LAKE COUNTY
FLORIDA

Right-of-Way Utilization Permit

Please complete a separate application for each road

Applicant Name: City of Clermont / Attn: Paul Roy

Date: 3-3-15

Paul Roy
Name Permit Will Be Returned To:

1733 / 24 / 22 / 25
County Road # Section Township Range

3335 Hancock Road
Street Address

12th Street / Lake Minneola Shores
Road Name

Clermont, FL 34711
City, State, Zip

Westside Water Main Loop /
Subdivision and/or Site Plan Name / Number

352-241-0178
Telephone Number

proy@clermontfl.org
Applicant's e-mail address

☒ 3-26-15 / Credit Card
Paid Date Rec'd By

If this project will result in any new above ground structures, poles, or facilities please state where and what is proposed. Applicant may be requested to provide an engineer's certification that roadway clearance and sight distances have been met.

Description of Work: Construction of 12" Water Main via Horizontal Directional Drilling and Open Cut methods see attached plans). Plans are being submitted for 12th Street only, CR 561.

Contractor: N/A
Telephone Number: N/A
Start of Construction Date: Summer 2015 (est.)
Length of time of construction: 365 +/- days
Is proposed work within city limits? YES
If so, what city? CLERMONT

A letter of notification was mailed on (see attached please) to the following utilities & municipalities:

Applicant declares that he/she has determined the location of all existing underground and aerial utilities.
Applicant declares that he/she has read the attached application requirements and permit conditions.

Signature Of Applicant

Applicant, Please Print Name: PAUL ROY

To be completed by County Staff

Permit # 6608
Permit Fee: $100.00
Fee Code: **PWRW**

Checked by: [signature]
Date Checked: 3-23-15

Approved by: [signature]
Date Approved: 3-23-15

Special Conditions: See Lake County's open cut detail - attached. Amended to go an additional Block 75
Expiration Date: ~~3-23-16~~ 3-23-17 1.5. 2-25-16

For inspection, call the Lake County Public Works Department at 352-483-9000
Submit Permit to: Lake County Public Works, 437 Ardice Avenue, Eustis, FL 32726

Public Works Department
Road Operations Division

Entered Data One	3-4-15
First Scan	"
Updated Data One	3-25-15
Second Scan	"
Returned to Client	

Right-of-Way Utilization Permit
Effective July 2012

LAKE COUNTY
FLORIDA

Right-of-way Utilization Permit Requirements

The purpose of the Right-of-Way Utilization permit is to control the use of public rights-of-way and public easements and protect the health, safety and welfare of the public. Any work within public rights-of-way requires an approved right-of-way utilization permit.

Application Requirements:
For each road involved, please submit one (1) original application and supporting documentation to the Lake County Department of Public Works.

Completed applications must include a sketch or construction plans drawn to scale, showing the following:

1. The offset from the centerline of the right-of-way or roadway to the proposed utility installation, the road right-of-way width and pavement width, the distance from the edge of pavement to the utility, sidewalks, and the location of all other utilities, including traffic signal utilities, within the area of work.

2. One or more typical cross sections to adequately reflect the location of the utility. Please indicate the minimum vertical clearance above or below the pavement or natural ground.

3. The location of the area of work in relation to the nearest road intersection, bridges, railroad crossings, and other physical features. Please include a location or vicinity map showing the general location of the installation.

All permit applications must demonstrate that the proposed improvements conform to the right-of-way utilization requirements included in the *Lake County Land Development Regulations.*

Projects of significant length and land size may require a complete right-of-way survey.

A performance bond may be required of the applicant in the event the work covered by the right-of-way utilization permit has the potential to significantly damage the right-of-way. The amount of the performance bond shall be 110% of the estimated cost to repair such damage, as determined by Lake County.

Prior to construction, applicant shall provide written notice to all property owners adjacent to the project limits. This notice shall include, at a minimum, the anticipated construction schedule, maintenance of traffic plan and any impacts, permanent or temporary, to the adjacent properties. The notice must provide contact information including the name and telephone number of the project manager. Within a minimum of fourteen (14) calendar days prior to construction, applicant shall provide to the County a copy of the notification with a list of the parties notified.

A copy of the approved permit and related supporting documents shall be on site at all times during construction.

Permit Conditions:
Whenever necessary for the construction, maintenance, operation or alteration of the right-of-way, as determined by the County, any or all of the appurtenances authorized by this permit shall be immediately removed from the right-of-way or relocated, as required by the County, at the expense of the applicant unless reimbursement is specifically authorized.

If above ground utilities are being replaced, the old utilities and utility appurtenances must be removed from County right-of-way within thirty (30) days after new utilities are installed.

All work, materials and equipment shall meet all County codes and standards and shall be subject to inspection by the County. All right-of-way disturbed by this work shall be restored to its original condition or better and in accordance to applicable County Codes. All disturbed areas must be sodded, matching existing grass type. Bahia sod shall be used if no grass is present at time of construction.

The construction and maintenance of this utility shall not interfere with the property and rights of a prior applicant.

Where possible, excavation shall not be allowed within five (5) feet from the edge of the pavement. Situations that cannot meet this requirement shall require prior approval of the County.

The County shall be notified twenty-four (24) hours in advance of starting work. In the interest of public safety all operations shall take place during daylight hours, unless specifically authorized, and discontinued by sunset with proper signage and traffic control devices maintained during off hours.

All traffic detours shall be restricted to the limits of right-of-way with necessary flagmen and marking devices. A traffic detour or lane closure shall require specific approval by the County.

Written approval from the Lake County Engineer shall be required before any alterations to existing traffic signal equipment including, but not limited to: vehicle detection loops and signal timing.

If traffic signal vehicle detection loops are rendered inoperable, temporary detection shall be installed within twenty-four (24) hours.

All traffic signal utilities disturbed by this work shall be restored to its original condition or better. Traffic signal utilities include but not limited to: vehicle detection loops, conduit, cabling, pull boxes, pedestrian signal equipment, span assemblies, signal heads, cabinet assemblies, cameras and fiber optic infrastructure.

All utility construction and maintenance shall be performed with proper shoring, barricades, and maintenance of traffic signage in accordance with the *Manual of Uniform Traffic Control Devices*, with the regulations of Florida Industrial Safety Board, and the *Florida Department of Transportation Safety Manual*.

The County shall not be responsible for damages to any structure placed within the right-of-way. All structures shall be properly maintained, adequately visible or properly delineated to prevent damage due to normal maintenance of the right-of-way.

Open cuts of roads will not be allowed unless specifically authorized by Lake County. Directional bore or jack and bore operations should maintain a five (5) foot minimum clearance from edge of pavement on road crossing each side. Recommended bore depth is thirty-six inches (36") and a minimum bore depth is thirty inches (30"). Any overhead installations should maintain a minimum of eighteen (18) feet vertical clearance over all roadways and driveways.

This permit is effective for one year from its approval date, unless otherwise rescinded by Lake County.

Inspection and Approval of Work:
The County shall have the right to inspect and approve all materials and/or phases of work. Final inspection and acceptance of work by the County must be obtained to document the completion of the work. All work shall be subject to the construction requirements and inspections as required in other provisions of the *Lake County Land Development Regulations*. Pursuant to Section 337.403(1), Florida Statues, any utility placed upon, under, over, or along any public road or publicly owned rail corridor that is found by Lake County to be unreasonably interfering in any way with the convenient, safe, or

continuous use, or maintenance, improvement, extension, or expansion, of such public road or publicly owned rail corridor shall, upon thirty (30) days written notice to the utility or its agent by Lake County be removed or relocated by such utility at its own expense.

It is agreed that in the event the installation, adjustment or relocation of said utilities are scheduled to be done simultaneously with Lake County construction work, the applicant shall coordinate with Lake County before proceeding and shall cooperate with the Lake County's contractor to arrange the sequence of work so as not to delay the work of Lake County contractor, defend any legal claims of Lake County's contractor due to delays caused by the applicant's failure to comply with the approved schedule, and shall comply with all provisions of the law and Lake County's current *Utility Accommodation Manual*. The applicant shall not be responsible for delay beyond its control.

All right-of-way utilization activities shall be reported to Sunshine State One-Call at least seventy-two (72) hours prior to commencement.

Guarantee and Responsibility for Compliance:
In the case of noncompliance with the County's requirements, this permit will be void and the facility will be brought into compliance or removed from the right-of-way at no cost to the County.

The County may issue "Stop Work" order(s) upon any permittee committing or creating an unsafe act which may create a public hazard or who is not complying with this permit or the applicable codes. The order shall remain in effect until such time as these matters are corrected.

Permits shall be issued with the understanding that the applicant shall guarantee all work performed under the terms of the permit for a period of one (1) year from the date of final inspection and acceptance of work.

Any failures shall be repaired by the applicant, at the direction of the County, within five (5) days, unless the urgency of the problem requires a quicker reaction time.

The applicant shall be responsible for all repair costs incurred due to damages to existing utilities by failure to use due care, including errors in locating existing utilities during construction.

Removal/Relocation of Improvements: Upon ten (10) days written notice, the applicant shall be required to remove and/or relocate the improvements placed within the right-of-way at the applicant's sole expense.

It is expressly stipulated that this permit is a license for permissive use only and that the placing of facilities upon public property pursuant to this permit shall not operate to create or vest any property right in said holder.

It is understood and agreed that the rights and privileges herein set out are granted only to the extent of the County's right, title and interest in the land to be entered upon and used by the holder, and the holder will, at all times, assume all risk of and indemnify, defend and save harmless the County of Lake from and against any and all loss, damage, cost or expense arising in any manner on account of the exercise or attempted exercises by said holder of the aforesaid rights and privileges.

I have read and understand the above requirements

_____

Applicant's Signature/Date

See updated application dated Feb 2015

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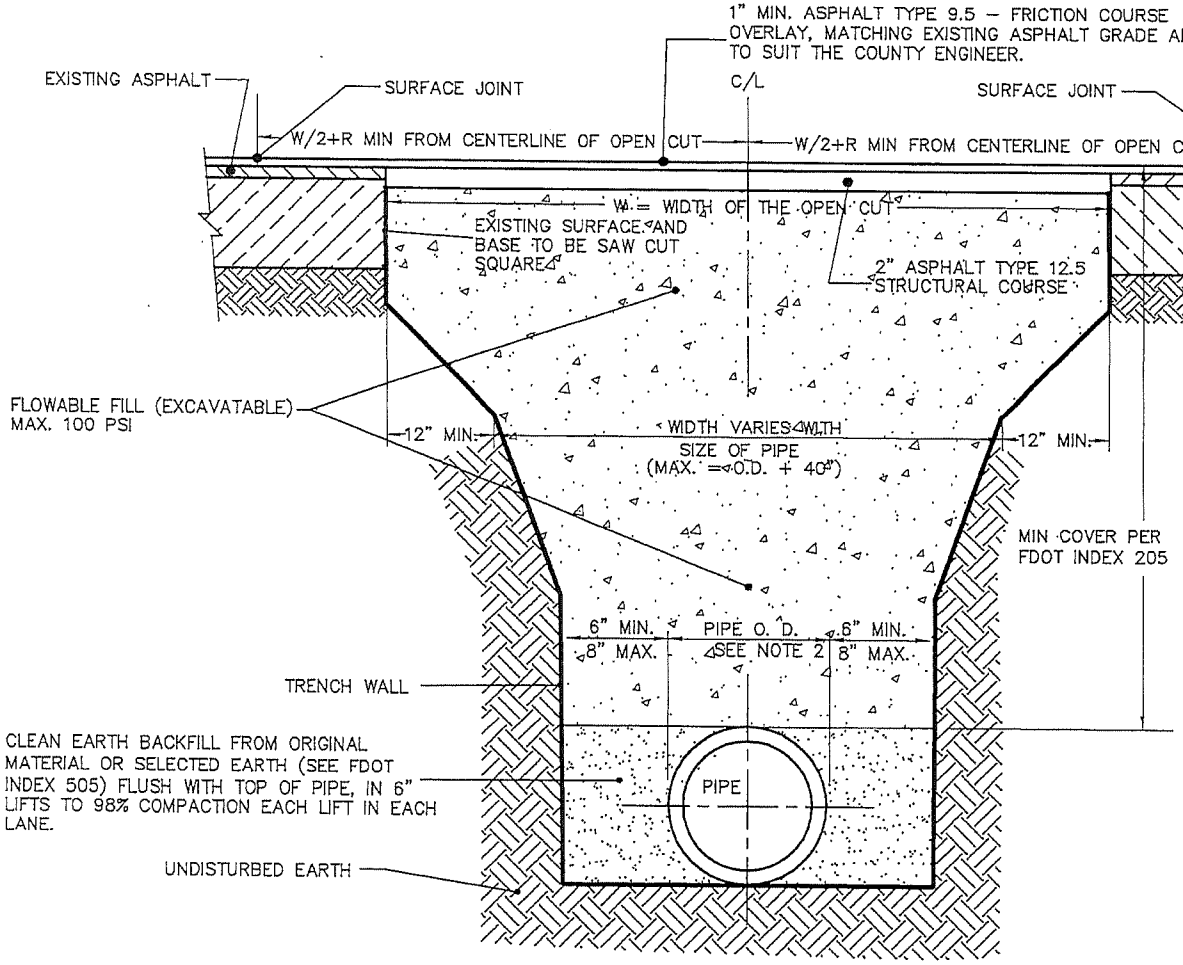
I have read and understand the above requirements

Applicant's Signature **Date** 3/3/2015

OPEN CUT DETAIL

STANDARD INSTALLATION OF CROSS DRAIN PIPE FOR APPROVED OPEN CUTS OR ROAD CROSSINGS DURING CONSTRUCTION.



OPEN CUT NOTES

1. PIPE TRENCHES OUTSIDE ROADWAY WILL REQUIRE CLEAN EARTH BACKFILL FROM ORIGINAL MATERIAL OR SELECTED EARTH (PER FDOT INDEX 505) IN 6" LIFTS AT 95% COMPACTION FOR EACH LIFT.
2. THE PIPE O. D. REFERS TO OUTSIDE EDGES OF MULTIPLE PIPES.
3. THE VALUE OF "R" IS THE MIN AMOUNT OVERLAY OF EXISTING ASPHALT PER "TABLE 1" PAST THE OPEN CUT. THIS DISTANCE MAY BE INCREASED DEPENDING ON PROJECTS LIMITS.

TABLE 1

ROAD TYPE	R
LOCAL ROAD	2'
COLLECTOR ROAD UP TO 45 MPH	15'
COLLECTOR ROAD GREATER THAN 45 MPH	25'

OPEN CUTS WILL NOT BE ALLOWED UNLESS SPECIFICALLY AUTHORIZED BY LAKE COUNTY PUBLIC WORKS DEPARTMENT

SECTION	TOWNSHIP	RANGE

DESIGNED:	FJS	DATE:	FEB 2012
DRAWN:	SNL	DATE:	FEB 2012
APPROVED:	FJS	DATE:	FEB 2012

LAKE COUNTY FLORIDA

DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION
437 ARDICE AVE. EUSTIS, FLORIDA 32726

OPEN CUT DETAIL
FOR LAKE COUNTY
MAINTAINED ROADS

SIGNATURE
DATE
P.E. - FL. REG. NO.

CAD FILE: STDIDCP

SHEET #: 1

RECEIPT

03/26/2015

LAKE COUNTY BOCC
315 W MAIN ST
Tavares , FL 32778
Phone

Transaction Type : Sale

Comment : RIGHT OF WAY PERMIT FOR 12TH ST/ LAKE MINNEOLA SHORES

Merchant-Defined Data Fields

Merchant-Defined Data Field 1 : RIGHT OF WAY UTILIZATION PERMIT
Department : PUBLIC WORKS
Merchant-Defined Data Field 3 : 5056260-341213

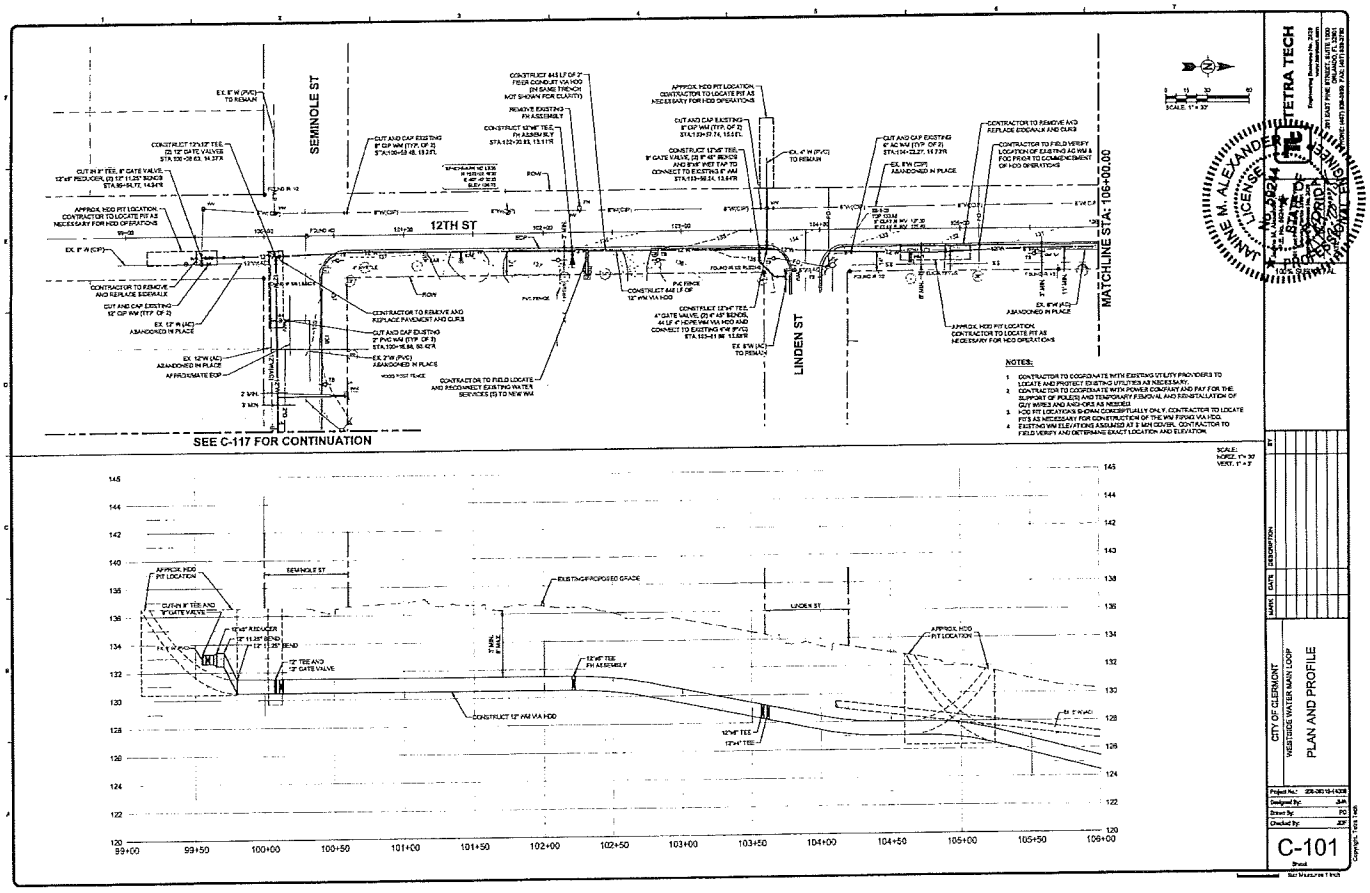
Total : 101.00 USD

Cardholder Information

Name HEATHER WOODING
Credit Card Type : MasterCard
Credit Card Number : ##########1586

Company : CITY OF CLERMONT
Phone : 3522410178
Email : HWOODING@CLERMONTFL.ORG

Rec'd: 3·20·15



TETRA TECH

Engineering Business No. 2039

201 EAST PINE STREET, SUITE 1300
ORLANDO, FL 32801
PHONE: (407) 836-3000 FAX: (407) 836-3750

LANCE M. ALEXANDER
LICENSE NO. 74214
STATE OF FLORIDA
PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION

CITY OF CLERMONT
WESTSIDE WATER MAIN LOOP

PLAN AND PROFILE

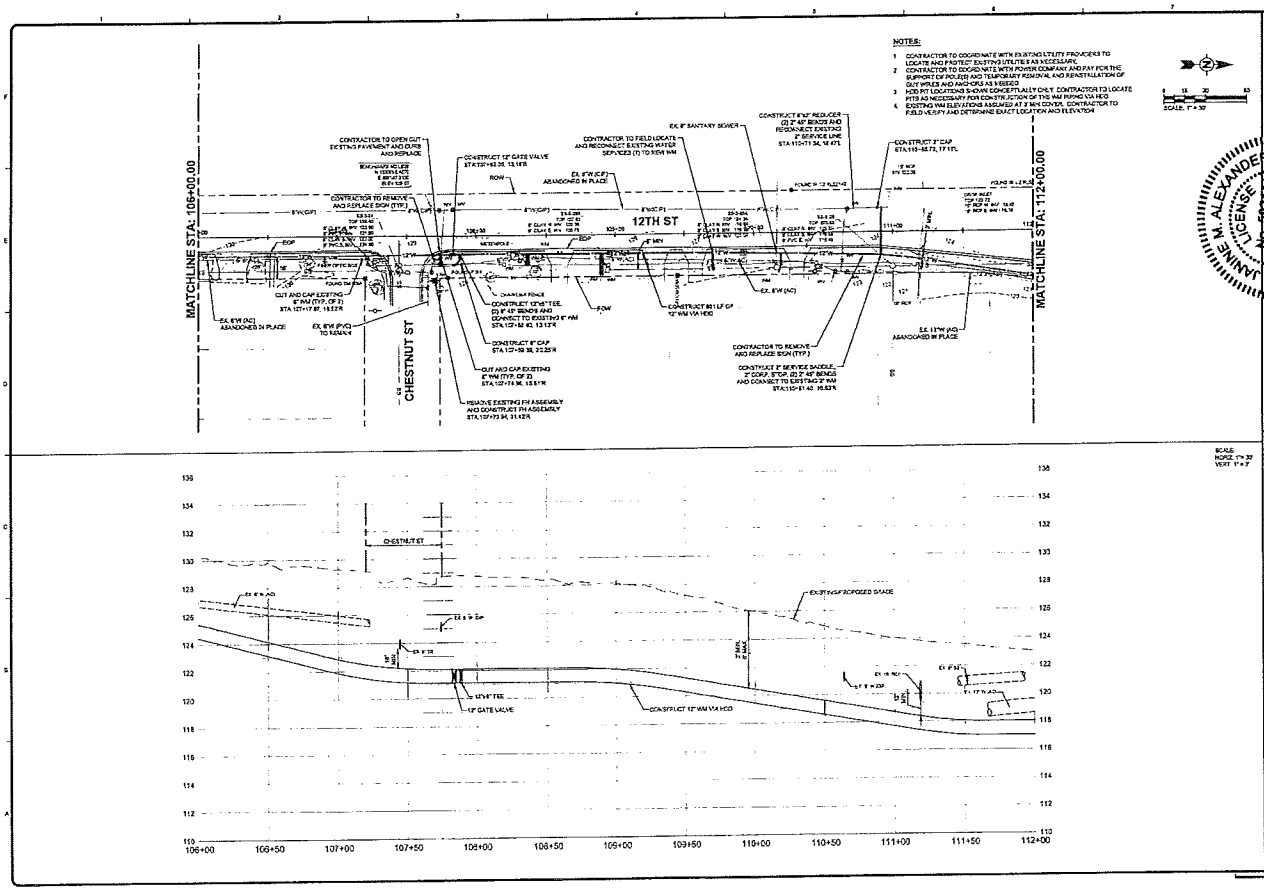
Project No.: 308-0019-1/008
Date: 03/16/15
Designed By: JLA
Drawn By: PG
Checked By: JSF

C-101

Sheet

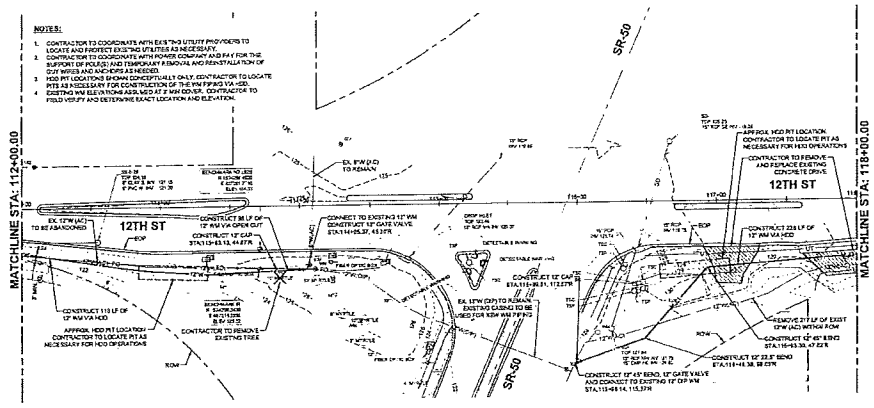
Bar Measures 1 Inch

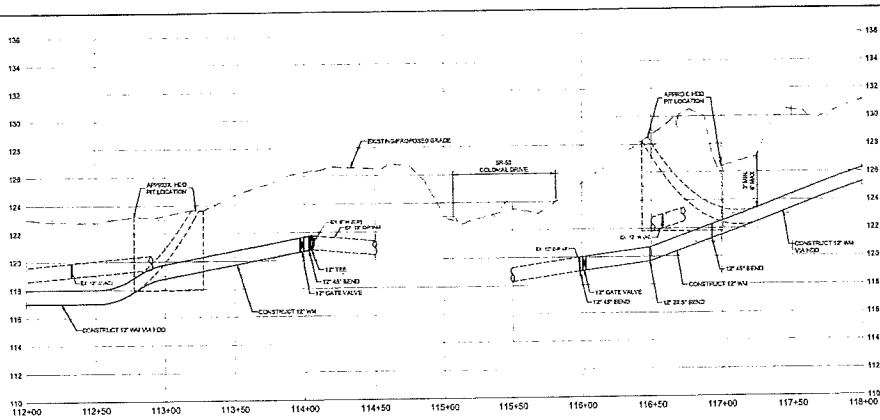
Copyright, Tetra Tech


NOTES:
1. CONTRACTOR TO COORDINATE WITH EXISTING UTILITY PROVIDERS TO LOCATE AND PROTECT EXISTING UTILITIES AS NECESSARY.
2. CONTRACTOR TO COORDINATE WITH POWER COMPANY AND PAY FOR THE SUPPORT OF POLE(S) AND TEMPORARY REMOVAL AND REINSTALLATION OF GUY WIRES AND ANCHORS AS NEEDED
3. HDD PIT LOCATIONS SHOWN CONCEPTUALLY ONLY. CONTRACTOR TO LOCATE PITS AS NECESSARY FOR CONSTRUCTION OF THIS AM PIPING VIA HDD
4. EXISTING WM ELEVATIONS ASSUMED AT 3' MIN COVER. CONTRACTOR TO FIELD VERIFY AND DETERMINE EXACT LOCATION AND ELEVATION
SCALE: 1" = 30'
MATCHLINE STA: 106+00.00
MATCHLINE STA: 112+00.00
12TH ST
CHESTNUT ST
CONTRACTOR TO OPEN CUT EXISTING PAVEMENT AND CURB AND REPLACE
CONTRACTOR TO REMOVE AND REPLACE SIGN (TYP.)
CONTRACTOR TO FIELD LOCATE AND RECONNECT EXISTING WATER SERVICES (7) TO NEW WM
EX. 8" SANITARY SEWER
CONSTRUCT 8"x6" REDUCER (2) 22.5° 45° BENDS AND RECONNECT EXISTING 2" SERVICE LINE
CONSTRUCT 2" CAP
CONSTRUCT 12" GATE VALVE
EX. 8" WM (AC) ABANDONED IN PLACE
CUT AND CAP EXISTING 6" WM (TYP. OF 3)
EX. 8" WM (AC) ABANDONED IN PLACE
EX. 8" WM (P/C) TO REMAIN
CONSTRUCT 12"x6" TEE, (3) 8" LF BENDS AND CONNECT TO EXISTING 6" WM
CONSTRUCT 8" CAP
CUT AND CAP EXISTING 6" WM (TYP. OF 2)
REMOVE EXISTING FH ASSEMBLY AND CONSTRUCT FH ASSEMBLY
CONSTRUCT 881 LF OF 12" WM VIA HDD
CONTRACTOR TO REMOVE AND REPLACE SIGN (TYP.)
CONSTRUCT 2" SERVICE SADDLE, 2" CORP. STOP, (2) 2" 45° BENDS AND CONNECT TO EXISTING 2" WM
EX. 12" WM (AC) ABANDONED IN PLACE
EXISTING/PROPOSED GRADE
CONSTRUCT 12" WM VIA HDD
12"x6" TEE
12" GATE VALVE
SCALE
HORIZ. 1" = 30'
VERT. 1" = 5'
106+00
106+50
107+00
107+50
108+00
108+50
109+00
109+50
110+00
110+50
111+00
111+50
112+00
TETRA TECH
Engineering Business No. 4424
311 EAST PINE STREET, SUITE 1000
ORLANDO, FLORIDA 32801
PHONE (407) 839-9400 FAX (407) 839-9700
JANINE M. ALEXANDER
LICENSE
NO. 73777
STATE OF FLORIDA
PROFESSIONAL ENGINEER
MARK
DATE
DESCRIPTION
BY
CITY OF CLERMONT
WESTSIDE WATER MAIN LOOP
PLAN AND PROFILE
Project No.: 22E-0312-0428
Designed By: JMA
Drawn By: RO
Checked By: JKF
C-102
Sheet
Copyright 1999-2020

NOTES:

1. CONTRACTOR TO COORDINATE WITH EXISTING UTILITY PROVIDERS TO LOCATE AND PROTECT EXISTING UTILITIES AS NECESSARY.
2. CONTRACTOR TO COORDINATE WITH POWER COMPANY AND PAY FOR THE SUPPORT OF POLE(S) AND TEMPORARY REMOVAL AND REINSTALLATION OF GUY WIRES AND ANCHORS AS NEEDED.
3. HDD PIT LOCATIONS SHOWN CONCEPTUALLY ONLY. CONTRACTOR TO LOCATE PITS AS NECESSARY FOR CONSTRUCTION OF THE WM PIPING VIA HDD.
4. EXISTING WM ELEVATIONS ARE BASED AT 2' MIN COVER. CONTRACTOR TO FIELD VERIFY AND DETERMINE EXACT LOCATION AND ELEVATION.





TETRA TECH

Engineering Business No. 4229

201 EAST FIFTH STREET, SUITE 1000
CINCINNATI, OHIO 45202

PHONE: (513) 651-3440 FAX: (513) 651-3779

JAMINE M. ALEXANDER
LICENSE NO. 50824
STATE OF OHIO
100% SUBMITTAL
PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION	BY

CITY OF CLERMONT

WEST SIDE WATER MAIN LOOP

PLAN AND PROFILE

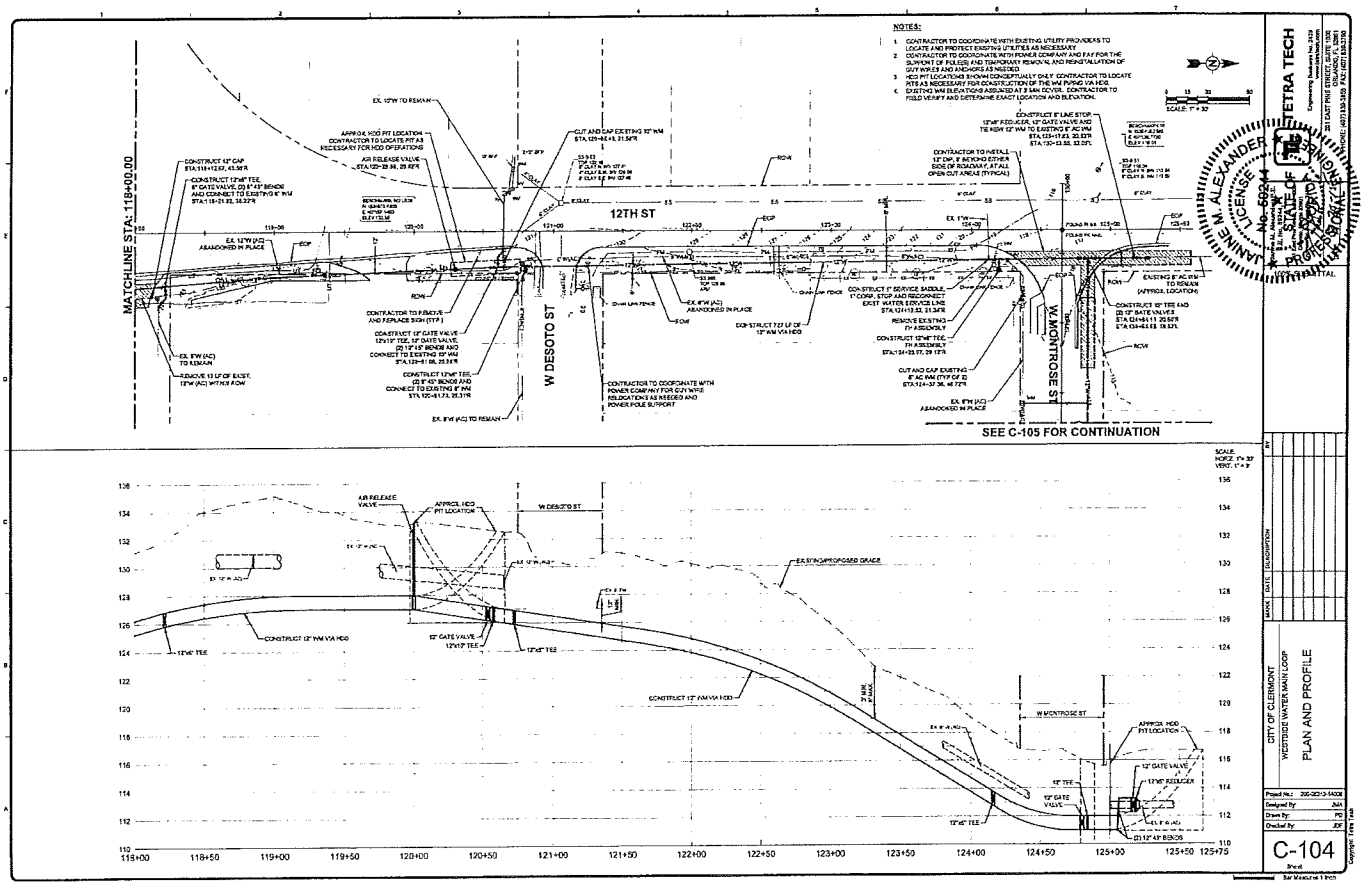
Project No.: 200-320 C1-14016
Designed By: BJA
Drawn By: HO
Checked By: JCF

C-103

Sheet

For Measurement 1 Inch

Copyright, Tetra Tech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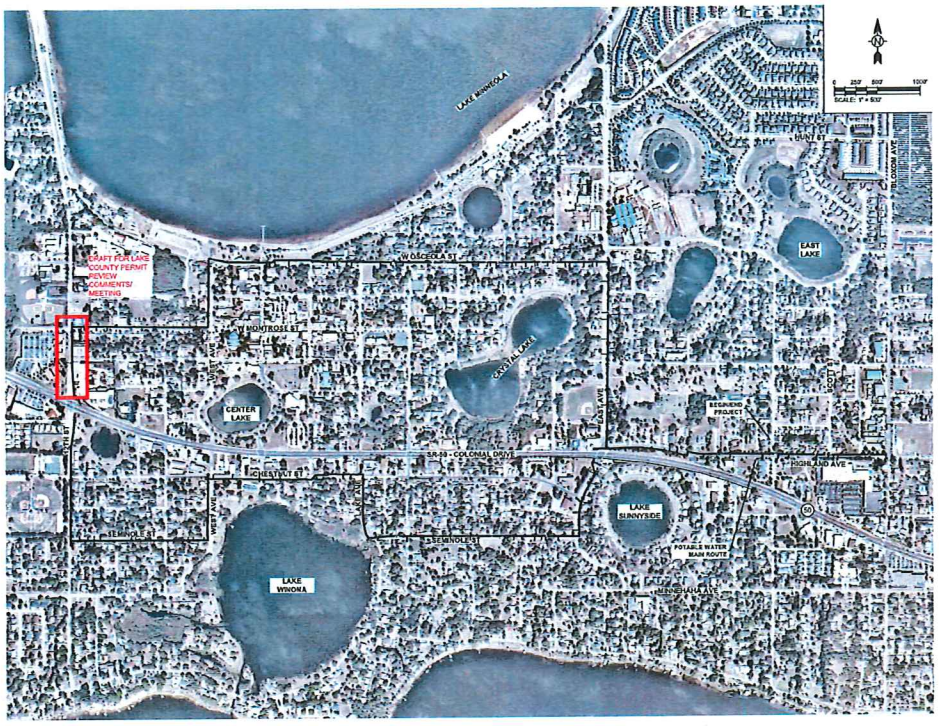
4. EXISTING WM ELEVATIONS ASSUMED AT 3' MIN COVER. CONTRACTOR TO FIELD VERIFY AND DETERMINE EXACT LOCATION AND ELEVATION.
MATCHLINE STA: 118+00.00
12TH ST
W DESOTO ST
W MONTROSE ST
SEE C-105 FOR CONTINUATION
TETRA TECH
CITY OF CLERMONT
WESTSIDE WATER MAIN LOOP
PLAN AND PROFILE
C-104

CITY OF CLERMONT
WESTSIDE WATER MAIN LOOP

CLERMONT
Choice of Champions

201 EAST PINE STREET, SUITE 1000
ORLANDO, FL 32801
PHONE: (407) 839-3955 FAX: (407) 839-3790
Engineering Business No. 2429
www.tetratech.com

TETRA TECH



PROJECT LOCATION:
CLERMONT, FL 34711

CLIENT INFORMATION:
CITY OF CLERMONT
685 W. MONTROSE ST
CLERMONT, FL 34711

TI PROJECT No.:
200-08310-14006

CLIENT PROJECT No.:

PROJECT DESCRIPTION / NOTES:

THE CITY OF CLERMONT INTENDS TO UPGRADE PORTIONS OF THEIR EXISTING POTABLE WATER DISTRIBUTION SYSTEM TO INCREASE SYSTEM RELIABILITY IN THE WESTSIDE WATER SERVICE AREA AND TO REPLACE EXISTING ASBESTOS-CEMENT WATER MAINS. THE PROJECT INCLUDES CONSTRUCTION OF APPROXIMATELY 23,600 LF OF 12-INCH WATER MAINS. CONSTRUCTION OF WATER MAINS WILL UTILIZE A COMBINATION OF OPEN CUT METHODS AND TRENCHLESS TECHNOLOGIES.

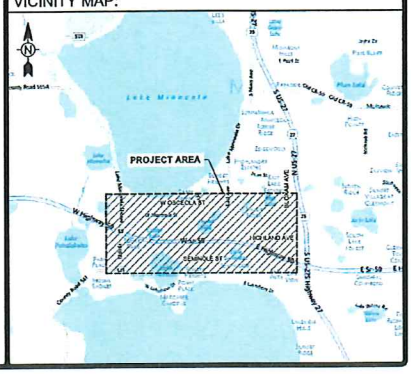
ISSUED: JANUARY 2015

90% SUBMITTAL

Janine M. Alexander, P.E.
P.E. No. 55244, FL
201 East Pine Street, Suite 1000
Orlando, Florida 32801
Engineering Business No. 2429

DATE _____

VICINITY MAP:



GENERAL NOTES

1. LOCATIONS OF EXISTING UTILITIES AS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL FIELD VERIFY THE EXISTENCE AND LOCATION OF ALL ABOVEGROUND AND UNDERGROUND UTILITIES. CONTRACTOR SHALL CONTACT UTILITY OWNERS AT LEAST SEVEN (7) WORKING DAYS PRIOR TO CONSTRUCTION AND A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION
2. THE LOCATION OF THE NEW WATER MAIN SHALL BE GENERALLY AS SHOWN BASED ON THE FIELD LOCATION OF EXISTING BURIED UTILITIES. ALIGNMENT OF THE WATER MAIN BOTH VERTICALLY AND HORIZONTALLY SHALL BE ACCOMPLISHED BY UTILIZING ALLOWABLE DEFLECTION IN THE PIPE JOINTS, FITTINGS, COUPLINGS, SPOOL PIECES, ETC. PIPE JOINT DEFLECTIONS SHALL NOT EXCEED 75% OF THE MANUFACTURER'S MAXIMUM ALLOWABLE DEFLECTION. THE BENDS SHOWN ON THE DRAWINGS PROVIDE GENERAL INFORMATION REGARDING THE WATER MAIN ALIGNMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTIMATING AND PROVIDING ANY AND ALL NECESSARY FITTINGS, COUPLINGS, SPOOL PIECES, ETC., NECESSARY TO COMPLETE THE WATER MAIN AS SHOWN ON THE PLANS. DEVIATION TO THE ALIGNMENT SHOWN SHALL NOT BE MADE WITHOUT THE APPROVAL OF THE ENGINEER. THERE WILL BE NO ADDITIONAL PAYMENT MADE FOR FITTINGS REQUIRED TO ALTER THE PIPE ALIGNMENT UNLESS ENGINEER OR OWNER APPROVAL IS OBTAINED IN ADVANCE.
3. ALL WATER PIPE, PIPE FITTINGS AND APPURTENANCES INSTALLED UNDER THIS PROJECT WILL BE COLOR CODED OR MARKED IN ACCORDANCE WITH SUBPARAGRAPH C2.3.5.3(3) (3.3) FAC. USING BLUE AS A PREDOMINANT COLOR FOR WATER.
4. ALL BACKFILL SHALL BE COMPACTED TO NOT LESS THAN 95% OF MAXIMUM DRY DENSITY AS MEASURED BY ASTM D 1557 METHOD "D" TEST MODIFIED PROCTOR) IN OPEN AREAS AND TO NOT LESS THAN 98% MAXIMUM DRY DENSITY AS MEASURED BY AASHTO T-180 METHOD "D" TEST (MODIFIED PROCTOR) UNDER ASPHALT OR CONCRETE PAVEMENT. ALL SOIL TESTING TO BE CONDUCTED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL PROVIDE ALL REASONABLE ASSISTANCE DURING SOIL TESTING.
5. WHERE CONSTRUCTION LIES WITHIN THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) RIGHT-OF-WAY (ROW), ALL REQUIREMENTS OF THE FDOT UTILITY ACCOMMODATION MANUAL SHALL BE MET. WORK WITHIN THE CITY OF CLERMONT ROW SHALL MEET THE REQUIREMENTS OF THE CITY, INCLUDING THE CITY'S ROW UTILIZATION PERMIT, AND WORK WITHIN LAKE COUNTY ROW SHALL MEET THE REQUIREMENTS OF THE COUNTY, INCLUDING THE COUNTY'S ROW UTILIZATION PERMIT.
6. LOCATIONS AND DIMENSIONS OF EXISTING RIGHT-OF-WAYS AND EASEMENTS ARE BASED ON BEST AVAILABLE INFORMATION. THE CONTRACTOR IS TO VERIFY AND STAKE THE LIMITS OF THE RIGHT-OF-WAYS AND EASEMENTS IN ORDER TO AVOID ENCROACHMENTS.
7. WHEN OBTAINING DATA AND INFORMATION FROM THE PLANS FIGURES SHALL BE USED IN PREFERENCE TO SCALED DIMENSIONS AND LARGER SCALE DRAWINGS IN PREFERENCE TO SMALLER SCALE DRAWINGS.
8. DEWATER AS NECESSARY TO PREVENT WATER FROM ENTERING THE TRENCH DURING EXCAVATION AND PIPE INSTALLATION. PIPE SHALL NOT BE LAID IN WATER. ALL EXCAVATIONS SHALL BE BACKFILLED AT THE END OF EACH WORKDAY AND PIPE OPENINGS SHALL BE SEALED WITH MJ PLUGS. ALL PIPE SHALL BE SEALED WITH A WATERTIGHT PLUG. PLASTIC, PLYWOOD OR FILTER FABRIC PLUGS ARE NOT ACCEPTABLE.
9. INSTALLATION, OPERATION AND MAINTENANCE OF ALL TRAFFIC CONTROL SIGNS, SIGNALS, DEVICES AND WARNINGS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (LATEST EDITION) ALONG WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION 60 SERIES DESIGN STANDARDS (LATEST EDITION).
13. DISPOSE OF ALL EXCESS EARTHWORK MATERIAL AND UNSUITABLE SOILS.
11. PROVIDE TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES. THE CONTROL MEASURES SHALL PROTECT EXISTING SLOPES AND CONTROL SEDIMENTATION AND TURBIDITY WITHIN WATERCOURSES AND WETLANDS TO MEET REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES.
12. PIPE LENGTHS SHOWN ON PLANS ARE APPROXIMATE. ACTUAL LENGTHS ARE TO BE DETERMINED DURING CONSTRUCTION.
13. COMPLETE CONSTRUCTION TO SATISFY ALL REQUIREMENTS OF REGULATORY AGENCY PERMITS.
14. ALL STATIONS AND OFFSETS REFER TO BASELINE OF STATIONING. NORTHING AND EASTINGS ARE FLORIDA STATE PLANE COORDINATES. SURVEY DATUM IS NAD 83.
15. SUPPORT & PROTECT ALL EXISTING UTILITIES. CONTRACTOR SHALL CONTACT UTILITY OWNERS FOR LOCATION OF ALL EXISTING FACILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH UTILITY OWNERS AND BE RESPONSIBLE FOR PROVIDING TEMPORARY SUPPORT FOR UTILITY POLES, GUY WIRES AND ANCHORS, AND ALL OTHER UTILITIES FACILITIES.
16. CONTRACTOR SHALL APPLY FOR AND OBTAIN A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) AND COMPLY WITH ALL NPDES REQUIREMENTS DURING CONSTRUCTION OF THE PROJECT.
17. EXPOSE AND VERIFY LOCATION OF EXISTING UTILITIES PRIOR TO EXCAVATION. A MINIMUM OF 7 DAYS PRIOR TO EXCAVATION AND IN ADVANCE OF CONSTRUCTION IS REQUIRED SUCH THAT THERE ARE NO POTENTIAL DELAYS ENCOUNTERED DUE TO LACK OF VERIFICATIONS.
18. ALL MAINS SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS. A MINIMUM COVER OF 36 INCHES SHALL BE MAINTAINED ON ALL MAINS, WHERE IT IS NOT OTHERWISE SPECIFIED ON PLANS OR DIRECTED BY THE ENGINEER. IN ADDITION, A MAXIMUM DEPTH OF 8 FEET OF COVER IS REQUIRED ON ALL HORIZONTAL DIRECTIONAL DRILLS. MAINS INSTALLED DEEPER THAN 8 FEET, WITHOUT PRIOR APPROVAL AND CERTIFICATION FOR THE DEEPER INSTALLATION, WILL BE AT THE CONTRACTOR'S RISK.
19. ALL PIPES SHALL BE RESTRAINED IN ACCORDANCE WITH THE RESTRAINT TABLES SHOWN ON THE CONSTRUCTION DETAIL SHEETS. IN ADDITION, ALL FITTINGS SHALL BE RESTRAINED MECHANICAL JOINT (MJ). THRUST BLOCKS/COLLARS SHALL BE PERMITTED FOR RESTRAINT OF EXISTING AC PIPING.
20. WHERE MINIMUM SEPARATION BETWEEN UTILITIES OR STORM SEWERS IS REQUIRED, THE DISTANCE IS MEASURED FROM THE OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE. SEE STANDARD DETAILS SHEET FOR SEPARATION REQUIREMENTS BETWEEN WATER MAINS AND OTHER UTILITIES.
21. IF RELOCATION OF AN EXISTING GAS MAIN IS REQUIRED, IT SHALL BE RELOCATED BY THE GAS COMPANY. THE CONTRACTOR IS REQUIRED TO COORDINATE WITH THE GAS COMPANY ACCORDINGLY.
22. RESTORE ALL EXISTING IMPROVEMENTS AND DISTURBED AREAS TO ORIGINAL CONDITION. PAVEMENT TO BE RESTORED IN ACCORDANCE WITH THE PAVEMENT RESTORATION DETAILS SHOWN ON THE CONSTRUCTION DETAIL SHEETS. PAVEMENT RESTORATION SHALL COMPLY WITH THE STANDARDS OF THE AUTHORITY HAVING JURISDICTION OVER THE RIGHT-OF-WAY LIMITS AS APPLICABLE (CITY, COUNTY, FDOT, ETC.). ALL DISTURBED AREAS ARE TO BE SODDED TO MATCH EXISTING SOD.
23. THE CONTRACTOR SHALL ENSURE ALL NECESSARY PERMITS ARE IN HAND BEFORE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SATISFYING ALL REQUIREMENTS OF REGULATORY AGENCY PERMITS, INCLUDING FILING FOR PERMIT FEES AS NECESSARY, AND FOR COORDINATING WITH CITY OF CLERMONT UTILITIES DEPARTMENT AND/OR OTHERS AS NECESSARY WITH REGARD TO CONSTRUCTION ACTIVITIES AND REQUIREMENTS STATED THEREIN.
24. ALL CONNECTIONS TO EXISTING MAINS SHALL BE MADE BY THE CONTRACTOR ONLY AFTER THE PROPOSED CONNECTION PROCEDURE AND WORK SCHEDULE HAVE BEEN REVIEWED AND ACCEPTED BY THE CITY. THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST TO THE CITY PRIOR TO SCHEDULING ANY CONNECTIONS. THE REQUEST SHALL REFERENCE THE LAND SURVEYOR CERTIFIED AS-BUILT RECORD DRAWINGS PREVIOUSLY SUBMITTED, AND SHALL OUTLINE THE FOLLOWING: A. POINTS OF CONNECTION, FITTINGS TO BE USED AND VERIFICATION OF RESTRAINT ON EXISTING PIPE. B. ESTIMATED CONSTRUCTION TIME FOR THE CONNECTIONS. THE CITY SHALL REVIEW THE SUBMITTAL WITHIN THREE (3) WORKING DAYS AFTER RECEIVING IT AND INFORM THE CONTRACTOR REGARDING APPROVAL OR DENIAL OF THE REQUEST. IF THE REQUEST IS REJECTED BY THE CITY, THE CONTRACTOR SHALL RESUBMIT THE REQUEST MODIFYING IT IN A MANNER ACCEPTABLE TO THE CITY. ALL CONNECTIONS SHALL ONLY BE MADE ON THE AGREED UPON DATE AND TIME. SHOULD THE CONTRACTOR NOT INITIATE AND COMPLETE THE CONNECTION WORK IN THE AGREED UPON MANNER, HE SHALL BE REQUIRED TO RESCHEDULE THE CONNECTION BY FOLLOWING THE PROCEDURE OUTLINED ABOVE. THE CONTRACTOR SHALL NOT OPERATE ANY VALVES IN THE SYSTEM AND SHALL COORDINATE WITH THE CITY FOR THIS EFFORT. MAINS SHALL NOT BE PLACED IN SERVICE UNTIL CLEARANCE IS RECEIVED FROM FDEP.
25. PROTECT EXISTING IMPROVEMENTS TO THE MAXIMUM EXTENT POSSIBLE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORATION AND REPAIRING ALL DAMAGE TO THE EXISTING PROJECT LIMITS, INCLUDING BUT NOT LIMITED TO, SIDEWALKS, ROADWAYS, PAVEMENT, SIGNS, TREES, MAILBOXES, DRIVEWAYS, GRASS, LANDSCAPING, IRRIGATION SYSTEMS AND OTHER IMPROVEMENTS, INCLUDING THOSE OUTSIDE OF THE LIMITS OF RESTORATION, TO THEIR ORIGINAL CONDITION. THE CONTRACTOR SHALL ALSO MAINTAIN ACCESS VIA EXISTING DRIVEWAYS AT ALL TIMES.
26. ASPHALTIC CONCRETE RESURFACING SHALL BE COMPLETED TO THE ORIGINAL EDGE OF PAVEMENT. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE EXISTING PAVEMENT OUTSIDE OF RESURFACING LIMITS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ALL DAMAGE TO THE EXISTING ROADWAY, INCLUDING THOSE OUTSIDE THE LIMITS OF THE RESURFACING, TO THEIR ORIGINAL CONDITION.
27. INSTALL AIR RELEASE VALVES (ARV) AT ALL HIGH POINTS IN THE SYSTEM WHERE AIR CAN ACCUMULATE. ARVS AND APPURTENANCES SHALL BE COLOR CODED BLUE FOR WATER. STATIONING FOR ARVS IS APPROXIMATE. CONTRACTOR IS REQUIRED TO POSITION OR ADJUST THE ARV LOCATIONS BASED ACTUAL CONSTRUCTED HIGH POINTS.
28. BENCHMARK LOCATIONS AND ELEVATIONS ARE SHOWN IN THE PLANS AS REPRESENTED BY SURVEYOR AT THE TIME OF THE SURVEY. CONTRACTOR SHALL VERIFY ITS CORRECTNESS AT THE TIME OF CONSTRUCTION AND INSTALL HIS OWN TEMPORARY BENCHMARKS.
29. NO VALVE BOXES, METERS, PORTIONS OF MANHOLES, OR OTHER APPURTENANCES OF ANY KIND RELATING TO ANY UNDERGROUND UTILITIES SHALL BE LOCATED IN ANY PORTION OF A CURB OR CURB AND GUTTER. CONTRACTOR SHALL ADVISE ENGINEER IMMEDIATELY UPON DISCOVERY OF A POTENTIAL CONFLICT.
30. WHERE REQUIRED, AT NO ADDITIONAL COST TO THE CITY, THE CONTRACTOR SHALL USE TEMPORARY SHEETING OR TRENCH BOXES TO MINIMIZE THE SIZE OF EXCAVATIONS AND TO PROTECT EXISTING ROADWAYS, PROTECT AND SUPPORT EXISTING UTILITIES AND OTHER EXISTING FACILITIES. CONTRACTOR TO COMPLY WITH OSHA TRENCH SAFETY REQUIREMENTS AT ALL TIMES.
31. CONTRACTOR TO PROVIDE DETAILED AS-BUILT DRAWINGS IN CONFORMANCE WITH THE SPECIFICATIONS, OF ALL UTILITIES UNCOVERED IN THE TRENCH CONSTRUCTED TO INSTALL THE MAIN. THE AS-BUILTS SHALL RECORD LOCATION, SIZE, TYPE, ELEVATION, SEPARATION DISTANCE AND OWNER OF ALL UTILITY FACILITIES UNCOVERED AND MEET THE REQUIREMENTS OF FDEP FOR NECESSARY SEPARATION REQUIREMENTS. CONTRACTOR SHALL ALSO INCLUDE A UTILITIES ASSET COORDINATES TABLE WITH THE AS-BUILT DRAWINGS.
32. DISTURBANCE OF ANY SURVEY MARKERS OR MONUMENTS REQUIRES RE-ESTABLISHMENT BY A FLORIDA LICENSED SURVEYOR AT THE CONTRACTOR'S EXPENSE.
33. EMERGENCY VEHICLE ACCESS SHALL REMAIN AVAILABLE TO ALL BUSINESSES AND RESIDENCES AT ALL TIMES DURING CONSTRUCTION.
34. ALL WATER LINES ARE TO BE PRESSURE TESTED, CHLORINATED, AND CLEARED FOR BACTERIA IN ACCORDANCE WITH THE SPECIFICATIONS AND FDEP REQUIREMENTS.
35. THE CONTRACTOR SHALL EXERCISE SPECIAL CARE WHEN WORKING IN RIGHT-OF-WAYS SO AS NOT TO DAMAGE FEATURES THAT ARE TO BE MAINTAINED. ALL SIGNS, MAILBOXES, FENCES, LAWNS, DRIVEWAYS, ETC., DISTURBED DURING CONSTRUCTION SHALL BE REPLACED IN-KIND AT NO ADDITIONAL COST TO THE OWNER.
36. NEW CURB AND GUTTER, DRIVEWAYS, CHAIN LINK FENCE, AND CONCRETE SIDEWALKS SHALL MATCH EXISTING CONSTRUCTION UNLESS OTHERWISE NOTED. CITY, COUNTY, FDOT OR OTHER JURISDICTIONAL REQUIREMENTS MUST BE MET FOR RESTORED AREAS, INCLUDING BUT NOT LIMITED TO PAVEMENT, CURB, SIDEWALKS, ADA COMPLIANCE, STRIPING, MARKINGS, ETC.
37. ALL AREAS WITH OPEN EXCAVATIONS, OPEN VAULTS OR MANHOLES, OR EQUIPMENT SHALL BE FENCED WITH TEMPORARY SECURE FENCING AT LEAST 6 FEET HIGH AT ALL TIMES WHEN WORK IS NOT ACTIVELY OCCURRING (INCLUDING THE END OF EACH WORKDAY AND DURING WEEKENDS AND HOLIDAYS). ALL OPEN EXCAVATIONS SHALL BE BACKFILLED BY THE END OF THE DAY.
38. CONTRACTOR SHALL CONTACT PROPERTY OWNERS 48 HOURS PRIOR TO WORKING IN ROW ON THE PROPERTY. CONTRACTOR SHALL NOT ACCESS PROPERTY OUTSIDE OF ROW WITHOUT WRITTEN PERMISSION FROM PROPERTY OWNER. CONTRACTOR SHALL PROVIDE TO ENGINEER A WRITTEN STATEMENT FROM THE PROPERTY OWNER INDICATING THAT THE OWNER IS SATISFIED WITH CONTRACTOR'S REPAIR OF AFFECTED AREA OUTSIDE OF ROW LIMITS.
39. UTILITY SERVICES SERVING RESIDENCES AND BUSINESSES ARE SHOWN IN APPROXIMATE LOCATIONS. CONTRACTOR SHALL VERIFY ACTUAL LOCATION AND RECORD ON RECORD DRAWINGS. CONTRACTOR IS WARNED THAT NOT ALL SERVICES ARE SHOWN. CONTRACTOR IS TO PROTECT, REPLACE, OR INSTALL NEW SERVICES AND LATERALS TO EXISTING PARCELS/SITS WHETHER THEY ARE SHOWN OR NOT AND TO REDONNECT WATER SERVICES TO EXISTING WATER METERS. LATERALS THAT MAY BE IMPACTED DURING CONSTRUCTION ARE TO HAVE A CLEANOUT INSTALLED AT THE ROW LIMITS/PROPERTY LINE.
40. WATER SERVICES ARE TO BE INSTALLED VIA BORING UNDER THE ROADWAY/PAVEMENT LIMITS. JETTING WILL NOT BE ACCEPTABLE FOR SERVICE INSTALLATIONS.
41. CONTRACTOR IS REQUIRED TO MAKE HIS OWN DETERMINATION OF ACTUAL SUBSURFACE CONDITIONS THAT WILL BE ENCOUNTERED DURING THE COURSE OF THE WORK. NO REPRESENTATION IS MADE OR WILL BE GIVEN BY THE ENGINEER CONCERNING ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED. ALL BIDDERS ARE DIRECTED PRIOR TO BIDDING TO CONDUCT ALL INVESTIGATIONS THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING SUCH CONDITIONS.
42. MAINTAIN EXISTING WATER AND SEWER SERVICE CONNECTIONS AT ALL TIMES. ANY DAMAGED CONNECTIONS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER.
43. SCREENED DRAWING LINES AND TEXT DELINEATION OF SYMBOLS DENOTES EXISTING FACILITIES AND FEATURES. CONTRACTOR SHALL VERIFY ALL EXISTING INFORMATION.
44. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY REGARDING ANY CONFLICTS THAT ARISE DURING CONSTRUCTION OF WORK SHOWN ON THE DRAWINGS.
45. CONDUIT FOR FIBER IS TO BE 2" SDR11 HDPE, ORANGE IN COLOR. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION ON THE FIBER CONDUIT, PULL BOXES AND INSTALLATION REQUIREMENTS.
46. THE CONTRACTOR IS REQUIRED TO HAVE A FRAC-OUT CONTINGENCY PLAN WITH VAC TRUCKS ON SITE AT ALL TIMES IN CASE OF AN OCCURRENCE.
47. WHENEVER THERE ARE DISCREPANCIES BETWEEN THE PLANS AND SPECIFICATIONS, THE MORE STRINGENT REQUIREMENTS SHALL BE REQUIRED. THE CONTRACTOR IS TO NOTIFY THE ENGINEER AND OWNER OF ANY SUCH DISCREPANCIES PRIOR TO COMMENCING CONSTRUCTION AND SHALL BE REQUIRED TO REQUEST A CLARIFICATION.

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PIPING MATERIAL SCHEDULE

MARK	SERVICE / INSTALLATION	BURIED PIPE		BURIED FITTINGS (BMJ)	COLOR
		MATERIAL	CLASS	MATERIAL	
W	POTABLE WATER/ OPEN CUT	PVC	DR 18	DUCTILE IRON	BLUE
W	POTABLE WATER/ HDD	PVC / HDPE	DR-18 / DR-11	DUCTILE IRON	BLUE
W	POTABLE WATER/ PIPE BURSTING	PVC / HDPE	DR-18 / DR-11	DUCTILE IRON	BLUE
FO	FIBER OPTIC CONDUIT	HDPE	DR-11	---	ORANGE

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DATE

90% SUBMITTAL

MARK	DATE	DESCRIPTION	BY

CITY OF CLERMONT
WESTSIDE WATER MAIN LOOP

GENERAL NOTES AND DRAWING INDEX

Project No.: 200-08310-14258
Designed By: JMK
Drawn By: PD
Checked By: JMK

G-001

Sheet

Ear Missions Final

CITY OF CLERMONT GENERAL NOTES

GENERAL PROJECT DATA
FOR IDENTIFICATION OF CONTRACTUAL AGREEMENTS, THIS SET OF DRAWINGS IS DATED 2/ 2015. ANY REVISIONS TO THESE "GP" NOTES, NOTED AND DATED ON THE AFFECTED DRAWINGS.

PRIOR TO THE COMMENCEMENT OF ANY WORK, A PRECONSTRUCTION MEETING WITH THE CITY OF CLERMONT IS REQUIRED. THE CITY OF CLERMONT SHALL BE NOTIFIED PRIOR TO COMMENCEMENT OF MAJOR PHASES OF CONSTRUCTION.

THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITIES AND TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATIONS TO THESE UTILITIES WITH THE OWNER OF THE UTILITY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING AN UNDERGROUND UTILITY, WHETHER SHOWN ON THE PLAN OR LOCATED BY THE UTILITY COMPANY. ALL UTILITIES THAT INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE RELOCATED BY THE RESPECTIVE UTILITY COMPANY AND THE CONTRACTOR SHALL COOPERATE WITH THEM DURING RELOCATION OPERATIONS. ANY DELAY OR INCONVENIENCE CAUSED TO THE CONTRACTOR BY THE RELOCATION OF VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED.

DRAINAGE SYSTEMS
THE CONTRACTOR SHALL PERFORM ALL WORK PERTAINING TO DRAINAGE INCLUDING EXCAVATION OF IN SITU PRIOR TO THE COMMENCEMENT OF OTHER WORK INCLUDED IN THESE PLANS. THE DRAINAGE FACILITIES SHALL BE MAINTAINED BY THE CONTRACTOR DURING THE COURSE OF THIS CONTRACT. THE CONTRACTOR SHALL INCLUDE PLACE IN THE DRAINAGE COSTS OF THE CONTRACT TO OPERATE AND MAINTAIN THE DRAINAGE SYSTEMS DURING THE WORK PROCESS.
THE UTILITIES ARE THE PROPERTY OF THE FOLLOWING:

WATER	POWER	POWER
CITY OF CLERMONT	PROGRESS ENERGY	SUMTER ELECTRIC
UTILITIES DEPARTMENT	P.O. BOX 120069	213 S. US HIGHWAY 301
685 WEST MONTROSE STREET	CLERMONT, FL 34712	SUMTERVILLE, FL 33585
CLERMONT, FL 34711	(800) 452-4773	(352) 357-5600
(352) 241-7335		
	CABLE	GAS
SEWER	BRIGHT HOUSE NETWORKS	LAKE APOPKA
CITY OF CLERMONT	1617 E HIGHWAY 50	NATURAL GAS DISTRICT
UTILITIES DEPARTMENT	CLERMONT, FL 34711	616 W. MONTROSE STREET
685 WEST MONTROSE STREET	(352) 394-5541	CLERMONT, FL 34711
CLERMONT, FL 34711		(352) 394-3450
(352) 241-7335	TELEPHONE	(800) 432-4770
	CENTURY LINK	
TELEPHONE	AT&T	
EMBARQ	1-800-223-3000	
250 CITRUS TOWER BLVD		
CLERMONT, FL 34711		
(800) 672-6242		

ASBUILTS
THE CONTRACTOR SHALL DELIVER ASBUILT DRAWING PLANS IN DWG FORMAT IN AUTOCAD FILES VERSION 2000 TO 2010. STANDARD TRANSFER MEDIA WILL BE ACCEPTED. THIS MEDIA INCLUDES CD OR DVD. ALL ASBUILT DATA SHALL BE PROVIDED BY A REGISTERED SURVEYOR, SIGNED, SEALED AND DATED BY THE RESPONSIBLE PARTY. SEE INDIVIDUAL SECTIONS (STORM, WATER SYSTEM, ETC.) FOR ADDITIONAL ASBUILT REQUIREMENTS.

THE CONTRACTOR SHALL DELIVER ONE SCANNED SET OF APPROVED ASBUILT DRAWING PLANS. THE SCANNED SETS SHALL BE COMPLETE AND INCLUDE THE TITLE SHEET, PLAN/PROFILE SHEETS, CROSS-SECTIONS AND DETAILS. EACH INDIVIDUAL SHEET CONTAINED IN THE PRINTED SET OF THE DRAWINGS SHALL BE INCLUDED IN THE ELECTRONIC SUBMITTAL WITH EACH SHEET BEING CONVERTED INTO AN INDIVIDUAL TIFF FORMAT. THE PLAN SHEETS SHALL BE SCANNED IN TIFF FORMAT AT 400 DPI RESOLUTION TO MAINTAIN LEGIBILITY OF EACH DRAWING. THEN, THE TIFF IMAGES SHALL BE EMBEDDED INTO A SINGLE PDF (ADOBE ACROBAT) FILE REPRESENTING THE COMPLETE PLAN SET. THESE DRAWINGS WILL ASSIST IN THE PROCESS OF PERFORMING QUALITY CONTROL AND QUALITY ASSURANCE ON THE ELECTRONIC SUBMITTAL SPECIFIED IN THIS DOCUMENT. THE DRAWINGS WILL BE REVIEWED FOR FORMAT AND COMPLETENESS. SPECIFICALLY, THE FOLLOWING REQUIREMENTS SHALL BE MET.

1 INCLUDE A LABEL ON THE MEDIA INDICATING PROJECT NAME AND NUMBER, CONSULTANT NAME, PROJECT MANAGER AND TELEPHONE NUMBER, TYPE OF SUBMITTAL (APPROVED CONSTRUCTION PLANS OR ASBUILT DRAWINGS), ONLY DRAWINGS RELEVANT TO THE PROJECT'S PHASE OF SUBMITTAL SHALL BE INCLUDED. FOR EXAMPLE, DO NOT INCLUDE "500 SET" DRAWINGS IN A "ASBUILT DRAWING" SUBMITTAL. ALSO, DO NOT INCLUDE DRAWINGS OR DOCUMENTS THAT WOULD NOT NORMALLY BE INCLUDED IN THE SET OF PRINTED DRAWINGS. EXCEPT FOR BASE DRAWINGS ON DRAWINGS TO BE EXTERNALLY REFERENCED.

2 RECORD DRAWING DATA TO BE UPLOADED WILL INCLUDE ONLY NEW CONSTRUCTION AND CARE WILL BE TAKEN TO EXCLUDE ANY "EXISTING" FACILITIES FROM THE DATASET (SO AS TO NOT DUPLICATE INFORMATION IN THE GIS SYSTEM. EXISTING DATA CAN BE INCLUDED IN THE DRAWING BUT SHOULD RESIDE ON SEPARATE LAYERS. IT IS RECOMMENDED THAT THE PREFIX "OA" BE ADDED TO THE LAYERS OF ALL EXISTING DATA

3 THE FOLLOWING ARE FILE FORMAT AND LAYER NAME STANDARDS.

a) A FOLDER SHALL BE CREATED WITH THE NAMED PROJECT AND PHASE NUMBER
b) A FILE NAMED DRAWINGSET.DWG
c) FILE NAMED SITE_PLAN.DWG SHOWING ONLY THE FOLLOWING 5 LAYERS VISIBLE:
-LAYER NAMED LOTS
-LAYER NAMED LOT NUMBERS
-LAYER NAMED ADDRESSES
-LAYER NAMED ROW SHOWING ALL RIGHTS-OF-WAYS
-LAYER NAMED EOP SHOWING ALL EDGE OF PAVEMENTS
d) A FILE NAMED MASTER-UTILITIES.DWG WITH SITE_PLAN.DWG X-REF AND ONLY THE FOLLOWING 3 LAYERS VISIBLE:
-LAYER NAMED WATERLINE SHOWING DIFFERENT PIPE SIZES, WATER METERS, AND HYDRANTS
-LAYER NAMED REUSEWATER AND ALL APPROPRIATE FEATURES
-LAYER NAMED SEWER AND ALL APPROPRIATE FEATURES
e) FILE NAMED GRADING_DRAINAGE.DWG WITH SITE_PLAN.DWG X-REF AND ONLY THE FOLLOWING 2 LAYERS VISIBLE:
-LAYER NAMED STORMWATER AND ALL APPROPRIATE FEATURES
-LAYER NAMED SPOT ELEVATIONS AND SPOT ELEVATIONS
-ANY OTHER LAYERS PERTINENT TO THE GRADING AND DRAINAGE OF THE SITE
f) IF APPLICABLE, A FILE NAMED OFF_SITE_UTILITIES.DWG
INCLUDE ANY OTHER FILES PERTINENT TO THE PROJECT (SURVEY, DETAILS, X-REFS ETC.)

PERMITS AND PERMIT REQUIREMENTS
THE CONTRACTOR SHALL OBTAIN FROM THE OWNER DOMES OF ALL REGULATORY AND LOCAL AGENCY PERMITS. THE CONTRACTOR SHALL BE EXPECTED TO REVIEW AND ABIDE BY ALL THE REQUIREMENTS AND LIMITATIONS SET FORTH IN THE PERMITS. A COPY OF THE PERMIT SHALL BE KEPT ON THE JOB AT ALL TIMES.

LAYOUT AND CONTROL
UNLESS OTHERWISE NOTED ON THE PLANS, THE CONTRACTOR SHALL PROVIDE FOR THE LAYOUT OF ALL THE WORK TO BE CONSTRUCTED. BENCHMARK INFORMATION SHALL BE PROVIDED TO THE CONTRACTOR BY THE OWNER OR OWNER'S SURVEYOR. ANY DISCREPANCIES BETWEEN FIELD MEASUREMENTS AND CONSTRUCTION PLAN INFORMATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.

QUALITY CONTROL TESTING REQUIREMENTS
ALL TESTING RESULTS SHALL BE PROVIDED TO THE OWNER/OPERATOR, CITY OF CLERMONT, AND THE ENGINEER. TESTING REQUIREMENTS ARE TO BE IN ACCORDANCE WITH THE OWNER/OPERATOR'S SPECIFICATIONS AND REQUIREMENTS. ALL TEST RESULTS SHALL BE PROVIDED. PASSING AND FAILING ON A REGULAR AND IMMEDIATE BASIS. CONTRACTOR SHALL PROVIDE TESTING SERVICES THROUGH A FLORIDA LICENSED GEOTECHNICAL ENGINEERING FIRM ACCEPTABLE TO THE OWNER AND THE ENGINEER. CONTRACTOR TO SUBMIT TESTING FIRM TO OWNER FOR APPROVAL PRIOR TO COMMENCING TESTING.

SHOP DRAWINGS
SHOP DRAWINGS AND CERTIFICATIONS FOR ALL STORM DRAINAGE, WATER SYSTEM, SEWER SYSTEM, AND PAVING SYSTEM MATERIALS AND STRUCTURES ARE REQUIRED. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING THE MATERIALS REQUIRED FOR CONSTRUCTION.

EARTHWORK QUANTITIES
THE CONTRACTOR SHALL PERFORM HIS OWN INVESTIGATIONS AND CALCULATIONS AS NECESSARY TO ASSURE HIMSELF OF EARTHWORK QUANTITIES. THERE IS NO INDICATION THAT EARTHWORK BALANCES, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY IMPORT FILL NEEDED, ON FOR REMOVAL AND DISPOSAL OF EXCESS MATERIALS

EROSION CONTROL
EROSION AND SEDIMENTATION CONTROL MEASURES ARE TO BE PROVIDED AND INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION. THESE MEASURES ARE TO BE INSPECTED BY THE CONTRACTOR ON A REGULAR BASIS AND ARE TO BE MAINTAINED OR REPAIRED ON AN IMMEDIATE BASIS AS REQUIRED. PRIOR TO WATER MANAGEMENT DISTRICT PERMIT FOR ADDITIONAL REQUIREMENTS FOR EROSION CONTROL AND SURFACE DRAINAGE. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE STABILIZED WITH SOD WITHIN 30 DAYS OF COMPLETION OF CONSTRUCTION. OTHER MATERIALS SHALL BE REVIEW AND APPROVED BY CITY.

WETLAND PROTECTION
THE LIMITS OF THE ON-SITE WETLANDS HAVE BEEN PROVIDED TO THE CONTRACTOR ON THE CONSTRUCTION PLANS ON PERMIT MATERIALS. THE WETLANDS ARE TO BE PROTECTED FROM DISTURBANCE AT ALL TIMES. CONTRACTOR SHALL PROVIDE EROSION, SILTATION, AND SEDIMENTATION MEASURES PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN A COPY OF EACH PERMIT RELATING TO WETLANDS AND WATER MANAGEMENT AND ADHERE TO ALL PROVISIONS AND CONDITIONS THEREIN.

LIMITS OF DISTURBANCE
AT NO TIME SHALL THE CONTRACTOR DISTURB SURROUNDING PROPERTIES OR TRAVEL ON SURROUNDING PROPERTIES WITHOUT WRITTEN CONSENT FROM THE PROPERTY OWNER. REPAIR OR RECONSTRUCTION OF DAMAGED AREAS ON SURROUNDING PROPERTIES SHALL BE PERFORMED BY THE CONTRACTOR ON AN IMMEDIATE BASIS. ALL COSTS FOR REPAIR SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO EXTRA COMPENSATION SHALL BE PROVIDED. GRADING AND/OR CLEARING ON PROPERTIES OTHER THAN SHOWN ON THE APPROVED PLANS IS PROHIBITED.

TREE REMOVAL
THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ENGINEER WHEN ALL WORK IS LAID OUT (SURVEY STAKED). SO THAT A DETERMINATION MAY BE MADE OF SPECIMEN TREES TO BE REMOVED. NO TREES ON THE CONSTRUCTION PLANS AS BEING SAVED SHALL BE REMOVED WITHOUT PERMISSION FROM THE OWNER, ENGINEER AND THE CITY OF CLERMONT.

CLEARING AND GRUBBING
THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING AND GRUBBING FOR SITE CONSTRUCTION INCLUDING CLEARING FOR PAVING, UTILITIES, DRAINAGE FACILITIES AND BUILDING CONSTRUCTION. ALL AREAS TO BE CLEARED SHALL BE FIELD STAKED AND REVIEWED BY THE OWNER AND ENGINEER PRIOR TO ANY CONSTRUCTION. NO BURN PERMITS (INCLUDING THOSE FOR LAND CLEARING) WILL BE ISSUED IN THE CITY OF CLERMONT WITHOUT PRIOR AUTHORIZATION FROM THE CITY MANAGER.

MATERIAL STORAGE/DEBRIS REMOVAL
1) NO COMBUSTIBLE BUILDING MATERIALS MAY BE ACCUMULATED ON THE SITE AND NO CONSTRUCTION WORK INVOLVING COMBUSTIBLE MATERIALS MAY BEGIN UNTIL INSTALLATION OF ALL REQUIRED WATER MAINS AND FIRE HYDRANTS HAVE BEEN COMPLETED, DEP APPROVAL RECEIVED FOR THE WATER MAINS, AND THE HYDRANTS ARE IN OPERATION. CONSTRUCTION WORK INVOLVING NON-COMBUSTIBLE MATERIALS, SUCH AS CONCRETE, MASONRY AND STEEL, MAY BEGIN PRIOR TO THE FIRE HYDRANTS BEING OPERATIONAL.

2) ALL MATERIALS EXCAVATED SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE STOCKPILED AT ON SITE LOCATIONS AS SPECIFIED BY THE OWNER. MATERIALS SHALL BE STOCKPILED SEPARATELY AS TO USABLE (NONORGANIC) FILL STOCKPILES AND ORGANIC (MUCK) STOCKPILES IF MUCK IS ENCOUNTERED. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL UNSUITABLE FILL MATERIALS FROM THE SITE. ALL CLAY ENCOUNTERED SHALL BE EXCAVATED OUT AND REPLACED WITH CLEAN GRANULAR FILL MATERIALS.

FILL MATERIAL
ALL MATERIALS SHALL CONTAIN NO MUCK, STUMPS, ROOTS, BRUSH, VEGETATIVE MATTER, RUBBISH OR OTHER MATERIAL THAT WILL NOT COMPACT INTO A SUITABLE AND ENDURING BACKFILL. FILL SHALL BE CLEAN, NON-ORGANIC, GRANULAR MATERIAL WITH NOT MORE THAN 12% PASSING THE NO. 200 SIEVE.

COMPACTION
FILL MATERIALS PLACED UNDER ROADWAYS SHALL BE COMPACTED TO AT LEAST 98% OF THE MAXIMUM DENSITY AS SPECIFIED IN AASHTO T-180. ALL OTHER FILL AREAS AND TO BE COMPACTED TO AT LEAST 95% MAXIMUM DENSITY AS SPECIFIED IN AASHTO T-180. FILL MATERIALS SHALL BE PLACED AND COMPACTED IN A MAXIMUM OF 12" LIFTS. THE CONTRACTOR SHALL PROVIDE THE ENGINEER AND OWNER WITH ALL PASSING AND FAILING TESTING RESULTS. RESULTS SHALL BE PROVIDED ON A TIMELY AND REGULAR BASIS PRIOR TO CONTRACTOR'S PAY REQUEST SUBMITTAL FOR THE AFFECTED WORK.

PAVEMENT AND/OR ROAD AND RIGHT-OF-WAY WORK
ALL PRESSURE PIPE UNDER ROADWAY SHALL BE DIP EXTENDING 5' FROM EDGE OF PAVEMENT.

OWNER/OPERATOR
THE ENTITY THAT WILL OWN, OPERATE AND MAINTAIN THE ROADWAYS SHOWN ON THESE PLANS IS FDOT, LAKE COUNTY OR THE CITY OF CLERMONT. THE CONTRACTOR SHALL BE EXPECTED TO MEET ALL THE REQUIREMENTS OF THAT ENTITY.

GENERAL DESIGN INTENT
ALL PAVING SURFACES IN INTERSECTIONS AND ADJACENT SECTIONS SHALL BE GRADED TO DRAIN POSITIVELY IN THE DIRECTION SHOWN BY THE FLOW ARROWS ON THE PLANS AND TO PROVIDE A SMOOTHLY TRANSITIONED DRIVING SURFACE FOR VEHICLES WITH NO SHARP BREAKS IN GRADE, AND NO UNUSUALLY STEEP OR REVERSE GRADES. BUILDER APPROACHES TO INTERSECTIONS AND ENTRANCE AND EXIT GRADES TO INTERSECTIONS WILL HAVE TO BE STAKED IN THE FIELD AT DIFFERENT GRADES THAN THE CENTER OF THE ROADWAY TO ACCOMPLISH THE PURPOSES OUTLINED. IN ADDITION, THE STANDARD CROWN WILL HAVE TO BE CHANGED IN ORDER TO DRAIN POSITIVELY IN THE AREA OF INTERSECTIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH THE ABOVE AND THE ENGINEER SHALL BE CONSULTED SO THAT HE MAY MAKE ANY AND ALL REQUIRED INTERPRETATIONS OF THE PLANS OR GIVE SUPPLEMENTARY INSTRUCTION TO ACCOMPLISH THIS INTENT OF THE PLANS.

MATERIAL/CONSTRUCTION SPECIFICATIONS
MATERIALS AND CONSTRUCTION METHODS FOR THE ROADWAY CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 1991, OR LATEST EDITION.

PAVEMENT SECTION REQUIREMENTS
CONSTRUCTION OF ROADWAYS SHALL BE 12" OF STABILIZED SUBBASE WITH A LIMEROCK BEARING RATIO OF (LBR) 40 COMPACTED TO THE MODIFIED PROCTOR MAXIMUM DRY DENSITY OF 98% PER AASHTO T-180, 8" OF LIMEROCK BASE COURSE, (LBR) 100, COMPACTED TO THE MODIFIED PROCTOR MAXIMUM DRY DENSITY OF 98% PER AASHTO T-180 AND 2" TYPE S-111 OF RECYCLED ASPHALTIC CONCRETE SURFACE COURSE WITH A MINIMUM STABILITY OF 1500 LBS. SUBGRADE PREPARATION AND PAVEMENT INSTALLATION SHALL CONFORM TO FDOT STANDARDS AND SOILS REPORT RECOMMENDATIONS

SIDEWALKS
SIDEWALKS ARE TO BE CONSTRUCTED IN THE AREA AS SHOWN ON THE CONSTRUCTION PLANS. THE 5' SIDEWALK SHALL BE CONSTRUCTED OF 4 INCHES OF CONCRETE WITH A 28 DAY COMPRESSION STRENGTH OF 2500 PSI. JOINTS SHALL BE EITHER TOOLED OR SAWCUT AT A DISTANCE OF 5' LENGTHS. HANDICAPPED RAMPS SHALL BE PROVIDED AT ALL INTERSECTIONS AND BE IN ACCORDANCE WITH STATE REGULATIONS FOR HANDICAP ACCESSIBILITY.

PAVEMENT MARKINGS/SIGNAGE
PAVEMENT MARKINGS AND SIGNAGE SHALL BE PROVIDED AS SHOWN ON THE CONSTRUCTION PLANS AND SHALL MEET THE REQUIREMENTS OF THE OWNER/OPERATOR. SIGNAGE SHALL BE IN CONFORMANCE WITH MUTCD (LATEST EDITION). A 48-HOUR PAVEMENT CURING TIME WILL BE PROVIDED PRIOR TO APPLICATION OF THE PAVEMENT MARKING. REFLECTIVE PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH FDOT INDEX NO. 17352

TRAFFIC CONTROL
AN MOT PLAN SHALL BE SUBMITTED TO THE INSPECTOR PRIOR TO COMMENCEMENT OF WORK. A MINIMUM OF 24 HRY. ONE LANE TRAFFIC SHALL BE MAINTAINED IN THE WORK SITE AREA. ALL CONSTRUCTION WARNING SIGNAGE SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF CONSTRUCTION AND BE MAINTAINED THROUGHOUT CONSTRUCTION. ACCESS SHALL BE CONTINUOUSLY MAINTAINED FOR ALL PROPERTY OWNERS SURROUNDING THE WORK SITE AREA. LIGHTED WARNING DEVICES ARE TO BE OPERATIONAL PRIOR TO DUSK EACH NIGHT DURING CONSTRUCTION.

CURBING
CURBING SHALL BE CONSTRUCTED WHERE NOTED ON THE CONSTRUCTION PLANS. CONCRETE FOR CURBS SHALL BE DEPARTMENT OF TRANSPORTATION CLASS "I" CONCRETE WITH A 28 DAY COMPRESSION STRENGTH OF 2500 PSI. ALL CURBS SHALL HAVE SAW CUT CONTRACTION JOINTS AND SHALL BE CONSTRUCTED AT INTERVALS NOT TO EXCEED 15'-0" ON CENTER. CONSTRUCTION OF CURBS SHALL BE IN CONFORMANCE WITH FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (1991) SECTION 520 AND DETAILS PROVIDED ON THE CONSTRUCTION PLANS.

R/W RESTORATION
ALL AREAS WITHIN THE RIGHT-OF-WAYS SHALL BE FINISH GRADED WITH A SMOOTH TRANSITION INTO EXISTING GROUND. ALL SWALES SHALL BE STABILIZED IMMEDIATELY AFTER FINAL GRADING. ALL DISTURBED AREAS SHALL BE RAKED CLEAN OF ALL LIMEROCK AND ROCKS AND SODDED AFTER FINAL GRADING IN ACCORDANCE WITH THE CONSTRUCTION PLANS PRIOR TO FINAL INSPECTION. ALL GRASSING (SEED OR SOD) SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL FINAL ACCEPTANCE BY THE OWNER/OPERATOR.

SITE ACCESS
ALL ACCESS TO THE JOB SITE FOR CONSTRUCTION AND RELATED ACTIVITIES SHALL BE BY EXISTING STREETS AND ROADS, ON BY THE CONSTRUCTION EASEMENT AS APPROVED BY THE CITY OF CLERMONT.

POTABLE WATER/FIRE SYSTEMS

OWNER/OPERATOR
THE ENTITY THAT WILL OWN, OPERATE AND MAINTAIN THE WATER SYSTEM SHOWN ON THESE PLANS IS CITY OF CLERMONT. THE CONTRACTOR SHALL BE EXPECTED TO MEET ALL THE REQUIREMENTS OF THAT ENTITY, UNLESS OTHERWISE INDICATED ON PLANS

LANDSCAPING
PROVIDE WINDOW 5' SEPARATION FROM UTILITIES AND TREES WITH INVASIVE ROOT SYSTEMS.

PIPE MATERIALS
SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL CITY INFRASTRUCTURE TO BE CONSTRUCTED. WATER SYSTEM SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER AND SHALL MEET CITY SPECIFICATIONS.

POLYVINYL CHLORIDE PLASTIC PIPE (PVC) 4" THROUGH 12" SHALL BE MANUFACTURED IN ACCORDANCE WITH ANSI/AWWA C900 (LATEST EDITION) AND SHALL HAVE A MINIMUM WORKING PRESSURE OF 150 PSI AND A DR (DIMENSION RATIO) OF 18. ALL PVC PIPE SHALL BEAR THE NSF LOGO FOR POTABLE WATER JOINTS SHALL BE OF THE PUSH-ON TYPE AND COUPLINGS CONFORMING TO ASTM D1784, D3139 & F913.

DUCTILE IRON PIPE (DIP) SHALL BE STANDARD PRESSURE CLASS 350 IN SIZES 4" THROUGH 12" AND CONFORM TO ANSI/AWWA C150/A21.50 (LATEST EDITION). ALL DUCTILE IRON PIPE SHALL HAVE A STANDARD THICKNESS OF CEMENT MORTAR LINING AS SPECIFIED IN ANSI/AWWA C104/A21.4 (LATEST EDITION). PIPE JOINTS SHALL BE OF THE PUSH-ON RUBBER GASKET TYPE CONFORMING TO ANSI/AWWA C111/A21.11 (LATEST EDITION).

ALL PRESSURE PIPE UNDER ROADWAY SHALL BE DIP EXTENDING 5' FROM EDGE OF PAVEMENT.

3" METALLIC LOCATOR TAPE WITH LOCATOR WIRE SHALL BE INSTALLED ON ALL WATER MAINS PER DETAIL.

PIPE SIZES GREATER THAN 12" BE SEPARATELY SPECIFIED ON THE PLANS, WITH THICKNESS CLASS 53 TO BE SHOWN BASED ON WORKING PRESSURES, PIPE DEPTH AND TRENCH CONDITIONS. FITTINGS FOR DUCTILE IRON PIPE AND PVC C-900 PIPE SHALL BE DUCTILE IRON AND SHALL CONFORM TO ANSI/AWWA C110/A21.10 (LATEST EDITION) AND SHALL BE CEMENT LINED IN CONFORMANCE WITH ANSI/AWWA C104/A21.4 (LATEST EDITION).

POLYETHYLENE WRAP USED FOR CORROSION PREVENTION ON DUCTILE IRON PIPE SHALL CONFORM TO THE REQUIREMENTS OF ANSI/ASTM D1248. THE MINIMUM NOMINAL THICKNESS SHALL BE 0.008 IN. (8 MIL). INSTALLATION OF POLY WRAP SHALL BE IN ACCORDANCE WITH AWWA C105. TRANSMISSION MAIN SHALL BE DIP RATED FOR 150 PSI.

ALL PRESSURE PIPE UNDER ROADWAYS SHALL BE DIP EXTENDING 5' FROM EDGE OF PAVEMENT OR AS SHOWN ON THE PLANS.

VALVES
GATE VALVES SHALL BE RESILIENT SEAT AND SHALL CONFORM TO ANSI/AWWA C509 87 WITH HANDWHEEL OR SPANNER NUT, EXTENSION STEMS AND OTHER APPURTENANCES AS REQUIRED. OPERATION NUT TO BE WITHIN 1 FEET OF FINISH GRADE. MANUFACTURER'S CERTIFICATION OF THE VALVES COMPLIANCE WITH AWWA SPECIFICATION AND TESTS LISTED THEREIN WILL BE REQUIRED. SEE CITY OF CLERMONT APPROVED PRODUCT LIST.

POTABLE WATER AND REUSE VALVES
ANY VALVE USED IN A POTABLE WATER OR REUSE WATER APPLICATION THAT IS 4" OR LARGER MUST BE A RESILIENT SEAT AND CONFORM TO ALL AWWA SPECIFICATIONS

AIR RELEASE VALVES
AIR RELEASE VALVES SHALL BE PLACED AT HIGH POINTS OF THE TRANSMISSION MAIN TO PERMIT ESCAPE OF TRAPPED AIR. THE VALVE SIZE, LOCATION AND METHOD OF INSTALLATION SHALL BE INDICATED ON THE DRAWINGS OR AS DIRECTED BY THE ENGINEER. SEE CITY OF CLERMONT APPROVED PRODUCTS LIST.

VALVE BOXES
VALVE BOXES ON PUBLIC POTABLE WATER MAINS SHALL BE ADJUSTABLE, CAST IRON CONSTRUCTION, WITH MINIMUM INTERIOR DIAMETER OF 5" WITH COVERS CAST WITH THE INSCRIPTION IN LEGIBLE LETTERING ON TOP. WATER BOXES SHALL BE SUITABLE FOR THE APPLICABLE SURFACE LOADING AND VALVE SIZE, AND SHALL BE MANUFACTURED BY MUELLER COMPANY, MODEL 10284, OR APPROVED EQUAL. VALVE BOX PADS SHALL BE 24"X24"X4" THICK CONCRETE WITH AN REINFORCING BARS, AND TO BE CAST AT FINISHED GRADE WITH RECESSED INDICTOR ARRE CONDUIT PORT PER DETAIL. REUSE BOXES TO HAVE SQUARE TOP VALVE BOXES

WATER SERVICES
UNLESS OTHERWISE NOTED IN THE PLANS, THE UTILITY COMPANY SHALL PROVIDE AND INSTALL WATER METERS. CONTRACTOR SHALL CONSTRUCT WATER SERVICE THROUGH THE CURB STOP AND SET METER BOXES TO FINISH-ISH GRADE AS SHOWN ON THE WATER SYSTEM DETAIL SHEET. POLYETHYLENE (PE) PRESSURE PIPE FOR WATER SERVICES 1/2" THROUGH 2" SHALL CONFORM TO AWWA C901 85, MIN. 200 PSI, CTS 1.00 OR IS ASTM D2737, 200 PSI. THE SERVICE SHALL BE COMPLETE THROUGH THE CURB STOP AS SHOWN ON THE DETAIL SHEET AND SHALL BE OF THE TYPE REQUIRED FOR COMPATIBILITY WITH THE SERVICE LINES SPECIFIED. UTILITY COMPANY SHALL PROVIDE AND INSTALL IRRIGATION METERS. WHERE RECLAIM SERVICE IS NOT PROVIDED, CONTRACTOR SHALL CONSTRUCT IRRIGATION SERVICE THROUGH THE CURB STOP AND SET NEW BOXES TO FINISH-ISH GRADE AS SHOWN ON THE WATER SYSTEM DETAIL SHEET. SEE CITY OF CLERMONT APPROVED PRODUCT LIST.

WATER SERVICES 2.5" AND LARGER
THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND INSTALLING A NEPTUNE R450 METER WITH E-CODER REGISTER, 127W-2205 127T NEPTUNE R450 WALL MAU (ELEMENT SPECIAL) AND 13506-002 NEPTUNE WALL MAU ADAPTOR FIPT STYLE REGISTER. THE ASSEMBLY SHALL BE ABOVE GROUND STYLE WITH BYPASS SET UP FOR METER TESTING. A STRAINER SHALL BE INSTALLED PRIOR TO THE METER AND AND SHALL BE FROM THE SAME MANUFACTURER AS THE WATER METER, INCLUDE SPOOL PIECES EX THE DIAMETER UPSTREAM AND 10X THE DIAMETER DOWNSTREAM MINIMUM LENGTH. ISOLATION VALVES SHALL BE INSTALLED PRIOR TO THE METER AND ANOTHER ONE PAST THE METER TEST PORT AND BEFORE THE THE DOWNSTREAM BYPASS CONNECTION. BYPASS PIPING SHALL HAVE A LOCKABLE ISOLATION VALVE UNLESS IT IS UNDERGROUND.

MATERIALS AS REQUIRED BY THE CITY OF CLERMONT
THE CONTRACTOR SHALL CUT A "W" IN THE CURB TOP AT EACH WATER SERVICE AND A "V" AT ALL VALVE LOCATIONS. CUT W'S AND V'S SHALL BE HIGHLIGHTED WITH BLUE PAINT. SEE WATER SYSTEM DETAILS FOR OTHER SERVICE LOCATION AND MARKING REQUIREMENTS

PIPE INSTALLATION
PIPE INSTALLATION OF PVC WATER MAIN SHALL SHALL BE IN CONFORMANCE WITH ASTM D2774 (LATEST EDITION). INSTALLATION OF DUCTILE IRON PIPE WATER MAIN SHALL BE IN CONFORMANCE WITH AWWA C600 87.

COMPACTED BACKFILL SHALL BE TO 98% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180 UNDER ALL PAVEMENTS WITH 12" MAXIMUM LIFT THICKNESS. OTHER COMPACTION OF BACKFILL SHALL BE TO 95% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180 WITH 12" MAXIMUM LIFT THICKNESS. SEE PIPE TRENCHING DETAILS

MINIMUM COVER OVER ALL PIPE SHALL BE 36" FROM TOP OF PIPE TO FINISHED GRADE. SEE PLAN AND PROFILE SHEETS FOR REQUIRED DEPTH.

ALL WATER MAINS SHALL BE INSTALLED WITH RESTRAINED JOINT FITTINGS. NO CONCRETE THRUST BLOCKS TO BE USED.

ALL PLUGS, CAPS, TEES, BENDS, FIRE HYDRANTS, VALVES, ETC. SHALL BE PROVIDED WITH MEGALUG PIPE RESTRAINTS FOR RESTRAINT CONSTRUCTION SPECIFICATIONS, REFER TO THE WATER SYSTEM DETAILS.

ALL VALVES TO BE RESTRAINED AS DEAD ENDS IN BOTH DIRECTIONS.

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MARK	DATE	DESCRIPTION

CITY OF CLERMONT
WESTSIDE WATER MAIN LOOP
GENERAL NOTES

Project No.	230-06015-14G8
Designed By:	JAA
Drawn By:	PG
Checked By:	JAA

G-002
Sheet

For Measure 1 Pnb

CITY OF CLERMONT GENERAL NOTES

PIPE IDENTIFICATION

3" METALLIC LOCATOR TAPE SHALL BE BURIED IN THE WATER MAIN TRENCH 12" DIRECTLY ABOVE THE WATER MAIN. A CONTINUOUS COPPER DETECTOR WIRE SHALL BE ATTACHED AS SHOWN ON THE WATER DETAIL SHEET. WIRE CONNECTIONS (SPLICES) SHALL BE DONE WITH WIRE NUT AND GREASE FILLED PROTECTIVE CAP.

ALL PIPE AND PIPE FITTINGS SHALL BE COLOR CODED OR MARKED IN ACCORDANCE WITH SUBPARAGRAPHS 553.3(2)(1)(3), F.A.C. USING BLUE AS A PREDOMINANT COLOR. (UNDERGROUND PLASTIC PIPE SHALL BE SOLID WALL BLUE PIPE. SHALL HAVE A CONTINUOUS BLUE EXTERNAL SKIN OR SHALL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL AND UNDERGROUND METAL OR CONCRETE PIPE SHALL HAVE BLUE STRIPES APPLIED TO THE PIPE WALL. PIPE STRIPED DURING MANUFACTURING OF THE PIPE SHALL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90 DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT SHALL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE. FOR PIPE WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT SHALL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE ABOVE GROUND PIPE SHALL BE PAINTED BLUE OR SHALL BE COLOR CODED OR MARKED LIKE UNDERGROUND PIPE.) PRIOR TO VIEW FLEXMARKING POST SHALL BE PLACED ON ALL TRANSMISSION MAINS AT 500 FEET.

DISINFECTION AND TESTING

ALL PIPE SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA STANDARD C651-92.

PVC WATER MAINS SHALL BE INSTALLED, PRESSURE AND LEAK TESTED IN ACCORDANCE WITH AWWA C605 AND DUCTILE IRON WATER MAINS IN ACCORDANCE WITH AWWA C600 (62-455.320(3)(b) 1 AND 62-555.330, F.A.C). ALL INSTALLATION, TESTING AND FIELD PROCEDURES MUST BE PROVIDED AND MUST CONFORM TO THE APPLICABLE AWWA STANDARDS.

THE CONTRACTOR SHALL PROVIDE AT HIS OWN EXPENSE ALL NECESSARY TEST PUMPING EQUIPMENT, WATER, WATER METERS, PRESSURE GAUGES AND OTHER EQUIPMENT, MATERIAL AND FACILITIES REQUIRED FOR ALL HYDROSTATIC AND LEAKAGE TESTING. CONTRACTOR SHALL CONTACT THE ENGINEER, OWNER/OPERATOR AND CITY IN WRITTEN FORM, FORTY EIGHT (48) HOURS IN ADVANCE OF PROPOSED TESTING. THE CONTRACTOR SHALL PERFORM SATISFACTORY PRETESTING PRIOR TO NOTIFICATION.

THE WATER SYSTEM SHALL BE BOAK TESTED 24 HOURS @ 150 PSI AND TESTED FOR LEAKAGE AT 150 PSI FOR TWO (2) HOURS, WITH ALLOWABLE LEAKAGE IN ACCORDANCE WITH ABOVE STANDARDS.

CONTRACTOR SHALL OBTAIN A COPY OF THE FDEP WATER SYSTEM PERMIT AND PULL BACTERIOLOGICAL TEST SAMPLES FROM THE SAMPLE POINTS SPECIFIED IN THAT PERMIT. CONTINUITY TEST SHALL BE PERFORMED ON WIRE BY CONTRACTOR.

CONNECTIONS TO EXISTING WATER MAINS

PRIOR TO THE CONNECTION TO ANY EXISTING MAIN, THE PROPOSED WATER MAIN SHALL BE DISINFECTED, HAVE ENGINEER APPROVED PRESSURE TESTING AND HAVE FDEP CLEARANCE. REFER TO FDEP PERMIT FOR ANY ADDITIONAL REQUIREMENTS.

ASBUILT DRAWINGS

THE CONTRACTOR SHALL PROVIDE VERTICAL AND HORIZONTAL "ASBUILT" INFORMATION RELATIVE TO ALL CONSTRUCTED UTILITIES AND STRUCTURES. THESE SETS SHALL BE PROVIDED FOR REVIEW ONCE APPROVED BY THE UTILITY, ONE REPRODUCIBLE SET SHALL BE PROVIDED.

AS-BUILT INFORMATION FOR THE WATER SYSTEM SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

1. LOCATION OF ALL VALVES, FITTINGS, HYDRANTS AND SERVICES - HORIZONTAL AND VERTICAL
2. LOCATION OF THE WATER MAIN TIED WITH COORDINATES FOR THE SUBDIVISION.
3. CERTIFICATION AS TO THE SYSTEM MEETING THE MINIMUM COVER REQUIREMENTS.
4. HORIZONTAL AND VERTICAL DATA FOR ANY CONSTRUCTION WHICH DEVIATES FROM THE APPROVED ENGINEERING PLANS.
5. UTILITY LOCATES ON SYSTEMS INSTALLED UNDER THIS CONTRACT SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR DEVELOPER UNTIL ASBUILT DRAWINGS ARE REVIEWED AND APPROVED BY THE UTILITY.

SANITARY SEWER NOTES

1. ALL PRESSURE PIPE UNDER ROADWAY SHALL BE DIP EXTENDING 8' FROM EDGE OF PAVEMENT.

MAINS AND MANHOLES

1. ALL GRAVITY SANITARY SEWER MAINS, LATERALS, AND APPURTENANCES SHALL BE CONSTRUCTED OF SDR35 PVC PIPE MEETING ASTM 3034, AND SHALL HAVE A MINIMUM COVER OF THREE (3) FEET.
2. WHERE REQUIRED, MAINS SHALL BE CLASS 150 DUCTILE IRON PIPE (DIP) MEETING AWWA C150 AND C151. MAINS SHALL BE 80 MIL EPOXY COATED WITH POLYETHYLENE WRAP CONFORMING TO AWWA C104.
3. ALL PVC PIPE SHALL BEAR THE NSF-DW SEAL.
4. JOINTS SHALL BE INTEGRAL BELL ELASTOMERIC GASKET JOINTS MANUFACTURED IN ACCORDANCE WITH ASTM D3212 AND ASTM F477. APPLICABLE UNI-BELL PLASTIC PIPE ASSOCIATION STANDARD IS UNI-B-7.
5. ALL SANITARY MANHOLES SHALL BE PRECAST CONCRETE WITH A MINIMUM WALL THICKNESS OF FIVE (5) INCHES FOR INSIDE DIAMETER OF FOUR (4) FEET.
6. MANHOLES SHALL MEET ASTM D-478. RING AND COVER SHALL BE TRAFFIC BEARING H-20 CLASS 20 MEETING ASTM A-48.
7. INTERIOR AND EXTERIOR WALLS OF ALL MANHOLES SHALL HAVE A MINIMUM OF TWO (2) 8 MIL COATS OF AN APPROVED PROTECTIVE COAL TAR EPOXY.
8. ALL MAINS NOT LOCATED UNDER PAVEMENT SHALL BE MARKED BY A 3" METALLIC LOCATOR TAPE AND TRACER WIRE 18" ABOVE THE CENTERLINE OF PIPE. DROP MANHOLE IF INVERT DIFFERENCE IS GREATER THAN OR EQUAL TO TWO (2) FEET. 3" METALLIC LOCATOR TAPE SHALL BE BURIED IN THE WATER MAIN TRENCH 18" DIRECTLY ABOVE THE WATER MAIN. A CONTINUOUS COPPER DETECTOR WIRE SHALL BE ATTACHED AS SHOWN ON THE WATER DETAIL SHEET.
9. LINING IS REQUIRED OF ALL MANHOLES WITH AN INCOMING SLOPE GREATER THAN 5%. ANY MANHOLE WITH FORCE MAIN TIE IN MUST BE LINED. SEE CITY OF CLERMONT APPROVED PRODUCT LIST.
10. NO DROP SHALL BE GREATER THAN 18 FEET.

LATERALS

1. ALL SERVICE LATERALS AND FITTINGS SHALL BE A MINIMUM OF 6" IN DIAMETER.
2. ALL LATERALS SHALL TERMINATE WITH A 4" CLEAN OUT AT THE PROPERTY LINE, AND AT A DEPTH TO FINAL GRADE OF 3 FEET. SEE DETAILS FOR LOCATION.
3. THE END OF EACH SERVICE CONNECTION SHALL BE MARKED WITH A 2"x2"x4' ABOVE GRADE WOODEN STAKE OR APPROVED MARKER AND CURB MARKED WITH A 5'

FORCEMAINS

1. FORCEMAINS SHALL BE CLASS 150 EPOXY 401 LINED DIP. DIP PIPE SHALL HAVE INTEGRAL BELL PUSH ON TYPE JOINTS CONFORMING TO ASTM D3139.
2. ALL FITTINGS SHALL BE MECHANICAL JOINT DUCTILE IRON WITH 350 PSI MINIMUM PRESSURE RATING. SUITABLE COUPLINGS COMPLYING WITH THE SPECIFICATIONS ARE REQUIRED FOR JOINING DISSIMILAR MATERIALS.
3. 3" METALLIC LOCATOR TAPE SHALL BE BURIED IN THE WATER MAIN TRENCH 12" DIRECTLY ABOVE THE WATER MAIN. A CONTINUOUS COPPER DETECTOR WIRE SHALL BE ATTACHED AS SHOWN ON THE WATER DETAIL SHEET.
4. ALL MAINS SHALL HAVE A MINIMUM COVER OF THREE (3) FEET.
5. ALL CONNECTIONS TO EXISTING SEWER FORCEMAINS SHALL BE ACCOMPLISHED WITH A WET TAP AND RESTRAINTS.
6. PROVIDE JOINT RESTRAINT AS SHOWN ON THE WATER DETAIL SHEET
7. AIR RELEASE AND VACUUM VALVE PRODUCTS SHALL ADHERE TO CITY OF CLERMONT APPROVED PRODUCT LIST.

TESTING

1. SEWAGE COLLECTION SYSTEM
   A. ALL GRAVITY SEWER MAINS REQUIRE LOW PRESSURE AIR TESTING IN ACCORDANCE WITH THE LATEST UNI-BELL STANDARD FOR LOW PRESSURE AIR TESTS. AIR TESTS, AS A MINIMUM, SHALL CONFORM TO THE TEST PROCEDURES DESCRIBED IN ASTM SPECIFICATIONS. ASTM F1417 FOR PLASTIC PIPE.
   B. ALL SEWER MAINS AND LATERALS SHALL BE VIDEO INSPECTED BY A CITY APPROVED VENDOR.
   C. ALL MANHOLES SHALL BE INSPECTED FOR INFILTRATION, ALIGNMENT, FLOW CHANNEL CONSTRUCTION, AND COAL TAR EPOXY PAINT THROUGHOUT.
   D. HYDROSTATIC TESTS CONSISTING OF A HYDROSTATIC PRESSURE TEST AND HYDROSTATIC LEAKAGE TEST SHALL BE CONDUCTED ON ALL NEWLY INSTALLED SEWER FORCE MAIN SYSTEM PRESSURE PIPES AND JOINTS IN ACCORDANCE WITH AWWA C600 OR M23 AS APPLICABLE. THE PRESSURE SHALL BE 150 PSI FOR TWO (2) HOURS.
   E. DEFLECTION TESTS ARE REQUIRED FOR ALL FLEXIBLE PIPE. TESTS SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES.

TEMPORARY JUMPER CONNECTION NOTES

A TEMPORARY JUMPER CONNECTION IS REQUIRED AT ALL CONNECTIONS BETWEEN EXISTING ACTIVE WATER MAINS AND PROPOSED NEW WATER MAIN IMPROVEMENTS. THE DETAIL PROVIDED IS TO BE USED FOR FILLING ANY NEW WATER MAIN OF ANY SIZE FROM EXISTING ACTIVE WATER MAINS AND FOR FLUSHING OF NEW MAINS UP TO 8" DIAMETER (2.5 FPS MINIMUM VELOCITY) AND FOR TAKING BACTERIOLOGICAL SAMPLES FROM ANY NEW WATER MAIN OF ANY SIZE. THE JUMPER CONNECTION SHALL BE MAINTAINED UNTIL AFTER FILLING, FLUSHING, TESTING AND DISINFECTING OF THE NEW MAIN HAS BEEN SUCCESSFULLY COMPLETED AND CLEARANCE FOR USE HAS BEEN OBTAINED FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) AND OTHER PERTINENT AGENCIES HAS BEEN RECEIVED BY THE CITY OF CLERMONT. THIS JUMPER CONNECTION SHALL ALSO BE USED TO MAINTAIN A MINIMUM LEVEL OF DISINFECTION AND UNTIL THE FDEP CLEARANCE LETTER IS OBTAINED AND THE LINES ARE PLACED INTO SERVICE.

ADEQUATE RESTRAINTS SHALL BE PROVIDED TEMPORARILY, AS REQUIRED.

PIPE AND FITTINGS USED FOR CONNECTING THE NEW PIPE TO THE EXISTING PIPE SHALL BE DISINFECTED PRIOR TO INSTALLATION IN ACCORDANCE WITH AWWA C651, 1992 EDITION. THE TAPPING SLEEVE AND THE EXTERIOR OF THE MAIN TO BE TAPPED SHALL BE DISINFECTED BY SPRAYING OR SWABBING PER SECTION 9 OF AWWA C651-92.

FLUSHING OF ALL WATER MAINS SHALL BE DONE THROUGH THE TIE-IN VALVE UNDER CONTROLLED CONDITIONS BY THE CITY ONLY. FULL BORE FLUSH IS REQUIRED. THE FOLLOWING PROCEDURES SHALL BE FOLLOWED:

A. THE TIE-IN VALVES SHALL BE OPERATED ONLY BY THE CITY AND PRESSURE TESTED IN THE PRESENCE OF THE CITY AND ENGINEER TO VERIFY WATER TIGHTNESS PRIOR TO TIE-IN. VALVES WHICH ARE NOT WATERTIGHT SHALL BE REPLACED OR A NEW VALVE INSTALLED IMMEDIATELY ADJACENT TO THE LEAKING VALVE.
B. THE TEMPORARY JUMPER CONNECTION SHALL BE CONSTRUCTED AS DETAILED. THE JUMPER CONNECTION SHALL BE USED TO FILL THE NEW WATER MAIN, FOR PROVIDING WATER FOR BACTERIOLOGICAL SAMPLING OF THE NEW MAIN AS REQUIRED BY THE FDEP PERMIT AND FOR MAINTAINING CHLORINE RESIDUALS IN THE MAINS.
   1. FLUSHING SHALL NOT BE ATTEMPTED DURING PEAK DEMAND HOURS OF THE EXISTING WATER MAIN.
   2. ALL DOWNSTREAM VALVES IN THE NEW SYSTEM MUST BE OPEN PRIOR TO THE CITY OPENING THE TIE-IN VALVE.
   3. PROVIDE FOR AND MONITOR THE PRESSURE AT THE TIE-IN POINT. THE PRESSURE IN THE EXISTING MAIN MUST NOT DROP BELOW 35 PSI.
   4. TIE-IN VALVES SHALL BE OPENED BY THE CITY A FEW TURNS ONLY, ENSURING A PRESSURE DROP ACROSS THE VALVE IS ALWAYS GREATER THAN 10 PSI.
C. THE TIE-IN VALVE SHALL BE LOCKED CLOSED BY THE CITY UNTIL THE FLUSHING BEGINS.
D. THE TIE-IN VALVE SHALL BE OPENED ONLY BY THE CITY FOR FLUSHING OF THE NEW MAIN. THE PROCEDURE SHALL BE DONE BY THE CITY AND OBSERVED BY THE ENGINEER.
E. AFTER FLUSHING, THE TIE-IN VALVE SHALL BE CLOSED AND LOCKED IN THE CLOSE POSITION BY THE CITY. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION DEMONSTRATING THAT THE RPZ BACK FLOW PREVENTION DEVICE HAS BEEN TESTED WITHIN ONE YEAR AT THE TIME OF INSTALLATION, AND IS IN GOOD WORKING ORDER AT THE TIME OF INSTALLATION. THE TEST SHALL BE PERFORMED BY A CERTIFIED BACK FLOW PREVENTION TECHNICIAN AS APPROVED BY THE CITY OF CLERMONT CROSS-CONNECTION CONTROL PROGRAM. A CERTIFICATE IS REQUIRED BY THE CITY.

EXCEPT AS REQUIRED TO FLUSH LINES TIE-IN VALVE SHALL REMAIN CLOSED AND SHALL BE LOCKED IN THE CLOSE POSITION BY THE CITY. THE TIE-IN VALVE SHALL REMAIN LOCKED CLOSED UNTIL THE NEW SYSTEM HAS BEEN CLEARED FOR USE BY FDEP AND ALL OTHER AGENCIES. UPON RECEIPT OF CLEARANCE FOR USE FROM FDEP AND ALL OTHER AGENCIES, THE CONTRACTOR SHALL REMOVE THE TEMPORARY JUMPER CONNECTION. THE CORPORATION STOPS ARE TO BE CLOSED AND PLUGGED WITH 2" BRASS PLUGS. THERE IS NO LEAKAGE.

ALL INSTALLATION AND MAINTENANCE OF THE TEMPORARY JUMPER CONNECTION AND ASSOCIATED BACK FLOW PREVENTION DEVICE, FITTINGS, VALVES, ETC., SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

WATER METERS SHALL BE PAID FOR AT THE CITY HALL AND SHALL BE DELIVERED TO THE JOB SITE BY THE UTILITIES DEPARTMENT.

FIRE HYDRANTS

FIRE HYDRANTS SHALL CONFORM TO THE LATEST EDITION OF AWWA C502.85 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. ALL HYDRANTS SHALL BE BREAKAWAY TYPE, WITH THE BREAKAWAY SECTION LOCATED SLIGHTLY ABOVE THE FINISH GROUND LINE. HYDRANTS SHALL CONTAIN TWO, TWO AND ONE-HALF INCH (2-1/2") HOSE CONNECTIONS, AND ONE, FOUR AND ONE-HALF INCH (4-1/2") STEAMER CONNECTION WITH NATIONAL STANDARD FIRE HOSE COUPLING SCREW THREADS. FIVE AND ONE-QUARTER INCH (5-1/4") VALVE OPENING. SIX INCH (6") MATTER MECHANICAL JOINT INLET, ONE AND ONE-HALF INCH (1-1/2") PENTAGON OPERATING NUT. SHALL OPEN COUNTERCLOCKWISE. HYDRANT MUST BE PAINTED AT FACTORY BY THE MANUFACTURER AND SHALL BE PAINTED IN CONFORMANCE WITH CITY OF CLERMONT REQUIREMENTS (COLORS BASED ON DELIVERED FIRE FLOW). HYDRANTS SHALL BE MUELLER CENTURION (TRAFFIC MODEL A-423) NO SUBSTITUTE. FIRE HYDRANTS TO BE THE BREAK AWAY TYPE WITH A CAST IRON DUCTILE IRON MECHANICAL JOINT HYDRANT TEE, WITH RESILIENT SEAT AND MECHANICAL JOINT GATE VALVE.

FIRE HYDRANTS CONT.

1. BLUE PAVEMENT REFLECTORS SHALL BE PLACED IN THE CENTERLINE OF THE DRIVING LANE CLOSEST TO, AND DIRECTLY IN FRONT OF EACH FIRE HYDRANT.
2. A POST-CONSTRUCTION FIRE FLOW TEST SHALL BE CONDUCTED. HYDRANTS SHALL DELIVER THE REQUIRED GPM PER THE CITY OF CLERMONT LAND DEVELOPMENT REGULATIONS WITH A RESIDUAL PRESSURE OF 20 PSI. CONTRACTOR SHALL NOTIFY CITY OF CLERMONT ENGINEERING DEPARTMENT WHEN HYDRANTS ARE READY TO BE FLOW TESTED. FOR FIRE HYDRANTS LOCATED WITHIN THE CITY OF CLERMONT, CONNECTED TO THE CITY OF CLERMONT'S WATER SYSTEM, AND/OR LOCATED WITHIN CLERMONT FIRE DEPARTMENT'S PROTECTION AREA, THIS TEST SHALL BE CONDUCTED BY CITY OF CLERMONT PERSONNEL. THIS TEST SHALL BE PROVIDED BY THE CONTRACTOR FOR LOCATIONS NOT INCLUDED ABOVE. THIS TEST MAY BE WITNESSED BY THE OWNER/OPERATOR IF REQUESTED AT TIME OF NOTIFICATION THAT HYDRANTS ARE READY FOR FLOW TEST.
3. IF A PERMIT FOR THE WATER SYSTEM IS REQUIRED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP), THE SYSTEM SHALL BE ACCEPTED AND APPROVED BY DEP PRIOR TO BEING PRESSURIZED OFF OF THE CITY SYSTEM AND PRIOR TO ANY FLOW TESTS BEING CONDUCTED.
4. FIRE HYDRANTS AND FIRE PROTECTION APPLIANCES SHALL BE KEPT ACCESSIBLE TO THE FIRE DEPARTMENT AT ALL TIMES. THE FOLLOWING CLEARANCES SHALL BE MAINTAINED FOR ALL FIRE HYDRANTS AND FIRE PROTECTION APPLIANCES. CLEARANCE OF SEVEN AND ONE-HALF FEET (7'-6") IN FRONT OF AND TO THE SIDES OF A FIRE HYDRANT, WITH A FOUR FOOT (4') CLEARANCE TO THE REAR OF THE HYDRANT. CLEARANCES BY SEVEN AND ONE-HALF FEET (7'-6") IN FRONT OF AND TO THE SIDES OF THE APPLIANCES. NO PERSON SHALL PLACE OR KEEP ANY POST, FENCE, VEHICLE, GROWTH, VEGETATION, TRASH OR STORAGE OF OTHER MATERIALS THAT WOULD OBSTRUCT A FIRE HYDRANT OR FIRE PROTECTION APPLIANCE AND HINDER OR PREVENT ITS IMMEDIATE USE BY FIRE DEPARTMENT PERSONNEL. SUCH FIRE HYDRANT OR FIRE PROTECTION APPLIANCE SHALL BE KEPT READILY VISIBLE AT ALL TIMES.
5. FIRE HYDRANTS SHALL NOT BE LOCATED CLOSER THAN THREE (3) FEET TO OR MORE THAN TWENTY (20) FEET FROM THE EDGE OF A STREET, DRIVE OR OTHER ACCESSWAY, UNLESS OTHERWISE REQUESTED BY THE FIRE OFFICIAL. THE 4-1/2" CONNECTION SHALL FACE THE NEAREST ROADWAY, OR IF LOCATED WITHIN A COMMON PARKING AREA, SHALL FACE THE NEAREST TRAFFIC WAY. NO HYDRANT SHALL BE INSTALLED WHERE PEDESTRIAN OR VEHICULAR TRAFFIC WOULD INTERFERE WITH THE USE OF THE HYDRANT. THE STANDARD FIRE HYDRANT APPROVED FOR USE IN THE CITY IS MUELLER MODEL A-423. THE CITY'S STANDARD FIRE HYDRANT DETAIL AND NOTES ARE AVAILABLE FROM THE CITY ENGINEER'S OFFICE AND MUST BE INCLUDED IN THE SITE PLANS. ALL FIRE HYDRANTS AND MAINS, INCLUDING THOSE PRIVATELY OWNED, THAT ARE CONNECTED TO THE CITY'S POTABLE WATER SYSTEM, SHALL CONFORM TO CITY STANDARDS.
6. A MINIMUM NUMBER OF FIRE HYDRANTS SHALL BE PROVIDED AND/OR AVAILABLE TO PROVIDE EQUAL TO OR GREATER THAN THE NEEDED FIRE FLOW FOR ALL BUILDINGS ON THE SITE BASED ON THE FOLLOWING: CREDITS, HYDRANT(S) WITHIN 300 FEET OF THE BUILDING, 1,000 GPM CREDIT; HYDRANT(S) 301 TO 600 FEET, 875 GPM CREDIT; HYDRANT(S) 601 TO 1,000 FEET, 250 GPM CREDIT.
7. FIRE HYDRANTS THAT HAVE NOT BEEN TESTED AND PLACED INTO SERVICE MUST BE CLEARLY MARKED AS "OUT OF SERVICE" USING INDUSTRY ACCEPTED METHODS (FLAGGING, TAGGING, ETC.)

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90% SUBMITTAL

MARK	DATE	DESCRIPTION	BY

CITY OF CLERMONT
WESTSIDE WATER MAIN LOOP
GENERAL NOTES

Project No: 200-0610-1400
Designed By: JLA
Drawn By: PD
Checked By: JLA

G-003

Sheet

Bar Measures 1 Inch

FDOT(PS) 10:23:28 AM - HEDRICK, KEITH PRINCE, KITTS(SEC)(WAS)(SDN-MS)(V-4)(PRINCE)(WAS)(SDN-MS)(V-4)(PRINCE)(WAS)(SDN-MS)(V-4)(PRINCE

LIST OF STANDARD ABBREVIATIONS

#	NUMBER	DWV	DRAIN, WASTE, AND VENT	LAV	LAVATORY	RPM	REVOLUTIONS PER MINUTE
AAP	ALARM ANNUNCIATOR PANEL	E	EAST	LEN	LENGTH	RR	RAILROAD
AAPV	AUTOMATIC AIR RELEASE VALVE	EA	EACH	LF	FOOT(FEET)	RT	RIGHT
AAV	AUTOMATIC AIR VENT	EBS	EXISTING BOLT	LP	LINEAR FEET	RW	RAW WATER
AB	ANCHOR BOLT	EF	EXCAVATE	LR	LIGHT POLE	RWT	RAW WASTEWATER
ABAN	ABANDONED	EFF	EFFICIENT	LSS	LIME STABILIZED SLUDGE	S	SOUTH
ABRDV	ABRADIVE	EG	EXISTING GRADE	LVR	LOUVER	SA	SANITARY
ABS	ACRYLONITRILE BUTADIENE STYRENE	EL	ELEVATION	LWL	LOW WATER LEVEL	SAN	SANITARY
AC	ASPHALT	ELEC	ELECTRICAL	M	METER	SC	SOLENOID
ACCMP	ASPHALT COATED CORRUGATED METAL PIPE	EMER	EMERGENCY	MAINT	MAINTENANCE	SD	STORM DRAIN
ACP	ASBESTOS CEMENT PIPE	ENCL	ENCLOSURE(ED)	MAN	MANUALLY	SE	SOUTHEAST
ADDM	ADDENDUM	ENGR	ENGINEER	MAS	MASONRY	SECT	SECTION
ADJ	ADJUSTABLE	EP	EDGE OF PAVEMENT	MATL	MATERIAL	SEP	SECONDARY EFFLUENT
AFF	ABOVE FINISHED FLOOR	EPDM	ETHYLENE PROPYLENE DIENE MONOMER	MAX	MAXIMUM	SFT	SQUARE FOOT OR FEET
AFG	ABOVE FINISHED GRADE	EPRF	EXPLOSION PROOF	MC	MOTOR CONTROL CENTER	SHT	SHEET(SHEETS)
AFS	ABOVE FINISHED SLAB	EQUIP	EQUIPMENT	MECH	MECHANICAL	SIM	SIMILAR
AHD	AHEAD	ER	EXISTING REDUCER	MEG	MEGOHM	SL	SLUDGE
AL	ALUMINUM	ERTM	EXCAVATION	MFR	MANUFACTURER	SLV	SLEEVE
ALT	ALTERNATE	EST	ESTIMATE(D)	MG	MILLION GALLONS	SM	SHEET METAL
AMP	AMPERE	EW	EACH WAY	MGD	MILLION GALLONS PER DAY	SOLN	SOLUTION
AMT	AMOUNT	EXC	EXCAVATE	MH	MANHOLE	SP	SPLICE, SPACING
APPR	APPROXIMATE(LY)	EXP	EXPANSION	MI	MILE(S)	SPEC	SPECIFICATION
APCR	ANCHOR(AGE)	EXIST	EXISTING	MIN	MINIMUM, MINUTES	SQ	SQUARE
APV	AIR RELEASE VALVE	EXT GR	EXISTING GRADE	MISC	MISCELLANEOUS	SSMT	SANITARY SEWER EASEMENT
ARV	AIR RELEASE VALVE	EXT	EXTENSION	MJ	MECHANICAL JOINT	SS	SANITARY
ASPH	ASPHALT	EXTN	EXTENSION	ML	MIXED LIQUOR	SS	SANITARY SEWER
ASSY	ASSEMBLY			MS	MASONRY OPENING	SSE	SUBSTANDARD EFFLUENT
AVE	AVENUE	F		MON	MONUMENT	SST	STAINLESS STEEL
A.C.	AIR CONDITIONING	FAB	FABRICATED	MPH	MILES PER HOUR	ST	STREET
ANV	ANNUNCIATOR VALVE	FCA	FLANGED COUPLING ADAPTER	MPT	MALE PIPE THREAD	STA	STATION
		FB	FLAT BAR	ME	MOTOR STARTER	STD	STANDARD
B		FCV	FLOW CONTROL VALVE	MSP	MOTOR STARTER PANEL	STK	STAKE
BAF	BAFFLE	FD	FLOOR DRAIN	MTD	MOUNTED	STL	STEEL
BCV	BALL CHECK VALVE	FE	FIRE EXTINGUISHER	MV	MANUAL VALVE	STM	STEAM
BFL	BLIND FLANGE	FE	FILTERED EFFLUENT	MW	MONITOR	STRUCT	STRUCTURAL
BFV	BUTTERFLY VALVE	FH	FIRE HYDRANT	MWL	MEAN WATER LEVEL	SUPP	SUPPORT
BHP	BRAKE HORSEPOWER	FIG	FIGURE	MWP	MAXIMUM WORKING PRESSURE	SV	SOLENOID VALVE
BI	BLACK IRON	FIN	FINISHED			SVCE	SERVICE
BITUM	BITUMINOUS OR BITUMASTIC	FIN FLR	FINISH FLOOR	N	NORTH	SVW	SERVICE WATER
BL	BASELINE	FIN GR	FINISH GRADE	NA	NOT APPLICABLE	SW	SOUTHWEST
BLDG	BUILDING	FL	FLUORIDE	NAD83	SODIUM ATOMIC LIGHT E	SWD	SIDEWALK DEPTH
BLK	BLOCK	FLG	FLANGED	NE	NORTHEAST	SWGR	SURFACE WATER
BM	BENCHMARK	FL	FLOW LINE	NIC	NOT IN CONTRACT	SYM	SYMBOL
BOC	BOTTOM OF CURB	FLR	FLOOR	NL	NEUTRAL	SYMM	SYMMETRICAL
BOF	BOTTOM	FM	FORCE MAIN	NOM	NOMINAL	SW	SIDEWALK
BP	BASE PLATE	FPM	FEET PER MINUTE	NPT	NATIONAL PIPE THREAD		
BRG	BEARING	FPS	FEET PER SECOND	NPT	NATIONAL PIPE TAPER (THREAD)	T	
BSP	BLACK STEEL PIPE	FRP	FIBERGLASS REINFORCED PLASTIC	NPW	NON POTABLE WATER	TAN	TANGENT
BV	BALL VALVE	FT	FOOT OR FEET	NTS	NON SCALE	TB	TOP OF BEAM
BW	BOTH WAYS	FUT	FUTURE	NTU	NEPHELOMETRIC TURBIDITY UNIT	TBM	TEMPORARY BENCH MARK
BWW	BACKWASH WATER	FV	FOOT VALVE	NW	NORTHWEST	TD	TEST BORING (# & 13-1)
		FW	FIREWATER	NA	NOT APPLICABLE	TDH	TOTAL DYNAMIC HEAD
C		FWP	FIREWATER PANEL			TEL	TELEPHONE
CA	CAPACITY	FF	FACE TO FACE	O	OXYGEN	TEFC	TOTALLY ENCLOSED FAN COOLED
CAL	COMPRESSED AIR			OC	ON CENTER	TEL	TELEPHONE
CAV	COMBUSTION AIR VALVE	G		OD	OUTSIDE DIAMETER	TENV	TOTALLY ENCLOSED NON-VENTILATED
CB	CATCH BASIN	GA	GAUGE	OEP	OPEN END PROOF		
CCE	CHLORINE CONTACT CHAMBER	GAL	GALLON(S)	OF	OUTSIDE FACE	THD	THREAD(S)
CE	CHLORINATED EFFLUENT	GALV	GALVANIZED	OH	OVER HEAD	THK	THICKNESS
CFM	CUBIC FEET PER MINUTE	GAP	GALVANIZED IRON PIPE	OHW	OVERHEAD WIRE	TIP	TIP OF BLADE
CFS	CUBIC FEET PER SECOND	GJ	GROOVE JOINT	OPP	OPPOSITE	TOB	TOP OF BARK
CV	CHECK VALVE	GPD	GALLONS PER DAY	OPT	OPTIONAL	TOC	TOP OF CURB
CI	CAST IRON	GPG	GALLONS PER GALLON	OR	OFFICIAL RECORDS	TOE	TOE OF SLOPE
CIP	CAST IRON PIPE	GPH	GALLONS PER HOUR	OSV	OUTSIDE SCREW AND YOKE	TOT	TOTAL
CJ	CONSTRUCTION JOINT	GPM	GALLONS PER MINUTE	OTM	OPERATION AND MAINTENANCE	TP	TELEPHONE POLE
CKT	CIRCUIT	GPS	GALLONS PER SECOND			TS	THICKENED SLUDGE
CL	CENTER LINE	GR	GRADE	P		TV	TELEVISION
CL2	CHLORINE GAS	GRTS	GRATING	PE	PLAIN END	TYP	TYPICAL
CLF	CHAIN LINK FENCE	GS	GALVANIZED STEEL	PG	PRESSURE GAGE	TOB	TOP OF BOTTOM
CLN	CLEAN OR CLEANAGE	GSR	GROUND STORAGE RESERVOIR	PCM	PERMANENT CONTROL MONUMENT		
CLVT	CLAY(ED)	GST	GROUND STORAGE TANK			U	
CMP	CORRUGATED METAL PIPE	GT	GRADE	PE	PLAIN END	UD	UNDERDRAIN
CMPA	CORRUGATED METAL PIPE ARCH	GV	GATE VALVE	PG	PRESSURE GAGE	UG	UNDERGROUND
CMU	CONCRETE MASONRY UNIT			PI	POINT OF INTERSECTION	ULT	ULTIMATE
CND	CONDUIT	H		PL	PLATE	UN	UNION
CNR	CORNER	HB	HOSE BIBB	PL	PROPERTY LINE	UNLS	UNLESS OTHERWISE NOTED
CO	CLEAN OUT	HD	HEAVY-DUTY	PNV	PINCH VALVE	UGE	UNDERGROUND ELECTRIC
COD	CHEMICAL OXYGEN DEMAND	HDPE	HIGH DENSITY POLYETHYLENE	POB	POINT OF BEGINNING	UTC	UNDERGROUND TELEPHONE CABLE
COAG	COAGULANT	HGA	HYDRAULIC GRADE LINE	POJ	PUSH-ON JOINT	UTL	UTILITY
COL	COLUMN	HCL	HYDROCHLORIC ACID	POT	POTABLE		
CO	CONDUIT	HM	HANDRAIL	PP	POWER POLE	V	
CONC	CONCRETE	HOD	HOIST	PPD	POUNDS PER DAY	V	VOLT(S)
CONN	CONNECTION	HOPE	HIGH DENSITY POLYETHYLENE	PPM	PARTS PER MILLION	VAC	VACUUM
CONSTR	CONSTRUCTION	HGA	HAND GRIP-AUTO	PREFAB	PREFABRICATED	VAR	VARIES
CONT	CONTINUOUS	HORIZ	HORIZONTAL	PRESS	PRESSURE	VCP	VITRIFIED CLAY PIPE
CONTR	CONTRACTOR	HP	HORSEPOWER	PRV	PRESSURE REDUCING VALVE	VS	VERTICAL CLEAN
COORD	COORDINATE	HPA	HIGH PRESSURE AIR	PSW	PROCESS WATER	VCP	VITRIFIED CLAY PIPE
CO	COMPANY	HR	HOUR	PSF	POUNDS PER SQUARE FOOT	VEL	VELOCITY
CP	CONCRETE PIPE	HVAC	HEATING, VENTILATION, AND AIR CONDITIONING	PSI	POUNDS PER SQUARE INCH	VERT	VERTICAL
CPA	CONCRETE PIPE ARCH			PSIA	POUNDS PER SQUARE INCH ABSOLUTE	VFD	VARIABLE FREQUENCY DRIVE
CPC	CONCRETE	HWL	HIGH WATER LEVEL			VG	VG LINE
CPVC	CHLORINATED POLYVINYL CHLORIDE	HW	HOT WATER	PSIG	POUNDS PER SQUARE INCH GAGE		
		HZ	HERTZ			W	
CR	CONCENTRIC REDUCER			PT	POINT OF TANGENCY	W	WATT, WEST
CS	CHLORINE SOLUTION	I		PV	PLUG VALVE	WAS	WASTE ACTIVATED SLUDGE
DIA	DIAMETER	ID	INSIDE DIAMETER	PVC	POLYVINYL CHLORIDE	WSD	WELDED STEEL PIPE
DC	DIRECT CURRENT	IN	INCHES	PVMT	PAVEMENT	WT	WIDE FLANGE
DISS	DISSOLUTION	INF	INFLUENT	PW	POTABLE WATER	WTP	WATER TREATMENT PLANT
DEPT	DEPARTMENT	INT	INTERSECTION	PWR	POWER	WV	WATER VALVE
DESC	DESCRIPTION	J	JUNCTION BOX			WW	WELDED WIRE FABRIC
DI	DUCTILE IRON	JT	JOINT	PZP	PRESTRESSED CONCRETE PIPE	WWF	WELDED WIRE MESH
DF	DIESEL FUEL			RCPA	REINFORCED CONCRETE PIPE ARCH	WWTP	WASTEWATER TREATMENT PLANT
DI	DUCTILE IRON	K					
DIA	DIAMETER	K	KIP (1,000 LB)	RD	ROAD	XF	WITH
DIFF	DIFFUSER	KPH	KILO PUMP	RDCR	REDUCER	W/O	WITHOUT
DIM	DIMENSION	KV	KILOVOLT	REBAR	REINFORCING STEEL		
DIP	DUCTILE IRON PIPE	KVA	KILOVOLT AMPERES	REF	REFERENCE	X	
DISCH	DISCHARGE	KW	KILOWATT	REINF	REINFORCE(D)(ING)(MENT)	XFER	TRANSFER
DIR	DIRECTION	KWH	KILOWATT HOUR	REQ	REQUIRE(D)		
DM-1	DRAIN MAIN #1			RESIL	RESILIENT	Y	
DN	DOWN	L		RF	RAISED FACE	YD	YARD(S)
DR	DRAIN	LT	LEFT	RJ	RESTRAINED JOINT	YH	YARD HYDRANT
DV	DIAPHRAGM VALVE	LAB	LABORATORY	RM	ROOM	YR	YEAR(S) FR
DW	DRIVEWAY	LAM	LAMINATE OR LAMINATION	RPM	REDUCED PRESSURE BACKFLOW PREVENTER		
DWG	DRAWING	LATL	LATERAL				

PIPING LEGEND

FITTING/ APPURTENANCE	FLANGED				WED/MANCAL JOINT				GROOVE JOINT				SOLVENT WELD			
	SINGLE LINE		DOUBLE LINE		SINGLE LINE		DOUBLE LINE		SINGLE LINE		DOUBLE LINE		SINGLE LINE		DOUBLE LINE	
	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED
BEND																
TEE																
WYE																
REDUCER																
CAP/ BLIND FLANGE					N/A	N/A	N/A	N/A								
PLUG	N/A	N/A	N/A	N/A					N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BUTTERFLY VALVE																
BALL VALVE					N/A	N/A	N/A	N/A								
CHECK VALVE					N/A	N/A	N/A	N/A								
GATE VALVE																
PLUG VALVE																
AUTOMATIC CONTROL VALVE					N/A	N/A	N/A	N/A								
PINCH VALVE					N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				

CIVIL LEGEND

- PROPERTY LINE
- RIGHT OF WAY LINE (R-O-W)
- LIMITS OF CONTRUCTION
- EASEMENT
- 133 — PROPOSED CONTOUR MAJOR
- 123 — PROPOSED CONTOUR MINOR (LABEL OPTIONAL)
- A — A — WATER MAIN
- AC — AC — AC WATER MAIN
- STORM SEWER
- SANITARY SEWER
- FM — SANITARY SEWER (FORCE MAIN)
- GUARD RAIL
- STEEL FENCE
- WOOD FENCE
- VEGETATION

TOP OF BOTTOM — XXXXX XX

- BENCHMARK
- 3/4 X 4 D DX
- TRAVERSE POINT
- FOUND IRON (TYPE)
- SET IRON (TYPE)
- FOUND MONUMENT (TYPE)
- SET MONUMENT (TYPE)
- SECTION CORNER
- UTILITY MANHOLE (AS SHOWN)
- UTILITY MANHOLE (AS SHOWN)
- UTILITY METER (AS SHOWN)
- UTILITY RISER (AS SHOWN)
- EAST UTILITY VALVE (AS SHOWN)
- UTILITY POLE (AS SHOWN)
- WELL
- TRAFFIC BOX
- CLEANOUT
- DECIDUOUS TREE
- ELECTRIC TRANSFORMER
- EVERGREEN TREE
- FIRE HYDRANT
- FLAG (AS SHOWN)
- GUY ANCHOR
- LIGHT POLE
- MAIL BOX
- PALM TREE
- POST
- SATELITE DISH
- SPIGOT
- SPRINKLER HEAD
- TRAFFIC SIGN

REFERENCE SYMBOLS

DENOTES SECTION LETTER IDENTIFICATION — X — X-XX — DENOTES DRAWING NO WHERE SECTION IS LOCATED

SECTION REFERENCE

DENOTES DETAIL NUMBER IDENTIFICATION — X — X-XX — DENOTES DRAWING NO WHERE DETAIL IS LOCATED

DETAIL REFERENCE

DENOTES SECTION LETTER IDENTIFICATION — X — SECTION — SCALE — DENOTES DRAWING NO WHERE SECTION IS LOCATED

SECTION TITLE

DENOTES DETAIL NUMBER IDENTIFICATION — X — DETAIL — SCALE — DENOTES DRAWING NO WHERE DETAIL IS LOCATED

DETAIL TITLE

HATCHING LEGEND

- ASPHALT OR CONCRETE SURFACE (SIDEWALK OR ROADWAY)
- ROADWAY SIDEWALK OPEN CUT REPLACE
- SODDED OR SEEDED AND MULCHED AREA OR EXISTING WETLAND
- EARTH
- EXISTING PIPES, STRUCTURES, EQUIPMENT TO BE REMOVED
- CAST-IN-PLACE CONCRETE
- PRECAST CONCRETE
- GROUT
- CONCRETE UNIT MASONRY (PLAN)
- STEEL
- ALUMINUM
- GRATING

MECHANICAL/DRAFTING LEGEND

	EXISTING	PROPOSED
VISIBLE LINE		
HIDDEN LINE		
CENTER LINE		
PHANTOM LINE		
MATCH LINE		
BREAK LINE		
DIMENSION LINES AND LEADERS	1 1/2"	NOTE

Bar Measures 1 inch

TETRA TECH
Engineering Business No. 4629
Water Management
201 East Pine Street, Suite 1000
Orlando, FL 32801
PHONE: (407) 839-3300 FAX: (407) 839-3290

Jenine M. Kennedy, P.E.
P.E. No. 52244, FL
201 East Pine Street, Suite 1000
Orlando, FL 32801
Engineering Business No. 4629

DATE: _____

90% SUBMITTAL

MARK	DATE	DESCRIPTION	BY

CITY OF CLERMONT
WEST/EAST WATER MAIN LOOP

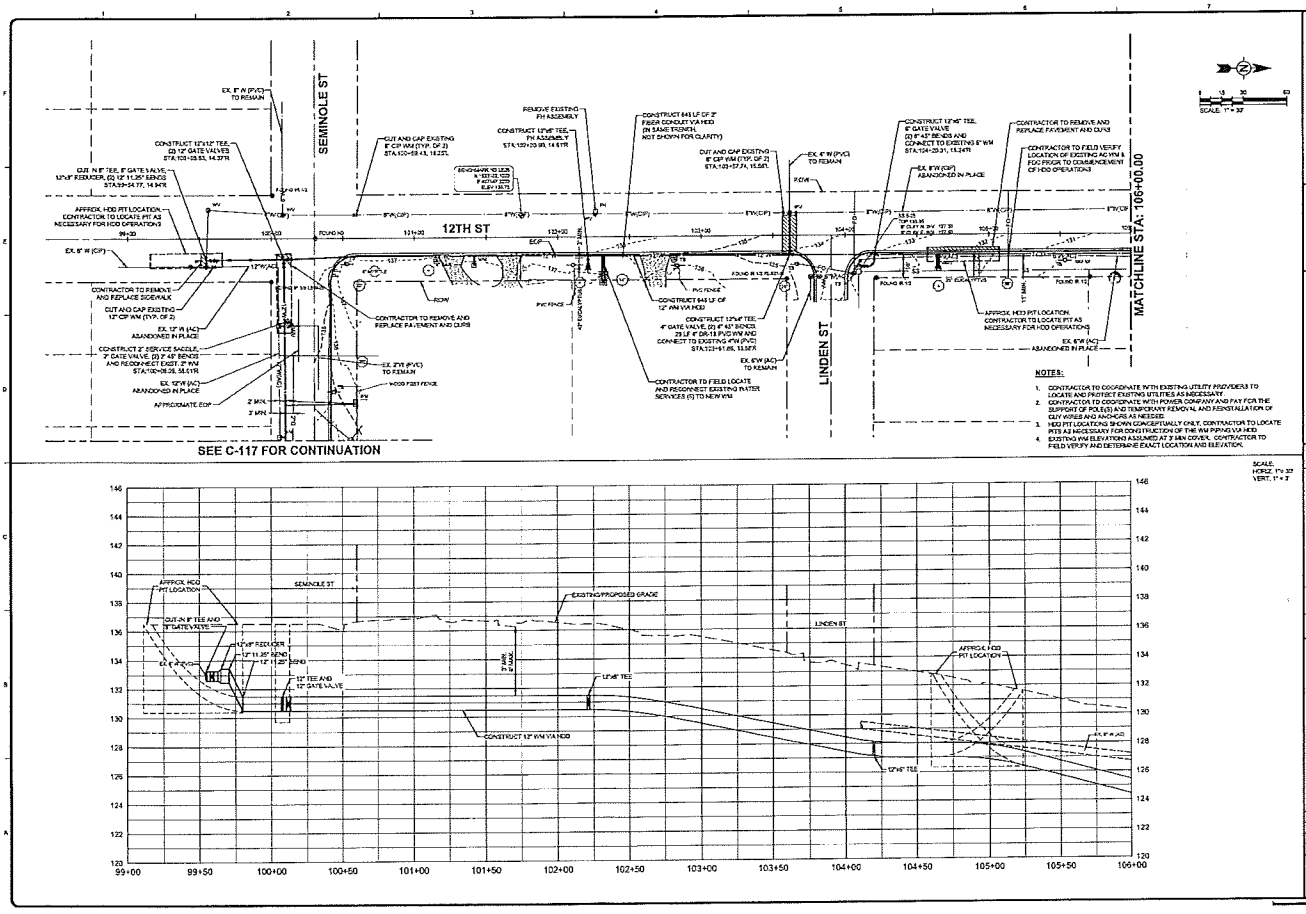
LEGEND & ABBREVIATIONS

Project No.: 309-5813-14004
Designed By: AAA
Drawn By: PO
Checked By: AAA

G-004

10/22/2014 10:31:25 AM - H:\HEBREW\PROJECTS\RECEIVED\15C20-2013\-14004\PROJECT\TETRA\CAD-C01 LEGEND AND ABBREVIATIONS.DWG - PETYEL, HECTOR

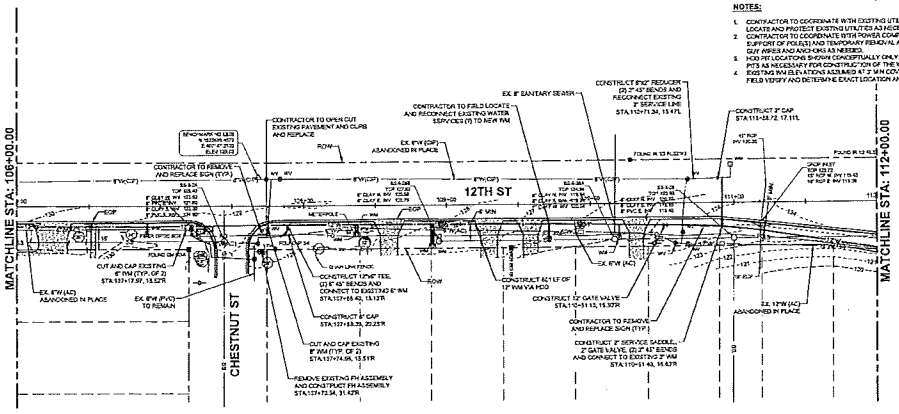
CITY OF CLERMONT	
WESTSIDE WATER MAIN LOOP	
KEY PLAN	
MARK	DATE	DESCRIPTION	BY
90% SUBMITTAL	
James M. Kaminski, P.E. P.E. No. 62244, FL 201 East Pine Street, Suite 1000 Orlando, FL 32801 Engineering Business No. 3429	DATE:
TETRA TECH 201 EAST PINE STREET, SUITE 1000 ORLANDO, FL 32801 PHONE: (407) 839-8851 FAX: (407) 839-8796	Engineering Business No. 3429 www.tetratech.com
Project No.: 352-03115-14024	
Drawing No.: JJA	
Drawn By: PD	
Checked By: JMK	
G-005	


SEMINOLE ST
12TH ST
LINDEN ST
MATCHLINE STA: 106+00.00
SEE C-117 FOR CONTINUATION
NOTES:
1. CONTRACTOR TO COORDINATE WITH EXISTING UTILITY PROVIDERS TO LOCATE AND PROTECT EXISTING UTILITIES AS NECESSARY.
2. CONTRACTOR TO COORDINATE WITH POWER COMPANY AND PAY FOR THE SUPPORT OF POLE(S) AND TEMPORARY REMOVAL AND REINSTALLATION OF GUY WIRES AND ANCHORS AS NEEDED.
3. HDD PIT LOCATIONS SHOWN CONCEPTUALLY ONLY. CONTRACTOR TO LOCATE PITS AS NECESSARY FOR CONSTRUCTION OF THE WM PIPING VIA HDD
4. EXISTING WM ELEVATIONS ASSUMED AT 3' MIN COVER. CONTRACTOR TO FIELD VERIFY AND DETERMINE EXACT LOCATION AND ELEVATION.
SCALE: HORZ. 1"= 30' VERT. 1" = 3'
EXISTING/PROPOSED GRADE
CONSTRUCT 12" WM VIA HDD
APPROX. HDD PIT LOCATION
12"x6" TEE
99+00
99+50
100+00
100+50
101+00
101+50
102+00
102+50
103+00
103+50
104+00
104+50
105+00
105+50
106+00
TETRA TECH
99% SUBMITTAL
CITY OF CLERMONT
WESTSIDE WATER MAIN LOOP
PLAN AND PROFILE
Project No.: 200-08202-14008
Designed By: JWA
Drawn By: FD
Checked By: JW
C-101
Sheet
Bar Measures 1 inch

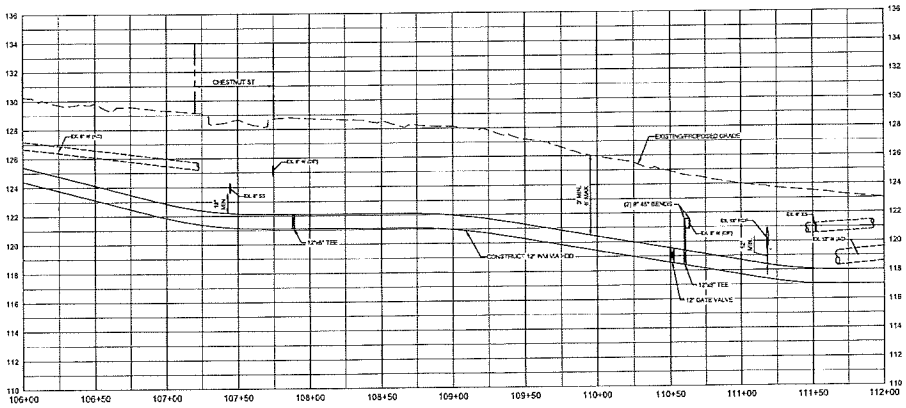
NOTES:

1. CONTRACTOR TO COORDINATE WITH EXISTING UTILITY PROVIDERS TO LOCATE AND PROTECT EXISTING UTILITIES AS NECESSARY.
2. CONTRACTOR TO COORDINATE WITH POWER COMPANY AND PAY FOR THE SUPPORT OF POLE(S) AND TEMPORARY REMOVAL AND REINSTALLATION OF GUY WIRES AND ANCHORS AS NEEDED.
3. HCD PF LOCATIONS SHOWN CONCEPTUALLY ONLY. CONTRACTOR TO LOCATE PITS AS NECESSARY FOR CONSTRUCTION OF THE WM FFPE(S) VIA HDD.
4. EXISTING WM ELEVATIONS ASSUMED 4'-2' MIN COVER. CONTRACTOR TO FIELD VERIFY AND DETERMINE EXACT LOCATION AND ELEVATION.

SCALE: 1"=30'



SCALE:
HORIZ. 1"= 30'
VERT. 1" = 2'



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Jacob N. Alexander, P.E.
P.E. No. 0084[illegible]
2017 Tetra Tech, Inc.
Orlando, Florida 32801
Engineering License No. 6[illegible]

DATE

90% SUBMITTAL

MARK	DATE	DESCRIPTION	BY

CITY OF CLERMONT
WESTSIDE WATER MAIN LOOP

PLAN AND PROFILE

Project No. 220-03310-M005
Designed By: JAA
Drawn By: PG
Checked By: JLB

C-102
Sheet

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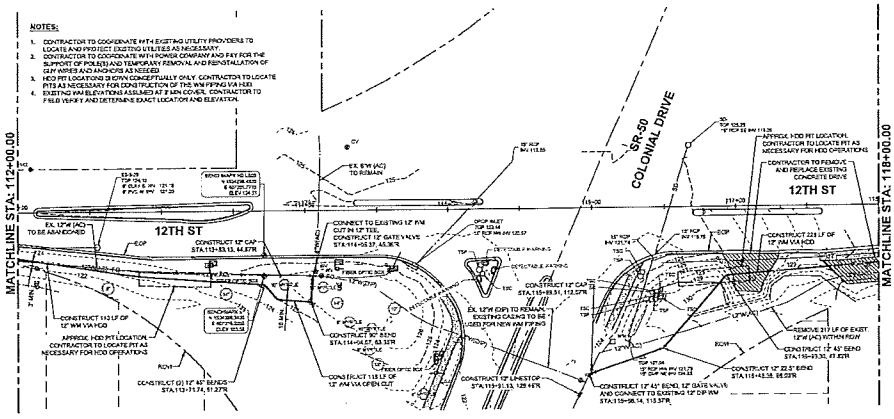
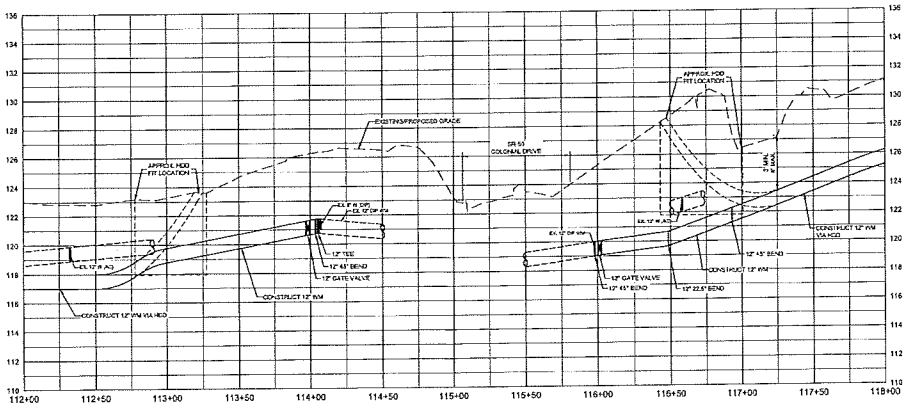
Ez Measure 1 inch

NOTES:

1. CONTRACTOR TO COORDINATE WITH EXISTING UTILITY PROVIDERS TO LOCATE AND PROTECT EXISTING UTILITIES AS NECESSARY.
2. CONTRACTOR TO COORDINATE WITH POWER COMPANY AND PAY FOR THE SUPPORT OF POLE(S) AND TEMPORARY REMOVAL AND REINSTALLATION OF GUY WIRES AND ANCHORS AS NEEDED.
3. HDD PIT LOCATIONS SHOWN CONCEPTUALLY ONLY. CONTRACTOR TO LOCATE PITS AS NECESSARY FOR CONSTRUCTION OF THE WM PIPING VIA HDD.
4. EXISTING WM ELEVATIONS ASSUMED AT 3' MIN COVER. CONTRACTOR TO FIELD VERIFY AND DETERMINE EXACT LOCATION AND ELEVATION.





SCALE:
HORZ. 1" = 30'
VERT. 1" = 2'

TETRA TECH
Engineering Business No. 2439
Surveying Business No. 2447
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Jashua M. Alexander, P.E.
P.E. No. 68294, FL
201 East Pine Street, Suite 1000
Orlando, Florida 32801
Engineering Business No. 2439

DATE

90% SUBMITTAL

MARK	DATE	DESCRIPTION	BY

CITY OF CLERMONT
WESTSIDE WATER MAIN LOOP

PLAN AND PROFILE

Project No. 200-08215-1-KKB
Designed By: JMA
Drawn By: PG
Checked By: JAK

C-103
Sheet

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Bar Measures 1 inch

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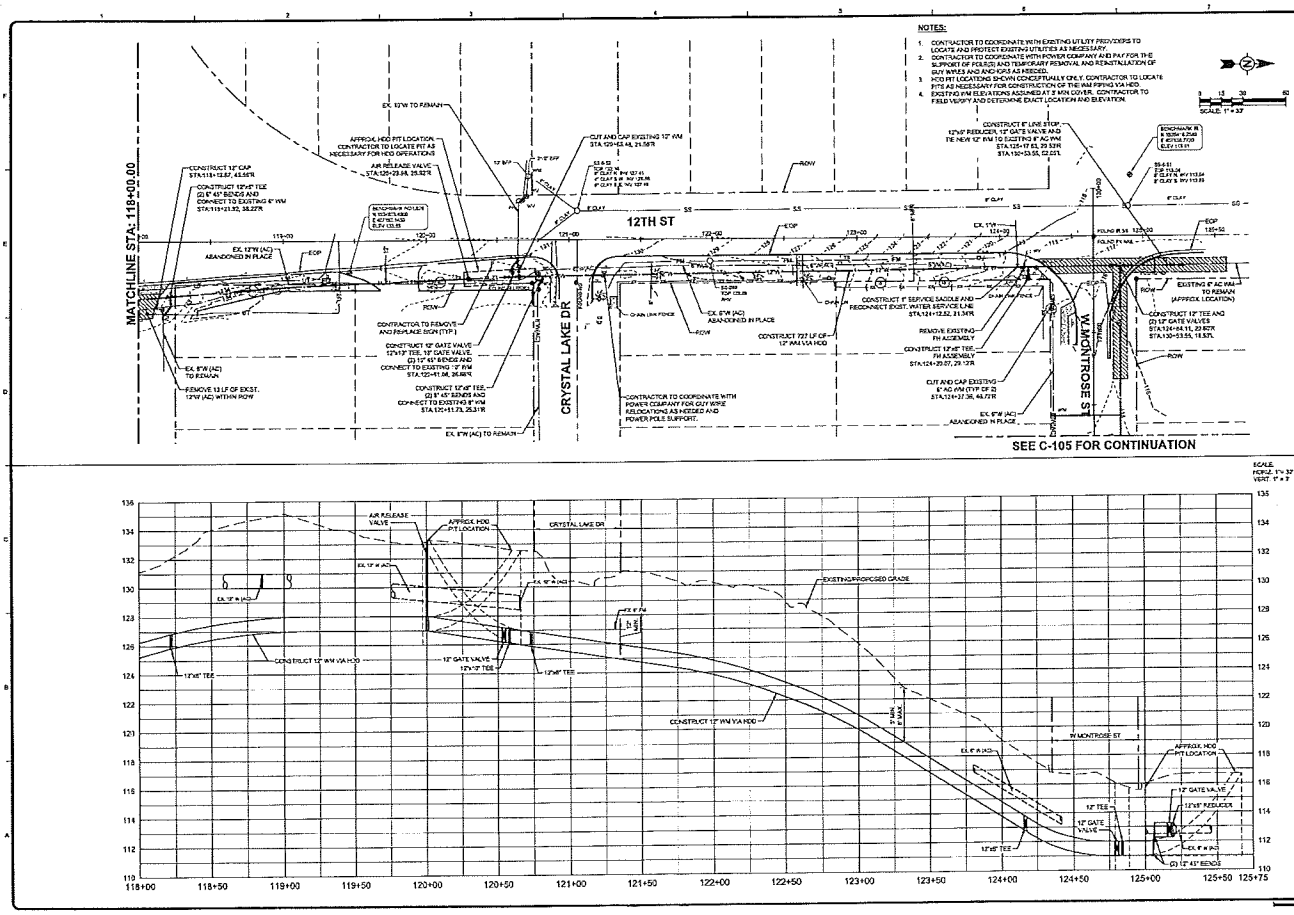

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Jamie M. Alexander, P.E.
P.E. No. 69244, P.C.
201 East Pine Street, Suite 1000
Orlando, Florida 32801
Engineering Business No. 2428

DATE:

50% SUBMITTAL

MARK	DATE	DESCRIPTION	BY

CITY OF CLERMONT
WESTSIDE WATER MAIN LOOP

PLAN AND PROFILE

Project No.: ZOC-0813-1423
Designed By: JMA
Drawn By: PD
Checked By: JCF

C-104
Sheet

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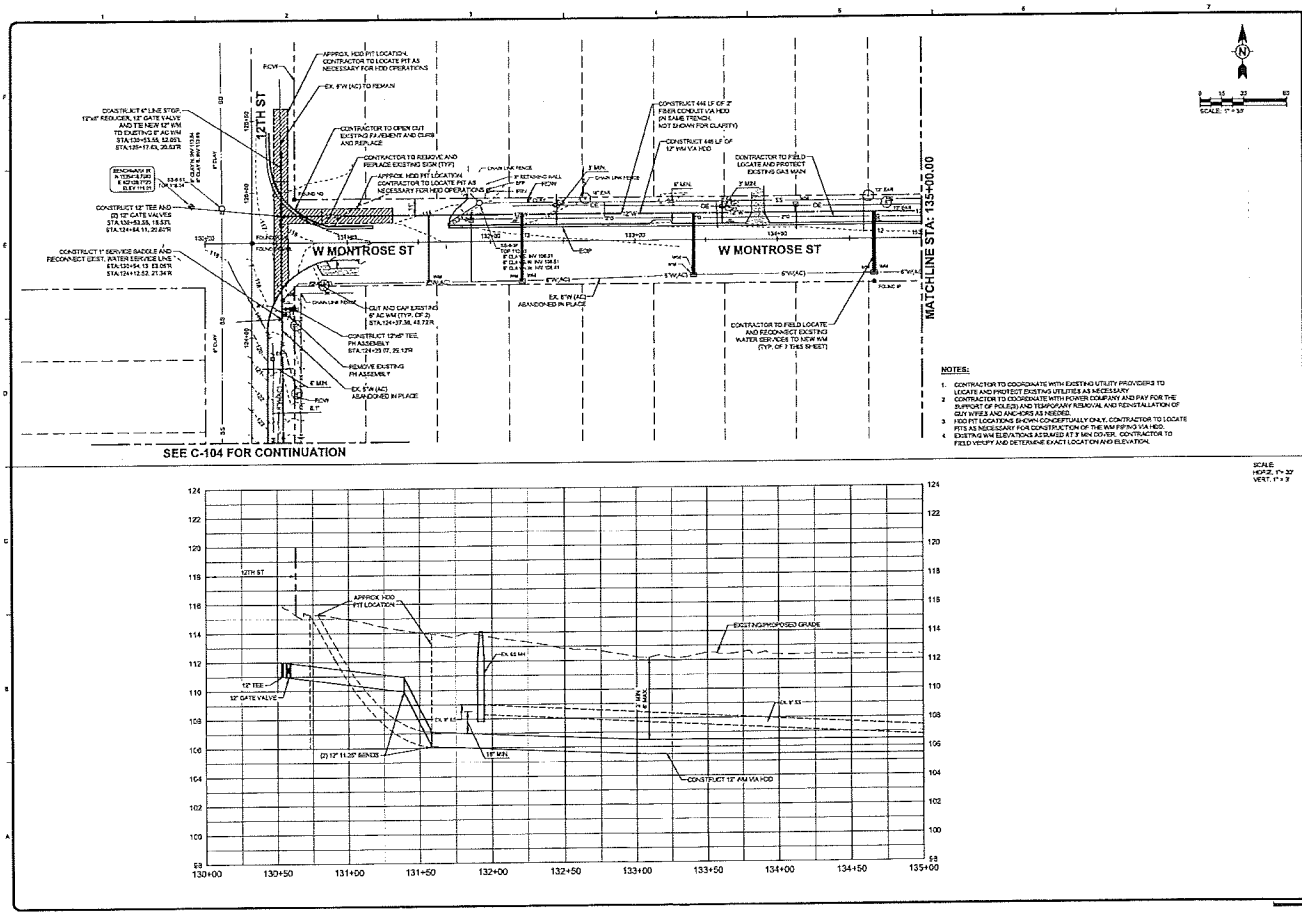

NOTES:

1. CONTRACTOR TO COORDINATE WITH EXISTING UTILITY PROVIDERS TO LOCATE AND PROTECT EXISTING UTILITIES AS NECESSARY.
2. CONTRACTOR TO COORDINATE WITH POWER COMPANY AND PAY FOR THE SUPPORT OF POLE(S) AND TEMPORARY REMOVAL AND REINSTALLATION OF GUY WIRES AND ANCHORS AS NEEDED.
3. HDD PIT LOCATIONS SHOWN CONCEPTUALLY ONLY. CONTRACTOR TO LOCATE PITS AS NECESSARY FOR CONSTRUCTION OF THE WM PIPING VIA HDD.
4. EXISTING WM ELEVATIONS ASSUMED AT 3' MIN COVER. CONTRACTOR TO FIELD VERIFY AND DETERMINE EXACT LOCATION AND ELEVATION.

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Engineering Business No. 2429

90% SUBMITTAL

DATE:

MARK	DATE	DESCRIPTION	BY

CITY OF CLERMONT

WESTSIDE WATER MAIN LOOP

PLAN AND PROFILE

Project No. 200-063-15-1402E
Designed By: JMM
Drawn By: KS
Checked By: JDF

C-105

Sheet

Bar Measures 1 Inch

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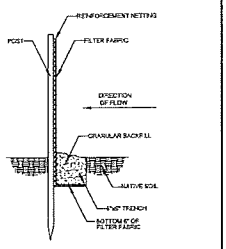
SILT BARRIER

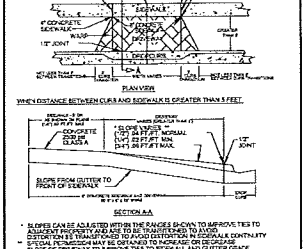
CITY OF CLERMONT
STANDARD DETAIL #22013



DETAIL 1
SCALE: NTS

SIDEWALK & PAVED DRIVEWAY

CITY OF CLERMONT
STANDARD DETAIL #22013



* SLOPES CAN BE ADJUSTED WITHIN THE RANGES SHOWN TO IMPROVE TIES TO ADJACENT PROPERTY AND ARE TO BE TRANSITIONED TO AVOID DISTORTION BY TRANSFORMED TO AVOID DISTORTION IN SIDEWALK CONTINUITY
** SIGNAL PEDESTRIAN MAY BE OBTAINED TO INCREASE OR DECREASE SLOPE OF DRIVEWAY TO IMPROVE TIES TO SIDEWALK AND GUTTER GRADE NOTE: DRIVEWAYS AND SIDEWALKS THROUGH DRIVEWAYS SHALL REQUIRE 6"x6" REINFORCEMENT WIRE.

CHECK AND VERIFY THESE ITEMS
- ☐ 6" NYYFE
- ☐ 7' TAPER CUT SQUARE
- ☐ 5' SIDEWALK TO R/W

** SLOPE VARIES **
- ☐ (1/2") 24 FT./FT. NORMAL
- (1/4") 22 FT./FT. MIN.
- (3/4") 20 FT./FT. MAX.

DETAIL 3
SCALE: NTS

PIPING CLEARANCES

CITY OF CLERMONT
STANDARD DETAIL #22013

General Water Notes

1. WATER SYSTEM COMPONENTS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND REGULATIONS, CLEANED, DISINFECTED AND BACTERIOLOGICALLY CLEARED FOR SERVICE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND CHAPTER 62-555 FLORIDA ADMINISTRATIVE CODE.
2. ALL PIPING SHALL BEAR THE "NSF" SEAL FOR POTABLE WATER.
3. WATER MAINS SHALL BE PVC CONFORMING TO AWWA C-900, DR - 18 FOR PIPE SIZES 4"-12". PIPES 16" OR LARGER SHALL BE AWWA C-905, DR - 18. ALL COUPLINGS, CLEANING COMPOUNDS, SOLVENTS, LUBRICANTS, AND PIPE PREPARATION FOR LAYING SHALL BE IN ACCORDANCE WITH THE PIPE MANUFACTURER'S LATEST RECOMMENDATIONS.
4. DEPTH OF WATER LINES TO BE 30" MINIMUM COVER FROM FINISH GRADE.
5. WATER MAINS TO BE LOCATED 4.50' FROM BACK OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
6. ALL SLEEVES UNDER PAVEMENT SHALL EXTEND 5' BEYOND THE BACK OF CURB.
7. DISINFECTING FOLLOWING THE PRESSURE TESTING, THE CONTRACTOR SHALL DISINFECT ALL SECTIONS OF THE WATER DISTRIBUTION SYSTEM. DISINFECTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF AWWA STANDARD C651, DIRECTLY IN WATER MAINS, AND ALL APPROPRIATE AGENCY APPROVAL.
8. ALL HYDROSTATIC TEST SHALL BE IN ACCORDANCE WITH AWWA CODE FOR DUCTILE IRON PIPE AND DESIGNED FOR PVC PIPE.
9. ALL WATER MAINS SHALL BE INSTALLED PRESSURE AND LEAK TESTED IN ACCORDANCE WITH AWWA C600, 62-555.320(21)(b1) AND 62-555.320, F.A.C. ALL INSTALLATION, TESTING AND FIELD PROCEDURES MUST BE PROVIDED AND MUST CONFORM TO THE APPLICABLE AWWA STANDARDS.
10. ALL PIPING MATERIALS AND SPECIFICATIONS CONSISTING PIPES, JOINTS AND PACKING MATERIALS, INTERNAL COATING AND LINING, FITTINGS, SPECIALS AND APPURTENANCES SHALL ALL BE IN ACCORDANCE WITH THE CORRESPONDING AWWA STANDARDS AND BE CONFORMING TO NSF REQUIREMENTS, AS MAY BE APPLICABLE, WITH EXCEPTIONS ALLOWED ONLY IF DOCUMENTATION AND ASSURANCES ARE PROVIDED IN COMPLIANCE WITH FLORIDA ADMINISTRATIVE CODE 62-555.320 (8) (b) AND 62-555.320 (21) (b) 1, F.A.C. SHALL ALSO CONFORM TO 62-555.320 (21) (b) 2, F.A.C. SHALL ALSO CONFORM. POLYETHYLENE TUBING SHALL BE PER AWWA C901. UNDERGROUND SERVICE LINES AND VALVES SHALL BE PER AWWA C500.

Utility Construction Notes (DEP)

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

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

(b) New or relocated, underground WATER MAINS shall be laid to provide a horizontal distance of at least (3) Three Feet, and preferably (10) Ten Feet, between the outside of the WATER MAIN and the outside of any existing or proposed WATER MAINS.

(c) New or relocated, underground WATER MAINS shall be laid to provide a horizontal distance of at least (3) Three Feet, and preferably (10) Ten Feet, between the outside of the WATER MAIN and the outside of any existing or proposed Gravity- or Pressure-type Sanitary Sewer, Wastewater Force Main, or pipeline conveying reclaimed water not regulated under Part III of Chapter 62-610 F.A.C. The Minimum Horizontal Separation distance between WATER MAINS and Gravity-type Sanitary Sewers shall be reduced to (3) Three Feet where the BOTTOM of the WATER MAIN is laid at least (6) Six Inches above the Top of the Sewer.

(d) New or relocated, underground WATER MAINS shall be laid to provide a horizontal distance of at least (10) Ten Feet between the outside of the WATER MAIN and all parts of any existing or proposed On-site Sewage Treatment and Disposal System as defined in Section 381.0065(3), F.S. and Rule 64E-6.002, F.A.C.

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

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

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

(c) At the Utility crossings described in paragraphs (a) & (b) Above, one full length of Water Main Pipe shall be centered above or below the other pipeline so the WATER MAIN joints will be as far as possible from the other pipeline. Alternatively, at such crossings, the pipes shall be arranged so that all WATER MAIN Joints are at least (3) Three feet from all joints in Vacuum-type Sanitary Sewers, Storm Sewers, Stormwater Force Mains, or pipelines conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C., and at least (6) Six Feet from all joints in Gravity- or Pressure-type Sanitary Sewers, Wastewater or Stormwater Force Mains, or pipelines conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C.

(3) Vertical Separation Between WATER MAINS and Sanitary or Storm Sewer Manholes:

(a) No WATER MAIN shall pass through or come into contact with any part of a Sanitary Manhole or a Storm Sewer Manhole.

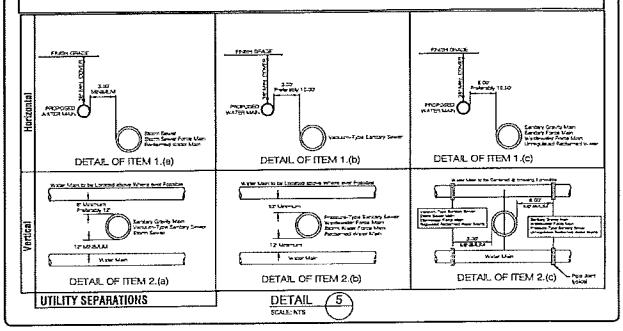
(4) Separation Between Fire Hydrant Drains and Sanitary or Storm Sewers, Wastewater or Stormwater Force Mains, reclaimed Water Pipelines, and On-Site Sewage Treatment and Disposal Systems: New or relocated fire Hydrants with underground Drains shall be located so that the drains are at least (3) Three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

(5) Exceptions to Separation:

Alternative or equivalent Compliance and Separations in Items 1 through 4 shall be allowed ONLY WITHOUT EXCEPTION: If for some reason where it is not technically feasible or Economically Sensible that items 1 through 4 cannot be complied with, Contractor will Stop Work and Notify the Engineer of Record for the appropriate solution, which will be submitted to The Department of Environmental Protection for APPROVAL prior to work commencement.

COLOR CODING

All water main pipe, including fittings, installed on or after August 23, 2003, except pipe installed under a bonafide extension permit for which the Department received a complete application on or after August 23, 2003, shall be color coded or marked using blue as a distinguishing color to differentiate drinking water from reclaimed or other water. Underground plastic pipe shall be solid wall blue pipe, shall have a co-extruded blue external skin, or shall be white or black pipe with blue stripes manufactured into, or applied to, the pipe wall, and underground metal or concrete pipe shall have blue stripes applied to the pipe wall. Pipe stripes during manufacturing of the pipe shall have continuous stripes that run parallel to the axis of the pipe, that are located at no greater than 90° intervals around the pipe, and will remain intact during and after installation of the pipe. If tape or paint is used to stripe pipe during installation of the pipe, the tape or paint shall be applied in a continuous line that runs parallel to the axis of the pipe and that is located along the top of the pipe. For pipes with an internal diameter of 24 inches or greater, tape or paint shall be applied in continuous lines along each side of the pipe to add a second stripe at the top of the pipe. Aboveground pipe as defined by water treatment plant or distribution system as defined in Section 62-555.320(10) F.A.C., and all other aboveground pipe shall be painted blue or shall be color coated or marked blue underground pipe.

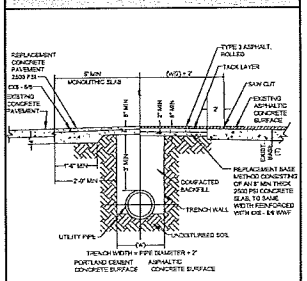


UTILITY SEPARATIONS

DETAIL 5
SCALE: NTS

ROADWAY OPEN CUT

CITY OF CLERMONT
STANDARD DETAIL #22013

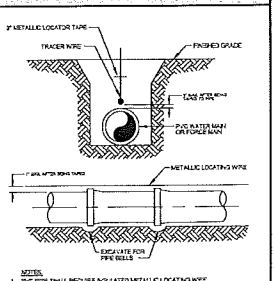


THE USE OF AN OPEN CUT IS NOT TO BE PRE APPROVED BY CITY ENGINEER.

DETAIL 2
SCALE: NTS

PVC PIPE LOCATING WIRE

CITY OF CLERMONT
STANDARD DETAIL #22013



NOTES:
1. PVC PIPE SHALL REQUIRE INSULATED METALLIC LOCATING WIRE (14 GAUGE COPPER) CAPABLE OF DETECTOR BY A CABLE LOCATER.
2. AND SHALL BE BURIED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE. LOCATING WIRE SHALL TERMINATE AT THE TOP OF EACH VALVE BOX.
3. AND BE CAPABLE OF EXTENDING 12" ABOVE TOP OF PIPE IN SUCH A MANNER SO AS NOT TO INTERFERE WITH VALVE OPERATION. USE DUCT TAPE AS NECESSARY TO HOLD WIRE DIRECTLY ON THE TOP OF THE PIPE.

DETAIL 4
SCALE: NTS

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Kenny M. Hoskins, P.E.
P.E. No. 60044, FL
201 East Pine Street, Suite 1000
Orlando, Florida 32801
Engineering License No. 2432
DATE:

90% SUBMITTAL

MARK	DATE	DESCRIPTION	BY

CITY OF CLERMONT
WEST SIDE WATER MAIN LOOP
DETAILS

Project No.:	200-05313-1-0026
Designed By:	MRS
Drawn By:	RG
Checked By:	JAS

C-501

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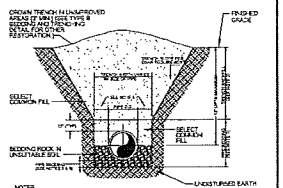
For Measures Text

TYPE A BEDDING & TRENCHING

CITY OF CLERMONT
STANDARD DETAIL 8/27/13

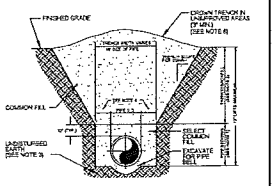


NOTES:
1. PIPE BEDDING, SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER ASHTO T-180.
2. TRENCH BACKFILL, COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER ASHTO T-180.
3. MOISTURE CONDITIONING TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CITY OF CLERMONT.
4. 12" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF PIPE LAYING.
7. SHEETING AND BRACING SHALL BE USED IN ACCORDANCE WITH CURRENT TRENCHING REGULATIONS AND IN-SITU UNSAFE CONDITIONS EXIST.
8. GRAVITY SEWERS SHALL UTILIZE TYPE A BEDDING, IF REQUIRED BY THE ENGINEER. BEDDING DEPTH SHALL BE 1/4 WALL FOR PIPE DIAMETER LESS THAN 18" AND 12" MINIMUM FOR PIPE DIAMETER 18" AND LARGER. IF UNSUITABLE MATERIAL EXISTS BELOW DEPTH OF BEDDING ROCK BELOW THE PIPE, CITY OF CLERMONT SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.

DETAIL 1
SCALE: NTS

TYPE B BEDDING & TRENCHING

CITY OF CLERMONT
STANDARD DETAIL 8/27/13



NOTES:
1. PIPE BEDDING, SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER ASHTO T-180.
2. TRENCH BACKFILL, COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER ASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY THE ENGINEER.
4. 12" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF PIPE LAYING.
7. SHEETING AND BRACING SHALL BE USED IN ACCORDANCE WITH CURRENT TRENCHING REGULATIONS AND IN-SITU UNSAFE CONDITIONS EXIST.
8. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN CITY OF CLERMONT RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

DETAIL 3
SCALE: NTS

THRUST RESTRAINT

CITY OF CLERMONT
STANDARD DETAIL 8/27/13

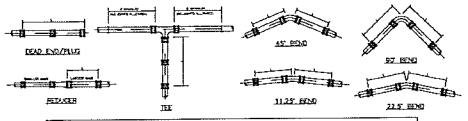


TABLE OF THRUST RESTRAINT LENGTHS

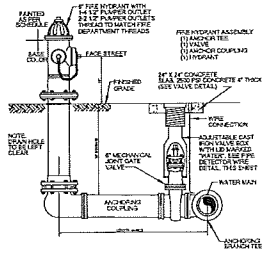
PIPE SIZE (INCHES)	90° BEND		45° BEND		22.5° BEND		11.25° BEND		TEES		DEAD END & PLUG		REDUCER			
	PVC DJ	DUCTILE IRON DJ	PVC DJ	DUCTILE IRON DJ	PVC DJ	DUCTILE IRON DJ	PVC DJ	DUCTILE IRON DJ	PVC DJ	DUCTILE IRON DJ	PVC DJ	DUCTILE IRON DJ	PIPE SIZE	PVC DJ	DUCTILE IRON DJ
4	20'	15'	8'	7'	4'	3'	2'	2'	15'	10'	45'	29'	6"x4"	32'	37'
6	25'	22'	12'	9'	6'	4'	3'	2'	23'	21'	67'	43'	8"x6"	34'	22'
8	35'	29'	15'	12'	7'	6'	4'	3'	32'	33'	82'	52'	12"x8"	33'	21'
10	43'	34'	18'	14'	8'	7'	4'	3'	38'	49'	98'	62'	12"x10"	34'	21'
12	53'	42'	21'	17'	10'	8'	5'	4'	55'	57'	118'	72'	16"x12"	62'	40'
14	57'	46'	24'	22'	12'	9'	6'	5'	62'	63'	132'	84'	18"x14"	63'	42'
16	62'	51'	26'	23'	13'	10'	6'	5'	110'	73'	148'	93'			

THRUST RESTRAINT DESIGN NOTES:
1. RESTRAINT JOINTS, FITTINGS AND VALVE REQUIREMENTS CALCULATED BY THE THRUST RESTRAINT DESIGN PROGRAM PROVIDED BY EBAA IRON SALES, INC.
2. DATA BASED ON MAXIMUM WATER PRESSURE OF 150 PSI, THE UNIFIED SOILS CLASSIFICATION SYSTEM (SOIL TYPE SP), THE PIPE BEDDED IN NATIVE SOIL WITH A MINIMUM 2.0' COMPACTED FILL OVER THE PIPE, AND USING A SAFETY FACTOR OF 1.5 FOR THE DATA.
3. ALL FITTINGS AND VALVES TO BE RESTRAINED WITH "MEGA-LUG" RESTRAINTS, AND ALL BELL AND SPIGOT JOINTS TO BE RESTRAINED WITH A RESTRAINING HARNESS WITH THE REQUIRED LENGTH OF RESTRAINED PIPE (L).

DETAIL 5
SCALE: NTS

FIRE HYDRANT

CITY OF CLERMONT
STANDARD DETAIL 8/27/13

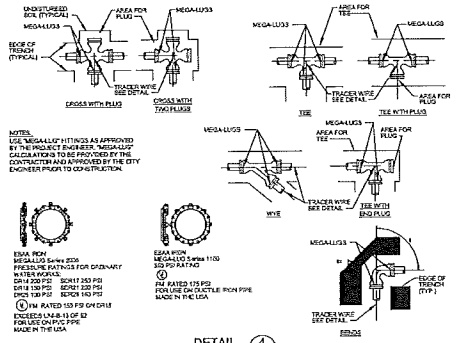


NOTES:
1. FIRE HYDRANTS SHALL BE MUELLER SUPER CENTURIAN.
2. HYDRANT MUST BE PAINTED AT FACTORY BY THE MANUFACTURER.
3. HYDRANT SHALL BE PAINTED IN ACCORDANCE WITH THE FOLLOWING COLORING DESIGNATION BASED ON THE TESTED FLOWS.
   BASE HYDRANT - OWNED AND MAINTAINED YELLOW BASE/BLUE BONNET
   CITY OWNED PCD
   LESS THAN 500 GPM - RED
   500 TO 999 GPM - ORANGE
   1000 TO 1499 - GREEN
   1500 GPM OR GREATER - BLUE
4. HYDRANTS TO BE FLOW TESTED BY CITY UTILITY DEPARTMENT OR COUNTY REPRESENTATIVE. COORDINATE WITH CITY INSPECTOR FOR TESTING PURPOSES.
5. BLUE PAVEMENT MARKERS (BPM) ARE TO BE INSTALLED IN THE CENTER OF THE DRIVING LANE NEAREST THE HYDRANT.

DETAIL 2
SCALE: NTS

MEGALUG

CITY OF CLERMONT
STANDARD DETAIL 8/27/13



NOTES:
USE "MEGA-LUG" FITTINGS AS APPROVED BY THE PROJECT ENGINEER. "MEGA-LUG" CALCULATIONS TO BE PROVIDED BY THE CONTRACTOR AND APPROVED BY THE CITY ENGINEER PRIOR TO CONSTRUCTION.

EBAA IRON
MEGALUG Series 2000
PRESSURE RATINGS FOR ORDINARY WATER WORKS
DN 3 200 PSI SCH 17 250 PSI
DN 4 150 PSI SCH 21 200 PSI
DN 6 150 PSI SCH 40 150 PSI
(6) FM RATED 150 PSI ON DIP
ENGINEER LM-B-13 OF 82
FOR USE ON PVC PIPE
MADE IN THE USA

EBAA IRON
MEGALUG Series 1100
300 PSI RATING
(4) FM RATED 175 PSI
FOR USE ON DUCTILE IRON PIPE
MADE IN THE USA

DETAIL 4
SCALE: NTS

TETRA TECH
Engineering Success Inc. 2424
www.tetratech.com
201 East Pine Street, Suite 1000
ORLANDO, FL 32801
PHONE: (407) 839-3300 FAX: (407) 839-3301

Kevin M. Moschino, P.E.
P.E. No. 55044, FL

201 East Pine Street, Suite 1000
Orlando, Florida 32801

50% SUBMITTAL

MARK	DATE	DESCRIPTION	BY

CITY OF CLERMONT
WEST SIDE WATER MAIN LOOP
DETAILS

Project No.: 220-0013-1408
Designed By: MEB
Drawn By: RG
Checked By: KM

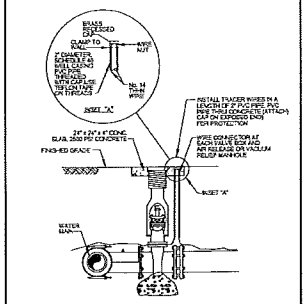
C-502

Copyright - Kevin Moschino

For Mounted Tech

TAPPING SLEEVE ELEVATION VIEW

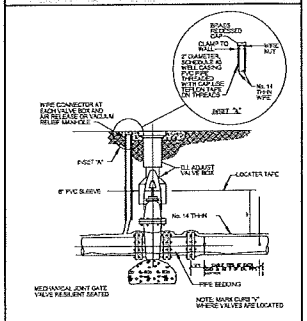
CITY OF CLERMONT
STANDARD DETAIL 8/27/13



DETAIL 1
SCALE: NTS

PIPE DETECTOR WIRE MARKER

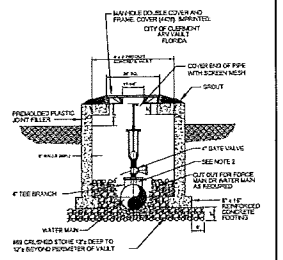
CITY OF CLERMONT
STANDARD DETAIL 8/27/13



DETAIL 3
SCALE: NTS

AIR OR COMBINATION AIR/VACUUM RELEASE VALVE

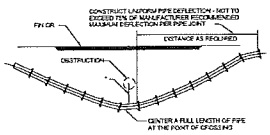
CITY OF CLERMONT
STANDARD DETAIL 8/27/13



NOTES:
1. ABOVE DETAIL IS BASED ON 1" COMBINATION AIR/VACUUM RELEASE VALVE. CHANGE PIPE AND FITTINGS ACCORDINGLY FOR OTHER VALVE SIZES AND TYPES. VALVE SIZES TO BE DETERMINED BY THE ENGINEER AND APPROVED BY THE CITY PRIOR TO INSTALLATION.
2. THE MINIMUM DIMENSION FROM TOP OF PIPE TO FINISHED GRADE SHALL BE 4.0 FEET.
3. A 2" AIR VALVE IS THE STANDARD SIZE FOR THIS PROJECT.

DETAIL 5
SCALE: NTS

UTILITY CROSSING - DEFLECTION

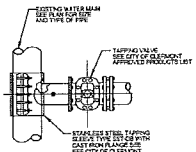


* 12" MIN CLEARANCE REQUIRED FOR WATER AND SEWER MAIN CROSSINGS
12" MIN CLEARANCE REQUIRED FOR OTHER TYPE UTILITIES CROSSING.
SEE ENCAUCHMENT DETAIL 9 MIN CLEARANCE CAN NOT BE OBTAINED.

DETAIL 7
SCALE: NTS

TAPPING SLEEVE PLAN

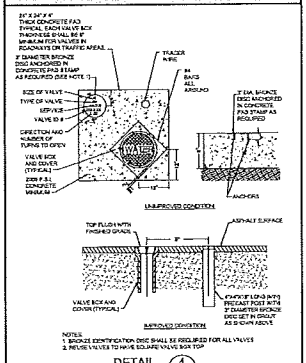
CITY OF CLERMONT
STANDARD DETAIL 8/27/13



DETAIL 2
SCALE: NTS

VALVE COLLAR

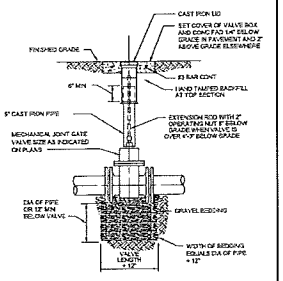
CITY OF CLERMONT
STANDARD DETAIL 8/27/13



NOTES:
1. BRONZE IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES
2. REVISE VALVES TO HAVE SQUARE VALVE BOX TOP

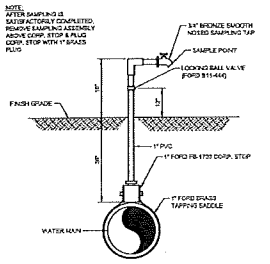
DETAIL 4
SCALE: NTS

GATE VALVE



DETAIL 6
SCALE: NTS

BACTERIOLOGICAL TEST CONNECTIONS



DETAIL 8
SCALE: NTS

TETRA TECH
Engineering Business No. 3279
www.tetratech.com
201 EAST PINE STREET, SUITE 1000
ORLANDO, FLORIDA 32801
PHONE: (407) 839-3400 FAX: (407) 839-3799

Project No. 202-05110-1438
Designed By: KSD
Drawn By: RD
Checked By: JLK

90% SUBMITTAL

MARK	DATE	DESCRIPTION	BY

CITY OF CLERMONT
WESTSIDE WATER MAIN LOOP
DETAILS

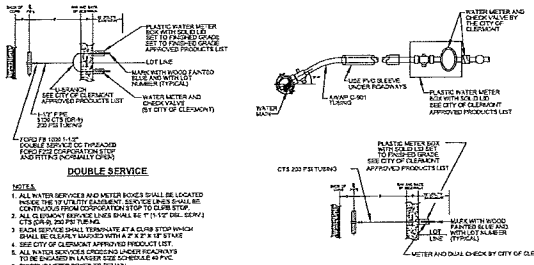
C-503

Copyright: Tetra Tech

For Measures 1 inch

WATER SERVICE CONNECTION

CITY OF CLERMONT
STANDARD DETAIL 8/2/13



DOUBLE SERVICE

NOTES:

1. ALL WATER SERVICES AND METER BOXES SHALL BE LOCATED INSIDE THE 10' UTILITY EASEMENT. SERVICE LINES SHALL BE CONTINUOUS FROM CORPORATION STOP TO CURB STOP.
2. ALL CLERMONT SERVICE LINES SHALL BE 1" (1-1/2" DBL. SERV.) CTS (DR-9), 200 PSI TUBING.
3. EACH SERVICE SHALL TERMINATE AT A CURB STOP WHICH SHALL BE CLEARLY MARKED WITH A 2" X 2" X 18" STAKE
4. SEE CITY OF CLERMONT APPROVED PRODUCT LIST.
5. ALL WATER SERVICES CROSSING UNDER ROADWAYS TO BE ENCASED IN LARGER SIZE SCHEDULE 40 PVC.
6. EXISTING METER BOXES TO REMAIN. PROVIDE NEW METER BOX FOR NEW SERVICES.
7. MARK CURB "W" WHERE SERVICES ARE LOCATED
8. PROVIDE TRACER WIRE ALONG SERVICE LINES.
9. SERVICE SADDLES 1" SHALL BE CC THREAD, 1.5" - 2" FIP THREAD.
10. NO LOOPING OR EXTENSIVE BENDING OF POLY TUBING. IF SERVICE NEEDS TO BE SHORTENED, COMP THE POLY TUBING AND INSTALL A 360 FULL CIRCLE CS AMP AROUND CRAMPED AREA WHEN COMPLETED

SINGLE SERVICE

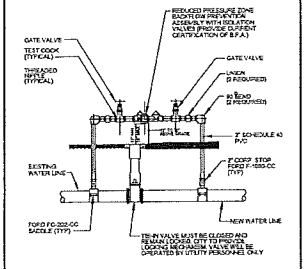
NOTE:

1. THE CONTRACTOR IS TO INSTALL NEW METERS AND MUFS FOR ALL NEW WATER SERVICE LINES, WHICH WILL BE PROVIDED BY THE CITY FOR THIS PROJECT.
2. ALL EXISTING WATER SERVICES THAT ARE NOT PE ARE TO BE REPLACED FOR THIS PROJECT.

DETAIL 1
SCALE: NTS

TEMPORARY JUMPER CONNECTION

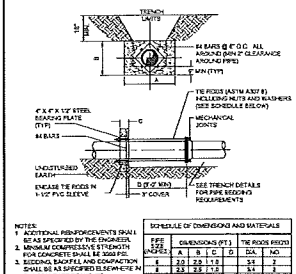
CITY OF CLERMONT
STANDARD DETAIL 8/2/13



NOTE: LOCATION TO BE DETERMINED AT TIME OF PRECONSTRUCTION CONFERENCE WITH THE CITY.

DETAIL 2
SCALE: NTS

THRUST COLLAR



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: 150 PSI.
7. REQUIRED FOR LINE STOPS.

SCHEDULE OF DIMENSIONS AND MATERIALS

PIPE SIZE (INCHES)	DIMENSIONS (FT.)				TIE RODS REQ'D	
	A	B	C	D	DIA.	NO.
6	2.0	2.5	1.0		3/4	2
8	2.5	2.5	1.0		3/4	2
10	3.5	3.5	1.0		3/4	4
12	5.0	3.0	1.0		3/4	4
16	6.0	4.0	1.0		3/4	4
20	8.5	5.0	1.0		3/4	6
24	9.0	6.0	1.0		3/4	6

NOTE: THRUST COLLAR WEIGHT TO BE COMPUTED BY BASE OF 2000 LBS/FT. SEAL TO SUPPORT BEARING.

DETAIL 3
SCALE: NTS

TETRA TECH
Engineering Science Inc. 2425
www.tetratech.com
201 EAST FIFTH STREET, SUITE 1030
CINCINNATI, OHIO 45202-3725
PHONE: (513) 639-3455 FAX: (513) 639-3780

Jerome M. Alexander, P.E.
Project Manager
Engineering License No. 2000

90% SUBMITTAL

MARK	DATE	DESCRIPTION	BY

CITY OF CLERMONT
WESTSIDE WATER MAIN LOOP
DETAILS

Project No.	230-3019-1409
Designed By:	MRS
Drawn By:	PG
Checked By:	JMA

C-504

Copyright: Tetra Tech

Esri Plotters 1 PS

#16608

Bilbrey, Michelle

From: Alexander, Janine <Janine.Alexander@tetratech.com>
Sent: Tuesday, August 18, 2015 9:03 AM
To: Bilbrey, Michelle
Subject: FW: City of Clermont Westside WM Loop ROW Use Permit Submittal - Revised Plans
Attachments: Lake Co ROW Use FINAL Permit Submittal Plans.pdf; Lake Co ROW Use_Rev Plans w SR50 xing.pdf

Importance: High

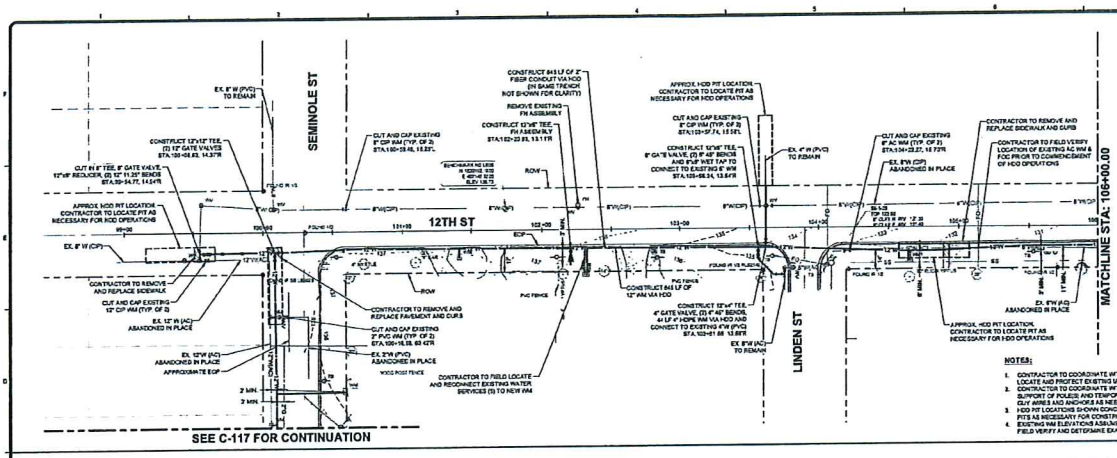
Hi Michelle:

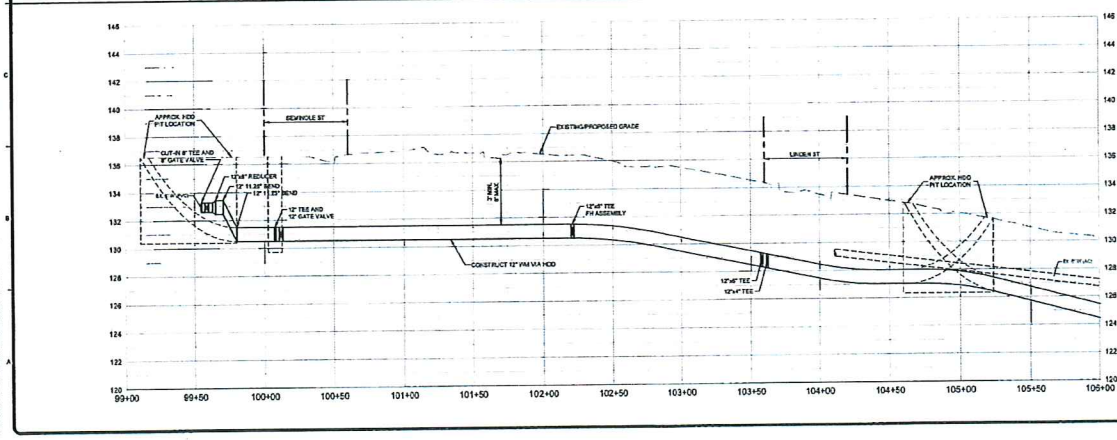
The City decided that they would replace the SR50 crossings as part of this project after all. As such, a few items changed for tie-ins at each side of the SR50 crossings where your ROW limits start. Technically, nothing really changed for your ROW limits, but I didn't want your inspector or field guys to have a set of plans that are not the most current set of plans.

As such, please see attached for your feedback and for "updating" the ROW use permit as necessary.

Please let me know if you should need anything else and thank you!
Janine

Approved ROW Permit excerpt:





NOTES:

1. CONTRACTOR TO COORDINATE WITH EXISTING UTILITY PROVIDERS TO LOCATE AND PROTECT EXISTING UTILITIES AS NECESSARY.
2. CONTRACTOR TO COORDINATE WITH POWER COMPANY AND PAY FOR THE SUPPORT OF POLES(S) AND TEMPORARY REMOVAL AND REINSTALLATION OF GUY WIRES AND ANCHORS AS NEEDED
3. HDD PIT LOCATIONS SHOWN CONCEPTUALLY ONLY. CONTRACTOR TO LOCATE PITS AS NECESSARY FOR CONSTRUCTION OF THE WM PIPING VIA HDD.
4. EXISTING WM ELEVATIONS ASSUMED AT 3' MIN COVER. CONTRACTOR TO FIELD VERIFY AND DETERMINE EXACT LOCATION AND ELEVATION.

SCALE:
HORIZ. 1"= 30'
VERT. 1" = 3'

MARK	DATE	DESCRIPTION

TETRA TECH

Engineering Corporation No. 3239
201 EAST PINE STREET, ORLANDO, FL 32801
PHONE: (407) 839-3900 FAX: (407) 839-3799

LANNE M. ALEXANDER
LICENSE NO. 39234
STATE OF FLORIDA
PROFESSIONAL ENGINEER

8-20-15

CITY OF CLERMONT
WESTSIDE WATER MAIN LOOP

PLAN AND PROFILE

Project No.: 320-0313-14208
Designed By: JMA
Drawn By: RD
Checked By: RM

C-101

Sheet

Set Measure 1 Inch

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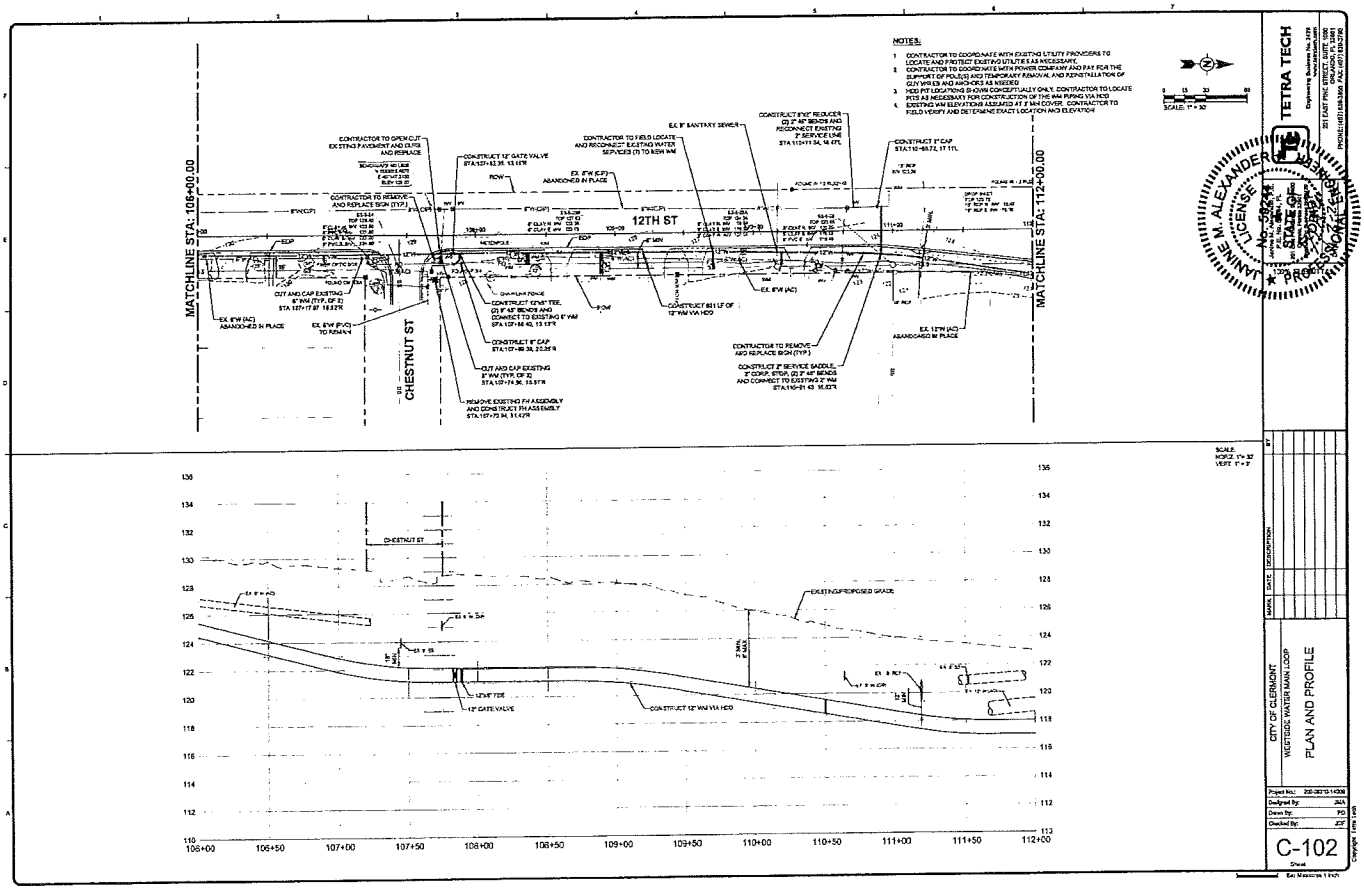

TETRA TECH

Engineering Business No. 2129
351 EAST PINE STREET, SUITE 100
ORLANDO, FLORIDA 32801
PHONE: (407) 648-3669 FAX: (407) 648-2318

HECTOR M. ALEXANDER
LICENSE NO. 50631
STATE OF FLORIDA
PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION	BY

CITY OF CLERMONT
WEETSEL WATER MAIN LOOP

PLAN AND PROFILE

Project No.: 230-0013-14008
Designed By: JMA
Drawn By: PO
Checked By: JCF

C-102

Sheet

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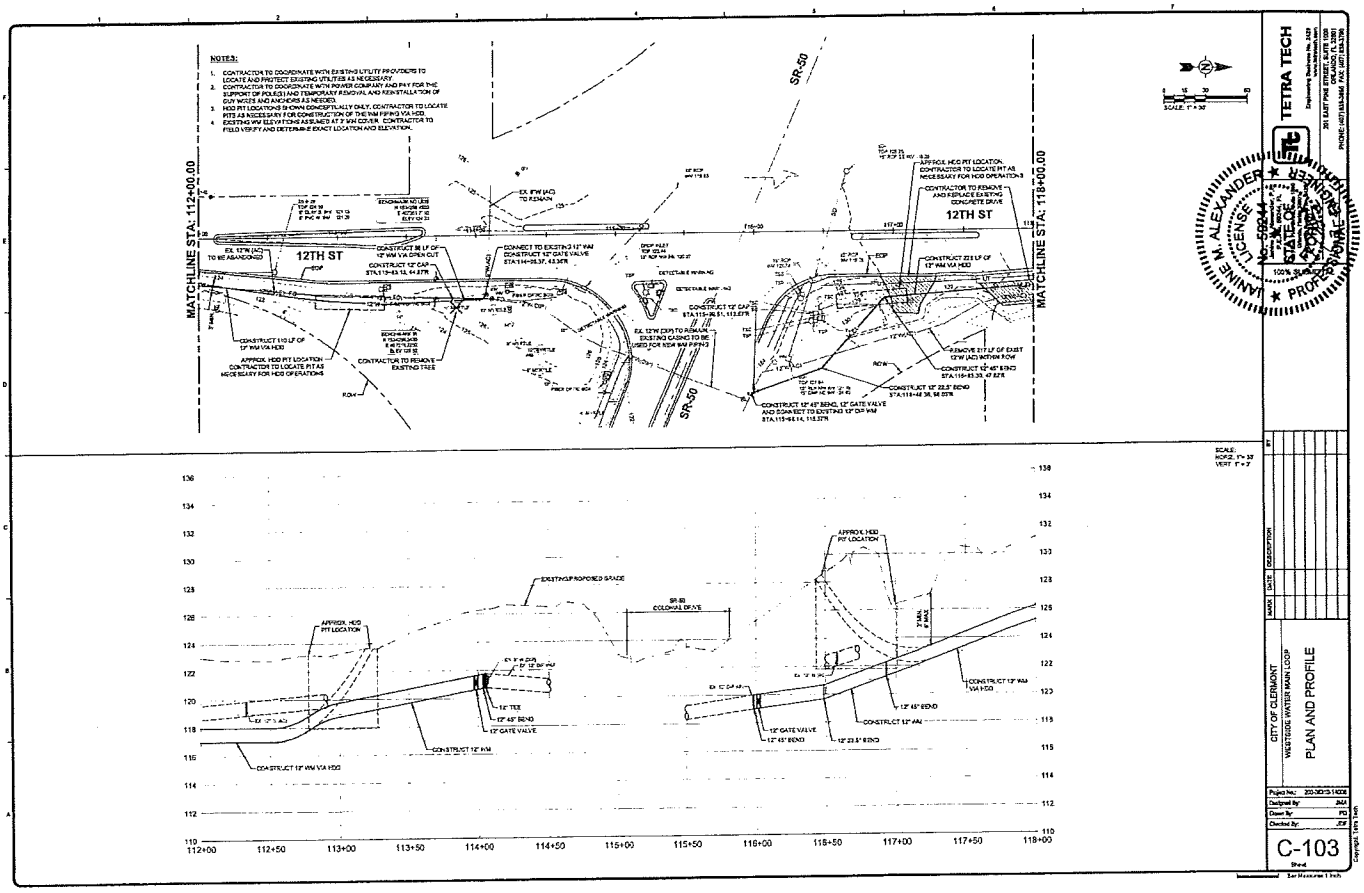
5/7/2015 9:46:54 AM - H:\2015\FP\PROJECTS\EXTENSIONS\ORLANDO\SHEETFILES\C102 TO C114.DWG - HEYES, HECTOR


NOTES:
1. CONTRACTOR TO COORDINATE WITH EXISTING UTILITY PROVIDERS TO LOCATE AND PROTECT EXISTING UTILITIES AS NECESSARY.
2. CONTRACTOR TO COORDINATE WITH POWER COMPANY AND PAY FOR THE SUPPORT OF POLES AND TEMPORARY REMOVAL AND REINSTALLATION OF GUY WIRES AND ANCHORS AS NEEDED.
3. HDD PIT LOCATIONS SHOWN CONCEPTUALLY ONLY. CONTRACTOR TO LOCATE PITS AS NECESSARY FOR CONSTRUCTION OF THE WM PIPING VIA HDD.
4. EXISTING WM ELEVATIONS AS MEASURED AT 3' WM COVER. CONTRACTOR TO FIELD VERIFY AND DETERMINE EXACT LOCATION AND ELEVATION.
MATCHLINE STA: 112+00.00
MATCHLINE STA: 118+00.00
12TH ST
SR-50
EX. 12"W (AC) TO BE ABANDONED
CONSTRUCT 110 LF OF 12" WM VIA HDD
APPROX. HDD PIT LOCATION CONTRACTOR TO LOCATE PITS AS NECESSARY FOR HDD OPERATIONS
CONTRACTOR TO REMOVE EXISTING TREE
CONSTRUCT 98 LF OF 12" WM VIA OPEN CUT
CONSTRUCT 12" GATE VALVE
CONNECT TO EXISTING 12" WM
EX. 12"W (AC) TO REMAIN
EX. 12"W CIPS TO REMAIN. EXISTING CASING TO BE USED FOR NEW WM PIPING
CONSTRUCT 12" GATE VALVE AND SOAK-EET TO EXISTING 12" DIP WM
CONSTRUCT 12" 45° BEND
CONSTRUCT 12" 22.5° BEND
REMOVE 311 LF OF EXIST 12"W (AC) WITHIN ROW
CONSTRUCT 221 LF OF 12" WM VIA HDD
CONTRACTOR TO REMOVE AND REPLACE EXISTING CONCRETE DRIVE
APPROX. HDD PIT LOCATION. CONTRACTOR TO LOCATE PIT AS NECESSARY FOR HDD OPERATIONS
EXISTING/PROPOSED GRADE
SR 50 COLONIAL DRIVE
CONSTRUCT 12" WM VIA HDD
CONSTRUCT 12" WM
12" TEE
12" 45° BEND
12" GATE VALVE
12" 22.5° BEND
SCALE: 1" = 30'
TETRA TECH
Engineering Excellence, Inc.
351 EAST PINE STREET, SUITE 1000
ORLANDO, FLORIDA 32801
PHONE: (407) 843-5446 FAX: (407) 843-5789
MARK DATE DESCRIPTION BY
CITY OF CLERMONT
WASTEWATER MAIN LOOP
PLAN AND PROFILE
Project No.: 200-30/03-14008
Designed By: JMA
Drawn By: FTD
Checked By: JM
C-103
Sheet
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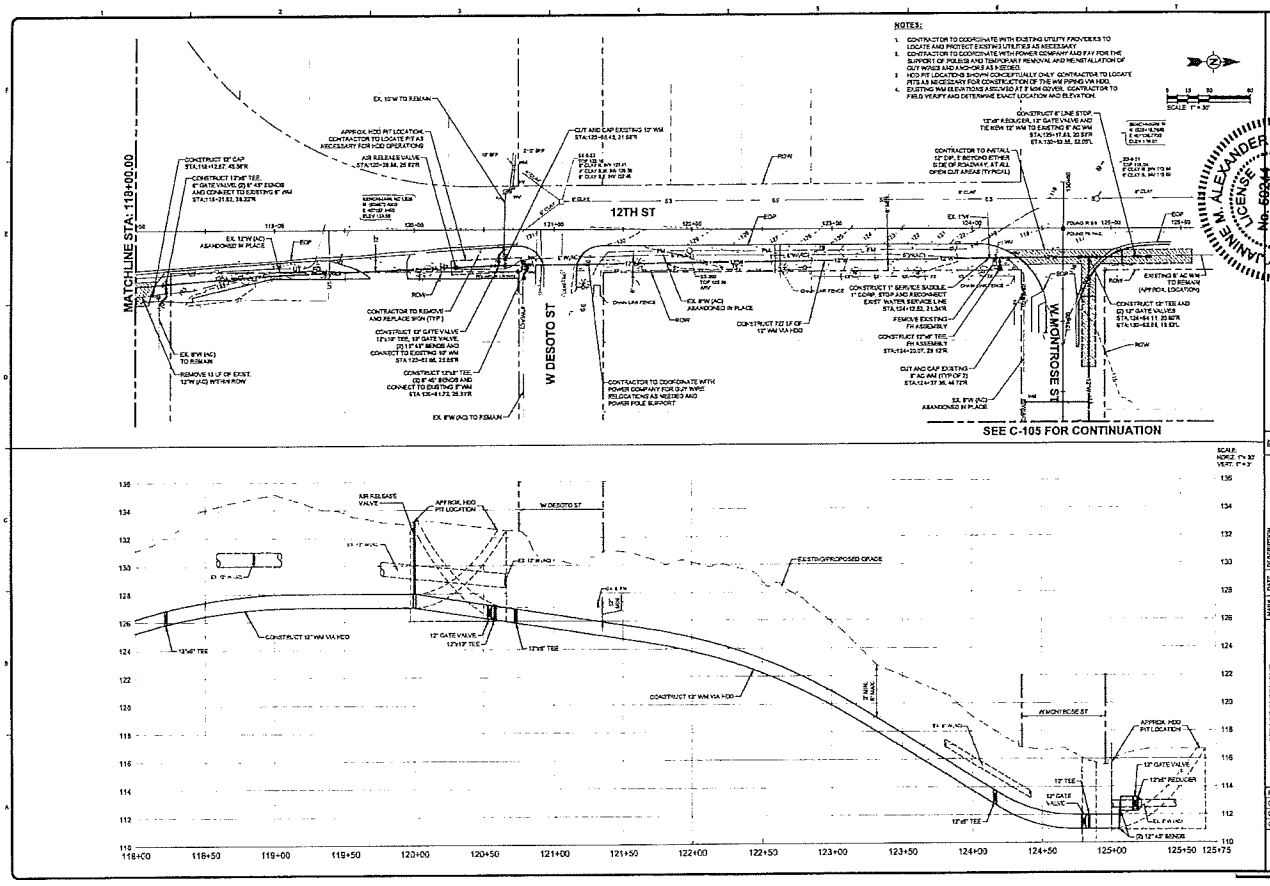
NOTES:
1. CONTRACTOR TO COORDINATE WITH EXISTING UTILITY PROVIDERS TO LOCATE AND PROTECT EXISTING UTILITIES AS NECESSARY
2. CONTRACTOR TO COORDINATE WITH POWER COMPANY AND FAY FOR THE SUPPORT OF POLES AND TEMPORARY REMOVAL AND REINSTALLATION OF GUY WIRES AND ANCHORS AS NEEDED.
3. HDD PIT LOCATIONS SHOWN CONCEPTUALLY ONLY. CONTRACTOR TO LOCATE PITS AS NECESSARY FOR CONSTRUCTION OF THE WM PIPING VIA HDD.
4. EXISTING WM ELEVATIONS ASSUMED AT 3' MIN COVER. CONTRACTOR TO FIELD VERIFY AND DETERMINE EXACT LOCATION AND ELEVATION.
MATCHLINE STA: 118+00.00
12TH ST
W DESOTO ST
W MONTROSE ST
SEE C-105 FOR CONTINUATION
EXISTING/PROPOSED GRADE
CONSTRUCT 12" WM VIA HDD
TETRA TECH
CITY OF CLERMONT
WESTSIDE WATER MAIN LOOP
PLAN AND PROFILE
C-104

LAKE MINNEOLA
HUNT ST
EAST LAKE
U.S. HWY 27
W OSCEOLA ST
W MONTROSE ST
GREEN LAKE
CENTER LAKE
SCOTT ST
EAST AVE
WEST AVE
PILLSBURY AVE
SR-50
CHESTNUT ST
HIGHLAND AVE
LAKE SUNNYSIDE
SEMINOLE ST
LAKE WINONA
MINNEHAHA AVE
C101
C102
C103
C104
C105
C106
C107
C108
C109
C110
C111
C112
C113
C114
C115
C116
C117
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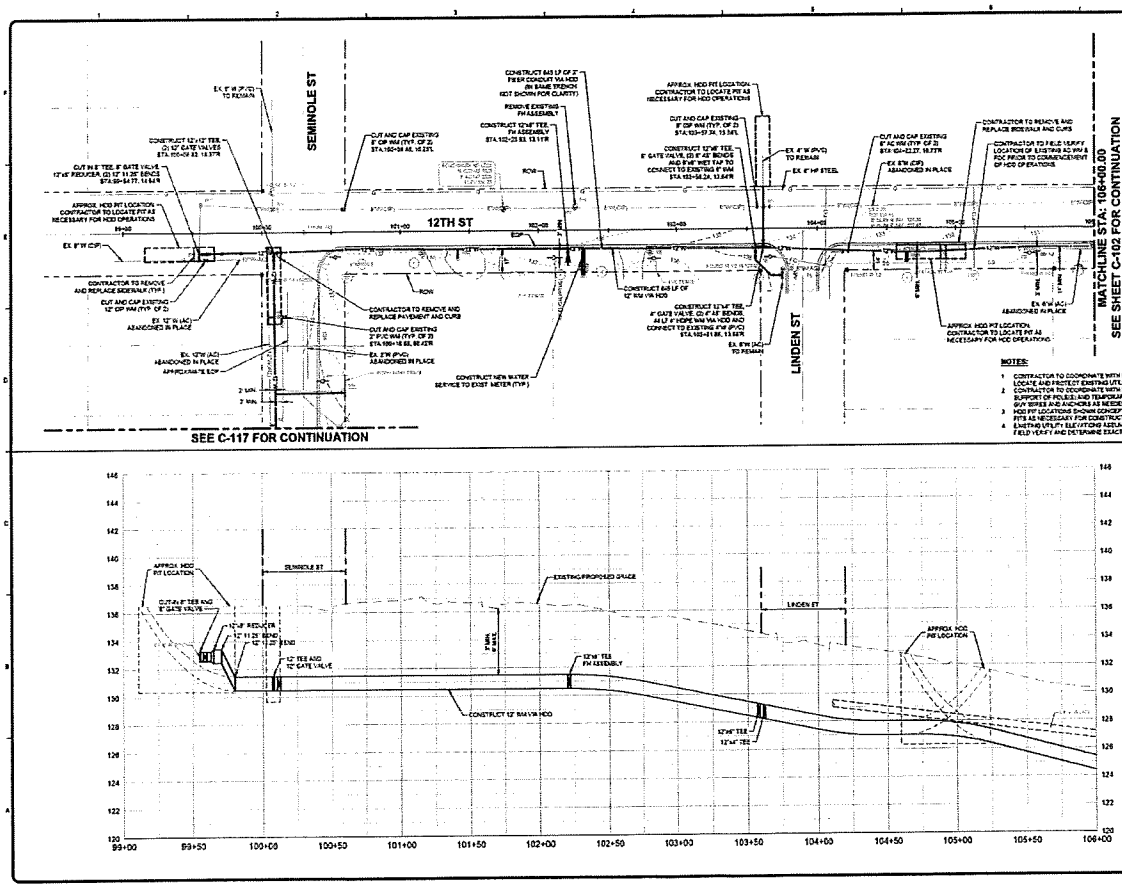
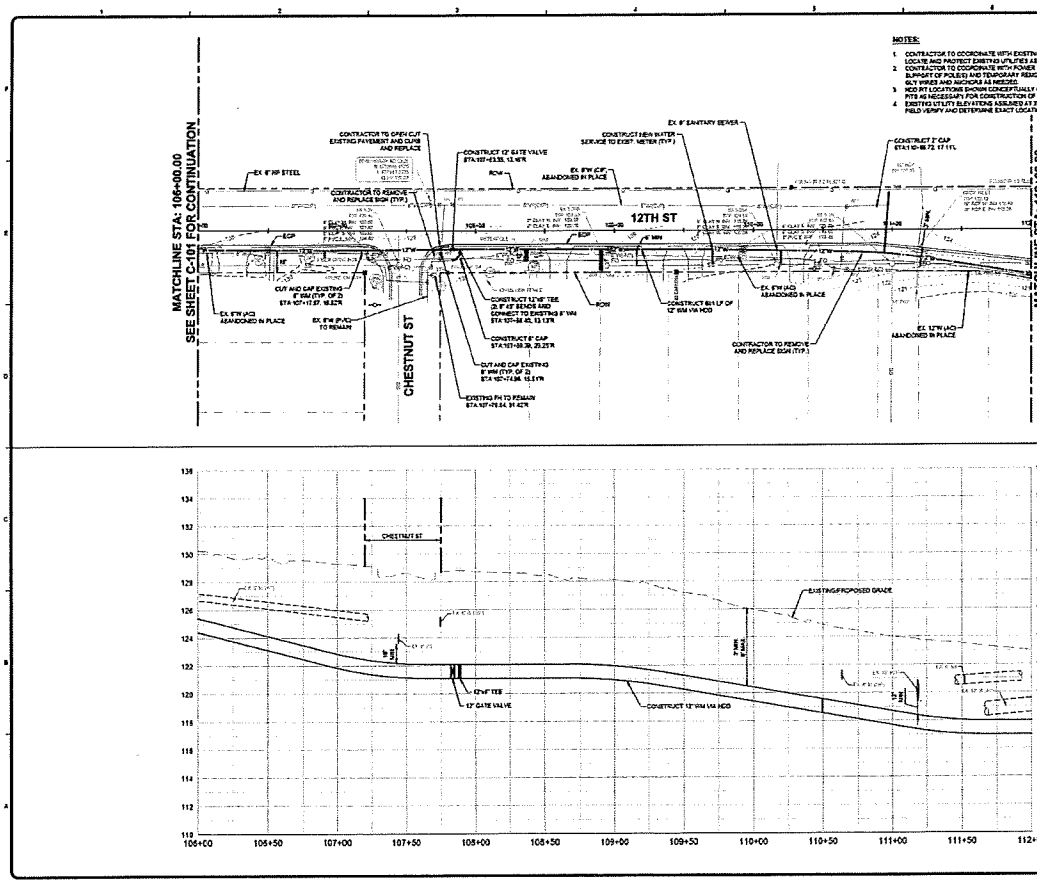
C121
C122
C123
C124
C125
C126
C127
C128
C129
C130
C131
C132
C133
C134
C135
C136
C137
C138
C139
C140
SCALE: 1"=400'
TETRA TECH
CITY OF CLERMONT
WESTSIDE WATER MAIN LOOP
KEY PLAN
G-005



TETRA TECH

CITY OF CLERMONT
WESTSIDE WATER MAIN LOOP
PLAN AND PROFILE

C-101



TETRA TECH

Engineering Business No. 3125
Architecture Business No. 26
1000 EAST PINE STREET, SUITE 1000
ORLANDO, FL 32801
(407) 839-3300 FAX (407) 839-3301

M. ALEXANDER BEECHER
STATE OF FLORIDA
PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION	BY

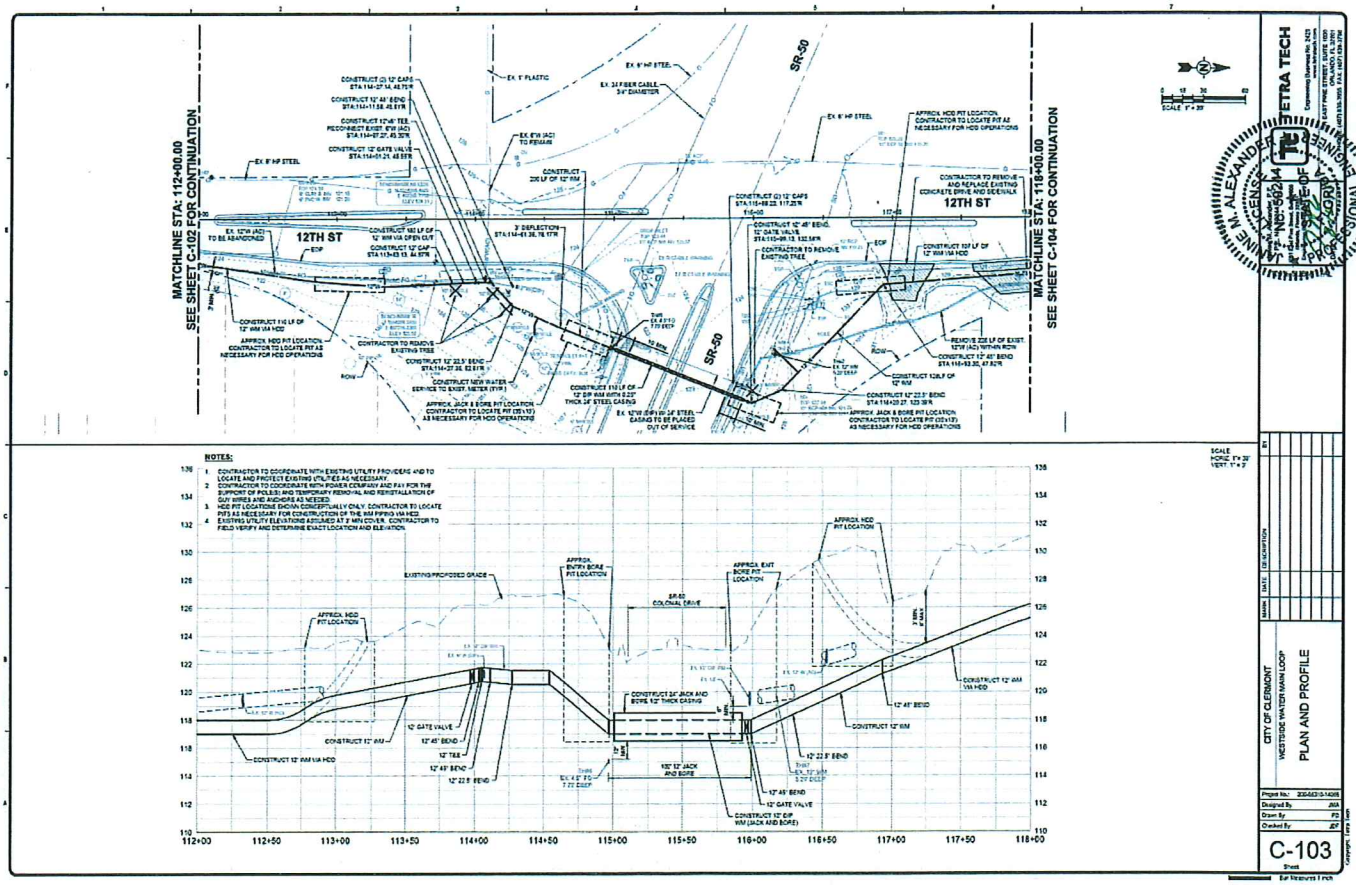
CITY OF CLERMONT
WESTSIDE WATER MAIN LOOP

PLAN AND PROFILE

Project No. 235-06219-1428
Designed By: JMA
Drawn By: PD
Checked By: AM

C-102

Sheet
Est Measures 1 inch


MATCHLINE STA: 112+00.00
SEE SHEET C-102 FOR CONTINUATION
MATCHLINE STA: 116+00.00
SEE SHEET C-104 FOR CONTINUATION
12TH ST
SR-50
NOTES:
1. CONTRACTOR TO COORDINATE WITH EXISTING UTILITY PROVIDERS AND TO LOCATE AND PROTECT EXISTING UTILITIES AS NECESSARY.
2. CONTRACTOR TO COORDINATE WITH POWER COMPANY AND FAA FOR THE SUPPORT OF POLE(S) AND TEMPORARY REMOVAL AND REINSTALLATION OF GUY WIRES AND ANCHORS AS NEEDED.
3. HDD PIT LOCATIONS SHOWN CONCEPTUALLY ONLY. CONTRACTOR TO LOCATE PIT(S) AS NECESSARY FOR CONSTRUCTION OF THE WM PIPING VIA HDD.
4. EXISTING UTILITY ELEVATIONS ASSUMED AT 3' MIN COVER. CONTRACTOR TO FIELD VERIFY AND DETERMINE EXACT LOCATION AND ELEVATION.
EXISTING/PROPOSED GRADE
APPROX. HDD PIT LOCATION
APPROX. BORE PIT LOCATION
APPROX. EXIT BORE PIT LOCATION
BRAD COLONIAL DRIVE
CONSTRUCT 12" AWJ
CONSTRUCT 12" WM VIA HDD
12" GATE VALVE
12" 45° BEND
12" TEE
12" 22.5° BEND
CONSTRUCT 25' JACK AND BORE, 12" THICK CASING
100' 12" JACK AND BORE
12" GATE VALVE
CONSTRUCT 12" GIP WM (JACK AND BORE)
CONSTRUCT 12" 6M
112+00
112+50
113+00
113+50
114+00
114+50
115+00
115+50
116+00
116+50
117+00
117+50
118+00
110
112
114
116
118
120
122
124
126
128
130
132
134
136
SCALE
HORIZ. 1" = 20'
VERT. 1" = 2'
TETRA TECH
CITY OF CLERMONT
WESTSIDE WATER MAIN LOOP
PLAN AND PROFILE
Project No.: 22-0432-0-1406
Designed By: JMA
Drawn By: PD
Checked By: JEF
C-103
Sheet
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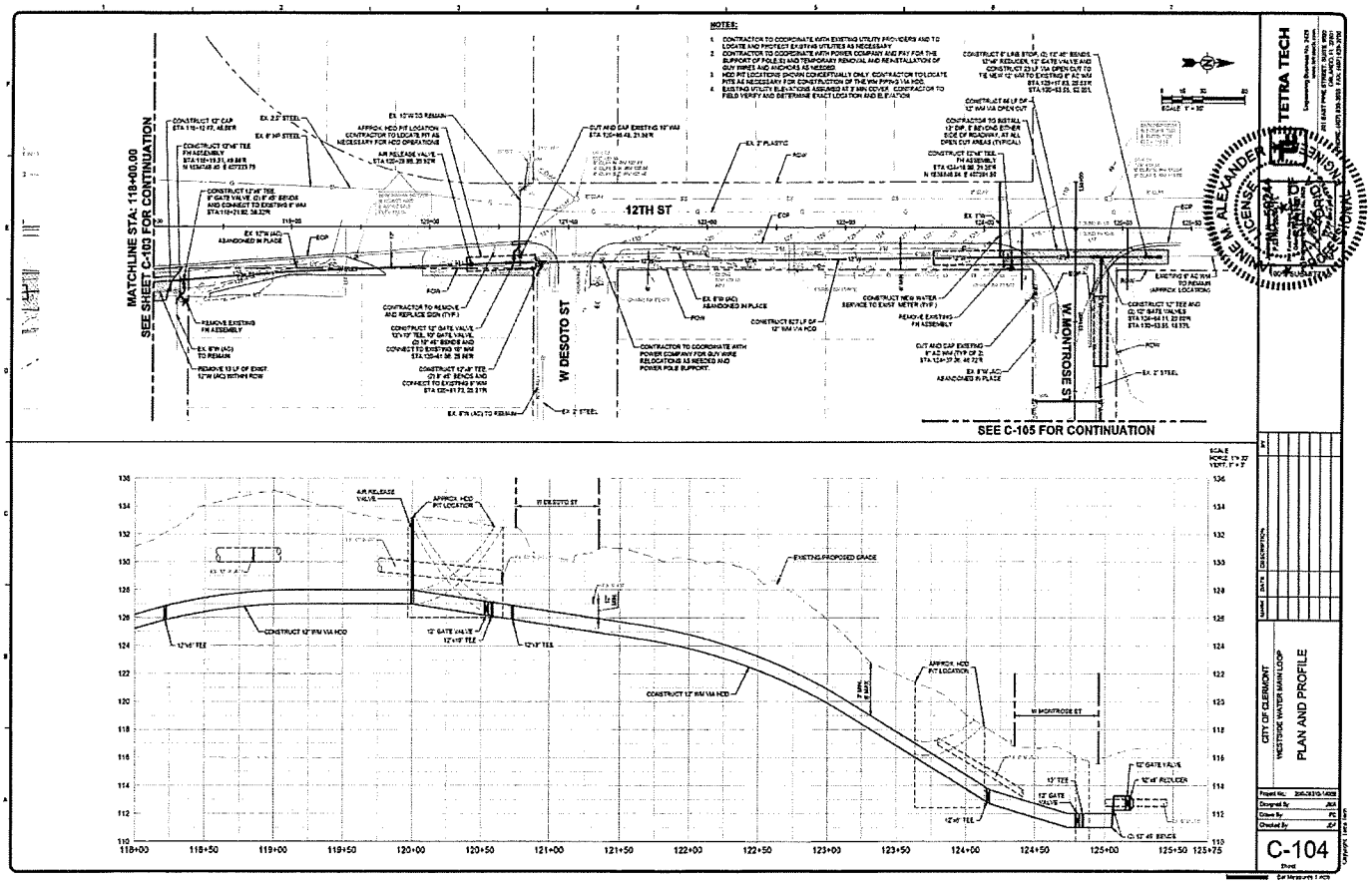
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MATCHLINE STA: 118+00.00
SEE SHEET C-103 FOR CONTINUATION
12TH ST
W DESOTO ST
W. MONTROSE ST
SEE C-105 FOR CONTINUATION
TETRA TECH
CITY OF GLENMONT
WESTSIDE WATER MAIN LOOP
PLAN AND PROFILE
C-104
EXISTING PROPOSED GRADE
CONSTRUCT 12" WM VIA HDD
12" GATE VALVE
12"x8" TEE
AIR RELEASE VALVE
APPROX. HDD PIT LOCATION
W MONTROSE ST
12" GATE VALVE
12" REDUCER
118+00
118+50
119+00
119+50
120+00
120+50
121+00
121+50
122+00
122+50
123+00
123+50
124+00
124+50
125+00
125+50
125+75

Bilbrey, Michelle

From: Alexander, Janine <Janine.Alexander@tetratech.com>
Sent: Thursday, February 25, 2016 3:22 PM
To: Bilbrey, Michelle
Subject: RE: Westside Inspector/Contact

Hi Michelle:

In reviewing the approved permit, it looks like it is expiring soon. Can we have a year extension please due to the Contractor just now mobilizing in the near future?

Thanks!
Janine

From: Bilbrey, Michelle [mailto:mbilbrey@lakecountyfl.gov]
Sent: Tuesday, February 16, 2016 3:30 PM
To: Alexander, Janine <Janine.Alexander@tetratech.com>
Cc: Hinton, Joseph <jhinton@lakecountyfl.gov>; McArdle, Heath <HMcArdle@lakecountyfl.gov>
Subject: RE: Westside Inspector/Contact

Janine,

My apologies, I gave you the phone number for the wrong inspector. The number you need to call for Joe is 352-516-7712. Sorry for any inconvenience.

Thank you,
Michelle Bilbrey
Permitting Technician II
Lake County Public Works

From: Bilbrey, Michelle
Sent: Tuesday, February 16, 2016 12:30 PM
To: 'Alexander, Janine'
Cc: Hinton, Joseph; McArdle, Heath
Subject: RE: Westside Inspector/Contact

Joe Hinton is the Inspector for that area. His cell phone number is 352-516-4370.

Thank you,
Michelle Bilbrey
Permitting Technician II
Lake County Public Works

From: Alexander, Janine [mailto:Janine.Alexander@tetratech.com]
Sent: Monday, February 15, 2016 8:09 AM

Rodriguez, Jeremy

From: Mark Griffin <mgriffin@clermontfl.org>
Sent: Thursday, June 02, 2016 10:57 AM
To: Rodriguez, Jeremy
Subject: RE: Permit
Attachments: 12th st water main.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Jeremy,
Attached is a map of the project location. The new 6" water main is identified by the yellow line on the map, the existing main will be abandoned in place.

Thank you,

Mark Griffin,
Environmental Services Coordinator
3335 Hancock Rd, Clermont, FL 34711
Tel 352- 241-0178 | Fax 352- 241-0542
Mgriffin@clermontfl.org
www.ClermontFl.gov

Our mission: To Preserve and enhance the quality of life for the Clermont community by providing exceptional services.

From: Rodriguez, Jeremy [mailto:jdrodriguez@lakecountyfl.gov]
Sent: Tuesday, May 31, 2016 4:15 PM
To: Mark Griffin <mgriffin@clermontfl.org>
Cc: Scott, Jimmy <JScott@lakecountyfl.gov>
Subject: RE: Permit

Mark,

Apologies for the delay—I was able to pass this permit along to another inspector, Paul Erickson, while Joe Hinton is out. He asked if you could provide a drawing for the PVC water main to be installed from West Montrose to West Minneola.

Thank you,

Jeremy Rodriguez
Permitting Technician II
jdrodriguez@lakecountyfl.gov
Lake County Public Works
323 N. Sinclair Ave.
Tavares, FL 32778
(352) 253-6019

From: Mark Griffin [mailto:mgriffin@clermontfl.org]
Sent: Wednesday, May 25, 2016 7:29 AM
To: Rodriguez, Jeremy
Cc: Tim Mattozzi; Rick Jiles; Jerrone McLaren
Subject: RE: Permit

Thank you Jeremy.

Mark Griffin,
Environmental Services Coordinator
3335 Hancock Rd, Clermont, FL 34711
Tel 352- 241-0178 | Fax 352- 241-0542
Mgriffin@clermontfl.org
www.ClermontFl.gov

Our mission: To Preserve and enhance the quality of life for the Clermont community by providing exceptional services.

From: Rodriguez, Jeremy [mailto:jdrodriguez@lakecountyfl.gov]
Sent: Tuesday, May 24, 2016 4:03 PM
To: Mark Griffin <mgriffin@clermontfl.org>
Cc: Scott, Jimmy <JScott@lakecountyfl.gov>
Subject: RE: Permit

Thank you Mark, I got your message. I have forwarded your request to Joe Hinton, one of our inspectors – he or I will update you as soon as we can.

Thank you,

Jeremy Rodriguez
Permitting Technician II
jdrodriguez@lakecountyfl.gov
Lake County Public Works
323 N. Sinclair Ave.
Tavares, FL 32778
(352) 253-6019

From: Mark Griffin [mailto:Mgriffin@clermontfl.org]
Sent: Tuesday, May 24, 2016 7:52 AM
To: Rodriguez, Jeremy
Subject: Permit

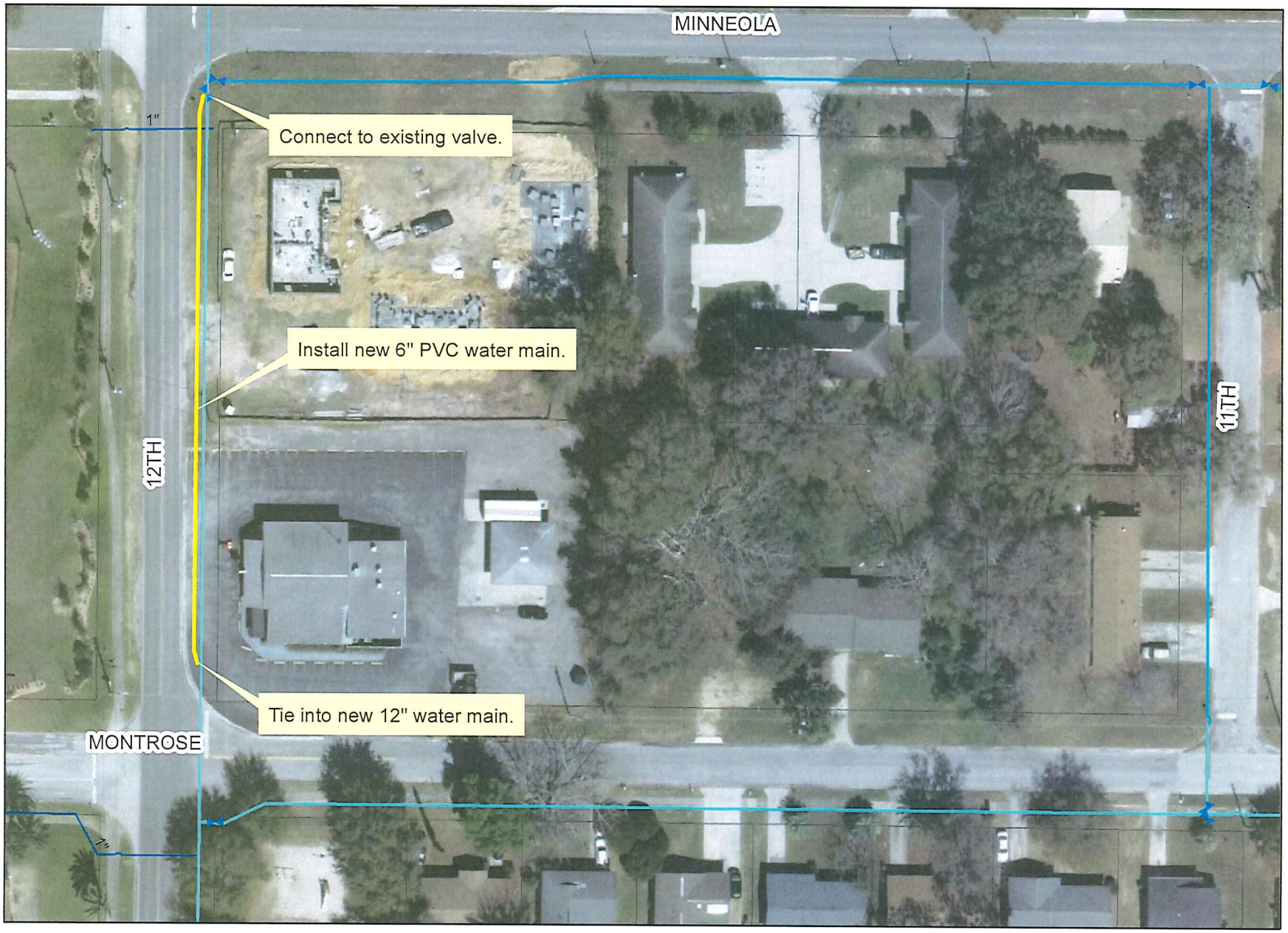
Jeremy, We would like to amend permit #6608 to include installing a PVC water main from West Montrose St to West Minneola Ave in the Eastern right-of-way of 12th St. Thank you, Mark Griffin

Website: www.clermontfl.gov

PLEASE NOTE: Under Florida law, e-mail addresses are public records. If you do not want your email address released in response to a public-records request, do not send electronic mail to this entity. Instead, contact this office by phone or in writing.

Website: www.clermontfl.gov

PLEASE NOTE: Under Florida law, e-mail addresses are public records. If you do not want your email address released in response to a public-records request, do not send electronic mail to this entity. Instead, contact this office by phone or in writing.


MINNEOLA
Connect to existing valve.
Install new 6" PVC water main.
Tie into new 12" water main.
12TH
11TH
MONTROSE
1"
7"

N