

Suburban System Water Line Replacement Project Phase 2

Manatee County, Florida Project No. 60747.70

INDEX OF DRAWINGS

DESCRIPTION

SHEET NO.

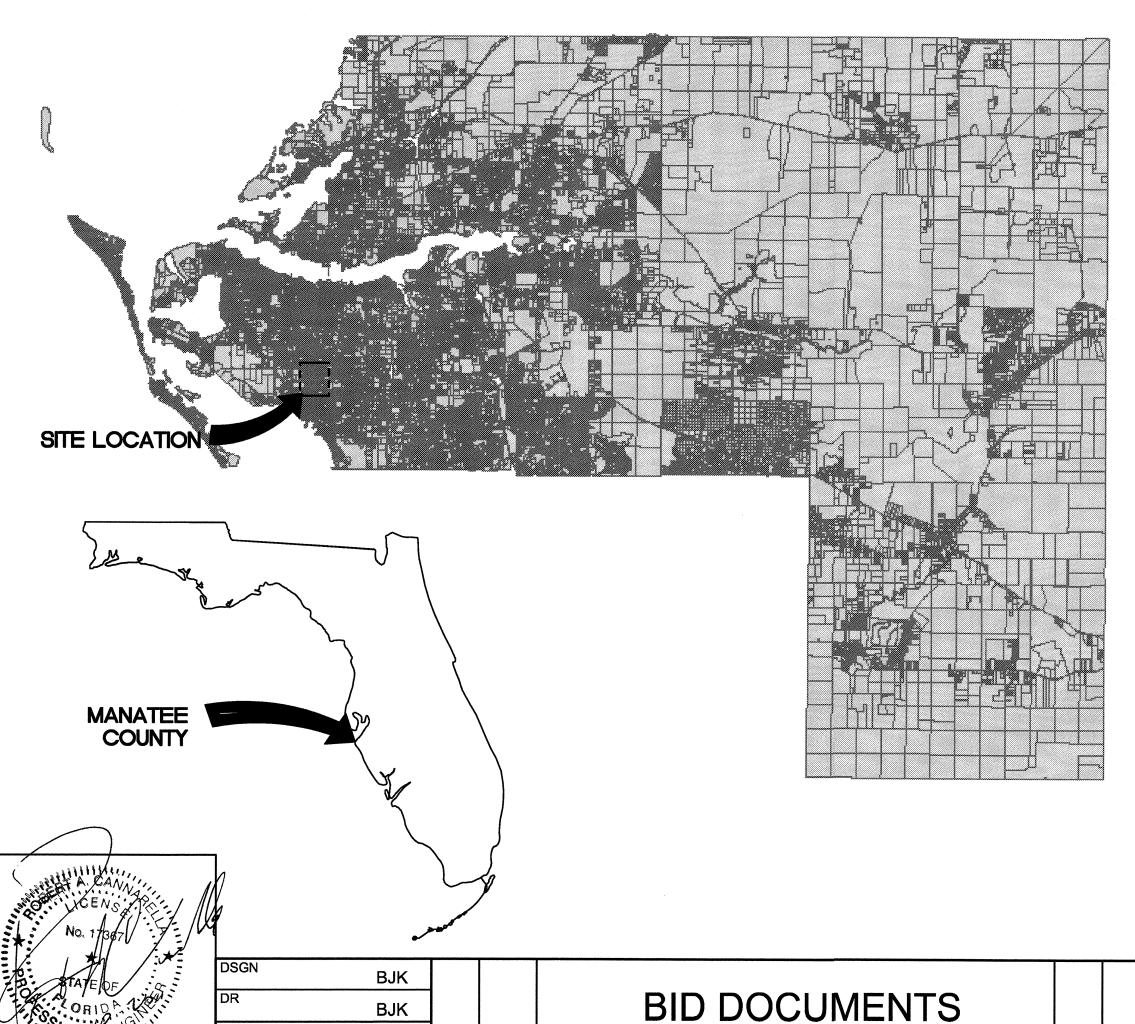
MANATEE COUNTY

SUBURBAN SYSTEM

MANATEE COUNTY, FLORIDA

PROJECT No. 60747.70

WATER LINE REPLACEMENT PROJECT

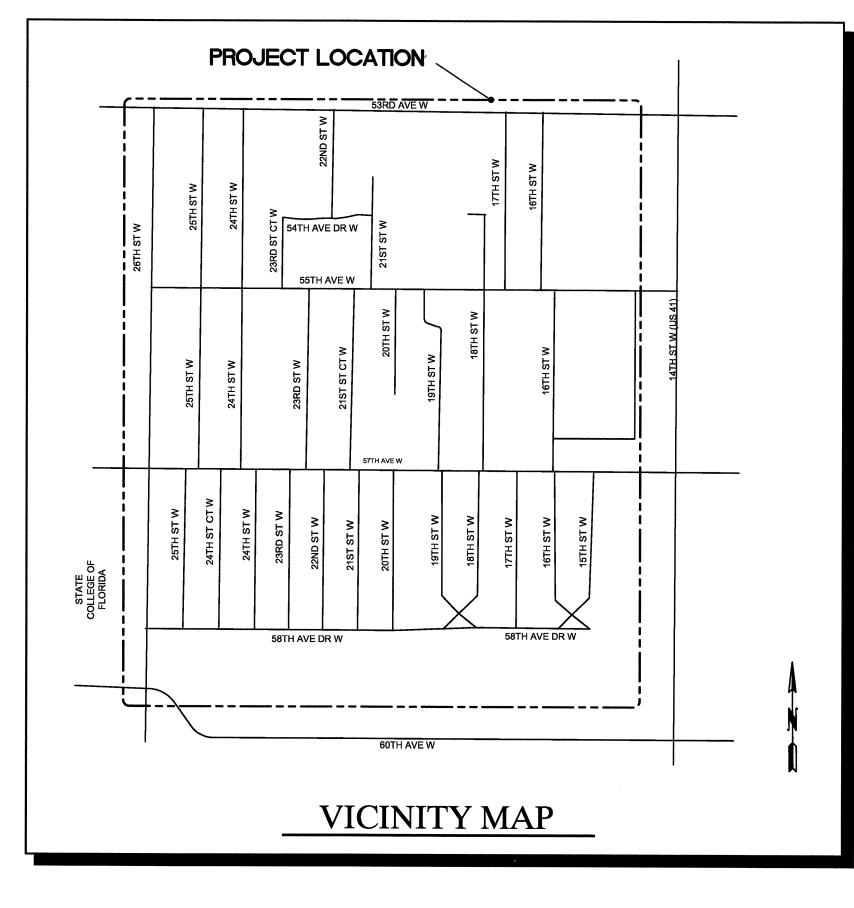


REVISION

RAC

RAC NO. DATE

ROBERT A. CANNARELLA, P.E. APVD



CH2MHILL

TAMPA, FLORIDA 33607-4155

LB 0002934 AA C000656

4350 WEST CYPRESS STREET SUITE 600

BAR IS ONE INCH ON

ORIGINAL DRAWING.

IF NOT ONE INCH ON

THIS SHEET, ADJUST

SCALES ACCORDINGLY

BY APVD

	DESCRIPTION
G1 G2 G3	COVER SHEET LEGEND AND NOTES KEY PLAN
	CIVIL
C1 C2 C3 C5 C6 C7 C8 C112 C13 C15 C15 C17 C16 C17 C19 C21 C22 C23 C24 C25 C27 C27 C27 C27 C27 C23 C23 C23 C23 C23 C23 C23 C23 C23 C23	PLAN SHEET WATER LINE 26th ST W FROM 53rd AVE W TO 5419 PLAN SHEET WATER LINE 26th ST W FROM 5419 TO 5615 PLAN SHEET WATER LINE 26th ST W FROM 5615 TO 5805 PLAN SHEET WATER LINE 26th ST W FROM 5811 TO 60th AVE W PLAN SHEET WATER LINE 25th ST W FROM 5728 TO 58th AVE DR W PLAN SHEET WATER LINE 25th ST W FROM 5728 TO 58th AVE DR W PLAN SHEET WATER LINE 24th ST CT W FROM 57th AVE W TO 5728 PLAN SHEET WATER LINE 24th ST CT W FROM 57th AVE W TO 5736 PLAN SHEET WATER LINE 24th ST W FROM 57th AVE W TO 5736 PLAN SHEET WATER LINE 24th ST W FROM 57th AVE W TO 5736 PLAN SHEET WATER LINE 23rd ST W FROM 57th AVE W TO 5736 PLAN SHEET WATER LINE 23rd ST W FROM 57th AVE W TO 5736 PLAN SHEET WATER LINE 23rd ST W FROM 5736 TO 58th AVE DR W PLAN SHEET WATER LINE 23rd ST W FROM 5736 TO 58th AVE DR W PLAN SHEET WATER LINE 22nd ST W FROM 5736 TO 58th AVE DR W PLAN SHEET WATER LINE 21st ST W FROM 5736 TO 58th AVE DR W PLAN SHEET WATER LINE 21st ST W FROM 5736 TO 58th AVE DR W PLAN SHEET WATER LINE 21st ST W FROM 5736 TO 58th AVE DR W PLAN SHEET WATER LINE 21st ST W FROM 5736 TO 58th AVE DR W PLAN SHEET WATER LINE 21st ST W FROM 5736 TO 58th AVE DR W PLAN SHEET WATER LINE 21st ST W FROM 5736 TO 58th AVE DR W PLAN SHEET WATER LINE 21st ST W FROM 5736 TO 58th AVE DR W PLAN SHEET WATER LINE 21st ST W FROM 5736 TO 58th AVE DR W PLAN SHEET WATER LINE 21st ST W FROM 5736 TO 58th AVE DR W PLAN SHEET WATER LINE 18th ST W & 19th ST W FROM 574h AVE W TO 5736 PLAN SHEET WATER LINE 17th ST W FROM 574h AVE W TO 5736 PLAN SHEET WATER LINE 17th ST W FROM 574h AVE W TO 1703 PLAN SHEET WATER LINE 15th ST W & 16th ST W FROM 574h AVE W TO 5722 PLAN SHEET WATER LINE 15th ST W & 16th ST W FROM 574h AVE W TO 5722 PLAN SHEET WATER LINE 15th ST W FROM 20th ST W TO 2208 PLAN SHEET WATER LINE 15th ST W & 16th ST W FROM 574h AVE W TO 5722 PLAN SHEET WATER LINE 58th AVE DR W FROM 26th ST W TO 22nd ST W PLAN SHEET WATER LINE 58th AVE DR W FROM 20th ST W TO 22nd ST W PLAN SHEET WATER LINE 58th AVE DR W FROM 20th ST W TO 22nd ST W PLAN SHEET WATER LINE 58th AVE DR W
D1 D2 D3 D4 D5 D6	DETAILS DETAILS DETAILS DETAILS DETAIL A — CROSSING AT 26th ST WEST BEST MANAGEMENT PRACTICES EXISTING SUBURBAN WATER SYSTEM PLAN

COVER SHEET

SHEET

GICOVER.DWG

JULY 2011

MANATEE COUNTY PUBLIC WORKS DEPT WAYNE TROXLER, PE (941) 708-4850 EXT. 7650

MANATEE COUNTY WATER DEPARTMENT DAVE SCHOFIELD SUPERINTENDENT WATER DISTRIBUTION (941) 782-8811 EXT. 5130

MANATEE COUNTY UTILITIES METER SERVICES MIKE HOOEY 941-792-8811 EXT.5401

TECO/PEOPLES GAS CO. DAN SHANAHAN (941) 342-4030 FAX: (941) 342-4011 EMERGENCY: 1-877-832-6911

VERIZON FLORIDA INC. WAYNE SUMNER (941) 330-9203 FAX: (941) 906-6706

MANATEE COUNTY HEALTH

(941) 748-0747 EXT. 1355

FAX: (941) 750-9364

DEPT.

HARRY MESSICK

(941) 377-3722 FLORIDA POWER & LIGHT FAX: (941) 373-7660 GREG COKER DEPARTMENT OF (941) 723-4430 **ENVIRONMENTAL PROTECTION** FAX: (941) 723-4444 STEPHANIE BARIOS EMERGENCY: (813) 632-7600, EXT. 408 1-800-4-OUTAGE

> FAX: (813) 632-7662 BRIGHT HOUSE NETWORKS TOM WRIGHT

> > (941) 749-3571

SUNSHINE STATE ONE CALL OF FLORIDA 1-(800) 432-4770

(941) 748-3816 EXT. 21348

SOUTHWEST FLORIDA WATER

SARASOTA SERVICE OFFICE

MANAGEMENT DISTRICT

DARYL R. FLATT, P.E.

MANATEE COUNTY PUBLIC WORK DEPT. TRAFFIC ENGINEERING BOB AGRUSA, P.E.

Know what's DCIOW Call before you dig.

1.THE CONSTRUCTION DOCUMENTS HAVE BEEN PREPARED USING AVAILABLE INFORMATION PERTAINING TO EXISTING UTILITY SYSTEMS AND OTHER IMPROVEMENTS LOCATED WITHIN THE RIGHT-OF-WAY IN THE VICINITY OF THE NEW WORK. THE CONTRACTOR SHALL PERFORM ADDITIONAL INVESTIGATIONS OR FIELD EVALUATION PRIOR TO AND DURING CONSTRUCTION TO CONFIRM THE EXISTING CONDITIONS IN THE FIELD THAT MAY IMPACT CONSTRUCTION OF THE WORK TO VERIFY THE EXISTING LOCATION OF ALL ABOVE GRADE AND BELOW GRADE IMPROVEMENTS THAT MAY IMPACT CONSTRUCTION OF THE WORK.

2.SURVEY INFORMATION USED TO PREPARE THE CONSTRUCTION DOCUMENTS WAS COMPILED BY ZNS ENGINEERING, 201 5TH AVE. DR. EAST, BRADENTON, FLORIDA 34208 (941)

4.HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM (NAD) OF 1983 (1990 ADJUSTMENT), FLORIDA STATE PLANE, WEST ZONE, AND WAS DERIVED FROM REDUNDANT REAL—TIME KINEMATIC GPS OBSERVATIONS UTILIZING NGS CONTROL POINT M 087 (NGS PID AG9192) AND ADHERES TO THE ACCURACY REQUIREMENTS OF FLORIDA'S MINIMUM TECHNICAL STANDARDS (61G17-6.003, F.A.C.).

5.IN THE EVENT A PUBLIC OR PRIVATE SURVEY MARKER, PROPERTY CORNER OR RIGHT-OF-WAY MARKER OR SIMILAR SURVEYED POINT IS DAMAGED OR MOVED BY CONSTRUCTION, THE CONTRACTOR SHALL ENGAGE A FLORIDA REGISTERED LAND SURVEYOR TO RESTORE SUCH ITEMS IMPACTED BY CONSTRUCTION.

CONTRACTOR SHALL USE CAUTION IN PERFORMING THE WORK TO PREVENT DAMAGE TO EXISTING UTILITY SYSTEMS AND SHALL COORDINATE WITH UTILITY COMPANIES LISTED AND OTHER LITHLITY COMPANIES PRIOR TO AND DURING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 48 HOURS NOTICE TO UTILITY COMPANIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN FIELD LOCATES OF EXISTING UNDERGROUND UTILITIES IN THE VICINITY OF NEW CONSTRUCTION.

7.THE CONTRACTOR SHALL PERFORM WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE SUNSHINE STATE ONE CALL OF FLORIDA, EXCAVATION GUIDE, LATEST EDITION. THE

ORDINANCES AND GUIDELINES RELATED TO PERFORMING ALL WORK ASSOCIATED WITH THE PROJECT. OF SPECIAL INTEREST ON THIS PROJECT IS THE REQUIREMENT TO PERFORM TRENCH EXCAVATION AND THE CONTRACTOR'S REQUIREMENT TO PERFORM ALL EXCAVATION IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATIONS (OHSA) TRENCH EXCAVATION SAFETY STANDARDS.

9.THE CONTRACTOR SHALL PERFORM THE WORK TO MINIMIZE IMPACT AND DAMAGE PRIVATE PROPERTY, DAMAGE TO PRIVATE PROPERTY CAUSED BY THE CONTRACTOR SHALL BE

10.THE WORK IS TO TAKE PLACE WITHIN PUBLIC RIGHT-OF-WAY AND WITHIN PUBLIC ROADWAYS. THE CONTRACTOR SHALL PERFORM WORK TO MINIMIZE IMPACT AND DAMAGE TO PUBLIC ROADWAYS, ROADWAY FEATURES, SIGNS, DRAINAGE FEATURES, PUBLIC AND PRIVATE UTILITIES LOCATED WITHIN THE RIGHT-OF-WAY AND ALL OTHER FEATURES ADJOINING THE WORK AREA. DAMAGE TO PUBLIC RIGHT-OF-WAY, ROADWAY, PUBLIC OR PRIVATE UTILITIES OR OTHER FEATURES LOCATED WITHIN THE MANATEE COUNTY RIGHT-OF-WAY SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE

11.THE CONTRACTOR SHALL PRODUCE PRE-CONSTRUCTION VIDEOS OF THE AREA OF CONSTRUCTION PER SECTION 01380 OF THE SPECIFICATIONS PRIOR TO COMMENCING

12. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS THAT ARE LOCATED ADJACENT

13.THE CONTRACTOR SHALL RELOCATE ALL FACILITIES OR IMPROVEMENTS THAT ARE IN CONFLICT WITH THE NEW WORK AND SUCH RELOCATION SHALL BE IN ACCORDANCE WITH COUNTY OR THE OWNING PARTIES STANDARDS.

BENCHMARKS

BENCHMARK 1-7

SHEET C2 & C25

AND 26TH ST W

BENCHMARK 1-5

AND 26TH ST W

BENCHMARK 2-23

WORK PROCEEDS

MADE FOR SUCE REPAIRS.

SHEET C3

SHEET C15

22ND ST W

SE CORNER OF 55TH AVE W

NE CORNER OF 57TH AVE W

SHEET C1

BENCHMARK 2-18 SHEET C19 NW CORNER OF 18TH ST W AND 57TH AVE W

BENCHMARK 2-15 SHEET C23 SE CORNER OF 53RD AVE SE CORNER OF 15TH ST W WAND 26TH ST W AND 57TH AVE W BENCHMARK 1-6

BENCHMARK 4-6 SE CORNER OF 24TH ST W AND 53RD AVE W

BENCHMARK 2-27

ST W AND 57TH AVE W

13.THE CONTRACTOR SHALL PROVIDE TEMPORARY EROSION AND SEDIMENTATION CONTROL AS REQUIRED

DURING CONSTRUCTION OF THE WORK. SPECIFIC EROSION CONTROL AND SEDIMENTATION CONTROL

REQUIREMENTS ARE PROVIDED IN THE SPECIFICATIONS AND SHALL BE FOLLOWED TO COMPLY WITH

SEDIMENTATION IMPACTS THAT RESULT FROM ACTIVITIES AT THE WORK SITE OR WHILE TRANSPORTING

FILL OR OVER-EXCATION MATERIAL TO OR FROM THE WORK SITE. THE CONTRACTOR SHALL PROVIDE

PERIODIC MAINTENANCE OF ALL EROSION AND SEDIMENTATION CONTROL DEVICES INSTALLED AND

SHALL CLEAN-UP AND RESTORE ALL AREAS IMPACTED BY EROSION CONTROL ACTIVITIES AS THE

14.THE CONTRACTOR SHALL MAINTAIN EXISTING DRAINAGE SYSTEMS WITHIN THE AREA OF THE WORK AND

CONTRACTOR SHALL BE REPAIRED WHEN NOTED AND SHALL NOT IMPACT AREA DRAINAGE CAPACITY.

15.THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING DAMAGE TO EXISTING ABOVE GROUND AND

BELOW GROUND FACILITIES THAT RESULT FROM THE CONTRACTOR PERFORMING WORK UNDER THIS

CONTACT. ALL RESTORATION WORK SHALL RESULT IN A REPAIR THAT IS EQUAL TO OR BETTER

THAN THE UTILITY SYSTEM, ABOVE GROUND FEATURE OR BELOW GROUND FEATURE DAMAGED.

REPAIRS SHALL BE MADE WITH NEW MATERIALS EQUAL IN QUALITY TO THAT DAMAGED. IN THE

16.THE CONTRACTOR SHALL BACKFILL TRENCHES AND/OR EXCAVATIONS AT THE END OF EACH WORK

DAY. MAINTAINING EXCAVATIONS OPEN OVER-NITE SHOULD BE THE EXCEPTION NOT THE RULE.

17.THE CONTRACTOR SHALL PERFORM CLEAN-UP OF THE WORK SITE AND RESTORATION OF SURFACE

AND SUBSURFACE IMPROVEMENTS DAMAGED AS A PART OF THE WORK AS THE PROJECT PROCEEDS.

SURFACE RESTORATION, RE-GRADING, GRASSING, REPLACEMENT OF PAVEMENT, REPLACEMENT OF

CONTRACTOR. THE CONTRACTOR SHALL DEVELOP SPECIFIC TRAFFIC CONTROL PLANS (TCP) AND

PEDESTRIAN WALKING PLANS TO PROTECT THE PUBLIC IN THE AREA OF CONSTRUCTION. TRAFFIC

DEPARTMENT OF TRANSPORTATION (FDOT) INDEX DRAWINGS AND STANDARDS. ACCESS TO EXISTING

19.THE CONTRACTOR'S WORK PLAN OR EXECUTION OF THE WORK SHALL NOT IMPACT THE PROVISION OF

CHANGE-OUTS OR SERVICE LINE TRANSFERS. THE CONTRACTOR SHALL COORDINATE WITH THE

CUSTOMER AND THE MANATEE COUNTY FIELD PROJECT MANAGER PRIOR TO ALL ACTIVITIES WHICH

DIRECTIONAL DRILLING CONSTRUCTION TECHNIQUES CONSISTENT WITH THE SPECIFIC REQUIREMENTS OF

THE MANATEE COUNTY STANDARD SPECIFICATIONS AND STANDARD DETAILS UNLESS OTHERWISE SHOWN

RESIDENCES SHALL BE MAINTAINED DURING THE WORK. SHORT TERM TEMPORARY BLOCKAGE OF

RESIDENTIAL DRIVEWAYS WILL BE APPROVED BY THE HOMEOWNER. ALL TRAFFIC CONTROL AND

CONTROL AND PEDESTRIAN CONTROL PLANS SHALL FOLLOW THE REQUIREMENTS OF FLORIDA

PEDESTRIAN CONTROL PLANS SHALL BE DEVELOPED BY AN INDIVIDUAL OR COMPANY WHO

WATER SERVICE TO MANATEE COUNTY CUSTOMERS EXCEPT AS REQUIRED TO MAKE METER

20.ALL PIPING, VALVES, FITTINGS, APPURTENANCES AND UTILITY CONSTRUCTION SHALL BE IN

ACCORDANCE WITH THESE PLANS AND MANATEE COUNTY PUBLIC WORKS DEPARTMENT UTILITY

STANDARDS, LATEST ADDITION. THE CONTRACTOR MAY UTILIZE OPEN CUT CONSTRUCTION OR

21.NEW WATER PIPELINES SHALL BE INSTALLED WITH A MINIMUM OF 3 FEET OF COVER. PRIOR TO

CONSTRUCTION OF PIPELINE ALONG EACH STREET SEGMENT, THE CONTRACTOR SHALL VERIFY THE

ELEVATION AND LOCATION OF ALL UNDERGROUND CROSSING UTILITIES THAT MAY INTERFERE WITH

THE CONSTRUCTION OF THE NEW PIPELINES AND SERVICES. (EG: WATER SERVICES, SANITARY SEWER

ELEVATION OF THE NEW PIPELINE BASED UPON SUCH VERIFICATIONS TO A MINIMUM DEPTH OF COVER

CONSTRUCTION WITH THE FOLLOWING EXCEPTIONS: SHEET C1 PIPELINE CONFLICT CROSSING AT 5325

26TH ST. W SHALL BE DIP USING OPEN-CUT CONSTRUCTION; DIP PIPELINE CAN BE INSTALLED VIA

OPEN-CUT CONSTRUCTION WHERE SHOWN ON THE DRAWINGS, SEE NOTE 24: INTERCONNECTIONS

CONSTRUCTION; FIRE HYDRANT LATERALS SHALL BE PER STANDARD DETAIL UW-5; NEW SERVICE

INSTALLATION OF DIP VIA OPEN CUT CONSTRUCTION UNDER KEY ROADWAYS ON THE PROJECT IN

LOCATIONS WHERE NEW MAINS ARE TO CONNECT WITH EXISTING MAINS. WITH THE APPROVAL OF

INSTALLATION OF NEW SERVICE LINES. THE DRAWINGS REQUIRE THE CONTRACTOR TO PLAN FOR THE

THE COUNTY, THE CONTRACTOR MAY BE AUTHORIZED TO INSTALL SUCH ROADWAY CROSSINGS WITH

BETWEEN NEW PIPELINES AND NEW PIPELINES AND EXISTING PIPELINES SHALL BE OPEN-CUT

LINES SHALL BE VIA OPEN-CUT CONSTRUCTION OR HDD. NO PNEUMATIC IMPACT MOLING FOR

SERVICES, GAS SERVICES, COMMUNICATION SERVICES ETC.) THE CONTRACTOR SHALL ADJUST THE

TO PROVIDE CLEARANCE AS REQUIRED BY MANATEE COUNTY SPECIFICATIONS BETWEEN EXISTING

22.THE CONTRACTOR SHALL CONSTRUCT NEW WATER MAINS WITH HDPE PIPE USING HDD

DRIVEWAYS, REPLACEMENT OF SIDEWALKS, REPLACEMENT OF STREET SIGNS. REPLACEMENT OR

RESTORATION OF PRIVATE PROPERTY AND SIMILAR ITEMS SHALL BE COMPLETED ON A STREET

18.MAINTENANCE OF TRAFFIC AND PEDESTRIAN SAFETY SHALL BE THE RESPONSIBILITY OF THE

SEGMENT BY STREET SEGMENT BASIS AS THE WORK PROCEEDS.

SPECIALIZES IN COMPLIANCE WITH FDOT TCP REQUIREMENTS.

MAY IMPACT THE AVAILABILITY OF WATER SERVICE TO CUSTOMERS.

AND SIGNAGE AROUND THE PLATED EXCAVATION PREVENTING THE ENTRY OF VEHICLES OR

EVENT OF DAMAGE TO AN EXISTING RECLAIMED WATER SERVICE OR POTABLE WATER SERVICE LINE,

THE REPAIR SHALL INCLUDED COMPLETE REPLACEMENT OF THE LINE FROM SERVICE CONNECTION TO

CUSTOMER SERVICE WITH NO PATCH/SPLICE REPAIRS ALLOWED. MO ADDITIONAL PAYMENT SHALL BE

SHOULD AN EXCAVATION NEED TO BE MAINTAINED OVERNIGHT, THE CONTRACTOR SHALL COVER THE

EXCAVATION WITH A TRAFFIC BEARING STEEL PLATE AND PROPERLY PLACE BARRICADES, LIGHTING

SHALL NOT IMPAIR OR IMPACT THE ABILITY OF EXISTING DRAINAGE FEATURES TO PERFORM THEIR

INTENDED FUNCTION. IMPACTS TO EXISTING DRAINAGE FEATURES CAUSED BY THE WORK OF THE

NOT ON A SHEET

ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL AND CONSTRUCTION STANDARDS. THE

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION AND SEDIMENTATION CONTROL OR

57TH AVE W BETWEEN 21ST & NW OF INTERSECTION OF 24TH

BENCHMARK 4-5 SHEET C31 & C32 SE CORNER OF 22ND ST W AND 53RD AVE W

CM ·

IP 。

IR •

HUB △

N&D ⊚

Parcel ID No 1234 Parcel ID No $\mathsf{GW} \leftarrow$ Guv Wire Power Pole LP * Light Pole MB 🛭 Mail Box SN 9

Bench mark

Iron Pipe

Iron Roc

Nail & Disk

Elevation

Concrete Monument

ARV (A) Air Release Valve SMH (S) Sanitary Sewer Manhole CO o Sanitary Sewer Clean-out SB#1 Soil Boring Location TEL Telephone Service Box mm

EXISTING

TSB

JB (D)

RV ⋈

RM 🗖

GI 📺

CB 🖂

CI 🗂

SEGMENT PRIOR TO CONSTRUCTION. THE DRILLING OR LAYING PLAN SHALL TAKE INTO

THREE (3) FEET, AND MINIMIZE ELEVATION CHANGES ALONG THE ALIGNMENT WHILE TAKING

INTO CONSIDERATION THE ELEVATION OF CROSSING UTILITIES AND OTHER ROW STRUCTURES,

THE CONTRACTOR SHALL INSTALL AUTOMATIC AIR RELEASE VALVES. ON EACH SIDE OF A

24.THE CONTRACTORS ATTENTION IS DIRECTED TO LOCATIONS WHERE NEW 6 INCH AND 8 INCH

PIPE CROSSES UNDER EXISTING ROADWAYS AT VARIOUS LOCATIONS IN THE PROJECT. IN

CONSTRUCTED WITH DIP. AT THESE LOCATIONS AND AT OTHER LOCATIONS WHERE NEW 6

INCH OR 8 INCH PIPELINES CROSS EXISTING ROADWAYS, THE CONTRACTOR MAY ELECT TO

USING HDD CONSTRUCTION. IN EITHER CASE, TOTAL PAYMENT FOR THE CROSSING SHALL

BE BASED UPON THE TOTAL LENGTH OF PIPE INSTALLED IN ACCORDANCE WITH THE UNIT

ACCORDANCE WITH THE REQUIREMENTS OF MANATEE COUNTY STANDARD DETAILS UG-8,

STANDARD DETAIL UG-7 SHALL ONLY BE USED ONLY WHEN SPECIFICALLY APPROVED BY

26.THE CONTRACTOR IS CAUTIONED TO CAREFULLY COORDINATE THE PIPING MATERIALS USED

THAT ARE ELECTED FOR USE. THE CONTRACTORS ATTENTION IS DIRECTED TO SECTION

27.A LATERAL SEPARATION OF A MINIMUM OF 10 FEET EDGE TO EDGE SHALL BE MAINTAINED

PLEASE REFER TO THE SPECIFICATION SECTION 02609 INSTALLATION OF PIPELINES FOR

BETWEEN NEW WATER MAINS AND SANITARY SEWER GRAVITY LINES OR FORCE MAINS.

28.IF A NEW WATER MAIN PARALLELS A SEWER MAIN WITH LESS THAN 10 FEET OF LATERAL

WITH THE JOINTS OF THE EXISTING SEWER LINE TO ACHIEVE A MINIMUM 10 FEET OF

SEPARATION BETWEEN THE JOINTS OF THE LINES IF POSSIBLE. PLEASE REFER TO THE

SPECIFICATION SECTION 02609 INSTALLATION OF PIPELINES FOR SPECIFIC REQUIREMENTS

29.A LATERAL SEPARATION OF A MINIMUM OF 3 FEET EDGE TO EDGE SHALL BE MAINTAINED

BETWEEN NEW WATER MAINS AND STORMWATER SEWERS OR MAINS OR, RECLAIMED WATER

MAINS. PLEASE REFER TO THE SPECIFICATION SECTION 02609 INSTALLATION OF PIPELINES

30.A VERTICAL CLEARANCE OF NOT LESS THAN 18 INCHES SHALL BE MAINTAINED BETWEEN ALL

STORM SEWERS, SANITARY SERVICE LINES, GAS LINES AND OTHER UTILITIES. PLEASE REFER

NEW WATER MAIN CROSSINGS WITH EXISTING SEWER MAINS, RECLAIMED WATER MAINS,

TO THE SPECIFICATION SECTION 02609 INSTALLATION OF PIPELINES - FOR SPECIFIC

31.THIS PROJECT WILL REQUIRE THAT EXISTING WATER MAINS BE CONNECTED TO THE NEW

WATER MAINS BEING INSTALLED AS A PART OF THIS PROJECT TO MAINTAIN WATER SERVICE

PROJECT AREA SHALL BE PROVIDED EXCEPT FOR THE SCHEDULED CHANGE-OUT OF WATER

MAINS TO THE NEW WATER MAINS BEING CONSTRUCTED AS A PART OF THIS PROJECT. THE

CUSTOMERS WITHIN THE TIME FRAME LIMITS ESTABLISHED BY THE COUNTY. THE CONTRACTOR

CONTRACTOR SHALL PERFORM EXPLORATORY WORK AND COORDINATE THE DISCONNECTION

PLANNED DISCONNECTION/RECONNECTION ACTIVITIES PRIOR TO INITIATING WORK TO INSURE

32. THE CONTRACTOR SHALL INSTALL NEW WATER SERVICES, WATER METER BOX ASSEMBLIES AS

A PART OF THIS PROJECT, COMPLETE. THE COUNTY WILL PROVIDE NEW METERS FOR THE

CONTRACTOR SHALL REMOVE ALL EXISTING METERS, METER BOXES AND APPURTENANCES

CONTRACTOR TO INSTALL UNDER THIS PROJECT IN THE NEW METER BOXES. THE

PRIOR TO INSTALLING THE NEW WATER METER SYSTEM. THE CONTRACTOR SHALL

PERTAINING TO METER REPLACEMENT. AT THE BEGINNING OF THE PROJECT, THE

COORDINATE WITH MIKE HOOEY OF THE COUNTY METER DEPARTMENT (941) 792-8811

CONTRACTOR SHALL PROVIDE A LIST TO THE COUNTY OF ALL METERS TO BE REPLACED

NOTING THE STREET ADDRESS, SIZE AND SERIAL NUMBER OF THE METER CURRENTLY IN

PLACE. THE CONTRACTOR SHALL DEVELOP A SCHEDULE FOR METER REPLACEMENT THAT

WILL ASSURE CONTINUOUS WATER SERVICE TO CUSTOMERS WITH SHUT DOWNS REQUIRED

METERS FOR REPLACEMENT AND SHALL PROVIDE THE COUNTY A LIST OF ADDRESSES WHERE

FOR METER INSTALLATION LIMITED TO NOT MORE THAN 30 MINUTES. THE CONTRACTOR

SHALL NOTIFY THE COUNTY METER DEPARTMENT 2 WORKING DAYS PRIOR TO NEEDING

THAT WATER SERVICE TO ALL CUSTOMERS IN RESTORED IN A TIME FRAME CONSISTENT WITH

TO EXISTING CUSTOMERS. CONTINUOUS WATER SERVICE TO ALL CUSTOMERS WITHIN THE

METERS AND SERVICES AND THE DISCONNECTION AND RECONNECTION OF OTHER WATER

AND RECONNECTION OF WATER SERVICES AND EXISTING WATER MAINS SERVING OTHER

SHALL COMPILE ALL FIELD EXPLORATORY INFORMATION AND CONFIRM THE IMPACTS OF

CLEARANCE, EDGE TO EDGE, THE JOINTS OF THE NEW WATER MAIN SHALL BE STAGGERED

02609 INSTALLATION OF PIPELINES PERTAINING TO THIS ISSUE.

SPECIFIC REQUIREMENTS REGARDING PIPELINE INSTALLATION.

FOR SPECIFIC REQUIREMENTS REGARDING PIPELINE INSTALLATION.

REQUIREMENTS REGARDING PIPELINE INSTALLATION.

FOR CONSTRUCTION UNDER PAVEMENT WITH THE CONSTRUCTION METHOD AND MATERIALS

THE COUNTY OR WHEN SHOWN ON COUNTY STANDARD DETAILS FOR THE PARTICULAR PIPING

UG-9, UG-10 AND PROJECT SPECIFICATIONS. THRUST BLOCKS AS SHOWN IN COUNTY

25.RESTRAINED PIPE JOINTS SHALL BE USED AT ALL FITTINGS, BENDS AND VALVES IN

CONSTRUCT THE CROSSING USING DIP USING OPEN CUT CONSTRUCTION OR USING HDPE PIPE

SEVERAL LOCATIONS ON THE DRAWINGS, THESE CROSSING HAVE BEEN SHOWN TO BE

MANATEE COUNTY DEPTH OF BURY STANDARDS AND WATER LINE CONNECTION POINTS.

LOW POINT IN THE LINE, WHEN THE PIPELINE ELEVATION CHANGES WITHIN A STREET

SEGMENT BY MORE THAN 3 FEET VERTICALLY WITHIN A 200 LINEAR DISTANCE.

Traffic Signal Box

Reclaim Valv

Reclaim Mete

Grate Inlet

Curb Inlet

Catch Basin

Ornamental Tre

Reflector

Sprinkler

Gas Marker

Blow Off Valve

Fire Hydrant

Water Valve

PRICE BID ITEMS FOR THE WORK

INSTALLATION IN QUESTION.

REGARDING PIPELINE INSTALLATION.

THE REQUIREMENTS OF THE PROJECT.

METERS WILL BE REPLACED.

Reducer

Back Flow Preventer

REF a

GM ©

RED ⊳

WM 🗆

BFP -0-

SPRK •

----- Edge of Concrete Oak Tree ---- Edge of Road Palm Tree ——— Ditch-Toe of Slope ------- Property Line / Lot Line Edge of ---- - Right of Way Guard Rail

Guard Rail Gate Valve 23.THE CONTRACTOR SHALL ESTABLISH A PIPE DRILLING OR LAYING PLAN FOR EACH STREET CONSIDERATION THE ELEVATION OF CROSSING UTILITIES, AS NOTED ABOVE. SUCH THAT THE DEPTH OF THE PIPELINE IS ESTABLISHED TO MINIMIZE DEPTH OF BURY GREATER THAN

GI 🖽

CONC

ASPH

DRWY

Drainage Structure

Mitered End Section

Edge of Pavement

Top of Bank

Right of Way

Grate Inlet

Concrete

Sidewalk

LEGEND

Chain Link Fence

---₩ ------ Potable Water

Reclaimed Water

------ 8--SS ----- Sanitary Sewer

---- OH ---- Overhead Utility

---- UG ---- Underground utility

----- GAS ----- Gas Line

Gate, Plug, or Butterfly Valve Sanitary Sewer Manho Blow-off Assemble Bend (Horizontal) Bend (Vertical) Plug or Cap Master Meter Assembly Water Service Line & Meter 一铝 Double Service Restrained Mechanical Joint $\langle CIP \rangle$ CHLORINE INJECTION POINT SP BACTERIOLOGICAL SAMPLE POINT RIGHT-OF-ENTRY (ROE) METER REPLACEMENT ROE LOCATION & TYPE TYPE X (HA2-XX)

HAND AUGER BORING LOCATION

PROPOSED

33.MOST NEW WATER METER BOXES WITH METERS WILL BE INSTALLED AT THE SAME LOCATION AS THE EXISTING WATER METERS. MOST METERS ARE LOCATED EITHER WITHIN THE PUBLIC ROW OR NOT MORE THAN 2 TO 3 FEET WITHIN PRIVATE PROPERTY ADJACENT TO THE PUBLIC ROW. FOR THESE LOCATIONS, THE NEW METERS AND METER BOXES WILL BE INSTALLED AT THE SAME LOCATION AS THE EXISTING METERS AND RECONNECTED TO THE EXISTING CUSTOMER SERVICE LINE WITH MINIMAL CUSTOMER SIDE SERVICE PIPING ADJUSTMENT WITHOUT ADDITIONAL COST TO THE COUNTY. THERE ARE SEVERAL LOCATIONS ON THE PROJECT WHERE THE EXISTING WATER METERS ARE LOCATED DEEP WITHIN PRIVATE PROPERTY (APPROXIMATELY 4 FEET OR MORE INSIDE THE PROPERTY LINE) AND MUST BE RELOCATED TO A LOCATION WITHIN THE PUBLIC ROW. THESE WORK LOCATIONS WILL REQUIRE THAT A RIGHT-OF-ENTRY APPROVAL BE GRANTED FOR PERFORMING WORK SUBSTANTIALLY WITHIN PRIVATE PROPERTY. IN ADDITION, AT THESE LOCATIONS, CUSTOMER SIDE SERVICE PIPING MODIFICATIONS WILL BE REQUIRED TO RE-PIPE THE CUSTOMER SERVICE FROM THE NEW METER LOCATION TO THE CUSTOMER HOUSE CONNECTION. THE LOCATION WHERE CUSTOMER RIGHT-OF-ENTRY APPROVAL AND CUSTOMER PIPING RELOCATION WILL BE REQUIRED AS NOTED ON THE DRAWINGS. COMPENSATION FOR REPLACEMENT OF METERS AS THESE LOCATIONS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND THE BID ITEMS ESTABLISHED FOR THESE PROJECT LOCATIONS. THE CONTRACTOR SHALL NOT PERFORM WORK ON RIGHT-OF-ENTRY PROPERTIES UNTIL THE COUNTY HAS PROVIDED THE CONTRACTOR WITH SPECIFIC RIGHT-OF-ENTRY APPROVAL DOCUMENTATION FOR THE LOCATION IN QUESTION.

34.ALL COMPONENTS OF THE NEWLY INSTALLED WATER SYSTEM SHALL BE TESTED IN ACCORDANCE WITH SECTION 02608 TESTING AND INSPECTIONS. TESTING AND INSPECTIONS SHALL INCLUDE COMPACTION TESTING FOR PIPELINE INSTALLATIONS; HYDROSTATIC TESTING OF PIPELINE VALVES AND FITTINGS; BACTERIOLOGICAL TESTING OF PIPING, FITTINGS, VAI VES AND APPURTENANCES; TRACER WIRE TESTING AND OTHER SUCH TESTS AS REQUIRED BY THE SPECIFICATION AND MANATEE COUNTY STANDARDS. THE CONTRACTOR SHALL PERFORM ALL TESTING AND PROVIDE TESTING RESULTS AS SPECIFIED AND WHEN REQUIRED PRIOR TO PLACING NEW WATER LINE COMPONENTS INTO SERVICE.

35.ALL PIPELINES SHALL BE CLEANED, DISINFECTED AND BACTERIOLOGICAL TESTS OF THE DISINFECTED PIPELINE SHALL BE APPROVED BY THE MANATEE COUNTY DEPARTMENT OF HEALTH BEFORE THE PIPELINES CAN BE PLACED INTO SERVICE. CHLORINE INJECTION POINTS AND SAMPLING POINTS SHALL BE LOCATED TO COMPLY WITH THE SPECIFICATIONS, MANATEE COUNTY HEALTH DEPARTMENT REQUIREMENTS AND THE REQUIREMENTS OF AWWA C651 LATEST EDITION. THE SPECIFIC LOCATION FOR THE CHLORINE INJECTION POINTS SHOWN ON THE DRAWINGS SHALL BE MODIFIED TO COMPLY WITH THE FOREGOING SPECIFICATIONS, HEALTH DEPARTMENT AND AWWA REGULATIONS AND THE CONTRACTORS SPECIFIC PLAN FOR SEQUENCING CONSTRUCTION OF THE PIPELINES. SAMPLING POINTS FOR BACTERIOLOGICAL TESTING WILL BE ESTABLISHED BY THE MANATEE COUNTY HEALTH DEPARTMENT BASED UPON THE CONTRACTORS PIPE INSTALLATION PLAN AND THE FOREGOING REQUIREMENTS. THE CONTRACTOR SHALL INSTALL AND REMOVE SAMPLING POINTS REQUIRED TO PERFORM BACTERIOLOGICAL SAMPLING OF EACH PIPE SEGMENT AT THE LOCATIONS DEFINED BY THE MANATEE COUNTY HEALTH DEPARTMENT AS A PART OF THE PROJECT.

36.ALL ABANDONED WATER MAINS SHALL BE FILLED WITH SAND/CEMENT GROUT IN ACCORDANCE WITH MANATEE COUNTY STANDARDS. ALL ABANDONED WATER MAINS SHALL BE DISCONNECTED FROM EXISTING ACTIVE WATER MAINS BACK TO THE NEAREST ISOLATION VALVE. THE DISCHARGE SIDE OF EXISTING VALVES WHICH REMAIN CONNECTED TO EXISTING ACTIVE WATER MAINS SHALL BE PLUGGED WITH A PLUG SUITABLE FOR LINE TEST PRESSURE AS REQUIRED BY THE CONTRACT DOCUMENTS FOR NEW PIPING. (FIELD TESTING WILL NOT BE REQUIRED). VALVE BOXES SHALL BE REMOVED ON VALVES WHICH ARE PLUGGED AND REMOVED FROM SERVICE. ALL EXISTING FIRE HYDRANTS CONNECTED TO EXISTING WATER LINES WHICH ARE TO BE REMOVED FROM SERVICE SHALL BE REMOVED. CLOSE FIRE HYDRANT ISOLATION VALVES; REMOVE VALVE BOX; PLUG OUTLET OF ISOLATION VALVE; REMOVE FIRE HYDRANT LATERAL TO HYDRANT; REMOVE FIRE HYDRANT ASSEMBLY COMPLETE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROPERLY DISPOSE OF SECTIONS OF ABANDONED WATER MAIN, AND ALL OTHER MATERIALS AND APPURTENANCES, WHICH MUST BE CUT-OUT AND REMOVED FROM THE PROJECT SITE. DISPOSAL OF ALL PIPE, PIPELINE MATERIALS, EXCESS EXCAVATION AND OTHER ABANDONED MATERIALS SHALL BE IN ACCORDANCE WITH APPROPRIATE ENVIRONMENTAL AND REGULATORY REQUIREMENTS FOR THE MATERIALS IN QUESTION.

AS-BUILT DRAWINGS SHALL INCLUDE THE LOCATION OF ABANDONED WATER MAIN CUT AND PLUG POINTS. AS BUILT DRAWINGS SHALL BE ANNOTED EACH DAY AS THE WORK PROCEEDS AND SHALL BE AVAILABLE TO THE COUNTY PROJECT MANAGER FOR REVIEW ON AN ONGOING BASIS. AS BUILT DRAWINGS SHALL PROVIDE THE HORIZONTAL AND VERTICAL INSTALLED LOCATION OF ALL NEW PIPELINES, FITTINGS, VALVES SERVICE LINES AND WATER SYSTEM APPURTENANCES REFERENCED TO FIXED SURFACE FEATURES THAT ARE SHOWN ON THE CONSTRUCTION DRAWINGS AND/OR RIGHT-OF-WAY LINES, PROPERTY CORNERS OR OTHER SURVEYED POINTS. THE CONTRACTOR SHALL ABLE TO PRESENT THE RECORD DRAWINGS TO THE COUNTY PROJECT MANAGER ON DEMAND AS THE WORK PROCEEDS.

GENERAL NOTES

748-8080, LEAD SURVEYOR JIM GATCH, P.S.M.

3.ELEVATIONS SHOWN ON THE CONSTRUCTION DOCUMENTS ARE BASE UPON NATIONAL GEODETIC VERTICAL DATUM, 1929 (N.G.V.D. - 1929). MANATEE COUNTY BENCHMARK # 110-29-18, ELEVATION = 20.557.

6.THE PROJECT INVOLVES THE CONSTRUCTION OF BURIED POTABLE WATER PIPELINES. THE

CONTRACTOR SHALL CONTACT THE ONE CALL CENTER AT 1-800-432-4770 A MINIMUM OF 48 HOURS PRIOR TO THE PLANNED EXCAVATION OR CONSTRUCTION DATE TO ARRANGE FOR THE FIELD LOCATION OF BURIED UTILITIES WITHIN THE CONSTRUCTION AREA.

8. THE CONTRACTOR SHALL FOLLOW ALL FEDERAL, STATE AND LOCAL RULES, STATUTES,

REPAIRED AND RESTORED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE COUNTY.

COUNTY.

TO THE NEW WORK AND ARE SHOWN TO NOT TO BE RELOCATED.

HDPE PIPE USING HDD. IN EITHER CASE, THE TOTAL COMPENSATION FOR THE WORK REQUIRED SHALL BE BASED UPON THE LINEAR FOOTAGE OF PIPE INSTALLED AND THE APPROVED UNIT PRICES IN THE CONTRACT. VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING.

CH2MHILL 4350 WEST CYPRESS STREET SUITE 600 TAMPA, FLORIDA 33607-4155

LB 0002934 AA C000656

MANATEE COUNTY SUBURBAN SYSTEM WATER LINE REPLACEMENT PROJECT PHASE 2 MANATEE COUNTY, FLORIDA

PROJECT No. 60747.70

LEGEND AND NOTES

G2 G2NOTES.DWG **JULY 2011** 386879.WM

Fla. P.E No. 17367

BID DOCUMENTS RAC IF NOT ONE INCH ON OBERT A. CANNARELLA, P.E. APVD THIS SHEET, ADJUST RAC NO. DATE **REVISION** BY APVD SCALES ACCORDINGLY

UTILITIES.

37.THE CONTRACTOR SHALL MAINTAIN AS-BUILT DRAWING OF THE WORK AS CONSTRUCTED.

C30¬ C31-\ 53rd AVE WEST 54th AVE DR WEST (CIP) C32 55th AVE WEST C2¬ (CIP) $C11_{\uparrow}$ $C13_{\uparrow}$ $C15_{\uparrow}$ $C17_{\uparrow}$ C21_{\\} C19-√ C23-\ (CIP) (CIP) _C24 C20-C8 C10 C12 C14 C16 C18 58th AVE DR WEST (CIP) C28-_60th AVE WEST

e County Waterline\Drawings\T1cover.dwg Plotted: 2/18/2009 0:13 pm By: bklein1 Model Plot Scale: 1=1,0 Xre

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ROBERT A. CANNARELLA, P.E. APVD
Fla. P.E No. 17367

CHLORINE INJECTION POINT

BJK
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RAC
RAC
NO. DATE
BID DOCUMENTS
REVISION

BY APVD

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.

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IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

CH2IVIHILL

4350 WEST CYPRESS STREET SUITE 600
TAMPA, FLORIDA 33607-4155
LB 0002934 AA C000656

MANATEE COUNTY
SUBURBAN SYSTEM
WATER LINE REPLACEMENT PROJECT
PHASE 2
MANATEE COUNTY, FLORIDA
PROJECT No. 60747.70

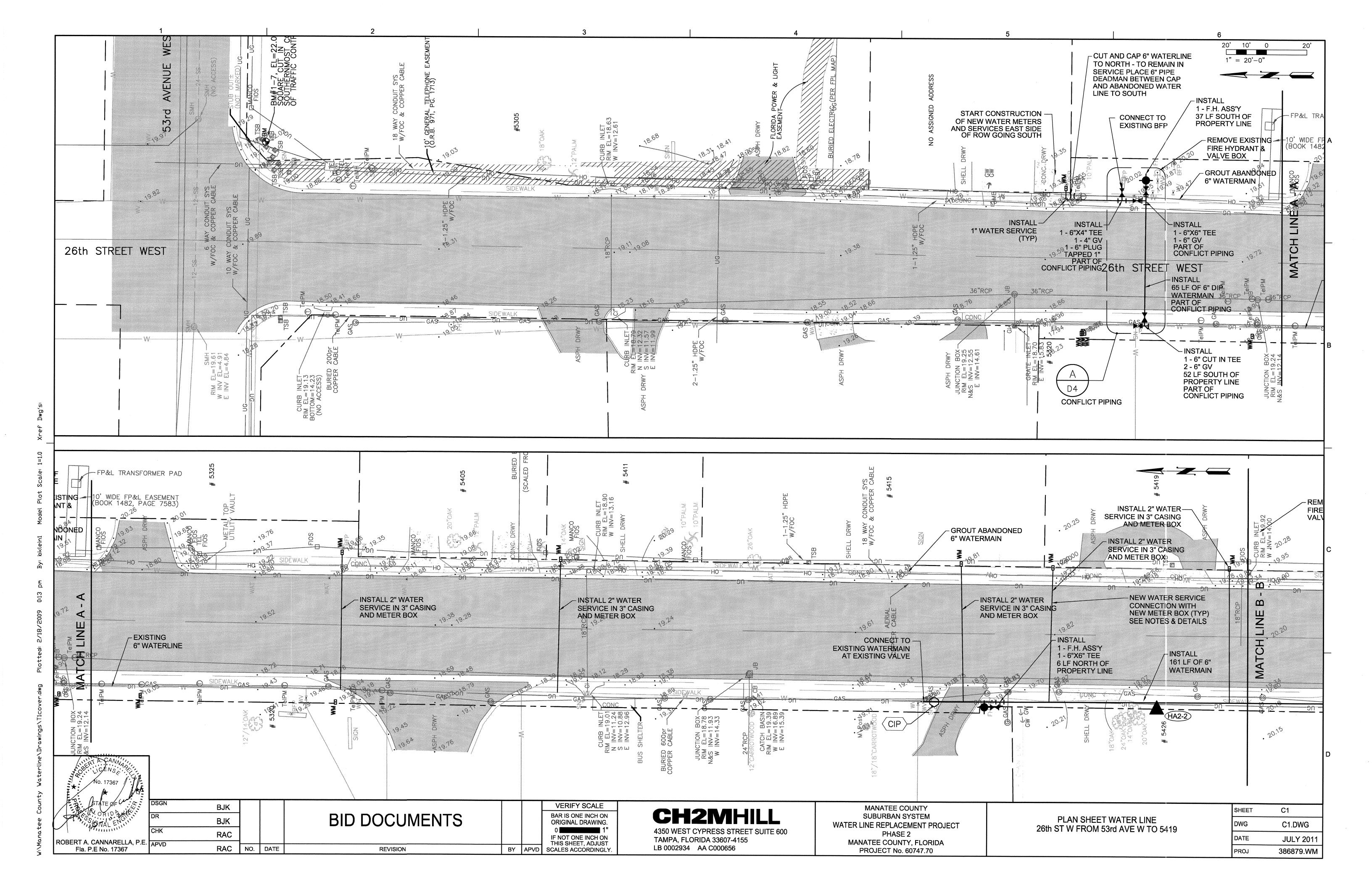
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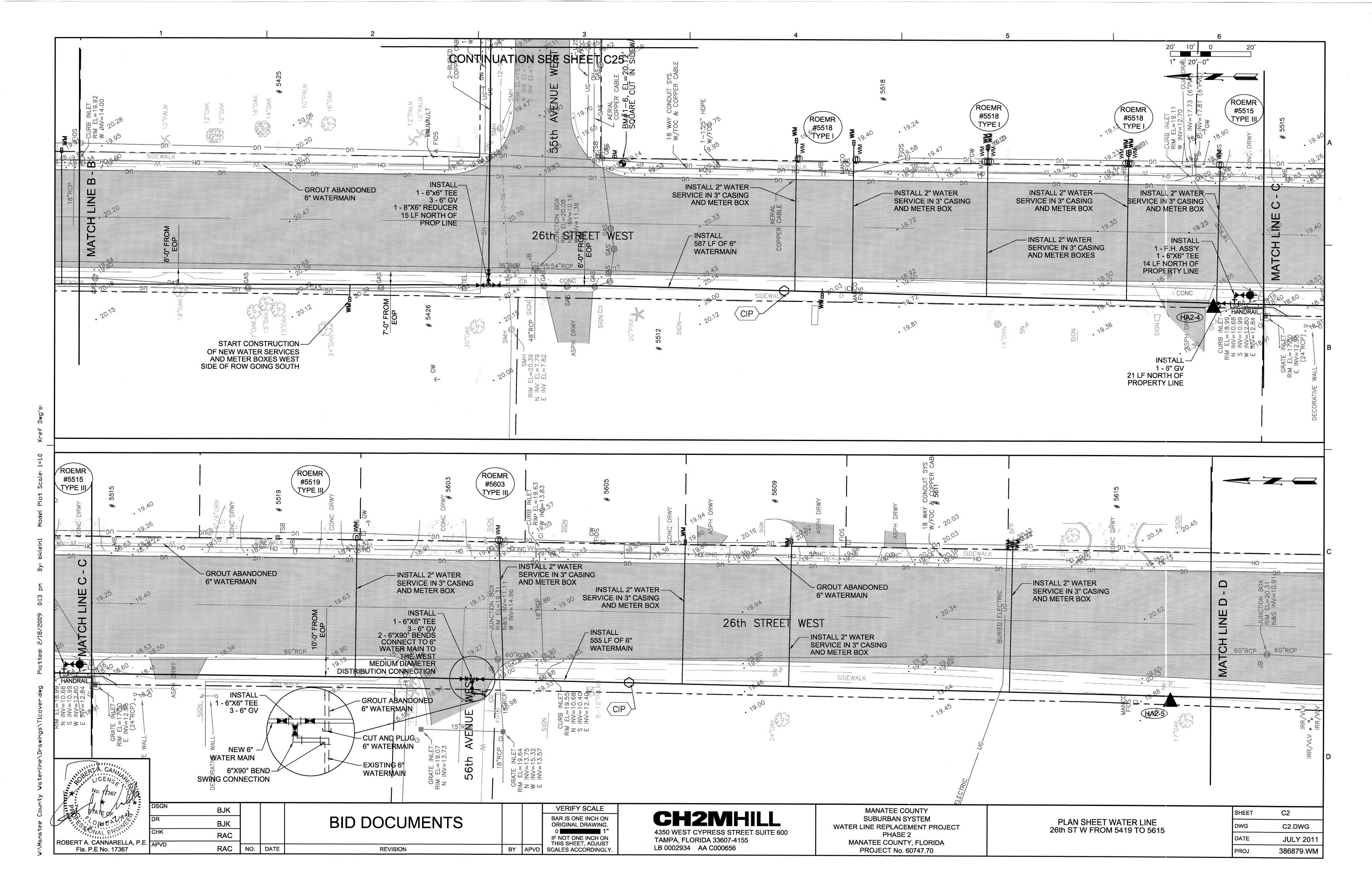
KEY PLAN

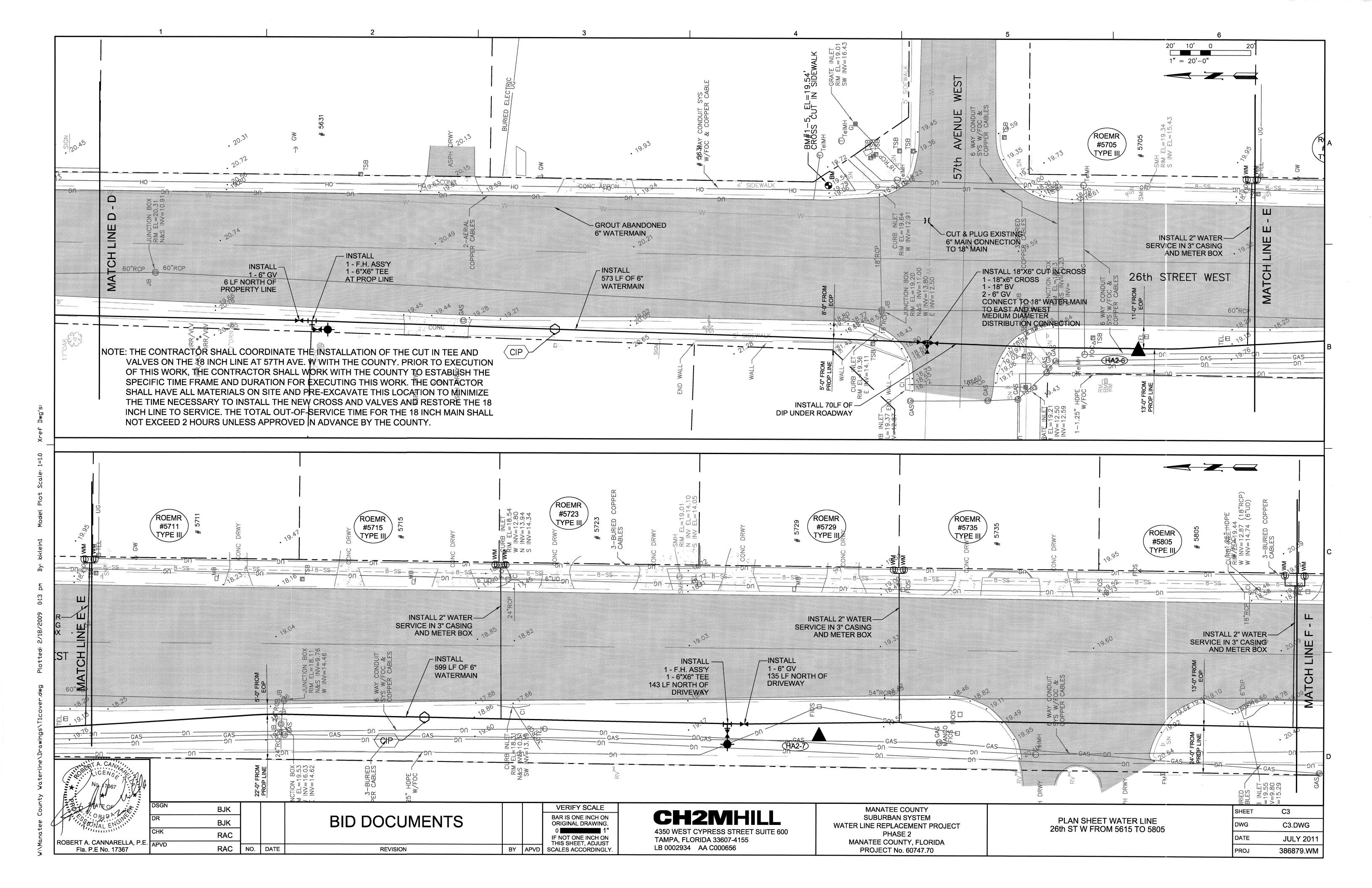
SHEET	G3
DWG	G3.DWG
DATE	JULY 2011
PROJ	386879.WM

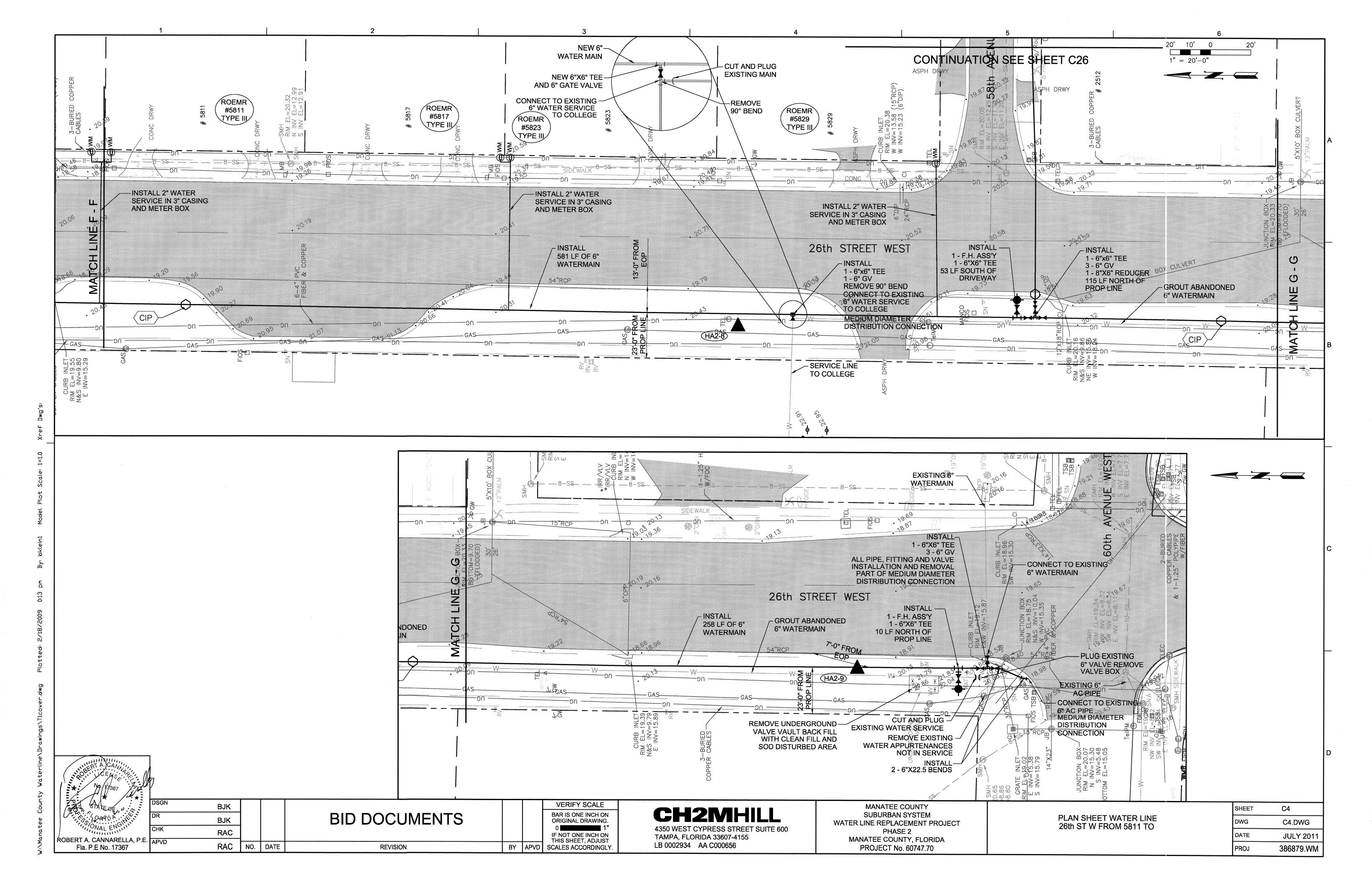
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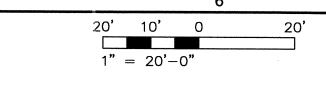
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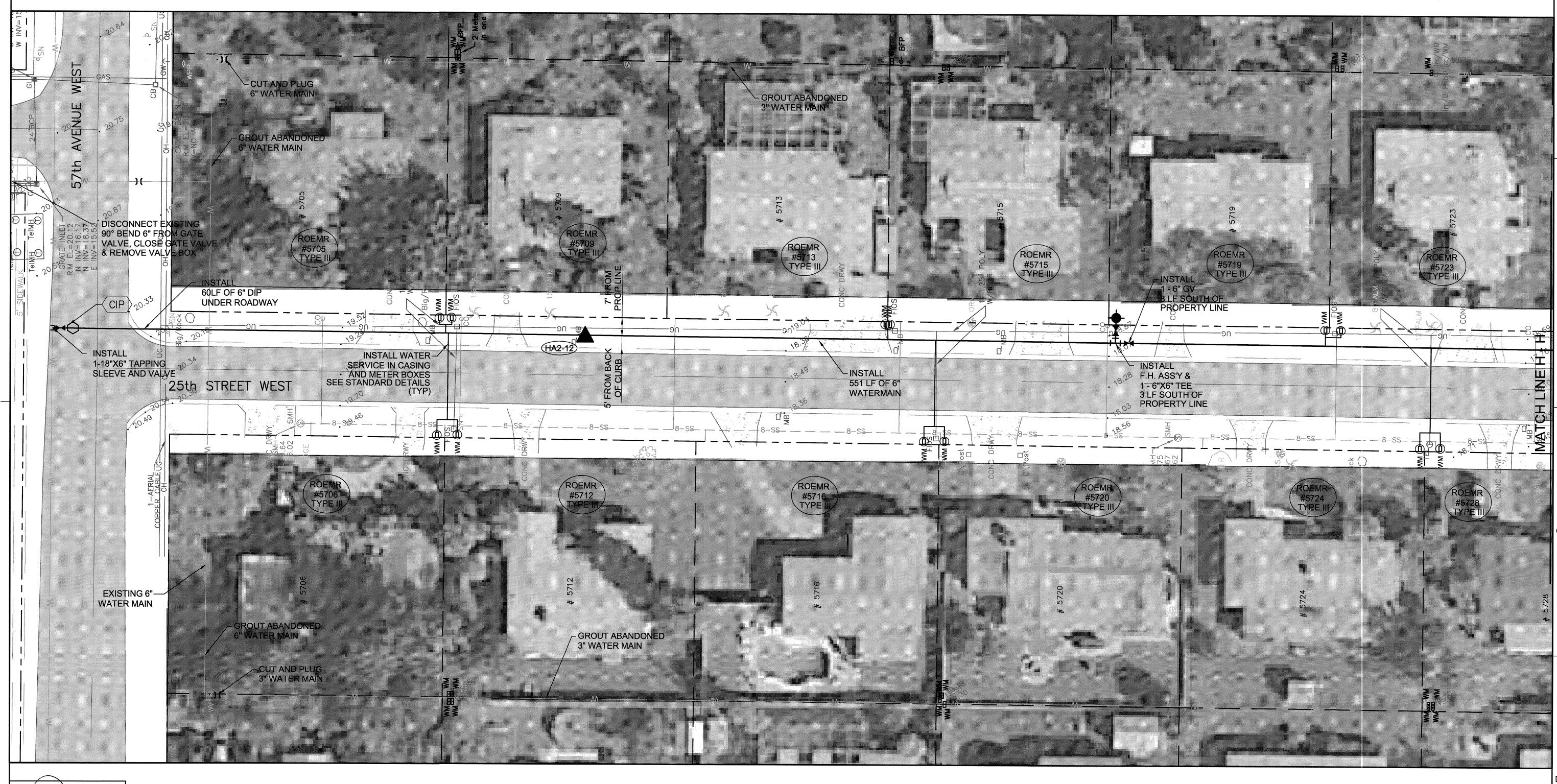












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ROBERT A. CANNARELLA, P.E. Fla. P.E No. 17367	A

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RAC
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NO. DATE
BID DOCUMENTS
REVISION

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.

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IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

4350 WEST CYPRESS STREET SUITE 600 TAMPA, FLORIDA 33607-4155 LB 0002934 AA C000656

MANATEE COUNTY
SUBURBAN SYSTEM
WATER LINE REPLACEMENT PROJECT
PHASE 2
MANATEE COUNTY, FLORIDA
PROJECT No. 60747.70

PLAN SHEET WATER LINE 25th ST W FROM 57th AVE W TO 5724

	SHEET	C5
	DWG	C5.DWG
	DATE	JULY 2011
	PROJ	386879.WM