



**Testimony to the Committee on Transportation and the Environment
Budget Oversight Hearing for the
Department of Transportation
April 30, 2024**

Zachary Burt on Behalf of the DC Preservation League

Good afternoon, Councilmember Allen and the members of this committee.

My name is Zachary Burt, and I am the Community Outreach and Grants Manager for the DC Preservation League (DCPL). For over 50 years, the DC Preservation League (DCPL) has served as Washington's citywide nonprofit advocacy organization dedicated to preserving and protecting our city's historic resources. DCPL invests significant time, effort, and funds to work with local agencies and stakeholders on preservation-related issues across the District of Columbia. The organization works diligently to ensure that all preservation projects encourage community development that is socially, economically, and environmentally sustainable.

In 2008, the Foundry Branch Trolley Trestle was listed as one of Washington, DC's Most Endangered Places. Built in 1897, the Foundry Branch Trolley Trestle is one of the few remaining pieces of the old streetcar system that carried District residents around the city for a century. The trolley line it served ran from Georgetown into Glen Echo, Maryland, transporting thousands of Washingtonians to the Glen Echo Amusement Park, connecting and developing the communities in its path, and allowing its riders to enjoy the scenic views of our city's unique topography. The last trolley car crossed the Trestle in January 1960. However, the bridge remained popular with pedestrians and cyclists, who continued to cross over and under it. After years of neglect by WMATA, it is in significant disrepair. The deterioration has necessitated the closure of part of the southern area of Glover-Archbold Park.

Today, the Trestle is officially THE Most Endangered Place in Washington, DC, as WMATA continues to pursue a raze permit from the National Park Service.

A 2019 study asserted the Trestle was in imminent danger of collapse. Five years later, it still stands. The Trestle is not in imminent danger of collapse. It can and should be rehabilitated to connect communities and serve a transportation purpose for Washingtonians and visitors to enjoy once again.

DDOT also asserts that the Trestle has no independent utility outside a more extensive trail network. **This is false!** Rehabilitation of the Trestle alone would have "independent utility" and a "transportation use" since the structure's western end is near the tunnel underneath Canal Road and connects directly to the Capital Crescent Trail. Further, the Trestle's eastern end is directly adjacent to Georgetown University's "Library Walk" Trail and Prospect Street, which lead into the heart of Georgetown. Moreover, the Trestle would connect students, faculty, and hospital workers who live in the neighborhoods west of Georgetown directly to the University, hospital, and beyond. The transportation routes resulting from Trestle rehabilitation would also be significantly safer and more direct than attempting to navigate the narrow sidewalks on Canal Road.

641 S Street, NW, Suite 300 | Washington, DC 20001 | T: 202.783.5144 | dcpreservation.org

Fay Armstrong, *President* | Greta Fuller, *Vice President* | Howard S. Berger, *Treasurer* | Melissa Cohen, AIA, LEED AP, *Secretary* | John DeFerrari, *At Large*
Amy Ballard | Philip Brault, LEED AP | Scott DeMartino, Esq. | Hany Hassan, FAIA | Constance Lai, FAIA, NCARB, LEED AP BD+C
Rob McLennan, AIA | Elizabeth Milnarik, Ph.D., AIA | D. Peter Sefton | James W. Shepherd, AIA, LEED
Joseph E. Taylor, AIA | Benjamin L. Williams, Esq., LEED AP | Juliet Zucker

DCPL's most recent studies are attached. DDOT's earlier estimates included extensive trail work that wouldn't necessarily be required at this point, thus resulting in a lower rehabilitation cost for the Trestle. Furthermore, rehabilitation of the Trestle could facilitate the expansion of existing trails in the future.

The estimate (\$205,000) attached was prepared by two reputable DC-based architecture and engineering firms and shows that for less than the currently budgeted \$250,000 in FY2024, architectural and engineering services can be carried out through construction documents, resulting in a shovel-ready project within eight months. The remaining funds could be carried forward for construction management and added to the contractor's roughly \$3.9M restoration budget, which includes site work between Foxhall Road and the Georgetown University bus turnaround.

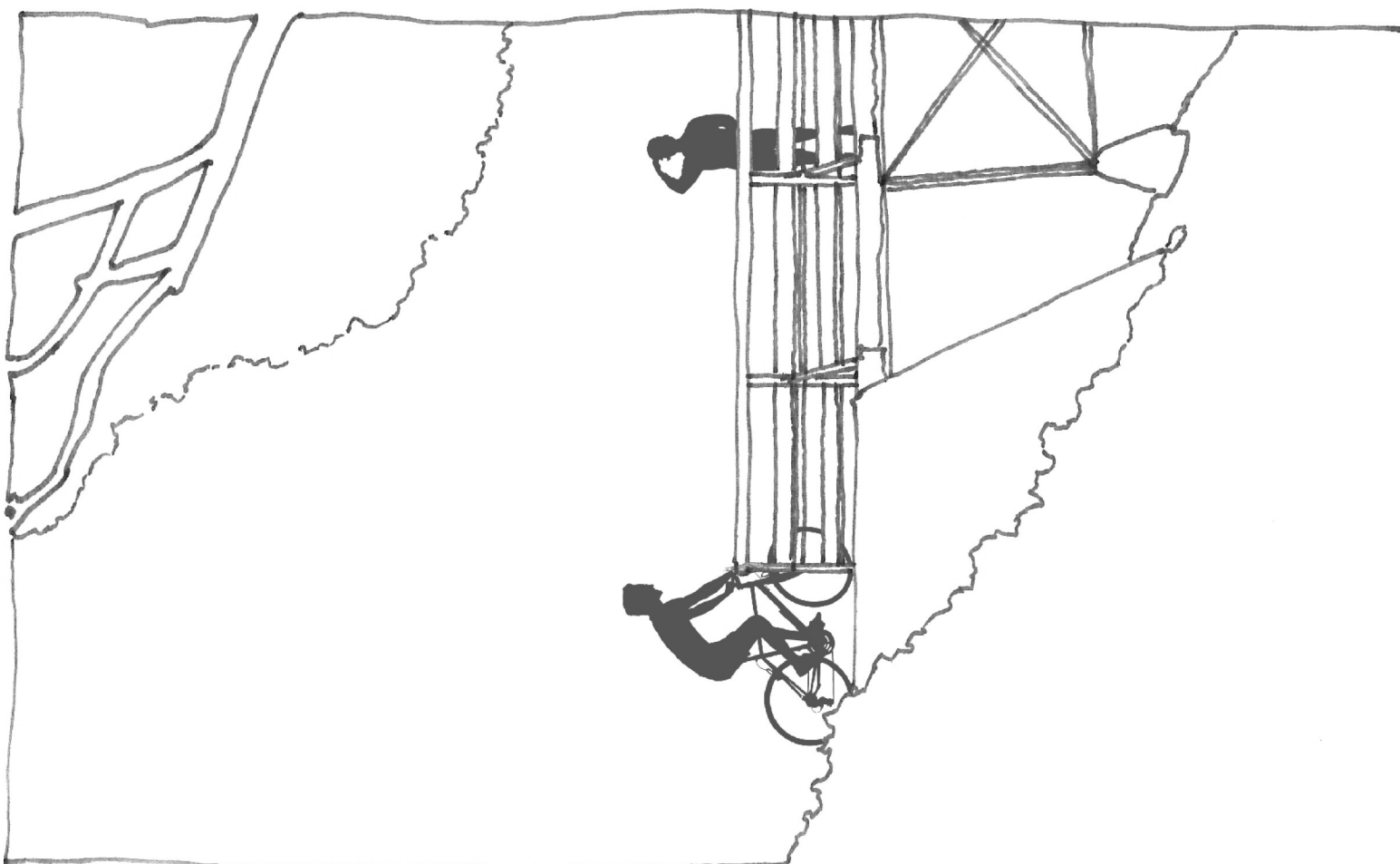
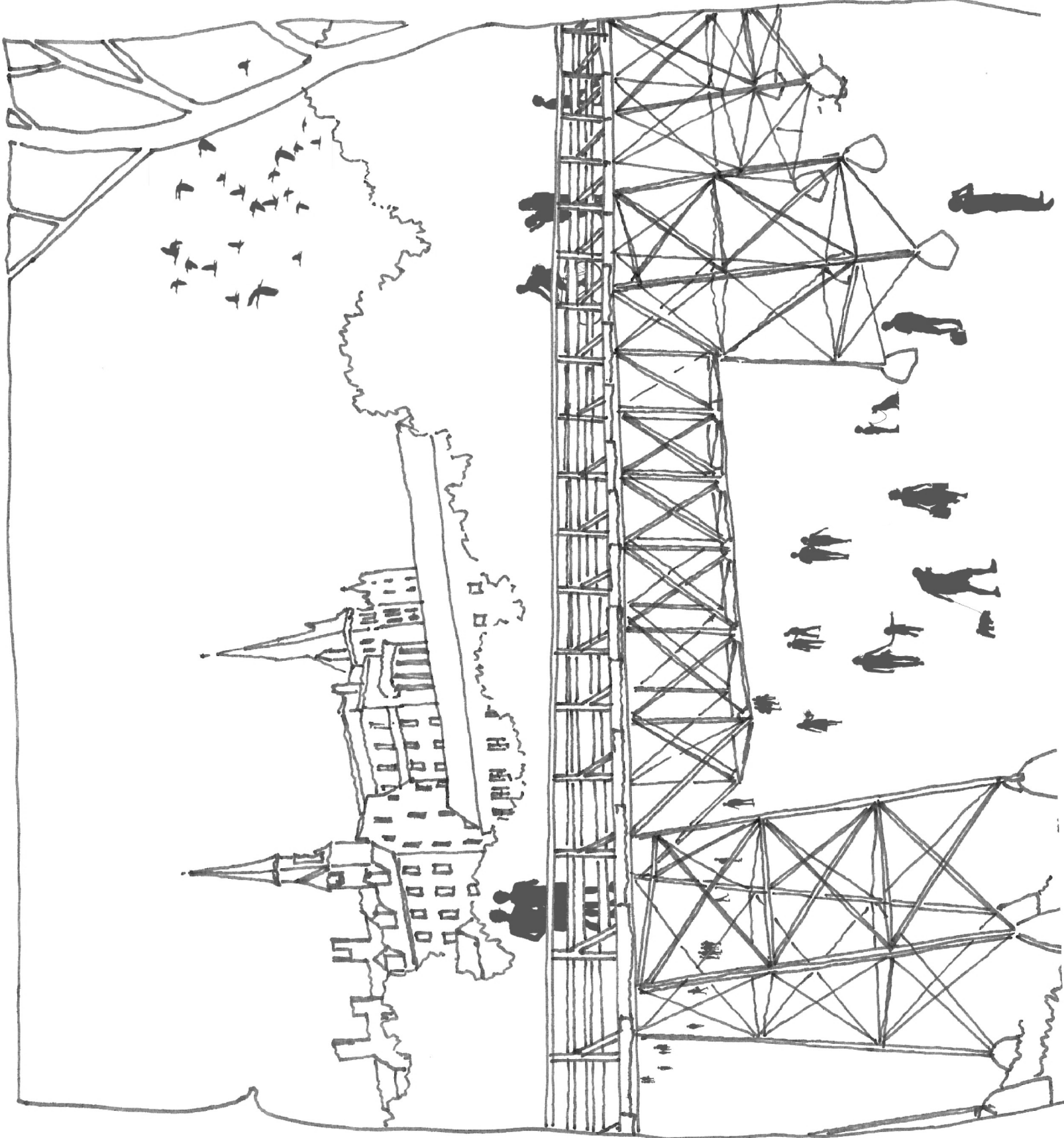
More than 1 400 petition signers and 400 letter writers have joined the preservation community, ANC 3D and 2E, Georgetown University students, and many neighborhood residents to support accepting and rehabilitating the Trestle.

Experts agree that the structure is demonstrably repairable and can be rehabilitated into a safe and sustainable pedestrian and cycling path that will connect communities, provide an alternative to the dangerous conditions of Canal Road, and preserve the last surviving historic trolley trestle in the District of Columbia. The only thing standing in the way of this project moving forward is DDOT.

We ask the Council to carry forward the \$250,000 in the FY 2025 Budget and make clear to the Mayor and DDOT that this project is a priority of the Council and DC residents.

DCPL and its consultants are ready and willing to assist in making this project a reality.

Thank you for your time.



1 August 2023

Ms. Rebecca Miller
Executive Director
DC Preservation League
641 S Street NW, Suite 300
Washington, DC 20001

Project Pro-Bono – Foundry Branch Trolley Trestle Rehabilitation and Reuse Feasibility

Dear Ms. Miller:

This letter summarizes our preliminary observations and recommendations regarding the feasibility of rehabilitating the Foundry Branch Trolley Trestle Bridge and adapting its use to a pedestrian and bike path.

1. BACKGROUND

The Foundry Branch Trolley Trestle Bridge is a historic bridge between the Georgetown and Palisades neighborhoods in Washington, DC. The bridge was constructed in 1897 as part of the trolley system that serviced the corridor between Western DC and Glenn Echo, Maryland. Since the trolley stopped running in 1962, other portions of the trolley system have been repurposed as bike or pedestrian paths, but this segment has remained unused.

2. OBSERVATIONS

On 13 July 2023, Matthew Daw, Senior Principal, and Erica Inmacolato, Project Consultant, of Simpson Gumpertz & Heger Inc visited Foundry Branch Park and observed the suspended truss portion of the trestle from outside the fenced area set up by the National Park Service (NPS). The suspended truss appeared to be in fairly good condition while the approach trestles were largely overgrown with vegetation and more difficult to observe. We attempted to visit the approach trestle from the east or Georgetown side of the bridge, but the thick summer vegetation made the area impassable. Without a path or clear markings, we were unable to locate the abutment.

3. DOCUMENT REVIEW

We (Simpson Gumpertz & Heger Inc) were provided a feasibility memorandum prepared by Jacobs dated December 2019. The memorandum documents the condition of the structure at the time Jacobs observed the bridge, analysis of the structure, repair options and considerations, and order of magnitude cost estimates.

3.1 Observations of the Bridge

Jacobs' observations of the bridge in 2019 are consistent with what we observed in July 2023. Jacobs performed a much more extensive hands-on investigation including 3D scanning the bridge. In general, Jacobs found the suspended truss was in generally good condition while the approach trestles showed more signs of deterioration and were overgrown by vegetation. The concrete abutments were beginning to show their age through small concrete spalls and cracks but were in generally stable condition. The approach trestle foundations vary in their condition. Many of the foundations on the west side were completely buried and, therefore, not visible. Others showed signs of concrete deterioration including cracking and spalling. And still others had been undercut or the soil had begun to erode below the footing. A geotechnical study was not performed in conjunction with Jacobs' assessment, therefore, actual foundation bearing conditions are unknown. Bedrock appears to be near the surface at this site as there are locations where the bedrock is visible.

3.2 Analysis of the Structure

The analysis done by Jacobs was based on the most current building code at the time, AASHTO Guide Spec for the Design of Pedestrian Bridges. This current code uses a design method known as Load and Resistance Factor Design or LRFD. The original structure was likely designed using a method known as Allowable Stress Design or ASD. For any rehabilitation project, we would recommend evaluating the structure following current codes when possible, therefore, we would have approached the analysis the same way. This analysis was done assuming no corrosion or significant section loss.

The analysis showed the maximum deflection for the reused structure was well within the code-prescribed allowable limits. From a strength perspective, the truss and deck members are also well within the allowable code limits. They are generally carrying a maximum of 70% of the load the code allows them to carry. For the approach trestles, the analysis shows a few members are overstressed for the reused condition. As the analysis is preliminary, we recommend finalizing the analysis in this area and, if necessary, providing local strengthening at these select locations.

3.3 Renovation Options and Considerations

Jacobs provided four renovation options and the positives and negatives of each.

1. Option 1 – Rehabilitation of the approach trestle. This option involves dismantling the approach trestles, cataloging each member, clean the members and re-assemble. This reuses as much of the historic fabric as possible.
2. Option 2 – Replace the approach trestles to match the existing. This option involves dismantling the approach trestles and fabricating and constructing new trestles in their place. This keeps the original aesthetic while reducing some of the labor required for Option 1 and, therefore, cost.
3. Option 3 – Replace the approach trestles with new long spans. This option involves removing the approach trestles and replacing them with longer span beams that bear on concrete piers. This changes the aesthetic of the bridge on the ends, maintains the aesthetic for the main portion that is most easily visible, and reduces life cycle cost.
4. Option 4 – Retain the approach trestle as facades. This option involves the same process as Option 1 but provides a new steel or concrete structural support and the re-assembled historic pieces simply act as a facade around the new support.

3.4 Order of Magnitude Cost Estimate

Jacobs provided a cost estimate for option 2. Unfortunately, because this estimate was done in 2019, it is likely the estimate is no longer accurate and should be reassessed.

4. FEASIBILITY RECOMMENDATIONS

Based on our field observations and review of Jacobs' feasibility study in December 2019, we believe the bridge could be rehabilitated and repurposed as a pedestrian and bike path with a few structural repair and strengthening details. The Glenn Echo Trolley Bridge that was part of the same trolley system and rehabilitated would act as a precedent for this project.

Because the bridge was built in 1897 and given its good condition, we believe the structure is comprised of wrought iron. Wrought iron has less impurities than steel, therefore, it tends to be much more corrosion resistant. The structure has received little to no maintenance since 1962, so some corrosion is expected but it is generally in good condition. We would expect that, given the low level of corrosion, the structure could be easily cleaned and coated in place. The available analysis showed there were only a few select members that may overstressed in the reuse scenario. We believe these areas could be easily addressed with local strengthening if necessary. Some of the concrete foundations show signs of spalling, but concrete repairs could be executed to address this issue. It would be recommended to engage a geotechnical

consultant to confirm the soil composition. However, based on borings completed nearby for the watermain project in 1981 and visible outcropped bedrock, it is likely that the foundations bear on suitable soils or bedrock.

Our recommendation would be to rehabilitate the historic structure in place in preparation for a proposed pedestrian reuse. All overgrown vegetation should be removed to clearly view and assess the structure. Ultimately, the wrought iron structural could be cleaned in place and painted with a protective coating. Localized reinforcement at any overstressed members and at any original members that are severely corroded could be performed. Some repairs may also be needed at connections where gusset plates have corroded. Concrete repairs at the spalled concrete on the foundations and abutments should be completed at deteriorated concrete locations. Foundations that have been undercut should be backfilled. To complete an adaptive reuse for pedestrian access, a new deck and railings to support the pedestrian and bike path will be necessary.

In conclusion, by implementing a fairly straightforward wrought iron and concrete repair campaign, we believe that the historic Foundry Branch Trolley Trestle could be easily rehabilitated and transformed into a pedestrian and bike path.

Sincerely yours,



Matthew J. Daw, P.E.

Senior Principal

DC License No. PE901523 (Structural)



Erica N. Inmacolato

Project Consultant

ASSUMPTIONS & QUALIFICATIONS

FOUNDRY BRANCH TROLLEY TRESTLE BRIDGE

ROUGH ORDER OF MAGNITUDE BUDGET

SEPTEMBER 1, 2023



GENERAL

1. Pricing is based on the following:
 - SGH report dated: 08/01/2023.
 - Jacobs Appendix #2 dated: December 2019
2. Design & estimate contingency are not included, and the budgeting provided is assumed as “design to” pricing.
3. Pricing is based on current market costs. We have included 8% escalation in this proposal to project forward to a potential construction start.
4. Testing and/or inspections are included.
5. Builder’s Risk Insurance is not included and assumed provided by the Owner.
6. Building permit cost is included.
7. A Payment and Performance Bond is included.
8. Sales tax is included.
9. Subcontractor insurances are included per Consigli standard subcontract.
10. Utility company back charges, user fees, etc (temporary electric, water, gas, etc.) are excluded.
11. Work hours are assumed to be normal business hours (7:00AM to 3:00PM) Monday to Friday. Overtime, phasing, or off-hours work costs are not included.
12. Winter/Weather conditions are excluded.
13. Site Security costs or provisions are not included.
14. All designs are by the Owner’s Designer. Delegated design is excluded.

DEMOLITION

15. Hazardous material testing is not included.
16. Prior to construction start we assume a hazmat report will be provided by Others.
17. Lumber for the existing trestle is assumed to contain no contaminants and is assumed disposed of using standard demolition procedures.
18. An allowance is included to sandblast, contain, and dispose of any existing paint as potentially hazardous.

CONCRETE

19. An allowance is included for underpinning the existing foundations for the trestle bridge.
20. An allowance is included for minimal spalling repair on the existing concrete foundations.

METALS

21. Allowances are included for the following scopes of work:
 - Sandblasting and lead abatement of the existing structure
 - Structural steel strengthening of the existing structure
 - Anchorages to receive timber framing for the new decking and framing.

ASSUMPTIONS & QUALIFICATIONS

FOUNDRY BRANCH TROLLEY TRESTLE BRIDGE

ROUGH ORDER OF MAGNITUDE BUDGET

SEPTEMBER 1, 2023



- Miscellaneous metal angles

WOODS, PLASTICS, AND COMPOSITES

22. Assumptions for a pressure treated timber pedestrian bridge consist of the following:
- 8"x8" pressure treated cross members
 - 4"x4" pressure treated sleepers
 - 4"x8" pressure treated decking
 - Railings consisting of two layers of 2"x6" pressure treated lumber with wire mesh sandwiched between
 - The decking system is assumed to be 12' wide consisting of timber on each side with 2' galvanized metal grate recessed in the middle of the decking.

FINISHES

23. All steel will be primed and painted.

SITework

24. Excavated soils are assumed to be clean and suitable for reuse. Soils to be exported are assumed suitable for use as residential fill, therefore premiums related to transportation and disposal of soils at like sites or landfills are not included.
25. Rock/ledge removal premiums are not included.
26. Temporary sediment and erosion controls are included within project limits.
27. The main construction entrance is assumed off of Canal Road with secondary access on Foxhall Road and through Georgetown Campus at the Bus Circle.
28. Grubbing of the vegetative growth that is on the existing bridge is included as well as entry paths from the secondary access points.
29. An allowance is included to stabilize around the bridge foundations on slopes with #2 stone.
30. No utility work, lighting, security, or blue light phone systems are included.

LANDSCAPING

31. An allowance for site restoration is included.
32. Paving mill & overlay is included for Canal and Foxhall Roads for the areas of impact only.
33. Removal and reinstallation of the timber bollards on Canal Road is included.
34. Crushed stone approach paths from Foxhall and Georgetown Bus Loop are included for pedestrian bridge access. We do not include ADA accessible paving.
35. Permanent fencing is not included; we have included temporary construction fencing only.

Foundry Branch Trolley Trestle

Restoration Budget

9/1/2023

Description	Takeoff Quantity	Total Cost/Unit	Total Amount
01-50 TRADE REQUIREMENTS			
01.52.50 Safety			
Safety toe kick at slab edges / shaft openings	1,000.00 lf	20.00 /lf	20,000
Safety			20,000
01.54.23 Temporary Scaffolding & Platforms			
Staging - installation & removal	5,040.00 sf	45.00 /sf	226,800
Staging - rental	12.00 mo	12,000.00 /mo	144,000
Staging - tarp in	15,000.00 sf	4.00 /sf	60,000
Scrim/debris netting - standard	5,040.00 sf	5.00 /sf	25,200
Temporary Scaffolding & Platforms			456,000
01.71.23 Field Engineering			
Foundation survey	1.00 allw	10,000.00 /allw	10,000
Field Engineering			10,000
01-50 TRADE REQUIREMENTS			486,000
02-20 DEMOLITION			
02.41.13 Demolition - Site			
Demo concrete sidewalks / pads	1,000.00 sf	13.00 /sf	13,000
Demo curbing - granite / concrete	100.00 lf	5.10 /lf	510
Demo fencing	1,800.00 lf	4.35 /lf	7,830
Demo misc. site items	1.00 allw	10,000.00 /allw	10,000
Demolition - Site			31,340
02.41.25 Demolition - Steel			
Demo steel beams (>20')	50.00 ea	400.00 /ea	20,000
Demolition - Steel			20,000
02.41.28 Demolition - Wood Framing			
Demo wood beams	210.00 ea	250.00 /ea	52,500
Demo floor structure	4,788.00 sf	15.00 /sf	71,820
Demolition - Wood Framing			124,320
02-20 DEMOLITION			175,660
03-01 CONCRETE			
03.01.30 Concrete Restoration & Cleaning			
Repair spalled concrete (< 1" d)	1,000.00 sf	25.00 /sf	25,000
Concrete Restoration & Cleaning			25,000
31.48.00 Underpinning			
Underpinning Allowance	125.00 cy	1,500.00 /cy	187,500

Foundry Branch Trolley Trestle

Restoration Budget

9/1/2023

Description	Takeoff Quantity	Total Cost/Unit	Total Amount
Underpinning			187,500
03-01 CONCRETE			212,500
05-01 METAL REPAIRS/RESTORATION			
05.01.01 Cleaning of Structural Metal Framing			
Pressure-washing	5,000.00 sf	4.00 /sf	20,000
Wire brush by hand	5,000.00 sf	3.00 /sf	15,000
Sandblasting / lead abatement	5,000.00 sf	45.00 /sf	225,000
Cleaning of Structural Metal Framing			260,000
05-01 METAL REPAIRS/RESTORATION			260,000
05-12 STRUCTURAL STEEL			
05.05.23 Metal Fastenings			
Anchors for grating / decking	1.00 ls	35,000.00 /ls	35,000
Metal Fastenings			35,000
05.12.00 Structural Steel Framing			
Strengthening Allowance	15.00 tons	10,000.00 /tons	150,000
Support framing for relieving angles/lintels Allowance	15.00 tons	10,000.00 /tons	150,000
Temporary cable safety railing - bridge	504.00 lf	45.00 /lf	22,680
Structural Steel Framing			322,680
05-12 STRUCTURAL STEEL			357,680
05-50 MISCELLANEOUS METALS			
05.53.00 Metal Gratings			
Floor grating - galv steel	1,100.00 sf	75.00 /sf	82,500
Metal Gratings			82,500
05-50 MISCELLANEOUS METALS			82,500
06-10 WOOD FRAMING			
06.19.00 Miscellaneous Rough Carpentry			
Frame (8"x8" pt cross members)	126.00 ea	351.50 /ea	44,289
Frame (4"x4" sleepers)	300.00 ea	164.00 /ea	49,200
Frame & deck exterior decks	620.00 ea	260.00 /ea	161,200
Delivery	1.00 ls	5,000.00 /ls	5,000
Rout channel into deck boards for grating	504.00 lf	25.00 /lf	12,600
Frame (4"x4" diagonal bracing handrail)	64.00 ea	176.00 /ea	11,264
Frame post for handrail	64.00 ea	176.00 /ea	11,264
Frame top plate for handrail	504.00 lf	33.83 /lf	17,051
Frame horizontal boards for handrail (2"x6")	1,512.00 lf	33.83 /lf	51,152
Frame horizontal outer boards for handrail (2"x6")	1,512.00 lf	33.83 /lf	51,152
F&I wire mesh partition for handrail	1,758.00 sf	30.00 /sf	52,740

Foundry Branch Trolley Trestle

Restoration Budget

9/1/2023

Description	Takeoff Quantity	Total Cost/Unit	Total Amount
Miscellaneous Rough Carpentry			466,912
06-10 WOOD FRAMING			466,912
09-90 PAINTING			
09.90.00 Painting & Coating			
Paint bridge	5,000.00 sf	30.00 /sf	150,000
Painting & Coating			150,000
09-90 PAINTING			150,000
31-23 SITEWORK			
02.30.00 Subsurface Investigation			
Test pits	10.00 ea	1,000.00 /ea	10,000
Test drilling / borings	1.00 allw	10,000.00 /allw	10,000
Subsurface Investigation			20,000
31.01.30 Site Restoration & Rehabilitation			
Site restoration	65,000.00 sf	4.00 /sf	260,000
Site Restoration & Rehabilitation			260,000
31.10.00 Site Clearing			
Clear & grub	1.50 acre	15,000.00 /acre	22,500
Shrub removal	200.00 ea	50.00 /ea	10,000
Stump removal	50.00 ea	500.00 /ea	25,000
Site Clearing			57,500
31.23.00 Excavation & Fill - Overall Site			
Rip rap (hill stabilization around footingss)	300.00 cy	85.00 /cy	25,500
Excavation & Fill - Overall Site			25,500
31.25.00 Erosion & Sedimentation Control			
Hay bales & silt fence	2,000.00 lf	8.00 /lf	16,000
Construction entrance (20' x 50')	3.00 ea	2,500.00 /ea	7,500
Tree protection fence	500.00 lf	15.00 /lf	7,500
Street sweeping	12.00 mnth	3,500.00 /mnth	42,000
Temporary inlet protection	4.00 ea	1,500.00 /ea	6,000
Remove erosion control measure at project completion	2,000.00 lf	1.50 /lf	3,000
Erosion & Sedimentation Control			82,000
31-23 SITEWORK			445,000
32-10 LANDSCAPING & SITE IMPROVEMENTS			
32.12.00 Flexible Paving			
Mill & Overlay	725.00 sy	125.00 /sy	90,625

Foundry Branch Trolley Trestle

Restoration Budget

9/1/2023

Description	Takeoff Quantity	Total Cost/Unit	Total Amount
Flexible Paving			90,625
32.15.00 Aggregate Surfacing			
Crushed stone approach pathway	250.00 cy	32.00 /cy	8,000
Aggregate Surfacing			8,000
32-10 LANDSCAPING & SITE IMPROVEMENTS			98,625
32-31 FENCING			
32.31.00 Fences & Gates			
Chain link fence - (temp)	2,200.00 lf	20.00 /lf	44,000
Fences & Gates			44,000
32.31.50 Walk / Road / Parking Appurtenances			
Timber bollards (remove and replace)	35.00 ea	350.00 /ea	12,250
Walk / Road / Parking Appurtenances			12,250
32-31 FENCING			56,250



Foundry Branch Trolley Trestle

Restoration Budget

9/1/2023

Estimate Totals

Description	Amount	Totals	Rate	Cost per Unit
Subtotal	2,791,127	2,791,127		
Design Contingency - NIC				
Escalation	223,290		8.000 %	
SDI (Subcontractor Bonds)	42,202		1.400 %	
Subtotal	265,492	3,056,619		
Contractor's Contingency	91,699		3.000 %	
General Conditions	244,530		8.000 %	
General Requirements	152,831		5.000 %	
Subtotal	489,060	3,545,679		
Builder's Risk Insurance - NIC				
General Liability Insurance	53,884		1.400 %	
Building Permit	38,489		1.000 %	
Performance & Payment Bond	27,550			
Subtotal	119,923	3,665,602		
Fee	183,280		5.000 %	
Total		3,848,882		