

**2015 ROUTINE  
BRIDGE INSPECTION REPORT**



**BRIDGE # 62597  
SHEPARD RD(CSAH37) over SEWER**

**DISTRICT: Metro**

**COUNTY: Ramsey**

**CITY/TOWNSHIP: St Paul**

**Date(s) of Inspection: 10/30/2015**

**Equipment Used:**

**Owner: City or Municipal Highway Agency**

**Inspected By: Ekstrand, Ron; Engel, Michael; Schaaf, Jerry; Sirian, Kirk**

**Report Written By: Ron Ekstrand**

**Report Reviewed By: Glenn Pagel**

**Final Report Date: 12/31/2015**

**MnDOT Bridge Office  
3485 Hadley Avenue North  
Oakdale, MN 55128**



# MnDOT Structure Inventory Report

Bridge ID: 62597

SHEPARD RD(CSAH37)

over SEWER

Date: 12/31/2015

GENERAL	
Agency Br. No.	
District	Metro
Maint. Area	Crew
County	062 - Ramsey
City	St Paul
Township	
Desc. Loc.	NEAR WABASHA ST
Sect., Twp., Range	6 - 028N - 22W
Latitude	Deg 44 Min 56 Sec 34.61
Longitude	Deg 93 Min 5 Sec 36.62
Custodian	04 - City or Municipal Highway Agency
Owner	04 - City or Municipal Highway Agency
BMU Agreement	
Year Built	2004
MN Year Reconstructed	
FHWA Year Reconstructed	
MN Temporary Status	
Bridge Plan Location	
Date Opened to Traffic	1/1/1901
On-Off System	1 - ON
Legislative District	65B

STRUCTURE	
Service On	1 - Highway
Service Under	0 - Other
Main Span Type	5 - Prestress or Precast 13 - Box Culvert
Main Span Detail	
Appr. Span Type	
Appr. Span Detail	
Skew	0
Culvert Type	
Barrel Length	ft.
Cantilever ID	

NUMBER OF SPANS	
MAIN: 1	APPR: 0 TOTAL: 1
Main Span Length	29.5 ft.
Structure Length	29.5 ft.
Deck Width (Out-to-Out)	0.0 ft.
Deck Material	N - Not Applicable
Wear Surf Type	N - Not Applicable (applies onl
Wear Surf Install Year	
Wear Course/Fill Depth	ft.
Deck Membrane	N - Not Applicable (applies onl
Deck Rebars	N - Not Applicable (no deck)
Deck Rebars Install Year	
Structure Area (Out-to-Out)	0 sq. ft.
Roadway Area (Curb-to-Curb)	sq. ft.
Sidewalk Width	Lt 0.00 ft. Rt 0.00 ft.
Curb Height	Lt ft. Rt ft.
Rail Type	Lt Rt

ROADWAY	
Bridge Match ID (TIS)	0
Roadway O/U Key	Route On Structure
Route Sys	04 - CSAH Number 37
Roadway Name or Description	SHEPARD RD (CSAH 37)
Level of Service	1 - MAINLINE
Roadway Type	2 - 2-way traffic
Control Section (TH Only)	
Reference Point	001+00.730
Detour Length	0.0 mi
Lanes	On 4 Under 0
	ADT 16135 Year 2008
HCACT	0 ADTT 0 %
Functional Class	14 - Urban - Other Principal Art

RDWY DIMENSIONS			
If Divided	NB-EB	SB-WB	
Roadway Width	42.65 ft.	ft.	
Vertical Clearance	ft.	ft.	
Max. Vert. Clear.	ft.	ft.	
Horizontal Clear.	ft.	ft.	
Lateral Clearance	ft.	ft.	
Appr. Surface Width	42.7 ft.		
Bridge Roadway Width	0.0 ft.		
Median Width On Bridge	ft.		

MISC. BRIDGE DATA	
Structure Flared	0 - No flare
Parallel Structure	N - No parallel structure
Field Conn. ID	
Abutment Foundation	
(Material/Type)	
Pier Foundation	
(Material/Type)	
Historic Status	5 - Not eligible

PAINT	
Year Painted	
Unsound Paint %	
Painted Area	sq. ft.
Primer Type	
Finish Type	

BRIDGE SIGNS	
Posted Load	0 - Not Required
Traffic	
Horizontal	
Vertical	

INSPECTION	
Userkey	199
Unofficial Structurally Deficient	N
Unofficial Functionally Obsolete	N
Unofficial Sufficiency Rating	85.0
Routine Inspection Date	10/30/2015
Routine Inspection Frequency	24
Inspector Name	City of St. Paul
Status	A - Open

NBI CONDITION RATINGS	
Deck	N - Not Applicable
Unsound Deck %	
Superstructure	N - Not Applicable
Substructure	N - Not Applicable
Channel	N - Not Applicable
Culvert	8 - No noticeable deficiencies

NBI APPRAISAL RATINGS	
Structure Evaluation	8
Deck Geometry	N
Underclearances	N
Water Adequacy	N - Not Applicable
Approach Alignment	9 - Superior to present desir

SAFETY FEATURES	
Bridge Railing	N - NOT REQUIRED
GR Transition	N - NOT REQUIRED
Appr. Guardrail	N - NOT REQUIRED
GR Termini	N - NOT REQUIRED

IN DEPTH INSP.		
Y/N	Freq	Date
Frac. Critical		
Underwater		
Pinned Asbly.		
Spec. Feat.		

WATERWAY	
Drainage Area (sq. mi.)	
Waterway Opening	sq. ft.
Navigation Control	0 - No nav. control on waterw
Pier Protection	
Nav. Clr. (ft.)	Vert. ft. Horiz. ft.
Nav. Vert. Lift Bridge Clear. (ft.)	
MN Scour Code	A - NON WATER' Year

CAPACITY RATINGS	
Design Load	0 - Other/Unknown
Operating Rating	5 - NRAP 42.0
Inventory Rating	5 - NRAP 25.0
Posting VEH:	SEMI: DBL:
Rating Date	8/26/2008

MnDOT Permit Codes	
A:	N - N/A
B:	N - N/A
C:	N - N/A

# MnDOT BRIDGE INSPECTION REPORT

12/31/2015

Inspector: City of St. Paul

**BRIDGE 62597 SHEPARD RD(CSAH37) OVER SEWER**

**ROUTINE INSP. DATE: 10/30/2015**

County: Ramsey	Location: NEAR WABASHA ST	Length: 29.5 ft.
City: St Paul	Route: 04 - CSAH 37 Ref. Pt.: 001+00.730	Deck Width: 0.0 ft.
Township:	Control Section:	Rdwy. Area/ Pct. Unsnd: sq. ft. / %
Section: 6 Township: 028N Range: 22W Maint. Area:		Paint Area/ Pct. Unsnd: sq. ft. / %
Span Type: 1 - Concrete 19 - Culvert (includes frame culverts)	Local Agency Bridge Nbr.:	Culvert: N/A
List:		Postings:
NBI Deck: N Super: N Sub: N Chan: N Culv: 8	Open, Posted, Closed: A - Open	
	MN Scour Code: A - NON WATERWAY	

Appraisal Ratings - Approach: 9 Waterway: N	Unofficial Structurally Deficient N
Required Bridge Signs - Load Posting: 0 - Not Required	Unofficial Functionally Obsolete N
Horizontal:	Unofficial Sufficiency Rating 85.0
Vertical:	

Structure Unit:

ELEM NBR	ELEMENT NAME	ENV	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
241	Reinforced Concrete Culvert	2	Routine	10/30/2015	98 LF	98	0	0	0	N/A
			Routine	10/30/2013	98 LF	98	0	0	0	N/A

Requires Monitoring                       Monitored

Notes: The joint in the older sewer where the sidewalls begin to taper wider is very deteriorated and water leaks thru the top and sidewalls. 07.  
 Sewer Maintenance said they have a contract being bid for repairs to this sewer. 07-08.  
 See plan sheet W-33 of 45 for location.  
 2008 - Top slab has several transverse cracks with efflorescence. They are hairline cracks and there is no sag in the top structural slab.  
 Minor cracking and efflorescence present. 2013-15

334	Metal Bridge Railing (Coated or Painted)	2	Routine	10/30/2015	30 LF	30	0	0	0	0
			Routine	10/30/2013	30 LF	30	0	0	0	0

Requires Monitoring                       Monitored

Notes: The railing is on the north riverbank walk on top of the culvert headwall. 2007-15

388	Culvert Headwall, Wingwall or Other End Treatment	2	Routine	10/30/2015	2 EA	2	0	0	0	N/A
			Routine	10/30/2013	2 EA	2	0	0	0	N/A

Requires Monitoring                       Monitored

Notes: Minor cracking present. 2013-15

964	Critical Finding Smart Flag	2	Routine	10/30/2015	1 EA	1	0	N/A	N/A	N/A
			Routine	10/30/2013	1 EA	1	0	N/A	N/A	N/A

Requires Monitoring                       Monitored

Notes: DO NOT DELETE THIS CRITICAL FINDING SMART FLAG.

Structure Unit:

ELEM NBR	ELEMENT NAME	ENV	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
987	Roadway over Culvert	2	Routine	10/30/2015	1 EA	0	1	0	N/A	N/A
			Routine	10/30/2013						

 Requires Monitoring Monitored

Notes: CSAH 37 is over the storm sewer culvert. 2015  
 Roadway, trail and walk over the culvert have minor cracking. 2013-15  
 Crack size in the roadway seems to have increased. (Monitor) 2015  
 Moderate cracking is present along the edges of the culvert. CS-2 2015

988	Miscellaneous Items	1	Routine	10/30/2015	1 EA	1	0	0	N/A	N/A
			Routine	10/30/2013	1 EA	1	0	0	N/A	N/A

 Requires Monitoring Monitored

Notes: Access is from the manhole in the parking lot by the former Ramsey County Jail. 2007-15

General Notes: Schedule MH entry with sewers. - air meter, flashlight, boots, harness, PPE, etc.

58. Deck NBI:

36A. Brdg Railings NBI:

36B. Transitions NBI:

36C. Appr Guardrail NBI:

36D. Appr Guardrail  
Terminal NBI:

59. Superstructure NBI:

60. Substructure NBI:

61. Channel NBI:

62. Culvert NBI:

71. Waterway Adeq NBI:

72. Appr Roadway  
Alignment NBI:

Inventory Notes:

Ron Ekstrand

Inspector's Signature

Glenn Pagel

Reviewer's Signature



1. 2011  
Nov.deckview\_1.jpg



2. 2011  
Nov.deckview\_2.jpg



3. 2011 outlet  
riverview.jpg



4. 2011-deckview.jpg



5. construction  
joint\_1-1.jpg



6. construction  
joint\_1-2.jpg



7. construction  
joint\_1-3.jpg



8. construction  
joint\_1-4.jpg



9. construction  
joint\_2-1.jpg



10. construction  
joint\_2-2.jpg



11. construction  
joint\_2-3.jpg



12. construction  
joint\_3-1.jpg



13. construction  
joint\_3-2.jpg



14. crack E.side\_1.jpg



15. crack E.side\_2.jpg



16. crack W.side\_1.jpg



17. crack W.side\_2.jpg



18. cracks topside\_1.jpg



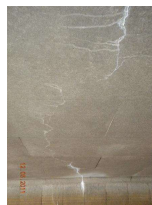
19. cracks topside\_2.jpg



20. cracks topside\_3.jpg



21. cracks topside\_4.jpg



22. cracks topside\_5.jpg



23. cracks topside\_6.jpg



24. cracks topside\_7.jpg



25. cracks wall\_1.jpg



26. cracks wall\_2.jpg



27. cracks wall\_3.jpg



28. cracks wall\_4.jpg



29. deckview E.side.jpg



30. deckview trail.jpg



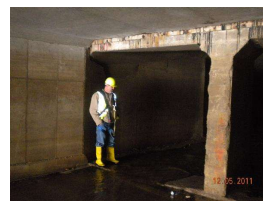
31. deckview W.side.jpg



32. down stream  
view\_2.jpg



33. matchline\_1.jpg



34. matchline\_2.jpg



35. outlet drop  
E.side\_1.jpg



36. outlet drop  
E.side\_2.jpg



37. outlet drop  
W.side\_1.jpg



38. outlet drop  
W.side\_2.jpg



39. outlet wall  
crack\_1.jpg



40. outlet wall  
crack\_2.jpg



41. outlet wall  
crack\_3.jpg



42. pipe and MH  
E.side\_2.jpg