CITY OF TAMPA



Bob Buckhorn, Mayor

CONTRACT ADMINISTRATION DEPARTMENT

David L. Vaughn, AIA, Director

ADDENDUM NO. 1

DATE: December 22, 2014

15-C-00008; Howard F. Curren Denitrification Filter Media Replacement, Phase III

Bidders on the above referenced project are hereby notified that the following addendum is made to the Contract Documents. BIDS TO BE SUBMITTED SHALL CONFORM TO THIS NOTICE.

- Item 1: Workmanship and Materials Specification 9999 Tetra Deep-BedTM Gravity Filter Underdrain and Media; Section 3.02 Rebuild Procedure, A. Demolition and Disassembly; Add as the last sentence to number 10: 'Contingency funds will be used for repair or replacement of air lateral piping, if required.'
- Item 2: Replace plan sheet 3 and plan sheet M301 with the attached revised plan sheets 3 and M301.
- Item 3: Revise SP-1 Scope, first paragraph, second sentence to read: "... replacement of twelve (12) 20-inch knife gate valves ...".
- Item 4: Add Workmanship and Materials Section WM-67 Steel Piping.
- Item 5: Attached for reference is the pre-bid meeting sign-in sheet.

All other provisions of the Contract Documents and Specifications not in conflict with this Addendum shall remain in full force and effect. Questions are to be e-mailed to Contract Administration@tampagov.net.

Jim Greiner, P.E., Contract Management Supervisor



GENERAL NOTES

- G-1. EXISTING DIMENSIONS ARE BASED ON THE BEST INFORMATION AVAILABLE. TRUE DIMENSIONS SHALL BE DETERMINED IN THE FIELD.
- G-2. SHOP DRAWINGS SHALL BE SUBMITTED AND APPROVED BY THE CITY FOR ALL PROPOSED ITEMS. ALL SUBMITTALS AND SHOP DRAWINGS SHALL BE ORIGINALS OR HIGH QUALITY COPIES (EASILY READABLE). NO FAXED SHEETS OR POOR QUALITY COPIES WILL BE ACCEPTED FOR SUBMITTAL REVIEW.
- G-3. OSHA STANDARD SAFETY EQUIPMENT FOR CONFINED SPACE AREA SUCH AS, BUT NOT LIMITED TO, SAFETY HARNESSES, GAS MONITORS, LOWER EXPLOSIVE LIMIT (LEL) DETECTORS, BREATHING APPARATUS, ETC. SHALL BE UTILIZED WHERE THE WORK DICTATES THEIR USE.
- G-4.CONTRACTOR SHALL REPLACE 12 DUAL CELL DENITRIFICATION FILTER TANKS
 UNDERDRAIN BLOCKS, FILTER MEDIA AND SUPPORT GRAVEL WITHIN THE EXISTING
 CONCRETE FILTER TANKS. SALVAGEABLE MATERIALS AS DETERMINED BY THE
 WASTEWATER DEPARTMENT PERSONNEL SHALL BE DELIVERED TO AN ONSITE
 LOCATION AT THE HFC AWTP. NON- SALVAGEABLE MATERIALS ARE TO BE REMOVED
 FROM THE SITE AND PROPERLY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. IN
 GENERAL, THE SUPPORT GRAVEL AND FILTER MEDIA SHALL REMAIN THE PROPERTY
 OF THE CITY. APPROXIMATELY, 3,000 TONS OF FILTER BLOCKS SHALL BE REMOVED
 AND PROPERLY DISPOSED OF FROM THE EXISTING 12 FILTER TANKS. REFER TO
 DISPOSAL OF DEBRIS SECTION IN THE SPECIFICATIONS.
- G-5. THE PROPOSED UNDERDRAIN FILTER BLOCKS SHALL BE THE SNAP-T UNDERDRAIN BLOCK AS MANUFACTURED BY SEVERN TRENT WATER PURIFICATION, INC. THE PROPOSED FILTER MEDIA, SUPPORT GRAVEL AND SNAP-T UNDERDRAIN BLOCK SHALL BE SUPPLIED BY ONE MANUFACTURER SEVERN TRENT SERVICES. THE FILTER UNDERDRAIN BLOCK IS A SOLE SOURCE ITEM AND NO "OR EQUAL" SUBMITTALS WILL BE CONSIDERED. REFER TO SPECIFICATIONS.
- ⚠ G-6. BYPASS PUMPING WILL NOT BE REQUIRED. ISOLATION OF THE FILTER TANKS SHALL BE PROVIDED BY INSTALLATION OF STOP LOGS, REFER TO PLAN SHEET 5 FOR EXACT LOCATIONS. AFTER STOP LOGS ARE INSTALLED, THE CONTRACTOR WILL BE REQUIRED TO SUPPLY DEWATERING PUMPS NECESSARY TO REMOVE THE REMAINING WATER IN THE EFFLUENT CONDUIT. ACCESS TO EACH FILTER TANK UNDERDRAIN SUMP AREA SHALL BE THROUGH THE 30" ACCESS MANHOLE AND REMOVING ONE PRECAST FILTER BOTTOM PER FILTER TANK.
- ⚠ G-7. THIS WORK REQUIRES TAKING ONE SET OF FILTER TANKS (6 TOTAL) OUT OF SERVICE AT ONE TIME. CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH TREATMENT PLANT PERSONNEL AND THE CONTRACT ADMINISTRATION DEPARTMENT. IT IS THE CONTRACTORS RESPONSIBILITY TO COORDINATE DELIVERY OF ALL UNDERDRAIN FILTER BLOCKS, MEDIA AND GRAVEL FROM SEVERN TRENT WITH THEIR CONSTRUCTION SCHEDULE TO PREVENT DELAYS DURING CONSTRUCTION.
 - G-8. THE CONTRACTOR SHALL ALLOW 3 WEEKS IN BETWEEN PHASE 1 AND PHASE 2 OF THE DENITRIFICATION FILTER MEDIA REPLACEMENT TO ALLOW SEEDING OF THE NEW FILTER MEDIA COMPONENTS.
 - G-9. KNIFE GATE VALVES WITH HAND WHEEL OPERATORS SHALL BE SIZE 20-INCH DEZURIK KGC-HD HEAVY DUTY CAST STAINLESS STEEL, OR APPROVED EQUAL.
 - $G\!-\!10.$ CONTRACTOR SHALL REPAIR OR REPLACE ANY DAMAGED ITEMS DURING THE REPLACEMENT PROJECT, IN KIND OR BETTER.
- ⚠ G-11. FOR CLARIFICATION, ALL REFERENCE TO SUMP COVER/PLATES ON SEVERN TRENT DRAWING M301 AND IN THE SPECIFICATION IS REFERRED TO AS PRECAST FILTER BOTTOM WITHIN THE PLAN SET.

STOP LOG NOTES

- S-1. CONTRACTOR WILL BE REQUIRED TO FABRICATE AND INSTALL (2) 304 STAINLESS STEEL STOP LOGS.
- S-2. STOP LOGS SHALL BE CONSTRUCTED WITH 304 SS STRUCTURAL MEMBERS AND PLATES.
- S-3. (1) STOP LOG SHALL BE DESIGNED FOR THE DENITRIFICATION FILTER TANK EFFLUENT CONDUIT TO RESIST A MAXIMUM WATER HEIGHT OF 15' WITH A MAXIMUM DEFLECTION OF .125" AND SHALL BE AS WATERTIGHT AS POSSIBLE WITH RUBBER MATERIAL SECURELY ATTACHED TO ITS "WETTED" PERIMETER. APPROXIMATE HEIGHT OF STOP LOG IS 30'-0" AND WIDTH OF THE STOP LOG GROOVE OPENING IS APPROXIMATELY 5'-2". CONTRACTOR SHALL SUBMIT FABRICATION DRAWINGS TO THE ENGINEER FOR REVIEW AND APPROVAL. FABRICATION DRAWINGS MUST REFLECT FIELD VERIFIED MEASUREMENTS. THE CONTRACTOR IS ENCOURAGED TO MEASURE THE CITY'S STOP LOG FOR THE EFFLUENT CONDUIT FOR MEASUREMENT GUIDANCE PRIOR TO FABRICATION OF PROPOSED STOP LOG.
- S-4. (1) STOP LOG SHALL BE DESIGNED FOR THE DENITRIFICATION FILTER TANK INFLUENT CONDUIT TO RESIST A MAXIMUM WATER HEIGHT OF 4' WITH A MAXIMUM DEFLECTION OF .125" AND SHALL BE AS WATERTIGHT AS POSSIBLE WITH RUBBER MATERIAL SECURELY ATTACHED TO ITS "WETTED" PERIMETER. APPROXIMATE HEIGHT OF STOP LOG IS 5'-0" AND WIDTH OF THE STOP LOG GROOVE OPENING IS APPROXIMATELY 8'-2". CONTRACTOR SHALL SUBMIT FABRICATION DRAWINGS TO THE ENGINEER FOR REVIEW AND APPROVAL. FABRICATION DRAWINGS MUST REFLECT FIELD VERIFIED MEASUREMENTS.
- S-5. THE EXISTING STOP LOG GROOVES ARE 1/4" THICK FRP CHANNELS. THE SIZE OF THE GROOVE IS ONLY 6" WIDE BY 15%" DEEP. IT IS RECOMMENDED THAT THE CONTRACTOR MEASURE THE STOP LOG GROOVE IN MULTIPLE LOCATIONS FOR UNIFORMITY PRIOR TO STOP LOG FABRICATION.
- S-6. CONTRACTOR SHALL INSTALL STOP LOGS AS REQUIRED. AFTER STOP LOGS ARE INSTALLED, THE CONTRACTOR WILL BE REQUIRED TO SUPPLY DEWATERING PUMPS NECESSARY TO REMOVE THE REMAINING WATER IN THE EFFLUENT CONDUIT.
- S-7. CONTRACTOR SHALL MINIMIZE ANY STOP LOG LEAKAGE AS NECESSARY TO FACILITATE THE WORK REQUIRED IN THIS CONTRACT. LEAKAGE MAY BE REDUCED BY INSTALLING VISQUEEN ROLLS BEHIND (WATER SIDE) OF STOP LOGS, OR INJECT OAKUM. ALL ITEMS LISTED SHALL BE CONTAINED, REMOVED AND PROPERLY DISCARDED OF AFTER WORK HAS COMPLETED.
- S-8. AT THE COMPLETION OF THIS PROJECT THE (2) STOP LOGS SHALL BECOME THE PROPERTY OF THE CITY OF TAMPA.

No.	DATE	REVISIONS	No.	DATE	REVISIONS	DES: <i>CB</i>
3			6			DRN: B B
2			5			CKD:
Δ	12/18/14	REVISED/ADDED NOTES BY ADDENDUM	4			DATE:

CITY of TAMPA

HOWARD F. CURREN
ADVANCED WASTEWATER TREATMENT PLANT

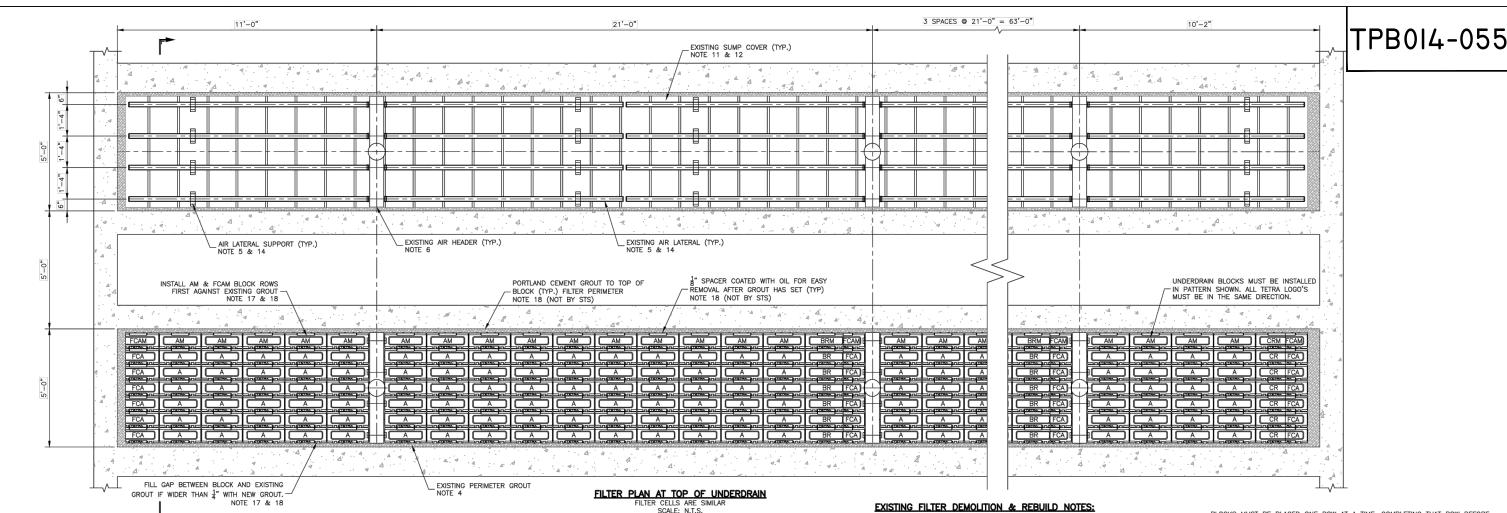
HOWARD F. CURREN A.W.T.P.

DENITRIFICATION FILTERS MEDIA REPLACEMENT

GENERAL NOTES

W.O.1000390

SHEET **3**



EXISTING AIR HEADER (TYP.) NOTE 6 5'-0" INSIDE FILTER CELL INSIDE FILTER CELL EXISTING AIR LATERAL (TYP.) NOTE 5 & 14 NEW UNDERDRAIN BLOCK -EXISTING GROU AIR LATERAL SUPPORT ₼ LATERAL EXISTING SUMP COVER (TYP. SUMP SUMP BEFORE UNDERDRAIN BLOCK INSTALLATION UNDERDRAIN BLOCK INSTALLED

GRAVEL & MEDIA MATERIAL LIST TOTAL VOLUME FOR ONE FILTER LAYER No GRAIN SIZE 1½" x ¾" GRAVEL LAYER #1 193 CU. FT. 3/4" x ½" GRAVEL LAYER #2 106 CU, FT. $\frac{1}{2}$ " x $\frac{1}{4}$ " GRAVEL LAYER #3 175 CU. FT. LAYER #4 1" x 1" GRAVEL 175 CU. FT. $\frac{1}{2}$ " x $\frac{1}{4}$ " GRAVEL LAYER #5 175 CU. FT.

ONE CUBIC FOOT OF GRAVEL OR SAND WEIGHS 100 lbs

2366 CU, FT.

TETRA #5 SAND

LAYER #6

LAYER #7

CHECKED

BLOCK MATERIAL LIST FOR ONE FILTER CELL (BY STS)							
MARK	LENGTH	QUANTITY					
А	1'-9 <mark>3</mark> "	294					
AM	1'-93"	49					
FCA	FIELD CUT MARK A	36					
FCAM	FIELD CUT MARK AM	6					
BR	1'-3"	24					
BRM	1'-3"	1					
CR	1'-7 1 "	6					
CRM	1'-7 <mark>1</mark> "	1					

- COMPLETELY DRAIN FILTER
- REMOVE ALL OLD MEDIA AND GRAVEL AND DELIVER TO THE CITY.
- REMOVE ALL OLD UNDERDRAIN BLOCK AND DISPOSE OF PROPERLY OFF SITE.
- THE GROUT AROUND THE PERIMETER OF THE EXISTING UNDERDRAIN IS NOT TO BE
- CAREFULLY REMOVE ALL AIR LATERALS AND AIR LATERAL SUPPORTS, CLEAN, MAKE CAREFULLY REMOVE ALL AIR LATERALS AND AIR LATERAL SUPPORTS. CLEAN. MAKE SURE ALL AIR DISTRIBUTION HOLES ARE CLEAR AND INTERNALS ARE DIRT AND DEBRIS FREE. COVER AND STORE IN A CLEAN ENVIRONMENT. MAKE SURE AIR LATERALS HAVE CENTER PUNCH MARK ON TOP LOCATION. TEMPORARILY COVER HEADER COUPLINGS WITH MASKING TAPE OR PLASTIC PLUGS TO PREVENT DEBRIS FROM ENTERING AIR HEADER.
- 6. OMITTED BY CITY
- OMITTED BY CITY
- OMITTED BY CITY
- 9. OMITTED BY CITY
- MAKE SURE 1"GAPS BETWEEN SUMP PLATES ARE TOTALLY CLEAR FROM OBSTRUCTIONS SO WATER CAN PASS THROUGH FREELY, IF NOT, THESE MUST BE THOROUGHLY CLEANED AND INSPECTED AS DIRECTED BY THE SERVICE ENGINEER.
- 11. OMITTED BY CITY
- 12. OMITTED BY CITY
- 13. CLEAN FILTER FLOOR OF ANY DEBRIS.
- 14. REMOVE TEMPORARY TAPE OR PLUGS ON AIR HEADER AND INSTALL CLEANED AIR LATERALS, SCREW AIR LATERAL INTO COUPLING ON AIR HEADER USING TEFLON TAPE OR THREAD LUBRICANT ON THREADS AND TIGHTEN SECURELY WITH PIPE WRENCH TO APPROX. 100'# TORQUE. CENTER PUNCH MARK ON THREADED END OF AIR LATERAL MUST BE ON TOP TO ASSURE ALIGNMENT OF HOLES ON BOTTOM OF AIR LATERAL. DO NOT BLOCK HOLES IN AIR LATERALS.
- 15. FILL FILTER WITH 3" INCHES OF WATER COVERING AIR LATERALS AND TURN AIR ON TO FILTERS FOR AN AIR PATTERN TEST. CHECK AIR PATTERN. MAKE SURE THERE ARE NO DEAD SPOTS IN FILTERS AIR GRID. IF A DEAD SPOT IS PRESENT, MARK LATERALS, SHUT OFF AIR, DRAIN FILTER, REMOVE, CLEAN AND REPLACE CLOGGED LATERALS. REPEAT AIR PATTERN TEST UNTIL NO DEAD SPOTS APPEAR.
- 16. SHUT OFF AIR AND DRAIN FILTER.
- 17. BLOCKS MUST BE INSTALLED IN THE PATTERN SHOWN.

- BLOCKS MUST BE PLACED ONE ROW AT A TIME, COMPLETING THAT ROW BEFORE STARTING THE NEXT ROW.
- BEGIN PLACEMENT AGAINST AIR HEADER BEGINNING WITH AM, BRM, CRM & FCAM BLOCK. THESE BLOCKS DO NOT HAVE THE MALE LUGS ON SIDE OF BLOCK. THEN WORK TO THE OUTER PERIMETER OF THE CELL LAYING ONE COMPLETE ROW AT A TIME. SOME BLOCKS MAY NEED TO BE SAW CUT TO FIT LENGTHWISE. REVIEW
- IF STEPS A AND B ARE NOT FOLLOWED EXACTLY, THE UNDERDRAIN BLOCKS WILL
- 18. INSTALL NEW GROUT TO ANY DAMAGED AREAS. DISTANCE FROM UNDERDRAIN BLOCK TO GROUT TO BE $\frac{1}{4}$ ".
- 19. INSTALLATION INSTRUCTIONS FOR NEW GRAVEL AND MEDIA.
- THE FILTER UNDERDRAIN SYSTEM INSTALLATION MUST BE INSPECTED AND APPROVED BY A STS REPRESENTATIVE BEFORE GRAVEL LAYERS AND MEDIA ARE INSTALLED. THE GRAVEL LAYERS AND MEDIA MUST BE INSTALLED UNDER THE SUPERVISION OF A STS REPRESENTATIVE.
- MEASURE FROM THE TOP OF THE UNDERDRAIN BLOCKS AND SCRIBE LINES AROUND THE INTERIOR FILTER SIDE WALLS TO LOCATE THE TOP OF EACH LAYER.
- SEE CHART ON DRAWING FOR TOTAL VOLUME (CU. FT.) FOR EACH LAYER BEING INSTALLED. FROM THE CHART AND SIZE OF BAGS BEING USED, ESTIMATE THE NUMBER OF BAGS REQUIRED FOR EACH LAYER.
- CAREFULLY PLACE GRAVEL OR MEDIA ON TOP OF UNDERDRAIN BLOCKS OR PREVIOUS LAYER, SO THAT MINIMUM LATERAL SPREADING AND INTERMIXING OF LAYERS OCCURS.
- USING A STRAIGHT EDGE AND THE SCRIBED LINES, BUILD UP EACH LAYER TO THE REQUIRED HEIGHT. THE TOP OF EACH LAYER IS TO BE LEVEL IN TWO DIRECTIONS ACROSS THE FILTER. WHILE INSTALLING AND LEVELING LAYERS, THE LAYERS MUST NOT BE WALKED ON - USE BOARDS FOR WORKING SURFACES, REMOVE BOARDS FROM BETWEEN LAYERS WHEN INSTALLING THE NEXT LAYER.
- COVER THE FINAL LAYER WITH PLASTIC UNTIL THE FILTERS ARE PLACED INTO SERVICE TO KEEP THE MEDIA FROM BEING CONTAMINATED WITH FOREIGN MATERIAL

NO.	REVISIONS		DATE	APP'D	NO.	REVISIONS	BY	DATE	APP'D	SCALE AS NOTED	FOR PROPOSAL
Α	FOR PROPOSAL	SS	11/14/2014	NPK	Δ	REVISED NOTE 3 BY ADDENDUM		12/18/14		APP'D	FUNFRUPUSAL
В	FOR PROPOSAL	SS	12/3/2014	NPK						DATE	ONLV
С	FOR PROPOSAL	SS	12/17/2014	NPK							UNLT
										DESIGNED	This drawing, any copies of this drawing and all information contained on this drawing is and shall remain the property of Severn Trent Services. It is submitted only in connection with the transaction to which it perfains a
										DRAFTED SS	must not be used or distributed for any purpose other than to accomplish the purpose of sold transaction with expressed written approval of Severn Trent Services. This drawing and/or any copy of this drawing is not to be

HOWARD CURREN WWTP CITY OF TAMPA, FLORIDA (24) 5'-0" x 105'-2" FILTER CELLS- REBUILDS FILTER FIELD INSTALLATION GENERAL ARRANGEMENT



FILTRATION PRODUCTS

E34512-M301

SECTION 67 - STEEL PIPE AND FITTINGS

W-67.01 General

Steel pipe and fittings include all wrought and fabricated steel pipe, stainless steel pipe, and fittings therefor. Steel pipe shall be used only where specifically shown or specified.

Completely detailed working drawings shall be submitted by the Contractor for approval in conformance with the requirements of the General Provisions. Such drawings shall show piping layouts and contain schedules of all pipe, fittings, valves, expansion joints, hangers and supports, and other appurtenances. When any of the steel pipeline work is of special design, such work shall be shown in large detail and be completely described and dimensioned.

W-67.02 Pipe Standards

Dimensions of steel pipe shall conform to ANSI B36.10, unless otherwise specified, shown, or required. Pipe 12 inches and smaller shall be not less than Schedule 40. Pipe 14 to 18 inches inclusive shall be not less than Schedule 30. Pipe 20 through 36 inches shall have a wall thickness of not less than 3/8 inch. Pipe larger than 36 inches shall have a wall thickness of not less than 1/2 inch.

Steel pipe 24 inches in diameter and smaller shall meet the requirements of ASTM A 53.

Steel pipe larger than 24 inches in diameter shall meet the requirements of AWWA C200, unless otherwise specified, shown, or required. Pipe conforming to AWWA C200 fabricated from plates shall meet the requirements of ASTM A 283 Grade B with not more than two longitudinal seams and with girth seams not less than 7 feet apart. Pipe conforming to AWWA C200 mill pipe shall be made with Grade B steel and spiral welded with inside and outside (double) fusion butt welds. All pipe shall be hydrostatically shop tested in accordance with AWWA C200 to the test pressure determined by the formula in Subsection 3.5 of AWWA C200. The Contractor shall provide an affidavit of compliance for all pipe and fittings furnished under AWWA C200. Stainless steel pipelines shall not be painted.

Steel pipe, including fabricated pipe, shall be furnished in the longest lengths commercially available unless otherwise shown, specified, or required. Pipe shall have the manufacturer's name, initials, or trademark rolled into the surface and the year of manufacture shall be suitably marked on the pipe.

W-67.03 Welding

Welding of pipe joints where shown, specified, permitted, or required shall meet the requirements of ANSI B31.1, Code for Pressure Piping, unless otherwise specified. Pipe and fittings with a wall thickness of 3/16 inch and greater shall have ends beveled for welding. All welding on steel pipelines shall be performed by certified welders having current certificates conforming to requirements of the ANSI Code. Such certification shall be submitted to the

Engineer before proceeding with any pipe welding.

Steel pipelines, with interior lining, shall be shop welded. No field welding on such pipelines will be permitted unless authorized in writing by the Engineer. Steel pipelines shall be shop welded and fabricated complete which includes fittings, lugs, anchors, supports, flanges, and like items, ready for field assembly before linings, as specified, are applied. Pipeline lining, where specified, shall include pipe, fittings, and specials.

W-67.04 Sleeve-Type Couplings

Except where standard solid sleeves or split sleeves are shown or specified, sleeve-type coupling for steel pipe shall be Style 38 couplings as made by Dresser Industries, Inc., or Type 411 as made by Smith-Blair, or equal. Gaskets shall be of molded rubber, Dresser Plain Grade 27, Smith-Blair 003, or equal. Middle rings shall be without a pipe stop and shall be at least 1/4 inch thick and 5 inches wide for 8-inch and smaller pipe, 3/8 inch thick and 7 inches wide for 10-inch through 30-inch pipe, and 1/2 inch thick and 10 inches wide for 36-inch and larger pipe with follower rings of appropriate thickness, unless otherwise shown or specified.

Sleeve-type couplings shall be shop coated with Dresser Red "D" Shop-Coat, Smith-Blair Standard Blue Shop Coat, or equal, nontoxic material compatible with the finished coatings specified.

The ends of pipe and fittings which are to have sleeve-type couplings shall be left free of shop coat or field coat for a distance of 12 inches, until after installation, when the pipe and couplings exposed to view shall be field painted as specified or directed.

W-67.05 Harnessing

The steel pipe joint harness shall consist of two or more steel tie rods set diametrically opposite, generally on the horizontal diameter of the pipe, extending across the joint from fabricated bent steel plate lugs welded to the pipe at either side of the joint. Steel plates used in the fabrication of bent plate lugs shall conform to ASTM A 242. Lugs and welds shall be designed to develop the full strength of the tie rods.

Harness tie rods and nuts shall be of mild steel meeting the requirements of ASTM A 307 Grade B. Nuts shall be hexagonal and have a standard chamfer on the back face.

W-67.06 Expansion and Flexible Couplings

Ample provision shall be made for flexibility in all pipelines to compensate for expansion. Expansion devices shall be adequate to allow the lines to expand and contract freely without injury to any part of the piping system. The devices may be in the form of expansion joints, expansion couplings, swivel or swing joints or pipe bends, and include such anchors as may be shown, specified, or required to make the devices effective. If expansion devices are not required, all runs of pipe subject to change in length shall be fabricated shorter than their theoretical length to the extent that there may be freedom to expand without increasing the stresses imposed when cold.

Expansion joints shall be provided with adequate tie rods to limit the axial movement at the specified test pressures, except where otherwise noted or specified.

W-67.07 Handling

During loading, transportation, and unloading, extraordinary care shall be taken to prevent injury to the pipes and coating. Loading and unloading shall be done slowly with each pipe under perfect control at all times. Under no circumstances shall a pipe be dropped. Suitable skids or blocks shall be placed under each pipe in the shop and the pipe shall be securely wedged during transportation to ensure the least possible injury to pipe, lining, and coating.

Pipe shall be handled with equipment such as stout canvas slings and wide padded skids, designed to prevent damage to the coating. The use of bare cables, chains, hooks, metal bars, or narrow skids in contact with the coating will not be permitted. All pipe handling and hauling equipment shall meet the approval of the Engineer before use. The ends of coated pipe shall be protected with roofing paper to prevent damage to the coating during transit. Abrasions and injuries shall be promptly and efficiently repaired.

Pieces shall be examined for defects and no piece shall be installed which is known to be defective. If any defective piece should be discovered after having been installed, it shall be removed and replaced with a sound one in a satisfactory manner by the Contractor at his own expense.

W-67.08 Erection

Steel pipelines shall be furnished, fabricated, erected, and otherwise installed to the lines, elevations, locations, and dimensions shown, specified, and required for a complete installation. In all existing structures and new structures as applicable, the Contractor shall verify all dimensions shown on the Plans and shall take such field dimensions that may be necessary to properly fabricate, locate, erect, connect to existing work, and otherwise install all steel pipelines, pipe supports, pipe anchors, and structural frames required for steel pipelines. Where temporary supports are used, they shall be sufficiently rigid to prevent shifting or distortion of the pipe. Expansion devices shall be properly adjusted so that pipelines will be tight during expansion and contraction.

For sleeve type couplings, diametrically opposite bolts shall be equally tightened on the connection so that the gaskets will be brought up evenly all around the pipe. Final tightening shall be done with torque wrenches set for the torque recommended by the coupling manufacturer.

W-67.09 Hangers and Supports

All steel pipelines shall be permanently erected and supporting devices shall be furnished and installed as specified on the construction plans.

W-67.10 Linings and Coatings - General

In general, all linings and coatings, except coatings applied as field painting, shall be shop applied.

Linings and coatings, where such are specified, shall be applied to all pipe and fittings.

All bolts, nuts, couplings, and the like shall be well coated after the joint has been made.

Painting shall conform to the Workmanship and Materials section headed "Painting."

* * *

E-Mail to Register as a Plan Holder and E-Mail All Questions to; ContractAdministration@tampagov.net Sign-In Sheet
Please Print City of Tampa, Contract Administration Department Name Organization E-Mail OR Phone Jody Gray Tampa Contract Administration Dept. jody.gray@tampagov.net WHARTON-SMETH CHRIS BARNETT ESTEMATENGTAMPA @WHARTONSMETH . COM 3 darrin linds ay Clayre com Heavy Civil 6 llabanowitz@+1c diversified.com 1ensities 9 Decker FERRAS COTIDECION DES 160 PCG. Deginc.or 12 AllEN DCG MARK Design LC Diversitied dlamberson Ptlediversitied com DOUGLAS N. HIGGINS, INC DELUCA MDELUCA @ MCKENNA CONTRACTING, ROM 16 Warner dave, warner @ stsarvices com CCHIVETTG. 17 bks@mosskelleri.com MOSS KELLEY 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 35