



City of Monroe Utilities

1224 10th AVE W
MONROE WI. 53566

Michael L. Kennison
Water / Wastewater Supervisor

PHONE: 608 - 329 - 2485
FAX: 608 - 329 - 2488

Date: July 2016

Attn: All Plumbers and Contractors
RE: Contacting the Utilities Department for Inspections

This Memo is to inform all plumbers and contractor that they are required to contact the Water and Wastewater Utilities whenever any work is being done to the water or sanitary sewer systems.

Utility Office Phone Number: 608-329-2480 or 608-329-2590

Examples

1. Making a new service tap
2. Water shut off for plumbing repairs.
3. Water main pressure test.
4. Sewer main pressure test
5. Manhole replacements
6. Locations / Relocation of stop boxes.
7. Water and Sewer abandonments.
8. Shut offs located in driveways or sidewalks that are being replaced.
9. All meter removals / installs
10. Any sewer connections
11. Repair of water service leak

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Date: June 2016

Attn: All Plumbers and Contractors
RE: Standard sanitary sewer materials list

The Monroe Wastewater treatment plant is using the following materials as their standard for use on construction project and repairs.

1. Manholes will be from County Materials.
2. Manhole casting will be Neenah. 6" 1580 4" 1640. Non rocking gasket lid.
3. SDR 35 gasket fittings will be used to connect to the main.
4. Internal and external chimney seals will be Cretex.
5. SDR 35 will be used and will have # 12 or larger tracer wire run with it.
6. Cretex Pro Grade Rings. Must be installed according to Manufacture specifications and will not exceed 18" in height.
7. Rubber Fernco with stainless steel clamps.
- 8.

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Mike Kennison
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Updated 6/21/2016

The Monroe Water Utility is currently using the following materials as their standard specification for use on construction project and repairs.

1. Ductile Iron Main (Class 52) Cable bond w/ conductivity straps.
2. C 909 Plastic Water Main (When Authorized)
3. C 900 Plastic Water Main (Only When Specified)
4. Ford Compression Brass MQ (Quick – Joint)
5. Kennedy Guardian Fire Hydrants K-81 3 - Way Traffic Flange. Industrial and Commercial Applications must have STORZ fittings installed on the 5” steamer outlet
6. Waterous, Kennedy, Clow, Resilient Wedge Gate Valves Open Left, Mech. Joint, Poly Coated
7. Smith Blair # 274 Joint Clamps
8. Minneapolis Style Curb Boxes (No internal rods allowed)
9. Tyler Water Main Fittings (American made only)
10. Ford Stainless Steel Repair Clamps
11. Tyler Valve Boxes with lid (American made only)
12. All main connection will be Mech. Joint. No cut in sleeves are allowed without prior approval.
13. Restraining glands (Mega – Lugs)
14. Duo – Sleeves Ductile Iron Mech. Joint
15. Copper water service pipe Type “K”
16. Endot Industries Endo-Trace w/ Tracer wire or Endo-Pure. If Endo-Pure is used then 10 Gauge tracer wire must be installed with it.
17. Water Main Tees Ductile Iron Mech. Joint short body (American Made)
18. Tracer Wire required with all Ductile main
19. Smith Blair or Cascade Tapping Saddle up to 2” only
20. Smith Blair 441 Sleeves or Cascade
21. Pipe wrapping Poly – Wrap for water main.

The Monroe Water Utility will only accept Ford compression brass fittings MQ style. Any other materials that are in question should be approved by the Water Utility ahead of time.

Sincerely,

Michael L. Kennison
City of Monroe
Water Utility Supervisor
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Date: July 2016

CITY OF MONROE SANITARY SEWER STANDARD SPECIFICATIONS

1. ALL SEWER LINE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN" (CURRENT EDITION).
2. STRUCTURAL FILL AROUND MANHOLE STRUCTURES SHALL BE GRANULAR BACKFILL MATERIAL AND SHALL BE MECHANICALLY COMPACTED IN 12 INCH LIFTS. COST SHALL BE INCIDENTAL TO THE MANHOLE.
3. MINIMUM HORIZONTAL CLEARANCE OF 8 FEET AND A MINIMUM VERTICAL SEPARATION OF 18 INCHES WITH THE WATER MAIN ABOVE MUST BE MAINTAINED AT ALL TIMES BETWEEN WATER AND SEWERS (STORM AND SANITARY). IF THE MINIMUM VERTICAL OR HORIZONTAL CLEARANCE CANNOT BE PROVIDED, THE SEPARATION REQUIREMENTS SHALL BE MET AS ILLUSTRATED AND SPECIFIED IN THE "STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN" (CURRENT EDITION).
4. ALL EXISTING MANHOLE CONNECTIONS SHALL BE CORE-DRILLED, UNLESS A PRE-CORED HOLE, SUITABLY LOCATED, EXISTS IN THE MANHOLE.
5. CONTRACTOR SHALL FURNISH ALL PIPE BEDDING. PIPE BEDDING MATERIAL SHALL BE AS SHOWN IN THE "STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN" (CURRENT EDITION). COST SHALL BE INCLUDED IN UNIT PRICE OF PIPE.
6. SANITARY SEWER LENGTHS INDICATED ON THE PLANS REPRESENT THE DISTANCE FROM OUTSIDE OF MANHOLE TO OUTSIDE OF MANHOLE.
7. SANITARY SEWER SLOPES INDICATED ON THE PLANS REPRESENT THE ACTUAL PIPE SLOPE FROM OUTSIDE MANHOLE WALL TO OUTSIDE MANHOLE WALL.
8. SANITARY MANHOLES SHALL BE CONSTRUCTED OF PRECAST CONCRETE SECTIONS CONFORMING TO ASTM C-478 WITH APPROVED STEPS.

9. ALL NEW SANITARY MANHOLES SHALL BE VACUUM TESTED IN ACCORDANCE WITH ASTM C1244.
10. CONTRACTOR SHALL INSTALL APPROVED EXTERNAL SEALS ON ALL MANHOLE CASTINGS AND BARREL SECTION JOINTS.
11. ALL SERVICE LOCATIONS ARE APPROXIMATE AND MAY BE CHANGED IN THE FIELD WITH THE APPROVAL OF THE INSPECTOR. NO ADDITIONAL COMPENSATION WILL BE AWARDED DUE TO REVISED LOCATION.
12. DEFLECTION TESTING SHALL BE REQUIRED AT A THIRTY (30) DAY DELAY FROM THE DATE THE SEWER TRENCH IS BACKFILLED AS REQUIRED BY, EPA REQUIREMENTS.
13. SANITARY SEWER SERVICE STUBS SHALL BE LAID AT A MINIMUM SLOPE OF 1.00% AND HAVE A MINIMUM COVER OF 6'.
14. TRENCH BACKFILL IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN" (CURRENT EDITION), SHALL BE USED WHERE SEWERS OR WATER MAINS ARE UNDER PAVEMENTS OR WALKS. MECHANICAL COMPACTION AND SELECT TRENCH BACKFILL ARE REQUIRED. COST SHALL BE INCLUDED IN UNIT PRICE OF PIPE.
15. ALL PVC SANITARY SEWERS SHALL BE SDR35 PIPE CONFORMING TO ASTM D-3034 (4" – 15" DIAMETER) OR ASTM F-679 (18" – 30" DIAMETER) WITH D-3212 JOINTS. WHERE REQUIRED, ALL WATER MAIN QUALITY PVC PIPE SHALL BE SDR26 CONFORMING TO ASTM D-2241 (4" – 15" DIAMETER) OR PS115 PER ASTM F-679 (18" – 30" DIAMETER) WITH ASTM D-3139 JOINTS. BEDDING FOR ALL PVC PIPE SHALL BE CLASS IA, PER ASTM D-2321-7.
16. AN OWNER REPRESENTATIVE SHALL BE PRESENT DURING CONSTRUCTION OF SANITARY SEWERS AND SERVICES. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE DESIGNATED REPRESENTATIVE A MINIMUM OF 48 HOURS IN ADVANCE OF SAID CONSTRUCTION.

FAILURE TO FOLLOW THESE RULES WILL RESULT IN MATTER BEING TURNED OVER TO THE JUDICIARY AND ORDINANCE REVIEW COMMITTEE FOR VIOLATION AND POSSIBLE MUNICIPAL CITATION.

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Installation Spec and Procedures

Updated 06/21/2016

- 1. Shutting off Water:** Contractors are not allowed to shut off any water for any reason unless permission has been given by the Water Utility Supervisor. The Water Utility will shut off any and all water only after contractors have made arrangements by contacting the Utility office. When contractors are ready to have water turned back on, they must contact the Utility office and the water will be turned back on. Turning off water during regular business hours shall be done at no cost. Contractors requiring Utility personal to work overtime shall pay all expenses accrued by the Utility. Contractors not following these rules will be issued a Municipal Citation and fined in accordance to City Ordinance.
- 2. New Main Flushing and Filling:** When a contractor is ready to have water turned on to fill a newly installed main and or to flush a new main, the contractor will call the Utility office to have this work done. At no time will a contractor turn water on for any reason unless permission has been given by the Utility Supervisor to do so.
- 3. Bulk Water Usage:** Any contractor in need of water for construction purposes will contact the Utility office. No contractor shall operate / use any hydrant within the city limits unless permission has been given by the Utility Supervisor. Under no circumstances shall a hydrant be operated unless a hydrant valve has been installed. A meter may or may not be installed based upon circumstances. Contractors needing water for extended periods of time shall contact the Utility office and make arrangements and pay a deposit of \$ 1500.00 before the meter will be installed. During cold or freezing conditions it will be the contractor's responsibility to see to it that the meter does not freeze. Failure to follow these procedures will result in a fine to the contractor for each separate offence.
- 4. Installation of Tracer Wire:** # 10 -12 gauge Tracer wire or larger will be installed with all new plastic and ductile water mains. Endotrace plastic tubing w/10 gauge tracer wire will be used for service pipe see Figure 3. The tracer wire shall be secured to the plastic and/or ductile main using plastic zip or duct tape on top of the main every 10'. The tracer wire will be looped up into the valve boxes as shown in Figure 1. Tracer wire shall be run with a plastic water service and will be attached to the Curb Stop using a stainless steel band as shown in Fig. 4. Tracer wire shall be run with hydrant leads and run into the hydrant valve box and looped back down to the main and continue on as in figure 1. Tracer wire shall be tested for conductivity before any main or services are accepted. If tracer wire is cut it should be spliced as in figure 2.

5. **Backfill and Bedding Material:** All newly installed water mains will be bedded with 6" of sand below the pipe and 1' above the pipe. Newly installed and repaired service laterals shall be bedded with sand 6" below and 6' above the pipe. The remainder shall be backfilled with crushed rock.
6. **Fire Hydrant Installation:** All newly installed or replaced fire hydrants shall be bedded with clear stone 3' above the hydrant boot. A layer of 8 mil plastic shall be placed on the clear stone around the barrel of the hydrant. The remainder can be filled with crushed stone and or top soil. **Reminder, tracer wire needs to be installed in the hydrant valve box in one continuous loop and back out.** Before the hydrant is backfilled the Utility needs to be notified for inspection. All new hydrants installed shall be ordered with the barrels painted red from the factory. All hydrants installed must have the traffic flange placed no higher than 6" above finished grade.
7. **Conductivity straps:** Conductivity straps shall be installed at every joint to bypass the rubber gasket. Straps shall also be used at all tees, bends, and valves to insure conductivity around the gaskets and valves.
8. **Pressure Testing Main:** After new main is installed the contractor must pressure test the main for 2 hours at 150 psi. If water is added, the test will follow the formula set forth in the Standard Specifications for Sewer and Water Construction of Wisconsin. The contractor will call the Utility before the test starts so it can be witnessed by the Utility Supervisor, Building Inspector, Engineering Dept. or one of the Utilities Operators. The pressure test will be done and passed before any Bac-T samples are taken.
9. **Bacteriological Samples:** A safe Bac-T sample shall be taken and sent to the State Lab of Hygiene for testing. Sample bottles shall be obtained from the Utility, but the contractor is responsible for getting it to the Lab. A copy of the safe Bac-T sample report shall be submitted to the Utility office to be put on file for the project.
10. **Valves and Fittings:** All valves and fittings that are installed shall be bagged with 8 mil black plastic and sealed on both ends. All valves installed deeper than 6' shall have a valve key extension installed. Depth from finished grade to top of extension shall not be more than 5'.
11. **Minimum Cover:** All newly installed or replaced water main shall have a minimum of 5 1/2' of cover material from top of pipe. Any main installed or replaced water main less than 5 1/2' will be insulated with 2" ridged polystyrene boards on top of the main for a width equaling 24" plus the O.D. of the pipe and the same on the sides of the main.
12. **Insulation and Insulating:** Insulation used will be 2" polystyrene boards and will be used when water main is installed less than 5 1/2' deep or when storm sewer pipe crosses the water main with less than 3' of clearance. Insulation will be installed on top the main 24" plus the O.D. of the pipe wide. The same for both sides of the water main.
13. **Installation of Curb Box's:** Newly installed or replaced curb boxes will be Minneapolis style pattern. When the contractor backfills around the curb box, the contractor will put the curb box's at its lowest possible position. After backfilling the contractor will pull the curb box to its highest position and contact the Utility so they can come and put the curb box to final grade. At no time should the contractors cut the curb box off to meet final grade. Extension Rods inside of stop boxes are **not allowed.**

14. **Brass Fittings:** The only brass fittings that the Monroe Water Utility allows is Ford Q series.
15. **Scrap removed:** All hydrants, brass, copper, lead, cast iron, and steel removed while replacing / installing services, main, or hydrants are the property of the Monroe Water Utility and will be given to them upon removal and delivered to their main shop.
16. **Materials Accepted:** The Monroe Water Utility is currently using the following materials as their standard specification for use on construction project.

1. Ductile Iron Main (Class 52) Cable bond w/ conductivity straps.
2. C 909 Plastic Water Main (When Authorized)
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17. Water Main Tees Ductile Iron Mech. Joint short body (American Made)
18. Tracer Wire required with all Ductile main
19. Smith Blair or Cascade Tapping Saddle up to 2” only
20. Smith Blair 441 Sleeves or Cascade
21. Pipe wrapping Poly – Wrap for water main.

Contractors not following these rules will be issued a Municipal Citation and fined in accordance to City Ordinance.

Michael L. Kennison
Water Utility Supervisor
City of Monroe



Fig 1

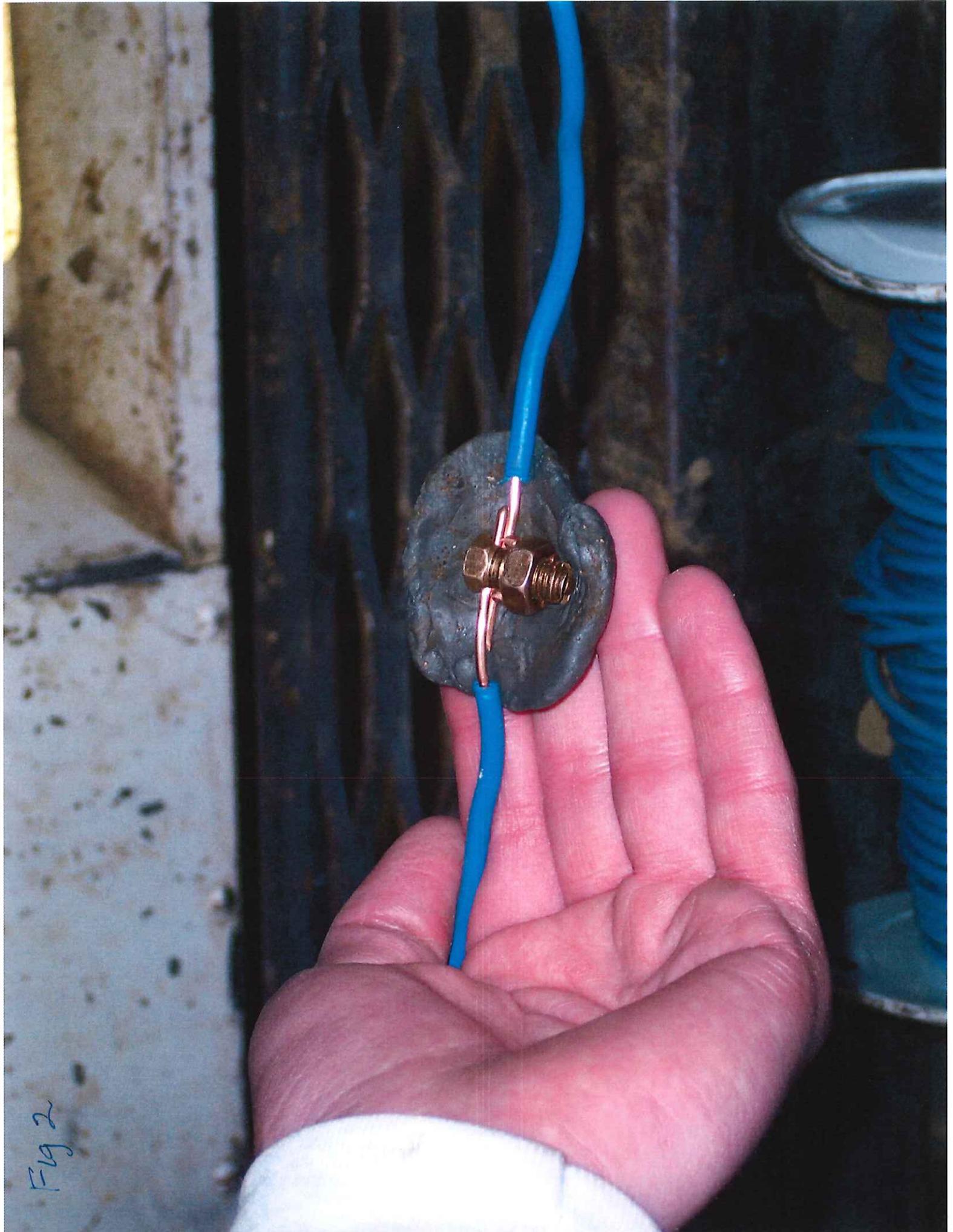


Fig 2