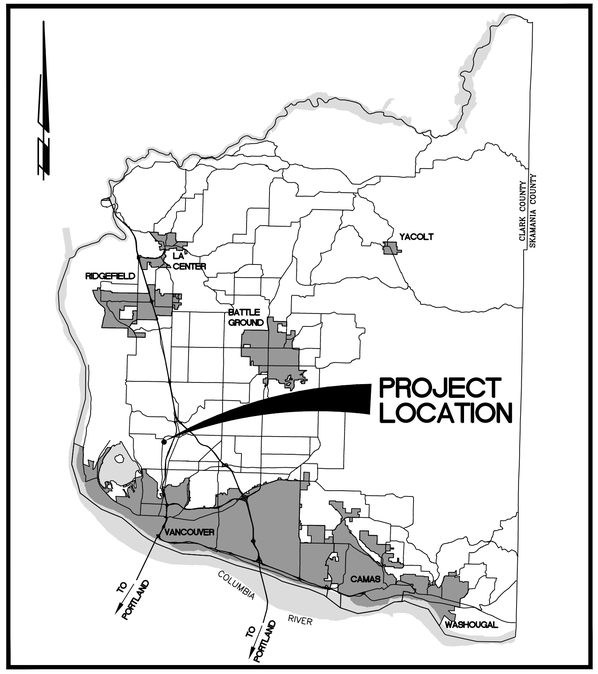
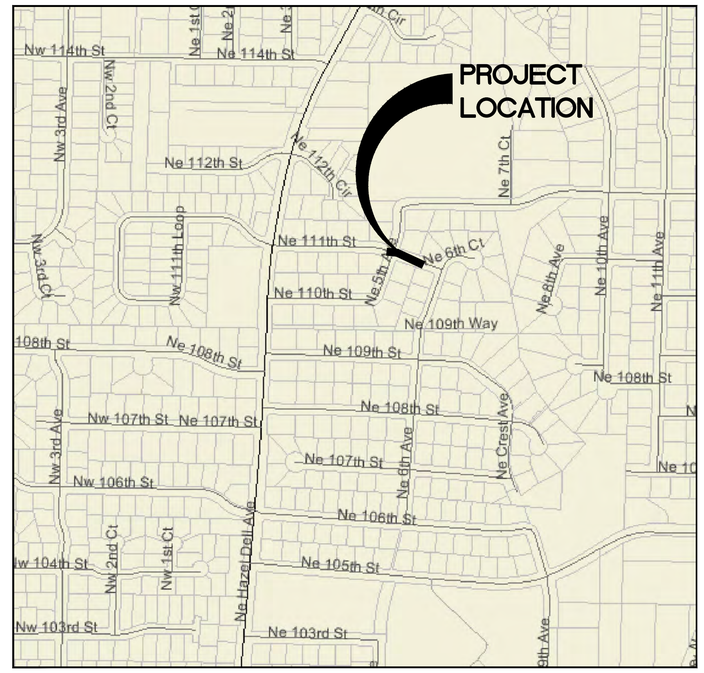
CAPITAL IMPROVEMENT PROJECT #351822

NE 111TH STREET SIDEWALK

VICINITY OF NE 5TH AVENUE

PLANS FOR THE CONSTRUCTION OF
PERVIOUS CONCRETE SIDEWALK





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BOARD OF COUNTY COUNCILORS:

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TOM MIELKE, Councilor

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CLARK COUNTY
WASHINGTON

DEPARTMENT OF
PUBLIC WORKS

ENGINEERING AND CONSTRUCTION DIVISION

Quality Assurance	Project Manager	PW Director/ County Engineer
Jeff Kostechka, P.E. DATE:	Michael Derleth DATE:	Heath Henderson, P.E. DATE:

LEGEND

TRAFFIC SIGNAL INTERCONNECT AND LIGHTING SYMBOLS

EXISTING	DESCRIPTION	REMOVED OR NEW
	Type I signal standard with terminal cabinet	
	Type III signal standard with terminal cabinet	
	Type III signal standard with terminal cabinet	
	Type IV luminaire standard with terminal cabinet	
	Type 332 Controller Cabinet with Type I electrical service	
	ITS 332 Style Controller Cabinet with Type I electrical service	
	Stretch P-1 controller cabinet with Type I electrical service	
	Type I electrical junction box	
	Type II electrical junction box	
	Type VIII electrical junction box	
	Cable Vault	
	Optically Programmed Arrow traffic signal display head	
	Standard LED Arrow traffic signal display head	
	Optically Programmed traffic signal display head	
	Conventional traffic signal display head	
	Pedestrian signal display	
	Optical preemption detector	
	Video Detection Camera	
	Mast arm mounted sign	
W	Ethernet Radio	W
R	Radar detection system	R
	Capped tenon	
	CPU power pole	
	Rigid metal conduit	
	Rigid polyvinyl chloride (PVC) conduit	
#	Signal standard number	#
#	Construction note	#
#	Wire note	#
	Conduit lead in for new or future loops	
P	Pavement Temperature Alert Probe	P

OTHER UTILITY SYMBOLS

SYMBOLS EXIST.	SYMBOLS PROP.	DESCRIPTION
		TRANSFORMER
		ELEC TOWER
		LIGHT
		GUY ANCHOR
		POWER POLE
		SIGNAL POLE
J	J	JUNCTION BOX
T	T	TELEPHONE MANHOLE
		TELEPHONE POLE
T	T	TELEPHONE PEDESTAL
T	T	TELEPHONE VAULT
tv	tv	TELEVISION BOX
G	G	GAS VALVE

OTHER GENERAL SYMBOLS

SYMBOLS	DESCRIPTION
	NEW SIDEWALK
#	CONSTRUCTION NOTE
A × B C	SURVEY TOPO SHOT A = POINT ID B = POINT DESCRIPTION C = POINT ELEVATION
	SURVEY TRAVERSE POINT
	TEST HOLE
	BIKE LANE STRIPING
	ROADWAY TURN ARROW STRIPING
	FLOW ARROW

GENERAL LINETYPES

LINETYPE EXISTING	LINETYPE PROPOSED	DESCRIPTION
		EDGE OF PAVEMENT
		CURB LINE
		SIDEWALK FRONT
		SIDEWALK BACK
		CENTER LINE
X	X	FENCE LINE
T	T	TELEPHONE LINE
TV	TV	TELEVISION LINE
W	W	WATER LINE
E	E	UNDERGROUND ELECTRIC
OHE	OHE	OVERHEAD ELECTRIC
S	S	SANITARY SEWER LINE
STM		STORM DRAINAGE
GAS	GAS	GAS LINE
	IC	INTERCONNECT LINE
FIBER	FIBER	FIBER OPTIC LINE
		STORM/CULVERT LINE
		DITCH CENTER LINE
		GUARDRAIL
WB	WB	WETLAND BOUNDARY
		ROW LINE
		EASEMENT LINE
		PROPERTY LINE
F	F	FILL LIMITS
C	C	CUT LIMITS
		SAWCUT LINE
		PERMANENT SLOPE EASEMENT
SF	SF	EROSION CONTROL SILT FENCE
GATE	GATE	GATE

SURFACE/LANDSCAPE SYMBOLS

SYMBOLS EXIST.	SYMBOLS PROP.	DESCRIPTION
		SHRUB
		CONIFEROUS TREE
		DECIDUOUS TREE
		DECIDUOUS TREE
		BRUSH LINE
		HEDGE
		SIGN
MB	MB	MAIL BOX

EROSION CONTROL/DEMOLITION SYMBOLS

SYMBOLS	DESCRIPTION
	NEW CEMENT CONC RAMP
	NEW CEMENT CONC
	NEW HMA PAVEMENT
	REMOVAL LIMITS
IP	EROSION CONTROL INLET PROTECTION
	NEW PERVIOUS CONC SIDEWALK

STORM/SANITARY SYMBOLS

SYMBOLS EXIST.	SYMBOLS PROP.	DESCRIPTION
		CURB INLET (CI)
		CATCH BASIN (CB)
		COMBINATION CURB INLET (CCI)
S		STORM MANHOLE (MH)
SAN	SAN	SANITARY SEWER (MH)
CL	CL	CLEAN OUT

WATER SYMBOLS

SYMBOLS EXIST.	SYMBOLS PROP.	DESCRIPTION
		FIRE HYDRANT
		WATER METER
W		WATER VALVE
		SPRINKLER HEAD
		WELL
		TEE
		CROSS
		THRUST BLOCK
		THRUST BLOCK
		PLUG

CURB RETURN/CURVE DATA

R = CURVE RADIUS
Δ = CURVE DELTA ANGLE
L = CURVE LENGTH
T = CURVE TANGENT

CX CURVE TABLE

RETURN INFORMATION		?
X1	BCR	E1
X2	1/4 Δ	E2
X3	1/2 Δ	E3
X4	3/4 Δ	E4
X5	ECR	E5

GENERAL NOTES

1. IF ANY CULTURAL RESOURCES AND/OR HUMAN REMAINS ARE DISCOVERED IN THE COURSE OF UNDERTAKING THE DEVELOPMENT ACTIVITY, THE DEPARTMENT OF ARCHAEOLOGY AND HISTORIC PRESERVATION IN OLYMPIA AND THE CLARK COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES SHALL BE NOTIFIED. FAILURE TO COMPLY WITH THESE STATE REQUIREMENTS MAY CONSTITUTE A CLASS C FELONY, SUBJECT TO IMPRISONMENT AND/OR FINES.

CONSTRUCTION NOTES

ROADWAY

1 – ASPHALT
2 – ASPHALT PLANING
3 – SIDEWALK AND RAMPS
4 – CURB
5 – FENCE AND GATE
6 – MAILBOX
7 – TREE/SHRUB
8 – SIGN
9 – CONCRETE
10 – RETAINING WALL
11 – LIGHT POLE
12 – GUARDRAIL
13 – TRAFFIC BARRIER
14 – POST/BOLLARD

STORM & SEWER

30 – MANHOLE
31 – INLET
32 – PIPE/CULVERT
33 – CLEANOUT
34 – SEPTIC SYSTEM

WATER & GAS

40 – VALVE
41 – METER
42 – FIRE HYDRANT
43 – IRRIGATION SYSTEM
44 – VENT PIPE

TELEPHONE, CABLE, ELECTRIC, TRAFFIC

50 – UTILITY POLE
51 – GUY WIRE
52 – PEDESTAL
53 – SIGNAL POLE
54 – SIGNAL CONTROL CABINET
55 – JUNCTION BOX
56 – CABINET
57 – VAULT
58 – TRANSFORMER

CONSTRUCTION NOTE LEGEND

RM – REMOVE
RL – RELOCATE
S – SAWCUT
P – PROTECT
T – TRIM
A – ADJUST
AB – ABANDON

BY CONTRACTOR

BY OTHERS

LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE AND MAY BE INCOMPLETE

CALL 48 HOURS BEFORE YOU DIG 1-800-424-5555 "It's the Law" NORTHWEST UTILITIES NOTIFICATION CENTER

CLARK COUNTY, WASHINGTON

TRANSPORTATION PROGRAM

PUBLIC WORKS
ENGINEERING & CONSTRUCTION DIVISION

ENGINEERING AND DESIGN SECTION

MICHAEL M. EMRICK STATE OF WASHINGTON 29030 REGISTERED PROFESSIONAL ENGINEER

75% PRELIMINARY

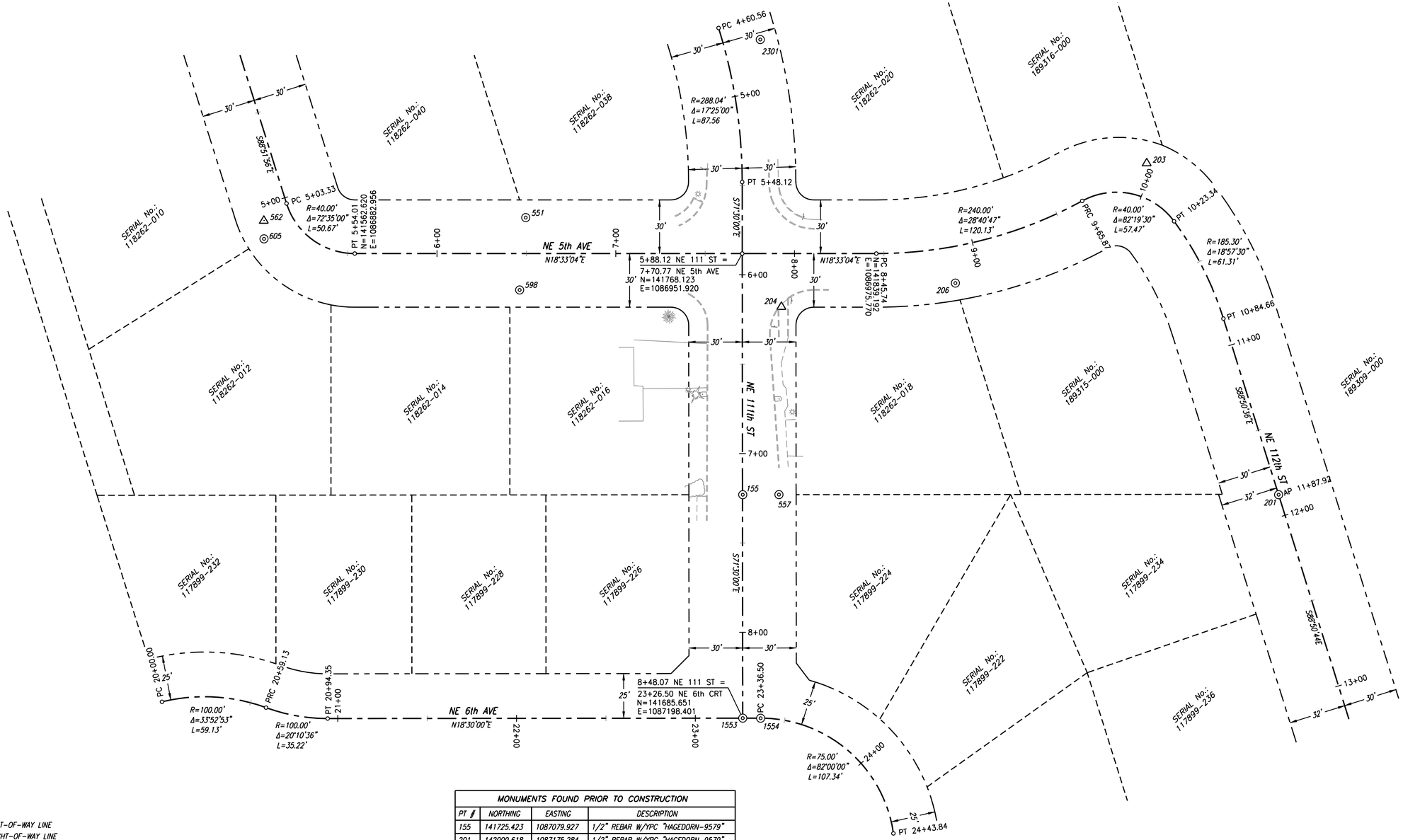
NE 111TH STREET SIDEWALK @ NE 5TH AVE CRP #351822

LEGEND AND GENERAL NOTES

DATE 06/30/15

LGN1

VE-12



LEGEND

- EXISTING RIGHT-OF-WAY LINE
- PROPOSED RIGHT-OF-WAY LINE
- EXISTING CENTERLINE
- CONSTRUCTION CENTERLINE
- EXISTING EASEMENT LINE
- PROPOSED EASEMENT LINE

⊙ MONUMENT FOUND – AS NOTED

TCE TEMPORARY CONSTRUCTION EASEMENT

0 30 60 Feet

SURVEYOR'S STATEMENT

- THE PURPOSE OF THIS SURVEY IS TO LOCATE AND ESTABLISH THE CENTERLINE AND RIGHT-OF-WAY LINES OF A PORTION OF NE 111th ST/5th AVE.
- LOT LINES ARE LOCATED BY DEED CALLS AND/OR PUBLIC RECORDS AND ARE SHOWN FOR CLARITY ONLY. THIS DOES NOT CONSTITUTE A BOUNDARY SURVEY OF SAID LOT LINES AND IS THEREFORE SUBJECT TO ANY INACCURACIES A SUBSEQUENT BOUNDARY SURVEY MAY DISCLOSE.
- GROSS, ACQUISITION, AND NET AREAS ARE BASED ON CLARK COUNTY ASSESSOR RECORDS.

MONUMENTS FOUND PRIOR TO CONSTRUCTION

PT #	NORTHING	EASTING	DESCRIPTION
155	141725.423	1087079.927	1/2" REBAR W/YPC "HAGEDORN-9579"
201	142009.618	1087175.284	1/2" REBAR W/YPC "HAGEDORN-9579"
206	141875.869	1087005.506	CURB SCREW
551	141659.674	1086894.303	CURB SCREW
557	141744.608	1087086.326	CURB SCREW
598	141643.561	1086931.619	CURB SCREW
605	141517.078	1086858.985	CURB SCREW
1553	141685.651	1087198.401	1/2" REBAR W/YPC "HAGEDORN-9579"
1554	141695.101	1087201.632	1/2" REBAR W/YPC "HAGEDORN-9579"
2301	141815.714	1086841.614	CURB SCREW

BEARINGS SHOWN HEREON ARE BASED ON THE EAST LINE OF THE NE 1/4 OF SECTION 34, T 3 N, R 1 E, WM AS BEING N1°56'01"E

CONTROL POINTS

PT #	NORTHING	EASTING	ELEV	DESCRIPTION
203	141998.730	1086975.860	155.59	MAG NAIL
204	141779.420	1086986.990	162.80	MAG NAIL
562	141520.320	1086849.230	170.49	MAG NAIL

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CLARK COUNTY, WASHINGTON

PUBLIC WORKS
ENGINEERING & CONSTRUCTION DIVISION

SURVEY SECTION

DATE

KENNETH W. PAUL, P.L.S.
COUNTY SURVEYOR
P.L.S. #35152

WASHINGTON PROFESSIONAL LAND SURVEYOR KENNETH W. PAUL 35152 REGISTERED

PRELIMINARY

NE 111TH STREET SIDEWALK @ NE 5TH AVE CRP #351822

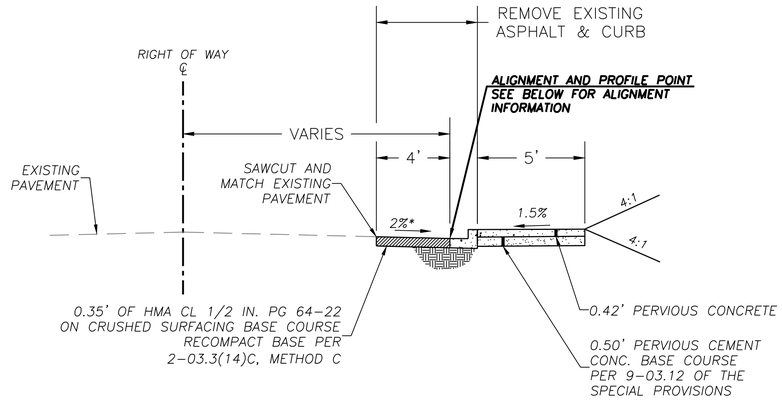
SURVEY MONUMENTATION & EXISTING CONDITIONS

DATE 06/30/15

SV1

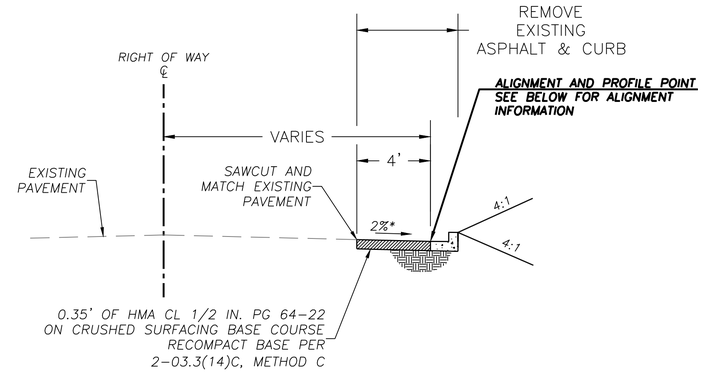
3 OF 9

Ver.1.2



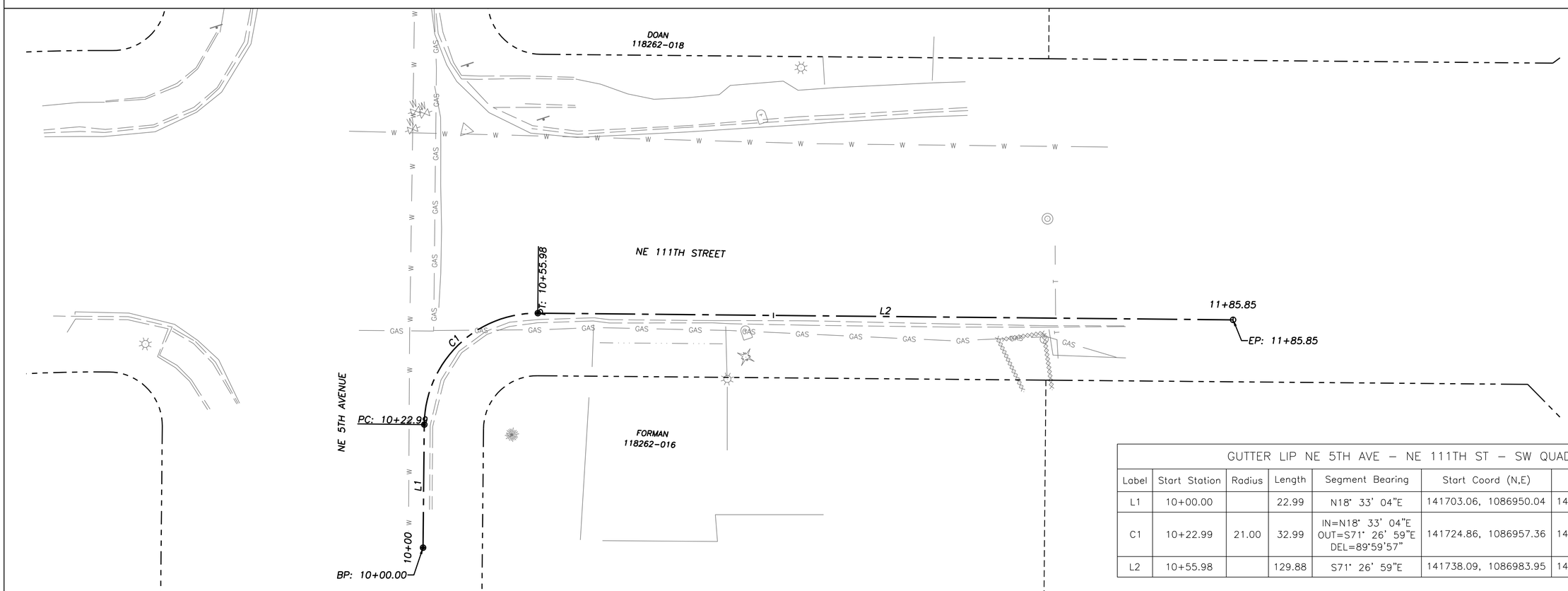
* MATCH EXISTING CROSS SLOPE – 2% STD. ± 0.5%

NE 5TH AVENUE/NE 111TH STREET
STA 10+35.73 TO STA 11+52.00



* MATCH EXISTING CROSS SLOPE

NE 5TH AVENUE/NE 111TH STREET
STA 10+22.99 TO STA 10+35.73



GUTTER LIP NE 5TH AVE – NE 111TH ST – SW QUAD						
Label	Start Station	Radius	Length	Segment Bearing	Start Coord (N,E)	End Coord (N,E)
L1	10+00.00		22.99	N18° 33' 04"E	141703.06, 1086950.04	141724.86, 1086957.36
C1	10+22.99	21.00	32.99	IN=N18° 33' 04"E OUT=S71° 26' 59"E DEL=89°59'57"	141724.86, 1086957.36	141738.09, 1086983.95
L2	10+55.98		129.88	S71° 26' 59"E	141738.09, 1086983.95	141696.77, 1087107.08

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PUBLIC WORKS
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ENGINEERING AND DESIGN SECTION

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75% PRELIMINARY

NE 111TH STREET SIDEWALK @ NE 5TH AVE CRP #351822

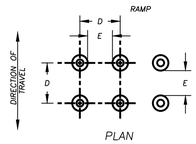
TYPICAL SECTIONS AND DESIGN ALIGNMENT

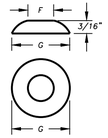
DATE 06/30/15

TS1

4 OF 9

Ver. 1.2





TRUNCATED DOME DETAIL

	MIN.	MAX.
D	1 5/8"	2 3/8"
E	5/8"	1 1/2"
F	7/16"	3/4"
G	7/8"	1 7/16"

ELEVATION

TRUNCATED DOMES (SEE NOTE 2)
DETECTABLE WARNING
PATTERN DETAIL

NOTES:

1. AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREA.
2. THE DETECTABLE WARNING PATTERNS CAN BE CREATED BY ACCEPTABLE MEANS THAT WILL ACHIEVE THE TRUNCATED DOME DIMENSIONS AND SPACING SHOWN.
3. PLACE TRUNCATED DOME DETECTABLE WARNING TEXTURE IN THE LOWER 24" OF THE THROAT OF THE RAMP ONLY. ARRANGE DOMES USING IN-LINE PATTERN ONLY AS SHOWN. COLOR OF TEXTURE (COATING) SHALL BE SAFETY YELLOW IN COMPLIANCE WITH WSDOT STANDARD SPECIFICATIONS OR AS PER ADA SPECIFICATIONS.
4. FOR CONSTRUCTION OF SIDEWALK RAMPS OUTSIDE OF PUBLIC RIGHT-OF-WAY, CHECK WITH STATE BUILDING CODES.

NO.	REVISIONS	DATE	BY

DWG: F10.DWG

Department of Public Works
CLARK COUNTY
WASHINGTON
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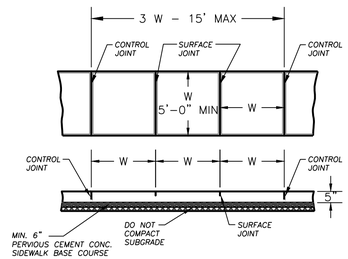
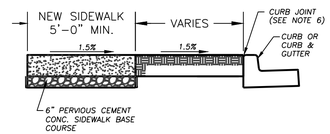
TRUNCATED DOME
DETECTABLE WARNING PATTERN

APPROVED
COUNTY ENGINEER
5/23/08
DATE

STANDARD DETAIL F10
DESIGNED
DRAWN
DATE 05/23/08

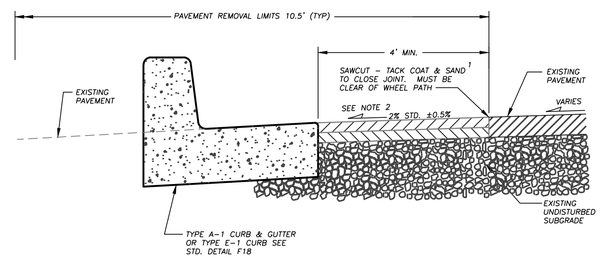




NOTE:

WHERE PERVIOUS CONCRETE IS ADJACENT TO NON-PERVIOUS (STANDARD) CONCRETE, USE EXPANSION JOINT PER STD. DETAIL F31.

PERVIOUS CEMENT CONCRETE SIDEWALK

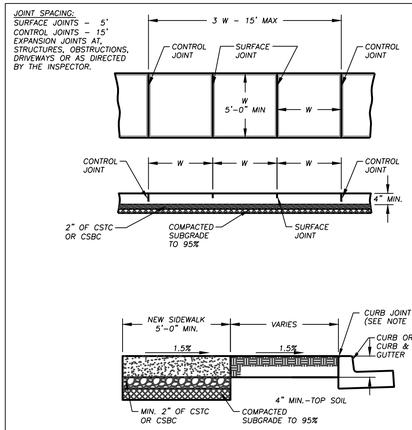


NOTES:

1. THE EDGES OF ALL EXISTING ASPHALT SURFACES SHALL BE SAWCUT TO PROVIDE A STRAIGHT, CLEAN EDGE. A TACK COAT SHALL BE APPLIED PER THE STANDARD SPECIFICATIONS. ALL JOINTS SHALL BE SEALED AND SANDED.
2. MATCH EXISTING PAVEMENT SLOPE. ROADWAY SLOPE OUTSIDE LISTED RANGE ALLOWED WITH APPROVAL FOR FRONTAGE/MATCHING SITUATIONS.

PAVEMENT NARROWING DETAIL

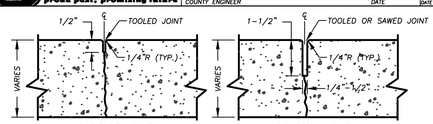
JOINT SPACING:
SURFACE JOINTS - 5'
CONTROL JOINTS - 15'
EXPANSION JOINTS AT, STRUCTURES, OBSTRUCTIONS, DRIVEWAYS OR AS DIRECTED BY THE INSPECTOR.

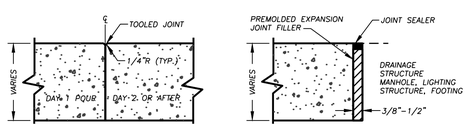


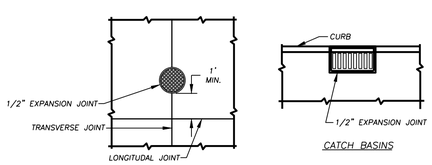
NOTES:

1. CONCRETE SHALL BE 3,000 PSI MIN. (CLASS 3000), 3 1/2" SLUMP (± 1").
2. FINISH SHALL BE MEDIUM BROOM PERPENDICULAR TO PEDESTRIAN TRAFFIC UNLESS OTHERWISE DIRECTED.
3. ALL EXISTING EDGES SHALL BE SAWCUT.
4. NO FILLER REQUIRED FOR SURFACE JOINTS.
5. ALL JOINTS AND EDGES SHALL BE FINISHED WITH 1/4" RADIUS EDGER (3" SMOOTH EACH SIDE).
6. FOR SIDEWALKS ADJACENT TO THE CURB AND POURED AT THE SAME TIME AS THE CURB, THE JOINT BETWEEN THEM SHALL BE A TROWELED JOINT WITH A MIN. 1/2" RADIUS.
7. THE SUBGRADE AND CRUSHED SURFACING MATERIALS SHALL BE COMPACTED PER WSDOT STANDARDS.
8. SEE STD. DETAIL F31 FOR CONCRETE JOINTS.

CEMENT SIDEWALK DETAIL







NOTES:

1. CONTROL JOINTS MAY BE USED IN PLACE OF SURFACE JOINTS.
2. CONSTRUCTION/COLD JOINTS MAY BE USED IN PLACE OF CONTROL JOINTS.
3. EXPANSION JOINTS MAY BE USED IN PLACE OF CONSTRUCTION/COLD JOINTS.
4. ALL JOINTS AND EDGES SHALL BE FINISHED WITH 1/4" RADIUS EDGER (3" SMOOTH EACH SIDE).
5. PARALLEL JOINTS SHALL BE SEPARATED BY A MINIMUM OF 2'.

NO.	REVISIONS	DATE	BY

DWG: F31.DWG

Department of Public Works
CLARK COUNTY
WASHINGTON
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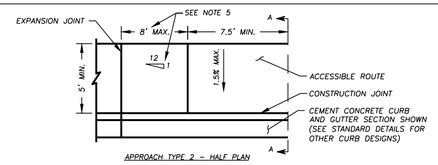
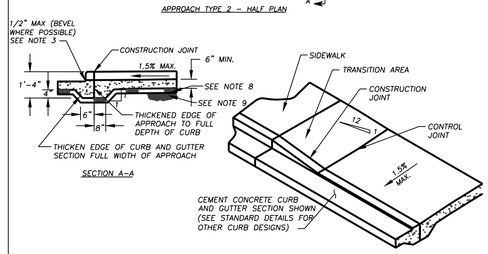
CONCRETE JOINTS

APPROVED
COUNTY ENGINEER
5/23/08
DATE

STANDARD DETAIL F31
DESIGNED
DRAWN
DATE 05/23/08



APPROACH TYPE 2 - HALF PLAN

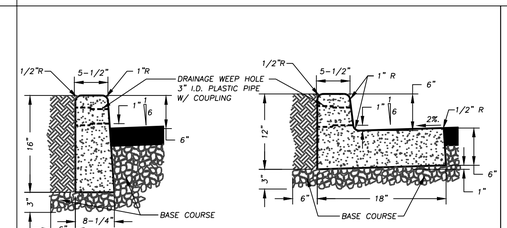


APPROACH TYPE 2 - HALF ISOMETRIC

NOTES:

1. A MINIMUM 3' WIDE ACCESSIBLE ROUTE SHALL BE MAINTAINED IN ALL PEDESTRIAN ACCESSIBLE AREAS.
2. EXPANSION JOINTS SHALL BE PLACED ALONG SIDEWALKS IN ACCORD WITH SIDEWALK DETAIL. ALL JOINTS SHALL BE CLEANED AND EDGED.
3. CHANGES IN LEVEL UP TO 1/4" MAY BE VERTICAL AND WITHOUT EDGE TREATMENT. CHANGES IN LEVEL BETWEEN 1/4" AND 1/2" SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 2:1.
4. TRANSITION AREA TO BE SLOPED AT 1v TO 12h, UNLESS STREET GRADE WOULD CREATE A TRANSITION LENGTH GREATER THAN 8', THEN THE MAXIMUM LENGTH OF 8' GOVERNS SLOPE.
5. CEMENT CONCRETE APPROACHES SHALL BE CONSTRUCTED OF AIR-ENTRAINED CONCRETE CLASS 3000 AND MAY BE POURED INTEGRAL WITH CURB.
6. EXISTING CURB, GUTTER AND SIDEWALK TO BE SAWCUT AND REMOVED FOR INSTALLATION OF APPROACH.
7. COMMERCIAL DRIVEWAY REQUIRES REINFORCING STEEL (6"x6"x10 GA MESH) MIN. 3" COVER. SEE STD. DETAIL F17 FOR REINFORCING AND CONCRTET THICKNESS.
8. MIN. 3" DEPTH OF CSBC, COMPACTED TO 95% OF MAX. DRY DENSITY.
9. SUBGRADE PREPARED PER WSDOT STANDARD SPECIFICATIONS 2-06.3(1).
10. SEE STD. DETAIL F31 FOR CONCRETE JOINTS.

CEMENT CONCRETE APPROACH
MODIFIED TYPE 2 - ATTACHED SIDEWALK



NOTES

1. CONCRETE SHALL BE 3000 PSI MIN. (CLASS 3000) 3 1/2" SLUMP (MAX.).
2. CURBS ADJACENT TO PAVEMENT OR SIDEWALK TO HAVE EXPANSION AND/OR CONTROL JOINTS TO MATCH EXISTING PATTERNS.
3. 3/8" EXPANSION JOINTS TO BE PROVIDED AT EACH POINT OF TANGENCY OF THE CURB, COLD JOINTS, EACH SIDE OF INLET STRUCTURES AND DRIVEWAYS. MATERIAL TO BE PRE-MOLDED, ASPHALT IMPREGNATED AND NON EXTRUDING. SEE STD. DETAIL F31 FOR JOINTS.
4. CONTROL JOINT SPACING NOT TO EXCEED 3W SIDEWALK PANELS. THE DEPTH OF THE JOINT SHALL BE AT LEAST 1-1/2 INCHES. WEEP HOLES TO BE CENTERED WITH CONTROL JOINTS.
5. BASE COURSE SHALL BE TO SUBGRADE OF STREET SECTION OR MIN. 3", WHICHEVER IS GREATER, AND SHALL EXTEND 6" BEHIND THE CURB. THE SUBGRADE AND CRUSHED SURFACING MATERIALS SHALL BE COMPACTED PER WSDOT STANDARDS.
6. DRAINAGE WEEP HOLES TO BE 3" I.D. PLASTIC PIPE WITH COUPLING. FINISH PIPE END FLUSH WITH FACE OF CURB.
7. GROUT ANY VOIDS IN CONCRETE SURROUNDING PIPE.
8. DRAINAGE ACCESS THROUGH EXISTING CURBS SHALL BE CORE DRILLED.
9. CURB TO BE BRUSH FINISHED. ALL EXISTING EDGES SHALL BE SAWCUT.
10. ALL MATERIALS AND WORKMANSHIP FOR TYPE E-1 & A-1 SHALL BE IN ACCORDANCE WITH WSDOT STANDARD PLAN No. F-10.12-00, APPROVED 12/20/06 OR MOST CURRENT REVISION.

NO.	REVISIONS	DATE	BY

DWG: F18.DWG

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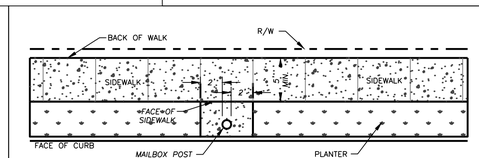
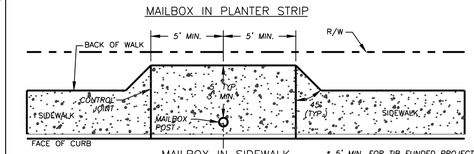
CONCRETE CURBS

APPROVED
COUNTY ENGINEER
5/23/08
DATE

STANDARD DETAIL F18
DESIGNED
DRAWN
DATE 05/23/08

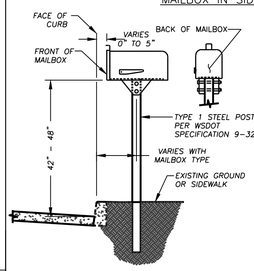


MAILBOX IN PLANTER STRIP



MAILBOX IN SIDEWALK

* 5' MIN. FOR TIB FUNDED PROJECTS.



NOTES:

1. SEE CURRENT WSDOT STANDARD PLAN No. H-12 FOR MAILBOX, POST (STEEL), BRACKET AND OTHER INSTALLATION DETAILS.
2. MAILBOXES MUST BE POSTMASTER APPROVED. CONTACT MAINTENANCE MANAGER AT 992-5052.
3. LOCATION OF MAILBOXES ARE SUBJECT TO APPROVAL BY COUNTY ENGINEERING FOR ACCESS AND SIGHT DISTANCE REQUIREMENTS. CONTACT ENGINEERING SERVICES AT 397-2375.
4. INSTALL EXPANSION JOINT MATERIAL AROUND MAILBOX POST WHEN SET IN SIDEWALK.
5. EXTEND SIDEWALK JOINTS THROUGH WIDENED SIDEWALK SECTION.
6. COLLECTION BOX UNITS (CBU) AND CONCRETE BASE ARE INSTALLED BY THE U.S. POSTAL SERVICE. SEE NOTE 2 FOR CONTACT.
7. A MAILBOX TURNOUT CONFORMING TO STD. DETAIL F13a IS REQUIRED FOR ALL STREETS EXCEPT ACCESS AND SUBCOLLECTOR STREETS WHERE THE POSTED SPEED LIMIT IS 25 MPH OR LESS.

NO.	REVISIONS	DATE	BY

DWG: F13.DWG

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SIDEWALK MAILBOX PLACEMENT

APPROVED
COUNTY ENGINEER
5/23/08
DATE

STANDARD DETAIL F13
DESIGNED
DRAWN
DATE 05/23/08

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ENGINEERING AND DESIGN SECTION

MICHAEL M. EMRICK
STATE OF WASHINGTON
29030
REGISTERED PROFESSIONAL ENGINEER

75% PRELIMINARY

NE 111TH STREET SIDEWALK @ NE 5TH AVE CRP #351822

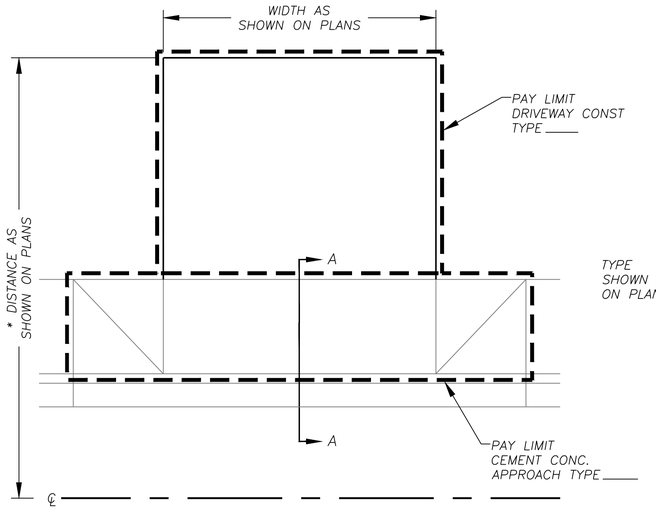
DETAILS - SHEET 1 OF 2

DATE 06/30/15

RD1

5 OF 9

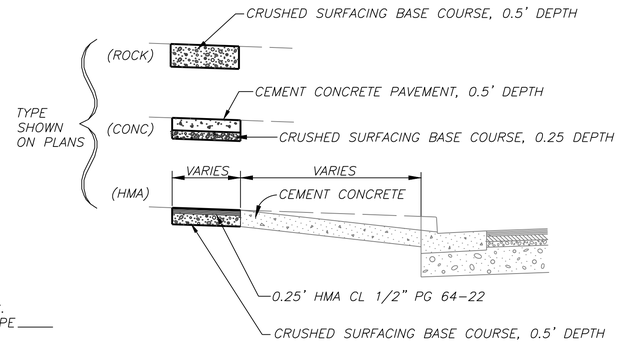
VER. 1.2



TYPICAL DRIVEWAY

N.T.S.

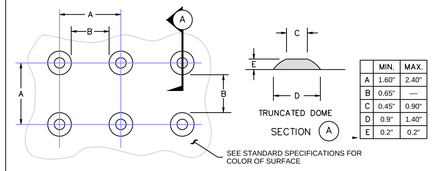
* DRIVEWAY DISTANCE LENGTH MAY CHANGE DUE TO FIELD CONDITIONS.



SECTION A-A

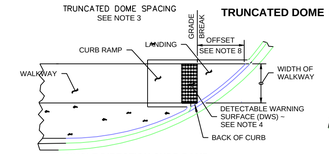
N.T.S.

DRIVEWAY CONSTRUCTION

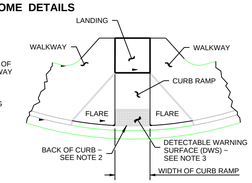


	MIN.	MAX.
A	1.60"	2.40"
B	0.65"	—
C	0.45"	0.90"
D	0.9"	1.40"
E	0.2"	0.2"

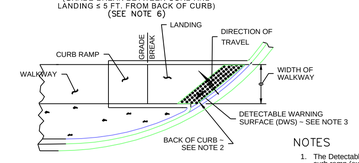
TRUNCATED DOME DETAILS



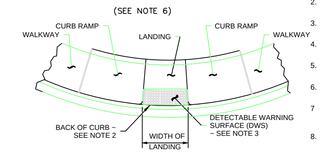
SINGLE DIRECTION CURB RAMP
(GRADE BREAK BETWEEN CURB AND LANDING ≤ 5 FT. FROM BACK OF CURB)
(SEE NOTE 6)



PERPENDICULAR CURB RAMP
(SEE NOTE 6)



(SEE NOTE 6)



PARALLEL CURB RAMP
(SEE NOTE 6)

NOTES

1. The Detectable Warning Surface (DWS) shall extend the full width of the curb ramp (exclusive of flares) or the landing.
2. The Detectable Warning Surface shall be placed at the back of curb, and need not follow the radius.
3. The rows of truncated domes shall be aligned to be perpendicular to the grade break at the back of curb.
4. The rows of truncated domes shall be aligned to be parallel to the direction of travel.
5. If curb and gutter are not present, such as a shared-use path connection, the Detectable Warning Surface shall be placed at the pavement edge.
6. See **CLARK COUNTY STANDARD DETAILS** for sidewalk and curb ramp details.
7. If a curb ramp is required, the location of the Detectable Warning Surface must be at the bottom of the ramp and within the required distance from the rail.
8. When the grade break between the curb ramp and the landing is less than or equal to 5 ft. from the back of curb at all points, place the Detectable Warning Surface on the bottom of the curb ramp.

NO.	REVISIONS	DATE	BY

DWG: F10.DWG

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CLARK COUNTY
WASHINGTON
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TRUNCATED DOME DETECTABLE WARNING SURFACE

APPROVED

COUNTY ENGINEER — DATE

STANDARD DETAIL F10

DESIGNED
DRAWN
DATE 06/22/15

LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE AND MAY BE INCOMPLETE

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MICHAEL M. EMRICH, STATE OF WASHINGTON, 29030, REGISTERED PROFESSIONAL ENGINEER

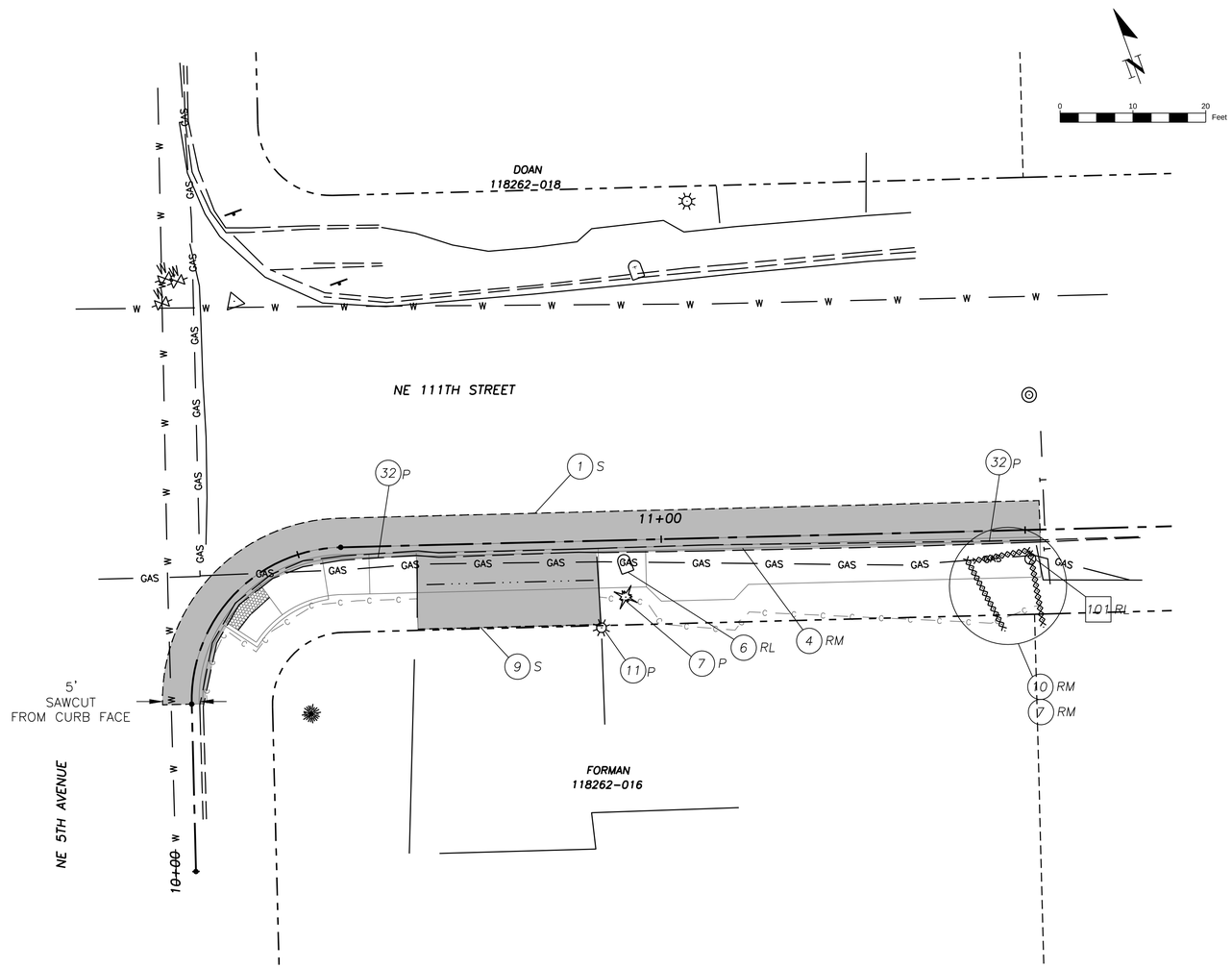
75% PRELIMINARY

NE 111TH STREET SIDEWALK @ NE 5TH AVE CRP #351822

DETAILS - SHEET 2 OF 2

DATE 06/30/15
RD2
6 OF 9

Ver. 1.2



SITE PREPARATION NOTES

CONSTRUCTION NOTES

ROADWAY

1 – ASPHALT, SAWCUT ALL CONNECTIONS
2 – ASPHALT PLANING
3 – SIDEWALK AND RAMPS, SAWCUT ALL CONNECTIONS
4 – CURB, SAWCUT ALL CONNECTIONS
5 – FENCE AND GATE
6 – MAILBOX
7 – TREE/SHRUB
8 – SIGN
9 – CONCRETE
10 – RETAINING WALL
11 – LIGHT POLE
12 – GUARDRAIL
13 – TRAFFIC BARRIER
14 – POST/BOLLARD
15 – BOULDER
16 – BRIDGE RAIL
17 – ECOLOGY BLOCK
18 – SHED/STRUCTURE

STORM & SEWER

30 – MANHOLE
31 – INLET
32 – PIPE/CULVERT
33 – CLEANOUT
34 – SEPTIC SYSTEM

WATER & GAS

40 – VALVE
41 – METER
42 – FIRE HYDRANT
43 – IRRIGATION SYSTEM
44 – VENT PIPE

TELEPHONE, CABLE, ELECTRIC, TRAFFIC

50 – UTILITY POLE
51 – GUY WIRE
52 – PEDESTAL
53 – SIGNAL POLE
54 – SIGNAL CONTROL CABINET
55 – JUNCTION BOX
56 – CABINET
57 – VAULT
58 – TRANSFORMER
59 – ELECTRICAL SERVICE
101 – WATER LOCATOR

CONSTRUCTION NOTE LEGEND

RM – REMOVE
RL – RELOCATE
S – SAWCUT
P – PROTECT
T – TRIM
A – ADJUST
AB – ABANDON

(#) (#) BY CONTRACTOR

[#] [#] BY OTHERS

EXISTING HMA AND CEMENT CONCRETE PAVEMENT REMOVAL AREA

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NE 111TH STREET SIDEWALK @ NE 5TH AVE CRP #351822

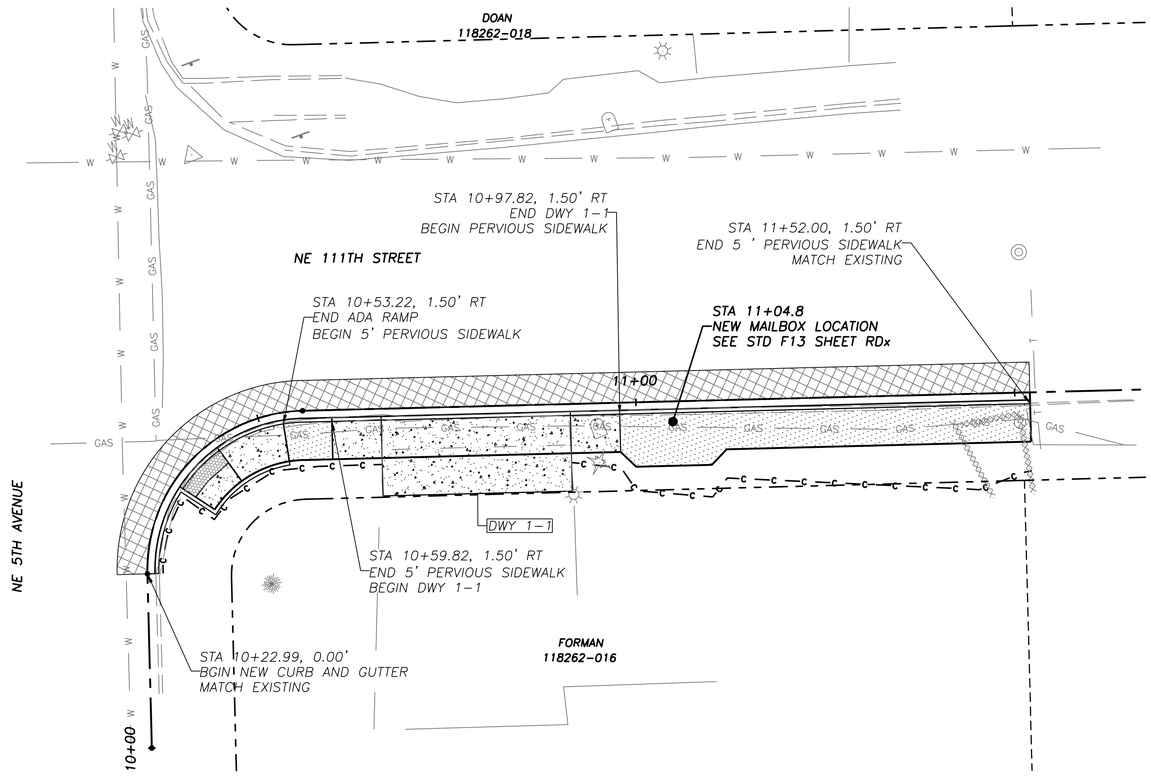
SITE PREPARATION AND STORMWATER POLLUTION PREVENTION

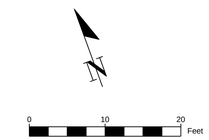
DATE 06/30/15

SPP1

7 OF 9

Ver. 1.2



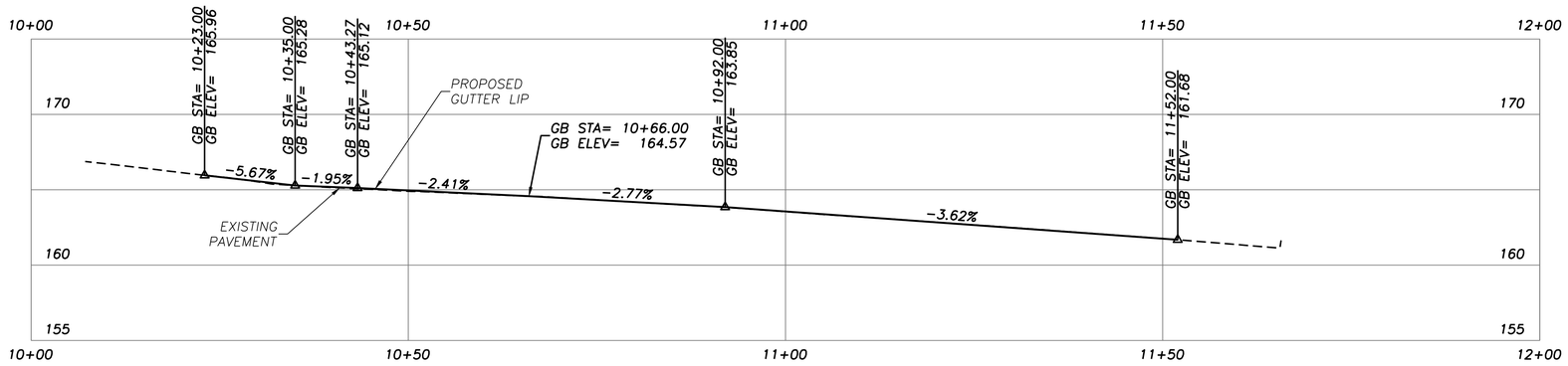


DWY 1-1
STA 10+78.80, 25' WIDE
CEM CONC APROACH TYPE 2
MATCH 11.5' RT
(ADJUST TO MATCH EXISTING JOINT)

PROPOSED HMA PAVEMENT AREA

CEMENT CONCRETE

PERVIOUS CEMENT CONCRETE



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NE 111TH STREET SIDEWALK @ NE 5TH AVE CRP #351822

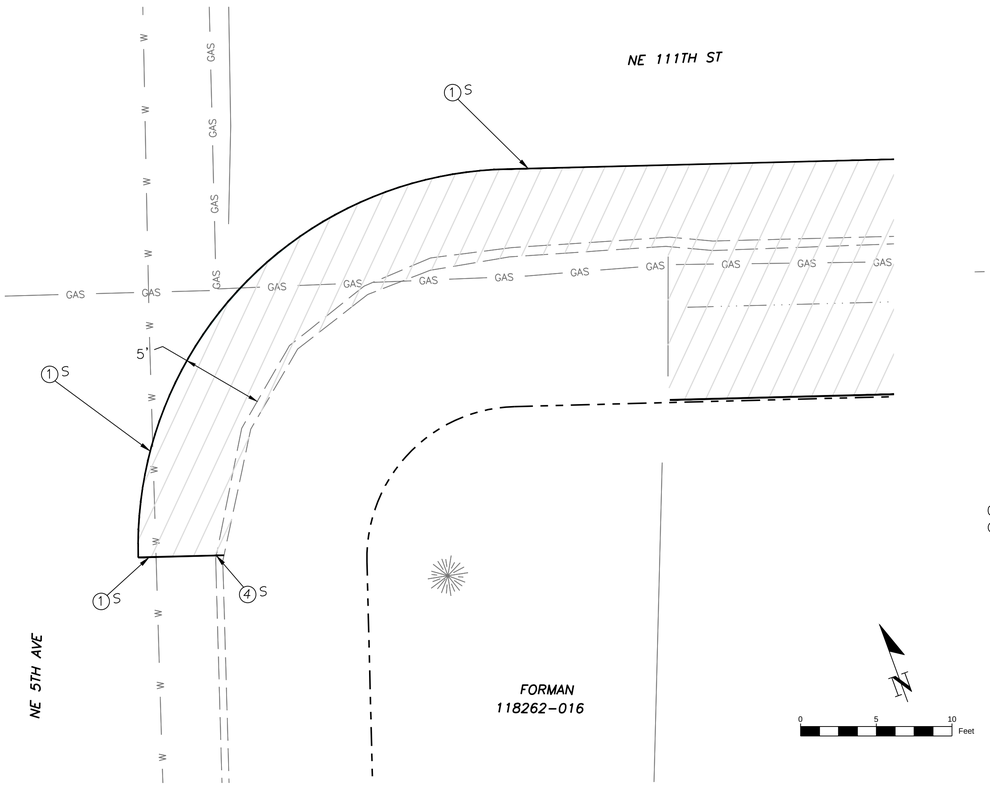
PLAN AND PROFILE

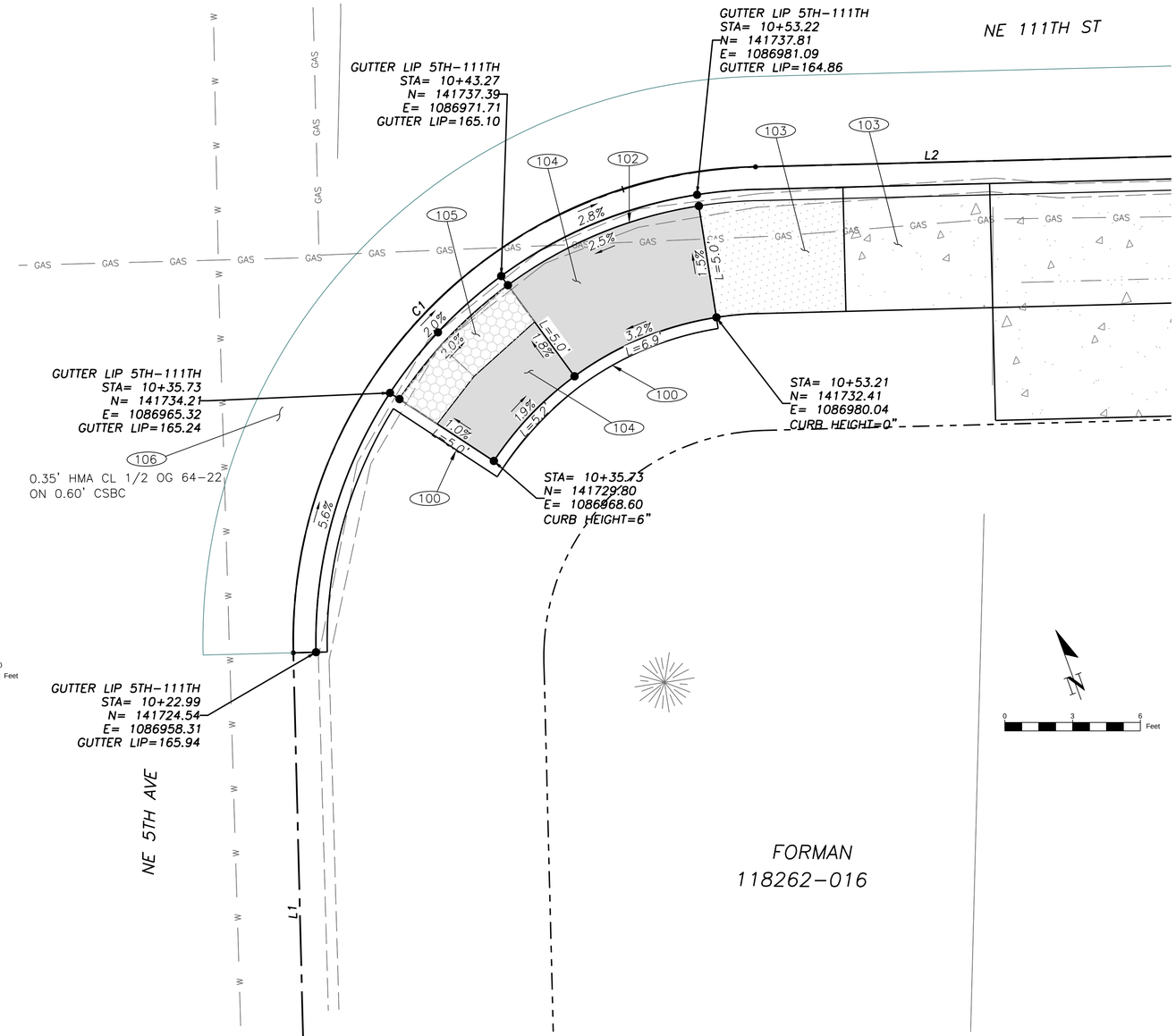
DATE 06/30/15

PP1

8 OF 9

Ver.1.2





SE QUADRANT

CONSTRUCTION NOTE LEGEND

1 – ASPHALT
4 – CURB
S – SAWCUT

CONSTRUCTION NOTES

- (0-99) SEE LEGEND ON SHEET LGN1.
- (100) CONSTRUCT PEDESTRIAN CURB PER DETAIL ON ROADWAY DETAIL SHEET RD(x).
- (101) CONSTRUCT TRAFFIC CURB PER DETAIL ON ROADWAY DETAIL SHEET RD(x).
- (102) CONSTRUCT TRAFFIC CURB AND GUTTER PER DETAIL ON ROADWAY DETAIL SHEET RD(x).
- (103) CONSTRUCT SIDEWALK PER PLAN AND DETAIL ON ROADWAY DETAIL SHEET RD(x).
- (104) CONSTRUCT CURB RAMP PER PLAN AND DETAILS ON ROADWAY DETAIL SHEETS RD(x).
- (105) INSTALL DETECTABLE WARNING SURFACE AT BACK OF CURB PER PLAN. AND DETAIL ON ROADWAY DETAIL SHEET RD(x).
- (106) PAVEMENT RESTORATION PER DETAIL ON ROADWAY DETAIL SHEET RD(x).
- (107) TRANSITION SECTION, TAPER WIDTH AND SLOPE TO MATCH EXISTING.
- (108) CONSTRUCT HMA CURB RAMP PER PLAN AND DETAIL ON ROADWAY DETAIL SHEET RD(x).
- (109) CONSTRUCT MODIFIED TRAFFIC CURB & GUTTER PER DETAIL ON ROADWAY DETAIL SHEET RD(x).

GENERAL NOTES

CONTRACTOR SHALL VERIFY DURING CONCRETE PLACEMENT THAT CURB RAMP SLOPES DO NOT EXCEED ADA MAXIMUMS.
IF EXISTING SIDEWALK JOINT IS LESS THAN 2 FEET BEYOND SAWCUT LIMITS MOVE SAWCUT TO AN EXISTING JOINT LOCATION.

GUTTER LIP NE 5TH AVE – NE 111TH ST – SE QUAD						
Label	Start Station	Radius	Length	Segment Bearing	Start Coord (N,E)	End Coord (N,E)
L1	10+00.00		22.99	N18° 33' 04"E	141703.06, 1086950.04	141724.86, 1086957.36
C1	10+22.99	21.00	32.99	IN=N18° 33' 04"E OUT=S71° 26' 59"E DEL=89°59'57"	141724.86, 1086957.36	141738.09, 1086983.95
L2	10+55.98		129.88	S71° 26' 59"E	141738.09, 1086983.95	141696.77, 1087107.08

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NE 111TH STREET SIDEWALK @ NE 5TH AVE CRP #351822

CURB RAMP DESIGN - SE QUADRANT

DATE 06/30/15
CR1
9 OF 9

Ver.1.2