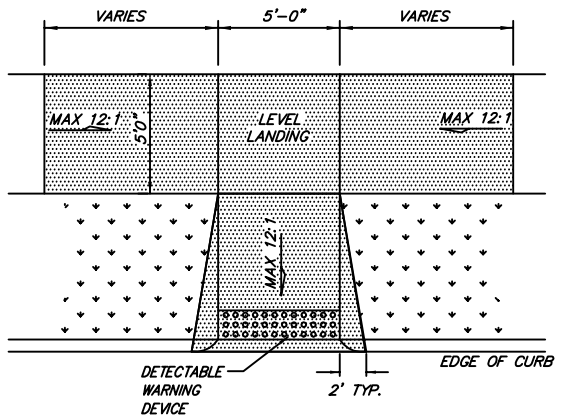
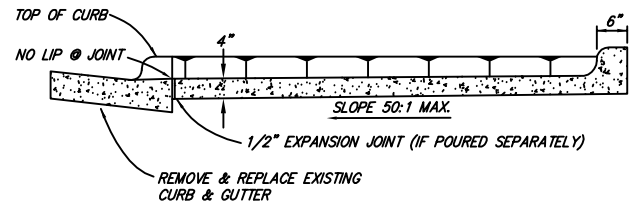
NOTE: IF HANDICAP RAMP SLOPE OF 12:1 CAN BE ACHIEVED FROM THE CURB TO THE EXISTING SIDEWALK, NO MODIFICATION TO THE EXISTING SIDEWALK IS NECESSARY.



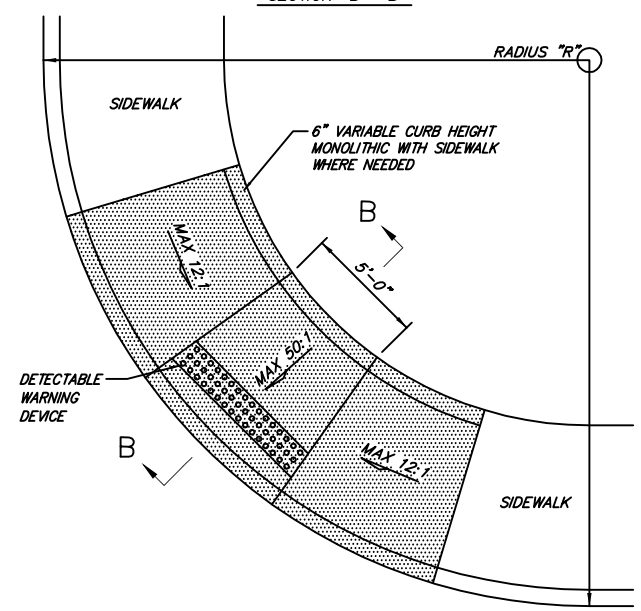
TYPE 5 RAMP

N.T.S.

SW.3.1



SECTION "B"–"B"



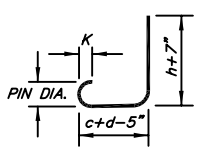
TYPE 6 RAMP

N.T.S.

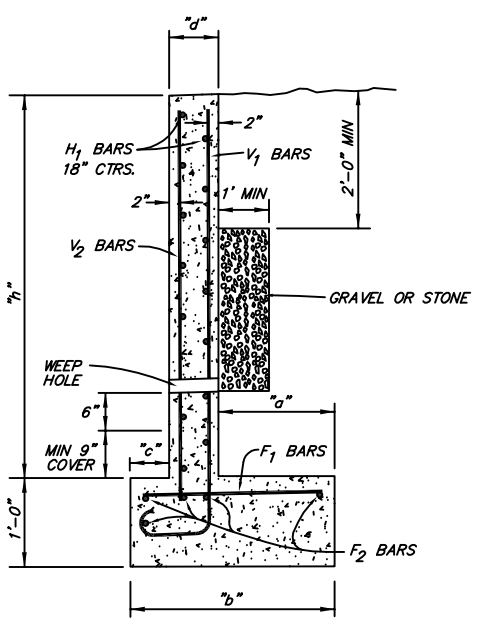
SW.3.2

SIDEWALK NOTES:

1. ALL CONCRETE SHALL BE CLASS "AA" 3500 psi., AIR–ENTRAINED, FIBER REINFORCED.
2. THE SUBGRADE FOR RAMP AND SIDEWALK CONSTRUCTION IS TO BE FIRM AND UNYIELDING SOIL, COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR.
3. 1/2" EXPANSION JOINT SHALL BE PLACED AT COLD JOINTS, AT BEGINNING AND END OF RETURN, AND AT MAXIMUM OF 100' INTERVALS.
4. CONTRACTION JOINTS SHALL BE CUT AT INTERVALS MATCHING THE SIDEWALK WIDTH WITH A MAXIMUM SPACING OF 6'. CONTRACTION JOINTS IN RAMP AREAS SHALL BE AT 5' MAX. SPACING. DEPTH OF JOINTS SHALL BE EQUAL TO T/4.
5. TYPE OF HANDICAP RAMP IDENTIFIED FOR EACH SITE MAY REQUIRE MODIFICATION TO FIT EXISTING FIELD CONDITIONS. DIMENSIONS, LOCATIONS, AND ORIENTATION OF RAMPS WILL VARY IN ORDER TO AVOID EXISTING OBSTACLES AND/OR TO OBTAIN REQUIRED GRADE FOR RAMP. CONTRACTOR TO INSTALL RAMPS AS DIRECTED IN THE FIELD BY THE ENGINEER.
6. TYPE 6 RAMP SHALL BE USED ONLY IF EXISTING CONDITIONS PROHIBIT USE OF TYPES 1 THROUGH TYPE 5 RAMPS.
7. ADDITIONAL REMOVALS OUTSIDE THE LIMITS SHOWN MAY BE REQUIRED IN ORDER TO OBTAIN THE GRADE FOR RAMPS OR PROVIDE LANDING AREAS.
8. THE LENGTH OF THE RAMP SHALL BE SUCH THAT THE SLOPE DOES NOT EXCEEED 12:1. IF SITE CONSTRAINTS PREVENT THE CONSTRUCTION OF THE TYPES OF RAMPS SHOWN IN THE DETAILS, THEN AND ONLY THEN CAN THE 12:1 MAXIMUM SLOPE ON THE RAMP BE EXCEEDED TO PROVIDE ACCESS TO THE STREET LEVEL. THE SLOPE CAN BE STEEPENED TO A 10:1 MAXIMUM FOR A MAXIMUM LENGTH OF 5 FEET OR AN 8:1 MAXIMUM FOR A MAXIMUM LENGTH OF 2 FEET. SLOPES STEEPER THAN 8:1 ARE NOT ALLOWED UNDER ANY CIRCUMSTANCES.
9. THE MINIMUM WIDTH OF THE RAMPS SHALL BE THE EXISTING WALK WIDTH OR 36", WHICHEVER IS GREATER.
10. THE SURFACE TEXTURE OF ALL RAMPS SHALL BE BROOM FINISHED EXCEPT FOR AREAS WITH DETECTABLE WARNING DEVICE.
11. THE NORMAL GUTTER GRADE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP.
12. A SAW–CUT TO A MINIMUM DEPTH OF 2 INCHES SHALL BE MADE PRIOR TO REMOVAL OR CONCRETE, ASPHALT, STONE OR BRICK.
13. FOR RECONSTRUCTION PROJECTS, IF EXISTING CURB & GUTTER IS IN GOOD CONDITION, CURB SHALL BE SAWCUT AT GUTTER FLOWLINE AND REMOVED.
14. FOR PAYMENT PURPOSES, SIDEWALKS WITHIN THE RAMP AREA WILL BE MEASURED AND PAID FOR BY THE SQUARE YARD (SY) AS SIDEWALK AND BY EACH (EA) AS HANDICAP RAMP. TYPE 1 AND TYPE 2 RAMPS WILL COUNT AS 2 RAMPS EACH.



V_1 BARS



BENDING DIAGRAM

BAR SIZE	K	PIN DIA.
#4	4 1/2"	2 1/2"

STEEL SCHEDULE

"c"	"d"	"h"	"a"	"b"	V_1 BARS		F_1 BARS		H_1	V_2	F_2
					SIZE	SPACING	SIZE	SPACING	#4 BARS SPAC.	#4 BARS SPAC.	NO. REQ'D
8"	8"	1'–0"	8"	2'–0"	#4	12"	#4	18"	18"	18"	5
8"	8"	2'–0"	8"	2'–0"	#4	12"	#4	18"	18"	18"	5
8"	8"	3'–0"	8"	2'–0"	#4	12"	#4	18"	18"	18"	5
8"	8"	4'–0"	1'–2"	2'–6"	#4	12"	#4	12"	18"	18"	5
8"	8"	5'–0"	1'–8"	3'–0"	#4	9"	#4	9"	18"	18"	5
8"	8"	6'–0"	2'–2"	3'–6"	#4	6"	#4	6"	18"	18"	6

GENERAL NOTES:

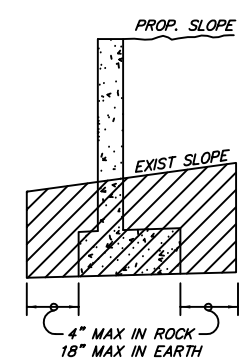
1. CONCRETE SHALL BE CLASS "AAA" 4000 psi.
2. GRAVEL OR STONE (CONTINUOUS) TO BE PLACED 1'–0" IN WIDTH AND 1'–0" IN HEIGHT AS A INCIDENTAL ITEM TO THE VARIOUS PAY ITEMS.
3. 3" WEEP HOLES (MAX SPACING: 10'–0" CTRS) TO BE PLACED WHERE SPECIFIED BY THE ENGINEER. THE CONTRACTOR WILL BE REQUIRED TO PLACE CONTRACTION JOINTS ON 20' CENTERS AND EXPANSION JOINTS ON 60' CENTERS.
4. ALL EXPOSED CONCRETE EDGES TO BE CHAMFERED 3/4".

REINFORCED CONCRETE RETAINING WALL

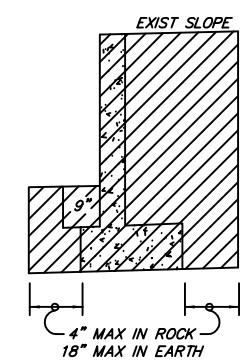
N.T.S.

SW.3.3

NOTE:
HATCHED AREA DENOTES MAX. LIMITS OF EXCAVATION FOR STRUCTURES FOR RETAINING WALL.



IN EMBANKMENT



IN EXCAVATION

Revision	Date	By

Standard Drawings
SIDEWALK & HANDICAP RAMPS
Public Works Construction

The City of Fort Smith ARKANSAS

CITY OF FORT SMITH
Engineering Department
623 Garrison Avenue, Room 409
Fort Smith, Arkansas 72901
Phone (479)784–2225 Fax (479)784–2245

Project:	Details
Date:	NOV 2012
Scale:	As Shown
Drawn By:	RBR
Dwg. No.:	SW3
Sheet No:	22

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