<ul> <li>D.C. Department of Transportation</li> <li>Transportation Operations Administration</li> <li>Asset Management Division</li> </ul>						
2021 BRIDGE INVENTORY						
BRIDGE NO.: 0066 HIGHWAY: Pedestrian Bridge						
OVER: Kenilworth Avenue near Lane Place, N.E.						
INSPECTION START DATE: 02/10/2021 INSPECTION END DATE: 05/14/2021						
INSPECTION CYCLE: 24 mo. INSPECTION TYPE: Routine						
<b>DESCRIPTION:</b> Single Span, Prestressed Concrete T-Beams Supported on Reinforced Concrete						
Abutments with Stone Fascia						
PRESENT POSTING: N/A SUFFICIENCY RATING: N/A						
YEAR BUILT: 1956 DATE OF MAJOR REHABILITATION: None						
NUMBER OF SPANS: 01						
TYPE OF DECK AND SURFACING: T-Beam Top Flange with Thin Asphaltic Aggregate Wearing Surface						
MILEPOST: N/A ADT (% TRUCK): N/A YEAR ADT: N/A						
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MERCADO

Bridge No.: 0066 D.O.I.: 02/10/2021 Name: Pedestrian Bridge over Kenilworth Avenue near Lane Place, N.E.

# 2021 District of Columbia Bridge Inspections Summary Report

Bridge No.:	0066			
Name:	Pedestrian Bridge over Kenilworth Avenue near Lane Place, N.E.			
Report Prepared by:	Mercado Consultants, Inc.			
Report Reviewed and Submitted by:	Mercado Consultants, Inc.			
Project Manager:	Bill Mercado, P.E.			
Team Leader:	Michael D. Groshek, P.E. Mll			
Date of Inspection:	02/10/2021			
Redundant/Non-Redundant:	Non-Redundant			
Fracture-Critical:	No			
Pin/Hanger UT Inspection:	Not Applicable			
Underwater Inspection:	Not Applicable			
Weight Posted:	No			
Rating Recommended:	No			
Date of Last Load Rating:	Not Applicat	ble		
Review Existing Sounding and Profile Sheets:	Not Applicable			
Recommended Maintenance Repairs/Rehabilitation:	Yes			
Letter of Concern & Submission Date:	Yes	05/25/2021		
Follow-Up Requirements:	None			

Reviewed and Approved by Modjeski and Masters, Inc.

Richard A. Little, P.E.























0066



# 2021 BRIDGE INSPECTION SUMMARY FORM BrM AND NBI RATINGS

BRIDGE NO.:

**HIGHWAY:** Pedestrian Bridge

**OVER:** Kenilworth Avenue near Lane Place, N.E.

BrM

Element			Enviro Total Quanti		Quantity	ty by State		
No.	Name			Quantity	1	2	3	4
National B	National Bridge Elements (NBEs)							
15	Prestressed Concrete Top Flange	SF	2	787		761	26	
1080	Delamination/Spall/Patched Area	SF	2	37		11	26	
1090	Exposed Reinforcing Steel	SF	2	10		10		
1120	Efflorescence/Corrosion Staining	SF	2	740		740		
109	Prestressed Concrete Open Girder	LF	2	161		140	21	
1080	Delamination/Spall/Patched Area	LF	2	149		134	15	
1090	Exposed Reinforcing Steel	LF	2	6		6		
1110	Cracking	LF	2	6			6	
215	Reinforced Concrete Abutment	LF	2	20	10	7	3	
1080	Delamination/Spall/Patched Area	LF	2	3			3	
1120	Efflorescence/Corrosion Staining	LF	2	7		7		
311	Movable Bearing	EA	2	2	-	2	-	
1000	Corrosion	EA	2	2		2		
313	Fixed Bearing	EA	2	2		2		
1000	Corrosion	EA	2	2		2		
330	Metal Bridge Railing	LF	2	161	148		13	
1020	Connection	LF	2	13			13	
Bridge Ma	nagement Elements (BMEs)							
302	Compression Joint Seal	LF	2	20	18			2
2320	Seal Adhesion	LF	2	2				2
510	Wearing Surface (15)	SF	2	723	722		1	
3210	Delamination/Spall/Patched Area/Pothole	SF	2	1			1	
515	Steel Protective Coating (311)	SF	2	14	-		-	14
3440	Effectiveness	SF	2	14				14
515	Steel Protective Coating (313)	SF	2	5				5
3440	Effectiveness	SF	2	5				5
515	Steel Protective Coating (330)	SF	2	524	524			







#### 2021 BRIDGE INSPECTION SUMMARY FORM **BrM AND NBI RATINGS**

BRIDGE NO.: 0066 HIGHWAY: Pedestrian Bridge

**OVER:** Kenilworth Avenue near Lane Place, N.E.

**NBI** Rating

NBI Item No.	Name	Rating	Descriptions
58	Deck	4	Spalls with Exposed Corroded Reinforcing Steel and Delaminated Areas in Soffit/T-Beam Top Flange
59	Superstructure	4	Spalls with Exposed Corroded Reinforcing Steel and Delaminated Areas in Soffit/T-Beam Top Flange; Spalls with Exposed Corroded Reinforcing Steel Due to Vehicular Impact; Delaminated Areas
60	Substructure	6	Spall at North End of East Abutment Backwall and Failed Patch/Spall at South End of West Abutment Backwall, Cracks in Concrete Interior Walls Between Upper/Lower Pedestrian Approach Ramps Inside Abutments; Area of Cracked and Missing Fascia Stones at Northwest Wingwall
61	Channel	N	
62	Culverts	Ν	

Page 2 of 2

**Special Equipment Used:** No. Hours (Field & Report): Inspection Team:

M.O.T., Bucket Truck, Flashlights, Gas Meter 12 Hrs./Person & 33 Hrs. 2-Person

Inspection Dates: 02/10/2021, 05/14/2021

Inspected By: MG/RA/TK



## 2021 BRIDGE INSPECTION REPORT INSPECTION COMMENTS

BRIDGE NO.: 0066

**HIGHWAY:** Pedestrian Bridge

**OVER:** Kenilworth Avenue near Lane Place, N.E.

ELEMENT NO.	COMMENTS
	<b>General:</b> Bridge No. 0066 is a single-span prestressed concrete T-beam structure that carries pedestrian traffic Eastbound and Westbound above Kenilworth Avenue, and is located just North of Lane Place in Northeast Washington, D.C. The superstructure is supported by reinforced concrete abutments with stone fascia. The bridge was constructed in 1956 with no major rehabilitation in the interim. There are double flight pedestrian approach ramps on each end of the structure with non-skid walking surfaces. The overall structure length including the approach ramps is 346'-6"± along the centerline. The length of the deck is 80'-4"±, with an out-to-out deck width of 9'-10"±, and a clear walkway deck width of 9'-0"±.
	The minimum vertical underclearance at the structure for Northbound Kenilworth Avenue is 14.25' located at the Left edge of the roadway under the North T-beam, and the minimum vertical underclearance at the structure for Southbound Kenilworth Avenue is 14.28' located at the Left edge of the roadway under the North T-beam. The bridge is not skewed. For reporting purposes, the numbering convention is from North to South (T-beams and bearings) and from East to West (diaphragms, abutments, and pedestrian approach ramps). Maintenance of Traffic (M.O.T.) and a bucket truck were used to perform the exterior bridge inspection, whereas flashlights and a gas meter for confined space entry were used during the inspection of the interior of the abutments. General views of the bridge, approaches and roadway below the bridge are shown in Photograph Nos. 1 through 10.
	An access key (Key A112) is required for the inspection to obtain access to the interior of the abutments. The DDOT point of contact for access to the interior of the abutments is Robert McNeely at 202-438-7770 (cellular telephone number).
	An advance vertical clearance sign has been installed on Northbound Kenilworth Avenue prior to the exit ramp for Burroughs Avenue since the prior inspection.
	The structure was inspected on February 10, 2021 by Michael Groshek, P.E. (Team Leader) and Rakesh Acharya and on May 14, 2021 by Michael Groshek, P.E. (Team Leader) and Tim Kress, E.I.T. The delay between starting and ending the inspection was due to the need for DDOT to change the lock and open the frozen East Abutment access door.
15 302 330 510 (15) 515 (330)	<b>Deck:</b> The thin asphaltic aggregate wearing surface is in satisfactory condition overall (see Photograph No. 11). There is a hairline longitudinal crack in the wearing surface for the full-length of the bridge (refer to Photograph No. 11). There is a 7" long x 10" wide x up to 2" deep spall in the wearing surface adjacent to the West Abutment joint (see Photograph No. 12).
	The compression joint seals at both abutment are in satisfactory condition with minor to moderate corrosion on the joint armor (see Photograph Nos. 13 and 14). The seal is debonded from the West joint armor at the South end for a length of 24" (see Photograph No. 15). The East side (deck) joint armor is 1/2" lower than the West side (approach) joint armor. The drainage trough for the West Abutment joint is detached from the backwall and laying on the abutment seat, and no longer functions as intended. The East side (approach) joint armor has settled up to 1" for a 4'-0" length at the South end (see Photograph No. 16).
Inspectors:	

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D.C. Department of Transportation
 Transportation Operations Administration
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# 2021 BRIDGE INSPECTION REPORT INSPECTION COMMENTS

BRIDGE NO.: 0066

**HIGHWAY:** Pedestrian Bridge

**OVER:** Kenilworth Avenue near Lane Place, N.E.

ELEMENT NO.	COMMENTS								
15 302 330 510 (15) 515 (330)	<b>Deck (Continued):</b> The four-strand galvanized steel bridge railings are in fair condition (refer to Photograph No. 7 The bridge railings are 37½" high and consist of four horizontal strands spaced 7" are vertically, except the lower strand is up to 8" above the deck surface. The railing height of 1/2" does <u>not</u> meet the minimum height requirement of 42" for pedestrian railings per AASH and the International Building Code (IBC). The 7" spacing/clear opening between the horizo strands and up to 8" spacing/clear opening between the lower strand and the deck surface do meet the 4" maximum required by the IBC; however, the safety fence behind the railing provi additional protection.								
	Specific defects noted in the bridge railings include the following:								
	<ul> <li>North Bridge Railing:</li> <li>One missing anchor bolt/nut and one missing anchor nut at the base of the sixth post from the West end.</li> <li>Both connection bolts/nuts missing from the bottom rail in the fourth section from the West end. The rail is unsecured.</li> <li>Missing cover plate at the top of the West post for the second section from the West end.</li> <li>Three sections of non-standard tubular rails extending for a total length of 12'-0" at the West end (see Photograph No. 17).</li> </ul>								
	<ul> <li>South Bridge Railing:</li> <li>Broken anchor bolt with a missing nut at the base of the first post at the East end of the bridge.</li> <li>Both connection bolts/nuts are missing at the second rail from the top in the third section from the East end (see Photograph No. 18). The rail is unsecured.</li> <li>One connection bolt/nut is missing at the third rail from the top in the third section from the East end and the rail is loose (refer to Photograph No. 18).</li> <li>One missing bolt/nut at the base of the sixth post from the East end of the bridge.</li> <li>Two missing bolts/nuts at the base of the second post from the West end.</li> <li>One missing bolt/nut at the base of the first post from the West end.</li> </ul>								
	The galvanized steel arch safety fence on top of the bridge is in satisfactory condition exhibiting moderate corrosion throughout (refer to Photograph No. 11). There is a 5" wide x 7" high hole in the South fence near mid-height behind the overhead sign above the Right Northbound Lane of Kenilworth Avenue.								
	The soffit/underside of the T-beam top flange is in poor condition with prior water leakage stains and minor to moderate efflorescence throughout, particularly adjacent to the concrete closure pour between the two T-beams (see Photograph No. 19). There is a series of four (4) minor spalls with exposed corroded reinforcing steel along the concrete closure pour near mid-span, the largest of which is 12" long x up to 8" wide x 1" deep. There is a 3'-4" long x 13" wide x 1" deep spalled and delaminated area with exposed corroded reinforcing steel in the soffit between the T-beams above the Left Northbound Lane. The deck overhangs exhibit random hairline cracks with minor efflorescence. The North deck overhang has random areas of spalling for a total area of approximately 10 SF, several with exposed corroded reinforcing steel, the largest of which is 24" long x 14" wide x up to 3" deep with exposed corroded reinforcing steel near the								
Inspectors:	MG/RA/TK Dates: 02/10/2021 05/14/2021 Sheet 2 of 7								



## 2021 BRIDGE INSPECTION REPORT INSPECTION COMMENTS

BRIDGE NO.: 0066

**HIGHWAY:** Pedestrian Bridge

**OVER:** Kenilworth Avenue near Lane Place, N.E.

ELEMENT NO.	COMMENTS
15 302 330 510 (15) 515 (330)	<ul> <li>Deck (Continued):</li> <li>East end of the North overhang above the Right Northbound Lane (see Photograph No. 20). There is a 2'-10" long x 6" high x up to 6" deep spall with exposed corroded reinforcing steel at the Northeast corner of the deck fascia/overhang under the first safety fence post (see Photograph No. 21). The North deck overhang exhibits a 3'-0" long x 12" wide area of delaminated concrete above the left edge of the Right Southbound Lane and 12" diameter area of delaminated concrete above the Center Southbound Lane (see Photograph No. 22). On the South deck fascia/overhang above the lane striping between the Right and Center Northbound Lanes of Kenilworth Avenue, there is a 3'-0" long x 12" wide area of delaminated and loose concrete (see Photograph No. 23). The inspection team was unable to safely remove the large area of delaminated/loose concrete given the significant traffic in the Center Northbound Lane of Kenilworth Avenue where there was no Maintenance of Traffic. DDOT was previously notified of this condition via a Letter of Concern dated February 18, 2019 and a Follow-Up Letter of Concern on May 25, 2021. An up to 7" high x up to 24" wide x up to 2" deep spall with exposed corroded reinforcing steel is in the South deck fascia near the West Abutment (see Photograph No. 24).</li> <li>The two drainage devices at the East and West ends of the deck (one in front of each armored abutment joint) are in good condition.</li> </ul>
109 311 313 515 (311) 515 (313)	Superstructure: The superstructure consists of two prestressed concrete T-beams with reinforced concrete intermediate and end diaphragms providing lateral support (refer to Photograph No. 19). The two prestressed concrete T-beams are in poor condition overall, which accounts for the top-flange condition noted above. The underside of the North T-beam adjacent to end diaphragm at the West Abutment exhibits a 24" long x 12" wide area of delaminated concrete with a 10" long x 7" wide x 1/2" deep spall with exposed corroded reinforcing steel (see Photograph No. 25). The North edge of the North T-beam above the Southbound Lanes exhibits impact scrapes and numerous minor to moderate spalls, several with exposed corroded reinforcing steel. The North edge and underside of the North T-beam exhibits a 18" long x 7" wide x up to 1½" deep spall above the Right Southbound Lane and a 6'-0" long x 1/16" wide horizontal crack in the North face web at this same location (see Photograph No. 26). The underside of the North T-beam exhibits a 12" diameter x 1" deep spall with exposed corroded reinforcing steel with an adjacent 12" diameter area of delaminated concrete at the first intermediate diaphragm from the West Abutment above the Right Southbound Lane (see Photograph No. 27). The North face of the North T-beam at the East Abutment beyond the bearing exhibits a 12" long x 6" high area of 1/16" wide map cracks. The South face of the South T-beam at the West Abutment beyond the bearing exhibits a 4" long x 8" high x up to 2" deep spall with an adjacent 7" long x 8" high area of delaminated concrete and hairline to 1/8" wide diagonal/map cracks. The North edge of the South T-beam above the Southbound Lanes exhibits impact scrapes and minor spalls. The South edge and underside of the North and South T-beams above the Northbound Lanes exhibits impact scrapes and minor spalls. The South face of the South T-beams above the Northbound Lanes exhibits impact scrapes and minor spalls. The South Edge and underside of the N

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D.C. Department of Transportation
 Transportation Operations Administration
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## 2021 BRIDGE INSPECTION REPORT INSPECTION COMMENTS

BRIDGE NO.: 0066

**HIGHWAY:** Pedestrian Bridge

**OVER:** Kenilworth Avenue near Lane Place, N.E.

NO.	COMMENTS
109 311 313 515 (311) 515 (313)	<b>Superstructure (Continued):</b> The reinforced concrete intermediate and end diaphragms are in satisfactory condition, exhibiting hairline cracks with minor efflorescence, and water leakage stains with minor efflorescence – particularly around the concrete closure pour between the two T-beams. There are up to $1/4"$ wide cracks in the underside of the third diaphragm from the East Abutment (see Photograph No. 29). The West end diaphragm exhibits hairline to $1/16"$ wide map cracks in the East, West and South faces on the South/exterior side of the South T-beam, as well as a spall on the South end face 11" high x 6" wide x up to 3" deep. The two steel roller expansion bearings at the West Abutment are in satisfactory condition with minor to moderate corrosion (see Photograph No. 30). The bearings are $1\frac{1}{2}"$ in the expanded position measured at an ambient temperature of 46° Fahrenheit (see Photograph No. 31).
	The two steel plate fixed bearings at the East Abutment are in satisfactory condition with moderate corrosion (see Photograph No. 32).
215	Substructure: The reinforced concrete abutment backwalls are in fair condition. Both abutment backwalls have random vertical hairline cracks, several with minor efflorescence. The North end of the East Abutment backwall exhibits a 12" high x 7" wide x up to 1" deep spall. A concrete repair at the South end of the West Abutment backwall has failed, resulting in a 24" high (full-height) x up to 16" wide x up to 6" deep spall with exposed corroded reinforcing steel; the concrete is soft in this area. The reinforced concrete East and West Abutment stems with stone fascia are in good condition with no defects noted (see Photograph No. 33). The reinforced concrete abutment seats are in good condition. There is a minor to moderate accumulation of debris on both abutment seats. There are utility rooms leading to the interior of the double-flight pedestrian approach ramps at both abutments. The utility rooms are accessed through metal doors.
	The interiors of the East and West Abutments are of similar construction. There are cinderblock walls throughout the interior face of the two wingwalls at each abutment, whereas there is a combination of cinderblock and concrete comprising the interior wall between the upper and lower pedestrian approach ramps at each abutment.
	East Abutment Interior (see Photograph No. 34): The interior cinderblock walls between the upper/lower pedestrian approach ramps and on the interior sides of the Southwest and Southeast Wingwalls are in satisfactory condition. There is minor to moderate efflorescence on the West face of the cinderblock wall between the upper/lower pedestrian approach ramps for the South half at the interface with the interior concrete wall that is below the cinderblock wall. The concrete interior wall between the upper and lower pedestrian approach ramps is in satisfactory condition. The concrete interior wall between the upper and lower pedestrian approach ramps is in satisfactory condition. The concrete interior wall between the upper and lower pedestrian approach ramps exhibits random hairline up to $1/16$ " wide full-height vertical cracks and minor to moderate efflorescence for the South half on the West face. There are three full-height hairline to $1/32$ " wide vertical cracks in the West face of the concrete wall near mid-length. There is a 5'-8" high x $3/16$ " wide vertical crack in the East and West faces of the concrete wall at approximately the one-third point from the South end across from the air vent on the interior side of the Southwest Wingwall (see Photograph No. 35). There is significant efflorescence and
Inspectors:	MG/RA/TK Dates: 02/10/2021.05/14/2021 Sheet 4 of 7



## 2021 BRIDGE INSPECTION REPORT INSPECTION COMMENTS

BRIDGE NO.: 0066

**HIGHWAY:** Pedestrian Bridge

**OVER:** Kenilworth Avenue near Lane Place, N.E.

ELEMENT NO.	COMMENTS
215	<b>Substructure (Continued):</b> corrosion stains from the corroded conduit above at the South end of the concrete interior wall on the West face under the upper pedestrian approach ramp. There are full-height water stains on the concrete wall at the North end of the lower pedestrian approach ramp extending down from an opening for a non-functional antifreeze pipe. A significant accumulation of debris is present on the concrete floor under the upper pedestrian approach ramp from just beyond the utility room extending to the South end of the ramp (see Photograph No. 36). The concrete floor under the lower pedestrian approach ramp exhibits a 1/8" wide full-width transverse crack at approximately 40 ft. from the South end. The air vents were open at the time of inspection.
	West Abutment Interior (see Photograph No. 37): The interior cinderblock walls between the upper/lower pedestrian approach ramps and on the interior sides of the Northwest and Northeast Wingwalls are in satisfactory condition. There are water stains and minor to moderate efflorescence on the East face of the cinderblock wall between the upper/lower pedestrian approach ramps for the North half at the interface with the interior concrete wall below the cinderblock wall. A full-height hairline to 1/16" wide vertical crack is in the cinderblock wall on the West/interior face of the Northeast Wingwall; this crack extends through an air vent to the underside of the upper pedestrian approach ramp located approximately 50 ft. from the access door. There is a 3'-0" high x 1/16" wide vertical crack in the East face of the cinderblock wall between the upper and lower pedestrian approach ramps, located approximately 30 ft. from the North end. Minor efflorescence is present at random locations on the East/interior face of the cinderblock wall at the Northwest Wingwall. The East/interior face of the cinderblock wall at the Northwest Wingwall. The East/interior face of the cinderblock wall at the Northwest Wingwall. The East/interior face of the cinderblock wall at the Northwest Wingwall exhibits a 19" long x up to 3" wide area of cracked (up to 1/8" wide) and broken cinderblocks (two) at the top of the wall located approximately 5 ft. from the North end (see Photograph No. 38). There is a 15" long x up to 3/16" wide diagonal crack with an adjacent 7" high x 5" wide x up to 4" deep spall in the East/interior face of the cinderblock wall at the Northwest Wingwall near the base, located 5 ft. from the North end (see Photograph No. 39). The concrete portion of the interior wall between the upper and lower pedestrian approach ramps approach ramps located approximately 30 ft. from the North end . There is a 4'-10" high x 1/8" wide vertical crack in the East face of the concrete wall between the upper and lower pedestrian approach
	The cinderblock wingwalls are covered on the exterior face with stone fascia. The stone fascia exterior faces of the wingwalls are in satisfactory condition. Random areas of minor deteriorated stones and mortar are present throughout the wingwalls. A 5'-0" high x up to 3'-0" wide x up to 7 1/2" deep area of cracked and missing stones exists at the base of the wall between the North ends of the Northwest and Northeast Wingwalls (see Photograph No. 41). There are two stones with hairline cracks on the Southwest Wingwall near the Southernmost vertical joint. The vertical joint material between the East Abutment and the Southwest and Southeast Wingwalls, and
Inspectors:	MG/RA/TK Dates: 02/10/2021, 05/14/2021 Sheet 5 of 7





## 2021 BRIDGE INSPECTION REPORT INSPECTION COMMENTS

BRIDGE NO.: 0066

**HIGHWAY:** Pedestrian Bridge

**OVER:** Kenilworth Avenue near Lane Place, N.E.

	COMMENTS
215	<b>Substructure (Continued):</b> between the West Abutment and the Northwest and Northeast Wingwalls is missing. The joint material in the intermediate vertical joints in the Southwest Wingwall is deteriorated and missing.
	<b>Approaches (Ramps):</b> The walking surfaces on the concrete ramps are in fair condition (refer to Photograph Nos. 3 through 8). Full-width transverse and longitudinal hairline to 1/16" wide cracks were noted throughout the walking surfaces of both approach ramps (refer to Photograph Nos. 3, 4, 7 and 8), and there are vertical hairline cracks in the exterior fascia of both approach ramps. The upper Southeast Approach ramp walking surface exhibits full-length hairline to 1/8" wide longitudinal cracks (see Photograph No. 42) and hairline map cracks.
	The <u>undersides</u> of the Northwest and Southeast Approach ramps are in satisfactory condition. At the Southeast Approach ramp, there are transverse hairline cracks with moderate efflorescence and stalactites in the underside of the upper ramp for the South one-third length and in the underside of the lower ramp at random locations. At the Northwest Approach ramp, there is a 6'-0" long x 4'-0" wide area of intermittent up to 2" deep spalls with three longitudinal and one transverse corroded reinforcing steel bars exposed in the underside of the upper ramp near the access door (see Photograph No. 43). The underside of the upper ramp exhibits full-width transverse hairline cracks with minor efflorescence at random locations and water stains with moderate efflorescence and stalactites for approximately the North one-quarter length on the Northwest Approach exhibits full-width transverse hairline cracks with moderate efflorescence; there are full-width transverse hairline cracks with moderate efflorescence and stalactites for approximately the North one-quarter length on the Northwest Approach exhibits full-width transverse hairline cracks with moderate efflorescence; there are full-width transverse hairline cracks with moderate efflorescence and stalactites starting at approximately the one-quarter point from the North end and continuing to the South end.
	The steel pedestrian railings on the Northwest and Southeast Approach ramps are in good condition. The railings are 42" high and consist of upper and lower horizontal strands with vertical pickets (spaced at a clear distance of 4" horizontally), and the lower horizontal strand is 4" above the ramp surface – all of which meet AASHTO and International Building Code (IBC) standards. Minor corrosion was noted at random locations on the approach railings, particularly at the post base plate connections.
	The four drains on the walking surfaces of the approach ramps (two on each approach ramp) are in fair condition. The drainage grate at the North end of the upper Southeast Approach ramp is cracked/broken and loose and there is concrete debris blocking six of the eight slotted openings in the grate (see Photograph No. 45). The drainage grate at the South end of the upper Southeast Approach ramp is missing (see Photograph No. 46).
	<b>Miscellaneous:</b> The signage at the structure is in fair condition. There are overhead directional signs and supports on the North side (two signs) and South side (one sign) of the bridge. Graffiti is present on the Right/West overhead directional sign on the North side of the bridge and on the overhead directional sign on the South side of the bridge. At the Right/West overhead directional sign on the North side of the bridge, the third sign clip from the bottom is missing on the second vertical attachment member from the West (see Photograph No. 47), and the second sign clip from the bottom is missing on the third vertical attachment member from the West. At the Left/East overhead directional sign on the North side of the bridge, the bridge of the bridge, the bridge, the bottom sign clip is detached on the
Inspectors:	MG/RA/TK Dates: 02/10/2021, 05/14/2021 Sheet 6 of 7



#### 2021 BRIDGE INSPECTION REPORT INSPECTION COMMENTS

BRIDGE NO.: 0066

**HIGHWAY:** Pedestrian Bridge

**OVER:** Kenilworth Avenue near Lane Place, N.E.

ELEMENT NO.	COMMENTS
	<b>Miscellaneous (Continued):</b> first vertical attachment member from the West. The South and North channels for the directional sign light support on the South side of the bridge are disconnected at the East end due to missing bolts (see Photograph No. 48). A junction box for the Northbound directional sign near the East Abutment is damaged/loose. The "Clearance 14 Ft." sign above the Northbound Lanes is missing the "14 Ft." section of the sign and the "Clearance" section of the sign is not clearly visible. The "Clearance 14 Ft." sign above the Southbound Lanes is missing both sections of the sign (see Photograph No. 49). Vertical clearance signs were installed between the 2015 and 2017 inspections on light standards on the median North and South of the bridge. An advance vertical clearance sign "Warning All Vehicles Over 13'-9" Must Exit at Eastern Avenue" was installed on Southbound I-295 between the exits for Route 50 and Eastern Avenue between the 2017 and 2019 inspections to provide notification pertaining to Bridge Nos. 0068 and 0066. An advance vertical clearance sign has been installed on Northbound Kenilworth Avenue prior to the exit ramp for Burroughs Avenue since the prior inspection. Any over height vehicles must use the service road.
	The 11 lights for the two overhead signs on the North fascia above the Southbound Lanes and the one light for the one overhead sign on the South fascia above the Northbound Lanes appeared to be in poor condition overall. There are total of six (6) damaged/broken lights and three (3) of them are disconnected for the directional sign on the North fascia above the Southbound Lanes of Kenilworth Avenue (see Photograph No. 50).
	The metal conduits for the lights inside both abutments are in poor condition. The metal conduit for the lights inside the East Abutment under the upper pedestrian approach ramp at the South end is bent, broken and the wires have been cut at the junction boxes such that the conduit appears to be abandoned. The metal conduits for the lights inside the West Abutment under both the upper and lower pedestrian approach ramps from approximately mid-length to the North end exhibit moderate to severe corrosion. The abandoned/non-functional conduits should be removed.
	Inside both abutments, there are three pipes for a non-functional antifreeze system that are attached to the undersides of the upper and lower pedestrian approach ramps. These pipes are in poor condition overall. The exposed portions of the pipes exhibit moderate corrosion. Two pipes at the South end of the lower pedestrian approach ramp inside the East Abutment exhibit severe corrosion and the pipe wrapping has become unraveled; there is also one broken support at this location (see Photograph No. 51). Two pipes at the North end of the lower pedestrian approach ramp inside the West Abutment exhibit moderate corrosion and both supports for the pipes are broken with 100% section loss at the interface with the underside of the ramp (see Photograph No. 52). The non-functional antifreeze pipes should be removed.
	The light on each of the two light standards adjacent to the pedestrian approach ramps at the East and West ends of the structure were not illuminated during the time of inspection; the lights appeared to be in good condition with all hardware in place. Moderate corrosion was noted on both light poles.
	A wire which extends from inside the West Abutment is hanging from the West Abutment seat to the North/exterior of the North T-beam.



Inspectors: MG/RA/TK Dates: 02/10/2021, 05/14/2021 Sheet 7 of 7

#### 2021 BRIDGE INSPECTION REPORT **NBI RATINGS**

BRIDGE NO.: 0066 HIGHWAY: Pedestrian Bridge

**OVER:** Kenilworth Avenue near Lane Place, N.E.

NBI Coding: 0-2 Critical, 3 & 4 Poor, 5 & 6 Fair, 7-9 Good, N Not Applicable, NV Not Visible

	Rating		Rating		Rating	
SI & A ITEM 58 DECK (MATERIALS: CONCRETE) 4						
Wearing Surface	6	Curbs	Ν	Railings Protective Coating	6	
Joints, Expansion, Open	Ν	Sidewalks	Ν	Delineation	Ν	
Joints, Expansion, Compression	6	Parapets	Ν	Fencing (Galvanized Steel Arch)	6	
Joints, Other, Pourable	Ν	Median Barrier	Ν	Soffit/Underside of T-beam Top Flange	4	
Drainage System	7	Bridge Railings (4-Strand Galvanized Steel)	5			
		SI & A ITEM 59 SUPERSTRUCTU	RE		4	
Main Member - Steel	Ν	Floor System Connections	Ν	Fixed Bearings (Steel Plate)	6	
Main Member - Prestressed Concrete	4	Secondary Members - Reinforced Concrete	6	Steel Protective Coating	6	
Main Member - Timber	Ν	Secondary Member Connections	Ν			
Main Member - Connections	Ν	Machinery (Movable Spans)	Ν			
Floor System Members	Ν	Expansion Bearings (Steel Roller)	6			
		SI & A ITEM 60 SUBSTRUCTUR	E		6	
		ABUTMENT				
Bearing Area/Caps/Seats	7	Backwalls	5	Wingwalls (Stone Fascia - Exterior)	6	
Above Ground (Stone Fascia)	7	Util. Rm Cinderblock Int. Wall. Bet. Ramps	6	Wingwalls (Cinderblock - Interior)	6	
Foundation (Footing, Piles, Piers)	NV	Concrete Interior Walls Between Ramps	6			
		INTERMEDIATE SUPPORT		Γ		
Caps - Concrete	Ν	Above Ground - Steel	Ν	Collision Protection System	Ν	
Caps - Steel	Ν	Above Ground - Timber	Ν	Steel Protective Coating	Ν	
Caps - Timber	Ν	Above Ground - Masonry	Ν			
Above Ground - Concrete	Ν	Foundation (Footing, Piles, Piers)	Ν			
	SI & A	ITEM 61 CHANNEL & CHANNEL PR	ROTECT	ION	Ν	
Channel Banks	Ν	Riprap, Toe Walls & Aprons	Ν	Canal Wall	N	
Channel Bed (Scour)	Ν	Dikes	Ν			
Waterway Opening	Ν	Jetties	Ν			
		SI & A ITEM 62 CULVERTS			Ν	
		APPROACHES		Γ		
Embankments	Ν	Approach Slab	Ν	Sight Distance	Ν	
Embankment Retaining Walls	Ν	Drainage System (Drains on Top of Ramps)	5	Pedestrian Ramps (Surface)	5	
Slope Protection	N	Guide Rail	N	Pedestrian Ramps (Underside)	6	
Roadway	Roadway         N         Delineation         N         Railings on Pedestrian Ramps         7					
MISCELLANEOUS						
Signs	5	Lights for Signs	4	Non-Functional Antifreeze System in Abuts.	4	
Illumination	7	Metal Conduits for Lights in Abuts. (Abandoned)	4	Air Vents in Abutments	7	

M.O.T., Bucket Truck, Special Equipment Used: No. Hours (Field & Report): 2-Person **Inspection Team:** 

Flashlights, Gas Meter 12 Hrs./Person & 33 Hrs. Inspection Dates: 02/10/2021, 05/14/2021

Inspected By: MG/RA/TK



# 2021 BRIDGE APPRAISAL WORKSHEET

BRIDGE NO.: 0066

HIGHWAY: Pedestrian Bridge

**OVER:** Kenilworth Avenue near Lane Place, N.E.

TRAFFIC SAFETY FEATURES (ITEM 36)			Date: 05/26/2021				
Not Applicable – Pedestrian Bridge with Traffic	No Veh	STRUCT OF COLUMN					
BRIDGE RAILING (1 <sup>st</sup> Digit)	RATING	Ν	No -0120 3				
Not Applicable – Pedestrian Bridge with Traffic	No Veh	TREGISTERED ILL'					
TRANSITIONS (2 <sup>nd</sup> Digit)	RATING	N	Grow of the second state of the second stat				
Not Applicable – Pedestrian Bridge with Traffic	No Veh	icular	UNDERCLEARANCES (ITEM 69) Urban – Freeway/Expressway (Kenilworth Avenue Under) Minimum Vertical Clearance = 14.25 ft. Table 3A Rating = 3 Minimum Right Lateral Underclearance = 3.9 ft. Minimum Left Lateral Underclearance = 1.5 ft. Table 3B Rating = 3				
APPROACH GUIDE RAIL (3rd Digit)	RATING	N	Minimum Right Lateral Underclearance = 3.9 ft.				
Not Applicable – Pedestrian Bridge with Traffic	No Vehi	icular	Minimum Left Lateral Underclearance = 1.5 ft. Table 3B Rating = 3				
GUIDE RAIL TERMINAL (4th Digit)	RATING	N	RATING 3				
STRUCTURAL EVALUATION (ITE	M 67)		BRIDGE POSTING (ITEM 70)				
Superstructure Rating = 4 Substructure Rating = 6		Operating Rating = Not Applicable					
Inventory Rating = Not Applicable			RATING N				
Table T Rating = Not Applicable			WATERWAY ADEQUACY (ITEM 71)				
		Not Applicable – Bridge Not Over a Waterway					
	RATING	4	RATING N				
DECK GEOMETRY (ITEM 68)			APPROACH ROADWAY ALIGNMENT (ITEM 72)				
Not Applicable – Pedestrian Bridge with Traffic	No Vehi	Not Applicable – Pedestrian Bridge with No Vehicular Traffic					





#### 2021 BRIDGE MAINTENANCE AND REPAIR/REHABILITATION RECOMMENDATIONS

**BRIDGE NO.:** 0066

DATES: 02/10/2021, 05/14/2021

021, 021 HIGHWAY: Pedestrian Bridge

OVER: Kenilworth Avenue near Lane Place, N.E. INSPECTORS: MG/RA/TK

DUE TO CONTINUING IMPACT DAMAGE TO THE PRESTRESSED CONCRETE T-BEAMS, SPALLS AND DELAMINATIONS IN THE SOFFIT, AND DETERIORATION OF THE WALKING SURFACES AND UNDERSIDES OF BOTH PEDESTRIAN APPROACH RAMPS, CONSIDERATION SHOULD BE GIVEN TO REPLACING THE BRIDGE. INTERIM RECOMMENDATIONS ARE PROVIDED BELOW.

#### MAINTENANCE RECOMMENDATIONS

BRIDGE ELEMENT	RECOMMENDED ACTION				
Metal Bridge Railing (330)	Replace the missing/broken bolts (11 EACH) and nuts (12 EACH) in the North and South railings on the bridge; replace the missing cover plate at the top of the West post for the second section from the West end of the North bridge railing (1 EACH).		2		
Reinforced Concrete Abutment with Stone Fascia (215)	Remove the debris from the concrete floor in the interior of both abutments and from the top of the abutment bridge seats (approximately 90 LF).		3		
Wingwall with Stone Fascia	Replace the vertical joint material that is missing at the wingwall joints at both abutments and at the intermediate joints on the Southwest Wingwall (approximately 80 LF).		4		
	Replace the drainage grate that is broken and blocked with concrete on the Southeast Approach ramp at the North end of the upper ramp (1 EACH).		1		
Miscellaneous (Drainage Devices)	Replace the drainage grate that is missing on the Southeast Approach ramp at the South end of the upper ramp (1 EACH).	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	1		
	Reattach the drainage trough for the West Abutment joint to the backwall (1 EACH).		2		

#### Page 1 of 5

PRIORITY CODE (PC):

E – EMERGENCY (NOTIFY D.C. IMMEDIATELY; FOLLOW-UP WITH LETTER REPORT) 3 – MEDIUM (SERVICEABILITY RELATED –

REPAIR AFTER HIGH PRIORITY ITEMS)

1 - FIRST (ITEMS TO BE REPAIRED FIRST - ADDRESSED WITHIN ONE YEAR)

4 – LOW (MINOR REPAIRS NEEDED – SCHEDULE AS PART OF REHABILITATION PROGRAM) 2 – HIGH (POTENTIAL TO BECOME SERIOUS – ADDRESSED WITHIN 2 YEARS)

5 - NO REPAIRS NEEDED AT THIS TIME



BRIDGE NO.: DATES:	0066 02/10/202	HIGHWAY:         Pedestrian Bridge           1,         OVER:         Kenilworth Avenue near Lane Place, N.E.	
-	05/14/202	1     INSPECTORS: MG/RA/TK	
AINTENANC	E RECOM	MENDATIONS (CONTINUED):	<u> </u>
BRIDGE ELE	EMENT	RECOMMENDED ACTION	
		Remove the graffiti from the Right/West overhead directional sign on the North side of the bridge and from the overhead directional sign on the South side of the bridge (2 EACH).	
Miscelland	eous	Replace the missing/detached sign clips at the Right/West and Left/East overhead directional signs on the North side of the bridge (3 EACH).	
Support	ts)	Reattach/secure with bolts the East end of the North and South channels for the overhead directional sign light support on the South fascia (2 EACH).	
		Replace the "Clearance 14 Ft." signs on the South fascia of the bridge over the Northbound Lanes and on the North fascia of the bridge over the Southbound Lanes (2 EACH).	
Miscellan (Conduits for I Pipes for Non- Antifreeze Sys Abutme	eous Lights and Functional tem Inside nts)	Remove the non-functioning conduits for the lights (2 EACH) and the antifreeze pipes (6 EACH) inside the East and West Abutments.	
Miscelland	eous	Remove the wire hanging from the West Abutment seat to the North/exterior of the North T-beam, which is extending from inside the West Abutment (1 EACH).	
RIORITY CODE (PC):	E – EMERGENCY (N FOLLOW-UP WITH LI 3 – MEDIUM (SERVIG REPAIR AFTER HIGH	Page 2 of 5         NOTIFY D.C. IMMEDIATELY;         1 - FIRST (ITEMS TO BE REPAIRED FIRST -       2 - High (POTENTIAL TO BECOME SERIOUS -         ADDRESSED WITHIN ONE YEAR)       ADDRESSED WITHIN 2 YEARS)         CEABILITY RELATED -       4 - LOW (MINOR REPAIRS NEEDED -       5 - NO REPAIRS NEEDED AT THIS TIME         HPRIORITY ITEMS)       SCHEDULE AS PART OF REHABILITATION PROGRAM       5 - NO REPAIRS NEEDED AT THIS TIME	



## Page 3 of 5

PRIORITY CODE (PC):

E – EMERGENCY (NOTIFY D.C. IMMEDIATELY; FOLLOW-UP WITH LETTER REPORT) 3 – MEDIUM (SERVICEABILITY RELATED –

REPAIR AFTER HIGH PRIORITY ITEMS)

 1 - FIRST (ITEMS TO BE REPAIRED FIRST -ADDRESSED WITHIN ONE YEAR)
 4 - LOW (MINOR REPAIRS NEEDED - 2 – HIGH (POTENTIAL TO BECOME SERIOUS – ADDRESSED WITHIN 2 YEARS) 5 – NO REPAIRS NEEDED AT THIS TIME



4 – LOW (MINOR REPAIRS NEEDED – SCHEDULE AS PART OF REHABILITATION PROGRAM)



## Page 4 of 5

1 - FIRST (ITEMS TO BE REPAIRED FIRST -

PRIORITY CODE (PC):

E – EMERGENCY (NOTIFY D.C. IMMEDIATELY; FOLLOW-UP WITH LETTER REPORT) 3 – MEDIUM (SERVICEABILITY RELATED –

REPAIR AFTER HIGH PRIORITY ITEMS)

ADDRESSED WITHIN ONE YEAR) 4 – LOW (MINOR REPAIRS NEEDED –

4 – LOW (MINOR REPAIRS NEEDED – SCHEDULE AS PART OF REHABILITATION PROGRAM) 2 – HIGH (POTENTIAL TO BECOME SERIOUS – ADDRESSED WITHIN 2 YEARS)

5 - NO REPAIRS NEEDED AT THIS TIME





## 2021 BRIDGE MAINTENANCE AND REPAIR/REHABILITATION RECOMMENDATIONS

BRIDGE NO.: 0066

**HIGHWAY:** Pedestrian Bridge

DATES: <u>02/10/2021,</u> 05/14/2021 **OVER:** Kenilworth Avenue near Lane Place, N.E.

**INSPECTORS:** MG/RA/TK

# **REPAIR/REHABILITATION RECOMMENDATIONS (CONTINUED):**

BRIDGE ELEMENT	RECOMMENDED ACTION						
Wingwall with Stone	West Abutment Interior: seal vertical cracks in cinderblock wall on West/interior face of Northeast Wingwall and in East face of center wall between ramps (approximately 9 LF); seal crack (approximately 2 LF) and repair spalled/cracked/broken cinderblocks (< 1 CF) in Northwest Wingwall East/interior face near North end.		3				
Fascia	Repair the area of cracked and missing stones at the base of the exterior face of the wall between the North ends of the Northwest and Northeast Wingwalls (approximately 9 CF).		3				
Walking Surfaces on Concrete Pedestrian Approach Ramps	Seal the full-length longitudinal cracks in the walking surfaces of the upper Southeast Approach pedestrian ramp and the lower Northwest Approach pedestrian ramp (approximately 291 LF).		3				
Undersides of Concrete Pedestrian Approach Ramps Inside Abutments	Clean the exposed corroded reinforcing steel bars (4 EACH) and repair the spalls in the underside of the West Abutment upper ramp near the access door (approximately 4 CF).	The second se	3				
Miscellaneous (Signs and Sign	Repair/replace the damaged/broken lights for the directional sign on the North fascia above the Southbound Lanes of Kenilworth Avenue (9 EACH).		1				
Supports)	Repair/replace the damaged/loose junction box for the Northbound overhead directional sign near the East Abutment (1 EACH).		3				

#### Page 5 of 5

PRIORITY CODE (PC):

E – EMERGENCY (NOTIFY D.C. IMMEDIATELY; FOLLOW-UP WITH LETTER REPORT)

3 – MEDIUM (SERVICEABILITY RELATED – REPAIR AFTER HIGH PRIORITY ITEMS) 1 – FIRST (ITEMS TO BE REPAIRED FIRST – ADDRESSED WITHIN ONE YEAR)

4 – LOW (MINOR REPAIRS NEEDED – SCHEDULE AS PART OF REHABILITATION PROGRAM) 2 – HIGH (POTENTIAL TO BECOME SERIOUS – ADDRESSED WITHIN 2 YEARS)

5 - NO REPAIRS NEEDED AT THIS TIME







May 25, 2021

Modjeski and Masters, Inc. 100 Sterling Parkway, Suite 302 Mechanicsburg, PA 17050

Attention: Mr. Richard A. Little, P.E.

- Project: Citywide Consultant Bridge Inspections: 2020-2021 DCDOT Bridge Inspections Option Year 2, Contract No. DCKA-2015-C-0023
- Reference: Bridge 66 Pedestrian Bridge over Kenilworth Avenue near Lane Place, N.E. Area of Delaminated and Loose Concrete over Kenilworth Avenue Follow-Up Letter of Concern (LOC)

Dear Mr. Little:

As part of the bridge inspections currently being performed by Mercado Consultants, Inc., a potential hazard was observed during the February 10, 2021 inspection of Bridge 66 that warrants prompt attention. Of note, DDOT was previously notified of this condition via a Letter of Concern dated February 18, 2019.

Bridge No. 66 is a single-span prestressed concrete T-beam structure that carries pedestrian traffic over Kenilworth Avenue, and is located just North of Lane Place in Northeast Washington, D.C. The superstructure consists of two prestressed concrete T-beams.

On the South overhang above the lane striping between the right and center Northbound lanes of Kenilworth Avenue, there is a 3'-0" long x 12" wide area of delaminated and loose concrete (see Photograph Nos. 1 through 3). The inspection crew was unable to safely remove the large area of loose concrete given the heavy traffic in the center Northbound lane of Kenilworth Avenue.

We recommend the following:

• Remove the area of delaminated concrete as soon as practical.

Sincerely,

Com marado

Bill Mercado, P.E. President

MERCADO CONSULTANTS, INC.



Photograph No. 1 – South Elevation (Looking North): Showing Location of Delaminated and Loose Concrete



Photograph No. 2 – Area of Delaminated and Loose Concrete on South Overhang



Photograph No. 3 – 2019 Photo: Area of Delaminated and Loose Concrete on South Overhang



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 D.C. Department of Transportation

 Transportation Operations Administration

 Asset Management Division

# 2021 BRIDGE INSPECTION PHOTOGRAPH SUMMARY SHEET

**BRIDGE NO.:** 0066 DATES: 02/10/2021,

HIGHWAY: Pedestrian Bridge

**OVER:** Kenilworth Avenue near Lane Place, N.E.

05/14/2021

Photograph No.	Description
1	North Elevation (Looking Southeast)
2	South Elevation (Looking Northeast)
3	Lower Northwest Approach Pedestrian Ramp (Looking North): Note Portion of Full-Length Longitudinal Crack with Water Stains in Walking Surface
4	Upper Northwest Approach Pedestrian Ramp (Looking South): Note Portion of Full-Length Longitudinal Crack in Walking Surface
5	Upper Northwest Approach Pedestrian Ramp (Looking North)
6	Lower Southeast Approach Pedestrian Ramp (Looking South)
7	Upper Southeast Approach Pedestrian Ramp (Looking North): Note Portion of Full-Length Longitudinal Crack in Walking Surface
8	Upper Southeast Approach Pedestrian Ramp (Looking South): Note Portion of Full-Length Longitudinal Crack in Walking Surface
9	Looking North From Top of Bridge at Mid-Span
10	Looking South From Top of Bridge at Mid-Span
11	Typical Deck Wearing Surface, Steel Bridge Railings and Steel Arch Safety Fence (Looking West): Note Longitudinal Crack
12	Spall in Deck Wearing Surface Adjacent to West Abutment Joint (Looking East)
13	Typical Compression Joint Seal (West Abutment Shown, Looking South): Note Corrosion on Joint Armor
14	Typical Compression Joint Seal (East Abutment Shown, Looking North): Note Corrosion on Joint Armor
15	West Abutment Compression Joint Seal Debonded From West Joint Armor at South End (Looking South)
16	East Abutment Compression Joint Seal: East Side (Approach) Joint Armor Settled 1" at South End (Looking Southwest)
17	Non-Standard Tubular North Bridge Railing at West End (Looking Northwest)
18	South Bridge Railing, Third Section from East: Both Connection Bolts Missing at Second Rail from Top – Rail Unsecured (Looking South): Note One Missing Connection Bolt at Third Rail from Top
19	Typical View of Concrete Soffit/Underside of T-Beam Top Flange and Underside of Concrete T- Beams (Looking West): Note Prior Water Leakage Stains and Efflorescence Throughout Soffit
20	Spall with Exposed Corroded Reinforcing Steel Near East End of North Deck Overhang Above Right Northbound Lane (Looking South)
21	Spall with Exposed Corroded Reinforcing Steel at Northeast Corner of Deck Fascia/Overhang Under First Safety Fence Post (Looking Southeast)
22	Area of Delaminated Concrete on North Deck Overhang Above Left Edge of Right Southbound Lane
23	Area of Delaminated and Loose Concrete on South Deck Fascia/Overhang Above Lane Striping Between Right and Center Northbound Lanes of Kenilworth Avenue (Looking North)
24	Spall with Exposed Corroded Reinforcing Steel in South Deck Fascia Near West Abutment (Looking Northwest)





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D.C. Department of Transportation Transportation Operations Administration Asset Management Division

# 2021 BRIDGE INSPECTION PHOTOGRAPH SUMMARY SHEET

BRIDGE NO.: 0066 DATES: \_02/10/2021,

T

HIGHWAY: Pedestrian Bridge

\_\_\_\_ РI ce, N.E.

OVER:	Kenilworth Avenue near Lane Place

05/14/2021	

Photograph No.	Description
25	North T-Beam Underside Adjacent to End Diaphragm at West Abutment: Area of Delaminated Concrete and Spall with Exposed Corroded Reinforcing Steel (Looking Southwest)
26	North T-beam Above Right Southbound Lane (Looking South): Spall on North Edge and Underside (Red Arrows); Horizontal Crack in North Face Web (Green Arrows)
27	North T-Beam Underside at First Intermediate Diaphragm From West Abutment Above Right Southbound Lane: Spall with Exposed Corroded Reinforcing Steel (Looking South)
28	South T-beam Above Right Northbound Lane (Looking North): Spall with Exposed Corroded Reinforcing Steel on South Edge and Underside
29	Crack in Underside of Third Diaphragm From East Abutment (Looking West)
30	Steel Roller Expansion Bearings at West Abutment: Mote Minor to Moderate Corrosion on Bearings
31	Steel Roller Expansion Bearings at West Abutment 1½" in Expanded Position Measured at Ambient Temperature of 46° Fahrenheit (South Bearing Shown, Looking North)
32	Steel Plate Fixed Bearings at East Abutment (Looking Northeast): Note Moderate Corrosion on Bearings
33	East Abutment Elevation
34	View Inside East Abutment Under Upper Pedestrian Approach Ramp (Looking South From Access Door)
35	East Abutment Interior: Vertical Crack in East and West Faces of Concrete Interior Wall Between Approach Ramps at Approximately One-Third Point From South End (West Face Shown, Looking East)
36	East Abutment Interior: Significant Accumulation of Debris on Concrete Floor Under Upper Pedestrian Approach Ramp From Just Beyond Utility Room Extending to South End of Ramp (Looking South)
37	View Inside West Abutment Under Upper Pedestrian Approach Ramp
38	West Abutment Interior: Area of Cracked and Broken Cinderblocks at Top of East/Interior Face of Cinderblock Wall at Northwest Wingwall Near North End
39	West Abutment Interior: Diagonal Crack with Adjacent Spall Near Base of East/Interior Face of Cinderblock Wall at Northwest Wingwall Near North End (Looking West)
40	West Abutment Interior: Vertical Crack in East and West Faces of Concrete Interior Wall Between Upper and Lower Pedestrian Approach Ramps 18 Ft. From North End (East Face Shown)
41	Area of Cracked and Missing Stones at Base of Wall Between North Ends of Northwest and Northeast Wingwalls (Looking South)
42	Full-Length Longitudinal Crack in Walking Surface of Upper Southeast Approach Pedestrian Ramp (Looking North)
43	West Abutment Interior, Underside of Upper Northwest Approach Pedestrian Ramp: Intermittent Spalls with Exposed Corroded Reinforcing Steel Bars Near Access Door
44	West Abutment Interior, Underside of Upper Northwest Approach Pedestrian Ramp: Water Stains with Moderate Efflorescence and Stalactites





# 2021 BRIDGE INSPECTION PHOTOGRAPH SUMMARY SHEET

BRIDGE NO.: 0066 DATES: 02/10/2021, 05/44/0004 **HIGHWAY:** Pedestrian Bridge

**OVER:** Kenilworth Avenue near Lane Place, N.E.

05/14/2021

Photograph No.	Description				
45	Cracked/Broken/Loose Drainage Grate at North End of Upper Southeast Approach Ramp: Note Concrete Debris Blocking Six of Eight Openings in Grate (Looking North)				
46	Missing Drainage Grate at South End of Upper Southeast Approach Ramp (Looking Northeast)				
47	Right/West Overhead Directional Sign on North Side of Bridge: Third Sign Clip From Bottom Missing on Second Vertical Attachment Member From West (Looking North)				
48	South and North Channels for Directional Sign Light Support on South Side of Bridge Disconnected at East End Due to Missing Bolts (Looking West)				
49	Both Sections of "Clearance 14 Ft." Sign Missing Above Southbound Lanes (Looking Southeast)				
50	Damaged/Broken Lights for Directional Sign on North fascia Above Southbound Lanes of Kenilworth Avenue				
51	Severe Corrosion and Pipe Wrapping Unraveled on Two Pipes of Non-Functional Antifreeze System at South End of Lower Pedestrian Approach Ramp Inside East Abutment				
52	Two Broken Supports for Pipes of Non-Functional Antifreeze System at North End of Lower Pedestrian Approach Ramp Inside West Abutment				





# 2021 BRIDGE INSPECTION PHOTOGRAPHS

**BRIDGE NO.:** 0066

H

 HIGHWAY:
 Pedestrian Bridge

 OVER:
 Kenilworth Avenue near Lane Place, N.E.



Photograph No. 1 – North Elevation (Looking Southeast)



Photograph No. 2 - South Elevation (Looking Northeast)





**Photograph No. 3** – Lower Northwest Approach Pedestrian Ramp (Looking North): Note Portion of Full-Length Longitudinal Crack with Water Stains in Walking Surface



Photograph No. 4 – Upper Northwest Approach Pedestrian Ramp (Looking South): Note Portion of Full-Length Longitudinal Crack in Walking Surface





# 2021 BRIDGE INSPECTION PHOTOGRAPHS

**BRIDGE NO.:** 0066

HIGHWAY: Pedestrian Bridge OVER: Kenilworth Avenue near Lane Place, N.E.



Photograph No. 5 – Upper Northwest Approach Pedestrian Ramp (Looking North)



Photograph No. 6 – Lower Southeast Approach Pedestrian Ramp (Looking South)





# 2021 BRIDGE INSPECTION PHOTOGRAPHS

**BRIDGE NO.:** 0066

HIGHWAY: Pedestrian Bridge OVER: Kenilworth Avenue near Lane Place, N.E.



**Photograph No. 7** – Upper Southeast Approach Pedestrian Ramp (Looking North): Note Portion of Full-Length Longitudinal Crack in Walking Surface



**Photograph No. 8** – Upper Southeast Approach Pedestrian Ramp (Looking South): Note Portion of Full-Length Longitudinal Crack in Walking Surface





Photograph No. 9 - Looking North From Top of Bridge at Mid-Span



Photograph No. 10 – Looking South From Top of Bridge at Mid-Span





# 2021 BRIDGE INSPECTION PHOTOGRAPHS

**BRIDGE NO.:** 0066

HIGHWAY: Pedestrian Bridge OVER: Kenilworth Avenue near Lane Place, N.E.



Photograph No. 11 – Typical Deck Wearing Surface, Steel Bridge Railings and Steel Arch Safety Fence (Looking West): Note Longitudinal Crack



Photograph No. 12 – Spall in Deck Wearing Surface Adjacent to West Abutment Joint (Looking East)





# 2021 BRIDGE INSPECTION PHOTOGRAPHS

**BRIDGE NO.:** 0066

HIGHWAY: Pedestrian Bridge OVER: Kenilworth Avenue near Lane Place, N.E.



Photograph No. 13 – Typical Compression Joint Seal (West Abutment Shown, Looking South): Note Corrosion on Joint Armor



Photograph No. 14 – Typical Compression Joint Seal (East Abutment Shown, Looking North): Note Corrosion on Joint Armor







Photograph No. 16 – East Abutment Compression Joint Seal: East Side (Approach) Joint Armor Settled 1" at South End (Looking Southwest)







**Photograph No. 19** – Typical View of Concrete Soffit/Underside of T-Beam Top Flange and Underside of Concrete T-Beams (Looking West): Note Prior Water Leakage Stains and Efflorescence Throughout Soffit



Photograph No. 20 – Spall with Exposed Corroded Reinforcing Steel Near East End of North Deck Overhang Above Right Northbound Lane (Looking South)





# 2021 BRIDGE INSPECTION PHOTOGRAPHS

**BRIDGE NO.:** 0066

HIGHWAY: Pedestrian Bridge OVER: Kenilworth Avenue near Lane Place, N.E.



**Photograph No. 21** – Spall with Exposed Corroded Reinforcing Steel at Northeast Corner of Deck Fascia/Overhang Under First Safety Fence Post (Looking Southeast)



Photograph No. 22 – Area of Delaminated Concrete on North Deck Overhang Above Left Edge of Right Southbound Lane





Photograph No. 23 – Area of Delaminated and Loose Concrete on South Deck Fascia/Overhang Above Lane Striping Between Right and Center Northbound Lanes of Kenilworth Avenue (Looking North)



Photograph No. 24 – Spall with Exposed Corroded Reinforcing Steel in South Deck Fascia Near West Abutment (Looking Northwest)





# 2021 BRIDGE INSPECTION PHOTOGRAPHS

**BRIDGE NO.:** 0066

HIGHWAY: Pedestrian Bridge OVER: Kenilworth Avenue near Lane Place, N.E.



Photograph No. 25 – North T-Beam Underside Adjacent to End Diaphragm at West Abutment: Area of Delaminated Concrete and Spall with Exposed Corroded Reinforcing Steel (Looking Southwest)



Photograph No. 26 – North T-beam Above Right Southbound Lane (Looking South): Spall on North Edge and Underside (Red Arrows); Horizontal Crack in North Face Web (Green Arrows)







Photograph No. 28 – South T-beam Above Right Northbound Lane (Looking North): Spall with Exposed Corroded Reinforcing Steel on South Edge and Underside





Photograph No. 30 – Steel Roller Expansion Bearings at West Abutment: Mote Minor to Moderate Corrosion on Bearings





Photograph No. 31 – Steel Roller Expansion Bearings at West Abutment 1½" in Expanded Position Measured at Ambient Temperature of 46° Fahrenheit (South Bearing Shown, Looking North)



Photograph No. 32 – Steel Plate Fixed Bearings at East Abutment (Looking Northeast): Note Moderate Corrosion on Bearings





Photograph No. 33 - East Abutment Elevation



Photograph No. 34 – View Inside East Abutment Under Upper Pedestrian Approach Ramp (Looking South From Access Door)





**Photograph No. 35** – East Abutment Interior: Vertical Crack in East and West Faces of Concrete Interior Wall Between Approach Ramps at Approximately One-Third Point From South End (West Face Shown, Looking East)



**Photograph No. 36** – East Abutment Interior: Significant Accumulation of Debris on Concrete Floor Under Upper Pedestrian Approach Ramp From Just Beyond Utility Room Extending to South End of Ramp (Looking South)





**Photograph No. 38** – West Abutment Interior: Area of Cracked and Broken Cinderblocks at Top of East/Interior Face of Cinderblock Wall at Northwest Wingwall Near North End

![](_page_48_Picture_2.jpeg)

![](_page_49_Picture_0.jpeg)

Photograph No. 39 – West Abutment Interior: Diagonal Crack with Adjacent Spall Near Base of East/Interior Face of Cinderblock Wall at Northwest Wingwall Near North End (Looking West)

![](_page_49_Picture_2.jpeg)

Photograph No. 40 – West Abutment Interior: Vertical Crack in East and West Faces of Concrete Interior Wall Between Upper and Lower Pedestrian Approach Ramps 18 Ft. From North End (East Face Shown)

![](_page_49_Picture_4.jpeg)

![](_page_50_Picture_0.jpeg)

**Photograph No. 41** – Area of Cracked and Missing Stones at Base of Wall Between North Ends of Northwest and Northeast Wingwalls (Looking South)

![](_page_50_Picture_2.jpeg)

Photograph No. 42 – Full-Length Longitudinal Crack in Walking Surface of Upper Southeast Approach Pedestrian Ramp (Looking North)

![](_page_50_Picture_4.jpeg)

![](_page_51_Picture_0.jpeg)

# 2021 BRIDGE INSPECTION PHOTOGRAPHS

**BRIDGE NO.:** 0066

I

HIGHWAY: Pedestrian Bridge OVER: Kenilworth Avenue near Lane Place, N.E.

![](_page_51_Picture_6.jpeg)

Photograph No. 43 – West Abutment Interior, Underside of Upper Northwest Approach Pedestrian Ramp: Intermittent Spalls with Exposed Corroded Reinforcing Steel Bars Near Access Door

![](_page_51_Picture_8.jpeg)

Photograph No. 44 – West Abutment Interior, Underside of Upper Northwest Approach Pedestrian Ramp: Water Stains with Moderate Efflorescence and Stalactites

![](_page_51_Picture_10.jpeg)

![](_page_52_Picture_0.jpeg)

**Photograph No. 45** – Cracked/Broken/Loose Drainage Grate at North End of Upper Southeast Approach Ramp: Note Concrete Debris Blocking Six of Eight Openings in Grate (Looking North)

![](_page_52_Picture_2.jpeg)

Photograph No. 46 – Missing Drainage Grate at South End of Upper Southeast Approach Ramp (Looking Northeast)

![](_page_52_Picture_4.jpeg)

![](_page_53_Figure_0.jpeg)

**Photograph No. 47** – Right/West Overhead Directional Sign on North Side of Bridge: Third Sign Clip From Bottom Missing on Second Vertical Attachment Member From West (Looking North)

![](_page_53_Picture_2.jpeg)

**Photograph No. 48** – South and North Channels for Directional Sign Light Support on South Side of Bridge Disconnected at East End Due to Missing Bolts (Looking West)

![](_page_53_Picture_4.jpeg)

![](_page_54_Picture_0.jpeg)

Photograph No. 49 – Both Sections of "Clearance 14 Ft." Sign Missing Above Southbound Lanes (Looking Southeast)

![](_page_54_Picture_2.jpeg)

Photograph No. 50 – Damaged/Broken Lights for Directional Sign on North fascia Above Southbound Lanes of Kenilworth Avenue

![](_page_54_Picture_4.jpeg)

![](_page_55_Picture_0.jpeg)

# 2021 BRIDGE INSPECTION PHOTOGRAPHS

**BRIDGE NO.:** 0066

HIGHWAY: Pedestrian Bridge OVER: Kenilworth Avenue near Lane Place, N.E.

![](_page_55_Picture_6.jpeg)

Photograph No. 51 – Severe Corrosion and Pipe Wrapping Unraveled on Two Pipes of Non-Functional Antifreeze System at South End of Lower Pedestrian Approach Ramp Inside East Abutment

![](_page_55_Picture_8.jpeg)

**Photograph No. 52** – Two Broken Supports for Pipes of Non-Functional Antifreeze System at North End of Lower Pedestrian Approach Ramp Inside West Abutment

![](_page_55_Picture_10.jpeg)

# Structure Inventory and Appraisal Sheet (English Units)

![](_page_56_Figure_3.jpeg)

INSP007\_Inspection\_SIA\_English

Bridg	Bridge Key: 0066 Agency ID: 0066 Sufficiency Rating: N/A						j: N/A						
Elem	Element Condition State Data												
Str Unit	Elm	Env	Description	Units	Total Quantity	% in 1	Qty. St. 1	% in 2	Qty. St. 2	% in 3	Qty. St. 3	% in 4	Qty. St. 4
0	15	2	Prestressed Concrete Top Flange	SF	787	0%	0	97%	761	3%	26	0%	0
0	1080	2	Delamination/Spall/Patched Area	SF	37	0%	0	30%	11	70%	26	0%	0
0	1090	2	Exposed Reinforcing Steel	SF	10	0%	0	100%	10	0%	0	0%	0
0	1120	2	Efflorescence/Corrosion Staining	SF	740	0%	0	100%	740	0%	0	0%	0
0	109	2	Prestressed Concrete Open Girder	LF	161	0%	0	87%	140	13%	21	0%	0
0	1080	2	Delamination/Spall/Patched Area	LF	149	0%	0	90%	134	10%	15	0%	0
0	1090	2	Exposed Reinforcing Steel	LF	6	0%	0	100%	6	0%	0	0%	0
0	1110	2	Cracking	LF	6	0%	0	0%	0	100%	6	0%	0
0	215	2	Reinforced Concrete Abutment	LF	20	50%	10	35%	7	15%	3	0%	0
0	1080	2	Delamination/Spall/Patched Area	LF	3	0%	0	0%	0	100%	3	0%	0
0	1120	2	Efflorescence/Corrosion Staining	LF	7	0%	0	100%	7	0%	0	0%	0
0	302	2	Compression Joint Seal	LF	20	90%	18	0%	0	0%	0	10%	2
0	2320	2	Seal Adhesion	LF	2	0%	0	0%	0	0%	0	100%	2
0	311	2	Movable Bearing	EA	2	0%	0	100%	2	0%	0	0%	0
0	1000	2	Corrosion	EA	2	0%	0	100%	2	0%	0	0%	0
0	313	2	Fixed Bearing	EA	2	0%	0	100%	2	0%	0	0%	0
0	1000	2	Corrosion	EA	2	0%	0	100%	2	0%	0	0%	0
0	330	2	Metal Bridge Railing	LF	161	92%	148	0%	0	8%	13	0%	0
0	1020	2	Connection	LF	13	0%	0	0%	0	100%	13	0%	0
0	510	2	Wearing Surface (15)	SF	723	99%	722	0%	0	1%	1	0%	0
0	3210	2	Delamination/Spall/Patched Area/Pothole	SF	1	0%	0	0%	0	100%	1	0%	0
0	515	2	Steel Protective Coating (311)	SF	14	0%	0	0%	0	0%	0	1 <b>00</b> %	14
0	3440	2	Effectiveness	SF	14	0%	0	0%	0	0%	0	100%	14
0	515	2	Steel Protective Coating (313)	SF	5	0%	0	0%	0	0%	0	100%	5
0	3440	2	Effectiveness	SF	5	0%	0	0%	0	0%	0	100%	5
0	515	2	Steel Protective Coating (330)	SF	524	100%	524	0%	0	0%	0	0%	0