CURBED STREETS THE EXACT LOCATION FOR EACH INSTALLED SERVICE SHALL BE MARKED BY ETCHING OR CUTTING A "W" IN THE CONCRETE CURB AND PAINTED BLUE. WHERE NO CURB EXISTS OR IS PLANNED, LOCATIONS SHALL BE ADEQUATELY MARKED BY A ONE-HALF-INCH STEEL REBAR, THREE INCHES BELOW FINAL GRADE.

7.13.4.

TESTING.

1.

THE CONTRACTOR SHALL PERFORM HYDROSTATIC TESTING OF ALL WATER DISTRIBUTION SYSTEMS, AS SET FORTH IN THE FOLLOWING AND SHALL CONDUCT SAID TESTS IN THE PRESENCE OF REPRESENTATIVES FROM THE CITY AND/OR OTHER AUTHORIZED AGENCIES, WITH 48 HOURS ADVANCE NOTICE PROVIDED, IN WRITING.

2.

PIPING AND APPURTENANCES TO BE TESTED SHALL BE WITHIN SECTIONS BETWEEN VALVES, NOT EXCEEDING 2,000 FEET UNLESS ALTERNATE METHODS HAVE RECEIVED PRIOR APPROVAL FROM THE CITY. TESTING SHALL NOT PROCEED UNTIL CONCRETE THRUST BLOCKS ARE IN PLACE AND CURED, OR OTHER RESTRAINING DEVICES INSTALLED. ALL PIPING SHALL BE THOROUGHLY CLEANED AND FLUSHED PRIOR TO TESTING TO CLEAR THE LINES OF ALL FOREIGN MATTER. WHILE THE PIPING IS BEING FILLED WITH WATER, CARE SHALL BE EXERCISED TO PERMIT THE ESCAPE OF AIR FROM EXTREMITIES OF THE TEST SECTION, WITH ADDITIONAL RELEASE COCKS PROVIDED IF REQUIRED.

POTABLE WATER GENERAL NOTES | PW001-1G | ISSUED: 2017 | REVISED: –

3.

HYDROSTATIC TESTING SHALL BE PERFORMED AT 150 POUNDS PER SQUARE INCH PRESSURE, UNLESS OTHERWISE APPROVED BY THE CITY, FOR A PERIOD OF NOT LESS THAN TWO HOURS. TESTING SHALL BE IN ACCORDANCE WITH THE APPLICABLE AWWA PROVISIONS FOR PVC-AWWA PUBLICATION M-23 AND FOR DIP-AWWA STANDARD C600, SECTION 4. THE ALLOWABLE RATE OF LEAKAGE SHALL BE LESS THAN THE NUMBER OF GALLONS PER HOUR DETERMINED BY THE FOLLOWING FORMULAS:

PVC DIP L = NDP 1/2

$\overline{7400}$

L = SDP 1/2

$\overline{133,200}$

FOR 150 PSI; TEST: L = 0.00165 ND (PVC)
FOR 150 PSI; TEST: L = 0.000092 SD (DIP)

L = ALLOWABLE LEAKAGE IN GALLONS PER HOUR

N = NUMBER OF JOINTS IN SECTION TESTED

S = LENGTH OF PIPE TESTED, IN FEET

D = NOMINAL DIAMETER OF THE PIPE IN INCHES

P = AVERAGE TEST PRESSURE MAINTAINED DURING THE LEAKAGE TEST IMPOUNDS PER SQUARE INCH GAUGE.

4.

THE TESTING PROCEDURE SHALL INCLUDE THE CONTINUED APPLICATION OF THE SPECIFIED PRESSURE TO THE TEST SYSTEM, FOR THE TWO-HOUR PERIOD, BY WAY OF A PIPE TAKING SUPPLY FROM A CONTAINER SUITABLE FOR MEASURING WATER LOSS. THE AMOUNT OF LOSS SHALL BE DETERMINED BY MEASURING THE VOLUME DISPLACED FROM SAID CONTAINER.

5.

SHOULD THE TEST FAIL, NECESSARY REPAIRS SHALL BE ACCOMPLISHED BY THE CONTRACTOR AND THE TEST REPEATED UNTIL WITHIN THE ESTABLISHED LIMITS. THE CONTRACTOR SHALL FURNISH THE NECESSARY LABOR, WATER, PUMPS, GAUGES AND ALL OTHER ITEMS REQUIRED TO CONDUCT THE REQUIRED WATER DISTRIBUTION SYSTEM TESTING AND PERFORM NECESSARY REPAIRS.

6.

PIPE SECTIONS TO BE PRESSURE TESTED SHALL BE SUBJECTED TO A HYDROSTATIC PRESSURE OF 150 PSI FOR A DURATION OF TWO HOURS BY MEANS OF A PUMP.

POTABLE WATER GENERAL NOTES | PW001-1H | ISSUED: 2017 | REVISED: –

7.13.5.

DISINFECTING. FOLLOWING THE PRESSURE TESTING: THE CONTRACTOR SHALL DISINFECT ALL SECTIONS OF THE WATER DISTRIBUTION SYSTEM, AND RECEIVE APPROVAL THEREOF FROM THE APPROPRIATE AGENCIES, PRIOR TO PLACING IN SERVICE. ADVANCE NOTICE SHALL BE PROVIDED TO THE CITY BEFORE DISINFECTING PROCEDURES START. THE DISINFECTION SHALL BE ACCOMPLISHED WITH THE APPLICABLE PROVISIONS OF AWWA STANDARD C651, 'DISINFECTING WATER MAINS' AND ALL APPROPRIATE AGENCY APPROVALS. COMPUTATION OF THE AMOUNTS OF CHLORINE TO BE USED FOR DISINFECTION SHOULD BE APPROVED BY THE CITY OR ITS ENGINEER CONSULTANT.

1.

CARE SHALL BE TAKEN TO PROVIDE DISINFECTION TO THE TOTAL SYSTEM AND EXTREMITIES SHALL BE CAREFULLY FLUSHED PRIOR TO CHLORINATION. AFTER DISINFECTION AND FINAL FLUSHING HAVE BEEN ACCOMPLISHED, SAMPLES OF WATER FOR BACTERIOLOGICAL ANALYSIS SHALL BE COLLECTED AND SUBMITTED TO AND AS DIRECTED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION OR OTHER APPROPRIATE APPROVAL AGENCY. SHOULD THESE SAMPLES OR SUBSEQUENT SAMPLES PROVE TO BE UNSATISFACTORY, THEN THE PIPING SHALL BE DISINFECTED UNTIL A SUFFICIENT NUMBER OF SATISFACTORY SAMPLES ARE OBTAINED.

2.

THE CONTRACTOR SHALL FURNISH ALL EQUIPMENT AND MATERIALS AND PERFORM THE WORK NECESSARY FOR THE DISINFECTING PROCEDURES, INCLUDING ADDITIONAL DISINFECTION AS REQUIRED.

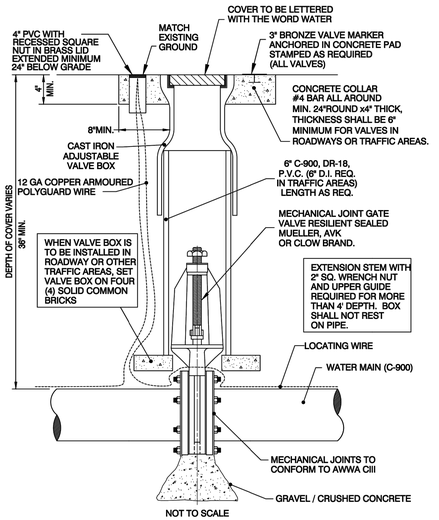
3.

CONTRACTOR SHALL PROVIDE THE CITY WITH 48 HOURS ADVANCED NOTICE OF DISINFECTION.

7.13.6.

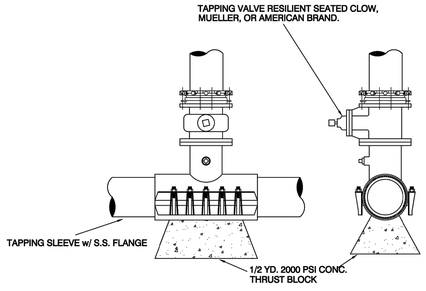
AS-BUILT RECORD DRAWINGS. THE DEVELOPER MUST PROVIDE ONE COMPLETE SET OF MYLARS AND FOUR COMPLETE SETS OF WHITE COPY PRINTS OF 'AS-BUILT RECORD DRAWINGS' OF THE PROJECT, SHOWING ACCURATE MEASUREMENTS OF WATER AND SEWER LINES AND STRUCTURES FROM FIXED KNOWN LOCATIONS WITHIN THE DEVELOPMENT. THE AS-BUILT RECORD DRAWINGS SHALL BE SIGNED AND SEALED BY THE PROJECT DESIGN ENGINEER ATTESTING TO THE ACCURACY OF THE LOCATIONS OF THE FACILITIES. THE AS-BUILT RECORD DRAWINGS ARE TO BE PROVIDED BEFORE THE CITY CAN ACCEPT THE IMPROVEMENTS.

POTABLE WATER GENERAL NOTES | PW001-1I | ISSUED: 2017 | REVISED: –



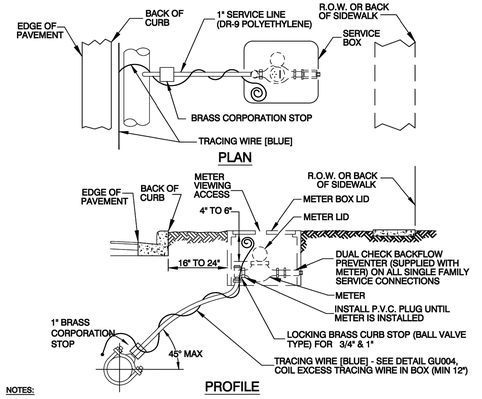
NOT TO SCALE

GATE VALVE & BOX | PW0012-1 | ISSUED: 2017 | REVISED: –



NOT TO SCALE

WET TAP SLEEVE & VALVE | PW0013-1 | ISSUED: 2017 | REVISED: –



NOTES:

1. THE CITY INSTALLS THE METER AND DUAL CHECK VALVE(S) IN THE SERVICE BOX. CONTRACTOR SPECIFIES 3/4" OR 1" SIZING FOR THE METER AND DUAL CHECK VALVES.
2. METER SHALL BE INSTALLED BETWEEN SIDEWALK AND CURB AND IN NO CASE SHALL IT BE INSTALLED IN SIDEWALK OR OTHER PAVED AREAS.
3. A DUAL CHECK BACKFLOW PREVENTER WILL BE FURNISHED WITH METER BY CITY OF MOUNT DORA ON ALL SINGLE FAMILY SERVICE CONNECTIONS. BACKFLOW PREVENTERS WILL NOT BE SUPPLIED BY THE CITY OF MOUNT DORA ON COMMERCIAL SERVICE CONNECTIONS. BACKFLOW PREVENTER REQUIREMENTS WILL VARY FOR COMMERCIAL CONNECTIONS.
4. ALL POTABLE WATER SERVICE AND PROPERTIES WITH ALTERNATIVE WATER SYSTEMS (WELL, ETC.) REQUIRE AN ABOVE GROUND BACKFLOW PROTECTION DEVICE ON THE OUTLET SIDE OF THE METER.
5. SERVICE LINES SHALL NOT BE LESS THAN METER SIZE.
6. 3/4" - 2" RESIDENTIAL WATER METERS WILL BE PROVIDED BY AND INSTALLED BY CITY OF MOUNT DORA

POTABLE WATER-SINGLE SERVICE CONNECTION | PW004-1 | ISSUED: 2017 | REVISED: –

REVISION	DATE
1	
2	
3	
4	
5	
6	
7	
8	

INSPIRE DONNELLY WOODS
MOUNT DORA, FL

C-305
WATER DISTRIBUTION STANDARD DETAILS

HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33580

DATE:	6/5/2023
DESIGNED BY:	CCH
DRAWN BY:	NTD
CHECKED BY.:	CBS
JOB NO.:	045953.001

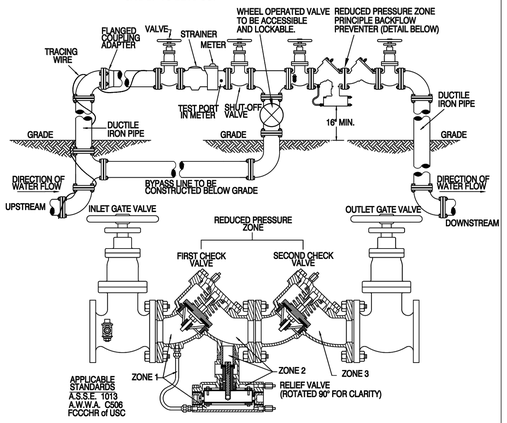
C-305

CHARLES C. HIOTT, PE
LICENSE # 54813

CONSTRUCTION SET

1050CM.dtb
F:\2020\045953001\CADD\Sheets\XYC-305 DETAILS.dwg
Smith, Cody
6/5/2023 2:46:00 PM

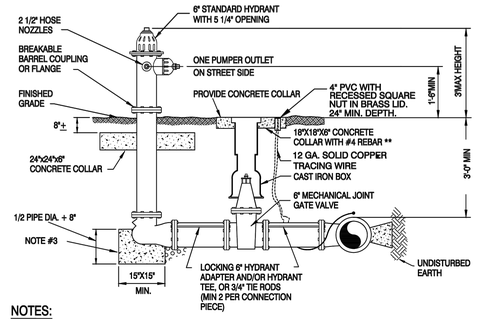
NOTES:
1. ALL DOMESTIC METERS TO BE COMPOUND OR FIRE LINE.
2. IRRIGATION METERS TO BE NEPTUNE HP TURBINE WITH STRAINER.
3. METERS SHALL BE NEPTUNE PROTECTUS III S/S METER WITH STRAINER.
4. METERS TO BE INSTALLED ABOVE GROUND.
5. BOLLARDS & CONCRETE COLLAR REQUIRED WHEN IN OR IMMEDIATLY ADJACENT TO TRAFFIC AREAS.
6. RPBP TO BE APCO.



MOUNT DORA, FLORIDA

MASTER METER ASSEMBLY WITH BY-PASS & REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLY (RPBA)

PW007-1
ISSUED: 2017
REVISED: –



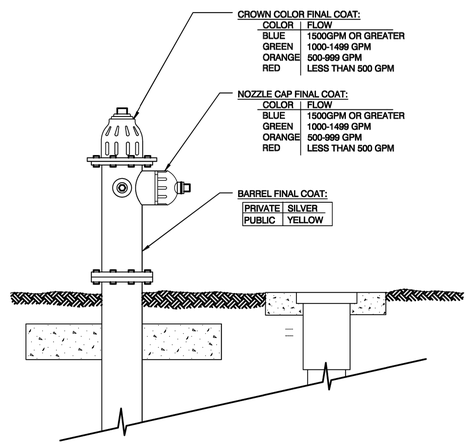
NOTES:
1. THE HYDRANTS ACCEPTABLE TO THE CITY OF MT. DORA SHALL BE EITHER AMERICAN DARLING B84B, MUELLER A-423, OR CLOW MEDALLION.
2. CONCRETE COLLAR AROUND LOWER BARREL OF HYDRANT IN SANDY SOIL OR HYDRANTS CONNECTED TO P.V.C. MAINS.
3. HYDRANT BASE AND TEE MUST BE WRAPPED IN 4 MIL POLYETHYLENE. NO CONCRETE WILL EXTEND ABOVE MID LINE OF PIPE
4. WEEP HOLES TO BE PLUGGED.
5. A VERTICAL CLEARANCE OF 1'-6" SHALL BE MAINTAINED FOR A HORIZONTAL DISTANCE OF 4 FEET IN ALL DIRECTIONS AROUND ALL HYDRANTS.
6. PRIVATELY-OWNED WATER SYSTEM HYDRANTS SHALL BE MAINTAINED BY OWNERS.
7. ANNUAL MAINTENANCE RECORDS FOR PRIVATE HYDRANTS SHALL BE SUBMITTED TO CITY FIRE DEPARTMENT.

* COIL EXCESS TRACING WIRE IN PVC TUBE FOR LOCATING.

** A 16" DIAMETER X 6" THICK CIRCULAR COLLAR MAY BE SUBSTITUTED FOR THE 18"X18"X6" COLLAR.

STANDARD FIRE HYDRANT ASSEMBLY

PW002-1
ISSUED: 2017
REVISED: –



NOTE:
1. PAINT SHALL BE PORTER PAINTS (SAFETY) DTM ACRYLIC GLOSS ENAMEL #2912 OR EQUAL.

FIRE HYDRANT COLOR IDENTIFICATION

PW003-1
ISSUED: 2017
REVISED: JAN 2020

RECLAIMED WATER SYSTEM CONSTRUCTION GENERAL NOTES

1. THE CITY'S PUBLIC SERVICES DEPARTMENT SHALL BE NOTIFIED PRIOR TO BEGINNING ANY RECLAIMED WATER SYSTEM CONSTRUCTION.
2. DE-WATERING SHALL BE PROVIDED TO KEEP GROUND WATER ELEVATION A MINIMUM OF 6 INCHES BELOW RECLAIMED WATER MAIN BEING LAID.
3. ALL RECLAIMED WATER MAINS SHALL BE LAID ON A FIRM FOUNDATION WITH ALL UNSUITABLE MATERIAL (MUCK, ROCK, COQUINA, ETC.) REMOVED AND REPLACED WITH CLEAN GRANULAR MATERIAL.
4. TRENCHES SHALL BE BACK FILLED WITH MATERIAL ACCEPTABLE TO THE CITY, WITH A MINIMUM COMPACTION OF 98% (AASHTO T-180) IN PAVED AREAS AND 95% (AASHTO T-180) IN UNPAVED AREAS.
5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT TRENCH COMPACTION TESTS BE PROVIDED AT POINTS 1 FOOT ABOVE THE PIPE AND AT 2 FEET VERTICAL INTERVALS TO FINISH GRADE, AT A MINIMUM SPACING OF EVERY 300 FEET, WITH RESULTS PROVIDED TO THE CITY.
6. PIPE WARNING TAPE SHALL BE LOCATED 18 INCHES BELOW FINISH GRADE FOR ALL PIPES. PIPE IDENTIFICATION TAPE SHALL BE PROVIDED ON ALL PIPES.
7. ALL SINGLE RESIDENTIAL WATER SERVICES SHALL BE MINIMUM 1" POLYETHYLENE TUBING. POLYBUTYLENE SHALL NOT BE ALLOWED. TUBING COLOR SHALL BE PURPLE.
8. ALL WATER SERVICE ENDINGS SHALL BE SECURED BY WIRE TO 2"x4" STAKES, APPROXIMATELY 2' ABOVE GRADE, WITH "Y" BRANCHES AT THE GROUND LEVEL, OR MAY BE PLACED IN RECLAIMED WATER METER BOXES AS SUPPLIED BY THE CITY AT THE TIME OF FINAL SUB- DIVISION INSPECTION.
9. RECLAIMED WATER VALVES SHALL BE PLACED AT ALL STREET INTERSECTIONS AND AT MAXIMUM SPACING OF 1,000 FEET.
10. AT ALL WATER MAIN TEES AND CROSSES, VALVES SHALL BE INSTALLED ON ALL LEGS, PROVIDED ADEQUATE DOWNSTREAM VALVING EXISTS.
11. APPROVED WATER VALVE TYPES ARE THE FOLLOWING:
    A. BRASS BALL-TYPE VALVE FOR VALVES LESS THAN 2" DIAMETER.
    B. STANDARD GATE VALVES 2" TO 12" DIAMETER, RESILIENT SEAT GATE VALVES (AWWA C-509)
    C. BUTTERFLY VALVES GREATER THAN 12" DIAMETER (AWWA C-504) ONLY WITH WRITTEN CITY ENGINEER APPROVAL.
    D. TAPPING VALVES WITH MECHANICAL TAPPING SLEEVE FOR SIZE ON SIZE STAINLESS STEEL.
12. ALL RECLAIMED WATER VALVES SHALL BE ADJUSTED TO FINISH GRADE AND THE CAPS SHALL BE PAINTED PURPLE TO MAKE THEM PLAINLY DISTINGUISHABLE.
13. AS STANDARD PRACTICE, RECLAIMED WATER MAINS SHALL BE INSTALLED 4 FEET OFF THE BACK OF THE CURB ON THE OPPOSITE SIDE OF THE POTABLE WATER LINES OR AS APPROVED BY THE CITY.

STANDARD CONSTRUCTION DETAIL GENERAL NOTES: RECLAIMED WATER

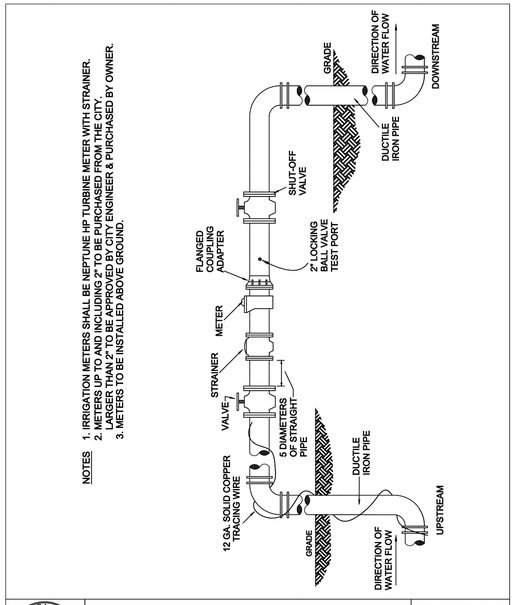
RW001-1A
ISSUED: 2017
REVISED: –

RECLAIMED WATER SYSTEM CONSTRUCTION GENERAL NOTES

12. ALL RECLAIMED WATER VALVES SHALL BE ADJUSTED TO FINISH GRADE AND THE CAPS SHALL BE PAINTED PURPLE TO MAKE THEM PLAINLY DISTINGUISHABLE.
13. AS STANDARD PRACTICE, RECLAIMED WATER MAINS SHALL BE INSTALLED 4 FEET OFF THE BACK OF THE CURB ON THE OPPOSITE SIDE OF THE POTABLE WATER LINES OR AS APPROVED BY THE CITY.
14. ALL RECLAIMED WATER MAINS SHALL HAVE A MINIMUM COVER OF 30 INCHES. IN SPECIAL CASES WHERE IT IS IMPOSSIBLE OR INAPPROPRIATE TO PROVIDE ADEQUATE COVER, DUCTILE IRON PRESSURE CLASS RATING OR CONCRETE ENCASEMENT MAY BE USED AS APPROVED BY THE CITY.
15. ALL RECLAIMED WATER MAINS TO BE CLEARED FOR SERVICE SHALL BE FLUSHED, DISINFECTED, PRESSURE TESTED, AND OTHERWISE TESTED IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS.
16. RECLAIMED WATER MAINS SHALL BE PVC AWWA CLASS C-900, MINIMUM CL-150 (DR-18) DUCTILE PIPE PRESSURE CLASS RATING, STANDARD CEMENT LINED, UNLESS OTHERWISE APPROVED BY THE CITY.
17. UPON CONSTRUCTION COMPLETION AND ACCEPTANCE OF THE SYSTEM, IT SHALL BE THE DESIGN ENGINEER'S RESPONSIBILITY TO INSURE THAT THE SYSTEM IS PROPERLY CERTIFIED AND ACCEPTED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION OR THE CITY PUBLIC WORKS AND "AS-BUILTS" ARE PROVIDED TO THE CITY, PRIOR TO ANY USE OF THIS SYSTEM.
18. ALL RECLAIMED WATER MAINS AND SERVICE LINES SHALL BE READILY DISTINGUISHABLE BY THEIR PANTENE PURPLE COLOR OR TAPE MARKINGS.
19. ALL RECLAIMED WATER SERVICES SHALL BE MARKED ALONG THE OUTSIDE EDGE OF CURB WITH UPSIDE-DOWN "RW" OR BY METAL TABS SET INTO PAVEMENT. VALVES FOR RECLAIMED WATER SHALL BE MARKED BY A "V" SET INTO THE PAVEMENT.
20. RECLAIM WATER SERVICES SHOULD BE DOUBLE 1-1/2" SERVICES LOCATED AT SIDE LOT LINES, ALTERNATING WITH POTABLE WATER SERVICE LOCATIONS. IN INSTANCES WHERE RECLAIMED WATER SERVICES NEED TO BE OFFSET, 1" SERVICES SHALL BE SPECIFIED. THESE SERVICES MAY BE OFFSET FROM THE LOT LINE A MAXIMUM DISTANCE OF 5.0 FEET.
21. ALL RECLAIMED WATER HOSE CONNECTIONS, HAND-OPERATED CONNECTIONS AND OUTLETS SHALL BE LOCKABLE CONTAINED IN UNDERGROUND SERVICES VAULTS AND SHALL BE APPROPRIATELY TAGGED OR LABELED TO WARN THE PUBLIC AND EMPLOYEES THAT THE WATER IS NOT INTENDED FOR DRINKING. ALL PIPING SHALL BE COLOR-CODED, OR OTHERWISE MARKED, TO DIFFERENTIATE RECLAIMED WATER FROM POTABLE OR OTHER WATER.
22. PRIOR TO TAKING ANY RECLAIMED WATER LINES OUT OF SERVICE, THE CONTRACTOR SHALL NOTIFY THE CITY AND AFFECTED CUSTOMERS, IN WRITING, 48-HOURS PRIOR TO SHUTDOWN WITH CITY APPROVAL.

STANDARD CONSTRUCTION DETAIL GENERAL NOTES: RECLAIMED WATER

RW001-1B
ISSUED: 2017
REVISED: –



RECLAIMED WATER MASTER METER ASSEMBLY

RW004-1
ISSUED: 2017
REVISED: –

DATE	REVISION
	1
	2
	3
	4
	5
	6
	7
	8

INSPIRE DONNELLY WOODS
MOUNT DORA, FL

C-306
WATER DISTRIBUTION STANDARD DETAILS

HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33380

DATE:	6/5/2023
DESIGNED BY:	CCH
DRAWN BY:	NTD
CHECKED BY.:	CBS
JOB NO.:	045953.001

C-306

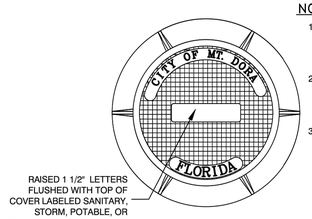
CHARLES C. HIOTT, PE
LICENSE # 54813

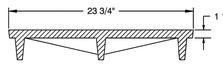
CONSTRUCTION SET

I:\45000s\45953\00\CAD\Sheets\CVC-00 DETAILS.dwg
Smith, Cody
6/5/2023 2:43:13 PM

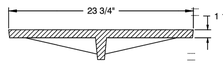
NOTES:

1. ARTERIAL ROADWAYS- USF RING AND COVER SERIES 170-BJ. HEAVY DUTY LOAD RATING. COVER WEIGHT 217#, TOTAL WEIGHT 372#.
2. ALL OTHER APPLICATIONS- USF RING AND COVER SERIES 170-J. HEAVY DUTY LOAD RATING. COVER WEIGHT 150#, TOTAL WEIGHT 305#.
3. CITY IDENTIFIER SHALL BE USED FOR CITY OWNED STRUCTURES ONLY. PRIVATE FACILITIES SHALL ONLY BE IDENTIFIED AS TO USE.

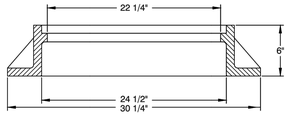




MANHOLE COVER TYPE BJ



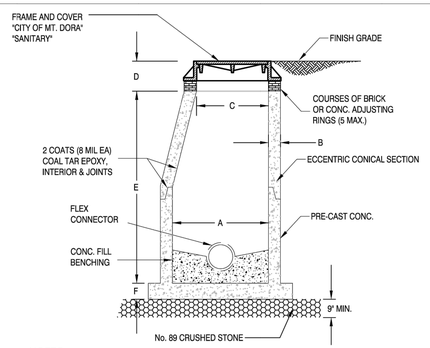
MANHOLE COVER TYPE J



USF 170 MANHOLE RING

MANHOLE FRAME & COVER

GU002-1
ISSUED: 2017
REVISED: --



NOTES
1. PRE-CAST CONCRETE SHALL BE TYPE 2 CEMENT (4,000 PSI).
2. LIFT HOLES NOT PERMITTED THROUGH PRE-CAST SECTIONS.
3. ALL OPENINGS SHALL BE SEALED WITH NON-SHRINK GROUT.
4. INSTALL FLOW CHANNEL INSIDE MANHOLES.
5. SERVICE LATERALS SHALL GENERALLY NOT BE PERMITTED DIRECTLY INTO MANHOLES. (SEE SS03-1)
6. WRAP JOINTS WITH RUBBER TAR BASED WRAP.
7. REINFORCING STEEL PER ASTM C478-88A.
8. PROVIDE 5' X 5' X 12" CONCRETE COLLAR AROUND COVER FRAME, WITH 4 - #4 REBAR E.W. IN UNPAVED AREAS.

MH DEPTH	A	B	C	D	E	F
UP TO 12'	48"	8"	24.5"	15"	AS REQ'D	8"
12' TO 18'*	60"	8"	24.5"	15"	AS REQ'D	10"
18' AND DEEPER	72"	8"	24.5"	15"	AS REQ'D	14"

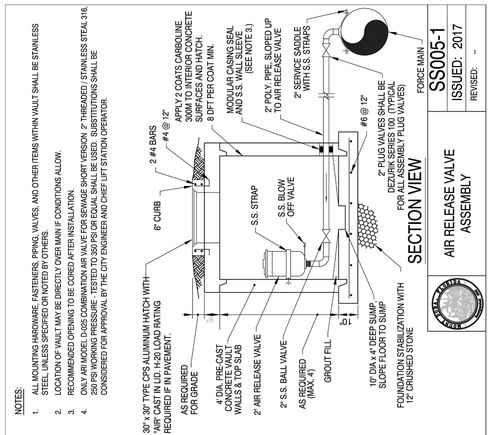
MANHOLE SIZE
UP TO 24" PIPE 48" MANHOLE
UP TO 36" PIPE 60" MANHOLE
OVER 36" PIPE 72" MANHOLE

*MIN MANHOLE SIZE FOR FORCEMAIN CONNECTION

STANDARD MANHOLE DETAIL

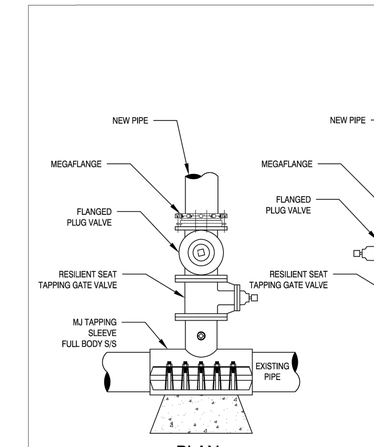
SS002-1
ISSUED: 2017
REVISED: --

NOTES:
1. ALL MOUNTING HARDWARE, FASTENERS, PIPING, VALVES, AND OTHER ITEMS WITHIN VAULT SHALL BE STAINLESS STEEL, UNLESS SPECIFIED OR NOTED BY OTHERS.
2. LOCATION OF VAULT MAY BE DIRECTLY OVER MAIN IF CONDITIONS ALLOW.
3. RECOMMENDED OPENING TO BE CORED AFTER INSTALLATION.
4. ONLY ARI MODEL D-025 COMBINATION AIR VALVE FOR SEWAGE SHORT (VERSION 6" THREADED, STAINLESS STEAL 316, FLANGED) SHALL BE USED FOR FORCE MAIN APPLICATIONS. SUBSTITUTIONS SHALL BE CONSIDERED FOR APPROVAL BY THE CITY ENGINEER AND CHIEF LIFT STATION OPERATOR.



AIR RELEASE VALVE ASSEMBLY

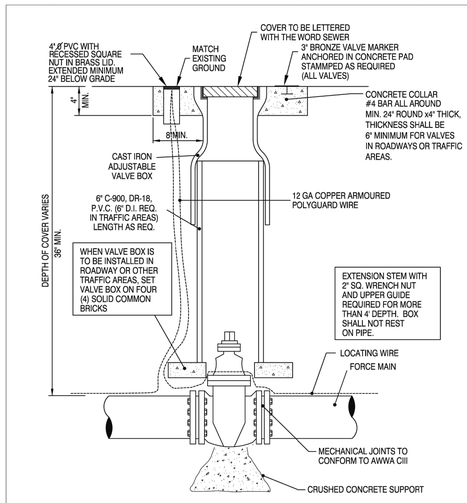
SS005-1
ISSUED: 2017
REVISED: -



PLAN SECTION

FORCE MAIN TAPPING SLEEVE AND VALVE

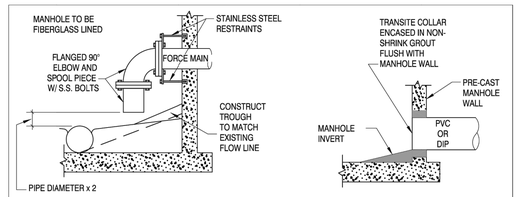
SS017-1
ISSUED: 2017
REVISED: --



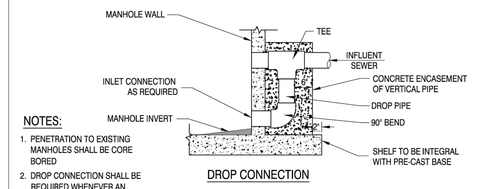
NOT TO SCALE

PLUG VALVE & BOX

SS0011-1
ISSUED: 2017
REVISED: --

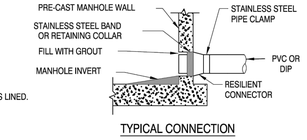


FORCE MAIN CONNECTION ALTERNATE CONNECTION



DROP CONNECTION

NOTES:
1. PENETRATION TO EXISTING MANHOLES SHALL BE CORE BORED
2. DROP CONNECTION SHALL BE REQUIRED WHENEVER AN INFLUENT SEWER IS LOCATED TWO FEET OR MORE ABOVE THE MAIN INVERT CHANNEL
3. ANY MANHOLE WITH PIPES ENTERING AT 45° OR GREATER TO THE FLOW LINE EXTENDED AND/OR WITH A DROP EQUAL TO OR GREATER THAN THE SMALLEST ENTERING PIPE DIAMETER SHALL BE FIBERGLASS LINED.
4. ANY MANHOLE DIRECTLY RECEIVING A FORCE MAIN MUST BE HDPE OR FIBERGLASS LINED.
5. MANHOLE WILL BE MINIMUM 60" DIAMETER.



TYPICAL CONNECTION

TYPICAL MANHOLE CONNECTIONS

SS003-1
ISSUED: 2017
REVISED: --

DATE	REVISION
	1
	2
	3
	4
	5
	6
	7
	8

INSPIRE DONNELLY WOODS
MOUNT DORA, FL

C-307

SANITARY SEWER STANDARD DETAILS

HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33380

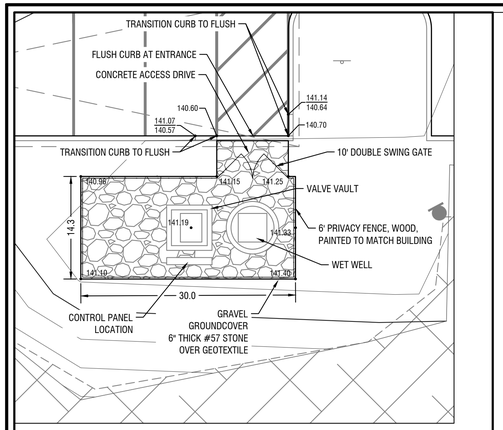
DATE:	6/5/2023
DESIGNED BY:	CCH
DRAWN BY:	NTD
CHECKED BY.:	CBS
JOB NO.:	045953.001

C-307

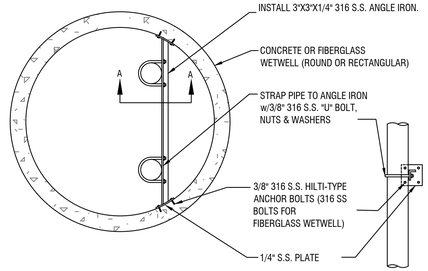
CHARLES C. HIOTT, PE
LICENSE # 54813

CONSTRUCTION SET

I:\2020\20-045953\07-CADD\Sheets\MOT-400 DETAILS.dwg
Smith, Cody
6/5/2023
2:42:23 PM
1000CM.ctb



LIFT STATION SITE CLOSE-UP



PLAN SECTION 'A-A'

PIPE ATTACHMENT TO WALL DETAIL

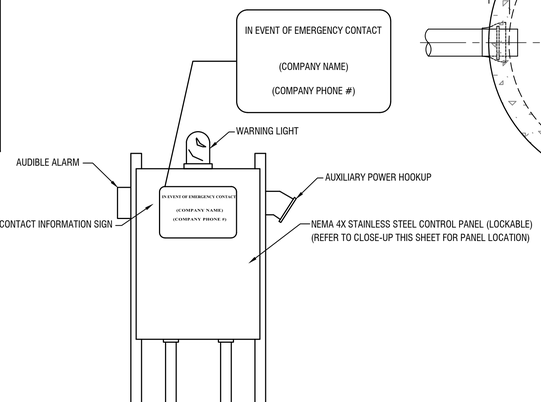
N.T.S

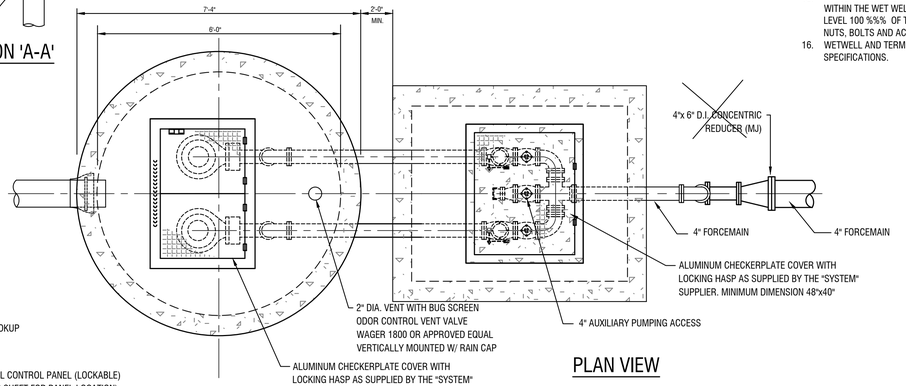
ELEVATIONS:	
TOP OF WETWELL EL. =	141.77'
EXISTING GRADE EL. =	±141.00'
FORCE MAIN EL. =	±137.67'
INFLUENT INV. =	133.64'
HIGH WATER ALARM EL.=	131.14'
LAG PUMP ON EL.=	130.64'
LEAD PUMP ON EL.=	130.14'
ALL PUMPS OFF EL. =	128.14'
BOTTOM OF WETWELL EL. =	125.14'

PUMP SPECIFICATIONS	
PUMPS REQUIRED	2 (DUPLEX)
MANUFACTURER	HYDROMATIC
MODEL NUMBER	HPGB/HPGBX-750
CAPACITY EACH (GPM)	95
TOTAL HEAD (FEET)	115
IMPELLER DIAMETER	6.50"
MOTOR HP REQUIRED	7.50 HP
SPEED (RPM)	3500
ELECTRICAL	60 Hz

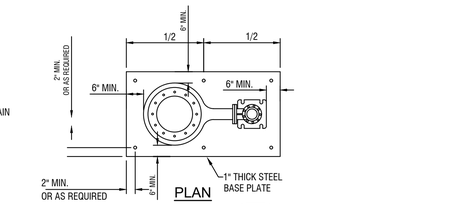
GENERAL NOTES:

1. HIGH LEVEL ALARM BOX SHALL HAVE A 120 VAC POWER SUPPLY SEPARATE AND SHALL BE ON A DIFFERENT CIRCUIT BREAKER FROM THE PUMP.
2. PUMP CONTROLS AND ALARM SHALL BE HOUSED IN NEMA 4X STAINLESS STEEL ELECTRICAL BOX.
3. PUMP REQUIRES A 480 VOLT, 3 PHASE ELECTRICAL SYSTEM.
4. 3" PVC ELECTRICAL CONDUIT SHALL BE USED - PVC PIPE WITH 90 DEGREE BENDS SHALL NOT BE ACCEPTABLE.
5. CONDUIT OR OTHER PIPING SHALL NOT BE BURIED OVER TANK ACCESS COVER.
6. IRRIGATION SPRINKLERS SHALL NOT BE PLACED IN PROXIMITY TO THE ELECTRICAL SUPPLY.
7. ALARM BOX SHALL BE SUPPLIED BY THE "SYSTEM" SUPPLIER.
8. PUMP SHALL BE MANUFACTURED ACCORDING TO PUMP SPECIFICATIONS.
9. CONTROL PANEL SHALL BE SUPPLIED BY PUMP MANUFACTURER.
10. A LIGHTNING ARRESTER SHALL BE SUPPLIED AND INSTALLED.
11. A SURGE SUPPRESSER SHALL BE SUPPLIED AND INSTALLED.
12. AN AUDIBLE ALARM W/ BATTERY BACKUP SHALL BE SUPPLIED AND INSTALLED.
13. UNOBSTRUCTED ALUMINUM SIGN VISIBLE TO THE PUBLIC WITH TELEPHONE NUMBER FOR A POINT OF CONTACT FOR CONTRACT OPERATOR IN CASE OF EMERGENCY. (OWNER WILL PROVIDE EMERGENCY CONTACT INFORMATION).
14. IF CONNECTION IS TO AN EXISTING FORCE MAIN; TEST PRESSURE AT THE POINT OF CONNECTION TO THE EXISTING FORCE MAIN AND REPORT PRESSURE TO THE ENGINEER OF RECORD PRIOR TO ORDERING MATERIALS IN ORDER TO VERIFY SYSTEM CURVE.
15. PIPING WITHIN THE WET WELL SHALL BE FLANGED 316 STAINLESS STEEL, (SCHEDULE 10, ONE PIECE CONSTRUCTION). FITTINGS WITHIN THE WET WELL SHALL BE FLANGED 316 STAINLESS STEEL. FITTINGS (WITHIN THE WET WELL) WHICH ARE BELOW THE WATER LEVEL 100 %%% OF THE TIME DURING NORMAL OPERATION MAY BE DUCTILE IRON, SHORT BODY WITH FLANGED CONNECTIONS. ALL NUTS, BOLTS AND ACCESSORIES WITHIN THE WET WELL SHALL BE 316 STAINLESS STEEL.
16. WETWELL AND TERMINAL MANHOLE SHALL HAVE SPECTRA SHIELD SPRAY-IN LINER (PINK) INSTALLED PER MANUFACTURE'S SPECIFICATIONS.

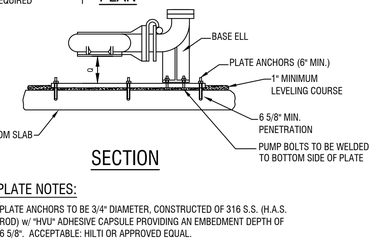




PLAN VIEW



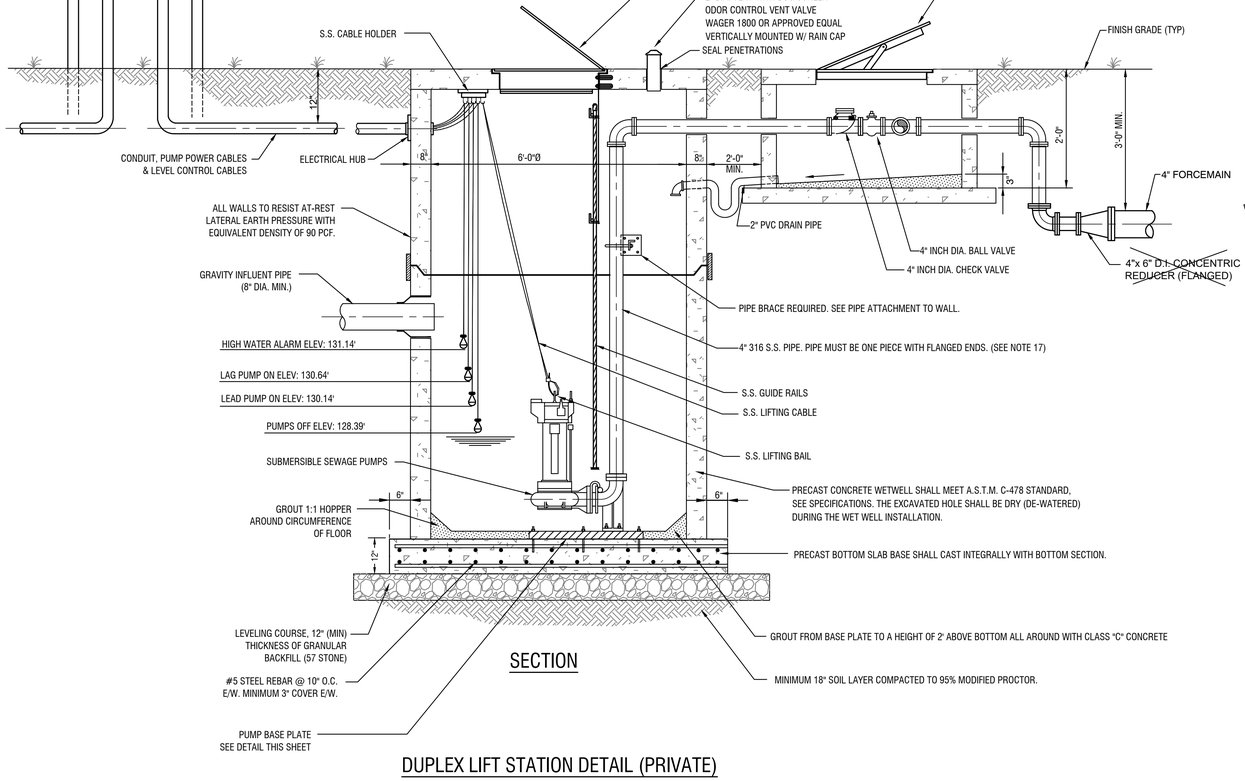
PLAN



SECTION

BASE PLATE NOTES:

1. PLATE ANCHORS TO BE 3/4" DIAMETER, CONSTRUCTED OF 316 S.S. (H.A.S. ROD) w/ "HVU" ADHESIVE CAPSULE PROVIDING AN EMBEDMENT DEPTH OF 6 5/8". ACCEPTABLE: HILTI OR APPROVED EQUAL.
2. NO EXPANSION ANCHORS ALLOWED.
3. PLATE SIZE: 6" LARGER THAN BASE ELL & PUMP VOLUTE
4. TYP. ALL AROUND BASE ELL BOLTS AND STUDS TO BE TYPE 316 STAINLESS STEEL.
5. BASE ELL BOLT HEADS SHALL BE WELDED TO UNDER SIDE OF STEEL PLATE.



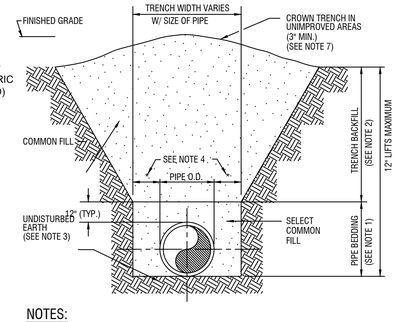
SECTION

DUPLEX LIFT STATION DETAIL (PRIVATE)

N.T.S

SUBMERSIBLE PUMP BASE PLATE DETAIL

N.T.S



NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE B BEDDING AND TRENCHING.
4. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF THE AGENCY HAVING JURISDICTION.
8. SURFACE RESTORATION WITHIN CITY OR COUNTY RIGHT-OF-WAY SHALL COMPLY WITH THE APPLICABLE REGULATIONS.

BEDDING & TRENCHING DETAILS

N.T.S

DATE	REVISION
	1
	2
	3
	4
	5
	6
	7
	8

INSPIRE DONNELLY WOODS
MOUNT DORA, FL

C-308
LIFT STATION STANDARD DETAILS

HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33380

DATE:	6/5/2023
DESIGNED BY:	CCH
DRAWN BY:	NTD
CHECKED BY.:	CBS
JOB NO.:	045953.001

C-308

CHARLES C. HIOTT, PE
LICENSE # 54813

CONSTRUCTION SET

I:\45000\45953\00\CAD\Sheets\AVC-00 DETAILS.dwg
Smith, Cody
6/2/2023 2:42:38 PM

EROSION AND SEDIMENT CONTROL NOTES:

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.

GENERAL

1. SILT FENCE SHOWN IS STRICTLY SCHEMATIC, FOR ILLUSTRATION ONLY, ALL FENCE TO BE WITHIN THE PROPERTY LINE OF THE PROJECT SITE.
2. THE CONTRACTOR SHALL APPLY WITH AND OBTAIN NPDES PERMIT FROM THE FLORIDA DEPT. OF ENVIRONMENTAL PROTECTION (FDEP). PROVIDE A COPY OF NPDES NOI TO THE CITY
3. CONTRACTOR TO DESILT ALL PIPES PRIOR TO COMPLETION OF CONSTRUCTION OF PROJECT.
4. THE INSTALLATION OF TEMPORARY EROSION CONTROL BARRIERS SHALL BE COORDINATED WITH THE CONSTRUCTION OF THE PERMANENT EROSION CONTROL FEATURES TO THE EXTENT NECESSARY TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL OF EROSION AND WATER POLLUTION THROUGHOUT THE LIFE OF THE CONSTRUCTION PHASE.
5. THE TYPE OF EROSION CONTROL BARRIERS USED SHALL BE GOVERNED BY THE NATURE OF THE CONSTRUCTION OPERATION AND SOIL TYPE THAT WILL BE EXPOSED. SILTY AND CLAYEY MATERIAL USUALLY REQUIRE SOLID SEDIMENT BARRIERS TO PREVENT TURBID WATER DISCHARGE. WHILE SANDY MATERIAL MAY NEED ONLY SILT SCREENS OR HAY BALES TO PREVENT EROSION. FLOATING TURBIDITY CURTAINS SHALL BE USED IN OPEN WATER SITUATIONS. DIVERSION DITCHES OR SWALES MAY BE REQUIRED TO PREVENT TURBID STORM WATER RUNOFF FROM BEING DISCHARGED TO WETLANDS OR OTHER WATER BODIES. IT MAY BE NECESSARY TO EMPLOY A COMBINATION OF BARRIERS, DITCHES AND OTHER EROSION/TURBIDITY CONTROL MEASURES IF CONDITIONS WARRANT.
6. THE CONTRACTOR SHALL SCHEDULE HIS OPERATIONS SUCH THAT THE AREA OF UNPROTECTED ERODIBLE EARTH EXPOSED AT ANY ONE TIME IS NOT LARGER THAN THE MINIMUM AREA NECESSARY FOR EFFICIENT CONSTRUCTION OPERATIONS, AND THE DURATION OF EXPOSED, UNCOMPLETED CONSTRUCTION TO THE ELEMENTS SHALL BE AS SHORT AS PRACTICABLE. CLEARING AND GRUBBING SHALL BE SO SCHEDULED AND PERFORMED THAT GRADING OPERATIONS CAN FOLLOW IMMEDIATELY THEREAFTER, AND GRADING OPERATIONS SHALL BE SCHEDULED AND PERFORMED THAT PERMANENT EROSION CONTROL FEATURES CAN FOLLOW IMMEDIATELY THEREAFTER IF CONDITIONS ON THE PROJECT PERMIT.
7. THE CONTRACTOR AND/OR OWNER'S REPRESENTATIVE SHALL PROVIDE ROUTINE MAINTENANCE OF PERMANENT AND TEMPORARY EROSION CONTROL FEATURES UNTIL THE PROJECT IS COMPLETE AND ALL BARED SOILS ARE STABILIZED.
8. REQUIRED TREE BARRICADES AND EROSION CONTROL MUST REMAIN INTACT THROUGHOUT CONSTRUCTION. ENCROACHMENT INTO OR FAILURE TO MAINTAIN THESE BARRICADES WILL RESULT IN ENFORCEMENT ACTION WHICH MAY INCLUDE CITATIONS AND/OR PERMIT REVOCATION AS PROVIDED BY LOCAL JURISDICTION.
9. ROOT PRUNING SHALL BE CONDUCTED AFTER STAKING FOR, AND PRIOR TO INSTALLATION OF SILT FENCE, A CERTIFIED ARBORIST, INTERNATIONAL SOCIETY OF ARBORICULTURE-CERTIFIED, SHALL CONDUCT OR OVERSEE ROOT PRUNING ACTIVITIES. THE CERTIFIED ARBORIST SHALL DETERMINE SPECIFIC EQUIPMENT AND METHODS TO BE USED. THE CERTIFIED ARBORIST SHALL REVIEW ROOT PRUNING SHOWN ON THE PLANS, AND SHALL VERIFY OR MODIFY AS NEEDED THE LIMITS AND LOCATIONS OF ROOT PRUNING TO MINIMIZE IMPACTS TO AFFECTED TREES. THE CERTIFIED ARBORIST SHALL RECOMMEND ANY ASSOCIATED TREATMENTS SUCH AS FERTILIZERS, FUNGICIDES, PESTICIDES, ETC. TO THE OWNER FOR REVIEW AND APPROVAL.
10. CONTRACTOR SHALL PREPARE A SWPPP FOR THE CITY TO REVIEW AND APPROVE PRIOR TO THE CONTRACTOR MOBILIZING TO THE SITE. SWPPP AND THE PERFORMANCE OF THE PROJECT'S EROSION CONTROL PROGRAM WILL BE IN ACCORDANCE WITH THE FDEP/WMD/CITY REQUIREMENTS.
11. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) PERMITTING WHERE REQUIRED. THIS INCLUDES FILING A NPDES NOTICE OF INTENT OR NOTICE OF TERMINATION. IF REQUIRED.

EROSION CONTROL DURING CONSTRUCTION

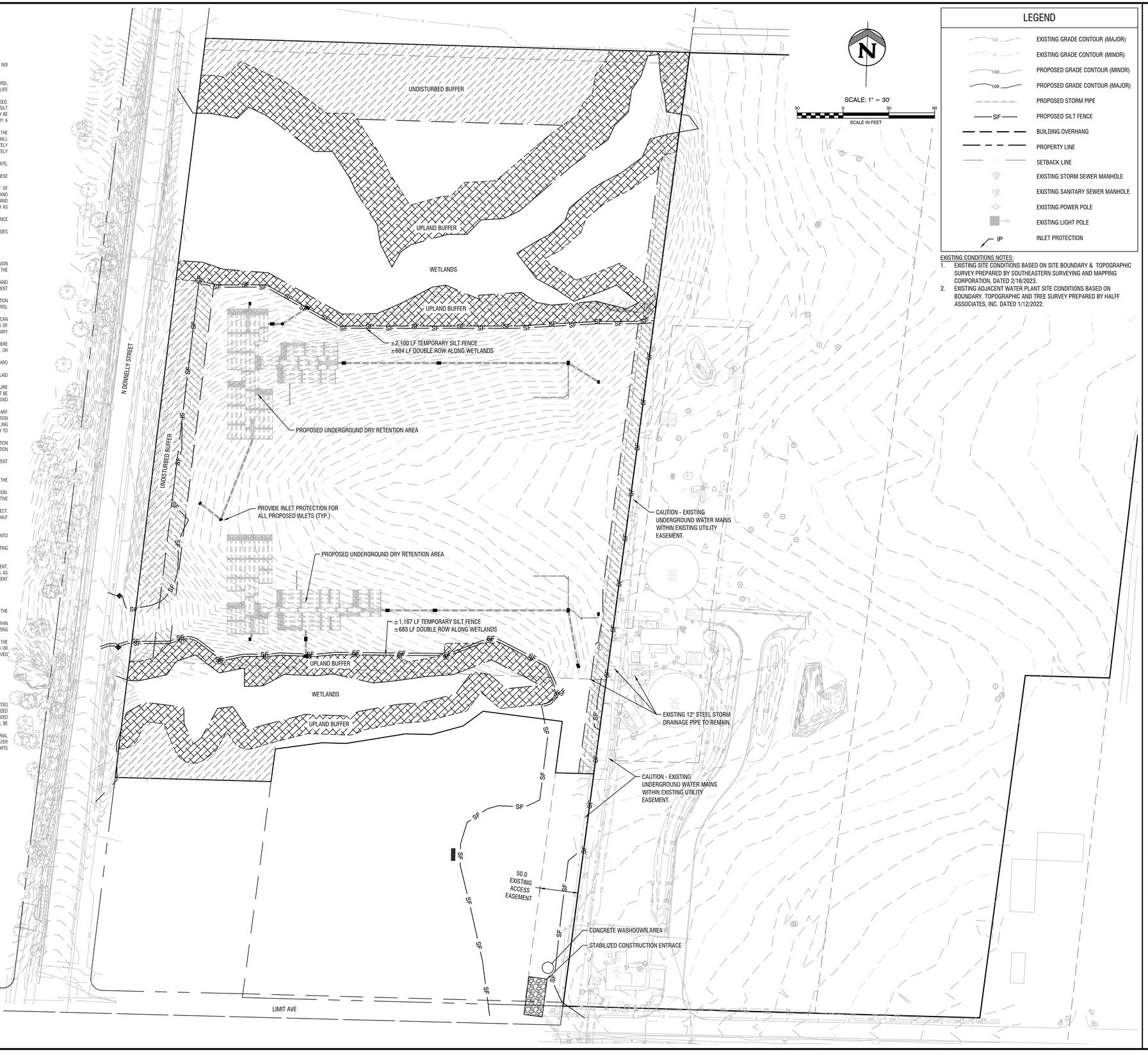
1. TEMPORARY EROSION CONTROL STRUCTURES SHALL BE UTILIZED DURING CONSTRUCTION AT AREAS ON-SITE WHERE UNSTABILIZED GRADES MAY CAUSE EROSION PROBLEMS. EROSION CONTROL STRUCTURES MAY BE REMOVED AFTER UPSLOPE AREA HAS BEEN STABILIZED BY SOD OR COMPACTED AS DETERMINED BY THE CONTRACTOR.
2. TEMPORARY EROSION 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.
3. PERMANENT EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AT THE EARLIEST PREDICTABLE 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. ALL STORMWATER INLETS TO HAVE EROSION CONTROL MEASURES APPLIED UPON THE COMPLETION OF THEIR INSTALLATION. THIS EROSION CONTROL MEASURE CAN BE A "SOOK" WITH ROCK BAGS THAT WILL NOT ALLOW FOR SEDIMENTS TO ENTER INTO THE INLETS AND IMMATELY ENTER INTO THE DRA. OTHER METHODS OF PROTECTION CAN BE OBTAINED FROM FDOT STANDARD INDEX 102, HOWEVER PLEASE NOTE THE USE OF HAY/STRAW BALES IS NOT PERMITTED. A SYNTHETIC BALE MAY BE USED INSTEAD.
5. TEMPORARY EROSION CONTROL STRUCTURE TO BE UTILIZED DURING CONSTRUCTION AT AREAS DESIGNATED BY THE ENGINEER OR AREAS ON-SITE WHERE UNSTABILIZED GRADES MAY CAUSE EROSION PROBLEMS. EROSION CONTROL STRUCTURE MAY BE REMOVED AFTER UPSLOPE AREA HAS BEEN STABILIZED BY SOD, OR COMPACTED AS DETERMINED BY CONTRACTOR.
6. ALTERNATE EROSION CONTROL STRUCTURE: WOVEN FILTER FABRIC SILT FENCE. FILTER FABRIC IN ACCORDANCE WITH SECTION 985 OF THE FDOT STANDARD SPECIFICATIONS.
7. TEMPORARY CONSTRUCTION ENTRANCE AREA SHALL BE CLEARED OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL. A GEOTEXTILE SHOULD BE LAID DOWN TO IMPROVE STABILITY AND SIMPLIFY MAINTENANCE. THE GRAVEL SHALL THEN BE PLACED OVER THE GEOTEXTILE TO THE SPECIFIED DIMENSIONS.
8. TEMPORARY CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF MUD ONTO PUBLIC ROADS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 2-INCH STONE AS CONDITIONS DEMAND. ALL MATERIALS SPILLED, DROPPED, OR TRACKED FROM VEHICLES ONTO ROADWAYS MUST BE REMOVED IMMEDIATELY. LOOK FOR SIGNS OF TRUCKS TRAILERED EQUIPMENT "CUTTING CORNERS" WHERE THE GRAVEL MEETS THE ROADWAY. SWEEP THE PAVED ROAD DAILY FOR SEDIMENTS.
9. CONSTRUCTION SITE OPERATORS MUST CONTROL WASTE SUCH AS DISCARDED BUILDING MATERIALS, CONCRETE TRUCK WASHOUT, CHEMICALS, LITTER AND SANITARY WASTE AT THE CONSTRUCTION SITE THAT MAY CAUSE ADVERSE IMPACTS TO WATER QUALITY. FLORIDA LAW (F.S. 556) UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT MANDATES THAT EXCAVATORS/CONTRACTORS SHALL CONTACT SUNSHINE 811 (FKA: SUNSHINE STATE ONE CALL OF FLORIDA) BY CALLING 800-432-4770 OR 811 AT LEAST 2 FULL BUSINESS DAYS PRIOR TO BEGINNING ANY EXCAVATION OR DEMOLITION TO ALLOW MEMBER OPERATORS AN OPPORTUNITY TO IDENTIFY AND MARK THEIR UNDERGROUND FACILITIES AND APPROPRIATELY RESPOND TO THE POSITIVE RESPONSE SYSTEM.
10. STORM WATER MANAGEMENT AREAS, STORM SEWER SYSTEM AND CONTROL STRUCTURES SHALL BE EXCAVATED TO ROUGH GRADE PRIOR TO BUILDING CONSTRUCTION OR PLACEMENT OF IMPERVIOUS SURFACES WITHIN THE AREA TO BE SERVED BY THOSE FACILITIES. TO PREVENT REDUCTION IN STORAGE VOLUME AND PERCOLATION RATE, ALL ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE STORM WATER FACILITIES PRIOR TO FINAL GRADING, STABILIZATION AND GRASSING.
11. EROSION CONTROL STRUCTURES, SUCH AS SILT FENCE AND BERMS, SHALL BE INSTALLED AROUND INLETS AND IN SWALES TO TRAP ERODED MATERIAL, PREVENT SEDIMENTATION IN DOWN STREAM AREAS AND KEEP RUNOFF VELOCITIES LOW.
12. THE CONTRACTOR SHALL MINIMIZE THE EXTENT OF AREA EXPOSED AT ANY ONE TIME AND THE DURATION OF EXPOSURE.
13. STABILIZATION MEASURES SHALL BE INITIATED FOR EROSION AND SEDIMENT CONTROL ON DISTURBED AREAS NO MORE THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN ANY PORTION OF THE SITE THAT HAS CEASED.
14. THE CONTRACTOR WILL INSTALL A PERMANENT VEGETATIVE COVER FOR EROSION AND SEDIMENT CONTROL ON ALL LAND SURFACES DISTURBED BY CONSTRUCTION. THIS PROTECTIVE COVER MUST BE INSTALLED WITHIN FOURTEEN (14) DAYS AFTER FINAL GRADING OF THE EFFECTED LAND SURFACES. A PERMANENT VEGETATIVE COVER MUST BE ESTABLISHED WITHIN SIXTY (60) DAYS AFTER PLANTING OR INSTALLATION.
15. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE ADEQUATELY MAINTAINED TO PERFORM THEIR INTENDED FUNCTION DURING CONSTRUCTION OF THE PROJECT. 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.
16. PLACEMENT OF BARRIERS OR NECESSARY REPAIRS TO BARRIERS SHALL BE ACCOMPLISHED PROMPTLY.
17. MATERIAL FROM SEDIMENT TRAPS SHALL NOT BE STOCK PILED OR DISPOSED OF IN A MANNER WHICH MAKES THEM READILY SUSCEPTIBLE TO BEING WASHED INTO ANY WATER COURSE BY RUNOFF OR HIGH WATER.
18. ANY ACCUMULATED SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE BARRIERS ARE NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED, AND SEEDED.
19. TO PROVIDE DUST CONTROL, A CONTRACTOR SHALL PROVIDE A WATER TRUCK OR IRRIGATION SYSTEM AS NEEDED, TO MAINTAIN SOIL MOISTURE.
20. IF SITE SPECIFIC CONDITIONS REQUIRE ADDITIONAL MEASURES DURING ANY PHASE OF CONSTRUCTION OR OPERATION TO PREVENT EROSION OR CONTROL SEDIMENT, BEYOND THOSE SPECIFIED IN THE EROSION AND SEDIMENT CONTROL PLAN, THE CONTRACTOR MUST IMPLEMENT ADDITIONAL BEST MANAGEMENT PRACTICES AS NECESSARY, IN ACCORDANCE WITH THE SPECIFICATION IN SECTION 6 OF THE FLORIDA LAND DEVELOPMENT MANUAL: A GUIDE TO LAND AND WATER MANAGEMENT (FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION, 1988).

PERMANENT STABILIZATION

1. WHERE CONSTRUCTION IS COMPLETE, PERMANENT VEGETATION SHALL BE INSTALLED AS SPECIFIED ON THE CONSTRUCTION PLANS AND IN ACCORDANCE WITH THE CONSTRUCTION SPECIFICATION DOCUMENTS. PERMANENT VEGETATION WILL INCLUDE SOD OR SEED AND MULCH.
2. THE STORMWATER RETENTION PONDS SHALL BE EXCAVATED TO ROUGH GRADE PRIOR TO BUILDING CONSTRUCTION OR PLACEMENT OF IMPERVIOUS SURFACES WITHIN THE DRAINAGE AREA SERVED BY THIS FACILITY. ALL ACCUMULATED SEDIMENT MUST BE REMOVED FROM THE RETENTION POND PRIOR TO FINAL GRADING, STABILIZING AND GRASSING.
3. PAVED STREETS ADJACENT TO THE CONSTRUCTION SITE ENTRANCE WILL BE SWEPT AS NEEDED TO PREVENT EXCESS MUD, DIRT OR ROCK FROM LEAVING THE CONSTRUCTION SITE. ALL DUMP TRUCKS HAULING MATERIAL TO AND FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARP. TEMPORARY STABILIZED OR ROCK CONSTRUCTION ENTRANCE MAY BE REQUIRE TO REMOVE EXCESS DIRT AND MUD FROM TIRES BEFORE CONSTRUCTION VEHICLES ENTER ADJACENT PAVED STREETS.
4. ALL GREEN AND/OR DISTURBED AREAS TO BE SODDED/RESODDED WITH LIKE SOD.
5. ANY SOD PLACED ON SLOPES EXCEEDING 3:1 TO BE ANCHORED BY STAKES, NETS, AND/OR ENGINEER'S APPROVED METHOD.

TIMING OF SEDIMENT AND EROSION CONTROL MEASURES

1. A SILT FENCE SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITY. A RETENTION POND AND STORM WATER CONVEYANCE SYSTEM SHALL BE CONSTRUCTED PRIOR TO THE PLACEMENT OF ANY IMPERVIOUS AREA. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN 14-DAYS SHALL BE STABILIZED WITH TEMPORARY SEED AND MULCH. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN ANY AREA, THAT AREA WILL BE STABILIZED WITH PERMANENT SEED AND MULCH OR SOD. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WITHIN ANY CATCH BASIN, STORM PIPES, OR RETENTION PONDS WILL BE REMOVED.
2. ALL PRACTICABLE AND NECESSARY EFFORT SHALL BE TAKEN DURING CONSTRUCTION TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT MATERIAL TO INLETS, SURFACE DRAINS, WETLANDS AND LAKE AREAS. CONTRACTOR IS RESPONSIBLE FOR PREPARING, IMPLEMENTING, AND MAINTAINING A STORMWATER POLLUTION PREVENTION PLAN MEETING ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RESTORATION EFFORTS THAT MAY BE REQUIRED.



N

SCALE: 1" = 30'

30 0 30 60

SCALE IN FEET

LEGEND

- EXISTING GRADE CONTOUR (MAJOR)
- EXISTING GRADE CONTOUR (MINOR)
- PROPOSED GRADE CONTOUR (MINOR)
- PROPOSED GRADE CONTOUR (MAJOR)
- PROPOSED STORM PIPE
- PROPOSED SILT FENCE
- BUILDING OVERHANG
- PROPERTY LINE
- SETBACK LINE
- EXISTING STORM SEWER MANHOLE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING POWER POLE
- EXISTING LIGHT POLE
- INLET PROTECTION

EXISTING CONDITIONS NOTES:

1. EXISTING SITE CONDITIONS BASED ON SITE BOUNDARY & TOPOGRAPHIC SURVEY PREPARED BY SOUTHEASTERN SURVEYING AND MAPPING CORPARTION, DATED 2/16/2023.
2. EXISTING ADJACENT WATER PLANT SITE CONDITIONS BASED ON BOUNDARY, TOPOGRAPHIC AND TREE SURVEY PREPARED BY HALFF ASSOCIATES, INC. DATED 1/12/2022.

REVISION	DATE
1	
2	
3	
4	
5	
6	
7	
8	

INSPIRE DONNELLY WOODS
MOUNT DORA, FL

C-500
EROSION CONTROL PLAN

HALFF

902 North Sinclair Ave.
Tavares, Florida 32778

Office: 352.343.8481
Fax: 352.343.8495

Certificate of Authorization Number: 33580

DATE:	6/5/2023
DESIGNED BY:	CCH
DRAWN BY:	NTD
CHECKED BY.:	CBS
JOB NO.:	045953.001

C-500

CHARLES C. HIOTT, PE
LICENSE # 54813

CONSTRUCTION SET

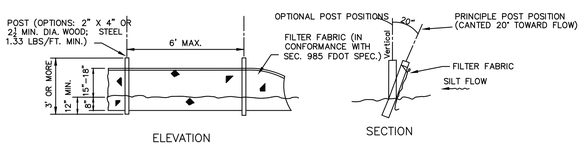
I:\MDORA\045953.001\CADD\Sheets\MDORA EROSION CONTROL.dwg
Barth, Cody
6/5/2023 2:40:13 PM

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

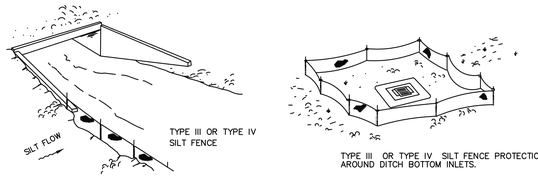
EROSION AND SEDIMENT CONTROL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SILT FROM SITE IF NOT REUSABLE ON-SITE AND ASSURING PLAN ALIGNMENT AND GRADE IN ALL DITCHES AND SWALES AT COMPLETION OF CONSTRUCTION.
2. THE SITE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED.
3. ADDITIONAL PROTECTION – ON-SITE PROTECTION IN ADDITION TO THE ABOVE MUST BE PROVIDED THAT WILL NOT PERMIT SILT TO LEAVE THE PROJECT CONFINES DUE TO UNSEEN CONDITIONS OR ACCIDENTS.
4. CONTRACTOR SHALL INSURE THAT ALL DRAINAGE STRUCTURES, PIPES, ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.
5. WIRE MESH SHALL BE LAID OVER THE DROP INLET SO THAT THE WIRE EXTENDS A MINIMUM OF 1 FOOT BEYOND EACH SIDE OF THE INLET STRUCTURE. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS SHALL BE USED. IF MORE THAN ONE STRIP OF MESH IS NECESSARY, THE STRIPS SHALL BE OVERLAPPED.
6. FDOT NO. 1 COARSE AGGREGATE SHALL BE PLACED OVER THE WIRE MESH AS INDICATED IN D-903. THE DEPTH OF STONE SHALL BE AT LEAST 12 INCHES OVER THE ENTIRE INLET OPENING. THE STONE SHALL EXTEND BEYOND THE INLET OPENING AT LEAST 18 INCHES ON ALL SIDES.
7. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONES MUST BE PULLED AWAY FROM THE INLET, CLEANED AND REPLACED.
8. SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
9. SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
10. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-THIRD THE HEIGHT OF THE BARRIER.
11. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.
12. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
13. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/3 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
14. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING THE BEST EROSION AND SEDIMENT CONTROL PRACTICES.
15. FOR ADDITIONAL INFORMATION ON SEDIMENT AND EROSION CONTROL REFER TO "THE FLORIDA DEVELOPMENT MANUAL – A GUIDE TO SOUND LAND AND WATER MANAGEMENT" FROM THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION (F.D.E.R.) CHAPTER 6.
16. EROSION AND SEDIMENT CONTROL BARRIERS SHALL BE PLACED ADJACENT TO ALL WETLAND AREAS WHERE THERE IS POTENTIAL FOR DOWNSTREAM WATER QUALITY DEGRADATION. SEE DETAIL SHEET FOR TYPICAL CONSTRUCTION.
17. ALL DISTURBED AREAS SHALL BE GRASSED, FERTILIZED, MULCHED AND MAINTAINED UNTIL A PERMANENT VEGETATIVE COVER IS ESTABLISHED.
18. SOD SHALL BE PLACED IN AREAS WHICH MAY REQUIRE IMMEDIATE EROSION PROTECTION TO ENSURE WATER QUALITY STANDARDS ARE MAINTAINED.
19. ANY DISCHARGE FROM DEWATERING ACTIVITY SHALL BE FILTERED AND CONVEYED TO THE OUTFALL IN A MANNER WHICH PREVEN.T.S. EROSION AND TRANSPORTATION OF SUSPENDED SOLIDS TO THE RECEIVING OUTFALL.
20. DEWATERING PUMPS SHALL NOT EXCEED THE CAPACITY OF THAT WHICH REQUIRES A CONSUMPTIVE USE PERMIT FROM THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.
21. ALL DISTURBED AREAS ARE TO BE STABILIZED THROUGH COMPACTION, SILT SCREENS AND GRASSING. ALL FILL SLOPES 3:1 OR STEEPER TO RECEIVE STAKED SOLID SOD.
22. ALL DEWATERING, EROSION, AND SEDIMENT CONTROL TO REMAIN IN PLACE AFTER COMPLETION OF CONSTRUCTION AND REMOVED ONLY WHEN AREAS HAVE STABILIZED.
23. THIS PLAN INDICATES THE MINIMUM EROSION AND SEDIMENT MEASURES REQUIRED FOR THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL APPLICABLE RULES, REGULATIONS AND WATER QUALITY GUIDELINES AND MAY NEED TO INSTALL ADDITIONAL CONTROLS.
24. THE CONTRACTOR SHALL BE REQUIRED TO RESPOND TO ALL WATER DEP INQUIRIES, RELATIVE TO COMPLIANCE OF DEP FOR EROSION AND SEDIMENTATION CONTROL. THE COST OF THIS COMPLIANCE SHALL BE PART OF THE CONTRACT.

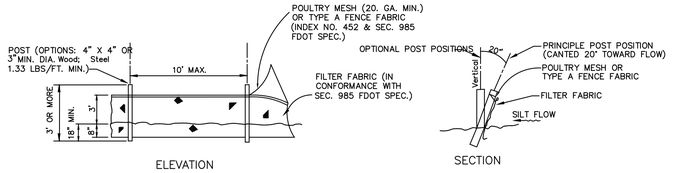
NOTE:
WHERE FDOT SPECS AND INDEX ARE REFERENCED, PLEASE REFER TO FDOT ROADWAY & TRAFFIC DESIGN STANDARDS, AND FDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION.



TYPE III SILT FENCE

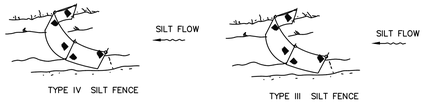


DO NOT DEPLOY IN A MANNER THAT SILT FENCES WILL ACT AS A DAM ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE USED AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.



NOTE: SILT FENCE TO BE PAID FOR UNDER THE CONTRACT LUMP SUM PRICE FOR EROSION AND SEDIMENT CONTROL.

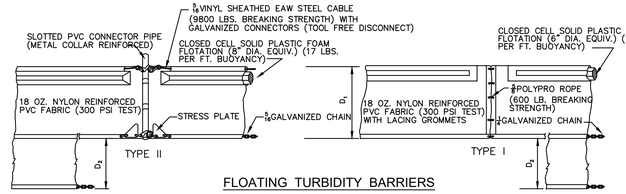
TYPE IV SILT FENCE



NOTE: SPACING FOR TYPE III & TYPE IV FENCE TO BE IN ACCORDANCE WITH CHART 1, SHEET 1 OF 3, FDOT INDEX NO. 102 AND DITCH INSTALLATIONS AT DRAINAGE STRUCTURES SHEET 2 OF 3, FDOT INDEX NO. 102.

SILT FENCE APPLICATIONS

SILT FENCE TYPE III & IV
N.T.S.

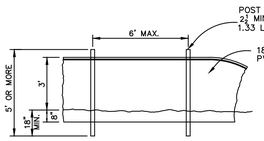


FLOATING TURBIDITY BARRIERS

NOTES:
1. TURBIDITY BARRIERS ARE TO BE USED IN ALL PERMANENT BODIES OF WATER REGARDLESS OF WATER DEPTH.
2. NUMBER AND SPACING OF ANCHORS DEPENDENT ON CURRENT VELOCITIES.
3. DEPLOYMENT OF BARRIER AROUND PILE LOCATIONS MAY VARY TO ACCOMMODATE CONSTRUCTION OPERATIONS.
4. NAVIGATION MAY REQUIRE SEGMENTING BARRIER DURING CONSTRUCTION OPERATIONS.
5. FOR ADDITIONAL INFORMATION SEE SECTION 104 OF THE FDOT STANDARD SPECIFICATIONS.

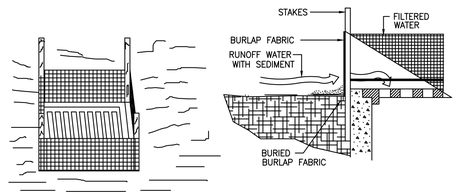
TURBIDITY BARRIERS
N.T.S.

NOTICE:
COMPONENTS OF TYPES I & TYPE II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND II SHALL BE AS APPROVED BY THE ENGINEER.



STAKED TURBIDITY BARRIER

NOTE:
TURBIDITY BARRIERS FOR FLOWING STREAMS AND TIDAL CREEKS MAY BE EITHER FLOATING, OR STAKED TYPES OR ANY COMBINATIONS OF TYPES THAT WILL SUIT SITE CONDITIONS AND MEET EROSION CONTROL AND WATER QUALITY REQUIREMENTS. THE BARRIER TYPE(S) WILL BE AT THE CONTRACTORS OPTION UNLESS OTHERWISE SPECIFIED IN THE PLANS, HOWEVER, PAYMENT WILL BE UNDER THE CONTRACT LUMP SUM PRICE ESTABLISHED IN THE BID PROPOSAL FOR EROSION AND SEDIMENT CONTROL POSTS IN STAKED TURBIDITY BARRIERS TO BE INSTALLED IN VERTICAL POSITION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

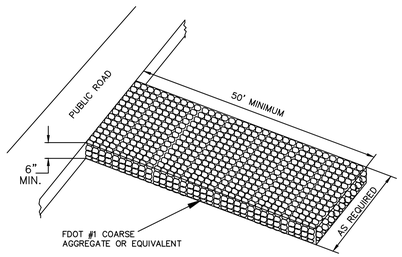


FABRIC SEDIMENT FILTER

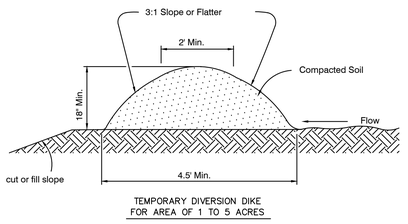
SPECIFIC APPLICATION

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

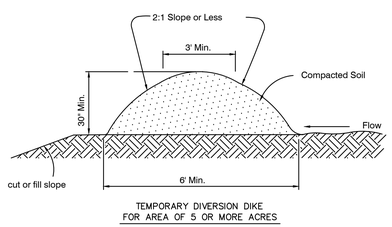
DROP INLET SEDIMENT TRAP
N.T.S.



STABILIZED CONSTRUCTION ENTRANCE
N.T.S.



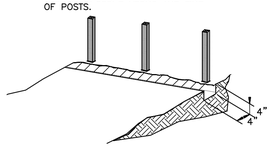
TEMPORARY DIVERSION DIKE FOR AREA OF 1 TO 5 ACRES



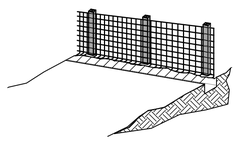
TEMPORARY DIVERSION DIKE FOR AREA OF 5 OR MORE ACRES

DIVERSION DIKE
N.T.S.

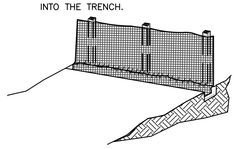
1. SET POSTS AND EXCAVATE A 4"x4" TRENCH UPSLOPE ALONG THE LINE OF POSTS.



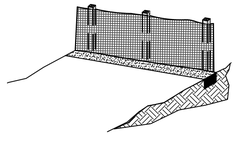
2. STAPLE WIRE FENCING TO THE POSTS.



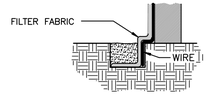
3. ATTACH THE FILTER FABRIC TO THE WIRE FENCE AND EXTEND IT INTO THE TRENCH.



4. BACK FILL AND COMPACT THE EXCAVATED SOIL.



EXTENSION OF FABRIC AND WIRE INTO THE TRENCH.



NOTE: SEE EROSION AND SEDIMENTATION CONTROL PLANS FOR LOCATION OF ALL SILT FENCE.

SILT FENCE CONSTRUCTION DETAILS
N.T.S.

REVISION	DATE
1	
2	
3	
4	
5	
6	
7	
8	

INSPIRE DONNELLY WOODS
MOUNT DORA, FL

C-501
SWPPP GENERAL NOTES AND DETAILS

HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33380

DATE:	6/5/2023
DESIGNED BY:	CCH
DRAWN BY:	NTD
CHECKED BY.:	CBS
JOB NO.:	045953.001

C-501

CHARLES C. HIOTT, PE
LICENSE # 54813

CONSTRUCTION SET

100CAA.tbl
V:\45000s\45953.001\CADD\Sheets\ACC-501STALS.dwg
Smith, Cody
8/5/2023 2:43:44 PM

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

OWNER'S REQUIREMENTS

SITE DESCRIPTION

PROJECT NAME AND LOCATION:
INSPIRE DONNELLY WOODS
N DONNELLY ST & OLD EUSTIC RD, MOUNT DORA, FL
MOUNT DORA, FLORIDA, 32757

OWNER NAME AND ADDRESS:
GC DEVELOPMENT OF LAKE COUNTY, INC.
P.O BOX 1273
MOUNT DORA, FL 32756
PHONE#: (352) 397-4869

DESCRIPTION:
13.39 ± ACRE SITE, CONSTRUCTION OF 1 LIBERTY ACTIVE ADULT BUILDING AND ASSOCIATED INFRASTRUCTURE.

SOIL DISTURBING ACTIVITIES WILL INCLUDE:
CLEARING, EXCAVATION, EARTHWORK, PAVEMENT INSTALLATION AND GRADING.

RUNOFF CURVE NUMBERS:
1. PRE-CONSTRUCTION = ±42
2. DURING CONSTRUCTION = ±42
3. POST-CONSTRUCTION = ±55

SOILS:
SEE SOIL BORING REPORT FOR SOILS DATA

SITE MAPS:
* SEE ATTACHED PLANS FOR LIMITS OF CONSTRUCTION AND SCOPE OF PROJECT.
* SEE GENERAL NOTES FOR REQUIREMENTS FOR TEMPORARY AND PERMANENT STABILIZATION.

SITE AREA:
1. TOTAL AREA OF SITE = ±13.39 ACRES
2. TOTAL AREA TO BE DISTURBED = ±11.15 ACRES

NAME OF RECEIVING WATERS: LAKE GERTRUDE

1. ANTICIPATED START DATE OF CONSTRUCTION:

2. ANTICIPATED END DATE OF CONSTRUCTION:

(CONSTRUCTION DATES ARE TO BE FILLED IN BY CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION)

CONTROLS

THIS PLAN UTILIZES BEST MANAGEMENT PRACTICES TO CONTROL EROSION AND TURBIDITY CAUSED BY STORM WATER RUN OFF. AN EROSION AND TURBIDITY PLAN HAS BEEN PREPARED TO INSTRUCT THE CONTRACTOR ON PLACEMENT OF THESE CONTROLS. IT IS THE CONTRACTORS RESPONSIBILITY TO INSTALL AND MAINTAIN THE CONTROLS PER PLAN AS WELL AS ENSURING THE PLAN IS PROVIDING THE PROPER PROTECTION AS REQUIRED BY FEDERAL, STATE AND LOCAL LAWS. REFER TO "CONTRACTORS RESPONSIBILITY" FOR A VERBAL DESCRIPTION OF THE CONTROLS THAT MAY BE IMPLEMENTED.

STORM WATER MANAGEMENT

STORM WATER DRAINAGE WILL BE PROVIDED BY (DESCRIPTION:) THE SITE IS CONNECTED TO A MASTER STORM WATER SYSTEM

WHERE PRACTICAL, TEMPORARY SEDIMENT BASINS WILL BE USED TO INTERCEPT SEDIMENT BEFORE ENTERING THE PERMANENT DETENTION BASIN. THE WET DETENTION SYSTEM IS DESIGNED WITH A TWO DAY MINIMUM RESIDENCE VOLUME. THIS IS IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH BY THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT FOR THIS TYPE OF DEVELOPMENT AT THE TIME OF PERMITTING.

TIMING OF CONTROLS/MEASURES

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

CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS

IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL LAWS RELATED TO STORM WATER MANAGEMENT AND EROSION AND TURBIDITY CONTROLS, THE FOLLOWING PERMITS HAVE BEEN OBTAINED (TO BE FILLED IN BY CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION).

D.E.R. DREDGE/FILL PERMIT # _____

C.O.E. DREDGE/FILL PERMIT # _____

S.J.R.W.M.D. M.S.S.W. PERMIT # _____

N.P.D.E.S PERMIT # _____

POLLUTION PREVENTION PLAN CERTIFICATION

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

SIGNED:_____
OWNER/OPERATOR OR CONTRACTOR

DATED:_____

CONTRACTOR'S REQUIREMENTS

GENERAL

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

SEQUENCE OF MAJOR ACTIVITIES:

THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:

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

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, THE SILT FENCES AND HAY BALES, STABILIZED CONSTRUCTION ENTRANCE AND SEDIMENT BASIN WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED PERMANENTLY IN ACCORDANCE WITH THE PLANS. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE SEDIMENT TRAPS AND THE EARTH DIKE/SWALES WILL BE REGRADED/REMOVED AND STABILIZED IN ACCORDANCE WITH THE EROSION & TURBIDITY CONTROL PLAN.

CONTROLS

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

EROSION AND SEDIMENT CONTROLS

STABILIZATION PRACTICES

1. FILTER FABRIC BARRIER: FILTER FABRIC BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:
   A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.
   B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES. REFER TO CITY STANDARD DETAIL D-910 FOR PROPER CONSTRUCTION OF THE FILTER FABRIC BARRIER.
2. BRUSH BARRIER WITH FILTER FABRIC: BRUSH BARRIER MAY BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WHERE ENOUGH RESIDUE MATERIAL IS AVAILABLE ON SITE.
3. LEVEL SPREADER: A LEVEL SPREADER MAY BE USED WHERE SEDIMENT-FREE STORM RUNOFF IS INTERCEPTED AND DIVERTED AWAY FROM THE GRADED AREAS ONTO UNDISTURBED STABILIZED AREAS. THIS PRACTICE APPLIES ONLY IN THOSE SITUATIONS WHERE THE SPREADER CAN BE CONSTRUCTED ON UNDISTURBED SOIL AND THE AREA BELOW THE LEVEL LIP IS STABILIZED. THE WATER SHOULD NOT BE ALLOWED TO RECONCENTRATE AFTER RELEASE.

CONTROLS CONT'D.

5. STOCKPILING MATERIAL: NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE INTO ANY ADJACENT WATER BODY OR STORM WATER COLLECTION FACILITY.
6. EXPOSED AREA LIMITATION: THE SURFACE AREA OF OPEN, RAW ERODIBLE SOIL EXPOSED BY CLEARING AND GRUBBING OPERATIONS OR EXCAVATION AND FILLING OPERATIONS SHALL NOT EXCEED 10 ACRES. THIS REQUIREMENT MAY BE WAIVED FOR LARGE PROJECTS WITH AN EROSION CONTROL PLAN WHICH DEMONSTRATES THAT OPENING OF ADDITIONAL AREAS WILL NOT SIGNIFICANTLY AFFECT OFF-SITE DEPOSIT OF SEDIMENTS.
7. INLET PROTECTION: INLETS AND CATCH BASINS WHICH DISCHARGE DIRECTLY OFF-SITE SHALL BE PROTECTED FROM SEDIMENT-LADEN STORM RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT TO THE INLET.
8. TEMPORARY SEEDING: AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE RE-EXCAVATED OR DRESSED AND RECEIVE FINAL GRASSING TREATMENT WITHIN 30 DAYS SHALL BE SEEDED WITH A QUICK GROWING GRASS SPECIES WHICH WILL PROVIDE AN EARLY COVER DURING THE SEASON IN WHICH IT IS PLANTED AND WILL NOT LATER COMPETE WITH THE PERMANENT GRASSING.
9. TEMPORARY SEEDING AND MULCHING: SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CATEGORY ESTABLISHED IN PARAGRAPH 8 ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF THE SEEDED AREA ADEQUATE TO PREVENT MOVEMENT OF SEED AND MULCH.
10. TEMPORARY GRASSING: THE SEEDED OR SEEDED AND MULCHED AREA(S) SHALL BE ROLLED AND WATERED OR HYDROMULCHED OR OTHER SUITABLE METHODS IF REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER. TEMPORARY GRASSING SHALL BE THE SAME MIX & AMOUNT REQUIRED FOR PERMANENT GRASSING IN THE CONTRACT SPECIFICATIONS.
11. TEMPORARY REGRASSING : IF, AFTER 14 DAYS FROM SEEDING, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM OF 85 PERCENT UNIFORM GOOD GRASS COVER, THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED SUFFICIENT TO ESTABLISH THE DESIRED VEGETATIVE COVER.
12. MAINTENANCE: ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.
13. PERMANENT EROSION CONTROL: THE EROSION CONTROL FACILITIES OF THE PROJECT SHOULD BE DESIGNED TO MINIMIZE THE IMPACT ON THE OFFSITE FACILITIES.
14. PERMANENT SEEDING: ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL. AS A MINIMUM, BE SEEDED. THE SEEDING MIX MUST PROVIDE BOTH LONG-TERM VEGETATION AND RAPID GROWTH SEASONAL VEGETATION. SLOPES STEEPER THAN 4:1 SHALL BE SEEDED AND MULCHED OR SODDED.

STRUCTURAL PRACTICES

1. TEMPORARY DIVERSION DIKE: TEMPORARY DIVERSION DIKES MAY BE USED TO DIVERT RUNOFF THROUGH A SEDIMENT-TRAPPING FACILITY. AND IT SHALL BE CONSTRUCTED IN ACCORDANCE TO D-914.
2. TEMPORARY SEDIMENT TRAP: A SEDIMENT TRAP SHALL BE INSTALLED IN AN DRAINAGEWAY AT A STORM DRAIN INLET OR AT OTHER POINTS OF DISCHARGE FROM A DISTURBED AREA.
   THE FOLLOWING SEDIMENT TRAPS MAY BE CONSTRUCTED EITHER INDEPENDENTLY OR IN CONJUNCTION WITH A TEMPORARY DIVERSION DIKE:
   A. BLOCK & GRAVEL SEDIMENT FILTER - THIS PROTECTION IS APPLICABLE WHERE HEAVY FLOWS AND/OR WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE. REFER TO D-902 FOR CONSTRUCTION OF A CURB INLET SEDIMENT FILTER, AND D-904 FOR CONSTRUCTION OF A DROP INLET SEDIMENT FILTER.
   B. GRAVEL SEDIMENT TRAP - THIS PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES & UNPROTECTED AREAS. REFER TO D-903 FOR CONSTRUCTION OF CURB INLET & DROP SEDIMENT TRAP.
   C. DROP INLET SEDIMENT TRAP - THIS PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (S < 5%) AND WHERE SHEET OR OVERLAND FLOWS (Q < 0.5 CFS) ARE TYPICAL. THIS METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS SUCH AS IN STREET OR HIGHWAY MEDIANS. REFER TO D-905 FOR CONSTRUCTION OF HAY BALE & FABRIC SEDIMENT FILTER.
3. OUTLET PROTECTION: APPLICABLE TO THE OUTLETS OF ALL PIPES AND PAVED CHANNEL SECTIONS WHERE THE FLOW COULD CAUSE EROSION & SEDIMENT PROBLEM TO THE RECEIVING WATER BODY. SILT FENCES & HAY BALES ARE TO BE INSTALLED IMMEDIATELY DOWNSTREAM OF THE DISCHARGING STRUCTURE AS SHOWN ON THE OUTLET PROTECTION DETAIL.
4. SEDIMENT BASIN: WILL BE CONSTRUCTED AT THE COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH 10 OR MORE DISTURBED ACRES AT ONE TIME. THE PROPOSED STORM WATER PONDS (OR TEMPORARY PONDS) WILL BE CONSTRUCTED FOR USE AS SEDIMENT BASINS. THESE SEDIMENT BASINS MUST PROVIDE A MINIMUM OF 3,600 CUBIC FEET OF STORAGE PER ACRE DRAINED UNTIL FINAL STABILIZATION OF THE SITE.

NOTE:
THE 3,600 CUBIC FEET OF STORAGE AREA PER ACRE DRAINED DOES NOT APPLY TO FLOWS FROM OFFSITE AREAS AND FLOWS FROM ONSITE AREAS THAT ARE EITHER UNDISTURBED OR HAVE UNDERGONE FINAL STABILIZATION WHERE SUCH FLOWS ARE DIVERTED AROUND BOTH THE DISTURBED AREA AND THE SEDIMENT BASIN. ANY TEMPORARY SEDIMENT BASINS CONSTRUCTED MUST BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS FOR STRUCTURAL FILL. ALL SEDIMENT COLLECTED IN PERMANENT OR TEMPORARY SEDIMENT TRAPS MUST BE REMOVED UPON FINAL STABILIZATION.

OTHER CONTROLS

WASTE DISPOSAL

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

HAZARDOUS WASTE

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

SANITARY WASTE

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

OFFSITE VEHICLE TRACKING

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

INVENTORY FOR POLLUTION PREVENTION PLAN

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

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

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES

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

GOOD HOUSEKEEPING

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

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

HAZARDOUS PRODUCTS

THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.

* PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
* ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION.
* IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

SPILL PREVENTION CONT'D.

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

PETROLEUM PRODUCTS

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

FERTILIZERS

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

PAINTS

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

CONCRETE TRUCKS

WASHING OF VEHICLES SHOULD BE CONDUCTED UGING PRACTICES THAT WILL PREVENT DIRECT, UNTREATED DISCHARGES OF WASTEWATER AND HAZARDOUS WASTES TO SURFACE AND GROUND WATERS. A DESIGNATED AREA MUST BE CREATED SPECIFICALLY FOR WASHING VEHICLES THAT WILL BE LAID WITH FILTER FABRIC, CRUSHED STONE (DOT GRAVEL #2 AND UP) AND COVERED WITH LINED BERM.

SPILL CONTROL PRACTICES

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

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

MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, LIQUID ABSORBENT (i.e. KITTY LITTER OR EQUAL), SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.

ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

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

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

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

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

MAINTENANCE/INSPECTION PROCEDURES

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES

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

* NO MORE THAN 10 ACRES OF THE SITE WILL BE DENUDED AT ONE TIME WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.
* ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY SITE OPERATION OR SOMEONE APPOINTED BY THE SUPERINTENDENT, AT LEAST ONCE A WEEK AND FOLLOWING ANY STORM EVENT OF 0.25 INCHES OR GREATER.
* ALL TURBIDITY CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF FAILED INSPECTION.
* BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.
* SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.
* DIVERSION DIKES/SWALES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.

MAINT./INSP. PROCEDURES CONT'D.

* THE SEDIMENT BASINS WILL BE INSPECTED FOR THE DEPTH OF SEDIMENT, AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 10 PERCENT OF THE DESIGN CAPACITY OR AT THE END OF THE JOB, WHICHEVER COMES FIRST.
* TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.
* A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTOR IS ATTACHED.
  THE REPORTS WILL BE KEPT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER OR ANY FEDERAL, STATE OR LOCAL AGENCY APPROVING SEDIMENT AND AND EROSION PLANS, OR STORM WATER MANAGEMENT PLANS.
  THE REPORTS SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED AND THE NOTICE OF TERMINATION IS SUBMITTED THE REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE.
* THE SITE SUPERINTENDENT WILL SELECT UP TO THREE INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.
* PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE. SUPERINTENDENT. THEY WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER.

NON-STORM WATER DISCHARGES

IT IS EXPECTED THAT THE FOLLOWING NON-STORM WATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:

* WATER FROM WATER LINE FLUSHING
* PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).
* UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION).

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

CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND AND SHALL COMPLY WITH THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STORMWATER POLLUTION PREVENTION PLAN PREPARED THERE UNDER.

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

DATE	REVISION
	1
	2
	3
	4
	5
	6
	7
	8

INSPIRE DONNELLY WOODS
MOUNT DORA, FL

C-502
SWPPP GENERAL CONDITIONS

HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33380

DATE: 6/5/2023
DESIGNED BY: CCH
DRAWN BY: NTD
CHECKED BY.: CBS
JOB NO.: 045953.001

C-502

CHARLES C. HIOTT, PE
LICENSE # 54813

CONSTRUCTION SET

I:\45000s\45953\05\CADD\Sheets\AXC-00 DETAILS.dwg
Smith, Cody
2:44:49 PM
6/5/2023

PROJECT: DONNELLY WOODS PUD, N. DONNELLY STREET, MOUNT DORA, FL

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM
TO BE COMPLETED EVERY 7 DAYS AND WITHIN 24 HOURS OF
A RAINFALL EVENT OF 0.25 INCHES OR MORE

INSPECTOR:_____ DATE:_____

INSPECTOR'S QUALIFICATIONS:
_____
_____
_____
_____

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

STABILIZATION MEASURES •

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

STABILIZATION REQUIRED:
_____
_____
_____
_____

TO BE PERFORMED BY:_____ ON OR BEFORE:_____

PAGE 1 OF 4

PROJECT: DONNELLY WOODS PUD, N. DONNELLY STREET, MOUNT DORA, FL

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM
STRUCTURAL CONTROLS

DATE:_____

EARTH DIKES/SWALES

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

MAINTENANCE REQUIRED FOR EARTH DIKE/SWALE:
_____
_____
_____
_____

TO BE PERFORMED BY:_____ ON OR BEFORE:_____

CATCH BASIN/CURB INLET/OUTFALL TURBIDITY CONTROLS

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

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

TO BE PERFORMED BY:_____ ON OR BEFORE:_____

PAGE 2 OF 4

PROJECT: DONNELLY WOODS PUD, N. DONNELLY STREET, MOUNT DORA, FL

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM
SEDIMENT BASIN

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

MAINTENANCE REQUIRED FOR SEDIMENT BASIN:
_____
_____
_____
_____

TO BE PERFORMED BY:_____ ON OR BEFORE:_____

OTHER CONTROLS

STABILIZED CONSTRUCTION ENTRANCE

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

MAINTENANCE REQUIRED FOR STABILIZED CONSTRUCTION ENTRANCE:
_____
_____
_____

TO BE PERFORMED BY:_____ ON OR BEFORE:_____

PAGE 3 OF 4

PROJECT: DONNELLY WOODS PUD, N. DONNELLY STREET, MOUNT DORA, FL

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM

CHANGES REQUIRED TO THE POLLUTION PREVENTION PLAN:
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

REASONS FOR CHANGES:
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

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

SIGNATURE:_____

DATE:_____

PAGE 4 OF 4

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

NOTE TO CONTRACTOR:
THIS IS THE CONTRACTORS CERTIFICATION REQUIRED BY THE FDEP'S NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES). STORM WATER POLLUTION PREVENTION PLAN FOR CONSTRUCTION SITES OF 1 ACRE OR MORE. THIS FORM MUST BE COMPLETED WITHIN 24 HOURS OF EVERY RAINFALL EVENT OVER 0.25 INCHES. IT IS SUGGESTED THAT THIS SHEET BE REMOVED FROM THE PLAN SET AND DUPLICATED AS NEEDED BY THE CONTRACTOR.

CONSTRUCTION SET

CHARLES C. HIOTT, PE
LICENSE # 54813

C-503

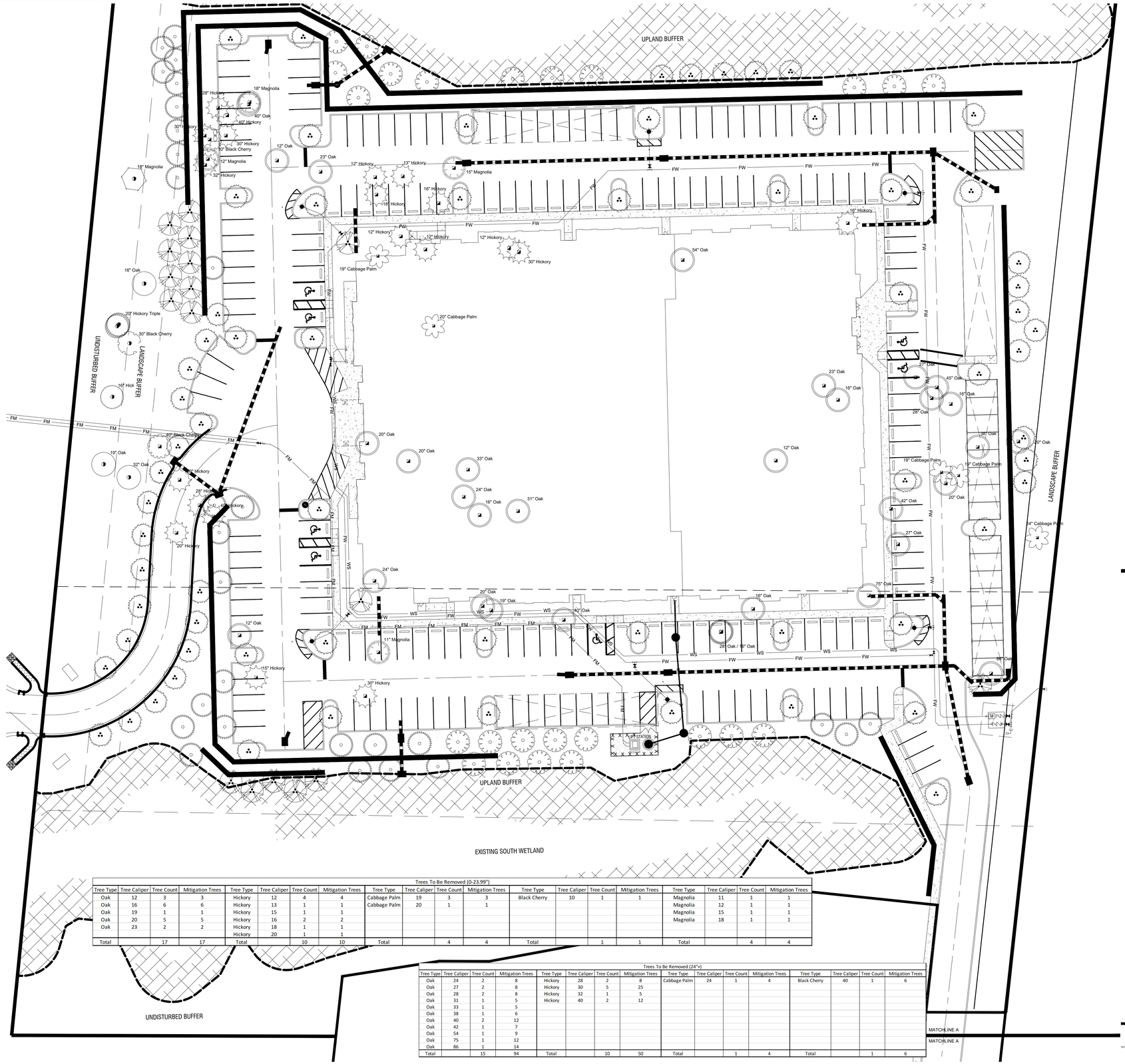
JOB NO.: 045953.001
CHECKED BY.: CBS
DRAWN BY: NTD
DESIGNED BY: CCH
DATE: 6/5/2023

HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33380

INSPIRE DONNELLY WOODS
MOUNT DORA, FL

C-503
SWPPP FORMS

	DATE	REVISION
1		
2		
3		
4		
5		
6		
7		
8		



PLANT SCHEDULE PHASE 2

REPLACEMENT TREES	QTY	COMMON NAME	BOTANICAL NAME	CONT	CAL	SIZE	SPACING	REMARKS
	24	Red Maple	Acer rubrum	65 gal	3.5"Cal	15'	As Shown	Native
	28	Southern Magnolia	Magnolia grandiflora	65 gal	3.5"Cal	15'	As Shown	Native
	67	Live Oak	Quercus virginiana	30 gal	3.5"Cal	15'	As Shown	Native
	17	Drake Elm	Ulmus parvifolia `Drake`	65 gal	3.5"Cal	15'	As Shown	Non Native
TO BE REMOVED	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**CONT**	**CAL**	**SIZE**	**SPACING**	**REMARKS**
	20	Pignut Hickory	Carya glabra	Existing	As labled	Existing	As Shown	Native
	4	Southern Magnolia	Magnolia grandiflora	Existing	As labled	Existing	As Shown	Native
	2	Black Cherry	Prunus serotina	Existing	As labled	Existing	As Shown	Native
	32	Live Oak	Quercus virginiana	Existing	As labled	Existing	As Shown	Native
	5	Cabbage Palmetto	Sabal palmetto	Existing	As labled	Existing	As Shown	Native
TREES TO REMAIN	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**CONT**	**CAL**	**SIZE**	**SPACING**	**REMARKS**
	4	Pignut Hickory	Carya glabra	Existing	As labled	Existing	As Shown	Native
	1	Southern Magnolia	Magnolia grandiflora	Existing	As labled	Existing	As Shown	Native
	1	Black Cherry	Prunus serotina	Existing	As labled	Existing	As Shown	Native
	3	Live Oak	Quercus virginiana	Existing	As labled	Existing	As Shown	Native

Existing trees and trees proposed for removal shall be shown on a landscape plan with the following tree data (applicant to fill-in blanks):
Total existing number of trees sized 6"—23.99": 43

Total existing number of trees sized 6"—23.99" removed: 36

Total existing number of trees sized 24" or greater: 29

Total existing number of trees sized 24" or greater removed: 27

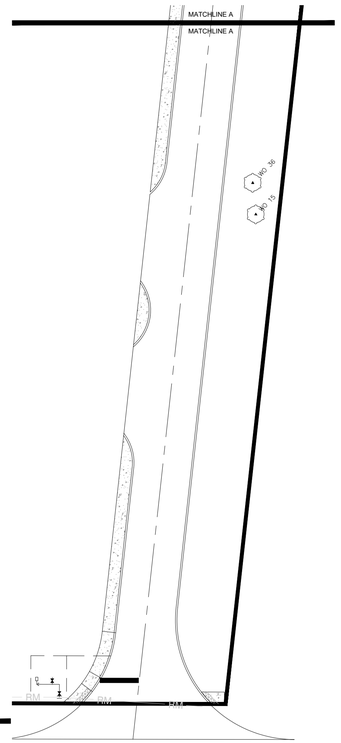
Total number of trees *to be* replaced at ratio 1:1 for trees removed 6'—23.99": 36

Total number of trees *to be re*placed at ratio 1:6 (for trees removed 24" or greater): 154

Total number of trees replaced: 136

Total number of tree deficient (not being replaced) for tree bank contribution and includes total dollar amount of contribution funds: $22,950 (54 x $425)

Note: See landscape plan for replacement tree locations.



Trees To Be Removed (0-23.99")

Tree Type	Tree Caliper	Tree Count	Mitigation Trees	Tree Type	Tree Caliper	Tree Count	Mitigation Trees	Tree Type	Tree Caliper	Tree Count	Mitigation Trees	Tree Type	Tree Caliper	Tree Count	Mitigation Trees	Tree Type	Tree Caliper	Tree Count	Mitigation Trees
Oak	12	3	3	Hickory	12	4	4	Cabbage Palm	19	3	3	Black Cherry	10	1	1	Magnolia	11	1	1
Oak	16	6	6	Hickory	13	1	1	Cabbage Palm	20	1	1					Magnolia	12	1	1
Oak	19	1	1	Hickory	15	1	1									Magnolia	15	1	1
Oak	20	5	5	Hickory	16	2	2									Magnolia	18	1	1
Oak	23	2	2	Hickory	18	1	1												
				Hickory	20	1	1												
Total		17	17	Total		10	10	Total		4	4	Total		1	1	Total		4	4

Trees To Be Removed (24"+)

Tree Type	Tree Caliper	Tree Count	Mitigation Trees	Tree Type	Tree Caliper	Tree Count	Mitigation Trees	Tree Type	Tree Caliper	Tree Count	Mitigation Trees	Tree Type	Tree Caliper	Tree Count	Mitigation Trees
Oak	24	2	8	Hickory	28	2	8	Cabbage Palm	24	1	4	Black Cherry	40	1	6
Oak	27	2	8	Hickory	30	5	25								
Oak	28	2	8	Hickory	32	1	5								
Oak	31	1	5	Hickory	40	2	12								
Oak	33	1	5												
Oak	38	1	6												
Oak	40	2	12												
Oak	42	1	7												
Oak	54	1	9												
Oak	75	1	12												
Oak	86	1	14												
Total		15	94	Total		10	50	Total		1	4	Total		1	6

Green Consulting Group, Inc.
Landscape Architecture ■ Land Planning ■ Development Assistance
4070 United Avenue, Mount Dora, Florida 32757
352-357-9241 ■ Fax 352-357-9278 ■ LA0000847

NORTH

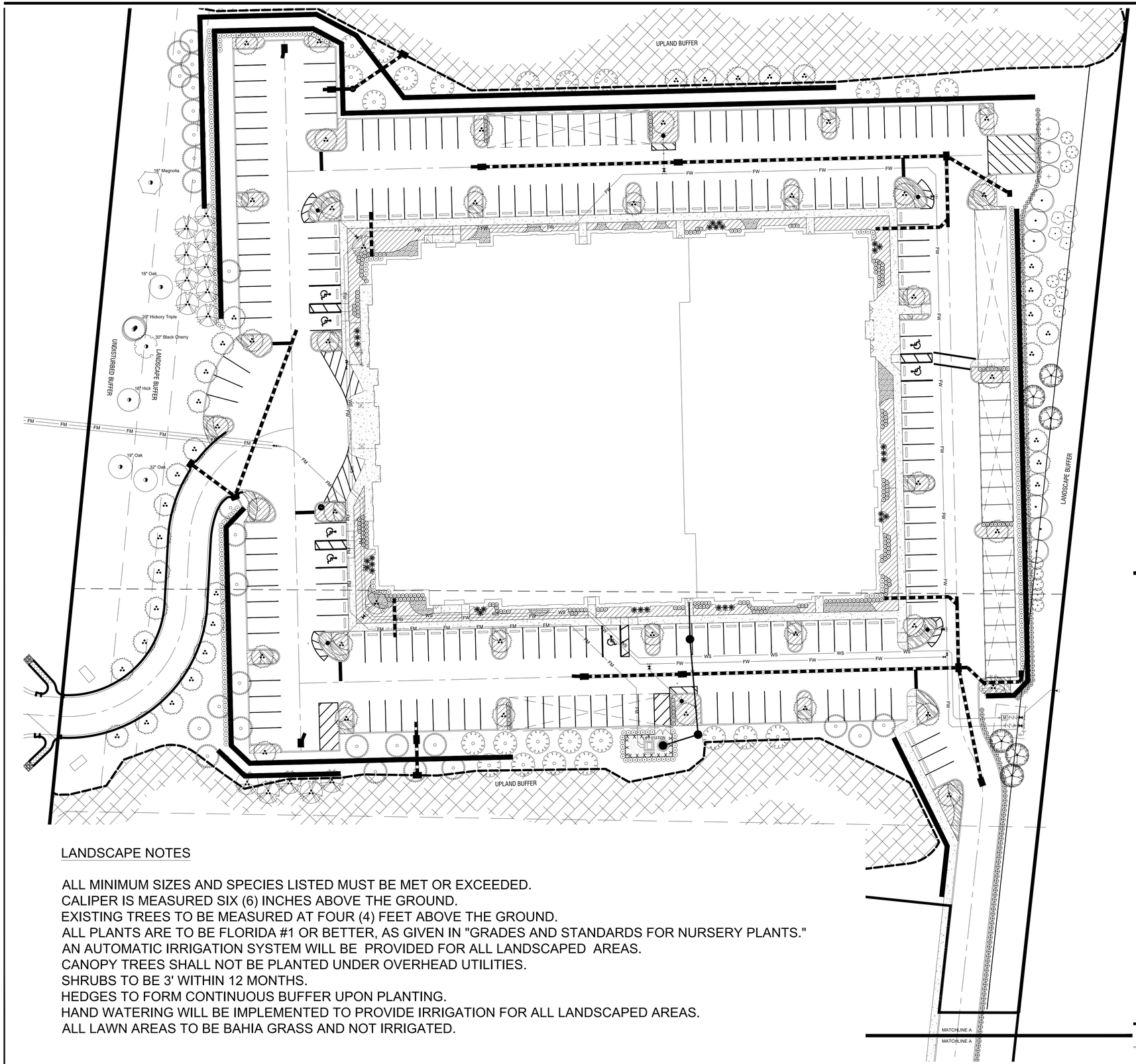
Drawing Number: 1632-04
Originated From: 1632-03
Date: June 5, 2023
Scale: 1"=30'
Drawn By: PAH
Layout: 24"x36"

Tree Removal Plan

Inspire Donnely Woods

Mount Dora, Florida

TBR-1



PLANT SCHEDULE PHASE 2

CANOPY TREES	QTY	COMMON NAME	BOTANICAL NAME	CONT	CAL	SIZE	SPACING
	3	Red Maple	Acer rubrum	65 gal	3.5"Cal	15`	As Shown
	6	Southern Magnolia	Magnolia grandiflora	65 gal	3.5"Cal	15`	As Shown
	6	Live Oak	Quercus virginiana	65 gal	3.5"Cal	15`	As Shown
REPLACEMENT TREES	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**CONT**	**CAL**	**SIZE**	**SPACING**
	24	Red Maple	Acer rubrum	65 gal	3.5"Cal	15`	As Shown
	28	Southern Magnolia	Magnolia grandiflora	65 gal	3.5"Cal	15`	As Shown
	67	Live Oak	Quercus virginiana	30 gal	3.5"Cal	15`	As Shown
	17	Drake Elm	Ulmus parvifolia `Drake`	65 gal	3.5"Cal	15`	As Shown
TREES TO REMAIN	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**CONT**	**CAL**	**SIZE**	**SPACING**
	4	Pignut Hickory	Carya glabra	Existing	As labled	Existing	As Shown
	1	Southern Magnolia	Magnolia grandiflora	Existing	As labled	Existing	As Shown
	1	Black Cherry	Prunus serotina	Existing	As labled	Existing	As Shown
	3	Live Oak	Quercus virginiana	Existing	As labled	Existing	As Shown
UNDERSTORY TREES	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**CONT**	**CAL**	**SIZE**	**SPACING**
	13	Yaupon Holly	Ilex vomitoria	30 gal	2"Cal	6`	As Shown
	5	Southern Wax Myrtle	Myrica cerifera	30 gal	2"Cal	6`	As Shown
SHRUBS	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**CONT**	**HEIGHT**	**WIDTH**	**SPACING**
	201	Yaupon Holly	Ilex vomitoria	3 gal	18"	12"	30" o.c.
	193	Anise	Illicium parviflorum	3 gal	30"	12"	36" o.c.
	300	Podocarpus	Podocarpus macrophyllus	7 gal	48"	18"	As Shown
	44	Walter`s Viburnum	Viburnum obovatum	3 gal	24"	30"	30" o.c.
	31	Cardboard Palm	Zamia furfuracea	5 gal	20"	24"	As Shown
SHRUB AREAS	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**CONT**	**HEIGHT**	**WIDTH**	**SPACING**
	721	Dwarf Yaupon Holly	Ilex vomitoria `Nana`	3 gal	24"		24" o.c.
GROUND COVERS	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**CONT**			
	295	African Iris	Dietes vegeta	1 gal			24" o.c.
	4,786	Dwarf Confederate Jasmine	Trachelospermum asiaticum	1 gal			18" o.c.

LANDSCAPE NOTES

ALL MINIMUM SIZES AND SPECIES LISTED MUST BE MET OR EXCEEDED.
CALIPER IS MEASURED SIX (6) INCHES ABOVE THE GROUND.
EXISTING TREES TO BE MEASURED AT FOUR (4) FEET ABOVE THE GROUND.
ALL PLANTS ARE TO BE FLORIDA #1 OR BETTER, AS GIVEN IN "GRADES AND STANDARDS FOR NURSERY PLANTS."
AN AUTOMATIC IRRIGATION SYSTEM WILL BE PROVIDED FOR ALL LANDSCAPED AREAS.
CANOPY TREES SHALL NOT BE PLANTED UNDER OVERHEAD UTILITIES.
SHRUBS TO BE 3' WITHIN 12 MONTHS.
HEDGES TO FORM CONTINUOUS BUFFER UPON PLANTING.
HAND WATERING WILL BE IMPLEMENTED TO PROVIDE IRRIGATION FOR ALL LANDSCAPED AREAS.
ALL LAWN AREAS TO BE BAHIA GRASS AND NOT IRRIGATED.

Green Consulting Group, Inc.
Landscape Architecture ■ Land Planning ■ Development Assistance
4070 United Avenue, Mount Dora, Florida 32757
352-357-9241 ■ Fax 352-357-9278 ■ LA0000847

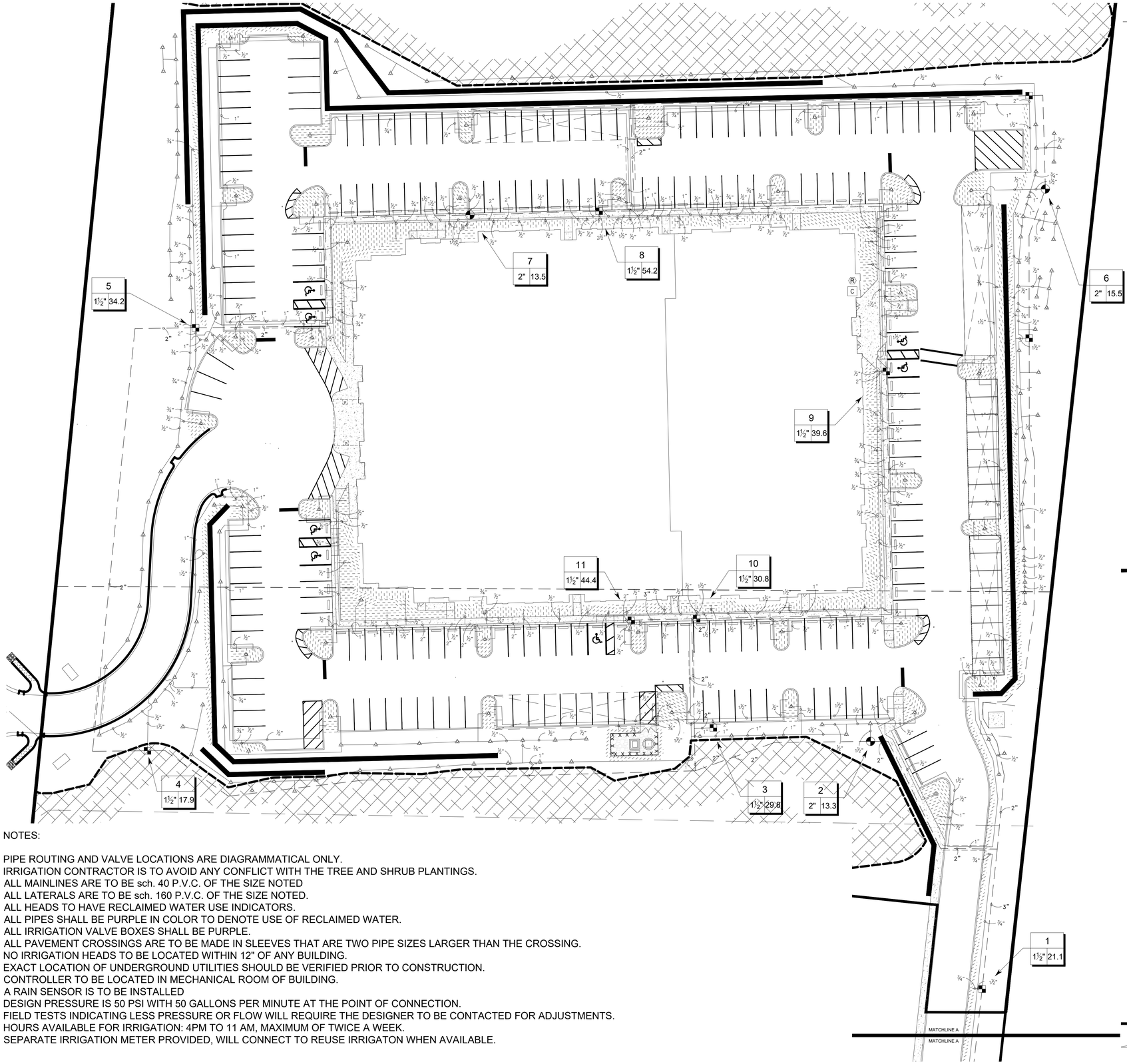
NORTH

Drawing Number: 1632-04
Originated From: 1632-03
Date: June 5, 2023
Scale: 1"=30'
Drawn By: PAH
Layout: 24"x36"

Landscape Plan

Inspire Donnely Woods

Mount Dora, Florida



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
1401 1402 1404 1408	Rain Bird 1800-1400 Flood 1401 Fixed flow rate (0.25-2.0GPM), full circle bubbler, 1/2" FIPT.	169	30

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Rain Bird XCZ-150-PRB-COM High Flow Control Zone Kit, for Large Commercial Drip Zones. 1-1/2" PESB Valve with two 1" Pressure Regulating (40psi) Quick-Check Basket Filters. Flow range: 15-40gpm.	10
	Area to Receive Dripline Rain Bird XFD-09-12-NP XFD On-Surface Pressure Compensating Landscape Dripline. 0.9 GPH emitters at 12" O.C. Dripline laterals spaced at 12" apart, with emitters offset for triangular pattern. UV Resistant. Specify XF insert fittings.	21,564 l.f.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Rain Bird PESBR-PRS-D 1", 1-1/2", and 2" Durable Chlorine-Resistant Valves for Reclaimed Water Applications. With Scrubber Mechanism Technology, Purple Flow Control Handle, and Pressure Regulator Module.	3
BF	Febco 765 2" Pressure Vacuum Breaker, brass with ball valve SOV. Install 12" (305MM) above highest downstream outlet and the highest point in the downstream piping.	1
C	Rain Bird ESP-LXD 50 Station, 2-Wire Decoder based Controller. (1) ESP-LXD 50-Station, Indoor/Outdoor, Plastic Wall-Mount Enclosure. System Requirements: Rain Bird FD-XXX-TURF Field Decoders, Paige Electric Cable P7072D & Rain Bird WC20 Dry Splices ONLY. Ground System w/ (X) LSP-1TURF Line Surge Protectors in Rain Bird Round Valve Boxes. Install Per Manufacturers Recommendations.	1
R	Rain Bird WR2-RFC Wireless Rain and Freeze Sensor Combo, includes 1 receiver and 1 rain/freeze sensor transmitter.	1
M	Water Meter 3"	1
	Irrigation Lateral Line: PVC Class 160 SDR 26	11,038 l.f.
	Irrigation Mainline: PVC Schedule 40	3,237 l.f.
	Pipe Sleeve: PVC Schedule 80	174.8 l.f.

NOTES:

PIPE ROUTING AND VALVE LOCATIONS ARE DIAGRAMMATICAL ONLY.
IRRIGATION CONTRACTOR IS TO AVOID ANY CONFLICT WITH THE TREE AND SHRUB PLANTINGS.
ALL MAINLINES ARE TO BE sch. 40 P.V.C. OF THE SIZE NOTED
ALL LATERALS ARE TO BE sch. 160 P.V.C. OF THE SIZE NOTED.
ALL HEADS TO HAVE RECLAIMED WATER USE INDICATORS.
ALL PIPES SHALL BE PURPLE IN COLOR TO DENOTE USE OF RECLAIMED WATER.
ALL IRRIGATION VALVE BOXES SHALL BE PURPLE.
ALL PAVEMENT CROSSINGS ARE TO BE MADE IN SLEEVES THAT ARE TWO PIPE SIZES LARGER THAN THE CROSSING.
NO IRRIGATION HEADS TO BE LOCATED WITHIN 12" OF ANY BUILDING.
EXACT LOCATION OF UNDERGROUND UTILITIES SHOULD BE VERIFIED PRIOR TO CONSTRUCTION.
CONTROLLER TO BE LOCATED IN MECHANICAL ROOM OF BUILDING.
A RAIN SENSOR IS TO BE INSTALLED
DESIGN PRESSURE IS 50 PSI WITH 50 GALLONS PER MINUTE AT THE POINT OF CONNECTION.
FIELD TESTS INDICATING LESS PRESSURE OR FLOW WILL REQUIRE THE DESIGNER TO BE CONTACTED FOR ADJUSTMENTS.
HOURS AVAILABLE FOR IRRIGATION: 4PM TO 11 AM, MAXIMUM OF TWICE A WEEK.
SEPARATE IRRIGATION METER PROVIDED, WILL CONNECT TO REUSE IRRIGATON WHEN AVAILABLE.

Green Consulting Group, Inc.
Landscape Architecture ■ Land Planning ■ Development Assistance
4070 United Avenue, Mount Dora, Florida 32757
352-357-9241 ■ Fax 352-357-9278 ■ LA0000847

NORTH

Drawing Number: 1632-04
Originated From: 1632-03
Date: June 5, 2023
Scale: 1"=30'
Drawn By: PAH
Layout: 24"x36"

Inspire Donnely Woods

Mount Dora, Florida

Irrigation Plan

STATISTICS						
Description	Symbol	Avg	Max	Min	Max/Min	Average/Min
Drive/Parking Areas	+	0.3 fc	1.9 fc	0.1 fc	19.0 : 1 fc	3.0 : 1 fc
Property Line	+	0.0 fc	0.2 fc	0.0 fc	N/A	N/A

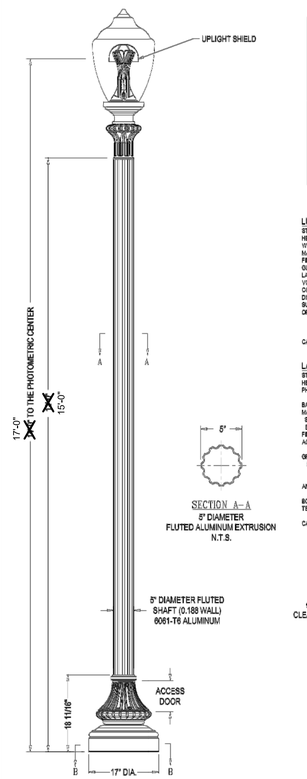
LUMINAIRE SCHEDULE					
Symbol	Label	Catalog Number	Description	Lamp	Watts
	A	WSH-LED050-EVX-L18-40-CR3-YS11	POLE MOUNTED LED LIGHT FIXTURE MOUNTED @ 15'-0" AFG. WITH TYPE-3 DISTRIBUTION	LED 4000K	50
	B	WSH-LED050-EVX-L18-40-CR3-YS11-HS	POLE MOUNTED LED LIGHT FIXTURE MOUNTED @ 15'-0" AFG. WITH TYPE-3 DIST. AND HOUSE SIDE SHIELD	LED 4000K	50

DRAWING INDEX

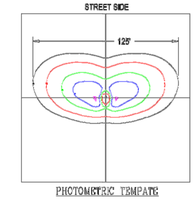
SL1 DETAILS, SCHEDULES AND OVERALL SITE PLAN – PROPERTY LINE PHOTOMETRICS
SL2 ENLARGED SITE PLAN – ROADWAY LIGHTING PHOTOMETRICS

FIXTURE TYPES - A & B

This drawing is property of Spring City Elect. Mfg. and is issued to the recipient with the understanding that it shall not be copied, duplicated, passed on to unauthorized parties, nor used for any purpose other than that for which it is specifically furnished except with Spring City's written permission.



SECTION A–A
5" DIAMETER
FLUTED ALUMINUM EXTRUSION
N.T.S.



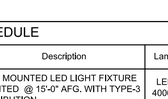
PHOTOMETRIC TEMPATE

LUMINAIRE SPECIFICATIONS:

STYLE:	WASHINGTON LED, X-SERIES
HEIGHT:	35 1/16"
WIDTH:	15 1/8" DIAMETER
MATERIAL:	CAST ALUMINUM ALLOY A360 PER A.S.T.M. B26-95
FINISH:	POWDER COAT - MOUNT DORA GREEN (RAL#XXXX)
GLOBE:	CLEAR STIPPLED ACRYLIC
LAMPING:	50 WATT LED
VOLTAGE:	ELECTRONIC WIRED AT 120-277 VOLTS
COLOR TEMP:	4000K (NEDAH) (WHITE)
DISTRIBUTION:	TYPE III (ASYMMETRIC)
BURGE:	130V
OPTIONS:	• MEDIUM FROSTED OPTICS (INCLUDED) • UPLIGHT SHIELD (REQUIRED) • HOUSE SIDE SHIELD (NOT REQUIRED)
CATALOG NO.:	ALMWSH-LED50-EVX/L18-40-FIS/ULS/B-YS19-DJ

LAMP POST SPECIFICATIONS:

STYLE:	WASHINGTON
HEIGHT:	12'-0"
PHOTOMETRIC CENTER:	14'-0"
BASE:	17" DIAMETER
MATERIAL:	
SHAFT:	5" DIA. 10-FLAT FLUTE ALUMINUM EXTRUSION (0.188" WALL)
BASE:	CAST ALUMINUM ALLOY A360 PER A.S.T.M. B26-95
FINISH:	POWDER COAT - MOUNT DORA GREEN (RAL#XXXX)
ACCESS DOOR:	LOCATED IN BASE SECURED WITH TAMPER PROOF HEX SOCKET SECURITY MACHINE SCREWS
GROUND PROVISIONS:	DRILL AND TAP BASE OPPOSITE ACCESS DOOR TO ACCOMMODATE A 1/4"-20 GROUND STUD (STUD SUPPLIED BY OTHERS)
ANCHOR BOLTS:	(4) 3/4" DIA. X 24" LONG + 3" HOOK (FULLY GALVANIZED WITH 1 NUT AND 1 WASHER PER BOLT)
BOLT PROJECTION:	3" REQUIRED
TENON:	3 1/2" DIA. X 5" HIGH (TO ACCEPT LUMINAIRE)
CATALOG NO.:	APS/WSH-17-12-05-55-TN3.0G3.0-CU

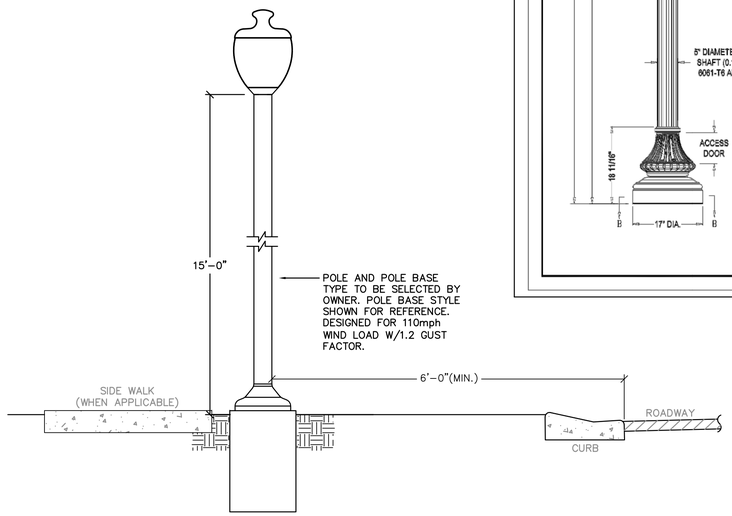


SECTION B–B
BASE PLATE DETAIL
N.T.S.

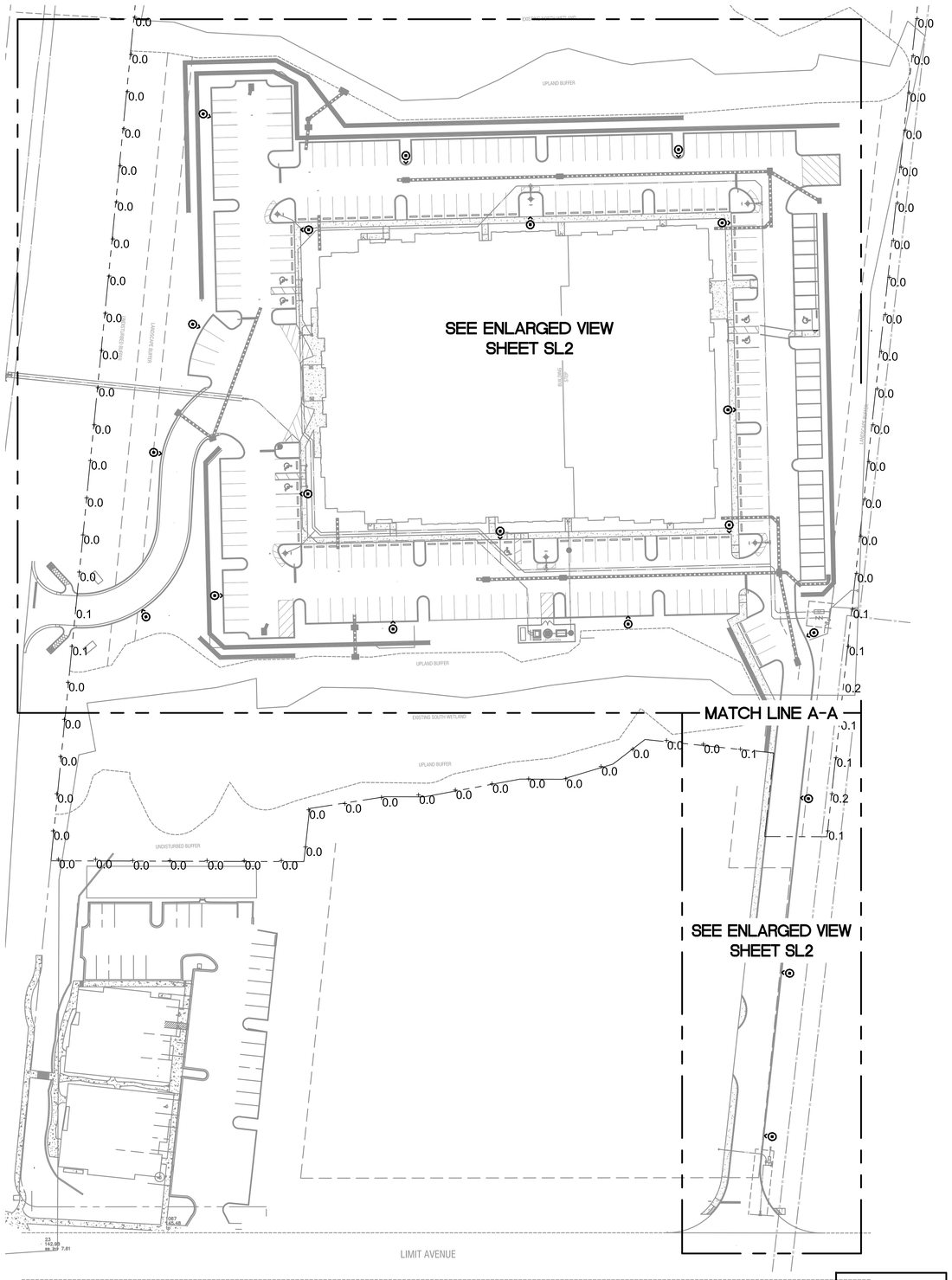
REVISED BY: D.A.K.	DATE: 1-10-19

Spring City Electrical Mfg. Co.
HALL AND MAIN STREETS - P.O. BOX 19 - SPRING CITY, PA. 19475
PHONE (610) 948-4000 - FAX (610) 948-5977 - WWW.SPRINGCITY.COM

DESCRIPTION	THE WASHINGTON LED X-SERIES LUMINAIRE ON THE 12' WASHINGTON LAMP POST		
CUSTOMER			
JOB	CORA LANDINGS RESIDENTIAL PUD		
SCALE: N.T.S.	DRAWN BY: T.E.B.	DATE: 11-30-18	DRAWING NO. S104530



2 SL1 **TYPICAL POLE MOUNTING DETAIL**
NOT TO SCALE (UNLESS INDICATED OTHERWISE)



N NORTH
1 SL1 **OVERALL SITE PLAN - PROPERTY LINE PHOTOMETRICS**
SCALE: 1"=50'-0"
0 25' 50' 100'

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY WOOD T. BRAZILL, P.E. ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Electrical Contractors & Engineers
ESI Electric Services, Inc. Since 1955 Leesburg, FL
Electric Services, Inc.
1746 US Highway 441 Leesburg, FL 34748
P:352-787-1322 F:352-787-7871
CA #9435 : EC #1415
ESI Job #E2300.16

DATE	REVISION
	1
	2
	3
	4
	5
	6
	7
	8

INSPIRE DONNELLY WOODS
MOUNT DORA, FL

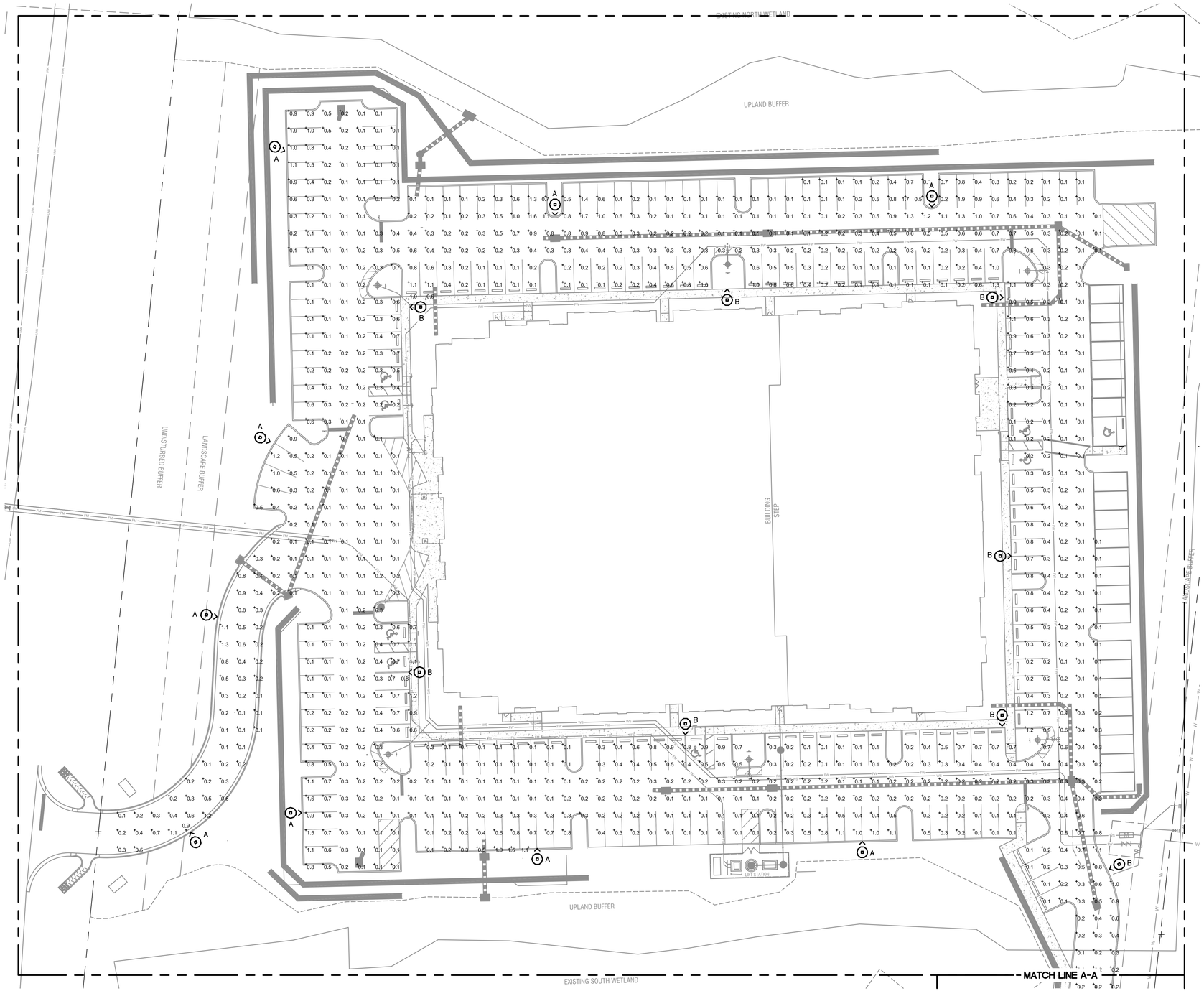
DETAILS, SCHEDULES AND OVERALL SITE PLAN – PROPERTY LINE PHOTOMETRICS

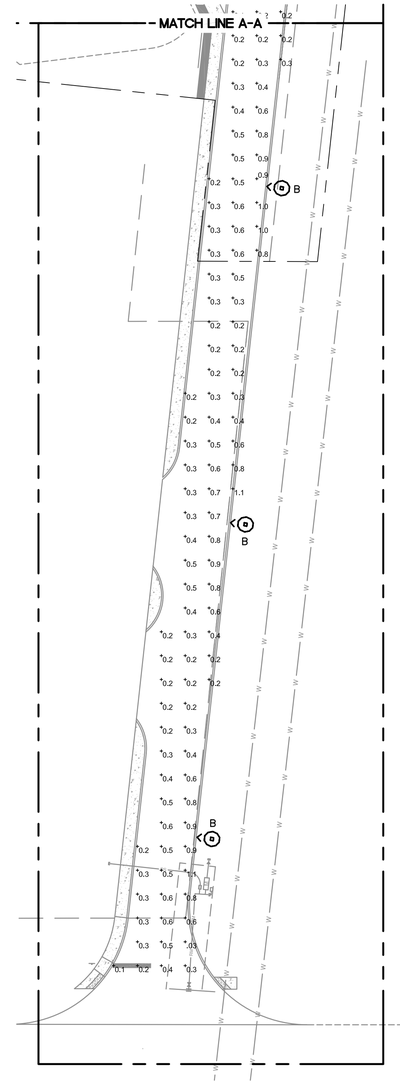
HALFF
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33380

DATE:	APRIL 27, 2023
DESIGNED BY:	WTB
DRAWN BY:	JEN
CHECKED BY.:	WTB
JOB NO.:	04593.001
FILE NAME:	E2300.16_SL1

Sheet SL1

WOOD T. BRAZILL LICENSED PROFESSIONAL ENGINEER No58563 STATE OF FLORIDA
WOOD T. BRAZILL, P.E.
Registered Florida No. 58563





1 SL2 ENLARGED SITE PLAN - PARKING AREA LIGHTING PHOTOMETRICS
SCALE: 1"=30'-0"
0 15' 30' 60'
N NORTH

2 SL2 ENLARGED SITE PLAN - PARKING AREA LIGHTING PHOTOMETRICS
SCALE: 1"=30'-0"
0 15' 30' 60'
N NORTH

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY WOOD T. BRAZILL, P.E. ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT TO BE CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Electrical Contractors & Engineers
ESI
Electric Services, Inc. Since 1969
Leesburg, FL
Electric Services, Inc.
1746 US Highway 441 Leesburg, FL 34748
P:352-787-1322 F:352-787-7871
CA #9435 : EC #1415
ESI Job #E2300.16

DATE	REVISION
	1
	2
	3
	4
	5
	6
	7
	8

INSPIRE DONNELLY WOODS
MOUNT DORA, FL

ENLARGED SITE PLAN - PARKING AREA LIGHTING PHOTOMETRICS

HALFF
Office: 352.343.8481
Fax: 352.343.8495
902 North Sinclair Ave.
Tavares, Florida 32778
Certificate of Authorization Number: 33380

DATE:	APRIL 27, 2023
DESIGNED BY:	WTB
DRAWN BY:	JEN
CHECKED BY.:	WTB
JOB NO.:	04593.001
FILE NAME:	E2300.16_SL1

Sheet SL2

WOOD T. BRAZILL
LICENSED
No 58563
STATE OF FLORIDA
PROFESSIONAL ENGINEER

WOOD T. BRAZILL, P.E.
Registered No. 58563

CITY OF MOUNT DORA
PLANNING AND DEVELOPMENT

RECEIVED
By scottw at 9:20 am, Mar 07, 2023

Office Use Only:
Project# SP23-03

City of Mount Dora
Planning & Development
510 N. Baker St.
Mount Dora, FL 32757
352-735-7112
PlanDev@CityofMountDora.com

SITE PLAN APPLICATION

Date: March 6, 2023 Project Name: Inspire Donnelly Woods

1. Site Address: North Donnelly Street
(Contact City Staff for New Address Assignments)

2. Applicant's Name: Timothy W Green, ASLA, AICP, LEED AP
Company's Name: Green Consulting Group, Inc.
Address: 4070 United Avenue
City, State & Zip: Mount Dora, FL 32757
Phone: 352-357-9241 E-mail: tgreen@greenconsultinggroup.com

3. Property Owner's Name(s): Jay Ogelsby for Liberty Senior Living Properties of Mt Dora, LLC
Company's Name: Liberty Senior Properties of Mt Dora, LLC
Address: 2334 S 41st Street
City, State & Zip: Wilmington , NC 28403
Phone: 205-864-5091 E-mail: joglesby@libertyseniorliving.com

4. Engineer's Name: Charles Hiott PE
Company's Name: Halff Associates, Inc.
Address: 902 North Sinclair Avenue
City, State & Zip: Tavares, FL 32778
Phone: 352-557-9230 E-mail: chiott@halff.com

5. Landscape Architect's Name: Timothy W Green, ASLA, AICP, LEED AP
Company's Name: Green Consulting Group, Inc.
Address: 4070 United Avenue
City, State & Zip: Mount Dora, FL 32757
Phone: 352-357-9241 E-mail: tgreen@greenconsultinggroup.com

6. Architect's Name: Ryan Meeks, AIA, LEED AP
Company's Name: Meeks Partners
Address: 16000 Memorial Drive
City, State & Zip: Houston, TX 77079
Phone: 281-558-8787 E-mail: rmeeks@meekspartners.com

7. Briefly describe the property project and proposed use(s): 166 Senior Living Apartments, associated amenities and parking (surface, garage, and covered)
8. Property is located on the following adjacent streets: East of Donnelly Street and North of Limit Avenue
9. Public or Private Roadways*: Site Plan with no proposed roads

   **Private Roads/Gated Communities may require a Traffic Enforcement Agreement with Mount Dora Police Department*
10. Is this project within the Joint Planning Agreement boundaries? [X] Yes [ ] No
11. Zoning District: PUD Future Land Use Category: L/MDR and HDR
12. Building Size Existing (SF): 0 Proposed (SF): 233,750 and 7,068
13. Total (SF): 240,818 Main Building and Garage Parking
14. Proposed Number of Seats: N A
15. Size of property in Acres: 13.37 Square Feet: 582,397
16. Number of structures to be built on the site: 2 : Main Building and Garage Parking
17. Height of structures(s): up to 55' Building Stories: 4
18. Total square footage of impervious surface: 4.5 4Acres
19. The percentage of lot coverage: 34%
20. Are vested rights being requested as part of this application?* [X] Yes [ ] No

    **If no, by signing this application you are waiving any future vested development rights on this property.*

CERTIFICATION AND SIGNATURE

By my signature below, I certify that the information contained in this application is true and correct to the best of my knowledge at the time of the application. I acknowledge that I understand and have complied with all of the submittal requirements and procedures and that this application is a complete application submittal pursuant to the City's Land Development Code. I further understand that an incomplete application submittal may cause my application to be deferred to the next posted deadline date.

Owner/Applicant Signature

3/6/23

Date

AGENT LETTER

TO: City of Mount Dora Planning & Development Department

This will serve as written authorization for Timothy W. Green, ASLA, AICP, LEED AP, President of Green Consulting Group, Inc. to act as agent for the purpose of submitting and processing of a Site Plan application for Donnelly Woods on behalf of Liberty Senior Living Properties of Mt Dora, LLC.

Signed:

_____ Date: 2/27/2023

Ronald B. McNeill - Manager

NOTARY PUBLIC
STATE OF North Carolina
COUNTY OF New Hanover

Before me, the undersigned authority, personally appeared Ronald B. McNeill who acknowledges that he is appointing Timothy W. Green to act as his agent for the purpose of submitting for a Site Plan application for the above referenced property and that he did X or did not ____ take an oath. X is known to me ____ or produced identification (type) _____ on this 13th day of February 2023.

ALICIA DELL WILSON
NOTARY PUBLIC
NEW HANOVER COUNTY, NC
My Commission Expires
05-18-27

2023 FOREIGN LIMITED LIABILITY COMPANY ANNUAL REPORT

FILED
Feb 16, 2023
Secretary of State
7661408740CC

DOCUMENT# M22000007719

Entity Name: LIBERTY SENIOR LIVING PROPERTIES OF MT. DORA, LLC

Current Principal Place of Business:

2334 S. 41ST STREET
WILMINGTON, NC 28403

Current Mailing Address:

2334 S. 41ST STREET
WILMINGTON, NC 28403 US

FEI Number: 88-2453803

Certificate of Status Desired: No

Name and Address of Current Registered Agent:

INCORPORATING SERVICES, LTD.
1540 GLENWAY DRIVE
TALLAHASSEE, FL 32301 US

The above named entity submits this statement for the purpose of changing its registered office or registered agent, or both, in the State of Florida.

SIGNATURE:

Electronic Signature of Registered Agent — Date

Authorized Person(s) Detail :

Title	MBR	Title	MGR
Name	LIBERTY REAL PROPERTIES V, LLC	Name	MCNEILL, JOHN A JR
Address	2334 S. 41ST STREET	Address	2334 S. 41ST STREET
City-State-Zip:	WILMINGTON NC 28403	City-State-Zip:	WILMINGTON NC 28403

Title	MGR
Name	MCNEILL, RONALD B
Address	2334 S. 41ST STREET
City-State-Zip:	WILMINGTON NC 28403

I hereby certify that the information indicated on this report or supplemental report is true and accurate and that my electronic signature shall have the same legal effect as if made under oath; that I am a managing member or manager of the limited liability company or the receiver or trustee empowered to execute this report as required by Chapter 605, Florida Statutes; and that my name appears above, or on an attachment with all other like empowered.

SIGNATURE: RONALD B MCNEILL MANAGER 02/16/2023

Electronic Signature of Signing Authorized Person(s) Detail — Date

CITY OF MOUNT DORA

Planning and Development
510 N. Baker St.
Mount Dora, FL 32757
352-735-7113
Fax: 352-735-7191
E-mail: plandev@cityofmountdora.com

DATE: July 19, 2023

TO: Planning and Zoning Commission

FROM: Development Review Committee

Vince Sandersfeld, Planning Director

THROUGH: Michele Janiszewski, AICP, Senior Planner

RE: **Request for Minor Site Plan; The Yardery;** 221 N. Baker Street (Site Address); West side of Baker Street and South of Third Avenue (General Location); Gaslight MDF 2, LLC (Property Owner, Applicant); Halff Associates, Inc. (Engineer); Green Consulting Group, Inc. (Landscape Architect); Powell Studio Architecture (Architect). Project No. SP23-06

SUMMARY OF RECOMMENDATION:

Staff recommends approval of the above-referenced site plan with conditions. Approval is subject to satisfactorily addressing engineering requirements, including attached CPH Inc. items memo dated July 11, 2023, prior to issuance of the Site Development Permit.

REFERENCES/SUPPORT:

Section 5.1 *LDC*
Gaslight District Replat (PB 75 PG 91)

SITE SUMMARY:

Owner:	Gaslight MDF 2, LLC – Gary Guenther III	
Applicant:	Gaslight MDF 2, LLC – Austin Guenther	
Engineer:	Halff Associates, Inc. – Charles Hiott P.E	
Architect:	Green Consulting Group, Inc. – Timothy W. Green, ALSA, AICP, LEED AP	
Parcel ID:	31-19-27-1600-000-00100	
Alternate Key:	3926463	
Existing Use:	Vacant Land – Previously improved with driveway and site grading	
Proposed Use:	Restaurant/Bar	
Future Land Use:	Mixed Use 2 (MU-2)	
Zoning:	Downtown Commercial (C-2)	
Overlay Zones:	Historic Preservation Review Area Mount Dora Community Redevelopment Area (CRA) Downtown Exempt District (Parking and Drainage) C-2 Central Business Sign District Building Height Impact District	
Site Area:	10,995-sf (0.25-ac)	
Max. Building Height:	35’	
Proposed Building Height:	34’-8”	
Proposed Building Size:	3,422-sf	1st Floor (Restaurant/Bar)
	2,059-sf	2nd Floor (Rooftop Bar)
	5,481-sf	Total Floor Area

Surrounding Property Table:

Direction	City/County	FLU	Zoning	Existing Use(s)
North	City	Mixed-Use Downtown	C-2	Office, SFDU
South	City	Mixed-Use Downtown	C-2	Charles Ave/RR/Marina
East	City	Mixed-Use Downtown	C-2/R-1/MU-2	City Parking, SFDU, Parking
West	City	Mixed-Use Downtown	C-2	SFDU, Parking Deck

ANALYSIS:

The Minor Site Plan application request proposes a redevelopment project consisting of a 3,422-sf two-story commercial structure to feature an open-air patio style restaurant/bar space, rooftop bar, wooden deck, and an astro-turfed open space located at the terminus. Baker Street in the Downtown core area.

The subject parcel was originally platted as Lots 2, 3, 5, 6, 7 and Tract A, B, and C of the *Olde Colony Gaslight* plat (PB 42 PG 86), approved in October of 1999. The commercial lots (5) were previously reassembled into a single commercial lot under the *Gaslight District Replat* (PB 75 PG 91) approved by City Council on December 1, 2020. PZC approved the replat on November 18, 2020. The parcel is currently vacant with pavers loop configuration driveway and existing trees.

The Mount Dora Historic Design Guidelines requires new construction to complement historic architecture within the Historic Preservation Review Area. The applicant received a Certificate of Appropriateness (COA) from the Historic Preservation Board on April 4, 2023. The applicant provided elevations to depict the proposed commercial vernacular style-structure, as presented to the Historic Preservation Board. The approval of the COA was conditioned the architecture design be consistent with Section 6.13 Commercial architectural of the City's *LDC*.

The site is located in the C-2 (Downtown Zoning District) and buildings may be built up to the property line with 100% lot coverage. The site plan proposes a wood deck to the south of the property. Located at the north side of the property will contain a brick paver courtyard and an access easement to "Lot 4", which was not included in the replat.

The site is located within the City's Downtown Parking Exempt District, in accordance with LDC Section 6.5.3. The proposed restaurant/bar use shall not be required to provide parking, in accordance with LDC Section 6.5.3(3). Pedestrian access/connection to the City's existing two-story parking garage adjacent to the west will remain. Bicycle racks will be installed on-site for additional bicycle parking options.

The project is within the City's Downtown Drainage Exempt District, which allows for master City storm water and exempts parking for certain uses. The applicant has coordinated with the City engineer on proper roof drain discharge for storm water management. This area is located between 6th and Charles and between McDonald and Baker.

The subject property is located within the Building Height Impact District. The allowable height of buildings and structures within the City's Historic Preservation Review Area shall not exceed thirty-five (35) feet; excluding but not limited to chimneys, water, fire, telecommunication, radio, and television tower, elevator bulkheads, and similar structures, and any related mechanical appurtenances. The proposal includes a two-story building that reaches a maximum height of 34'-8" at the top of the gabled roof, highest point of the structure.

The proposed site improvements will impact the existing trees on site; the applicant has submitted a tree replacement mitigation plan. The applicant proposes to replace 8 of the 9 trees removed on site and will contribute $425.00 to the tree bank fund for the one (1) tree not replaced. The replacement trees are proposed to be located surrounding the outdoor seating area.

ATTACHMENTS:

Vicinity Map
CPH Comments (July 11, 2023)
Certificate of Appropriateness
Elevations
Site Plan
Application

The Yardery

Application for Site Plan

0.25 acres



Map Date 5/4/2023

0 50 100 200 Feet

Legend

Subject Parcel

The Yardery

CITY OF MOUNT DORA

1117 East Robinson St.
Orlando, FL 32801
Phone: 407.425.0452
Fax: 407.648.1036

DELIVERED VIA E-MAIL

July 11, 2023

Mr. Vince Sandersfeld
Planning Director
City of Mount Dora
510 Baker Street
Mount Dora, FL 32757

RE: Yardery Minor Site Plan (Project No.: SP23-06 Minor)
Second Review

Dear Mr. Sandersfeld,

We are in receipt of the Site Plan Application and civil plans for the above listed project. We compared the revised plans and response letter to our previous comments dated June 15, 2023 to verify if all our civil engineering and architectural comments had been addressed.

Most of our comments have been addressed. We held over three civil engineering comments from the previous review for additional discussion with the City prior to providing our approval. We have a specific concern with our remaining civil comment 1, referencing the wood deck. We discussed the design with the engineer of record and their response was that there was not going to be fencing or skirting around the perimeter of the area below the wood deck. Our concern is trash, animals or people will have open access to the area below the deck. Our recommendation is to provide a decorative wood panel fence along the east side, facing Baker Street and tie the fencing to the retaining wall on the SE corner of the site. Since this is a working storm water pond with an outfall structure, access to the structure also needs to be maintained. A gate installed as part of the fence would be one option for ease of access.

<u>New Civil Comments 6.15.23</u>

1. Sheet 4 – Please provide a cross section through the wood deck from the north side to the south side, showing the retaining wall in the north side and how the deck will be constructed at the south property line. The plans do not call out a retaining wall on the south side. **How will the 7-foot open area between existing ground and the top of deck be addressed? How will this match up to the existing wall and handrail that is existing (for the garage drive lane)?** The new plans show a separation of 2 feet between the new deck and the existing retaining wall. How will that separation be addressed? The concern is the open access between the two structures and access sunder the wood deck.

2. Resolved. The FM is called out as 1 ¼" HDPE. City to confirm this is acceptable.

6. Sheet 5 – The plans show the location of an existing fire hydrant on the NW corner of the intersection of Baker Street and E 3RD Avenue. City FD to verify if this meets their requirements for fire protection. *Response was noted by EOR.*

Our previous Architectural comments have been addressed. We do not have any new comments on the plans, other than the three held over Civil comments noted above.

This concludes our review of the plans and documents. Please have the applicant address our comment number 1 above. We have reservations about the design and the open area below the deck that needs to be revisited. Please feel free to contact us should you have any questions.

Sincerely,
CPH, LLC

Allen C. Lane, Jr, P.E.
Senior Project Manager

CC: Javier E. Omana, CNU-a
Sache Fernandez
Kiersten U. Cavender

J:\M7000.01\z-Orlando\Civil\City Plan Review\201.00M7000.540 (M7000.54)_Yardery Minor SP\Letter\Review 3\CPH Comments - Yardery Minor Site Plan - 3rd Review.docx

April 5, 2023

GC Development of Lake County, Inc.
P.O. Box 1273
Mount Dora, FL. 32756
By Email: Austin.Guenther@G3Development.com

RE: Approval - Application for a Certificate of Appropriateness
221 N. Baker Street – New Construction for Commercial Building

To Whom It May Concern:

On April 4, 2023, the Mount Dora Historic Preservation Board reviewed and approved your application for a Certificate of Appropriateness for a new commercial building located at 221 N Baker Street, Mount Dora, with the following conditions:

1. The Applicant adhere to the Architectural Design Standards within the Land Development Code; and
2. The roof shed roof be revised to a gable roof.

This letter will serve as your Certificate of Appropriateness. You may now proceed with the site plan process through Planning & Zoning and the permitting process through Building Services; a copy of this letter must be included in your application packet for the site plan and building permit. Please note that the work for which a Certificate of Appropriateness is issued shall commence within one (1) year from the date of issuance.

If you have any questions or need additional information regarding the above please contact me at (352) 735-7112.

Sincerely,

Michele Janiszewski

Michele Janiszewski, AICP
Senior Planner

THE YARDERY





PROPOSED MATERIALS:

FIBER CEMENT
PLANK, TRIM, BOARD & BATTEN
JAMES HARDIE - ARCTIC WHITE

FIBER CEMENT
TRIM
JAMES HARDIE - IRON GRAY

METAL ROOF,
COPING, & RAILING

MATTE BLACK



DECORATIVE EXTERIOR
SCONCE LIGHTING

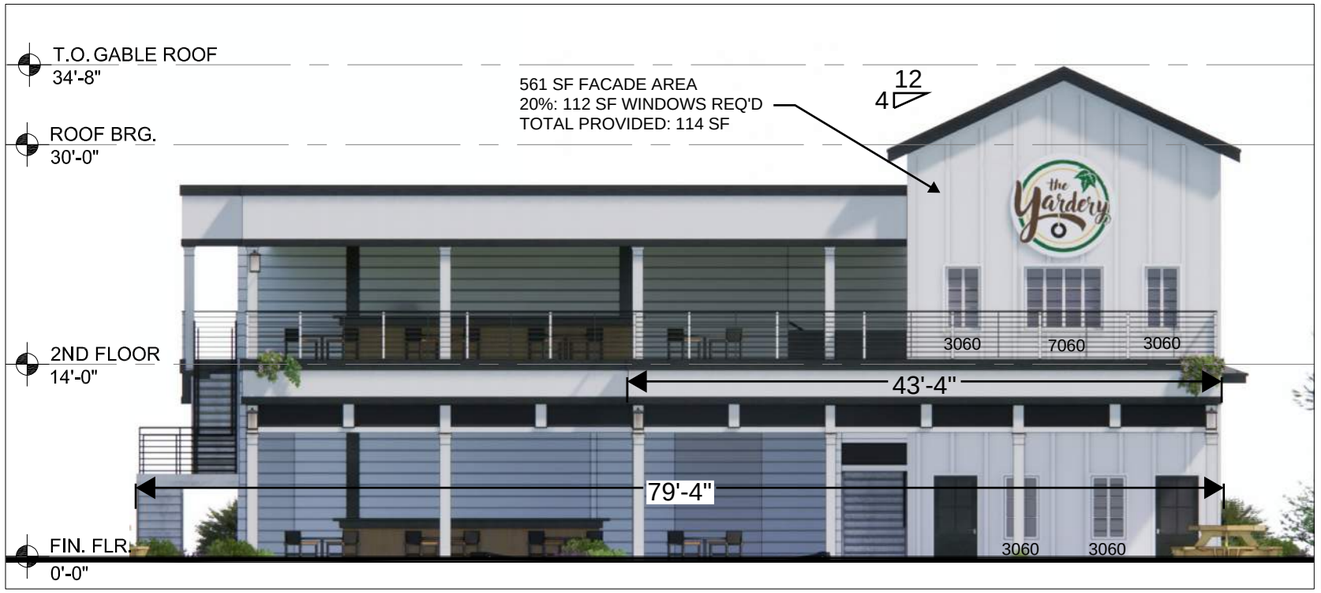
MILLENNIUM LIGHTING - BOWTON

POWDER COAT BLACK

G3
DEVELOPMENT

POWELL STUDIO
ARCHITECTURE

THE YARDERY









LAND DEVELOPMENT CODE:

1. Primary facade features per 6.13.3(1)(b)(2):
   (must provide 2 of the 3 features listed in code section)

(b) projected covered public entry with a minimum of 20% of the wall space devoted to windows

(c) covered walkway attached to the building, with a minimum width of six feet and a 50% minimum coverage for the affected facade.

2. DESIGN ELEMENTS:
   a. Arcades
   b. Building Banding
   c. Ornamental / Structural Architectural Details
   d. Metal as dominant roof material

3. Decorative landscape planting areas & specialty pavers.

4. Repeating facade treatments; color change, pattern change, architectural banding.

G3 DEVELOPMENT

POWELL STUDIO ARCHITECTURE

MINOR SITE PLAN
FOR
THE YARDERY

1

SECTION 31, TOWNSHIP 19 SOUTH, RANGE 27 EAST
CITY OF MT DORA, FLORIDA

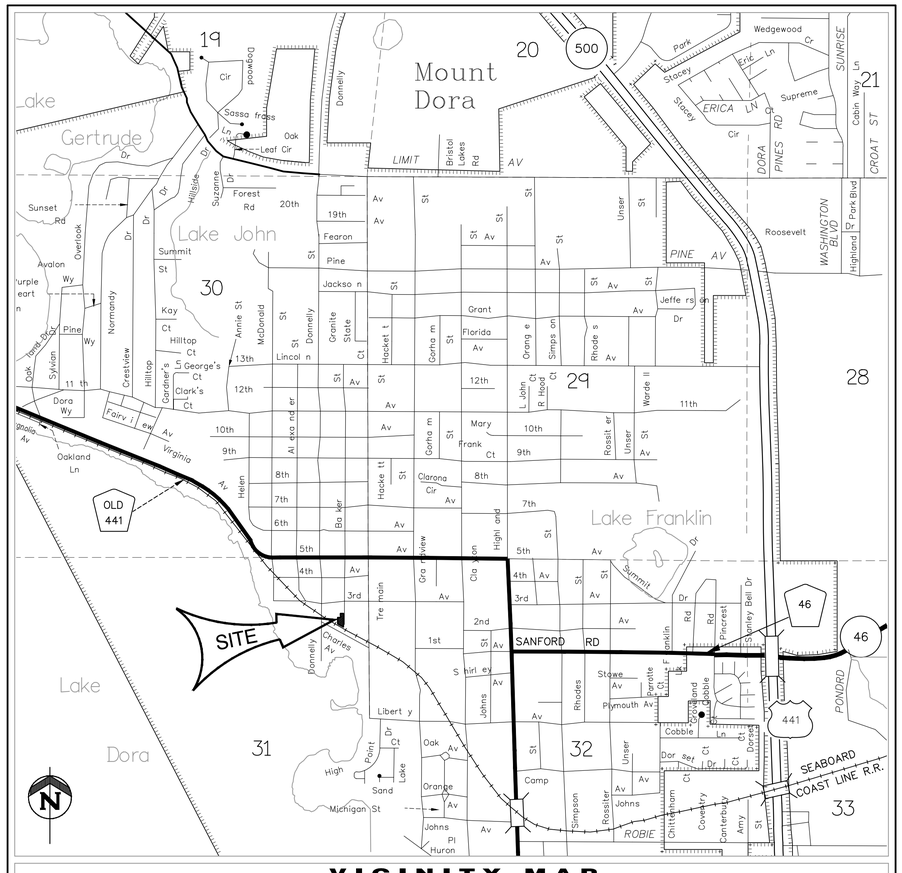
OWNER:
GASLIGHT MDF 2, LLC
PO BOX 1273
MOUNT DORA, FLORIDA 32756
PHONE: (352) 397-4869

ENGINEER:
HALFF ASSOCIATES, INC.
902 NORTH SINCLAIR AVENUE
TAVARES, FLORIDA 32778
PHONE (352) 343-8481
CONTACT: CHARLES C. HIOTT, P.E.

SURVEYOR:
FREELAND-CLINKSCALES & ASSOCIATES, INC.
1910 S. GROVE STREET
EUSTIS, FLORIDA 32726
PHONE (352) 357-0415
CONTACT: FULTON V. CLINKSCALES, JR.

LEGAL DESCRIPTION

LOT 3, OLDE COLONY GASLIGHT, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 42, PAGE 86, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA.
AND
LOT 5, OLDE COLONY GASLIGHT, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 42, PAGE 86, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA.
AND
LOT 6, OLDE COLONY GASLIGHT, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 42, PAGE 86, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA.
AND
LOT 7, OLDE COLONY GASLIGHT, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 42, PAGE 86, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA.
AND
TRACT B, OLDE COLONY GASLIGHT, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 42, PAGE 86, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA.
AND
TRACT C OLDE COLONY GASLIGHT, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 42, PAGE 86, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA.
AND
LOT 2, OLDE COLONY GASLIGHT PARTIAL REPLAT, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 64, PAGE 92, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA.
AND
TRACT A, OLDE COLONY GASLIGHT PARTIAL REPLAT, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 64, PAGE 92, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA.



VICINITY MAP
SCALE: 1"=1000'

JULY 05, 2023

INDEX OF SHEETS

1	COVER SHEET
2	AERIAL PHOTOGRAPH
3	EROSION CONTROL & DEMOLITION PLAN
4	SITE PLAN
5	UTILITY PLAN
6	PAVING & DRAINAGE DETAILS
7	POTABLE WATER DETAILS
8	UTILITY DETAILS
	REFERENCE DRAWINGS
I-1	IRRIGATION PLAN
L-1	LANDSCAPE PLAN
TBR-1	TREE REMOVAL PLAN

PREPARED BY:

halff
902 North Sinclair Ave.
Tavares, Florida 32778
TEL. (352) 343-8481 FAX (352) 343-8495
Certificate of Authorization Number: 33380

ORIGINAL DOCUMENT SIZE 24"x36"

0 1 2 3 4 5
(INCHES)



CHARLES C. HIOTT, P.E.
PROFESSIONAL ENGINEER NO. 94913

Sheet 2

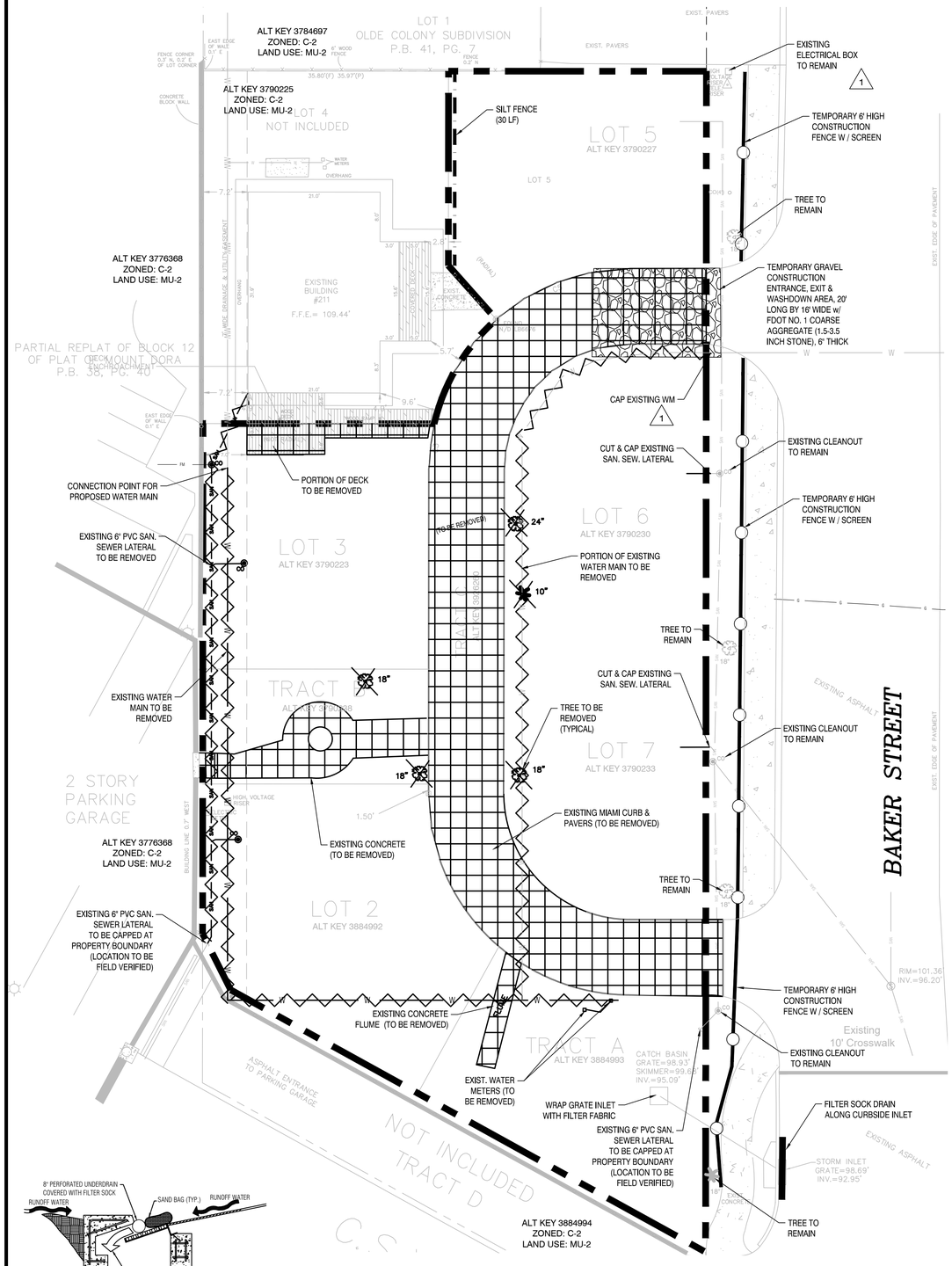
DATE:	APRIL 28, 2023
DESIGNED BY:	KDH
DRAWN BY:	KDH
CHECKED BY:	CCH
JOB NO.:	044687.001
FILE NAME:	GASLIGHT SITE

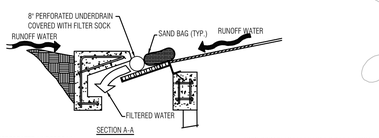
halff
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33380

MINOR SITE PLAN FOR THE YARDERY

AERIAL PHOTOGRAPH

DATE	REVISION
	1
	2
	3
	4
	5
	6
	7
	8





NOTES:
1. DIMENSIONS OF SEDIMENT FILTER DETAILS MAY BE ADJUSTED FOR TYPE "9" CURB INLET TOPS.
2. PRE-MANUFACTURED INLET SOCK MAY BE SUBSTITUTED IF APPROVED BY THE ENGINEER.
3. SEE EROSION CONTROL PLAN FOR LOCATION AND APPLICABILITY.

CURB INLET SEDIMENT FILTER DETAIL

NOT TO SCALE



LEGEND

- SILT FENCE
- CONSTRUCTION FENCE W/SCREEN
- PAVEMENT, DECK, & CONCRETE TO BE REMOVED
- 18" TREE TO BE REMOVED
- PORTION OF WATER MAIN TO BE REMOVED

Scale: 1"= 10'
10 0 10 20
SCALE IN FEET

GENERAL NOTES:
1. CONTRACTOR TO DESILT ALL PIPES PRIOR TO COMPLETION OF CONSTRUCTION OF PROJECT.

2. SILT FENCE SHOWN IS STRICTLY SCHEMATIC, FOR ILLUSTRATION ONLY, ALL FENCE TO BE WITHIN THE PROPERTY LINE OF THE PROJECT SITE.

3. THE CONTRACTOR SHALL APPLY WITH AND OBTAIN NPDES PERMIT FROM THE FLORIDA DEPT. OF ENVIRONMENTAL PROTECTION (FDEP).

4. ALL STORMWATER INLETS TO HAVE EROSION CONTROL MEASURES APPLIED UPON THE COMPLETION OF THEIR INSTALLATION. THIS EROSION CONTROL MEASURE CAN BE A "SOCK" WITH ROCK BAGS THAT WILL NOT ALLOW FOR SEDIMENTS TO ENTER INTO THE INLETS AND ULTIMATELY ENTER INTO THE DRA. OTHER METHODS OF PROTECTION CAN BE OBTAINED FROM THE MOST RECENT FDOT STANDARD SPECIFICATIONS, HOWEVER PLEASE NOTE THE USE OF HAY/STRAW BALES IS NOT PERMITTED, A SYNTHETIC BALE MAY BE USED INSTEAD.

5. TEMPORARY EROSION CONTROL STRUCTURE TO BE UTILIZED DURING CONSTRUCTION AT AREAS DESIGNATED BY THE ENGINEER OR AREAS ON-SITE WHERE UNSTABILIZED GRADES MAY CAUSE EROSION PROBLEMS. EROSION CONTROL STRUCTURE MAY BE REMOVED AFTER UPSLOPE AREA HAS BEEN STABILIZED BY SOD, OR COMPACTED AS DETERMINED BY CONTRACTOR.

6. ALTERNATE EROSION CONTROL STRUCTURE: WOVEN FILTER FABRIC SILT FENCE IN ACCORDANCE WITH THE MOST RECENT FDOT STANDARD SPECIFICATIONS.

7. TEMPORARY CONSTRUCTION ENTRANCE AREA SHALL BE CLEARED OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL. A GEOTEXTILE SHOULD BE LAID DOWN TO IMPROVE STABILITY AND SIMPLIFY MAINTENANCE. THE GRAVEL SHALL THEN BE PLACED OVER THE GEOTEXTILE TO THE SPECIFIED DIMENSIONS.

8. TEMPORARY CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF MUD ONTO PUBLIC ROADS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 2-INCH STONE AS CONDITIONS DEMAND. ALL MATERIALS SPILLED, DROPPED, OR TRACKED FROM VEHICLES ONTO ROADWAYS MUST BE REMOVED IMMEDIATELY. LOOK FOR SIGNS OF TRUCKS TRAILERED EQUIPMENT "CUTTING CORNERS" WHERE THE GRAVEL MEETS THE ROADWAY. SWEEP THE PAVED ROAD DAILY FOR SEDIMENTS.

9. CONSTRUCTION SITE OPERATORS MUST CONTROL WASTE SUCH AS DISCARDED BUILDING MATERIALS. CONCRETE TRUCK WASHOUT, CHEMICALS, LITTER AND SANITARY WASTE AT THE CONSTRUCTION SITE THAT MAY CAUSE ADVERSE IMPACTS TO WATER QUALITY.

10. ALL DISTURBED AREAS TO BE SEEDED AND MULCHED.

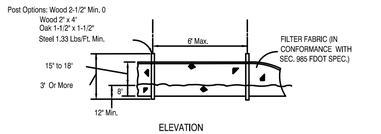
11. ALL DEBRIS, BRANCHES, AND TRASH NEEDS TO BE DISPOSED OF.

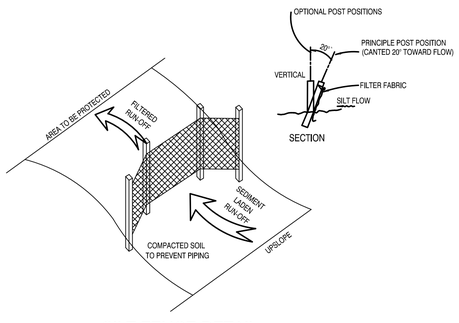
12. GRIND ALL STUMPS IF ANY TREES ARE REMOVED A MINIMUM OF 8" BELOW FINISHED GRADE.

CONTRACTOR SHALL CALL SUNSHINE ONE CALL OF FLORIDA, INC.
AT LEAST 48 HRS PRIOR TO EXCAVATION
1-800-432-4770

1

NOTE:
1. ALL ACCESS TO EXISTING DRIVEWAYS AND ANY OTHER PUBLIC FACILITY TO REMAIN OPEN FOR LOCAL TRAFFIC AND PUBLIC SAFETY.





SILT FENCE DETAIL

EROSION AND SEDIMENT CONTROL NOTES:

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.

EROSION AND SEDIMENT CONTROL

A. EROSION CONTROL DURING CONSTRUCTION.

1. TEMPORARY EROSION CONTROL STRUCTURES SHALL BE UTILIZED DURING CONSTRUCTION AT AREAS ON-SITE WHERE UNSTABILIZED GRADES MAY CAUSE EROSION PROBLEMS. EROSION CONTROL STRUCTURES MAY BE REMOVED AFTER UPSLOPE AREA HAS BEEN STABILIZED BY SOD OR COMPACTED AS DETERMINED BY THE CONTRACTOR.

2. 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.

3. PERMANENT EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AT THE EARLIEST PREDICTABLE 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. STORM WATER MANAGEMENT AREAS, STORM SEWER SYSTEM AND CONTROL STRUCTURES SHALL BE EXCAVATED TO ROUGH GRADE PRIOR TO BUILDING CONSTRUCTION OR PLACEMENT OF IMPERVIOUS SURFACES WITHIN THE AREA TO BE SERVED BY THOSE FACILITIES. TO PREVENT REDUCTION IN STORAGE VOLUME AND PERCOLATION RATE, ALL ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE STORM WATER FACILITIES PRIOR TO FINAL GRADING, STABILIZATION AND GRASSING.

5. EROSION CONTROL STRUCTURES, SUCH AS SILT FENCE AND BERMS, SHALL BE INSTALLED AROUND INLETS AND IN SWALES TO TRAP ERODED MATERIAL, PREVENT SEDIMENTATION IN DOWN STREAM AREAS AND KEEP RUNOFF VELOCITIES LOW.

6. THE CONTRACTOR SHALL MINIMIZE THE EXTENT OF AREA EXPOSED AT ANY ONE TIME AND THE DURATION OF EXPOSURE.

7. STABILIZATION MEASURES SHALL BE INITIATED FOR EROSION AND SEDIMENT CONTROL ON DISTURBED AREAS NO MORE THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN ANY PORTION OF THE SITE THAT HAS CEASED.

8. THE CONTRACTOR WILL INSTALL A PERMANENT VEGETATIVE COVER FOR EROSION AND SEDIMENT CONTROL ON ALL LAND SURFACES DISTURBED BY CONSTRUCTION. THIS PROTECTIVE COVER MUST BE INSTALLED WITHIN FOURTEEN (14) DAYS AFTER FINAL GRADING OF THE EFFECTED LAND SURFACES. A PERMANENT VEGETATIVE COVER MUST BE ESTABLISHED WITHIN SIXTY (60) DAYS AFTER PLANTING OR INSTALLATION.

9. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE ADEQUATELY MAINTAINED TO PERFORM THEIR INTENDED FUNCTION DURING CONSTRUCTION OF THE PROJECT. 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.

10. PLACEMENT OF BARRIERS OR NECESSARY REPAIRS TO BARRIERS SHALL BE ACCOMPLISHED PROMPTLY.

11. MATERIAL FROM SEDIMENT TRAPS SHALL NOT BE STOCK PILED OR DISPOSED OF IN A MANNER WHICH MAKES THEM READILY SUSCEPTIBLE TO BEING WASHED INTO ANY WATER COURSE BY RUNOFF OR HIGH WATER.

12. ANY ACCUMULATED SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE BARRIERS ARE NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED, AND SEEDED.

13. TO PROVIDE DUST CONTROL, A CONTRACTOR SHALL PROVIDE A WATER TRUCK OR IRRIGATION SYSTEM AS NEEDED, TO MAINTAIN SOIL MOISTURE.

14. IF SITE SPECIFIC CONDITIONS REQUIRE ADDITIONAL MEASURES DURING ANY PHASE OF CONSTRUCTION OR OPERATION TO PREVENT EROSION OR CONTROL SEDIMENT, BEYOND THOSE SPECIFIED IN THE EROSION AND SEDIMENT CONTROL PLAN, THE CONTRACTOR MUST IMPLEMENT ADDITIONAL BEST MANAGEMENT PRACTICES AS NECESSARY, IN ACCORDANCE WITH THE SPECIFICATION IN SECTION 6 OF THE FLORIDA LAND DEVELOPMENT MANUAL: A GUIDE TO LAND AND WATER MANAGEMENT (FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION, 1988).

B. PERMANENT STABILIZATION

WHERE CONSTRUCTION IS COMPLETE, PERMANENT VEGETATION SHALL BE INSTALLED AS SPECIFIED ON THE CONSTRUCTION PLANS AND IN ACCORDANCE WITH THE CONSTRUCTION SPECIFICATION DOCUMENTS. PERMANENT VEGETATION WILL INCLUDE SOD OR SEED AND MULCH.

STORMWATER MANAGEMENT SYSTEM

THE STORMWATER RETENTION PONDS SHALL BE EXCAVATED TO ROUGH GRADE PRIOR TO BUILDING CONSTRUCTION OR PLACEMENT OF IMPERVIOUS SURFACES WITHIN THE DRAINAGE AREA SERVED BY THIS FACILITY. ALL ACCUMULATED SEDIMENT MUST BE REMVOED FROM THE RETENTION POND PRIOR TO FINAL GRADING, STABILIZING AND GRASSING.

OTHER CONTROLS

A. OFFSITE VEHICLE TRACKING

PAVED STREETS ADJACENT TO THE CONSTRUCTION SITE ENTRANCE WILL BE SWEPT AS NEEDED TO PREVENT EXCESS MUD, DIRT OR ROCK FROM LEAVING THE CONSTRUCTION SITE. ALL DUMP TRUCKS HAULING MATERIAL TO AND FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARP. TEMPORARY STABILIZED OR ROCK CONSTRUCTION ENTRANCE MAY BE REQUIRE TO REMOVE EXCESS DIRT AND MUD FROM TIRES BEFORE CONSTRUCTION VEHICLES ENTER ADJACENT PAVED STREETS.

TIMING OF SEDIMENT AND EROSION CONTROL MEASURES

A SILT FENCE SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITY. A RETENTION POND AND STORM WATER CONVEYANCE SYSTEM SHALL BE CONSTRUCTED PRIOR TO THE PLACEMENT OF ANY IMPERVIOUS AREA. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN 14-DAYS SHALL BE STABILIZED WITH TEMPORARY SEED AND MULCH. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN ANY AREA, THAT AREA WILL BE STABILIZED WITH PERMANENT SEED AND MULCH OR SOD. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WITHIN ANY CATCH BASIN, STORM PIPES, OR RETENTION PONDS WILL BE REMOVED.

DATE	REVISION
06-05-23	1 CITY COMMENTS RAI#1
	2
	3
	4
	5
	6
	7
	8

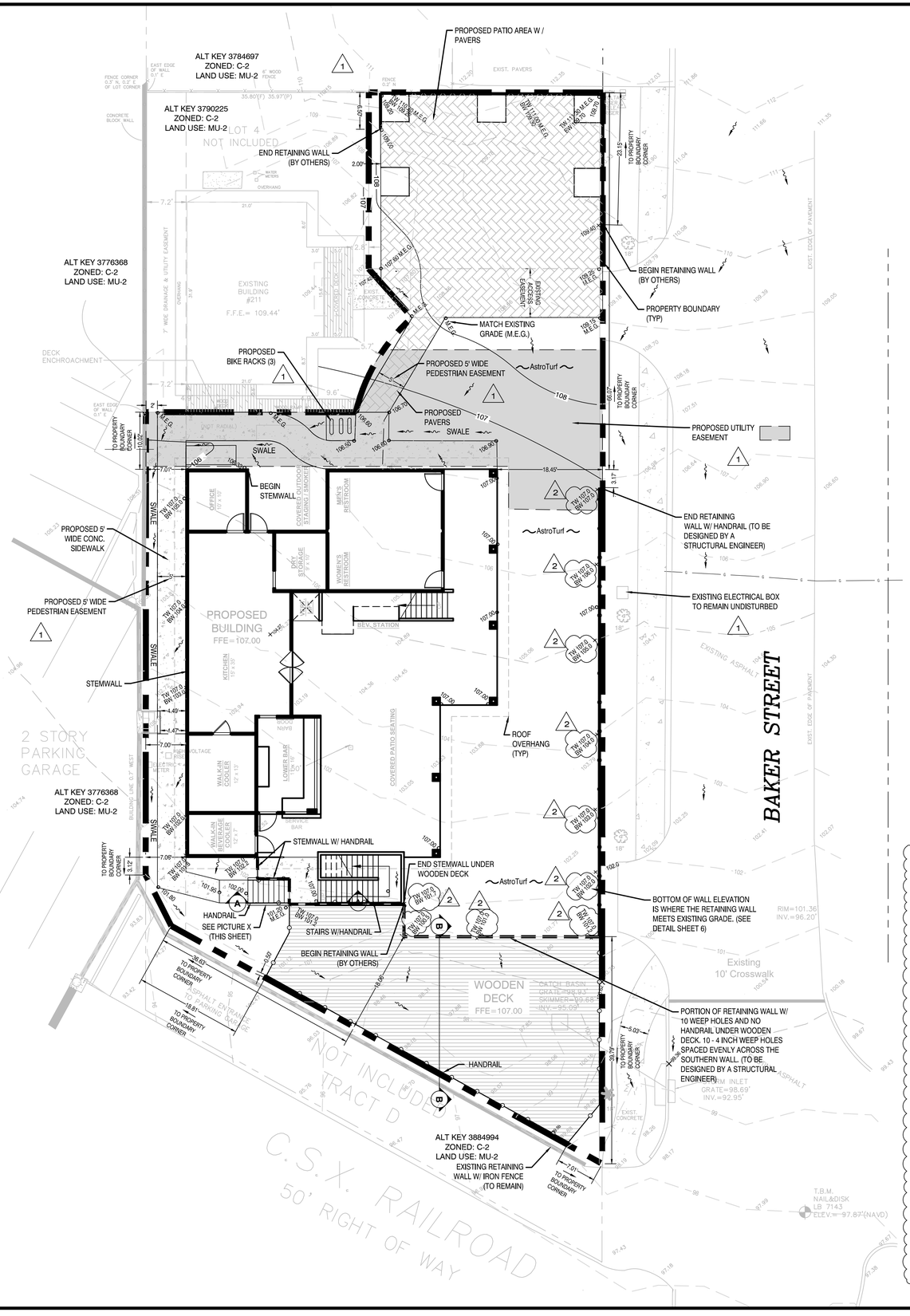
MINOR SITE PLAN FOR THE YARDERY

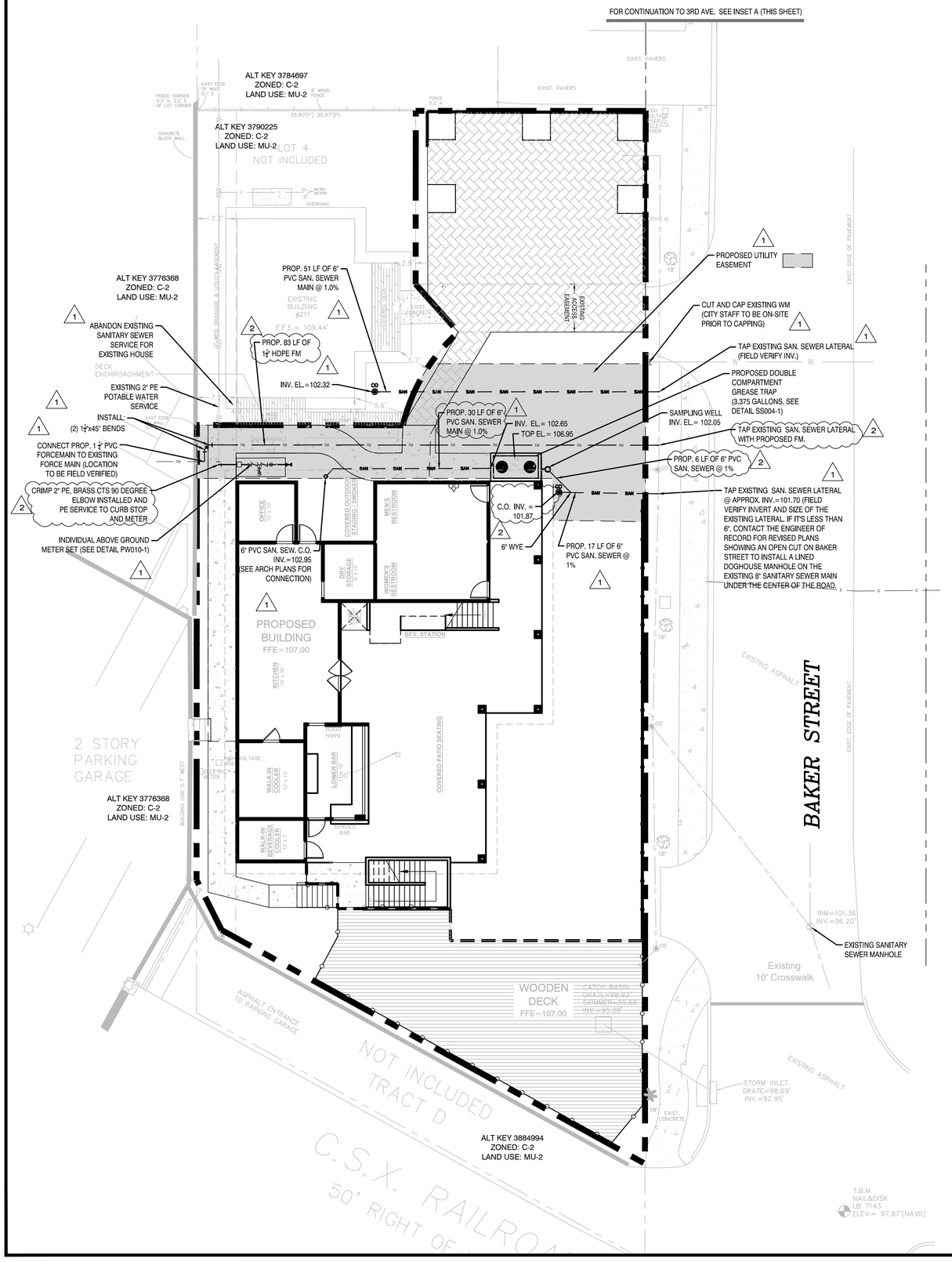
EROSION CONTROL & DEMOLITION PLAN

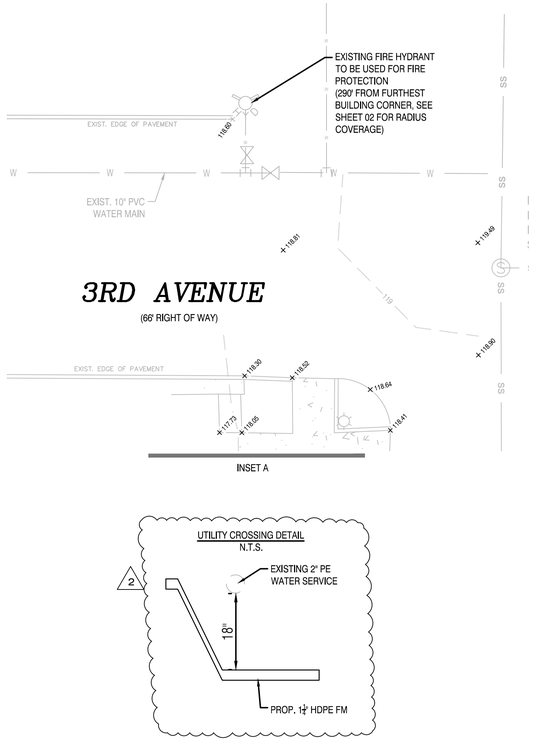
halff
Office: 352.343.8481
Fax: 352.343.8495
902 North Sinclair Ave.
Tavares, Florida 32778
Certificate of Authorization Number: 33380

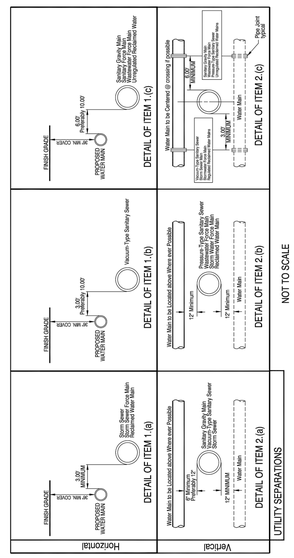
DATE:	APRIL 28, 2023
DESIGNED BY:	KDH
DRAWN BY:	KDH
CHECKED BY:	CCH
JOB NO.:	044687.001
FILE NAME:	GASLIGHT SITE
Sheet	3

CHARLES C. HIOTT, P.E.
PROFESSIONAL ENGINEER NO. 54813

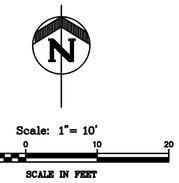

ALT KEY 3784697
ZONED: C-2
LAND USE: MU-2
ALT KEY 3790225
ZONED: C-2
LAND USE: MU-2
ALT KEY 3776368
ZONED: C-2
LAND USE: MU-2
LOT 4
NOT INCLUDED
EXISTING BUILDING #211
F.F.E.= 109.44'
PROPOSED PATIO AREA W / PAVERS
EXIST. PAVERS
END RETAINING WALL (BY OTHERS)
BEGIN RETAINING WALL (BY OTHERS)
PROPERTY BOUNDARY (TYP)
MATCH EXISTING GRADE (M.E.G.)
PROPOSED BIKE RACKS (3)
PROPOSED 5' WIDE PEDESTRIAN EASEMENT
AstroTurf
PROPOSED PAVERS
SWALE
PROPOSED UTILITY EASEMENT
BEGIN STEMWALL
END RETAINING WALL W/ HANDRAIL (TO BE DESIGNED BY A STRUCTURAL ENGINEER)
PROPOSED 5' WIDE CONC. SIDEWALK
PROPOSED 5' WIDE PEDESTRIAN EASEMENT
EXISTING ELECTRICAL BOX TO REMAIN UNDISTURBED
PROPOSED BUILDING
FFE=107.00
OFFICE
COVERED OUTDOOR STAGING / SMOKER
MEN'S RESTROOM
DRY STORAGE
WOMEN'S RESTROOM
BEV. STATION
KITCHEN
WALK-IN COOLER
LOWER BAR
BEVERAGE BAR
WALK-IN BEVERAGE COOLER
STEMWALL
STEMWALL W/ HANDRAIL
END STEMWALL UNDER WOODEN DECK
HANDRAIL
SEE PICTURE X (THIS SHEET)
STAIRS W/HANDRAIL
ROOF OVERHANG (TYP)
COVERED PATIO SEATING
2 STORY PARKING GARAGE
WOODEN DECK
FFE=107.00
BOTTOM OF WALL ELEVATION IS WHERE THE RETAINING WALL MEETS EXISTING GRADE. (SEE DETAIL SHEET 6)
PORTION OF RETAINING WALL W/ 10 WEEP HOLES AND NO HANDRAIL UNDER WOODEN DECK. 10 - 4 INCH WEEP HOLES SPACED EVENLY ACROSS THE SOUTHERN WALL. (TO BE DESIGNED BY A STRUCTURAL ENGINEER)
CATCH BASIN GRATE=98.93 SKIMMER=95.68 INV=95.00
RIM=101.36 INV.=96.20'
Existing 10' Crosswalk
RIM INLET GRATE=98.69 INV.=92.95'
EXIST. CONCRETE
EXIST. ASPHALT
EXIST. EDGE OF PAVEMENT
BAKER STREET
ALT KEY 3884994
ZONED: C-2
LAND USE: MU-2
EXISTING RETAINING WALL W/ IRON FENCE (TO REMAIN)
NOT INCLUDED TRACT D
C.S.X. RAILROAD
50' RIGHT OF WAY
T.B.M. NAIL&DISK LB 7143
ELEV.= 97.87'(NAVD)
TO PROPERTY BOUNDARY CORNER
TO PROPERTY BOUNDARY
ASPHALT ENTRANCE TO PARKING GARAGE
BUILDING LINE 0.7' WEST
7' WIDE DRAINAGE & UTILITY EASEMENT
DECK ENCROACHMENT
EXISTING ACCESS EASEMENT
OVERHANG
WATER METERS
CONCRETE BLOCK WALL
FENCE CORNER 0.3' N, 0.3' E OF LOT CORNER
EAST EDGE OF WALL 0.1' E
6' WOOD FENCE
CONCRETE SLOPED SIDEWALK
EXIST. CONCRETE
EXIST. BUILDING
EXIST. ASPHALT
EXIST. CONCRETE
EXIST. EDGE OF PAVEMENT
SWALE
TW 107.0 BW 106.5
TW 107.0 BW 106.0
TW 107.0 BW 105.5
TW 107.0 BW 105.0
TW 107.0 BW 104.5
TW 107.0 BW 104.0
TW 107.0 BW 103.5
TW 107.0 BW 103.0
TW 107.0 BW 102.5
TW 107.0 BW 102.0
TW 107.0 BW 101.5
TW 107.0 BW 101.0
TW 107.0 BW 100.5
TW 107.0 BW 100.0
TW 107.0 BW 99.5
TW 107.0 BW 99.0
TW 107.0 BW 98.5
TW 107.0 BW 98.0
TW 107.0 BW 97.5
TW 107.0 BW 97.0
TW 107.0 BW 96.5
TW 107.0 BW 96.0
TW 107.0 BW 95.5
TW 107.0 BW 95.0
TW 107.0 BW 94.5
TW 107.0 BW 94.0
TW 107.0 BW 93.5
TW 107.0 BW 93.0
TW 107.0 BW 92.5
TW 107.0 BW 92.0
TW 107.0 BW 91.5
TW 107.0 BW 91.0
TW 107.0 BW 90.5
TW 107.0 BW 90.0
TW 107.0 BW 89.5
TW 107.0 BW 89.0
TW 107.0 BW 88.5
TW 107.0 BW 88.0
TW 107.0 BW 87.5
TW 107.0 BW 87.0
TW 107.0 BW 86.5
TW 107.0 BW 86.0
TW 107.0 BW 85.5
TW 107.0 BW 85.0
TW 107.0 BW 84.5
TW 107.0 BW 84.0
TW 107.0 BW 83.5
TW 107.0 BW 83.0
TW 107.0 BW 82.5
TW 107.0 BW 82.0
TW 107.0 BW 81.5
TW 107.0 BW 81.0
TW 107.0 BW 80.5
TW 107.0 BW 80.0
TW 107.0 BW 79.5
TW 107.0 BW 79.0
TW 107.0 BW 78.5
TW 107.0 BW 78.0
TW 107.0 BW 77.5
TW 107.0 BW 77.0
TW 107.0 BW 76.5
TW 107.0 BW 76.0
TW 107.0 BW 75.5
TW 107.0 BW 75.0
TW 107.0 BW 74.5
TW 107.0 BW 74.0
TW 107.0 BW 73.5
TW 107.0 BW 73.0
TW 107.0 BW 72.5
TW 107.0 BW 72.0
TW 107.0 BW 71.5
TW 107.0 BW 71.0
TW 107.0 BW 70.5
TW 107.0 BW 70.0
TW 107.0 BW 69.5
TW 107.0 BW 69.0
TW 107.0 BW 68.5
TW 107.0 BW 68.0
TW 107.0 BW 67.5
TW 107.0 BW 67.0
TW 107.0 BW 66.5
TW 107.0 BW 66.0
TW 107.0 BW 65.5
TW 107.0 BW 65.0
TW 107.0 BW 64.5
TW 107.0 BW 64.0
TW 107.0 BW 63.5
TW 107.0 BW 63.0
TW 107.0 BW 62.5
TW 107.0 BW 62.0
TW 107.0 BW 61.5
TW 107.0 BW 61.0
TW 107.0 BW 60.5
TW 107.0 BW 60.0
TW 107.0 BW 59.5
TW 107.0 BW 59.0
TW 107.0 BW 58.5
TW 107.0 BW 58.0
TW 107.0 BW 57.5
TW 107.0 BW 57.0
TW 107.0 BW 56.5
TW 107.0 BW 56.0
TW 107.0 BW 55.5
TW 107.0 BW 55.0
TW 107.0 BW 54.5
TW 107.0 BW 54.0
TW 107.0 BW 53.5
TW 107.0 BW 53.0
TW 107.0 BW 52.5
TW 107.0 BW 52.0
TW 107.0 BW 51.5
TW 107.0 BW 51.0
TW 107.0 BW 50.5
TW 107.0 BW 50.0
TW 107.0 BW 49.5
TW 107.0 BW 49.0
TW 107.0 BW 48.5
TW 107.0 BW 48.0
TW 107.0 BW 47.5
TW 107.0 BW 47.0
TW 107.0 BW 46.5
TW 107.0 BW 46.0
TW 107.0 BW 45.5
TW 107.0 BW 45.0
TW 107.0 BW 44.5
TW 107.0 BW 44.0
TW 107.0 BW 43.5
TW 107.0 BW 43.0
TW 107.0 BW 42.5
TW 107.0 BW 42.0
TW 107.0 BW 41.5
TW 107.0 BW 41.0
TW 107.0 BW 40.5
TW 107.0 BW 40.0
TW 107.0 BW 39.5
TW 107.0 BW 39.0
TW 107.0 BW 38.5
TW 107.0 BW 38.0
TW 107.0 BW 37.5
TW 107.0 BW 37.0
TW 107.0 BW 36.5
TW 107.0 BW 36.0
TW 107.0 BW 35.5
TW 107.0 BW 35.0
TW 107.0 BW 34.5
TW 107.0 BW 34.0
TW 107.0 BW 33.5
TW 107.0 BW 33.0
TW 107.0 BW 32.5
TW 107.0 BW 32.0
TW 107.0 BW 31.5
TW 107.0 BW 31.0
TW 107.0 BW 30.5
TW 107.0 BW 30.0
TW 107.0 BW 29.5
TW 107.0 BW 29.0
TW 107.0 BW 28.5
TW 107.0 BW 28.0
TW 107.0 BW 27.5
TW 107.0 BW 27.0
TW 107.0 BW 26.5
TW 107.0 BW 26.0
TW 107.0 BW 25.5
TW 107.0 BW 25.0
TW 107.0 BW 24.5
TW 107.0 BW 24.0
TW 107.0 BW 23.5
TW 107.0 BW 23.0
TW 107.0 BW 22.5
TW 107.0 BW 22.0
TW 107.0 BW 21.5
TW 107.0 BW 21.0
TW 107.0 BW 20.5
TW 107.0 BW 20.0
TW 107.0 BW 19.5
TW 107.0 BW 19.0
TW 107.0 BW 18.5
TW 107.0 BW 18.0
TW 107.0 BW 17.5
TW 107.0 BW 17.0
TW 107.0 BW 16.5
TW 107.0 BW 16.0
TW 107.0 BW 15.5
TW 107.0 BW 15.0
TW 107.0 BW 14.5
TW 107.0 BW 14.0
TW 107.0 BW 13.5
TW 107.0 BW 13.0
TW 107.0 BW 12.5
TW 107.0 BW 12.0
TW 107.0 BW 11.5
TW 107.0 BW 11.0
TW 107.0 BW 10.5
TW 107.0 BW 10.0
TW 107.0 BW 9.5
TW 107.0 BW 9.0
TW 107.0 BW 8.5
TW 107.0 BW 8.0
TW 107.0 BW 7.5
TW 107.0 BW 7.0
TW 107.0 BW 6.5
TW 107.0 BW 6.0
TW 107.0 BW 5.5
TW 107.0 BW 5.0
TW 107.0 BW 4.5
TW 107.0 BW 4.0
TW 107.0 BW 3.5
TW 107.0 BW 3.0
TW 107.0 BW 2.5
TW 107.0 BW 2.0
TW 107.0 BW 1.5
TW 107.0 BW 1.0
TW 107.0 BW 0.5
TW 107.0 BW 0.0
TW 107.0 BW -0.5
TW 107.0 BW -1.0
TW 107.0 BW -1.5
TW 107.0 BW -2.0
TW 107.0 BW -2.5
TW 107.0 BW -3.0
TW 107.0 BW -3.5
TW 107.0 BW -4.0
TW 107.0 BW -4.5
TW 107.0 BW -5.0
TW 107.0 BW







NOT TO SCALE



DATE		REVISION
06-05-23	1	CITY COMMENTS RAI#1
	2	
	3	
	4	
	5	
	6	
	7	
	8	

MINOR SITE PLAN FOR THE YARDERY

UTILITY PLAN

PIPE CLEARANCE

GU0016-1
ISSUED: 2017
REVISED: --

General Water Notes

1. Water system components shall be installed in strict accordance with all local codes and regulations, cleaned, disinfected and bacteriologically cleared for service in accordance with the latest AWWA standards and CHAPTER 62-555 Florida Administrative code.
2. All piping shall bear the "NSF" seal for potable water.
3. Water mains shall be pvc conforming to AWWA C-900, DR 18 for pipe sizes 4"-12". Pipes 14" or longer 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.
4. Depth of water lines to be 36" minimum cover from finish grade.
5. Water mains to be located 6.00' from back of curb or edge of pavement unless otherwise noted.
6. All sleeves under pavement shall extend 5' beyond the back of curb.
7. Disinfecting: following the pressure testing, the contractor shall disinfect all sections of the water distribution system. Disinfection shall be in accordance with the applicable provisions of AWWA standard C651 "Disinfecting water mains", and all appropriate agency approval.
8. All hydrostatic test shall be in accordance with AWWA C600 for ductile iron pipe and C605/M23 for pvc pipe.
9. All water mains shall be installed, pressure and leak tested in accordance with AWWA C600, (62-555.320(21)(b) 1 and 62-555.330, F.A.C. All installation, testing and field procedures must be provided and must conform to the applicable AWWA standards.
10. All piping materials and specifications covering pipes, joints and packing materials, internal coating and linings fittings, specials and appurtenances shall all be in accordance with the corresponding AWWA standards and be conforming to NSF requirements, as may be applicable, with exceptions allowed only if documentation and assurances are provided in compliance with paragraphs 62-555.320(3) (d) 62-555.320 (3) (b), and 62-555.320 (21) (c), F.A.C. The lead use prohibition in rule 62-555.322, F.A.C. shall also apply. Polyethylene tubing shall be per AWWA C901. Underground service lines, and valves shall be per AWWA C800.

COLOR Coding

All water main pipe, including fittings shall be color coded or marked blue as a predominate color to differentiate drinking water from reclaimed water or other water. Underground plastic pipe shall be solid-wall blue pipe, shall have a co-extruded blue external skin, or shall be white or black pipe with blue stripes incorporated into, or applied to, the pipe wall; and underground metal or concrete pipe shall have blue striped applied to the pipe wall. Pipe striped during manufacturing of the pipe shall have continuous stripes that run parallel to the axis of the pipe, that are located at no greater than 90°intervals around the pipe, and 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 shall 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 pipes with an internal diameter of 24 inches or greater, tape or paint shall be applied in continuous lines along each side of the pipe as well as along the top of the pipe. Aboveground pipe as drinking water treatment plants shall be color coded and labeled in accordance with subsection 62-555.320(10), F.A.C., and all other aboveground pipe shall be painted blue or shall be color coated or marked like underground pipe.

Utility Construction Notes (DEP)

62-555.314 Location of Public Water System Mains:

For the purpose of this section, the phrase "Water Mains" shall mean Mains, including treatment Plant process piping, conveying either raw, partially treated, or finished drinking water; Fire Hydrant leads; and service lines that are under the control of a public Water System and that have an inside diameter of three (3") inches or greater.

(1) Horizontal Separation Between Underground Water Mains and Sanitary or Storm Sewers, Wastewater or Storm water Force Mains, Reclaimed Water Pipelines, and On-site Sewage Treatment and Disposal Systems:

(a) New or relocated, underground WATER MAINS shall be laid to provide a horizontal distance of at least (3) Three Feet between the outside of the WATER MAIN and the outside of any existing or proposed Sewer Water Force Main, or pipeline conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C.

PIPE CLEARANCE NOTES

GU0016-2
ISSUED: 2017
REVISED: --

Utility Construction Notes (DEP) (CONTINUED)

(b) New or relocated, underground WATER MAINS shall be laid to provide a horizontal distance of at least (3) three feet, and preferably (10) Ten Feet, between the outside of the WATER Main and the outside of any existing or proposed vacuum-type Sanitary Sewer.

(c) New or relocated, underground WATER MAINS shall be laid to provide a horizontal distance of at least (6) Six Feet and preferably (10) Ten Feet, between the outside of the WATER MAIN and the outside of any existing or proposed Gravity- or Pressure-type Sanitary Sewer Wastewater Force Main, or pipeline conveying reclaimed water not regulated under Part III of Chapter62-610 F.A.C. The minimum Horizontal Separation distance between WATER MAINS and Gravity-type Sanitary Sewers shall be reduced to (3) Three Feet where the BOTTOM of the WATER MAIN is laid at least (6) Six Inches above the Top of the Sewer.

(d) New or relocated, underground WATER MAINS shall be laid to provide a horizontal distance of at least (10) Ten Feet between the outside of the WATER MAIN and all parts of any existing or proposed "On site Sewage Treatment and Disposal System" as defined in Section 381.0065(2). F.S. and Rule 64E-6.002. F.A.C.

(2) Vertical Separation Between Underground WATER MAINS and Sanitary or Storm Sewers, Wastewater or Storm water Force Mains, and Reclaimed Water Pipelines:

(a)New or relocated underground WATER MAINS crossing any existing or proposed gravity- or vacuum-type sanitary sewer or storm sewer shall be laid so the outside of the WATER MAIN is at least (6) Six inches, and preferably 12 inches above, or at least 12 inches below the outside of the other pipeline. However, it is preferable to lay the WATER MAIN "ABOVE" the other pipeline.

(b) New or relocated, Underground WATER MAINS crossing any existing or proposed pressure-type sanitary sewer, wastewater or stormwater Force Main, or Pipeline conveying reclaimed water shall be laid so the outside of the WATER MAIN is at least (12) inches ABOVE or BELOW the Outside of the other pipeline. However, it is preferable to lay the WATER MAIN above the other pipeline.

(c) At the Utility crossings described in paragraphs (a) & (b) Above, one full length of Water Main Pipe shall be centered above or below the other pipeline so the WATER MAIN joints will be as far as possible from the other pipeline. Alternatively, at such crossings, the pipes shall be arranged so that all WATER MAIN Joints are at least (3) Three feet from all joints in Vacuum-type Sanitary Sewers, Storm Sewers, Stormwater Force Mains, or pipelines conveying reclaimed water regulated under Part III of Chapter62-610, F.A.C., and at least (6) Six Feet 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) Separation Between WATER MAINS and Sanitary or Storm Sewer Manholes:

(a)No WATER MAIN shall pass thru, or come into contact with any part of a Sanitary Manhole.

(4) Separation Between Fire Hydrant Drains and Sanitary or Storm Sewers, Wastewater or Stormwater Force Mains, reclaimed Water Pipelines, and On-Site Sewage Treatment and Disposal Systems. New or relocated Fire Hydrants with underground Drains shall be located so that the drains are at least (3) Three Feet from any existing or proposed storm sewer, Stormwater force main, or pipeline conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C.; at least (3) Three Feet, and preferably (10) Ten 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.; and at least (10) Ten Feet from any existing or proposed "on-site sewage treatment and disposal system" as defined in Section 381.0065(2), F.S. and Rule 64E-6.002, F.A.C.

(5) Exceptions/Mitigation:
Adhere to the above Constraints and Separations in items 1 through 4 shall be Complied to, "WITHOUT EXCEPTION". If for some reason where it is not technically feasible or Economically Sensible that items 1 through 4 cannot be complied with, Contractor will Stop Work and Notify the Engineer of record for the appropriate solution which will be submitted to "The Department of Environmental Protection" for APPROVAL, prior to work commencement.

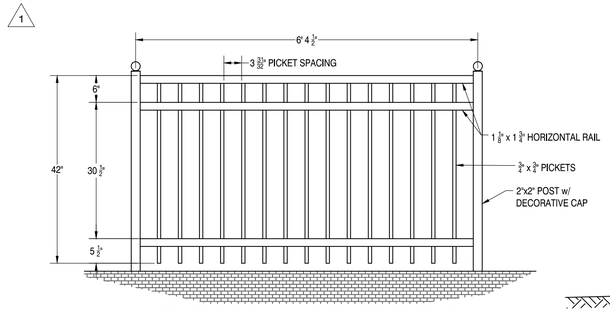
PIPE CLEARANCE NOTES

GU0016-2B
ISSUED: 2017
REVISED: --

halff
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33380

DATE:	APRIL 28, 2023
DESIGNED BY:	KDH
DRAWN BY:	KDH
CHECKED BY:	CCH
JOB NO.:	044687.001
FILE NAME:	GASLIGHT SITE
Sheet	5

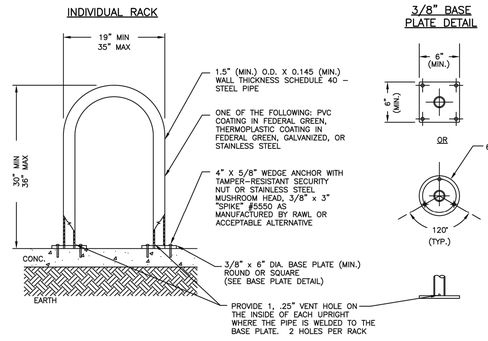
CHARLES C. HIOTT, P.E.
PROFESSIONAL ENGINEER NO. 54813



NOTE: PROPOSED FENCING SHALL MATCH THE EXISTING METAL DECORATIVE TYPE PLACED ON RETAINING WALLS/RAMPS IN THE DOWNTOWN AREA.

BLACK IRON ROD FENCE / HANDRAIL

NOT TO SCALE



NOTES:

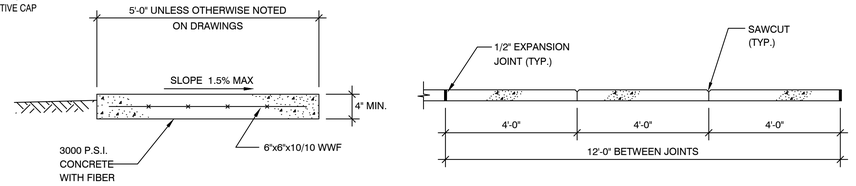
1. RACK SHALL NOT BE WELDED IN SECTIONS.
2. BASE PLATE SHALL BE WELDED TO STEEL PIPE.
3. RACK DIMENSIONS MAY VARY BY MANUFACTURER.

MOUNTING (CONCRETE):

1. BASE PLATE SHALL BE MOUNTED TO CONCRETE VIA EXPANSION ANCHOR: 4" X 5/8" WEDGE ANCHOR WITH TAMPER–RESISTANT SECURITY NUT, OR STAINLESS STEEL MUSHROOM HEAD 3/8" X 3" "SPIKE" #5550 AS MANUFACTURED BY RAWL OR APPROVED EQUAL
2. RACK SHALL BE SET FIRM AND ALIGNED WITH A TOLERANCE PLUS OR MINUS 1/4" FROM PLUMB.
3. STEEL SHIMS SHALL BE INSTALLED PRIOR TO ANCHORING IN PLACE WHEN NEEDED.

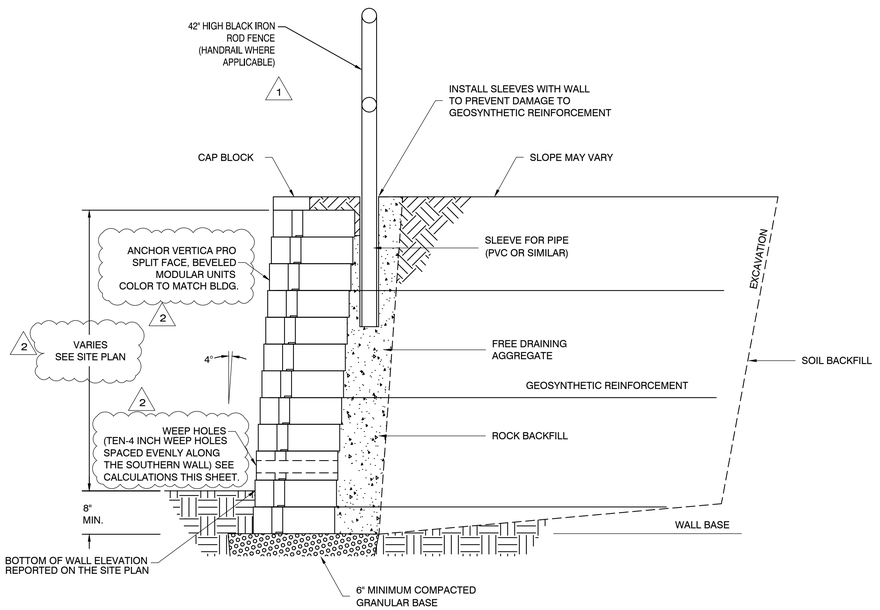
INVERTED U BIKE RACK DETAIL

NOT TO SCALE



CONCRETE WALKWAY DETAIL

NOT TO SCALE



STACK-BLOCK RETAINING WALL (TO BE DESIGNED BY A STRUCTURAL ENGINEER)

N.T.S.

WEEP HOLE CALCULATIONS:

Drainage area: 15,124 square feet (0.36 acres).

Using the rational method, Q=CiA, i of 7.4 inches/hour for the 10 year storm event, C=(0.22*.95+0.14*0.20)/0.36=0.66

Q = (0.66)*(7.4)*(0.36) = 1.76 cfs.

Walls of 6-feet in height generally have weep holes 3-4 inches in diameter. 4-inch weep holes assumed for this calculation.

Other assumptions: The weep holes will need to be installed at a 1% slope or higher, and will be PVC or a material with a lower manning's roughness coefficient.

Manning's formula = Q = 1.49/n * A * R^0.67 * S^0.5

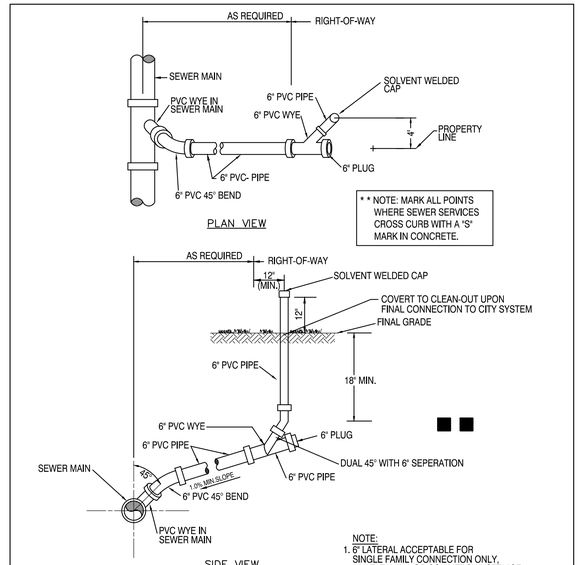
n for PVC pipe is 0.013.
S is 0.01 as specified above
R for round pipe is (A/P) = pir^2/2pir or just r/2. For a 4-inch pipe, r=2-inches (or for our purposes, 2/12 = 0.16666 feet).
A is pir^2

So Q = (1.49/0.013)*(3.1415*0.16666/2^2)*(0.1666/2)^0.67*(0.01^0.5)

Q= 0.191 cfs.

Number of weep holes:
1.76 cfs / 0.191 cfs = 9.21, round up to 10 weep holes.

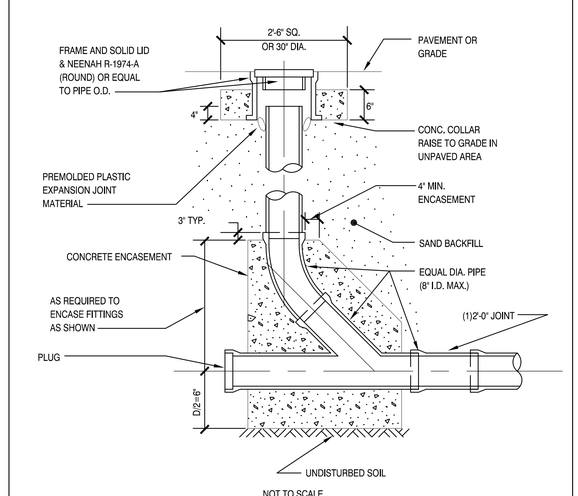
MINIMUM 10 WEEP HOLES NEEDED. IF WALL MANUFACTURER REQUIRES MORE WEEP HOLES, USE THEIR RECOMMENDATION.



PVC SINGLE SERVICE
NOT TO SCALE

SINGLE SANITARY SEWER SERVICE

SS012-1
ISSUED: 2017
REVISED: --



NOT TO SCALE

GRAVITY CLEANOUT

SS014-1
ISSUED: 2017
REVISED: --

DATE	REVISION
06-05-23	1 CITY COMMENTS RAI#1
	2
	3
	4
	5
	6
	7
	8

MINOR SITE PLAN FOR THE YARDERY

PAVING & DRAINAGE DETAILS

halff
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33380

DATE:	APRIL 28, 2023
DESIGNED BY:	KDH
DRAWN BY:	KDH
CHECKED BY:	CCH
JOB NO.:	044687.001
FILE NAME:	GASLIGHT SITE
Sheet	6

CHARLES C. HIOTT, P.E.
PROFESSIONAL ENGINEER NO. 54813

WATER SYSTEM CONSTRUCTION GENERAL NOTES

1. THE CITY'S PUBLIC WORKS DEPARTMENT SHALL BE NOTIFIED PRIOR TO BEGINNING ANY WATER SYSTEM CONSTRUCTION.
2. DE-WATERING SHALL BE PROVIDED TO KEEP GROUND WATER ELEVATION A MINIMUM OF 6 INCHES BELOW PROPOSED WATER MAIN.
3. ALL WATER MAINS SHALL BE INSTALLED ON A FIRM FOUNDATION WITH ALL UNSUITABLE MATERIAL (MUCK, ROCK, COQUINA, ETC.) REMOVED AND REPLACED WITH CLEAN GRANULAR MATERIAL.
4. TRENCHES SHALL BE BACK FILLED WITH MATERIAL ACCEPTABLE TO THE CITY, WITH A MINIMUM COMPACTION OF 98% (AASHTO T-180) IN PAVED AREAS AND 95% (AASHTO T-180) IN UNPAVED AREAS.
5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT TRENCH COMPACTION TESTS BE PROVIDED AT POINTS 1 FOOT ABOVE THE PIPE AND AT 2 FEET VERTICAL INTERVALS TO FINISH GRADE, AT A MINIMUM SPACING OF EVERY 300 FEET.
6. PIPE WARNING TAPE SHALL BE LOCATED 18 INCHES BELOW FINISH GRADE FOR ALL PIPES. PIPE IDENTIFICATION TAPE SHALL BE PROVIDED ON ALL PIPES.
7. ALL SINGLE RESIDENTIAL WATER SERVICES SHALL BE MINIMUM 1" AND DOUBLE RESIDENTIAL SERVICES SHALL BE MINIMUM 1-1/2" BLACK OR BLUE POLYETHYLENE TUBING. POLYBUTYLENE SHALL NOT BE USED.
8. ALL WATER SERVICE ENDINGS SHALL BE MARKED BY 2"x4" LUMBER (PRESSURE TREATED), ALL SERVICE SHALL EXTEND 6 INCHES ABOVE GRADE, SECURED TO THE BASE OF THE LUMBER. ALL SERVICES MUST BE ADJUSTED TO FINAL METER BOX LOCATION BY OWNER PRIOR TO INITIAL METER INSTALLATION.
9. WATER VALVES SHALL BE PLACED AT ALL STREET INTERSECTIONS AND AT MAXIMUM SPACING OF 1,000 FEET FOR RESIDENTIAL SERVICE (500' FOR COMMERCIAL, MULTIFAMILY AND INDUSTRIAL). AT ALL WATER TEES AND CROSSES, VALVES SHALL BE INSTALLED ON ALL BRANCHES.
10. APPROVED WATER VALVE TYPES ARE THE FOLLOWING:
    A. BRASS BALL-TYPE VALVE FOR VALVES LESS THAN 2" DIAMETER.
    B. STANDARD GATE VALVES 2" AND LARGER DIAMETER, RESILIENT WEDGE GATE VALVES (AWWA C-509)
    C. TAPPING VALVES WITH MECHANICAL TAPPING SLEEVE FOR SIZE ON SIZE STAINLESS STEEL.

POTABLE WATER GENERAL NOTES | PW001-1A | ISSUED: 2017 | REVISED: --

WATER SYSTEM CONSTRUCTION GENERAL NOTES

11. ALL POTABLE WATER VALVE BOXES SHALL BE ADJUSTED TO FINISH GRADE AND THE CAPS SHALL BE PAINTED BLUE TO MAKE THEM PLAINLY VISIBLE.
12. AS STANDARD PRACTICE, WATER MAINS SHALL BE INSTALLED 4 FEET OFF THE BACK OF THE CURB ON THE OPPOSITE SIDE OF THE RECLAIMED WATER LINES OR AS APPROVED BY THE CITY.
13. ALL WATER MAINS SHALL BE NSF APPROVED FOR POTABLE WATER USE, AND HAVE A MINIMUM COVER OF 36 INCHES. IN SPECIAL CASES WHERE IT IS IMPOSSIBLE OR INAPPROPRIATE TO PROVIDE ADEQUATE COVER, DUCTILE IRON PIPE OR ENCASEMENT MAY BE USED AS APPROVED BY THE CITY AND FDEP.
14. ALL WATER MAINS TO BE CLEARED FOR SERVICE SHALL BE FLUSHED, DISINFECTED, PRESSURE TESTED, AND BACTERIOLOGICALLY CLEANSED FOR SERVICE, IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS.
15. WATER MAINS SHALL BE PVC AWWA CLASS C-900, MINIMUM CL-150 (DR-18) DUCTILE IRON PIPE PRESSURE RATING, STANDARD CEMENT LINED, UNLESS OTHERWISE APPROVED BY THE CITY.
16. UPON CONSTRUCTION COMPLETION AND ACCEPTANCE OF THE SYSTEM, IT SHALL BE THE DESIGN ENGINEER'S RESPONSIBILITY TO INSURE THAT THE SYSTEM IS PROPERLY CERTIFIED AND ACCEPTED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION OR THE CITY PUBLIC WORKS AND "AS-BUILTS" ARE PROVIDED TO THE CITY, PRIOR TO ANY USE OF THIS SYSTEM.
17. WATER DISTRIBUTION SYSTEM SHALL BE DESIGNED TO COMPLY WITH THE CITY'S FIRE (WATER) FLOW CODE AND NFPA 291.
18. ALL WATER SERVICES SHALL BE MARKED ALONG THE OUTSIDE EDGE OF CURB WITH UPSIDE-DOWN "W" OR BY METAL TABS SET INTO PAVEMENT. VALVES FOR WATER SHALL BE MARKED BY A "V" OR METAL TABS SET INTO THE PAVEMENT. BLOW-OFFS SHALL BE MARKED WITH A "B".
19. BLUE REFLECTORS SHALL BE SECURELY AFFIXED TO ROADWAY (CENTER LINE OF ROAD) ADJACENT TO HYDRANT LOCATION.
20. WATER SERVICES SHOULD BE DOUBLE 1-1/2" SERVICES LOCATED AT SIDE LOT LINES, ALTERNATING WITH RECLAIMED WATER SERVICE LOCATIONS. IN INSTANCES WHERE WATER SERVICES NEED TO BE OFFSET, 1" SERVICES SHALL BE SPECIFIED. THESE SERVICES MAY BE OFFSET FROM THE LOT LINE A MAXIMUM DISTANCE OF 5.0 FEET.
21. OUT-OF-SERVICE FIRE HYDRANTS MUST BE CLEARLY MARKED (RED RING ON NOZZLE, LABELED DISK ON NOZZLE) FACING ROADWAY. ALL LABELS AND DISK PROVIDED BY THE CITY OR BLACK BAGGED - NOTIFY THE FIRE DEPT. THAT THE HYDRANT IS OUT OF SERVICE.
22. PRIOR TO TAKING ANY WATER LINES OUT OF SERVICE, THE CONTRACTOR SHALL NOTIFY THE CITY AND AFFECTED CUSTOMERS, IN WRITING, 48-HOURS PRIOR TO SHUTDOWN WITH CITY APPROVAL.
23. WATER SYSTEMS WILL BE PRESSURE TESTED AT 150 PSI STATIC PRESSURE FOR A PERIOD OF 2 HOURS PER AWWA STANDARDS. PRIVATE WATER SYSTEMS SUPPLYING FIRE HYDRANTS OR FIRE SPRINKLER SYSTEMS SHALL BE TESTED AT 200 PSI FOR 2 HOURS IN ACCORDANCE WITH NFPA 13. NOTIFY FIRE AND BUILDING DEPARTMENTS PRIOR TO TESTING.

POTABLE WATER GENERAL NOTES | PW001-1B | ISSUED: 2017 | REVISED: --

WATER SYSTEM CONSTRUCTION GENERAL NOTES

24. MEGALUGS, SPLIT-RESTRAINED BOLTLESS RESTRAINED JOINTS, OR GRIPPER GASKETS SHALL BE USED ON ALL RESTRAINED JOINT INSTALLATIONS, MINIMUM DEPTH OF BURY ON ALL PIPES NOT MEETING REQUIRED COVER REQUIREMENTS SHALL FOLLOW THE MOST RECENT DIPRA THRUST RESTRAINT DESIGN GUIDELINES.
25. WATER VALVES SHALL BE COMPLETELY OPENED BY THE CITY, IN THE PRESENCE OF THE CONTRACTOR, PRIOR TO FINAL ACCEPTANCE OF ANY NEW WATER SYSTEM.
26. ALL FIRE HYDRANTS SHALL BE CONSTRUCTED TO MAKE THEM EASILY ACCESSIBLE TO FIRE PERSONNEL IN CASE OF A FIRE. THE MAIN NOZZLE SHOULD ALWAYS FACE THE STREET AND BE 18" - 22" ABOVE FINAL GRADE.
27. HYDRANT LOCATION AND SPACING SHALL BE AS PER ARTICLE 7.13.2 OF THE LAND DEVELOPMENT CODE.

7.13. - WATER DISTRIBUTION SYSTEMS.

7.13.1.

GENERAL. THIS SECTION SETS FORTH THE GENERAL REQUIREMENTS FOR DESIGN AND INSTALLATION OF WATER DISTRIBUTION SYSTEMS FOR POTABLE WATER SERVICE.

7.13.2.

DESIGN STANDARDS.

1. REFERENCE: NORMAL FLOW DEMANDS FOR DESIGN SHALL BE CALCULATED ON THE BASIS OF FULL ULTIMATE DEVELOPMENT AS KNOWN, OR PROJECTED. THE AVERAGE DAILY FLOW FOR DOMESTIC USE SHALL BE CALCULATED AT THE MINIMUM RATE OF 135 GALLONS PER DAY PER CAPITA, WITH 3.5 PERSONS PER SINGLE-FAMILY RESIDENCE, AND 2.5 PERSONS PER MULTIFAMILY OR MOBILE HOME DWELLING UNIT. MAXIMUM DAY INSTANTANEOUS DEMAND TO BE USED FOR DESIGN SHALL BE 1.0 GALLON PER MINUTE (GPM) PER SINGLE-FAMILY RESIDENCE AND 0.7 GPM PER DWELLING UNIT FOR EACH MULTIFAMILY OR MOBILE HOME UNIT. FLOW DEMANDS FOR COMMERCIAL, INDUSTRIAL OR OTHER SPECIAL DEVELOPMENTS SHALL BE ESTABLISHED FROM EXISTING RECORDS OR BY ESTIMATED PROJECTIONS, USING THE BEST AVAILABLE DATA.
2. WATER DISTRIBUTION SYSTEMS AND/OR WATER MAIN EXTENSIONS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE FIRE PROTECTION REQUIREMENTS OF THE INSURANCE SERVICES OFFICE (NATIONAL BOARD OF FIRE UNDERWRITERS), AS STATED IN THEIR PUBLICATION "GUIDE FOR THE DETERMINATION OF REQUIRED FIRE FLOWS," IF NOT IN CONFLICT WITH THE FOLLOWING:
   A. FIRE FLOWS IN SINGLE-FAMILY RESIDENTIAL AREAS SHALL PROVIDE A MINIMUM OF 600 GPM AT A 20 PSI RESIDUAL PRESSURE.

POTABLE WATER GENERAL NOTES | PW001-1C | ISSUED: 2017 | REVISED: --

   B. FIRE FLOWS IN COMMERCIAL, INSTITUTIONAL, INDUSTRIAL AREAS AND APARTMENT OR MULTIUNIT COMPLEXES, SHALL PROVIDE A MINIMUM OF 1,500 GPM AT A 20 PSI RESIDUAL PRESSURE. LARGER COMMERCIAL/INDUSTRIAL, MAJOR SHOPPING CENTERS, SCHOOLS, AND SIMILAR USES SHALL HAVE A FIRE FLOW CAPACITY AS DETERMINED NECESSARY BY THE FIRE DEPARTMENT.
   C. FIRE HYDRANTS: DISTANCE FROM OR SPACING OF FIRE HYDRANTS SHALL BE A MINIMUM OF 600 FEET FROM THE FURTHERMOST POINT OF ANY RESIDENTIAL STRUCTURE AND 300 FEET FROM THE FURTHERMOST POINT OF ANY COMMERCIAL STRUCTURE, AS THE FIRE DEPARTMENT WOULD LAY HOSE OR AS OTHERWISE SPECIFIED BY THE FIRE DEPARTMENT TO MEET DETERMINED WATER FLOW REQUIREMENTS FOR FIRE PROTECTION AND/OR INCREASE FIRE PROTECTION EFFECTIVENESS. FIRE HYDRANTS SHALL BE CONNECTED TO WATER MAINS OF EIGHT-INCH MAINS IN ALL AREAS. CONNECTION TO DEAD END STUBS ARE ACCEPTABLE, PROVIDED THAT SAID STUBBED WATER MAIN IS NOT LESS THAN EIGHT INCHES AND WILL PROVIDE ACCEPTABLE FLOW.
   D. SYSTEM SIZE COMPUTATION: THE MINIMUM DESIGN FOR WATER DISTRIBUTION SYSTEMS SHALL PROVIDE FOR AT LEAST 100 PERCENT OF THE COMBINED MAXIMUM DAY-DEMAND RATE AND REQUIRED FIRE FLOW FOR SAID RATE, WITH SPECIAL PROVISIONS FOR PEAK FLOWS IN EXCESS THEREOF. THE ALLOWABLE MINIMUM SERVICE PRESSURE UNDER SAID DESIGN CONDITION SHALL NOT BE LESS THAN 20 POUNDS PER SQUARE INCH. DESIGN COMPUTATION SHALL BE BY THE "HARDY CROSS" PROCEDURE, OR OTHER APPLICABLE METHODS, AS DICTATED BY THE SYSTEM CONFIGURATION.
   DESIGN FLOWS AND METHOD OF COMPUTATION SHALL BE SUBJECT TO REVIEW AND APPROVAL BY THE CITY.
   E. VALVE LOCATIONS: VALVES SHALL BE PROVIDED FOR ALL BRANCH CONNECTIONS, LOOP ENDS, FIRE HYDRANT STUBS, OR OTHER LOCATIONS, AS REQUIRED TO PROVIDE AN OPERABLE, EASILY MAINTAINED, AND REPAIRED WATER DISTRIBUTION SYSTEM. VALVES ARE TO BE PLACED SO THAT THE MAXIMUM ALLOWABLE LENGTH OF WATER MAIN REQUIRED TO BE SHUT DOWN FOR REPAIR WORK SHALL BE 500 FEET IN COMMERCIAL, INDUSTRIAL OR HIGH-DENSITY RESIDENTIAL DISTRICTS, OR 1,000 FEET IN OTHER AREAS.

POTABLE WATER GENERAL NOTES | PW001-1D | ISSUED: 2017 | REVISED: --

7.13.3.

STANDARD REQUIREMENTS.

1. GENERAL: THE MATERIALS OF CONSTRUCTION AND GENERAL INSTALLATION PROCEDURES, WITH THE EXCEPTION OF FIRE HYDRANTS, SHALL COMPLY WITH THE SPECIFIC APPLICABLE STANDARDS SET FORTH UNDER SECTION 7.3, "UTILITY EXCAVATION, TRENCHING AND BACKFILLING," SECTION 7.4, "BORING AND JACKING," AND SECTION 7.5, "PIPE, FITTINGS, VALVES AND APPURTENANCES," AS WELL AS "STANDARD DETAILS-WATER DISTRIBUTION SYSTEMS."
2. FIRE HYDRANTS: HYDRANTS SHALL COMPLY WITH AWWA STANDARD C502, "FIRE HYDRANTS FOR ORDINARY WATER WORKS SERVICE," AND SHALL BE EQUIPPED WITH A MINIMUM OF ONE PUMPER OUTLET NOZZLE 4½ INCHES IN DIAMETER AND TWO HOSE NOZZLES 2½ INCHES IN DIAMETER, THREADS, NOZZLE CAPS, OPERATING NUTS AND COLOR SHALL CONFORM TO CITY STANDARDS. UNITS SHALL BE TRAFFIC TYPE WITH BREAKABLE SAFETY CLIPS OR FLANGE, AND STEM WITH SAFETY COUPLING LOCATED BELOW BARREL BREAK LINE TO PRECLUDE VALVE OPENING. HYDRANTS SHALL BE DRY TOP TYPE. OUTLET NOZZLES SHALL BE ON THE SAME PLANE, WITH MINIMUM DISTANCE OF 18 INCHES FROM CENTER OF NOZZLES TO GROUND LINE. VALVE SHALL BE COMPRESSION TYPE WITH 5½ INCHES MINIMUM OPENING UNLESS OTHERWISE REQUESTED AND SHOW INLET CONNECTION TO BE SIX INCHES MINIMUM.
   A. HYDRANTS SHALL BE INSTALLED PLUMB AND IN TRUE ALIGNMENT WITH THE CONNECTION PIPES TO THE WATER MAIN. THEY SHALL BE SECURELY BRACED AGAINST THE END OF THE TRENCH (UNDISTURBED SOIL) WITH CONCRETE THRUST BLOCKS. THE GRAVEL OR CRUSHED STONE FOR THE DRAIN SUMP, FOLLOWED BY BACKFILL SHALL BE CAREFULLY PLACED AND COMPACTED. INSTALLED HYDRANTS SHALL BE PAINTED RED FOR THE FINAL COAT.
   B. HYDRANT PLACEMENT IS TO BE A MINIMUM OF SIX FEET AND A MAXIMUM OF NINE FEET FROM THE CURB OR PAVED ROAD SURFACE UNLESS OTHERWISE APPROVED. THE CENTER OF THE STEAMER PORT SHALL BE 18 INCHES MINIMUM AND 24 INCHES MAXIMUM ABOVE FINAL GRADE. STEAMER PORT SHALL BE CORRECTLY POSITIONED FOR THE PROPER CONNECTION, WITH THE APPROVAL OF THE CITY (WATER AND FIRE DEPARTMENT).
3. JOINT RESTRAINING: PRESSURE PIPING FITTINGS AND OTHER ITEMS REQUIRING RESTRAINT, SHALL BE BRACED WITH 2,500 PSI CONCRETE THRUST BLOCKS OR OTHER RESTRAINING ASSEMBLIES. SAID RESTRAINING DEVICES SHALL BE DESIGNED FOR THE MAXIMUM PRESSURE CONDITION (TESTING) AND THE SAFE BEARING LOADS FOR HORIZONTAL THRUST, IF THRUST BLOCKING IS USED.

POTABLE WATER GENERAL NOTES | PW001-1E | ISSUED: 2017 | REVISED: --

4. PIPE DEPTH AND PROTECTION: THE STANDARD MINIMUM COVER FOR WATER DISTRIBUTION SYSTEMS SHALL BE THREE FEET FROM THE TOP OF THE FINISH GRADE. HOWEVER, SHOULD THIS DESIGN NOT BE FEASIBLE, PROTECTIVE CONCRETE SLABS SHALL BE PROVIDED OVER THE PIPE WITHIN THE LIMITS OF THE LESSER COVER. WHERE WATERWAYS, CANALS, DITCHES OR OTHER CUTS ARE CROSSED, DUCTILE IRON PIPE SHALL BE INSTALLED ACROSS AND TO TEN FEET EACH SIDE OF THE BOTTOM. ADDITIONALLY, APPROVED UTILITY CROSSING SIGNS SHALL BE PLACED ON THE PIPE ALIGNMENT AT EACH SIDE OF THE CANAL, ETC.
5. CONNECTIONS AT STRUCTURE: WHERE PIPES ARE TO EXTEND INTO OR THROUGH STRUCTURES, FLEXIBLE JOINTS ARE TO BE PROVIDED AT THE WALL FACE.
6. SPECIAL EXTERIOR PROTECTION FOR CORROSION: EXTRA PROTECTION SHALL BE PROVIDED FOR UNDERGROUND CAST OR DUCTILE IRON PIPE AND FITTINGS WITHIN AREAS OF SEVERE CORROSIVE CONDITIONS. THIS SHALL BE ACCOMPLISHED BY THE INSTALLATION OF POLYETHYLENE ENCASEMENT, THROUGH THE AREA OF CONCERN. THE SOIL TEST EVALUATION TO DETERMINE THE NECESSITY FOR EXTRA PROTECTION IN SUSPECT AREAS SHALL BE AS SET FORTH IN ANSI STANDARD A21.5. ADDITIONALLY, WHERE OTHER EXISTING UTILITIES ARE KNOWN TO BE CATHODICALLY PROTECTED, CAST OR DUCTILE IRON PIPE CROSSING SAID UTILITY SHALL BE INSTALLED PARALLEL TO AND WITHIN TEN FEET OF, PROTECTION SHALL ALSO BE PROVIDED. STEEL PIPE SHALL NOT BE INSTALLED IN SEVERE CORROSION AREAS.
7. AIR VENTING AND BLOWOFFS: WHERE THE WATERMAIN PROFILE IS SUCH THAT AN AIR POCKET OR ENTRAPMENT COULD OCCUR, RESULTING IN FLOW BLOCKAGE, METHODS FOR AIR RELEASE SHALL BE PROVIDED. AIR VENTING CAPABILITIES SHALL BE PROVIDED FOR DISTRIBUTION MAINS BY APPROPRIATELY PLACING FIRE HYDRANTS, BLOWOFFS, OR OTHER MANUAL DEVICES. AT CRITICAL POINTS ON MAJOR MAINS, AUTOMATIC AIR RELEASE ASSEMBLIES SHALL BE INSTALLED. SPECIAL CARE SHALL BE TAKEN TO PRECLUDE ANY CROSS-CONNECTION POSSIBILITY IN THE DESIGN OF AUTOMATIC AIR RELEASE VALVE APPLICATION. ALL DEAD-END WATER MAINS, TEMPORARY OR PERMANENT, SHALL BE EQUIPPED WITH A MANUALLY OPERATED BLOWOFF AT THE TERMINAL.

POTABLE WATER GENERAL NOTES | PW001-1F | ISSUED: 2017 | REVISED: --

8. SERVICE CONNECTIONS: CONNECTIONS TO WATER MAINS FOUR INCHES AND LARGER SHALL BE MADE BY DRILLING THE APPROPRIATE SIZE HOLE AND INSTALLATION OF SERVICE SADDLES, WITH SERVICES TO SMALLER SIZES ACCOMPLISHED BY IN-LINE FITTINGS. A FITTING WITH THE SERVICE LINE EXTENDED TO THE PROPERTY LINE OR EASEMENT LINE, PERPENDICULAR TO SAID LINE, AND TERMINATING WITH A PLUGGED CURB STOP AND METER BOX WITH STANDARD PLASTIC METER BOX WITH CAST IRON LID. CONCRETE BOXES SHALL BE USED IN HIGH TRAFFIC AREAS PENDING METER INSTALLATION. ON CURBED STREETS THE EXACT LOCATION FOR EACH INSTALLED SERVICE SHALL BE MARKED BY ETCHING OR CUTTING A "W" IN THE CONCRETE CURB AND PAINTED BLUE. WHERE NO CURB EXISTS OR IS PLANNED, LOCATIONS SHALL BE ADEQUATELY MARKED BY A ONE-HALF-INCH STEEL REBAR, THREE INCHES BELOW FINAL GRADE.

7.13.4.

TESTING.

1. THE CONTRACTOR SHALL PERFORM HYDROSTATIC TESTING OF ALL WATER DISTRIBUTION SYSTEMS, AS SET FORTH IN THE FOLLOWING AND SHALL CONDUCT SAID TESTS IN THE PRESENCE OF REPRESENTATIVES FROM THE CITY AND/OR OTHER AUTHORIZED AGENCIES, WITH 48 HOURS ADVANCE NOTICE PROVIDED, IN WRITING.
2. PIPING AND APPURTENANCES TO BE TESTED SHALL BE WITHIN SECTIONS BETWEEN VALVES, NOT EXCEEDING 2,000 FEET UNLESS ALTERNATE METHODS HAVE RECEIVED PRIOR APPROVAL FROM THE CITY. TESTING SHALL NOT PROCEED UNTIL CONCRETE THRUST BLOCKS ARE IN PLACE AND CURED, OR OTHER RESTRAINING DEVICES INSTALLED. ALL PIPING SHALL BE THOROUGHLY CLEANED AND FLUSHED PRIOR TO TESTING TO CLEAR THE LINES OF ALL FOREIGN MATTER. WHILE THE PIPING IS BEING FILLED WITH WATER, CARE SHALL BE EXERCISED TO PERMIT THE ESCAPE OF AIR FROM EXTREMITIES OF THE TEST SECTION, WITH ADDITIONAL RELEASE COCKS PROVIDED IF REQUIRED.

POTABLE WATER GENERAL NOTES | PW001-1G | ISSUED: 2017 | REVISED: --

3. HYDROSTATIC TESTING SHALL BE PERFORMED AT 150 POUNDS PER SQUARE INCH PRESSURE, UNLESS OTHERWISE APPROVED BY THE CITY, FOR A PERIOD OF NOT LESS THAN TWO HOURS. TESTING SHALL BE IN ACCORDANCE WITH THE APPLICABLE AWWA PROVISIONS FOR PVC-AWWA PUBLICATION M-23 AND FOR DIP-AWWA STANDARD C600, SECTION 4. THE ALLOWABLE RATE OF LEAKAGE SHALL BE LESS THAN THE NUMBER OF GALLONS PER HOUR DETERMINED BY THE FOLLOWING FORMULAS:

PVC DIP $L = NDP^{1/2}$

$\frac{7400}{133,200} L = SDP^{1/2}$

FOR 150 PSI: TEST: L = 0.00165 ND (PVC)
FOR 150 PSI: TEST: L = 0.000092 SD (DIP)

L = ALLOWABLE LEAKAGE IN GALLONS PER HOUR

N = NUMBER OF JOINTS IN SECTION TESTED

S = LENGTH OF PIPE TESTED, IN FEET

D = NOMINAL DIAMETER OF THE PIPE IN INCHES

P = AVERAGE TEST PRESSURE MAINTAINED DURING THE LEAKAGE TEST IMPOUNDS PER SQUARE INCH GAUGE.

4. THE TESTING PROCEDURE SHALL INCLUDE THE CONTINUED APPLICATION OF THE SPECIFIED PRESSURE TO THE TEST SYSTEM. FOR THE TWO-HOUR PERIOD, BY WAY OF A PIPE TAKING SUPPLY FROM A CONTAINER SUITABLE FOR MEASURING WATER LOSS. THE AMOUNT OF LOSS SHALL BE DETERMINED BY MEASURING THE VOLUME DISPLACED FROM SAID CONTAINER.
5. SHOULD THE TEST FAIL, NECESSARY REPAIRS SHALL BE ACCOMPLISHED BY THE CONTRACTOR AND THE TEST REPEATED UNTIL WITHIN THE ESTABLISHED LIMITS. THE CONTRACTOR SHALL FURNISH THE NECESSARY LABOR, WATER, PUMPS, GAUGES AND ALL OTHER ITEMS REQUIRED TO CONDUCT THE REQUIRED WATER DISTRIBUTION SYSTEM TESTING AND PERFORM NECESSARY REPAIRS.
6. PIPE SECTIONS TO BE PRESSURE TESTED SHALL BE SUBJECTED TO A HYDROSTATIC PRESSURE OF 150 PSI FOR A DURATION OF TWO HOURS BY MEANS OF A PUMP.

POTABLE WATER GENERAL NOTES | PW001-1H | ISSUED: 2017 | REVISED: --

7.13.5.

DISINFECTING. FOLLOWING THE PRESSURE TESTING: THE CONTRACTOR SHALL DISINFECT ALL SECTIONS OF THE WATER DISTRIBUTION SYSTEM, AND RECEIVE APPROVAL THEREOF FROM THE APPROPRIATE AGENCIES, PRIOR TO PLACING IN SERVICE. ADVANCE NOTICE SHALL BE PROVIDED TO THE CITY BEFORE DISINFECTING PROCEDURES START. THE DISINFECTION SHALL BE ACCOMPLISHED WITH THE APPLICABLE PROVISIONS OF AWWA STANDARD C651, "DISINFECTING WATER MAINS" AND ALL APPROPRIATE AGENCY APPROVALS. COMPUTATION OF THE AMOUNTS OF CHLORINE TO BE USED FOR DISINFECTION SHOULD BE APPROVED BY THE CITY OR ITS ENGINEER CONSULTANT.

1. CARE SHALL BE TAKEN TO PROVIDE DISINFECTION TO THE TOTAL SYSTEM AND EXTREMITIES SHALL BE CAREFULLY FLUSHED PRIOR TO CHLORINATION. AFTER DISINFECTION AND FINAL FLUSHING HAVE BEEN ACCOMPLISHED, SAMPLES OF WATER FOR BACTERIOLOGICAL ANALYSIS SHALL BE COLLECTED AND SUBMITTED TO AND AS DIRECTED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION OR OTHER APPROPRIATE APPROVAL AGENCY. SHOULD THESE SAMPLES OR SUBSEQUENT SAMPLES PROVE TO BE UNSATISFACTORY, THEN THE PIPING SHALL BE DISINFECTED UNTIL A SUFFICIENT NUMBER OF SATISFACTORY SAMPLES ARE OBTAINED.
2. THE CONTRACTOR SHALL FURNISH ALL EQUIPMENT AND MATERIALS AND PERFORM THE WORK NECESSARY FOR THE DISINFECTING PROCEDURES, INCLUDING ADDITIONAL DISINFECTION AS REQUIRED.
3. CONTRACTOR SHALL PROVIDE THE CITY WITH 48 HOURS ADVANCED NOTICE OF DISINFECTION.

7.13.6.

AS-BUILT RECORD DRAWINGS. THE DEVELOPER MUST PROVIDE ONE COMPLETE SET OF MYLARS AND FOUR COMPLETE SETS OF WHITE COPY PRINTS OF "AS-BUILT RECORD DRAWINGS" OF THE PROJECT, SHOWING ACCURATE MEASUREMENTS OF WATER AND SEWER LINES AND STRUCTURES FROM FIXED KNOWN LOCATIONS WITHIN THE DEVELOPMENT. THE AS-BUILT RECORD DRAWINGS SHALL BE SIGNED AND SEALED BY THE PROJECT DESIGN ENGINEER ATTESTING TO THE ACCURACY OF THE LOCATIONS OF THE FACILITIES. THE AS-BUILT RECORD DRAWINGS ARE TO BE PROVIDED BEFORE THE CITY CAN ACCEPT THE IMPROVEMENTS.

POTABLE WATER GENERAL NOTES | PW001-1I | ISSUED: 2017 | REVISED: --

GENERAL UTILITIES CONSTRUCTION NOTES

1. THE PUBLIC SERVICES DEPARTMENT MUST BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO ANY WORK ON EXISTING CITY OF MOUNT DORA UTILITIES. THE CONTRACTOR MUST CONTACT, JOSH KRAMM, UTILITY LINE MANAGER AT HIS OFFICE (352) 735-7151 OR CELL PHONE (352) 516-3691, DISTRIBUTION SUPERVISOR - OFFICE (352) 735-7151 OR CELL PHONE (352) 460-7922, RUSSELL HOPPER, COLLECTION & LIFT STATION SUPERVISOR - OFFICE (352) 735-7151 OR CELL PHONE (352) 973-2032.
2. NO GRADING, CUTTING, OR FILLING SHALL COMMENCE UNTIL SUCH TIME AS APPROPRIATE EROSION AND SEDIMENTATION CONTROL DEVICES HAVE BEEN INSTALLED BETWEEN THE DISTURBED AREA AND WATER BODIES, WATERCOURSES OR WETLANDS.
3. CONSTRUCTION MUST BE PER THE DRC APPROVED SITE PLAN. DEVIATIONS IN ROADWAY, UTILITY OR DRAINAGE CONSTRUCTION WILL REQUIRE WRITTEN APPROVAL OF THE CITY ENGINEER OR THE DIRECTOR OF PUBLIC SERVICES. (NOTE: SIGNIFICANT CHANGES FROM THE DRC APPROVED PLAN MAY REQUIRE THE OWNER/DEVELOPER TO SUBMIT A REVISED SITE PLAN THROUGH THE DRC FOR REVIEW.)
4. CONTRACTOR SHALL PROVIDE AN EMERGENCY CONTACT NUMBER LIST FOR KEY SITE PERSONNEL.
5. ENGINEER OF RECORD REVIEWED SHOP DRAWING SUBMITTALS ARE REQUIRED FOR ALL WATER/ SEWER/ RECLAIMED AND STORMWATER SYSTEMS TO BE DEDICATED TO THE CITY OF MOUNT DORA. TWO SETS ARE REQUIRED FOR REVIEW. ONE SET WILL BE RETURNED TO THE ENGINEER OF RECORD.
6. OFF SITE OR ROADWAY RIGHT OF WAY CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL CONDITIONS OF THE APPROVED R/W PERMIT(S). A COPY OF THE APPROVED R/W PERMIT MUST BE KEPT ON-SITE AND READILY AVAILABLE DURING ALL CONSTRUCTION ACTIVITIES WITHIN THE R/W.
7. THE PUBLIC SERVICES DEPARTMENT MUST BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO UTILITY TESTING. THE CONTRACTOR MUST CONTACT JOSH KRAMM, UTILITY LINE MANAGER, AT HIS OFFICE (352) 735-7151 OR CELL (352) 516-3691, DISTRIBUTION SUPERVISOR - OFFICE (352) 735-7151 OR CELL PHONE (352) 460-7922, RUSSELL HOPPER, COLLECTION & LIFT STATION SUPERVISOR - OFFICE (352) 735-7151 OR CELL PHONE (352) 973-2032. HYDROSTATIC TESTING SHALL BE PER THE APPLICABLE PROVISIONS AS SET FORTH IN AWWA STANDARDS. (MINIMUM 150 PSI @ 2 HOURS - POTABLE/RECLAIMED AND MINIMUM 100 PSI @ 2 HOURS - FORCE MAINS).
8. GRAVITY SEWER PIPING TESTS SHALL BE IN ACCORDANCE WITH UNI-BELL PVC PIPE ASSOCIATION; "RECOMMENDED PRACTICES FOR LOW-PRESSURE AIR TESTING OF INSTALLED SEWER PIPE". THE CONTRACTOR WILL BE REQUIRED TO PROVIDE VIDEO INSPECTION OF THE ENTIRE LINE DEMONSTRATING SATISFACTORY WORKMANSHIP AND SHOWING POSITIVE FLOW WITHIN THE SANITARY SYSTEM. ANY DEFECTS IN WORKMANSHIP, AREAS OF STANDING WATER OR "BELLIES" SHALL BE CAUSE FOR REJECTION. ONE DVD FORMAT COPY OF THE VIDEO INSPECTION MUST BE PROVIDED TO THE PUBLIC SERVICES DEPARTMENT.
9. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE INSPECTION OF ALL STORM SYSTEM PIPES DEMONSTRATING SATISFACTORY WORKMANSHIP AND SHOWING POSITIVE FLOW WITHIN THE DRAINAGE SYSTEM. ANY DEFECTS IN WORKMANSHIP, AREAS OF STANDING WATER OR "BELLIES" SHALL BE CAUSE FOR REJECTION. ONE DVD FORMAT COPY OF THE VIDEO INSPECTION MUST BE PROVIDED TO THE PUBLIC SERVICES DEPARTMENT.
10. AFTER JUMPER CONNECTION IS REMOVED, WATER & RECLAIMED WATER SERVICES MUST BE LOCKED OUT AND KEY SUPPLIED TO CITY.
11. FOLLOWING SATISFACTORY PRESSURE TESTING, THE CONTRACTOR SHALL DISINFECT ALL SECTIONS OF THE WATER DISTRIBUTION SYSTEM, AND RECEIVE APPROVAL THEREOF FROM THE APPROPRIATE AGENCIES, PRIOR TO PLACING IN SERVICE. ADVANCE NOTICE SHALL BE PROVIDED TO THE CITY BEFORE DISINFECTING PROCEDURE START. THE DISINFECTION SHALL BE ACCOMPLISHED WITH THE APPLICABLE PROVISIONS OF AWWA STANDARD, "DISINFECTING WATER MAINS" AND ALL APPROPRIATE AGENCY APPROVALS.

STANDARD CONSTRUCTION DETAIL GENERAL NOTES | GU001-1A | ISSUED: 2017 | REVISED: --

NOTE:
THE DETAILS AND SPECIFICATIONS SHOWN ON THIS SHEET WERE SUPPLIED BY THE CITY OF MT. DORA AND NOT BY HALFF ASSOCIATES, INC. HALFF ASSOCIATES, INC. ASSUMES NO LIABILITY FOR THE ACCURACY OF THE DETAILS, DESIGNS, AND SPECIFICATIONS SHOWN ON THIS SHEET.

DATE	REVISION	1	2	3	4	5	6	7	8

MINOR SITE PLAN
FOR THE YARDERY

POTABLE WATER DETAILS

halff
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33380

DATE:	APRIL 28, 2023
DESIGNED BY:	KDH
DRAWN BY:	KDH
CHECKED BY:	CCH
JOB NO.:	044687.001
FILE NAME:	GASLIGHT SITE

Sheet 7

CHARLES C. HIOTT, P.E.
PROFESSIONAL ENGINEER NO. 54813

NOTE:
THE DETAILS AND SPECIFICATIONS SHOWN ON THIS SHEET WERE SUPPLIED BY THE CITY OF MT. DORA AND NOT BY HALFF ASSOCIATES, INC. HALFF ASSOCIATES, INC. ASSUMES NO LIABILITY FOR THE ACCURACY OF THE DETAILS, DESIGNS, AND SPECIFICATIONS SHOWN ON THIS SHEET.

CITY OF MOUNT DORA, GREASE TRAP SIZING METHOD

(D) x (MF) x (GL) x (RT) x (ST) = CAPACITY IN GALLONS

(D) X (MF) X (GL) X (RT) X (ST) = CAPACITY IN GALLONS
(150) X (1) X (6) X (2.5) X (1.5) = 3,375 GALLONS

D = NUMBER OF SEATS:

MF = MEAL FACTOR: BASED ON ESTABLISHMENT TYPE AND TIME PER MEAL:

FAST FOOD / CAFETERIA	=	30M	use	2.00
RESTAURANT	=	60M	use	1.00
LEISURE DINING	=	90M	use	0.67
DINNER CLUB	=	120M	use	0.50

GL = GALLONS OF WASTEWATER PER MEAL:

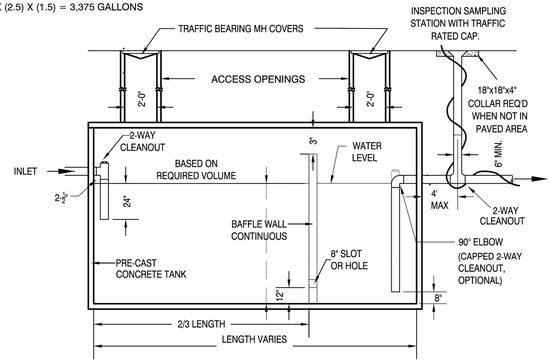
WITH DISHWASHER	=	6 GALLONS
WITHOUT DISHWASHER	=	5 GALLONS
SINGLE SERVICE KITCHEN	=	2 GALLONS
FOOD DISPENSER	=	1 GALLON

RT = RETENTION TIME:

COMMERCIAL KITCHEN	=	2.5 HOURS
SINGLE SERVICE KITCHEN	=	1.5 HOURS

ST = STORAGE FACTOR:

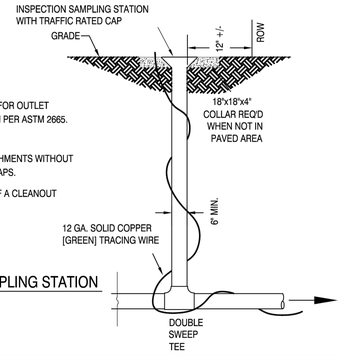
8 HOURS	=	1.0
12 HOURS	=	1.5 (ALSO S.S. KITCHENS)
16 HOURS	=	2.0
24 HOURS	=	3.0



GREASE TRAP DOUBLE COMPARTMENT
(NOT TO SCALE)

NOTE: WIDTH VARIES

1. VOLUME TO BE DETERMINED BY CITY OF MT. DORA CITY ENGINEER OR DESIGNEE UPON APPLICATION BY OWNER.
2. STRUCTURAL DESIGN SHALL BE THE RESPONSIBILITY OF THE MANUFACTURER.
3. ONLY KITCHEN WASTE SHALL BE DISCHARGED INTO THE GREASE TRAP. ALL DOMESTIC WASTE (I.E., REST-ROOMS) SHALL BE CONNECTED DOWNSTREAM OF THE GREASE TRAP.
4. ALL PIPE AND FITTINGS FOR OUTLET AND SAMPLING STATION PER ASTM 2665.
5. BUILDING FLOOR ELEVATION SHALL BE 6" HIGHER THAN MANHOLE COVERS.



NOTE:
ALL PIPE AND FITTINGS FOR OUTLET AND SAMPLING STATION PER ASTM 2665.

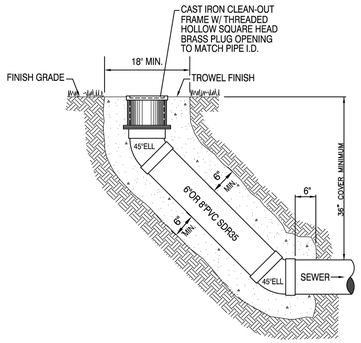
REQUIRED FOR:
COMMERCIAL ESTABLISHMENTS WITHOUT IN-GROUND GREASE TRAPS.

CAN BE USED IN LIEU OF A CLEANOUT

INSPECTION SAMPLING STATION

DOUBLE COMPARTMENT GREASE TRAP AND INSPECTION SAMPLING STATION

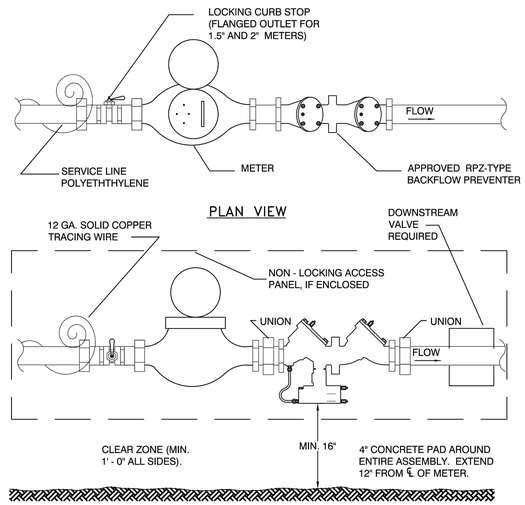
SS004-1
ISSUED: 2017
REVISED: --



NOT TO SCALE

TRUNK LINE CLEAN-OUT

SS015-1
ISSUED: 2017
REVISED: --

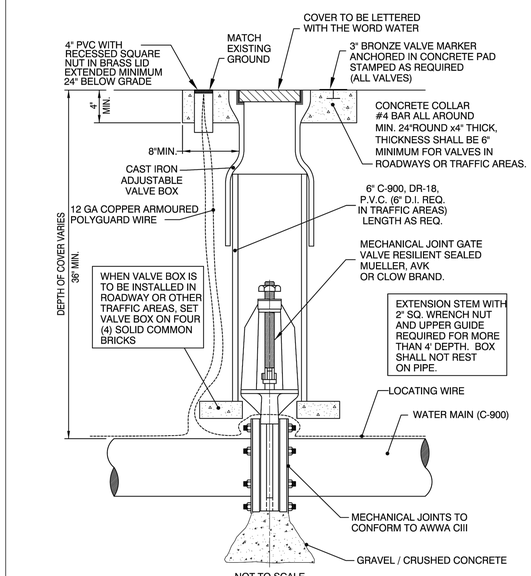


NOTES:

1. ALL METERS UP TO AND INCLUDING 2" SHALL BE NEPTUNE MODEL T10 INSTALLED BY THE CITY.
2. LOCATION SHALL BE COORDINATED WITH UTILITY BILLING & PUBLIC SERVICES DEPARTMENT.
3. SERVICE LINES SHALL NOT BE LESS THAN METER SIZE.
4. BOLLARDS MAY BE REQUIRED IN TRAFFIC AREAS OR LOCATIONS IMMEDIATELY ADJACENT TO TRAFFIC AREAS.
5. PROVIDE PIPE SUPPORTS WHERE NEEDED.

POTABLE WATER INDIVIDUAL ABOVE GROUND METER SET

PW010-1
ISSUED: 2017
REVISED: --



NOT TO SCALE

GATE VALVE & BOX

PW0012-1
ISSUED: 2017
REVISED: --

DATE: 06-05-23
REVISION: 1 CITY COMMENTS RAI#1

MINOR SITE PLAN FOR THE YARDERY

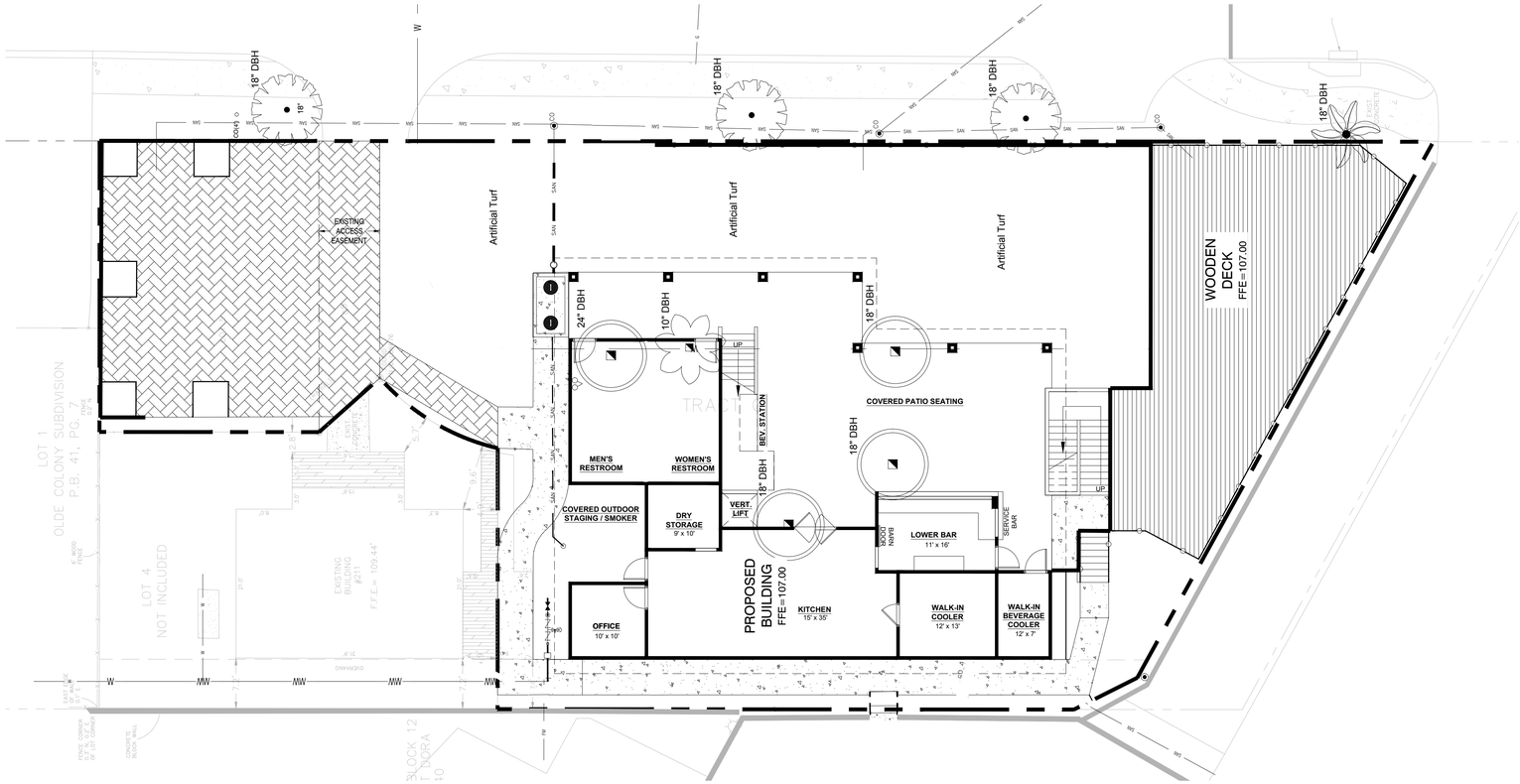
UTILITY DETAILS

halff
902 North Sinclair Ave.
Tavares, Florida 32778
Office: 352.343.8481
Fax: 352.343.8495
Certificate of Authorization Number: 33580

DATE:	APRIL 28, 2023
DESIGNED BY:	KDH
DRAWN BY:	KDH
CHECKED BY:	CCH
JOB NO.:	044687.001
FILE NAME:	GASLIGHT SITE

Sheet 8

CHARLES C. HIOTT, P.E.
PROFESSIONAL ENGINEER NO. 54813



Information Required Per: Chapter VI - Design Standards

6.6.7: Preservation of Existing Trees

1. Tree Removal and Replacement Program Requirements

Total existing number of trees sized 6" - 23.99" : 8

Total existing number of trees sized 6" - 23.99" removed : 4

Total existing number of trees sized 24" or greater : 1

Total existing number of trees sized 24" or greater removed : 1

Total number of trees replaced at ratio 1:1 for trees removed 6" - 23.99" : 4

Total number of trees placed at ratio 1: 6" (for trees removed 24" or greater) : 4

Total number of trees replaced : 8

Total number of tree deficient (not being replaced) for tree bank contribution and includes total dollar amount of contribution funds : 1 ($425)

See Sheet L-1 for location of Replacement Trees.

PLANT SCHEDULE

EXISTING STREET TREES	QTY	COMMON NAME	BOTANICAL NAME	CONT	CAL	SIZE	SPACING	REMARKS
	3	Live Oak	Quercus virginiana	Existing	As labled	Existing	As Shown	Native
	1	Cabbage Palmetto	Sabal palmetto	Existing	As labled	Existing	As Shown	Native

TO BE REMOVED	QTY	COMMON NAME	BOTANICAL NAME	CONT	CAL	SIZE	SPACING	REMARKS
	4	Live Oak	Quercus virginiana	Existing	As labled	Existing	As Shown	Native
	1	Cabbage Palmetto	Sabal palmetto	Existing	As labled	Existing	As Shown	Native

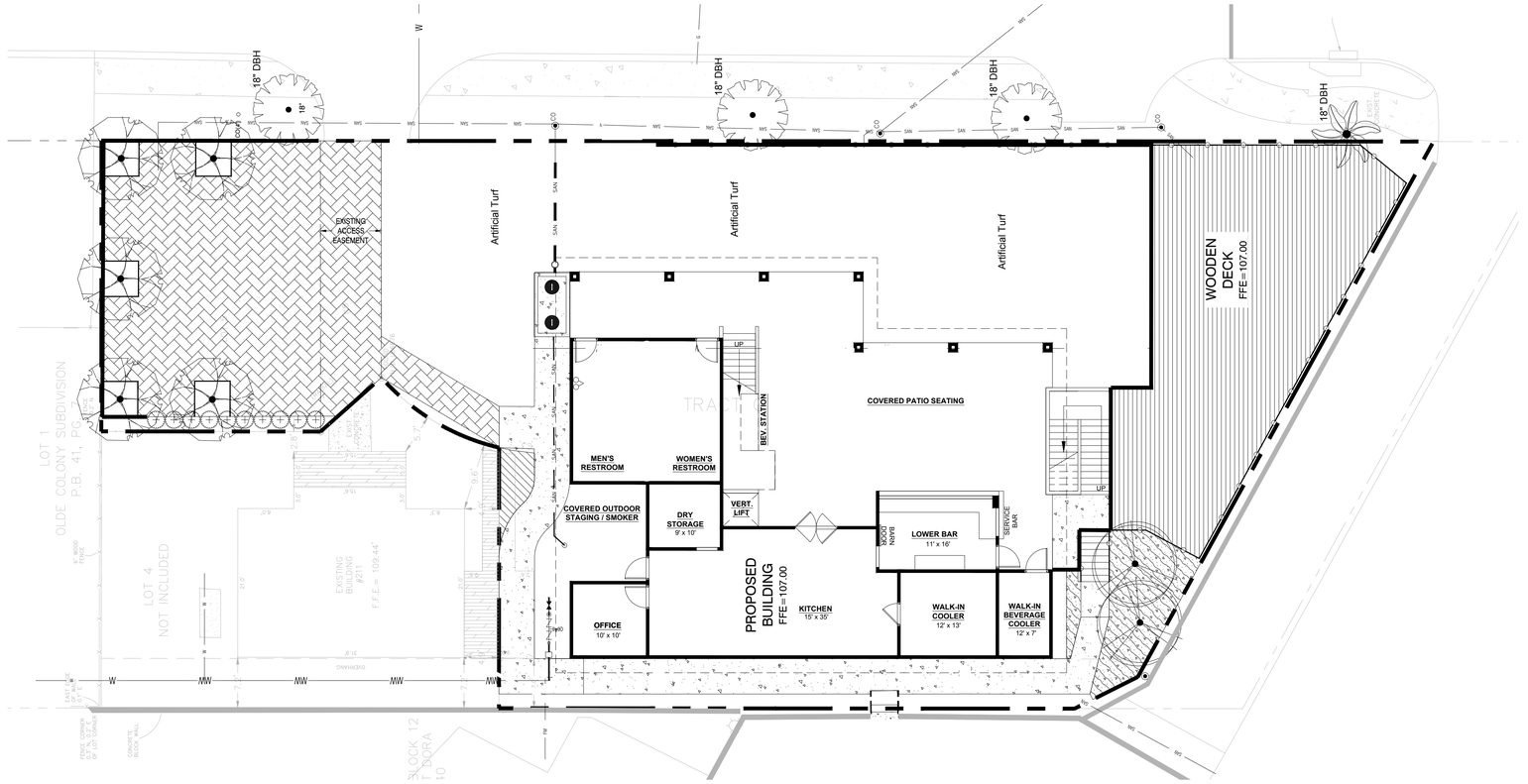
Green Consulting Group, Inc.
Landscape Architecture ■ Land Planning ■ Development Assistance
4070 United Avenue, Mount Dora, Florida 32757
352-357-9241 ■ Fax 352-357-9278 ■ LA0000847

NORTH

Drawing Number: 1672-03
Originated From: 1672-02
Date: June 29, 2023
Scale: 1" = 10'
Drawn By: PAH
Layout: 24"x36"

Tree Removal Plan

The Yardery
Mount Dora, Florida



LANDSCAPE NOTES

ALL MINIMUM SIZES AND SPECIES LISTED MUST BE MET OR EXCEEDED.
CALIPER IS MEASURED SIX (6) INCHES ABOVE THE GROUND.
EXISTING TREES TO BE MEASURED AT FOUR (4) FEET ABOVE THE GROUND.
ALL PLANTS ARE TO BE FLORIDA #1 OR BETTER, AS GIVEN IN "GRADES AND STANDARDS FOR NURSERY PLANTS."
AN AUTOMATIC IRRIGATION SYSTEM WILL BE PROVIDED FOR ALL LANDSCAPED AREAS.
CANOPY TREES SHALL NOT BE PLANTED UNDER OVERHEAD UTILITIES.
SHRUBS TO BE 3' WITHIN 12 MONTHS.
HEDGES TO FORM CONTINUOUS BUFFER UPON PLANTING.
HAND WATERING WILL BE IMPLEMENTED TO PROVIDE IRRIGATION FOR ALL LANDSCAPED AREAS.
ALL LAWN AREAS TO BE BAHIA GRASS AND NOT IRRIGATED.

PLANT SCHEDULE

EXISTING STREET TREES	QTY	COMMON NAME	BOTANICAL NAME	CONT	CAL	SIZE	SPACING	REMARKS
	3	Live Oak	Quercus virginiana	Existing	As labled	Existing	As Shown	Native
	1	Cabbage Palmetto	Sabal palmetto	Existing	As labled	Existing	As Shown	Native
REPLACEMENT TREES	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**CONT**	**CAL**	**SIZE**	**SPACING**	**REMARKS**
	2	Live Oak	Quercus virginiana	-	3.5"Cal	8`+	As Shown	Native
	5	Drake Elm	Ulmus parvifolia 'Drake'	-	3.5"Cal	8`+	As Shown	Non Native
SHRUBS	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**CONT**	**HEIGHT**	**WIDTH**	**SPACING**	**REMARKS**
	10	Podocarpus	Podocarpus macrophyllus	5 gal	36"	24"	As Shown	Non Native
GROUND COVERS	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**CONT**				
	103	Evergreen Giant Lilyturf	Liriope muscari 'Evergreen Giant'	1 gal			18" o.c.	Non Native
	20	Dwarf Confederate Jasmine	Trachelospermum asiaticum	1 gal			18" o.c.	Non Native

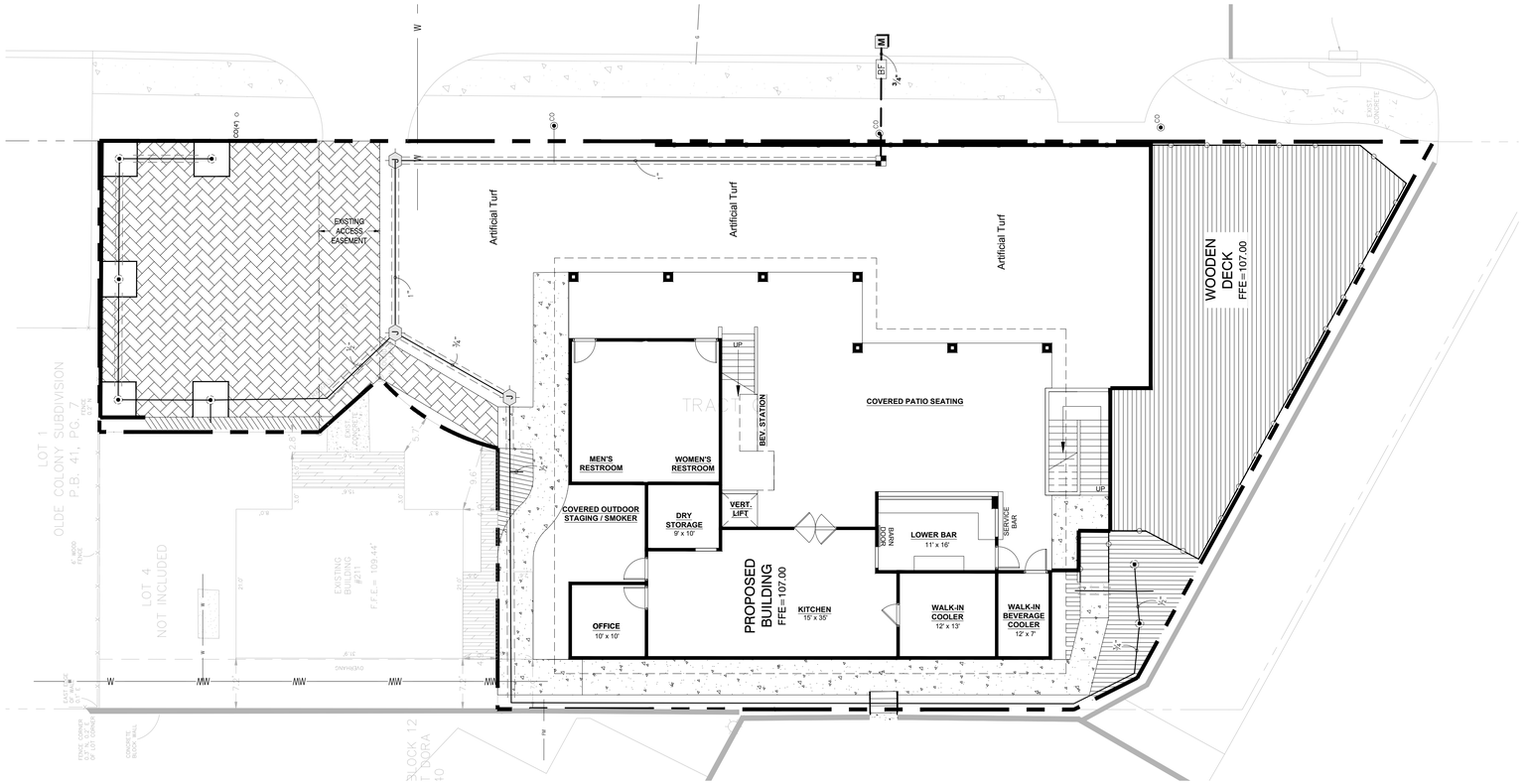
Green Consulting Group, Inc.
Landscape Architecture ■ Land Planning ■ Development Assistance
4070 United Avenue, Mount Dora, Florida 32757
352-357-9241 ■ Fax 352-357-9278 ■ LA0000847

NORTH

Drawing Number: 1672-03
Originated From: 1672-02
Date: June 29, 2023
Scale: 1" = 10'
Drawn By: PAH
Layout: 24"x36"

Landscape Plan

The Yardery
Mount Dora, Florida



NOTES:

PIPE ROUTING AND VALVE LOCATIONS ARE DIAGRAMMATICAL ONLY.
IRRIGATION CONTRACTOR IS TO AVOID ANY CONFLICT WITH THE TREE AND SHRUB PLANTINGS.
ALL MAINLINES ARE TO BE sch. 40 P.V.C. OF THE SIZE NOTED
ALL LATERALS ARE TO BE sch. 160 P.V.C. OF THE SIZE NOTED.
ALL HEADS TO HAVE RECLAIMED WATER USE INDICATORS.
ALL PIPES SHALL BE PURPLE IN COLOR TO DENOTE USE OF RECLAIMED WATER.
ALL PAVEMENT CROSSINGS ARE TO BE MADE IN SLEEVES THAT ARE TWO PIPE SIZES LARGER THAN THE CROSSING.
NO IRRIGATION HEADS TO BE LOCATED WITHIN 12" OF ANY BUILDING.
EXACT LOCATION OF UNDERGROUND UTILITIES SHOULD BE VERIFIED PRIOR TO CONSTRUCTION.
CONTROLLER TO BE LOCATED IN MECHANICAL ROOM OF BUILDING.
A RAIN SENSOR IS TO BE INSTALLED
DESIGN PRESSURE IS 60 PSI WITH 37.5 GALLONS PER MINUTE AT THE POINT OF CONNECTION.
FIELD TESTS INDICATING LESS PRESSURE OR FLOW WILL REQUIRE THE DESIGNER TO BE CONTACTED FOR ADJUSTMENTS.

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
■	Rain Bird XCZ-150-LCDR High Flow Control Zone Kit, for Large Commercial Drip Zones. 1-1/2in. PESB-R Scrubber Globe Valve with single 1-1/2in. Pressure Regulating 40psi Quick-Check Basket Filters. Flow range: 15-62 GPM.	1
●	Rain Bird XFD-09-12-NP Drip Ring Ring Count: 2 Inner Diameter: 24" Ring Spacing: 9"	7
	Area to Receive Dripline Rain Bird XFD-09-12-NP XFD On-Surface Pressure Compensating Landscape Dripline. 0.9 GPH emitters at 12" O.C. Dripline laterals spaced at 12" apart, with emitters offset for triangular pattern. UV Resistant. Specify XF insert fittings.	305.3 l.f.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
BF	Febco 765 1" Pressure Vacuum Breaker, brass with ball valve SOV. Install 12in. above highest downstream outlet and the highest point in the downstream piping.	1
J	Junction Box	3
M	Water Meter 1"	1
	Irrigation Lateral Line: PVC Class 160 SDR 26	363.8 l.f.
	Irrigation Mainline: PVC Schedule 40	16.7 l.f.
	Pipe Sleeve: PVC Schedule 80	189.2 l.f.

Green Consulting Group, Inc.
Landscape Architecture ■ Land Planning ■ Development Assistance
4070 United Avenue, Mount Dora, Florida 32757
352-357-9241 ■ Fax 352-357-9278 ■ LA0000847

NORTH

Drawing Number: 1672-03
Originated From: 1672-02
Date: June 29, 2023
Scale: 1" = 10'
Drawn By: PAH
Layout: 24"x36"

Irrigation Plan

The Yardery
Mount Dora, Florida

Exhibit "A"

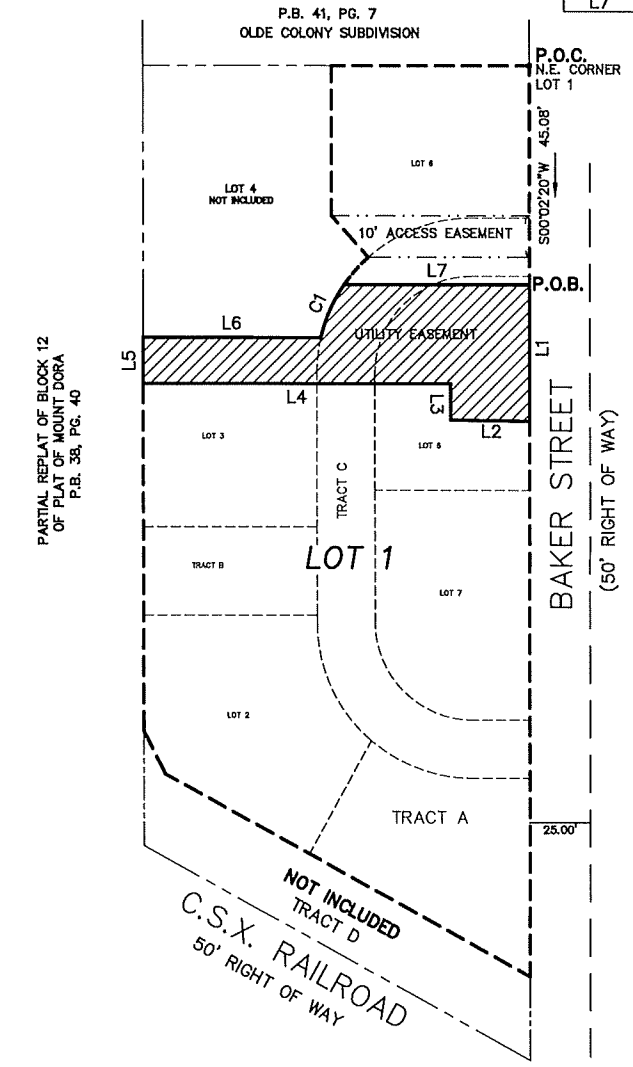
SKETCH OF DESCRIPTION FOR
UTILITY EASEMENT
THE YARDERY
Mount Dora, Lake County, Florida

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD LENGTH	DELTA
C1	32.00'	12.07'	N24°01'40"E	12.00'	21°36'52"

LINE	BEARING	DISTANCE
L1	S00°02'20"W	28.16'
L2	N89°10'02"W	16.45'
L3	N00°00'00"W	7.47'
L4	N90°00'00"W	63.55'
L5	N00°02'20"E	9.51'
L6	S89°57'40"E	36.75'
L7	N90°00'00"E	38.37'

N
W E
S

SCALE
30'



DESCRIPTION:

Comence at the Northeast corner of Lot 1, Gaslight District, according to the plat as recorded in Plat Book 75, Page 91, Public Records of Lake County, Florida; thence run S00°02'20W, 45.08 feet along the West right of way line of Baker Street to the Point of Beginning; thence continuing with said right of way of Baker Street run S00° 02'20"W for 28.16' to a point; thence run N89°10'02W for 16.45 feet to a point; thence run N00°00'00W for 7.47 feet to a point; thence run N90°00'00"W for 63.55 feet to a point; thence run N00°02'20"E for 9.51 feet to a point; thence S89° 57'40"E for 36.75 feet to a point; thence with a non radial curve concave Southeasterly, having a chord bearing and distance of N24°01'40"E, 12.00', (Radius=32.00', Length=12.07', Delta=21°01'40") to a point; thence N90° 00'00"E for 38.37 feet to the Point of Beginning.

0.03 Acres ±
1,336 Sq.Ft. ±

Not a Boundary Survey

FREELAND – CLINKSCALES
& ASSOCIATES, INC.
ENGINEERS * LAND SURVEYORS
201 2nd AVE. EAST
HENDERSONVILLE, N.C. 28792
(828) 697-6539
info@fcaofnc.com
1220 Huffstetler Drive, Unit 201
Eustis, FL 32726
(352) 609-2830 LB 7064

REF. PLAT BOOK	75/91
REF. O.R. BOOK	6091/2160
TAX MAP	3928463
PARTY CHIEF	****
DRAWN	SCL
DATE	JUNE 27, 2023
DWG. NO.	F43072

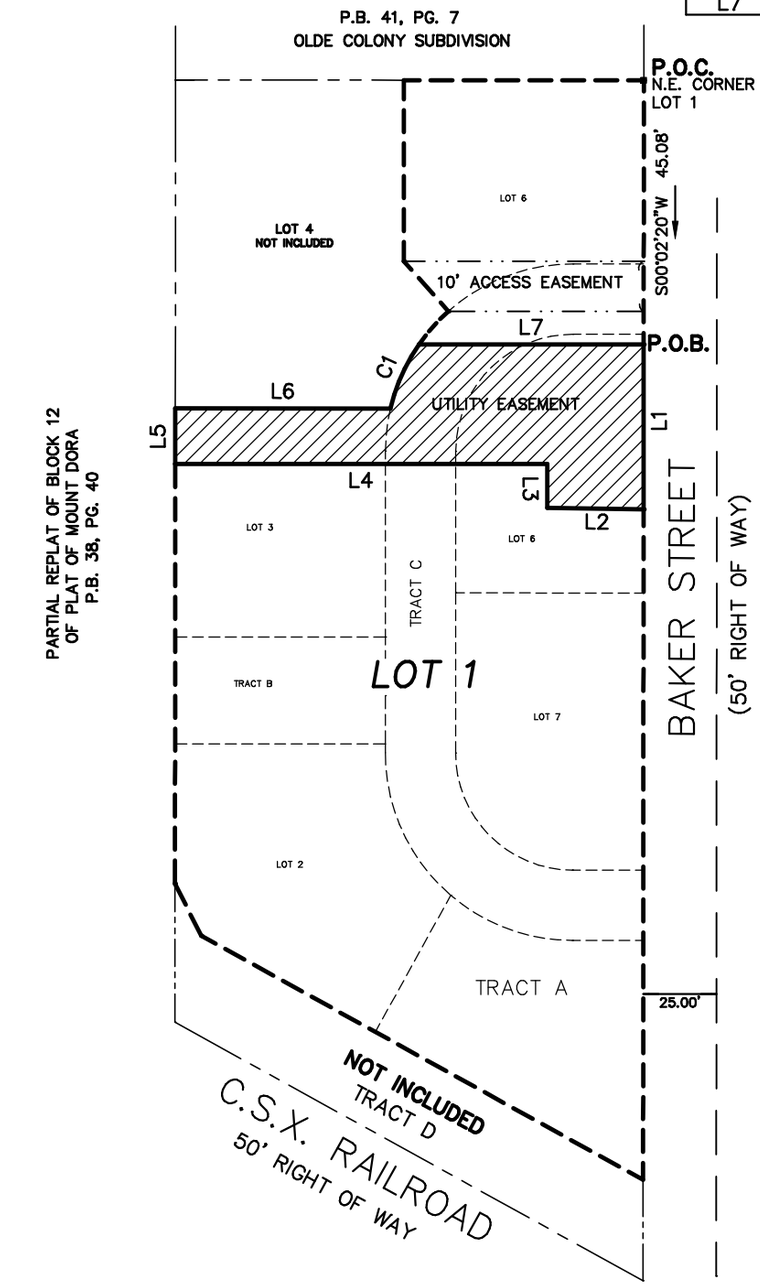
SKETCH OF DESCRIPTION FOR
UTILITY EASEMENT
THE YARDERY
Mount Dora, Lake County, Florida

N
W E
S

SCALE
30'

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD LENGTH	DELTA
C1	32.00'	12.07'	N24°01'40"E	12.00'	21°36'52"

LINE	BEARING	DISTANCE
L1	S00°02'20"W	28.16'
L2	N89°10'02"W	16.45'
L3	N00°00'00"W	7.47'
L4	N90°00'00"W	63.55'
L5	N00°02'20"E	9.51'
L6	S89°57'40"E	36.75'
L7	N90°00'00"E	38.37'



DESCRIPTION:

Comence at the Northeast corner of Lot 1, Gaslight District, according to the plat as recorded in Plat Book 75, Page 91, Public Records of Lake County, Florida; thence run S00°02'20W, 45.08 feet along the West right of way line of Baker Street to the Point of Beginning; thence continuing with said right of way of Baker Street run S00°02'20"W for 28.16' to a point; thence run N89°10'02W for 16.45 feet to a point; thence run N00°00'00W for 7.47 feet to a point; thence run N90°00'00"W for 63.55 feet to a point; thence run N00°02'20"E for 9.51 feet to a point; thence S89°57'40"E for 36.75 feet to a point; thence with a non radial curve concave Southeasterly, having a chord bearing and distance of N24°01'40"E, 12.00', (Radius=32.00', Length=12.07', Delta=21°01'40") to a point; thence N90°00'00"E for 38.37 feet to the Point of Beginning.

0.03 Acres ±
1,336 Sq.Ft. ±

Not a Boundary Survey

FREELAND – CLINKSCALES
& ASSOCIATES, INC.
ENGINEERS * LAND SURVEYORS
201 2nd AVE. EAST
HENDERSONVILLE, N.C. 28792
(828) 697-6539
info@fcaofnc.com
1220 Huffstetler Drive, Unit 201
Eustis, FL 32726
(352) 609-2830 LB 7064

REF. PLAT BOOK	75/91
REF. O.R. BOOK	6091/2160
TAX MAP	3928463
PARTY CHIEF	****
DRAWN	SCL
DATE	JUNE 27, 2023
DWG. NO.	F43072

CITY OF MOUNT DORA

City of Mount Dora
Planning and Development
510 N. Baker St.
Mount Dora, FL 32757
352-735-7112
E-mail: plandev@cityofmountdora.com

MINOR SITE PLAN APPLICATION

Date: 6/1/2021 Project Name: The Yardery

1. Site Address: 221 N. Baker St., Mount Dora, FL 32757

2. Applicant's Name: Austin Guenther

   Company's Name: Gaslight MDF 2, LLC

   Address: 639 N Alexander St

   City, State & Zip: Mount Dora, FL 32757

   Phone: (352) 397-4869 E-mail: Austin.Guenther@G3 Development.com

3. Property Owner's Name(s): Gerry Guenther III

   Company's Name: Gaslight MDF 2, LLC

   Address: 639 N. Alexander St

   City, State & Zip: Mount Dora, FL 32757

   Phone: (352) 397-4869 E-mail: Austin.Guenther@G3 Development.com

4. Engineer's Name: Charles C. Hiott

   Company's Name: Halff

   Address: 902 North Sinclair Ave.

   City, State & Zip: Tavares, FL 32778

   Phone: (352) 343 - 8481 E-mail: chiott@halff.com

5. Landscape Architect's Name: Timothy Green

   Company's Name: Green Consulting Group, Inc.

   Address: 4070 United Avenue

   City, State & Zip: Mount Dora, FL 32757

   Phone: (352) 357 - 9241 E-mail: tgreen@greenconsultinggroup.com

6. Architect's Name: Jeff Powell

Company's Name: Powell Studio Architecture

Address: 713 W. Montrose St.

City, State & Zip: Clermont, FL 34711

Phone: (352) 874-2340 E-mail: Jeff@PowellStudioArch.com

7. Briefly describe the property project and proposed use(s): Restaurant

situated on .25 acres of land in the City of Mount Dora

8. Property is located on the following adjacent streets: N Baker St. and E. 8th Ave, Mount Dora, FL 32757

9. Zoning District: C-2 Future Land Use Category: MU-2

10. Building Size Existing (SF): 0 Proposed (SF: 5,481

Total (SF): 5,481

11. Proposed Number of Seats: N/A

12. Size of property in Acres: 0.25 Square Feet: 10,995

13. Number of structures to be built on the site:

14. Height of structures(s): 34'8" Building Stories: 2

15. Total square footage of impervious surface: 4928

16. The percentage of lot coverage: 44.82%

17. Are vested rights being requested as part of this application? Yes √ No
If no, by signing this application you are waiving any future vested development rights on this property.

CERTIFICATION AND SIGNATURE

By my signature below, I certify that the information contained in this application is true and correct to the best of my knowledge at the time of the application. I acknowledge that I understand and have complied with all of the submittal requirements and procedures and that this application is a complete application submittal pursuant to the City's Land Development Code. I further understand that an incomplete application submittal may cause my application to be deferred to the next posted deadline date.

Owner/Applicant Signature

4/27/23

Date

CITY OF MOUNT DORA

Planning and Development
510 N. Baker St.
Mount Dora, FL 32757
352-735-7113
plandev@cityofmountdora.com

DATE: July 19, 2023

TO: Planning and Zoning Commission

FROM: Development Review Committee

Vince Sandersfeld, Planning Director

THROUGH: Michele Janiszewski, AICP, Senior Planner

RE: **Request for Site Plan; Big Dan's Car Wash;** 17580 Highway 441, Mount Dora, FL 32757 (Site Address); South of US HWY 441 and east of Morningside Drive (General Location); Frat House LLC (Property Owner); Brightwork Acquisitions, LLC. (Applicant); Infinity Engineering Group, LLC (Engineer); Patrick D. Cunningham, LLC (Landscape Architect); Oliveri Architects (Architect). Project No. SP23-04

SUMMARY OF RECOMMENDATION:

Staff recommends approval of the above-referenced site plan with conditions. Approval is subject to satisfactorily addressing engineering requirements prior to issuance of the City Development Permit, and public shard cross-access easement agreement being amended with new driveway and access configuration

REFERENCES/SUPPORT:

Section 5.1 *LDC*

SITE SUMMARY:

Owner:	Frat House, LLC
Applicant:	Brightwork Acquisitions, LLC – Timothy Austin Simmons
Engineer:	Infinity Engineering Group, LLC – Nisit Sapparkhao
Architect:	Oliveri Architects – Joseph Oliveri, Aaron Coy
Existing Use:	Medical Office
Proposed Use:	125-foot automatic car wash with associated vacuum and detail parking spaces.
Parcel IDs:	24-19-26-1602-000-00D03 24-19-26-1602-000-00D02
Future Land Use:	Commercial
Zoning:	Highway Commercial (C-3)
Overlay Zones:	None
Max. Building Height:	65 feet
Proposed Building Height:	33'-2"
Proposed Building Size:	3,992-sf (1.67-ac)
Site Area:	78,130-sf (1.79-ac)
Maximum ISR:	65%
Proposed ISR:	34%
Max FAR:	35%
Proposed FAR:	5%

Surrounding Property Table:

Direction	City/County	FLU	Zoning	Existing Use(s)
North	Eustis	General Commercial	N/A	Outdoor Automobile Dealer
South	City	Commercial	C-3	Vacant, Retention
East	City	Commercial	C-3	Gas Station (Wawa)
East	County	Urban Low	R-3	Single Family Dwelling Unit
West	City	Commercial	C-3	Medical Offices

ANALYSIS:

The Site Plan proposal is for a 125-foot car wash facility including a vacuum and detailing parking spaces, and storm water pond. Land Development Code Section 3.4.8.(2)(j) indicates car washes as a permitted use within the C-3 zoning district. The property is currently developed with a medical office.

The City's Land Development Code requires one parking space per 250-sf of gross floor area. The proposed 3,992-sf building shall require a minimum of 16 parking spaces. The site plan proposes a total of 31 parking spaces consisting of 24 vacuum spaces, 1 reserved space with handicap access, 4 prep-spaces, and 2 employee parking spaces.

Ingress/Egress to the site will utilize the existing access from US-444. The existing 35-ft easement (ORB 4585 PG 32) is proposed to be vacated and replaced with a 24-ft easement for access and utilities and relocate the existing US-441 access apron westerly to facilitate more efficient traffic flow for ingress/egress to the site. The frontage road will continue to provide interconnected access between the Morningside Drive (east) through the subject property to the Spring Harbor Blvd (west). Pedestrian access will be provided through a sidewalk connection to the existing sidewalk along US Highway 441.

The site layout proposes a storm water retention pond on the south end of the project site. The retention pond will capture storm water runoff onsite and will also act as a buffer to the residential properties to the south and east of the site. A 35-foot landscaped buffer (Type B) will be installed along properties which abut residential zoned properties. An eight foot (8') vinyl fence will be installed along the eastern property line which abuts the single family dwelling unit within the Lake Gertrude Groves subdivision to further enhance screening and buffering efforts from the storm water pond.

The property has been previously developed and is not extensively wooded and the impacts of the proposed site improvements will remove existing trees. The applicant has included a tree replacement mitigation plan. New tree plantings will be extensive within all open areas and surrounding the storm water pond.

ATTACHMENTS:

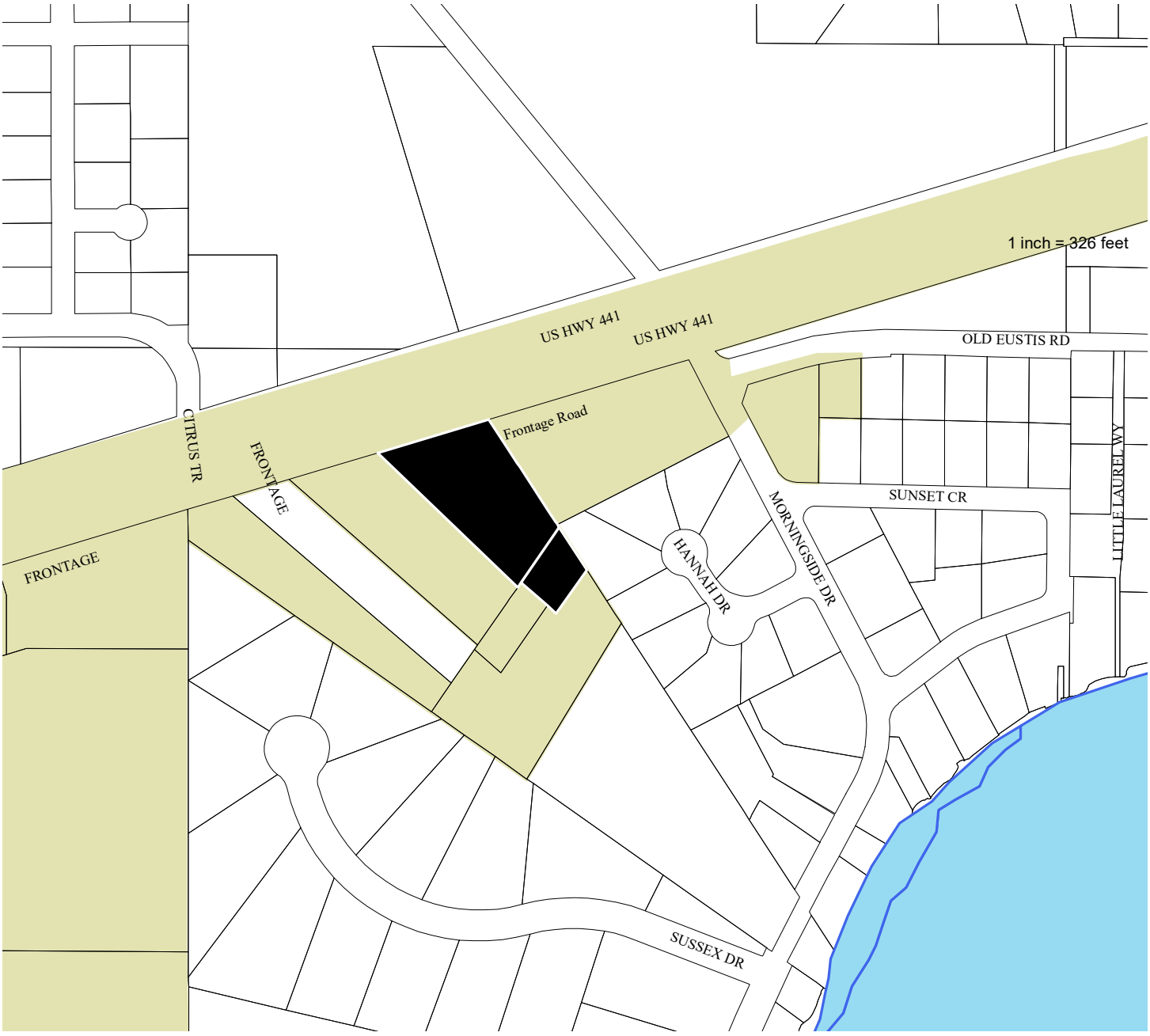
Vicinity Map
Cross-Access Easement Draft
Elevations
Site Plan
Application

Big Dan's Car Wash

Application for Site Plan

1.79 Acres

N



Map Date: 3/17/2023

Legend

- Subject Parcels
- Wetlands
- City Limits

510 255 0 510 Feet

CITY OF MOUNT DORA

After recording, please return to:

Michael R. Rocha
Brooks Rocha, PLLC
400 N. Tampa Street, Suite 1910
Tampa, Florida 33602

AMENDMENT TO RIGHT-OF-WAY CROSS ACCESS EASEMENT

THIS AMENDMENT TO RIGHT-OF-WAY CROSS ACCESS EASEMENT (this "Amendment") is made and entered into this _____ day of _____, 2023, by and between **BD RC MT. DORA, LP**, a Delaware limited partnership ("BD RC"), whose mailing address is 330 E. Crown Point Rd., Winter Garden, Florida 34787, and **THE CITY OF MOUNT DORA**, a political subdivision of the State of Florida (the "City"), whose mailing address is 510 North Baker Street, Mount Dora, Florida 32757.

RECITALS:

WHEREAS, EJB Properties, LLC, a Florida limited liability company ("EJB Properties"), as Grantor, executed that certain Right-of-Way Cross Access Easement in favor of the City, as Grantee, dated January 21, 2015 and recorded in Official Records Book 4585, Page 32 of the Public Records of Lake County, Florida (the "Easement"), which granted the City a perpetual, non-exclusive right of way and public easement for ingress and egress over and across a portion of certain real property owned by EJB Properties located in Lake County, Florida and more particularly described in the Easement as the "easement area";

WHEREAS, pursuant to that certain Special Warranty Deed dated May 24, 2023 and recorded in Official Records Book 6150, Page 748 of the Public Records of Lake County, Florida, BD RC is the current owner of the real property burdened by the Easement; and

WHEREAS, BD RC and the City desire to amend the Easement in order to modify the easement area thereunder as more particularly set forth herein.

NOW, THEREFORE, in consideration of the sum of Ten and No/100 Dollars ($10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, BD RC and the City agree as follows:

1. Recitals; Exhibits. The above recitals are true and correct and, along with all exhibits attached hereto, are incorporated herein by reference.

2. Definitions. Capitalized terms used but not defined in this Amendment shall have the meanings given to them in the Easement.

3. Easement Area. Exhibit "A" and Exhibit "B" to the Easement, which describe the easement area by sketch and legal description, are hereby deleted in their entirety and replaced with the Exhibit "A" attached to this Amendment. No portion of the land described in the original

Easement, which is not included in the land described on Exhibit "A" attached hereto, constitutes part of the easement area under the Easement.

4. Maintenance. It is understood and agreed that BD RC shall be solely responsible for maintenance of the Easement Area, ensuring that the same is kept in good, safe and passable condition at all times.

5. Ratification. Except as specifically modified hereby, the Easement shall remain unamended and in full force and effect, and the Easement is hereby ratified and confirmed by the parties hereto.

6. Counterparts. This Amendment may be executed in separate counterparts, each of which shall be deemed an original, and all of which when taken together, shall constitute one and the same instrument.

[*Signatures on Following Pages*]

IN WITNESS WHEREOF, the Parties hereto have executed this Amendment as of the date first above written.

BD RC:

Signed, sealed and delivered
in the presence of

BD RC MT. DORA, LP, a Delaware limited partnership

By: REAL CAPITAL CAR WASH LOWER FUND, L.P., a Delaware limited partnership, its General Partner

By: Real Capital Car Wash Upper Fund, L.P., an Ontario (Canada) limited partnership, its General Partner

By: Real Capital Car Wash Fund GP, LLC, a Delaware limited liability company, its General Partner

By: _____
Name: Christopher Harris
Title: Manager

_____
Name:_____
(Type or Print Name)

_____
Name:_____
(Type or Print Name)

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization on this ____ day of _____, 2023, by Christopher Harris, as Manager of Real Capital Car Wash Fund GP, LLC, a Delaware limited liability company, the General Partner of Real Capital Car Wash Upper Fund, L.P., an Ontario (Canada) limited partnership, the General Partner of Real Capital Car Wash Lower Fund, L.P., a Delaware limited partnership, the General Partner of BD RC MT. DORA, LP, a Delaware limited partnership, on behalf of the company and partnerships. He ☐ is personally known to me or ☐ who has produced a valid driver's license as identification.

_____
Notary Public

_____
(Print, Type or Stamp Name)

My Commission Expires:

[*Signatures Continue on Following Page*]

The Easement granted by this instrument is hereby accepted by the City of Mount Dora this _____ day of _____, 2023, pursuant to the authority granted to the City Manager under City of Mount Dora Resolution 2017-150.

CITY:

THE CITY OF MOUNT DORA,
a municipal corporation of the State of Florida

By:_____
Print Name: Patrick Comiskey
Title: City Manager

[*End of Signature Pages*]

EXHIBIT "A"

SKETCH OF DESCRIPTION

(NOT A BOUNDARY SURVEY)

LEGAL DESCRIPTION:

THAT PART OF LOT D OF THE J.H. SAGE AND C. KINNEY SUBDIVISION PER PLAT BOOK 1, PAGE 32 OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA DESCRIBED AS FOLLOWS:

COMMENCE AT AT THE NORTHWEST CORNER OF SAID LOT D; THENCE S00°01'23"E, ALONG THE WEST LINE OF LOT D A DISTANCE OF 344.57 FEET TO THE SOUTH RIGHT-OF-WAY LINE OF US 441; THENCE N73°16'55"E, ALONG SAID SOUTH RIGHT-OF-WAY LINE A DISTANCE OF 422.26 FEET TO THE NORTHWEST CORNER OF A PARCEL DESCRIBED IN ORB 4991, PAGE 938; THENCE S46°15'23"E, ALONG THE SOUTHWEST LINE OF SAID PARCEL, LEAVING SAID SOUTH RIGHT-OF-WAY LINE A DISTANCE OF 32.59 TO THE POINT OF BEGINNING; THENCE N74°07'54"E, LEAVING SAID SOUTHWEST LINE A DISTANCE OF 18.66 FEET; THENCE 31.67 FEET ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 20.00 FEET AND CENTRAL ANGLE OF 90°44'01" (CHORD BEARING N28°45'54"E, A DISTANCE OF 28.46 FEET); THENCE N16°36'07"W, A DISTANCE OF 8.67 FEET TO THE SOUTH RIGHT-OF-WAY LINE OF US HIGHWAY 441; THENCE N73°16'55"E, ALONG SAID SOUTH RIGHT OF WAY LINE A DISTANCE OF 30.00 FEET; THENCE S16°36'07"E, LEAVING SAID SOUTH RIGHT-OF-WAY LINE A DISTANCE OF 9.63 FEET; THENCE 31.16 FEET ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 20.00 FEET AND CENTRAL ANGLE OF 89°16'00" (CHORD BEARING S61°14'07"E, A DISTANCE OF 28.10 FEET); THENCE N74°07'54"E, A DISTANCE OF 154.85 FEET TO THE NORTHEAST LINE OF A PARCEL DESCRIBED IN ORB 4991, PAGE 938; THENCE S33°03'24"E, ALONG SAID NORTHEAST LINE A DISTANCE OF 25.12 FEET; THENCE S74°07'54"W, LEAVING SAID NORTHEAST LINE A DISTANCE OF 236.87 FEET TO THE SOUTHWEST LINE OF A PARCEL DESCRIBED IN ORB 4991, PAGE 938; THENCE N46°15'23"W, ALONG SAID SOUTHWEST LINE A DISTANCE OF 27.82 FEET TO THE POINT OF BEGINNING.

CONTAINING 6,811 SQUARE FEET OR 0.156 ACRES, MORE OR LESS.

GRAPHIC SCALE

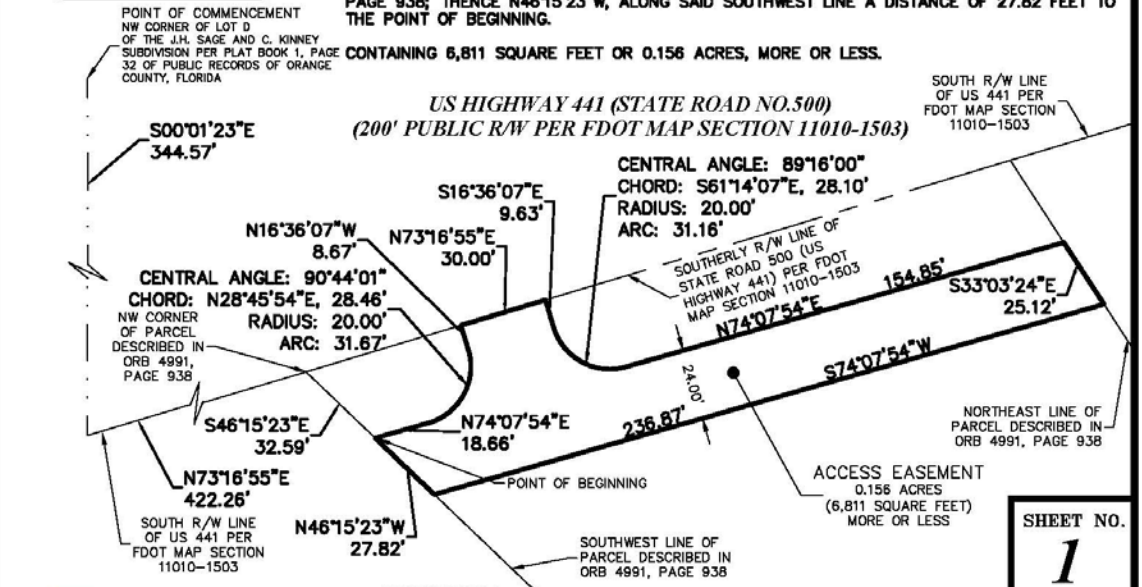
50 0 50

1 inch = 50 Feet

LEGEND

ABBREVIATIONS

ID	IDENTIFICATION
LB	LICENSED BUSINESS NUMBER
LS	LICENSED SURVEYOR
ORB	OFFICIAL RECORDS BOOK
(P)	PER PLAT
PSM	PROFESSIONAL SURVEYOR AND MAPPER
R/W	RIGHT-OF-WAY



SHEET NO. 1 OF 1

EBI Surveying
8415 Sunstate Street
Tampa, Florida 33634
Phone: (813) 886-6080 / Fax: (813) 886-6081
Certificate of Authorization Number: LB-7652

SURVEY REPORT:
1. UNLESS DIGITALLY SIGNED AND SEALED, THIS SKETCH OF DESCRIPTION AND/OR REPORT OR THE COPIES HEREOF ARE NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER. ADDITIONS OR DELETIONS TO SURVEY MAPS OR REPORTS BY OTHER THAN THE SIGNING PARTY OR PARTIES ARE PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.

I HEREBY CERTIFY THAT THIS SKETCH OF DESCRIPTION WAS MADE UNDER MY DIRECTION AND MEETS THE STANDARDS OF PRACTICE REQUIREMENTS OF CHAPTER 5J-17 OF THE FLORIDA ADMINISTRATIVE CODE.

THOMAS PATRICK SERBU LICENSE NUMBER 4744 STATE OF FLORIDA

Digitally signed by Thomas Serbu
Date: 2023.06.20 08:31:16 -04'00'

THOMAS PATRICK SERBU
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA REGISTRATION NUMBER LS-4744
EMAIL: thomas@ebisurvey.com
DATE SIGNED: 6/20/23

DATE: 5/31/2023
DRAWN: EWB / SDN
CHECKED: TPS
REVISION:
FILE: BW44ACCESSSODX.dwg

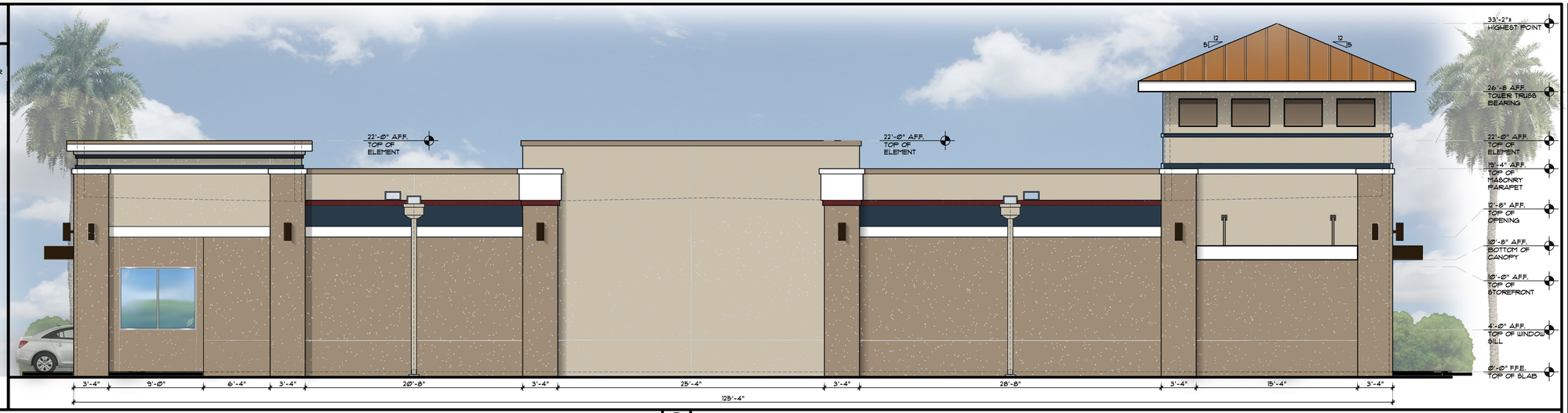
PROJECT NUMBER:
BWRE0044

SKETCH OF DESCRIPTION

ACCESS EASEMENT
17580 US HIGHWAY 441
J.H. SAGE & C. KINNEY SUBDIVISON
LAKE COUNTY, FLORIDA

EXTERIOR FINISH KEY

- METAL SEAMED ROOF SYSTEM. METALLIC COPPER
- SMOOTH SAND FLOAT FINISH STUCCO. COLOR: SW 7535 - SANDY RIDGE
- SMOOTH SAND FLOAT FINISH STUCCO. COLOR: SW 7541 - SANDBAR
- ALUMINUM CANOPY / LIGHTS. COLOR: KYNAR 5200 - RAL* 8022 BLACK BROWN
- E.F.I.S. BAND. COLOR: SW 6034 - FIREWEED
- E.F.I.S. BAND. COLOR: SW 6244 - ANCHORS AWEIGH



1 **EAST EXTERIOR ELEVATION**
SCALE: 3/16" = 1'-Ø"



2 **NORTH EXTERIOR ELEVATION - FACING HWY 441**
SCALE: 3/16" = 1'-Ø"



3 **SOUTH EXTERIOR ELEVATION - TUNNEL ENTRY**
SCALE: 3/16" = 1'-Ø"



4 **WEST EXTERIOR ELEVATION - FACING VACUUMS**
SCALE: 3/16" = 1'-Ø"

REVISIONS	BY

OLIVERI ARCHITECTS
AA 0002921
Member of the American Institute of Architects
32707 US Hwy. 19 • Palm Harbor, FL 34684
Phone 727 . 781 . 7525 • Fax 727 . 781 . 6623
• www.oliverarchitects.com •

© 2023 OLIVERI ARCHITECTS
ALL INFORMATION CONTAINED IN THIS DRAWING IS THE PROPERTY OF OLIVERI ARCHITECTS
ALL RIGHTS RESERVED

DESIGN DEVELOPMENT SCHEME 'B'

New Freestanding Building for:
BIG DAN'S CARWASH
17580 Hwy 441
Mt. Dora, FL 32757
City of Mt. Dora

Date: 02. 27. 23
Scale: AS NOTED
Project Mgr: ADC
Drawn: SLH
Job: 22-208

Sheet
A3

06/02/2023

CONSTRUCTION PLANS FOR:

BIG DAN'S CAR WASH

17580 HIGHWAY 441
MOUNT DORA, FLORIDA 32757

PROJECT TEAM

PROPERTY OWNER:
FRAT HOUSE LLC
11049 BRIDGE HOUSE ROAD
WINDERMERE, FLORIDA 34786

DEVELOPER:
BRIGHTWORK ACQUISITIONS LLC
3708 W. SWANN AVENUE
SUITE 200
TAMPA, FLORIDA 33609
PH: (813) 965-1580
CONTACT: TIMOTHY AUSTIN SIMMONS

SURVEYORS:
EBI SURVEYING
8415 SUNSTATE STREET
TAMPA, FLORIDA 33634
PH: (813) 886-6080
CONTACT: THOMAS SERBU
EMAIL: thomas@ebisurveying.com

CIVIL ENGINEER:
INFINITY ENGINEERING GROUP, LLC
1208 EAST KENNEDY BOULEVARD
SUITE 230
TAMPA, FLORIDA 33602
PH: (813) 434-4770
CONTACT: NISIT SAPPARKHAO

ARCHITECT:
OLIVERI ARCHITECTS
1004 INDIANA AVENUE
PALM HARBOR, FLORIDA 34683
PH: (727) 781-7525
CONTACT: AARON COY

LEGAL DESCRIPTION:

LEGAL DESCRIPTION:

THAT PART OF LOT "D" IN J.H. SAGE AND C. KINNEY SUBDIVISION, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 1, PAGE 32, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA, BOUNDED AND DESCRIBED AS FOLLOWS: FROM THE NORTHWEST CORNER OF SAID LOT "D", RUN THENCE SOUTH 00°03'20" EAST, ALONG THE WEST LINE OF SAID LOT "D", A DISTANCE OF 415.10 FEET; THENCE RUN SOUTH 54°52'50" EAST, A DISTANCE OF 638.15 FEET, RUN THENCE NORTH 34°17'30" EAST, A DISTANCE OF 325.00 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION; FROM SAID POINT OF BEGINNING, CONTINUE NORTH 34°17'30" EAST TO THE NORTHEASTERLY LINE OF SAID LOT "D"; RUN THENCE NORTHWESTERLY ALONG SAID NORTHEASTERLY LINE TO THE SOUTHERLY LINE OF THE RIGHT OF WAY OF U.S. HIGHWAY 441; RUN THENCE SOUTHWESTERLY ALONG THE SOUTHERLY LINE OF SAID RIGHT OF WAY TO A POINT THAT IS NORTH 46°11'26" WEST OF THE POINT OF BEGINNING; RUN THENCE SOUTH 46°11'26" EAST TO THE POINT OF BEGINNING.

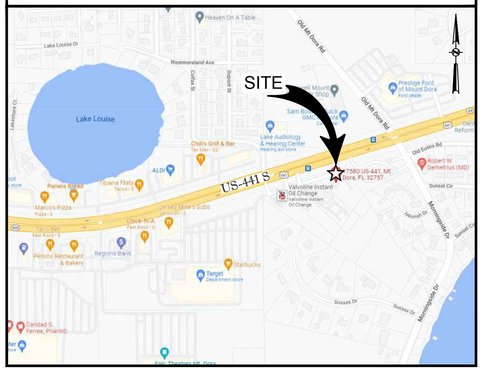
AND

COMMENCE AT A 4" X 4" CONCRETE MONUMENT STAMPED PLS 1916 ON THE WESTERLY LINE OF LOT "D", J.H. SAGE AND C. KINNEY SUBDIVISION, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 1, PAGE 32, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA, SAID POINT LYING SOUTH 00 DEGREES 03'20" EAST, A DISTANCE OF 415.10 FEET FROM THE NORTHWEST CORNER OF SAID LOT "D"; RUN THENCE SOUTH 54 DEGREES 52'50" EAST, A DISTANCE OF 638.15 FEET TO A 4" WIDE OCTAGON SHAPED CONCRETE MONUMENT WITH NO NUMBER; RUN THENCE NORTH 34 DEGREES 17'30" EAST, A DISTANCE OF 337.50 FEET TO A 5/8" REBAR AND CAP STAMPED LB 4709 AND THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE CONTINUE TO RUN NORTH 34 DEGREES 17'30" EAST, A DISTANCE OF 144.60 FEET TO A 5/8" REBAR AND CAP STAMPED PLS 3351; RUN THENCE SOUTH 33 DEGREES 04'27" EAST, A DISTANCE OF 108.34 FEET TO A 5/8" REBAR AND CAP STAMPED PLS 3351; RUN THENCE SOUTH 34 DEGREES 17'30" WEST, A DISTANCE OF 114.84 FEET TO A 5/8" REBAR AND CAP STAMPED PLS 3351; RUN THENCE NORTH 48 DEGREES 54'15" WEST, A DISTANCE OF 100.71 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION.

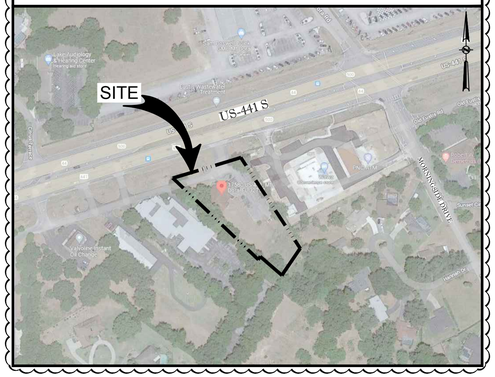
LANE CLOSURE RESTRICTIONS
SECTION 11010 MP1.739

INT./US ROUTE NO.	STATE ROAD NO.		COUNTY	SECTION	SHEET
US 441	500		LAKE	11010000	2 OF 2
		COUNT STATION	475		6 lanes
M.P.	17.47	TO M.P.	20.057	DATE	05/25/22
NO LANE CLOSURES	12:00 PM	TO	6:00 PM	DIRECTION	EASTBOUND
NO LANE CLOSURES	6:00 AM	TO	10:00 PM	DIRECTION	WESTBOUND
	RESTRICTIONS				

VICINITY MAP



AERIAL MAP



PARCEL ID: 24-19-26-1602-000-00D03 & 24-19-26-1602-000-00D02
LAKE COUNTY, FLORIDA

DRAWING INDEX

SHEET NO.	SHEET TITLE
C00.00	COVER SHEET
C00.01	CIVIL SPECIFICATIONS
C01.01	DEMOLITION PLAN
C02.01	SITE PLAN
C03.01	GRADING PLAN
C03.02	STORM PIPING PLAN
C04.01	UTILITY PLAN
C04.02	VACUUM SYSTEM PLAN
C04.03	MAT WASHER WATER SUPPLY PLAN
C05.01	DETAILS
C05.02	DETAILS
C05.03	LIFT STATION DETAILS
C05.04	CITY OF MOUNT DORA STANDARD DETAILS
C05.05	CITY OF MOUNT DORA STANDARD DETAILS
C05.06	FDOT STANDARD DETAILS
C05.07	FDOT STANDARD DETAILS
C05.08	CROSS SECTIONS
C06.01	SWPPP GENERAL REQUIREMENTS
C06.02	EROSION CONTROL PLAN PHASE I
C06.03	EROSION CONTROL PLAN PHASE II
C06.04	EROSION AND SEDIMENTATION CONTROL DETAILS
LP01.01	LANDSCAPE PLAN
LP02.01	TREE INVENTORY PLAN
LP03.01	LANDSCAPE DETAILS
IR01.01	IRRIGATION PLAN
IR02.01	IRRIGATION DETAILS
EP1	SITE PHOTOMETRIC PLAN
EP2	SITE PHOTOMETRIC DETAILS
SA01.01	SITE ACCESS PLAN
1 OF 1	SURVEY

INFINITY ENGINEERING GROUP, LLC

1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889

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

IEG JOB NO. 365-01.00

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY NISIT SAPPARKHAO, PE ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY. FAC 61G15-23.004

GENERAL NOTE

1. ALL CONSTRUCTION SHALL BE EXECUTED AS SHOWN ON THESE PLANS. ANY REVISIONS AND/OR DEVIATIONS MUST BE APPROVED BY THE ENGINEER OF RECORD AND MAY RESULT IN ADDITIONAL PERMITTING EFFORTS THROUGH THE RELATED PERMITTING AGENCY. THE CONTRACTOR SHALL ACKNOWLEDGE THAT REVISIONS AND/OR DEVIATIONS MAY RESULT IN ADDITIONAL PERMITTING REQUIREMENTS AND POSSIBLY AFFECT SCHEDULING OF WORK.

2. UNLESS OTHERWISE NOTED ON PLANS, OR WITHIN THE PROJECT SPECIFICATIONS, ALL MATERIALS AND CONSTRUCTION ARE TO BE IN ACCORDANCE WITH DESIGN AND CONSTRUCTION STANDARDS OF THE PERMITTING AGENCY HAVING JURISDICTION. THE LOCALLY ADOPTED BUILDING CODE; AND ALL APPLICABLE LOCAL AND STATE CODES AND ORDINANCES.

3. PERMITS MAY BE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR IS TO ACKNOWLEDGE AND SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR WORK IN THE PUBLIC RIGHT-OF-WAY.

⚠ 4. FLORIDA LAW (F.S. 556) UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT MANDATES THAT EXCAVATORS/CONTRACTORS SHALL CONTACT SUNSHINE 811 (FKA: SUNSHINE STATE ONE-CALL OF FLORIDA) BY CALLING 800-432-4770 OR 811 AT LEAST 2 FULL BUSINESS DAYS PRIOR TO BEGINNING ANY EXCAVATION OR DEMOLITION TO ALLOW MEMBER OPERATORS AN OPPORTUNITY TO IDENTIFY AND MARK THEIR UNDERGROUND FACILITIES AND APPROPRIATELY RESPOND TO THE POSITIVE RESPONSE SYSTEM.

5. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES FOR VERIFICATION OF UTILITIES WITHIN THE LIMITS OF CONSTRUCTION. CALL AREA ONE CALL SYSTEM 48 HOURS PRIOR TO ANY EXCAVATION.

6. THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER IN A TIMELY MANNER.

7. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING PERMANENT SURVEY MONUMENTS AND BENCHMARKS FROM DISTURBANCE. SURVEY MONUMENTS DISTURBED BY CONSTRUCTION ARE TO BE REPLACED AND ADJUSTED VIA A LAND SURVEYOR REGISTERED IN THE STATE FOR WHICH THE PROJECT IS LOCATED.

⚠ 8. THE CONTRACTOR SHALL COORDINATE WORK EFFORTS WITH THE OWNER TO MINIMIZE TRAFFIC INTERFERENCE AND OPERATIONS OF THE FACILITIES.

9. NO BLASTING OR BURNING IS ALLOWED ON THE PROJECT.

10. IT IS NOT EXPECTED THAT HAZARDOUS MATERIALS WILL BE ENCOUNTERED, HOWEVER IF MATERIALS SUSPECTED OF CONTAINING HAZARDOUS MATERIALS ARE ENCOUNTERED, DO NOT DISTURB; IMMEDIATELY NOTIFY ENGINEER AND OWNER. HAZARDOUS MATERIALS WILL BE REMOVED BY OWNER UNDER A SEPARATE CONTRACT.

REGULATORY STANDARDS AND REQUIREMENTS

1. COMPLY WITH HAULING AND DISPOSAL REGULATIONS OF AUTHORITIES HAVING JURISDICTION.

2. COMPLY WITH ANSI A10.6, "SAFETY REQUIREMENTS FOR CONSTRUCTION AND DEMOLITION."

3. COMPLY WITH NFPA 241, "SAFEGUARDING CONSTRUCTION, ALTERATION AND DEMOLITION OPERATIONS."

⚠ 4. APPROPRIATE REFERENCES TO CITY OF MOUNT DORA CODES, ORDINANCES, AND DESIGN AND CONSTRUCTION STANDARDS AND DETAILS; ST JOHNS RIVER WATER MANAGEMENT DISTRICT REGULATIONS; FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REGULATIONS FOR UTILITIES; FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NPDES REGULATIONS: AND OSHA REGULATIONS AND FLORIDA TRENCH SAFETY ACT.

DEMOLITION AND CLEARING

1. DEMOLITION AND CLEARING OPERATIONS SHALL CONFORM TO APPLICABLE REGULATIONS RELATING TO ENVIRONMENTAL REQUIREMENTS DISPOSAL OF DEBRIS, BURNING OF DEBRIS ON SITE, AND USE OF HERBICIDES.

2. DEMOLITION WASTE SHALL BE DISPOSED OF IN A LEGAL MANNER. REMOVED DEMOLITION WASTE MATERIALS FROM PROJECT SITE AND DISPOSE OF WASTE IN AN EPA-APPROVED LANDFILL ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION. DO NOT BURY OR BURN DEMOLITION WASTE ON-SITE.

3. HISTORIC ITEMS, RELICS, ANTIQUES, AND SIMILAR OBJECTS, INCLUDING, BUT NOT LIMITED TO CORNERSTONES AND THEIR CONTENTS, COMMEMORATIVE PLAQUES AND TABLETS, AND OTHER ITEMS OF INTEREST OF VALUE TO OWNER THAT MAY BE UNCOVERED DURING DEMOLITION REMAIN THE PROPERTY OF THE OWNER.

4. ARRANGE DEMOLITION SCHEDULE SO AS NOT TO INTERFERE WITH OWNER'S ON-SITE OPERATIONS OR OPERATIONS OF ADJACENT OCCUPIED BUILDINGS.

5. CONDUCT BUILDING DEMOLITION AND DEBRIS REMOVAL OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKWAYS, AND OTHER ADJACENT OCCUPIED AND USED FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, WALKWAYS, OR OTHER ADJACENT OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM OWNER AND AUTHORITIES HAVING JURISDICTION.

6. AUTHORITY FOR PERFORMING SITE CLEARING INDICATED ON PROPERTY ADJOINING OWNERS PROPERTY MUST BE OBTAINED BY OWNER PRIOR TO COMMENCEMENT OF CLEARING. DO NOT PROCEED WITH WORK ON ADJOINING PROPERTY UNTIL DIRECTED BY ENGINEER.

7. PRIOR TO COMMENCEMENT OF DEMOLITION OPERATIONS:
   a. VERIFY THAT HAZARDOUS MATERIALS, IF PRESENT, HAVE BEEN REMEDIATED.
   b. REVIEW PROJECT RECORD DRAWINGS OF EXISTING BUILDING AND EXISTING SITE IMPROVEMENTS.
   c. INVENTORY AND RECORD THE CONDITION OF ITEMS TO BE REMOVED AND SALVAGED. TAKE DIGITAL PHOTOGRAPHS OR VIDEO OF PROJECT SITE AND SURROUNDING PROPERTIES, INCLUDING EXISTING ITEMS TO REMAIN DURING CONSTRUCTION OPERATIONS, RECORD CONDITIONS THAT MIGHT BE MISCONSTRUED AS DAMAGE CAUSED BY SALVAGE OPERATIONS.
   d. CLEAN, PACK, IDENTIFY, AND TRANSPORT SALVAGED ITEMS TO STORAGE AREA DESIGNATED BY OWNER.
   e. REMOVE REFRIGERANT FROM THE MECHANICAL EQUIPMENT ACCORDING TO 40 CFR 82 AND REGULATIONS OF AUTHORITIES HAVING JURISDICTION.
   f. COORDINATE ANY ADDITIONAL REQUIREMENTS FOR DEMOLISHING OR RELOCATING SITE MECHANICAL AND ELECTRICAL ITEMS WITH OWNER AND OTHER AUTHORITIES HAVING JURISDICTION.
   g. ASSURE THAT ANY REQUIRED INITIAL EROSION AND SEDIMENT CONTROL MEASURES ARE INSTALLED AND IN WORKING ORDER.
   h. LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP-OFF EXISTING UTILITIES SERVING BUILDINGS AND STRUCTURES TO BE DEMOLISHED. CUT AND REMOVE PIPE OR CONDUIT A MINIMUM OF 24 INCHES BELOW GRADE. CAP, VALVE, PLUG AND SEAL REMAINING PORTION OF PIPE OR CONDUIT.

⚠ i. DO NOT START DEMOLITION WORK UNTIL UTILITY DISCONNECTION AND SEALING HAVE BEEN COMPLETED AND VERIFIED IN WRITING. ANY DISCONNECTION AND SEALING OF UTILITIES SHALL BE PERFORMED BY AND/OR WITNESSED BY THAT UTILITY.

8. PRIOR TO COMMENCEMENT OF SITE CLEARING OPERATIONS, VERIFY THE FOLLOWING:
   a. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES ARE IN PLACE AND IN WORKING ORDER.

⚠ b. FLORIDA LAW (F.S. 556) UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT MANDATES THAT EXCAVATORS/CONTRACTORS SHALL CONTACT SUNSHINE 811 (FKA: SUNSHINE STATE ONE-CALL OF FLORIDA) BY CALLING 800-432-4770 OR 811 AT LEAST 2 FULL BUSINESS DAYS PRIOR TO BEGINNING ANY EXCAVATION OR DEMOLITION TO ALLOW MEMBER OPERATORS AN OPPORTUNITY TO IDENTIFY AND MARK THEIR UNDERGROUND FACILITIES AND APPROPRIATELY RESPOND TO THE POSITIVE RESPONSE SYSTEM.
   c. EXISTING SITE IMPROVEMENTS AND UTILITIES TO REMAIN HAVE BEEN PROTECTED.
   d. BENCHMARKS AND SURVEY CONTROL POINTS HAVE BEEN PROTECTED FROM DISTURBANCE.

⚠ e. TREES AND VEGETATION TO REMAIN (OR TO BE RELOCATED) HAVE BEEN LOCATED AND CLEARLY FLAGGED IN ACCORDANCE WITH TREE PROTECTION AND TRIMMING REQUIREMENTS. TREES AND VEGETATION TO REMAINHAVE BEEN FENCED OFF FROM ANY EQUIPMENT, MATERIAL, AND PERSONNEL DAMAGE.

9. COORDINATE UTILITY DEMOLITION AND ABANDONMENT WITH UTILITY COMPANY OR AUTHORITY HAVING JURISDICTION.

10. IN THE EVENT BUILDINGS IMMEDIATELY ADJACENT TO THE DEMOLITION AREA WILL BE OCCUPIED, CONDUCT SITE DEMOLITION SO OPERATIONS OF OCCUPIED BUILDINGS WILL NOT BE DISRUPTED. MAINTAIN ACCESS TO AND FROM EXISTING WALKWAYS, EXITS, AND OTHER FACILITIES USED BY OCCUPANTS OF ADJACENT BUILDINGS.

11. PROTECT EXISTING FACILITIES AND ADJACENT WALKWAYS, LOADING DOCKS, BUILDING ENTRIES, AND OTHER BUILDING FACILITIES DURING DEMOLITION OPERATIONS. MAINTAIN EXITS FROM EXISTING BUILDINGS.

12. ERECT TEMPORARY PROTECTION, SUCH AS WALKS, FENCES, RAILINGS, CANOPIES, AND COVERED PASSAGEWAYS, AS NECESSARY, AND AS REQUIRED BY AUTHORITIES HAVING JURISDICTION. REMOVE TEMPORARY BARRIERS AND PROTECTIONS WHERE HAZARDS NO LONGER EXIST. WHERE OPEN EXCAVATIONS OR OTHER HAZARDOUS CONDITIONS REMAIN, LEAVE TEMPORARY BARRIERS AND PROTECTIONS IN PLACE.

13. PROTECT EXISTING UTILITIES FROM DAMAGE DURING DEMOLITION OPERATIONS. MAINTAIN OPERATION OF UTILITY SERVICES TO REMAIN. PROVIDE AT LEAST 72 HOURS' NOTICE TO OCCUPANTS OF AFFECTED BUILDINGS IF SHUTDOWN OF SERVICE IS REQUIRED.

14. IF REMOVAL, RELOCATION, OR ABANDONMENT OF UTILITY SERVICES WILL AFFECT ADJACENT OCCUPIED BUILDINGS, MAINTAIN CONTINUITY OF SERVICE TO ADJACENT BUILDINGS BY PROVIDING TEMPORARY UTILITIES THAT BYPASS BUILDINGS AND STRUCTURES TO BE DEMOLISHED. TEMPORARY BYPASS SERVICES SHALL BE PROVIDED IN ACCORDANCE WITH UTILITY COMPANY OR AUTHORITIES HAVING JURISDICTION.

15. TEMPORARY SHORING: PROVIDE AND MAINTAIN INTERIOR AND EXTERIOR SHORING, BRACING, OR STRUCTURAL SUPPORT TO PRESERVE STABILITY AND PREVENT UNEXPECTED MOVEMENT OR COLLAPSE OF EXISTING IMPROVEMENTS BEING DEMOLISHED. ALL SHORING OPERATIONS SHALL BE DESIGNED BY A LICENSED PROFESSIONAL AND INSTALLED PER OSHA REQUIREMENTS.

16. DEMOLITION OF STRUCTURAL FRAMING MEMBERS SHALL PROCEED SYSTEMATICALLY, FROM HIGHER TO LOWER LEVEL. COMPLETE BUILDING DEMOLITION OPERATIONS ABOVE EACH FLOOR OR TIER BEFORE DISTURBING SUPPORTING MEMBERS ON THE NEXT LOWER LEVEL. REMOVE DEBRIS FROM ELEVATED PORTIONS OF THE BUILDING BY CHUTE, HOIST, OR OTHER DEVICE THAT WILL CONVEY DEBRIS TO GRADE LEVEL IN A CONTROLLED DESCENT.

17. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT, AND DEBRIS CAUSED BY BUILDING DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE BUILDING DEMOLITION OPERATIONS BEGAN.

18. CLEARING AND GRUBBING:
   a. REMOVE OBSTRUCTIONS, TREES, SHRUBS, GRASS, AND OTHER VEGETATION TO PERMIT INSTALLATION OF NEW CONSTRUCTION. DO NOT REMOVE TREES, SHRUBS, AND OTHER VEGETATION INDICATED TO REMAIN OR TO BE RELOCATED.

⚠ b. CUT MINOR ROOTS AND BRANCHES OF TREES INDICATED TO REMAIN IN A CLEAN AND CAREFUL MANNER AND ONLY WHERE SUCH ROOTS AND BRANCHES OBSTRUCT INSTALLATION OF NEW CONSTRUCTION. ANY TRIMMING OF TREE BRANCHES AND/OR ROOTS SHALL BE APPROVED AND/OR PERFORMED BY A LICENSED ARBORIST.
   c. CLEAR UNDERGROWTH AND DEADWOOD WITHOUT DISTURBING SUBSOIL.
   d. GRIND STUMPS AND REMOVE ROOTS, OBSTRUCTIONS, AND DEBRIS EXTENDING TO A DEPTH BELOW EXPOSED SUBGRADE AS FOLLOWS:
      - FOOTINGS, SLABS ON GRADE AND BOTTOM SLABS OF STRUCTURES: 36 INCHES.
      - ROADS AND PAVEMENT AREAS: 18 INCHES.
      - AREAS TO BE GRASSED OR LANDSCAPED: 8 INCHES.
      - AREAS TO BE FILLED: 12 INCHES.
   e. USE ONLY HAND METHODS FOR GRUBBING WITHIN TREE PROTECTION ZONES.
   f. CHIP REMOVED TREE BRANCHES AND DISPOSE OF OFF-SITE.
   g. UNLESS FURTHER EXCAVATION OF EARTHWORK IS INDICATED, FILL DEPRESSIONS CAUSED BY CLEARING AND GRUBBING OPERATIONS WITH SATISFACTORY SOIL MATERIAL. PLACE FILL MATERIAL IN HORIZONTAL LAYERS NOT EXCEEDING A LOOSE DEPTH OF 8 INCHES, AND COMPACT EACH LAYER TO A DENSITY EQUAL TO ADJACENT ORIGINAL GROUND.

19. TOPSOIL STRIPPING:
   a. REMOVE SOD AND GRASS BEFORE STRIPPING TOPSOIL.
   b. STRIP TOPSOIL TO WHATEVER DEPTHS ARE ENCOUNTERED IN A MANNER TO PREVENT INTERMINGLING WITH UNDERLYING SUBSOIL OR OTHER WASTE MATERIALS. REMOVE SUBSOIL AND NON-SOIL MATERIALS FROM TOPSOIL, INCLUDING TRASH, DEBRIS, WEEDS, ROOTS, AND OTHER WASTE MATERIALS.
   c. STOCKPILE TOPSOIL MATERIALS AWAY FROM EDGE OF EXCAVATIONS WITHOUT INTERMIXING WITH SUBSOIL. GRADE AND SHAPE STOCKPILES TO DRAIN SURFACE WATER. COVER TO PREVENT WINDBLOWN DUST. LIMIT HEIGHT OF TOPSOIL STOCKPILES TO 72 INCHES. DO NOT STOCKPILE TOPSOIL WITHIN TREE PROTECTION ZONES. STOCKPILE SURPLUS TOPSOIL TO ALLOW FOR RESPREADING DEEPER TOPSOIL.

20. SITE IMPROVEMENTS:
   a. REMOVE EXISTING ABOVE- AND BELOW-GRADE IMPROVEMENTS AS INDICATED AND AS NECESSARY TO FACILITATE NEW CONSTRUCTION. REMOVE SLABS, PAVING, CURBS, GUTTERS, AND AGGREGATE BASE AS INDICATED.
   b. UNLESS EXISTING FULL-DEPTH JOINTS COINCIDE WITH LINE OF DEMOLITION, NEATLY SAW-CUT LENGTH OF EXISTING PAVEMENT TO REMAIN BEFORE REMOVING EXISTING PAVEMENT. SAWCUT ALL FACES VERTICALLY.
   c. PAINT CUT ENDS OF STEEL REINFORCEMENT IN CONCRETE TO REMAIN TO PREVENT CORROSION.

21. DISPOSAL:
   a. REMOVE SURPLUS SOIL MATERIAL, UNSUITABLE TOPSOIL, OBSTRUCTIONS, DEMOLISHED MATERIALS, AND WASTE MATERIALS, INCLUDING TRASH AND DEBRIS, AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY.
   b. REMOVE AND TRANSPORT DEBRIS AND RUBBISH IN A MANNER THAT WILL PREVENT SPILLAGE ON STREETS OR ADJACENT AREAS. CLEAN UP SPILLAGE FROM STREETS AND ADJACENT AREAS.
   c. COMPLY WITH FEDERAL, STATE AND LOCAL HAULING AND DISPOSAL REGULATIONS.
   d. SEPARATE RECYCLABLE MATERIALS PRODUCED DURING SITE CLEARING FROM OTHER NON-RECYCLABLE STORE OR STOCKPILE WITHOUT INTERMIXING WITH OTHER MATERIALS AND TRANSPORT THEM TO RECYCLING FACILITIES.

TREE PROTECTION AND TRIMMING

1. INSTALL TEMPORARY FENCING AROUND TREE PROTECTION ZONES TO PROTECT TREES AND VEGETATION DESIGNATED TO REMAIN FROM CONSTRUCTION DAMAGE. MAINTAIN TEMPORARY FENCING AROUND TREE PROTECTION ZONES. AND REMOVE WHEN CONSTRUCTION IS COMPLETE.

2. KEEP TREE PROTECTION ZONES FREE OF WEEDS AND TRASH.

3. DO NOT STORE CONSTRUCTION MATERIALS, DEBRIS, OR EXCAVATED MATERIAL INSIDE TREE PROTECTION ZONE; OR PERMIT VEHICLES OR FOOT TRAFFIC WITHIN TREE PROTECTION ZONE, OR ALLOW FIRES WITHIN TREE PROTECTION ZONE.

4. PROTECT TREE ROOT SYSTEMS FROM THE FOLLOWING:
   a. DAMAGE CAUSED BY RUNOFF OR SPILLAGE OF NOXIOUS MATERIALS WHILE MIXING, PLACING, OR STORING CONSTRUCTION MATERIALS;
   b. DAMAGE CAUSED BY PONDING, ERODING, OR EXCESSIVE WETTING FROM DEWATERING OPERATIONS.

5. UNLESS OTHERWISE INDICATED, DO NOT EXCAVATE WITHIN TREE PROTECTION ZONES. WHERE EXCAVATION FOR NEW CONSTRUCTION IS UNAVOIDABLE, HAND CLEAR AND EXCAVATE TO MINIMIZE DAMAGE TO ROOT SYSTEMS.

6. WHERE UTILITY TRENCHES ARE UNAVOIDABLE WITHIN TREE PROTECTION ZONES, TUNNEL UNDER OR AROUND ROOTS BY DRILLING, AUGER BORING, PIPE JACKING, OR DIGGING BY HAND. DO NOT CUT MAIN LATERAL ROOTS OR TAPROOTS.

7. PROMPTLY REPAIR TREES DAMAGED BY CONSTRUCTION OPERATIONS WITHIN 24 HOURS. TREAT DAMAGED TRUNKS, LIMBS, AND ROOTS ACCORDING TO ARBORIST'S WRITTEN INSTRUCTIONS.

8. TREE PRUNING: PRUNE TREES ACCORDING TO ANSI A300 (PART 1), "TREE, SHRUB, AND OTHER WOODY PLANT MAINTENANCE - STANDARD PRACTICES (PRUNING)."

EROSION AND SEDIMENTATION CONTROL

1. PRIOR TO COMMENCEMENT OF ANY CLEARING AND EXCAVATION WITHIN A WORK AREA, ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND IN WORKING ORDER.

⚠ 2. PERFORM WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE STATE AND FEDERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT. ALSO REFERENCE THE WATER MANAGEMENT DISTRICT AND CITY REQUIREMENTS.

3. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EROSION AND SEDIMENT CONTROL FEATURES TO PREVENT AND CONTROL SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION AREAS AND ENTERING EXISTING STORMWATER FACILITIES AND SURFACE WATERS. ADDITIONAL MEASURES BEYOND THOSE SHOWN WITHIN THESE PLANS MAY BE NECESSARY DURING CONSTRUCTION, INCLUDING TEMPORARY VEGETATIVE MEASURES AND INSTALLATION OF OTHER SILT TRAPPING MEASURES.

4. THE CONTRACTOR IS REQUIRED TO ADJUST THE EROSION AND SEDIMENT CONTROLS AS NECESSARY AND AS SHOWN ON THE DRAWINGS: AND ADD ADDITIONAL CONTROL MEASURES AS REQUIRED TO INSURE THE SITE MEETS ALL FEDERAL, STATE AND LOCAL EROSION AND SEDIMENT CONTROL REQUIREMENTS.

5. ALL BEST MANAGEMENT EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY OPERATIONS; OR SOMEONE APPOINTED BY THE SUPERINTENDENT, AT LEAST EVERY OTHER WEEK AND FOLLOWING A STORM EVENT OF 0.5 INCHES OR GREATER.

6. ALL BEST MANAGEMENT CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.

EARTHWORK

1. IN THE EVENT OF ANY UNFORESEEN CONDITIONS THAT ARE ENCOUNTERED AND NOT COVERED BY THESE NOTES DURING GRADING OPERATIONS, THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.

2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND RELATED OFF-SITE WORK SO AS TO ESTABLISH THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SPECIFIED WITHIN THE PLANS.

3. ADEQUATE SHORING IS TO BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION. ALL SHORING AND ASSOCIATED TEMPORARY STRUCTURES SHALL BE DESIGNED BY A LICENSED PROFESSIONAL AND INSTALLED PURSUANT TO OSHA REQUIREMENTS.

SOIL MATERIALS:

1. UNSATISFACTORY SOILS CONSIST OF SOIL CLASSIFICATION GROUPS ML, OL, CH, MH, OH, AND PT, OR A COMBINATION OF THESE GROUPS. UNSATISFACTORY SOILS ALSO INCLUDE SATISFACTORY SOILS NOT MAINTAINED WITHIN 3 PERCENT OF OPTIMUM MOISTURE CONTENT AT TIME OF COMPACTION.

2. SATISFACTORY SOILS: ASTM D 2487 SOIL CLASSIFICATION GROUPS AS IDENTIFIED ON THE DRAWINGS, OR A COMBINATION OF THESE GROUPS; FREE OF ROCK OR GRAVEL LARGER THAN 3 INCHES IN ANY DIMENSION, DEBRIS WASTE, FROZEN MATERIALS, VEGETATION, AND OTHER DELETERIOUS MATERIAL.

SUBGRADE INSPECTION:

1. PROOF-ROLL SUBGRADE BELOW THE BUILDING SLABS AND PAVEMENTS WITH HEAVY PNEUMATIC-TIRED EQUIPMENT TO IDENTIFY SOFT POCKETS AND AREAS OF EXCESS YIELDING. DO NOT PROOF-ROLL WET OR SATURATED SUBGRADES.
   a. COMPLETELY PROOF-ROLL SUBGRADE IN TWO DIRECTIONS, REPEATING PROOF ROLLING IN DIRECTION PERPENDICULAR TO FIRST DIRECTION. LIMIT VEHICLE SPEED TO 3 MPH.
   b. PROOF-ROLL WITH A LOADED 10-WHEEL, TANDEM-AXLE DUMP TRUCK WEIGHING NOT LESS THAN 15 TONS.
   c. EXCAVATE SOFT SPOTS, UNSATISFACTORY SOILS, AND AREAS OF EXCESSIVE PUMPING OR RUTTING, AS DETERMINED BY ENGINEER AND REPLACE WITH COMPACTED BACKFILL OR FILL AS DIRECTED.

2. RECONSTRUCT SUBGRADES DAMAGED BY FREEZING TEMPERATURES, FROST, RAIN, ACCUMULATED WATER, OR CONSTRUCTION ACTIVITIES AS DIRECTED BY ENGINEER, WITHOUT ADDITIONAL COMPENSATION.

BACKFILL:

1. THE CONTRACTOR SHALL PLACE AND COMPACT BACKFILL IN EXCAVATIONS PROMPTLY, BUT NOT BEFORE COMPLETING THE FOLLOWING:
   a. CONSTRUCTION BELOW FINISH GRADE INCLUDING, WHERE APPLICABLE, SUBDRAINAGE, DAMPPROOFING, WATERPROOFING, AND PERIMETER INSULATION.
   b. SURVEYING LOCATIONS OF UNDERGROUND UTILITIES FOR RECORD DRAWINGS.
   c. TESTING AND INSPECTING UNDERGROUND UTILITIES.
   d. REMOVING CONCRETE FORMWORK.
   e. REMOVING TRASH AND DEBRIS.
   f. REMOVING TEMPORARY SHORING AND BRACING, AND SHEETING.
   g. INSTALLING PERMANENT OR TEMPORARY HORIZONTAL BRACING ON HORIZONTALLY SUPPORTED WALLS.

COMPACTION OF SOIL BACKFILLS AND FILLS:

1. CONTRACTOR SHALL PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8-INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4-INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS.

2. PLACE BACKFILL AND FILL SOIL MATERIALS EVENLY ON ALL SIDES OF STRUCTURES TO REQUIRED ELEVATIONS, AND UNIFORMLY ALONG THE FULL LENGTH OF EACH STRUCTURE.

3. COMPACT SOIL MATERIALS TO NOT LESS THAN THE PLAN SPECIFIED PERCENTAGES OF MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D 698 OR ASTM D 1557. (SEE CIVIL DETAILS FOR SUMMARY OF TRENCH BACKFILL AND BEDDING MATERIALS AND PLACEMENT SPECIFICATIONS).

GRADING:

1. GENERAL: UNIFORMLY GRADE AREAS TO A SMOOTH SURFACE. FREE OF IRREGULAR SURFACE CHANGES. COMPLY WITH COMPACTION REQUIREMENTS AND GRADE TO DETAILED/INDICATED CROSS-SECTIONS. LINES, AND ELEVATIONS INDICATED IN PLANS. PROVIDE A SMOOTH TRANSITION BETWEEN ADJACENT EXISTING GRADES AND NEW GRADES. CUT OUT SOFT SPOTS, FILL LOW SPOTS, AND TRIM HIGH SPOTS TO COMPLY WITH REQUIRED SURFACE TOLERANCES.

2. SITE GRADING: SLOPE GRADES TO DIRECT WATER AWAY FROM BUILDINGS AND TO PREVENT PONDING. FINISH SUBGRADES TO REQUIRED ELEVATIONS WITHIN THE FOLLOWING TOLERANCES:
   a. LAWN OR UNPAVED AREAS: PLUS OR MINUS ONE (1) INCH.
   b. WALKS: PLUS OR MINUS ONE (1) INCH.
   c. PAVEMENTS: PLUS OR MINUS ONE-HALF (1/2) INCH.
   d. GRADING INSIDE BUILDING LINES: FINISH SUBGRADE TO A TOLERANCE OF ONE-HALF (1/2) INCH WHEN TESTED WITH A 10-FOOT STRAIGHTEDGE.

3. SUBBASE AND BASE COURSES:
   a. PLACE SUBBASE AND BASE COURSE ON SUBGRADES FREE OF MUD, FROST, SNOW, OR ICE.
   b. PLACE SUBBASE AND BASE COURSE 6 INCHES OR LESS IN COMPACTED THICKNESS IN A SINGLE LAYER.
   c. PLACE SUBBASE AND BASE COURSE EXCEEDING 6 INCHES IN COMPACTED THICKNESS IN LAYERS OF EQUAL THICKNESS, WITH NO COMPACTED LAYER MORE THAN 6 INCHES THICK OR LESS THAN 3 INCHES.

4. COMPACT SUBBASE AND BASE COURSE AT OPTIMUM MOISTURE CONTENT TO REQUIRED GRADES, LINES, CROSS SECTIONS. AND THICKNESS ACCORDING TO ASTM D 698 OR ASTM D 1557, AS INDICATED ON THE DRAWING DETAILS.

FIELD QUALITY CONTROL:

1. THE TESTING AGENCY WILL INSPECT AND TEST SUBGRADES AND EACH FILL OR BACKFILL LAYER. CONTRACTOR SHALL PROCEED WITH SUBSEQUENT EARTHWORK ONLY AFTER TEST RESULTS FOR PREVIOUSLY COMPLETED WORK COMPLY WITH REQUIREMENTS.

2. FOOTING SUBGRADE: AT FOOTING SUBGRADES, AT LEAST ONE TEST OF EACH SOIL STRATUM WILL BE PERFORMED TO VERIFY DESIGN BEARING CAPACITIES. SUBSEQUENT VERIFICATION AND APPROVAL OF OTHER FOOTING SUBGRADES MAY BE BASED ON A VISUAL COMPARISON OF SUBGRADE WITH TESTED SUBGRADE WHEN APPROVED BY ENGINEER.

3. THE TESTING AGENCY WILL TEST COMPACTION OF SOILS IN PLACE ACCORDING TO ASTM D 1556, ASTM D 2167, ASTM D 2922, AND ASTM D 2937, AS APPLICABLE. TESTS WILL BE PERFORMED AT THE FOLLOWING LOCATIONS AND FREQUENCIES:
   a. PAVED AND BUILDING SLAB AREAS: AT SUBGRADE AT EACH COMPACTED FILL AND BACKFILL LAYER, AT LEAST 1 TEST FOR EVERY 10,000 SQ. FT. OR LESS OF PAVED AREA OR BUILDING SLAB, BUT IN NO CASE FEWER THAN 3 TESTS.
   b. FOUNDATION WALL BACKFILL: AT EACH COMPACTED BACKFILL LAYER, AT LEAST 1 TEST FOR EACH 100 FEET OR LESS OF WALL LENGTH, BUT NO FEWER THAN 2 TESTS.
   c. TRENCH BACKFILL: AT EACH COMPACTED INITIAL AND FINAL BACKFILL LAYER, AT LEAST 1 TEST FOR EACH 150 FEET OR LESS OF TRENCH LENGTH, BUT NO FEWER THAN 2 TESTS.

4. IF THE TESTING AGENCY REPORTS THAT SUBGRADES, FILLS, OR BACKFILLS HAVE NOT ACHIEVED DEGREE OF COMPACTION SPECIFIED, SCARIFY AND MOISTEN OR AERATE, OR REMOVE AND REPLACE SOIL TO DEPTH REQUIRED; RECOMPACT AND RETEST UNTIL SPECIFIED COMPACTION IS OBTAINED.

5. ALL FIELD QUALITY CONTROL TESTS THAT FAIL TO MEET THE SPECIFIED COMPACTION DENSITY SHALL BE REPORTED TO THE ENGINEER.

GENERAL UTILITY NOTES

1. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES FOR VERIFICATION OF UTILITIES WITHIN THE LIMITS OF CONSTRUCTION. CALL THE AREA ONE CALL SYSTEM 48 HOURS PRIOR TO ANY EXCAVATION. FLORIDA LAW (F.S. 556) UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT MANDATES THAT EXCAVATORS/CONTRACTORS SHALL CONTACT SUNSHINE 811 (FKA: SUNSHINE STATE ONE-CALL OF FLORIDA) BY CALLING 800-432-4770 OR 811 AT LEAST 2 FULL BUSINESS DAYS PRIOR TO BEGINNING ANY EXCAVATION OR DEMOLITION TO ALLOW MEMBER OPERATORS AN OPPORTUNITY TO IDENTIFY AND MARK THEIR UNDERGROUND FACILITIES AND APPROPRIATELY RESPOND TO THE POSITIVE RESPONSE SYSTEM.

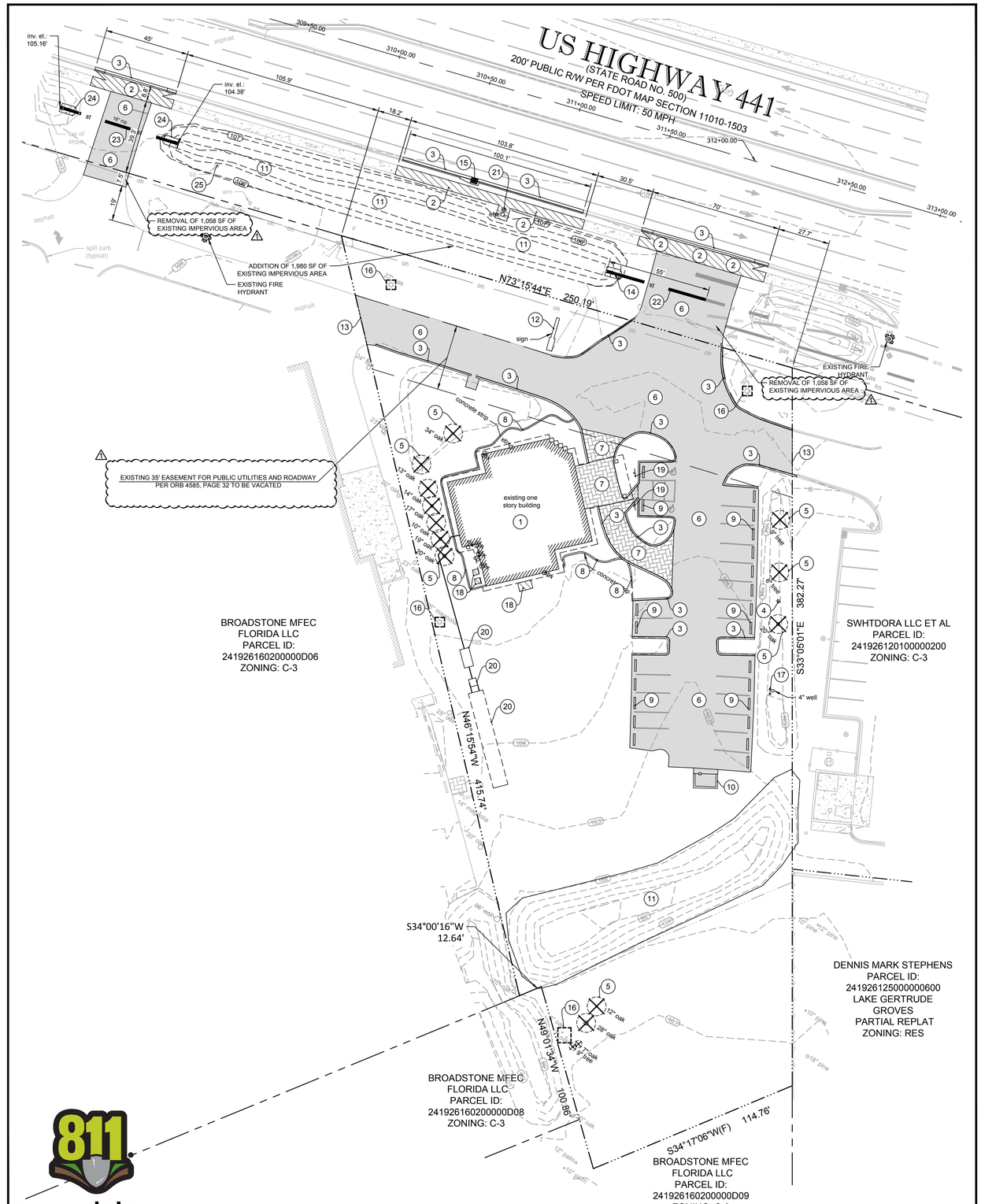
2. THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER.

3. THE CONTRACTOR SHALL COORDINATE WORK EFFORTS WITH THE OWNER TO MINIMIZE TRAFFIC INTERFERENCE AND OPERATIONS OF THE FACILITIES.

4. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING PERMANENT SURVEYING MONUMENTS AND BENCHMARKS FROM DISTURBANCE. SURVEY MONUMENTS DISTURBED BY CONSTRUCTION ARE TO BE REPLACED AND ADJUSTED VIA A LAND SURVEYOR REGISTERED IN THE STATE FOR WHICH THE PROJECT IS LOCATED.

5. EXISTING UTILITIES SHOWN HEREIN ARE BASED ON AVAILABLE RECORDS AND FIELD INVESTIGATIONS. THE CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES PRIOR TO EXCAVATION WITHIN WORK AREAS. THE ENGINEER SHALL BE NOTIFIED UPON DISCOVERY OF ANY DISCREPANCIES THAT WILL AFFECT INSTALLATION OF WORK OR DISCOVERY OF UNCHARTED UTILITIES WHICH MAY REQUIRE RELOCATION. NOTIFICATION SHALL BE DONE IN A TIMELY MANNER

06/02/2023



PLAN VIEW | SCALE: AS NOTED | -

KEYED NOTES

1	EXISTING BUILDING TO BE DEMOLISHED/REMOVED.
2	EXISTING CONCRETE SIDEWALK TO BE REMOVED.
3	EXISTING CURB AND GUTTER TO BE REMOVED.
4	EXISTING LIGHT POLE TO BE REMOVED (TYPICAL). GENERAL CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER PRIOR TO REMOVAL.
5	EXISTING TREE TO BE REMOVED (TYPICAL).
6	EXISTING PAVEMENT, BASE AND SUB BASE TO BE REMOVED.
7	EXISTING BRICK PAVERS TO BE REMOVED.
8	EXISTING CONCRETE PAVEMENT TO BE REMOVED.
9	EXISTING WHEEL STOPS TO BE REMOVED (TYPICAL OF 23).
10	EXISTING TRASH ENCLOSURE AND CONCRETE PAD TO BE REMOVED.
11	EXISTING STORM MANAGEMENT TO BE REMOVED/FILLED. REFER TO GRADING PLAN, SHEET C03.01.
12	EXISTING ID SIGN AND FOUNDATION TO BE REMOVED.
13	SAWCUT CLEAN EDGE LINE IN ASPHALT PAVEMENT FOR NEW CONSTRUCTION.
14	EXISTING STORM STRUCTURE TO BE REMOVED.
15	EXISTING STORM STRUCTURE TO BE MODIFIED. SEE SITE PLAN, SHEET C02.01 AND STORM PIPING PLAN, SHEET C03.02.
16	NEW TREE BARRICADE PER CITY OF MOUNT DORA STANDARD DETAIL GU0023-1. SEE CITY OF MOUNT DORA STANDARD DETAILS, SHEET C05.05.
17	EXISTING 4" WELL PUMP AND ASSOCIATED PIPE(S) TO BE REMOVED BY LICENSED WELL CONTRACTOR.
18	EXISTING CONCRETE PAD TO BE REMOVED.
19	EXISTING ADA SIGNS TO BE REMOVED.
20	EXISTING 2,700 GALLON SEPTIC TANK TO BE REMOVED BY LICENSED CONTRACTOR, TANK AND DISTRIBUTION BOX TO BE REMOVED. DRAINFIELD TO BE ABANDONED IN PLACE.
21	EXISTING LIGHT POLE AND ELECTRICAL JUNCTION BOX TO BE RELOCATED. GENERAL CONTRACTOR TO COORDINATE WITH FDOT.
22	EXISTING 55 LF OF 18" RCP TO BE REMOVED.
23	EXISTING 18" RCP TO BE REMOVED.
24	EXISTING MITERED END SECTION TO BE REMOVED.
25	EXISTING WATER VALVE LID AND CONCRETE PAD TO REMAIN.

LEGEND

- PROPERTY LINE
- EXISTING CONCRETE TO REMAIN
- EXISTING TO REMAIN
- EXISTING ASPHALT/CONCRETE TO BE REMOVED
- EXISTING SIDEWALK/CONCRETE TO BE REMOVED
- EXISTING TO BE REMOVED
- TREE BARRIER LINE
- EXISTING TREE TO BE REMOVED
- TREE BARRICADE
- gas — EXISTING GAS
- san — EXISTING SANITARY
- tel — EXISTING TELEPHONE
- ue — EXISTING UNDERGROUND ELECTRIC
- oh — EXISTING OVERHEAD LINE
- wm — EXISTING WATER
- 29 — EXISTING CONTOUR
- ×428.33 — EXISTING GRADE ELEVATION

DEMOLITION NOTES

1. CONTRACTOR TO ESTABLISH AND PROPERLY FLAG PROPERTY LINES PRIOR TO DEMOLITION.
2. ⚠ ALL ABOVE AND BELOW GROUND HARDWARE, EQUIPMENT AND MATERIALS TO BE DISPOSED OF IN ACCORDANCE WITH LOCAL MUNICIPALITY REQUIREMENTS.
3. UTILITIES TO BE PLUGGED SHALL BE FILLED WITH A MINIMUM 1.0 CUBIC FT. OF NON SHRINK GROUT. THE USE OF NON SHRINK GROUT TO BE APPROVED BY THAT UTILITY
4. TREES SHOWN TO REMAIN SHALL MAINTAIN PROTECTIVE BARRIERS DURING DEMOLITION. THESE BARRIERS SHALL BE IN ACCORDANCE WITH CURRENT LOCAL MUNICIPALITY STANDARDS.
5. THE CONTRACTOR SHALL COORDINATE THE REMOVAL OF EXISTING UTILITIES WITH THE OWNER OF SAID UTILITY. THIS SHALL INCLUDE BUT NOT BE LIMITED TO WATER, SEWER, GAS, CABLE TV, POWER AND TELEPHONE.
6. ⚠ THE CONTRACTOR SHALL UTILIZE SUITABLE EROSION CONTROL DURING DEMOLITION, SEE "EROSION & SEDIMENT CONTROL DETAILS".
7. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO DEMOLITION AND WILL BE RESPONSIBLE FOR THE DAMAGE OF ANY ON-SITE OR OFF-SITE UTILITIES THAT ARE NOT A PART OF THIS PROJECT OR ARE NOT IDENTIFIED TO BE REMOVED. FLORIDA LAW (F.S. 556) UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT MANDATES THAT EXCAVATORS/CONTRACTORS SHALL CONTACT SUNSHINE 811 (FKA: SUNSHINE STATE ONE-CALL OF FLORIDA) BY CALLING 800-432-4770 OR 811 AT LEAST 2 FULL BUSINESS DAYS PRIOR TO BEGINNING ANY EXCAVATION OR DEMOLITION TO ALLOW MEMBER OPERATORS AN OPPORTUNITY TO IDENTIFY AND MARK THEIR UNDERGROUND FACILITIES AND APPROPRIATELY RESPOND TO THE POSITIVE RESPONSE SYSTEM.
8. ALL DISTURBED AREA WITH THE RIGHT OF WAY WILL BE RESTORED TO ORIGINAL OR BETTER CONDITION BY GRADING AND SODDING THE AREA DISTURBED.

TREE NOTE:

CONTRACTOR TO INSTALL TREE BARRICADES SURROUNDING ALL TREES TO REMAIN. IRRIGATE ALL LANDSCAPING AS NEEDED.

REFERENCE NORTH

0' 30' 60'

SCALE: 1" = 30'

No.	Revision/Issue	Date
3	Revised Per Agency Review Comments By City/State	06/02/2023
2	Issue For Permit	03/15/2023
1	Issue For Client Review	03/08/2023

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889

NISIT SAPPARKHAO, P.E.
FL REG. NO. 64085

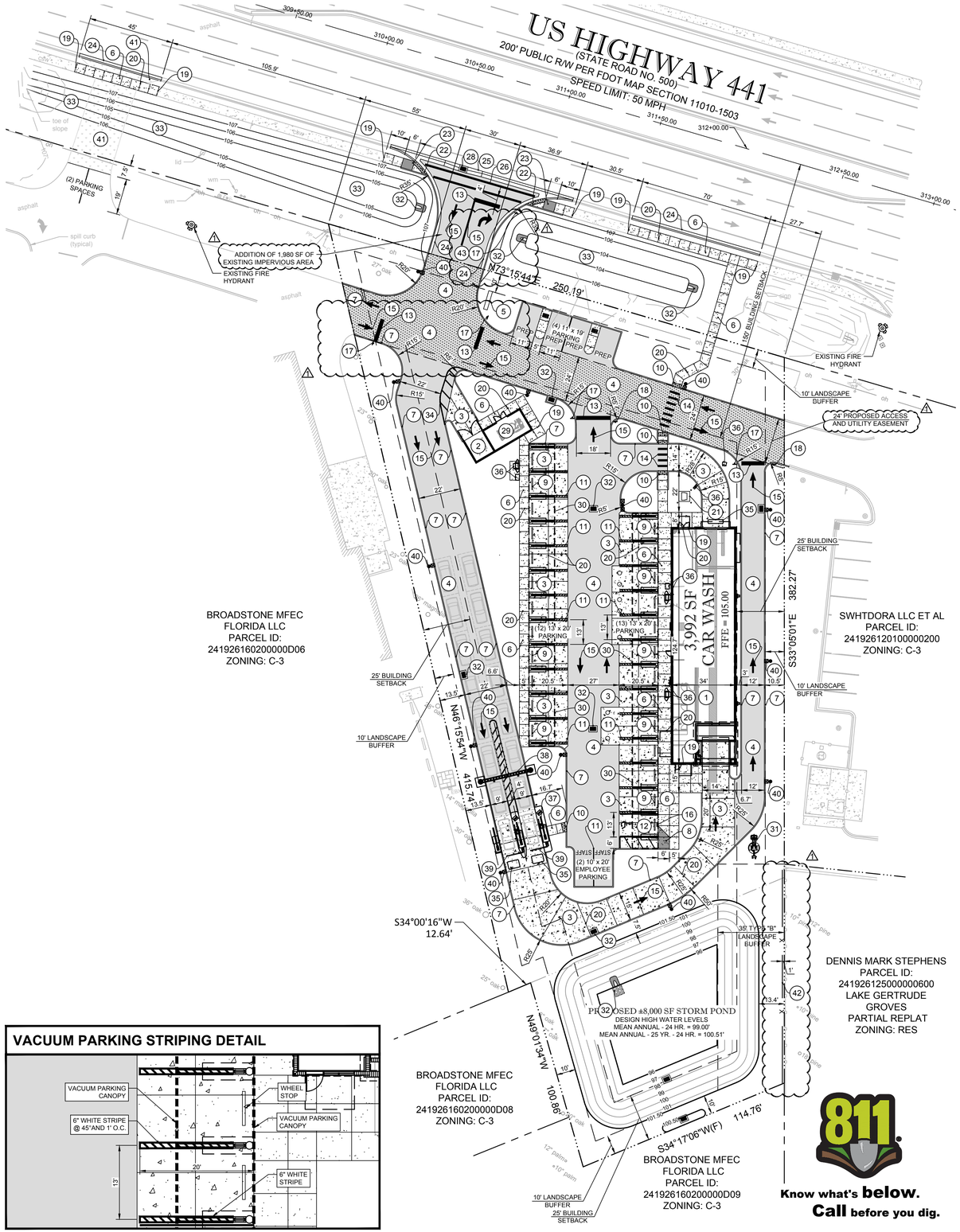
THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY (NISIT SAPPARKHAO, PE) ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY.FAC 61G15-23.004

Project Name and Address: **BIG DAN'S CAR WASH**
17580 HIGHWAY 441
MOUNT DORA, FLORIDA 32757

Sheet Title: **DEMOLITION PLAN**

Project No.	365-01.00
Date	01/23/23
Scale	AS NOTED
Sheet	C01.01

06/02/2023



VACUUM PARKING STRIPING DETAIL

PLAN VIEW | SCALE: AS NOTED | -

KEYED NOTES

1	NEW BUILDING (SEE ARCHITECTURAL DRAWINGS).
2	NEW TRASH ENCLOSURE (SEE ARCHITECTURAL DRAWING).
3	NEW 6" CONCRETE PAVEMENT. SEE DETAILS, SHEET C05.01.
4	NEW ASPHALT PAVEMENT. SEE DETAILS, SHEET C05.01.
5	NEW ID SIGN (DESIGNED AND PERMITTED BY OTHERS).
6	NEW 4" CONCRETE SIDEWALK, SEE PLAN FOR WIDTH. SEE DETAILS, SHEET C05.01.
7	NEW 6" X 18" VERTICAL CURB. SEE DETAILS, SHEET C05.01.
8	NEW ADA RAMP. SEE DETAILS, SHEET C05.01.
9	NEW WHEEL STOP (TYPICAL OF 25). SEE DETAILS, SHEET C05.01.
10	NEW DETECTABLE WARNING. SEE DETAILS, SHEET C05.01.
11	NEW 6-INCH "WHITE" PARKING/AISLE STRIPE (CONTINUOUS PAINT).
12	NEW ACCESSIBLE PARKING SPACE AND ACCES AISLE. SEE DETAILS, SHEET C05.01.
13	NEW 24-INCH "WHITE" STOP BAR (CONTINUOUS PAINT).
14	5-FOOT WIDE CROSSWALK, 12-INCH "WHITE" STRIPE @ 36" O.C. (CONTINUOUS PAINT).
15	NEW "WHITE" DIRECTIONAL ARROW (CONTINUOUS PAINT).
16	NEW ACCESSIBLE PARKING SIGN. SEE DETAILS, SHEET C05.02.
17	NEW 30" R1-1 "STOP" SIGN (TYPICAL OF 5). SEE DETAILS, SHEET C05.01.
18	NEW 30" R5-1 "DO NOT ENTER" SIGN (TYPICAL OF 2). SEE DETAILS, SHEET C05.01.
19	NEW EXPANSION JOINT. SEE DETAILS, SHEET C05.01.
20	NEW CONTROL JOINT. SEE DETAILS, SHEET C05.01.
21	NEW ELECTRICAL TRANSFORMER. REFER TO BUILDING SITE ELECTRICAL DRAWINGS.
22	NEW DETECTABLE WARNING SURFACE COLOR BRICK RED (TYP).
23	NEW CR-F RAMP PER FDOT INDEX 522-002. SEE FDOT STANDARD DETAILS, SHEET C05.04.
24	NEW TYPE "F" CURB PER FDOT INDEX 520-001. SEE FDOT STANDARD DETAILS, SHEET C05.04.
25	NEW VALLEY GUTTER PER FDOT INDEX 520-001. SEE FDOT STANDARD DETAILS, SHEET C05.04.
26	NEW 12" WHITE CROSSWALK PER FDOT INDEX 711-001. SEE FDOT STANDARD DETAILS, SHEET C05.04.
27	NEW 6-INCH "DOUBLE YELLOW" LANE STRIPE (CONTINUOUS PAINT).
28	EXISTING CURB INLET TO BE MODIFIED TO A TYPE "V" GUTTER INLET PER FDOT INDEX 425-041. SEE FDOT STANDARD DETAILS, SHEET C05.04.
29	NEW VACUUM ENCLOSURE. SEE ARCHITECTURAL PLAN DRAWINGS.
30	NEW PARKING CANOPY FOR VACUUM AND DETAIL SPACES.
31	NEW LIFT STATION. SEE UTILITY PLAN, SHEET C04.01.
32	NEW STORM STRUCTURE. SEE STORM PIPING PLAN, SHEET C03.02.
33	DITCH WITHIN US HIGHWAY 441 TO BE MODIFIED. REFER TO DEMOLITION PLAN, SHEET C01.01 AND GRADING PLAN, SHEET C03.01. DITCH AND ADJACENT DISTURBED AREA TO BE SODDED WITH BAHIA SOD.
34	NEW 6-INCH WHITE PERIMETER STRIPE. 6- INCH WHITE @ 60° AND 5-FOOT ON CENTER.
35	NEW DETECTION LOOP. GENERAL CONTRACTOR TO COORDINATE WITH CARWASH MANUFACTURER.
36	NEW CARWASH EQUIPMENT. SEE CARWASH EQUIPMENT DRAWINGS.
37	NEW PAY STATION EQUIPMENT AND CANOPY AND FOOTING. SEE CARWASH EQUIPMENT DRAWINGS.
38	NEW LICENSE PLATE READER CAMERA TRUSS - BY OTHERS.
39	NEW GATE. SEE CARWASH EQUIPMENT DRAWINGS.
40	NEW AREA LIGHT POLE. SEE ELECTRICAL SITE PLANS.
41	NEW BAHIA SOD TO MATCH EXISTING.
42	NEW 6-FOOT HIGH PVC TYPE FENCING.
43	NEW R3-5R "RIGHT TURN ONLY" SIGN. SEE DETAILS, SHEET C05.01.

LEGEND

- PROPERTY LINE
- EXISTING TO REMAIN
- EXISTING CONCRETE TO REMAIN
- PROPOSED CONCRETE LESS THAN 6"
- PROPOSED CONCRETE 6" OR GREATER
- NEW ASPHALT PAVEMENT
- SETBACK/BUFFER
- PROPOSED CURB
- PROPOSED CURB AND GUTTER

SITE DATA

SITE ADDRESS:	17580 HIGHWAY 441 MT. DORA, FLORIDA 32757
PARCEL NUMBER:	24-19-26-1602-000-00D03 24-19-26-1602-000-00D02
SITE AREA:	78,130 SF / 1.79 AC
BUILDING AREA:	3,992 SF
F.A.R:	5%
EXISTING ZONING:	C-3 (HIGHWAY COMMERCIAL)
EXISTING LAND USE:	MEDICAL BLDG (1900)
FUTURE LAND USE DESIGNATION:	COMMERCIAL
DEVELOPED USE:	CAR WASH
MAX IMPERVIOUS COVERAGE:	65%
PROPOSED IMPERVIOUS:	56%

PARKING REQUIREMENTS

PARKING REQUIRED:	GENERAL BUSINESS 1 SPACE PER 250 SF 3,992 SF * (1 SPACE / 250 SF)	= 16 SPACES
TOTAL PARKING PROVIDED:	VACUUM PARKING	= 24 SPACES
	ADA COMPLIANT VACUUM PARKING	= 1 SPACE
	PREP PARKING	= 4 SPACES
	EMPLOYEE PARKING	= 2 SPACES
	TOTAL PARKING	= 31 SPACES
PARKING SPACE SIZE:	10' x 20' MIN. / 24' AISLE	

BUILDING REQUIREMENTS

BUILDING SETBACK - FRONT (HWY 441)	= 150' FROM CENTERLINE
BUILDING SETBACK - SIDE (EAST)	= 25' / 50'-RESIDENTIAL
BUILDING SETBACK - SIDE (WEST)	= 25'
BUILDING SETBACK - REAR (SOUTH)	= 25'
BUILDING MAX HEIGHT	= 65'

LANDSCAPE REQUIREMENTS

LANDSCAPE SETBACK - FRONT (HWY 441)	= TYPE "A" - 10'
LANDSCAPE SETBACK - SIDE (EAST)	= TYPE "A" - 10' TYPE "B" - 35' (RES)
LANDSCAPE SETBACK - SIDE (WEST)	= TYPE "A" - 10'
LANDSCAPE SETBACK - REAR (SOUTH)	= TYPE "A" - 10'

FLOOD ZONE:

FLOOD ZONE "X" PER MAP 12069C0358E

SITE AREAS

AREAS	SQUARE FEET (SF)	ACRE (AC)	PERCENT %
GROSS SITE	78,130	1.79	100%
BUILDING	3,992	0.09	5%
TOTAL IMPERVIOUS	43,786	1.01	56%
TOTAL PERVIOUS (LS + DRY POND AREA)	34,344	0.79	44%

SITE PLAN GENERAL NOTES

1. ALL DIMENSIONS SHOWN ARE TO FACE OF CURB. BUILDING DIMENSIONS ARE TO FACE OF BUILDING.
2. EXISTING IMPROVEMENTS SHOWN ARE TAKEN FROM THE SURVEY.
3. BUILDING AND SIDEWALK DIMENSIONS ARE TO OUTSIDE EDGE OF WALL
4. ALL TIES TO THE PROPERTY LINE ARE BASED ON THE SURVEY.
5. ALL CURB RADIUS ARE 3' UNLESS OTHERWISE NOTED

REFERENCE NORTH

0' 30' 60'

SCALE: 1" = 30'

No.	Revision/Issue	Date
3	Revised Per Agency Review Comments By City/State	06/02/2023
2	Issue For Permit	03/15/2023
1	Issue For Client Review	03/08/2023

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889



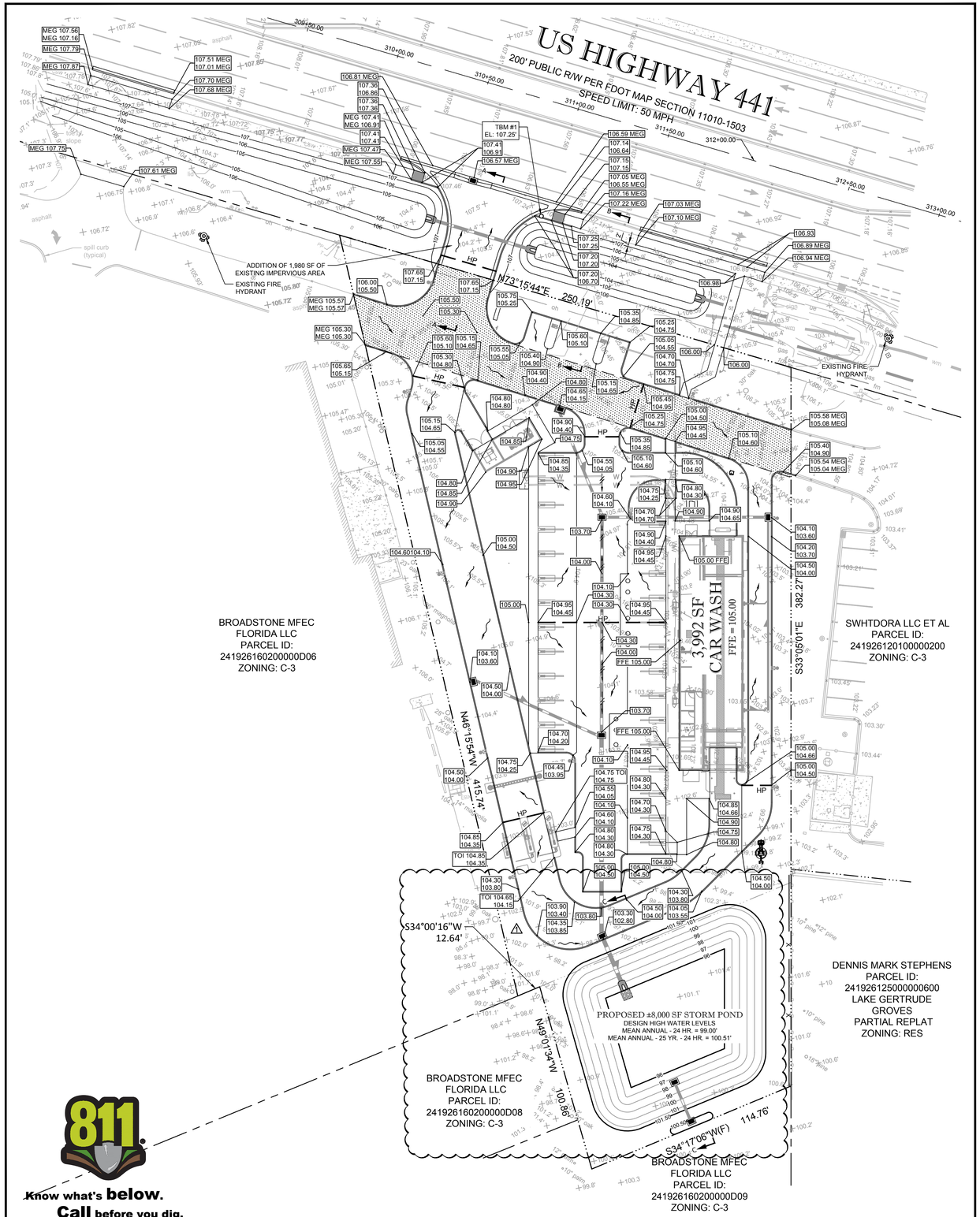
NISIT SAPPARKHAO, P.E.
FL REG. NO. 64085

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY NISIT SAPPARKHAO, PE ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY.FAC 61G15-23.004

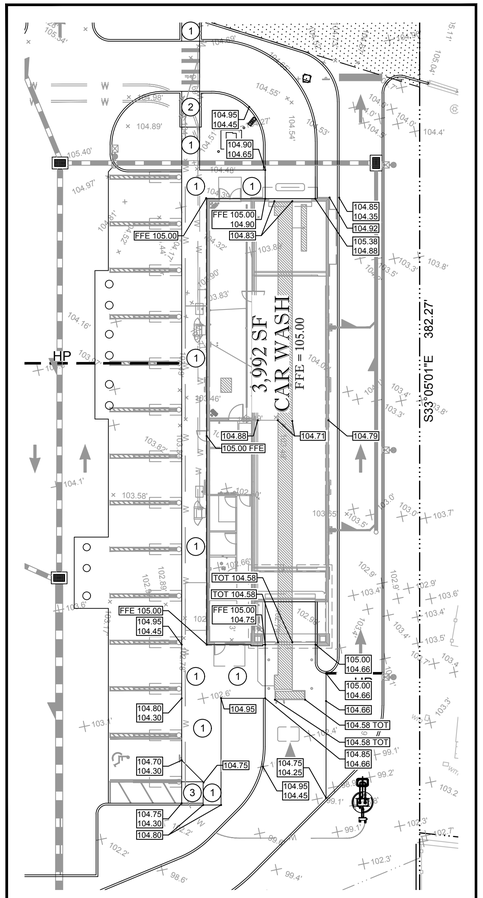
Project Name and Address: **BIG DAN'S CAR WASH**
17580 HIGHWAY 441
MOUNT DORA, FLORIDA 32757

Sheet Title: **SITE PLAN**

Project No.	365-01.00
Date	01/23/23
Scale	AS NOTED
Sheet	C02.01



PLAN VIEW | SCALE: AS NOTED | -



PLAN VIEW | SCALE: AS NOTED | -

KEYED NOTES:

1	SURFACE SLOPES NOT TO EXCEED 1:48 IN ALL DIRECTIONS.
2	SURFACE SLOPES NOT TO EXCEED 1:48 CROSS SLOPES AND 1:20 RUNNING.
3	SURFACE SLOPES NOT TO EXCEED 1:48 CROSS SLOPES AND 1:12 RUNNING.

LEGEND

EL	ELEVATION
TYP	TYPICAL
CO	CLEANOUT
IE	INVERT ELEVATION
SE	SUMP ELEVATION
×49.58	EXISTING ELEVATION
0.00	PROPOSED PAVEMENT ELEVATION
0.00 / 0.00	TOP OF SIDEWALK/CURB EDGE OF PAVEMENT
	DITCH BOTTOM INLET
	CURB INLET
FFE	FINISH FLOOR ELEVATION
RCP	REINFORCED CONCRETE PIPE
HP	HIGH POINT
MEG	MATCH EXISTING GRADE
TOI	TOP OF ISLAND
DS	BUILDING DOWN SPOUT
	12" OR GREATER STORMWATER PIPE
	LESS THAN 12" STORMWATER PIPE
	PROPOSED SURFACE STORMWATER FLOW
	PROPOSED SWALE STORMWATER FLOW
29	EXISTING CONTOUR
29	PROPOSED CONTOUR

CONTROL BENCHMARKS

ELEVATIONS SHOWN HEREON ARE BASED ON NAVD88

NOTE:
CONTRACTOR TO ESTABLISH CONTROL BENCHMARKS BEYOND LIMITS OF DEMOLITION PRIOR TO CONSTRUCTION.

EROSION CONTROL MEASURE NOTE

REQUIRED EROSION CONTROL MEASURES SHALL BE INSTALLED AS NEEDED AND MUST REMAIN INTACT THROUGHOUT CONSTRUCTION. FAILURE TO INSTALL OR PROPERLY MAINTAIN THESE BARRICADES WILL RESULT IN ENFORCEMENT ACTION WHICH MAY INCLUDE CITATIONS, AND INITIATION OF CIVIL PENALTY PROCEDURES.

PAVING AND GRADING GENERAL NOTES

1. SEE GENERAL NOTES SHEET FOR EROSION AND SILTATION CONTROL ALONG WITH GENERAL NOTES.
2. SEE SITE PLAN SHEET FOR SITE DATA.
3. SEE SURVEY FOR TEMPORARY BENCH MARK (TBM) LOCATIONS.
4. THE CONTRACTOR SHALL MEET ALL REQUIREMENTS FOR LOCAL MUNICIPALITY AND THE FLORIDA DEPARTMENT OF TRANSPORTATION WITH REGARD TO IMPROVEMENTS WITHIN THEIR RESPECTIVE RIGHTS-OF-WAY.
5. ALL DISTURBED AREAS WITHIN RIGHT-OF-WAY TO BE RETURNED TO MATCH EXISTING CONDITION.
6. ALL CLEANOUT TOP ELEVATION SHALL MATCH FINISH GRADE ELEVATIONS.
7. CONTRACTOR SHALL INSTALL EROSION CONTROL SILT FENCE AROUND THE PERIMETER OF THE SITE AND MUST MAINTAIN THE SILT FENCE IN GOOD REPAIR UNTIL ALL CONSTRUCTION IS COMPLETE AND THE AREA IS STABILIZED.
8. THE CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO ANY CONSTRUCTION IF ANY PROBLEMS OR DISCREPANCIES EXIST.

ACCESSIBILITY NOTES

1. ALL ACCESSIBLE PARKING SPACES AND ACCESS AISLES ADJACENT TO THE HANDICAP PARKING SPACES SHALL HAVE A MAXIMUM OF 2% SLOPE IN ALL DIRECTIONS (THIS INCLUDES RUNNING SLOPE AND CROSS SLOPE).
2. AN ACCESSIBLE ROUTE FROM THE PUBLIC STREET OR SIDEWALK TO ALL BUILDING ENTRANCES MUST BE PROVIDED. THIS ACCESS ROUTE SHALL BE A MINIMUM OF 48" WIDE. THE RUNNING SLOPE OF AN ACCESSIBLE ROUTE SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2%.
3. SLOPES EXCEEDING 5% BUT LESS THAN 8% WILL REQUIRE A RAMP AND MUST CONFORM TO THE REQUIREMENTS FOR RAMP DESIGN (HANDRAILS, CURBS, LANDINGS). NO RAMP SHALL EXCEED AN 8% RUNNING SLOPE OR 2% CROSS SLOPE.
4. IT WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE THAT THE ACCESSIBLE PARKING SPACES, ACCESSIBLE ROUTES, AND SIDEWALK/CROSSWALKS ARE CONSTRUCTED TO MEET ADA REQUIREMENTS.
5. ANY REQUIREMENTS LISTED ABOVE THAT CAN NOT BE MET SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY. ANYTHING NOT BUILT TO THE ABOVE STANDARDS WILL REQUIRE REMOVAL AND REPLACEMENT OF THE NON COMPLIANT AREAS AT THE GENERAL CONTRACTORS COST.

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

REFERENCE NORTH

0' 30' 60'

SCALE: 1" = 30'

No.	Revision/Issue	Date
3	Revised Per Agency Review Comments By City/State	06/02/2023
2	Issue For Permit	03/15/2023
1	Issue For Client Review	03/08/2023

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889

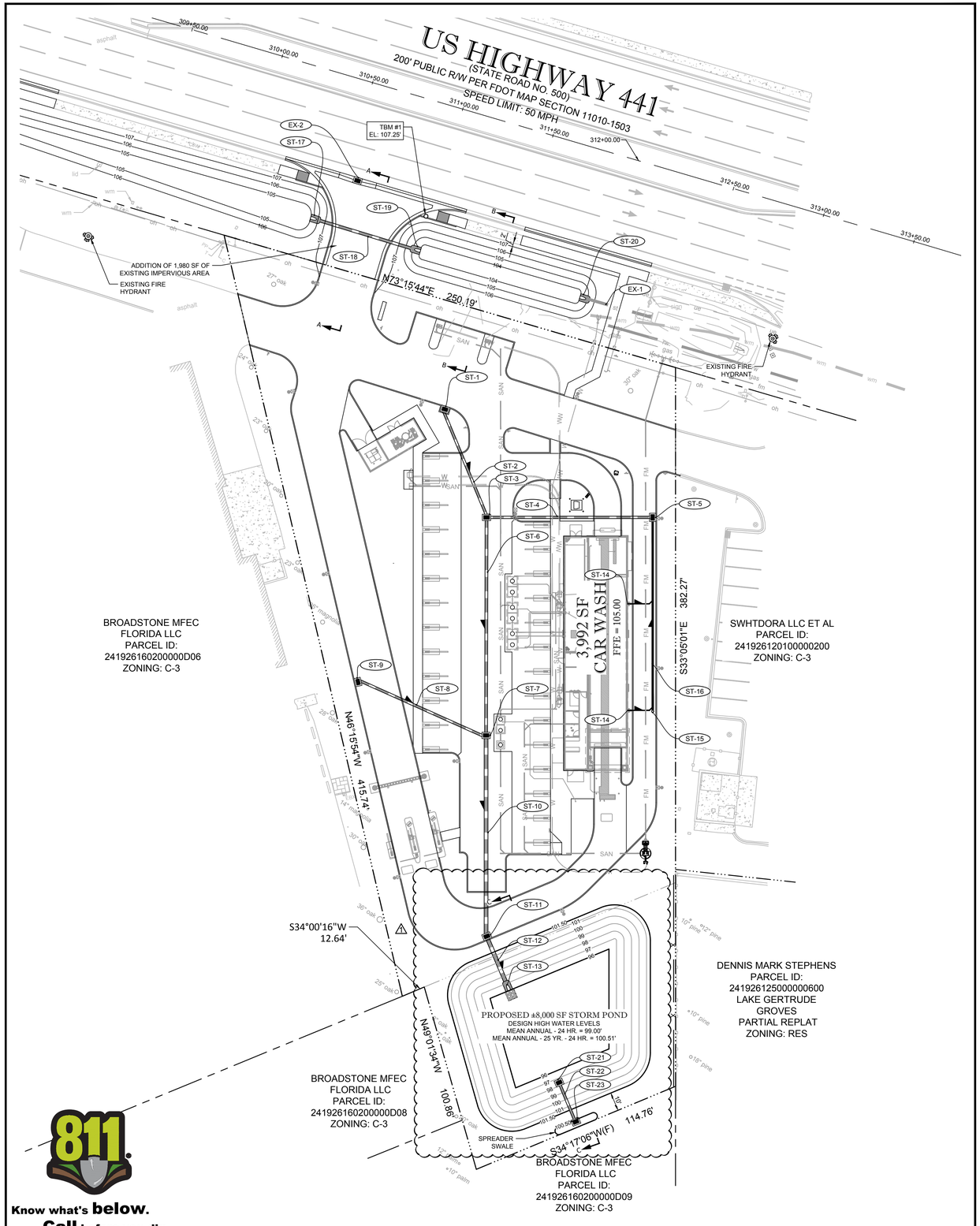
NISIT SAPPARKHAO, P.E.
FL REG. NO. 64085

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY NISIT SAPPARKHAO, PE.ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY.FAC 61G15-23.004

Project Name and Address
BIG DAN'S CAR WASH
17580 HIGHWAY 441
MOUNT DORA, FLORIDA 32757

Sheet Title
GRADING PLAN

Project No.	365-01.00
Date	01/23/23
Scale	AS NOTED
Sheet	C03.01



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

PLAN VIEW | SCALE: AS NOTED | -

EXISTING STORM STRUCTURE/PIPING DATA

EX-1
EXISTING 35 LF - 18" RCP
@ 0.46% SLOPE

EX-2
MODIFIED EXISTING CURB INLET
TO GUTTER INLET TYPE V PER
FDOT INDEX 425-041
SEE DETAILS, SHEET C05.02
& FDOT STANDARD DETAILS,
SHEET C05.07

STORM STRUCTURE/PIPING DATA

ST-1
TYPE "C" CATCH BASIN
FDOT INDEX NO. 425-052
GRATE = 104.15'
IE (S) = 99.15'

ST-2
60 LF OF 15" HDPE
@ 2.2% SLOPE

ST-3
TYPE "C" CATCH BASIN
FDOT INDEX NO. 425-052
GRATE = 103.70'
IE (N,S,E) = 97.80'

ST-4
85 LF OF 15" HDPE
@ 2.1% SLOPE

ST-5
TYPE "C" CATCH BASIN
FDOT INDEX NO. 425-052
GRATE = 103.60'
IE (S,W) = 99.60'

ST-6
115 LF OF 18" HDPE
@ 0.74% SLOPE

ST-7
TYPE "C" CATCH BASIN
FDOT INDEX NO. 425-052
GRATE = 103.70'
IE (N,S,W) = 96.95'

ST-8
72 LF OF 15" HDPE
@ 2.3% SLOPE

ST-9
TYPE "C" CATCH BASIN
FDOT INDEX NO. 425-052
GRATE = 103.60'
IE (E) = 98.60'

ST-10
105 LF OF 24" HDPE
@ 1.0% SLOPE

ST-11
TYPE "C" CATCH BASIN
FDOT INDEX NO. 425-052
GRATE = 103.40'
IE (N,S) = 96.20' ⚠

ST-12
30 LF OF 24" HDPE
@ 0.67% SLOPE

ST-13
24" MITERED END SECTION
FDOT INDEX NO. 430-021
IE = 96.00'

ST-14
BUILDING DOWNSPOUT AND
CLEANOUT
TOP TO BE SET AT GRADE
14 LF 6" PVC @ 1.0% MIN. SLOPE
IE = 102.50'

ST-15
CONSTRUCT CLEANOUT
TOP TO BE SET AT GRADE
IE = 102.35'

ST-16
101 LF OF 12" PVC
@ 1.0% MIN. SLOPE

ST-17
18" MITERED END SECTION
FDOT INDEX NO. 430-021
IE = 104.30'

ST-18
60 LF OF 18" RCP
@ 0.5% MIN. SLOPE

ST-19
18" MITERED END SECTION
FDOT INDEX NO. 430-021
IE = 104.00'

ST-20
18" MITERED END SECTION
FDOT INDEX NO. 430-021
IE = 103.64'

ST-21
TYPE "C" CATCH BASIN
FDOT INDEX NO. 425-052
GRATE = 100.25'
2' WEIR CREST AT 99.50'
IE (S) = 97.00' ⚠

ST-22
20 LF OF 15" HDPE
@ 1.25% SLOPE

ST-23
TYPE C DBI
BUBBLE BOX
DISCHARGE STRUCTURE
GRATE = 99.25
IE = 96.75

LEGEND

EL	ELEVATION
TYP	TYPICAL
CO	CLEANOUT
IE	INVERT ELEVATION
SE	SUMP ELEVATION
×49.58	EXISTING ELEVATION
	DITCH BOTTOM INLET
	CURB INLET
FFE	FINISH FLOOR ELEVATION
RCP	REINFORCED CONCRETE PIPE
ST-23	STORM SEWER STRUCTURE NUMBER
DS	BUILDING DOWN SPOUT
	12" OR GREATER STORMWATER PIPE
	LESS THAN 12" STORMWATER PIPE
	DIRECTION OF PIPE FLOW
29	EXISTING CONTOUR
29	PROPOSED CONTOUR

CONTROL BENCHMARKS

ELEVATIONS SHOWN HEREON ARE BASED ON NAVD88

NOTE:
CONTRACTOR TO ESTABLISH CONTROL BENCHMARKS BEYOND LIMITS OF DEMOLITION PRIOR TO CONSTRUCTION.

EROSION CONTROL MEASURE NOTE

REQUIRED EROSION CONTROL MEASURES SHALL BE INSTALLED AS NEEDED AND MUST REMAIN INTACT THROUGHOUT CONSTRUCTION. FAILURE TO INSTALL OR PROPERLY MAINTAIN THESE BARRICADES WILL RESULT IN ENFORCEMENT ACTION WHICH MAY INCLUDE CITATIONS, AND INITIATION OF CIVIL PENALTY PROCEDURES.

PAVING AND GRADING GENERAL NOTES

1. SEE GENERAL NOTES SHEET FOR EROSION AND SILTATION CONTROL ALONG WITH GENERAL NOTES.
2. SEE SITE PLAN SHEET FOR SITE DATA.
3. SEE SURVEY FOR TEMPORARY BENCH MARK (TBM) LOCATIONS.
4. THE CONTRACTOR SHALL MEET ALL REQUIREMENTS FOR LOCAL MUNICIPALITY AND THE FLORIDA DEPARTMENT OF TRANSPORTATION WITH REGARD TO IMPROVEMENTS WITHIN THEIR RESPECTIVE RIGHTS-OF-WAY.
5. ALL DISTURBED AREAS WITHIN RIGHTS-OF-WAY TO BE RETURNED TO MATCH EXISTING CONDITION.
6. ALL CLEANOUT TOP ELEVATION SHALL MATCH FINISH GRADE ELEVATIONS.
7. CONTRACTOR SHALL INSTALL EROSION CONTROL SILT FENCE AROUND THE PERIMETER OF THE SITE AND MUST MAINTAIN THE SILT FENCE IN GOOD REPAIR UNTIL ALL CONSTRUCTION IS COMPLETE AND THE AREA IS STABILIZED.
8. THE CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO ANY CONSTRUCTION IF ANY PROBLEMS OR DISCREPANCIES EXIST.

REFERENCE NORTH

0' 30' 60'

SCALE: 1" = 30'

No.	Revision/Issue	Date
3	Revised Per Agency Review Comments By City/State	06/02/2023
2	Issue For Permit	03/15/2023
1	Issue For Client Review	03/08/2023

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889

NISIT SAPPARKHAO, P.E.
FL REG. NO. 64085

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY (NISIT SAPPARKHAO, PE) ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY FAC 61G15-23.004

Project Name and Address
BIG DAN'S CAR WASH
17580 HIGHWAY 441
MOUNT DORA, FLORIDA 32757

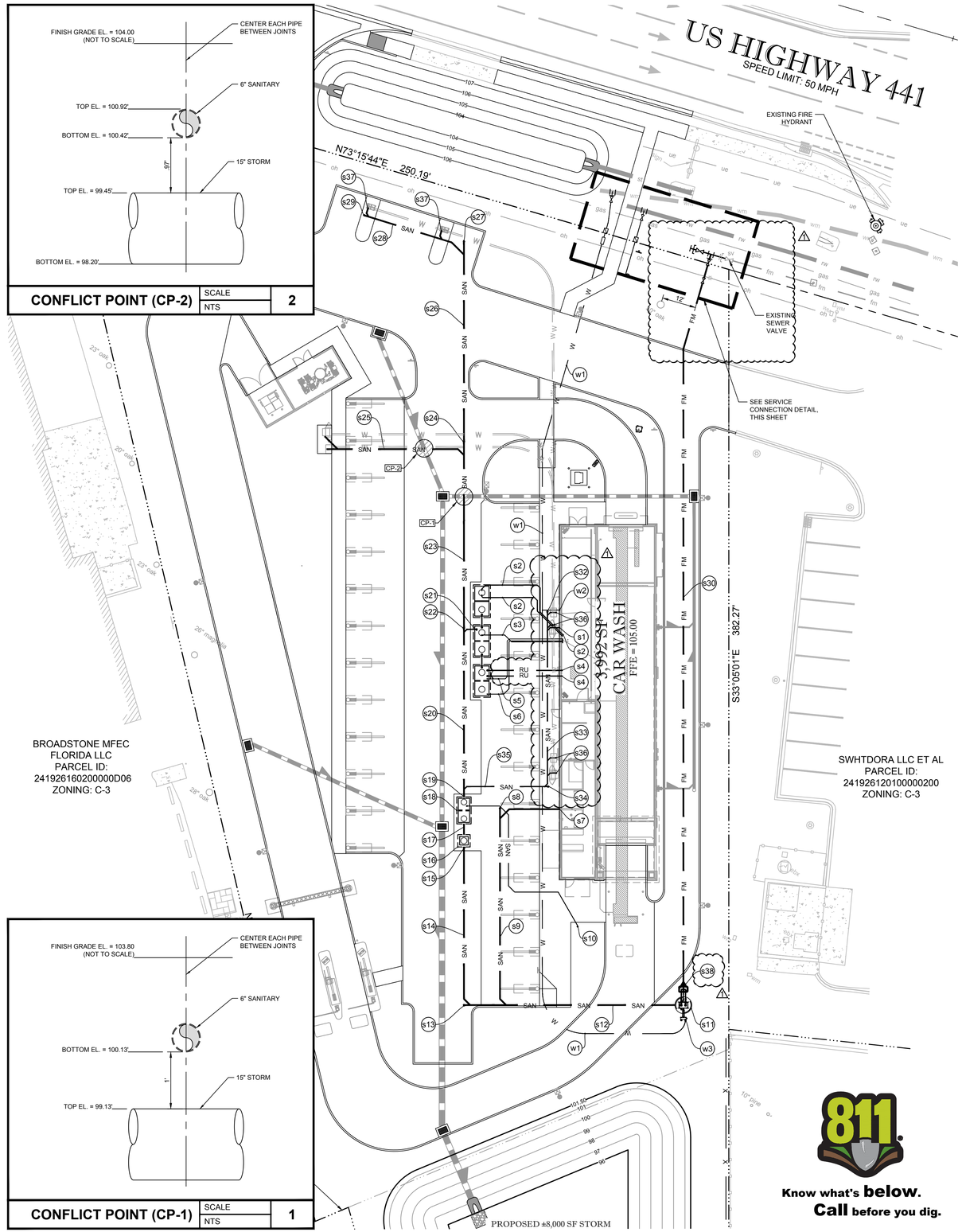
Sheet Title
STORM PIPING PLAN

Project No. 365-01.00	Sheet C03.02
Date 01/23/23	
Scale AS NOTED	

06/02/2023

CONFLICT POINT (CP-2) | SCALE: NTS | 2

CONFLICT POINT (CP-1) | SCALE: NTS | 1



PLAN VIEW | SCALE: AS NOTED | -

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

UTILITY SYSTEM DATA

	WATER
w1	330 LF - 2" C901 DR18 BLUE POLY TUBING
w2	POINT OF CONNECTION TO BUILDING WATER MANIFOLD
w3	NEW HOSE BIB MOUNTED ON CONTROL PANEL POST. WITH INLINE ZURN RPZ MODEL 975XL2 BACKFLOW PREVENTER.
	SANITARY
s1	6-INCH SEWER STUBOUT FROM BUILDING (BY PLUMBING CONTRACTOR). REFER TO BUILDING PLUMBING PLAN FOR EXACT LOCATION. CONSTRUCT SEWER CLEANOUT. CLEANOUT TOP ELEVATION SHALL MATCH PROPOSED GRADE ELEVATION. INV. EL 101.33'
s2	(2) 45 LF - 3" PVC SCHEDULE 80 SUCTION LINES. REFER TO PLUMBING DRAWINGS.
s3	30 LF - 2" PVC SCHEDULE 80 RECIRCULATION LINE.
s4	(2) 30 LF - 6" PVC SCHEDULE 80 SEWER STUBOUT FROM TRASH PIT. INV. EL 100.00'. REFER TO PLUMBING DRAWINGS.
s5	40 LF - 1-1/2" PVC SCHEDULE 80 TANK FLUSH. REFER TO PLUMBING PLANS.
s6	45 LF - 2" PVC SCHEDULE 80 BACK FLUSH DISCHARGE. REFER TO PLUMBING PLANS.
s7	6-INCH SEWER STUBOUT FROM BUILDING (BY PLUMBING CONTRACTOR). REFER TO BUILDING PLUMBING PLAN FOR EXACT LOCATION. INV. EL 103.00 25 LF - 3" PVC SCHEDULE 80 @ 6.4% SLOPE.
s8	CONSTRUCT SEWER CLEAN OUT - IE. 101.40'.
s9	70 LF - 6" PVC SCHEDULE 80 @ 6.4% SLOPE.
s10	75 LF - 3" PVC SCHEDULE 80 VENT LINE. ROUTE TO LANDSCAPE AREA AND TERMINATE WITH GOOSENECK @ 6" ABOVE FINISHED GRADE.
s11	SANITARY LIFT STATION. SEE LIFT STATION DETAIL SHEET C05.06. RIM = 105.00' IE. (IN) = 97.15' BOTTOM = 92.30'
s12	75 LF - 6" PVC SCHEDULE 80 @ 1.00% SLOPE.
s13	CONSTRUCT SEWER CLEAN OUT - IE. 98.24'.
s14	60 LF - 6" PVC SCHEDULE 80 @ 1.00% SLOPE.
s15	CONSTRUCT SEWER CLEAN OUT - IE. 98.84'.
s16	MONITOR-SCOPE WELL/MANHOLE IE. (IN) 98.84' IE. (OUT) 98.84'
s17	4 LF - 6" PVC SCHEDULE 80 @ 1.00% SLOPE.
s18	750 GALLON OIL/WATER SEPARATOR. REFER TO BUILDING PLUMBING PLAN. IE. (IN) 99.05' IE. (OUT) 98.88'
s19	CONSTRUCT SEWER CLEAN OUT - IE. 99.05'.
s20	60 LF - 6" PVC SCHEDULE 80 @ 1.00% SLOPE.
s21	5 LF - 4" PVC SCHEDULE 80 DISCHARGE LINE FROM RECLAIM SYSTEM TO OIL/WATER SEPARATOR. IE. 99.70.
s22	CONSTRUCT SEWER CLEAN OUT - IE. 99.65'.
s23	65 LF - 6" PVC SCHEDULE 80 @ 1.00% SLOPE.
s24	CONSTRUCT SEWER CLEAN OUT - IE. 100.30'.
s25	50 LF - 4" PVC SCHEDULE 80 @ 1.00% MIN. SLOPE.
s26	70 LF - 6" PVC SCHEDULE 80 @ 1.00% SLOPE.
s27	CONSTRUCT SEWER CLEAN OUT - IE. 101.00'.
s28	38 LF - 4" PVC SCHEDULE 80 @ 1.00% SLOPE.
s29	CONSTRUCT SEWER CLEAN OUT - IE. 101.38'.
s30	253 LF - 4" C901 DR18 PVC.
s31	6-INCH SEWER STUBOUT FROM BUILDING (BY PLUMBING CONTRACTOR). REFER TO BUILDING PLUMBING PLAN FOR EXACT LOCATION. INV. EL 101.33 5 LF - 6" PVC SCHEDULE 80 @ 1.0% MIN. SLOPE.
s32	CONSTRUCT SEWER CLEAN OUT - IE. 101.34'.
s33	62 LF - 6" PVC SCHEDULE 80 @ 1.00% SLOPE.
s34	CONSTRUCT SEWER CLEAN OUT - IE. 100.70'.
s35	30 LF - 6" PVC SCHEDULE 80 @ 1.00% SLOPE.
s36	5 LF - 4" PVC SCHEDULE 80 @ 1.00% MIN. SLOPE TO MAT WASHER AND PREP STATION.
s37	5 LF - 4" PVC SCHEDULE 80 @ 1.00% MIN. SLOPE TO PREP STATION.
s38	3" X 4" ENLARGER.

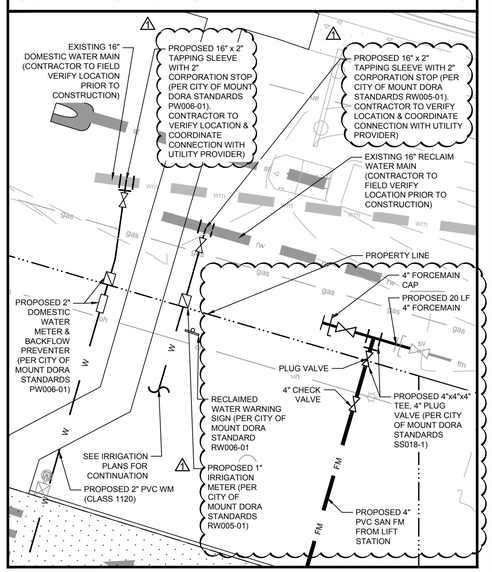
LEGEND

TYP	TYPICAL
H/C	HANDICAP
R	RADIUS
R/W	RIGHT-OF-WAY
	PROPOSED CONCRETE 6" OR LESS
	PROPOSED CONCRETE GREATER THAN 6"
	PROPERTY LINE
SAN	PROPOSED SANITARY SERVICE
GW	PROPOSED GREASE WASTE
FM	PROPOSED FORCE MAIN
RU	PROPOSED RE-USE LINE
W	PROPOSED WATER MAIN
FIRE	PROPOSED FIRE MAIN
E	PROPOSED ELECTRIC SERVICE
GAS	PROPOSED GAS SERVICE
TEL	PROPOSED TELEPHONE SERVICE
san	EXISTING SANITARY PIPE
wm	EXISTING WATER PIPE
rw	EXISTING RECLAIM WATER PIPE
ue	EXISTING UNDERGROUND POWER
oh	EXISTING OVERHEAD WIRE
gas	EXISTING GAS LINE
tel	EXISTING TELEPHONE LINE

UTILITY NOTES

1. CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES WITHIN THE LIMITS OF CONSTRUCTION AND ADVISE THE ENGINEER OF RECORD OF ANY CONFLICTS IMMEDIATELY.
2. CONTRACTOR SHALL NOTIFY AND COORDINATE WATER SERVICE WITH LOCAL MUNICIPALITIES UTILITIES DEPARTMENT.
3. CONTRACTOR SHALL NOTIFY AND COORDINATE SEWER SERVICE WITH LOCAL MUNICIPALITIES UTILITIES DEPARTMENT.
4. CONTRACTOR TO COORDINATE INSTALLATION OF ELECTRICAL POWER SERVICE WITH LOCAL ELECTRIC COMPANY.
5. CONTRACTOR TO INSTALL PVC CONDUIT FOR TELEPHONE SERVICE (TO PROPERTY LINE) AND COORDINATE INSTALLATION OF SERVICE WITH TELEPHONE OPERATIONS.
6. SEE SURVEY FOR LOCATION OF OTHER EXISTING UTILITIES.
7. SEE CIVIL SPECIFICATIONS AND REFERENCE DRAWING SHEETS FOR ADDITIONAL UTILITY NOTES.
8. ALL ON-SITE PVC WATER SERVICE AFTER METER SHALL BE SCHEDULE 80 OR PRESSURE RATED HDPE (POLY PIPE).
9. ALL CROSSINGS OF WATER AND SEWER LINES MUST MAINTAIN PROPER CLEARANCE (SEE CIVIL SPECIFICATIONS AND REFERENCE DRAWING SHEETS).
10. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE CITY/TOWNS STANDARD CONSTRUCTION AND UTILITY REQUIREMENTS.
11. TREES SHALL NOT BE PLANTED WITHIN 10 FEET FROM THE WATER MAIN.
12. ALL CLEANOUT TOP ELEVATION SHALL MATCH FINISH GRADE ELEVATIONS.

SERVICE CONNECTION DETAIL 1" = 10'



REFERENCE NORTH

0' 20' 40'

SCALE: 1" = 20'

No.	Date	Revision/Issue
3	06/02/2023	Revised Per Agency Review Comments By City/State
2	03/15/2023	Issue For Permit
1	03/08/2023	Issue For Client Review

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889

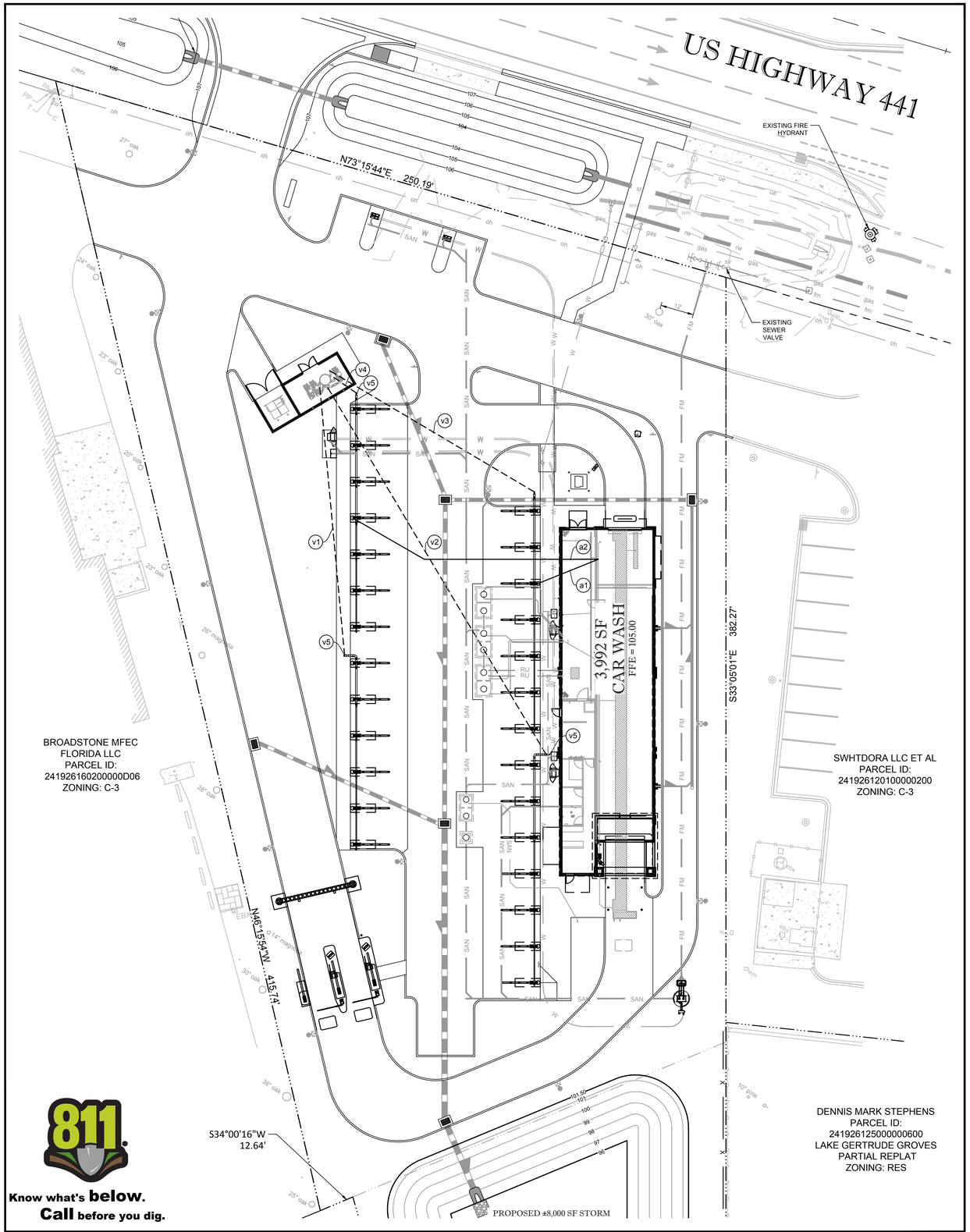
NISIT SAPPARKHAO, P.E.
FL REG. NO. 64085

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY NISIT SAPPARKHAO, PE ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY.FAC 61G15-23.004

Project Name and Address: **BIG DAN'S CAR WASH**
17580 HIGHWAY 441
MOUNT DORA, FLORIDA 32757

Sheet Title: **UTILITY PLAN**

Project No.	365-01.00
Date	01/23/23
Scale	AS NOTED
Sheet	C04.01



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

PLAN VIEW | SCALE: AS NOTED | -

UTILITY SYSTEM DATA

	VACUUM SYSTEM
v1	100 LF - 6" SCHEDULE 40 SOLID CORE PVC UNDERGROUND PIPING BY GENERAL CONTRACTOR. REFER TO SONNY'S CARWASH VACUUM'S DESIGN DRAWING FOR FURTHER DETAILS.
v2	155 LF - 6" SCHEDULE 40 SOLID CORE PVC UNDERGROUND PIPING BY GENERAL CONTRACTOR. REFER TO SONNY'S CARWASH VACUUM'S DESIGN DRAWING FOR FURTHER DETAILS.
v3	90 LF - 6" SCHEDULE 40 SOLID CORE PVC UNDERGROUND PIPING BY GENERAL CONTRACTOR. REFER TO SONNY'S CARWASH VACUUM'S DESIGN DRAWING FOR FURTHER DETAILS.
v4	10 LF - 6" SCHEDULE 40 SOLID CORE PVC UNDERGROUND PIPING BY GENERAL CONTRACTOR. REFER TO SONNY'S CARWASH VACUUM'S DESIGN DRAWING FOR FURTHER DETAILS.
v5	CONSTRUCT IN LINE 3" CLEAN OUT. REFER TO SONNY'S CARWASH VACUUM'S DESIGN DRAWING FOR FURTHER DETAILS.
	AIR CHASE
a1	25 LF - 2" SCH 40 PVC CONDUIT AIR CHASE. REFER TO SONNY'S CARWASH VACUUM'S DESIGN DRAWING FOR FURTHER DETAILS.
a2	95 LF - 2" SCH 40 PVC CONDUIT AIR CHASE. REFER TO SONNY'S CARWASH VACUUM'S DESIGN DRAWING FOR FURTHER DETAILS.

LEGEND

TYP	TYPICAL
H/C	HANDICAP
R	RADIUS
R/W	RIGHT-OF-WAY
	PROPOSED CONCRETE 6" OR LESS
	PROPOSED CONCRETE GREATER THAN 6"
	PROPERTY LINE
SAN	PROPOSED SANITARY SERVICE
GW	PROPOSED GREASE WASTE
FM	PROPOSED FORCE MAIN
W	PROPOSED WATER MAIN
FIRE	PROPOSED FIRE MAIN
E	PROPOSED ELECTRIC SERVICE
GAS	PROPOSED GAS SERVICE
TEL	PROPOSED TELEPHONE SERVICE
san	EXISTING SANITARY PIPE
wm	EXISTING WATER PIPE
rw	EXISTING RECLAIM WATER PIPE
ue	EXISTING UNDERGROUND POWER
oh	EXISTING OVERHEAD WIRE
gas	EXISTING GAS LINE
tel	EXISTING TELEPHONE LINE

REFERENCE NORTH

0' 20' 40'

SCALE: 1" = 20'

No.	Revision/Issue	Date
3	Revised Per Agency Review Comments By City/State	06/02/2023
2	Issue For Permit	03/15/2023
1	Issue For Client Review	03/08/2023

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889

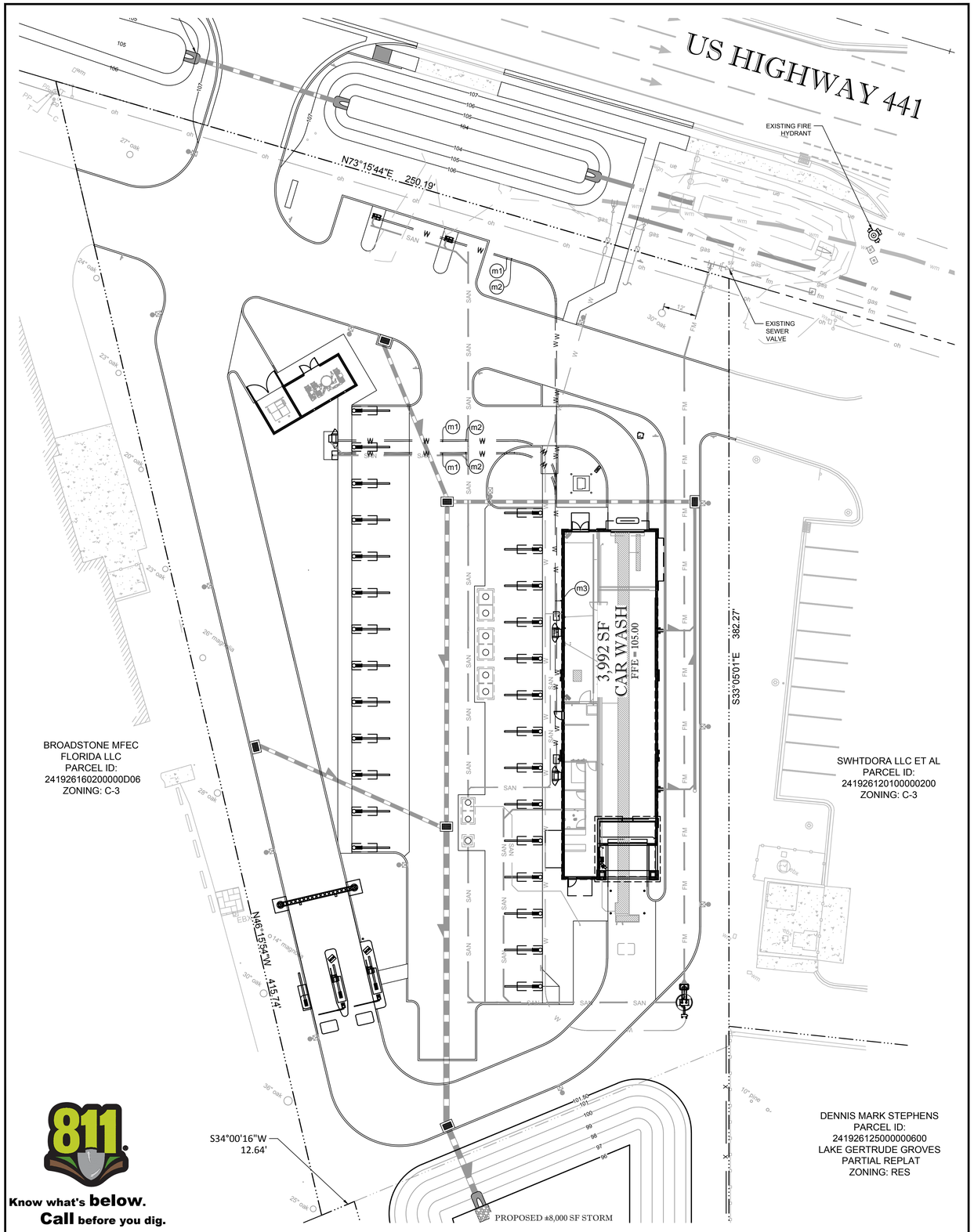
NISIT SAPPARKHAO, P.E.
FL REG. NO. 64085

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY (NISIT SAPPARKHAO, PE) ON THE DATE, AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY FAC 61G15-23.004

Project Name and Address: **BIG DAN'S CAR WASH**
17580 HIGHWAY 441
MOUNT DORA, FLORIDA 32757

Sheet Title: **VACUUM SYSTEM PLAN**

Project No.	365-01.00
Date	01/23/23
Scale	AS NOTED
Sheet	C04.02



PLAN VIEW | SCALE: AS NOTED | -

UTILITY SYSTEM DATA

MAT WASHER	
m1	3/4" POLY PREP SOAP TO (3) RUBBER MAT WASHER AND (2) SELF PREP.
m2	3/4" POLY PREP WATER TO (3) RUBBER MAT WASHER AND (2) SELF PREP.
m3	POINT OF CONNECTION TO BUILDING FOR PREP WATER AND PREP SOAP. REFER TO BUILDING PLUMBING DRAWINGS.

LEGEND

TYP	TYPICAL
H/C	HANDICAP
R	RADIUS
R/W	RIGHT-OF-WAY
	PROPOSED CONCRETE 6" OR LESS
	PROPOSED CONCRETE GREATER THAN 6"
	PROPERTY LINE
SAN	PROPOSED SANITARY SERVICE
GW	PROPOSED GREASE WASTE
FM	PROPOSED FORCE MAIN
W	PROPOSED WATER MAIN
FIRE	PROPOSED FIRE MAIN
E	PROPOSED ELECTRIC SERVICE
GAS	PROPOSED GAS SERVICE
TEL	PROPOSED TELEPHONE SERVICE
san	EXISTING SANITARY PIPE
wm	EXISTING WATER PIPE
rw	EXISTING RECLAIM WATER PIPE
ue	EXISTING UNDERGROUND POWER
oh	EXISTING OVERHEAD WIRE
gas	EXISTING GAS LINE
tel	EXISTING TELEPHONE LINE

REFERENCE NORTH

0' 20' 40'

SCALE: 1" = 20'

No.	Revision/Issue	Date
3	Revised Per Agency Review Comments By City/State	06/02/2023
2	Issue For Permit	03/15/2023
1	Issue For Client Review	03/08/2023

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889

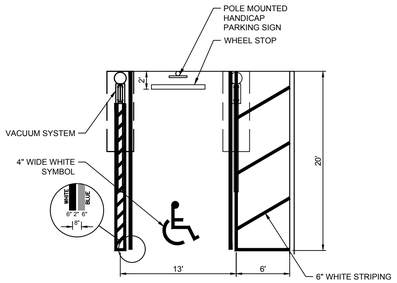
NISIT SAPPARKHAO, P.E.
FL REG. NO. 64085

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY (NISIT SAPPARKHAO, PE) ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY FAC 61G15-23.004

Project Name and Address: **BIG DAN'S CAR WASH**
17580 HIGHWAY 441
MOUNT DORA, FLORIDA 32757

Sheet Title: **MAT WASHER WATER SUPPLY PLAN**

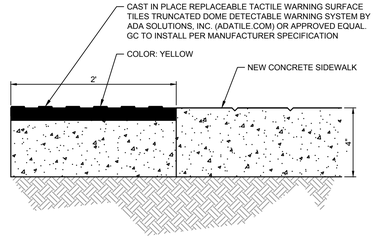
Project No.	365-01.00
Date	01/23/23
Scale	AS NOTED
Sheet	C04.03



NOTE: DIMENSIONS ARE MEASURED FROM THE CENTER OF WHITE STRIPES

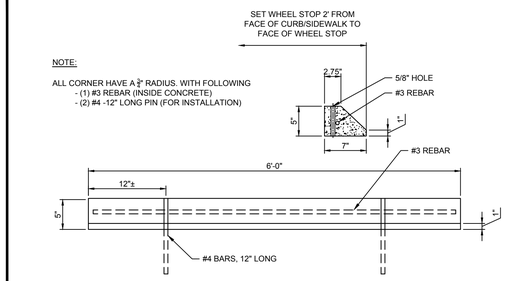
ACCESSIBLE PARKING STRIPING

SCALE	
NTS	1



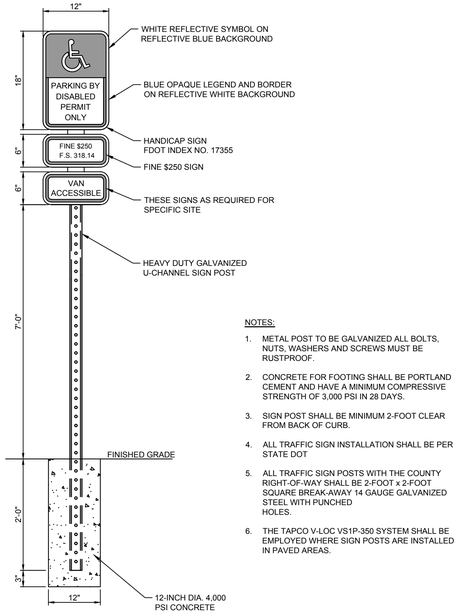
DETECTABLE WARNING

SCALE	
NTS	2



WHEEL STOP DETAIL

SCALE	
NTS	3

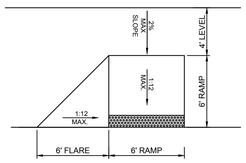


NOTES:

1. METAL POST TO BE GALVANIZED ALL BOLTS, NUTS, WASHERS AND SCREWS MUST BE RUSTPROOF.
2. CONCRETE FOR FOOTING SHALL BE PORTLAND CEMENT AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI IN 28 DAYS.
3. SIGN POST SHALL BE MINIMUM 2-FOOT CLEAR FROM BACK OF CURB.
4. ALL TRAFFIC SIGN INSTALLATION SHALL BE PER STATE DOT
5. ALL TRAFFIC SIGN POSTS WITH THE COUNTY RIGHT-OF-WAY SHALL BE 2-FOOT x 2-FOOT SQUARE BREAK-AWAY 14 GAUGE GALVANIZED STEEL WITH PUNCHED HOLES.
6. THE TAPCO V-LOC VS1P-350 SYSTEM SHALL BE EMPLOYED WHERE SIGN POSTS ARE INSTALLED IN PAVED AREAS.

ACCESSIBLE PARKING SIGN

SCALE	
NTS	7



ACCESS RAMP CONSTRUCTION NOTES

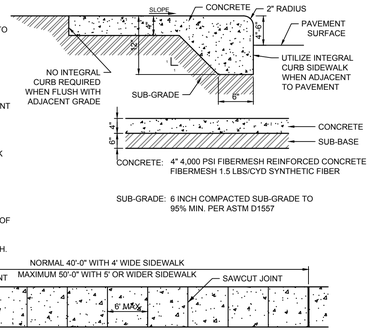
1. THE SURFACE OF THE RAMP SHALL HAVE A TRANSVERSE BROOMED SLIP-RESISTANT SURFACE TEXTURE ROUGHER THAN THE SURROUNDING SIDE
2. RAMP CONSTRUCTION SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL CODES AND REGULATIONS.

CURB RAMP

SCALE	
NTS	4

NOTES:

1. SIDEWALK EXPANSION JOINTS TO BE AT ALL TIES TO CONCRETE OTHER THAN DRIVEWAYS. MAXIMUM SPACING SHALL BE 50-FOOT.
2. EXPANSION JOINT MATERIAL SHALL BE ASPHALT FIBER IMPREGNATED PREFORMED JOINT FILLER, TO FULL DEPTH OF CONCRETE.
3. ALL SIDE WALKS SHALL BE CONSTRUCTED OF 4 INCH THICK 4,000 PSI PORT LAND CEMENT CONCRETE AND SHALL BE INSTALLED OVER COMPACTED SUB-GRADE.
4. CONTROL JOINT MUST BE PERFORMED WITHIN 12 HOURS OF CONCRETE PLACEMENT DO A DEPTH NO LESS THAN 1/4-INCH THE OVERALL CONCRETE DEPTH.

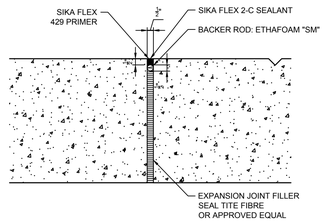


SIDEWALK

SCALE	
NTS	5

NOTES:

1. SIDEWALK EXPANSION JOINTS TO BE AT ALL TIES TO CONCRETE OTHER THAN DRIVEWAYS. MAXIMUM SPACING SHALL BE 50-FOOT.
2. EXPANSION JOINT MATERIAL SHALL BE ASPHALT FIBER IMPREGNATED PREFORMED JOINT FILLER, TO FULL DEPTH OF CONCRETE.

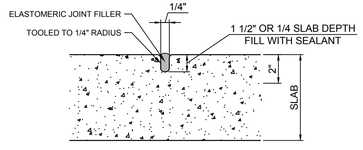


EXPANSION JOINT

SCALE	
NTS	6

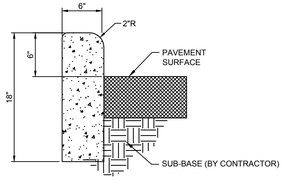
NOTES:

1. CONTROL JOINT MUST BE PERFORMED WITHIN 12 HOURS OF CONCRETE PLACEMENT DO A DEPTH NO LESS THAN 1/4-INCH THE OVERALL CONCRETE DEPTH.



SAWCUT CONTROL JOINT

SCALE	
NTS	8

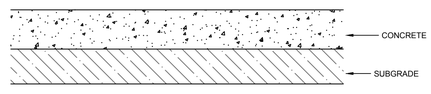


NOTE:

TRANSVERSE JOINTS SHALL BE 1/2" FULL DEPTH ASPHALT IMPREGNATED FIBER EXP. JOINT RECESSED 1/4" IN FROM THE FRONT FACE AND TOP OF THE CURB @ 20'-0" MAXIMUM.

6" CURB

SCALE	
NTS	9

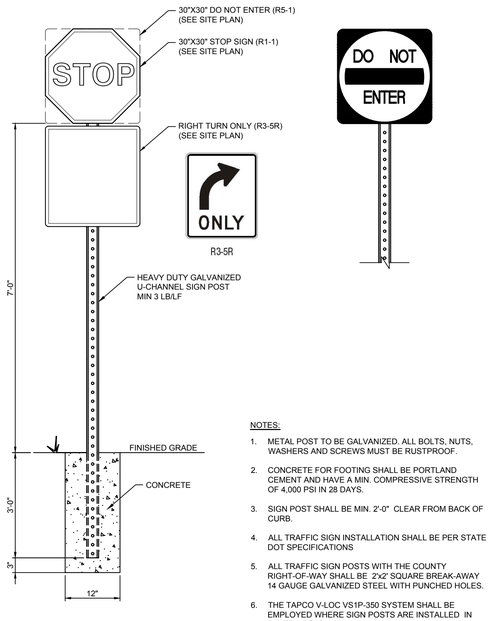


CONCRETE — 6-INCH THICKNESS 4,000 PSI
6"X6" W 1.4XW 1.4 WWF OR FIBERMESH 1.5 LBS/CYD SYNTHETIC FIBER

SUB-GRADE — 12-INCH COMPACTED SUB-GRADE LBR 40 COMPACTED TO 98% AASHTO T-180

CONCRETE PAVEMENT

SCALE	
NTS	10

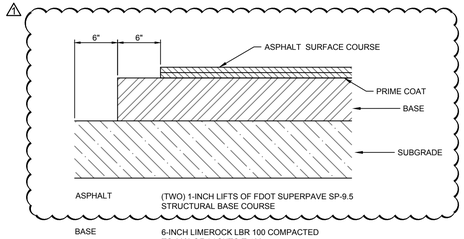


NOTES:

1. METAL POST TO BE GALVANIZED. ALL BOLTS, NUTS, WASHERS AND SCREWS MUST BE RUSTPROOF.
2. CONCRETE FOR FOOTING SHALL BE PORTLAND CEMENT AND HAVE A MIN. COMPRESSIVE STRENGTH OF 4,000 PSI IN 28 DAYS.
3. SIGN POST SHALL BE MIN. 2'-0" CLEAR FROM BACK OF CURB.
4. ALL TRAFFIC SIGN INSTALLATION SHALL BE PER STATE DOT SPECIFICATIONS
5. ALL TRAFFIC SIGN POSTS WITH THE COUNTY RIGHT-OF-WAY SHALL BE 2'x2' SQUARE BREAK-AWAY 14 GAUGE GALVANIZED STEEL WITH PUNCHED HOLES.
6. THE TAPCO V-LOC VS1P-350 SYSTEM SHALL BE EMPLOYED WHERE SIGN POSTS ARE INSTALLED IN PAVED AREAS.

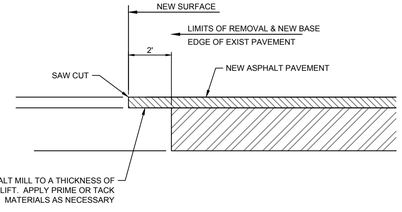
MUTCD SIGN(S)

SCALE	
NTS	13



ASPHALT PAVEMENT

SCALE	
NTS	11



EXISTING ASPHALT PAVEMENT CONNECTION

SCALE	
NTS	12

No.	Revision/Issue	Date
3	Revised Per Agency Review Comments By City/State	06/02/2023
2	Issue For Permit	03/15/2023
1	Issue For Client Review	03/08/2023

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889



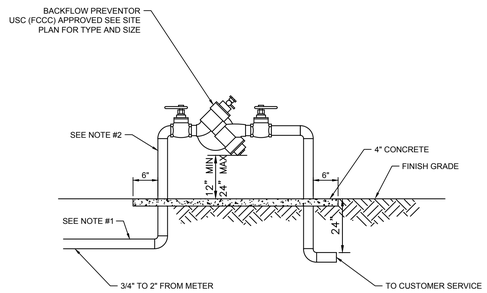
NISIT SAPPARKHAO, P.E.
FL REG. NO. 64085

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY NISIT SAPPARKHAO, PE ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY. FAC 61G15-23.004

Project Name and Address
BIG DAN'S CAR WASH
17580 HIGHWAY 441
MOUNT DORA, FLORIDA 32757

Sheet Title
DETAILS

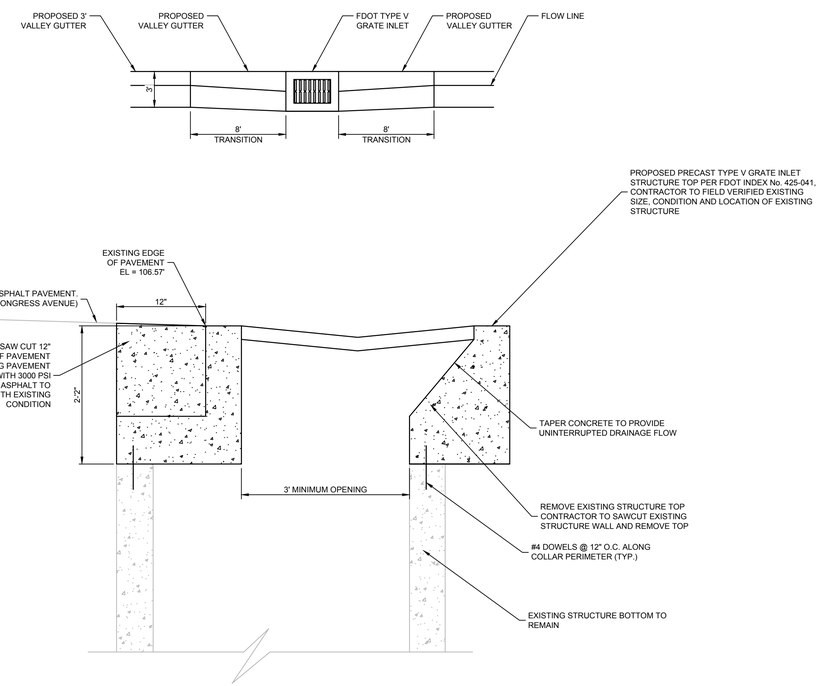
Project No.	Sheet
365-01.00	C05.01
Date: 01/23/23	
Scale: AS NOTED	



NOTES:

1. BRASS OR COPPER
2. BOTH RISERS SHALL BE BRASS OR TYPE "K" COPPER TUBING (HARD DRAWN) WITH COPPER/BRASS "SWEAT" FITTINGS AND ADAPTERS. ONLY LEAD FREE SOLDER AND FLUX SHALL BE ALLOWED.
3. PROVIDE ADDITIONAL SUPPORT AS NECESSARY TO SECURELY SUPPORT ASSEMBLY.

RPZ BACKFLOW PREVENTER (3/4" - 2") | SCALE NTS | 1



(EX-2) MODIFIED EXISTING DRAINAGE STRUCTURE | SCALE NTS | 2

No.	Revision/Issue	Date
3	Revised Per Agency Review Comments By City/State	06/02/2023
2	Issue For Permit	03/15/2023
1	Issue For Client Review	03/08/2023

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889

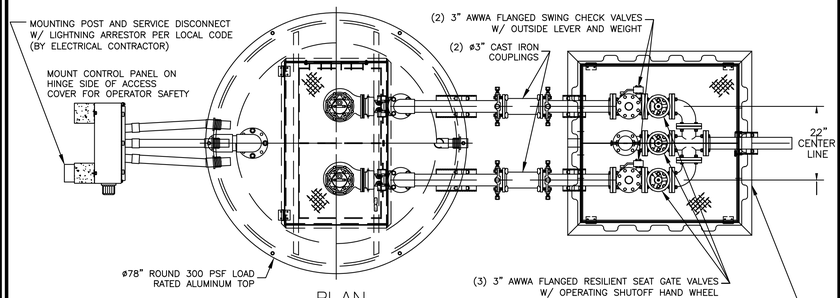
NISIT SAPPARKHAO, P.E.
FL REG. NO. 64085

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY (NISIT SAPPARKHAO, PE) ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY FAC 61G15-23.004

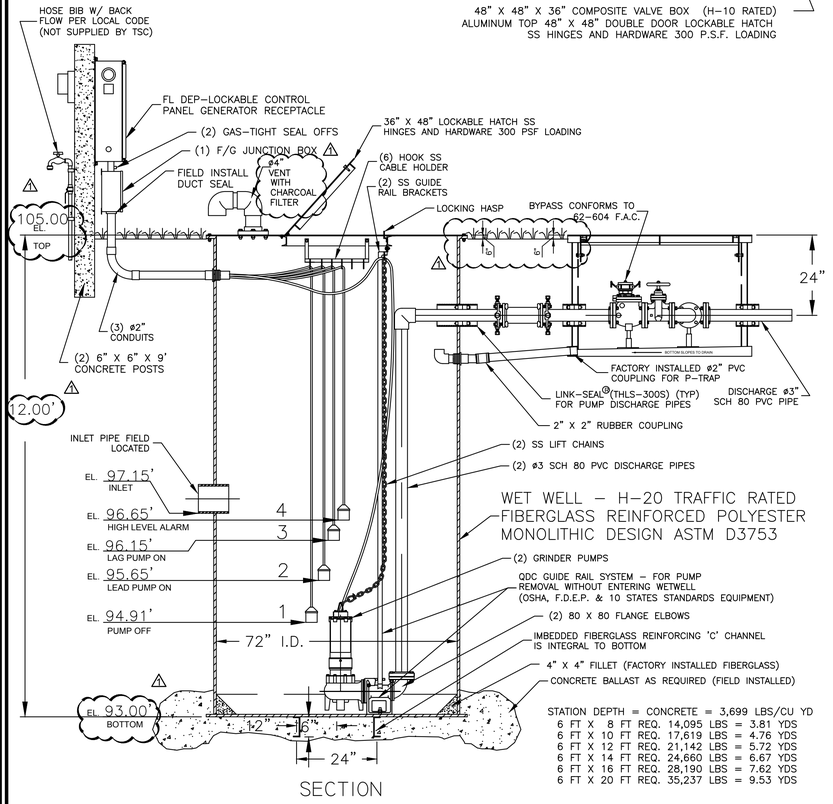
Project Name and Address: **BIG DAN'S CAR WASH**
17580 HIGHWAY 441
MOUNT DORA, FLORIDA 32757

Sheet Title: **DETAILS**

Project No.	Sheet
365-01.00	C05.02
Date: 01/23/23	
Scale: AS NOTED	



48" X 48" X 36" COMPOSITE VALVE BOX (H-10 RATED)
ALUMINUM TOP 48" X 48" DOUBLE DOOR LOCKABLE HATCH
SS HINGES AND HARDWARE 300 P.S.F. LOADING



SECTION

STATION DEPTH = CONCRETE = 3,699 LBS/CU YD
6 FT X 8 FT REQ. 14,095 LBS = 3.81 YDS
6 FT X 10 FT REQ. 17,619 LBS = 4.76 YDS
6 FT X 12 FT REQ. 21,142 LBS = 5.72 YDS
6 FT X 14 FT REQ. 24,660 LBS = 6.67 YDS
6 FT X 16 FT REQ. 28,190 LBS = 7.62 YDS
6 FT X 20 FT REQ. 35,237 LBS = 9.53 YDS

72" DUPLEX STATION - 3" PIPING
SLIDE RAIL SYSTEM, VALVE BOX. AND F.D.E.P. PANEL

TSC PRE-FAB PUMP SOLUTIONS ©

MODEL
TSC2-72.3 R9.dwg ©

1. HOSE BIBB WITH REDUCED PRESSURE BACKFLOW PREVENTER FIELD INSTALL BY CONTRACTOR

JOB: _____

QS: _____

GENERAL NOTES

FURNISH AND INSTALL LIBERTY SUBMERSIBLE GRINDER PUMPS:

DESIGN CONDITION:

MODEL	LGV, LGH	7.5, 10, 15	HP
GPM	108	140	FT/TDH
VOLTAGE	208/230 OR 460	THREE	PHASE
DISCHARGE	4"	7"	IMPELLER

SEWAGE GRINDER PUMP: 1. RATED FOR FIFTEEN (15) STARTS PER HOUR.

2. OIL FILLED MOTOR DESIGNED FOR SEWAGE APPLICATION WITH CLASS H INSULATION.

3. DUAL MECHANICAL SHAFT SEALS (SILICON CARBIDE / SILICON CARBIDE)

4. HIGH TEMPERATURE BALL BEARINGS B-10 RATING OF 100,000 HOURS, UPPER - SINGLE ROW, LOWER - DOUBLE ROW

5. PUMP SHAFT HORSEPOWER (BHP) SHALL NOT EXCEED MOTOR RATED HORSEPOWER THROUGHOUT THE ENTIRE OPERATING RANGE OF THE PUMP PERFORMANCE CURVE.

6. MOTORS SHALL BE DUAL WOUND AND CAPABLE OF OPERATING ON 208/230 VOLT WITH A 10% TOLERANCE VOLTAGE (190 TO 260) OR OPERATE ON 460 VOLT BY CHANGING THE MOTOR LEADS INSIDE THE PUMP.

FIBERGLASS WET WELL: SHALL BE A ONE PIECE UNIT WITH INTEGRAL BOTTOM, WALL AND UPPER FLANGE. THE ENTIRE FIBERGLASS WET WELL SHALL HAVE A DYNAMIC LOAD RATING OF 16,000 FT/LBS. EACH UNIT MUST BE SERIAL NUMBERED TO IDENTIFY THE TEST PROCEDURE. ASTM D 3753 & H-20 SPECIFICATIONS SHALL BE REQUIRED AS MINIMUM.

ALUMINUM HATCH: TSC MODEL-78R (78") ROUND WITH 36" X 48" LOCKABLE HATCH, REINFORCED FOR LOAD RATING OF 300 LBS/FT WITH HOLD OPEN SAFETY ARM, LOCKING DEVICE FOR HASP TYPE PADLOCK AND STAINLESS STEEL HARDWARE.

VALVE BOX: FIBERGLASS COMPOSITE (H-10 TRAFFIC RATED) WITH INTEGRAL BOTTOM. (FOR 4" DISCHARGE PIPING FXF HEADER SYSTEM) SHALL BE 48" X 48" X 36" WITH ALUMINUM TOP 48" X 48" DOUBLE DOOR LOCKABLE HATCH, REINFORCED FOR LOAD RATING OF 300 LBS/FT, LOCKING DEVICE FOR HASP TYPE PADLOCK AND STAINLESS STEEL HARDWARE.

ACCESSORIES: #304 S/S - GUIDE RAILS, UPPER GUIDE RAIL BRACKETS, CABLE HOLDER, ANCHOR BOLTS AND PUMP LIFTING CHAINS.

VALVES : SHALL BE SEWAGE SERVICE DESIGN LEVER AND WEIGHT CHECK VALVES AND RESILIENT SEAT GATE VALVES OPEN 100% WITH OPERATING HAND WHEEL.

PIPING: 3" SCHEDULE 80 PVC.

FLOAT SWITCHES: UL LISTED SJ ELECTRO MODEL (SJ 30 SWENO).

PUMP SUPPLIER SHALL PROVIDE SUBMERSIBLE PUMPS, SLIDE RAIL ASSEMBLIES, CONTROL PANEL, JUNCTION BOX, FLOAT SWITCHES, ALUMINUM HATCHES AND ACCESSORIES TO INSURE PROPER OPERATION AND WARRANTY.

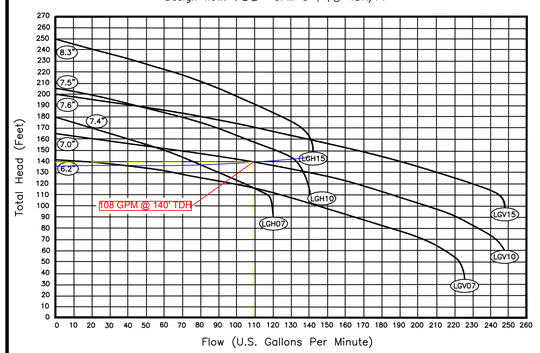
THE COMPLETE PACKAGE PUMPING STATION SHALL HAVE PUMP BASES, SLIDE RAIL ASSEMBLIES AND DISCHARGE PIPING ASSEMBLED BY TECHNICAL SALES CORPORATION READY TO SHIP FOR FIELD INSTALLATION.

THE MANUFACTURER OF PRE-FAB PUMP SOLUTIONS©:

TECHNICAL SALES CORPORATION, 4621 N. HALE AVE TAMPA, FL 33614 (813)876-9256

LIBERTY ENGINEERED PRODUCTS

LGV, LGH 7.5, 10, 15HP Synchronous Speed: 3450 RPM
Three Phase 3 or 4 Inch Discharge
Design flow: 105 GPM @ 140 TDH/FT



PUMP PERFORMANCE CURVE

CONTROL PANEL -SHALL CONFORM TO FL DEP 64-604.42(A)

CONTROL PANEL SHALL BE TSC MODEL # 38-D IN NEMA 4X FIBERGLASS ENCLOSURE. THE PANEL SHALL MEET STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP), ENVIRONMENTAL PROTECTION COMMISSION (EPC) AND LOCAL CODE REQUIREMENTS GOVERNING PRIVATE LIFT STATIONS.

FLOAT SWITCHES AND CONTROL SYSTEM SHALL BE UL LISTED AND INTRINSICALLY SAFE. ALL COMPONENTS SHALL BE UL LISTED.

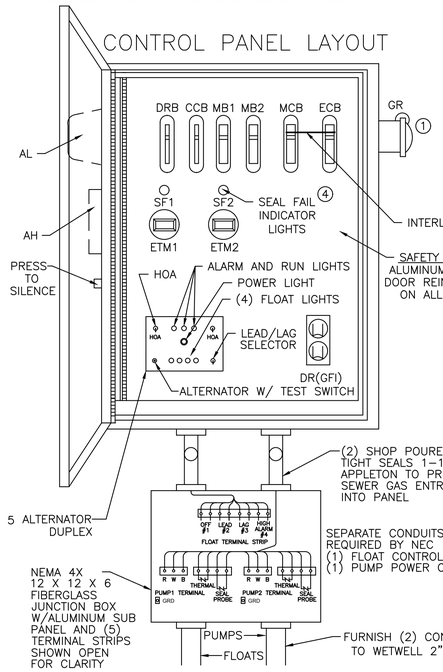
A JUNCTION BOX IS REQUIRED, WITH SHOP POURED SEALS BETWEEN BOX AND CONTROL PANEL TO PREVENT SEWER GAS ENTRY INTO CONTROL PANEL.

ELECTRICAL CONTRACTOR TO PROVIDE SERVICE DISCONNECT WITH LIGHTNING ARRESTOR MOUNTED PER LOCAL CODES.

THE CONTROL PANEL SHALL BE SUITABLY INSTALLED TO PREVENT SETTLING OR TIPPING.

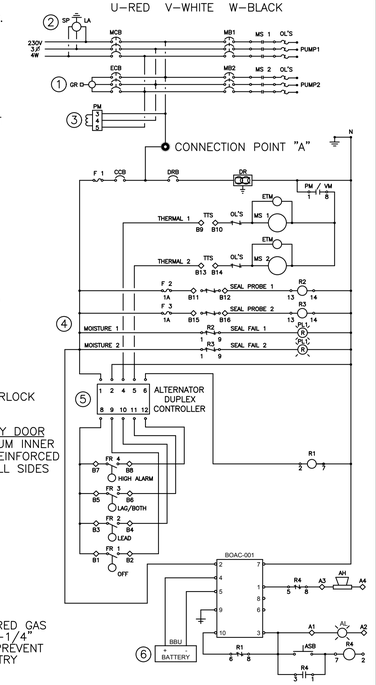
BATTERY BACK-UP ALARM SYSTEM TO BE INCORPORATED INTO CONTROL PANEL PER THE "10 STATES STANDARDS"

CONTROL PANEL LAYOUT



THREE PHASE WIRING DIAGRAM

U-RED V-WHITE W-BLACK



LEGEND

	AH	ALARM HORN
	AL	ALARM LIGHT
	ASB	ALARM SILENCE BUTTON
(5)	ATS	ALTERNATOR W/TEST SWITCH
(6)	BBU	BATTERY (BACK-UP UNIT)
	CCB	CONTROL CIRCUIT BREAKER
	DR	DUPLEX RECEPTACLE
	DRB	DUPLEX RECEPTACLE BREAKER
	ECB	EMERGENCY CIRCUIT BREAKER
	ETM	ELAPSED TIME METER
	F	FUSE
	FL	FLASHER
	FS	FLOAT SWITCH (REGULATOR)
(1)	GR	GENERATOR RECEPTACLE
	GRD	GROUND
	HOA	HAND-OFF-AUTOMATIC SELECTOR
	LA	LIGHTNING ARRESTOR
	MB	MOTOR BREAKER
	MCB	MAIN CIRCUIT BREAKER
	MS	MOTOR STARTER
	N	NEUTRAL
	OL'S	OVERLOAD HEATERS
(3)	PM	PHASE MONITOR
	PTS	PUMP TERMINAL STRIP
	R	RELAY
	RC	RUN CAPACITOR
	RD	DISCHARGE RESISTOR
	RL	PUMP RUN INDICATORS
	RTS	REGULATOR TERMINAL STRIP
	SC	START CAPACITOR
(4)	SF	SEAL FAIL (SHAFT)
	SR	START RELAY
(2)	SP	SURGE PROTECTOR
	TTS	THERMAL TERMINAL STRIP

PANEL WIRING DIAGRAM

PANELS SHALL CONFORM TO FLORIDA DEP 64-604.400

(1) GENERATOR RECEPTACLE FOR EMERGENCY POWER CONNECTION WITH INTERLOCK
(2) SURGE PROTECTION AND LIGHTNING PROTECTION ON ALL INCOMING LEGS
(3) PHASE PROTECTION SHALL BE PROVIDED
(4) SHAFT SEAL FAIL DETECTION
(5) ALTERNATOR W/TEST SWITCH
(6) BATTERY BACK-UP UNIT

PANEL MANUFACTURER SHALL BE A "UL" LISTED SHOP.

TSC DUPLEX PUMP STATION
FIBERGLASS WET WELL

TECHNICAL SALES CORPORATION
TSC PRE-FAB PUMP SOLUTIONS©
WATERWORKS & WASTEWATER SPECIALTIES
Representing Innovative Manufacturers
MODEL TSCE2-72.3©
4621 N. HALE AVENUE PH (813)876-9256
TAMPA, FL 33614 FAX (813)874-1194
EMAIL: Sales@TSCTampa.com
REV-21 SCALE: N.T.S.

72" DUPLEX STATION - 3" PIPING WITH SLIDE RAIL SYSTEM, VALVE BOX AND F.D.E.P. PANEL TSCE2-72.3 R21©

No.	Revision/Issue	Date
3	Revised Per Agency Review Comments By City/State	06/02/2023
2	Issue For Permit	03/15/2023
1	Issue For Client Review	03/08/2023

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889



NISIT SAPPARKHAO, P.E.
FL REG. NO. 64085

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY NISIT SAPPARKHAO, PE.ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY.FAC 51G15-23.004

Project Name and Address
BIG DAN'S CAR WASH
17580 HIGHWAY 441
MOUNT DORA, FLORIDA 32757

Sheet Title
LIFT STATION DETAILS

Project No.	Sheet
365-01.00	C05.03
Date	
01/23/23	
Scale	
AS NOTED	

GENERAL UTILITIES CONSTRUCTION NOTES

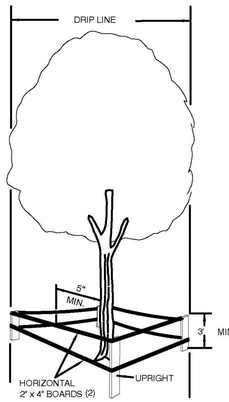
1. THE PUBLIC SERVICES DEPARTMENT MUST BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO ANY WORK ON EXISTING CITY OF MOUNT DORA UTILITIES. THE CONTRACTOR MUST CONTACT, JOSH KRAMM, UTILITY LINE MANAGER AT HIS OFFICE (352) 735-7151 OR CELL PHONE (352) 516-3691, DISTRIBUTION SUPERVISOR - OFFICE (352) 735-7151 OR CELL PHONE (352) 460-7922, RUSSELL HOPPER, COLLECTION & LIFT STATION SUPERVISOR - OFFICE (352) 735-7151 OR CELL PHONE (352) 973-2032.
2. NO GRADING, CUTTING, OR FILLING SHALL COMMENCE UNTIL SUCH TIME AS APPROPRIATE EROSION AND SEDIMENTATION CONTROL DEVICES HAVE BEEN INSTALLED BETWEEN THE DISTURBED AREA AND WATER BODIES, WATERCOURSES OR WETLANDS.
3. CONSTRUCTION MUST BE PER THE DRC APPROVED SITE PLAN. DEVIATIONS IN ROADWAY, UTILITY OR DRAINAGE CONSTRUCTION WILL REQUIRE WRITTEN APPROVAL OF THE CITY ENGINEER OR THE DIRECTOR OF PUBLIC SERVICES. (NOTE: SIGNIFICANT CHANGES FROM THE DRC APPROVED PLAN MAY REQUIRE THE OWNER/DEVELOPER TO SUBMIT A REVISED SITE PLAN THROUGH THE DRC FOR REVIEW.)
4. CONTRACTOR SHALL PROVIDE AN EMERGENCY CONTACT NUMBER LIST FOR KEY SITE PERSONNEL.
5. ENGINEER OF RECORD REVIEWED SHOP DRAWING SUBMITTALS ARE REQUIRED FOR ALL WATER/ SEWER/ RECLAIMED AND STORMWATER SYSTEMS TO BE DEDICATED TO THE CITY OF MOUNT DORA. TWO SETS ARE REQUIRED FOR REVIEW. ONE SET WILL BE RETURNED TO THE ENGINEER OF RECORD.
6. OFF SITE OR ROADWAY RIGHT OF WAY CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL CONDITIONS OF THE APPROVED R/W PERMIT(S). A COPY OF THE APPROVED R/W PERMIT MUST BE KEPT ON-SITE AND READILY AVAILABLE DURING ALL CONSTRUCTION ACTIVITIES WITHIN THE R/W.
7. THE PUBLIC SERVICES DEPARTMENT MUST BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO UTILITY TESTING. THE CONTRACTOR MUST CONTACT JOSH KRAMM, UTILITY LINE MANAGER, AT HIS OFFICE (352) 735-7151 OR CELL (352) 516-3691, DISTRIBUTION SUPERVISOR - OFFICE (352) 735-7151 OR CELL PHONE (352) 460-7922, RUSSELL HOPPER, COLLECTION & LIFT STATION SUPERVISOR - OFFICE (352) 735-7151 OR CELL PHONE (352) 973-2032. HYDROSTATIC TESTING SHALL BE PER THE APPLICABLE PROVISIONS AS SET FORTH IN AWWA STANDARDS. (MINIMUM 150 PSI @ 2 HOURS - POTABLE/RECLAIMED AND MINIMUM 100 PSI @ 2 HOURS - FORCE MAINS).
8. GRAVITY SEWER PIPING TESTS SHALL BE IN ACCORDANCE WITH UNI-BELL PVC PIPE ASSOCIATION; "RECOMMENDED PRACTICES FOR LOW-PRESSURE AIR TESTING OF INSTALLED SEWER PIPE". THE CONTRACTOR WILL BE REQUIRED TO PROVIDE VIDEO INSPECTION OF THE ENTIRE LINE DEMONSTRATING SATISFACTORY WORKMANSHIP AND SHOWING POSITIVE FLOW WITHIN THE SANITARY SYSTEM. ANY DEFECTS IN WORKMANSHIP, AREAS OF STANDING WATER OR "BELLIES" SHALL BE CAUSE FOR REJECTION. ONE DVD FORMAT COPY OF THE VIDEO INSPECTION MUST BE PROVIDED TO THE PUBLIC SERVICES DEPARTMENT.
9. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE INSPECTION OF ALL STORM SYSTEM PIPES DEMONSTRATING SATISFACTORY WORKMANSHIP AND SHOWING POSITIVE FLOW WITHIN THE DRAINAGE SYSTEM. ANY DEFECTS IN WORKMANSHIP, AREAS OF STANDING WATER OR "BELLIES" SHALL BE CAUSE FOR REJECTION. ONE DVD FORMAT COPY OF THE VIDEO INSPECTION MUST BE PROVIDED TO THE PUBLIC SERVICES DEPARTMENT.
10. AFTER JUMPER CONNECTION IS REMOVED, WATER & RECLAIMED WATER SERVICES MUST BE LOCKED OUT AND KEY SUPPLIED TO CITY.
11. FOLLOWING SATISFACTORY PRESSURE TESTING, THE CONTRACTOR SHALL DISINFECT ALL SECTIONS OF THE WATER DISTRIBUTION SYSTEM, AND RECEIVE APPROVAL THEREOF FROM THE APPROPRIATE AGENCIES, PRIOR TO PLACING IN SERVICE. ADVANCE NOTICE SHALL BE PROVIDED TO THE CITY BEFORE DISINFECTING PROCEDURE START. THE DISINFECTION SHALL BE ACCOMPLISHED WITH THE APPLICABLE PROVISIONS OF AWWA STANDARD, "DISINFECTING WATER MAINS" AND ALL APPROPRIATE AGENCY APPROVALS.

STANDARD CONSTRUCTION DETAIL GENERAL NOTES	GU001-1A ISSUED: 2017 REVISED: –

GENERAL UTILITIES CONSTRUCTION NOTES

12. COPIES OF SATISFACTORY BACTERIOLOGICAL TESTING AND THE FDEP "LETTER OF RELEASE REQUEST" SIGNED BY THE ENGINEER OF RECORD MUST BE SUBMITTED TO THE CITY ENGINEER FOR PROCESSING. NO POTABLE WATER LINE SHALL BE PLACED INTO SERVICE WITHOUT RECEIPT OF FDEP AUTHORIZATION.
13. FDEP CLEARANCE REQUEST MUST BE SUBMITTED THROUGH THE PUBLIC WORKS AND UTILITY DEPARTMENT.
14. EARTHWORK, PAVEMENT AND CONCRETE CONSTRUCTION NOT SPECIFICALLY ADDRESSED BY THE CITY LDC, SHALL BE THE CURRENT FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, WHICHEVER IS MORE STRINGENT.
15. COPIES OF ALL MATERIALS AND COMPACTION TESTING PER THE CURRENT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION MUST BE PROVIDED PRIOR TO CLOSEOUT.
16. THE PUBLIC SERVICES DEPARTMENT REQUIRES A PRE-CLOSEOUT FIELD REVIEW WITH THE CONTRACTOR /SITE DEVELOPER. THE CONTRACTOR MUST CONTACT PUBLIC SERVICES -ENGINEERING AT (352) 735-7151, TO COORDINATE. ALL ISSUES IDENTIFIED AT THE FIELD REVIEW MUST BE ADDRESSED PRIOR TO PUBLIC SERVICES FINAL CLOSE OUT APPROVAL.
17. LIFT STATION START UP WILL REQUIRE A MINIMUM OF 48 HOURS PRIOR NOTIFICATION TO THE CITY. THE CONTRACTOR MUST CONTACT JOSH KRAMM, UTILITY LINE MANAGER, AT (352) 735-7151 OR (352) 551-9263 OR RUSSELL HOPPER, COLLECTION & LIFT STATION SUPERVISOR - OFFICE (352) 735-7151 OR CELL PHONE (352) 973-2032 TO COORDINATE THE START UP INSPECTION.
18. ALL MANUALS FOR LIFT STATION CONTROL PANELS, GENERATORS, AND PUMPS WILL BE REQUIRED PRIOR TO START UP. THESE MANUALS WILL BE SUBJECT TO CITY REVIEW / APPROVAL TO INCLUDE O&M MANUALS. NO LIFT STATION WILL BE ACCEPTED UNTIL SATISFACTORY DOCUMENTATION HAS BEEN PROVIDED. ANY LIFT STATION PUMP, SIZED LARGER THAN 20 HP, SHALL BE PROVIDED WITH A REBUILD KIT CONSISTING OF BEARINGS SEALS, O-RINGS AND WEAR RINGS. ALSO, A TOOL KIT WITH BOX IS REQUIRED.
19. DEDICATION OF IMPROVEMENTS TO THE PUBLIC SHALL BE IN ACCORDANCE WITH THE CITY OF MOUNT DORA LDC 4.3.4(4)(A) - BONDS, 5.3.5(1) - BONDS, AND 7.2.4 - BONDS AND WARRANTIES. THE CITY'S LAND DEVELOPMENT CODE IS AVAILABLE ONLINE AT WWW.MUNICODE.COM FOR YOUR REFERENCE.
20. AS-BUILT DRAWINGS - PER LDC 7.13.6: OWNER / DEVELOPER SHALL PROVIDE FOUR HARD COPIES AND ONE ELECTRONIC OF THE APPROVED FINAL ENGINEERING PLANS CONFORMED TO SHOW ALL AS-BUILT CONDITIONS. AS-BUILTS MUST SHOW ACCURATE MEASUREMENTS OF WATER AND SEWER LINES AND STRUCTURES FROM FIXED KNOWN LOCATIONS WITHIN THE DEVELOPMENT. CERTIFICATION OF THE PROJECT ENGINEER ATTESTING TO THE ACCURACY OF THE DRAWINGS IF REQUIRED, CITY ACCEPTANCE OF IMPROVEMENTS AND / OR ISSUANCE OF OCCUPANCY WILL BE WITHHELD UNTIL SATISFACTORY AS-BUILTS ARE PROVIDED.

STANDARD CONSTRUCTION DETAIL GENERAL NOTES	GU001-1B ISSUED: 2017 REVISED: –



NOTE:
BARRIER MUST BE ERECTED PRIOR TO CONSTRUCTION

WHY A BARRIER?

1. TO PROTECT ALL ABOVE GROUND PORTIONS
2. TO PROTECT SOIL NEAR TREE FROM COMPACTION
3. PROVIDES PHYSICAL AND MENTAL AWARENESS OF TREES' PRESENCE TO EQUIPMENT OPERATORS

WHY IT WORKS

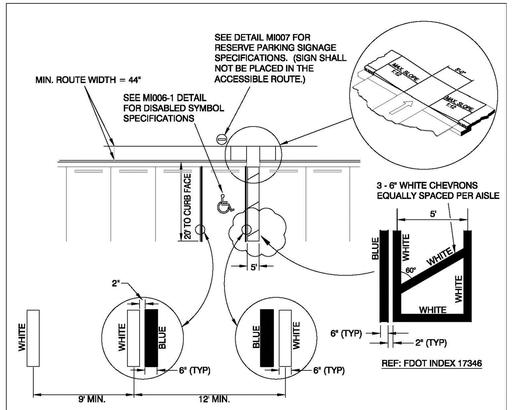
1. NO HEAVY EQUIPMENT ALLOWED INSIDE BARRIER, ONLY HAND LABOR
2. NO CONSTRUCTION MATERIALS OR TEMPORARY SOIL DEPOSITS ALLOWED INSIDE THIS AREA

BY OBSERVING THESE TWO SIMPLE PRINCIPLES, A TREES' CHANCE FOR SURVIVAL IS GREATLY ENHANCED

SPECIFICATIONS FOR WOOD BARRIER

1. MINIMUM RADIUS TO BE PROTECTED IS ENTIRE DRIP LINE
2. MINIMUM 3' IN HEIGHT
3. UPRIGHTS- THE EQUIVALENT OF 2"x4" LUMBER ON 6' MINIMUM CENTERS
4. HORIZONTAL- THE EQUIVALENT OF TWO COURSES OF 2" x 4" LUMBER PAINTED SAFETY YELLOW
5. BARRIERS TO BE ERECTED AROUND TREES TO REMAIN BEFORE CONSTRUCTION OR NEARBY TREES ARE REMOVED
6. BARRIERS TO REMAIN IN PLACE UNTIL ALL PAVING, CONSTRUCTION AND HEAVY EQUIPMENT IS OUT OF AREA

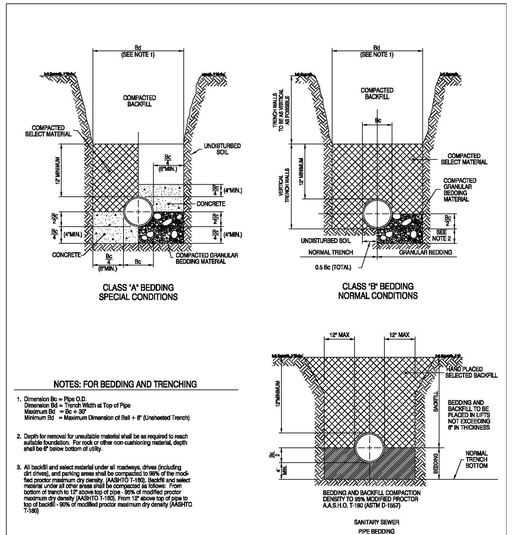
TREE PROTECTION MEASURES	GU0023-1 ISSUED: 2017 REVISED: – 2019



NOTES:

1. EACH ACCESSIBLE PARKING SPACE SHALL BE CONSPICUOUSLY STRIPED IN BLUE PAINT, AND SHALL BE POSTED AND MAINTAINED WITH A PERMANENT, ABOVE-GRADE SIGN BEARING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY, AND THE CAPTION 'PARKING BY DISABLED PERMIT ONLY". SUCH SIGNS SHALL NOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE. ALL DISABLED PARKING SPACES MUST BE SIGNED AND MARKED IN ACCORDANCE WITH THE STANDARDS ADOPTED BY THE DEPARTMENT OF TRANSPORTATION.
2. PARKING SPACE WIDTH AND ACCESS AISLES SHALL BE MEASURED FROM CENTER OF WHITE STRIPE TO CENTER OF WHITE STRIPE.
3. THIS DETAIL IS PROVIDED TO SUPPORT LDC SECTION 3.41.3.2
4. WHERE CURBING EXISTS PARALLEL TO STALL, BLUE LINE SHALL BE REQUIRED ADJACENT TO CURB (WHITE LINE WILL NOT BE REQUIRED).
5. CURB RAMPS CONSTRUCTED ON EXISTING SITES OR FACILITIES MAY HAVE SLOPES AND RISES AS ALLOWED IN ADA 4.1.6 (3) (a) IF SPACE LIMITATIONS PROHIBIT THE USE OF A 1:12 SLOPE OR LESS.

ACCESSIBLE PARKING - SINGLE SPACE STRIPING	GU0024-1 ISSUED: 2017 REVISED: –



NOTES: FOR BEDDING AND TRENCHING

1. Dimension Bc = Pipe O.D.
   Dimension Bd = Trench Width at Top of Pipe
   Maximum Bd = Bc + 30"
   Minimum Bd = Maximum Dimension of Bell + 8" (Unsheeted Trench)
2. Depth for removal for unsuitable material shall be as required to reach suitable foundation. For rock or other non-cushioning material, depth shall be 6" below bottom of utility.
3. All backfill and select material under all roadways, drives (including dirt drives), and parking areas shall be compacted to 98% of the modified proctor maximum dry density (AASHTO T-180). Backfill and select material shall be compacted to 95% of the modified proctor from the bottom of trench to 12" above top of pipe - 95% of modified proctor maximum dry density (AASHTO T-180). From 12" above top of pipe to top of backfill - 90% of modified proctor maximum dry density (AASHTO T-180)

NOT TO SCALE

BEDDING DETAILS	GU0017-1 ISSUED: 2017 REVISED: –

No.	Date	Revision/Issue
3	08/02/2023	Revised Per Agency Review Comments By City/State
2	03/15/2023	Issue For Permit
1	03/08/2023	Issue For Client Review

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889

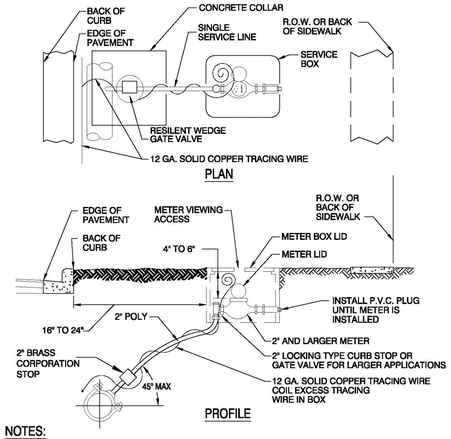
NISIT SAPPARKHAO, P.E.
FL REG. NO. 64085

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY NISIT SAPPARKHAO, PE ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY.FAC 51515-23.004

Project Name and Address
BIG DAN'S CAR WASH
17580 HIGHWAY 441
MOUNT DORA, FLORIDA 32757

Sheet Title
CITY OF MOUNT DORA STANDARD DETAILS

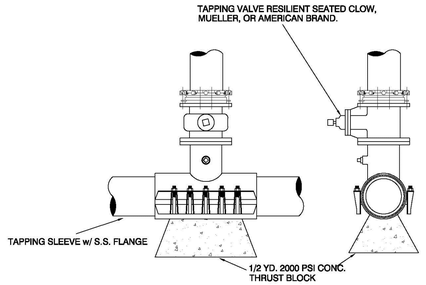
Project No. 365-01.00
Date 01/23/23
Scale AS NOTED
Sheet **C05.04**



NOTES:

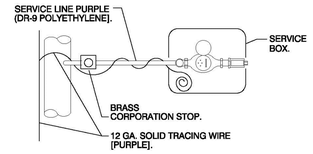
1. SERVICE BOX SHALL BE DFW QUALITY PRODUCTS NDS 1200*RR.
2. METER SHALL BE INSTALLED BETWEEN SIDEWALK AND CURB AND IN NO CASE SHALL IT BE INSTALLED IN SIDEWALK OR OTHER PAVED AREAS.
3. BACKFLOW PREVENTERS WILL NOT BE SUPPLIED BY THE CITY OF MT. DORA ON COMMERCIAL SERVICE CONNECTIONS. BACKFLOW PREVENTER REQUIREMENTS WILL VARY FOR COMMERCIAL CONNECTIONS.
4. IRRIGATION METERS REQUIRE A CITY APPROVED TESTABLE BACKFLOW PREVENTER.
5. CASING OF SERVICE LINE IS REQUIRED UNDER PAVEMENT, USE SCH 40 PVC PIPE.
6. 3/4" - 2" RESIDENTIAL WATER METERS WILL BE PROVIDED BY AND INSTALLED BY CITY OF MOUNT DORA

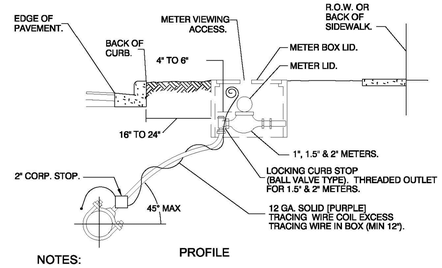
POTABLE WATER-SINGLE SERVICE CONNECTION FOR 2" AND LARGER METERS	PW006-1
	ISSUED: 2017
	REVISED: --



NOT TO SCALE

WET TAP SLEEVE & VALVE	PW0013-1
	ISSUED: 2017
	REVISED: --





NOTES:

1. SERVICE BOX SHALL BE DFW QUALITY PRODUCTS NDS 1200 *RR, LAVENDER IN COLOR.
2. METER SHALL BE INSTALLED BETWEEN SIDEWALK AND CURB AND IN NO CASE SHALL IT BE INSTALLED IN SIDEWALK OR OTHER PAVED AREAS.
3. SERVICE LINES SHALL NOT BE LESS THAN METER SIZE.
4. CASING OF SERVICE LINES IS REQUIRED UNDER PAVEMENT, USE SCH 40 PVC PIPE..
5. 1" - 2" RECLAIMED WATER METERS SHALL BE NEPTUNE MODEL T-10 AND SHALL BE INSTALLED BY THE CITY.
6. RECLAIMED WATER METERS 2" AND LARGER SHALL BE NEPTUNE HP TURBINE METERS WITH STRAINERS.

RECLAIMED WATER COMMERCIAL SINGLE SERVICE CONNECTION	RW005-1
	ISSUED: 2017
	REVISED: --

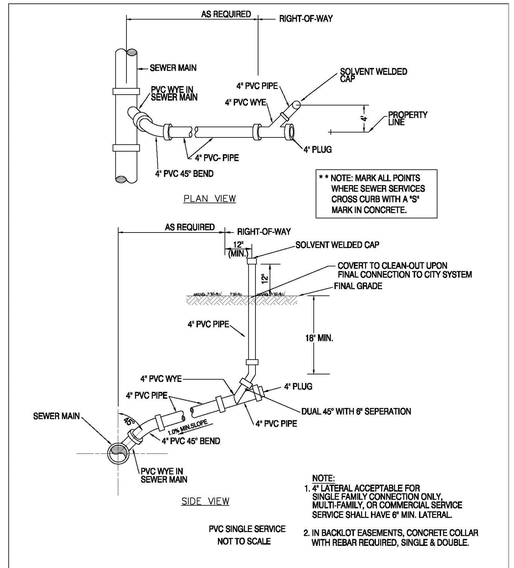
Irrigation Systems



Storage Ponds & Lakes

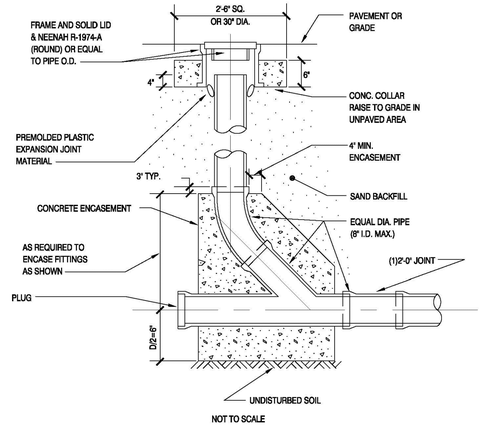


RECLAIMED WATER REQUIRED WARNING SIGNS	RW006-1
	ISSUED: 2017
	REVISED: --



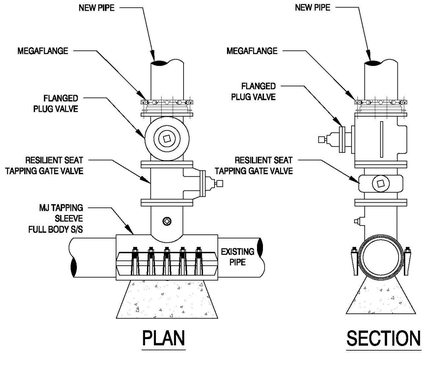
PVC SINGLE SERVICE
NOT TO SCALE

SINGLE SANITARY SEWER SERVICE	SS012-1
	ISSUED: 2017
	REVISED: --

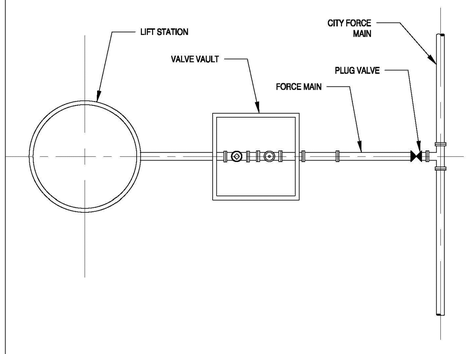


NOT TO SCALE

GRAVITY CLEANOUT	SS014-1
	ISSUED: 2017
	REVISED: --



FORCE MAIN TAPPING SLEEVE AND VALVE	SS017-1
	ISSUED: 2017
	REVISED: --



PRIVATE LIFT STATION DETAIL	SS018-1
	ISSUED: 2017
	REVISED: --

No.	Revision/Issue	Date
3	Revised Per Agency Review Comments By City/State	06/02/2023
2	Issue For Permit	03/15/2023
1	Issue For Client Review	03/08/2023

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889

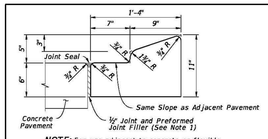
NISIT SAPPARKHAO, P.E.
FL REG. NO. 64085

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY NISIT SAPPARKHAO, PE ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY.FAC 61G15-23.004

Project Name and Address
BIG DAN'S CAR WASH
17580 HIGHWAY 441
MOUNT DORA, FLORIDA 32757

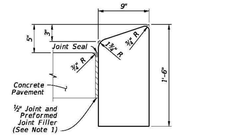
Sheet Title
CITY OF MOUNT DORA STANDARD DETAILS

Project No.	Sheet
365-01.00	C05.05
Date: 01/23/23	
Scale: AS NOTED	



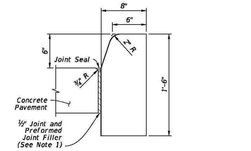
NOTE: For use adjacent to concrete or flexible pavement, concrete shown (See Note 4).

TYPE A



NOTE: For use adjacent to concrete or flexible pavement, concrete shown.

TYPE B

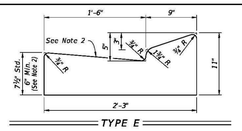


NOTE: For use adjacent to concrete or flexible pavement, concrete shown.

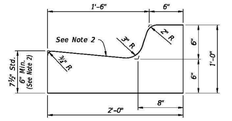
TYPE D

NOTES:

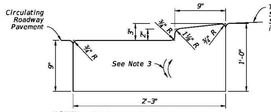
1. For Type A, Type B, and Type D Curb: Expansion joint, preformed joint filler and joint seal are required between curbs and concrete pavement only, see Sheet 3.
2. For Type E, Type F, Drop Curb, and Valley Gutter: When used on high side of roadways, match the cross slope of the gutter to the cross slope of the adjacent pavement. The thickness of the lip is 6", unless otherwise shown on Plans.
3. For Type RA, rotate entire section so that gutter cross slope matches slope of adjacent circulating roadway pavement.
4. For details depicting usage of Type A Curb adjacent to flexible pavement see Sheet 3.



TYPE E

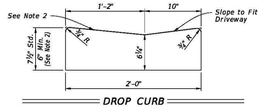


TYPE F

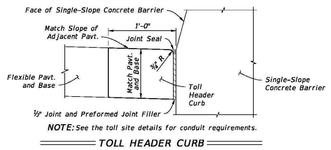


NOTE: Traffic Bearing Sections for use in Roundabout Central Island Construction.

TYPE RA

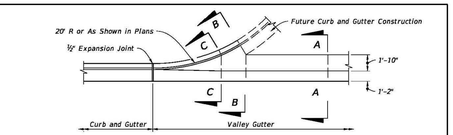


DROP CURB

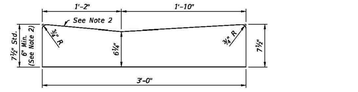


NOTE: See the toll site details for conduit requirements.

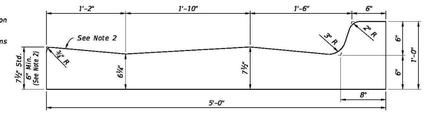
TOLL HEADER CURB



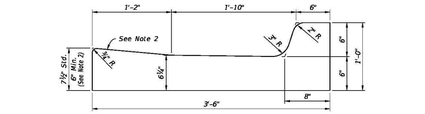
PLAN VIEW



SECTION A-A

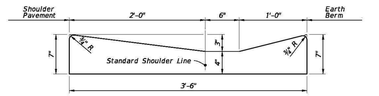


SECTION B-B



SECTION C-C

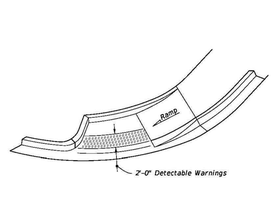
VALLEY GUTTER



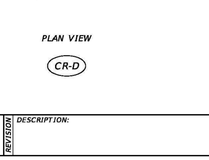
SHOULDER GUTTER

CONCRETE CURB AND GUTTER

LAST REVISION	DESCRIPTION:			INDEX	SHEET
11/01/21		FY 2023-24 STANDARD PLANS	CURB AND GUTTER	520-001	2 of 3

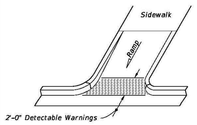


ISOMETRIC VIEW

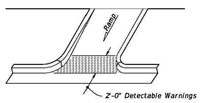


PLAN VIEW

CR-D

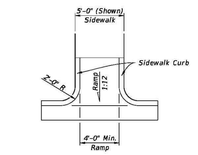


OPTION A



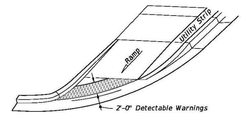
OPTION B

ISOMETRIC VIEW

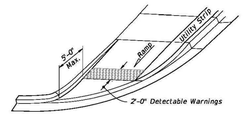


PLAN VIEW

CR-E

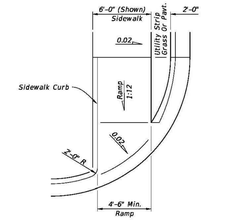


OPTION A



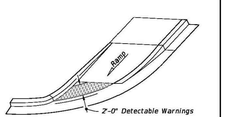
OPTION B

ISOMETRIC VIEW

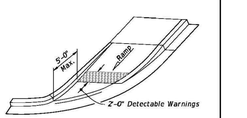


PLAN VIEW

CR-F

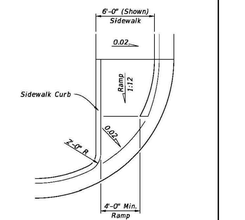


OPTION A



OPTION B

ISOMETRIC VIEW



PLAN VIEW

CR-G

SIDEWALK CURB RAMPS CR-D, CR-E, CR-F & CR-G

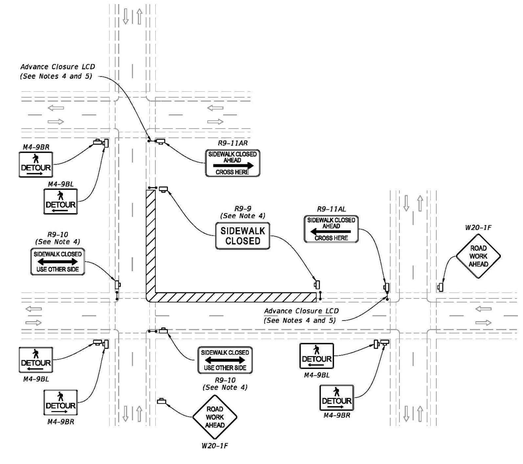
LAST REVISION	DESCRIPTION:			INDEX	SHEET
11/01/21		FY 2023-24 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	522-002	4 of 7

NOTES:

1. Cover or deactivate pedestrian traffic signal display(s) controlling closed crosswalks.
2. Place pedestrian LCDs across the full width of the closed sidewalk.
3. For post mounted signs located near or adjacent to a sidewalk, maintain a minimum 7' clearance from the bottom of the sign panel to the surface of the sidewalk.
4. "Sidewalk Closed" signs (R9-XX) may be mounted on pedestrian LCDs in accordance with the manufacturer's instructions.
5. Omit the Advance Closure LCD if it blocks access to other pedestrian facilities (e.g., transit stops, residences, or business entrances).

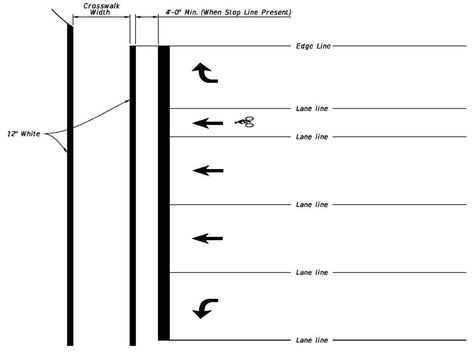
SYMBOLS:

- Work Area
- Work Zone Sign
- Pedestrian Longitudinal Channelizing Device (LCD)
- Lane Identification and Direction of Traffic

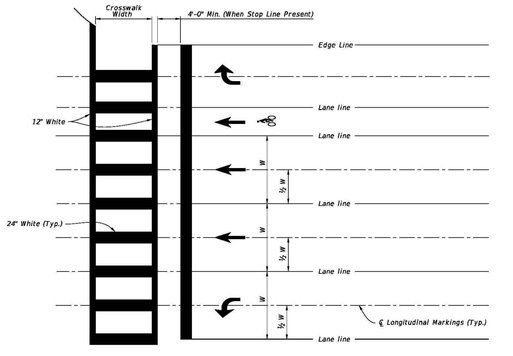


PEDESTRIAN DETOUR

LAST REVISION	DESCRIPTION:			INDEX	SHEET
11/01/20		FY 2023-24 STANDARD PLANS	SIDEWALK CLOSURE	102-660	1 of 2



STANDARD CROSSWALK DETAILS



SPECIAL EMPHASIS CROSSWALK DETAILS

NOTES:

1. For crosswalk width, exceed width of the adjacent sidewalk, but do not make width less than 6' for intersection crosswalks and 10' for midblock crosswalks. Measure width from the inside of the transverse crosswalk markings.
2. When the Special Emphasis Crosswalk is not perpendicular to the lane lines, make the longitudinal markings parallel to the lane lines.
3. Refer to Index 522-002 when Curb Ramps are present.

LAST REVISION	DESCRIPTION:			INDEX	SHEET
11/01/21		FY 2023-24 STANDARD PLANS	PAVEMENT MARKINGS	711-001	9 of 13

No.	Revision/Issue	Date
3	Revised Per Agency Review Comments By City/State	08/02/2023
2	Issue For Permit	03/15/2023
1	Issue For Client Review	03/08/2023

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889

NISIT SAPPARKHAO, P.E.
FL REG. NO. 64085

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY NISIT SAPPARKHAO, PE ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY.FAC 61G15-23.004

Project Name and Address: BIG DAN'S CAR WASH
17580 HIGHWAY 441
MOUNT DORA, FLORIDA 32757

Sheet Title: FDOT STANDARD DETAILS

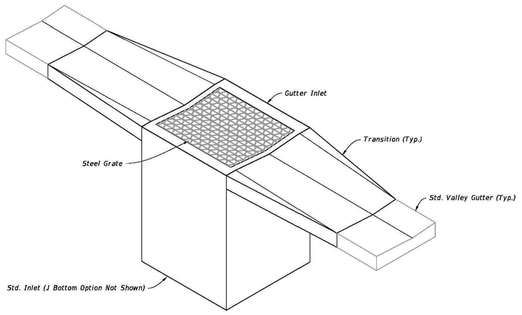
Project No.	Sheet
365-01.00	C05.06
Date: 01/23/23	
Scale: AS NOTED	

GENERAL NOTES:

1. Work this Index with Index 425-001 and Index 425-010.
2. All reinforcing is Grade 60 bars with 2" min. cover unless otherwise noted. See Index 425-001 for equivalent area of welded wire fabric. Cut or bend bars out of way of pipe to clear pipe 1½".
3. Chamfer all exposed edges and corners ¾" or tool to ¼" radius.
4. Dimensions are for both precast and cast-in-place inlets unless otherwise noted.

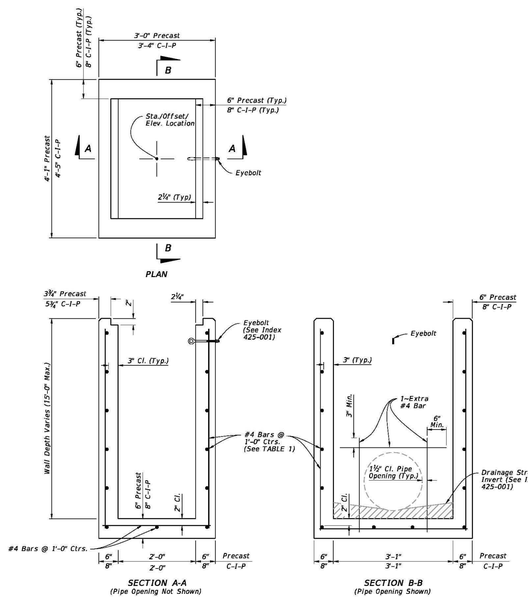
TABLE OF CONTENTS:

Sheet	Description
1	General Notes and Contents
2	Dimensional and Reinforcing Details
3	Steel Grate Details
4	Alternate A Structure Bottom - Top Slab Details



GUTTER INLET TYPE V
(Pipe Opening Not Shown)

LAST REVISION	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	GUTTER INLET TYPE V	INDEX	SHEET
10/01/20				425-041	1 of 4



STEEL GRATE DETAIL
(Approx. 104 Lbs. - See Sheet 7 For Cast Iron Grates)

DIMENSIONAL AND REINFORCING DETAILS

TYPE C - DIMENSIONAL, REINFORCING, AND STEEL GRATE DETAILS

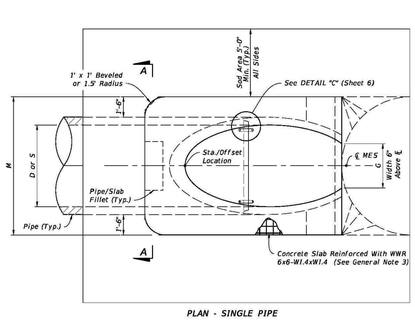
TABLE 1
HORIZONTAL WALL REINFORCING SCHEDULE

WALL DEPTH	SCHEDULE	AREA (in.²/ft.)	MAX. SPACING	
			BARS	WWF
0' - 15'	A12	0.20	12"	8"

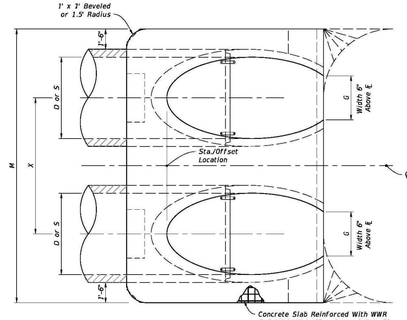
NOTES:

1. Grate, Concrete Apron, and Sod not shown on structure detail.
2. See Sheet 8, 9, and 10 for Concrete Apron and Sodded Area details.

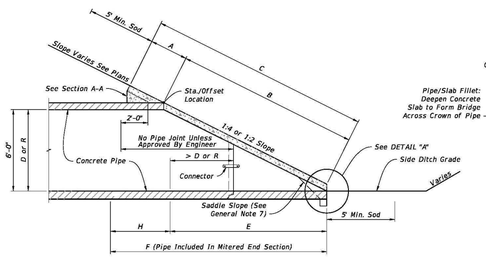
LAST REVISION	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	DITCH BOTTOM INLET TYPES C, D, E, AND H	INDEX	SHEET
10/01/20				425-052	2 of 14



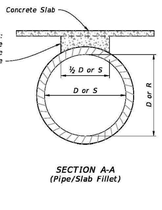
PLAN - SINGLE PIPE



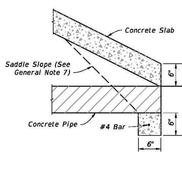
PLAN - MULTIPLE PIPE



ELEVATION



SECTION A-A
(Pipe/Slab Fillet)



DETAIL "A"

ROUND CONCRETE PIPE
(Elliptical Pipe Similar)

NOTE: See Table 1 on Sheet 3 for Dimensions and Quantities.

SINGLE AND MULTIPLE CONCRETE PIPE

LAST REVISION	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	CROSS DRAIN MITERED END SECTION	INDEX	SHEET
11/01/19				430-021	2 of 6

TABLE 1
SINGLE AND MULTIPLE CONCRETE PIPE DIMENSIONS AND QUANTITIES

	Dia. D	Rise R	Span S	X	A	B	C	E	F	G	H	M Single Pipe	M Double Pipe	M Triple Pipe	M Quad. Pipe	N	3½" CONC. SLAB (CY) (See General Note 3) Single Pipe	3½" CONC. SLAB (CY) (See General Note 3) Double Pipe	3½" CONC. SLAB (CY) (See General Note 3) Triple Pipe	3½" CONC. SLAB (CY) (See General Note 3) Quad. Pipe	3" CONC. SLAB (CY) (See General Note 3) Single Pipe	3" CONC. SLAB (CY) (See General Note 3) Double Pipe	3" CONC. SLAB (CY) (See General Note 3) Triple Pipe	3" CONC. SLAB (CY) (See General Note 3) Quad. Pipe	SODDING (SY) Single Pipe	SODDING (SY) Double Pipe	SODDING (SY) Triple Pipe	SODDING (SY) Quad. Pipe
Round Concrete Pipe 1:2 Slope	15"	—	—	2'-7"	1.92'	2.18'	4.10'	2.06'	5'	1.22'	2.9'	4.6.5'	7.2'	9.79'	12.37'	1.19'	0.38	0.58	0.77	0.96	0.27	0.41	0.54	0.67	21	24	27	30
	18"	—	—	2'-10"	1.97'	2.74'	4.71'	2.56'	6'	1.41'	3.4'	4.92'	7.75'	10.58'	13.42'	1.21'	0.44	0.65	0.87	1.09	0.31	0.45	0.60	0.75	22	25	28	31
	24"	—	—	3'-5"	2.06'	3.85'	5.91'	3.56'	7'	1.73'	3.4'	5.50'	8.92'	12.33'	15.75'	1.25'	0.54	0.83	112	1.42	0.39	0.59	0.79	1.00	24	28	32	35
	30"	—	—	4'-3"	2.15'	4.95'	7.10'	4.50'	8'	2.00'	3.4'	6.08'	10.33'	14.58'	18.83'	1.29'	0.66	1.09	1.50	1.91	0.46	0.76	1.04	1.32	26	31	35	40
	36"	—	—	5'-1"	2.25'	6.08'	8.33'	5.56'	9'	2.24'	3.4'	6.67'	11.75'	16.83'	21.92'	1.33'	0.81	1.38	1.95	2.51	0.55	0.94	1.33	1.71	28	34	39	45
	42"	—	—	6'-0"	2.34'	7.21'	9.59'	6.50'	10'	2.45'	3.4'	7.25'	13.25'	19.25'	25.25'	1.38'	0.97	1.70	2.45	3.19	0.66	1.15	1.66	2.15	30	37	43	50
	48"	—	—	6'-9"	2.43'	8.33'	10.76'	7.56'	11'	2.65'	3.4'	7.83'	14.58'	21.33'	28.08'	1.42'	1.13	2.04	2.93	3.84	0.76	1.37	1.96	2.57	32	39	47	54
	54"	—	—	7'-8"	2.52'	9.44'	11.96'	8.56'	12'	2.83'	3.4'	8.42'	16.08'	23.75'	31.42'	1.46'	1.31	2.44	3.58	4.72	0.87	1.62	2.38	3.14	34	42	51	59
	60"	—	—	8'-6"	2.62'	10.50'	13.18'	9.50'	14'	3.00'	4.0'	9.00'	17.50'	26.00'	34.50'	1.50'	1.51	2.89	4.28	5.68	0.99	1.90	2.81	3.73	36	45	55	64
	66"	—	—	9'-3"	2.71'	11.68'	14.39'	10.56'	15'	3.18'	4.0'	9.58'	18.75'	27.92'	37.08'	1.54'	1.68	3.25	4.84	6.43	1.11	2.15	3.21	4.27	38	48	58	68
	72"	—	—	10'-0"	2.80'	12.80'	15.60'	11.56'	16'	3.35'	4.0'	10.16'	20.00'	30.16'	40.16'	1.58'	1.89	3.74	5.59	7.45	1.24	2.46	3.68	4.90	40	51	62	73
	15"	—	—	2'-7"	2.27'	4.09'	6.36'	4.03'	8'	1.22'	4.0'	4.63'	7.29'	9.79'	12.37'	1.19'	0.57	0.87	1.15	1.44	0.40	0.61	0.80	1.00	23	26	29	32
	18"	—	—	2'-10"	2.36'	5.12'	7.48'	5.03'	9'	1.41'	4.0'	4.92'	7.75'	10.58'	13.42'	1.21'	0.66	0.99	1.31	1.65	0.47	0.69	0.91	1.14	25	28	31	35
	24"	—	—	3'-5"	2.53'	7.18' Δ	9.71'	7.03' Δ	11'	1.73'	4.0'	5.50'	8.92'	12.33'	15.75'	1.25'	0.85	1.30	1.75	2.20	0.60	0.90	1.21	1.52	28	32	36	40
	30"	—	—	4'-3"	2.70'	9.29'	11.99'	9.03'	13'	2.00'	4.0'	6.08'	10.33'	14.58'	18.83'	1.29'	1.10	1.74	2.39	3.05	0.76	1.19	1.63	2.07	31	36	41	46
	36"	—	—	5'-1"	2.87'	11.31' ◇	14.18'	11.03' ◇	15'	2.24'	4.0'	6.67'	11.75'	16.83'	21.92'	1.33'	1.32	2.21	3.08	3.96	0.89	1.48	2.05	2.63	34	40	46	52
	42"	—	—	6'-0"	3.05'	13.37'	16.42'	13.03'	17'	2.45'	4.0'	7.25'	13.25'	19.25'	25.25'	1.38'	1.58	2.76	3.91	5.09	1.05	1.82	2.57	3.34	38	44	51	58
	48"	—	—	6'-9"	3.22'	15.43'	18.65'	15.03'	19'	2.65'	4.0'	7.83'	14.58'	21.33'	28.08'	1.42'	1.85	3.30	4.73	6.17	1.21	2.15	3.07	4.00	41	48	56	63
	54"	—	—	7'-8"	3.39'	17.49'	20.88'	17.03'	21'	2.83'	4.0'	8.42'	16.08'	23.75'	31.42'	1.46'	2.14	3.95	5.77	7.58	1.39	2.55	3.72	4.88	44	52	61	69
	60"	—	—	8'-6"	3.56'	19.55'	23.11'	19.03'	23'	3.00'	4.0'	9.00'	17.50'	26.00'	34.50'	1.50'	2.45	4.66	6.87	9.07	1.59	3.02	4.44	5.86	47	56	66	75
	66"	—	—	9'-3"	3.73'	21.62'	25.35'	21.03'	25'	3.18'	4.0'	9.58'	18.75'	27.92'	37.08'	1.54'	2.88	5.54	8.18	10.84	1.91	3.66	5.40	7.15	49	59	69	80
	72"	—	—	10'-0"	3.91'	23.68'	27.59'	23.03'	27'	3.35'	4.0'	10.16'	20.00'	30.16'	40.16'	1.58'	3.54	6.61	9.67	13.13	2.12	4.18	6.24	8.30	52	63	74	85
Elliptical Concrete Pipe 1:2 Slope	—	12"	18"	2'-10"	1.97'	1.62'	3.59'	1.56'	6'	1.50'	2.4'	4.92'	7.75'	10.58'	13.42'	1.21'	0.30	0.49	0.67	0.85	0.19	0.33	0.45	0.57	21	24	27	30
	—	14"	23"	3'-4"	2.01'	1.99'	4.00'	1.89'	5'	1.90'	3'	5.38'	8.71'	12.04'	15.38'	1.23'	0.37	0.59	0.81	1.02	0.25	0.40	0.55	0.69	22	26	29	33
	—	19"	30"	4'-0"	2.31'	2.92'	5.03'	2.73'	6'	2.37'	3.3'	6.04'	10.04'	14.04'	18.04'	1.27'	0.50	0.80	1.09	1.39	0.34	0.55	0.75	0.95	24	28	33	37
	—	24"	38"	5'-0"	2.20'	3.85'	6.05'	3.56'	7'	2.83'	3.4'	6.79'	11.79'	16.79'	21.79'	1.31'	0.62	1.03	1.45	1.86	0.43	0.71	1.00	1.28	26	31	37	42
	—	29"	45"	5'-3"	2.34'	4.79'	7.13'	4.39'	8'	3.19'	3.6'	7.50'	13.42'	19.33'	25.25'	1.38'	0.75	1.30	1.84	2.39	0.52	0.90	1.27	1.65	28	34	41	47
	—	34"	53"	7'-0"	2.43'	5.72'	8.15'	5.23'	9'	3.57'	3.8'	8.25'	15.25'	22.25'	29.25'	1.42'	0.90	1.61	2.32	3.03	0.62	1.11	1.60	2.09	30	37	45	53
	—	38"	60"	7'-10"	2.52'	6.46'	8.98'	5.89'	9'	3.95'	3'	8.92'	16.75'	24.58'	32.42'	1.46'	1.03	1.89	2.74	3.60	0.70	1.29	1.87	2.46	31	40	49	57
	—	43"	68"	8'-10"	2.62'	7.39'	10.01'	6.73'	10'	4.28'	3.3'	9.92'	18.58'	27.50'	36.42'	1.50'	1.19	2.26	3.33	4.40	0.81	1.54	2.26	2.99	33	43	53	63
	—	48"	76"	9'-3"	2.71'	8.33'	11.04'	7.56'	11'	4.59'	3.4'	10.42'	20.33'	30.25'	40.17'	1.54'	1.38	2.65	3.93	5.21	0.93	1.79	2.66	3.53	35	46	57	68
	—	53"	83"	10'-8"	2.80'	9.26'	12.06'	8.39'	12'	4.77'	3.6'	11.08'	21.75'	32.42'	43.08'	1.58'	1.55	3.03	4.50	5.96	1.04	2.04	3.03	4.02	37	49	61	73
	—	58"	91"	11'-6"	2.90'	10.19'	13.09'	9.22'	13'	5.01'	3.8'	11.83'	23.50'	35.17'	46.83'	1.63'	1.75	3.47	5.20	6.93	1.17	2.33	3.49	4.66	39	52	65	77
Elliptical Concrete Pipe 1:4 Slope	—	12"	18"	2'-10"	1.97'	1.62'	3.59'	1.56'	6'	1.50'	2.4'	4.92'	7.75'	10.58'	13.42'	1.21'	0.45	0.68	0.92	1.14	0.30	0.45	0.61	0.76	23	26	29	32
	—	14"	23"	3'-4"	2.44'	3.75'	6.19'	3.70'	6'	1.90'	2.3'	5.38'	8.71'	12.04'	15.38'	1.23'	0.53	0.83	1.13	1.42	0.36	0.56	0.76	0.95	24	28	32	35
	—	19"	30"	4'-0"	2.62'	5.47'	8.09'	5.36'	8'	2.37'	2.6'	6.04'	10.04'	14.04'	18.04'	1.27'	0.74	1.15	1.57	1.98	0.51	0.79	1.08	1.36	27	32	36	40
	—	24"	38"	5'-0"	2.79'	7.18'	9.97'	7.03'	10'	2.83'	3.0'	6.79'	11.79'	16.79'	21.79'	1.31'	0.97	1.50	2.03	2.81	0.68	1.10	1.53	1.96	30	36	41	47
	—	29"	45"	5'-3"	3.05'	8.90'	11.95'	8.70'	12'	3.19'	3.3'	7.50'	13.42'	19.33'	25.25'	1.38'	1.22	2.07	2.92	3.77	0.86	1.45	2.04	2.63	33	40	46	53
	—	34"	53"	7'-0"	3.22'	10.62'	13.84'	10.36'	13'	3.57'	2.6'	8.25'	15.25'	22.25'	29.25'	1.42'	1.48	2.62	3.77	4.92	1.02	1.81	2.60	3.39	36	44	52	59
	—	38"	60"	7'-10"	3.39'	11.99'	15.38'	11.70'	15'	3.95'	3.3'	8.92'	16.75'	24.58'	32.42'	1.46'	1.72	3.12	4.53	5.92	1.18	2.14	3.10	4.05	38	47	56	65
	—	43"	68"	8'-3"	3.56'	13.71'	17.27'	13.36'	17'	4.28'	3.6'	9.67'	18.58'	27.50'	36.42'	1.50'	2.02	3.78	5.56	7.32	1.38	2.58	3.79	4.99	41	51	61	71
	—	48"	76"	9'-0"	3.73'	15.43'	19.36'	15.03'	19'	4.59'	4.0'	10.42'	20.33'	30.25'	40.17'	1.54'	2.34	4.49	6.64	8.79	1.59	3.05	4.51	5.97	44	55	66	77
	—	53"	83"	10'-8"	3.91'	17.15'	21.06'	16.70'	20'	4.77'	3.3'	11.08'	21.75'	32.42'	43.08'	1.58'	2.66	5.17	7.66	10.16	1.80	3.50	5.19	6.88	47	59	71	83
	—	58"	91"	11'-8"	4.08'	18.87'	22.95'	18.36'	22'	5.01'	3.6'	11.83'	23.50'	35.17'	46.83'	1.63'	3.02	5.98	8.95	11.90	2.04	4.04	6.05	8.05	50	63	76	89

B
E
△ 6.42' △ 6.25' Dimensions permitted to allow use of 8' standard pipe lengths.
◇ 10.40' ◇ 10.10' Dimensions permitted to allow use of 12' standard pipe lengths.

CONCRETE PIPE DIMENSIONS AND QUANTITIES

LAST REVISION	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	CROSS DRAIN MITERED END SECTION	INDEX	SHEET
11/01/19				430-021	3 of 6

No.	Revision/Issue	Date
3	Revised Per Agency Review Comments By City/State	06/02/2023
2	Issue For Permit	03/15/2023
1	Issue For Client Review	03/08/2023

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889



NISIT SAPPARKHAO, P.E.
FL REG. NO. 64085

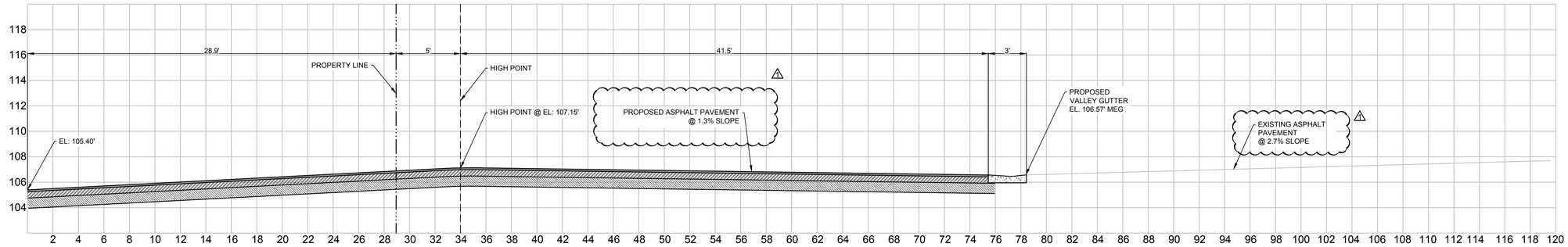
THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY NISIT SAPPARKHAO, PE ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY. FAC 61G15-23.004

Project Name and Address: **BIG DAN'S CAR WASH**
17580 HIGHWAY 441
MOUNT DORA, FLORIDA 32757

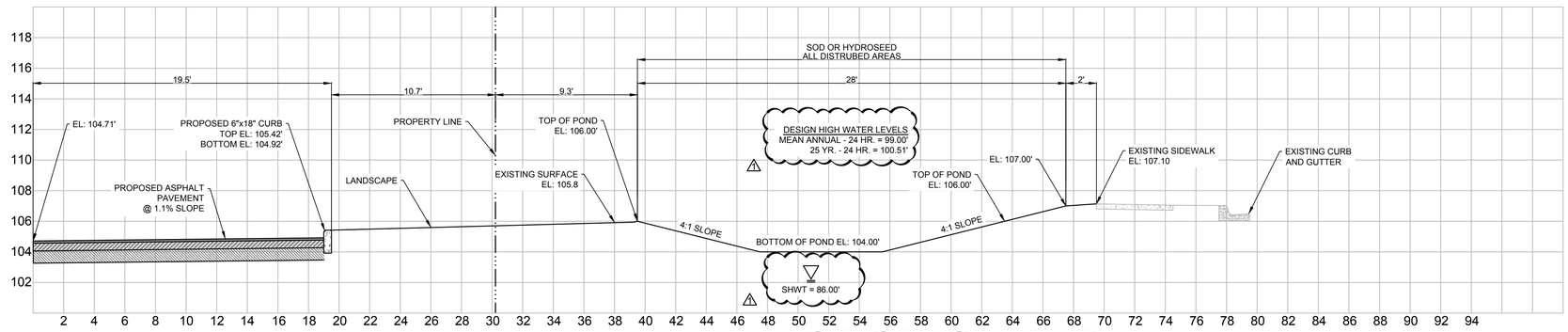
Sheet Title: **FDOT STANDARD DETAILS**

Project No.	Sheet
365-01.00	C05.07
Date: 01/23/23	
Scale: AS NOTED	

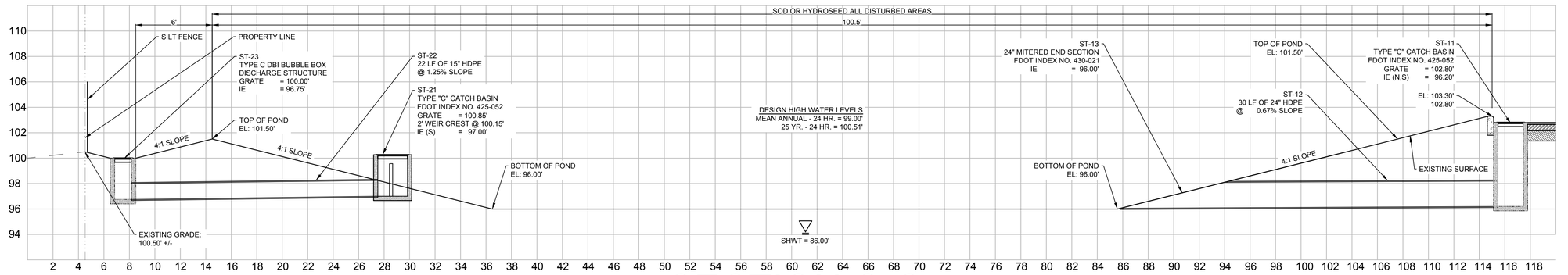
1:47:34 PM 10/6/2022
1:54:24 PM 10/20/2022
1:54:12 PM 10/6/2022
8:14:24 AM 10/20/2022



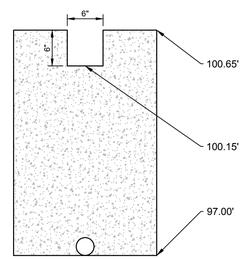
SECTION A-A



SECTION B-B



SECTION C-C



WEIR WALL DETAIL

No.	Revision/Issue	Date
3	Revised Per Agency Review Comments By City/State	06/02/2023
2	Issue For Permit	03/15/2023
1	Issue For Client Review	03/08/2023

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889

NISIT SAPPARKHAO, P.E.
FL REG. NO. 64085

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY NISIT SAPPARKHAO, PE ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY FAC 61G15-23.004

Project Name and Address
BIG DAN'S CAR WASH
17580 HIGHWAY 441
MOUNT DORA, FLORIDA 32757

Sheet Title
CROSS SECTIONS

Project No.	Sheet
365-01.00	C05.08
Date: 01/23/23	
Scale: AS NOTED	

OWNER'S REQUIREMENTS

SITE DESCRIPTION

PROJECT NAME AND LOCATION:

BIG DAN'S CAR WASH

PROPERTY OWNER:

FRAT HOUSE LLC
11049 BRIDGE HOUSE ROAD
WINDERMERE, FLORIDA 34786

SITE ADDRESS:

17580 HIGHWAY441
MT. DORA, FLORIDA 32757

DESCRIPTION:

CONSTRUCT NEW BUILDING AND PARKING LOT.
MODIFY EXISTING SMS AS REQUIRED TO ACCOMMODATE IMPROVEMENTS PER AUTHORITIES WITH JURISDICTION.

SOIL DISTURBING ACTIVITIES WILL INCLUDE: RE-GRADING, CONSTRUCTION OF FACILITY

SOILS:

SEE SOIL REPORT

SITE MAPS:

* SEE ATTACHED GRADING PLAN FOR PRE & POST DEVELOPMENT GRADES, AREAS OF SOILS, DISTURBANCE, LOCATION OF SURFACE WATERS, WETLANDS, PROTECTED AREAS, MAJOR STRUCTURAL AND NONSTRUCTURAL CONTROLS AND STORMWATER DISCHARGE POINTS.

* SEE ATTACHED EROSION & TURBIDITY CONTROL PLAN FOR TEMPORARY STABILIZATION PRACTICES, AND TURBIDITY BARRIERS

* SEE GENERAL NOTES FOR REQUIREMENTS FOR TEMPORARY AND PERMANENT STABILIZATION.

NAME OF RECEIVING WATERS:

STORM POND

CONTROLS

THIS PLAN UTILIZES BEST MANAGEMENT PRACTICES TO CONTROL EROSION AND TURBIDITY CAUSED BY STORMWATER RUN OFF. AN EROSION AND TURBIDITY PLAN HAS BEEN PREPARED TO INSTRUCT THE CONTRACTOR ON PLACEMENT OF THESE CONTROLS. IT IS THE CONTRACTORS RESPONSIBILITY TO INSTALL AND MAINTAIN THE CONTROLS PER PLAN AS WELL AS ENSURING THE PLAN IS PROVIDING THE PROPER PROTECTION AS REQUIRED BY FEDERAL, STATE AND LOCAL LAWS. REFER TO "CONTRACTORS RESPONSIBILITY" FOR A VERBAL DESCRIPTION OF THE CONTROLS THAT MAY BE IMPLEMENTED.

STORMWATER MANAGEMENT

STORMWATER DRAINAGE WILL BE PROVIDED BY (DESCRIPTION:)

MODIFIED COLLECTION, CONVEYANCE, TREATMENT & ATTENUATION SYSTEM FOR THE PROJECT. AREAS WHICH ARE NOT TO BE CONSTRUCTED ON, BUT WILL BE REGRADED SHALL BE STABILIZED IMMEDIATELY AFTER GRADING IS COMPLETE, WHEN CONSTRUCTION IS COMPLETE. THE SITE DISCHARGES TO AN UNDERGROUND DETENTION SYSTEM. WHERE PRACTICAL, TEMPORARY SEDIMENT BASINS WILL BE USED TO INTERCEPT SEDIMENT BEFORE ENTERING THE PERMANENT DETENTION BASIN. THE DRY DETENTION SYSTEM IS DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR THIS TYPE OF DEVELOPMENT AT THE TIME IT WAS CONSTRUCTED.

TIMING OF CONTROLS/MEASURES

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

CONTRACTOR'S REQUIREMENTS

GENERAL

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

SEQUENCE OF MAJOR ACTIVITIES

THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:

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

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, THE SILT FENCES AND HAY BALES, STABILIZED CONSTRUCTION ENTRANCE AND SEDIMENT BASIN WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED PERMANENTLY IN ACCORDANCE WITH THE PLANS. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE SEDIMENT TRAPS AND THE EARTH DIKE/SWALES WILL BE REGRADED/REMOVED AND STABILIZED IN ACCORDANCE WITH THE EROSION & TURBIDITY CONTROL PLAN.

CONTROLS

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

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES

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

GOOD HOUSEKEEPING

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

* AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.

* ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.

* PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.

* SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.

* WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.

* MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.

* THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE MATERIALS ONSITE RECEIVE PROPER USE AND DISPOSAL.

STABILIZATION PRACTICES EROSION AND SEDIMENT CONTROLS

1. HAY BALE BARRIER: HAY BALE BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:
   A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.
   B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES.
   C. WHERE EFFECTIVENESS IS REQUIRED FOR LESS THAN 3 MONTHS.
   D. EVERY EFFORT SHOULD BE MADE TO LIMIT THE USE OF STRAW BALE BARRIERS CONSTRUCTED IN LIVE STREAMS OR IN SWALES WHERE THERE IS THE POSSIBILITY OF A WASHOUT. IF NECESSARY, MEASURES SHALL BE TAKEN TO PROPERLY ANCHOR BALES TO INSURE AGAINST WASHOUT.
2. FILTER FABRIC BARRIER: FILTER FABRIC BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:
   A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.
   B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2. ACRES.
3. BRUSH BARRIER WITH FILTER FABRIC: BRUSH BARRIER MAY BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WHERE ENOUGH RESIDUE MATERIAL IS AVAILABLE ON SITE.
4. LEVEL SPREADER: A LEVEL SPREADER MAY BE USED WHERE SEDIMENT-FREE STORM RUNOFF IS INTERCEPTED AND DIVERTED AWAY FROM THE GRADED AREAS ONTO UNDISTURBED STABILIZED AREAS. THIS PRACTICE APPLIES ONLY IN THOSE SITUATIONS WHERE THE SPREADER CAN BE APPLIES ONLY IN THOSE SITUATIONS WHERE THE SPREADER CAN BE APPLIES ONLY IN THOSE SITUATIONS WHERE THE SPREADER CAN BE CONSTRUCTED ON UNDISTURBED SOIL AND THE AREA BELOW THE LEVEL LIP IS STABILIZED. THE WATER SHOULD NOT BE ALLOWED TO RECONCENTRATE AFTER RELEASE.
5. STOCKPILING MATERIAL: NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE INTO ANY ADJACENT WATER BODY OR STORMWATER COLLECTION FACILITY.
6. EXPOSED AREA LIMITATION: THE SURFACE AREA OF OPEN, RAW ERODIBLE SOIL EXPOSED BY CLEARING AND GRUBBING OPERATIONS OR EXCAVATION AND FILLING OPERATIONS SHALL NOT EXCEED 10 ACRES. THIS REQUIREMENT MAY BE WAIVED FOR LARGE PROJECTS WITH AN EROSION CONTROL PLAN WHICH DEMONSTRATES THAT OPENING OF ADDITIONAL AREAS WILL NOT SIGNIFICANTLY AFFECT OFF-SITE DEPOSIT OF SEDIMENTS.
7. INLET PROTECTION: INLETS AND CATCH BASINS WHICH DISCHARGE DIRECTLY OFF-SITE SHALL BE PROTECTED FROM SEDIMENT-LADEN STORM RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT TO THE INLET.
8. TEMPORARY SEEDING: AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE RE-EXCAVATED OR DRESSED AND RECEIVE FINAL GRASSING TREATMENT WITHIN 30 DAYS SHALL BE SEEDED WITH A QUICK GROWING GRASS SPECIES WHICH WILL PROVIDE AN EARLY COVER DURING THE SEASON IN WHICH IT IS PLANTED AND WILL NOT LATER COMPETE WITH THE PERMANENT GRASSING.
9. TEMPORARY SEEDING AND MULCHING: SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CATEGORY ESTABLISHED IN PARAGRAPH 8 ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF THE SEEDED AREA ADEQUATE TO PREVENT MOVEMENT OF SEED AND MULCH.
10. TEMPORARY GRASSING: THE SEEDED OR SEEDED AND MULCHED AREA(S) SHALL BE ROLLED AND WATERED OR HYDROMULCHED OR OTHER SUITABLE METHODS IF REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER. TEMPORARY GRASSING SHALL BE THE SAME MIX & AMOUNT REQUIRED FOR PERMANENT GRASSING IN THE CONTRACT SPECIFICATIONS.
11. TEMPORARY REGRASSING : IF, AFTER 14 DAYS FROM SEEDING, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM OF 75 PERCENT GOOD GRASS COVER, THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED SUFFICIENT TO ESTABLISH THE DESIRED VEGETATIVE COVER.
12. MAINTENANCE: ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.
13. PERMANENT EROSION CONTROL: THE EROSION CONTROL FACILITIES OF THE PROJECT SHOULD BE DESIGNED TO MINIMIZE THE IMPACT ON THE OFFSITE FACILITIES.
14. PERMANENT SEEDING: ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL, AS A MINIMUM, BE SEEDED. THE SEEDING MIX MUST PROVIDE BOTH LONG-TERM VEGETATION AND RAPID GROWTH SEASONAL VEGETATION. SLOPES STEEPER THAN 4:1 SHALL BE SEEDED AND MULCHED OR SODDED.

OTHER CONTROLS

WASTE DISPOSAL

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

HAZARDOUS WASTE

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

SANITARY WASTE

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

OFFSITE VEHICLE TRACKING

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

INVENTORY FOR POLLUTION PREVENTION PLAN

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

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

STRUCTURAL PRACTICES

1. TEMPORARY DIVERSION DIKE: TEMPORARY DIVERSION DIKES MAY BE USED TO DIVERT RUNOFF THROUGH A SEDIMENT-TRAPPING FACILITY.
2. TEMPORARY SEDIMENT TRAP: A SEDIMENT TRAP SHALL BE INSTALLED IN AN DRAINAGEWAY AT A STORM DRAIN INLET OR AT OTHER POINTS OF DISCHARGE FROM A DISTURBED AREA. THE FOLLOWING SEDIMENT TRAPS MAY BE CONSTRUCTED EITHER INDEPENDENTLY OR IN CONJUNCTION WITH A TEMPORARY DIVERSION

DIKE:

1. BLOCK & GRAVEL SEDIMENT FILTER - THIS PROTECTION IS APPLICABLE WHERE HEAVY FLOWS AND/OR WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE.
2. GRAVEL SEDIMENT TRAP - THIS PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES & UNPROTECTED AREAS.
3. DROP INLET SEDIMENT TRAP - THIS PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (S < 5%) AND WHERE SHEET OR OVERLAND FLOWS (Q < 0.5 CFS) ARE TYPICAL. THIS METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS SUCH AS IN STREET OR HIGHWAY MEDIANS.
4. OUTLET PROTECTION: APPLICABLE TO THE OUTLETS OF ALL PIPES AND PAVED CHANNEL SECTIONS WHERE THE FLOW COULD CAUSE EROSION & SEDIMENT PROBLEM TO THE RECEIVING WATER BODY. SILT FENCES & HAY BALES ARE TO BE INSTALLED IMMEDIATELY DOWNSTREAM OF THE DISCHARGING STRUCTURE AS SHOWN ON THE OUTLET PROTECTION DETAIL.
5. SEDIMENT BASIN: WILL BE CONSTRUCTED AT THE COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH 10 OR MORE DISTURBED ACRES AT ONE TIME, THE PROPOSED STORMWATER PONDS (OR TEMPORARY PONDS) WILL BE CONSTRUCTED FOR USE AS SEDIMENT BASINS. THESE SEDIMENT BASINS MUST PROVIDE A MINIMUM OF 3,600 CUBIC FEET OF STORAGE PER ACRE DRAINED UNTIL FINAL STABILIZATION OF THE SITE. THE 3,600 CUBIC FEET OF STORAGE AREA PER ACRE DRAINED DOES NOT APPLY TO FLOWS FROM OFFSITE AREAS AND FLOWS FROM ONSITE AREAS THAT ARE EITHER UNDISTURBED OR HAVE UNDERGONE FINAL STABILIZATION WHERE SUCH FLOWS ARE DIVERTED AROUND BOTH THE DISTURBED AREA AND THE SEDIMENT BASIN. ANY TEMPORARY SEDIMENT BASINS CONSTRUCTED MUST BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS FOR STRUCTURAL FILL ALL SEDIMENT COLLECTED IN PERMANENT OR TEMPORARY SEDIMENT TRAPS MUST BE REMOVED UPON FINAL STABILIZATION.

HAZARDOUS PRODUCTS

THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.

* PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.

* ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION.

* IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

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

PETROLEUM PRODUCTS

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

FERTILIZERS

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

PAINTS

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

CONCRETE TRUCKS

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

SPILL CONTROL PRACTICES

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

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

MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, LIQUID ABSORBENT (i.e. KITTY LITTER OR EQUAL), SAND, SAWDUST, PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.

ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

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

THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED. THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE/SHE WILL DESIGNATE AT LEAST ONE OTHER SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IF APPLICABLE, IN THE OFFICE TRAILER ONSITE.

MAINTENANCE/INSPECTION PROCEDURES

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES

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

* NO MORE THAN 10 ACRES OF THE SITE WILL BE DENUDED AT ONE TIME WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.

* ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY SITE OPERATION OR SOMEONE APPOINTED BY THE SUPERINTENDENT, AT LEAST ONCE A WEEK AND FOLLOWING ANY STORM EVENT OF 0.25 INCHES OR GREATER.

* ALL TURBIDITY CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.

* BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.

* SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.

* DIVERSION DIKES/SWALES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.

MAINTENANCE/INSPECTION PROCEDURES

* THE SEDIMENT BASINS WILL BE INSPECTED FOR THE DEPTH OF SEDIMENT AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 10 PERCENT OF THE DESIGN CAPACITY OR AT THE END OF THE JOB, WHICHEVER COMES FIRST.

* TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.

* A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTOR IS ATTACHED. THE REPORTS WILL BE KEPT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER OR ANY FEDERAL, STATE OR LOCAL AGENCY APPROVING SEDIMENT AND AND EROSION PLANS, OR STORMWATER MANAGEMENT PLANS. THE REPORTS SHALL BE MADE AND RETAINED AS PART OF THE WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED AND THE NOTICE OF TERMINATION IS SUBMITTED THE REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE.

* THE SITE SUPERINTENDENT WILL SELECT UP TO THREE INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.

* PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE SUPERINTENDENT. THEY WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER.

NON-STORMWATER DISCHARGES

IT IS EXPECTED THAT THE FOLLOWING NON-STORMWATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:

* WATER FROM WATER LINE FLUSHING

*PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).

* UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION).

ALL NON-STORMWATER DISCHARGE WILL BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE.

CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND THAT AUTHORIZES THE STORM CONDITIONS OF THE DEP GENERIC PERMIT WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

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

EROSION AND SEDIMENTATION CONTROL

1. PRIOR TO COMMENCEMENT OF ANY CLEARING AND EXCAVATION WITHIN A WORK AREA, ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND IN WORKING ORDER.
2. PERFORM WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE STATE AND FEDERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT. ALSO REFERENCE THE WATER MANAGEMENT DISTRICT AND CITY REQUIREMENTS.
3. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EROSION AND SEDIMENT CONTROL FEATURES TO PREVENT AND CONTROL SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION AREAS AND ENTERING EXISTING STORMWATER FACILITIES AND SURFACE WATERS. ADDITIONAL MEASURES BEYOND THOSE SHOWN WITHIN THESE PLANS MAY BE NECESSARY DURING CONSTRUCTION, INCLUDING TEMPORARY VEGETATIVE MEASURES AND INSTALLATION OF OTHER SILT TRAPPING MEASURES.
4. THE CONTRACTOR IS REQUIRED TO ADJUST THE EROSION AND SEDIMENT CONTROLS AS NECESSARY AND AS SHOWN ON THE DRAWINGS: AND ADD ADDITIONAL CONTROL MEASURES AS REQUIRED TO INSURE THE SITE MEETS ALL FEDERAL, STATE AND LOCAL EROSION AND SEDIMENT CONTROL REQUIREMENTS.
5. ALL BEST MANAGEMENT EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY OPERATIONS; OR SOMEONE APPOINTED BY THE SUPERINTENDENT, AT LEAST EVERY OTHER WEEK AND FOLLOWING A STORM EVENT OF 0.5 INCHES OR GREATER.
6. ALL BEST MANAGEMENT CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.

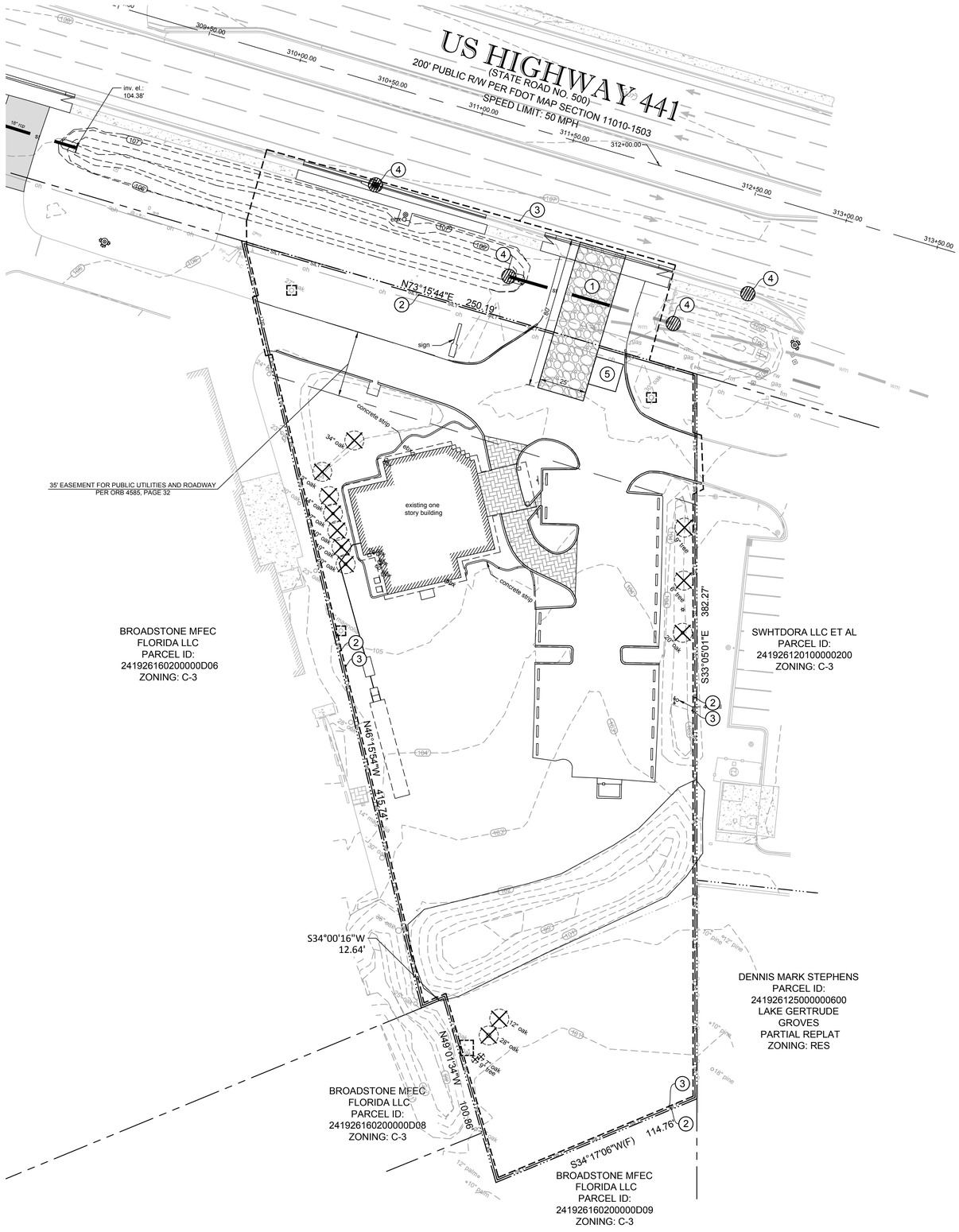
No.	Revision/Issue	Date
3	Revised Per Agency Review Comments By City/State	06/02/2023
2	Issue For Permit	03/15/2023
1	Issue For Client Review	03/08/2023

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889

NISIT SAPPARKHAO, P.E.
FL REG. NO. 64085

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY NISIT SAPPARKHAO, PE ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY.FAC 61G15-23.004

Project Name and Address
BIG DAN'S CAR WASH
17580 HIGHWAY 441
MOUNT DORA, F



PLAN VIEW | SCALE: AS NOTED | -

EROSION CONTROL KEYED NOTES

1	CRUSHED STONE CONSTRUCTION ENTRANCE AND CONCRETE TRUCK WASHOUT AREA
2	SILT FENCE
3	LIMITS OF CONSTRUCTION
4	INLET/STORM OUTLET PROTECTION
5	TEMPORARY CONCRETE WASHOUT

LEGEND

- PROPERTY LINE
- EXISTING CONCRETE TO REMAIN
- EXISTING TO REMAIN
- SILT FENCE
- LIMITS OF CONSTRUCTION
- INLET PROTECTION
- EXISTING CONTOUR (29)
- EXISTING GRADE ELEVATION (×428.33)

GENERAL NOTES

- ALL MATERIALS INCLUDING FILL STOCKPILES SHALL NOT BE PERMANENTLY LOCATED ON THE UNDEVELOPED AREA OF PROPOSED DEVELOPMENT.
- ALL DISTURBED AREAS OF UNDEVELOPED PROPERTY SHALL BE HYDROMULCHED WITH SEED TO ESTABLISH TURN AND PREVENT SILT RUNOFF INTO THE STREETS.
- PRIOR TO COMMENCEMENT OF ANY CLEARING AND EXCAVATION WITHIN A WORK AREA, ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND IN WORKING ORDER.
- PERFORM WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE STATE AND FEDERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT. ALSO REFERENCE THE WATER MANAGEMENT DISTRICT AND CITY REQUIREMENTS.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EROSION AND SEDIMENT CONTROL FEATURES TO PREVENT AND CONTROL SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION AREAS AND ENTERING EXISTING STORMWATER FACILITIES AND SURFACE WATERS. ADDITIONAL MEASURES BEYOND THOSE SHOWN WITHIN THESE PLANS MAY BE NECESSARY DURING CONSTRUCTION, INCLUDING TEMPORARY VEGETATIVE MEASURES AND INSTALLATION OF OTHER SILT TRAPPING MEASURES.
- THE CONTRACTOR IS REQUIRED TO ADJUST THE EROSION AND SEDIMENT CONTROLS AS NECESSARY AND AS SHOWN ON THE DRAWINGS: AND ADD ADDITIONAL CONTROL MEASURES AS REQUIRED TO INSURE THE SITE MEETS ALL FEDERAL, STATE AND LOCAL EROSION AND SEDIMENT CONTROL REQUIREMENTS.
- ALL BEST MANAGEMENT EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY OPERATIONS; OR SOMEONE APPOINTED BY THE SUPERINTENDENT, AT LEAST EVERY OTHER WEEK AND FOLLOWING A STORM EVENT OF 0.5 INCHES OR GREATER.
- ALL BEST MANAGEMENT CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.

REFERENCE NORTH

0' 30' 60'

SCALE: 1" = 30'

No.	Revision/Issue	Date
3	Revised Per Agency Review Comments By City/State	06/02/2023
2	Issue For Permit	03/15/2023
1	Issue For Client Review	03/08/2023

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889

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

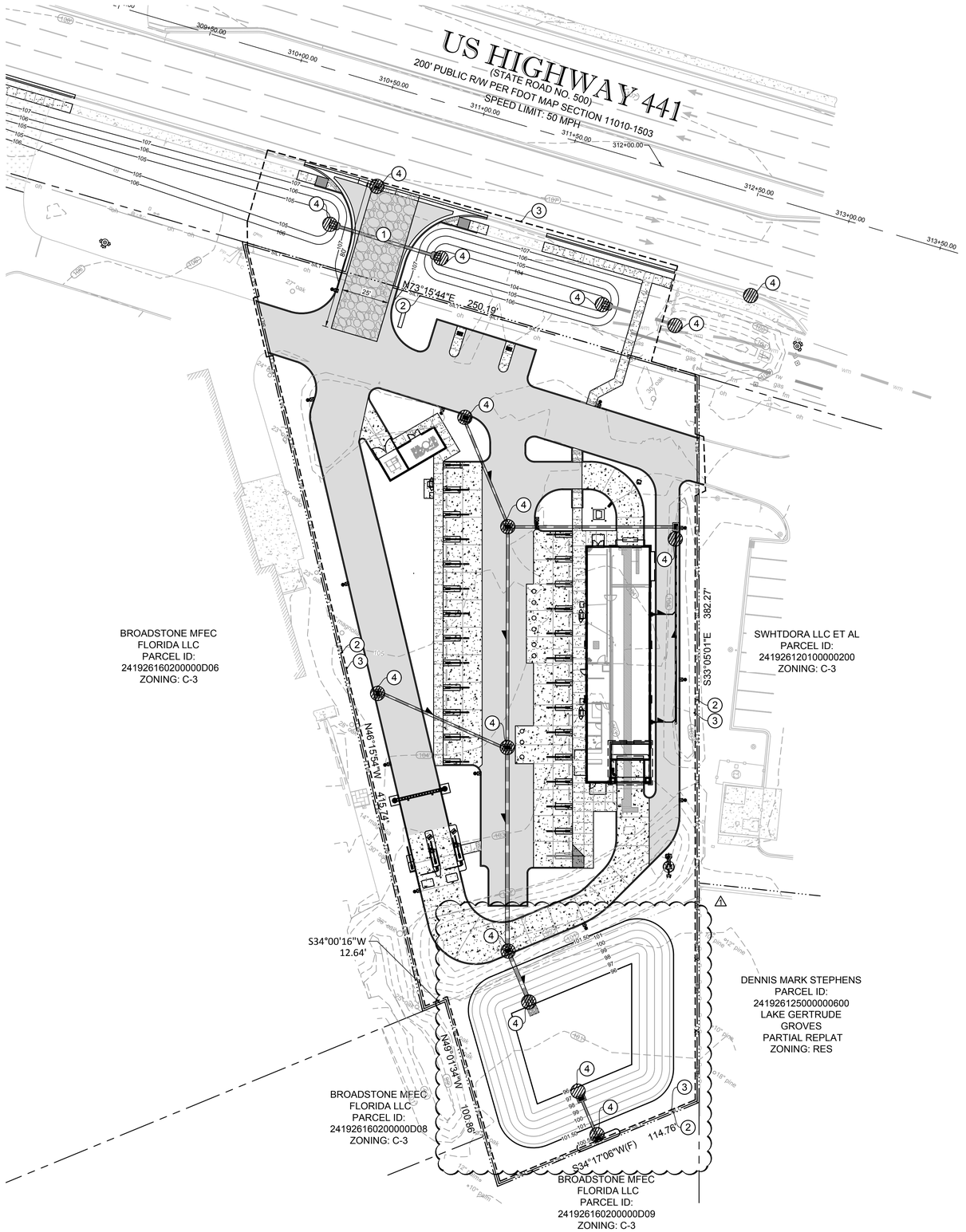
NISIT SAPPARKHAO, P.E.
FL REG. NO. 64085

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY (NISIT SAPPARKHAO, PE) ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY.FAC 61G15-23.004

Project Name and Address: **BIG DAN'S CAR WASH**
17580 HIGHWAY 441
MOUNT DORA, FLORIDA 32757

Sheet Title: **EROSION CONTROL PLAN PHASE I**

Project No.	365-01.00
Date	01/23/23
Scale	AS NOTED
Sheet	C06.02



PLAN VIEW | SCALE: AS NOTED | -

EROSION CONTROL KEYED NOTES

1	CRUSHED STONE CONSTRUCTION ENTRANCE AND CONCRETE TRUCK WASHOUT AREA
2	SILT FENCE
3	LIMITS OF CONSTRUCTION
4	INLET/STORM OUTLET PROTECTION

LEGEND

- PROPERTY LINE
- EXISTING CONCRETE TO REMAIN
- EXISTING TO REMAIN
- SILT FENCE
- LIMITS OF CONSTRUCTION
- INLET PROTECTION
- EXISTING CONTOUR
- EXISTING GRADE ELEVATION (×428.33)

GENERAL NOTES

- ALL MATERIALS INCLUDING FILL STOCKPILES SHALL NOT BE PERMANENTLY LOCATED ON THE UNDEVELOPED AREA OF PROPOSED DEVELOPMENT.
- ALL DISTURBED AREAS OF UNDEVELOPED PROPERTY SHALL BE HYDROMULCHED WITH SEED TO ESTABLISH TURN AND PREVENT SILT RUNOFF INTO THE STREETS.
- PRIOR TO COMMENCEMENT OF ANY CLEARING AND EXCAVATION WITHIN A WORK AREA, ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND IN WORKING ORDER.
- PERFORM WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE STATE AND FEDERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT. ALSO REFERENCE THE WATER MANAGEMENT DISTRICT AND CITY REQUIREMENTS.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EROSION AND SEDIMENT CONTROL FEATURES TO PREVENT AND CONTROL SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION AREAS AND ENTERING EXISTING STORMWATER FACILITIES AND SURFACE WATERS. ADDITIONAL MEASURES BEYOND THOSE SHOWN WITHIN THESE PLANS MAY BE NECESSARY DURING CONSTRUCTION, INCLUDING TEMPORARY VEGETATIVE MEASURES AND INSTALLATION OF OTHER SILT TRAPPING MEASURES.
- THE CONTRACTOR IS REQUIRED TO ADJUST THE EROSION AND SEDIMENT CONTROLS AS NECESSARY AND AS SHOWN ON THE DRAWINGS: AND ADD ADDITIONAL CONTROL MEASURES AS REQUIRED TO INSURE THE SITE MEETS ALL FEDERAL, STATE AND LOCAL EROSION AND SEDIMENT CONTROL REQUIREMENTS.
- ALL BEST MANAGEMENT EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY OPERATIONS; OR SOMEONE APPOINTED BY THE SUPERINTENDENT, AT LEAST EVERY OTHER WEEK AND FOLLOWING A STORM EVENT OF 0.5 INCHES OR GREATER.
- ALL BEST MANAGEMENT CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.

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

REFERENCE NORTH

0' 30' 60'

SCALE: 1" = 30'

No.	Issue/Revision	Date
3	Revised Per Agency Review Comments By City/State	08/02/2023
2	Issue For Permit	03/15/2023
1	Issue For Client Review	03/08/2023

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889

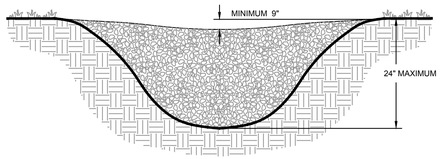
NISIT SAPPARKHAO, P.E.
FL REG. NO. 64085

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY (NISIT SAPPARKHAO, PE) ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY.FAC 61G15-23.004

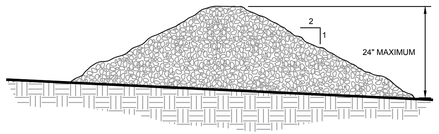
Project Name and Address
BIG DAN'S CAR WASH
17580 HIGHWAY 441
MOUNT DORA, FLORIDA 32757

Sheet Title
EROSION CONTROL PLAN PHASE II

Project No.	365-01.00
Date	01/23/23
Scale	AS NOTED
Sheet	C06.03



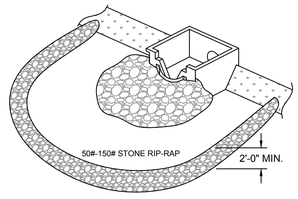
CROSS SECTION



PROFILE VIEW

NOTES:
1. CHECK DAMS ARE TO BE USED ONLY IN SMALL OPEN CHANNELS (THEY ARE NOT TO BE USED IN LIVE STREAMS)
2. THE DRAINAGE AREA FOR STONE CHECK DAMS SHALL NOT EXCEED TWO ACRES.
3. THE CENTER OF THE CHECK DAM MUST BE AT LEAST 9 INCHES LOWER THAN THE OUTER EDGES.
4. THE DAM HEIGHT SHOULD BE A MAXIMUM OF 2 FEET FROM CENTER TO RIM EDGE.
5. THE SIDE SLOPES OF THE CHECK DAM SHALL NOT EXCEED A 2:1 SLOPE.
6. GEOTEXTILE SHALL BE USED TO PREVENT THE MITIGATION OF SUBGRADE SOIL PARTICLES INTO THE STONES (REFER TO AASHTO M288-96, SECTION 7.3, TABLE 3).

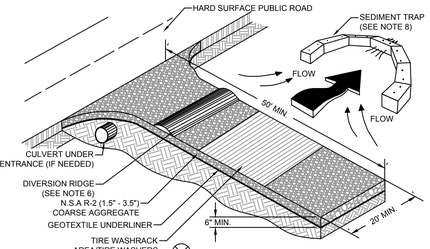
STONE CHECK DAM



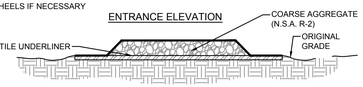
A TEMPORARY STONE BARRIER CONSTRUCTED AT STORM DRAIN INLETS AND POND OUTLETS TO REDUCE FLOW VELOCITIES, PREVENT FAILURE OF OTHER SEDIMENT CONTROL DEVICES AND TO PREVENT SEDIMENT FROM LEAVING THE SITE OR ENTERING DRAINAGE SYSTEMS.

STONE FILTER RING

EXIT DIAGRAM

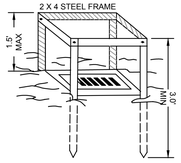


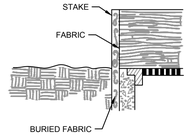
ENTRANCE ELEVATION

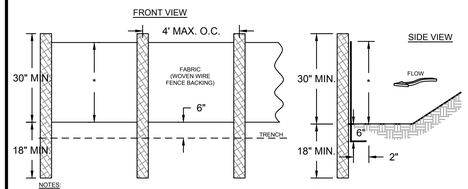


NOTES:
1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6".
5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
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 REMOVE 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

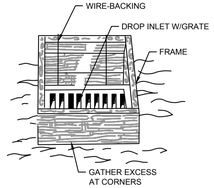






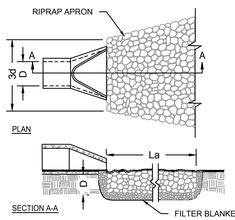
NOTES
1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
2. HEIGHT (") IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
3. DOT ALTERNATIVE

Sd1-S SILT FENCE - TYPE SENSITIVE



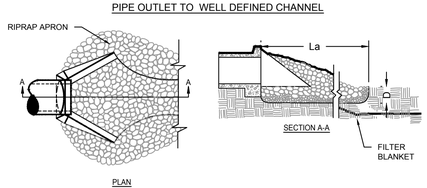
Sd2-F INLET SEDIMENT TRAP-FILTER FABRIC

PIPE OUTLET TO FLAT AREA -- NO WELL DEFINED CHANNEL

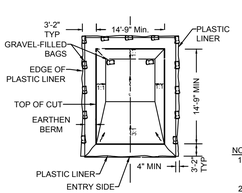


NOTES:
1. La IS THE LENGTH OF THE RIPRAP APRON.
2. D = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6"
3. IN A WELL-DEFINED CHANNEL, EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK (WHICHEVER IS LESS).
4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND THE SOIL FOUNDATION.

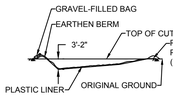
PIPE OUTLET TO WELL DEFINED CHANNEL



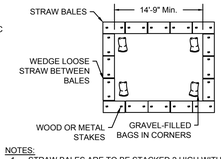
St STORM OUTLET PROTECTION



BELOW GRADE PLAN

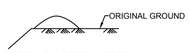


SECTION A-A



NOTES:
1. STRAW BALES ARE TO BE STACKED 2 HIGH WITH TWO METAL OR WOOD STAKES PER BALE. STAKES ARE TO BE DRIVEN INTO THE GROUND A MINIMUM OF 1 FOOT.
2. PLASTIC LINER TO BE PLACED SO THAT AN EXCESS OF 6 INCHES WILL BE OVER THE OUTSIDE EDGE OF THE BALES.
3. A MINIMUM OF TWO 8"x2"x8" 16 GAUGE STEEL ANCHOR PINS (OR LARGER) ARE TO BE USED PER BALE TO ANCHOR THE PLASTIC LINER IN PLACE.

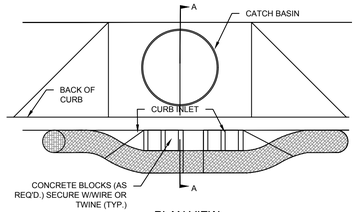
ON GRADE PLAN



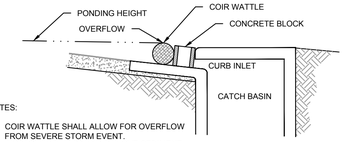
EARTHEN BERM SECTION

NOTES:
1. WASHOUT OF THE DRUM AT THE CONSTRUCTION SITE IS PROHIBITED.
2. A SUITABLE WASHOUT FACILITY MUST BE PROVIDED FOR THE CLEANING OF CHUTES, MIXERS, AND HOPPERS OF THE DELIVERY VEHICLES UNLESS SUCH A FACILITY WILL BE USED AT THE SOURCE OF THE CONCRETE.UNDER NO CIRCUMSTANCES MAY WASH WATER FROM THESE VEHICLES BE ALLOWED TO ENTER ANY SURFACE WATERS.
3. A 4'X2' WHITE SIGN WITH 6" BLACK LETTERS STATING "CONCRETE WASHOUT" IS TO BE PROVIDED SO DRIVERS ARE AWARE OF THE PRESENCE OF WASHOUT FACILITIES.
4. WASHOUT FACILITIES SHOULD NOT BE PLACED WITHIN 50 FEET OF STORM DRAINS, OPEN DITCHES OR SURFACE WATERS. THEY SHOULD BE IN A CONVENIENT LOCATION FOR THE TRUCKS, PREFERABLY NEAR THE PLACE WHERE THE CONCRETE IS BEING POURED, BUT FAR ENOUGH FROM OTHER VEHICULAR TRAFFIC TO MINIMIZE THE POTENTIAL FOR ACCIDENTAL DAMAGE OR SPILLS.
5. THE CONTRACTOR SHALL INSPECT THE WASH DOWN AREA INTERMITTENTLY TO ENSURE PROPER CONTAINMENT IS ACCOMPLISHED.
6. IN THE EVENT OF A SPILL OR LEAK THE CONTRACTOR SHALL IMMEDIATELY REPORT THE INCIDENT TO THE APPROPRIATE AUTHORITIES AS REQUIRED BY LAWS.
7. THE TEMPORARY CONCRETE WASHOUT AREA SHALL BE ON-SITE TO BE CONTROLLED BY THE CONTRACTOR. NO WASH OUT SHALL OCCUR OFF SITE.

Cw TEMPORARY CONCRETE WASHOUT FACILITY



PLAN VIEW



NOTES:
1. COIR WATTLE SHALL ALLOW FOR OVERFLOW FROM SEVERE STORM EVENT.
2. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT. SEDIMENT MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

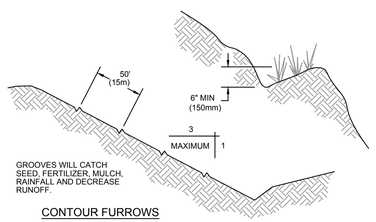
SECTION A - A

Sd2-P CURB INLET SEDIMENT BARRIER (COIR WATTLE)



'TRACKING' WITH MACHINERY UP AND DOWN THE SLOPE PROVIDES GROOVES THAT WILL CATCH SEED, RAINFALL AND REDUCE RUNOFF.

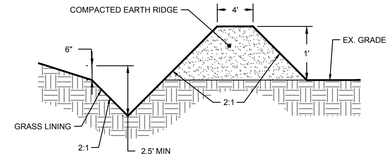
TRACKING



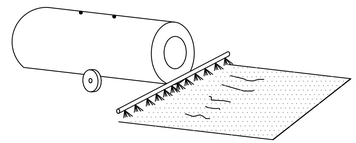
GROOVES WILL CATCH SEED, FERTILIZER, MULCH, RAINFALL AND DECREASE RUNOFF.

CONTOUR FURROWS

Su SURFACE ROUGHENING



Di DIVERSION



TEMPORARY METHODS
- MULCHES
- TEMPORARY VEGETATIVE COVER
- SPRAY ON ADHESIVES
- TILLAGE
- IRRIGATION
- BARRIERS
- CALCIUM CHLORIDE

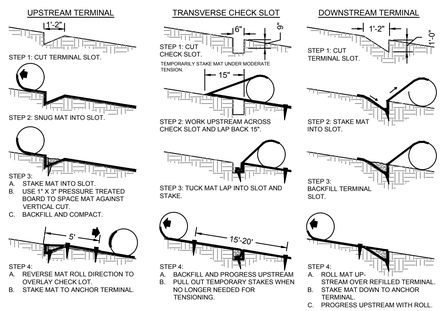
PERMANENT METHODS
- PERMANENT VEGETATION
- TOPSOILING
- STONE COVER

CHEMICAL CONTROL

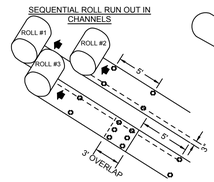
ADHESIVE	WATER DILUTION	TYPE OF NOZZLE	APPLICATION RATE (GAL/AC)
ANIOIC ASPHALT EMULSION	7.1*	SPRAY	1200
LATEX EMULSION	12 1/2:1*	FINE SPRAY	235
RESIN-IN-WATER EMULSION	4:1*	FINE SPRAY	300

*USE MANUFACTURER'S RECOMMENDATIONS WHEN AVAILABLE

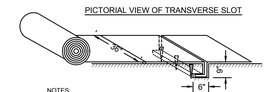
Du DUST CONTROL ON DISTURBED AREAS



SEQUENTIAL ROLL RUN OUT IN CHANNELS



PICTORIAL VIEW OF TRANSVERSE SLOT



NOTES:
1. START AT DOWNSTREAM TERMINAL AND PROGRESS UPSTREAM.
2. FIRST ROLL IS CENTERED LONGITUDINALLY IN MID-CHANNEL AND PINNED WITH TEMPORARY STAKES TO MAINTAIN ALIGNMENT.
3. SUBSEQUENT ROLLS FOLLOW IN STAGGERED SEQUENCE BEHIND THE FIRST ROLL. USE THE CENTER ROLL FOR ALIGNMENT TO THE CHANNEL CENTER.
4. WORK OUTWARDS FROM THE CHANNEL CENTER TO THE EDGE.
5. USE 3' OVERLAPS AND STAKE AT 5' INTERVALS ALONG THE SEAMS.
6. USE 3' OVERLAPS AND SHINGLE DOWNSTREAM TO CONNECT THE LINING AT THE ROLL ENDS.

RECP ROLLED EROSION CONTROL PRODUCT

Ss EROSION BLANKETS & TURF REINFORCEMENT MATS
INSTALL NORTH AMERICAN GREEN SC-150 EROSION BLANKET OR EQUAL U.N.O. INSTALL PER MANUFACTURES SPECIFICATIONS.

GENERAL NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SILT FROM SITE IF NOT REUSABLE ON-SITE AND ASSURING PLAN ALIGNMENT AND GRADE IN ALL DITCHES AND SWALES AT COMPLETION OF CONSTRUCTION.

2. THE SITE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED.

3. ADDTIONAL PROTECTION - ON-SITE PROTECTION IN ADDITI0N TO THE ABOVE MUST BE PROVIDED THAT WILL NOT PERMIT SILT TO LEAVE THE PROJECT CONFINES DUE TO UNSEEN CONDITIONS OR ACCIDENTS.

4. CONTRACTOR SHALL INSURE THAT ALL DRAINAGE STRUCTURES, PIPES. ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.

5. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING THE BEST MANAGEMENT PRACTICES (BMP) AND MOST CURRENT EROSION AND SEDIMENT CONTROL PRACTICES. THIS PLAN INDICATES THE MINIMUM EROSION AND SEDIMENT MEASURES REQUIRED FOR THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL APPLICABLE RULES, REGULATIONS AND WATER QUALITY GUIDELINES AND MAY NEED TO INSTALL ADDITIONAL CONTROLS.

PRE-CONSTRUCTION SITE PROTECTION:

8. EROSION AND SEDIMENT CONTROL BARRIERS SHALL BE PLACED ADJACENT TO ALL WETLAND AREAS WHERE THERE IS POTENTIAL FOR DOWNSTREAM WATER QUALITY DEGRADATION. SEE DETAIL SHEET FOR TYPICAL CONSTRUCTION.

9. ANY DISCHARGE FROM DEWATERING ACTIVITY SHALL BE FILTERED AND CONVEYED TO THE OUTFALL IN A MANNER WHICH PREVENTS EROSION AND TRANSPORTATION OF SUSPENDED SOLIDS TO THE RECEIVING OUTFALL.

10. DEWATERING PUMPS SHALL NOT EXCEED THE CAPACITY OF THAT WHICH REQUIRES A CONSUMPTIVE USE PERMIT FROM THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

11. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.

12. ALL DISTURBED AREAS ARE TO BE STABILIZED THROUGH COMPACTION. SILT SCREENS, SYNTHETIC BALES, AND GRASSING. ALL FILL SLOPES 3:1 OR STEEPER TO RECEIVE STAKED SOLID SOD.

SITE PROTECTION:

13. THE FILTER BARRIER SHALL BE ENTRENCHED AND BACKFILLED PROPERLY. A TRENCH SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 6 INCHES, BARRIER IS STAKED, THE EXCAVATED SOIL OR GRAVEL SHALL BE BACKFILLED AND COMPACTED AGAINST THE FILTER BARRIER. USING WIRE BACKING FOR SUPPORT IS DISCOURAGED DUE TO DISPOSAL PROBLEMS.

14. WATER OR SLURRY USED TO CONTROL DUST SHALL BE RETAINED ON THE SITE AND NOT ALLOWED TO RUN DIRECTLY INTO WATERCOURSE OR STORMWATER CONVEYANCE SYSTEMS.

15. SPECIAL AREAS SHALL BE DESIGNATED AS VEHICLE AND EQUIPMENT WASHING AREAS AND SUCH AREAS SHALL NOT ALLOW RUNOFF TO FLOW DIRECTLY INTO WATERCOURSE OR STORMWATER CONVEYANCE SYSTEMS.

16. SILT FENCE BARRIERS ARE NOT TO BE USED WHERE CONCENTRATED FLOWS OF WATER ARE ANTICIPATED SUCH AS DRAINAGE DITCHES. AROUND INLETS OR ABOVE/ BELOW WHERE CULVERTS DISCHARGE.

17. SYNTHETIC BALES, SANDBAGS OR OTHER APPROVED DEVICE FACED WITH FILTER FABRIC SHALL BE USED IN HIGH VOLUME AREAS TO DECREASE THE RUNOFF VELOCITY AND SHALL BE SECURELY ANCHORED.

18. ALL DEVICES INCLUDING SILT FENCE. FILTER BARRIERS. SYNTHETIC BALES AND/OR SANDBAGS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED BARRIERS. END RUNS AND UNDERCUTTING BENEATH BARRIERS.

19. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

20. SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.

STORM DRAIN INLET PROTECTION:

21. FILTER FABRIC SHALL BE LAID OVER INLETS SO THAT THE FABRIC EXTEND A MINIMUM OF 1 FOOT BEYOND EAST SIDE OF THE INLET STRUCTURE. IF MORE THAN ONE STRIP OF FABRIC IS NECESSARY, THE STRIPS SHALL BE OVERLAPPED.

22. 2 INCH - 3 INCH COARSE AGGREGATE SHALL BE PLACED OVER THE FILTER FABRIC. THE DEPTH OF STONE SHALL BE AT LEAST 6 INCHES OVER THE ENTIRE INLET OPENING. THE STONE SHALL EXTEND BEYOND THE INLET OPENING AT LEAST 18 INCHES ON ALL SIDES.

23. IF STONE FILTERS BECOME CLOGGED WITH SEDIMENT SO THAT THEY NO LONGER ADEQUATELY PERFORM THEIR FUNCTION, THE STONES MUST BE PULLED AWAY FROM THE INLET, CLEANED AND REPLACED.

POST-CONSTRUCTION SITE PROTECTION:

24. ALL DEWATERING, EROSION AND SEDIMENT CONTROL TO REMAIN IN PLACE AFTER COMPLETION OF CONSTRUCTION AND REMOVED ONLY WHEN AREAS HAVE STABILIZED.

25. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER TEMPORARY BARRIERS ARE. NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA IN SUCH A MANNER THAT IT WILL NOT ERODE.

26. ALL DISTURBED AREAS SHALL BE GRASSED, FERTILIZED, MULCHED AND MAINTAINED UNTIL A PERMANENT VEGETATIVE COVER IS ESTABLISHED.

27. SOD SHALL BE PLACED IN AREAS WHICH MAY REQUIRE IMMEDIATE EROSION PROTECTION TO ENSURE WATER QUALITY STANDARDS ARE MAINTAINED.

EROSION AND SEDIMENTATION CONTROL

28. PRIOR TO COMMENCEMENT OF ANY CLEARING AND EXCAVATION WITHIN A WORK AREA, ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND IN WORKING ORDER.

29. PERFORM WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE STATE AND FEDERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT. ALSO REFERENCE THE WATER MANAGEMENT DISTRICT AND CITY REQUIREMENTS.

30. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EROSION AND SEDIMENT CONTROL FEATURES TO PREVENT AND CONTROL SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION AREAS AND ENTERING EXISTING STORMWATER FACILITIES AND SURFACE WATERS. ADDITIONAL MEASURES BEYOND THOSE SHOWN WITHIN THESE PLANS MAY BE NECESSARY DURING CONSTRUCTION, INCLUDING TEMPORARY VEGETATIVE MEASURES AND INSTALLATION OF OTHER SILT TRAPPING MEASURES.

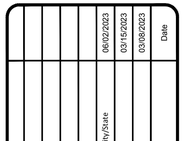
31. THE CONTRACTOR IS REQUIRED TO ADJUST THE EROSION AND SEDIMENT CONTROLS AS NECESSARY AND AS SHOWN ON THE DRAWINGS; AND ADD ADDITIONAL CONTROL MEASURES AS REQUIRED TO INSURE THE SITE MEETS ALL FEDERAL, STATE AND LOCAL EROSION AND SEDIMENT CONTROL REQUIREMENTS.

32. ALL BEST MANAGEMENT EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY OPERATIONS; OR SOMEONE APPOINTED BY THE SUPERINTENDENT, AT LEAST EVERY OTHER WEEK AND FOLLOWING A STORM EVENT OF 0.5 INCHES OR GREATER.

33. ALL BEST MANAGEMENT CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.

No.	Revision/Issue	Date
3	Revised Per Agency Review Comments By City/State	08/02/2023
2	Issue For Permit	03/15/2023
1	Issue For Client Review	03/08/2023

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889



NISIT SAPPARKHAO, P.E.
FL REG. NO. 64085

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY NISIT SAPPARKHAO, PE.ON THE DATE ANDUSR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY.FAC 01G15-23.004

Project Name and Address
BIG DAN'S CAR WASH
17580 HIGHWAY 441
MOUNT DORA, FLORIDA 32757

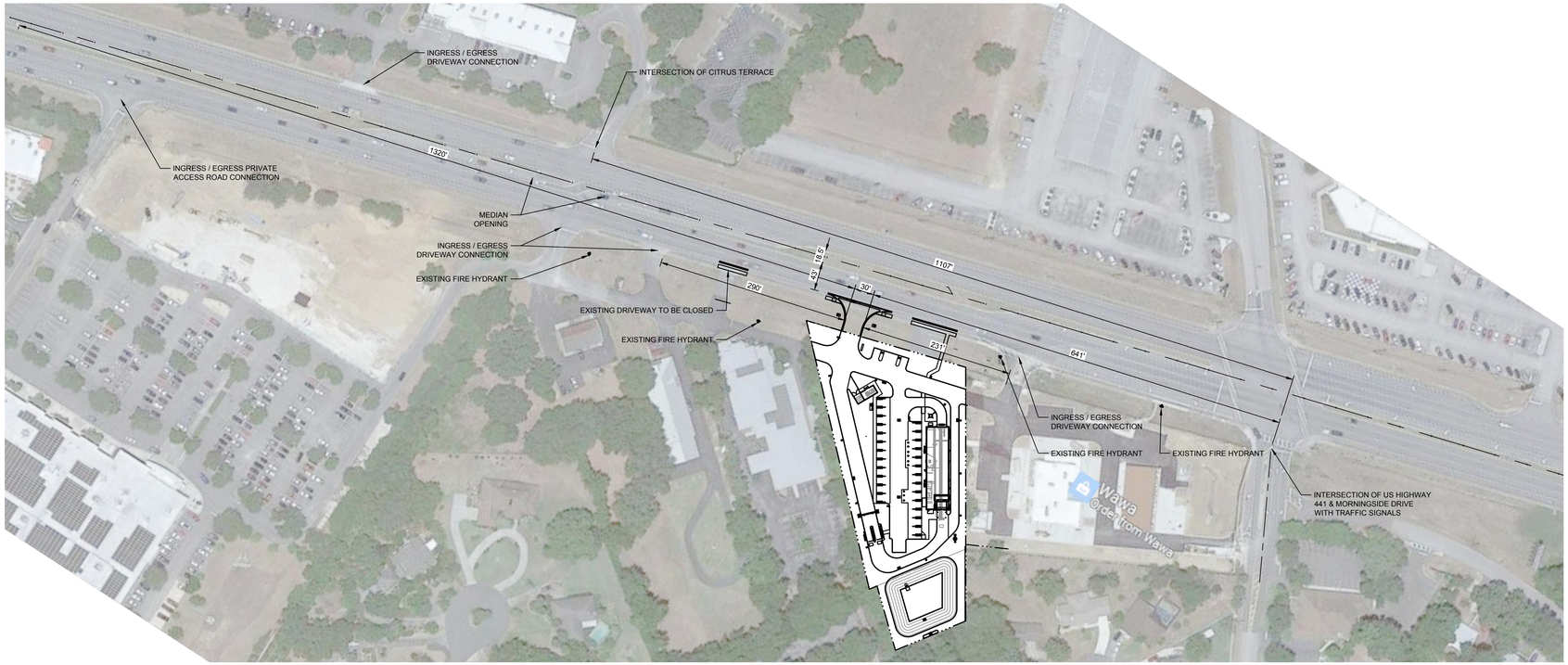
Sheet Title
EROSION AND SEDIMENTATION CONTROL DETAILS

Project No.
365-01.00

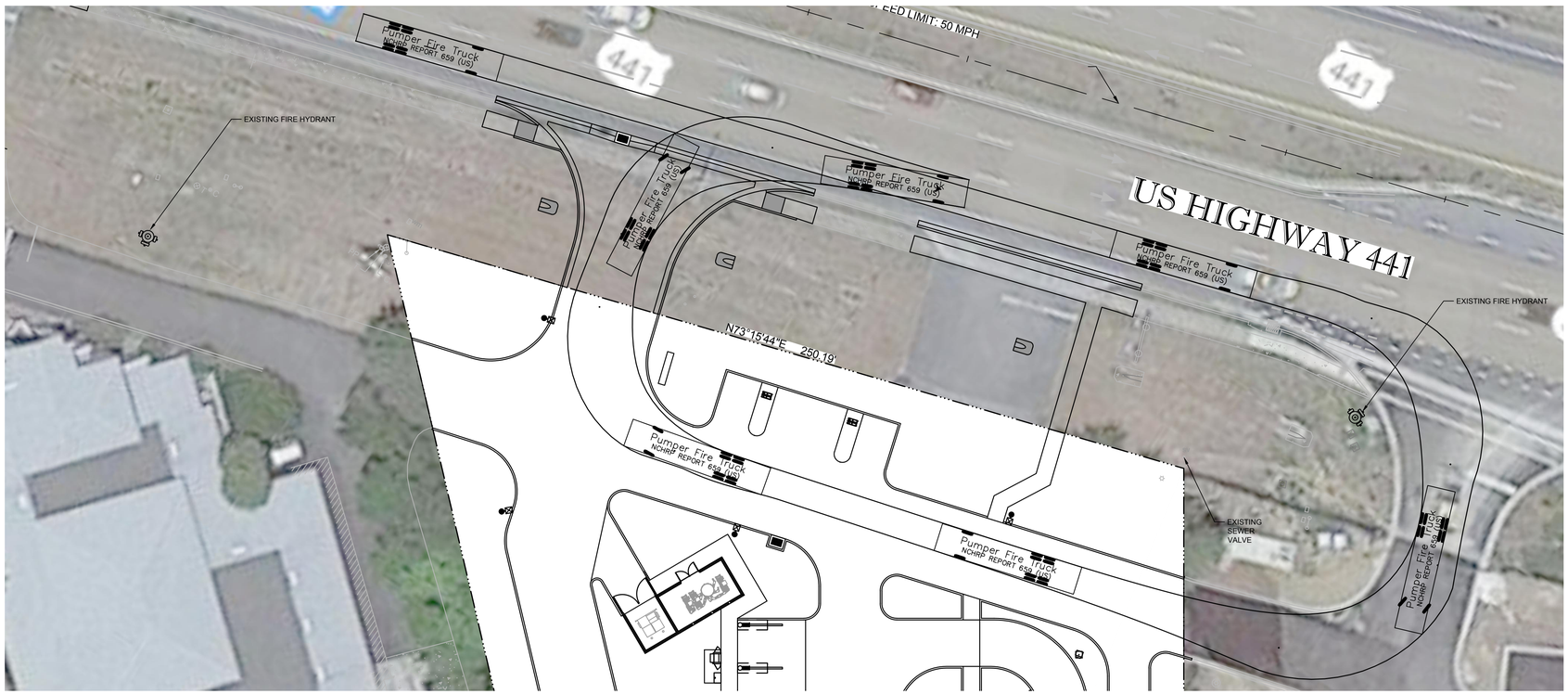
Sheet
C06.04

Date
01/23/23

Scale
AS NOTED

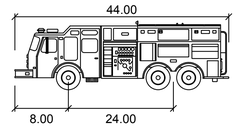


PLAN VIEW | SCALE 1" = 100' | -



PLAN VIEW | SCALE 1" = 20' | -

TRUCK LEGEND



Pumper Fire Truck

	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 37.8

REFERENCE NORTH

0' 30' 60'

SCALE: AS NOTED

No.	Revision/Issue	Date
3	Revised Per Agency Review Comments By City/State	06/02/2023
2	Issue For Permit	03/15/2023
1	Issue For Client Review	03/08/2023

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889

NISIT SAPPARKHAO, P.E.
FL REG. NO. 64085

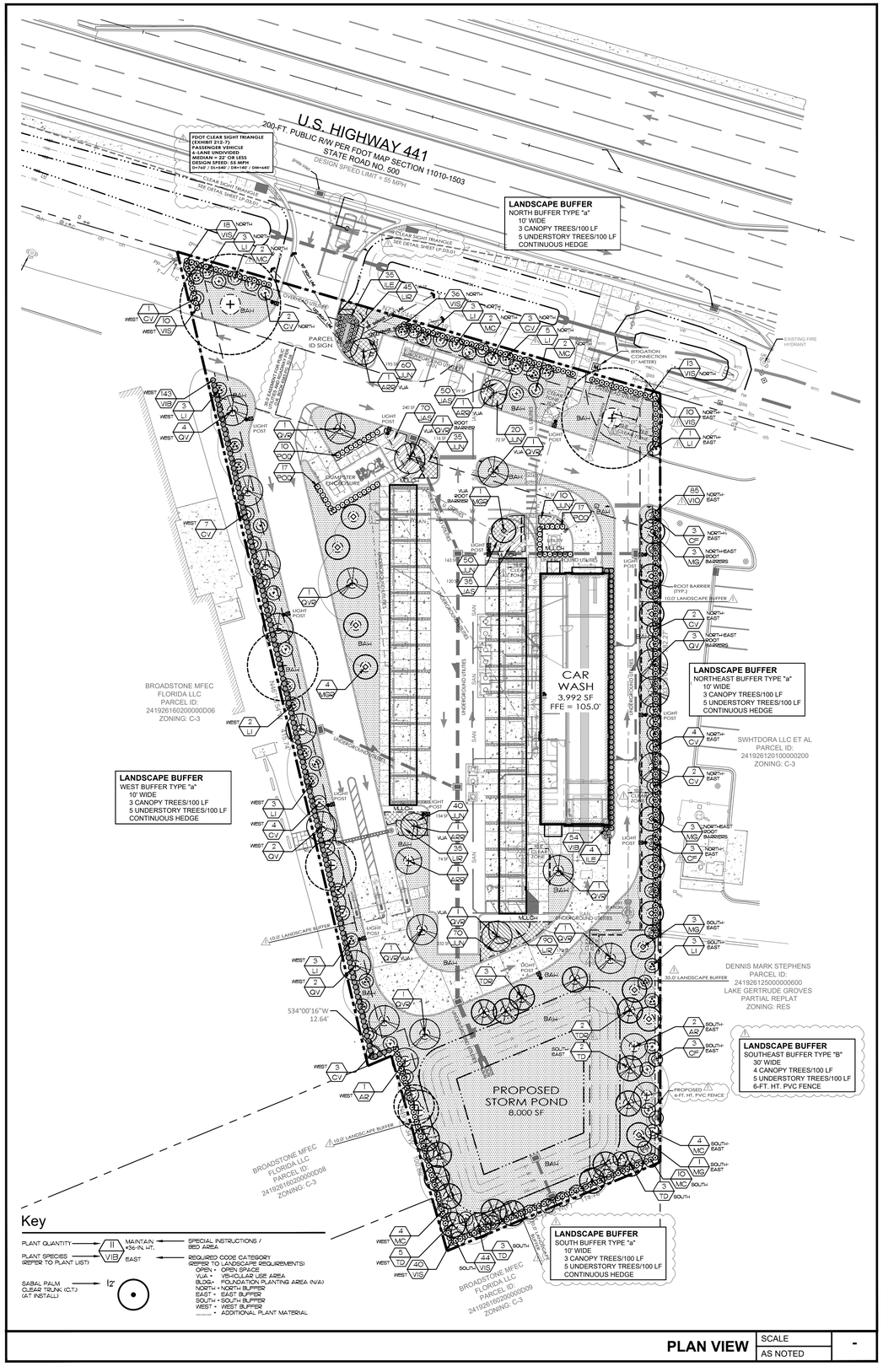
THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY (NISIT SAPPARKHAO, PE) ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY.FAC 61G15-23.004

Project Name and Address
BIG DAN'S CAR WASH
17580 HIGHWAY 441
MOUNT DORA, FLORIDA 32757

Sheet Title
SITE ACCESS PLAN

Project No.	Sheet
365-01.00	SA01.01
Date: 01/23/23	
Scale: AS NOTED	

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



Landscape Requirements

	REQUIRED/ PERMITTED	PROVIDED
TOTAL SITE:		71,130 SF (1.799 AC.)
IMPERVIOUS AREA (65% MAX)	46,234 SF	34,381 SF (48.3%)
LANDSCAPE BUFFERS		
NORTH - NON-CONTIGUOUS (C-3)		
BUFFER TYPE "a" - 10-FT. WIDE (250.19 LF)		
CANOPY TREES: 3 / 100 LF =	9 TREES	2 TREES * ⚠
INCLUDES (2) EXISTING OAKS		
ACCENT TREES: 5 / 100 LF =	15 TREES	22 TREES * ⚠
CONT. HEDGE		
WEST - (ADJACENT TO C-3)		
BUFFER TYPE "a" - 10-FT. WIDE (529.24 LF)		
CANOPY TREES: 3 / 100 LF =	18 TREES	18 TREES
INCLUDES (2) EXISTING OAKS (2) EXISTING MAGNOLIAS		
ACCENT TREES: 5 / 100 LF =	30 TREES	30 TREES
CONT. HEDGE		
SOUTH - (ADJACENT TO C-3)		
BUFFER TYPE "a" - 10-FT. WIDE (114.76 LF)		
CANOPY TREES: 3 / 100 LF =	6 TREES	6 TREES
ACCENT TREES: 5 / 100 LF =	10 TREES	10 TREES
CONT. HEDGE		
NORTH-EAST - (ADJACENT TO C-3)		
BUFFER TYPE "a" - 10-FT. WIDE (266.93LF)		
CANOPY TREES: 3 / 100 LF =	9 TREES	9 TREES
ACCENT TREES: 5 / 100 LF =	15 TREES	15 TREES
CONT. HEDGE		
SOUTH-EAST - (ADJACENT TO R-3)		
BUFFER TYPE "B" - 30-FT. WIDE (115.34 LF)		
CANOPY TREES: 4 / 100 LF =	8 TREES	8 TREES
ACCENT TREES: 5 / 100 LF =	10 TREES	10 TREES
⚠ 6-FT. HT. PVC FENCE		
PARKING LOT REQUIREMENTS		
PAVED AREA (VUA)		30,473 SF
LANDSCAPE AREA (10% MIN.)	3,048 SF	4,544 SF (15%)
INTERIOR PARKING ISLANDS (8)	8 TREES	8 TREES ⚠
(1) TREE / ISLAND		

*** PLEASE NOTE: THERE ARE (7) CANOPY TREES DEFICIENT IN THE NORTH BUFFER DUE TO THE CLOSE PROXIMITY TO THE EXISTING OVERHEAD UTILITY LINES PRESENT. (7) ADDITIONAL UNDERSTORY TREES ARE PROPOSED "IN LIEU OF" TO MAKE UP THE SHORT FALL IN QUANTITY.* ⚠

Plant List

	SYM	BOTANICAL NAME/ COMMON NAME	HEIGHT/ SPREAD	SPECIFICATION	NATIVE	DROUGHT TOLERANT	TOTAL
CANOPY TREES	AR	ACER RUBRUM RED MAPLE	8' HT. 4' SPR.	FIELD GROWN, B&B 2" CAL. MIN.	Y	M	3 ⚠
	ARR	ACER RUBRUM RED MAPLE	12' HT. 5' SPR.	FIELD GROWN, B&B 3.5" CAL. MIN.	Y	M	4
	MG	MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA	8' HT. 4' SPR.	FIELD GROWN, B&B 2" CAL.	Y	H	10
	MGR	MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA	12' HT. 5' SPR.	FIELD GROWN, B&B 3.5" CAL.	Y	H	5 ⚠
	QV	QUERCUS VIRGINIANA LIVE OAK	8' HT. 4' SPR.	FIELD GROWN, B&B 2" CAL., 5' CT.	Y	H	11 ⚠
	QVR	QUERCUS VIRGINIANA LIVE OAK	12' HT. 5' SPR.	FIELD GROWN, B&B 3.5" CAL., 5' CT.	Y	H	9 ⚠
	TD	TAXODIUM DISTICHUM BALD CYPRESS	8' HT. 4' SPR.	FIELD GROWN, B&B 2" CAL., 5' CT.	Y	H	13
	TDR	TAXODIUM DISTICHUM BALD CYPRESS	12' HT. 5' SPR.	FIELD GROWN, B&B 3.5" CAL., 5' CT.	Y	H	5 ⚠
UNDERSTORY TREES	CF	CORNUS FLORIDA FLORIDA DOGWOOD	6' HT. 4' SPR.	2.5" CAL F. GRWON/B&B MULTI-STEM, 3 MAIN TRUNKS	Y	H	9 ⚠
	CV	CALISTEMON VIMINALIS BOTTLE BRUSH	6' HT. 4' SPR.	1.5" CAL F. GRWON/B&B STANDAD	N	H	26
	LI	LAGERSTROEMIA INDICA CRAPE MYRTLE	6' HT. 4' SPR.	2.5" CAL F. GRWON/B&B MULTI-STEM, 3 MAIN TRUNKS	N	H	26 ⚠
	MC	MYRICA CARIFERA WAX MYRTLE	6' HT. 4' SPR.	2.5" CAL F. GRWON/B&B MULTI-STEM, 3 MAIN TRUNKS	Y	H	24
SHRUBS	POD	PODOCARPUS MACROPHYLLUS PODOCARPUS	24" X 18"	30" O.C. FULL TO BASE	N	M	44
	VIB	VIBURNUM OBOVATUM WALTER'S VIBURNUM	24" X 18"	30" O.C. FULL TO BASE	Y	H	197
	VIS	VIBURNUM SUSPENSUM SANDANKWA VIBURNUM	24" X 18"	30" O.C. FULL TO BASE	N	M	171 ⚠
	VIO	VIBURNUM ODORATISSIMUM SWEET VIBURNUM	24" X 18"	30" O.C. FULL TO BASE	N	M	85 ⚠
SMALL SHRUBS AND GROUNDCOVERS	ILE	ILEX VOMITORIA 'SHILLINGS' DWARF SHILLINGS HOLLY	16" HT.	3 GAL, 24" O.C. FULL TO BASE	Y	H	39
	JAS	JASMINUM VOLUBILE WAX JASMINE	14" X 14"	3 GAL, 24" O.C. FULL TO BASE	N	H	155
	JUN	JUNIPERUS HORIZONTALIS 'WILTONI' BLUE RUG JUNIPER		3 GAL., 24" O.C. FULL	N	H	285
	LIR	LIRIOPE MUSCARY 'EVERGREEN GIANT' LIRIOPE		1 GAL, 18" O.C. FULL	N	H	170
TURF	BAH	PASPALUM NOTATUM 'FLUGGE' ARGENTINE BAHIA SOD		DISEASE FREE, LAID TIGHT-LY, EVEN UNIFORM	N	M	T.B.D.

⚠ ● DELINEATES TREE MATERIAL CALCULATED FOR THE REQUIRED TREE REPLACEMENT, INSTALLED AT 3.5" CALIPER MIN.

General Notes

1. PLANT AND LANDSCAPE MATERIALS SHALL CONFORM TO THE STANDARDS FOR FLORIDA NO. 1, AS GIVEN IN THE GRADES AND STANDARDS FOR NURSERY PLANTS, PARTS I & II AS PREPARED BY FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES.
2. ALL UTILITIES THAT ARE KNOWN TO THE LANDSCAPE ARCHITECT ARE LOCATED ON THE PLAN, FOR EXISTING OR PROPOSED UTILITIES:
   A. NO TREE SHALL BE PLANTED WHERE IT COULD CONFLICT WITH OVER-HEAD POWER LINES AT MATURE HEIGHT.
   B. NO TREE, SHRUBS, HEDGES OR VINES SHALL BE PLANTED WITHIN FIVE (5) FEET OF ANY EXISTING OR PROPOSED UTILITY POLE, GUY WIRE OR PAD MOUNTED TRANSFORMER.
   C. LARGE TREES (HEIGHT AT MATURITY OF MORE THAN 30 FEET SHALL BE PLANTED NO CLOSER THAN A HORIZONTAL DISTANCE OF 30 FEET FROM THE NEAREST OVER-HEAD POWERLINE.
   D. MEDIUM HEIGHT TREE (HEIGHT AT MATURITY BETWEEN 20 AND 30 FEET) SHALL BE OFFSET AT LEAST TWENTY 20 FEET.
   E. SMALL TREES (HEIGHT AT MATURITY OF LESS THAN 20 FEET) REQUIRE NO OFFSET.
   F. PALMS SHOULD BE PLANTED AT A DISTANCE EQUAL TO OR GREATER THAN THE AVERAGE FROND LENGTH PLUS 2 FEET FROM POWER LINES.
3. THE CONTRACTOR SHALL ENSURE THAT ALL PLANTING ISLANDS AND OTHER AREAS SHALL BE CLEAN OF TRASH, CONSTRUCTION DEBRIS, OR OTHER WASTE MATERIALS TO A DEPTH OF 24 INCHES PRIOR TO LANDSCAPE INSTALLATION.
4. IT IS THE CONTRACTORS RESPONSIBILITY TO INSURE THAT ALL PLANT BED AREAS HAVE PROPER DRAINAGE FOR OPTIMUM GROWTH OF LANDSCAPE MATERIAL BEFORE INSTALLATION BEGINS. EXISTING DRAINAGE PATTERN SHALL NOT BE ALTERED OR EFFECTED BY NEW LANDSCAPING.
5. PLANT ALL TREES AND PALMS (2 INCH - 4 INCH) ABOVE FINISHED GRADE. TREES INSTALLED OR BURIED TOO DEEP SHALL BE RESET TO THIS STANDARD. REMOVE THE TOP ONE-THIRD (1/3) OF THE WIRE BASKETS ON ALL B & B MATERIAL.
6. ALL HEDGES AND GROUNDCOVERS TO BE PLANTED LEAVING SPACE BETWEEN PLANTS AND BUILDINGS, WALLS AND FENCES.
7. ALL PLANT BEDS AND TREE RINGS SHALL BE TREATED WITH PRE-EMERGENT HERBICIDE AND THEN TOP-DRESSED WITH 3-INCH DEEP LAYER OF COMMERCIAL PINE BARK NUGGETS. CONTRACTOR SHALL INSTALL WOVEN WEED BARRIER FABRIC IN ALL SHRUB/GROUNDCOVER BEDS.
8. HAND DIGGING HOLES FOR INSTALLING PROPOSED TREES IN CLOSE PROXIMITY TO UTILITIES IS REQUIRED TO AVOID CONFLICTS.
9. ALL EXOTIC VEGETATION TO BE REMOVED FROM THE SITE PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
10. ⚠ NEW SOD SHALL BE ARGENTINE BAHIA SOD. THE QUANTITY SHOWN ON THE PLANT LIST IS AN ESTIMATE AND CONTRACTOR SHALL DETERMINE EXACT QUANTITIES IN THE FIELD. SOD AREAS TO BE MAINTAINED BY THE CONTRACTOR FROM THE TIME OF INSTALLATION TO THE TIME OF FINAL ACCEPTANCE.
11. EXISTING AND PROPOSED LANDSCAPING IS TO BE MAINTAINED PER JURISDICTION'S CLEAR SIGHT TRIANGLE REGULATIONS.
12. NO SUBSTITUTIONS WILL BE ACCEPTABLE IF SPECIFIED LANDSCAPE MATERIAL IS NOT OBTAINABLE, SUBMIT PROOF OF NON-AVAILABILITY TO LANDSCAPE ARCHITECT AND JURISDICTION TOGETHER WITH THE PROPOSAL FOR USE OF EQUIVALENT MATERIAL.
13. THE LANDSCAPE ARCHITECT MAY INSPECT TREES AND SHRUBS WHETHER AT PLACE OF GROWTH OR AT SITE BEFORE PLANTING FOR COMPLIANCE WITH THE REQUIREMENTS FOR GENUS, SPECIES, VARIETY, SIZE AND QUALITY. LANDSCAPE ARCHITECT RETAINS RIGHT TO FURTHER INSPECT TREES AND SHRUBS FOR SIZE AND CONDITION OF BALLS AND ROOT SYSTEMS, INSECTS, INJURIES AND LATENT DEFECTS, AND TO REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING PROGRESS OF WORK. REMOVE REJECTED TREES OR SHRUBS IMMEDIATELY FROM PROJECT SITE.
14. IN EVENT OF DISCREPANCY, THE PLANTING PLAN SHALL TAKE PRECEDENCE OVER THE PLANT LIST.
15. ALL MINIMUMS FOR EACH PLANT SPECIFIED WITHIN THE PLANT LIST ARE REQUIRED TO BE MET.
    A. THE TREE HEIGHT AND SPREAD WILL PREVAIL OVER CALIPER AND CONTAINER SIZE.
    B. PERIMETER HEDGES ARE REQUIRED TO BE INSTALLED AT 30-IN. HEIGHT, AND CALCULATED AT A 36-IN. ON-CENTER (O.C.) EQUIVALENT.

    IF ANY OF THE MINIMUMS ARE NOT MET, THE INSTALLED MATERIAL MAY OR MAY NOT BE REJECTED ON A CASE BY CASE BASIS BY THE LANDSCAPE ARCHITECT, OWNER, OR JURISDICTION. FOR EXAMPLE, ALL TREE CALIPER AND CONTAINER SIZES NOTED ON THE PLANT LIST ARE A MINIMUM. CONTRACTOR TO INCREASE THE SIZE IF NECESSARY TO CONFORM TO THE PLANT SIZES AND SPECIFICATIONS.
16. TREES TO BE STAKED IF REQUIRED AS DEEMED NECESSARY BY OWNER AND LANDSCAPE ARCHITECT TO ASSURE HEALTH, SAFETY AND WELFARE (INCLUDES BUT NOT LIMITED TO ALL CURVED CABBAGE, TALL ROYALS, CURVED AND LEANING SPECIMEN). ALL WOOD STAKES TO BE PAINTED FOREST GREEN. STAKING PROCEDURES SHALL BE STANDARD CONTRACTOR PRACTICE CREATING NO TRUNK DAMAGE OR FUTURE STRANGULATION OF TREE.
17. ALL PLANT MATERIAL SHALL BE PLANTED WITH 'TERRA-SORB AG' OR AN APPROVED EQUAL, IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR THE RATE OF APPLICATION.
18. AN AUTOMATIC IRRIGATION SYSTEM WILL BE PROVIDED WHICH MEETS OR EXCEEDS THE FULL REQUIREMENTS OF THE LAND DEVELOPMENT REGULATIONS. THE OWNER WILL SUPPLY ALL PROPOSED PLANT MATERIAL WITH 100% IRRIGATION (AUTOMATIC) COVERAGE (WITH SOX OVERLAP MINIMUM) WITHIN TEN DAYS OF INITIAL INSTALLATION.
19. CONTRACTOR TO INSTALL THE IRRIGATION SYSTEM PER THE JURISDICTIONS REGULATIONS TO CONFORM TO THE LANDSCAPE DESIGN.

⚠ Preservation of Existing Trees

REQUIRED EXISTING TREES DATA
(PER CODE SECTION 6.6.7.1.i)

- TOTAL EXISTING NUMBER OF TREES SIZED 6"--23.99": (15) TREES
- TOTAL EXISTING NUMBER OF TREES SIZED 6"--23.99" REMOVED: (12) TREES
- TOTAL EXISTING NUMBER OF TREES SIZED 24" OR GREATER: (6) TREES
- TOTAL NUMBER OF TREES SIZED 24" OR GREATER REMOVED: (2) TREES
- TOTAL NUMBER OF TREES REPLACED AT RATIO 1:1 FOR TREES REMOVED 6"--23.99": (12) TREES
- TOTAL NUMBER OF TREES PLACED AT RATIO 1:12 (FOR TREES REMOVED 24" +): (11) TREES
- TOTAL NUMBER OF TREES REPLACED: (23) TREES
- TOTAL NUMBER OF TREE DEFICIENT (NOT BEING REPLACED): (0) TREES
- TREE BANK CONTRIBUTION INCLUDES TOTAL DOLLAR AMOUNT OF CONTRIBUTION FUNDS: $ 0.00

⚠ Additional Notes

1. DUE TO THE OVER-HEAD POWER LINES ALONG U.S. HIGHWAY 441, (7) OF THE REQUIRED CANOPY TREES WITHIN THE NORTH BUFFER HAVE BEEN SUBSTITUTED @ 1 : 1 RATIO WITH (7) UNDERSTORY TREES. THESE SPECIES CAN GROW IN CLOSE PROXIMITY TO THE UTILITY. PLEASE NOTE THESE SUBSTITUTED TREES ARE IN ADDITION TO THE REQUIRED (15) UNDERSTORY TREES IN THE NORTH BUFFER.
2. THE SOUTH-EAST LANDSCAPE BUFFER HAS BEEN DESIGNED TO BE A MODIFIED TYPE 'B' BUFFER, REPLACING THE REQUIRED HEDGE MATERIAL WITH A 6-FT. HEIGHT PVC OPAQUE FENCE.
3. THERE ARE NO TREES PROPOSED WITHIN 10-FT OF THE PROPOSED POTABLE, RE-USE, OR FORCE MAIN UTILITIES. (10-FT. CLEAR ZONE SHOWN ON THE PLANS) CANOPY TREES IN CLOSE PROXIMITY TO THESE UTILITIES ARE TO HAVE AN INSTALLED ROOT BARRIER PER THE PLAN AND DETAIL ON SHEET LP.03.01.
4. THE FDOT CLEAR SIGHT TRIANGLE IS SHOWN ON THE LANDSCAPE PLAN PER FDOT EXHIBIT 212-7. THERE IS NO PROPOSED VEGETATION FOR THE AREA BETWEEN THE RIGHT-OF-WAY LINE AND BACK OF CURB, THEREFORE, THE REQUIRED CLEAR VISIBILITY CONE IS NOT IMPACTED.
5. ALL IRRIGATION VALVE BOXES, PIPING AND SPRAY HEADS SHALL BE PURPLE IN COLOR TO REFLECT THE RE-USE WATER SOURCE.

PATRICK D. CUNNINGHAM, LLC
■ land planning
■ landscape architecture
519 Sapphire Drive
Sarasota, FL 34234
O: 941.351.8915
pcunningham.LLC@gmail.com

48 HOURS BEFORE DIGGING CALL TOLL FREE 8-1-1 SUNSHINE811.COM NOTIFICATION CENTER

REFERENCE NORTH

0' 30' 60'

SCALE: 1" = 30'

NO.	Date	Revision/Issue
1	05/12/2023	REVISED PER COMMENTS
	03/08/2023	ISSUE FOR PERMIT

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889

big Dan's CAR WASH

PATRICK D. CUNNINGHAM
FL REG. NO. LA0001669

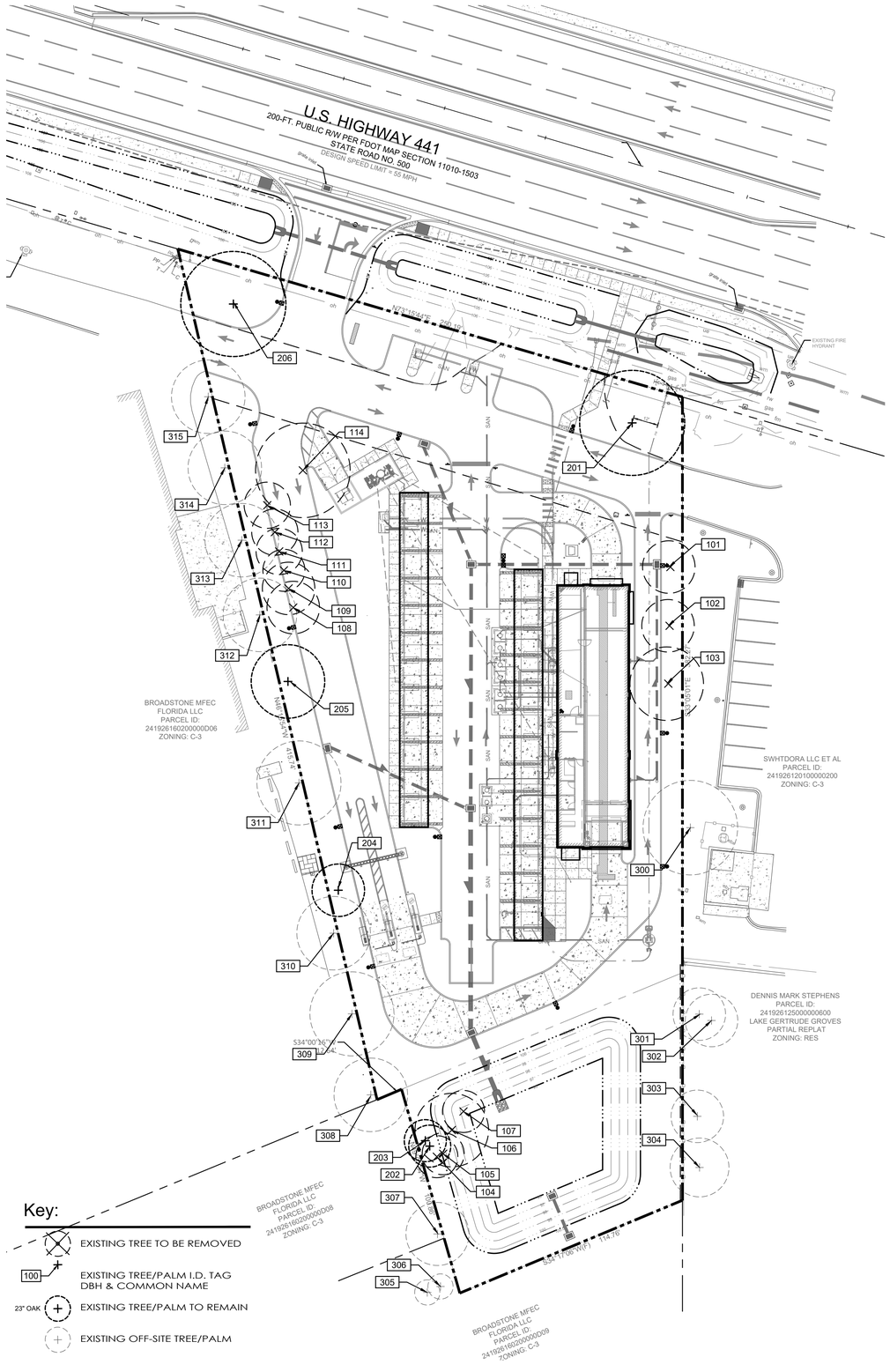
DATE

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY PATRICK D. CUNNINGHAM ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY FS 471.025 (7) (a)

Project Name and Address
BIG DAN'S CAR WASH
17580 HIGHWAY 441
MOUNT DORA, FLORIDA 32757

Sheet Title
LANDSCAPE PLAN

Project No.	Sheet
365-01.00	LP01.01
Date: 01/23/2023	
Scale: AS NOTED	



PLAN VIEW | SCALE: AS NOTED | -

Existing Tree Inventory List

EXISTING TREES: (TO BE REMOVED)

NO. (INCH)	TREE SPECIES	DBH	ACTION	MITIGATION
101	UNK. TREE	9 "	TO BE REMOVED	- 1 CREDIT
102	UNK. TREE	6 "	TO BE REMOVED	- 1 CREDIT
103	OAK SPP.	20 "	TO BE REMOVED	- 1 CREDIT
104	UNK. TREE	9 "	TO BE REMOVED	- 1 CREDIT
105	OAK SPP.	7 "	TO BE REMOVED	- 1 CREDIT
106	OAK SPP.	28 "	TO BE REMOVED	28" @ 1:6
107	OAK SPP.	12 "	TO BE REMOVED	- 1 CREDIT
108	OAK SPP.	20 "	TO BE REMOVED	- 1 CREDIT
109	OAK SPP.	19 "	TO BE REMOVED	- 1 CREDIT
110	OAK SPP.	10 "	TO BE REMOVED	- 1 CREDIT
111	OAK SPP.	17 "	TO BE REMOVED	- 1 CREDIT
112	OAK SPP.	14 "	TO BE REMOVED	- 1 CREDIT
113	OAK SPP.	13 "	TO BE REMOVED	- 1 CREDIT
114	OAK SPP.	34 "	TO BE REMOVED	34" @ 1:6
TOTAL REMOVED:		218 "	TOTAL 6" - <24" @ 1:1 = (12) TREES TOTAL 24"+ = 62" @1:6=(11) TREES	
			TOT. MITIGATION REQ.=(23) TREES (@ 3.5" DBH)	

EXISTING TREES - ON SITE: (TO BE REMAIN)

NO.	TREE SPECIES	DBH	ACTION
201	OAK SPP.	30 "	TO REMAIN
202	OAK SPP.	7 "	TO REMAIN
203	OAK SPP.	8 "	TO REMAIN
204	MAGNOLIA	16 "	TO REMAIN
205	MAGNOLIA	26 "	TO REMAIN
206	OAK SPP.	27 "	TO REMAIN
TOTAL REMAINING:		114"	(6) TREES

EXISTING TREES - OFF SITE: (TO REMAIN)

NO.	TREE SPECIES	DBH (INCH)	ACTION	TREE CREDITS
300 *	OAK SPP.	+/- 24 "	PROTECT	NOT APPLICABLE
301	PINE SPP.	10 "	PROTECT	NOT APPLICABLE
302	PINE SPP.	12 "	PROTECT	NOT APPLICABLE
303	PINESPP.	10 "	PROTECT	NOT APPLICABLE
304	PINE SPP.	18 "	PROTECT	NOT APPLICABLE
305	PALM SPP.	10 "	PROTECT	NOT APPLICABLE
306	PALM SPP.	12 "	PROTECT	NOT APPLICABLE
307	OAK SPP.	20 "	PROTECT	NOT APPLICABLE
308	OAK SPP.	25 "	PROTECT	NOT APPLICABLE
309	OAK SPP.	36 "	PROTECT	NOT APPLICABLE
310	OAK SPP.	30 "	PROTECT	NOT APPLICABLE
311	OAK SPP.	28 "	PROTECT	NOT APPLICABLE
312	OAK SPP.	23 "	PROTECT	NOT APPLICABLE
313	OAK SPP.	20 "	PROTECT	NOT APPLICABLE
314	OAK SPP.	23 "	PROTECT	NOT APPLICABLE
315	OAK SPP.	24 "	PROTECT	NOT APPLICABLE

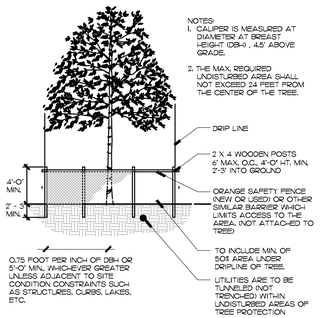
* TREE IS NOT FOUND ON SURVEY

PLEASE NOTE:
EXISTING TREE INFORMATION IS TAKEN FROM THE TREE SURVEY PREPARED BY EBI SURVEYING, CERTIFIED ON 01/20/2023 AND RELIED ON BY THE LANDSCAPE ARCHITECT. TREES NOT FOUND ON SURVEY ARE TAKEN FROM RECENT AERIAL PHOTOGRAPHS AND SITE PHOTOGRAPHS.

⚠ Preservation of Existing Trees

REQUIRED EXISTING TREES DATA
(PER CODE SECTION 6.6.7.1.i)

- TOTAL EXISTING NUMBER OF TREES SIZED 6"--23.99": (15) TREES
- TOTAL EXISTING NUMBER OF TREES SIZED 6"--23.99" REMOVED: (12) TREES
- TOTAL EXISTING NUMBER OF TREES SIZED 24" OR GREATER: (6) TREES
- TOTAL EXISTING NUMBER OF TREES SIZED 24" OR GREATER REMOVED: (2) TREES
- TOTAL NUMBER OF TREES REPLACED AT RATIO 1:1 FOR TREES REMOVED 6'--23.99": (12) TREES
- TOTAL NUMBER OF TREES PLACED AT RATIO 1:12 (FOR TREES REMOVED 24" +): (11) TREES
- TOTAL NUMBER OF TREES REPLACED: (23) TREES
- TOTAL NUMBER OF TREE DEFICIENT (NOT BEING REPLACED): (0) TREES
- TREE BANK CONTRIBUTION INCLUDES TOTAL DOLLAR AMOUNT OF CONTRIBUTION FUNDS: $ 0.00



TYPICAL TREE PROTECTION DETAIL
NOT TO SCALE

ALL EXISTING TREES TO BE PROTECTED DURING ANY LAND CLEARING AND/OR CONSTRUCTION AS FOLLOWS

(A) PRIOR TO ANY LAND CLEARING OPERATIONS, TEMPORARY BARRIERS SHALL BE INSTALLED AROUND ALL TREES TO REMAIN WITHIN THE LIMITS OF LAND CLEARING OR CONSTRUCTION AND SHALL REMAIN UNTIL THE COMPLETION OF THE WORK.

TREE PROTECTION SHALL COMPLY WITH THE JURISDICTIONS REGULATIONS.

(B) NO MATERIALS, TRAILERS, EQUIPMENT OR CHEMICALS SHALL BE STORED, OPERATED DUMPED, BURIED OR BURNED WITHIN THE PROTECTED AREAS.

NO ATTACHMENT, WIRES (OTHER THAN PROTECTIVE GUY WIRES), SIGNS OR PERMITS SHALL BE ATTACHED TO A PROTECTED TREE.

(C) PROTECTED TREES SHALL BE PRUNED TO RESTORE THE NATURAL SHAPE AND FERTILIZED AS NECESSARY TO COMPENSATE FOR ANY LOSS OF ROOTS AND TO STIMULATE ROOT GROWTH.

ANY DAMAGE TO TREE CROWNS OR ROOT SYSTEMS SHALL BE REPAIRED IMMEDIATELY AFTER DAMAGE OCCURS.

Notes:

1. TREE CALCULATIONS ABOVE ARE PER THE LAND DEVELOPMENT REGULATIONS.
2. A TREE REMOVAL PERMIT IS REQUIRED PRIOR COMMENCEMENT OF DEVELOPMENT ACTIVITY.
3. A CERTIFIED ARBORIST, NOT THE LANDSCAPE ARCHITECT IS RESPONSIBLE FOR ANY TREE EVALUATION REQUIRED BY THE CITY.
4. A CERTIFIED ARBORIST IS TO PROVIDE FINAL TREE DISPOSITION PLAN AT TIME OF TREE PERMITTING. THE VALUATION OF TREES SHALL BE APPRAISED USING THE COUNCIL OF TREE AND LANDSCAPE APPRAISERS GUIDE FOR PLANT APPRAISAL, LATEST EDITION.TREE BARRICADES FOR TREES TO BE PRESERVED DURING CONSTRUCTION SHALL BE LOCATED AT THE DRIP LINE, UNLESS OTHERWISE APPROVED BY THE ENVIRONMENTAL REVIEW STAFF, PRIOR TO COMMENCEMENT OF CONSTRUCTION.
5. DRIP LINES CAN BE ESTIMATED BASED ON 1-FOOT OF RADIUS (OUT FROM THE TRUNK IN ALL DIRECTIONS) FOR EVERY 1-INCH DBH (DIAMETER AT BREAST HEIGHT).
6. THE AREA WITHIN THE DRIP LINE SHALL REMAIN UNDISTURBED.
7. THE FOLLOWING ACTIVITIES ARE PROHIBITED WITHIN THE DRIP LINE OF PRESERVED TREES:
   A. IMPROVEMENTS, FILL, MACHINERY AND VEHICLE TRAVEL OR PARKING
   B. UNDERGROUND UTILITIES
   C. GRADE CHANGES, COMPACTION OF SOIL, OR EXCAVATION
   D. STORAGE OR CONSTRUCTION MATERIALS.
8. THE TREE PROTECTION BARRICADES SHALL CONSIST OF A CHAINLINK FENCE OR ORANGE SAFETY FENCE PER THE DETAIL UNLESS OTHERWISE APPROVED BY THE CITY.
9. IF POSSIBLE, BARRICADES SHALL BE ERECTED AT A MINIMUM DISTANCE FROM THE BASE OF THE TREES TO BE PRESERVED AS FOLLOWS:
   A. TREES 10-IN. OR LESS DBH = 5-FT. MIN. FROM BASE OF TREE TO BE PROTECTED.
   B. TREES GREATER THAN 10-IN. DBH = 10-FT., PLUS 1-FT. FOR EACH ADDITIONAL INCH DBH GREATER THAN 10-IN. FROM BASE OF TREE TO BE PROTECTED.

PATRICK D. CUNNINGHAM, LLC
■ land planning
■ landscape architecture
519 Sapphire Drive
Sarasota, FL 34234
O: 941.351.8915
pcunningham.LLC@gmail.com

48 HOURS BEFORE DIGGING CALL TOLL FREE 8-1-1 SUNSHINE811.COM NOTIFICATION CENTER

REFERENCE NORTH
0' 30' 60'
SCALE: 1" = 30'

NO.	Revision/Issue	Date
1	REVISED PER COMMENTS	03/12/2023
	ISSUE FOR PERMIT	03/08/2023

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889



PATRICK D. CUNNINGHAM
FL REG. NO. LA0001669

DATE

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY (PATRICK D. CUNNINGHAM) ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY.FAC 61G15-23.004

Project Name and Address
BIG DAN'S CAR WASH
17580 HIGHWAY 441
MOUNT DORA, FLORIDA 32757

Sheet Title
TREE INVENTORY PLAN

Project No.	Sheet
365-01.00	LP02.01
Date: 01/23/2023	
Scale: AS NOTED	

NOTES:

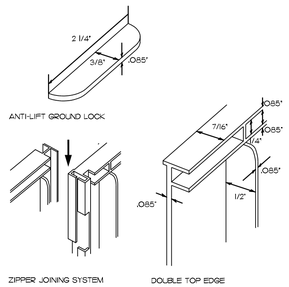
SPECIFIED TREE ROOT BARRIERS ARE A MECHANICAL BARRIER AND ROOT DEFLECTOR TO PREVENT TREE ROOTS FROM DAMAGING HARDSCAPES AND LANDSCAPES. ASSEMBLED IN 2' LONG MODULES TO CREATE VARYING SIZES OF CYLINDERS FOR SURROUNDING ROOT BALLS (SURROUND PLANTING STYLE) OR FOR LINEAR APPLICATIONS DIRECTLY BESIDE A HARDSCAPE ADJACENT TO ONE SIDE OF THE TREES (LINEAR PLANTING STYLE).

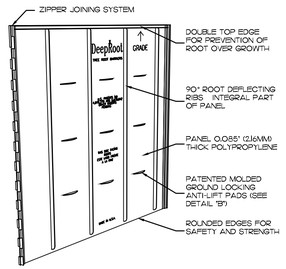
A. MATERIALS

1. THE CONTRACTOR SHALL FURNISH AND INSTALL TREE ROOT BARRIERS AS SPECIFIED. THE TREE ROOT BARRIERS SHALL BE PRODUCT # UB 24-2, # UB 36-2, AND # UB 48-2 AS MANUFACTURED BY DEEP ROOT PARTNERS, L.P. 345 LORTON AVE. #103, BURLINGAME, CA (800-458-7668), OR APPROVED EQUAL. THE BARRIER SHALL BE BLACK, INJECTION MOLDED PANELS, OF 0.085" WALL THICKNESS IN MODULES 24" LONG BY 24" & 48" DEEP, MANUFACTURED WITH A MINIMUM 50% POST CONSUMER RECYCLED POLYPROPYLENE PLASTIC WITH ADDED ULTRAVIOLET INHIBITORS, RECYCLABLE. EACH PANEL SHALL HAVE:

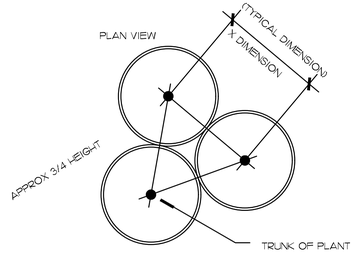
B. CONSTRUCTION AND INSTALLATION

1. THE CONTRACTOR SHALL INSTALL THE TREE ROOT BARRIERS WITH THE NUMBER OF PANELS AND IN THE MANNER SHOWN ON THE DRAWINGS. THE VERTICAL ROOT DEFLECTING RIBS SHALL BE FACING INWARDS TO THE ROOT BALL AND THE TOP OF THE DOUBLE EDGE SHALL BE 1/2" ABOVE GRADE. EACH OF THE REQUIRED NUMBER OF PANELS SHALL BE CONNECTED TO FORM A CIRCLE AROUND THE ROOT BALL OR WHERE SPECIFIED JOINED IN A LINEAR FASHION AND PLACED ALONG THE ADJACENT HARDSCAPE.
   ALL STREET TREES WITH TRUNKS CLOSER THAN 4 FT. TO PAVED SURFACES SHALL BE PLANTED WITH ROOT BARRIER BETWEEN THE ROOT BALL AND PAVING.
   PLANTINGS WITHIN TREE WELLS REQUIRE ROOT BARRIERS ALONG ALL SIDES OF THE TREE WELL.
2. EXCAVATION AND SOIL PREPARATION SHALL CONFORM TO THE DRAWINGS.
3. THE TREE ROOT BARRIERS SHALL BE BACKFILLED ON THE OUTSIDE WITH 3/4" TO 1 1/2" GRAVEL OR CRUSHED ROCK AS SHOWN ON THE DRAWINGS. NO GRAVEL BACKFILL IS REQUIRED FOR A LINEAR PLANTING.

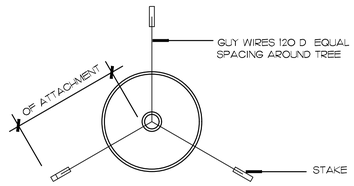




TYPICAL ROOT BARRIER INSTALLATION
NOT TO SCALE

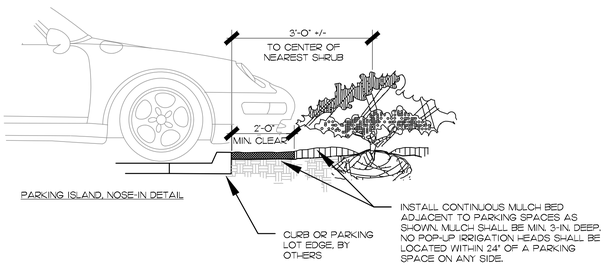


TYPICAL PLANT SPACING DETAIL
NOT TO SCALE

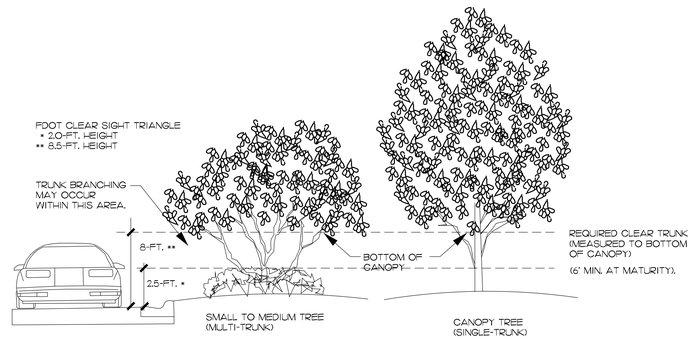


(UNDER 16'-0" HT.)

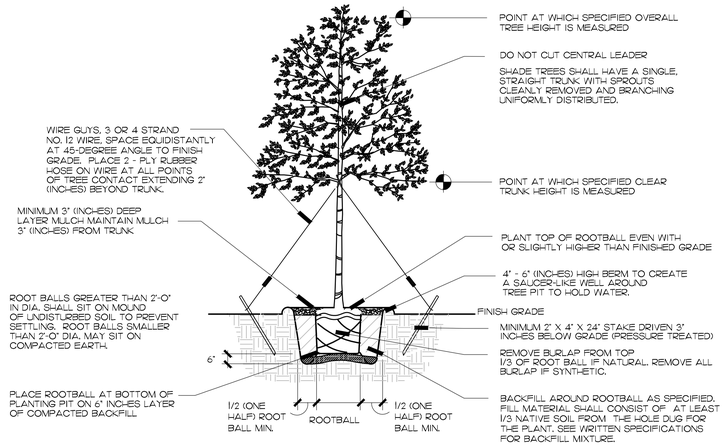
TYPICAL TREE GUYING DETAIL
NOT TO SCALE



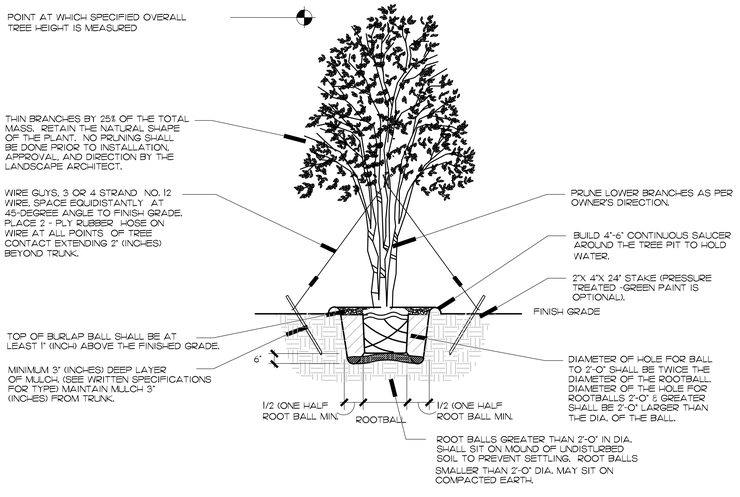
PARKING SPACE/CURB PLANTING
NOT TO SCALE



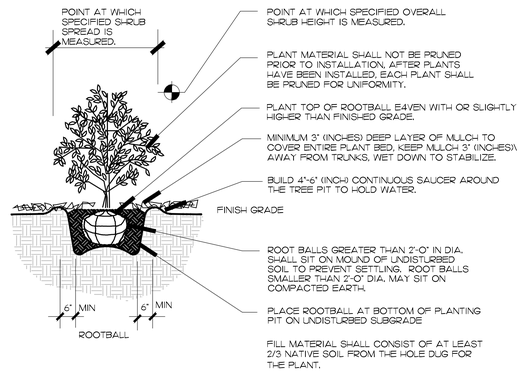
CLEAR TRUNK WITHIN SIGHT TRIANGLE DETAIL
NOT TO SCALE



TYPICAL TREE PLANTING DETAIL
NOT TO SCALE



TYPICAL IRREGULAR/MULTI-TRUNK TREE PLANTING DETAIL
NOT TO SCALE



TYPICAL SHRUB/ GROUNDCOVER PLANTING DETAIL
NOT TO SCALE

PATRICK D. CUNNINGHAM, LLC
■ land planning
■ landscape architecture
519 Sapphire Drive
Sarasota, FL 34234
O: 941.351.8915
pcunningham.LLC@gmail.com

48 HOURS BEFORE DIGGING CALL TOLL FREE 8-1-1 SUNSHINE811.COM NOTIFICATION CENTER

REFERENCE NORTH
0' 30' 60'
SCALE: 1" = 30'

No.	Revision/Issue	Date
	ISSUE FOR PERMIT	03/08/2023

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889

PATRICK D. CUNNINGHAM
FL REG. NO. LA0001669

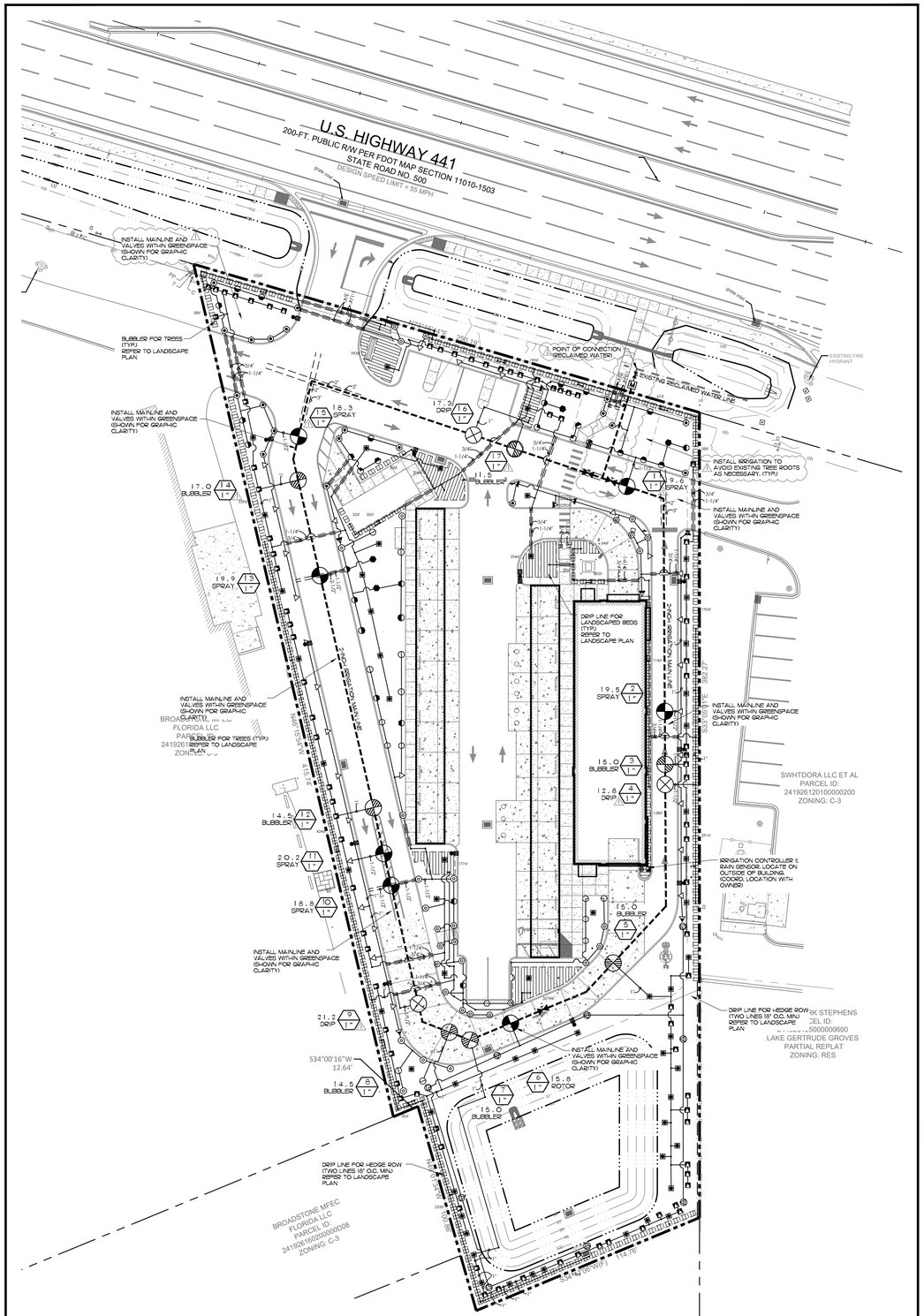
DATE

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY PATRICK D. CUNNINGHAM ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY.

Project Name and Address
BIG DAN'S CAR WASH
17580 HIGHWAY 441
MOUNT DORA, FLORIDA 32757

Sheet Title
LANDSCAPE DETAILS

Project No.	Sheet
365-01.00	LP03.01
Date: 01/23/2023	
Scale: AS NOTED	



PLAN VIEW | SCALE: AS NOTED | -

Irrigation Legend

PLEASE NOTE: ALL IRRIGATION SPRAY HEADS TO BE 30 PSI REGULATED 6" POP-UP, CO-MOLDED WIPER SEAL WITH UV RESISTANT MATERIAL.

HUNTER PROS-06-PRS30-R 5' STRIP SPRAY
- LCS @ 0.65 GPM
- RCS @ 0.65 GPM
- SST @ 1.30 GPM

HUNTER PROS-06-PRS30-R 4' RADIUS
- H @ 0.45 GPM

HUNTER PROS-06-PRS30-R 6' RADIUS
- Q @ 0.51 GPM
- H @ 0.98 GPM

HUNTER PROS-06-PRS30-R 8' RADIUS
- Q @ 0.24 GPM
- H @ 0.47 GPM
- F @ 0.97 GPM

HUNTER PROS-06-PRS30-R 10' RADIUS
- Q @ 0.42 GPM
- H @ 0.88 GPM
- F @ 1.59 GPM

HUNTER PROS-06-PRS30-R 12' RADIUS
- Q @ 0.67 GPM
- H @ 1.30 GPM
- F @ 2.70 GPM

HUNTER PROS-06-PRS30-R 15' RADIUS
- Q @ 0.97 GPM
- H @ 1.69 GPM
- F @ 3.75 GPM

HUNTER PROS-06-PRS30-R 17' RADIUS
- Q @ 1.15 GPM
- H @ 2.37 GPM

HUNTER PROS-06-PRS30-R ADJ
- 8 @ 1.76 GPM
- 10 @ 2.00 GPM
- 12 @ 2.52 GPM
- 15 @ 3.72 GPM
- 17 @ 4.60 GPM

HUNTER PCB:-R FLOOD BUBBLER, 1/2" FIPT.
- 50 @ 0.50 GPM
- 10 @ 1.00 GPM

AREA TO RECEIVE DRIPLINE

HUNTER PLD-10-12 (18)
IN-LINE PRESSURE COMPENSATING LANDSCAPE DRIPLINE WITH BUILT-IN CHECK VALVE, 1.0 GPH EMITTERS AT 12.0" O.C. DRIPLINE LATERALS SPACED AT 18.0" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. UV RESISTANT.

HUNTER PCZ-101-25
DRIP CONTROL VALVE KIT. 1" PGV GLOBE VALVE WITH 1" HY100 FILTER SYSTEM. PRESSURE REGULATION: 25PSI. FLOW RANGE: 0.5 GPM TO 15 GPM. 150 MESH STAINLESS STEEL SCREEN.

HUNTER PGV-101G
1" PLASTIC ELECTRIC REMOTE CONTROL VALVE, FOR RESIDENTIAL/LIGHT COMMERCIAL USE. FEMALE NPT INLET/OUTLET. GLOBE CONFIGURATION, WITH FLOW CONTROL.

MATCO-NORCA 514TX
1/2"-4" BRASS GATE VALVE, FULL PORT, WITH SOLID WEDGE. IPS. CROSS HANDLE. SAME SIZE AS MAINLINE PIPE.

⚠ BACKFLOW PREVENTER REMOVED FROM PLANS

WEATHERMATIC SL1600 SMARTLINE CONTROLERW/ SMARTLINK AIRCARD

WEATHERMATIC SLW5 WIRELESS ON-SITE WEATHER SENSOR

IRRIGATION SOURCE
1" METER @ 28 GPM AT 60 PSI REQUIRED

IRRIGATION LATERAL LINE:
PURPLE FOR RE-USE WATER
PVC CLASS 160 SDR 26
PVC CLASS 315 FOR 1/2" PIPE.
PVC CLASS 200 FOR 3/4" PIPE.
PVC CLASS 160 SDR 26 FOR 1" AND ABOVE.

PLEASE NOTE:
ONLY LATERAL TRANSITION PIPE SIZES 1" AND ABOVE ARE INDICATED ON THE PLAN, WITH ALL OTHERS BEING 3/4" IN SIZE.

IRRIGATION MAINLINE:
PURPLE FOR RE-USE WATER
PVC SCHEDULE 40 IRRIGATION PIPE.

PIPE SLEEVE:
PVC SCHEDULE 40

VALVE CALL OUT

VALVE FLOW / VALVE NUMBER / VALVE SIZE

Sleeve Size Schedule

PIPE SIZE	SLEEVE SIZE
3/4"	1-1/4"
1"	2"
1-1/4"	2-1/2"
1-1/2"	2-1/2"
2"	3"
2-1/4"	4"
3" - 4"	6"

⚠ ALL IRRIGATION FIXTURES/ EQUIPMENT SPECIFIED TO BE FOR RECLAIMED, RE-USE, NON-POTABLE IRRIGATION.

PATRICK D. CUNNINGHAM, LLC
- land planning
- landscape architecture

519 Sapphire Drive
Sarasota, FL 34234

O: 941.351.8915

pcunningham.LLC@gmail.com

48 HOURS BEFORE DIGGING CALL TOLL FREE 8-1-1 SUNSHINE811.COM NOTIFICATION CENTER

REFERENCE NORTH

0' 30' 60'

SCALE: 1" = 30'

No.	Revision/Issue	Date
1	REVISED PER COMMENTS	05/17/2023
2	ISSUE FOR PERMIT	03/08/2023

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889

PATRICK D. CUNNINGHAM
FL REG. NO. LA0001669

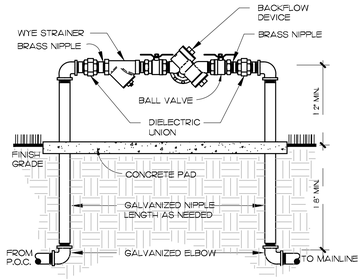
DATE

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY (PATRICK D. CUNNINGHAM) ON (DATE). ADOBE ACROBAT DIGITAL SIGNATURES OR PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY OR ANY ELECTRONIC COPY.FAC 61G15-23.005

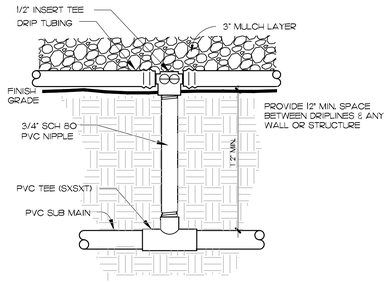
Project Name and Address: BIG DAN'S CAR WASH
17580 HIGHWAY 441
MOUNT DORA, FLORIDA 32757

Sheet Title: IRRIGATION PLAN

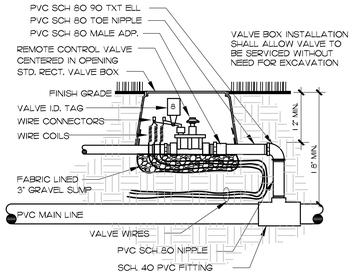
Project No.	Sheet
365-01.00	IR01.01
Date: 01/23/2023	
Scale: AS NOTED	



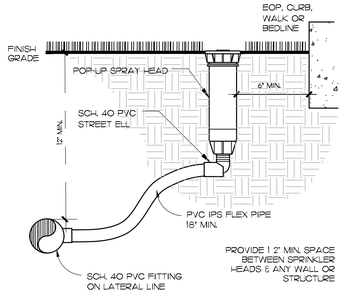
BACKFLOW PREVENTER
NOT TO SCALE



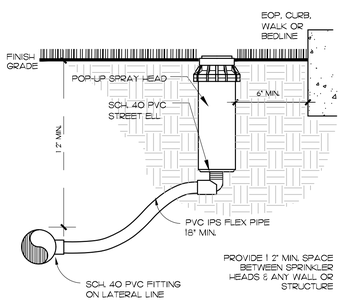
PVC - DRIP CONNECTION
NOT TO SCALE



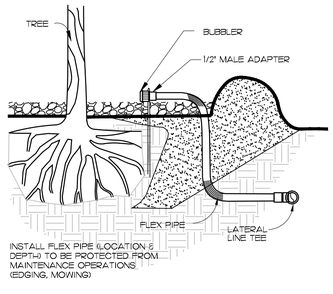
REMOTE CONTROL VALVE
NOT TO SCALE



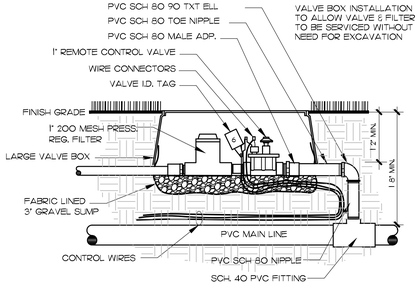
TURF SPRAY HEAD
NOT TO SCALE



TURF ROTOR HEAD
NOT TO SCALE



TREE BUBBLER
NOT TO SCALE



20 gpm DRIP ZONE CONTROL VALVE
NOT TO SCALE

General Notes

1. IRRIGATION SYSTEM DESIGN REQUIREMENTS: 28 GPM @ A MINIMUM OF 60 PSI AT THE POINT OF CONNECTION. THE IRRIGATION CONTRACTOR SHALL VERIFY THE AVAILABLE GPM AND PSI PRIOR TO INSTALLATION OF THE SYSTEM.
2. DO NOT INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT CONDITIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE DESIGN PROCESS. FOR EXAMPLE: OBSTRUCTIONS, GRADE DIFFERENCES, WATER LEVELS, DIMENSIONAL DIFFERENCES, ETC. REFER TO THE LANDSCAPE PLAN TO AVOID CONFLICTS WITH PROPOSED TREES OR SHRUBS.
3. PIPING MAY SOMETIMES BE INDICATED AS BEING LOCATED IN UNLIKELY AREAS I.E. UNDER BUILDINGS OR PAVEMENT, OUTSIDE OF PROPERTY LINES, IN LAKES OR DITCHES, ETC. THIS IS DONE FOR GRAPHIC CLARITY ONLY. WHENEVER POSSIBLE, PIPING IS TO BE INSTALLED IN PERVIOUS AREAS.
4. ALL COMPONENTS ARE SHOWN AND/OR DEPICTED ON THE PLAN SHEETS REPRESENT APPROXIMATE LOCATION(S) ONLY, AND ARE FOR CLARIFICATION PURPOSES. THE FINAL LOCATION OF ALL COMPONENTS SHALL BE SUBJECT TO APPROVAL BY THE OWNER AND/OR OWNER'S REPRESENTATIVE.
5. DO NOT SCALE PLAN FOR EXACT HEAD LOCATION.
6. PIPE SIZES SHALL CONFORM TO THOSE ON THE DRAWINGS. SUBSTITUTING WITH SMALLER PIPE SIZES WILL NOT BE PERMITTED.
7. MAIN LINE: FITTINGS SHALL BE PVC SCH. 40 JOINT FITTINGS. PIPES PLACED IN SLEEVES SHALL BE SCH. 40 SOLVENT WELD PIPE WITH ADEQUATE RESTRAINTS. SLEEVE LOCATION ARE ACCOMPANIED WITH A 2" ELECTRICAL CHASE FOR THE CONTROL WIRING.
8. MAINLINE IS TO BE INSTALLED WITH A MINIMUM OF 18-IN. DEPTH OF COVER. LATERAL LINES ARE TO BE INSTALLED WITH A MINIMUM OF 12" DEPTH OF COVER.
9. UNLESS OTHERWISE INDICATED, ALL SLEEVES ARE TO BE PVC SCH 40 AND TWO (2) NOMINAL SIZES LARGER THAN THE PIPE TO BE SLEEVED. FOR EXAMPLE: THE SLEEVE FOR A 2-IN. PIPE SHALL BE 3-IN.
10. INSTALL VALVES IN MULCHED BEDS AND/OR IN LOW TRAFFIC AREAS. ALL VALVES , FLUSH VALVES AND WIRE SPLICES SHALL BE INSTALLED IN RAIN BIRD WIDE FLANGED, STRUCTURAL FOAM "PLASTIC" VALVES BOXES
11. THE BOTTOM AND SIDES OF THE VALVE BOXES SHALL BE LINED WITH LANDSCAPE FABRIC. INSTALL A 3-IN. DEEP BED OF GRAVEL ON THE LANDSCAPE FABRIC TO CREATE A DRAINAGE SUMP.
12. ALL POP-UP SPRINKLER HEADS SHALL BE INSTALLED LEVEL AND FLUSH TO GRADE.
13. THE TOPS OF ALL SHRUB SPRINKLERS SHALL BE INSTALLED 12-IN. ABOVE HEIGHT OF SURROUNDING PLANT MATERIAL. FOR PLANT HEIGHTS OF 12-IN. OR MORE, SUPPORT RISER WITH #5 REBAR STAKE AND NYLON CABLE TIES. ALL RISERS SHALL BE PLACED A MINIMUM OF 12-IN. FROM ANY SIDEWALK, EDGE OF PAVEMENT OR STRUCTURE.
14. LOCATION OF ALL SPRINKLER HEADS SHALL BE SITE ADJUSTED TO MINIMIZE WATER OVERTHROW ONTO BUILDING SURFACES AND WALKWAYS. THROTTLE VALVES ON SPRAY ZONES AS REQUIRED TO PREVENT FOGGING.
15. INSTALL DRIP TUBING AT GRADE AND COVER WITH MULCH. TYPICAL SPACING FOR DRIP TUBING IS 18-IN. TO 24-IN. ON CENTER, SPACING TO BE DETERMINED BY PLANT LAYOUT. REFER TO LANDSCAPE PLAN. ANCHOR TUBING EVERY 7-FT. WITH 8-IN. LONG WIRE TUBING STAKES. INSTALL FLUSH VALVE ASSEMBLIES AT ALL TUBING "DEAD ENDS".
16. EXACT CONTROLLER LOCATION(S) SHALL BE COORDINATED WITH AN OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. THE IRRIGATION CONTRACTOR IS RESPONSIBLE FOR THE CONNECTION FROM THE POWER SOURCE TO THE CONTROLLER(S).
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HARD WIRING ALL ELECTRICAL SERVICE CONNECTIONS, AND SHALL RUN TWO (2) ADDITIONAL SETS OF WIRES IN EACH DIRECTION TO EACH END OF THE MAIN FOR FUTURE USE.
18. INSTALL IRRIGATION CONTROLLER PER MANUFACTURERS SPECIFICATIONS.
19. AT EACH IRRIGATION CONTROLLER, INSTALL A "SECONDARY SURGE ARRESTER" TO THE INCOMING (120 VOLT) POWER SUPPLY (INTERMATIC #AG2401 OR EQUAL).
20. A WEATHER BASED SENSOR WITH INTERFACE SHALL BE CONNECTED TO IRRIGATION CONTROLLER. THE SENSOR/ SHALL ADJUST IRRIGATION PROGRAM BASED ON DAILY WEATHER READINGS. SENSOR SHALL BE INSTALLED TO MEET LOCAL CODES AND/OR MINIMUM MANUFACTURER'S RECOMMENDATIONS. OBSTRUCTIONS, VANDALISM AND EASE OF SERVICE SHALL BE CONSIDERED IN LOCATING THE DEVICE.
21. IRRIGATION CONTRACTOR SHALL PREPARE AN AS-BUILT DRAWING ON REPRODUCIBLE PAPER DETAILING THE ACTUAL INSTALLATION OF THE IRRIGATION SYSTEM. THE AS-BUILT DRAWINGS SHALL LOCATE ALL MAIN LINE PIPING, CONTROL WIRES, WIRE SPLICES, SLEEVES AND VALVES BY SHOWING EXACT MEASUREMENTS FROM PERMANENT FEATURES (BUILDINGS, EDGE OF PAVEMENT, POWER POLES, FIRE HYDRANTS, ETC.). INCLUDE DEPTH OF COVER ON MAINLINE AND SLEEVES.
22. NO PRODUCT SUBSTITUTIONS WILL BE PERMITTED WITHOUT THE WRITTEN PERMISSION OF THE OWNER'S REPRESENTATIVE. IRRIGATION CONTRACTOR TO PROVIDE SUBMITTALS TO THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO INSTALLATION.
23. ANY OTHER EQUIPMENT REQUIRED THAT IS NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS AND LOCAL CODE.

Additional Notes

1. AN AUTOMATIC IRRIGATION SYSTEM TO BE PROVIDED THAT MEETS OR EXCEEDS THE FULL REQUIREMENTS OF THE LAND DEVELOPMENT REGULATIONS.
2. THE OWNER WILL SUPPLY ALL PROPOSED PLANT MATERIAL WITH 100% IRRIGATION (AUTOMATIC) COVERAGE (WITH 50% OVERLAP MINIMUM) WITHIN TEN DAYS OF INITIAL INSTALLATION. THE CONTRACTOR SHALL MAKE ALL ADJUSTMENTS TO THE IRRIGATION SYSTEM TO INSURE 100% COVERAGE.
3. ⚠ RE-USE WATER IS TO BE USED FOR IRRIGATION. THEREFORE, ALL EQUIPMENT IS TO BE SPECIFIED / MARKED AS SUCH IF REQUIRED BY THE JURISDICTION. (PURPLE LATERALS, HEADS, ETC.)
4. ALL IRRIGATION SHALL USE THE LOWEST QUALITY WATER AVAILABLE WHICH ADEQUATELY AND SAFELY MEETS THE NEEDS OF THE SYSTEM. STORM WATER REUSE RECLAIMED WATER USE, GRAY WATER IRRIGATION SYSTEMS AND/OR SHALLOW WELLS SHALL BE USED. THE USE OF POTABLE WATER FOR IRRIGATION WILL NOT BE ALLOWED.

⚠ ALL IRRIGATION FIXTURES/ EQUIPMENT SPECIFIED TO BE FOR RECLAIMED, RE-USE, NON-POTABLE IRRIGATION.

PATRICK D. CUNNINGHAM, LLC
■ land planning
■ landscape architecture
519 Sapphire Drive
Sarasota, FL 34234
O: 941.351.8915
pcunningham.LLC@gmail.com

48 HOURS BEFORE DIGGING CALL TOLL FREE 8-1-1 SUNSHINE811.COM NOTIFICATION CENTER

REFERENCE NORTH
0' 30' 60'
SCALE: 1" = 30'

No.	Revision/Issue	Date
1	REVISED PER COMMENTS	05/12/2023
	ISSUE FOR PERMIT	03/08/2023

INFINITY ENGINEERING GROUP, LLC
1208 East Kennedy Boulevard
Suite 230
Tampa, Florida 33602
[p]: 813.434.4770
[f]: 813.445.4211
www.iegroup.net
FL Cert. of Auth. No. 27889



PATRICK D. CUNNINGHAM
FL REG. NO. LA0001669

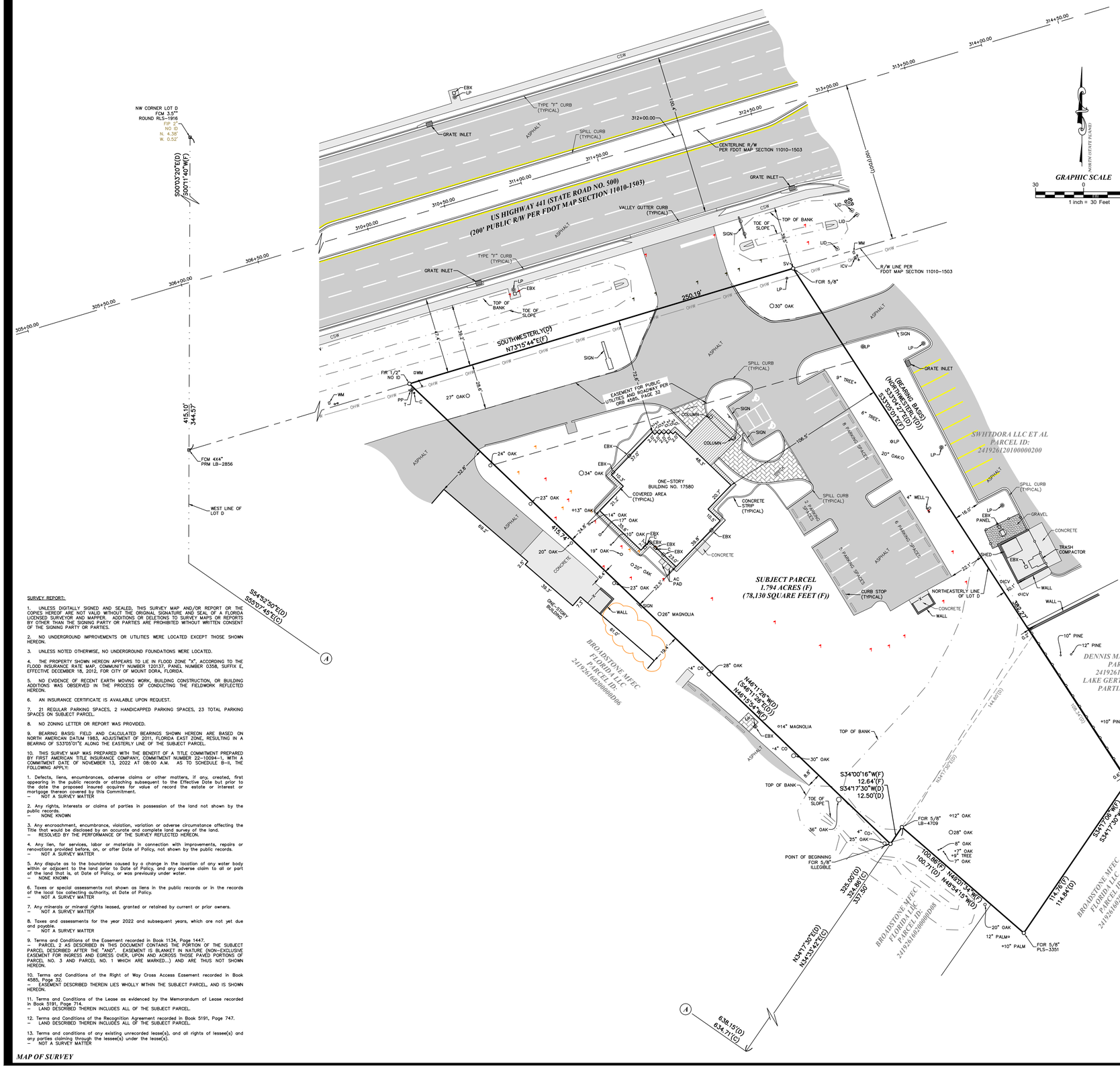
DATE

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY (PATRICK D. CUNNINGHAM) ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED BY A 3RD PARTY CERTIFICATE AUTHORITY ON ANY ELECTRONIC COPY. 61G15-23.004

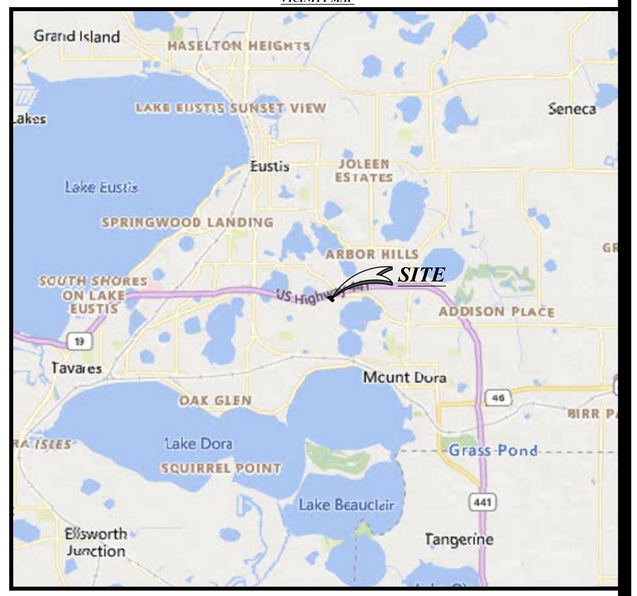
Project Name and Address: BIG DAN'S CAR WASH
17580 HIGHWAY 441
MOUNT DORA, FLORIDA 32757

Sheet Title: IRRIGATION DETAILS

Project No.	Sheet
365-01.00	IR02.01
Date: 01/23/2023	
Scale: AS NOTED	



VICINITY MAP



LEGEND

ABBREVIATIONS

AC	AIR CONDITIONER	ICV	IRRIGATION CONTROL VALVE
ADA	AMERICANS WITH DISABILITIES ACT	INV.	INVERT
ID	IDENTIFICATION	LB	LICENSED BUSINESS NUMBER
(C)	CALCULATED MEASUREMENT	LP	LIGHT POLE
CO	CLEAN OUT	LS	LICENSED SURVEYOR
CONC	CONCRETE	MW	MONITORING WELL
CSW	CONCRETE SIDEWALK	NAVD	NORTH AMERICAN VERTICAL DATUM
(D)	DEED/DESCRIPTION DATA	NGVD	NATIONAL GEODETIC VERTICAL DATUM
EBX	ELECTRIC BOX	OHW	OVERHEAD WIRE
EL	ELEVATION	ORB	OFFICIAL RECORDS BOOK
EM	ELECTRIC METER	(P)	PLAT MEASUREMENT – CALL
(F)	FIELD MEASUREMENT	PP	POWER POLE
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION	PRM	PERMANENT REFERENCE MONUMENT
		PSM	PROFESSIONAL SURVEYOR & MAPPER
F.F.	FINISHED FLOOR	R/W	RIGHT-OF-WAY
FCR	FOUND CAPPED IRON ROD	SCIR	SET CAPPED IRON ROD
FCM	FOUND CONCRETE MONUMENT	SND	SET NAIL AND DISK
FIP	FOUND IRON PIPE	SV	SEWER VALVE
FIR	FOUND IRON ROD	TBM	TEMPORARY BENCHMARK
FND	FOUND NAIL AND DISK	WM	WATER METER
FPP	FOUND PINCHED PIPE	WV	WATER VALVE

SYMBOLS

- BACKFLOW PREVENTION DEVICE
- CABLE RISER
- GRATE INLET
- SANITARY SEWER STRUCTURE
- SPOT ELEVATION
- STORM STRUCTURE
- TELEPHONE PEDESTAL
- TRAFFIC SIGNAL JUNCTION BOX
- TRAFFIC SIGNAL POLE (UNLESS OTHERWISE DESIGNATED)
- FIRE HYDRANT
- SIGN
- BOLLARD
- TREE LOCATION (SIZE AND TYPE AS NOTED)
- UTILITY FLAG ELECTRIC
- UTILITY FLAG COMMUNICATIONS
- UTILITY FLAG GAS
- UTILITY FLAG RECLAIMED WATER
- UTILITY FLAG SANITARY/STORM SEWER
- UTILITY FLAG WATER
- WOOD FENCE
- METAL FENCE
- PVC FENCE

LEGAL DESCRIPTION:

THAT PART OF LOT "D" IN J.H. SAGE AND C. KINNEY SUBDIVISION, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 1, PAGE 32, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA, BOUNDED AND DESCRIBED AS FOLLOWS: FROM THE NORTHWEST CORNER OF SAID LOT "D", RUN THENCE SOUTH 00°03'20" EAST, ALONG THE WEST LINE OF SAID LOT "D", A DISTANCE OF 415.10 FEET; THENCE RUN SOUTH 54°52'50" EAST, A DISTANCE OF 638.15 FEET; RUN THENCE NORTH 34°17'30" EAST, A DISTANCE OF 325.00 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION; FROM SAID POINT OF BEGINNING, CONTINUE NORTH 34°17'30" EAST TO THE NORTHEASTERLY LINE OF SAID LOT "D"; RUN THENCE NORTHWESTERLY ALONG SAID NORTHEASTERLY LINE TO THE SOUTHERLY LINE OF THE RIGHT OF WAY OF U.S. HIGHWAY 441; RUN THENCE SOUTHWESTERLY ALONG THE SOUTHERLY LINE OF SAID RIGHT OF WAY TO A POINT THAT IS NORTH 46°11'26" WEST OF THE POINT OF BEGINNING; RUN THENCE SOUTH 46°11'26" EAST TO THE POINT OF BEGINNING.

AND

COMMENCE AT A 4" X 4" CONCRETE MONUMENT STAMPED PLS 1916 ON THE WESTERLY LINE OF LOT "D", J.H. SAGE AND C. KINNEY SUBDIVISION, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 1, PAGE 32, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA, SAID POINT LYING SOUTH 00 DEGREES 03'20" EAST, A DISTANCE OF 415.10 FEET FROM THE NORTHWEST CORNER OF SAID LOT "D"; RUN THENCE SOUTH 54 DEGREES 52'50" EAST, A DISTANCE OF 638.15 FEET TO A 4" X 4" WIDE OCTAGON SHAPED CONCRETE MONUMENT WITH NO NUMBER; RUN THENCE NORTH 34 DEGREES 17'30" EAST, A DISTANCE OF 337.50 FEET TO A 5/8" REBAR AND CAP STAMPED LB 4709 AND THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE CONTINUE TO RUN NORTH 34 DEGREES 17'30" EAST, A DISTANCE OF 144.60 FEET TO A 5/8" REBAR AND CAP STAMPED PLS 3351; RUN THENCE SOUTH 33 DEGREES 04'27" EAST, A DISTANCE OF 108.34 FEET TO A 5/8" REBAR AND CAP STAMPED PLS 3351; RUN THENCE SOUTH 34 DEGREES 17'30" WEST, A DISTANCE OF 114.84 FEET TO A 5/8" REBAR AND CAP STAMPED PLS 3351; RUN THENCE NORTH 48 DEGREES 54'15" WEST, A DISTANCE OF 100.71 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION.

SITE PHOTOGRAPH



SURVEY REPORT:

1. UNLESS DIGITALLY SIGNED AND SEALED, THIS SURVEY MAP AND/OR REPORT OR THE COPIES HEREOF ARE NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER. ADDITIONS OR DELETIONS TO SURVEY MAPS OR REPORTS BY OTHER THAN THE SIGNING PARTY OR PARTIES ARE PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.

2. NO UNDERGROUND IMPROVEMENTS OR UTILITIES WERE LOCATED EXCEPT THOSE SHOWN HEREON.

3. UNLESS NOTED OTHERWISE, NO UNDERGROUND FOUNDATIONS WERE LOCATED.

4. THE PROPERTY SHOWN HEREON APPEARS TO LIE IN FLOOD ZONE "X", ACCORDING TO THE FLOOD INSURANCE RATE MAP, COMMUNITY NUMBER 120137, PANEL NUMBER 0358, SUFFIX E, EFFECTIVE DECEMBER 18, 2012, FOR CITY OF MOUNT DORA, FLORIDA.

5. NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS WAS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK REFLECTED HEREON.

6. AN INSURANCE CERTIFICATE IS AVAILABLE UPON REQUEST.

7. 21 REGULAR PARKING SPACES, 2 HANDICAPPED PARKING SPACES, 23 TOTAL PARKING SPACES ON SUBJECT PARCEL.

8. NO ZONING LETTER OR REPORT WAS PROVIDED.

9. BEARING BASIS: FIELD AND CALCULATED BEARINGS SHOWN HEREON ARE BASED ON NORTH AMERICAN DATUM 1983, ADJUSTMENT OF 2011, FLORIDA EAST ZONE, RESULTING IN A BEARING OF S33°05'01"E ALONG THE EASTERLY LINE OF THE SUBJECT PARCEL.

10. THIS SURVEY MAP WAS PREPARED WITH THE BENEFIT OF A TITLE COMMITMENT PREPARED BY FIRST AMERICAN TITLE INSURANCE COMPANY, COMMITMENT NUMBER 22-10094-1, WITH A COMMITMENT DATE OF NOVEMBER 13, 2022 AT 08:00 A.M. AS TO SCHEDULE B-II, THE FOLLOWING APPLY:

1. Defects, liens, encumbrances, adverse claims or other matters, if any, created, first appearing in the public records or attaching subsequent to the Effective Date but prior to the date the proposed insured acquires for value of record the estate or interest or mortgage thereon covered by this Commitment.
– NOT A SURVEY MATTER

2. Any rights, interests or claims of parties in possession of the land not shown by the public records.
– NONE KNOWN

3. Any encroachment, encumbrance, violation, variation or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the land.
– RESOLVED BY THE PERFORMANCE OF THE SURVEY REFLECTED HEREON.

4. Any lien, for services, labor or materials in connection with improvements, repairs or renovations provided before, on, or after Date of Policy, not shown by the public records.
– NOT A SURVEY MATTER

5. Any dispute as to the boundaries caused by a change in the location of any water body within or adjacent to the land prior to Date of Policy, and any adverse claim to all or part of the land that is, at Date of Policy, or was previously under water.
– NONE KNOWN

6. Taxes or special assessments not shown as liens in the public records or in the records of the local tax collecting authority, at Date of Policy.
– NOT A SURVEY MATTER

7. Any minerals or mineral rights leased, granted or retained by current or prior owners.
– NOT A SURVEY MATTER

8. Taxes and assessments for the year 2022 and subsequent years, which are not yet due and payable.
– NOT A SURVEY MATTER

9. Terms and Conditions of the Easement recorded in Book 1134, Page 1447.
– PARCEL 2 AS DESCRIBED IN THIS DOCUMENT CONTAINS THE PORTION OF THE SUBJECT PARCEL DESCRIBED AFTER THE "AND". EASEMENT IS BLANKET IN NATURE (NON-EXCLUSIVE EASEMENT FOR INGRESS AND EGRESS OVER, UPON AND ACROSS THOSE PAVED PORTIONS OF PARCEL NO. 3 AND PARCEL NO. 1 WHICH ARE MARKED...) AND ARE THUS NOT SHOWN HEREON.

10. Terms and Conditions of the Right of Way Cross Access Easement recorded in Book 4585, Page 32.
– EASEMENT DESCRIBED THEREIN LIES WHOLLY WITHIN THE SUBJECT PARCEL, AND IS SHOWN HEREON.

11. Terms and Conditions of the Lease as evidenced by the Memorandum of Lease recorded in Book 5191, Page 714.
– LAND DESCRIBED THEREIN INCLUDES ALL OF THE SUBJECT PARCEL.

12. Terms and Conditions of the Recognition Agreement recorded in Book 5191, Page 747.
– LAND DESCRIBED THEREIN INCLUDES ALL OF THE SUBJECT PARCEL.

13. Terms and conditions of any existing unrecorded lease(s), and all rights of lessee(s) and any parties claiming through the lessee(s) under the lease(s).
– NOT A SURVEY MATTER

TO BRIGHTWORK ACQUISITIONS, LLC, THE CLOSING CITY, LLC, AND FIRST AMERICAN TITLE INSURANCE COMPANY:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 6(a), 7(a), 8, 9, 13, 16 and 19 OF TABLE A THEREOF.

THE FIELDWORK WAS COMPLETED ON 01/17/2023.

AND

I HEREBY CERTIFY THAT THIS SURVEY WAS MADE UNDER MY DIRECTION AND MEETS THE STANDARDS OF PRACTICE REQUIREMENTS OF CHAPTER 5J-17 OF THE FLORIDA ADMINISTRATIVE CODE.

1/20/2023
DATE SIGNED

THOMAS PATRICK SERBU
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA REGISTRATION NUMBER LS-4744
EMAIL: thomas@ebisurvey.com

EBI Surveying
8415 Sunstate Street
Tampa, Florida 33634
Phone: (813) 886-6080 / Fax: (813) 886-6081
Certificate of Authorization Number: LB-7652

ALTA/NSPS LAND TITLE BOUNDARY SURVEY

17580 US HIGHWAY 441
PART OF LOT D
J.H. SAGE AND C. KINNEY SUBDIVISION
LAKE COUNTY, FLORIDA.

REVISIONS: APPD.

DATE OF SURVEY: 01/17/2023
DRAWN: EWB/SDT
CHECKED: TPS
REVISION:
FILE: BW44ALTAX.dwg

PROJECT NUMBER:
BWRE0044

SHEET NO.
1
OF 1

CITY OF MOUNT DORA
PLANNING AND DEVELOPMENT

Office Use Only:
Project # SP-____
SP 23-04

City of Mount Dora
Planning & Development
510 N. Baker St.
Mount Dora, FL 32757
352-735-7112
PlanDev@CityofMountDora.com

SITE PLAN APPLICATION

Date: 01.24.2023 Project Name: Big Dan's Car Wash

1. Site Address: 17580 Highway 441, Mount Dora, FL 32757
   (Contact City Staff for New Address Assignments)

2. Applicant's Name: Timothy Austin Simmons
   Company's Name: Brightwork Acquisitions, LLC
   Address: 3708 West Swann Avenue, STE 200
   City, State & Zip: Tampa, FL 33609
   Phone: 813.874.1700 Ext. 231 E-mail: wbarrs@brightworkre.com

3. Property Owner's Name(s): _____
   Company's Name: Frat House, LLC
   Address: 11049 Bridge House Road
   City, State & Zip: Windermere, FL 34786
   Phone: 813-815-4301 E-mail: Permitting@IEGroup.net

4. Engineer's Name: Nisit Sapparkhao
   Company's Name: Infinity Engineering Group, LLC.
   Address: 1208 East Kennedy Boulevard, STE 230
   City, State & Zip: Tampa, FL 33602
   Phone: 813.434.4770 E-mail: nisit@iegroup.net

5. Landscape Architect's Name: Patrick Cunningham
   Company's Name: Patrick D. Cunningham, LLC.
   Address: 519 Sapphire Drive
   City, State & Zip: Sarasota, FL 34234
   Phone: 941.351.8915 E-mail: pcunningham@gmail.com

6. Architect's Name: "Joseph Oliveri (Architect-of-Record) / Aaron Coy (Project Architect)
   Company's Name: Oliveri Architects
   Address: 1004 Indiana Avenue
   City, State & Zip: Palm Harbor, FL 34683
   Phone: 727.781.7525 E-mail: ACoy@OliveriArchitects.com

7. Briefly describe the property project and proposed use(s): 125-Foot Automatic Car Wash and associated Vacuum and Detail Parking Spaces. Customer remains within Vehicle.
8. Property is located on the following adjacent streets: US Highway 441 (SR 500)
9. Public or Private Roadways*: Public

   **Private Roads/Gated Communities may require a Traffic Enforcement Agreement with Mount Dora Police Department*
10. Is this project within the Joint Planning Agreement boundaries? ☐ Yes ☒ No
11. Zoning District: C-3 Future Land Use Category: Commercial
12. Building Size Existing (SF): N/A - To be Razed Proposed (SF): 3,992 SF
13. Total (SF): 3,992 SF
14. Proposed Number of Seats: N/A
15. Size of property in Acres: 1.794 acres Square Feet: 78,130 SF
16. Number of structures to be built on the site: 1
17. Height of structures(s): 33'-4" Building Stories: 1
18. Total square footage of impervious surface: 43,785 SF
19. The percentage of lot coverage: 56%
20. Are vested rights being requested as part of this application?* ☐ Yes ☒ No

    **If no, by signing this application you are waiving any future vested development rights on this property.*

CERTIFICATION AND SIGNATURE

By my signature below, I certify that the information contained in this application is true and correct to the best of my knowledge at the time of the application. I acknowledge that I understand and have complied with all of the submittal requirements and procedures and that this application is a complete application submittal pursuant to the City's Land Development Code. I further understand that an incomplete application submittal may cause my application to be deferred to the next posted deadline date.

Owner/Applicant Signature

Date 3/10/23

CITY OF MOUNT DORA

Planning and Development
510 N. Baker St.
Mount Dora, FL 32757
352-735-7113
plandev@cityofmountdora.com

DATE: July 19, 2023

TO: Planning and Zoning Commission

FROM: Development Review Committee
Michele Janiszewski, AICP, Senior Planner

RE: Land Development Code Amendments

Recommendation:
Staff recommends approval of the attached Ordinance which amends the Land Development Code in multiple sections.

Background:
On June 14, 2023, the Planning and Zoning Commission (PZC) met and reviewed the draft ordinance amending multiple sections of the Land Development Code (LDC). Staff incorporated the feedback received by the PZC into the revised, attached ordinance. A summary of the revisions is provided below; sections which are underlined indicate they were modified after the June PZC meeting.

Code Section	Summary
1.4	Allows PUDs within the Mixed-Use Transitional Land Use Category; amends the definition of floor-area-ratio to exclude residential dwellings in the calculation; corrects the definition of gross and net acres; and deletes verbiage about the conservation land use category (still applicable).
3.4.2 (5)	Establishes a contextual setback within the single-family zoning districts for new dwelling units and additions by averaging the front yard setback of the four abutting properties.
3.4.3	Reduces the side setback for duplexes within the R-2 zoning district from 25 feet to 15 feet.
3.4.5	Clarifies that PUD are not granted by right. Section was revised to state that PUDs may be rejected or denied 'for any reason including substantial variations to existing development standards such as, but not limited to, building height, floor-area ratio, landscaping requirements, etc.'
3.5.1	Updates language pertaining to average setbacks for residential dwelling units. Updated to require adherence to the wetland setbacks.
3.5.8	Allows a greater fence height for single-family and duplex lots abutting multi-family developments. Reworded to make the setback clear for double frontage lots and breaks the section down into three subsections.

3.5.12	Updates the code criteria for Home Occupations to match Florida Statutes.
3.5.16	Organizes the regulations relating to the storage of boats, recreational vehicles and utility trailers and prohibits the occupation of a recreational vehicle outside of the MHP zoning district.
3.5.17	Deletes the requirement that Bed & Breakfast establishments obtain a new conditional use permit when the property changes ownership.
3.5.29	Updates the Sidewalk Café provisions to require the business to pressure wash the area on a regular basis.
3.5.30	New section which allows backyard chickens in residential zoning districts with conditions. Stated in the restrictions that roosters are prohibited. Clarified that the setbacks are from the property lines.
3.5.4	Allows accessory structures to be 25 feet or as high as the dwelling unit, whichever is greater.
3.5.5	Establishes criteria for eaves and overhangs which encroach into the setback.
3.4.16	Clarifies the process for rezoning applications for the Mixed Use zoning districts.
6.2.13	Establishes a Lot Grading section which requires impervious surfaces to maintain a three (3) foot setback from the side and rear property lines. Includes provisions limiting the elevation change in topography to ten (10) feet for residential developments or fifteen (15) feet for commercial developments with the exception of roads, utilities, and stormwater ponds with approval of the City Manager or designee. All other requests for waivers to this section shall be granted by the Planning and Zoning Commission at their sole discretion.
6.2.11	Clarifies the information needed on construction plans.
6.3.15	Codifies regulations and process for naming streets. Numbering adjusted.
6.3.17	Modifies criteria asphalt improvements.
6.3.21	Establishes criteria for turn lanes.
6.6.1	Amends the impervious surface chart to eliminate prior zoning districts (M1 and M2) and include zoning districts WP-1 and WP-2.
6.6.7	Corrects scrivener's error pertaining to tree mitigation calculation
6.7.5	Clarifies the height of temporary signs.
Chapter VIII	Amends the definition of residential density to reference net acres; defines net acres; and defines flood-prone area.

Attachments:
Draft Ordinance amending the LDC

ORDINANCE NO: 2023-11

AN ORDINANCE OF THE CITY OF MOUNT DORA, FLORIDA, PERTAINING TO REVISIONS TO THE CITY OF MOUNT DORA LAND DEVELOPMENT CODE; PROVIDING FOR LEGISLATIVE FINDINGS AND INTENT; PROVIDING FOR AMENDMENTS TO CITY OF MOUNT DORA LAND DEVELOPMENT CODE, CHAPTER I, OVERVIEW, CHAPTER III, ZONING REGULATIONS, CHAPTER VI, DESIGN STANDARDS AND CHAPTER VIII, DEFINITIONS; PROVIDING FOR THE IMPLEMENTATION OF ADMINISTRATIVE ACTIONS; PROVIDING FOR CODIFICATION AND SCRIVENER'S ERRORS; PROVIDING A SAVINGS CLAUSE; PROVIDING FOR CONFLICTS; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, Florida Statutes, Chapter 166, confers upon a local government, the authority to adopt regulations designed to promote the public health, safety and general welfare of its citizens; and

WHEREAS, pursuant to its home rule powers, the City of Mount Dora may regulate land use matters and design standards within the City limits through the adoption of Land Development regulations; and

WHEREAS, from time to time the City of Mount Dora provides updates and amendments to its Land Development regulations; and

WHEREAS, the City finds that the amendments to its Land Development Code, as set forth herein, are consistent with all applicable policies of the City of Mount Dora Comprehensive Plan; and

WHEREAS, the City has determined that the amendments to its Land Development Code, as set forth herein, advance a legitimate public purpose and promote and protect the health, safety and welfare of the citizens of the City of Mount Dora.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY OF MOUNT DORA, FLORIDA, AS FOLLOWS:

SECTION 1. LEGISLATIVE FINDINGS AND INTENT. The City of Mount Dora has complied with all requirements and procedures of the Florida law in processing this Ordinance. The above recitals are hereby adopted.

SECTION 2. AMENDMENTS TO CITY OF MOUNT DORA LAND DEVELOPMENT CODE. The City of Mount Dora Land Development Code, is hereby revised and amended as follows:

Note: Underlined words constitute additions to existing text, ~~strikethrough~~ constitutes deletions from existing text and asterisks (***) indicate omitted parts which are intended to remain unchanged.

CHAPTER I. – OVERVIEW

***

Section 1.4. Land use category and zoning district compatibility.

All development must be consistent with the city's comprehensive plan which establishes the basis and general guidelines for guiding and regulating land uses. The future land use map of the comprehensive plan should be reviewed to determine if the land use shown would allow the type of development contemplated. The land use categories and zoning districts permitted in each are as follows:

Land Use Category	Permitted Zoning Districts
***	
Mixed Use Traditional (Maximum FAR 3.00. Minimum Density 6.0 dwelling units per acre. Maximum Density 35 dwelling units per acre)	MU-1, C-3, PUD
Mixed Use Downtown (Maximum FAR 3.00. Minimum Density 6.0 dwelling units per acre. Maximum Density 35 dwelling units per acre)	MU-2, C-2
Notes:	
• Floor Area Ratio (FAR) is defined as the total floor area of a building or buildings on a parcel, excluding dwelling units, divided by the gross area of the parcel.	
• The ~~gross~~ net area of a parcel shall be defined as the full area of a parcel minus any areas within natural bodies of water, wetlands, and floodplains.	
• The maximum development potential for a parcel shall be calculated using the net ~~gross~~ area. Within land uses that allow both residential and non-residential uses, maximum density shall be calculated in addition to the maximum intensity.	

~~The proposed development must either be consistent with the land use designation or an application must be filed to amend the comprehensive plan. This may be done concurrent with an application to rezone.~~

~~Areas designated as "conservation" were mapped based on the best information available at the time of preparation of the comprehensive plan. If information is presented to, and accepted by, the city showing that an area is improperly mapped, then the adjacent land use designation shall apply.~~

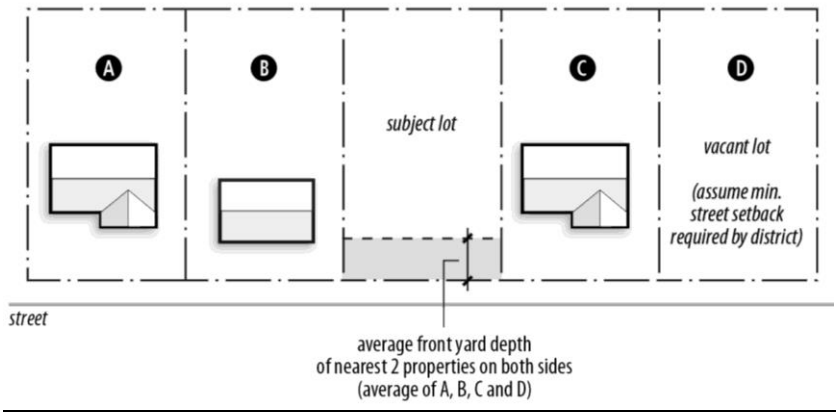
CHAPTER III. - ZONING REGULATIONS

Section 3.4.2. *R-1AAAA, R-1AAA, R-1AA, R-1A, R-1, R-1B, Single-Family Residential Districts:*

***

5. *Site Development standards:*

		R-1AAAA	R-1AAA	R-1AA	R-1A	R-I	R-1B
a.	Minimum lot size (sq. ft.)	43,560	15,000	12,500	10,000	7,500	5,500
b.	Minimum lot width at building line (ft.)	150	100	90	90	75	75
c.	Minimum street front (ft.)	50	25	25	25	25	25
d.	Minimum setbacks (ft.) - Note*:						
	Front yard	50	25	25	25	25	20
	Side yard	20	15	12	10	7	7
	Rear yard	50	30	30	25	20	20
	From any street	50	25	25	25	25	20
	Contextual Setback	The front yard setback for additions to existing dwelling units or construction of new dwelling units shall be established by averaging the front yard depths of the adjacent two homes on each side of the subject property located on the same side of street. If one or more of the lots required to be included in the averaging calculation is vacant, that vacant lot will be deemed to have a street yard depth equal to the minimum requirement of the zoning district. The front setback shall be measured to the front vertical wall of the home. When the block has no existing development to serve as the reference for the required setback, the front yard setback shall be twenty-five (25) feet.					

		R-1AAAA	R-1AAA	R-1AA	R-1A	R-I	R-1B
							
	Park and recreation facilities setbacks:	All 25 feet					
e.	Maximum building height (ft.)	35	35	35	35	35	35
	Within 100 ft. of Lake Dora	25	25	25	25	25	25
f.	Minimum dwelling size (sq. ft.)	1,600	1,600	1,500	1,300	1,200	800
g.	Parking Minimum Spaces:	2	2	2	2	2	2
	Minimum Garage Type:	2-Car	2-Car	2-Car	1-Car	1-Car	1-Car
	(See section 6.5 for other requirements)						
h.	Landscaping and buffers	See section 6.6					
i.	Signs	See section 6.7					
j.	Access	See subsection 6.3.7					

*Note: Also, see section 3.5.1 for minimum setback averaging in certain cases.

***

Section 3.4.3 *R-2 Duplex (one- and two-family) Residential District:*

***

5. *Site development standards:*

		Single-Family Dwelling	Duplex
***			
d.	Minimum building setback (ft.) - Note*:		
	Front yard	20	20
	Side yard	7	7
	Rear yard	20	20
	From any street	15	~~25~~ 15

***

Section 3.4.5 PUD Planned Unit Development District:

7. *Special Provisions:* The Planning and Zoning Commission and City Council may deny the Planned Unit Development application or return the PUD to the applicant for revisions. Planned Unit Developments are not guaranteed or a given by right. Consideration of a PUD is at the sole discretion of the City and may be rejected or denied for any reason including substantial variations to existing development standards such as, but not limited to, building height, floor-area ratio, landscaping requirements, etc.

***

Section 3.5. - Supplemental regulations.

***

Section 3.5.1 Setback relief for single-family residential dwellings: The front, street (corner), rear and side yard setback requirements of this code for single-family residential dwellings ~~shall not apply~~ may be reduced on any lot where the average setback of existing buildings located within 200 feet surrounding the property lines is less than the code requirements. In such cases, the setback on such lot may be less than the required setback but not less than the average of the setbacks of the aforementioned existing buildings. Documentation and evidence of the averaging setback within the prescribed area shall be provided by professional surveyor. In no case shall the reduced setback be less than five (5) feet from the property lines; encroach into the wetland setback; or create a public safety hazard by obstructing vehicular visibility or other means.

***

Section 3.5.8. Fence requirements.

***

2. Height of fences. ~~Fences in single-family and duplex residential zoning districts shall be limited to six feet in height in the rear yard, side yard and street side yard. No fence installed at a height of six feet along street side yards shall be located closer to the street side yard property line of the lot, parcel, or piece of land upon which the fence is located, than the distance required by the zoning regulations of the city for side yards in the zone in which the property is located. Fences may be~~

~~installed in the front yard not to exceed four feet in height. Further, fences four feet or greater in height cannot be installed within the street side yard setback of the zoning district.~~

a. Fences in single-family and duplex residential zoning districts shall be limited to six feet in height in the rear yard, side yard and street side yard and four feet in the front yard. Fences four feet or greater in height cannot be installed within the street side yard setback as established by the zoning district.

b. Where an existing single-family or duplex residential dwelling is located adjacent to existing multi-family structure the side and rear fence height shall be limited to 8 feet in lieu of the 6 feet fence height listed above.

c. In all other commercial, WBI-E, WBI-G and PLI zoning districts, the fences shall be limited to eight feet in height along the side and rear property line and four feet in front yards.

***

Section 3.5.12. *Home occupations.*–~~Home occupations shall be allowed only when there is no appearance of commercial activity. No signs shall be permitted. Pickup and delivery, vehicular and pedestrian traffic should not exceed normal traffic to and from other residences in the neighborhood. No adverse noise, light or dirt impacts will be allowed. All equipment used in the business must be stored in an enclosed structure. For contractors and handymen, no materials may be stored on site. If it is determined by the development review coordinator that the above criteria are met, the home occupation license shall be granted. If, in the opinion of the development review coordinator, the subject home occupation does not meet one of these requirements the home occupation shall be denied.~~ Home occupations are permitted as a secondary use to a residential dwelling, shall maintain a business tax receipt and shall operate in accordance with Federal law, Florida law and any City code requirements related to parking, signage, equipment or processes that create noise, vibration, heat, smoke, dust, glare, fumes, or noxious odors or with respect to the use, storage, or disposal of any corrosive, combustible, or other hazardous or flammable materials or liquids.

***

Section 3.5.16. *Boats, recreational vehicles and utility trailers.* Boats, recreational vehicles and utility trailers may be stored within all zoning districts subject to the following conditions:

1. The storing of boats, recreational vehicles and utility trailers is an accessory use and not permitted on vacant lots.
2. Boats, recreational vehicles and utility trailers shall not be permitted in front yards and shall not be permitted in side yards if the length of the boat, RV, utility trailer and/or motor home exceeds 25 feet in overall length.
3. In the case of corner lots, boats, recreation vehicles and utility trailers, over 25 feet may be stored in the side yards provided that the yard is enclosed by a six-foot privacy fence.
4. Recreational vehicles shall not be occupied as a residence permanently or temporarily in any zoning district except for the MHP zoning district.
5. ~~(See r~~Refer to Section ~~82.230~~ 42-34 of the Code of Ordinances for additional requirements pertaining to truck and trailer parking ~~and operation additional requirements)~~ and Section 42-35 of the Code of Ordinances for additional requirements pertaining to vehicular parking in residential districts.

***

Section 3.5.17. *Bed and breakfast establishments existing prior to the adoption of Ordinance No. 2020-03.* A bed and breakfast establishment which existed with a conditional use approval prior to the adoption of Ordinance No. 2020-03 shall be considered a legal non-conforming use subject to the provisions of City of Mount Dora Land Development Code, chapter III, section 3.5.7, except for section 3.5.7.1.e. ~~A change in ownership of the property upon which any such legal non-conforming bed and breakfast establishment is located shall require a new conditional use approval subject to the existing code requirements at the time of application. Such new conditional use approval must be secured within 90 days of the date of change in ownership.~~

***

Section 3.5.29 Sidewalk Café.

***

6. *Standards and criteria*.

***

g. The adjacent sidewalk shall be pressure washed with a commercial-grade pressure washer at least quarterly. The permittee must maintain records of each pressure washing and must provide these records to the City upon request. Satisfying this requirement does not absolve the permittee from otherwise keeping the sidewalk café area, the adjacent sidewalk clear path, and the adjacent sidewalk café area in a clean and safe condition at all times.

***

Section 3.5.30 *Backyard Chickens:* Chickens, other than Roosters, shall be allowed for personal use as an accessory use associated with existing single-family or duplex residential dwellings within the GB, R-1AAAA, R-1AAA, R-1AA, R-1A, R-1, R-1B, R-2, and R-3 Zoning Districts subject to the following requirements:

1. Any person keeping, harboring, raising or maintaining chickens as an accessory to an occupied dwelling unit shall be subject to the following restrictions:
    a. Chickens are prohibited on vacant lots. The lot or parcel must be developed with a residential dwelling;
    b. No more than five (5) chickens may be kept;
    c. Roosters are prohibited;
    d. Slaughtering of chickens is prohibited;
    e. Chickens must be secured within the chicken coop or fenced enclosure at all times;
    f. All feed and other items associated with the keeping of chickens that are likely to attract or to become infested with rodents or other pests shall be kept in a rodent and pest-proof container;
    g. No manure shall be allowed to accumulate on the floor of the coop or ground. A fly-tight bin for storage of manure shall be utilized; the size shall be sufficient to contain all accumulations of manure. The fly-tight bin shall be kept at least twenty (20) feet away from all property lines; and

h. Composting of chicken manure shall be allowed in an enclosed bin. The composting bin shall be kept at least twenty (20) feet away from all property lines.

2. Chicken coop or fenced enclosure used to house chickens. Any chicken coop or fenced enclosure used to house chickens shall:
   a. Not be located in the front or side yards; and
   b. Be set back a minimum of twenty (20) feet from all property lines.

***

Section 3.5.4 *Accessory buildings/structures and uses in residential district.*

***

6. Height limit. No accessory structure shall exceed a height of 25 feet or the height of the dwelling unit, whichever is greater ~~and one story~~.

***

Section 3.5.5. *Yards.*

1. Every part of a required yard shall be open from its lowest point to the sky, unobstructed, except that an overhang or eaves may project into the required yard five (5) feet or half the width of the established setback, whichever is less.

***

Section 3.4.16 MU-1 Mixed Use Traditional and MU-2 Mixed Use Downtown Districts:

***

16. *Process and application requirement,* the applicant for mixed use development shall in addition provide the following information:

   a. ~~Mixed use master plans, when required, shall follow the same PUD application, submittal requirements, and approvals procedures of this code: Preliminary mixed use master plan, final mixed use master plan, and final site plan and plat (these steps may be combined).~~ Establishment and assignment of the Mixed Use Traditional (MU-1) and Mixed Use Downtown (MU-2) shall following the normal rezoning application process of this code and include a concept master plan outlining the development plan, uses, and performance standards as shall serve as the development master plan for the proposed mixed-use project.

CHAPTER VI. - DESIGN STANDARDS

***

Section 6.2.13. *Lot Grading*. Lot Grading is the movement, extraction and/or placement of soils within the limits of an individual residential lot or parcel boundary.

1. Lot Grading shall not adversely affect surrounding or downstream wetlands, floodplains or neighboring property. Runoff directed to drainage easements shall not be considered an adverse impact. The volume, rate and quality of stormwater runoff shall be consistent

with conditions prior to the lot grading, or consistent with approved site or lot grading plans.

2. It is the intent of this Section to minimize alterations of the natural topography of land within the City of Mount Dora. Elevation changes in topography shall not exceed ten (10) feet for residential developments or fifteen (15) feet for commercial developments. Any development proposed for a Site Shall be appropriate to the existing natural topographical characteristics of the Site, while recognizing that minimal grade changes are essential to Site development. The exception to this rule will be for roads, utilities, and stormwater ponds with approval of the City Manager or designee. All other requests for waivers to this section shall be granted by the Planning and Zoning Commission at their sole discretion.

3. Lot Grading Requirements in subdivisions where a Mass Grading Plan was approved.
    a. In a subdivision where a mass grading plan was approved by the City in connection with the approval of a subdivision plat, any lot grading which occurs on a lot shall be consistent with the mass grading plan. Building permit shall include information about the grading plans on the individual lot to ensure that the lot grading is consistent with the mass grading plan.
    b. Should an individual lot owner wish to conduct lot grading which is inconsistent with the mass grading plan for the subdivision, prior to the lot grading taking place a lot grading plan shall be required to be submitted and approved by the City.

4. Impervious surfaces may encroach into the established yard setback, provided a minimum three (3) foot setback is maintained on the property lines and the impervious surfaces do not adversely impact a drainage easement. Driveways are exempt from this requirement.

5. Additional impervious surface may intrude into the three (3) foot side or rear setback under the following circumstances:
    a. Impervious surface is installed in no more than two (2) areas with a maximum size of four (4) feet by four (4) feet each, for the purpose of supporting mechanical equipment, pool equipment, electric generators, step-off pads and other similar uses; or
    b. A detailed plan is submitted by the owner or applicant demonstrating that stormwater will be conveyed in a way to protect neighboring property. Drainage pipes, underdrains, inlets, or other approved methods may be used to convey the stormwater. The plan shall be reviewed and approved prior to construction of an alternative method of stormwater conveyance.

***

Section 6.2.11 *Stormwater management plan requirements.*

***

c. Construction plans including, but not limited to, the following:

***

8. ~~Density of the project.~~ Scope of project (density, intensity, and land uses).

9. Natural features (wetlands, water features, floodzones with base flood elevation, and karst features).
10. Lot grading plans to control final lot grading which delineate the building footprint, include flow arrows, and specify the following:
    i. Finished grade elevations at all lot corners and at every location that the lot slope changes in order to drain according to the lot grading diagram for that lot.
    ii. Finished floor elevation of the building.
    iii. Finished ground elevations at all exterior corners of the building at least 8-inches lower than the finished floor elevation and comply with Section 6.2.5. Protection from flooding.

***

Section 6.3. - Roads.

***

6.3.15. *Street names*. New street names shall not duplicate, or closely approximate phonetically, in spelling or by use of alternative suffixes, such as "lane," "way," "drive," "court," "avenue" or "street," the names of existing streets, except that a new street that is an extension of or in alignment with an existing street shall bear the same name as that borne by such existing street. Street naming shall be as follows:

1. The names of public or private streets shall not be duplicates of names of existing streets or private way.

2. The selection of names shall be coordinated with the Lake County Emergency 9-1-1 communications system and City communication systems.

3. The City and/or developers shall avoid street names that are likely to be confused with the names of existing public streets, private streets, or private ways.

4. Street name changes must be adopted by resolution, following public hearing. Notice of the public hearing will be provided to all property owners whose property abuts the street to be renamed. Notice will also be provided to any businesses located on the street to be renamed. Public notice shall also be provided in the newspaper in advance of the public hearing. The adopted and signed resolution shall be forwarded to Lake County and duly recorded in the Lake County Clerk of Court. Other agency notifications shall follow the listing maintained by the Planning and Development Department.

5. No separate name shall be used for a cul-de-sac that provides street frontage for three or less lots. The name shall be the same as that of the intersecting street. Where there is a series of long and short cul-de-sac, however, each should have separate names.

6. The developer shall be responsible for naming streets within a project. Names should be chosen that relate to the scale and location of a project, which helps establish locational identity. Before preliminary development plan approval the developer shall submit

proposed street names to the Planning and Development Department. The final construction plan and plat shall include the overall tract illustrating the proposed street layout and proposed street name.

7. Unacceptable city street names. Numerical names (such as one, two, three, etc.) except numbers which continue the established grid pattern (such as First Avenue, Second Avenue, etc.); alphabetical letters (A, B, C, etc.); complicated; and compound names (may be used sparingly however) shall be avoided on streets less than 1,000 feet.

8. Directional type street names shall be prohibited as part of a street name, such as east, west, north, and south; however, such name may only be used to reference the approved grid numbering system (such as 100 East Fifth Avenue).

9. Definition of thoroughfare designations. All roadway suffix names shall be used for street naming within the City. Street suffixes not mentioned below may be used, provided the developer or property owner obtains approval by the Planning and Development Department.

    a. Alley or alleyway: Located in the rear of residential or commercial lots and used for servicing structures fronting on regularly established roadways.

    b. Avenues: A roadway running in a west-east direction.

    c. Boulevard or parkway: A roadway divided by a landscape center island or median, used as a minor collector and serving as an internal traffic collector.

    d. Circle: Streets which form a ring-like shape. All circles shall contain one name.

    e. Courts: Permanently closed street such as a cul-de-sac generally less than 1,000 feet. All courts shall have one name only.

    f. Drives: Curving or meandering streets generally longer than 1,000 feet.

    g. Lane: One-block roadway in a north-south or east-west direction, generally less than 1,000 feet long.

    h. Loop: Short circular roadway which configuration is a U-shape (horseshoe-shape).

    i. Parkway: (See Boulevard.)

    j. Place: A cul-de-sac or permanent dead-end road.

    k. Road: Thoroughfares or minor arterials that run in any direction.

    l. Street: A roadway running in an north-south direction

m. Way: Diagonal street in a northwest-southeast or northeast-southwest direction, generally less than 1,000 feet long.

***

Section 6.3.17 *Specifications for improvements.*

***

4. ~~Wearing surface. The material used for the wearing surface shall be a Florida DOT asphaltic concrete mix of Type SIII, or Florida DOT modifications thereof, having a Hubbard-Field Stability of not less than 2,000 pounds. The wearing surface shall have a compacted nominal thickness of 1¼ inches with a tolerance of ¼ inch, with an absolute minimum of one inch compacted thickness. On all arterial streets and all streets in commercial or industrial subdivisions, the wearing surface shall be constructed no less than 1¾ inches thick in any place, with a tolerance of one-fourth inch. Ponded water due to paving inaccuracies shall be limited to a water depth of no greater than one-fourth inch. Ponding in excess of this depth shall require correction.~~

~~A certified copy of the design mix shall be filed with the city, stating the type and design stability of the product used. Any deviation from this stability requirement will be considered only after review and documentation of the special circumstances. The completed road shall be guaranteed by maintenance bonding for a period of two years.~~

The wearing surface shall be asphaltic concrete structural course conforming to the latest edition of the FDOT Standard Specifications for Road and Bridge Construction, currently Section 334 Superpave Asphalt Concrete. The pavement shall have a performance period of at least 25 years with no major rehabilitation measures required for at least 15 years from the date of construction acceptance.

The pavement design engineer shall file a signed and sealed copy of the design mix with the City that includes a statement that the pavement design satisfies the required performance periods. The developer shall provide a maintenance bond to guarantee the completed road for a period of two years.

The wearing surface shall have a compacted nominal thickness of 1¼ inches with a tolerance of ¼ inch and an absolute minimum of one inch compacted thickness. On all arterial streets and all streets in commercial or industrial subdivisions, the constructed wearing surface shall be no less than 1¾ inches thick in any place with a tolerance of one-fourth inch.

Ponded water due to paving inaccuracies shall be limited to a water depth of no greater than one-fourth inch. Ponding in excess of this depth shall require correction.

***

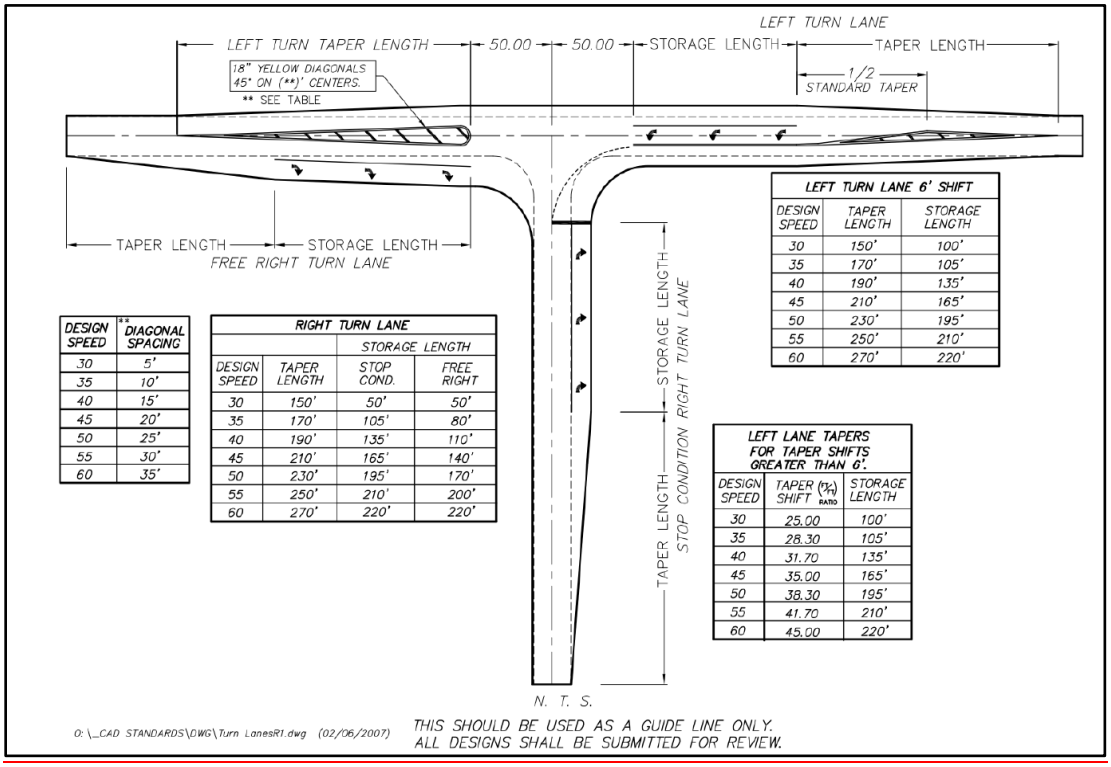
6.3.21 *Turn Lanes*. Turn lanes consist of left-turn lanes and right-turn lanes (deceleration lanes).

1. Turn lanes shall be installed on the road which is being accessed at the proposed entrance(s) to the development, as deemed necessary by the City Manager or Designee. The City Manager or Designee may also require turn lanes at adjacent or nearby intersections in lieu of, or in addition to, turn lanes at the development entrances.

2. Conditions which are to be considered in determining the need for turn lanes include the following:

   a. If the property accessing the road is projected to generate 500 or more vehicle trips per day, or 50 or more vehicle trips in any hour;
   b. If a traffic analysis indicates that turn lanes would be necessary to maintain capacity on fronting roads and/or on adjacent or nearby intersections.
   c. If entrances are proposed at locations where grade, topography, site distance, traffic, or other unusual conditions indicate that turn lanes would be needed for traffic safety. The need for turn lanes to accommodate right turn movements and left turn movements shall be based upon anticipated traffic distribution and projected turning movement volumes among other considerations, including traffic safety.

3. Turn lanes shall be installed in accordance with the standards depicted below.



DESIGN SPEED	** DIAGONAL SPACING
30	5'
35	10'
40	15'
45	20'
50	25'
55	30'
60	35'

RIGHT TURN LANE

DESIGN SPEED	TAPER LENGTH	STORAGE LENGTH STOP COND.	STORAGE LENGTH FREE RIGHT
30	150'	50'	50'
35	170'	105'	80'
40	190'	135'	110'
45	210'	165'	140'
50	230'	195'	170'
55	250'	210'	200'
60	270'	220'	220'

LEFT TURN LANE 6' SHIFT

DESIGN SPEED	TAPER LENGTH	STORAGE LENGTH
30	150'	100'
35	170'	105'
40	190'	135'
45	210'	165'
50	230'	195'
55	250'	210'
60	270'	220'

LEFT LANE TAPERS FOR TAPER SHIFTS GREATER THAN 6'.

DESIGN SPEED	TAPER SHIFT (W/L) RATIO	STORAGE LENGTH
30	25.00	100'
35	28.30	105'
40	31.70	135'
45	35.00	165'
50	38.30	195'
55	41.70	210'
60	45.00	220'

***

6.6. - Landscaping and buffers.

***

Section 6.6.1. *General requirements.* The landscape requirements contained herein shall apply to all new development with the exception of city parks.

No additions or improvements may be made on existing developed property unless the development conforms to the regulations contained herein.
City parks shall be exempt from the regulations contained herein; however, landscape improvements shall be required at the discretion of the city council.

In order to fulfill the purposes of this code and to allow for necessary recharge, impervious surface may cover no more than the percentage of the site area (land above the mean high water line) shown below:

District	Percentage
***	
~~M1~~ WP-1	65
~~M2~~ WP-2	65
***	

***

Section 6.6.7. *Preservation of existing trees.*

1. *Tree removal and replacement program requirements:*
   ***
   i. Existing trees and trees proposed for removal shall be shown on a landscape plan with the following tree data (applicant to fill-in blanks):

   Total existing number of trees sized 6"—23.99":____
   Total existing number of trees sized 6"—23.99" removed: _____
   Total existing number of trees sized 24" or greater: _____
   Total existing number of tree sized 24" or greater removed: _____
   Total number of trees replaced at ratio 1:1 for trees removed 6'-23.99":_____
   Total number of trees placed at ratio ~~1:12~~ 1:6 (for trees removed 24" or greater):_____
   Total number of trees replaced: _____
   Total number of tree deficient (not being replaced) for tree bank contribution and includes total dollar amount of contribution funds: $_____

***

6.7. - Signs.

***

Section 6.7.5 *Temporary signs*.
***

3. Temporary Sign Height. Temporary signs are limited to the following heights based on the zoning district or use of the property on which it will be erected as follows:
   a. GB, C-2, C-2A, RP, PLI, and OP: 5 feet
   b. Residential uses: 6 Feet
   c. Non-residential uses: 10 feet

***

CHAPTER VIII. – DEFINITIONS

The following definitions shall apply throughout this code. Words not specifically defined or otherwise explained within this code shall be as defined in a standard dictionary or as understood by the development review coordinator. Definitions specifically related to signage shall be found within Chapter VI, Design Standards, Section 6.7, Signs.

***

Density, residential: Refers to the number of residential dwelling units permitted per ~~gross~~ net acre of land and is determined by dividing the number of units by the total area of land within the boundaries of a lot or parcel; less preservation and undevelopable areas, or areas below the normal high water line of a lake, wetlands and floodplain areas. In the determination of the number of residential dwelling units to be permitted on a specific parcel of land, a fractional unit shall not entitle the applicant to an additional unit.

***

Flood-Prone Area. Any area which lies at or below the water surface elevation of the Base Flood.

***

Net Acre: The total area of a parcel, or combination of parcels, proposed for development, of land minus wetlands, water bodies and areas lying below the flood prone areas.

SECTION 3. IMPLEMENTATION OF ADMINISTRATIVE ACTIONS. The City Manager is hereby authorized and directed to take such actions as deemed necessary and appropriate in order to implement the provisions of this Ordinance. The City Manager may, as deemed appropriate, necessary and convenient, delegate the powers of implementation as herein set forth to such City employees as deemed prudent.

SECTION 4. CODIFICATION AND SCRIVENER'S ERRORS.

A. The revisions to City of Mount Dora Land Development Code, as set forth in Sections 3 above shall be codified in the City of Mount Dora Code of Ordinances.

B. The sections, divisions and provisions of this Ordinance may be renumbered or re-lettered as deemed appropriate by the codifier of the City of Mount Dora Land Development Code.

C. Typographical errors and other matters of a similar nature that do not affect the intent of this Ordinance, as determined by the City Clerk and City Attorney, may be corrected with the endorsement of the City Manager, or designee, without the need for a public hearing.

SECTION 5. SAVINGS CLAUSE. All prior actions of the City pertaining to the amendments to the City of Mount Dora Land Development Code, as well as any and all other applicable matters, are hereby ratified and affirmed consistent with the provisions of this Ordinance.

SECTION 6. CONFLICTS. All ordinances or part of ordinances in conflict with this Ordinance are hereby repealed; provided, however, that any code or ordinance that provides for an alternative process to effectuate the general purposes of this Ordinance shall not be deemed a conflicting code or ordinance.

SECTION 7. SEVERABILITY. If any section, sentence, phrase, word, or portion of this Ordinance is determined to be invalid, unlawful or unconstitutional, said determination shall not be held to invalidate or impair the validity, force or effect of any other section, sentence, phrase, word, or portion of this Ordinance not otherwise determined to be invalid, unlawful, or unconstitutional.

SECTION 8. EFFECTIVE DATE. This Ordinance shall become effective immediately upon enactment by the City of Mount Dora.

PASSED AND ADOPTED this _____ day of _____, 2023.

FIRST READING: _____

SECOND READING: _____

_____
CRISSY STILE
MAYOR of the City of Mount Dora, Florida

ATTEST:

_____
Jeanann Hand, City Clerk

For the use and reliance of
City of Mount Dora only.
Approved as to form and legality.

_____
Sherry G. Sutphen, City Attorney