"EXHIBIT A"

149812

AGREEMENT

This Agreement, entered into this_____day of_____, 1980, between the STATE OF OREGON, by and through its DEPARTMENT OF TRANSPORTATION, HIGHWAY DIVISION, hereinafter referred to as "State", and the CITY OF PORTLAND, municipal corporation of the State of Oregon, by and through its City Officials, hereinafter referred to as "City".

WHEREAS, the State is planning the reconstruction of the S. W. Bancroft Street-Sellwood Bridge Section of the Oswego Highway (Macadam Avenue) in the City of Portland; and

WHEREAS, the City plans to construct a 60" water transmission main which will cross the Oswego Highway within the limits of the State's proposed project; and

WHEREAS, it is desirable to install a 60" water main crossing while the highway is under construction rather than after construction has been completed; and

WHEREAS, funds for furnishing and installing said water main crossing are included in the 1979-80 Budget for the Bureau of Water Works; and

WHEREAS, the State, because of time scheduling and because of the advantage of having a contractor engaged in highway construction is best suited to administer the contract for installation of the pipe line crossing during construction of the highway;

NOW THEREFORE, the parties hereto agree that the following policy shall be effective regarding the installation of the new water line crossing of the Oswego Highway at the new connection of Southwest Taylors Ferry Road to the Oswego Highway;

1) The State shall provide a contract bid item for the installation of 820 linear feet of 60-inch diameter steel or concrete cylinder water main.

2) Both State and City shall have the right to reject any or all bid prices submitted and must mutually agree to accept any bid for said main installation. In the event mutual agreement is not obtained, the City may accomplish the main installation by Price Agreement or Extra Work Order (Force Account) subject to mutual agreement of the parties.

3) The City shall furnish all plans, specifications and perform inspection of the pipeline as to conformance with their specifications.

4) State shall perform inspection of traffic control, backfill, and pavement repair.

5) State shall keep track of contractor's time, equipment, and materials required for installation of water main crossing. State shall make monthly progress payments to contractor and administer the contract.

6) City shall make monthly progress payments to the State for all costs incurred by the State's contractor for the acceptable installation of said water line crossing upon receipt of monthly estimates. City shall reimburse the State for actual cost amounts incurred for engineering and inspection required for installation of said water line crossing.

7) Installation shall be accomplished in accordance with the City of Portland Bureau of Water Works' Plans and Specifications for said water main crossing Project No. 3411, Job 11986, attached hereto, marked Exhibit "A", and by this reference, made a part hereof.

8) This Agreement shall be in effect from the date of adoption by parties.

9) This Agreement may be terminated by either party by notifying the other at least thirty (30) days in advance of the desired termination date.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and year first above written.

The State Highway Engineer, acting under delegated authority from the Oregon Transportation Commission, authorized the Right-of-Way Manager to approve and execute this contract on behalf of the Commission.

APPROVED AS TO FORM

Assistant Attorney General and Counsel

APPROVED AS TO FORM

APPROVED AS TO FORM

Office of City Attorney

STATE OF OREGON, by and through its DEPARTMENT OF TRANSPORTATION, HIGHWAY DIVISION

Right-of-Way Manager 5/30/80

CITY OF PORTLAND

Mayor

Commissioner of Public Utilities

May 2, 1980 149812

TECHNICAL SERVICES UNIT

MAY - 8 1980

SPECIFICATIONS FOR 60" DIAMETER WATER MAIN INSTALLATION MACADAM AVENUE CROSSING AT MILES STREET

Scope

The work shall consist of supplying all materials, labor, equipment, appurtenances, and incidentals required to install a 60-inch diameter steel or concrete cylinder water main as shown on the plans for the City of Portland Bureau of Water Works. The contractor shall perform all operations necessary to finish the water main installation complete, in place, and ready for future use in the water distribution system.

Disinfection of the pipeline after installation will be performed by the City.

Drawings to be Submitted

Drawings and schedules showing full details including appropriate material designation of reinforcement, cement-mortar lining and coating, joints and dimensions for pipe fittings and specials and interior pipe bracing details shall be submitted to the engineer for approval prior to the start of any fabrication. The contractor shall also submit to the engineer for approval, a pipe-laying schedule tabulated with reference to the stationing and grade lines shown on the plans.

Cleanliness of Pipe

The contractor shall take particular care to keep the pipe clean during construction. Open ends of pipe in the trench shall be adequately covered except during actual coupling of the pipe. If, in the opinion of the engineer, the pipe is not sufficiently clean, the contractor shall be required to clean the line in a manner satisfactory to the engineer. Equipment and materials required to clean the line shall be furnished by the contractor at his own expense.

Handling of Pipe

All pipe and accessories shall be handled in such a manner as to insure delivery and installation in a sound, undamaged condition. Particular care shall be taken not to damage the interior lining and exterior protective coating. Canvas, nylon or similar type slings shall be used in handling the pipe. Unprotected chains, wire rope or end hooks will not be permitted.

Notice to Commence Work

The contractor shall notify the engineer ten days prior to starting the water main installation and shall submit a

Exhibit A

tentative schedule of work at this time. The contractor shall notify the engineer at least 48 hours in advance of performing any work which requires the inspector to be present.

Testing

All pipe, fittings, and specials shall be hydrostatically tested at the factory at a minimum test pressure of 275 psi. All welded pipe joints shall be field air tested prior to coating or lining application at the joints.

Excavation, Bedding and Backfill

A. Excavation

Excavate for the installation of all piping, specials, and appurtenances to the limits required to accomplish the construction as shown on the plans and as specified herein.

The trench shall be excavated to a depth of six inches below the bottom of the pipe invert elevations and to a width of the pipe O.D. plus 18 inches.

The contractor shall not excavate any trench until he has on the job site all lumber, pipe, materials, and all equipment necessary for the rapid completion of the pipe installation therein. Unless a work suspension is approved by the Engineer, work to install the water main shall be continuous until complete. The length of trench to be opened in advance of the completed work shall depend on conditions at the site but shall not exceed 400 feet, including excavation, construction and backfilling.

The trench at all times shall be kept free from water. Adequate pumping equipment shall be provided to handle and dispose of water without damage to adjacent property.

B. Sand Bedding and Backfill

Prior to installing pipe in the trench, a 6-inch course of sand bedding shall be placed in the trench and fine graded to the established pipe invert elevations. The sand used for pipe bedding shall be the fine granular material naturally produced by the disintegration of rock and shall be sufficiently free of organic material, mica, loam, clay and other deleterious substances to be thoroughly suitable for the purpose for which it is intended. Sand shall be such size that 90% to 100% by weight will pass a No. 4 sieve and not more than 2% will pass a No. 200 sieve. In areas where suitable bedding material is encountered, the 6-inch over-excavation may be waived by the engineer, providing that suitable methods are proposed by the contractor to insure proper bedding for the pipe and appurtenances thereto.

Exhibit A

In any option selected by the contractor, sand bedding shall be graded to the shape of the pipe being laid to provide for a firm support.

Consolidation of sand bedding shall be accmplished by mechanical compaction methods to a minimum density of 95% of the maximum dry density as determined by A.S.T.M. D-698 Standard Proctor Method. The moisture content of the sand shall optimize the compaction method used.

C. Pipe Zone Backfill

After placing the pipe, the trench shall be backfilled with the same type of sand as used for bedding to an elevation 12-inches above the pipe soffit.

Consolidate the pipe zone backfill to a minimum density of 95% of the maximum as previously described. Prevent or repair any damage to the pipe exterior coating.

The remainder of the trench shall be backfilled with imported or approved native granular material and shall comply with Oregon State Highway Division specifications.

Concrete Cylinder Pipe (Alternate A)

A. General

The term "concrete cylinder pipe" shall be understood to include all special pieces and related parts necessary for the complete installation as shown and shall be included in the bid price. Special pieces shall include, but not be limited to, fittings, bends, outlets, branches, closure sections and all other concrete cylinder piping required to complete the work.

The pipe and fittings to be furnished for this project shall be manufactured in accordance with AWWA C-303, "Standard for Reinforced Concrete Water Pipe, Steel Cylinder Type, Pretensioned," except as otherwise specified herein or shown on the plans.

B. Pipe Material and Construction Requirements

Steel for the pipe cylinders and special fittings shall conform to Section 2.5.1 of AWWA C 303 stipulating ASTM A 570, Grade C or D, or ASTM A 283, Grade D.

Steel bar to be wrapped on the cylinder shall be plain round bar conforming to the current ASTM designation A 306, Grade 80 or ASTM A 615, Grade 40.

Exhibit A

Cement for mortar shall conform to ASTM C 150, Type 1 or Type 2. Aggregates shall conform to ASTM C 33.

The pipe shall be 60-inch I.D. furnished in uniform lengths with a range of 24 to 40 feet, with shorter lengths as required for closures and changes of alignment and grade.

The pipe shall be hydrostatically tested at the plant in accordance with Section 1.10 of AWWA C 303.

The steel coil rod reinforcement shall conform to AWWA C 303. Wrapping shall take place after interior mortar has been applied and set. An accurate and dependable device shall be provided for tensioning and for measuring and indicating the tension in the rod reinforcement during the winding operation. The cement mortar lining and coating shall be of the thickness shown on the plans.

C. Specials and Fittings

Specials and fittings shall be manufactured in accordance with Section 4 of AWWA C 303, and shall be placed at locations shown on the plans. All outlets for connections to other mains shall be furnished with steel flanges as shown on the plans. The wall thicknesses for fittings shall provide strength equal to that of the pipe section.

Data for the concrete cylinder pipe shall be submitted in accordance with AWWA C 303, Sec. 1.6.2, Detail Drawings and Layout Schedules.

D. Joints

All joints shall be continuous, welded as shown on the plans.

Field welds shall conform to the current AWWA C 206. All welders performing any work on this project shall be certified by the State of Oregon Department of Commerce for the particular material being welded.

A testing tap shall be placed in each joint as shown on the plans. The contractor shall air pressure test each joint to 100 psi. Any leakage shall be repaired by the contractor at his own expense.

1. Exterior Joint Coating
   Wrap the joint with a strip of woven fabric and band around the pipe at each side of the joint. The fabric shall be of such a weave as to allow the escape of air and excess water, but prevent escape of mortar. Pour the joint full of grout

through a space in the woven fabric slightly to one side of the top. Rod the grout with a beaded wire or chain as it is poured into the joint. Immediately after completing the exterior joint, place damp earth over and around the joint to prevent rapid drying. Styrofoam "diapers" with integral banding may be used subject to prior approval by the engineer of the design and method of use.

After the pipe section has been laid, clean the exposed metal at the exterior space at the joint and fill the annular space with a Portland cement grout, composed of one part cement to one and a half parts fine aggregate with sufficient water to form a mixture the consistency of thick cream.

2. Interior Joint Coating

After the backfill has been placed at least to the top of the pipe, dampen the inside joint space with water or a neat cement slurry and fill by compacting into the joint a portland cement mortar composed of one part cement to not more than two parts fine aggregate with only sufficient water to form a stiff mix. The finished surface shall be a dense troweled surface, free of projections or depressions.

Steel Pipe (Alternate B)

A. General

The term "steel pipe" shall be understood to include all special pieces and related parts necessary for the complete installation as shown and shall be included in the bid price. Special pieces shall include, but not be limited to, fittings, bends, outlets, branches, closure sections and all other steel piping required to complete the work.

The pipe and fittings to be furnished for this project shall be manufactured in accordance with AWWA C-200, "Steel Water Pipe 6-Inches and Larger," except as otherwise specified herein or shown on the plans.

B. Pipe Material and Construction Requirements

Steel for the pipe and special fittings shall have a minimum yield strength of 36,000 psi. Pipe and fittings shall be suitable for an internal pressure of 216 psi with a stress allowance equal to or less than 18,000 psi.

Exhibit A

The steel pipe and fittings shall be cement mortar lined in accordance with AWWA C-205 (shop applied) or AWWA C-602 (applied in place). Portland cement shall conform to ASTM C-150 Type I or Type II cement.

The steel pipe and fittings shall be coal-tar coated in accordance with AWWA C-203 using Type B primer, Type I coal-tar enamel, perforated and reinforced asbestos felt, and single wrap kraft paper finish.

The pipe shall be 60-inch I.D. furnished in uniform lengths with a range of 24 to 40 feet, with shorter lengths as required for closures and changes of alignment and grade.

The pipe shall be hydrostatically tested at the plant in accordance with Section 3.5 of AWWA C200.

C. Specials and Fittings

Specials and fittings shall be manufactured in accordance with AWWA C-208 and shall be placed at locations shown on the plans. All outlets for connections to other mains shall be furnished with steel flanges as shown on the plans. The wall thicknesses for fittings shall provide strength equal to that of the pipe section.

Detailed shop drawings and layout schedules shall be submitted for the engineer's approval prior to starting any fabrication.

D. Joints

All joints shall be continuous welded lap joints as shown on the plans.

Field welds shall conform to the current AWWA C-206. All welders performing any work on this project shall be certified by the State of Oregon Department of Commerce for the particular material being welded.

Three testing taps shall be placed in each joint as shown on the plans. The contractor shall air pressure test each joint to 100 psi. Any leakage shall be repaired by the contractor at his own expense. Plug weld taps after completion of test.

1. Exterior Joint Coating
   After testing, all joints shall receive a cold-applied tape coating in accordance with AWWA C-209 for Type I prefabricated tape application.

Exhibit A

2. Interior Joint Lining
After testing, all joints shall be field cement mortar lined in accordance with Appendix A of AWWA C-205.

Laying Pipe

A. General

All pipe, fittings, and specials shall be laid and maintained to the lines and grades as shown on the plans and approved detailed shop drawings. All pipe, fittings, and specials shall be placed in a manner to prevent damage to materials and protective coatings and linings. Grade changes shall have prior approval of the engineer.

Particular care shall be taken at all joints deflecting from a straight line, either vertically or horizontally, that the amount of deflection shall not exceed that permitted by the manufacturer's specifications.

B. Field Changes of Alignment and Grade

If ordered by the engineer, changes of grade and alignment will be made during the course of the work in order to avoid interference with sewer laterals or other unforeseen obstructions and to insure that sewer laterals may be reconnected. The contractor shall locate existing utilities to be crossed by pot-holing ahead of the pipe installation a sufficient distance to facilitate minor changes in grade.

All costs for minor field changes in alignment and grade shall be borne by the Contractor.

C. Handling Material

Lifting of pipe during unloading shall be done using two slings placed at the quarter points of the pipe sections. The slings shall bear uniformly against the pipe. When not being handled, the pipe shall be supported on timber cradles or on properly prepared ground, graded to eliminate all rock points and to provide uniform support along the full length. When being transported, the pipe shall be supported at all times in a manner which will not permit distortion or damage to the lining or coating. Any unit of pipe that, in the opinion of the engineer, is damaged beyond repair by the contractor, shall be replaced with another unit at the expense of the contractor. No payment will be made for damaged pipe or for repairs to such damaged pipe.

D. Laying Plan

The contractor shall follow the pipe laying schedule as

Exhibit A

set forth in the approved shop drawings. Any deviation or exception shall have the prior approval of the engineer.

E. Placing of Pipe in the Trench

Prevent foreign material from entering the pipe while it is being placed in the trench. Remove all foreign material from the pipe or joint ring before the next pipe is placed. If the pipe-laying crew cannot put the pipe into the trench and in place without getting earth into the pipe, the engineer may require that snugly fitted, tightly-woven, canvas bags be placed over each end before lowering the pipe. The bags shall be left in place until the connection is made to the adjacent pipe. During laying operations, keep debris, tools, clothing, or other materials out of the pipe.

Follow pipe laying operations closely with outside joint coating or grouting operations and backfilling of the trenches with sufficient material to prevent the pipe from moving. Place backfill carefully and simultaneously on both sides of the pipe to avoid displacement of the pipe and damage to the joints and mortar coating or lining. Schedule work so that at no time will pipe remain in the trench more than seven days before being covered with backfill, unless otherwise approved by the engineer.

F. Alignment

Pipeline sections intended to be straight forward shall be so laid, and in no case shall deviation from the approved shop drawings exceed one inch at any joint. Where sections are to be laid on a curve, the deflections shall not exceed the maximum allowable deflections recommended by the pipe manufacturer, as approved by the engineer.

G. Unsuitable Conditions for Laying Pipe

Do not lay pipe in water or when, in the opinion of the engineer, trench conditions are unsuitable.

At times when pipe joining is not in progress, close the open end of the pipe with a water-tight plug, or by other means approved by the engineer, to preclude rapid drying of the interior joint mortar and to prevent trench water from entering the pipe. If water is in the trench, keep the seal in place until the trench is pumped free of water.

Exhibit A

H. Plugs at Pipe Ends

Furnish and install temporary water-resistant plugs at the ends of the 60-inch pipe prior to backfilling. Use 1" marine plywood, 4 x 6 fir strong back bracing, seamless 4 mil visqueen sheets, and steel bands.

I. Stulling and Interior Bracing

Interior bracing placed in concrete cylinder pipe by the pipe manufacturer shall remain in place until after the trench backfill has been consolidated.

Prior to placement in the trench, steel pipe shall be braced on the interior by alternating stulls and cross braces on 6-foot maximum centers. Stulls and cross braces shall be 4 x 4 fir members between 4 x 4 fir blocks 24 inches long, shaped to match the pipe curvature. Stulls and cross braces shall be firmly wedged so that they remain intact during handling, installation, and trench backfilling. All bracing shall remain in place until after the trench backfill has been consolidated.

Interior bracing may be subject to variation as may be ordered by the Engineer to suit the trench conditions encountered along the pipeline. The contractor shall make such variations at no additional cost to the owner.

J. Pavement Restoration

The pavement restoration required beyond the limits of the State's improvement of Macadam Avenue shall be incidental to the main installation. Such pavement shall be restored to a condition equal to or better than existed prior to the main installation and shall meet State specifications.

K. Traffic Control

Traffic control for the main installation shall be incidental to the cost of installing the 60-inch main.

Measurement

Measurement for the 60-inch water main shall be the horizontal length actually installed, measured along the pipeline centerline to the nearest 0.1 foot.

Payment

The accepted pay quantity, measured as provided above, will be paid for at the contract price for the following pay item, which price and payment shall be full compensation for furnishing and placing all materials including all labor, tools, equipment, pipe, fittings, specials, pipeline appurtenances,

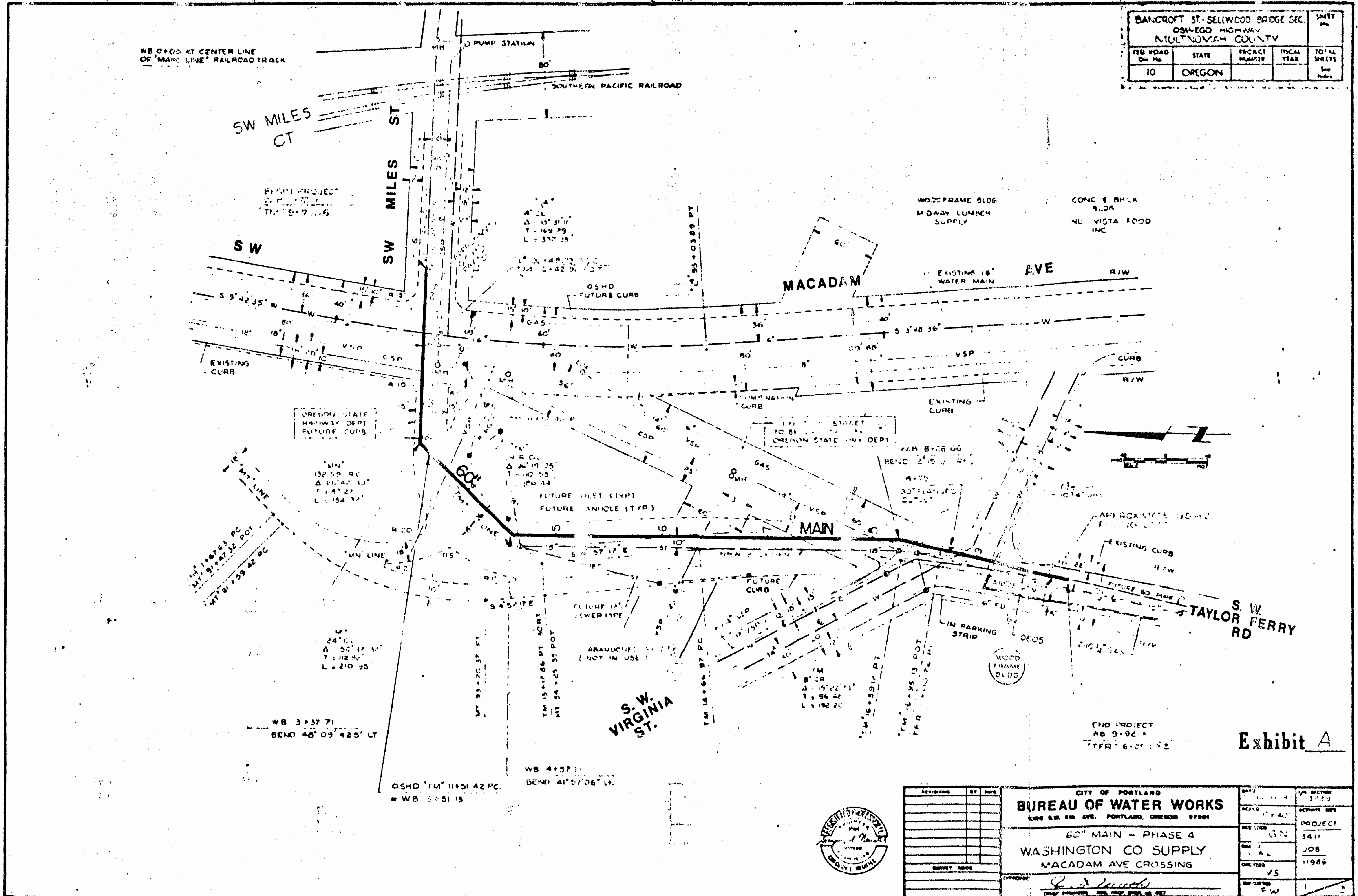
Exhibit A

excavation, bedding, backfill, compaction, and incidentals to complete the water main installation as shown on the Plans and as specified:

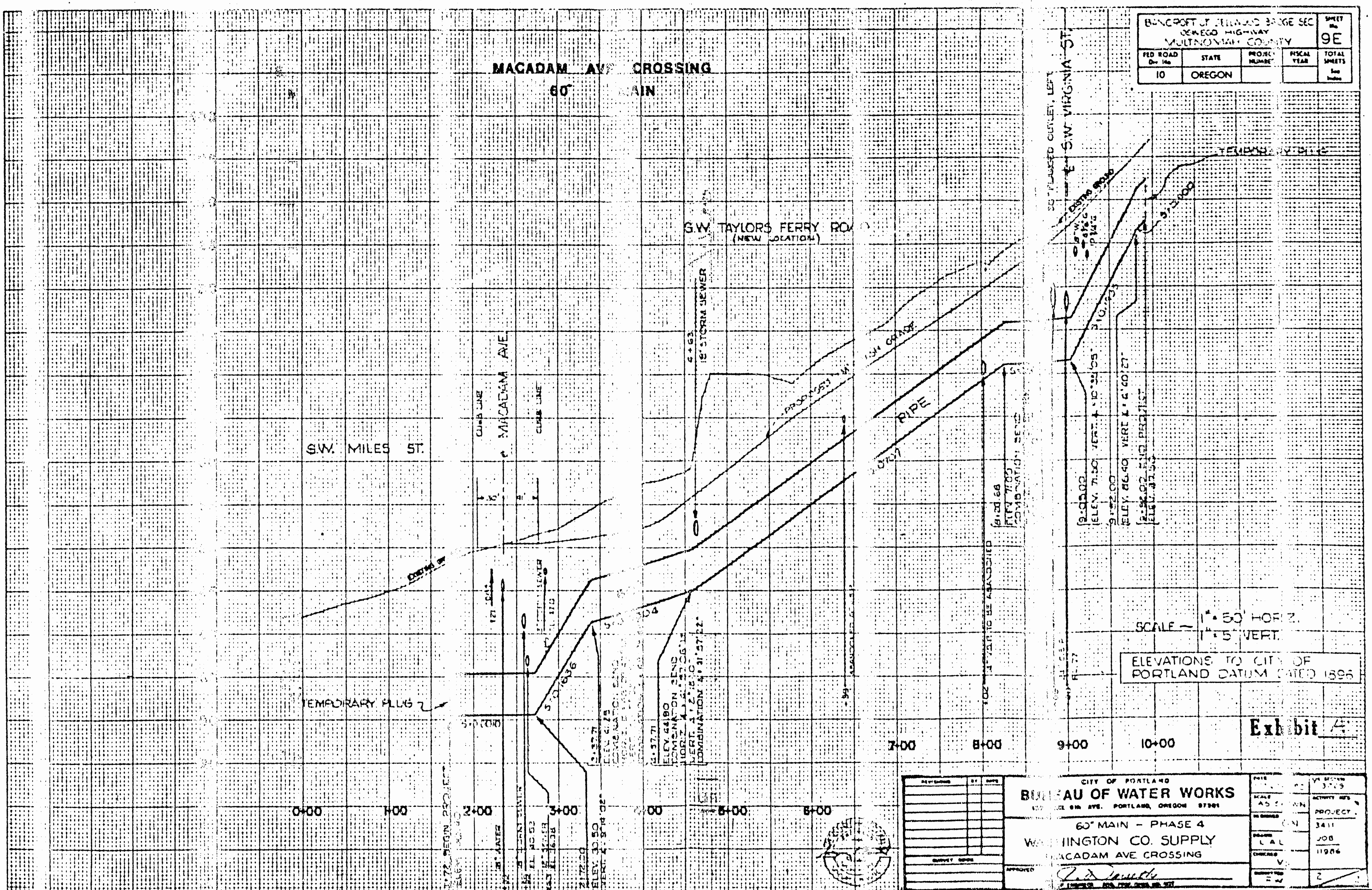
	Pay Item	Unit of Measure
(Alt. A)	60-Inch Concrete Cylinder Water Main	Linear Foot
(Alt. B)	60-Inch Steel Water Main	

Exhibit A

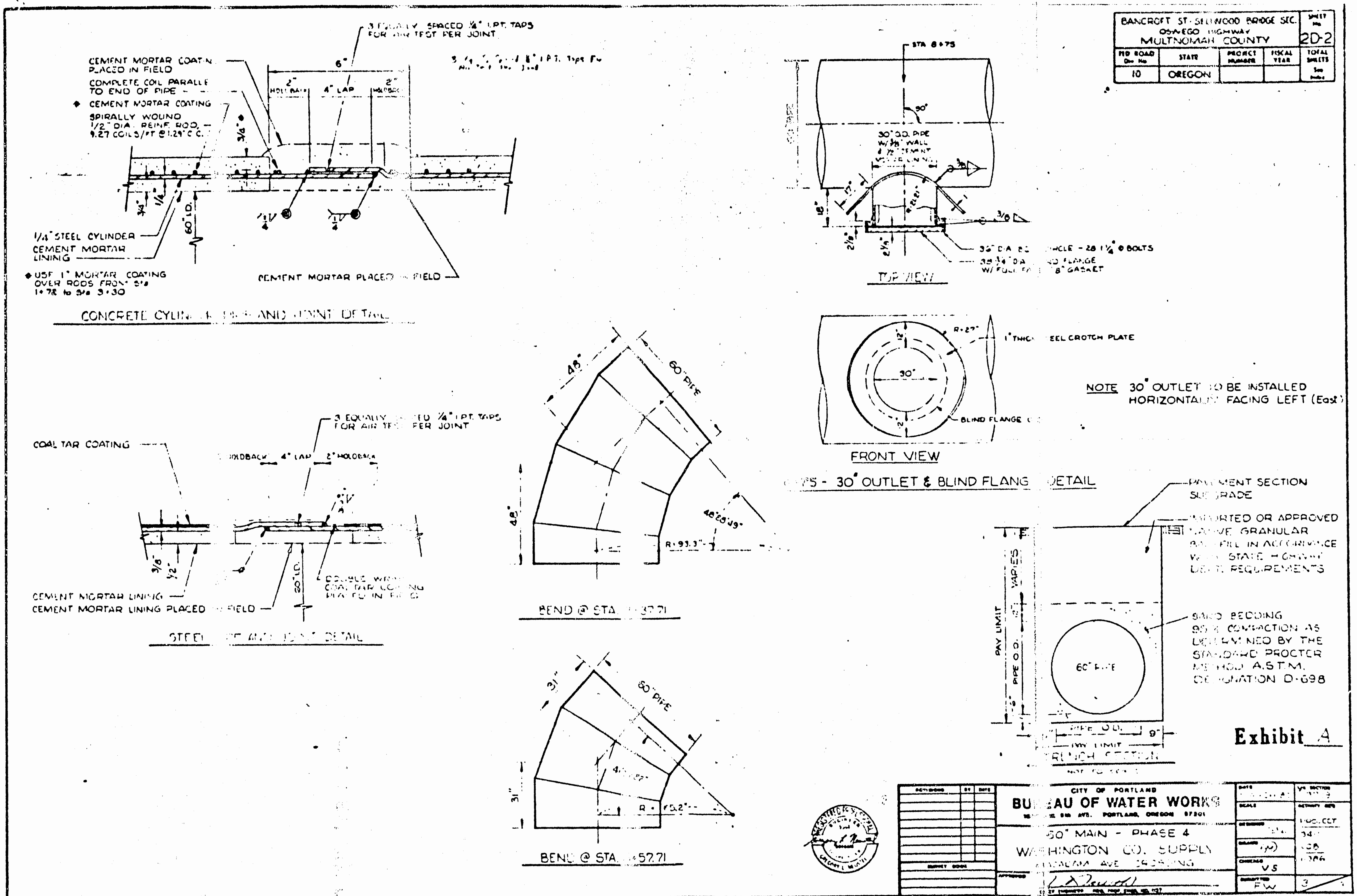
149812



BANCROFT ST.-SELLWOOD BRIDGE SEC.
OSWEGO HIGHWAY
MULTNOMAH COUNTY
10
OREGON
WB 0+00 AT CENTER LINE OF "MAIN LINE" RAILROAD TRACK
PUMP STATION
SOUTHERN PACIFIC RAILROAD
SW MILES CT
SW MILES ST
SW MACADAM AVE
EXISTING 16" WATER MAIN
WOOD FRAME BLDG
EXISTING CURB
OREGON STATE HIGHWAY DEPT FUTURE CURB
OSHD FUTURE CURB
60" MAIN
FUTURE INLET (TYP)
FUTURE MANHOLE (TYP)
FUTURE CURB
S.W. VIRGINIA ST.
S.W. TAYLOR FERRY RD
IN PARKING STRIP
END PROJECT
WB 3+37.71
BEND 46°09'42.5" LT
Exhibit A
CITY OF PORTLAND
BUREAU OF WATER WORKS
60" MAIN – PHASE 4
WASHINGTON CO SUPPLY
MACADAM AVE CROSSING
PROJECT
3411
JOB
11986


MACADAM AVE CROSSING
60" MAIN
BANCROFT ST. SELLWOOD BRIDGE SEC
OSWEGO HIGHWAY
MULTNOMAH COUNTY
SHEET No. 9E
FED ROAD DIV No. 10
STATE OREGON
S.W. MILES ST.
MACADAM AVE
CURB LINE
S.W. TAYLORS FERRY ROAD
(NEW LOCATION)
15" STORM SEWER
S.W. VIRGINIA ST.
TEMPORARY PLUG
PIPE
SCALE — 1" = 50' HORIZ.
1" = 5' VERT.
ELEVATIONS TO CITY OF PORTLAND DATUM DATED 1896
Exhibit 4
0+00
1+00
2+00
3+00
5+00
6+00
7+00
8+00
9+00
10+00
CITY OF PORTLAND
BUREAU OF WATER WORKS
PORTLAND, OREGON
60" MAIN - PHASE 4
WASHINGTON CO. SUPPLY
MACADAM AVE CROSSING
PROJECT 3411
JOB 11906

149812



.11988

ORDINANCE NO. 149812

An ordinance authorizing an agreement between the City of Portland and the State of Oregon Department of Transportation, providing for the installation of that portion of the Washington County Supply Main (Phase IV) crossing the Oswego Highway (S.W. Macadam Avenue) at an estimated cost of $265,000, authorizing the drawing and delivery of warrants and declaring an emergency.

The City of Portland ordains:

Section 1. The Council finds:

1. The Bureau of Water Works plans the future construction of the Washington County Supply Main (Phase IV) which will cross the Oswego Highway (S.W. Macadam Avenue) at S.W. Taylors Ferry Road.

2. It is to the advantage of the City to install at an estimated cost of $265,000, that portion of the Washington County Supply Main (Phase IV) (S.W. Macadam Avenue) during the reconstruction period of said highway.

3. The terms of an agreement with the Oregon Department of Transportation are substantially as shown in "Exhibit A" attached to the original only and provide for the most advantageous method of installing said supply main crossing.

NOW, THEREFORE, the Council directs:

a. The Commissioner of Public Utilities and the Auditor are authorized to execute on behalf of the City of Portland, an agreement with the State of Oregon Department of Transportation as shown in "Exhibit A" attached to the original only.

b. The Mayor and the Auditor are hereby authorized to draw and deliver warrants chargeable to the 1979-80 Budget, Water Fund, Bureau of Water Works, BUC 18600374, Object Code 630, Project No. 3411, when demand is presented, approved by the proper authorities, for an estimated amount of $265,000.

Section 2. The Council declares that an emergency exists because a delay in proceeding with the construction may result in additonal expense to the City and will unnecessarily deprive

ORDINANCE No.

the City of the benefits of completion of the work at an early date; therefore, this ordinance shall be in force and effect from and after its passage by the Council.

Passed by the Council, JUN 25 1980

Commissioner Ivancie
G. Neustel:cw
June 10, 1980
BUC 18600374
Project No. 3411

George Yerkovich
Auditor of the City of Portland

THE COMMISSIONERS VOTED AS FOLLOWS:		
	Yeas	Nays
Ivancie	/	
Jordan	/	
Lindberg	/	
Schwab	/	
McCready	/	

FOUR-FIFTHS CALENDAR	
Ivancie	
Jordan	
Lindberg	
Schwab	
McCready	

Calendar No. 2190 ~~2401~~

ORDINANCE No. 149812

Title

An ordinance authorizing an agreement between the City of Portland and the State of Oregon Department of Transportation, providing for the installation of that portion of the Washington County Supply Main (Phase IV) crossing the Oswego Highway (S.W. Macadam Avenue) at an estimated cost of $265,000, authorizing the drawing and delivery of warrants and declaring an emergency.

JUN 18 1980

CONTINUED TO JUN 25 1980

Filed JUN 13 1980

GEORGE YERKOVICH
Auditor of the CITY OF PORTLAND

By Gordon Crowell Deputy

INTRODUCED BY
COMMISSIONER IVANCIE

NOTED BY THE COMMISSIONER
Affairs
Finance and Administration
Safety
Utilities FJI/mag.
Works

BUREAU APPROVAL	
Bureau:	WATER WORKS
Prepared By:	Date:
G.Neustel:cw	June 10,1980
Budget Impact Review:	
☐ Completed	☐ Not required
Bureau Head:	Carl Goebel, Administrator

NOTED BY
City Attorney
City Auditor
City Engineer