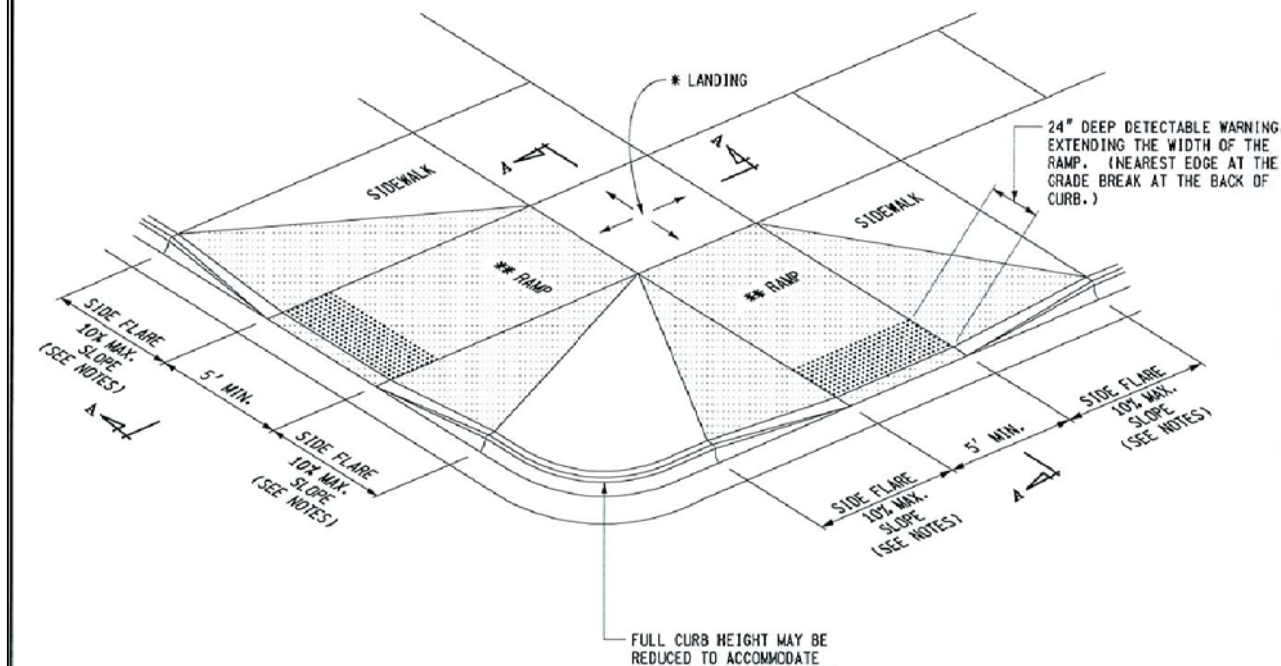
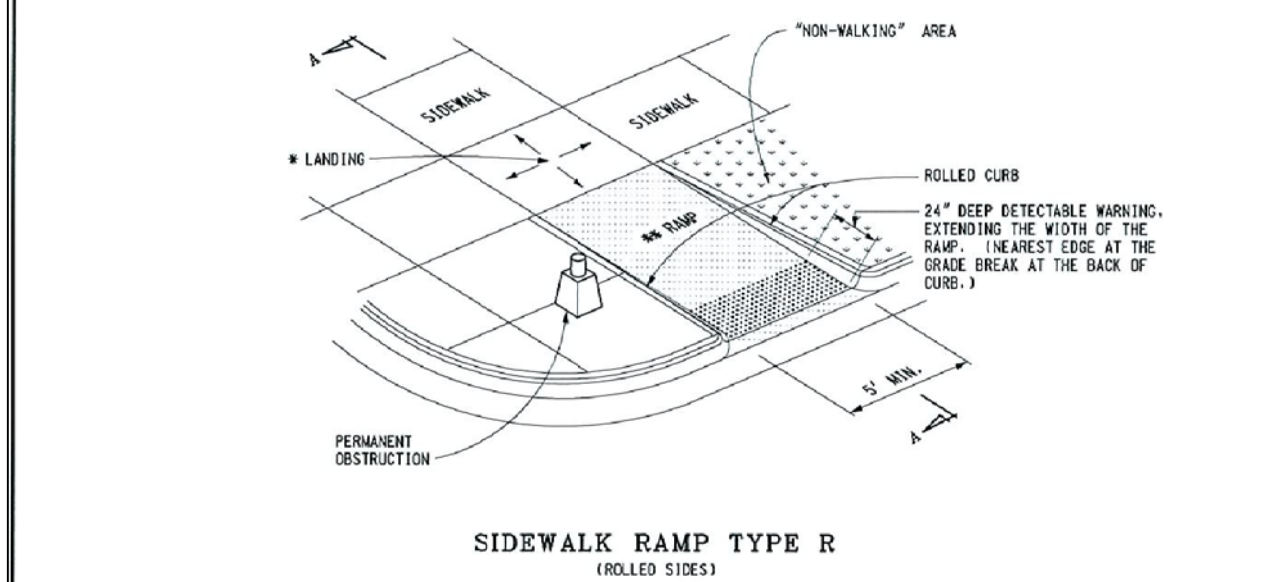


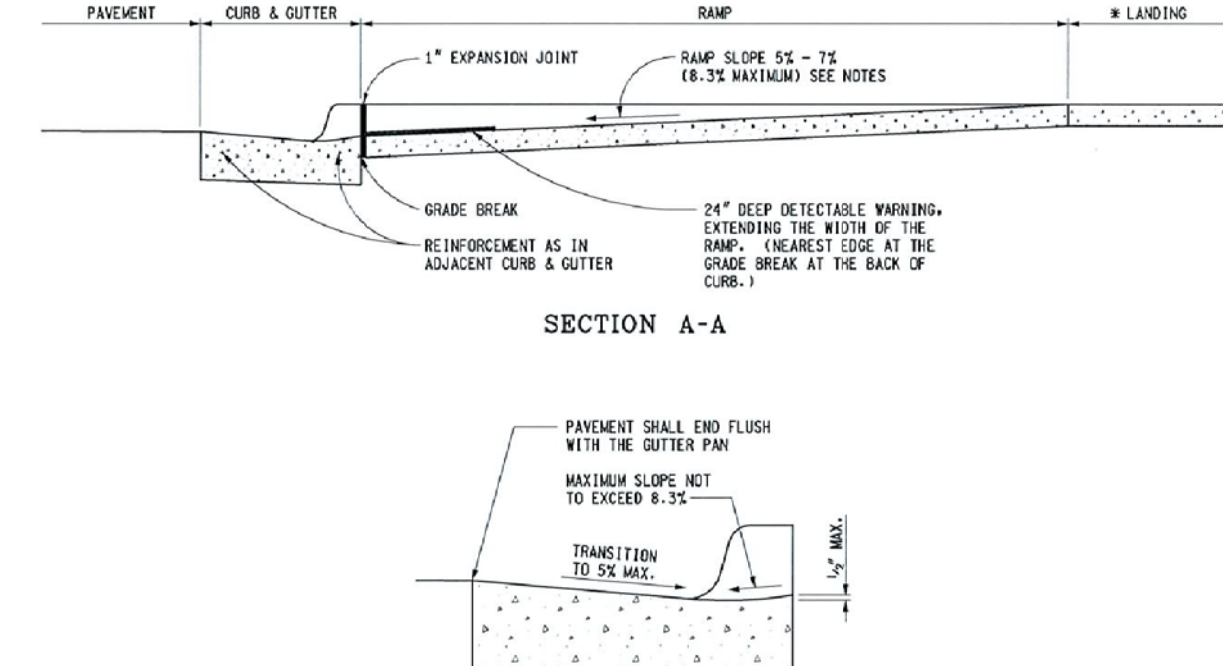
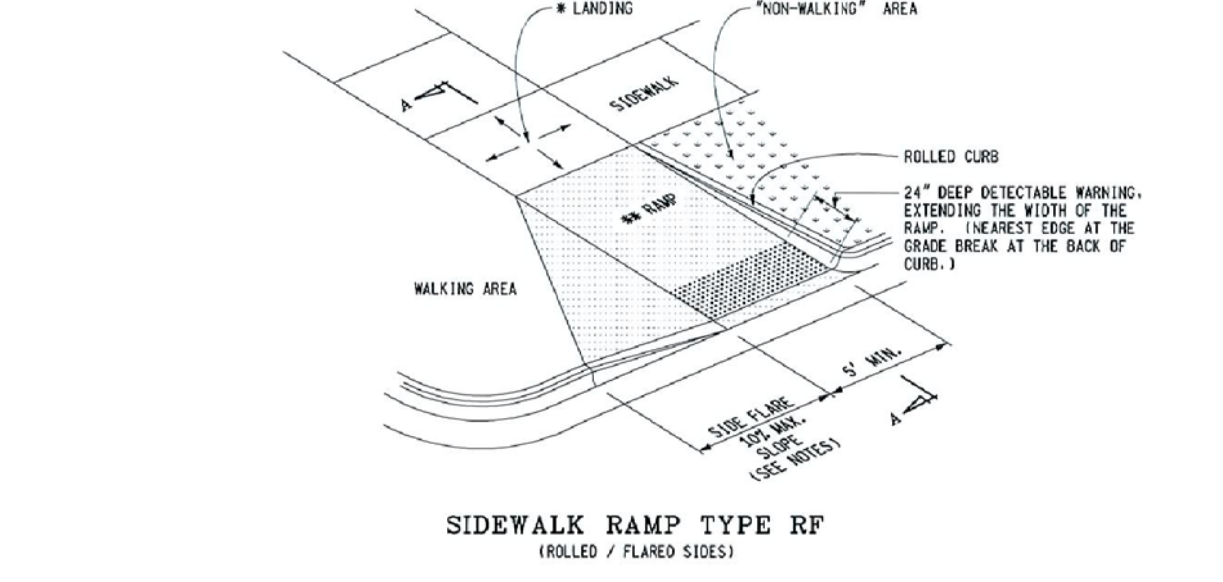
• MAXIMUM LANDING SLOPE IN ANY DIRECTION IS 2.0%. MINIMUM LANDING DIMENSIONS: 5' x 5'.
• MAXIMUM CROSS SLOPE ON RAMP IS THE SAME AS THAT FOR SIDEWALK (2.0%). RUNNING SLOPE 5% - 7% (8.3% MAXIMUM) SEE NOTES.



SIDEWALK RAMP TYPE F
(FLARED SIDES, TWO RAMPS SHOWN)

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR SIDEWALK RAMP AND DETECTABLE WARNING DETAILS	APPROVED BY: <i>John C. Friel</i> ENGINEER OF DESIGN	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F	SHEET 1 OF 7
	PREPARED BY: DESIGN DIVISION	APPROVED BY: <i>John C. Friel</i> ENGINEER OF DESIGN	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F
	DESIGNED BY: J.B.W.A.	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F	SHEET 1 OF 7
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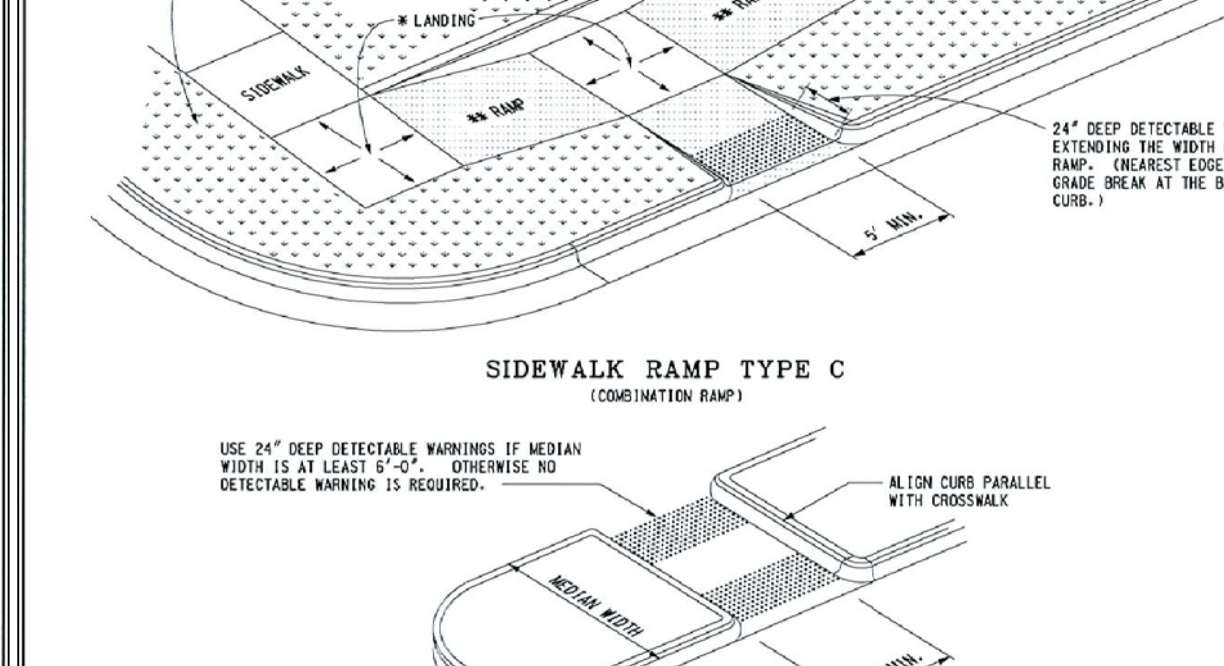
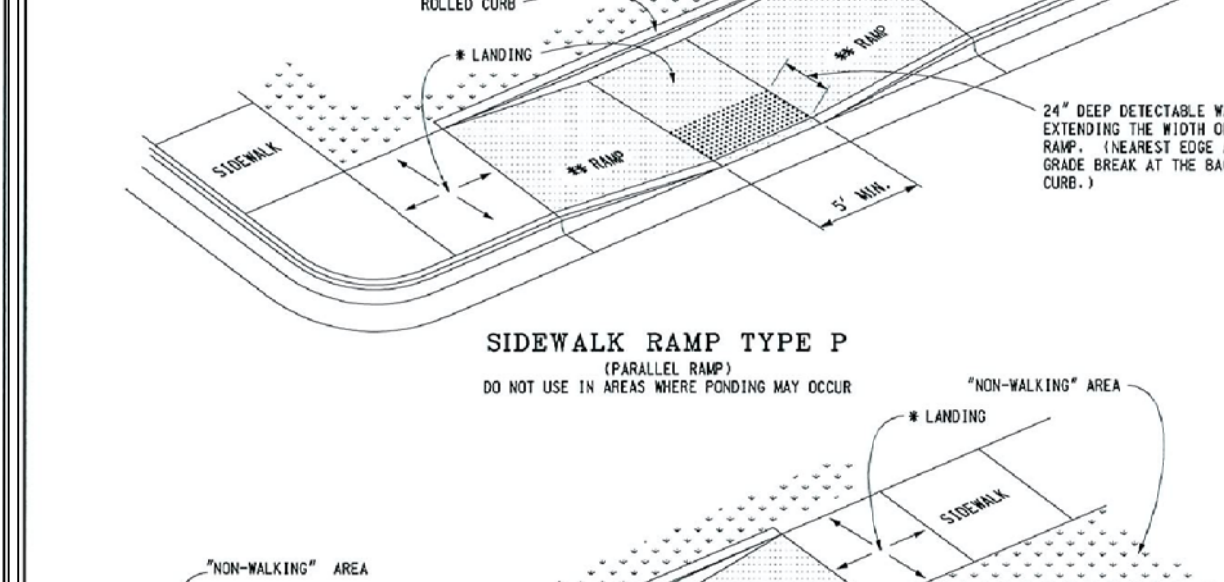
• MAXIMUM LANDING SLOPE IN ANY DIRECTION IS 2.0%. MINIMUM LANDING DIMENSIONS: 5' x 5'.
• MAXIMUM CROSS SLOPE ON RAMP IS THE SAME AS THAT FOR SIDEWALK (2.0%). RUNNING SLOPE 5% - 7% (8.3% MAXIMUM) SEE NOTES.



SIDEWALK RAMP TYPE RF
(ROLLED / FLARED SIDES)

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR SIDEWALK RAMP AND DETECTABLE WARNING DETAILS	APPROVED BY: <i>John C. Friel</i> ENGINEER OF DESIGN	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F	SHEET 2 OF 7
	PREPARED BY: DESIGN DIVISION	APPROVED BY: <i>John C. Friel</i> ENGINEER OF DESIGN	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F
	DESIGNED BY: J.B.W.A.	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F	SHEET 2 OF 7
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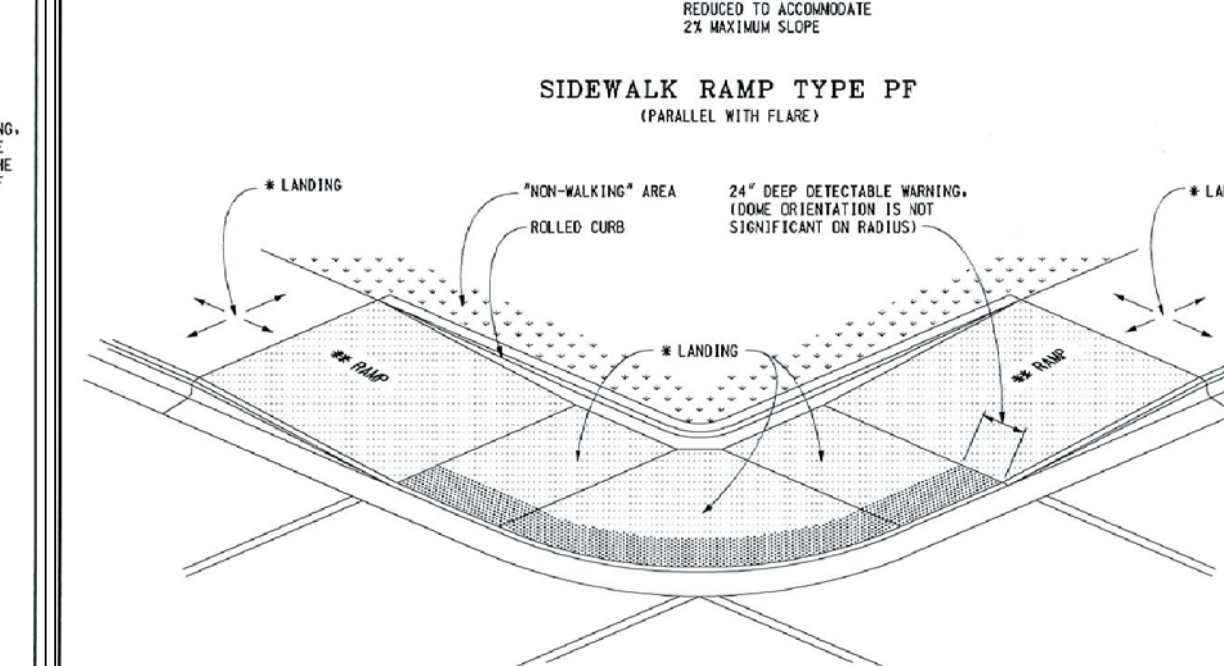
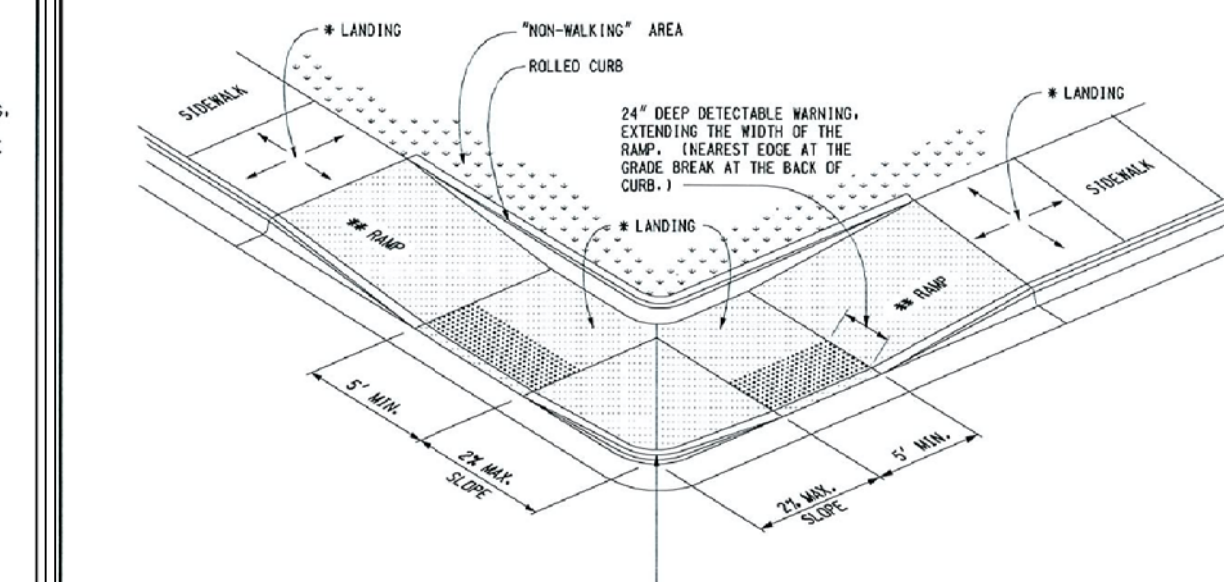
• MAXIMUM LANDING SLOPE IN ANY DIRECTION IS 2.0%. MINIMUM LANDING DIMENSIONS: 5' x 5'.
• MAXIMUM CROSS SLOPE ON RAMP IS THE SAME AS THAT FOR SIDEWALK (2.0%). RUNNING SLOPE 5% - 7% (8.3% MAXIMUM) SEE NOTES.



SIDEWALK RAMP TYPE P
(PARALLEL RAMP)

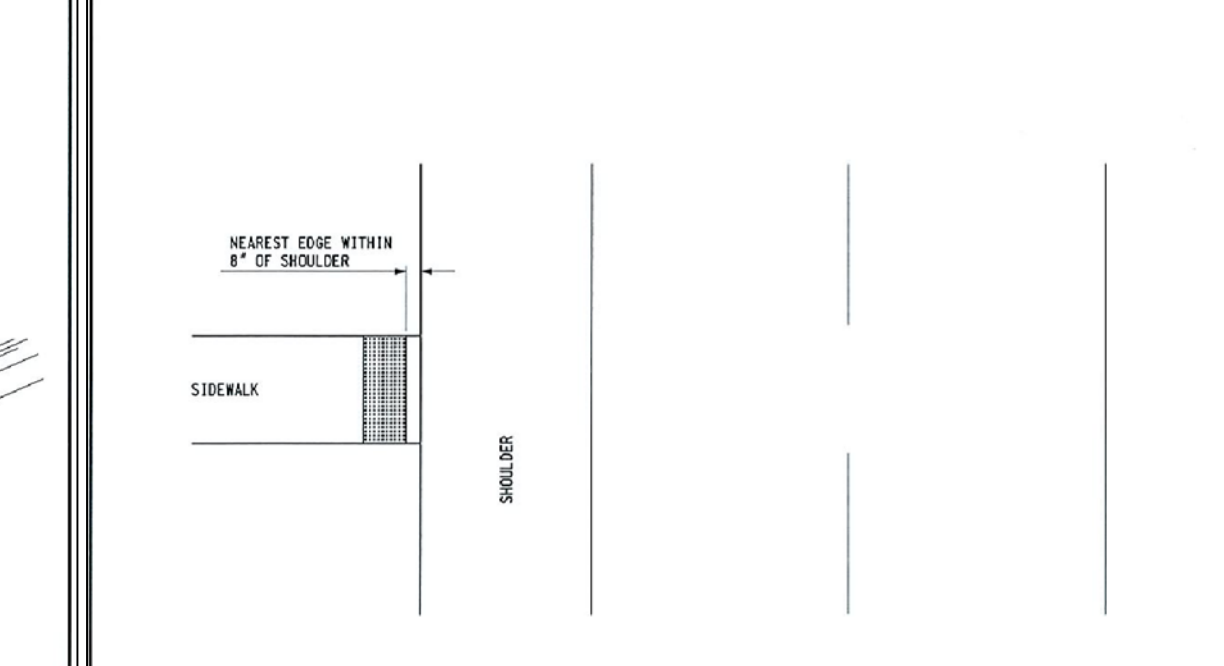
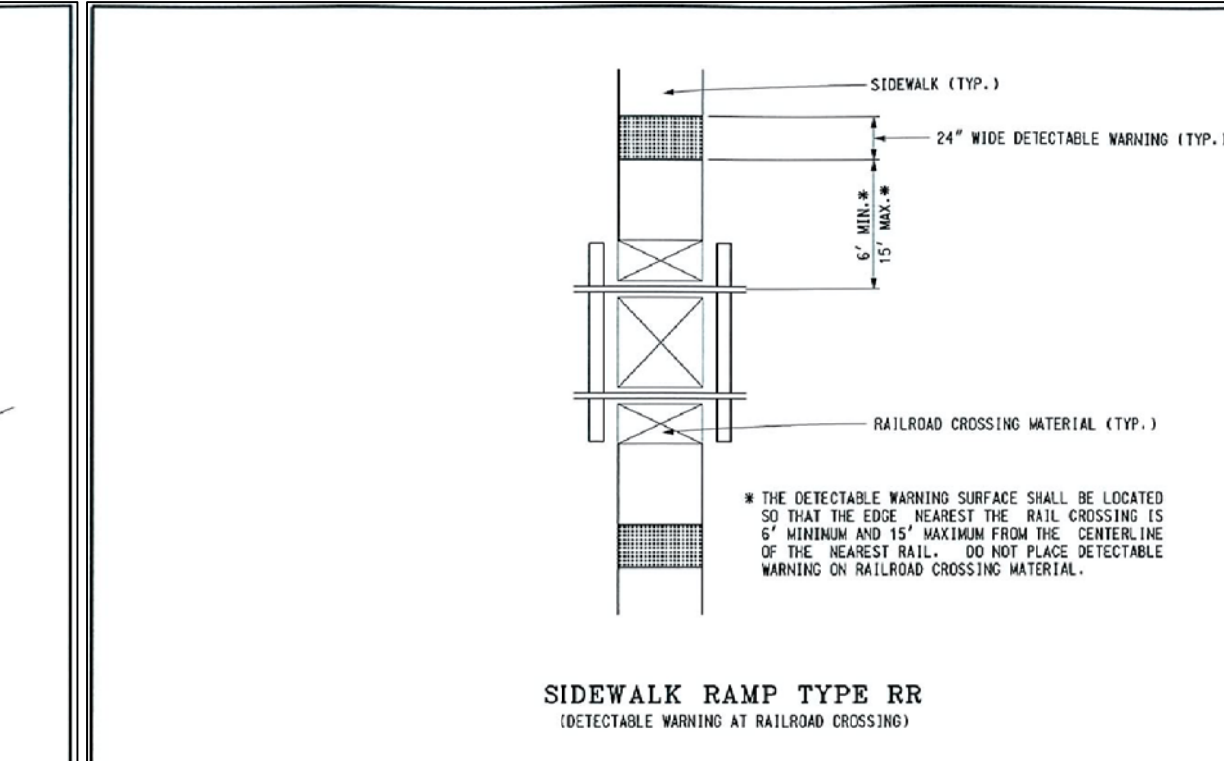
MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR SIDEWALK RAMP AND DETECTABLE WARNING DETAILS	APPROVED BY: <i>John C. Friel</i> ENGINEER OF DESIGN	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F	SHEET 3 OF 7
	PREPARED BY: DESIGN DIVISION	APPROVED BY: <i>John C. Friel</i> ENGINEER OF DESIGN	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F
	DESIGNED BY: J.B.W.A.	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F	SHEET 3 OF 7
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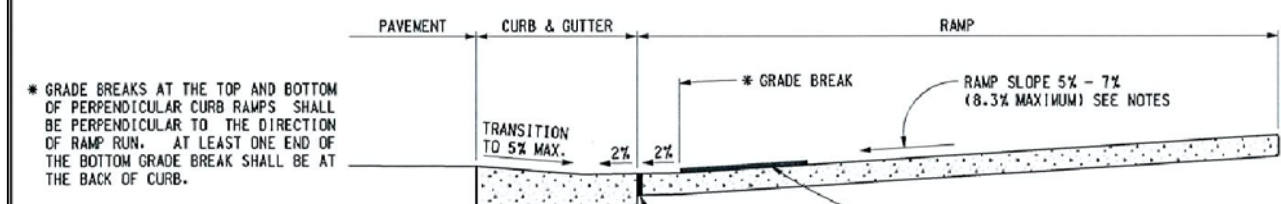
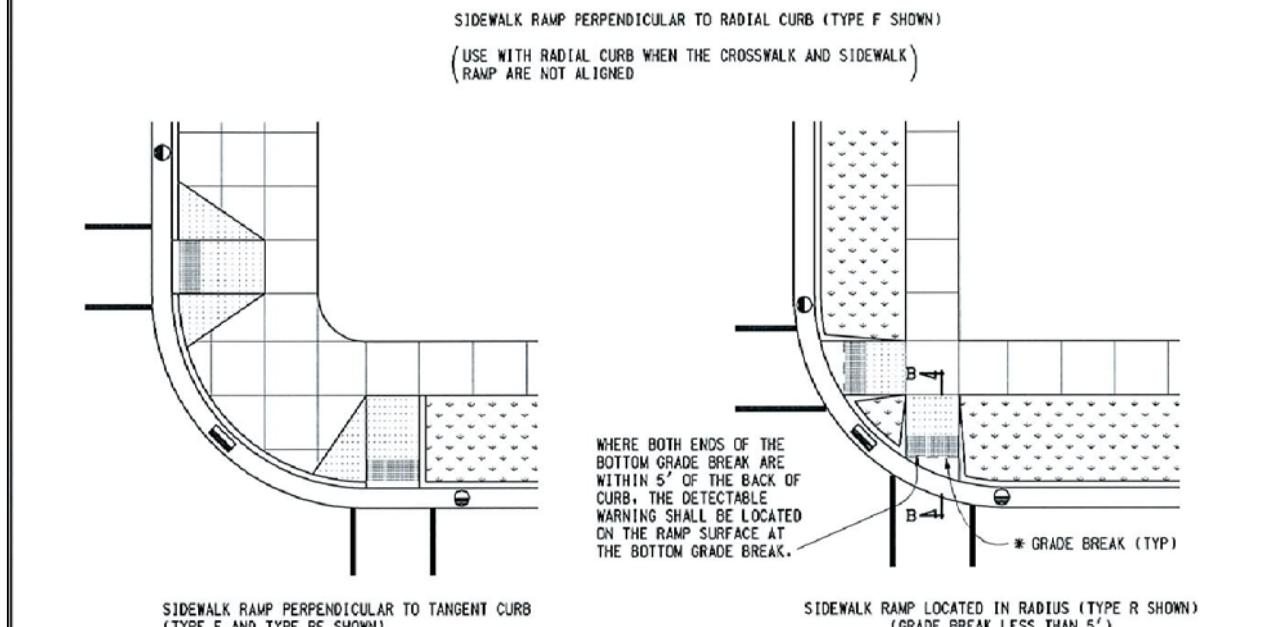
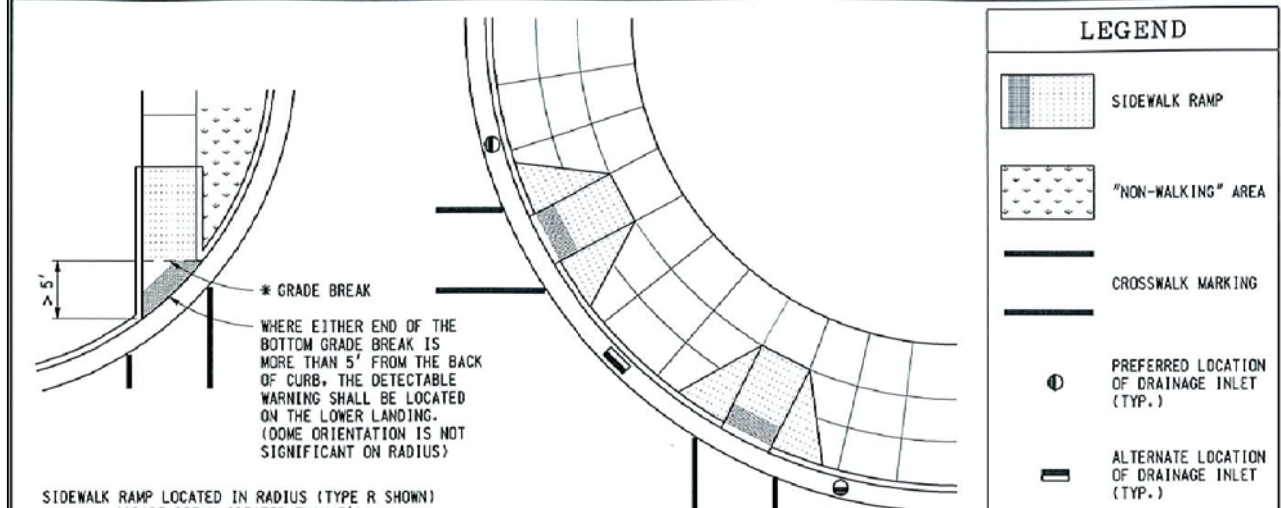
SIDEWALK RAMP TYPE PF
(PARALLEL WITH FLARE)

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR SIDEWALK RAMP AND DETECTABLE WARNING DETAILS	APPROVED BY: <i>John C. Friel</i> ENGINEER OF DESIGN	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F	SHEET 4 OF 7
	PREPARED BY: DESIGN DIVISION	APPROVED BY: <i>John C. Friel</i> ENGINEER OF DESIGN	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F
	DESIGNED BY: J.B.W.A.	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F	SHEET 4 OF 7
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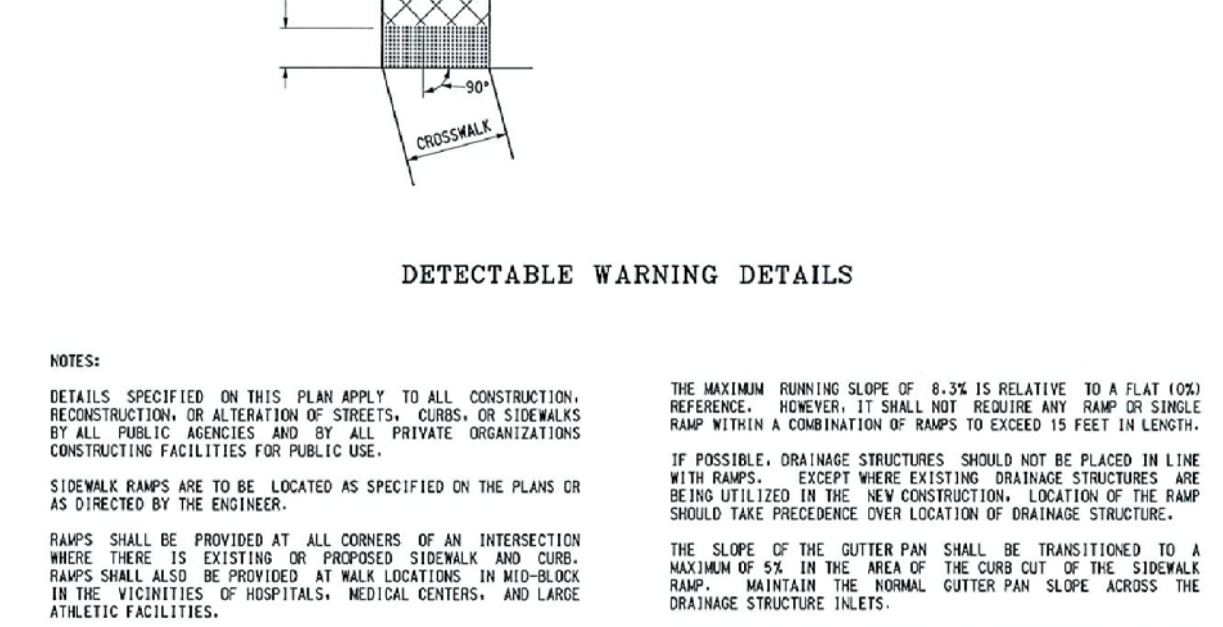
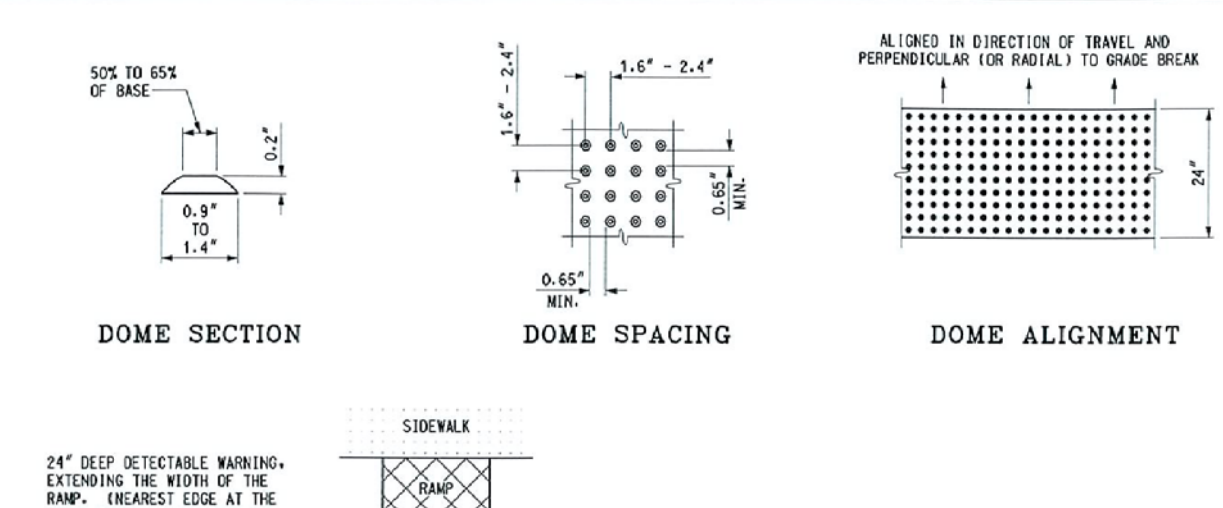
SIDEWALK RAMP TYPE RR
(DETECTABLE WARNING AT RAILROAD CROSSING)

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR SIDEWALK RAMP AND DETECTABLE WARNING DETAILS	APPROVED BY: <i>John C. Friel</i> ENGINEER OF DESIGN	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F	SHEET 5 OF 7
	PREPARED BY: DESIGN DIVISION	APPROVED BY: <i>John C. Friel</i> ENGINEER OF DESIGN	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F
	DESIGNED BY: J.B.W.A.	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F	SHEET 5 OF 7
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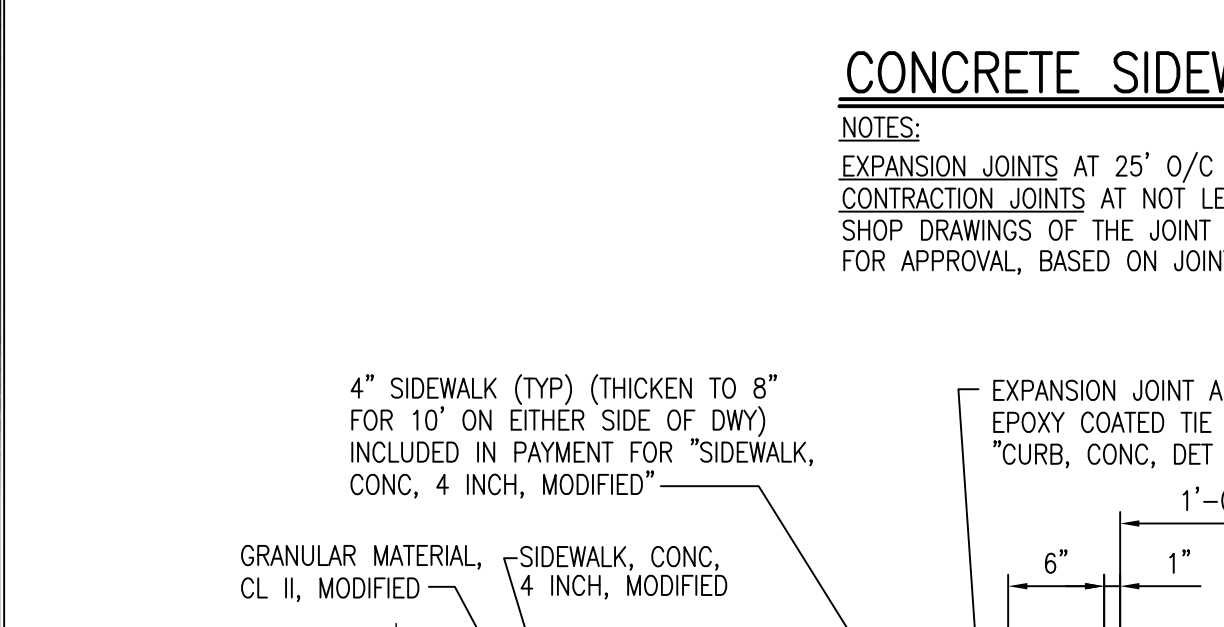
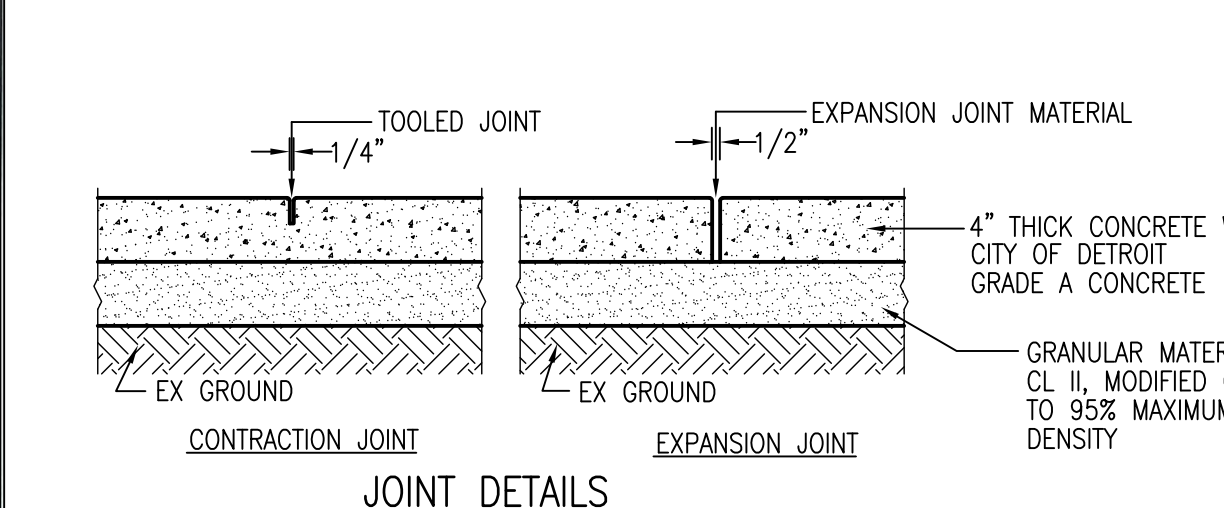
SIDEWALK RAMP TYPE F
(FLARED SIDES, TWO RAMPS SHOWN)

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR SIDEWALK RAMP AND DETECTABLE WARNING DETAILS	APPROVED BY: <i>John C. Friel</i> ENGINEER OF DESIGN	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F	SHEET 6 OF 7
	PREPARED BY: DESIGN DIVISION	APPROVED BY: <i>John C. Friel</i> ENGINEER OF DESIGN	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F
	DESIGNED BY: J.B.W.A.	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F	SHEET 6 OF 7
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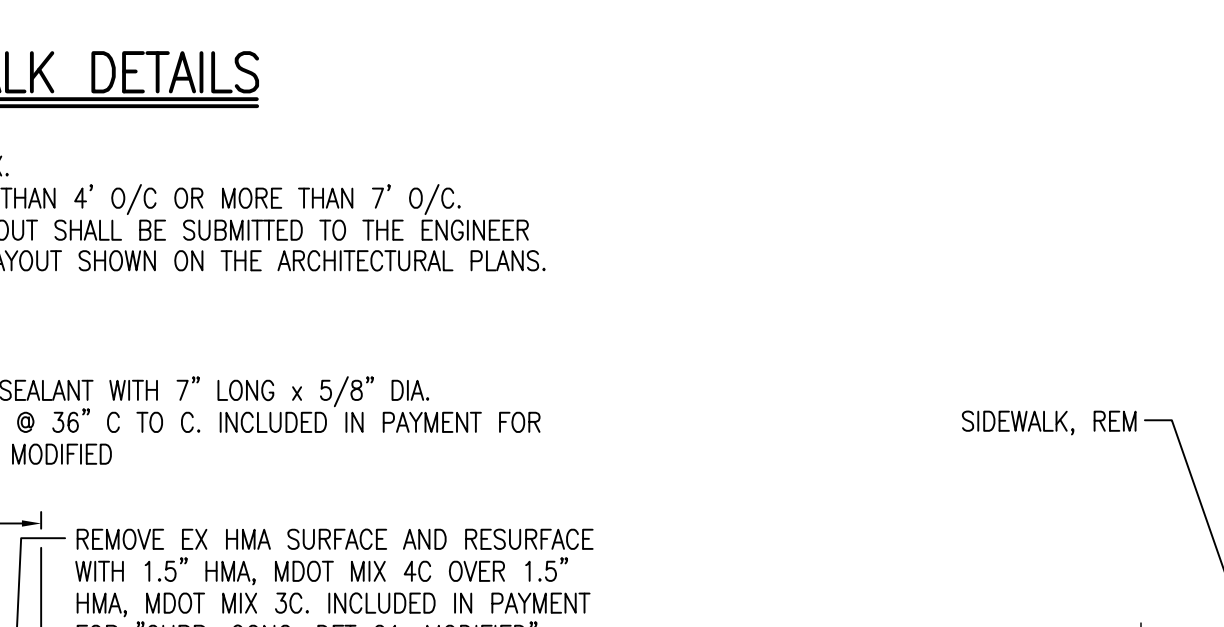
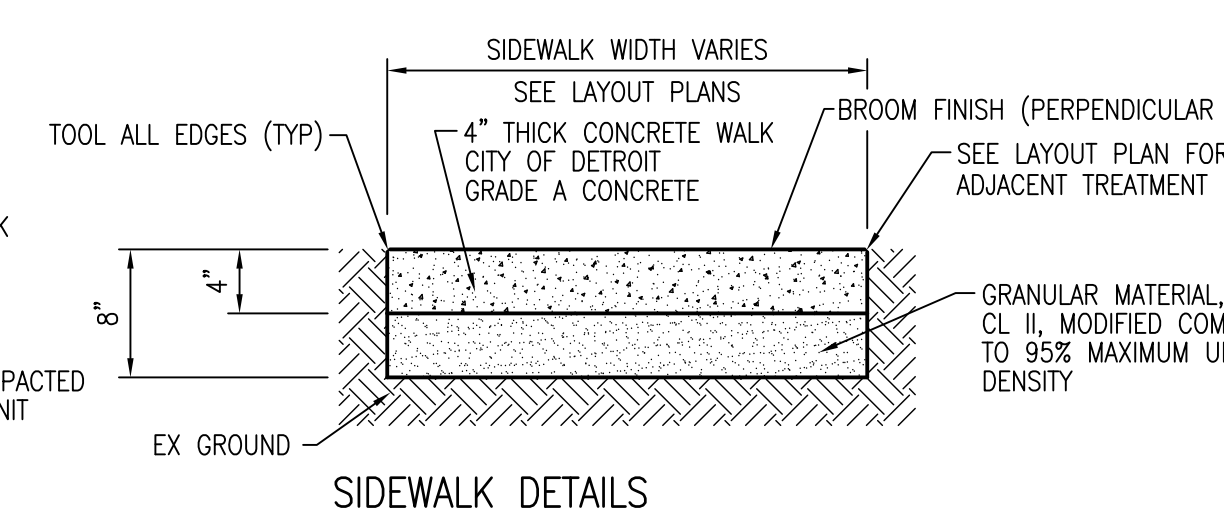
DETECTABLE WARNING DETAILS

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR SIDEWALK RAMP AND DETECTABLE WARNING DETAILS	APPROVED BY: <i>John C. Friel</i> ENGINEER OF DESIGN	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F	SHEET 7 OF 7
	PREPARED BY: DESIGN DIVISION	APPROVED BY: <i>John C. Friel</i> ENGINEER OF DESIGN	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F
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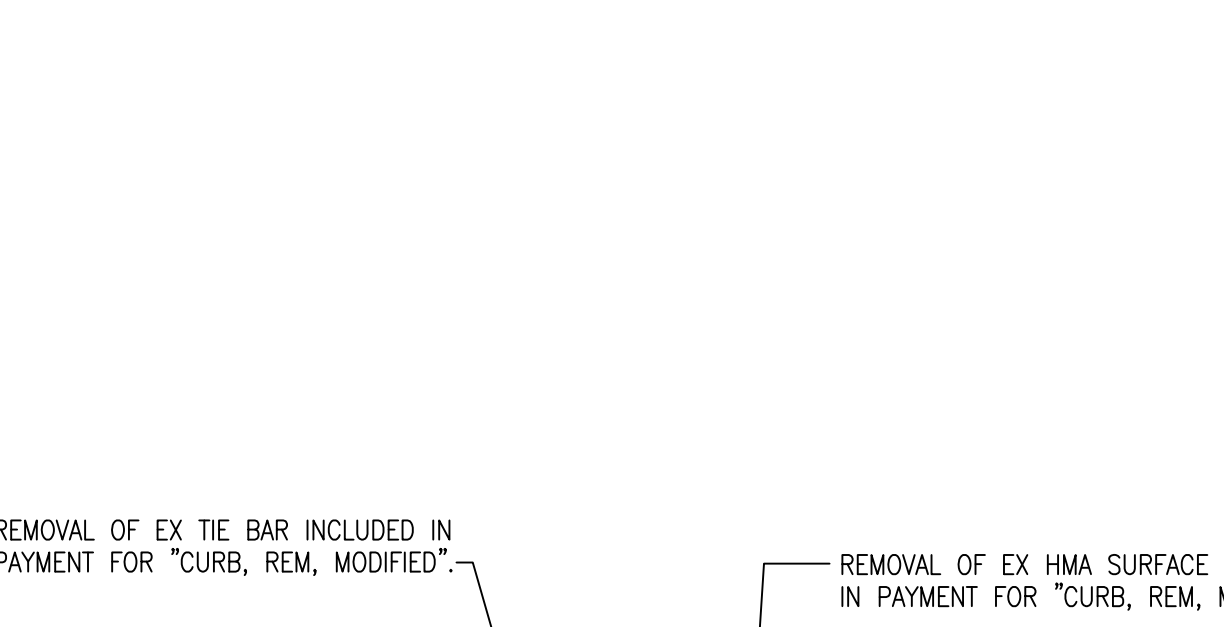
JOINT DETAILS

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR SIDEWALK RAMP AND DETECTABLE WARNING DETAILS	APPROVED BY: <i>John C. Friel</i> ENGINEER OF DESIGN	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F	SHEET 8 OF 7
	PREPARED BY: DESIGN DIVISION	APPROVED BY: <i>John C. Friel</i> ENGINEER OF DESIGN	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F
	DESIGNED BY: J.B.W.A.	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F	SHEET 8 OF 7
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CONCRETE SIDEWALK DETAILS

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR SIDEWALK RAMP AND DETECTABLE WARNING DETAILS	APPROVED BY: <i>John C. Friel</i> ENGINEER OF DESIGN	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F	SHEET 9 OF 7
	PREPARED BY: DESIGN DIVISION	APPROVED BY: <i>John C. Friel</i> ENGINEER OF DESIGN	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F
	DESIGNED BY: J.B.W.A.	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F	SHEET 9 OF 7
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EXISTING CURB

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR SIDEWALK RAMP AND DETECTABLE WARNING DETAILS	APPROVED BY: <i>John C. Friel</i> ENGINEER OF DESIGN	10-21-2008 F.B.W.A. APPROVAL	6-20-2008 PLAN DATE	R-28-F	SHEET 10 OF 7
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ph (313) 964-0270, fax (313) 964-0170, www.hamilton-anderson.com

REVISION #	DATE

DATE 07/09/09	SCALE NTS	JOB NO. C0720	DESIGN UNIT HIMES
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WASHINGTON BLVD ADA HANDICAP RAMPS - DETROIT, MICHIGAN		SHEET NO. 110
DATE 07/09/09	SCALE NTS	JOB NO. C0720
DESIGN UNIT HIMES	SHEET NO. DET-13	