July 5, 2024
PROJECT NAME: 7-ELEVEN BELLEVIEW
PROJECT NUMBER: 2022080152
APPLICATION: MAJOR SITE PLAN #30884

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

2 DEPARTMENT: ENGIN - DEVELOPMENT REVIEW
REVIEW ITEM: 2.12.4.K - List of approved waivers, their conditions, and the date of approval
STATUS OF REVIEW: INFO
REMARKS: 12/13/23 - add waivers if requested in the future

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

4 DEPARTMENT: DOH - ENVIRONMENTAL HEALTH
REVIEW ITEM: Additional Health comments
STATUS OF REVIEW: INFO
REMARKS: n/a

5 DEPARTMENT: LUCURR - LAND USE CURRENT REVIEW
REVIEW ITEM: Additional Planning Items:
STATUS OF REVIEW: INFO
REMARKS: Staff is aware the applicant/developer has been coordinating with the owner of the parcel to the east regarding the relocation of the existing driveway access as shown on the plan.

Marion County
Board of County Commissioners
Office of the County Engineer
412 SE 25th Ave.
Ocala, FL 34471
Phone: 352-671-8686
Fax: 352-671-8687

AR 30884

DEVELOPMENT REVIEW PLAN APPLICATION

Date: _____

A. PROJECT INFORMATION:

Project Name: 7-Eleven Belleview
Parcel Number(s): 37515-004-01
Section 19 Township 16 Range 23 Land Use _____ Zoning Classification _____
Commercial [X] Residential [ ] Industrial [ ] Institutional [ ] Mixed Use [ ] Other _____
Type of Plan: Major Site Plan
Property Acreage 16.17 Number of Lots _____ Miles of Roads _____
Location of Property with Crossroads NEC SR 35 (SE 58th Ave) & SE 92nd Loop
Additional information regarding this submittal: _____

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

[X] **Engineer:**
Firm Name: Common Oak Engineering LLC Contact Name: Jeremy Anderson, P.E.
Mailing Address: 4016 Edgewater Dr. City: Orlando State: FL Zip Code: 32804
Phone # (407) 951-5915 Alternate Phone # N/A
Email(s) for contact via ePlans: Jeremy@CommonOakEngineering.com Morgan@CommonOakEngineering.com

[ ] **Surveyor:**
Firm Name: Altamax Surveying Contact Name: _____
Mailing Address: 910 Belle Ave Ste 1100 City: Casselberry State: FL Zip Code: 32708
Phone # 407-677-0200 Alternate Phone # _____
Email(s) for contact via ePlans: _____

Property Owner:
Owner: Anthony & Rebecca Mendola Contact Name: _____
Mailing Address: PO Box 6331 City: Ocala State: FL Zip Code: 34478
Phone # 352-8170-7522 Alternate Phone # _____
Email address: _____

Developer:
Developer: RKM Development Corp Contact Name: William Lloyd
Mailing Address: 147 2nd Ave S, Ste 400 City: St. Petersburg State: FL Zip Code: 33701
Phone # 727-895-2150 Alternate Phone # _____
Email address: _____

MAJOR SITE PLAN
7-ELEVEN
AT
SEC OF SE 92ND LP & SE 58TH AVE, BELLEVIEW, FL 34420
MARION COUNTY PARCEL #: 37515-004-01

PLAN SHEET INDEX

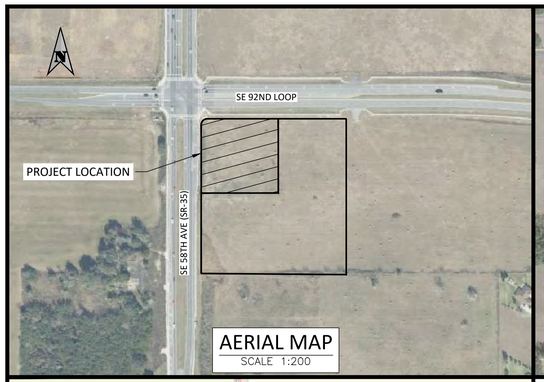
TOTAL SHEETS : 36

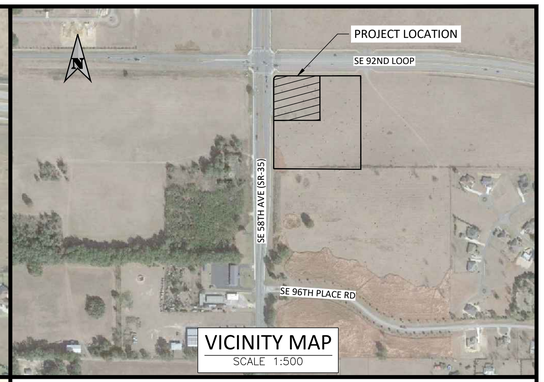
LEGEND:

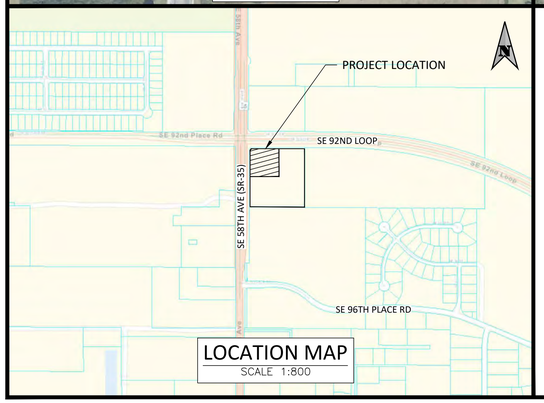
(#)	:	NO. OF PARKING SPACES
# / CX.X	:	DETAIL NO. / SHEET
	:	HEAVY DUTY ASPHALT PAVEMENT
	:	PROPOSED CONCRETE SURFACE
W	:	WATER LINE
E	:	ELECTRIC LINE
SS	:	WASTEWATER LINE
FM	:	BURIED FORCE MAIN
TELE	:	TELEPHONE LINE
	:	FIRE HYDRANT
	:	VALVE
M	:	WATER METER
	:	BACKFLOW PREVENTER WITH CONCRETE PAD
75.40	:	TOP OF ASPHALT/CONCRETE SPOT ELEVATION
75.40 / 75.40	:	TOP OF CURB/SIDEWALK (ON TOP) / BOTTOM OF CURB (ON BOTTOM)
	:	FLOW ARROW
#	:	REVISION NUMBER
FDC	:	FIRE DEPARTMENT CONNECTION

NOTES:

1. ALL FUTURE DEVELOPMENTS WILL NEED TO APPLY FOR A PERMIT PRIOR TO CONSTRUCTION
2. NO CHANGE TO THE WORK AS SHOWN ON THE APPROVED PLANS SHALL BE MADE WITHOUT NOTIFICATION TO AND APPROVAL BY THE OFFICE OF THE COUNTY ENGINEER
3. THIS PROPOSED PROJECT HAS NOT BEEN GRANTED CONCURRENCY APPROVAL AND/OR GRANTED AND/OR RESERVED ANY PUBLIC FACILITY CAPACITIES. FUTURE RIGHTS TO DEVELOP THE PROPERTY ARE SUBJECT TO A DEFERRED CONCURRENCY DETERMINATION, AND FINAL APPROVAL TO DEVELOP THE PROPERTY HAS NOT BEEN OBTAINED. THE COMPLETION OF CONCURRENCY REVIEW AND/OR APPROVAL HAS BEEN DEFERRED TO LATER DEVELOPMENT REVIEW STAGES, SUCH AS, BUT NOT LIMITED TO, MASTER PLAN, PRELIMINARY PLAT, IMPROVEMENT PLAN, FINAL PLAT, SITE PLAN, OR BUILDING PERMIT REVIEW.
4. FDOT LANE CLOSURE RESTRICTIONS ARE 4 PM – 6 PM, NORTHBOUND AND SOUTHBOUND.







LEGAL DESCRIPTION

PARENT PARCEL:
COMMENCE AT THE SOUTHWEST CORNER OF THE NORTHWEST 1/4 OF SECTION 19, TOWNSHIP 16 SOUTH, RANGE 23 EAST, MARION COUNTY, FLORIDA; RUN THENCE S89°30'56"E ALONG THE SOUTH BOUNDARY OF THE NORTHWEST 1/4 OF SAID SECTION 19, A DISTANCE OF 102.00 FEET TO THE EAST RIGHT-OF-WAY LINE OF COUNTY ROAD C-35 PER OFFICIAL RECORDS BOOK 6125, PAGE 977, PUBLIC RECORDS OF MARION COUNTY, FLORIDA FOR A POINT OF BEGINNING; THENCE N00°01'05"E, ALONG SAID EAST RIGHT-OF-WAY LINE, A DISTANCE OF 623.38 FEET TO A POINT OF CURVATURE CONCAVE SOUTHEASTERLY HAVING A RADIUS OF 25.00 FEET, A CHORD BEARING OF N45°00'47"E AND A CHORD DISTANCE OF 35.35 FEET; RUN THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 89°59'24" A DISTANCE OF 39.27 FEET TO THE SOUTH RIGHT-OF-WAY LINE OF SE 92ND LOOP PER SAID OFFICIAL RECORDS BOOK 6125, PAGE 977; THENCE S89°59'31"E, ALONG SAID SOUTH RIGHT-OF-WAY LINE, A DISTANCE OF 583.00 FEET; THENCE S00°01'05"W A DISTANCE OF 653.43 FEET TO THE SOUTH BOUNDARY OF SAID NORTHWEST 1/4 OF SECTION 19; THENCE N89°30'56"W, ALONG SAID SOUTH LINE, A DISTANCE OF 608.02 FEET TO THE POINT OF BEGINNING.

PARCEL A:
COMMENCE AT THE SOUTHWEST CORNER OF THE NORTHWEST 1/4 OF SECTION 19, TOWNSHIP 16 SOUTH, RANGE 23 EAST, MARION COUNTY, FLORIDA; RUN THENCE S89°30'56"E ALONG THE SOUTH BOUNDARY OF THE NORTHWEST 1/4 OF SAID SECTION 19, A DISTANCE OF 102.00 FEET TO THE EAST RIGHT-OF-WAY LINE OF COUNTY ROAD C-35 PER OFFICIAL RECORDS BOOK 6125, PAGE 977, PUBLIC RECORDS OF MARION COUNTY, FLORIDA; THENCE N00°01'05"E, ALONG SAID EAST RIGHT-OF-WAY LINE, A DISTANCE OF 337.22 FEET FOR A POINT OF BEGINNING; THENCE CONTINUE N00°01'05"E, ALONG SAID EAST RIGHT-OF-WAY LINE, A DISTANCE OF 286.16 FEET TO A POINT OF CURVATURE CONCAVE SOUTHEASTERLY HAVING A RADIUS OF 25.00 FEET, A CHORD BEARING OF N45°00'47"E AND A CHORD DISTANCE OF 35.35 FEET; RUN THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 89°59'24" A DISTANCE OF 39.27 FEET TO THE SOUTH RIGHT-OF-WAY LINE OF SE 92ND LOOP PER SAID OFFICIAL RECORDS BOOK 6125, PAGE 977; THENCE S89°59'31"E, ALONG THE SOUTH RIGHT-OF-WAY LINE, A DISTANCE OF 297.96 FEET; THENCE S00°01'05"W A DISTANCE OF 311.16 FEET; THENCE N89°59'31"W A DISTANCE OF 322.96 FEET TO THE POINT OF BEGINNING.

GENERAL REVISION LOG

NO:	DATE:	REVISION / ISSUE:	SHEETS REVISED:	BY:
1	12/04/2024	FDOT DRAINAGE COMMENTS	C5.1	JR
2	12/05/2024	FDOT ACCESS COMMENTS	C1.0, C3.0, C4.0, C4.1, C4.2, C4.3, C7.0, D1.0, D1.1, D2.5, SURVEY	JR
3	12/07/2024	CITY OF BELLEVIEW UTILITY COMMENTS	C6.0, D3.0	JR
4	12/15/2024	MARION COUNTY COMMENTS	C1.0, C4.0, C4.1, C5.0, C5.1, C8.0, C7.0, C7.1, C7.2, C9.0, D3.0, D3.1, 3.2, D3.3, SURVEY	JR
5	02/19/2024	FDOT ACCESS COMMENTS	C1.0, C4.1, C7.0, C7.1, D1.0, D1.5	JR
6	02/26/2024	MARION COUNTY COMMENTS	C1.0, C4.0, C6.0, C7.0, D3.0	JR
7	03/13/2024	CITY OF BELLEVIEW UTILITY COMMENTS	C6.0, D3.0	JR
8	03/13/2024	CLIENT COMMENTS	C4.1, C4.2, C5.0, C5.1, C6.0, C7.0, C7.1, D2.0	JR
9	02/16/2024	FDOT DRAINAGE COMMENTS	C5.1, D2.0	JR
10	04/09/2024	FDOT DRAINAGE COMMENTS	C3.0, C4.1, C5.1, D2.0	JR
11	04/16/2024	CLIENT COMMENTS	C5.1, C6.0	JR
12	04/22/2024	MARION COUNTY COMMENTS	C1.0, C4.1, C5.0, C5.1, D1.0, D1.2, D2.4	JR
13	04/22/2024	FDOT ACCESS COMMENTS	C5.1	JR
14	05/02/2024	FDOT ACCESS COMMENTS	C6.0, D3.0	JR
15	05/09/2024	CLIENT COMMENTS	C6.0	JR

SITE DATA TABLE

PARENT TRACT

AREAS	EXISTING CONDITION			PROPOSED CONDITION		
	EXISTING (SF)	ACRES	PERCENT OF TOTAL PROPERTY AREA	PROPOSED (SF)	ACRES	PERCENT OF TOTAL PROPERTY AREA
LOT:	±295,227	±6.78	100%	±295,227	±6.78	100%
IMPERVIOUS (70% MAX):	0	-	-	±21,151	±0.49	7.16%
PERVIOUS:	±295.277	±6.78	100%	±274,076	±6.78	92.84%

7-ELEVEN SITE

AREAS	EXISTING CONDITION			PROPOSED CONDITION		
	EXISTING (SF)	ACRES	PERCENT OF TOTAL PROPERTY AREA	PROPOSED (SF)	ACRES	PERCENT OF TOTAL PROPERTY AREA
LOT:	±100,357	±2.30	100%	±100,357	±2.30	100%
IMPERVIOUS (70% MAX):	0	-	-	±59,617	±1.37	59.40%
PERVIOUS:	±100,357	±2.30	100%	±40,740	±0.94	40.60%

PROJECT DIRECTORY

OWNER / DEVELOPER:	RKM DEVELOPMENT CORP. 147 2ND AVE S. ST. PETERSBURG, FL 33701 PHONE: (727) 895-2150
CIVIL ENGINEER:	COMMON OAK ENGINEERING, LLC 4016 EDGEWATER DRIVE, ORLANDO, FL 32804 PHONE: (407) 951-5915
GEOTECH ENGINEER:	ARDAMAN & ASSOCIATES, INC. 8008 S. ORANGE AVENUE ORLANDO, FL 32809 PHONE: (407) 855-3860
SURVEYOR:	ALTAMAX SURVEYING 910 BELLE AVENUE, SUITE 1100 CASSELBERRY, FL 32708 PHONE: (407) 677-0200
ARCHITECT:	INTERPLAN, LLC 220 E. CENTRAL PLKWY, STE 4000 ALTAMONTE SPRINGS, FL 32701 PHONE: (407) 645-5008

OWNER'S CERTIFICATON

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

REPRESENTATIVE OWNER, R.K.M. DEVELOPMENT CORP. — DATE

LICENSED DESIGN PROFESSIONAL CERTIFICATION

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

JEREMY R. ANDERSON, P.E. — P.E. LICENSE NO. 71636 — DATE

UTILITY PROVIDERS

WATER & SEWER:	CITY OF BELLEVIEW UTILITIES 5525 E 119TH ST BELLEVIEW, FL 34420 LELZI MERRITT DUFF PUBLIC WORKS DEPARTMENT PHONE: (352) 245-7021
ELECTRIC:	DUKE ENERGY 9700 DAVID TAYLOR DRIVE CHARLOTTE, NC PHONE: (863) 582-6345
GAS:	TECO PEOPLES GAS 316 SW 33RD AVE, OCALA, FL 34474 CHUCK HUMPHREY – COMMERCIAL ACCOUNT MANAGER PHONE: (352) 427-0743 CMHUMPHREY@TECOENERGY.COM
STORM:	MARION COUNTY OFFICE OF THE COUNTY ENGINEER 412 SE 25TH AVENUE OCALA, FL 34471 JAMES HULSEY PHONE: (352) 671-8686 JAMES.HULSEY@MARIONCOUNTYFL.ORG
COMMUNICATIONS:	CENTURYLINK A LUMEN TECHNOLOGIES COMPANY 555 LAKE BORDER DR. APOPKA FL 32703 MINETTA CROSIER PHONE: (352) 573-6008 MINETTA.CROSIER@LUMEN.COM

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

This item has been digitally signed and sealed by Jeremy R. Anderson, PE, on the date indicated here.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

R.K.M. DEVELOPMENT CORP.

COMMON OAK ENGINEERING
4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP & SE 58TH AVE
BELLEVIEW, FL MARION COUNTY

NO:	DATE:	REVISION / ISSUE:	BY:
2	12/05/2024	FDOT ACCESS COMMENTS	JR
4	12/15/2024	MARION COUNTY COMMENTS	JR
5	02/19/2024	FDOT ACCESS COMMENTS	JR
6	02/26/2024	MARION COUNTY COMMENTS	JR
12	04/22/2024	MARION COUNTY COMMENTS	JR

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

PROJECT # 222.108

DATE 05/13/2024

SCALE N.T.S.

SHEET C1.0

COVER SHEET

GENERAL NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH THE NOTES AND SPECIFICATIONS CONTAINED HEREIN. THESE NOTES SHALL APPLY TO ALL WORK IN THIS SET OF CONSTRUCTION DOCUMENTS. CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE CONFORMANCE TO THESE REQUIREMENTS BY ALL SUBCONTRACTORS.
2. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES, AFFECTING THIS WORK, PRIOR TO CONSTRUCTION AND PRIOR TO PROVIDING A COST FOR CONSTRUCTION. CONTRACTOR MUST NOTIFY ENGINEER AND OWNER, IN WRITING, IF ANY CONFLICTS, DISCREPANCIES, OR AMBIGUITIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR WORK WHICH HAS TO BE REDONE OR REPAIRED DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO CONTRACTOR GIVING ENGINEER AND OWNER WRITTEN NOTIFICATION OF SAME AND ENGINEER AND OWNER, THEREAFTER, PROVIDING CONTRACTOR WITH WRITTEN AUTHORIZATION TO PROCEED WITH SUCH ADDITIONAL WORK
3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE PERMIT INSPECTION AND CERTIFICATION REQUIREMENTS SPECIFIED BY THE VARIOUS GOVERNMENTAL AGENCIES AND THE ENGINEER. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, AND SCHEDULE INSPECTIONS ACCORDING TO AGENCY INSTRUCTIONS/REQUIREMENTS.
4. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR MUST COORDINATE THE BUILDING LAYOUT BY CAREFUL REVIEW OF THE ENTIRE SITE PLAN AND THE LATEST ARCHITECTURAL PLANS (INCLUDING, BUT NOT LIMITED TO, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLAN, WHERE APPLICABLE). CONTRACTOR MUST IMMEDIATELY NOTIFY OWNER, ARCHITECT AND SITE ENGINEER, IN WRITING, OF ANY CONFLICTS, DISCREPANCIES OR AMBIGUITIES WHICH EXIST.
5. NO EXTRA PAYMENT WILL BE ALLOWED FOR ANY WORK REQUIRED DUE TO MISUNDERSTANDING OF JOB OR SITE CONDITIONS AFFECTING THE WORK AS DESCRIBED IN THE SPECIFICATIONS OR SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL NOT TAKE ADVANTAGE OF ANY APPARENT ERROR OR OMISSIONS IN THE DRAWINGS OR SPECIFICATIONS, AND THE ENGINEER SHALL BE PERMITTED TO MAKE CORRECTIONS AND INTERPRETATIONS AS MAY BE DEEMED NECESSARY FOR THE FULFILLMENT OF THE INTENT ON THE CONTRACT DOCUMENTS. THE TENDERING OF A PROPOSAL WILL ACKNOWLEDGE ACCEPTANCE OF THESE CONDITIONS BY THE BIDDER.
6. THE ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION METHODS, MEANS, TECHNIQUES OR PROCEDURES, GENERALLY OR FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES OR PROCEDURES FOR COMPLETION OF THE WORK DEPICTED BOTH ON THESE PLANS, AND FOR ANY CONFLICTS/SCOPE REVISIONS WHICH RESULT FROM SAME. CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE METHODS/MEANS FOR COMPLETION OF THE WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
7. THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SET FORTH HEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND, IN CASE OF CONFLICT, DISCREPANCY OR AMBIGUITY, THE MORE STRINGENT REQUIREMENTS AND/OR RECOMMENDATIONS CONTAINED IN THE PLANS AND THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR MUST NOTIFY THE ENGINEER, IN WRITING, OF ANY SUCH CONFLICT, DISCREPANCY OR AMBIGUITY BETWEEN THE GEOTECHNICAL REPORTS AND PLANS AND SPECIFICATIONS PRIOR TO PROCEEDING WITH ANY FURTHER WORK.
8. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL PRE-CAST AND MANUFACTURED ITEMS TO THE OWNER'S ENGINEER FOR REVIW, PRIOR TO ORDERING. FAILURE TO SUBMIT FOR REVIEW BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE. THE ENGINEER WILL REVIEW OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND/OR METHODS AND/OR TECHNIQUES OR PROCEDURES, COORDINATION OF THE WORK WITH OTHER TRADES, AND CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND COMMON OAK ENGINEERING HAS NO RESPONSIBILITY OR LIABILITY FOR SAME HEREUNDER. THE SHOP DRAWING REVIEW WILL BE CONDUCTED WITH REASONABLE PROMPTNESS WHILE ALLOWING SUFFICIENT TIME TO PERMIT ADEQUATE REVIEW. REVIEW OF A SPECIFIC ITEM MUST NOT INDICATE THAT COMMON OAK ENGINEERING HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. COMMON OAK ENGINEERING WILL NOT BE RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS NOT PROMPTLY AND IMMEDIATELY BROUGHT TO ITS ATTENTION, IN WRITING, BY THE CONTRACTOR. COMMON OAK ENGINEERING WILL NOT BE REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.
9. NEITHER THE PROFESSIONAL ACTIVITIES OF OWNER'S ENGINEER, NOR THE PRESENCE OF AND/OR ITS RELATED ENTITIES AT A CONSTRUCTION/PROJECT SITE, SHALL RELIEVE THE GENERAL CONTRACTOR OF ITS OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, OVERSEEING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND COMPLIANCE WITH ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES WITH JURISDICTION OVER THE PROJECT AND/OR PROPERTY. THE OWNERS ENGINEER AND ITS PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY HEALTH OR SAFETY PROGRAMS OR PROCEDURES. THE GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY.
10. ALL CONTRACTORS MUST CARRY THE SPECIFIED STATUTORY WORKER'S COMPENSATION INSURANCE, EMPLOYER'S LIABILITY INSURANCE AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE (CGL). ALL CONTRACTORS MUST HAVE THEIR CGL POLICIES ENDORSED TO NAME COMMON OAK ENGINEERING, AND ITS SUB-CONSULTANTS AS ADDITIONAL NAMED INSURERS AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE THIS HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED BY THE CONTRACTORS. ALL CONTRACTORS MUST FURNISH COMMON OAK ENGINEERING WITH CERTIFICATIONS OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE PRIOR TO COMMENCING WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION. IN ADDITION, ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS COMMON OAK ENGINEERING AND ITS SUB-CONSULTANTS FROM AND AGAINST ANY DAMAGES, LIABILITIES OR COSTS, INCLUDING REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE PROJECT, INCLUDING ALL CLAIMS BY EMPLOYEES OF THE CONTRACTORS.
11. ALL UTILITY SERVICE STUB-OUTS (WATER, SANITARY SEWER, ETC.) ARE TO BE INSTALLED TO WITHIN 5' OF BUILDING(S), UNLESS OTHERWISE NOTED ON PLANS.
12. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL CALL "SUNSHINE" AT 1-800-432-4770, AT LEAST 48 HOURS PRIOR TO CONSTRUCTION, TO ARRANGE FOR FIELD LOCATIONS OF BURIED UTILITIES.
13. CONTRACTOR TO COORDINATE WITH THE APPLICABLE ELECTRIC UTILITY SUPPLIER REGARDING ANY NECESSARY RELOCATION(S) OF UNDERGROUND AND/OR OVERHEAD ELECTRIC FACILITIES, AND FOR THE LOCATION AND INSTALLATION OF TRANSFORMER PAD(S) AND ASSOCIATED ELECTRIC FACILITIES.
14. FLORIDA STATUTES REQUIRES THAT THE COMPANY PERFORMING THE EXCAVATION WORK SHALL NOTIFY ALL GAS UTILITIES A MINIMUM OF TWO (2) & A MAXIMUM OF FIVE (5) WORKING DAYS PRIOR TO EXCAVATING. DRAWINGS SHOW ONLY THE APPROXIMATE LOCATION OF GAS MAINS (IF ANY ARE PRESENT), AND DO NOT SHOW SERVICE LINES. THE ONLY SAFE AND PROPER WAY TO LOCATE EITHER MAINS OR SERVICE LINES IS BY AN ON-SITE INSPECTION BY GAS SYSTEM PERSONNEL THEREFORE, THE COMPANY PERFORMING THE EXCAVATION WORK IS INSTRUCTED TO CALL SUNSHINE ONE CALL AT 1-800-432-4770 AT LEAST TWO (2) & A MAXIMUM OF FIVE (5) WORKING DAYS BEFORE DIGGING THE CONSTRUCTION AREA. NO MACHINE EXCAVATION SHALL BE PERFORMED WITHIN FIVE 5 FEET OF A GAS MAIN WITHOUT THE UTILITY OWNERS PRESENCE. WORKING DAYS EXCLUDE SATURDAYS, SUNDAYS & LEGAL HOLIDAYS. PERMIT MUST BE APPLIED FOR AT LEAST 5 BUSINESS DAYS PRIOR TO CONSTRUCTION DATE.
15. THE ENGINEER OF RECORD, DESIGN ENGINEER OR OWNER'S ENGINEER HAS NO CONTRACTUAL, LEGAL, OR OTHER RESPONSIBILITY FOR JOB SITE SAFETY OR JOB SITE SUPERVISION, OR ANYTHING RELATED TO SAME. THE BELOW ARE SAFETY GUIDELINES AND ARE NOT ALL ENCOMPASSING:
   A. DURING THE CONSTRUCTION AND/OR 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/HER PERSONNEL.
   B. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION.
   C. THE MINIMUM STANDARDS AS SET FORTH IN THE CURRENT EDITION OF "THE STATE OF FLORIDA, MANUAL ON TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS" SHALL BE FOLLOWED IN THE DESIGN, APPLICATION, INSTALLATION, MAINTENANCE AND REMOVAL OF ALL TRAFFIC CONTROL DEVICES, WARNING DEVICES AND BARRIERS NECESSARY TO PROTECT THE PUBLIC AND CONSTRUCTION PERSONNEL FROM HAZARDS WITHIN THE PROJECT LIMITS.
   D. ALL TRAFFIC CONTROL MARKINGS AND DEVICES SHALL CONFORM TO THE PROVISIONS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PREPARED BY THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION.
   E. ALL SUBSURFACE CONSTRUCTION SHALL COMPLY WITH THE "TRENCH SAFETY ACT". THE CONTRACTOR SHALL INSURE THAT THE METHOD OF TRENCH PROTECTION AND CONSTRUCTION IS IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS.

   IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY WITH AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS. THE ABOVE INFORMATION HAS BEEN PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT AND/OR ENFORCE SAFETY REGULATIONS. THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SITE SAFETY. THE ENGINEER OF RECORD HAS NOT BEEN RETAINED TO PERFORM OR BE RESPONSIBLE FOR JOB SITE SAFETY, SAME BEING WHOLLY OUTSIDE OF ENGINEER'S SERVICES AS RELATED TO THE PROJECT. THE ENGINEER OF RECORD IS NOT RESPONSIBLE TO IDENTIFY OR REPORT ANY JOB SITE SAFETY ISSUES, AT ANY TIME.
16. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN A RIGHT-OF-WAY UTILIZATION PERMIT "ROW PERMIT" (IF REQUIRED) FOR CONSTRUCTION OF THE PROPOSED UTILITY FACILITIES. THIS PERMIT MUST BE OBTAINED BY A DULY LICENSED PLUMBING/UTILITY CONTRACTOR (OR CLASS A GENERAL CONTRACTOR) PRIOR TO THE START OF CONSTRUCTION. THESE PLANS AND ANY SUBSEQUENT REVISIONS TO THESE PLANS THAT ARE ISSUED BY THE ENGINEER WILL BE SUBJECT TO THE APPROVAL CONDITIONS OF THIS PERMIT.
17. THE GRAPHIC INFORMATION DEPICTED ON THESE PLANS HAS BEEN COMPILED TO PROPORTION BY SCALE AS ACCURATELY AS POSSIBLE. HOWEVER, DUE TO REPRODUCTIVE DISTORTION, REDUCTION, AND/OR REVISIONS, INFORMATION CONTAINED HEREIN IS NOT INTENDED TO BE SCALED FOR CONSTRUCTION PURPOSES.
18. WHEN DETAILS ARE PROVIDED, CONTRACTOR SHALL CONSTRUCT JOB PER SPECIFIC DETAILS AND NOT BY SCALING FROM THESE PLANS.
19. THIS SET OF PLANS MAY CONTAIN DRAWINGS PREPARED BY OTHER PROFESSIONALS, WHICH CONTAIN THE NAME, ADDRESS, AND LOGO OF THE PROFESSIONAL. COMMON OAK ENGINEERING, LLC IS NOT RESPONSIBLE FOR DRAWINGS PREPARED BY OTHER PROFESSIONALS.
20. ALL SPECIFICATIONS AND DOCUMENTS REFERENCED HEREIN SHALL BE OF THE LATEST REVISION.
21. ALL UNDERGROUND UTILITIES MUST BE IN-PLACE, TESTED AND INSPECTED PRIOR TO BASE AND SURFACE CONSTRUCTION.
22. WORK PERFORMED UNDER THIS CONTRACT SHALL INTERFACE SMOOTHLY WITH ANY OTHER WORK BEING PERFORMED ON-SITE BY OTHER CONTRACTORS/SUBCONTRACTORS AND UTILITY COMPANIES. IT WILL BE NECESSARY FOR THE GENERAL CONTRACTOR TO COORDINATE AND SCHEDULE ITS ACTIVITIES ACCORDINGLY. THE CONTRACTOR SHALL PLAN AND SCHEDULE THE SEQUENCE OF WORK IN ORDER TO PREVENT UNNECESSARY DELAYS OR COSTS ASSOCIATED WITH CRITICAL PATH ITEMS OF THE WORK. IT IS RECOMMENDED THAT A FINAL SCHEDULE SHALL BE GIVEN TO THE OWNER, THE OWNERS ENGINEER AND ARCHITECT. THE CONTRACTOR AND SUB-CONTRACTORS WILL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH DELAYS RELATED TO POOR SCHEDULE PLANNING.
23. ALL AREAS AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THE EXISTING CONDITION, UNLESS SPECIFICALLY EXEMPTED BY THE PLANS. THE COST FOR SUCH RESTORATION SHALL BE INCIDENTAL TO OTHER CONSTRUCTION AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
24. ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED, BY THE CONTRACTOR OR SUBCONTRACTORS, SHALL BE REPAIRED. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
25. THE CONTRACTOR SHALL REMAIN SOLELY RESPONSIBLE FOR ANY DESIGN CHANGES WHICH HE MAY INCORPORATE INTO THE PLANS WITHOUT PRIOR WRITTEN CONSENT AND/OR APPROVAL FROM THE OWNER AND ENGINEER.
26. ENGINEER IS NOT RESPONSIBLE FOR ANY INJURY OR DAMAGES RESULTING FROM CONTRACTOR'S FAILURE TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH THE APPROVED PLANS. IF CONTRACTOR AND/OR OWNER FAIL TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH APPROVED PLANS, THEY AGREE TO JOINTLY AND SEVERALLY INDEMNIFY AND HOLD ENGINEER HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT THE ENGINEER INCURS.
27. OWNER MUST MAINTAIN AND PRESERVE ALL PHYSICAL SITE FEATURES AND DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS, IN STRICT ACCORDANCE WITH THE APPROVED PLAN(S) AND DESIGN AND FURTHER, ENGINEER IS NOT RESPONSIBLE FOR ANY FAILURE TO SO MAINTAIN OR PRESERVE SITE AND/OR DESIGN FEATURES. IF OWNER FAILS TO MAINTAIN AND/OR PRESERVE ALL PHYSICAL SITE FEATURES AND/OR DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS, OWNER AGREES TO INDEMNIFY AND HOLD ENGINEER HARMLESS FOR ALL INJURIES
28. AS CONTAINED IN THESE DRAWINGS AND ASSOCIATED APPLICATION DOCUMENTS PREPARED BY THE SIGNATORY PROFESSIONAL ENGINEER, THE USE OF THE WORDS CERTIFY OR CERTIFICATION CONSTITUTES AN EXPRESSION OF 'PROFESSIONAL OPINION' REGARDING THE INFORMATION WHICH IS THE SUBJECT OF THE UNDERSIGNED PROFESSIONAL KNOWLEDGE OR BELIEF AND IN ACCORDANCE WITH COMMON ACCEPTED PROCEDURE CONSISTENT WITH THE APPLICABLE STANDARDS OF PRACTICE, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EITHER EXPRESSED OR IMPLIED.
29. UPON THE RECEIPT OF THE "NOTICE TO PROCEED", THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD AND ARRANGE A PRE-CONSTRUCTION CONFERENCE TO INCLUDE ALL INVOLVED GOVERNMENTAL AGENCIES, UTILITY OWNERS, THE OWNER AND THE ENGINEER OF RECORD.
30. ALL UTILITY EASEMENTS SHALL BE SECURED PRIOR TO CONSTRUCTION (IF REQUIRED) OR IF ALLOWED PRIOR TO CERTIFICATE OF OCCUPANCY. THESE EASEMENTS SHALL BE SKETCHED, DESCRIBED, AND RECORDED AT THE SOLE COST OF THE CONTRACTOR.
31. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL FURNISH THE OWNER'S ENGINEER WITH COMPLETE "AS-BUILT" INFORMATION, MINIMUM "AS-BUILT" SCOPE HEREIN, CERTIFIED BY A REGISTERED LAND SURVEYOR. NO ENGINEER'S CERTIFICATIONS FOR CERTIFICATE OF OCCUPANCY (C.O.) PURPOSES WILL BE MADE UNTIL THIS INFORMATION HAS BEEN RECEIVED AND APPROVED BY THE OWNER'S ENGINEER.
32. PROTECT BENCHMARKS, PROPERTY CORNERS, AND OTHER SURVEY MONUMENTS FROM DAMAGE OR DISPLACEMENT. IF MARKER NEEDS TO BE REMOVED, IT SHALL BE REFERENCED BY LICENSED LAND SURVEYOR AND REPLACED AS NECESSARY, BY SAME.
33. AFTER THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL PERFORM SITE CLEAN UP OPERTATION FOR REMOVAL OF ALL TRASH, DEBRIS, EXCESS MATERIAL & EQUIPMENT. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PRESENT THE SITE CLEAN & IN GOOD ORDER AT THE TIME OF FINAL ACCEPTANCE.
34. ALL EQUIPMENT SHALL BE HANDLED, STORED, INSTALLED, TESTED & OPERATED IN STRICT ACCORDANCE WITH THE APPLICABLE MANUFACTURES WRITTEN INSTRUCTIONS.
35. CONSULTANT IS NEITHER LIABLE NOR RESPONSIBLE FOR ANY SUBSURFACE CONDITIONS AND FURTHER, SHALL HAVE NO LIABILITY FOR ANY HAZARDOUS MATERIALS, HAZARDOUS SUBSTANCES, OR POLLUTANTS ON, ABOUT OR UNDER THE PROPERTY.
36. CONTRACTORS MUST EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ADA (HANDICAP) ACCESSIBLE COMPONENTS AND ACCESS ROUTES FOR THE SITE. THESE COMPONENTS, AS CONSTRUCTED, MUST COMPLY WITH THE CURRENT LOCAL CODE REQUIREMENTS, AS WELL AS STATE BUILDING CODE AND THE DEPARTMENT OF JUSTICE ADA STANDARDS AND REGULATIONS' BARRIER FREE ACCESS AND ANY MODIFICATIONS, REVISIONS OR UPDATES TO SAME.

HISTORICAL RESOURCES PRESERVATION NOTES:

1. IF PREHISTORIC OR HISTORIC ARTIFACTS, SUCH AS POTTERY OR CERAMICS, STONE TOOLS OR METAL IMPLEMENTS, OR ANY OTHER PHYSICAL REMAINS THAT COULD BE ASSOCIATED WITH NATIVE AMERICAN CULTURES, OR EARLY COLONIAL OR AMERICAN SETTLEMENT ARE ENCOUNTERED AT ANY TIME WITHIN THE PROJECT SITE AREA, THE PERMITTED PROJECT SHOULD CEASE ALL ACTIVITIES INVOLVING SUBSURFACE DISTURBANCE IN THE IMMEDIATE VICINITY OF SUCH DISCOVERIES. THE PERMITTEE, OR OTHER DESIGNEE, SHOULD CONTACT THE FLORIDA DEPARTMENT OF THE STATE, DIVISION OF HISTORICAL RESOURCES, REVIEW AND COMPLIANCE SECTION AT (850) 245-6333 OR (800) 847-7278, AS WELL AS THE APPROPRIATE PERMITTING AGENCY OFFICE. PROJECT ACTIVITIES SHOULD NOT RESUME WITHOUT VERBAL AND/OR WRITTEN AUTHORIZATION FROM THE DIVISION OF HISTORICAL RESOURCES.
2. IN THE EVENT THAT UNMARKED HUMAN REMAINS ARE ENCOUNTERED DURING PERMITTED ACTIVITIES, ALL WORK SHALL STOP IMMEDIATELY AND THE PROPER AUTHORITIES NOTIFIED IN ACCORDANCE WITH SECTION 872.05FLORIDA STATUES.
3. IF DURING CONSTRUCTION ACTIVITIES ANY EVIDENCE OF THE PRESENCE OF STATE AND/OR FEDERALLY PROTECTED PLANT AND/OR ANIMAL SPECIES OR THOSE LISTED AS THREATENED, ENDANGERED OR OF SPECIAL CONCERN IS DISCOVERED OR OBSERVED, WORK SHALL COME TO AN IMMEDIATE STOP AND THE DEVELOPER, OWNER, OR AGENT THEREOF SHALL NOTIFY THE FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION (FFWCC), THE U.S. FISH AND WILDLIFE SERVICE (USFWS) AND CITY/COUNTY AUTHORITIES WITHIN 24 HOURS OF THE PLANT AND/OR ANIMAL SPECIES FOUND ON THE SITE.

DEMOLITION NOTES:

1. THE DEMOLITION PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION ONLY, REGARDING ITEMS TO BE DEMOLISHED AND/OR REMOVED AND MAY NOT BE ALL INCLUSIVE. THE CONTRACTOR MUST REVIEW THE OTHER SITE PLAN DRAWINGS AND INCLUDE IN DEMOLITION ACTIVITIES ALL INCIDENTAL WORK NECESSARY FOR THE CONSTRUCTION OF THE NEW SITE IMPROVEMENTS.
2. CONTRACTOR MUST RAISE ANY QUESTIONS CONCERNING THE ACCURACY OR INTENT OF THESE PLANS OR SPECIFICATIONS, CONCERNS REGARDING THE APPLICABLE SAFETY STANDARDS, OR THE SAFETY OF THE CONTRACTOR OR THIRD PARTIES IN PERFORMING THE WORK ON THIS PROJECT, WITH THE OWNER OR THE OWNERS ENGINEER, IN WRITING, AND RESPONDED TO BY THE OWNER OR THE OWNERS ENGINEER, IN WRITING, PRIOR TO THE INITIATION OF ANY SITE ACTIVITY AND ANY DEMOLITION ACTIVITY. ALL DEMOLITION ACTIVITIES MUST BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS AND ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, RULES, REQUIREMENTS, STATUTES, ORDINANCES AND CODES.
3. PRIOR TO STARTING ANY DEMOLITION, CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL EROSION CONTROL DEVICES PER THE SWPPP CONTAINED WITHIN THESE CONSTRUCTION DOCUMENTS AND OBTAINING ALL REQUIRED PERMITS AND MAINTAINING THE SAME ON SITE FOR REVIEW BY THE ENGINEER AND OTHER PUBLIC AGENCIES HAVING JURISDICTION THROUGHOUT THE DURATION OF THE PROJECT, SITE WORK AND DEMOLITION WORK.
4. SITE DEMOLITION SHALL BE CONDUCTED IN SUCH A MANNER THAT OPERATIONS WILL HAVE MINIMAL INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES. DO NOT CLOSE OR OBSTRUCT STREET, WALKS OR OTHER OCCUPIED OR USED FACILITIES WITHOUT WRITTEN PERMISSION FROM AUTHORITIES HAVING JURISDICTION OVER SAID PROPERTY.
5. ALL EXISTING ITEMS TO REMAIN MUST BE PROTECTED IN SUCH A MANNER AS TO PREVENT DAMAGE.
6. ALL DAMAGED IMPROVEMENTS MUST BE RESTORED TO THEIR ORIGINAL CONDITION, OR BETTER, AS ACCEPTABLE TO THE PARTIES HAVING JURISDICTION.
7. STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES MUST BE PROTECTED FROM DAMAGED CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT AND OTHER HAZARDS CREATED BY DEMOLITION OPERATIONS.
8. IN THE ABSENCE OF SPECIFICATIONS, THE CONTRACTOR SHALL PERFORM EARTH MOVEMENT ACTIVITIES, DEMOLITION AND REMOVAL OF ALL FOUNDATION WALLS, FOOTINGS, AND OTHER MATERIALS WITHIN THE LIMITS OF DISTURBANCE IN ACCORDANCE WITH DIRECTION BY OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINEER.
9. EXPLOSIVES SHALL NOT BE USED WITHOUT PRIOR WRITTEN CONSENT OF BOTH THE OWNER AND APPLICABLE GOVERNMENTAL AUTHORITIES. ALL THE REQUIRED PERMITS AND EXPLOSIVE CONTROL MEASURES THAT ARE REQUIRED BY THE FEDERAL, STATE, AND LOCAL GOVERNMENTS SHALL BE IN PLACE PRIOR TO STARTING AN EXPLOSIVE PROGRAM. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ALL INSPECTION AND SEISMIC VIBRATION TESTING THAT IS REQUIRED TO MONITOR THE EFFECTS ON ALL LOCAL STRUCTURES.
10. USE DUST CONTROL MEASURES TO LIMIT AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR IN ACCORDANCE WITH FEDERAL, STATE, AND/OR LOCAL STANDARDS. AFTER THE DEMOLITION IS COMPLETE, ADJACENT STRUCTURES AND IMPROVEMENTS SHALL BE CLEANED OF ALL DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION.
11. CONTRACTOR IS RESPONSIBLE TO SAFEGUARD SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF UNAUTHORIZED PERSONS AT ANY TIME.
12. DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION WASTES AND DEBRIS (SOLID WASTE, REFUSE, COMBUSTIBLE DEBRIS, ETC.) SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL TOWN, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES.
13. ALL FENCES, MAILBOXES, AND SIGNAGE DISTURBED BY CONSTRUCTION SHALL BE RELOCATED OR REPLACED AT NO ADDITIONAL COST TO OWNER.
14. ANY UTILITIES ENCOUNTERED DURING DEMOLITION THAT ARE NOT DEPICTED/ADDRESSED ON THE CONSTRUCTION DOCUMENTS SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER. THE CONTRACTOR SHALL COORDINATE WITH UTILITY OWNER PRIOR TO REMOVAL AND/OR RELOCATION.

CLEARING AND SITE PREPARATION NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION OF THE EROSION CONTROL DEVICES, AS SHOWN ON THE CONSTRUCTION PLANS, PRIOR TO ANY SITE CLEARING. REFER TO THE "EROSION CONTROL PLAN" CONTAINED HEREIN THE CONSTRUCTION DOCUMENT FOR ADDITIONAL REQUIREMENTS.
2. UNLESS OTHERWISE DIRECTED BY THE OWNER OR ENGINEER, THE CONTRACTOR IS EXPECTED TO CONTAIN ALL CONSTRUCTION ACTIVITIES WITHIN THE PROPERTY, RIGHT-OF-WAY, AND EASEMENTS AS INDICATED ON THE DRAWINGS. AT NOT TIME SHALL THE CONTRACTOR DISTURB SURROUNDING PROPERTIES OR TRAVELS ON SURROUNDING PROPERTIES WITHOUT WRITTEN PERMISSION FORM THE GOVERNING OWNER. THE CONTRACTOR SHALL BARE THE RESPONSIBILITY OF ALL COST RELATED TO REPAIRS/RECONSTRUCTION OF DAMAGED AREAS TO SURROUNDING PROPERTIES.
3. PRIOR TO ANY SITE CLEARING, ALL TREES SHOWN TO REMAIN, AS INDICATED ON THE CONSTRUCTION PLANS, SHALL BE PROTECTED IN ACCORDANCE WITH LOCAL TREE ORDINANCES, AND DETAILS CONTAINED IN THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THESE TREES IN GOOD CONDITION. NO TREE(S) SHOWN TO REMAIN SHALL BE REMOVED WITHOUT WRITTEN APPROVAL FROM THE OWNER AND THE LOCAL AGENCY HAVING JURISDICTION OVER THESE ACTIVITIES.
4. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION STAKE OUT THE CONSTRUCTION, ESTABLISH LINES AND LEVELS, TEMPORARY BENCH MARKS, BATTER BOARDS, CENTERLINES, BASELINE AND REFERENCE POINTS FOR THE PROPOSED WORK AND VERIFY ALL DIMENSIONS RELATING TO THE INTERCONNECTIONS WITH EXISTING FEATURES. ANY INCONSISTENCIES IN THE PROPOSED GRADES, LINES AND LEVELS, DIMENSIONS AND LOCATIONS SHALL BE REPORT TO THE ENGINEER.
5. THE CONTRACTOR SHALL CLEAR AND GRUB ONLY THOSE PORTIONS OF THE SITE NECESSARY FOR CONSTRUCTION. ALL DISTURBED AREAS MUST BE SODDED WITH BAHIA SOD, UNLESS OTHERWISE NOTED ON PLANS, IMMEDIATELY FOLLOWING CONSTRUCTION.
6. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED AS PER PLANS. THE AREAS SHALL THEN BE SODDED OR SEEDED AS SPECIFIED IN THE PLANS, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL EARTHEN AREAS WILL BE SODDED OR SEEDED AND MULCHED AS SHOWN ON THE LANDSCAPING PLAN.
7. THE TOP 4" TO 6" OF GROUND REMOVED DURING CLEARING AND GRUBBING ACTIVITIES SHALL BE STOCKPILED, TO BE USED FOR LANDSCAPING PURPOSES, UNLESS OTHERWISE DIRECTED BY THE OWNER. REMAINING EARTHWORK THAT RESULTS FROM CLEARING AND GRUBBING OR SITE EXCAVATION IS TO BE UTILIZED ON-SITE, PROVIDED THE MATERIAL IS DEEMED SUITABLE BY THE OWNER'S SOILS TESTING COMPANY. EXCESS MATERIAL IS TO EITHER BE STOCKPILED ON-SITE, AS DIRECTED BY THE OWNER OR OWNER'S ENGINEER, OR REMOVED FROM THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING EXCESS EARTHWORK FROM THE SITE.
8. ANY WELLS DISCOVERED ON SITE THAT WILL HAVE NO USE MUST BE PLUGGED BY A LICENSED WELL DRILLING CONTRACTOR IN A MANNER APPROVED BY ALL JURISDICTIONAL AGENCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY WELL ABANDONMENT PERMITS REQUIRED.
9. ANY WELL DISCOVERED DURING EARTH MOVING OR EXCAVATION SHALL BE REPORTED TO THE APPROPRIATE JURISDICTIONAL AGENCIES WITHIN 24 HOURS AFTER DISCOVERY IS MADE.
10. ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR, IN ACCORDANCE WITH APPLICABLE REGULATORY AGENCY REQUIREMENTS. A DUMPSTER OR OTHER CONTAINER SUITABLE IN SIZE TO CONTAIN ALL WASTE MATERIAL SHALL BE PROVIDED DURING THE CONSTRUCTION.
11. GRUBBING SHALL CONSIST OF REMOVING AND DISPOSING OF STUMPS, ROOTS LARGER THAN 2" IN DIAMETER, AND MATTED ROOTS. REMOVE TO A DEPTH OF NOT LESS THAN 18" BELOW THE ORIGINAL SURFACE LEVEL OF THE GROUND.
12. THE CONTRACTOR IS TO PREPARE THE SITE IN ACCORDANCE WITH THE SOILS REPORT (ARDAMAN & ASSOCIATES, INC.), COPIES OF WHICH ARE AVAILABLE THROUGH THE OWNER OR SOILS TESTING COMPANY DIRECTLY.
13. POSITIVE DRAINAGE FACILITIES SHALL BE ESTABLISHED PRIOR TO THE CONSTRUCTION OF ANY IMPERVIOUS SURFACES AND DRAINAGE SHALL BE MAINTAINED DURING THE CONSTRUCTION PROCESS. THE DRAINAGE PATTERNS SHALL NOT BE ALTERED UNLESS DENOTED ON THE CONTRACT DOCUMENTS.
14. CONTRACTOR MUST ENSURE ALL SOILS SLOPE AWAY FROM THE BUILDING AT A MINIMUM OF $\frac{1}{4}$" OVER 10 FEET. SOD OR GROUND COVER SHALL NOT BE PLACED EVENLY WITH THE FINISHED FLOOR ELEVATION.

TRENCHING, EXCAVATION, AND FILL:

1. THE CONTRACTOR SHALL PERFORM HIS OWN INVESTIGATIONS AND CALCULATIONS AS NECESSARY TO ASSURE HIMSELF OF EARTHWORK QUANTITIES. THERE IS NO IMPLICATION THAT EARTHWORK BALANCES AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY IMPORT FILL NEEDED. EXCESS FILL MATERIALS SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.
2. THE CONTRACTOR SHALL RECOGNIZE AND ABIDE BY ALL OSHA EXCAVATION SAFETY STANDARDS, INCLUDING THE FLORIDA TRENCH SAFETY ACT (FS 553.60-553.64). ANY MATERIAL, CONSTRUCTION METHODS, OR MATERIAL COST TO COMPLY WITH THESE LAWS SHALL BE INCIDENTAL TO THE CONTRACT.
3. DURING THE EXCAVATION/TRENCHING PROCESS IF GROUNDWATER IS ENCOUNTERED, THE CONTRACTOR SHALL FOLLOW THE DEWATERING NOTES HERE WITHIN.
4. ROUGH EXCAVATE AND GRADE ANY PROPOSED STORMWATER PONDS AT THE START OF SITE GRADING ACTIVITIES. SITE RUNOFF SHALL BE DIRECTED TO THE PONDS TO MINIMIZE RUNOFF TO OFFSITE AREAS.
5. POND CONSTRUCTION SHALL RESULT IN THE FINISHED POND HAVING SIDE SLOPES AND DIMENSIONS THAT ARE IN ACCORDANCE WITH THE CONSTRUCTION DRAWINGS. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO ENSURE THAT THESE REQUIREMENTS HAVE BEEN MET. IF THE CONSTRUCTED SIDE SLOPES ARE STEEPER THAN THE REQUIRED SIDE SLOPES, OR THE POND VOLUME IS NOT WITHIN THREE (3) PERCENT OF THE DESIGN VOLUME, THE CONTRACTOR MAY BE REQUIRED TO MAKE CORRECTIONS TO THE POND AT NO ADDITIONAL COST TO THE OWNER.
6. IT IS INTENDED THAT PREVIOUSLY EXCAVATED MATERIALS CONFORMING TO THE FOLLOWING REQUIREMENTS BE UTILIZED WHEREVER POSSIBLE.
   A. ACCEPTABLE MATERIALS: AASHTO M145 CLASSIFICATION A-1, A-3, A-2-4, A-2-6; ASTM D2487 CLASSIFICATION GW, GP, GM, SM, SW, SP; UNLESS OTHERWISE DISAPPROVED WITHIN THE GEOTECHNICAL REPORT OR BY THE GEOTECHNICAL ENGINEER. NO MORE THAN 12% OF ACCEPTABLE MATERIALS SHALL PASS THE NUMBER 200 SIEVE.
   B. UNACCEPTABLE MATERIALS: AASHTO M145 CLASSIFICATION A-2-5, A-2-7, A-4, A-5, A-6, A-7, A-8; ASTM D2487 CLASSIFICATION GC, SC, ML, MH, CL, CH, OL, OH, PT; UNLESS OTHERWISE APPROVED WITHIN GEOTECHNICAL REPORT OR BY THE GEOTECHNICAL ENGINEER.
7. PROVIDE BARRIERS, WARNING LIGHTS AND OTHER PROTECTIVE DEVICES AT ALL EXCAVATIONS.
8. SIDEWALKS, ROADS, STREETS, AND PAVEMENTS SHALL NOT BE BLOCKED OR OBSTRUCTED BY EXCAVATED MATERIALS, EXCEPT AS AUTHORIZED BY THE ENGINEER, IN WHICH CASE ADEQUATE TEMPORARY PROVISIONS MUST BE MADE FOR SATISFACTORY TEMPORARY PASSAGE OF PEDESTRIANS, AND VEHICLES. MINIMIZE INCONVENIENCE TO PUBLIC TRAVEL OR TO TENANTS OCCUPYING ADJOINING PROPERTY.
9. FURNISH, INSTALL, AND MAINTAIN, WITHOUT ADDITIONAL COMPENSATION, SHEETING, BRACING, AND SHORING SUPPORT REQUIRED TO KEEP EXCAVATIONS WITHIN THE PROPERTY OR EASEMENTS PROVIDED, TO SUPPORT THE SIDES OF THE EXCAVATION, AND TO PREVENT ANY MOVEMENT WHICH MAY DAMAGE ADJACENT PAVEMENTS OR STRUCTURES, DAMAGE OR DELAY THE WORK, OR ENDANGER LIFE AND HEALTH. VOIDS OUTSIDE THE SUPPORTS SHALL BE IMMEDIATELY FILLED AND COMPACTED.
10. SHEETING, SHORING, AND BRACING USED FOR THE SUPPORT OF EXCAVATIONS OVER 20 FEET DEEP SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED BY THE STATE OF FLORIDA. THIS WILL BE PROVIDED FOR AT THE CONTRACTORS EXPENSE AND THE FINAL DESIGN SHALL BE PROVIDED TO THE SITE ENGINEER FOR RECORD.
11. ALL EXCAVATIONS SHALL BE MADE BY OPEN CUT UNLESS OTHERWISE INDICATED. SLOPE SIDES OF TRENCHES IN ACCORDANCE WITH OSHA REQUIREMENTS AND THE RECOMMENDATIONS CONTAINED WITHIN THE PROJECT GEOTECHNICAL REPORT.
12. EXCAVATE TRENCHES TO DEPTH INDICATED OR REQUIRED FOR INDICATED FLOW LINES AND INVERT ELEVATIONS. OVER EXCAVATE TRENCHES A MINIMUM OF 2 FEET WHERE EXCAVATIONS OCCUR WITHIN UNSUITABLE SOILS, AND REPLACE OVER EXCAVATED MATERIAL WITH SUITABLE SOILS.
13. EXCEPT AS OTHERWISE INDICATED, EXCAVATE FOR PRESSURE PIPING SO TOP OF PIPING IS MINIMUM 3 FEET BELOW FINISHED GRADE.
14. TRENCH BOTTOMS AND THE BOTTOMS OF ALL STRUCTURES SHALL BE KEPT DRY, COMPACTED, AND STABLE TO A DEPTH TWO FEET BELOW THE BOTTOM OF THE TRENCH OR STRUCTURE.
15. ALL BEDDING, FILL, AND BACKFILL MATERIAL SHALL BE SUITABLE SOILS OR FLOWABLE FILL. WHERE TRENCH OR EXCAVATION IS WITHIN THE INFLUENCE AREA OF ROADWAYS, STRUCTURES, FOUNDATIONS, OR SLABS, PLACE BACKFILL IN LAYERS OF 8 INCH LOOSE DEPTH. IN ALL OTHER AREAS, PLACE FILL AND BACKFILL IN LAYERS OF 12 INCH LOOSE DEPTH.
16. IF SOLVENT CONTAMINATION IS FOUND VIA AN EXCAVATION ACTIVITY OR IN GENERAL, THE CONTRACTOR SHALL BE STOPPED AND THE PROPER AUTHORITIES NOTIFIED. WITH APPROVAL OF THE GOVERNING AGENCY, DUCTILE IRON PIPE, FITTINGS AND SOLVENT RESISTANT GASKET MATERIAL SUCH AS FLUOROCARBON SHALL BE USED IN THE CONTAMINATED AREA. THE DUCTILE IRON PIPE SHALL EXTEND AT LEAST 100 FEET BEYOND ANY SOLVENT DISCOVERED. ANY CONTAMINATED SOIL THAT IS EXCAVATED SHALL BE PLACED ON AN IMPERMEABLE MAT AND COVERED WITH A WATERPROOF COVERING. THE PROPER AUTHORITIES WILL BE NOTIFIED AND THE CONTAMINATED SOILS HELD FOR PROPER DISPOSAL.

TESTING AND INSPECTION REQUIREMENTS (TRENCHING, EXCAVATION, AND FILL):

1. ALL SITE WORK CONSTRUCTION TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH THE PROJECTS GEOTECHNICAL REPORT AND/OR THE TESTING PARAMETERS OF THE LOCAL MUNICIPALITY/AGENCY HAVING JURISDICTION OVER THE SITE WORK. THE MORE STRINGENT REQUIREMENTS SHALL APPLY.
2. MINIMUM DENSITY REQUIREMENT (ASTM D1557 OR AASHTO T180): BACKFILL AND FILL UNDER AND WITHIN THE INFLUENCE AREA OF ROADWAYS, STRUCTURES, SLABS, FOUNDATIONS = 98 PERCENT; BACKFILL AND FILL PLACED WITHIN PUBLIC ROAD RIGHT-OF-WAY AND UTILITY EASEMENTS = 95 PERCENT; BACKFILL AND FILL PLACED WITHIN POND AND ROAD EMBANKMENT = 95 PERCENT; BACKFILL AND FILL PLACED IN ALL OTHER AREAS = 90 PERCENT.
3. FIELD DENSITY TESTING FREQUENCIES: A) ONE TEST FOR EACH 10,000 SQUARE FEET OR FRACTION THEREOF PER LIFT OF GENERAL BACKFILLING, MINIMUM 2 TESTS EACH LAYER; B) ONE TEST FOR EACH 100 SQUARE FEET OR FRACTION THEREOF OF BACKFILL AROUND AND UNDER STRUCTURES; C) ONE TEST FOR EACH 300 LINEAL FEET OR FRACTION THEREOF PER LIFT OF GENERAL BACKFILLING IN THE PIPELINE TRENCH; D) ONE TEST PER LIFT PER EACH CHANGE IN TYPE OF FILL; E) ONE TEST PER 1000 SQUARE FEET OF PAVEMENT SUBGRADE, MINIMUM OF 2 TESTS.

DRAINAGE SYSTEM NOTES:

1. FDOT STANDARD INDEXES REFER TO THE 2023-2024 EDITION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS".
2. ALL STORM PIPING LOCATED ON PROPERTY AND NOT IN A DEDICATED EASEMENT SHALL BE INSTALLED PER THE FLORIDA BUILDING CODE - PLUMBING.
3. PIPE LENGTHS SHOWN ARE APPROXIMATE AND TO CENTER OF DRAINAGE STRUCTURES, WITH THE EXCEPTION OF MITERED END AND FLARED END SECTIONS, WHICH ARE NOT INCLUDED IN LENGTHS.
4. MINIMUM COVER OVER THE DRAINAGE PIPE, INCLUDING COVER OVER THE BELL OF THE PIPE WHERE APPLICABLE, SHALL COMPLY WITH CURRENT FDOT STANDARDS. ANY DEVIATION FROM THE PIPE COVER CRITERIA SHOULD BE DISCUSSED WITH THE ENGINEER.
5. RCP STORM SEWER PIPE SHALL BE REINFORCED CONCRETE CLASS III (ASTM C-76) UNLESS OTHERWISE INDICATED ON THE CONSTRUCTION DOCUMENTS. ROUND CONCRETE PIPE SHALL COMPLY WITH ASTM C76. ELLIPTICAL CONCRETE PIPE SHALL COMPLY WITH ASTM C507. PIPE JOINTS SHALL COMPLY WITH ASTM C443 AND CURRENT FDOT SPECIFICATIONS, AND RUBBER GASKETS SHALL COMPLY WITH CURRENT FDOT SPECIFICATIONS.
6. RCP PIPE SHALL NOT BE SHIPPED FROM MANUFACTURER UNTIL THE COMPRESSIVE STRENGTH OF THE PIPE HAS REACHED 4000 PSI AND A MINIMUM OF 5 DAYS HAVE PASSED SINCE THE MANUFACTURING OR REPAIR OF THE PIPE HAS BEEN COMPLETED.
7. CORRUGATED POLYETHYLENE PIPE AND FITTINGS 4 INCH THROUGH 10 INCH DIAMETER SHALL COMPLY WITH AASHTO M252, TYPE S. PIPE 12 INCH THROUGH 48 INCH DIAMETER SHALL COMPLY WITH AASHTO M294, TYPE S, AND ASTM F2306. PIPE 54 INCH THROUGH 60 INCH DIAMETER SHALL COMPLY WITH FDOT SPECIFICATION SECTION 948 (CLASS II PIPE) AND SHALL COMPLY WITH AASHTO M294. BELL JOINTS FOR 4 INCH THROUGH 10 INCH DIAMETER PIPE SHALL BE PUSH-ON SLEEVE. BELL JOINTS FOR 12 INCH THROUGH 60 INCH DIAMETER PIPE SHALL BE INTEGRALLY FORMED ON PIPE. PIPE JOINTS SHALL BE WATERTIGHT PER ASTM 03212. GASKETS SHALL BE INSTALLED BY PIPE MANUFACTURER AND SHALL COMPLY WITH ASTM F477.
8. POLYETHYLENE PIPE SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321. THE PIPE SHALL BE BACKFILLED AND COMPACTED EVENLY ON EACH SIDE TO PREVENT DISPLACEMENT. MINIMUM COVER OVER POLYETHYLENE PIPE SHALL BE 36 INCHES OR ONE PIPE DIAMETER. WHERE THE BEDDING IS MANUFACTURED AGGREGATES CLASS 1A OR 1B AS DEFINED IN ASTM 02321 THEN THE MINIMUM COVER SHALL BE 30 INCHES OR ONE PIPE DIAMETER, WHICHEVER IS GREATER.
9. UNDERDRAIN PIPE SHALL BE PERFORATED POLYVINYL CHLORIDE PIPE IN ACCORDANCE WITH ASTM F758. FILTER FABRIC UNDERDRAIN SOCK SHALL BE TYPE D-3 IN ACCORDANCE WITH CURRENT FDOT INDEX SPECIFICATIONS.
10. UNDERDRAINS SHALL BE INSTALLED IN ACCORDANCE WITH FDOT SPECIFICATION SECTION 440 AND CLEANOUTS SHALL BE INSTALLED AS SHOWN ON CONSTRUCTION DOCUMENTS.
11. RIP-RAP SHALL MEET THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 530. GEOTEXTILE FABRIC AND TURF MAT SHALL MEET THE REQUIREMENTS OF CURRENT FDOT SPECIFICATIONS.
12. STORMWATER ROOF DRAIN LOCATIONS ARE BASED ON PRELIMINARY ARCHITECTURAL PLANS. CONTRACTOR IS RESPONSIBLE TO AND FOR VERIFYING LOCATIONS OF SAME BASED ON FINAL ARCHITECTURAL PLANS.
13. ALL PIPE JOINTS SHALL BE WRAPPED WITH FILTER FABRIC. FILTER FABRIC SHALL BE IN ACCORDANCE WITH CURRENT FDOT SPECIFICATIONS, TYPE D-3, A.O.S. 70-100. INSTALL IN ACCORDANCE WITH CURRENT FDOT SPECIFICATIONS. PROVIDE MINIMUM 12" OVERLAP.
14. ALL STORM STRUCTURES ARE TO BE PLACED ON A 12 INCH BED OF CRUSHED STONE OR EQUAL AS APPROVED BY THE GOVERNING JURISDICTION AND OR ENTITY AND BE FULLY ENVELOPED WITH FILTER FABRIC.
15. ALL DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH CURRENT F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS UNLESS OTHERWISE NOTED ON PLANS.
16. ALL DRAINAGE STRUCTURE GRATES AND COVERS SHALL BE TRAFFIC RATED FOR H-20 LOADING UNLESS SPECIFIED OTHERWISE.
17. ALL NEWLY CONSTRUCTED DRY STROMWATER FACILITIES (I.E. SWALES, PONDS, ETC.) SHOWN MUST HAVE THE TOP 6 INCHES SCARIFIED AFTER FINAL GRADING HAS TAKEN PLACE, BUT PRIOR TO SEEDING OR FINAL SODDING.

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

This item has been digitally signed and sealed by Jeremy R. Anderson, PE, on the date indicated here.

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CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP
&
SE 58TH AVE
BELLEVIEW, FL
MARION COUNTY

NO:	DATE:	REVISION / ISSUE:	BY:

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

PROJECT # 222.108
DATE 05/13/2024
SCALE N.T.S.
SHEET C2.0

GENERAL NOTES

18. CONSTRUCTION OF THE STORMWATER MANAGEMENT SYSTEM MUST BE COMPLETE AND ALL DISTURBED AREAS STABILIZED IN ACCORDANCE WITH THE PERMITTED PLANS AND CONDITIONS PRIOR TO ANY OF THE FOLLOWING: ISSUANCE OF THE FIRST CERTIFICATE OF OCCUPANCY; INITIATION OF INTENDED USE OF THE INFRASTRUCTURE; OR TRANSFER OF RESPONSIBILITY FOR MAINTENANCE OF THE SYSTEM TO A LOCAL GOVERNMENT OR OTHER RESPONSIBLE ENTITY.

19. ALL STORM WATER SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED AND RESEEDED AS NEEDED. SEEDED AREAS WILL NOT BE ACCEPTED BY ENGINEER FOR CLEARANCE UNLESS A 1 INCH STAND HAS BEEN ESTABLISHED. IF THE ACCEPTABLE STAND IS NOT MEET THEN THE AREA DESIGNATED FOR SEED WILL BE SODED AT NO ADDITIONAL COST TO THE OWNER.

20. PRIOR TO INSPECTIONS AND TESTING ALL INSTALLED LINES AND STRUCTURES MUST BE CLEANED.

TESTING AND INSPECTION REQUIREMENTS (DRAINAGE):

1. THE STORM DRAINAGE PIPING AND STORM WATER POND SYSTEM SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL. CONTRACTOR TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE INSPECTION.
2. THE ENGINEER RESERVES THE RIGHT TO HAVE ALL DRY STORM WATER FEATURES TESTED BY AN APPROVED SOILS ENGINEER TO ENSURE INFILTRATION RATES ARE WITHIN DESIGN PARAMETERS REFER TO AS-BUILT REQUIREMENT HEREIN.
3. DENSITIES AT UTILITY AND STORM STRUCTURES (INLET/MANHOLES WITHIN ROADWAY TO 3' IN BACK OF CURB) SHALL BE 98% WITHIN PAVEMENT AREAS, AND A DENSITY OF 95% FOR STRUCTURES OUTSIDE PAVED AREAS PER AASHT0-180 (MODIFIED) IS REQUIRED.
4. THE CONTRACTOR SHALL MAINTAIN AND PROTECT FROM MUD, DIRT, DEBRIS, ETC. THE STORM DRAINAGE SYSTEM UNTIL FINAL ACCEPTANCE OF THE PROJECT. THE STORM SYSTEM WILL BE REINSPECTED BY THE OWNERS ENGINEER PRIOR TO APPROVAL FOR CERTIFICATE OF OCCUPANCY PURPOSES. THE CONTRACTOR MAY BE REQUIRED TO RECLEAN PIPES AND INLETS FOR THESE PURPOSES.
5. AS REQUIRED BY THE OWNER ALL STORM PIPE SHALL BE SUBJECTED TO LEAKAGE TESTING. WHEN THE GROUNDWATER LEVEL IS ABOVE THE TOP OF THE PIPE, AN INFILTRATION TEST SHALL BE PERFORMED BY SEALING OFF A LENGTH OF PIPE AND MEASURING THE DEPTH OF FLOW OVER A MEASURING WEIR, OR BY PUMPING THE INFILTRATED WATER INTO CONTAINERS FOR MEASUREMENT. TESTS SHALL BE CONDUCTED FOR A MINIMUM OF FOUR HOURS. INFILTRATION LEAKAGE SHALL NOT EXCEED 150 GALLONS PER 24 HOURS, PER INCH DIAMETER, PER MILE OF PIPE. WHEN THE GROUNDWATER LEVEL IS BELOW THE TOP OF THE PIPE, THE PIPE SHALL BE TESTED FOR LEAKAGE BY EXFILTRATION. EXFILTRATION LEAKAGE TEST SHALL CONSIST OF ISOLATING THE PARTICULAR SECTION, FILLING IT WITH WATER TO A POINT 4 FEET ABOVE THE TOP OF THE PIPE AT THE UPPER MANHOLE OR INLET, AND ALLOWING IT TO STAND FOR NO LESS THAN FOUR HOURS. THE SECTION SHALL THEN BE REFILLED WITH WATER UP TO THE ORIGINAL LEVEL AND AFTER TWO HOURS THE DROP IN WATER SURFACE SHALL BE MEASURED. THE COMPUTED LEAKAGE SHALL NOT EXCEED 150 GALLONS PER INCH DIAMETER, PER 24 HOURS, PER MILE OF PIPE.

GAS, ELECTRICAL, TELEPHONE, CABLE TV AND UTILITIES:

ENGINEER IS NOT RESPONSIBLE FOR THE DESIGN OF GAS, ELECTRIC, TELEPHONE, FIBER OR CABLE TV UTILITIES, AND ANY INFORMATION PERTAINING TO THE DESIGN OR LOCATION OF THOSE UTILITIES IS SHOWN ON THE CIVIL DRAWINGS FOR GENERAL REFERENCE ONLY. REFER TO ELECTRICAL PLANS FOR ACTUAL LOCATIONS OF THESE UTILITIES AND FOR SPECIFIC NOTES AND INFORMATION.

6. MATERIALS INTERFERING WITH CONSTRUCTION AND ABANDONED UTILITY LINES, PIPES, STRUCTURES, AND OTHER SUBTERRANEAN OBJECTS SHALL BE REMOVED. ALL MATERIALS NOT CLAIMED BY THE OWNER SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN A LEGAL MANNER.
7. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL EXISTING UTILITIES AND COORDINATING WITH THE APPROPRIATE UTILITY AUTHORITIES BEFORE CONSTRUCTION COMMENCES. CONTRACTOR MUST CALL SUNSHINE STATE ONE CALL (OR PRIVATE LOCATER) FOR UTILITY LOCATES 48 HOURS PRIOR TO CONSTRUCTION AT 1-800-432-4770. ANY UTILITY CONFLICTS SHALL BE REPORTED TO THE ENGINEER AND RESOLVED PRIOR TO CONSTRUCTION.
8. INSTALL ALL REQUIRED CONDUIT TO THE PROPERTY PER LINE FOR APPLICABLE UTILITY SERVICE. COORDINATE WITH UTILITY PROVIDER, ELECTRICAL ENGINEER AND ARCHITECTURAL PLANS ON FINAL SIZE AND LOCATION OF CONDUIT.

WATER SYSTEM NOTES:

GOVERNING JURISDICTIONAL PUBLIC WORKS AND/OR UTILITY STANDARDS ARE MINIMUM STANDARDS FOR PUBLIC POTABLE WATER, RECLAIMED WATER AND/OR SANITARY SEWER CONSTRUCTION. IF THERE IS A CONFLICT BETWEEN THOSE REQUIREMENTS AND THOSE LISTED BELOW THE MORE STRINGENT REQUIREMENTS SHALL APPLY.

1. SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS SHOULD ALWAYS CROSS UNDERNEATH WATER MAINS. INSTALLATIONS OF SANITARY SEWERS, FORCE MAINS AND STORM SEWERS, AT CROSSINGS OF WATER MAINS, SHALL BE PERFORMED SO AS 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. THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER JOINTS AND WATER JOINTS SHALL BE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN 10 FEET BETWEEN ANY TWO JOINTS. WHERE SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 18 INCHES VERTICAL DISTANCE, BOTH THE SEWER AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP), AT THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS IF IT IS NOT AVAILABLE IN THE SIZE PROPOSED.). SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO (2) JOINTS IN LIEU OF DIP, THE SANITARY SEWER MAY BE PLACED IN A SLEEVE FOR 20 FEET CENTERED ON THE POINT OF CROSSING. 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. WHERE THERE IS NO ALTERNATIVE TO SEWER PIPES CROSSING OVER WATER MAINS, THE CRITERIA FOR MINIMUM SEPARATION OF 18 INCHES BETWEEN LINES, AND 10 FEET BETWEEN JOINTS CENTERED AT THE POINT OF CROSSING SHALL BE REQUIRED. THE WATER MAIN SHALL BE PLACED IN A SLEEVE FOR 20 FEET CENTERED ON THE POINT OF CROSSING. ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO PREVENT DAMAGE TO THE WATER MAIN. CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (I.E... PIPES CENTERED ON THE CROSSING). WHERE A PROPOSED PIPE CONFLICTS WITH AN EXISTING PIPE, THE PROPOSED PIPE SHALL BE CONSTRUCTED OF DIP, AND THE CROSSING SHALL BE ARRANGED SO AS TO SATISFY THE REQUIREMENTS IDENTIFIED ABOVE.

   WHEN THE RECLAIMED WATER LINE IS TRANSPORTING WATER FOR PUBLIC ACCESS IRRIGATION:

   MAXIMUM OBTAINABLE SEPARATION OF RECLAIMED WATER LINES AND DOMESTIC WATER LINES SHALL BE PRACTICED. A MINIMUM HORIZONTAL SEPARATION OF FIVE FEET (CENTER TO CENTER) OR THREE FEET (OUTSIDE TO OUTSIDE) SHALL BE MAINTAINED BETWEEN RECLAIMED WATER LINES AND EITHER POTABLE WATER MAINS OR SEWAGE COLLECTION LINES. AN 18 INCH VERTICAL SEPARATION SHALL BE MAINTAINED AT CROSSINGS.

   WHEN THE RECLAIMED WATER LINE IS TRANSPORTING WATER FOR NON-PUBLIC ACCESS IRRIGATION:

   THE RECLAIMED WATER MAIN SHALL BE TREATED LIKE A SANITARY SEWER, AND A 10-FT. HORIZONTAL AND 18 INCH VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN THE RECLAIMED WATER MAIN AND ALL EXISTING OR PROPOSED POTABLE WATER MAINS. NO MINIMUM SEPARATION IS REQUIRED BETWEEN THE RECLAIMED WATER MAIN AND SANITARY SEWERS, OTHER THAN NECESSARY TO ENSURE STRUCTURAL INTEGRITY AND PROTECTION OF THE LINES THEMSELVES.

2. A MINIMUM 10 FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN (INCLUDING FORCE MAINS) AND EXISTING OR PROPOSED WATER MAINS, IN PARALLEL INSTALLATIONS, WHENEVER POSSIBLE. THE DISTANCE FOR SEPARATION SHALL BE MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10 FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE INSTALLED IN A SEPARATE TRENCH, OR IN AN UNDISTURBED EARTH SHELF, LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN, AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER LINE, AND WATER AND SEWER JOINTS SHALL BE STAGGERED. WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 18 INCHES, IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR FORCE MAIN SHALL BE CONSTRUCTED OF DIP (IF AVAILABLE IN THE SIZE PROPOSED), WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE LOCATED ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (i.e.. STAGGERED JOINTS).
3. ALL DIP PIPE SHALL BE MW CLASS 50 OR PRESSURE CLASS 250. REFER TO NOTE #9 BELOW FOR ADDITIONAL DIP SPECIFICATIONS. ADEQUATE MEASURES AGAINST CORROSION SHALL BE UTILIZED.
4. ALL UTILITIES SHALL BE INSTALLED WITH COMPLIANCE TO GOVERNING JURISDICTION WATER DISTRICT STANDARD CONSTRUCTION DETAILS AND LAND DEVELOPMENT CODE.
5. ALL WATER MAINS SHALL BE INSTALLED WITH A MINIMUM OF 36 INCHES OF COVER WHERE POSSIBLE. 48" MAXIMUM COVER UNLESS SPECIFIED OTHERWISE ON THE CONSTRUCTION DOCUMENTS.
6. ALL WATER SERVICE LINES, VALVES AND METERS SHALL BE INSTALLED TO COMPLY WITH APPLICABLE MUNICIPALITY/AGENCY DEPARTMENT STANDARDS AND SPECIFICATIONS.
7. NO LEAKAGE IS ALLOWED IN EXPOSED PIPING, BURIED PIPING WITH FLANGED, THREADED, OR WELDED JOINTS OR BURIED NON POTABLE PIPING IN CONFLICT WITH POTABLE WATER LINES. TESTED SECTIONS OF BURIED PIPING WITH SLIP-TYPE OR MECHANICAL JOINTS WILL NOT BE ACCEPTED IF IT HAS A LEAKAGE RATE IN EXCESS OF THAT RATE DETERMINED BY THE FORMULA LISTED HEREIN THE WATER TESTING SECTION.
8. THRUST BLOCKING SHALL BE PROVIDED AT ALL FITTINGS AND HYDRANTS, IN ACCORDANCE WITH APPLICABLE UTILITY DEPT. SPECIFICATIONS.
9. ALL DUCTILE IRON PIPE SHALL BE MANUFACTURED IN ACCORDANCE WITH THE LATEST EDITION OF AWWA C151/A21.51. PIPE SHALL BE FURNISHED IN 18 OR 20 FOOT SECTIONS, PIPE THICKNESS SHALL BE CLASS 50, UNLESS OTHERWISE SPECIFIED.
10. ALL PIPE, PIPE FITTINGS, PIPE JOINT PACKING AND JOINTING MATERIALS, VALVES, FIRE HYDRANTS, AND METERS INSTALLED UNDER THIS PROJECT SHALL CONFORM TO APPLICABLE AWWA STANDARDS.
11. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT SHALL BE COLOR CODED OR MARKED IN ACCORDANCE WITH FDEP SUBPARAGRAPH 62-555.320(21) (b) 3, F.A.C., USING BLUE AS A PREDOMINATE COLOR.
12. ALL WATER AND REUSE MAINS SHALL BE ALLOWED TO DEFLECT PER MANUFACTURERS SPECIFICATIONS.
13. ALL ON-SITE FIRE HYDRANTS SHALL BE PAINTED WITH HIGH GRADE ENAMEL FEDERAL, COLOR SHALL COMPLY WITH APPLICABLE UTILITY HAVING JURISDICTION, AND BE OSHA APPROVED, AND MUST BE LOCATED A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT OR BACK OF CURB. OTHERWISE BOLLARDS WILL BE REQUIRED FOR PROTECTION. ALL FIRE HYDRANTS SHALL COMPLY WITH AWWA STANDARDS C502-80 THEREOF. CONTRACTOR TO INSTALL TEMPORARY BLOWOFFS, AT THE END(S) OF PROPOSED WATER MAINS AND SERVICE LATERALS TO BUILDING(S) TO ASSURE ADEQUATE FLUSHING AND DISINFECTION/CHLORINATION.
14. ALL WATER MAINS SHALL BE PRESSURE TESTED IN ACCORDANCE WITH AWWA MANUAL M23, CONCERNING HYDROSTATIC TESTING OF PVC PIPING. OFF-SITE UTILITIES HYDROSTATIC TESTING TO BE WITNESSED BY A GOVERNING JURISDICTIONAL WATER DISTRICT DEPARTMENT INSPECTOR.
15. ALL WATER MAINS SHALL BE STERILIZED IN ACCORDANCE WITH THE APPLICABLE SECTION OF THE LATEST AWWA SPECIFICATION C651 AND GOVERNING JURISDICTIONAL WATER DISTRICT UTILITIES OPERATION MANUAL.
16. ALL PVC WATER MAIN, 4" TO 12" DIAMETER PIPING, SHALL CONFORM TO AWWA C900 (DR 18) STANDARD SPECIFICATIONS, PRESSURE CLASS 150 PSI. ALL PVC WATER MAIN PIPING LESS THAN 4" DIAMETER SHALL BE SCHEDULE 80, PRESSURE CLASS 200 PSI.
17. ALL PVC WATER MAINS LESS THAN 4 INCHES SHALL BE IN ACCORDANCE WITH ASTM (SCHEDULE 40, 80, 120) OR ASTM 2241 SDR 21 (200 PSI). THREADED PIPE AND FITTINGS SHALL BE SCHEDULE 80 AND CONFORM TO ASTM D2464. UNTHREADED PIPE AND FITTINGS SHALL BE SCHEDULE 40 WITH SOLVENT-CEMENTED JOINTS. CEMENTED JOINTS AND FITTINGS SHALL COMPLY WITH ASTM D2466 AND D2855.
18. ALL PVC WATER MAINS 2" OR LESS SHALL BE SDR21 (200 PSI) UNLESS OTHERWISE NOTED.
19. POLYETHYLENE PIPE AND TUBING USED FOR SERVICE LINES ½" - 3" SHALL BE POLYETHYLENE IN ACCORDANCE WITH AWWA C901, STANDARD CODE DESIGNATION PE 4710, SDR 9 (OUTSIDE DIAMETER BASED DIMENSION RATIO), 250 PSI. PIPE SHALL BE COLOR CODED BLUE (POTABLE WATER) OR PURPLE (RECLAIMED WATER). PIPE AND FITTINGS SHALL BE NSF APPROVED FOR THE USAGE TO WHICH THEY ARE TO BE APPLIED. JOINTS IN SDR-PR PE PIPE SHALL BE BUTT HEAT FUSION OR SOCKET HEAT FUSION TYPE. FITTINGS SHALL BE MANUFACTURED OF THE SAME MATERIAL AS THE PIPE AND SHALL BE OF THE SAME SDR OR LESS. PROVIDE ADAPTERS AS REQUIRED TO JOIN PE PIPE TO PIPE, FITTINGS AND EQUIPMENT OF OTHER MATERIALS.
20. ALL PVC WATER MAINS SHALL HAVE A SUITABLE MAGNETIC LOCATOR TAPE BURIED OVER THE WATER MAIN, BURIED NO LESS THAN 18 INCHES ABOVE MAIN LINES. THE TAPE SHALL BE AT LEAST 5-1/2 MILS THICK, 2 INCH MINIMUM WIDTH, AND MADE WITH AN ALUMINUM MATERIAL SANDWICHED BETWEEN 2 LAYERS OF POLYETHYLENE. IT SHALL HAVE IMPRINTED, IN PERMANENT BLACK INK WITH ONE INCH TALL LETTERS, "CAUTION: WATER LINE BURIED BELOW", ON BLUE BACKGROUND. THE TAPE SHALL BE CONTINUOUS BETWEEN VALVES, AND SECURED TO EACH VALVE. WHERE OTHER LINES OR SERVICE LINES JOIN THE WATER MAIN THE TAPE USED FOR DETECTION OF THESE LINES SHALL BE SECURED TO THE MAIN LINE TAPE.
21. ALL WATER MAIN INSTALLATIONS SHALL COMPLY WITH COLOR CODING REQUIREMENTS OF CHAPTER 62-555.320, FAC.
22. DISINFECT ALL POTABLE WATER LINES, FIRE LINES, VALVES, FITTINGS, AND HYDRANTS. ALL DISINFECTION WORK SHALL BE ACCEPTABLE TO THE STATE HEALTH AUTHORITY. IF ANY REQUIREMENTS OF THIS SECTION ARE IN CONFLICT WITH REQUIREMENTS OF THE AUTHORITY FOR DISINFECTION, THOSE OF THE AUTHORITY SHALL GOVERN. THE WATER MAIN DISINFECTION AND BACTERIOLOGICAL SAMPLING AND METHODS OF DISINFECTION FOR ALL WATER CONTAINMENT DEVICES AND PIPING SYSTEMS SHALL CONFORM TO AWWA C651.

TESTING AND INSPECTION REQUIREMENTS (WATER):

1. ALL COMPONENTS OF THE WATER SYSTEM, INCLUDING FITTINGS, HYDRANTS, CONNECTIONS, AND VALVES SHALL REMAIN UNCOVERED UNTIL PROPERLY PRESSURE TESTED AND ACCEPTED BY THE OWNER'S ENGINEER, OR CITY INSPECTOR. PRESSURE TESTING OF WATER MAINS SHALL BE FOR A PERIOD OF FOUR (4) HOURS. CONTRACTOR TO NOTIFY THE OWNER'S ENGINEER AND APPLICABLE AGENCY INSPECTORS 48 HOURS IN ADVANCE OF PERFORMING TESTS.
2. TESTED SECTIONS OF BURIED PIPING WITH SLIP-TYPE OR MECHANICAL JOINTS WILL NOT BE ACCEPTED IF IT HAS A LEAKAGE RATE IN EXCESS OF THAT RATE DETERMINED BY THE FORMULA: $L = (S*D*P)/148,000$

WHERE L = MAXIMUM PERMISSIBLE LEAKAGE RATE, IN GALLONS PER HOUR, THROUGHOUT THE ENTIRE LENGTH OF LINE BEING TESTED; S = LENGTH OF LINE TESTED (IN FEET); D = NOMINAL INTERNAL DIAMETER (IN INCHES) OF THE PIPE; AND P = THE SQUARE ROOT OF THE ACTUAL PRESSURE IN POUNDS PER SQUARE INCH GAUGE (PSIG) ON ALL JOINTS IN THE TESTED PORTION OF THE LINE. THIS ACTUAL PRESSURE SHALL BE DETERMINED BY FINDING THE DIFFERENCE BETWEEN THE AVERAGE ELEVATION OF ALL TESTED PIPE JOINTS AND THE ELEVATION OF THE PRESSURE GAUGE AND ADDING THE DIFFERENCE IN ELEVATION HEAD TO THE AUTHORIZED TEST PRESSURE.

3. CONTRACTOR SHALL ARRANGE FOR CHLORINATION AND BACTERIOLOGICAL SAMPLING, AND OBTAIN CLEARANCE OF DOMESTIC AND FIRE LINE WATER SYSTEM(S). COPIES OF ALL BACTERIOLOGICAL TEST RESULTS ARE TO BE SUBMITTED TO THE OWNER'S ENGINEER, IMMEDIATELY UPON COMPLETION OF THE WATER SYSTEM, FOR CERTIFICATION PURPOSES.
4. THE SEQUENCE OF TESTING AND DISINFECTION SHALL BE AS FOLLOWS:
   A. CONDUCT PRESSURE AND LEAKAGE TESTING;
   B. PERFORM FLUSHING PER UTILITY REQUIREMENTS AND AWWA C651;
   C. DISINFECT THE WATER MAIN, INCLUDING VALVES AND FITTINGS;
   D. FLUSH AFTER DISINFECTION.
   E. CONDUCT BACTERIOLOGICAL SAMPLING (TWO (2) CONSECUTIVE DAYS OF PASSING RESULTS ARE REQUIRED)
5. IF THE ABOVE TESTING REQUIREMENTS ARE IN CONFLICT WITH ANY LOCAL, STATE, OR FEDERAL AGENCY THE MORE STRINGENT REQUIREMENTS SHALL APPLY.

GENERAL FIRE PROTECTION NOTES:

1. FIRE LINES SHALL BE INSTALLED BY A CONTRACTOR, DULY LICENSED BY THE STATE OF FLORIDA FIRE MARSHALL'S OFFICE. CONTRACTOR TO VERIFY REQUIREMENTS PRIOR TO CONSTRUCTION OF THE FIRE PROTECTION SYSTEM.
2. ALL FIRE PROTECTION SHALL MEET THE REQUIREMENTS OF THE APPLICABLE MUNICIPALITY OR COUNTY AND N.F.P.A 24 WHICH REGULATES THE CONSTRUCTION AND TESTING OF SUCH LINES.
3. COMBUSTIBLE CONSTRUCTION CANNOT OCCUR UNTIL PROPER DOCUMENTATION HAS BEEN SUBMITTED TO THE LOCAL FIRE MARSHAL. DOCUMENTATION SHALL SHOW THAT HYDRANTS HAVE BEEN INSTALLED, TESTED, AND ARE IN PROPER WORKING ORDER.
4. ALL FIRE LINE PIPING FROM POINT OF SERVICE AS DEFINED BY FS 633.021(16) SHALL BE C900 DR 14 AND HAVE A MINIMUM OF 36 INCHES OF COVER. THE FIRE LINE SHALL BE PRESSURE TESTED TO 200 PSI FOR A MINIMUM OF TWO HOURS, TESTED IN ACCORDANCE WITH NFPA 24-9-2.
5. THE CONTRACTOR INSTALLING THE UNDERGROUND FIRE PROTECTION PIPING TO ONE FOOT ABOVE FINISHED GRADE SHALL HOLD A CLASS I, II, OR LEVEL V CERTIFICATION AS ISSUED BY THE STATE OF FLORIDA, AS REQUIRED BY FS 633.021(5)
6. FIRE PROTECTION SYSTEM MAINS ON PRIVATE PROPERTY SHALL MEET THE REQUIREMENTS AND SHALL BEE INSTALLED PER N.F.P.A 24. ALL FIRE PROTECTION SPRINKLER SYSTEMS INSTALLED SHALL COMPLY WITH NFPA 13, AND SHALL BE MONITORED BY A COMPANY LISTED AS A CENTRAL STATION.
7. HYDRANTS SHALL CONFORM TO AWWA C502 AND SHALL BE FURNISHED COMPLETE WITH WRENCH AND OTHER APPURTENANCES. MANUFACTURER'S CERTIFICATION OF COMPLIANCE WITH AWWA C502 AND TESTS LISTED THEREIN WILL BE REQUIRED.
8. ALL HYDRANTS SHALL BE OF BREAKABLE TYPE, WITH THE BREAKABLE SECTION LOCATED SLIGHTLY ABOVE THE FINISH GROUND LINE. HYDRANTS SHALL CONTAIN TWO-TWO AND A HALF INCH (2-1/2") HOSE CONNECTIONS AND ONE-FOUR AND A HALF INCH (4-1/2") STEAMER CONNECTIONS WITH NATIONAL STANDARD FIRE HOSE COUPLING SCREW THREADS, FIVE AND ONE QUARTER INCH (5-1/4") VALVE OPENING, SIX INCH (6") DIAMETER MECHANICAL JOINT INLET, ONE AND ONE-HALF INCH (1-1/2") PENTAGON OPERATING NUT. THE HYDRANTS SHALL OPEN COUNTERCLOCKWISE.
9. ALL HYDRANTS SHALL BE PAINTED PER N.F.P.A 291 OR IN ANOTHER APPROVED MANNER WITH THE FINISH PAINT BEING TWO COATS OF ENAMEL OR SPECIAL COATING TO COLOR AS REQUIRED BY THE LOCAL FIRE DEPARTMENT.
10. BLUE PAVEMENT REFLECTORS SHALL BE PLACED IN THE CENTERLINE OF THE DRIVING LANE DIRECTLY IN FRONT OF ALL FIRE HYDRANTS. THERE SHALL BE NO TREES, SHRUBS, OR LANDSCAPING PLANTED AROUND THE FIRE HYDRANTS OR IN AREAS DESIGNATED AS FIRE LANES.
11. NEW OR RELOCATED FIRE HYDRANTS SHALL BE LOCATED SUCH THAT THE UNDERGROUND DRAIN (WEEP HOLE) IS AT LEAST: THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, RECLAIMED WATER MAIN, OR VACUUM TYPE SANITARY SEWER; SIX FEET FROM ANY EXISTING OR PROPOSED GRAVITY SANITARY SEWER AND WASTEWATER FORCE MAIN; AND TEN FEET FROM ANY ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM SUCH AS SEPTIC TANKS, DRAINFIELDS, AND GREASE TRAPS. ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS DO NOT INCLUDE PACKAGE SEWAGE TREATMENT FACILITIES AND PUBLIC WASTEWATER TREATMENT FACILITIES.
12. THE ACCESS ROADS SHALL REMAIN CLEAR OF VEHICULAR OBSTRUCTIONS TO ALLOW ACCESS OF FIRE DEPARTMENT UNITS WHILE THE BUILDINGS ARE BEING CONSTRUCTED.

TESTING AND INSPECTION REQUIREMENTS
(FIRE PROTECTION):

1. THE CONTRACTOR SHALL PROVIDE A POST-CONSTRUCTION FIRE FLOW TEST WITNESSED AND APPROVED BY THE ENGINEER AND THE UTILITY. HYDRANTS SHALL DELIVER A MINIMUM OF 1250 GPM WITH A RESIDUAL PRESSURE OF 20 PSI.
2. APPLY HYDROSTATIC TEST PRESSURE OF 200 PSI (FIRE MAINS) FOR 10 MINUTES AND FOR SUCH ADDITIONAL PERIOD NECESSARY FOR THE ENGINEER TO COMPLETE THE INSPECTION OF THE LINE UNDER TEST. DO NOT EXCEED PIPE MANUFACTURER'S SUGGESTED TIME DURATION AT THE TEST PRESSURE. IF DEFECTS ARE NOTED, REPAIRS SHALL BE MADE AND THE TEST REPEATED UNTIL ALL PARTS OF THE LINE WITHSTAND THE TEST PRESSURE.
3. APPLY LEAKAGE TEST PRESSURE OF 200 PSI (FIRE MAINS) MAINTAIN PRESSURE AT A MAXIMUM VARIATION OF 5% DURING THE ENTIRE LEAKAGE TEST. THE DURATION OF THE LEAKAGE TEST SHALL BE TWO HOURS MINIMUM, AND FOR SUCH ADDITIONAL TIME NECESSARY FOR THE ENGINEER TO COMPLETE INSPECTION OF THE SECTION OF LINE UNDER TEST. LEAKAGE MEASUREMENTS SHALL NOT BE STARTED UNTIL A CONSTANT TEST PRESSURE HAS BEEN ESTABLISHED. THE LINE LEAKAGE SHALL BE MEASURED BY MEANS OF A WATER METER INSTALLED ON THE SUPPLY SIDE OF THE PRESSURE PUMP.

TRAFFIC CONTROL:

1. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A MAINTENANCE OF TRAFFIC (M.O.T.) PLAN PRIOR TO CONSTRUCTION. THE M.O.T. PLAN SHALL SHOW ALL PROPOSED TRAFFIC CONTROL SIGNS, PAVEMENT MARKINGS, AND BARRICADES, AND SHALL DETAIL ALL PROPOSED CONSTRUCTION SEQUENCING. THE M.O.T. PLAN AND INSTALLED TRAFFIC CONTROL MEASURES SHALL BE APPROVED BY THE ENGINEER, OWNER, AND ROADWAY JURISDICTIONAL AGENCY PRIOR TO CONSTRUCTION. IN GENERAL, ROADWAY AND DRIVEWAY LANE CLOSURES ARE PROHIBITED DURING CONSTRUCTION UNLESS SPECIFICALLY DETAILED ON THESE PLANS. IN THE EVENT IT IS DETERMINED THAT ROADWAY AND DRIVEWAY LANE CLOSURES WILL BE ALLOWED, THE CLOSURES SHALL BE RESTRICTED TO THE HOURS BETWEEN 9:00 A.M. AND 4:00 P.M. UNLESS OTHERWISE AUTHORIZED IN THE APPROVED M.O.T.
2. THE CONTRACTOR SHALL BE REQUIRED TO NOTIFY ALL APPROPRIATE AGENCIES (PARTIAL LISTED BELOW) PRIOR TO ANY LANE CLOSURES ON AN ARTERIAL OR COLLECTOR ROADWAY:
   A. GOVERNING PUBLIC WORKS
   B. SHERIFF'S OFFICE
   C. TRANSIT AUTHORITY
   D. SCHOOL TRANSPORTATION
   E. EMS & FIRE ADMINISTRATION
3. ALL TRAFFIC CONTROL MEASURES SHALL BE IN ACCORDANCE WITH CURRENT FDOT SPECIFICATIONS AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL TRAFFIC CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND MAINTAINED DURING CONSTRUCTION.
4. INSPECT TRAFFIC CONTROL DEVICES ON A DAILY BASIS TO ENSURE PLACEMENT OF BARRICADES AND FUNCTION OF LIGHTS IS MAINTAINED THROUGHOUT CONSTRUCTION.
5. CONTACT PROPERTY OWNERS AFFECTED BY CONSTRUCTION. COORDINATE TEMPORARY DRIVEWAY CLOSURES AND SEQUENCING. MAINTAIN ACCESS FOR ALL PROPERTY OWNERS DURING CONSTRUCTION.
6. ADJUST TRAFFIC CONTROL DEVICES AS REQUIRED UNDER EMERGENCY CONDITIONS.
7. THE CONTRACTOR IS EXPECTED TO COORDINATE ITS ACTIVITIES WITH OTHER CONTRACTORS WHO MAY BE WORKING IN THE IMMEDIATE VICINITY.
8. WHEN WORK OCCURS WITHIN 15-FT OF ACTIVE ROAD TRAVEL LANES BUT NO CLOSER THAN 2-FT FROM THE EDGE OF PAVEMENT, SIGNAGE AND WARNING DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH CURRENT FDOT SPECIFICATIONS.
9. TYPE I OR TYPE II BARRICADES AT 20-FT CENTERS SHALL BE PLACED AND MAINTAINED ALONG THE EDGE OF THE ROAD WHEREVER DROP-OFFS OR OTHER HAZARDS EXIST AND TO BLOCK ENTRANCE INTO COMPLETED OR PARTIALLY COMPLETED PAVEMENTS UNTIL SUCH PAVEMENTS ARE OPEN TO PUBLIC USE.
10. THE CONTRACTOR SHALL PROVIDE FLAGMAN AND OTHER TRAFFIC MEASURES NECESSARY TO PROTECT AND FACILITATE TRAFFIC MOVEMENT DURING CONSTRUCTION.
11. COMPLY WITH ALL LOAD RESTRICTIONS IN THE HAULING OF MATERIALS ON PUBLIC ROADS BEYOND THE LIMITS OF THE WORK. A SPECIAL PERMIT WILL NOT RELIEVE THE CONTRACTOR OF LIABILITY FOR THE DAMAGE WHICH MAY RESULT FROM THE MOVING OF MATERIAL AND EQUIPMENT. THE CONTRACTOR SHALL CONTROL HIS OPERATIONS AND THOSE OF HIS SUBCONTRACTORS, AND ALL SUPPLIERS TO ASSURE THE LEAST INCONVENIENCE TO THE TRAVELING PUBLIC. THE CONTRACTOR SHALL MAINTAIN FREE AND UNOBSTRUCTED MOVEMENT OF VEHICULAR TRAFFIC AND LIMIT HIS OPERATIONS FOR THE SAFETY AND CONVENIENCE OF THE TRAVELING PUBLIC. UNDER ALL CIRCUMSTANCES, SAFETY SHALL BE THE MOST IMPORTANT CONSIDERATION.

SANITARY SYSTEM NOTES:

GOVERNING JURISDICTIONAL PUBLIC WORKS AND/OR UTILITY STANDARDS ARE MINIMUM STANDARDS FOR PUBLIC POTABLE WATER, RECLAIMED WATER AND/OR SANITARY SEWER CONSTRUCTION. THE NOTES BELOW APPLY ONLY WHEN THEY EXCEED THE GOVERNING JURISDICTION PUBLIC WORK STANDARDS.

1. SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS SHOULD ALWAYS CROSS UNDERNEATH WATER MAINS. INSTALLATIONS OF SANITARY SEWERS, FORCE MAINS AND STORM SEWERS, AT CROSSINGS OF WATER MAINS, SHALL BE PERFORMED SO AS 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. THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER JOINTS AND WATER JOINTS SHALL BE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN 10 FEET BETWEEN ANY TWO JOINTS. WHERE SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 18 INCHES VERTICAL DISTANCE, BOTH THE SEWER AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP), AT THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS IF IT IS NOT AVAILABLE IN THE SIZE PROPOSED.). SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO (2) JOINTS. IN LIEU OF DIP, THE SANITARY SEWER MAY BE PLACED IN A SLEEVE FOR 20 FEET CENTERED ON THE POINT OF CROSSING. 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. WHERE THERE IS NO ALTERNATIVE TO SEWER PIPES CROSSING OVER WATER MAINS, THE CRITERIA FOR MINIMUM SEPARATION OF 18 INCHES BETWEEN LINES, AND 10 FEET BETWEEN JOINTS, CENTERED AT THE POINT OF CROSSING SHALL BE REQUIRED. THE WATER MAIN SHALL BE PLACED IN A SLEEVE FOR 20 FEET CENTERED ON THE POINT OF CROSSING. ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO PREVENT DAMAGE TO THE WATER MAIN. ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (I.E.. PIPES CENTERED ON THE CROSSING). WHERE A PROPOSED PIPE CONFLICTS WITH AN EXISTING PIPE, THE PROPOSED PIPE SHALL BE CONSTRUCTED OF DIP, AND THE CROSSING SHALL BE ARRANGED SO AS TO SATISFY THE REQUIREMENTS IDENTIFIED ABOVE.

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

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

2. A MINIMUM 10 FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF SEWER (INCLUDING FORCE MAINS) AND EXISTING OR PROPOSED WATER MAINS, IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE. THE DISTANCE FOR SEPARATION SHALL BE MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10 FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE INSTALLED IN A SEPARATE TRENCH, OR IN AN UNDISTURBED EARTH SHELF, LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN, AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER LINE, AND WATER AND SEWER JOINTS SHALL BE STAGGERED. WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 18 INCHES, IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR FORCE MAIN SHALL BE CONSTRUCTED OF DIP (IF AVAILABLE IN THE SIZE PROPOSED), WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE LOCATED ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (I.E.. STAGGERED JOINTS).
3. ALL DIP PIPE SHALL BE CLASS 50 OR HIGHER. REFER TO NOTE #'S: 6, 9 & 10 BELOW FOR ADDITIONAL DIP SPECIFICATIONS. ADEQUATE MEASURES AGAINST CORROSION SHALL BE UTILIZED.
4. ALL PVC PIPE SHALL BE SOLID WALL POLYVINYL CHLORIDE PIPE AND COMPLY WITH ASTM D 3034 AND ALL APPLICABLE ASTM DOCUMENTS AS COVERED IN SECTION No. 2 OF ASTM D 3034. MAIN LINES SHALL BE A MINIMUM OF 8" DIAMETER, AND LATERALS SHALL BE A MINIMUM 6" DIAMETER.
5. ALL SANITARY SEWER MAINS, LATERALS AND FORCE MAINS SHALL HAVE A MINIMUM OF 36 INCHES OF COVER, UNLESS OTHERWISE NOTED ON PLANS.
6. ALL GRAVITY SEWERS MUST BE SDR 26 PVC OR SCHEDULE 40 PIPE. ELASTOMERIC GASKET JOINTS SHALL BE UTILIZED FOR PVC PIPE, AND SHALL COMPLY WITH ASTM F477, ASTM D3231 & ASTM F1336. JOINTS SHALL COMPLY WITH ASTM D3212.
7. ALL PVC FORCE MAINS (IF REQUIRED) SHALL BE CLASS 200, DR 14 FOR 4" DIAMETER, AND CLASS 150, DR 18 FOR 6" TO 12" DIAMETER PIPE, IN ACCORDANCE WITH AWWA C900 STANDARDS. PVC FORCE MAIN PIPE SMALLER THAN 4" DIAMETER SHALL BE CLASS 200, SDR 21, IN ACCORDANCE WITH ASTM D 2241. FORCE MAINS SHALL BE SPIRAL WRAPPED WITH 2 INCH WIDE DARK GREEN STICK-ON VINYL TAPE. FORCE MAINS WITHIN THE RIGHT-OF-WAY SHALL BE CLASS 52 DIP, MINIMUM 3" DIAMETER.
8. ALL SANITARY MANHOLES SHALL BE LOCATED NO MORE THAN 400 FEET APART AND SHALL CONFORM TO THE DETAILS CONTAINED HEREIN, AS WELL AS WITH ASTM C478.
9. ALL DUCTILE IRON PIPE SHALL MEET REQUIREMENTS OF AWWA C151, ANSI SPEC. A21.51.
10. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE PROVIDED WITH A VIRGIN POLYETHYLENE INTERIOR LINING COMPLYING WITH ASTM D 1248 (40 MILS THICK) HEAT BONDED TO THE INTERIOR OF ALL PIPES. ALL DIP PIPE SHALL HAVE A STANDARD OUTSIDE COATING COMPLYING WITH ASTM C151-8.1.
11. ALL SLOPES FOR GRAVITY SEWER MAINS AND SERVICE CONNECTIONS SHALL COMPLY WITH STATE AND LOCAL UTILITY CRITERIA. CONTRACTOR TO NOTIFY ENGINEER IF THE SLOPES DEVIATES FROM THOSE SHOWN ON THE CONSTRUCTION DOCUMENTS.
12. ALL UTILITIES SHALL BE INSTALLED WITH COMPLIANCE TO GOVERNING JURISDICTION STANDARDS CONSTRUCTION DETAILS AND LAND DEVELOPMENT CODE.
13. PRIOR TO COMMENCING WORK WHICH REQUIRES CONNECTING PROPOSED FACILITIES TO EXISTING LINES OR APPURTENANCES, THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION(S) OF EXISTING CONNECTION POINT(S) AND NOTIFY THE OWNER'S ENGINEER OF ANY CONFLICTS OR DISCREPANCIES.
14. SANITARY SEWER MAINS SHALL HAVE SUITABLE MAGNETIC LOCATOR TAPE(S) BURIED AT LEAST 18 INCHES ABOVE THE MAIN LINES.
15. FORCE MAINS SHALL HAVE SUITABLE MAGNETIC LOCATOR TAPE(S) BURIED AT LEAST 18 INCHES ABOVE THE FORCE MAIN.

TESTING AND INSPECTION REQUIREMENTS (SANITARY):

1. ALL GRAVITY SEWER PIPING SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER AND APPLICABLE MUNICIPALITY/AGENCY. THE CONTRACTOR SHALL NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE INSPECTION(S). THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COSTS ASSOCIATED WITH A TELEVISED INSPECTION (TV) OF THE PROPOSED GRAVITY SEWER LINE CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE COPIES OF THE TV INSPECTION TAPE TO THE ENGINEER, THE OWNER AND THE APPLICABLE MUNICIPALITY/AGENCY.
2. THE CONTRACTOR SHALL PERFORM AN INFILTRATION/EXFILTRATION TEST ON ALL GRAVITY SEWERS IN ACCORDANCE WITH THE REGULATORY AGENCY HAVING JURISDICTION. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER OF RECORD AND SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL. THE SCHEDULING, COORDINATION AND NOTIFICATION OF ALL PARTIES IS THE CONTRACTOR'S RESPONSIBILITY.

LEAKAGE TEST ARE SPECIFIED REQUIRING THAT:

   A. THE LEAKAGE EXFILTRATION OR INFILTRATION DOES NOT EXCEED 150 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE SYSTEM. RUNS THAT ARE 300 FEET OR LESS SHALL HAVE NO LEAKAGE.
   B. MANHOLE LEAKAGE TEST SHALL NOT EXCEED FOUR (4) GALLONS PER DAY PER UNIT. NO VISUAL LEAKAGE ALLOWED.
   C. EXFILTRATION OR INFILTRATION TESTS BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET.
   D. AIR TESTS, AS MINIMUM, CONFORM TO THE TEST PROCEDURE DESCRIBED IN ASTM C-924 FOR CONCRETE PIPE, ASTM F-1417 FOR PLASTIC PIPE AND FOR OTHER MATERIALS APPROPRIATE TEST PROCEDURES, AIR TESTING, IF SPECIFIED FOR CONCRETE SEWER MANHOLES, CONFORMS TO THE TEST PROCEDURES DESCRIBED IN ASTM C-1244.

3. DEFLECTION TESTS SHALL BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES, CHAPTER 33.85, FOR ALL GRAVITY SANITARY SEWER LINES. TESTING IS REQUIRED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS TO PERMIT STABILIZATION OF THE SOIL-PIPE SYSTEM.TESTING REQUIREMENTS SPECIFY:
   A. NO PIPE SHALL EXCEED A DEFLECTION OF 5%.
   B. USING A RIGID BALL OR MANDREL FOR THE PIPE DEFLECTION TESTS WITH A DIAMETER NOT LESS THAN 95% OF THE BASE INSIDE DIAMETER OR AVERAGE INSIDE DIAMETER OF THE PIPE, DEPENDING ON WHICH IS SPECIFIED IN THE ASTM SPECIFICATION, INCLUDING THE APPENDIX, TO WHICH THE PIPE IS MANUFACTURED.
4. ALL FORCE MAINS (IF APPLICABLE) SHALL BE SUBJECT TO A HYDROSTATIC PRESSURE TEST IN ACCORDANCE WITH THE REGULATORY AGENCY HAVING JURISDICTION. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER OF RECORD AND SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL. THE SCHEDULING, COORDINATION AND NOTIFICATION OF ALL PARTIES IS THE CONTRACTOR'S RESPONSIBILITY.
5. COORDINATE WITH THE ENGINEER, GOVERNING UTILITY AUTHORITY AND INSTALLER FOR THE LIFT-STATION/WASTEWATER PUMP STATION START-UP. START-UP PROCEDURES SHALL FOLLOW THE GOVERNING UTILITY AUTHORITY. ENGINEER REQUIRES 48 HOUR NOTICE PRIOR TO REQUESTED START-UP DATE,.
6. IF THE ABOVE TESTING REQUIREMENTS ARE IN CONFLICT WITH ANY LOCAL, STATE, OR FEDERAL AGENCY, THE MORE STRINGENT REQUIREMENTS SHALL APPLY.

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

This item has been digitally signed and sealed by Jeremy R. Anderson, PE, on the date indicated here.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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CERTIFICATE OF
AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP
&
SE 58TH AVE
BELLEVIEW, FL
MARION COUNTY

NO:	DATE:	REVISION / ISSUE:	BY:

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

PROJECT # 222.108

DATE 05/13/2024

SCALE N.T.S.

SHEET C2.1

GENERAL NOTES

DEWATERING NOTES:

1. DURING THE EXCAVATION PROCESS IF GROUNDWATER IS ENCOUNTERED, THE CONTRACTOR SHALL CONSTRUCT A SEDIMENT BASIN TO PROVIDE A DISCHARGE POINT FOR DEWATERING. THE SEDIMENT BASIN CAN BE A CELL IN THE PROPOSED EXCAVATION AREA OF A POND OR IT CAN BE A BERMED AREA ABOVE GROUND OR AN ABOVE GOUND CHAMBER. ALL DEWATERING MUST BE RETAINED IN THE SEDIMENT AREA UNTIL THE WATER IS CLEAN SUCH THAT THERE WOULD BE NO TURBID DISCHARGE. AFTER THE WATER IN THE SEDIMENT BASIN IS CLEAN, THE WATER MAY BE RELEASED INTO THE ON-SITE POND PROVIDED THERE IS NO ADVERSE IMPACT TO THE EXISTING WATER QUALITY.
2. IF LIMITED AVAILABLE SPACE BECOMES A CONSTRAINT DURING CONSTRUCTION ACTIVITIES, AND A SETTLING POND CAN NOT BE CONSTRUCTED THEN WE RECOMMEND UTILIZING A BAKER TANK AND NON-CATIONIC FLOCCULENT TO REMAIN IN COMPLIANCE WITH THE GENERIC PERMIT. THE MANUFACTURER INFORMATION SHEET FOR THE FLOCCULENT SHOULD BE KEPT ONSITE ALONG WITH THE PERMIT, IF UTILIZED TO REDUCE TURBIDITY.
3. IF THE GROUDNWATER CAN NOT BE CONTAINED ON-SITE AND MUST BE DISCHARGED OFF-SITE, THE CONTRACTORS IS RESPONSIBLE FOR FILING FOR AN FDEP DEWATERING NOI, AND CONDUCTING ALL WATER TESTING REQUIREMENTS SET FORTH BY THE LOCAL JURISDICTION AND FDEP. IF THE PROJECT IS WITHIN PROXIMITY OF CONTAMINATION OR SUSPECTED CONTAMINATION THE GROUNDWATER WILL HAVE TO BE TESTED PER FDEP REQUIREMENTS AT A MINIMUM. NO POLLUTED WATERS SHALL BE DISCHARGED INTO STORM SYSTEM OR BODIES OF WATER. BEFORE DISCHARGE OF PRODUCED GROUND WATER TO ANY SURFACE WATER OF THE STATE FROM A NON-CONTAMINATED SITE, ANALYTICAL TESTS ON SAMPLES OF DISCHARGE WATER SHALL BE PERFORMED TO DETERMINE CONTAMINATION. TEST RESULTS MUST MEET MINIMUM REQUIREMENTS SET BY FDEP [DOCUMENT 62-621.300(2) GENERIC PERMIT FOR THE DISCHARGE OF PRODUCED GROUNDWATER FROM NON-CONTAMINATED SITE ACTIVITY]. ANY DEWATERING DRAINAGE DISCHARGED INTO SANITARY SEWERS MUST BE APPROVED BY THE GOVERNING WASTEWATER DIVISION BEFORE DISCHARGING.
4. UNDER NO CIRCUMSTANCES WILL THE DISCHARGE FROM THE ON-SITE DEWATERING BE DIRECTLY DISCHARGED OFF-SITE.
5. ALL GROUND WATER DISCHARGED OFF-SITE SHALL BE 29 NEPHELOMETRIC TURBIDITY UNITS (NTUS) OR LESS. TURBIDITY READINGS SHOULD BR COLLECTED TWICE DAILY, AT LEAST FOUR HOURS APART, TO CONFIRM TURBIDITY IS KEPT BELOW 29 NTUS. THE SAMPLES WILL BE COLLECTED AT THE DISCHARGE LOCATION. A LOG OF DAILY TURBIDITY MEASUREMENTS WILL BE KEPT ONSITE FOR THE DURATION OF DEWATERING ACTIVITIES ALONG WITH DAILY MEASUREMENTS OF THE FLOW RATE IN GALLONS PER DAY
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DEVELOP A DEWATERING SYSTEM THAT PROVIDES PRETREATMENT OF EFFLUENT PRIOR TO DISCHARGE INTO ADJACENT SURFACE WATERS OR LOCAL SANITARY UTILITY SYSTEM, IF ALLOWED/REQUIRED. THE CONTRACTOR'S DEWATERING METHOD MUST MEET ALL FEDERAL, STATE, AND LOCAL LAWS, RULES, AND REGULATIONS CONCERNING THIS PRACTICE INCLUDING THE USE OF PERMITTED OUTFALL STRUCTURES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE AND APPLY FOR A DEWATERING PERMIT WITH THE APPROPRIATE WATER MANAGEMENT DISTRICT AND LOCAL GOVERNING JURISDICTION.
7. THE DEWATERING SYSTEM SHALL BE DESIGNED, AND BE PROVIDED, USING ACCEPTED AND PROFESSIONAL METHODS CONSISTENT WITH CURRENT INDUSTRY PRACTICE. PROVIDE DEWATERING SYSTEM OF SUFFICIENT SIZE AND CAPACITY TO CONTROL GROUNDWATER IN A MANNER THAT PRESERVES STRENGTH OF FOUNDATION SOILS, DOES NOT CAUSE INSTABILITY OR RAVELING OF EXCAVATION OR RAVELING OF EXCAVATION SLOPES, AND DOES NOT RESULT IN DAMAGE TO EXISTING STRUCTURES. WHERE NECESSARY TO THESE PURPOSES, LOWER WATER LEVEL IN ADVANCE OF EXCAVATION UTILIZING WELLS, WELLPOINTS, OR SIMILAR POSITIVE METHODS.MAINTAIN THE GROUNDWATER LEVEL TO A MINIMUM OF 2 FEET BELOW EXCAVATIONS. PROVIDE PIEZOMETERS IF DIRECTED BY THE ENGINEER TO DOCUMENT THE GROUNDWATER LEVEL IS BEING MAINTAINED.
8. CONTROL BY ACCEPTABLE MEANS, ALL WATER REGARDLESS OF SOURCE AND BE FULLY RESPONSIBLE FOR DISPOSAL OF THE WATER. NO ADDITIONAL PAYMENT WILL BE MADE FOR ANY SUPPLEMENTAL MEASURES TO CONTROL SEEPAGE GROUNDWATER OR ARTESIAN HEAD.
9. OPEN PUMPING WITH SUMPS AND DITCHES SHALL BE ALLOWED PROVIDED IT DOES NOT RESULT IN BOILS, LOSS OF FINES, SOFTENING OF THE GROUND, OR INSTABILITY OF SLOPES. SUMPS SHALL BE LOCATED OUTSIDE OF LOAD BEARING AREAS SO THE BEARING SURFACES WILL NOT BE DISTURBED. WATER CONTAINING SILT IN SUSPENSION SHALL BE PUMPED INTO SEWER LINES OR ADJACENT STREAMS, DURING NORMAL PUMPING AND UPON DEVELOPMENT WELL(S), LEVEL OF FINE SAND OR SILT IN THE DISCHARGE WATER SHALL NOT EXCEED 5PPM.
10. THE CONTRACTOR SHALL BE REQUIRED TO PERMIT THE DEWATERING SYSTEM WITH THE LOCAL WATER MANAGEMENT DISTRICT IF:
    - A. 100,000 GPD TOTAL IN A 24 HOUR (1 DAY) PERIOD FROM DEWATERING
    - B. 1,000,000 GPD PUMP CAPACITY IS REQUIRED
    - C. GROUNDWATER WELL SIZE 8" IN DIAMETER OR GREATER
    - D. CUMULATIVE OUTSIDE DIAMETER OR SURFACE WATER WITHDRAWAL PIPES IS 6" IN DIAMETER OR GREATER

THE CONTRACTOR SHALL BE REQUIRED TO PERMIT THE DEWATERING SYSTEM WITH WATER MANAGEMENT DISTRICT. HOWEVER, IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY WITH THE LOCAL WATER MANAGEMENT AND GOVERNING JURISDICTION ON THE PERMIT REQUIREMENTS FOR DEWATERING. ALL PERMITS SHALL BE SUBMITTED A MINIMUM OF 21 DAYS PRIOR TO STARTING DEWATERING ACTIVITIES.

11. CONTINUOUSLY MAINTAIN EXCAVATIONS IN A DRY CONDITION WITH POSITIVE DEWATERING METHODS DURING PREPARATION OF SUBGRADE, INSTALLATION OF PIPE, AND CONSTRUCTION OF STRUCTURES UNTIL THE CRITICAL PERIOD OF CONSTRUCTION AND/OR BACKFILL IS COMPLETED TO PREVENT DAMAGE OF SUBGRADE SUPPORT, PIPING, STRUCTURE, SIDE SLOPES, OR ADJACENT FACILITIES FROM FLOATATION OR OTHER HYDROSTATIC PRESSURE IMBALANCE.
12. IF SILTY/CLAY SANDS, WHICH CAUSE THE WATER TO BECOME TURBID, ARE ENCOUNTERED THEN THE WATER SHALL BE TREATED WITH CHEMICAL ADDITIVES, SUCH AS ALUM, IN THE SEDIMENT BASIN IN ORDER TO PROMOTE THE COAGULATION OF THE PARTICLES WHICH ALLOW THE SEDIMENT TO SETTLE AND THE WATER TO BECOME LESS TURBID. IF TURBID WATER IS ENCOUNTERED DURING THE EXCAVATION OF THE PONDS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IMMEDIATELY TO DETERMINE THE COURSE OF ACTION THAT IS APPROPRIATE TO ELIMINATE THE TURBIDITY AND ALLOW DISCHARGE THAT MEETS WATER QUALITY STANDARDS.
13. THE EXCAVATION PROCESS SHALL BE SEQUENCED IN SUCH A MANNER SUCH THAT THE SEDIMENT BASIN WILL BE AVAILABLE AT ALL TIMES. THE SEDIMENT BASIN CAN BE RELOCATED AS NECESSARY SUBJECT TO THE WATER WITHIN THE SEDIMENT BASIN BEING NON-TURBID AND ACCEPTABLE FOR DISCHARGE.
14. WHEN CONSTRUCTION IS COMPLETE, REMOVE ALL DEWATERING EQUIPMENT FROM SITE INCLUDING WELLS AND RELATED TEMPORARY ELECTRICAL SERVICE.

GENERAL ADA GUIDELINES FOR SITE CONSTRUCTION:

CONTRACTORS MUST EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ADA (HANDICAP) ACCESSIBLE COMPONENTS AND ACCESS ROUTES FOR THE SITE. THESE COMPONENTS, AS CONSTRUCTED, MUST COMPLY WITH THE CURRENT STATE & LOCAL BUILDING CODE, THE DEPARTMENT OF JUSTICE ADA STANDARDS, REGULATIONS' BARRIER FREE ACCESS AND ANY MODIFICATIONS, REVISIONS OR UPDATES TO SAME. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE OF TRAVEL FROM PARKING SPACE, PUBLIC TRANSPORTATION, PEDESTRIAN ACCESS, INTER-BUILDING ACCESS, TO POINTS OF ACCESSIBLE BUILDING ENTRANCE/EXIT, MUST COMPLY WITH THESE ADA CODE REQUIREMENTS. THESE INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

1. PARKING SPACES AND PARKING AISLES - SLOPE SHALL NOT EXCEED 1:50 (1/4" PER FDOT OR 2.0%) IN ANY DIRECTION. THIS INCLUDES RUNNING SLOPE AND CROSS SLOPE.
2. RAMPS - SLOPES EXCEEDING 1:20 (5%) BUT NO MORE THAN 1:12 (8.3%) CONSTITUTE A RAMP AND MUST CONFORM TO THE REQUIREMENTS FOR RAMP DESIGN (HANDRAILS, CURBS, AND LANDINGS). NO RAMP SHALL EXCEED A 1:12 (8.3%) RUNNING SLOPE OR 1:50 (2%) CROSS SLOPE. RAMPS EXCEEDING SIX FEET IN LENGTH REQUIRE A HANDRAIL THAT CONFORMS TO ADA STANDARDS. A RAMP MAY NOT RISE MORE THAN 2.5 FEET WITHOUT A LANDING.
3. LANDINGS - MUST BE PROVIDED AT EACH END OF RAMPS, MUST PROVIDE POSITIVE DRAINAGE, AND MUST NOT EXCEED 1:50 (1/4" PRT FDOT OR 2.0%) IN ANY DIRECTION. THE LANDING SHOULD BE AS WIDE AS THE PROPOSED RAMP, MIN 36" WIDE, AND BE 60" LONG. IN MOST SITE CASES LANDINGS SHOULD BE 5 FEET BY 5 FEET.
4. PATH OF TRAVEL ALONG ACCESSIBLE ROUTE - MUST PROVIDE A 36-INCH OR GREATER UNOBSTRUCTED WIDTH OF TRAVEL (CAR OVERHANGS AND/OR HANDRAILS CANNOT REDUCE THIS MINIMUM WIDTH). IF THE PATH OF TRAVEL GOES TO A PUBLIC RIGHT-OF WAY, IT IS PREFERRED THAT THE ROUTE BE A MINIMUM OF 60 INCHES. THE SLOPE SHOULD BE NO GREATER THAN 1:20 (5.0%) IN THE DIRECTION OF TRAVEL, AND MUST NOT EXCEED 1:50 (¼" PER FDOT OR 2.0%) IN CROSS SLOPE. WHERE PATH OF TRAVEL WILL BE GREATER THAN 1:20 (5.0%), THE ADA RAMP CRITERIA MUST BE ADHERED TO. A MAXIMUM SLOPE OF 1:12 (8.3%), FOR A MAXIMUM RISE OF 2.5 FEET, MUST BE PROVIDED. THE RAMP MUST HAVE ADA HAND RAILS AND 'LEVEL' LANDINGS ON EACH END THAT ARE CROSS SLOPED NO MORE THAN 1:50 (1/4" PER FDOT OR 2.0%) FOR POSITIVE DRAINAGE.
5. CROSS-WALKS - THE PATH OF TRAVEL STANDARD APPLIES TO CROSS WALKS IN THE DRIVEWAY AS WELL AND WILL REQUIRE SPECIAL ATTENTION DURING STAKING TO MAKE SURE THE 1:50 (2%) CROSS SLOPE IS MET IN THE CROSS WALK.
6. DOORWAYS - MUST HAVE A 'LEVEL' LANDING AREA ON THE EXTERIOR SIDE OF THE DOOR THAT IS SLOPED AWAY FROM THE DOOR NO MORE THAN 1:50 (1/4" PER FDOT OR 2.0%) FOR POSITIVE DRAINAGE. THIS LANDING AREA MUST BE NO LESS THAN 60 INCHES (5 FEET) LONG, EXCEPT WHERE OTHERWISE PERMITTED BY ADA STANDARDS FOR ALTERNATIVE DOORWAY OPENING CONDITIONS. (SEE ICC/ANSI A117.1-2003 AND OTHER REFERENCED INCORPORATED BY FDOT.)
7. WHEN THE PROPOSED CONSTRUCTION INVOLVES RECONSTRUCTION, MODIFICATION, REVISION OR EXTENSION OF OR TO ADA COMPONENTS FROM EXISTING DOORWAYS OR SURFACES, CONTRACTOR MUST VERIFY EXISTING ELEVATIONS SHOWN ON THE PLAN. NOTE THAT TABLE 405.2 OF THE DEPARTMENT OF JUSTICE'S ADA STANDARDS FOR ACCESSIBLE DESIGN ALLOWS FOR STEEPER RAMP SLOPES, IN RARE CIRCUMSTANCES. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCIES AND/OR FIELD CONDITIONS THAT DIFFER IN ANY WAY OR ANY RESPECT FROM WHAT IS SHOWN ON THE PLANS, IN WRITING, BEFORE COMMENCEMENT OF WORK. CONSTRUCTED IMPROVEMENTS MUST FALL WITHIN THE MAXIMUM AND MINIMUM LIMITATIONS IMPOSED BY THE BARRIER FREE REGULATIONS AND THE ADA REQUIREMENTS.
8. IT WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE THAT THE HANDICAP PARKING SPACES, ACCESSIBLE ROUTES, AND SIDEWALKS/CROSSWALKS ARE CONSTRUCTED TO MEET ADA REQUIREMENTS. THE CONTRACTOR MUST VERIFY THE SLOPES OF CONTRACTOR'S FORMS PRIOR TO POURING CONCRETE. IF ANY NON-CONFORMANCE IS OBSERVED OR EXISTS, CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER PRIOR TO POURING CONCRETE. THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS TO REMOVE, REPAIR AND REPLACE NON-CONFORMING CONCRETE.

IT IS STRONGLY RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION WITH THE LOCAL BUILDING CODE PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY REQUIREMENTS LISTED ABOVE OR OTHER NON-STATED ADA REQUIREMENT 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 NONCOMPLIANT AREAS AT THE GENERAL CONTRACTOR'S COST.

PAVING AND GRADING NOTES:

1. ALL DELETERIOUS SUBSURFACE MATERIAL (I.E. MUCK, PEAT, BURIED DEBRIS OR AS DEFINED BY CURRENT FDOT SPECIFICATIONS) IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS OR AS DIRECTED BY THE OWNER, THE OWNER'S ENGINEER, OR OWNER'S SOILS TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER. EXCAVATED AREAS ARE TO BE BACKFILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING DELETERIOUS MATERIAL FROM THE SITE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL 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 SOILS TESTING COMPANY (FLORIDA TESTING & ENVIRONMENTAL, INC.) OR ENGINEER AND BE PLACED AND COMPACTED ACCORDING TO THESE PLANS.
4. PROPOSED SPOT ELEVATIONS REPRESENT FINISHED PAVEMENT OR GROUND SURFACE GRADES UNLESS OTHERWISE NOTED.
5. FINISHED SURFACES ADJACENT TO PAVED AREAS AND WITHIN 10 FEET OF STRUCTURES SHALL BE WITHIN 1 INCH OF THE PROPOSED GRADE. ALL OTHER AREAS SHALL BE WITHIN 3 INCHES OF THE PROPOSED GRADE.
6. IT MAY BE NECESSARY TO FIELD ADJUST PAVEMENT ELEVATIONS TO PRESERVE THE ROOT SYSTEMS OF TREES SHOWN TO BE SAVED. CONTRACTOR TO COORDINATE WITH OWNER'S ENGINEER PRIOR TO ANY ELEVATION CHANGES.
7. CONTRACTOR SHALL SAW CUT, TACK, AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT.
8. UNIFORMLY SMOOTH GRADE THE SITE. DEPRESSIONS FROM SETTLEMENT SHALL BE FILLED AND COMPACTED. TOPS OF EMBANKMENTS AND BREAKS IN GRADE SHALL BE ROUNDED. FINISHED SURFACES SHALL BE REASONABLY SMOOTH, COMPACTED, FREE FROM IRREGULAR SURFACE CHANGES AND COMPARABLE TO THE SMOOTHNESS OBTAINED BY BLADE-GRADER OPERATIONS.
9. CURBING SHALL BE PLACED AT THE EDGES OF ALL PAVEMENT, UNLESS OTHERWISE NOTED. REFER TO THE LATEST EDITION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS" FOR DETAILS AND SPECIFICATIONS OF ALL F.D.O.T. TYPE CURB AND GUTTERS CALLED FOR IN THESE PLANS.
10. PRIOR TO CONSTRUCTING CONCRETE PAVEMENT, THE CONTRACTOR IS TO SUBMIT A PROPOSED JOINTING PATTERN TO THE SOILS ENGINEER FOR REVIEW/APPROVAL.
11. CONTRACTOR TO PROVIDE A 1/2" TO 1" BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER AT ABUTMENT OF CONCRETE AND OTHER MATERIALS (STRUCTURES, OTHER PLACED CONCRETE, ETC.).
12. SEAL CONCRETE PER ASTM C309 OR ASTM C1315 (TYPE II) PRIOR TO SAW CUTTING CONTROL JOINTS.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING ALL EXISTING MANHOLE AND INLET COVERS, VALVE BOXES, BLOW-OFF RISERS, ETC. TO PROPOSED ELEVATIONS, AS REQUIRED, WHETHER SPECIFICALLY SHOWN ON PLANS OR NOT.
14. ALL SIGNING AND PAVEMENT MARKINGS SHALL BE PROVIDED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) DESIGN STANDARDS, AND/OR LOCAL GOVERNING JURISDICTION.
15. THE CONTRACTOR WILL STABILIZE, BY SEED AND MULCH, SOD, OR OTHER APPROVED MATERIALS (REFER TO PLANS), ANY AND ALL DISTURBED AREAS WITHIN ONE WEEK FOLLOWING CONSTRUCTION OF THE UTILITY SYSTEMS AND PAVEMENT AREAS. CONTRACTOR SHALL MAINTAIN SUCH AREAS UNTIL FINAL ACCEPTANCE BY OWNER AND OWNER'S ENGINEER. CONTRACTOR TO COORDINATE WITH OWNER REGARDING TYPE OF MATERIAL, LANDSCAPING AND IRRIGATION REQUIREMENTS.
16. ELEVATIONS REFER TO NAVD 88 VERTICAL DATUM.
17. GRADING SHOWN ON THESE PLANS IS PROVIDED TO CONTRACTOR TO EXPRESS THE GENERAL GRADING INTENT OF THE PROJECT. THE CONTRACTOR SHALL BE EXPECTED TO GRADE THE ENTIRE SITE TO PROVIDE POSITIVE DRAINAGE IN ALL AREAS THROUGHOUT THE SITE. SMOOTH TRANSITIONS SHALL BE PROVIDED BETWEEN CONTOURS OR SPOT ELEVATIONS AS SHOWN ON THE PLANS TO ACCOMPLISH THE GRADING INTENT. ALL SLOPES SHALL BE STABILIZED IMMEDIATELY AFTER FINAL GRADING HAS BEEN COMPLETED. CONTRACTOR SHALL NOTIFY OWNER AND ENGINEER PRIOR TO DEMOBILIZATION OF GRADING EQUIPMENT TO DETERMINE THAT THE GRADING INTENT HAS BEEN ACHIEVED.
18. NEWLY GRADED AREAS SHALL BE PROTECTED FROM TRAFFIC AND EROSION. ALL SETTLEMENT OR WASHING AWAY THAT MAY OCCUR FROM ANY CAUSE PRIOR TO SEEDING OR ACCEPTANCE SHALL BE REPAIRED AND GRADES RE-ESTABLISHED TO THE REQUIRED ELEVATIONS AND SLOPES AT NO ADDITIONAL COST TO THE OWNER.

TESTING AND INSPECTION REQUIREMENTS (PAVING/GRADING):

1. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPLICABLE TESTING WITH THE SOILS ENGINEER. TESTS WILL BE REQUIRED PURSUANT WITH SITE SPECIFIC GEOTECHNICAL REPORT FOR THE SITE, AS WELL AS THE TESTING SCHEDULE REQUIRED BY FDOT AND THE AFFECTED MUNICIPALITY. THE MORE STRINGENT REQUIREMENTS SHALL APPLY. UPON COMPLETION OF WORK, THE SOILS ENGINEER WILL SUBMIT CERTIFICATIONS TO THE OWNER AND OWNER'S ENGINEER STATING THAT ALL REQUIREMENTS HAVE BEEN MET.
2. A QUALIFIED TESTING LABORATORY 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.
3. THE OWNER'S ENGINEER WILL NOT BE RESPONSIBLE FOR SCHEDULING, COORDINATION OR EVALUATION OF THE SOILS TESTING AND CERTIFICATIONS. IT SHALL BE THE SOLE RESPONSIBILITY OF THE OWNER/DEVELOPER TO MAKE THE NECESSARY ARRANGEMENTS DIRECTLY WITH THE SOILS TESTING LABORATORY/GEOTECHNICAL FIRM AND THE SITE CONTRACTOR.
4. THE FINISHED SURFACE OF THE BASE COURSE AND THAT OF THE WEARING SURFACE SHALL NOT VARY MORE THAN $\frac{1}{4}$" FROM THE TEMPLATE. ANY IRREGULARITIES EXCEEDING THIS LIMIT SHALL BE CORRECTED.
5. FIELD COMPACTION DENSITY, STABILITY, AND THICKNESS TESTING FREQUENCIES OF SUB-BASE, BASE, AND ASPHALT SHALL BE TESTED ONCE EVERY 300 LINEAR FEET OF PAVING PER 24-FT WIDE STRIP, STAGGERED LEFT, CENTER AND RIGHT OF CENTERLINE. WHERE LESS THAN 300 LINEAR FEET OF SUB-BASE, BASE, AND ASPHALT IS PLACED IN ONE DAY, PROVIDE MIN. OF ONE TEST FOR EACH PER DAY'S CONSTRUCTION AT A LOCATION DESIGNATED BY THE ENGINEER. ASPHALT EXTRACTION GRADATION SHALL BE TESTED FROM GRAB SAMPLES COLLECTED ONCE EVERY 1800 SQUARE YARDS OF ASPHALT DELIVERED TO THE SITE (OR A MINIMUM OF ONCE PER DAY).

AS-BUILTS, RECORD DRAWINGS & CERTIFICATIONS:

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR WILL OBTAIN A COPY OF THE MINIMUM REQUIREMENTS FOR AS-BUILT RECORD DRAWING ACCEPTANCE FOR THE AGENCY HAVING JURISDICTION (SUCH AS THE CITY OR COUNTY) AND/OR UTILITY SERVICE PROVIDER, FAMILIARIZE THEMSELVES WITH THESE REQUIREMENTS, AND PRODUCE AS-BUILT RECORD DRAWINGS THAT SUBSTANTIALLY COMPLY WITH OR EXCEED THESE REQUIREMENTS, INCLUDING ANY REQUIRED ELECTRONIC DATA SUBMITTALS.
2. AT LEAST 30 DAYS PRIOR TO ANTICIPATED COMPLETION OF SITE CONSTRUCTION, THE FINAL CERTIFICATION PROCESS SHALL BEGIN. THE CONTRACTOR SHALL PROVIDE DOCUMENTS AND INFORMATION IN A TIMELY MANNER TO ENGINEER, INCLUDING AND WITHOUT LIMITATIONS.
    - A. SURVEYED "AS-BUILTS", MINIMUM AS-BUILT SURVEY SCOPE IS LISTED BELOW.
    - B. COMPACTION AND DENSITY TEST RESULTS CERTIFIED BY OWNERS TESTING COMPANY.
    - C. PRESSURE TESTING AND BACTERIOLOGICAL TESTING RESULTS AS REQUIRED FOR WATER DISTRIBUTION AND/OR WASTEWATER COLLECTION/TRANSMISSION SYSTEMS.
3. AS-BUILT DRAWINGS SHALL BE ACCURATELY RECORDED AND CERTIFIED BY A LICENSED LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA AND SHALL MEET THE MINIMAL TECHNICAL STANDARDS SET FORTH BY THE FLORIDA BOARD OF SURVEYOR'S AND MAPPERS IN CHARTER 61G17-6, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027 FLORIDA STATUTES.
4. ALL RECORD DRAWINGS SHALL BE PREPARED BY THE CONTRACTOR IN AUTOCAD FORMAT USING CONSTRUCTION PLAN SHEETS PROVIDED BY THE ENGINEER. AS-BUILT INFORMATION SHALL BE FIELD VERIFIED, MEASURED, ADDED TO THE AUTOCAD FILES OF THE CONSTRUCTION PLAN SHEETS PROVIDED BY THE ENGINEER, AND CERTIFIED, SIGNED AND SEALED BY THE CONTRACTOR'S LICENSED SURVEYOR WHO WILL BE RESPONSIBLE FOR THE ACCURACY OF ALL DIMENSIONS AND ELEVATIONS.
5. THE X, Y AND (Z) LOCATION BASED ON THE COORDINATE SYSTEM FLORIDA EAST ZONE STATE PLANE COORDINATE FEET NAD 83, OF ALL VALVES (CENTER OF PIPE), MANHOLES, INLETS, VALVE BOXES (GRADE), HYDRANTS (GRADE), BLOW OFFS (GRADE), SAMPLE POINTS (GRADE) AND METER BOXES (GRADE) ETC. SHALL BE CLEARLY SHOWN. ACCEPTABLE POSITION ACCURACY SHALL BE SUB-METER OR BETTER FOR COMPATIBILITY WITH GLOBAL POSITIONING SYSTEM (GPS) EQUIPMENT. THE VERTICAL DATUM USED SHALL BE NAVD 88 UNLESS OTHERWISE SHOWN ON THE CONSTRUCTION PLANS.
6. THE AS-BUILT INFORMATION IS TO INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

❖ SITE IMPROVEMENTS:
- ALL BUILDINGS AND OTHER IMPROVEMENTS WITH DESCRIPTIONS, DIMENSIONS, AND LOCATION.
- PAVEMENT WIDTH AND ELEVATIONS AT THE CENTERLINE AND EDGE OF PAVEMENT EVERY 200 FEET PLUS AT ALL CHANGES IN LONGITUDINAL SLOPE, CROSS SLOPE, INLET LOCATIONS, AND AT ALL DRIVEWAY AND STREET INTERSECTIONS.
- FOR PARKING LOTS, RECORD CENTERLINE AND EDGE OF PAVEMENT ELEVATIONS ALONG ALL DRIVE AISLES AND ISLANDS.
- ALL PARKING AREAS AND SIDEWALK RAMPS DESIGNATED FOR HANDICAP ACCESS SHALL CONTAIN HORIZONTAL AND VERTICAL MEASUREMENTS IN ORDER TO VERIFY REQUIRED WIDTHS AND SLOPES HAVE BEEN MET.
- HORIZONTAL AND VERTICAL DATA FOR ANY CONSTRUCTION THAT DEVIATES FROM THE APPROVED ENGINEERING DRAWINGS.
- WHERE THE PLANS CONTAIN SPECIFIC HORIZONTAL LOCATION DATA, SUCH AS STATION AND OFFSET, THE AS-BUILT DRAWINGS ARE TO REFLECT THE ACTUAL HORIZONTAL LOCATION.
- WHERE THE PLANS CONTAIN SPECIFIC VERTICAL ELEVATION DATA, THE AS-BUILT DRAWINGS ARE TO REFLECT THE ACTUAL MEASURED VERTICAL ELEVATION.

❖ SANITARY SEWER:
- TOP ELEVATION OF EACH MANHOLE FRAME AND COVER AND INVERTS OF EACH LINE ENTERING AND LEAVING EACH MANHOLE/STRUCTURE.
- LENGTH OF EACH RUN OF MAIN BETWEEN MANHOLES (CENTER TO CENTER).
- ACTUAL GRADE/SLOPE OF PIPE BETWEEN MANHOLES.
- LOCATE ALL SERVICE WYES FROM DOWNSTREAM MANHOLE WITH DEPTH AT LOT LINE AND DISTANCE FROM THE MAIN LINE.
- LOCATE WITH MEASUREMENTS FROM PERMANENT VISIBLE OBJECTS ALL FITTINGS/ACCESSORIES NOT VISIBLE FROM THE SURFACE (MINIMUM TWO POINT TIES).

❖ STORM DRAINAGE:
- TOP ELEVATION OF EACH MANHOLE FRAME AND COVER/GRATE AS WELL AS ALL OTHER STRUCTURES (HEADWALLS, CONTROL STRUCTURES, ETC.) AND INVERT OF EACH LINE ENTERING AND LEAVING EACH STRUCTURE, INCLUDING UNDERDRAIN PIPES AND ROCK ENVELOPES.
- INVERTS OF ALL MITERED END SECTIONS.
- ACTUAL GRADE/SLOPE OF PIPE BETWEEN THE STRUCTURES.
- INVERT ELEVATION AND TWO HORIZONTAL TIES FROM PERMANENT VISIBLE OBJECTS TO ALL STORM STUB-OUTS.
- STORMWATER POND TOP OF BERM AND POND BOTTOM ELEVATIONS AND HORIZONTAL DIMENSIONS MEASURED AT A MINIMUM OF TEN LOCATIONS PER POND, AT LOCATIONS DESIGNATED BY THE ENGINEER. TOP OF POND HORIZONTAL DIMENSIONS ARE ALSO TO BE TIED TO PROPERTY CORNERS, EASEMENTS, AND RIGHTS-OF-WAY.
- STORMWATER CONTROL STRUCTURE DIMENSIONS AND ELEVATIONS, INCLUDING ALL WEIRS, SLOTS, ORIFICES, GRATES, AND SKIMMERS.

❖ WATER AND REUSE SYSTEMS AND FORCE MAINS:
- ACTUAL LENGTHS OF PIPE BETWEEN BRANCHES AND VALVES IN THE RUN.
- LOCATE WITH MEASUREMENTS FROM PERMANENT VISIBLE OBJECTS ALL FITTINGS/ACCESSORIES NOT VISIBLE FROM THE SURFACE (MINIMUM TWO POINT TIES).
- LIST THE DEPTHS OF THE LINES AT ALL VALVES, FITTINGS AND FIRE HYDRANTS.
- POTABLE WATER SHALL CLEARLY INDICATE COMPLIANCE TO MINIMUM SEPARATION DISTANCES OR REQUIRED PIPE UPGRADES.

PRIOR TO THE CIVIL ENGINEERING PUNCH LIST INSPECTION THE CONTRACTOR SHALL SEND THE ENGINEER AN AS-BUILT SURVEY. THE ENGINEER WILL REVIEW THE DRAWINGS FOR COMPLETENESS IN ACCORDANCE WITH THE REQUIREMENTS OF THESE NOTES WITHIN FIVE (5) FULL WORKING DAYS. FOR PRELIMINARY REVIEW, SUBMITTAL IN AUTOCAD AND PDF FORMAT IS SUFFICIENT. IF ANY DEFICIENCIES ARE NOTED, ONE COPY OF REDLINED AS-BUILTS WILL BE GIVEN TO THE GENERAL CONTRACTOR FOR REVISIONS TO BE MADE. REVISED AS-BUILTS WILL NEED TO BE FORWARDED TO THE OWNER'S ENGINEER BEFORE ANY CERTIFICATIONS WILL BE INITIATED.

7. IT IS STRONGLY RECOMMENDED THAT THE CONTRACTOR KEEP A DAILY "AS-BUILT" SET OF DRAWINGS WHILE THE WORK BEING DONE IS VISIBLY EXPOSED ACCORDING TO THE CRITERIA OUTLINED HEREIN.
8. THE ENGINEER RESERVES THE RIGHT TO REQUIRE THE CONTRACTOR TO UNCOVER, RETEST AND/OR PERFORM ANY ACTION NECESSARY TO ENSURE THAT THE IMPROVEMENTS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
9. THE CONTRACTOR'S GEOTECHNICAL ENGINEER SHALL CERTIFY TO OWNER'S ENGINEER THAT ALL SITE, UTILITY, AND ROADWAY COMPACTION, BERM STABILITY, AND PAVEMENT CONSTRUCTION SPECIFICATIONS HAVE BEEN CONSTRUCTED TO MEET THE RECOMMENDATIONS OF THE DESIGN GEOTECHNICAL ENGINEER.
10. THE DESIGN ENGINEER RESERVES THE RIGHT TO REQUIRE PERMEABILITY TESTING RESULTS AND BORING LOGS WITHIN DRY RETENTION/DETENTION BASINS TO BE PROVIDED TO OR COMPLETED BY THE GEOTECHNICAL ENGINEER CERTIFYING THE RECOVERY TO THE DESIGN ENGINEER. QUANTITIES, LOCATIONS, AND DEPTHS BELOW FINISHED GRADE SHALL BE SPECIFIED BY THE GEOTECHNICAL ENGINEER.
11. COPIES OF PASSING TEST RESULTS SHALL BE PROVIDED TO THE DEVELOPER, ENGINEER OF RECORD, CONTRACTOR AND LOCAL MUNICIPALITY/AGENCY FOR PURPOSES, SUCH AS BUT NOT LIMITED TO, CERTIFICATION, AND ACCEPTANCE OF FACILITIES BY THE DEVELOPER AND/OR MUNICIPALITY/AGENCY.
12. THE CONTRACTOR SHALL NOTIFY THE ENGINEER WHEN CONSTRUCTION IS COMPLETE FOR WATER, WASTEWATER, AND STORMWATER SYSTEMS SO TIMELY CERTIFICATIONS MAY BE INITIATED. SATISFACTORY BACTERIOLOGICAL TEST RESULTS, PRESSURE TEST RESULTS, AND AN AS-BUILT SURVEY SHALL BE SUBMITTED TO ENGINEER FOR ALL WORK REQUIRING CERTIFICATIONS.
13. IN CASES WHERE THE OWNER DETERMINES PARTIAL CLEARANCES FROM PERMITTING AGENCIES ARE BENEFICIAL TO THE OWNER FOR COMPLETED PORTIONS OF THE PROJECT, PROVIDE PRELIMINARY RECORD DRAWINGS (AUTOCAD FORMAT) TO THE ENGINEER FOR ITS USE IN PREPARING THE PARTIAL CLEARANCE APPLICATIONS FOR THE OWNER.
14. COMPLETE RECORD DRAWINGS THAT ARE FOUND TO BE SATISFACTORY AS A RESULT OF THE ENGINEER'S REVIEW WILL BE USED AS THE BASIS FOR THE FINAL PROJECT RECORD DRAWINGS PREPARED BY THE ENGINEER USING THE CONTRACTOR PROVIDED RECORD DRAWINGS PLUS ENGINEER ADDED INFORMATION.
15. COMPLETE SIGNED AND SEALED RECORD DRAWINGS ARE REQUIRED TO BE DELIVERED TO THE OWNER PRIOR TO FINAL INSPECTION OF THE PROJECT. FINAL INSPECTIONS WILL ONLY BE SCHEDULED UPON RECEIPT OF SIGNED AND SEALED RECORD DRAWINGS THAT HAVE BEEN REVIEWED BY THE ENGINEER AND DELIVERED BY THE ENGINEER TO THE OWNER.
16. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING DESIGN PARAMETERS ARE MET TO THE SATISFACTION OF THE GEOTECHNICAL AND DESIGN ENGINEER PRIOR TO CERTIFICATION OF COMPLETION.

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

This item has been digitally signed and sealed by Jeremy R. Anderson, PE, on the date indicated here.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

R.K.M. DEVELOPMENT CORP.

COMMON OAK ENGINEERING
4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF
AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP
&
SE 58TH AVE
BELLEVIEW, FL
MARION COUNTY

NO:	DATE:	REVISION / ISSUE:	BY:

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

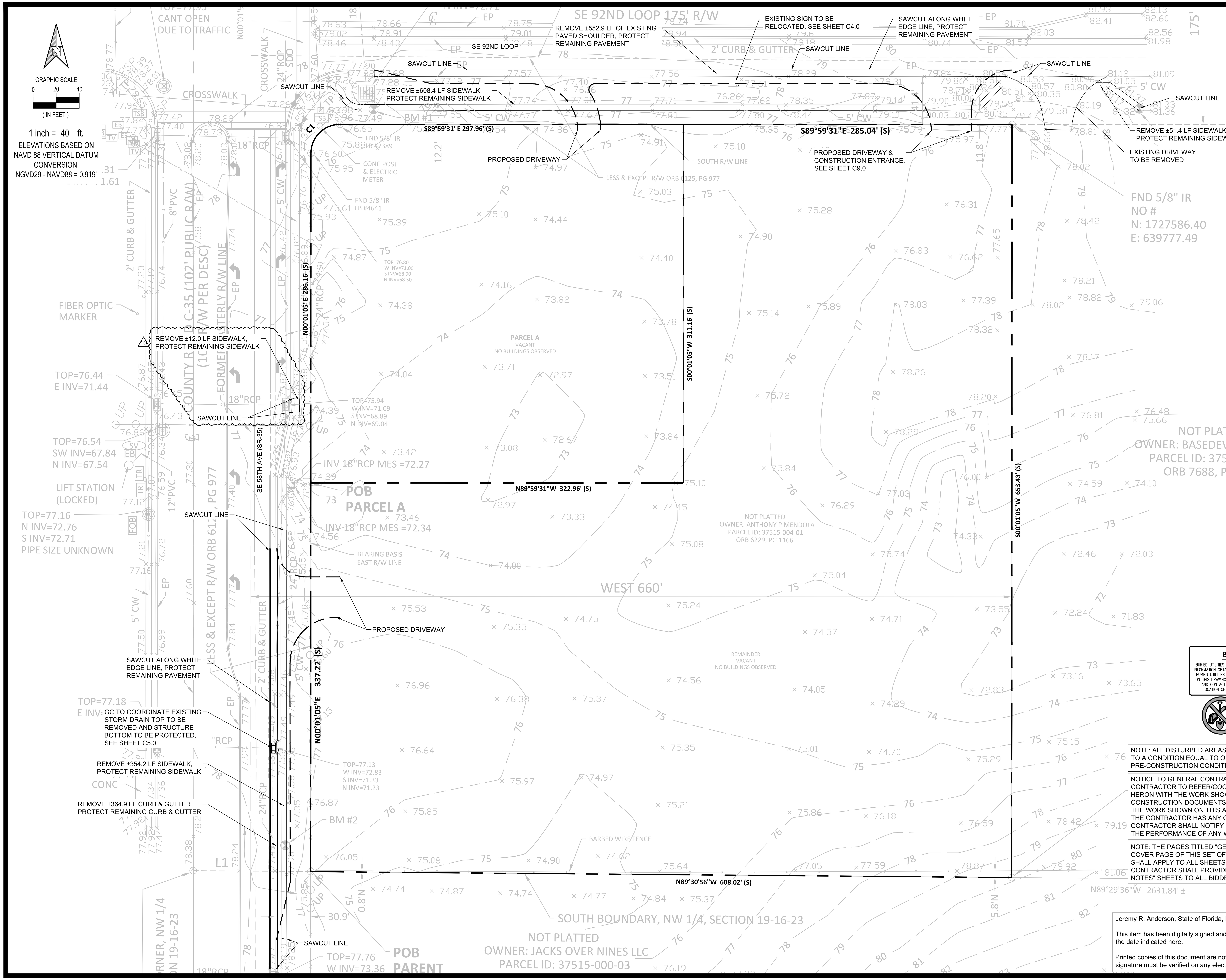
PROJECT # 222.108

DATE 05/13/2024

SCALE N.T.S.

SHEET C2.2

GENERAL NOTES


SE 92ND LOOP 175' R/W
SE 92ND LOOP
GRAPHIC SCALE
0 20 40
(IN FEET)
1 inch = 40 ft.
ELEVATIONS BASED ON NAVD 88 VERTICAL DATUM CONVERSION: NGVD29 - NAVD88 = 0.919'
REMOVE ±552.9 LF OF EXISTING PAVED SHOULDER, PROTECT REMAINING PAVEMENT
EXISTING SIGN TO BE RELOCATED, SEE SHEET C4.0
SAWCUT ALONG WHITE EDGE LINE, PROTECT REMAINING PAVEMENT
SAWCUT LINE
REMOVE ±608.4 LF SIDEWALK, PROTECT REMAINING SIDEWALK
REMOVE ±51.4 LF SIDEWALK, PROTECT REMAINING SIDEWALK
EXISTING DRIVEWAY TO BE REMOVED
PROPOSED DRIVEWAY
PROPOSED DRIVEWAY & CONSTRUCTION ENTRANCE, SEE SHEET C9.0
S89°59'31"E 297.96' (S)
S89°59'31"E 285.04' (S)
N00°01'05"E 286.16' (S)
S00°01'05"W 311.16' (S)
N89°59'31"W 322.96' (S)
S00°01'05"W 653.43' (S)
N00°01'05"E 337.22' (S)
N89°30'56"W 608.02' (S)
FND 5/8" IR NO # N: 1727586.40 E: 639777.49
PARCEL A VACANT NO BUILDINGS OBSERVED
POB PARCEL A
NOT PLATTED OWNER: ANTHONY P MENDOLA PARCEL ID: 37515-004-01 ORB 6229, PG 1166
NOT PLATTED OWNER: BASEDEV LAND TRUST PARCEL ID: 37515-004-02 ORB 7688, PG 1224
REMAINDER VACANT NO BUILDINGS OBSERVED
WEST 660'
REMOVE ±12.0 LF SIDEWALK, PROTECT REMAINING SIDEWALK
FIBER OPTIC MARKER
LIFT STATION (LOCKED)
SE 58TH AVE (SR-35)
COUNTY RD C-35 (102' PUBLIC R/W)
SAWCUT ALONG WHITE EDGE LINE, PROTECT REMAINING PAVEMENT
GC TO COORDINATE EXISTING STORM DRAIN TOP TO BE REMOVED AND STRUCTURE BOTTOM TO BE PROTECTED, SEE SHEET C5.0
REMOVE ±354.2 LF SIDEWALK, PROTECT REMAINING SIDEWALK
REMOVE ±364.9 LF CURB & GUTTER, PROTECT REMAINING CURB & GUTTER
BARBED WIRE FENCE
SOUTH BOUNDARY, NW 1/4, SECTION 19-16-23
NOT PLATTED OWNER: JACKS OVER NINES LLC PARCEL ID: 37515-000-03
POB PARENT
N89°29'36"W 2631.84' ±

BURIED UTILITIES NOTE

BURIED UTILITIES ARE SHOWN AT THEIR APPROXIMATE LOCATION BASED UPON INFORMATION OBTAINED FROM UTILITY COMPANIES AND FIELD EVIDENCE. OTHER BURIED UTILITIES MIGHT EXIST ON THE SUBJECT SITE WHICH ARE NOT SHOWN ON THIS DRAWING. USE EXTREME CAUTION DURING EXCAVATION PROCEDURES AND CONTACT SUNSHINE STATE ONE AT 1-800-432-4770 FOR EXACT LOCATION OF BURIED FACILITIES PRIOR TO EXCAVATION OPERATIONS.

CALL BEFORE YOU DIG...
1-800-432-4770
UTILITIES PROTECTION CENTER
IT'S THE LAW

NOTE: ALL DISTURBED AREAS TO BE SODDED AND RESTORED TO A CONDITION EQUAL TO OR BETTER THAN PRE-CONSTRUCTION CONDITION.

NOTICE TO GENERAL CONTRACTORS:
CONTRACTOR TO REFER/COORDINATE THE WORK SHOWN HERON WITH THE WORK SHOWN ON THE REMAINDER OF THESE CONSTRUCTION DOCUMENTS. IF ANY DISCREPANCIES BETWEEN THE WORK SHOWN ON THIS AND OTHER PAGES IS FOUND, OR IF THE CONTRACTOR HAS ANY QUESTIONS OF ANY KIND, CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING PRIOR TO THE PERFORMANCE OF ANY WORK.

NOTE: THE PAGES TITLED "GENERAL NOTES", AS LISTED ON THE COVER PAGE OF THIS SET OF CONSTRUCTION DOCUMENTS, SHALL APPLY TO ALL SHEETS HEREIN. THE GENERAL CONTRACTOR SHALL PROVIDE A COPY OF THE "GENERAL NOTES" SHEETS TO ALL BIDDERS AND SUBCONTRACTORS.

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

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R.K.M. DEVELOPMENT CORP.

COMMON OAK ENGINEERING
4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN

AT SEC OF SE 92ND LP & SE 58TH AVE
BELLEVIEW, FL
MARION COUNTY

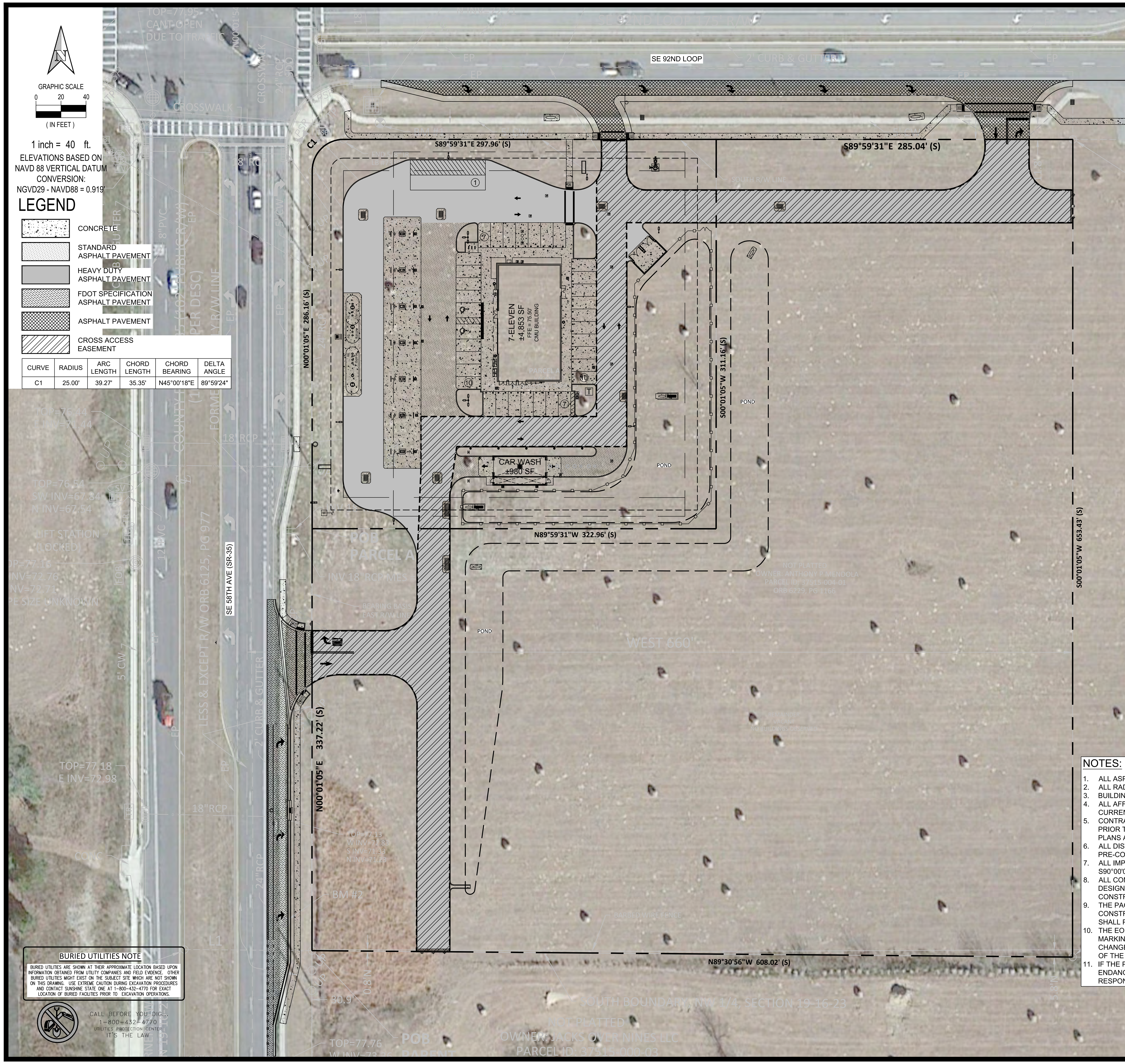
NO:	DATE:	REVISION / ISSUE:	BY:
2	12/05/2024	FDOT ACCESS COMMENTS	JR
4	12/15/2024	MARION COUNTY COMMENTS	JR
10	04/09/2024	FDOT DRAINAGE COMMENTS	JR

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

PROJECT # 222.108	
DATE 05/13/2024	SHEET C3.0
SCALE 1" = 40'	

DEMO PLAN



ELEVATIONS BASED ON NAVD 88 VERTICAL DATUM CONVERSION: NGVD29 - NAVD88 = 0.919'

LEGEND

- CONCRETE
- STANDARD ASPHALT PAVEMENT
- HEAVY DUTY ASPHALT PAVEMENT
- FDOT SPECIFICATION ASPHALT PAVEMENT
- ASPHALT PAVEMENT
- CROSS ACCESS EASEMENT

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	25.00'	39.27'	35.35'	N45°00'18"E	89°59'24"

BURIED UTILITIES NOTE

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UTILITIES PROTECTION CENTER
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SITE DATA TABLE

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF A CONVENIENCE STORE WITH PARKING, A STAND ALONE CAR WASH, FUELING STATIONS WITH A CANOPY, AND ON-SITE STORMWATER MANAGEMENT.

LOCATION & LAND USE

TAX PARCEL #'S:	37515-004-01
ZONING DISTRICT:	B-2 (WITHIN PRIMARY SPRING PROTECTION ZONE)
FUTURE LAND USE:	COM - COMMERCIAL

ADJACENT ZONING / FLU:

WEST (FRONT):	B-5 / COM
NORTH (SIDE) :	B-2 / COM
EAST (REAR) :	PUD / COM
SOUTH (SIDE) :	R-1 / COM

DEVELOPER'S AGREEMENT (COUNTY) - OR BOOK 3996, PAGES 789-792
DEVELOPER'S AGREEMENT (BELLEVIEW) - PENDING (WATER & SEWER CONNECTIONS)

AREAS

7-ELEVEN AREAS	PROPOSED (SF)	ACRES	PERCENT OF TOTAL PROPERTY AREA
LOT:	±100,357	±2.30	100%
TOTAL IMPERVIOUS (70% MAX):	±59,617	±1.37	59.40%
BUILDING FOOTPRINT:	±4,853	±0.11	4.83%
CAR WASH FOOTPRINT:	±980	±0.02	0.98%
PAVEMENT, LOADING & SIDEWALKS:	±53,784	±1.23	53.59%
TOTAL PERVIOUS AREA:	±40,740	±0.94	40.60%

FLOOR AREA RATIO (1.0 MAX): ±0.048 OPEN SPACE (20% MIN): 40.60%

PARENT TRACT AREAS	PROPOSED (SF)	ACRES	PERCENT OF TOTAL PROPERTY AREA
LOT:	±295,257	±6.78	100%
TOTAL IMPERVIOUS (70% MAX):	±21,151	±0.49	7.16%
TOTAL PERVIOUS AREA:	±274,106	±6.29	92.84%

FLOOR AREA RATIO (1.0 MAX): N / A OPEN SPACE (20% MIN): 92.84%

SETBACKS & BUFFERS

BUILDING SETBACKS:	REQUIRED / PERMITTED:	PROPOSED:
WEST (FRONT):	10' (MIN)	148.0' (MIN FROM PROPERTY LINE)
NORTH (SIDE) :	65' (MIN)	99.5' (MIN FROM PROPERTY LINE)
EAST (REAR) :	25' (MIN)	123.6' (MIN FROM PROPERTY LINE)
SOUTH (SIDE) :	10' (MIN)	117.7' (MIN FROM PROPERTY LINE)
LANDSCAPE BUFFERS:		
WEST (FRONT):	15' (MIN)	15' (FROM PROPERTY LINE)
NORTH (SIDE) :	15' (MIN)	15' (FROM PROPERTY LINE)
EAST (REAR) :	15' (MIN)	15' (FROM PROPERTY LINE)
SOUTH (SIDE) :	15' (MIN)	15' (FROM PROPERTY LINE)

PARKING

PARKING REQUIRED: ONE (1) SPACE FOR EVERY 300SF OF GROSS FLOOR AREA. BASED ON A 4,853SF CONVENIENCE STORE, A TOTAL OF SIXTEEN (17) PARKING SPACES ARE REQUIRED.

PARKING CALCULATIONS:	4,853 / 300 = 16.18	17 REQUIRED STALLS
PROPOSED PARKING STALLS:		33
PROPOSED ADA STALLS:		2
	TOTAL:	35 SPACES

FEMA

FLOOD ZONE: X FLOOD MAP #12083C0733D EFFECTIVE AUGUST 28, 2008

NOTES:

1. ALL ASPHALT DIMENSIONS ARE TO FACE OF CURB, UNLESS NOTED OTHERWISE
2. ALL RADII ARE 3' UNLESS OTHERWISE SPECIFIED
3. BUILDING SETBACKS ARE TO CONCRETE CORNER OF BUILDING
4. ALL AFFECTED SIDEWALKS, RAMPS AND CROSSWALKS, WILL BE BUILT AND INSPECTED TO MEET CURRENT ADA REQUIREMENTS
5. CONTRACTOR SHALL FIELD VERIFY UTILITY POINT OF CONNECTIONS LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF RECORD OF ANY DISCREPANCIES BETWEEN THE PLANS AND EXISTING FACILITIES
6. ALL DISTURBED AREAS TO BE SODDED AND RESTORED TO A CONDITION EQUAL TO OR BETTER THAN PRE-CONSTRUCTION CONDITION
7. ALL IMPROVEMENTS ARE PARALLEL AND PERPENDICULAR TO NORTH (SIDE) PROPERTY LINE (BEARING S90°00'00"E) UNLESS OTHERWISE SHOWN.
8. ALL CONSTRUCTION IN THE FDOT ROW SHALL CONFORM TO THE LATEST EDITIONS OF THE FDOT DESIGN STANDARDS (INDEXES), THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE FDOT UTILITY ACCOMMODATION MANUAL
9. THE PAGES TITLED "GENERAL NOTES", AS LISTED ON THE COVER PAGE OF THIS SET OF CONSTRUCTION DOCUMENTS, SHALL APPLY TO ALL SHEETS HEREIN. THE GENERAL CONTRACTOR SHALL PROVIDE A COPY OF THE "GENERAL NOTES" SHEETS TO ALL BIDDERS AND SUBCONTRACTORS.
10. THE EOR WILL BE FULLY RESPONSIBLE TO UPDATE / ADD / REMOVE ANY SIGNS OR PAVEMENT MARKINGS THAT NEED TO BE UPDATED / ADDED / REMOVED IN THE FIELD WITH THE PROPOSED CHANGES EVEN IF THE FDOT COMMENTS ARE NOT COMPREHENSIVE AND DO NOT COVER EVERY ONE OF THE CHANGES REQUIRED.
11. IF THE PERMITTED CONNECTION POSES A CURRENT OR POTENTIAL OPERATIONAL PROBLEM THAT ENDANGERS THE HEALTH, SAFETY, OR WELFARE OF THE PUBLIC, THE OWNER / PERMITTEE WILL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE REQUIRED MODIFICATION PER FAC GUIDELINES.

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

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R.K.M. DEVELOPMENT CORP.

COMMON OAK ENGINEERING
4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP & SE 58TH AVE
BELLEVIEW, FL
MARION COUNTY

NO:	DATE:	REVISION / ISSUE:	BY:
2	12/05/2024	FDOT ACCESS COMMENTS	JR
4	12/15/2024	MARION COUNTY COMMENTS	JR
6	02/26/2024	MARION COUNTY COMMENTS	JR

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

PROJECT # 222.108
DATE 05/13/2024
SCALE 1" = 40'
SHEET C4.0

OVERALL SITE PLAN

GRAPHIC SCALE
0 15 30
(IN FEET)

1 inch = 30 ft.
ELEVATIONS BASED ON NAVD 88 VERTICAL DATUM CONVERSION:
NGVD29 - NAVD88 = 0.919'

LEGEND

- CONCRETE
- STANDARD ASPHALT PAVEMENT
- HEAVY DUTY ASPHALT PAVEMENT
- FDOT SPECIFICATION ASPHALT PAVEMENT
- ASPHALT PAVEMENT

##	SITE PLAN NOTES
1	BUILDING SETBACK
2	LANDSCAPE BUFFER
3	ACCESSORY SETBACK
4	20' PEDESTRIAN SIGHT TRIANGLE
5	6" WHITE STRIPING (TYP.)
6	STOP SIGN & POST, DETAIL: 7 / D1.0
7	"DO NOT ENTER" SIGN & POST, DETAIL: 7 / D1.0
8	OM4-1 SIGN & POST LOCATED ON PROPERTY LINE, DETAIL: 8 / D1.0
9	RELOCATED 50 MPH SPEED LIMIT SIGN & POST
10	5' WIDE PAVED SHOULDER, DETAIL: 6 / D1.0
11	6" WHITE SKIP STRIPING, DETAIL: (FDOT INDEX 711-001) / D1.5
12	6" SOLID WHITE STRIPING, DETAIL: (FDOT INDEX 711-001) / D1.4
13	24" WHITE STOP BAR PAVEMENT MARKING DETAIL: (FDOT INDEX 711-001) / D1.4
14	ON SITE DIRECTIONAL ARROW (TYP.), DETAIL: 3 / D1.0
15	FDOT DIRECTIONAL ARROW, DETAIL: (FDOT INDEX 711-001) / D1.4
16	HANDICAP ACCESSIBLE PARKING / SIGNAGE / MARKINGS DETAIL: 1 / D1.0
17	ADA COMPLIANT CROSSWALK DETAIL: (FDOT INDEX 711-001) / D1.4
18	DETECTABLE WARNING, DETAIL: 10 / D1.0
19	HANDICAP ACCESSIBLE RAMP DETAIL: (FDOT INDEX 522-002) / D1.3
20	5' X 5' LANDING (MIN)
21	CONCRETE FLUME, SEE SHEET C5.0 GRADING PLAN
22	MONOLITHIC CURB & SIDEWALK (TYP.), DETAIL: 13 / D1.0
23	FLUSH MONOLITHIC CURB & SIDEWALK (TYP.) DETAIL: 14 / D1.0
24	PROPOSED CURB/SIDEWALK/PAVEMENT TO TRANSITION SMOOTHLY TO EXISTING ADJACENT SURFACE. CONTRACTOR TO VERIFY CONNECTION, LOCATION AND ELEVATION OF EXISTING ADJACENT SURFACE.
25	6" PIPE BOLLARD (TYP.), DETAIL: 11 / D1.0
26	TYPE D CURB (TYP.), DETAIL: (FDOT INDEX 520-001) / D1.2
27	TYPE F CURB (TYP.), DETAIL: (FDOT INDEX 520-001) / D1.2
28	CONCRETE VALLEY GUTTER, DETAIL: (FDOT INDEX 520-001) / D1.2
29	CONCRETE SIDEWALK, DETAIL: (FDOT INDEX 522-001) / D1.3
30	(3) PROPOSED "INVERTED U" BIKE RACKS, DETAIL: 15 / D1.0
31	CONCRETE PAVEMENT (TYP.), DETAIL: 2 / D1.0
32	FDOT ASPHALT PAVEMENT (TYP.), DETAIL: 5 / D1.0
33	HEAVY DUTY ASPHALT PAVEMENT (TYP.), DETAIL: 4 / D1.0
34	STANDARD ASPHALT PAVEMENT (TYP.), DETAIL: 4 / D1.0
35	WATER CONNECTION/RPZ/METER, SEE SHEET C6.0 UTILITY PLAN
36	IRRIGATION CONNECTION TO WELL, SEE SHEET C6.0 UTILITY PLAN
37	STORM DRAINAGE STRUCTURE (TYP.), SEE SHEET C5.0 GRADING PLAN
38	SANITARY SEWER CLEANOUT (TYP.), SEE SHEET C6.0 UTILITY PLAN
39	HOSE BIB
40	PROPOSED PYLON SIGN, PERMIT BY OTHERS
41	PROPOSED PRIVATE FIRE HYDRANT
42	GROUND MOUNTED TRANSFORMER
43	FUELING STATION CANOPY (DASHED LINE)
44	FUELING STATION (TYP.)
45	UNDERGROUND FUEL STORAGE TANKS (2 X 20,000 GALLON CAPACITY)
46	FUELING VENTS
47	AIR COMPRESSOR / VACUUM
48	AWNING, SEE ARCHITECTURAL PLANS
49	SITE LIGHTING POLES (TYP.), SEE PHOTOMETRIC PLANS
50	DUMPSTER ENCLOSURE, DETAIL: 12 / D1.0
51	CONCRETE APRON, DETAIL: 9 / D1.0
52	PRIVATE LIFT STATION, SEE SHEET C6.0 UTILITY PLAN
53	TRASH RECEPTACLE (TYP.), SEE ARCHITECTURAL PLANS
54	ICE MACHINE (2 UNITS), SEE ARCHITECTURAL PLANS
55	PROPANE TANK CAGE, SEE ARCHITECTURAL PLANS
56	SIDEWALK SIGNAGE, SEE ARCHITECTURAL PLANS
57	R6-1R ONE-WAY SIGN, DETAIL: 7 / D1.0
58	RIGHT TURN ONLY SIGN, DETAIL: 16 / D1.0
59	LOADING ZONE
60	ASPHALT PAVEMENT (TYP.), DETAIL: 6 / D1.0
61	SITE LIGHTING POLE, SEE PHOTOMETRIC PLANS
62	±790.6 LF OF CHAIN LINK FENCE AROUND POND
63	8' WIDE DOUBLE GATE
64	END OF ±27.0 LF OF GRAVITY WALL, DETAIL: (FDOT INDEX 400-011) / D1.2
65	1' WIDE RIBBON CURB, DETAIL: 17 / D1.0

SOUTHERN RIGHT-TURN LANE
SCALE: 1"=30'

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

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R.K.M. DEVELOPMENT CORP.

COMMON OAK ENGINEERING

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4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP & SE 88TH AVE
BELLEVIEW, FL
MARION COUNTY

NO:	DATE:	REVISION / ISSUE:	BY:
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4	12/15/2024	MARION COUNTY COMMENTS	JR
5	02/19/2024	FDOT ACCESS COMMENTS	JR
8	03/13/2024	CLIENT COMMENTS	JR
10	04/09/2024	FDOT DRAINAGE COMMENTS	JR
12	04/22/2024	MARION COUNTY COMMENTS	JR

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

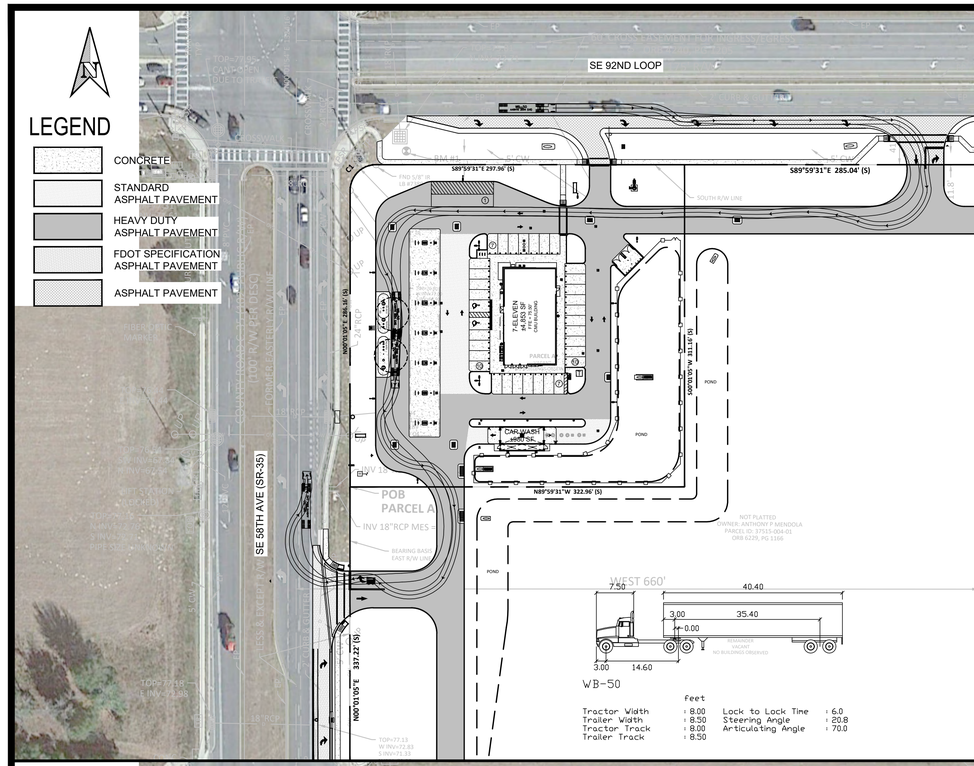
PROJECT # 222.108

DATE 05/13/2024

SCALE 1" = 30'

SHEET C4.1

SITE PLAN



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MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP & SE 58TH AVE
BELLEVIEW, FL
MARION COUNTY

NO.	DATE	REVISION / ISSUE	BY:
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ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

PROJECT # 222.108

DATE 05/13/2024

SCALE NTS

SHEET C4.2

TRUCK ACCESS PLAN

R.K.M. DEVELOPMENT CORP.

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MAJOR SITE PLAN
7-ELEVEN
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NO:	DATE:	REVISION / ISSUE:	BY:
2	12/05/2024	FDOT ACCESS COMMENTS	JR

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

PROJECT # 222.108

DATE 05/13/2024

SHEET C4.3

SCALE 1" = 200'

DRIVEWAY SPACING PLAN

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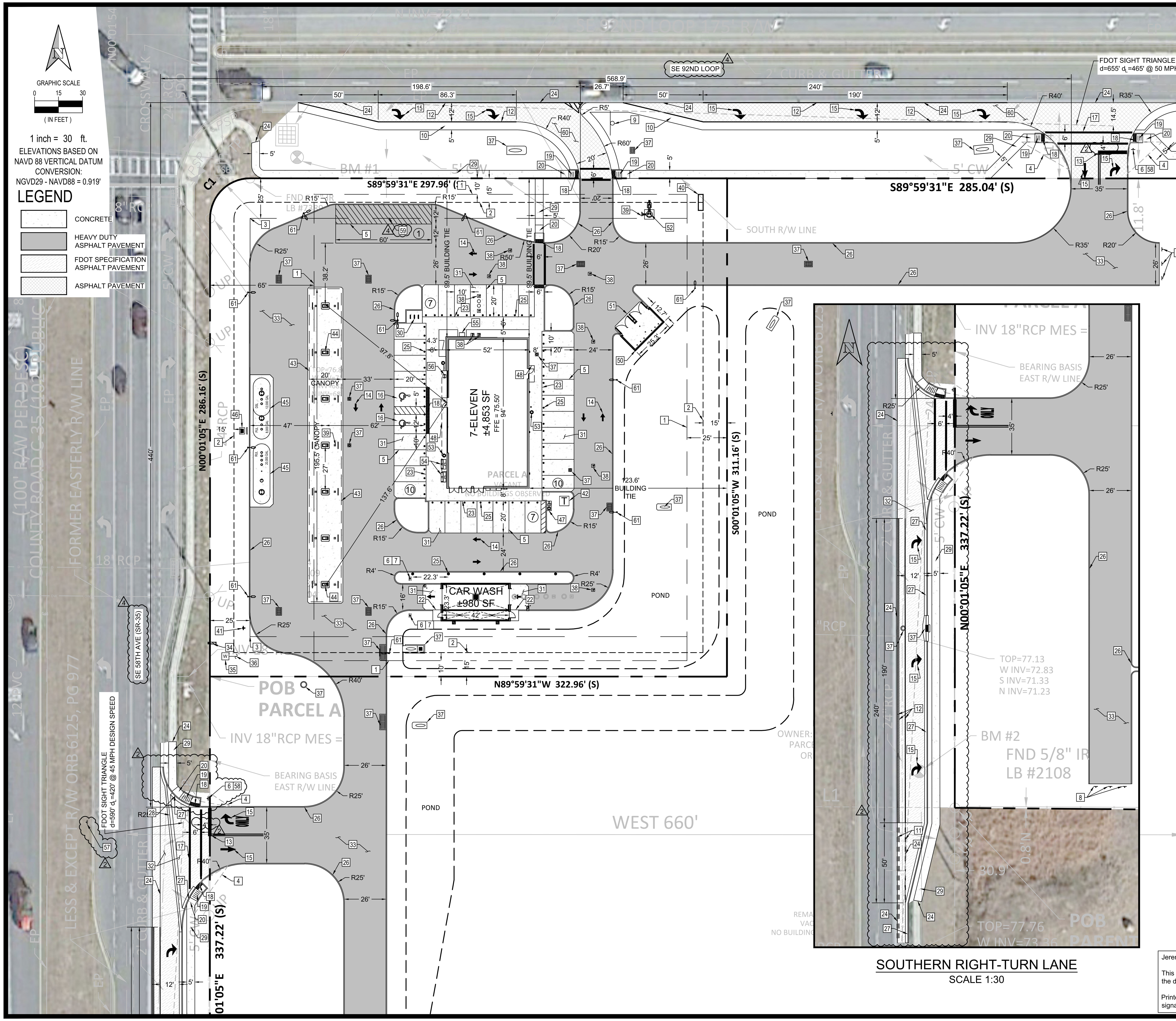

SOUTHERN RIGHT-TURN LANE
SCALE 1:30

##	SITE PLAN NOTES
1	BUILDING SETBACK
2	LANDSCAPE BUFFER
3	ACCESSORY SETBACK
4	20' PEDESTRIAN SIGHT TRIANGLE
5	6" WHITE STRIPING (TYP.)
6	STOP SIGN & POST, DETAIL: 7 / D1.0
7	"DO NOT ENTER" SIGN & POST, DETAIL: 7 / D1.0
8	OM4-1 SIGN & POST, DETAIL: 8 / D1.0
9	RELOCATED 50 MPH SPEED LIMIT SIGN & POST
10	5' WIDE PAVED SHOULDER, DETAIL: 6 / D1.0
11	6" WHITE SKIP STRIPING, DETAIL: (FDOT INDEX 711-001) / D1.4
12	6" SOLID WHITE STRIPING, DETAIL: (FDOT INDEX 711-001) / D1.4
13	24" WHITE STOP BAR PAVEMENT MARKING DETAIL: (FDOT INDEX 711-001) / D1.4
14	ON SITE DIRECTIONAL ARROW (TYP.), DETAIL: 3 / D1.0
15	FDOT DIRECTIONAL ARROW, DETAIL: (FDOT INDEX 711-001) / D1.4
16	HANDICAP ACCESSIBLE PARKING / SIGNAGE / MARKINGS DETAIL: 1 / D1.0
17	ADA COMPLIANT CROSSWALK DETAIL: (FDOT INDEX 711-001) / D1.4
18	DETECTABLE WARNING, DETAIL: 10 / D1.0
19	HANDICAP ACCESSIBLE RAMP DETAIL: (FDOT INDEX 522-002) / D1.3
20	5' X 5' LANDING (MIN)
21	±41.8 LF SEGMENTAL BLOCK RETAINING WALL BY OTHERS
22	MONOLITHIC CURB & SIDEWALK (TYP.), DETAIL: 13 / D1.0
23	FLUSH MONOLITHIC CURB & SIDEWALK (TYP.) DETAIL: 14 / D1.0
24	PROPOSED CURB/SIDEWALK/PAVEMENT TO TRANSITION SMOOTHLY TO EXISTING ADJACENT SURFACE. CONTRACTOR TO VERIFY CONNECTION, LOCATION AND ELEVATION OF EXISTING ADJACENT SURFACE.
25	6" PIPE BOLLARD (TYP.), DETAIL: 11 / D1.0
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27	TYPE F CURB (TYP.), DETAIL: (FDOT INDEX 520-001) / D1.2
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34	WATER CONNECTION/RPZ/METER, SEE SHEET C6.0 UTILITY PLAN
35	IRRIGATION WELL
36	IRRIGATION CONNECTION, SEE SHEET C6.0 UTILITY PLAN
37	STORM DRAINAGE STRUCTURE (TYP.), SEE SHEET C5.0 GRADING PLAN
38	SANITARY SEWER CLEANOUT (TYP.), SEE SHEET C6.0 UTILITY PLAN
39	HOSE BIB
40	PROPOSED SIGNAGE
41	PROPOSED PRIVATE FIRE HYDRANT
42	GROUND MOUNTED TRANSFORMER
43	FUELING STATION CANOPY (DASHED LINE)
44	FUELING STATION (TYP.)
45	UNDERGROUND FUEL STORAGE TANKS (2 X 20,000 GALLON CAPACITY)
46	FUELING VENTS
47	AIR COMPRESSOR / VACUUM
48	AWNING, SEE ARCHITECTURAL PLANS
49	SITE LIGHTING POLES (TYP.), SEE PHOTOMETRIC PLANS
50	DUMPSTER ENCLOSURE, DETAIL: 12 / D1.0
51	CONCRETE APRON, DETAIL: 9 / D1.0
52	PRIVATE LIFT STATION, SEE SHEET C6.0 UTILITY PLAN
53	TRASH RECEPTACLE (TYP.), SEE ARCHITECTURAL PLANS
54	ICE MACHINE (2 UNITS), SEE ARCHITECTURAL PLANS
55	PROPANE TANK CAGE, SEE ARCHITECTURAL PLANS
56	SIDEWALK SIGNAGE, SEE ARCHITECTURAL PLANS
57	R6-1R ONE-WAY SIGN, DETAIL: 7 / D1.0 (2)
58	RIGHT TURN ONLY SIGN, DETAIL: 16 / D1.0
59	LOADING ZONE (4)
60	ASPHALT PAVEMENT (TYP.), DETAIL: 6 / D1.0
61	SITE LIGHTING POLE, SEE PHOTOMETRIC PLANS

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

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MAJOR SITE PLAN (4)
7-ELEVEN
AT SEC OF SE 92ND LP & SE 58TH AVE
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MARION COUNTY

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ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

PROJECT # 222.108
DATE 02/08/2024
SCALE 1" = 30'
SHEET C4.1

SITE PLAN

GRAPHIC SCALE
0 20 40
(IN FEET)

1 inch = 40 ft.

ELEVATIONS BASED ON NAVD 88 VERTICAL DATUM CONVERSION:
NGVD29 - NAVD88 = 0.919'

7-ELEVEN PROPOSED DEVELOPMENT TRACT CONTRIBUTING BASIN

	AREA (SF)	AREA (AC)	PERCENTAGE
PROPERTY AREA	±107,495	±2.47	100%
BUILDING AREA	±5,833	±0.13	5.81%
IMPERVIOUS PAVEMENT, LOADING, SIDEWALKS	±53,784	±1.23	53.59%
IMPERVIOUS TOTAL	±59,617	±1.37	59.40%
PERVIOUS TOTAL	±47,878	±1.10	44.54%
TOTAL	±107,495	±2.47	100%

7-ELEVEN PROPOSED DEVELOPMENT LAND USE AREAS

	AREA (SF)	AREA (AC)	PERCENTAGE
PROPERTY AREA	±100,357	±2.30	100%
BUILDING AREA	±5,833	±0.13	5.81%
IMPERVIOUS PAVEMENT, LOADING, SIDEWALKS	±53,784	±1.23	53.59%
IMPERVIOUS TOTAL	±59,617	±1.37	59.40%
PERVIOUS TOTAL	±40,740	±0.94	40.60%
TOTAL	±100,357	±2.30	100%

PARENT TRACT PROPOSED DEVELOPMENT TRACT CONTRIBUTING BASIN

	AREA (SF)	AREA (AC)	PERCENTAGE
PROPERTY AREA	±197,847	±4.54	100%
BUILDING AREA	N / A	0.00	0%
IMPERVIOUS PAVEMENT, LOADING, SIDEWALKS	±21,151	±0.49	7.16%
IMPERVIOUS TOTAL	±21,151	±0.49	7.16%
PERVIOUS TOTAL	±176,696	±4.06	89.31%
TOTAL	±197,847	±4.54	100%

PARENT TRACT PROPOSED DEVELOPMENT LAND USE AREAS

	AREA (SF)	AREA (AC)	PERCENTAGE
PROPERTY AREA	±298,257	±6.78	100%
BUILDING AREA	N / A	0.00	0%
IMPERVIOUS PAVEMENT, LOADING, SIDEWALKS	±21,151	±0.49	7.16%
IMPERVIOUS TOTAL	±21,151	±0.49	7.16%
PERVIOUS TOTAL	±274,106	±6.29	92.84%
TOTAL	±298,257	±6.78	100%

SUPPLEMENTAL NOTES

##	
1	CONCRETE FLUME, DETAIL: 7 / D2.0

PROFILE INDEX

NOTES:

1. CONTRACTOR SHALL FIELD VERIFY UTILITY POINT OF CONNECTIONS LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF RECORD OF ANY DISCREPANCIES BETWEEN THE PLANS AND EXISTING FACILITIES.
2. ALL CONSTRUCTION IN THE FDOT ROW SHALL CONFORM TO THE LATEST EDITIONS OF THE FDOT DESIGN STANDARDS (INDEXES), THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE FDOT UTILITY ACCOMMODATION MANUAL.
3. THE PAGES TITLED "GENERAL NOTES", AS LISTED ON THE COVER PAGE OF THIS SET OF CONSTRUCTION DOCUMENTS, SHALL APPLY TO ALL SHEETS HEREIN. THE GENERAL CONTRACTOR SHALL PROVIDE A COPY OF THE "GENERAL NOTES" SHEETS TO ALL BIDDERS AND SUBCONTRACTORS.
4. ALL DISTURBED AREAS TO BE SODDED AND RESTORED TO A CONDITION EQUAL TO OR BETTER THAN PRE-CONSTRUCTION CONDITION.
5. CONTRACTOR TO REFER/COORDINATE THE WORK SHOWN HEREIN WITH THE WORK SHOWN ON THE REMAINDER OF THESE CONSTRUCTION DOCUMENTS. IF ANY DISCREPANCIES BETWEEN THE WORK SHOWN ON THIS AND OTHER PAGES IS FOUND, OR IF THE CONTRACTOR HAS ANY QUESTIONS OF ANY KIND, CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING PRIOR TO THE PERFORMANCE OF ANY WORK.
6. CONTRACTOR SHALL SHOOT SANITARY SEWER AND STORM WATER INFRASTRUCTURE AS-BUILT DATA AND SUBMIT TO ENGINEER OF RECORD FOR APPROVAL PRIOR TO ASPHALT PAVEMENT AND BASE COURSE INSTALLATION.
7. ALL PROPOSED SIDEWALKS, RAMPS AND CROSSWALKS SHALL BE BUILT AND INSPECTED TO MEET CURRENT ADA REQUIREMENTS, SEE "GENERAL NOTES".
8. ALL SPOT ELEVATIONS ARE TO BOTTOM OF CURB (TOP OF ASPHALT/CONCRETE) UNLESS OTHERWISE IDENTIFIED.

BURIED UTILITIES NOTE

BURIED UTILITIES ARE SHOWN AT THEIR APPROXIMATE LOCATION BASED UPON INFORMATION OBTAINED FROM UTILITY COMPANIES AND FIELD EVIDENCE. OTHER BURIED UTILITIES MIGHT EXIST ON THE SUBJECT SITE WHICH ARE NOT SHOWN ON THIS DRAWING. USE EXTREME CAUTION DURING EXCAVATION PROCEDURES AND CONTACT SUNSHINE STATE ONE AT 1-800-432-4770 FOR EXACT LOCATION OF BURIED FACILITIES PRIOR TO EXCAVATION OPERATIONS.

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UTILITIES PROTECTION CENTER
IT'S THE LAW

SOUTHERN ACCESS
SCALE 1"=30'

R.K.M. DEVELOPMENT CORP.

COMMON OAK ENGINEERING

COMMON OAK ENGINEERING
4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
SEC OF SE 92ND LP & SE 58TH AVE
BELLEVIEW, FL
MARION COUNTY

NO:	DATE:	REVISION / ISSUE:	BY:
4	12/15/2024	MARION COUNTY COMMENTS	JR
8	03/13/2024	CLIENT COMMENTS	JR
12	04/22/2024	MARION COUNTY COMMENTS	JR

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

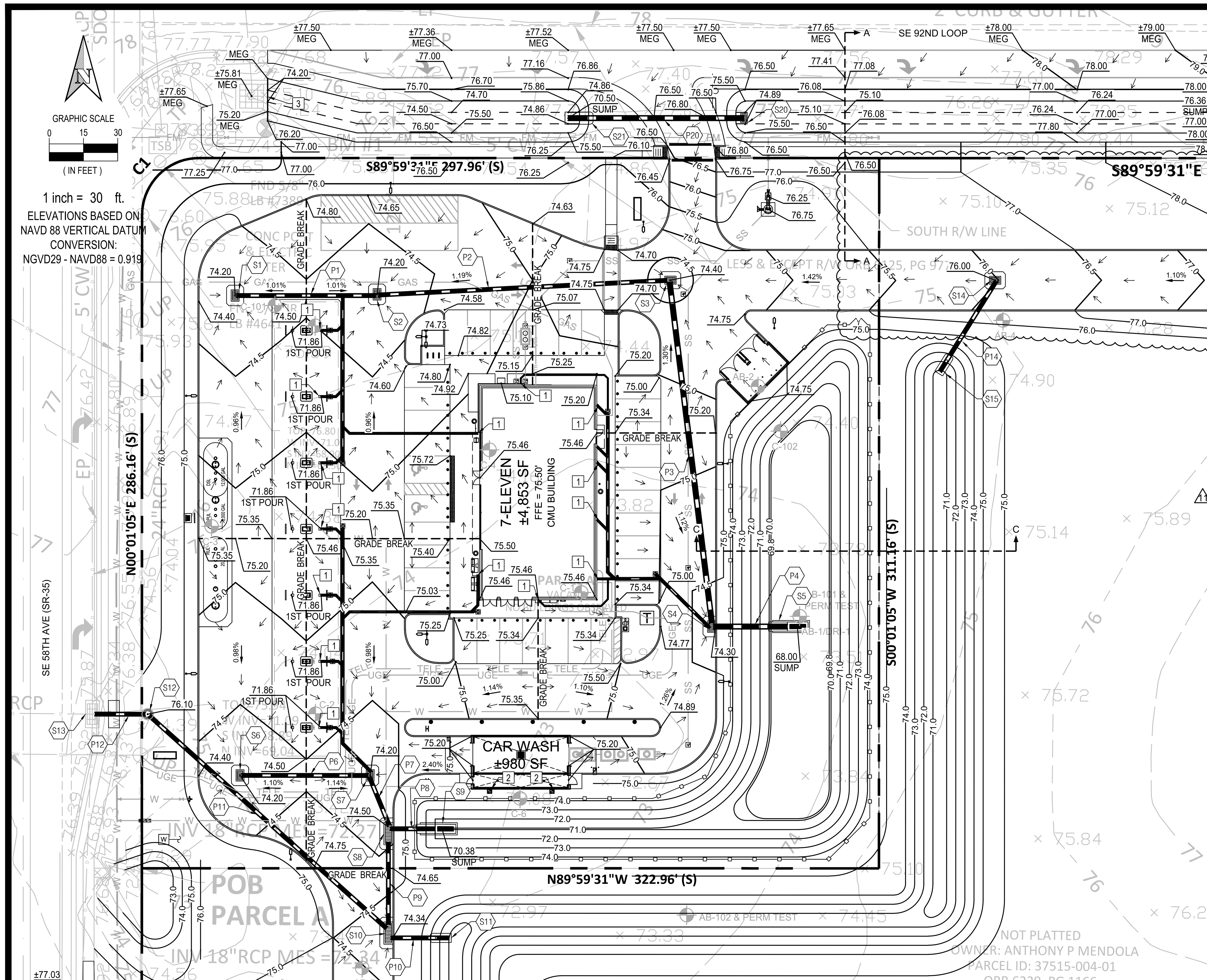
PROJECT # 222.108

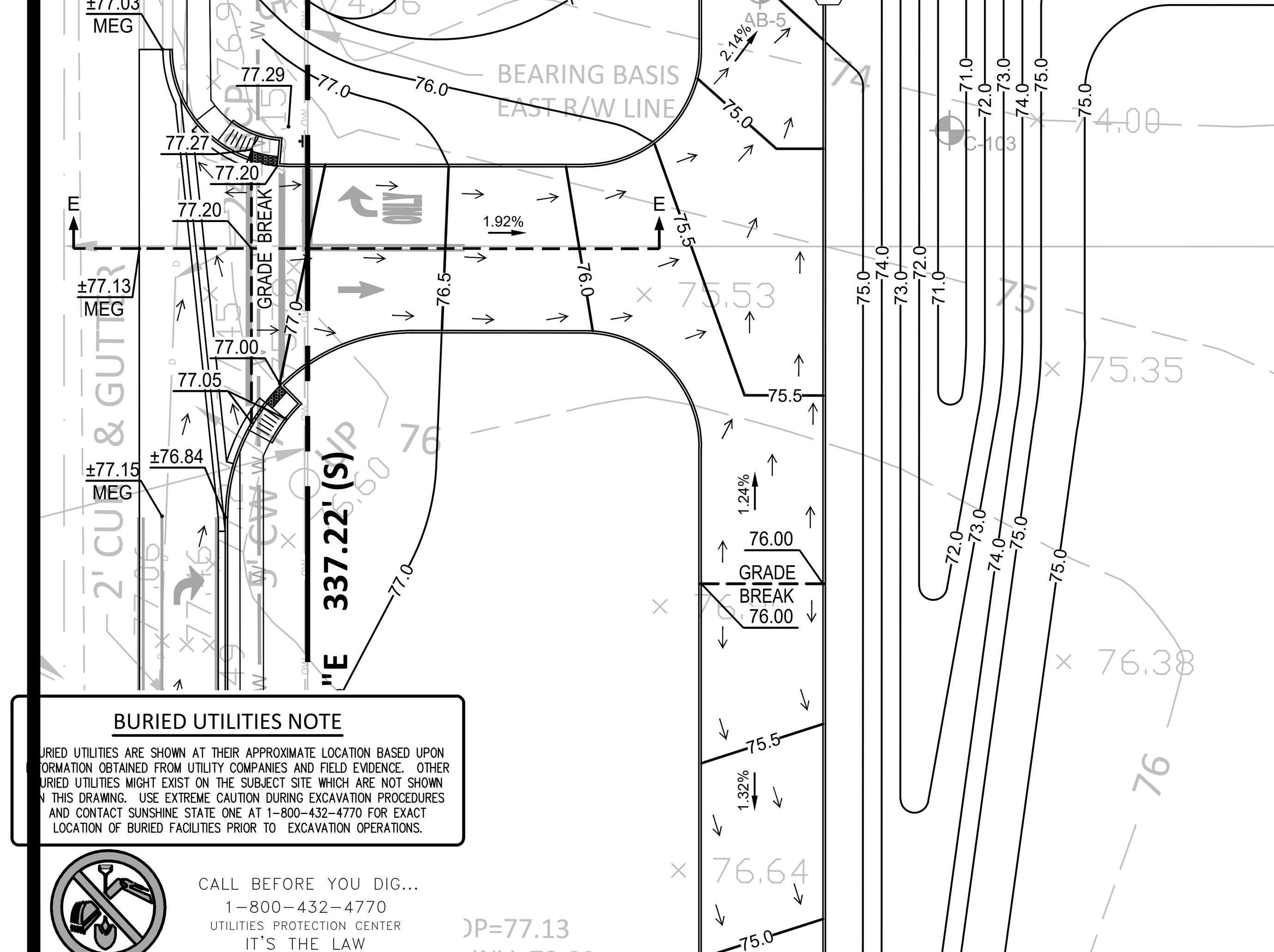
DATE 05/13/2024

SCALE 1" = 40'

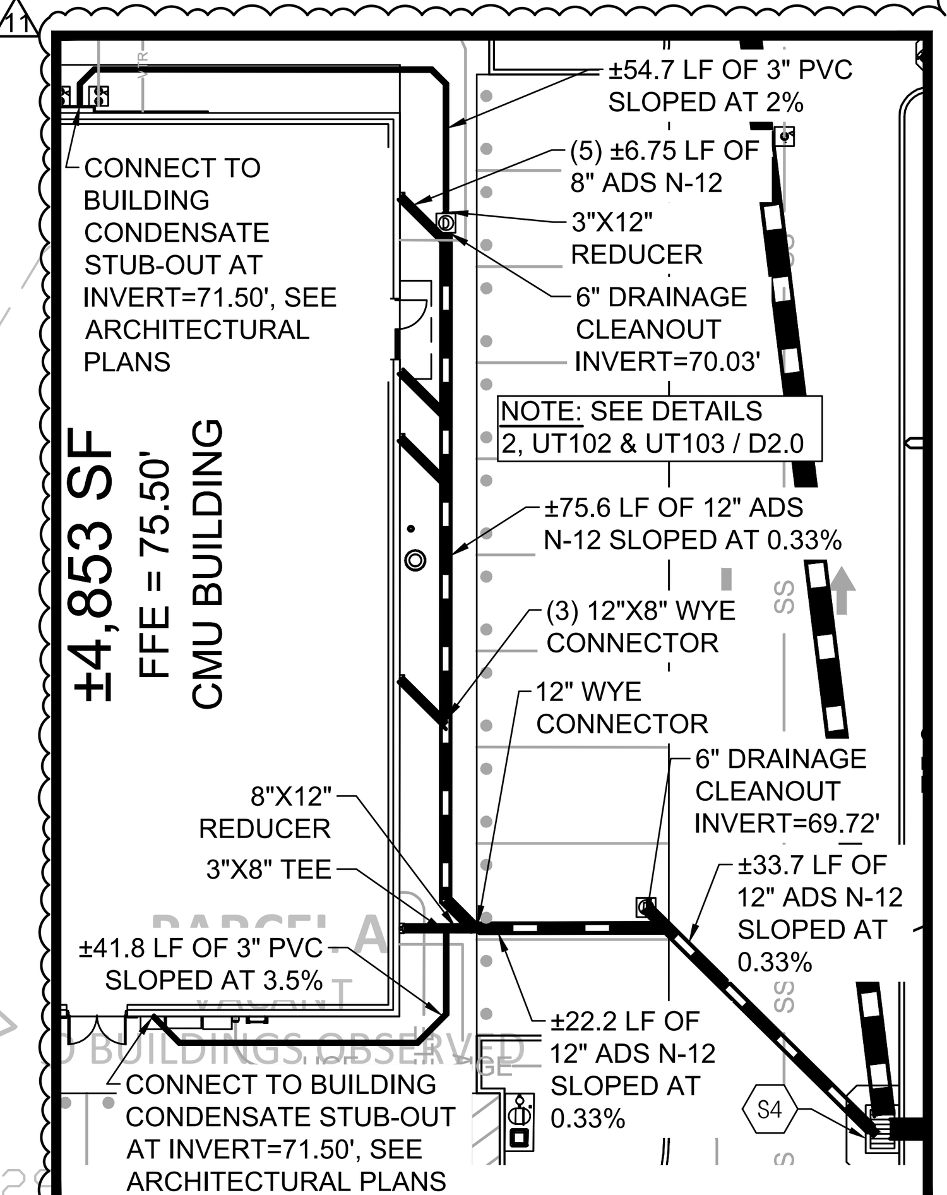
SHEET C5.0

OVERALL GRADING PLAN

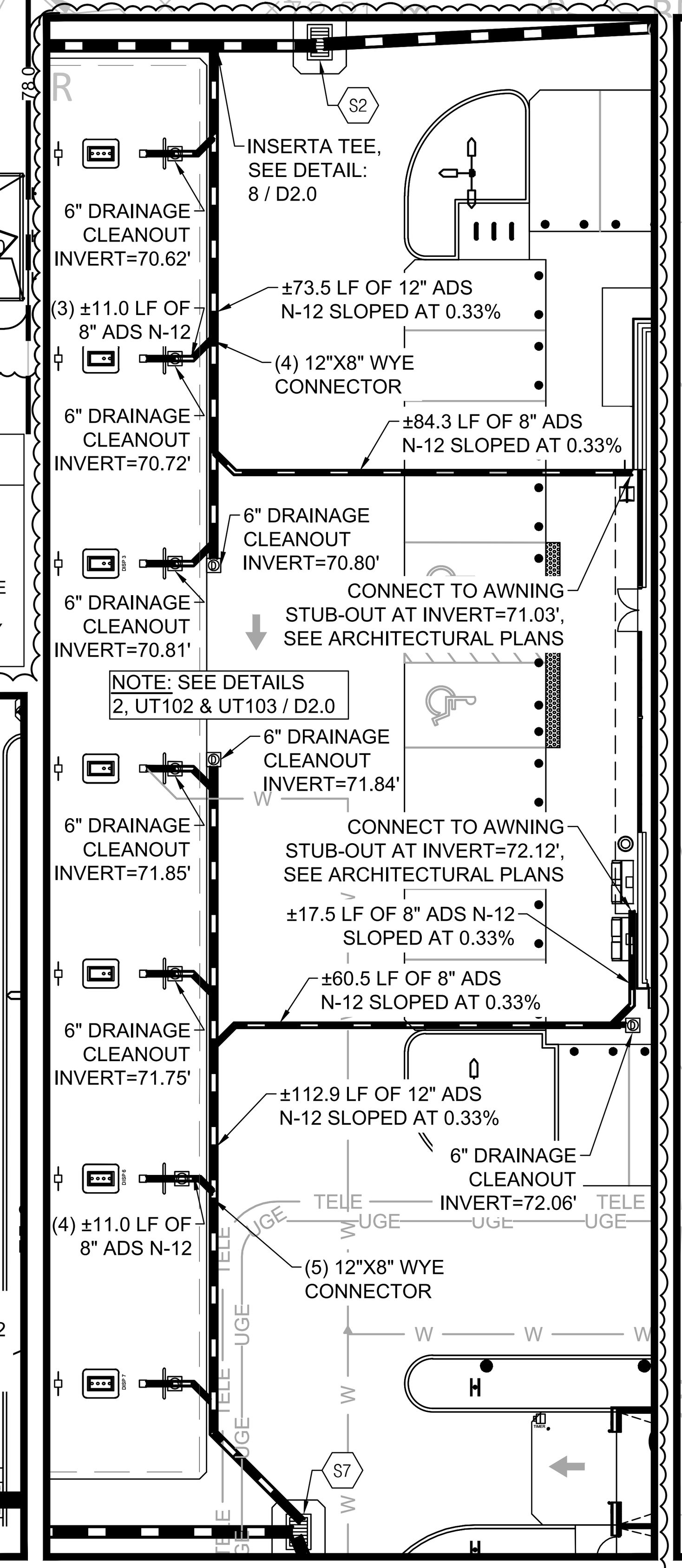




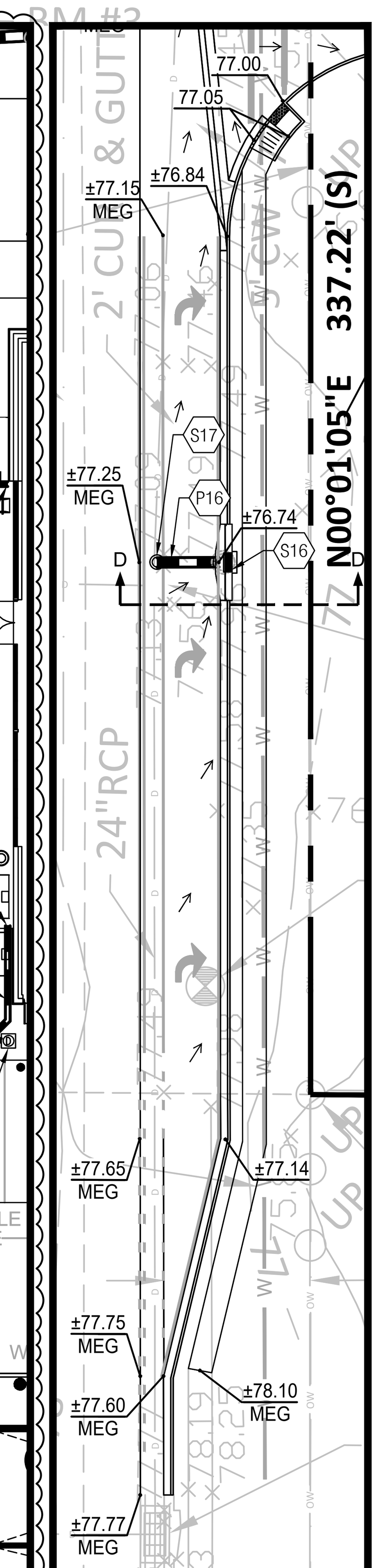
##	SUPPLEMENTAL NOTES
1	ROOF DRAINS (R-D) TO STORMWATER SYSTEM DETAIL: THIS SHEET & ARCHITECTURAL PLANS
2	DAYLIGHT ROOF DRAINS, ADD RIP RAP IN GREEN AREAS
3	CUT 2.0' WIDE WINDOW ON EAST SIDE OF EXISTING STRUCTURE TO ELEVATION 74.75' FOR DRAINAGE. CONTRACTOR TO VERIFY EXISTING WINDOW SIZE PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER.



ROOF DRAIN TO STORMWATER SYSTEM
SCALE 1"=20'



FUELING CANOPY DRAIN TO STORMWATER SYSTEM
SCALE 1"=20'



SOUTHWESTERN TURN LANE
SCALE 1"=30'

GRADING PLAN NOTES

S1 STRUCTURE NO. 1
TYPE "F" INLET | TOG = 74.20'
P1 INVERT (PROPOSED 18" ADS N-12 PIPE) = 70.70'
DETAIL: 1 & 9 / D2.0, (FDOT INDEX 425-053) / D2.2

P1 S1 TO S2
±62.2 LF OF 18" ADS-N12 PIPE AT 0.33% SLOPE
DETAIL: UT102 & UT103 / D2.0

S2 STRUCTURE NO. 2
TYPE "F" INLET | TOG = 75.35'
P1 & P2 INVERT (PROPOSED 18" ADS N-12 PIPE) = 70.51'
R-D INVERT (PROPOSED 12" ADS N-12 PIPE) = 71.26'
DETAIL: 1 & 9 / D2.0, (FDOT INDEX 425-053) / D2.2

P2 S2 TO S3
±132.9 LF OF 18" ADS-N12 PIPE AT 0.33% SLOPE
DETAIL: UT102 & UT103 / D2.0

S3 STRUCTURE NO. 3
TYPE "F" INLET | TOG = 74.40'
P2 INVERT (PROPOSED 18" ADS N-12 PIPE) = 70.07'
P3 INVERT (PROPOSED 18" ADS N-12 PIPE) = 68.61'
DETAIL: 1 & 9 / D2.0, (FDOT INDEX 425-053) / D2.2

P3 S3 TO S4
±135.0 LF OF 24" ADS-N12 PIPE AT 0.33% SLOPE
DETAIL: UT102 & UT103 / D2.0

S4 STRUCTURE NO. 4
TYPE "F" INLET | TOG = 74.30'
P3 INVERT (PROPOSED 24" ADS N-12 PIPE) = 68.11'
R-D INVERT (PROPOSED 12" ADS N-12 PIPE) = 70.02'
P4 INVERT (PROPOSED 24" ADS N-12 PIPE) = 68.11'
DETAIL: 1 & 9 / D2.0, (FDOT INDEX 425-053) / D2.2

P4 S4 TO S5
±33.3 LF OF 24" ADS-N12 PIPE AT 0.33% SLOPE
DETAIL: UT102 & UT103 / D2.0

S5 STRUCTURE NO. 5
CONCRETE MITERED END SECTION SUMP
P4 INVERT (PROPOSED 24" ADS N-12) = 68.00'
DETAIL: 3 & 4 / D2.0

S6 STRUCTURE NO. 6
TYPE "F" INLET | TOG = 74.20'
P6 INVERT (PROPOSED 18" ADS N-12 PIPE) = 70.70'
DETAIL: 1 & 9 / D2.0, (FDOT INDEX 425-053) / D2.2

P6 S6 TO S7
±57.0 LF OF 18" ADS-N12 PIPE AT 0.33% SLOPE
DETAIL: UT102 & UT103 / D2.0

S7 STRUCTURE NO. 7
TYPE "F" INLET | TOG = 74.20'
P6 INVERT (PROPOSED 18" ADS N-12 PIPE) = 70.52'
R-D INVERT (PROPOSED 12" ADS N-12 PIPE) = 71.47'
P7 INVERT (PROPOSED 18" ADS N-12 PIPE) = 70.52'
DETAIL: 1 & 9 / D2.0, (FDOT INDEX 425-053) / D2.2

P7 S7 TO S8
±23.7 LF OF 18" ADS-N12 PIPE AT 0.33% SLOPE
DETAIL: UT102 & UT103 / D2.0

S8 STRUCTURE NO. 8 - CONTROL STRUCTURE NO. 1
TYPE "H" INLET (4 GRATE) | TOG = 74.50'
TOP OF WALL AT ELEVATION = 73.95'
0.5' WIDE RECTANGULAR WEIR AT ELEVATION = 73.45'
CENTER OF Ø3" ORIFICE AT ELEVATION = 72.10'
SKIMMER TOP = 73.95' | SKIMMER BOTTOM = 72.95'
P7 & P8 INVERT (PROPOSED 18" ADS N-12 PIPE) = 70.44'
P9 INVERT (PROPOSED 18" ADS N-12 PIPE) = 69.18' 13
DETAIL: 1, 5, & 9 / D2.0, (FDOT INDEX 425-052) / D2.2

P8 S8 TO S9
±19.7 LF OF 18" ADS-N12 PIPE AT 0.33% SLOPE
DETAIL: UT102 & UT103 / D2.0

S9 STRUCTURE NO. 9
CONCRETE MITERED END SECTION SUMP
P8 INVERT (PROPOSED 18" ADS N-12) = 70.38'
DETAIL: 3 & 4 / D2.0

P9 S9 TO S10
±39.7 LF OF 18" ADS-N12 PIPE AT 0.33% SLOPE
DETAIL: UT102 & UT103 / D2.0

S10 STRUCTURE NO. 10 - CONTROL STRUCTURE NO. 2
TYPE "H" INLET (4 GRATE) | TOG = 74.34'
TOP OF WALL AT ELEVATION = 74.84'
1.0' WIDE RECTANGULAR WEIR AT ELEVATION = 73.33'
CENTER OF Ø3" ORIFICE AT ELEVATION = 72.80'
SKIMMER TOP = 73.83' | SKIMMER BOTTOM = 72.83'
P9 & P11 INVERT (PROPOSED 18" ADS N-12 PIPE) = 69.05'
P10 INVERT (PROPOSED 18" ADS N-12 PIPE) = 71.09'
DETAIL: 1, 6, & 9 / D2.0, (FDOT INDEX 425-052) / D2.2

P10 S10 TO S11
±26.2 LF OF 18" ADS-N12 PIPE AT 0.33% SLOPE
DETAIL: UT102 & UT103 / D2.0

S11 STRUCTURE NO. 11
CONCRETE MITERED END SECTION
P12 INVERT (PROPOSED 18" ADS N-12) = 71.00'
DETAIL: 4 / D2.0

P11 S10 TO S12
±140.9 LF OF 18" ADS-N12 PIPE AT 0.33% SLOPE
DETAIL: UT102 & UT103 / D2.0

S12 STRUCTURE NO. 12
TYPE J ALTERNATE A 5' DIAMETER STORM MANHOLE
RIM = 76.10'
P11 INVERT (PROPOSED 18" ADS N-12 PIPE) = 72.03'
P12 INVERT (PROPOSED 18" ADS N-12 PIPE) = 69.05'
DETAIL: (FDOT INDEX 425-010) / D2.0

P12 S12 TO S13
±24.2 LF OF 18" ADS-N12 PIPE AT 0.33% SLOPE
DETAIL: UT102 & UT103 / D2.0

S13 STRUCTURE NO. 13
EXISTING CURB INLET
P12 INVERT (PROPOSED 18" ADS N-12 PIPE) = 68.97'
EXISTING NORTH INVERT = 69.04'
EXISTING SOUTH INVERT = 68.89'
EXISTING WEST INVERT = 71.09'

S14 STRUCTURE NO. 14
TYPE "F" INLET | TOG = 75.50'
P11 INVERT (PROPOSED 18" ADS N-12 PIPE) = 71.15'
DETAIL: 1 & 9 / D2.0, (FDOT INDEX 425-053) / D2.2

P14 S14 TO S15
±46.7 LF OF 18" ADS-N12 PIPE AT 0.33% SLOPE
DETAIL: UT102 & UT103 / D2.0

S15 STRUCTURE NO. 15
CONCRETE MITERED END SECTION
P14 INVERT (PROPOSED 18" ADS N-12) = 71.00'
DETAIL: 4 / D2.0

S16 STRUCTURE NO. 16
CURB INLET TYPE "6" STRUCTURE TOP WITH Ø3.5' TYPE "J" STRUCTURE BOTTOM
P17 INVERT (PROPOSED 24" RCP) = 71.47'
DETAIL: 1 / D2.0, (FDOT INDEX 425-010 & 425-021) / D2.1

P16 S16 TO S17
±13.9 LF OF 24" RCP PIPE AT 1.0% SLOPE
DETAIL: UT102 & UT103 / D2.0

S17 STRUCTURE NO. 17
REMOVE EXISTING STRUCTURE TOP AND REPLACE WITH MANHOLE STRUCTURE TOP AND Ø2' MANHOLE COVER
P16 INVERT (PROPOSED 24" RCP) = 71.33'
DETAIL: (FDOT INDEX 425-001) / D2.1

S18 STRUCTURE NO. 14
TYPE "C" INLET | TOG = 79.75'
P18 INVERT (PROPOSED 24" ADS N-12 PIPE) = 76.75'
DETAIL: 1 / D2.0, (FDOT INDEX 425-052) / D2.2

P18 S18 TO S19
±129.8 LF OF 24" ADS-N12 PIPE AT 0.3% SLOPE
DETAIL: UT102 & UT103 / D2.0

S19 STRUCTURE NO. 19
CONCRETE MITERED END SECTION WITH GRADED SUMP
P18 INVERT (PROPOSED 24" ADS N-12) = 76.36'
DETAIL: 4 / D2.0

S20 STRUCTURE NO. 20
TYPE "C" INLET | TOG = 74.89'
P20 INVERT (PROPOSED 24" ADS N-12 PIPE) = 70.89'
DETAIL: 1 / D2.0, (FDOT INDEX 425-052) / D2.2

P20 S20 TO S21
±77.1 LF OF 24" ADS-N12 PIPE AT 0.5% SLOPE
DETAIL: UT102 & UT103 / D2.0

S21 STRUCTURE NO. 21
CONCRETE MITERED END SECTION WITH GRADED SUMP
P20 INVERT (PROPOSED 24" ADS N-12) = 70.50'
DETAIL: 4 / D2.0

BURIED UTILITIES NOTE

URIED UTILITIES ARE SHOWN AT THEIR APPROXIMATE LOCATION BASED UPON ORMATION OBTAINED FROM UTILITY COMPANIES AND FIELD EVIDENCE. OTHER URIED UTILITIES MIGHT EXIST ON THE SUBJECT SITE WHICH ARE NOT SHOWN N THIS DRAWING. USE EXTREME CAUTION DURING EXCAVATION PROCEDURES AND CONTACT SUNSHINE STATE ONE AT 1-800-432-4770 FOR EXACT LOCATION OF BURIED FACILITIES PRIOR TO EXCAVATION OPERATIONS.

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IT'S THE LAW

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

This item has been digitally signed and sealed by Jeremy R. Anderson, PE, on the date indicated here.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

R.K.M. DEVELOPMENT CORP.

COMMON OAK ENGINEERING
4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP & SE 58TH AVE
BELLEVIEW, FL
MARION COUNTY

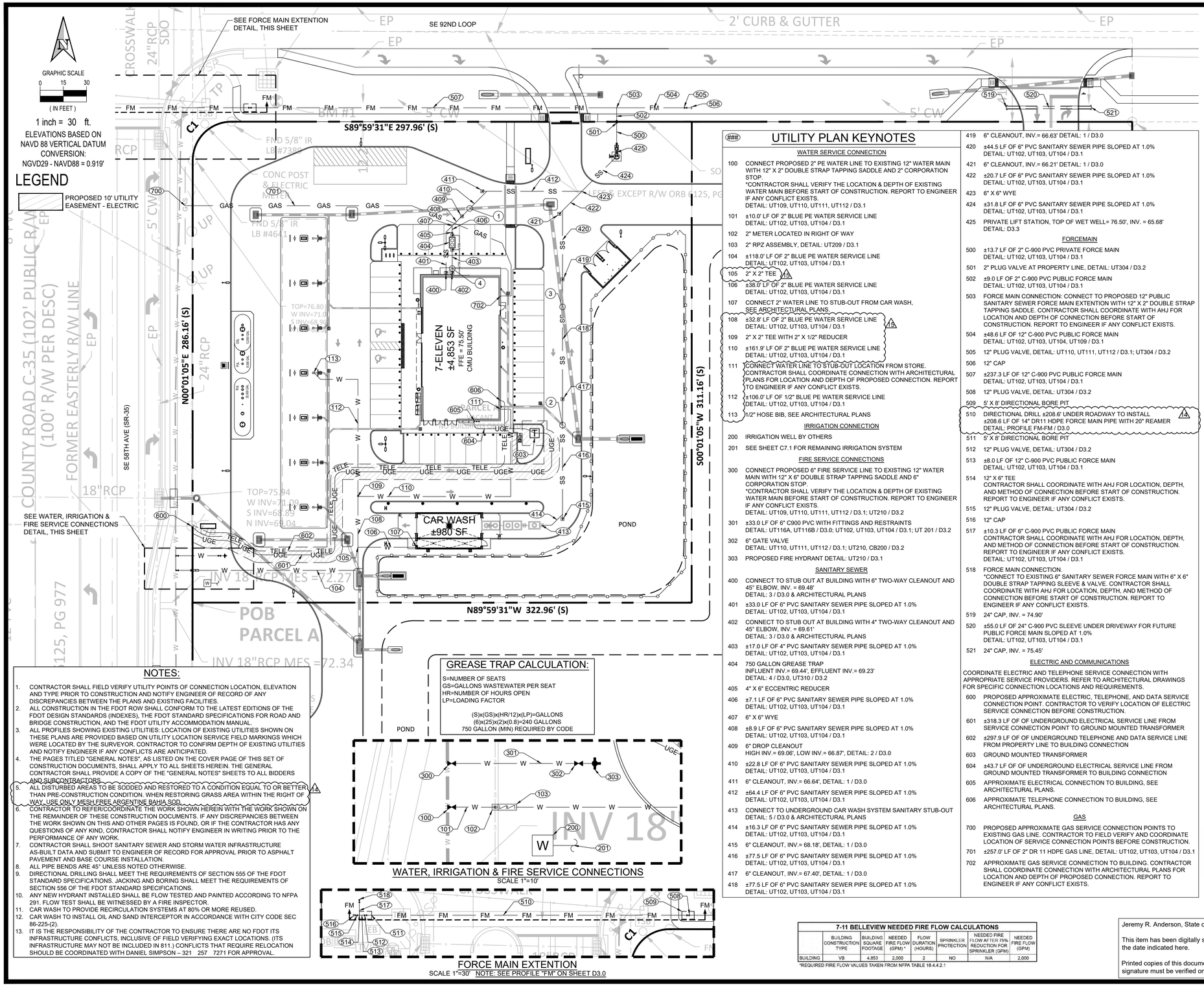
NO:	DATE:	REVISION / ISSUE:	BY:
4	12/15/2024	MARION COUNTY COMMENTS	JR
8	03/13/2024	CLIENT COMMENTS	JR
9	02/16/2024	FDOT DRAINAGE COMMENTS	JR
10	04/09/2024	FDOT DRAINAGE COMMENTS	JR
11	04/16/2024	CLIENT COMMENTS	JR
13	04/23/2024	FDOT ACCESS COMMENTS	JR

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

PROJECT # 222.108	
DATE 05/13/2024	SHEET C5.1
SCALE 1" = 30'	

GRADING PLAN



NOTES:

1. CONTRACTOR SHALL FIELD VERIFY UTILITY POINTS OF CONNECTION LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF RECORD OF ANY DISCREPANCIES BETWEEN THE PLANS AND EXISTING FACILITIES.
2. ALL CONSTRUCTION IN THE FDOT ROW SHALL CONFORM TO THE LATEST EDITIONS OF THE FDOT DESIGN STANDARDS (INDEXES), THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE FDOT UTILITY ACCOMMODATION MANUAL.
3. ALL PROFILES SHOWING EXISTING UTILITIES LOCATION OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE PROVIDED BASED ON UTILITY LOCATION SERVICE FIELD MARKINGS WHICH WERE LOCATED BY THE SURVEYOR. CONTRACTOR TO CONFIRM DEPTH OF EXISTING UTILITIES AND NOTIFY ENGINEER IF ANY CONFLICTS ARE ANTICIPATED.
4. THE PAGES TITLED "GENERAL NOTES", AS LISTED ON THE COVER PAGE OF THIS SET OF CONSTRUCTION DOCUMENTS, SHALL APPLY TO ALL SHEETS HEREIN. THE GENERAL CONTRACTOR SHALL PROVIDE A COPY OF THE "GENERAL NOTES" SHEETS TO ALL BIDDERS AND SUBCONTRACTORS.
5. ALL DISTURBED AREAS TO BE SODDED AND RESTORED TO A CONDITION EQUAL TO OR BETTER THAN PRE-CONSTRUCTION CONDITION. WHEN RESTORING GRASS AREA WITHIN THE RIGHT OF WAY, USE ONLY MESH FREE ARGENTINE BAHIA SOD. 1A
6. CONTRACTOR TO REFER/COORDINATE THE WORK SHOWN HEREIN WITH THE WORK SHOWN ON THE REMAINDER OF THESE CONSTRUCTION DOCUMENTS. IF ANY DISCREPANCIES BETWEEN THE WORK SHOWN ON THIS AND OTHER PAGES IS FOUND, OR IF THE CONTRACTOR HAS ANY QUESTIONS OF ANY KIND, CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING PRIOR TO THE PERFORMANCE OF ANY WORK.
7. CONTRACTOR SHALL SHOOT SANITARY SEWER AND STORM WATER INFRASTRUCTURE AS-BUILT DATA AND SUBMIT TO ENGINEER OF RECORD FOR APPROVAL PRIOR TO ASPHALT PAVEMENT AND BASE COURSE INSTALLATION.
8. ALL PIPE BENDS ARE 45° UNLESS NOTED OTHERWISE.
9. DIRECTIONAL DRILLING SHALL MEET THE REQUIREMENTS OF SECTION 555 OF THE FDOT STANDARD SPECIFICATIONS. JACKING AND BORING SHALL MEET THE REQUIREMENTS OF SECTION 556 OF THE FDOT STANDARD SPECIFICATIONS.
10. ANY NEW HYDRANT INSTALLED SHALL BE FLOW TESTED AND PAINTED ACCORDING TO NFPA 291. FLOW TEST SHALL BE WITNESSED BY A FIRE INSPECTOR.
11. CAR WASH TO PROVIDE RECIRCULATION SYSTEMS AT 80% OR MORE REUSED.
12. CAR WASH TO INSTALL OIL AND SAND INTERCEPTOR IN ACCORDANCE WITH CITY CODE SEC 86-225-(2).
13. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THERE ARE NO FDOT ITS INFRASTRUCTURE CONFLICTS, INCLUSIVE OF FIELD VERIFYING EXACT LOCATIONS. (ITS INFRASTRUCTURE MAY NOT BE INCLUDED IN 811.) CONFLICTS THAT REQUIRE RELOCATION SHOULD BE COORDINATED WITH DANIEL SIMPSON – 321 257 7271 FOR APPROVAL.

GREASE TRAP CALCULATION:

S=NUMBER OF SEATS
GS=GALLONS WASTEWATER PER SEAT
HR=NUMBER OF HOURS OPEN
LP=LOADING FACTOR

(S)x(GS)x(HR/12)x(LP)=GALLONS
(6)x(25)x(2)x(0.8)=240 GALLONS
750 GALLON (MIN) REQUIRED BY CODE

WATER, IRRIGATION & FIRE SERVICE CONNECTIONS
SCALE 1"=10'

FORCE MAIN EXTENTION
SCALE 1"=30' NOTE: SEE PROFILE "FM" ON SHEET D3.0

UTILITY PLAN KEYNOTES

WATER SERVICE CONNECTION

100 CONNECT PROPOSED 2" PE WATER LINE TO EXISTING 12" WATER MAIN WITH 12" X 2" DOUBLE STRAP TAPPING SADDLE AND 2" CORPORATION STOP.
*CONTRACTOR SHALL VERIFY THE LOCATION & DEPTH OF EXISTING WATER MAIN BEFORE START OF CONSTRUCTION. REPORT TO ENGINEER IF ANY CONFLICT EXISTS.
DETAIL: UT109, UT110, UT111, UT112 / D3.1

101 ±10.0' LF OF 2" BLUE PE WATER SERVICE LINE
DETAIL: UT102, UT103, UT104 / D3.1

102 2" METER LOCATED IN RIGHT OF WAY

103 2" RPZ ASSEMBLY, DETAIL: UT209 / D3.1

104 ±118.0' LF OF 2" BLUE PE WATER SERVICE LINE
DETAIL: UT102, UT103, UT104 / D3.1

105 2" X 2" TEE 1A

106 ±38.0' LF OF 2" BLUE PE WATER SERVICE LINE
DETAIL: UT102, UT103, UT104 / D3.1

107 CONNECT 2" WATER LINE TO STUB-OUT FROM CAR WASH, SEE ARCHITECTURAL PLANS.

108 ±32.8' LF OF 2" BLUE PE WATER SERVICE LINE 1A
DETAIL: UT102, UT103, UT104 / D3.1

109 2" X 2" TEE WITH 2" X 1/2" REDUCER

110 ±161.9' LF OF 2" BLUE PE WATER SERVICE LINE
DETAIL: UT102, UT103, UT104 / D3.1

111 CONNECT WATER LINE TO STUB-OUT LOCATION FROM STORE. CONTRACTOR SHALL COORDINATE CONNECTION WITH ARCHITECTURAL PLANS FOR LOCATION AND DEPTH OF PROPOSED CONNECTION. REPORT TO ENGINEER IF ANY CONFLICT EXISTS.

112 ±106.0' LF OF 1/2" BLUE PE WATER SERVICE LINE
DETAIL: UT102, UT103, UT104 / D3.1

113 1/2" HOSE BIB, SEE ARCHITECTURAL PLANS

IRRIGATION CONNECTION

200 IRRIGATION WELL BY OTHERS

201 SEE SHEET C7.1 FOR REMAINING IRRIGATION SYSTEM

FIRE SERVICE CONNECTIONS

300 CONNECT PROPOSED 6" FIRE SERVICE LINE TO EXISTING 12" WATER MAIN WITH 12" X 6" DOUBLE STRAP TAPPING SADDLE AND 6" CORPORATION STOP.
*CONTRACTOR SHALL VERIFY THE LOCATION & DEPTH OF EXISTING WATER MAIN BEFORE START OF CONSTRUCTION. REPORT TO ENGINEER IF ANY CONFLICT EXISTS.
DETAIL: UT109, UT110, UT111, UT112 / D3.1; UT210 / D3.2

301 ±33.0 LF OF 6" C900 PVC WITH FITTINGS AND RESTRAINTS
DETAIL: UT116A, UT116B / D3.0; UT102, UT103, UT104 / D3.1; UT 201 / D3.2

302 6" GATE VALVE
DETAIL: UT110, UT111, UT112 / D3.1; UT210, CB200 / D3.2

303 PROPOSED FIRE HYDRANT DETAIL: UT210 / D3.1

SANITARY SEWER

400 CONNECT TO STUB OUT AT BUILDING WITH 6" TWO-WAY CLEANOUT AND 45° ELBOW, INV. = 69.48'
DETAIL: 3 / D3.0 & ARCHITECTURAL PLANS

401 ±33.0 LF OF 6" PVC SANITARY SEWER PIPE SLOPED AT 1.0%
DETAIL: UT102, UT103, UT104 / D3.1

402 CONNECT TO STUB OUT AT BUILDING WITH 4" TWO-WAY CLEANOUT AND 45° ELBOW, INV. = 69.61'
DETAIL: 3 / D3.0 & ARCHITECTURAL PLANS

403 ±17.0 LF OF 4" PVC SANITARY SEWER PIPE SLOPED AT 1.0%
DETAIL: UT102, UT103, UT104 / D3.1

404 750 GALLON GREASE TRAP
INFLUENT INV.= 69.44', EFFLUENT INV.= 69.23'
DETAIL: 4 / D3.0, UT310 / D3.2

405 4" X 6" ECCENTRIC REDUCER

406 ±7.1 LF OF 6" PVC SANITARY SEWER PIPE SLOPED AT 1.0%
DETAIL: UT102, UT103, UT104 / D3.1

407 6" X 6" WYE

408 ±8.9 LF OF 6" PVC SANITARY SEWER PIPE SLOPED AT 1.0%
DETAIL: UT102, UT103, UT104 / D3.1

409 6" DROP CLEANOUT
HIGH INV.= 69.06', LOW INV.= 66.87', DETAIL: 2 / D3.0

410 ±22.8 LF OF 6" PVC SANITARY SEWER PIPE SLOPED AT 1.0%
DETAIL: UT102, UT103, UT104 / D3.1

411 6" CLEANOUT, INV.= 66.64', DETAIL: 1 / D3.0

412 ±64.4 LF OF 6" PVC SANITARY SEWER PIPE SLOPED AT 1.0%
DETAIL: UT102, UT103, UT104 / D3.1

413 CONNECT TO UNDERGROUND CAR WASH SYSTEM SANITARY STUB-OUT
DETAIL: 5 / D3.0 & ARCHITECTURAL PLANS

414 ±16.3 LF OF 6" PVC SANITARY SEWER PIPE SLOPED AT 1.0%
DETAIL: UT102, UT103, UT104 / D3.1

415 6" CLEANOUT, INV.= 68.18', DETAIL: 1 / D3.0

416 ±77.5 LF OF 6" PVC SANITARY SEWER PIPE SLOPED AT 1.0%
DETAIL: UT102, UT103, UT104 / D3.1

417 6" CLEANOUT, INV.= 67.40', DETAIL: 1 / D3.0

418 ±77.5 LF OF 6" PVC SANITARY SEWER PIPE SLOPED AT 1.0%
DETAIL: UT102, UT103, UT104 / D3.1

419 6" CLEANOUT, INV.= 66.63' DETAIL: 1 / D3.0

420 ±44.5 LF OF 6" PVC SANITARY SEWER PIPE SLOPED AT 1.0%
DETAIL: UT102, UT103, UT104 / D3.1

421 6" CLEANOUT, INV.= 66.21' DETAIL: 1 / D3.0

422 ±20.7 LF OF 6" PVC SANITARY SEWER PIPE SLOPED AT 1.0%
DETAIL: UT102, UT103, UT104 / D3.1

423 6" X 6" WYE

424 ±31.8 LF OF 6" PVC SANITARY SEWER PIPE SLOPED AT 1.0%
DETAIL: UT102, UT103, UT104 / D3.1

425 PRIVATE LIFT STATION, TOP OF WET WELL= 76.50', INV. = 65.68'
DETAIL: D3.3

FORCEMAIN

500 ±13.7 LF OF 2" C-900 PVC PRIVATE FORCE MAIN
DETAIL: UT102, UT103, UT104 / D3.1

501 2" PLUG VALVE AT PROPERTY LINE, DETAIL: UT304 / D3.2

502 ±9.0 LF OF 2" C-900 PVC PUBLIC FORCE MAIN
DETAIL: UT102, UT103, UT104 / D3.1

503 FORCE MAIN CONNECTION: CONNECT TO PROPOSED 12" PUBLIC SANITARY SEWER FORCE MAIN EXTENTION WITH 12" X 2" DOUBLE STRAP TAPPING SADDLE. CONTRACTOR SHALL COORDINATE WITH AHJ FOR LOCATION AND DEPTH OF CONNECTION BEFORE START OF CONSTRUCTION. REPORT TO ENGINEER IF ANY CONFLICT EXISTS.

504 ±48.6 LF OF 12" C-900 PVC PUBLIC FORCE MAIN
DETAIL: UT102, UT103, UT104, UT109 / D3.1

505 12" PLUG VALVE, DETAIL: UT110, UT111, UT112 / D3.1; UT304 / D3.2

506 12" CAP

507 ±237.3 LF OF 12" C-900 PVC PUBLIC FORCE MAIN
DETAIL: UT102, UT103, UT104 / D3.1

508 12" PLUG VALVE, DETAIL: UT304 / D3.2

509 5' X 8' DIRECTIONAL BORE PIT

510 DIRECTIONAL DRILL ±208.6' UNDER ROADWAY TO INSTALL ±208.6 LF OF 14" DR11 HDPE FORCE MAIN PIPE WITH 20" REAMER 1A
DETAIL: PROFILE FM-FM / D3.0

511 5' X 8' DIRECTIONAL BORE PIT

512 12" PLUG VALVE, DETAIL: UT304 / D3.2

513 ±8.0 LF OF 12" C-900 PVC PUBLIC FORCE MAIN
DETAIL: UT102, UT103, UT104 / D3.1

514 12" X 6" TEE
CONTRACTOR SHALL COORDINATE WITH AHJ FOR LOCATION, DEPTH, AND METHOD OF CONNECTION BEFORE START OF CONSTRUCTION. REPORT TO ENGINEER IF ANY CONFLICT EXISTS.

515 12" PLUG VALVE, DETAIL: UT304 / D3.2

516 12" CAP

517 ±10.3 LF OF 6" C-900 PVC PUBLIC FORCE MAIN
CONTRACTOR SHALL COORDINATE WITH AHJ FOR LOCATION, DEPTH, AND METHOD OF CONNECTION BEFORE START OF CONSTRUCTION. REPORT TO ENGINEER IF ANY CONFLICT EXISTS.
DETAIL: UT102, UT103, UT104 / D3.1

518 FORCE MAIN CONNECTION.
*CONNECT TO EXISTING 6" SANITARY SEWER FORCE MAIN WITH 6" X 6" DOUBLE STRAP TAPPING SLEEVE & VALVE. CONTRACTOR SHALL COORDINATE WITH AHJ FOR LOCATION, DEPTH, AND METHOD OF CONNECTION BEFORE START OF CONSTRUCTION. REPORT TO ENGINEER IF ANY CONFLICT EXISTS.

519 24" CAP, INV. = 74.90'

520 ±55.0 LF OF 24" C-900 PVC SLEEVE UNDER DRIVEWAY FOR FUTURE PUBLIC FORCE MAIN SLOPED AT 1.0%
DETAIL: UT102, UT103, UT104 / D3.1

521 24" CAP, INV. = 75.45'

ELECTRIC AND COMMUNICATIONS

COORDINATE ELECTRIC AND TELEPHONE SERVICE CONNECTION WITH APPROPRIATE SERVICE PROVIDERS. REFER TO ARCHITECTURAL DRAWINGS FOR SPECIFIC CONNECTION LOCATIONS AND REQUIREMENTS.

600 PROPOSED APPROXIMATE ELECTRIC, TELEPHONE, AND DATA SERVICE CONNECTION POINT. CONTRACTOR TO VERIFY LOCATION OF ELECTRIC SERVICE CONNECTION BEFORE CONSTRUCTION.

601 ±318.3 LF OF OF UNDERGROUND ELECTRICAL SERVICE LINE FROM SERVICE CONNECTION POINT TO GROUND MOUNTED TRANSFORMER

602 ±297.9 LF OF OF UNDERGROUND TELEPHONE AND DATA SERVICE LINE FROM PROPERTY LINE TO BUILDING CONNECTION

603 GROUND MOUNTED TRANSFORMER

604 ±43.7 LF OF OF UNDERGROUND ELECTRICAL SERVICE LINE FROM GROUND MOUNTED TRANSFORMER TO BUILDING CONNECTION

605 APPROXIMATE ELECTRICAL CONNECTION TO BUILDING, SEE ARCHITECTURAL PLANS.

606 APPROXIMATE TELEPHONE CONNECTION TO BUILDING, SEE ARCHITECTURAL PLANS.

GAS

700 PROPOSED APPROXIMATE GAS SERVICE CONNECTION POINTS TO EXISTING GAS LINE. CONTRACTOR TO FIELD VERIFY AND COORDINATE LOCATION OF SERVICE CONNECTION POINTS BEFORE CONSTRUCTION.

701 ±257.0' LF OF 2" DR 11 HDPE GAS LINE, DETAIL: UT102, UT103, UT104 / D3.1

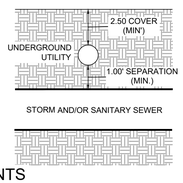
702 APPROXIMATE GAS SERVICE CONNECTION TO BUILDING. CONTRACTOR SHALL COORDINATE CONNECTION WITH ARCHITECTURAL PLANS FOR LOCATION AND DEPTH OF PROPOSED CONNECTION. REPORT TO ENGINEER IF ANY CONFLICT EXISTS.

7-11 BELLEVIEW NEEDED FIRE FLOW CALCULATIONS

	BUILDING CONSTRUCTION TYPE	BUILDING SQUARE FOOTAGE	NEEDED FIRE FLOW (GPM) *	FLOW DURATION (HOURS)	SPRINKLER PROTECTION	NEEDED FIRE FLOW AFTER 75% REDUCTION FOR SPRINKLER (GPM)	NEEDED FIRE FLOW (GPM)
BUILDING	V-B	4,853	2,000	2	NO	N/A	2,000

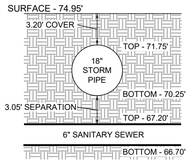
*REQUIRED FIRE FLOW VALUES TAKEN FROM NFPA TABLE 18.4.4.2.1

TYPICAL CROSSINGS



NTS

CROSSING # 1



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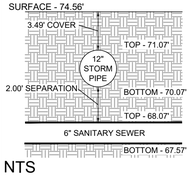

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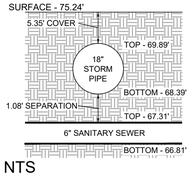

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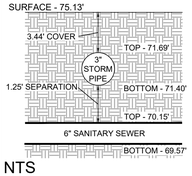


NTS

BURIED UTILITIES NOTE

BURIED UTILITIES ARE SHOWN AT THEIR APPROXIMATE LOCATION BASED UPON INFORMATION OBTAINED FROM UTILITY COMPANIES AND FIELD EVIDENCE. OTHER BURIED UTILITIES MIGHT EXIST ON THE SUBJECT SITE WHICH ARE NOT SHOWN ON THIS DRAWING. USE EXTREME CAUTION DURING EXCAVATION PROCEDURES AND CONTACT SUNSHINE STATE ONE AT 1-800-432-4770 FOR EXACT LOCATION OF BURIED FACILITIES PRIOR TO EXCAVATION OPERATIONS.

CALL BEFORE YOU DIG... 1-800-432-4770 UTILITIES PROTECTION CENTER IT'S THE LAW

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

This item has been digitally signed and sealed by Jeremy R. Anderson, PE, on the date indicated here.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

R.K.M. DEVELOPMENT CORP.

COMMON OAK ENGINEERING
4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP & SE 58TH AVE
BELLEVIEW, FL
MARION COUNTY

NO.	DATE:	REVISION / ISSUE:	BY:
2	12/05/2024	FDOT ACCESS COMMENTS	JR
3	12/07/2024	CITY OF BELLEVIEW UTILITY COMMENTS	JR
4	12/15/2024	MARION COUNTY COMMENTS	JR
6	02/26/2024	MARION COUNTY COMMENTS	JR
7	03/13/2024	CITY OF BELLEVIEW UTILITY COMMENTS	JR
8	03/13/2024	CLIENT COMMENTS	JR
15	05/09/2024	CLIENT COMMENTS	JR
15	05/09/2024	CLIENT COMMENTS	JR

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

PROJECT # 222.108

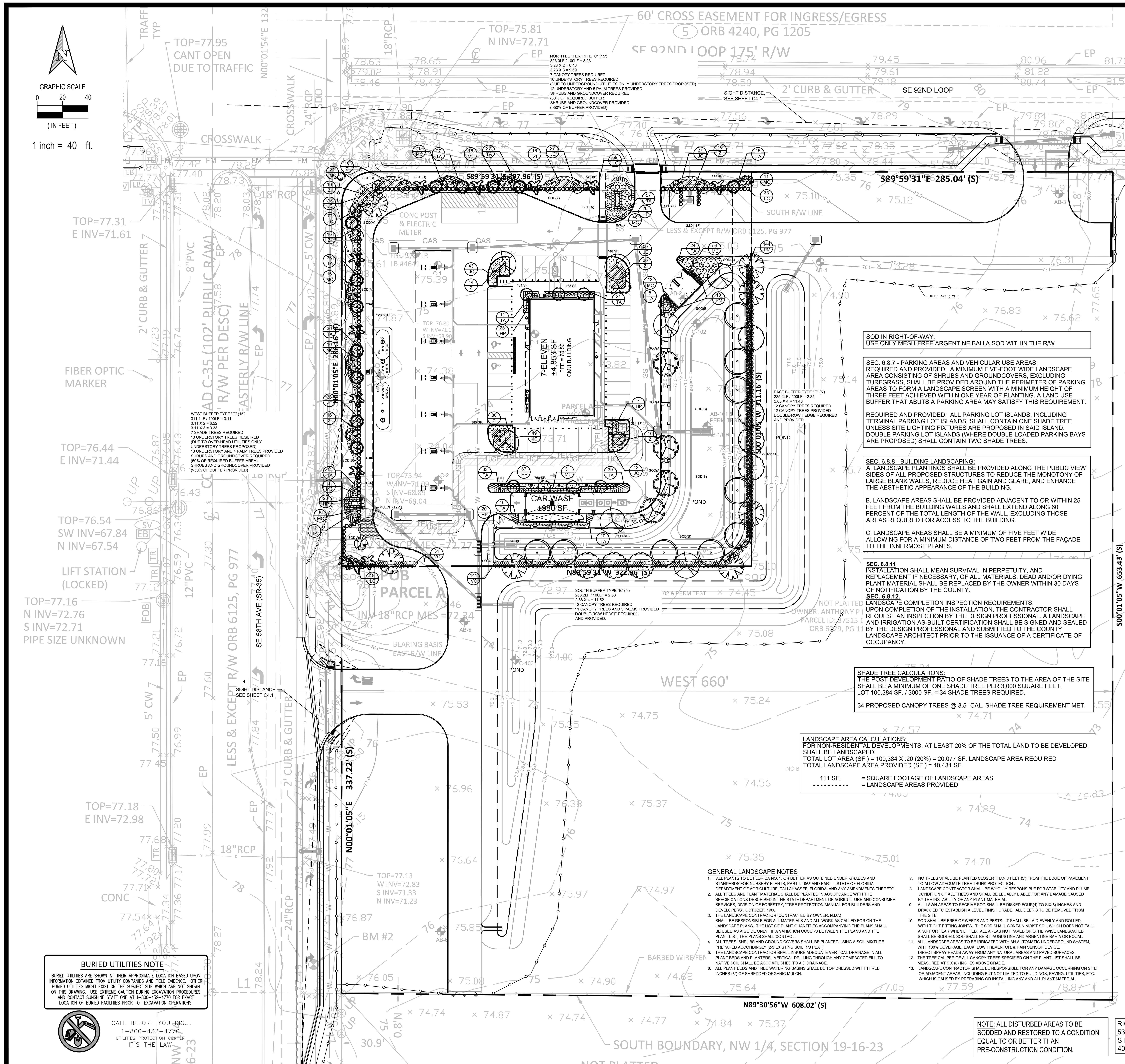
DATE 05/13/2024

SCALE 1" = 30'

SHEET C6.0

UTILITY PLAN

NOTE: LANDSCAPE PLAN CONFORMS TO FLORIDA FRIENDLY STANDARDS.



SOD IN RIGHT-OF-WAY:
USE ONLY MESH-FREE ARGENTINE BAHIA SOD WITHIN THE R/W

SEC. 6.8.7 - PARKING AREAS AND VEHICULAR USE AREAS:
REQUIRED AND PROVIDED: A MINIMUM FIVE-FOOT WIDE LANDSCAPE AREA CONSISTING OF SHRUBS AND GROUNDCOVERS, EXCLUDING TURFGRASS, SHALL BE PROVIDED AROUND THE PERIMETER OF PARKING AREAS TO FORM A LANDSCAPE SCREEN WITH A MINIMUM HEIGHT OF THREE FEET ACHIEVED WITHIN ONE YEAR OF PLANTING. A LAND USE BUFFER THAT ABUTS A PARKING AREA MAY SATISFY THIS REQUIREMENT.

REQUIRED AND PROVIDED: ALL PARKING LOT ISLANDS, INCLUDING TERMINAL PARKING LOT ISLANDS, SHALL CONTAIN ONE SHADE TREE UNLESS SITE LIGHTING FIXTURES ARE PROPOSED IN SAID ISLAND. DOUBLE PARKING LOT ISLANDS (WHERE DOUBLE-LOADED PARKING BAYS ARE PROPOSED) SHALL CONTAIN TWO SHADE TREES.

SEC. 6.8.8 - BUILDING LANDSCAPING:
A. LANDSCAPE PLANTINGS SHALL BE PROVIDED ALONG THE PUBLIC VIEW SIDES OF ALL PROPOSED STRUCTURES TO REDUCE THE MONOTONY OF LARGE BLANK WALLS, REDUCE HEAT GAIN AND GLARE, AND ENHANCE THE AESTHETIC APPEARANCE OF THE BUILDING.

B. LANDSCAPE AREAS SHALL BE PROVIDED ADJACENT TO OR WITHIN 25 FEET FROM THE BUILDING WALLS AND SHALL EXTEND ALONG 60 PERCENT OF THE TOTAL LENGTH OF THE WALL, EXCLUDING THOSE AREAS REQUIRED FOR ACCESS TO THE BUILDING.

C. LANDSCAPE AREAS SHALL BE A MINIMUM OF FIVE FEET WIDE ALLOWING FOR A MINIMUM DISTANCE OF TWO FEET FROM THE FAÇADE TO THE INNERMOST PLANTS.

SEC. 6.8.11
INSTALLATION SHALL MEAN SURVIVAL IN PERPETUITY, AND REPLACEMENT IF NECESSARY, OF ALL MATERIALS. DEAD AND/OR DYING PLANT MATERIAL SHALL BE REPLACED BY THE OWNER WITHIN 30 DAYS OF NOTIFICATION BY THE COUNTY.
SEC. 6.8.12.
LANDSCAPE COMPLETION INSPECTION REQUIREMENTS.
UPON COMPLETION OF THE INSTALLATION, THE CONTRACTOR SHALL REQUEST AN INSPECTION BY THE DESIGN PROFESSIONAL. A LANDSCAPE AND IRRIGATION AS-BUILT CERTIFICATION SHALL BE SIGNED AND SEALED BY THE DESIGN PROFESSIONAL AND SUBMITTED TO THE COUNTY LANDSCAPE ARCHITECT PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

SHADE TREE CALCULATIONS:
THE POST-DEVELOPMENT RATIO OF SHADE TREES TO THE AREA OF THE SITE SHALL BE A MINIMUM OF ONE SHADE TREE PER 3,000 SQUARE FEET.
LOT 100,384 SF. / 3000 SF. = 34 SHADE TREES REQUIRED.

34 PROPOSED CANOPY TREES @ 3.5" CAL. SHADE TREE REQUIREMENT MET.

LANDSCAPE AREA CALCULATIONS:
FOR NON-RESIDENTAL DEVELOPMENTS, AT LEAST 20% OF THE TOTAL LAND TO BE DEVELOPED, SHALL BE LANDSCAPED.
TOTAL LOT AREA (SF.) = 100,384 X .20 (20%) = 20,077 SF. LANDSCAPE AREA REQUIRED
TOTAL LANDSCAPE AREA PROVIDED (SF.) = 40,431 SF.

111 SF. = SQUARE FOOTAGE OF LANDSCAPE AREAS
- - - - - - - - - - = LANDSCAPE AREAS PROVIDED

GENERAL LANDSCAPE NOTES

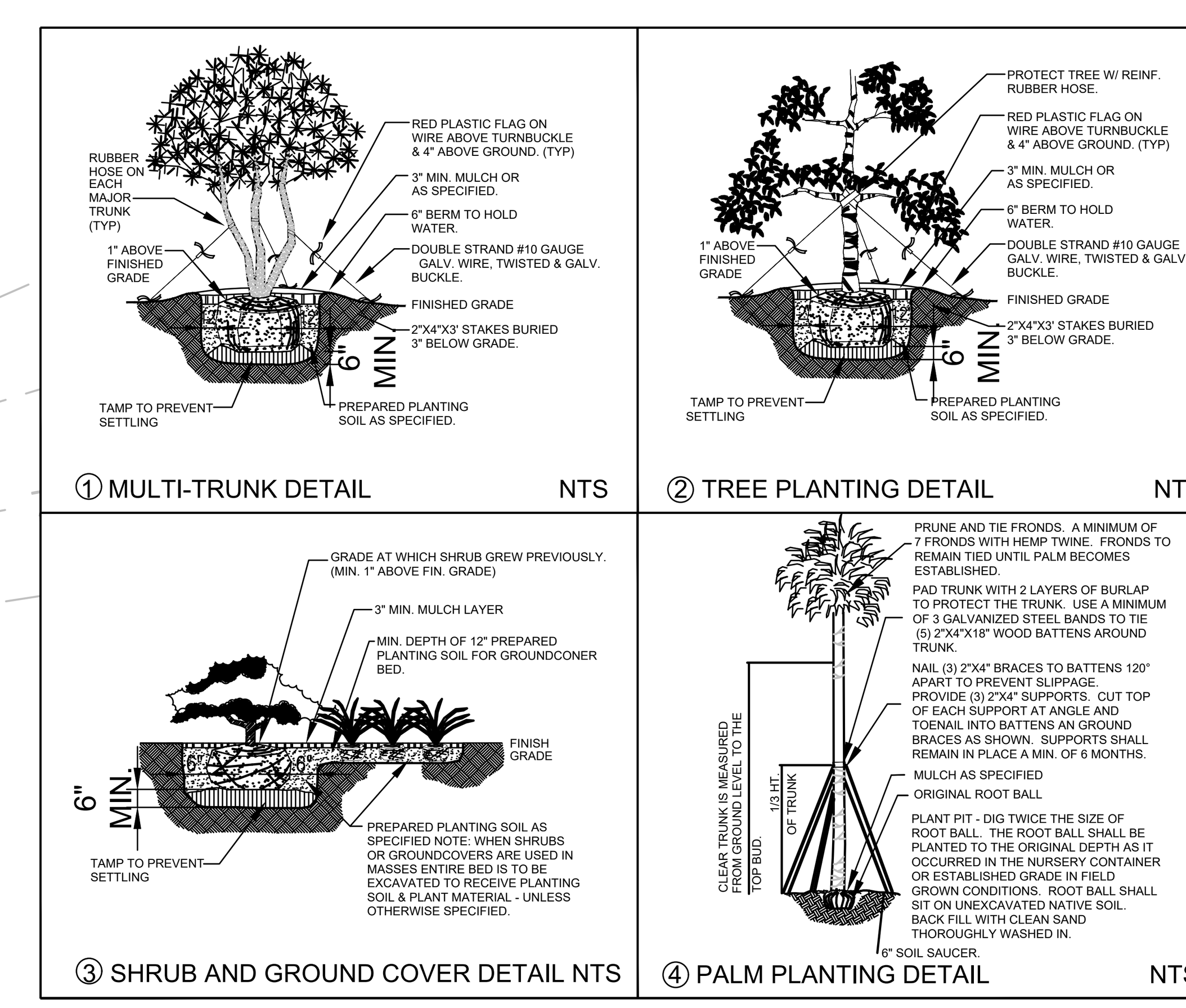
1. ALL PLANTS TO BE FLORIDA NO. 1, OR BETTER AS OUTLINED UNDER 'GRADES AND STANDARDS FOR NURSERY PLANTS, PART I, 1963 AND PART II, STATE OF FLORIDA DEPARTMENT OF AGRICULTURE, TALLAHASSEE, FLORIDA, AND ANY AMENDMENTS THERETO.
2. ALL TREES AND PLANT MATERIAL SHALL BE PLANTED IN ACCORDANCE WITH THE SPECIFICATIONS DESCRIBED IN THE STATE DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, DIVISION OF FORESTRY, "TREE PROTECTION MANUAL FOR BUILDERS AND DEVELOPERS", OCTOBER, 1980.
3. THE LANDSCAPE CONTRACTOR (CONTRACTED BY OWNER, N.I.C.) SHALL BE RESPONSIBLE FOR ALL MATERIALS AND ALL WORK AS CALLED FOR ON THE LANDSCAPE PLANS. THE LIST OF PLANT QUANTITIES ACCOMPANYING THE PLANS SHALL BE USED AS A GUIDE ONLY. IF A VARIATION OCCURS BETWEEN THE PLANS AND THE PLANT LIST, THE PLANS SHALL CONTROL.
4. ALL TREES, SHRUBS AND GROUND COVERS SHALL BE PLANTED USING A SOIL MIXTURE PREPARED ACCORDINGLY (2/3 EXISTING SOIL, 1/3 PEAT).
5. THE LANDSCAPE CONTRACTOR SHALL INSURE ADEQUATE VERTICAL DRAINAGE IN ALL PLANT BEDS AND PLANTERS. VERTICAL DRILLING THROUGH ANY COMPACTED FILL TO NATIVE SOIL SHALL BE ACCOMPLISHED TO AID DRAINAGE.
6. ALL PLANT BEDS AND TREE WATERING BASINS SHALL BE TOP DRESSED WITH THREE INCHES (3") OF SHREDDED ORGANIC MULCH.
7. NO TREES SHALL BE PLANTED CLOSER THAN 3 FEET (3') FROM THE EDGE OF PAVEMENT TO ALLOW ADEQUATE TREE TRUNK PROTECTION .
8. LANDSCAPE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR STABILITY AND PLUMB CONDITION OF ALL TREES AND SHALL BE LEGALLY LIABLE FOR ANY DAMAGE CAUSED BY THE INSTABILITY OF ANY PLANT MATERIAL.
9. ALL LAWN AREAS TO RECEIVE SOD SHALL BE DISKED FOUR(4) TO SIX(6) INCHES AND DRAGGED TO ESTABLISH A LEVEL FINISH GRADE. ALL DEBRIS TO BE REMOVED FROM THE SITE.
10. SOD SHALL BE FREE OF WEEDS AND PESTS. IT SHALL BE LAID EVENLY AND ROLLED, WITH TIGHT FITTING JOINTS. THE SOD SHALL CONTAIN MOIST SOIL WHICH DOES NOT FALL APART OR TEAR WHEN LIFTED. ALL AREAS NOT PAVED OR OTHERWISE LANDSCAPED SHALL BE SODDED. SOD SHALL BE ST. AUGUSTINE AND ARGENTINE BAHIA OR EQUAL.
11. ALL LANDSCAPE AREAS TO BE IRRIGATED WITH AN AUTOMATIC UNDERGROUND SYSTEM, WITH 100% COVERAGE, BACKFLOW PREVENTOR, & RAIN SENSOR DEVICE. DIRECT SPRAY HEADS AWAY FROM ANY NATURAL AREAS AND PAVED SURFACES.
12. THE TREE CALIPER OF ALL CANOPY TREES SPECIFIED ON THE PLANT LIST SHALL BE MEASURED AT SIX (6) INCHES ABOVE GRADE.
13. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE OCCURRING ON SITE OR ADJACENT AREAS, INCLUDING BUT NOT LIMITED TO BUILDINGS, PAVING, UTILITIES, ETC. WHICH IS CAUSED BY PREPARING OR INSTALLING ANY AND ALL PLANT MATERIAL.

PLANT LIST

SYMBOL	BOTANICAL NAME (COMMON NAME)	MINIMUM SIZE/SPACING	DROUGHT TOLERANCE	NATIVE FLORIDA	QUANTITY
TD	TAXODIUM DISTICHUM (BALD CYPRESS)	10' MIN.HT. 3.5" CAL.MIN.	YES	YES	9
QV	QUERCUS VIRGINIANA (SOUTHERN LIVE OAK)	10' MIN.HT. 3.5" CAL.MIN.	YES	YES	7
MG	MAGNOLIA GRANDIFLORA ('LITTLE GEM' MAGNOLIA)	10' MIN.HT. 3.5" CAL.MIN.	YES	YES	7
AR	ACER RUBRUM 'FLORIDANUM' (FLORIDA FLAME MAPLE)	10' MIN.HT. 3.5" CAL.MIN.	YES	YES	4
UA	ULMAS ALATA (WINGED ELM)	10' MIN.HT. 3.5" CAL.MIN.	YES	YES	7
IA	ILEX X ATTENUATA 'EAST PALATKA' (EAST PALATKA HOLLY)	6' MIN.HT. 42" SPREAD MIN.	YES	YES	13
LJ	LIGUSTRUM JAPONICUM (WAX-LEAF PRIVET)	6' MIN.HT. 42" SPREAD MIN. MULTI-TRUNK	YES	NO	15
FS	FEIJOA SELLOWIANA (PINEAPPLE GUAVA TREE)	6' MIN.HT. 42" SPREAD MIN. MULTI-TRUNK	YES	NO	12
SP	SABAL PALMETTO (CABBAGE PALM)	10' CLEAR TRUNK MIN. 3.5" CAL.MIN.	YES	YES	12
PM	PODOCARPUS MACROPHYLLUS (PODOCARPUS)	36" MIN. HT. 36" O.C.	YES	NO	154
VO	VIBURNUM OBOVATUM (WALTER'S VIBURNUM)	36"MIN. HT. 36" O.C.	YES	YES	172
LC	LOROPETALUM CHINENSIS (CHINESE FRINGE-FLOWER)	36"MIN. HT. 36" O.C.	YES	NO	188
HP	HAMELIA PATENS (FIREBUSH)	30"MIN. HT. 30" O.C.	YES	YES	137
TA	TRACHELOSPERMUM ASIATICUM (SMALL-LEAF CONFERDERATE JASMINE)	18" MIN.HT 3 RUNNNERS MIN. 1 GAL. 24" O.C.	YES	NO	308
JC	JUNIPERUS CHINENSIS 'PARSONII' (PARSONS JUNIPER)	18" MIN.HT. 1 GAL. 24" O.C.	YES	NO	384
ZI	ZAMIA INTEGRIFOLIA (COONTIE PALM)	24" MIN.HT. 3 GAL. 30" O.C.	YES	YES	192
MC	MULENBURGIA CAPILLARIS ('WHITE CLOUD' MUHLY GRASS)	24" MIN.HT. 3 GAL. 30" O.C.	YES	YES	202
SOD(A)	ST. AUGUSTINE	QUANTITY TO BE CALCULATED BY CONTRACTOR	YES	YES	TBD
SOD(B)	BAHIA	QUANTITY TO BE CALCULATED BY CONTRACTOR	YES	YES	TBD
	MULCH ONLY AREAS	QUANTITY TO BE CALCULATED BY CONTRACTOR			TBD

PLANT QUANTITY — 00 / XX — PLANT SYMBOL

NOTE:
WHERE GALLON REFERENCES MAY CONFLICT WITH HEIGHT/SPREAD AND CALIPER MEASUREMENTS, THE HEIGHT/SPREAD AND CALIPER MEASUREMENTS SHALL GOVERN.



NOTE: ALL DISTURBED AREAS TO BE SODDED AND RESTORED TO A CONDITION EQUAL TO OR BETTER THAN PRE-CONSTRUCTION CONDITION.

RICK ABT
5349 HUGH HOWELL RD.
STONE MOUNTAIN, GA 30087
404-909-2736

Richard T. Abt, State of Florida, Landscape Architect, License No.1321

This item has been digitally signed and sealed by Richard T. Abt on the date indicated here.

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R.K.M. DEVELOPMENT CORP.

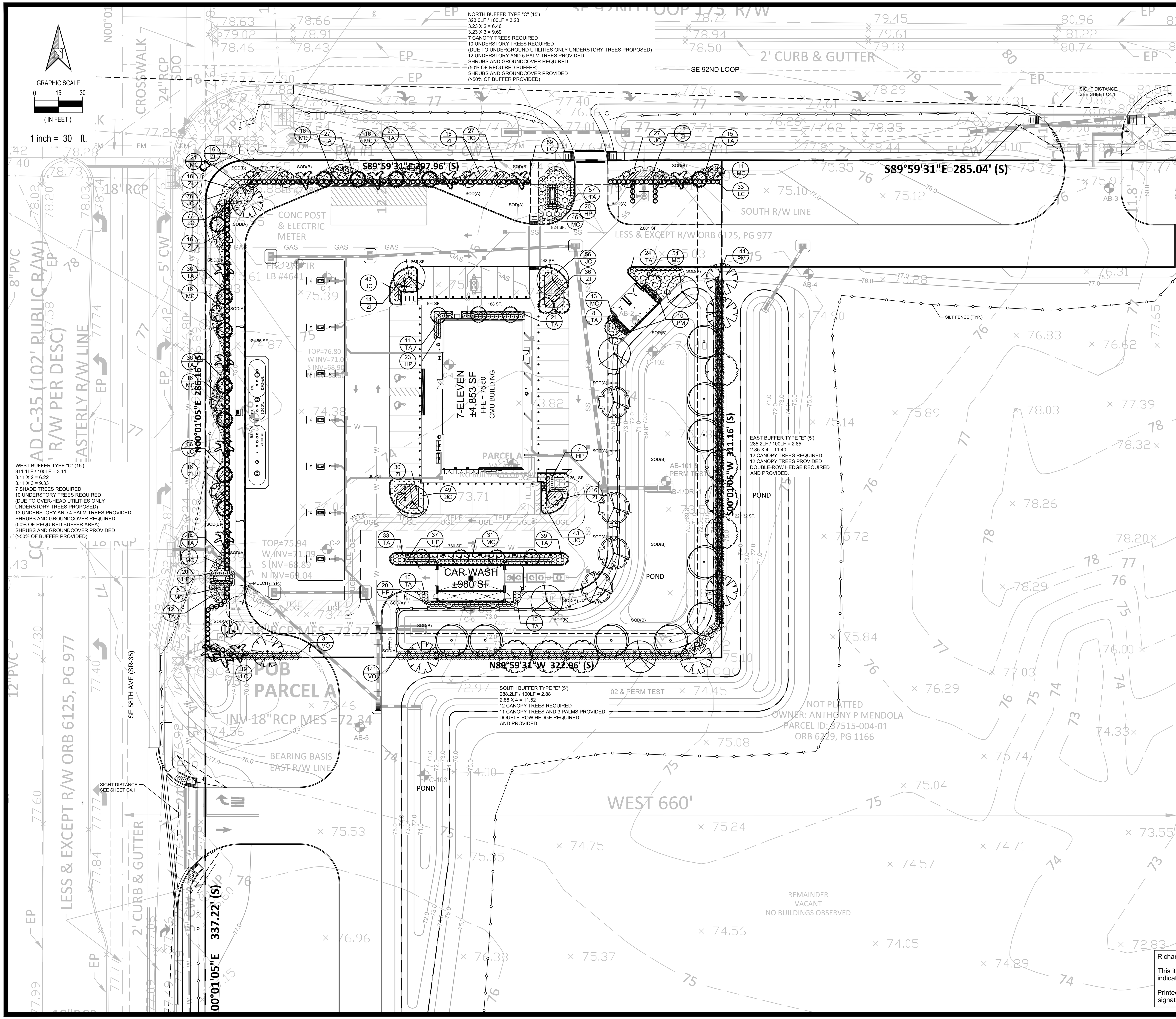
COMMON OAK ENGINEERING
4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP & SE 58TH AVE
BELLEVIEW, FL
MARION COUNTY

NO:	DATE:	REVISION / ISSUE:	BY:
4	12/15/2024	MARION COUNTY COMMENTS	JR
6	02/26/2024	MARION COUNTY COMMENTS	CS
8	03/13/2024	CLIENT COMMENTS	CS

ENGINEER'S NAME & PE#
RICK ABT
FLORIDA RLA #1321

PROJECT # 222.108
DATE 05/13/2024
SCALE 1" = 40'
SHEET C7.0
OVERALL LANDSCAPE PLAN



PLANT KEY

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LC	LOROPETALUM CHINENSIS (CHINESE FRINGE-FLOWER)	36"MIN. HT. 36" O.C.	YES	NO
HP	HAMELIA PATENS (FIREBUSH)	30"MIN. HT. 30" O.C.	YES	YES
TA	TRACHELOSPERMUM ASIATICUM (SMALL-LEAF CONFERDERATE JASMINE)	18" MIN.HT 3 RUNNNERS MIN. 1 GAL. 24" O.C.	YES	NO
JC	JUNIPERUS CHINENSIS 'PARSONII' (PARSONS JUNIPER)	18" MIN.HT. 1 GAL. 24" O.C.	YES	NO
ZI	ZAMIA INTEGRIFOLIA (COONTIE PALM)	24" MIN.HT. 3 GAL. 30" O.C.	YES	YES
MC	MULENBURGIA CAPILLARIS ('WHITE CLOUD' MUHLY GRASS)	24" MIN.HT. 3 GAL. 30" O.C.	YES	YES
SOD(A)	ST. AUGUSTINE	QUANTITY TO BE CALCULATED BY CONTRACTOR	YES	YES
SOD(B)	BAHIA	QUANTITY TO BE CALCULATED BY CONTRACTOR	YES	YES

PLANT QUANTITY — 00 / XX — PLANT SYMBOL

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RICK ABT
5349 HUGH HOWELL RD.
STONE MOUNTAIN, GA 30087
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Richard T. Abt, State of Florida, Landscape Architect, License No.1321

This item has been digitally signed and sealed by Richard T. Abt on the date indicated here.

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R.K.M. DEVELOPMENT CORP.

COMMON OAK ENGINEERING
4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP & SE 58TH AVE
BELLEVIEW, FL
MARION COUNTY

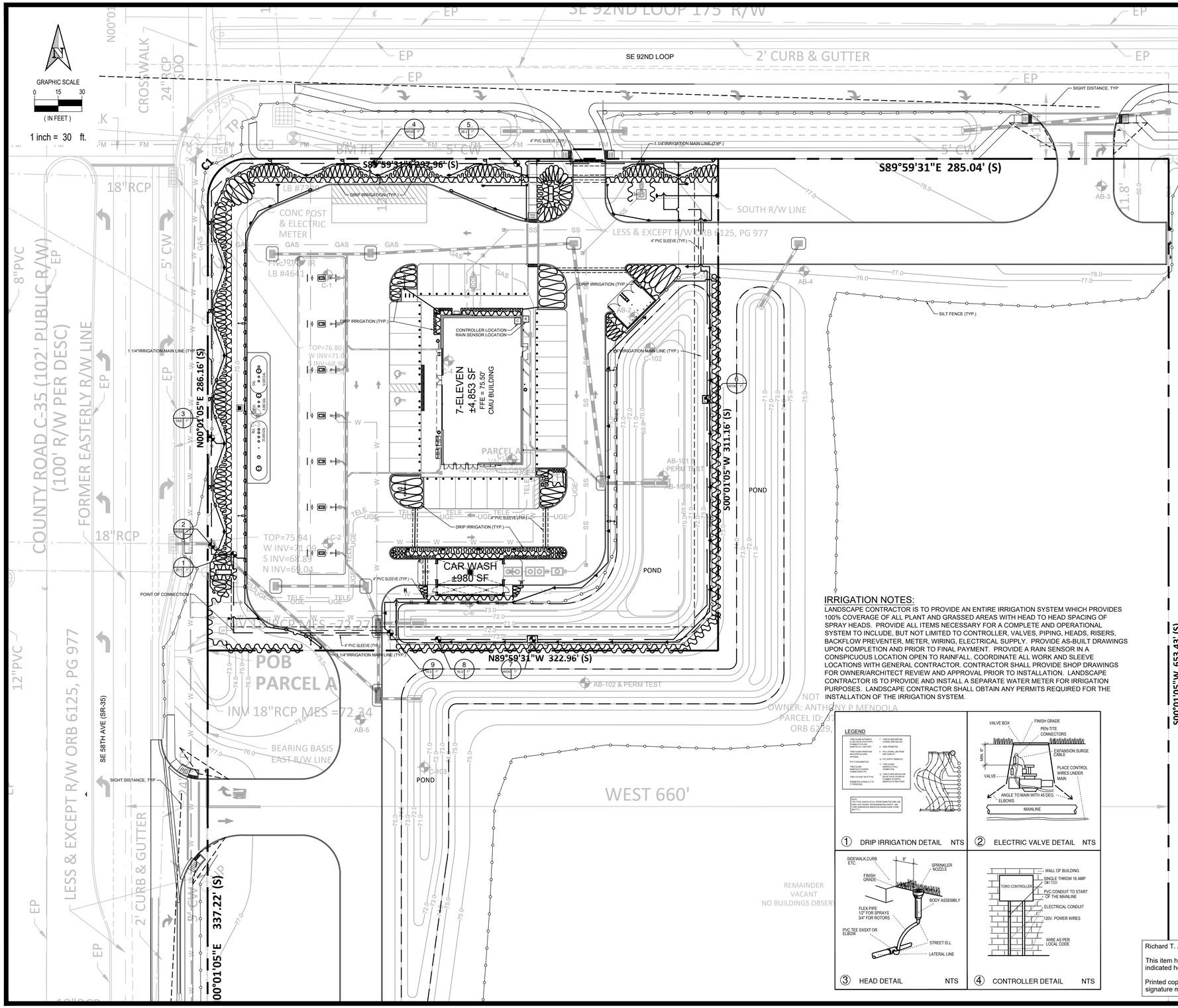
NO:	DATE:	REVISION / ISSUE:	BY:
4	12/15/2024	MARION COUNTY COMMENTS	JR
5	02/19/2024	FDOT ACCESS COMMENTS	JR
8	03/13/2024	CLIENT COMMENTS	CS

ENGINEER'S NAME & PE#

REGISTERED LANDSCAPE ARCHITECT RICHARD T. ABT LA 1321 STATE OF FLORIDA
RICK ABT
FLORIDA RLA #1321

PROJECT #	222.108
DATE	05/13/2024
SCALE	1" = 30'
SHEET	C7.1

LANDSCAPE PLAN



IRRIGATION LEGEND

FULL 6" POP-UP SPRAY HEAD	570-8-F
1/4 6" POP-UP SPRAY HEAD	570-8-Q
1/2 6" POP-UP SPRAY HEAD	570-8-H
1/3 6" POP-UP SPRAY HEAD	570-8-T
2/3 6" POP-UP SPRAY HEAD	570-8-TT
3/4 6" POP-UP SPRAY HEAD	570-8-TQ
FULL 6" POP-UP SPRAY HEAD	570-15-F
1/4 6" POP-UP SPRAY HEAD	570-15-Q
1/2 6" POP-UP SPRAY HEAD	570-15-H
1/3 6" POP-UP SPRAY HEAD	570-15-T
2/3 6" POP-UP SPRAY HEAD	570-15-TT
3/4 6" POP-UP SPRAY HEAD	570-15-TQ
CENTER STRIP SPRAY HEAD	570-4-CST
SIDE STRIP SPRAY HEAD	570-4-SST
END STRIP SPRAY HEAD	570-4-EST
DENOTES VARIABLE 6" POP-UP SPRAY HEAD IN 15' PATTERN	570-15-ADJ
DENOTES 4" POP-UP SPRAY HEAD OR ROTOR ON PVC RISER	
POP-UP STREAM ROTOR	
500 SERIES STREAM BUBBLER	
TORO PLASTIC VALVE	
CLASS 200 PVC MAIN LINE	
CLASS 160 PVC LATERAL LINE	
PVC SLEEVE 4" IN DIAMETER	
PIPE CROSSOVER	
BACKFLOW PREVENTER	
IRRIGATION METER	
CONTROLLER LOCATION TORO MODEL # CC-P12	
RAIN SENSOR LOCATION	

DRIP IRRIGATION
VALVE ZONE NO.
VALVE SIZE
VALVE GPM

VALVES

254-06-03	3/4" VALVES
252-06-04	1" VALVES
252-25-06	1.5" VALVES

NOTE: MODEL NOS. SHOWN REFLECT TORO SPRINKLER HEADS. ANY HEADS OF EQUAL QUALITY MAY BE USED WITH THE APPROVAL OF THE OWNER. CONTRACTOR TO SIZE ALL LATERAL LINES AND INSURE THE PERFORMANCE OF ALL HEADS.

IRRIGATION NOTES:

LANDSCAPE CONTRACTOR IS TO PROVIDE AN ENTIRE IRRIGATION SYSTEM WHICH PROVIDES 100% COVERAGE OF ALL PLANT AND GRASSED AREAS WITH HEAD TO HEAD SPACING OF SPRAY HEADS. PROVIDE ALL ITEMS NECESSARY FOR A COMPLETE AND OPERATIONAL SYSTEM TO INCLUDE, BUT NOT LIMITED TO CONTROLLER, VALVES, PIPING, HEADS, RISERS, BACKFLOW PREVENTER, METER, WIRING, ELECTRICAL SUPPLY. PROVIDE AS-BUILT DRAWINGS UPON COMPLETION AND PRIOR TO FINAL PAYMENT. PROVIDE A RAIN SENSOR IN A CONSPICUOUS LOCATION OPEN TO RAINFALL. COORDINATE ALL WORK AND SLEEVE LOCATIONS WITH GENERAL CONTRACTOR. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR OWNER/ARCHITECT REVIEW AND APPROVAL PRIOR TO INSTALLATION. LANDSCAPE CONTRACTOR IS TO PROVIDE AND INSTALL A SEPARATE WATER METER FOR IRRIGATION PURPOSES. LANDSCAPE CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED FOR THE INSTALLATION OF THE IRRIGATION SYSTEM.

BURIED UTILITIES NOTE

BURIED UTILITIES ARE SHOWN AT THEIR APPROXIMATE LOCATION BASED UPON INFORMATION OBTAINED FROM UTILITY COMPANIES AND FIELD EVIDENCE. OTHER BURIED UTILITIES MIGHT EXIST ON THE SUBJECT SITE WHICH ARE NOT SHOWN ON THIS DRAWING. USE EXTREME CAUTION DURING EXCAVATION PROCEDURES AND CONTACT SUNSHINE STATE ONE AT 1-800-432-4770 FOR EXACT LOCATION OF BURIED FACILITIES PRIOR TO EXCAVATION OPERATIONS.

CALL BEFORE YOU DIG... 1-800-432-4770 UTILITIES PROTECTION CENTER IT'S THE LAW

NOTE: ALL DISTURBED AREAS TO BE SODDED AND RESTORED TO A CONDITION EQUAL TO OR BETTER THAN PRE-CONSTRUCTION CONDITION.

NOTE: LANDSCAPE PLAN CONFORMS TO FLORIDA FRIENDLY STANDARDS.

RICK ABT
5349 HUGH HOWELL RD.
STONE MOUNTAIN, GA 30087
404-909-2736

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ENGINEER'S NAME & PE#

REGISTERED LANDSCAPE ARCHITECT RICHARD T. ABT LA 1321 STATE OF FLORIDA

RICK ABT
FLORIDA RLA #1321

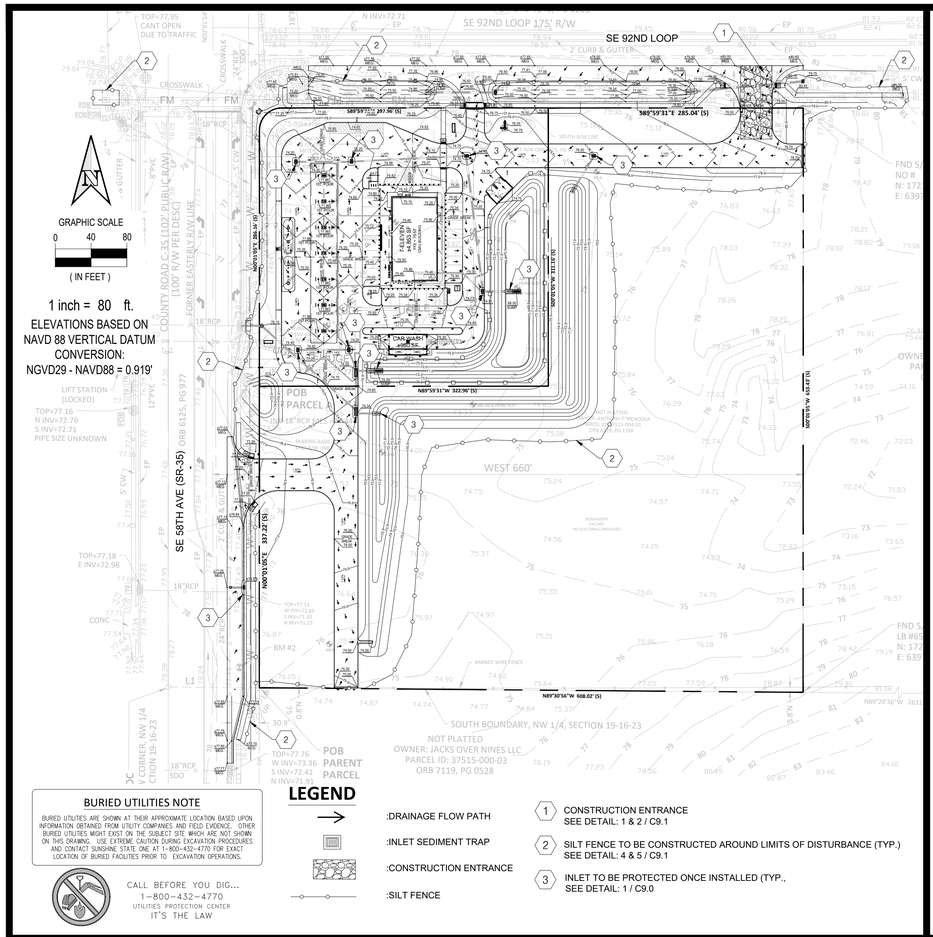
PROJECT # 222.108

DATE 05/13/2024

SHEET C7.2

SCALE 1" = 30'

IRRIGATION PLAN



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1-800-432-4770
UTILITIES PROTECTION CENTER
IT'S THE LAW

LEGEND

:DRAINAGE FLOW PATH

:INLET SEDIMENT TRAP

:CONSTRUCTION ENTRANCE

:SILT FENCE

1. CONSTRUCTION ENTRANCE SEE DETAIL: 1 & 2 / C9.1
2. SILT FENCE TO BE CONSTRUCTED AROUND LIMITS OF DISTURBANCE (TYP.) SEE DETAIL: 4 & 5 / C9.1
3. INLET TO BE PROTECTED ONCE INSTALLED (TYP., SEE DETAIL: 1 / C9.0

PROJECT NAME AND LOCATION

PROJECT NAME: 7- ELEVEN AT BELLEVIEW
TAX PARCEL: 37515-004-01

LOCATION: SEC OF SE 92ND LP & SE 58TH AVE BELLEVIEW, FL
LAT: 29°3'8.75" N
LONG: 82°29.55" W

*SEE COVER SHEET FOR LOCATION MAP

DEVELOPER NAME AND ADDRESS
RKM DEVELOPMENT CORP:
147 2ND AVE S.
ST. PETERSBURG, FL 33701

PROJECT DESCRIPTION
THIS PROJECT CONSISTS OF A CONVENIENCE STORE, PARKING, A STAND ALONE CAR WASH, FUELING STATIONS WITH A CANOPY, AND ON-SITE STORMWATER MANAGEMENT.

PROJECT AREA: 2.3 ACRES

ULTIMATE RECEIVING WATERS: AQUIFER

ACTIVITIES THAT REQUIRE EROSION CONTROL
SITE CLEARING AND GRUBBING; PROVIDING A STABILIZED CONSTRUCTION ENTRANCE, PERIMETER, AND OTHER EROSION AND SEDIMENT CONTROLS; EXCAVATION FOR THE RETENTION POND; SITE GRADING; INSTALLATION OF STORM WATER, SANITARY SEWER, AND WATER STRUCTURES; CURB, ROADWAYS, AND PARKING FACILITIES.

*SEE PLANS FOR THE LOCATION OF TEMPORARY SEDIMENT BARRIERS AND OTHER EROSION CONTROL METHODS.

SOIL PARAMETERS
SOIL TYPES: REFER TO GEOTECH REPORT

SEQUENCE OF MAJOR ACTIVITIES
HALT ALL ACTIVITIES AND CONTACT THE DESIGN CIVIL ENGINEERING CONSULTANT TO PERFORM INSPECTION OF BMP's. THE GENERAL CONTRACTOR SHALL SCHEDULE AND CONDUCT A STORM WATER PRE-CONSTRUCTION MEETING WITH THE ENGINEER AND ALL GROUND DISTURBING CONTRACTORS BEFORE PROCEEDING WITH CONSTRUCTION.

THE ORDER OF CONSTRUCTION IS AS FOLLOWS:
1. PROVIDE STABILIZED CONSTRUCTION ENTRANCE
2. INSTALL SILT FENCES AND OTHER EROSION CONTROL METHODS
3. CLEAR AND GRUB FOR SEDIMENT BASIN AND EARTH DIKE. PREPARE TEMPORARY PARKING AND STORAGE AREA, UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAY DOWN, PORTA POTTY, WHEEL WASH, CONCRETE WASHOUT, MASONS AREA, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC. DENOTE THEM ON THE SITE MAPS IMMEDIATELY AND NOTE ANY CHANGES IN THE LOCATIONS AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.
4. CONSTRUCT EARTH DIKE AND SEDIMENT BASIN, IF REQUIRED
5. FINISH CLEARING AND GRUBBING
6. REMOVE AND STORE TOPSOIL
7. PROVIDE INITIAL GRADING AS REQUIRED
8. STABILIZE ALL DISTURBED AREAS AS SOON AS POSSIBLE VIA SEEDING
9. INSTALL UTILITIES, STORM SEWER, CURB AND GUTTER
10. INSTALL RIP RAP AROUND OUTLET STRUCTURES.
11. INSTALL BASE TO ROAD AND PARKING AREA
12. FINISH GRADING ENTIRE SITE
13. CONSTRUCT FINAL PAVING
14. REMOVE ACCUMULATED SEDIMENT
15. REMOVE ANY ITEMS THAT ARE NOT REQUIRED (ONLY IF STABILIZED)

TIMING OF CONTROL MEASURES
THE INSTALLATION OF SILT FENCE (AND OTHER EROSION CONTROL MEASURES), A STABILIZED ENTRANCE AND SEDIMENT BASIN SHALL OCCUR PRIOR TO CLEARING AND GRUBBING ACTIVITY. AFTER CONSTRUCTION IS COMPLETE, THE ACCUMULATED SEDIMENT SHALL BE REMOVED AND THE AREAS SHALL BE REGRADED AND PERMANENTLY STABILIZED AS SHOWN ON THE PLANS.

CONTROLS:
1. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO, OR AS THE FIRST STEP IN CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL EROSION CONTROL MEASURES SHOWN ON THE PLANS. THE EROSION CONTROL SYSTEM DESCRIBED WITHIN THE CONSTRUCTION DOCUMENTS SHOULD BE CONSIDERED TO REPRESENT THE MINIMUM ACCEPTABLE STANDARDS FOR THIS PROJECT. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DEPENDENT UPON THE STAGE OF CONSTRUCTION, THE SEVERITY OF THE RAINFALL EVENT AND/OR AS DEEMED NECESSARY AS A RESULT OF ONSITE INSPECTIONS BY THE OWNER, THEIR REPRESENTATIVES, OR THE APPLICABLE JURISDICTIONAL AUTHORITIES. THESE ADDITIONAL MEASURES (IF NEEDED) SHALL BE INSTALLED AT NO ADDITIONAL COST TO THE OWNER. IT NOTED THAT THE MEASURES IDENTIFIED ON SHOULD BE THIS PLAN ARE ONLY SUGGESTED BEST MANAGEMENT PRACTICES (BMPS).

2. EROSION AND SEDIMENT CONTROL BMP'S IN ADDITION TO THOSE PRESENTED ON THESE PLANS SHALL BE IMPLEMENTED AS NECESSARY TO PREVENT TURBID DISCHARGES FROM FLOWING ONTO ADJACENT PROPERTIES OR ROADWAYS. OFF SITE STORMWATER CONVEYANCES OR RECEIVING WATERS, OR ON SITE WETLANDS AND SURFACE WATERS. BMP'S SHALL BE DESIGNED, INSTALLED, AND MAINTAINED BY THE SITE OPERATOR TO ENSURE THAT OFF SITE SURFACE WATER QUALITY REMAINS CONSISTENT WITH STATE AND LOCAL REGULATIONS. (THE OPERATOR IS THE ENTITY THAT OWNS OR OPERATES THE CONSTRUCTION ACTIVITY AND HAS AUTHORITY TO CONTROL THOSE ACTIVITIES AT THE PROJECT NECESSARY TO ENSURE COMPLIANCE.)

ITEMS REQUIRING POLLUTION PREVENTION

THE FOLLOWING ITEMS ARE EXPECTED TO BE PRESENT ON THE PROJECT SITE:

- ☐ ASPHALT
- ☐ CONCRETE
- ☐ FERTILIZERS
- ☐ METAL PIECES
- ☐ PETROLEUM BASED PRODUCTS
- ☐ TAR
- ☐ CLEANING SUPPLIES
- ☐ DETERGENTS
- ☐ MASONRY BLOCK/BRICKS
- ☐ PAINT
- ☐ WOOD

THE FOLLOWING ARE NON-STORM WATER SOURCES THAT WILL BE ENCOUNTERED AT THE SITE AND SHOULD BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE:

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

SPILL PREVENTION AND CONTROL

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.

RESPONSIBLE STEWARDSHIP

- SUPERINTENDENT SHALL INSPECT PROJECT AREA DAILY FOR PROPER STORAGE, USE, AND DISPOSAL OF CONSTRUCTION MATERIALS.
- STORE ONLY ENOUGH MATERIAL ON SITE FOR PROJECT COMPLETION.
- ALL SUBSTANCES SHOULD BE USED BEFORE DISPOSAL OF CONTAINER.
- ALL CONSTRUCTION MATERIALS STORED SHALL BE ORGANIZED AND IN THE PROPER CONTAINER AND IF POSSIBLE, STORED UNDER A ROOF OR PROTECTIVE COVER.
- PRODUCTS SHALL NOT BE MIXED UNLESS DIRECTED BY THE MANUFACTURER.
- ALL PRODUCTS SHALL BE USED AND DISPOSED OF ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

HAZARDOUS PRODUCTS

- MATERIALS SHOULD BE KEPT IN ORIGINAL CONTAINER WITH LABELS UNLESS THE ORIGINAL CONTAINERS CANNOT BE RESEALED. IF ORIGINAL CONTAINERS CANNOT BE USED, LABELS AND PRODUCT INFORMATION SHALL BE SAVED.
- PROPER DISPOSAL PRACTICES SHALL ALWAYS BE FOLLOWED IN ACCORDANCE WITH MANUFACTURER AND LOCAL/STATE REGULATIONS.

PRODUCT SPECIFIC PRACTICES

- PETROLEUM PRODUCTS MUST BE STORED IN PROPER CONTAINERS AND CLEARLY LABELED. VEHICLES CONTAINING PETROLEUM PRODUCTS SHALL BE PERIODICALLY INSPECTED FOR LEAKS. PRECAUTIONS SHALL BE TAKEN TO AVOID LEAKAGE OF PETROLEUM PRODUCTS ON SITE.
- THE MINIMUM AMOUNT OF FERTILIZER SHALL BE USED AND MIXED INTO THE SOIL IN ORDER TO LIMIT EXPOSURE TO STORM WATER. FERTILIZERS SHALL BE STORED IN A COVERED SHED. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
- PAINT CONTAINERS SHALL BE SEALED AND STORED WHEN NOT IN USE. EXCESS PAINT MUST BE DISPOSED OF IN AN APPROVED MANNER.
- CONCRETE TRUCKS SHALL 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 SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

- SPILL CLEANUP INFORMATION SHALL BE POSTED ON SITE TO INFORM EMPLOYEES ABOUT CLEANUP PROCEDURES AND RESOURCES.
- THE FOLLOWING CLEAN-UP EQUIPMENT MUST BE KEPT ON-SITE NEAR THE MATERIAL STORAGE AREA: GLOVES, MOPS, RAGS, BROOMS, DUST PANS, SAND, SAWDUST, LIQUID ABSORBER, GOGGLES, AND TRASH CONTAINERS.
- ALL SPILLS SHALL BE CLEANED UP AS SOON AS POSSIBLE.
- WHEN CLEANING A SPILL, THE AREA SHOULD BE WELL VENTILATED AND THE EMPLOYEE SHALL WEAR PROPER PROTECTIVE COVERING TO PREVENT INJURY.
- TOXIC SPILLS MUST BE REPORTED TO THE PROPER AUTHORITY REGARDLESS OF THE SIZE OF THE SPILL.
- AFTER A SPILL, THE PREVENTION PLAN SHALL BE REVIEWED AND CHANGED TO PREVENT FURTHER SIMILAR SPILLS FROM OCCURRING. THE CAUSE OF THE SPILL, MEASURES TO PREVENT IT, AND HOW TO CLEAN THE SPILL UP SHALL BE RECORDED.
- THE SUPERINTENDENT SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR AND IS RESPONSIBLE FOR THE DAY TO DAY SITE OPERATIONS. THE SUPERINTENDENT ALSO OVERSEES THE SPILL PREVENTION PLAN AND SHALL BE RESPONSIBLE FOR EDUCATING THE EMPLOYEES ABOUT SPILL PREVENTION AND CLEANUP PROCEDURES.

S.W.P.P. IMPLEMENTATION UPDATES AND AMENDMENTS

THE CONTRACTOR MUST UPDATE THE S.W.P.P.P. INCLUDING THE JOBSITE BINDER AND SITE MAPS TO REFLECT THE PROGRESS OF CONSTRUCTION ACTIVITIES AND GENERAL CHANGES TO PROJECT SITE. UPDATES SHALL BE MADE DAILY TO TRACK PROGRESS WHEN ANY OF THE FOLLOWING ACTIVITIES OCCUR; BMP INSTALLATION, MODIFICATION OR REMOVAL. CONSTRUCTION ACTIVITIES (E.G. PAVING, STORM SEWER, INSTALLATION, FOOTING INSTALLATION, ETC.) CLEARING, GRUBBING OR GRADING, OR TEMPORARY OR PERMANENT STABILIZATION.

IMPORTANT:
THE GENERAL CONTRACTOR MUST SUBMIT A REQUEST FOR INFORMATION (RFI) TO THE DESIGN ENGINEER AND OBTAIN WRITTEN APPROVAL FROM THE DESIGN ENGINEER BEFORE DOING ANY OF THE FOLLOWING:

1. MODIFYING EROSION OR SEDIMENT CONTROL BMPS (SUBSTITUTIONS ARE TYPICALLY ONLY APPROVED IF SPECIFIED MATERIALS ARE NOT AVAILABLE OR THERE IS A VALID REASON THE SPECIFIED BMP WILL NOT WORK.)
2. ADDING/DELETING EROSION OR SEDIMENT CONTROL BMPS.
3. MODIFYING THE S.W.P.P. IMPLEMENTATION SEQUENCE
4. PERFORMING ANY ACTIONS OR IN ANY MANNER THAT CONTRARY TO THE S.W.P.P.P.

THE CONTRACTOR MAY MODIFY OR ADD ADDITIONAL BMPS, WITHOUT THE DESIGN ENGINEER APPROVAL, IN AN EMERGENCY SITUATION TO PREVENT SEDIMENT DISCHARGE OR PROTECT WATER QUALITY; HOWEVER, THE GC MUST NOTIFY THE DESIGN ENGINEER AS SOON AS PRACTICAL AS THEIR ACTIONS TO DISCUSS THE NEED FOR ADDITIONAL OR SUPPLEMENTAL MEASURES AND TO OBTAIN THE REQUIRED APPROVALS. THE CONTRACTOR IS ULTIMATELY RESPONSIBLE TO ENSURE COMPLIANCE WITH THE PERMIT AND PROTECTION OF DOWNSTREAM WATER QUALITY.

AMENDING THE S.W.P.P.P. DOES NOT MEAN THAT IT HAS TO BE REPRINTED. IT IS ACCEPTABLE TO ADD ADDENDA, SKETCHES, NEW SECTIONS, DETAILS, AND/OR REVISED DRAWINGS THAT HAVE THE DESIGN ENGINEERS NAME IN PRINT, ARE STAMPED, SIGNED, DATED, AND ARE ACCOMPANIED BY WRITTEN COPY OF THE ASSOCIATED RFI AND IT'S RESPONSE FROM THE DESIGN ENGINEER. ENGINEERED ITEMS MUST BE SIGNED AND STAMPED BY THE CEC OF RECORD FOR THE PROJECT.

INSPECTION AND MAINTENANCE NOTES

N.P.D.E.S. PERMIT COMPLIANCE REQUIRES INSPECTIONS EVERY 7 CALENDAR DAYS BY A NPDES QUALIFIED INSPECTOR AS PERIODIC INSPECTIONS WITHIN 24 HOURS OF ANY RAINFALL EVENT (OR EQUIVALENT SNOWFALL EVENT) OF 0.5 INCHES OR GREATER. THESE INSPECTIONS MAY RESULT IN RECOMMENDATIONS FOR ROUTINE MAINTENANCE OF THE SOIL EROSION CONTROL DEVICES, AS WELL AS FURTHER MAINTENANCE AS OUTLINED BELOW.

1. THROUGHOUT THE CONSTRUCTION PERIOD, ALL MUD/SILT TRACKED ONTO EXISTING FDOT ROADS FROM THE SITE DUE TO CONSTRUCTION SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR.
2. CATCH BASIN INLET AND CONCRETE FLUME FILTERS SHALL BE MAINTAINED CLEAN AT ALL TIMES THROUGHOUT THE CONSTRUCTION PERIOD. WEEKLY INSPECTIONS WILL BE PERFORMED EVERY 7 CALENDAR DAYS. IF A FILTER HAS HOLES OR IS INUNDATED WITH SEDIMENT, THE FILTER WILL REQUIRE REPLACEMENT.
3. CONSTRUCTION ACCESS AND TRACKING MAT MUST BE MAINTAINED AS NECESSARY. REPLENISH CRUSHED AGGREGATE IF PRESENT LAYER IS FILLED WITH SEDIMENT, POOLING WATER OR HAS RUTS. A NEW LAYER MAY BE ADDED IF OLD LAYERS BECOME COMPACTED.
4. SILT FENCE IS TO BE INSPECTED DAILY BY CONTRACTOR AND EVERY 7 CALENDAR DAYS BY NPDES QUALIFIED INSPECTOR. IF REPAIRS OR REPLACEMENT IS NECESSARY, IT SHALL BE PERFORMED IMMEDIATELY. THE SILT FENCE SHOULD BE TRENCHED IN, BACK-FILLED, AND STAPLED OR STAKED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS. MAINTENANCE INCLUDES THE REMOVING OF BUILT-UP SEDIMENT. WHEN THE SEDIMENT ACCUMULATES TO 1/3 OF THE HEIGHT OF THE FENCE, CONTRACTOR MAY HAVE TO REMOVE, REPLACE, RETRENCH, OR RE-BACKFILL THE FENCE IF IT FAILS. IT WOULD ALSO BE NECESSARY TO REINSTALL IF ANY PORTION OF THE FENCING WAS DAMAGED BY CONSTRUCTION MACHINERY.
5. SEEDING OR RESEEDING MAY BE REQUIRED IMMEDIATELY TO AREAS WHICH HAVE BEEN DAMAGED BY RUNOFF.
6. REMOVE ANY VISIBLE SEDIMENT FROM THE POND BOTTOM TO KEEP THE BASIN DESIGNED INFILTRATION PERFORMANCE
7. THE CONTRACTOR SHALL CONTINUOUSLY ENSURE THAT THE PERIMETER OF THE SITE, INCLUDING CONSTRUCTION ENTRANCES, IS SECURED FROM ALLOWING DEBRIS TO LEAVE THE SITE DUE TO CONSTRUCTION ACTIVITY OR RAINFALL EVENTS. A WEEKLY LOG SHALL BE UPDATED AND KEPT ONSITE IN ACCORDANCE WITH THE NPDES PERMIT. BY BIDDING DOCUMENTS CONTRACTOR ACKNOWLEDGES HE/SHE IS AWARE OF NPDES GUIDELINES AND POLICIES AS WELL AS BEST MANAGEMENT PRACTICES AND ASSUMES SOLE RESPONSIBILITY FOR FINES IMPOSED BY GOVERNMENTAL AGENCIES DUE TO VIOLATIONS.
8. THE DISCHARGE OF GROUNDWATER PRODUCED THROUGH DEWATERING, TO SURFACE WATERS, OR ANY PORTION OF THE MS4 WILL REQUIRE SEPARATE PERMITTING FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP). PERMIT(S) SHALL BE OBTAINED PRIOR TO THE COMMENCEMENT OF DEWATERING.
9. PRIOR TO DEMOLITION OF EXISTING ON SITE STRUCTURES AN ASBESTOS SURVEY AND/OR ASBESTOS NOTIFICATION MAY BE REQUIRED.
10. OFF SITE SURFACE WATER DISCHARGES, OR DISCHARGES TO ONSITE WETLANDS OR SURFACE WATERS WITH TURBIDITY IN EXCESS OF 29 NEPHELOMETRIC TURBIDITY UNITS (NTUS) ABOVE BACKGROUND LEVEL SHALL BE IMMEDIATELY CORRECTED. SUCH INCIDENTS SHALL BE REPORTED TO WATER RESOURCES WITHIN 24 HOURS OF THE OCCURRENCE. THE REPORT SHALL INCLUDE THE CAUSE OF THE DISCHARGE AND CORRECTIVE ACTIONS TAKEN

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ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

PROJECT # 222.108
DATE 05/13/2024
SHEET C9.0
SCALE NTS
EROSION CONTROL PLAN

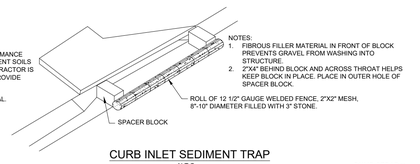
NOTICE TO GENERAL CONTRACTORS:

1. THIS IS THE CONTRACTOR'S CERTIFICATION OF CORRECT INSPECTION AND MAINTENANCE. IT IS SUGGESTED THAT THIS SHEET BE REMOVED FROM THE PLAN SET AND DUPLICATED AS NEEDED BY THE CONTRACTOR.
2. A COPY OF SHEET C0.1 AND C0.2 SHALL BE PROVIDED TO ALL BIDDERS AND SUB-CONTRACTORS

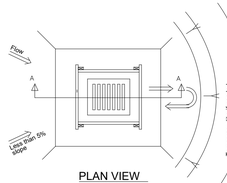
CONTRACTOR'S RESPONSIBILITY

EROSION AND SEDIMENTATION CONTROLS ARE PERFORMANCE BASED CRITERIA. IF THE BMPS PROVIDED DO NOT PREVENT SOILS FROM LEAVING A CONSTRUCTION SITE, THEN THE CONTRACTOR IS REQUIRED TO EMPLOY ADDITIONAL PROCEDURES TO PROVIDE CLEAN RUNOFF FROM A SITE.

BUILDING BLOCK LAID 6" FROM THROAT WEB HORIZONTAL.



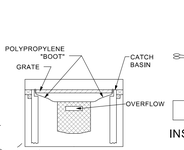
CURB INLET SEDIMENT TRAP
N.T.S.



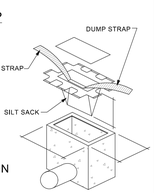
PLAN VIEW
N.T.S.

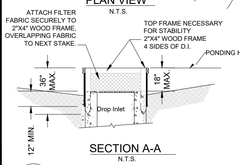
CONTRACTOR'S RESPONSIBILITY
EROSION AND SEDIMENTATION CONTROLS ARE PERFORMANCE BASED CRITERIA. IF THE BMPS PROVIDED DO NOT PREVENT SOILS FROM LEAVING A CONSTRUCTION SITE, THEN THE CONTRACTOR IS REQUIRED TO EMPLOY ADDITIONAL PROCEDURES TO PROVIDE CLEAN RUNOFF FROM A SITE.

NOTES:
1. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS. (LESS THAN 5%).
2. USE 2"X4" WOOD OR EQUIVALENT METAL STAKES. (3' MIN. LENGTH).
3. INSTALL 2"X4" WOOD TOP FRAME TO INSURE STABILITY.
4. THE TOP OF THE FRAME (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BYPASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.
5. MIRAFI OR APPROVED EROSION CONTROL FABRIC SHALL BE WRAPPED AROUND GRATE.
6. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.



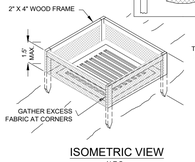
INSTALLATION DETAIL





SECTION A-A
N.T.S.

DETAIL OF STAKE & FABRIC ORIENTATION
N.T.S.



ISOMETRIC VIEW
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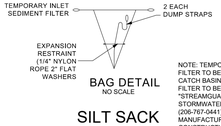


BAG DETAIL
NO SCALE

SILT SACK

NOTE: TEMPORARY INLET SEDIMENT FILTER TO BE INSTALLED ON ALL PAVED CATCH BASINS OR STORM INLETS. INLET FILTER TO BE SIMILAR TO "STREAMGUARD" AS MANUFACTURED BY STORMWATER SERVICES CORPORATION (206-767-0441) OR "SILTSACK" AS MANUFACTURED BY ATLANTIC CONSTRUCTION FABRICS, INC. (800-448-3636). CLEAN FILTER AS NEEDED.

1 INLET PROTECTION NTS

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 THEREUNDER.

SIGNATURE AND DATE	NAME AND TITLE, COMPANY/ADDRESS AND TELEPHONE NUMBER	RESPONSIBILITY

PERMITTEE:
" I CERTIFY UNDER THE 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 OR IMPRISONMENT FOR KNOWING VIOLATIONS."

PERMITTEE / AGENT _____ DATE _____

OWNER/S/AGENT'S CERTIFICATION:
THE OWNER/AGENT IS AWARE OF, AND MUST ASSURE MAINTENANCE OF, THE EROSION PROTECTION THAT IS ASSOCIATED WITH THIS PROJECT DURING CONSTRUCTION.

OWNER / AGENT _____ DATE _____

STORMWATER POLLUTION PREVENTION PLAN INSPECTION REPORT FORM

INSPECTIONS MUST OCCUR AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF A STORM EVENT THAT IS 0.50 INCHES OR GREATER.

PROJECT NAME: _____
FDEP NPDES IDENTIFICATION NUMBER: _____

NOTE: THIS IS AN EXAMPLE OF AN INSPECTION LOG AND IS GIVEN FOR REFERENCE PURPOSES ONLY. THIS OR A SIMILAR FORM IS REQUIRED.

LOCATION	RAIN DATA	TYPE OF CONTROL (SEE BELOW)	DATE INSTALLED/ MODIFIED	CURRENT CONDITION (SEE BELOW)	CORRECTIVE ACTION/ OTHER REMARKS

CONDITION CODE:
G=GOOD, M=MARGINAL, NEEDS MAINTENANCE OR REPLACEMENT SOON, P=POOR, NEEDS IMMEDIATE REPLACEMENT, C=NEEDS TO BE CLEANED, O=OTHER

CONTROL TYPE CODES

1. SILT FENCE	13. RETENTION POND	25. HAY BALES
2. EARTH DIKES	14. CONSTRUCTION ENTRANCE STABILIZATION	26. GEOTEXTILE
3.STRUCTURAL DIVERSION	15. PERIMETER DITCH	27. RIP-RAP
4. SWALE	16. CURB AND GUTTER	28. TREE PROTECTION
5. SEDIMENT TRAP	17. PAVED ROAD SURFACE	29. DETENTION POND
6. CHECK DAM	18. ROCK OUTLET PROTECTION	30. RETENTION POND
7. SUBSURFACE DRAIN	19. REINFORCED SOIL RETAINING SYSTEM	31. WASTE DISPOSAL/ HOUSE KEEPING
8. PIPE SLOPE DRAIN	20. GABON	32. DAM
9. LEVEL SPREADERS	21. SEDIMENT BASIN	33. SAND BAG
10. STORM DRAIN INLET PROTECTION	22. TEMPORARY SEED/SOD	34. OTHER
11. VEGETATIVE BUFFER STRIP	23. PERMANENT SEED/SOD	
12. VEGETATIVE PRESERVATION AREA	24. MULCH	

INSPECTOR INFORMATION:
NAME: _____ QUALIFICATION: _____ DATE: _____

" I CERTIFY UNDER THE 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 OR IMPRISONMENT FOR KNOWING VIOLATIONS."

NAME (RESPONSIBLE AUTHORITY) DATE

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

This item has been digitally signed and sealed by Jeremy R. Anderson, PE, on the date indicated here.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

EROSION AND SEDIMENT CONTROL NOTES:

1. CLEARING AND GRUBBING OPERATIONS SHALL BE CONTROLLED SO AS TO MINIMIZE UNPROTECTED ERODIBLE AREAS EXPOSED TO WEATHER, GENERAL EROSION CONTROL BMPS SHALL BE EMPLOYED TO MINIMIZE SOIL EROSION AND OFF-SITE SEDIMENTATION. WHILE THE VARIOUS TECHNIQUES REQUIRED WILL BE SITE AND PLAN SPECIFIC, THEY SHOULD BE EMPLOYED PRIOR TO ANY CONSTRUCTION ACTIVITY. SEDIMENT CONTROL CONSISTS OF SILT FENCING, HAY BALES, AND FLOATING TURBIDITY BARRIERS PER CURRENT FDOT SPECIFICATIONS. EROSION CONTROL CONSISTS OF SEEDING AND MULCHING, SODDING, WETTING SURFACES, PLACEMENT OF COARSE AGGREGATE, TEMPORARY PAVING.

2. CONTRACTOR SHALL RESPOND TO EROSION AND SEDIMENT CONTROL MAINTENANCE REQUIREMENTS OR IMPLEMENT ADDITIONAL MEASURES TO CONTROL EROSIONS ORDERED BY OWNER OR GOVERNING AUTHORITIES WITHIN 48 HOURS OR SOONER IF REQUIRED AT NO ADDITIONAL COST TO THE OWNER.

3. EXCAVATED MATERIAL WILL NOT BE DEPOSITED IN LOCATIONS WHERE IT COULD BE WASHED AWAY BY HIGH WATER OR STORM WATER RUNOFF, STOCKPILED MATERIAL SHALL BE COVERED OR ENCIRCLED WITH SEDIMENT CONTAINMENT DEVICES.

4. STABILIZATION MEASURES SHALL BE INITIATED FOR EROSION AND SEDIMENT CONTROL ON DISTURBED AREAS AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. CLEARED SITE DEVELOPMENT AREAS WHICH WILL REMAIN AT ROUGH GRADE FOR 14 DAYS OR MORE SHOULD BE STABILIZED IMMEDIATELY BY COVERING WITH ADEQUATE AMOUNT OF HAY, OVER SEEDED AND PERIODICALLY WATERED SUFFICIENT TO STABILIZE THE TEMPORARY GROUNDCOVER, OR BY THE USE OF AN APPROPRIATE ALTERNATIVE BMP.

5. ALL GRASS SLOPES CONSTRUCTED STEEPER THAN 4H:1V SHALL BE SODDED IMMEDIATELY AFTER FINAL GRADE IS ESTABLISHED.

6. WHERE REQUIRED TO PREVENT EROSION FROM SHEET FLOW ACROSS BARE GROUND FROM ENTERING A LAKE OR SWALE, A TEMPORARY SEDIMENT SUMP SHALL BE CONSTRUCTED. THE TEMPORARY SEDIMENT SUMP SHALL REMAIN IN PLACE UNTIL VEGETATION IS ESTABLISHED ON THE GROUND DRAINING TO THE SUMP.

7. PERMANENT SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHED OR ANY DISTURBED LAND AREAS SHALL BE COMPLETED IMMEDIATELY AFTER FINAL GRADING. WHEN IT IS NOT POSSIBLE TO PERMANENTLY PROTECT A DISTURBED AREA IMMEDIATELY AFTER GRADING OPERATIONS, TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED. ALL TEMPORARY PROTECTION SHALL BE MAINTAINED UNTIL PERMANENT MEASURES ARE IN PLACE AND ESTABLISHED.CONTRACTOR WILL BE REQUIRED TO INCORPORATE PERMANENT EROSION CONTROL FEATURES INTO PROJECT AT EARLIEST PRACTICAL TIME TO MINIMIZE NEED FOR TEMPORARY CONTROLS.

8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DESIGNATE AN AREA WITHIN THE PROJECT LIMITS FOR CONCRETE TRUCK WASHOUT ACTIVITIES. THIS AREA SHALL PROVIDE EROSION CONTROL DEVICES THAT PREVENT CONTACT BETWEEN CONCRETE WASHOUT MATERIALS AND STORMWATER AND/OR SURFACE WATERS.

9. IN ADDITION TO THOSE RESPONSIBILITIES OUTLINED WITHIN THE CONSTRUCTION PLANS AND DOCUMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING MEASURES:

A. PROJECT SCHEDULE WITH EROSION AND SEDIMENT CONTROL INSTALLATION AND MAINTENANCE TIED TO THE SPECIFIC DATES OR CONSTRUCTION ACTIVITIES.
B. ALTERATIONS TO THE DESIGN EROSION AND SEDIMENT CONTROLS DUE TO DIFFERENCE BETWEEN THE DESIGN PLANS AND ANTICIPATED CONSTRUCTION PHASING AND THE CONTRACTOR'S CONSTRUCTION METHODS
C. NAME AND PHONE NUMBER OF CONTRACTOR'S REPRESENTATIVE RESPONSIBLE FOR EROSION AND SEDIMENT CONTROL INSTALLATION AND MAINTENANCE ON A 24 HOUR BASIS.
D. THE CONTRACTOR WILL FURNISH, INSTALL, MAINTAIN AND SUBSEQUENTLY REMOVE ALL NECESSARY EROSION CONTROL. THE CONTRACTOR WILL FURNISH AND INSTALL ALL NECESSARY PERMANENT EROSION CONTROLS.
E. THE DEVELOPMENT OF THE APPLICABLE BMP'S TO ENSURE THE CONTROL OF OFF-SITE TRACKING/SPILLAGE, SANITARY, WASTE, FERTILIZERS & PESTICIDES, SOLID WASTE DISPOSAL, AND NON-STORMWATER DISCHARGES & HAZARDOUS WASTE. WHEN THE CONTRACTOR ENCOUNTERS A SPILL, CONSTRUCTION WILL STOP AND WORK WILL NOT RESUME UNTIL DIRECTED BY THE PROJECT ENGINEER. DISPOSITION OF HAZARDOUS WASTEWILL BE MADE IN ACCORDANCE WITH ANY REQUIREMENTS AND REGULATIONS OF ANY LOCAL, STATE, OR FEDERAL AGENCY HAVING JURISDICTION. THE CONTRACTOR IS ADVISED THAT THE CONTRACT DRAWINGS ONLY INDICATE EROSION, SEDIMENT AND TURBIDITY CONTROLS AT LOCATIONS DETERMINED IN THE DESIGN PROCESS, HOWEVER, THE CONTRACTOR IS REQUIRED TO PROVIDE ANY ADDITIONAL CONTROLS NECESSARY TO PREVENT THE POSSIBILITY OF SILTING ANY ADJACENT LOWLAND PARCEL OR RECEIVING WATER.
F. INSPECT EROSION AND SEDIMENT CONTROLS WEEKLY OR IMMEDIATELY FOLLOWING A RAIN EVENT OF 1/2 INCH OR GREATER DURING CONSTRUCTION. REMOVE ANY SEDIMENT BUILD-UP, REPAIR AND REINSTALL ANY DAMAGED OR MISSING SEDIMENT CONTROL MEASURES. INSTALL ADDITIONAL MEASURES IF INSPECTION REVEALS ADDITIONAL SEDIMENTATION CONTROL IS NECESSARY.

10. EROSION AND SEDIMENT CONTROL BARRIERS SHALL BE PLACED ADJACENT TO ALL WETLAND AREAS WHERE THERE IS POTENTIAL FOR DOWNSTREAM WATER QUALITY DEGRADATION.

11. 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 RECEIVING OUTFALL.

12. DE-WATERING PUMPS SHALL NOT EXCEED THE CAPACITY OF THAT WHICH REQUIRES A CONSUMPTIVE USE PERMIT FROM THE WATER MANAGEMENT DISTRICT.

13. ALL DE-WATERING, EROSION, AND SEDIMENT CONTROL TO REMAIN IN PLACE AFTER COMPLETION OF CONSTRUCTION AND REMOVED ONLY WHEN AREAS HAVE BEEN STABILIZED.

14. THE CONTRACTOR SHALL BE REQUIRED TO RESPOND TO ALL WATER MANAGEMENT DISTRICT, FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) AND ANY GOVERNING JURISDICTIONS INQUIRES RELATIVE TO COMPLIANCE FOR EROSION AND SEDIMENTATION CONTROL. THE COST OF THIS COMPLIANCE SHALL BE PART OF THE CONTRACT.

15. ALL FILL SLOPES SHALL HAVE SILT FENCE AT THE TOP OF SLOPES.

16. ALL SLOPES STEEPER THEN 2:5:1 AND WITH A HEIGHT OF 10' FEET OR GREATER, AND CUTS AND FILLS WITHIN STREAM BUFFERS SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL MATTING OR BLANKETS AND ACCORDING TO FLORIDA E.P.D. REQUIREMENTS.

17. 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.

PROTECTION OF SURFACE WATERS

1. WHERE APPROPRIATE OR WHEN REQUIRED BY STATE, FEDERAL OR LOCAL AGENCIES, DOWNSTREAM RECEIVING WATERS SHALL BE MONITORED THROUGHOUT CONSTRUCTION FOR TURBIDITY AND PH. A BACKGROUND SAMPLE SHALL BE TAKEN PRIOR TO COMMENCEMENT OF CONSTRUCTION.

2. WHERE PRACTICAL, STORMWATER SHALL BE CONVEYED BY SWALES, SWALES SHALL BE CONSTRUCTED AS SHOWN ON PLANS.

3. EXCAVATED MATERIAL WILL NOT BE DEPOSITED IN LOCATIONS WHERE IT COULD BE WASHED AWAY BY HIGH WATER OR STORM WATER RUNOFF, STOCKPILED MATERIAL SHALL BE COVERED OR ENCIRCLED WITH SEDIMENT CONTAINMENT DEVICES.

4. EROSION CONTROL MEASURES SHALL BE EMPLOYED TO MINIMIZE TURBIDITY OF SURFACE WATERS LOCATED DOWNSTREAM OF ANY CONSTRUCTION ACTIVITY. WHILE THE VARIOUS MEASURES REQUIRED WILL BE SITE SPECIFIC, THEY SHALL BE EMPLOYED AS NEEDED IN ACCORDANCE WITH THE FOLLOWING:
A.) IN GENERAL, EROSION SHALL BE CONTROLLED AT THE FURTHEST PRACTICAL UPSTREAM LOCATION.
B.) NEW AND EXISTING STORMWATER INLETS AND OUTFALL STRUCTURES SHALL BE PROTECTED DURING CONSTRUCTION. PROTECTION MEASURES SHALL BE EMPLOYED IMMEDIATELY AS REQUIRED DURING THE VARIOUS STAGES OF CONSTRUCTION.
C.) PERIMETER EROSION CONTROL DEVICES SHALL BE INSTALL PRIOR TO LAND DISTURBANCE AND SHALL REMAIN IN PLACE UNTIL FINAL SITE STABILIZATION HAS BEEN ESTABLISHED.

5. HEAVY CONSTRUCTION EQUIPMENT PARKING AND MAINTENANCE AREAS SHALL BE DESIGNED TO PREVENT OIL, GREASE, AND LUBRICANTS FROM ENTERING SITE DRAINAGE FEATURES INCLUDING STORMWATER COLLECTION AND TREATMENT SYSTEMS. CONTRACTORS SHALL PROVIDE BROAD DIKES OR SILT SCREENS AROUND, AND SEDIMENT SUMPS WITHIN, SUCH AREAS AS REQUIRED TO CONTAIN SPILLS OF OIL, GREASE, LUBRICANTS, OR OTHER CONTAMINANTS. CONTRACTORS SHALL HAVE AVAILABLE, AND SHALL USE, ABSORBENT FILTER PADS TO CLEAN UP SPILLS IMMEDIATELY AFTER ANY OCCURRENCE.

CONTROL OF FUGITIVE DUST AND WIND EROSION

1. THESE NOTES ARE PROVIDED TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES, TO REDUCE ON AND OFF SITE DAMAGE AND HEALTH HAZARDS, AND TO IMPROVE TRAFFIC SAFETY ON THE CONSTRUCTION SITE.

2. THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO DUST BLOWING AND MOVEMENT WHERE ON AND OFF SITE DAMAGE IS LIKELY WITHOUT TREATMENT. THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL MEASURES AS APPROPRIATE AND AS DIRECTED BY THE ENGINEER.

3. THE FOLLOWING METHODS SHOULD BE CONSIDERED FOR CONTROLLING DUST:

A. MULCHES - SEE STANDARDS FOR STABILIZATION WITH MULCHES ONLY
B. VEGETATIVE COVER - SEE STANDARDS FOR: TEMPORARY VEGETATIVE COVER, PERMANENT VEGETATIVE COVER, AND PERMANENT STABILIZATION WITH SOD.
C. SPRAY ON ADHESIVES (SEE CHART BELOW) - ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS

MATERIAL	WATER DILUTION	TYPE OF NOZZLE	APPLY GALLONS/ACRE
ANIONIC ASPHALT EMULSION	7:1	COARSE SPRAY	1200
LATEX EMULSION	12:5:1	FINE SPRAY	235
RESIN IN WATER	4:1	FINE SPRAY	300
POLYACRYLAMIDE (PAM) - SPRAY ON POLYACRYLAMIDE (PAM) - DRY SPRAY	WATER DILUTION	APPLY ACCORDING TO MANUFACTURE'S INSTRUCTIONS. MAY ALSO BE USED AS AN ADDITIVE TO SEDIMENT BASINS TO FLOCCULATE AND PRECIPITAVE SUSPENDED COLLOIDS. SEE SEDIMENT BASIN STANDARD	
ACIDULATED SOY BEAN SOP STICK	NONE	COARSE SPRAY	1200

D. TILLAGE - TO ROUGHEN SURFACE AND BRING CLODS TO SURFACE. THIS IS A TEMPORARY EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12" APART, AND SPRING TOOTHED HARROWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.
E. SPRINKLING - SITE IS SPRINKLED UNTIL THE SURFACE IS WET.
F. BARRIERS - SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING.
G. CALCIUM CHLORIDE - SHALL BE IN THE FORM OF LOOSE, DRY GRANULES OR FLAKES FINE ENOUGH TO FEED THROUGH COMMONLY USED SPREADERS AT A RATE THAT WILL KEEP ENOUGH SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE. IF USED ON STEEPER SLOPES, THEN USE OTHER PRACTICES TO PREVENT WASHING INTO STREAMS OR ACCUMULATION AROUND PLANTS.
H. STONE - COVER SURFACES WITH CRUSHED STONE OR COARSE GRAVEL.

4. PREVENT THE GENERATION OF DUST IN PREFERENCE TO APPLYING DUST SUPPRESSION MEASURES. ENSURE IN THE PROJECT SCHEDULE THAT THE AREA OF CLEARED LAND IS MINIMIZED DURING THE DRIER MONTHS OF THE YEAR, WHEN DUST GENERATION IS AT ITS GREATEST.

5. THE SOIL SHALL BE MAINTAINED IN A SUFFICIENTLY DAMP CONDITION TO PREVENT LOOSE GRAINS OF SOIL FROM BECOMING DISLODGED. THE SOIL SHALL BE COMPLETELY CRUSTED OVER BY APPLICATION OF WATER OR COMPLETELY COVERED WITH CLEAN GRAVEL OR TREATED WITH AN APPROVED DUST SUPPRESSANT.

6. PAVE AND WATER HAUL ROADS. THE FREQUENCY OF WATERING WILL BE DETERMINED BY WEATHER CONDITIONS AND THE ERODIBILITY OF THE SOIL. IF ADDITIVES IN THE WATER ARE USED TO INCREASE ITS DUST SUPPRESSION PROPERTIES, THE CHEMICAL SHOULD HAVE NO ADVERSE ENVIRONMENTAL IMPACT ON ADJACENT WATER BODIES.

7. WATER AREAS OTHER THAN HAUL ROADS, IF THEY ARE A SOURCE OF DUST.

8. ENSURE THAT SMOOTH SURFACES ARE DEEP RIPPED AND LEFT ROUGH AND CLODDY TO REDUCE THE WIND VELOCITY AT THE SOIL SURFACE.

9. CONSTRUCT WIND FENCES IF THIS IS APPROPRIATE FOR THE SITE. AS A CONTINGENCY MEASURE, IN AREAS THAT DO NOT HAVE ACCESS TO A WATER SUPPLY, WATER STORED ON-SITE SHOULD NEVER BE LESS THAN FIFTY PERCENT OF DISTURBED LAND SURFACE. WHEREVER WATERING IS USED TO SUPPRESS DUST, ENSURE IT DOES NOT CREATE CONTAMINATED RUN-OFF THAT WILL CONTAMINATE SURFACE WATERS.

10. USE BARRIERS WHERE REQUIRED TO PREVENT THE MIGRATION OF SAWDUST OR PARTICULATES FROM SANDING OR SURFACE PREPARATION ACTIVITIES DURING CONSTRUCTION.

11. BARE EARTH AREAS SHALL BE WATERED DURING CONSTRUCTION AS NECESSARY TO MINIMIZE THE TRANSPORT OF FUGITIVE DUST. IT MAY BE NECESSARY TO LIMIT CONSTRUCTION VEHICLE SPEED IF BARE EARTH HAS NOT BEEN EFFECTIVELY WATERED. IN NO CASE SHALL FUGITIVE DUST BE ALLOWED TO LEAVE THE SITE UNDER CONSTRUCTION.

12. AS REQUIRED AFTER COMPLETION OF CONSTRUCTION, BARE EARTH AREAS SHALL BE VEGETATED.

13. AT ANY TIME BOTH DURING AND AFTER SITE CONSTRUCTION THAT WATERING AND/OR VEGETATION ARE NOT EFFECTIVE IN CONTROLLING WIND EROSION AND/OR TRANSPORT OF FUGITIVE DUST, OTHER METHODS AS ARE NECESSARY FOR SUCH CONTROL SHALL BE EMPLOYED. THESE METHODS MAY INCLUDE ERECTION OF DUST CONTROL FENCES. IF REQUIRED, DUST CONTROL FENCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAIL FOR A SILT FENCE EXCEPT THE MINIMUM HEIGHT SHALL BE 4 FEET.

POLLUTION PREVENTION NOTES:

1. OFF SITE SURFACE WATER DISCHARGES, OR DISCHARGES TO ONSITE WETLANDS OR SURFACE WATERS WITH TURBIDITY IN EXCESS OF 29 NEPHELOMETRIC TURBIDITY UNITS (NTU'S) ABOVE GROUND LEVEL SHALL BE IMMEDIATELY CORRECTED. SUCH INCIDENTS SHALL BE REPORTED TO WATER RESOURCES WITHIN 24 HOURS OF THE OCCURRENCE. THE REPORT SHALL INCLUDE THE CAUSE OF DISCHARGE AND CORRECTIVE ACTIONS TAKEN.

2. FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ENTER STORMWATER DRAINS OR WATERBODIES, OR FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ARE IN EXCESS OF 25 GALLONS SHALL BE CONTAINED, CLEANED UP, AND IMMEDIATELY REPORTED TO WATER RESOURCES. SMALLER GROUND SURFACE SPILLS SHALL BE CLEANED UP AS SOON AS PRACTICAL.

3. IF CONTAMINATED SOIL/OR GROUNDWATER IS DISCOVERED DURING DEVELOPMENT OF THE SITE, ALL ACTIVITY IN THE VICINITY OF THE CONTAMINATION SHALL IMMEDIATELY CEASE, AND WATER RESOURCES SHALL BE CONTACTED.

4. PRIOR TO DEMOLITION OF EXISTING ON SITE STRUCTURES AN ASBESTOS SURVEY AND/OR ASBESTOS NOTIFICATION MAY BE REQUIRED.

5. THE DISCHARGE OF GROUNDWATER PRODUCED THROUGH DEWATERING, TO SURFACE WATERS, OR ANY PORTION OF THE MS4 WILL REQUIRE SEPARATE PERMITTING FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP). PERMITS SHALL BE OBTAINED PRIOR TO THE COMMENCEMENT OF DEWATERING.

EROSION AND SEDIMENT CONTROLS BMP'S:

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. 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.WHERE EFFECTIVENESS IS
C. 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 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 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 REGRESSING: 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.

2. TEMPORARY SEDIMENT TRAP: A SEDIMENT TRAP SHALL BE INSTALLED IN AN DRAINAGEWAY AT A STORM DRAIN INLET OR AT OTHER POINTS OF DISCHARGE FORM 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.
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.
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.

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 2.30 ACRES 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.

EPA NOTES:

1. NO CONSTRUCTION MATERIAL SHALL BE DISCHARGED TO WATERS OF THE STATE UNLESS AUTHORIZED BY A SECTION 404 PERMIT AND/OR THE STATE OF FLORIDA ENVIRONMENTAL RESOURCE PERMIT. ALL CONSTRUCTION DEBRIS SHALL BE DISPOSED OF IN AN APPROVED UPLAND LOCATION. BUILDING MATERIAL SHALL NOT BE DISPOSED OF IN WETLANDS OR BURIED ON-SITE.

2. IT IS THE RESPONSIBLY OF THE CONTRACTOR TO DEVELOP AN EROSION CONTROL PLAN THAT PROVIDES A DETAILED DESCRIPTION OF ALL EROSION AND SEDIMENT CONTROLS. BEST MANAGEMENT PRACTICES AND MEASURES THAT WILL BE IMPLEMENTED AT THE CONSTRUCTION SITE FOR EACH ACTIVITY IDENTIFIED IN SECTION 1.B. SEQUENCE OF SOIL DISTURBING ACTIVITIES. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TIME FRAMES IN WHICH THE CONTROLS WILL BE IMPLEMENTED, MAINTAINED AND REMOVED. THIS INFORMATION SHALL BE KEPT AT THE PROJECT FIELD OFFICE IN ORDER FOR THE PROJECT TO BE CONSIDERED IN COMPLIANCE WITH FDEP GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION SITES.

3. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THE FOLLOWING ITEMS ARE ON SITE:
A. COPY OF THE STORMWATER POLLUTION PREVENTION PLAN WITH THE ORIGINAL CERTIFICATION SIGNATURES.
B. COPY OF CONTRACTOR'S EROSION CONTROL PLAN.
C. HAZARDOUS SPILL CONTROL PLAN WITH GUIDELINES ON CONTACTING THE 24 HOUR EMERGENCY RESPONSE PROGRAM FOR HAZARDOUS MATERIAL SPILLS. THIS SHALL INCLUDE COPIES OF DISCHARGE NOTIFICATIONS THAT HAVE OCCURRED WITHIN THE PROJECT LIMITS.
D. COMPLETE INSPECTIONS FORM.

4. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THE FOLLOWING ITEMS TO FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION IN ORDER FOR THE NPDES PERMIT TO BE PROCESSED:
A. FDEP FORM 62-621.300(4)(b) - NOTICE OF INTENT TO USE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES. THIS NOTICE OF INTENT SHALL BE SIGNED BY THE CONTRACTOR.
B. THE CONTRACTOR IS REQUIRED TO SUBMIT A COPY OF THIS LOG ALONG WITH A NOTICE OF TERMINATION TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION UPON THE COMPLETION OF CONSTRUCTION.
C. CONTRACTOR IS REQUIRED TO RETAIN ALL RECORDS FOR A PERIOD OF NO LESS THAN 3 YEARS FOLLOWING THE NOTICE OF TERMINATION

5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SUBMIT THE NOI TO FDEP NO LESS THAN 48 HOURS PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROOF OF MAIL TO THE PROJECT ADMINISTRATOR.

6. STABILIZED CONSTRUCTION ENTRANCES AND CONSTRUCTION ROADS, IF APPROPRIATE, SHALL BE IMPLEMENTED IN ORDER TO REDUCE OFFSITE TRACKING.

7. LOADED HAUL TRUCKS SHALL BE COVERED WITH TARPAULIN. EXCESS DIRT ON THE ROAD SHALL BE REMOVED DAILY.

8. IF CONTAMINATED SOIL OR GROUNDWATER IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR IS TO CEASE OPERATIONS IN THAT AREA. THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD IMMEDIATELY WHO WILL NOTIFY THE DISTRICT CONTAMINATION IMPACT COORDINATOR.

NOTICE TO GENERAL CONTRACTORS:

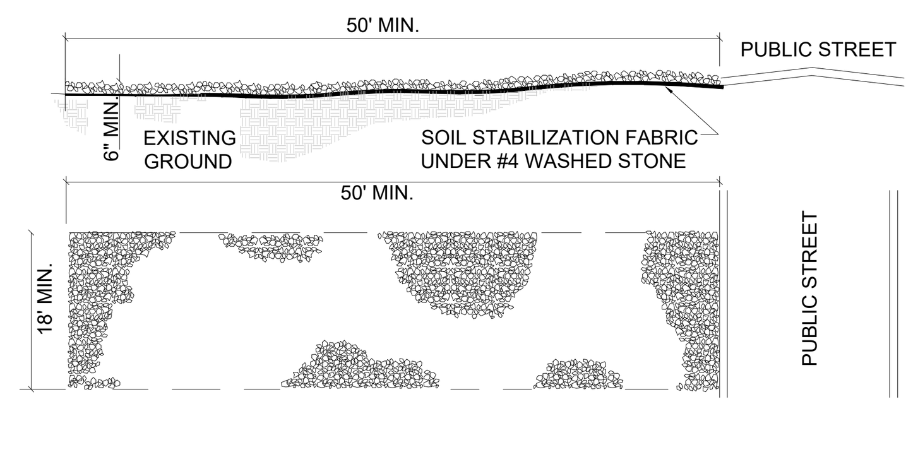
1. BMP'S (INCLUDING SILT FENCE INSTALLED IN PHASE 1) SHALL NOT BE REMOVED UNTIL FINAL STABILIZATION HAVE BEEN ACHIEVED. CONTRACTOR SHALL REFERENCE THE SEQUENCE OF CONSTRUCTION.
2. PRIOR TO CONSTRUCTION, GC MUST CLEARLY DELINEATE AND MARK OFF AREAS IDENTIFIED IN THE S.W.P.P.P. OR IN THE FIELD TO CLEARLY BE PROTECTED (SUCH AS NATURAL BUFFERS, TREES, HABITATS OF ENDANGERED/THREATENED SPECIES, HISTORIC PROPERTIES ETC.)

CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS

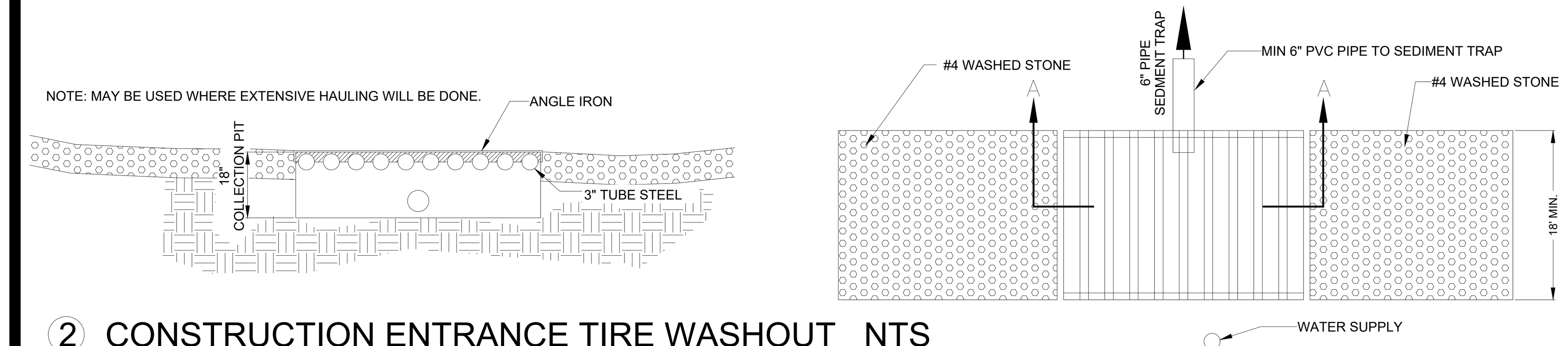
IN AN EFFORT TO ENSURE COMPLIANCE WITH FEDERAL, STATE, AND LOCAL LAWS REGARDING EROSION AND TURBIDITY CONTROLS, THE FOLLOWING PERMITS HAVE BEEN OBTAINED.

D.E.P. DREDGE/FILL PERMIT ________N/A________
C.O.E. DREDGE/FILL PERMIT ________N/A________
WATER MANAGMENT PERMIT ________XXXXXXXX_____

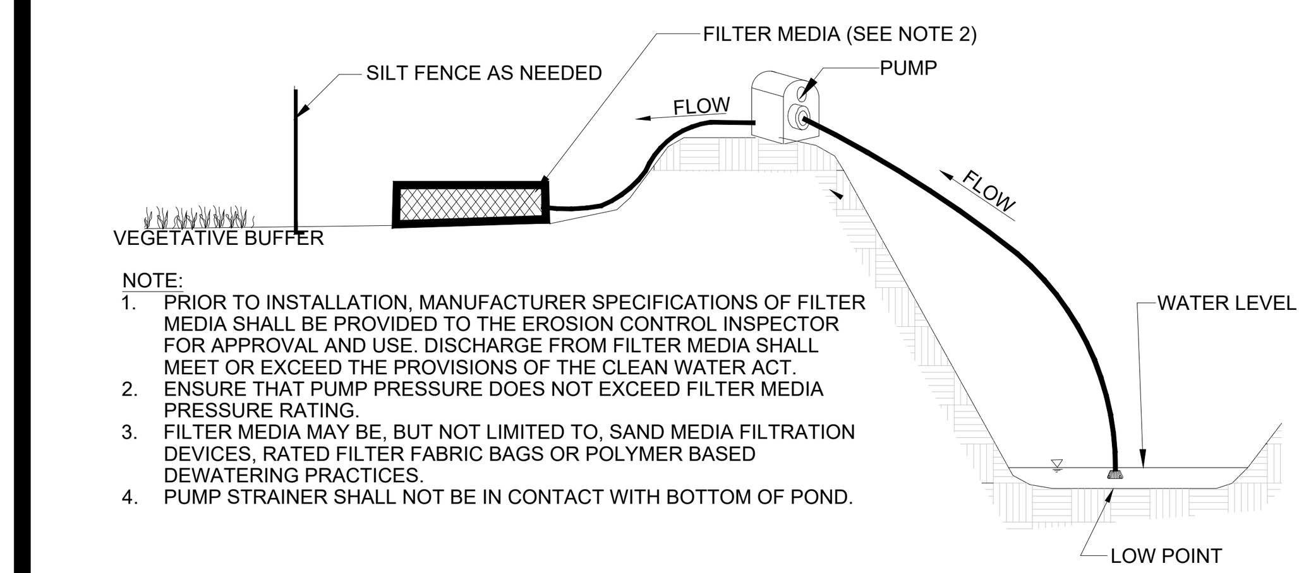
NOTES
1. A STABILIZED ENTRANCE PAD OF #4 WASHED STONE AND RAILROAD BALLAST SHALL BE LOCATED WHERE TRAFFIC WILL ENTER OR LEAVE THE CONSTRUCTION SITE ONTO A PUBLIC STREET.
2. FILTER FABRIC OR COMPACTED CRUSHER RUN STONE SHALL BE USED AS A BASE FOR THE CONSTRUCTION ENTRANCE.
3. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC STREETS OR EXISTING PAVEMENT. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS WARRANT AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
4. ANY SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC STREETS MUST BE REMOVED IMMEDIATELY.
5. ANY AGGREGATE TRACKED INTO THE ROADWAY MUST BE SWEPT BACK ONSITE ON A NIGHTLY BASIS.
6. WHEN APPROPRIATE, WHEELS MUST BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTERING A PUBLIC STREET. WHEN WASHING IS REQUIRED, IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN SEE STD. NO. 30.11B.
7. FDOT MAY REQUIRE A STANDARD COMMERCIAL DRIVEWAY TO ACCESS THE CONSTRUCTION SITE IF THE DRIVEWAY IS ON A THOROUGHFARE.



1 STABILIZED CONSTRUCTION ENTRANCE NTS

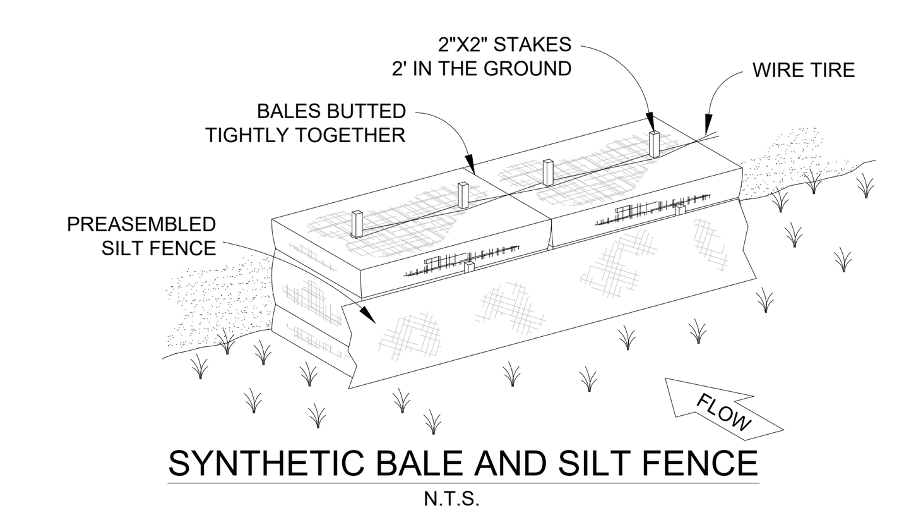


2 CONSTRUCTION ENTRANCE TIRE WASHOUT NTS



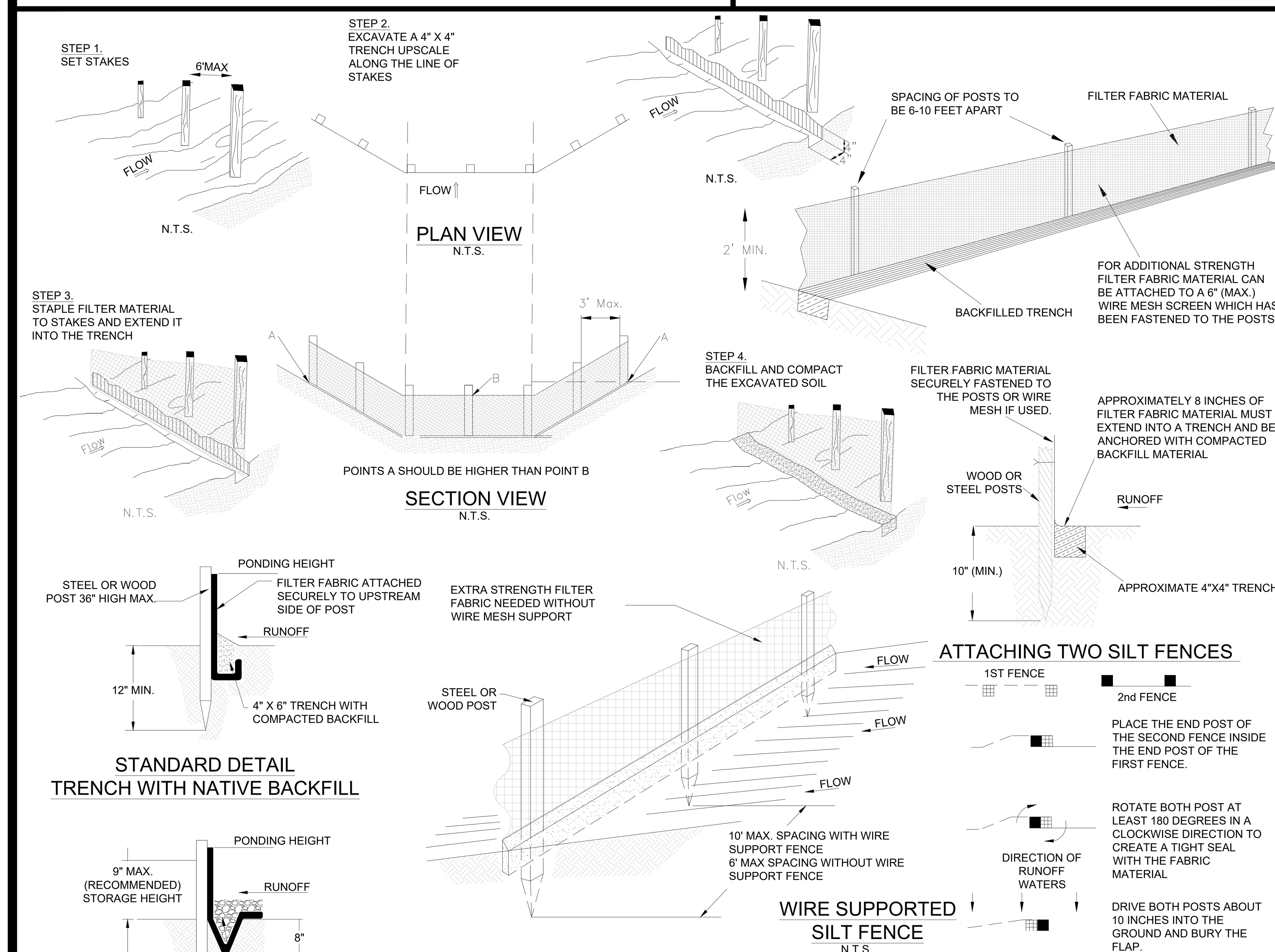
NOTE:
1. PRIOR TO INSTALLATION, MANUFACTURER SPECIFICATIONS OF FILTER MEDIA SHALL BE PROVIDED TO THE EROSION CONTROL INSPECTOR FOR APPROVAL AND USE. DISCHARGE FROM FILTER MEDIA SHALL MEET OR EXCEED THE PROVISIONS OF THE CLEAN WATER ACT.
2. ENSURE THAT PUMP PRESSURE DOES NOT EXCEED FILTER MEDIA PRESSURE RATING.
3. FILTER MEDIA MAY BE, BUT NOT LIMITED TO, SAND MEDIA FILTRATION DEVICES, RATED FILTER FABRIC BAGS OR POLYMER BASED DEWATERING PRACTICES.
4. PUMP STRAINER SHALL NOT BE IN CONTACT WITH BOTTOM OF POND.

3 DEWATERING NTS



SYNTHETIC BALE AND SILT FENCE
N.T.S.

4 SYNTHETIC BALE & SILT FENCE NTS



ALTERNATE DETAIL
TRENCH WITH GRAVEL

NOTES:
1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

CONTRACTOR'S RESPONSIBILITY
EROSION AND SEDIMENTATION CONTROLS ARE PERFORMANCE BASED CRITERIA. IF THE BMPS PROVIDED DO NOT PREVENT SOILS FROM LEAVING A CONSTRUCTION SITE, THEN THE CONTRACTOR IS REQUIRED TO EMPLOY ADDITIONAL PROCEDURES TO PROVIDE CLEAN RUNOFF FROM A SITE.

5 SILT FENCE NTS

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

This item has been digitally signed and sealed by Jeremy R. Anderson, PE, on the date indicated here.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

R.K.M. DEVELOPMENT CORP.

COMMON OAK ENGINEERING
4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP
&
SE 58TH AVE
BELLEVIEW, FL
MARION COUNTY

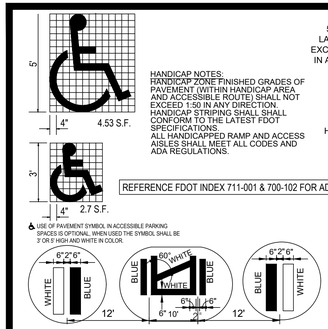
NO:	DATE:	REVISION / ISSUE:	BY:

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

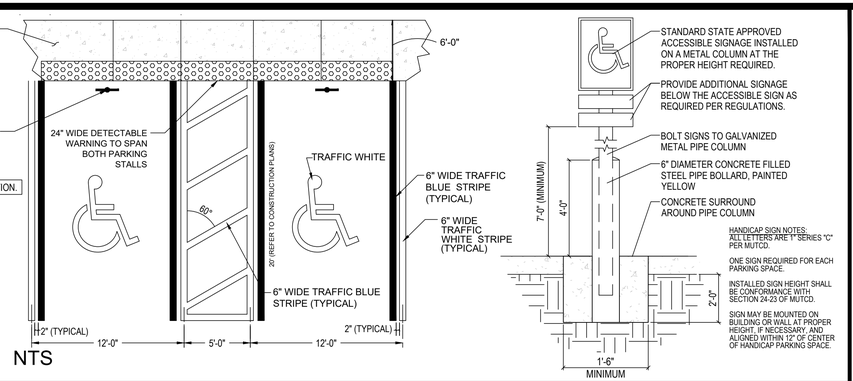
PROJECT # 222.108
DATE 05/13/2024
SCALE NTS
SHEET C9.1

EROSION CONTROL DETAILS



1 HANDICAP STRIPING AND BOLLARD NTS

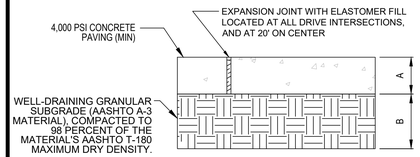
CONCRETE 28 DAY STRENGTH SHALL BE 3,000 PSI (MIN)



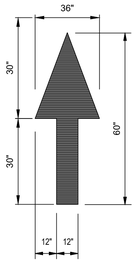
MINIMUM CONCRETE PAVEMENT THICKNESS*

CONCRETE SECTION	PARKING & CANOPY AREA	TANK MAT AREA
MIN THICKNESS (A)	7"	8"
STABILIZED SUBGRADE (B)	12" FDOT TYPE B, LBR MINIMUM=40	
MAXIMUM CONTROL JOINT SPACING	12' X 12'	14' X 14'
RECOMMENDED SAW CUT DEPTH (MIN)	2.00"	2.66"

*REFER TO GEOTEHNICAL REPORT



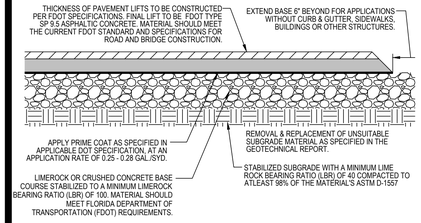
2 CONCRETE PAVING SECTION NTS



3 ON-SITE DIRECTIONAL ARROW NTS

PAVEMENT THICKNESS (MINIMUM)

	LAYER COMPONENT		
	SURFACE COURSE	BASE COURSE	STABILIZED SUBGRADE
STANDARD ASPHALT	1.5"	6.0"	12.0"
HEAVY DUTY ASPHALT	2.0"	8.0"	12.0"

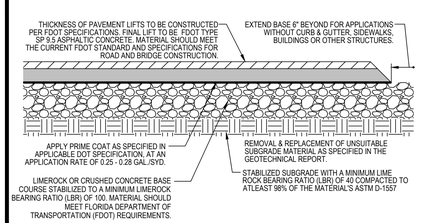


4 ASPHALT PAVING SECTION NTS

(ON-SITE)

PAVEMENT THICKNESS (MINIMUM)

	LAYER COMPONENT		
	SURFACE COURSE	BASE COURSE	STABILIZED SUBGRADE
FDOT ASPHALT (INCLUDES BIKE LANE)	1.5" FC12.5 3.5" SP12.5	10.0"	12.0"

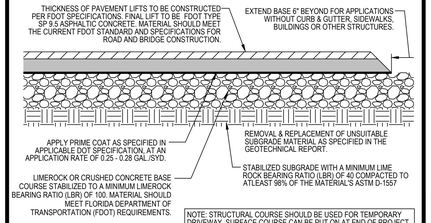


5 FDOT ASPHALT PAVING SECTION NTS

(SR 35 RIGHT OF WAY)

PAVEMENT THICKNESS (MINIMUM)

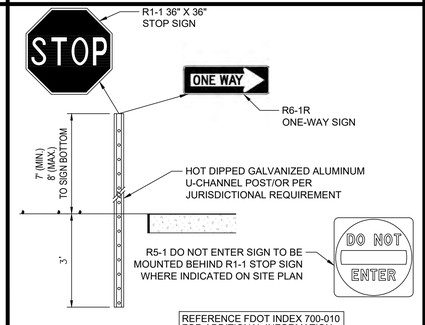
	LAYER COMPONENT		
	SURFACE COURSE	BASE COURSE	STABILIZED SUBGRADE
TURN LANE & DRIVEWAY ASPHALT	0.75" FC5 3.0" SP12.5	11.0"	12.0"
PAVED SHOULDER	0.75" FC5 1.5" SP12.5	5.5"	12.0"



NOTE: STRUCTURAL COURSE SHOULD BE USED FOR TEMPORARY DRIVEWAY, SURFACE COURSE CAN BE PUT ON AT END OF PROJECT.

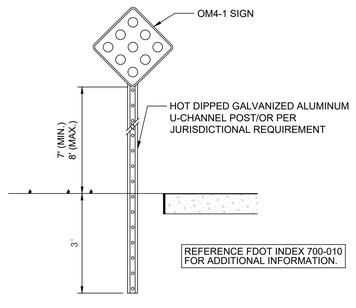
6 ASPHALT PAVING SECTION NTS

(SE 92 LOOP RIGHT OF WAY)



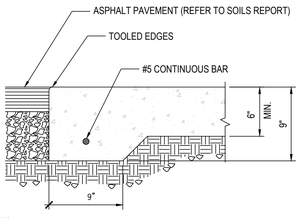
REFERENCE FDOT INDEX 700-010 FOR ADDITIONAL INFORMATION.

7 SIGNAGE/POST NTS



REFERENCE FDOT INDEX 700-010 FOR ADDITIONAL INFORMATION.

8 SITE SIGNAGE/POST NTS



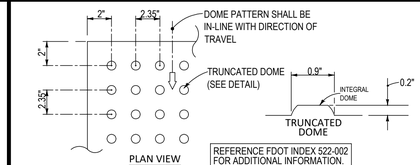
NOTES:

A. CONTRACTOR SHALL REFER TO THE GEOMETRY AND GRADING PLANS FOR SPECIFICATIONS ON PAVEMENT SLOPE, LINEAR DIMENSIONS, AND CURB TEXT.

B. ALL PAVEMENT SECTION (i.e. ASPHALT, BASE AND SUB BASE) MUST BE CONSTRUCTED IN ACCORDANCE WITH THE RECOMMENDATIONS FROM THE GEOTECHNICAL ENGINEER ON RECORD AND ALL PAVEMENT REQUIREMENTS FROM THE LOCAL JURISDICTION.

9 CONCRETE APRON NTS

CONCRETE 28 DAY STRENGTH SHALL BE 4,000 PSI (MIN)



REFERENCE FDOT INDEX 522-002 FOR ADDITIONAL INFORMATION.

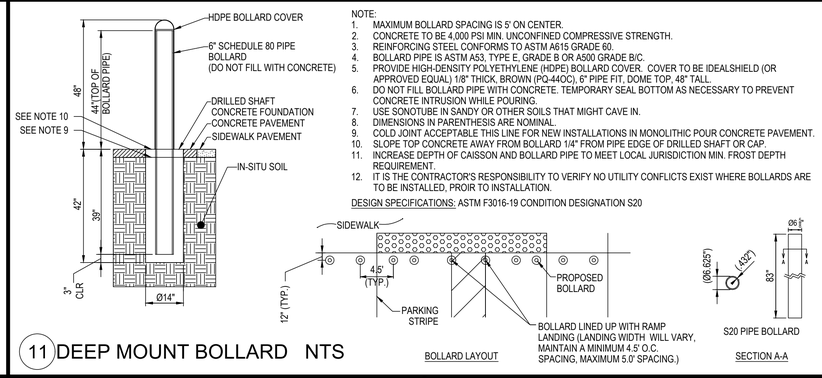
NOTES:
1. RAMP RUNNING SLOPES SHALL NOT EXCEED A 1:12 SLOPE AND A 1: 50 CROSS SLOPE.

2. DETECTABLE WARNING SURFACES SHALL BE CONSTRUCTED BY TEXTURING OR APPLYING A TRUNCATED DOME MATERIAL IN CONFORMANCE WITH THE U.S. DEPARTMENT OF JUSTICE A.D.A. STANDARDS FOR ACCESSIBLE DESIGN, A.D.A. ACCESSIBILITY GUIDELINES, SECTION 4.29.2.

3. WHERE ADJACENT SURFACES ARE COLORED OR ARE CONSTRUCTED WITH MATERIALS OTHER THAN STANDARD CLASS 1 PORTLAND CEMENT CONCRETE IN ACCORDANCE WITH SECTION 522 OF THE SPECIFICATIONS, THE PLAN MUST PROVIDE FOR DETECTABLE WARNING SURFACE COLORS OR MATERIALS THAT PROVIDE THE NECESSARY CONTRAST, EITHER DARK ON LIGHT OR LIGHT ON DARK. (SAFETY YELLOW OR BRICK RED)

4. SIDEWALK SHALL BE CONSTRUCTED PER CURRENT FDOT DESIGN SPECIFICATIONS. DETECTABLE WARNING STRIPS, A.K.A TRUCATED DOMES, FOR DISTRICT SEVEN CONSTRUCTION AND MAINTENANCE SHOULD BE EITHER INSET CERAMIC TILES OR THERMOPLASTIC DETECTABLE WARNING STRIPS. THESE WARNING SURFACES SHALL ONLY BE PROVIDED BY THE FOLLOWING VENDORS/MANUFACTURERS:
A) INLINE TRUNCATED DOME EZ TILE SUPPLIED BY PROFESSIONAL PAVEMENT PRODUCTS.
B) TOPMARK SUPPLIED BY FLINT TRADING.
C) VANGUARD TRUNCATED DOME SUPPLIED BY VANGUARD.

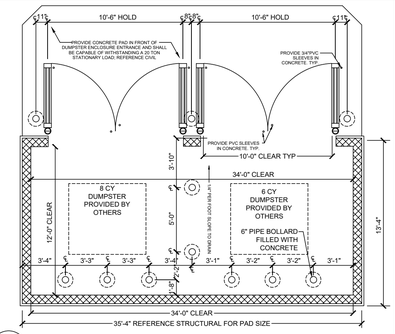
10 TRUNCATED DOME NTS



NOTE:
1. MAXIMUM BOLLARD SPACING IS 5' ON CENTER.
2. CONCRETE TO BE 4,000 PSI MIN. UNCONFINED COMPRESSIVE STRENGTH.
3. REINFORCING STEEL CONFORMS TO ASTM A615 GRADE 60.
4. BOLLARD PIPE IS ASTM A53, TYPE E, GRADE B OR A500 GRADE B/C.
5. PROVIDE HIGH-DENSITY POLYETHYLENE (HDPE) BOLLARD COVER. COVER TO BE IDEALSHIELD (OR APPROVED EQUAL) 1/8" THICK, BROWN (PQ-44OC), 6" PIPE FIT, DOME TOP, 48" TALL.
6. DO NOT FILL BOLLARD PIPE WITH CONCRETE. TEMPORARY SEAL BOTTOM AS NECESSARY TO PREVENT CONCRETE INTRUSION WHILE POURING.
7. USE SONOTUBE IN SANDY OR OTHER SOILS THAT MIGHT CAVE IN.
8. DIMENSIONS IN PARENTHESIS ARE NOMINAL.
9. COLD JOINT ACCEPTABLE THIS LINE FOR NEW INSTALLATIONS IN MONOLITHIC POUR CONCRETE PAVEMENT.
10. SLOPE TOP CONCRETE AWAY FROM BOLLARD 1/4" FROM PIPE EDGE OF DRILLED SHAFT OR CAP.
11. INCREASE DEPTH OF CAISSON AND BOLLARD PIPE TO MEET LOCAL JURISDICTION MIN. FROST DEPTH REQUIREMENT.
12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY NO UTILITY CONFLICTS EXIST WHERE BOLLARDS ARE TO BE INSTALLED, PROIR TO INSTALLATION.

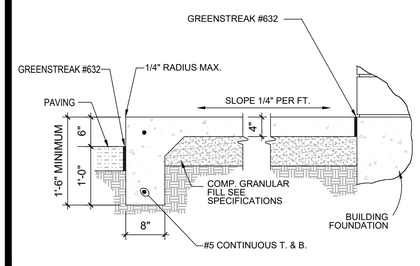
DESIGN SPECIFICATIONS: ASTM F3016-19 CONDITION DESIGNATION S20

11 DEEP MOUNT BOLLARD NTS



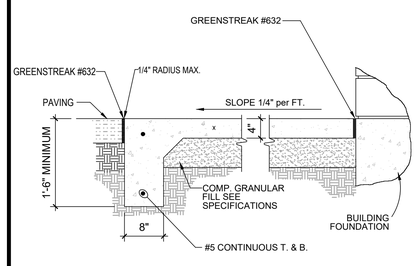
12 DUMPSTER ENCLOSURE NTS

CONCRETE 28 DAY STRENGTH SHALL BE 4,000 PSI (MIN)



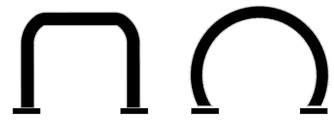
13 MONOLITHIC CURB & SIDEWALK NTS

CONCRETE 28 DAY STRENGTH SHALL BE 3,000 PSI (MIN)



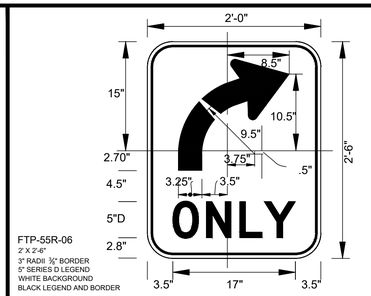
14 FLUSH MONOLITHIC CURB & SIDEWALK NTS

CONCRETE 28 DAY STRENGTH SHALL BE 3,000 PSI (MIN)



INVERTED U
ALSO CALLED:
STAPLE, LOOP

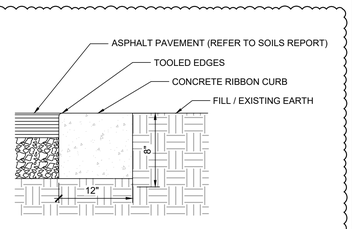
15 BIKE RACK NTS



FTP-55R-06
2' X 2'-6"
3" RADII 3/8" BORDER
5" SERIES D LEGEND
WHITE BACKGROUND
BLACK LEGEND AND BORDER

MOUNT UNDER R1-1 STOP SIGN AS SHOWN IN PLANS. REFERENCE FDOT INDEX 700-102 & 700-010 FOR ADDITIONAL INFORMATION.

16 RIGHT TURN ONLY SIGN NTS



17 12" RIBBON CURB NTS

CONCRETE 28 DAY STRENGTH SHALL BE 3,000 PSI (MIN)

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

This item has been digitally signed and sealed by Jeremy R. Anderson, PE, on the date indicated here.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

R.K.M. DEVELOPMENT CORP.

COMMON OAK ENGINEERING

COMMON OAK ENGINEERING
4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP & SE 58TH AVE
BELLEVIEW, FL
MARION COUNTY

NO:	DATE:	REVISION / ISSUE:	BY:
2	12/05/2024	FDOT ACCESS COMMENTS	JR
5	02/19/2024	FDOT ACCESS COMMENTS	JR
12	04/22/2024	MARION COUNTY COMMENTS	JR

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

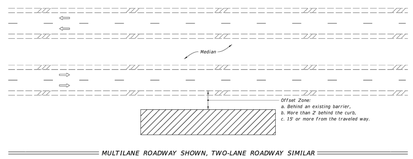
PROJECT # 222.108

DATE 05/13/2024

SCALE N.T.S.

SHEET D1.0

SITE PLAN DETAILS



MULTILANE ROADWAY SHOWN, TWO-LANE ROADWAY SIMILAR

NOTES:

1. This Index applies to Two-Lane, Two-Way and Multilane Roadways, including Medians of divided roadways, with work beyond the shoulder.
2. Use Index 102-602 when the work operation (excluding establishing and terminating the work area) requires that two or more work vehicles cross the Offset Zone in any one hour period.
3. Use Index 102-660 when Work Area encroaches a Sidewalk.

SYMBOLS:

Work Area

Lane Identification and Direction of Traffic

LAST REVISION 11/01/20 | DESCRIPTION: | FDOT FY 2023-24 STANDARD PLANS | TWO-LANE AND MULTILANE ROADWAY, WORK BEYOND THE SHOULDER | INDEX 102-601 | SHEET 1 of 1

NOTES:

1. This Index applies to Two-Lane, Two-Way and Multilane Roadways, including Medians of divided roadways, with work on the shoulder.
2. L = Taper Length
   X = Work Zone Sign Spacing
   B = Buffer Length
   See Index 102-600 for "L", "X", "B", and channelizing device spacing values.
3. Where work activities are between 2' and 15' from the edge of traveled way, the Engineer may omit signs and channelizing devices for work operations 60 minutes or less.
4. When four or more work vehicles enter the through traffic lanes in a one hour period (excluding establishing and terminating the work area), use a flagger or lane closure to accommodate work vehicle ingress and egress.
5. For work less than 2' from the traveled way where the work zone speed is greater than 45 MPH, use a lane closure.
6. The "Speeding Fines Doubled When Workers Present" signs (W07-13-06) and "End Road Work" Signs (G20-2) along with the associated work zone sign spacing distances may be omitted when the work operation is in place for 24 hours or less.
7. Temporary pavement markings may be omitted when the work operation is in place for 3 days or less.
8. Omit "Shoulder Closed" signs (W21-5a) along with associated work zone sign spacing distances for work on the median.
9. When there is no paved shoulder, the "Worker" sign (W21-1) may be used instead of the "Shoulder Closed" sign (W21-5a).

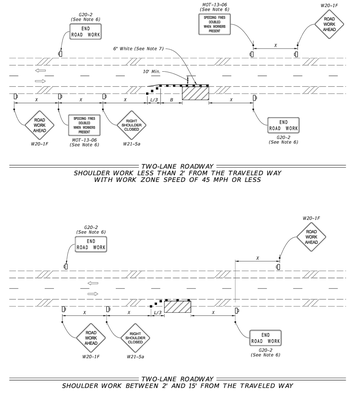
SYMBOLS:

Work Area

Channelizing Device (See Index 102-600)

Work Zone Sign

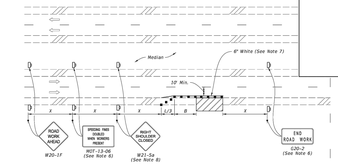
Lane Identification and Direction of Traffic



TWO-LANE ROADWAY
SHOULDER WORK LESS THAN 2' FROM THE TRAVELED WAY
WITH WORK ZONE SPEED OF 45 MPH OR LESS

TWO-LANE ROADWAY
SHOULDER WORK BETWEEN 2' AND 15' FROM THE TRAVELED WAY

LAST REVISION 11/01/21 | DESCRIPTION: | FDOT FY 2023-24 STANDARD PLANS | TWO-LANE AND MULTILANE, WORK ON SHOULDER | INDEX 102-602 | SHEET 1 of 2



MULTILANE ROADWAY
SHOULDER WORK LESS THAN 2' FROM THE TRAVELED WAY
WITH WORK ZONE SPEED OF 45 MPH OR LESS

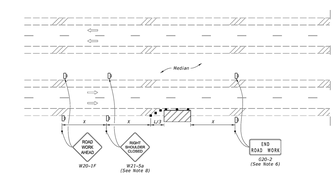
SYMBOLS:

Work Area

Channelizing Device (See Index 102-600)

Work Zone Sign

Lane Identification and Direction of Traffic



MULTILANE ROADWAY
SHOULDER WORK BETWEEN 2' AND 15' FROM THE TRAVELED WAY

LAST REVISION 11/01/21 | DESCRIPTION: | FDOT FY 2023-24 STANDARD PLANS | TWO-LANE AND MULTILANE, WORK ON SHOULDER | INDEX 102-602 | SHEET 2 of 2

NOTES:

1. Cover or deactivate pedestrian traffic signal display(s) controlling closed sidewalks.
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 (R9-9X) 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).

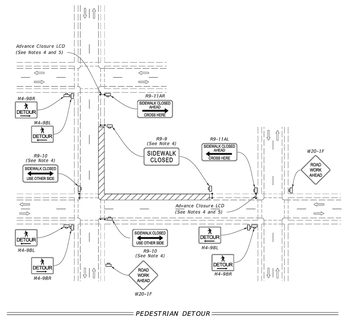
SYMBOLS:

Work Area

Work Zone Sign

Pedestrian Longitudinal Channelizing Device (LCD)

Lane Identification and Direction of Traffic



PEDESTRIAN DETOUR

LAST REVISION 11/01/20 | DESCRIPTION: | FDOT FY 2023-24 STANDARD PLANS | SIDEWALK CLOSURE | INDEX 102-660 | SHEET 1 of 2

NOTES:

1. L = Taper Length
   B = Buffer Length
   X = Work Zone Sign Distance
   See Index 102-600 for "L", "B", "X", channelizing device spacing values.
2. Provide a 3' wide temporary pedestrian way with a maximum cross-slope of 0.02, except where space restrictions warrant a minimum width of 4'. Provide a 5' x 5' passing space for temporary pedestrian ways less than 5' in width at intervals not to exceed 200'.
3. When temporary pedestrian ways require curb ramps, meet the requirements of Index 522-002. Detectable warnings are not required for curb ramps diverting pedestrian traffic into a closed lane.
4. The "Speeding Fines Doubled When Workers Present" signs (W07-13-06) and "End Road Work" signs (G20-2), along with associated work zone sign distances, may be omitted when the work operation will be in place for 24 hours or less.
5. Pedestrian Diversion Option 2 may only be used when called for in the Plans or as approved by an Engineer.

SYMBOLS:

Work Area

Temporary Pedestrian Way

Channelizing Device (See Index 102-600)

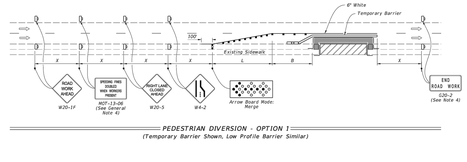
Pedestrian Longitudinal Channelizing Device (LCD)

Work Zone Sign

Arrow Board

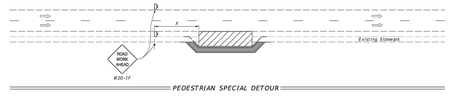
Crash Cushion

Lane Identification and Direction of Traffic



PEDESTRIAN DIVERSION - OPTION 1
(Temporary Barrier Shown, Low Profile Barrier Similar)

PEDESTRIAN DIVERSION - OPTION 2
(Work Zone Speed 35 mph or Less)

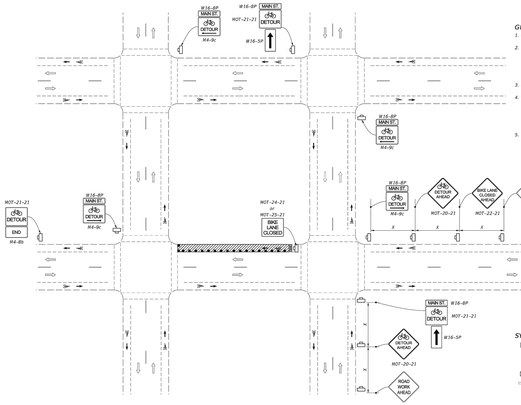


PEDESTRIAN SPECIAL DETOUR

LAST REVISION 11/01/21 | DESCRIPTION: | FDOT FY 2023-24 STANDARD PLANS | SIDEWALK CLOSURE | INDEX 102-660 | SHEET 2 of 2

GENERAL NOTES:

1. Use this Index only when called for in the Plans.
2. L = Taper Length
   B = Buffer Length
   X = Work Zone Sign Distance
   See Index 102-600 for "L", "B", "X", channelizing device spacing values.
3. Provide a minimum 5'-0" wide bicycle path.
4. The "Speeding Fines Doubled When Workers Present" signs (W07-13-06) and "End Road Work" signs (G20-2), along with associated work zone sign distances, may be omitted when the work operation will be in place for 24 hours or less.
5. Include additional signage at intersections as required by the Engineer or shown in the Plans.



BICYCLE DETOUR

SYMBOLS:

Work Area

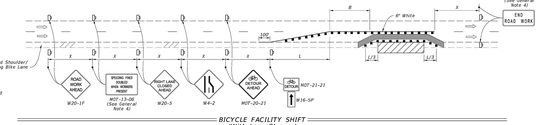
Channelizing Device (See Index 102-600)

Work Zone Sign

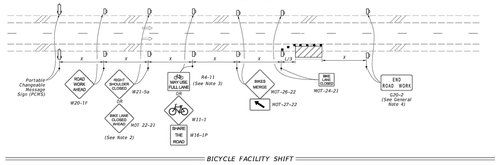
Type III Barricade

Lane Identification and Direction of Traffic

LAST REVISION 11/01/21 | DESCRIPTION: | FDOT FY 2023-24 STANDARD PLANS | BICYCLE FACILITY CLOSURES | INDEX 102-661 | SHEET 1 of 2



BICYCLE FACILITY SHIFT
(With Lane Closure)

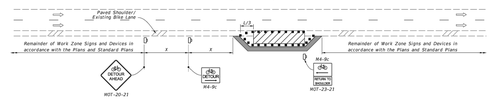


BICYCLE FACILITY SHIFT
(Work Zone Speed of 35 mph or Less)

TYPICAL PCMS DISPLAY:

Message 1: BIKE FACILITY CLOSED

Message 2: BICYCLES ON ROAD



BICYCLE SPECIAL DETOUR

LAST REVISION 11/01/21 | DESCRIPTION: | FDOT FY 2023-24 STANDARD PLANS | BICYCLE FACILITY CLOSURES | INDEX 102-661 | SHEET 2 of 2

R.K.M. DEVELOPMENT CORP.

COMMON OAK ENGINEERING

COMMON OAK ENGINEERING
4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP & SE 98TH AVE
BELLEVIEW, FL
MARION COUNTY

NO.	DATE	REVISION / ISSUE	BY
2	12/05/2024	FDOT ACCESS COMMENTS	JR

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

PROJECT # 222.108

DATE 05/13/2024

SCALE N.T.S.

SHEET D1.1

FDOT DETAILS

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

This item has been digitally signed and sealed by Jeremy R. Anderson, PE, on the date indicated here.

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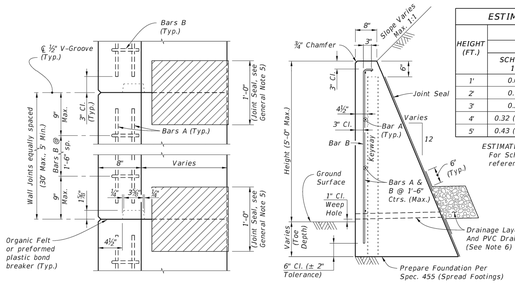


KEYWAY & WALL JOINT DETAIL
(TOP VIEW)

TYPICAL SECTION
C-I-P CONCRETE GRAVITY WALL

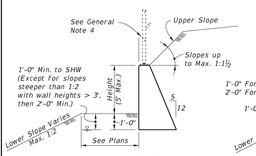
ESTIMATED QUANTITIES FOR C-I-P WALL

HEIGHT (FT.)	PER LINEAR FOOT OF WALL				WEEP HOLES & DRAIN REQD.
	CLASS NS CONCRETE (CY.)			REINF. STEEL (LB.)	
	SCHEME 1	SCHEME 2	SCHEME 3**		
1'	0.08	0.11 (0.20*)	0.03	3 (4*)	No
2'	0.14	0.20 (0.32*)	0.09	4 (5*)	No
3'	0.22	0.32 (0.47*)	0.29	5 (6*)	Yes
4'	0.32 (0.43*)	0.47 (0.65*)	0.43	6 (7*)	Yes
5'	0.43 (0.55*)	0.65 (0.85*)	0.60	7 (8*)	Yes

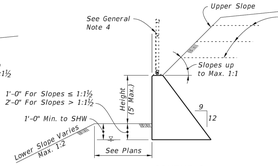
ESTIMATED QUANTITIES NOTES:
For Scheme 3 Junction Slab and Traffic Railing see the referenced Index for estimated quantities.
* Quantity for 2'-0" Toe Depth.
** Quantity for Scheme 3 assumes 1'-3" thick coping above Gravity Wall.

GENERAL NOTES

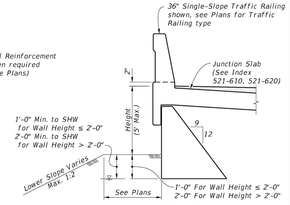
1. C-I-P Gravity Walls constructed as extensions of reinforced concrete retaining walls, except walls of proprietary designs, shall have the same face texture and finish as the reinforced concrete retaining wall.
2. Concrete for Gravity Wall shall be Class NS per Section 347. Concrete for Scheme 3 Junction Slab and Traffic Railing shall be Class II per Section 346, unless otherwise specified in the plans.
3. Reinforcing steel shall meet the requirements of Specification Section 931 (Grade 40 or 60). Smooth or Deformed Welded Wire Reinforcement (WWR) may be substituted on an equal area basis. Do not increase bar/wire spacing for Grade 60 reinforcing steel or WWR.
4. When required, for adjunct guiderail, see Index 515-070 or 515-080 as appropriate. For adjunct Type B fence see Index 550-002.
5. Joint Seal: Organic Felt bond breaker in accordance with Specification Section 400 or Type D-5 geotextile fabric in accordance with Specification Section 985. Map all contact surfaces of concrete and Organic Felt or geotextile fabric with cut-back asphalt. Stop Organic Felt or geotextile fabric 6" below top of wall.
6. Provide a continuous 1'x1' clean gravel or crushed rock drain for wall heights 3 ft. and higher. Wrap drainage layer as shown, with Type D-3 geotextile fabric in accordance with Specification Section 985. Provide 8"x8" galvanized mesh with ½" openings, at the inside end of the PVC Drain Pipe. Provide 2" Ø PVC Drain Pipe (Sch. 40) at 10 ft. max. spacing (when Drainage Layer is required). Locate outermost edge of Drain Pipe a minimum of 2'-0" from wall joints.
7. Cost of reinforcing steel, face texture, finish, joint seal, drain pipes, drainage layer, galvanized mesh and geotextile fabric to be included in the Contract Unit Price for Concrete Class NS, Gravity Wall. Cost of concrete for Junction Slab in Scheme 3 to be included in Contract Unit Price for Concrete Traffic Railing Barrier With Junction Slab. Adjunct railings or fences to be paid for separately.



SCHEME 1
(No Traffic Loading Effects & Upper Slopes ≤ 1:1½)



SCHEME 2
(With Traffic Loading or Upper Slopes > 1:1½)

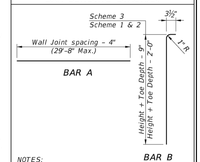


SCHEME 3
(With Traffic Railing)

BILL OF REINFORCING STEEL

MARK	SIZE	LENGTH
A	4	As Reqd.
B	4	As Reqd.

BAR BENDING DIAGRAM

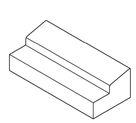


NOTES:
1. All bar dimensions are out to out.
2. Lap splices for Bars A must be a minimum of 1'-10".

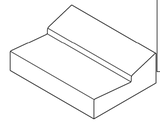
GENERAL NOTES:

1. For curb, gutter and curb & gutter provide ½" – ½" contraction joints at 10' centers (max.). Contraction joints adjacent to concrete pavement on tangents and flat curves are to match the pavement joints, with intermediate joints not to exceed 10' centers.
2. Locate expansion joints for curb, gutter and curb & gutter in accordance with Specification 520.

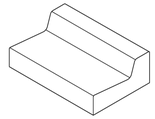
TABLE OF CONTENTS:



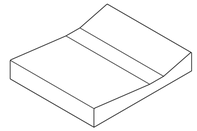
TYPE A



TYPE E

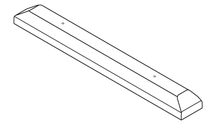


TYPE F

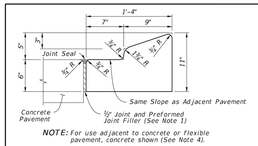


SHOULDER GUTTER

TYPE A, TYPE E, TYPE F, AND SHOULDER GUTTER
(Other Types Similar)

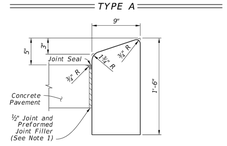


CONCRETE BUMPER GUARD



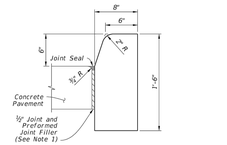
NOTE: For use adjacent to concrete or flexible pavement, concrete shown (See Note 4).

TYPE A



NOTE: For use adjacent to concrete or flexible pavement, concrete shown.

TYPE B

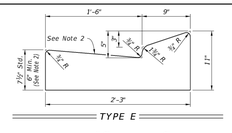


NOTE: For use adjacent to concrete or flexible pavement, concrete shown.

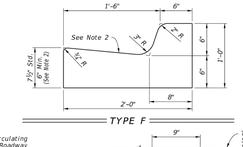
TYPE D

NOTES:

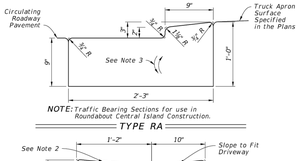
1. For Type A, Type B, and Type D Curb: Expansion joint, preformed joint filler and joint seal are required between curbs and concrete pavement only, see Sheet 3.
2. For Type E, Type F, Drop Curb, and Valley Gutter: When used on high side of roadways, match the cross slope of the gutter to the cross 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

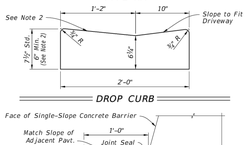


TYPE F

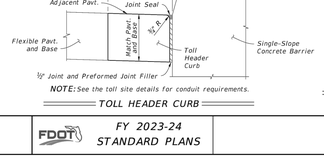


NOTE: Traffic Bearing Sections for use in Roundabout Central Island Construction.

TYPE RA

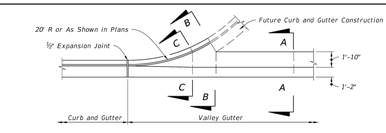


DROP CURB

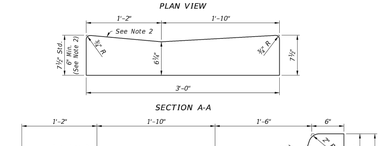


NOTE: See the toll site details for conduit requirements.

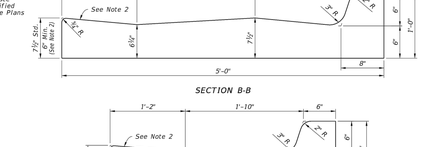
TOLL HEADER CURB



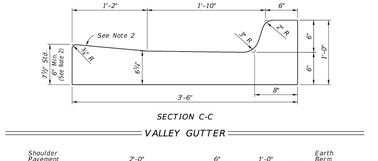
PLAN VIEW



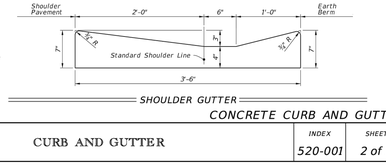
SECTION A-A



SECTION B-B

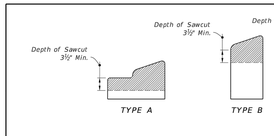


SECTION C-C

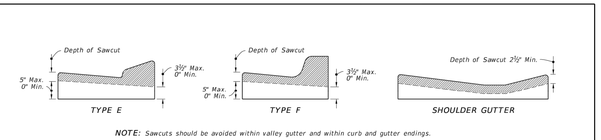


SHOULDER GUTTER

CONCRETE CURB AND GUTTER

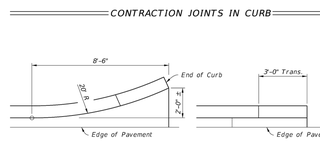


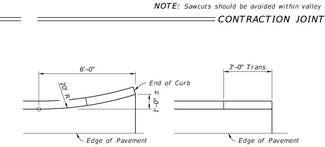
CONTRACTION JOINTS IN CURB

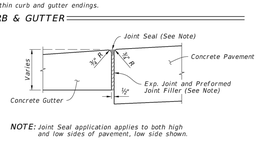


NOTE: Sawcuts should be avoided within valley gutter and within curb and gutter endings.

CONTRACTION JOINTS IN CURB & GUTTER

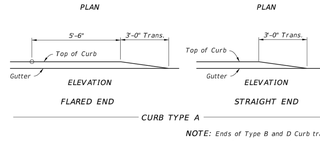




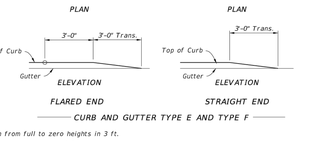


NOTE: Joint Seal application applies to both high and low sides of pavement, low side shown.

EXPANSION JOINT BETWEEN GUTTER AND CONCRETE PAVEMENT



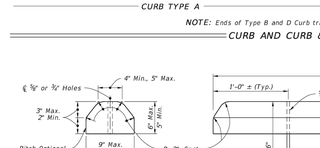
CURB TYPE A



CURB AND GUTTER TYPE E AND TYPE F

NOTE: Ends of Type B and D Curb transition from full to zero heights in 3 ft.

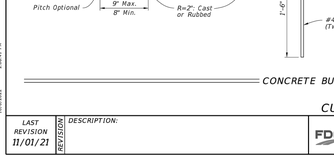
CURB AND CURB & GUTTER ENDINGS

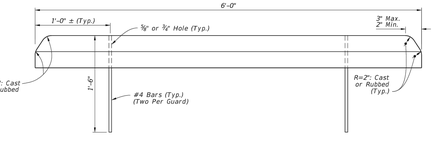


NOTES:

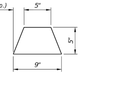
1. Surface on Low Side of Pavement to be ½" Above Lip of Gutter. Surface on High Side to be Flush With Lip of Curb or Curb & Gutter.
2. Applies to both high and low sides of pavement, low side shown. Applies to shoulder gutter only where adjoining traffic lanes.

CURB AND GUTTER AND TYPE A CURB ADJACENT TO FLEXIBLE PAVEMENT





CONCRETE BUMPER GUARD



ASPHALTIC CONCRETE CURB

CURB AND GUTTER JOINTS AND ENDINGS, CONCRETE BUMPER GUARD, AND ASPHALTIC CONCRETE CURB

R.K.M. DEVELOPMENT CORP.

COMMON OAK ENGINEERING
4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP & SE 58TH AVE
BELLEVIEW, FL
MARION COUNTY

NO.	DATE	REVISION / ISSUE	BY
12	04/22/2024	MARION COUNTY COMMENTS	JR

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

PROJECT # 222.108

DATE 05/13/2024

SCALE N.T.S.

SHEET D1.2

FDOT DETAILS

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

This item has been digitally signed and sealed by Jeremy R. Anderson, PE, on the date indicated here.

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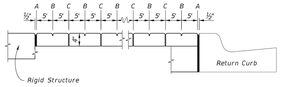
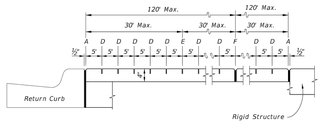
GENERAL NOTES:

1. Construct sidewalks in accordance with Specification 522. Use 6" concrete for Sidewalks and Curb Ramps Located within Curb Returns (See Plan View). Install all other concrete with thickness as shown, unless otherwise detailed in the Plans.
2. Include detectable warnings on sidewalk curb ramps in accordance with Index 522-002.
3. For Driveways see Index 522-003.
4. Bond breaker material can be any impermeable coated or sheet membrane or preformed material having a thickness of not less than 6 mils and not more than ½".
5. Construct sidewalks with Edge Beam through the limits of any surface mounted Pedestrian/Bicycle Railing or Pipe Guiderail shown in the plans. (See RAILING DETAIL)



OPEN JOINTS



SAWED JOINTS

LONGITUDINAL SECTION

LEGEND:

A- ½" Expansion Joints (Preformed Joint Filler) between the sidewalk and; driveways, sidewalk-intersections, and all other fixed objects (e.g. drainage inlets and utility poles).

B- ¾" Dummy Joints, Tooled

C- ¾" Formed Open Joints

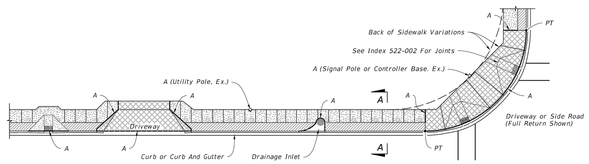
D- 3⅛" Saw Cut Joints, 1½" Deep (within 96 hours) Max. 5' Centers

E- 3⅛" Saw Cut Joints, 1½" Deep (within 12 hours) Max. 30' Centers Joint(s) Required When Length Exceeds 30'

F- ½" Expansion Joint When Run Of Sidewalk Exceeds 120'. Intermediate locations when called for in the plans or at locations as directed by the Engineer.

G- Cold Joint With Bond Breaker, Tooled

SIDEWALK JOINTS

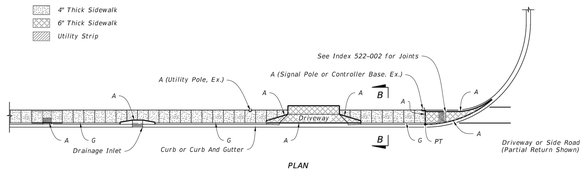


PLAN

SIDEWALK WITH UTILITY STRIP

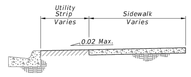
LEGEND:

4" Thick Sidewalk
6" Thick Sidewalk
Utility Strip



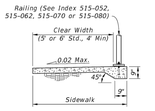
PLAN

SIDEWALK WITHOUT UTILITY STRIP



SECTION A-A

SECTION B-B



Varies Based on Railing Used

RAILING DETAIL

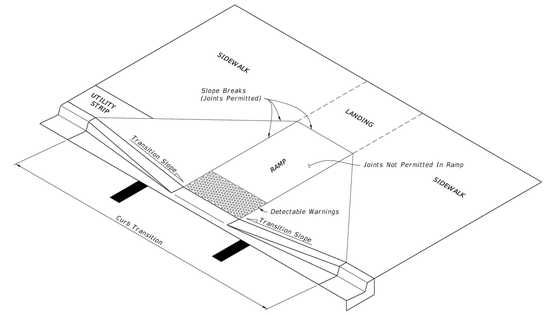
GENERAL NOTES AND CONCRETE SIDEWALK ON CURBED ROADWAYS

LAST REVISION 11/01/18	REVISION	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	CONCRETE SIDEWALK	INDEX 522-001	SHEET 1 of 2

10/6/2022 2:14:14 PM

GENERAL NOTES:

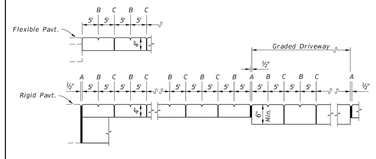
1. Cross Slopes and Grades:
   - A. Sidewalk, ramp, and landing slopes (i.e. 0.02, 0.05, and 1:12) shown in this Index are maximums. With approval of the Engineer, provide the minimum feasible slope where the requirements cannot be met.
   - B. Landings must have cross-slopes less than or equal to 0.02 in any direction.
   - C. Maintain a single longitudinal slope along each side of the curb ramp. Ramp slopes are not required to exceed 15 feet in length.
   - D. Joints permitted at the location of Slope Breaks. Otherwise locate joints in accordance with Index 522-001. No joints are permitted within the ramp portion of the Curb Ramp.
2. Curb, Curb and Gutter and/or Sidewalk:
   - A. Refer to Index 522-001 for concrete thickness and sidewalk details.
   - B. Remove any existing curb, curb and gutter, or sidewalk to the nearest joint beyond the curb transition or to the extent that no remaining section is less than 5 feet long.
   - C. Width of Curb Ramp is 4'-0" minimum. Match sidewalk or Shared Use Path width as shown in the Plans.
3. Curb Ramp Alpha-Identification:
   - A. Sidewalk curb ramp alpha-identifications (e.g. CR-A) are provided for reference purposes in the Plans.
   - B. Alpha-identifications CR-I and CR-J are intentionally omitted.
4. Detectable Warnings:
   - A. Install detectable warnings in accordance with Specification 527.
   - B. Place detectable warnings across the full width of the ramp or landing, to a minimum depth of 2 feet measured perpendicular to the curb line and no greater than 5 feet from the back of the curb or edge of pavement.
   - C. If detectable warnings are shown in the Plans on slopes greater than 5%, align the truncated domes with the centerline of the ramp; otherwise, the truncated domes are not required to be aligned.



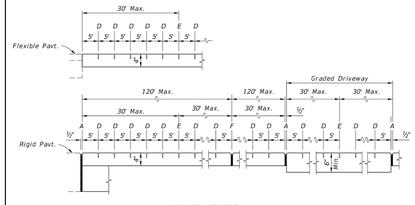
CURB RAMP NOMENCLATURE

LAST REVISION 11/01/21	REVISION	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX 522-002	SHEET 1 of 7

10/6/2022 2:15:08 PM



OPEN JOINTS



SAWED JOINTS

LONGITUDINAL SECTION

LEGEND:

A- ½" Expansion Joints (Preformed Joint Filler) between the sidewalk and driveways, sidewalk-intersections, and all other fixed objects (e.g. drainage inlets and utility poles).

B- ¾" Dummy Joints, Tooled

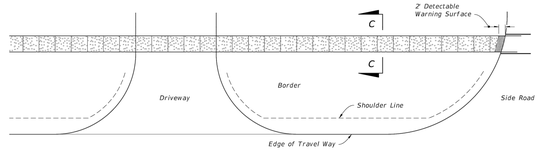
C- ¾" Formed Open Joints

D- 3⅛" Saw Cut Joints, 1½" Deep (within 96 hours) Max. 5' Centers

E- 3⅛" Saw Cut Joints, 1½" Deep (within 12 hours) Max. 30' Centers Joint(s) Required When Length Exceeds 30'

F- ½" Expansion Joint When Run Of Sidewalk Exceeds 120'. Intermediate locations when called for in the plans or at locations as directed by the Engineer.

SIDEWALK JOINTS

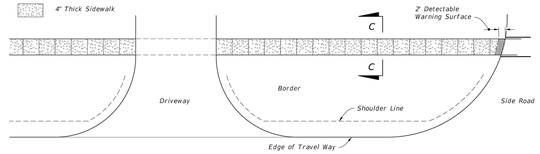


PLAN

CONTINUOUS SIDEWALK

LEGEND:

4" Thick Sidewalk



PLAN

DISCONTINUOUS SIDEWALK

SECTION C-C

CONCRETE SIDEWALK ON FLUSH SHOULDER ROADWAYS

LAST REVISION 11/01/18	REVISION	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	CONCRETE SIDEWALK	INDEX 522-001	SHEET 2 of 2

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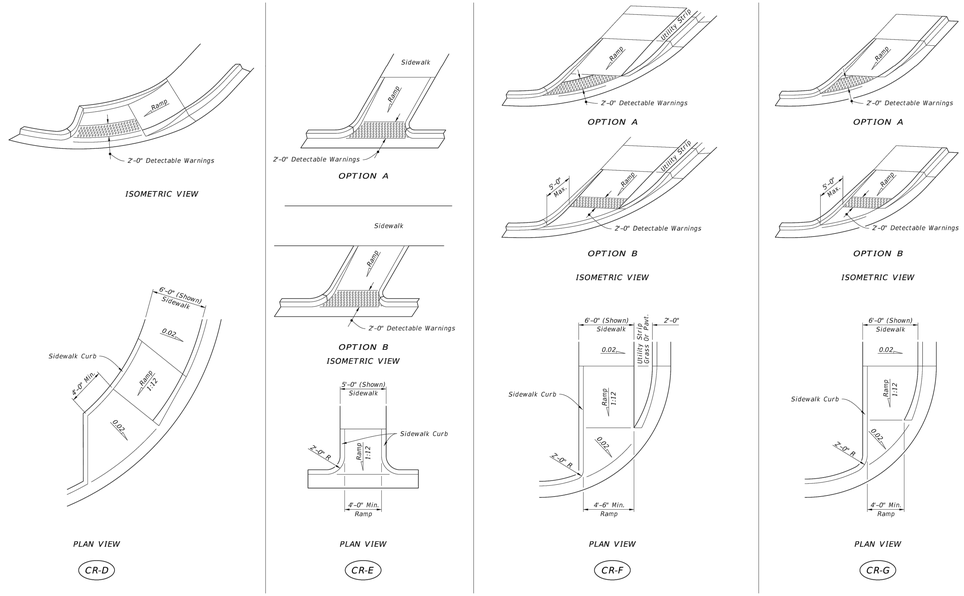

SIDEWALK CURB RAMPS CR-D, CR-E, CR-F & CR-G

LAST REVISION 11/01/21	REVISION	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX 522-002	SHEET 4 of 7

10/6/2022 2:15:10 PM

R.K.M. DEVELOPMENT CORP.

COMMON OAK ENGINEERING
4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP & SE 58TH AVE
BELLEVIEW, FL
MARION COUNTY

BY:	DATE:	REVISION / ISSUE:	NO:

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

PROJECT # 222.108

DATE 05/13/2024

SCALE N.T.S.

SHEET D1.3

FDOT DETAILS

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

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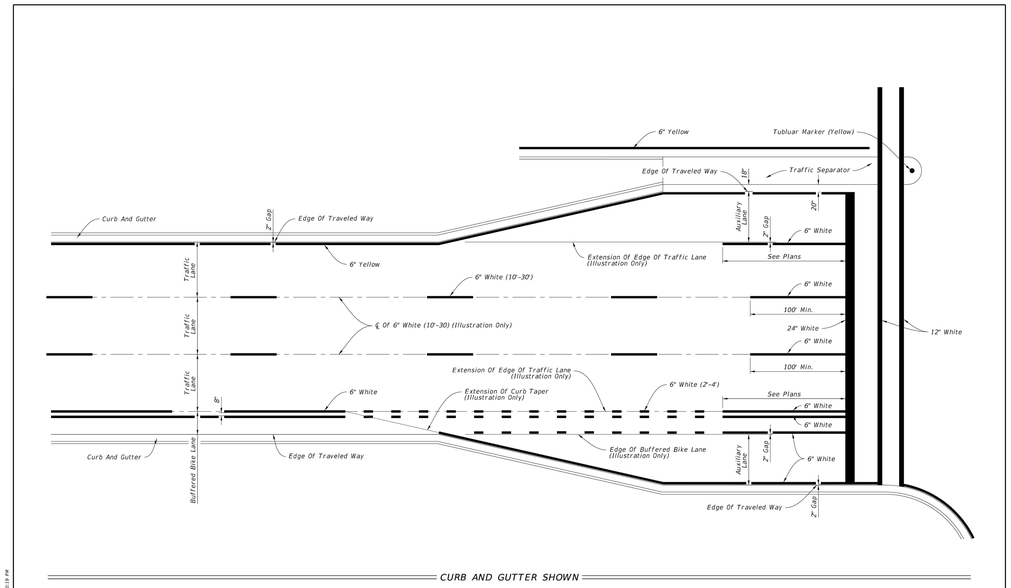

PLACEMENT OF LONGITUDINAL PAVEMENT MARKINGS

LAST REVISION 11/01/21	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	PAVEMENT MARKINGS	INDEX 711-001	SHEET 5 of 13

3/2/2022 2:50:19 PM

R.K.M. DEVELOPMENT CORP.

COMMON OAK ENGINEERING
4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP & SE 58TH AVE
BELLEVIEW, FL
MARION COUNTY

NO:	DATE:	REVISION / ISSUE:	BY:
5	02/19/2024	FDOT ACCESS COMMENTS	JR

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

PROJECT # 222.108

DATE 05/13/2024

SHEET D1.5

SCALE N.T.S.

FDOT DETAILS

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

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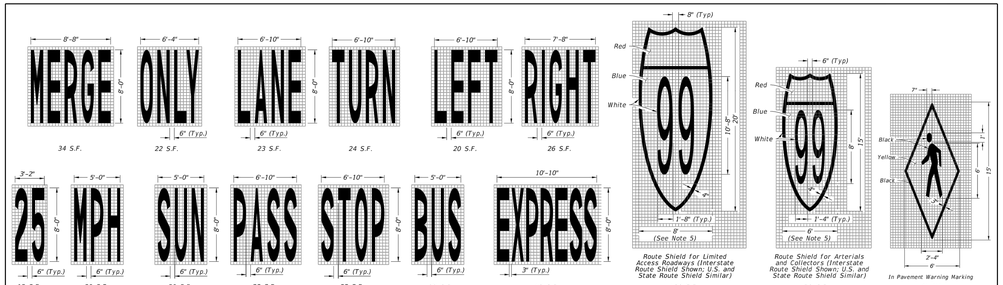
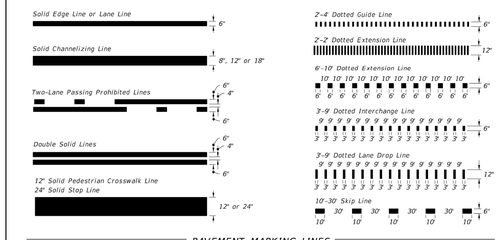


PAVEMENT MESSAGE AND ARROW DETAILS

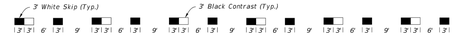
PAVEMENT MESSAGES NOTES:

1. Place all pavement messages 25' back from the stop line.
2. Dimensions are within 1" ±.
3. All grids are 4" x 4".
4. All pavement messages must be white except Route Shields and In Pavement Warning Markings.
5. Increase width of route shield for routes with three digits.



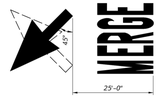
PAVEMENT MARKING LINES

10'-30' SKIP LINE WITH CONTRAST MARKINGS

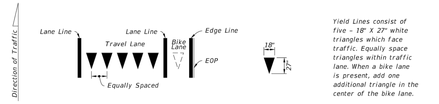


DOTTED LINE WITH ALTERNATING CONTRAST MARKINGS
(3'-9' Dotted Line Shown, Other Dotted Lines Similar)

LONGITUDINAL SOLID LANE LINE WITH CONTRAST MARKINGS
(Not For Use On Edge Lines)

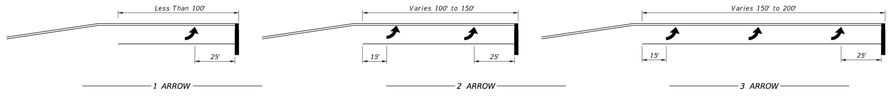


MARKINGS FOR MERGE



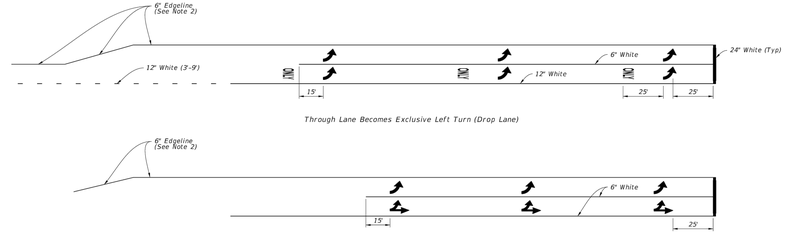
Yield Lines consist of five – 18" x 12" white triangles which face traffic. Equally space triangles within traffic lane. When a bike lane is present, add one additional triangle in the center of the bike lane.

YIELD LINES



Arrow should be evenly spaced between first and last arrow. Turn lanes longer than 200' add one arrow for each 100' additional length.

ARROW SPACING

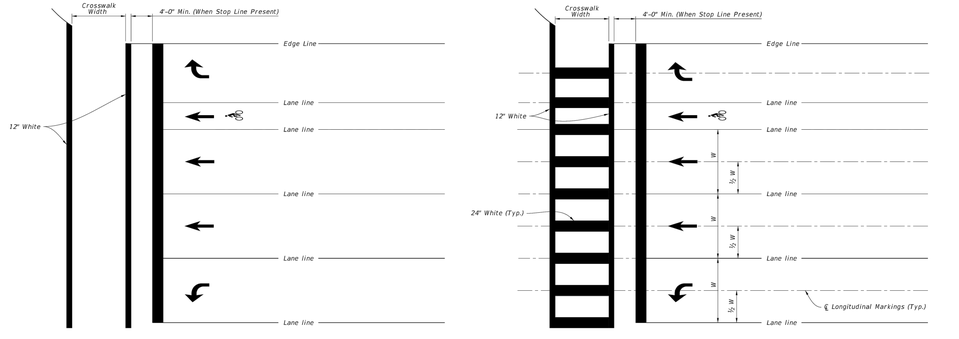


TURNS LANE MARKINGS

NOTES:

1. This Index also applies to right turn lanes.
2. Make Edgeline pavement markings yellow for left-turn lanes and white for right-turn lanes.

ARROW SPACING AND TURN LANE MARKINGS



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.

R.K.M. DEVELOPMENT CORP.

COMMON OAK ENGINEERING
4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP & SE 58TH AVE
BELLEVIEW, FL
MARION COUNTY

NO:	DATE:	BY:	REVISION / ISSUE:

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

PROJECT # 222.108

DATE 05/13/2024 | SHEET D1.4

SCALE N.T.S.

FDOT DETAILS

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

This item has been digitally signed and sealed by Jeremy R. Anderson, PE, on the date indicated here.

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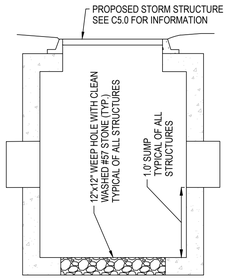
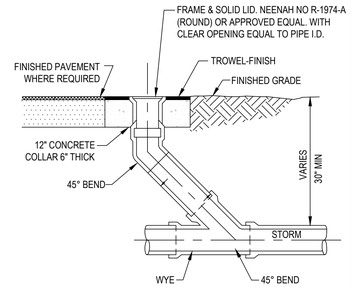
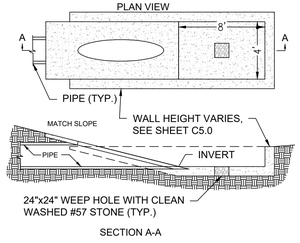


1 STORM STRUCTURE WEEP HOLE NTS

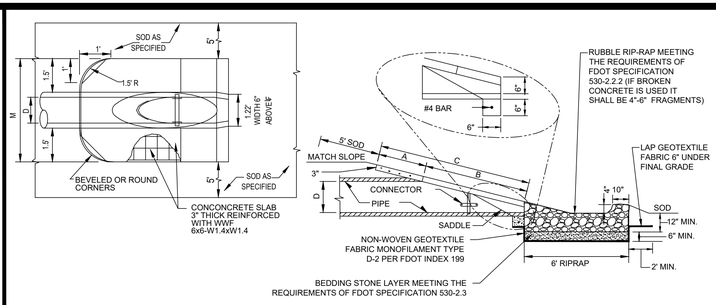


2 CLEANOUT NTS



SECTION A-A

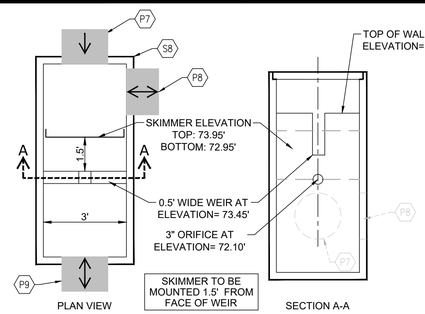
3 MITERED END SECTION SUMP NTS



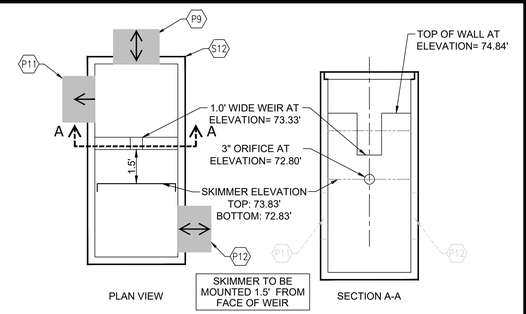
4 MITERED END SECTION NTS

	DIMENSIONS									
	D	A	B	C	E	F	G	H	M SINGLE PIPE
1:4 SLOPE	8"	1.5'	2.25'	3.75'	2.2'	4'	0.60'	1.8'	2.0'
	12"	2.0'	3.10'	5.10'	3.0'	6'	1.00'	3.0'	3.0'
	15"	2.27'	4.09'	6.36'	4.03'	8'	1.22'	4.0'	4.63'
	18"	2.36'	5.12'	7.48'	5.03'	9'	1.41'	4.0'	4.92'
	24"	2.53'	7.18'	9.71'	7.03'	11'	1.73'	4.0'	5.50'
	30"	2.70	9.25'	11.95'	9.03'	13'	2.00'	4.0'	6.08'
1:2 SLOPE	24"	2.06	3.85'	5.91'	3.56'	7'	1.73'	3.4'	5.50'

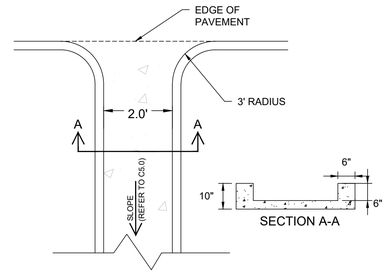
REFERENCE FDOT INDEX 430-022 FOR ADDITIONAL INFORMATION.



5 CONTROL STRUCTURE NO. 1 NTS



6 CONTROL STRUCTURE NO. 2 NTS



7 CONCRETE FLUME NTS

CONCRETE 28 DAY STRENGTH SHALL BE 3,000 PSI (MIN)

ADS INSETRTA TEE OFFERS AIR-TIGHT RELIABILITY AND GROUNDBREAKING VERSATILITY THAT IS DESIGNED FOR VIRTUALLY ANY TYPE OF LATERAL CONNECTION INCLUDING: NYOPLAST STRUCTURES, PRECAST, MANHOLES AND VAULTS, STORMTECH CHAMBERS, ROOF DRAIN LEADERS, AGRICULTURAL DRAINAGE, TURF & RECREATION, RETENTION/DETENTION SYSTEMS, WATER QUALITY SYSTEMS

1. CORE A HOLE PERPENDICULAR TO THE HOST PIPE USING THE RECOMMENDED HOLE SAW. REMOVE THE COUPON FROM THE SAW. DEBURR THE CORED HOLE.

2. USE THE COUPON TO ESTIMATE THE SEPARATION BETWEEN THE TWO SLEEVES AND FIT THE TWO SLEEVES TOGETHER. BE SURE THE GOLD LINES ON THE SLEEVES ARE LINED UP.

3. INSERT THE RUBBER SLEEVES INTO THE CORED HOLE, WITH THE GOLD LINES PERPENDICULAR TO THE PIPE. ONCE IN PLACE, PULL UP ON THE INNER SLEEVE AND PUSH DOWN ON THE OUTER SLEEVE UNTIL FITTED TO THE HOSE PIPE.

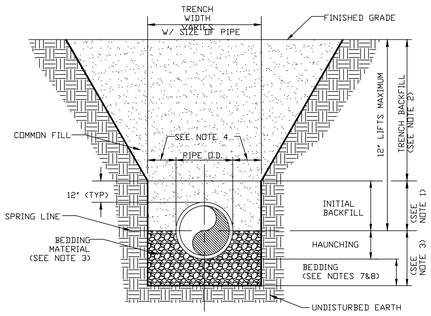
4. APPLY SOAP SOLUTION TO INSIDE OF THE INNER SLEEVE AND ON THE PVC HUB. INSERT THE PVC HUB INTO THE SLEEVE BY HAND UNTIL SNUG FIT, ALIGNING THE RED LINE ON THE HUB WITH THE GOLD LINES ON THE RUBBER SLEEVES.

5. DRIVE THE PLASTIC HUB INTO THE RUBBER SLEEVES WITH A 4 LB. MALLET AND BLOCK OF WOOD. STOP WHEN THE RUBBER SLEEVE MEETS THE RED LINE.

6. PLACE AND TIGHTEN THE STAINLESS-STEEL BAND.

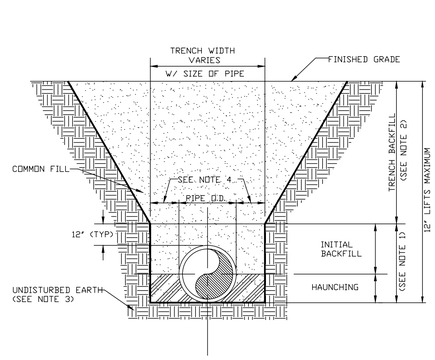
8 ADS INSERTA-TEE DETAIL NTS

NOTE:
1. DETAILS B, C, F PROVIDED FOR CONCRETE COLLAR ONLY (DISREGARD PAVEMENT SPECIFICATIONS)



NOTES:
1. INITIAL BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. BEDDING MATERIAL SHALL CONFORM TO FDOT NO. 57 AGGREGATE.
4. 15' MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER UP TO 12" AND 6" MINIMUM FOR PIPE DIAMETER 16" AND LARGER.
8. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. UTILITIES SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.
9. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN MARION COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.
10. ONE COMPACTION TEST SHALL BE REQUIRED FOR EACH LIFT NOT TO EXCEED 200'.

Marion County FLORIDA UTILITIES	MCBCC EFFECTIVE 04/13/2023	BEDDING AND TRENCHING 1	7.3.2
	REVISION # 2		UT 102



NOTES:
1. INITIAL BACKFILL AND HAUNCHING: SELECT COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH BEDDING AND TRENCHING 1 DETAIL MAY BE REQUIRED AS DIRECTED BY MCU.
4. 15' MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
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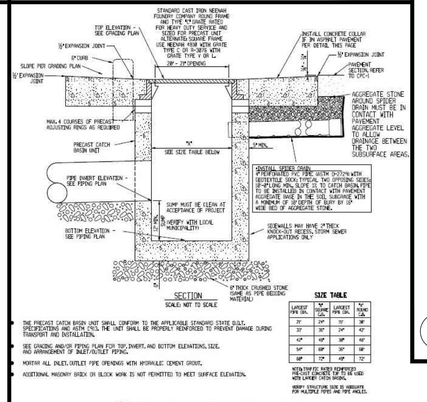
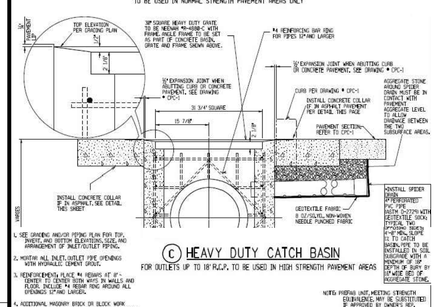
8. ONE COMPACTION TEST SHALL BE REQUIRED FOR EACH LIFT NOT TO EXCEED 200'.

Marion County FLORIDA UTILITIES	MCBCC EFFECTIVE 04/13/2023	BEDDING AND TRENCHING 2	7.3.2
	REVISION # 2		UT 103



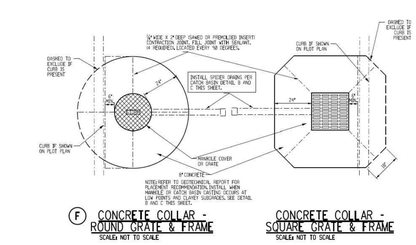
B STANDARD DUTY CATCH BASIN

TO BE USED IN NORMAL STRENGTH PAVEMENT AREAS ONLY



C HEAVY DUTY CATCH BASIN

FOR OUTLETS UP TO 18" R.C.P., TO BE USED IN HIGH STRENGTH PAVEMENT AREAS



F CONCRETE COLLAR - ROUND GRATE & FRAME
SCALES NOT TO SCALE

CONCRETE COLLAR - SQUARE GRATE & FRAME
SCALES NOT TO SCALE

9 CONCRETE COLLAR NTS

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

This item has been digitally signed and sealed by Jeremy R. Anderson, PE, on the date indicated here.

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R.K.M. DEVELOPMENT CORP.

COMMON OAK ENGINEERING

COMMON OAK ENGINEERING
4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP & SE 58TH AVE
BELLEVIEW, FL
MARION COUNTY

NO:	DATE:	REVISION / ISSUE:	BY:
3	12/07/2024	CITY OF BELLEVIEW UTILITY COMMENTS	JR
8	03/13/2024	CLIENT COMMENTS	JR
9	02/16/2024	FDOT DRAINAGE COMMENTS	JR
10	04/09/2024	FDOT DRAINAGE COMMENTS	JR

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

PROJECT # 222.108

DATE 05/13/2024

SCALE N.T.S.

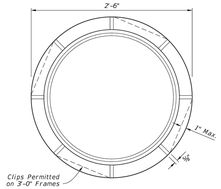
SHEET D2.0

GRADING DETAILS

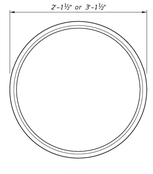
TABLE 1
WEIGHT OF CASTINGS (lb)

Frame Type	2'-0" OPENING		3'-0" OPENING			
	Frame	Cover (Std.)	Frame	2-Piece Cover		
				Inside	Outside	Total
I	155	190	220	190	220	410
II	145	190	255	190	220	410
III	90	190	180	190	220	410

NOTE:
Frame Type I in Table 1, includes Adjustable frames.



PLAN



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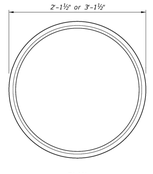

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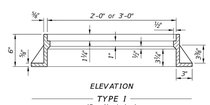
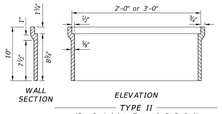
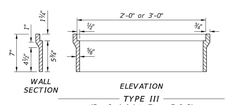


ELEVATION
TYPE I
(For Manholes)



WALL SECTION

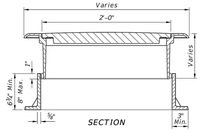
ELEVATION
TYPE II
(For Curb Inlets Types 1, 2, 3, & 4)



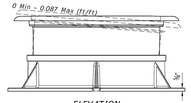
WALL SECTION

ELEVATION
TYPE III
(For Curb Inlets Types 7 & 8)

MANHOLE FRAMES

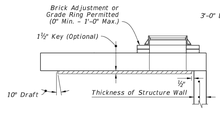


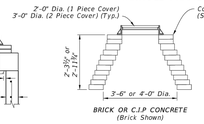
SECTION



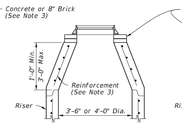
ELEVATION

TYPE I ADJUSTABLE FRAME

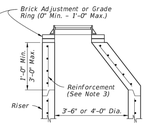




BRICK OR C.I.P CONCRETE (Brick Shown)



PRECAST CONCENTRIC CONE



PRECAST ECCENTRIC CONE

TYPE 7 — TYPE 8

MANHOLE TOPS

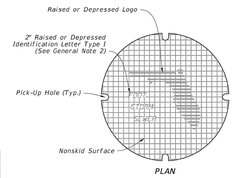
NOTES:
1. Use Class II concrete for Manhole top Type 7 slabs.
2. Manhole top Type 7 slabs may be of cast-in-place or precast construction. The optional key is for precast tops and in lieu of dowels. Omit frame and slab openings when top is used over a junction box.
3. Manhole top Type 8 may be of cast-in-place, precast concrete construction, or brick construction. For concrete construction, use the same concrete and steel reinforcement as the supporting wall unit. An eccentric cone may be used.
4. Use construction joint options, as shown on Sheet 6 to secure manhole tops to structures.
5. Frames may be adjusted to a maximum 12" height with brick or precast ASTM C478 grade rings.
6. Manhole top Type 8 may be substituted for a Type 7, if the minimum dimensions are not reduced.
7. Manhole top Type 7 may be substituted for Type 8, if the minimum thickness (h) above pipe opening cannot be maintained with Type 8.

MANHOLE FRAMES AND MANHOLE TOPS

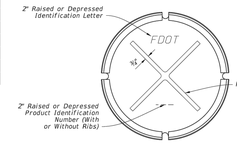
LAST REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	SUPPLEMENTARY DETAILS FOR DRAINAGE STRUCTURES	INDEX	SHEET
11/01/20					425-001	2 of 8

GENERAL NOTES:
1. Use a 1-piece cover, unless the 2-piece cover is called for in the Plans, except at inlets and manholes with sump bottoms. Use the 2-piece cover when the sump depth exceeds 2', unless otherwise noted.
2. Include "Adjustable" on the cover for Type 1 manhole adjustable frames.
3. For square or rectangular precast drainage structures, use either deformed or smooth WWR meeting the requirements of Specification 931. WWR must be continuous around the box and lapped in accordance with Option 1 or 3 as shown in the Wall Reinforcing Splice Details.
4. Lap splice horizontal steel in the walls of rectangular structures in accordance with Option 1, 2 or 3 as shown in the Wall Reinforcing Splice Details.
5. Welding of splices and laps is permitted. Use AASHTO M259 requirements and restrictions on welds.
6. Rebar straight end embedment of peripheral reinforcement may be used in lieu of ACI standard hooks for top and bottom slabs, except when hooks are specifically called for in the Plans.
7. Precast opening for pipe must be the pipe OD plus 6" (± 2" tolerance). Use mortar to seal the pipe into the opening of such a mix that shrinkage will not cause leakage into or out of the structure. Dry-pack mortar may be used to seal openings less than 2½" wide.

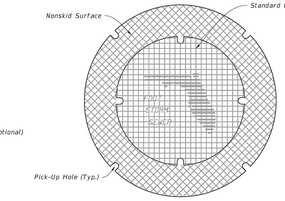
TABLE OF CONTENTS:



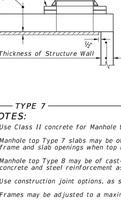
PLAN



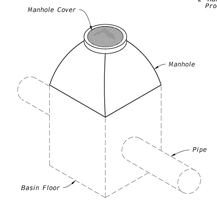
BOTTOM



PLAN

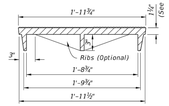


TYPE 7

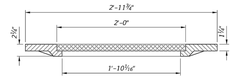


TYPE 8

MANHOLE TOPS



ELEVATION
1-PIECE COVER



ELEVATION
2-PIECE COVER

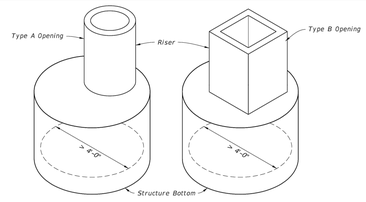
MANHOLE COVERS

LAST REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	SUPPLEMENTARY DETAILS FOR DRAINAGE STRUCTURES	INDEX	SHEET
11/01/20					425-001	1 of 8

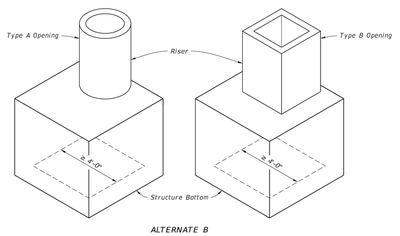
GENERAL NOTES:
1. Work this Index with Specification 425 and Index 425-001.
2. Type P standard structure bottoms are 4'-0"diameter and smaller (Alt. A) and 3'-6" square (Alt. B) . Larger standard structure bottoms are designated Type J. Risers are permitted for all structures.
3. Walls of circular structures (Alt. A) constructed in place may be of brick or reinforced concrete. Construct precast and rectangular structures (Alt. B) with reinforced concrete only.
4. Wall thickness and reinforcement are for either reinforced cast-in-place or precast concrete units except that precast circular units may be furnished with walls in accordance with ASTM C478 (See Table 1).
5. Top and bottom slab thickness and reinforcement are for precast and cast-in-place construction. Use Class II concrete, except when Class IV concrete is shown in the Plans.
6. Alt. A or Alt. B structure bottoms may be used in conjunction with curb inlet tops Types 1, 2, 3, 4, 5, 6, 9, and 10, and any manhole or junction box. Alt. B structure bottoms may be used in conjunction with curb inlet Types 7 & 8, or any ditch bottom inlet.
7. Rectangular structures may be rotated as directed by the Engineer in order to facilitate connections between the structure walls and pipes.
8. Use straight embedment reinforcement in top and bottom slabs ,except when ACI hooks are specifically required.
9. Construct corner fillets as shown for rectangular structures used with circular risers and inlet throats, and when used on skew with rectangular risers, inlets, and inlet throats. Construct fillets in the top slab of the Alt. A structure bottoms when used with the Type B risers. Reinforce each fillet with two #5 bars.
10. Units larger than specified standards may be substituted at the contractor's option when these units will not cause or increase the severity of utility conflicts. Furnish such larger units at no additional cost to the Department. Larger Alt. A units cannot replace Alt. B units without approval of the Engineer. This Note applies to this Index only.

REINFORCEMENT NOTES:
1. Locate wall reinforcement in rectangular structures as shown in the WALL REINFORCEMENT SPLICE DETAILS in Index 425-001.
2. Provide a minimum 2"clear cover for all reinforcement unless otherwise noted and except for 36"diameter ASTM C478 units.
3. Additional bars used to restrain hole formers for precast structures with grouted pipe connections may be left flush with the hole surface.
4. Cut or bend reinforcement at pipe openings to maintain cover.
5. Remove exposed ends of reinforcing at precast pipe openings and grouted joints to 1" below the concrete surface and seal with a Type F Epoxy meeting the requirements of Specification 926.
6. Equivalent area smooth or deformed welded wire reinforcement may be substituted in accordance with Index 425-001.

TABLE OF CONTENTS:

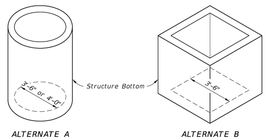


ALTERNATE A



ALTERNATE B

TYPE J



ALTERNATE A — ALTERNATE B

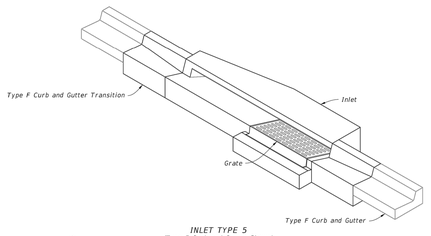
TYPE P

LAST REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	STRUCTURE BOTTOMS TYPE J AND P	INDEX	SHEET
11/01/20					425-010	1 of 4

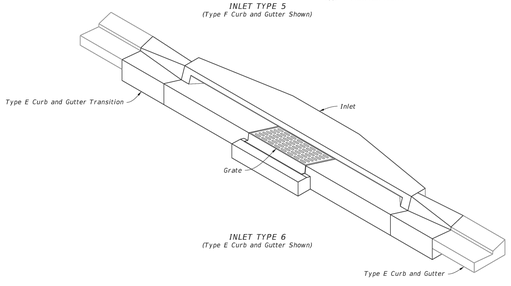
3/8/2022 3:43:14 PM

GENERAL NOTES:
1. Work this Index with Index 425-001 and Index 425-010.
2. Conform the finished grade and slope of the inlet tops with the finished cross slope and grade of the proposed sidewalk and/or border.
3. For inlets constructed on a curve, refer to the plans to determine the radius. Bend steel when necessary.
4. Use Grade 60 reinforcing bars with 1½" minimum cover unless otherwise shown, see Sheet 6 for equivalent area Welded Wire Reinforcement details.
5. Inlet tops may be either cast-in-place or precast concrete. Conform precast units to the dimensions shown or in accordance with approved shop drawings.
6. Corner fillets are required at inlet opening for precast units or C-I-P units used in conjunction with circular inlet bottoms or skewed rectangular inlet boxes. Finish top of fillets flush with drain throat bottom and match slope.
7. For Type E curb and gutter, transition the shape of the curb over the gutter transition length to match the face of the inlet (Type F1).
8. Meet the requirements of ASTM A36/A36M with steel used for frames and grates.
9. Use either cast iron grates or steel grates.

TABLE OF CONTENTS:



INLET TYPE 5
(Type F Curb and Gutter Shown)



INLET TYPE 6
(Type E Curb and Gutter Shown)

CURB INLETS TOPS

LAST REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	CURB INLET TOP TYPES 5 AND 6	INDEX	SHEET
11/01/20					425-021	1 of 7

3/8/2022 3:43:05 PM

R.K.M. DEVELOPMENT CORP.

COMMON OAK ENGINEERING
4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP & SE 58TH AVE
BELLEVIEW, FL
MARION COUNTY

BY:	REVISION / ISSUE:	DATE:	NO.:

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

PROJECT # 222.108

DATE 05/13/2024

SHEET D2.1

SCALE N.T.S.

GRADING DETAILS

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

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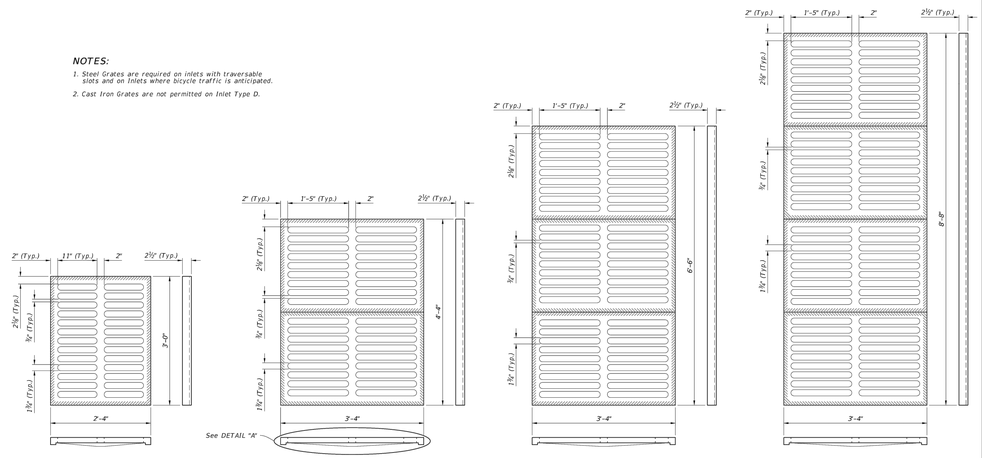
NOTES:

1. Steel Grates are required on inlets with traversable slots and on inlets where bicycle traffic is anticipated.
2. Cast Iron Grates are not permitted on Inlet Type D.



CAST IRON GRATE DETAILS

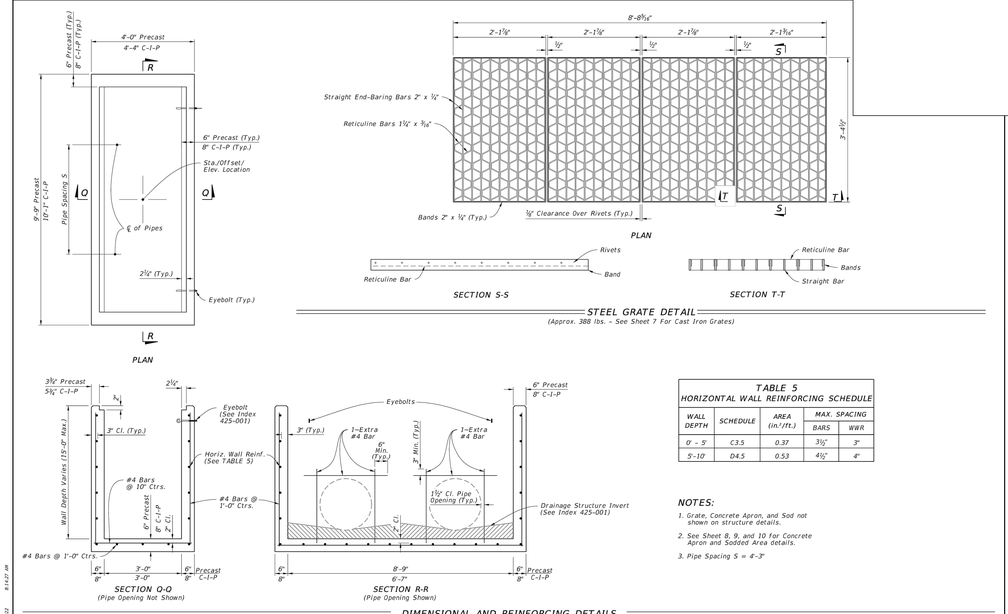


TABLE 5
HORIZONTAL WALL REINFORCING SCHEDULE

WALL DEPTH	SCHEDULE	AREA (in.²/ft.)	MAX. SPACING	
			BARS	WWR
0' - 5'	C3.5	0.37	3½"	3"
5'-10'	D4.5	0.53	4½"	4"

NOTES:

1. Grate, Concrete Apron, and Sod not shown on structure details.
2. See Sheet 8, 9, and 10 for Concrete Apron and Sodded Area details.
3. Pipe Spacing S = 4'-3"

TYPE H (4 GRATE) - DIMENSIONAL, REINFORCEMENT, AND STEEL GRATE DETAILS

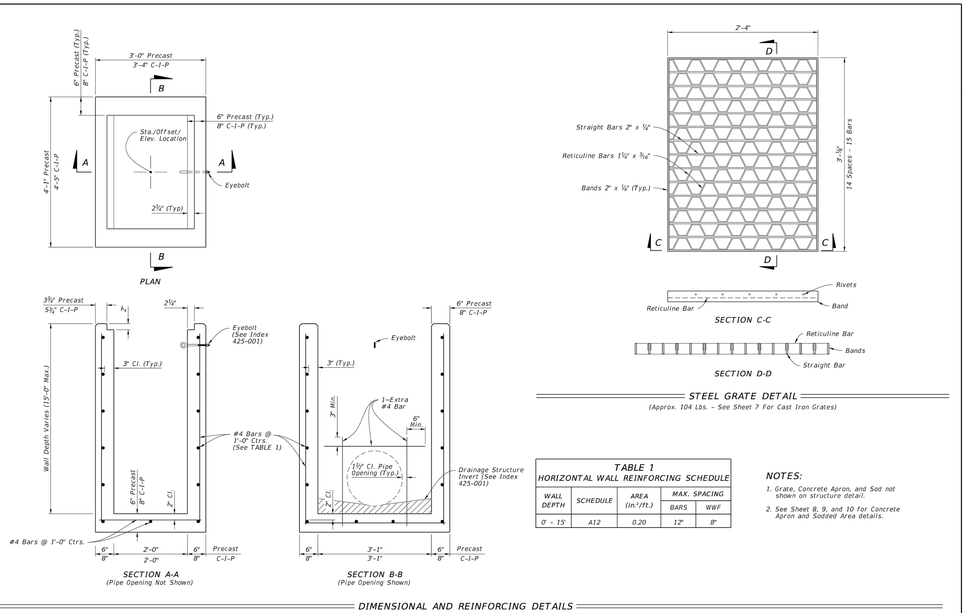


TABLE 1
HORIZONTAL WALL REINFORCING SCHEDULE

WALL DEPTH	SCHEDULE	AREA (in.²/ft.)	MAX. SPACING	
			BARS	WWR
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.

TYPE C - DIMENSIONAL, REINFORCING, AND STEEL GRATE DETAILS

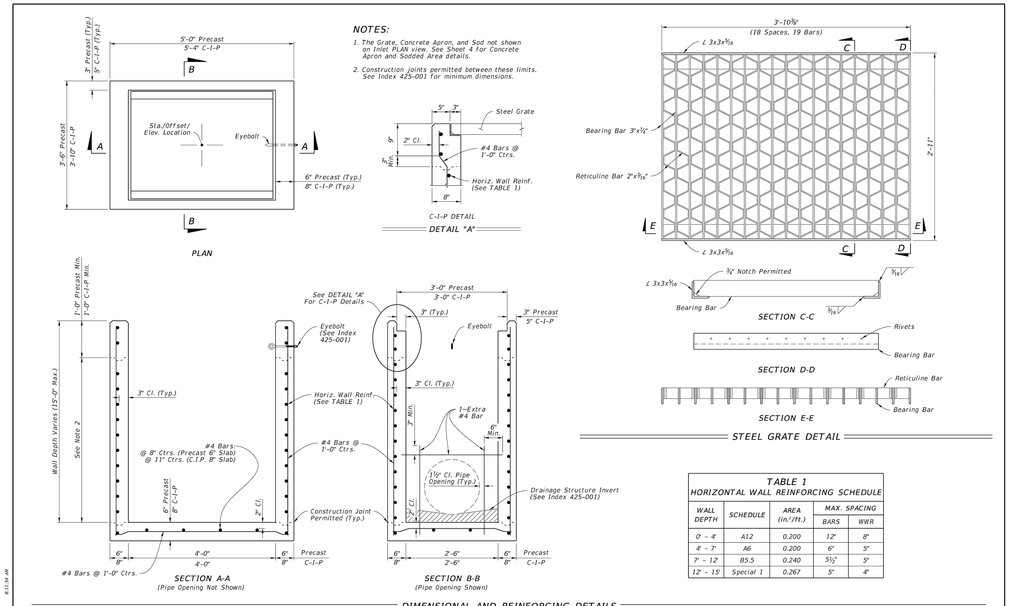


TABLE 1
HORIZONTAL WALL REINFORCING SCHEDULE

WALL DEPTH	SCHEDULE	AREA (in.²/ft.)	MAX. SPACING	
			BARS	WWR
0' - 4'	A12	0.200	12"	8"
4' - 7'	A6	0.200	6"	5"
7' - 12'	B5.5	0.240	5½"	5"
12' - 15'	Special 1	0.267	5"	4"

TYPE F - DIMENSIONAL, REINFORCING, AND GRATE DETAILS

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NO:	DATE:	REVISION / ISSUE:	BY:

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

PROJECT # 222.108

DATE 05/13/2024

SCALE N.T.S.

SHEET D2.2

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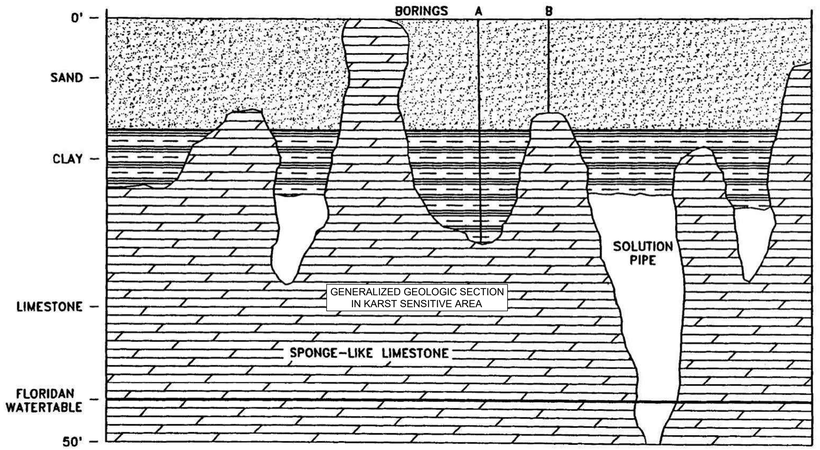
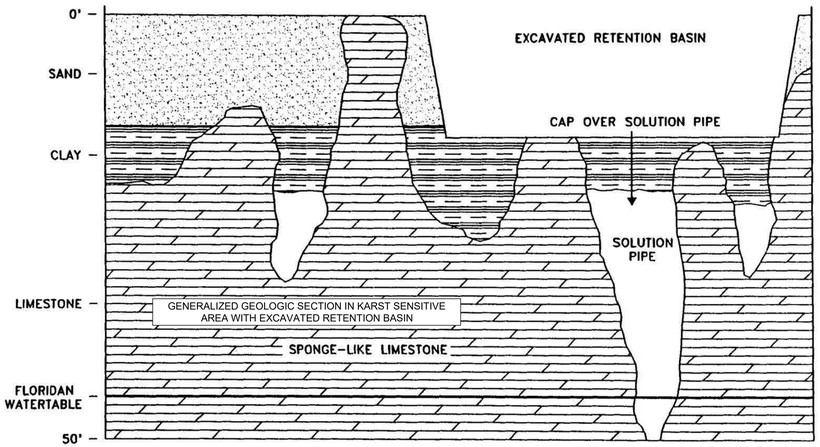
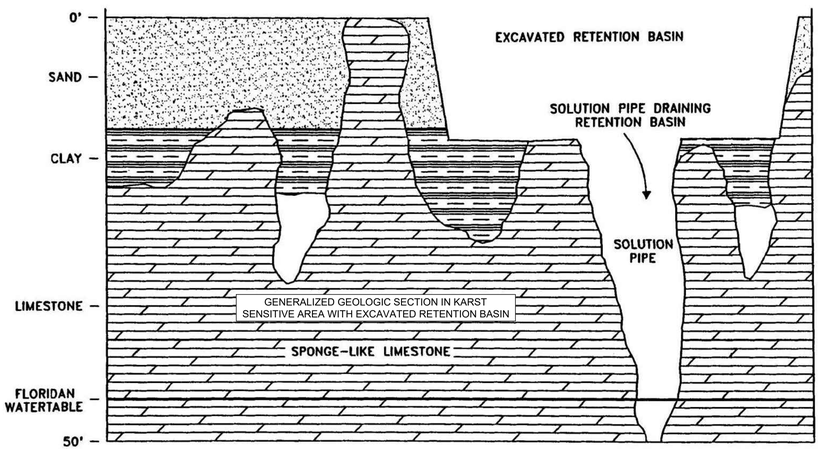


GENERALIZED GEOLOGIC SECTION IN KARST SENSITIVE AREA



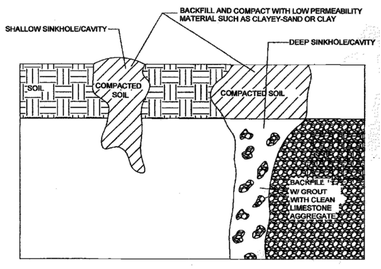
GENERALIZED GEOLOGIC SECTION IN KARST SENSITIVE AREA WITH EXCAVATED RETENTION BASIN



GENERALIZED GEOLOGIC SECTION IN KARST SENSITIVE AREA WITH EXCAVATED RETENTION BASIN

A MINIMUM OF THREE FEET OF UNCONSOLIDATED SOIL MATERIAL BETWEEN THE SURFACE OF THE LIMESTONE BEDROCK AND THE BOTTOM AND SIDES OF THE STORMWATER BASIN. EXCAVATION AND BACKFILL OF SUITABLE MATERIAL MAY BE MADE TO MEET THIS CRITERIA.

RECOMMENDATIONS FOR KARST SENSITIVE AREAS



SECTION VIEW

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

SHALLOW REPAIR (SEE DETAIL):
IF THE COLLAPSE IS SHALLOW (<5' DEEP) AND THE VOIDS IN THE LIMESTONE ARE SMALL, THEN THE SINKHOLE CAN BE REPAIRED BY BACKFILLING WITH A LOWER-PERMIEABILITY MATERIAL, SUCH AS CLAYEY-SAND OR CLAY. THE MATERIAL SHOULD BE COMPACTED AND THE REPAIR SHALL BE SLIGHTLY ABOVE THE ORIGINAL BOTTOM IN ORDER TO CREATE A SMALL MOUND TO ACCOUNT FOR SETTLING.

DEEP REPAIR (SEE DETAIL):
IF THE COLLAPSE IS DEEP, THEN THE REPAIR SHALL BE MORE PERMANENT. THE COLLAPSE SHALL BE EXCAVATED TO THE LIMESTONE BEDROCK THE VOID(S) IN MATERIAL SHALL BE PLACED OVER THE CONCRETE PLUG. THE MATERIAL SHALL BE COMPACTED AND BROUGHT TO EXISTING BASIN BOTTOM.

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

SHALLOW AND DEEP SINKHOLE/CAVITY MAINTENANCE REPAIR DETAIL

N.T.S.

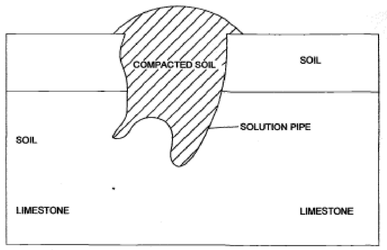
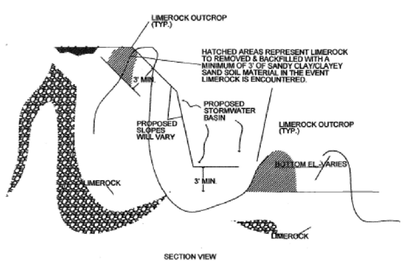


FIGURE 8

RECOMMENDED REPAIR FOR SMALL SOLUTION PIPE SINKHOLES

N. T. S.



SECTION VIEW

LIMEROCK OUTCROP REMOVAL DETAIL

N.T.S.

SOLUTION PIPE REPAIR:

IF A SOLUTION PIPE SINKHOLE DOES FORM IN A STORM WATER BASIN, IT SHOULD BE REPAIRED QUICKLY AND IN A MANNER THAT WILL ENSURE THAT THE FLORIDIAN AQUIFER WILL BE PROTECTED FROM CONTAMINATION AND ALSO BE DONE IN A MANNER THAT PRECLUDES ANY FURTHER SUBSIDENCE OR UNPLUGGING OF THE SOLUTION PIPE.
THERE ARE MANY WAYS IN WHICH A SOLUTION PIPE SINKHOLE MAY BE ADEQUATELY REPAIRED. THE REPAIR WILL VARY DEPENDING ON THE MORPHOLOGY OF THE SINKHOLE. BEFORE REPAIR, ANY TRASH AND ORGANIC DEBRIS SHOULD BE REMOVED FROM THE SINKHOLE. TWO RECOMMENDED REPAIR METHODS ARE LISTED BELOW:

REPAIR METHOD 1 (FIGURE 8)

IF THE COLLAPSE OCCURS IN A SHALLOW BASIN (<5' DEEP) AND THE VOID(S) IN THE LIMESTONE ARE SMALL, THEN THE SINKHOLE CAN BE REPAIRED BY BACKFILLING WITH MATERIAL THAT IS SIMILAR TO THE MATERIAL IN WHICH THE BASIN WAS CONSTRUCTED. A LOWER- PERMEABILITY MATERIAL, SUCH AS CLAYEY-SAND OR CLAY IS RECOMMENDED. THE MATERIAL SHOULD THEN BE COMPACTED AND THE SINKHOLE REPAIR SHOULD BRING THE SURFACE BACK TO AN ELEVATION WHICH IS SLIGHTLY ABOVE THE ORIGINAL BOTTOM, CREATING A SMALL MOUND.
THIS REPAIR METHOD WILL NOT ASSURE THAT FUTURE SUBSIDENCE WILL BE PREVENTED. THE SINKHOLE MAY NEED TO BE REPAIRED AGAIN AT A LATER TIME IF A SINKHOLE HAS BEEN REPAIRED USING METHOD #1, AND CONTINUES TO SUBSIDE, IT MUST BE REPAIRED USING METHOD #2

REPAIR METHOD 2 (FIGURE 9)

IF THE COLLAPSE OCCURS IN A DEEPER BASIN (>5' DEEP), A BASIN WITH LARGE VOID(S), OR IN A BASIN THAT IS RECEIVING STORMWATER WHICH CONTAINS A HIGHER LEVEL OF CONTAMINATION, THEN THE REPAIR SHOULD BE MORE PERMANENT. THE COLLAPSE SHOULD BE EXCAVATED TO LIMESTONE BEDROCK. THE VOID(S) IN THE BEDROCK SHOULD BE PLUGGED WITH CLEAN CONCRETE GROUT (CLEAN LIMESTONE AGGREGATE, 1 /3 TO 1 /2 THE SIZE OF THE VOID DIAMETER MAY BE INCLUDED IN THE GROUT). MATERIAL CONSISTENT WITH THE BASIN BOTTOM ELEVATION BROUGHT BACK TO NORMAL.
THE DISTRICT SHOULD BE NOTIFIED TO ANY SINKHOLE DEVELOPMENT WITHIN 48 HOURS OF DISCOVERY AND THE PROPOSED METHOD BY WHICH THE SINKHOLE WILL BE REPAIRED SHOULD BE SUBMITTED TO THE DISTRICT FOR APPROVAL WITHIN 30 DAYS OF FINDING A SOLUTION PIPE SINKHOLE WITHIN A STORMWATER BASIN. THE DISTRICT WILL THEN NOTIFY THE RESPONSIBLE PARTY AS TO THE ACCEPTANCE, DENIAL OR NEED FOR MODIFICATION OF THE REPAIR METHOD.

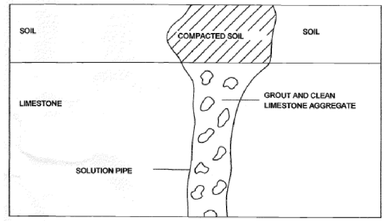


FIGURE 9

RECOMMEND REPAIR FOR LARGER SOLUTION PIPE SINKHOLES

N.T.S.

BASIN LIMEROCK OUTCROP CONSTRUCTION NOTES

1. IN THE EVENT THAT LIMEROCK OUTCROP IS ENCOUNTERED DURING CONSTRUCTION OF THE RETENTION BASINS THE FOLLOWING TREATMENT SHALL BE PERFORMED. THE LIMEROCK OUTCROP SHALL BE EXCAVATED TO AN ELEVATION OF THREE (3) FEET BELOW THE DESIGN BASIN BOTTOM. THE EXCAVATED AREA SHALL BE BACKFILLED TO THE DESIGN BASIN BOTTOM ELEVATION WITH CLAYEY-SAND/SANDY-CLAY (AASHTO SOIL GROUP-A2) SOILS. A MIXTURE OF THE BACKFILL MATERIAL SHALL BE PLACED IN SIX INCH LIFTS AND ROLLED WITH HEAVY LOADED RUBBER TIRED EQUIPMENT. THE APPLICABLE WATER MANAGEMENT DISTRICT AND APPLICABLE COUNTY PUBLIC WORKS DEPARTMENT SHALL BE NOTIFIED WHEN LIMEROCK OUTCROPS ARE ENCOUNTERED AND PRIOR TO COMMENCING REMEDIAL ACTION.

2. IN THE EVENT THAT ANY KARST FEATURES, SUCH AS SOLUTION CAVITIES, CHIMNEYS, OR SINKHOLES APPEAR IN THE RETENTION BASIN, THE FOLLOWING ACTIONS SHALL BE REQUIRED:

A. THE ENGINEER OF RECORD, THE ST. JOHN RIVER WATER MANAGEMENT DISTRICT, AND THE MARION COUNTY PUBLIC WORKS DEPARTMENT SHALL BE NOTIFIED WHEN THE FEATURE IS ENCOUNTERED PRIOR TO REMEDIAL ACTION.

B. A LICENSED GEOTECHNICAL ENGINEERING FIRM SHALL BE RETAINED TO EVALUATE THE SIGNIFICANCE OF THE FEATURE AND TO DETERMINE THE REMEDIAL ACTION NECESSARY.

C. THE GEOTECHICAL ENGINEERING FIRM SHALL BE REQUIRED TO MONITOR THE REMEDIAL WORK AND SEND A SUMMARY REPORT UPON REPAIR COMPLETION TO THE ENGINEER OF RECORD THE ST. JOHN RIVER WATER MANAGEMENT DISTRICT, AND THE MARION COUNTY PUBLIC WORKS DEPARTMENT.

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

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4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
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MARION COUNTY

NO:	DATE:	REVISION / ISSUE:	BY:

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

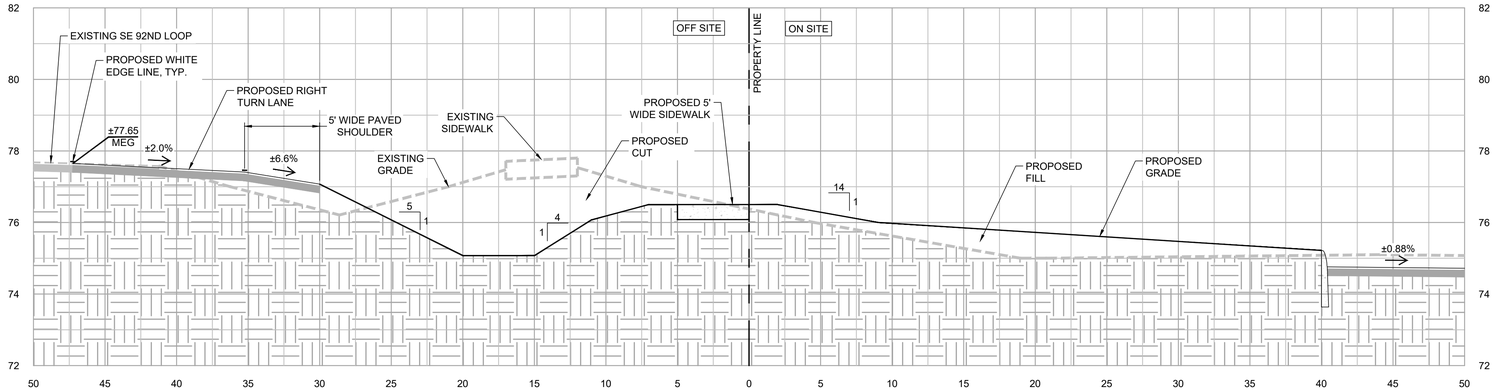
PROJECT # 222.108

DATE 05/13/2024

SHEET D2.3

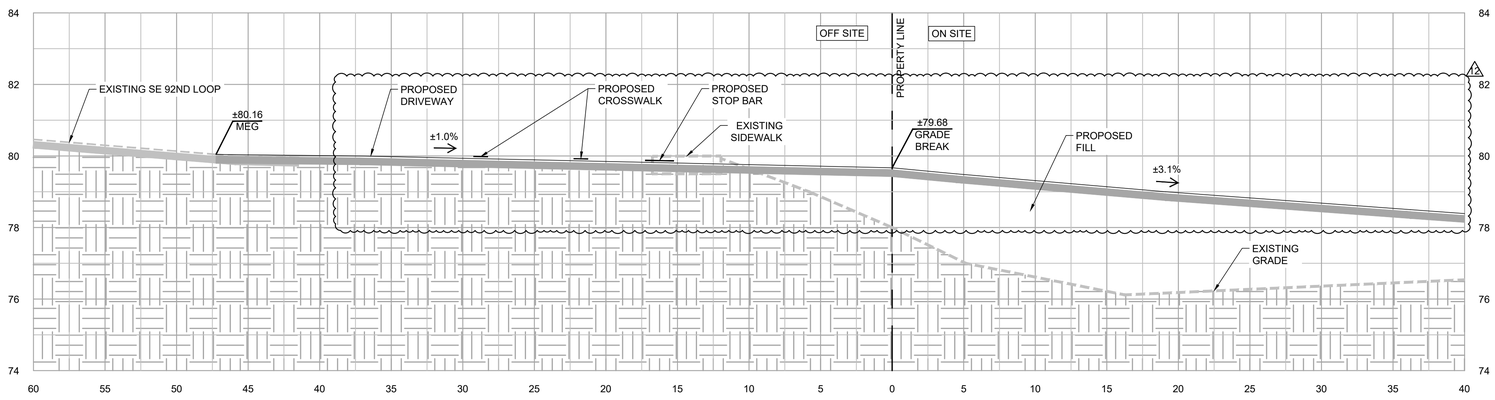
SCALE N.T.S.

KARST



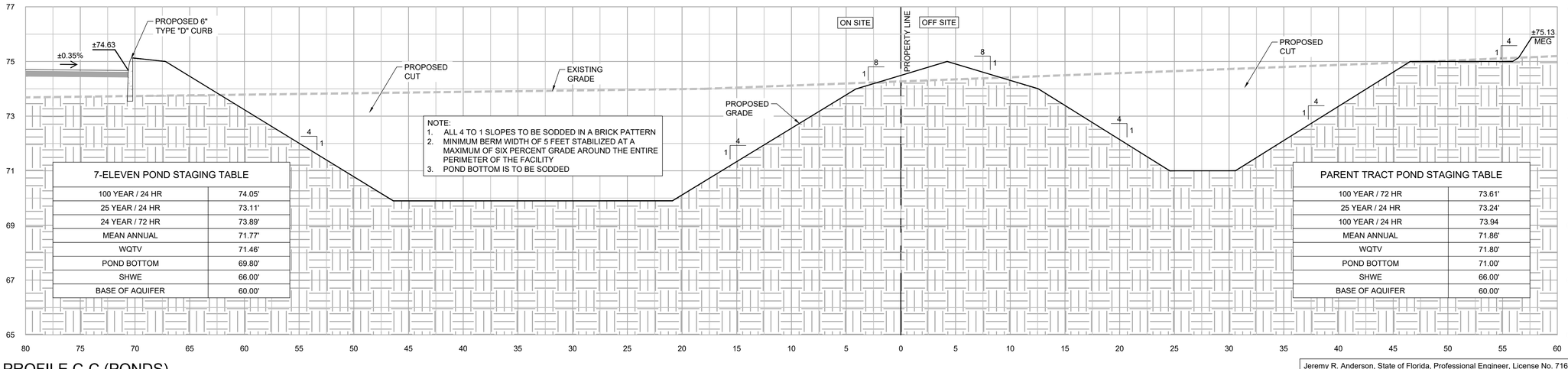
PROFILE A-A (NORTH TURN LANE)

SCALE: 1" IS 2' (VERTICAL) 1" IS 5' (HORIZONTAL)
NOTE: ELEVATIONS BASED NAVD 88 VERTICAL DATUM



PROFILE B-B (NORTHERN DRIVEWAY)

SCALE: 1" IS 2' (VERTICAL) 1" IS 5' (HORIZONTAL)
NOTE: ELEVATIONS BASED NAVD 88 VERTICAL DATUM



NOTE:
1. ALL 4 TO 1 SLOPES TO BE SODDED IN A BRICK PATTERN
2. MINIMUM BERM WIDTH OF 5 FEET STABILIZED AT A MAXIMUM OF SIX PERCENT GRADE AROUND THE ENTIRE PERIMETER OF THE FACILITY
3. POND BOTTOM IS TO BE SODDED

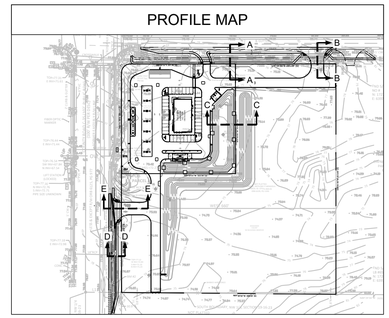
7-ELEVEN POND STAGING TABLE	
100 YEAR / 24 HR	74.05'
25 YEAR / 24 HR	73.11'
24 YEAR / 72 HR	73.89'
MEAN ANNUAL	71.77'
WQTV	71.46'
POND BOTTOM	69.80'
SHWE	66.00'
BASE OF AQUIFER	60.00'

PARENT TRACT POND STAGING TABLE	
100 YEAR / 72 HR	73.61'
25 YEAR / 24 HR	73.24'
100 YEAR / 24 HR	73.94
MEAN ANNUAL	71.86'
WQTV	71.80'
POND BOTTOM	71.00'
SHWE	66.00'
BASE OF AQUIFER	60.00'

PROFILE C-C (PONDS)

SCALE: 1" IS 2' (VERTICAL) 1" IS 5' (HORIZONTAL)
NOTE: ELEVATIONS BASED NAVD 88 VERTICAL DATUM

PROFILE MAP



LEGEND

- EXISTING EARTH
- ASPHALT PAVEMENT
- CONCRETE

R.K.M. DEVELOPMENT CORP.

COMMON OAK ENGINEERING
4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP & SE 88TH AVE
BELLEVIEW, FL
MARION COUNTY

NO:	DATE:	REVISION / ISSUE:	BY:
4	12/15/2024	MARION COUNTY COMMENTS	JR
12	04/22/2024	MARION COUNTY COMMENTS	JR

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

PROJECT # 222.108

DATE 05/13/2024

SCALE N.T.S.

SHEET D2.4

PROFILES

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

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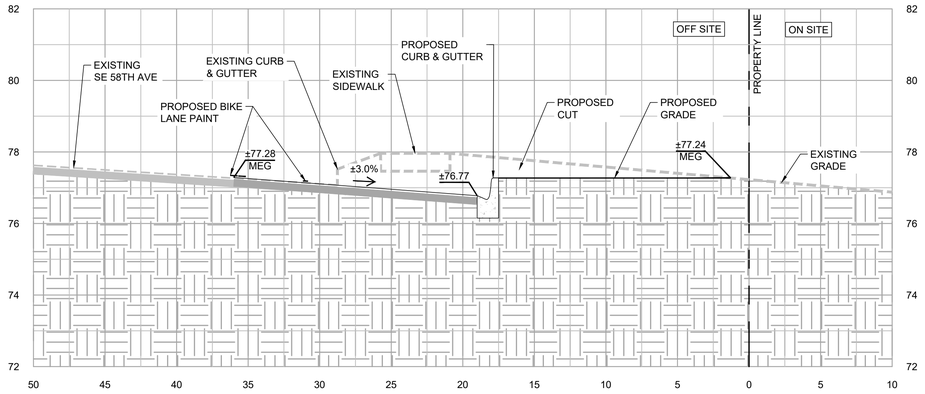
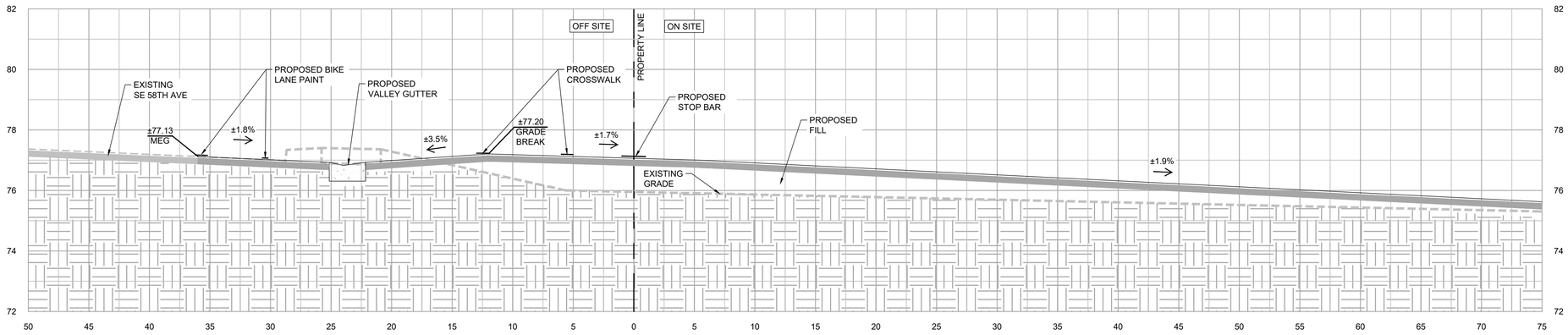


PROFILE D-D (SOUTHERN TURN LANE)

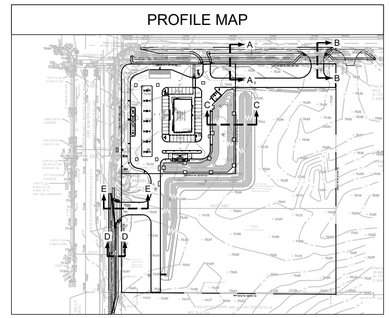
SCALE: 1" IS 2' (VERTICAL) 1" IS 5' (HORIZONTAL)
NOTE: ELEVATIONS BASED NAVD 88 VERTICAL DATUM



PROFILE E-E (SOUTHERN DRIVEWAY)

SCALE: 1" IS 2' (VERTICAL) 1" IS 5' (HORIZONTAL)
NOTE: ELEVATIONS BASED NAVD 88 VERTICAL DATUM

PROFILE MAP



LEGEND

- EXISTING EARTH
- ASPHALT PAVEMENT
- CONCRETE

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

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R.K.M. DEVELOPMENT CORP.

COMMON OAK ENGINEERING
4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP & SE 58TH AVE
BELLEVIEW, FL
MARION COUNTY

NO:	DATE:	REVISION / ISSUE:	BY:
2	12/05/2024	FDOT ACCESS COMMENTS	JR

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

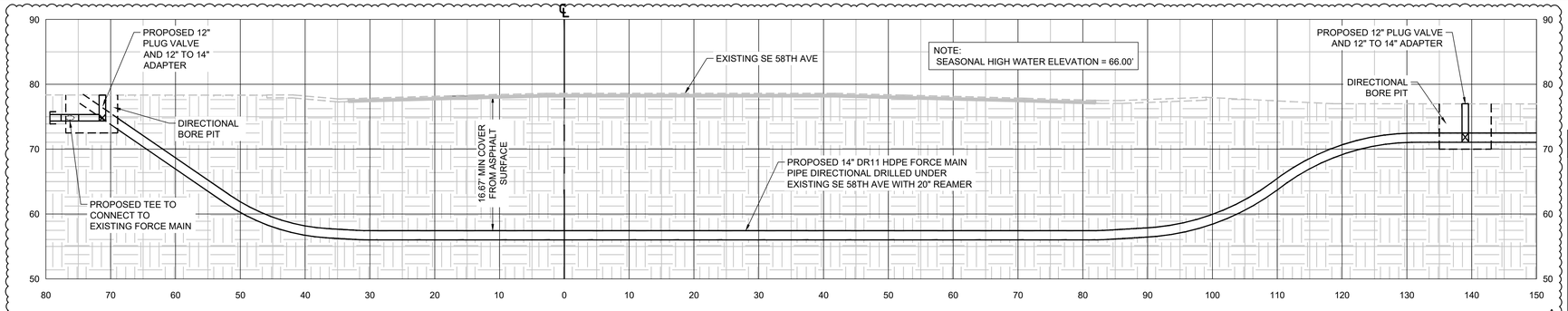
PROJECT # 222.108

DATE 05/13/2024

SCALE N.T.S.

SHEET D2.5

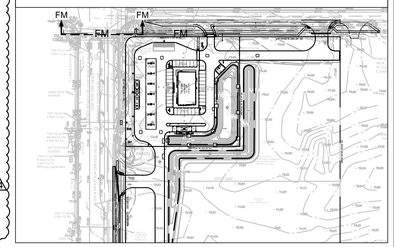
PROFILES



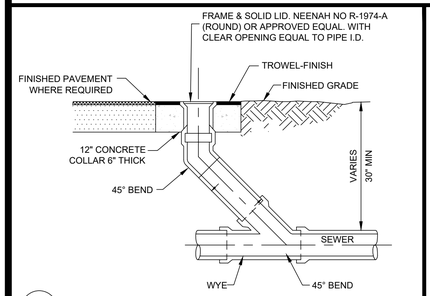
PROFILE FM-FM (FORCE MAIN DIRECTIONAL BORE UNDER SE 58TH AVE)

SCALE: 1" IS 10' (VERTICAL) 1" IS 10' (HORIZONTAL)
NOTE: ELEVATIONS BASED NAVD 88 VERTICAL DATUM

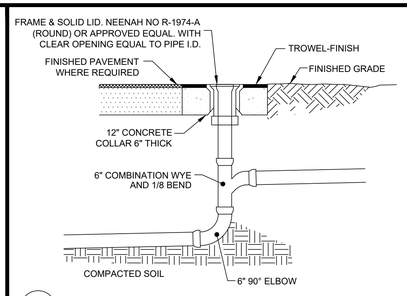
UTILITY PROFILE MAP



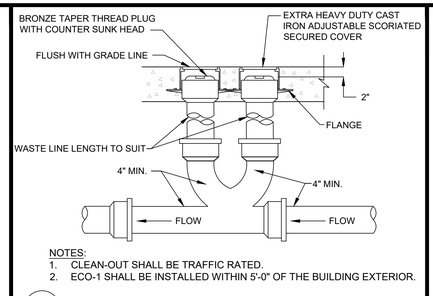
R.K.M. DEVELOPMENT CORP.



1 CLEANOUT NTS



2 DROP CLEANOUT NTS



NOTES:
1. CLEAN-OUT SHALL BE TRAFFIC RATED.
2. ECO-1 SHALL BE INSTALLED WITHIN 5'-0" OF THE BUILDING EXTERIOR.

3 2-WAY CLEANOUT NTS

GREASE DRAINAGE FIXTURE UNITS

PLUMBING FIXTURE	DFU (EACH)	DFU (TOTAL)
3" FLOOR SINK	5	5
MOP SINK (2)	2	4
	TOTAL	9

DRAINAGE FIXTURE UNIT PER FLORIDA PLUMBING CODE

HYDROMECHANICAL GREASE TRAP SIZING

FIXTURE	QTY	LENGTH (IN)	WIDTH (IN)	DEPTH (IN)	VOLUME (CU. IN.)	GALLONS
WASH SINK COMPARTMENT	1	12	19	12	2736	11.8
RINSE SINK COMPARTMENT	1	12	19	12	2736	11.8
SANITIZE SINK COMPARTMENT	1	12	19	12	2736	11.8
3-COMP SINK (S2) TOTAL						35.5
MOP SINK (MS)	2	24	24	10	5760	49.9
TOTAL GALLONS						85.4
REDUCTION VALUE [5]					0.75	
TOTAL REDUCED GALLONS						64.1
DRAIN TIME (MIN) [5]					2	
FLOW THROUGH RATING (GPM) [5]						32.0
[1] PER FBC, PLUMBING TABLE 709.1 DRAINAGE FIXTURE UNIT VALUES						
[2] PER FBC, PLUMBING TABLE 709.2 (3" TRAP = 5 DFU)						
[3] PER FBC, PLUMBING SECTION 709.3 (1 GPM = 2 DFU)						
[4] PER FBC, PLUMBING SECTION 709.4 VALUES FOR INDIRECT WASTE RECEPTOR						
[5] PER FBC, PLUMBING SECTION 1003.3.4 & PDI TABLE 8.3.2						

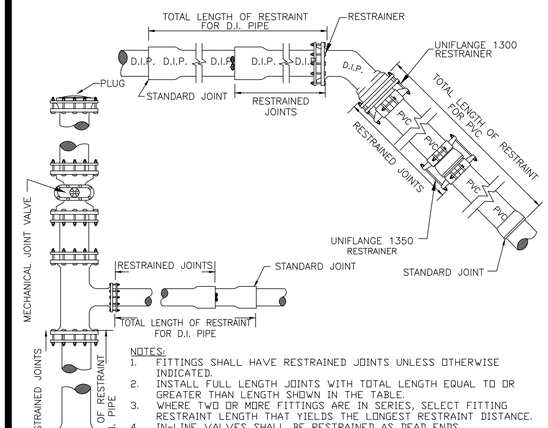
4 GREASE TRAP SIZING NTS

COMMON OAK ENGINEERING
4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP & SE 58TH AVE
BELLEVIEW, FL
MARION COUNTY

NO.	DATE:	REVISION / ISSUE:	BY:
3	12/07/2024	CITY OF BELLEVIEW UTILITY COMMENTS	JR
6	02/26/2024	MARION COUNTY COMMENTS	JR
7	03/13/2024	CITY OF BELLEVIEW UTILITY COMMENTS	JR
14	05/02/2024	FDOT UTILITY COMMENTS	JR

ENGINEER'S NAME & PE#



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

MINIMUM RESTRAINED LENGTH (FT) – EACH SIDE OF FITTING AND VALVE FOR DIP, PE ENCASED DIP OR BARE PVC

H=HORIZONTAL
VU=VERTICAL-UP
VD=VERTICAL-DOWN

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

REQUIRED RESTRAINED LENGTH ON WATER MAIN

Bend Type		Pipe Length (ft)						
		4"	6"	8"	10"	12"	16"	20"	24"
Angle	Orientation								
11-1/4°	H	2	3	4	5	5	6	8	9
	VU	2	3	4	5	5	6	8	9
	VD	6	9	11	13	16	20	24	28
22-1/2°	H	4	6	7	9	10	12	15	17
	VU	4	6	7	9	10	12	15	17
	VD	12	17	22	27	31	40	48	56
45°	H	8	11	15	17	20	25	30	35
	VU	8	11	15	17	20	25	30	35
	VD	25	35	46	55	65	82	99	115
90°	H	19	27	35	41	48	61	72	83
	VU	19	27	35	41	48	61	72	83
	VD	61	85	111	132	155	198	238	277
DEAD END PLUG AND VALVE		61	85	111	132	155	198	238	277

REQUIRED RESTRAINED LENGTH ON TEE BRANCH

TEE FITTING		Pipe Length (ft)						
		Diameter of Run						
		4"	6"	8"	10"	12"	16"	20"	24"
Diameter of Branch	4"	39	28	18	6	0	0	0	0
	6"		63	55	48	40	22	4	0
	8"			89	82	77	63	49	34
	10"				110	105	95	84	71
	12"					133	124	115	105
	16"						175	168	161
	20"							215	209
	24"								254

REQUIRED RESTRAINED LENGTH ON LARGER PIPE

REDUCER FITTING		Pipe Length (ft)					
		Diameter of Large Pipe					
		6"	8"	10"	12"	16"	20"	24"
Diameter of Small Pipe	4"	44	80	108	135	183	226	268
	6"		47	81	113	167	214	257
	8"			45	83	145	196	243
	10"				46	118	175	226
	12"					84	149	205
	16"						84	151
	20"							83

Minimum Design Criteria
Bedding Type: 4
Safety Factor: 1.5
Soil: Sand-Silt
Run Length (First Joint): 10 ft.

REQUIRED RESTRAINED LENGTH ON FORCE MAIN

Bend Type		Pipe Length (ft)						
		4"	6"	8"	10"	12"	16"	20"	24"
Angle	Orientation								
11-1/4°	H	2	2	3	4	4	5	6	7
	VU	2	2	3	4	4	5	6	7
	VD	5	7	9	11	12	16	19	22
22-1/2°	H	3	5	6	7	8	10	12	14
	VU	3	5	6	7	8	10	12	14
	VD	10	13	17	21	24	31	38	44
45°	H	6	9	11	14	16	20	24	28
	VU	6	9	11	14	16	20	24	28
	VD	20	27	36	43	50	64	78	91
90°	H	15	21	27	32	38	48	57	66
	VU	15	21	27	32	38	48	57	66
	VD	46	65	85	102	121	155	187	219
DEAD END PLUG AND VALVE		46	65	85	102	121	155	187	219

REQUIRED RESTRAINED LENGTH ON TEE BRANCH

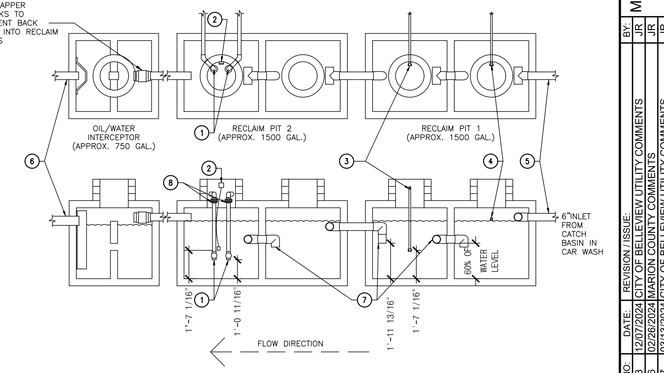
TEE FITTING		Pipe Length (ft)						
		Diameter of Run						
		4"	6"	8"	10"	12"	16"	20"	24"
Diameter of Branch	4"	25	14	4	0	0	0	0	0
	6"		43	36	28	21	5	0	0
	8"			63	57	52	39	26	12
	10"				80	75	66	55	44
	12"					98	90	81	72
	16"						132	126	119
	20"							164	159
	24"								196

REQUIRED RESTRAINED LENGTH ON LARGER PIPE

REDUCER FITTING		Pipe Length (ft)						
		Diameter of Large Pipe						
		6"	8"	10"	12"	16"	20"	24"
Diameter of Small Pipe	4"	34	61	83	105	143	178	212
	6"		36	63	88	131	168	204
	8"			35	64	113	155	192
	10"				36	92	138	179
	12"					66	118	162
	16"						66	120
	20"							66

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

NOTES
A. POSITION TANKS SO THAT PLUMBING IS BELOW THE FROST LINES IN AREAS WHERE FREEZING MAY OCCUR.
B. PLUMBING LINES MUST BE RUN BELOW FROST LINE, LINES MAY BE RUN INTO THE SIDE OF THE TANK IF MANWAY IS TO CLOSE TO THE FROST LINE.
C. DRAWINGS ARE FOR REFERENCE ONLY. CONSULT WITH TANK MANUFACTURER TO IDENTIFY STANDARD CONFIGURATIONS FOR APPROVED APPLICATIONS.
D. SEAL ALL TANK PENETRATIONS TO PREVENT LEAKAGE INTO SOIL.
E. IT IS RECOMMENDED THAT A BACK FLOW PREVENTER BE INSTALLED IN APPLICATIONS THAT ARE AT RISK OF HAVING SEWAGE BACKING UP INTO THE RECLAIM TANK SYSTEM.
F. APPROXIMATE TANK VOLUME IS 1500 GALLONS EACH (TWO 750 GALLON COMPARTMENTS), TOTAL STORAGE APPROXIMATELY 3000 GALLONS.
G. AN ADDITIONAL SAND/OIL SEPARATOR TO BE ADDED TO TANKING CONFIGURATION PER CITY/STATE REQUIREMENTS.
H. DO NOT ALLOW ANY TIRE SHINE TO ENTER INTO THE RECLAIM TANK SYSTEM.
I. CONSULT WITH CHEMICAL SUPPLIER TO ENSURE CAR WASH CHEMISTRY IS RECLAIM COMPATIBLE (BIO-DEGRADABLE).



LEGEND: (-)

1. 2" SCH 80 PVC SUCTION LINES FOR RECLAIM WATER PUMPING STATION. QTY (2) INCLUDING ONE SPARE LINE. SUCTION LINE FOR 24 HRS AT 30 PSI BEFORE POURING CONCRETE. PROTECT LINES FROM FREEZING.
2. WATERTIGHT JUNCTION BOX FOR LOW LEVEL FLOAT. (LOCATED ABOVE WATER LINE)
3. RECLAIM OZONE RETICULATION LINE. TERMINATE BELOW THE WATER LEVEL WITH HORIZONTAL TEE 24" FROM THE BOTTOM OF THE TANK FLOOR.
4. RECLAIM OVERFLOW. 1-1/2" PVC SCH 80 W/ DISTRIBUTION TEE. LOCATE JUST ABOVE WATER LINE. (USE SANITARY 90'S WHENEVER POSSIBLE).
5. 6" TRENCH DRAIN FROM WASH BAY.
6. 6" DISCHARGE TO SEWER.
7. 6" SCH. 80 PVC CROSS OVER PIPES. INLET SIDE TO BE PROVIDED WITH DOWNWARD FACING ELBOW AND DROP PIPE TO A LEVEL EQUAL TO 60% OF WATER DEPTH. OUTLET TO BE PROVIDED WITH A HORIZONTAL TEE TO PROVIDE CIRCULATION IN THE TANK.
8. 2" UNIONS LOCATED ABOVE WATER LINE.

5 CAR WASH RECLAIM SYSTEM NTS

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

PROJECT # 222.108

DATE 05/13/2024

SCALE N.T.S.

SHEET D3.0

UTILITY DETAILS

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

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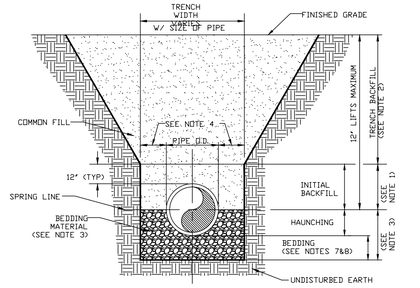
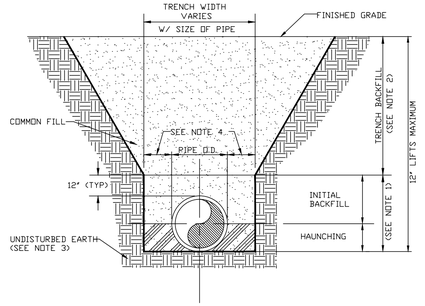
Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # NA | RESTRAINED PIPE TABLE | 7.3.2 | UT 116 A

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # NA | RESTRAINED PIPE TABLE | 7.3.2 | UT 116 B



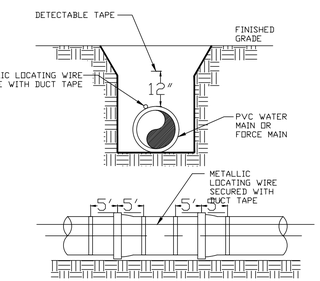
NOTES:
1. INITIAL BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. BEDDING MATERIAL SHALL CONFORM TO FDOT NO. 57 AGGREGATE.
4. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER UP TO 12" AND 6" MINIMUM FOR PIPE DIAMETER 16" AND LARGER.
8. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. UTILITIES SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.
9. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN MARION COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.
10. ONE COMPACTION TEST SHALL BE REQUIRED FOR EACH LIFT NOT TO EXCEED 200'.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # 2 | BEDDING AND TRENCHING 1 | 7.3.2 UT 102



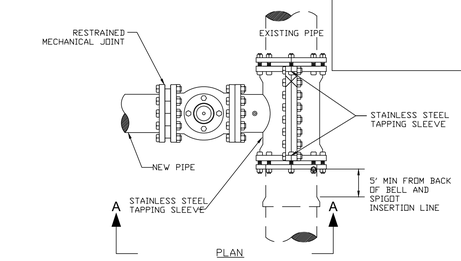
NOTES:
1. INITIAL BACKFILL AND HAUNCHING: SELECT COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH BEDDING AND TRENCHING 1 DETAIL MAY BE REQUIRED AS DIRECTED BY MCU.
4. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN MARION COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.
8. ONE COMPACTION TEST SHALL BE REQUIRED FOR EACH LIFT NOT TO EXCEED 200'.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # 2 | BEDDING AND TRENCHING 2 | 7.3.2 UT 103



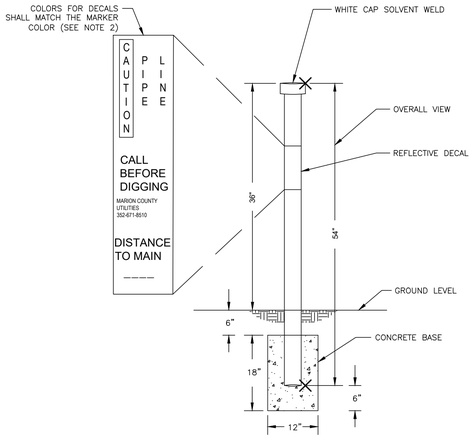
NOTES:
1. PVC PIPE SHALL REQUIRE INSULATED METALLIC LOCATING WIRE (10 GAUGE COPPER) CAPABLE OF DETECTION BY A CABLE LOCATOR AND SHALL BE BURIED ON TOP OF THE PIPE.
2. LOCATING WIRE SHALL TERMINATE AT EACH VALVE BOX AND BE CAPABLE OF EXTENDING 12" ABOVE TOP OF BOX IN SUCH A MANNER SO AS NOT TO INTERFERE WITH VALVE OPERATION PER UT 112.
3. ALL WIRE CONNECTIONS SHALL BE SPLICED TOGETHER USING WATERTIGHT WIRE NUTS.
4. FOR HORIZONTAL DIRECTIONAL DRILLING, UTILIZE 2 LOCATING WIRES EACH WITH A BREAK LOAD OF 2032 POUNDS.
5. DETECTABLE TAPE SHALL BE 1' ABOVE THE CENTERLINE OF THE PIPE.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # 2 | PIPE LOCATING WIRE AND DETECTABLE TAPE | 7.3.2 UT 104



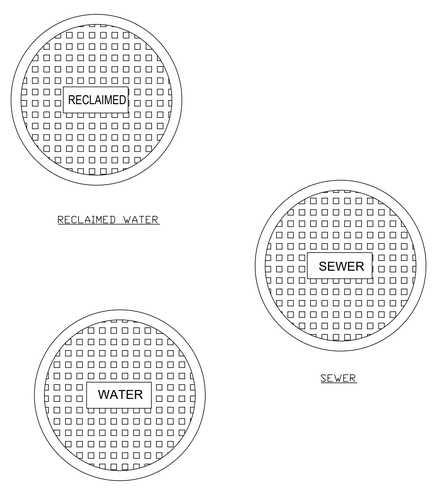
NOTES:
1. PRIOR TO BEGINNING THE TAPPING OPERATION, THE SLEEVE AND VALVE SHALL BE PRESSURE TESTED AT 150 PSI FOR A MINIMUM OF 30 MINUTES TO ENSURE THAT NO LEAKAGE WILL OCCUR.
2. CONTRACTOR SHALL PROVIDE MCU PROOF OF PRESSURE TEST IN THE FORM OF A TAPPING TEST LOG WITH THE CONTRACTOR'S SIGNATURE.
3. CONTRACTOR MUST CONFIRM RESTRAINTS IN ALL DIRECTIONS AND INSTALL ADDITIONAL RESTRAINTS AS NECESSARY TO COMPLY WITH LAND DEVELOPMENT CODE.
4. ALL TAPS MUST BE LOCATED A MINIMUM OF 5' AWAY FROM ANY BELL AND/OR FITTING.
5. STAINLESS STEEL TAPPING SLEEVE SHALL BE MADE OF 316SS.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # 1 | TAPPING SLEEVE AND GATE VALVE ASSEMBLY | 7.3.2 UT 108

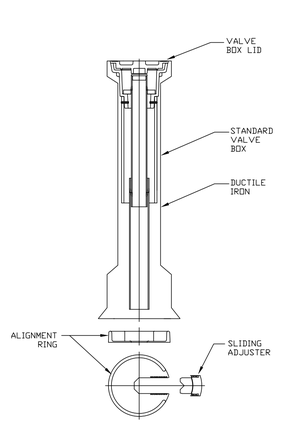


NOTES:
1. MARKERS ARE REQUIRED WHEN UTILITY MAIN IS LOCATED OVER 30 FEET FROM EDGE OF PAVEMENT OR IN AN EASEMENT NOT ADJACENT TO THE RIGHT-OF-WAY.
2. MARKERS SHALL BE 4" DIAMETER SCH80 OR DR18 PVC: BLUE FOR WATER; GREEN FOR WASTEWATER; AND PANTONE PURPLE 522C FOR RECLAIMED WATER.
3. MARKERS SHALL BE PLACED AT ALL VALVES THAT MEET NOTE 1 EXCEPT WATER VALVES NEAR FIRE HYDRANTS.
4. ADDITIONAL MARKERS SHALL BE INSTALLED AS NEEDED SO THAT THE DISTANCE BETWEEN MARKERS DOES NOT EXCEED 1,000 FEET.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # 2 | UTILITY MAIN MARKER | 7.3.2 UT 109

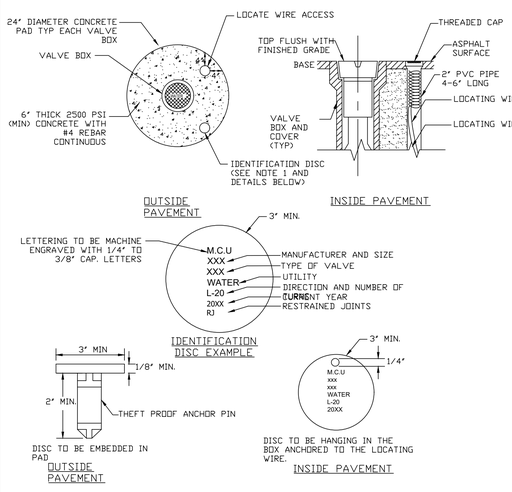


Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # NA | TYPICAL VALVE BOX COVER | 7.3.2 UT 110



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

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # 1 | SEALED VALVE BOX, ADJUSTABLE | 7.3.2 UT 111



NOTES:
1. BRONZE (OR STAINLESS STEEL) IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES, EXCEPT HYDRANT VALVES.
2. LOCATING WIRE SHALL TERMINATE AT EACH VALVE BOX AND BE CAPABLE OF EXTENDING 12" ABOVE TOP OF BOX IN SUCH A MANNER SO AS NOT TO INTERFERE WITH VALVE OPERATION.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # 1 | VALVE BOX PAD | 7.3.2 UT 112

R.K.M. DEVELOPMENT CORP.

COMMON OAK ENGINEERING

COMMON OAK ENGINEERING
4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP & SE 58TH AVE
BELLEVIEW, FL
MARION COUNTY

NO:	DATE:	REVISION / ISSUE:	BY:
3	12/07/2024	CITY OF BELLEVIEW UTILITY COMMENTS	JR

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

PROJECT # 222.108

DATE 05/13/2024

SCALE N.T.S.

SHEET D3.1

UTILITY DETAILS

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

This item has been digitally signed and sealed by Jeremy R. Anderson, PE, on the date indicated here.

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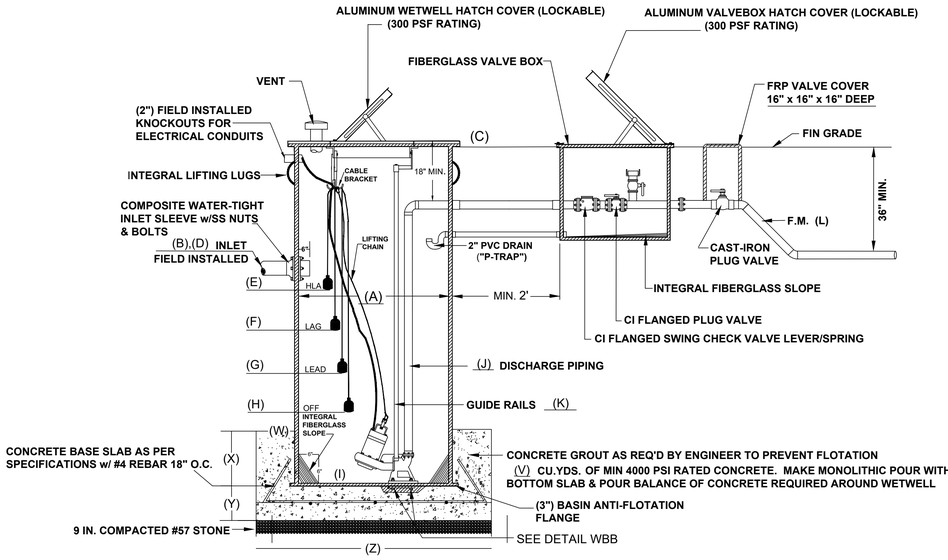


STATION DESIGN CONDITION		
PRIMARY PUMP CAPACITY	24.5	GPM
PRIMARY TDH	129	'TDH
RUN-OUT PUMP CAPACITY	102.7	GPM
RUN-OUT TDH	41	'TDH
PUMP MODEL #	FLYGT RCMP3127-263	
R.P.M.	3455	
HORSEPOWER	6.0	
ELECTRICAL/ VOLTS / PHASE	230V/3	
PUMP DISCHARGE SIZE	2"	

STATION ELEVATIONS AND DIMENSIONS		
WETWELL DIAMETER	(A)	48"
INVERT DIAMETER	(B)	PER EOR
TOP OF WETWELL	(C)	76.50'
INLET / INVERT	(D)	65.68'
HIGH LEVEL ALARM (HLA)	(E)	65.18'
2nd PUMP ON (LAG)	(F)	64.68'
1st PUMP ON (LEAD)	(G)	64.18'
PUMPS OFF (OFF)	(H)	63.68'
BOTTOM OF WETWELL	(I)	62.00'
DISCHARGE PIPE DIAMETER	(J)	2"
GUIDE RAIL DIAMETER	(K)	1"
F.M. PIPE DIAMETER	(L)	2"

STATION MANUFACTURING MATERIALS	
DISCHARGE PIPE	HDPE
INLET PIPE	PER EOR
GUIDE RAIL	304 SS
WET WELL	FRP ASTM D-3753
WET WELL HATCH COVER	300 LBS. PSI ALUM.
CABLE BRACKET	304 SS
LIFTING CHAIN	304 SS
BALL VALVE	304 SS
SWING CHECK VALVE	304 SS
VALVE BOX	FRP
VALVE BOX HATCH COVER	300 LBS. PSI ALUM.

STATION VALVE BOX SIZES	
(32" x 30" x 24" DEEP)	FOR 2" DISCHARGE
(36" x 36" x 36" DEEP)	FOR 3" DISCHARGE

STATION HATCH OPENINGS			
WETWELL DIA.	36"	48"	60"
	27" x 20"	36" x 24"	40" x 30"

CONCRETE BALLAST REQUIREMENTS		
CUBIC YARDS OF CONCRETE REQUIRED	(V)	4.13 yds^3
CIRCUMFERENCE DIMENSION - WIDTH	(W)	18.0"
CIRCUMFERENCE DIMENSION - HEIGHT	(X)	24.0"
BASE SLAB DIMENSION - HEIGHT	(Y)	18.0"
BASE SLAB DIMENSION - LENGTH & WIDTH	(Z)	84.0"

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

w/ BATTERY BACK-UP FOR AUDIO AND VISUAL ALARMS ©

PUMPS: **SPECIFICATION**

Submersible grinder pumps shall be: Manufacturer FLGYT - Model RCMP3127-263.

The pumps shall be installed in the FRP wetwell utilizing a dual slide rail system.
The grinder system shall be capable of grinding the waste materials normally found in domestic and commercial sewage into a fine slurry which will pass through the pump and discharge piping.
Stator winding shall be open type with Class H insulation and shall be heat shrink fitted into the stator housing. Shall withstand a continous operating temperature of 155° C.
A heat sensor (2) thermal switches shall be attached to the motor windings.
The pump motor grinder shaft shall be EN 1.4301 / AISI 304SS connection to take the pump impeller and the grinder assembly.
Semi Axial Centrifugal Impeller shall be Cast Iron EN-GJL-200 / ASTM A48 30B.
Cutter/Grinder Assembly shall be Stainless Steel EN 1.4301 / AISI 304.
Double mechanical cartridge shaft seals shall be provided. The seal springs located inside the oil housing should be fully protected from the pumped liquid. The mechanical seals should be able to withstand rotation on either side.
Moisture sensor (2) shall be included in the motor housing assembly.
Power and Control cables shall be clamped against tensile loads and have a serviceable inlet to the motor, with hermetically sealed polyurethane filled, stainless steel cable plug connection. The pump and electric cables shall be capable of continuance submergance, witout loss of waterproof integrity to a depth of 65 ft.

CONTROL PANEL: **SPECIFICATION**

The Enclosure shall be NEMA 4X, minimum 30" high x 20" wide x 10" deep with 3 point latching system.
The enclosure shall have external mounting feet to allow for wall mounting.
The following components shall be mounted through the enclosure:
1- ea. Red Alarm Beacon (Light) LED 360 Degree viewable range
1- ea. Alarm Horn (minimum 95 DCB)
1- ea. Generator Receptacle w/ weatherproof cover 60A Minimum. Shall meet UL 1682 and UL 1686 Configuration.

The back panel shall be fabricated from .125, 5052-H32 marine alloy aluminum. All components shall be mounted by machined stainless steel screws.
The following components shall be mounted to back panel:
2- ea. IEC style Motor Contactors
1- ea. Volt Monitor (1 Ph) Phase Monitor (3 Ph) w/2 N/O & 1 N/C Contacts
1- ea. Alternator
1- ea. Control Transformer (480 Volt Only) (Min. 500VA)
1- ea. Model RCBB5AH Battery Back-Up w/ Smart Charger (UPS)
20- ea. Terminals For Field Connections
6- ea. Terminals For Motor Connections (Single Phase Only)
7- ea. Grounding Lugs
1-ea. Lightning and Surge Protection shall meet the UL 1449 2nd Edition

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

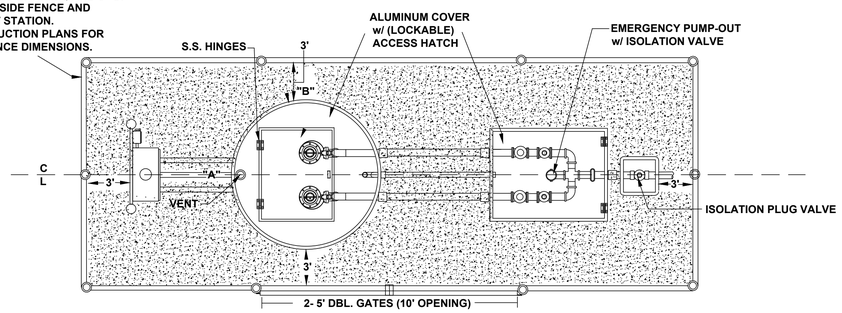
MISCELLANEOUS: All wiring on the back panel shall be contained within the wiring duct. All wiring between the inner door and the back panel shall be contained with in a plastic spiral wrap.
Each wire shall have a wire number at each end to correspond to the as built drawing for field troubleshooting.
The control panel must be manufactured in-house by lift station supplier and be a TUV (UL508A Certified) facility.

INSPECTION & TESTING: A factory representative shall be provide for a one (1) time start-up and shall have complete knowledge of the proper operation and maintenance of complete system. Megger the motors. The pump motors shall be megged out prior to the start-up to ensure that the insulation of the pump motor/cable is intact. The pump controls and pumps shall be checked for mechanical reliability and proper operation.

NOTES:

1. DRAWING NOT TO SCALE
2. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES
3. ELECTRICIAN SHALL SEAL OFF CONDUIT RUNS
4. CONTRACTOR SHALL VERIFY POWER SOURCE PRIOR TO ORDERING EQUIPMENT
5. NEUTRAL TO BE SUPPLIED FOR 23OV-3 PHASE OR 230V-SINGLE PHASE POWER.

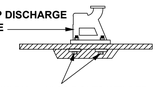
CONTRACTOR TO INSTALL 6' TALL COMMERCIAL GRADE - CHAINLINK FENCING, WEED BARRIER, AND 6" OF #57 STONE INSIDE FENCE AND AROUND LIFT STATION. SEE CONSTRUCTION PLANS FOR OVERALL FENCE DIMENSIONS.



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

(DETAIL WBB)

WETWELL BOTTOM BOLT & SUPPORT DETAIL



MIN. 1/2" DIA. x 3" SS BOLTS WELDED TO A (2" x 24" x 1/4") SS ANCHOR PLATE EMBEDDED IN FIBERGLASS

WETWELL: **SPECIFICATION**

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

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

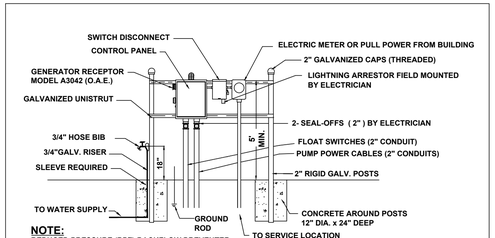
The wet well FRP laminate must be constructed to with stand or exceed two times the assumed loading on any depth of the wet well.

The cover shall be constructed of ¼ inch thick material finish aluminum diamond plate pattern with 300 series stainless steel hardware. The hatch shall have a positive means of holding door open in the vertical position (Locking hold open arm) made of non-corrosive material. The cover shall be mounted with minimum of six 300 series stainless steel fasteners. The access hatch cover shall have a lift handle and a means of locking.

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

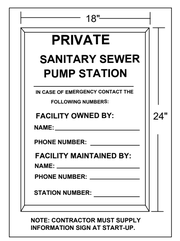
EXECUTION:
Installation shall be in strict accordance with the manufacturer's recommendations in the locations shown on the drawing.

02/02/24 SR



NOTE:
REDUCED PRESSURE (RPZ) BACKFLOW PREVENTER TO BE INSTALLED IN WATER SUPPLY LINE TO LIFT STATION "FEBCO WATTS" (OAE)

ELECTRICAL RISER FOR ILLUSTRATION PURPOSES ONLY



NOTE: CONTRACTOR MUST SUPPLY INFORMATION SIGN AT START-UP.

LIFT STATION WILL BE PRIVATELY OWNED AND MAINTAINED.

NO SUBSTITUTIONS - NO ALTERNATES

R.K.M. DEVELOPMENT CORP.

COMMON OAK ENGINEERING
4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP & SE 98TH AVE
BELLEVIEW, FL
MARION COUNTY

NO.	DATE:	REVISION / ISSUE:	BY:
3	12/07/2024	CITY OF BELLEVIEW UTILITY COMMENTS	JR
4	12/15/2024	MARION COUNTY COMMENTS	JR

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

PROJECT # 222.108

DATE 05/13/2024

SHEET D3.3

SCALE N.T.S.

UTILITY DETAILS

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

This item has been digitally signed and sealed by Jeremy R. Anderson, PE, on the date indicated here.

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SANITARY DRAINAGE FIXTURE UNITS

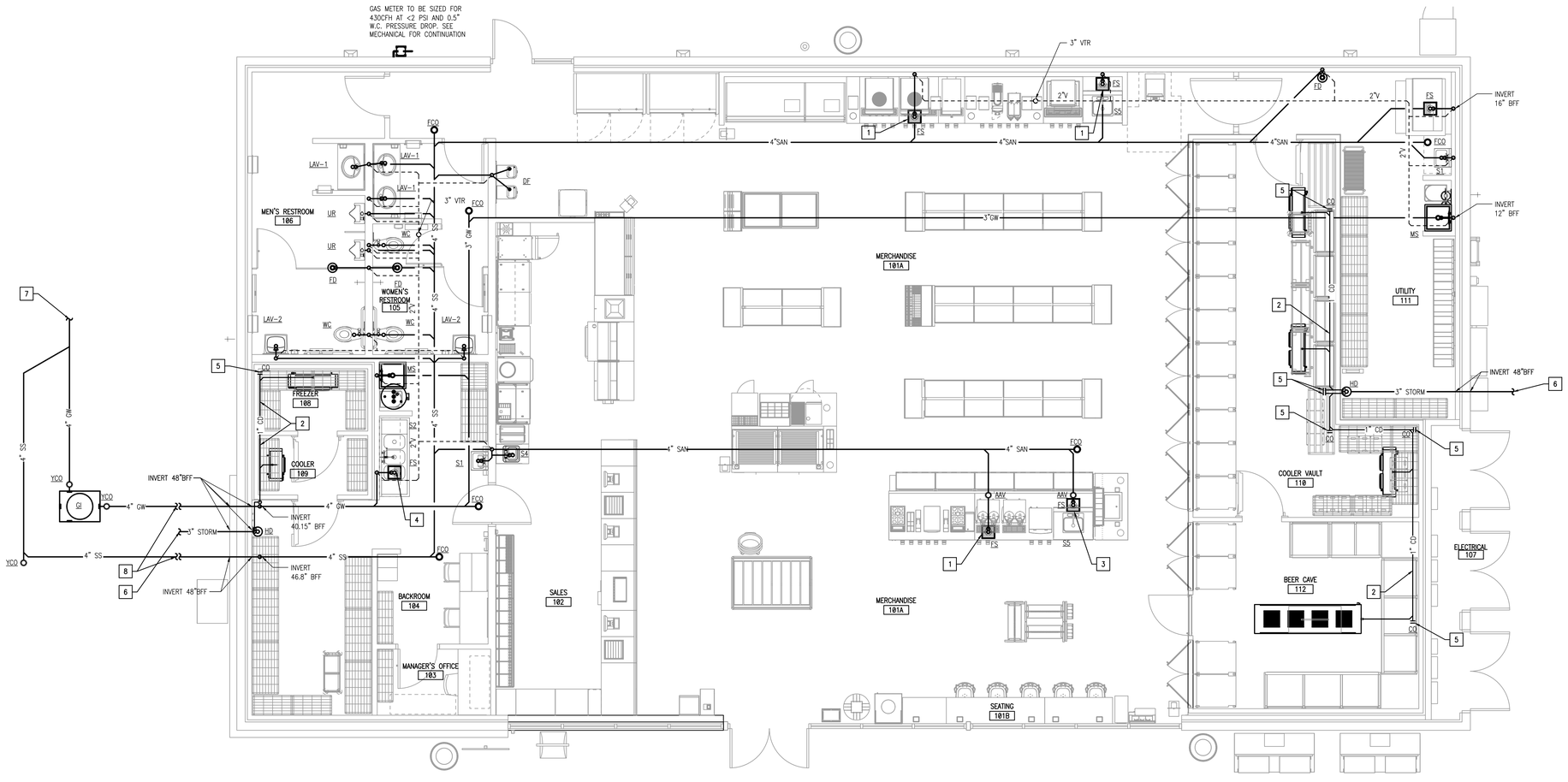
PLUMBING FIXTURE	DFU (EACH)	DFU
DRINKING FOUNTAIN	0.5	0.5
3" FLOOR DRAIN (3)	2	6
LAVATORY (5)	1	5
URINAL (2)	2	4
WATER CLOSET (3)	4	12
HAND SINK/DUMP SINK (5)	1	5
3" FLOOR SINK (3)	5	15
	TOTAL	47.5
DRAINAGE FIXTURE UNIT PER FLORIDA PLUMBING CODE		

GREASE DRAINAGE FIXTURE UNITS

PLUMBING FIXTURE	DFU (EACH)	DFU (TOTAL)
3" FLOOR SINK	5	5
MOP SINK (2)	2	4
	TOTAL	9
DRAINAGE FIXTURE UNIT PER FLORIDA PLUMBING CODE		

HYDROMECHANICAL GREASE TRAP SIZING

FIXTURE	QTY	LENGTH (IN)	WIDTH (IN)	DEPTH (IN)	VOLUME (CU. IN.)	GALLONS
WASH SINK COMPARTMENT	1	12	19	12	2736	11.8
RINSE SINK COMPARTMENT	1	12	19	12	2736	11.8
SANITIZE SINK COMPARTMENT	1	12	19	12	2736	11.8
3-COMP SINK (S2) TOTAL						35.5
MOP SINK (MS)	2	24	24	10	5760	49.9
TOTAL GALLONS						85.4
REDUCTION VALUE [5]					0.75	
TOTAL REDUCED GALLONS						64.1
DRAIN TIME (MIN) [5]					2	
FLOW THROUGH RATING (GPM) [5]						32.0
[1] PER FBC, PLUMBING TABLE 709.1 DRAINAGE FIXTURE UNIT VALUES						
[2] PER FBC, PLUMBING TABLE 709.2 (3" TRAP = 5 DFU)						
[3] PER FBC, PLUMBING SECTION 709.3 (1 GPM = 2 DFU)						
[4] PER FBC, PLUMBING SECTION 709.4 VALUES FOR INDIRECT WASTE RECEPTOR						
[5] PER FBC, PLUMBING SECTION 1003.3.4 & PDI TABLE 8.3.2						



1 PLUMBING SANITARY PLAN 1/4" = 1'-0"

PLUMBING NOTES

A. NOTES APPLY TO ALL PLUMBING SHEETS.

B. EACH CONTRACTOR IS RESPONSIBLE FOR HAVING THOROUGH KNOWLEDGE OF ALL DRAWINGS AND SPECIFICATIONS AS THEY RELATE TO THIS WORK. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED DUE TO LACK OF THIS KNOWLEDGE.

C. PROVIDE ALL MATERIALS FOR A COMPLETE INSTALLATION IN ALL RESPECTS READY FOR INTENDED USE AND IN STRICT ACCORDANCE WITH STATE AND LOCAL CODES AND MANUFACTURER'S RECOMMENDATIONS.

D. COORDINATE SEWER AND WATER CONNECTIONS WITH CIVIL AND AHJ. PROVIDE PRESSURE REDUCING VALVE AND BACKFLOW PREVENTER AS SHOWN OR REQUIRED BY AHJ. VERIFY INVERT AND SLOPE OF INCOMING SANITARY SEWER BEFORE TRENCHING.

E. REFER TO RISER DIAGRAMS AND PLUMBING FIXTURE SCHEDULE FOR ALL PIPING AND PIPE SIZES NOT SHOWN ON PLAN.

F. SANITARY AND STORM SEWER PIPING SHOWN IS BASED ON 1/4" PER FOOT FALL FOR ALL PIPE. NOTIFY 7-11 CM IF THE SLOPE CANNOT BE ACHIEVED.

G. ALL SEWER PIPING BELOW SLAB TO BE 2" DIAMETER MINIMUM.

H. PROVIDE ACCESS DOORS TO ALL CONCEALED VALVES AND CLEAN-OUTS; AND NOT ABOVE AN ACCESSIBLE CEILING.

I. PROVIDE TRAP SEAL PRIMERS AND 1/2" COPPER TUBING CONNECTION TO ALL FLOOR DRAINS AS SHOWN OR AS REQUIRED BY AHJ. CONTRACTOR SHALL VERIFY REQUIREMENTS.

J. INSTALL VTR'S, EXHAUST FANS, AND FLUES A MINIMUM 5'-0" FROM PARAPET OR OUTSIDE WALL AND 10'-0" MINIMUM FROM EQUIPMENT WITH OUTSIDE AIR INTAKE.

K. INSTALL WATER PIPE ON INSIDE OF EXTERIOR WALL INSULATION TO PREVENT FREEZING.

L. WHEN DEEP FROST LOCATIONS ARE ENCOUNTERED, ROUTE SANITARY LINES UNDER BUILDING AS MUCH AS POSSIBLE.

M. PROVIDE PVC SLEEVE FOR ALL COLD/HOT WATER FLOOR PIPE PENETRATIONS. MAKE SLEEVE LARGE ENOUGH FOR INSULATION. SEAL WITH GRAY MASTIC AND ENSURE OF NO WATER PENETRATIONS.

N. PROVIDE AND INSTALL WATTS 8A VACUUM BREAKER ON ANY THREADED EXTERIOR OR INTERIOR FAUCETS.

O. ALL WATER SHUT-OFF VALVES SHALL BE "BALL LOCK" TYPE. PROVIDE SHUT-OFF VALVES AT EACH TERMINATION POINT OF ASSOCIATED EQUIPMENT.

P. PROVIDE SEISMIC BRACING BASED ON APPROPRIATE SEISMIC ZONE REQUIREMENTS PER LOCAL AND NATIONAL CODES. CONTRACTOR'S RESPONSIBILITY INCLUDES STRUCTURAL ENGINEER'S CERTIFICATION ON DETAILS SUBMITTED FOR PERMITTING.

KEY NOTES

1. PLUMBING CONTRACTOR TO PROVIDE FULL SIZE DRAINS FROM BEVERAGE EQUIPMENT TO FS WITH AIR GAP (TYP).
2. ROUTE CONDENSATE DRAIN FROM COOLER/FREEZER EVAPORATOR TIGHT TO HUB DRAIN. FREEZER AND BEER CAVE CONDENSATE PIPING SHALL HAVE HEAT TRACE. SEE ELECTRICAL SPECIFICATIONS 3.5.12 FOR HEAT TRACE REQUIREMENTS.
3. ROUTE FULL SIZE DRAIN FROM DUMP SINK (S4) TO FS WITH AN APPROVED AIR GAP.
4. ROUTE FULL SIZE SCH 80 PVC DRAINS FROM 3 COMPARTMENT SINK (S2) TO FS WITH AN APPROVED AIR GAP. SEE DETAIL 3/P2.0 FOR MORE INFORMATION.
5. PLACE CLEANOUT AT EVERY CHANGE OF DIRECTION IN CONDENSATE PIPING (TYPICAL).
6. PROVIDE HUB DRAIN WITH P-TRAP FOR CONDENSATE DISPOSAL. ROUTE AS SHOWN ON PLAN, COORDINATE FINAL CONNECTION WITH CIVIL SITE UTILITY PLANS.
7. 4" SEWER, REFER TO CIVIL DRAWINGS FOR CONTINUATION.
8. REFER TO CIVIL SITE DRAWINGS FOR DISTANCE AND EXACT LOCATION FOR POINTS OF CONNECTION.

PLUMBING SYMBOLS

SS	SANITARY SEWER
GW	GREASE WASTE
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	DOMESTIC HOT WATER RETURN
FW	FILTERED WATER
G	NATURAL GAS
CD	CONDENSATE DRAIN
	PLUMBING VENT
	UNION
	ELBOW - TURNED DOWN
	ELBOW - TURNED UP
	TEE - TURNED DOWN
	TEE - TURNED UP
	BALL VALVE
	SHUT-OFF VALVE IN VERTICAL LINE
	BACKFLOW PREVENTER
FD	FLOOR DRAIN
FS	FLOOR SINK
FCO	FLOOR CLEANOUT
YCO	YARD CLEANOUT
FPWH	FREEZE PROOF WALL HYDRANT
HB	HOSE BIBB
WCO	WALL CLEANOUT
	GAS PRESSURE REGULATOR
	GAS COCK

NORTH

INTERPLAN
INTERPLAN LLC
AR99238
CA 8660
ARCHITECTURE
ENGINEERING
PERMITTING
220 E. CENTRAL PKWY, STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

SEAL:

THIS DOCUMENT IS NOT FOR REGULATORY APPROVAL, PERMITTING, OR CONSTRUCTION.

NO DATE REMARKS
REVISIONS

7-ELEVEN
STORE #42379

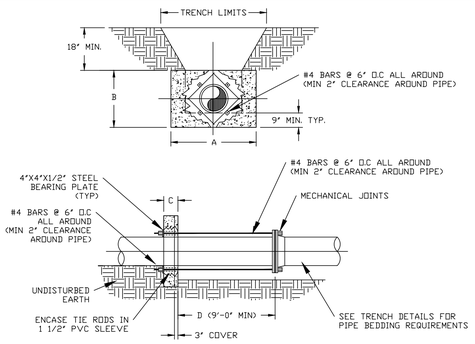
SEC 58TH AVE AND 92ND LOOP
BELLEVIEW FL, 34480

PROJECT NO: 2022.0783
DATE: FEBRUARY 26, 2024

P1.0
DRAIN PIPING PLAN

CHECKED: DAK DRAWN: IC

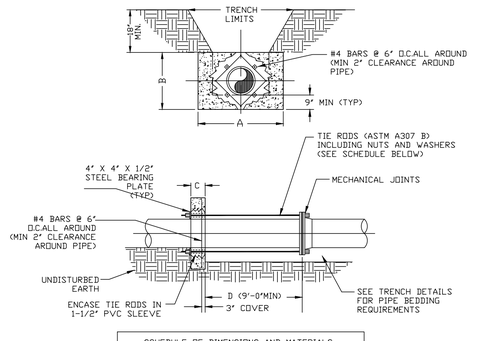
ANGMEN - 04/02/2024 12:36:49 PM



SCHEDULE OF DIMENSIONS AND MATERIALS						
PIPE SIZE (INCHES)	DIMENSIONS (FT.)				TIE RODS REQ'D	
	A	B	C	D	DIA.	NO.
6	2.0	2.0	1.0		3/4	2
8	2.5	2.5	1.0		3/4	2
10	3.0	2.5	1.0		3/4	4
12	4.0	3.0	1.0		3/4	4
16	5.5	3.5	1.5		3/4	4
20	7.5	4.0	1.5		3/4	4
24	8.5	5.0	1.5		3/4	6
NOTE: THRUST COLLAR AREAS TO BE COMPUTED ON BASIS OF 2000 LBS/SF SOIL RESTRAINT BEARING.						

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

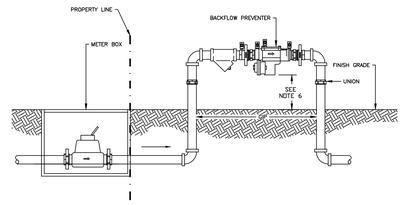
Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # 1 | THRUST COLLAR WASTEWATER FORCE MAINS | 7.3.2 UT 301



SCHEDULE OF DIMENSIONS AND MATERIALS						
PIPE SIZE (INCHES)	DIMENSIONS (FT.)				TIE RODS REQ'D	
	A	B	C	D	DIA.	NO.
6	2.0	2.0	1.0		3/4	2
8	2.5	2.5	1.0		3/4	2
10	3.5	3.0	1.0		3/4	4
12	5.0	3.0	1.0		3/4	4
16	6.0	4.0	1.5		3/4	4
20	8.0	5.0	1.5		3/4	6
24	9.0	6.0	1.5		3/4	8
NOTE: THRUST COLLAR AREAS TO BE COMPUTED ON BASIS OF 2000 LBS/SF SOIL RESTRAINT BEARING.						

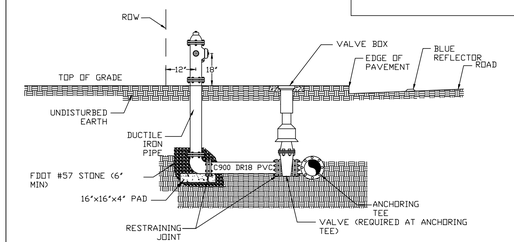
NOTES:
1. ADDITIONAL REINFORCEMENTS SHALL BE AS SPECIFIED BY THE ENGINEER.
2. MINIMUM COMPRESSIVE STRENGTH FOR CONCRETE SHALL BE 3000 PSI.
3. BEDDING, BACKFILL AND COMPACTION SHALL BE AS SPECIFIED ELSEWHERE IN THE LAND DEVELOPMENT CODE.
4. ALL FORM BOARDS SHALL BE REMOVED PRIOR TO BACKFILL.
5. NO ALLOWANCE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

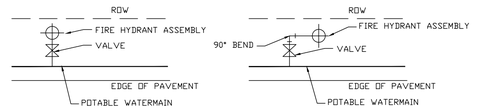
Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # NA | THRUST COLLAR WATER MAINS | 7.3.2 UT 201



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

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

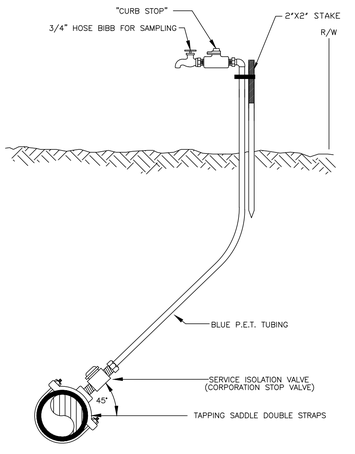




STANDARD CONFIGURATION ALTERNATE CONFIGURATION

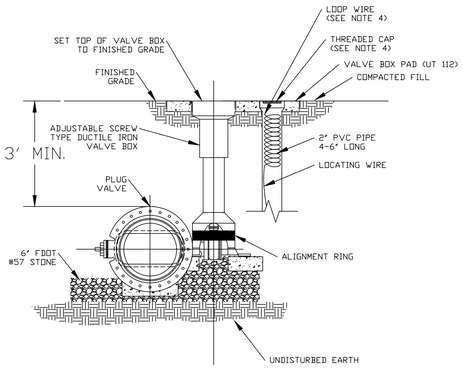
NOTES:
1. BONNET COLORS SHALL BE IN ACCORDANCE WITH SEC. 6.18.2-G.
2. HYDRANT SHALL BE 1' INSIDE OF RIGHT-OF-WAY, WHEN POSSIBLE.
3. BLUE REFLECTOR SHALL BE PLACED IN THE MIDDLE OF THE ADJACENT TRAVEL LANE.
4. RADIUS OF CLEAR SPACE AROUND THE FIRE HYDRANT SHALL BE IN ACCORDANCE WITH NFPA STANDARDS (NFPA 1 SEC. 18.5.7, AS AMENDED).

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # 2 | FIRE HYDRANT ASSEMBLY | 7.3.2 UT 210



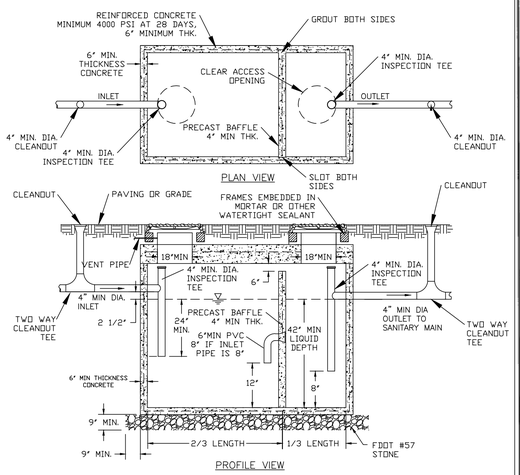
NOTE: POLY IS TO BE REMOVED AND CORPORATION STOP CLOSED AND CAPPED OFF AFTER WATER SAMPLES ARE COLLECTED AND SYSTEM IS PLACED INTO SERVICE BY FDEP.

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # 1 | TEMPORARY SAMPLE POINT | 7.3.2 UT 211



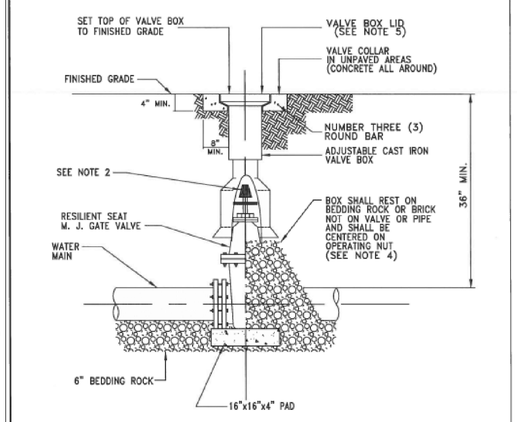
NOTES:
1. VALVE BOX INSTALLATION SHALL COMPLY WITH UT 111.
2. THE VALVE ACTUATING NUT SHALL BE EXTENDED UP TO BE WITHIN 3' OF FINISHED GRADE.
3. PROVIDE A PLASTIC DEBRIS SHIELD / ALIGNMENT RING WHICH INSTALLS BELOW THE VALVE ACTUATING NUT. THIS SHIELD SHALL CENTER THE RISER PIPE BOX OVER THE ACTUATING NUT AND MINIMIZE INFILTRATION.
4. LOCATING WIRE SHALL BE CONTINUOUS WITH NO SPLICES AND SHALL EXTEND 12" ABOVE TOP OF COLLAR. WIRE SHALL BE COLOR CODED TO MATCH THE UTILITY INSTALLED.
5. FOR NEW CONSTRUCTION, THE VALVE BOX SHALL BE ADJUSTED TO MIDRANGE TO ALLOW FOR FUTURE BOX ADJUSTMENTS.
6. VALVE BOX SHALL BE SET ON SOLID COMMON BLOCKS

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # 2 | PLUG VALVE AND BOX | 7.3.2 UT 304



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

Marion County FLORIDA UTILITIES | MCBCC EFFECTIVE 04/13/2023 | REVISION # 1 | GREASE INTERCEPTOR | 7.3.2 UT 310



NOTES:
1. PVC EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
2. THE ACTUATING NUT FOR VALVES DEPPER THAN 6 FEET SHALL BE EXTENDED TO COME UP TO 4 FOOT DEPTH BELOW FINISHED GRADE.
3. GATE VALVES SHALL BE USED WITH ALL WATER MAINS.
4. WHEN VALVE BOX IS TO BE INSTALLED IN ROADWAY OR OTHER TRAFFIC AREAS SET VALVE BOX ON FIVE (5) SOLID COMMON BRICKS.
5. VALVE BOX LID TO BE LETTERED WITH THE WORD "WATER".

Revisions:

CITY OF BELLEVIEW
Department of Public Works
Date: March 2001 | H:\Drawings\Utilities\Spec...dwg

GATE VALVE AND BOX DETAIL

Detail Number CB 200

R.K.M. DEVELOPMENT CORP.

COMMON OAK ENGINEERING
4016 EDGEWATER DRIVE
ORLANDO, FL 32804
(407) 951-5915
CERTIFICATE OF AUTHORIZATION: 32644

MAJOR SITE PLAN
7-ELEVEN
AT SEC OF SE 92ND LP & SE 58TH AVE
BELLEVIEW, FL
MARION COUNTY

NO:	DATE:	REVISION / ISSUE:	BY:
3	12/07/2024	CITY OF BELLEVIEW UTILITY COMMENTS	JR

ENGINEER'S NAME & PE#

JEREMY R. ANDERSON, P.E.
P.E. LICENSE NO. 71636

PROJECT # 222.108

DATE 05/13/2024

SCALE N.T.S.

SHEET D3.2

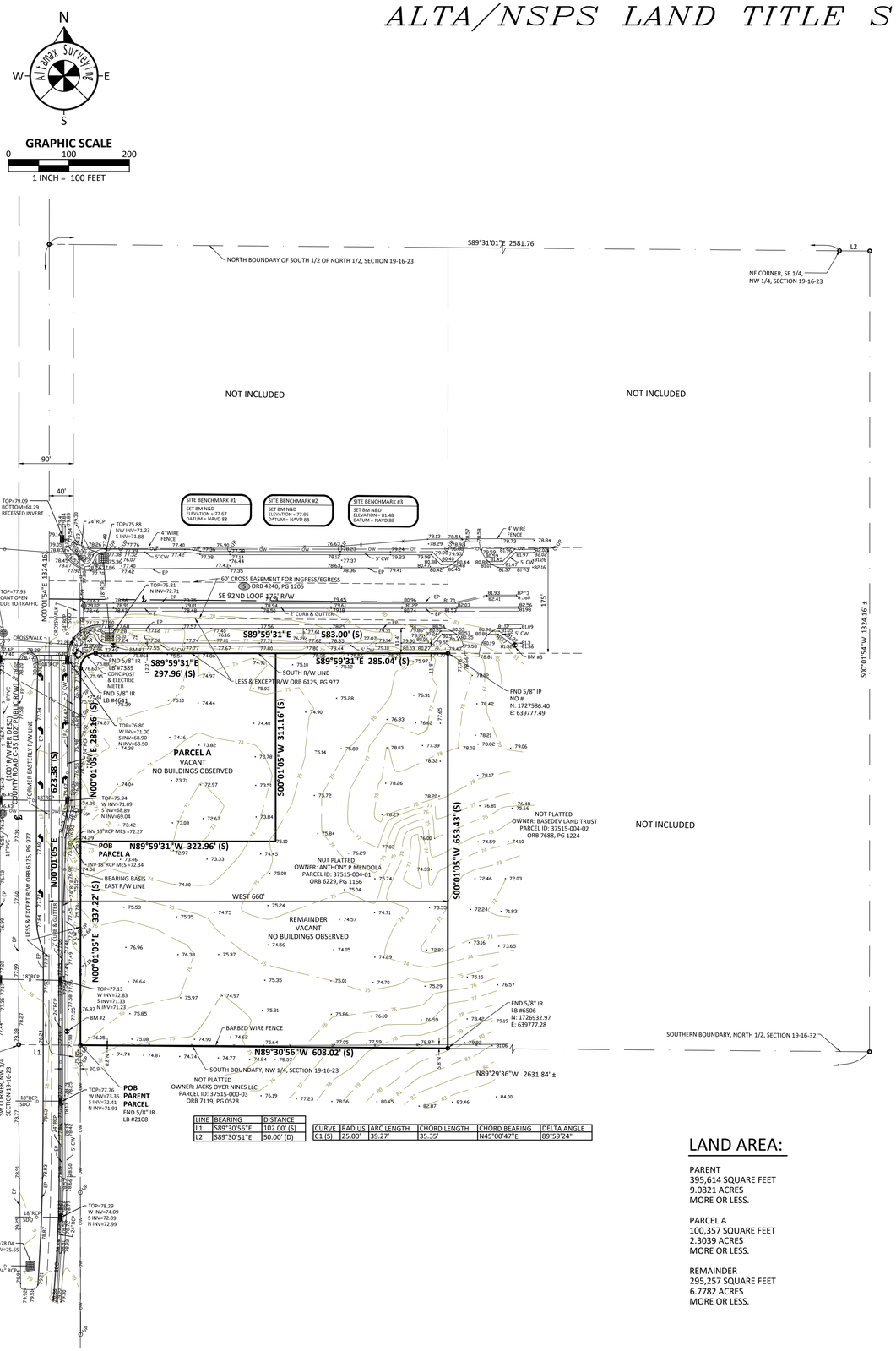
UTILITY DETAILS

Jeremy R. Anderson, State of Florida, Professional Engineer, License No. 71636

This item has been digitally signed and sealed by Jeremy R. Anderson, PE, on the date indicated here.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

ALTA/NSPS LAND TITLE SURVEY



LINE	BEARING	DISTANCE
L1	S89°30'56"E	102.00' (S)
L2	S89°30'51"E	50.00' (D)

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1 (S)	25.00'	39.27'	35.35'	N45°00'47"E	89°59'24"

GENERAL SURVEY NOTES:

1. BEARING STRUCTURE IS BASED ON THE MONUMENTED EAST R/W LINE OF COUNTY ROAD C-35, BEING N00°00'36"E (ASSUMED).

2. THIS SURVEY REFLECTS ONLY MATTERS OF RECORD AS PROVIDED BY THE CLIENT OR CLIENTS REPRESENTATIVE.

3. THIS SURVEY WAS MADE ON THE GROUND. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. ENGINEER AND CONTRACTOR SHALL VERIFY MEASUREMENTS OF CONNECTIONS TO EXISTING UTILITIES BEFORE ORDERING MATERIALS AND BEFORE COMMENCEMENT OF CONSTRUCTION. IF THERE IS A DISCREPANCY BETWEEN THE MEASUREMENTS SHOWN HEREON AND THE VERIFYING MEASUREMENTS, THIS SURVEYOR SHALL BE CONTACTED IMMEDIATELY TO FURTHER VERIFY THE DISCREPANCY.

4. THIS SITE LIES IN ZONE "X", BASED ON FLOOD INSURANCE RATE MAP NO. 12083C0733D, COMMUNITY NO. 120160, MARION COUNTY, FLORIDA, HAVING AN EFFECTIVE DATE OF AUGUST 28, 2008.

5. ACCORDING TO FLORIDA STATUTES, CHAPTER 472.025, A LAND SURVEYOR SHALL NOT AFFIX HIS SEAL OR NAME TO ANY PLAN OR DRAWING WHICH DEPICTS WORK WHICH HE IS NOT LICENSED TO PERFORM OR WHICH IS BEYOND HIS PROFESSION OR SPECIALTY THEREIN. THEREFORE, WE ARE UNABLE TO CERTIFY AS TO MUNICIPAL ZONING COMPLIANCE, INTERPRETATION OF ZONING CODES OR THE DETERMINATION OF VIOLATIONS THEREOF.

6. THIS SURVEY MADE WITH BENEFIT OF COMMITMENT FOR TITLE NO. 0224096, EFFECTIVE: AUGUST 26, 2022, ISSUED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY. SUBJECT PROPERTY IS A PORTION OF THE LANDS DESCRIBED IN THE TITLE COMMITMENT.

7. THIS ***"BOUNDARY AND TOPOGRAPHIC SURVEY"*** WAS MADE IN ACCORDANCE WITH LAWS AND/OR STANDARDS OF PRACTICE FOR THE STATE OF FLORIDA.

8. THE PROPERTY IS CONTIGUOUS TO SE 92ND LOOP AND COUNTY ROAD C-35, A PAVED PUBLIC RIGHT-OF-WAY.

9. OBSERVABLE SURFACE EVIDENCE OF UTILITIES SERVING THE PROPERTY AND STORM DRAINAGE FACILITIES ARE SHOWN HEREON.

10. ALL PARCELS AND/OR LOTS SHOWN HEREON ARE CONTIGUOUS BETWEEN SAID PARCELS AND/OR LOTS AND DO NOT CREATE ANY GAPS, GORES OR HIATUSES.

11. NO SURFACE EVIDENCE OF SITE USE AS A CEMETERY WAS OBSERVED.

13. ELEVATIONS ARE BASED ON BENCHMARK DESIGNATION Y 582, BEING: 84.82 FEET, (NAVD 88), PUBLISHED BY NGS (NATIONAL GEODETIC SURVEY).

14. THE MAPPED FEATURES SHOWN HEREON ARE RELATIVE TO FLORIDA STATE PLANE COORDINATE SYSTEM WEST ZONE, NAD(83)-(2011)-(EPOCH 2010.0000), ESTABLISHED PER FDOT FPRN.

NOTES PERTAINING TO TABLE A ITEMS OF ALTA/NSPS LAND TITLE SURVEY STANDARDS:

ITEM 16: NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS WAS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.

ITEM 17: NO EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS WAS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK. SURVEYOR IS NOT AWARE OF PROPOSED CHANGES IN STREET RIGHT OF WAY LINES.

LAND AREA:

PARENT
395,614 SQUARE FEET
9.0821 ACRES
MORE OR LESS.

PARCEL A
100,357 SQUARE FEET
2.3039 ACRES
MORE OR LESS.

REMAINDER
295,257 SQUARE FEET
6.7782 ACRES
MORE OR LESS.

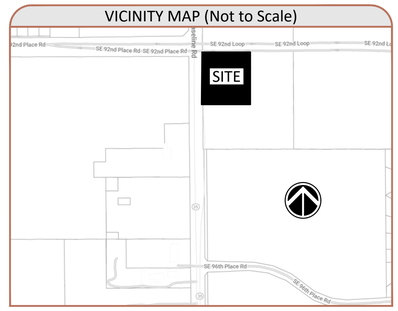
PARKING COUNT:

REGULAR SPACES: 0
HANDICAP SPACES: 0
TOTAL SPACES: 0

ZONING INFORMATION:

THE ZONING INFORMATION NOT PROVIDED AT TIME OF SURVEY.

VICINITY MAP (Not to Scale)



DESCRIPTION:

PARENT PARCEL:
COMMENCE AT THE SOUTHWEST CORNER OF THE NORTHWEST 1/4 OF SECTION 19, TOWNSHIP 16 SOUTH, RANGE 23 EAST, MARION COUNTY, FLORIDA; RUN THENCE S89°30'56"E ALONG THE SOUTH BOUNDARY OF THE NORTHWEST 1/4 OF SAID SECTION 19, A DISTANCE OF 102.00 FEET TO THE EAST RIGHT-OF-WAY LINE OF COUNTY ROAD C-35 PER OFFICIAL RECORDS BOOK 6125, PAGE 977, PUBLIC RECORDS OF MARION COUNTY, FLORIDA FOR A POINT OF BEGINNING; THENCE N00°01'05"E, ALONG SAID EAST RIGHT-OF-WAY LINE, A DISTANCE OF 623.38 FEET TO A POINT OF CURVATURE CONCAVE SOUTHEASTERLY HAVING A RADIUS OF 25.00 FEET, A CHORD BEARING OF N45°00'47"E AND A CHORD DISTANCE OF 35.35 FEET; RUN THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 89°59'24" A DISTANCE OF 39.27 FEET TO THE SOUTH RIGHT-OF-WAY LINE OF SE 92ND LOOP PER SAID OFFICIAL RECORDS BOOK 6125, PAGE 977; THENCE S89°59'31"E, ALONG SAID SOUTH RIGHT-OF-WAY LINE, A DISTANCE OF 583.00 FEET; THENCE S00°01'05"W A DISTANCE OF 653.43 FEET TO THE SOUTH BOUNDARY OF SAID NORTHWEST 1/4 OF SECTION 19; THENCE N89°30'56"W, ALONG SAID SOUTH LINE, A DISTANCE OF 608.02 FEET TO THE POINT OF BEGINNING.

PARCEL A:
COMMENCE AT THE SOUTHWEST CORNER OF THE NORTHWEST 1/4 OF SECTION 19, TOWNSHIP 16 SOUTH, RANGE 23 EAST, MARION COUNTY, FLORIDA; RUN THENCE S89°30'56"E ALONG THE SOUTH BOUNDARY OF THE NORTHWEST 1/4 OF SAID SECTION 19, A DISTANCE OF 102.00 FEET TO THE EAST RIGHT-OF-WAY LINE OF COUNTY ROAD C-35 PER OFFICIAL RECORDS BOOK 6125, PAGE 977, PUBLIC RECORDS OF MARION COUNTY, FLORIDA; THENCE N00°01'05"E, ALONG SAID EAST RIGHT-OF-WAY LINE, A DISTANCE OF 286.16 FEET TO A POINT OF CURVATURE CONCAVE SOUTHEASTERLY HAVING A RADIUS OF 25.00 FEET, A CHORD BEARING OF N45°00'47"E AND A CHORD DISTANCE OF 35.35 FEET; RUN THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 89°59'24" A DISTANCE OF 39.27 FEET TO THE SOUTH RIGHT-OF-WAY LINE OF SE 92ND LOOP PER SAID OFFICIAL RECORDS BOOK 6125, PAGE 977; THENCE S89°59'31"E, ALONG THE SOUTH RIGHT-OF-WAY LINE, A DISTANCE OF 297.96 FEET; THENCE S00°01'05"W A DISTANCE OF 311.16 FEET; THENCE N89°59'31"W A DISTANCE OF 322.96 FEET TO THE POINT OF BEGINNING.

SCHEDULE B-2 EXCEPTIONS NOTES:

4. TERMS AND PROVISIONS OF THAT DEVELOPER'S AGREEMENT RECORDED APRIL 8, 2005 IN OFFICIAL RECORDS BOOK 3996, PAGE 789. (AS TO ALL PARCELS). (ON SUBJECT PROPERTY-BLANKET IN NATURE)

5. SUBJECT TO TERMS AND CONDITIONS SET FORTH IN THAT CERTAIN CROSS EASEMENT FOR INGRESS AND EGRESS BY AND BETWEEN ANTHONY P. MENDOLA AND REBECCA J. MENDOLA, GRANTOR, AND ROY T. BOYD, III, AS TRUSTEE OF THE BASELINE 150 LAND TRUST AGREEMENT DATED NOVEMBER 1, 2005, GRANTEE, RECORDED NOVEMBER 10, 2005, IN OFFICIAL RECORDS BOOK 4240, PAGE 1205. (AS TO ALL PARCELS). (LIES IN SE 92ND LOOP RIGHT-OF-WAY AS SHOWN HEREON)

6. SUBJECT TO THE TERMS AND CONDITIONS SET FORTH IN THAT CERTAIN RECIPROCAL EASEMENT AGREEMENT BY AND BETWEEN ANTHONY P. MENDOLA AND REBECCA J. MENDOLA, HIS WIFE, GRANTOR, AND _____, GRANTEE, RECORDED _____, 2022, IN OFFICIAL RECORDS BOOK _____, PAGE _____. (AS TO ALL PARCELS). (DOCUMENT NOT PROVIDED)

ALTA/NSPS Land Title Survey Certification

To: R.K.M. DEVELOPMENT CORP; FIDELITY NATIONAL TITLE INSURANCE COMPANY; INVESTORS REALTY TITLE COMPANY, L.L.C.

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, 5, 6(a), 6(b), 7(a), 7(b1), 7(c), 8, 9, 11(a), 13, 14, 16, 17 and 19 of Table A thereof. The field work was completed on 1/3/2024.

Date: 1/3/2024

_____
JAMES D. BRAY PSM 6507

JAMES DENNIS BRAY
License Number
PSM6507
STATE OF FLORIDA
Professional Surveyor and Mapper

This Survey is "Not Valid" without the original signature and seal of this Florida licensed Surveyor and Mapper, unless provided with electronic signature. The seal appearing on this document was authorized by the signing Professional Surveyor and Mapper on the Date of the electronic signature.

LEGEND

AC	AIR CONDITIONER
-BB-	BOTTOM OF BANK
BHM	BUILDING HEIGHT MEASUREMENT
	BACK FLOW PREVENTER
	BENCHMARK
	BOLLARD
-E-	BURIED ELECTRIC LINE
-C-	BURIED CABLE TELEVISION LINE
CALC	CALCULATED
C&M	CALCULATED & MEASURED
Δ	CENTRAL ANGLE
CBW	CONCRETE BLOCK WALL
CC	COVERED CONCRETE
CCR	CERTIFIED CORNER RECORD
CF	CONCRETE FLUME
CHW	CONCRETE HEADWALL
CLF	CHAIN LINK FENCE
℄	CENTERLINE
CM	CONCRETE MONUMENT
CMP	CORRUGATED METAL PIPE
+CO	CLEAN OUT
CONC	CONCRETE
COVD	COVERED
CP	CONCRETE PAD
	CURB INLET
CW	CONCRETE WALKWAY
-D-	BURIED STORM/DRAIN LINE
DB	DEED BOOK
DE	DRAINAGE EASEMENT
	DOT INLET
DP	DUMPSTER PAD
DW	DRIVEWAY
	EASEMENT NUMBER
	ELECTRIC BOX
	ELECTRICAL METER
EL	ELEVATION
ESMT	EASEMENT
EP	EDGE OF PAVEMENT
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FPRN	FLORIDA PERMANENT REFERENCE NETWORK
FIRM	FLOOD INSURANCE RATE MAP
FFE	FINISHED FLOOR ELEVATION
	FIRE HYDRANT
-FM-	BURIED FORCE MAIN LINE
FND	FOUND
-FO-	BURIED FIBER OPTIC CABLE LINE
	FIBER OPTIC CABLE BOX
FP	FLAG POLE
-G-	BURIED GAS LINE
	GAS METER
	GAS VALVE
	GREASE TRAP MANHOLE
	GUY WIRE ANCHOR
	HANDICAP PARKING
HDPE	HIGH DENSITY POLYETHYLENE PIPE
INST#	RECORD INSTRUMENT#
INV	INVERT ELEVATION
IP	IRON PIPE
IR	IRON ROD
L	ARC LENGTH
LB	LICENSED BUSINESS
	LIGHT POLE
LS	LICENSED SURVEYOR
LSA	LANDSCAPED AREA
MF	METAL FENCE
MS	METAL SHED
	MITERED END SECTION
	MONITORING WELL
N&D	NAIL & DISK
NAVD	NORTH AMERICAN VERTICAL DATUM
NAD	NORTH AMERICAN DATUM
NGVD	NATIONAL GEODETIC VERTICAL DATUM
NTS	NOT TO SCALE
ORB	OFFICIAL RECORDS BOOK
-OW-	OVERHEAD WIRE
PB	PLAT BOOK
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PP	PER PLAT
PG	PAGE
PI	POINT OF INTERSECTION
POB	POINT OF BEGINNING
POC	POINT OF COMMENCEMENT
PRC	POINT OF REVERSE CURVATURE
# PS	PARKING SPACES
PSM	PROFESSIONAL SURVEYOR & MAPPER
PSP	PEDESTRIAN SIGNAL POLE
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE PIPE
R	CURVE RADIUS
RCP	REINFORCED CONCRETE PIPE
-R-	REUSE WATER LINE
	REUSE WATER METER
	REUSE WATER VALVE
RP	RAMP
R/W	RIGHT-OF-WAY
	SANITARY MANHOLE
-S-	BURIED SANITARY LINE
(S)	SURVEY
SP	STATE PLANE
SDO	SHOWN FOR DIRECTION ONLY
SN	SIGN
SWF	STOCK WIRE FENCE
	SEWER VALVE
XXX.00	SPOT ELEVATION
	STORM MANHOLE
-T-	BURIED TELECOMMUNICATIONS LINE
	TELECOMMUNICATIONS MANHOLE
	STORM INLET
-TB-	TOP OF BANK
TPP	TRAFFIC SIGNAL POLE
	TRAFFIC SIGN
	TRANSFORMER/JUNCTION BOX
	TELEPHONE RISER
	TRAFFIC SIGNAL BOX
	TELEVISION BOX
TSW	TRAFFIC SIGNAL WIRE
TYP	TYPICAL
-U-	UNKNOWN UTILITY
UE	UTILITY EASEMENT
O UP	UTILITY POLE
UM	UTILITY MARKER
VCP	VITRIFIED CLAY PIPE
VF	VINYL FENCE
-W-	BURIED WATER LINE
WF	WOOD FENCE
WS	WOOD SHED
	WATER VALVE
	WATER METER
YD	YARD DRAIN

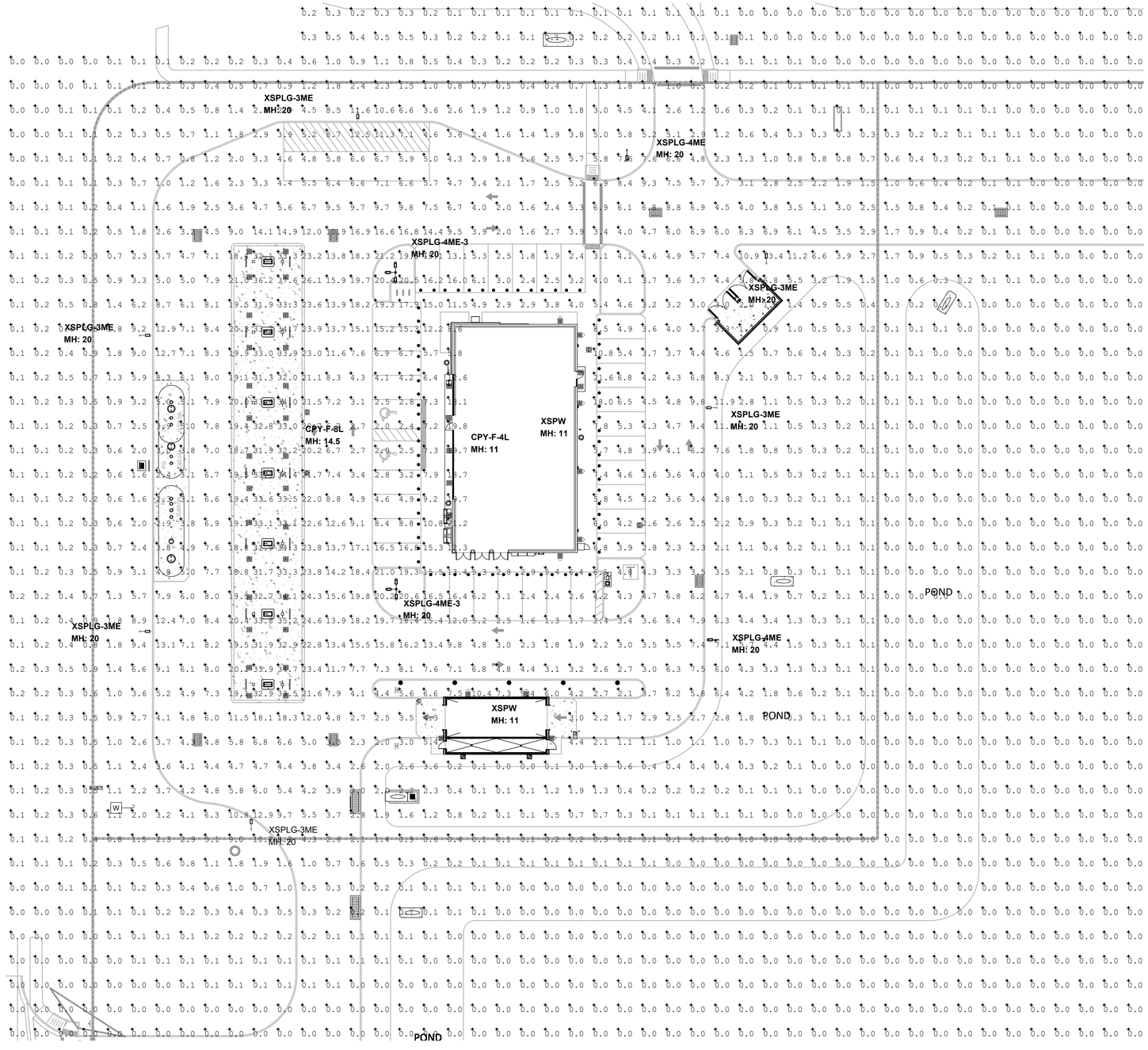
ADDRESS:
UNASSIGNED 92ND LOOP
BELLEVIEW, FL 34420

Job Information
JOB NO. 905244
CF NO. MRN-19-16-23
FIELD DATE: 09/22/2022
SCALE: 1" = 100'
DRAWN BY: GLT

Revisions		
Date:	Description	By:
01/03/24	Resurvey & Additional Topo	GLT

Altamax Surveying
910 Belle Avenue, Suite 1100
Casselberry, FL 32708
Phone: 407-677-0200
Licensed Business No. 7833
www.altamaxsurveying.com

SHEET 1 OF 1



Fixture Mounting Height: 20' AFG (17' Pole + 3.0' Base)

Pole Schedule
(10) SSS-4-7-17-CW-BS-OT-C-BZ (17' X 4" X 7ga STEEL SQUARE POLE, Tenon)

Proposed poles meet 180 MPH sustained winds.

Additional Equipment:
(8) PD-1H4 (Single Head Tenon)
(2) PD-3H4(90) (Triple Head Tenon @ 90°)

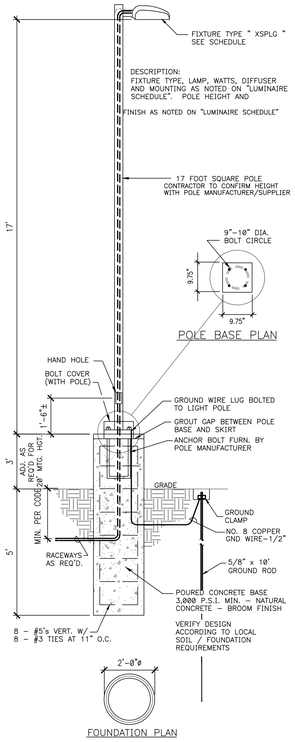
*** CUSTOMER TO VERIFY ORDERING INFORMATION AND CATALOGUE NUMBER PRIOR TO PLACING ORDER ***

Calculation Summary (Footcandles calculated using LMF: 1.00)						
Label	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts	Fc	3.17	37.6	0.0	N.A.	N.A.
Paved Parking	Fc	5.79	21.2	1.1	5.26	19.27

Luminaire Schedule							
Symbol	Qty	Label	Arrangement	LMF	Lum. Lumens	Lum. Watts	Part Number
	7	CPY-F-4L	SINGLE	1.000	4590	31	CPY250-C-4L-57K7-F-UL-DM-BK-HZ
	28	CPY-F-8L	Single	1.000	8475	53	CPY250-C-8L-57K7-F-UL-DM-WH-HZ
	6	XSPLG-3ME	SINGLE	1.000	23800	184	XSPLG-D-HT-3ME-24L-57K7-UL-BK-N
	2	XSPLG-4ME	Single	1.000	23800	184	XSPLG-D-HT-4ME-24L-57K7-UL-BK-N
	2	XSPLG-4ME-3	3 @ 90°	1.000	23800	184	XSPLG-D-HT-4ME-24L-57K7-UL-BK-N
	10	XSPW	WALL MOUNT	1.000	4270	31	XSPW-B-WM-3ME-4L-57K-UL-BK

1 SITE LIGHTING PLAN
1" = 20'

NORTH



NOTES:
ALL CONCRETE POLE BASES TO BE INSTALLED OF 24"–36" BEHIND BACK OF CONCRETE CURB.

POLE SHALL BE CAPABLE OF WITHSTANDING 140 MPH WIND SPEED.

SITE LIGHTING POLE PERMIT WILL BE SUBMITTED UNDER A SEPARATE APPLICATIPON AND AT LATER DAY.

2 SITE LIGHTING POLE AND BASE
NTS

INTERPLAN
INTERPLAN LLC
AR99238
CA 8660
ARCHITECTURE
ENGINEERING
PERMITTING
220 E. CENTRAL PKWY, STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

SEAL:

THIS DOCUMENT IS NOT FOR REGULATORY APPROVAL, PERMITTING, OR CONSTRUCTION.

1 04/01/24 CIVIL COMMENTS
NO DATE REMARKS
REVISIONS

7-ELEVEN
STORE #42379

SEC 58TH AVE AND 92ND LOOP
BELLEVIEW FL, 34480

PROJECT NO: 2022.0783
DATE: FEBRUARY 26, 2024

SL1.0
SITE LIGHTING PLAN

CHECKED: SN DRAWN: SB