



STRUCTURAL DATA			
WALL AND SLAB DIMENSIONS AND REINFORCEMENT REQUIREMENTS			
NO. OF GRATES	MAX V	t	REINFORCEMENT FOR WALLS AND SLABS
1-2	1.2 m (4')	150 mm (6")	NOT REQUIRED
1-2	2.4 m (8')	200 mm (8")	
1-2	3.0 m (10')	250 mm (10")	
1-2	3.5 m (12')	250 mm (10")	REQUIRED
3-4	1.2 m (4')	150 mm (6")	NOT REQUIRED
3-4	2.0 m (7')	200 mm (8")	
3-4	2.4 m (8')	200 mm (8")	
3-4	3.5 m (12')	250 mm (10")	REQUIRED
5-6	1.2 m (4')	150 mm (6")	NOT REQUIRED
5-6	1.8 m (6')	200 mm (8")	
5-6	2.4 m (8')	200 mm (8")	
5-6	3.5 m (12')	250 mm (10")	REQUIRED
> 6	1.2 m (4')	150 mm (6")	
> 6	2.4 m (8')	200 mm (8")	
> 6	3.5 m (12')	250 mm (10")	

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION		
PROMULGATED BY THE PUBLIC WORKS STANDARDS, INC., GREENBOOK COMMITTEE 1984 REV. 1992, 1996	<h2 style="margin: 0;">GRATING CATCH BASIN-ALLEY (LONGITUDINAL)</h2>	STANDARD PLAN METRIC <h1 style="margin: 0;">304-2</h1>
USE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION		SHEET 1 OF 2

NOTES:

1. ALL CURVED CONCRETE SURFACES SHALL BE FORMED BY CURVED FORMS, AND SHALL NOT BE SHAPED BY PLASTERING.
2. ONE GRATING IS REQUIRED UNLESS OTHERWISE SHOWN ON THE PLANS.
3. FLOOR OF BASIN SHALL BE GIVEN A STEEL TROWEL FINISH AND SHALL HAVE A LONGITUDINAL AND LATERAL SLOPE OF 1:12 MINIMUM AND 1:3 MAXIMUM, EXCEPT WHERE THE SURFACE GRADE EXCEEDS 8%, IN WHICH CASE THE LONGITUDINAL SLOPE OF THE FLOOR SHALL BE THE SAME AS THE SURFACE GRADE, SLOPE FLOOR FROM ALL DIRECTIONS TO THE OUTLET.
4. DIMENSIONS:
 - B = 1.0 m (3'-6")
 - V_U = THE DEPTH AT THE UPSTREAM END OF THE BASIN AND SHALL BE DETERMINED BY THE REQUIREMENTS OF NOTE 3, BUT SHALL NOT BE LESS THAN 750 mm (2.5').
 - V_I = THE DEPTH AT THE INVERT OF THE INLET. NOTED ON THE PLANS.
 - W = 900 mm (2'-11 3/8") FOR ONE GRATING; ADD 1051 mm (3'-5 3/8") FOR EACH ADDITIONAL GRATING.
 - A = THE ANGLE, IN DEGREES, INTERCEPTED BY THE CENTERLINE OF THE CONNECTOR PIPE AND THE CATCH BASIN WALL TO WHICH THE CONNECTOR PIPE IS ATTACHED.
5. PLACE CONNECTOR PIPES AS INDICATED ON THE PLANS. UNLESS OTHERWISE SPECIFIED, THE CONNECTOR PIPE SHALL BE LOCATED AT THE DOWNSTREAM END OF THE BASIN. WHERE THE CONNECTOR PIPE IS SHOWN AT A CORNER, THE CENTERLINE OF THE PIPE SHALL INTERSECT THE INSIDE CORNER OF THE BASIN. THE PIPE MAY BE CUT AND TRIMMED AT A SKEW NECESSARY TO INSURE MINIMUM 80 mm (3") PIPE EMBEDMENT, ALL AROUND, WITHIN THE CATCH BASIN WALL, AND 75 mm (3") RADIUS OF ROUNDING OF STRUCTURE CONCRETE, ALL AROUND, ADJACENT TO PIPE ENDS. A MONOLITHIC CATCH BASIN CONNECTION SHALL BE USED TO JOIN THE CONNECTOR PIPE TO THE CATCH BASIN WHENEVER ANGLE "A" IS LESS THAN 70° OR GREATER THAN 110°, OR WHENEVER THE CONNECTOR PIPE IS LOCATED IN A CORNER. THE OPTIONAL USE OF A MONOLITHIC CATCH BASIN CONNECTION IN ANY CASE IS PERMITTED. MONOLITHIC CATCH BASIN CONNECTIONS MAY BE CONSTRUCTED TO AVOID CUTTING STANDARD LENGTHS OF PIPE.
6. STEPS SHALL BE LOCATED AS SHOWN. IF THE CONNECTOR PIPE INTERFERES WITH THE STEPS, THEY SHALL BE LOCATED ON THE OPPOSITE WALL AT THE CENTERLINE OF THE DOWNSTREAM GRATING. STEPS SHALL BE SPACED 300 mm (12") APART. THE TOP STEP SHALL BE 175 mm (7") BELOW THE TOP OF THE GRATING AND PROJECT 65 mm (2 1/2"). ALL OTHER STEPS SHALL PROJECT 130 mm (5").
7. THE FOLLOWING SPPWC ARE INCORPORATED HEREIN:
 - 308 MONOLITHIC CATCH BASIN CONNECTION
 - 309 CATCH BASIN REINFORCEMENT
 - 311 FRAME AND GRATING FOR CATCH BASINS
 - 635 STEEL STEP
 - 636 POLYPROPYLENE PLASTIC STEP

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

GRATING CATCH BASIN-ALLEY (LONGITUDINAL)

STANDARD PLAN
METRIC

304-2

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