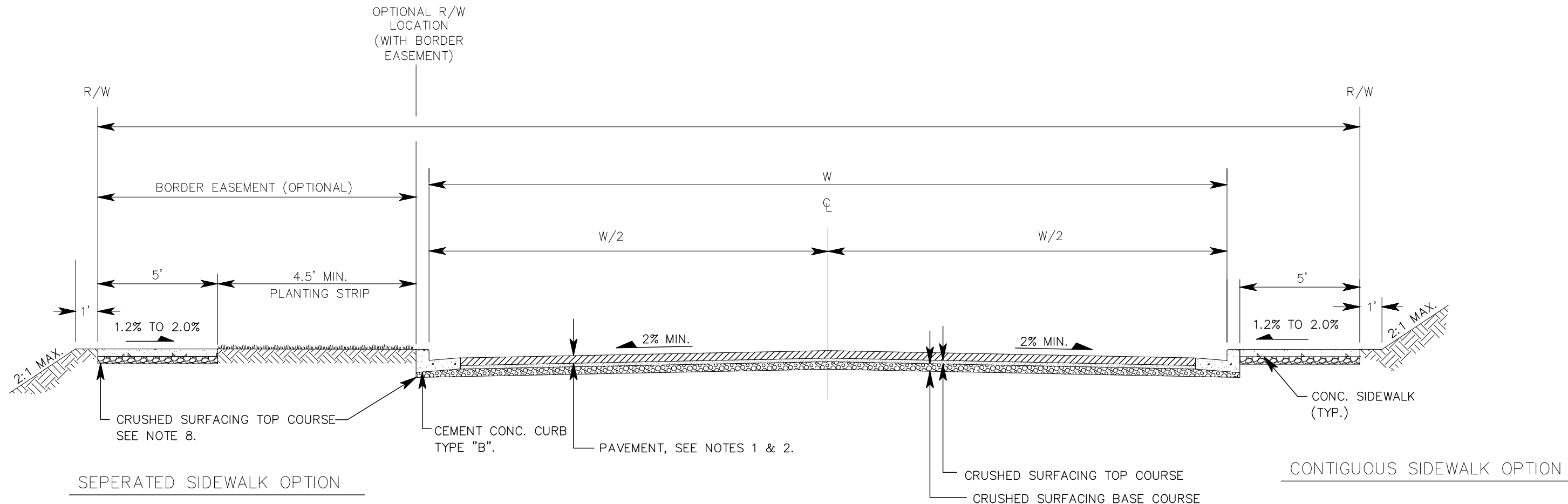


City of Cheney Engineering Standard Details

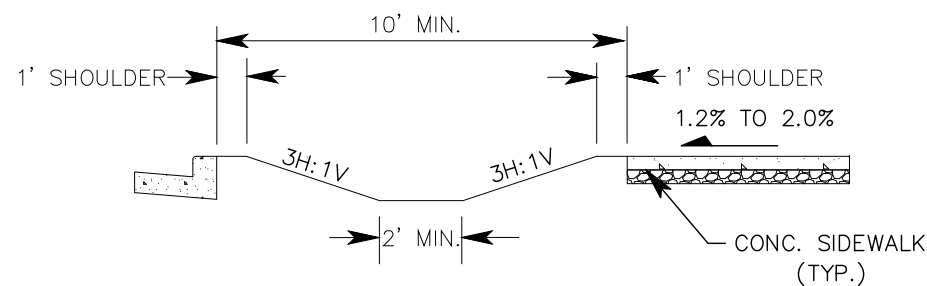


Streets, Alleys, & Bikeways



GENERAL NOTES

1. PAVEMENT MAY BE ASPHALT CONCRETE OR PORTLAND CEMENT CONCRETE AS DETERMINED BY THE CITY ENGINEER.
2. PAVEMENT, CRUSHED SURFACING TOP COURSE AND CRUSHED SURFACING BASE COURSE THICKNESSES SHALL BE PER THE DESIGN STANDARDS OR AS DETERMINED BY A PAVEMENT DESIGN.
3. DITCH SLOPES AND SIDE SLOPES SHALL BE NO STEEPER THAN RATIOS SHOWN UNLESS RECOMMENDED BY A SOILS REPORT AND APPROVED BY THE CITY ENGINEER. EXCAVATION SLOPES HIGHER THAN 8' SHALL BE DETERMINED BY SOILS TESTING.
4. "W" SHALL BE SHOWN ON CONSTRUCTION PLANS.
5. CRUSHED BASE ROCK (UNDER THE ASPHALT) AND ROADWAY SUBGRADE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE AASHTO T-180 TEST PROCEDURE.
6. PLANTER STRIPS MUST BE APPROVED BY THE CHENEY PUBLIC WORKS DEPARTMENT. IF PLANTING STRIPS ARE USED AS A BIOFILTRATION SWALE, THE MINIMUM WIDTH SHALL BE 10'. THE MINIMUM WIDTH FOR ALL OTHER PLANTING STRIPS SHALL BE 4.5'.
7. WHEN RAISED MEDIANS ARE CONTINUOUS BETWEEN INTERSECTIONS, CRUSHED SURFACING SECTION SHOULD BE EXTENDED UNDER CURB.
8. CRUSHED ROCK AND SUBGRADE LOCATED UNDER CURBS AND SIDEWALKS SHALL BE COMPACTED TO 92% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE AASHTO T-180 TEST PROCEDURE.



ROADSIDE BIOFILTRATION SWALE

APPROVED BY:



CITY ENGINEER:
MARK ARONSON, P.E.

ADOPTED: 02/2011
REVISED: 04/2018
SUPERSEDES: 02/2011

DWG/REV BY: MJL
CHECKED BY: MAA



CITY OF CHENEY
DEPARTMENT OF PUBLIC WORKS
CHENEY, WA. 99004 498-9230

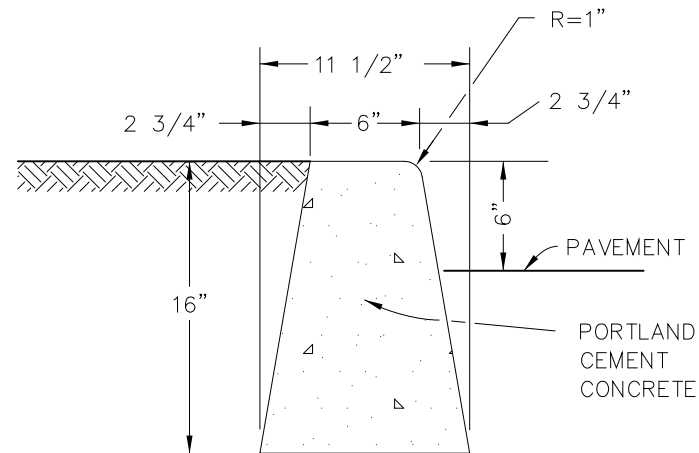
STANDARD
ROADWAY SECTION - CURBED

NOT TO SCALE
STD-A01.DWG

SHEET
A-1

GENERAL NOTES

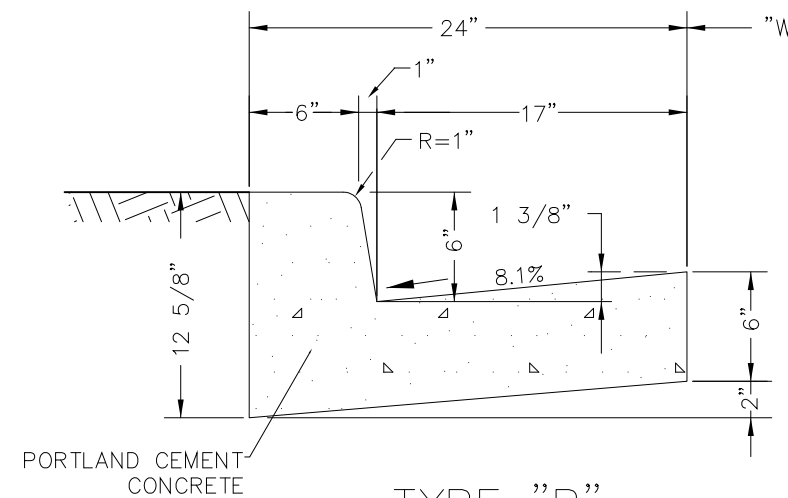
1. PORTLAND CEMENT CONCRETE SHALL BE CLASS 3000, AIR ENTRAINED, CONFORMING TO THE STANDARD SPECIFICATIONS.
2. EXPANSION JOINTS SHALL USE A 3/8" PREMOLDED JOINT FILLER. EXPANSION JOINTS SHALL EXTEND THROUGH THE FULL CROSS SECTION OF THE CURB OR CURB AND GUTTER. EXPANSION JOINTS SHALL BE PLACED AT ALL CURB RETURNS AND BETWEEN EXISTING AND NEW CURBS.
3. CONTRACTION JOINTS SHALL BE HAND TOOLED 1/4" WIDE BY 2" MINIMUM DEPTH SPACED AT MAX. 15' O.C.
4. THE TOP AND FACE OF THE CURB SHALL RECEIVE A LIGHT BRUSH FINISH AND THE TOP OF THE GUTTER SHALL RECEIVE A BROOM FINISH.
5. TYPE "A" CURB IS ONLY ALLOWED WHERE CONSTRUCTION REQUIRES REMOVAL AND REPLACEMENT OF CURBS ON EXISTING ROADWAYS THAT DO NOT HAVE CURB AND GUTTER. TYPE "B" CURB AND GUTTER IS REQUIRED IN ALL NEW DEVELOPMENTS.
6. 4" OF CRUSHED SURFACING TOP COURSE IS REQUIRED UNDER ALL CURBS AND SIDEWALKS. THE SUBGRADE AND CRUSHED ROCK SHALL BE COMPACTED TO 92% OF THE DRY DENSITY.



TYPE "A"

QUANTITY = 0.036025 C.Y./ L.F.

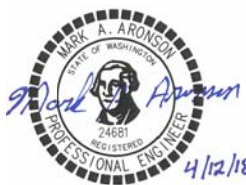
SEE NOTE 5



TYPE "B"

QUANTITY = 0.047657 C.Y. / L.F.

APPROVED BY:



CITY ENGINEER:
MARK ARONSON, P.E.

ADOPTED: 02/2011
REVISED: 04/2018
SUPERSEDES: 02/2011

DWG/REV BY: MJL
CHECKED BY: MAA



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DEPARTMENT OF PUBLIC WORKS
CHENEY, WA. 99004 498-9230

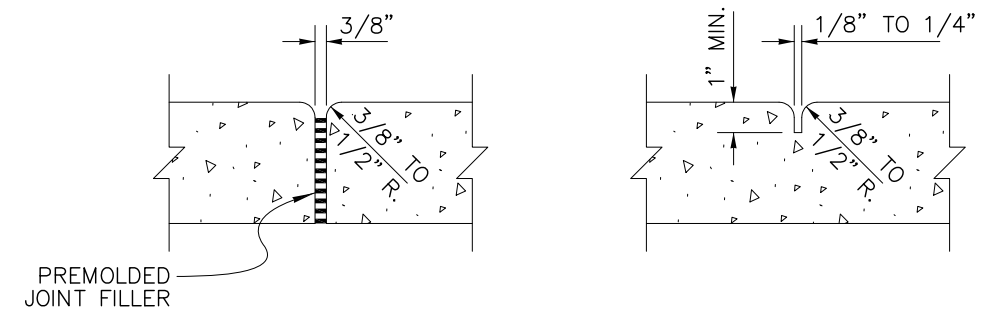
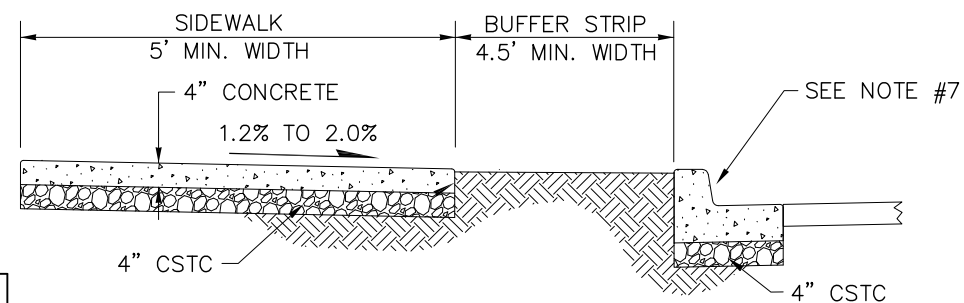
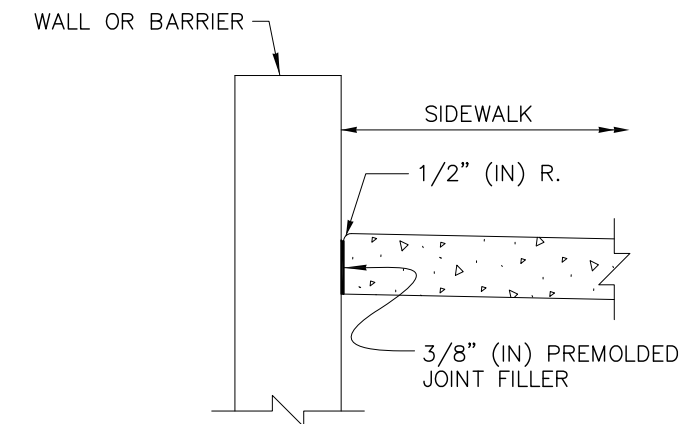
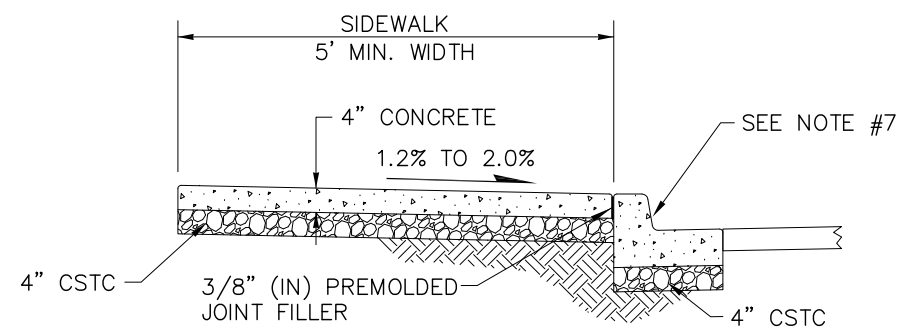
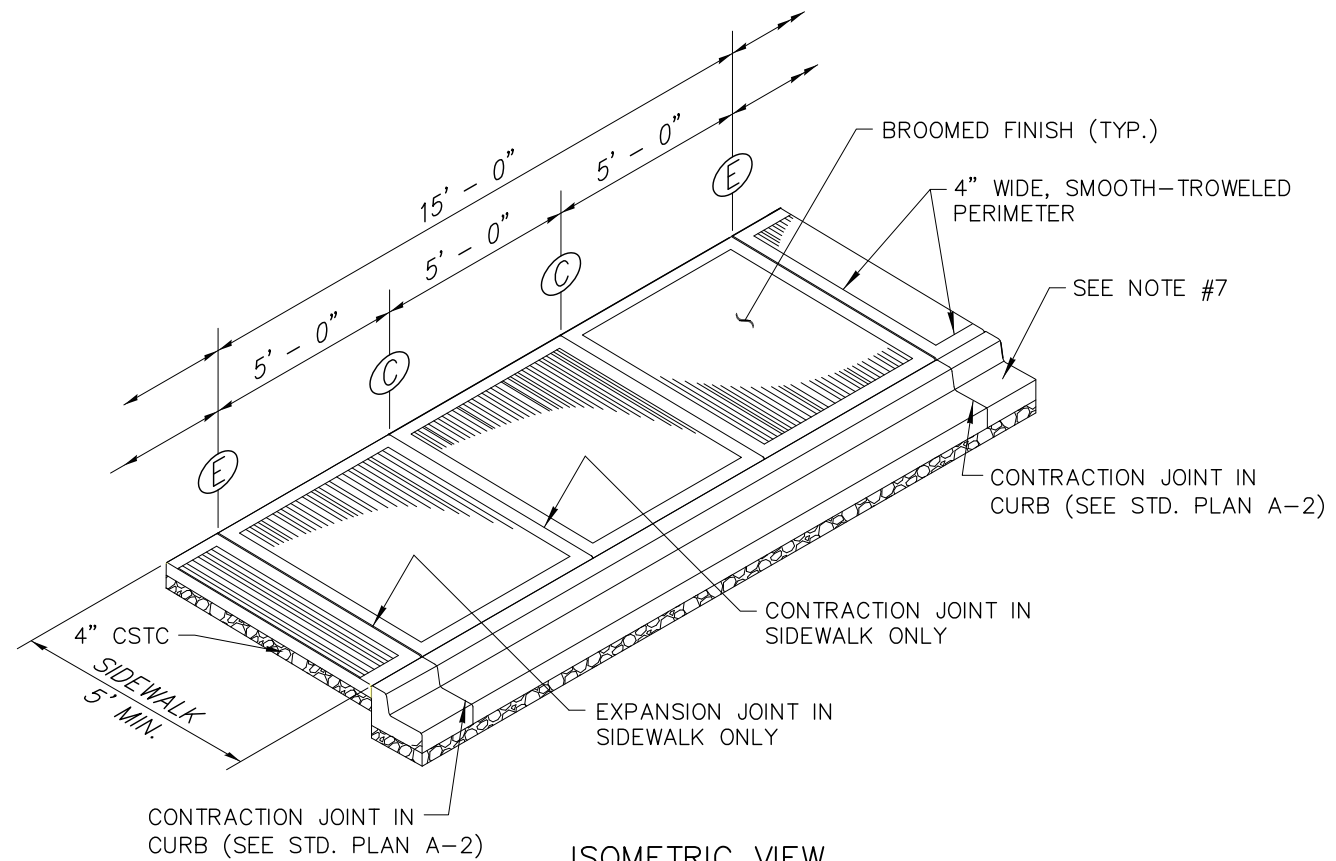
STANDARD
CURBS AND GUTTERS

NOT TO SCALE
STD-A02.DWG

SHEET
A-2

GENERAL NOTES

1. EXPANSION JOINTS SHALL BE 3/8" PREMOLDED JOINT FILLER EXTENDING THROUGH THE FULL CONCRETE CROSS SECTIONS. IN ADDITION TO THE EXPANSION JOINT LOCATIONS SHOWN, EXPANSION JOINTS SHALL ALSO BE PLACED BETWEEN EXISTING AND NEW SIDEWALK INSTALLATIONS.
2. CONCRETE SHALL BE CLASS 3000, AIR ENTRAINED.
3. ALL EXTERNAL SIDEWALK EDGES TO BE TROWELED WITH 1/2" RADIUS EDGER.
4. BROOMED FINISH ON SIDEWALKS SHALL BE APPLIED PERPENDICULAR TO THE PEDESTRIAN DIRECTION OF TRAVEL.
5. 4" CSTC IS REQUIRED UNDER ALL CONCRETE.
6. 92% COMPACTION FOR SUBGRADE AND CSTC REQUIRED UNDER ALL CONCRETE SIDEWALKS.
7. TYPE "B" CURB AND GUTTER (SHOWN) IS REQUIRED IN ALL NEW DEVELOPMENTS. TYPE "A" CURB IS ALLOWED WHERE DRIVEWAYS ARE TO BE INSTALLED ON EXISTING ROADWAYS THAT DO NOT HAVE CURB AND GUTTER. SEE STANDARD PLAN A-2.

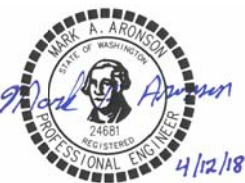


Ⓔ EXPANSION JOINT

Ⓒ CONTRACTION JOINT

NOT TO SCALE
STD-A03.DWG

APPROVED BY:



CITY ENGINEER:
MARK ARONSON, P.E.

ADOPTED: 04/2018
REVISED:
SUPERSEDES:

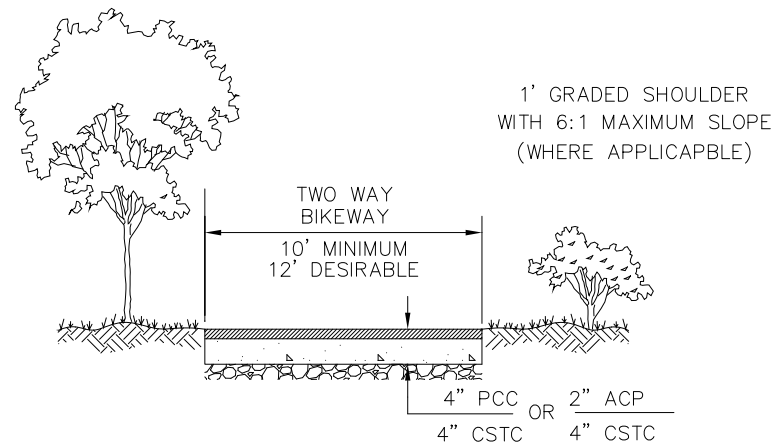
DWG/REV BY: MJL
CHECKED BY: MAA



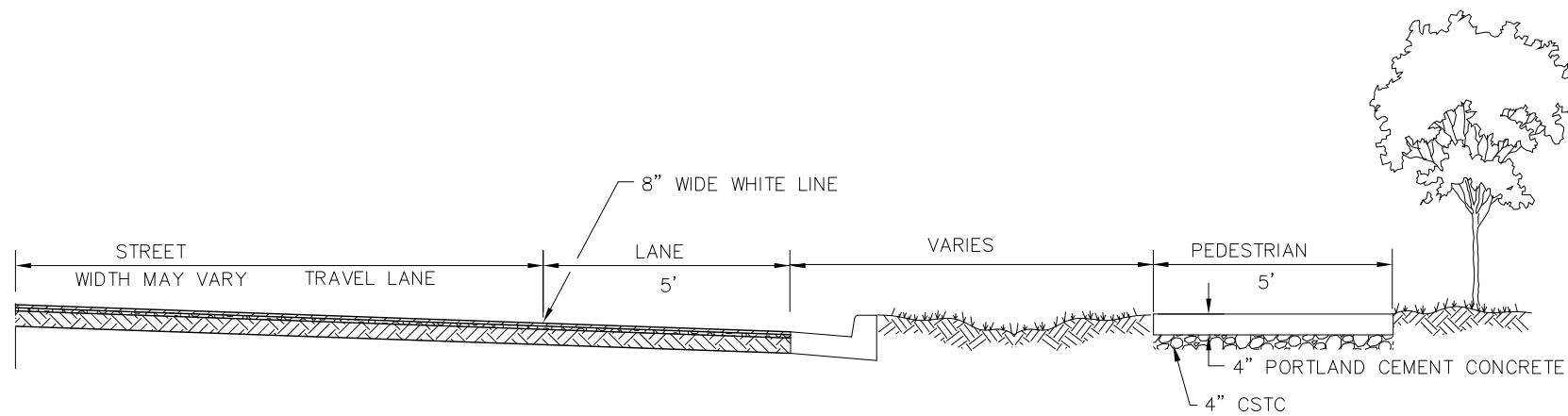
CITY OF CHENEY
DEPARTMENT OF PUBLIC WORKS
CHENEY, WA. 99004 498-9230

STANDARD
CEMENT CONCRETE SIDEWALKS

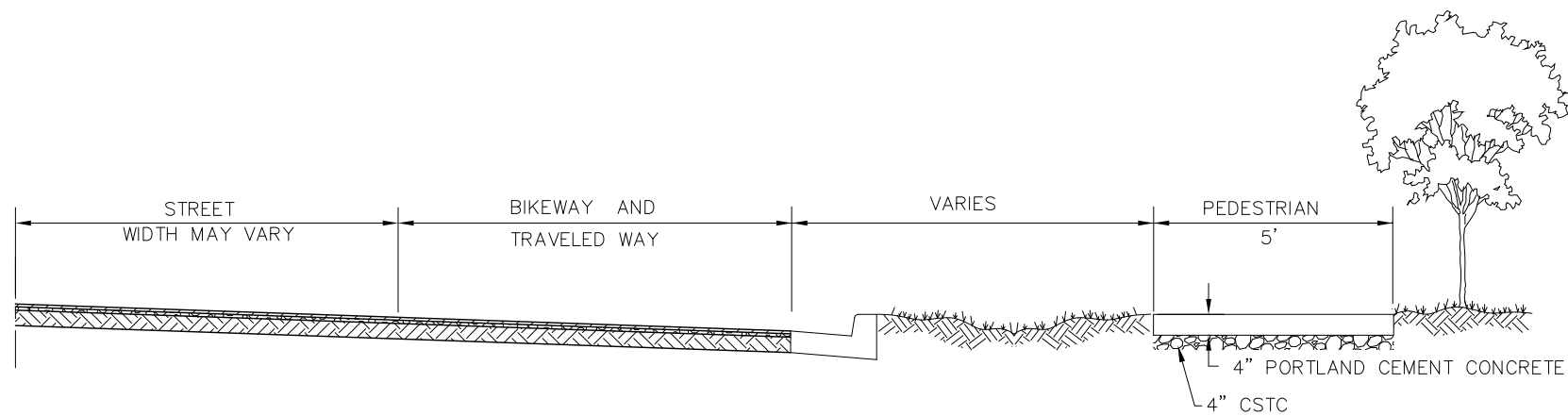
SHEET
A-3



SHARED USE PATHWAY



BIKE LANE



BIKE ROUTE

NOTE: SIGNING FOR BIKEWAYS SHALL BE CONSISTENT WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES

APPROVED BY:



CITY ENGINEER:
MARK ARONSON, P.E.

ADOPTED: 02/2011
REVISED: 04/2018
SUPERSEDES: 02/2011

DWG/REV BY: MJL
CHECKED BY: MAA

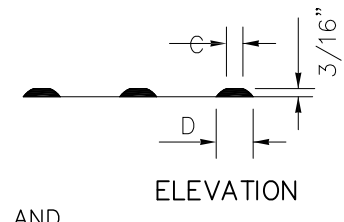
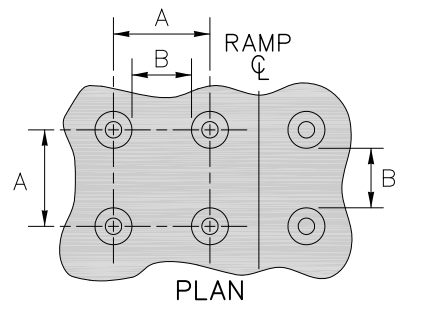
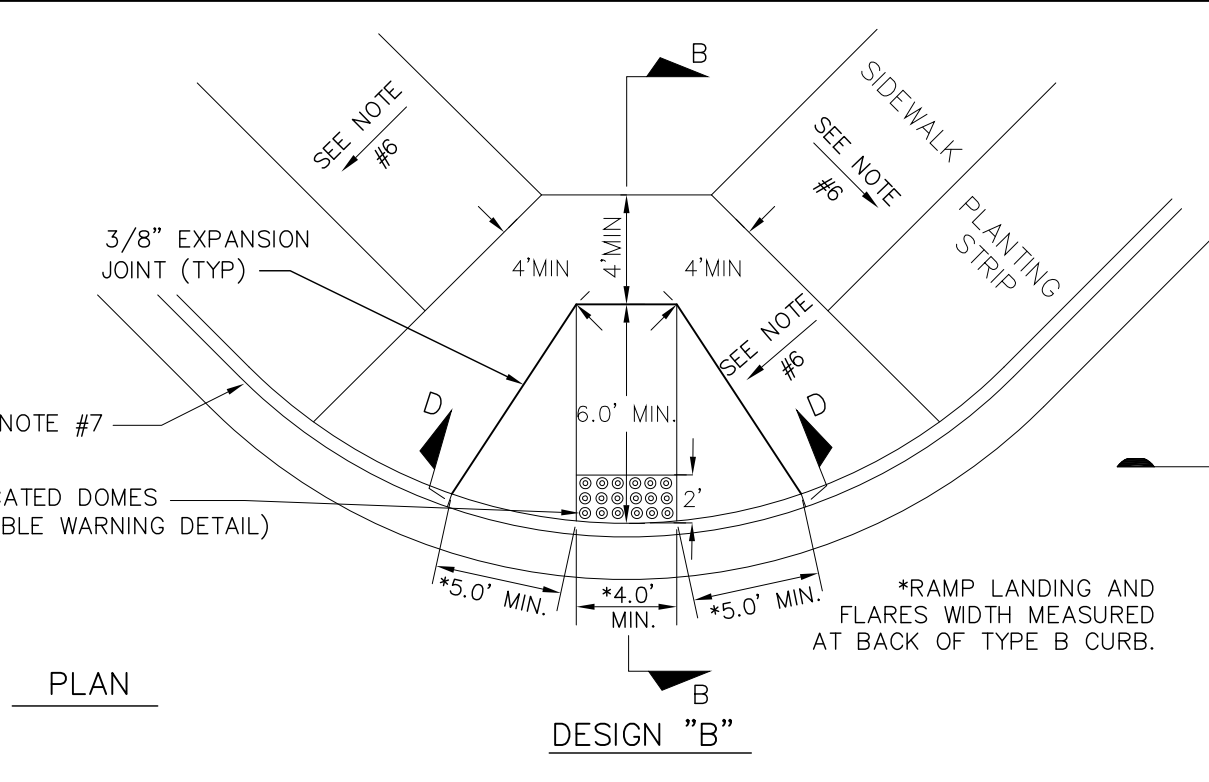
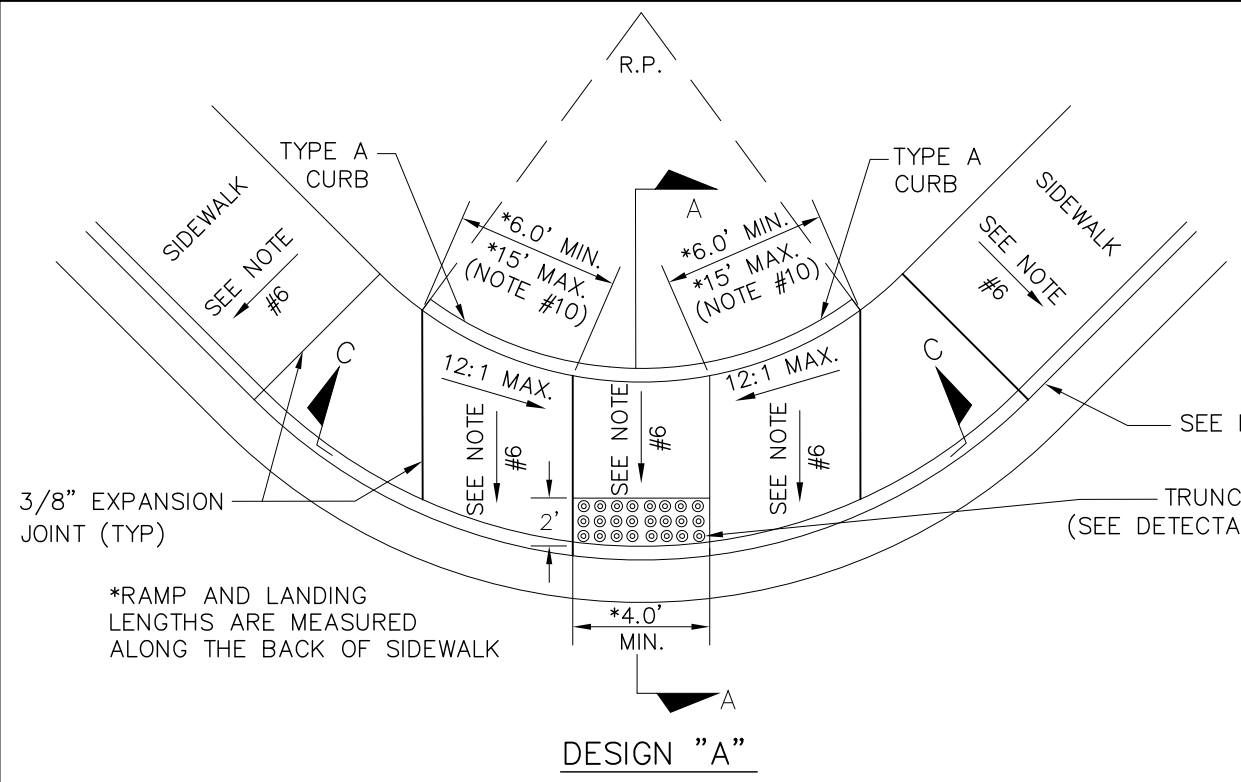


CITY OF CHENEY
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CHENEY, WA. 99004 498-9230

STANDARD
BIKE WAYS AND PEDESTRIAN PATHS

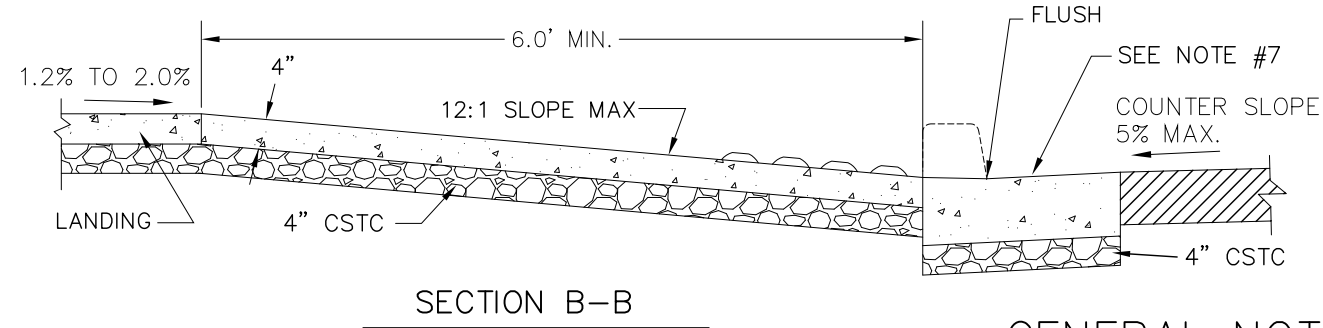
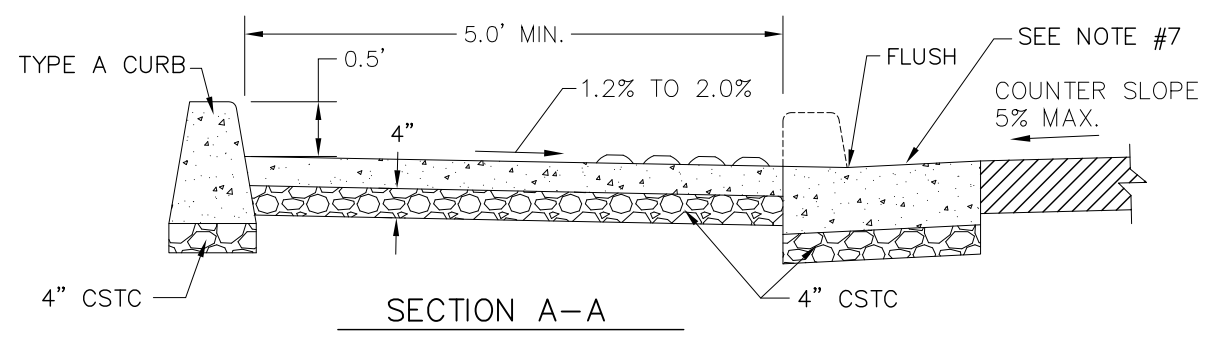
NOT TO SCALE
STD-A04.DWG

SHEET
A-4



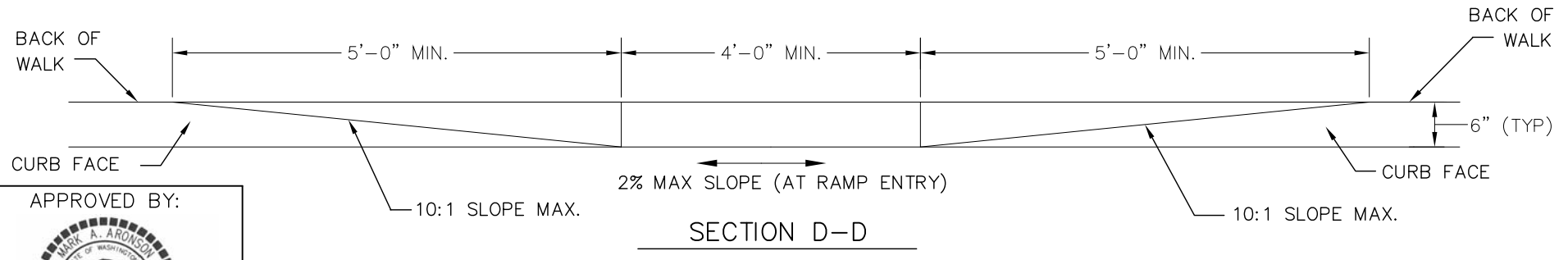
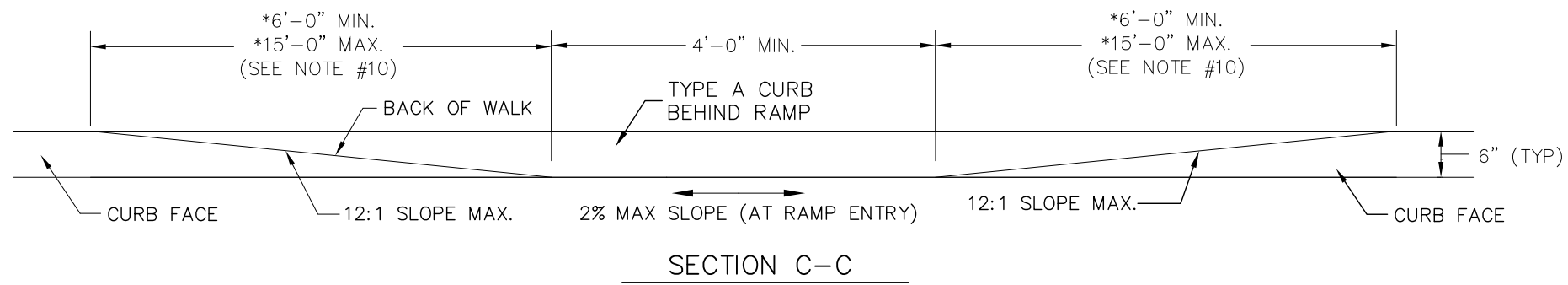
	MIN.	MAX.
A	1 5/8"	2 3/8"
B	5/8"	1 1/2"
C	7/16"	3/4"
D	7/8"	1 7/16"


TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL
(SEE NOTE 2)



GENERAL NOTES

1. DRAINAGE INLETS SHALL BE LOCATED OUTSIDE THE CURB RAMP.
2. DETECTABLE WARNING DOMES SHALL BE PRECAST DUCTILE IRON.
3. CURB RAMPS SHALL BE ISOLATED BY EXPANSION JOINT MATERIAL ON ALL SIDES, EXCEPT AT THE SIDE ADJACENT TO THE ROADWAY.
4. WHERE CONSTRUCTED ON STRAIGHT CURB, DESIGN "A" DIMENSIONS REMAIN THE SAME AS SHOWN.
5. TOP OF CURB ELEVATIONS SHOWN ON PLANS ARE PROJECTED TOP OF CURB ELEVATIONS THROUGH CURB RAMP AREA.
6. 1.2% TO 2.0% CROSS-SLOPES ALLOWED ON ALL SIDEWALKS AND RAMPS, UNLESS OTHERWISE INDICATED.
7. TYPE "B" CURB AND GUTTER (SHOWN) IS REQUIRED IN ALL NEW DEVELOPMENTS. TYPE "A" CURB IS ALLOWED WHERE CURB RAMPS ARE TO BE INSTALLED ON EXISTING ROADWAYS THAT DO NOT HAVE CURB AND GUTTER. SEE STANDARD PLAN A-2.
8. 4" OF CSTC IS REQUIRED UNDER ALL CONCRETE.
9. 92% COMPACTION FOR SUBGRADE AND CSTC IS REQUIRED UNDER ALL CONCRETE FOR SIDEWALKS, CURB RAMPS AND CURBS.
10. THE LENGTH OF THE CURB RAMP IS NOT REQUIRED TO EXCEED 15'. WHEN APPLYING THE 15' MAX. LENGTH, THE RUNNING SLOPE OF THE CURB RAMP IS ALLOWED TO EXCEED 8.3%.



APPROVED BY:

 CITY ENGINEER:
 MARK ARONSON, P.E.

ADOPTED: 02/2011
 REVISED: 04/2018
 SUPERSEDES: 02/2011

DWG/REV BY: MJL
 CHECKED BY: MAA

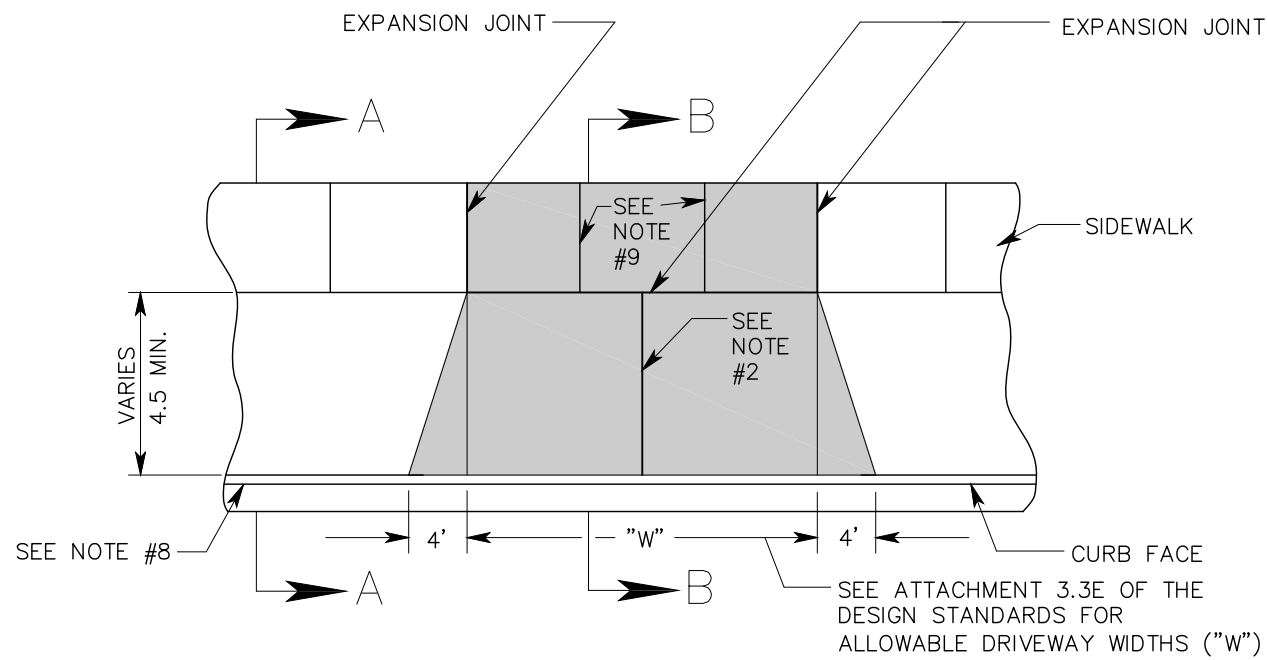


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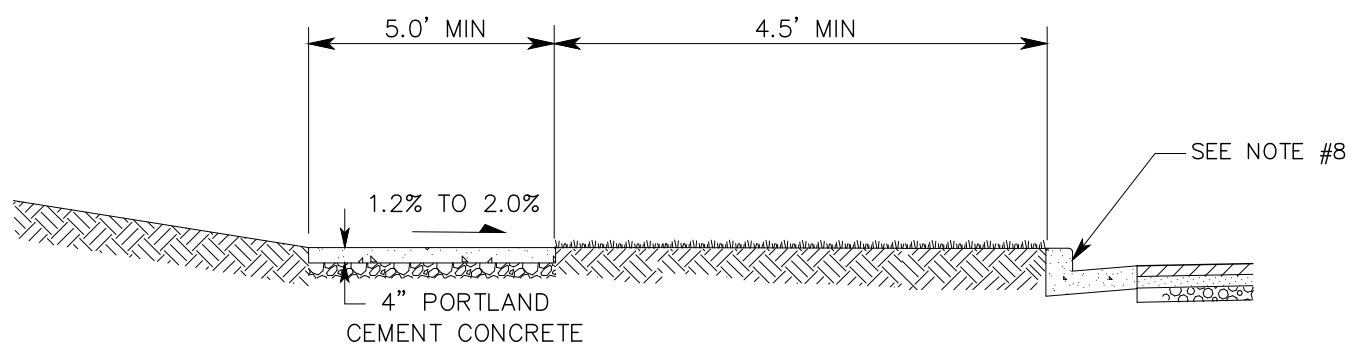
STANDARD
 CURB RAMPS

NOT TO SCALE
 STD-A05.DWG

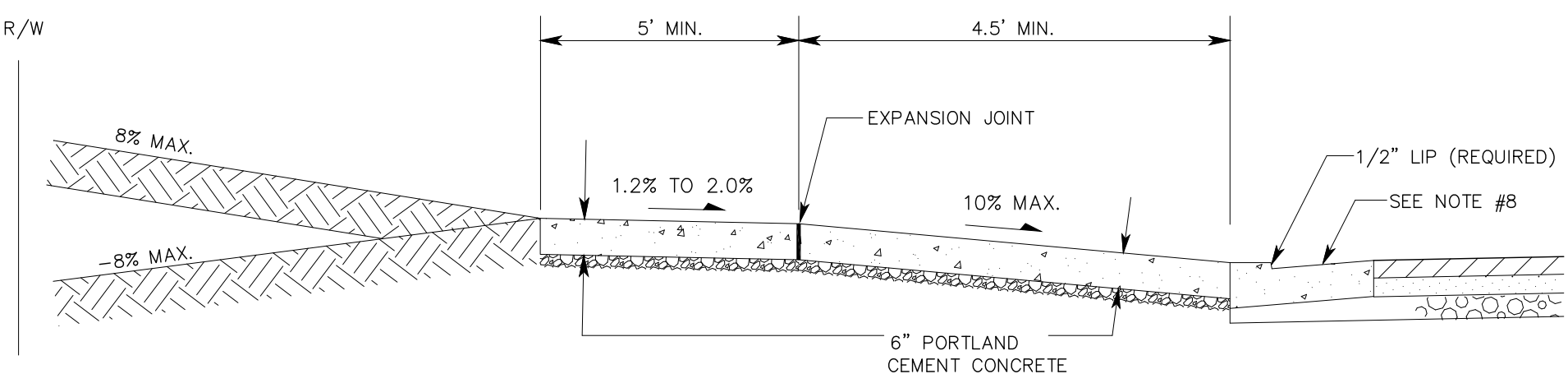
SHEET
 A-5



PLAN



SECTION A-A



SECTION B-B

GENERAL NOTES

1. EXPANSION JOINTS SHALL BE 3/8" PREMOLDED JOINT FILLER EXTENDING THROUGH THE FULL CONCRETE CROSS SECTIONS.
2. EXPANSION JOINTS SHALL BE PLACED IN THE CENTER OF ALL DRIVEWAYS OVER 20' IN WIDTH.
3. CONCRETE FOR DRIVEWAYS SHALL BE CLASS 3000 AIR ENTRAINED.
4. ALL EXTERNAL EDGES TO BE TROWELED WITH 1/4" RADIUS EDGER.
5. BROOMED FINISH ON DRIVEWAY SHALL BE APPLIED PERPENDICULAR TO THE VEHICULAR DIRECTION OF TRAVEL. BROOMED FINISH ON SIDEWALK SHALL BE APPLIED PERPENDICULAR TO THE PEDESTRIAN DIRECTION OF TRAVEL.
6. 4" CSTC IS REQUIRED UNDER ALL CONCRETE.
7. 95% COMPACTION FOR SUBGRADE AND CSTC REQUIRED UNDER ALL DRIVEWAY APPROACHES. (SHADED AREA)
8. TYPE "B" CURB AND GUTTER (SHOWN) IS REQUIRED IN ALL NEW DEVELOPMENTS. TYPE "A" CURB IS ALLOWED WHERE DRIVEWAYS ARE TO BE INSTALLED ON EXISTING ROADWAYS THAT DO NOT HAVE CURB AND GUTTER. SEE STANDARD PLAN A-2.
9. INSTALL CONTRACTION JOINTS PER STANDARD PLAN A-3 ACROSS THE SIDEWALK PORTION OF THE DRIVEWAY APPROACH. MAXIMUM SPACING OF CONTRACTION JOINTS SHALL BE 5'.

APPROVED BY:



CITY ENGINEER:
MARK ARONSON, P.E.

ADOPTED: 02/2011
REVISED: 04/2018
SUPERSEDES: 02/2011

DWG/REV BY: MJL
CHECKED BY: MAA



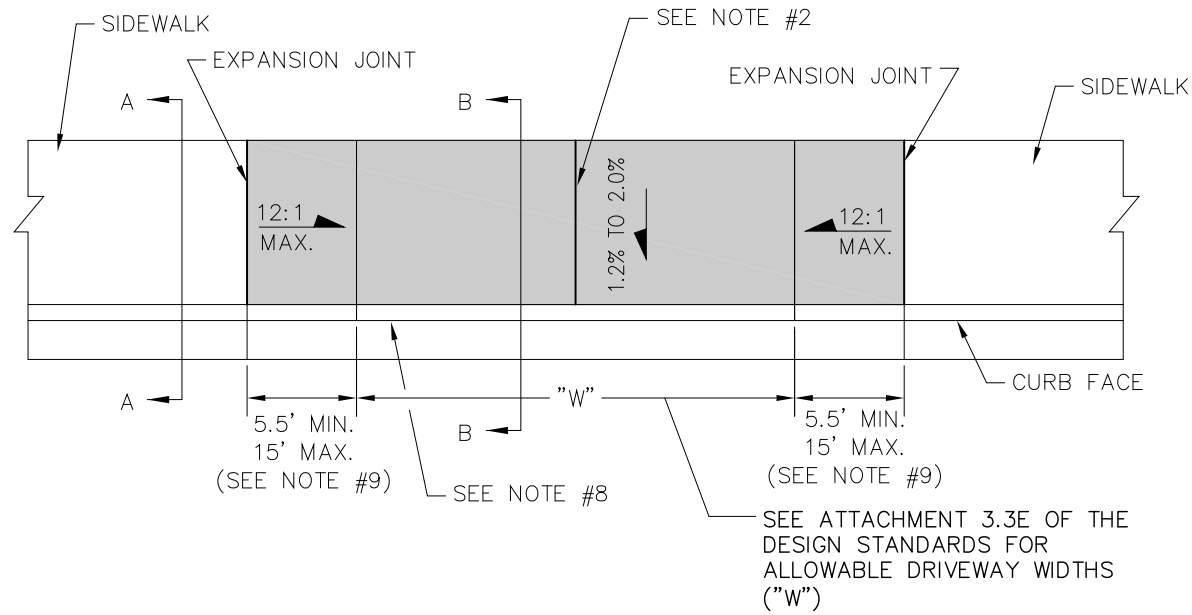
CITY OF CHENEY
DEPARTMENT OF PUBLIC WORKS
CHENEY, WA. 99004 498-9230

STANDARD
URBAN DRIVEWAYS - SEPARATED SIDEWALKS

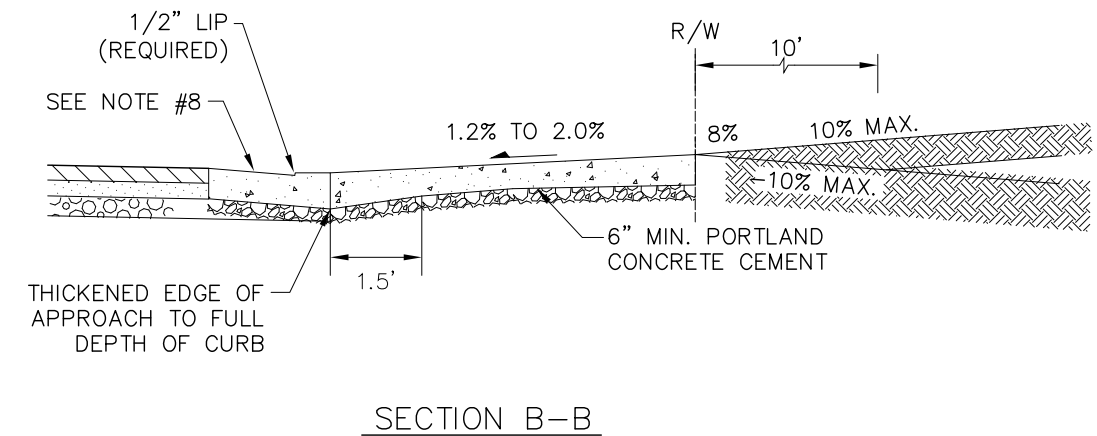
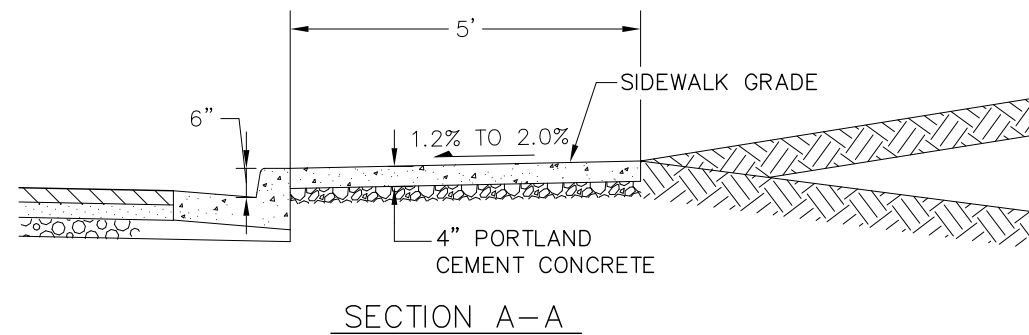
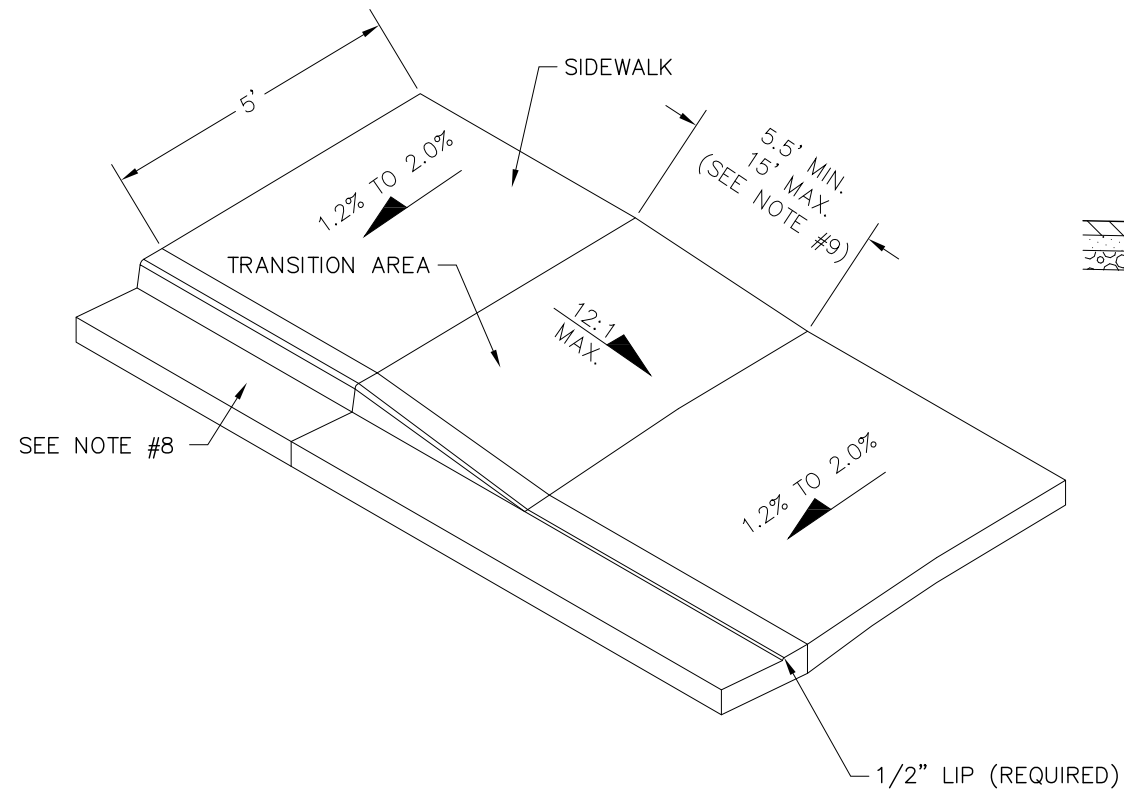
NOT TO SCALE
STD-A06.DWG

SHEET
A-6

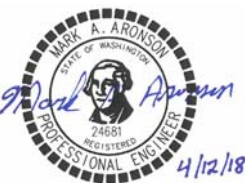
GENERAL NOTES



1. EXPANSION JOINTS SHALL BE 3/8" PREMOLDED JOINT FILLER EXTENDING THROUGH THE FULL CONCRETE CROSS SECTIONS.
2. EXPANSION JOINTS SHALL BE PLACED IN THE CENTER OF ALL DRIVEWAYS OVER 20' IN WIDTH.
3. CONCRETE FOR DRIVEWAYS SHALL BE CLASS 3000 AIR ENTRAINED.
4. ALL EXTERNAL EDGES TO BE TROWELED WITH 1/4" RADIUS EDGER.
5. BROOMED FINISH ON DRIVEWAY AND SIDEWALK SHALL BE APPLIED PERPENDICULAR TO THE PEDESTRIAN DIRECTION OF TRAVEL.
6. 4" CSTC IS REQUIRED UNDER ALL CONCRETE.
7. 95% COMPACTION FOR SUBGRADE AND CSTC REQUIRED UNDER ALL DRIVEWAY APPROACHES. (SHADED AREA)
8. TYPE "B" CURB AND GUTTER (SHOWN) IS REQUIRED IN ALL NEW DEVELOPMENTS. TYPE "A" CURB IS ALLOWED WHERE DRIVEWAYS ARE TO BE INSTALLED ON EXISTING ROADWAYS THAT DO NOT HAVE CURB AND GUTTER.
9. THE LENGTH OF THE DRIVEWAY TRANSITION AREA IS NOT REQUIRED TO EXCEED 15'. WHEN APPLYING THE 15' MAX. LENGTH, THE RUNNING SLOPE OF THE TRANSITION AREA IS ALLOWED TO EXCEED 8.3%.



APPROVED BY:



CITY ENGINEER:
MARK ARONSON, P.E.

ADOPTED: 02/2011
REVISED: 04/2018
SUPERSEDES: 02/2011

DWG/REV BY: MJL
CHECKED BY: MAA

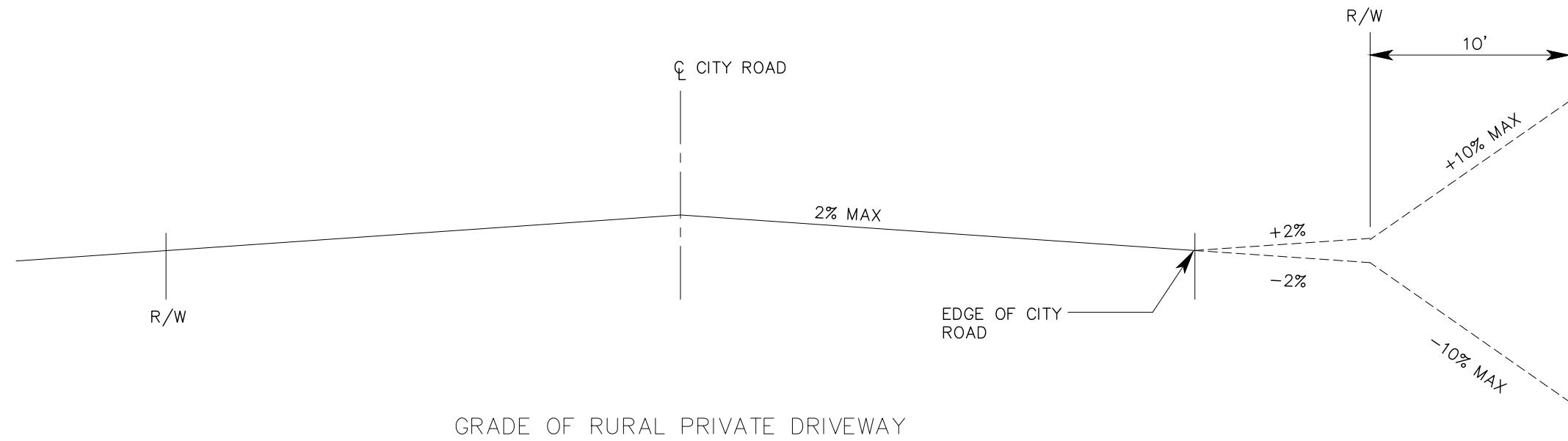


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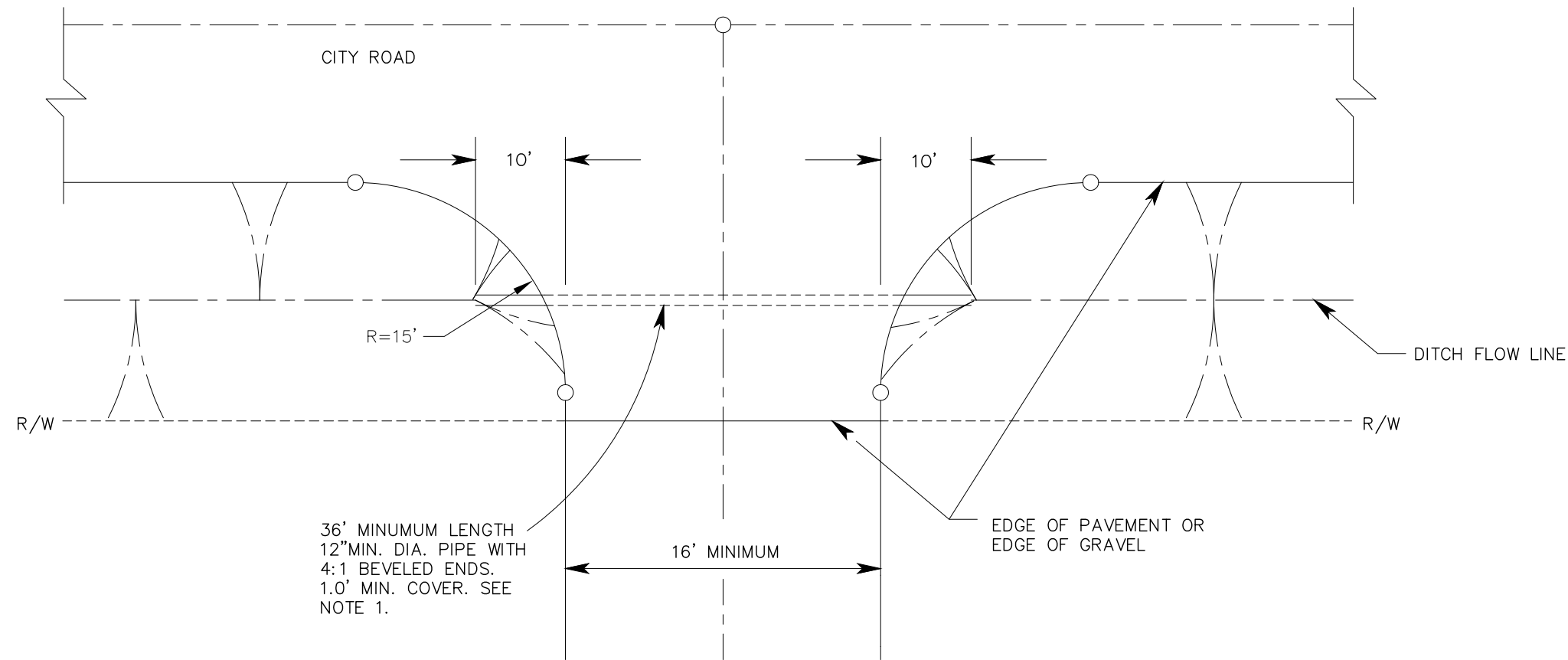
STANDARD
CEMENT CONCRETE APPROACHES

NOT TO SCALE
STD-A07.DWG

SHEET
A-7



GRADE OF RURAL PRIVATE DRIVEWAY



RURAL PRIVATE DRIVEWAY

GENERAL NOTES

1. THE DRAINAGE PIPE SHALL HAVE A MINIMUM DIAMETER OF 12". LARGER PIPES MAY BE REQUIRED BY THE CITY ENGINEER WHERE LARGER FLOWS OCCUR.
2. REFER TO APPROACH SECTION REGARDING LARGER CULVERTS

APPROVED BY:



CITY ENGINEER:
MARK ARONSON, P.E.

ADOPTED: 02/2011
REVISED: 04/2018
SUPERSEDES: 02/2011

DWG/REV BY: MJL
CHECKED BY: MAA

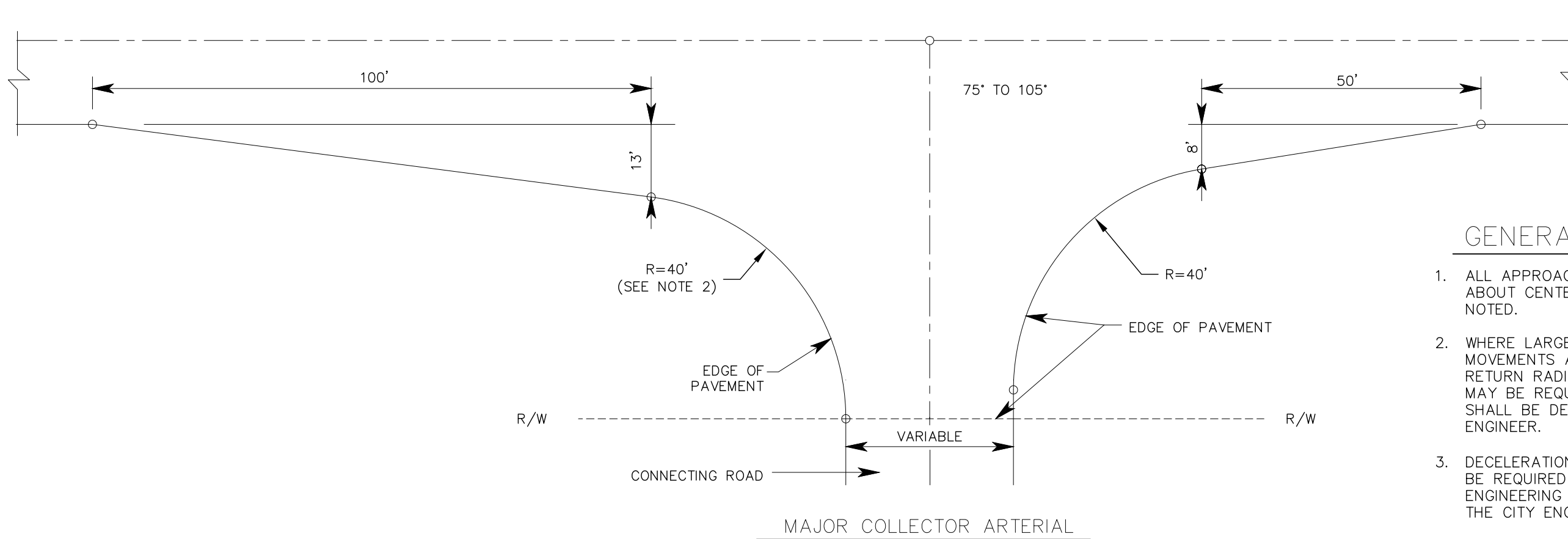


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CHENEY, WA. 99004 498-9230

STANDARD
RURAL DRIVEWAY APPROACHES

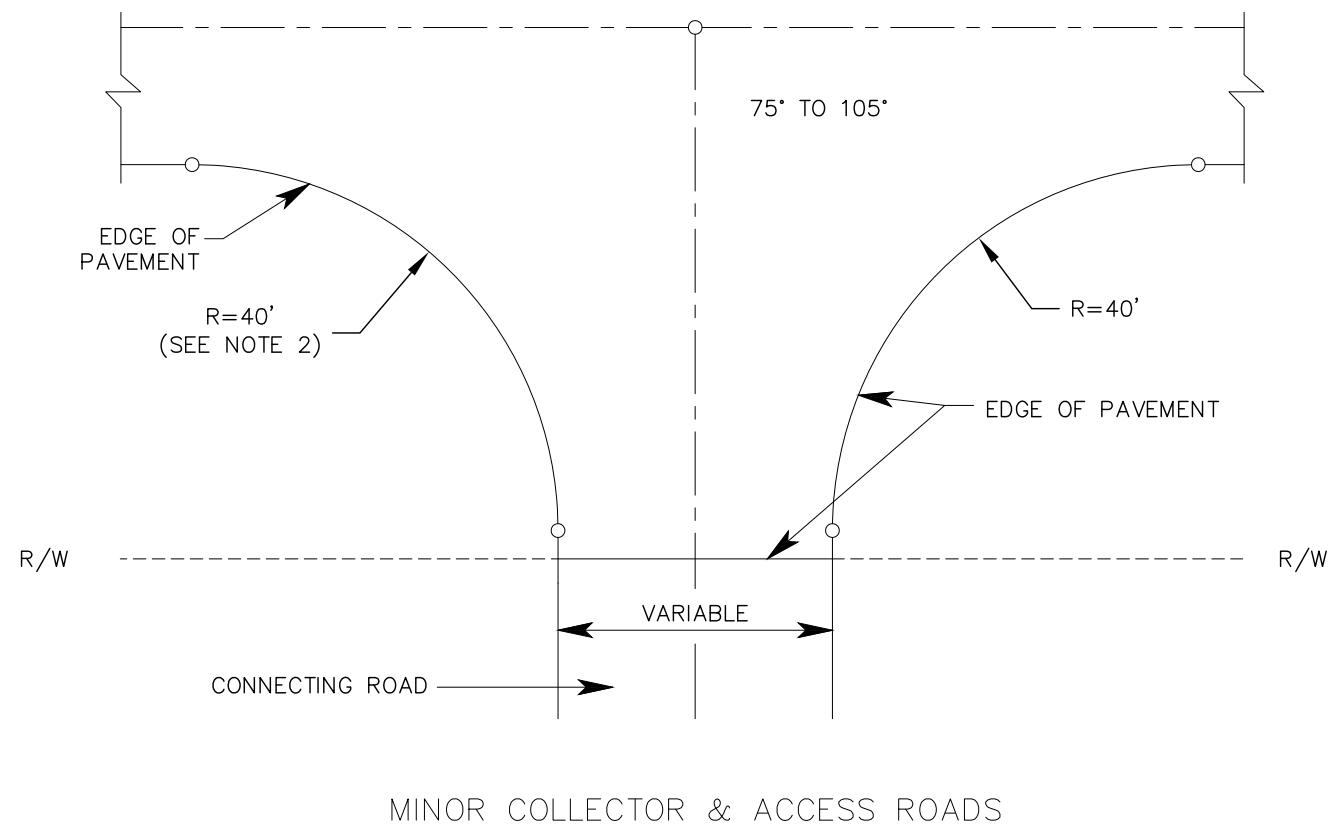
NOT TO SCALE
STD-A08.DWG

SHEET
A-8

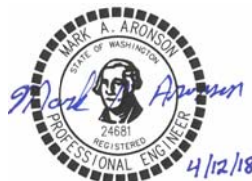


GENERAL NOTES

1. ALL APPROACHES ARE SYMMETRICAL ABOUT CENTERLINE UNLESS OTHERWISE NOTED.
2. WHERE LARGER TRUCK TURNING MOVEMENTS ARE ENCOUNTERED LARGER RETURN RADII AND RIGHT TURN TAPERS MAY BE REQUIRED. RADIUS AND TAPERS SHALL BE DETERMINED BY THE CITY ENGINEER.
3. DECELERATION/ACCELERATION LANES MAY BE REQUIRED IF DETERMINED BY ENGINEERING ANALYSIS OR REQUIRED BY THE CITY ENGINEER.



APPROVED BY:



CITY ENGINEER:
MARK ARONSON, P.E.

ADOPTED: 02/2011
REVISED: 04/2018
SUPERSEDES: 02/2011

DWG/REV BY: MJL
CHECKED BY: MAA

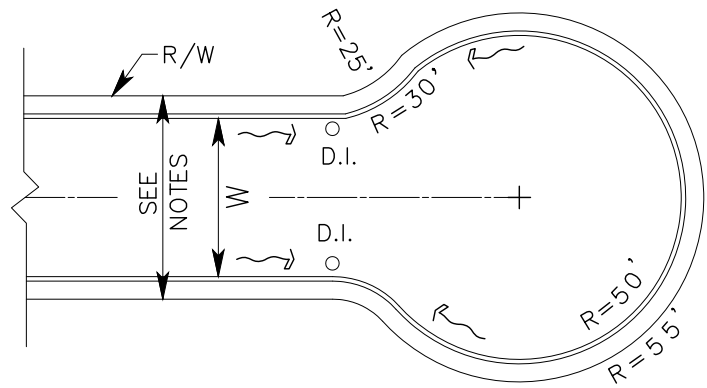


CITY OF CHENEY
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STANDARD
RURAL ROAD APPROACHES

NOT TO SCALE
STD-A09.DWG

SHEET
A-9



FULL CUL-DE-SAC

GENERAL NOTES

1. THE DRAINAGE INLETS (D.I.) SHOWN ON THIS SHEET ARE REQUIRED ONLY WHEN THE STREET SLOPES TOWARD THE CUL-DE-SAC.
2. THE WIDTH OF RIGHT-OF-WAY AND THE CURB TO CURB STREET DIMENSIONS SHALL BE SPECIFIED BY THE CITY ENGINEER.
3. MINIMUM CURB GRADES ON CUL-DE-SACS SHALL BE 1%.

APPROVED BY:



CITY ENGINEER:
MARK ARONSON, P.E.

ADOPTED: 02/2011
REVISED: 04/2018
SUPERSEDES: 02/2011

DWG/REV BY: MJL
CHECKED BY: MAA

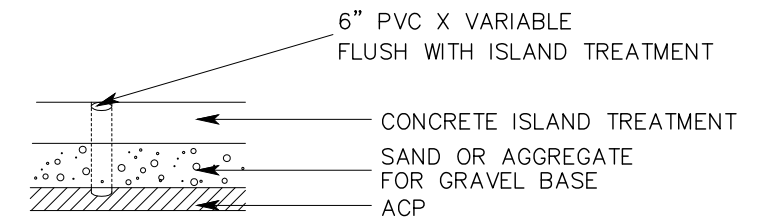
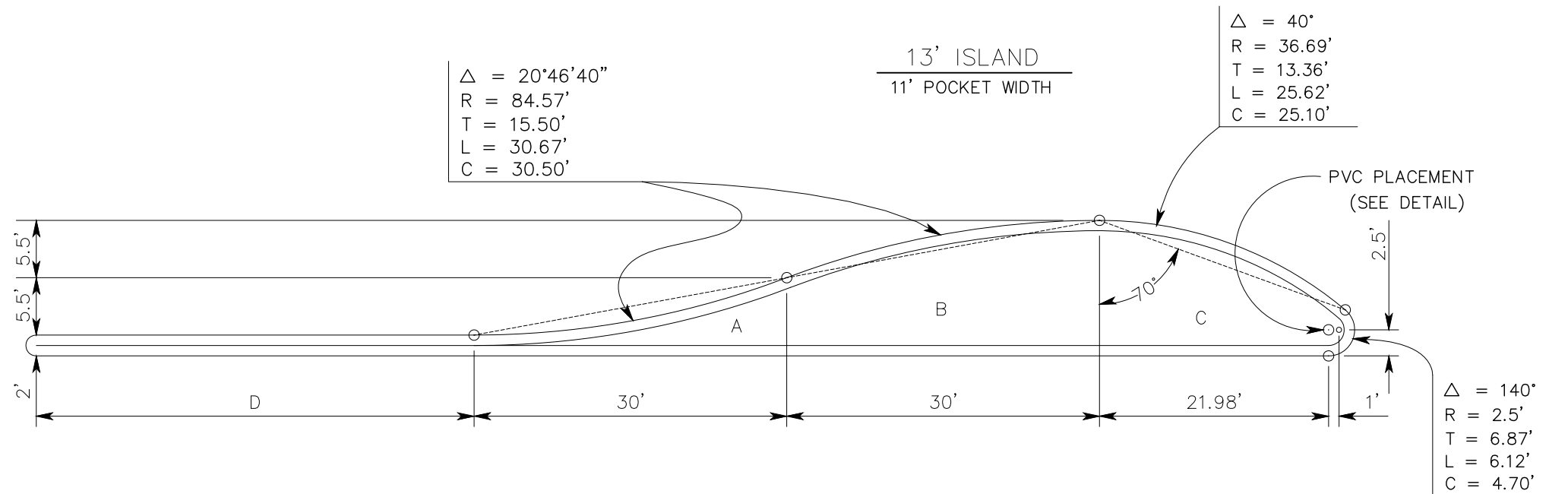


CITY OF CHENEY
DEPARTMENT OF PUBLIC WORKS
CHENEY, WA. 99004 498-9230

STANDARD
CUL-DE-SACS

NOT TO SCALE
STD-A10.DWG

SHEET
A-10

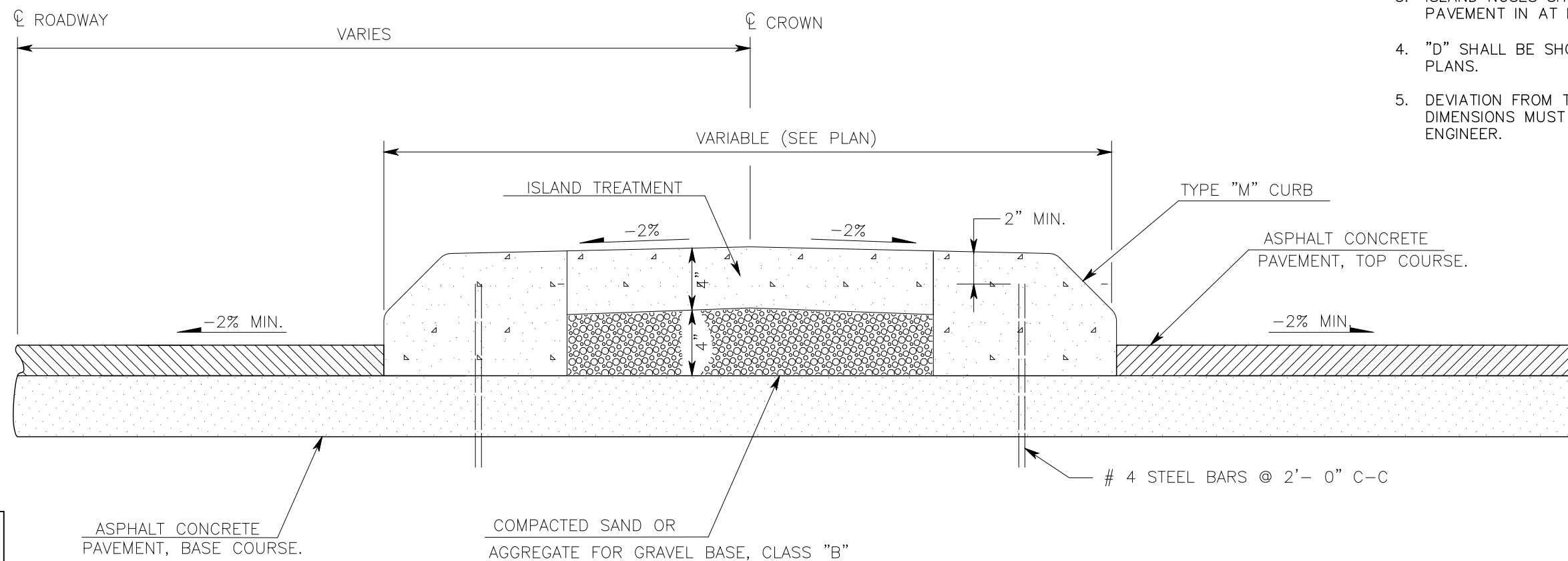


P.V.C. PLACEMENT DETAIL

AREA TABLE		A	B	C	TOTAL
TOTAL AREA	FT ²	114.27	335.74	244.73	694.74
CURB AREA	FT ²	58.71	62.63	52.14	173.48
TREATMENT AREA	FT ²	55.56	273.11	192.59	521.26
CURB(OUTER EDGE)	L.F.	60.67	60.67	53.72	175.06

GENERAL NOTES

1. CONSTRUCTION OF ISLAND TREATMENT SHALL CONFORM TO SECTION 8-04 & 8-14 OF THE STANDARD SPECIFICATIONS.
2. EXPOSED CURB SURFACES SHALL BE STEEL TROWELLED TO PROVIDE A DENSE, SMOOTH, REFLECTIVE FINISH. THE CONCRETE SLAB SHALL HAVE A BROOMED FINISH.
3. ISLAND NOSES SHALL BE DOWELED TO THE PAVEMENT IN AT LEAST TWO PLACES.
4. "D" SHALL BE SHOWN ON CONSTRUCTION PLANS.
5. DEVIATION FROM THE STANDARD ISLAND DIMENSIONS MUST BE APPROVED BY THE CITY ENGINEER.



APPROVED BY:



CITY ENGINEER:
MARK ARONSON, P.E.

ASPHALT CONCRETE
PAVEMENT, BASE COURSE.

COMPACTED SAND OR
AGGREGATE FOR GRAVEL BASE, CLASS "B"

ADOPTED: 02/2011
REVISED: 04/2018
SUPERSEDES: 02/2011

DWG/REV BY: MJL
CHECKED BY: MAA

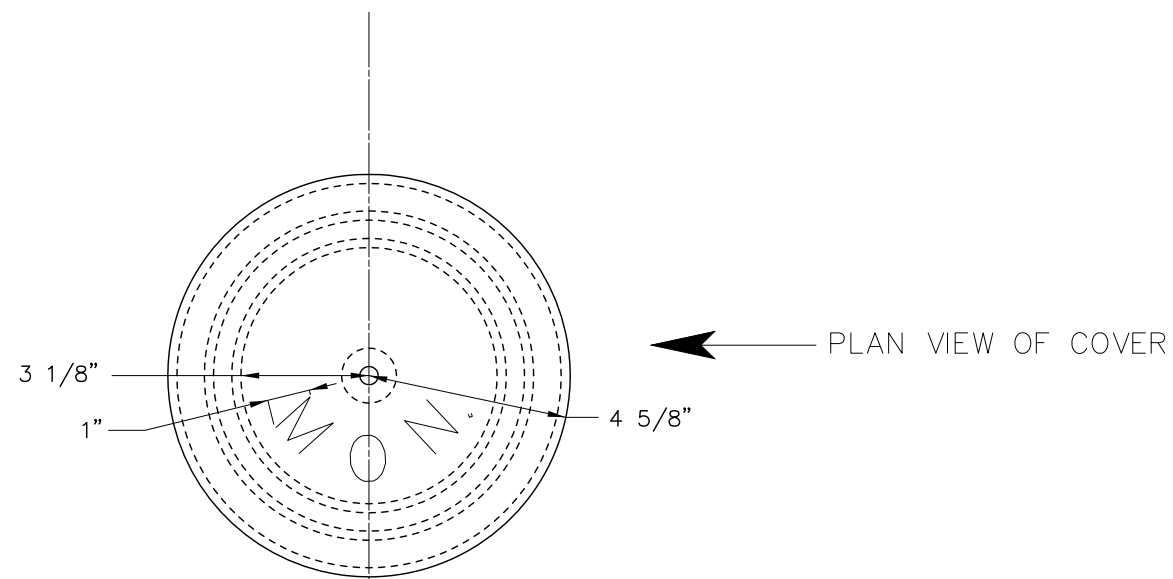


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DEPARTMENT OF PUBLIC WORKS
CHENEY, WA. 99004 498-9230

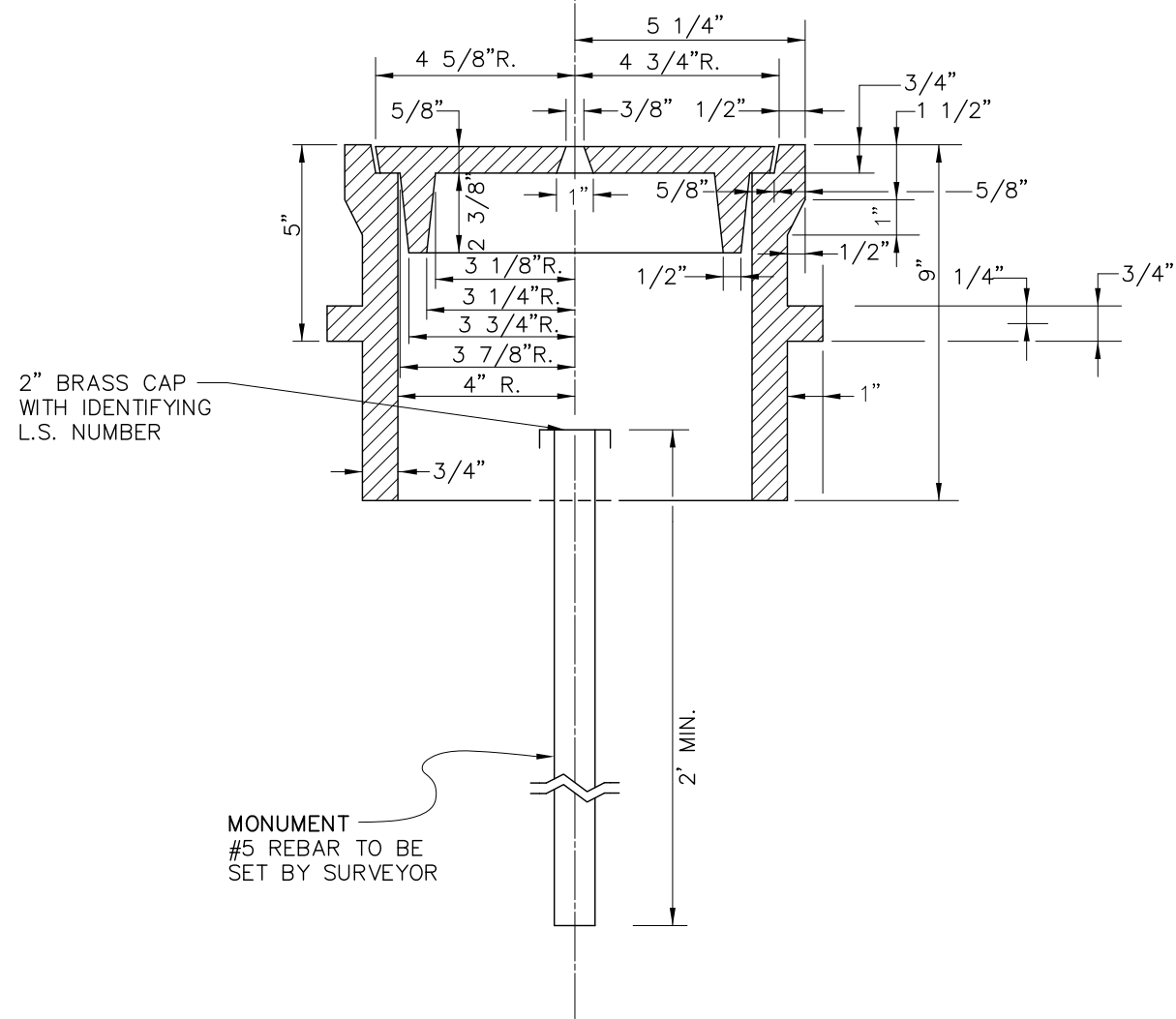
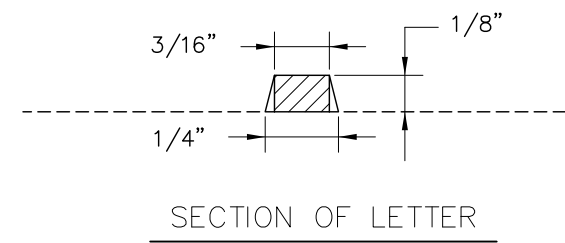
STANDARD
TRAFFIC ISLAND

NOT TO SCALE
STD-A11.DWG

SHEET
A-11



NOTE:
 THE CASTINGS SHALL BE GREY IRON CASTINGS, AASHTO DESIGNATION M-105, CLASS 30B. THE COVER AND SEAT SHALL BE MACHINED SO AS TO HAVE CONTACT AROUND THE ENTIRE CIRCUMFERENCE AND FULL WIDTH OF BEARING SURFACE.



2" BRASS CAP WITH IDENTIFYING L.S. NUMBER

MONUMENT #5 REBAR TO BE SET BY SURVEYOR

SECTION

APPROVED BY:



CITY ENGINEER:
 MARK ARONSON, P.E.

ADOPTED: 02/2011
 REVISED: 04/2018
 SUPERSEDES: 02/2011

DWG/REV BY: MJL
 CHECKED BY: MAA



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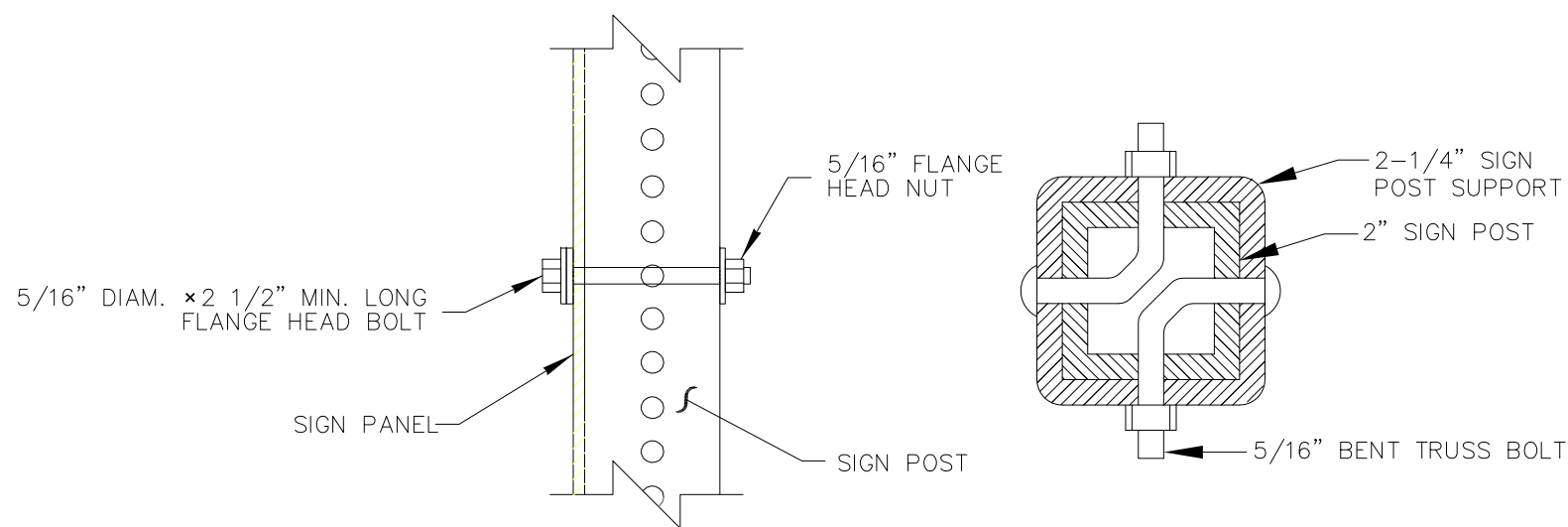
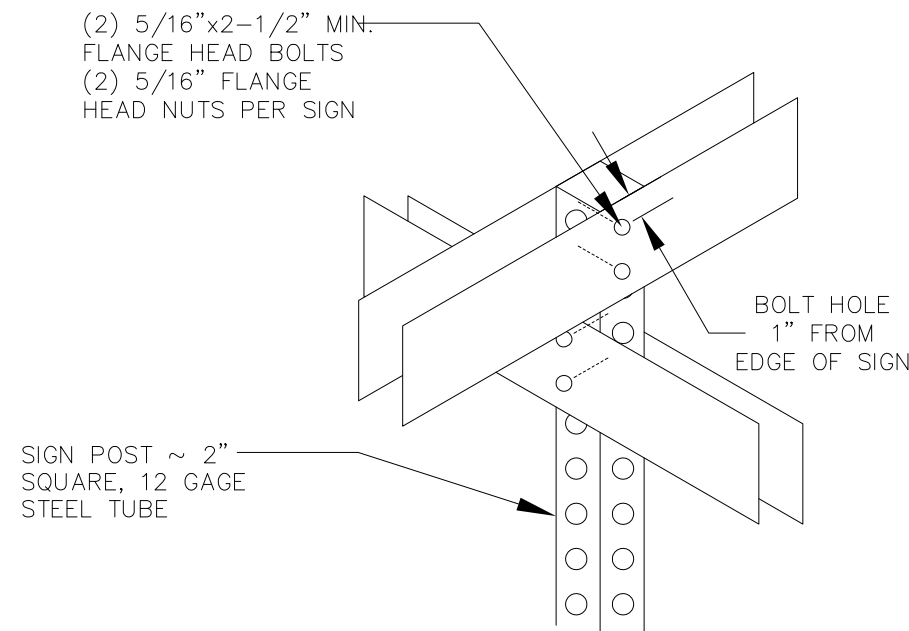
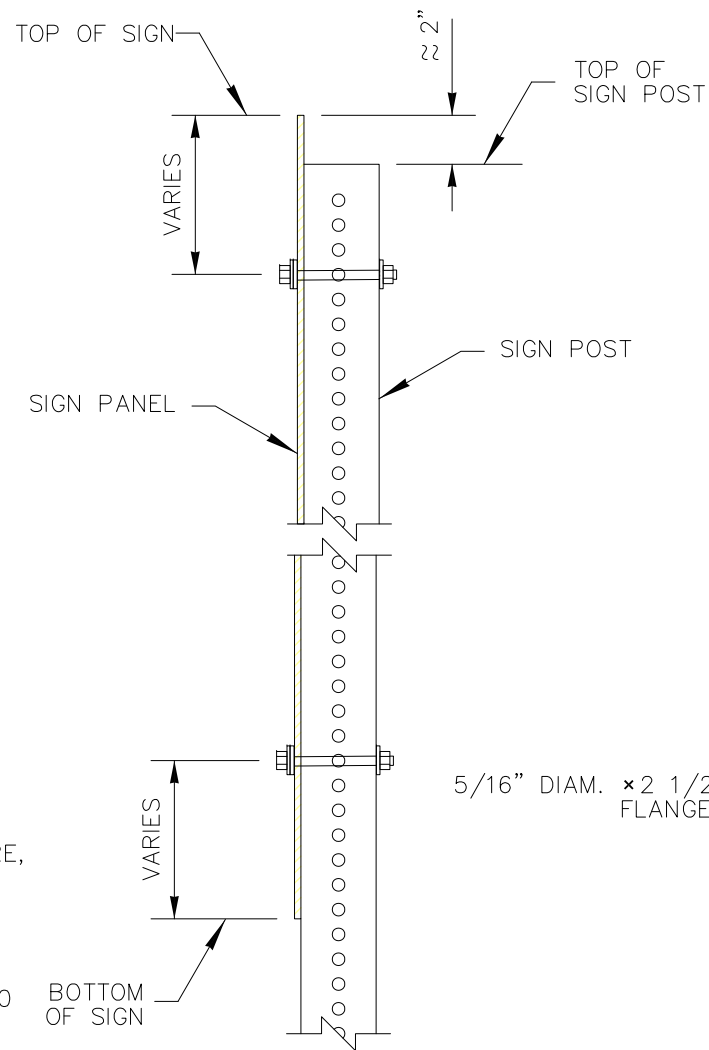
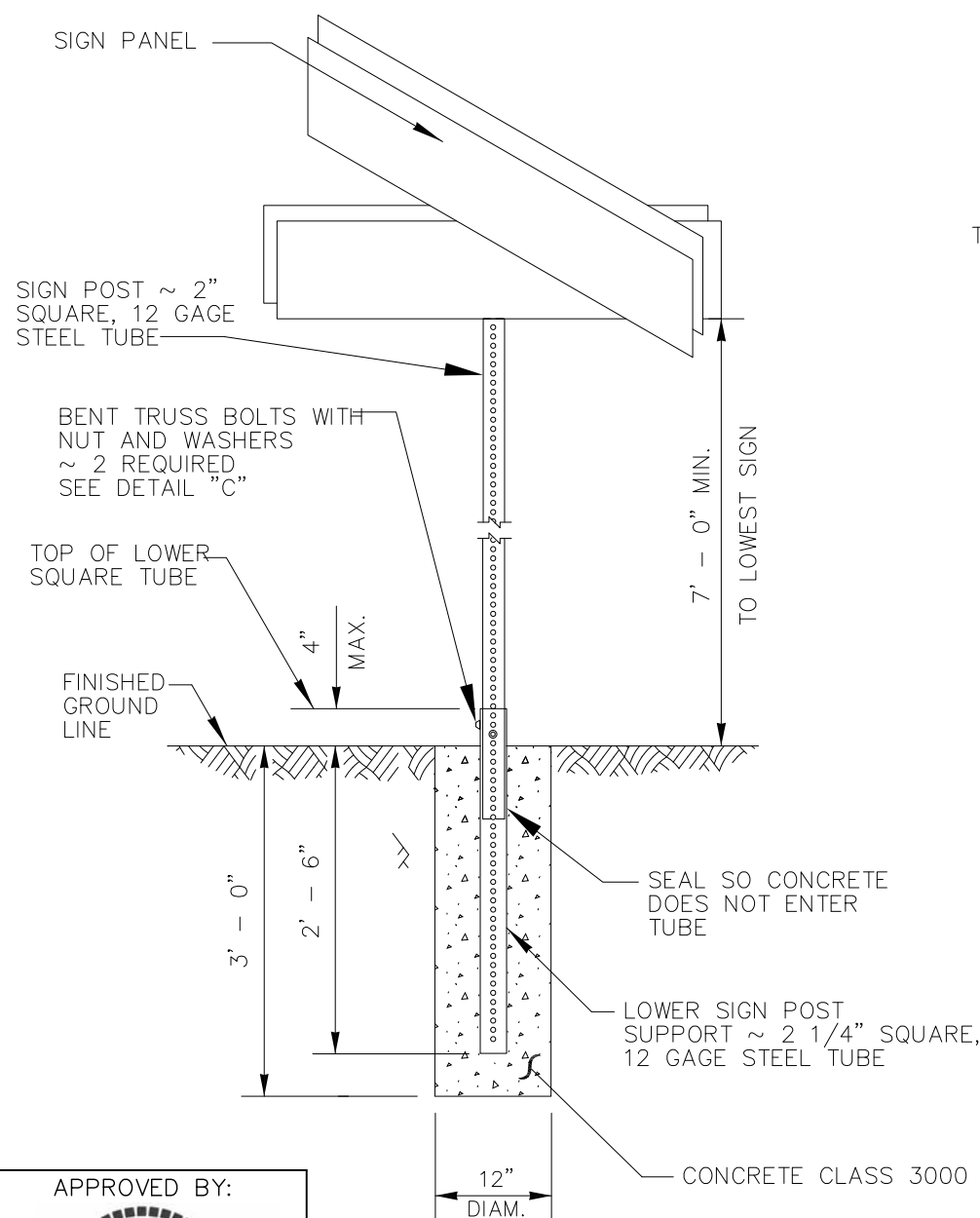
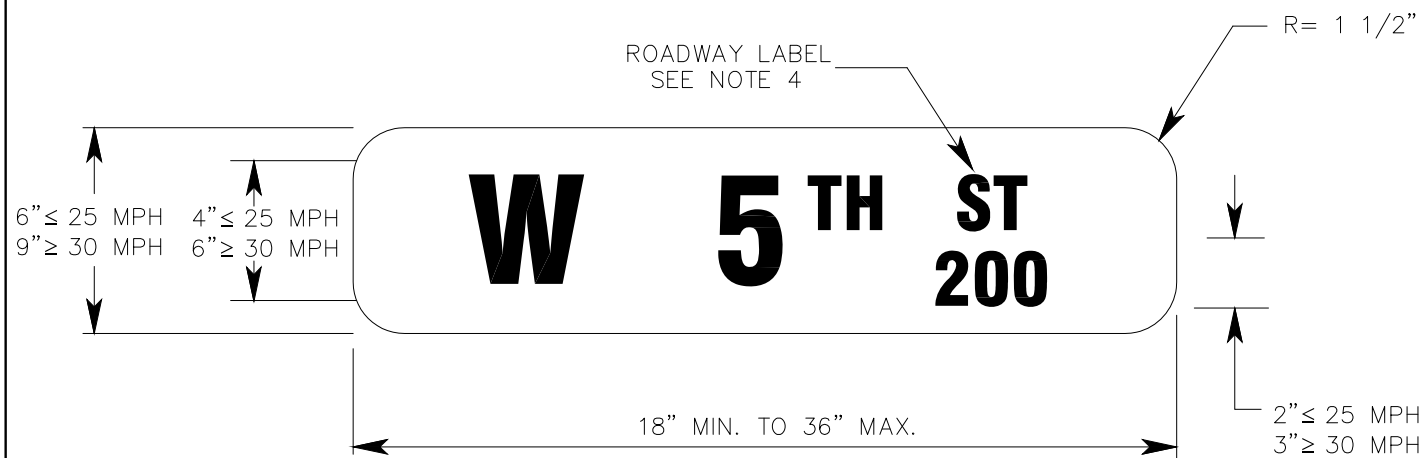
STANDARD
 MONUMENT CASE AND COVER

NOT TO SCALE
 STD-A12.DWG

SHEET
 A-12

GENERAL NOTES

1. SIGNS SHALL MEET SPECIFICATIONS FOR FLAT PLATE ALUMINUM, 0.08" THICK, ALODINE 1200 OR EQUAL.
2. THE SIGN SURFACE SHALL BE GREEN TRANSPARENT ELECTRONIC CUTTABLE (EC) FILM REVERSE WEDED ON WHITE BACKGROUND MEETING OR EXCEEDING ASTM 4956 TYPE IV (HIGH INTENSITY PRISMATIC) RETRO-REFLECTIVE SHEETING.
3. LETTERS SHALL BE SERIES B.
4. ALL ROADWAYS SHALL INCLUDE THE ABBREVIATED LABEL (I.E. - COURT - CT. DRIVE - DR. ETC.) ROADWAY LABEL SHALL BE UPPER CASE.



APPROVED BY:



CITY ENGINEER:
MARK ARONSON, P.E.

ADOPTED: 02/2011
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DWG/REV BY: MJL
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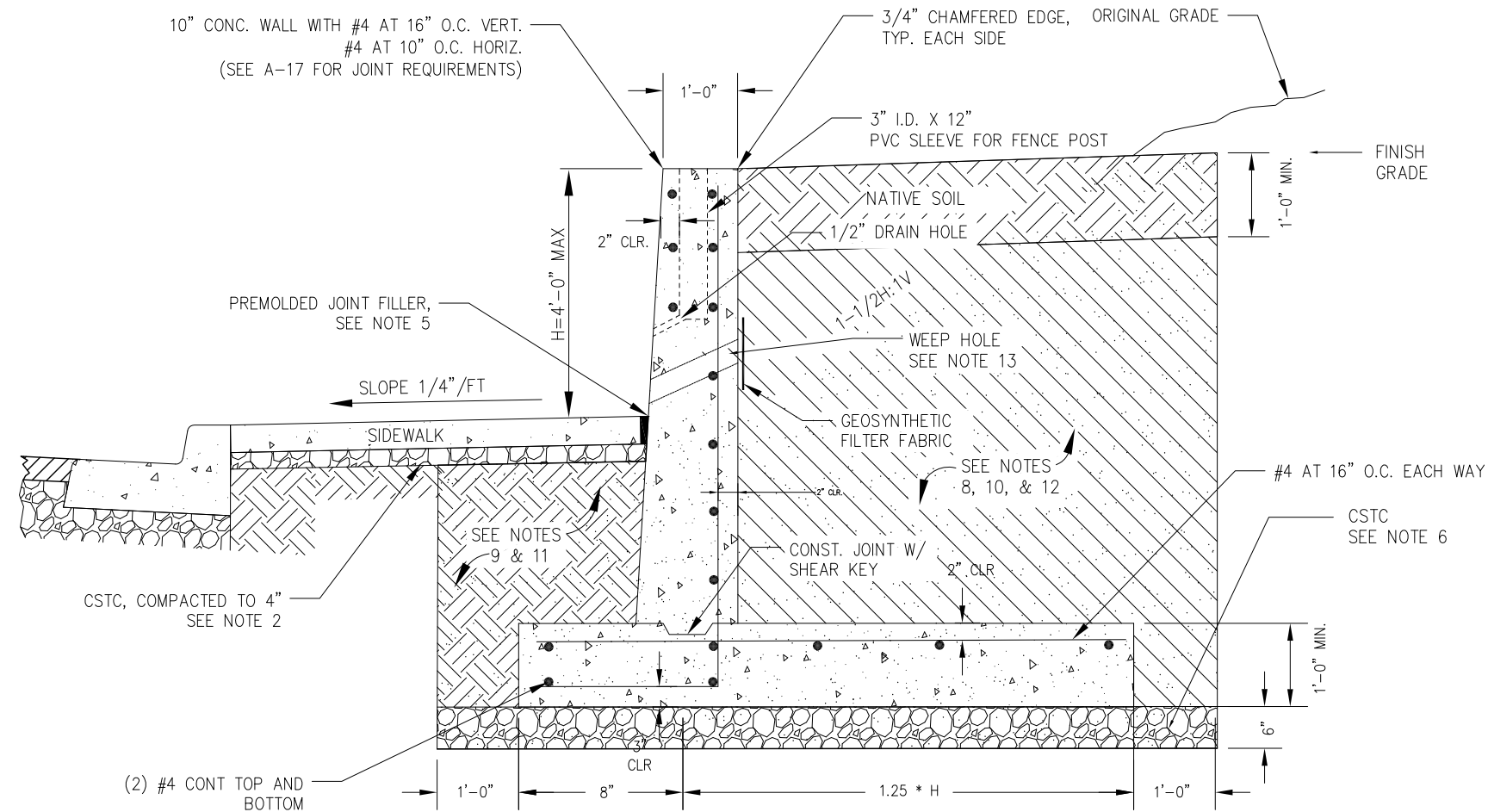
STANDARD
STREET NAME SIGNS

NOT TO SCALE

STD-A13.DWG

SHEET

A-13

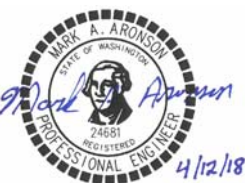


TYPE 2

NOTES:

1. CONCRETE USED FOR RETAINING WALLS SHALL BE AIR-ENTRAINED CLASS 3000. STEEL USED SHALL BE A MINIMUM OF GRADE 40 AND SHALL MEET THE REQUIREMENTS OF SEC 9-07. WALLS SHALL BE CURED IN ACCORDANCE WITH SEC 6-02.3(11). ALL EDGES TO BE 3/4" CHAMFER.
2. SEE CITY OF CHENEY DESIGN STANDARDS FOR SIDEWALK AND CURB REQUIREMENTS.
3. SEE DETAIL A-16 FOR RETAINING WALL JOINTS AND DETAILS.
4. EXPOSED RETAINING CONCRETE WALL SHALL HAVE A CLASS 1 SURFACE FINISH PER SEC 6-02.3(14)A.
5. RETAINING CONCRETE WALLS WITH ADJACENT SIDEWALKS SHALL REQUIRE A PREMOLDED JOINT FILLER AT LEAST 3/8-INCH THICK PER SEC 9-04 PLACED BETWEEN THE ADJACENT SIDEWALK AND CONCRETE WALL FACE.
6. RETAINING WALL FOUNDATIONS SHALL BE PREPARED PER SEC 2-09.3(3)C AND SHALL HAVE CSTC PER WSDOT STANDARD SPECIFICATIONS PLACED UNDERNEATH THE FOOTING IN 6" MAX HORIZ LAYERS AND COMPACTED TO 95% MAX DENSITY PER AASHTO T-180. STRUCTURAL EXCAVATION REQUIRED FOR INSTALLATION OF RETAINING WALLS SHALL BE PERFORMED IN ACCORDANCE WITH SEC 2-09.
7. BACKFILL SHALL NOT BE PLACED UNTIL THE CONCRETE HAS ATTAINED 90% OF ITS DESIGN STRENGTH AND CURED FOR AT LEAST 14 DAYS PER SEC 2-09.3(1)E.
8. GRAVEL BACKFILL BEHIND RETAINING WALLS SHALL COMPLY WITH SEC 9-03.12(2).
9. BACKFILL IN FRONT OF RETAINING WALLS MAY COME FROM INSITU SOILS THAT ARE APPROVED BY THE GEOTECH ENGINEER. WHEN INSITU SOILS ARE NOT ACCEPTABLE, AN APPROVED BORROW MATERIAL MAY BE UTILIZED.
10. BACKFILL IN UNTRAVELED OR LANDSCAPED AREAS SHALL BE PLACED IN 6" MAX HORIZ LAYERS AND COMPACTED TO 85% MAX DENSITY PER AASHTO T-180.
11. BACKFILL THAT SUPPORTS SIDEWALK AREAS SHALL BE PLACED IN 6" MAX HORIZ LAYERS AND COMPACTED TO 92% MAX DENSITY PER AASHTO T-180.
12. GRAVEL BACKFILL FOR DRAINS SHALL BE PLACED IN 12" MAX HORIZ LAYERS AND COMPACTED WITH A MIN OF THREE PASSES OF A VIBRATORY MANUAL COMPACTOR.
13. WEEP HOLES SHALL BE LOCATED PER SEC 6-02.3(22), SHALL BE A MIN OF 3" I.D. GALV STEEL OR PVC, SPACED AT A MAX 10'-0" O.C. AND SHAL BE SLOPED DOWNWARD TOWARD THE FRONT EXPOSED WALL FACE. AT EACH WEEP HOLE A MINIMUM OF 1 CUBIC FOOT OF DRAINAGE ROCK MEETING THE REQUIREMENTS OF SEC 9-03.12(4) "GRAVEL BACKFILL FOR DRAINS" SHALL BE PLACED AT THE BACK OF THE WALL, COVERING EACH WEEP HOLE INLET. BACKFILL WITHIN 18 INCHES OF WEEP HOLES SHALL COMPLY WITH SEC 9-03.12(4).
14. GUARDRAIL OR FENCING INSERTS SHALL BE INCORPORATED INTO THE WALL DESIGN WHEN $H > 30'$ AND PLACED FLUSH TO THE TOP OF THE WALL.
15. WALL FOOTINGS SHALL NOT EXTEND INTO THE ROADWAY BOUNDARY AS LOCATED BY THE BACK SIDE OF THE CURB OR CURB/GUTTER.
16. SEC REFERS TO WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION, LATEST VERSION.
17. RETAINING WALL IS DESIGNED FOR A MINIMUM SOIL BEARING OF 1500 PSF, ACTIVE PRESSURE OF 40 PCF, A SLIDING COEFFICIENT OF 0.25 WITH A LEVEL BACKFILL AND NO SURCHARGE.
18. RETAINING WALLS OUTSIDE OF THE CRITERIA OF THIS PLAN SHALL BE SPECIFICALLY DESIGNED FOR THE LOCATION USED. THE NON-STRUCTURAL PROVISIONS OF THIS PLAN SHALL BE INCORPORATED INTO SUCH DESIGN.

APPROVED BY:



CITY ENGINEER:
MARK ARONSON, P.E.

ADOPTED: 04/2018
REVISED: _____
SUPERSEDES: _____

DWG/REV BY: MJL
CHECKED BY: MAA

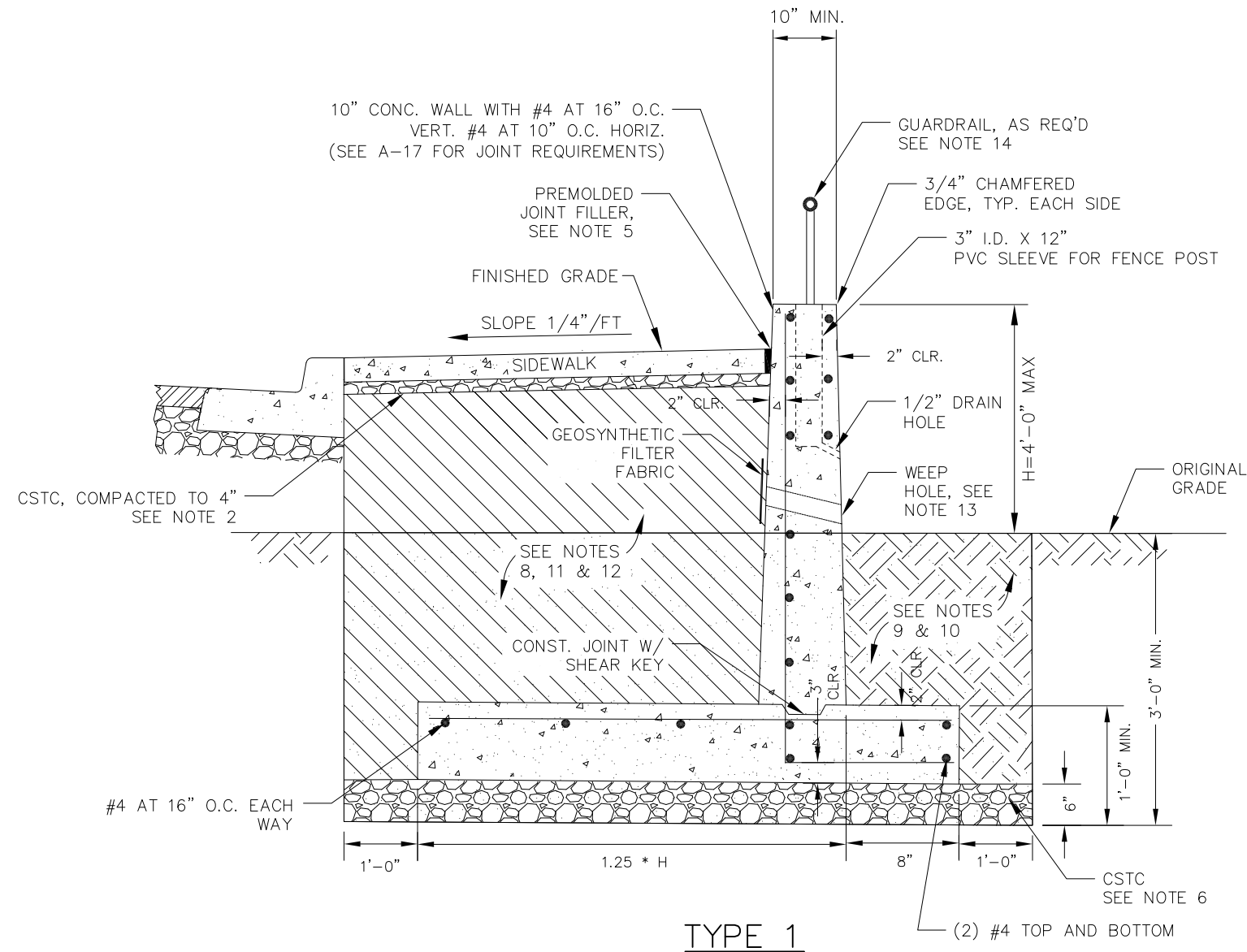


CITY OF CHENEY
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CHENEY, WA. 99004 498-9230

STANDARD
SIDEWALK RETAINING WALL (SIDEWALK BELOW)

NOT TO SCALE
STD-A01.DWG

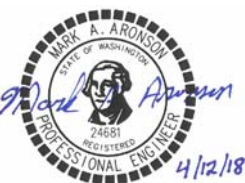
SHEET
A-14



NOTES:

1. CONCRETE USED FOR RETAINING WALLS SHALL BE AIR-ENTRAINED CLASS 3000. STEEL USED SHALL BE A MINIMUM OF GRADE 40 AND SHALL MEET THE REQUIREMENTS OF SEC 9-07. WALLS SHALL BE CURED IN ACCORDANCE WITH SEC 6-02.3(11). ALL EDGES TO BE 3/4" CHAMFER.
2. SEE CITY OF CHENEY DESIGN STANDARDS FOR SIDEWALK AND CURB REQUIREMENTS.
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APPROVED BY:



CITY ENGINEER:
MARK ARONSON, P.E.

ADOPTED: 04/2018
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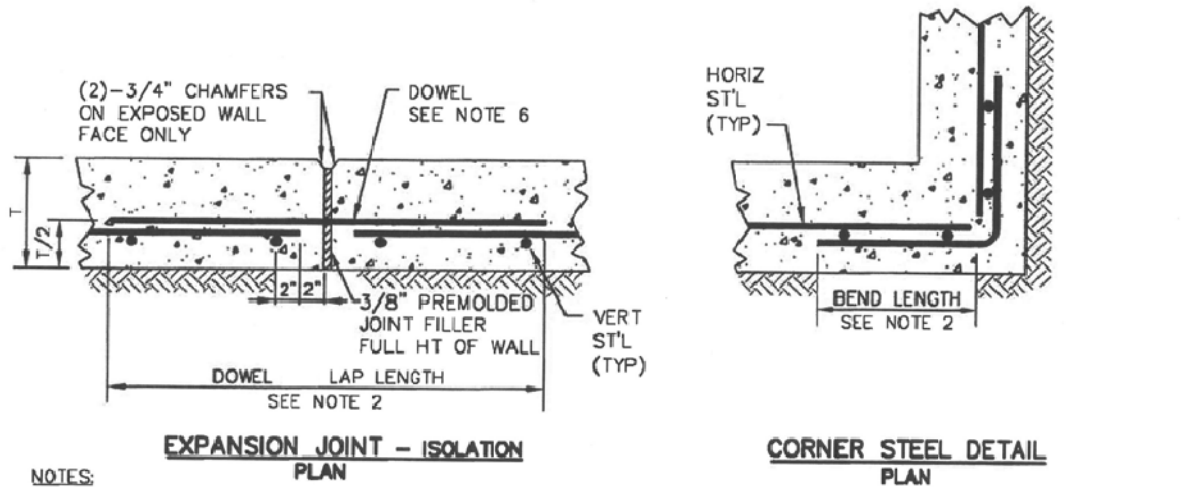
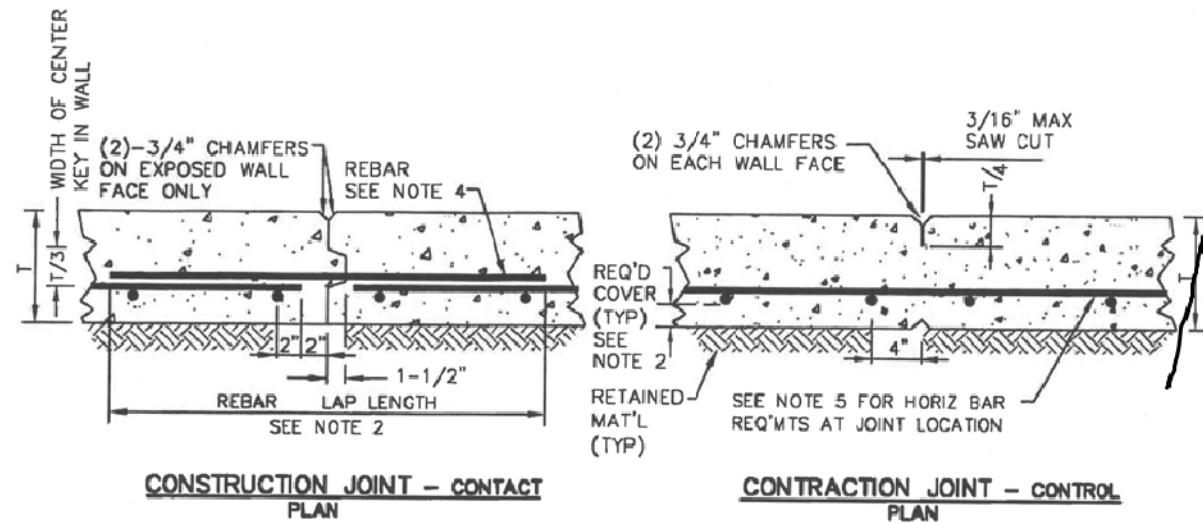


CITY OF CHENEY
DEPARTMENT OF PUBLIC WORKS
CHENEY, WA. 99004 498-9230

STANDARD
SIDEWALK RETAINING WALL (SIDEWALK ABOVE)

NOT TO SCALE
STD-A15.DWG

SHEET
A-15



- NOTES:
1. PLACE 3/4" CHAMFER ON ALL EXPOSED CORNERS AND SLOPE TOP OF WALL TOWARDS EXPOSED FACE FOR DRAINAGE.
 2. REINFORCING ST'L, BAR ANCHORAGE, COVER AND BEND AND LAP LENGTHS, SHALL BE PER LATEST EDITION OF THE A.C.I. CONCRETE CODE.
 3. EXPOSED RETAINING WALL CONCRETE SHALL HAVE A CLASS 1 SURFACE FINISH PER SEC 6-02.3(14).
 4. CONSTRUCTION JOINT: REBAR ACCESS JOINT SHALL MATCH SIZE, LOCATION AND LAP LENGTH PER DESIGN REQUIREMENTS. ALTERNATE TO DETAIL: EXTEND HORIZ. REBAR FROM ONE WALL SEGMENT INTO THE OTHER FOR A DISTANCE EQUAL TO THE REQUIRED LAP LENGTH.
 5. CONTRACTION JOINT: CUT 2ND HORIZ. BAR DOWN FROM TOP-OF-WALL AND ALTERNATE HORIZ. BARS WHILE PROCEEDING DOWNWARDS. TOP BAR AND ALTERNATE UN-CUT BARS SHALL EXTEND ACROSS JOINT. CONTRACTION JOINTS SHALL BE SPACE AT 20-FT O.C.
 6. EXPANSION JOINT: DOWELS SHALL BE ROUND AND SMOOTH. THE TOP DOWEL SHALL BE A MIN. OF (T/2) DOWN FROM TOP OF WALL. ONE DOWEL END SHALL BE SAW-CUT TO PREVENT BURRS THAT WOULD INHIBIT MOVEMENT DURING EXPANSION. THE SAW-CUT DOWEL END SHALL BE LUBRICATED UP TO THE EXPANSION JOINT W/ A PARTING COMPOUND TO MINIMIZE CONCRETE BONDING. EXPANSION JOINTS SHALL BE LOCATED AT EVERY 4TH JOINT (80-FT O.C.) AND ARE NOT REQUIRED ON CONTINUOUS WALL LENGTHS < 100-FT.
 7. "T" INDICATES WALL THICKNESS.

CONTRACTION AND EXPANSION JOINT SPACING		
	WALL LENGTH	
	< 100'	> 100'
CONTRACTION	20' O.C.	20' O.C.
EXPANSION	NR	80' O.C.

APPROVED BY:

CITY ENGINEER:
MARK ARONSON, P.E.

ADOPTED: 04/2018
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DWG/REV BY: MJL
 CHECKED BY: MAA



CITY OF CHENEY
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 CHENEY, WA. 99004 498-9230

STANDARD
 RETAINING WALL DETAILS

NOT TO SCALE
 STD-A16.DWG

SHEET
 A-16