



**CITY OF TUALATIN STANDARD DRAWINGS  
TABLE OF CONTENTS**

DWG Number	Eff. Date	Title
001	Oct 2020	STANDARD GENERAL NOTES
005	Oct 2020	EXAMPLE SINGLE FAMILY EROSION & SEDIMENT CONTROL SITE PLAN
<b>SEWERS (STORM AND SANITARY)</b>		
010	3/1/2003	MANHOLE - 48-INCH ECCENTRIC CONE TOP
011	3/1/2003	MANHOLE - 48-INCH FLAT TOP
012	3/1/2003	MANHOLE - 60-INCH ECCENTRIC CONE TOP
013	3/1/2003	MANHOLE - 60-INCH FLAT TOP
014	3/1/2003	MANHOLE - 72-INCH ECCENTRIC CONE TOP
015	3/1/2003	MANHOLE - 72-INCH FLAT TOP
016	3/1/2003	MANHOLE - 84-INCH ECCENTRIC CONE TOP
017	3/1/2003	MANHOLE - 84-INCH FLAT TOP
018	3/1/2003	MANHOLE - 96-INCH ECCENTRIC CONE TOP
019	3/1/2003	MANHOLE - 96-INCH FLAT TOP
020	3/1/2003	MANHOLE - OUTSIDE DROP ASSEMBLY
021	3/1/2004	MANHOLE - INSIDE DROP ASSEMBLY
030	3/1/2003	MANHOLE COVER AND FRAME - STANDARD
031	3/1/2003	MANHOLE COVER AND FRAME - WATERTIGHT
032	3/1/2003	MANHOLE STEPS
040	3/1/2003	CATCH BASIN - 36-INCH GUTTER GRATE INLET
041	3/1/2003	CATCH BASIN - 30-INCH CURB INLET
042	3/1/2003	CATCH BASIN - 48-INCH CURB INLET
043	3/1/2003	DITCH INLET - 24-INCH PIPE
050	3/1/2003	CATCH BASIN - GRATE AND FRAME
060	10/1/2005	MANHOLE - WATER QUALITY
100	7/23/2018	CLEANOUT
241	2/12/2018	TRENCH & SURFACE RESTORATION
270	7/1/2004	CONCRETE PIPE SLOPE ANCHORS
290	3/1/2004	UNDERCROSSING
300	7/23/2018	SEWER BUILDING LATERAL
310	3/1/2003	SUBGRADE DRAIN
330	3/1/2003	PIPELINE STREAM CROSSING



**CITY OF TUALATIN STANDARD DRAWINGS  
TABLE OF CONTENTS**

DWG Number	Eff. Date	Title
<b>TRANSPORTATION</b>		
425	10/1/2005	STREET UTILITY LOCATIONS
430	Oct 2020	STRIPING DETAILS
431	Oct 2020	BIKE LANE TUBULAR MARKER
432	Oct 2020	RIGHT TURN ADD LANE WITH BIKE LANE
440	4/24/2017	COMMERCIAL DRIVEWAY APPROACH - CURBSIDE PLANTER STRIP
441	4/25/2017	COMMERCIAL DRIVEWAY APPROACH - CURBSIDE SIDEWALK
442	4/26/2017	RESIDENTIAL DRIVEWAY APPROACH - CURBSIDE PLANTER STRIP
443	4/27/2017	RESIDENTIAL DRIVEWAY APPROACH - CURBSIDE SIDEWALK
450	3/1/2003	PARABOLIC SPEED HUMP - CONSTRUCTION
451	3/1/2003	PARABOLIC SPEED HUMP - PAVEMENT MARKINGS AND STREET SIGNS
452	3/1/2003	SPEED TABLE HUMP - CONSTRUCTION
453	3/1/2003	SPEED TABLE HUMP - PAVEMENT MARKINGS AND STREET SIGNS
454	Oct 2020	SAFETY ISLAND
455	Oct 2020	SHARED USE PATH INTERSECTION WITH ROADWAY
456	Oct 2020	INTERSECTION SAFETY ISLAND
457	Oct 2020	CHANNELIZED RIGHT TURN LANE
458	Oct 2020	TRAFFIC CIRCLE
460	7/23/2018	ADA CURB RAMP - GENERAL NOTES
461	12/31/2016	ADA CURB RAMP - PERPENDICULAR
462	6/11/2015	ADA CURB RAMP - PARALLEL
463	11/19/2013	ADA CURB RAMP - MIDBLOCK
464	4/29/2012	ADA CURB RAMP - DETAILS
470	4/24/2017	CURB AND GUTTER
471	4/24/2017	CURB
472	Oct 2020	CURB EXTENSIONS AND CORNER RADII
475	7/23/2018	CONCRETE SIDEWALK
480	2/12/2018	ASHPALT REPAIR FOR NEWLY PAVED ROADS
481	2/12/2018	CONCRETE ROADWAY
482	2/12/2018	TEMPORARY STEEL PLATES
483	2/12/2018	TEMPORARY SURFACING
484	2/12/2018	PAVEMENT CORING REPAIR
490	Oct 2020	SINGLE SIDED (SOLAR) RECTANGULAR RAPID FLASHING BEACON ASSEMBLY
491	Oct 2020	DUAL SIDED (SOLAR) RECTANGULAR RAPID FLASHING BEACON ASSEMBLY
493	Oct 2020	SOLAR VEHICLE SPEED SIGN PEDESTAL



**CITY OF TUALATIN STANDARD DRAWINGS  
TABLE OF CONTENTS**

DWG Number	Eff. Date	Title
500	10/1/2005	MAILBOX POST INSTALLATION
510	3/1/2003	STREET BARRICADE
511	2/1/2002	STREET BARRICADE SIGN
512	3/1/2004	STORMWATER FACILITY SIGN
514	1/1/2013	TREE WELL AND GRATE
516	12/31/2016	STREET SIGN POST
517	12/31/2016	STREET NAME SIGN
520	4/1/2010	CENTERLINE SURVEY MONUMENT
530	7/9/2018	FOLD-DOWN BOLLARD
<b>WATER</b>		
600	4/1/2010	VALVE - GATE
601	4/1/2010	VALVE - BUTTERFLY
602	3/1/2008	VALVE - 1-INCH AIR RELEASE
603	3/1/2008	VALVE - 2-INCH AIR RELEASE
604	3/1/2008	SAMPLE STATION
605	3/1/2008	MAINLINE VALVE ASSEMBLY - PERMANENT BLOW-OFF
606	3/1/2008	MAINLINE VALVE ASSEMBLY - TEMPORARY BLOW-OFF
607	12/1/2018	REDUCED PRESSURE BACKFLOW ASSEMBLY (EXTERIOR) - 3/4" THROUGH 2"
608	12/1/2018	REDUCED PRESSURE BACKFLOW ASSEMBLY (INTERIOR) - 3/4" THROUGH 2"
609	12/1/2018	DOUBLE CHECK BACKFLOW ASSEMBLY - 3/4" THROUGH 1"
610	12/1/2018	FIRE HYDRANT ASSEMBLY
611	12/1/2018	DOUBLE CHECK BACKFLOW ASSEMBLY - 1-1/2" THROUGH 2-1/2"
612	12/1/2018	REDUCED PRESSURE BACKFLOW ASSEMBLY (INTERIOR) - 2-1/2" THROUGH 10"
613	12/1/2018	DOUBLE CHECK BACKFLOW ASSEMBLY - 3" THROUGH 10"
614	12/1/2018	DOUBLE CHECK DETECTOR FIRE PROTECTION - WITHOUT FDC
615	12/1/2018	DOUBLE CHECK DETECTOR FIRE PROTECTION - WITH FDC CONNECTION
616	12/1/2018	DOUBLE CHECK VALVE ASSEMBLY - INSIDE BLDG. 3/4" THROUGH 2"
617	12/1/2018	REDUCED PRESSURE BACKFLOW ASSEMBLY (EXTERIOR) - 2-1/2" THROUGH 10"
620	7/1/2003	PIPE JOINT RESTRAINT - BEARING THRUST BLOCKS
621	7/1/2003	PIPE JOINT RESTRAINT - GRAVITY THRUST BLOCKS
622	7/1/2003	PIPE JOINT RESTRAIN - STRADDLE THRUST BLOCKS
630	Oct 2020	WATER SERVICE - 5/8" X 3/4" METER
631	Oct 2020	WATER SERVICE - 1" METER
632	Oct 2020	WATER SERVICE - 1-1/2" METER
633	Oct 2020	WATER SERVICE - 2" METER
634	12/1/2018	WATER SERVICE - 3" AND LARGER METER COMPOUND TYPE

GENERAL NOTES APPLICABLE TO ALL CITY OF TUALATIN DETAILS:

1. ALL STRUCTURES MUST BE LOCATED OUTSIDE OF THE PEDESTRIAN TRAVEL PATH. IF STRUCTURES ARE REQUIRED TO BE LOCATED PARTIALLY OR FULLY IN THE PEDESTRIAN TRAVEL WAY, THE STRUCTURES MUST ADHERE TO PROWAG'S SURFACE REQUIREMENTS (PROWAG R302.7).
2. RIMS OF STRUCTURES LOCATED WITHIN THE PEDESTRIAN TRAVEL WAY MUST BE FLUSH WITH SURROUNDING GRADE, AND CHANGES IN LEVEL MUST NOT EXCEED  $\frac{1}{4}$ " OR  $\frac{1}{2}$ " WITH A 1:2 BEVEL (PROWAG R302.7.2).
3. GAPS BETWEEN SURFACES OR GRATINGS MAY NOT EXCEED  $\frac{1}{2}$ " (PROWAG R302.7.3). STRUCTURES WITH GAPS THAT EXCEED  $\frac{1}{2}$ " SHALL BE LOCATED OUTSIDE THE PEDESTRIAN TRAVEL PATH.
4. SURFACES OF LIDS OF GRATES MUST BE FIRM, STABLE, AND SLIP RESISTANT (PROWAG R302.7).
5. OBJECTS LOCATED WITHIN THE PEDESTRIAN TRAVEL WAY MUST MEET PROWAG REQUIREMENTS, SPECIFICALLY ROUTE WIDTH (PROWAG R302.3), PROTRUSION LIMITS (PROWAG R402), AND CLEAR SPACE REQUIREMENTS (PROWAG R404).
6. CATCH BASINS AND ADJACENT GUTTER SECTIONS REQUIRING PAVEMENT DEFORMATIONS SHALL NOT BE LOCATED IN PEDESTRIAN STREET CROSSINGS (MARKED OR UNMARKED) OR OTHER PEDESTRIAN PATH OF TRAVEL, OR SHALL BE LOCATED IN A MANNER THAT ADHERES TO PROWAG'S SLOPE REQUIREMENTS (PROWAG R302.5.1).



**CITY OF  
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**GENERAL  
NOTES**

REVISED: 09/2020  
VALID: 10/2020

SCALE: NOT TO SCALE

DRAWN: M. SCHLAGEL  
APPROVED: K. MCMILLAN

DWG NO. **001**



**CITY OF  
TUALATIN, OR**

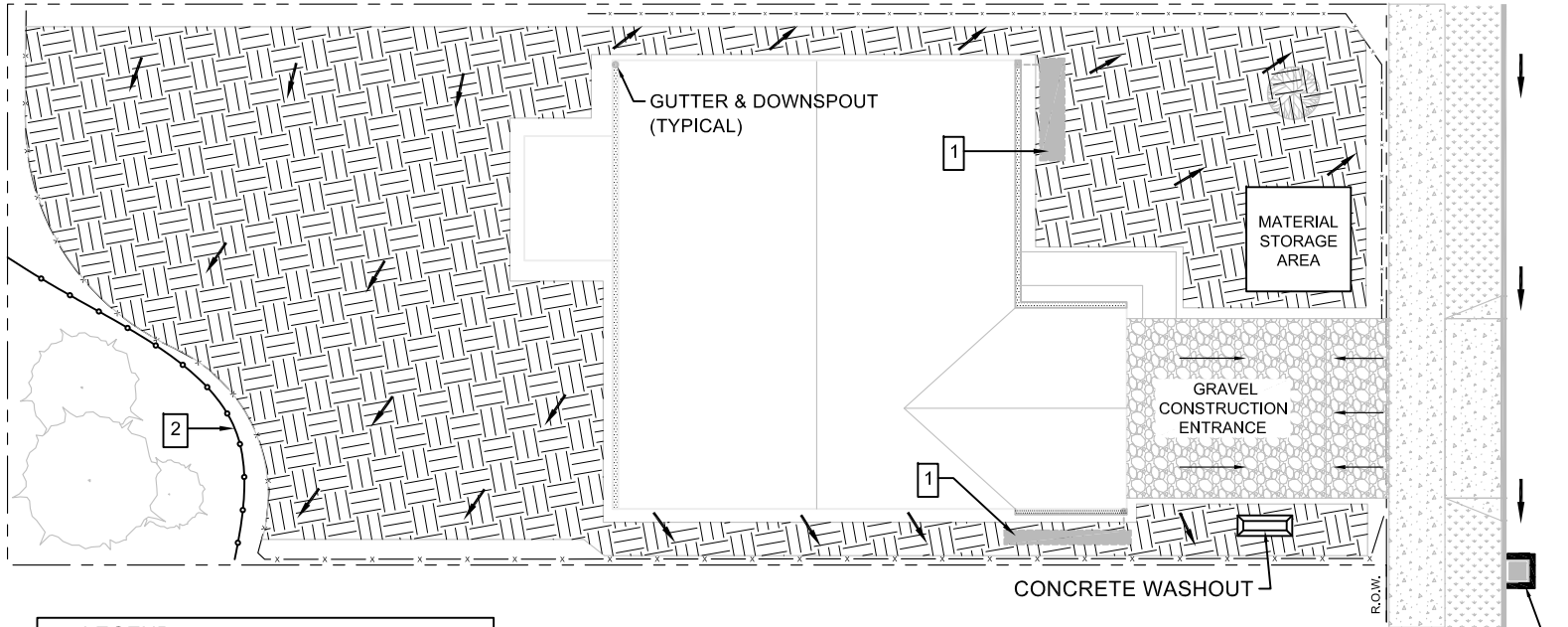
**EROSION & SEDIMENT  
CONTROL EXAMPLE SINGLE  
FAMILY SITE PLAN**

REVISED: 09/2020  
VALID: 10/2020

SCALE: NOT TO SCALE

DRAWN: M. SCHLAGEL  
APPROVED: K. MCWILLAN

DWG NO. 005



**LEGEND**

- PROPERTY LINE
- PERIMETER SEDIMENT CONTROL
- TEMP CONSTRUCTION FENCE
- GROUND SLOPE DIRECTION
- EXISTING VEGETATION
- STABILIZED SOIL
- EXISTING TREE
- EXISTING VEGETATION

**KEYNOTES:**

- ① MINIMIZE COMPACTION OF SURFACE INFILTRATION AREAS. INSTALL PROTECTION FENCING WHEN FEASIBLE.
- ② IF VEGETATED CORRIDOR AND/OR OTHER SENSITIVE AREAS ARE PRESENT, INSTALL CONSTRUCTION FENCE ALONG BOUNDARY.

**CONSTRUCTION SITE BEST MANAGEMENT PRACTICES (BMPs)**

REQUIRED BASE MEASURES

- PERIMETER SEDIMENT CONTROL
- CONSTRUCTION SITE ENTRANCE
- STORM DRAIN INLET PROTECTION

INSTALL INLET PROTECTION (TYPICAL)

NON-STORMWATER POLLUTION CONTROL BMPs

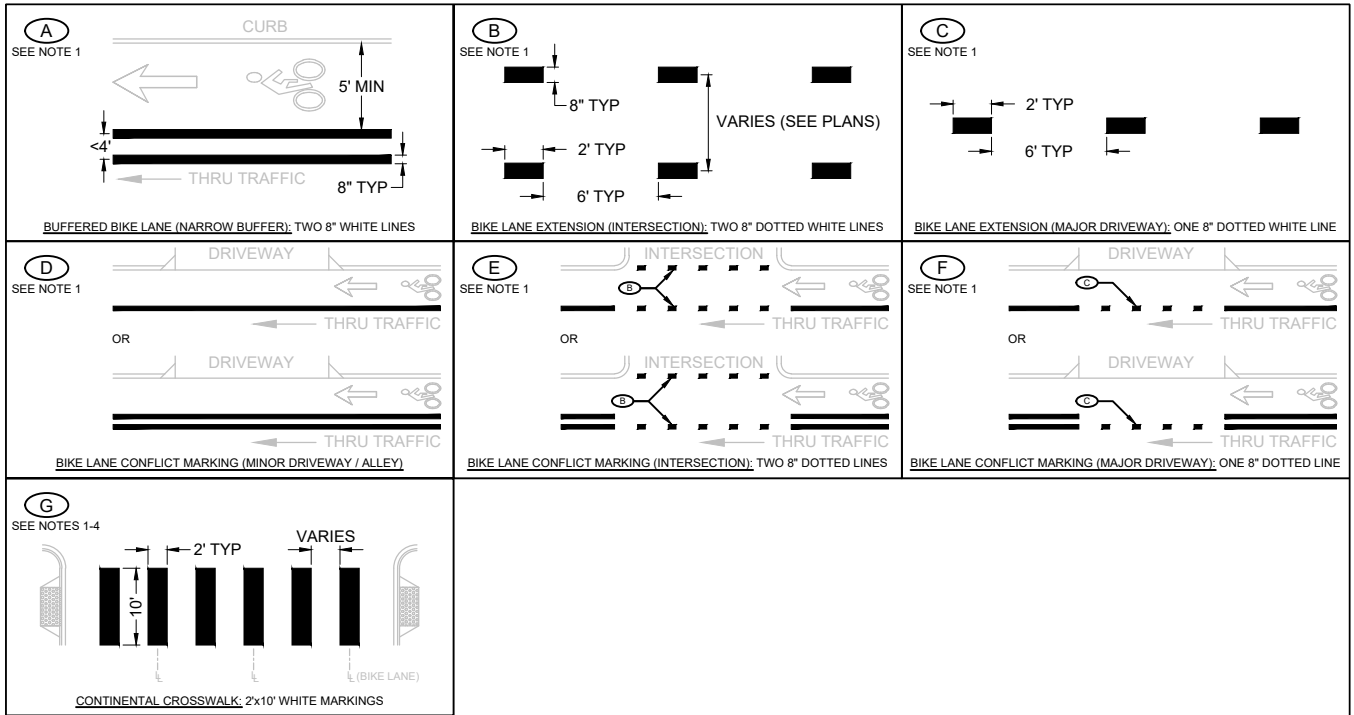
- STORE ALL PAINTS, STAINS, SOLVENTS, AND HAZARDOUS MATERIAL IN A COVERED STORAGE AREA.
- DISPOSE OF ALL TRASH/DEBRIS THAT COULD ENTER STORM SYSTEM IN A DUMPSTER OR TRASH CAN.
- CLEAN UP SPILLS PROMPTLY USING DRY CLEANUP METHODS.
- DISPOSE OF CONCRETE WASHOUT IN APPROVED LOCATIONS TO REDUCE POTENTIAL FOR DISCHARGE FROM CONSTRUCTION SITE.

ADDITIONAL CONSTRUCTION SITE BMPs

- SWEEP STREET AND/OR HARD SURFACES DAILY AND PROPERLY DISPOSE OF ALL MATERIALS.
- REMOVE TEMPORARY CONTROL MEASURES WHEN NO LONGER NEEDED.
- INSTALL GUTTERS & DOWNSPOUTS AS EARLY AS POSSIBLE. CAPTURE RUNOFF TO PREVENT ADDITIONAL ON SITE EROSION E.G. SWALE, RAIN GARDEN, FRENCH DRAIN.
- IF EXISTING VEGETATION IN RIGHT-OF-WAY IS DISTURBED AND SOIL IS EXPOSED, INSTALL A PERIMETER SEDIMENT CONTROL TO PREVENT MATERIAL FROM ENTERING ROADWAY.

DO NOT DUMP OR WASH ANY MATERIAL INTO THE STORM DRAIN

DISCLAIMER: FOR GUIDANCE ONLY. BEST MANAGEMENT PRACTICES MAY VARY DEPENDING ON CONSTRUCTION SITE CHARACTERISTICS. FOR MORE INFORMATION ON EROSION CONTROL MEASURES PLEASE SEE CLEAN WATER SERVICES D&C STANDARDS CHAPTER 6 OR THE EROSION PREVENTION & SEDIMENT CONTROL MANUAL (VERSION 1, MAY 5, 2016)



**NOTES:**

1. USE 120 MILLIMETER WHITE HIGH SKID THERMOPLASTIC PAVEMENT MARKING MATERIAL.
2. USE CONTINENTAL CROSSWALK MARKINGS FOR ALL MARKED CROSSWALKS.
3. PLACE CROSSWALK BARS PARALLEL TO THE DIRECTION OF MOTOR VEHICLE TRAFFIC TO AVOID TIRE WEAR.
4. CENTER CROSSWALK BARS ON LANE LINES (ℓ) AND AT CENTER OF LANES AS SHOWN TO AVOID TIRE WEAR.



**CITY OF  
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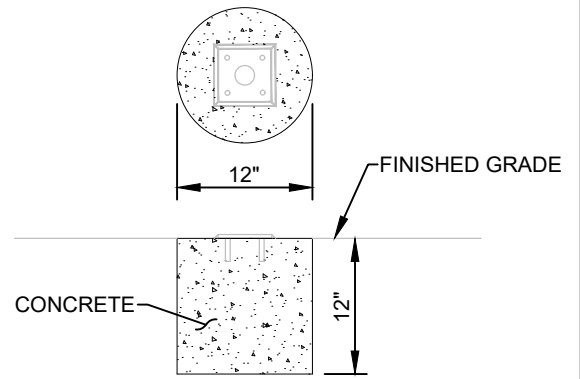
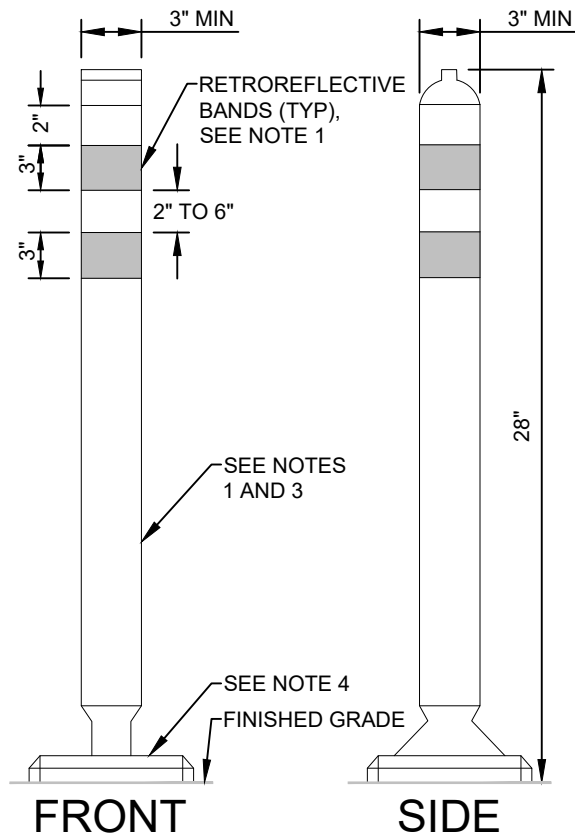
**STRIPING DETAILS**

REVISED: 09/2020  
 VALID: 10/2020

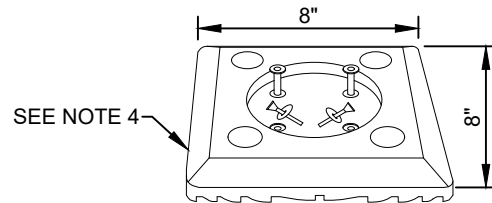
SCALE: NOT TO SCALE

DRAWN: K. PAULSEN  
 APPROVED: J. FUCHS

DWG NO. **430**



**CONCRETE BASE**



**QUICK RELEASE FIXED BASE**



**NOTES:**

1. TUBULAR MARKERS AND RETROREFLECTIVE MATERIAL TO BE THE SAME COLOR AS THE SUPPLEMENTED PAVEMENT MARKING.
2. MAXIMUM SPACING DISTANCE EQUALS THE NUMERICAL VALUE OF THE ROADWAY DESIGN SPEED (MPH), IN FEET.
3. TUBULAR MARKER SHALL BE OBTAINED FROM 'IMPACT RECOVERY SYSTEMS, INC' (WHITE TUBULAR MARKER PRODUCT CODE: TP3-28WS-DW-DW-Q) OR APPROVED EQUAL. BOTTOM OF TUBULAR MARKER TO BE QUICK RELEASE. TUBULAR MARKER TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
4. BASE OF TUBULAR MARKER TO HAVE A "QUICK RELEASE" FEATURE (PRODUCT CODE: BS-SMQB). BASE TO BE INSTALLED USING ANCHOR KIT (PRODUCT CODE: IM-ANCHOR, SEE MANUFACTURER'S INSTRUCTIONS) OR "J" BOLTS SET INTO CONCRETE.



**CITY OF TUALATIN, OR**

**BIKE LANE TUBULAR MARKER**

REVISED: 09/2020  
VALID: 10/2020

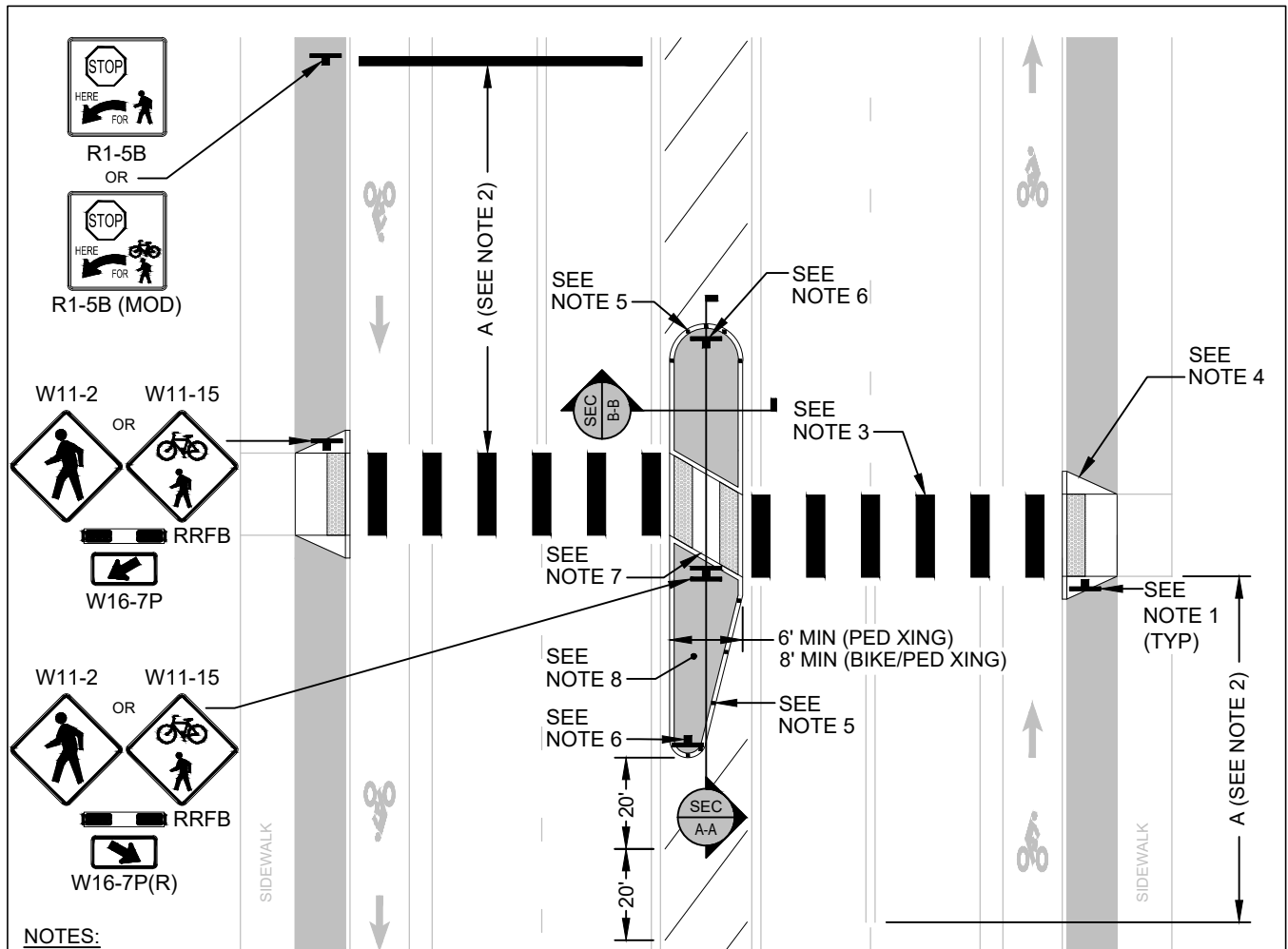
SCALE: NOT TO SCALE

DRAWN: K. PAULSEN  
APPROVED: J. FUCHS

DWG NO. **431**







**NOTES:**

1. SINGLE SIDED OR DUAL SIDED (SOLAR) RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN ASSEMBLY AND PUSH BUTTON (SEE STD DWG #490 OR 491). NEAR-SIDE/FAR-SIDE PLACEMENT OF SIGN ASSEMBLY AT CROSSING LOCATION BASED ON SURROUNDING LAND USE AND APPROVAL BY CITY.
2. DISTANCE 'A' FOR ADVANCE 'STOP HERE FOR PEDESTRIANS' SIGN (R1-5B) AND LIMIT LINE BASED ON POSTED SPEED AND DETERMINED BY ENGINEER.
3. CONTINENTAL CROSSWALK, SEE STD DWG #430 DETAIL G.
4. CURB RAMP WITH TRUNCATED DOME DETECTABLE WARNING SURFACE PER STD DWG #460, 463, AND 464.
5. INSTALL YELLOW TYPE 1 BI-DIRECTIONAL RAISED PAVEMENT MARKER, MINIMUM OF 5 AT EACH END OF ISLAND. CITY ENGINEER TO APPROVE TYPE OF MEDIAN NOSE STYLE.
6. INSTALL "KEEP RIGHT" SIGN (R4-7) AND OBJECT MARKER SIGN (OM-3L) IN MEDIAN. USE WASHINGTON COUNTY DETAIL 6050 FOR SIGNING BASE.
7. ANGLE OF 30°. ISLAND WALKWAY AT ROAD GRADE LEVEL. PROVIDE MINIMUM 2' SEPARATION BETWEEN TRUNCATED DOME DETECTABLE WARNING SURFACE PANELS.
8. DO NOT LANDSCAPE MEDIAN ISLAND.
9. SEE WASHINGTON COUNTY DETAIL 2310 FOR SECTIONS A-A AND B-B.



**CITY OF  
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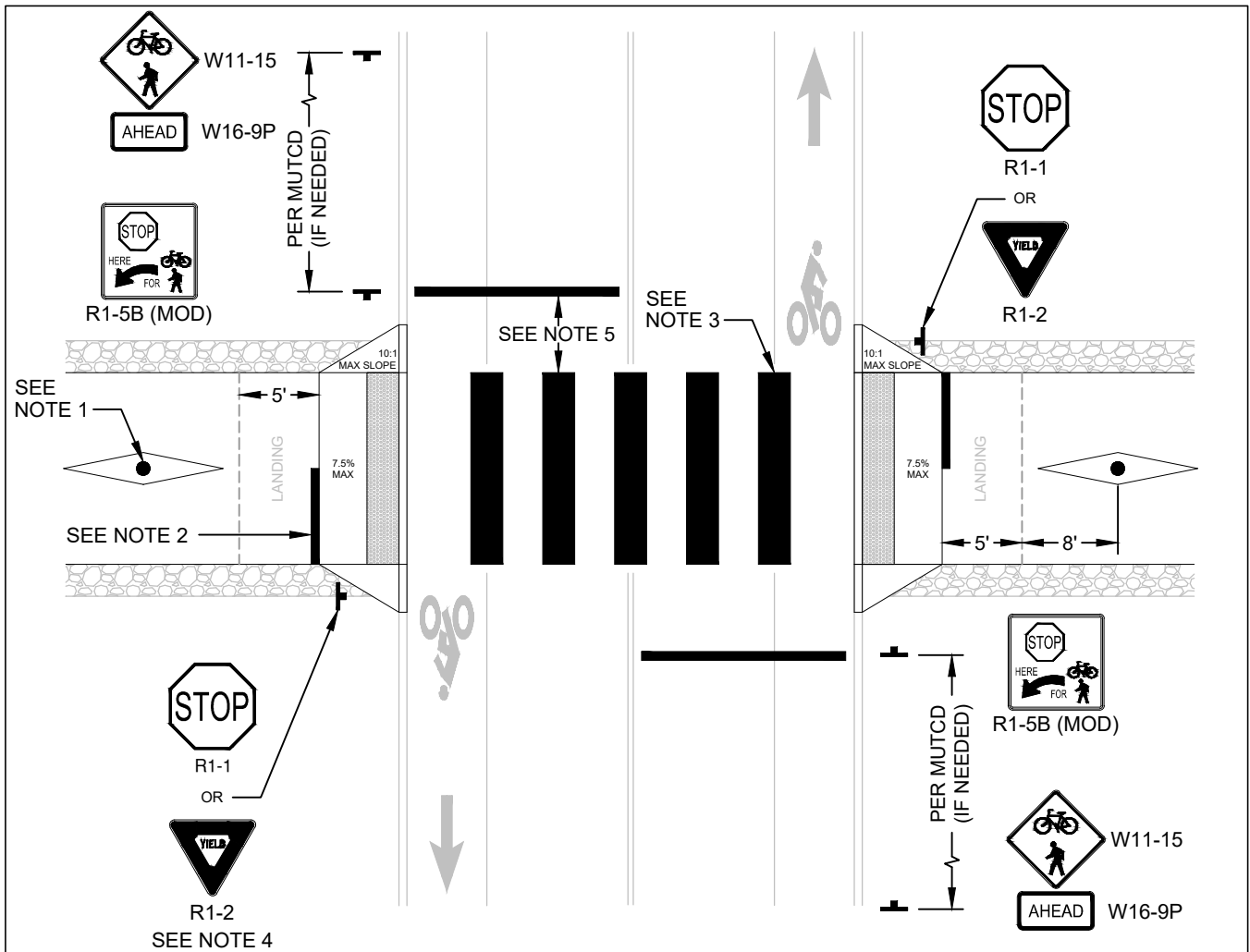
**SAFETY ISLAND**

REVISED: 09/2020  
VALID: 10/2020

SCALE: NOT TO SCALE

DRAWN: K. PAULSEN  
APPROVED: J. FUCHS

DWG NO. **454**



**NOTES:**

1. IF PATH IS WIDER THAN 9 FEET, INSTALL BOLLARD (SEE STD DWG #530) AND STRIPING (SEE MUTCD FIGURE 9C-8A).
2. (OPTIONAL) INSTALL LIMIT LINE OR YIELD MARKINGS CORRESPONDING TO TRAFFIC-CONTROL AT TRAIL APPROACH.
3. CONTINENTAL CROSSWALK, SEE STD DWG #440 DETAIL G.
4. DETERMINE 'STOP' OR 'YIELD' CONTROL BASED ON STOPPING SIGHT DISTANCE GUIDANCE IN CHAPTER 5 OF THE 2012 AASHTO *GUIDE FOR THE DEVELOPMENT OF BICYCLE FACILITIES*.
5. DISTANCE FOR ADVANCE 'STOP HERE FOR PEDESTRIANS' SIGN (R1-5B) AND LIMIT LINE BASED ON POSTED SPEED AND ENGINEER'S AUTHORITY.
6. APPLY TREATMENT AT TRAIL CROSSINGS INTERSECTING ROADWAYS WITH POSTED SPEED  $\leq 35$  MPH AND WHERE THERE IS ADEQUATE SIGHT DISTANCE.
7. MEDIAN REFUGE ISLAND MAY BE REQUIRED AS DIRECTED BY CITY ENGINEER.
8. SIGNAL, RRFB, OR PHB MAY BE REQUIRED AS DIRECTED BY CITY ENGINEER.



**CITY OF  
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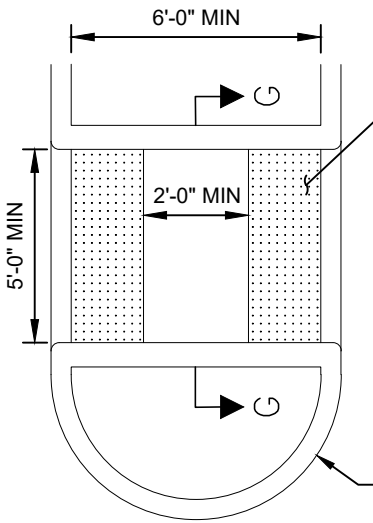
**SHARED USE PATH  
INTERSECTION WITH ROADWAY**

REVISED: 09/2020  
VALID: 10/2020

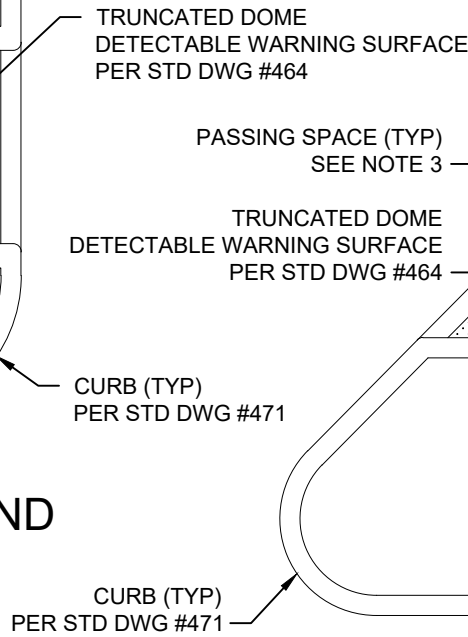
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DRAWN: K. PAULSEN  
APPROVED: J. FUCHS

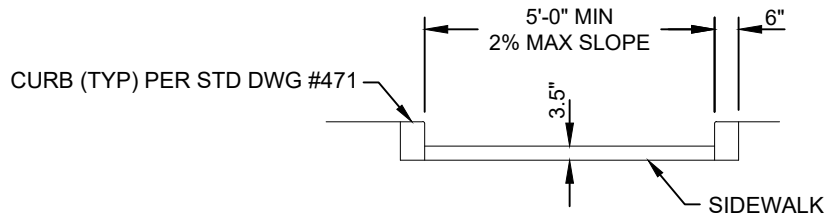
DWG NO. **455**



**MEDIAN REFUGE ISLAND**



**CHANNELIZING ISLAND**



**SECTION G-G**

**NOTES:**

1. DETAILS ARE INTENDED TO SHOW MINIMUM REQUIRED CLEARANCES AND DETECTABLE WARNING SURFACE PLACEMENT LOCATIONS.
2. USE CUT-THROUGH OR STANDARD CURB RAMP DETAILS FOR PEDESTRIAN ACCESS ROUTES THROUGH ISLAND.
3. PROVIDE A MINIMUM 5'-0" x 5'-0" PASSING SPACE FOR EACH PEDESTRIAN ACCESS ROUTE THROUGH ISLAND.



**CITY OF TUALATIN, OR**

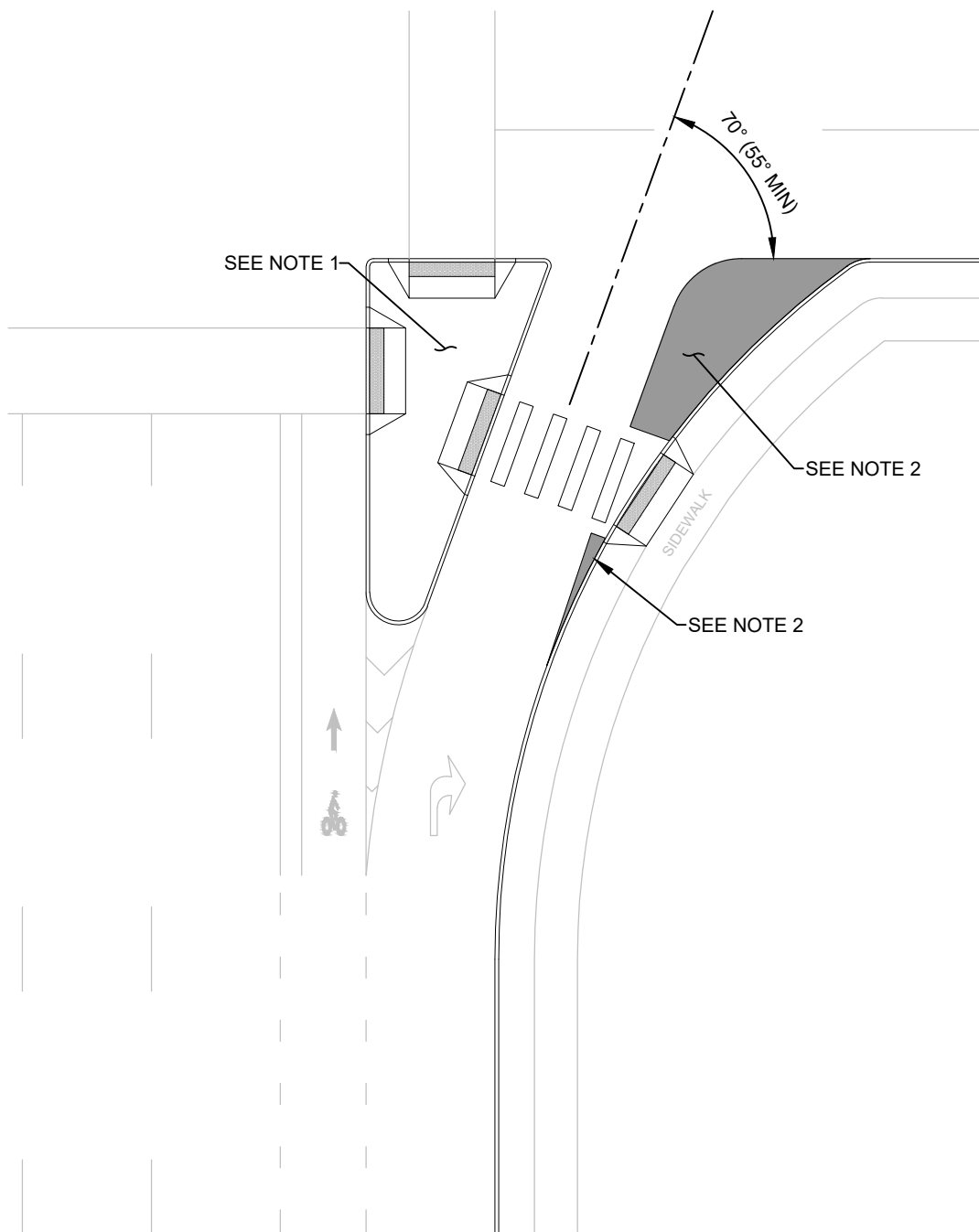
**INTERSECTION SAFETY ISLAND**

REVISED: 09/2020  
VALID: 10/2020

SCALE: NOT TO SCALE

DRAWN: K. PAULSEN  
APPROVED: J. FUCHS

DWG NO. **456**



**NOTES:**

1. INTERSECTION SAFETY ISLAND, SEE STD DWG #456.
2. MOUNTABLE TRUCK APRON TO ACCOMMODATE DESIGN VEHICLE.



**CITY OF  
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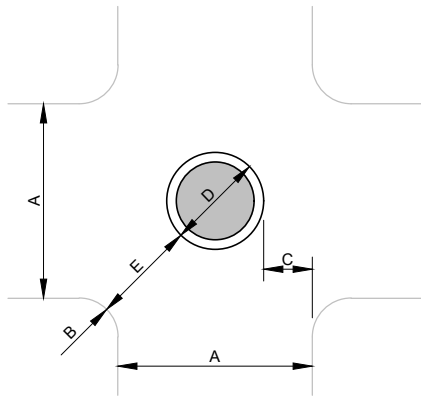
**CHANNELIZED RIGHT TURN LANE**

REVISED: 09/2020  
VALID: 10/2020

SCALE: NOT TO SCALE

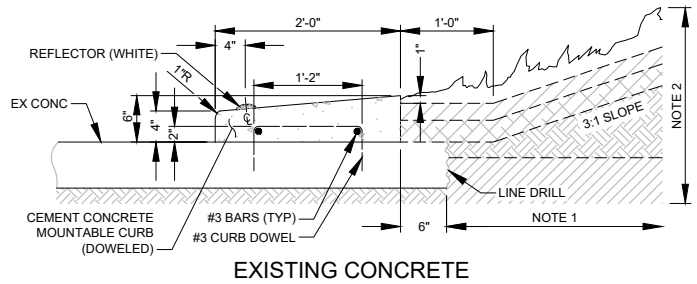
DRAWN: K. PAULSEN  
APPROVED: J. FUCHS

DWG NO. **457**

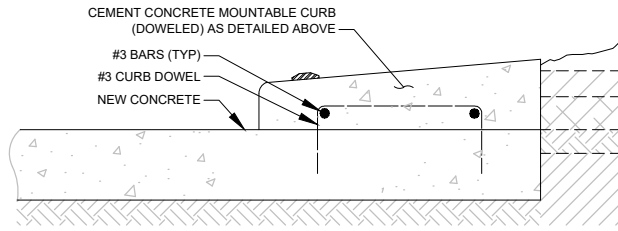


**NOTES:**

1. REMOVE PAVEMENT AND BASE COURSE, THOROUGHLY LOOSEN SUBSOIL TO 6" DEPTH (AFTER COMPLETE REMOVAL OF ALL PAVEMENT AND BASE MATERIAL).



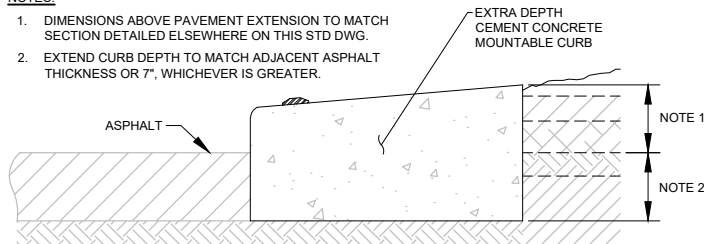
EXISTING CONCRETE



NEW CONCRETE

**NOTES:**

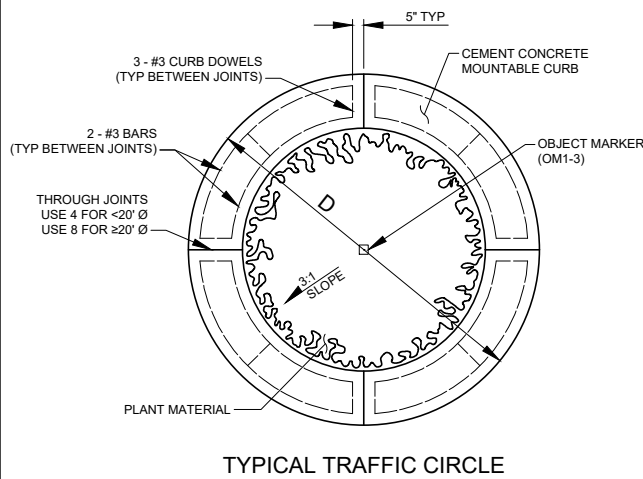
1. DIMENSIONS ABOVE PAVEMENT EXTENSION TO MATCH SECTION DETAILED ELSEWHERE ON THIS STD DWG.
2. EXTEND CURB DEPTH TO MATCH ADJACENT ASPHALT THICKNESS OR 7", WHICHEVER IS GREATER.



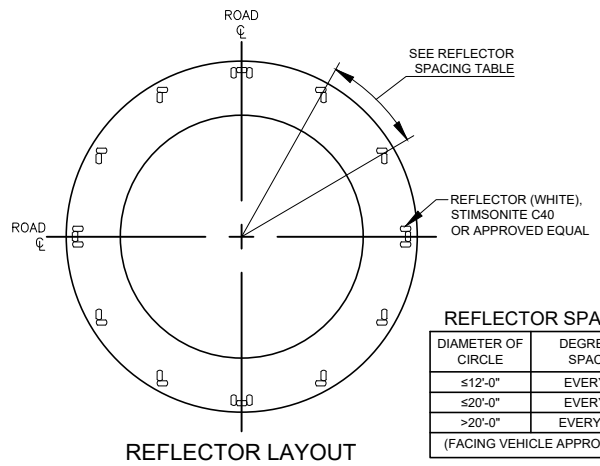
ASPHALT

A STREET WIDTH	B CURB RETURN RADIUS	C SET BACK DISTANCE	D CIRCLE DIAMETER	E OPENING WIDTH
20'	RECONSTRUCT CURBS			
	<15'	5.5'	9'	16'+
	15'	5.0'	10'	17'-
	18'	4.5'	11'	18'-
	20'	4.0'	12'	19'+
24'	RECONSTRUCT CURBS			
	<12'	5.5'	13'	16'+
	12'	5.0'	14'	17'-
	15'	4.5'	15'	18'+
	20'	3.5'	17'	20'-
25'	RECONSTRUCT CURBS			
	<12'	5.5'	14'	16'+
	12'	5.0'	15'	17'-
	15'	4.5'	16'	18'-
	20'	4.5'	16'	18'+
30'	RECONSTRUCT CURBS			
	<12'	5.5'	18'	20'+
	10'	5.0'	19'	16'+
	12'	5.0'	20'	17'-
	15'	5.0'	20'	17'+
32'	RECONSTRUCT CURBS			
	15'	4.5'	21'	18'+
	18'	4.0'	22'	19'+
	20'	4.0'	22'	19'+
	25'	3.0'	24'	20'
36'	RECONSTRUCT CURBS			
	10'	5.5'	21'	16'+
	12'	5.0'	22'	17'-
	15'	4.5'	23'	18'-
	20'	4.0'	24'	19'+
40'	RECONSTRUCT CURBS			
	10'	5.0'	26'	17'-
	12'	5.0'	26'	17'+
	15'	4.0'	27'	18'+
	18'	4.0'	28'	19'+
OPTIMUM CRITERIA	RECONSTRUCT CURBS			
	-	5.5' MAX	-	16' MIN
	-	5'	-	17'±
	-	4.5'	-	18'±
	-	4'	-	19'±
-	3.5' OR LESS	-	20'	

NOTE: "+" or "-" DENOTES MINOR VARIATIONS



TYPICAL TRAFFIC CIRCLE



REFLECTOR LAYOUT



**CITY OF  
TUALATIN, OR**

**TRAFFIC CIRCLE**

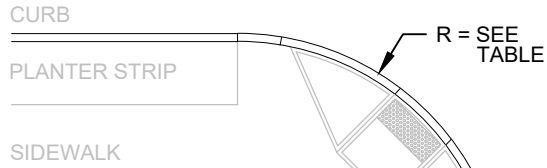
REVISED: 09/2020  
VALID: 10/2020

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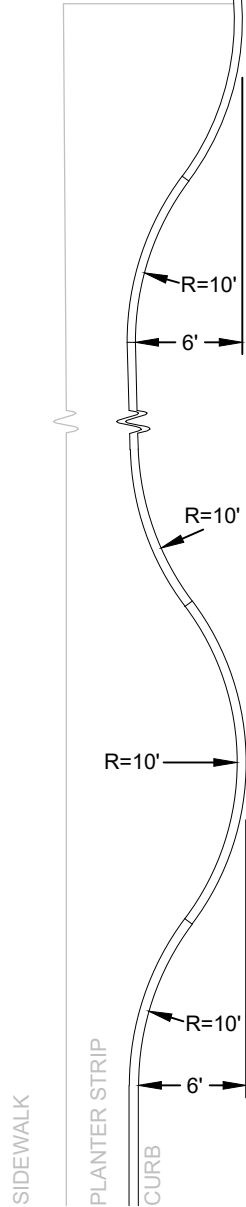
DRAWN: K. PAULSEN  
APPROVED: J. FUCHS

DWG NO. **458**

# CORNER CURB EXTENSION



# MID-BLOCK CURB EXTENSION



INTERSECTING STREETS	CURB RADIUS
NEIGHBORHOOD YIELD STREETS	10'
ALL OTHER STREETS (EXCEPT FREIGHT STREETS)	20'
MINOR FREIGHT STREETS	25'
MAJOR FREIGHT STREETS	30'

**NOTES:**

1. SIZE CURB EXTENSIONS SO GUTTER PAN JOINT, IF PRESENT, IS OUTSIDE OF THE BIKE LANE.
2. BEGIN CURVATURE OF CURB BULB NO LESS THAN 10' BEYOND THE CROSSWALK.
3. IF CURB EXTENSION IS LANDSCAPED, USE LOW GROWING VEGETATION TO MAINTAIN ADEQUATE SIGHT DISTANCE.
4. USE YELLOW PAINT ON TOP AND FACE OF CURB. DO NOT PAINT CURB RAMP OR RAMP WINGS. PLACE 4" WHITE MONO-DIRECTIONAL TYPE I REFLECTORS ON TOP OF CURB, IN ADVANCE OF THE CURB RAMP. POSITION REFLECTORS AT 2' INCREMENTS OFFSET FROM THE CURB LINE PARALLEL TO THE PATH OF APPROACHING TRAFFIC.
5. DESIGN FOR DRAINAGE TO CATCH BASIN.



**CITY OF TUALATIN, OR**

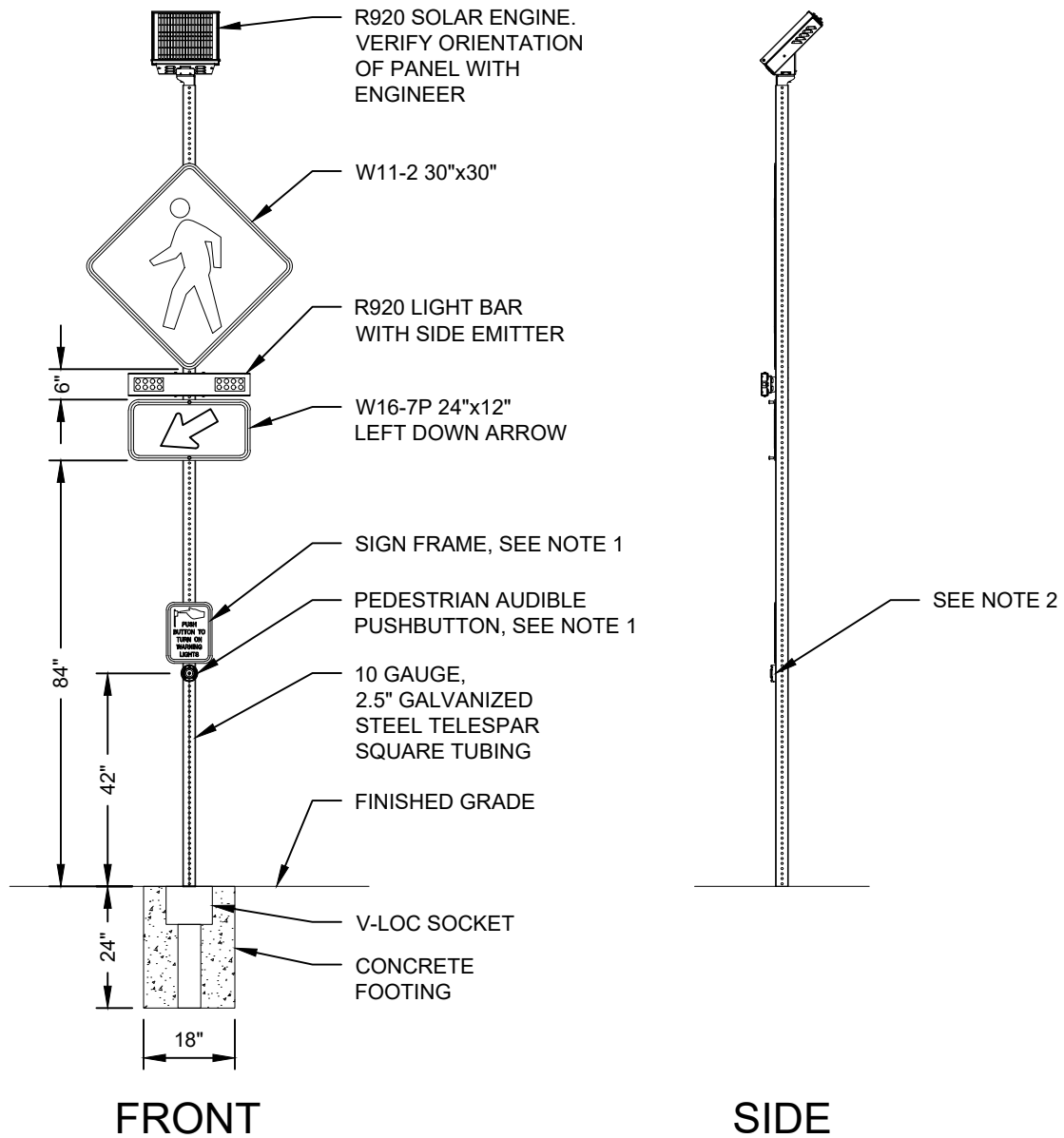
**CURB EXTENSIONS AND CORNER RADII**

REVISED: 09/2020  
VALID: 10/2020

SCALE: NOT TO SCALE

DRAWN: K. PAULSEN  
APPROVED: J. FUCHS

DWG NO. **472**



**NOTES:**

1. INSTALL 'PUSHBUTTON' AND 'SIGN FRAME' ON SIDE OF POLE NEAREST TO CORRESPONDING CURB RAMP. ORIENT PUSHBUTTON TACTILE ARROW AND SIGN TOWARD THE CORRESPONDING CROSSING.
2. INSTALL 'BULLDOG' STYLE PEDESTRIAN PUSHBUTTON WHEN POLE IS LOCATED AT BACK OF SIDEWALK.



**CITY OF  
TUALATIN, OR**

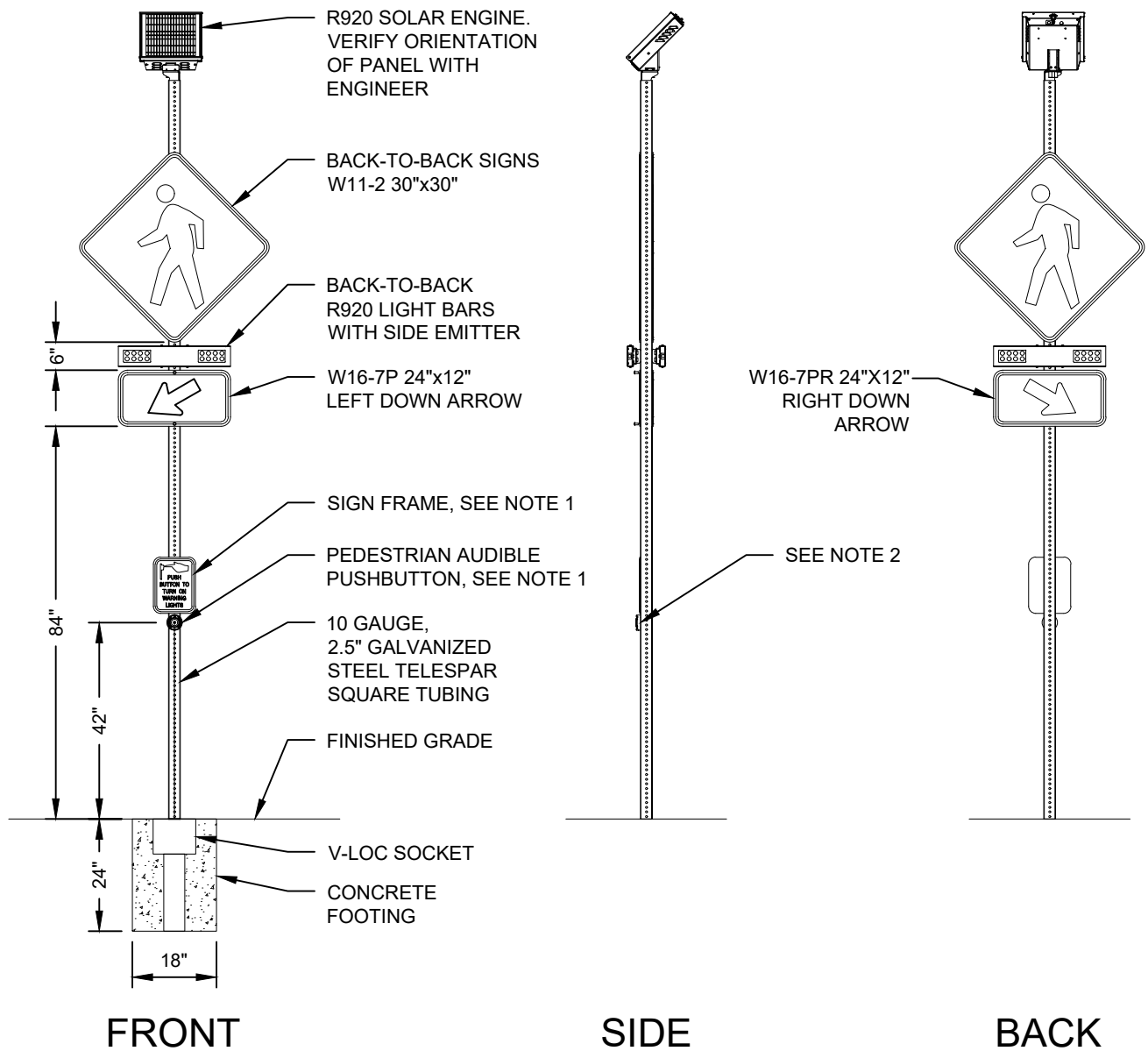
**SINGLE SIDED (SOLAR)  
RECTANGULAR RAPID FLASHING  
BEACON ASSEMBLY**

REVISED: 09/2020  
VALID: 10/2020

SCALE: NOT TO SCALE

DRAWN: K. PAULSEN  
APPROVED: J. FUCHS

DWG NO. **490**



**NOTES:**

1. INSTALL 'PUSHBUTTON' AND 'SIGN FRAME' ON SIDE OF POLE NEAREST TO CORRESPONDING CURB RAMP. ORIENT PUSHBUTTON TACTILE ARROW AND SIGN TOWARD THE CORRESPONDING CROSSING.
2. INSTALL 'BULLDOG' STYLE PEDESTRIAN PUSHBUTTON WHEN POLE IS LOCATED AT BACK OF SIDEWALK.



**CITY OF TUALATIN, OR**

**DUAL SIDED (SOLAR) RECTANGULAR RAPID FLASHING BEACON ASSEMBLY**

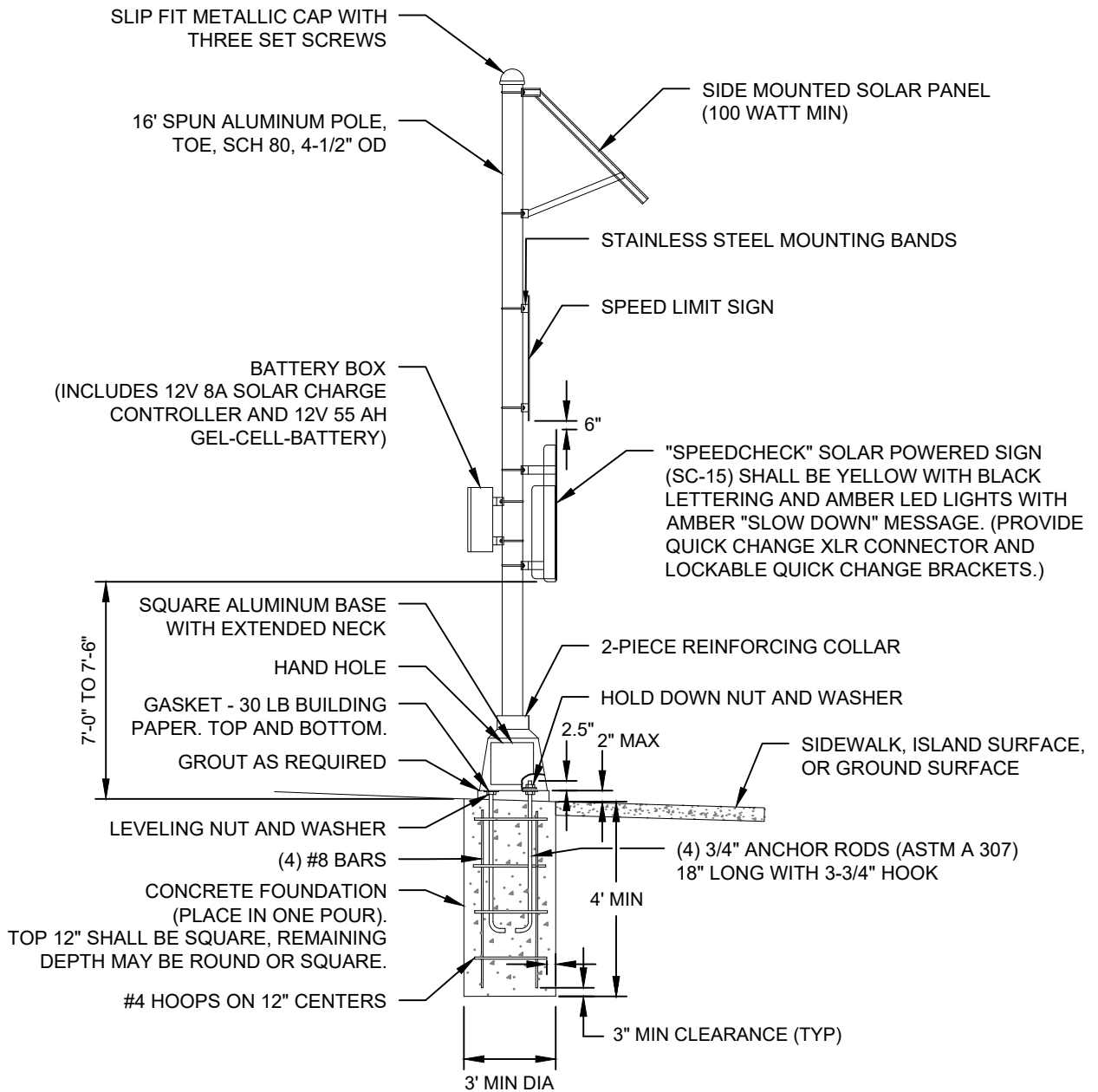
REVISED: 09/2020  
VALID: 10/2020

SCALE: NOT TO SCALE

DRAWN: K. PAULSEN  
APPROVED: J. FUCHS

DWG NO. **491**





**CITY OF  
TUALATIN, OR**

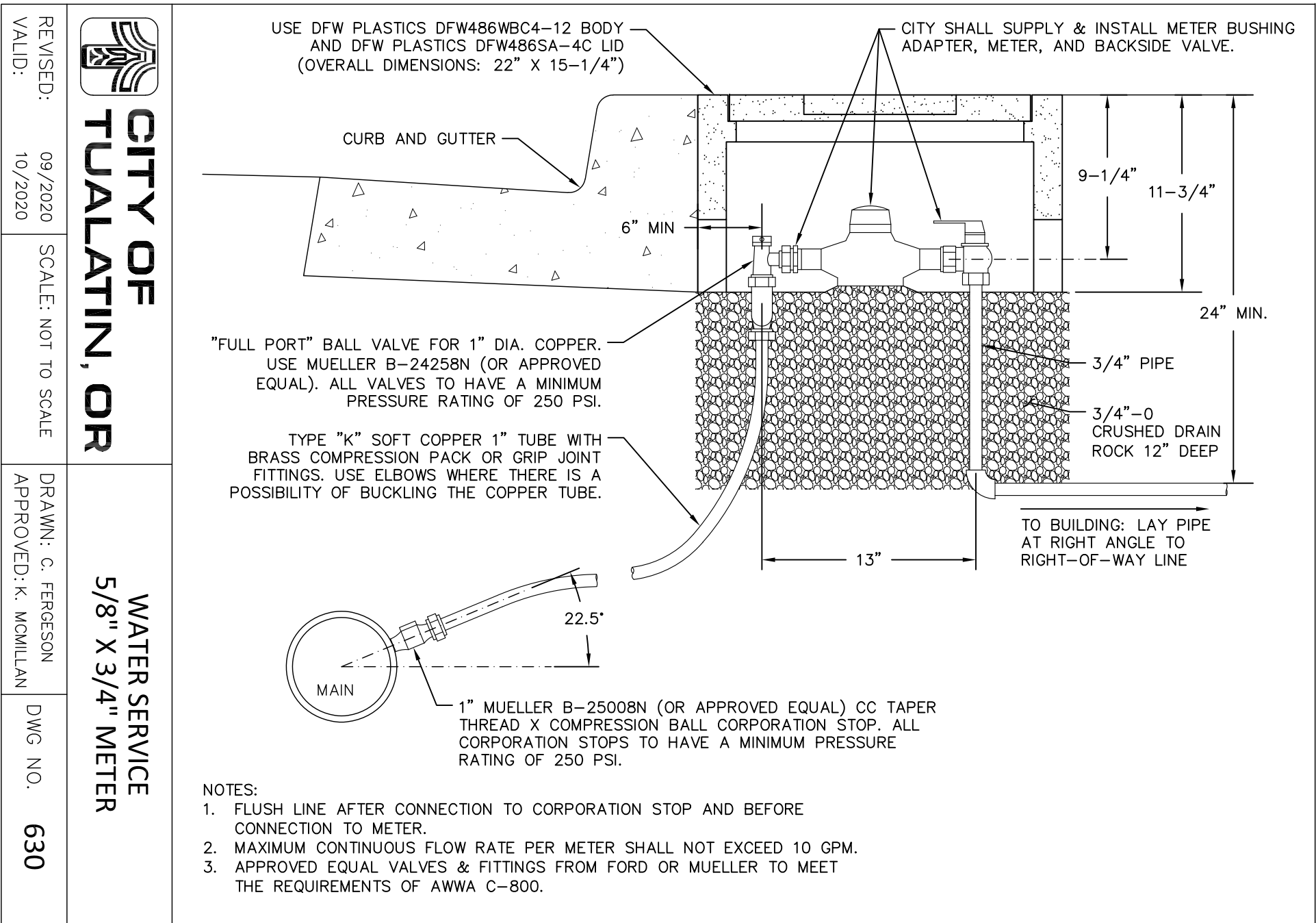
**SOLAR VEHICLE SPEED  
SIGN PEDESTAL**

REVISED: 09/2020  
VALID: 10/2020

SCALE: NOT TO SCALE

DRAWN: K. PAULSEN  
APPROVED: J. FUCHS

DWG NO. **493**



USE DFW PLASTICS DFW486WBC4-12 BODY AND DFW PLASTICS DFW486SA-4C LID (OVERALL DIMENSIONS: 22" X 15-1/4")

CITY SHALL SUPPLY & INSTALL METER BUSHING ADAPTER, METER, AND BACKSIDE VALVE.

CURB AND GUTTER

6" MIN

9-1/4"

11-3/4"

24" MIN.

"FULL PORT" BALL VALVE FOR 1" DIA. COPPER. USE MUELLER B-24258N (OR APPROVED EQUAL). ALL VALVES TO HAVE A MINIMUM PRESSURE RATING OF 250 PSI.

TYPE "K" SOFT COPPER 1" TUBE WITH BRASS COMPRESSION PACK OR GRIP JOINT FITTINGS. USE ELBOWS WHERE THERE IS A POSSIBILITY OF BUCKLING THE COPPER TUBE.

3/4" PIPE

3/4"-0 CRUSHED DRAIN ROCK 12" DEEP

TO BUILDING: LAY PIPE AT RIGHT ANGLE TO RIGHT-OF-WAY LINE

13"

22.5°

MAIN

1" MUELLER B-25008N (OR APPROVED EQUAL) CC TAPER THREAD X COMPRESSION BALL CORPORATION STOP. ALL CORPORATION STOPS TO HAVE A MINIMUM PRESSURE RATING OF 250 PSI.

NOTES:

1. FLUSH LINE AFTER CONNECTION TO CORPORATION STOP AND BEFORE CONNECTION TO METER.
2. MAXIMUM CONTINUOUS FLOW RATE PER METER SHALL NOT EXCEED 10 GPM.
3. APPROVED EQUAL VALVES & FITTINGS FROM FORD OR MUELLER TO MEET THE REQUIREMENTS OF AWWA C-800.



**CITY OF TUALATIN, OR**

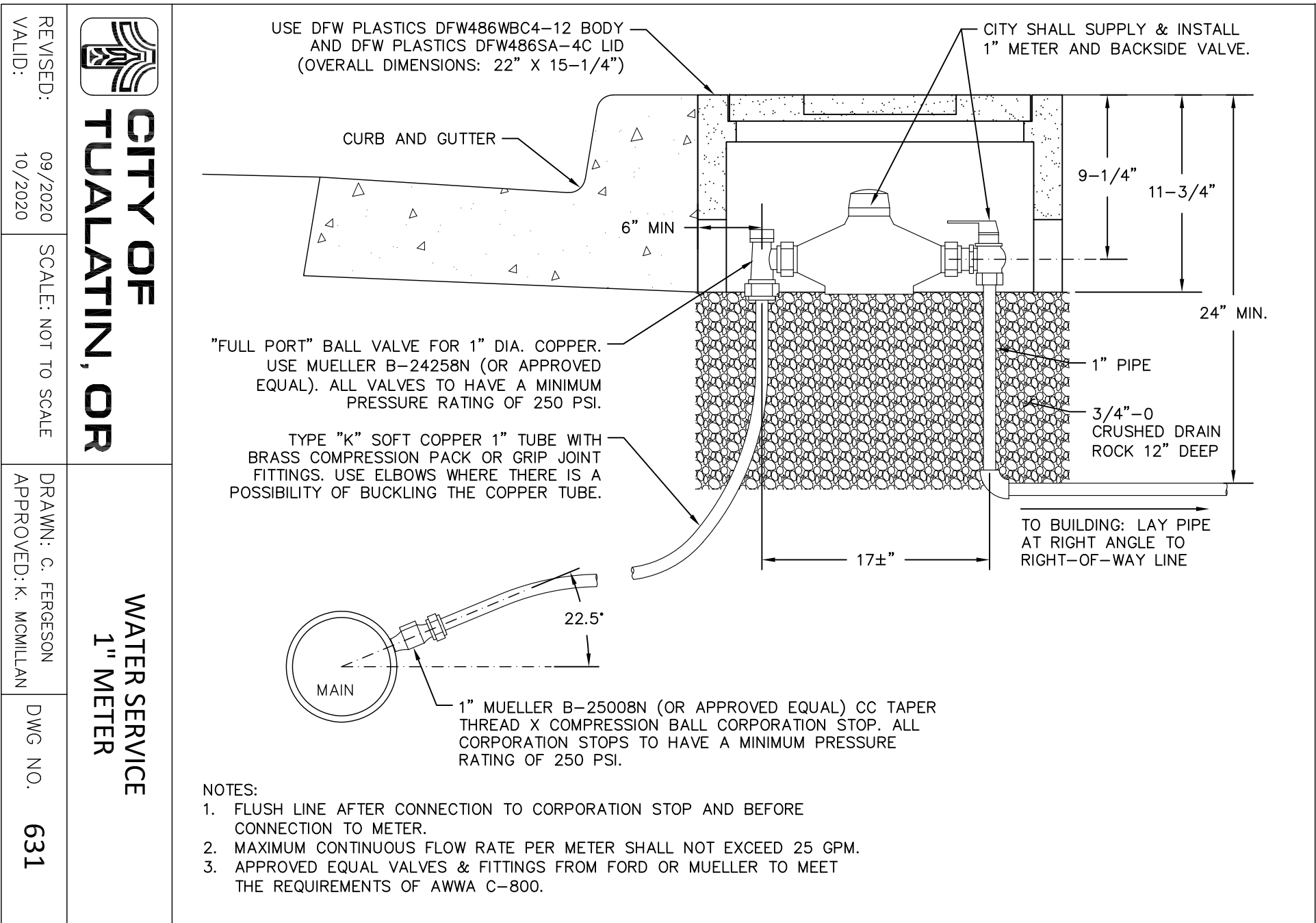
**WATER SERVICE 5/8" X 3/4" METER**

REVISED: 09/2020  
VALID: 10/2020

SCALE: NOT TO SCALE

DRAWN: C. FERGESON  
APPROVED: K. MCILLIAN

DWG NO. 630



USE DFW PLASTICS DFW486WBC4-12 BODY AND DFW PLASTICS DFW486SA-4C LID (OVERALL DIMENSIONS: 22" X 15-1/4")

CITY SHALL SUPPLY & INSTALL 1" METER AND BACKSIDE VALVE.

CURB AND GUTTER

6" MIN

9-1/4"

11-3/4"

24" MIN.

"FULL PORT" BALL VALVE FOR 1" DIA. COPPER. USE MUELLER B-24258N (OR APPROVED EQUAL). ALL VALVES TO HAVE A MINIMUM PRESSURE RATING OF 250 PSI.

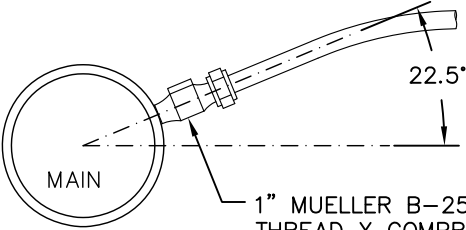
TYPE "K" SOFT COPPER 1" TUBE WITH BRASS COMPRESSION PACK OR GRIP JOINT FITTINGS. USE ELBOWS WHERE THERE IS A POSSIBILITY OF BUCKLING THE COPPER TUBE.

1" PIPE

3/4"-0 CRUSHED DRAIN ROCK 12" DEEP

TO BUILDING: LAY PIPE AT RIGHT ANGLE TO RIGHT-OF-WAY LINE

17±"



1" MUELLER B-25008N (OR APPROVED EQUAL) CC TAPER THREAD X COMPRESSION BALL CORPORATION STOP. ALL CORPORATION STOPS TO HAVE A MINIMUM PRESSURE RATING OF 250 PSI.

NOTES:

1. FLUSH LINE AFTER CONNECTION TO CORPORATION STOP AND BEFORE CONNECTION TO METER.
2. MAXIMUM CONTINUOUS FLOW RATE PER METER SHALL NOT EXCEED 25 GPM.
3. APPROVED EQUAL VALVES & FITTINGS FROM FORD OR MUELLER TO MEET THE REQUIREMENTS OF AWWA C-800.

REVISED: 09/2020  
VALID: 10/2020


SCALE: NOT TO SCALE

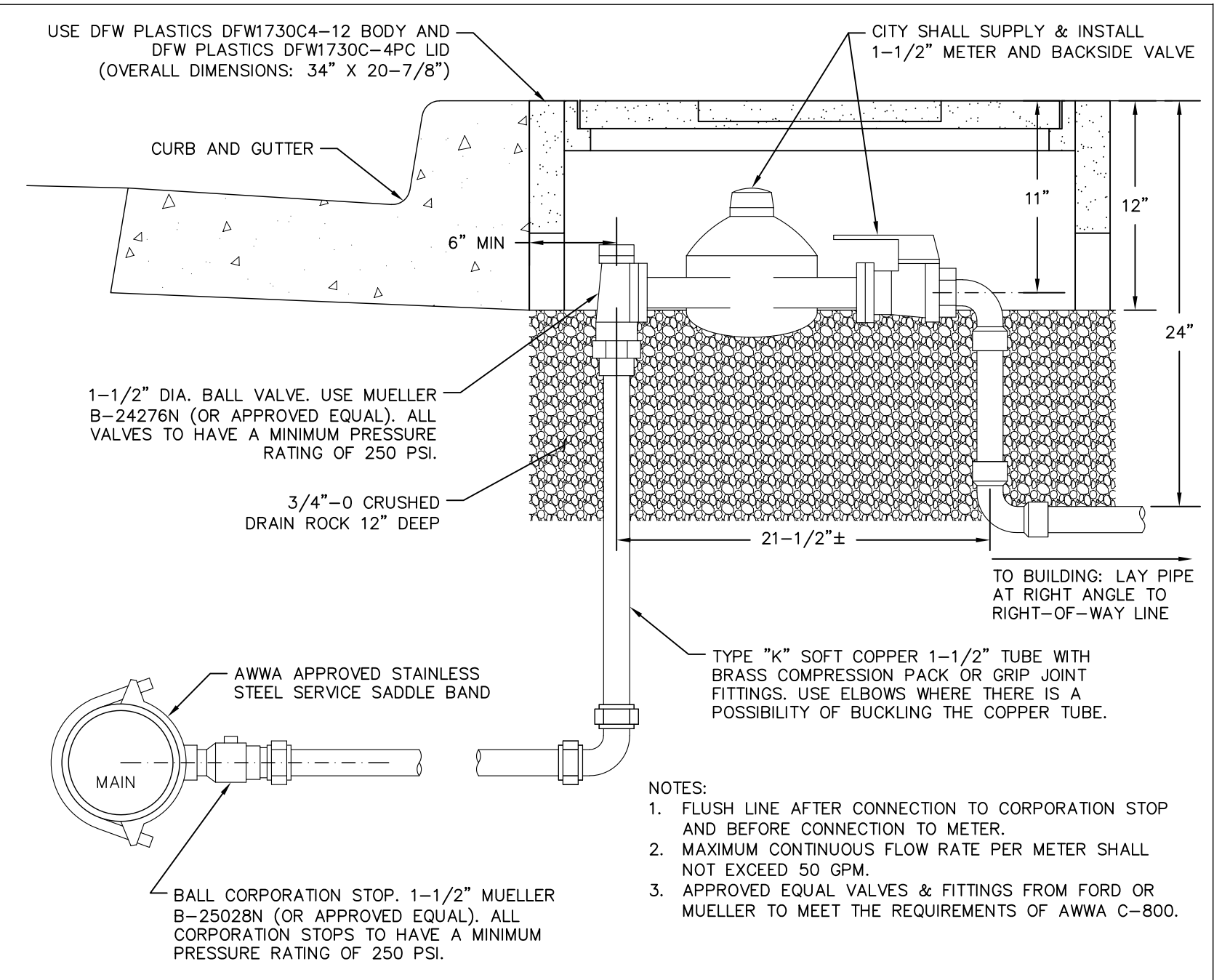
DRAWN: C. FERGESON  
APPROVED: K. MCILLIAN

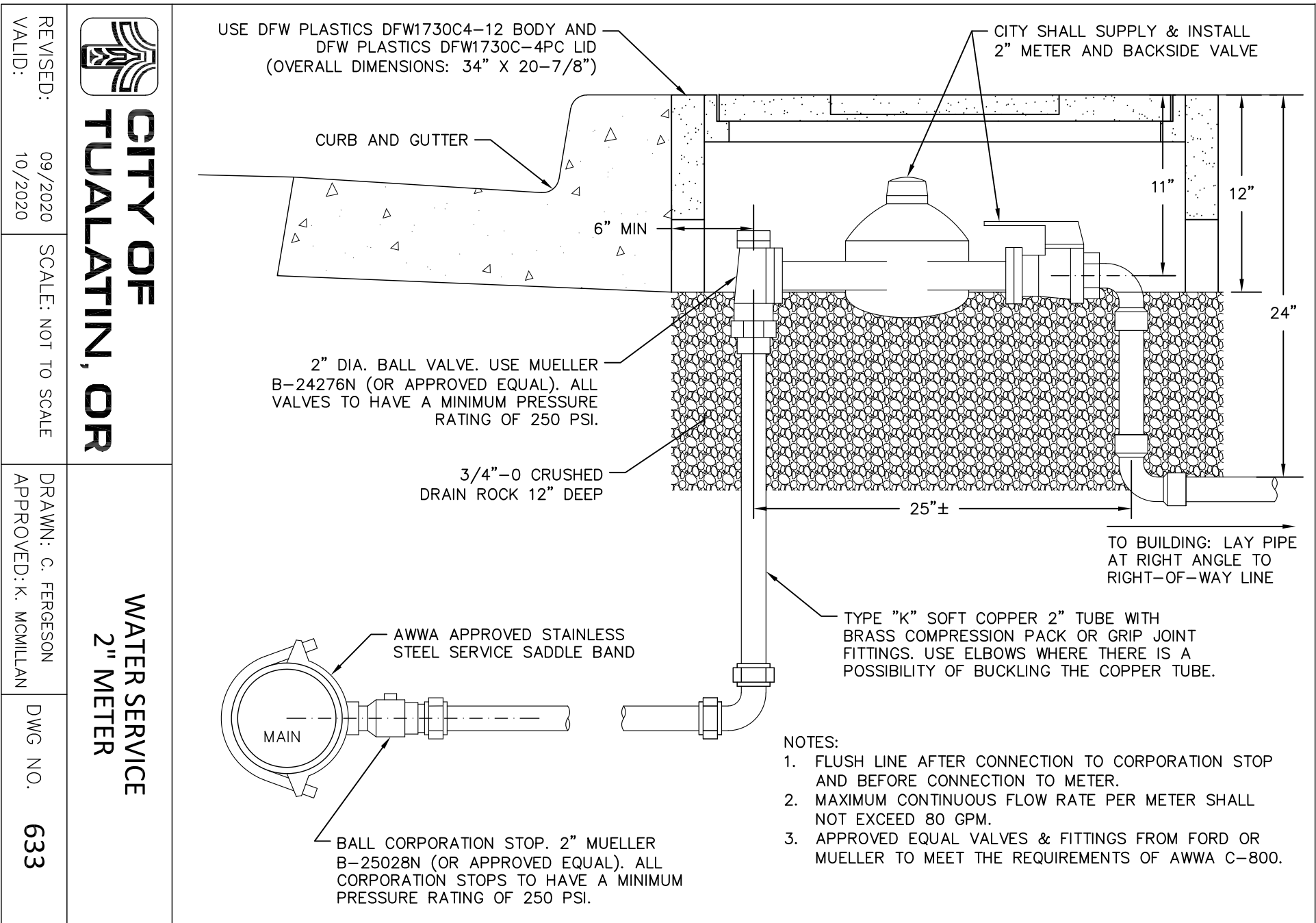
DWG NO. 631

**CITY OF TUALATIN, OR**

**WATER SERVICE 1" METER**

 <b>CITY OF TUALATIN, OR</b>	REVISED: 09/2020 VALID: 10/2020
	SCALE: NOT TO SCALE
<b>WATER SERVICE 1-1/2" METER</b>	DRAWN: C. FERGESON APPROVED: K. MCILLAN
	DWG NO. <b>632</b>





**CITY OF TUALATIN, OR**

**WATER SERVICE 2" METER**

REVISED: 09/2020  
VALID: 10/2020

SCALE: NOT TO SCALE

DRAWN: C. FERGESON  
APPROVED: K. MCILLIAN

DWG NO. **633**