



HOUSE of REPRESENTATIVES

STATE OF MICHIGAN

Appropriations Requests for Legislatively Directed Spending Items

1. The sponsoring representative's first name:
Natalie
2. The sponsoring representative's last name:
Price
3. The cosponsoring representatives' names. All cosponsors must be listed. If none, please type 'n/a.' A signed letter from the sponsor approving the co-sponsorship and a signed letter from the member wishing to co-sponsor are required. Attach letters at question #9 below.
n/a; local officials' endorsement letters are attached under question #9.
4. Name of the entity that the spending item is intended for:
City of Berkley
5. Physical address of the entity that the spending item is intended for:
3338 Coolidge Hwy, Berkley, MI 48072
6. If there is not a specific recipient, the intended location of the project or activity:
Bacon Avenue, City of Berkley
7. Name of the representative and the district number where the legislatively directed spending item is located:
Natalie Price, 6th House District
8. Purpose of the legislatively directed spending item. Please include how it provides a public benefit and why it is an appropriate use of taxpayer funding. Please also demonstrate that the item does not violate Article IV, S 30 of the Michigan Constitution. In the City of Berkley, many of our water main services were installed in the late 1920s, and they consisted of lead. We have learned from this and started identifying what areas of Berkley have lead service lines that need to be replaced to have safe drinking water. The proposed scope of work for this project entails the complete removal and replacement of existing pavement, curbs, driveway approaches, and sidewalks that have severely deteriorated, along with the replacement of the existing water main and service lines. This section was chosen due to the existing water main age, condition, break history, amount of confirmed and presumed lead service lines, and PASER road condition data.

We have an obligation to our residents to provide a great quality of life, which is becoming increasingly more difficult to achieve with our aging infrastructure. We have identified Bacon Ave as the highest priority for this project as one of the most significant areas for water main breaks that have resulted in service disruption to dozens of residents. Looking at our Pavement Surface Evaluation Rating (PASER), which rates the condition of the roadway on a scale of 1(failed) to 10 (excellent), this area has primarily been rated a 2. This crucial piece of our infrastructure must be updated to give our residents and community a better quality of life.

Additional improvements would include roughly one mile of road, curb, sidewalk, and driveway approach replacements, stormwater improvements, and off-street parking improvements at the newly installed Oxford Park Splash Pad. This project would benefit the entire community by increasing the overall safety, reliability, and experience of this area. This project has been estimated to cost \$6,500,000 in its entirety and will fix and update many issues to improve our residents' quality of life. Within our organization, we can work on this project alongside our engineering firm, Hubbell, Roth, and Clark, INC. (HRC).

9. Attach documents here if needed:

Attachments added to the end of this file.

10. The amount of state funding requested for the legislatively directed spending item.

6500000

11. Has the legislatively directed spending item previously received any of the following types of funding? Check all that apply.

["None"]

12. Please select one of the following groups that describes the entity requesting the legislatively directed spending item:

Local unit government

13. For a non-profit organization, has the organization been operating within Michigan for the preceding 36 months?

Not applicable

14. For a non-profit organization, has the entity had a physical office within Michigan for the preceding 12 months?

Not applicable

15. For a non-profit organization, does the organization have a board of directors?

Not applicable

16. For a non-profit organization, list all the active members on the organization's board of directors and any other officers. If this question is not applicable, please type 'n/a.'

n/a

17. "I certify that neither the sponsoring representative nor the sponsoring representative's staff or immediate family has a direct or indirect pecuniary interest in the legislatively directed spending item."

Yes, this is correct

18. Anticipated start and end dates for the legislatively directed spending item:

May 2026 Start- December 1, 2026

19. "I hereby certify that all information provided in this request is true and accurate."

Yes

March 31, 2025

Dear Representative Natalie Price,

I am writing in support of the proposed \$6,500,000 funding request for a water main replacement and road reconstruction project on Bacon Avenue in the City of Berkley. Like many Metro Detroit communities, Berkley faces the difficult combination of deteriorating infrastructure and limited funds. The poor conditions of its infrastructure are further substantiated by the exorbitant reactive maintenance costs associated with continuous road repair and water main breaks along the roadway.

With the assistance of the City's engineering firm, Hubbell, Roth, and Clark Inc, Bacon Avenue between 11 and 12 Mile has been identified as the highest priority candidate for this project. Over the past five years, this area has had a high number of water main breaks, resulting in water service disruptions for dozens of residents each time emergency repairs need to be made. This section of infrastructure has a 2022 Pavement Surface Evaluation Rating (PASER) of primarily 2, with a few blocks rated as a 3. The PASER system rates the condition of a roadway from 1 (failed) to 10 (excellent). The northernmost block of Bacon also regularly experiences high and heavy vehicular traffic from DPW vehicles, resulting in damage to the road.

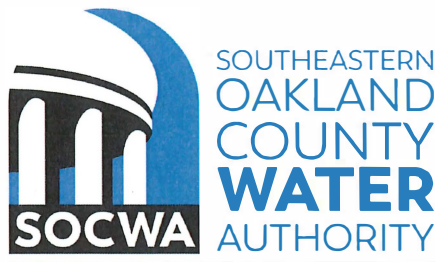
This project is a continuation of the community's 2018 Capital Improvements Millage program and is similar in size and scope to water main reconstruction projects successfully completed in 2022 and 2023 in different areas of the city. Receiving funding for this project will allow the City of Berkley to invest resources into other crucial infrastructure improvements planned in the Capital Improvements Millage, like streets, sidewalks, and facilities.

Thank you for your time and consideration of this request.

Sincerely,



Charlie Cavell, Commissioner
District 19
Oakland County Board of Commissioners



Proudly Serving – Berkley | Beverly Hills | Bingham Farms | Birmingham | Bloomfield Hills | Bloomfield Township
Clawson | Huntington Woods | Lathrup Village | Pleasant Ridge | Royal Oak | Southfield | Southfield Township

March 31, 2025

Dear Representative Price,

The Southeastern Oakland County Water Authority (SOCWA) is pleased to support a request for a water main replacement and road reconstruction project on Bacon Avenue in the City of Berkley. Like many of our 13 member communities, Berkley faces the difficult combination of deteriorating infrastructure and limited funds, resulting in much of its infrastructure being in poor condition. These poor conditions are further substantiated by the exorbitant reactive maintenance costs associated with continuous road repair and water main breaks along the roadway.

With the assistance of the City's engineering firm, Hubbell, Roth, and Clark Inc, Bacon Avenue between 11 and 12 Mile has been identified as the highest priority candidate for this project. Over the past five years, this area has had a high number of water main breaks, resulting in water service disruptions for dozens of residents each time emergency repairs need to be made. This section of infrastructure has a 2022 Pavement Surface Evaluation Rating (PASER) of primarily 2, with a few blocks rated as a 3. The PASER system rates the condition of a roadway from 1 (failed) to 10 (excellent). The northernmost block of Bacon also regularly experiences high and heavy vehicular traffic from DPW vehicles, resulting in damage to the road.

This project is a continuation of Berkley's 2018 Capital Improvements Millage program and is similar in size and scope to water main reconstruction projects successfully completed in 2022 and 2023 in different areas of the City. Receiving funding for this project will allow the City of Berkley to invest resources into other crucial infrastructure improvements planned in the Capital Improvements Millage, like streets, sidewalks, and facilities.

Thank you for your time and consideration.

Sincerely,

Eric Griffin

General Manager, Southeastern Oakland County Water Authority



CITY OF BERKLEY

3338 COOLIDGE HWY, BERKLEY, MICHIGAN 48072

March 30, 2025

Dear Representative Price,

I am writing in support of the proposed \$6,500,000 funding request for a water main replacement and road reconstruction project on Bacon Avenue in the City of Berkley. Like many Metro Detroit communities, Berkley faces the difficult combination of deteriorating infrastructure and limited funds, resulting in much of its infrastructure being in poor condition. These poor conditions are further substantiated by the exorbitant reactive maintenance costs associated with continuous road repair and water main breaks along the roadway.

With the assistance of the City's engineering firm, Hubbell, Roth, and Clark Inc, Bacon Avenue between 11 and 12 Mile has been identified as the highest priority candidate for this project. Over the past five years, this area has had a high number of water main breaks, resulting in water service disruptions for dozens of residents each time emergency repairs need to be made. This section of infrastructure has a 2022 Pavement Surface Evaluation Rating (PASER) of primarily 2, with a few blocks rated as a 3. The PASER system rates the condition of a roadway from 1 (failed) to 10 (excellent). The northernmost block of Bacon also regularly experiences high and heavy vehicular traffic from DPW vehicles, resulting in damage to the road.

This project is a continuation of our community's 2018 Capital Improvements Millage program and is similar in size and scope to water main reconstruction projects successfully completed in 2022 and 2023 in different areas of the City. Receiving funding for this project will allow the City of Berkley to invest resources into other crucial infrastructure improvements planned in the Capital Improvements Millage, like streets, sidewalks, and facilities.

Thank you for your time and consideration, and please don't hesitate to reach out with questions.

Bridget Dean

Mayor of Berkley



October 04, 2024

City of Berkley
3338 Coolidge Highway
Berkley, Michigan 48072

Attn: Mr. Shawn Young, Director of Public Works
Mr. Nate Geinzer, Interim City Manager

Re: Proposal for **Design Engineering Services**
Bacon Avenue Water Main Replacement and Road Reconstruction
(12 Mile Road to 11 Mile Road)

HRC Job No. 20240449

Dear Mr. Young and Mr. Geinzer:

Thank you for the opportunity to allow Hubbell, Roth & Clark, Inc. (HRC) to submit this proposal for professional design engineering services. We understand that the City wishes to move forward with the next phase of the Infrastructure Millage program. For the 2026 construction year, the City desires to complete a road reconstruction and water main replacement project similar in size and scope to the 2022 Kenmore/Cornwall and 2023 Wiltshire Road and Watermain Reconstruction projects. It is HRC's understanding that the Contract/Design Documents will be completed in early 2025 and the project will be bid at a later date, most likely early 2026.

Berkley Public Works and HRC staff(s) have been closely working together to identify candidates for the next significant road/watermain reconstruction project based on a combination of the City's Pavement Surface Evaluation Ratings (PASER) ratings, water main break frequency maps, and probable/known lead/galvanized water service line locations. In addition, the City considered which of the highest priority roads are scheduled to have the gas main and services replaced in the near future and which have already been replaced. In August 2022, HRC completed a PASER roadway rating survey for all City owned roadways. Utilizing this PASER Rating data along with watermain age/break information, we developed the attached Figure A which identifies 5 of the highest priority roadway sections. Each segment is approximately 0.5 mile in length (similar to the Kenmore/Cornwall and Wiltshire projects).

The section of Bacon Avenue between 12 Mile Road and 11 Mile Road has been identified, by the above factors, as the current highest priority candidate. It should be noted that this section has had a high number of water main breaks over the last 5 years and has a 2022 PASER rating of primarily 2 with a few blocks rated as a 3. The PASER system rates the condition of a roadway from 1 (failed) to 10 (excellent). The northernmost block of Bacon also regularly experiences high and heavy vehicular traffic from DPW vehicles.

Due to the potential for budgetary constraints, the Bacon Avenue Water Main Replacement and Road Reconstruction project will be presented in two (2) divisions; however, each division will essentially entail the same scope of work.

1. **Division I - 12 Mile Road to Catalpa Drive** – Approximately 2,600 lft in length.
2. **Division II - Catalpa Drive to 11 Mile Road** – Approximately 2,600 lft in length.

Scope of Proposed Construction:

As mentioned above, the two (2) divisions will essentially entail the same proposed scope of work.

Proposed Overall Scope:

The proposed scope of work for each division entails the complete removal and replacement of existing pavement, curbs, driveway approaches and sidewalks and replacement of the existing water main. All right-of-way trees will be evaluated by the City's arborist, and any trees with health concerns or conflicts with the proposed construction will be removed and replaced with new trees following construction. Improvements include new concrete curbs, aggregate base, HMA pavement, storm drainage cover adjustments, concrete driveway approaches, concrete sidewalks, ADA ramp and new landscaping. The existing water main will be abandoned in place and new 8" water main will be installed along with new public water services and stop boxes. Existing water services and hydrants will be connected to the new 8" water main. Any private lead water service lines that are encountered will be replaced.

Additional Scope Notes:

- ≡ **Division I - 12 Mile Road to Catalpa Drive** – Project also includes the construction of a new asphalt parking area along the east side of Bacon, in front of the DPW building. Further, the section of existing 12" water main in the northernmost block will be replaced, in kind, while the remaining water main sections in Bacon will be replaced with a new 8" main.
- ≡ **Division II - Catalpa Drive to 11 Mile Road** – Project includes the replacement of the existing concrete front-in street parking lot along the east side of Bacon along Oxford Park with a new asphalt parking area.

Preliminary cost estimates for each project division are attached to this Proposal letter. The estimated engineering fees are also provided in an attached table which indicate the total fees for topographic survey, and administrative services while the design (plans, specs, permits) will be shown per division.

Scope of Design Engineering Services:

1. Notify/coordinate this project with Utility Agencies to assist in avoiding future conflicts.
2. Complete a topographic survey of the proposed section of Bacon Avenue will be completed to collect field data on the existing road, utilities, and topographic information necessary to prepare construction drawings. City DPW staff will locate and mark stop boxes prior to the topo survey.
3. Assist City staff with the planned public engagement effort, including flyer creation and distribution and attendance of one (1) on-site meeting with residents and City staff.
 - a. HRC suggests conducting the initial public engagement event in late November 2024 prior to the completion of the 60% design plans. This early engagement will allow residents to express their thoughts prior to the final design being completed.
4. Prepare preliminary Construction Documents and Cost Estimates at the 60%, 90% and Final completion levels and provide them to the City for review.
5. Conduct Design Coordination Meetings at the beginning of the project and at the 60% and 90% Construction Document Completion Stages.

6. Prepare permit applications for EGLE Water Supply (Act 399), Oakland County Soil Erosion Control, Drain and Tap Permits, RCOC ROW and Michigan Department of Transportation (MDOT) permits (as required).
7. HRC will prepare and provide Final Plans, Specifications, Engineer's Estimate and Bid Documents and assist with advertising for bidding.
8. HRC will assist in the bidding process, make recommendation of award and prepare the Contract Documents for execution by the selected Contractor.

Schedule:

October 21, 2024	City Council Authorizes HRC to proceed with project
November 2024	Complete topographic survey and soils investigation
November 2024	Public Engagement Meeting
February 2025	60% Design Review Meeting
March 2025	90% Design Review Meeting
April 2025	Final Review Meeting
May 2025	Final Bid Documents Delivered
Early <u>2026</u>	Project Let for Bidding
March/April 2026	Award of Project to Lowest Responsible Bidder

Clarifications:

1. Pavement and sub-base investigation will be completed as part of a Citywide geotechnical investigation which will help identify future road rehabilitation projects. This work was previously approved by the City, therefore costs for geotechnical investigations are not included in this scope of services.
2. Construction Engineering services are not included in this proposal and will be outlined after the bid opening. HRC will provide an additional proposal to include construction engineering, construction administration, survey layout, materials testing, progress meetings, record drawing preparation, and full-time construction observation.
3. Grading easement acquisition services are not included in this proposal but can be provided on a time and material basis if needed.

Design Engineering Fees (See detailed breakdown of costs attached):

Task 1 – Topographic Survey	\$ 34,106.90
Task 2a – Completion of Design and Bid Documents (Division I)	\$ 105,521.14
Task 2b – Completion of Design and Bid Documents (Division II)	\$ 97,397.66
Task 3 – Public Engagement	\$ 11,552.44
Task 4 – Bidding Assistance	\$ 3,569.90
Task 5 – Project Management and Meetings	\$ <u>30,273.68</u>
Total Not-to-Exceed Fee	\$ 282,421.72

Fees will be invoiced monthly and shall be based on our cost times a 2.9 multiplier in accordance with our current agreement with the City.

If this proposal is deemed acceptable to the City, please sign and return one copy to this office. Thank you for this exciting opportunity to serve the City on this project. If you have any questions or require any additional information, please feel free to contact our office at 248-454-6300.

Very truly yours,

HUBBELL, ROTH & CLARK, INC.



Roland N. Alix, P.E.
Vice President



Edward Zmich
Civil Department/Project Manager

Accepted By:

City of Berkley

Signature: _____

Written Name: _____

Title: _____

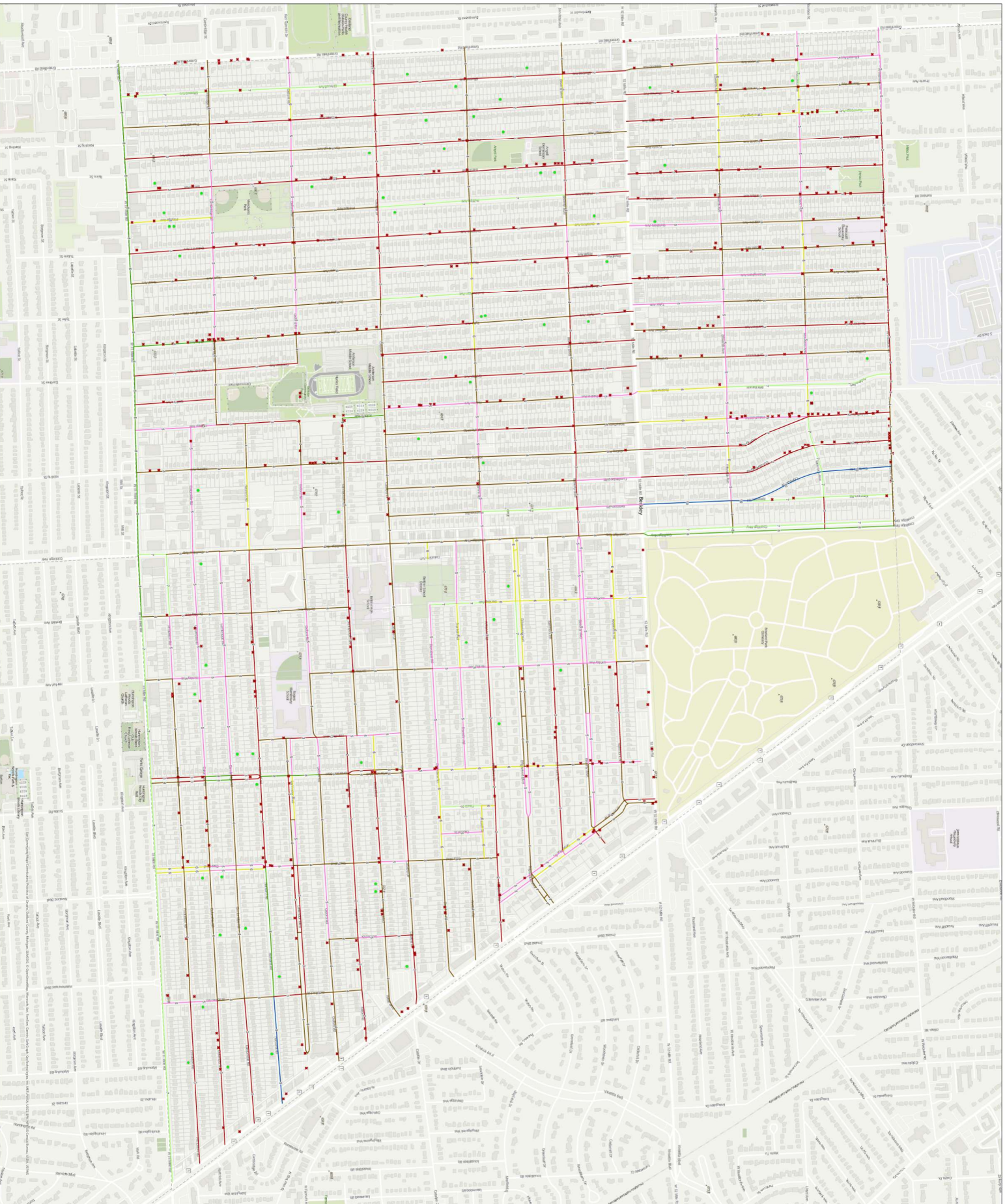
Date: _____

Cc: HRC; Business Office, File

Attachments: 2022 PASER Rating & WM Break Location Map (with lead line service information)
Preliminary Cost Estimate: Bacon Avenue Water Main Replacement and Road Reconstruction
Detailed breakdown of HRC Fees

Berkeley Watermain Breaks With 2022 PASER Ratings and DSWT Locations; Material Lead or Galvanized

- Legend**
- Layer
 - 2022 PASER Rating
 - 9 - 10
 - 8
 - 7
 - 6
 - 5
 - 4
 - 3
 - 1 - 3
 - Water Main Breaks
 - Material Verification
 - Complete
 - Incomplete
 - Not Done





HUBBELL, ROTH & CLARK, INC
CONSULTING ENGINEERS SINCE 1915

555 Hulet Dr., Bloomfield Hills, MI 48302 ph. (248) 454-6300

Bacon Ave Water Main & Pavement Replacement

Engineer's Opinion of Probable Cost

Location: Bacon Ave (12 Mile to 11 Mile)

Date: 6/13/2024

Basis for Estimate: ☒ PRELIMINARY ☐ FINAL

Project No: 20240449

Estimator: MAS

Checked By: EDZ

Description: Project includes two (2) divisions of work on Bacon Ave. Division I is from 12 Mile to Catalpa and Division II is from Catalpa to 11 Mile. Both divisions include construction of new water main, abandonment of existing water main, misc. storm sewer and drainage structures, pavement, curbs, driveway approaches and sidewalks in the City right-of-way.

DIVISION I - BACON AVE (12 MILE TO CATALPA)

	Description	Quantity	Unit	Unit Price	Total Cost
1	Mobilization Division I (Max. 5%)	1	Lsum	\$ 132,100.00	\$ 132,100.00
2	Erosion Control, Inlet Protection, Fabric Drop	40	Ea	\$ 150.00	\$ 6,000.00
3	Tree Protection Fence	2,100	Lft	\$ 4.00	\$ 8,400.00
4	Exploratory Excavation & Utility Location	1	Lsum	\$ 10,000.00	\$ 10,000.00
5	Traffic Maintenance, Incl. Flag Control	1	Lsum	\$ 40,000.00	\$ 40,000.00
6	Color Audio-Video Route Survey	1	Lsum	\$ 5,000.00	\$ 5,000.00
7	Pavt, Rem, MOD	8,050	Syd	\$ 22.00	\$ 177,100.00
8	Driveway, Rem	700	Syd	\$ 15.00	\$ 10,500.00
9	Sidewalk, Rem	2,870	Syd	\$ 15.00	\$ 43,050.00
10	Dr Structure, Rem	4	Ea	\$ 800.00	\$ 3,200.00
11	Storm Sewer, Rem	50	Lft	\$ 30.00	\$ 1,500.00
12	Tree, Rem, Less than 19-inch (if needed)	3	Ea	\$ 1,500.00	\$ 4,500.00
13	Tree, Rem, 19-inch to 36-inch (if needed)	3	Ea	\$ 2,500.00	\$ 7,500.00
14	Station Grading, MOD	25.6	Sta	\$ 3,000.00	\$ 76,800.00
15	Subgrade Undercutting, Type 1, MOD	270	Cyd	\$ 65.00	\$ 17,550.00
16	Maintenance Gravel, Special	800	Ton	\$ 38.00	\$ 30,400.00
17	Hand Patching, HMA	190	Ton	\$ 250.00	\$ 47,500.00
18	Aggregate Base, MDOT 21AA, 8 inch	3,220	Ton	\$ 40.00	\$ 128,800.00
19	Aggregate Base, 1"x3", 8 inch	2,150	Ton	\$ 40.00	\$ 86,000.00
20	Tensar TX150L Triaxial Geogrid	8,050	Syd	\$ 6.00	\$ 48,300.00
21	Void Reducing Asphalt Membrane (Spray, J-Band Type)	2,560	Lft	\$ 6.00	\$ 15,360.00
22	2-inch MDOT 5EML, MOD Mix (Wearing)	980	Ton	\$ 148.00	\$ 145,040.00
23	2.5-inch MDOT 4EML, MOD Mix (Leveling/Base)	1,220	Ton	\$ 148.00	\$ 180,560.00
24	Conc Pavt, Nonreinf, Misc, 8 inch	100	Syd	\$ 90.00	\$ 9,000.00
25	Driveway, Nonreinf Conc, 6-inch (incl. sand base)	700	Syd	\$ 70.00	\$ 49,000.00
26	Curb, Conc, MDOT Det F4	5,120	Lft	\$ 30.00	\$ 153,600.00
27	Sidewalk, Conc, 4-inch, Special (incl. sand base)	22,900	Sft	\$ 9.00	\$ 206,100.00
28	Sidewalk, Conc, 6-inch, Special (incl. sand base)	2,700	Sft	\$ 12.00	\$ 32,400.00
29	Sidewalk Ramp, Conc 6". Special (Inlc. Sand Base)	200	Sft	\$ 12.00	\$ 2,400.00
30	Detectable Warning Surface (5-foot x 2-foot)	4	Ea	\$ 400.00	\$ 1,600.00
31	Underdrain, Subgrade, 6-inch, Special	5,120	Lft	\$ 18.00	\$ 92,160.00
32	12-inch C76 CL-IV Sewer, Tr. Det "B"	50	Lft	\$ 100.00	\$ 5,000.00
33	4-foot Diameter Manhole	2	Ea	\$ 5,000.00	\$ 10,000.00
34	4-foot Diameter Catch basin	2	EA	\$ 4,000.00	\$ 8,000.00
35	2-foot Diameter Catch Basin	2	Ea	\$ 2,500.00	\$ 5,000.00
36	Drainage Structure Tap, 12-inch	12	Ea	\$ 1,000.00	\$ 12,000.00
37	Dr Structure Frame & Cover, EJ 1040	2	Ea	\$ 800.00	\$ 1,600.00
38	Dr Structure Frame & Cover, EJ 5000	4	Ea	\$ 800.00	\$ 3,200.00
39	Dr Structure Cover, Adjust	40	Ea	\$ 750.00	\$ 30,000.00
40	Water Structure Cover, Adjust	6	Ea	\$ 750.00	\$ 4,500.00
41	Sanitary Sewer Lead Repair (if needed)	5	Ea	\$ 1,250.00	\$ 6,250.00
42	Hydrant Assembly, Rem	6	Ea	\$ 900.00	\$ 5,400.00
43	Gate Valve and Well, Rem	4	Ea	\$ 800.00	\$ 3,200.00
44	Water Main, 6-inch, Rem	50	Lft	\$ 30.00	\$ 1,500.00
45	Water Main, 12-inch, Rem	30	Lft	\$ 50.00	\$ 1,500.00
46	Abandon 6-inch Water Main in Place & Grout	1,980	Lft	\$ 5.00	\$ 9,900.00

47	Abandon 12-inch Water Main in Place & Grout	580	Lft	\$	8.00	\$	4,640.00
48	Water Main, 6-inch, Cut & Plug	4	Ea	\$	1,000.00	\$	4,000.00
49	Water Main, 12-inch, Cut & Plug	2	Ea	\$	2,000.00	\$	4,000.00
50	Water Main Break Repair (12-inch & Less) (if needed)	2	Ea	\$	5,500.00	\$	11,000.00
51	Water Main, 8-inch Dia., CL 54 DI, Open Cut	1,980	Lft	\$	160.00	\$	316,800.00
52	Water Main, 12-inch Dia., CL 54 DI, Open Cut	580	Lft	\$	220.00	\$	127,600.00
52	Water Main Connection, 10-inch	1	Ea	\$	6,000.00	\$	6,000.00
53	Water Main Connection, 12-inch	1	Ea	\$	7,500.00	\$	7,500.00
54	Gate Valve & Well, 8-inch	3	Ea	\$	7,500.00	\$	22,500.00
55	Gate Valve & Well, 12-inch	2	Ea	\$	9,000.00	\$	18,000.00
56	Water Structure Cover, EJIW No. 1040	5	Ea	\$	900.00	\$	4,500.00
57	Short Water Service Lead to New Main, Polyethylene, 1-inch, Open Cut	25	Ea	\$	1,500.00	\$	37,500.00
58	Long Water Service Lead to New Main, Polyethylene, 1-inch, Directional Drill	30	Ea	\$	2,500.00	\$	75,000.00
59	Lead Line Water Service Replacement (Private) (if needed)	2	Ea	\$	5,000.00	\$	10,000.00
60	Water Service Stop Box	55	Ea	\$	500.00	\$	27,500.00
61	Hydrant Assembly, 5BR250 Model	6	Ea	\$	8,500.00	\$	51,000.00
62	4-inch Topsoil	1,710	Syd	\$	5.00	\$	8,550.00
63	Sodding (incl. 14-day watering)	1,710	Syd	\$	14.00	\$	23,940.00
64	Seed & Mulch Blanket (Incl. 14-day watering)	180	Syd	\$	14.00	\$	2,520.00
65	Sign, Type III, Erect, Salv	22	Ea	\$	220.00	\$	4,840.00
66	Sign, Type III, Rem	32	Ea	\$	22.00	\$	704.00
67	Sign, Type IIIA	72	Sft	\$	16.50	\$	1,188.00
68	Sign, Type IIIB	3	Sft	\$	20.00	\$	60.00
69	Sign, Type VB	8	Sft	\$	35.00	\$	280.00
70	Reflective Panel for Permanent Sign Support, 6 foot	10	Ea	\$	35.00	\$	350.00
71	Sign, Type III, Rem, Salv	22	Ea	\$	65.00	\$	1,430.00
72	Ground Mtd Sign Support, Rem	21	Ea	\$	250.00	\$	5,250.00
73	Steel Post System	21	Ea	\$	550.00	\$	11,550.00
74	Pavt Mrkg, Waterborne, 4 inch, White	240	Lft	\$	2.00	\$	480.00
75	Pavt Mrkg, Waterborne, 4 inch, Blue	160	Lft	\$	2.00	\$	320.00
76	Pavt Mrkg, Preformed Thermopl, Accessible Sym	2	Ea	\$	400.00	\$	800.00
77	Permit Allowance	1	Dlr	\$	10,000.00	\$	10,000.00
78	Observation Crew Days	120	Day	\$	800.00	\$	96,000.00
	Subtotal - Division I						\$ 2,774,272.00

DIVISION II - BACON AVE (CATALPA TO 11 MILE)					
	Description	Quantity	Unit	Unit Price	Total Cost
1	Mobilization Division I (Max. 5%)	1	Lsum	\$ 138,200.00	\$ 138,200.00
2	Erosion Control, Inlet Protection, Fabric Drop	40	Ea	\$ 150.00	\$ 6,000.00
3	Tree Protection Fence	2,100	Lft	\$ 4.00	\$ 8,400.00
4	Exploratory Excavation & Utility Location	1	Lsum	\$ 10,000.00	\$ 10,000.00
5	Traffic Maintenance, Incl. Flag Control	1	Lsum	\$ 40,000.00	\$ 40,000.00
6	Color Audio-Video Route Survey	1	Lsum	\$ 5,000.00	\$ 5,000.00
7	Pavt, Rem, MOD	9,340	Syd	\$ 22.00	\$ 205,480.00
8	Driveway, Rem	860	Syd	\$ 15.00	\$ 12,900.00
9	Sidewalk, Rem	2,890	Syd	\$ 15.00	\$ 43,350.00
10	Dr Structure, Rem	4	Ea	\$ 800.00	\$ 3,200.00
11	Storm Sewer, Rem	50	Lft	\$ 30.00	\$ 1,500.00
12	Tree, Rem, Less than 19-inch (if needed)	3	Ea	\$ 1,500.00	\$ 4,500.00
13	Tree, Rem, 19-inch to 36-inch (if needed)	3	Ea	\$ 2,500.00	\$ 7,500.00
14	Station Grading, MOD	25.6	Sta	\$ 3,000.00	\$ 76,800.00
15	Subgrade Undercutting, Type 1, MOD	320	Cyd	\$ 65.00	\$ 20,800.00
16	Maintenance Gravel, Special	800	Ton	\$ 38.00	\$ 30,400.00
17	Hand Patching, HMA	220	Ton	\$ 250.00	\$ 55,000.00
18	Aggregate Base, MDOT 21AA, 8 inch	3,740	Ton	\$ 40.00	\$ 149,600.00
19	Aggregate Base, 1"x3", 8 inch	2,500	Ton	\$ 40.00	\$ 100,000.00
20	Tensar TX150L Triaxial Geogrid	9,340	Syd	\$ 6.00	\$ 56,040.00
21	Void Reducing Asphalt Membrane (Spray, J-Band Type)	2,560	Lft	\$ 6.00	\$ 15,360.00
22	2-inch MDOT 5EML, MOD Mix (Wearing)	1,140	Ton	\$ 148.00	\$ 168,720.00
23	2.5-inch MDOT 4EML, MOD Mix (Leveling/Base)	1,420	Ton	\$ 148.00	\$ 210,160.00
24	Conc Pavt, Nonreinf, Misc, 8 inch	100	Syd	\$ 90.00	\$ 9,000.00
25	Driveway, Nonreinf Conc, 6-inch (incl. sand base)	860	Syd	\$ 70.00	\$ 60,200.00
26	Curb, Conc, MDOT Det F4	5,120	Lft	\$ 30.00	\$ 153,600.00
27	Sidewalk, Conc, 4-inch, Special (incl. sand base)	22,200	Sft	\$ 9.00	\$ 199,800.00
28	Sidewalk, Conc, 6-inch, Special (incl. sand base)	3,400	Sft	\$ 12.00	\$ 40,800.00
29	Sidewalk Ramp, Conc 6". Special (Inlc. Sand Base)	400	Sft	\$ 12.00	\$ 4,800.00
30	Detectable Warning Surface (5-foot x 2-foot)	8	Ea	\$ 400.00	\$ 3,200.00
31	Underdrain, Subgrade, 6-inch, Special	5,120	Lft	\$ 18.00	\$ 92,160.00
32	12-inch C76 CL-IV Sewer, Tr. Det "B"	50	Lft	\$ 100.00	\$ 5,000.00
33	4-foot Diameter Manhole	2	Ea	\$ 5,000.00	\$ 10,000.00
34	4-foot Diameter Catch basin	2	EA	\$ 4,000.00	\$ 8,000.00
35	2-foot Diameter Catch Basin	2	Ea	\$ 2,500.00	\$ 5,000.00
36	Drainage Structure Tap, 12-inch	12	Ea	\$ 1,000.00	\$ 12,000.00
37	Dr Structure Frame & Cover, EJ 1040	2	Ea	\$ 800.00	\$ 1,600.00
38	Dr Structure Frame & Cover, EJ 5000	4	Ea	\$ 800.00	\$ 3,200.00
39	Dr Structure Cover, Adjust	40	Ea	\$ 750.00	\$ 30,000.00
40	Water Structure Cover, Adjust	6	Ea	\$ 750.00	\$ 4,500.00
41	Sanitary Sewer Lead Repair (if needed)	5	Ea	\$ 1,250.00	\$ 6,250.00
42	Hydrant Assembly, Rem	5	Ea	\$ 900.00	\$ 4,500.00
43	Gate Valve and Well, Rem	3	Ea	\$ 800.00	\$ 2,400.00
44	Water Main, 6-inch, Rem	50	Lft	\$ 30.00	\$ 1,500.00
45	Abandon 6-inch Water Main in Place & Grout	2,560	Lft	\$ 5.00	\$ 12,800.00
46	Water Main, 6-inch, Cut & Plug	6	Ea	\$ 1,000.00	\$ 6,000.00
47	Water Main Break Repair (12-inch & Less) (if needed)	2	Ea	\$ 5,500.00	\$ 11,000.00
48	Water Main, 8-inch Dia., CL 54 DI, Open Cut	2,560	Lft	\$ 160.00	\$ 409,600.00
49	Water Main Connection, 12-inch	1	Ea	\$ 7,500.00	\$ 7,500.00
50	Gate Valve & Well, 8-inch	5	Ea	\$ 7,500.00	\$ 37,500.00
51	Water Structure Cover, EJIW No. 1040	5	Ea	\$ 900.00	\$ 4,500.00
52	Short Water Service Lead to New Main, Polyethylene, 1-inch, Open Cut	32	Ea	\$ 1,500.00	\$ 48,000.00
53	Long Water Service Lead to New Main, Polyethylene, 1-inch, Directional Drill	32	Ea	\$ 2,500.00	\$ 80,000.00
54	Lead Line Water Service Replacement (Private) (if needed)	3	Ea	\$ 5,000.00	\$ 15,000.00
55	Water Service Stop Box	64	Ea	\$ 500.00	\$ 32,000.00
56	Hydrant Assembly, 5BR250 Model	5	Ea	\$ 8,500.00	\$ 42,500.00
57	4-inch Topsoil	1,710	Syd	\$ 5.00	\$ 8,550.00
58	Sodding (incl. 14-day watering)	1,710	Syd	\$ 14.00	\$ 23,940.00
59	Seed & Mulch Blanket (Incl. 14-day watering)	180	Syd	\$ 14.00	\$ 2,520.00

60	Sign, Type III, Erect, Salv	22	Ea	\$	220.00	\$	4,840.00
61	Sign, Type III, Rem	32	Ea	\$	22.00	\$	704.00
62	Sign, Type IIIA	72	Sft	\$	16.50	\$	1,188.00
63	Sign, Type IIIB	3	Sft	\$	20.00	\$	60.00
64	Sign, Type VB	8	Sft	\$	35.00	\$	280.00
65	Reflective Panel for Permanent Sign Support, 6 foot	10	Ea	\$	35.00	\$	350.00
66	Sign, Type III, Rem, Salv	22	Ea	\$	65.00	\$	1,430.00
67	Ground Mtd Sign Support, Rem	21	Ea	\$	250.00	\$	5,250.00
68	Steel Post System	21	Ea	\$	550.00	\$	11,550.00
69	Pavt Mrkg, Waterborne, 4 inch, White	920	Lft	\$	2.00	\$	1,840.00
70	Pavt Mrkg, Waterborne, 4 inch, Blue	280	Lft	\$	2.00	\$	560.00
71	Pavt Mrkg, Preformed Thermopl, Accessible Sym	4	Ea	\$	400.00	\$	1,600.00
72	Permit Allowance	1	Dlr	\$	10,000.00	\$	10,000.00
73	Observation Crew Days	120	Day	\$	800.00	\$	96,000.00
	Subtotal - Division II						\$ 2,903,482.00
Subtotal - Construction Cost							
							\$ 5,677,754.00
Contingencies (15%)							\$ 851,663.10
Subtotal - Construction Cost w/ Contingencies							\$ 6,529,417.10
TOTAL CONSTRUCTION BUDGET - Bacon Ave							\$ 6,529,417.10

JOB NUMBER: **20240449**

PROJECT NAME: **Bacon Avenue Water Main Replacement and Road Reconstruction**

PRINCIPAL **Roland Alix**

PROJECT MANAGER **Eddie Zmich**

DATE **October 4, 2024**

		HRC STAFF POSITION																		TOTAL	
		PRINCIPAL		MANAGER		STAFF ENGINEER		SENIOR CONSTRUCTION SUPERVISOR		ASSOCIATE		GRADUATE ENGINEER		TESTING TECHNICIAN		SR. SURVEY OFFICE TECH		SURVEY PARTY CHIEF			
TASK		HRS	FEE	HRS	FEE	HRS	FEE	HRS	FEE	HRS	FEE	HRS	FEE	HRS	FEE	HRS	FEE	HRS	FEE	HRS	FEE
Pavement Cores and Subgrade Investigation																					
To be completed under previously approved 2024 Design Proposal																					
1 Topographic Survey																					
Field Topographic Survey																		200	\$23,200.00	200	\$23,200.00
Office Work & Coordination				10	\$1,545.70	10	\$1,067.20			10	\$1,595.00	20	\$2,059.00			40	\$4,640.00			90	\$10,906.90
																					\$34,106.90
2a Completion of Design and Bid Documents																					
Division I Utility Coordination				2	\$309.14	4	\$426.88					4	\$411.80							10	\$1,147.82
60% Design Documents				40	\$6,182.80	200	\$21,344.00					160	\$16,472.00							400	\$43,998.80
90% Design Documents				40	\$6,182.80	80	\$8,537.60					60	\$6,177.00							180	\$20,897.40
Final Bid Documents				20	\$3,091.40	60	\$6,403.20					40	\$4,118.00							120	\$13,612.60
Specifications				40	\$6,182.80	80	\$8,537.60			8	\$1,276.00	40	\$4,118.00							168	\$20,114.40
Submit Dwgs for EGLE, OCWRC & RCOC Permits				4	\$618.28	12	\$1,280.64					4	\$411.80							20	\$2,310.72
QA/QC		4	\$580.00					12	\$1,583.40	8	\$1,276.00									24	\$3,439.40
																					\$105,521.14
2b Completion of Design and Bid Documents																					
Division II Utility Coordination				2	\$309.14	4	\$426.88					4	\$411.80							10	\$1,147.82
60% Design Documents				40	\$6,182.80	200	\$21,344.00					160	\$16,472.00							400	\$43,998.80
90% Design Documents				40	\$6,182.80	100	\$10,672.00					80	\$8,236.00							220	\$25,090.80
Final Bid Documents				20	\$3,091.40	56	\$5,976.32					20	\$2,059.00							96	\$11,126.72
Specifications				20	\$3,091.40	40	\$4,268.80			8	\$1,276.00	20	\$2,059.00							88	\$10,695.20
Submit Dwgs for EGLE, OCWRC & RCOC Permits				4	\$618.28	12	\$1,280.64													16	\$1,898.92
QA/QC		4	\$580.00					12	\$1,583.40	8	\$1,276.00									24	\$3,439.40
																					\$97,397.66
3 Public Engagement																					
"Upcoming Construction" Flyer Creation & Distribution				4	\$618.28	40	\$4,268.80					8	\$823.60							52	\$5,710.68
One (1) On-Site Meeting with Residents incl. Prep		6	\$870.00	12	\$1,854.84	16	\$1,707.52	6	\$791.70			6	\$617.70							46	\$5,841.76
																					\$11,552.44
4 Bidding Assistance																					
Pre-Bid Meeting		2	\$290.00	2	\$309.14	4	\$426.88					2	\$205.90							10	\$1,231.92
Questions During Bidding				2	\$309.14	4	\$426.88					2	\$205.90							8	\$941.92
Addendum				2	\$309.14	2	\$213.44					2	\$205.90							6	\$728.48
Bid Tab & Recommendations		1	\$145.00	2	\$309.14	2	\$213.44													5	\$667.58
																					\$3,569.90
5 Project Management and Meetings																					
Administration		16	\$2,320.00	80	\$12,365.60	16	\$1,707.52													112	\$16,393.12
Engineering Award Council Meeting		2	\$290.00	2	\$309.14															4	\$599.14
Initial Kickoff Meeting		4	\$580.00	4	\$618.28	4	\$426.88	4	\$527.80			4								20	\$2,152.96
60% & 90% Design Review Mtgs		4	\$580.00	8	\$1,236.56	8	\$853.76					4	\$411.80							24	\$3,082.12
60%, 90% & Final Cost Estimates				10	\$1,545.70	20	\$2,134.40					10	\$1,029.50							40	\$4,709.60
Finalize Docs & Prepare Bid Package				4	\$618.28	16	\$1,707.52					4	\$411.80							24	\$2,737.60
Construction Award Council Meeting		2	\$290.00	2	\$309.14															4	\$599.14
																					\$30,273.68
TOTAL NOT-TO-EXCEED DESIGN ENG. FEE		45	\$6,525.00	416	\$64,301.12	990	\$105,652.80	34	\$4,486.30	42	\$6,699.00	654	\$66,917.50			40	\$4,640.00	200	\$23,200.00	2,421	\$282,421.72