



CITY OF TACOMA
Public Works Engineering

ADDENDUM NO. 4

DATE: 2/21/2024

REVISIONS TO:
Request for Bids Specification No. PW23-0130F
Historic Water Ditch Trail Phase IIIA

NOTICE TO ALL BIDDERS:

This addendum is issued to clarify, revise, add to or delete from, the original specification documents for the above project. This addendum, as integrated with the original specification documents, shall form the specification documents. The noted revisions shall take precedence over previously issued specification documents and shall become part of this contract.

REVISIONS TO THE SUBMITTAL DEADLINE:

The submittal deadline has changed to Tuesday March 5th, 2024 at 11:00AM.

REVISIONS TO THE PROPOSAL:

Change #1

The Proposal is replaced with the attached Proposal labeled Addendum # 4.

REVISIONS TO THE SPECIAL PROVISIONS:

Change #1

Section 7-05 is replaced with the attached Section 7-05, Addendum #4.

Change #2

Section 8-02 is replaced with the attached Section 8-02, Addendum #4.

Change #3

Section 8-06 is replaced with the attached Section 8-06, Addendum #4.

Change #4

Section 8-22 is replaced with the attached Section 8-22, Addendum #4.

NOTE: Acknowledge receipt of this addendum by initialing the corresponding space as indicated on the signature page. Vendors who have already submitted their bid/proposal may contact the Purchasing Division at 253-502-8468 and request return of their bid/proposal for acknowledgment and re-submittal. Or, a letter acknowledging receipt of this addendum may be submitted in an envelope marked Request for Bids Specification No. PW23-0130F Addendum No. 4. The City reserves the right to reject any and all bids, including, in certain circumstances, for failure to appropriately acknowledge this addendum.

cc: Chris Storey, Public Works/Engineering

BID PROPOSAL

SPECIFICATION NO. PW23-0130F

Water Ditch Trail Phase IIIA

Addendum #4

The undersigned hereby certifies that he/she has examined the location and construction details of work as outlined on the Plans and Specifications for Project No. PWK-G0018 and has read and thoroughly understands the Plans and Specifications and contract governing the work embraced in this improvement and the method by which payment will be made for said work, and hereby proposes to undertake and complete the work embraced in this improvement in accordance with said Plans, Specifications and contract and at the following schedule of rates and prices:

- NOTE:
1. Unit prices of all items, all extensions and total amount of bid should be shown. Show unit prices in figures only.
 2. The notations below the item numbers refer to the specification section where information may be found regarding each contract item. These notations are intended only as a guide and are not warranted to refer to all specification sections where information may be found.
 3. Washington State Department of Revenue Rules 170 and 171 shall apply as shown in the Proposal and per Section 1-07.2 Of the WSDOT State Amendments to the Standard Specifications.

All bid items are sorted in the following groups

Schedule A: Roadway, Bid Items R1 – R102

Schedule B: Water Main Replacement W1 – W38

SCHEDULE A: ROADWAY IMPROVEMENTS (Rule 171)

<u>ITEM NO.</u>	<u>ITEM DESCRIPTION</u>	<u>ESTIMATED QUANTITY</u>	<u>UNIT PRICE</u>	<u>TOTAL AMOUNT</u>
R1. 1-05.4	Roadway Surveying, Lump Sum	1 Lump Sum	Lump Sum	\$ _____
R2. 1-07.15(1)	SPCC Plan, lump sum	1 Lump Sum	Lump Sum	\$ _____
R3. 1-09.7	Mobilization, lump sum	1 Lump Sum	Lump Sum	\$ _____
R4. 1-10	Pedestrian Traffic Control, lump sum	1 Lump Sum	Lump Sum	\$ _____
R5. 1-10	Project Temporary Traffic Control, lump sum	1 Lump Sum	Lump Sum	\$ _____
R6. 2-01	Clearing and Grubbing, lump sum	1 Lump Sum	Lump Sum	\$ _____
R7. 2-02	Removal of Structures and Obstructions, lump sum	1 Lump Sum	Lump Sum	\$ _____
R8. 2-06	Subgrade Maintenance and Protection, lump sum	1 Lump Sum	Lump Sum	\$ _____
R9. 7-08	Temporary Storm Sewer Bypass Plan, per lump sum	1 Lump Sum	Lump Sum	\$ _____
R10. 7-08	Temporary Storm Sewer Bypass, per lump sum	1 Lump Sum	Lump Sum	\$ _____
R11. 8-01	Erosion Control and Water Pollution Prevention, lump sum	1 Lump Sum	Lump Sum	\$ _____
R12. 8-01	NPDES Construction Stormwater General Permit, lump sum	1 Lump Sum	Lump Sum	\$ _____
R13. 8-01	Stormwater Pollution Prevention Plan (SWPPP), lump sum	1 Lump Sum	Lump Sum	\$ _____
R14. 8-02	Roadside Restoration, lump sum	1 Lump Sum	Lump Sum	\$ _____
R15. 8-20	RRFB System at South Tacoma Way and S Sprague Ave, lump sum	1 Lump Sum	Lump Sum	\$ _____
R16. 8-20	Traffic Signal at South Tacoma Way and Wilkeson St, lump sum	1 Lump Sum	Lump Sum	\$ _____

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	TOTAL AMOUNT
R17. 8-20	Traffic Signal at South Tacoma Way and M St, lump sum	1 Lump Sum	Lump Sum	\$ _____
R18. 8-20	Illumination System, lump sum	1 Lump Sum	Lump Sum	\$ _____
R19. 8-21	Permanent Signing, lump sum	1 Lump Sum	Lump Sum	\$ _____
R20. 1-05	Record Drawings, Lump Sum	1 Lump Sum	Lump Sum	\$ _____
R21. 1-07.11	Training, per hour	800 HR	\$ _____	\$ _____
R22. 1-10	Uniformed Police Officer for Traffic Control, per hour	100 HR	\$ _____	\$ _____
R23. 2-03	Unsuitable Foundation Excavation Incl. Haul, per cubic yard	200 CY	\$ _____	\$ _____
R24. 2-03	Roadway Excavation Incl. Haul, per cubic yard	5010 CY	\$ _____	\$ _____
R25. 2-03	Embankment Compaction, per cubic yard	200 CY	\$ _____	\$ _____
R26. 2-03	Gravel Borrow Incl. Haul, per ton	790 TN	\$ _____	\$ _____
R27. 2-09	Structure Excavation Class B Incl. Haul, per cubic yard	930 CY	\$ _____	\$ _____
R28. 2-09	Shoring or Extra Excavation Class B, per square foot	7810 SF	\$ _____	\$ _____
R29. 2-09	Gravel Backfill for Walls, per cubic yard	560 CY	\$ _____	\$ _____
R30. 2-14	Remove Existing Pavement, Class CA, per square yard	14780 SY	\$ _____	\$ _____
R31. 2-14	Remove Existing Pavement, Class C6, per square yard	960 SY	\$ _____	\$ _____
R32. 2-14	Remove Existing Pavement, Class C12, per square yard	80 SY	\$ _____	\$ _____
R33. 2-15	Remove Curb, per linear foot	3200 LF	\$ _____	\$ _____

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	TOTAL AMOUNT
R34. 2-16	Remove Catch Basin, per each	7 EA	\$ _____	\$ _____
R35. 4-04	Recycled Concrete Aggregate, per ton	3570 TN	\$ _____	\$ _____
R36. 4-04	Crushed Surfacing Top Course, per ton	1000 TN	\$ _____	\$ _____
R37. 4-04	Crushed Surfacing Base Course, per ton	190 TN	\$ _____	\$ _____
R38. 5-04	Planing Bituminous Pavement, per square yard	2100 SY	\$ _____	\$ _____
R39. 5-04	HMA for Trail Edge Cl. 3/8" PG 58H-22, per ton	140 TN	\$ _____	\$ _____
R40. 5-04	Fiber Reinforced HMA CL 1/2" PG 58H-22, per ton	1600 TN	\$ _____	\$ _____
R41. 5-04	Fiber Reinforced HMA CL 1" PG 58H-22, per ton	2000 TN	\$ _____	\$ _____
R42. 5-04	Temporary Pavement Patch, per ton	190 LF	\$ _____	\$ _____
R43. 7-05	Adjust Existing Manhole, Install new Frame and Cover, per each	20 EA	\$ _____	\$ _____
R44. 7-05	Adjust Existing Water Valve Chamber to Grade, per each	23 EA	\$ _____	\$ _____
R45. 7-05	Adjust Existing PSE Gas Valve Chamber to Grade, per each	12 EA	\$ _____	\$ _____
R46. 7-05	Area Drain, per each	3 EA	\$ _____	\$ _____
R47. 7-05	Concrete Inlet, per each	2 EA	\$ _____	\$ _____
R48. 7-05	Catch Basin Type 1, per each	8 EA	\$ _____	\$ _____
R49. 7-05	Catch Basin Type 1, with combination inlet, per each	7 EA	\$ _____	\$ _____
R50. 7-05	Catch Basin 48-In. Diam. Type 2, per each	1 EA	\$ _____	\$ _____

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	TOTAL AMOUNT
R51. 7-05	Catch Basin 48-In. Diam. Type 2, with combination inlet, per each	6 EA	\$ _____	\$ _____
R52. 7-05	Catch Basin Type 2, additional height, 48-inch Diam, per lineal foot	4 LF	\$ _____	\$ _____
R53. 7-05	Reconnect Existing Sewer Pipe, 8-In. Diam., to New Structure, per each	2 EA	\$ _____	\$ _____
R54. 7-05	Adjust Existing Catch Basin, Install New Frame and Grate, per each	1 EA	\$ _____	\$ _____
R55. 7-05	Connect New Sewer Pipe, 12-In. Diam., to Existing Structure, per each	12 EA	\$ _____	\$ _____
R56. 7-05	Connect New Sewer Pipe, 18-In. Diam., to Existing Structure, per each	1 EA	\$ _____	\$ _____
R57. 7-08	Underground Utility Potholing, per each	14 EA	\$ _____	\$ _____
R58. 7-08	CDF for Pipe Abandonment, per cubic yard	10 CY	\$ _____	\$ _____
R59. 7-17	PVC Storm Sewer Pipe 8 In. Diam., per linear foot	110 LF	\$ _____	\$ _____
R60. 7-17	PVC Storm Sewer Pipe 12 In. Diam., per linear foot	1110 LF	\$ _____	\$ _____
R61. 7-17	PVC Storm Sewer Pipe 18 In. Diam., per linear foot	34 LF	\$ _____	\$ _____
R62. 7-17	Testing Sewer Pipe, per linear foot	1254 LF	\$ _____	\$ _____
R63. 7-05	Concrete Trench Drain, per linear foot	170 LF	\$ _____	\$ _____
R64. 8-04	Cement Conc. Traffic Curb and Gutter, per linear foot	3200 LF	\$ _____	\$ _____
R65. 8-04	Extruded Curb Type 3, per linear foot	50 LF	\$ _____	\$ _____
R66. 8-04	Cement Conc. Pedestrian Curb, per linear foot	300 LF	\$ _____	\$ _____

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	TOTAL AMOUNT
R67. 8-04	Mountable Traffic Island Curb, per linear foot	82 LF	\$ _____	\$ _____
R68. 8-06	Cement Conc. Residential Driveway Entrance, per square yard	550 SY	\$ _____	\$ _____
R69. 8-06	Cement Conc. Commercial Driveway Entrance, per square yard	460 SY	\$ _____	\$ _____
R70. 8-09	Raised Pavement Marker Type 2, per hundred	4 HUND	\$ _____	\$ _____
R71. 8-12	Chain Link Fence Type 3, per linear foot	140 LF	\$ _____	\$ _____
R72. 8-13	Poured Monument, per each	7 EA	\$ _____	\$ _____
R73. 8-14	Cement Conc. Sidewalk, per square yard	3120 SY	\$ _____	\$ _____
R74. 8-14	Cement Conc. Curb Ramp, per each	18 EA	\$ _____	\$ _____
R75. 8-15	Quarry Spalls, per ton	10 TN	\$ _____	\$ _____
R76. 8-22	Plastic Line, per linear foot	15610 LF	\$ _____	\$ _____
R77. 8-22	Plastic Wide Line, per linear foot	160 LF	\$ _____	\$ _____
R78. 8-22	Plastic Crosswalk Line, per linear foot	1600 LF	\$ _____	\$ _____
R79. 8-22	Plastic Stop Line, per linear foot	130 LF	\$ _____	\$ _____
R80. 8-22	Plastic Crosshatch Marking, per linear foot	40 LF	\$ _____	\$ _____
R81. 8-22	Plastic Traffic Arrow, per each	20 EA	\$ _____	\$ _____
R82. 8-22	Plastic Traffic Letter, per each	4 EA	\$ _____	\$ _____
R83. 8-22	Removing Paint Line, per linear foot	6300 LF	\$ _____	\$ _____

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	TOTAL AMOUNT
R84. 8-23	Temporary Pavement Marking – Long Duration, per linear foot	8000 LF	\$ _____	\$ _____
R85. 8-32	Artificial Turf, per square yard	550 SY	\$ _____	\$ _____
R86. 1-04, 1-09	Minor Change, by Force Account	1 Force Account	Estimated	\$ <u>10,000</u>
R87. 2-01	Roadside Cleanup, by force account	1 Force Account	Estimated	\$ <u>1,000</u>
R88. 2-02	Existing Irrigation Systems, by Force Account	1 Force Account	Estimated	\$ <u>5,000</u>
R89. 2-03	Field Adjustment, by Force Account	1 Force Account	Estimated	\$ <u>10,000</u>
R90. 1-10	Portable Changeable Message Sign, per Hour	1400 HR	\$ _____	\$ _____
R91. 8-02	Soil Amendment, per Cubic Yard	380 CY	\$ _____	\$ _____
R92. 8-02	Top Soil Type A, per Ton	710 TN	\$ _____	\$ _____
R93. 8-02	Seeded Lawn Installation, per Square Yard	2400 SY	\$ _____	\$ _____
R94. 8-02	Wood Chip Mulch, per Cubic Yard	270 CY	\$ _____	\$ _____
R95. 8-02	PSIPE PP Japanese white Pine (Pinus parviflora), per Each	51 EA	\$ _____	\$ _____
R96. 8-02	PSIPE SP Japanese stewartia (Stewartia pseudocamellia), per Each	31 EA	\$ _____	\$ _____
R97. 8-02	PSIPE FP Cascara (Frangula purshiana), per Each	29 EA	\$ _____	\$ _____
R98. 8-02	PSIPE ZS Zelkova 'city sprite' (Zelkova serrata 'JFS-KWI' PP20996), per Each	29 EA	\$ _____	\$ _____
R99. 8-02	PSIPE CC American hornbeam 'Wisconsin Red' (Carpinus carolinia), per Each	34 EA	\$ _____	\$ _____

<u>ITEM NO.</u>	<u>ITEM DESCRIPTION</u>	<u>ESTIMATED QUANTITY</u>	<u>UNIT PRICE</u>	<u>TOTAL AMOUNT</u>
R100. 8-02	PSIPE MA Amur maackia (Maackia amurensis), per Each	30 EA	\$ _____	\$ _____
R101. 8-02	PSIPE CO Hackberry (celtis Occidentalis), per Each	5 EA	\$ _____	\$ _____
R102. 8-02	PSIPE CD Incense cedar (Calocedrus decurrens), per Each	6 EA	\$ _____	\$ _____
(1)	Base Bid (Subtotal Items Nos. R1 – R102)			\$ _____

SCHEDULE B: WATER MAIN IMPROVEMENTS (Rule 170)

<u>ITEM NO.</u>	<u>ITEM DESCRIPTION</u>	<u>ESTIMATED QUANTITY</u>	<u>UNIT PRICE</u>	<u>TOTAL AMOUNT</u>
W1. 1-09.7	Mobilization (1-09.7)	1 Lump Sum	Lump Sum	\$ _____
W2. 1-10	Project Temporary Traffic Control	1 Lump Sum	Lump Sum	\$ _____
W3. 2-02.3(3)	Removal and disposal of existing pavement, sidewalks, curbs, and gutters includes all thicknesses & combinations	90 Sq. Yd.	\$ _____	\$ _____
W4. 5-04 & 9-03.8	Temporary HMA Class ½" PG58-22, 2-inch minimum depth, installed & removed	90 Sq. Yd.	\$ _____	\$ _____
W5. 5-04 & 9-03.8	HMA CI ½" PG58-22 pavement for permanent trench patch -6" in Depth	14 Ton	\$ _____	\$ _____
W6. 7-09.5 & 9-03.9(3)	Crushed Surfacing Top Course for trench backfill as directed by the Inspector.	198 Ton	\$ _____	\$ _____
W7. 7-04, 7-09.5, 7-17 & 7-18	Storm, Sanitary, and Side Sewer Restoration	2 Each	\$ _____	\$ _____
W8. 7-09.3(7) 7-05.9	Trench Excavation & Disposal	131 Cu. Yd.	\$ _____	\$ _____
W9. 7-09.3(7) 7-05.9	Trench Shoring	259 Lin. Ft.	\$ _____	\$ _____
W10. 7-09.3(15)A 7-05.9 & 9-30.1(1)	12-inch Ductile Iron Pipe, Push-On Joint, ANSI/AWWA, C151, Special Class Thickness No. 52, to furnish, lay and test	20 Lin. Ft.	\$ _____	\$ _____
W11. 7-09.3(15)A 7-05.9 & 9-30.1(1)	6-inch Ductile Iron Pipe, Push-On Joint, ANSI/AWWA, C151, Special Class Thickness No. 52, to furnish, lay and test,	263 Lin. Ft.	\$ _____	\$ _____
W12. 7-05.9 & 9-30.2(1)	12-inch x 6-inch Ductile Iron Reducer, 2-B, M.J., w/ anchor, installed	2 Each	\$ _____	\$ _____

<u>ITEM NO.</u>	<u>ITEM DESCRIPTION</u>	<u>ESTIMATED QUANTITY</u>	<u>UNIT PRICE</u>	<u>TOTAL AMOUNT</u>
W13. 9-30.2(1)	6-inch Ductile Iron Tee, 3-B, M.J., installed	1 Each	\$ _____	\$ _____
W14. 7-09 & 9-30.2(1)	6-inch Ductile Iron Ell, M.J., 45°, installed.	4 Each	\$ _____	\$ _____
W15. 7-09 & 9-30.2(1)	6-inch Ductile Iron Ell, M.J., 22 1/2°, installed.	1 Each	\$ _____	\$ _____
W16. 7-09 & 9-30.2(1)	6-inch Ductile Iron Ell, M.J., 11 1/4°, installed	1 Each	\$ _____	\$ _____
W17. 7-09.5 & 9-30.2(1)	12-inch Ductile Iron Solid Sleeve (Long Pattern) M.J., installed.	1 Each	\$ _____	\$ _____
W18. 7-09.5 & 9-30.2(1)	6-inch Ductile Iron Solid Sleeve (Long Pattern) M.J., installed	1 Each	\$ _____	\$ _____
W19. 7-09.3(19)A 7-09.5 & 9-30.2(7)	6-inch Transition Coupling with 7-inch center ring, epoxy coating, and stainless steel bolts, C.I. to D.I., installed	2 Each	\$ _____	\$ _____
W20. 7-09.5 & 9-30.2(1)	6-inch Ductile Iron Cap, M.J., tapped 2", installed and removed	3 Each.	\$ _____	\$ _____
W21. 7-09.5 & 9-30.2(1)	12-inch Ductile Iron Plug, M.J., installed	1 Each	\$ _____	\$ _____
W22. 7-09.5 & 9-30.2(1)	6-inch Ductile Iron Cap, M.J., tapped 2", installed	1 Each	\$ _____	\$ _____
W23. 7-09.5 & 9-30.2(1)	12-inch Ductile Iron Plug, M.J., installed and removed	1 Each	\$ _____	\$ _____
W24. 7-09.3(22) & 7-09.5	2-inch Blow-Off Assembly, installed (Dwg. 17-56-1)	1 Each	\$ _____	\$ _____
W25. 7-09.3(22) & 7-09.5	Temporary 2-inch Blow-Off Assembly, installed and removed (Dwg. 17-56-1)	4 Each	\$ _____	\$ _____

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	TOTAL AMOUNT
W26. 7-14, 7-09.5 & 9-30.2(6)	12-inch Mechanical Joint Restraining Glands	3 Each	\$ _____	\$ _____
W27. 7-14, 7-09.5 & 9-30.2(6)	6-inch Mechanical Joint Restraining Glands	22 Each	\$ _____	\$ _____
W28. 7-09.3(21) & 7-09.5	Concrete Thrust Anchor, installed.	8 Each	\$ _____	\$ _____
W29. 7-09.3(21) & 7-09.5	Temporary Concrete Thrust Anchor, installed and removed	4 Each	\$ _____	\$ _____
W30. 7-09.3(11) & 7-09.5	Trench Compaction Test (as directed by the Inspector	5 Each	\$ _____	\$ _____
W31. 7-09.3(6) & 7-09.5	Test Holes (See Special Provisions).	1 Lump Sum	Lump Sum	\$ _____
W32. 7-12 & 9-30.3	6-inch Gate Valve, M.J., ANSI/AWWA, C509/515, with C.I. Valve Box	1 Each	\$ _____	\$ _____
W33. 7-09 & 9-30.3	24x12-inch Tapping Sleeve. installed	1 Each	\$ _____	\$ _____
W34. 7-12 & 9-30.3	12-inch Tapping Gate Valve, M.J., ANSI/AWWA, C509/515, with C.I. Valve Box	1 Each	\$ _____	\$ _____
W35. 7-14 & 9-30.5(2)	6-inch Hydrant, M.J., 5.5-ft bury, with 4-inch Tacoma Standard Threads & 5-inch Quick Coupling	1 Each	\$ _____	\$ _____
W36. 8-01.3(8)	Street cleaning with Self-propelled Pickup and Vacuum Street Sweeper Equipment.	6 Hrs	\$ _____	\$ _____
W37. 8-22	Traffic Lane Markings	1 Lump Sum	Lump Sum	\$ _____
W38. 1-09.6	Force Account	1 Force Account	Estimated	\$ <u>40,000</u>

(3) **Base Bid** \$ _____
 (Subtotal Items Nos. W1-
 W38)

SCHEDULE A: ROADWAY IMPROVEMENTS (R) (Rule 171)

Base Bid (Subtotal Items Nos. R1 – R102) \$ _____ (1)

ROADWAY IMPROVEMENTS TOTAL \$ _____ (2)

SCHEDULE B: WATER MAIN IMPROVEMENTS (W) (Rule 170)

Base Bid (Subtotal Items Nos. W1-W38) \$ _____ (3)

10.3% Sales Tax (Items Nos. W1-W38) \$ _____ (4)

WATER MAIN IMPROVEMENTS TOTAL \$ _____ (5)

TOTAL BASE BID (2) + (3) \$ _____
 (not including sales tax) Rule 170

Proposal for Incorporating Recycled Materials into the Project

In compliance with RCW 70A.205.700, the Bidder shall propose below, the total percent of construction aggregate and concrete materials to be incorporated into the Project that are recycled materials. Calculated percentages must be within the amounts allowed in Section 9-03.21(1)E, Table on Maximum Allowable Percent (By Weight) of Recycled Material, of the Standard Specifications.

Proposed total percentage: _____ percent.

Note: Use of recycled materials is highly encouraged within the limits shown above, but does not constitute a Bidder Preference, and will not affect the determination of award, unless two or more lowest responsive Bid totals are exactly equal, in which case proposed recycling percentages will be used as a tie-breaker, per the APWA GSP in Section 1-03.1 of the Special Provisions. Regardless, the Bidder's stated proposed percentages will become a goal the Contractor should do its best to accomplish. Bidders will be required to report on recycled materials actually incorporated into the Project, in accordance with the APWA GSP in Section 1-06.6 of the Special Provisions.

Bidder: _____

Signature of Authorized Official: _____

Date: _____

7-05 MANHOLES, INLETS, CATCH BASINS, AND DRYWELLS

(*****)

7-05.1 Description

This section is supplemented with the following:

All references to sanitary sewers shall be construed to also mean storm sewers. The term "Manhole" shall be synonymous with the term "Maintenance Hole".

7-05.3 Construction Requirements

The first sentence of the eleventh paragraph is revised to read:

A flexible pipe-to-manhole connector shall be used in all connections of rigid and thermoplastic pipes to **new** precast concrete manholes to provide a watertight joint between the pipe and the manhole, unless otherwise directed by the Engineer. The connector shall be shall be ASTM C923 compliant and manufactured by "Kor-N-Seal", or Fernco, Press-Seal, A-Lok, or Engineer approved equal. The connectors shall be installed in accordance with the manufacturer's recommendations.

Section 7-05.3 is supplemented with the following:

Frames, Covers and Grates

The City of Tacoma shall supply the Contractor with all standard frames, covers and grates for new manholes holes and catch basins.

Concrete Trench Drains

Concrete trench drains shall be constructed in accordance with the Plans. The Contractor shall construct concrete trench drains poured in place with Class 3000 air entrained concrete in accordance with Section 6-02. Trench drain grate frames shall be wet-set, anchored in the concrete per details in the Plans. Linear grates shall be secured with locking bolts, and shall be removable by maintenance crews.

Contraction joints at 5' max. on centers and Expansion Joints at 15' max. on centers with 3/8-inch pre-molded joint filler shall be constructed in line with sidewalk joints per Standard Plan SU-04; and seal joints in accordance with Section 5-03.

Connections to concrete inlets where shown per Plans shall be water tight, durable and strong. Connections can be constructed with solid wall 6" diameter PVC pipe stubs set in the closed end of the trench drain, and be made with sand collars. The Contractor shall submit detailed shop drawings to the Engineer for approval prior to construction. Shop drawings shall show trench cross section dimensions and rebar placement, frame and grate detail, and shall detail connections to concrete inlets.

The Contractor shall install ADA compliant grates for trench drains with a wave pattern, by Urban Accessories, Jonite, Vodaland or equivalent other.

Concrete inlets within the shared use path or within any pedestrian circulation route shall have ADA compliant grates in accordance with WSDOT Standard Plan B-30.15-00, Alternative 3.

Area Drains

Where the Plans call for area drains, the Contractor shall furnish and install grated drainage junctions to accommodate PVC drains 8-inch in diameter. The inlet grate for an area drain shall be minimum 12" by 12", and ADA compliant. Area drains shall have a minimum load rating of 3000 lbs. Standard concrete inlets with ADA grates per WSDOT Standard Plans would also be accepted.

7-05.3(1) Adjusting Manholes and Catch Basins to Grade

This section including the heading is revised to read:

7-05.3(1) Adjusting Utility Structures to Grade

Where shown in the Plans or where directed by the Engineer, utility structures shall be adjusted to grade as staked or as otherwise designated by the Engineer.

When adjusting an existing catch basin the contractor shall clean the structure in accordance with specification 7-07 and shall include all costs in the price for adjustment.

The materials and methods of construction shall conform to the requirements specified in Section 7-05.3 and Standard Plan No. SU-25. The finished structure shall conform to the requirements of the standard plan for the specific structure.

For all manholes and catch basins the City of Tacoma shall supply a new frame and cover or new frame and grate to the Contractor. The contractor shall arrange pick-up, a minimum of **5 working days** prior, with:

Ryan Welander, Environmental Services Transmission Maintenance Coordinator,
by phone at 253-404-6964 (office) or 253-327-4391 (mobile)
or by email at RWelander@cityoftacoma.org

The pick-up location shall be:

Sewer Treatment Plant
2201 Portland Ave E
Tacoma, WA 98421

Where shown on the plans for water main valve chambers to be adjusted to grade, existing valve cans and covers shall be replaced with new castings. New water valve cans and covers for "Adjust Existing Water Valve Chamber to Grade" will be provided by the Contracting Agency. The Contractor shall coordinate with the Contracting Agency for pick-up of the castings. The contractor shall arrange pick-up, a minimum of **5 working days** prior, with:

Geff Yotter, Water Distribution Operations Manager,
By phone at 253-502-8253 (office) or 253-377-5966 (mobile)
or by email at GYotter2@cityoftacoma.org

The pick-up location shall be:

Water Operations Distribution Building
3506 South 35th Street
Tacoma, WA 98409

7-05.3(3) Connections to Existing Manholes

The first sentence is revised to read:

The Contractor shall inspect the existing manholes in the field to verify invert elevations and the scope of work necessary to make the connection(s) prior to construction.

This section is supplemented with the following:

New pipe openings and replacement with larger pipes require core drilling the manhole wall, and rechanneling or enlarging the manhole channel. Where new pipes come in above the manhole channel shelf, no rechanneling is required. In the case where a pipe is replaced with the same size, the existing pipe may be cut and a Rigid Coupling connection may be made outside the manhole to connect the new pipe. Any rigid couplings shall be Romac, JCM Industries, or Krausz-USA, or an Engineer approved equal.

Section 7-05.3 is supplemented with the following:

Reconnect Existing Sewer Pipe to New Structure

(*****)

The Contractor shall reconnect existing sewer pipes to new structures where shown on the plans. The Contractor shall locate the existing pipe and place the new structure in line with the existing pipe. The invert elevation shall be field determined.

The Contractor shall cut the existing sewer pipe within 5 feet of the new structure and work within the pavement removal limits according to the plans. The Contractor shall connect the existing pipe to the new structure using the same pipe material and size if possible; or use a similar interior size PVC, RCP, or DI pipe as directed by the Engineer with appropriate pipe adaptors. Submit pipe adaptor manufacturer's recommendations.

Rigid Couplings shall be used at any pipe joint in which bell and spigot or fused joints are not used. Flexible couplings are not permitted, except for side sewer installation. The rigid couplings shall be Romac, JCM Industries, or Krausz-USA, or an Engineer approved equal.

7-05.4 Measurement

The sixth paragraph is revised to read:

Connections to existing structures will be measured per each.

This section is supplemented with the following:

Reconnecting existing sewer pipes to new manhole structures will be measured per each.

Manholes with Cast-in-Place Base will be measured per each.

Catch Basin Type 2 __ in excess of 10 feet in height will be measured per linear foot for each additional foot of height over 10 feet. Measurement will be the distance from the inside sump elevation to the top of the manhole ring rounded up to the nearest foot.

7-05.5 Payment

This Section is supplemented with the following:

"Connect New Sewer Pipe, ____-In. Diam., to Existing Structure", per each

The unit Contract price per each for "Connect New Sewer Pipe, ____-In. Diam., to Existing Structure" shall be full pay for all costs to construct the pipe connection to the existing manhole in accordance with Section 7-05.3, including but not limited to cutting any existing pipe and using a coupling to connect the new pipe, or core drilling a new pipe opening in the manhole, removing old pipe connection, constructing sand collar connection with the new pipe end, modifying manhole channel, excavating, furnishing and placing backfill, and compacting backfill.

"Adjust Existing Water Valve Chamber to Grade", per each

The unit Contract price per each for "Adjust Existing Water Valve Chamber to Grade" shall be full pay for all costs associated with adjusting the water valve chamber to finished grade, including but not limited to, excavating, furnish and place backfill, compacting, surfacing, and restoration.

"Adjust Existing PSE Gas Valve Chamber to Grade", per each

The unit Contract price per each for "Adjust Existing PSE Gas Valve Chamber to Grade" shall be full pay for all costs associated with coordinating adjusting the water valve chamber to finished grade with PSE, including but not limited to, excavating, furnish and place backfill, compacting, surfacing, and restoration.

"Adjust Existing Manhole, Install new Frame and Cover", per each

The unit Contract price per each for "Adjust Existing Manhole" shall be full pay for all costs associated with adjusting the frame and cover to finished grade, including but not limited to, excavating, furnish and place backfill, installing the new city supplied frame and cover, compacting, surfacing, and restoration.

"Adjust Existing Catch Basin, Install new Frame and Grate", per each

The unit Contract price per each for "Adjust Existing Catch Basin" shall be full pay for all costs associated with adjusting the frame and grate to finished grade, including but not limited to, excavating, furnish and place backfill, installing the new city supplied frame and grate, compacting, surfacing, and restoration.

"Area Drain", per each

The unit Contract price per each for "Area Drain" shall be full pay for all work required to furnish and install the new area drain to finished grade, including, but not limited to, excavating for, furnishing backfill, compaction of backfill, connection of new pipe(s), and furnish and install frame and ADA grate as shown per Plans.

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The unit Contract price per each for "Catch Basin Type 1" shall be full pay for all work required to furnish and install the new catch basin to finished grade, including, but not limited to, excavating for, furnishing backfill, compaction of backfill, connection of new pipe(s), and installing city supplied frame and grate frame and grate or cover as shown per Plans.

"Catch Basin Type 1, with Combination Inlet", per each

The unit Contract price per each for "Catch Basin Type 1, with Combination Inlet" shall be full pay for all work required to furnish and install the new catch basin to finished grade, including, but not limited to, excavating for, furnishing backfill, compaction of backfill, connection of new pipe(s), and installing city supplied frame and grate for a Combination Inlet as shown per Plans.

The unit Contract price per each for "Catch Basin__Diam. Type 2" shall be full pay for all work required to furnish and install the new catch basin to finished grade, including, but not limited to, excavating for, furnishing backfill, compaction of backfill, connection of new pipe(s), and installing city supplied frame and grate frame and grate as shown per Plans.

"Catch Basin__Diam. Type 2, with Combination Inlet", per each

The unit Contract price per each for "Catch Basin__Diam. Type 2, with Combination Inlet" shall be full pay for all work required to furnish and install the new catch basin to finished grade, including, but not limited to, excavating for, furnishing backfill, compaction of backfill, connection of new pipe(s), and installing city supplied frame and grate for a Combination Inlet as shown per Plans.

The unit Contract price per each for "Concrete Inlet" shall be full pay for all work required to furnish and install the new concrete inlet to finished grade, including, but not limited to, excavating for, furnishing backfill, compaction of backfill, connection of new pipe(s), and furnish and install frame and ADA grate as shown per Plans.

"Reconnect Existing Sewer Pipe, ___-In. Diam., to New Structure", per each.

The unit Contract price per each for "Reconnect Existing Sewer Pipe, ___-In. Diam., to New Structure" shall be full pay for all labor, equipment and materials necessary to reconnect the existing sewer pipe to the new structure as specified in Section 7-05.3.

"Catch Basin Type 2 Additional Height, ___ In. Diam.", per linear foot.

"Reconnect Existing Sewer Pipe, ___-In. Diam., to New Structure", per each.

"Concrete Trench Drain", per linear foot

The unit Contract price per linear foot for "Concrete Trench Drain" shall be full pay for all labor, equipment and materials necessary to furnish and haul materials, to construct the complete concrete trench drain poured in place with integral curb, including reinforcing steel bars, linear frames and grates, including all joints and joint sealing, and PVC pipe connections as specified in Section 7-05.3 and in accordance with the Plans.

END OF SECTION

8-02 ROADSIDE RESTORATION

(*****)

8-02.1 Description

This section is supplemented with the following:

This Work shall include roadside maintenance and construction cleanup in accordance with the Specifications.

8-02.3 Materials

This section is supplemented with the following:

Topsoil Type A shall meet the requirements of Section 9-14.2.

Compost shall meet the requirements of Section 9-14.5(8).

8-02.3 Construction Requirements

8-02.3(4) Topsoil

This section is supplemented with the following:

The Contractor shall use Topsoil Type A in accordance with Special Provisions Section 9-14.2 unless otherwise shown on the Plans or as approved by the Engineer.

8-02.3(5) Roadside Seeding, Lawn and Planting Area Preparation

This section is supplemented with the following:

All grades shall be maintained in the areas to be planted in a true and even condition. The contractor shall be careful not to disturb any of the existing or cut slopes. Where final grades have not been established, the areas shall be finish graded and all surfaces left in an even and compacted condition. The finished grade shall be such that after planting, the grade shall be flush with adjoining surfaces; positive drainage shall also be maintained.

8-02.3(5)A Seeding Area Preparation

Item 4. of this section is revised to read:

4. Amended topsoil shall be cultivated to a depth of **12 inches** or 6 inch depth imported and placed over 6 inch loosened subsoil in accordance with Standard Plans GSI-01b through GSI-01d. Rake to a smooth even grade without low areas that trap water and compact. The finished grade of the soil shall be 1 inch below the top of all curbs, junction and valve boxes, walks, driveways and other structures.

8-02.3(5)B Lawn Area Preparation

Item 4. of this section is revised to read:

4. Amended topsoil shall be cultivated to a depth of **12 inches** or 6 inch imported and placed over 6 inch loosened subsoil in accordance with Standard Plans GSI-01b through GSI-01d. Rake to a smooth even grade without low areas that trap

water and compact. The finished grade of the soil shall be 1 inch below the top of all curbs, junction and valve boxes, walks, driveways and other structures.

8-02.3(5)C Planting Area Preparation

Item 6. of this section is revised to read:

6. Amended topsoil shall be cultivated to a depth of 12 inches or 6 inch depth imported and placed over 6 inch loosened subsoil in accordance with Standard Plans GSI-01b through GSI-01d. Do not till or place loose topsoil without compaction and stabilization measures on slopes 3H:1V or steeper. The top of the newly placed mulch or woodchips shall be flush with the top of all curbs, junction and valve boxes, walks, driveways and other structures.

This Section is supplemented with the following:

Where the planter area is adjacent to the paved edge of the shared use path, for a 2 ft. width adjacent to the paved edge the Contractor shall manually compact the topsoil to a firm and unyielding surface under foot. The compacted topsoil surface shall be 4-inch below the paved edge of the shared use path, to receive 4-inch arborist woodchips.

8-02.3(6) Mulch and Amendments

This section is supplemented with the following:

Existing soil shall be amended with Fine Compost in accordance with the Plans, these Special Provisions, and Section 9-14.

The Contractor shall amend the roadside planter strip where indicated with note "2" on the planting plan, with 3" Fine Compost into 4" of existing soil below the 6" layer of imported Topsoil Soil Type A, in accordance with the Plans.

The Contractor shall amend the tree planting area indicated with note "3" on the planting plan, with 4" Fine Compost into 4" of existing soil, underlain by 4" of scarified subgrade; otherwise in accordance with Standard Plan GSI-01b for Planting Beds.

The Contractor shall amend the soil in the restoration area indicated by note "4" on the planting plan, where areas are hydro-seeded in accordance with the Plans and Standard Plan GSI-01b for turf (lawn) areas.

8-02.3(6)A Compost

This section is supplemented with the following:

Compost as a surface applied mulch shall be Coarse Compost in accordance with BMP C125, Section 1.12 of the City of Tacoma Surface Water Management Manual.

The Contractor shall report the amount of cubic yards of Compost incorporated into the project, as mulch and as soil amendment, and as content in Topsoil Type A. The Contractor shall submit the quantity of Compost per type and supplier.

8-02.3(8)C Pruning, Staking, Guying, and Wrapping

This section is supplemented with the following:

Crossed or rubbing branches shall be removed providing the natural shape of the tree is preserved. Under no circumstances shall pruning be done prior to inspection and approval of plants by the Engineer. All cuts shall be made flush with the parent stem leaving no stubs. Pruning cuts shall be made in a manner to favor the earliest possible covering of the wound by callus growth. Cuts that produce large wounds and weaken the tree will not be acceptable.

Top growth removal to compensate for root loss shall not exceed one-third (1/3) of the top growth unless otherwise specified or directed by the Engineer. Cuts created 3/4 inch in diameter shall be treated with an approved tree wound dressing. All pruning shall produce a clean cut without bruising or tearing the bark and shall be in living wood where the wood can properly heal over.

Evergreens shall not be pruned, except to remove injured branches. The use of pole shears and/or hedge shears for pruning deciduous and evergreen trees will not be permitted. All trimmings and other debris left over from the planting operations shall be collected and disposed of off the site.

All evergreen trees and deciduous trees over 15 feet in height shall be guyed with three wires or cables.

All deciduous and evergreen trees shall be staked the same day of planting.

8-02.3(10) Lawn Installation

8-02.3(10)A Dates and Conditions for Lawn Installation

This section is revised to read:

Where no irrigation system is to be installed, hydroseed lawn shall be installed during the following periods only:

March 1st – June 30th

September 1st - October 25

8-02.3(10)B Lawn Seeding and Sodding

This section is supplemented with the following:

Hydroseeding will be the preferred method for lawn installation. All permanent seeding areas shall be seeded with Low-Growing Turf Seed Mix:

Type of Seed	% by Weight
Dwarf tall fescue	45
Dwarf perennial rye	30
Red fescue	20
Colonial bentgrass	5

The rate of application shall be per manufacturer's recommendation.

Seeding fertilizer shall be per manufacturer's recommendation.

For Sodded Lawns: On sloped areas, the sod strips shall be laid perpendicular to the flow of water.

8-02.3(10)C Lawn Establishment

This section is supplemented with the following:

Lawn that is replaced shall be of the same mixture and grade as the surviving lawn.

8-02.3(11) Mulch

This section is supplemented with the following:

Mulch shall be an arborist wood chip mulch and shall be feathered to plant material trunks, stems, canes, or root collars, and level with the top of junction and valve boxes, curbs and pavement edges.

Wood Chip Mulch shall be in accordance with Section 9-14.5 and shall be applied to a depth of 4 inches in accordance with the Plans or as directed by the Engineer.

8-02.3(13) Plant Establishment

This section is supplemented with the following:

The Contractor shall maintain the planting areas and all trees and plants planted within the project limits to ensure the resumption and continued growth of the planted material until expiration of the plant warranty period per Special Provisions Section 8-02.3(14).

Maintenance shall include, but not be limited to, labor and materials necessary for removal of foreign, dead, or rejected plant material, maintaining a weed-free condition, watering, and maintaining slow release tree watering bags ("gator bags"), and the replacement of all unsatisfactory plant material planted under the contract.

Planting dates for replacement plant material will be approved by the Engineer.

The Contractor shall meet with the Engineer for the purpose of joint inspection of the project once installation has been completed and thereafter on a periodic "as needed" basis as determined by the Engineer, until the expiration of the plant warranty period per Special Provisions Section 8-02.3(14). Thus, plant establishment shall be included in the Contract price per each for the duration of the warranty and the Contract, whichever is the longer duration.

All conditions unsatisfactory to the Engineer shall be corrected by the Contractor within a ten-day period immediately following the inspection. Failure to comply with corrective steps as outlined by the Engineer shall constitute justification of the Contracting Agency to take corrective steps and to deduct all costs thereof from any monies due the Contractor.

The Contractor shall replace all plants stolen or damaged by the acts of others until the physical completion date of the contract.

8-02.3(14) Plant Replacement

This section is supplemented with the following:

The Contractor shall provide the Contracting Agency a one (1) year non pro-rated, full labor and materials warranty for all planted material. The warranty shall cause the Contractor to remove and replace all rejected plant material during the warranty period. The warranty period shall

begin at the date of physical completion of the contract and end one calendar year from that date. Thus, plant establishment shall be included in the Contract price per each for the duration of the warranty and the Contract, whichever is the longer duration.

The Contractor shall be responsible for growing or providing enough plants for replacement of all plant material rejected during the warranty period. All rejected plant material shall be replaced at dates approved by the Engineer.

All replacement plants shall be of the same species and quality as the plants they replace. Plants may vary in size reflecting one season of growth should the Contractor elect to hold plant material under nursery conditions for an additional year to serve as replacement plants.

Replacement plants will be subject to the original warranty provision as stated above.

8-02.3(16) Roadside Maintenance Under Construction

This section is supplemented with the following:

Construction Cleanup

Where staining, dust or other material has visibly accumulated on the adjoining buildings and sidewalks as a result of the Contractor's Work, the Contractor shall clean these off as directed by the Engineer. The Contractor shall remove all siltation, spoils, debris and solid waste resulting from the Contractor's activities along the project right of way and dispose of it in accordance with the Contract. The cost for any cleanup described in Section 8-02 shall be included in the lump sum Contract price for "Roadside Restoration".

8-02.4 Measurement

The first paragraph is revised to read:

Mulch, and soil amendments will be measured by the cubic yard in the haul conveyance at the point of delivery when included in the proposal.

The third paragraph is revised to read:

Compost will be measured by the cubic yard in the haul conveyance at the point of delivery, and the Contractor shall submit all quantities of compost incorporated into the project to the Engineer.

The fourth paragraph is supplemented with the following:

Seeding, fertilizing, cultivation, weed control, and any preparation of lawn or planting areas are included in other bid items such as "PSIPE___" and "Seeded Lawn Installation".

This section is supplemented with the following:

Topsoil Type A will be measured per Ton incorporated into the project.

Irrigation water used to establish vegetation will be considered included in the cost of plants.

8-02.5 Payment

The pay item for "PSIPE___" is revised to read

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“PSIPE____”, per each.

Payment per each for “PSIPE____” shall be full pay for all materials, labor, tools, equipment and supplies necessary for weed control within planting areas, planting area preparation, root barrier, fine grading, planting, cultivating, watering, gator bag, and clean-up for the particular items called for in the Plans and Specifications for the duration of the Contract. A one (1) year plant warranty shall be included in the unit contract price. Plant establishment shall be included in the Contract price per each for the duration of the warranty and the Contract, whichever is the longer duration.

This section is supplemented with the following:

“Topsoil Type A”, per ton

The unit Contract price per ton for “Topsoil Type A” shall be full compensation for furnishing the topsoil mix, including Compost, haul and delivery, scarifying subgrade, and placing and compacting the topsoil in accordance with the Plans and Specifications.

“Soil Amendment”, per cubic yard

The unit Contract price per cubic yard for “Soil Amendment” shall be full compensation for scarifying subgrade, and furnishing and incorporating fine compost into the existing soil in accordance with the Specifications and Plans.

“Wood Chip Mulch”, per cubic yard

The unit Contract price per cubic yard for “Wood Chip Mulch” shall be full compensation for furnishing the mulch, including haul and delivery onsite, and placing and spreading the mulch in accordance with the Specifications and Plans.

“Roadside Restoration”, lump sum.

The lump sum payment for “Roadside Restoration” shall be full payment for all costs incurred to carry out the requirements of Section 8-02 and any Roadside Restoration items not specifically included in other bid items, including but not limited to Construction Cleanup, watering, planting area preparation, cultivating, grading, and gravel replacement.

END OF SECTION

8-06 CEMENT CONCRETE DRIVEWAY ENTRANCES

(*****)

8-06.3 Construction Requirements

The first paragraph is revised to read:

All cement concrete driveway approaches shall be constructed with air entrained cement concrete Class 4000 conforming to the requirements of Section 6-02.

The first sentence of the third paragraph is revised to read:

The Contractor shall construct each driveway entrance in two segments to permit access to an existing driveway.

This section is supplemented with the following:

Root Barriers

The Contractor shall install root barriers in accordance with the Plans, during the construction process for driveway entrances and their foundations. Thus the root barrier can be built into the foundation material without undermining the driveway foundation.

This section is supplemented with the following sub-section:

8-06.3(1) Cold Weather Work

The following additional requirements for placing concrete shall be in effect from November 1 to April 1:

- The Engineer shall be notified at least 24 hours prior to placement of concrete.
- All concrete placement shall be completed no later than 2:00 p.m. each day.
- Where forms have been placed and the subgrade has been subjected to frost, no concrete shall be placed until the ground is completely thawed. At that time, the forms shall be adjusted and subgrade repaired as determined by the Engineer.
- When temperatures below 35 degrees Fahrenheit are predicted up to 7 days after pouring the concrete, the concrete shall be covered in blankets.

8-06.5 Payment

This section is revised to read:

(*****)

"Cement Conc. Residential Driveway Entrance", per square yard.

The unit contract price per square yard for "Cement Conc. Residential Driveway Entrance" shall be full pay for all labor, tools, equipment, and materials required to construct 6" thickness concrete residential driveways in segments; construction and removal of Temporary Driveway Access shall be included. All types of residential concrete driveway entrances are included in this bid item.

"Cement Conc. Commercial Driveway Entrance", per square yard.

The unit contract price per square yard for "Cement Conc. Commercial Driveway Entrance" shall be full pay for all labor, tools, equipment, and materials required to construct 8" thickness concrete Commercial driveways in segments; construction and removal of Temporary Driveway Access shall be included. All types of commercial concrete driveway entrances are included in this bid item.

Excavation required for the construction of the driveway entrance shall be paid for under the unit Contract price for "Roadway Excavation, Incl. Haul".

END OF SECTION

8-22 PAVEMENT MARKING

(*****)

8-22.2 Materials

This section is supplemented with the following:

All legends and arrows including "Plastic Arrow" and "Plastic Letter" markings shall be a Preformed retro-reflective thermoplastic pavement marking material incorporating a pre-applied bead coating that can be adhered to asphalt, concrete and Portland Cement Concrete pavements by means of heat fusion. All "Plastic Crosswalk Line", and "Plastic Stop Line" shall be hot applied thermoplastic. The applied markings shall be very durable, oil and grease impervious, and provide immediate and continuing retro-reflectivity meeting the requirements of Section 9-34.3(2).

8-22.3 Construction Requirements

8-22.3(3)E Installation

This section is supplemented with the following for applying Type B material:

Effective Performance Life: When properly applied, in accordance with manufacturer's instructions, the preformed marking materials shall be neat and durable. The markings shall remain skid resistant and show no lifting, shrinkage, tearing, roll back, or other signs of poor adhesion.

Packaging: The flexible preformed marking material, for use as transverse or bike symbols as well as legends, shall be available in flat form material up to a maximum of 2 foot width by 4 foot length. The material shall be packed in suitable cartons clearly labeled for ease of identifying the contents. Packaging shall not use plastic liners within to separate material from itself. Product packaging shall identify part number and mil thickness.

Material Replacement Provisions: Any properly applied preformed marking materials that shall smear or soften independent of pavement movement or condition within a period of one year from date of application shall be replaced by the supplier.

Installation: The preformed marking materials shall be applied in accordance with the manufacturer's recommendations on clean and dry surfaces. New Portland concrete cement surfaces must be sandblasted to entirely remove curing compound. Marking configuration shall be in accordance with the "Manual on Uniform Traffic Control Devices," where applicable.

New Surfaces: Preformed marking materials specified for newly paved asphalt road surfaces shall be capable of being applied as the original permanent marking on the day the surface is paved.

Fusion: The preformed marking materials shall be fusible to the pavement by means of a propane torch recommended by the manufacturer.

Technical Services: The supplier shall provide technical services as may be required.

8-22.3(3)F Application Thickness

The Section is supplemented with the following:

Green Durable Product: Approximately 4.2 Gallon mixture of Green colored MMA, hardwearing aggregate, and catalyst should cover 70-75 SF at 90 mils thickness.

8-22.3(4) Tolerances for Lines

The allowable tolerance for "Length of Line" is revised to read:

Length of Line: The longitudinal accumulative error within a 32-foot length of skip stripe shall not exceed plus or minus 1 inch.

8-22.4 Measurement

The last sentence of the sixth paragraph is revised to read:

Crosswalk lines will be measured by the linear foot of marking installed.

This section is supplemented with the following:

Green Durable Products will be measured by the square foot of marking area installed.

8-22.5 Payment

This section is supplemented with the following:

"Plastic Crosswalk Line", per linear foot.

END OF SECTION