



Preliminary Engineering Report

2017 Street & Utility Improvements

City of Hopkins

City Project No. 2016-10

BMI Project No. T19.112021

August, 2016

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in

Hopkins, MN

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:



Michael Waltman, P.E.

License No. 48696

Date: August 10, 2016

Amended: September 12, 2016

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EXECUTIVE SUMMARY

Background Information

The Hopkins City Council ordered preparation of this Preliminary Engineering Report at its June 7, 2016 meeting. In general, the goal of the project is to preserve the investments Hopkins has made in its infrastructure with proper upkeep through the City's Pavement Management Program. The preliminary design report has been completed to identify the appropriate improvements and rehabilitations needed as well as the related project costs and preliminary estimated assessments.

Proposed Improvements

This report examines potential street and utility construction in the Park Valley neighborhood in the City of Hopkins. These areas are depicted in Figure 1 of Appendix B. The proposed improvements are described in the body of this report and are graphically illustrated in Appendix B. In brief, the proposed improvements consist of:

- Full reconstruction of the street section with new concrete curb and gutter along with replacement of at least one if not all of the following utilities: watermain, sanitary sewer, and storm sewer. Reconstruction will occur on the following streets:
 - 6th Street S from 5th Street S to West Park Valley Dr
 - 7th Street S from 11th Ave S to approx. 100' east of East Park Valley Dr
 - East/West Park Valley Drive north of 7th Street S
 - 5th Avenue S from 5th Street S to 7th Street S
 - 6th Avenue S from 5th Street S to 9th Street S
 - 9th Avenue S from 7th Street S to Westbrook Way
 - 10th Avenue S from 6th Street S to 7th Street S
- Concrete paving of the gravel alley south of 5th Street S between 10th and 11th Avenue S.
- Pavement rehabilitation of the alley between the easterly limit of 8th Street S and 6th Avenue S.
- Mill and overlay of the top 2 inches of asphalt pavement with spot curb and gutter replacement on the following streets:
 - 7th Avenue S from 5th Street S to 8th Street S
 - 8th Avenue S from 6th Street S to 8th Street S
 - 8th Street S from 8th Ave S to 6th Ave S
- Sanitary Sewer lining in 3 areas across the City identified by the Public Works Department
- Spot concrete sidewalk, alley, and curb repairs spread out across one quadrant of the City

PRELIMINARY ENGINEERING REPORT

Estimated Costs & Proposed Funding

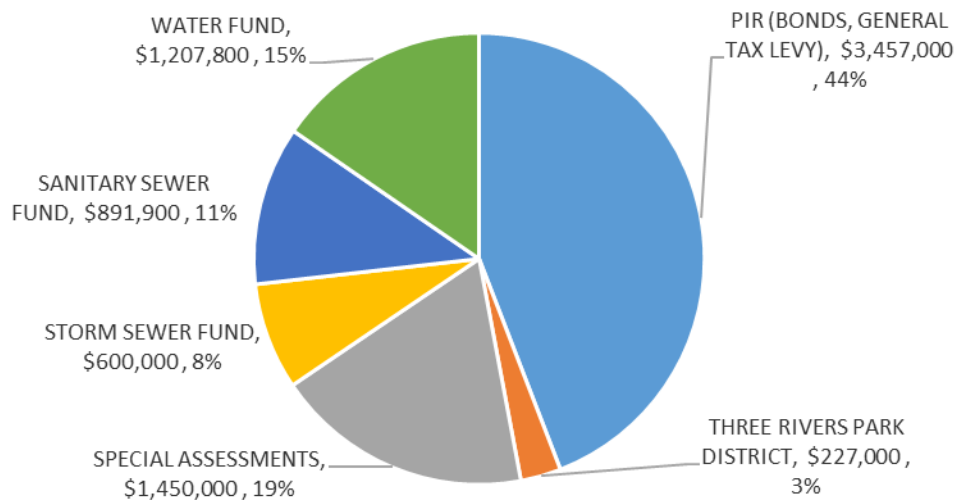
Cost estimates have been prepared for addressing the varying needs of all areas reviewed. Detailed cost estimates are provided in Appendix A and summarized below in Table ES-1.

Table ES-1 – Estimated Cost of Proposed 2017 Improvements Project

STREET	\$ 3,258,500
SANITARY SEWER	\$ 901,900
WATERMAIN	\$ 1,207,800
STORM SEWER	\$ 517,400
CONTINGENCIES (10%)	\$ 588,600
ENGINEERING & ADMINISTRATION (21%)	\$ 1,359,700
TOTAL ESTIMATED PROJECT COST	\$ 7,834,300

The project is proposed to be funded with City utility funds, Three Rivers Park District funds, general obligation bonds and assessments to individual properties.

SUMMARY OF PROJECT FUNDING SOURCES



1. PROJECT INTRODUCTION

This report examines the proposed street and utility improvements including storm sewer, water main, sanitary sewer, and street reconstruction along the following streets as shown on Figure 1 in Appendix B:

- ◆ 6th Street S from 5th Street S to West Park Valley Dr
- ◆ 7th Street S from 11th Avenue S to approx. 100' east of East Park Valley Dr
- ◆ East/West Park Valley Drive north of 7th Street S
- ◆ 5th Avenue S from 5th Street S to 7th Street S
- ◆ 6th Avenue S from 5th Street S to 9th Street S
- ◆ 9th Avenue from 7th Street S to Westbrook Way
- ◆ 10th Avenue from 6th Street S to 7th Street S
- ◆ Alley south of 5th Street S between 10th and 11th Avenues S
- ◆ Alley between the easterly limit of 8th Street S and 6th Avenue S

This report also examines the following related improvements which are proposed to be designed/bid and constructed in the same project, but without involvement of special assessments:

- ◆ Mill/overlay of 7th Avenue S, from 5th Street S to 8th Street S
- ◆ Mill/overlay of 8th Avenue S, from 6th Street S to 8th Street S
- ◆ Mill/overlay of 8th Street S, from 8th Avenue S to 6th Avenue S
- ◆ Sanitary Sewer lining along 17th Avenue N, from Hwy 7 to Mainstreet
- ◆ Sanitary Sewer lining along 10th Avenue, from 1st St S to 1st St N
- ◆ Sanitary Sewer lining along a segment of Hiawatha Avenue to the west of Blake Road
- ◆ Citywide spot alley/sidewalk repairs (annual project)

Specifically the project as a whole involves:

- ◆ Addition/replacement of storm sewer
- ◆ Water main replacement
- ◆ Water service replacement
- ◆ Sanitary sewer replacement and rehabilitation
- ◆ Sanitary sewer service replacement
- ◆ Concrete curb & gutter replacement
- ◆ Bituminous street removal and reconstruction

2. **BACKGROUND**

The 2017 Street & Utility Improvements project was initiated following its presence for several years in the City's Capital Improvements Plan. Hopkins City Council ordered the preparation of this feasibility report at its June 7, 2016 council meeting. The feasibility study and report has been completed to better identify the infrastructure improvements needed in the proposed project area and to better define costs associated with the improvements. This report will be used as the basis for final design and is also a required step in the State's Chapter 429 process for special assessments. The project area consists of single family high density zoning (residential neighborhood), park, institutional, and commercial.

3. **EXISTING CONDITIONS**

3.1 **STREETS**

The bituminous streets within the project areas are aged and exhibit various levels of wear and distress. This is evident on the surface by transverse, block, and alligator cracking. The majority of the project area streets have concrete curb and gutter, though a few blocks have no curbing. In many areas, the curb height is only a few inches, indicating the presence of patching or overlaying of the existing pavement and gutter. There is evidence of previous additional street repairs and maintenance throughout the project area including numerous street patches.



Existing Pavement Conditions

Consistent with observations of the existing pavements made during preparation of this report, the City's Pavement Management System also indicates that the "Pavement Condition Index" (PCI) for many of the street segments in the neighborhood is below the threshold where rehabilitation is cost effective. As such, street reconstruction is appropriate in these areas.

Subgrade soil sampling was completed throughout the entire project area by Braun Intertec in the summer of 2016. A copy of Braun's Geotechnical Evaluation Report is included in Appendix F of this report. Twenty-four soil borings were taken throughout the project area. Ground penetrating radar was also used to better delineate and identify discernable bituminous and aggregate base thicknesses present.

In 1 of the 24 borings a slight petroleum odor was observed indicating the potential for contaminated soils. The report and previous experience indicates the source of the odor is likely a petroleum based stabilization agent used at the surface when the streets were constructed; however, contingencies have been included in the engineer's estimate to account for mitigating contaminated soils. Additional testing was not recommended by Braun Intertec as a part of the preliminary evaluation. During construction, if odor is present, additional testing will be required to determine the appropriate actions to take for handling the material.

The existing soils just beneath pavements in the project area most commonly included fill soils and the majority were classified as silty sand but also included clayey sand, poorly graded sand with silt, sandy lean clay and lean clay with sand. Glacial outwash and glacial till were also encountered. A few of the borings in the project area found buried topsoil and swamp deposits of organic lean clay, lean clay and peat.

The resistance of the soils to deformation under repeated loadings is indicated by an R value estimated by the geotechnical engineer for the various boring locations. Laboratory tests to determine an R-value were not performed but the geotechnical engineer recommends using an R-value of 30 for pavement thickness design of the overall project.

Loadings from traffic on the natural soils under a pavement are reduced by using layers of stronger materials at the surface to spread wheel weight to a larger "footprint" on the underlying soils. Engineers typically use a lower cost, moderate strength material consisting of a blend of rock, sand, and fine "filler" particles for the lowest level in the pavement. This layer is referred to as aggregate base and is an important element of the pavement in residential areas. The aggregate base is capped with layers of higher cost asphaltic concrete, often referred to as "bituminous surfacing" for additional strength, a smoother ride, and dust and mud control. The thicknesses used will vary within practical limits, but are typically held to a minimum in residential areas. Designers try to seek a section that balances cost with strength and durability needs and constructability constraints. This usually means a heavy reliance on the aggregate base layer in low traffic areas like residential neighborhoods.

PRELIMINARY ENGINEERING REPORT

The existing aggregate base layer beneath the existing pavement ranged from none present to 10-inches. For the entire project area the average thickness was around 5-inches. The thickness of the bituminous surfacing ranged from 2 to 8-inches, with the average being approximately 4-inches.

The streets within the neighborhood vary in width from 31.3 feet to 44 feet, as measured from curb face to curb face. Parking is typically allowed on both sides of the streets throughout the neighborhood. The existing grades range from less than 0.50% (very flat) to 5.5% (moderate). Minimal sidewalk exists in the area. Two short segments of walk, immediately at back of curb, exist at the west ends of both 6th and 7th Streets. Large, mature trees are located in the boulevards, near the back of curb, throughout the project area. Table 3.1 identifies the existing street width, existing curb type, existing street grade, existing right-of-way (ROW) width, and sidewalk/trail location on each street within the project area.

Table 3.1

Street	Existing Street Width	Existing Curb Type	Existing Longitudinal Grade [%]	Existing ROW Width	Existing Sidewalk Side
6th Street S	32.5 feet	Concrete B618 C&G	0.50 – 3.75	60 feet	South side: 5 th Street S for approx. 75'
7th Street S	36-44 feet	Concrete B618 C&G	0.50 – 1.25	66 feet	South side: 11 th Avenue east for approx. 200'
West Park Valley Dr	31 feet	Concrete B618 C&G	2.49 – 3.15	60 feet	None
East Park Valley Dr	31 feet	Concrete B618 C&G	1.68 – 4.16	60 feet	None
5th Avenue S	32.5 feet	Concrete B618 C&G	0.60 – 3.15	60 feet	None
6th Avenue S	35 feet	Concrete B618 C&G	0.75 – 5.50	66 feet	None
9th Avenue S	31-36 ft feet	Concrete B618 C&G, no curb	0.50 – 2.15	60 feet	None
10th Avenue S	30 feet	No curb	0.50 – 3.92	66 feet	None

The soil borings revealed existing pavement thicknesses ranging from 2 – 8 inches, with most streets between 3 to 4 inches. The subgrade materials varied throughout the neighborhood but were most commonly found to be silty sand and sandy lean clay fill. A summary of the existing soils conditions and bituminous thicknesses are listed in Table 3.2. Soil boring logs are included in the geotechnical report in Appendix F.

Table 3.2

Street	Bituminous Thickness	Subgrade Material
6 th Street S	3" – 8"	Mixture of silty sand, poorly graded sand and clayey sand with some gravel. Odor detected in 1 of 4 borings.
7 th Street S	3" – 8"	Mixture of silty sand and clayey sand with some gravel and organic clay.
West Park Valley Dr	3.5" – 4"	Mixture of poorly graded san with silt and lean clay with sand, with some gravel.
East Park Valley Dr	2" – 3"	Mixture of silty sand and lean clay with sand with trace gravel.
5 th Avenue S	4"	Mixture of sandy lean clay and poorly graded sand.
6 th Avenue S	4.5" – 5"	Mixture of silty sand and clayey sand with trace gravel.
9 th Avenue S	6"-8"	Mixture of silty sand with gravel and peat (swamp desposit)
10 th Avenue S	3"	Mixture of silty sand with gravel and clayey sand

Alleys

An existing gravel alley of varying width is south of 5th Street S, between 10th and 11th Avenues, serves single-family residential properties along 10th Avenue, a multi-family apartment building on 11th Avenue and a commercial property on 5th Street. The alley is in close proximity to Nine Mile Creek and is delineated by overhead utility poles and residential parking areas/garages. It dead-ends at the driveway of a single family home.

A bituminous alley serving properties along the east side of 6th Avenue S is in poor condition. Public works staff has patched the alley several times, however the patching efforts have reached a point where they are no longer cost effective.

3.2 STORM SEWER

The existing storm sewer system materials were inventoried through a field survey completed in June, 2016, from available record drawings, and through discussions with City Staff. The existing storm sewer systems serving the neighborhood are comprised primarily of reinforced concrete pipe (RCP). Figures in Appendix B illustrate the existing storm sewer layout.

There are multiple storm sewer systems serving the project area. Portions of the project area flow to catch basins that drain directly to Nine Mile Creek, which crosses the project area on 7th Street S and 9th Avenue S. A large trunk line (66" RCP) runs along 6th Avenue S continuing south of 8th Street S in Valley Park, eventually making its way to Nine Mile Creek.

Another system collects drainage along 7th Street S and continues southeast in a 48" diameter RC pipe from the cul-de-sac at the east end of 7th Street S.

A few drainage issues have been identified throughout the project area through evaluation of site grades/elevations, feedback from the neighborhood, and discussions with City Staff. Due to the flat grades of some of the streets and long stretches of streets with no catch basins, localized drainage problems are prevalent. Many drainage structures were also found to be in very poor condition during the field survey. Such structures are often comprised of block or brick, and appear to have been patched with mortar in previous decades. Over time, the mortar has deteriorated from freeze thaw, leaving several structures subject to leakage or potential drastic failure. Recommendations to alleviate these drainage problems are included in section 4.2 of this report and shown in the Appendix B figures.

3.3 SANITARY SEWER

The existing condition of the sanitary sewer system was determined through discussions with City staff and televising reports. Manhole structures were evaluated during a field

survey completed by Bolton & Menk. The existing sanitary sewer system is illustrated in the Appendix B Figures.

The existing sanitary sewer system consists of 8-18-inch pipe varying in materials from CIP, VCP, RCP and PVC. The majority of the manholes are precast with some block manholes constructed in the early 1950's. VCP is susceptible to infiltration and root intrusion over time due to the large number of joints and the deterioration of the gasket material originally used to seal the joints. Block manholes are also susceptible to infiltration over time due to cracks and deterioration of the mortared joints. Record drawings obtained from the City illustrate a small portion of the sanitary sewer system supported by pilings due to poor soils.

Service lines in the neighborhood are typically 4-inch or 6-inch and their material may be clay, orangeburg, or PVC. Proposed sanitary sewer improvements are discussed later in this report.

3.4 WATER MAIN

The existing layout and condition of the water main was determined from record drawings and discussions with City staff. Water main runs along a portion of all the streets within the project area, there are isolated blocks throughout the area that do not have any watermain. The water main is primarily 6-inch cast iron pipe (CIP). CIP is susceptible to rusting and breakage. Service lines in the neighborhood are typically ¾-inch or 1-inch and their material may be copper, galvanized steel, or lead.

The layout of the existing water main is illustrated in the Appendix B Figures.

4. PROPOSED IMPROVEMENTS

4.1 STREETS

The majority of streets within the 2017 project limits are scheduled for full reconstruction. This is based on the City of Hopkins' Capital Improvement Plan (CIP), observed pavement conditions, and pavement and soil sampling. These streets have reached a point where maintenance procedures such as seal coating or milling and overlaying are no longer cost effective strategies to improve ride and delay deterioration:

- 6th Street S from 5th Street S to West Park Valley Dr
- 7th Street S from 11th Avenue S to approx. 100' east of East Park Valley Dr
- East/West Park Valley Drive north of 7th Street S
- 5th Avenue S from 5th Street S to 7th Street S
- 9th Avenue from 7th Street S to Westbrook Way
- 10th Avenue from 6th Street S to 7th Street S

Due to utility needs – primarily watermain and services - along 6th Avenue S, from 5th Street S to 8th Street S, that roadway is also proposed to be reconstructed.

Proposed reconstruction improvements include replacing the concrete curb and gutter and complete pavement section. In areas where there isn't curb, concrete curb and gutter will be added. The horizontal and vertical alignments will approximate the existing alignments with attempts at lowering the road to facilitate drainage from the front yards to the street where beneficial and practical. A consistent street width of 32 feet from face of curb to face of curb will be utilized throughout the majority of the project area. In general, this is closely matching existing conditions. A few exceptions to the 32' width are proposed:

- 7th Street S is proposed be reconstructed at a width of 36-feet-wide. This narrows the roadway between 11th Ave S and 9th Ave S, creating space for the proposed regional trail connection, and also makes the full street width consistent within the project area.
- 10th Avenue S is proposed to be reconstructed at 28-feet-wide. This narrows the roadway by approximately three feet. 28-foot-width is comparable to other local residential streets in Hopkins and narrowing of the roadway should help address the vehicle “short cut” volume and speed observed by multiple residents.
- East and West Park Valley Drive is proposed to be 31 feet wide, more closely matching the 31.3' – 31.5' width. Widening to 32' width was considered, however it is more likely this widening would result in additional tree impacts and benefits of the additional one-foot-width would be relatively minimal.

The minimum proposed street grade is 0.5%. Street grades flatter than 0.50% are undesirable as acceptable drainage is typically not achieved. Drainage problems can create safety issues in freezing weather and accelerate the degradation of the pavement. Overall drainage patterns throughout the project area are not anticipated to change significantly. Low-points may need to be created on streets with flat grades to help facilitate drainage and maintain the minimum street grades. These locations will be confirmed during the final design process.

The recommended typical section for all the streets consists of 3.5 inches of bituminous pavement over 8 inches of aggregate base class 5, in addition 12-24" of granular base will be included throughout the majority of the project area. Due to poor soils, a geotextile fabric is also proposed on 7th Street S and 9th Avenue S. The recommended amounts of subgrade correction, with select granular borrow, will be determined by a roll test during construction. Subgrade corrections usually range from 12 to 24 inches when needed.

4.2 STORM SEWER

The majority of the existing storm sewer systems will be replaced as a part of the project due age, size, and changes in street widths. The existing systems will also be in conflict with the replacement of the sanitary sewer and water main in many locations. Full replacement of the existing storm sewer systems is recommended as a part of this project. Additional storm structures are proposed in areas to help improve drainage and assist in removing water from flowing in the streets. Catch basins will be relocated away from driveways and pedestrian ramps.

The 66" RCP trunk line along 6th Avenue S is not proposed for replacement as a part of this project.

A 15-inch outlet pipe along 7th Street S appears to discharge excess runoff into the park open space to the north between 9th and 10th Avenues S. It is proposed to perpetuate this function as it is good stormwater management practice and is the most economical alternative.

4.3 SANITARY SEWER

The information used to evaluate the existing condition of the sanitary sewer includes televised recordings of the sewers, record drawings, manhole reports, and discussions with City staff. Due to the age of the sanitary sewer system and the City policy to replace VCP and CIP sewers during street projects, the majority of the sanitary sewer is recommended to be completely replaced with PVC pipe. New service wyes will be provided to each home. Per City policy, sanitary services which are not PVC are proposed to be replaced with PVC pipe to the right-of-way (ROW) line. New precast concrete manholes will be installed and incorporate the City standard 27-inch diameter cover with concealed pick-holes.

The existing sanitary along 6th Avenue S from 5th Street S to 7th Street S consists of 8" PVC pipe and was installed in 1989. It is in good condition, no improvements are proposed in that area. The existing sanitary sewer from 7th to 8th Street S is 12" RCP, it is proposed to line this segment.

The sanitary sewer along 7th Street S from 9th Avenue S to 11th Avenue S and 9th Avenue S from Westbrooke Way to 7th Street S consists of 15-18" RCP and due to the age (constructed in the 70's-80's), and existing (poor) soils along these blocks it is proposed to line the existing sanitary sewer to avoid disturbing the existing soils in the area.

Table 4-1 summarize the proposed sanitary sewer improvements:

ROADWAY	FROM / TO	EXISTING PIPE			PROPOSED IMPROVEMENTS
		DIA.	MATL	AGE	
5th Ave S	7th to 5th St S	8	CLAY	53	Reconstruct
6th Ave S	8th to 7th St S	12	RCP	46	Lining
6th Ave S	7th to 5th St S	8	PVC	27	None
6th Ave S	8th to 5th St S	14	DIP	27	None
6th St S	10th Ave to W Park Valley	None			None
7th St S	11th to 9th Ave S	18	RCP	46	Lining
7th St S	9th to 6th Ave S	8	CIP	64	Reconstruct
7th St S	6th Ave to W Park Valley	10	CIP	62	Reconstruct
7th St S	W Park Valley Dr to 2nd Ave S	8	CLAY	63	Reconstruct
9th Ave S	Westbrooke Way to 8th St S	15	RCP	46	Lining
9th Ave S	8th to 7th St S	18	RCP	46	Lining
10th Ave S	7th to 6th St S	8	CLAY	63	Reconstruct
Park Valley Dr	All	8	CLAY	62	Reconstruct

4.4 WATER MAIN

Watermain varies in both age and material throughout the project area, though the majority is comprised of cast iron material of over 50 years in age. It is proposed to replace the cast-iron water system with ductile iron pipe (DIP) as a part of this project. 8-inch pipe is a typical recommended minimum main size because the cost differential is relatively low, but the capacity for supplying water, especially fire flows, is much greater. Per City policy all water service lines are proposed to be replaced to the ROW line with 1-inch copper unless the existing service material is copper. A new curb stop and box will be provided on each service.

Table 4-2 summarizes the proposed watermain improvements:

ROADWAY	FROM / TO	EXISTING PIPE			PROPOSED IMPROVEMENTS
		DIA.	MATL	AGE	
5th Ave S	7th to 5th St S	6	Cast	53	Reconstruct with 8" DIP
6th Ave S	8th to 5th St S	6	Cast	51	Reconstruct with 8" DIP
6th St S	10th to 8th Ave S	-	-		Add New 8" DIP
6th St S	8th to 6th Ave S	6	Ductile	52	Reconstruct with 8" DIP
6th St S	6th to W Park Valley	-	-		Add New 8" DIP
7th St S	11th to 10th Ave S	12	Cast	55	Reconstruct with 12" DIP
7th St S	10th to 9th Ave S	12	Ductile	28	Reconstruct with 12" DIP
7th St S	9th to 8th Ave S	6	Cast	63	Reconstruct with 8" DIP or Fused HDPE
7th St S	8th to 7th Ave S	8	Ductile	28	Reconstruct with 8" DIP or Fused HDPE
7th St S	7th to 2nd Ave S	6	Cast	51	Reconstruct with 8" DIP
9th Ave S	Westbrooke Way to 7th St S	8	Ductile	46	Reconstruct with 8" DIP or Fused HDPE
10th Ave S	7th to 6th St S	6	Cast	63	Reconstruct with 8" DIP
E & W Park Valley Dr	All	6	Cast		Reconstruct with 8" DIP

Watermain segments along both 9th Ave S and 7th St S are located on existing pilings in areas of poor soil conditions. In areas where no services are connected to these mains, it is recommended that watermain on piling be replaced with fused HDPE or PVC and directionally drilled off the existing pilings. In areas where services are connected to watermain on piling, it is recommended adequate piling spacing be verified during final design and restrained joint ductile iron be used atop the existing (or added) piling.

4.5 PEDESTRIAN FACILITIES

The City and Three Rivers Park District are in discussions to complete a trail connection between the Nine Mile Creek regional trail (along Westbrooke Way at 9th Ave S) and the existing trail along 11th Ave S at 7th St S. Consistent with Three Rivers Trail guidelines, a 10 foot wide bituminous trail is proposed along the west side of 9th Avenue S and the south side of 7th Street S from 9th to 11th Avenues S. A three to five foot boulevard will be constructed between back of curb and the proposed trail edge. To accommodate the trail

and boulevard being constructed within City right-of-way along the west side of 9th Avenue S, the roadway is proposed to be shifted approximately 2 feet to the east. The segment of 7th Street, where the trail is proposed, is being narrowed from 44-feet to 36-feet, to be a consistent width of the rest of 7th Street S to the east of 9th Avenue S. To accommodate the trail construction along its south side, 7th Street S will be narrowed from the south side leaving the northerly curb line in approximately the existing location.

The proposed trail connection crosses Nine Mile Creek along both streets, the existing box culvert crossing along 7th Street S can accommodate the trail construction based on the proposed reconfiguration of that street width. Improvements will also be needed along 9th Avenue S to accommodate the trail construction over Nine Mile Creek. A pedestrian bridge similar to the CONTECH bridge just downstream in Valley Park is proposed to cross the Creek along 9th Avenue S.

Figures 3.06, 3.18, and 3.19 illustrate the proposed trail improvements.

4.6 DRIVEWAYS

All existing driveways within the project areas receiving new concrete curb and gutter will receive a new 5-foot concrete apron to match the proposed concrete curb. Where trail is being placed the apron will extend to the trail. The new concrete aprons will be constructed according to City standards. In addition to the 5-foot driveway apron, additional driveway pavement disturbed as a part of the project will be replaced in-kind to match the existing driveway with the street improvements.

4.7 LAWN SPRINKLER SYSTEMS

There may be existing sprinkler systems in the residential neighborhood. Adjacent property owners will need to assist in locating and identifying the type of sprinkler systems that are in place prior to and during construction. The contractor will be required to make every effort to preserve the in place systems during construction. Where this is found to be unfeasible, the contractor will be required to remove and replace or salvage and reinstall the existing sprinkler system.

4.8 STREET SIGNING AND STRIPING

The existing street name signs will be salvaged and reinstalled by the contractor as necessary to facilitate construction. Regulatory signs such as STOP signs will be replaced in order to conform to new retroreflectivity requirements. Existing zebra crosswalk striping will be repainted upon completion of the paving.

4.9 TURF RESTORATION

Boulevards will be graded as necessary to facilitate drainage from the existing yards to the streets. Turf areas disturbed by construction, either due to boulevard grading or utility service construction, will be graded to match the new street and sidewalk grades and restored with lawn type sod in residential yards. In park or other areas maintained by the City, areas will be restored with seed and mulch (hydroseed).

4.10 BOULEVARD TREES

As with all projects being considered by the City of Hopkins, it is a goal of this project to protect healthy boulevard trees and/or make improvements to the urban tree canopy where feasible. Residents echoed the desire to protect healthy trees in questionnaire responses. Design and construction of improvements, including appropriate selection of street widths and utility main placement, are proposed to be completed in a manner to achieve the City's goals to save healthy trees. An evaluation of boulevard tree species and condition was completed in consideration of the adjacent street and utility improvements to facilitate design and construction and meet this criteria.

Due to their susceptibility to the Emerald Ash Borer, green ash trees are generally considered undesirable trees. Similarly, Silver Maple trees are more susceptible to storm damage than other species, create a lot of litter because of their soft wood and weak, brittle branches, and thus are not desirable trees to Public Works staff and local residents. Silver maples are also known to have an intrusive root system that can damage sidewalks and curbs and penetrate sewer joints. Finally, American Elm also exist in the project area and are still susceptible to Dutch Elm disease. These three undesirable species, as well as other trees that are either dead or in poor health, should either be removed or otherwise not protected through the design/construction process.

An inventory of the trees located in the right of way was performed in August 2016 by City Public Works Staff. Consistent with the recent 2016 Street & Utility Improvements project, trees that are dead or in very poor condition, and "undesirable" species in fair or poor condition, are proposed to be removed and replaced. Approximately 50 boulevard tree species within the project area, similar to the amount in the 2016 project area, are considered undesirable due to condition/species. Specific tree removals will be identified in the final construction plans for the project. Properties located adjacent to boulevard tree removals will be contacted and allowed to provide input on proposed tree replacements. Tree replacements Certain trees may be identified during design or construction to be removed. This may be due to the street reconstruction, grading, utility replacement, sidewalk replacement, water service replacement, sewer service replacement, or other factors. Options to preserve highly desirable trees in harm's way include small retaining walls or moving service lines around trees. The City will work with the homeowners to replace these trees as part of the project in the event tree removal is necessary.

This project provides an opportunity to increase the health of the neighborhood forest by replacing some of the undesirable species with trees better suited for boulevard areas. Up to two trees are proposed to be installed per each tree removed. The City has usually planted new 2-inch balled and burlapped (B &B) trees. A list of species to be planted will be formulated during final design in cooperation with the City's Public Works department.

5. NEIGHBORHOOD MEETING

A neighborhood meeting occurred on September 6, 2016 with residents and property owners that are affected by and being assessed for the improvements. The City Engineer and Bolton & Menk, Inc. representatives presented the scope of the project with a discussion of existing and proposed street and utility conditions, project costs, projected assessments and schedule. Details related to assessment computation and payment options were provided. Feedback from the residents are documented in Appendix D of this report. There will be a 2nd neighborhood meeting on September 15, 2016 with the same information for those who could not attend the 1st meeting.

Residents within the project area were also mailed questionnaires shown in Appendix D. Sixty seven questionnaires were returned with comments. The most common questionnaire responses related to:

- a. Specific drainage problems
- b. Opposition to any sidewalk improvements
- c. Cars routinely bottoming out when accessing driveways due to steep roadway crowns
- d. A desire to minimize traffic volumes/speed on 10th Ave S
- e. Traffic flow/detours during the 2017 work by MnDOT on Highway 169
- f. Questions or concerns about assessments and project costs
- g. Individual sewer and water service problems, history of backups/root blockages
- h. Other unique issues specific to individual properties (individual tree conditions, water service line, driveways, landscaping, etc.)

6. ESTIMATED COSTS

Estimated construction costs presented in this report include a 10 percent contingency factor. Overhead costs, estimated at 21 percent, include legal, engineering, administrative and fiscal costs. Final costs and assessments will be determined by using low-bid construction costs of the proposed work.

Proposed construction costs for the 2017 Street and Utility Improvements (including curb and gutter, bituminous street, pedestrian facilities, storm sewer, sanitary sewer, water main, and turf restoration) are itemized in Appendix A and are summarized in Table 6.1 below. These cost estimates are based upon public construction cost information. Since the consultant has no control

over the cost of labor, materials, competitive bidding process, weather conditions and other factors affecting the cost of construction, all cost estimates are opinions for general information of the client and no warranty or guarantee as to the accuracy of construction cost estimates is made. It is recommended that costs for project financing should be based upon actual, competitive bid prices with reasonable contingencies.

Table 6.1

SUBTOTAL OF PROPOSED STREET IMPROVEMENTS	\$3,258,500.00
SUBTOTAL OF PROPOSED STORM SEWER IMPROVEMENTS	\$ 517,400.00
SUBTOTAL OF PROPOSED WATER MAIN IMPROVEMENTS	\$ 1,207,800.00
SUBTOTAL OF PROPOSED SANITARY SEWER IMPROVEMENTS	\$ 901,900.00
STREET & UTILITY SUBTOTAL	\$5,885,600.00
CONTINGENCIES (10%)	\$ 588,560.00
ENGINEERING AND ADMINISTRATION (21%)	\$ 1,359,574.00
TOTAL ESTIMATED COST	\$7,833,734.00

7. ASSESSMENT RATES

Street improvements throughout the project area will be assessed to adjacent and benefitting properties according to the City's assessment policy. Street improvement work includes pavement and sidewalk removals, grading, subgrade correction, aggregate base, curbing, sidewalks, driveways and pavements construction, and restoration.

According to the City's assessment policy, residential street improvement costs are assessed to the benefitting properties. In summary, assessments to benefitting properties are determined based on the following criteria:

- Properties are assessed based on 70% of the actual street improvement costs. This is referred to as a **"Street Assessment"**.
 - North/South Avenue improvements are typically assessed to properties with direct frontage based on a front foot basis (length) along the Avenue
 - East/West Street improvements are typically assessed to properties located within one block north/south of the Street on a unit basis (per each property)
 - In some cases where properties front Streets rather than Avenues (or where no properties front Avenues), City Staff reviews and considers the intent of the policy as it applies to each unique situation. For example along 7th Street S, between 6th Avenue and E Park Valley Dr, properties front the roadway in a fashion similar to typical layouts along North/South avenues as contemplated in the policy. Therefore, assessments for this half of the 7th St S were treated in similar fashion to north/south Avenues.

- **“Street Assessments”** to any individual property are capped at front foot rate increase annually by 3% over the prior year’s amount. An assessment cap for residential properties of \$86.30 per front foot has been established by adding 3% to the 2016 assessment cap according to City policy. This cap is applied only to residential properties in the project area and is not applicable to non-residential properties.
- Utility (sanitary sewer, storm sewer, water) main improvements are 100% paid by the respective utility funds. No assessment for utility mains is proposed and there costs do not contribute to either the **“Street Assessments”** or **“Utility Assessments”**.
- Utility service lines are owned by the individual property per City Code. As a result, the City assesses for the cost of the individual service line replacements. This is referred to as a **“Utility Assessment”**. The City participates in a share of these costs because the replacement is mandatory where mains are reconstructed, and therefore properties are assessed for only 50% of the cost of the service replacement.
- The estimated cost of the water service replacement from the main to property line is \$1,600. With the proposed 50/50 **“Utility Assessment”** split, \$800 will be assessed to each property where water services are replaced. The estimated cost of the sewer service replacement from the main to the property line is \$1,500. With the proposed 50/50 **“Utility Assessment”** split, \$750 will be assessed to each property where sewer services are replaced. Thus, a property proposed to receive both a new water service and sewer service would have a proposed **“Utility Assessment”** of \$1,550.

In the case that sanitary sewer services are made of Orangeburg or Transite, or are in disrepair, replacement or lining of the entire line will also be required from the property line to the house. On past projects, the property owner has been given one year to affect the necessary repairs.

A preliminary assessment roll is included in Appendix C of this report. Total estimated assessments are \$1,453,668.01.

RIGHT-OF-WAY / EASEMENTS / PERMITS

The majority of the proposed improvements will be limited to the existing street ROW along all corridors. Temporary construction easements may be needed for work outside the street ROW such as driveway apron replacement, grading and turf restoration.

Permits will be required from the Minnesota Pollution Control Agency for grading (National Pollutant Discharge Elimination System permit), Minnesota Department of Health for Water Main Replacement, and the Nine Mile Creek Watershed District.

8. PROJECT SCHEDULE

If this Preliminary Engineering Report is accepted by the City Council, the following schedule is proposed:

Order Public Improvement Hearing.....	August 16, 2016
Conduct Public Improvement Hearing	September 20, 2016
Order Final Plans & Specifications.....	September 20, 2016
Final Design.....	September 21 – December 20, 2016
Present Final Plans / Authorize Ad for Bids	December 20, 2016
Open Bids	January 18, 2017
Accept Bids / Order Public Assessment Hearing.....	January 24, 2017
Conduct Public Assessment Hearing / Adopt Assessment Roll /	
Award Project	February 21, 2017
Construction.....	April/May – November 2017

9. FEASIBILITY AND RECOMMENDATION

From an engineering standpoint, this project is feasible, cost effective, and necessary and can best be accomplished by letting competitive bids for the work. It is recommended that the work be done under one contract in order to complete the work in an orderly and efficient manner. The City, its financial consultant, and the persons assessed will have to determine the economic feasibility of the proposed improvements.

Appendix A:

Preliminary Cost Estimate

ENGINEER'S ESTIMATE

2017 STREET & UTILITY IMPROVEMENTS

CITY OF HOPKINS, MN

BMI PROJECT NO. T19.112021

ITEM NO.	ITEM	UNIT	UNIT PRICE	ESTIMATED QUANTITIES			
				STREET	UTILITIES		
				STREET TOTAL	SANITARY SEWER	WATER	STORM SEWER
1	MOBILIZATION	LUMP SUM	\$ 200,000.00	0.59	0.15	0.17	0.09
2	CLEARING AND GRUBBING (TREE)	EACH	\$ 400.00	54			
3	TREE TRIMMING	LUMP SUM	\$ 5,000.00	0.59	0.15	0.17	0.09
4	REMOVE BITUMINOUS PAVEMENT (TRAILS AND DRIVEWAYS)	SQ YD	\$ 4.00	1964			
5	REMOVE CONCRETE PAVEMENT (WALKS, DRIVEWAYS, AND ALLEYS)	SQ YD	\$ 6.00	3937			
6	REMOVE CURB & GUTTER	LIN FT	\$ 3.00	20089			
7	REMOVE CONCRETE STEP	EACH	\$ 100.00	19			
8	REMOVE CONCRETE PARKING STOP	LIN FT	\$ 20.00	50			
9	REMOVE RETAINING WALL	SQ FT	\$ 20.00	60			
10	REMOVE FENCE	LIN FT	\$ 10.00	0			
11	SAWING CONCRETE PAVEMENT (FULL-DEPTH)	LIN FT	\$ 5.00	1260			
12	SAWING BITUMINOUS PAVEMENT (FULL-DEPTH)	LIN FT	\$ 4.00	1894			
13	COMMON EXCAVATION	CU YD	\$ 13.00	29277			
14	SUBGRADE EXCAVATION	CU YD	\$ 13.00	2189			
15	SELECT GRANULAR BORROW	CU YD	\$ 15.00	16458			
16	TOPSOIL BORROW (SPECIAL)	CU YD	\$ 25.00	2609			
17	EXPLORATORY EXCAVATION	HOUR	\$ 450.00	10			
18	CLASS 5 AGGREGATE BASE	TON	\$ 14.00	23564			
19	CLASS 2 AGGREGATE SURFACING (GRAVEL DRIVEWAY)	TON	\$ 29.00	76			
20	MILL OR RECLAIM BITUMINOUS SURFACE	SQ YD	\$ 2.50	59902			
21	BITUMINOUS WEARING COURSE (SPWEA240C)	TON	\$ 70.00	6767			
22	BITUMINOUS NON-WEARING COURSE (SPNWB230C)	TON	\$ 65.00	4954			
23	BITUMINOUS MATERIAL FOR TACK COAT	GAL	\$ 4.00	3293			
24	3" BITUMINOUS DRIVEWAY & PAVEMENT (SPWEA240B)	SQ YD	\$ 20.00	3742			
25	MODULAR BLOCK RETAINING WALL	SQ FT	\$ 45.00	0			
26	CONTECH PREFABRICATED PEDESTRIAN BRIDGE	LUMP SUM	\$ 50,000.00	1			
27	PEDESTRIAN BRIDGE ABUTMENT	EACH	\$ 25,000.00	2			
28	4" CONCRETE WALK	SQ FT	\$ 3.70	5513			
29	TRUNCATED DOMES	SQ FT	\$ 42.00	108			
30	CONCRETE STEP	EACH	\$ 225.00	14			
31	CONCRETE CURB & GUTTER	LIN FT	\$ 13.00	22427			
32	SPOT CONCRETE CURB & GUTTER REPLACEMENT	LIN FT	\$ 27.00	0			
33	6" CONCRETE DRIVEWAYS & PEDESTRIAN RAMPS	SQ YD	\$ 60.00	3354			
34	6" CONCRETE ALLEY	SQ YD	\$ 60.00	1358			
35	ALLEY CONCRETE TIE-BARS	EACH	\$ 22.00	509			
36	TRAFFIC CONTROL	LUMP SUM	\$ 25,000.00	0.59	0.15	0.17	0.09
37	ZEBRA CROSSWALK BLOCK - WHITE EPOXY	SQ FT	\$ 7.00	648			
38	TRAFFIC SIGN POST	EACH	\$ 193.00	26			
39	SIGN PANELS (TYPE C)	SQ FT	\$ 59.00	24			
40	SIGN PANELS (TYPE D)	SQ FT	\$ 63.00	21			
41	LANDSCAPE ALLOWANCE	LUMP SUM	\$ 30,000.00	0.59	0.15	0.17	0.09
42	DECIDUOUS TREE - 2-INCH DIAMETER B&B	EACH	\$ 350.00	11			
43	DECIDUOUS TREE - 2-INCH DIAMETER B&B (WHITE OAK)	EACH	\$ 350.00	11			
44	DECIDUOUS TREE - 2-INCH DIAMETER B&B (PARKWAY NORWAY MAPLE)	EACH	\$ 350.00	11			
45	DECIDUOUS TREE - 2-INCH DIAMETER B&B (RED OAK)	EACH	\$ 350.00	11			
46	DECIDUOUS TREE - 2-INCH DIAMETER B&B (GREENSPIRE LINDEN)	EACH	\$ 350.00	11			
47	DECIDUOUS TREE - 2-INCH DIAMETER B&B (CATHEDRAL ELM - DISEASE RESIS	EACH	\$ 350.00	11			
48	INLET PROTECTION	EACH	\$ 150.00	57			
49	SILT FENCE	LIN FT	\$ 2.30	1000			
50	STREET SWEEPER WITH OPERATOR	HOUR	\$ 150.00	36			
51	TURF RESTORATION	SQ YD	\$ 4.00	29341			
52	REMOVE SANITARY SEWER PIPE	LIN FT	\$ 4.00		6452		
53	REMOVE SANITARY MANHOLE	EACH	\$ 500.00		29		
54	SANITARY MANHOLE CASTING	EACH	\$ 650.00		29		
55	8" PVC SDR 35 SANITARY SEWER PIPE	LIN FT	\$ 38.00		5762		
56	10" PVC SDR 35 SANITARY SEWER PIPE	LIN FT	\$ 45.00		690		
57	LINE 8" SANITARY SEWER PIPE	LIN FT	\$ 50.00		4400		
57	LINE 18" RCP SANITARY SEWER PIPE	LIN FT	\$ 90.00		675		
58	6" PVC SDR 26 SANITARY SEWER SERVICE PIPE	LIN FT	\$ 25.00		5115		
59	8" x 6" SDR 26 PVC SERVICE WYE	EACH	\$ 200.00		155		
60	SANITARY MANHOLE	EACH	\$ 2,500.00		29		
61	RECONNECT SANITARY SEWER SERVICE	EACH	\$ 175.00		155		
62	CONNECT TO EXISTING SANITARY SEWER MANHOLE	EACH	\$ 2,500.00		1		
63	CONNECT TO EXISTING SANITARY SEWER PIPE	EACH	\$ 1,500.00		8		
64	REMOVE WATERMAIN	LIN FT	\$ 5.00			7255	
65	ABANDON WATERMAIN	LIN FT	\$ 8.00			960	
66	REMOVE HYDRANT	EACH	\$ 300.00			13	
67	CONNECT TO EXISTING WATER MAIN	EACH	\$ 1,326.00			17	
68	HYDRANT	EACH	\$ 3,832.00			17	
69	18" BUTTERFLY VALVE & BOX	EACH	\$ 6,000.00			1	
70	8" GATE VALVE & BOX	EACH	\$ 2,000.00			45	
71	6" GATE VALVE & BOX	EACH	\$ 1,400.00			17	
72	8" DIP WATER MAIN	LIN FT	\$ 45.00			7911	
73	6" DIP WATER MAIN	LIN FT	\$ 42.00			340	
74	8" DIP RJ WATER MAIN	LIN FT	\$ 85.00			800	
75	DIRECTIONAL DRILL 8" WATERMAIN	LIN FT	\$ 135.00			300	
76	DIRECTIONAL DRILL 12" WATERMAIN	LIN FT	\$ 160.00			660	
77	1" TYPE K COPPER SERVICE PIPE	LIN FT	\$ 28.00			5346	
78	1" CURB STOP & BOX	EACH	\$ 350.00			162	
79	1" CORPORATION STOP	EACH	\$ 250.00			162	
80	CONNECT TO EXISTING WATER SERVICE	EACH	\$ 200.00			162	
81	TEMPORARY WATER SERVICE	EACH	\$ 275.00			162	
82	REMOVE STORM SEWER PIPE	LIN FT	\$ 7.00				1570
83	REMOVE DRAINAGE STRUCTURE	EACH	\$ 300.00				33
84	STORM SEWER CASTING	EACH	\$ 650.00				91
85	12" RC PIPE SEWER CL V DESIGN 3006 (STORM)	LIN FT	\$ 33.00				0
86	15" RC PIPE SEWER CL V DESIGN 3006 (STORM)	LIN FT	\$ 34.00				2674
87	18" RC PIPE SEWER CL III DESIGN 3006 (STORM)	LIN FT	\$ 37.00				1020
88	21" RC PIPE SEWER CL III DESIGN 3006 (STORM)	LIN FT	\$ 40.00				680
89	24" RC PIPE SEWER CL III DESIGN 3006 (STORM)	LIN FT	\$ 44.00				550
90	27" RC PIPE SEWER CL III DESIGN 3006 (STORM)	LIN FT	\$ 55.00				0
91	42" RC PIPE SEWER CL III DESIGN 3006 (STORM)	LIN FT	\$ 33.00				600
92	48" RC PIPE SEWER CL III DESIGN 3006 (STORM)	LIN FT	\$ 55.00				130
93	STORM MANHOLE	EACH	\$ 2,500.00				19
94	STORM MANHOLE - 60"	EACH	\$ 3,500.00				8
95	STORM MANHOLE - 72"	EACH	\$ 5,000.00				4
96	STORM MANHOLE - 90"	EACH	\$ 8,000.00				1
97	STORM CATCH BASIN	EACH	\$ 1,500.00				59
98	SAFL BAFFLE W/SUMP IN MANHOLE	EACH	\$ 7,500.00				1
99	CONNECT TO EXISTING STORM PIPE	EACH	\$ 750.00				10
100	CONNECT TO EXISTING DRAINAGE STRUCTURE	EACH	\$ 1,000.00				0

SUBTOTAL

CONTINGENCIES (10%)

ENGINEERING AND ADMINISTRATION (21%)

TOTAL ESTIMATED PROJECT COST

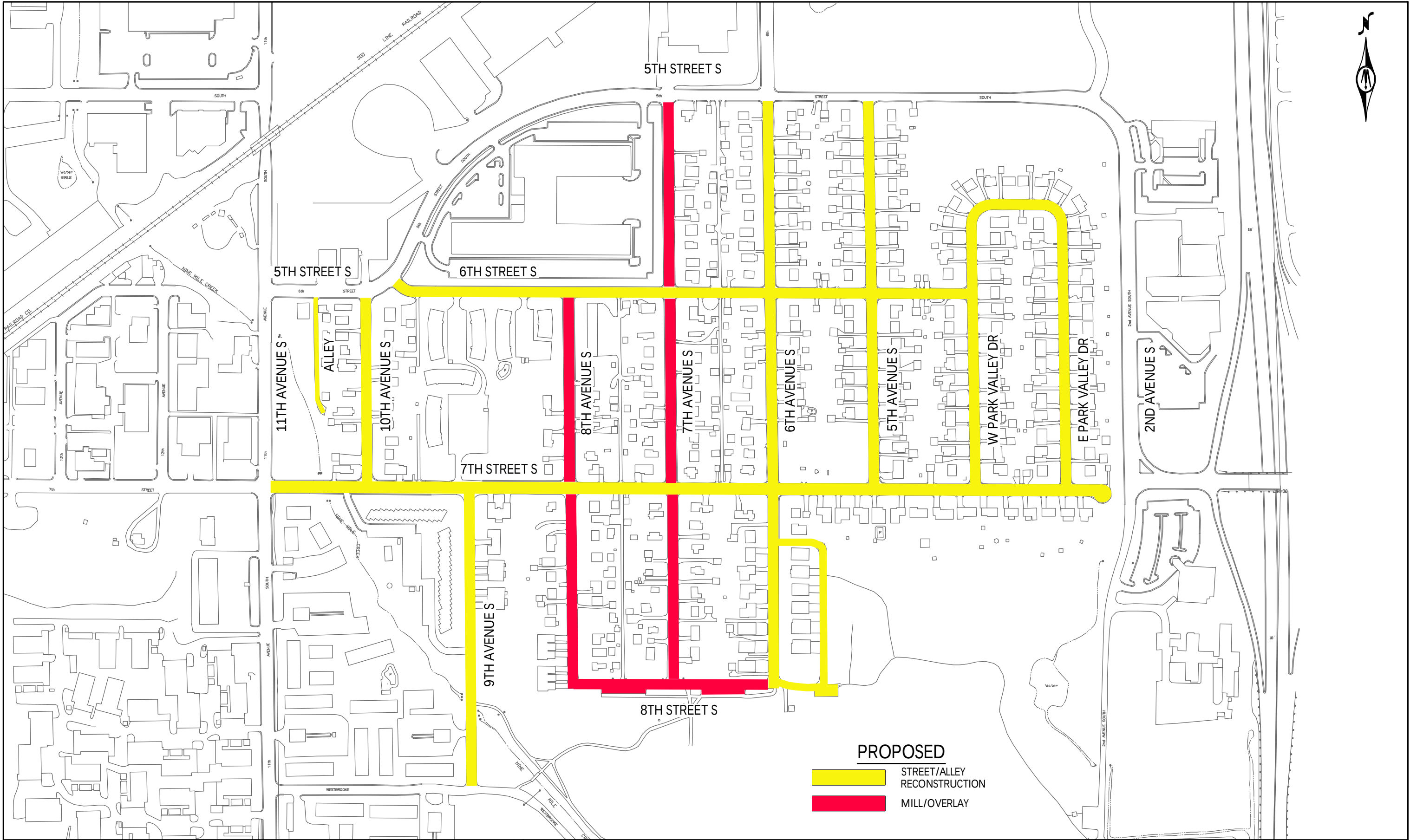
ENGINEER'S ESTIMATE
2017 STREET & UTILITY IMPROVEMENTS
CITY OF HOPKINS, MN
BMI PROJECT NO. T19.112021

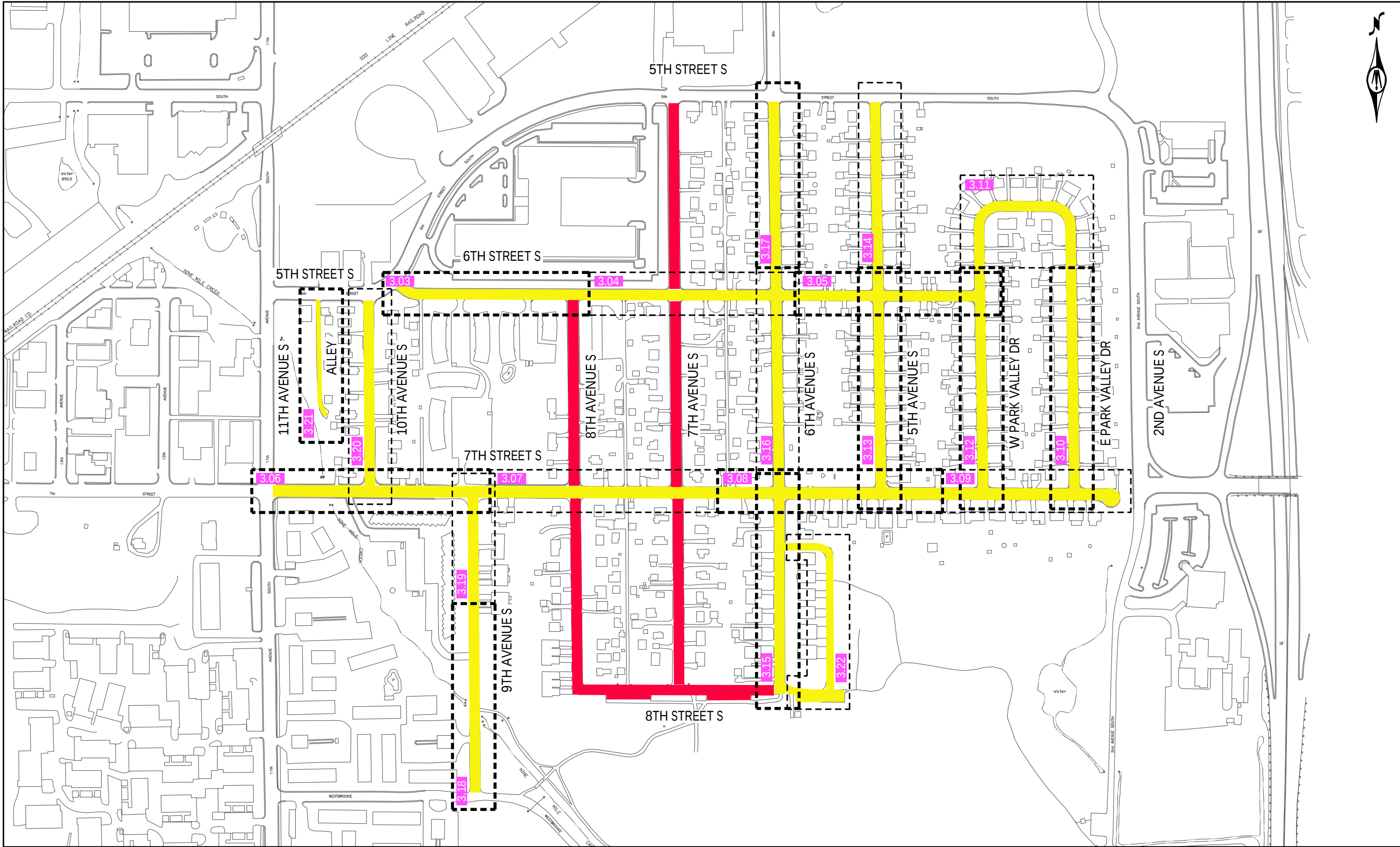
ITEM NO.	ITEM	UNIT	UNIT PRICE	ESTIMATED STREET COSTS BY CORRIDOR												
				STREET												
				10TH AVE S	9TH AVE S	8TH AVE S	7TH AVE S	6TH AVE S	5TH AVE S	E & W PARK VALLEY	6TH ST S	7TH ST S	8TH ST S	NINE MILE TRAIL	ALLEY: 5TH ST S	ALLEY: 8TH ST S
1	MOBILIZATION	LUMP SUM	\$ 200,000.00	\$ 4,000	\$ 10,000	\$ 2,000	\$ 4,000	\$ 16,000	\$ 10,000	\$ 18,000	\$ 14,000	\$ 28,000	\$ 2,000	\$ 6,000	\$ 2,000	\$ 2,000
2	CLEARING AND GRUBBING (TREE)	EACH	\$ 400.00	\$ 1,600	\$ 2,400	\$ -	\$ -	\$ 4,000	\$ 4,000	\$ 4,000	\$ 1,600	\$ 4,000	\$ -	\$ -	\$ -	\$ -
3	TREE TRIMMING	LUMP SUM	\$ 5,000.00	\$ 100	\$ 250	\$ 50	\$ 100	\$ 400	\$ 250	\$ 450	\$ 350	\$ 700	\$ 50	\$ 150	\$ 50	\$ 50
4	REMOVE BITUMINOUS PAVEMENT (TRAILS AND DRIVEWAYS)	SQ YD	\$ 4.00	\$ 260	\$ 356	\$ -	\$ -	\$ 1,376	\$ 712	\$ 1,264	\$ 364	\$ 3,436	\$ 88	\$ -	\$ -	\$ -
5	REMOVE CONCRETE PAVEMENT (WALKS, DRIVEWAYS, AND ALLEYS)	SQ YD	\$ 6.00	\$ 1,422	\$ 2,694	\$ 264	\$ 264	\$ 3,498	\$ 1,884	\$ 4,392	\$ 2,004	\$ 4,506	\$ 666	\$ -	\$ 1,014	\$ 1,014
6	REMOVE CURB & GUTTER	LIN FT	\$ 3.00	\$ 150	\$ 2160	\$ 210	\$ -	\$ 10,947	\$ 7,254	\$ 12,408	\$ 10,230	\$ 16,488	\$ -	\$ -	\$ 210	\$ 210
7	REMOVE CONCRETE STEP	EACH	\$ 100.00	\$ 500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,400	\$ -	\$ -	\$ -	\$ -
8	REMOVE CONCRETE PARKING STOP	LIN FT	\$ 20.00	\$ 1,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
9	REMOVE RETAINING WALL	SQ FT	\$ 20.00	\$ 1,200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	REMOVE FENCE	LIN FT	\$ 10.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11	SAWING CONCRETE PAVEMENT (FULL-DEPTH)	LIN FT	\$ 5.00	\$ 470	\$ 280	\$ 190	\$ 190	\$ 2,815	\$ 470	\$ 375	\$ 565	\$ 375	\$ 190	\$ -	\$ 190	\$ 190
12	SAWING BITUMINOUS PAVEMENT (FULL-DEPTH)	LIN FT	\$ 4.00	\$ 224	\$ 300	\$ -	\$ -	\$ 1,576	\$ 1,500	\$ 2,324	\$ 376	\$ 1,124	\$ 152	\$ -	\$ -	\$ -
13	COMMON EXCAVATION	CU YD	\$ 13.00	\$ 17,979	\$ 48,321	\$ 494	\$ 494	\$ 54,444	\$ 40,235	\$ 70,148	\$ 31,525	\$ 108,225	\$ 689	\$ 4,095	\$ 1,976	\$ 1,976
14	SUBGRADE EXCAVATION	CU YD	\$ 13.00	\$ 897	\$ 1,625	\$ -	\$ -	\$ 3,107	\$ 2,054	\$ 3,575	\$ 8,697	\$ 8,502	\$ -	\$ -	\$ -	\$ -
15	SELECT GRANULAR BORROW	CU YD	\$ 15.00	\$ 11,385	\$ 39,375	\$ -	\$ -	\$ 39,375	\$ 26,130	\$ 45,360	\$ 10,035	\$ 75,210	\$ -	\$ -	\$ -	\$ -
16	TOPSOIL BORROW (SPECIAL)	CU YD	\$ 25.00	\$ 3,650	\$ 5,875	\$ 625	\$ 625	\$ 1,125	\$ 7,475	\$ 12,775	\$ 11,600	\$ 15,900	\$ 625	\$ -	\$ 2,475	\$ 2,475
17	EXPLORATORY EXCAVATION	HOURL	\$ 450.00	\$ -	\$ -	\$ 900	\$ 900	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 900	\$ -	\$ 900	\$ 900
18	CLASS 5 AGGREGATE BASE	TON	\$ 14.00	\$ 13,958	\$ 25,214	\$ 140	\$ 140	\$ 48,076	\$ 31,444	\$ 55,202	\$ 51,604	\$ 8				

ENGINEER'S ESTIMATE
2017 STREET & UTILITY IMPROVEMENTS
CITY OF HOPKINS, MN
BMI PROJECT NO. T19.112021

ITEM NO.	ITEM	UNIT	UNIT PRICE	TOTAL ESTIMATED COSTS					
				STREET	UTILITIES			TOTAL QUANTITY	TOTAL COST
					SANITARY SEWER	WATER	STORM SEWER		
1	MOBILIZATION	LUMP SUM	\$ 200,000.00	\$ 118,000	\$ 30,000	\$ 34,000	\$ 18,000	1.00	\$ 200,000
2	CLEARING AND GRUBBING (TREE)	EACH	\$ 400.00	\$ 21,600	\$ -	\$ -	\$ -	54	\$ 21,600
3	TREE TRIMMING	LUMP SUM	\$ 5,000.00	\$ 2,950	\$ 750	\$ 850	\$ 450	1.00	\$ 5,000
4	REMOVE BITUMINOUS PAVEMENT (TRAILS AND DRIVEWAYS)	SQ YD	\$ 4.00	\$ 7,856	\$ -	\$ -	\$ -	1964	\$ 7,900
5	REMOVE CONCRETE PAVEMENT (WALKS, DRIVEWAYS, AND ALLEYS)	SQ YD	\$ 6.00	\$ 23,622	\$ -	\$ -	\$ -	3937	\$ 23,600
6	REMOVE CURB & GUTTER	LIN FT	\$ 3.00	\$ 60,267	\$ -	\$ -	\$ -	20089	\$ 60,300
7	REMOVE CONCRETE STEP	EACH	\$ 100.00	\$ 1,900	\$ -	\$ -	\$ -	19	\$ 1,900
8	REMOVE CONCRETE PARKING STOP	LIN FT	\$ 20.00	\$ 1,000	\$ -	\$ -	\$ -	50	\$ 1,000
9	REMOVE RETAINING WALL	SQ.FT	\$ 20.00	\$ 1,200	\$ -	\$ -	\$ -	60	\$ 1,200
10	REMOVE FENCE	LIN FT	\$ 10.00	\$ -	\$ -	\$ -	\$ -	0	\$ -
11	SAWING CONCRETE PAVEMENT (FULL-DEPTH)	LIN FT	\$ 5.00	\$ 6,300	\$ -	\$ -	\$ -	1260	\$ 6,300
12	SAWING BITUMINOUS PAVEMENT (FULL-DEPTH)	LIN FT	\$ 4.00	\$ 7,576	\$ -	\$ -	\$ -	1894	\$ 7,600
13	COMMON EXCAVATION	CU YD	\$ 13.00	\$ 380,601	\$ -	\$ -	\$ -	29277	\$ 380,600
14	SUBGRADE EXCAVATION	CU YD	\$ 13.00	\$ 28,457	\$ -	\$ -	\$ -	2189	\$ 28,500
15	SELECT GRANULAR BORROW	CU YD	\$ 15.00	\$ 246,870	\$ -	\$ -	\$ -	16458	\$ 246,900
16	TOPSOIL BORROW (SPECIAL)	CU YD	\$ 25.00	\$ 65,225	\$ -	\$ -	\$ -	2609	\$ 65,200
17	EXPLORATORY EXCAVATION	HOURL	\$ 450.00	\$ 4,500	\$ -	\$ -	\$ -	10	\$ 4,500
18	CLASS 5 AGGREGATE BASE	TON	\$ 14.00	\$ 329,896	\$ -	\$ -	\$ -	23564	\$ 329,900
19	CLASS 2 AGGREGATE SURFACING (GRAVEL DRIVEWAY)	TON	\$ 29.00	\$ 2,204	\$ -	\$ -	\$ -	76	\$ 2,200
20	MILL OR RECLAIM BITUMINOUS SURFACE	SQ YD	\$ 2.50	\$ 149,755	\$ -	\$ -	\$ -	59902	\$ 149,800
21	BITUMINOUS WEARING COURSE (SPWEA240C)	TON	\$ 70.00	\$ 473,690	\$ -	\$ -	\$ -	6767	\$ 473,700
22	BITUMINOUS NON-WEARING COURSE (SPNWB230C)	TON	\$ 65.00	\$ 322,010	\$ -	\$ -	\$ -	4954	\$ 322,000
23	BITUMINOUS MATERIAL FOR TACK COAT	GAL	\$ 4.00	\$ 13,172	\$ -	\$ -	\$ -	3293	\$ 13,200
24	3" BITUMINOUS DRIVEWAY & PAVEMENT (SPWEA240B)	SQ YD	\$ 20.00	\$ 74,840	\$ -	\$ -	\$ -	3742	\$ 74,800
25	MODULAR BLOCK RETAINING WALL	SQ.FT	\$ 45.00	\$ -	\$ -	\$ -	\$ -	0	\$ -
26	CONTECH PREFABRICATED PEDESTRIAN BRIDGE	LUMP SUM	\$ 50,000.00	\$ 50,000	\$ -	\$ -	\$ -	1.00	\$ 50,000
27	PEDESTRIAN BRIDGE ABUTMENT	EACH	\$ 25,000.00	\$ 50,000	\$ -	\$ -	\$ -	2	\$ 50,000
28	4" CONCRETE WALK	SQ.FT	\$ 3.70	\$ 20,398	\$ -	\$ -	\$ -	5513	\$ 20,400
29	TRUNCATED DOMES	SQ.FT	\$ 42.00	\$ 4,536	\$ -	\$ -	\$ -	108	\$ 4,500
30	CONCRETE STEP	EACH	\$ 225.00	\$ 3,150	\$ -	\$ -	\$ -	14	\$ 3,200
31	CONCRETE CURB & GUTTER	LIN FT	\$ 13.00	\$ 291,551	\$ -	\$ -	\$ -	22427	\$ 291,600
32	SPOT CONCRETE CURB & GUTTER REPLACEMENT	LIN FT	\$ 27.00	\$ -	\$ -	\$ -	\$ -	0	\$ -
33	6" CONCRETE DRIVEWAYS & PEDESTRIAN RAMPS	SQ YD	\$ 60.00	\$ 201,240	\$ -	\$ -	\$ -	3354	\$ 201,200
34	6" CONCRETE ALLEY	SQ YD	\$ 60.00	\$ 81,480	\$ -	\$ -	\$ -	1358	\$ 81,500
35	ALLEY CONCRETE TIE-BARS	EACH	\$ 22.00	\$ 11,198	\$ -	\$ -	\$ -	509	\$ 11,200
36	TRAFFIC CONTROL	LUMP SUM	\$ 25,000.00	\$ 14,750	\$ 3,750	\$ 4,250	\$ 2,250	1.00	\$ 25,000
37	ZEBRA CROSSWALK BLOCK - WHITE EPOXY	SQ.FT	\$ 7.00	\$ 4,536	\$ -	\$ -	\$ -	648	\$ 4,500
38	TRAFFIC SIGN POST	EACH	\$ 193.00	\$ 5,018	\$ -	\$ -	\$ -	26	\$ 5,000
39	SIGN PANELS (TYPE C)	SQ.FT	\$ 59.00	\$ 1,416	\$ -	\$ -	\$ -	24	\$ 1,400
40	SIGN PANELS (TYPE D)	SQ.FT	\$ 63.00	\$ 1,323	\$ -	\$ -	\$ -	21	\$ 1,300
41	LANDSCAPE ALLOWANCE	LUMP SUM	\$ 30,000.00	\$ 17,700	\$ 4,500	\$ 5,100	\$ 2,700	1.00	\$ 30,000
42	DECIDUOUS TREE - 2-INCH DIAMETER B&B	EACH	\$ 350.00	\$ 3,850	\$ -	\$ -	\$ -	11	\$ 3,900
43	DECIDUOUS TREE - 2-INCH DIAMETER B&B (WHITE OAK)	EACH	\$ 350.00	\$ 3,850	\$ -	\$ -	\$ -	11	\$ 3,900
44	DECIDUOUS TREE - 2-INCH DIAMETER B&B (PARKWAY NORWAY MAPLE)	EACH	\$ 350.00	\$ 3,850	\$ -	\$ -	\$ -	11	\$ 3,900
45	DECIDUOUS TREE - 2-INCH DIAMETER B&B (RED OAK)	EACH	\$ 350.00	\$ 3,850	\$ -	\$ -	\$ -	11	\$ 3,900
46	DECIDUOUS TREE - 2-INCH DIAMETER B&B (GREENSPIRE LINDEN)	EACH	\$ 350.00	\$ 3,850	\$ -	\$ -	\$ -	11	\$ 3,900
47	DECIDUOUS TREE - 2-INCH DIAMETER B&B (CATHEDRAL ELM - DISEASE RESISTANT)	EACH	\$ 350.00	\$ 3,850	\$ -	\$ -	\$ -	11	\$ 3,900
48	INLET PROTECTION	EACH	\$ 150.00	\$ 8,550	\$ -	\$ -	\$ -	57	\$ 8,600
49	SILT FENCE	LIN FT	\$ 2.30	\$ 2,300	\$ -	\$ -	\$ -	1000	\$ 2,300
50	STREET SWEEPER WITH OPERATOR	HOURL	\$ 150.00	\$ 5,400	\$ -	\$ -	\$ -	36	\$ 5,400
51	TURF RESTORATION	SQ YD	\$ 4.00	\$ 117,364	\$ -	\$ -	\$ -	29341	\$ 117,400
52	REMOVE SANITARY SEWER PIPE	LIN FT	\$ 4.00	\$ -	\$ 25,808	\$ -	\$ -	6452	\$ 25,800
53	REMOVE SANITARY MANHOLE	EACH	\$ 500.00	\$ -	\$ 14,500	\$ -	\$ -	29	\$ 14,500
54	SANITARY MANHOLE CASTING	EACH	\$ 650.00	\$ -	\$ 18,850	\$ -	\$ -	29	\$ 18,900
55	8" PVC SDR 35 SANITARY SEWER PIPE	LIN FT	\$ 38.00	\$ -	\$ 218,956	\$ -	\$ -	5762	\$ 219,000
56	10" PVC SDR 35 SANITARY SEWER PIPE	LIN FT	\$ 45.00	\$ -	\$ 31,050	\$ -	\$ -	690	\$ 31,100
57	LINE 8" SANITARY SEWER PIPE	LIN FT	\$ 50.00	\$ -	\$ 220,000	\$ -	\$ -	4400	\$ 220,000
57	LINE 18" RCP SANITARY SEWER PIPE	LIN FT	\$ 90.00	\$ -	\$ 60,750	\$ -	\$ -	675	\$ 60,800
58	6" PVC SDR 26 SANITARY SEWER SERVICE PIPE	LIN FT	\$ 25.00	\$ -	\$ 127,875	\$ -	\$ -	5115	\$ 127,900
59	8" x 6" SDR 26 PVC SERVICE WYE	EACH	\$ 200.00	\$ -	\$ 31,000	\$ -	\$ -	155	\$ 31,000
60	SANITARY MANHOLE	EACH	\$ 2,500.00	\$ -	\$ 72,500	\$ -	\$ -	29	\$ 72,500
61	RECONNECT SANITARY SEWER SERVICE	EACH	\$ 175.00	\$ -	\$ 27,125	\$ -	\$ -	155	\$ 27,100
62	CONNECT TO EXISTING SANITARY SEWER MANHOLE	EACH	\$ 2,500.00	\$ -	\$ 2,500	\$ -	\$ -	1	\$ 2,500
63	CONNECT TO EXISTING SANITARY SEWER PIPE	EACH	\$ 1,500.00	\$ -	\$ 12,000	\$ -	\$ -	8	\$ 12,000
64	REMOVE WATERMAIN	LIN FT	\$ 5.00	\$ -	\$ -	\$ 36,275	\$ -	7255	\$ 36,300
65	ABANDON WATERMAIN	LIN FT	\$ 8.00	\$ -	\$ -	\$ 7,680	\$ -	960	\$ 7,700
66	REMOVE HYDRANT	EACH	\$ 300.00	\$ -	\$ -	\$ 3,900	\$ -	13	\$ 3,900
67	CONNECT TO EXISTING WATER MAIN	EACH	\$ 1,326.00	\$ -	\$ -	\$ 22,542	\$ -	17	\$ 22,500
68	HYDRANT	EACH	\$ 3,832.00	\$ -	\$ -	\$ 65,144	\$ -	17	\$ 65,100
69	18" BUTTERFLY VALVE & BOX	EACH	\$ 6,000.00	\$ -	\$ -	\$ 6,000	\$ -	1	\$ 6,000
70	8" GATE VALVE & BOX	EACH	\$ 2,000.00	\$ -	\$ -	\$ 90,000	\$ -	45	\$ 90,000
71	6" GATE VALVE & BOX	EACH	\$ 1,400.00	\$ -	\$ -	\$ 23,800	\$ -	17	\$ 23,800
72	8" DIP WATER MAIN	LIN FT	\$ 45.00	\$ -	\$ -	\$ 355,995	\$ -	7911	\$ 356,000
73	6" DIP WATER MAIN	LIN FT	\$ 42.00	\$ -	\$ -	\$ 14,280	\$ -	340	\$ 14,300
74	8" DIP RJ WATER MAIN	LIN FT	\$ 85.00	\$ -	\$ -	\$ 68,000	\$ -	800	\$ 68,000
75	DIRECTIONAL DRILL 8" WATERMAIN	LIN FT	\$ 135.00	\$ -	\$ -	\$ 40,500	\$ -	300	\$ 40,500
76	DIRECTIONAL DRILL 12" WATERMAIN	LIN FT	\$ 160.00	\$ -	\$ -	\$ 105,600	\$ -	660	\$ 105,600
77	1" TYPE K COPPER SERVICE PIPE	LIN FT	\$ 28.00	\$ -	\$ -	\$ 149,688	\$ -	5346	\$ 149,700
78	1" CURB STOP & BOX	EACH	\$ 350.00	\$ -	\$ -	\$ 56,700	\$ -	162	\$ 56,700
79	1" CORPORATION STOP	EACH	\$ 250.00	\$ -	\$ -	\$ 40,500	\$ -	162	\$ 40,500
80	CONNECT TO EXISTING WATER SERVICE	EACH	\$ 200.00	\$ -	\$ -	\$ 32,400	\$ -	162	\$ 32,400
81	TEMPORARY WATER SERVICE	EACH	\$ 275.00	\$ -	\$ -	\$ 44,550	\$ -	162	\$ 44,600
82	REMOVE STORM SEWER PIPE	LIN FT	\$ 7.00	\$ -	\$ -	\$ -	\$ 10,990	1570	\$ 11,000
83	REMOVE DRAINAGE STRUCTURE	EACH	\$ 300.00	\$ -	\$ -	\$ -	\$ 9,900	33	\$ 9,900
84	STORM SEWER CASTING	EACH	\$ 650.00	\$ -	\$ -	\$ -	\$ 59,150	91	\$ 59,200
85	12" RC PIPE SEWER CL V DESIGN 3006 (STORM)	LIN FT	\$ 33.00	\$ -	\$ -	\$ -	\$ -	0	\$ -
86	15" RC PIPE SEWER CL V DESIGN 3006 (STORM)	LIN FT	\$ 34.00	\$ -	\$ -	\$ -	\$ 90,916	2674	\$ 90,900
87	18" RC PIPE SEWER CL III DESIGN 3006 (STORM)	LIN FT	\$ 37.00	\$ -	\$ -	\$ -	\$ 37,740	1020	\$ 37,700
88	21" RC PIPE SEWER CL III DESIGN 3006 (STORM)	LIN FT	\$ 40.00	\$ -	\$ -	\$ -	\$ 27,200	680	\$ 27,200
89	24" RC PIPE SEWER CL III DESIGN 3006 (STORM)	LIN FT	\$ 44.00	\$ -	\$ -	\$ -	\$ 24,200	550	\$ 24,200
90	27" RC PIPE SEWER CL III DESIGN 3006 (STORM)	LIN FT	\$ 55.00	\$ -	\$ -	\$ -	\$ -	0	\$ -
91	42" RC PIPE SEWER CL III DESIGN 3006 (STORM)	LIN FT	\$ 33.00	\$ -	\$ -	\$ -	\$ 19,800	600	\$ 19,800
92	48" RC PIPE SEWER CL III DESIGN 3006 (STORM)	LIN FT	\$ 55.00	\$ -	\$ -	\$ -	\$ 7,150	130	\$ 7,200
93	STORM MANHOLE	EACH	\$ 2,500.00	\$ -	\$ -	\$ -	\$ 47,500	19	\$ 47,500
94	STORM MANHOLE - 60"	EACH	\$ 3,500.00	\$ -	\$ -	\$ -	\$ 28,000	8	\$ 28,000
95	STORM MANHOLE - 72"	EACH	\$ 5,000.00	\$ -	\$ -	\$ -	\$ 20,000	4	\$ 20,000
96	STORM MANHOLE - 90"	EACH	\$ 8,000.00	\$ -	\$ -	\$ -	\$ 8,000	1	\$ 8,000
97	STORM CATCH BASIN	EACH	\$ 1,500.00	\$ -	\$ -	\$ -	\$ 88,500	59	\$ 88,500
98	SAFL BAFFLE W/SUMP IN MANHOLE	EACH	\$ 7,500.00	\$ -	\$ -	\$ -	\$ 7,500	1	\$ 7,500
99	CONNECT TO EXISTING STORM PIPE	EACH	\$ 750.00	\$ -	\$ -	\$ -	\$ 7,500	10	\$ 7,500
100	CONNECT TO EXISTING DRAINAGE STRUCTURE	EACH	\$ 1,000.00	\$ -	\$ -	\$ -	\$ -	0	\$ -
SUBTOTAL				\$ 3,258,500	\$ 901,900	\$ 1,207,800	\$ 517,400		\$ 5,886,000
CONTINGENCIES (10%)				\$ 325,900	\$ 90,200	\$ 120,800	\$ 51,700	\$ -	\$ 588,600
ENGINEERING AND ADMINISTRATION (21%)				\$ 752,700	\$ 208,300	\$ 279,000	\$ 119,500	\$ -	\$ 1,359,700
TOTAL ESTIMATED PROJECT COST				\$ 4,337,100	\$ 1,200,400	\$ 1,607,600	\$ 688,600		\$ 7,834,300

Appendix B: Figures





EXISTING FIGURES

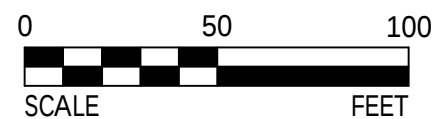
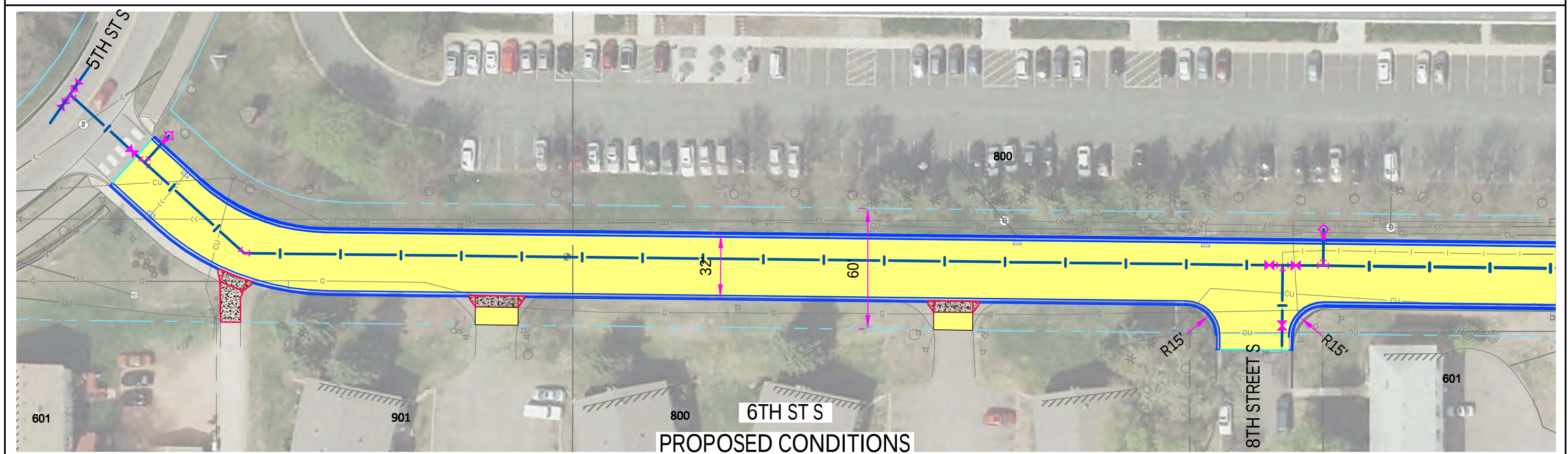
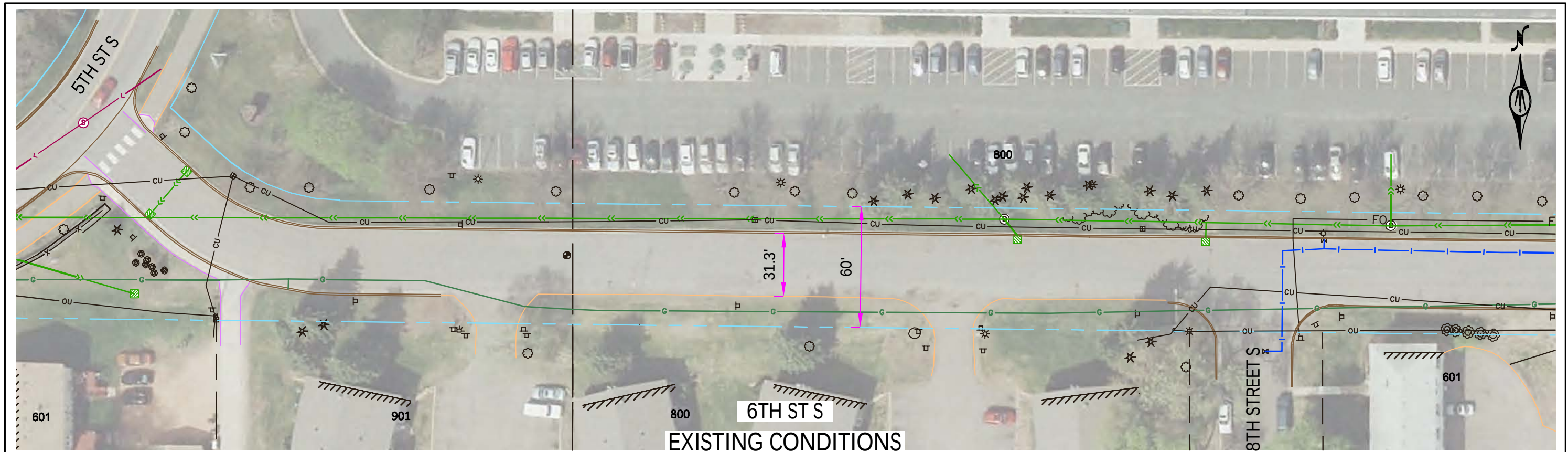
EXISTING	
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	CONCRETE CURB
	GRAVEL EDGE
	RIGHT-OF-WAY
	SANITARY SEWER
	SANITARY MANHOLE
	STORM SEWER
	STORM MANHOLE
	STORM CATCH BASIN
	WATERMAIN
	HYDRANT
	GATE VALVE

PROPOSED FIGURES

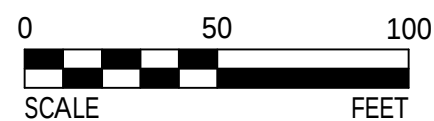
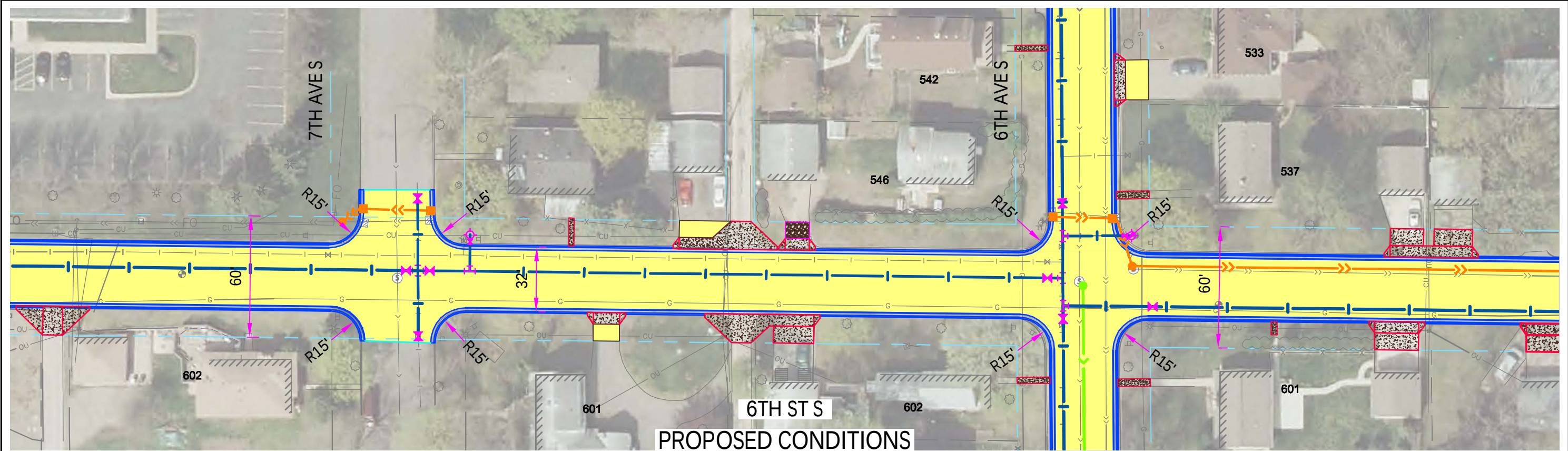
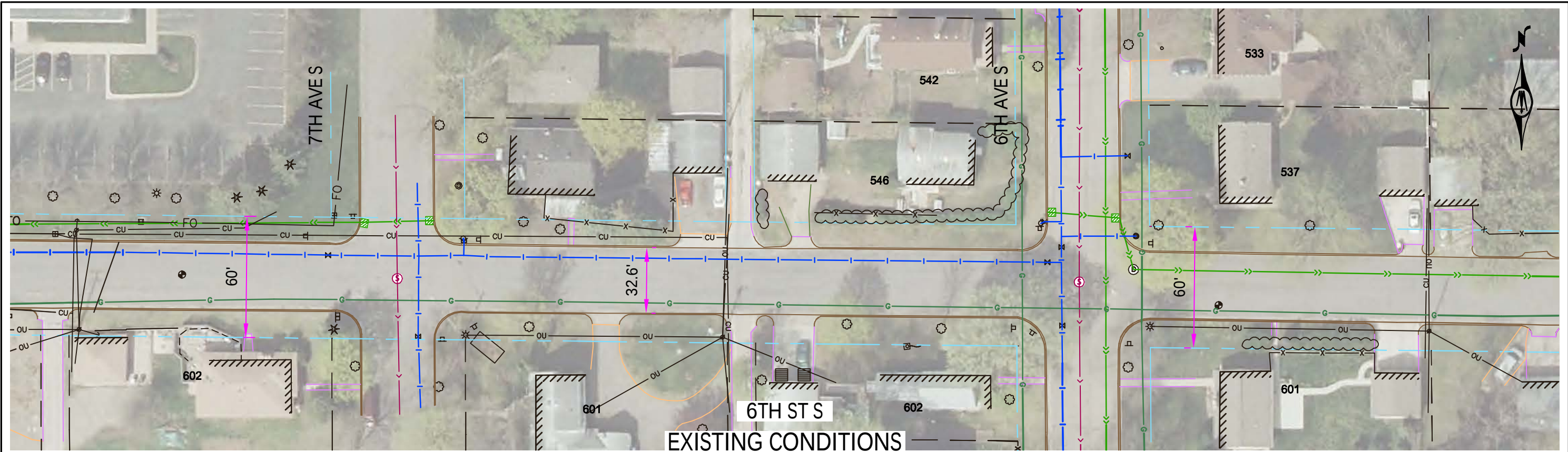
PROPOSED	
	CURB & GUTTER
	BITUMINOUS PAVEMENT
	CONCRETE DRIVEWAY
	CONCRETE SIDEWALK
	BITUMINOUS TRAIL
	PAVERS
	STORM MANHOLE
	STORM CATCH BASIN
	STORM SEWER
	SANITARY SEWER MANHOLE
	SANITARY SEWER
	HYDRANT & VALVE
	GATE VALVE
	WATERMAIN
	TREE REMOVAL

EXISTING BACKGROUND	
	BITUMINOUS
	CONCRETE
	CONCRETE CURB
	GRAVEL
	RIGHT-OF-WAY
	SANITARY SEWER
	SANITARY MANHOLE
	STORM SEWER
	STORM MANHOLE
	STORM CATCH BASIN
	WATERMAIN
	HYDRANT
	GATE VALVE

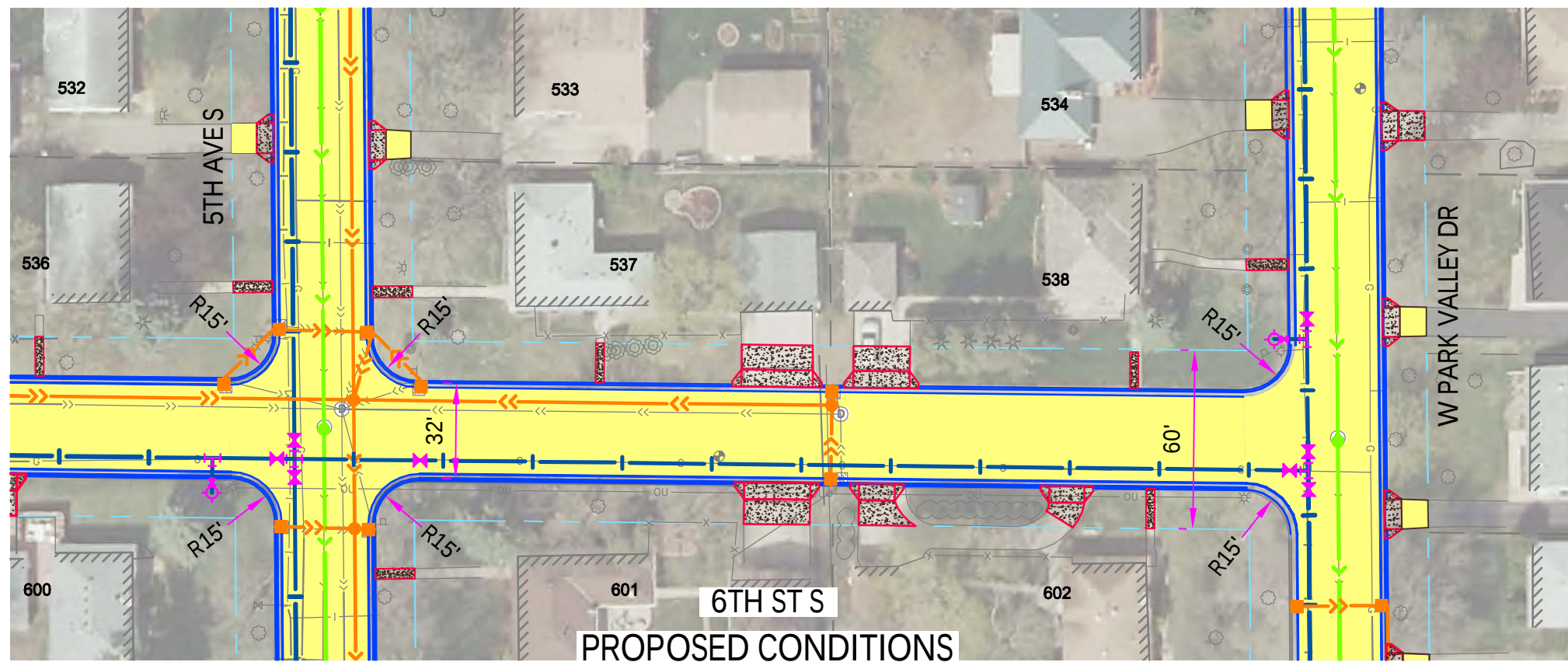
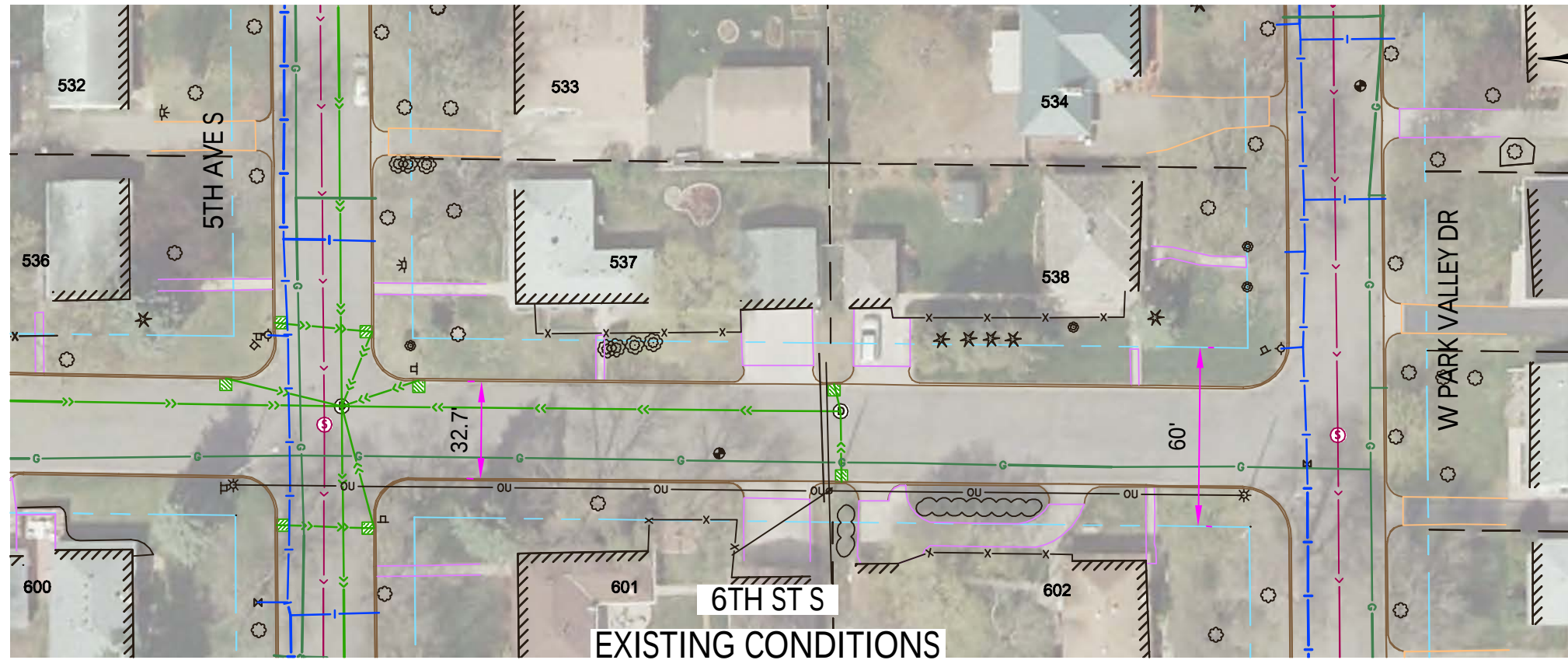




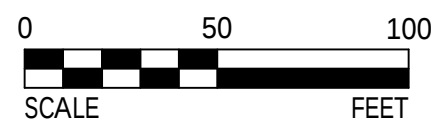
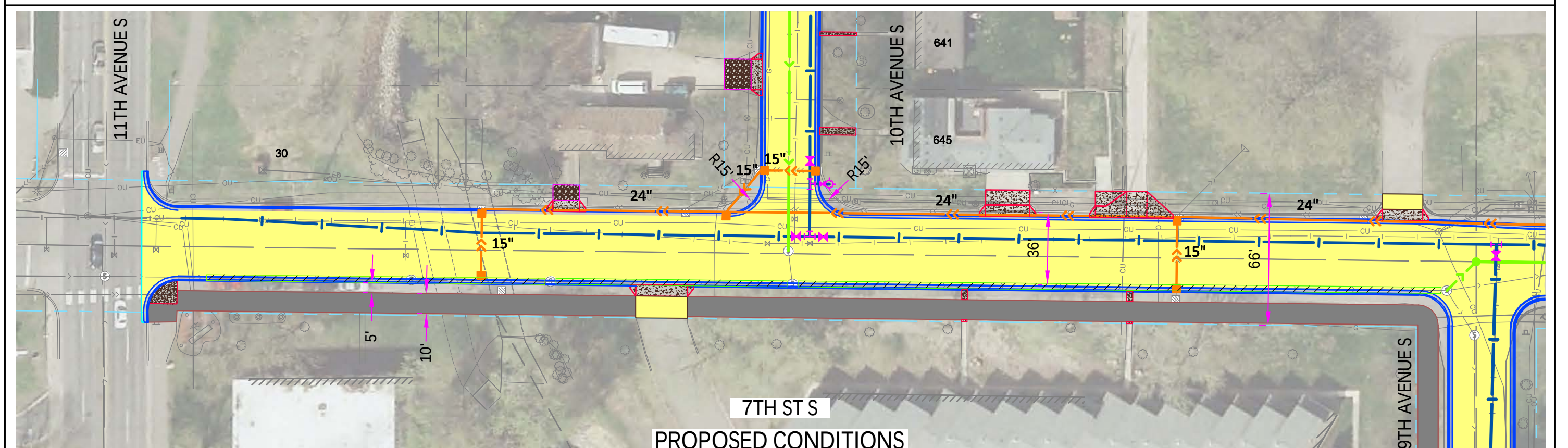
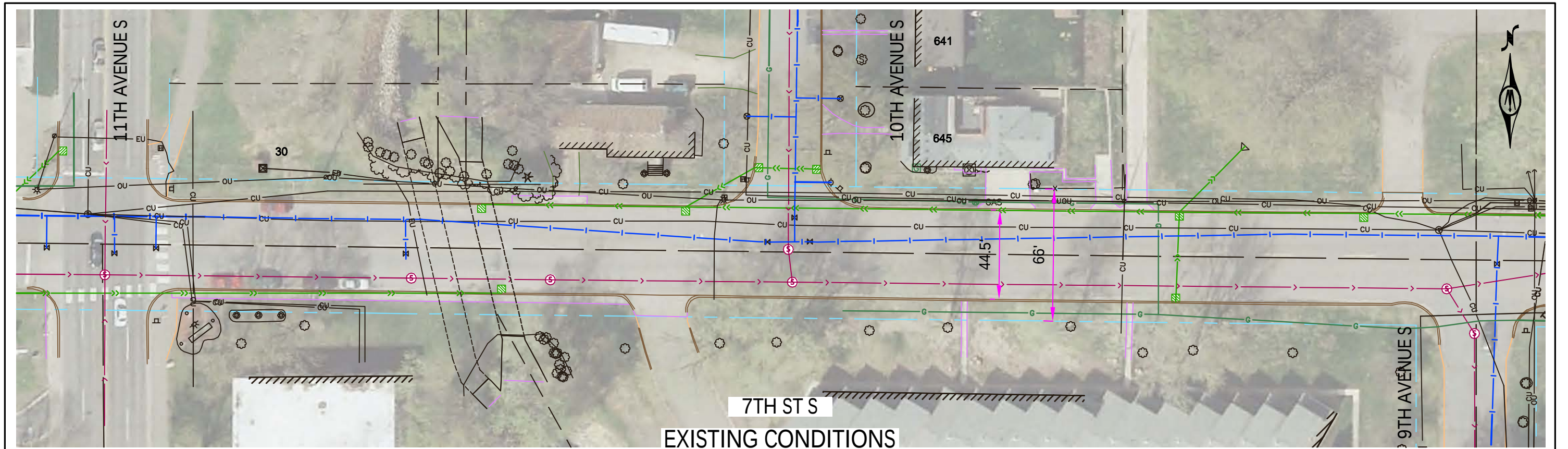
CITY OF HOPKINS
2017 STREET & UTILITY IMPROVEMENTS
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6TH STREET S



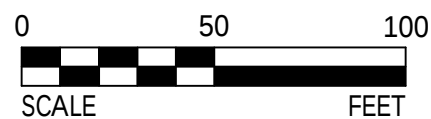
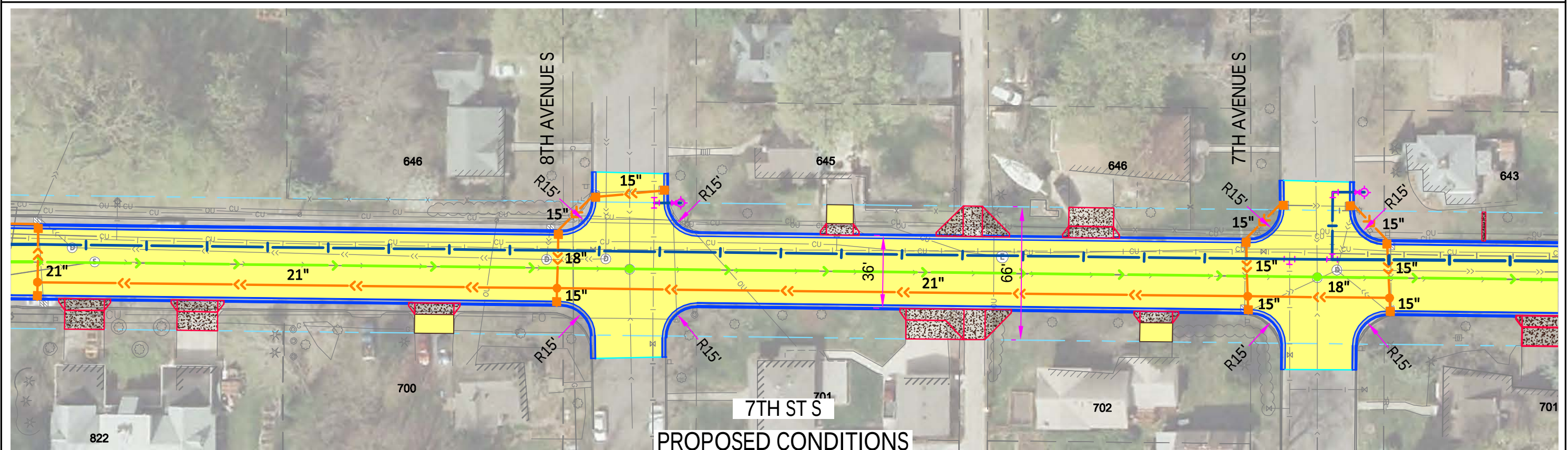
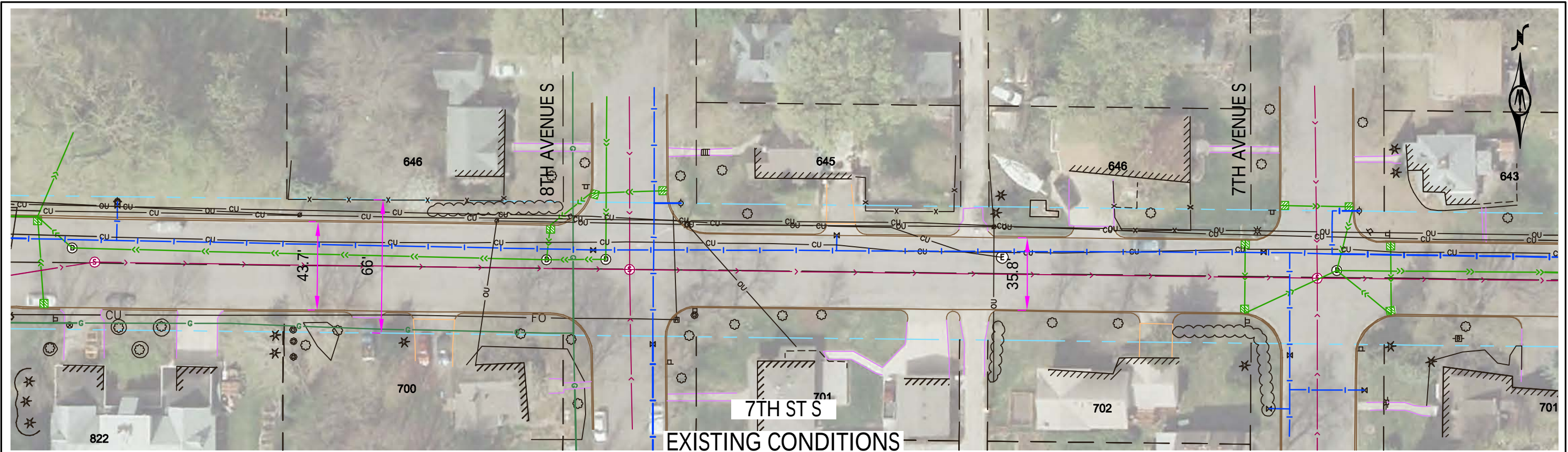
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2017 STREET & UTILITY IMPROVEMENTS
EXISTING/PROPOSED CONDITIONS
6TH STREET S



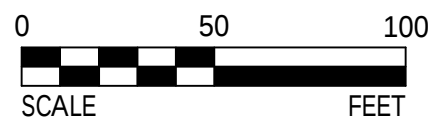
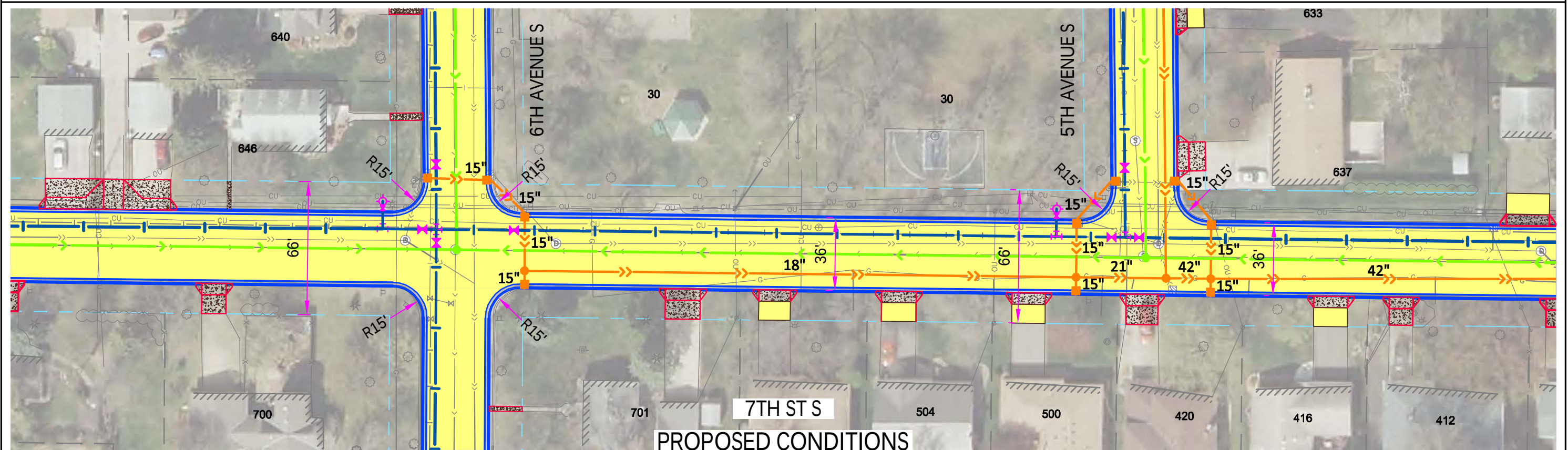
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2017 STREET & UTILITY IMPROVEMENTS
EXISTING/PROPOSED CONDITIONS
6TH STREET S



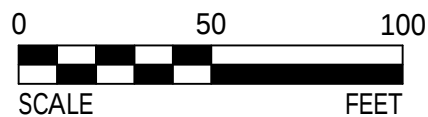
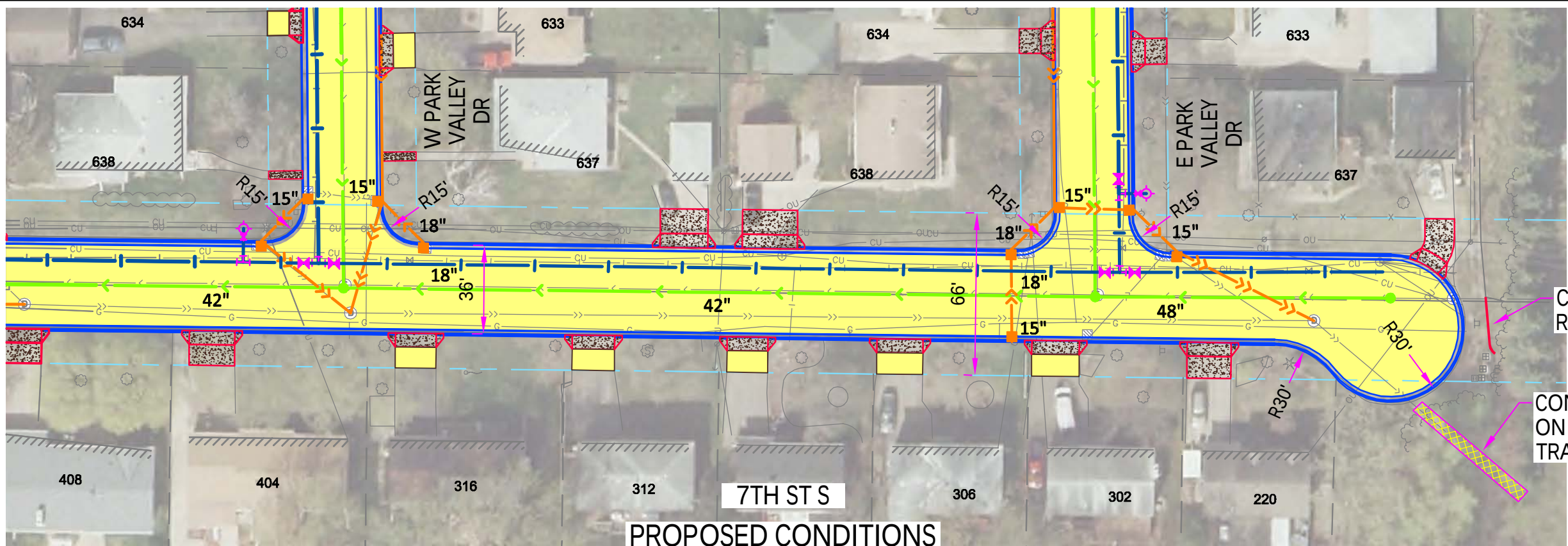
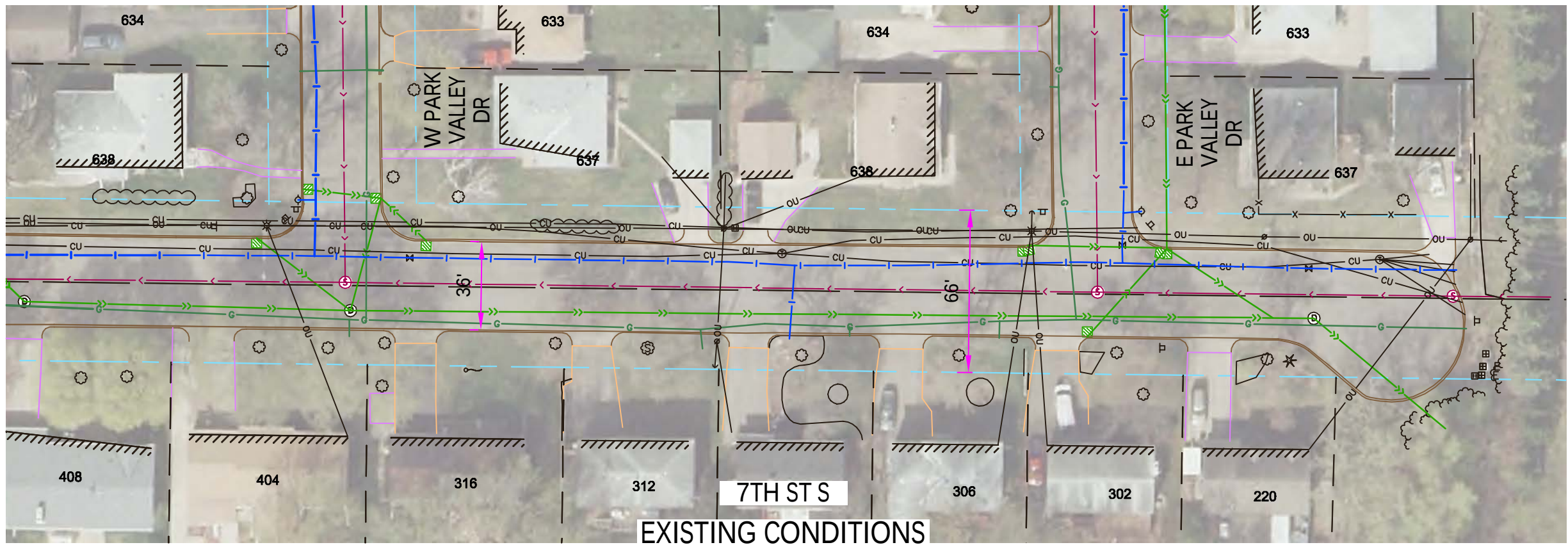
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2017 STREET & UTILITY IMPROVEMENTS
EXISTING/PROPOSED CONDITIONS
7TH STREET S



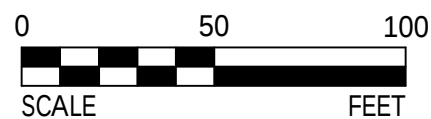
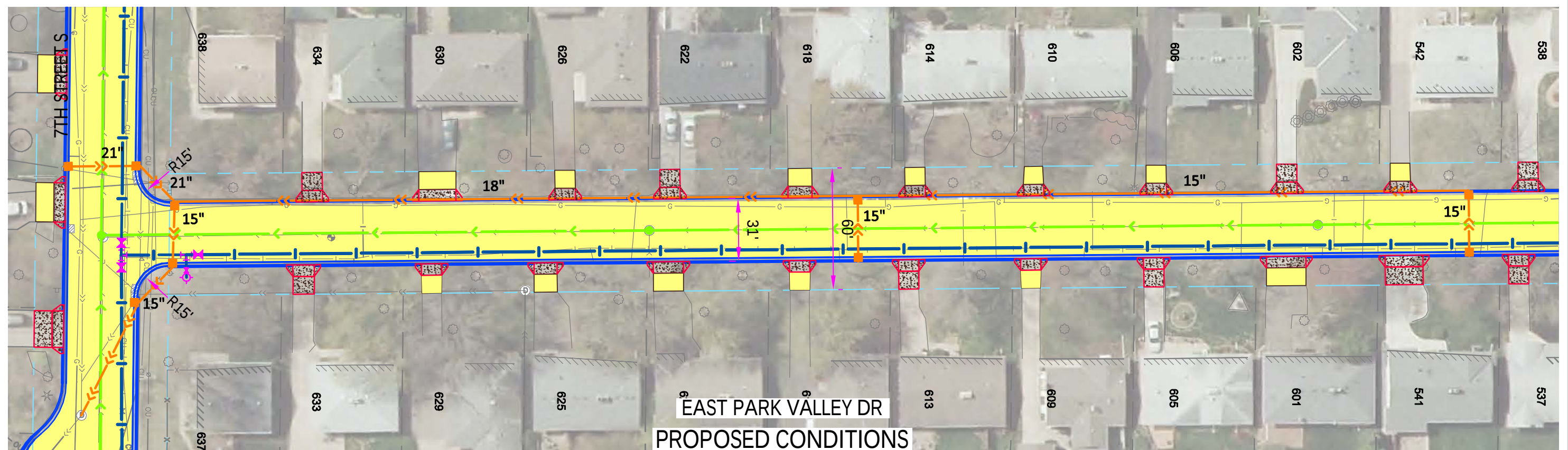
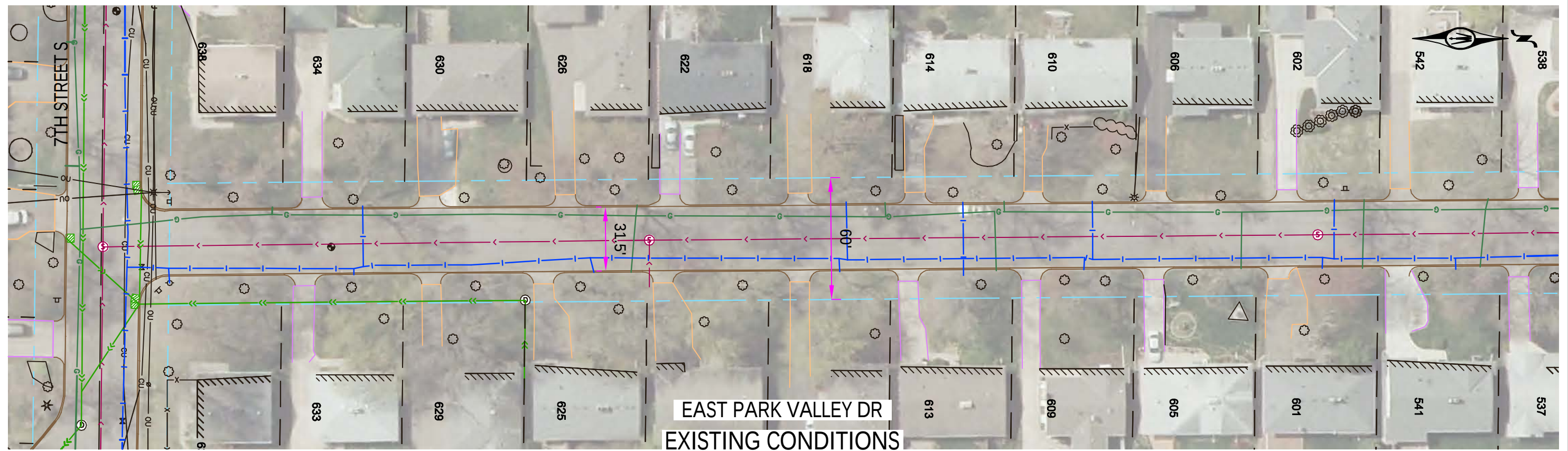
CITY OF HOPKINS
2017 STREET & UTILITY IMPROVEMENTS
EXISTING/PROPOSED CONDITIONS
7TH STREET S



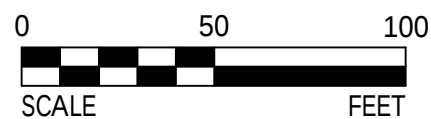
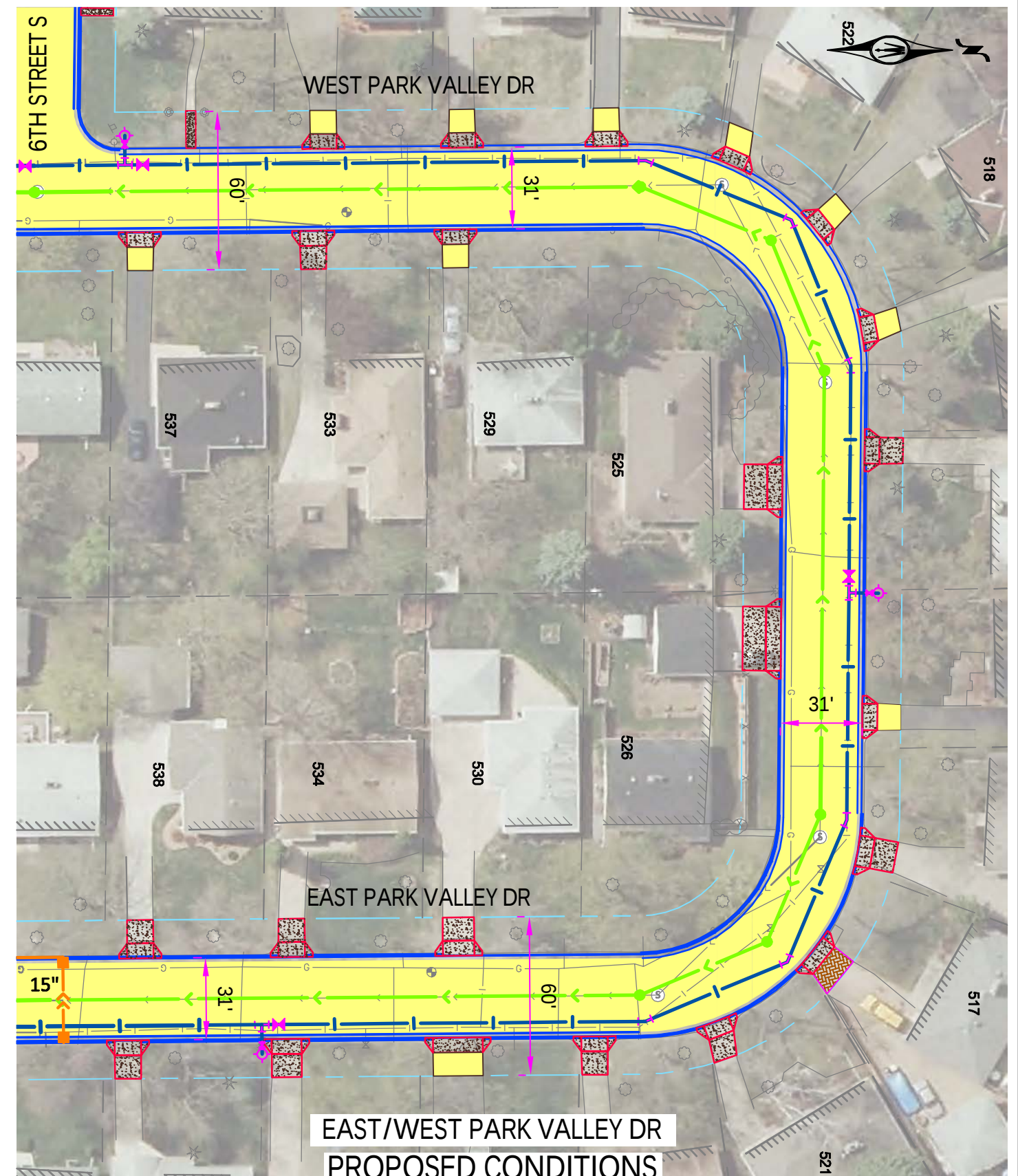
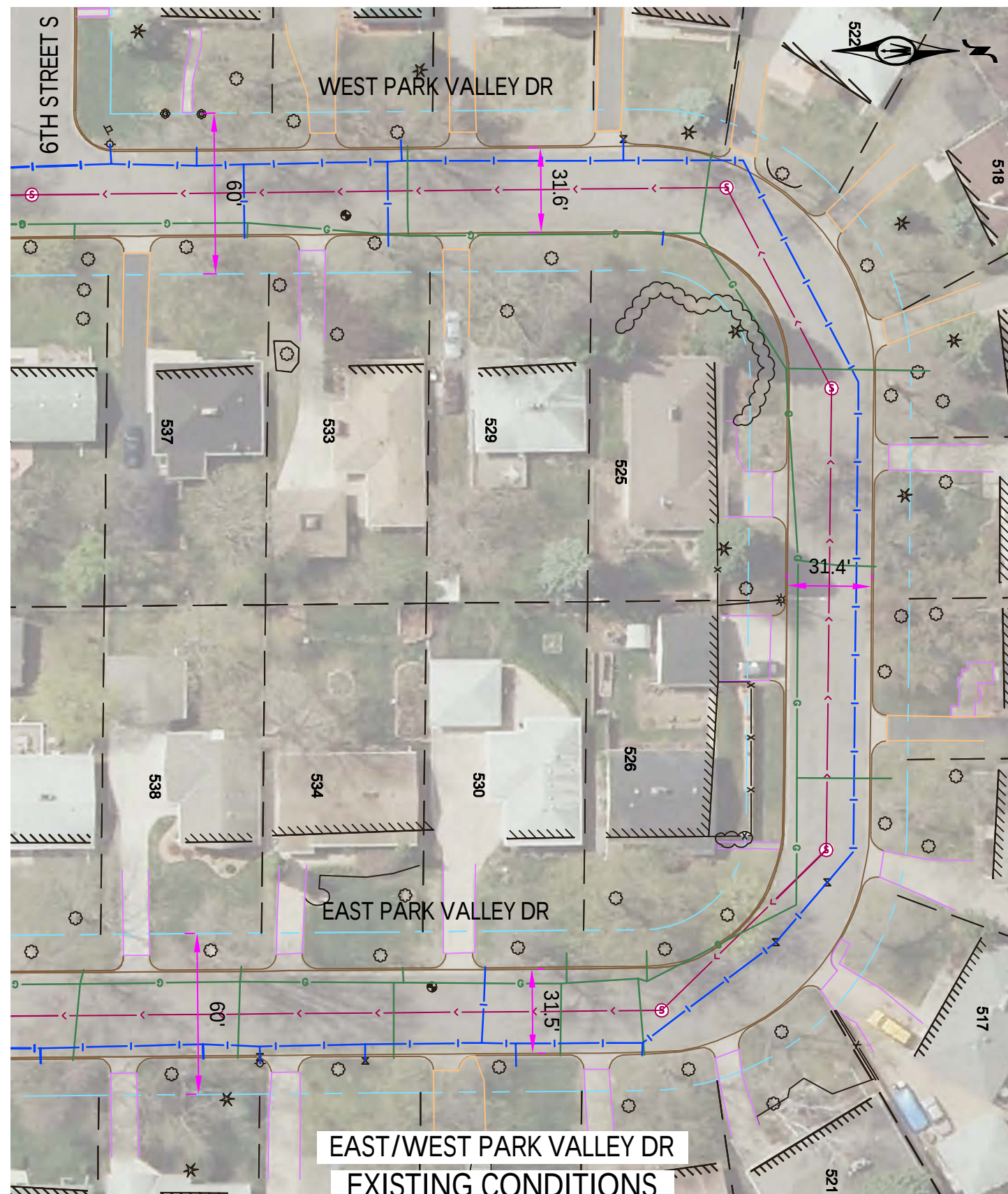
CITY OF HOPKINS
2017 STREET & UTILITY IMPROVEMENTS
EXISTING/PROPOSED CONDITIONS
7TH STREET S



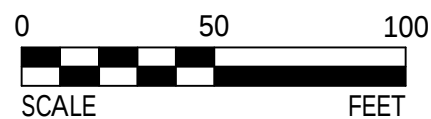
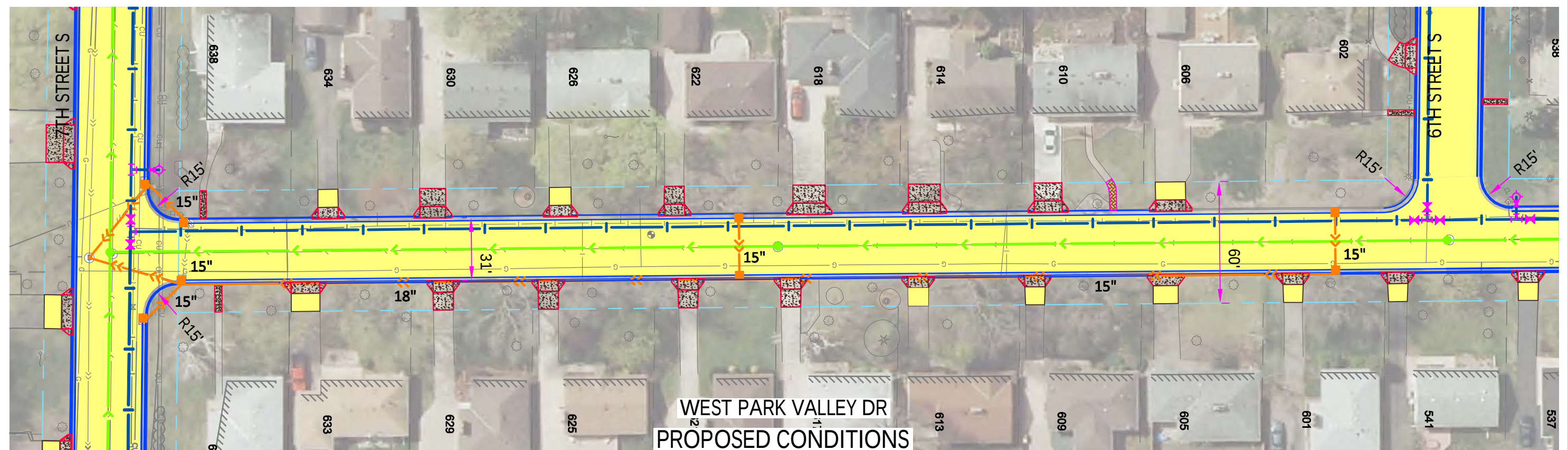
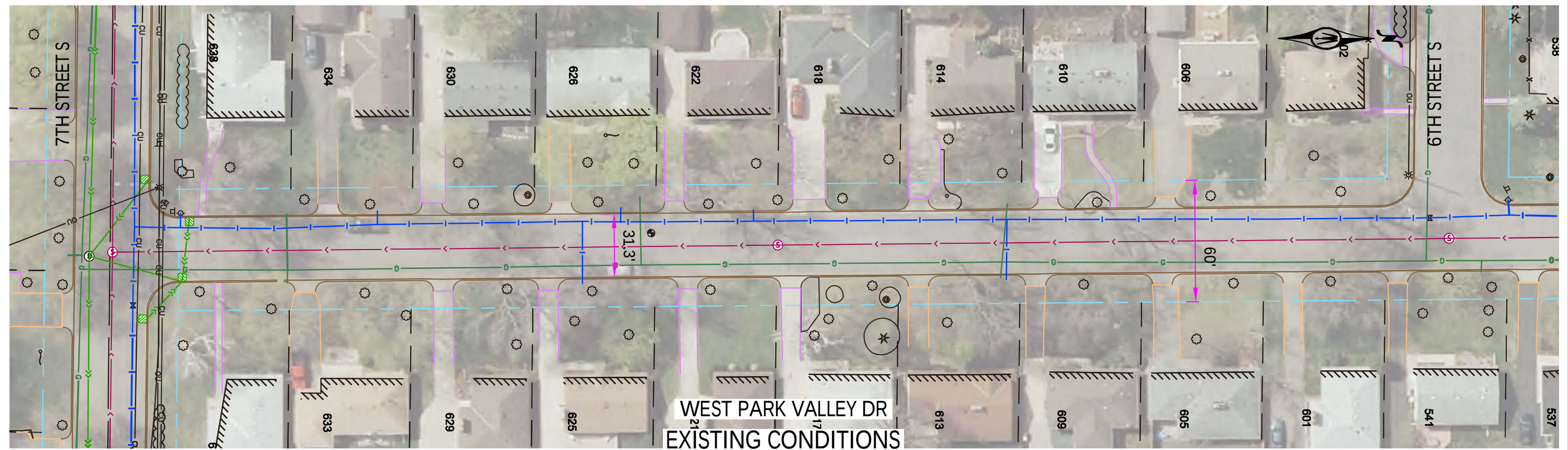
CITY OF HOPKINS
2017 STREET & UTILITY IMPROVEMENTS
EXISTING/PROPOSED CONDITIONS
7TH STREET S



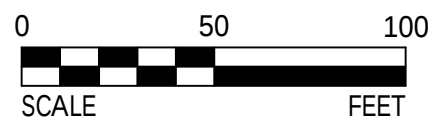
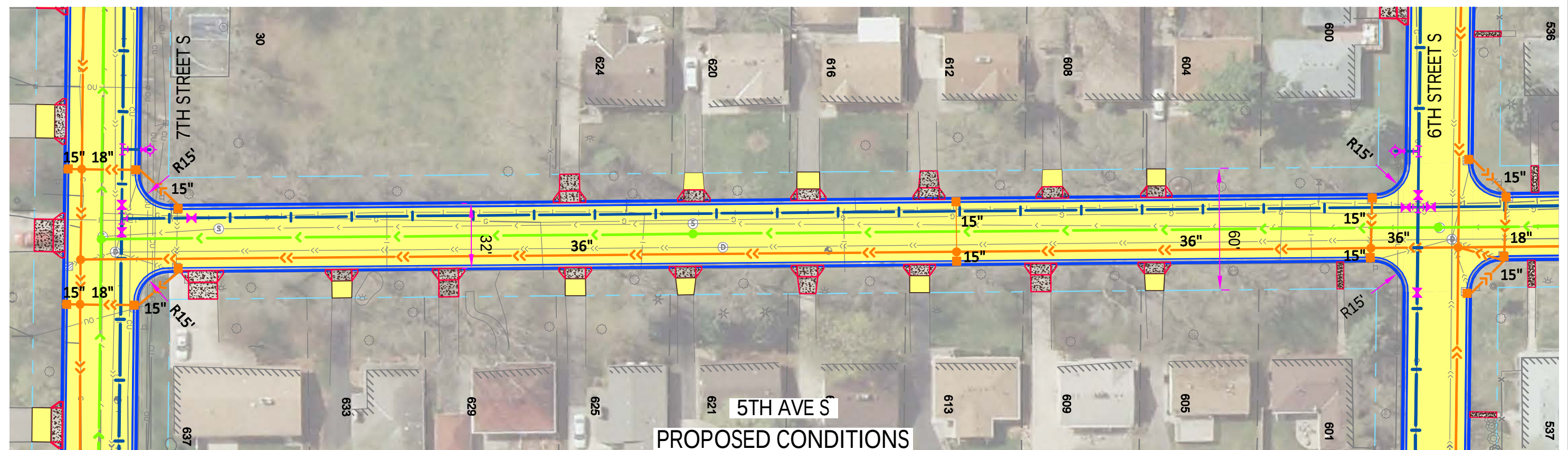
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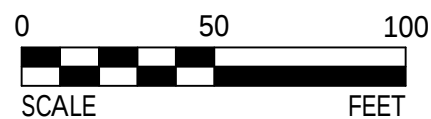
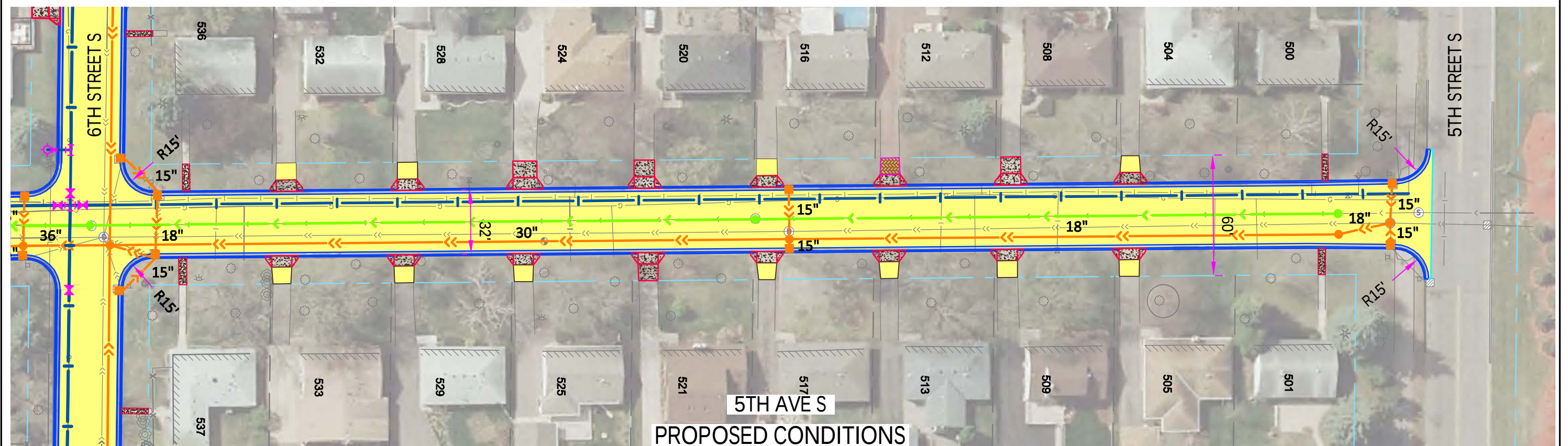
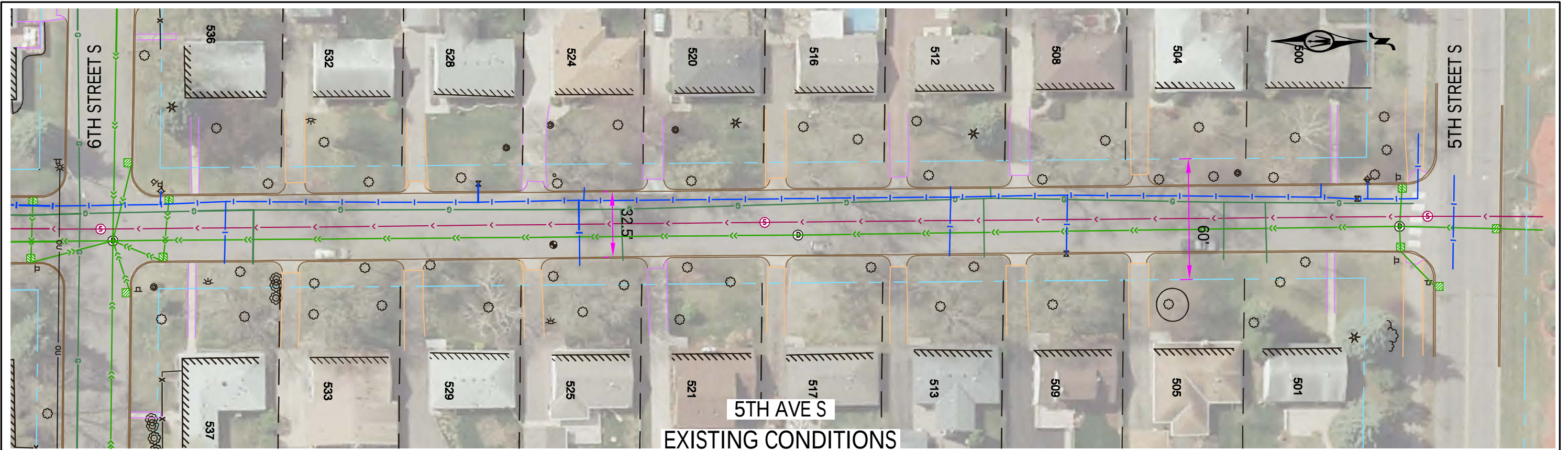
CITY OF HOPKINS
2017 STREET & UTILITY IMPROVEMENTS
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EAST/WEST PARK VALLEY DRIVE



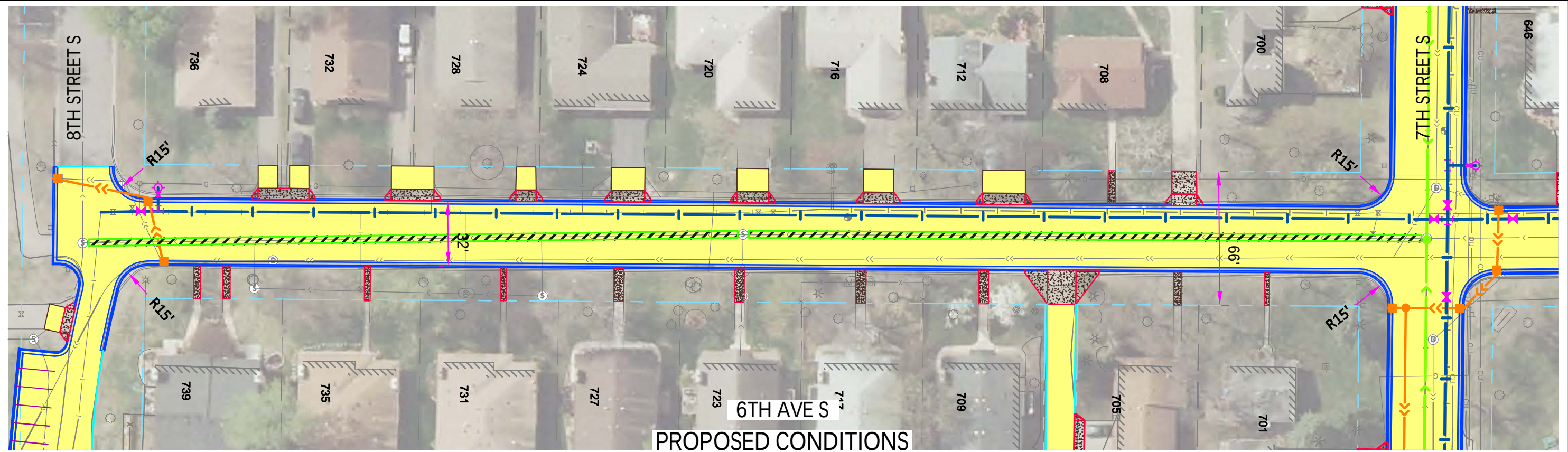
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EAST/WEST PARK VALLEY DRIVE



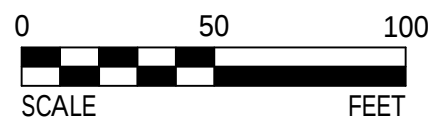
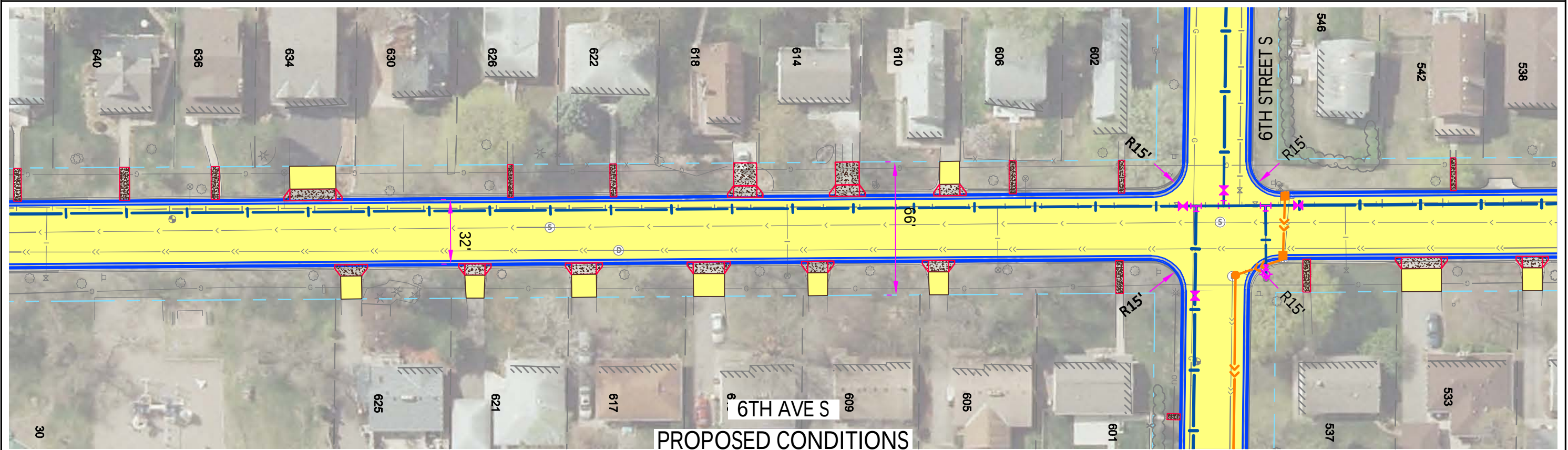
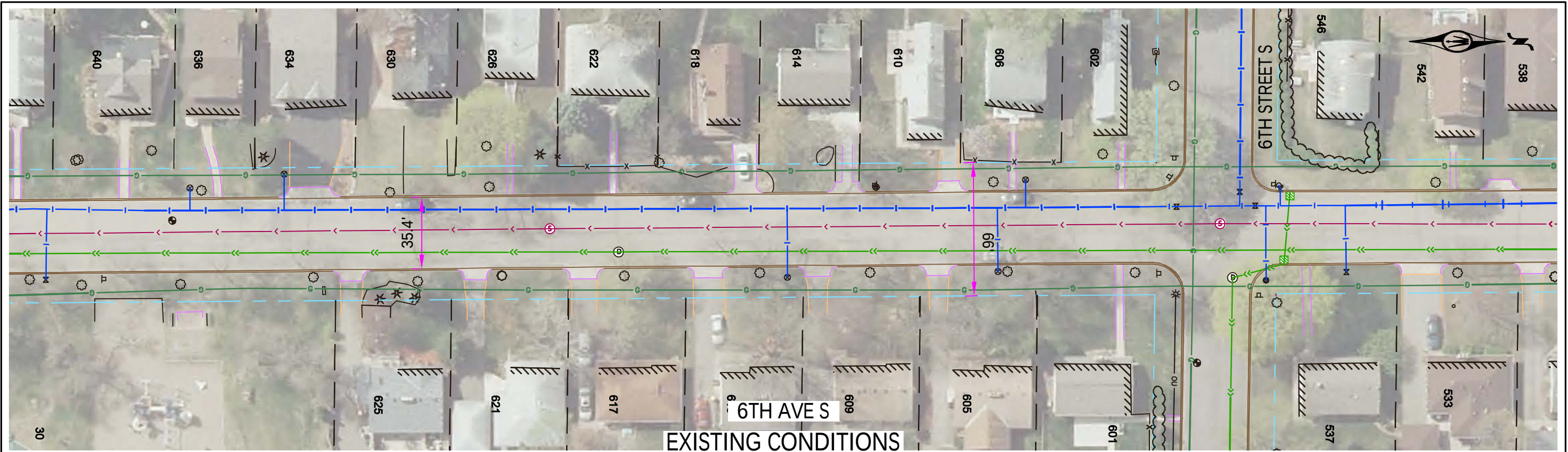
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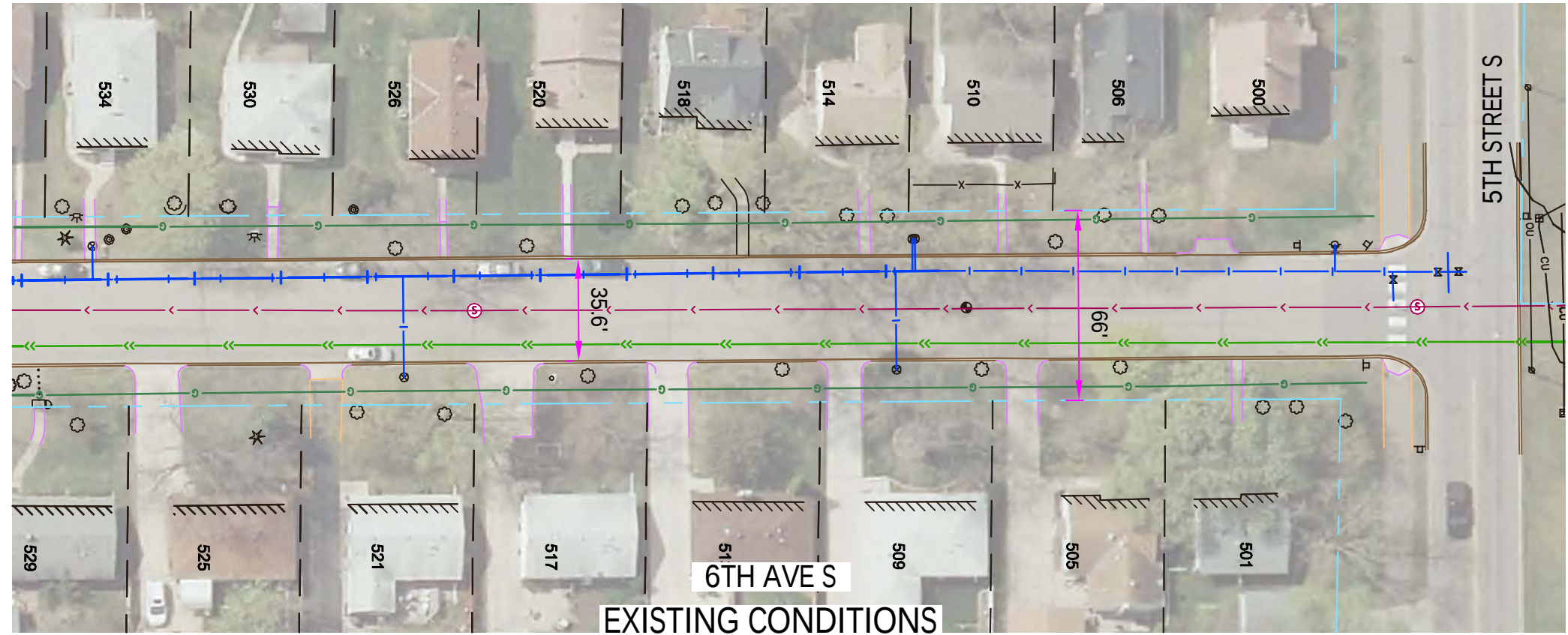
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2017 STREET & UTILITY IMPROVEMENTS
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5TH AVENUE S



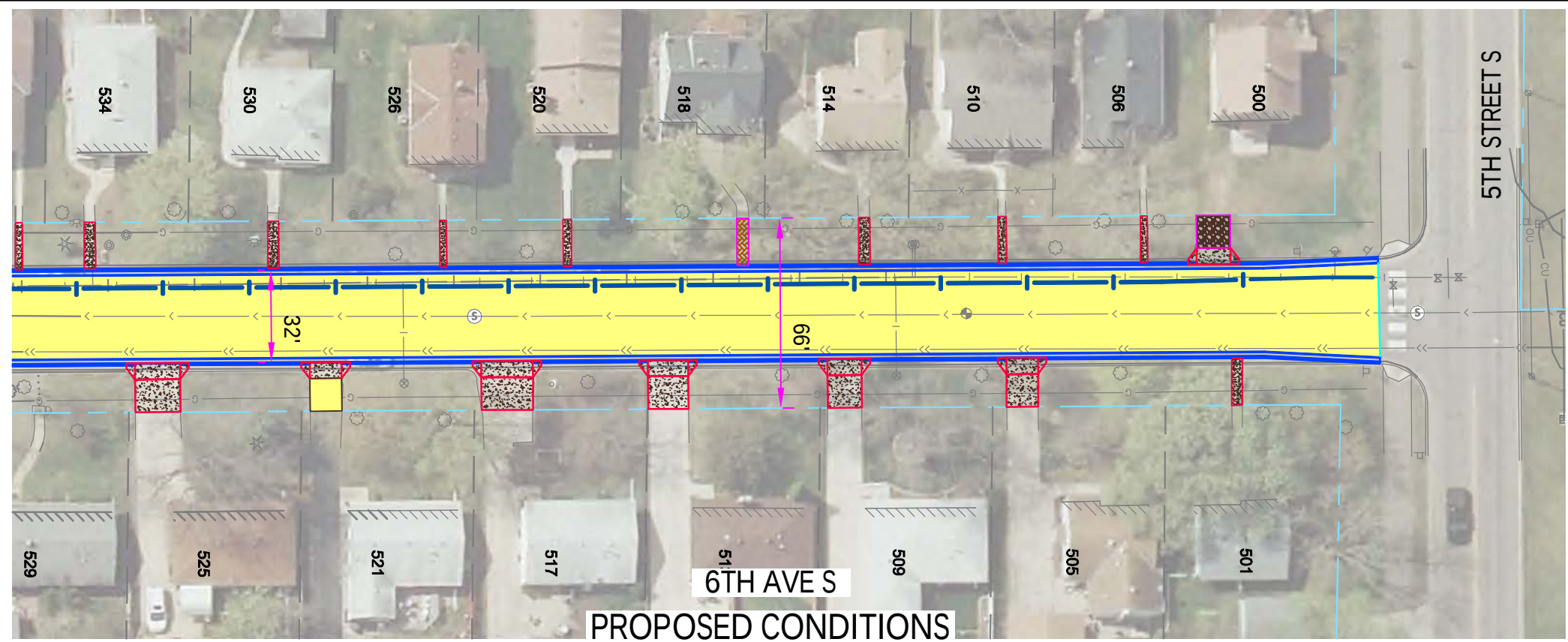
CITY OF HOPKINS
2017 STREET & UTILITY IMPROVEMENTS
EXISTING/PROPOSED CONDITIONS
6TH AVENUE S



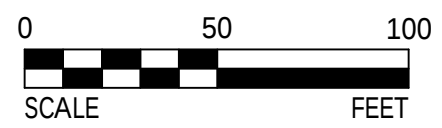
CITY OF HOPKINS
2017 STREET & UTILITY IMPROVEMENTS
EXISTING/PROPOSED CONDITIONS
6TH AVENUE S



EXISTING CONDITIONS

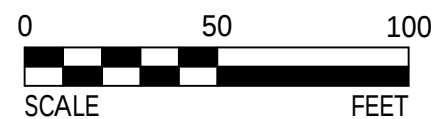
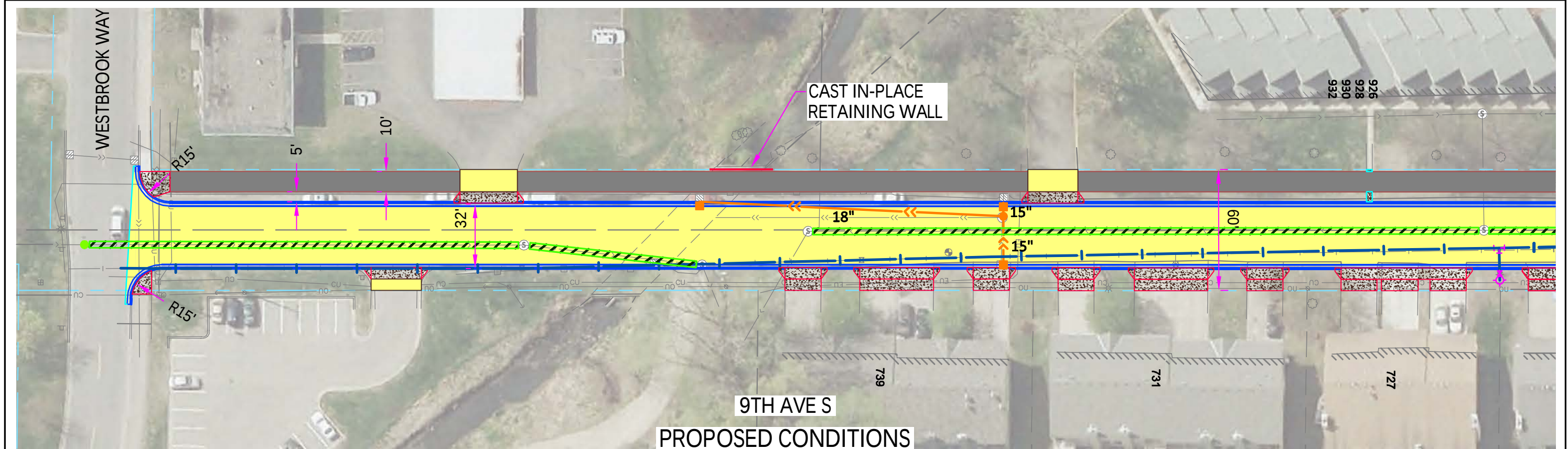
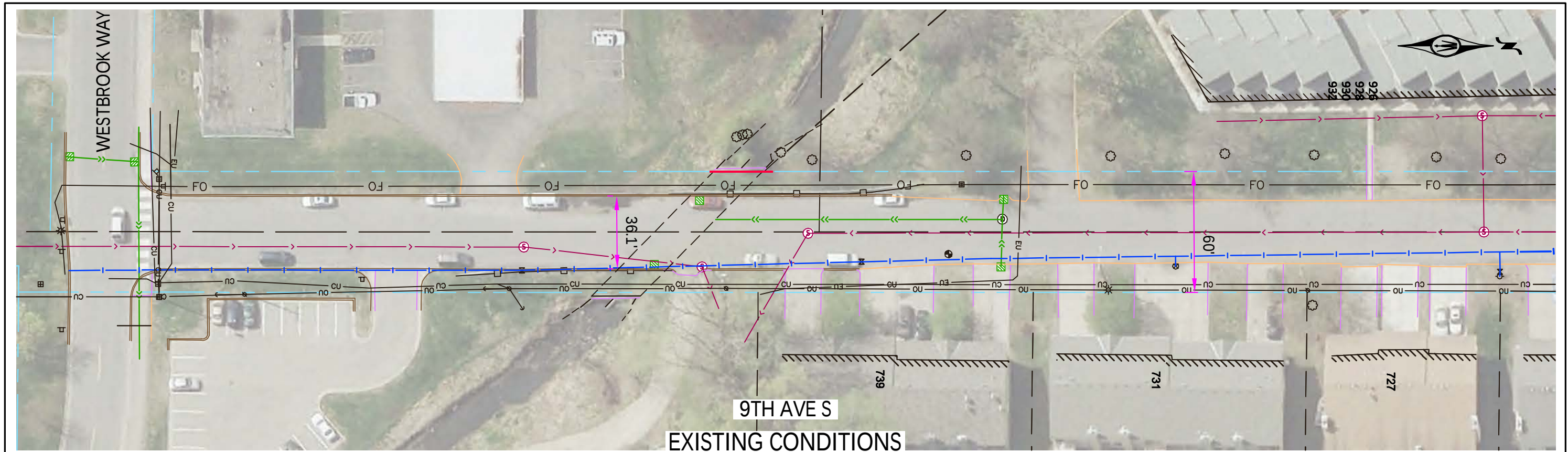


PROPOSED CONDITIONS

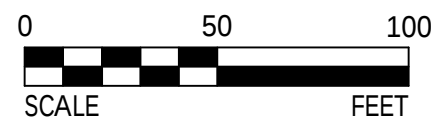
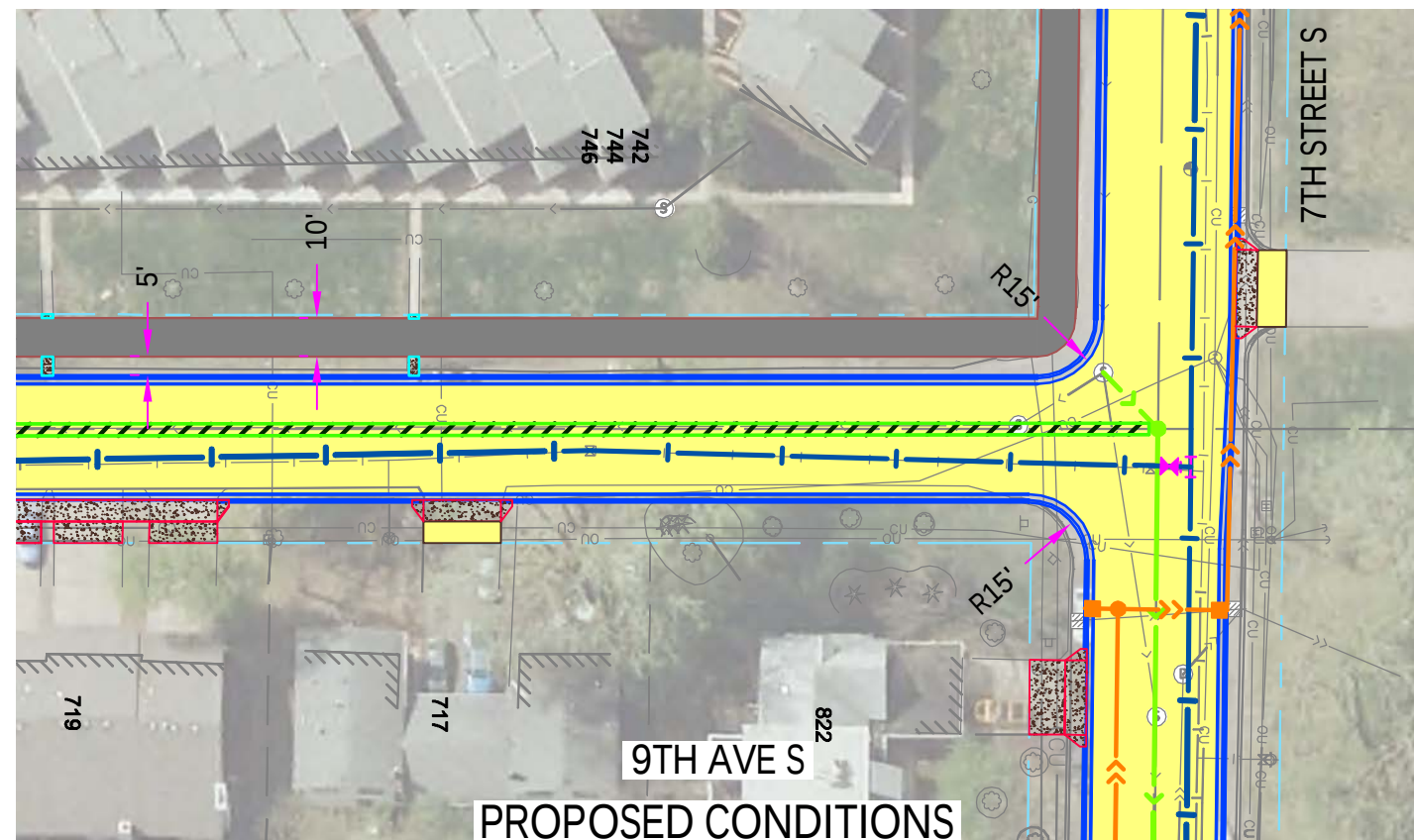
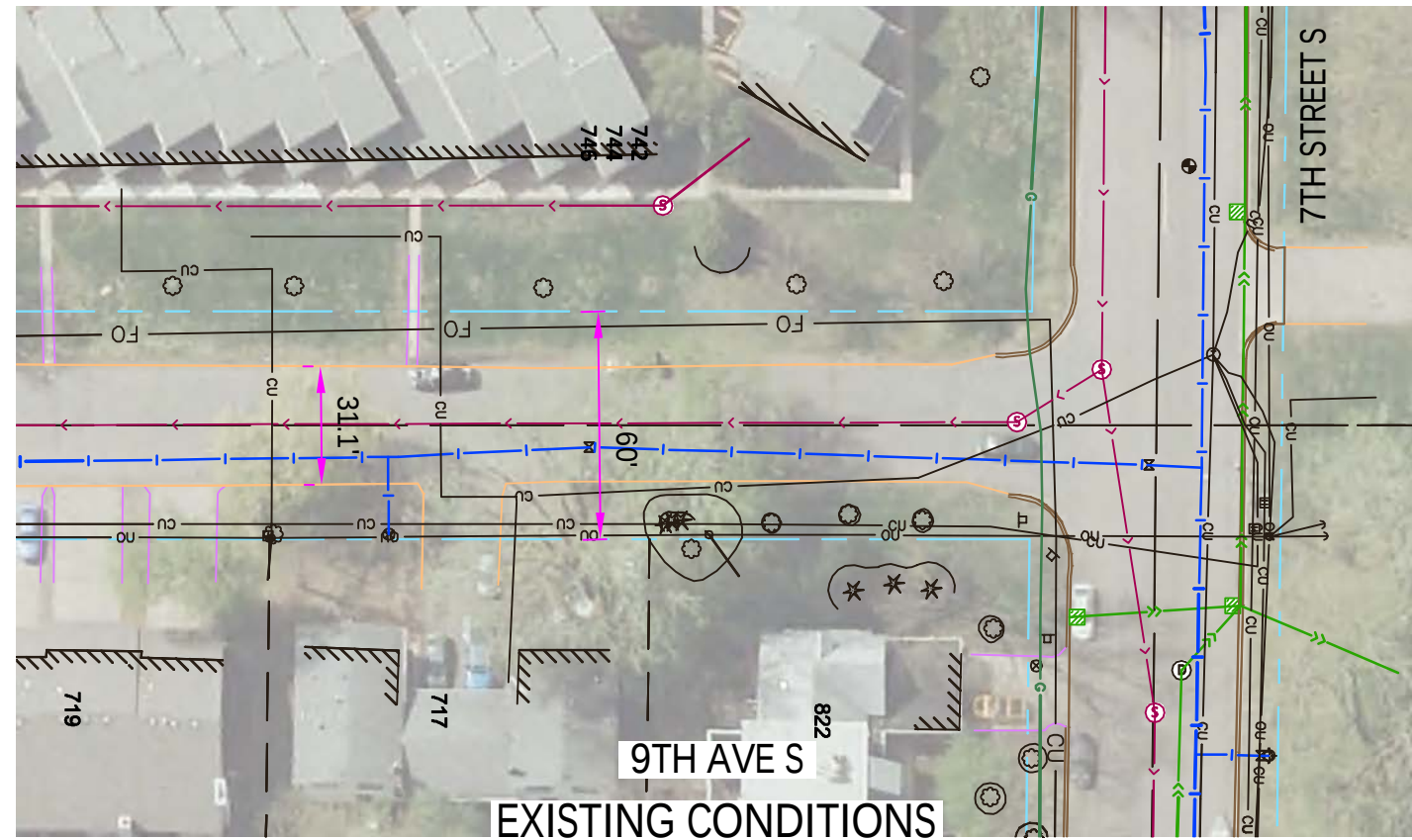


CITY OF HOPKINS
2017 STREET & UTILITY IMPROVEMENTS
EXISTING/PROPOSED CONDITIONS
6TH AVENUE S

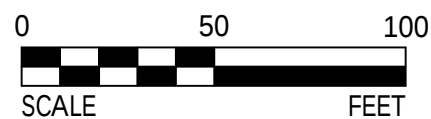
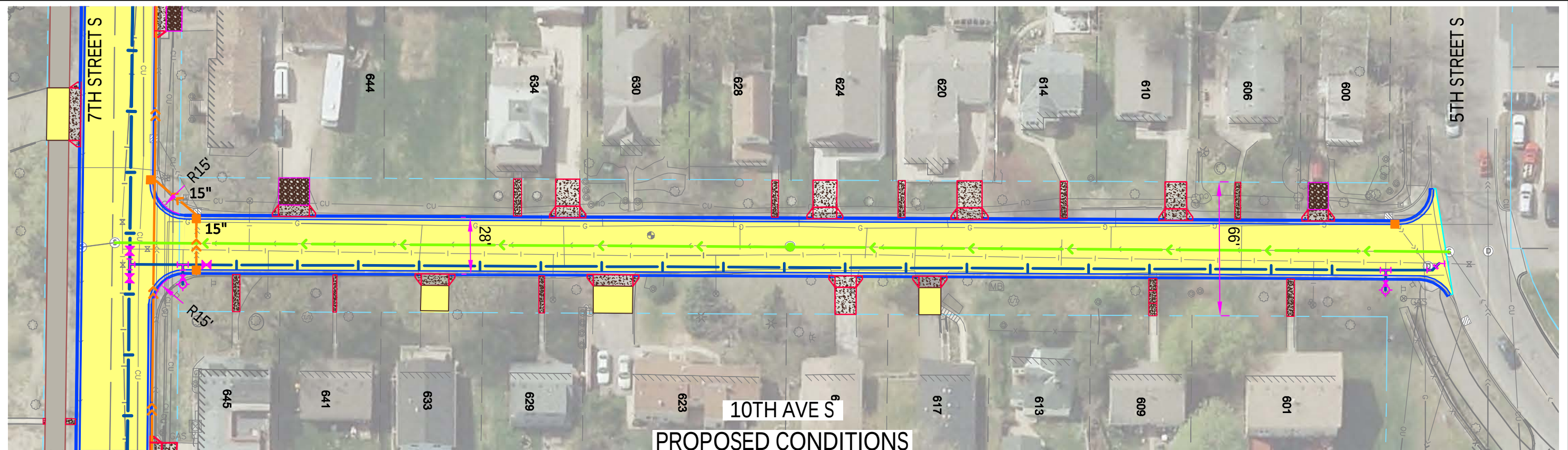
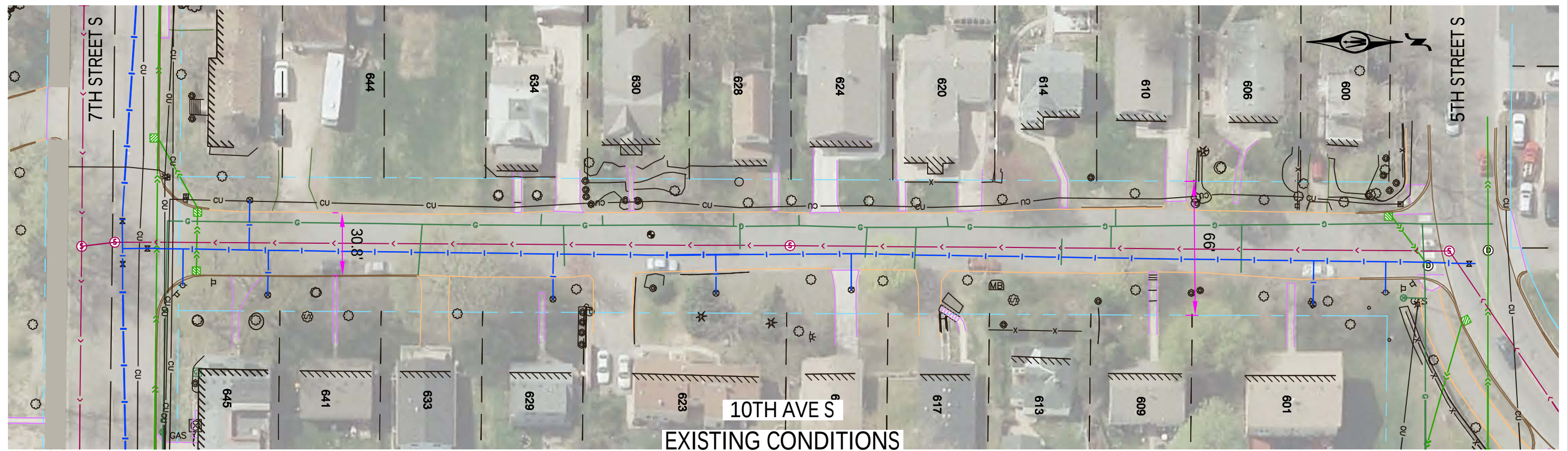
FIGURE 3.17



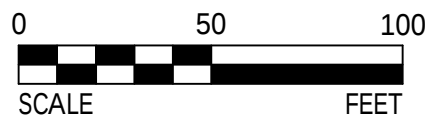
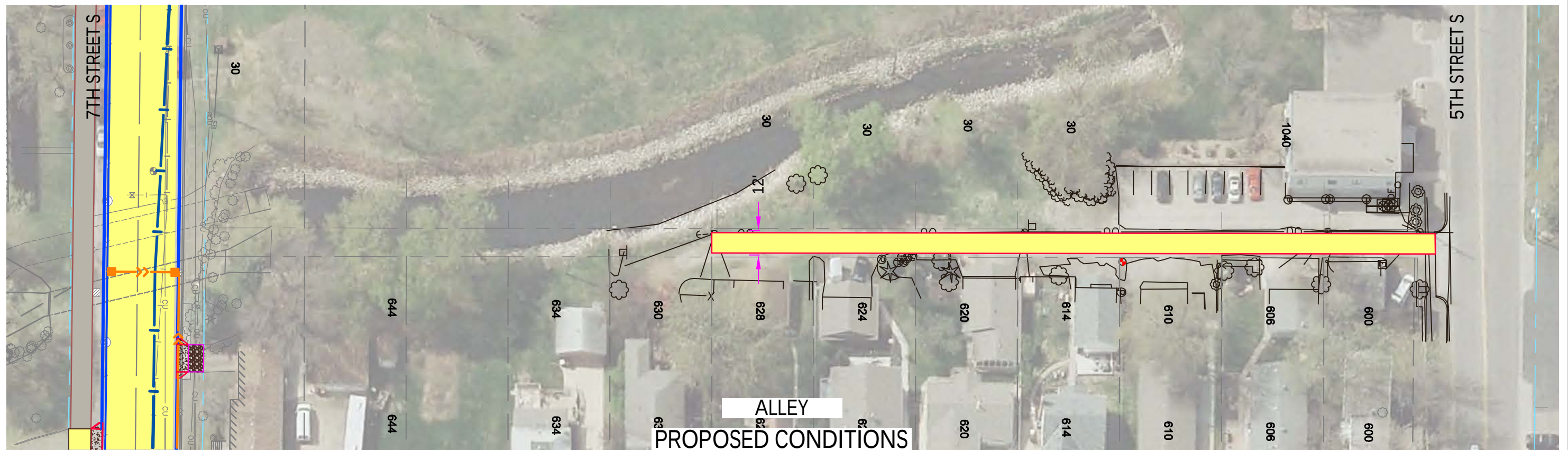
CITY OF HOPKINS
2017 STREET & UTILITY IMPROVEMENTS
EXISTING/PROPOSED CONDITIONS
9TH AVENUE S



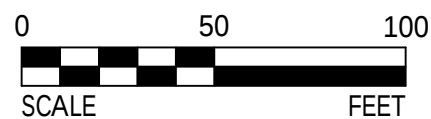
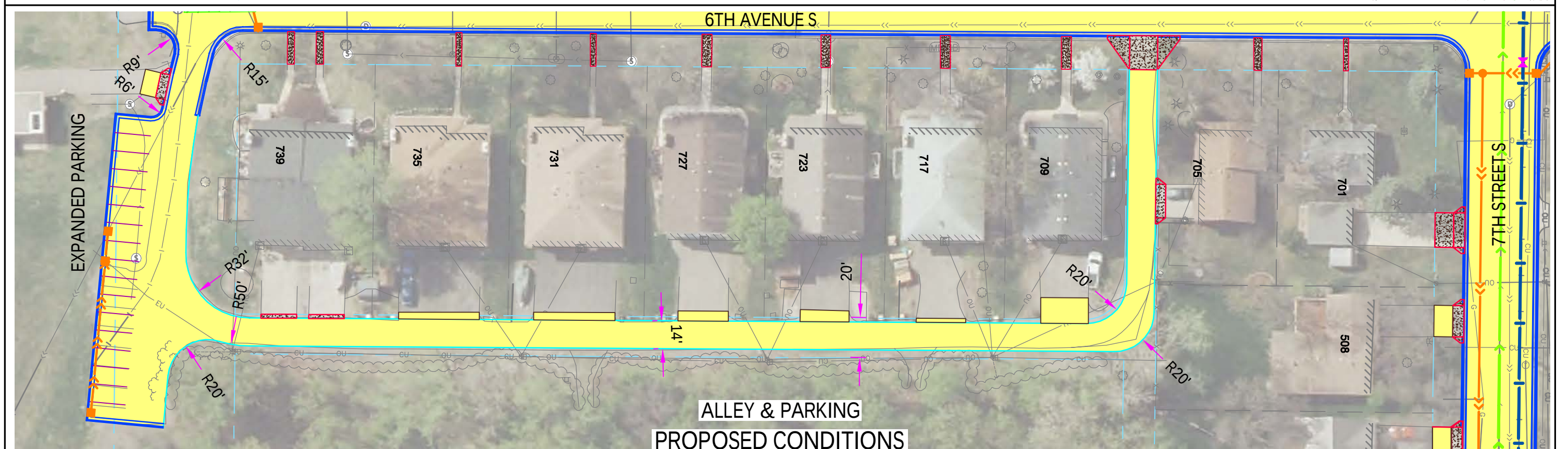
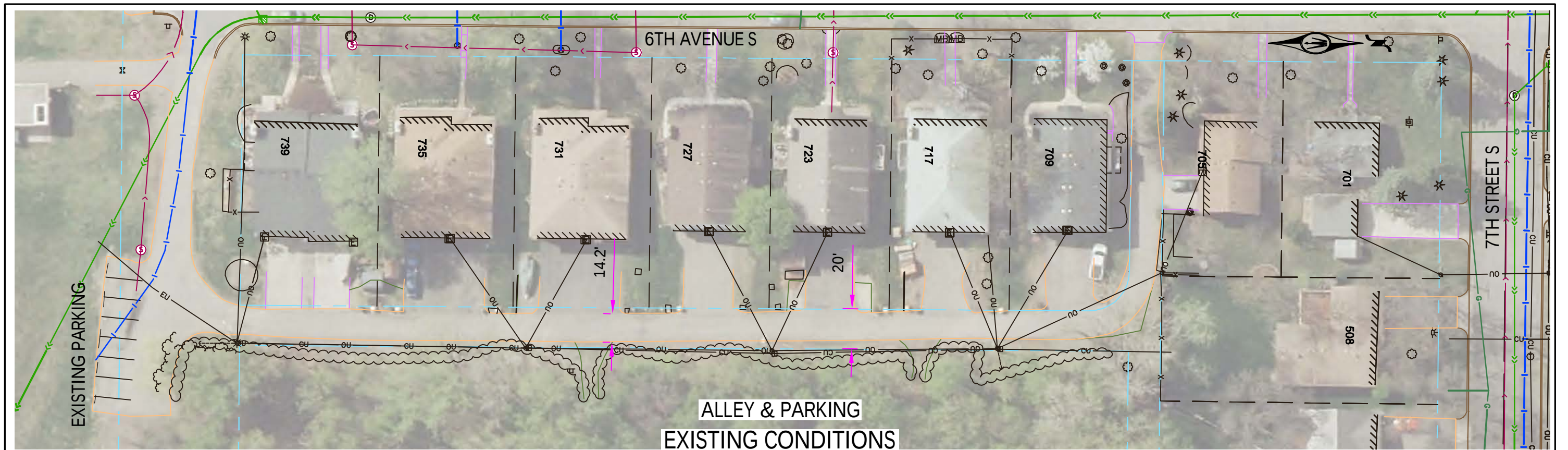
CITY OF HOPKINS
2017 STREET & UTILITY IMPROVEMENTS
EXISTING/PROPOSED CONDITIONS
9TH AVENUE S



CITY OF HOPKINS
2017 STREET & UTILITY IMPROVEMENTS
EXISTING/PROPOSED CONDITIONS
10TH AVENUE S



CITY OF HOPKINS
2017 STREET & UTILITY IMPROVEMENTS
EXISTING/PROPOSED CONDITIONS
ALLEY



CITY OF HOPKINS
2017 STREET & UTILITY IMPROVEMENTS
EXISTING/PROPOSED CONDITIONS
ALLEY & PARKING LOT

Appendix C:

Preliminary Assessment Roll

PRELIMINARY ASSESSMENT ROLL

2017 STREET & UTILITY IMPROVEMENTS

CITY OF HOPKINS, MN

BMI PROJECT NO. T19.112021

8/24/2016																			A		B					
PID	ADDRESS	OWNER NAME	OWNER NAME 2	GROUP	FRONT FOOT ASSESSMENTS										UNIT ASSESSMENTS					STREET ASSESSMENT WITHOUT CAP CONSIDERED	STREET ASSESSMENT CAP		PROPOSED STREET ASSESSMENT (Lesser of Column A or B)	PROPOSED SEWER SERVICE ASSESSMENT	PROPOSED WATER SERVICE ASSESSMENT	TOTAL PROPOSED ASSESSMENT
					FRONT FOOTAGE	ADJUSTED FRONT FOOTAGE	PARK VALLEY DR	5TH AVE S	6TH ST S	7TH ST S	9TH AVE S	10TH AVE S	SUBTOTAL FRONT FOOT ASSESSMENT	6TH ST S	7TH ST S	ALLEY 5TH ST S	ALLEY 8TH ST S	SUBTOTAL UNIT ASSESSMENT	ASSESSMENT RATE CAP PER FRONT FOOT		STREET ASSESSMENT PER CAP					
2511722130001	500 5TH AVE S	NOREEN FAY RALSTON		G	59.93		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,658.93	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,142.22	\$ 86.30	\$ 5,172.04	\$ 5,172.04	\$ 750.00	\$ 800.00	\$ 6,722.04
2511722130002	504 5TH AVE S	STEPHEN T GEORGE		G	59.93		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,658.96	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,142.25	\$ 86.30	\$ 5,172.07	\$ 5,172.07	\$ 750.00	\$ 800.00	\$ 6,722.07
2511722130003	508 5TH AVE S	ALICE L SCHULZ		G	59.93		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,659.00	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,142.29	\$ 86.30	\$ 5,172.10	\$ 5,172.10	\$ 750.00	\$ 800.00	\$ 6,722.10
2511722130004	512 5TH AVE S	WILLIAM H OVERHOLT		G	59.93		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,658.92	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,142.21	\$ 86.30	\$ 5,172.04	\$ 5,172.04	\$ 750.00	\$ 800.00	\$ 6,722.04
2511722130005	516 5TH AVE S	J D HOLMAN & N G HOLMAN		G	59.93		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,658.96	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,142.25	\$ 86.30	\$ 5,172.07	\$ 5,172.07	\$ 750.00	\$ 800.00	\$ 6,722.07
2511722130006	520 5TH AVE S	MATTHEW A MCNEIL	JEANA LANGER-MCNEIL	G	59.93		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,658.96	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,142.25	\$ 86.30	\$ 5,172.07	\$ 5,172.07	\$ 750.00	\$ 800.00	\$ 6,722.07
2511722130007	524 5TH AVE S	WILLIAM C MADISON		G	59.93		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,658.96	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,142.25	\$ 86.30	\$ 5,172.07	\$ 5,172.07	\$ 750.00	\$ 800.00	\$ 6,722.07
2511722130008	528 5TH AVE S	MICHAEL IUBERT		G	59.93		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,658.96	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,142.25	\$ 86.30	\$ 5,172.07	\$ 5,172.07	\$ 750.00	\$ 800.00	\$ 6,722.07
2511722130009	532 5TH AVE S	DARRELL J HAAR	JUDITH A HAAR	G	59.93		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,658.96	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,142.25	\$ 86.30	\$ 5,172.07	\$ 5,172.07	\$ 750.00	\$ 800.00	\$ 6,722.07
2511722130010	536 5TH AVE S	SUSAN K BOLDEN		G	60.11		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,678.76	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,162.05	\$ 86.30	\$ 5,187.44	\$ 5,187.44	\$ 750.00	\$ 800.00	\$ 6,737.44
2511722130011	537 6TH AVE S	LOUISE E FERCH		F			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,483.29	\$ -	\$ -	\$ 1,483.29	\$ -	\$ 800.00	\$ 2,283.29
2511722130012	533 6TH AVE S	ROBERT & KATHLEEN OAKES		F			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,483.29	\$ -	\$ -	\$ 1,483.29	\$ -	\$ 800.00	\$ 2,283.29
2511722130013	529 6TH AVE S	BARBARA A ANSTETT		F			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,483.29	\$ -	\$ -	\$ 1,483.29	\$ -	\$ 800.00	\$ 2,283.29
2511722130014	525 6TH AVE S	DONALD W CARLSON		F			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,483.29	\$ -	\$ -	\$ 1,483.29	\$ -	\$ 800.00	\$ 2,283.29
2511722130015	521 6TH AVE S	GEORGE C HERMANN		F			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,483.29	\$ -	\$ -	\$ 1,483.29	\$ -	\$ 800.00	\$ 2,283.29
2511722130016	517 6TH AVE S	KAREN L PULTZ		F			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,483.29	\$ -	\$ -	\$ 1,483.29	\$ -	\$ 800.00	\$ 2,283.29
2511722130017	513 6TH AVE S	TWYLA D HOBBS		F			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,483.29	\$ -	\$ -	\$ 1,483.29	\$ -	\$ 800.00	\$ 2,283.29
2511722130018	509 6TH AVE S	THOMAS M BAUMAN		F			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,483.29	\$ -	\$ -	\$ 1,483.29	\$ -	\$ 800.00	\$ 2,283.29
2511722130019	505 6TH AVE S	SHELLI PIETZ		F			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,483.29	\$ -	\$ -	\$ 1,483.29	\$ -	\$ 800.00	\$ 2,283.29
2511722130020	501 6TH AVE S	DENNIS E DAEHN		F			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,483.29	\$ -	\$ -	\$ 1,483.29	\$ -	\$ 800.00	\$ 2,283.29
2511722130021	600 5TH AVE S	MARK PANGER		L	58.08		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,452.86	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 9,412.29	\$ 86.30	\$ 5,011.98	\$ 5,011.98	\$ 750.00	\$ 800.00	\$ 6,561.98
2511722130022	604 5TH AVE S	JORGE VILLANUEVA CASTILLO		L	58.08		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,452.85	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 9,412.28	\$ 86.30	\$ 5,011.98	\$ 5,011.98	\$ 750.00	\$ 800.00	\$ 6,561.98
2511722130023	608 5TH AVE S	THOMAS MIKELSON		L	58.08		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,452.85	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 9,412.28	\$ 86.30	\$ 5,011.98	\$ 5,011.98	\$ 750.00	\$ 800.00	\$ 6,561.98
2511722130024	612 5TH AVE S	GREGORY C HAZLETT		L	58.08		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,452.85	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 9,412.28	\$ 86.30	\$ 5,011.98	\$ 5,011.98	\$ 750.00	\$ 800.00	\$ 6,561.98
2511722130025	616 5TH AVE S	JORDAN WILLIAM STANS	ABBY LEIGH STANS	L	58.08		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,452.85	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 9,412.28	\$ 86.30	\$ 5,011.98	\$ 5,011.98	\$ 750.00	\$ 800.00	\$ 6,561.98
2511722130026	620 5TH AVE S	BRANDON HARRIS	JUSTINE JACKSON	L	58.08		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,452.85	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 9,412.28	\$ 86.30	\$ 5,011.98	\$ 5,011.98	\$ 750.00	\$ 800.00	\$ 6,561.98
2511722130027	624 5TH AVE S	VICTORIA HANNIGAN		L	58.03		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,447.60	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 9,407.03	\$ 86.30	\$ 5,007.90	\$ 5,007.90	\$ 750.00	\$ 800.00	\$ 6,557.90
2511722130028	625 6TH AVE S	BETTY LOU QUIST		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ 800.00	\$ 3,759.43
2511722130029	621 6TH AVE S	DANE A & STEPHANIE J JOHNSON		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ 800.00	\$ 3,759.43
2511722130030	617 6TH AVE S	JOHN R CHELIKOWSKY	TONI L CHELIKOWSKY	D			\$ -	\$ -																		

PRELIMINARY ASSESSMENT ROLL

2017 STREET & UTILITY IMPROVEMENTS

CITY OF HOPKINS, MN

BMI PROJECT NO. T19.112021

8/24/2016																			A		B		PROPOSED STREET ASSESSMENT (Lesser of Column A or B)	PROPOSED SEWER SERVICE ASSESSMENT	PROPOSED WATER SERVICE ASSESSMENT	TOTAL PROPOSED ASSESSMENT
PID	ADDRESS	OWNER NAME	OWNER NAME 2	GROUP	FRONT FOOTAGE	ADJUSTED FRONT FOOTAGE	PARK VALLEY DR	5TH AVE S	6TH ST S	7TH ST S	9TH AVE S	10TH AVE S	SUBTOTAL FRONT FOOT ASSESSMENT	6TH ST S	7TH ST S	ALLEY 5TH ST S	ALLEY 8TH ST S	SUBTOTAL UNIT ASSESSMENT	STREET ASSESSMENT WITHOUT CAP CONSIDERED	ASSESSMENT RATE CAP PER FRONT FOOT	STREET ASSESSMENT PER CAP					
2511722130082	606 6TH AVE S	JOSEPH CHARLES MARSO		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ 800.00	\$ 3,759.43	
2511722130083	610 6TH AVE S	M ELIZABETH LEE & JOHN T LEE		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ 800.00	\$ 3,759.43	
2511722130084	614 6TH AVE S	NEIL J & KATHRYN J OLSON		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ 800.00	\$ 3,759.43	
2511722130085	618 6TH AVE S	E G SIDLA & E A AUSTIN		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ 800.00	\$ 3,759.43	
2511722130086	622 6TH AVE S	SCOTT M KIEFFER	NICHOLE A WALTER	D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ 800.00	\$ 3,759.43	
2511722130087	626 6TH AVE S	PHYLLIS A LAVIGNE		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ 800.00	\$ 3,759.43	
2511722130090	636 6TH AVE S	MARCIE HILL		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ 800.00	\$ 3,759.43	
2511722130091	640 6TH AVE S	RUTH SLETTEN ERDAHL		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ 800.00	\$ 3,759.43	
2511722130092	646 6TH AVE S	STEPHEN T & JANET A GUENTHER		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ 800.00	\$ 3,759.43	
2511722130093	643 7TH AVE S	STEPHEN & SUSAN KLAPPA		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	
2511722130094	641 7TH AVE S	IH3 PROPERTY ILLINOIS LP		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	
2511722130095	633 7TH AVE S	DEBRA & DAVID JOHNSON		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	
2511722130096	629 7TH AVE S	NATHAN P HARRIS		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	
2511722130097	637 7TH AVE S	JEFFREY R & DENISE D NISSEN		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	
2511722130098	625 7TH AVE S	JACOB SCHNEIDER		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	
2511722130099	621 7TH AVE S	JEFFREY J VOIGHT		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	
2511722130100	613 7TH AVE S	ALLAN T & JEAN P BREITBARTH		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	
2511722130105	621 8TH AVE S	ERIC & JAIME EDDINS		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	
2511722130106	601 7TH AVE S	SHAWN STRATHE & ZOE C LISTON		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	
2511722130107	605 7TH AVE S	GHOLAMREZA ASHRAFZADEH KIAN		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	
2511722130108	601 8TH AVE S	6224 EQUITIES L L C		D			\$ -	\$ -	\$ 1,483.29	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43
2511722130109	603 8TH AVE S	6224 EQUITIES L L C		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	
2511722130110	605 8TH AVE S	6224 EQUITIES L L C		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	
2511722130111	607 8TH AVE S	6224 EQUITIES L L C		D			\$ -	\$ -	\$ 1,483.29	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43
2511722130112	609 8TH AVE S	6224 EQUITIES L L C		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	
2511722130113	611 8TH AVE S	6224 EQUITIES L L C		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	
2511722130114	613 8TH AVE S	6224 EQUITIES L L C		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	
2511722130115	615 8TH AVE S	6224 EQUITIES L L C		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	
2511722130116	617 8TH AVE S	6224 EQUITIES L L C		D			\$ -	\$ -	\$ 1,483.29	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43
2511722130117	619 8TH AVE S	6224 EQUITIES L L C		D			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	\$ -	\$ -	\$ 2,959.43	
2511722130118	800 5TH ST S	WESTSIDE PROPERTY OWNER LLC	C/O GREENFIELD PARTNERS LLC	E			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 1,483.29	\$ -	\$ -	\$ 1,483.29	\$ -	\$ -	\$ 1,483.29	
2511722130120	900 6TH ST S	HALIFAX PROPERTIES LLC		D2	1.94		\$ -	\$ -	\$ 110.55	\$ 147.74	\$ -	\$ -	\$ 501.31	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 501.31	\$ 86.30	\$ 167.50	\$ 167.50	\$ -	\$ -	\$ 167.50	
2511722130121	900 6TH ST S	JASON C DROMETER		D2	1.94		\$ -	\$ -	\$ 110.55	\$ 147.74	\$ -															

PRELIMINARY ASSESSMENT ROLL

2017 STREET & UTILITY IMPROVEMENTS

CITY OF HOPKINS, MN

BMI PROJECT NO. T19.112021

8/24/2016																		A		B		PROPOSED STREET ASSESSMENT (Lesser of Column A or B)	PROPOSED SEWER SERVICE ASSESSMENT	PROPOSED WATER SERVICE ASSESSMENT	TOTAL PROPOSED ASSESSMENT	
PID	ADDRESS	OWNER NAME	OWNER NAME 2	GROUP	FRONT FOOTAGE	ADJUSTED FRONT FOOTAGE	PARK VALLEY DR	5TH AVE S	6TH ST S	7TH ST S	9TH AVE S	10TH AVE S	SUBTOTAL FRONT FOOT ASSESSMENT	6TH ST S	7TH ST S	ALLEY 5TH ST S	ALLEY 8TH ST S	SUBTOTAL UNIT ASSESSMENT	STREET ASSESSMENT WITHOUT CAP CONSIDERED	ASSESSMENT RATE CAP PER FRONT FOOT	STREET ASSESSMENT PER CAP					
2511722140011	509 5TH AVE S	TRAVIS J GAU		G	59.93		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ 6,658.85	\$ 1,483.29	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,142.14	\$ 86.30	\$ 5,171.98	\$ 5,171.98	\$ 750.00	\$ 800.00	\$ 6,721.98
2511722140012	513 5TH AVE S	TIMOTHY A ASP		G	59.93		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ 6,658.82	\$ 1,483.29	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,142.11	\$ 86.30	\$ 5,171.95	\$ 5,171.95	\$ 750.00	\$ 800.00	\$ 6,721.95
2511722140013	517 5TH AVE S	LUKE J RICE & CAROLYN P RICE		G	59.93		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ 6,658.81	\$ 1,483.29	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,142.10	\$ 86.30	\$ 5,171.95	\$ 5,171.95	\$ 750.00	\$ 800.00	\$ 6,721.95
2511722140014	521 5TH AVE S	JENNIFER LIA EASTWOLD CHO	JUN HO CHO	G	59.93		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ 6,658.85	\$ 1,483.29	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,142.14	\$ 86.30	\$ 5,171.98	\$ 5,171.98	\$ 750.00	\$ 800.00	\$ 6,721.98
2511722140015	525 5TH AVE S	LORI & JOHN SCHLATTER		G	59.93		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ 6,658.85	\$ 1,483.29	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,142.14	\$ 86.30	\$ 5,171.98	\$ 5,171.98	\$ 750.00	\$ 800.00	\$ 6,721.98
2511722140016	529 5TH AVE S	DONALD POLLARD		G	59.93		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ 6,658.85	\$ 1,483.29	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,142.14	\$ 86.30	\$ 5,171.98	\$ 5,171.98	\$ 750.00	\$ 800.00	\$ 6,721.98
2511722140017	533 5TH AVE S	MICHAEL & DEBRA REINITZ		G	59.93		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ 6,658.82	\$ 1,483.29	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,142.11	\$ 86.30	\$ 5,171.95	\$ 5,171.95	\$ 750.00	\$ 800.00	\$ 6,721.95
2511722140018	537 5TH AVE S	DOREEN BORGSMANN		G	60.13		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ 6,681.17	\$ 1,483.29	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,164.46	\$ 86.30	\$ 5,189.31	\$ 5,189.31	\$ 750.00	\$ 800.00	\$ 6,739.31
2511722140019	601 5TH AVE S	LARRY BRAKKEN & LYNN DAHL		L	58.08		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ 6,452.85	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ -	\$ 2,959.43	\$ 9,412.28	\$ 86.30	\$ 5,011.98	\$ 5,011.98	\$ 750.00	\$ 800.00	\$ 6,561.98
2511722140020	605 5TH AVE S	SAU Y LEE		L	58.08		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ 6,452.85	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ -	\$ 2,959.43	\$ 9,412.28	\$ 86.30	\$ 5,011.98	\$ 5,011.98	\$ 750.00	\$ 800.00	\$ 6,561.98
2511722140021	609 5TH AVE S	TAYLOR S LOFTSGAARDEN		L	58.08		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ 6,452.85	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ -	\$ 2,959.43	\$ 9,412.28	\$ 86.30	\$ 5,011.98	\$ 5,011.98	\$ 750.00	\$ 800.00	\$ 6,561.98
2511722140022	613 5TH AVE S	KATHERINE R DAHLQUIST		L	58.08		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ 6,452.85	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ -	\$ 2,959.43	\$ 9,412.28	\$ 86.30	\$ 5,011.98	\$ 5,011.98	\$ 750.00	\$ 800.00	\$ 6,561.98
2511722140023	617 5TH AVE S	KATHRYN SATZER		L	58.08		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ 6,452.85	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ -	\$ 2,959.43	\$ 9,412.28	\$ 86.30	\$ 5,011.98	\$ 5,011.98	\$ 750.00	\$ 800.00	\$ 6,561.98
2511722140024	621 5TH AVE S	MARK L & PEI FEN Y SMITH		L	58.08		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ 6,452.85	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ -	\$ 2,959.43	\$ 9,412.28	\$ 86.30	\$ 5,011.98	\$ 5,011.98	\$ 750.00	\$ 800.00	\$ 6,561.98
2511722140025	625 5TH AVE S	O J OLSON		L	56.23		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ 6,247.95	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ -	\$ 2,959.43	\$ 9,207.38	\$ 86.30	\$ 4,852.83	\$ 4,852.83	\$ 750.00	\$ 800.00	\$ 6,402.83
2511722140026	538 WEST PARK VALLEY DR	CHESTER & EVELYN VERVILLE		H	60.18	\$ 113.17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,810.31	\$ 1,483.29	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,293.60	\$ 86.30	\$ 5,193.33	\$ 5,193.33	\$ 750.00	\$ 800.00	\$ 6,743.33
2511722140027	534 WEST PARK VALLEY DR	JOELLEN KUMPULA/RANDY GONCZY		H	59.88	\$ 113.17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,776.52	\$ 1,483.29	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,259.81	\$ 86.30	\$ 5,167.57	\$ 5,167.57	\$ 750.00	\$ 800.00	\$ 6,717.57
2511722140028	530 WEST PARK VALLEY DR	MARCIA A O'KEEFE		H	59.88	\$ 113.17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,776.59	\$ 1,483.29	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,259.88	\$ 86.30	\$ 5,167.62	\$ 5,167.62	\$ 750.00	\$ 800.00	\$ 6,717.62
2511722140029	526 WEST PARK VALLEY DR	JOHN J VESOVICH		H	50.50	\$ 113.17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,715.23	\$ 1,483.29	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 7,198.52	\$ 86.30	\$ 4,358.26	\$ 4,358.26	\$ 750.00	\$ 800.00	\$ 5,908.26
2511722140030	522 WEST PARK VALLEY DR	KATHERINE M POWELL		H	51.06	\$ 113.17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,778.51	\$ 1,483.29	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 7,261.80	\$ 86.30	\$ 4,406.52	\$ 4,406.52	\$ 750.00	\$ 800.00	\$ 5,956.52
2511722140031	518 WEST PARK VALLEY DR	ELVERA & LOANNE BORGSMANN		H	51.82	\$ 113.17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,864.69	\$ 1,483.29	\$ -	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 7,347.98	\$ 86.30	\$ 4,472.23	\$ 4,472.23	\$ 750.00	\$ 800.00	\$ 6,022.23
2511722140032	514 WEST PARK VALLEY DR	TERRY D & MARY JO KELLY		I	49.67	\$ 113.17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,620.64	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,620.64	\$ 86.30	\$ 4,286.13	\$ 4,286.13	\$ 750.00	\$ 800.00	\$ 5,836.13
2511722140033	510 WEST PARK VALLEY DR	JAMES R CUNNINGHAM		I	59.98	\$ 113.17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,787.72	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,787.72	\$ 86.30	\$ 5,176.11	\$ 5,176.11	\$ 750.00	\$ 800.00	\$ 6,726.11
2511722140034	509 EAST PARK VALLEY DR	KEVIN & AMBER CORCORAN		I	59.90	\$ 113.17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,779.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,779.32	\$ 86.30	\$ 5,169.70	\$ 5,169.70	\$ 750.00	\$ 800.00	\$ 6,719.70
2511722140035	513 EAST PARK VALLEY DR	FRANK & JOY PETERS		I	52.07	\$ 113.17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,892.86	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,892.86	\$ 86.30	\$ 4,493.71	\$ 4,493.71	\$ 750.00	\$ 800.00	\$ 6,043.71
2511722140036	517 EAST PARK VALLEY DR	ROBERT TRIDEN		I	52.54	\$ 113.17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,946.24	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,946.24	\$ 86.30	\$ 4,534.42	\$ 4,534.42	\$ 750.00	\$ 800.00	\$ 6,084.42
2511722140037	521 EAST PARK VALLEY DR	ANN BOWIE BIRTCL		I	51.59	\$ 113.17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,838.08	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,838.08	\$ 86.30	\$ 4,451.95	\$ 4,451.95	\$ 750.00	\$ 800.00	\$ 6,001.95
2511722140038	525 EAST PARK VALLEY DR	CHRISTINE E DOCHERTY		I	51.41	\$ 113.17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,818.54	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,818.54	\$ 86.30	\$ 4,437.04	\$ 4,437.04	\$ 750.00	\$ 800.00	\$ 5,987.04
2511722140039	529 EAST PARK VALLEY DR	JOHN T HUTCHISON																								

PRELIMINARY ASSESSMENT ROLL
2017 STREET & UTILITY IMPROVEMENTS
CITY OF HOPKINS, MN
BMI PROJECT NO. T19.112021

8/24/2016																			A		B		PROPOSED STREET ASSESSMENT (Lesser of Column A or B)	PROPOSED SEWER SERVICE ASSESSMENT	PROPOSED WATER SERVICE ASSESSMENT	TOTAL PROPOSED ASSESSMENT
PID	ADDRESS	OWNER NAME	OWNER NAME 2	GROUP	FRONT FOOTAGE	ADJUSTED FRONT FOOTAGE	PARK VALLEY DR	5TH AVE S	6TH ST S	7TH ST S	9TH AVE S	10TH AVE S	SUBTOTAL FRONT FOOT ASSESSMENT	6TH ST S	7TH ST S	ALLEY 5TH ST S	ALLEY 8TH ST S	SUBTOTAL UNIT ASSESSMENT	STREET ASSESSMENT WITHOUT CAP CONSIDERED	ASSESSMENT RATE CAP PER FRONT FOOT	STREET ASSESSMENT PER CAP					
2511722140090	618 WEST PARK VALLEY DR	DONALD D ROESNER		K	60.08		\$ 113.17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,799.69	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,282.98	\$ 86.30	\$ 5,185.23	\$ 5,185.23	\$ 750.00	\$ 800.00	\$ 6,735.23	
2511722140091	622 WEST PARK VALLEY DR	NICOLE M SAILER		K	60.08		\$ 113.17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,799.72	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,283.01	\$ 86.30	\$ 5,185.26	\$ 5,185.26	\$ 750.00	\$ 800.00	\$ 6,735.26	
2511722140092	626 WEST PARK VALLEY DR	BENJAMYN M ANDERSON		K	60.08		\$ 113.17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,799.69	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,282.98	\$ 86.30	\$ 5,185.23	\$ 5,185.23	\$ 750.00	\$ 800.00	\$ 6,735.23	
2511722140093	630 WEST PARK VALLEY DR	WENDELL L KETTNER	STACEY A KETTNER	K	60.08		\$ 113.17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,799.72	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,283.01	\$ 86.30	\$ 5,185.26	\$ 5,185.26	\$ 750.00	\$ 800.00	\$ 6,735.26	
2511722140094	634 WEST PARK VALLEY DR	JUAN RAMON ORTEGON JR	AMANDA JO ORTEGON	K	60.08		\$ 113.17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,799.69	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,282.98	\$ 86.30	\$ 5,185.23	\$ 5,185.23	\$ 750.00	\$ 800.00	\$ 6,735.23	
2511722140095	638 WEST PARK VALLEY DR	JOSEPH R LEVERNIER JR		K	60.08		\$ 113.17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,799.25	\$ 1,483.29	\$ -	\$ -	\$ -	\$ 1,483.29	\$ 8,282.54	\$ 86.30	\$ 5,184.90	\$ 5,184.90	\$ 750.00	\$ 800.00	\$ 6,734.90	
2511722140096	637 5TH AVE S	DOLORIS G ZIPOY		L	58.08		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ 6,453.27	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 9,412.70	\$ 86.30	\$ 5,012.30	\$ 5,012.30	\$ 750.00	\$ 800.00	\$ 6,562.30	
2511722140097	633 5TH AVE S	ALISON & BRIAN SWIGGUM		L	57.97		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ 6,441.37	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 9,400.80	\$ 86.30	\$ 5,003.06	\$ 5,003.06	\$ 750.00	\$ 800.00	\$ 6,553.06	
2511722140098	629 5TH AVE S	SANDRA A LIEN		L	64.97		\$ -	\$ 111.11	\$ -	\$ -	\$ -	\$ -	\$ 7,218.85	\$ 1,483.29	\$ 1,476.14	\$ -	\$ -	\$ 2,959.43	\$ 10,178.28	\$ 86.30	\$ 5,606.94	\$ 5,606.94	\$ 750.00	\$ 800.00	\$ 7,156.94	
2511722240046	600 10TH AVE S	THOMAS T WALDACK		B	46.21		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 103.94	\$ 4,802.76	\$ -	\$ 1,476.14	\$ 5,407.50	\$ -	\$ 6,883.64	\$ 11,686.40	\$ 86.30	\$ 3,987.67	\$ 3,987.67	\$ 750.00	\$ 800.00	\$ 5,537.67	
2511722240047	606 10TH AVE S	NICK CHAN DO & TONU NGUON		B	49.95		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 103.94	\$ 5,191.63	\$ -	\$ 1,476.14	\$ 5,407.50	\$ -	\$ 6,883.64	\$ 12,075.27	\$ 86.30	\$ 4,310.54	\$ 4,310.54	\$ 750.00	\$ 800.00	\$ 5,860.54	
2511722240048	610 10TH AVE S	JOAN M RIEGER		B	49.95		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 103.94	\$ 5,191.63	\$ -	\$ 1,476.14	\$ 5,407.50	\$ -	\$ 6,883.64	\$ 12,075.27	\$ 86.30	\$ 4,310.54	\$ 4,310.54	\$ 750.00	\$ 800.00	\$ 5,860.54	
2511722240049	614 10TH AVE S	PAUL JOPPA & BRIDGET JOPPA		B	49.95		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 103.94	\$ 5,191.63	\$ -	\$ 1,476.14	\$ 5,407.50	\$ -	\$ 6,883.64	\$ 12,075.27	\$ 86.30	\$ 4,310.54	\$ 4,310.54	\$ 750.00	\$ 800.00	\$ 5,860.54	
2511722240051	628 10TH AVE S	JACQUELINE F LEWIS		B	49.95		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 103.94	\$ 5,191.63	\$ -	\$ 1,476.14	\$ 5,407.50	\$ -	\$ 6,883.64	\$ 12,075.27	\$ 86.30	\$ 4,310.54	\$ 4,310.54	\$ 750.00	\$ 800.00	\$ 5,860.54	
2511722240052	630 10TH AVE S	BRIAN E JENSEN		B	49.95		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 103.94	\$ 5,191.63	\$ -	\$ 1,476.14	\$ 5,407.50	\$ -	\$ 6,883.64	\$ 12,075.27	\$ 86.30	\$ 4,310.54	\$ 4,310.54	\$ 750.00	\$ 800.00	\$ 5,860.54	
2511722240053	634 10TH AVE S	JEFFREY C GRAFF		C	49.95		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 103.94	\$ 5,191.63	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 6,667.77	\$ 86.30	\$ 4,310.54	\$ 4,310.54	\$ -	\$ -	\$ 4,310.54	
2511722240068	645 10TH AVE S	BEVERLY J HOERNEMANN	CRAIG R BERTELSON	C	49.95		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 103.94	\$ 5,191.80	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 6,667.94	\$ 86.30	\$ 4,310.69	\$ 4,310.69	\$ -	\$ -	\$ 4,310.69	
2511722240069	641 10TH AVE S	NICHOLAS P ZUMBUSCH		C	49.95		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 103.94	\$ 5,191.59	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 6,667.73	\$ 86.30	\$ 4,310.51	\$ 4,310.51	\$ -	\$ -	\$ 4,310.51	
2511722240071	623 10TH AVE S	JOHN W STEEN		C	99.90		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 103.94	\$ 10,383.26	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 11,859.40	\$ 86.30	\$ 8,621.08	\$ 8,621.08	\$ -	\$ -	\$ 8,621.08	
2511722240072	621 10TH AVE S	ROBERT J COTTER		C	49.95		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 103.94	\$ 5,191.63	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 6,667.77	\$ 86.30	\$ 4,310.54	\$ 4,310.54	\$ -	\$ -	\$ 4,310.54	
2511722240073	617 10TH AVE S	JOHN F UNDERDAHL		C	49.95		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 103.94	\$ 5,191.63	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 6,667.77	\$ 86.30	\$ 4,310.54	\$ 4,310.54	\$ -	\$ -	\$ 4,310.54	
2511722240074	613 10TH AVE S	BRADLEY J TUTTLE		C	49.95		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 103.94	\$ 5,191.59	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 6,667.73	\$ 86.30	\$ 4,310.51	\$ 4,310.51	\$ -	\$ -	\$ 4,310.51	
2511722240075	609 10TH AVE S	TERESA L HILL		C	49.95		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 103.94	\$ 5,191.63	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 6,667.77	\$ 86.30	\$ 4,310.54	\$ 4,310.54	\$ -	\$ -	\$ 4,310.54	
2511722240076	601 10TH AVE S	ROBERT & JUDITH HUTCHINS		C	49.95		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 103.94	\$ 5,191.66	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 6,667.80	\$ 86.30	\$ 4,310.57	\$ 4,310.57	\$ -	\$ -	\$ 4,310.57	
2511722240079	901 7TH ST S	MARLYS B ROSENGREN		D2	1.85		\$ -	\$ -	\$ 110.55	\$ 147.74	\$ -	\$ -	\$ 478.16	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 478.16	\$ 86.30	\$ 159.76	\$ 159.76	\$ -	\$ -	\$ 159.76	
2511722240080	901 7TH ST S	STEPHEN & JUDITH CLARK		D2	1.85		\$ -	\$ -	\$ 110.55	\$ 147.74	\$ -	\$ -	\$ 478.16	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 478.16	\$ 86.30	\$ 159.76	\$ 159.76	\$ -	\$ -	\$ 159.76	
2511722240081	911 7TH ST S	LIEN KIM NGUYEN		D2	1.85		\$ -	\$ -	\$ 110.55	\$ 147.74	\$ -	\$ -	\$ 478.16	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 478.16	\$ 86.30	\$ 159.76	\$ 159.76	\$ -	\$ -	\$ 159.76	
2511722240082	911 7TH ST S	STEVEN A SCHMIDT		D2	1.85		\$ -	\$ -	\$ 110.55	\$ 147.74	\$ -	\$ -	\$ 478.16	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 478.16	\$ 86.30	\$ 159.76	\$ 159.76	\$ -	\$ -	\$ 159.76	
2511722240083	911 7TH ST S	LIEN KIM NGUYEN		D2	1.85		\$ -	\$ -	\$ 110.55	\$ 147.74	\$ -	\$ -	\$ 478.16	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 478.16	\$ 86.30	\$ 159.76	\$ 159.76				

PRELIMINARY ASSESSMENT ROLL

2017 STREET & UTILITY IMPROVEMENTS

CITY OF HOPKINS, MN

BMI PROJECT NO. T19.112021

8/24/2016																		A		B						
PID		ADDRESS	OWNER NAME	OWNER NAME 2	GROUP	FRONT FOOT ASSESSMENTS								UNIT ASSESSMENTS						STREET ASSESSMENT WITHOUT CAP CONSIDERED	STREET ASSESSMENT CAP		PROPOSED STREET ASSESSMENT (Lesser of Column A or B)	PROPOSED SEWER SERVICE ASSESSMENT	PROPOSED WATER SERVICE ASSESSMENT	TOTAL PROPOSED ASSESSMENT
						FRONT FOOTAGE	ADJUSTED FRONT FOOTAGE	PARK VALLEY DR	5TH AVE S	6TH ST S	7TH ST S	9TH AVE S	10TH AVE S	SUBTOTAL FRONT FOOT ASSESSMENT	6TH ST S	7TH ST S	ALLEY 5TH ST S	ALLEY 8TH ST S	SUBTOTAL UNIT ASSESSMENT		ASSESSMENT RATE CAP PER FRONT FOOT	STREET ASSESSMENT PER CAP				
2511722240136	620	10TH AVE S	JAMES WARDEN	CHRISTA B MELAND	B	49.95		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 103.94	\$ 5,191.63	\$ -	\$ 1,476.14	\$ 5,407.50	\$ -	\$ 6,883.64	\$ 12,075.27	\$ 86.30	\$ 4,310.54	\$ 4,310.54	\$ 750.00	\$ 800.00	\$ 5,860.54
2511722240137	624	10TH AVE S	FRANZ P PETRUSKA		B	49.95		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 103.94	\$ 5,191.63	\$ -	\$ 1,476.14	\$ 5,407.50	\$ -	\$ 6,883.64	\$ 12,075.27	\$ 86.30	\$ 4,310.54	\$ 4,310.54	\$ 750.00	\$ 800.00	\$ 5,860.54
2511722310484	707	11TH AVE S	PHILLIP V TATEOSIAN		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310485	707	11TH AVE S	JERRY J TALBERT	HELEN L THOMAS	R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310487	707	11TH AVE S	J P & B L GASTERLAND		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310488	707	11TH AVE S	CHERYL & MARK HATHAWAY		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310489	707	11TH AVE S	R NESLUND CO	C/O PARK AVENUE OF WAYZATA	R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310491	707	11TH AVE S	J P & B L GASTERLAND		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310492	709	11TH AVE S	WILLIAM L/VIRGINIA J HUTTNER		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310493	709	11TH AVE S	SABRINA A CROW		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310494	709	11TH AVE S	REBECCA R DALTON		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310495	709	11TH AVE S	KIMBERLY J KUHLMAN		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310496	709	11TH AVE S	PALLADIUM HOLDINGS LLC		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310497	709	11TH AVE S	PAUL HOFRENNING		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310498	709	11TH AVE S	SABRINA A CROW		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310499	709	11TH AVE S	TIMOTHY & PAULA LEAHY		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310500	711	11TH AVE S	HOPKINS 4 LLC		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310502	711	11TH AVE S	WILLIAM & SUSAN BRODY		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310503	711	11TH AVE S	ANN M HANKE		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310505	711	11TH AVE S	PAUL HAGA		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310506	711	11TH AVE S	JOSEPH P HAEGELE		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310508	739	11TH AVE S	PISETH BUNTHA		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310511	739	11TH AVE S	TIM & CHRIS CANNON		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310513	739	11TH AVE S	FRED V KERBER		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310515	739	11TH AVE S	WAYNE B WENKER		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310516	741	11TH AVE S	NEW CONCEPTS MGMT GROUP INC	ATTN: DAVID SCHULTZ	R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310518	741	11TH AVE S	WAYNE WENKER		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310519	741	11TH AVE S	GLENGARRY PROPERTIES LLC		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310520	741	11TH AVE S	WAYNE B WENKER		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310521	741	11TH AVE S	JANEA MASHEK MITCHELTREE		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310522	741	11TH AVE S	WAYNE WENKER		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310523	741	11TH AVE S	GLENGARRY PROPERTIES LLC		R	1.81		\$ -																		

PRELIMINARY ASSESSMENT ROLL
2017 STREET & UTILITY IMPROVEMENTS
CITY OF HOPKINS, MN
BMI PROJECT NO. T19.112021

8/24/2016																			A		B					
PID	ADDRESS	OWNER NAME	OWNER NAME 2	GROUP	FRONT FOOT ASSESSMENTS								UNIT ASSESSMENTS						STREET ASSESSMENT WITHOUT CAP CONSIDERED	STREET ASSESSMENT CAP		PROPOSED STREET ASSESSMENT (Lesser of Column A or B)	PROPOSED SEWER SERVICE ASSESSMENT	PROPOSED WATER SERVICE ASSESSMENT	TOTAL PROPOSED ASSESSMENT	
					FRONT FOOTAGE	ADJUSTED FRONT FOOTAGE	PARK VALLEY DR	5TH AVE S	6TH ST S	7TH ST S	9TH AVE S	10TH AVE S	SUBTOTAL FRONT FOOT ASSESSMENT	6TH ST S	7TH ST S	ALLEY 5TH ST S	ALLEY 8TH ST S	SUBTOTAL UNIT ASSESSMENT		ASSESSMENT RATE CAP PER FRONT FOOT	STREET ASSESSMENT PER CAP					
2511722310573	809 11TH AVE S	MARIA KOEGEL		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310575	809 11TH AVE S	KEITH A NIEMI		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310576	809 11TH AVE S	R NESLUND CO	C/O PARK AVENUE OF WAYZATA	R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310577	809 11TH AVE S	R NESLUND CO	C/O PARK AVENUE OF WAYZATA	R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310578	809 11TH AVE S	PHILIP & TERESA TATEOSIAN		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310579	809 11TH AVE S	MICHAEL DRIES		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310580	811 11TH AVE S	WAYNE B WENKER		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310581	811 11TH AVE S	R NESLUND CO	C/O PARK AVENUE OF WAYZATA	R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310582	811 11TH AVE S	DREVLOW PROPERTIES LLC		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310583	811 11TH AVE S	R NESLUND CO	C/O PARK AVENUE OF WAYZATA	R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310584	811 11TH AVE S	J P & B L GASTERLAND		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310585	811 11TH AVE S	LYLE GUHL & YVONNE GUHL		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310586	811 11TH AVE S	MARY JANE MAJOR		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310587	811 11TH AVE S	R NESLUND CO	C/O PARK AVENUE OF WAYZATA	R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310588	810 9TH AVE S	ANDREI PETRUSEVICH	VIKTORYIA PETRUSEVICH	R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310589	810 9TH AVE S	R NESLUND CO	C/O PARK AVENUE OF WAYZATA	R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310590	810 9TH AVE S	JOHN W LARSEN		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310591	810 9TH AVE S	WESTBROOKE-PARK CONDO ASSOC	ATTN: DAVID SCHULTZ	R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310592	810 9TH AVE S	KATHERINE TOUTIN CACERES		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310593	810 9TH AVE S	R NESLUND CO	C/O PARK AVENUE OF WAYZATA	R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310594	810 9TH AVE S	ROCK CITY LLC		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310595	810 9TH AVE S	R NESLUND CO	C/O PARK AVENUE OF WAYZATA	R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310596	812 9TH AVE S	CROSSROAD ENTERPRISE LLC		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310597	812 9TH AVE S	GLENGARRY PROPERTIES LLC		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310598	812 9TH AVE S	R NESLUND CO	C/O PARK AVENUE OF WAYZATA	R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310600	812 9TH AVE S	R NESLUND CO	C/O PARK AVENUE OF WAYZATA	R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310602	812 9TH AVE S	R NESLUND CO	C/O PARK AVENUE OF WAYZATA	R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310603	812 9TH AVE S	R NESLUND CO	C/O PARK AVENUE OF WAYZATA	R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310604	813 11TH AVE S	R NESLUND CO	C/O PARK AVENUE OF WAYZATA	R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310605	813 11TH AVE S	DOC CHICKEN LLC		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310607	813 11TH AVE S	R NESLUND CO	C/O PARK AVENUE OF WAYZATA	R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310608	813 11TH AVE S	R NESLUND CO	C/O PARK AVENUE OF WAYZATA	R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13	
2511722310609	813 11TH AVE S	J P & B L GASTERLAND		R	1.81		\$ -	\$ -																		

PRELIMINARY ASSESSMENT ROLL

2017 STREET & UTILITY IMPROVEMENTS

CITY OF HOPKINS, MN

BMI PROJECT NO. T19.112021

8/24/2016																A		B							
PID	ADDRESS	OWNER NAME	OWNER NAME 2	GROUP	FRONT FOOT ASSESSMENTS								UNIT ASSESSMENTS					STREET ASSESSMENT WITHOUT CAP CONSIDERED	STREET ASSESSMENT CAP		PROPOSED STREET ASSESSMENT (Lesser of Column A or B)	PROPOSED SEWER SERVICE ASSESSMENT	PROPOSED WATER SERVICE ASSESSMENT	TOTAL PROPOSED ASSESSMENT	
					FRONT FOOTAGE	ADJUSTED FRONT FOOTAGE	PARK VALLEY DR	5TH AVE S	6TH ST S	7TH ST S	9TH AVE S	10TH AVE S	SUBTOTAL FRONT FOOT ASSESSMENT	6TH ST S	7TH ST S	ALLEY 5TH ST S	ALLEY 8TH ST S		SUBTOTAL UNIT ASSESSMENT	ASSESSMENT RATE CAP PER FRONT FOOT					STREET ASSESSMENT PER CAP
2511722310693	809 11TH AVE S	GLENGARRY PROPERTIES LLC		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310694	815 11TH AVE S	GLENGARRY PROPERTIES LLC		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310695	711 11TH AVE S	PHILLIP V TATEOSIAN		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310696	741 11TH AVE S	BRYAN P BJORNSON		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310697	747 11TH AVE S	JOHN H WARD		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310698	812 9TH AVE S	MCCLURE PROPERTIES LLC		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310701	707 11TH AVE S	MELBA LETICIA CARDENAS ARDON		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310715	711 11TH AVE S	MOHAMMED ALI TAJBAKSHH		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310716	739 11TH AVE S	TRONG Q PHAM		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310717	805 11TH AVE S	THE BERKLEY GROUP INC		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310718	812 9TH AVE S	THE BERKLEY GROUP INC		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310719	813 11TH AVE S	JEANNE L BAILEY		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310720	815 11TH AVE S	PETER M ANDERSON		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310721	816 9TH AVE S	MARTEE A ROWE		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310722	817 11TH AVE S	GLENGARRY PROPERTIES LLC		R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310723	819 11TH AVE S	ROGER WAYNE MILLER	BARBARA ANN MILLER	R	1.81		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 236.22	\$ -	\$ 8.79	\$ -	\$ -	\$ 8.79	\$ 245.01	\$ 86.30	\$ 156.13	\$ 156.13	\$ -	\$ -	\$ 156.13
2511722310726	706 9TH AVE S	SOKHA SEAN		Q	14.30		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 1,866.82	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 3,342.96	\$ 86.30	\$ 1,233.87	\$ 1,233.87	\$ -	\$ -	\$ 1,233.87
2511722310727	708 9TH AVE S	BRITTNEY D MUSSELL		Q	14.30		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 1,866.82	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 3,342.96	\$ 86.30	\$ 1,233.87	\$ 1,233.87	\$ -	\$ -	\$ 1,233.87
2511722310728	710 9TH AVE S	CHELSEY SWANSON		Q	14.30		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 1,866.82	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 3,342.96	\$ 86.30	\$ 1,233.87	\$ 1,233.87	\$ -	\$ -	\$ 1,233.87
2511722310729	714 9TH AVE S	ROSEMARY CARPENTER		Q	14.30		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 1,866.82	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 3,342.96	\$ 86.30	\$ 1,233.87	\$ 1,233.87	\$ -	\$ -	\$ 1,233.87
2511722310730	716 9TH AVE S	IBRAHIM A GABOW		Q	14.30		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 1,866.82	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 3,342.96	\$ 86.30	\$ 1,233.87	\$ 1,233.87	\$ -	\$ -	\$ 1,233.87
2511722310731	718 9TH AVE S	PEACE VALLEY HOWNERS ASSN	C/O ASK PROPERTY MGMT	Q	14.30		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 1,866.82	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 3,342.96	\$ 86.30	\$ 1,233.87	\$ 1,233.87	\$ -	\$ -	\$ 1,233.87
2511722310732	720 9TH AVE S	CRYSTAL JOHNSON		Q	14.30		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 1,866.82	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 3,342.96	\$ 86.30	\$ 1,233.87	\$ 1,233.87	\$ -	\$ -	\$ 1,233.87
2511722310733	722 9TH AVE S	DANA SPRINGER		Q	14.30		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 1,866.82	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 3,342.96	\$ 86.30	\$ 1,233.87	\$ 1,233.87	\$ -	\$ -	\$ 1,233.87
2511722310734	726 9TH AVE S	DMYTRO KRYKUN	NATALIYA PERETYATKO	Q	14.30		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 1,866.82	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 3,342.96	\$ 86.30	\$ 1,233.87	\$ 1,233.87	\$ -	\$ -	\$ 1,233.87
2511722310735	728 9TH AVE S	LORI D ROWEN		Q	14.30		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 1,866.82	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 3,342.96	\$ 86.30	\$ 1,233.87	\$ 1,233.87	\$ -	\$ -	\$ 1,233.87
2511722310736	730 9TH AVE S	TERRY JOHNSON		Q	14.30		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 1,866.82	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 3,342.96	\$ 86.30	\$ 1,233.87	\$ 1,233.87	\$ -	\$ -	\$ 1,233.87
2511722310737	732 9TH AVE S	PETER FITZGERALD		Q	14.30		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 1,866.82	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 3,342.96	\$ 86.30	\$ 1,233.87	\$ 1,233.87	\$ -	\$ -	\$ 1,233.87
2511722310738	734 9TH AVE S	CHRISTINA HILLAN		Q	14.30		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 1,866.82	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 3,342.96	\$ 86.30	\$ 1,233.87	\$ 1,233.87	\$ -	\$ -	\$ 1,233.87
2511722310739	738 9TH AVE S	STEPHEN L FARROW		Q	14.30		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 1,866.82	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 3,342.96	\$ 86.30	\$ 1,233.87	\$ 1,233.87	\$ -	\$ -	\$ 1,233.87
2511722310740	740 9TH AVE S	ABIGAIL CEYNAR		Q	14.30		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 1,866.82	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 3,342.96	\$ 86.30	\$ 1,233.87	\$ 1,233.87	\$ -	\$ -	\$ 1,233.87
251																									

PRELIMINARY ASSESSMENT ROLL

2017 STREET & UTILITY IMPROVEMENTS

CITY OF HOPKINS, MN

BMI PROJECT NO. T19.112021

8/24/2016															A		B								
PID	ADDRESS	OWNER NAME	OWNER NAME 2	GROUP	FRONT FOOT ASSESSMENTS									UNIT ASSESSMENTS					STREET ASSESSMENT WITHOUT CAP CONSIDERED	STREET ASSESSMENT CAP		PROPOSED STREET ASSESSMENT (Lesser of Column A or B)	PROPOSED SEWER SERVICE ASSESSMENT	PROPOSED WATER SERVICE ASSESSMENT	TOTAL PROPOSED ASSESSMENT
					FRONT FOOTAGE	ADJUSTED FRONT FOOTAGE	PARK VALLEY DR	5TH AVE S	6TH ST S	7TH ST S	9TH AVE S	10TH AVE S	SUBTOTAL FRONT FOOT ASSESSMENT	6TH ST S	7TH ST S	ALLEY 5TH ST S	ALLEY 8TH ST S	SUBTOTAL UNIT ASSESSMENT		ASSESSMENT RATE CAP PER FRONT FOOT	STREET ASSESSMENT PER CAP				
2511722420016	734 8TH AVE S	SCOTT A & JUDITH ST MICHEL		P			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14
2511722420023	500 7TH ST S	BRETT K & COLLEEN T JOHNSON		M	61.96		\$ -	\$ -	\$ -	\$ 147.74	\$ -	\$ -	\$ 9,154.01	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,154.01	\$ 86.30	\$ 5,347.17	\$ 5,347.17	\$ 750.00	\$ 800.00	\$ 6,897.17
2511722420024	504 7TH ST S	WILLIAM C & DIANE M GAMBLE		M	61.96		\$ -	\$ -	\$ -	\$ 147.74	\$ -	\$ -	\$ 9,154.06	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,154.06	\$ 86.30	\$ 5,347.20	\$ 5,347.20	\$ 750.00	\$ 800.00	\$ 6,897.20
2511722420025	508 7TH ST S	ROBERT M & KATHLEEN L GROVER		M	62.80		\$ -	\$ -	\$ -	\$ 147.74	\$ -	\$ -	\$ 9,278.36	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,278.36	\$ 86.30	\$ 5,419.81	\$ 5,419.81	\$ 750.00	\$ 800.00	\$ 6,969.81
2511722420026	705 6TH AVE S	HELEN CANNING		N	59.97		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ 10,240.00	\$ 11,716.14	\$ 11,716.14	\$ 86.30	\$ 5,175.77	\$ 5,175.77	\$ -	\$ 800.00	\$ 5,975.77
2511722420027	708 6TH AVE S	CECELIA J THOMPSON		P			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ -	\$ 800.00	\$ 2,276.14
2511722420028	712 6TH AVE S	JAY & KAREN STRACHOTA		P			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ -	\$ 800.00	\$ 2,276.14
2511722420029	716 6TH AVE S	RICHARD D GARTON		P			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ -	\$ 800.00	\$ 2,276.14
2511722420030	720 6TH AVE S	BRENDA L SCHWICKERATH		P			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ -	\$ 800.00	\$ 2,276.14
2511722420031	724 6TH AVE S	STEVEN & ERIN TESCH		P			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ -	\$ 800.00	\$ 2,276.14
2511722420032	728 6TH AVE S	KRISTIN S CARLSON		P			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ -	\$ 800.00	\$ 2,276.14
2511722420033	732 6TH AVE S	BRADLEY A FERGUSON		P			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ -	\$ 800.00	\$ 2,276.14
2511722420034	736 6TH AVE S	MICHAEL H CRAEMER		P			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ -	\$ 800.00	\$ 2,276.14
2511722420035	709 6TH AVE S	STEPHEN J & SHARON M ROEDEL		N	59.94		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ 10,240.00	\$ 11,716.14	\$ 11,716.14	\$ 86.30	\$ 5,172.96	\$ 5,172.96	\$ -	\$ 800.00	\$ 5,972.96
2511722420036	717 6TH AVE S	HOPKINS 6TH AVE S LLC		N	59.94		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ 10,240.00	\$ 11,716.14	\$ 11,716.14	\$ 86.30	\$ 5,172.96	\$ 5,172.96	\$ -	\$ 800.00	\$ 5,972.96
2511722420037	723 6TH AVE S	GRANTE MORROW CARNES		N	59.94		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ 10,240.00	\$ 11,716.14	\$ 11,716.14	\$ 86.30	\$ 5,172.94	\$ 5,172.94	\$ -	\$ 800.00	\$ 5,972.94
2511722420038	727 6TH AVE S	THOMAS R BRIX		N	59.94		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ 10,240.00	\$ 11,716.14	\$ 11,716.14	\$ 86.30	\$ 5,172.96	\$ 5,172.96	\$ -	\$ 800.00	\$ 5,972.96
2511722420042	822 7TH ST S	TIMOTHY & MEREDITH SOKOLOSKI		Q	138.87	125	\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 18,132.73	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 19,608.87	\$ 86.30	\$ 10,787.50	\$ 10,787.50	\$ -	\$ -	\$ 10,787.50
2511722420043	717 9TH AVE S	ESSO PROPERTIES		Q	99.97		\$ -	\$ -	\$ -	\$ -	\$ 130.57	\$ -	\$ 13,052.93	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 14,529.07	\$ 86.30	\$ 8,627.31	\$ 8,627.31	\$ 750.00	\$ 800.00	\$ 10,177.31
2511722420045	702 7TH AVE S	METOK METOK	LOBSANG DOLMA	P			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14
2511722420046	704 7TH AVE S	ESTATE OF GLORIA F WILES	C/O MARY LOCKWOOD	P			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14
2511722420047	714 7TH AVE S	MARY D LOCKWOOD		P			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14
2511722420051	720 7TH AVE S	RANDAL E RALPH		P			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14
2511722420055	726 7TH AVE S	DONALD WHITE		P			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14
2511722420057	734 7TH AVE S	JAMES & ALEXIS GALLAGHER		P			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14
2511722420062	753 8TH AVE S	FEDERAL NATL MORTGAGE ASSN		P			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14
2511722420063	741 8TH AVE S	DOUGLAS J MATTSO		P			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14
2511722420064	737 8TH AVE S	NATHAN ROBERT WESTGARD		P			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14
2511722420065	733 8TH AVE S	GRAIG KVEEN		P			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14
2511722420068	725 8TH AVE S	PAUL M ANDERSON	KJIRSTEN A WALT	P			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14
2511722420074	709 8TH AVE S	DANIEL & JUNE LEVANDOSKI		P			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14
2511722420075	705 8TH AVE S	LEE P VAUGHN		P			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14
2511722420076	701 8TH AVE S	ANTHONY PUCKETT	BRITTANY E PUCKETT	P			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,476.14	\$ -	\$ -	\$ 1,476.14	\$ 1,476.14						

Appendix D:
Neighborhood Meeting
&
Resident Questionnaire

2017 STREET & UTILITY IMPROVEMENT NEIGHBORHOOD MEETING #1 (9/6/16)

Q: Where will the second meeting be held?

A: The second meeting on 9/15/16 will cover the same information and will be at the City Hall Council Chambers.

Q: Will there be new curb installed in the Mill & Overlay areas?

A: Only as needed. Full curb replacement will occur in the Reconstruction areas.

Q: What is milling?

A: Milling is the process of grinding off the top couple of inches of the existing asphalt pavement. The milled surface will then be overlaid with new asphalt pavement.

Q: 6th Ave S had work done not too long ago for the new lift station, does this street need to be reconstructed at this time?

A: Yes, the watermain needs to be replaced due to age and material but watermain improvements along with the street restoration caused by watermain construction are not assessed.

Q: What does DIP stand for?

A: Ductile Iron Pipe, which is the material that is used for the new watermain.

Q: What if your sanitary or water service has been replaced recently?

A: You will not be assessed for any service that was replaced within the last 10 years. This is discovered by looking through city plumbing records.

Q: Is 7th St S going to be wider?

A: No, the street is going to be narrowed or stay the same. It currently ranges from 36 ft to 44 ft wide and it is proposed to be at a constant width of 36 ft.

Q: Why is 7th St being narrowed?

A: To keep the road width consistent and to install a trail on the south side between 11th Ave and 9th Ave.

Q: We have a parking spot in our yard that is right behind the curb, will we be able to use that still with the new curb?

A: It depends on the individual situation, you will have to discuss with one of the project team members.

Q: Will there be new sidewalks in the neighborhood?

A: There is a proposed asphalt trail that runs along 7th St S from 11th Ave to 9th Ave and then down 9th Ave to the Park, but otherwise there are no proposed sidewalks. The general consensus from the resident questionnaires was that sidewalks are not wanted in the neighborhood and this area does not have a large need for sidewalks.

Q: Is there a proposed fence for the trail to act as a buffer for the properties along the trail?

A: There is no proposed fence for the trail.

Q: What is the trail used for and who's paying for it?

A: The trail is for pedestrians and cyclists and Three Rivers Park District will be paying for it.

Q: Will the trail by Smetana and Shady Oak be fixed?

A: That is within the City of Minnetonka so that would be up to their staff.

Q: The preliminary assessments slide is hard to read, what is my assessment?

A: We have printed sheets to look at after the meeting and also everyone will be receiving a letter in the mail within the next couple of days that states their preliminary assessment.

Q: What is the payback period for the assessments?

A: Assessments can be paid through your taxes over a 15 year period with a relatively low interest rate, usually around 4 - 4.5%.

Q: Can you pay off assessments early or at the time of sale?

A: Yes, you can pay off the remainder of your assessment at any time and not have to pay any interest after that date.

Q: What is the typical lot width?

A: The typical lot width in this neighborhood is 50 to 60 ft.

Q: Will this presentation be available somewhere?

A: Yes, the slides will be posted on the Hopkins Website.

Q: Is it necessary to pave the alley west of 10th Ave? There is a lot of peat in the area, it looks better with a natural surface, and the City does very little maintenance as it is.

A: This is part of a City-wide initiative to pave every gravel alley. It will make maintenance for the city much easier such as snow plowing. Also, residents will not pay an assessment for the alley since they will already be at the assessment cap for the work on 10th Ave.

Q: Would the schedule for this project potentially change if the Highway 169 project made it difficult for traffic?

A: This schedule for this project will not change due to the Highway 169 project. The City has been planning for this project for the last 5 years and it will start in April 2017 and last until October/November 2017. This will be during the Highway 169 project but Mn/DOT will be working with the City on anything we need.

Q: Trucks use 6th St S to cut through to get to Supervalu, can something be done to keep them off local streets?

A: The trucks will be reminded to stay off local streets.

Q: Can our driveway widths be adjusted at the curb?

A: Yes, as long as it meets city driveway codes and you can meet with the construction observer to make sure the codes are met.

Q: Where do we park during construction?

A: The contractor is required to restore the road every night so that you can access your driveway at night. The only exceptions to this would be if there is a heavy rain event that makes the dirt road unpassable or if the concrete curb and driveway needs to cure. Also, the contractor will be limited to how many blocks they can work on at once so there will be streets with parking available during working hours while your street is under construction.

Q: There is only one entrance to the parking lot of the business that comes off of the alley behind 10th Ave, where are we supposed to park when the alley is being constructed?

A: We will make sure the contractor constructs the alley at a different time than 10th Ave so that 10th Ave can be used for parking.

Q: Is it ok if the City is replacing a tree in my front yard this fall?

A: Yes, they will avoid planting it around any services which would be the only reason the tree would be in danger of being removed during construction next year.



CITY OF HOPKINS

PUBLIC WORKS-ENGINEERING DIVISION

2017 STREET AND UTILITY IMPROVEMENT QUESTIONNAIRE

PLEASE RETURN TO CITY HALL (1010 1ST ST S, HOPKINS MN 55343) BY: JULY 8, 2016

Street and utility improvements are proposed for your street in 2017. This questionnaire is a valuable resource for the City in identifying issues to receive attention. Your comments and concerns are greatly appreciated.

1. DRAINAGE

_____ I have observed standing water in the street or my front yard after a significant rain. It is located at:

2. SANITARY SEWER

_____ We have experienced no problems with our sanitary sewer service.

_____ We have experienced problems or replaced our sewer service. Please describe:

3. WATERMAIN

_____ We have experienced no problems with our water service.

_____ We have experienced problems or replaced our water service. Please describe:

4. SIDEWALKS

Do you have interest in seeing additional sidewalks within your neighborhood? If so, where?

5. IRRIGATION SYSTEM / INVISIBLE FENCE

_____ Yes, we have an irrigation system. _____ Yes, we have an invisible pet fence.

6. TREES / LANDSCAPING

Do you have concerns about trees or landscaping in your front yard? If so, describe.

7. GENERAL COMMENTS / QUESTIONS

Please describe any issues you suggest be considered as part of this project:

The following information is optional but is useful if we have a question about your responses:

Name: _____ Phone No.: _____

Address: _____

THANK YOU FOR YOUR RESPONSE!

Should you have any questions please contact Nate Stanley, City Engineer, at 952-548-6356 or nstanley@hopkinsmn.com or Mike Waltman at 612-221-6946 or mikewa@bolton-menk.com

2017 STREET & UTILITY IMPROVEMENT QUESTIONNAIRE SUMMARY

Storm:

- Road drains into vacant lot near 630 8th Avenue S (according to resident at 630), floods backyard. Need sewer on 7th Street and 9th Ave S.
- Drainage issue/standing water at 614 10th Avenue S.
- Standing water at drain near 738 7th Avenue S.
- 316 7th St. S. Curb appears to have sunk after waterline replacement and now some pooled water
- 738 7th Ave S. has had drainage issues since creek project, water overflows banks into park and now backs up into this yard. Look into the culvert on 8th Street and the area around it as a part of this project.

Sanitary:

- Concerns at 312 7th Street has had a few repairs over the year. Wondering if storm sewer is crushing sewer service

Sidewalks:

- In general, vast majority of respondents do not want sidewalks added, a few want them considered for families or in area of park in project area.

Trees:

- A number of residents have concerns about boulevard trees, dying or with dead branches that fall off
- Protect large, mature trees near road.
- 600 10th Avenue S. commented that City installed sidewalk on 5th Street and caused damage to tree roots and tree is now dying.

General Comments:

- A few comments about crown in road, causing bottoming out when entering dwy.
- 10th avenue S. used as "short-cut" to avoid stop signs on 11th avenue, install speed bumps or narrow road (a couple of comments on this)
- Concerned about work being completed same time as work on 169 and additional traffic volumes on 11th Street S. due that work as it is an alternative route to Shady Oak.
- 602 Park Valley Dr. W. would like wider dwy entrance.
- Add stop signs on 8th Street heading East and west to slow folks down by the park.

Appendix E:

Geotechnical Evaluation

Geotechnical Evaluation Report

2017 Street and Utility Improvement Project
Hopkins, Minnesota

Prepared for

Bolton & Menk, Inc.

Professional Certification:

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.

Neil G. Lund, PE
Senior Engineer
License Number: 46212
August 3, 2016

Project B1605339

Braun Intertec Corporation

August 3, 2016

Project B1605339

Mr. Mike Waltman, PE
Bolton & Menk, Inc.
12224 Nicollet Avenue
Burnsville, MN 55337-1649

Re: Geotechnical Evaluation
2017 Street and Utility Improvement Project
Hopkins, Minnesota

Dear Mr. Waltman:

We are pleased to present this Geotechnical Evaluation Report for the 2017 Street Improvement Project in Hopkins, Minnesota. Our results and recommendations in light of the geotechnical issues influencing design and construction are presented in the attached report, which we request that you read in its entirety.

Remarks

Thank you for making Braun Intertec Corporation your geotechnical consultant for this project. If you have questions about this report, or if there are other services that we can provide in support of our work to date, please call Neil Lund at 952.995.2284.

Sincerely,

BRAUN INTERTEC CORPORATION

Neil G. Lund, PE
Senior Engineer

Matthew S. Oman, PE
Principal Engineer

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Appendix

Boring Location Sketch

GPR Figures

Log of Boring Sheets (ST-01 through ST-24)

Descriptive Terminology

A. Introduction

A.1. Project Description

This Geotechnical Evaluation Report addresses the proposed 2017 Street and Utility Improvement Project in Hopkins, Minnesota. The total length of street reconstruction proposed for the project is about 12,000 linear feet and includes the following:

- 6th Street South, from 5th Street South to West Park Valley Drive.
- 7th Street South, from 11th Avenue South to 2nd Avenue South.
- Alley, from 5th Street to one-half block south.
- 9th Avenue South, from Westbrooke Way to 7th Street South.
- 6th Avenue South, from 8th Street South to 5th Street South.
- 5th Avenue South, from 7th Street South to 5th Street South.
- West and East Park Valley Drive, from 7th Street South to 7th Street South.

The City will most likely replace utilities on the above streets, though some may receive only pavement rehabilitation (such mill and overlay or reclamation) if utility replacements are not required.

A.2. Purpose

The purpose of this geotechnical evaluation was to characterize subsurface geologic conditions at selected exploration locations and provide geotechnical recommendations for the design and construction of the Hopkins 2017 Street and Utility Improvement Project.

A.3. Background Information and Reference Documents

To facilitate our evaluation, we were provided with or reviewed the following information or documents:

- A base map of the project area provided by Bolton & Menk, Inc., Inc.
- *Geologic Atlas of Hennepin County* available from the Minnesota Geological Survey.

A.4. Project Area Conditions

Based on our referenced documents and past experience, the native soils underlying the project area

include a mix of glacial till, glacial outwash and organic/swamp deposits.

The streets in the 2017 Street and Utility Improvement Project area are residential, with bituminous pavement and concrete curb and gutter. The topography is rolling; surface elevations generally decrease from north to south and east to west.

A.5. Scope of Services

Our scope of services for this project was originally submitted as a Proposal to Mr. Mike Waltman of Bolton & Menk, Inc., for which we received e-mail authorization to proceed on June 8, 2016. Tasks performed in accordance with our authorized scope of services included:

- Clearing exploration locations of underground utilities.
- Performing penetration test borings (labeled ST-1 through ST-24) to between 15 feet below the existing street surfaces. Some borings, including ST-12 and ST-13, were extended to penetrate poor or weak soils. Boring ST-17 was drilled to 6 feet prior to meeting refusal on an unmarked utility.
- Performing laboratory moisture content tests and mechanical analyses (#200 sieve only) on selected penetration test samples.
- At the City's option, performing a ground penetrating radar (GPR) survey and analysis to evaluate pavement thickness on each street.
- Preparing this report containing a CAD sketch, exploration logs, a summary of the geologic materials encountered, results of laboratory tests, and recommendations for subgrade preparation, pavement thickness design and utility placement.

Exploration locations and surface elevations at the exploration locations were determined using GPS technology that utilizes the Minnesota Department of Transportation's (MnDOT's) permanent GPS Virtual Reference Network (VRN).

Our scope of services was performed under the terms of our September 1, 2013, General Conditions.

B. Results

B.1. GPR Results

GPR was used to determine approximate pavement layer thicknesses along the streets. GPR data was collected at a nominal one-foot interval in both directions of travel. Where “ground-truth” data (borings) were performed, the interpreted layers from the GPR scan were compared directly to the measured thicknesses from the pavement cores and hand auger borings to validate the accuracy of the GPR analysis.

Table 1 provides the average bituminous thickness, average aggregate base thickness (where present), and average total pavement thickness for each street in each direction based on our analysis using the RADAN software program. The Appendix shows the interpreted layer depth by foot along each street in the stated direction; we recommend consulting these figures for areas of anomalous thickness.

Table 1. Average GPR Thickness Results

Street	Scan Direction	Average Layer Thickness (inches)		
		Bituminous	Aggregate Base	Total
6th Street S	EB	4.4	4.1	8.5
7th Street S	EB	5.1	--	--
Alley	SB	<i>No discernable layers in scan</i>		
10th Ave S	NB	4.0	--	--
9th Ave S	SB	6.1	6.7	12.9
6th Ave S	SB	3.8	--	--
5th Ave S	NB	3.2	--	--
Park Valley Dr W	SB	3.0	--	--
Park Valley Dr E	NB	3.4	--	--

A distinct aggregate base was encountered only on portions of 5th and 9th Avenues South. Materials that are close in composition (such as a silty aggregate base overlying a silty sand fill) will often fail to produce a visible reflection in the GPR scan; this is consistent with the noted similarity of these materials by the drillers, as well as experience with past projects in the area. Further discussion follows in our boring results summary and construction considerations below.

B.2. Exploration Logs

B.2.a. Log of Boring Sheets

Log of Boring sheets for our penetration test borings are included in the Appendix. The logs identify and describe the geologic materials that were penetrated, and present the results of penetration resistance tests, laboratory tests performed on penetration test samples retrieved from them and groundwater measurements.

Strata boundaries were inferred from changes in the penetration test samples and the auger cuttings. Because sampling was not performed continuously, the strata boundary depths are only approximate. The boundary depths likely vary away from the boring locations, and the boundaries themselves may also occur as gradual rather than abrupt transitions.

B.2.b. Geologic Origins

Geologic origins assigned to the materials shown on the logs and referenced within this report were based on: (1) a review of the background information and reference documents cited above, (2) visual classification of the various geologic material samples retrieved during the course of our subsurface exploration, (3) penetration resistance testing performed for the project, (4) laboratory test results and (5) available common knowledge of the geologic processes and environments that have impacted the site and surrounding area in the past.

B.3. Geologic Profile

B.3.a. Pavement Materials

The borings first encountered an average bituminous pavement thickness of 4.5 inches as shown in Table 2. The aggregate base averaged 6.8 inches where it was noted; however, this aggregate was often similar to the underlying fill (silty sand and poorly graded sand with silt) and could not always be easily distinguished from those layers.

Table 2. Pavement Thickness Summary

Street	# of borings	Average Pavement Thickness (in.)	
		Bituminous	Aggregate Base
All	24	4.5	6.8
6th Street S	4	4.8	6.0

Street	# of borings	Average Pavement Thickness (in.)	
		Bituminous	Aggregate Base
7th Street S	6	4.7	6.8
Alley	1	N/A	N/A
10th Ave S	1	3.0	10.0
9th Ave S	2	7.0	5.0
6th Ave S	4	5.0	6.3
5th Ave S	2	4.0	7.8
Park Valley Dr W	2	3.8	5.3
Park Valley Dr E	2	2.5	8.3

The thicknesses measured in the borings generally compare well to those estimated via GPR, both at select locations and on average. Note that borings can often underestimate thickness in older pavements, particularly given the possibility that bituminous pavements have experienced stripping and material loss may be further damaged by the augering process. The limited sample size of the boring thickness data can also factor into discrepancies between GPR and boring data.

B.3.b. Geologic Materials

Beneath the pavement layers, the general geologic profile of site (from the top down) most commonly included:

- Fill or possible fill soils: The majority of soils were classified as silty sand but also included clayey sand, poorly graded sand with silt, sandy lean clay and lean clay with sand. Where encountered, the fill soils extended to between 5 feet below the surface to boring termination depth.
- Glacial outwash: Poorly graded sand, poorly graded sand with silt and silty sand soils that were usually fine- to medium-grained and brown to gray.
- Glacial till: The glacial till soils ranged from silty sand to clayey sand, sandy lean clay and lean clay with sand.

More limited deposits of the following were also present:

- Buried topsoil, consisting of black, brown or dark brown sandy lean clay with traces of roots, was encountered in ST-3, ST-9, ST-19 and ST-24. The buried topsoil was present at depth with the exception of in ST-19, where it appeared to be directly below the pavement section.

- Swamp deposits of organic lean clay, lean clay with sand and peat were present in ST-10 (5 to 10 feet deep) and ST-13 (7 to 24 feet deep).

A complete summary of pavement material thicknesses and the classifications of underlying soils are presented in Table 3. The soils are listed in the order in which they were encountered in the soil column, separated by the subgrade zone (upper 5 feet) and the underlying strata (utility zone). ST-6 and ST-17 were drilled adjacent to the paved surface or did not have field measurements for the pavement section thickness; ST-11 was drilled in the unpaved alley.

Table 3. Pavement Thickness and Subgrade Soil Type Summary

Boring	Street	Pavement Thicknesses (in.)		Subsurface Soil Classification(s)	
		Bituminous	Aggregate Base	0 -5 feet (pavement subgrade)	5 – 16 feet (utility zone)
ST-1	6th Street S	8	*	SM	SM, SC
ST-2	6th Street S	3 1/2	7 1/2	SM	SM, SP-SM, CL
ST-3	6th Street S	4 1/2	4	SM	SM, CL, SP-SM
ST-4	6th Street S	3	6 1/2	SP-SM, SM	SM, SP-SM, CL
ST-5	7th Street S	8	8	SM, SP-SM	SP-SM, SM, SP
ST-6	7th Street S	N/A	N/A	SM	SM, SC
ST-7	7th Street S	5 1/2	*	SM, SP-SM	SP-SM, SM, CL
ST-8	7th Street S	3	4	SM	SM, CL
ST-9	7th Street S	4	7	SM, CL	CL, SP-SM
ST-10	7th Street S	3	8	SM	OL, CL, SP-SM
ST-11	Alley	N/A	N/A	SM	SM, SP
ST-12	10th Ave S	3	10	SM	SM, SP, SC
ST-13	9th Ave S	8	*	SM	SM, PT, OL, SM
ST-14	9th Ave S	6	5	SM	SM, SP-SM
ST-15	6th Ave S	5	6	SM	SM, SP-SM
ST-16	6th Ave S	5 1/2	6 1/2	SM	SM, SC
ST-17	6th Ave S	N/A	N/A	SM	N/A
ST-18	6th Ave S	4 1/2	6 1/2	SM	SM, CL
ST-19	5th Ave S	4	7 1/2	CL	CL, SP-SM
ST-20	5th Ave S	4	8	SP-SM	SP-SM, CL, SC
ST-21	Park Valley Dr W	4	5	CL, SM	SM, SP-SM
ST-22	Park Valley Dr W	3 1/2	5 1/2	SP-SM	SP-SM, SM
ST-23	Park Valley Dr E	3	10	SM	SM, SP-SM
ST-24	Park Valley Dr E	2	6 1/2	SM	SM, CL

*A distinct aggregate base layer was either not noted by the drillers or was noted as being difficult to distinguish from underlying materials.

Penetration resistance data is summarized in Table 4, with comments to qualify the significance of penetration test results.

Table 4. Penetration Resistance Data

Geologic Material	Soil Classification(s) Represented	Range of Penetration Resistances (BPF)*	Comments
Fill (granular and non-granular)	SP-SM, SM, SC, CL	2 to 40	Mostly SM – variable, mostly loosely compacted
Glacial Till (clayey)	SC, CL	4 to 28	Rather soft to very stiff; generally medium
Glacial Till (silty sand)	SM	5 to 24	Loose to medium dense
Glacial Outwash (granular)	SP, SP-SM, SM	5 to 50/6"	Loose to hard; generally loose
Swamp deposits	OL, PT, CL	0 to 15	--

*BPF – blows per foot.

In several borings, the drillers noted instances where blow counts may have been influenced by possible cobbles or coarse gravel at the tip of the sampler. The depth of these occurrences is noted in the comments section of the boring logs.

B.3.c. Groundwater

Groundwater was observed during our drilling operations as shown in Table 5.

Table 5. Groundwater Observation Summary

Boring	Surface Elevation (feet)*	Observed Groundwater Depth (feet)	Corresponding Groundwater Elevation (feet)
ST-4	903 1/2	12 1/2	891
ST-5	890 1/2	12 1/2	878
ST-6	888	12 1/2	875 1/2
ST-7	892	14 1/2	877 1/2
ST-9	888 1/2	12 1/2	876
ST-10	885 1/2	10	875 1/2
ST-11	892	8	884
ST-12	896	9	887
ST-13	882	13 1/2	868 1/2
ST-14	887	12	875
ST-15	888	12 1/2	875 1/2
ST-19	895 1/2	12 1/2	883
ST-20	892 1/2	15	877 1/2
ST-24	891	10	881

*Rounded to nearest 1/2 foot

The most common groundwater elevation was approximately between 875 and 880 feet. Due to the layered nature of the soils in borings with higher measured groundwater elevations (ST-4; ST-12), it is possible these represent perched conditions. In Boring ST-13, the reported groundwater level was below the peat layer, whose surface likely corresponds to the true static groundwater condition (elevation of approximately 875 feet).

Seasonal and annual fluctuations of groundwater should be anticipated.

B.4. Laboratory Test Results

Laboratory test results, including moisture content, organic content and mechanical analysis (#200 sieve only) tests, are summarized in Table 6. The moisture contents of the sandy fill soils (above the apparent water table) were around 2 to 14 percent, indicating the materials were likely below to slightly above their optimum moisture contents for compaction. The higher moisture contents of noted clayey soils are likely above their optimum moisture contents for compaction.

Table 6. Laboratory Testing Results

Borehole	Soil Classification	Depth	%<#200 Sieve	Water Content (%)	Organic Content (%)
ST-02	SM	2 1/2	--	5	--
ST-03	CL	7 1/2	--	19	--
ST-04	SP-SM	7 1/2	9	5	--
ST-05	SP-SM	5	--	7	--
ST-06	SM	5	--	4	--
ST-07	SP-SM	7 1/2	--	5	--
ST-08	SM	7 1/2	--	10	--
ST-09	CL	7 1/2	--	24	2
ST-10	SM	2 1/2	--	8	--
ST-11	SM	5	--	12	--
ST-12	SM	2 1/2	--	8	--
ST-13	SM	2 1/2	46	14	--
ST-16	SM	2 1/2	--	8	--
ST-18	SM	5	27	8	--
ST-19	CL	5	--	19	--
ST-20	SP-SM	5	--	4	--
ST-21	CL	2 1/2	--	19	--
ST-22	SP-SM	5	--	2	--
ST-23	SM	2 1/2	--	7	--

ST-24	CL	7 1/2	--	26	3
-------	----	-------	----	----	---

C. Basis for Recommendations

C.1. Design Details

C.1.a. Traffic Loads

The majority of streets of the 2017 Street Improvement Project are residential and no traffic count data was available. We assume that these streets will experience a maximum of 50,000 Equivalent Single Axle Loads (ESALs) over a 20-year design period.

C.1.b. Anticipated Grade Changes

Based on the nature of construction, we anticipate grade changes will be minimal.

C.1.c. Utility Depths

Design utility depths were not provided to us. Based on the maximum requested boring depths, we assume sanitary sewer depths will be 15 feet or less below grade, and water main will generally be less than 10 feet below grade. We assume storm sewer improvements will be approximately 5 feet below grade.

C.1.d. Precautions Regarding Changed Information

We have attempted to describe our understanding of the proposed construction to the extent it was reported to us by others. Depending on the extent of available information, assumptions may have been made based on our experience with similar projects. If we have not correctly recorded or interpreted the project details, we should be notified. New or changed information could require additional evaluation, analyses and/or recommendations.

C.2. Design and Construction Considerations

C.2.a. Pavement Surface Condition (Potential Mill and Overlay Areas)

We understand some mill and overlay may take place in the 2017 Improvements Project area if there will be no or only limited utility installations. Pavement surface condition data was not available for our review and a survey of pavement condition was outside our scope of work.

Based on the pavement thickness from soil borings and GPR, it appears milling will generally be feasible if

the mill depth is limited to 1 1/2 or 2 inches, depending on the street. However, several areas showed relatively thin pavements that may not be able to support a milling operation. We recommend reviewing the attached GPR data for areas with less than 2 1/2 inches of bituminous pavement prior to selecting partial-depth mill as a preservation strategy. A minimum intact pavement thickness of 1 inch is good practice to support construction loads.

The suitability of a mill and overlay approach should also be evaluated against the existing surface condition of each street. The following conditions, in general, will complicate the mill and overlay process and result in a reduced service life if not addressed:

- High-severity transverse cracking: Any crack running transverse to the centerline of the street with significant adjacent random cracking (12 inches or more apart), large areas of spalling, missing material and/or potholes.
- High-severity longitudinal cracking: Any crack running parallel to the centerline of the street with significant adjacent random cracking (12 inches or more apart), large areas of spalling, missing material and/or potholes.
- Alligator cracking: A series of interconnected cracks forming many-sided, sharp-angled pieces, six inches or less in size typically located in the wheelpaths or where traffic loads are concentrated.

We recommend an experienced engineer walk the milled surface to delineate areas where further repair may be warranted based on conditions exposed by the milling process.

C.2.b. Pavement Subgrades and Drainage

The pavement subgrades (top 5 feet below the pavement surface) will consist of predominantly silty sand or poorly graded sand with silt fill. Based on the borings there may also be clayey pockets, including possible buried topsoil of minor organic content. We anticipate the majority of the subgrade soils present beneath the existing roads will generally be suitable for pavement support in their current condition or with minor rework such as surface compaction. The noted clayey soils (ST-9; ST-19; ST-21) may be wet upon exposure given their measured moisture contents, and these soils in particular may require additional work, such as drying or moisture conditioning.

To improve pavement drainage and uniformity, we recommend considering the installation of a subbase, consisting of MnDOT select granular borrow, beneath the aggregate base section. We further recommend placing drain tile about catch basins and at low points behind curb in order

to facilitate drainage of the roadways. The drain tile should be trenched at least 8 inches below the aggregate base or subbase, wrapped in filter fabric and backfilled with highly permeable aggregate.

C.2.c. Reuse of Materials

Our borings encountered a bituminous layer averaging slightly less than 5 inches thick, though relatively variable. The aggregate base, in the majority of borings but only in limited GPR data, was between around 4 and 7 inches thick. Visually, the limited materials identified as “aggregate base” in the field during drilling were often similar to those described as fill (usually dark brown silty sand (SM) with gravel) and a consistent, readily identifiable support layer did not always appear to be present. This is corroborated by GPR data, which only had a clear secondary (aggregate base) layer on a limited number of the scanned streets, suggesting limited contrast between the properties any aggregate layer present and the underlying soil.

Based on the available information, it is our opinion that full-depth reclamation (FDR) will be difficult to perform in a way that will provide a consistent, quality product for reuse in new pavements as aggregate base. Coupled with the need to remove or stockpile these materials in order to maintain grades in areas requiring utility excavations, FDR may also prove to be relatively costly.

If the bituminous millings can be stockpiled near the site for direct reuse on the project then some cost savings may be realized. To meet the recommend pavement section thickness, the millings will have to be combined (blended) or supplemented with additional imported materials.

C.2.d. Utility Support and Impact of Groundwater

The reuse of the utility trench backfill soils will have potential impacts on the pavement subgrades. If the backfill is not properly compacted, there is the potential for subgrade instability and settlement (and premature deterioration) of the driving surface. We anticipate the trench soils will consist of a mix of granular outwash soils (poorly graded sand and poorly graded sand with silt, silty sand), along with clayey glacial till. Numerous borings encountered clayey soils at depth; consult Table 3 and the Logs of Boring for the location of such soils.

Depending on the conditions at the time of excavation, drying of the clayey and silty soils may be necessary to achieve the levels of compaction recommended for utility support. Clayey and particularly silt-rich trench soils that are exposed to moisture will be more susceptible to strength loss and may also become unstable, which will require moisture conditioning or removal and replacement with suitable soils.

D. Recommendations

D.1. Pavements

D.1.a. Subgrade Preparation and Proofrolls

For preparation of any exposed subgrades prior to placement of new pavement sections or reclaimed aggregate (see below), we recommend the subgrade soils be proofrolled with a loaded tandem-axle truck and observed by a geotechnical engineer and City personnel. This will assist in identifying any soft or weak areas that will require additional soil correction work. Areas that yield or rut more than 2 inches due to wheel traffic should be corrected. Failed areas should be compacted, or if too wet, we recommend that the upper 1 to 2 feet of the resulting subgrade be scarified, dried to a moisture content not more than 1 percentage point above optimum, and compacted to a minimum of 100 percent of its standard Proctor maximum dry density (ASTM D 698).

If there are areas that still cannot be compacted, we recommend subexcavating the unstable materials to a minimum depth of 1 to 2 feet (depending on the replacement material), replacing them with suitable materials, and compacting them to 100 percent of their standard Proctor maximum densities. Depending on the depth of subcut and underlying material, suitable subcut backfill material may consist of MnDOT Select Granular Borrow, aggregate base or larger diameter crushed aggregate ("3-inch minus"). We should be consulted regarding subcut depths and backfill material.

D.1.b. Backfill and Material Compaction

We recommend compacting soils used as backfill for subcuts or material replacement be compacted to a minimum of 100 percent of standard Proctor density within 3 feet of the top of the subgrade. For fills more than 3 feet below final subgrades, 95 percent compaction is sufficient. The moisture content of the fill and backfill should be as shown in the table below depending on the classification of the backfill soils. Our compaction requirements are summarized in Table 7.

Table 7. Compaction Recommendations Summary

Reference	Relative Compaction, percent (ASTM D 698 – Standard Proctor)	Moisture Content Variance from Optimum, percentage Points
Below pavements, within 3 feet of subgrade elevations	100	-3/+3 (sandy soils) -2/+1 (clayey soils)
Below pavements, more than 3 feet below subgrade elevations	95	-3/+3 (sandy soils) -2/+3 (clayey soils)
Below utilities		

D.1.c. Design Sections

Laboratory tests to determine an R-value for pavement design were not included in the scope of this project. Given the most common soils in the top 5 feet of pavement sections, which include mostly silty sand with various other soils, we recommend using an R-value of 30 for pavement thickness design of the overall project. In our opinion, due to the variability of the subgrade soils, this R-value is a reasonable value to apply on a block-by-block basis. Further testing or refinement of the R-value used for design is possible and can be provided upon request.

Based upon the assumed traffic loads and an R-value of 30, we recommend a new pavement section for the streets in the 2017 Street Reconstruction meet the minimum thicknesses presented in Table 8.

Table 8. Recommended Bituminous Pavement Thickness Design for Residential Streets

Layer	Thickness (in.)	MnDOT Specification/Designation
Bituminous Wear	1 1/2 (1 lift)	SPWEB240C
Bituminous Non-wear	2 (1 lift)	SPNWB230C
Aggregate Base (Class 5 or 6)	8	3138
or Reclaim		3135
(OPTIONAL) Select Granular Subbase	12	3149.2B2

*The aggregate base thickness can be reduced to 6 inches if the subbase is utilized.

If a paved surface with a tighter and smoother look is desired, we recommend using a smaller maximum aggregate size in the wear course (SPWEA240C). Differences in performance will generally be minor, though the smaller aggregate size may be more prone to dimpling or distortion under concentrated loads.

The above pavement designs are based upon a 20-year performance life. This is the amount of time before major reconstruction is anticipated. This performance life assumes maintenance such as seal coating and crack sealing is routinely performed. The actual pavement life will vary depending on variations in weather, traffic conditions and maintenance.

A minor reduction in life-cycle maintenance costs is likely with the inclusion of the select granular subbase, which will stiffen the subgrade zone against traffic loading, improve drainage and reduce the damaging effects of frost heave.

D.1.d. Materials and Compaction

We recommend specifying pavement materials as recommended in Table 8.

We recommend compacting the aggregate base to meet the requirements of MnDOT specification 2211.3.D.2.c. (Penetration Index Method). We recommend compacting bituminous pavements to at least 92 percent of the maximum theoretical Rice density per the Maximum Density Method (specification 2360.3.D.1), with bituminous materials and placement practices meeting the requirements of MnDOT Specification 2360.

D.2. Utilities

D.2.a. Subgrades

The native and fill soils encountered at likely utility elevations generally appear suitable for pipe and utility structure support and we anticipate that utilities can be installed per manufacturer bedding requirements. However, we encountered somewhat wet, clayey or silty soils at likely utility depths in several borings, as well as significant depths of wet, organic soils (ST-10; ST-13) that have very limited stability and are not suitable for backfill or support of utilities. These soils should be removed and replaced with suitable grading materials where encountered during excavation. At pipe elevations, we recommend a minimum subcut and replacement with crushed-faced rock that is free of material 1 inch in diameter or smaller.

Due in part to the likelihood of wet, clayey soils being present, we also recommend providing a contingency for further subcutting and soil replacement of utility backfill and foundation soils.

A geotechnical engineer should observe all utility trench excavations and subcuts.

D.2.b. Excavation Side Slopes

The project area soils appear to meet OSHA Type A, B and C requirements. We then recommend constructing excavation side slopes to lie back at a horizontal to vertical slope of 1 1/2 to 1 or flatter. In significant depths of organic soils these side slopes may be need to made flatter, or supplemental support may be necessary.

All excavations must comply with the requirements of OSHA 29 CFR, Part 1926, Subpart P, "Excavations and Trenches." This document states that excavation safety is the responsibility of the contractor. Reference to these OSHA requirements should be included in the project specifications.

D.2.c. Selection, Placement and Compaction of Backfill

We recommend compacting backfill placed above and below utilities to a minimum of 95 percent of standard Proctor density. The exception is within 3 feet vertically of pavement subgrades, where the minimum compaction level should be increased to 100 percent. The fill should be within 3 percentage points of its optimum moisture content for sands; clays should only exceed their optimum moisture contents by 2 percent.

To achieve compaction over wet or waterbearing subgrades, we recommend the use of sands or gravel with less than 5 percent by weight passing the number 200 sieve and less than 50 percent passing the number 40 sieve.

D.2.d. Excavation Dewatering

We recommend removing groundwater from the utility excavations if encountered, and removing any water that seeps into excavations from sidewalls or the adjacent sitework. Sumps and pumps will generally be suitable for short-term water removal under the soil conditions likely to be encountered for this project. Alternative approaches should be considered for long-term or large-scale groundwater removal.

D.2.e. Corrosion Potential

If founded in sandy soils, corrosion protection should not be required for ductile iron pipe. Type I cement may also be specified for concrete utilities.

Some clayey soils were present at likely utility depths, which are considered at least moderately corrosive to ductile iron pipe. We recommend corrosion protection or the use of corrosion-resistant pipe material if utilities will be bedded within such soils, particular if in close proximity to static groundwater.

D.3. Construction Quality Control

D.3.a. Excavation Observations

We recommend having a geotechnical engineer observe all excavations related to subgrade preparation, utility placement and pavement construction. The purpose of the observations is to evaluate the competence of the geologic materials exposed in the excavations and the adequacy of required excavation oversizing.

D.3.b. Materials Testing

We recommend density tests be taken in excavation backfill and additional required fill placed below pavements and utilities.

We recommend Gyratory tests on bituminous mixes to evaluate strength and air voids and density tests to evaluate compaction.

D.3.c. Pavement Subgrade Proofroll

We recommend that proofrolling of the pavement subgrades be observed by a geotechnical engineer to determine if the results of the procedure meet project specifications and to delineate the extent of additional pavement subgrade preparation work that may be necessary.

D.3.d. Cold Weather Precautions

If site grading and construction is anticipated during cold weather, all snow and ice should be removed from cut and fill areas prior to additional grading. No fill should be placed on frozen subgrades. No frozen soils should be used as fill.

Concrete delivered to the site should meet the temperature requirements of ASTM C 94. Concrete should not be placed on frozen subgrades. Concrete should be protected from freezing until the necessary strength is attained.

E. Procedures

E.1.a. GPR Data Collection

GPR data collection occurred at posted speed limits according to GSSI, Inc. (manufacturer) SIR-20 processor settings at a specified interval of approximately one scan per lineal foot a single travel direction. A calibration file, required for data post-processing, was collected at the onset of testing.

E.1.b. GPR Analysis

Data collected by the GPR unit was analyzed to estimate the pavement thickness using RADAN 7.0, a software package included with the GSSI RoadScan system. The software includes tools to aid in delineating pavement layer transitions and automatically calculates their depths from the pavement surface using the calibration file(s) collected prior to or following testing.

Where “ground-truth” data was collected, the interpreted layers from the GPR scan were compared directly to the measured thicknesses from the cores to validate the accuracy of the GPR analysis.

E.2. Penetration Test Borings

The penetration test borings were drilled with a truck-mounted core and auger drill equipped with hollow-stem auger. The borings were performed in accordance with ASTM D 1586. Penetration test samples were taken at 2 1/2- or 5-foot intervals. Actual sample intervals and corresponding depths are shown on the boring logs.

E.3. Material Classification and Testing

E.3.a. Visual and Manual Classification

The geologic materials encountered were visually and manually classified in accordance with ASTM Standard Practice D 2488. A chart explaining the classification system is attached. Samples were placed in jars or bags and returned to our facility for review and storage.

E.3.b. Laboratory Testing

The results of the laboratory tests performed on geologic material samples are noted on or follow the appropriate attached exploration logs. The tests were performed in accordance with ASTM or AASHTO procedures.

E.4. Groundwater Measurements

The drillers checked for groundwater as the penetration test borings were advanced, and again after auger withdrawal. The boreholes were then backfilled as noted on the boring logs.

F. Qualifications

F.1. Variations in Subsurface Conditions

F.1.a. Material Strata

Our evaluation, analyses and recommendations were developed from a limited amount of site and subsurface information. It is not standard engineering practice to retrieve material samples from exploration locations continuously with depth, and therefore strata boundaries and thicknesses must be inferred to some extent. Strata boundaries may also be gradual transitions, and can be expected to vary

in depth, elevation and thickness away from the exploration locations.

Variations in subsurface conditions present between exploration locations may not be revealed until additional exploration work is completed, or construction commences. If any such variations are revealed, our recommendations should be re-evaluated. Such variations could increase construction costs, and a contingency should be provided to accommodate them.

F.1.b. Groundwater Levels

Groundwater measurements were made under the conditions reported herein and shown on the exploration logs, and interpreted in the text of this report. It should be noted that the observation periods were relatively short, and groundwater can be expected to fluctuate in response to rainfall, flooding, irrigation, seasonal freezing and thawing, surface drainage modifications and other seasonal and annual factors.

F.2. Continuity of Professional Responsibility

F.2.a. Plan Review

This report is based on a limited amount of information, and a number of assumptions were necessary to help us develop our recommendations. It is recommended that our firm review the geotechnical aspects of the designs and specifications, and evaluate whether the design is as expected, if any design changes have affected the validity of our recommendations, and if our recommendations have been correctly interpreted and implemented in the designs and specifications.

F.2.b. Construction Observations and Testing

It is recommended that we be retained to perform observations and tests during construction. This will allow correlation of the subsurface conditions encountered during construction with those encountered by the borings, and provide continuity of professional responsibility.

F.3. Use of Report

This report is for the exclusive use of the parties to which it has been addressed. Without written approval, we assume no responsibility to other parties regarding this report. Our evaluation, analyses and recommendations may not be appropriate for other parties or projects.

F.4. Standard of Care

In performing its services, Braun Intertec used that degree of care and skill ordinarily exercised under similar circumstances by reputable members of its profession currently practicing in the same locality. No warranty, express or implied, is made.

DRAFT

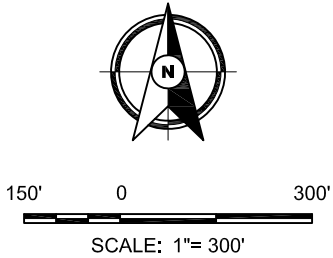
DRAFT

Appendix

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 DENOTES APPROXIMATE LOCATION OF STANDARD PENETRATION TEST BORING



Base Dwg Provided By:

SOIL BORING LOCATION SKETCH
GEOTECHNICAL EVALUATION
2017 STREET AND UTILITY IMPROVEMENTS
HOPKINS, MINNESOTA

Project No:	
B1605339	
Drawing No:	
B1605339	
Scale:	1"= 300'
Drawn By:	JAG
Date Drawn:	6/16/16
Checked By:	NGL
Last Modified:	7/7/16

Sheet:	Fig:
of	

Project Name

Project No.

Roadway

From

To

Length (feet)

Hopkins 2017 Imprv

B1605339

6th St S

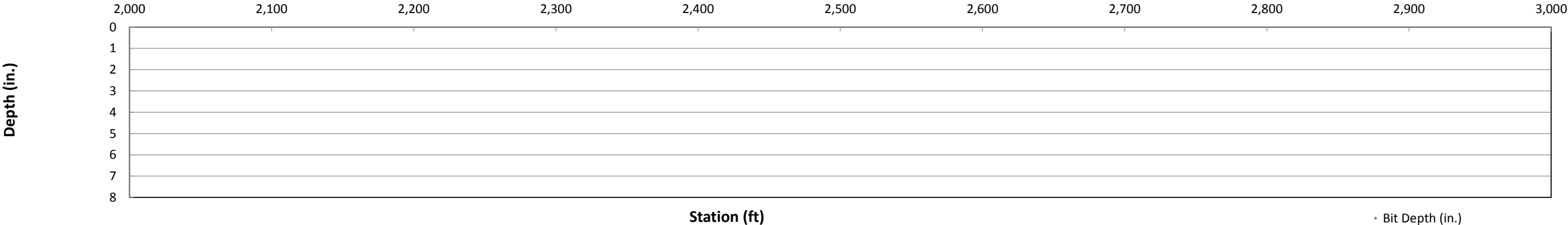
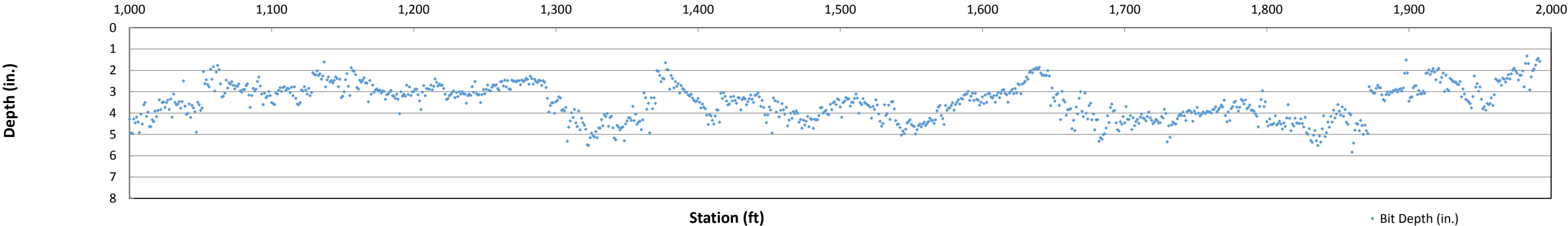
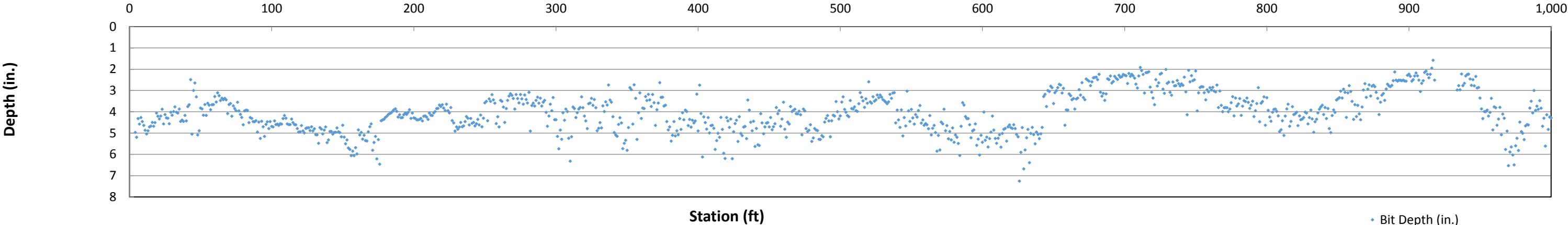
5th St S

W Valley Park

1,992



6th St S : 5th St S to W Valley Park



Project Name

Project No.

Roadway

From

To

Length (feet)

Hopkins 2017 Imprv

B1605339

7th St S

11th Ave S

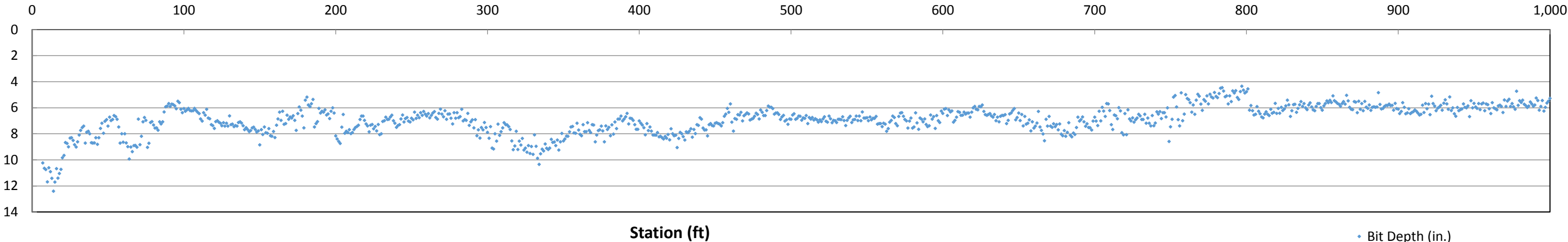
2nd Ave S

2,818

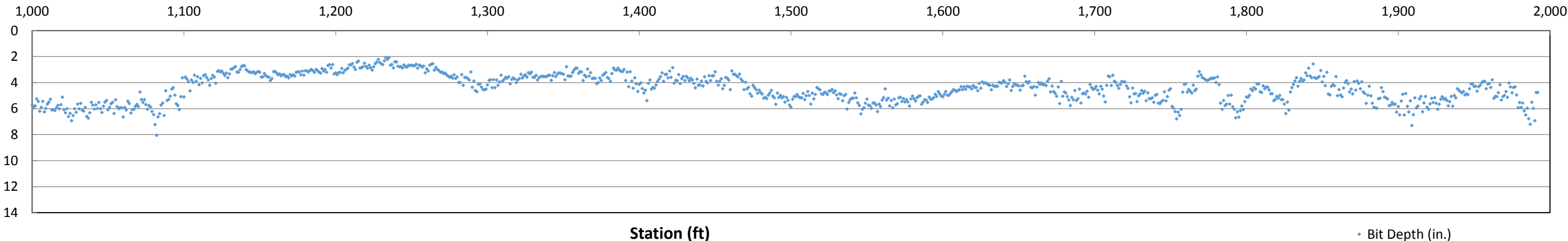


7th St S : 11th Ave S to 2nd Ave S

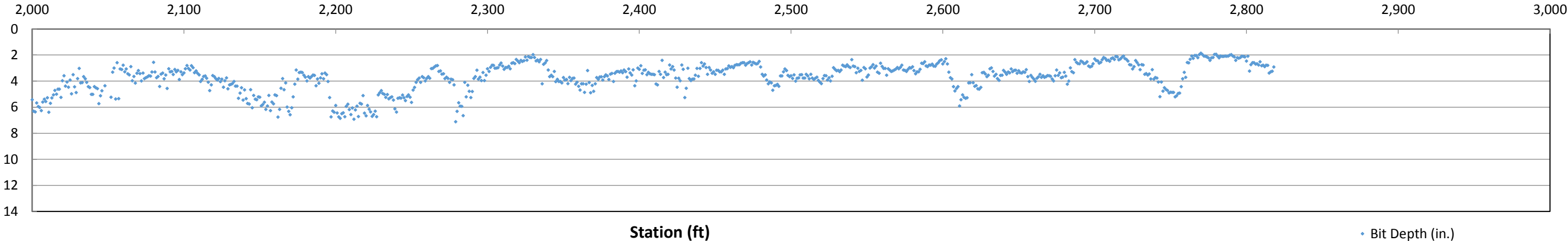
Depth (in.)



Depth (in.)

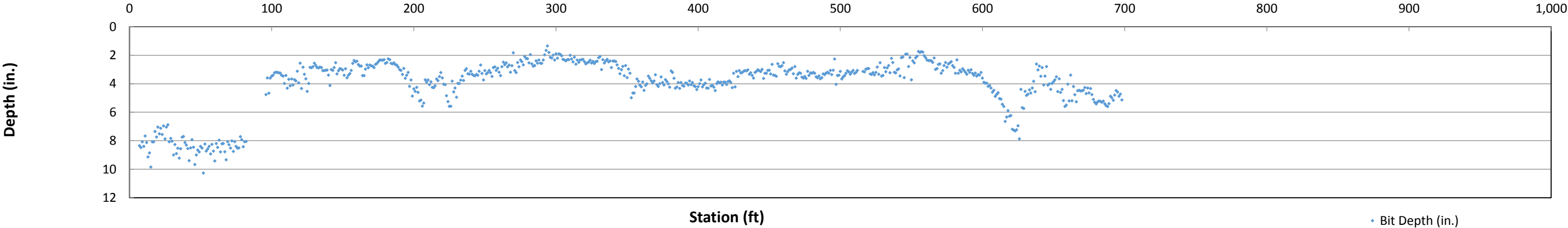


Depth (in.)



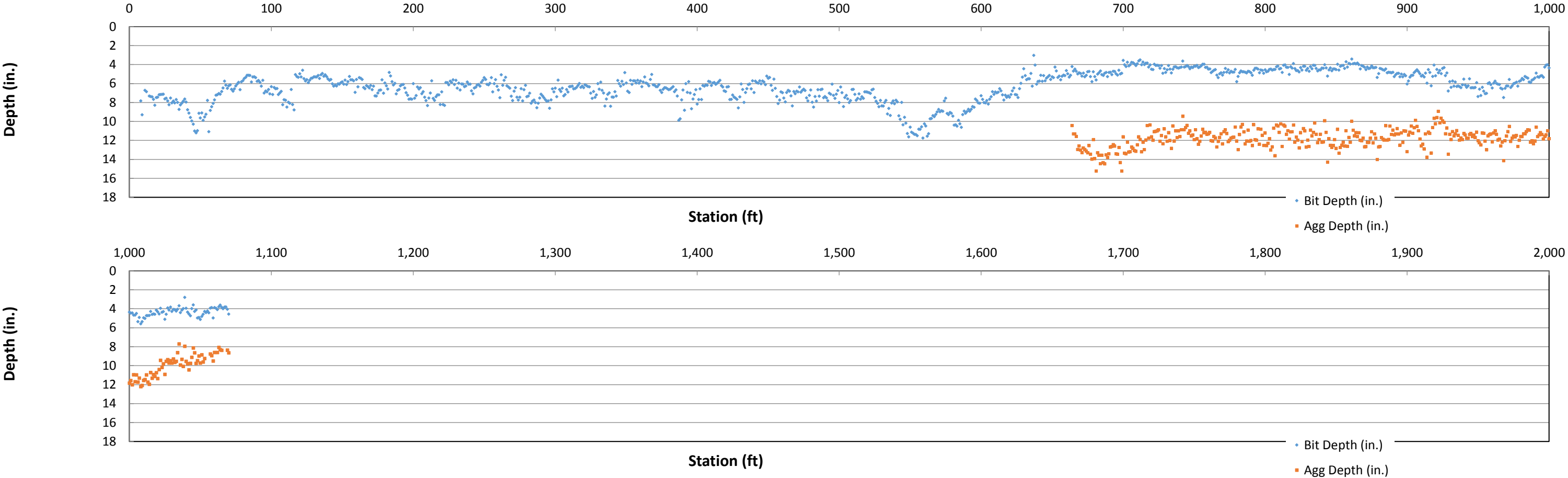
10th Ave S : 7th St S to 5th St S

Project Name	Hopkins 2017 Imprv
Project No.	B1605339
Roadway	10th Ave S
From	7th St S
To	5th St S
Length (feet)	698



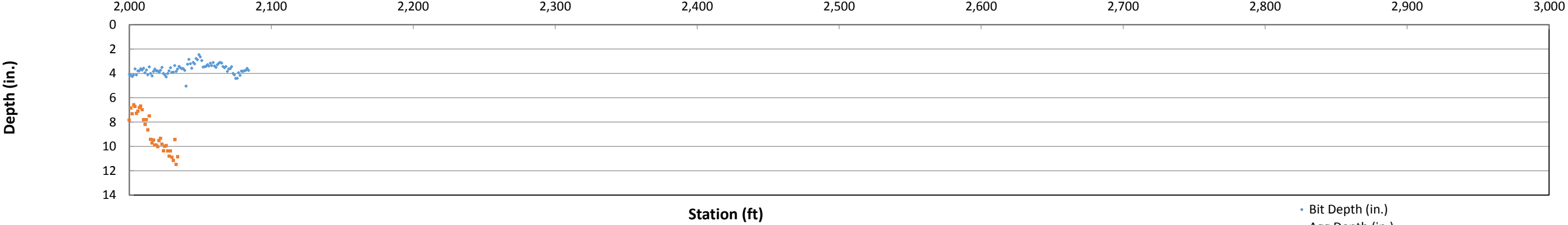
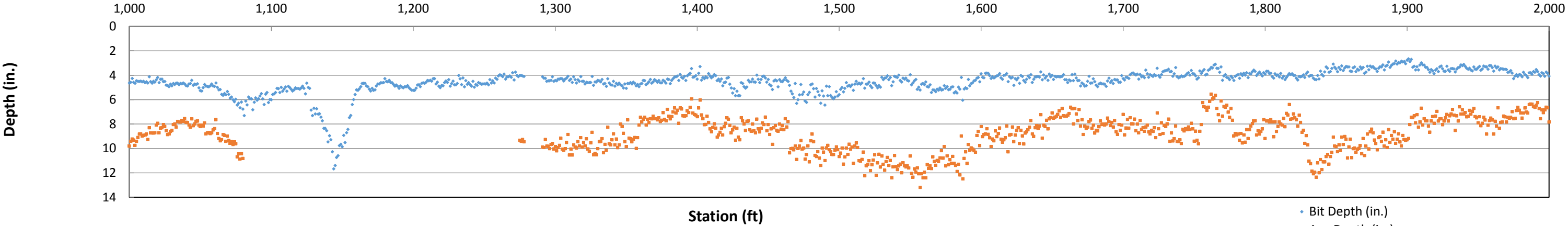
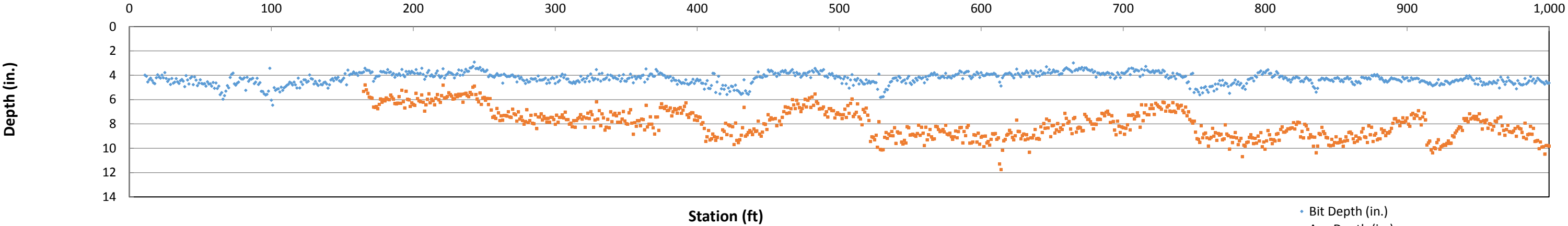
9th Ave S : 7th St S to Westbrooke Way

Project Name	Hopkins 2017 Imprv
Project No.	B1605339
Roadway	9th Ave S
From	7th St S
To	Westbrooke Way
Length (feet)	1,070



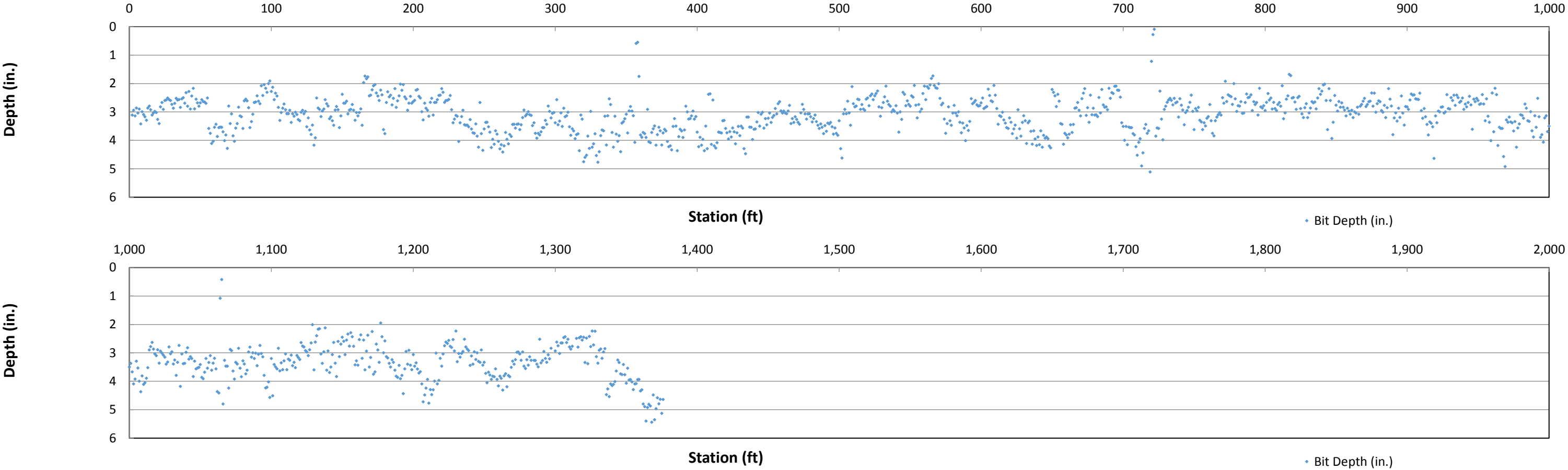
6th Ave S : 5th St S to 8th St S

Project Name	Hopkins 2017 Imprv
Project No.	B1605339
Roadway	6th Ave S
From	5th St S
To	8th St S
Length (feet)	2,084



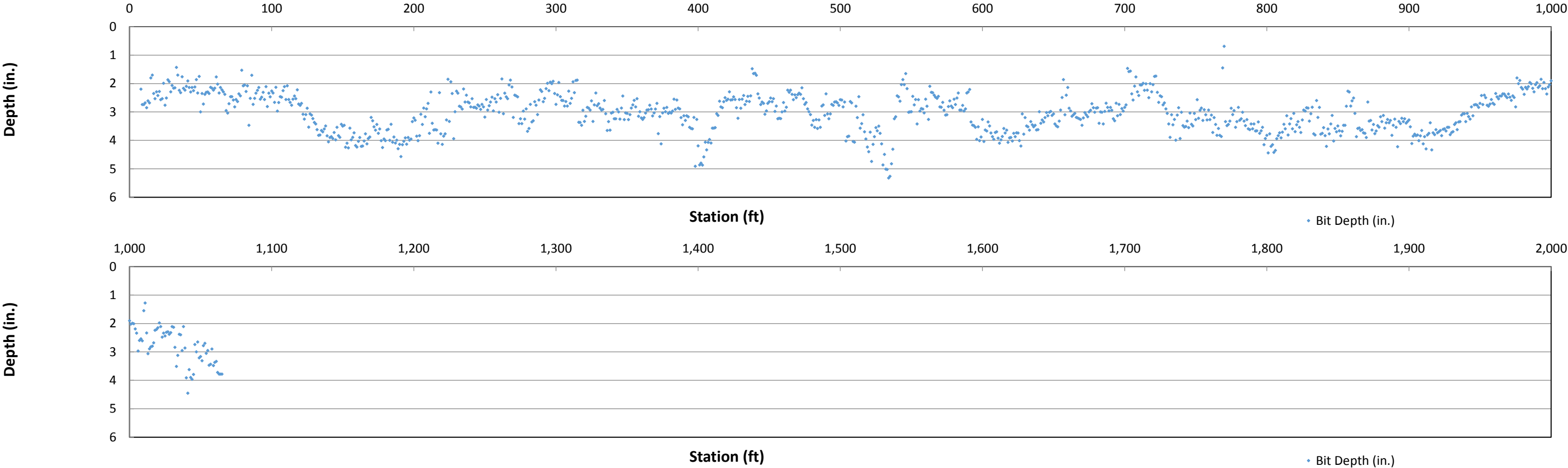
5th Ave S : 7th St S to 5th St S

Project Name	Hopkins 2017 Imprv
Project No.	B1605339
Roadway	5th Ave S
From	7th St S
To	5th St S
Length (feet)	1,376



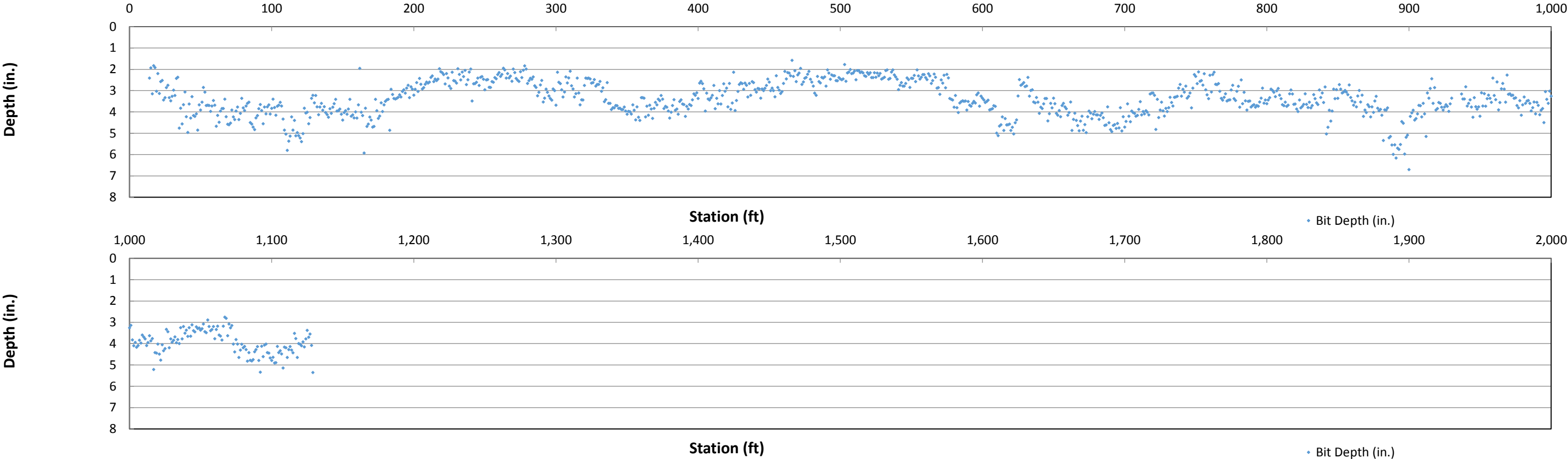
W Park Valley Dr : E Park Valley Dr to 7th St S

Project Name	Hopkins 2017 Imprv
Project No.	B1605339
Roadway	W Park Valley Dr
From	E Park Valley Dr
To	7th St S
Length (feet)	1,065



E Park Valley Dr : 7th St S to W Park Valley Dr

Project Name	Hopkins 2017 Imprv
Project No.	B1605339
Roadway	E Park Valley Dr
From	7th St S
To	W Park Valley Dr
Length (feet)	1,129



(See Descriptive Terminology sheet for explanation of abbreviations)

LOG OF BORING N:\GINT\PROJECTS\AX PROJECTS\2016\05339.GPJ BRAUN_V8_CURRENT.GDT 7/12/16 10:16

Braun Project B1605339 GEOTECHNICAL EVALUATION 2017 Hopkins Street and Utility Improvements Hopkins, Minnesota					BORING: ST-01 LOCATION: N: 145273: E: 492659. See attached sketch.		
DRILLER: R. Hansen		METHOD: 3 1/4" HSA, Autohammer		DATE: 6/21/16		SCALE: 1" = 4'	
Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	Tests or Notes	
895.8	0.0						
895.1	0.7	PAV	8 inches of bituminous.			Odor from 1 to 4 feet.	
		FILL	FILL: Silty Sand, fine- to medium-grained, with Gravel, brown, moist.				
				20			
				21			
				13			
886.8	9.0						
		SC	CLAYEY SAND, with Gravel, brown, moist to wet, rather soft to rather stiff. (Glacial Till)				
				9			
				7			
				4			
879.8	16.0		END OF BORING.				
			Water not observed while drilling.				
			Boring then backfilled.				

(See Descriptive Terminology sheet for explanation of abbreviations)

LOG OF BORING N:\GINT\PROJECTS\AX PROJECTS\2016\05339.GPJ BRAUN_V8_CURRENT.GDT 7/12/16 10:16

Braun Project B1605339 GEOTECHNICAL EVALUATION 2017 Hopkins Street and Utility Improvements Hopkins, Minnesota					BORING: ST-02 LOCATION: N: 145263: E: 493234. See attached sketch.			
DRILLER: C. McClain		METHOD: 3 1/4" HSA, Autohammer		DATE: 6/21/16		SCALE: 1" = 4'		
Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	MC %	Tests or Notes	
900.3	0.0							
899.4	0.9	PAV	3 1/2 inches of bituminous over 7 1/2 inches of aggregate base.					
		FILL	FILL: Silty Sand, fine- to medium-grained, trace Gravel, brown to dark brown, moist.	21		5		
				12				
				8				
891.3	9.0							
		FILL	FILL: Poorly Graded Sand with Silt, fine- to medium-grained, trace Gravel, brown, moist.	10				
888.3	12.0							
		SM	SILTY SAND, fine- to medium-grained, Lean Clay Seam, brown, wet, loose. (Glacial Till)	9				
886.3	14.0							
		CL	LEAN CLAY with SAND, gray, wet, rather stiff. (Glacial Till)	10				
884.3	16.0							
			END OF BORING.					
			Water not observed while drilling.					
			Boring then backfilled.					

(See Descriptive Terminology sheet for explanation of abbreviations)

LOG OF BORING N:\GINT\PROJECTS\AX PROJECTS\2016\05339.GPJ BRAUN_V8_CURRENT.GDT 7/12/16 10:16

Braun Project B1605339 GEOTECHNICAL EVALUATION 2017 Hopkins Street and Utility Improvements Hopkins, Minnesota					BORING: ST-03 LOCATION: N: 145247: E: 493747. See attached sketch.			
DRILLER: C. McClain		METHOD: 3 1/4" HSA, Autohammer		DATE: 6/21/16		SCALE: 1" = 4'		
Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	MC %	Tests or Notes	
908.4	0.0							
907.7	0.7	PAV	4 1/2 inches of bituminous over 4 inches of aggregate base.					
		FILL	FILL: Silty Sand, fine- to medium-grained, trace Gravel, brown, moist.	10				
				7				
901.4	7.0	CL	LEAN CLAY with SAND, trace roots, brown, wet, rather stiff. (Buried Topsoil)	9		19		
899.4	9.0	SP-SM	POORLY GRADED SAND with SILT, fine- to medium-grained, trace Gravel, brown, moist, loose. (Glacial Outwash)	5				
896.4	12.0	CL	LEAN CLAY with SAND, brown, wet, rather soft to rather stiff. (Glacial Till)	5				
892.4	16.0			9				
			END OF BORING.					
			Water not observed while drilling.					
			Boring then backfilled.					

Braun Project B1605339
GEOTECHNICAL EVALUATION
2017 Hopkins Street and Utility Improvements
Hopkins, Minnesota

BORING: **ST-04**

LOCATION: N: 145244; E: 494152.
Offset 3' N of stake. See attached sketch.

DRILLER: C. McClain

METHOD: 3 1/4" HSA, Autohammer

DATE: **6/21/16**

SCALE: 1" = 4'

Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	MC %	P200 %	Tests or Notes
902.8	0.8	PAV	3 inches of bituminous over 6 1/2 inches of aggregate base.					
		FILL	FILL: Poorly Graded Sand with Silt, fine- to medium-grained, trace Gravel, brown, moist.	25				
899.5	4.0	FILL	FILL: Silty Sand, fine- to medium-grained, trace Gravel, brown, moist to waterbearing, medium dense. (Glacial Outwash)	7				
896.5	7.0	SP-SM	POORLY GRADED SAND with SILT, fine- to medium-grained, trace Gravel, brown, moist to waterbearing, medium dense. (Glacial Outwash)	19		5	9	
			Lean Clay seam at 10 feet.	12				
889.5	14.0	CL	LEAN CLAY with SAND, gray, wet, very stiff. (Glacial Till)	17				
887.5	16.0		END OF BORING.					
			Water observed at 12 1/2 feet while drilling.					
			Boring then backfilled.					

(See Descriptive Terminology sheet for explanation of abbreviations)

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(See Descriptive Terminology sheet for explanation of abbreviations)

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Braun Project B1605339 GEOTECHNICAL EVALUATION 2017 Hopkins Street and Utility Improvements Hopkins, Minnesota					BORING: ST-05 LOCATION: N: 144631; E: 492115. Offset 10' S of stake. See attached sketch.			
DRILLER: R. Hansen		METHOD: 3 1/4" HSA, Autohammer		DATE: 6/21/16		SCALE: 1" = 4'		
Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	MC %	Tests or Notes	
890.3	0.0							
889.6	0.7	PAV	8 inches of bituminous.					
		FILL	FILL: Silty Sand, fine- to medium-grained, with Gravel, brown, moist.					
888.3	2.0							
		FILL	FILL: Poorly Graded Sand with Silt, fine- to medium-grained, with Gravel, brown to dark brown, moist.	22				
				16		7		
883.3	7.0							
		FILL	FILL: Silty Sand, fine- to medium-grained, dark brown, moist.	13				
881.3	9.0							
		SP	POORLY GRADED SAND, fine- to medium-grained, with Gravel, brown, moist to waterbearing, loose to medium dense. (Glacial Outwash)	8				
				9				
				11				
874.3	16.0							
			END OF BORING.					
			Water observed at a depth of 12 feet with 12 feet of hollow-stem auger in the ground.					
			Water observed at a depth of 12 1/2 feet with 14 1/2 feet of hollow-stem auger in the ground.					
			Boring then backfilled.					

(See Descriptive Terminology sheet for explanation of abbreviations)

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Braun Project B1605339 GEOTECHNICAL EVALUATION 2017 Hopkins Street and Utility Improvements Hopkins, Minnesota					BORING: ST-06 LOCATION: N: 144619; E: 492595. See attached sketch.		
DRILLER: C. McClain		METHOD: 3 1/4" HSA, Autohammer		DATE: 6/22/16		SCALE: 1" = 4'	
Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	MC %	Tests or Notes
888.0	0.0	FILL	(Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)				
		FILL	FILL: Silty Sand, fine- to medium-grained, trace Gravel, brown, moist.	38			
		FILL	FILL: Clayey Sand, Lean Clay seam, brown, wet.	19		4	
879.0	9.0	FILL	FILL: Silty Sand, fine- to medium-grained, with Gravel, trace wood, brown to gray, waterbearing.	9			
		FILL	FILL: Silty Sand, fine- to medium-grained, with Gravel, trace wood, brown to gray, waterbearing.	7			
876.0	12.0	FILL	FILL: Silty Sand, fine- to medium-grained, with Gravel, trace wood, brown to gray, waterbearing.	2	▽		
		FILL	FILL: Silty Sand, fine- to medium-grained, with Gravel, trace wood, brown to gray, waterbearing.	5			
872.0	16.0		END OF BORING.				
			Groundwater at a depth of 12 1/2 feet with 12 1/2 feet of hollow-stem auger in the ground.				
			Boring then backfilled.				

(See Descriptive Terminology sheet for explanation of abbreviations)

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Braun Project B1605339 GEOTECHNICAL EVALUATION 2017 Hopkins Street and Utility Improvements Hopkins, Minnesota					BORING: ST-07 LOCATION: N: 144594; E: 493094. See attached sketch.			
DRILLER: R. Hansen		METHOD: 3 1/4" HSA, Autohammer		DATE: 6/21/16		SCALE: 1" = 4'		
Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	MC %	Tests or Notes	
892.2	0.0							
891.7	0.5	PAV	5 1/2 inches of bituminous.					
		FILL	FILL: Silty Sand, fine- to medium-grained, with Gravel, brown, moist.					
890.2	2.0							
		FILL	FILL: Poorly Graded Sand with Silt, fine- to medium-grained, with Gravel, brown, moist.	10		5		
				3				
				5				
			Dark brown seam at 10 feet.	5				
880.2	12.0	SP	POORLY GRADED SAND, fine- to medium-grained, trace Gravel, brown, moist to wet, medium dense. (Glacial Outwash)	12				
877.2	15.0				▽			
876.2	16.0	CL	LEAN CLAY with SAND, brown, wet, medium. (Glacial Till)	6				
			END OF BORING.					
			Water observed at a depth of 14 1/2 feet with 14 1/2 feet of hollow-stem auger in the ground.					
			Boring then backfilled.					

(See Descriptive Terminology sheet for explanation of abbreviations)

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Braun Project B1605339 GEOTECHNICAL EVALUATION 2017 Hopkins Street and Utility Improvements Hopkins, Minnesota					BORING: ST-08 LOCATION: N: 144606; E: 493631. See attached sketch.			
DRILLER: C. McClain		METHOD: 3 1/4" HSA, Autohammer		DATE: 6/22/16		SCALE: 1" = 4'		
Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	MC %	Tests or Notes	
893.1	0.0							
892.5	0.6	PAV FILL	3 inches of bituminous over 4 inches of aggregate base. FILL: Silty Sand, fine- to medium-grained, trace Gravel, brown, moist.					
		FILL		10				
				8				
				6		10		
				12				
881.1	12.0	CL	LEAN CLAY with SAND, gray, wet, medium to rather stiff. (Glacial Till)					
		CL		9				
877.1	16.0			8				
			END OF BORING. Water not observed while drilling. Boring then backfilled.					

Braun Project B1605339
GEOTECHNICAL EVALUATION
2017 Hopkins Street and Utility Improvements
Hopkins, Minnesota

BORING: **ST-09**

LOCATION: N: 144601; E: 494105. See attached sketch.

DRILLER: C. McClain

METHOD: 3 1/4" HSA, Autohammer

DATE: **6/22/16**

SCALE: 1" = 4'

Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	MC %	Tests or Notes
888.6	0.0	PAV					
887.7	0.9		4 inches of bituminous over 7 inches of aggregate base.				
		FILL	FILL: Silty Sand, fine- to medium-grained, Lean Clay seam, trace Gravel, brown, moist.	9			
884.6	4.0	FILL	FILL: Sandy Lean Clay, trace Gravel, brown to gray, wet.	11			
881.6	7.0	CL	LEAN CLAY with SAND, trace roots, dark gray, wet. (Possible Buried Topsoil)	8		24	OC=2%
879.6	9.0	SP-SM	POORLY GRADED SAND with SILT, fine- to medium-grained, trace Gravel, brown, moist, medium dense. (Glacial Outwash)	13			
				11			
872.6	16.0		Lean Clay seams at 15 feet.	17			
			END OF BORING.				
			Groundwater at a depth of 12 1/2 feet with 12 1/2 feet of hollow-stem auger in the ground.				
			Boring then backfilled.				

(See Descriptive Terminology sheet for explanation of abbreviations)

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(See Descriptive Terminology sheet for explanation of abbreviations)

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Braun Project B1605339 GEOTECHNICAL EVALUATION 2017 Hopkins Street and Utility Improvements Hopkins, Minnesota					BORING: ST-10		
DRILLER: C. McClain			METHOD: 3 1/4" HSA, Autohammer		DATE: 6/21/16		SCALE: 1" = 4'
Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	MC %	Tests or Notes
885.4	0.0						
884.5	0.9	PAV	3 inches of bituminous over 8 inches of aggregate base.				
		FILL	FILL: Silty Sand, fine- to medium-grained, with Gravel, brown, moist.	40		8	
880.4	5.0	OL	ORGANIC CLAY, with roots and fibers, black, wet, rather soft to medium. (Swamp Deposit)	8			
				4			
876.4	9.0	CL	LEAN CLAY with SAND, slight Gravel, black to gray, waterbearing. (Swamp Deposit)	15	▽		
873.4	12.0	SP-SM	POORLY GRADED SAND with SILT, trace Gravel, brown, waterbearing, loose to medium dense. (Glacial Outwash)	11			
				7			
869.4	16.0		END OF BORING. Groundwater at a depth of 10 feet with 10 feet of hollow-stem auger in the ground. Boring then backfilled.				

(See Descriptive Terminology sheet for explanation of abbreviations)

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Braun Project B1605339 GEOTECHNICAL EVALUATION 2017 Hopkins Street and Utility Improvements Hopkins, Minnesota					BORING: ST-11 LOCATION: N: 145140; E: 492158. See attached sketch.		
DRILLER: R. Hansen		METHOD: 3 1/4" HSA, Autohammer		DATE: 6/21/16		SCALE: 1" = 4'	
Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	MC %	Tests or Notes
891.9	0.0	SM	SILTY SAND, fine- to medium-grained, with Gravel, dark brown, moist. (Topsoil)				
887.9	4.0	SM	SILTY SAND, fine-grained, gray, moist, loose. (Glacial Outwash)	4		12	
884.9	7.0	SP	POORLY GRADED SAND, fine- to medium-grained, with Gravel, brown, moist to waterbearing, very loose to loose. (Glacial Outwash)	9	▽		
				10			
				3			
875.9	16.0			6			
			END OF BORING.				
			Water observed at a depth of 10 feet with 9 1/2 feet of hollow-stem auger in the ground.				
			Water observed at a depth of 8 feet with 14 1/2 feet of hollow-stem auger in the ground.				
			Boring then backfilled.				

(See Descriptive Terminology sheet for explanation of abbreviations)

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Braun Project B1605339 GEOTECHNICAL EVALUATION 2017 Hopkins Street and Utility Improvements Hopkins, Minnesota					BORING: ST-12 LOCATION: N: 144879; E: 492315. See attached sketch.			
DRILLER: R. Hansen		METHOD: 3 1/4" HSA, Autohammer		DATE: 6/21/16		SCALE: 1" = 4'		
Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	MC %	Tests or Notes	
895.9	0.0							
894.8	1.1	PAV	3 inches of bituminous over 10 inches of aggregate base.					
		FILL	FILL: Silty Sand, fine- to medium-grained, with Gravel, brown, moist.	5		8		
888.9	7.0	FILL	FILL: Clayey Sand, trace Gravel, brown, moist.	7	▽			
886.9	9.0	SP	POORLY GRADED SAND, fine- to medium-grained, brown, moist to waterbearing, very loose to loose. (Glacial Outwash)	8				
				4				
				WOH				
874.9	21.0		No recovery at 20 feet.	6				
			END OF BORING.					
			Water observed at a depth of 6 1/2 feet with 19 1/2 feet of hollow-stem auger in the ground.					
			Water observed at a depth of 9 feet with 14 feet of hollow-stem auger in the ground.					
			Boring then backfilled.					

(See Descriptive Terminology sheet for explanation of abbreviations)

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Braun Project B1605339 GEOTECHNICAL EVALUATION 2017 Hopkins Street and Utility Improvements Hopkins, Minnesota						BORING: ST-13 LOCATION: N: 144010: E: 492674. See attached sketch.				
DRILLER: R. Hansen			METHOD: 3 1/4" HSA, Autohammer		DATE: 6/21/16		SCALE: 1" = 4'			
Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	MC %	P200 %	Tests or Notes		
881.8	0.0									
881.1	0.7	PAV	8 inches of bituminous.							
		FILL	FILL: Silty Sand, fine- to medium-grained, with Gravel, brown to gray, moist to wet.							
				7		14	46			
				15						
874.8	7.0	PT	PEAT, trace shells, black, wet. (Swamp Deposit)							
				3						
				2						
				3						
867.8	14.0	OL	ORGANIC CLAY, with shells and fibers, gray, wet, very soft. (Swamp Deposit)		▽					
				WOH						
				WOH						
857.8	24.0	SM	SILTY SAND, fine- to medium-grained, Lean Clay seam, gray, wet, medium. (Glacial Till)							
855.8	26.0			6						
			END OF BORING.							
			Water observed at a depth of 13 1/2 feet with 24 1/2 feet of hollow-stem auger in the ground.							
			Water not observed to cave-in depth of 8 feet.							
			Boring then backfilled.							

(See Descriptive Terminology sheet for explanation of abbreviations)

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Braun Project B1605339 GEOTECHNICAL EVALUATION 2017 Hopkins Street and Utility Improvements Hopkins, Minnesota					BORING: ST-14 LOCATION: N: 144429: E: 492652. See attached sketch.		
DRILLER: R. Hansen		METHOD: 3 1/4" HSA, Autohammer		DATE: 6/21/16		SCALE: 1" = 4'	
Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	Tests or Notes	
887.0	0.0						
886.1	0.9	PAV	6 inches of bituminous over 5 inches of aggregate base.				
		FILL	FILL: Silty Sand, fine- to medium-grained, with Gravel, dark brown, moist.	6			
883.0	4.0	FILL	FILL: Silty Sand, fine- to medium-grained, gray, moist.	11			
880.0	7.0	SP-SM	POORLY GRADED SAND with SILT, fine- to medium-grained, with Gravel, gray to dark gray, moist to waterbearing, loose. (Glacial Outwash)	6			
				6			
				7	▽		
871.0	16.0			4			
END OF BORING. Water observed at a depth of 12 feet with 12 feet of hollow-stem auger in the ground. Water not observed to cave-in depth of 9 feet. Boring then backfilled.							

(See Descriptive Terminology sheet for explanation of abbreviations)

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Braun Project B1605339 GEOTECHNICAL EVALUATION 2017 Hopkins Street and Utility Improvements Hopkins, Minnesota					BORING: ST-15 LOCATION: N: 144312; E: 493673. See attached sketch.		
DRILLER: C. McClain		METHOD: 3 1/4" HSA, Autohammer		DATE: 6/22/16		SCALE: 1" = 4'	
Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	Tests or Notes	
887.8	0.0						
886.9	0.9	PAV	5 inches of bituminous over 6 inches of aggregate base.				
		FILL	FILL: Silty Sand, fine- to medium-grained, trace Gravel, brown, moist.	7			
				7			
				6			
878.8	9.0						
		SP-SM	POORLY GRADED SAND with SILT, fine- to medium-grained, trace Gravel, brown, moist to waterbearing, medium dense. (Glacial Outwash)	11			
				15	▽		
				12			
871.8	16.0		END OF BORING.				
			Groundwater at a depth of 12 1/2 feet with 12 1/2 feet of hollow-stem auger in the ground.				
			Boring then backfilled.				

(See Descriptive Terminology sheet for explanation of abbreviations)

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Braun Project B1605339 GEOTECHNICAL EVALUATION 2017 Hopkins Street and Utility Improvements Hopkins, Minnesota					BORING: ST-16 LOCATION: N: 144740; E: 493676. See attached sketch.			
DRILLER: C. McClain		METHOD: 3 1/4" HSA, Autohammer		DATE: 6/22/16		SCALE: 1" = 4'		
Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	MC %	Tests or Notes	
894.6	0.0							
893.6	1.0	PAV	5 1/2 inches of bituminous over 6 1/2 inches of aggregate base.					
		FILL	FILL: Silty Sand, fine- to medium-grained, trace Gravel, brown, moist.	16		8		
				16				
				13				
885.6	9.0	SC	CLAYEY SAND, gray to brown, moist, stiff. (Glacial Till)	15				
882.6	12.0	CL	LEAN CLAY with SAND, gray, wet, rather stiff. (Glacial Till)	10				
				10				
878.6	16.0		END OF BORING.					
			Water not observed while drilling.					
			Boring then backfilled.					

(See Descriptive Terminology sheet for explanation of abbreviations)

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Braun Project B1605339 GEOTECHNICAL EVALUATION 2017 Hopkins Street and Utility Improvements Hopkins, Minnesota					BORING: ST-17 LOCATION: N: 145143; E: 493689. See attached sketch.		
DRILLER: C. McClain		METHOD: 3 1/4" HSA, Autohammer		DATE: 6/22/16		SCALE: 1" = 4'	
Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	Tests or Notes	
903.7	0.0	FILL	FILL: Silty Sand, fine- to medium-grained, trace Gravel, brown, moist.				
		FILL	Lean Clay seam at 5 feet.	12			
897.7	6.0		END OF BORING.	10			
			Water not observed while drilling.				
			Boring then backfilled.				

(See Descriptive Terminology sheet for explanation of abbreviations)

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Braun Project B1605339 GEOTECHNICAL EVALUATION 2017 Hopkins Street and Utility Improvements Hopkins, Minnesota						BORING: ST-18 LOCATION: N: 145757; E: 493678. See attached sketch.				
DRILLER: C. McClain			METHOD: 3 1/4" HSA, Autohammer		DATE: 6/22/16		SCALE: 1" = 4'			
Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	MC %	P200 %	Tests or Notes		
914.2	0.0									
913.3	0.9	PAV	4 1/2 inches of bituminous over 6 1/2 inches of aggregate base.							
		FILL	FILL: Silty Sand, fine- to medium-grained, trace Gravel, brown, moist.	9						
				15		9	27			
				4						
905.2	9.0	CL	LEAN CLAY with SAND, gray, wet, medium. (Glacial Till)	7						
902.2	12.0	SM	SILTY SAND, fine- to medium-grained, brown, moist, medium dense. (Glacial Till)	24						
				24						
898.2	16.0		END OF BORING. Water not observed while drilling. Boring then backfilled.							

(See Descriptive Terminology sheet for explanation of abbreviations)

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Braun Project B1605339 GEOTECHNICAL EVALUATION 2017 Hopkins Street and Utility Improvements Hopkins, Minnesota					BORING: ST-19 LOCATION: N: 144952; E: 494031. See attached sketch.			
DRILLER: C. McClain		METHOD: 3 1/4" HSA, Autohammer		DATE: 6/22/16		SCALE: 1" = 4'		
Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	MC %	Tests or Notes	
895.5	0.0							
894.6	0.9	PAV	4 inches of bituminous over 7 1/2 inches of aggregate base.					
		CL	SANDY LEAN CLAY, trace roots, dark brown, wet. (Buried Topsoil)	5				
891.5	4.0	CL	SANDY LEAN CLAY, brown, wet, rather soft. (Glacial Till)	4		19		
888.5	7.0	SP-SM	POORLY GRADED SAND with SILT, fine- to medium-grained, trace Gravel, brown, waterbearing, loose to medium dense. (Glacial Outwash)	13	▽			
				9				
				10				
881.5	14.0	CL	SANDY LEAN CLAY, gray, wet, rather stiff. (Glacial Till)	12				
879.5	16.0		END OF BORING.					
			Water observed at 7 1/2 feet with 7 1/2 feet of hollow-stem auger in the ground.					
			Water observed at 12 1/2 feet immediately after withdrawal of auger.					
			Boring then backfilled.					

(See Descriptive Terminology sheet for explanation of abbreviations)

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Braun Project B1605339 GEOTECHNICAL EVALUATION 2017 Hopkins Street and Utility Improvements Hopkins, Minnesota						BORING: ST-20 LOCATION: N: 145479; E: 494027. See attached sketch.			
DRILLER: C. McClain			METHOD: 3 1/4" HSA, Autohammer			DATE: 6/22/16		SCALE: 1" = 4'	
Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	MC %	Tests or Notes		
950.0	0.0								
949.1	0.9	PAV	4 inches of bituminous over 8 inches of aggregate base.						
		FILL	FILL: Poorly Graded Sand with Silt, fine- to medium-grained, trace Gravel, brown, moist.	10					
946.0	4.0								
		SP-SM	POORLY GRADED SAND with SILT, fine- to medium-grained, trace Gravel, brown, moist, medium dense. (Glacial Outwash)	15		4			
				18					
941.0	9.0								
		CL	LEAN CLAY with SAND, gray, wet, rather stiff. (Glacial Till)	12					
				9					
936.0	14.0								
		SC	CLAYEY SAND, brown, wet, very stiff. (Glacial Till)	18					
934.0	16.0								
END OF BORING.									
Water not observed while drilling.									
Boring then backfilled.									

(See Descriptive Terminology sheet for explanation of abbreviations)

LOG OF BORING N:\GINT\PROJECTS\X PROJECTS\2016\05339.GPJ BRAUN_V8_CURRENT.GDT 7/12/16 10:17

Braun Project B1605339 GEOTECHNICAL EVALUATION 2017 Hopkins Street and Utility Improvements Hopkins, Minnesota					BORING: ST-21 LOCATION: N: 144856; E: 494358. See attached sketch.		
DRILLER: C. McClain		METHOD: 3 1/4" HSA, Autohammer		DATE: 6/21/16		SCALE: 1" = 4'	
Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	MC %	Tests or Notes
892.5	0.0						
891.8	0.8	PAV	4 inches of bituminous over 5 inches of aggregate base.				
		FILL	FILL: Lean Clay with Sand, brown, wet.				
888.5	4.0			5		19	
		FILL	FILL: Silty Sand, fine- to medium-grained, Lean Clay seams, brown, moist.				
885.5	7.0			10			
		SP-SM	POORLY GRADED SAND with SILT, fine- to medium-grained, brown, moist to waterbearing, medium dense. (Glacial Outwash)	11			
			Lean Clay seam with roots at 10 feet.	13			
				25			
876.5	16.0			22	▽		
			END OF BORING.				
			Water observed at a depth of 15 feet with 15 feet of hollow-stem auger in the ground.				
			Boring then backfilled.				

(See Descriptive Terminology sheet for explanation of abbreviations)

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Braun Project B1605339 GEOTECHNICAL EVALUATION 2017 Hopkins Street and Utility Improvements Hopkins, Minnesota					BORING: ST-22 LOCATION: N: 145367; E: 494367. Offset 3' N of stake. See attached sketch.			
DRILLER: C. McClain		METHOD: 3 1/4" HSA, Autohammer		DATE: 6/21/16		SCALE: 1" = 4'		
Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	MC %	Tests or Notes	
909.7	0.0							
908.9	0.8	PAV	3 1/2 inches of bituminous over 5 1/2 inches of aggregate base.					
		FILL	FILL: Poorly Graded Sand with Silt, fine- to medium-grained, with Gravel, brown, moist.	15				
				18		2		
902.7	7.0	FILL	FILL: Silty Sand, fine- to medium-grained, trace Gravel, brown, moist.	32				
				17				
				17				
893.7	16.0			13				
			END OF BORING.					
			Water not observed while drilling.					
			Boring then backfilled.					

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(See Descriptive Terminology sheet for explanation of abbreviations)

Braun Project B1605339 GEOTECHNICAL EVALUATION 2017 Hopkins Street and Utility Improvements Hopkins, Minnesota					BORING: ST-23 LOCATION: N: 145399; E: 494655. Offset 4' E of stake. See attached sketch.			
DRILLER: C. McClain		METHOD: 3 1/4" HSA, Autohammer		DATE: 6/21/16		SCALE: 1" = 4'		
Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	MC %	Tests or Notes	
913.4	0.0	PAV	3 inches of bituminous over 10 inches of aggregate base.					
912.3	1.1	FILL	FILL: Silty Sand, fine- to medium-grained, trace Gravel, brown, moist. Lean Clay seam at 4 feet.	5		7		
905.4	8.0	SP-SM	POORLY GRADED SAND with SILT, fine- to medium-grained, with Gravel, brown, moist, medium dense. (Glacial Outwash)	18				
901.4	12.0	SM	SILTY SAND, fine- to medium-grained, trace Gravel, brown, moist, medium dense. (Glacial Outwash)	25				
899.4	14.0	SP-SM	POORLY GRADED SAND with SILT, fine-grained, with Gravel, black to gray, moist, very dense. (Glacial Outwash)	50/6"				
			END OF BORING. Water not observed while drilling. Boring then backfilled.					

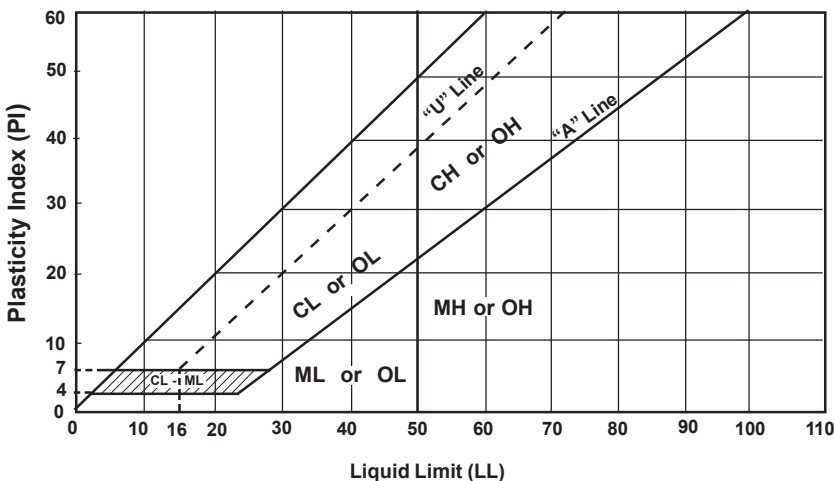
(See Descriptive Terminology sheet for explanation of abbreviations)

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Braun Project B1605339 GEOTECHNICAL EVALUATION 2017 Hopkins Street and Utility Improvements Hopkins, Minnesota						BORING: ST-24 LOCATION: N: 144698; E: 494671. Offset 7' W of stake. See attached sketch.					
DRILLER: C. McClain			METHOD: 3 1/4" HSA, Autohammer			DATE: 6/21/16		SCALE: 1" = 4'			
Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	MC %	P200 %	Tests or Notes			
890.8	0.0										
890.1	0.7	PAV FILL	2 inches of bituminous over 6 1/2 inches of aggregate base. FILL: Silty Sand, fine- to medium-grained, trace Gravel, brown to gray, moist.	24							
883.8	7.0	CL	LEAN CLAY with SAND, trace organics, dark brown, wet. (Possible Buried Topsoil)	4		26	3				
881.8	9.0	SM	SILTY SAND, fine- to medium-grained, gray to brown, waterbearing, loose. (Glacial Outwash)	8	▽						
878.8	12.0	SP-SM	POORLY GRADED SAND with SILT, fine- to medium-grained, brown, waterbearing, loose. (Glacial Outwash)	6							
874.8	16.0		END OF BORING. Groundwater at a depth of 10 feet with 10 feet of hollow-stem auger in the ground. Boring then backfilled.	7							

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests ^a					Soils Classification	
					Group Symbol	Group Name ^b
Coarse-grained Soils more than 50% retained on No. 200 sieve	Gravels More than 50% of coarse fraction retained on No. 4 sieve	Clean Gravels 5% or less fines ^e	$C_u \geq 4$ and $1 \leq C_c \leq 3$ ^c	GW	Well-graded gravel ^d	
			$C_u < 4$ and/or $1 > C_c > 3$ ^c	GP	Poorly graded gravel ^d	
	Gravels with Fines More than 12% fines ^e	Fines classify as ML or MH	GM	Silty gravel ^{d f g}		
		Fines classify as CL or CH	GC	Clayey gravel ^{d f g}		
	Sands 50% or more of coarse fraction passes No. 4 sieve	Clean Sands 5% or less fines ⁱ	$C_u \geq 6$ and $1 \leq C_c \leq 3$ ^c	SW	Well-graded sand ^h	
			$C_u < 6$ and/or $1 > C_c > 3$ ^c	SP	Poorly graded sand ^h	
	Sands with Fines More than 12% ⁱ	Fines classify as ML or MH	SM	Silty sand ^{f g h}		
		Fines classify as CL or CH	SC	Clayey sand ^{f g h}		
Fine-grained Soils 50% or more passed the No. 200 sieve	Silts and Clays Liquid limit less than 50	Inorganic	PI > 7 and plots on or above "A" line ^j	CL	Lean clay ^{k l m}	
			PI < 4 or plots below "A" line ^j	ML	Silt ^{k l m}	
		Organic	Liquid limit - oven dried < 0.75	OL	Organic clay ^{k l m n}	
			Liquid limit - not dried < 0.75	OL	Organic silt ^{k l m o}	
	Silts and clays Liquid limit 50 or more	Inorganic	PI plots on or above "A" line	CH	Fat clay ^{k l m}	
			PI plots below "A" line	MH	Elastic silt ^{k l m}	
		Organic	Liquid limit - oven dried < 0.75	OH	Organic clay ^{k l m p}	
			Liquid limit - not dried < 0.75	OH	Organic silt ^{k l m q}	
Highly Organic Soils		Primarily organic matter, dark in color and organic odor		PT	Peat	

- Based on the material passing the 3-in (75mm) sieve.
- If field sample contained cobbles or boulders, or both, add "with cobbles or boulders or both" to group name.
- $C_u = D_{60} / D_{10}$ $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$
- If soil contains $\geq 15\%$ sand, add "with sand" to group name.
- Gravels with 5 to 12% fines require dual symbols:
GW-GM well-graded gravel with silt
GW-GC well-graded gravel with clay
GP-GM poorly graded gravel with silt
GP-GC poorly graded gravel with clay
- If fines classify as CL-ML, use dual symbol GC-GM or SC-SM.
- If fines are organic, add "with organic fines" to group name.
- If soil contains $\geq 15\%$ gravel, add "with gravel" to group name.
- Sands with 5 to 12% fines require dual symbols:
SW-SM well-graded sand with silt
SW-SC well-graded sand with clay
SP-SM poorly graded sand with silt
SP-SC poorly graded sand with clay
- If Atterberg limits plot in hatched area, soil is a CL-ML, silty clay.
- If soil contains 10 to 29% plus No. 200, add "with sand" or "with gravel" whichever is predominant.
- If soil contains $\geq 30\%$ plus No. 200, predominantly sand, add "sandy" to group name.
- If soil contains $\geq 30\%$ plus No. 200 predominantly gravel, add "gravelly" to group name.
- PI ≥ 4 and plots on or above "A" line.
- PI < 4 or plots below "A" line.
- PI plots on or above "A" line.
- PI plots below "A" line.



Laboratory Tests

DD	Dry density, pcf	OC	Organic content, %
WD	Wet density, pcf	S	Percent of saturation, %
MC	Natural moisture content, %	SG	Specific gravity
LL	Liquid limit, %	C	Cohesion, psf
PL	Plastic limit, %	ϕ	Angle of internal friction
PI	Plasticity index, %	qu	Unconfined compressive strength, psf
P200	% passing 200 sieve	qp	Pocket penetrometer strength, tsf

Particle Size Identification

Boulders	.....	over 12"
Cobbles	.....	3" to 12"
Gravel	.....	
Coarse	.....	3/4" to 3"
Fine	.....	No. 4 to 3/4"
Sand	.....	
Coarse	.....	No. 4 to No. 10
Medium	.....	No. 10 to No. 40
Fine	.....	No. 40 to No. 200
Silt	.....	< No. 200, PI < 4 or below "A" line
Clay	.....	< No. 200, PI ≥ 4 or on or above "A" line

Relative Density of Cohesionless Soils

Very loose	.....	0 to 4 BPF
Loose	.....	5 to 10 BPF
Medium dense	.....	11 to 30 BPF
Dense	.....	31 to 50 BPF
Very dense	.....	over 50 BPF

Consistency of Cohesive Soils

Very soft	.....	0 to 1 BPF
Soft	.....	2 to 3 BPF
Rather soft	.....	4 to 5 BPF
Medium	.....	6 to 8 BPF
Rather stiff	.....	9 to 12 BPF
Stiff	.....	13 to 16 BPF
Very stiff	.....	17 to 30 BPF
Hard	.....	over 30 BPF

Drilling Notes

Standard penetration test borings were advanced by 3 1/4" or 6 1/4" ID hollow-stem augers unless noted otherwise. Jetting water was used to clean out auger prior to sampling only where indicated on logs. Standard penetration test borings are designated by the prefix "ST" (Split Tube). All samples were taken with the standard 2" OD split-tube sampler, except where noted.

Power auger borings were advanced by 4" or 6" diameter continuous-flight, solid-stem augers. Soil classifications and strata depths were inferred from disturbed samples augered to the surface and are, therefore, somewhat approximate. Power auger borings are designated by the prefix "B."

Hand auger borings were advanced manually with a 1 1/2" or 3 1/4" diameter auger and were limited to the depth from which the auger could be manually withdrawn. Hand auger borings are indicated by the prefix "H."

BPF: Numbers indicate blows per foot recorded in standard penetration test, also known as "N" value. The sampler was set 6" into undisturbed soil below the hollow-stem auger. Driving resistances were then counted for second and third 6" increments and added to get BPF. Where they differed significantly, they are reported in the following form: 2/12 for the second and third 6" increments, respectively.

WH: WH indicates the sampler penetrated soil under weight of hammer and rods alone; driving not required.

WR: WR indicates the sampler penetrated soil under weight of rods alone; hammer weight and driving not required.

TW indicates thin-walled (undisturbed) tube sample.

Note: All tests were run in general accordance with applicable ASTM standards.

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