SUPPLEMENTAL STANDARDS FOR PUBLIC WORKS CONSTRUCTION



March 2022

New Revisied Drawings Include:

- HD-730 Curb Line Sidewalk Driveways or Alleys (Option M)
- RD-730 Curb Line Sidewalk
- Street Standards

City of Ontario

1551 NW 9th St

Ontario, OR 97914

I. GENERAL

1. The City of Ontario has adopted the 2020 edition of the Idaho Standard for Public Works Construction (ISPWC), as amended including all supplements and revisions for construction and new development. The following supplemental standards include standards for acceptable materials, construction practices, and other specified requirements, which may not be covered under the ISPWC or that the City has elected to amend. Prior to any public work development or construction, the contractors and/or developers shall review the adopted ISPWC documents.

II. DIVISION 100:

1. Division 100 of the ISPWC are not applicable and shall be replaced with the Standard General Conditions of the Construction Contract as prepared by the Engineers Joint Contract Documents Committee with the following modifications:

SUPPLEMENTARY CONDITIONS

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract, Funding Agency Edition IEJCDC C-710, 2002) and other provisions of the Contract Documents as indicated below. All provisions which are not so amended or supplemented remain in full force and effect.

The terms used in these Supplementary Conditions will have the meanings indicated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings indicated below, which are applicable to both the singular and plural thereof.

SC-5.04.B.1 Include as additional insured, as provided in paragraph 5.04.B.1. of the General Conditions, the following parties or entities:

OWNER: CITY OF ONTARIO, 1551 NW 9TH STREET, Ontario, Oregon 97914

PROJECT ENGINEER: (to be named by City)

SC-16 Add the following new paragraph immediately after paragraph 16.01:

SC-16.02 Mediation

16.02.1 If a dispute arises out of or relates to this contract or the breach thereof and if the dispute cannot be settled through negotiation, the parties agree first to try in good faith to settle the dispute by mediation administered by the American Arbitration Association under its Commercial Mediation Rules before resorting to arbitration, litigation, or some other dispute-resolution procedure.

Such agreement shall be in writing, and duly signed by the parties. "Parties," as used here, shall include all lenders, funding agencies, and insurance carriers interested in or connected with the Work.

16.02.2 Notice of the request for Mediation shall be filed in writing with OWNER and the American Arbitration Association, and a copy shall be filed with PROJECT ENGINEER. Request for Mediation shall in no event be made on any claim, dispute, or other matter in question which would be barred by the applicable statue of limitations.

16.02.3 CONTRACTOR will carry on the work and maintain the progress schedule during any Mediation proceeding, unless otherwise mutually agreed in writing. SC-18 Federal Requirements Article·18 - Federal Requirements section of the General Conditions does not apply to this contract.

III. DIVISION 200:

1. Section 202-3.7:

Add the following: The City shall authorize excavation of unsuitable material or payment will not be allowed. The Contractor shall select and utilize equipment and methods to minimize pumping of soil material. Request for additional payment for unsuitable material excavation will not be considered by the City if the use of track equipment and/or modified construction procedures to remove and /or place materials could eliminate the problem.

IV. DIVISON 300:

1. Section 304-2. 3.A:

Change to state the following: Field inspection shall be performed by the Engineer or City authorized representative. Laboratory analysis and field testing reports will be provided to the City weekly during construction from the independent testing laboratory.

2. Section 304-4. 1:

Add the following: No payment will be made without City (or authorized representative) approval and without field measurement by the City (or authorized representative) prior to placement of bedding material.

3. Section 305-2:

Unless otherwise approved by the City and/or required by special conditions, Type I or Type Ill Bedding shall be used for pipe bedding material.

4. Section 305-3:

Unless otherwise approved by the City and/or required by special conditions, Class A-1 or 8-2 Bedding System shall be used.

5. Section 306-3. 3:

Unless otherwise approved or specified by the City, Type A-1 compaction shall be used for Type A trench backfill.

6. Section 307-3.7:

Delete Item C and replace with the following:

For local steets use 8 inches and for collectors and arterials use 12 inches of compacted base course or match existing base depth (whichever is greater) consisting of Type I Aggregate in accordance with Section 802-Crushed Aggregate.

Delete Item E and replace with the following:

Asphalt concrete pavement thickness is to match existing pavement depth to a maximum depth of 6 inches. In no case shall pavement thickness be less than 3 inches for local streets or 4 inches on designated collector and arterial streets.

7. Section 307-3.9:

Delete Item E and replace with the following:

After base compaction, trim back existing pavement one foot behind furthest edge of undisturbed base material on both sides of the trench.

8. Section 307-3.12:

Add the following to subsection B. 2:

A two foot cutback behind furthest edge of undisturbed base material is required for curb & gutter replacement. Where asphalt pavement and concrete curb & gutters are restored there shall be a 6" (min.) offset of the cold joints of both repairs.

9. SD-301:

Delete and replace with the revised detail SD-301 dated October 2007.

10. SD-303:

Delete and replace with the revised detail SD-303 dated October 2007.

V. DIVISION 400:

- 1. The locator wire at valves shall be placed on the outside of the valve box and placed into the inside of the valve box through a drill hole with a rubber grommet at 8 inches from the top with 18 inches of wire into the box.
- 2. All tracer lines shall be tested after backfilling is complete. A /ow-voltage source shall be connected to the tracer contacts, and a magnetic locator

shall be used at intervals not greater than 100 feet, to determine whether the pipe can be located with the magnetic locator. The contractor shall supply the necessary testing equipment and personnel at no additional cost to the City. Faulty tracer wire shall be repaired by the contractor and retested.

3. Section 401-2:

All water mains, with a diameter of 4 inch through 12 inch shall be PVC Pressure pipe meeting ANSI/A WWA C 900, unless otherwise approved. Unless otherwise approved, all pipe fittings shall be ductile iron fittings meeting ANSI/A WWA C 110.

4. Section 402-2:

Valves for water mains under 12 inches in diameter shall be resilient seated gate valves meeting ANSI/A WWA C 509. Valves for water mains 12 inches and larger shall be rubber seated butterfly valves meeting ANSI/A WWA C 504.

5. Section 403-2:

Hydrants shall be Mueller 24016 and conform with ANSI/A WWA C 502. Hydrants shall be painted red with two coats of hydrant enamel, have a five and one-quarter inch (5-1/4") minimum valve opening with a six inch (6") flange, two (2) two and one-half inch (2-1/2") hose nozzles, .and one and one-fourth inch (1-1/4") pentagon operating nut. (open counterclockwise) and safety flange.

Item shall be constructed per ISPWC SD-404 with the addition of a 6" thick by 30" diameter concrete collar around the hydrant barrel placed at least 12" below the finished ground surface elevation. The hydrant shall be arranged for a three and one-half foot (3-1/2') bury, minimum, unless otherwise specified.

6. Section 404-2:

Water service pipe shall be Type K, annealed, seamless copper water tube meeting ASTM B 88. Polyethylene pipe may be acceptable for conditions where corrosive soils are present, with approval of the City.

Delete Section 2.4.B, and replace with the following:

Corporation stops shall be Ford FB-1000 Iron Pipe x CTS Pack Joint.

7. SD-401:

Delete and replace with the revised detail SD-401 dated January 17, 200

8. SD-404:

Delete and replace with the revised detail SD-404 dated January 16, 2007.

9. SD-405:

Delete and replace with appended detail.

10. SD-406:

Delete and replace with the revised detail SD-406 dated October 2007.

VI. DIVISON 500

- 1. Locator wire is required for all sewer pipes and manholes. The wire shall be 12 A WG UF with green colored insulation and fastened to the top of the pipe with duct tape at intervals not exceeding ten feet. The locator wire shall be installed outside the manhole and enter the manhole at the grade ring joint.
- 2. All tracer lines shall be tested after backfilling is complete. A /ow-voltage source shall be connected to the tracer contacts, and a magnetic locator shall be used at intervals not greater than 100 feet, to determine whether the pipe can be located with the magnetic locator. The contractor shall supply the necessary testing equipment and personnel at no additional cost to the City. Faulty tracer wire shall be repaired by the contractor and retested.
- 3. Section 501-2:

Unless otherwise approved, gravity sewer pipe with diameter of 4 inch to 15 inch shall be solid wall PVC conforming to ASTM D 3034 SOR 35 pipe. Gravity sewer pipe with diameter of 18 inch to 36 inch shall be solid wall PVC conforming to ASTM F 679. The type of material used for gravity sewer pipe larger than 36 inch diameter shall be as approved by the City on a project specific basis.

4. Section 502-3:

Delete Section 3. 7. C. and replace with the following:

Ensure that the top of the cone section follows for a maximum of 17 inches from top of the cone to the finished rim elevation.

Delete Section 3.8.A. and replace with the following:

Adjust frame elevations to finish grade with grade rings or by an approved cast in place adjustment method. Maximum distance from the top of the cone to finish grade shall be no more than 17 inches.

Delete Section 3.9.

Delete Section 3. 13.A and replace with the following:

Concrete collars are required on all new manholes. Place collars per the standard drawing SD-508 and Section 703. Concrete to be Class 3000.

5. Section 504-2:

Unless otherwise approved, sewer services shall be PVC conforming to ASTM D 3034 SOR 35.

6. Section 504-5:

Sanitary Sewer Abandonment

A. All manholes shall be removed.

The excavation shall be backfilled in accordance with applicable ISPWC requirements.

- B. All pipe shall either be
 - a. Removed, with the excavation backfilled as described in above; or
 - b. Permanently filled with a non-settling material. At least 70 percent of the cross sectional area of the pipe shall be filled at all locations. All abandoned pipes shall be capped or plugged at both ends.

7. Section 505-2:

Unless otherwise approved, pressure sewer mains shall be PVC reclaimed water pipe conforming to ANSI/A WWA C900.

8. SD-501:

Delete and replace with the revised detail S0-501 dated October 2007.

9. SD-502:

Delete and replace with the revised detail S0-502 dated October 200 7.

10.SD-503:

Delete and replace with the revised detail SD-503 dated October 200 7.

11.SD-504:

Delete and replace with the revised detail S0-504 dated October 2007.

12.SD-505:

Delete and replace with the revised detail S0-505 dated October 2007.

13.SD-505A:

Delete and replace with the revised detail SD-505A dated October 2007.

14.SD-506:

Delete Detail.

15. Grease interceptors, when required by the City per Ontario City Code 8-7-4, Section F, shall conform to revised SD-520.

VII. DIVISION 600:

1. Section 601-2:

Unless otherwise approved, storm drain pipe with diameter of 4 inch to 15 inch shall be solid wall PVC conforming to ASTM D 3034 SOR 35 pipe. Storm drain pipe with diameter of 18 inch to 36 inch shall be solid wall PVC conforming to ASTM F 679. The type of material used for storm drain pipe larger than 36 inch diameter shall be as approved by the City on a project specific basis.

2. Section 602-2:

Unless otherwise approved, all catch basins shall be per attached revised details SD-603 and 603A dated October 2007.

3. SD-611:

Delete and replace with the revised detail SD-611 dated October 200 7.

4. SD-612:

Delete and replace with the revised detail SD-612 dated October 200 7.

5. SD-613:

Delete and replace with the revised detail SD-613 dated October 200 7.

6. SD-613A:

Delete and replace with the revised detail SD-613A dated October 2007.

7. SD-614:

Delete and replace with the revised detail SD-614 dated October 2007.

8. SD-614A:

Delete and replace with the revised detail SD-614A dated October 2007.

9. SD-615:

Delete and replace with the revised detail SD-615 dated October 200 7.

10.SD-615A:

Delete and replace with the revised detail SD-615A dated October 2007.

11.SD-618:

Delete detail.

VIII. DIVISON 700:

- 1. Vertical curb and gutter (6") as detailed in SD-701 is required for all construction, unless otherwise approved. (i.e. inside of new subdivisions where the developer wants to use rolled curb).
- 2. Pedestrian Ramp Standards: Use SD-712A (Revised October 2007) for vertical curbs or SD-712B for rolled curbs.
- 3. Sidewalks shall have expansion/contraction joint material every 30' or less. Contraction/expansion joint material /fiber board} is to extend full depth of thickest adjacent slab thickness. Construction joints are to be scored 3/5 of the depth of the slab thickness.

IX. DIVISION 800:

1. Section 803-2::

Delete Subsection 2.1.E.3. and replace with the following:

Thin or elongated aggregate particles (length greater than 5 times width) not to exceed 15% by weight in the coarse aggregate stockpile(s).

Add the following Subsection 2.1 .. F.:

- 1. Maximum Size: One sieve size larger than the nominal maximum size.
- 2. Nominal Maximum Size: One sieve size larger than the first sieve to retain more than 10 percent.

Add the following to Subsection 2.2.A.:

Aggregate for Class II mixes, as a minimum, shall be provided in three separate stockpiles, two coarse and one fine. When Class /ff mix is required, aggregate may be provided in a single stockpile if the mix meets all crushed gravel of such gradation that when combined with other required aggregate fractions and fillers, in proper proportion, the resultant mixture shall meet the gradation required under the composition of mixture for the specific class under contract.

Coarse Aggregate: The coarse aggregate stockpiles shall contain less than twelve percent of minus 4. 75 mm (No. 4) material.

Fine Aggregate: The fine aggregate stockpile(s) shall contain no more than twelve percent of plus 4. 75 mm (No. 4) material.

The coarse and fine aggregate fractions for the mixture shall be sized, graded, and combined in such proportions that the resulting composite blend meets the grading requirements set forth in Table 803A as amended herein.

Delete Table 803A (including NOTE) and replace with the following tables:

<u>Table 803A-1</u>

314" Nominal Maximum Size

Sieve Size Control Points Restricted Zone Boundary

(mm)	Minimum	Maximum	Minimum	Maximum
25 (1 ")		100		
19 (314")	90	100		
12.5 (112")		90		
9.5 (3/8")	52	80		
4.75 (No. 4)				
2.36 (No. 8)	23	49	34.6	34.6
1 .18 (No. 16)			22.3	28.3
0.600 (No. 30)			16.7	20.7
0.300 (No. 50)			13.7	13.7
0.150 (No. 100)				
0.075 (No. 200)	2	8		

Table 803A-2

1/2" Nominal Maximum Size				
Sieve Size (mm)	Control Points		Restricted Zone Boundary	
	Minimum	Maximum	Minimum	Maximum
19 (3/4")		100		
12.5 (1/2")	90	100		
9.5 (3/8")		90		
4.75 (No. 4)				
2.36 (No. 8)	28	58	39.1	39.1
1.18 (No. 16)			25.6	31.6
0.600 (No. 30)			19.1	25.6
0.300 (No. 50)			15.5	15.5
0.150 (No. 100)				

Table 803A-3

3/8" Nominal Maximum Size				
Sieve Size (mm)	Control Points		Restricted Zone Boundary	
	Minimum	Maximum	Minimum	Maximum
12.5 (1/2")		100		
9.5 (3/8")	90	100		
4.75 (No. 4)		90		
2.36 (No. 8)	32	67	47.2	47.2
1.18" (No. 16)			31.6	· 37.6
0.600 (No. 30)			23.5	27.5
0.300 (No. 50)			18.7	18.7
0.150 (No. 100)				
0.075 (No. 200)	2	10		

2. Section 803-2:

Delete Subsection 2.2.D. and replace with the following:

3. Section 803:

For Class III mixes from a single stockpile, the nominal maximum aggregate size shall be $\frac{1}{2}$ inch.

4. Section 805:

Unless otherwise approved, asphalt cement used for plant mix pavement shall be AC-10 or PG 58-28 grades.

5. Section 810:

The following classes of plant mix pavements are required for the specific road classification:

- Road Classification	Plant Mix Pavement
Local Residential	Class III
Local Industrial	Class III
Minor Collector	Class III
Minor Collector Industrial	Class II
Major Collector	Class II
Minor Arterial	Class II
Principal Arterial	Project Specific Requirement

6. Section 81 0:

Add the following to subsection 3.13.B:

Laboratory analysis and field testing reports from the independent testing laboratory will be provided to the City weekly during construction.

7. Section 811:

Add the following to subsection 1.3.A:

Laboratory analysis and field testing reports from the independent testing laboratory will be provided to the City weekly during construction.

8. SD-801:

The minimum structural sections for the following road classifications shall be used unless determined otherwise using actual R-values obtained from laboratory testing (designs shall use the indicated traffic indices):

Note: Design based on R-vaule of 12

Road Classification	Traffic Index	Asphalt Pavement	³¼" Minus Base
Local Residential	3. 1	3	8
Local Industrial	5.4	3	10
Minor Collector	6.7	3.5	16
Minor Collector Industrial	8.0	4	20
Major Collector	7.9	4	20
Minor Arterial	9.4	5	24
Principal Arterial		Project Specific	Project Specific

X. DIVISION 900:

No changes

XI. DIVISION 1000:

No changeS

XII. DIVISION 1100:

1. Delete Section 1101 (including applicable standard drawings) and replace with the applicable elements of Section 00900 of the Standard Specifications for Highway Construction as prepared by the Oregon Department of Transportation.

2. Add the following table:

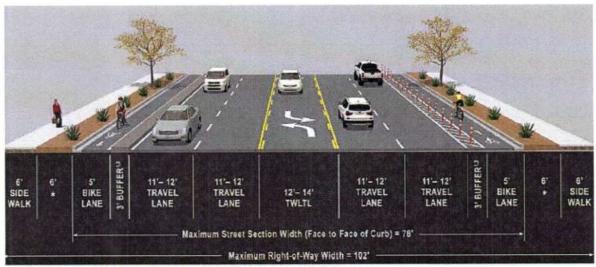
Item _	Type	Material	Dimension
Signpost		Galvanized	10'-6" & 12', 2 3/8" 0, 0.095 wall _thickness_
Street Sign Blanks	Extruded Blade	Aluminum Alloy	6" × 24" & 6" × 30"
Street Sign Lettering			2" & 4"
Street Sign Brackets	THDW-105 & THDW-107		
Street Sign Reflective Sheeting	Hi-Intensity Prismatic - Type IV		
Stop Sign Blanks	5052 H38	Aluminum Alloy	
Stop Sign Reflective Sheeting	Hi-Intensity Prismatic Type IV		
Stop Sign Brackets	THDW-105		
School Sign Blanks	5052 H38		
School Sign Reflective Sheeting	(Yellow/Green) - Hi Intensity Prismatic Type IV		
Speed Signs	5052 H38		

XIII. DIVISION 2000: No changes

10C-25.08 - STREET STANDARDS

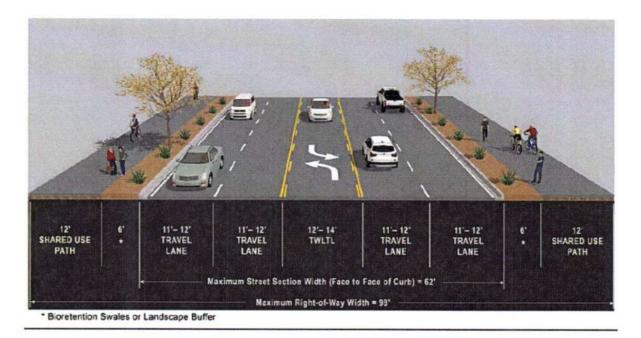
Planter strips shown on any figure, a through k, may be waived at the discretion of the Director of Public Works.

Figure 10C-25.08a - Principal Arterial and Five-Lane Minor Arterial



¹ Buffer includes a vertical element, such as raised concrete or flexposts/bollards.

Figure 10C-25.08b - Principal Arterial and Five-Lane Minor Arterial Shared
Use Path Option



If the bike lane is grade separated (i.e., a raised bike lane) the buffer can be reduced to the curb separating the bike lane from the motor vehicle lane.

^{*} Bioretention Swales or Landscape Buffer

¹⁴

Figure 10C-25.08c - Three-Lane Minor Arterial



Figure 10C-25.08d - Three-Lane Collector



^{*} Bioretention Swales or Landscape Buffer

¹Bike lane buffer recommended when roadway width is available

Figure 10C-25.08e - Neighborhood Collector



Figure 10C-25.08f - Neighborhood Collector with Bike Lanes

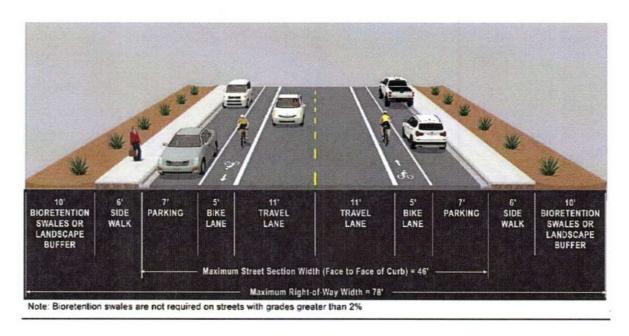


Figure 10C-25.08g - Local Street (With Optional Bikeway Designation)



Note: Bioretention swales are not required on streets with grades greater than 2%

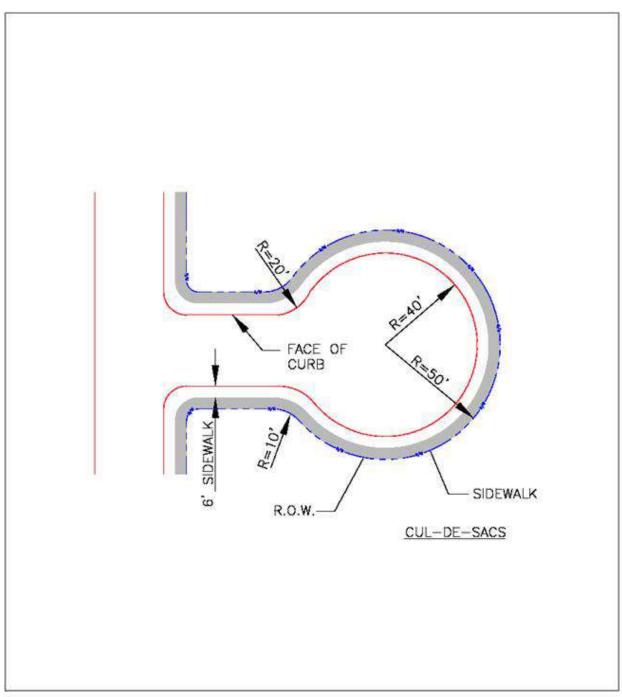
Figure 10C-25.08h - Local Street, ≤2% grade



¹ Curb opening drainage channel through sidewalk with expanded metal cover.

Notes: Ribbon curbs or curb openings with drainage channels can be used for final street sections. Sidewalks can be detached from the roadway (shown at left) or curb-tight to the roadway (shown at right). Both types are shown for illustrative purposes in this example.

Figure 10C-25.08i - Cul-de-sac turnaround



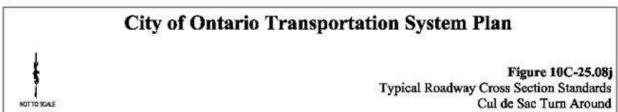


Figure 10C-25.08j - Alley cross section

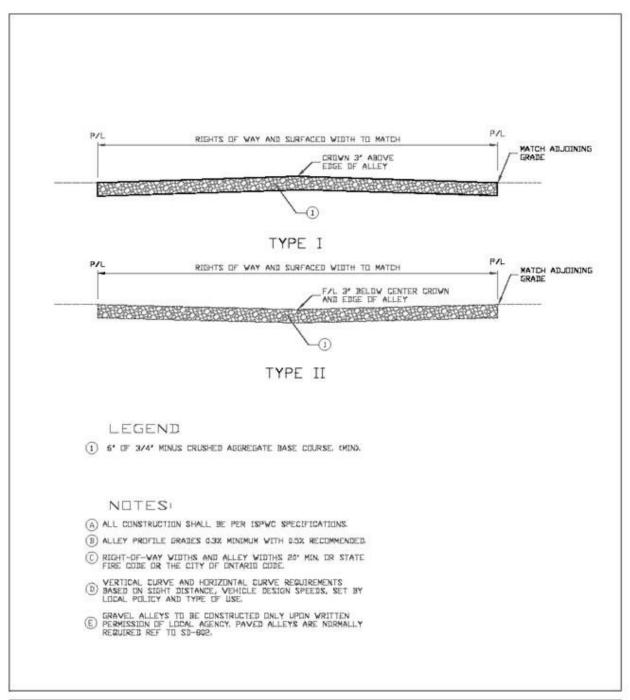
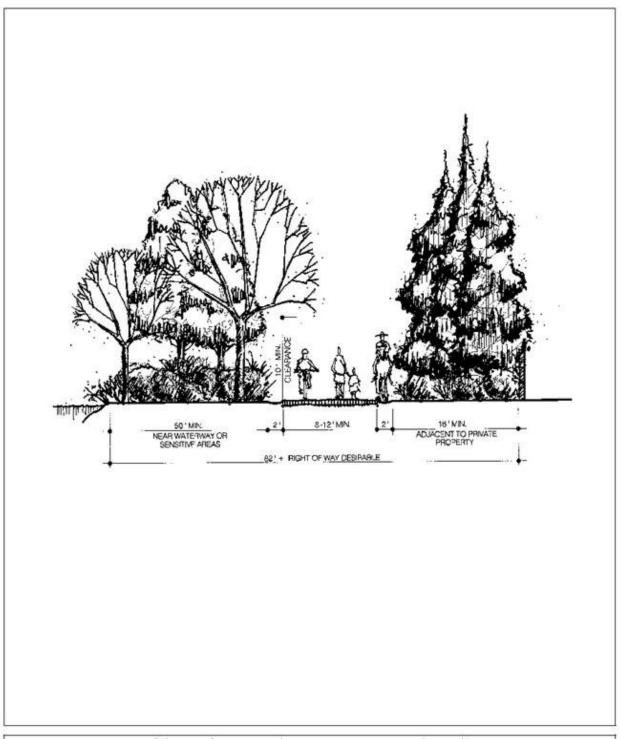




Figure 10C-25.08k - Multi-purpose trail



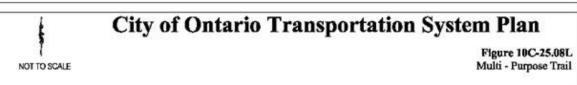


Figure 10C-25.08l - S Oregon Street from W Idaho Avenue to 1stAvenue

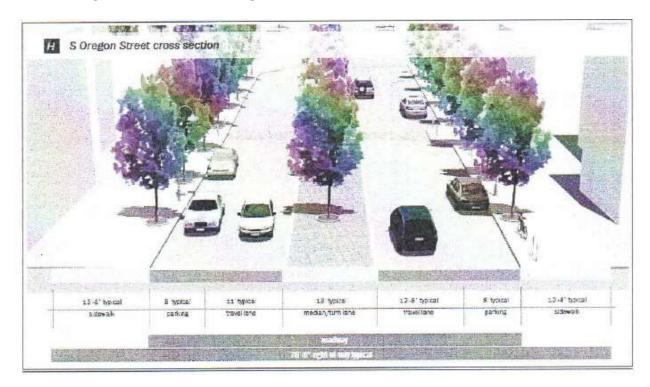


Figure 10C-25.08m - Depot Row (SW 3rdAvenue from S Oregon Street to Depot)

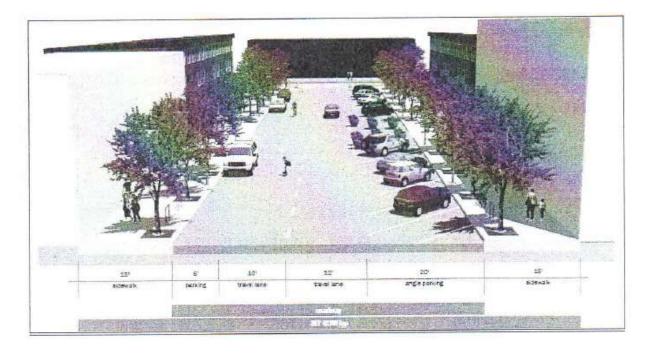


Figure 10C-25.08n - SE 5th Avenue Railroad Crossing

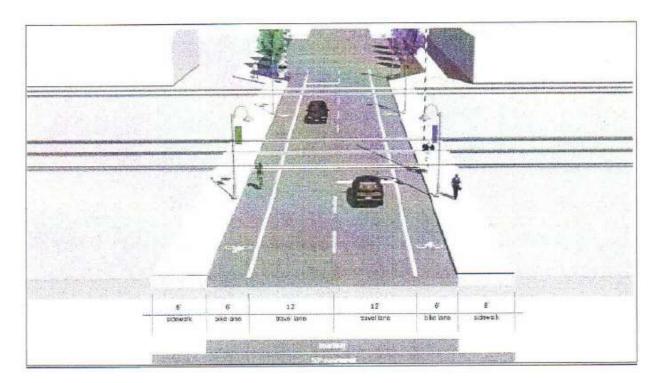
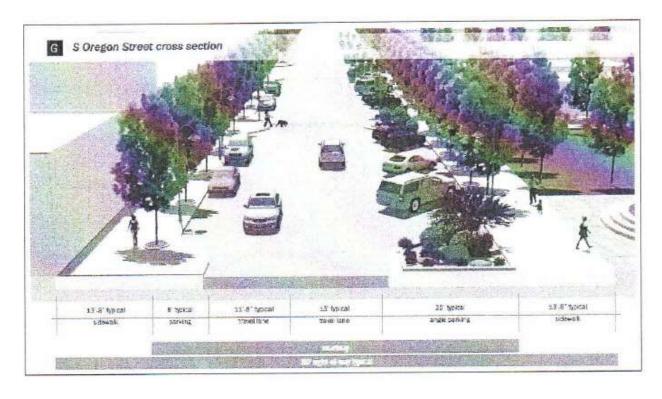
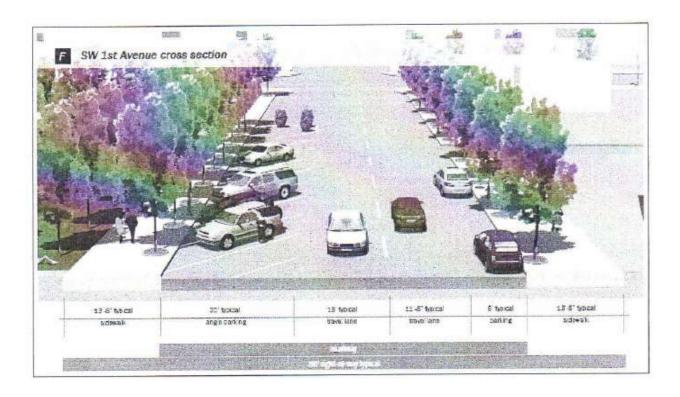


Figure 10C-25.08o - Diagonal Parking





(Ord. No. 2630-2009, § 1, 7-2-2009; Ord. No. 2787-2021, § 2(Exh. C), 4-20-2021)