



MSI GENERAL CORPORATION
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 SINGLE SOURCE RESPONSIBILITY™

ISSUE DATES:
 Proposal: 10/31/18
 Bid:
 Contract:
 State Submittal / Permit:
 As-Built:

REVISIONS:
 1 P. C. SUBMITTAL 02-25-19
 2 ADDR. CITY COMMENTS 05-10-19
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KEY PLAN



PROJECT ADDRESS:
 avid™ hotels
 STREET ADDRESS
 Marshview Street
 CITY/ STATE / ZIP
 Waukesha, WI 53186

ALL WORK TO BE COMPLETED AS SHOWN, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE MSI GENERAL MASTER SPECIFICATION

Architect: CJO
 Engineer: JSD
 Reviewed By: XXX

Sheet Title:
DETAILS

Sheet Number:
C-110
 Project Number: P12269

P12269

STANDARD CONSTRUCTION DETAILS
--CONCRETE FLARED END--

NOTES:
 1. REINFORCING IN THE 10" PORTION SHALL BE THE SAME AS SPECIFIED FOR CONCRETE PIPE ASTM C76 AND ASHTO M170 CLASS II AND/OR PAVD PUB. 280 TYPE A STANDARD INSTALLATION WITH FILL HEIGHT OF 3-6INCH.
 2. CONCRETE IN THESE END SECTIONS SHALL HAVE A MINIMUM STRENGTH OF 4000 PSI.
 3. VARIATIONS IN MANUFACTURING DIMENSIONS SHALL BE AS CALLED FOR IN ASTM C76 AND ASHTO M170 AND/OR PAVD PUB.280.
 4. PIPE TO END SECTION CONNECTION SHALL MATCH JOINTS OF STANDARD PIPE DETAILS.
 5. REFER TO STANDARD DETAILS FOR INFORMATION NOT LISTED ON THIS DRAWING.

DM	A	B	C	T1	T2	H1	H2	L	S	R
10	30	24	48	3/8	5/8	16	6	73	27	11
12	30	24	48	3/8	5/8	16	6	73	27	11
15	30	24	48	3/8	5/8	16	6	73	27	11
18	36	29	48	3/8	5/8	16	6	73	27	12
21	48	33	30	4/8	6	25	9 3/8	73 3/8	43 3/8	14
24	48	33	30	4/8	4 1/2	25	9 3/8	73 3/8	43 3/8	14

CITY OF WALKESHA
 DEPARTMENT OF PUBLIC WORKS
 APPROVED: ALEX DAMEN DATE: 12/13/2018 DRAWN BY: JSD DATE: 12/13/2018 PLOT SCALE: 3/8" = 1'-0" PLOT DATE: 12/13/2018 8:21 AM PROJECT NO: 05-0600

STANDARD CONSTRUCTION DETAILS
--18-INCH TYPE B--

NOTE: AT ALL HANDICAP RAMP LOCATIONS THE CROSS-SLOPE OF THE FLANGE CANNOT EXCEED 1/4"/FT. THIS MUST BE MAINTAINED THE WIDTH OF THE RAMP. TRANSITION A MINIMUM 5 FT. ALONG THE FACE OF THE FLANGE ON EITHER SIDE OF THE RAMP TO THE TYPICAL CROSS-SLOPE.

NOTE: WHEN TYPE "B" CURB AND GUTTERS USED WITH CONCRETE PAVEMENT, THE CURB AND GUTTER SHALL BE TIED TO THE PAVEMENT WITH NO. 4, 2"-0" DEFORMED EPOXY-COATED TIE BARS SPACED AT 3'-0" C. TO C.

CITY OF WALKESHA
 DEPARTMENT OF PUBLIC WORKS
 APPROVED: ALEX DAMEN DATE: 12/13/2018 DRAWN BY: JSD DATE: 12/13/2018 PLOT SCALE: 3/8" = 1'-0" PLOT DATE: 12/13/2018 10:27 AM PROJECT NO: 07-0341

STANDARD CONSTRUCTION DETAILS
--18-INCH TYPE A--

NOTE: AT ALL HANDICAP RAMP LOCATIONS THE CROSS-SLOPE OF THE FLANGE CANNOT EXCEED 1/4"/FT. THIS MUST BE MAINTAINED THE WIDTH OF THE RAMP. TRANSITION A MINIMUM 5 FT. ALONG THE FACE OF THE FLANGE ON EITHER SIDE OF THE RAMP TO THE TYPICAL CROSS-SLOPE.

NOTE: WHEN TYPE "A" CURB AND GUTTERS USED WITH CONCRETE PAVEMENT, THE CURB AND GUTTER SHALL BE TIED TO THE PAVEMENT WITH NO. 4, 2"-0" DEFORMED EPOXY-COATED TIE BARS SPACED AT 3'-0" C. TO C.

CITY OF WALKESHA
 DEPARTMENT OF PUBLIC WORKS
 APPROVED: ALEX DAMEN DATE: 12/13/2018 DRAWN BY: JSD DATE: 12/13/2018 PLOT SCALE: 3/8" = 1'-0" PLOT DATE: 12/13/2018 10:16 AM PROJECT NO: 07-0340

STANDARD CONSTRUCTION DETAILS
--CONCRETE SIDEWALK--

NOTE: TRANSVERSE JOINTS SHALL BE CUT WITH A JOINTER HAVING A RADIUS OF 1/4" AT SPACING AS INDICATED OR AS DIRECTED BY THE ENGINEER.

2. SIDEWALK SHALL BE 6" THICK AT ALL DRIVEWAY CROSSING.

CITY OF WALKESHA
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 APPROVED: ALEX DAMEN DATE: 12/13/2018 DRAWN BY: JSD DATE: 12/13/2018 PLOT SCALE: 3/8" = 1'-0" PLOT DATE: 12/13/2018 8:14 AM PROJECT NO: 07-0300

STANDARD CONSTRUCTION DETAILS
--STANDARD DRIVE APPROACH--

MIN. 10'-MAX. 30' (RESIDENTIAL)
 MIN. 10'-MAX. 45' (COMMERCIAL)
 MIN. 10'-MAX. 45' (INDUSTRIAL)

CONCRETE SIDEWALK
 1/2" X 4" EXPANSION JOINT

6" CONCRETE OR 4" ASPHALT DRIVE APP.
 1/2" X 6" EXPANSION JOINT

RESIDENTIAL - MAX. 35'
 COMMERCIAL - MAX. 50'
 INDUSTRIAL - MAX. 50'

NOTES:
 1. DRIVEWAYS 10' TO 20' WIDE SHALL HAVE ONE (1) JOINT.
 2. DRIVEWAYS 21' TO 30' WIDE SHALL HAVE TWO (2) JOINTS EQUALLY SPACED.
 3. DRIVEWAYS 31'-40' WIDE SHALL HAVE THREE (3) JOINTS EQUALLY SPACED.
 4. 1/2" X 6" EXPANSION JOINT AT THE FACE OF WALK AND BACK OF CURB IS REQUIRED ONLY FOR CONCRETE DRIVE APPROACH.
 5. FLARE WIDTH = 3' MIN. TO 5' MAX.
 6. 8" CONCRETE ALLOWED FOR APPROACH AND SIDEWALK FOR HEAVY TRAFFIC.
 7. 4" OF DENSE AGGREGATE BASE (3/4" OR 1-1/4") REQUIRED UNDER APPROACH AND SIDEWALK.
 8. 6" MINIMUM OF DENSE AGGREGATE BASE (1-1/4") REQUIRED UNDER CURB AND GUTTER.
 9. THE ENTIRE CURB AND GUTTER SHALL BE REMOVED AND REPLACED FOR THE WIDTH OF THE DRIVE APPROACH. SAWCUTTING OF THE HEAD (ONLY) IS NOT ALLOWED.
 10. MAINTAIN A MIN. 5'-FEET BETWEEN CURB AND GUTTER JOINTS.

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 APPROVED: ALEX DAMEN DATE: 12/13/2018 DRAWN BY: JSD DATE: 12/13/2018 PLOT SCALE: 3/8" = 1'-0" PLOT DATE: 12/13/2018 7:49 AM PROJECT NO: 07-0320

STANDARD CONSTRUCTION DETAILS
--RIPRAP AND GEOTEXTILE FABRIC AT APRON ENDWALLS--

STANDARD APRON ENDWALL

SECTION A-A
 SECTION B-B

PIPE 'A' DIMENSION
 6"-24" 6" MIN 10" MAX
 27"-54" 9" MIN 12" MAX
 60"-90" 12" MIN 24" MAX

CITY OF WALKESHA
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 APPROVED: ALEX DAMEN DATE: 12/13/2018 DRAWN BY: JSD DATE: 12/13/2018 PLOT SCALE: 3/8" = 1'-0" PLOT DATE: 12/13/2018 8:20 AM PROJECT NO: 05-0400

STANDARD CONSTRUCTION DETAIL
--PIPE TRENCH DETAIL--

12" TRENCH WIDTH

PIPE OD

PIPE SIZE

CITY OF WALKESHA
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 APPROVED: ALEX DAMEN DATE: 12/13/2018 DRAWN BY: JSD DATE: 12/13/2018 PLOT SCALE: 3/8" = 1'-0" PLOT DATE: 12/13/2018 8:14 AM PROJECT NO: 05-0008

STANDARD CONSTRUCTION DETAILS
STANDARD STORM MANHOLE

NEEMA 8-1661 LID, SEE SPECIFICATIONS

PRO-RING GRADE RINGS, TYP.

PRECAST TOP PER ASTM C478 0.12 SQ. IN./LINEAR FEET STEEL REINF. BOTH WAYS. PROVIDE 12 ADDITIONAL #4 REINF. BARS 3 TOP & 3 BOTTOM EA. SIDE OF MANHOLE OPENING.

ASTM C443 RUBBER GASKET JOINTS, TYPICAL

PRECAST REDUCER CAP PER ASTM C-478 0.12 SQ. IN./LINEAR FEET STEEL REINF. BOTH WAYS. PROVIDE 12 ADDITIONAL #4 REINF. BARS 3 TOP & 3 BOTTOM EA. SIDE OF MANHOLE OPENING.

PRECAST CONC. MANHOLE SECTIONS, PER ASTM C478 OR PRECAST CONC. PIPE PER ASTM C76.

CONC. FILLET SLOPE 1"/FT.

PRECAST BASE PER ASTM C478 0.12 SQ. IN./LINEAR FEET STEEL REINF. BOTH WAYS. PROVIDE 12" THICK BASE WHEN BASE IS CAST IN PLACE WITH #4 @ 12" OC BOTH WAYS, TOP AND BOTTOM.

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DETAILS



JSD Professional Services, Inc.
 Engineers • Surveyors • Planners

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