Norwood Young America
more than a place, it's home.

CITY COUNCIL AGENDA

May 26, 2020 – 6:00 p.m.
City Council Meeting
Zoom Meeting Link
https://us02web.zoom.us/j/2334797414
Meeting ID: 233 479 7414

WORK SESSION

1. Call Meeting of City Council Work Session to Order

2. Approve Agenda
   2.1 Dr. Richard Scott – Carver County COVID-19 Pandemic Update
   2.2 Street & Utility Reconstruction Projects Scoping Study

3. Adjournment

ECONOMIC DEVELOPMENT AUTHORITY

1. Call Meeting of Economic Development Authority to Order
   1.1 Pledge of Allegiance

2. Approve Agenda
   2.1 Approve minutes of April 27, 2020 meeting

3. Adjournment

CITY COUNCIL

1. Call Meeting of City Council to Order
   1.1 Pledge of Allegiance

2. Approve Agenda

3. Introductions, Presentations, Proclamations, Awards, and Public Comment
   (Individuals may address the City Council about any non-agenda item of concern. Speakers must state their name, address, and limit their remarks to three minutes. The City Council will not take official action on these items but may refer the matter to staff for a future report or direct that the matter be scheduled for a future meeting agenda.)

4. Consent Agenda
   (NOTE TO THE PUBLIC: All items listed as part of the Consent Agenda will be approved by a single motion, unless a request to discuss one or more of the items is made prior to the motion being made. Anyone present at the meeting may request an item to be removed from the Consent Agenda for discussion. Please inform the City Council when they approve the meeting agenda of your request to have an item removed for discussion.)
   4.1 Approve minutes of May 11, 2020 meeting
   4.2 Approve payment of Claims
   4.3 Approve Central Schools Street Closure Request
   4.4 Rescind Motion to Hire Seasonal Employee

5. Public Hearings

6. Old Business
   6.1 Highway 212 Underpass and Highway 5/25CSAH 33 Roundabout Project Update

7. New Business
   7.1 Consider Request to Discharge Firearms to Control Canadian Geese
   7.2 Consider Highway 212 Underpass and Highway 5/25CSAH 33 Roundabout Project Funding Options
   7.3 Approve Liquor License Renewals and New Liquor License
   7.4 Discuss COVID-19 Updates

8. Council Member & Mayor and Staff Reports

9. Adjournment

The following informational items have been included in the Council packet for informational purposes, council review and discussion. No action is required by the City Council: 1st Quarter Financial Report.

UPCOMING MEETINGS / EVENTS

May 30 Spring Clean-up Day – 8:00 to noon
June 2 Planning Commission – 6:00 p.m.
June 8 Personnel Committee – 5:00 p.m.
June 8 City Council – 6:00 p.m.
June 10 Economic Development Commission – 6:00 p.m.
June 16 Parks and Recreation Commission – 4:45 p.m.
June 18 Senior Advisory Committee – 9:00 a.m.
June 22 Work Session, EDA, City Council – 6:00 p.m.

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Norwood Young America

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TO: Honorable Mayor Lagergren and City Council Members

FROM: Steven Helget, City Administrator

DATE: May 26, 2020

SUBJECT: Dr. Richard Scott – Carver County COVID-19 Pandemic Update

==========

Dr. Richard Scott, Carver County Deputy Director of Health Services, will provide an update on the COVID-19 Pandemic, identify the critical areas the County is working on, and review possible future County policy decisions.

Suggested Motion:

Work Session item only. No action proposed.

Norwood Young America

more than a place, it's home.

TO: Honorable Mayor Lagergren and City Council Members

FROM: Steven Helget, City Administrator

DATE: May 26, 2020

SUBJECT: Street and Utility Reconstruction Projects Scoping Study

==========

Jake Saulsbury, Bolton & Menk, will present the enclosed Street & Utility Reconstruction Projects Scoping Study. The purpose of the study is to assist with developing a long-range plan for reconstruction projects. The Scoping Plan identifies the projects, condition of existing utilities, proposed work to be completed for each project, project cost estimates, etc.

Suggested Motion:

Work Session item only. No action proposed.

BOLTON & MENK

Real People. Real Solutions.

City of Norwood Young America, MN

Street & Utility Reconstruction Projects

Scoping Study

May 20, 2020

Submitted by:
Bolton & Menk, Inc.
2638 Shadow Lane
Suite 200
Chaska, MN 55318
P: 954-448-8838

Certification

City of Norwood Young America
Street & Utility Reconstruction Projects
Scoping Study

May 20, 2020

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

By: Jake D. Saulsbury

Jake Saulsbury, P.E.
License No. 42713

Date: May 20, 2020

I. INTRODUCTION

A. IMPETUS

This Scoping Study, as authorized by the City Council, covers the proposed street and utility reconstruction projects for the City of Norwood Young America over the next several years. The Scoping Study was authorized due to concerns of the City's aging infrastructure system, as well as the need to further evaluate and better define the upcoming necessary projects. The ultimate goal of the City is to maintain a safe and useable local transportation system for the traveling public, and to provide necessary municipal utilities in a cost-effective and fiscally responsible manner. This document is intended to serve as a guide to help achieve this goal, and to assist with the decision-making process pertaining to the project scope and the funding approach for future infrastructure improvement projects.

B. REPORT ORGANIZATION

To address the various projects in an orderly manner, the report is organized into 5 sections as follows:

Section 1: Introduction
Section 2: Existing Conditions
Section 3: Proposed Projects
Section 4: Financing & Funding
Section 5: Recommended Next Steps

C. SCOPE

The scope and content of this report is the result of many factors and many items, including but not limited to, the following:

- Meetings and discussions with City staff
- Street evaluations
- Record drawing and as-built information
- Existing identified maintenance concerns
- Staff provided condition appraisals
- Sanitary sewer manhole inspections and mainline televising

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The goal of this Study is to outline what is needed to upgrade the most structurally deficient streets to a serviceable and reliable condition, and to address the most significant underlying utility issues. The report objectives can be summarized by the following:

- Outline existing infrastructure condition and needs.
- Replace utilities in conjunction with street reconstruction if these utilities are determined to be failing or need to be added to the system.
- Determine the recommended scope of work for each project identified.
- Determine a budgetary cost estimate needed to complete each project.
- Summarize financing and funding options available.

II. EXISTING CONDITIONS

A. BACKGROUND

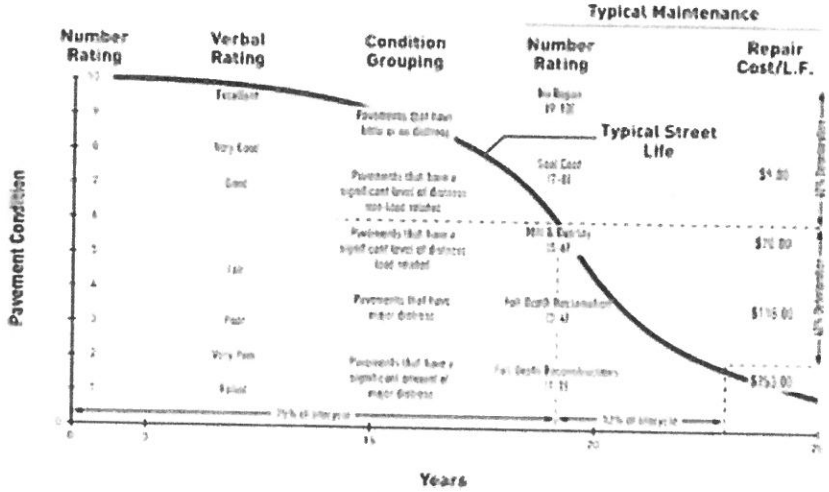
The City Council has approved reports which were previously completed and used to complete this study. These reports include the following:

- 2019 Comprehensive Plan Update
- 2019 Surface Water Management Plan
- 2018 Water Supply Plan
- 2007 Water System Infrastructure Study
- 2002 Street & Infrastructure Rehabilitation Plan (and subsequent updates)

Additional information utilized includes record drawings (as-builts) from completed projects.

B. INFRASTRUCTURE LIFECYCLES

Newly constructed bituminous streets can be expected to last 20 to 40 years if the City is performing little to no maintenance. Selecting the proper pavement maintenance or replacement procedure at the appropriate time can increase this life expectancy to beyond 50 years. The illustration below shows a graphical representation of the bituminous pavement life cycle. As seen in the figure, the condition of the pavement will decrease over time as repeated freeze and thaw cycles, traffic loading, water, sun, etc. begin to wear on the pavement structure. Also, the older the pavement becomes, the more costly the appropriate maintenance becomes.



C. PAVEMENT CONDITION

The City Council has requested a brief evaluation of all local streets to determine which streets currently require reconstruction, which are mill and overlay candidates, and which only require routine maintenance (crack sealing and seal coating). This exercise was also completed in 2012. As a result of the 2012 evaluation, a large mill and overlay project was completed in 2013. Most of the remaining roads identified as mill and overlay candidates at that time have further deteriorated and are now recommended for complete reconstruction. Figure No. 1 in Appendix A outlines the findings of this recent visual evaluation. Streets shown in red are currently recommended for routine maintenance consisting of crack sealing and seal coating. The city has been completing crack sealing and seal coating on an ongoing basis. As the streets continue to age, theses streets shown in red will become candidates for future mill and overlay projects.

D. UTILITY CONDITION

The municipal utilities consist of sanitary sewer, watermain, and storm sewer. In general, the condition of these facilities mimic that of the street above it. The new developments only require routine maintenance. This consists of cleaning and jetting for the sanitary sewer and storm sewer systems and flushing for the water system. The older sections of town require full replacement, spot repairs and lining (sanitary sewer only).

Based on the information obtained through visual inspections and sanitary sewer televising, the sanitary sewer system in general is in poor to fair condition. The existing lines, manholes, and castings have some inflow and infiltration concerns that are adding to the total amount of water that the city is treating. The sanitary sewer lift station on 2nd Avenue SE is more than 40 years old and needs to be replaced. The existing watermain is showing signs of its age, with occasional breaks. Based on the year that the watermain was installed and the information that the city staff has shared, it is believed that the watermain on the north side of town is asbestos piping. Although there is not a health concern to the residents, the pipe when needing to be repaired, can be hazardous. The storm sewer system is at the end of its design life and needs to be replaced. Drainage systems in parts of town become overwhelmed during large rain events and cause minor flooding. In other parts of town there is poor drainage and no existing storm sewer. Since the installation of the existing storm sewer, design standards have changed, and rainfall amounts have increased.

III. PROPOSED PROJECTS

A. SUMMARY

Figure No. 1 in Appendix A shows the recommended rehabilitation and maintenance plan for the City of Norwood Young America. Figure No. 2 in Appendix A outlines the proposed street improvement projects over the next several years. This list was generated on the findings discussed previously in this report and from previous discussions with the City staff and City Council. A priority or construction year has not been assigned to these projects. The order of these projects shown in this section is generally from north to south and from west to east.

Two different pavement sections are required to reconstruct the streets in the proposed plan due to the variation in design functional class and anticipated truck traffic with each street. The first is the City Standard Section which consists of 4.5 inches of bituminous pavement, 9 inches of aggregate base, 12 inches of select granular borrow, and geotextile fabric. The second section is the Truck Route Section. This section consists of 6.5 inches of bituminous pavement, 14 inches of aggregate base, 12 inches of select granular borrow, and geotextile fabric. The details of each section can be seen on Figure No. 3 in Appendix A. Please note there are two sections shown for the Standard Section. This is due to Oak Lane being proposed as a rural section (without curb and gutter) and the remaining streets being proposed as an urban section (with curb and gutter).

The Carver County Water Management Organization (CCWMO) is the governing body over the watershed and has setup rules and guidance on how stormwater needs to be treated. This has not been completed on past projects as it is new for street reconstruction projects as of 2018. The treatment methods include the construction of bioretention basins, treatment structures, and other structural best management practices to aid in the removal of phosphorus, sediment, and other contaminants. There are various ways to treat the water and this will need to be further evaluated for the appropriate method and scale to meet the current CCWMO requirements at the time of the project. Cost are included in each project for stormwater treatment. However, once a project proceeds it is recommended to further evaluate the stormwater treatment options. It would be more cost effective to complete additional treatment with the initial project, or projects, and then bank the treatment credits to meet the requirements for future projects. This approach may also require the acquisition of temporary construction easements and/or permanent drainage and utility easements. There are no easement costs

included in the cost estimates.

Below are the necessary project scopes and estimated costs for these recommended street and utility improvements, based on the selected project areas and recent bid prices. The estimated utility costs are assumed based on known utility issues at this time. Please note that all costs are based on 2020 prices and will need to be adjusted for projects completed in future years. Please note that all streets are assumed to have the proposed width match the existing width. Potential cost savings exist if a street can be narrowed. This option is recommended to be evaluated in the future as part of a more detailed Feasibility Study for each project. A cost summary of all the proposed projects is included in Section 4 and an itemized cost estimate for each project is included in Appendix B.

B. PROJECT NO. 1 – NORTHEAST AREA

This project consists of the reconstruction of 1st Avenue NE, 2nd Avenue NE, 3rd Avenue NE, 4th Avenue NE, 1st Street NE, and 2nd Street NE as shown on Figure 4 in Appendix A. The sanitary sewer system on 2nd Street NE and 4th Avenue NE is proposed to be replaced due to deterioration of the line and multiple sags in the line. The remaining sanitary sewer mains and manholes on the previously listed roads are recommended to be lined. The lining project does not need to be completed in conjunction with the reconstruction of the streets. Lining the sanitary main and the manholes will prolong the life of the system and will reduce the inflow and infiltration of stormwater and ground water into the sanitary system. This will reduce the amount of water that the city is treating at the City's wastewater treatment facility, therefore reducing the cost spent on treating the City's water. There are additional ways to reduce the inflow and infiltration of water into the system such as installing chimney seals and watertight castings. These methods should be incorporated in when the road is reconstructed. The watermain in this area will be removed and replaced with a new upsized pipe, from a 6" to an 8" line. The new 8" line will meet the recommended minimum size for a looped water system and will allow for increased fire flow capacity. All valves and fire hydrants will be replaced, and new service lines will be extended and connected to all properties within the project limits. The existing storm sewer pipe, manholes, catch basins, and castings will be replaced. The system will be evaluated on a street by street basis to ensure the water is treated according to the CCWMO standards, while ensuring the system functions appropriately. In addition to replacing the current system, drain tile and sump pump connections will be installed to capture

water and direct it into the storm sewer system. Additionally, the proposed road profile of 4th Avenue NE will be set to facilitate better drainage to the north. The streets are proposed to be replaced with the city standard section, and street widths are assumed to remain the same as they currently are today.

The estimated total project costs are as follows:

- Street Cost = $2,008,200
- Sanitary Sewer Cost = $311,200
- Watermain Cost = $494,600
- Storm Sewer Cost = $279,900
- Sanitary Lining = $233,100
- Total Estimated Project Cost = $3,327,000

The alternate sanitary sewer alignment shown on Figure 4 allows for the sanitary sewer route to be adjusted and removed from private property at the east end of the project area. The revised total estimated project cost to include this alternate is $3,477,000.

C. PROJECT NO. 2 – SE 2ND AVENUE AND LIFT STATION REPLACEMENT

This project consists of reconstructing 2nd Avenue SE and the replacing the Lift Station as shown on Figure 5 in Appendix A. The sanitary sewer main on 2nd Avenue SE in general is in adequate shape and is proposed to be lined. There are multiple sanitary manholes on 2nd Avenue that are made of brick. These brick structures are no longer a standard construction practice, are in poor condition, and are recommended to be replaced. Lining the sanitary sewer main and replacing the manholes will prolong the life of the system and will reduce inflow and infiltration into the sanitary system. The lining project does not need to be in conjunction with the reconstruction of the streets. There are additional ways to reduce the inflow and infiltration of water into the system such as installing chimney seals and watertight castings. These methods should be incorporated into construction when the road is reconstructed. The lift station on 2nd Avenue SE is at the end of its design life and needs to be replaced. The recommendation is to abandon the old one and reconnect to a new upgraded lift station in the same location. The lift station work should be done in conjunction with the street project to minimize impacts and restoration costs. The watermain in this area will be removed and replaced with a new upsized pipe, from a 6" to an 8" line. The new 8" line will meet the

recommended minimum size for a looped water system and will allow for increased fire flow capacity. All valves and fire hydrants will be replaced, and new service lines will be extended and connected to all properties within the project limits. The existing storm sewer pipe, manholes, catch basins, and castings will be replaced. The system will be evaluated on a street by street basis to ensure the water is treated according to the CCWMO standards, while ensuring the system functions appropriately. In addition to replacing the current system, drain tile and sump pump connections will be installed to capture water and direct it into the storm sewer system. The streets are proposed to be replaced with the city standard truck route section and street widths will remain the same as they currently are today.

Not included in the proposed scope of work or estimated costs is a modification to the 5-way intersection at the south end of the project area. If this is desired, an additional study is necessary to evaluate intersection options and the possibility of installing a roundabout and/or reducing this intersection to a 4-way intersection.

The estimated costs for this project are as follows:

- Street Cost = $2,661,800
- Sanitary Sewer Cost = $52,700
- Watermain Cost = $915,200
- Storm Sewer Cost = $411,000
- Sanitary Sewer Lining = $225,700
- Lift Station Cost = $765,900
- Total Estimated Project Cost = $5,032,300

D. PROJECT NO. 3 – SW 4TH AVENUE AREA

This project consists of reconstructing 4th Avenue SW, Hilltop Circle, Colonial Circle, and Webster Street SW as shown on Figure 6 in Appendix A. The sanitary sewer main in general in this area is in adequate shape and is proposed to be lined. The lining project does not need to be in conjunction with the reconstruction of the streets. Lining the sanitary main and the manholes will prolong the life of the system and will reduce the inflow and infiltration of ground water into the sanitary system reducing the amount of water that the city is treating; overall reducing the total cost spent on treating the city's water. There are additional ways to reduce the inflow and infiltration of water into the system such as installing chimney seals and

watertight castings. These methods should be incorporated into construction when the road is reconstructed. The watermain in this area will be removed and replaced with a new upsized pipe, from a 6" to an 8" line. The new 8" line will meet the recommended minimum size for a looped water system and will allow for increased fire flow capacity. All valves and fire hydrants will be replaced, and new service lines will be extended and connected to all properties within the project limits. The existing storm sewer pipe, manholes, catch basins, and castings will be replaced. The system will be evaluated on a street to street basis to ensure the water is treated according to the CCWMO standards, while ensuring the system functions appropriately. In addition to replacing the current system drain tile and sump pump connections will be installed to capture water and direct it into the storm sewer system. The streets are proposed to be replaced with the city standard section and street widths will remain the same as they currently are today.

The estimated costs for this project are as follows:

- Street Cost = $1,526,900
- Sanitary Sewer Cost = $40,700
- Watermain Cost = $690,900
- Storm Sewer Cost = $297,100
- Sanitary Sewer Lining = $257,000
- Total Estimated Project Cost = $2,812,600

E. PROJECT NO. 4 – OAK LANE

This project consists of reconstructing Oak Lane as shown on Figure 7 in Appendix A. The existing sanitary sewer main along the north side of the project area is in good shape and is proposed to be left as is. The sanitary sewer system currently does not serve all adjacent properties along Oak Lane. The proposed plan is to construct two additional sanitary lines to serve the lots on the south side of Oak Lane, the north lot at the cul-de-sac, and the two lots on the west side of Tacoma Avenue. The sanitary line along Tacoma Avenue is proposed to be directionally drilled and service lines installed to the lots adjacent to Tacoma Avenue. The lots on the south side of Oak Lane and the lots adjacent to the lots in the cul-de-sac are currently not served with water either. An 8" watermain and service lines are proposed to be installed to service the remaining lots. Oak Lane is currently a gravel road. It is proposed to be upgraded and paved to a 28' wide road with no curb and gutter and with the city standard section.

The City entered into an agreement with the Township in 2013. This agreement impacts this project timeline as it is required that the Oak Lane properties connect to the City sewer and water systems within 10 years (January 1, 2023). In order for this to occur the City must first provide sewer and water mains for these homes to connect to. Therefore, this project should be a high priority or the terms of the previous agreement should be renegotiated with the Township and/or the Oak Lane property owners.

The estimated costs for this project are as follows:

- Street Cost = $532,100
- Sanitary Sewer Cost = $255,100
- Watermain Cost = $87,400
- Storm Sewer Cost = $22,000
- Total Estimated Project Cost = $896,600

The street improvements and a portion of the utility improvements could be completed in the future. To comply with the Township agreement the work that must be completed consists of the sewer along County Road 134 / Tacoma Avenue and providing a sewer and water to the property at the north end of the cul-de-sac. The total estimated project cost for this reduced scope of work is $150,000.

F. PROJECT NO. 5 – MERGER STREET

This project consists of reconstructing Merger Street as shown on Figure 8 in Appendix A. The sanitary sewer main in general on this street is in adequate shape and is proposed to be lined. The lining project does not need to be in conjunction with the reconstruction of the streets. Lining the sanitary main and the manholes will prolong the life of the system and will reduce the inflow and infiltration of ground water into the sanitary system reducing the amount of water that the city is treating; overall reducing the total cost spent on treating the city's water. There are additional ways to reduce the inflow and infiltration of water into the system such as installing chimney seals and watertight castings. The watermain in this area will be removed and replaced with a new upsized pipe, from a 6" to an 8" line. The new 8" line will meet the recommended minimum size for a looped water system and will allow for increased fire flow capacity. All valves and fire hydrants will be replaced, and new service lines will be extended and connected to all properties within the project limits. The existing storm sewer pipe,

manholes, catch basins, and castings will be replaced. The system will be evaluated on a street by street basis to ensure the water is treated according to the CCWMO standards, while ensuring the system functions appropriately. In addition to replacing the current system, drain tile will be added along the back of curb. The street is proposed to be replaced with the city standard sections and the street width is proposed to remain the same as it is today.

The estimated costs for this project are as follows:

- Street Cost = $518,000
- Sanitary Sewer Cost = $21,500
- Watermain Cost = $237,800
- Storm Sewer Cost = $93,300
- Sanitary Sewer Lining Costs = $74,400
- Total Estimated Project Cost = $945,000

G. PROJECT NO. 6 – RAILROAD STREET

This project consists of the reconstruction Railroad Street as shown on Figure 9 in Appendix A. The sanitary sewer system on Railroad Street has degraded to a degree that lining the sanitary main is not feasible and it is recommended to be replaced in its entirety. Chimney seals and watertight castings will be installed to reduce inflow and infiltration into the sanitary sewer system. The watermain on Railroad Street will be removed and replaced with a new upsized pipe, from a 6" to a 12" line. The new 12" line will allow for better safety with increased fire flow capacity, as well as allow for looping and future development to the west. All valves and fire hydrants will be replaced, and new service lines will be extended and connected to all properties within the project limits. The existing storm sewer pipe, manholes, catch basins, and castings will be replaced. The system will be evaluated on a street by street basis to ensure the water is treated according to the CCWMO standards, while ensuring the system functions appropriately. In addition to replacing the current system, drain tile and sump pump connections will be installed to capture water and direct it into the storm sewer system. Currently there is no curb and gutter from East Street to Faxon Road. This portion of Railroad Street is known to temporarily flood after heavy rain events. The proposed plan is to add curb and gutter and storm sewer on this portion of Railroad Street to ensure proper drainage. The streets are proposed to be replaced with the city standard truck route section and the street width will remain the same as it currently is today.

The estimated costs for this project are as follows:

- Street Cost = $1,210,400
- Sanitary Sewer Cost = $322,200
- Watermain Cost = $529,300
- Storm Sewer Cost = $188,400
- Total Estimated Project Cost = $2,250,300

H. PROJECT NO. 7 – SOUTH STREET AND REFORM STREET

This project consists of the reconstruction of South Street, and a portion of Reform Street between South Street and Elm Street as shown on Figure 10 in Appendix A. The sanitary sewer system on South Street and Reform Street has certain segments of the line that are too shallow and freeze during winter months. This line is a maintenance nuisance and is proposed to be replaced at a deeper elevation that also includes insulation. Chimney seals and watertight castings will be installed to reduce inflow and infiltration into the sanitary sewer system. The watermain in this area will be removed and replaced with a new upsized pipe, from a 6" to an 8" line. The new 8" line will meet the recommended minimum size for a looped water system and will allow for increased fire flow capacity. All valves and fire hydrants will be replaced, and new service lines will be extended and connected to all properties within the project limits. The existing storm sewer pipe, manholes, catch basins, and castings will be replaced. The system will be evaluated on a street by street basis to ensure the water is treated and ensuring the system functions appropriately. In addition to replacing the current system, drain tile and sump pump connections will be installed to capture water and direct it into the storm sewer system. The existing storm sewer on South Street and Reform Street is part of a large system that drains to the east and into the ditch to the east of Faxon Road. This system does not have the capacity to handle large rain events, which causes water to back-up into South Park. Our recommendation is to replace and upsize the storm sewer on South Street from Reform Street to Hazel Street. This would allow for the remaining system to be removed and upsized with another project. Although this may not remedy the system from being overwhelmed and backing up, it will give the city options in the future to upsize the remaining drainage system, correcting the flooding issues. The streets are proposed to be replaced with the city standard section, and the street widths will remain the same as they currently are today.

Currently the city has the capacity to produce enough water to meet its needs, but in the future

when the city grows, the production of water will need to be increased to meet the needs of the growing population. One feasible solution for increasing the city's water production would be to utilize the existing well located near City Hall, and connect it to the South Water Treatment Facility, located in the Lions Pool Park. During the redevelopment of the Oak Grove site in 2009 a raw water line was connected to the existing well and was stubbed out to Elm Street for future use. To complete the connection, the raw water main will need to be routed from Elm Street to the Water Treatment Facility in Lions Pool Park. Due to the proximity of the South Street and Reform Street project we recommend extending the line from the stubbed-out location on Elm Street to the limits of the project. This will allow for the raw water main to be connected to the South Water Treatment Facility in the future. Prior to this work though, a determination needs to be made if the South Water Treatment Facility will be brought back online.

The estimated costs for this project are as follows:

- Street Cost = $1,230,400
- Sanitary Sewer Cost = $661,900
- Watermain Cost = $690,000
- Storm Sewer Cost = $300,900
- Raw Watermain = $197,700
- Total Estimated Project Cost = $3,080,900

IV. SUMMARY AND FINANCING & FUNDING

A. SUMMARY

The following table summarizes all the costs as outlined in this report.

PROJECT	STREET COST	SANITARY SEWER COST	SAN SWR LINING COST	WATER COST	STORM SEWER COST	TOTAL PROJECT COST
NO. 1 - NORTHEAST AREA	$2,008,200	$311,200	$233,100	$494,600	$279,900	$3,327,000
NO. 2 – SE 2ND AVENUE	$2,661,800	$52,700	$225,700	$915,200	$411,000	$4,266,400
NO. 3 – SW 4TH AVE AREA	$1,526,900	$40,700	$257,000	$690,900	$297,100	$2,812,600
NO. 4 - OAK LANE	$532,100	$255,100	N/A	$87,400	$22,000	$896,600
NO. 5 – MERGER STREET	$518,000	$21,500	$74,400	$237,800	$93,300	$945,000
NO. 6 – RAILROAD ST.	$1,210,400	$322,200	N/A	$529,300	$188,400	$2,250,300
NO. 7 - SOUTH ST. & REFORM ST.	$1,230,400	$661,900	N/A	$690,000	$300,900	$2,883,200
SE 2ND STREET LIFT STATION	N/A	$765,900	N/A	N/A	N/A	$765,900
SOUTH ST. RAW WATERMAIN	N/A	N/A	N/A	$197,700	N/A	$197,700
TOTAL	**$9,687,800**	**$2,431,200**	**$790,200**	**$3,842,900**	**$1,592,600**	**$18,344,700**

Please note the following assumptions pertaining to these costs:

- All costs are in 2020 dollars and will need to be adjusted to the appropriate construction year as project timelines are determined.
- All preliminary designs included are based on current standards and regulations.
- Easement needs are widely unknown at this time. Therefore, no costs for any potential easements are included.
- Proposed street widths match existing street widths.

B. FINANCING

Based on the high costs associated with these proposed projects, the City will likely need to obtain bonds to pay for the improvements. Bond terms for street projects generally have a term of 10, 15, or 20 years. The bonds that are typically utilized by small cities for street and utility reconstruction projects are Chapter 429 General Obligation Bonds. Chapter 429 Bonds allow for a city to assess a portion of the improvements to benefitting property owners. The main requirement for this to occur is that the process as outlined in the State Statute is followed and that a minimum of 20% of the total project cost is assessed.

- Pros = Able to assess properties which are not taxed, able to reduce the City's portion of the project cost, not subject to debt limits (better for on-going improvement plans).
- Cons = Subject to appeals by property owners, detailed process and legal requirements, requires a 4/5's City Council vote.

Due to the City's Assessment Policy, achieving the minimum requirement of assessing 20% of the identified projects will be difficult. Therefore, a combined bond approach utilizing a Chapter 429 Bond with a Chapter 115 (sanitary sewer/wastewater) Bond, a Chapter 444 (water/stormwater) Bond, and/or another type of bond will likely be necessary.

Please note that this discussion on bond options is very general. The bonds listed, along with other bond types, are able to be combined to creatively finance specific projects. It is also possible to assess property owners without obtaining a Chapter 429 bond, but the process is still required to be followed. The City should engage their financial consultant to determine the most appropriate financing method on a per project basis.

C. FUNDING

Funding for the proposed projects are likely to be derived from the following sources:

- Property Tax Revenue
- Sewer Revenues
- Water Revenues
- Stormwater Revenues
- Special Assessments

The availability for grant funds or other outside funds for will also be evaluated for each project.

V. RECOMMENDED NEXT STEPS

The following next steps are recommended to be completed by the City:

1. Review the Scoping Study with the City staff and City Council
2. Modify and update the Scoping Study (if necessary)
3. Adopt the Scoping Study & determine the highest priority project
4. Proceed with the identified project
    a. Authorize the completion of a Feasibility Study
    b. Authorize topographic survey work and geotechnical exploration work
    c. Conduct an Open House (optional) and/or a Public Hearing (required if assessed)
    d. Review financing options with the City's financial consultant
    e. Design, bid, and construct the project
5. Reevaluate the streets, update project priorities, review estimated costs, and update / modify the Scoping Study (approximately every 5 years)
6. Continue with street and utility maintenance and document any issues (ongoing)

Appendix A: Figures

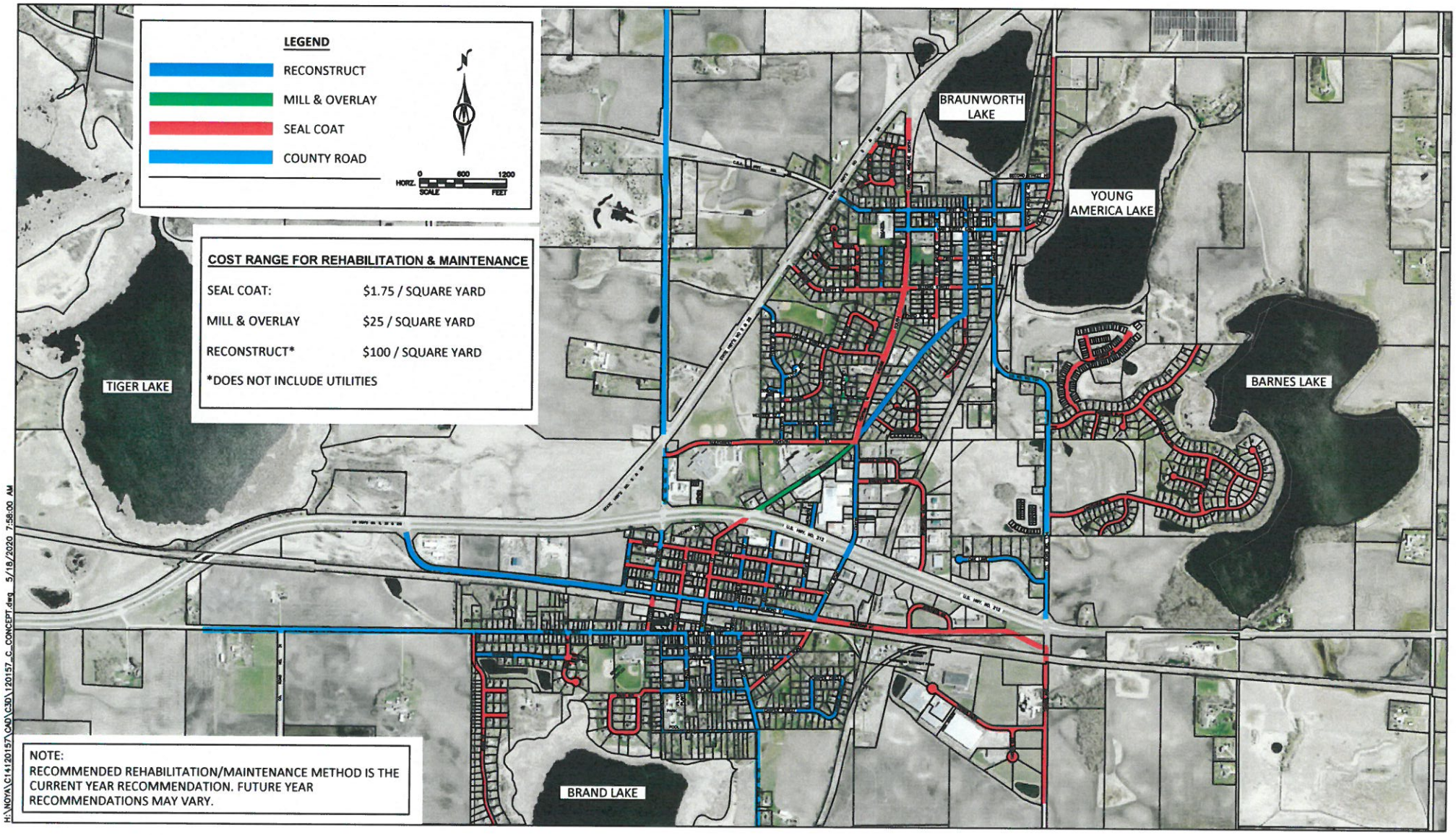
STREET & UTILITY SCOPING STUDY

CITY OF NORWOOD YOUNG AMERICA

FIGURE 1: RECOMMENDED STREET REHABILITATION & MAINTENANCE PLAN

MAY 2020

BOLTON & MENK



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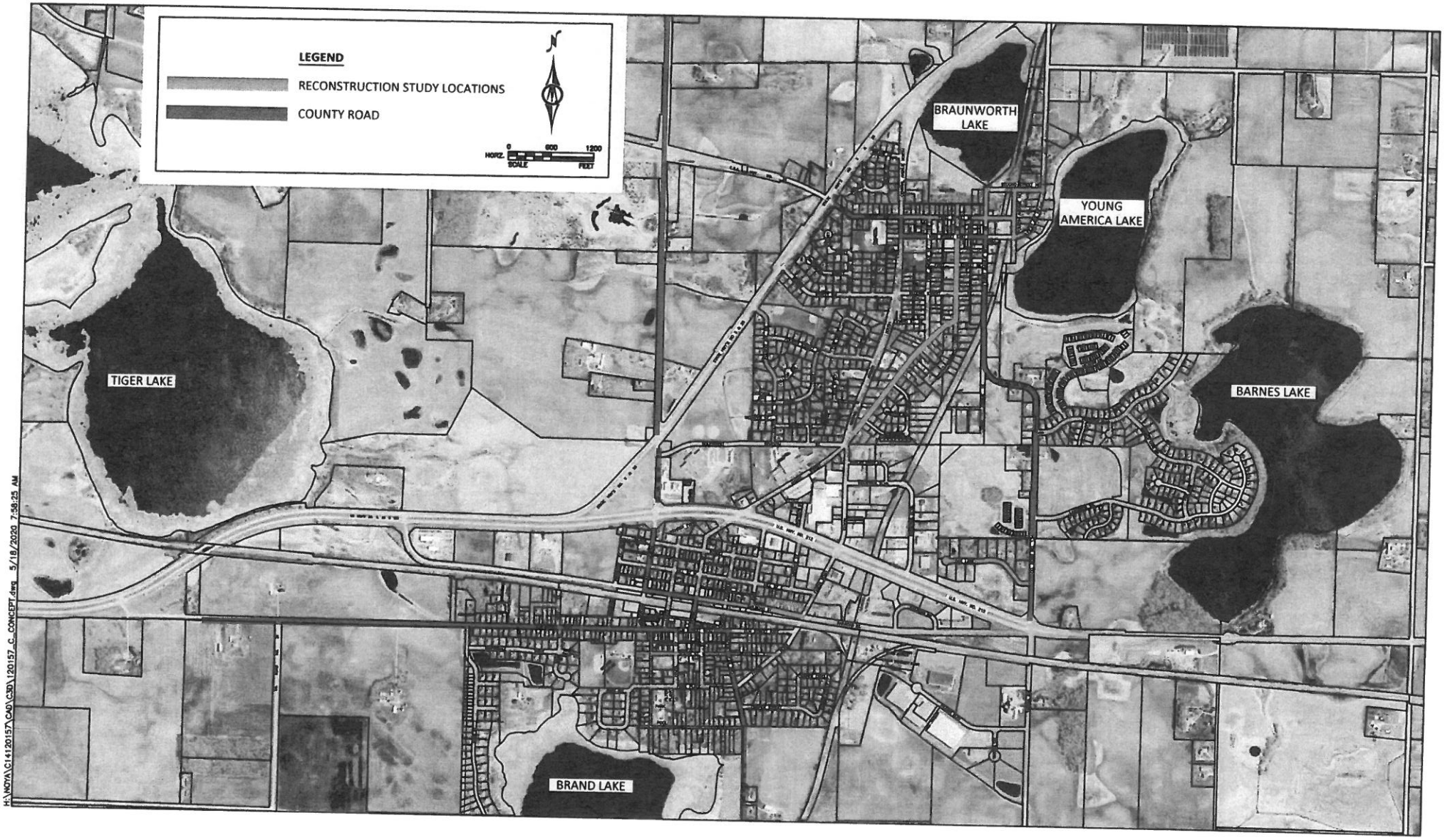
PAVEMENT MANAGEMENT PLAN

CITY OF NORWOOD YOUNG AMERICA

FIGURE 2: STREET & UTILITY RECONSTRUCTION STUDY LOCATIONS

MAY 2020

BOLTON & MENK



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STREET & UTILITY SCOPING STUDY

CITY OF NORWOOD YOUNG AMERICA

FIGURE 4: NORTHEAST AREA

MAY 2020

BOLTON & MENK

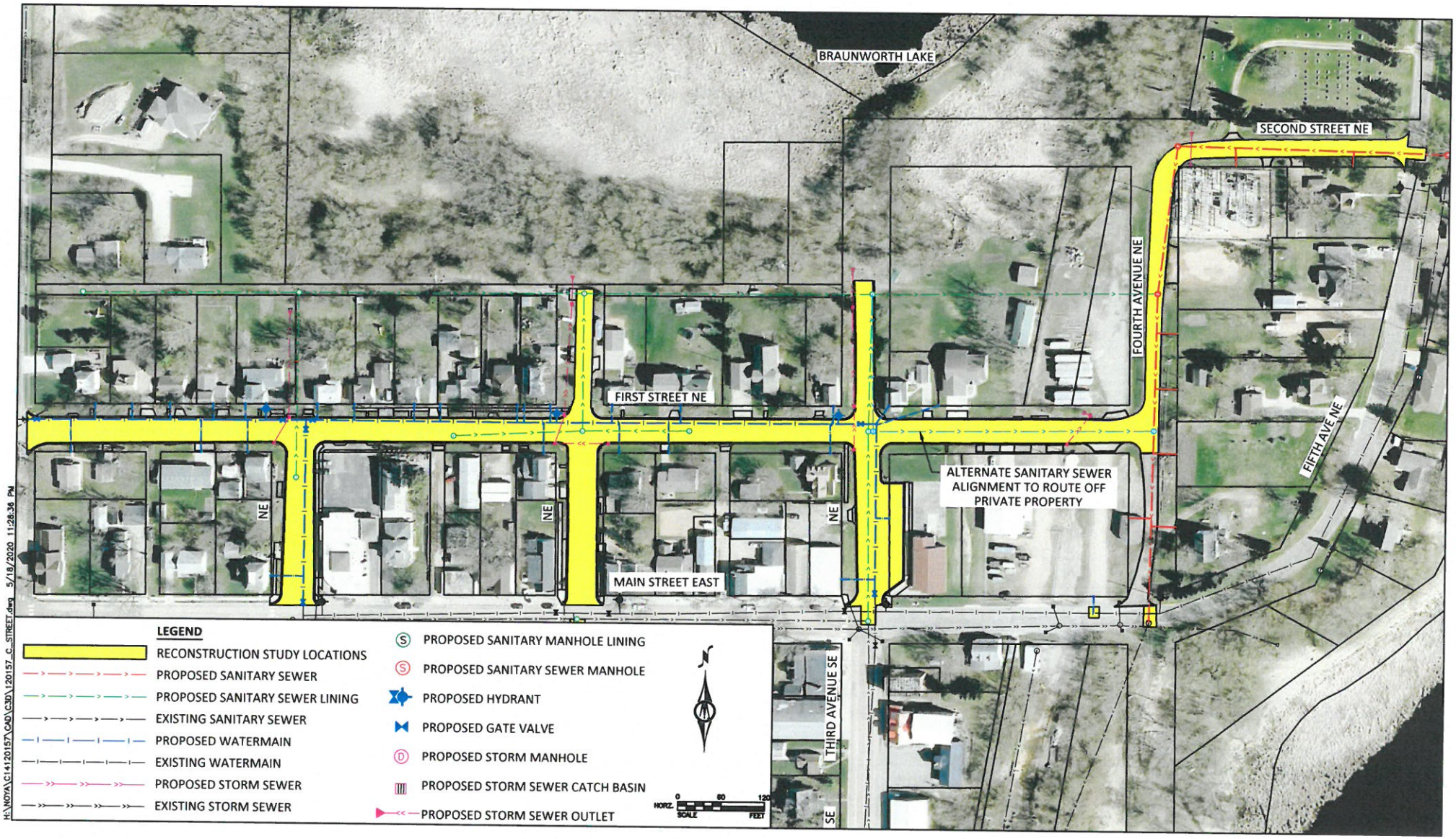


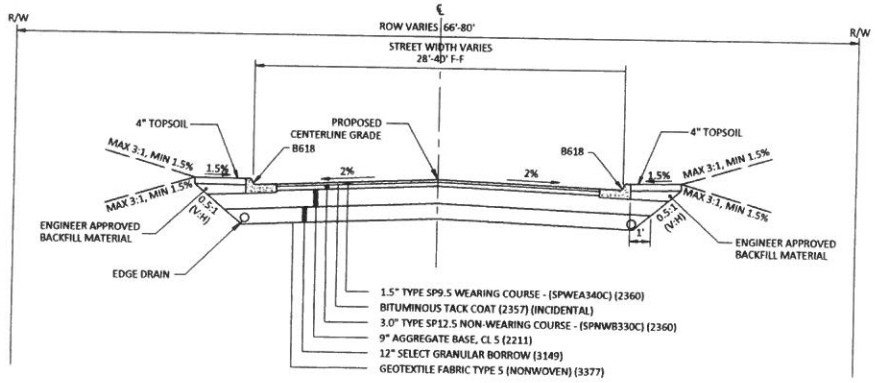
FIGURE 3: CITY PAVEMENT SECTIONS

MAY 2020

BOLTON & MENK

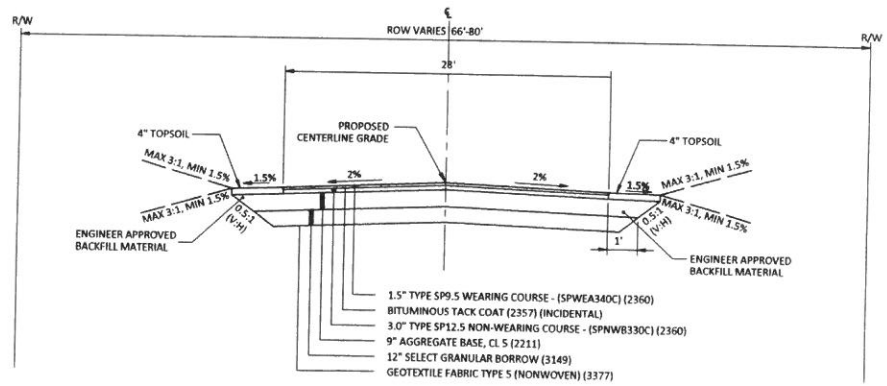
TYPICAL SECTION - STANDARD SECTION

FIRST STREET, SECOND STREET, FOURTH STREET, FIRST AVENUE, SECOND AVENUE, THIRD AVENUE, FOURTH AVENUE, COLONIAL CIRCLE, WEBSTER STREET, HILLTOP CIRCLE, MERGER STREET, REFORM STREET, SOUTH STREET



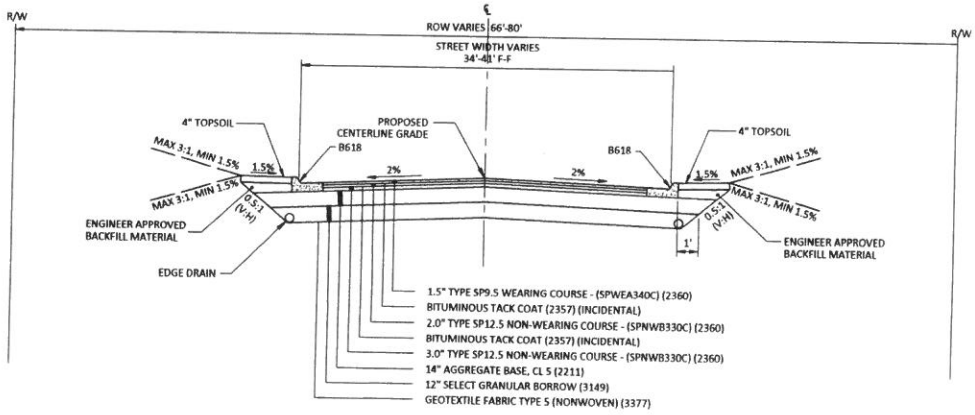
TYPICAL SECTION - STANDARD SECTION

OAK LANE



TYPICAL SECTION - TRUCK ROUTE SECTION

SECOND AVENUE SE, RAILROAD STREET



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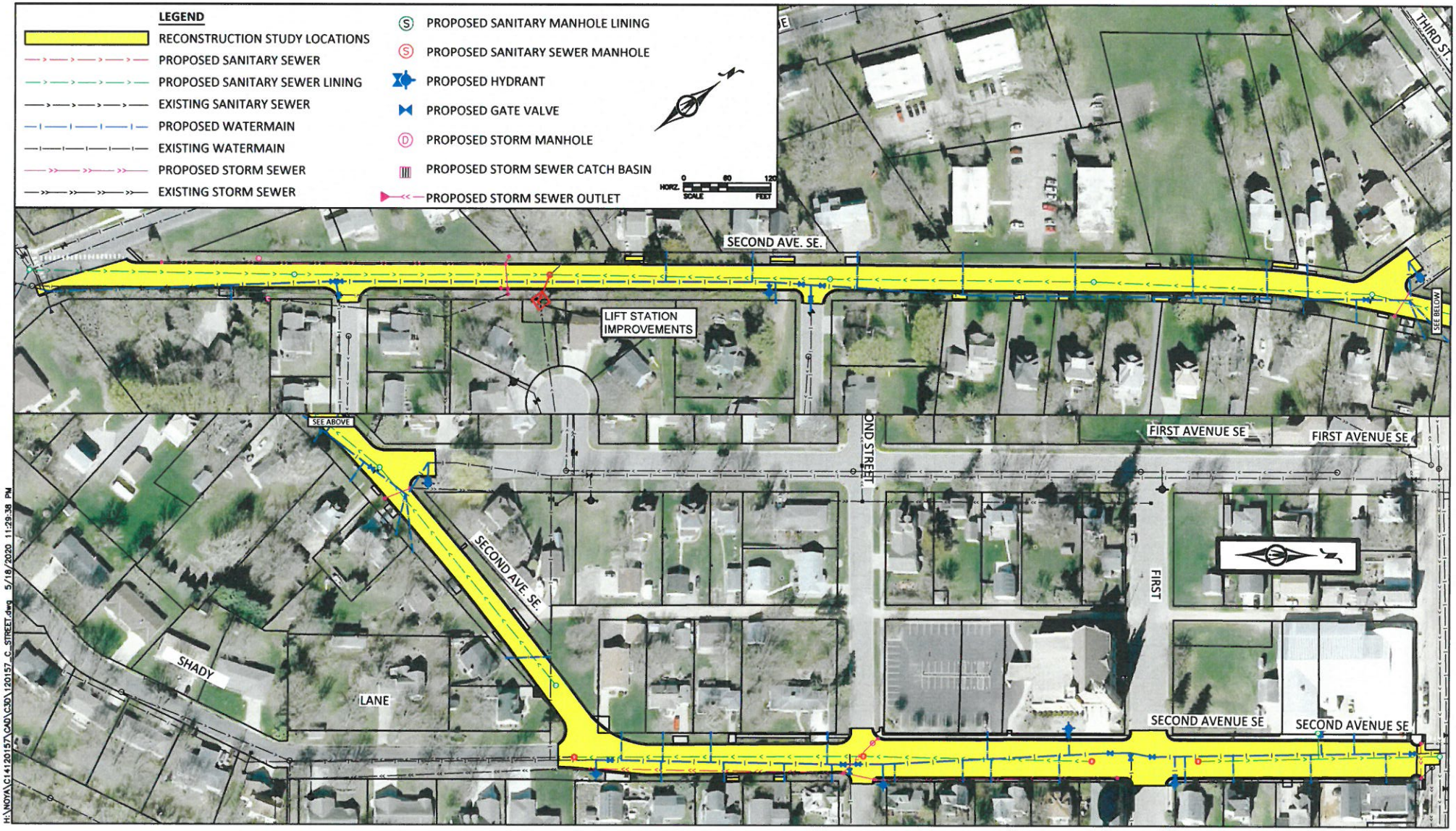
STREET & UTILITY SCOPING STUDY
CITY OF NORWOOD YOUNG AMERICA

FIGURE 5: SECOND AVENUE SE AREA
MAY 2020

BOLTON & MENK



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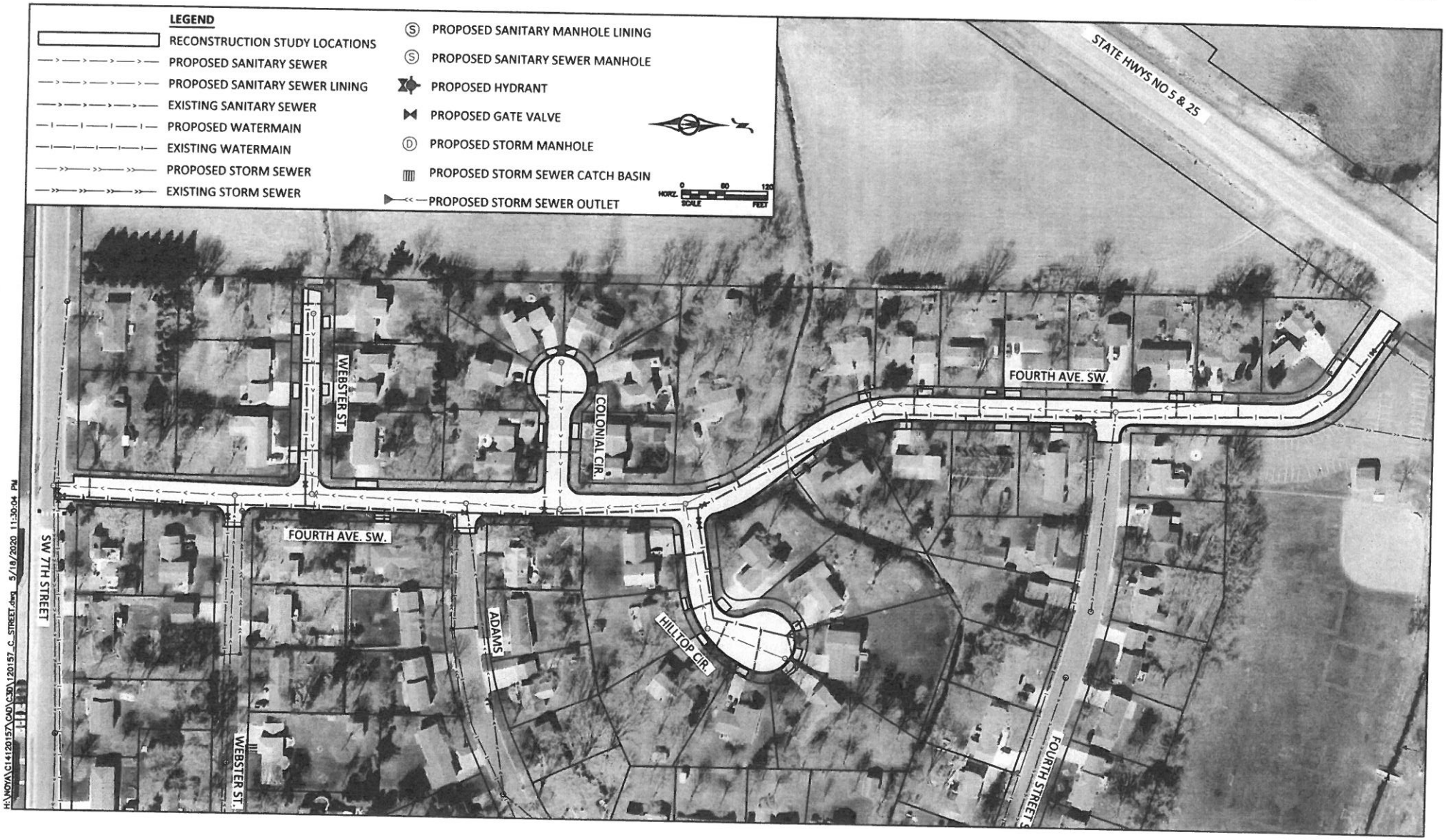
STREET & UTILITY SCOPING STUDY
CITY OF NORWOOD YOUNG AMERICA

FIGURE 6: FOURTH AVENUE SW AREA
MAY 2020

BOLTON & MENK



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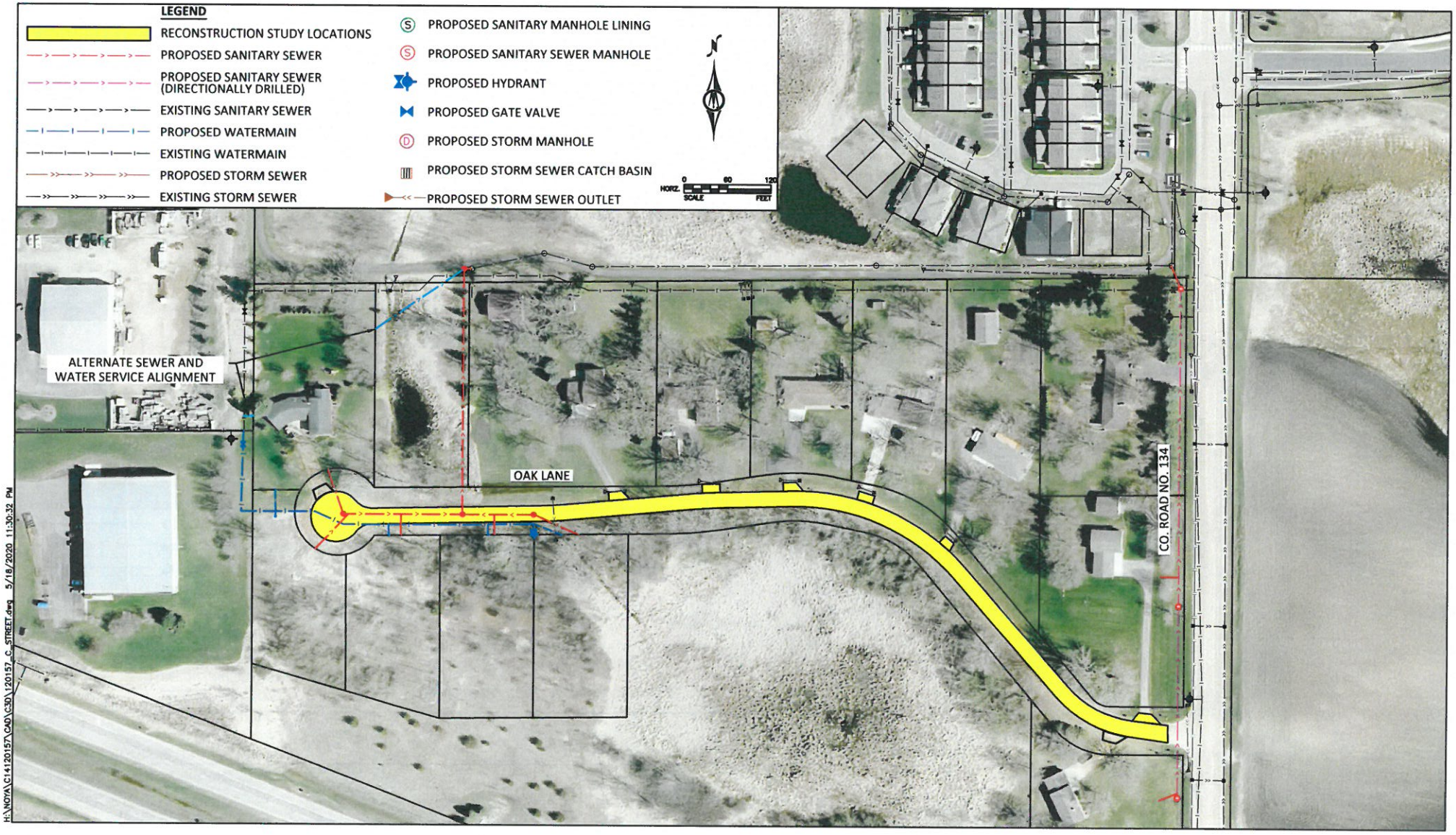
STREET & UTILITY SCOPING STUDY

CITY OF NORWOOD YOUNG AMERICA

FIGURE 7: OAK LANE AREA

MAY 2020

BOLTON & MENK



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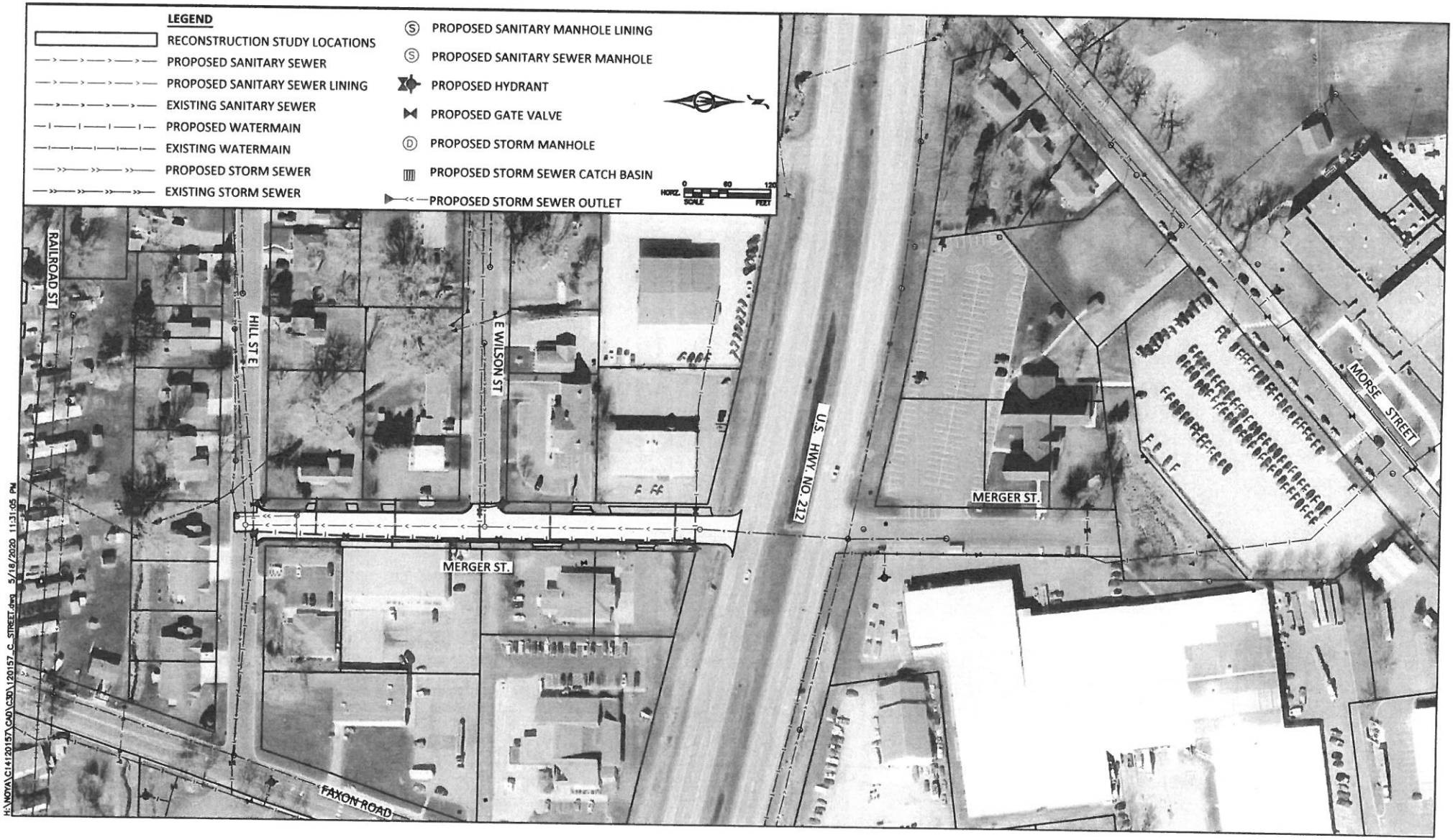
STREET & UTILITY SCOPING STUDY
CITY OF NORWOOD YOUNG AMERICA

FIGURE 8: MERGER STREET AREA
MAY 2020

BOLTON & MENK



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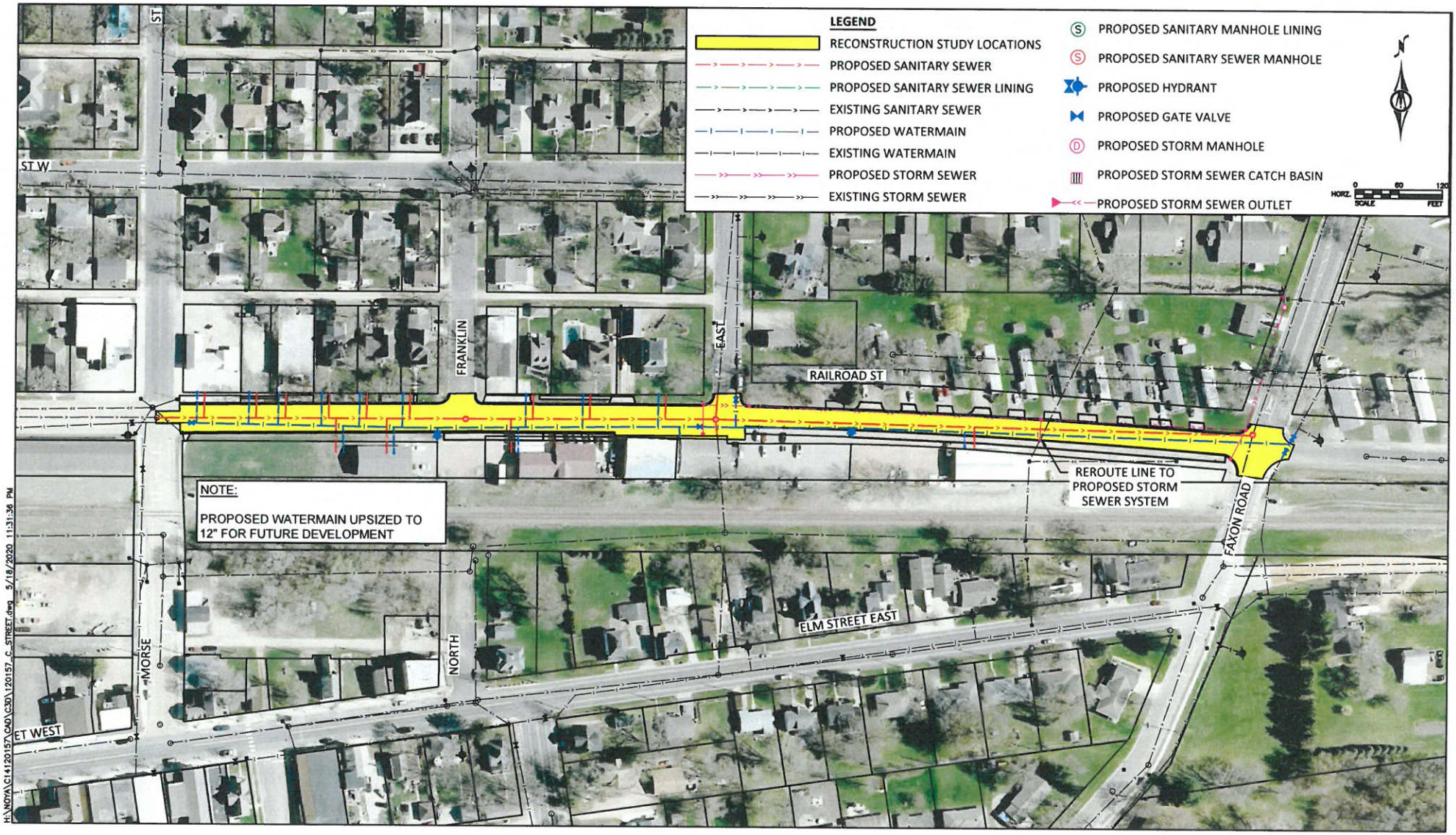
STREET & UTILITY SCOPING STUDY

CITY OF NORWOOD YOUNG AMERICA

FIGURE 9: RAILROAD STREET AREA

MAY 2020

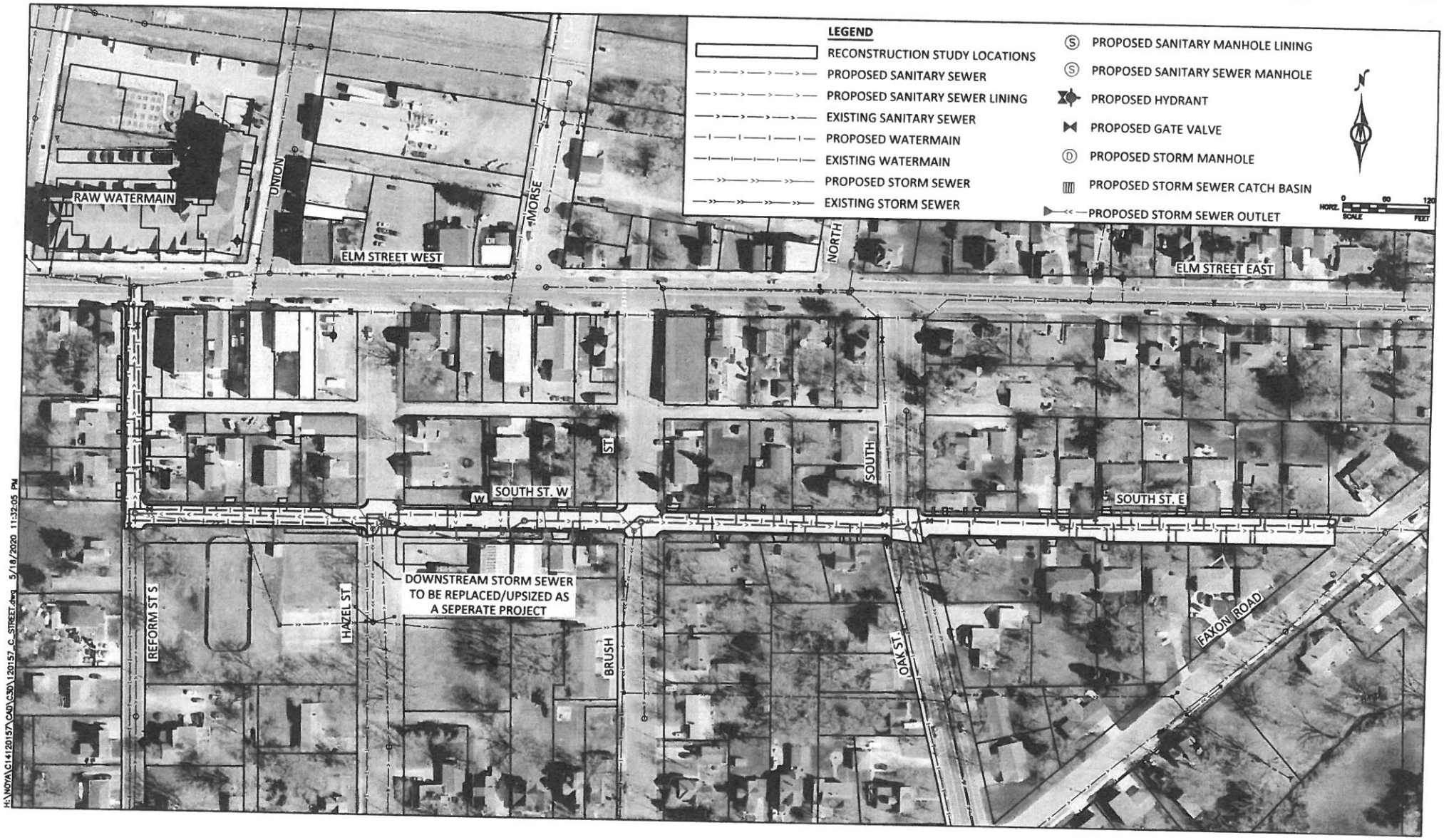
BOLTON & MENK



STREET & UTILITY SCOPING STUDY
CITY OF NORWOOD YOUNG AMERICA

FIGURE 10: SOUTH STREET AREA
MAY 2020

BOLTON & MENK



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Appendix B: Cost Estimates

STREET AND UTILITY RECONSTRUCTION

NORTHEAST AREA

TABLE #1

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	TOTAL COST	STREET RECONSTRUCTION									
						STREET RECONSTRUCTION		STORM		SANITARY SEWER		SANITARY SEWER LINING		WATERMAIN	
						QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
1	MOBILIZATION	LUMP SUM	1.00	$150,000.00	$150,000.00	0.604	$90,541.33	0.084	$12,618.68	0.094	$14,030.41	0.070	$10,510.28	0.149	$22,299.30
2	TRAFFIC CONTROL	LUMP SUM	1.00	$25,000.00	$25,000.00	0.604	$15,090.22	0.084	$2,103.11	0.094	$2,338.40	0.070	$1,751.71	0.149	$3,716.55
3	CLEAR AND GRUB TREE (4.0" DIA OR GREATER)	TREE	9.00	$500.00	$4,500.00	9.00	$4,500.00								
4	REMOVE WATERMAIN (ASBESTOS PIPE)	LIN FT	1,690.00	$28.00	$47,320.00									1,690.00	$47,320.00
5	REMOVE WATER SERVICE PIPE AND CURB STOP	EACH	28.00	$600.00	$16,800.00									28.00	$16,800.00
6	REMOVE PIPE SEWER (STORM)	LIN FT	655.00	$15.00	$9,825.00			655	$9,825.00						
7	REMOVE SANITARY STRUCTURE	EACH	7.00	$1,200.00	$8,400.00					7.00	$8,400.00				
8	REMOVE DRAINAGE STRUCTURE	EACH	11.00	$500.00	$5,500.00			11	$5,500.00						
9	REMOVE CASTING (SANITARY)	EACH	10.00	$200.00	$2,000.00					10.00	$2,000.00				
10	REMOVE HYDRANT	EACH	3.00	$700.00	$2,100.00									3.00	$2,100.00
11	REMOVE CONCRETE CURB & GUTTER	LIN FT	4,765.00	$4.00	$19,060.00	4,765.00	$19,060.00								
12	REMOVE CONCRETE SIDEWALK AND DRIVEWAY PAVEMENT	SQ FT	11,125.00	$1.50	$16,687.50	11,125.00	$16,687.50								
13	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ FT	3,120.00	$1.25	$3,900.00	3,120.00	$3,900.00								
14	REMOVE BITUMINOUS PAVEMENT	SQ YD	12,230.00	$2.50	$30,575.01	12,230.00	$30,575.01								
15	REMOVE AND DISPOSE SIGN POST	EACH	14.00	$40.00	$560.00	14.00	$560.00								
16	REMOVE AND DIPOSE STREET SIGN PANEL	EACH	14.00	$15.00	$210.00	14.00	$210.00								
17	SALVAGE & INSTALL STEP RAILING	EACH	1.00	$1,000.00	$1,000.00	1.00	$1,000.00								
18	SALVAGE & INSTALL RETAINING WALL	LIN FT	75.00	$85.00	$6,375.00	75.00	$6,375.00								
19	SALVAGE & INSTALL MAIL BOXES	EACH	40.00	$500.00	$20,000.00	40.00	$20,000.00								
19	SALVAGE & INSTALL PAVERS	SQ FT	242.00	$45.00	$10,890.00	242.00	$10,890.00								
20	EXPLORATORY EXCAVATION	HOUR	25.00	$500.00	$12,500.00	25.00	$12,500.00								
21	COMMON EXCAVATION (EV)	CU YD	8,265.00	$22.00	$181,830.00	8,265.00	$181,830.00								
22	SUBGRADE EXCAVATION (EV)	CU YD	691.00	$22.00	$15,202.00	691.00	$15,202.00								
23	TOPSOIL BORROW (LV)	CU YD	588.00	$38.00	$22,344.00	588.00	$22,344.00								
24	STABILIZING AGGREGATE 3" MINUS CRUSHED	TON	1,385.00	$38.00	$52,630.00	1,385.00	$52,630.00								
25	SUBGRADE PREPARATION	SQ YD	13,825.00	$1.50	$20,737.50	13,825.00	$20,737.50								
26	SELECT GRANULAR BORROW (CV)	CU YD	4,610.00	$35.00	$161,350.00	4,610.00	$161,350.00								
27	GEOTEXTILE FABRIC TYPE V	SQ YD	13,825.00	$1.50	$20,737.50	13,825.00	$20,737.50								
28	AGGREGATE SURFACING CLASS 5 (DRIVEWAY)	TON	130.00	$40.00	$5,200.00	130.00	$5,200.00								
29	AGGREGATE BASE CLASS 5 (CV)	CU YD	3,460.00	$35.00	$121,100.00	3,460.00	$121,100.00								
30	TYPE SP 9.5 WEARING COURE MIXTURE (2,C)	TON	1,110.00	$90.00	$99,900.00	1,110.00	$99,900.00								
31	TYPE SP 12.5 NON WEAR COURSE MIXTURE (2,C)	TON	2,220.00	$80.00	$177,600.00	2,220.00	$177,600.00								
32	BITUMINOUS RAMP CURB EDGE	LIN FT	4,765.00	$5.00	$23,825.00	4,765.00	$23,825.00								
33	MILL OUT BITUMINOUS RAMP CURB EDGE	LIN FT	4,765.00	$5.00	$23,825.00	4,765.00	$23,825.00								
34	4" PERF PE EDGE DRAIN	LIN FT	3,330.00	$10.00	$33,300.00			3330	$33,300.00						
35	4" PIPE DRAIN CLEANOUT	EACH	25.00	$350.00	$8,750.00			25	$8,750.00						
36	SUMP PUMP SERVICE CONNECTION	EACH	27.00	$500.00	$13,500.00			27	$13,500.00						
37	RANDOM RIP RAP CL III	CU YD	10.00	$180.00	$1,800.00			10	$1,800.00						
38	STORM WATER TREATMENT	LUMP SUM	1.00	$30,000.00	$30,000.00			1	$30,000.00						
39	12" RC PIPE SEWER DESIGN 3006 CLASS V	LIN FT	615.00	$50.00	$30,750.00			615	$30,750.00						
40	18" RC PIPE SEWER DESIGN 3006 CLASS V	LIN FT	45.00	$70.00	$3,150.00			45	$3,150.00						
41	12" RC APRON W/TRASH GUARD	EACH	3.00	$2,000.00	$6,000.00			3	$6,000.00						
42	18" RC APRON W/TRASH GUARD	EACH	2.00	$2,500.00	$5,000.00			2	$5,000.00						
43	CONSTRUCT DRAINAGE STRUCTURE DESIGN R-1	EACH	11.00	$2,000.00	$22,000.00			11	$22,000.00						
44	CONSTRUCT DRAINAGE STRUCTURE DES 48-4020	EACH	3.00	$2,750.00	$8,250.00			3	$8,250.00						
45	CASTING ASSEMBLY (STORM)	EACH	11.00	$1,000.00	$11,000.00			11	$11,000.00						
46	CONNECT TO EXISTING WATERMAIN	EACH	3.00	$2,500.00	$7,500.00									3.00	$7,500.00
47	HYDRANT	EACH	3.00	$7,000.00	$21,000.00									3.00	$21,000.00
48	CASTING ASSEMBLY - CURB STOP	EACH	1.00	$600.00	$600.00									1.00	$600.00
49	6" GATE VALVE AND BOX	EACH	3.00	$2,150.00	$6,450.00									3.00	$6,450.00
50	8" GATE VALVE AND BOX	EACH	7.00	$2,500.00	$17,500.00									7.00	$17,500.00
51	3/4" CORPORATION STOP	EACH	29.00	$375.00	$10,875.00									29.00	$10,875.00
52	3/4" WATER SERVICE LINE	LIN FT	965.00	$45.00	$43,425.00									965.00	$43,425.00
53	3/4" CURB STOP & BOX	EACH	28.00	$450.00	$12,600.00									28.00	$12,600.00
54	6" WATERMAIN DUCTILE IRON CL 52	LIN FT	42.00	$70.00	$2,940.00									42.00	$2,940.00
55	8" WATERMAIN DUCTILE IRON CL 52	LIN FT	1,690.00	$50.00	$84,500.00									1,690.00	$84,500.00
56	4" POLYSTYRENE INSULATION	SQ YD	25.00	$55.00	$1,375.00									25.00	$1,375.00

STREET AND UTILITY RECONSTRUCTION
NORTHEAST AREA
TABLE #1

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	TOTAL COST	STREET RECONSTRUCTION									
						STREET RECONSTRUCTION		STORM		SANITARY SEWER		SANITARY SEWER LINING		WATERMAIN	
						QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
57	PIPE FITTINGS	POUND	500.00	$15.00	$7,500.00									500.00	$7,500.00
58	TEMPORARY WATER SYSTEM	LUMP SUM	1.00	$50,000.00	$50,000.00									1.00	$50,000.00
59	9 LB ANODE	EACH	8.00	$150.00	$1,200.00									8.00	$1,200.00
60	CONNECT TO EXISTING SANITARY SEWER SERVICE	EACH	8.00	$1,000.00	$8,000.00					8.00	$8,000.00				
61	CONNECT TO EXISTING SANITARY SEWER	EACH	3.00	$2,000.00	$6,000.00					3.00	$6,000.00				
62	CONNECT TO EXISTING SANITARY MANHOLE	EACH	1.00	$3,500.00	$3,500.00					1.00	$3,500.00				
63	CONSTRUCT SANITARY MANHOLE	EACH	8.00	$9,000.00	$72,000.00					8.00	$72,000.00				
64	CIPP LINING	LIN FT	2,875.00	$25.00	$71,875.00							2,875.00	$71,875.00		
65	LATERAL REINSTATEMENT (ANY SIZE)	EACH	35.00	$90.00	$3,150.00							35.00	$3,150.00		
66	PROTRUDING TAP TRIMMING (ANY SIZE)	EACH	5.00	$450.00	$2,250.00							5.00	$2,250.00		
67	MANHOLE RESTORATION	EACH	10.00	$8,000.00	$80,000.00							10.00	$80,000.00		
68	8" PVC PIPE SEWER SDR 35	LIN FT	1,100.00	$60.00	$66,000.00					1,100.00	$66,000.00				
69	4" PVC PIPE SEWER SERVICE SDR-26	LIN FT	240.00	$50.00	$12,000.00					240.00	$12,000.00				
70	8"X4" PVC WYE	EACH	9.00	$350.00	$3,150.00					9.00	$3,150.00				
71	CASTING ASSEMBLY (SANITARY)	EACH	14.00	$1,000.00	$14,000.00					14.00	$14,000.00				
72	EXTERNAL CHIMNEY SEAL	EACH	14.00	$550.00	$7,700.00					14.00	$7,700.00				
73	CLEAN AND REMUD INVERTS	EACH	9.00	$800.00	$7,200.00					9.00	$7,200.00				
74	6" CONCRETE DRIVEWAY PAVEMENT (W/ 4" AGG. BASE CL. 5)	SQ FT	4,805.00	$8.00	$38,440.00	4,805.00	$38,440.00								
75	6" CONCRETE PEDESTRIAN RAMP (W/ 4" AGG. BASE CL. 5)	SQ FT	450.00	$25.00	$11,250.00	450.00	$11,250.00								
76	4" CONCRETE WALK (W/ 4" AGG. BASE CL. 5)	SQ FT	5,870.00	$6.00	$35,220.00	5,870.00	$35,220.00								
77	CONCRETE STEPS	SQ FT	50.00	$75.00	$3,750.00	50.00	$3,750.00								
78	TRUNCATED DOMES	SQ FT	60.00	$70.00	$4,200.00	60.00	$4,200.00								
79	CONCRETE CURB & GUTTER DESIGN B618	LIN FT	4,540.00	$20.00	$90,800.00	4,540.00	$90,800.00								
80	3" BITUMINOUS DRIVEWAY (W/ 6" AGG. BASE CL. 5)	SQ FT	3,120.00	$4.00	$12,480.00	3,120.00	$12,480.00								
81	CROSSWALK MARKING - EPOXY	SQ FT	170.00	$10.00	$1,700.00	170.00	$1,700.00								
82	FURNISH AND INSTALL SIGN POST	EACH	14.00	$175.00	$2,450.00	14.00	$2,450.00								
83	FURNISH AND INSTALL SIGN PANEL	EACH	14.00	$100.00	$1,400.00	14.00	$1,400.00								
84	SILT FENCE, TYPE MACHINE SLICED	LIN FT	2,750.00	$2.50	$6,875.00	2,750.00	$6,875.00								
85	STREET SWEEPING	HOUR	24.00	$400.00	$9,600.00	24.00	$9,600.00								
86	SEDIMENT CONTROL LOG TYPE WOOD FIBER	LIN FT	1,000.00	$3.00	$3,000.00	1,000.00	$3,000.00								
87	STORM DRAIN INLET PROTECTION	EACH	11.00	$250.00	$2,750.00	11.00	$2,750.00								
88	STABILIZED CONSTRUCTION EXIT	LUMP SUM	1.00	$8,000.00	$8,000.00	1.00	$8,000.00								
89	SODDING TYPE LAWN	SQ YD	2,500.00	$12.00	$30,000.00	2,500.00	$30,000.00								
90	DECIDUOUS TREE, 2 1/2" CALIPER, B & B	TREE	9.00	$600.00	$5,400.00	9.00	$5,400.00								
91	LANDSCAPING	ALLOWANCE	1.00	$20,000.00	$20,000.00	1.00	$20,000.00								
92	IRRIGATION SYSTEM AND ELECTRIC FENCE REPAIR	ALLOWANCE	1.00	$15,000.00	$15,000.00	1.00	$15,000.00								
	TOTAL WITHOUT PRORATA ITEMS				$2,244,588.51		$1,354,853.51		$188,825.00		$209,950.00		$157,275.00		$333,685.00
	RATIO				1.0000000		0.604		0.084		0.094		0.070		0.149
	PRORATA ITEMS				$175,000.00		$105,631.55		$14,721.80		$16,368.81		$12,261.99		$26,015.85
	TOTAL ESTIMATED CONSTRUCTION COST:				**$2,419,588.51**		**$1,460,485.06**		**$203,546.80**		**$226,318.81**		**$169,536.99**		**$359,700.85**
	10% CONTINGENCY				**$241,958.85**		**$146,048.51**		**$20,354.68**		**$22,631.88**		**$16,953.70**		**$35,970.08**
	25% PROJECT COSTS:				**$665,386.84**		**$401,633.39**		**$55,975.37**		**$62,237.67**		**$46,622.67**		**$98,917.73**
	TOTAL ESTIMATED PROJECT COST:				**$3,326,934.20**		**$2,008,166.96**		**$279,876.85**		**$311,188.37**		**$233,113.36**		**$494,588.67**

STREET AND UTILITY RECONSTRUCTION
2ND AVENUE SE
TABLE #2

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	TOTAL COST	2ND STREET & LIFT STATION RECONSTRUCTION									
						STREET RECONSTRUCTION		STORM		SANITARY SEWER		SANITARY SEWER LINING		WATERMAIN	
						QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
1	MOBILIZATION	LUMP SUM	1.00	$165,000.00	$165,000.00	0.624	$102,943.27	0.096	$15,894.08	0.012	$2,038.07	0.053	$8,730.23	0.215	$35,394.35
2	TRAFFIC CONTROL	LUMP SUM	1.00	$80,000.00	$80,000.00	0.624	$49,911.89	0.096	$7,706.22	0.012	$988.16	0.053	$4,232.84	0.215	$17,160.90
3	CLEAR AND GRUB TREE (4.0" DIA OR GREATER)	TREE	8.00	$500.00	$4,000.00	8.000	$4,000.00								
4	REMOVE WATERMAIN (ASBESTOS PIPE)	LIN FT	3,570.00	$28.00	$99,960.00									3,570.00	$99,960.00
5	REMOVE WATER SERVICE PIPE AND CURB STOP	EACH	38.00	$600.00	$22,800.00									38.00	$22,800.00
6	REMOVE PIPE SEWER (STORM)	LIN FT	1,400.00	$12.00	$16,800.00			1400	$16,800.00						
7	REMOVE SANITARY STRUCTURE	EACH	8.00	$1,200.00	$9,600.00					8.00	$9,600.00				
8	REMOVE DRAINAGE STRUCTURE	EACH	13.00	$500.00	$6,500.00			13	$6,500.00						
9	REMOVE CASTING (SANITARY)	EACH	11.00	$200.00	$2,200.00					11.00	$2,200.00				
10	REMOVE HYDRANT	EACH	6.00	$700.00	$4,200.00									6.00	$4,200.00
11	REMOVE CONCRETE CURB & GUTTER	LIN FT	7,105.00	$3.50	$24,867.50	7105.000	$24,867.50								
12	REMOVE CONCRETE SIDEWALK AND DRIVEWAY PAVEMENT	SQ FT	13,955.00	$1.25	$17,443.75	13955.000	$17,443.75								
13	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ FT	882.00	$1.25	$1,102.50	882.000	$1,102.50								
14	REMOVE BITUMINOUS PAVEMENT	SQ YD	15,905.00	$2.50	$39,762.49	15904.997	$39,762.49								
15	REMOVE AND DISPOSE SIGN POST	EACH	10.00	$40.00	$400.00	10.000	$400.00								
16	REMOVE AND DIPOSE STREET SIGN PANEL	EACH	10.00	$20.00	$200.00	10.000	$200.00								
17	SALVAGE & INSTALL RETAINING WALL	LIN FT	90.00	$85.00	$7,650.00	90.000	$7,650.00								
18	SALVAGE & INSTALL MAILBOX	EACH	23.00	$500.00	$11,500.00	23.000	$11,500.00								
19	EXPLORATORY EXCAVATION	HOUR	25.00	$450.00	$11,250.00	25.000	$11,250.00								
20	COMMON EXCAVATION (EV)	CU YD	13,090.00	$16.00	$209,440.00	13090.000	$209,440.00								
21	SUBGRADE EXCAVATION (EV)	CU YD	880.00	$18.00	$15,840.00	880.000	$15,840.00								
22	TOPSOIL BORROW (LV)	CU YD	705.00	$38.00	$26,790.00	705.000	$26,790.00								
23	STABILIZING AGGREGATE 3" MINUS CRUSHED	TON	880.00	$38.00	$33,440.00	880.000	$33,440.00								
24	SUBGRADE PREPARATION	SQ YD	17,530.00	$1.50	$26,295.00	17530.000	$26,295.00								
25	SELECT GRANULAR BORROW (CV)	CU YD	5,845.00	$28.00	$163,660.00	5845.000	$163,660.00								
26	GEOTEXTILE FABRIC TYPE V	SQ YD	17,530.00	$1.50	$26,295.00	17530.000	$26,295.00								
27	AGGREGATE SURFACING CLASS 5 (DRIVEWAY)	TON	10.00	$55.00	$550.00	10.000	$550.00								
28	AGGREGATE BASE CLASS 5 (CV)	CU YD	6,820.00	$30.00	$204,600.00	6820.000	$204,600.00								
29	TYPE SP 9.5 WEARING COURE MIXTURE (2,C)	TON	1,375.00	$90.00	$123,750.00	1375.000	$123,750.00								
30	TYPE SP 12.5 NON WEAR COURSE MIXTURE (2,C)	TON	4,580.00	$80.00	$366,400.00	4580.000	$366,400.00								
31	BITUMINOUS RAMP CURB EDGE	LIN FT	7,105.00	$5.00	$35,525.00	7105.000	$35,525.00								
32	MILL OUT BITUMINOUS RAMP CURB EDGE	LIN FT	7,105.00	$5.00	$35,525.00	7105.000	$35,525.00								
33	4" PERF PE EDGE DRAIN	LIN FT	5,160.00	$10.00	$51,600.00			5160	$51,600.00						
34	4" PIPE DRAIN CLEANOUT	EACH	34.40	$350.00	$12,040.00			34	$12,040.00						
35	SUMP PUMP SERVICE CONNECTION	EACH	38.00	$500.00	$19,000.00			38	$19,000.00						
36	12" RC PIPE SEWER DESIGN 3006 CLASS V	LIN FT	930.00	$50.00	$46,500.00			930	$46,500.00						
37	24" RC PIPE SEWER DESIGN 3006 CLASS III	LIN FT	520.00	$70.00	$36,400.00			520	$36,400.00						
38	CONSTRUCT DRAINAGE STRUCTURE DESIGN R-1	EACH	14.00	$2,000.00	$28,000.00			14	$28,000.00						
39	CONSTRUCT DRAINAGE STRUCTURE DES 48-4020	EACH	3.00	$2,750.00	$8,250.00			3	$8,250.00						
40	CONNECT TO EXISTING STORM PIPE	EACH	2.00	$1,500.00	$3,000.00			2	$3,000.00						
41	CASTING ASSEMBLY (STORM)	EACH	15.00	$1,000.00	$15,000.00			15	$15,000.00						
42	CONNECT TO EXISTING STORM STRUCTURE	EACH	1.00	$2,200.00	$2,200.00			1	$2,200.00						
43	STORM WATER TREATMENT	LUMP SUM	1.00	$30,000.00	$30,000.00			1	$30,000.00						
44	CONNECT TO EXISTING WATERMAIN	EACH	8.00	$2,500.00	$20,000.00									8.00	$20,000.00
45	HYDRANT	EACH	7.00	$7,000.00	$49,000.00									7.00	$49,000.00
46	CASTING ASSEMBLY - CURB STOP	EACH	20.00	$400.00	$8,000.00									20.00	$8,000.00
47	6" GATE VALVE AND BOX	EACH	9.00	$2,100.00	$18,900.00									9.00	$18,900.00
48	8" GATE VALVE AND BOX	EACH	12.00	$2,500.00	$30,000.00									12.00	$30,000.00
49	3/4" CORPORATION STOP	EACH	38.00	$375.00	$14,250.00									38.00	$14,250.00
50	3/4" WATER SERVICE LINE	LIN FT	1,275.00	$45.00	$57,375.00									1,275.00	$57,375.00
51	3/4" CURB STOP & BOX	EACH	38.00	$450.00	$17,100.00									38.00	$17,100.00
52	6" WATERMAIN DUCTILE IRON CL 52	LIN FT	204.00	$70.00	$14,280.00									204.00	$14,280.00
53	8" WATERMAIN DUCTILE IRON CL 52	LIN FT	3,335.00	$50.00	$166,750.00									3,335.00	$166,750.00
54	4" POLYSTYRENE INSULATION	SQ YD	20.00	$55.00	$1,100.00									20.00	$1,100.00
55	PIPE FITTINGS	POUND	1,505.00	$15.00	$22,575.00									1,505.00	$22,575.00
56	TEMPORARY WATER SYSTEM	LUMP SUM	1.00	$60,000.00	$60,000.00									1.00	$60,000.00
57	9 LB ANODE	EACH	45.00	$150.00	$6,750.00									45.00	$6,750.00

STREET AND UTILITY RECONSTRUCTION

2ND AVENUE SE

TABLE #2

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	TOTAL COST	2ND STREET & LIFT STATION RECONSTRUCTION									
						STREET RECONSTRUCTION		STORM		SANITARY SEWER		SANITARY SEWER LINING		WATERMAIN	
						QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
58	CIPP LINING	LIN FT	3,490.00	$25.00	$87,250.00							3,490.00	$87,250.00		
59	RECONSTRUCT SANITARY MANHOLE (BARREL SECTION)	EACH	1.00	$1,750.00	$1,750.00							1.00	$1,750.00		
60	LATERAL REINSTATEMENT (ANY SIZE)	EACH	34.00	$90.00	$3,060.00							34.00	$3,060.00		
61	PROTRUDING TAP TRIMMING (ANY SIZE)	EACH	7.00	$450.00	$3,150.00							7.00	$3,150.00		
62	MANHOLE RESTORATION	EACH	7.00	$8,000.00	$56,000.00							7.00	$56,000.00		
63	CASTING ASSEMBLY (SANITARY)	EACH	10.00	$1,000.00	$10,000.00					10.00	$10,000.00				
64	EXTERNAL CHIMNEY SEAL	EACH	10.00	$550.00	$5,500.00					10.00	$5,500.00				
65	CLEAN AND REMUD INVERTS	EACH	10.00	$800.00	$8,000.00					10.00	$8,000.00				
66	6" CONCRETE DRIVEWAY PAVEMENT (W/ 4" AGG. BASE CL. 5)	SQ FT	3,635.00	$8.00	$29,080.00	3635.000	$29,080.00								
67	6" CONCRETE PEDESTRIAN RAMP (W/ 4" AGG. BASE CL. 5)	SQ FT	910.00	$25.00	$22,750.00	910.000	$22,750.00								
68	4" CONCRETE WALK (W/ 4" AGG. BASE CL. 5)	SQ FT	9,450.00	$6.00	$56,700.00	9450.000	$56,700.00								
69	CONCRETE STEPS	SQ FT	60.00	$75.00	$4,500.00	60.000	$4,500.00								
70	TRUNCATED DOMES	SQ FT	146.00	$70.00	$10,220.00	146.000	$10,220.00								
71	CONCRETE CURB & GUTTER DESIGN B618	LIN FT	7,105.00	$18.00	$127,890.00	7105.000	$127,890.00								
72	3" BITUMINOUS DRIVEWAY (W/ 6" AGG. BASE CL. 5)	SQ FT	885.00	$4.00	$3,540.00	885.000	$3,540.00								
73	CROSSWALK MARKING - EPOXY	SQ FT	1,200.00	$10.00	$12,000.00	1200.000	$12,000.00								
74	FURNISH AND INSTALL SIGN POST	EACH	10.00	$175.00	$1,750.00	10.000	$1,750.00								
75	FURNISH AND INSTALL SIGN PANEL	EACH	10.00	$100.00	$1,000.00	10.000	$1,000.00								
76	SILT FENCE, TYPE MACHINE SLICED	LIN FT	3,300.00	$2.50	$8,250.00	3300.000	$8,250.00								
77	STREET SWEEPING	HOUR	24.00	$400.00	$9,600.00	24.000	$9,600.00								
78	SEDIMENT CONTROL LOG TYPE WOOD FIBER	LIN FT	1,500.00	$3.00	$4,500.00	1500.000	$4,500.00								
79	STORM DRAIN INLET PROTECTION	EACH	16.00	$250.00	$4,000.00	16.000	$4,000.00								
80	STABILIZED CONSTRUCTION EXIT	LUMP SUM	1.00	$8,000.00	$8,000.00	1.000	$8,000.00								
81	SODDING TYPE LAWN	SQ YD	4,845.00	$12.00	$58,140.00	4845.000	$58,140.00								
82	DECIDUOUS TREE, 2 1/2" CALIPER, B & B	TREE	8.00	$600.00	$4,800.00	8.000	$4,800.00								
83	LANDSCAPING	ALLOWANCE	1.00	$15,000.00	$15,000.00	1.000	$15,000.00								
84	IRRIGATION SYSTEM AND ELECTRIC FENCE REPAIR	ALLOWANCE	1.00	$15,000.00	$15,000.00	1.000	$15,000.00								
	TOTAL WITHOUT PRORATA ITEMS				$2,857,846.24		$1,783,006.24		$275,290.00		$35,300.00		$151,210.00		$613,040.00
	RATIO				1.0000000		0.624		0.096		0.012		0.053		0.215
	PRORATA ITEMS				$245,000.00		$152,855.15		$23,600.31		$3,026.23		$12,963.07		$52,555.24
	TOTAL ESTIMATED CONSTRUCTION COST:				**$3,102,846.24**		**$1,935,861.40**		**$298,890.31**		**$38,326.23**		**$164,173.07**		**$665,595.24**
	10% CONTINGENCY				**$310,284.62**		**$193,586.14**		**$29,889.03**		**$3,832.62**		**$16,417.31**		**$66,559.52**
	25% PROJECT COSTS:				**$853,282.72**		**$532,361.88**		**$82,194.83**		**$10,539.71**		**$45,147.59**		**$183,038.69**
	TOTAL ESTIMATED PROJECT COST:				**$4,266,413.58**		**$2,661,809.42**		**$410,974.17**		**$52,698.57**		**$225,737.97**		**$915,193.46**

STREET AND UTILITY RECONSTRUCTION
4TH AVE SW AREA
TABLE #3

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	TOTAL COST	STREET RECONSTRUCTION									
						STREET RECONSTRUCTION		STORM		SANITARY SEWER		SANITARY SEWER LINING		WATERMAIN	
						QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
1	MOBILIZATION	LUMP SUM	1.00	$90,000.00	$90,000.00	0.543	$48,859.63	0.106	$9,505.66	0.014	$1,303.00	0.091	$8,224.52	0.246	$22,107.18
2	TRAFFIC CONTROL	LUMP SUM	1.00	$25,000.00	$25,000.00	0.543	$13,572.12	0.106	$2,640.46	0.014	$361.94	0.091	$2,284.59	0.246	$6,140.88
3	CLEAR AND GRUB TREE (4.0" DIA OR GREATER)	TREE	5.00	$500.00	$2,500.00	5.00	$2,500.00								
4	REMOVE WATERMAIN (ASBESTOS PIPE)	LIN FT	2,745.00	$28.00	$76,860.00									2,745.00	$76,860.00
5	REMOVE WATER SERVICE PIPE AND CURB STOP	EACH	26.00	$600.00	$15,600.00									26.00	$15,600.00
6	REMOVE PIPE SEWER (STORM)	LIN FT	805.00	$12.00	$9,660.00			805	$9,660.00						
7	REMOVE DRAINAGE STRUCTURE	EACH	10.00	$500.00	$5,000.00			10	$5,000.00						
8	REMOVE CASTING (SANITARY)	EACH	11.00	$200.00	$2,200.00					11.00	$2,200.00				
9	REMOVE HYDRANT	EACH	5.00	$700.00	$3,500.00									5.00	$3,500.00
10	REMOVE CONCRETE CURB & GUTTER	LIN FT	5,640.00	$4.00	$22,560.00	5,640.00	$22,560.00								
11	REMOVE CONCRETE SIDEWALK AND DRIVEWAY PAVEMENT	SQ FT	5,780.00	$1.50	$8,670.00	5,780.00	$8,670.00								
12	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ FT	835.00	$1.25	$1,043.75	835.00	$1,043.75								
13	REMOVE BITUMINOUS PAVEMENT	SQ YD	10,460.00	$2.50	$26,150.00	10,460.00	$26,150.00								
14	REMOVE AND DISPOSE SIGN POST	EACH	16.00	$40.00	$640.00	16.00	$640.00								
15	REMOVE AND DIPOSE STREET SIGN PANEL	EACH	16.00	$15.00	$240.00	16.00	$240.00								
16	SALVAGE & INSTALL MAILBOX	EACH	21.00	$400.00	$8,400.00	21.00	$8,400.00								
17	EXPLORATORY EXCAVATION	HOUR	10.00	$500.00	$5,000.00	10.00	$5,000.00								
18	COMMON EXCAVATION (EV)	CU YD	7,440.00	$18.00	$133,920.00	7,440.00	$133,920.00								
19	SUBGRADE EXCAVATION (EV)	CU YD	615.00	$20.00	$12,300.00	615.00	$12,300.00								
20	TOPSOIL BORROW (LV)	CU YD	560.00	$38.00	$21,280.00	560.00	$21,280.00								
21	STABILIZING AGGREGATE 3" MINUS CRUSHED	TON	1,230.00	$38.00	$46,740.00	1,230.00	$46,740.00								
22	SUBGRADE PREPARATION	SQ YD	12,350.00	$1.50	$18,525.00	12,350.00	$18,525.00								
23	SELECT GRANULAR BORROW (CV)	CU YD	4,120.00	$28.00	$115,360.00	4,120.00	$115,360.00								
24	GEOTEXTILE FABRIC TYPE V	SQ YD	12,350.00	$1.50	$18,525.00	12,350.00	$18,525.00								
25	AGGREGATE BASE CLASS 5 (CV)	CU YD	3,090.00	$30.00	$92,700.00	3,090.00	$92,700.00								
26	TYPE SP 9.5 WEARING COURE MIXTURE (2,C)	TON	950.00	$90.00	$85,500.00	950.00	$85,500.00								
27	TYPE SP 12.5 NON WEAR COURSE MIXTURE (2,C)	TON	1,900.00	$80.00	$152,000.00	1,900.00	$152,000.00								
28	BITUMINOUS RAMP CURB EDGE	LIN FT	5,640.00	$5.00	$28,200.00	5,640.00	$28,200.00								
29	MILL OUT BITUMINOUS RAMP CURB EDGE	LIN FT	5,640.00	$5.00	$28,200.00	5,640.00	$28,200.00								
30	4" PERF PE EDGE DRAIN	LIN FT	5,110.00	$10.00	$51,100.00			5110	$51,100.00						
31	4" PIPE DRAIN CLEANOUT	EACH	33.00	$350.00	$11,551.17			33	$11,551.17						
32	SUMP PUMP SERVICE CONNECTION	EACH	24.00	$500.00	$12,000.00			24	$12,000.00						
33	RANDOM RIP RAP CL III	CU YD	8.00	$180.00	$1,440.00			8	$1,440.00						
34	STORM WATER TREATMENT	LUMP SUM	1.00	$30,000.00	$30,000.00			1	$30,000.00						
35	12" RC PIPE SEWER DESIGN 3006 CLASS V	LIN FT	735.00	$50.00	$36,750.00			735	$36,750.00						
36	36" RC PIPE SEWER DESIGN 3006 CLASS V	LIN FT	70.00	$90.00	$6,300.00			70	$6,300.00						
37	12" RC APRON W/TRASH GUARD	EACH	1.00	$2,000.00	$2,000.00			1	$2,000.00						
38	CONSTRUCT DRAINAGE STRUCTURE DESIGN R-1	EACH	8.00	$2,000.00	$16,000.00			8	$16,000.00						
39	CONSTRUCT DRAINAGE STRUCTURE DES 48-4020	EACH	2.00	$2,750.00	$5,500.00			2	$5,500.00						
40	CONNECT TO EXISTING STORM PIPE	EACH	3.00	$2,200.00	$6,600.00			3	$6,600.00						
41	CASTING ASSEMBLY (STORM)	EACH	10.00	$1,000.00	$10,000.00			10	$10,000.00						
42	CONNECT TO EXISTING WATERMAIN	EACH	6.00	$2,500.00	$15,000.00									6.00	$15,000.00
43	HYDRANT	EACH	5.00	$7,000.00	$35,000.00									5.00	$35,000.00
44	CASTING ASSEMBLY - CURB STOP	EACH	15.00	$400.00	$6,000.00									15.00	$6,000.00
45	6" GATE VALVE AND BOX	EACH	5.00	$2,150.00	$10,750.00									5.00	$10,750.00
46	8" GATE VALVE AND BOX	EACH	11.00	$2,500.00	$27,500.00									11.00	$27,500.00
47	3/4" CORPORATION STOP	EACH	28.00	$375.00	$10,500.00									28.00	$10,500.00
48	3/4" WATER SERVICE LINE	LIN FT	895.00	$45.00	$40,275.00									895.00	$40,275.00
49	3/4" CURB STOP & BOX	EACH	28.00	$450.00	$12,600.00									28.00	$12,600.00
50	6" WATERMAIN DUCTILE IRON CL 52	LIN FT	60.00	$70.00	$4,200.00									60.00	$4,200.00
51	8" WATERMAIN DUCTILE IRON CL 52	LIN FT	2,745.00	$50.00	$137,250.00									2,745.00	$137,250.00
52	4" POLYSTYRENE INSULATION	SQ YD	15.00	$55.00	$825.00									15.00	$825.00
53	PIPE FITTINGS	POUND	1,540.00	$15.00	$23,100.00									1,540.00	$23,100.00
54	TEMPORARY WATER SYSTEM	LUMP SUM	1.00	$50,000.00	$50,000.00									1.00	$50,000.00
55	9 LB ANODE	EACH	30.00	$175.00	$5,250.00									30.00	$5,250.00
56	CIPP LINING	LIN FT	2,400.00	$28.00	$67,200.00							2,400.00	$67,200.00		
57	LATERAL REINSTATEMENT (ANY SIZE)	EACH	28.00	$90.00	$2,520.00							28.00	$2,520.00		

STREET AND UTILITY RECONSTRUCTION

4TH AVE SW AREA

TABLE #3

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	TOTAL COST	STREET RECONSTRUCTION									
						STREET RECONSTRUCTION		STORM		SANITARY SEWER		SANITARY SEWER LINING		WATERMAIN	
						QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
58	PROTRUDING TAP TRIMMING (ANY SIZE)	EACH	6.00	$450.00	$2,700.00							6.00	$2,700.00		
59	MANHOLE RESTORATION	EACH	13.00	$8,000.00	$104,000.00							13.00	$104,000.00		
60	CASTING ASSEMBLY (SANITARY)	EACH	13.00	$1,000.00	$13,000.00					13.00	$13,000.00				
61	EXTERNAL CHIMNEY SEAL	EACH	13.00	$550.00	$7,150.00					13.00	$7,150.00				
62	CLEAN AND REMUD INVERTS	EACH	7.00	$800.00	$5,600.00					7.00	$5,600.00				
63	6" CONCRETE DRIVEWAY PAVEMENT (W/ 4" AGG. BASE CL. 5)	SQ FT	6,070.00	$8.00	$48,560.00	6,070.00	$48,560.00								
64	CONCRETE CURB & GUTTER DESIGN B618	LIN FT	5,640.00	$15.00	$84,600.00	5,640.00	$84,600.00								
65	3" BITUMINOUS DRIVEWAY (W/ 6" AGG. BASE CL. 5)	SQ FT	832.00	$3.50	$2,912.00	832.00	$2,912.00								
66	FURNISH AND INSTALL SIGN POST	EACH	16.00	$200.00	$3,200.00	16.00	$3,200.00								
67	FURNISH AND INSTALL SIGN PANEL	EACH	16.00	$100.00	$1,600.00	16.00	$1,600.00								
68	SEDIMENT CONTROL LOG TYPE WOOD FIBER	LIN FT	1,200.00	$3.00	$3,600.00	1,200.00	$3,600.00								
68	SILT FENCE, TYPE MACHINE SLICED	LIN FT	275.00	$2.50	$687.50	275.00	$687.50								
69	STREET SWEEPING	HOUR	24.00	$400.00	$9,600.00	24.00	$9,600.00								
69	STORM DRAIN INLET PROTECTION	EACH	10.00	$250.00	$2,500.00	10.00	$2,500.00								
70	STABILIZED CONSTRUCTION EXIT	LUMP SUM	1.00	$5,000.00	$5,000.00	1.00	$5,000.00								
71	SODDING TYPE LAWN	SQ YD	3,435.00	$10.00	$34,350.00	3,435.00	$34,350.00								
72	DECIDUOUS TREE, 2 1/2" CALIPER, B & B	TREE	5.00	$600.00	$3,000.00	5.00	$3,000.00								
73	LANDSCAPING	ALLOWANCE	1.00	$10,000.00	$10,000.00	1.00	$10,000.00								
74	IRRIGATION SYSTEM AND ELECTRIC FENCE REPAIR	ALLOWANCE	1.00	$10,000.00	$10,000.00	1.00	$10,000.00								
	TOTAL WITHOUT PRORATA ITEMS				$1,930,544.41		$1,048,063.25		$203,901.17		$27,950.00		$176,420.00		$474,210.00
	RATIO				1.0000000		0.543		0.106		0.014		$0.09		0.246
	PRORATA ITEMS				$115,000.00		$62,431.75		$12,146.13		$1,664.94		$10,509.11		$28,248.07
	TOTAL ESTIMATED CONSTRUCTION COST:				**$2,045,544.41**		**$1,110,495.00**		**$216,047.29**		**$29,614.94**		**$186,929.11**		**$502,458.07**
	10% CONTINGENCY				**$204,554.44**		**$111,049.50**		**$21,604.73**		**$2,961.49**		**$18,692.91**		**$50,245.81**
	25% PROJECT COSTS:				**$562,524.71**		**$305,386.13**		**$59,413.01**		**$8,144.11**		**$51,405.50**		**$138,175.97**
	TOTAL ESTIMATED PROJECT COST:				**$2,812,623.57**		**$1,526,930.63**		**$297,065.03**		**$40,720.55**		**$257,027.52**		**$690,879.84**

STREET AND UTILITY RECONSTRUCTION

OAK LANE

TABLE #4

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	TOTAL COST	STREET RECONSTRUCTION							
						STREET RECONSTRUCTION		STORM SEWER		SANITARY SEWER		WATERMAIN	
						QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
1	MOBILIZATION	LUMP SUM	1.00	$35,000.00	$35,000.00	0.594	$20,773.17	0.025	$857.73	0.285	$9,958.21	0.097	$3,410.90
2	TRAFFIC CONTROL	LUMP SUM	1.00	$5,000.00	$5,000.00	0.594	$2,967.60	0.025	$122.53	0.285	$1,422.60	0.097	$487.27
3	CLEAR AND GRUB TREE (4.0" DIA OR GREATER)	TREE	10.00	$500.00	$5,000.00	10.00	$5,000.00						
4	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ FT	1,785.00	$1.25	$2,231.25	1,785.00	$2,231.25						
5	REMOVE AND DISPOSE SIGN POST	EACH	3.00	$40.00	$120.00	3.00	$120.00						
6	SALVAGE & INSTALL MAILBOX	EACH	8.00	$400.00	$3,200.00	8.00	$3,200.00						
6	REMOVE AND DIPOSE STREET SIGN PANEL	EACH	3.00	$18.00	$54.00	3.00	$54.00						
7	EXPLORATORY EXCAVATION	HOUR	5.00	$450.00	$2,250.00	5.00	$2,250.00						
8	COMMON EXCAVATION (EV)	CU YD	2,630.00	$22.00	$57,860.00	2,630.00	$57,860.00						
9	SUBGRADE EXCAVATION (EV)	CU YD	185.00	$22.00	$4,070.00	185.00	$4,070.00						
10	TOPSOIL BORROW (LV)	CU YD	70.00	$38.00	$2,660.00	70.00	$2,660.00						
11	STABILIZING AGGREGATE 3" MINUS CRUSHED	TON	370.00	$38.00	$14,060.00	370.00	$14,060.00						
12	SUBGRADE PREPARATION	SQ YD	3,710.00	$1.50	$5,565.00	3,710.00	$5,565.00						
13	SELECT GRANULAR BORROW (CV)	CU YD	1,240.00	$35.00	$43,400.00	1,240.00	$43,400.00						
14	GEOTEXTILE FABRIC TYPE V	SQ YD	3,710.00	$1.75	$6,492.50	3,710.00	$6,492.50						
15	AGGREGATE SURFACING CLASS 5 (DRIVEWAY)	TON	15.00	$28.00	$420.00	15.00	$420.00						
16	AGGREGATE BASE CLASS 5 (CV)	CU YD	930.00	$32.00	$29,760.00	930.00	$29,760.00						
17	TYPE SP 9.5 WEARING COURE MIXTURE (2,C)	TON	310.00	$90.00	$27,900.00	310.00	$27,900.00						
18	TYPE SP 12.5 NON WEAR COURSE MIXTURE (2,C)	TON	620.00	$80.00	$49,600.00	620.00	$49,600.00						
19	BITUMINOUS RAMP CURB EDGE	LIN FT	2,800.00	$5.00	$14,000.00	2,800.00	$14,000.00						
20	MILL OUT BITUMINOUS RAMP CURB EDGE	LIN FT	2,800.00	$5.00	$14,000.00	2,800.00	$14,000.00						
21	ADJUST FRAME, RING & CASTING	EACH	1.00	$1,000.00	$1,000.00	1.00	$1,000.00						
22	STORM WATER TREATMENT	LUMP SUM	1.00	$15,000.00	$15,000.00			1.00	$15,000.00				
23	CONNECT TO EXISTING WATERMAIN	EACH	1.00	$1,800.00	$1,800.00							1.00	$1,800.00
24	HYDRANT	EACH	1.00	$7,000.00	$7,000.00							1.00	$7,000.00
25	6" GATE VALVE AND BOX	EACH	1.00	$2,150.00	$2,150.00							1.00	$2,150.00
26	8" GATE VALVE AND BOX	EACH	1.00	$2,500.00	$2,500.00							1.00	$2,500.00
27	3/4" CORPORATION STOP	EACH	5.00	$375.00	$1,875.00							5.00	$1,875.00
28	3/4" WATER SERVICE LINE	LIN FT	120.00	$45.00	$5,400.00							120.00	$5,400.00
29	3/4" CURB STOP & BOX	EACH	5.00	$450.00	$2,250.00							5.00	$2,250.00
30	6" WATERMAIN DUCTILE IRON CL 52	LIN FT	20.00	$70.00	$1,400.00							20.00	$1,400.00
31	8" WATERMAIN DUCTILE IRON CL 52	LIN FT	555.00	$50.00	$27,750.00							555.00	$27,750.00
32	PIPE FITTINGS	POUND	400.00	$14.00	$5,600.00							400.00	$5,600.00
33	9 LB ANODE	EACH	11.00	$175.00	$1,925.00							11.00	$1,925.00
34	CONNECT TO EXISTING SANITARY SEWER	EACH	1.00	$2,000.00	$2,000.00					1.00	$2,000.00		
35	CONNECT TO EXISTING SANITARY MANHOLE	EACH	1.00	$3,500.00	$3,500.00					1.00	$3,500.00		
36	CONSTRUCT SANITARY MANHOLE	EACH	7.00	$9,000.00	$63,000.00					7.00	$63,000.00		
37	6" DIRECTIONALLY DRILLED SANITARY SEWER	LIN FT	775.00	$60.00	$46,500.00					775.00	$46,500.00		
38	8" PVC PIPE SEWER SDR 35	LIN FT	680.00	$50.00	$34,000.00					680.00	$34,000.00		
39	4" PVC PIPE SEWER SERVICE SDR-26	LIN FT	330.00	$50.00	$16,500.00					330.00	$16,500.00		
40	8"X4" PVC WYE	EACH	7.00	$400.00	$2,800.00					7.00	$2,800.00		
41	CASTING ASSEMBLY (SANITARY)	EACH	7.00	$600.00	$4,200.00					7.00	$4,200.00		
42	EXTERNAL CHIMNEY SEAL	EACH	3.00	$550.00	$1,650.00					3.00	$1,650.00		
43	3" BITUMINOUS DRIVEWAY (W/ 6" AGG. BASE CL. 5)	SQ FT	1,420.00	$4.50	$6,390.00	1,420.00	$6,390.00						
44	FURNISH AND INSTALL SIGN POST AND PANEL	EACH	3.00	$225.00	$675.00	3.00	$675.00						
45	SILT FENCE, TYPE MACHINE SLICED	LIN FT	3,300.00	$2.25	$7,425.00	3,300.00	$7,425.00						
46	SEDIMENT CONTROL LOG TYPE WOOD FIBER	LIN FT	300.00	$3.00	$900.00	300.00	$900.00						
47	STORM DRAIN INLET PROTECTION	EACH	2.00	$250.00	$500.00	2.00	$500.00						
48	STREET SWEEPING	HOUR	24.00	$400.00	$9,600.00	24.00	$9,600.00						

STREET AND UTILITY RECONSTRUCTION

OAK LANE

TABLE #4

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	TOTAL COST	STREET RECONSTRUCTION							
						STREET RECONSTRUCTION		STORM SEWER		SANITARY SEWER		WATERMAIN	
						QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
49	STABILIZED CONSTRUCTION EXIT	LUMP SUM	1.00	$5,000.00	$5,000.00	1.00	$5,000.00						
50	SODDING TYPE LAWN	SQ YD	1,710.00	$15.00	$25,650.00	1,710.00	$25,650.00						
51	HYDROMULCH, TYPE 5 WITH SEED MIX 25-151	SQ YD	100.00	$20.00	$2,000.00	100.00	$2,000.00						
52	DECIDUOUS TREE, 2 1/2" CALIPER, B & B	TREE	10.00	$650.00	$6,500.00	10.00	$6,500.00						
53	LANDSCAPING	ALLOWANCE	1.00	$5,000.00	$5,000.00	1.00	$5,000.00						
54	IRRIGATION SYSTEM AND ELECTRIC FENCE REPAIR	ALLOWANCE	1.00	$10,000.00	$10,000.00	1.00	$10,000.00						
	TOTAL ESTIMATE PROJECT COST				$612,082.75		$363,282.75		$15,000.00		$174,150.00		$59,650.00
	RATIO				1.0000000		0.594		0.025		0.285		0.097
	PRORATA ITEMS				$40,000.00		$23,740.76		$980.26		$11,380.81		$3,898.17
	TOTAL ESTIMATED CONSTRUCTION COST:				**$652,082.75**		**$387,023.51**		**$15,980.26**		**$185,530.81**		**$63,548.17**
	10% CONTINGENCY				**$65,208.28**		**$38,702.35**		**$1,598.03**		**$18,553.08**		**$6,354.82**
	25% PROJECT COSTS:				**$179,322.76**		**$106,431.47**		**$4,394.57**		**$51,020.97**		**$17,475.75**
	TOTAL ESTIMATED PROJECT COST:				**$896,613.78**		**$532,157.33**		**$21,972.86**		**$255,104.87**		**$87,378.73**

STREET AND UTILITY RECONSTRUCTION

MERGER STREET

TABLE #5

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	TOTAL COST	STREET RECONSTRUCTION									
						STREET RECONSTRUCTION		STORM		SANITARY SEWER		SANITARY SEWER LINING		WATERMAIN	
						QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
1	MOBILIZATION	LUMP SUM	1.00	$35,000.00	$35,000.00	0.548	$19,185.34	0.099	$3,454.24	0.023	$795.09	0.079	$2,757.14	0.252	$8,808.18
2	TRAFFIC CONTROL	LUMP SUM	1.00	$25,000.00	$25,000.00	0.548	$13,703.81	0.099	$2,467.32	0.023	$567.92	0.079	$1,969.39	0.252	$6,291.56
3	REMOVE WATERMAIN (ASBESTOS PIPE)	LIN FT	655.00	$28.00	$18,340.00									655.00	$18,340.00
4	REMOVE WATER SERVICE PIPE AND CURB STOP	EACH	6.00	$600.00	$3,600.00									6.00	$3,600.00
5	REMOVE PIPE SEWER (STORM)	LIN FT	140.00	$12.00	$1,680.00			140	$1,680.00						
6	REMOVE DRAINAGE STRUCTURE	EACH	3.00	$500.00	$1,500.00			3	$1,500.00						
7	REMOVE CASTING (SANITARY)	EACH	3.00	$200.00	$600.00					3.00	$600.00				
8	REMOVE HYDRANT	EACH	2.00	$700.00	$1,400.00									2.00	$1,400.00
9	REMOVE CONCRETE CURB & GUTTER	LIN FT	1,260.00	$4.00	$5,040.00	1,260.00	$5,040.00								
10	REMOVE CONCRETE SIDEWALK AND DRIVEWAY PAVEMENT	SQ FT	530.00	$3.00	$1,590.00	530.00	$1,590.00								
11	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ FT	2,915.00	$1.25	$3,643.75	2,915.00	$3,643.75								
12	REMOVE BITUMINOUS PAVEMENT	SQ YD	2,980.00	$3.00	$8,940.01	2,980.00	$8,940.01								
13	REMOVE AND DISPOSE SIGN POST	EACH	8.00	$40.00	$320.00	8.00	$320.00								
14	SALVAGE & INSTALL MAILBOX	EACH	1.00	$400.00	$400.00	1.00	$400.00								
15	REMOVE AND DIPOSE STREET SIGN PANEL	EACH	8.00	$15.00	$120.00	8.00	$120.00								
16	EXPLORATORY EXCAVATION	HOUR	5.00	$500.00	$2,500.00	5.00	$2,500.00								
17	COMMON EXCAVATION (EV)	CU YD	2,040.00	$22.00	$44,880.00	2,040.00	$44,880.00								
18	SUBGRADE EXCAVATION (EV)	CU YD	165.00	$22.00	$3,630.00	165.00	$3,630.00								
19	TOPSOIL BORROW (LV)	CU YD	125.00	$38.00	$4,750.00	125.00	$4,750.00								
20	STABILIZING AGGREGATE 3" MINUS CRUSHED	TON	330.00	$38.00	$12,540.00	330.00	$12,540.00								
21	SUBGRADE PREPARATION	SQ YD	3,405.00	$1.50	$5,107.50	3,405.00	$5,107.50								
22	SELECT GRANULAR BORROW (CV)	CU YD	1,135.00	$35.00	$39,725.00	1,135.00	$39,725.00								
23	GEOTEXTILE FABRIC TYPE V	SQ YD	3,405.00	$1.75	$5,958.75	3,405.00	$5,958.75								
24	AGGREGATE BASE CLASS 5 (CV)	CU YD	850.00	$35.00	$29,750.00	850.00	$29,750.00								
25	TYPE SP 9.5 WEARING COURE MIXTURE (2,C)	TON	270.00	$90.00	$24,300.00	270.00	$24,300.00								
26	TYPE SP 12.5 NON WEAR COURSE MIXTURE (2,C)	TON	545.00	$80.00	$43,600.00	545.00	$43,600.00								
27	BITUMINOUS RAMP CURB EDGE	LIN FT	1,260.00	$5.00	$6,300.00	1,260.00	$6,300.00								
28	MILL OUT BITUMINOUS RAMP CURB EDGE	LIN FT	1,260.00	$5.00	$6,300.00	1,260.00	$6,300.00								
29	4" PERF PE EDGE DRAIN	LIN FT	1,239.00	$10.00	$12,390.00			1239	$12,390.00						
30	4" PIPE DRAIN CLEANOUT	EACH	8.00	$350.00	$2,798.83			8	$2,798.83						
31	SUMP PUMP SERVICE CONNECTION	EACH	6.00	$500.00	$3,000.00			6	$3,000.00						
32	STORM WATER TREATMENT	LUMP SUM	1.00	$15,000.00	$15,000.00			1	$15,000.00						
33	12" RC PIPE SEWER DESIGN 3006 CLASS V	LIN FT	164.00	$60.00	$9,840.00			164	$9,840.00						
34	CONSTRUCT DRAINAGE STRUCTURE DESIGN R-1	EACH	2.00	$2,000.00	$4,000.00			2	$4,000.00						
35	CONSTRUCT DRAINAGE STRUCTURE DES 48-4020	EACH	2.00	$2,750.00	$5,500.00			2	$5,500.00						
36	CASTING ASSEMBLY (STORM)	EACH	4.00	$1,000.00	$4,000.00			4	$4,000.00						
37	CONNECT TO EXISTING STORM STRUCTURE	EACH	1.00	$2,200.00	$2,200.00			1	$2,200.00						
38	CONNECT TO EXISTING WATERMAIN	EACH	3.00	$2,500.00	$7,500.00									3.00	$7,500.00
39	HYDRANT	EACH	1.00	$7,000.00	$7,000.00									1.00	$7,000.00
40	CASTING ASSEMBLY - CURB STOP	EACH	4.00	$400.00	$1,600.00									4.00	$1,600.00
41	6" GATE VALVE AND BOX	EACH	3.00	$2,150.00	$6,450.00									3.00	$6,450.00
42	8" GATE VALVE AND BOX	EACH	5.00	$2,500.00	$12,500.00									5.00	$12,500.00
43	3/4" CORPORATION STOP	EACH	6.00	$375.00	$2,250.00									6.00	$2,250.00
44	3/4" WATER SERVICE LINE	LIN FT	245.00	$45.00	$11,025.00									245.00	$11,025.00
45	3/4" CURB STOP & BOX	EACH	6.00	$450.00	$2,700.00									6.00	$2,700.00
46	6" WATERMAIN DUCTILE IRON CL 52	LIN FT	90.00	$70.00	$6,300.00									90.00	$6,300.00
47	8" WATERMAIN DUCTILE IRON CL 52	LIN FT	720.00	$50.00	$36,000.00									720.00	$36,000.00
48	4" POLYSTYRENE INSULATION	SQ YD	10.00	$55.00	$550.00									10.00	$550.00
49	PIPE FITTINGS	POUND	500.00	$15.00	$7,500.00									500.00	$7,500.00
50	TEMPORARY WATER SYSTEM	LUMP SUM	1.00	$30,000.00	$30,000.00									1.00	$30,000.00
51	9 LB ANODE	EACH	18.00	$175.00	$3,150.00									18.00	$3,150.00
52	CONSTRUCT SANITARY MANHOLE	EACH	1.00	$9,000.00	$9,000.00					1.00	$9,000.00				
53	CIPP LINING	LIN FT	685.00	$35.00	$23,975.00							685.00	$23,975.00		
54	LATERAL REINSTATEMENT (ANY SIZE)	EACH	6.00	$90.00	$540.00							6.00	$540.00		
55	PROTRUDING TAP TRIMMING (ANY SIZE)	EACH	2.00	$450.00	$900.00							2.00	$900.00		
56	MANHOLE RESTORATION	EACH	3.00	$8,000.00	$24,000.00							3.00	$24,000.00		
57	CASTING ASSEMBLY (SANITARY)	EACH	3.00	$1,000.00	$3,000.00					3.00	$3,000.00				

STREET AND UTILITY RECONSTRUCTION

MERGER STREET

TABLE #5

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	TOTAL COST	STREET RECONSTRUCTION									
						STREET RECONSTRUCTION		STORM		SANITARY SEWER		SANITARY SEWER LINING		WATERMAIN	
						QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
58	EXTERNAL CHIMNEY SEAL	EACH	3.00	$550.00	$1,650.00					3.00	$1,650.00				
59	6" CONCRETE DRIVEWAY PAVEMENT (W/ 4" AGG. BASE CL. 5)	SQ FT	530.00	$15.00	$7,950.00	530.00	$7,950.00								
60	CONCRETE CURB & GUTTER DESIGN B618	LIN FT	1,260.00	$22.00	$27,720.00	1,260.00	$27,720.00								
61	3" BITUMINOUS DRIVEWAY (W/ 6" AGG. BASE CL. 5)	SQ FT	2,915.00	$3.00	$8,745.00	2,915.00	$8,745.00								
62	FURNISH AND INSTALL SIGN POST	EACH	8.00	$175.00	$1,400.00	8.00	$1,400.00								
63	FURNISH AND INSTALL SIGN PANEL	EACH	8.00	$100.00	$800.00	8.00	$800.00								
64	SEDIMENT CONTROL LOG TYPE WOOD FIBER	LIN FT	400.00	$3.00	$1,200.00	400.00	$1,200.00								
65	SILT FENCE, TYPE MACHINE SLICED	LIN FT	1,320.00	$2.50	$3,300.00	1,320.00	$3,300.00								
66	STREET SWEEPING	HOUR	24.00	$400.00	$9,600.00	24.00	$9,600.00								
67	STORM DRAIN INLET PROTECTION	EACH	6.00	$250.00	$1,500.00	6.00	$1,500.00								
68	STABILIZED CONSTRUCTION EXIT	LUMP SUM	1.00	$5,000.00	$5,000.00	1.00	$5,000.00								
69	SODDING TYPE LAWN	SQ YD	770.00	$12.00	$9,240.00	770.00	$9,240.00								
70	LANDSCAPING	ALLOWANCE	1.00	$8,000.00	$8,000.00	1.00	$8,000.00								
71	IRRIGATION SYSTEM AND ELECTRIC FENCE REPAIR	ALLOWANCE	1.00	$10,000.00	$10,000.00	1.00	$10,000.00								
	TOTAL WITHOUT PRORATA ITEMS				$627,288.84		$343,850.01		$61,908.83		$14,250.00		$49,415.00		$157,865.00
	RATIO				1.0000000		0.548		0.099		0.023		$0.08		0.252
	PRORATA ITEMS				$60,000.00		$32,889.16		$5,921.56		$1,363.01		$4,726.53		$15,099.74
	TOTAL ESTIMATED CONSTRUCTION COST:				**$687,288.84**		**$376,739.17**		**$67,830.40**		**$15,613.01**		**$54,141.53**		**$172,964.74**
	10% CONTINGENCY				**$68,728.88**		**$37,673.92**		**$6,783.04**		**$1,561.30**		**$5,414.15**		**$17,296.47**
	25% PROJECT COSTS:				**$189,004.43**		**$103,603.27**		**$18,653.36**		**$4,293.58**		**$14,888.92**		**$47,565.30**
	TOTAL ESTIMATED PROJECT COST:				**$945,022.16**		**$518,016.35**		**$93,266.79**		**$21,467.89**		**$74,444.60**		**$237,826.52**

STREET AND UTILITY RECONSTRUCTION
RAILROAD STREET
TABLE #6

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	TOTAL COST	STREET RECONSTRUCTION							
						STREET RECONSTRUCTION		STORM		SANITARY SEWER		WATERMAIN	
						QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
1	MOBILIZATION	LUMP SUM	1.00	$80,000.00	$80,000.00	0.538	$43,030.58	0.084	$6,696.35	0.143	$11,456.15	0.235	$18,816.91
2	TRAFFIC CONTROL	LUMP SUM	1.00	$25,000.00	$25,000.00	0.538	$13,447.06	0.084	$2,092.61	0.143	$3,580.05	0.235	$5,880.29
3	CLEAR AND GRUB TREE (4.0" DIA OR GREATER)	TREE	6.00	$600.00	$3,600.00	6.00	$3,600.00						
4	REMOVE WATERMAIN (ASBESTOS PIPE)	LIN FT	1,615.00	$28.00	$45,220.00							1,615.00	$45,220.00
5	REMOVE WATER SERVICE PIPE AND CURB STOP	EACH	24.00	$600.00	$14,400.00							24.00	$14,400.00
6	REMOVE SANITARY STRUCTURE	EACH	3.00	$1,200.00	$3,600.00					3.00	$3,600.00		
7	REMOVE CASTING (SANITARY)	EACH	5.00	$150.00	$750.00					5.00	$750.00		
8	REMOVE CONCRETE CURB & GUTTER	LIN FT	1,365.00	$3.50	$4,777.50	1,365.00	$4,777.50						
9	REMOVE CONCRETE SIDEWALK AND DRIVEWAY PAVEMENT	SQ FT	4,730.00	$1.25	$5,912.50	4,730.00	$5,912.50						
10	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ FT	960.00	$1.00	$960.00	960.00	$960.00						
11	REMOVE BITUMINOUS PAVEMENT	SQ YD	6,415.00	$2.50	$16,037.51	6,415.00	$16,037.51						
12	REMOVE CONCRETE PAVEMENT	SQ YD	6,415.00	$7.50	$48,112.53	6,415.00	$48,112.53						
13	REMOVE RETAINING WALL TYPE (WOOD)	LIN FT	50.00	$20.00	$1,000.00	50.00	$1,000.00						
14	REMOVE AND DISPOSE SIGN POST	EACH	6.00	$40.00	$240.00	6.00	$240.00						
15	REMOVE AND DIPOSE STREET SIGN PANEL	EACH	6.00	$15.00	$90.00	6.00	$90.00						
16	SALVAGE & INSTALL MAILBOX	EACH	24.00	$400.00	$9,600.00	24.00	$9,600.00						
16	SALVAGE & INSTALL CHAIN LINK FENCE	LIN FT	105.00	$35.00	$3,675.00	105.00	$3,675.00						
17	EXPLORATORY EXCAVATION	HOUR	15.00	$450.00	$6,750.00	15.00	$6,750.00						
18	COMMON EXCAVATION (EV)	CU YD	5,515.00	$18.00	$99,270.00	5,515.00	$99,270.00						
19	SUBGRADE EXCAVATION (EV)	CU YD	335.00	$20.00	$6,700.00	335.00	$6,700.00						
20	TOPSOIL BORROW (LV)	CU YD	135.00	$38.00	$5,130.00	135.00	$5,130.00						
21	STABILIZING AGGREGATE 3" MINUS CRUSHED	TON	665.00	$38.00	$25,270.00	665.00	$25,270.00						
22	SUBGRADE PREPARATION	SQ YD	7,330.00	$1.50	$10,995.00	7,330.00	$10,995.00						
23	SELECT GRANULAR BORROW (CV)	CU YD	2,445.00	$30.00	$73,350.00	2,445.00	$73,350.00						
24	GEOTEXTILE FABRIC TYPE V	SQ YD	7,330.00	$1.50	$10,995.00	7,330.00	$10,995.00						
25	AGGREGATE SURFACING CLASS 5 (DRIVEWAY)	TON	200.00	$30.00	$6,000.00	200.00	$6,000.00						
26	AGGREGATE BASE CLASS 5 (CV)	CU YD	2,850.00	$30.00	$85,500.00	2,850.00	$85,500.00						
27	TYPE SP 9.5 WEARING COURE MIXTURE (2,C)	TON	555.00	$90.00	$49,950.00	555.00	$49,950.00						
28	TYPE SP 12.5 NON WEAR COURSE MIXTURE (2,C)	TON	1,850.00	$80.00	$148,000.00	1,850.00	$148,000.00						
29	BITUMINOUS RAMP CURB EDGE	LIN FT	1,365.00	$5.00	$6,825.00	1,365.00	$6,825.00						
30	MILL OUT BITUMINOUS RAMP CURB EDGE	LIN FT	1,365.00	$5.00	$6,825.00	1,365.00	$6,825.00						
31	4" PERF PE EDGE DRAIN	LIN FT	840.00	$10.00	$8,400.00			840	$8,400.00				
32	4" PIPE DRAIN CLEANOUT	EACH	10.00	$350.00	$3,500.00			10	$3,500.00				
33	12" RC PIPE SEWER DESIGN 3006 CLASS V	LIN FT	785.00	$50.00	$39,250.00			785	$39,250.00				
34	18" RC PIPE SEWER DESIGN 3006 CLASS V	LIN FT	190.00	$70.00	$13,300.00			190	$13,300.00				
35	18" RC APRON W/TRASH GUARD		1.00	$3,000.00	$3,000.00			1	$3,000.00				
36	CONSTRUCT DRAINAGE STRUCTURE DESIGN R-1	EACH	5.00	$2,000.00	$10,000.00			5	$10,000.00				
37	CONSTRUCT DRAINAGE STRUCTURE DES 48-4020	LIN FT	1.00	$2,750.00	$2,750.00			1	$2,750.00				
38	CASTING ASSEMBLY (STORM)	EACH	6.00	$1,000.00	$6,000.00			6	$6,000.00				
39	SUMP PUMP SERVICE CONNECTION	EACH	24.00	$500.00	$12,000.00			24	$12,000.00				
40	STORM WATER TREATMENT	LUMP SUM	1.00	$30,000.00	$30,000.00			1	$30,000.00				
41	CONNECT TO EXISTING WATERMAIN	EACH	4.00	$2,000.00	$8,000.00							4.00	$8,000.00
42	HYDRANT	EACH	2.00	$7,000.00	$14,000.00							2.00	$14,000.00
43	CASTING ASSEMBLY - CURB STOP	EACH	15.00	$400.00	$6,000.00							15.00	$6,000.00
44	6" GATE VALVE AND BOX	EACH	3.00	$2,150.00	$6,450.00							3.00	$6,450.00
45	12" GATE VALVE AND BOX	EACH	5.00	$3,250.00	$16,250.00							5.00	$16,250.00
46	3/4" CORPORATION STOP	EACH	24.00	$375.00	$9,000.00							24.00	$9,000.00
47	3/4" WATER SERVICE LINE	LIN FT	1,230.00	$45.00	$55,350.00							1,230.00	$55,350.00
48	3/4" CURB STOP & BOX	EACH	24.00	$450.00	$10,800.00							24.00	$10,800.00
49	6" WATERMAIN DUCTILE IRON CL 52	LIN FT	50.00	$65.00	$3,250.00							50.00	$3,250.00

STREET AND UTILITY RECONSTRUCTION

RAILROAD STREET

TABLE #6

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	TOTAL COST	STREET RECONSTRUCTION							
						STREET RECONSTRUCTION		STORM		SANITARY SEWER		WATERMAIN	
						QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
50	12" WATERMAIN DUCTILE IRON CL 52	LIN FT	1,690.00	$65.00	$109,850.00							1,690.00	$109,850.00
51	4" POLYSTYRENE INSULATION	SQ YD	20.00	$60.00	$1,200.00							20.00	$1,200.00
52	PIPE FITTINGS	POUND	1,085.00	$15.00	$16,275.00							1,085.00	$16,275.00
53	TEMPORARY WATER SYSTEM	LUMP SUM	1.00	$40,000.00	$40,000.00							1.00	$40,000.00
54	9 LB ANODE	EACH	24.00	$175.00	$4,200.00							24.00	$4,200.00
55	CONNECT TO EXISTING SANITARY SEWER SERVICE	EACH	24.00	$1,000.00	$24,000.00					24.00	$24,000.00		
56	CONNECT TO EXISTING SANITARY SEWER	EACH	5.00	$2,000.00	$10,000.00					5.00	$10,000.00		
57	CONNECT TO EXISTING SANITARY MANHOLE	EACH	2.00	$3,500.00	$7,000.00					2.00	$7,000.00		
58	CONSTRUCT SANITARY MANHOLE	EACH	3.00	$9,000.00	$27,000.00					3.00	$27,000.00		
59	8" PVC PIPE SEWER SDR 35	LIN FT	1,650.00	$50.00	$82,500.00					1,650.00	$82,500.00		
60	6" PVC PIPE SEWER SERVICE SDR-26	LIN FT	220.00	$55.00	$12,100.00					220.00	$12,100.00		
61	4" PVC PIPE SEWER SERVICE SDR-26	LIN FT	825.00	$45.00	$37,125.00					825.00	$37,125.00		
62	8"X4" PVC WYE	EACH	19.00	$400.00	$7,600.00					19.00	$7,600.00		
63	8"X6" PVC WYE	EACH	5.00	$600.00	$3,000.00					5.00	$3,000.00		
64	CASTING ASSEMBLY (SANITARY)	EACH	3.00	$1,000.00	$3,000.00					3.00	$3,000.00		
65	EXTERNAL CHIMNEY SEAL	EACH	3.00	$550.00	$1,650.00					3.00	$1,650.00		
66	6" CONCRETE DRIVEWAY PAVEMENT (W/ 4" AGG. BASE CL. 5)	SQ FT	3,930.00	$10.00	$39,300.00	3,930.00	$39,300.00						
67	6" CONCRETE PEDESTRIAN RAMP (W/ 4" AGG. BASE CL. 5)	SQ FT	75.00	$25.00	$1,875.00	75.00	$1,875.00						
68	TRUNCATED DOMES	SQ FT	25.00	$70.00	$1,750.00	25.00	$1,750.00						
69	4" CONCRETE WALK (W/ 4" AGG. BASE CL. 5)	SQ FT	685.00	$8.00	$5,480.00	685.00	$5,480.00						
70	CONCRETE STEPS	SQ FT	75.00	$85.00	$6,375.00	75.00	$6,375.00						
71	CONCRETE CURB & GUTTER DESIGN B618	LIN FT	3,470.00	$19.00	$65,930.00	3,470.00	$65,930.00						
72	3" BITUMINOUS DRIVEWAY (W/ 6" AGG. BASE CL. 5)	SQ FT	956.00	$7.00	$6,692.00	956.00	$6,692.00						
73	FURNISH AND INSTALL SIGN POST	EACH	6.00	$175.00	$1,050.00	6.00	$1,050.00						
74	FURNISH AND INSTALL SIGN PANEL	EACH	6.00	$100.00	$600.00	6.00	$600.00						
75	SILT FENCE, TYPE MACHINE SLICED	LIN FT	1,650.00	$2.25	$3,712.50	1,650.00	$3,712.50						
76	SEDIMENT CONTROL LOG TYPE WOOD FIBER	LIN FT	1,000.00	$3.00	$3,000.00	1,000.00	$3,000.00						
77	STORM DRAIN INLET PROTECTION	EACH	6.00	$250.00	$1,500.00	6.00	$1,500.00						
78	STREET SWEEPING	HOUR	24.00	$400.00	$9,600.00	24.00	$9,600.00						
79	STABILIZED CONSTRUCTION EXIT	LUMP SUM	1.00	$5,000.00	$5,000.00	1.00	$5,000.00						
80	SODDING TYPE LAWN	SQ YD	1,065.00	$12.00	$12,780.00	1,065.00	$12,780.00						
81	DECIDUOUS TREE, 2 1/2" CALIPER, B & B	TREE	6.00	$600.00	$3,600.00	6.00	$3,600.00						
82	LANDSCAPING	ALLOWANCE	1.00	$10,000.00	$10,000.00	1.00	$10,000.00						
83	IRRIGATION SYSTEM AND ELECTRIC FENCE REPAIR	ALLOWANCE	1.00	$10,000.00	$10,000.00	1.00	$10,000.00						
	TOTAL WITHOUT PRORATA ITEMS				$1,531,579.53		$823,809.53		$128,200.00		$219,325.00		$360,245.00
	RATIO				1.0000000		0.538		0.084		0.143		0.235
	PRORATA ITEMS				$105,000.00		$56,477.64		$8,788.97		$15,036.19		$24,697.20
	TOTAL ESTIMATED CONSTRUCTION COST:				**$1,636,579.53**		**$880,287.18**		**$136,988.97**		**$234,361.19**		**$384,942.20**
	10% CONTINGENCY				**$163,657.95**		**$88,028.72**		**$13,698.90**		**$23,436.12**		**$38,494.22**
	25% PROJECT COSTS:				**$450,059.37**		**$242,078.97**		**$37,671.97**		**$64,449.33**		**$105,859.10**
	TOTAL ESTIMATED PROJECT COST:				**$2,250,296.86**		**$1,210,394.87**		**$188,359.83**		**$322,246.64**		**$529,295.52**

STREET AND UTILITY RECONSTRUCTION

SOUTH STREET

TABLE #7

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	TOTAL COST	SOUTH STREET RECONSTRUCTION							
						STREET RECONSTRUCTION		STORM		SANITARY SEWER		WATERMAIN	
						QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
1	MOBILIZATION	LUMP SUM	1.00	$105,000.00	$105,000.00	0.427	$44,809.08	0.104	$10,957.84	0.230	$24,103.82	0.239	$25,129.25
2	TRAFFIC CONTROL	LUMP SUM	1.00	$25,000.00	$25,000.00	0.427	$10,668.83	0.104	$2,609.01	0.230	$5,739.01	0.239	$5,983.16
3	VIBRATORY MONITORING	LUMP SUM	1.00	$70,000.00	$70,000.00	0.427	$29,872.72	0.104	$7,305.23	0.230	$16,069.22	0.239	$16,752.84
4	CLEAR AND GRUB TREE (4.0" DIA OR GREATER)	TREE	5.00	$500.00	$2,500.00	5.000	$2,500.00						
5	REMOVE FENCE	LIN FT	45.00	$10.00	$450.00	45.000	$450.00						
6	REMOVE STEPS	EACH	3.00	$600.00	$1,800.00	3.000	$1,800.00						
7	REMOVE WATERMAIN	LIN FT	2,090.00	$12.00	$25,080.00							2,090.00	$25,080.00
8	REMOVE SANITARY PIPE	LIN FT	1,975.00	$18.00	$35,550.00					1,975.00	$35,550.00		
9	REMOVE WATER SERVICE PIPE AND CURB STOP	EACH	37.00	$600.00	$22,200.00							37.00	$22,200.00
10	REMOVE PIPE SEWER (STORM)	LIN FT	670.00	$18.00	$12,060.00			670	$12,060.00				
11	REMOVE SANITARY STRUCTURE	EACH	8.00	$1,200.00	$9,600.00					8.00	$9,600.00		
12	REMOVE DRAINAGE STRUCTURE	EACH	15.00	$500.00	$7,500.00			15	$7,500.00				
13	REMOVE CASTING (SANITARY)	EACH	8.00	$200.00	$1,600.00					8.00	$1,600.00		
14	REMOVE HYDRANT	EACH	4.00	$700.00	$2,800.00							4.00	$2,800.00
15	REMOVE CONCRETE CURB & GUTTER	LIN FT	3,930.00	$3.50	$13,755.00	3,930.00	$13,755.00						
16	REMOVE CONCRETE SIDEWALK AND DRIVEWAY PAVEMENT	SQ FT	5,700.00	$1.25	$7,125.00	5,700.00	$7,125.00						
17	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ FT	5,508.30	$1.25	$6,885.38	5,508.30	$6,885.38						
18	REMOVE BITUMINOUS PAVEMENT	SQ YD	6,570.00	$2.50	$16,425.00	6,570.00	$16,425.00						
19	REMOVE RETAINING WALL	LIN FT	44.00	$20.00	$880.00	44.00	$880.00						
20	REMOVE AND DISPOSE SIGN POST	EACH	10.00	$40.00	$400.00	10.00	$400.00						
21	REMOVE AND DIPOSE STREET SIGN PANEL	EACH	10.00	$20.00	$200.00	10.00	$200.00						
22	SALVAGE & INSTALL STEP RAILING	EACH	1.00	$1,000.00	$1,000.00	1.00	$1,000.00						
23	SALVAGE & INSTALL MAIL BOXES	EACH	19.00	$500.00	$9,500.00	19.00	$9,500.00						
24	EXPLORATORY EXCAVATION	HOUR	25.00	$450.00	$11,250.00	25.00	$11,250.00						
25	COMMON EXCAVATION (EV)	CU YD	4,750.00	$18.00	$85,500.00	4,750.00	$85,500.00						
26	SUBGRADE EXCAVATION (EV)	CU YD	185.00	$20.00	$3,700.00	185.00	$3,700.00						
27	TOPSOIL BORROW (LV)	CU YD	485.00	$38.00	$18,430.00	485.00	$18,430.00						
28	STABILIZING AGGREGATE 3" MINUS CRUSHED	TON	370.00	$38.00	$14,060.00	370.00	$14,060.00						
29	SUBGRADE PREPARATION	SQ YD	7,860.00	$1.50	$11,790.00	7,860.00	$11,790.00						
30	SELECT GRANULAR BORROW (CV)	CU YD	2,620.00	$28.00	$73,360.00	2,620.00	$73,360.00						
31	GEOTEXTILE FABRIC TYPE V	SQ YD	7,860.00	$1.50	$11,790.00	7,860.00	$11,790.00						
32	AGGREGATE SURFACING CLASS 5 (DRIVEWAY)	TON	48.00	$35.00	$1,680.00	48.00	$1,680.00						
33	AGGREGATE BASE CLASS 5 (CV)	CU YD	1,965.00	$30.00	$58,950.00	1,965.00	$58,950.00						
34	TYPE SP 9.5 WEARING COURE MIXTURE (2,C)	TON	594.00	$90.00	$53,460.00	594.00	$53,460.00						
35	TYPE SP 12.5 NON WEAR COURSE MIXTURE (2,C)	TON	1,189.00	$80.00	$95,120.00	1,189.00	$95,120.00						
36	BITUMINOUS RAMP CURB EDGE	LIN FT	3,930.00	$5.00	$19,650.00	3,930.00	$19,650.00						
37	MILL OUT BITUMINOUS RAMP CURB EDGE	LIN FT	3,930.00	$5.00	$19,650.00	3,930.00	$19,650.00						
38	MODULAR BLOCK RETAINING WALL	SQ FT	200.00	$38.00	$7,600.00	200.00	$7,600.00						
39	4" PERF PE EDGE DRAIN	LIN FT	2,345.00	$10.00	$23,450.00			2345	$23,450.00				
40	4" PIPE DRAIN CLEANOUT	EACH	16.00	$350.00	$5,600.00			16	$5,600.00				
41	SUMP PUMP SERVICE CONNECTION	EACH	37.00	$500.00	$18,500.00			37	$18,500.00				
42	12" RC PIPE SEWER DESIGN 3006 CLASS V	LIN FT	670.00	$55.00	$36,850.00			670	$36,850.00				
43	CONSTRUCT DRAINAGE STRUCTURE DESIGN R-1	EACH	12.00	$2,500.00	$30,000.00			12	$30,000.00				
44	CONSTRUCT DRAINAGE STRUCTURE DES 48-4020	EACH	3.00	$3,000.00	$9,000.00			3	$9,000.00				
45	CONNECT TO EXISTING STORM PIPE	EACH	4.00	$2,500.00	$10,000.00			4	$10,000.00				
46	CASTING ASSEMBLY (STORM)	EACH	15.00	$1,000.00	$15,000.00			15	$15,000.00				
47	STORM WATER TREATMENT	LUMP SUM	1.00	$30,000.00	$30,000.00			1	$30,000.00				
48	CONNECT TO EXISTING WATERMAIN	EACH	6.00	$3,000.00	$18,000.00							6.00	$18,000.00
49	HYDRANT	EACH	4.00	$7,000.00	$28,000.00							4.00	$28,000.00
50	CASTING ASSEMBLY - CURB STOP	EACH	15.00	$400.00	$6,000.00							15.00	$6,000.00

STREET AND UTILITY RECONSTRUCTION

SOUTH STREET

TABLE #7

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	TOTAL COST	SOUTH STREET RECONSTRUCTION							
						STREET RECONSTRUCTION		STORM		SANITARY SEWER		WATERMAIN	
						QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
51	6" GATE VALVE AND BOX	EACH	12.00	$2,100.00	$25,200.00							12.00	$25,200.00
52	8" GATE VALVE AND BOX	EACH	4.00	$2,500.00	$10,000.00							4.00	$10,000.00
53	3/4" CORPORATION STOP	EACH	37.00	$400.00	$14,800.00							37.00	$14,800.00
54	3/4" WATER SERVICE LINE	LIN FT	830.00	$50.00	$41,500.00							830.00	$41,500.00
55	3/4" CURB STOP & BOX	EACH	37.00	$400.00	$14,800.00							37.00	$14,800.00
56	CONNECT TO EXISTING WATER SERVICE	EACH	37.00	$550.00	$20,350.00							37.00	$20,350.00
57	6" WATERMAIN DUCTILE IRON CL 52	LIN FT	87.00	$85.00	$7,395.00							87.00	$7,395.00
58	8" WATERMAIN DUCTILE IRON CL 52	LIN FT	2,060.00	$70.00	$144,200.00							2,060.00	$144,200.00
59	4" POLYSTYRENE INSULATION	SQ YD	25.00	$55.00	$1,375.00							25.00	$1,375.00
60	PIPE FITTINGS	POUND	1,100.00	$15.00	$16,500.00							1,100.00	$16,500.00
61	TEMPORARY WATER SYSTEM	LUMP SUM	1.00	$50,000.00	$50,000.00							1.00	$50,000.00
62	9 LB ANODE	EACH	33.00	$175.00	$5,775.00							33.00	$5,775.00
63	CONNECT TO EXISTING SANITARY SEWER SERVICE	EACH	34.00	$1,000.00	$34,000.00					34.00	$34,000.00		
64	CONNECT TO EXISTING SANITARY SEWER	EACH	7.00	$2,000.00	$14,000.00					7.00	$14,000.00		
65	CONNECT TO EXISTING SANITARY MANHOLE	EACH	1.00	$3,500.00	$3,500.00					1.00	$3,500.00		
66	CONSTRUCT SANITARY MANHOLE	EACH	8.00	$9,000.00	$72,000.00					8.00	$72,000.00		
67	8" PVC PIPE SEWER SDR 35	LIN FT	1,985.00	$70.00	$138,950.00					1,985.00	$138,950.00		
68	4" PVC PIPE SEWER SERVICE SDR-26	LIN FT	1,065.00	$90.00	$95,850.00					1,065.00	$95,850.00		
69	8"X4" PVC WYE	EACH	36.00	$500.00	$18,000.00					36.00	$18,000.00		
70	CASTING ASSEMBLY (SANITARY)	EACH	8.00	$1,000.00	$8,000.00					8.00	$8,000.00		
71	EXTERNAL CHIMNEY SEAL	EACH	8.00	$550.00	$4,400.00					8.00	$4,400.00		
72	6" CONCRETE DRIVEWAY PAVEMENT (W/ 4" AGG. BASE CL. 5)	SQ FT	2,950.00	$10.00	$29,500.00	2,950.00	$29,500.00						
73	6" CONCRETE PEDESTRIAN RAMP (W/ 4" AGG. BASE CL. 5)	SQ FT	790.00	$25.00	$19,750.00	790.00	$19,750.00						
74	4" CONCRETE WALK (W/ 4" AGG. BASE CL. 5)	SQ FT	1,575.00	$8.00	$12,600.00	1,575.00	$12,600.00						
75	CONCRETE STEPS	SQ FT	157.50	$75.00	$11,812.50	157.50	$11,812.50						
76	TRUNCATED DOMES	SQ FT	94.50	$70.00	$6,615.00	94.50	$6,615.00						
77	CONCRETE CURB & GUTTER DESIGN B618	LIN FT	3,920.00	$18.00	$70,560.00	3,920.00	$70,560.00						
78	3" BITUMINOUS DRIVEWAY (W/ 6" AGG. BASE CL. 5)	SQ FT	5,530.00	$3.50	$19,355.00	5,530.00	$19,355.00						
79	CROSSWALK MARKING - EPOXY	SQ FT	90.00	$10.00	$900.00	90.00	$900.00						
80	FURNISH AND INSTALL SIGN POST	EACH	10.00	$175.00	$1,750.00	10.00	$1,750.00						
81	FURNISH AND INSTALL SIGN PANEL	EACH	10.00	$100.00	$1,000.00	10.00	$1,000.00						
82	SILT FENCE, TYPE MACHINE SLICED	LIN FT	2,420.00	$2.50	$6,050.00	2,420.00	$6,050.00						
83	STREET SWEEPING	HOUR	24.00	$400.00	$9,600.00	24.00	$9,600.00						
84	SEDIMENT CONTROL LOG TYPE WOOD FIBER	LIN FT	1,000.00	$3.00	$3,000.00	1,000.00	$3,000.00						
85	STORM DRAIN INLET PROTECTION	EACH	18.00	$250.00	$4,500.00	18.00	$4,500.00						
86	STABILIZED CONSTRUCTION EXIT	LUMP SUM	1.00	$5,000.00	$5,000.00	1.00	$5,000.00						
87	SODDING TYPE LAWN	SQ YD	2,300.00	$12.00	$27,600.00	2,300.00	$27,600.00						
88	TREE	TREE	5.00	$600.00	$3,000.00	5.00	$3,000.00						
89	LANDSCAPING	ALLOWANCE	1.00	$15,000.00	$15,000.00	1.00	$15,000.00						
90	IRRIGATION SYSTEM AND ELECTRIC FENCE REPAIR	ALLOWANCE	1.00	$15,000.00	$15,000.00	1.00	$15,000.00						
	TOTAL WITHOUT PRORATA ITEMS				$1,896,887.88		$809,502.88		$197,960.00		$435,450.00		$453,975.00
	RATIO				1.0000000		0.427		0.104		0.230		0.239
	PRORATA ITEMS				$200,000.00		$85,350.63		$20,872.08		$45,912.04		$47,865.24
	TOTAL ESTIMATED CONSTRUCTION COST:				**$2,096,887.88**		**$894,853.50**		**$218,832.08**		**$481,362.04**		**$501,840.24**
	10% CONTINGENCY				**$209,688.79**		**$89,485.35**		**$21,883.21**		**$48,136.20**		**$50,184.02**
	25% PROJECT COSTS:				**$576,644.17**		**$246,084.71**		**$60,178.82**		**$132,374.56**		**$138,006.07**
	TOTAL ESTIMATED PROJECT COST:				**$2,883,220.83**		**$1,230,423.57**		**$300,894.11**		**$661,872.81**		**$690,030.33**

STREET AND UTILITY RECONSTRUCTION

2ND AVENUE SE LIFT STATION

TABLE #8

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	LIFT STATION RECONSTRUCTION TOTAL COST
1	MOBILIZATION	LUMP SUM	1.00	$27,000.00	$27,000.00
2	REMOVE SANITARY PIPE	LIN FT	535.00	$18.00	$9,630.00
3	REMOVE SANITARY STRUCTURE	EACH	2.00	$1,200.00	$2,400.00
4	REMOVE CONCRETE SIDEWALK AND DRIVEWAY PAVEMENT	SQ FT	135.00	$4.50	$607.50
5	REMOVE CONTROL PANEL	EACH	1.00	$1,500.00	$1,500.00
6	ABANDON 6" CIP FORCEMAIN	LIN FT	720.00	$8.00	$5,760.00
7	ABANDON LIFT STATION	LUMP SUM	1.00	$6,000.00	$6,000.00
8	8" PVC PIPE SEWER SDR 26, 27' -31' DEPTH	LIN FT	535.00	$85.00	$45,475.00
9	10" PVC PIPE SEWER SDR 26, 22' -24' DEPTH	LIN FT	30.00	$85.00	$2,550.00
10	12" PVC PIPE SEWER SDR 26, 30' -32' DEPTH	LIN FT	35.00	$95.00	$3,325.00
11	8" DUCTILE IRON FORCEMAIN CL 52	LIN FT	270.00	$70.00	$18,900.00
12	CONSTRUCT SANITARY MANHOLE	LIN FT	88.00	$300.00	$26,400.00
13	CASTING ASSEMBLY (SANITARY)	EACH	3.00	$1,000.00	$3,000.00
14	EXTERNAL CHIMNEY SEAL	EACH	3.00	$550.00	$1,650.00
15	8"X6" WYE BRANCH	EACH	4.00	$500.00	$2,000.00
16	6" PVC SEWER SERVICE PIPE SDR 26	LIN FT	60.00	$70.00	$4,200.00
17	CONNECT TO EXISTING SANITARY SEWER SERVICE	EACH	4.00	$1,000.00	$4,000.00
18	CONNECT TO EXISTING SANITARY MANHOLE	EACH	2.00	$2,500.00	$5,000.00
19	CONNECT EXISTING PIPE TO MANHOLE	EACH	2.00	$1,500.00	$3,000.00
20	CONNECT WET WELL TO MANHOLE	EACH	1.00	$3,500.00	$3,500.00
21	AGGREGATE BEDDING	TON	100.00	$30.00	$3,000.00
22	LIFT STATION (8' DIA) AND VALVE MANHOLE (8' DIA)	LUMP SUM	1.00	$180,000.00	$180,000.00
23	PUMPING EQUIPMENT (2-20 HP PUMPS)	LUMP SUM	1.00	$38,000.00	$38,000.00
24	CONTROLS AND ELECTRICAL CONSTRUCTION	LUMP SUM	1.00	$45,000.00	$45,000.00
25	ONSITE GENERATOR	LUMP SUM	1.00	$32,000.00	$32,000.00
26	ELECTRICAL SERVICE	LUMP SUM	1.00	$8,000.00	$8,000.00
27	BOLLARD GUARD POST	EACH	4.00	$450.00	$1,800.00
28	8" CONCRETE DRIVEWAY PAVEMENT (W/ 6" AGG. BASE CL. 5)	SQ FT	144.00	$18.00	$2,592.00

STREET AND UTILITY RECONSTRUCTION

2ND AVENUE SE LIFT STATION

TABLE #8

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	LIFT STATION RECONSTRUCTION TOTAL COST
29	3" BITUMINOUS DRIVEWAY (W/ 6" AGG. BASE CL. 5)	SQ FT	10.00	$175.00	$1,750.00
30	AGGREGATE BASE CLASS 5	TON	1,965.00	$30.00	$58,950.00
31	SODDING TYPE LAWN	SQ YD	600.00	$10.00	$6,000.00
32	SILT FENCE, TYPE MACHINE SLICED	LIN FT	200.00	$2.50	$500.00
33	TEMPORARY CONSTRUCTION FENCE	LIN FT	200.00	$5.00	$1,000.00
34	STORM DRAIN INLET PROTECTION	EACH	2.00	$250.00	$500.00
35	LANDSCAPING	ALLOWANCE	1.00	$2,000.00	$2,000.00
	TOTAL ESTIMATE PROJECT COST				$529,989.50
	RATIO				1.0000000
	PRORATA ITEMS				$27,000.00
	TOTAL ESTIMATED CONSTRUCTION COST:				**$556,989.50**
	10% CONTINGENCY				**$55,698.95**
	25% PROJECT COSTS:				**$153,172.11**
	TOTAL ESTIMATED PROJECT COST:				**$765,860.56**

STREET AND UTILITY RECONSTRUCTION

SOUTH STREET RAW WATERMAIN

TABLE #9

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	TOTAL COST
1	MOBILIZATION	LUMP SUM	1.00	$7,500.00	$7,500.00
2	VIBRATORY MONITORING	LUMP SUM	1.00	$35,000.00	$35,000.00
3	6" DUCTILE IRON FORCEMAIN CL 52	LIN FT	750.00	$70.00	$52,500.00
4	6" MIN I.D. HDPE DIRECTIONALLY DRILLING	LIN FT	180.00	$70.00	$12,600.00
5	6" GATE VALVE AND BOX	EACH	1.00	$2,500.00	$2,500.00
6	HYDRANT	EACH	1.00	$8,500.00	$8,500.00
7	PIPE FITTINGS	POUND	400.00	$18.00	$7,200.00
8	VALVE MANHOLE (6' DIA) WITH 2 GATE VALVES & 2 CHECK VALVES	LUMP SUM	1.00	$18,000.00	$18,000.00
	TOTAL ESTIMATE PROJECT COST				$101,300.00
	RATIO				1.0000000
	PRORATA ITEMS				$42,500.00
	TOTAL ESTIMATED CONSTRUCTION COST:				**$143,800.00**
	10% CONTINGENCY				**$14,380.00**
	25% PROJECT COSTS:				**$39,545.00**
	TOTAL ESTIMATED PROJECT COST:				**$197,725.00**