

TYPICAL REINFORCEMENT DETAILS  
CURB OPENING CATCH BASIN

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS

CATCH BASIN REINFORCEMENT

STANDARD PLAN

WQ 309

APPROVED

DIRECTOR OF PUBLIC WORKS

DATE

SHEET 1 OF 4

MAX. W	MAX. V	t <sub>1</sub>	t <sub>2</sub>	t <sub>3</sub>	A BARS	B BARS	C BARS	D BARS	E BARS	F BARS
3.2 m (10.5')	1.8 m (6')	150 mm (6")	150 mm (6")	200 mm (8")	#13 450mm (#4 18")	#13 150mm (#4 6")	#13 450mm (#4 18")	#13 380mm (#4 15")	#13 150mm (#4 6")	#13 150mm (#4 6")
4.3 m (14.0')	1.8 m (6')	150 mm (6")	150 mm (6")	200 mm (8")	#13 450mm (#4 18")	#13 150mm (#4 6")	#13 450mm (#4 18")	#13 380mm (#4 15")	#13 150mm (#4 6")	#13 150mm (#4 6")
4.3 m (14.0')	2.4 m (8')	200 mm (8")	150 mm (6")	200 mm (8")	#13 450mm (#4 18")	#13 200mm (#4 8")	#13 200mm (#4 8")	#13 225mm (#4 9")	#16 150mm (#5 6")	#16 150mm (#5 6")
4.3 m (14.0')	3.7 m (12')	250 mm (10")	200 mm (8")	305 mm (12")	#13 225mm (#4 9")	#13 225mm (#4 9")	#16 180mm (#5 7")	#16 225mm (#5 9")	#16 150mm (#5 6")	#16 150mm (#5 6")
5.2 m (17')	1.8 m (6')	150 mm (6")	150 mm (6")	200 mm (8")	#13 450mm (#4 18")	#13 150mm (#4 6")	#13 450mm (#4 18")	#13 380mm (#4 15")	#13 150mm (#4 6")	#13 150mm (#4 6")
5.2 m (17')	2.4 m (8')	200 mm (8")	150 mm (6")	200 mm (8")	#13 450mm (#4 18")	#13 200mm (#4 8")	#13 200mm (#4 8")	#13 225mm (#4 9")	#16 150mm (#5 6")	#16 150mm (#5 6")
5.2 m (17')	3.0 m (10')	200 mm (8")	200 mm (8")	250 mm (10")	#13 300mm (#4 12")	#13 225mm (#4 9")	#13 225mm (#4 9")	#13 225mm (#4 9")	#13 180mm (#4 7")	#13 180mm (#4 7")
5.2 m (17')	3.7 m (12')	250 mm (10")	200 mm (8")	305 mm (12")	#13 225mm (#4 9")	#13 225mm (#4 9")	#16 180mm (#5 7")	#16 225mm (#5 9")	#16 150mm (#5 6")	#16 150mm (#5 6")
6.4 m (21')	1.8 m (6')	150 mm (6")	150 mm (6")	200 mm (8")	#13 450mm (#4 18")	#13 150mm (#4 6")	#13 450mm (#4 18")	#13 380mm (#4 15")	#13 150mm (#4 6")	#13 150mm (#4 6")
6.4 m (21')	2.4 m (8')	200 mm (8")	150 mm (6")	200 mm (8")	#13 450mm (#4 18")	#13 200mm (#4 8")	#13 200mm (#4 8")	#13 225mm (#4 9")	#16 150mm (#5 6")	#16 150mm (#5 6")
6.4 m (21')	3.0 m (10')	200 mm (8")	200 mm (8")	250 mm (10")	#13 300mm (#4 12")	#13 225mm (#4 9")	#13 225mm (#4 9")	#13 225mm (#4 9")	#13 180mm (#4 7")	#13 180mm (#4 7")
6.4 m (21')	3.7 m (12')	250 mm (10")	200 mm (8")	305 mm (12")	#13 225mm (#4 9")	#13 225mm (#4 9")	#16 180mm (#5 7")	#16 225mm (#5 9")	#16 150mm (#5 6")	#16 150mm (#5 6")
10.7 m (35')	1.8 m (6')	150 mm (6")	150 mm (6")	200 mm (8")	#13 450mm (#4 18")	#13 150mm (#4 6")	#13 450mm (#4 18")	#13 380mm (#4 15")	#13 150mm (#4 6")	#13 150mm (#4 6")
10.7 m (35')	2.4 m (8')	200 mm (8")	150 mm (6")	200 mm (8")	#13 450mm (#4 18")	#13 200mm (#4 8")	#13 200mm (#4 8")	#13 225mm (#4 9")	#16 150mm (#5 6")	#16 150mm (#5 6")
10.7 m (35')	3.0 m (10')	200 mm (8")	200 mm (8")	250 mm (10")	#13 300mm (#4 12")	#13 225mm (#4 9")	#13 225mm (#4 9")	#13 225mm (#4 9")	#13 180mm (#4 7")	#13 180mm (#4 7")
10.7 m (35')	3.7 m (12')	250 mm (10")	200 mm (8")	305 mm (12")	#13 225mm (#4 9")	#13 225mm (#4 9")	#16 180mm (#5 7")	#16 225mm (#5 9")	#16 150mm (#5 6")	#16 150mm (#5 6")
12.8 m (42')	1.8 m (6')	150 mm (6")	150 mm (6")	200 mm (8")	#13 450mm (#4 18")	#13 150mm (#4 6")	#13 450mm (#4 18")	#13 380mm (#4 15")	#13 150mm (#4 6")	#13 150mm (#4 6")
12.8 m (42')	2.4 m (8')	200 mm (8")	150 mm (6")	200 mm (8")	#13 450mm (#4 18")	#13 200mm (#4 8")	#13 200mm (#4 8")	#13 225mm (#4 9")	#16 150mm (#5 6")	#16 150mm (#5 6")
12.8 m (42')	3.0 m (10')	200 mm (8")	200 mm (8")	250 mm (10")	#13 300mm (#4 12")	#13 225mm (#4 9")	#13 225mm (#4 9")	#13 225mm (#4 9")	#13 180mm (#4 7")	#13 180mm (#4 7")
12.8 m (42')	3.7 m (12')	250 mm (10")	200 mm (8")	305 mm (12")	#13 225mm (#4 9")	#13 225mm (#4 9")	#16 180mm (#5 7")	#16 225mm (#5 9")	#16 150mm (#5 6")	#16 150mm (#5 6")

CURB OPENING CATCH BASIN REINFORCEMENT

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS

CATCH BASIN REINFORCEMENT

STANDARD PLAN

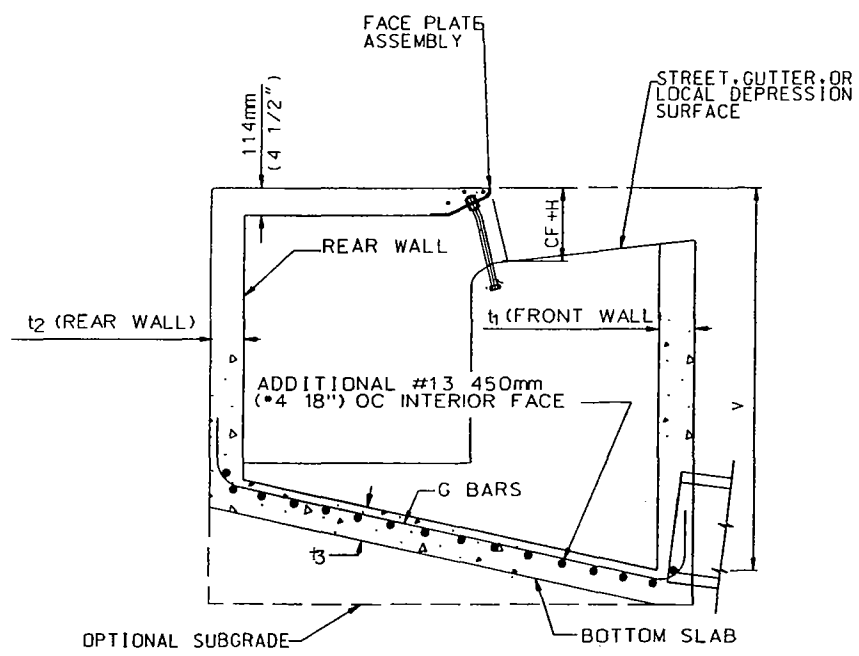
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**TYPICAL REINFORCEMENT DETAILS**

**CURB OPENING CATCH BASIN WITH GRATING(S)**

- NOTE: 1. TYPICAL REINFORCEMENT DETAILS ARE NOT SHOWN.  
 2. TYPICAL REINFORCEMENT DETAILS ARE SIMILAR TO CURB OPENING CATCH BASIN EXCEPT AS ADDED.

MAX. V	t <sub>1</sub>	t <sub>2</sub>	t <sub>3</sub>	A BARS	B BARS	C BARS	D BARS	E BARS	F BARS	G BARS
1.2 m (4')	200 mm (8")	200 mm (8")	250 mm (10")	#16 180mm (#5 7")	#13 380mm (#4 15")	#13 450mm (#4 18")	#16 180mm (#5 7")	#16 180mm (#5 7")	#16 180mm (#5 7")	#13 225mm (#4 9")
2.4 m (8')	200 mm (8")	200 mm (8")	300 mm (12")	#16 150mm (#5 6")	#13 380mm (#4 15")	#13 380mm (#4 15")	#16 150mm (#5 6")	#16 180mm (#5 7")	#16 180mm (#5 7")	#13 300mm (#4 12")
3.7 m (12')	250 mm (10")	200 mm (8")	300 mm (12")	#16 200mm (#5 8")	#13 225mm (#4 9")	#16 180mm (#5 7")	#16 150mm (#5 6")	#16 180mm (#5 7")	#16 180mm (#5 7")	#13 300mm (#4 12")

**CATCH BASIN REINFORCEMENT**

**CURB OPENING CATCH BASIN WITH GRATING(S)**

**NOTES:**

- UNLESS OTHERWISE SPECIFIED, REINFORCEMENT FOR CURB OPENING AND GRATING CATCH BASIN SHALL TERMINATE 50 mm (2") FROM FACE OF CONCRETE.
- DIMENSIONS SHOWN ON THIS PLAN FOR METRIC AND ENGLISH UNITS ARE NOT EXACT EQUAL VALUES. IF METRIC VALUES ARE USED, ALL VALUES USED FOR CONSTRUCTION SHALL BE METRIC VALUES, EXCEPT REINFORCING BARS SIZES IN ENGLISH UNITS MAY BE SUBSTITUTED FOR METRIC BAR SIZES. IF ENGLISH UNITS ARE USED, ALL VALUES USED FOR CONSTRUCTION SHALL BE ENGLISH UNITS.

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CATCH BASIN REINFORCEMENT

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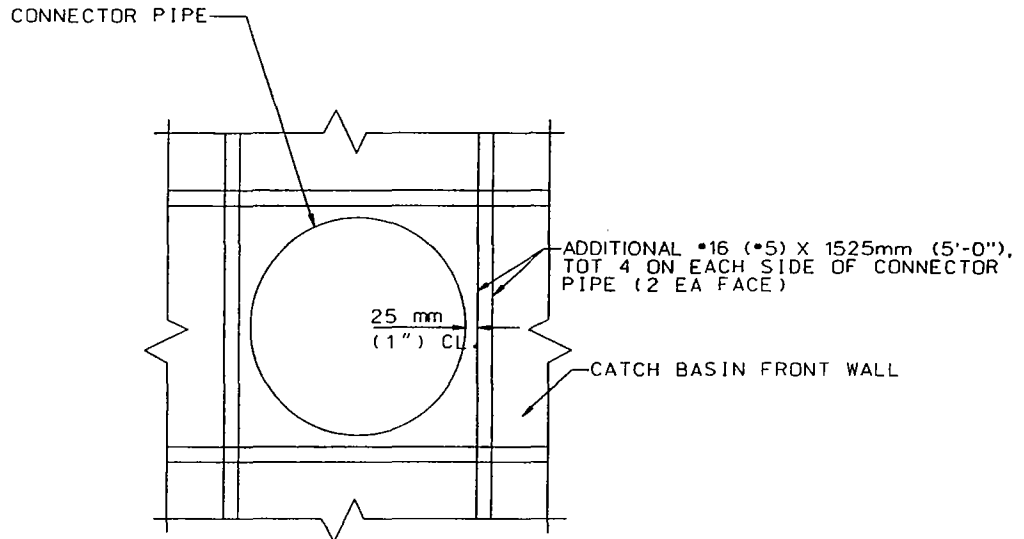
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CONNECTOR PIPE OPENING DETAILS

MAXIMUM SOIL BEARING PRESSURE:

MAX V	MAX BEARING PRESSURE (CATCH BASIN WITHOUT WATER)	MAX BEARING PRESSURE (CATCH BASIN FILLED WITH WATER)
1.2m (4.0')	72 kPa (1.5 ksf)	86 kPa (1.8 ksf)
1.8m (6.0')	72 kPa (1.5 ksf)	91 kPa (1.9 ksf)
2.4m (8.0')	91 kPa (1.9 ksf)	115 kPa (2.4 ksf)
3.0m (10.0')	81 kPa (1.7 ksf)	115 kPa (2.4 ksf)
3.7m (12.0')	86 kPa (1.8 ksf)	125 kPa (2.6 ksf)

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