

ROTO ROOTER
PO BOX 3154
BISMARCK ND 58502
701-222-2653

Pipe Inspection Summary for Project: **KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01**

Printed: September 9, 2014 5:50am

SUMMARY INFORMATION

Total Number of Pipes	22
Total Pipe Footage	3,819.10
Total Inspected Pipe Footage	3,819.10
Total Uninspected Pipe Footage	0.00
Average Pipe Length	174
Total Estimated Pipe Joints	945
Total Number of Observations	93
Total Inch-Diameter-Miles	7.2
Total Leak Rate (gpm).....	0.0
Leakage Rate Per IDM	0.00

Pipe Filter for this Report (if any):

FREQUENCY COUNT BY OBSERVATION

<u>Observation</u>	<u>Count</u>
Inspection, End.....	7
Manhole, Downstream.....	21
Manhole, Upstream.....	15
Service, Connection.....	50
Total Observation Count	93

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Pipe Inspection Summary for Project: KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01

Printed: September 9, 2014 5:50am

PIPE FOOTAGE BY TYPE, MATERIAL, AND SIZE

SANITARY SEWER - <No Shape>

<u>Material</u>	<u>Size</u>	<u>Footage</u>
PVC	0	75.2
	8.0	3,743.9
		3,819.1
Sanitary Sewer Total		3,819.1
Total All Pipe Types		3,819.1

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PIPE FOOTAGE BY TYPE, SIZE, AND MATERIAL

SANITARY SEWER - <No Shape>

<u>Size</u>	<u>Material</u>	<u>Footage</u>
0	PVC	75.2
		<u>75.2</u>
8.0	PVC	3,743.9
		<u>3,743.9</u>
Sanitary Sewer Total		3,819.1
Total All Pipe Types		3,819.1

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PIPE COUNT AND FOOTAGE BY CONDITION RATING

SANITARY SEWER

Condition	Rating	Pipe Count	Footage
Hydraulic	<Unknown>	22	3,819.1
Infiltration	<Unknown>	22	3,819.1
Maintenance	<Unknown>	22	3,819.1
Structural	<Unknown>	22	3,819.1

Filter for this Report:

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Pipe Data Report for Project: **KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01**

Printed: September 9, 2014 6:19am

	Upstream Structure	Downstream Structure
Pipe Number	CAP	MH 14
Pipe Type	Sanitary Sewer	
Address / Street		
Location		

Inspection:

Inspection Type TV
Inspector(s) CP
Starting Date/Time 9/4/2014 9:36:10AM
Ending Date/Time 9/4/2014 9:43:10AM
Weather Condition Dry
Ground Condition Damp
Surface Over Pipe Bare Dirt
Percent (%) Paved 0
View Direction Against Flow

Pipe:

Pipe Material PVC
Pipe Roughness 0.00
Pipe Slope 0.00
Pipe Diameter [in] 8
Total Pipe Length [ft] ... 58.7
Length Measured As Structure Base Centers
Flow Depth [in] 0.00
Flow Direction NW
Joint Spacing [ft] 0.0

Video Tape ID

Tape Start Index

Tape End Index

Depth From Top of Structure to Invert: [ft]

Upstream End 0.00
Downstream End 0.00

Comments:

**None

Supplemental Pipe Data:

TV Contractor

TV Operator ID

TV Contract #

Pipe Shape

Pipe Width [in] 8.00
Pipe Height [in] 8.00
Buildings to Left 0
Buildings to Right 0
Length, Map [ft] 0.0
Length, Rolatape [ft] 0.0
Length, Contractor [ft] .. 0.0

Cond, Structural

Cond, Hydraulic

Cond, Infiltration

Cond, Maintenance

TV Incomplete No
Incomplete Reason

Pipe Isolated No
Weir GPD 0.0
Re-TV Required No
Reversal Required No
Cleaning Required No

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Pipe Number Upstream Structure Downstream Structure
CAP MH 14

Ftg	End	Offset	Observation	Leak (gpm)	Rtng	Clk	Video
7.0			Manhole, Downstream				
58.7			Inspection, End CAP				

Total Number of Observations 2
Total Leakage (gpm)..... 0.0

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Pipe Data Report for Project: **KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01**

Printed: September 9, 2014 6:19am

	Upstream Structure	Downstream Structure
Pipe Number	CO 1	MH 1
Pipe Type	Sanitary Sewer	
Address / Street	4TH AVE SW	
Location		

Inspection:

Inspection Type TV
Inspector(s) CP
Starting Date/Time 9/8/2014 1:27:11PM
Ending Date/Time

Weather Condition Dry
Ground Condition Damp
Surface Over Pipe Bare Dirt
Percent (%) Paved 0
View Direction Against Flow

Pipe:

Pipe Material PVC
Pipe Roughness 0.00
Pipe Slope 0.00
Pipe Diameter [in] 8
Total Pipe Length [ft] ... 231.9
Length Measured As Structure Base Centers
Flow Depth [in] 0.00
Flow Direction N
Joint Spacing [ft] 0.0

Video Tape ID

Tape Start Index

Tape End Index

Depth From Top of Structure to Invert: [ft]

Upstream End 0.00
Downstream End 0.00

Comments:

**None

Supplemental Pipe Data:

TV Contractor

TV Operator ID

TV Contract #

Pipe Shape

Pipe Width [in] 8.00
Pipe Height [in] 8.00
Buildings to Left 0
Buildings to Right 0
Length, Map [ft] 0.0
Length, Rolatape [ft] 0.0
Length, Contractor [ft] .. 0.0

Cond, Structural

Cond, Hydraulic

Cond, Infiltration

Cond, Maintenance

TV Incomplete No
Incomplete Reason

Pipe Isolated No
Weir GPD 0.0
Re-TV Required No
Reversal Required No
Cleaning Required No

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Pipe Data Report for Project: **KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01**

Printed: September 9, 2014 6:19am

	Upstream Structure	Downstream Structure
Pipe Number	CO 2	MH 6
Pipe Type	Sanitary Sewer	
Address / Street	COBBLESTONE LOOP SW	
Location		

Inspection:

Inspection Type TV
Inspector(s) CP
Starting Date/Time 9/5/2014 9:28:16AM
Ending Date/Time 9/5/2014 9:34:30AM
Weather Condition Dry
Ground Condition Damp
Surface Over Pipe Bare Dirt
Percent (%) Paved 0
View Direction Against Flow

Pipe:

Pipe Material PVC
Pipe Roughness 0.00
Pipe Slope 0.00
Pipe Diameter [in] 8
Total Pipe Length [ft] ... 122.2
Length Measured As Structure Base Centers
Flow Depth [in] 0.00
Flow Direction N
Joint Spacing [ft] 0.0

Video Tape ID

Tape Start Index

Tape End Index

Depth From Top of Structure to Invert: [ft]

Upstream End 0.00
Downstream End 0.00

Comments:

**None

Supplemental Pipe Data:

TV Contractor

TV Operator ID

TV Contract #

Pipe Shape

Pipe Width [in] 8.00
Pipe Height [in] 8.00
Buildings to Left 0
Buildings to Right 0
Length, Map [ft] 0.0
Length, Rolatape [ft] 0.0
Length, Contractor [ft] .. 0.0

Cond, Structural

Cond, Hydraulic

Cond, Infiltration

Cond, Maintenance

TV Incomplete No
Incomplete Reason

Pipe Isolated No
Weir GPD 0.0
Re-TV Required No
Reversal Required No
Cleaning Required No

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	Upstream Structure	Downstream Structure
Pipe Number	CO 2	MH 6

Fig	End	Offset	Observation	Leak (gpm)	Rng	Clk	Video
7.0			Manhole, Downstream				
46.0			Service, Connection			2	
122.2			Inspection, End C.O.				

Total Number of Observations 3
 Total Leakage (gpm)..... 0.0

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	Upstream Structure	Downstream Structure
Pipe Number	CO 3	MH 3
Pipe Type	Sanitary Sewer	
Address / Street	6TH AVE SW	
Location		

Inspection:

Inspection Type TV
 Inspector(s) CP
 Starting Date/Time 9/5/2014 10:51:49AM
 Ending Date/Time

Weather Condition Dry
 Ground Condition Damp
 Surface Over Pipe Bare Dirt
 Percent (%) Paved 0
 View Direction Against Flow

Pipe:

Pipe Material PVC
 Pipe Roughness 0.00
 Pipe Slope 0.00
 Pipe Diameter [in] 8
 Total Pipe Length [ft] ... 7.0
 Length Measured As Structure Base Centers
 Flow Depth [in] 0.00
 Flow Direction N
 Joint Spacing [ft] 0.0

Video Tape ID

Tape Start Index

Tape End Index

Depth From Top of Structure to Invert: [ft]

Upstream End 0.00
 Downstream End 0.00

Comments:

**None

Supplemental Pipe Data:

TV Contractor

TV Operator ID

TV Contract #

Pipe Shape

Pipe Width [in] 8.00
 Pipe Height [in] 8.00
 Buildings to Left 0
 Buildings to Right 0
 Length, Map [ft] 0.0
 Length, Rolatape [ft] 0.0
 Length, Contractor [ft] .. 0.0

Cond, Structural

Cond, Hydraulic

Cond, Infiltration

Cond, Maintenance

TV Incomplete No
 Incomplete Reason

Pipe Isolated No
 Weir GPD 0.0
 Re-TV Required No
 Reversal Required No
 Cleaning Required No

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Pipe Number Upstream Structure Downstream Structure
CO 3 MH 3

Ftg	End	Offset	Observation	Leak (gpm)	Rtng	Clk	Video
7.0			Manhole, Downstream				

Total Number of Observations 1
Total Leakage (gpm)..... 0.0

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	Upstream Structure	Downstream Structure
Pipe Number	CO 4	MH 15
Pipe Type	Sanitary Sewer	
Address / Street	2ND AVE SW	
Location		

Inspection:

Inspection Type TV
Inspector(s) CP
Starting Date/Time 9/4/2014 11:09:40AM
Ending Date/Time 9/4/2014 11:13:51AM
Weather Condition Dry
Ground Condition Damp
Surface Over Pipe Bare Dirt
Percent (%) Paved 0
View Direction Against Flow

Pipe:

Pipe Material PVC
Pipe Roughness 0.00
Pipe Slope 0.00
Pipe Diameter [in] 8
Total Pipe Length [ft] ... 173.6
Length Measured As Structure Base Centers
Flow Depth [in] 0.00
Flow Direction N
Joint Spacing [ft] 0.0

Video Tape ID

Tape Start Index

Tape End Index

Depth From Top of Structure to Invert: [ft]

Upstream End 0.00

Downstream End 0.00

Comments:

**None

Supplemental Pipe Data:

TV Contractor

TV Operator ID

TV Contract #

Pipe Shape

Pipe Width [in] 8.00

Pipe Height [in] 8.00

Buildings to Left 0

Buildings to Right 0

Length, Map [ft] 0.0

Length, Rolatape [ft] 0.0

Length, Contractor [ft] .. 0.0

Cond, Structural

Cond, Hydraulic

Cond, Infiltration

Cond, Maintenance

TV Incomplete No

Incomplete Reason

Pipe Isolated No

Weir GPD 0.0

Re-TV Required No

Reversal Required No

Cleaning Required No

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	Upstream Structure	Downstream Structure
Pipe Number	CO 4	MH 15

Ftg	End	Offset	Observation	Leak (gpm)	Rtng	Clk	Video
7.0			Manhole, Downstream				
173.6			Inspection, End C.O.				

Total Number of Observations 2
 Total Leakage (gpm)..... 0.0

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Pipe Data Report for Project: **KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01**
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	Upstream Structure	Downstream Structure
Pipe Number	CO 5	MH 7
Pipe Type	Sanitary Sewer	
Address / Street	8TH AVE SW	
Location		

Inspection:

Inspection Type TV
 Inspector(s) CP
 Starting Date/Time 9/5/2014 9:46:54AM
 Ending Date/Time 9/5/2014 9:57:33AM
 Weather Condition Dry
 Ground Condition Damp
 Surface Over Pipe Bare Dirt
 Percent (%) Paved 0
 View Direction Against Flow

Pipe:

Pipe Material PVC
 Pipe Roughness 0.00
 Pipe Slope 0.00
 Pipe Diameter [in] 8
 Total Pipe Length [ft] ... 146.9
 Length Measured As Structure Base Centers
 Flow Depth [in] 0.00
 Flow Direction N
 Joint Spacing [ft] 0.0

Video Tape ID

Tape Start Index

Tape End Index

Depth From Top of Structure to Invert: [ft]

Upstream End 0.00

Downstream End 0.00

Comments:

**None

Supplemental Pipe Data:

TV Contractor

TV Operator ID

TV Contract #

Pipe Shape

Pipe Width [in] 8.00

Pipe Height [in] 8.00

Buildings to Left 0

Buildings to Right 0

Length, Map [ft] 0.0

Length, Rolatape [ft] 0.0

Length, Contractor [ft] .. 0.0

Cond, Structural

Cond, Hydraulic

Cond, Infiltration

Cond, Maintenance

TV Incomplete No

Incomplete Reason

Pipe Isolated No

Weir GPD 0.0

Re-TV Required No

Reversal Required No

Cleaning Required No

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	Upstream Structure	Downstream Structure
Pipe Number	CO 5	MH 7

Ftg	End	Offset	Observation	Leak (gpm)	Rtng	Clk	Video
7.0			Manhole, Downstream				
146.9			Inspection, End				
			C.O.				

Total Number of Observations 2
 Total Leakage (gpm)..... 0.0

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 Printed: September 9, 2014 6:19am

	<u>Upstream Structure</u>	<u>Downstream Structure</u>
Pipe Number	CO 6	MH 14
Pipe Type	Sanitary Sewer	
Address / Street	COBBLESTONE LOOP SW	
Location		

Inspection:

Inspection Type TV
 Inspector(s) CP
 Starting Date/Time 9/4/2014 9:29:53AM
 Ending Date/Time 9/4/2014 9:35:20AM
 Weather Condition Dry
 Ground Condition Damp
 Surface Over Pipe Bare Dirt
 Percent (%) Paved 0
 View Direction Against Flow

Pipe:

Pipe Material PVC
 Pipe Roughness 0.00
 Pipe Slope 0.00
 Pipe Diameter [in] 0
 Total Pipe Length [ft] ... 75.2
 Length Measured As Structure Base Centers
 Flow Depth [in] 0.00
 Flow Direction NE
 Joint Spacing [ft] 0.0

Video Tape ID

Tape Start Index

Tape End Index

Depth From Top of Structure to Invert: [ft]

Upstream End 0.00

Downstream End 0.00

Comments:

**None

Supplemental Pipe Data:

TV Contractor

TV Operator ID

TV Contract #

Pipe Shape

Pipe Width [in] 0.00

Pipe Height [in] 0.00

Buildings to Left 0

Buildings to Right 0

Length, Map [ft] 0.0

Length, Rolatape [ft] 0.0

Length, Contractor [ft] .. 0.0

Cond, Structural

Cond, Hydraulic

Cond, Infiltration

Cond, Maintenance

TV Incomplete No

Incomplete Reason

Pipe Isolated No

Weir GPD 0.0

Re-TV Required No

Reversal Required No

Cleaning Required No

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	Upstream Structure	Downstream Structure
Pipe Number	CO 6	MH 14

Ftg	End	Offset	Observation	Leak (gpm)	Rtng	Clk	Video
7.0			Manhole, Downstream				
75.2			Inspection, End C.O.				

Total Number of Observations 2
 Total Leakage (gpm)..... 0.0

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	Upstream Structure	Downstream Structure
Pipe Number	MH 1	EX SEWER
Pipe Type	Sanitary Sewer	
Address / Street	4TH AVE SW	
Location		

Inspection:

Inspection Type TV
 Inspector(s) CP
 Starting Date/Time 9/8/2014 1:48:19PM
 Ending Date/Time 9/8/2014 1:54:25PM
 Weather Condition Dry
 Ground Condition Damp
 Surface Over Pipe Bare Dirt
 Percent (%) Paved 0
 View Direction With Flow

Pipe:

Pipe Material PVC
 Pipe Roughness 0.00
 Pipe Slope 0.00
 Pipe Diameter [in] 8
 Total Pipe Length [ft] ... 219.9
 Length Measured As Structure Base Centers
 Flow Depth [in] 0.00
 Flow Direction N
 Joint Spacing [ft] 0.0

Video Tape ID

Tape Start Index	
Tape End Index	

Depth From Top of Structure to Invert: [ft]

Upstream End	0.00
Downstream End	0.00

Comments:

**None

Supplemental Pipe Data:

TV Contractor

TV Operator ID

TV Contract #

Pipe Shape

Pipe Width [in] 8.00

Pipe Height [in] 8.00

Buildings to Left 0

Buildings to Right 0

Length, Map [ft] 0.0

Length, Rolatape [ft] 0.0

Length, Contractor [ft] .. 0.0

Cond, Structural

Cond, Hydraulic

Cond, Infiltration

Cond, Maintenance

TV Incomplete No

Incomplete Reason

Pipe Isolated No

Weir GPD 0.0

Re-TV Required No

Reversal Required No

Cleaning Required No

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Pipe Data Report for Project: **KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01**
 Printed: September 9, 2014 6:19am

	Upstream Structure	Downstream Structure
Pipe Number	MH 10	MH 9
Pipe Type	Sanitary Sewer	
Address / Street	COBBLESTONE LOOP SW	
Location		

Inspection:

Inspection Type TV
 Inspector(s) CP
 Starting Date/Time 9/4/2014 10:53:01AM
 Ending Date/Time 9/4/2014 11:02:41AM
 Weather Condition Dry
 Ground Condition Damp
 Surface Over Pipe Bare Dirt
 Percent (%) Paved 0
 View Direction With Flow

Pipe:

Pipe Material PVC
 Pipe Roughness 0.00
 Pipe Slope 0.00
 Pipe Diameter [in] 8
 Total Pipe Length [ft] ... 200.7
 Length Measured As Structure Base Centers
 Flow Depth [in] 0.00
 Flow Direction W
 Joint Spacing [ft] 0.0

Video Tape ID

Tape Start Index

Tape End Index

Depth From Top of Structure to Invert: [ft]

Upstream End 0.00
 Downstream End 0.00

Comments:

**None

Supplemental Pipe Data:

TV Contractor

TV Operator ID

TV Contract #

Pipe Shape

Pipe Width [in] 8.00
 Pipe Height [in] 8.00
 Buildings to Left 0
 Buildings to Right 0
 Length, Map [ft] 0.0
 Length, Rolatape [ft] 0.0
 Length, Contractor [ft] .. 0.0

Cond, Structural

Cond, Hydraulic

Cond, Infiltration

Cond, Maintenance

TV Incomplete No
 Incomplete Reason

Pipe Isolated No
 Weir GPD 0.0
 Re-TV Required No
 Reversal Required No
 Cleaning Required No

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	Upstream Structure	Downstream Structure
Pipe Number	MH 10	MH 9

Ftg	End	Offset Observation	Leak (gpm)	Rtng	Clk	Video
7.0		Manhole, Upstream				
8.8		Service, Connection			2	
86.4		Service, Connection			10	
87.9		Service, Connection			2	
173.5		Service, Connection			10	
175.7		Service, Connection			2	
200.7		Manhole, Downstream				

Total Number of Observations 7
 Total Leakage (gpm)..... 0.0

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	Upstream Structure	Downstream Structure
Pipe Number	MH 11	MH 10
Pipe Type	Sanitary Sewer	
Address / Street	COBBLESTONE LOOP SW	
Location		

Inspection:

Inspection Type TV
 Inspector(s) CP
 Starting Date/Time 9/4/2014 10:30:40AM
 Ending Date/Time 9/4/2014 10:52:26AM
 Weather Condition Dry
 Ground Condition Damp
 Surface Over Pipe Bare Dirt
 Percent (%) Paved 0
 View Direction Against Flow

Pipe:

Pipe Material PVC
 Pipe Roughness 0.00
 Pipe Slope 0.00
 Pipe Diameter [in] 8
 Total Pipe Length [ft] ... 268.2
 Length Measured As Structure Base Centers
 Flow Depth [in] 0.00
 Flow Direction W
 Joint Spacing [ft] 0.0

Video Tape ID
 Tape Start Index
 Tape End Index

Depth From Top of Structure to Invert: [ft]
 Upstream End 0.00
 Downstream End 0.00

Comments:

**None

Supplemental Pipe Data:

TV Contractor
 TV Operator ID
 TV Contract #
 Pipe Shape
 Pipe Width [in] 8.00
 Pipe Height [in] 8.00
 Buildings to Left 0
 Buildings to Right 0
 Length, Map [ft] 0.0
 Length, Rolatape [ft] 0.0
 Length, Contractor [ft] .. 0.0

Cond, Structural
 Cond, Hydraulic
 Cond, Infiltration
 Cond, Maintenance
 TV Incomplete No
 Incomplete Reason
 Pipe Isolated No
 Weir GPD 0.0
 Re-TV Required No
 Reversal Required No
 Cleaning Required No

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	Upstream Structure	Downstream Structure
Pipe Number	MH 11	MH 10

Ftg	End	Offset	Observation	Leak (gpm)	Rtng	Clk	Video
7.0			Manhole, Downstream				
73.9			Service, Connection			10	
80.4			Service, Connection			2	
150.3			Service, Connection			10	
157.9			Service, Connection			2	
229.6			Service, Connection			10	
268.2			Manhole, Upstream				

Total Number of Observations 7
 Total Leakage (gpm)..... 0.0

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	Upstream Structure	Downstream Structure
Pipe Number	MH 12	MH 11
Pipe Type	Sanitary Sewer	
Address / Street	COBBLESTONE LOOP SW	
Location		

Inspection:

Inspection Type TV
Inspector(s) CP
Starting Date/Time 9/4/2014 10:20:50AM
Ending Date/Time 9/4/2014 10:29:53AM
Weather Condition Dry
Ground Condition Damp
Surface Over Pipe Bare Dirt
Percent (%) Paved 0
View Direction With Flow

Pipe:

Pipe Material PVC
Pipe Roughness 0.00
Pipe Slope 0.00
Pipe Diameter [in] 8
Total Pipe Length [ft] ... 208.8
Length Measured As Structure Base Centers
Flow Depth [in] 0.00
Flow Direction NW
Joint Spacing [ft] 0.0

Video Tape ID

Tape Start Index
Tape End Index

Depth From Top of Structure to Invert: [ft]

Upstream End 0.00
Downstream End 0.00

Comments:

**None

Supplemental Pipe Data:

TV Contractor
TV Operator ID
TV Contract #
Pipe Shape
Pipe Width [in] 8.00
Pipe Height [in] 8.00
Buildings to Left 0
Buildings to Right 0
Length, Map [ft] 0.0
Length, Rolatape [ft] 0.0
Length, Contractor [ft] .. 0.0

Cond, Structural
Cond, Hydraulic
Cond, Infiltration
Cond, Maintenance
TV Incomplete No
Incomplete Reason
Pipe Isolated No
Weir GPD 0.0
Re-TV Required No
Reversal Required No
Cleaning Required No

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Pipe Data Report for Project: KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01

Printed: September 9, 2014 6:19am

	<u>Upstream Structure</u>	<u>Downstream Structure</u>
Pipe Number	MH 12	MH 11

Ftg	End	Offset Observation	Leak (gpm)	Rtng	Clk	Video
7.0		Manhole, Upstream				
29.7		Service, Connection			3	
103.4		Service, Connection			2	
183.4		Service, Connection			9	
185.6		Service, Connection			3	
208.8		Manhole, Downstream				

Total Number of Observations 6
Total Leakage (gpm)..... 0.0

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Pipe Data Report for Project: KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01

Printed: September 9, 2014 6:19am

	Upstream Structure	Downstream Structure
Pipe Number	MH 13	MH 12
Pipe Type	Sanitary Sewer	
Address / Street	COBBLESTONE LOOP SW	
Location		

Inspection:

Inspection Type TV
Inspector(s) CP
Starting Date/Time 9/4/2014 10:14:09AM
Ending Date/Time 9/4/2014 10:20:18AM
Weather Condition Dry
Ground Condition Damp
Surface Over Pipe Bare Dirt
Percent (%) Paved 0
View Direction Against Flow

Pipe:

Pipe Material PVC
Pipe Roughness 0.00
Pipe Slope 0.00
Pipe Diameter [in] 8
Total Pipe Length [ft] ... 213.1
Length Measured As Structure Base Centers
Flow Depth [in] 0.00
Flow Direction N
Joint Spacing [ft] 0.0

Video Tape ID

Tape Start Index
Tape End Index

Depth From Top of Structure to Invert: [ft]

Upstream End 0.00
Downstream End 0.00

Comments:

**None

Supplemental Pipe Data:

TV Contractor
TV Operator ID
TV Contract #
Pipe Shape
Pipe Width [in] 8.00
Pipe Height [in] 8.00
Buildings to Left 0
Buildings to Right 0
Length, Map [ft] 0.0
Length, Rolatape [ft] 0.0
Length, Contractor [ft] .. 0.0

Cond, Structural
Cond, Hydraulic
Cond, Infiltration
Cond, Maintenance
TV Incomplete No
Incomplete Reason
Pipe Isolated No
Weir GPD 0.0
Re-TV Required No
Reversal Required No
Cleaning Required No

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Pipe Data Report for Project: **KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01**
Printed: September 9, 2014 6:19am

	Upstream Structure	Downstream Structure
Pipe Number	MH 13	MH 12

Ftg	End	Offset	Observation	Leak (gpm)	Rtng	Clk	Video
7.0			Manhole, Downstream				
18.6			Service, Connection			3	
46.4			Service, Connection			10	
129.9			Service, Connection			2	
168.6			Service, Connection			9	
213.1			Manhole, Upstream				

Total Number of Observations 6
Total Leakage (gpm)..... 0.0

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Pipe Data Report for Project: KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01

Printed: September 9, 2014 6:19am

	Upstream Structure	Downstream Structure
Pipe Number	MH 14	MH 13
Pipe Type	Sanitary Sewer	
Address / Street	COBBLESTONE LOOP SW	
Location		

Inspection:

Inspection Type TV
Inspector(s) CP
Starting Date/Time 9/4/2014 9:43:37AM
Ending Date/Time 9/4/2014 9:58:16AM
Weather Condition Dry
Ground Condition Damp
Surface Over Pipe Bare Dirt
Percent (%) Paved 0
View Direction With Flow

Pipe:

Pipe Material PVC
Pipe Roughness 0.00
Pipe Slope 0.00
Pipe Diameter [in] 8
Total Pipe Length [ft] ... 176.6
Length Measured As Structure Base Centers
Flow Depth [in] 0.00
Flow Direction NE
Joint Spacing [ft] 0.0

Video Tape ID

Tape Start Index

Tape End Index

Depth From Top of Structure to Invert: [ft]

Upstream End 0.00
Downstream End 0.00

Comments:
**None

Supplemental Pipe Data:

TV Contractor

TV Operator ID

TV Contract #

Pipe Shape

Pipe Width [in] 8.00
Pipe Height [in] 8.00
Buildings to Left 0
Buildings to Right 0
Length, Map [ft] 0.0
Length, Rolatape [ft] 0.0
Length, Contractor [ft] .. 0.0

Cond, Structural

Cond, Hydraulic

Cond, Infiltration

Cond, Maintenance

TV Incomplete No
Incomplete Reason

Pipe Isolated No
Weir GPD 0.0
Re-TV Required No
Reversal Required No
Cleaning Required No

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Pipe Data Report for Project: KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01

Printed: September 9, 2014 6:19am

	<u>Upstream Structure</u>	<u>Downstream Structure</u>
Pipe Number	MH 14	MH 13

Ftg	End	Offset	Observation	Leak (gpm)	Rtnng	Clk	Video
7.0			Manhole, Upstream				
25.0			Service, Connection			12	
148.0			Service, Connection			9	
152.0			Service, Connection			3	
176.6			Manhole, Downstream				

Total Number of Observations 5
Total Leakage (gpm)..... 0.0

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Pipe Data Report for Project: KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01

Printed: September 9, 2014 6:19am

	Upstream Structure	Downstream Structure
Pipe Number	MH 15	MH 10
Pipe Type	Sanitary Sewer	
Address / Street	2ND AVE SW	
Location		

Inspection:

Inspection Type TV
Inspector(s) CP
Starting Date/Time 9/4/2014 11:03:45AM
Ending Date/Time 9/4/2014 11:08:49AM
Weather Condition Dry
Ground Condition Damp
Surface Over Pipe Bare Dirt
Percent (%) Paved 0
View Direction Against Flow

Pipe:

Pipe Material PVC
Pipe Roughness 0.00
Pipe Slope 0.00
Pipe Diameter [in] 8
Total Pipe Length [ft] ... 49.6
Length Measured As Structure Base Centers
Flow Depth [in] 0.00
Flow Direction N
Joint Spacing [ft] 0.0

Video Tape ID

Tape Start Index
Tape End Index

Depth From Top of Structure to Invert: [ft]

Upstream End 0.00
Downstream End 0.00

Comments:

**None

Supplemental Pipe Data:

TV Contractor
TV Operator ID
TV Contract #
Pipe Shape
Pipe Width [in] 8.00
Pipe Height [in] 8.00
Buildings to Left 0
Buildings to Right 0
Length, Map [ft] 0.0
Length, Rolatape [ft] 0.0
Length, Contractor [ft] .. 0.0

Cond, Structural
Cond, Hydraulic
Cond, Infiltration
Cond, Maintenance
TV Incomplete No
Incomplete Reason
Pipe Isolated No
Weir GPD 0.0
Re-TV Required No
Reversal Required No
Cleaning Required No

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Pipe Data Report for Project: **KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01**

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	<u>Upstream Structure</u>	<u>Downstream Structure</u>
Pipe Number	MH 15	MH 10

Ftg	End	Offset	Observation	Leak (gpm)	Rtng	Clk	Video
7.0			Manhole, Downstream				
49.6			Manhole, Upstream				

Total Number of Observations 2
Total Leakage (gpm)..... 0.0

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Pipe Data Report for Project: **KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01**

Printed: September 9, 2014 6:19am

	Upstream Structure	Downstream Structure
Pipe Number	MH 2	MH 1
Pipe Type	Sanitary Sewer	
Address / Street	COBBLESTONE LOOP SW	
Location		

Inspection:

Inspection Type TV
Inspector(s) CP
Starting Date/Time 9/5/2014 11:12:21AM
Ending Date/Time 9/5/2014 11:21:26AM
Weather Condition Dry
Ground Condition Damp
Surface Over Pipe Bare Dirt
Percent (%) Paved 0
View Direction With Flow

Pipe:

Pipe Material PVC
Pipe Roughness 0.00
Pipe Slope 0.00
Pipe Diameter [in] 8
Total Pipe Length [ft] ... 256.0
Length Measured As Structure Base Centers
Flow Depth [in] 0.00
Flow Direction E
Joint Spacing [ft] 0.0

Video Tape ID
Tape Start Index
Tape End Index

Depth From Top of Structure to Invert: [ft]

Upstream End 0.00
Downstream End 0.00

Comments:

**None

Supplemental Pipe Data:

TV Contractor
TV Operator ID
TV Contract #
Pipe Shape
Pipe Width [in] 8.00
Pipe Height [in] 8.00
Buildings to Left 0
Buildings to Right 0
Length, Map [ft] 0.0
Length, Rolatape [ft] 0.0
Length, Contractor [ft] .. 0.0

Cond, Structural
Cond, Hydraulic
Cond, Infiltration
Cond, Maintenance
TV Incomplete No
Incomplete Reason
Pipe Isolated No
Weir GPD 0.0
Re-TV Required No
Reversal Required No
Cleaning Required No

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Pipe Data Report for Project: **KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01**

Printed: September 9, 2014 6:19am

	<u>Upstream Structure</u>	<u>Downstream Structure</u>
Pipe Number	MH 2	MH 1

Ftg	End	Offset	Observation	Leak (gpm)	Rtng	Clk	Video
7.0			Manhole, Upstream				
9.1			Service, Connection			11	
73.7			Service, Connection			2	
92.7			Service, Connection			11	
165.8			Service, Connection			2	
180.2			Service, Connection			10	
256.0			Manhole, Downstream				

Total Number of Observations 7
Total Leakage (gpm)..... 0.0

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Pipe Data Report for Project: **KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01**
Printed: September 9, 2014 6:19am

	Upstream Structure	Downstream Structure
Pipe Number	MH 3	MH 2
Pipe Type	Sanitary Sewer	
Address / Street	COBBLESTONE LOOP SW	
Location		

Inspection:

Inspection Type TV
Inspector(s) CP
Starting Date/Time 9/5/2014 10:41:02AM
Ending Date/Time 9/5/2014 10:50:39AM
Weather Condition Dry
Ground Condition Damp
Surface Over Pipe Bare Dirt
Percent (%) Paved 0
View Direction With Flow

Pipe:

Pipe Material PVC
Pipe Roughness 0.00
Pipe Slope 0.00
Pipe Diameter [in] 8
Total Pipe Length [ft] ... 255.7
Length Measured As Structure Base Centers
Flow Depth [in] 0.00
Flow Direction E
Joint Spacing [ft] 0.0

Video Tape ID

Tape Start Index

Tape End Index

Depth From Top of Structure to Invert: [ft]

Upstream End 0.00
Downstream End 0.00

Comments:

**None

Supplemental Pipe Data:

TV Contractor

TV Operator ID

TV Contract #

Pipe Shape

Pipe Width [in] 8.00
Pipe Height [in] 8.00
Buildings to Left 0
Buildings to Right 0
Length, Map [ft] 0.0
Length, Rolatape [ft] 0.0
Length, Contractor [ft] .. 0.0

Cond, Structural

Cond, Hydraulic

Cond, Infiltration

Cond, Maintenance

TV Incomplete No
Incomplete Reason

Pipe Isolated No
Weir GPD 0.0
Re-TV Required No
Reversal Required No
Cleaning Required No

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Pipe Data Report for Project: **KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01**

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	<u>Upstream Structure</u>	<u>Downstream Structure</u>
Pipe Number	MH 3	MH 2

Fig	End	Offset	Observation	Leak (gpm)	Rtng	Clk	Video
7.0			Manhole, Upstream				
22.9			Service, Connection			11	
85.3			Service, Connection			2	
102.4			Service, Connection			11	
172.2			Service, Connection			2	
183.9			Service, Connection			11	
252.6			Service, Connection			1	
255.7			Manhole, Downstream				

Total Number of Observations 8
Total Leakage (gpm)..... 0.0

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Pipe Data Report for Project: KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01

Printed: September 9, 2014 6:19am

	Upstream Structure	Downstream Structure
Pipe Number	MH 4	MH 3
Pipe Type	Sanitary Sewer	
Address / Street	COBBLESTONE LOOP SW	
Location		

Inspection:

Inspection Type TV
Inspector(s) CP
Starting Date/Time 9/5/2014 10:25:30AM
Ending Date/Time 9/5/2014 10:40:20AM
Weather Condition Dry
Ground Condition Damp
Surface Over Pipe Bare Dirt
Percent (%) Paved 0
View Direction Against Flow

Pipe:

Pipe Material PVC
Pipe Roughness 0.00
Pipe Slope 0.00
Pipe Diameter [in] 8
Total Pipe Length [ft] ... 197.5
Length Measured As Structure Base Centers
Flow Depth [in] 0.00
Flow Direction E
Joint Spacing [ft] 0.0

Video Tape ID

Tape Start Index
Tape End Index

Depth From Top of Structure to Invert: [ft]

Upstream End 0.00
Downstream End 0.00

Comments:

**None

Supplemental Pipe Data:

TV Contractor
TV Operator ID
TV Contract #
Pipe Shape
Pipe Width [in] 8.00
Pipe Height [in] 8.00
Buildings to Left 0
Buildings to Right 0
Length, Map [ft] 0.0
Length, Rolatape [ft] 0.0
Length, Contractor [ft] .. 0.0

Cond, Structural
Cond, Hydraulic
Cond, Infiltration
Cond, Maintenance
TV Incomplete No
Incomplete Reason
Pipe Isolated No
Weir GPD 0.0
Re-TV Required No
Reversal Required No
Cleaning Required No

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Pipe Data Report for Project: **KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01**

Printed: September 9, 2014 6:19am

	Upstream Structure	Downstream Structure
Pipe Number	MH 4	MH 3

Ftg	End	Offset Observation	Leak (gpm)	Rtn	Clk	Video
7.0		Manhole, Downstream				
66.4		Service, Connection			1	
77.3		Service, Connection			11	
146.0		Service, Connection			2	
160.0		Service, Connection			10	
197.5		Manhole, Upstream				

Total Number of Observations 6
 Total Leakage (gpm)..... 0.0

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Pipe Data Report for Project: KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01
 Printed: September 9, 2014 6:19am

	Upstream Structure	Downstream Structure
Pipe Number	MH 5	MH 4
Pipe Type	Sanitary Sewer	
Address / Street	COBBLESTONE LOOP SW	
Location		

Inspection:

Inspection Type TV
 Inspector(s) CP
 Starting Date/Time 9/5/2014 9:59:10AM
 Ending Date/Time 9/5/2014 10:16:05AM
 Weather Condition Dry
 Ground Condition Damp
 Surface Over Pipe Bare Dirt
 Percent (%) Paved 0
 View Direction With Flow

Pipe:

Pipe Material PVC
 Pipe Roughness 0.00
 Pipe Slope 0.00
 Pipe Diameter [in] 8
 Total Pipe Length [ft] ... 212.4
 Length Measured As Structure Base Centers
 Flow Depth [in] 0.00
 Flow Direction E
 Joint Spacing [ft] 0.0

Video Tape ID

Tape Start Index

Tape End Index

Depth From Top of Structure to Invert: [ft]

Upstream End 0.00
 Downstream End 0.00

Comments:

**None

Supplemental Pipe Data:

TV Contractor

TV Operator ID

TV Contract #

Pipe Shape

Pipe Width [in] 8.00
 Pipe Height [in] 8.00
 Buildings to Left 0
 Buildings to Right 0
 Length, Map [ft] 0.0
 Length, Rolatape [ft] 0.0
 Length, Contractor [ft] .. 0.0

Cond, Structural

Cond, Hydraulic

Cond, Infiltration

Cond, Maintenance

TV Incomplete No
 Incomplete Reason

Pipe Isolated No
 Weir GPD 0.0
 Re-TV Required No
 Reversal Required No
 Cleaning Required No

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Pipe Data Report for Project: **KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01**

Printed: September 9, 2014 6:19am

	<u>Upstream Structure</u>	<u>Downstream Structure</u>
Pipe Number	MH 5	MH 4

Ftg	End	Offset Observation	Leak (gpm)	Rtn	Clk	Video
7.0		Manhole, Upstream				
111.8		Service, Connection			10	
160.6		Service, Connection			2	
194.3		Service, Connection			11	
212.4		Manhole, Downstream				

Total Number of Observations 5
Total Leakage (gpm)..... 0.0

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Pipe Data Report for Project: KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01

Printed: September 9, 2014 6:19am

	<u>Upstream Structure</u>	<u>Downstream Structure</u>
Pipe Number	<u>MH 5</u>	<u>MH 4</u>

Sort Order for this Report:

Pipes.USStructureNumber, Pipes.DSStructureNumber, Pipes.StartDate DESC

Filter for this Report:

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Pipe Data Report for Project: **KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01**

Printed: September 9, 2014 5:50am

	Upstream Structure	Downstream Structure
Pipe Number	MH 6	MH 5
Pipe Type	Sanitary Sewer	
Address / Street	COBBLESTONE LOOP SW	
Location		

Inspection: Inspection Type TV Inspector(s) CP Starting Date/Time 9/5/2014 9:35:22AM Ending Date/Time 9/5/2014 9:45:13AM Weather Condition Dry Ground Condition Damp Surface Over Pipe Bare Dirt Percent (%) Paved 0 View Direction With Flow	Pipe: Pipe Material PVC Pipe Roughness 0.00 Pipe Slope 0.00 Pipe Diameter [in] 8 Total Pipe Length [ft] ... 231.1 Length Measured As Structure Base Centers Flow Depth [in] 0.00 Flow Direction NE Joint Spacing [ft] 0.0
---	---

Video Tape ID	Depth From Top of Structure to Invert: [ft]
Tape Start Index	Upstream End 0.00
Tape End Index	Downstream End 0.00

Comments:
 **None

Supplemental Pipe Data:	
TV Contractor	Cond, Structural
TV Operator ID	Cond, Hydraulic
TV Contract #	Cond, Infiltration
Pipe Shape	Cond, Maintenance
Pipe Width [in] 8.00	TV Incomplete No
Pipe Height [in] 8.00	Incomplete Reason
Buildings to Left 0	Pipe Isolated No
Buildings to Right 0	Weir GPD 0.0
Length, Map [ft] 0.0	Re-TV Required No
Length, Rolatape [ft] 0.0	Reversal Required No
Length, Contractor [ft] .. 0.0	Cleaning Required No

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Pipe Data Report for Project: **KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01**
 Printed: September 9, 2014 5:50am

	Upstream Structure	Downstream Structure
Pipe Number	MH 6	MH 5

Ftg	End	Offset	Observation	Leak (gpm)	Rtng	Clk	Video
7.0			Manhole, Upstream				
11.2			Service, Connection			2	
79.2			Service, Connection			10	
231.1			Manhole, Downstream				

Total Number of Observations 4
 Total Leakage (gpm)..... 0.0

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Pipe Data Report for Project: KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01

Printed: September 9, 2014 5:50am

	Upstream Structure	Downstream Structure
Pipe Number	MH 7	MH 6
Pipe Type	Sanitary Sewer	
Address / Street	20TH ST SW	
Location		

Inspection:

Inspection Type TV
 Inspector(s) CP
 Starting Date/Time 9/5/2014 9:18:17AM
 Ending Date/Time 9/5/2014 9:27:10AM
 Weather Condition Dry
 Ground Condition Damp
 Surface Over Pipe Bare Dirt
 Percent (%) Paved 0
 View Direction Against Flow

Pipe:

Pipe Material PVC
 Pipe Roughness 0.00
 Pipe Slope 0.00
 Pipe Diameter [in] 8
 Total Pipe Length [ft] ... 208.2
 Length Measured As Structure Base Centers
 Flow Depth [in] 0.00
 Flow Direction E
 Joint Spacing [ft] 0.0

Video Tape ID
 Tape Start Index
 Tape End Index

Depth From Top of Structure to Invert: [ft]

Upstream End 0.00
 Downstream End 0.00

Comments:

**None

Supplemental Pipe Data:

TV Contractor
 TV Operator ID
 TV Contract #
 Pipe Shape
 Pipe Width [in] 8.00
 Pipe Height [in] 8.00
 Buildings to Left 0
 Buildings to Right 0
 Length, Map [ft] 0.0
 Length, Rolatape [ft] 0.0
 Length, Contractor [ft] .. 0.0

Cond, Structural
 Cond, Hydraulic
 Cond, Infiltration
 Cond, Maintenance
 TV Incomplete No
 Incomplete Reason
 Pipe Isolated No
 Weir GPD 0.0
 Re-TV Required No
 Reversal Required No
 Cleaning Required No

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Pipe Data Report for Project: KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01

Printed: September 9, 2014 5:50am

	Upstream Structure	Downstream Structure
Pipe Number	MH 7	MH 6

Ftg	End	Offset	Observation	Leak (gpm)	Rtng	Clk	Video
7.0			Manhole, Downstream				
208.2			Manhole, Upstream				

Total Number of Observations 2
Total Leakage (gpm)..... 0.0

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Pipe Data Report for Project: **KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01**

Printed: September 9, 2014 5:50am

	Upstream Structure	Downstream Structure
Pipe Number	MH 8	MH 5
Pipe Type	Sanitary Sewer	
Address / Street	CUL-DE-SAC	
Location		

Inspection:

Inspection Type TV
Inspector(s) CP
Starting Date/Time 9/5/2014 10:16:55AM
Ending Date/Time 9/5/2014 10:24:17AM
Weather Condition Dry
Ground Condition Damp
Surface Over Pipe Bare Dirt
Percent (%) Paved 0
View Direction Against Flow

Pipe:

Pipe Material PVC
Pipe Roughness 0.00
Pipe Slope 0.00
Pipe Diameter [in] 8
Total Pipe Length [ft] ... 96.0
Length Measured As Structure Base Centers
Flow Depth [in] 0.00
Flow Direction SE
Joint Spacing [ft] 0.0

Video Tape ID

Tape Start Index
Tape End Index

Depth From Top of Structure to Invert: [ft]

Upstream End 0.00
Downstream End 0.00

Comments:

**None

Supplemental Pipe Data:

TV Contractor
TV Operator ID
TV Contract #
Pipe Shape
Pipe Width [in] 8.00
Pipe Height [in] 8.00
Buildings to Left 0
Buildings to Right 0
Length, Map [ft] 0.0
Length, Rolatape [ft] 0.0
Length, Contractor [ft] .. 0.0

Cond, Structural
Cond, Hydraulic
Cond, Infiltration
Cond, Maintenance
TV Incomplete No
Incomplete Reason
Pipe Isolated No
Weir GPD 0.0
Re-TV Required No
Reversal Required No
Cleaning Required No

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Pipe Data Report for Project: **KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01**

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	<u>Upstream Structure</u>	<u>Downstream Structure</u>
Pipe Number	MH 8	MH 5

Ftg	End	Offset	Observation	Leak (gpm)	Rtnng	Clk	Video
7.0			Manhole, Downstream				
28.9			Service, Connection			10	
34.5			Service, Connection			2	
78.4			Service, Connection			9	
87.8			Service, Connection			3	
96.0			Manhole, Upstream				

Total Number of Observations 6
Total Leakage (gpm)..... 0.0

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Pipe Data Report for Project: KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01

Printed: September 9, 2014 5:50am

	Upstream Structure	Downstream Structure
Pipe Number	MH 9	MH 1
Pipe Type	Sanitary Sewer	
Address / Street	COBBLESTONE LOOP SW	
Location		

Inspection:

Inspection Type TV
Inspector(s) CP
Starting Date/Time 9/5/2014 11:22:08AM
Ending Date/Time 9/5/2014 11:36:20AM
Weather Condition Dry
Ground Condition Damp
Surface Over Pipe Bare Dirt
Percent (%) Paved 0
View Direction With Flow

Pipe:

Pipe Material PVC
Pipe Roughness 0.00
Pipe Slope 0.00
Pipe Diameter [in] 8
Total Pipe Length [ft] ... 209.8
Length Measured As Structure Base Centers
Flow Depth [in] 0.00
Flow Direction W
Joint Spacing [ft] 0.0

Video Tape ID

Tape Start Index

Tape End Index

Depth From Top of Structure to Invert: [ft]

Upstream End 0.00
Downstream End 0.00

Comments:

**None

Supplemental Pipe Data:

TV Contractor

TV Operator ID

TV Contract #

Pipe Shape

Pipe Width [in] 8.00
Pipe Height [in] 8.00
Buildings to Left 0
Buildings to Right 0
Length, Map [ft] 0.0
Length, Rolatape [ft] 0.0
Length, Contractor [ft] .. 0.0

Cond, Structural

Cond, Hydraulic

Cond, Infiltration

Cond, Maintenance

TV Incomplete No
Incomplete Reason

Pipe Isolated No
Weir GPD 0.0
Re-TV Required No
Reversal Required No
Cleaning Required No

**ROTO ROOTER
PO BOX 3154
BISMARCK ND 58502
701-222-2653**

Pipe Data Report for Project: **KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01**

Printed: September 9, 2014 5:50am

	Upstream Structure	Downstream Structure
Pipe Number	MH 9	MH 1

Ftg	End	Offset Observation	Leak (gpm)	Rtn	Clk	Video
7.0		Manhole, Upstream				
53.6		Service, Connection			10	
55.1		Service, Connection			2	
131.2		Service, Connection			2	
155.0		Service, Connection			10	
209.8		Manhole, Downstream				

Total Number of Observations 6
Total Leakage (gpm)..... 0.0

ROTO ROOTER
PO BOX 3154
BISMARCK ND 58502
701-222-2653

Pipe Data Report for Project: **KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01**

Printed: September 9, 2014 5:50am

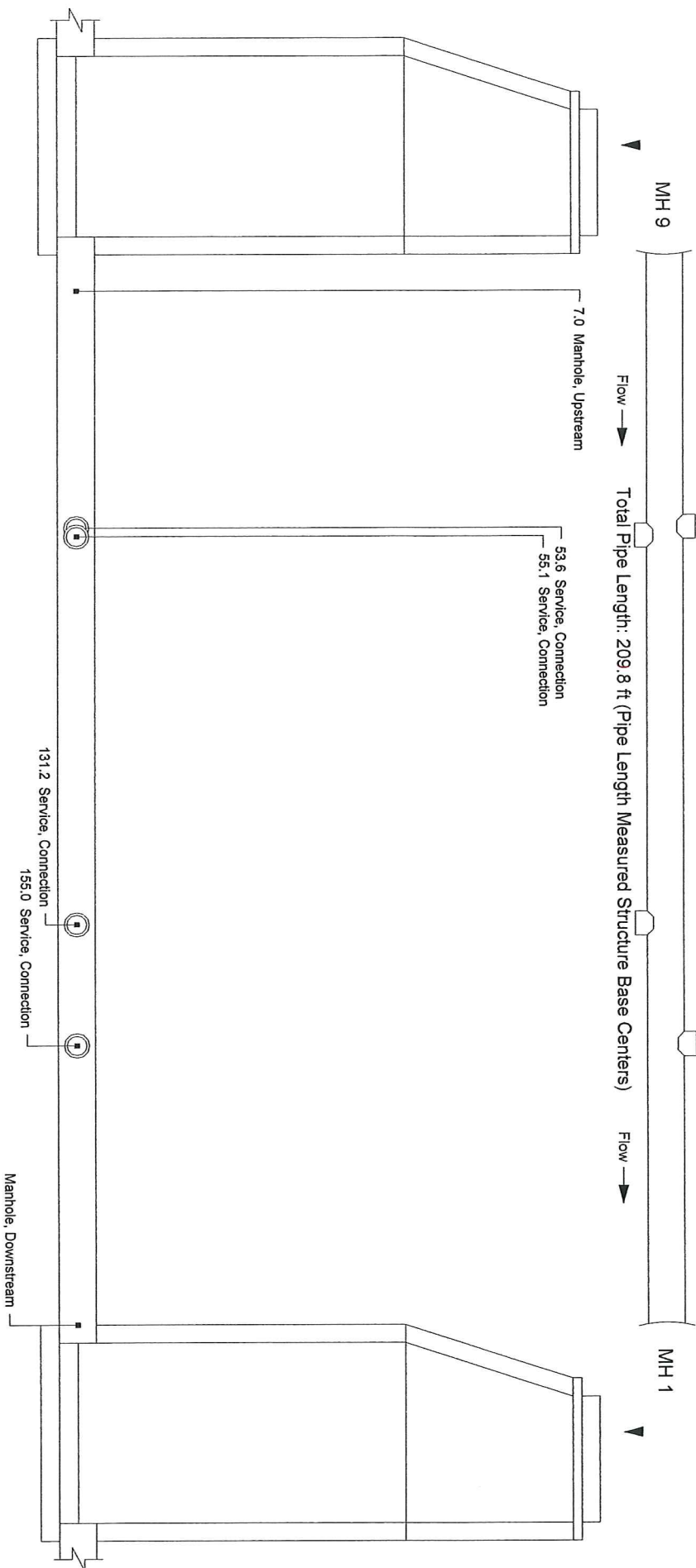
	<u>Upstream Structure</u>	<u>Downstream Structure</u>
Pipe Number	MH 9	MH 1

Sort Order for this Report:

Pipes.USStructureNumber, Pipes.DSStructureNumber, Pipes.StartDate DESC

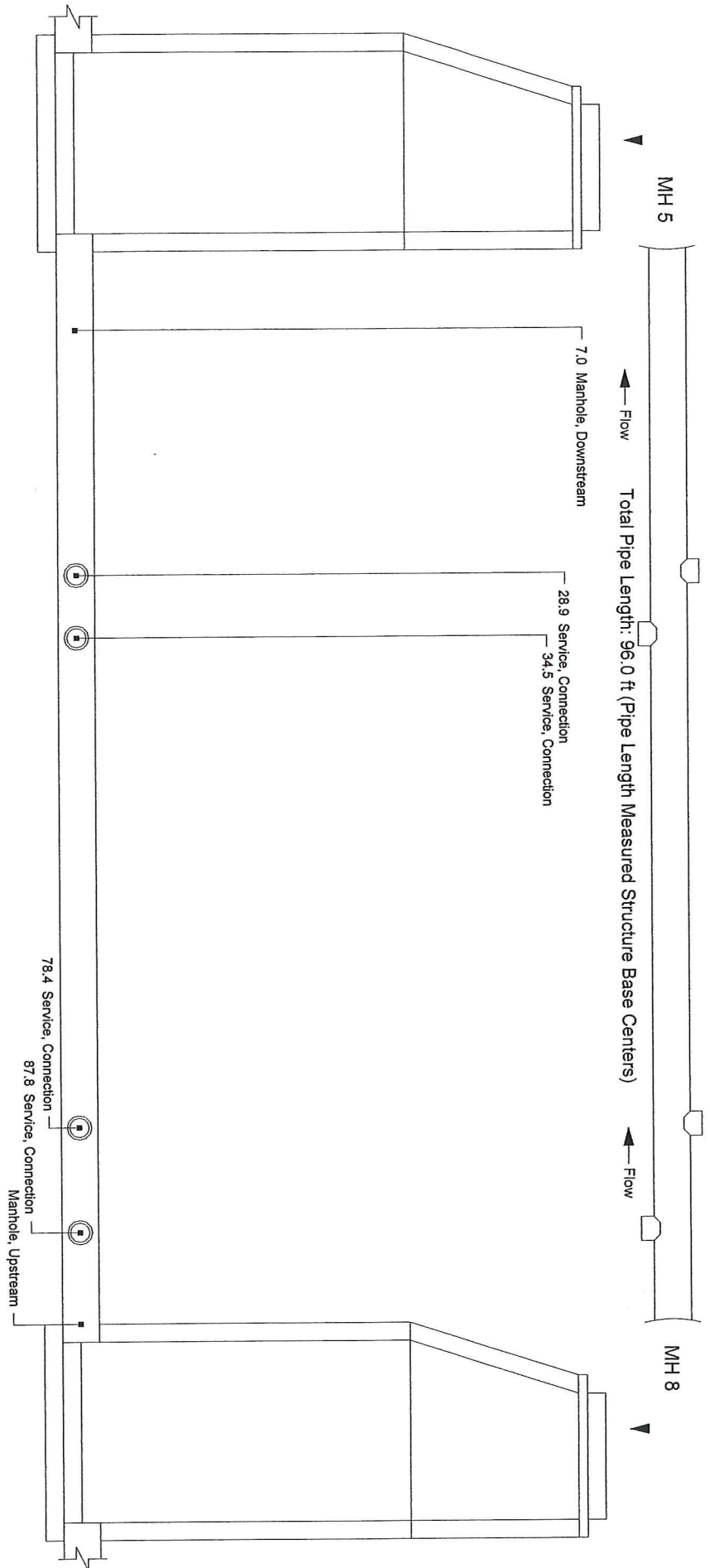
Filter for this Report:

SCHEMATIC CROSS SECTION (Not to Scale) - Sewer Reach: MH [MH 9] to MH [MH 1]



Project Name KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01
 Street Name COBBLESTONE LOOP SW
 Inspection Date..... 9/5/2014
 Pipe Type Sanitary Sewer
 Pipe Size/Material..... 8 in / PVC
 Pipe Length 209.8 ft
 Joint Spacing 0 ft
 Cover Type Bare Dirt
 Condition S/H/I/M..... / / /
 Comments:

SCHEMATIC CROSS SECTION (Not to Scale) - Sewer Reach: MH [MH 8] to MH [MH 5]



Project Name KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01

Street Name CUL-DE-SAC

Inspection Date..... 9/5/2014

Pipe Type Sanitary Sewer

Pipe Size/Material..... 8 in / PVC

Pipe Length 96 ft

Joint Spacing 0 ft

Cover Type Bare Dirt

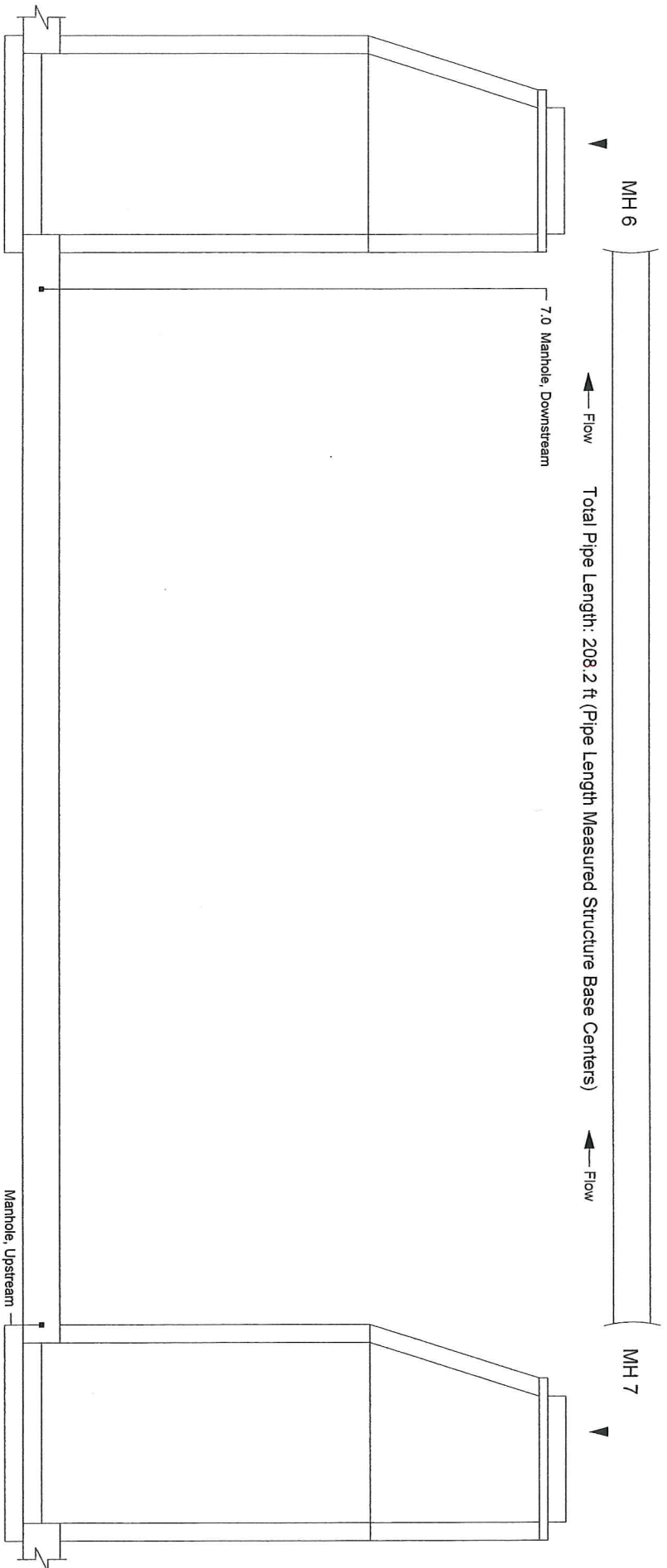
Condition S/H/M..... / / /

Comments:

ROTO ROOTER

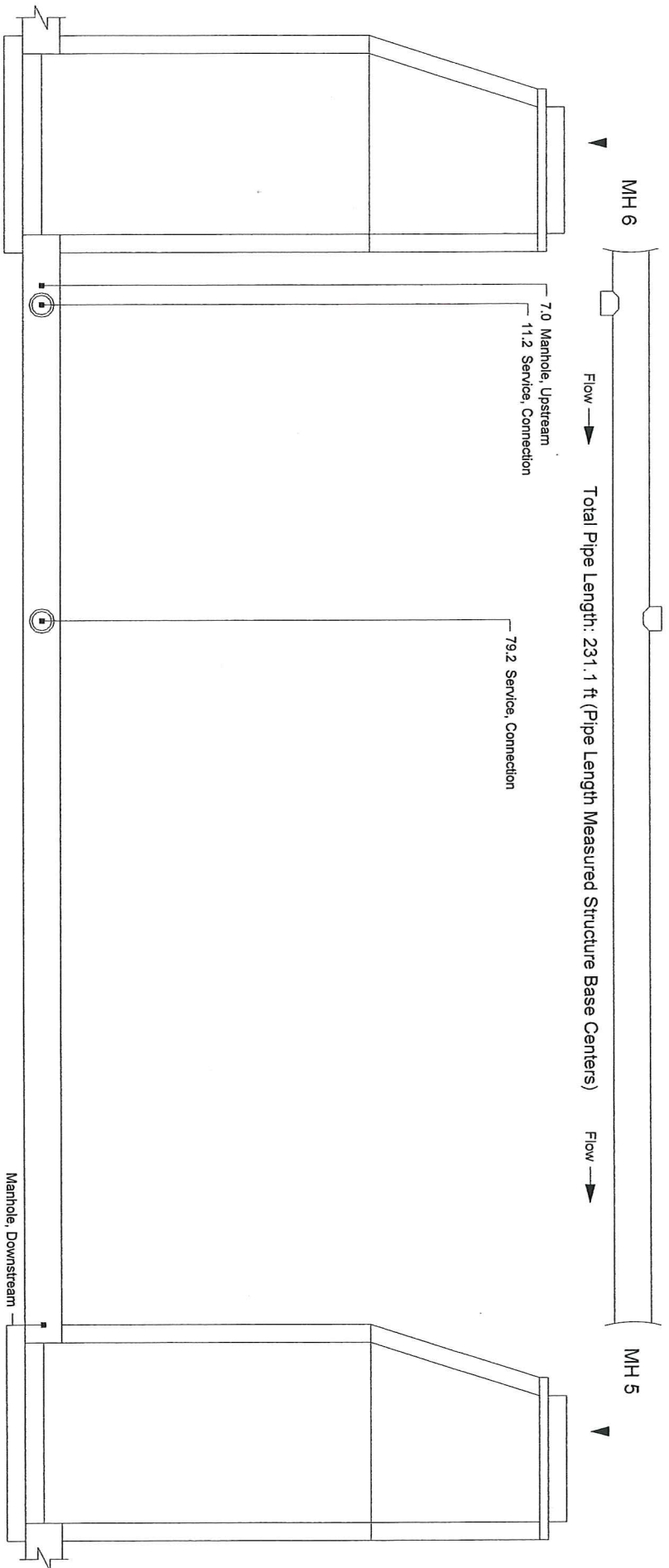
Drawing Date: September 9, 2014 5:49 am

SCHEMATIC CROSS SECTION (Not to Scale) - Sewer Reach: MH [MH 7] to MH [MH 6]



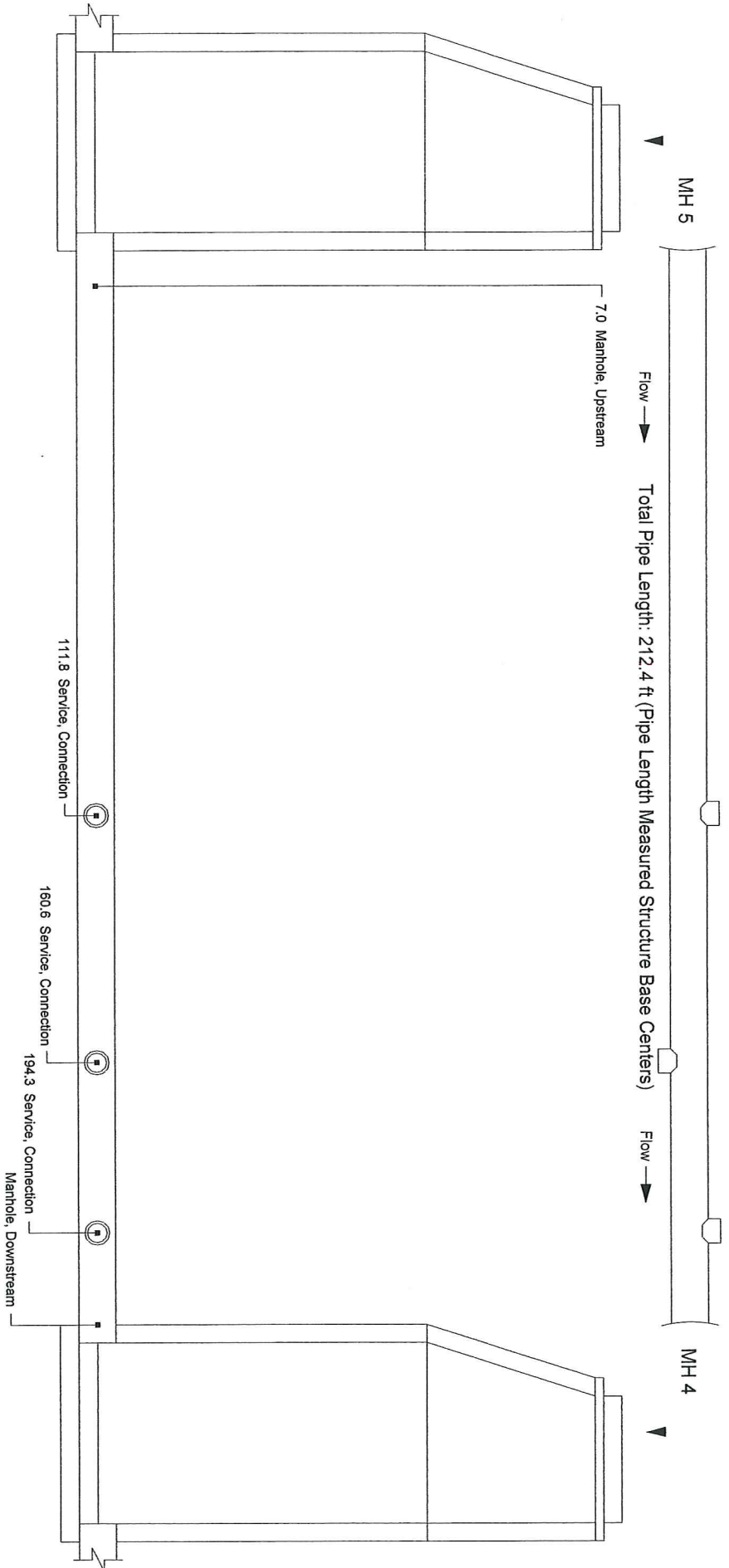
Project Name KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01
 Street Name 20TH ST SW
 Inspection Date 9/5/2014
 Pipe Type Sanitary Sewer
 Pipe Size/Material 8 in / PVC
 Pipe Length 208.2 ft
 Joint Spacing 0 ft
 Cover Type Bare Dirt
 Condition S/H/I/M / / /
 Comments:

SCHEMATIC CROSS SECTION (Not to Scale) - Sewer Reach: MH [MH 6] to MH [MH 5]



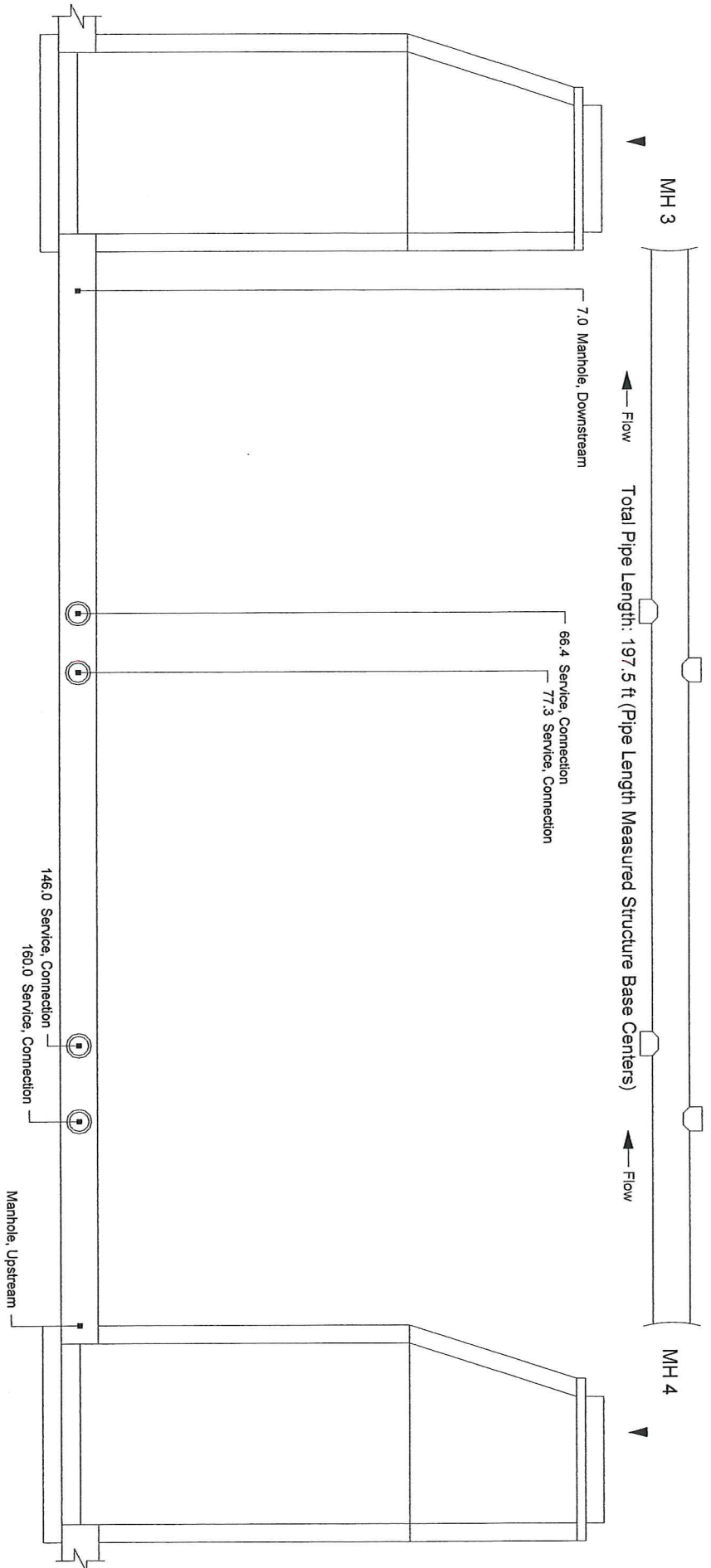
Project Name KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01
 Street Name COBBLESTONE LOOP SW
 Inspection Date 9/5/2014
 Pipe Type Sanitary Sewer
 Pipe Size/Material 8 in / PVC
 Pipe Length 231.1 ft
 Joint Spacing 0 ft
 Cover Type Bare Dirt
 Condition S/H/I/M / / /
 Comments:

SCHEMATIC CROSS SECTION (Not to Scale) - Sewer Reach: MH [MH 5] to MH [MH 4]



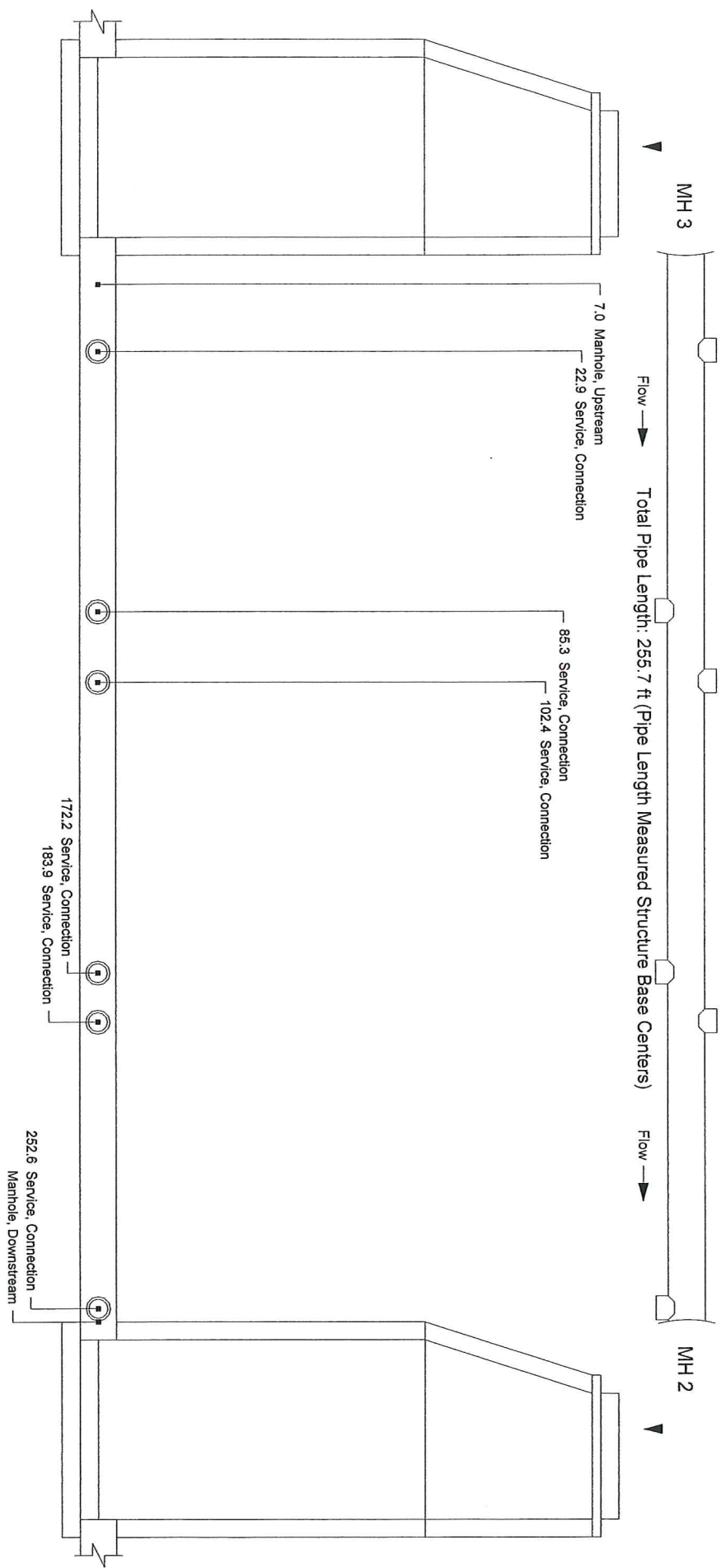
Project Name KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01
 Street Name COBBLESTONE LOOP SW
 Inspection Date..... 9/6/2014
 Pipe Type Sanitary Sewer
 Pipe Size/Material..... 8 in / PVC
 Pipe Length 212.4 ft
 Joint Spacing 0 ft
 Cover Type Bare Dirt
 Condition S/H/M..... / / /
 Comments:

SCHEMATIC CROSS SECTION (Not to Scale) - Sewer Reach: MH [MH 4] to MH [MH 3]



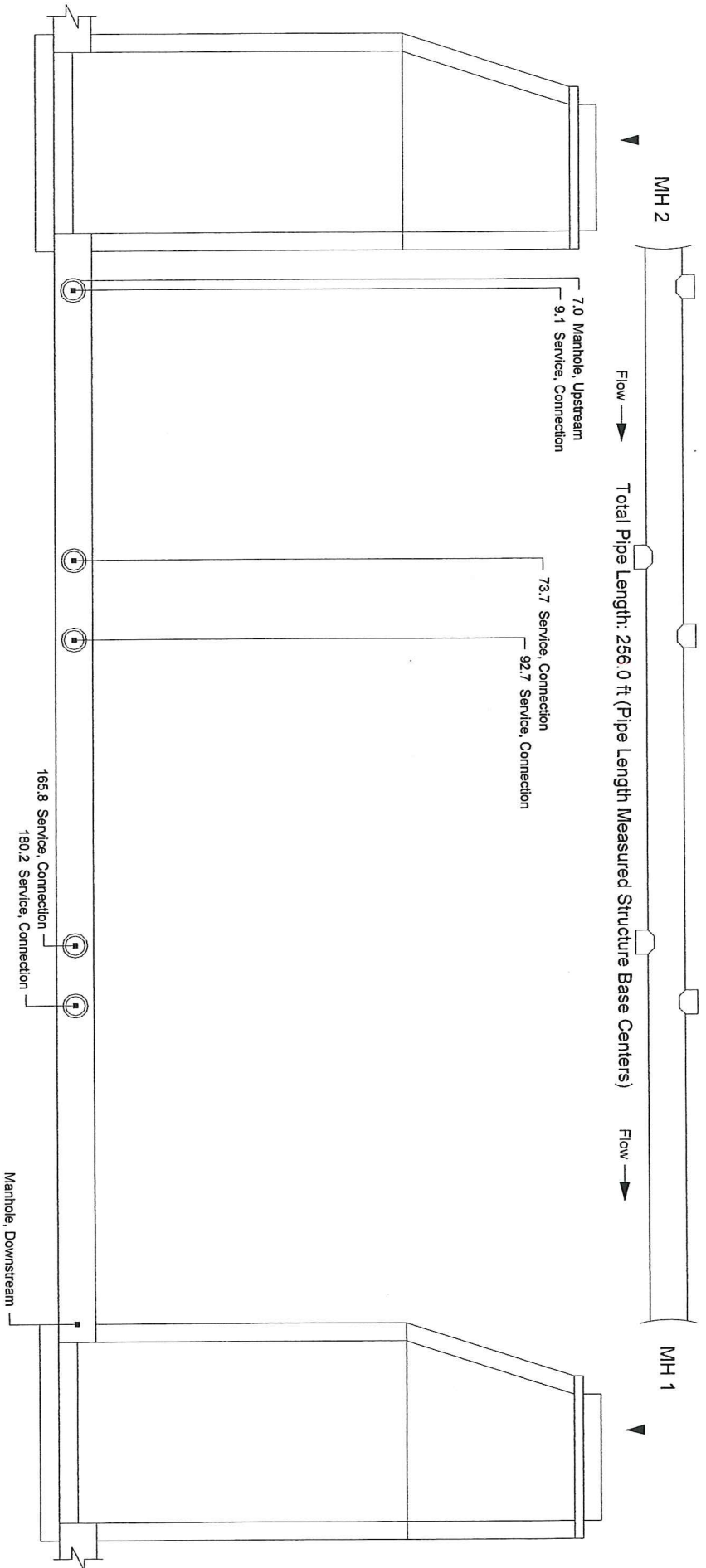
Project Name KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01
 Street Name COBBLESTONE LOOP SW
 Inspection Date..... 9/6/2014
 Pipe Type Sanitary Sewer
 Pipe Size/Material..... 8 In / PVC
 Pipe Length 197.5 ft
 Joint Spacing 0 ft
 Cover Type Bare Dirt
 Condition S/H/I/M..... / / /
 Comments:

SCHEMATIC CROSS SECTION (Not to Scale) - Sewer Reach: MH [MH 3] to MH [MH 2]



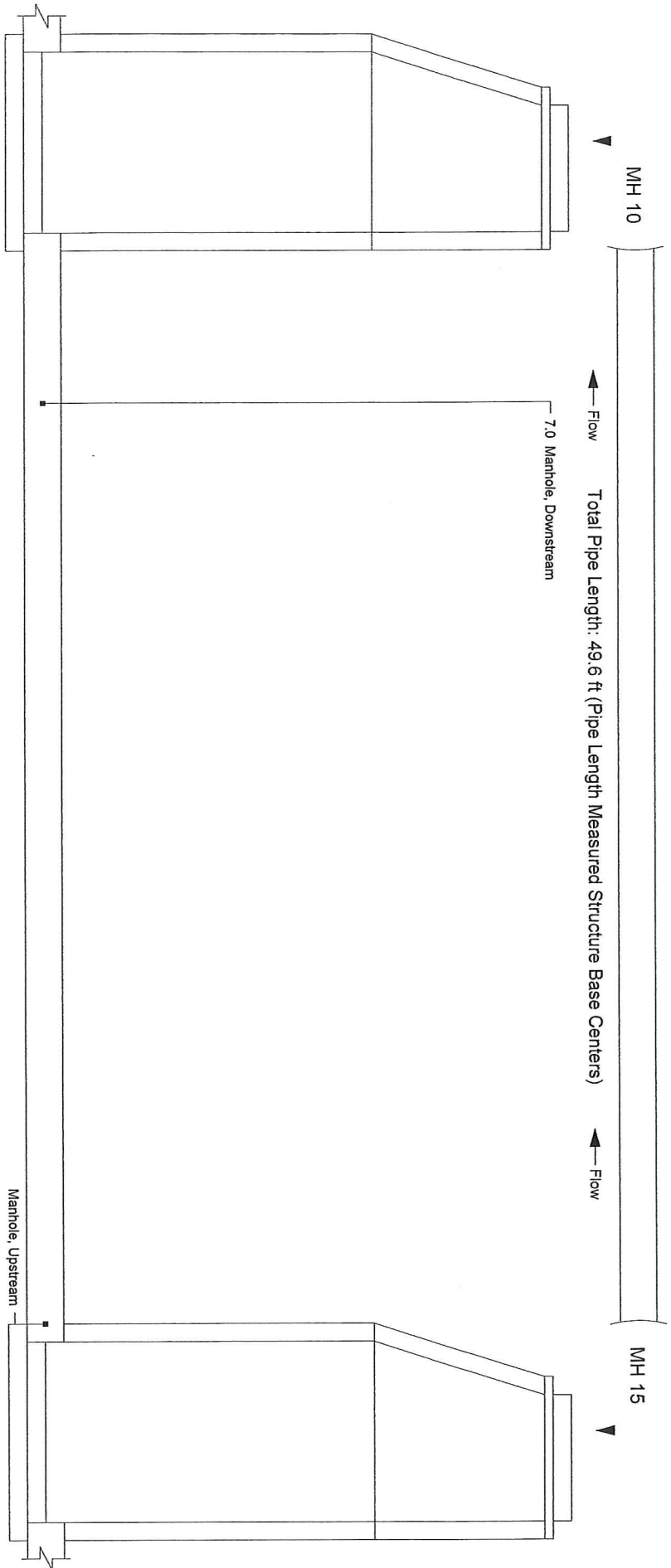
Project Name KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01
 Street Name COBBLESTONE LOOP SW
 Inspection Date 9/5/2014
 Pipe Type Sanitary Sewer
 Pipe Size/Material 8 in / PVC
 Pipe Length 255.7 ft
 Joint Spacing 0 ft
 Cover Type Bare Dirt
 Condition S/H/M / / /
 Comments:

SCHEMATIC CROSS SECTION (Not to Scale) - Sewer Reach: MH [MH 2] to MH [MH 1]



Project Name KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01
 Street Name COBBLESTONE LOOP SW
 Inspection Date 9/5/2014
 Pipe Type Sanitary Sewer
 Pipe Size/Material 8 in / PVC
 Pipe Length 256 ft
 Joint Spacing 0 ft
 Cover Type Bare Dirt
 Condition S/H/M / / /
 Comments:

SCHMATIC CROSS SECTION (Not to Scale) - Sewer Reach: MH [MH 15] to MH [MH 10]



MH 10

Flow

Total Pipe Length: 49.6 ft (Pipe Length Measured Structure Base Centers)

Flow

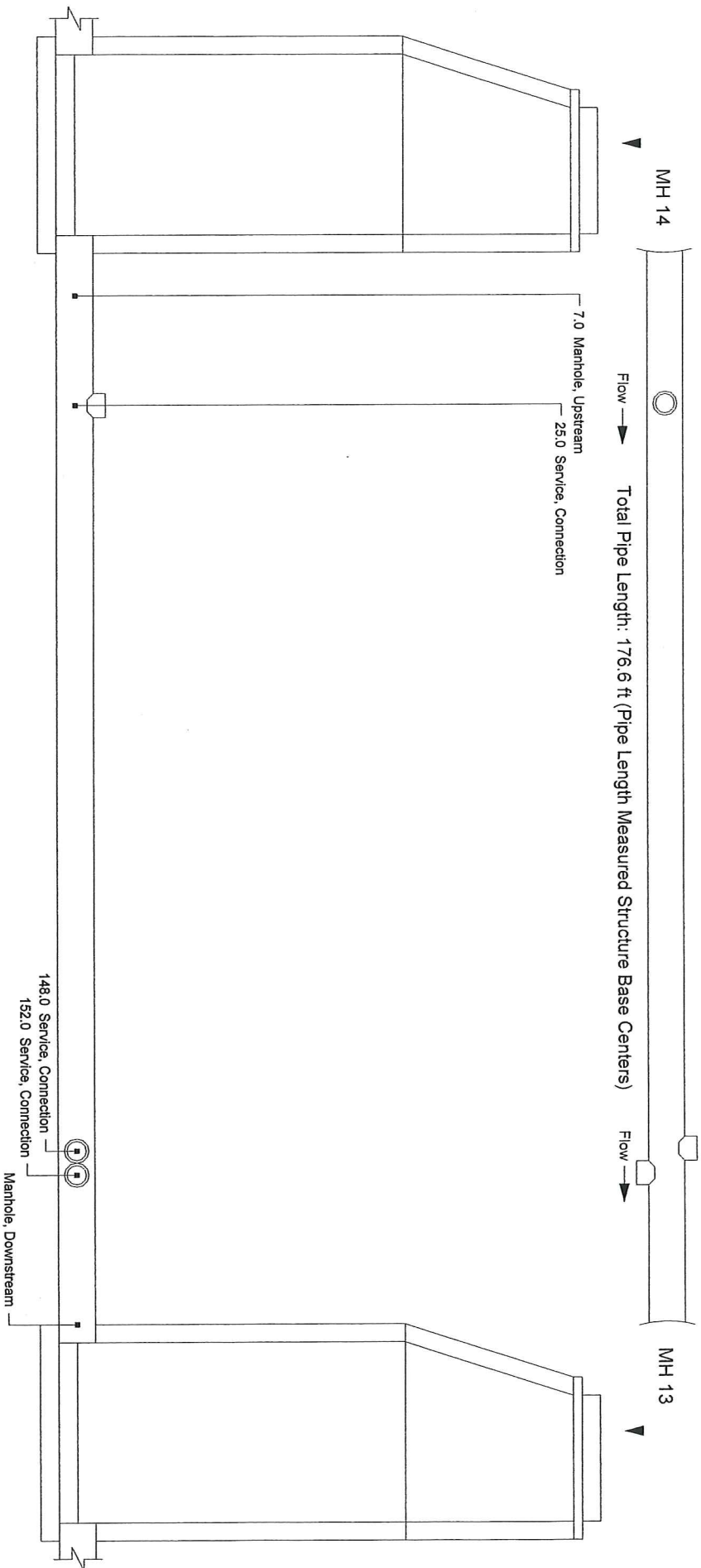
MH 15

7.0 Manhole, Downstream

Manhole, Upstream

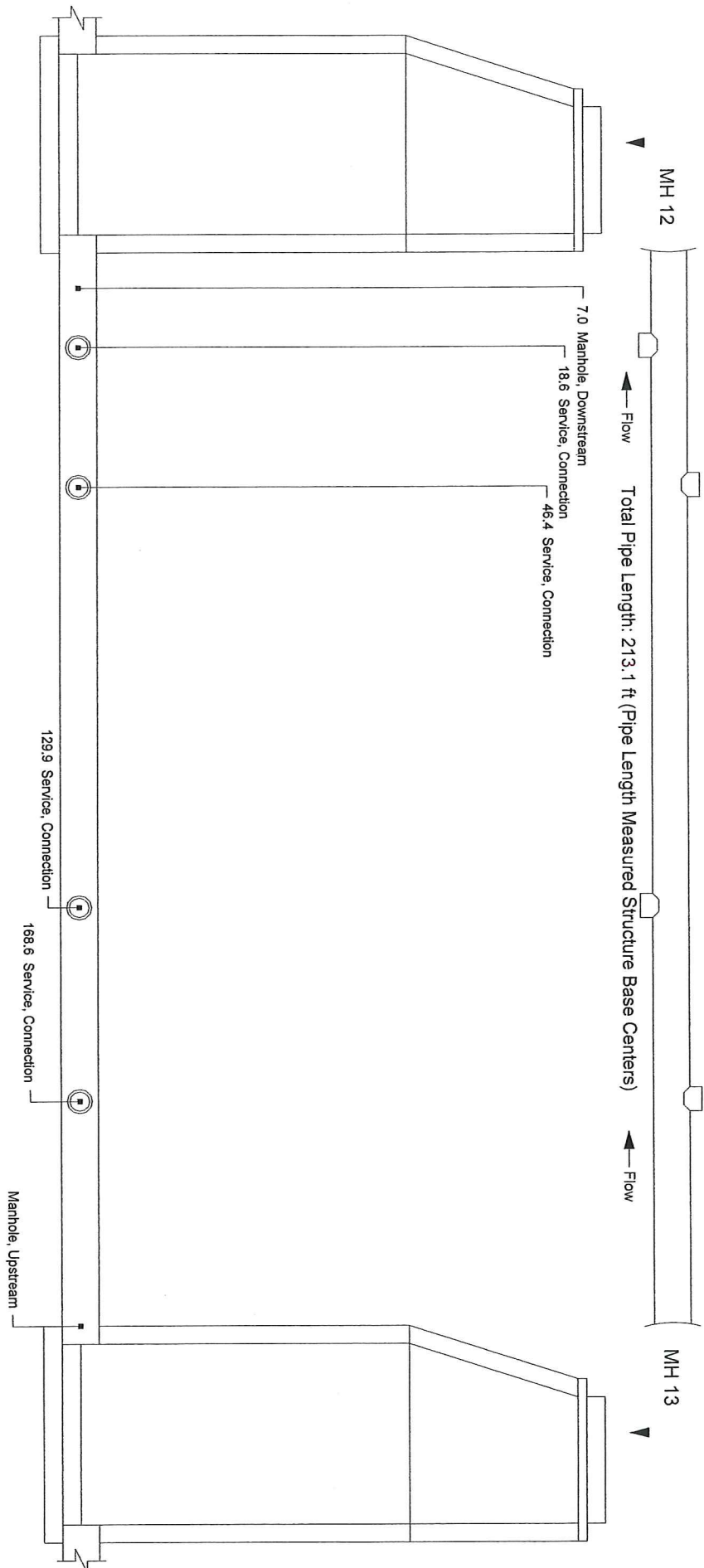
Project Name KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01
 Street Name 2ND AVE SW
 Inspection Date 9/4/2014
 Pipe Type Sanitary Sewer
 Pipe Size/Material 8 in / PVC
 Pipe Length 49.6 ft
 Joint Spacing 0 ft
 Cover Type Bare Dirt
 Condition S/H/M / / /
 Comments:

SCHEMATIC CROSS SECTION (Not to Scale) - Sewer Reach: MH [MH 14] to MH [MH 13]



Project Name KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01
 Street Name COBBLESTONE LOOP SW
 Inspection Date 9/4/2014
 Pipe Type Sanitary Sewer
 Pipe Size/Material 8 in / PVC
 Pipe Length 176.6 ft
 Joint Spacing 0 ft
 Cover Type Bare Dirt
 Condition S/H/M / / /
 Comments:

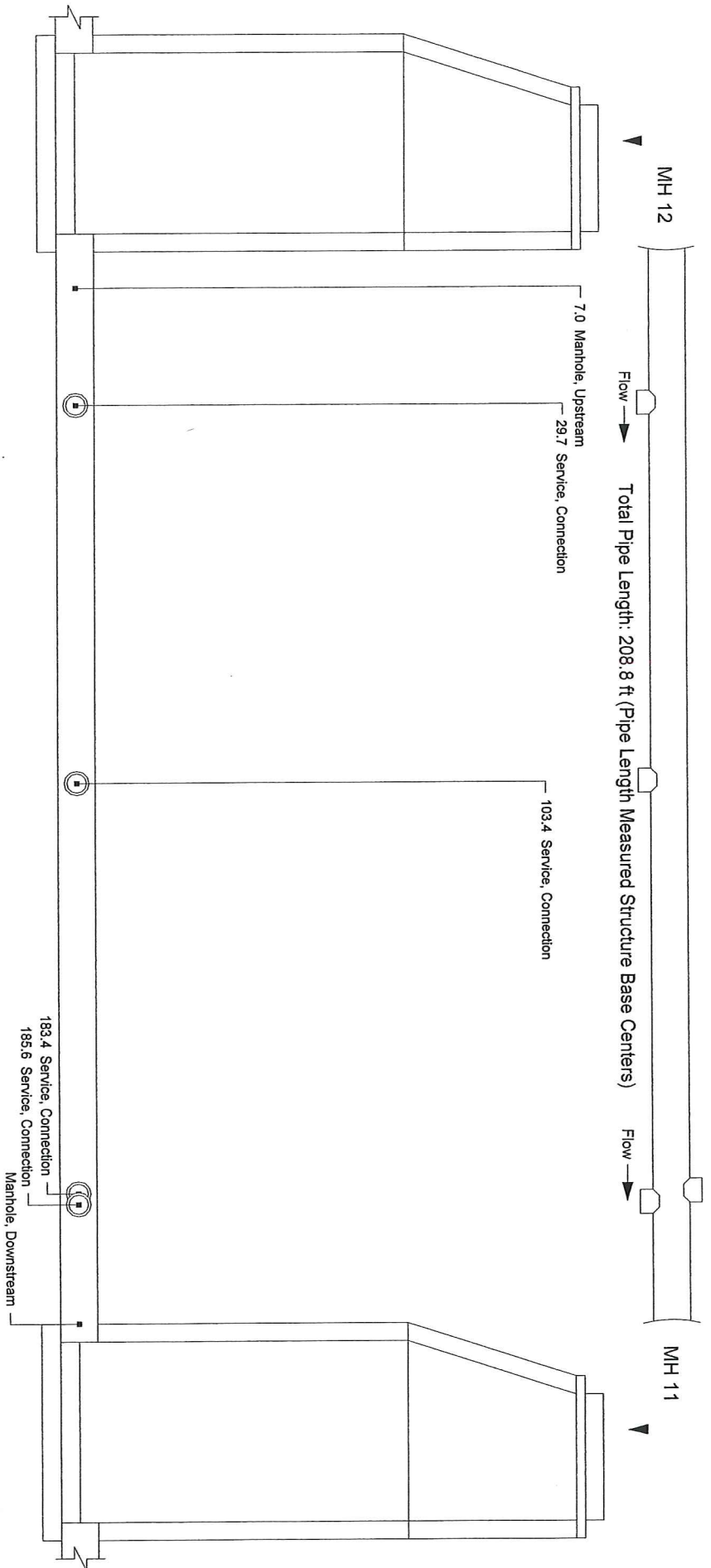
SCHEMATIC CROSS SECTION (Not to Scale) - Sewer Reach: MH [MH 13] to MH [MH 12]



Project Name KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01
 Street Name COBBLESTONE LOOP SW
 Inspection Date 9/4/2014
 Pipe Type Sanitary Sewer
 Pipe Size/Material 8 In / PVC
 Pipe Length 213.1 ft
 Joint Spacing 0 ft
 Cover Type Bare Dirt
 Condition S/H/M / / /
 Comments:

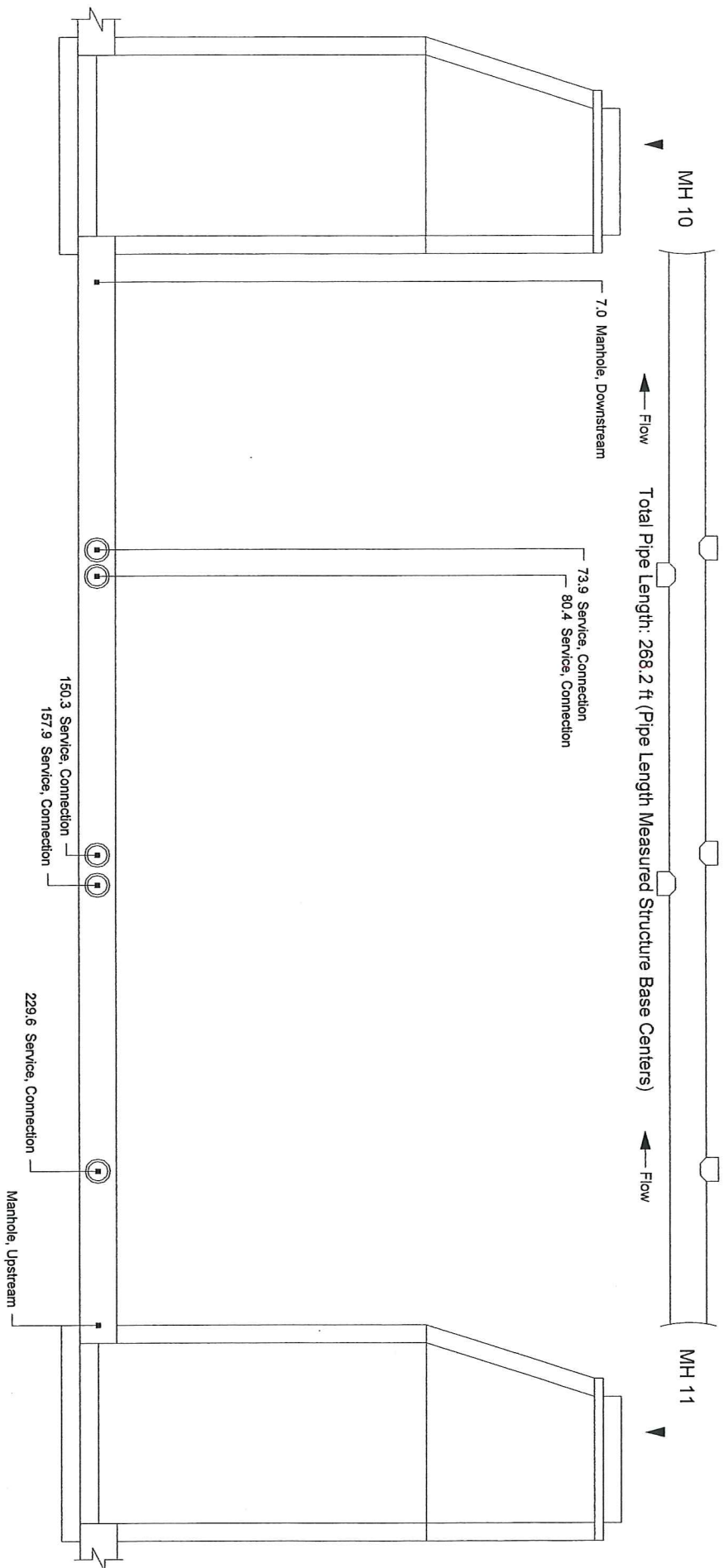
ROTO ROOTER
 Drawing Date: September 9, 2014 5:49 am

SCHEMATIC CROSS SECTION (Not to Scale) - Sewer Reach: MH [MH 12] to MH [MH 11]



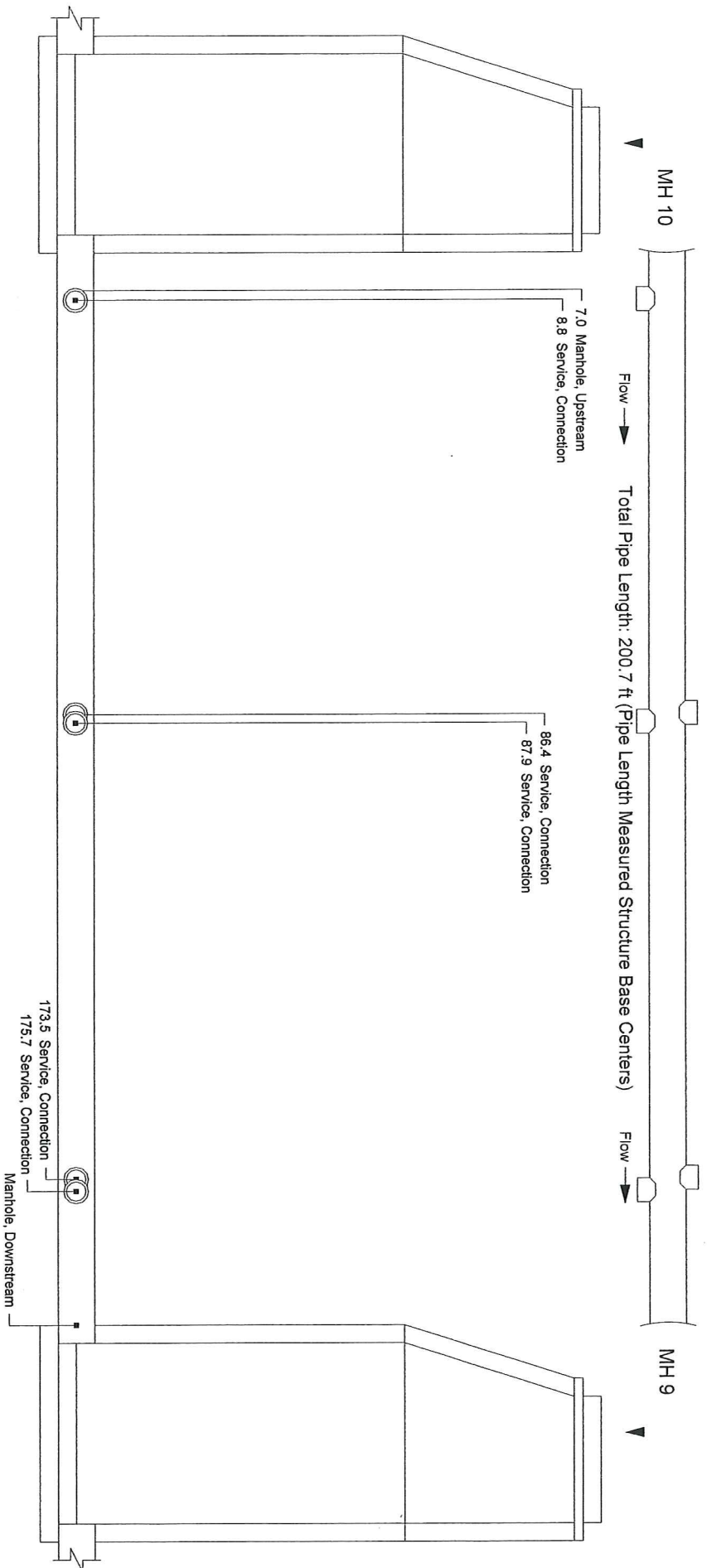
Project Name KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01
 Street Name COBBLESTONE LOOP SW
 Inspection Date 9/4/2014
 Pipe Type Sanitary Sewer
 Pipe Size/Material 8 in / PVC
 Pipe Length 208.8 ft
 Joint Spacing 0 ft
 Cover Type Bare Dirt
 Condition S/H/M / / /
 Comments:

SCHEMATIC CROSS SECTION (Not to Scale) - Sewer Reach: MH [MH 11] to MH [MH 10]



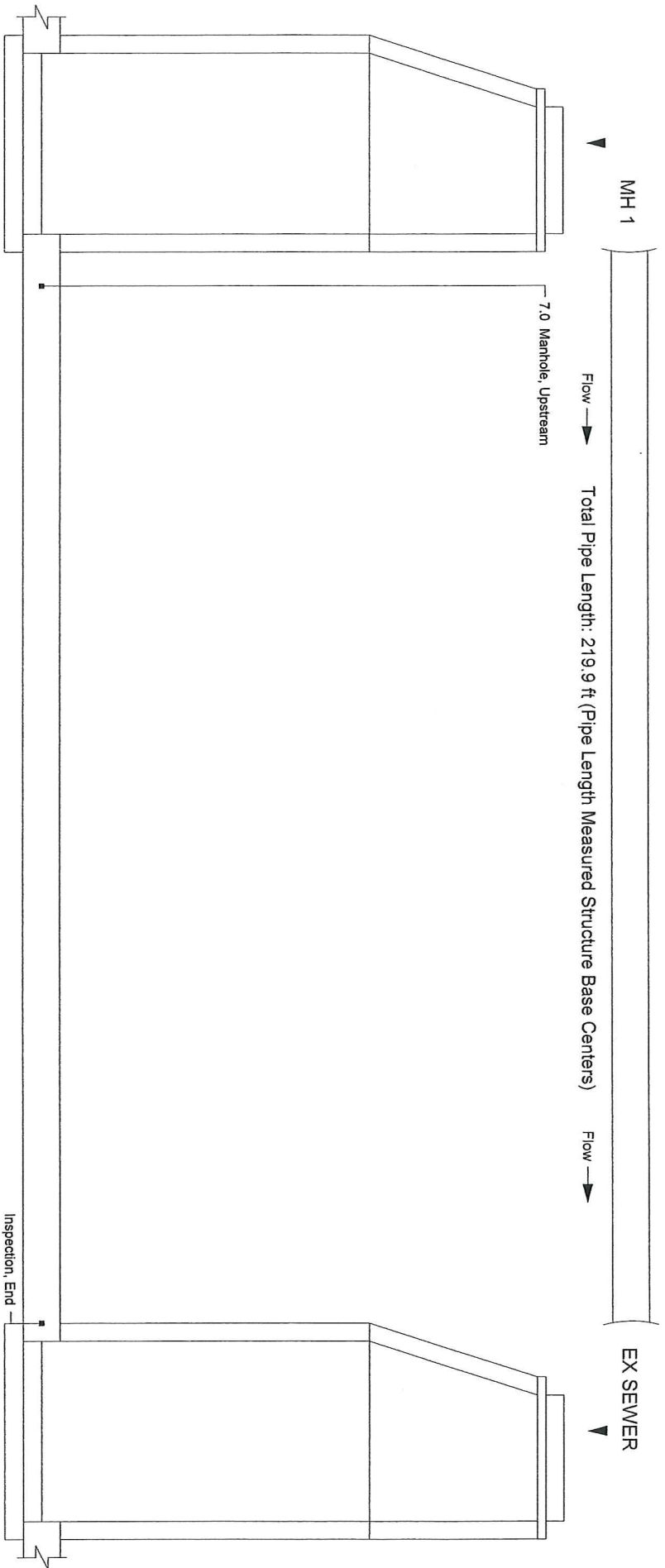
Project Name KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01
 Street Name COBBLESTONE LOOP SW
 Inspection Date 9/4/2014
 Pipe Type Sanitary Sewer
 Pipe Size/Material 8 in / PVC
 Pipe Length 268.2 ft
 Joint Spacing 0 ft
 Cover Type Bare Dirt
 Condition S/H/M / / /
 Comments:

SCHEMATIC CROSS SECTION (Not to Scale) - Sewer Reach: MH [MH 10] to MH [MH 9]



Project Name KEIDEL'S SOUTH HEART TERRACE 3RD ADD. 2014-01
 Street Name COBBLESTONE LOOP SW
 Inspection Date 9/4/2014
 Pipe Type Sanitary Sewer
 Pipe Size/Material 8 in / PVC
 Pipe Length 200.7 ft
 Joint Spacing 0 ft
 Cover Type Bare Dirt
 Condition S/H/M / / /
 Comments:

SCHEMATIC CROSS SECTION (Not to Scale) - Sewer Reach: MH [MH 1] to MH [EX SEWER]



Project Name KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01

Street Name 4TH AVE SW

Inspection Date 9/8/2014

Pipe Type Sanitary Sewer

Pipe Size/Material 8 in / PVC

Pipe Length 219.9 ft

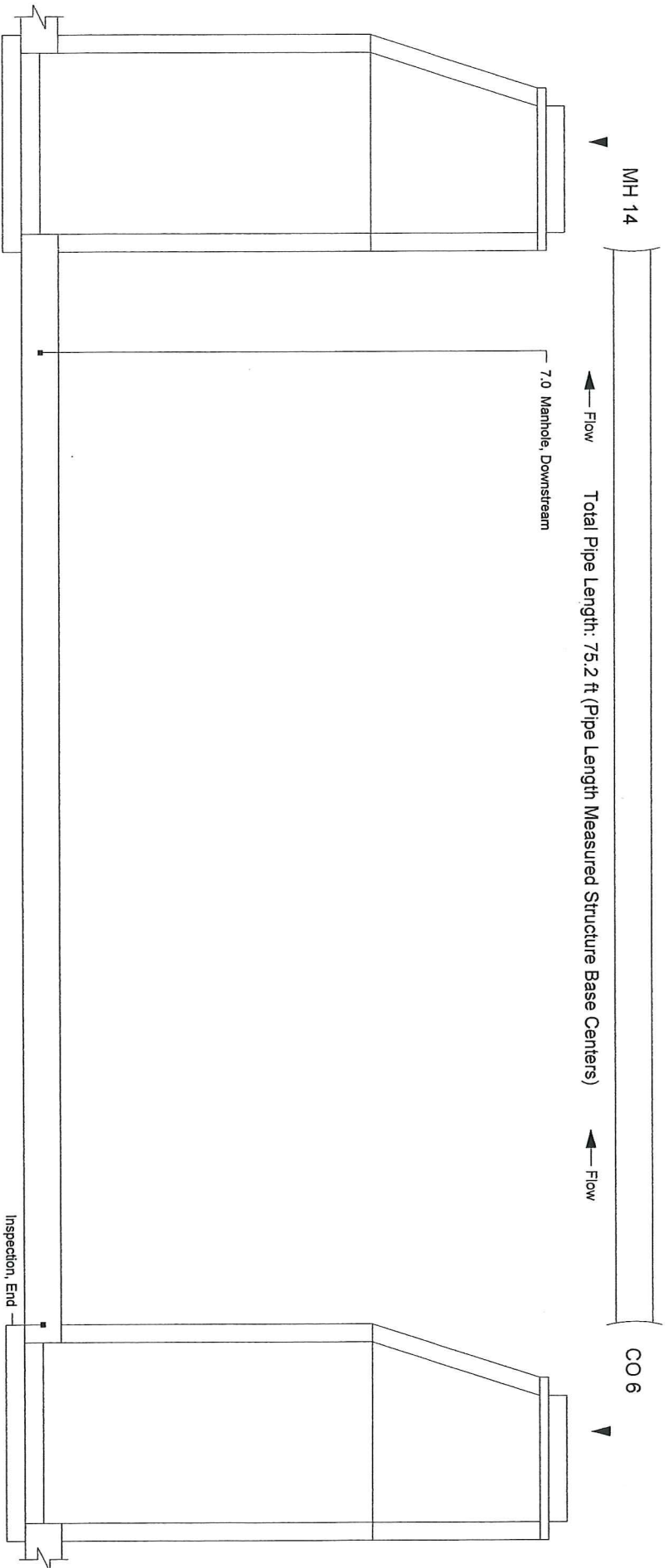
Joint Spacing 0 ft

Cover Type Bare Dirt

Condition S/H/I/M / / /

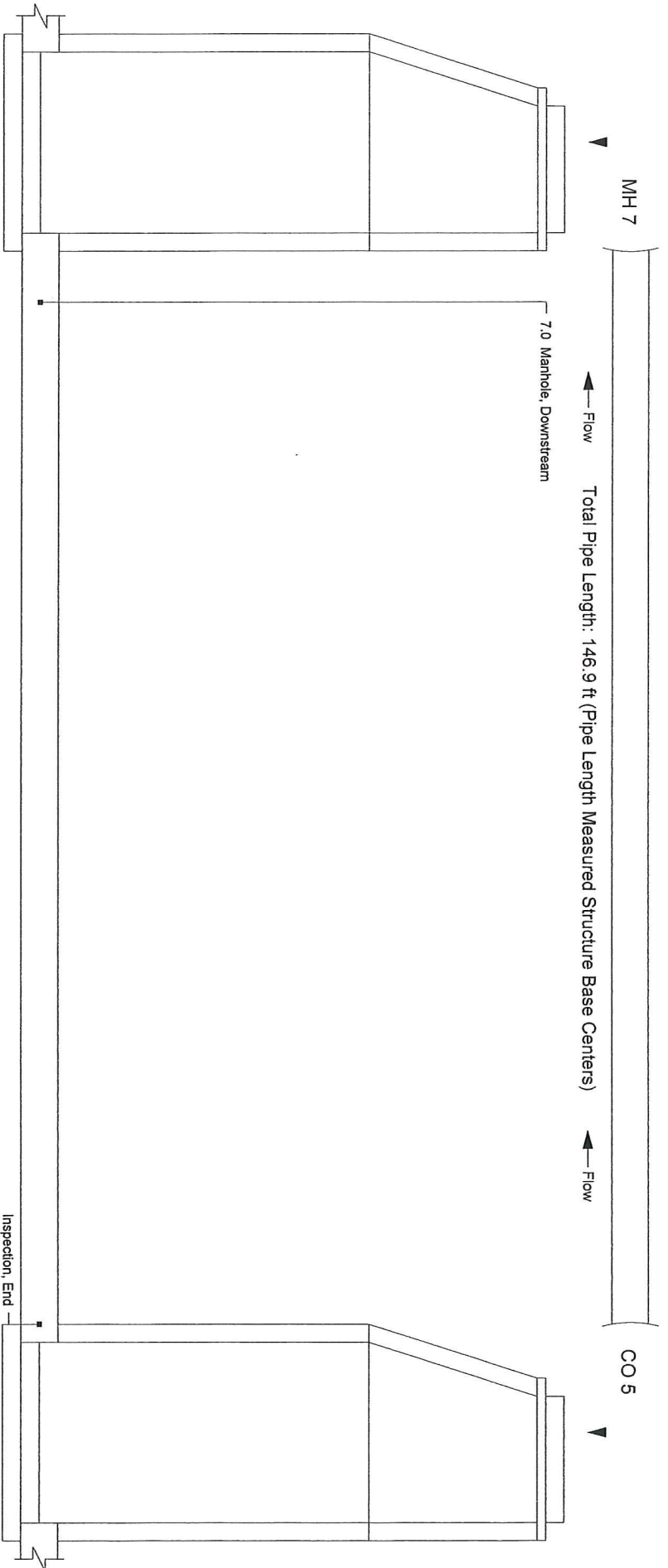
Comments:

SCHEMATIC CROSS SECTION (Not to Scale) - Sewer Reach: MH [CO 6] to MH [MH 14]



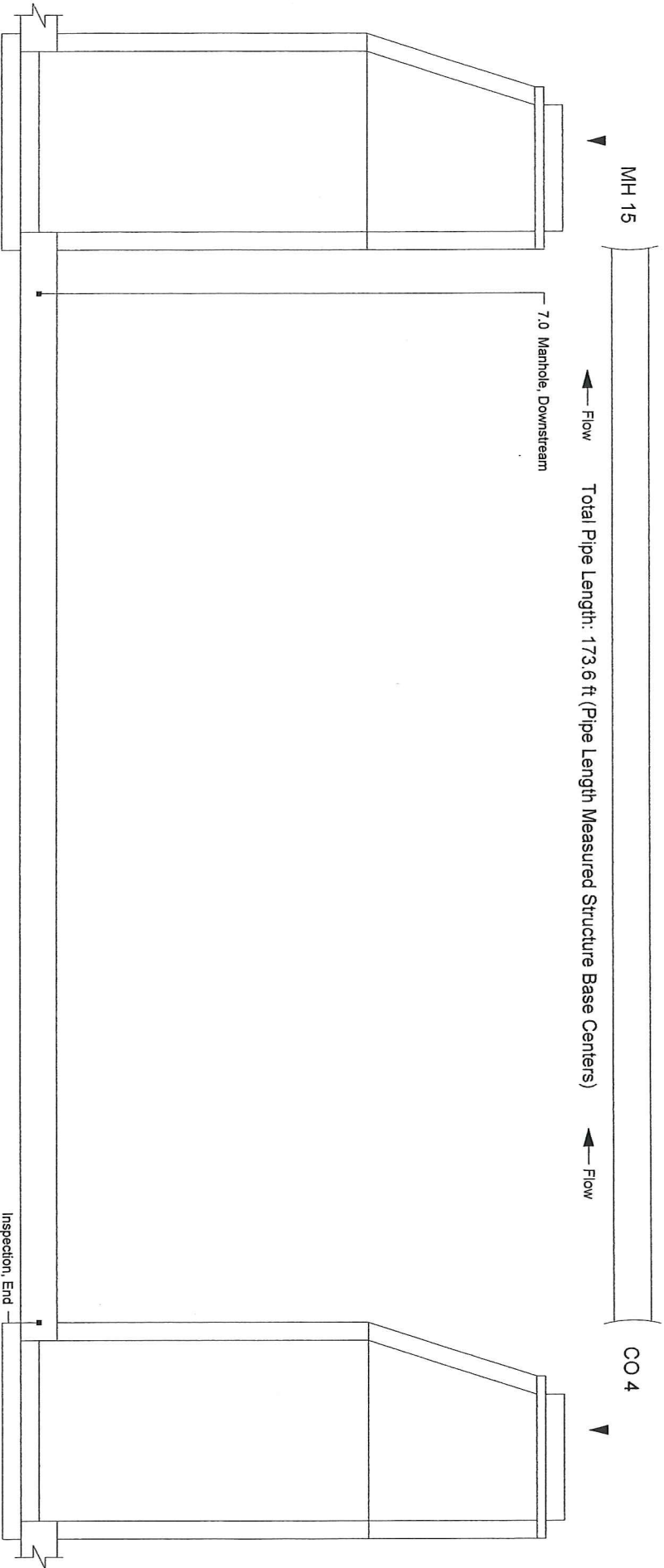
Project Name KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01
Street Name COBBLESTONE LOOP SW
Inspection Date 9/4/2014
Pipe Type Sanitary Sewer
Pipe Size/Material 0 in / PVC
Pipe Length 75.2 ft
Joint Spacing 0 ft
Cover Type Bare Dirt
Condition S/H/I/M / / /
Comments:

SCHEMATIC CROSS SECTION (Not to Scale) - Sewer Reach: MH [CO 5] to MH [MH 7]



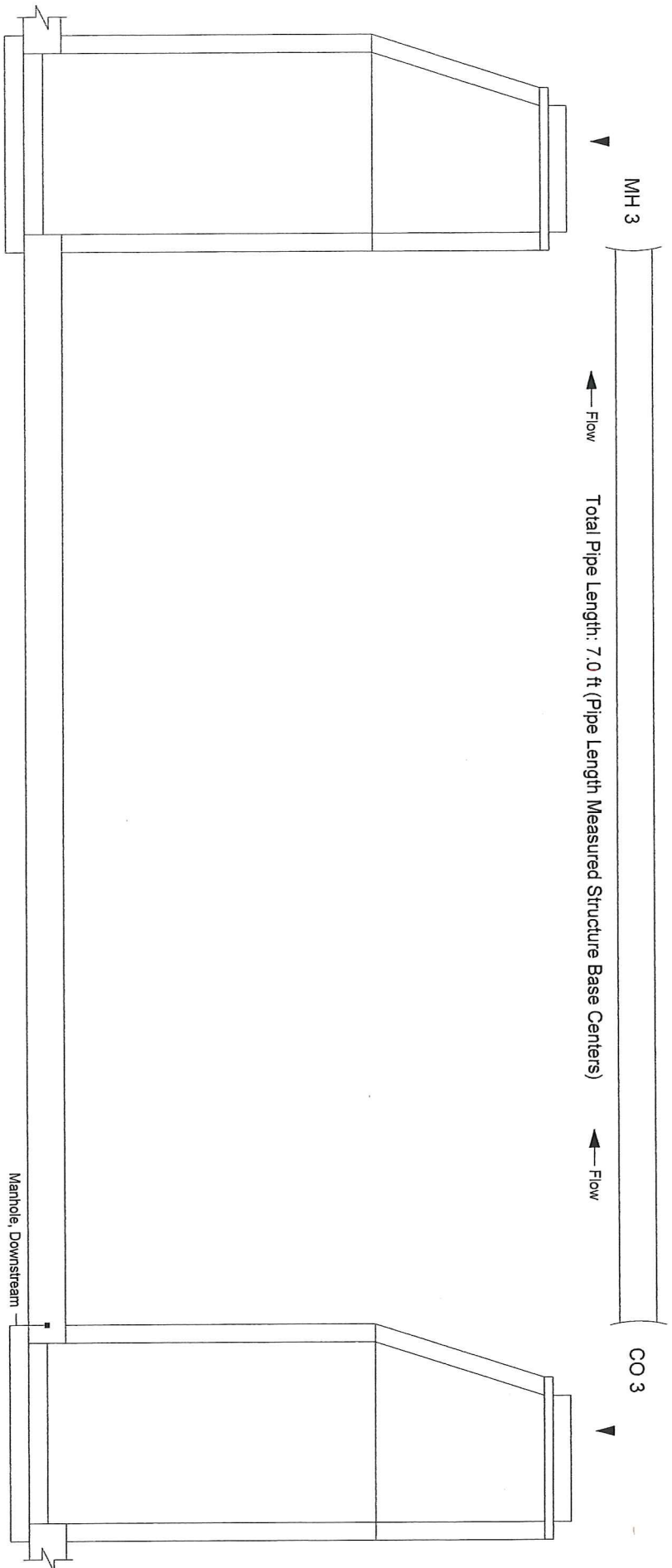
Project Name KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01
 Street Name 8TH AVE SW
 Inspection Date 9/5/2014
 Pipe Type Sanitary Sewer
 Pipe Size/Material 8 in / PVC
 Pipe Length 146.9 ft
 Joint Spacing 0 ft
 Cover Type Bare Dirt
 Condition S/H/I/M / / /
 Comments:

SCHEMATIC CROSS SECTION (Not to Scale) - Sewer Reach: MH [CO 4] to MH [MH 15]



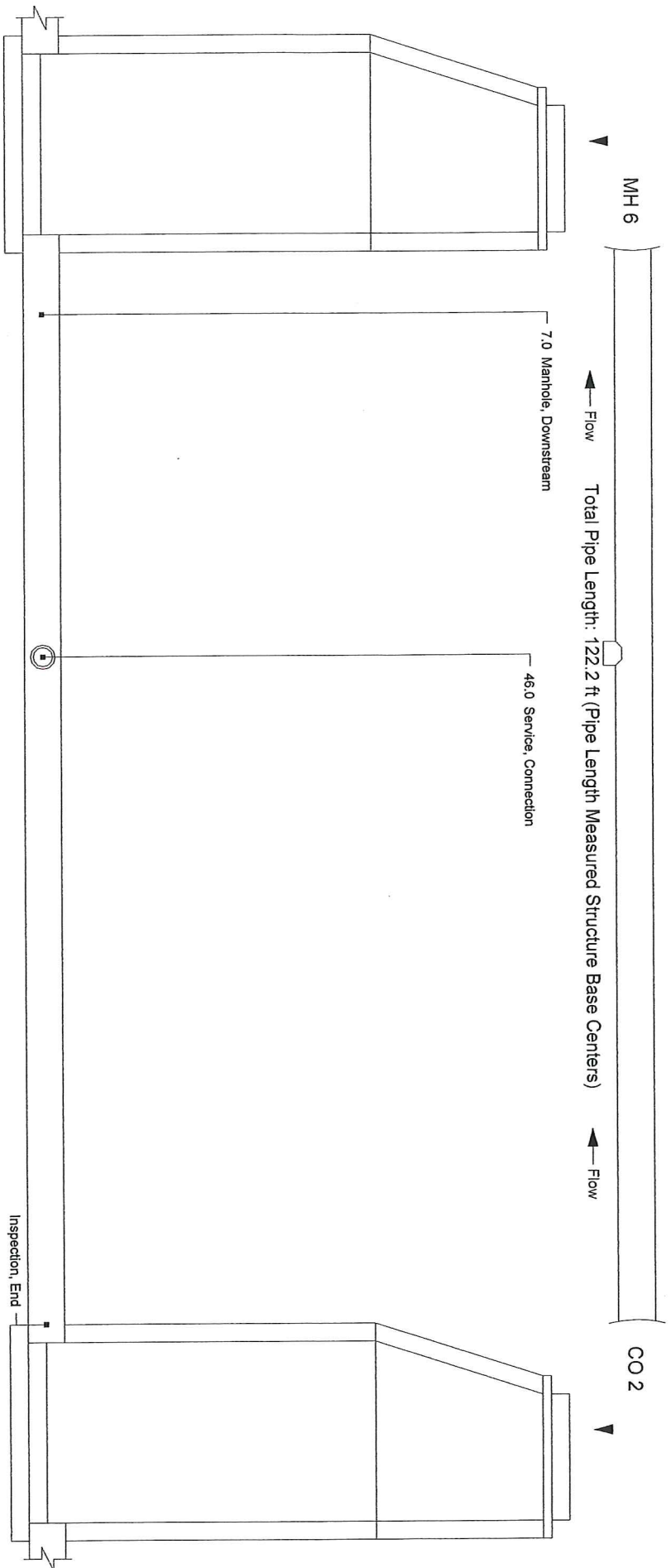
Project Name KEIDELS SOUTH HEART TERRACE 3RD ADD, 2014-01
 Street Name 2ND AVE SW
 Inspection Date..... 9/4/2014
 Pipe Type Sanitary Sewer
 Pipe Size/Material..... 8 in / PVC
 Pipe Length 173.6 ft
 Joint Spacing 0 ft
 Cover Type Bare Dirt
 Condition S/H/M..... / / /
 Comments:

SCHEMATIC CROSS SECTION (Not to Scale) - Sewer Reach: MH [CO 3] to MH [MH 3]



Project Name KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01
Street Name 6TH AVE SW
Inspection Date 9/5/2014
Pipe Type Sanitary Sewer
Pipe Size/Material 8 in / PVC
Pipe Length 7 ft
Joint Spacing 0 ft
Cover Type Bare Dirt
Condition S/H//M / / /
Comments:

SCHEMATIC CROSS SECTION (Not to Scale) - Sewer Reach: MH [CO 2] to MH [MH 6]



Project Name KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01

Street Name COBBLESTONE LOOP SW

Inspection Date..... 9/5/2014

Pipe Type Sanitary Sewer

Pipe Size/Material..... 8 in / PVC

Pipe Length 122.2 ft

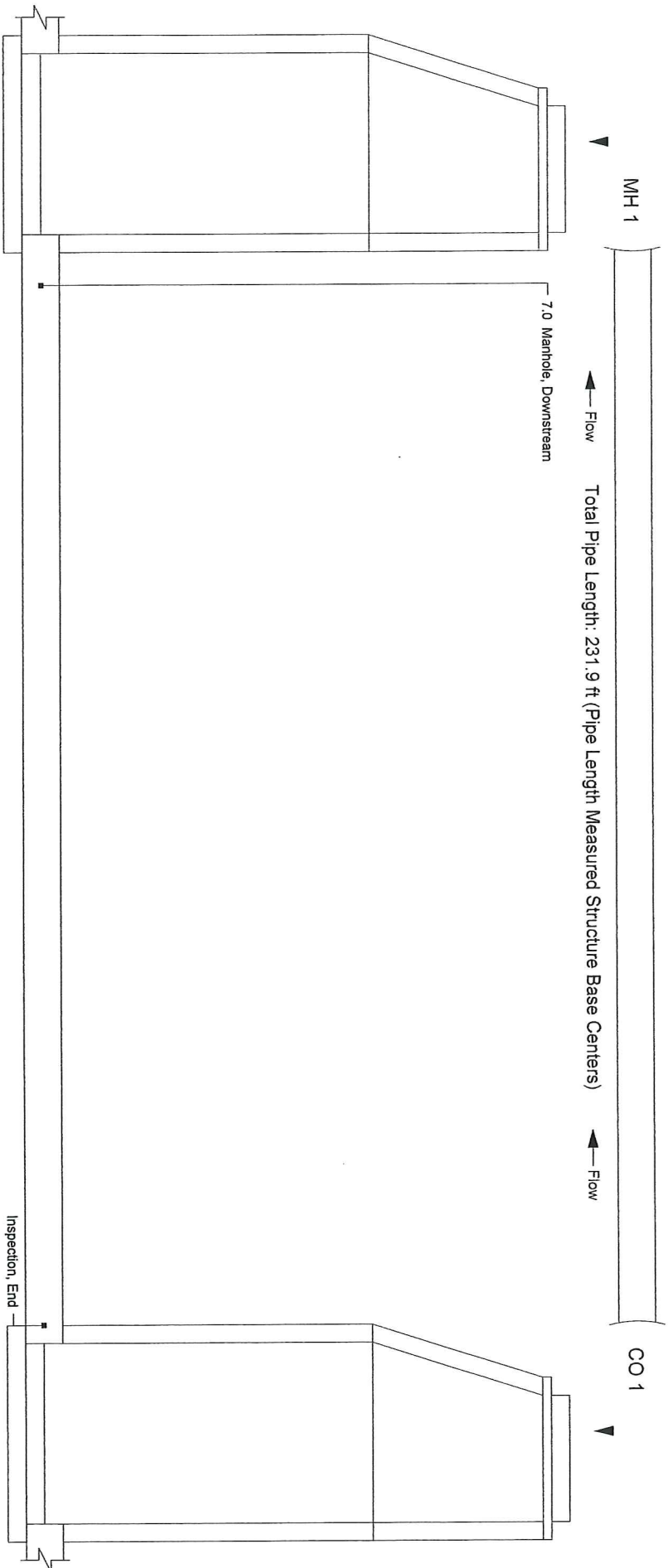
Joint Spacing 0 ft

Cover Type Bare Dirt

Condition S/H/M..... / / /

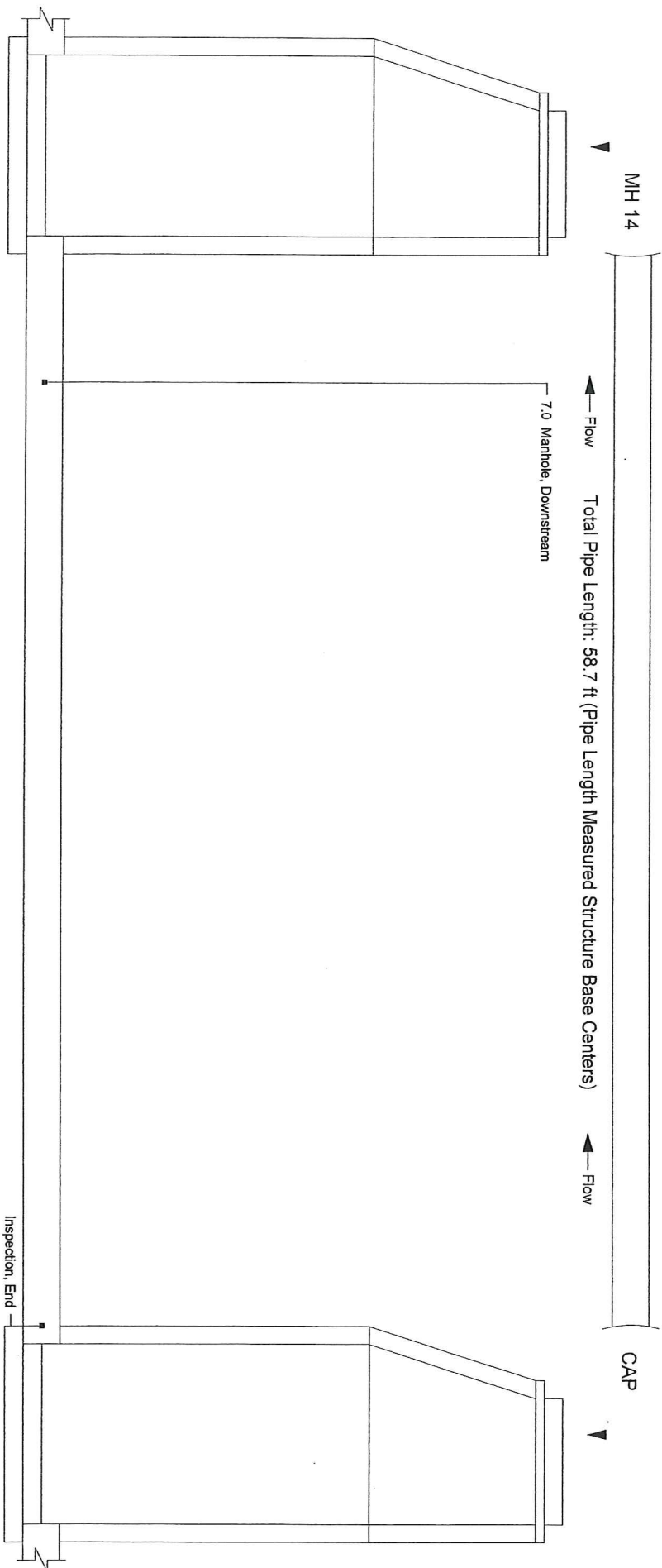
Comments:

SCHEMATIC CROSS SECTION (Not to Scale) - Sewer Reach: MH [CO 1] to MH [MH 1]



Project Name KEIDELS SOUTH HEART TERRACE 3RD ADD. 2014-01
Street Name 4TH AVE SW
Inspection Date 9/8/2014
Pipe Type Sanitary Sewer
Pipe Size/Material 8 in / PVC
Pipe Length 231.9 ft
Joint Spacing 0 ft
Cover Type Bare DIT
Condition S/H/M / / /
Comments:

SCHEMATIC CROSS SECTION (Not to Scale) - Sewer Reach: MH [CAP] to MH [MH 14]



Project Name KEIDELS SOUTH HEART TERRACE 3RD ADD: 2014-01
Street Name
Inspection Date 9/4/2014
Pipe Type Sanitary Sewer
Pipe Size/Material 8 in / PVC
Pipe Length 58.7 ft
Joint Spacing 0 ft
Cover Type Bare Dirt
Condition S/H/I/M / / /
Comments: