ADDENDUM NO. 1

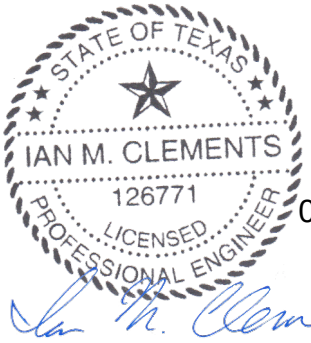
Dated: July 21, 2020

FOR:

CITY OF COPPERAS COVE

SOUTH MEADOWS WATER LINE IMPROVEMENTS PROJECT

Bid No. PW 2020-58-82



07/21/2020

PREPARED BY:

Kimley»Horn

Texas Firm Registration No. F-928
2600 Via Fortuna, Terrace I, Suite 300,
Austin, TX 78746

CITY OF COPPERAS COVE
SOUTH MEADOWS WATER LINE IMPROVEMENT PROJECT
Bid No. PW 2020-58-82

ADDENDUM No. 1

July 21, 2020

This Addendum forms a part of the Bidding and Contract Documents and modifies the original Bidding and Contract Documents, consisting of drawings dated May 15, 2020 and Project Manual date June 17, 2020, as noted below. Acknowledge receipt of this addendum in the space provided on the Bid Form. Failure to do so may subject the bidder to disqualification.

CHANGES TO SPECIFICATIONS:

NONE

CHANGES TO DRAWINGS:

Replace sheet G1 with revised sheet G1. See revised drawing attached.

ATTACHMENTS:

Revised sheet G1.

END OF ADDENDUM No. 1

GENERAL NOTES

1. ALL WATER SYSTEM MATERIALS SHALL FULLY COMPLY WITH TCEQ AND AWWA STANDARDS. ALL CONSTRUCTION SHALL FULLY COMPLY WITH THE CITY'S CONSTRUCTION STANDARDS.
2. PIPE CROSSING UNDER STREET/DRIVEWAY PAVEMENT SHALL BE BACKFILLED USING CRUSHED LIMESTONE BASE, 6 INCH MAXIMUM LIFTS TO 95 PROCTOR ABOVE THE PIPE EMBEDMENT MATERIAL, FLOWABLE FILL OR SUCH OTHER BACKFILL AS MAY BE REQUIRED BY THE CITY OF COPPERAS COVE AND/OR CORYELL COUNTY.
3. STATE HIGHWAY BARE SHALL BE IN COMPLIANCE WITH TXDOT PERMIT REQUIREMENTS.
4. THE CITY'S MAINTENANCE/REPAIR RESPONSIBILITY SHALL END AT EACH SERVICE METER WITHIN THE METER BOX AND AT THE FIRST GATE VALVE AFTER TEE IN THE CITY'S WATER LINE FOR BUILDING SPRINKLER SYSTEM OR IRRIGATION SYSTEM.
5. ANY UNDERGROUND ELECTRICAL CONDUIT/CONDUCTORS CROSSING THE CITY'S WATER LINE SHALL BE LOCATED MINIMUM 12 INCHES UNDER WATER LINE AT NEAR 90° ANGLE AND BE ENCASED WITH MINIMUM 4 INCH THICK CONCRETE FOR A LENGTH OF NOT LESS THAN 24 INCHES EACH SIDE OF O.D. OF WATER LINE.
6. CONTRACTOR TO COORDINATE WITH PUBLIC WORKS AND WASTEWATER TREATMENT PLANT FOR ALL NECESSARY UTILITY SHUT DOWNS AND PLANT ACCESS WORK. CONTRACTOR TO MAINTAIN ACCESS TO THE WASTEWATER TREATMENT PLANT AT ALL TIMES.

WATER LINE NOTES

1. ALL WATER LINES SHALL CONFORM TO THE MOST RECENT REVISION OF THE CITY OF COPPERAS COVE STANDARD SPECIFICATIONS.
2. ALL PVC WATER LINES BETWEEN 4" AND 12" ARE TO BE C-900 DR-18 PIPE.
3. ALL FITTINGS SHALL BE DUCTILE IRON AND IN CONFORMANCE WITH AWWA STANDARD C110.
4. THE DEPTH OF COVER TO THE TOP OF THE PIPE SHALL BE A MINIMUM OF THREE (3) FEET BELOW NATURAL GROUND OR THE BOTTOM OF THE FLEX BASE COURSE WHERE UNDER PAVEMENT.
5. STERILIZATION AND TESTING OF THE WATER LINE SHALL BE IN ACCORDANCE WITH TECHNICAL SPECIFICATIONS. ALL NEW WATER CONSTRUCTION MUST PASS PRESSURE TEST AND DISINFECTION TEST PRIOR TO BEING PLACED IN SERVICE.
6. PIPE EMBEDMENT MATERIAL SHALL CONFORM TO THE CITY'S STANDARD DETAILS AND SPECIFICATIONS.
7. FIRE HYDRANTS SHALL CONFORM TO AWWA STANDARD C502 AND THE CITY'S STANDARD SPECIFICATIONS.
8. CONTRACTOR SHALL COORDINATE WITH CITY STAFF FOR ANY NECESSARY VALVE CLOSURES AND OPENINGS.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING THE WATER LINE CONNECTIONS AS SPECIFIED IN THE PLANS. ANY ADDITIONAL PIPE, FITTINGS, OR MATERIALS NOT SPECIFICALLY SHOWN IN THE PLANS BUT NEEDED TO MAKE THE CONNECTIONS SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT COST AND REFLECTED IN THE UNIT BID PRICES FOR THE VARIOUS BID ITEMS LISTED IN THE PROPOSAL.
10. THE CONTRACTOR SHALL VERIFY ELEVATION AND HORIZONTAL LOCATION AT CONNECTION POINTS FOR EXISTING WATER LINES PRIOR TO CONSTRUCTION.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT ALL LOTS WHICH REQUIRE WATER SERVICES RECEIVE A FULLY FUNCTIONAL WATER SERVICE.

TRAFFIC CONTROL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR ALL TRAFFIC CONTROL. ALL TRAFFIC CONTROL DEVICES (SIGNS, MARKERS, BARRICADES, ETC.) USED TO WARN MOTORIST OF THE CONSTRUCTION ACTIVITY MUST CONFORM TO THE LATEST VERSION OF THE TEXAS MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AS PUBLISHED BY THE TEXAS DEPARTMENT OF TRANSPORTATION.
2. CONTRACTOR SHALL PHASE CONSTRUCTION OF ALL ROADWAY CROSSINGS TO ALLOW, AT A MINIMUM, ONE LANE OF TRAFFIC OPERATED WITH A FLAGGER TWO WAYS.
3. ALL OPEN CUTS SHALL BE PLATED AND OPENED TO TRAFFIC WHEN CONSTRUCTION ACTIVITIES ARE NOT OCCURRING.
4. PAVEMENT STRIPING SHALL BE AS PER TXDOT SPECIFICATION 666.

EROSION AND SEDIMENTATION CONTROL NOTES

1. EROSION CONTROL MEASURES, SITE WORK AND RESTORATION WORK SHALL BE IN ACCORDANCE WITH THE CITY OF COPPERAS COVE STANDARD SPECIFICATIONS.
2. ALL SLOPES SHALL BE SODDED OR SEEDED WITH APPROVED GRASS, GRASS MIXTURES OR GROUND COVER SUITABLE TO THE AREA AND SEASON IN WHICH THEY ARE APPLIED.
3. SILT FENCES, ROCK BERMS, SEDIMENTATION BASINS AND SIMILARLY RECOGNIZED TECHNIQUES AND MATERIALS SHALL BE EMPLOYED DURING CONSTRUCTION TO PREVENT POINT SOURCE SEDIMENTATION LOADING OF DOWNSTREAM FACILITIES. SUCH INSTALLATION SHALL BE REGULARLY INSPECTED BY THE CITY OF COPPERAS COVE AND/OR CORYELL COUNTY FOR EFFECTIVENESS. ADDITIONAL MEASURES MAY BE REQUIRED IF, IN THE OPINION OF THE CITY OF COPPERAS COVE AND/OR CORYELL COUNTY, THEY ARE WARRANTED.
4. ALL TEMPORARY EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL FINAL INSPECTION AND APPROVAL OF THE CITY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL TEMPORARY EROSION CONTROL STRUCTURES AND TO REMOVE EACH STRUCTURE AS APPROVED BY THE CITY.
5. ALL MUD, DIRT, ROCKS, DEBRIS, ETC., SPILLED, TRACKED OR OTHERWISE DEPOSITED ON EXISTING PAVED STREETS, DRIVES AND AREAS USED BY THE PUBLIC SHALL BE CLEANED UP IMMEDIATELY.

STREET AND DRAINAGE NOTES

1. ALL TESTING SHALL BE DONE BY AN INDEPENDENT LABORATORY HIRED BY THE CONTRACTOR. ALL TESTING SHALL BE AT THE CONTRACTOR'S EXPENSE AND SHALL BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID ITEMS. TESTING METHODS AND FREQUENCY SHALL BE IN ACCORDANCE WITH THE CITY'S STANDARD SPECIFICATIONS. ALL TESTING RESULTS AND REPORTS SHALL BE SUBMITTED TO THE CITY AND ENGINEER.
2. BACKFILL BEHIND THE CURB SHALL COMPLY WITH THE CITY'S STANDARD DETAILS AND SPECIFICATIONS..

TCEQ NOTES

1. THIS WATER DISTRIBUTION SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS 30 TEXAS ADMINISTRATIVE CODE (TAC) CHAPTER 290 SUBCHAPTER D. WHEN CONFLICTS ARE NOTED WITH LOCAL STANDARDS, THE MORE STRINGENT REQUIREMENT SHALL BE APPLIED. AT A MINIMUM, CONSTRUCTION FOR PUBLIC WATER SYSTEMS MUST ALWAYS MEET TCEQ'S "RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS."
2. ALL NEWLY INSTALLED PIPES AND RELATED PRODUCTS MUST CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)/NSF INTERNATIONAL STANDARD 61 AND MUST BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY ANSI [§290.44(A)(1)].
3. PLASTIC PIPE FOR USE IN PUBLIC WATER SYSTEMS MUST BEAR THE NSF INTERNATIONAL SEAL OF APPROVAL (NSF-PW) AND HAVE AN ASTM DESIGN PRESSURE RATING OF AT LEAST 150 PSI OR A STANDARD DIMENSION RATIO OF 26 OR LESS [§290.44(A)(2)].
4. NO PIPE WHICH HAS BEEN USED FOR ANY PURPOSE OTHER THAN THE CONVEYANCE OF DRINKING WATER SHALL BE ACCEPTED OR RELOCATED FOR USE IN ANY PUBLIC DRINKING WATER SUPPLY [§290.44(A)(3)].
5. ALL WATER LINE CROSSINGS OF WASTEWATER MAINS SHALL BE PERPENDICULAR [§290.44(E)(4)(B)].
6. WATER TRANSMISSION AND DISTRIBUTION LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. HOWEVER, THE TOP OF THE WATER LINE MUST BE LOCATED BELOW THE FROST LINE AND IN NO CASE SHALL THE TOP OF THE WATER LINE BE LESS THAN 24 INCHES BELOW GROUND SURFACE [§290.44(A)(4)].
7. THE MAXIMUM ALLOWABLE LEAD CONTENT OF PIPES, PIPE FITTINGS, PLUMBING FITTINGS, AND FIXTURES IS 0.25 PERCENT [§290.44(B)].
8. THE CONTRACTOR SHALL INSTALL APPROPRIATE AIR RELEASE DEVICES WITH VENT OPENINGS TO THE ATMOSPHERE COVERED WITH 16-MESH OR FINER, CORROSION RESISTANT SCREENING MATERIAL OR AN ACCEPTABLE EQUIVALENT [§290.44(D)(1)].
9. THE CONTRACTOR SHALL NOT PLACE THE PIPE IN WATER OR WHERE IT CAN BE FLOODED WITH WATER OR SEWAGE DURING ITS STORAGE OR INSTALLATION [§290.44(F)(1)].
10. WHEN WATERLINES ARE LAID UNDER ANY FLOWING OR INTERMITTENT STREAM OR SEMI-PERMANENT BODY OF WATER THE WATERLINE SHALL BE INSTALLED IN A SEPARATE WATERTIGHT PIPE ENCASEMENT. VALVES MUST BE PROVIDED ON EACH SIDE OF THE CROSSING WITH FACILITIES TO ALLOW THE UNDERWATER PORTION OF THE SYSTEM TO BE ISOLATED AND TESTED [§290.44(F)(2)].
11. PURSUANT TO 30 TAC §290.44(A)(5), THE HYDROSTATIC LEAKAGE RATE SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY THE MOST CURRENT AWWA FORMULAS FOR PVC PIPE, CAST IRON AND DUCTILE IRON PIPE. INCLUDE THE FORMULAS IN THE NOTES ON THE PLANS.
   - THE HYDROSTATIC LEAKAGE RATE FOR POLYVINYL CHLORIDE (PVC) PIPE AND APPURTENANCES SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY FORMULAS IN AMERICA WATER WORKS ASSOCIATION (AWWA) C-605 AS REQUIRED IN 30 TAC §290.44(A)(5). PLEASE ENSURE THAT THE FORMULA FOR THIS CALCULATION IS CORRECT AND MOST CURRENT FORMULA IS IN USE;

$$Q = \frac{L*D*\sqrt{P}}{148{,}000}$$

   WHERE:
   - Q = THE QUANTITY OF MAKEUP WATER IN GALLONS PER HOUR,
   - L = THE LENGTH OF THE PIPE SECTION BEING TESTED, IN FEET,
   - D = THE NOMINAL DIAMETER OF THE PIPE IN INCHES, AND
   - P = THE AVERAGE TEST PRESSURE DURING THE HYDROSTATIC TEST IN POUNDS PER SQUARE INCH (PSI).

   - THE HYDROSTATIC LEAKAGE RATE FOR DUCTILE IRON (DI) PIPE AND APPURTENANCES SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY FORMULAS IN AMERICA WATER WORKS ASSOCIATION (AWWA) C-600 AS REQUIRED IN 30 TAC §290.44(A)(5). PLEASE ENSURE THAT THE FORMULA FOR THIS CALCULATION IS CORRECT AND MOST CURRENT FORMULA IS IN USE;

$$L = \frac{S*D*\sqrt{P}}{148{,}000}$$

   WHERE:
   - L = THE QUANTITY OF MAKEUP WATER IN GALLONS PER HOUR,
   - S = THE LENGTH OF THE PIPE SECTION BEING TESTED, IN FEET,
   - D = THE NOMINAL DIAMETER OF THE PIPE IN INCHES, AND
   - P = THE AVERAGE TEST PRESSURE DURING THE HYDROSTATIC TEST IN POUNDS PER SQUARE INCH (PSI).
12. THE CONTRACTOR SHALL MAINTAIN A MINIMUM SEPARATION DISTANCE IN ALL DIRECTIONS OF NINE FEET BETWEEN THE PROPOSED WATERLINE AND WASTEWATER COLLECTION FACILITIES INCLUDING MANHOLES. IF THIS DISTANCE CANNOT BE MAINTAINED, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROJECT ENGINEER FOR FURTHER DIRECTION. SEPARATION DISTANCES, INSTALLATION METHODS, AND MATERIALS UTILIZED MUST MEET §290.44(E)(1)-(4).
13. THE SEPARATION DISTANCE FROM A POTABLE WATERLINE TO A WASTEWATER MAIN OR LATERAL MANHOLE OR CLEANOUT SHALL BE A MINIMUM OF NINE FEET. WHERE THE NINE-FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, THE INSTALLATION SHALL BE IN ACCORDANCE WITH §290.44(E)(4) AND (5).
14. WHEN A NEW WATERLINE CROSSES UNDER A WASTEWATER MAIN OR LATERAL, THE INSTALLATION SHALL BE IN ACCORDANCE WITH §290.44(E)(4)(B)(iii).
15. FIRE HYDRANTS SHALL NOT BE INSTALLED WITHIN NINE FEET VERTICALLY OR HORIZONTALLY OF ANY WASTEWATER LINE, WASTEWATER LATERAL, OR WASTEWATER SERVICE LINE REGARDLESS OF CONSTRUCTION [§290.44(E)(6)].
16. SUCTION MAINS TO PUMPING EQUIPMENT SHALL NOT CROSS WASTEWATER MAINS, WASTEWATER LATERALS, OR WASTEWATER SERVICE LINES. RAW WATER SUPPLY LINES SHALL NOT BE INSTALLED WITHIN FIVE FEET OF ANY TILE OR CONCRETE WASTEWATER MAIN, WASTEWATER LATERAL, OR WASTEWATER SERVICE LINE [§290.44(E)(7)].
17. WATERLINES SHALL NOT BE INSTALLED CLOSER THAN TEN FEET TO SEPTIC TANK DRAINFIELDS [§290.44(E)(8)].
18. THE CONTRACTOR SHALL DISINFECT THE NEW WATERLINES IN ACCORDANCE WITH AWWA STANDARD C-651-14 OR MOST RECENT, THEN FLUSH AND SAMPLE THE LINES BEFORE BEING PLACED INTO SERVICE. SAMPLES SHALL BE COLLECTED FOR MICROBIOLOGICAL ANALYSIS TO CHECK THE EFFECTIVENESS OF THE DISINFECTION PROCEDURE WHICH SHALL BE REPEATED IF CONTAMINATION PERSISTS. A MINIMUM OF ONE SAMPLE FOR EACH 1,000 FEET OF COMPLETED WATERLINE WILL BE REQUIRED OR AT THE NEXT AVAILABLE SAMPLING POINT BEYOND 1,000 FEET AS DESIGNATED BY THE DESIGN ENGINEER [§290.44(F)(3)].
19. DECHLORINATION OF DISINFECTING WATER SHALL BE IN STRICT ACCORDANCE WITH CURRENT AWWA STANDARD C655-09 OR MOST RECENT.

LEGEND

X" WL	EXISTING WATER LINE
X" SS	EXISTING SANITARY SEWER LINE
X" SD	EXISTING STORM SEWER LINE
X" G	EXISTING GAS LINE
OHE	EXISTING OVERHEAD ELECTRIC
UGT	EXISTING UNDERGROUND TELEPHONE
UGE	EXISTING UNDERGROUND ELECTRIC
UGC	EXISTING UNDERGROUND CABLE
	EXISTING CURB
	EXISTING WOOD FENCE
	EXISTING CHAIN LINK FENCE
	EXISTING METAL FENCE
x x x	EXISTING BARBED WIRE FENCE
	PROPOSED WATER/SEWER LINE
	PROPOSED WATER LINE PLUG
	PROPOSED SANITARY SEWER MANHOLE
RE: A/B	REFERENCE FIGURE A ON SHEET B
	WATER/SEWER LINE TO BE PLUGGED AND ABANDONED
	EXISTING WATER/SEWER LINE THAT HAS PREVIOUSLY BEEN ABANDONED
	PROPOSED WATER/SANITARY LINE REFERENCED TO ANOTHER SHEET NO.

MH	EXISTING MANHOLE
WM	EXISTING WATER METER
	EXISTING FIRE HYDRANT
	EXISTING POWER POLE
	EXISTING SANITARY SEWER CLEAN OUT
SS	EXISTING SANITARY SEWER MANHOLE
	EXISTING LIGHT POLE
	EXISTING WATER VALVE
	PROPOSED COMBINATION AIR/VACUUM VALVE
	PROPOSED COMBINATION AIR/VACUUM VALVE (PROFILE)
	PROPOSED FLUSH VALVE (PLAN)
	EXISTING FLUSH VALVE (PLAN)
WM	PROPOSED WATER METER
	PROPOSED FIRE HYDRANT
	PROPOSED WATER VALVE
	PROPOSED REDUCER
	EXISTING REDUCER
	EXISTING STREET SIGN
	EXISTING TREE
	EXISTING TREE TO BE REMOVED
	CONTROL POINT
HB	EXISTING HOSE BIB
	ASPHALT PAVEMENT REPAIR
	GRAVEL PAVEMENT REPAIR
	CONCRETE PAVEMENT REPAIR

Kimley»Horn
Firm No. F-928
2600 Via Fortuna, Terrace 1, Suite 300, Austin, TX 78746 P.512-646-2237

No.	Revision	By	Date
1	ADDENDUM #1	IMC	7/20/20

IAN M. CLEMENTS 126771 LICENSED PROFESSIONAL ENGINEER 07/21/2020

COPPERAS COVE
SOUTH MEADOWS
WATER LINE
IMPROVEMENT

Copperas Cove

GENERAL NOTES

DATE:	DESIGN:	DRAWN:	CHECKED:	KHA NO.:
JULY 2020	IMC	SAJ	SRM	069282100

SHEET

G1