

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH19-0037

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 6/4/2024

Inspector(s): Dugan

General Location Features: 200 ft North of G & Front St, in the West Ditch along G St

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	South Influent / 12" / Ductile Iron	198"	4"
2.	North Effluent / 12" / Ductile Iron	198.2"	4"
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 1

Material of Construction: Concrete

Manhole Shape: Circular

Dimensions: 48"

Cover/Lid: 25" Type – C.I. Score – 2

Frame: Height – 5" Type – C.I. Score – 2

Chimney: Number/Height – N/A Score –

Cone: Height – 28" Type – Ecc. Score – 1

Reducing Slab: Height – N/A Score –

Barrel Sections: Number/Height – 1/24", 2/48" Score – 1

Base: Height – 34" Score – 2

Shelf: Type – Conc. Score – 2

Steps: 12 Type: Metal Score – 1

Influent Pipe Connection(s):

Solid Grouting

Graded score of 1

Effluent Pipe Connection(s):

Solid Grouting

Graded score of 1

Additional Comments:

- Difficult to determine extent of I&I due to large quantities of water in catchpan

- No significant mineralization / I&I evidence

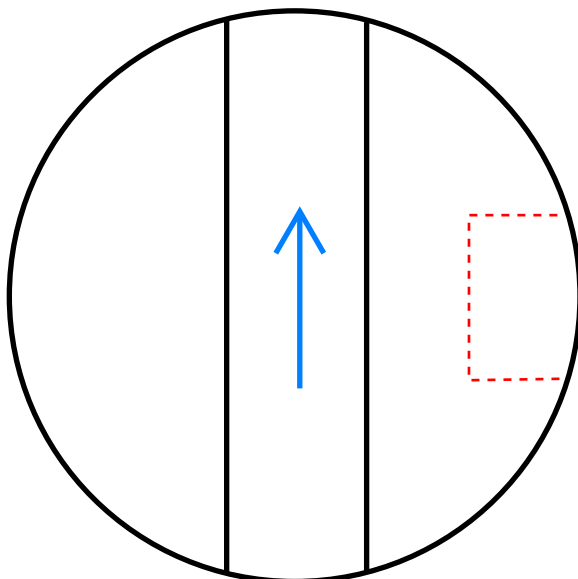




Image 1 – MH facing North along G St



Image 2 – Cover & Frame



Image 3 – Barrels and Base



Image 4 – Steps and Barrels



Image 5 – South Influent Connection



Image 6 – North Effluent Connection

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH19-0038

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 6/6/2024

Inspector(s): Dugan

General Location Features: G St & Gliska St Intersection, 20 ft East of Lift Station 19-0007

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	South Influent / 12" / Ductile Iron	218"	4"
2.	East Influent / 8" / Ductile Iron	204.5"	Minimal
3.	West Effluent / 12" / Ductile Iron	218.5"	4"
4.	Decommissioned East Elevated / 8" / Ductile Iron	120"	No Flow
5.	Decommissioned North Elevated / 8" / Ductile Iron	105"	No Flow
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 3
Material of Construction: Concrete
Manhole Shape: Circular
Dimensions: 72"
Cover/Lid: 25" Type – C.I. Score – 2
Frame: Height – 4" Type – C.I. Score – 2
Chimney: Number/Height – 1/10" Score – 1
Cone: Height – N/A Type – Score –
Reducing Slab: Height – 72" Score – 1
Barrel Sections: Number/Height – 1/72" Score – 4
Base: Height – 42" Score – 4
Shelf: Type – Conc. Score – 3
Steps: 14 Type: Poly Score – 2

Influent Pipe Connection(s):

Solid grouting and coverage for all pipe connections, however grouting is highly mineralized.

Evidence of I&I coming from decommissioned pipes

Grade score of 3

Effluent Pipe Connection(s):

Solid grouting

Highly mineralized

Grade score of 2

Additional Comments:

- Catch pan is unfunctional and has rusted entirely through
- I&I drippers present along East decommissioned pipe connection and North along significant cracks in the barrel
- Standing moisture present on entire shelf
- South base features old hand-turn valve that has been mineralized and warped

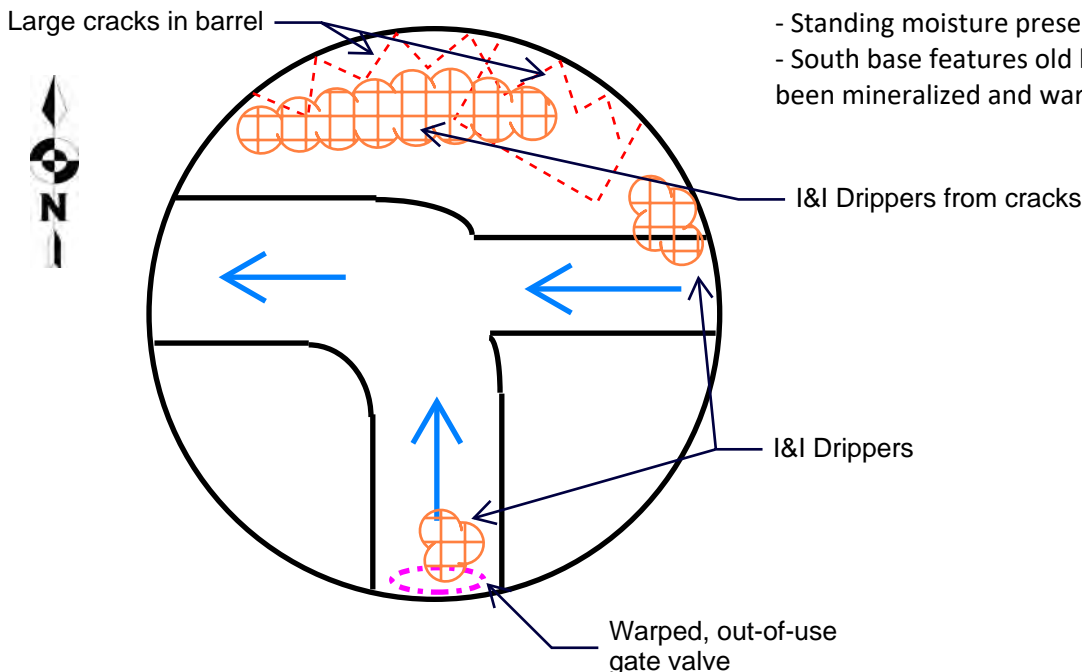




Image 1 – MH in relation to LS19-0007



Image 2 – Frame & Unfunctional Catchpan



Image 3 – North Wall with Decommissioned Pipe



Image 4 – Base & Shelf



Image 5 – Crack in the Barrel



Image 6 – Old Warped Valve & Base

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH24-001

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 6/1/2024

Inspector(s): Dugan

General Location Features: Main & F St Intersection

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	North Influent / 8" / Ductile Iron	94.5"	1.5"
2.	South Influent / 8" / Ductile Iron	94.5"	2"
3.	East Effluent / 8" / Ductile Iron	94.5"	2"
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 1	
Material of Construction: Concrete	
Manhole Shape: Circular	
Dimensions: 48"	
Cover/Lid: 25" Type – C.I. Score – 1	
Frame: Height – 5" Type – C.I. Score – 1	
Chimney: Number/Height – N/A Score –	
Cone: Height – 40" Type – Ecc. Score – 2	
Reducing Slab: Height – N/A Score –	
Barrel Sections: Number/Height – 1/12" Score – 1	
Base: Height – 18" Score – 1	
Shelf: Type – Conc. Score – 1	
Steps: 6 Type: Metal/Poly Score – 2	

Influent Pipe Connection(s):

Solid grouting
Graded score of 1

Effluent Pipe Connection(s):

Solid grouting
Graded score of 1

Additional Comments:

- Water is very static; depth of flow reflects standing water
- Moderate root intrusion along cone/barrel joint

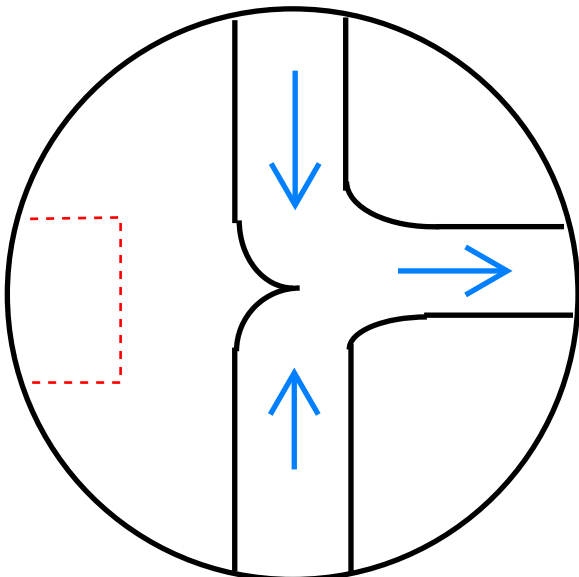




Image 1 – MH facing North on F St



Image 2 – Frame and Steps



Image 3 – Base



Image 4 – Standing Water in Pipes



Image 5 – Minor Root Intrusion along West Section



Image 6 – South and East Connections

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH24-002

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/29/2024

Inspector(s): Dugan, Markson

General Location Features: North Alley & D St Intersection

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	Northeast Influent / 6" / Ductile Iron	96.5"	Minimal
2.	Southeast Influent / 4" / PVC	92"	1"
3.	West Effluent / 8" / Ductile Iron	101.5"	1"
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 1

Material of Construction: Concrete

Manhole Shape: Circular

Dimensions: 48"

Cover/Lid: 25" Type – C.I. Score – 1

Frame: Height – 5" Type – C.I. Score – 1

Chimney: Number/Height – 2/6", 1/12" Score – 1

Cone: Height – 28" Type – Ecc. Score – 1

Reducing Slab: Height – N/A Score –

Barrel Sections: Number/Height – 1/24" Score – 1

Base: Height – 20" Score – 2

Shelf: Type – Conc. Score – 1

Steps: 5 Type: Metal Score – 2

Influent Pipe Connection(s):

Link seal for PVC should be monitored for infiltration
 Moderate mineralization underneath connection
 Graded score of 2

Effluent Pipe Connection(s):

Missing grout on top of connection
 Gasket and pipe visible
 Graded score of 2

Additional Comments:

- Hairline crack extending upwards from West Effluent connection
- Small chunks of concrete missing from base

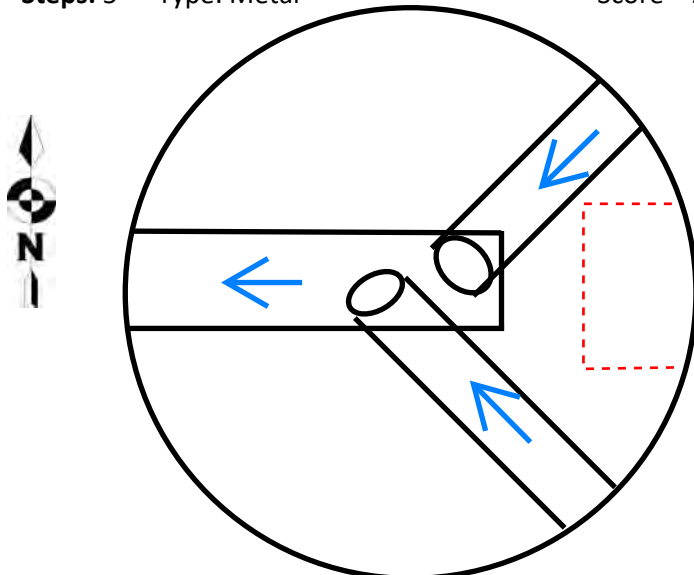




Image 1 – MH facing towards Talkeetna City Park



Image 2 – MH facing West towards North Alley



Image 3 – PVC Connection Link Seal



Image 4 – Effluent Connection with Exposed Gasket



Image 5 – Missing Concrete along Base



Image 6 – Elevated Pipe Connections

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH24-003

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/29/2024

Inspector(s): Dugan, Markson

General Location Features: North Alley & C St Intersection

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	North Influent / 8" / Ductile Iron	74"	1"
2.	East Influent / 8" / Ductile Iron	75"	1"
3.	West Influent / 8" / Ductile Iron	75"	1"
4.	South Effluent / 8" / Ductile Iron	75.5"	1.5"
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 3

Material of Construction: Concrete

Manhole Shape: Circular

Dimensions: 48"

Cover/Lid: 25" Type – C.I. Score – 2

Frame: Height – 5" Type – C.I. Score – 2

Chimney: Number/Height – 1/3", 2/6" Score – 2

Cone: Height – 28" Type – Ecc. Score – 1

Reducing Slab: Height – N/A Score –

Barrel Sections: Number/Height – N/A Score –

Base: Height – 16" Score – 3

Shelf: Type – Conc. Score – 4

Steps: 3 Type: Metal Score – 1

Influent Pipe Connection(s):

West Connection grout is broken, exposed gasket
 East connection some grout is missing, exposed gasket
 North connection has some mineralization
 Graded score of 3

Effluent Pipe Connection(s):

Mineralization around grout
 Some grout is missing
 Graded score of 2

Additional Comments:

- Small fracture in channel invert
- Broken/missing channel present
- Concrete is fracturing along shelf
- 1" of debris in invert before cleaning

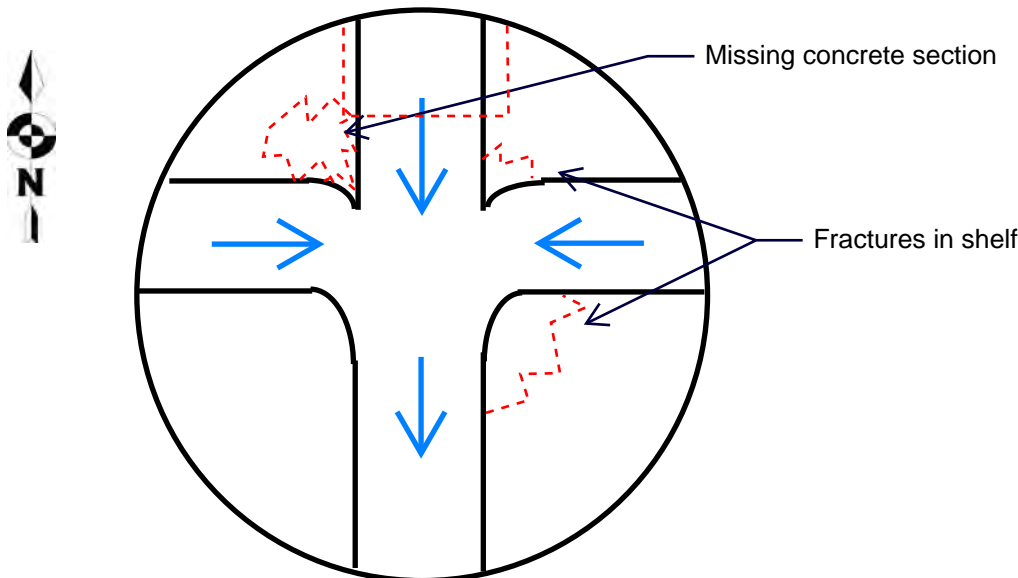




Image 1 – MH facing North along C St



Image 2 – Frame, Chimney, and Stairs



Image 3 – West Influent Connection



Image 4 – North Influent Connection



Image 5 – Missing Concrete along Shelf



Image 6 – East Influent Connection

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH24-004

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/29/2024

Inspector(s): Dugan, Markson

General Location Features: North Alley, in Front of 13464 North Alley

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	East Effluent / 8" / Ductile Iron	64"	Minimal
2.			
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 1		
Material of Construction: Concrete		
Manhole Shape: Circular		
Dimensions: 48"		
Cover/Lid: 25"	Type – C.I.	Score – 2
Frame: Height – 5"	Type – C.I.	Score – 2
Chimney: Number/Height – N/A		Score –
Cone: Height – 40"	Type – Ecc.	Score – 1
Reducing Slab: Height – N/A		Score –
Barrel Sections: Number/Height – N/A		Score –
Base: Height – 12"		Score – 1
Shelf: Type – Conc.		Score – 2
Steps: 4	Type: Metal	Score – 1

Influent Pipe Connection(s):

N/A

Effluent Pipe Connection(s):

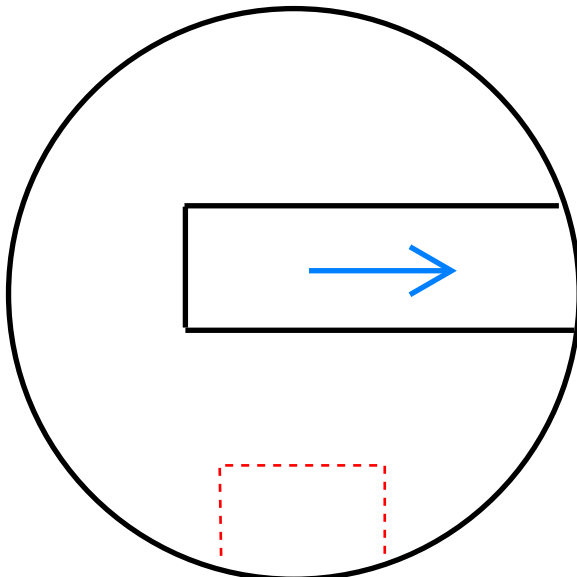
Some grout is missing

Gasket exposed

Graded score of 2

Additional Comments:

- Pipe dead ends along the West section of the base
- Heavy sediment build-up along the shelf
- Catchpan is bent and semi-unfunctional



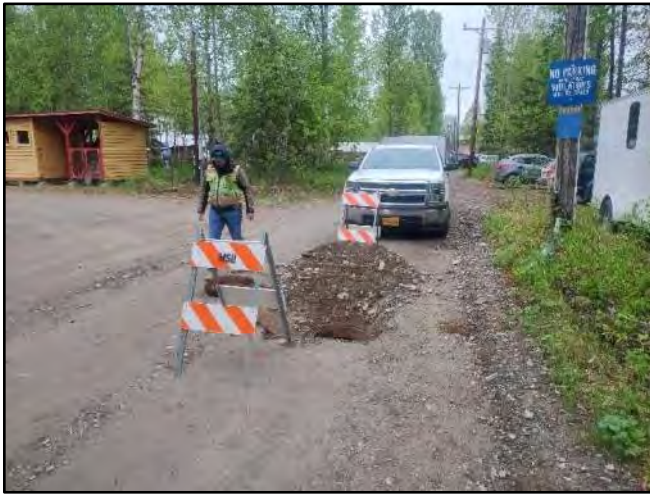


Image 1 – MH facing East along North Alley



Image 2 – MH facing West along North Alley



Image 3 – Cover, Catchpan, and Frame



Image 4 – Cone and Base



Image 5 – Sediment Build-up



Image 6 – East Effluent Connection

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH24-005

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/29/2024

Inspector(s): Dugan, Markson

General Location Features: Main & B St Intersection

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	Northwest Influent / 4" / PVC	62"	Minimal
2.	East Effluent / 8" / Ductile Iron	59"	Minimal
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 1	
Material of Construction: Concrete	
Manhole Shape: Circular	
Dimensions: 48"	
Cover/Lid: 25" Type – C.I.	Score – 1
Frame: Height – 5" Type – C.I.	Score – 2
Chimney: Number/Height – N/A	Score –
Cone: Height – N/A Type –	Score –
Reducing Slab: Height – 8"	Score – 1
Barrel Sections: Number/Height – 1/12"	Score – 1
Base: Height – 28"	Score – 2
Shelf: Type – Conc.	Score – 2
Steps: 3 Type: Metal	Score – 1

Influent Pipe Connection(s):

Break in the grouting directly above connection
Graded score of 2

Effluent Pipe Connection(s):

Some grout is missing
Gasket exposed
Graded score of 2

Additional Comments:

- Shelf has moderate decay/sediment build-up along North edge

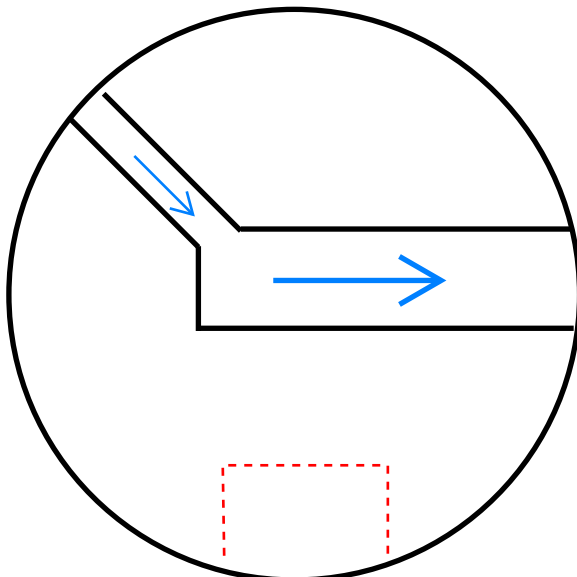




Image 1 – MH facing East along Main St



Image 2 – MH facing North along B St



Image 3 –Cone and Base



Image 4 – Sediment Build-up on Shelf



Image 5 – NW PVC Influent



Image 6 – East Effluent Connection

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH24-006

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/29/2024

Inspector(s): Dugan, Markson

General Location Features: Main & C St Intersection

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	West Influent / 8" / Ductile Iron	92.5"	0.25"
2.	North Influent / 8" / Ductile Iron	92.5"	0.25"
3.	East Influent / 8" / Ductile Iron	92.5"	0.5"
4.	South Effluent / 8" / Ductile Iron	92.7"	1"
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 2

Material of Construction: Concrete

Manhole Shape: Circular

Dimensions: 48"

Cover/Lid: 25" Type – C.I. Score – 1

Frame: Height – 6" Type – C.I. Score – 2

Chimney: Number/Height – N/A Score –

Cone: Height – 52" Type – Ecc. Score – 1

Reducing Slab: Height – N/A Score –

Barrel Sections: Number/Height – 1/12" Score –

Base: Height – 30" Score – 2

Shelf: Type – Conc. Score – 2

Steps: 6 Type: Metal Score – 2

Influent Pipe Connection(s):

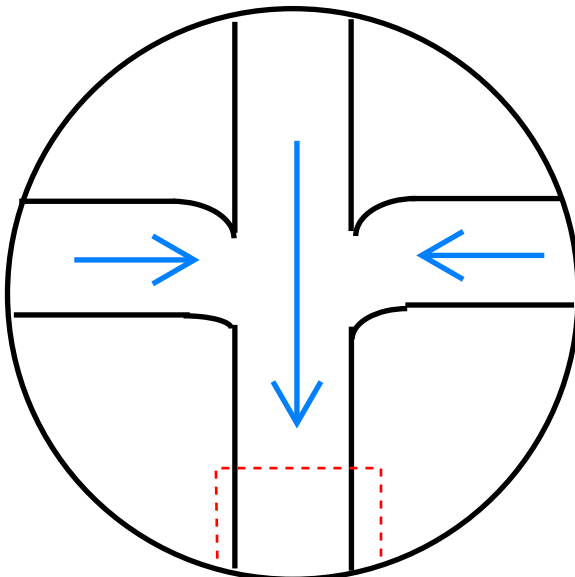
West Influent connection has some grouting missing, gasket exposed
Graded score of 2

Effluent Pipe Connection(s):

Some grout is missing, pipe exposed
Graded score of 2

Additional Comments:

- Small chunks of concrete spalling in some parts of base and cone



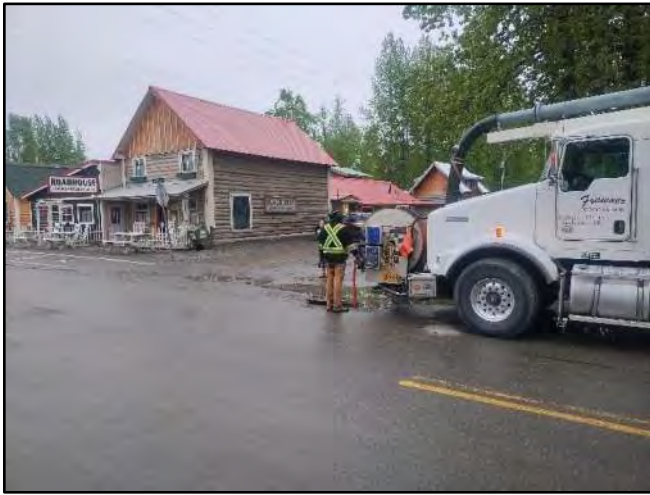


Image 1 – MH facing South towards C St



Image 2 – Cone and Base



Image 3 – West Influent Connection



Image 4 – North Influent Connection and Spalling



Image 5 – East Influent Connection



Image 6 – South Effluent Connection and Stairs

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH24-007

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/29/2024

Inspector(s): Dugan, Markson

General Location Features: Main & D St Intersection

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	East Influent / 8" / Ductile Iron	87.2"	0.5"
2.	West Effluent / 8" / Ductile Iron	87"	0.5"
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 1		
Material of Construction: Concrete		
Manhole Shape: Circular		
Dimensions: 48"		
Cover/Lid: 25"	Type – C.I.	Score – 2
Frame: Height – 6"	Type – C.I.	Score – 2
Chimney: Number/Height – 1/12"		Score – 1
Cone: Height – 28"	Type – Ecc.	Score – 1
Reducing Slab: Height – N/A		Score –
Barrel Sections: Number/Height – 1/12"		Score – 1
Base: Height – 30"		Score – 1
Shelf: Type – Conc.		Score – 2
Steps: 5	Type: Metal	Score – 1

Influent Pipe Connection(s):

Connection has some grouting missing, gasket exposed

Graded score of 2

Effluent Pipe Connection(s):

Solid grouting

Graded score of 1

Additional Comments:

- Some sediment build-up along the shelf of base
- Steps are not in line with one another

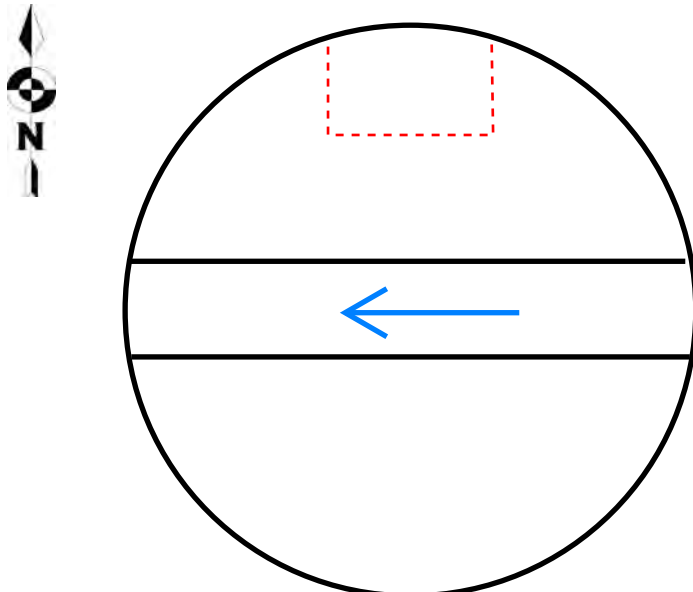




Image 1 – MH facing North on D St



Image 2 – MH facing Fairview Inn



Image 3 – Cone and Base



Image 4 – East Influent Connection



Image 5 – West Effluent Connection



Image 6 – Solids Build-up on North Shelf

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH24-008

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/29/2024

Inspector(s): Dugan, Markson

General Location Features: Talkeetna Spur & Main St Intersection

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	Southeast Influent / 8" / Ductile Iron	90"	Minimal
2.	West Effluent / 8" / Ductile Iron	90.2"	Minimal
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 2	
Material of Construction: Concrete	
Manhole Shape: Circular	
Dimensions: 48"	
Cover/Lid: 25" Type – C.I. Score – 2	
Frame: Height – 6" Type – C.I. Score – 2	
Chimney: Number/Height – 1/6", 1/4" Score – 1	
Cone: Height – 28" Type – Ecc. Score – 2	
Reducing Slab: Height – N/A Score –	
Barrel Sections: Number/Height – 1/12" Score – 1	
Base: Height – 24" Score – 2	
Shelf: Type – Conc. Score – 3	
Steps: 5 Type: Metal Score – 2	

Influent Pipe Connection(s):

Connection has some grouting missing, gasket exposed
Graded score of 2

Effluent Pipe Connection(s):

Missing most grout around connection, gasket very exposed
Graded score of 3

Additional Comments:

- Pipes' inverts are not connected for approximately 6"
- Frame is offset from the remainder of structure
- North side of Effluent pipe has significant chunk of concrete pipe missing

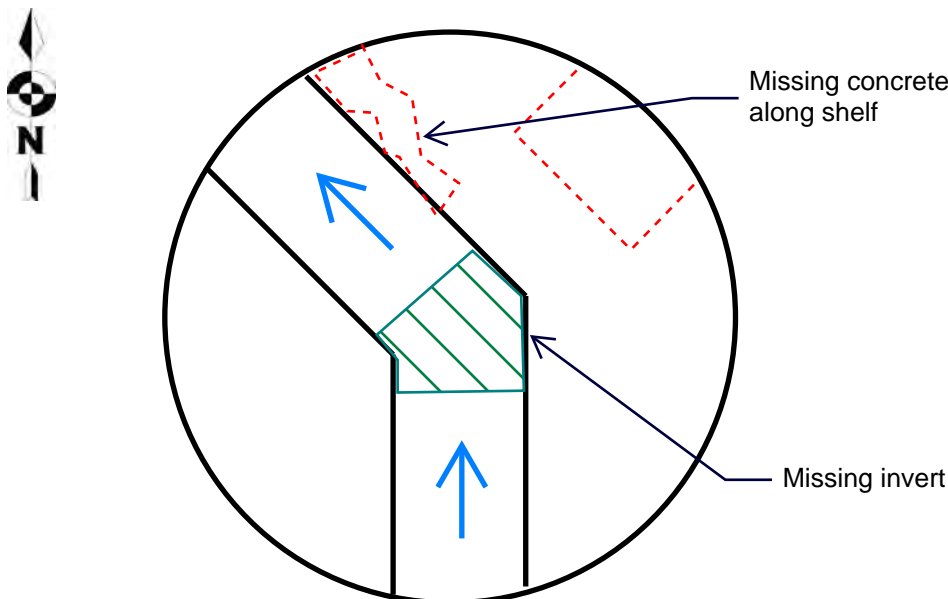




Image 1 – MH facing East towards Railroad



Image 2 – MH facing North towards Talkeetna City Park



Image 3 – Barrel and Base



Image 4 – Missing Invert



Image 5 – Southeast Influent Connection



Image 6 – West Effluent Connection

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH24-009

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/29/2024

Inspector(s): Dugan, Markson

General Location Features: Along F St, 50 ft SE of Mahay's

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	North Effluent / 8" / Ductile Iron	99.5"	No Flow
2.			
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 1		
Material of Construction: Concrete		
Manhole Shape: Circular		
Dimensions: 48"		
Cover/Lid: 25"	Type – C.I.	Score – 1
Frame: Height – 6"	Type – C.I.	Score – 1
Chimney: Number/Height – 1/6", 1/2"		Score – 2
Cone: Height – 40"	Type – Ecc.	Score – 1
Reducing Slab: Height – N/A		Score –
Barrel Sections: Number/Height – N/A		Score –
Base: Height – 36"		Score – 1
Shelf: Type – Conc.		Score – 2
Steps: 5	Type: Metal	Score – 2

Influent Pipe Connection(s):

N/A

Effluent Pipe Connection(s):

Solid grouting

Graded score of 1

Additional Comments:

- Pipe ends along South wall in shear wall
- Chimney's grout is experiencing some peeling
- Large amount of sediment in the bottom shelf and invert

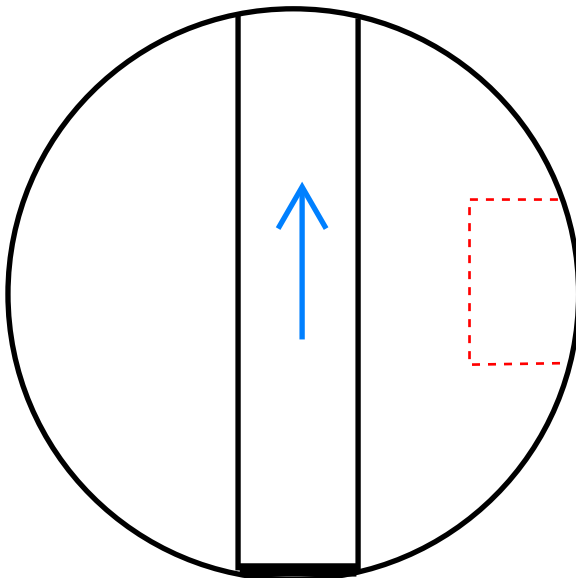




Image 1 – MH facing South on F St



Image 2 – MH facing Mahay's



Image 3 – Steps, Cone, and Base



Image 4 – Sediment along Base



Image 5 – North Effluent Connection



Image 6 – Chimney's Concrete Peeling

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH24-0010

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/29/2024

Inspector(s): Dugan, Markson

General Location Features: Along B St, in front of Annie's Ice Cream

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	South Effluent / 8" / Ductile Iron	67"	2"
2.			(Standing Water)
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 2		
Material of Construction: Concrete		
Manhole Shape: Circular		
Dimensions: 48"		
Cover/Lid: 25"	Type – C.I.	Score – 2
Frame: Height – 6"	Type – C.I.	Score – 1
Chimney: Number/Height –		Score –
Cone: Height – 28"	Type – Ecc.	Score – 1
Reducing Slab: Height – N/A		Score –
Barrel Sections: Number/Height – N/A		Score –
Base: Height – 22"		Score – 2
Shelf: Type – Conc.		Score – 2
Steps: 4	Type: Metal	Score – 1

Influent Pipe Connection(s):

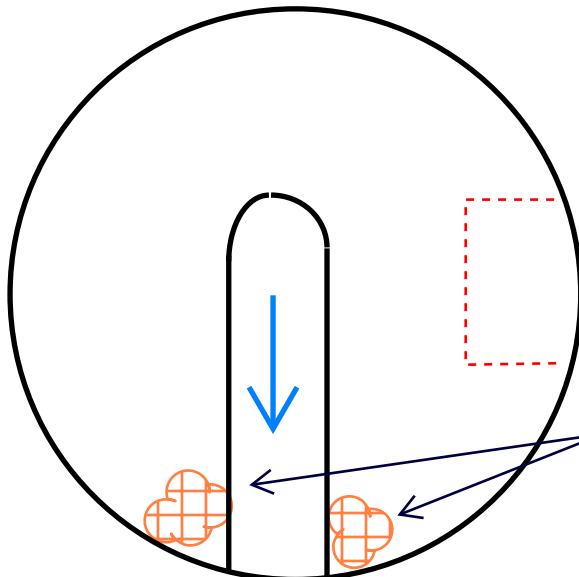
N/A

Effluent Pipe Connection(s):

Decent grouting, part of gasket exposed
 High mineralization and surface corrosion on either side of connection
 Graded score of 3

Additional Comments:

- Pipe dead ends in North section of base
- Water in pipe is static and not directionally moving
- Flowlines descending from cone/base joint
- Significant solids build-up along the shelf



Mineralization along connection and shelf



Image 1 – MH facing North on B St



Image 2 – MH facing Annie's



Image 3 – Base



Image 4 – Cone/Base Joint



Image 5 – South Effluent Connection



Image 6 – Sediment along Shelf

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH24-0011

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/29/2024

Inspector(s): Dugan, Markson

General Location Features: West end of First St, 100 ft West of B St, by the River

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	East Effluent / 8" / Ductile Iron	56"	No Flow
2.			
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 1

Material of Construction: Concrete

Manhole Shape: Circular

Dimensions: 48"

Cover/Lid: 25" Type – C.I. Score – 1

Frame: Height – 6" Type – C.I. Score – 2

Chimney: Number/Height – 3/6" Score – 1

Cone: Height – N/A Type – Score –

Reducing Slab: Height – 8" Score – 1

Barrel Sections: Number/Height – N/A Score –

Base: Height – 18" Score – 1

Shelf: Type – Conc. Score – 2

Steps: 1 Type: Metal Score – 1

Influent Pipe Connection(s):

N/A

Effluent Pipe Connection(s):

Solid grouting. some pipe exposure and decay

Two cracks extending diagonally along base from connection

Graded score of 2

Additional Comments:

- Pipe dead ends in West section of the base

- No active flow within the pipe

- Large amount of organic debris present in the base

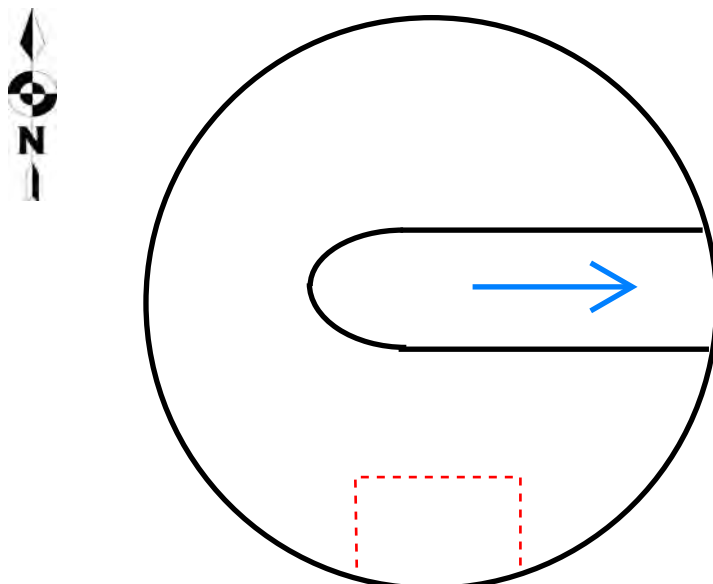




Image 1 – MH facing East towards First St



Image 2 – MH facing West towards the River



Image 3 – Frame and Chimney



Image 4 – Debris along the Base



Image 5 – East Effluent Connection



Image 6 – Cracks above Connection

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH24-0012

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/29/2024

Inspector(s): Dugan, Markson

General Location Features: First & B St Intersection

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	North Influent / 8" / Ductile Iron	78.5"	Minimal
2.	West Influent / 8" / Ductile Iron	79"	Minimal
3.	East Effluent / 8" / Ductile Iron	79.2"	Minimal
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 3		
Material of Construction: Concrete		
Manhole Shape: Circular		
Dimensions: 48"		
Cover/Lid: 25"	Type – C.I.	Score – 1
Frame: Height – 6"	Type – C.I.	Score – 1
Chimney: Number/Height – N/A		Score –
Cone: Height – 28"	Type – Ecc.	Score – 2
Reducing Slab: Height – N/A		Score –
Barrel Sections: Number/Height – 2/12"		Score – 2
Base: Height – 10"		Score – 3
Shelf: Type – Conc.		Score – 4
Steps: 5	Type: Metal	Score – 1

Influent Pipe Connection(s):

Both influent connections have exposed gaskets
Grouting is receding, Z-boot connection
Large crack extends from West connection
Graded score of 3

Effluent Pipe Connection(s):

Decent grouting, pipe somewhat exposed
Z-boot connection with vertical crack above
Graded score of 3

Additional Comments:

- Deep concrete fractures in multiple parts of the shelf
- Large amounts of sediment on South shelf
- Invert missing from North connection to East-West pipe, groundwater infiltration suspected beneath pipe
- Upon secondary visit, multiple I&I sources around connections, especially West connection

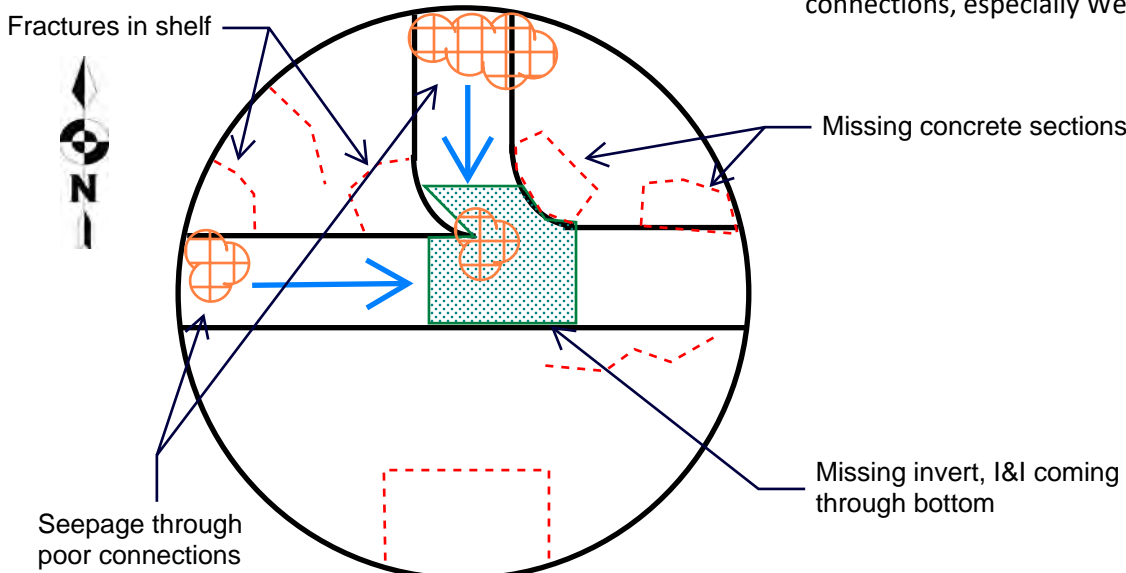




Image 1 – MH facing NW towards Intersection



Image 2 – Barrels and Base



Image 3 – North Influent Connection



Image 4 – West Influent Connection and Crack



Image 5 – East Effluent Connection and Crack



Image 6 – Missing Invert and Sediment on Shelf

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH24-0013

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/29/2024

Inspector(s): Dugan, Markson

General Location Features: First & C St Intersection

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	North Influent / 8" / Ductile Iron	100.8"	1.5"
2.	West Influent / 8" / Ductile Iron	100.8"	2"
3.	East Effluent / 8" / Ductile Iron	101"	2.5"
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 2		
Material of Construction: Concrete		
Manhole Shape: Circular		
Dimensions: 48"		
Cover/Lid: 25"	Type – C.I.	Score – 1
Frame: Height – 6"	Type – C.I.	Score – 1
Chimney: Number/Height – 1/6"		Score – 1
Cone: Height – 52"	Type – Ecc.	Score – 2
Reducing Slab: Height – N/A		Score –
Barrel Sections: Number/Height – N/A		Score –
Base: Height – 27"		Score – 3
Shelf: Type – Conc.		Score – 3
Steps: 6	Type: Metal	Score – 1

Influent Pipe Connection(s):

Decent grouting
Slight gasket exposure on West pipe
Graded score of 2

Effluent Pipe Connection(s):

Decent grouting
Gasket significantly exposed on South connection
Graded score of 2

Additional Comments:

- Infiltration along shelf on the West section of base and East side of North connection
- Runner along the North side of West connection
- Significant crack on South side of West connection

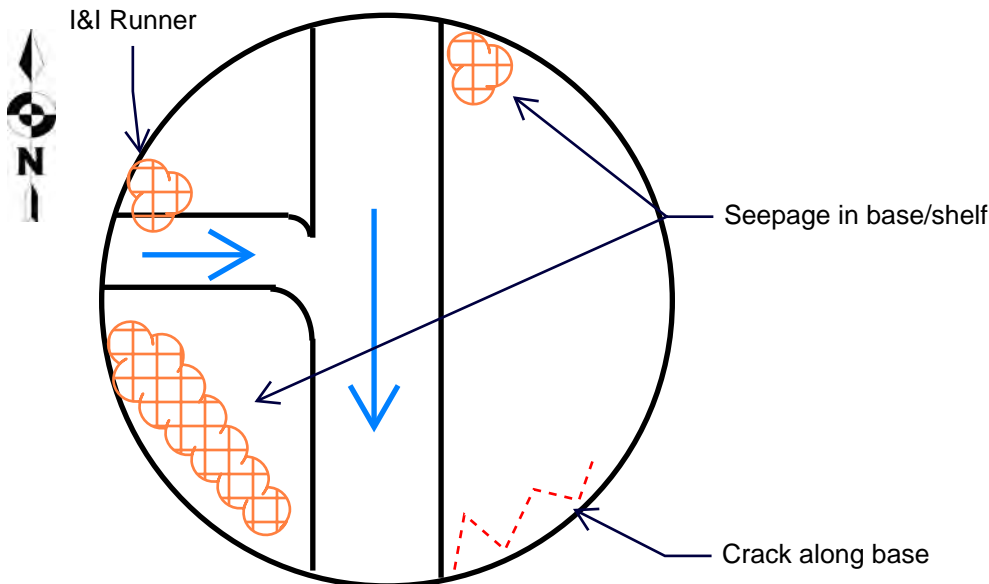




Image 1 – MH facing NW towards Intersection



Image 2 – Frame and Chimney



Image 3 – Base



Image 4 – West Influent Connection and Runner



Image 5 – South Effluent Connection



Image 6 – North Influent Connection and Dripper

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH24-0014

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/30/2024

Inspector(s): Dugan

General Location Features: 25 ft West of First & D St, along East bank of Airfield

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	East Influent / 8" / Ductile Iron	72.8"	0.5"
2.	South Effluent / 8" / Ductile Iron	73"	0.5"
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 1

Material of Construction: Concrete

Manhole Shape: Circular

Dimensions: 48"

Cover/Lid: 25" Type – C.I. Score – 1

Frame: Height – 6" Type – C.I. Score – 2

Chimney: Number/Height – 1/6" Score – 2

Cone: Height – 28" Type – Ecc. Score – 1

Reducing Slab: Height – N/A Score –

Barrel Sections: Number/Height – N/A Score –

Base: Height – 20" Score – 2

Shelf: Type – Conc. Score – 1

Steps: 4 Type: Metal Score – 1

Influent Pipe Connection(s):

Solid grouting

Slight pipe exposure

Graded score of 1

Effluent Pipe Connection(s):

Solid grouting

Crack slightly above top of grouting

Graded score of 2

Additional Comments:

- Sealant between frame and chimney is peeling in some parts

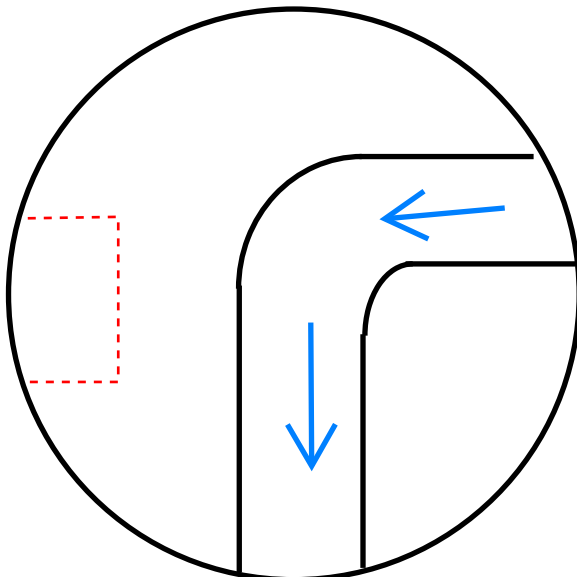




Image 1 – MH facing East towards First St



Image 2 – Facing MH from Outside Airfield



Image 3 – Base



Image 4 – East Influent Connection



Image 5 – South Effluent Connection



Image 6 – Sealant Between Frame and Chimney

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH24-0015

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/29/2024

Inspector(s): Dugan, Markson

General Location Features: The East End of First St

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	East Influent / 8" / Ductile Iron	72"	3"
2.	South Effluent / 8" / Ductile Iron	72.1"	3"
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 1	
Material of Construction: Concrete	
Manhole Shape: Circular	
Dimensions: 48"	
Cover/Lid: 25" Type – C.I.	Score – 1
Frame: Height – 6" Type – C.I.	Score – 2
Chimney: Number/Height – 1/6"	Score – 1
Cone: Height – 28" Type – Ecc.	Score – 1
Reducing Slab: Height – N/A	Score –
Barrel Sections: Number/Height – N/A	Score –
Base: Height – 23"	Score – 1
Shelf: Type – Conc.	Score – 2
Steps: 4 Type: Metal	Score – 1

Influent Pipe Connection(s):

Decent grouting
 Significant gasket exposure
 Graded score of 2

Effluent Pipe Connection(s):

Decent grouting
 Significant gasket exposure
 Graded score of 2

Additional Comments:

- Flows are at a very low velocity, but high for a cleanout attachment
- Moderate sediment build-up along the shelf

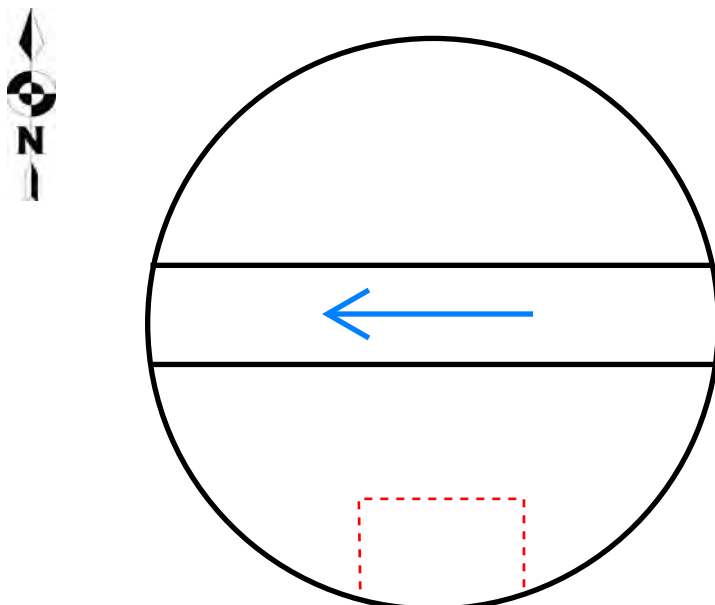




Image 1 – MH facing North towards Post Office



Image 2 – Facing NE towards Talkeetna Spur



Image 3 – Base



Image 4 – East Influent Connection



Image 5 – West Effluent Connection



Image 6 – Sediment Build-up on Shelf

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH24-0016

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 6/3/2024

Inspector(s): Dugan

General Location Features: Front St & Easy St, Center of Intersection

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	West Influent / 8" / Ductile Iron	104.5"	2"
2.	Northwest Influent / 4" / Ductile Iron	97"	Minimal
3.	Southwest Influent / 6" / Ductile Iron	91"	Minimal
4.	East Effluent / 12" / Ductile Iron	106"	2"
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 3		
Material of Construction: Concrete		
Manhole Shape: Circular		
Dimensions: 48"		
Cover/Lid: 25"	Type – C.I.	Score – 2
Frame: Height – 5"	Type – C.I.	Score – 2
Chimney: Number/Height – 1/4"		Score – 2
Cone: Height – 40"	Type – Ecc.	Score – 3
Reducing Slab: Height – N/A		Score –
Barrel Sections: Number/Height – 1/24"		Score – 1
Base: Height – 20"		Score – 3
Shelf: Type – Conc.		Score – 4
Steps: 7	Type: Metal	Score – 2

Influent Pipe Connection(s):

Solid grouting
Substantial Mineralization / Infiltration along West Influent Connection
Graded score of 3

Effluent Pipe Connection(s):

Decent grouting
I&I dripper just North of pipe
Graded score of 2

Additional Comments:

- Pipe expands from 8" to 12" diameter
- Significant cracking along the top of cone and the chimney/cone joint
- Moisture present throughout the base
- Severe wear on the shelf has created lots of loose debris from excess I&I

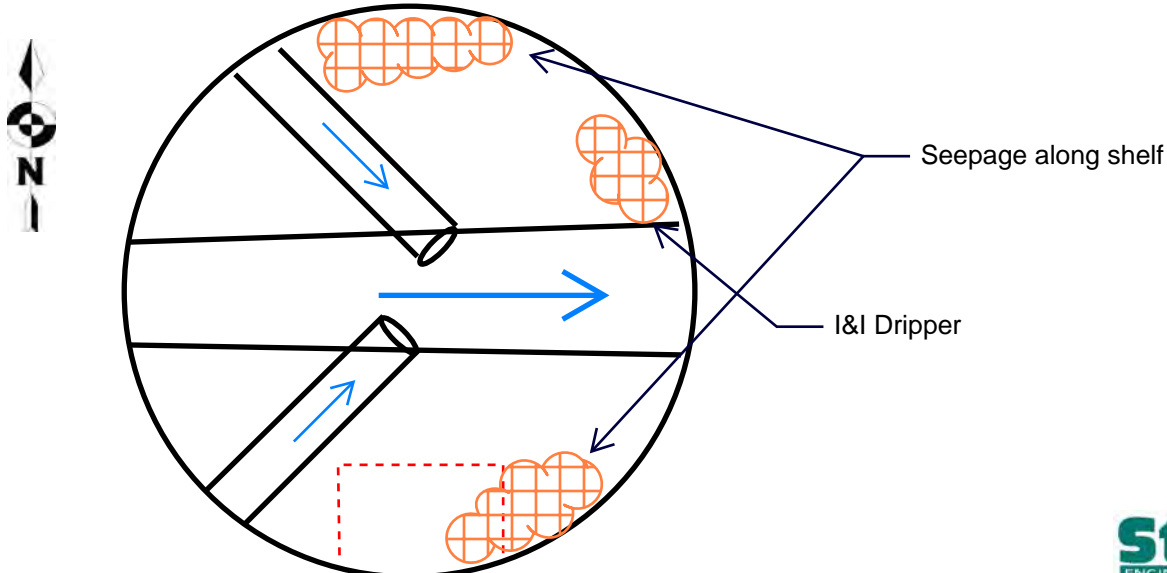




Image 1 – MH facing West along Second St



Image 2 – Cracking Along top of Cone and Joint



Image 3 – Barrel and Base



Image 4 – West Influent Connection



Image 5 – East Effluent Connection



Image 6 – Debris and Moisture along Base's Shelf

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH24-0017

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 6/5/2024

Inspector(s): Dugan

General Location Features: Along Main St, Directly between F & G St

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	West Influent / 8" / Ductile Iron	92.5"	1"
2.	East Effluent / 8" / Ductile Iron	92.7"	1"
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 3	
Material of Construction: Concrete	
Manhole Shape: Circular	
Dimensions: 48"	
Cover/Lid: 25" Type – C.I. Score – 2	
Frame: Height – 6" Type – C.I. Score – 2	
Chimney: Number/Height – N/A Score –	
Cone: Height – 28" Type – Ecc. Score – 2	
Reducing Slab: Height – N/A Score –	
Barrel Sections: Number/Height – 1/24" Score – 1	
Base: Height – 26" Score – 4	
Shelf: Type – Conc. Score – 3	
Steps: 6 Type: Metal Score – 1	

Influent Pipe Connection(s):

Solid grouting
 Large crack extending from North side of connection
 Significant mineralization
 Graded score of 2

Effluent Pipe Connection(s):

Solid grouting
 I&I Drippers present on both sides of connection
 Large crack extending from South and North end of connection
 Moderate mineralization
 Graded score of 3

Additional Comments:

- Most I&I appears to be coming from the joint connecting the barrel and base
- Significant organic/root growth along the cone
- Base is heavily mineralized, especially along East side

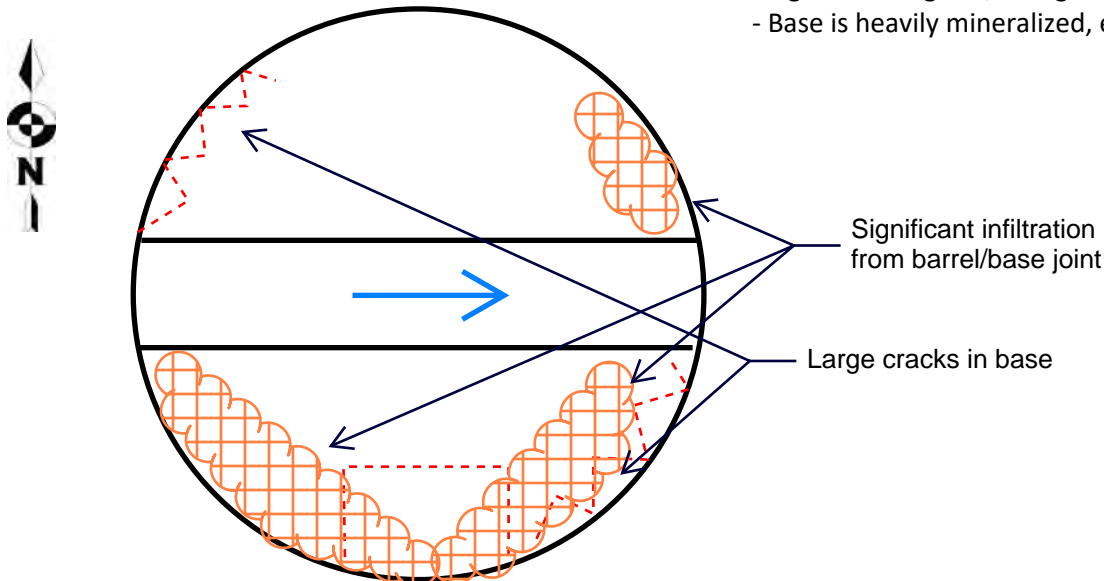




Image 1 – MH facing East on Main St



Image 2 – Frame and Cover



Image 3 –Organic Growth along Frame and Cone



Image 4 – Base



Image 5 – West Influent Connection



Image 6 – East Effluent Connection

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH24-001A

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 6/3/2024

Inspector(s): Dugan

General Location Features: Along F Street, in front of the Swiss-Alaska Inn

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	South Effluent / 8" / Ductile Iron	93"	0.25"
2.			
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 3

Material of Construction: Concrete

Manhole Shape: Circular

Dimensions: 48"

Cover/Lid: 25" Type – C.I. Score – 1

Frame: Height – 5" Type – C.I. Score – 2

Chimney: Number/Height – 1/3" Score – 3

Cone: Height – 40" Type – Ecc. Score – 2

Reducing Slab: Height – N/A Score –

Barrel Sections: Number/Height – N/A Score –

Base: Height – 18" Score – 3

Shelf: Type – Conc. Score – 3

Steps: 5 Type: Metal Score – 2

Influent Pipe Connection(s):

N/A

Effluent Pipe Connection(s):

Missing grouting and concrete near topside

Not flush with the base wall

Pipe is protruding and entirely uncovered

Graded score of 4

Additional Comments:

- Catchpan is rusted through and unfunctional
- No influent as North end of pipe ends in shear wall
- Steel bottom missing in invert right before shear wall, allowing I&I runner directly into pipe
- Steel bottom missing in invert directly before effluent connection as well
- Cone/base joint has some gaps, but no obvious mineralization
- All flow reflected in this MH is a product of I&I

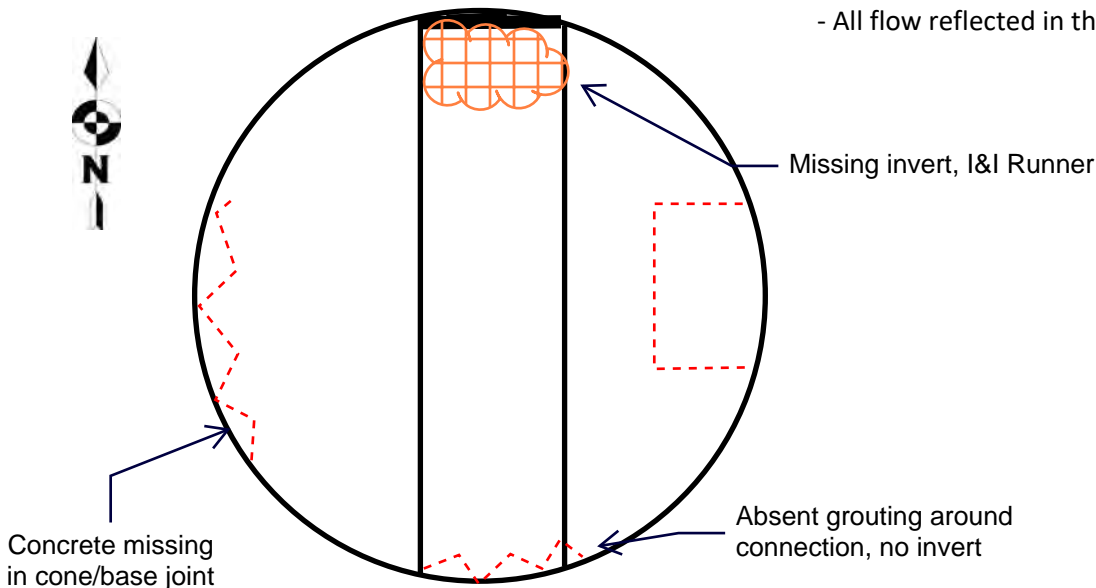




Image 1 – MH facing West towards Swiss-Alaska Inn



Image 2 – Unfunctional Catchpan



Image 3 – Cracks and Damage in Chimney



Image 4 – Missing Invert and I&I Runner



Image 5 – Missing Invert and South Effluent Connection



Image 6 – Cone/Base Joint

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH25-001

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/30/2024

Inspector(s): Dugan

General Location Features: On Second St, 100 ft West of Talkeetna Spur

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	Northeast Inflow / 8" / Ductile Iron	69"	0.25"
2.	West Effluent / 8" / Ductile Iron	73"	0.25"
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 2		
Material of Construction: Concrete		
Manhole Shape: Circular		
Dimensions: 48"		
Cover/Lid: 25"	Type – C.I.	Score – 1
Frame: Height – 6"	Type – C.I.	Score – 2
Chimney: Number/Height – 3/6"		Score – 2
Cone: Height – 28"	Type – Ecc.	Score – 1
Reducing Slab: Height – N/A		Score –
Barrel Sections: Number/Height – N/A		Score –
Base: Height – 10"		Score – 1
Shelf: Type – Conc.		Score – 3
Steps: 3	Type: Metal	Score – 2

Influent Pipe Connection(s):

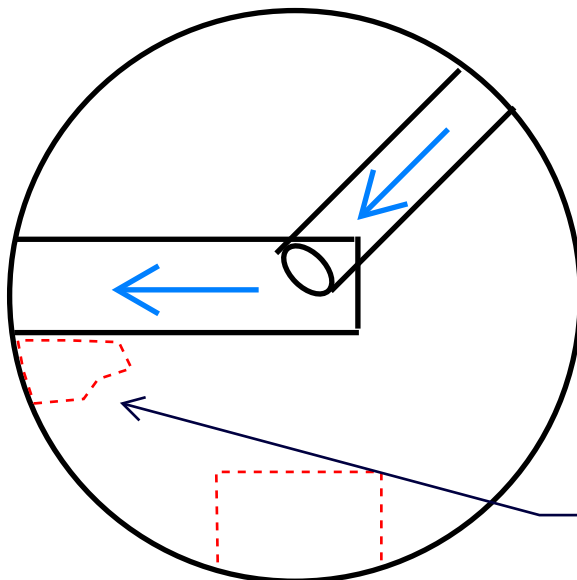
Elevated within MH and protruding from base
Solid grouting
Graded score of 1

Effluent Pipe Connection(s):

Decent grouting, some pipe exposure
Graded score of 2

Additional Comments:

- Before cleaning large amounts of sediment along shelf
- Large, fractured concrete chunk along South side of West Effluent connection



Fractured concrete along shelf



Image 1 – MH facing West towards Talkeetna Spur



Image 2 – Facing East along Second St



Image 3 – Frame and Chimney



Image 4 – Base



Image 5 – West Effluent Connection



Image 6 – Fractured Concrete Section

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH25-002

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/30/2024

Inspector(s): Dugan

General Location Features: Along Second St, Between D St & Talkeetna Spur

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	East Influent / 8" / Ductile Iron	61"	Minimal
2.	West Effluent / 8" / Ductile Iron	61.2"	Minimal
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 2

Material of Construction: Concrete

Manhole Shape: Circular

Dimensions: 48"

Cover/Lid: 25" Type – C.I. Score – 2

Frame: Height – 6" Type – C.I. Score – 2

Chimney: Number/Height – 1/6" Score – 2

Cone: Height – 28" Type – Ecc. Score – 1

Reducing Slab: Height – N/A Score –

Barrel Sections: Number/Height – N/A Score –

Base: Height – 10" Score – 3

Shelf: Type – Conc. Score – 1

Steps: 3 Type: Metal Score – 1

Influent Pipe Connection(s):

Large concrete crack above connection

Gasket remains covered

Graded score of 2

Effluent Pipe Connection(s):

Large crack and missing piece of concrete above connection, some mineralization

Gasket exposed

Graded score of 3

Additional Comments:

- Significant structural cracking above both East and West Connections

- Sediment deposit on South side of shelf, likely from excavation

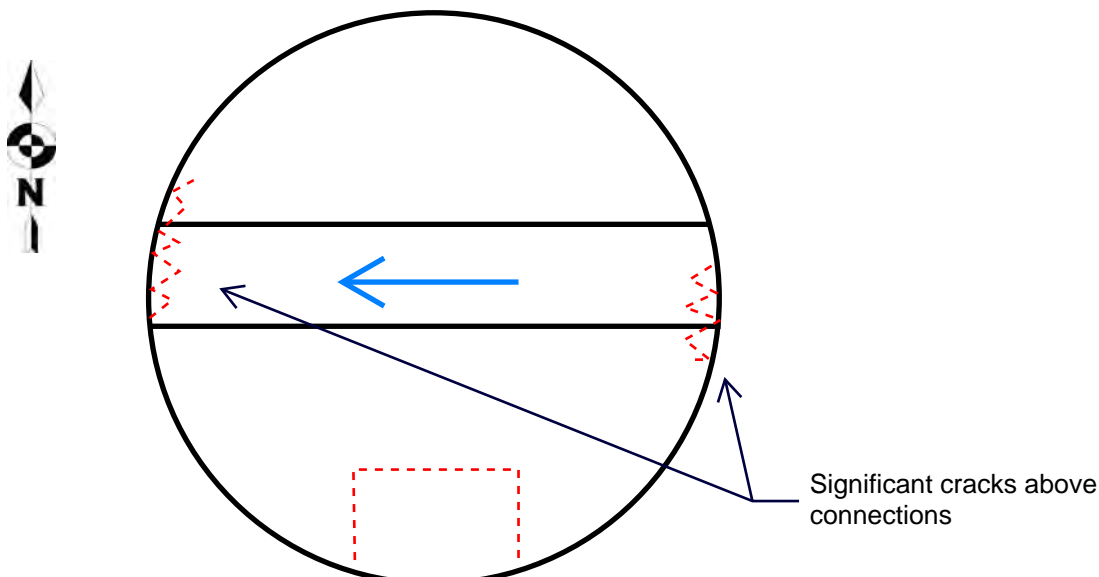




Image 1 – MH facing West towards Talkeetna Spur

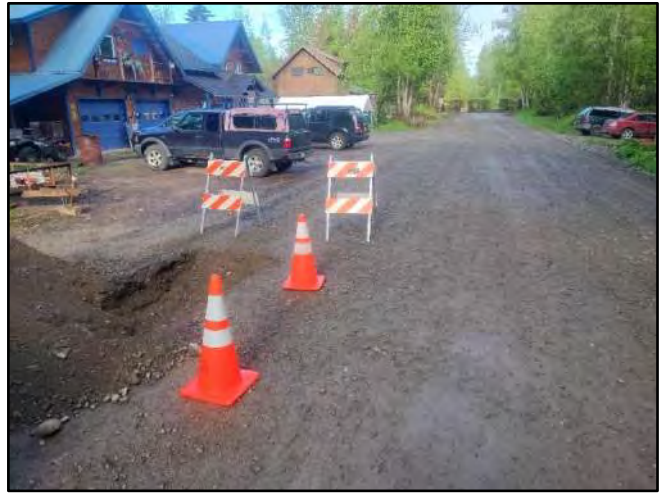


Image 2 – MH Facing East along Second St



Image 3 – Base



Image 4 – East Influent Connection and Crack



Image 5 – West Effluent Connection and Crack



Image 6 – Sediment along South Shelf

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH25-003

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/30/2024

Inspector(s): Dugan

General Location Features: 50 ft West of Second & D St Intersection, Located in Airfield

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	North Influent / 8" / Ductile Iron	88"	0.5"
2.	East Influent / 8" / Ductile Iron	78.5"	Minimal
3.	West Effluent / 8" / Ductile Iron	89"	0.5"
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 3		
Material of Construction: Concrete		
Manhole Shape: Circular		
Dimensions: 48"		
Cover/Lid: 25"	Type – C.I.	Score – 2
Frame: Height – 6"	Type – C.I.	Score – 2
Chimney: Number/Height – 1/6"		Score – 2
Cone: Height – 40"	Type – Ecc.	Score – 2
Reducing Slab: Height – N/A		Score –
Barrel Sections: Number/Height – N/A		Score –
Base: Height – 31"		Score – 3
Shelf: Type – Conc.		Score – 3
Steps: 5	Type: Metal	Score – 1

Influent Pipe Connection(s):

Solid grouting for both
North Connection has I&I runner along the West side
Graded score of 3

Effluent Pipe Connection(s):

Solid Grouting
Graded score of 1

Additional Comments:

- Chunk of concrete is missing from shelf where the North Influent meets the West Effluent
- Mineralization flowlines along base & cone

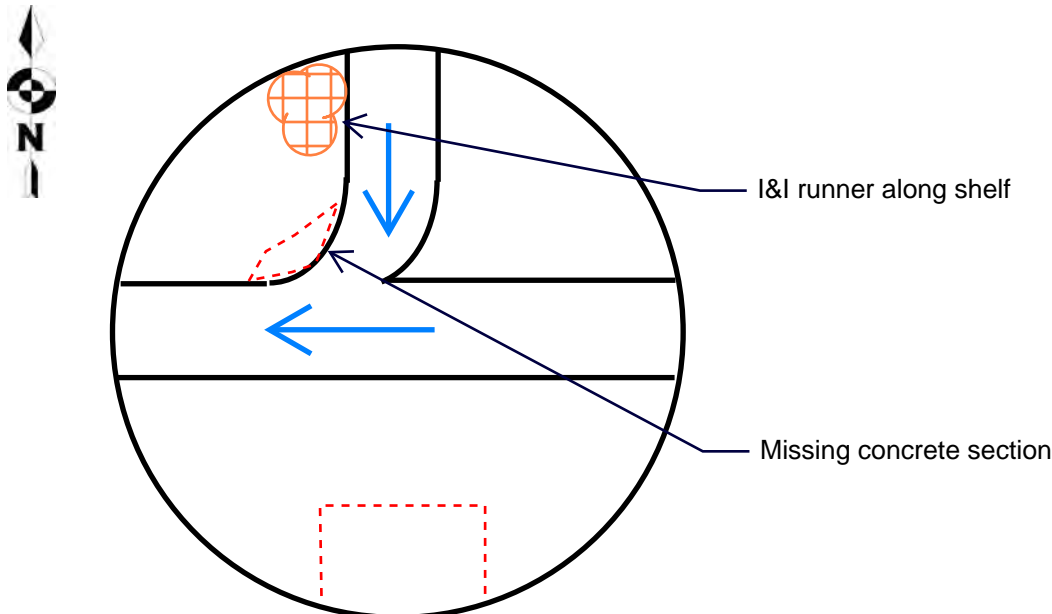




Image 1 – MH facing West towards Airfield



Image 2 – MH Facing North inside of Airfield



Image 3 – Frame, Chimney, and Cone



Image 4 – Base



Image 5 – Runner alongside North Connection



Image 6 – Missing Concrete Section

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH25-004

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/29/2024

Inspector(s): Dugan, Markson

General Location Features: Second & C St Intersection

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	North Influent / 8" / Ductile Iron	101"	2"
2.	West Influent / 8" / Ductile Iron	95"	0.5"
3.	East Influent / 8" / Ductile Iron	101"	1"
4.	South Effluent / 8" / Ductile Iron	101.5"	2"
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 3	
Material of Construction: Concrete	
Manhole Shape: Circular	
Dimensions: 48"	
Cover/Lid: 25" Type – C.I.	Score – 2
Frame: Height – 6" Type – C.I.	Score – 2
Chimney: Number/Height – N/A	Score –
Cone: Height – 52" Type – Ecc.	Score – 1
Reducing Slab: Height – N/A	Score –
Barrel Sections: Number/Height – N/A	Score –
Base: Height – 31"	Score – 4
Shelf: Type – Conc.	Score – 3
Steps: 7 Type: Metal	Score – 2

Influent Pipe Connection(s):

Decent grouting
West connection has I&I dripper from the top of pipe
Graded score of 3

Effluent Pipe Connection(s):

Decent Grouting
I&I seepage present on both sides of connection
Graded score of 3

Additional Comments:

- I&I runners present along Northeast and Southeast section of base/shelf
- Multiple I&I drippers present along East side of base
- General seepage can be seen from cone/base joint around entire circumference

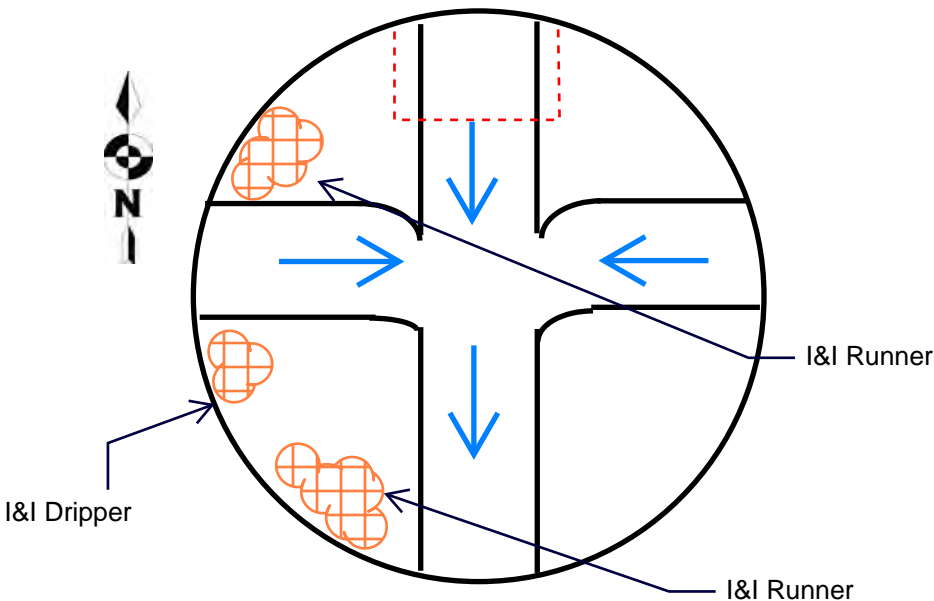




Image 1 – MH facing North along C St



Image 2 – Frame, Cone, and Base



Image 3 – Base



Image 4 – Northeast I&I Runner / Dripper



Image 5 – Southeast I&I Runner / Dripper



Image 6 – South Effluent Connection

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH25-006

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/29/2024

Inspector(s): Dugan, Markson

General Location Features: Third & C St Intersection

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	East Effluent / 8" / Ductile Iron	64"	No Flow
2.			
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 2

Material of Construction: Concrete

Manhole Shape: Circular

Dimensions: 48"

Cover/Lid: 25" Type – C.I. Score – 2

Frame: Height – 6" Type – C.I. Score – 2

Chimney: Number/Height – 1/6" Score – 2

Cone: Height – 28" Type – Ecc. Score – 2

Reducing Slab: Height – N/A Score –

Barrel Sections: Number/Height – N/A Score –

Base: Height – 15" Score – 2

Shelf: Type – Conc. Score – 1

Steps: 3 Type: Metal Score – 1

Influent Pipe Connection(s):

N/A

Effluent Pipe Connection(s):

Grouting is receding, some mineralization

Gasket exposed along top of pipe

Graded score of 2

Additional Comments:

- Pipe ends along West side of shelf
- Chimney is experiencing some spalling
- High sediment build-up in invert before cleaning

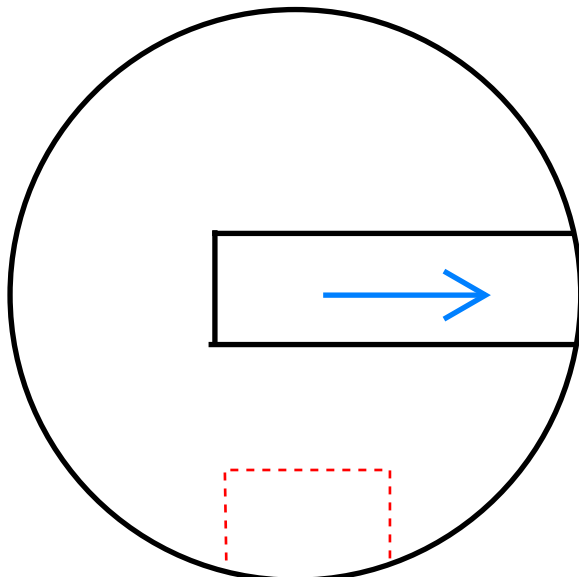




Image 1 – MH facing North along B St



Image 2 – MH facing East along Third St



Image 3 – Frame and Chimney



Image 4 – Base



Image 5 – East Effluent Connection



Image 6 – Chimney's Concrete Spalling

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH25-007

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/29/2024

Inspector(s): Dugan, Markson

General Location Features: Third & C St, in Front of Riverside Park Entrance

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	North Influent / 8" / Ductile Iron	110"	2"
2.	West Influent / 8" / Ductile Iron	110"	1"
3.	East Effluent / 8" / Ductile Iron	110.2"	2"
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 3	
Material of Construction: Concrete	
Manhole Shape: Circular	
Dimensions: 48"	
Cover/Lid: 25"	Type – C.I. Score – 2
Frame: Height – 6"	Type – C.I. Score – 2
Chimney: Number/Height – 1/10"	Score – 1
Cone: Height – 40"	Type – Ecc. Score – 1
Reducing Slab: Height – N/A	Score –
Barrel Sections: Number/Height – N/A	Score –
Base: Height – 46"	Score – 3
Shelf: Type – Conc.	Score – 4
Steps: 6 Type: Metal	Score – 1

Influent Pipe Connection(s):

Decent grouting
 North pipe has I&I gusher coming from East side of connection
 West pipe has gasket exposed
 Graded score of 3

Effluent Pipe Connection(s):

Solid grouting
 Graded score of 1

Additional Comments:

- Decommissioned 8" DI pipe connected 2 ft above West Influent connection
- Mineralization flowlines extending from not-in-use pipe connection
- Gusher difficult to discern until CCTV camera footage

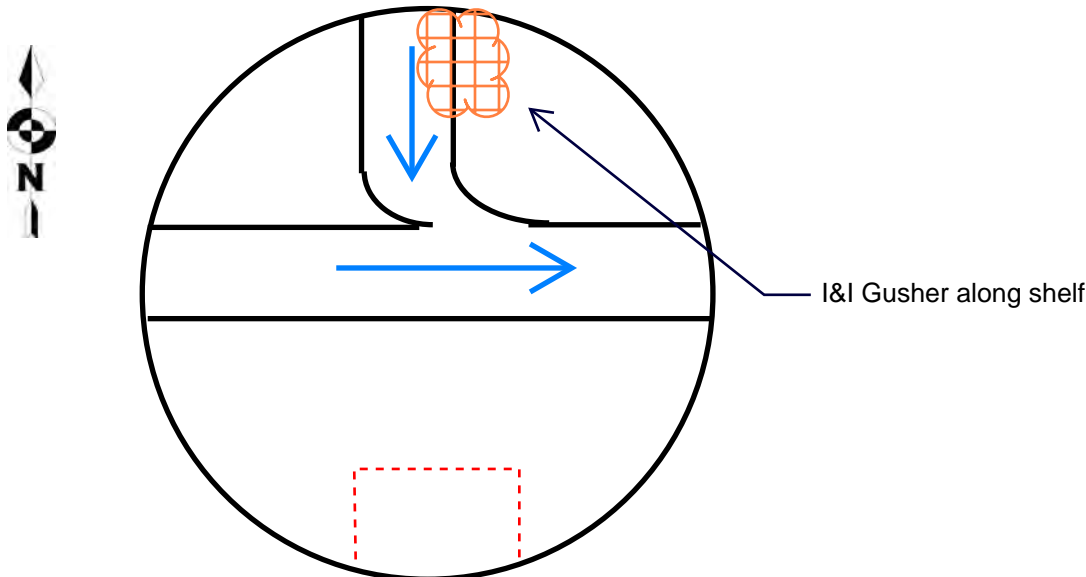




Image 1 – MH facing West along Third St

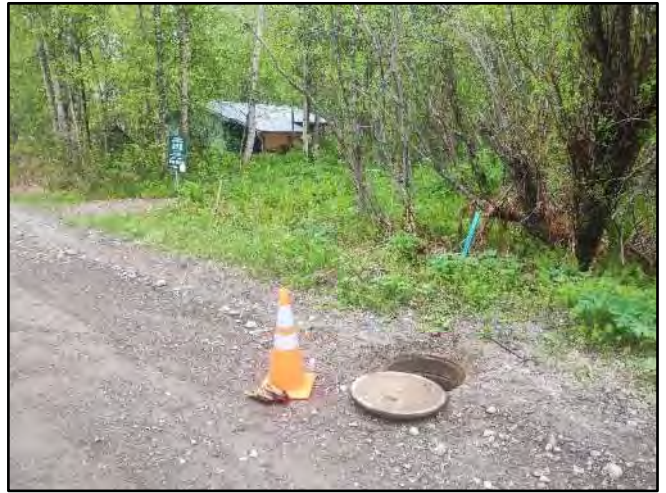


Image 2 – MH facing Riverside Park Entrance



Image 3 – Base



Image 4 – North Influent Connection



Image 5 – North Connection Gusher CCTV



Image 6 – West Influent Connection

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH25-009

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/31/2024

Inspector(s): Dugan

General Location Features: On Third St, 200 ft East of D & Third St Intersection

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	East Influent / 8" / Ductile Iron	106.5"	0.25"
2.	West Effluent / 8" / Ductile Iron	106.7"	0.25"
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 2	
Material of Construction: Concrete	
Manhole Shape: Circular	
Dimensions: 48"	
Cover/Lid: 25" Type – C.I. Score – 2	
Frame: Height – 6" Type – C.I. Score – 2	
Chimney: Number/Height – 1/6" Score – 1	
Cone: Height – 52" Type – Ecc. Score – 1	
Reducing Slab: Height – N/A Score –	
Barrel Sections: Number/Height – N/A Score –	
Base: Height – 32" Score – 3	
Shelf: Type – Conc. Score – 2	
Steps: 7 Type: Metal Score – 1	

Influent Pipe Connection(s):

Crack extending from grouting with I&I dripper on North side of connection
Graded score of 3

Effluent Pipe Connection(s):

Mineralization and missing concrete above connection
Graded score of 2

Additional Comments:

- I&I dripper coming from crack in West side
- Some mineralization present along South shelf

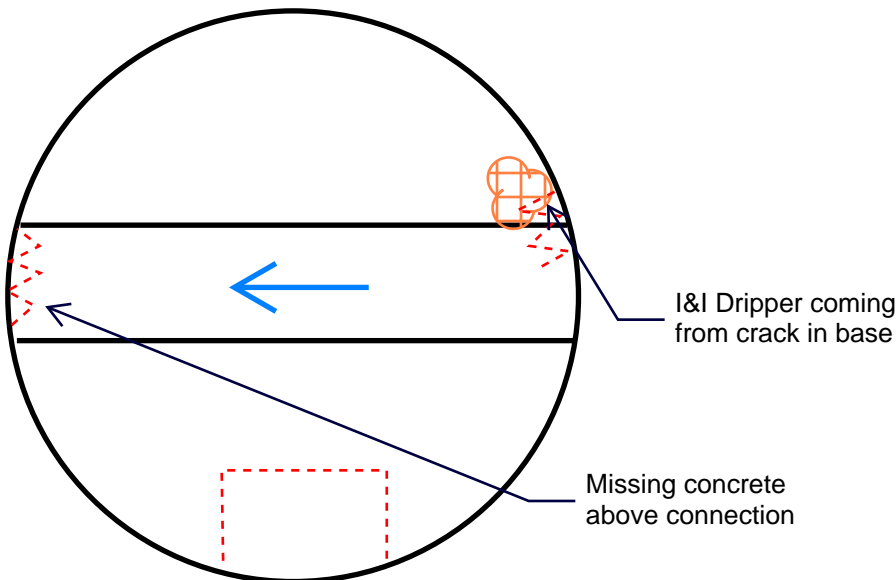




Image 1 – MH facing East along Third St



Image 2 – Cover, Frame, and Steps



Image 3 – Base



Image 4 – West Influent Connection



Image 5 – East Effluent Connection



Image 6 – Crack and I&I Dripper

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH25-0010

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/31/2024

Inspector(s): Dugan

General Location Features: At dead end of Third St on South side of Alaska Mountaineering School

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	Northeast Inflow / 8" / Ductile Iron	92.5"	Minimal
2.	West Effluent / 8" / Ductile Iron	92.7"	Minimal
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 3		
Material of Construction: Concrete		
Manhole Shape: Circular		
Dimensions: 48"		
Cover/Lid: 25"	Type – C.I.	Score – 1
Frame: Height – 6"	Type – C.I.	Score – 2
Chimney: Number/Height – 3/6"		Score – 1
Cone: Height – 28"	Type – Ecc.	Score – 1
Reducing Slab: Height – N/A		Score –
Barrel Sections: Number/Height – N/A		Score –
Base: Height – 31"		Score – 3
Shelf: Type – Conc.		Score – 4
Steps: 5	Type: Metal	Score – 1

Influent Pipe Connection(s):

South end of pipe has crack extending upwards
Heavy mineralization
Graded score of 3

Effluent Pipe Connection(s):

Decent grouting
Heavy mineralization
I&I dripper along South end of pipe
Graded score of 3

Additional Comments:

- Steel missing in 2" sections along both ends of invert's connection
- Steel missing in center of pipe for approximately 6"
- Concrete missing along South side of base
- Large amounts of moisture present on shelf

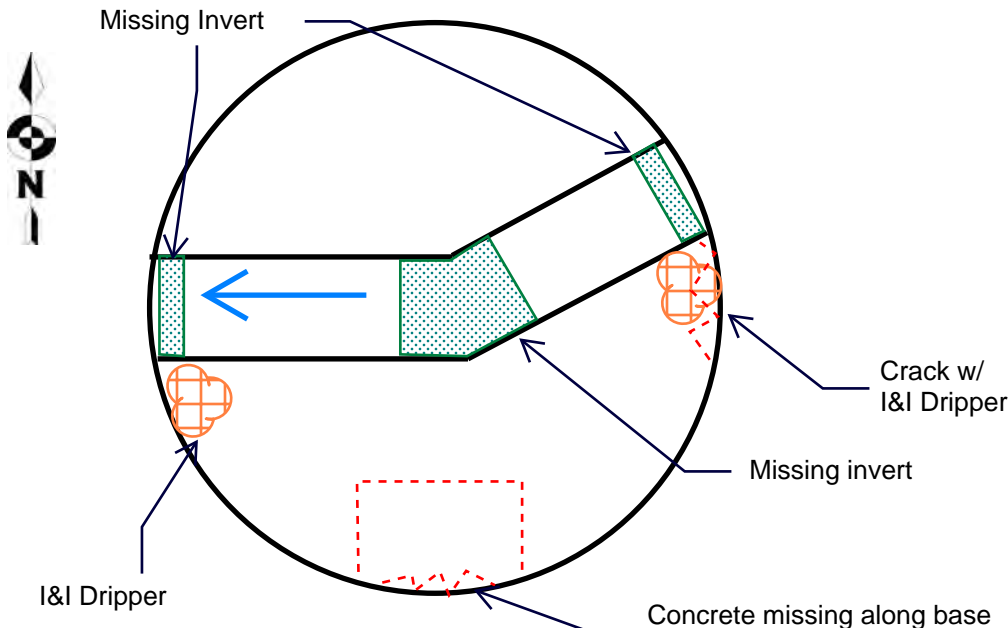




Image 1 – MH facing East along Third St



Image 2 – Frame, Chimney, and Steps



Image 3 – Missing Invert



Image 4 – West Effluent Connection and I&I Dripper



Image 5 – Northeast Influent Connection and Crack



Image 6 – Missing Concrete along Base

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH25-0011

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/31/2024

Inspector(s): Dugan

General Location Features: 100 ft East of Dead End on Third St, Just South of Chinook Wind Cabins

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	Southeast Inflow / 8" / Ductile Iron	83.8"	2.5"
2.	West Effluent / 8" / Ductile Iron	84"	2.5"
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 2		
Material of Construction: Concrete		
Manhole Shape: Circular		
Dimensions: 48"		
Cover/Lid: 25"	Type – C.I.	Score – 2
Frame: Height – 6"	Type – C.I.	Score – 2
Chimney: Number/Height – 1/6"		Score – 1
Cone: Height – 40"	Type – Ecc.	Score – 2
Reducing Slab: Height – N/A		Score –
Barrel Sections: Number/Height – N/A		Score –
Base: Height – 31"		Score – 2
Shelf: Type – Conc.		Score – 2
Steps: 6	Type: Metal	Score –1

Influent Pipe Connection(s):

Appears solid
Covered in large amounts of grime
Graded score of 2

Effluent Pipe Connection(s):

Appears solid
Covered in large amounts of grime
Graded score of 2

Additional Comments:

- Water in MH is standing water, no water movement
- Pipe experienced massive sludge clog before cleaning
- Base & connection difficult with remaining debris

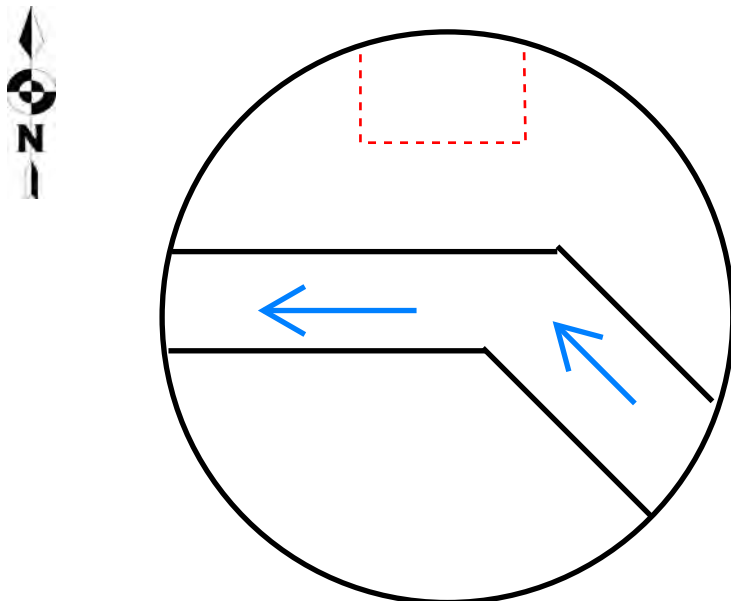




Image 1 – MH facing North towards Cabins



Image 2 – MH Facing East towards Denali Edu Center



Image 3 – Frame, Cone and Stairs



Image 4 – Base



Image 5 – East Influent Connection



Image 6 – West Effluent Connection

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH25-0012

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 6/1/2024

Inspector(s): Dugan

General Location Features: On Talkeetna Airport Tarmac, 100 ft North of Shipping Containers

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	South Influent / 8" / Ductile Iron	102"	Minimal
2.	Northeast Effluent / 8" / Ductile Iron	102.2"	Minimal
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 2

Material of Construction: Concrete

Manhole Shape: Circular

Dimensions: 48"

Cover/Lid: 25" Type – C.I. Score – 1

Frame: Height – 6" Type – C.I. Score – 1

Chimney: Number/Height – 1/2", 1/6", 1/1" Score – 3

Cone: Height – 52" Type – Ecc. Score – 1

Reducing Slab: Height – N/A Score –

Barrel Sections: Number/Height – N/A Score –

Base: Height – 27" Score – 1

Shelf: Type – Conc. Score – 2

Steps: 6 Type: Metal/Poly Score – 1

Influent Pipe Connection(s):

Solid grouting

Graded score of 1

Effluent Pipe Connection(s):

Decent grouting

Moderate mineralization along North side

Graded score of 2

Additional Comments:

- Chimney and connecting joints are experiencing significant wear/crushing

- 2 Reinforcing bars present, 1 is out of socket

- Sediment present on West shelf

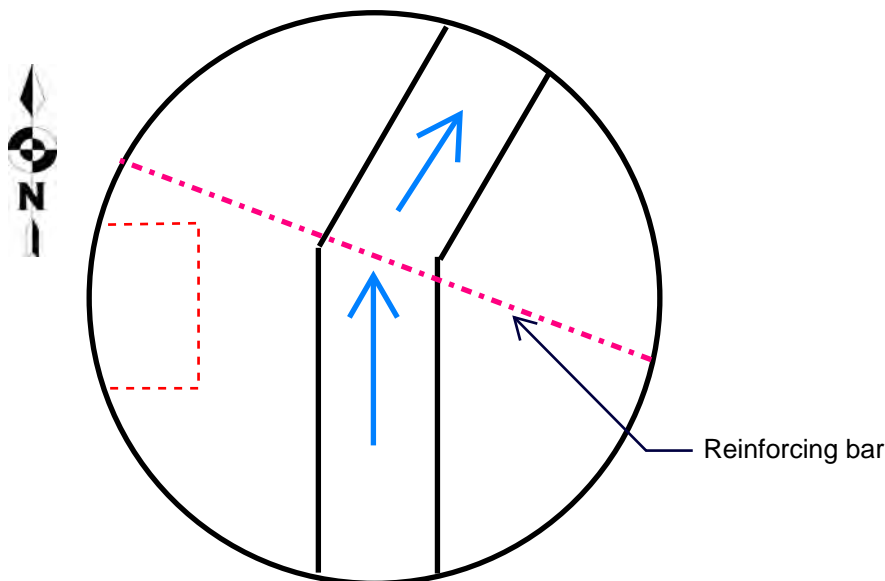




Image 1 – MH Facing North



Image 2 – MH facing NW towards K2



Image 3 – Frame and Chimney



Image 4 – Base



Image 5 – Sediment Build-up on West Shelf



Image 6 – Chimney Sections Eroding

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH25-0013

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 6/2/2024

Inspector(s): Dugan

General Location Features: 25 ft South of Shipping Containers at Talkeetna Airport

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	South Influent / 4" / Ductile Iron	78"	Minimal
2.	East Influent / 8" / Ductile Iron	80.8"	Minimal
3.	North Effluent / 8" / Ductile Iron	81"	Minimal
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 1

Material of Construction: Concrete

Manhole Shape: Circular

Dimensions: 48"

Cover/Lid: 25" Type – C.I. Score – 1

Frame: Height – 6" Type – C.I. Score – 2

Chimney: Number/Height – N/A Score –

Cone: Height – 40" Type – Ecc. Score – 2

Reducing Slab: Height – N/A Score –

Barrel Sections: Number/Height – N/A Score –

Base: Height – 27" Score – 1

Shelf: Type – Conc. Score – 1

Steps: 4 Type: Metal Score – 1

Influent Pipe Connection(s):

Solid grouting

Graded score of 1

Effluent Pipe Connection(s):

Solid grouting

Graded score of 1

Additional Comments:

Frame is approx. 1" off-center from cone

Joint between cone and base shows minor cracking

Reinforcing brackets in place, no bars present

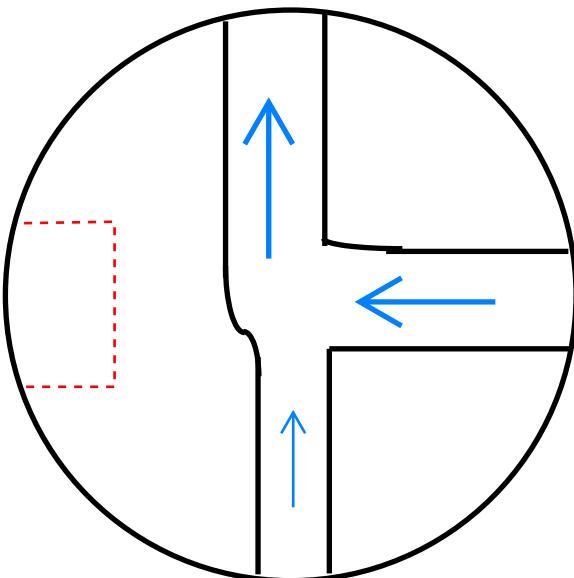




Image 1 – MH Facing North



Image 2 – MH facing East



Image 3 – Frame, Cone, and Stairs



Image 4 – Base



Image 5 – East Influent and North Effluent Connections



Image 6 – South Influent Connection

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH25-0014

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/31/2024

Inspector(s): Dugan

General Location Features: 25 ft West of Veterans Way & D St, on East side of Airfield

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	East Influent / 8" / Ductile Iron	92.5"	Minimal
2.	North Effluent / 8" / Ductile Iron	92.7"	Minimal
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 2

Material of Construction: Concrete

Manhole Shape: Circular

Dimensions: 48"

Cover/Lid: 25" Type – C.I. Score – 1

Frame: Height – 6" Type – C.I. Score – 2

Chimney: Number/Height – 1/4" Score – 1

Cone: Height – 28" Type – Ecc. Score – 2

Reducing Slab: Height – N/A Score –

Barrel Sections: Number/Height – 1/36" Score – 1

Base: Height – 31" Score – 2

Shelf: Type – Conc. Score – 2

Steps: 7 Type: Metal Score – 2

Influent Pipe Connection(s):

Solid grouting

Moderate mineralization

Graded score of 1

Effluent Pipe Connection(s):

Decent grouting

Minor gasket exposure

Moderate mineralization

Graded score of 2

Additional Comments:

- Small crack along the East side of cone

- Moisture in photos is from large quantities of water in catchpan

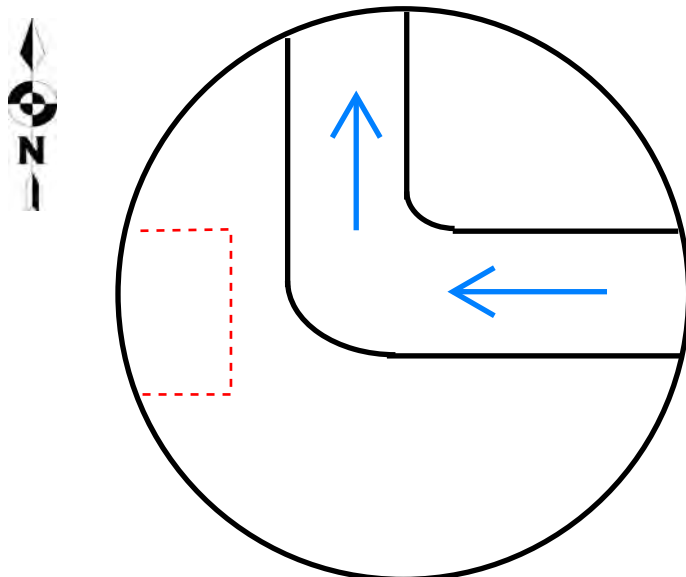




Image 1 – MH facing East from Airfield



Image 2 – Frame and Steps



Image 3 – Base



Image 4 – East Influent Connection



Image 5 – North Effluent Connection



Image 6 – Crack along cone

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH25-0015

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/30/2024

Inspector(s): Dugan

General Location Features: 50 ft West of Veterans Way & Timber Wolf Loop

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	East Influent / 8" / Ductile Iron	84.8"	0.5"
2.	South Influent / 8" / Ductile Iron	84.8"	Minimal
3.	West Effluent / 8" / Ductile Iron	85"	0.5"
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 2		
Material of Construction: Concrete		
Manhole Shape: Circular		
Dimensions: 48"		
Cover/Lid: 25"	Type – C.I.	Score – 1
Frame: Height – 6"	Type – C.I.	Score – 2
Chimney: Number/Height – 1/3"		Score – 2
Cone: Height – 28"	Type – Ecc.	Score – 1
Reducing Slab: Height – N/A		Score –
Barrel Sections: Number/Height – 1/24"		Score – 1
Base: Height – 15"		Score – 3
Shelf: Type – Conc.		Score – 2
Steps: 5	Type: Metal/Poly	Score – 1

Influent Pipe Connection(s):

2" Depth of concrete missing above South connection
 1" Depth of concrete missing above North connection
 Graded score of 4

Effluent Pipe Connection(s):

Decent grouting
 Moderate mineralization
 Graded score of 2

Additional Comments:

- Hairline crack along base that runs half the circumference along the East side (No I&I visible)
- Influent Pipe connections are in very poor shape

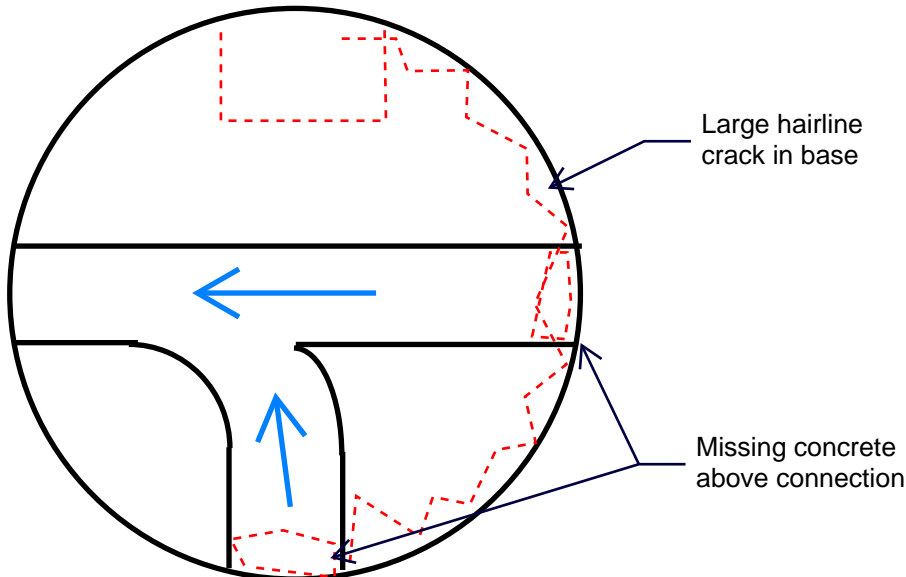




Image 1 – MH facing East on Veterans Way



Image 2 – MH Facing South



Image 3 – Base



Image 4 – South Influent Connection



Image 5 – East Influent Connection



Image 6 – Base Hairline Crack

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH25-0016

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/30/2024

Inspector(s): Dugan

General Location Features: Veterans Way & Timber Wolf Loop

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	East Influent / 8" / Ductile Iron	86"	0.25"
2.	West Effluent / 8" / Ductile Iron	86.5"	0.25"
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 2		
Material of Construction: Concrete		
Manhole Shape: Circular		
Dimensions: 48"		
Cover/Lid: 25"	Type – C.I.	Score – 2
Frame: Height – 6"	Type – C.I.	Score – 2
Chimney: Number/Height – 1/2"		Score – 2
Cone: Height – 40"	Type – Ecc.	Score – 1
Reducing Slab: Height – N/A		Score –
Barrel Sections: Number/Height – N/A		Score –
Base: Height – 35"		Score – 4
Shelf: Type – Conc.		Score – 2
Steps: 6	Type: Metal	Score – 1

Influent Pipe Connection(s):

Solid grouting
Graded score of 1

Effluent Pipe Connection(s):

Solid grouting
Graded score of 1

Additional Comments:

- Large crack along centerline of base for half the circumference along North side
- Several pieces of concrete missing
- Light mineralization descending from crack

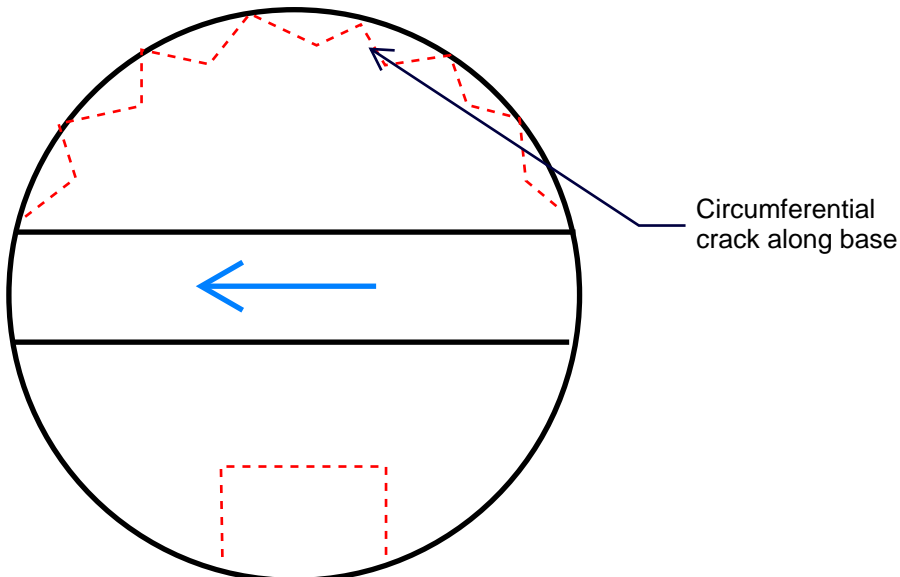




Image 1 – MH facing East on Veterans Way



Image 2 – Cone & Base



Image 3 – East Influent Connection



Image 4 – West Effluent Connection



Image 5 – East side of North Crack in Base



Image 6 – West side of North Crack in Base

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH25-0017

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/30/2024

Inspector(s): Dugan

General Location Features: 25 ft East of Talkeetna Spur & Veterans Way

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	South Influent / 8" / Ductile Iron	141"	1.5"
2.	North Influent / 6" / Ductile Iron	132.5"	1"
3.	West Effluent / 8" / Ductile Iron	141.2"	2"
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 3		
Material of Construction: Concrete		
Manhole Shape: Circular		
Dimensions: 48"		
Cover/Lid: 25"	Type – C.I.	Score – 1
Frame: Height – 6"	Type – C.I.	Score – 2
Chimney: Number/Height – 3/6"		Score – 2
Cone: Height – 40"	Type – Ecc.	Score – 2
Reducing Slab: Height – N/A		Score –
Barrel Sections: Number/Height – 1/24"		Score – 2
Base: Height – 35"		Score – 3
Shelf: Type – Conc.		Score – 4
Steps: 6	Type: Metal/Poly	Score – 1

Influent Pipe Connection(s):

North connection has some grouting missing
Grouting soft and very brittle
Graded score of 3

Effluent Pipe Connection(s):

Solid grouting
Graded score of 1

Additional Comments:

- Shelf missing concrete in several sections
- Concrete shelf extending from North pipe is actively eroding and very soft
- Invert is missing at attachment point from North pipe to main flow, water pooling in exposed concrete
- Moisture and sludge present along shelf, possible I&I but likely from high flows
- Cone's concrete spalling slightly

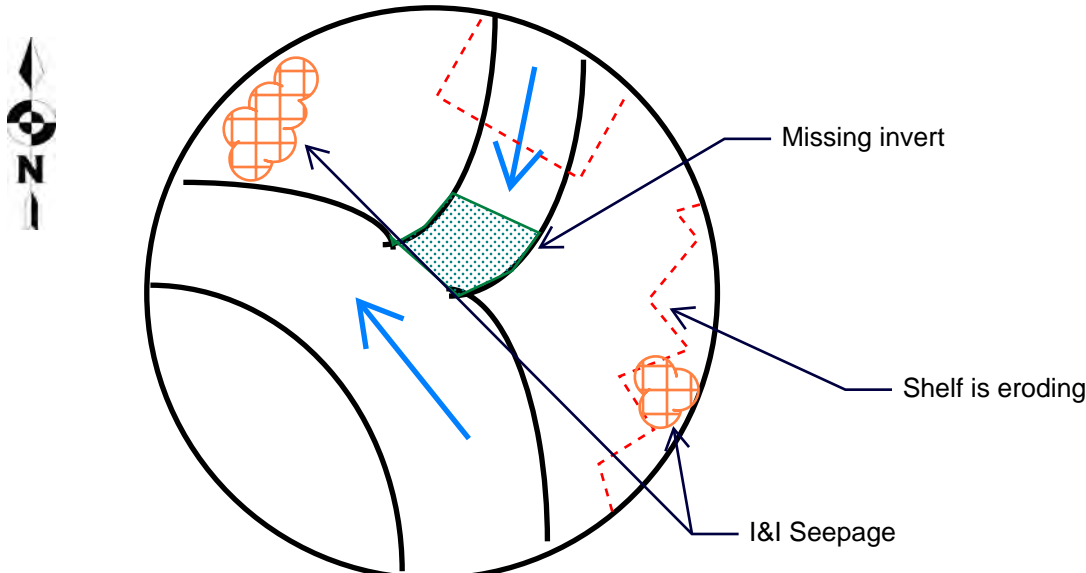




Image 1 – MH facing North on Talkeetna Spur



Image 2 – MH facing East toward Denali Fireside Cabins



Image 3 – Base



Image 4 – Missing Invert and Moisture on Shelf



Image 5 – Deteriorating North Influent Connection



Image 6 – South Influent Connection

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH25-0018

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/30/2024

Inspector(s): Dugan

General Location Features: 50 ft East off Talkeetna Spur, in Front of Latitude 62 Motel

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	South Influent / 8" / Ductile Iron	100"	Minimal
2.	North Effluent / 8" / Ductile Iron	100.2"	Minimal
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 1	
Material of Construction: Concrete	
Manhole Shape: Circular	
Dimensions: 48"	
Cover/Lid: 25"	Type – C.I. Score – 1
Frame: Height – 6"	Type – C.I. Score – 1
Chimney: Number/Height – 1/6"	Score – 2
Cone: Height – 52"	Type – Ecc. Score – 1
Reducing Slab: Height – N/A	Score –
Barrel Sections: Number/Height – N/A	Score –
Base: Height – 27"	Score – 2
Walls: Type – Conc.	Score – 2
Steps: 6 Type: Metal/Poly	Score – 1

Influent Pipe Connection(s):

Solid grouting
 Nearly flush with wall, no protrusion
 Graded score of 1

Effluent Pipe Connection(s):

Solid grouting
 Graded score of 1

Additional Comments:

- Moisture present along both shelves

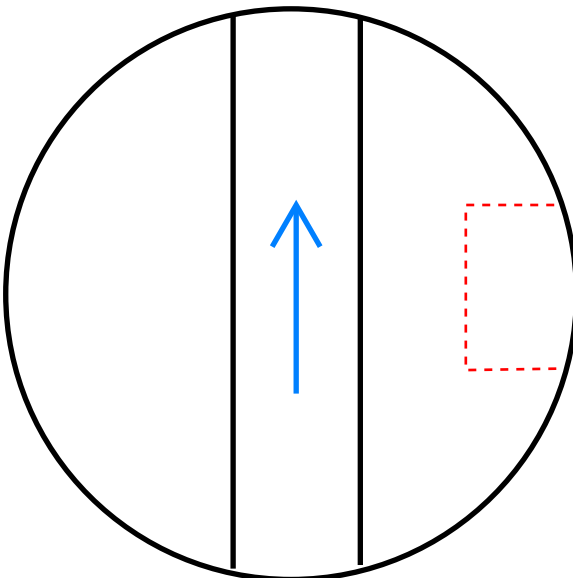




Image 1 – MH facing South in Parking Lot



Image 2 – MH facing Latitude 62 Motel



Image 3 – Cone, Stairs, and Base



Image 4 – Base



Image 5 – South Influent Connection



Image 6 – North Effluent Connection

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH25-0019

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/31/2024

Inspector(s): Dugan

General Location Features: 150 ft Northwest of Talkeetna Elementary, 200 ft South of Veterans Way

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	South Influent / 8" / Ductile Iron	72.5"	Minimal
2.	North Influent / 8" / Ductile Iron	72.7"	Minimal
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 2		
Material of Construction: Concrete		
Manhole Shape: Circular		
Dimensions: 48"		
Cover/Lid: 25"	Type – C.I.	Score – 2
Frame: Height – 6"	Type – C.I.	Score – 1
Chimney: Number/Height – N/A		Score –
Cone: Height – 52"	Type – Ecc.	Score – 2
Reducing Slab: Height – N/A		Score –
Barrel Sections: Number/Height – N/A		Score –
Base: Height – 7"		Score – 2
Shelf: Type – Conc.		Score – 2
Steps: 4	Type: Metal	Score – 2

Influent Pipe Connection(s):

Grouting is solid
 Large roots growing adjacent
 Minor mineralization
 Graded score of 2

Effluent Pipe Connection(s):

Solid grouting
 Graded score of 1

Additional Comments:

- South part of invert is missing pipe for 1" section
- Joint between cone and base is experiencing root intrusion on several sides
- Soil present along shelf before cleaning

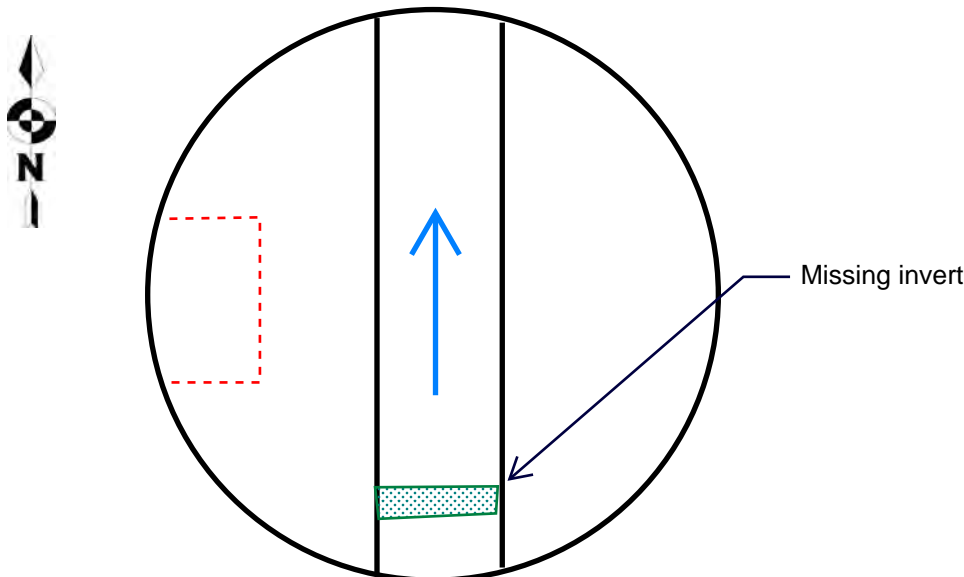




Image 1 – MH facing North along Powerline



Image 2 – MH facing Southeast towards Talkeetna Elementary



Image 3 – South Influent with Missing Invert



Image 4 – North Effluent



Image 5 – Shelf and Root Intrusion



Image 6 – Stairs and Base

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH25-0021

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/30/2024

Inspector(s): Dugan

General Location Features: 50 ft East of Talkeetna Spur, just South of RV Park

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	South Influent / 8" / Ductile Iron	171"	1"
2.	North Influent / 8" / Ductile Iron	171.2"	1"
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 1	
Material of Construction: Concrete	
Manhole Shape: Circular	
Dimensions: 48"	
Cover/Lid: 25" Type – C.I. Score – 2	
Frame: Height – 6" Type – C.I. Score – 2	
Chimney: Number/Height – 1/6" Score – 2	
Cone: Height – 52" Type – Ecc. Score – 2	
Reducing Slab: Height – N/A Score –	
Barrel Sections: Number/Height – 1/72" Score – 1	
Base: Height – 7" Score – 1	
Shelf: Type – Conc. Score – 1	
Steps: 12 Type: Metal Score – 1	

Influent Pipe Connection(s):

Solid grouting
Graded score of 1

Effluent Pipe Connection(s):

Solid grouting
Graded score of 1

Additional Comments:

- Chimney and joint above cone are being penetrated by roots & organic matter

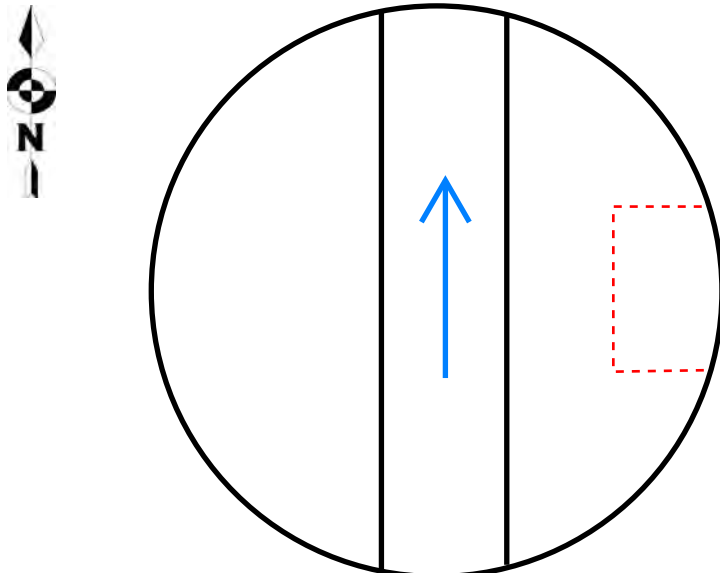




Image 1 – MH facing North towards RV Park



Image 2 – Cover and Frame



Image 3 – Chimney, Cone, and Stairs



Image 4 – Barrel and Base



Image 5 – South Influent Connection



Image 6 – North Effluent Connection

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH25-0022

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/30/2024

Inspector(s): Dugan

General Location Features: 50 ft East of Talkeetna Spur, facing

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	South Influent / 8" / Ductile Iron	134.5"	0.5"
2.	North Influent / 8" / Ductile Iron	134.7"	0.5"
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 2

Material of Construction: Concrete

Manhole Shape: Circular

Dimensions: 48"

Cover/Lid: 25" Type – C.I. Score – 1

Frame: Height – 6" Type – C.I. Score – 1

Chimney: Number/Height – 1/6" Score – 1

Cone: Height – 40" Type – Ecc. Score – 3

Reducing Slab: Height – N/A Score –

Barrel Sections: Number/Height – 1/48" Score – 3

Base: Height – 24" Score – 2

Shelf: Type – Conc. Score – 1

Steps: 9 Type: Metal Score – 1

Influent Pipe Connection(s):

Solid grouting

Graded score of 1

Effluent Pipe Connection(s):

Solid grouting

Graded score of 1

Additional Comments:

- Root & plant growth along East interior of cone, barrel and base, no cracks visible

- No roots present on shelf or in base

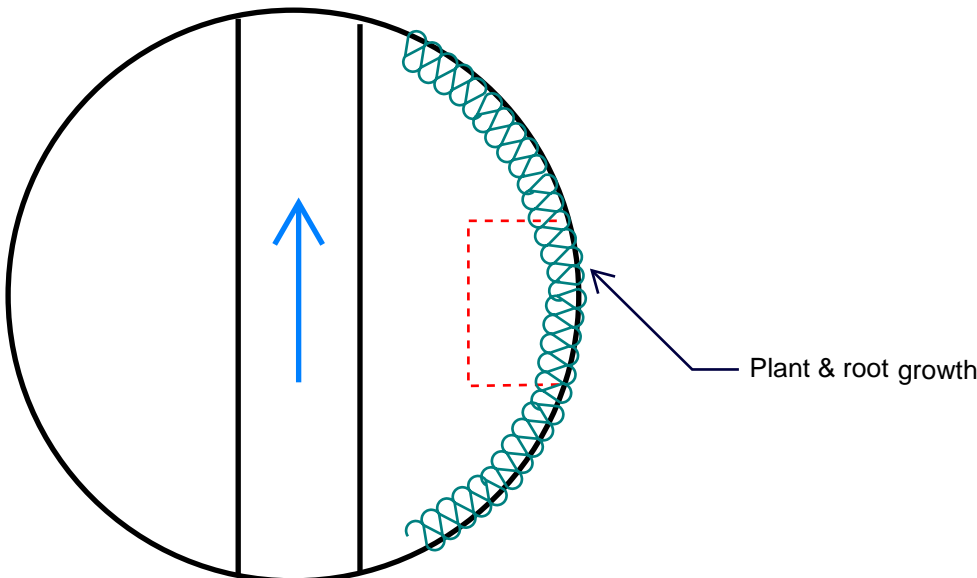




Image 1 – MH Facing North Parallel to Talkeetna Spur



Image 2 – MH Facing North Parallel to Talkeetna Spur



Image 3 – Frame, Chimney, and Cone



Image 4 – Base



Image 5 – Root Growth on East Cone and Barrel



Image 6 – Root Growth along Barrel and Base

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH25-0023

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/30/2024

Inspector(s): Dugan

General Location Features: 25 ft East of Talkeetna Spur, 200 ft South of Tesla Circle

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	West Influent / 8" / Ductile Iron	117.8"	Minimal
2.	North Effluent / 8" / Ductile Iron	118"	Minimal
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 2		
Material of Construction: Concrete		
Manhole Shape: Circular		
Dimensions: 48"		
Cover/Lid: 25" Type – C.I.	Score – 1	
Frame: Height – 6" Type – C.I.	Score – 2	
Chimney: Number/Height – 1/6"	Score – 2	
Cone: Height – 52" Type – Ecc.	Score – 3	
Reducing Slab: Height – N/A	Score –	
Barrel Sections: Number/Height – 1/24"	Score – 1	
Base: Height – 32"	Score – 1	
Shelf: Type – Conc.	Score – 2	
Steps: 9 Type: Metal	Score – 2	

Influent Pipe Connection(s):

Solid grouting
Graded score of 1

Effluent Pipe Connection(s):

Solid grouting
Graded score of 1

Additional Comments:

- Extensive plant roots growing along West side of cone
- No evidence of I&I from plant roots
- Missing concrete section along shelf with mineralization present

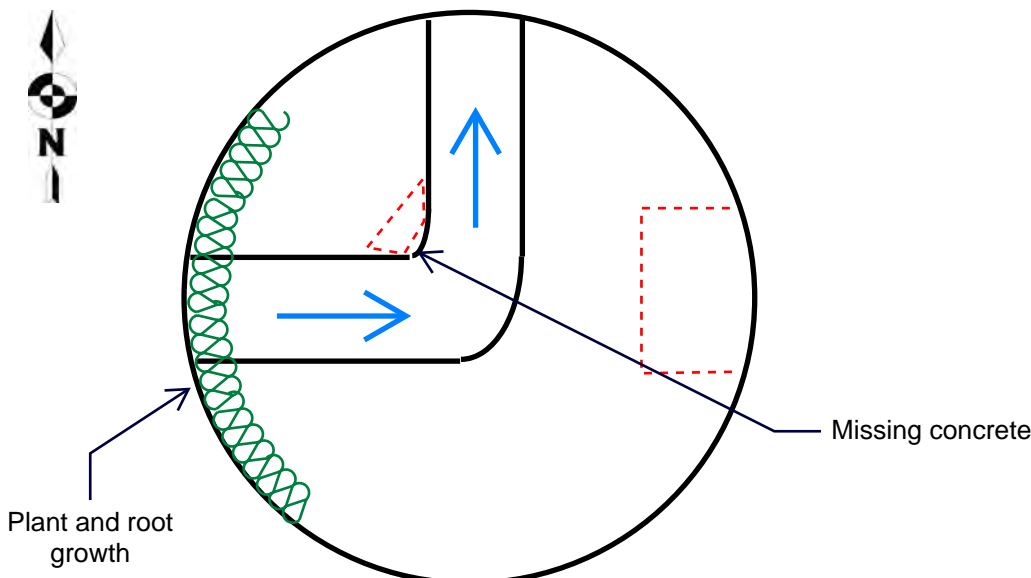




Image 1 – MH Facing Southeast from Talkeetna Spur



Image 2 – Frame, Chimney, and Steps



Image 3 – Base



Image 4 – Root Growth along Cone



Image 5 – Missing Concrete on Shelf



Image 6 – North and West Connections

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH25-0024

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/30/2024

Inspector(s): Dugan

General Location Features: On Veterans Way, 50 ft West of Talkeetna Spur

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	West Influent / 8" / Ductile Iron	112.8"	0.5"
2.	East Effluent / 8" / Ductile Iron	113"	0.5"
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 1

Material of Construction: Concrete

Manhole Shape: Circular

Dimensions: 48"

Cover/Lid: 25" Type – C.I. Score – 1

Frame: Height – 6" Type – C.I. Score – 1

Chimney: Number/Height – 1/6" Score – 2

Cone: Height – 40" Type – Ecc. Score – 1

Reducing Slab: Height – N/A Score –

Barrel Sections: Number/Height – 1/24" Score – 1

Base: Height – 32" Score – 1

Shelf: Type – Conc. Score – 1

Steps: 7 Type: Metal Score – 2

Influent Pipe Connection(s):

Solid grouting

Graded score of 1

Effluent Pipe Connection(s):

Solid grouting

Graded score of 1

Additional Comments:

- Some concrete missing along chimney

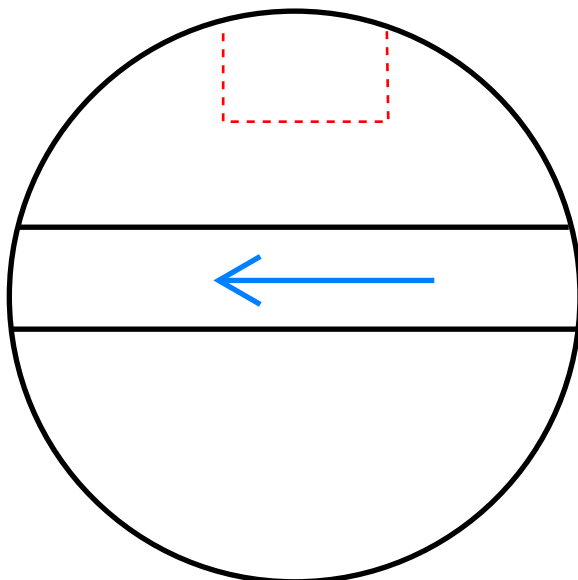




Image 1 – MH Facing East on Veterans Way



Image 2 – MH Facing Towards Fire Station



Image 3 – Base



Image 4 – West Influent



Image 5 – East Effluent



Image 6 – Missing Concrete along Chimney

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH25-0025

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 5/29/2024

Inspector(s): Dugan, Markson

General Location Features: Intersection of Second & B St

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	North Influent / 8" / Ductile Iron	72"	0.5"
2.	West Effluent / 8" / Ductile Iron	72.1"	0.5"
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 2		
Material of Construction: Concrete		
Manhole Shape: Circular		
Dimensions: 48"		
Cover/Lid: 25"	Type – C.I.	Score – 1
Frame: Height – 6"	Type – C.I.	Score – 2
Chimney: Number/Height – 1/6"		Score – 1
Cone: Height – 28"	Type – Ecc.	Score – 1
Reducing Slab: Height – N/A		Score –
Barrel Sections: Number/Height – N/A		Score –
Base: Height – 30"		Score – 2
Shelf: Type – Conc.		Score – 3
Steps: 4	Type: Poly	Score – 1

Influent Pipe Connection(s):

Decent grouting, some pipe exposure
 Significant mineralization
 Graded score of 2

Effluent Pipe Connection(s):

Decent grouting, some pipe exposure
 Highly mineralized
 Graded score of 2

Additional Comments:

- Manhole is NOT a cleanout as listed on map
- MH is West of Intersection, not East as shown on map
- 3 inches of standing water present throughout the entire shelf
- Significant sediment/mineralization build-up lining the pipe

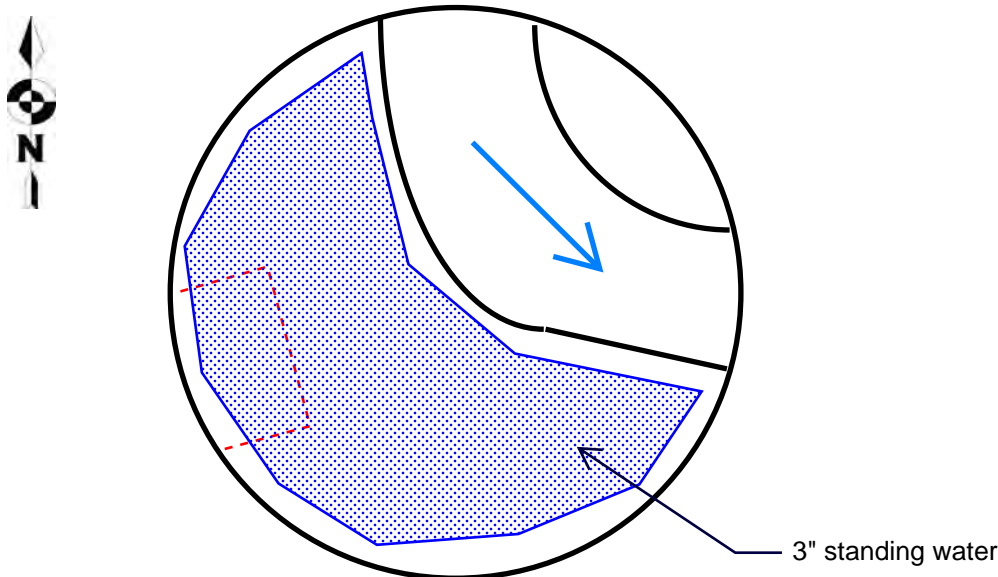




Image 1 – MH facing West towards Talkeetna Inn



Image 2 – MH Facing East along Second St



Image 3 – Base



Image 4 – North Influent Connection



Image 5 – West Effluent Connection



Image 6 – Solids Build-Up Lining Pipe

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH25-0026

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 7/1/2024

Inspector(s): Dugan

General Location Features: Along Veterans Way, underneath road asphalt

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	East Influent / 8" / Ductile Iron	76"	0.5"
2.	West Effluent / 8" / Ductile Iron	76.2"	0.5"
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 1	
Material of Construction: Concrete	
Manhole Shape: Circular	
Dimensions: 48"	
Cover/Lid: 25" Type – C.I. Score – 2	
Frame: Height – 6" Type – C.I. Score – 2	
Chimney: Number/Height – 1/6", 1/4" Score – 1	
Cone: Height – 28" Type – Ecc. Score – 1	
Reducing Slab: Height – N/A Score –	
Barrel Sections: Number/Height – N/A Score –	
Base: Height – 26" Score – 2	
Shelf: Type – Conc. Score – 2	
Steps: 4 Type: Metal Score –1	

Influent Pipe Connection(s):

Solid grouting, small hairline crack
Graded score of 2

Effluent Pipe Connection(s):

Solid grouting
Graded score of 1

Additional Comments:

- Manhole is not labeled on original map and is 18" below road grade
- Catchpan is highly mineralized
- Small hairline crack present along East side of shelf
- Minor seepage North of West connection

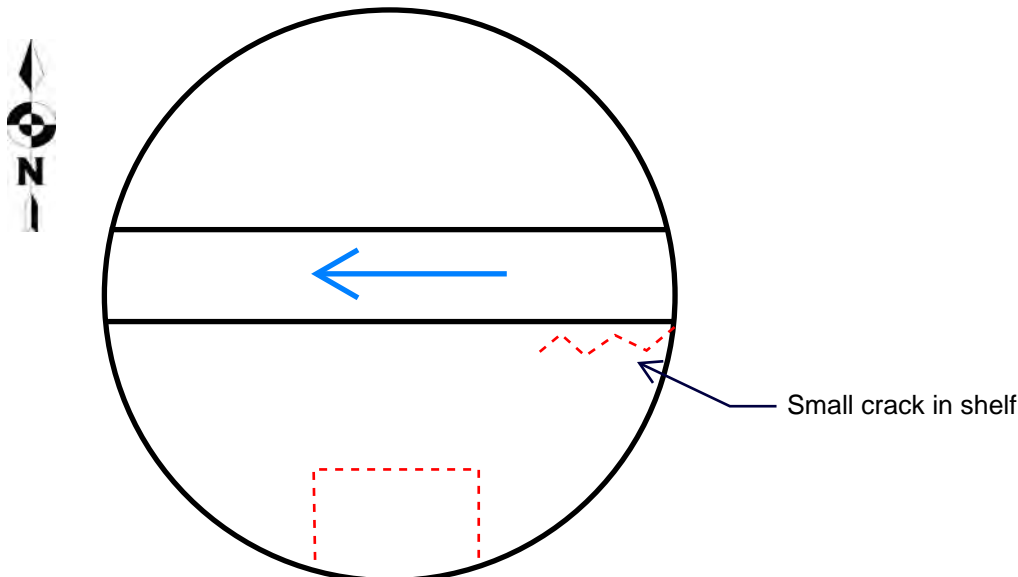




Image 1 – MH facing East along Veterans Way



Image 2 – Frame, Lid, and Catchpan



Image 3 – Chimney, Cone, and Stairs



Image 4 – Base



Image 5 – East Influent Connection and Crack



Image 6 – West Effluent Connection

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH30-001

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 6/1/2024

Inspector(s): Dugan

General Location Features: On Talkeetna Airport Tarmac, approximately 50 ft Southwest of Okonek Hangar

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	South Influent / 8" / Ductile Iron	119"	Minimal
2.	North Influent / 8" / Ductile Iron	119.2"	Minimal
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 2		
Material of Construction: Concrete		
Manhole Shape: Circular		
Dimensions: 48"		
Cover/Lid: 25"	Type – C.I.	Score – 1
Frame: Height – 6"	Type – C.I.	Score – 2
Chimney: Number/Height – 2/2", 1/6"		Score – 3
Cone: Height – 52"	Type – Ecc.	Score – 2
Reducing Slab: Height – N/A		Score –
Barrel Sections: Number/Height – N/A		Score –
Base: Height – 36"		Score – 1
Shelf: Type – Conc.		Score – 1
Steps: 6	Type: Metal/Poly	Score – 2

Influent Pipe Connection(s):

Solid grouting
Graded score of 1

Effluent Pipe Connection(s):

Solid grouting
Graded score of 1

Additional Comments:

- Frame and chimney are 3" off-center
- Chimney is experiencing significant cracks and wear
- 2 reinforcing bars are present, only 1 is operational

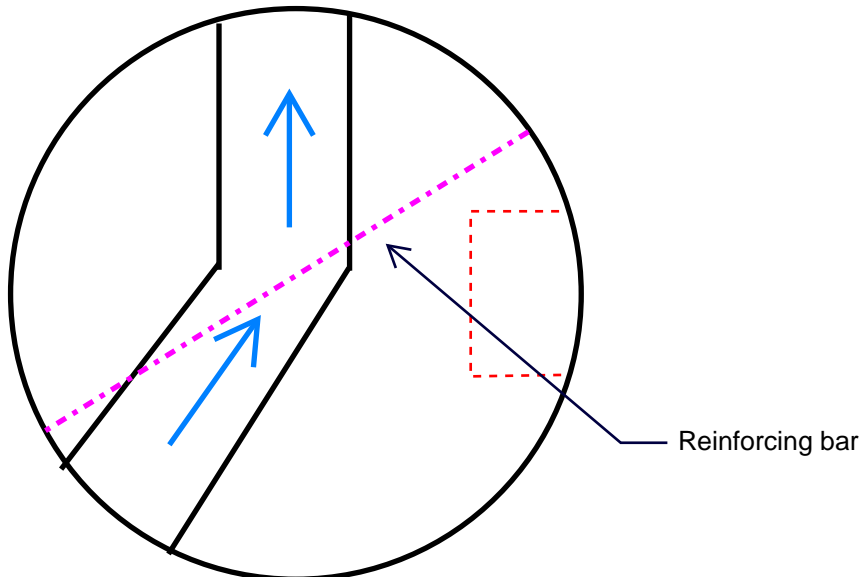




Image 1 – MH Facing South on Tarmac



Image 2 – MH facing NE to Okonek Hangar



Image 3 – Frame and Chimney Offset



Image 4 – Chimney Cracking



Image 5 – Base



Image 6 – Wear Along Steps

Talkeetna Sewer Condition Assessment

SEWER STRUCTURE INSPECTION REPORT

Structure #: MH30-002

DATE, INSPECTOR(S), & LOCATION DATA

Date of Inspection: 6/2/2024

Inspector(s): Dugan

General Location Features: 50 ft Southeast of TAT Airport Maintenance Hangar, Buried

PIPE CHARACTERISTICS

	In-Effluent Pipe Size/Type/Diameter	Rim to Invert	Depth of Flow
1.	South Influent / 4" / Ductile Iron	63.5"	Minimal
2.	West Effluent / 8" / Ductile Iron	65"	Minimal
3.			
4.			
5.			
6.			

MANHOLE CHARACTERISTIC

Defect grades: 0=No defect, 1=Minor Defect, 2=Minor to moderate Defect, 3=Moderate defect, 4=Significant defect, 5=Most significant defect

Overall Structural Condition: Score – 2		
Material of Construction: Concrete		
Manhole Shape: Circular		
Dimensions: 48"		
Cover/Lid: 25"	Type – C.I.	Score – 2
Frame: Height – 6"	Type – C.I.	Score – 2
Chimney: Number/Height – N/A		Score –
Cone: Height – 28"	Type – Ecc.	Score – 1
Reducing Slab: Height – N/A		Score –
Barrel Sections: Number/Height – N/A		Score –
Base: Height – 20"		Score – 1
Shelf: Type – Conc.		Score – 2
Steps: 3	Type: Metal/Poly	Score – 2

Influent Pipe Connection(s):

Solid grouting
Graded score of 1

Effluent Pipe Connection(s):

Solid grouting
Graded score of 1

Additional Comments:

- Neither reinforcing bar is in place nor functional
- Pipe invert missing for approx. 6" section where the two pipes connect

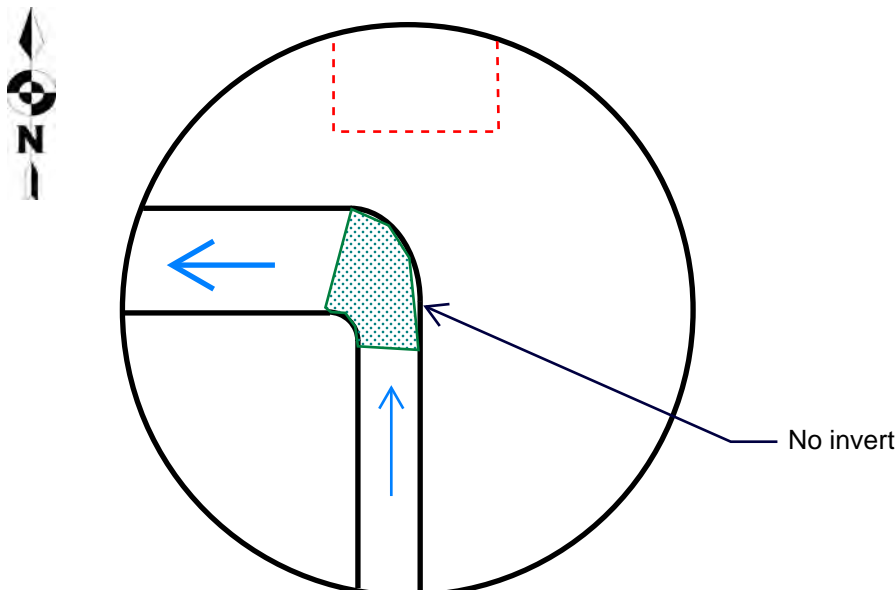




Image 1 – MH Facing Northeast



Image 2 – MH facing NW to TAT Hangar



Image 3 – Frame and Cone



Image 4 – Base



Image 5 – South Influent Connection



Image 6 – West Effluent and Missign Invert