# *CLERK'S CONTRACT and AGREEMENT COVER PAGE*

**Legistar File ID#:**

**Innoprise Contract #:** C14-0023

**Year:** 2014

**Amount:**

**Department:** Finance - all

**Contract Type:** Master Agreement for Professional Services

**Contractors Name:** V3 Companies of Illinois

**Contract Description:** Master Agreement for Professional Services (all executed proposals are filed as Exhibit B)
C14-0024 03/19/2014 Topographic Survey of Nature Center $4900
C17-0129 2017-0681 Consulting Engineering Services $19,040
C18-0007 Consulting Services - KC $15,000
C18-0084 Butterfield Pond Engineering Services - $10,000
C18-0090 2018-0426 I-80 and Wolf Rd. Interchange Concept Feasibility Study
C19-0033 JHC Renovation Geotechnical Exploration $9800
C19-0031 2019-0023 Phase 1 167th Multi-Use Path $211,000

14700 S. Ravinia Avenue
Orland Park, IL 60462
708.403.6100
OrlandPark.org

ORLAND PARK

**VILLAGE HALL**



March 12, 2019

Mr. Kurt Corrigan
V3 Companies of Illinois
7325 Janes Avenue
Woodridge, Illinois 60517

RE: Exhibit B Phase I Engineering 167th Multi-Use Path-Steeplechase Pkwy to 104th Avenue

Dear Kurt:

Enclosed is a copy of Exhibit B dated January 15, 2019 (signed February 21, 2019) for the Phase I Engineering 167th Multi-Use Path-Steeplechase Pkwy to 104th Avenue. Please attach this to the original Master Agreement for Professional Services dated March 20, 2014. All the terms of that agreement shall apply to this work. Purchase Order #19-000546 shall apply to this work and it was emailed on February 26, 2019.

If you have any questions, please call me at 708-403-6173.

Sincerely,

Denise Domalewski
Purchasing & Contract Administrator

Encl:
cc: Karie Friling
Khurshid Hoda

January 15, 2019

Karie Friling
Assistant Village Manager
Village of Orland Park
14700 Ravinia Avenue
Orland Park, IL 60462

Re: Professional Services Proposal – Phase I Engineering Services
167th Multi-Use Trail – Steeplechase Pkwy to 104th Avenue

Dear Ms. Friling:

On behalf of V3 Companies, we are pleased to submit this proposal for Phase I engineering services on the above-referenced project. If you find this proposal to be acceptable, the executed copies of this letter, together with the General Terms and Conditions and Billing Rate Schedule attached hereto, which sets forth the contractual elements of this agreement, will constitute the entire agreement between the Village of Orland Park (CLIENT) and V3 for services on this project.

**PROJECT UNDERSTANDING**

It is our understanding that the CLIENT would like to complete a Phase I engineering report for a new multi-use path along 167th from Steeplechase Parkway to 104th Avenue. This path will connect the western-most development in Orland Park to the Grasslands at 104th Avenue. It will also connect to the existing 104th Avenue path that heads north connecting into the proposed path at 159th into Centennial Park. This route is highlighted in the Village's 2040 Transportation Plan. The Village is interested in seeking outside funding for Phase II Engineering, Construction and Construction Engineering, which in most cases requires Phase I engineering be completed to be eligible to apply. Invest in Cook funding does not require a Phase I study to be completed in order to apply, however having the study started does look favorable to Cook County when evaluating the applications. Recently V3 assisted the Village with three outside funding opportunities, Invest in Cook, Illinois Transportation Enhancement Program and ICC pedestrian crossing funds. Although, the Village did not receive funding through these resources, we will be submitting to all applicable sources as we develop this Phase I study.

The scope of work will include preliminary engineering and environmental studies consistent with Phase I study procedures that are part of the National Environmental Policy Act (NEPA) and IDOT requirements. This process is being followed in anticipation that federal or state funding may be used for Phase II design and Phase III construction and construction engineering of the path improvements.

V3 services will include coordination with the Norfolk Southern Railroad, Metra and Illinois Commerce Commission (ICC) to obtain consensus of the proposed at-grade pedestrian crossing.

This proposal is comprised of V3 services associated with the preparation of a Phase I Engineering Study for a new multi-use path along 167th Street. The scope of work will include preliminary engineering and environmental studies consistent with Phase I study procedures that are part of the National Environmental Policy Act (NEPA), IDOT, Cook County and local requirements. The study Details of services that are to be provided by V3 can be found in Exhibit I that is attached to this proposal.

**V3 Experience**

This project requires a firm that has both company and individual experience and qualifications for trail/path projects that include multiple agencies - IDOT District 1 and Cook County Department of Highways. We are currently working with the Village of Schaumburg on a similar path project that is federally funded, administered by IDOT District 1 and coordinated with Cook County.

Members of our staff, specifically Kurt Corrigan have been involved, with the planning of this project for a number of years. With its connection to Orland Grasslands, the existing 104th path and future 108th path, the 167th path will provide a safe alternative mode of transportation to a variety of Village amenities including Centennial Park and 153rd Street Metra station.

**COMPENSATION**

The following is a breakdown of the costs for the anticipated tasks required to complete the Phase I engineering study. This work will be invoiced monthly on an hourly basis not to exceed the total amount. Manhour breakdown attached.

| Task – Phase I Services | | Fee Type | Total |
|---|---|---|---|
| Task 1 | Topographic Survey | Hourly | $40,000.00 |
| Task 2 | Right of Way and Easement Research and Verification | Actual | $20,000.00 |
| Task 3 | Data Collection | Hourly | $2,000.00 |
| Task 4 | Railroad/ICC Coordination | Hourly | $10,000.00 |
| Task 5 | Geotechnical Investigation | Actual | $8,500.00 |
| Task 6 | Environmental Survey Request | Hourly | $2,000.00 |
| Task 7 | Traffic/Capacity Analysis | Hourly | $6,000.00 |
| Task 8 | Alternate Geometric Studies | Hourly | $10,000.00 |
| Task 9 | Location Drainage Study | Hourly | $32,000.00 |
| Task 10 | Wetland Delineation/Assessment and Impact | Hourly | $7,000.00 |

| | | | |
|---|---|---|---|
| | Evaluation | | |
| Task 11 | Hydraulic Report | Hourly | $15,000.00 |
| Task 12 | Marley Creek Structure Inspection and Bridge Condition Report and Type, Size and Location (TS&L) | Hourly | $10,000.00 |
| Task 13 | Construction Cost Estimate | Hourly | $2,000.00 |
| Task 14 | Project Development Report | Hourly | $25,000.00 |
| Task 15 | Special Waste Evaluation (PESA) | Hourly | $3,800.00 |
| Task 16 | Quality Assurance/Quality Control | Hourly | $3,500.00 |
| Task 17 | Meetings & Agency Coordination | Hourly | $8,000.00 |
| Task 18 | Outside Funding Application Preparation and Application | Hourly | No Charge |
| Task 19 | Administration and Management | Hourly | $7,000.00 |
| **Total Fee** | | | **$211,800.00** |

**Miscellaneous Exhibits**

**Scope of Services and Manhour Breakdown – Exhibit I**

**V3 Standard Billing Rate Schedule – Exhibit II**

**General Terms and Conditions – Exhibit III**

**Project Location Map – Exhibit IV**

If Additional Services are required, they will be the subject of a separate agreement or amendment to this agreement. This may include updates to the project report for expiring items such as wetland delineation, crash analysis and traffic counts.

**PROJECT SCHEDULE**

Upon a notice to proceed, V3 will coordinate a project initiation meeting with IDOT. We anticipate the project to be completed within 12-18 months after our initial meeting with IDOT.

**SUMMARY**

V3 will initiate its services promptly upon receipt of CLIENT's acceptance of this proposal and receipt of all requested information to be provided by the CLIENT.

If the CLIENT or other interested parties request a computer flash drive of the Phase I study, V3 shall be indemnified from any claims arising out of the accuracy, misuse or reuse by others of the data delivered in disk form.

This agreement, together with the Scope of Services, Billing Rate Schedule and General Terms and Conditions attached hereto, represents the entire understanding between the Client and V3. If the terms of this agreement are found to be satisfactory, please sign this agreement in the space provided and return one signed copy to our office. Receipt of the signed authorization will serve as our Notice to Proceed for this work.

We appreciate the opportunity to present this proposal and look forward to working with you on this project.

Sincerely,
V3 COMPANIES OF ILLINOIS, LTD.

Kurt Corrigan, P.E.
Municipal Market Leader

Vincent J. Del Medico, P.E.
Director of Transportation and Municipal Engineering

Accepted For:
VILLAGE OF ORLAND PARK

BY _____
Authorized Signature

PRINTED Joseph S. LaMargo

TITLE Village Manager

DATE 2/29/19

Attachments

# EXHIBIT I

## SCOPE OF SERVICES

### Phase I Engineering & Environmental Studies
### 167th Street Multi-Use Path - Steeplechase Parkway to 104th Avenue

**Project Description**

The proposed multi-use path along 167th Street is located in the Village of Orland Park and extends from Steeplechase Parkway to 104th Avenue. The path will be located along the south side of 167th and will include the extension of the Marley Creek structure located at the intersection of Wolf Road and 167th Street, any pedestrian signal improvements necessary at the signalized intersections, an at-grade RR crossing just east of 108th Avenue and potentially retaining walls along the route to limit the ROW necessary to build the path. The scope of work will include preliminary engineering and environmental studies consistent with Phase I study procedures that are part of the National Environmental Policy Act (NEPA) and IDOT requirements. This process is being followed in anticipation that federal or state funding may be used for Phase II design and Phase III construction and construction engineering of the path.

V3 services will include meetings and negotiations with the Norfolk Southern Railroad and the Illinois Commerce Commission (ICC) to obtain approval for the proposed pedestrian crossing just east of 108th Avenue.

**Task 1 - Topographic Survey**

A topographic survey will be conducted within a survey area of the right-of-way for 167th Street from Steeplechase Parkway to 104th Avenue. This includes an additional 20 ft south of the south right of way of 167th Street. Full intersection topography will be taken at the intersections of Steeplechase Parkway, Wolf Road, 108th Avenue and 104th Avenue. Minor side street topography will be conducted to approximately 100 ft south of the 167th edge of pavement. Included is the topographic survey of the Marley Creek Structure and associated Creek information. The topographic survey services will include the following:

1. Record a minimum of two permanent benchmarks at the site. Elevations will be referenced to a datum commonly used at the site. Typical datum's used are the National Geodetic Vertical Datum of 1929 (NGVD29), and the North American Vertical Datum of 1988 (NAVD88). If an assumed local or other datum is used, an equation relating said datum to NGVD, or NAVD may be indicated on the survey. Description of location and elevation of the source benchmark to which the topographic surveying and site benchmarks are tied to, will be indicated on the survey.

2. A contour survey with 1'-0" contour intervals will be prepared from field spot elevations. Spot elevations obtained in the field will be of sufficient quantity to generate a contour survey, which properly represents the ground surface. Additional elevations will be indicated on the survey as required to establish accurate profiles (including all changes or breaks in grade) and cross-sections of walks, curbs, gutter, pavement edges, and centerlines.

3. Spot elevations will be shown to the nearest 0.01 foot on all "hard surfaces" and utility structures. Spot elevations in unpaved areas such as grass and dirt shall be accurate to the nearest 0.1 foot.

4. Pavement types such as concrete, asphaltic concrete, gravel, etc. will be indicated.

5. Existing improvements, such as mailboxes and signs shall also be located.

6. Individual parkway trees of 3" diameter or greater (callipered 4'± above the ground) will be located within one foot tolerance. Where groups of trees exist, the perimeter outline only of the tree grove will be shown.

7. V3's International Society of Arboriculture (ISA) certified arborist will identify all trees 6" DBH and greater within the project area. The trees will be tagged as part of V3's topographic survey scope of services. The tag number, diameter, and tree species will be recorded for each tree identified. A rating will be assigned to each tree which will consider the size, species, condition, location, and aesthetics of each. A summary table will be prepared listing the scientific name, common name, DBH, and rating of each tree identified.

   The information provided by V3 regarding tree quality is based on an interpretation of observed tree growth habit and health at the time of the field investigation. V3 provides the best information available at the time of the field investigation, but outside factors may affect tree characteristics with time, including weather, vegetation maintenance, altered drainage, disease, or other events.

8. Mean elevations of water in retention ponds, lakes, or streams will be shown as depicted at the time the survey field work was conducted.

9. Top of curb, flow line, and edge of pavement elevations of all roadways and streets within the survey area shall be shown.

10. The centerline profile of the road and certain utility conflicts may be shown in the profile section of the drawing. This shall be negotiated with the client.

11. Right-of-way lines shall be established from existing monumentation and record drawings.

12. Marley Creek cross sections, streambed determination and structure opening determination.

**Utilities**

The Topographic Survey shall incorporate information on existing utility systems adjoining or contained within the Survey Area which are obtained from Village departments or utility companies responding to written or verbal requests for utility records through the Joint Utility Locating Information for Excavators (J.U.L.I.E.) Design Stage/Planning Information Process and available for the surveyors use at the time of the survey. Records or Atlas information that is provided to V3 after completion of the survey can be provided to the CLIENT or engineer.

Field markings by J.U.L.I.E. members, which are coordinated by others, shall be shown on the survey if present and practical at the time of survey.

The following list contains typical information provided for the specific utilities located which are above ground and visible at the time of the survey. Snow cover, earth or construction debris covering typically above ground structures may not be located.

1. Sanitary and Storm Sewers: Size, type and direction of pipes; rim and invert elevations. Location of manholes, inlets, catch basins, and end sections.

2. Water Mains: Size, type and direction of pipes, top of pipe elevations at valve vault locations, location of valves and hydrants.

3. Gas Mains: Location of valves and mains if marked in the field at the time of the survey.

4. Telephone, Electric, and Cable TV pedestals, and transformers.

5. Traffic and Street Light poles and cables if marked in the field at the time of the survey.

6. Visible evidence of field tiles or those marked in the field at the time of the survey.

7. Other utilities not listed above and occurring within the Survey Area will be shown in a similar manner.

Utilities and improvements shall be shown based on visible field verified structures, in coordination with atlas information provided by utility companies through J.U.L.I.E.'s design stage process, if available. V3 shall only show underground utility lines between structures that are located in the field and appear to be connected. In areas where structures are not shown connected, V3 recommends that the CLIENT contract a specialist to perform a die test or other sub terrain exploratory test.

Upon completion of survey, base sheets will be prepared in Microstation in accordance with IDOT's "CADD Standards" and "CADD Roadway Drafting Reference Guidelines".

### Task 2 – Right of Way and Easement Research and Verification

In addition to the topographic survey V3 will verify actual right of way and easements for each parcel along the corridor. Although not required during the Phase I process we have found establishing the actual ROW and easements early in the process helps to better evaluate alternatives and the impacts they may have on the existing ROW and easements. We are anticipating acquiring 40 title reports for this task. Each report and title commitment research will cost $500 per parcel.

### Task 3 – Data Collection

Pertinent information for the project will be obtained from the Village. This information will include:

- any available aerial photography
- as-built plans
- right-of-way plats
- plans for new developments including any stormwater management or hydraulic studies
- accident records
- utility mapping

- Marley Creek regulatory model

The design team will conduct a field review of site conditions and prepare a photographic log of the project site.

### Task 4 - Railroad/ICC Coordination

V3 will assist the Village in meetings and coordination with the Norfolk Southern Railroad, Cook County, IDOT, and the ICC to obtain approval for the proposed at-grade pedestrian crossing. Early coordination with the railroad is recommended to understand what may be required for the railroad to approve a new at-grade crossing.

Preliminary engineering will be performed to determine the alignment, profile and width at the grade crossing. We anticipate grade crossing warning devices and gates and crossing surface materials will be required by the railroad, County and IDOT. The scope will include two meetings with each of the agencies to define railroad requirements, determine needed crossing improvements and review preliminary plans and installation costs.

A formal petition and hearing with the ICC will be required to obtain approval for the at-grade crossing. V3 will develop documentation and exhibits needed for the petition and hearing and provide the necessary testimony at the hearing in support of the Village's request for a new at-grade pedestrian crossing. We anticipate that an Intergovernmental Agreement between the Village and Cook County will be necessary for the cost of construction and maintenance of the new crossing.

### Task 5 - Geotechnical Investigation

V3 will hire Rubino Engineering, a geotechnical subconsultant, to perform 12 soil borings and prepare a geotechnical report to determine the suitability of the soils for the construction of any retaining walls, extension of the Marley Creek drainage structure and the path. The borings will also be utilized for the Special Waste evaluation discussed later in this proposal.

### Task 6 - Environmental Survey Request

V3 will prepare and submit the Environmental Survey Request Form (ESRF) to IDOT following the ESR Guidelines provided by IDOT, which will include the following exhibits:

- Location Map
- Aerials exhibits or CADD drawings with anticipated proposed ROW
- Photos of all buildings constructed prior to 1960
- NWI Maps

V3 will coordinate with IDOT staff and provide additional information as required. The IDOT Central Office will perform the necessary coordination with the involved environmental and cultural agencies and provide the appropriate results to obtain an inventory of the affected environment and identify any potential issues that the project may need to address as part of required environmental studies.

V3 will photograph, research and document all building structures that were constructed prior to 1960. Digital photographs will be taken in the field and included in the ESRF.

**Task 7 – Traffic/Capacity Analysis**

Although the proposed improvements do not involve vehicular movements we anticipate that IDOT and/or Cook County will require a capacity analysis at the intersections of 167th/Wolf Road and 167th/108th Avenue to in order to incorporate the new pedestrian signals. At the 167th/104th Avenue intersection pedestrian signals currently exist and will be utilized with this improvement.

V3 will collect weekday am (7:00-9:00 am) and weekday pm (4:00-6:00 pm) peak period traffic volumes for the intersections of 167th/Wolf Road and 167th/108th Avenue. The weekday peak hour counts will be collected on a Tuesday, Wednesday, or Thursday during dry weather and a non-holiday week.

Accident records furnished by IDOT, County and the Village for the most recent five-year period will be collected and analyzed to identify if there is a history of any pedestrian accidents. The alternate geometric studies will take into account the type of pedestrian accidents along the corridor, if applicable.

Signal timings and turn lane storage lengths may need to be adjusted depending on the affects the pedestrian signals and crosswalk locations have on the intersection operations. V3 will prepare a technical memorandum with appropriate graphics to present the potential impacts and necessary improvements.

**Task 8 - Alternate Geometric Studies**

Alternate geometric studies will be performed to develop a preferred path alignment and intersection improvements along the south side of 167th Street. Path geometrics will be evaluated to minimize impacts to right-of-way, utilities, environmentally sensitive areas, railroad facilities and the Marley Creek drainage structure.

Cross section studies will be performed in order to define any right-of-way and easements required for path improvements. These will be utilized to evaluate the vertical and horizontal needs of any retaining walls required.

We anticipate that a retaining wall will be required from Wolf Road to Lee Street. If the wall is 7 ft in height or greater a Type, Size and Location (TS&L) drawing will be required as part of the Phase I study. There may be additional areas that require a retaining wall but we anticipate that these locations to be less than 7 ft in height and therefore TS&L's will not be required.

**Task 9 - Location Drainage Study**

A Location Drainage Study (LDS) will be prepared in accordance with IDOT's Drainage Manual. The study will include a description of the existing and proposed drainage systems, identification

of outfall locations and their adequacy, and calculation of storm water detention volumes based on IDOT and Cook County criteria.

The study will include required mapping and exhibits, design of the drainage system and storm water detention, a discussion of Best Management Practices (BMPs) (if applicable), and identification of permitting requirements. Although the existing and proposed drainage exhibits typically only include the proposed limits of the project, it may be necessary to study areas outside the projects limits due to the potential for tailwater impacts of extending the Marley Creek box culvert. As such, additional survey and/or field investigations outside of the ROW may be required to confirm off-site drainage routes and capacity. Specifically, surveyed cross sections 1000 feet upstream and downstream of the Marley Creek culvert crossing will be required. Additionally, there is an existing culvert crossing of the Norfolk Southern RR line that may be impacted by the path crossing location of the RR.

V3 will coordinate with MWRD to verify design and permitting requirements under the Watershed Management Ordinance (WMO). We anticipate that stormwater detention volume, volume control, and site runoff requirements are not applicable. Correspondence and meeting notes will be prepared to document coordination with IDOT, MWRD, and/or local agencies.

**Task 10 - Wetland Delineation/Assessment and Impact Evaluation**

**Wetland Delineation** V3's Wetland Specialists from our Natural Resources Division will conduct a field investigation during the 2019 Cook County growing season (May 15-October 15) to locate and delineate wetlands in accordance with the *Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Midwest Region*. The limits of any delineated wetlands/Waters of the U.S. will be staked in the field, and approximate boundaries will be mapped on a recent large-scale aerial photograph, based on our field assessment of the vegetation, soils and hydrology at the site. The limits of any on-site wetland/Waters of the U.S. will be located using a handheld GPS unit during the field investigation portion of the wetland delineation. Professional survey of any wetland/Waters flags will be required for any future permitting that may be required.

**Wetland Assessment** Since wetlands/Waters of the U.S. are likely present on the site, wetland assessment is required by the U.S. Army Corps of Engineers, Chicago District (USACE) and the Village of Orland Park. Wetland assessment involves an evaluation of wetland characteristics, including wildlife habitat quality, water quality functions, and plant community quality. Wetland Assessment also includes a preliminary jurisdictional determination for isolated or adjacent wetland[1]. Delineated wetlands will be rated as High Quality Aquatic Resources (HQAR's) in accordance with the USACE and MWRD, if applicable. V3 will prepare and submit the jurisdictional determination forms to the USACE for the wetlands/Waters of the U.S. identified at the site.

**Wetland Delineation Technical Report** A wetland report will be provided with the results of our field investigation, including the location and approximate size of wetlands/Waters of the U.S. present, a wetland quality evaluation, a Floristic Quality Assessment (FQA), and the wetland assessment. Floristic inventories and detailed soil classification data for each area investigated will be provided in the report. Areas determined to be wetland on the property

[1] December 2, 2008, USEPA and Department of the Army Joint Memorandum, Clean Water Act Jurisdiction Following the U. S. Supreme Court Decision in Raponos v. United States and Carabell v. United States

will be shown on a recent, large-scale aerial photo exhibit. USACE and MWRD/Orland Park wetland permitting and/or mitigation requirements will be addressed in the report. Wetland Impact Evaluation (WIE) forms (D1 PD0007) will be submitted for wetland areas that will be disturbed or filled by the proposed improvements. The forms will document the areas impacted and identify mitigation measures and will include exhibits showing their location and floristic quality rating.

**Threatened & Endangered Species Consultation** As required by the USACE and MWRD/Orland Park, V3 will conduct and complete the United States Fish and Wildlife (USFWS) Section 7 Federal threatened and endangered species consultation checklist for the site. V3 will also prepare and submit the required IDNR EcoCat for inquiry on State threatened & endangered species.

**Task 11 - Hydraulic Report**

Marley Creek crosses Wolf Road and 167th Street at a diagonal from NE to SW thru the intersection. In order to accommodate the new path the structure will need to be extended, requiring a hydraulic analysis of Marley Creek.

We understand that the proposed project will extend the existing box culvert crossing of Marley Creek located just west of Wolf Road. V3 will prepare a Hydraulic Report for the proposed crossing in accordance with IDOT's Drainage Manual. This will include information and calculations regarding regulatory, natural, modified existing and proposed hydraulics, compensatory storage analysis, and permit requirements. The modeling effort is assumed to only include the regulatory modeling. V3 assumes that an existing regulatory model of Marley Creek at 167th Street is available and that a new model will not need to be created.

The report will include required data sheets and exhibits, correspondence, and meeting notes to document any coordination with regulatory agencies. The report will follow requirements of Section 2-701 of IDOT's Drainage Manual and will include the hydraulic report outline, hydraulic report data sheets and program output results. The hydraulic survey includes the size, type and opening of the existing structure and cross sections of Marley Creek 1000 feet up and downstream of the culvert. The survey work is included under the topographic survey task.

**Task 12 – Marley Creek Structure Inspection, Bridge Condition Report and Type, Size and Location (TS&L)**

V3 will perform field inspections and prepare an abbreviated Bridge Condition Report (BCR) and TS&L for the structure over Marley Creek at the intersection of 167th Street and Wolf Road. The field inspection will document the existing condition of the structure, wing walls, railings and guardrail. The BCR and TS&L will summarize the results of field investigations, provide recommendations for rehabilitation repairs and widening improvements and estimate probable construction costs. The report will be submitted to IDOT and County for review and approval.

**Task 13 - Construction Cost Estimate**

V3 will prepare a preliminary engineer's opinion of probable construction costs (EOPCC) of the proposed improvements utilizing IDOT pay items, railroad workforce costs and the Village's standards and guidelines. Itemized costs will be determined using available guides and bid tabulations from similar projects. In addition, the pay item reports with awarded prices from IDOT's website will be used to approximate current unit costs.

**Task 14 - Project Development Report**

A Project Development Report (PDR) for a Group II Categorical Exclusion will be prepared following IDOT's report format using BLR Form 22210. The report will include a description of existing conditions, proposed improvements, traffic and capacity analysis, right-of-way/easement required, identified environmental concerns and impacts, maintenance of traffic during construction and agency coordination/public involvement activities. Exhibits that will be prepared and incorporated into the project report will include:

- Location Map
- Existing and Proposed Typical Sections
- Proposed Plan and Profile sheets
- ADA Details at Each Intersection
- Pedestrian Signal Modifications or Additions
- Railroad Crossing Details
- Intersection Capacity Analysis
- Type Size and Location – Retaining Wall and Marley Creek Structure
- Right-of-way and Easement Mapping
- Estimate of Probable Construction Cost

Two submittals of the PDR will be made to the Village of Orland Park (preliminary and final). Prior to the preliminary PDR submittal, conceptual typical proposed sections and plan and profile sheets will be submitted to the Village for review and comment. After receiving comments from the Village, the final PDR will be submitted to IDOT and Cook County for review and comment. A disposition of comments will be included with each submittal.

**Task 15 - Special Waste Evaluation**

A Preliminary Environmental Site Assessment (PESA) for the corridor will be prepared by the Illinois State Geological Survey (ISGS). The PESA will identify sites along 167$^{th}$ Street and the Norfolk Southern railroad right-of-way that are determined to have Recognized Environmental Conditions (REC). If excavation will be done within properties or right-of-ways with REC's, a Preliminary Site Investigation (PSI) will be required to identify the special waste involved, its extent and measures needed during construction to legally dispose of excavated earth and special waste materials.

**Task 16 - Quality Assurance/Quality Control**

V3 will perform in-house quality control reviews to ensure that the preliminary plans, cost estimates and PDR are prepared to meet the standards and guidelines for the plans or document required. These quality control reviews will occur prior to submittal of any deliverable to the Village, IDOT and County. The project manager will be responsible for the oversight of the QA/QC procedures and quality control reviews of the documents prepared for the project.

Prior to each submittal, V3's project manager will designate a quality assurance reviewer that has not been directly involved in the project to perform independent quality reviews. These reviews will include plan design reviews, reviews of supporting calculations and review of report documents.

The QA/QC process also includes the preparation and maintenance of project records. The process will ensure that records are legible, identifiable and retrievable; protected from damage or loss and are systematically filed in a singular location.

**Task 17 - Meetings & Agency Coordination**

V3 will attend a project kickoff meeting and progress meetings at the Village (6 total). We anticipate a project kick off meeting with IDOT and Cook County. Progress meetings with these agencies as well as coordination meetings with the FHWA are anticipated. (5 total). During the development of the PDR one open house or presentation at a Village Board Committee meeting will be held. We will confirm with IDOT that this will satisfy the public involvement requirements (1 total).

A separate kickoff meeting with the ICC and Village will be held to discuss the at grade pedestrian crossing of the Norfolk Southern railroad. In addition, we anticipate a project progress meeting and attendance at the necessary hearing for the crossing (3 total).

Meeting minutes will be taken and sent out within 5 days of the meeting.

V3 will send each utility owner a set of preliminary plans to verify the locations of their facilities. The intent in the design of the project is to avoid impacts to existing utilities to the extent feasible.

V3 will advise the Village regarding any required permitting that may be needed for the project during the Phase II design process.

**Task 18 - Outside Funding Application Preparation**

As outside funding opportunities become available V3 will assist the Village in completing the necessary documents and developing applicable exhibits. We anticipate submitting applications for STP, CMAQ, ITEP, ICC Safe Crossings and Invest in Cook funds

**Task 19 - Administration & Management**

Project administration and management will be performed by project manager and administrative staff.

- Prepare invoices and progress reports on a monthly basis and submit to the City for review and processing.
- Provide project and staff management. Coordinate project tasks between design team members and the geotechnical subconsultant.
- Conduct internal team meetings as necessary and provide procedures for documenting and filing of project information.
- Prepare a subconsultant agreement for geotechnical subconsultant and manage performance of their work efforts.

**Village of Orland Park**
**167th Street Multi-Use Path**
**Phase I Engineering**
**Manhour Summary**

**V3 Companies**
**15-Jan-19**

| | ITEM | MANHOURS | IN-HOUSE DIRECT COSTS | SERVICES BY OTHERS |
|---|---|---|---|---|
| | Topographic Survey | 370.5 | | |
| | ROW and Easement | 0 | $ 20,000.00 | |
| | Data Collection | 16 | | |
| | RR/ICC Coordination | 72 | | |
| | Geotechnical Investigations | 0 | | $ 8,500.00 |
| | Environmental Survey Request | 16 | | |
| | Traffic/Capacity Analysis | 40 | | |
| | Alt. Geometric Studies | 122 | | |
| | Location Drainage Study | 365 | | |
| | Wetland Assessment | 56 | | |
| | Hydraulic Report | 149 | | |
| | Marley Creek Structure | 104 | | |
| | Construction Cost | 40 | | |
| | Project Report | 184 | | |
| | Special Waste Study (PESA) | 10 | | |
| | QA/QC | 16 | | |
| | Meetings/Agency Coordination | 66 | | |
| | Outside Funding Application | 32 | | |
| | Admin/Management | 32 | | |
| | | | | |
| | | | | |
| | | | | |
| | **Subconsultant DL** | | | |
| | **TOTALS** | 1690.5 | $ 20,000.00 | $ 8,500.00 |



**PREPARED BY THE CONSULTANT**

## Manhour Summary

| PAYROLL CLASSIFICATION | TOTAL PROJECT HOURS | Topographic Survey Hours | | | ROW and Easement Hours | | | Data Collection Hours | | | RR/CC Coordination Hours | | | Geotechnical Investigations Hours | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Administration I | 13 | | | | | | | | | | | | | | | |
| Design Technician III | 4 | | | | | | | | | | | | | | | |
| Division Director | 4 | | | | | | | | | | | | | | | |
| Engineer I | 151 | | | | | | | | | | | | | | | |
| Engineer II | 297 | | | | | | | | | | | | | | | |
| Engineer III | 8 | | | | | | | | | | 8 | | | | | |
| Project Engineer I | 180 | | | | | | | 16 | | | 48 | | | | | |
| Project Engineer II | 198 | | | | | | | | | | | | | | | |
| Project Manager | 135 | | | | | | | | | | | | | | | |
| Project Surveyor II | 18 | | | | | | | | | | | | | | | |
| Project Surveyor III | 80 | 80 | | | | | | | | | | | | | | |
| Senior Project Engineer | 80 | | | | | | | | | | | | | | | |
| Senior Project Manager | 88.5 | 22.5 | | | | | | | | | | | | | | |
| Senior Project Manager (Trans.) | 154 | | | | | | | | | | 24 | | | | | |
| Superintendent | 0 | | | | | | | | | | | | | | | |
| Survey Crew | 268 | 268 | | | | | | | | | | | | | | |
| Technician I/II | 0 | | | | | | | | | | | | | | | |
| Technician II | 0 | | | | | | | | | | | | | | | |
| | 16 | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | |
| TOTALS | 1690.5 | 370.5 | | | 0 | | | 16 | | | 72 | | | 0 | | |

## Manhour Summary

| PAYROLL | Environmental Survey Request | | | Traffic/Capacity Analysis | | | Alt. Geometric Studies | | | Location Drainage Study | | | Wetland Assessment | | | Hydraulic Report | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CLASSIFICATION | Hours | | | Hours | | | Hours | | | Hours | | | Hours | | | Hours | | |
| Administration I | | | | | | | | | | 8 | | | | | | 5 | | |
| Design Technician III | | | | | | | | | | 4 | | | | | | | | |
| Division Director | | | | | | | | | | | | | | | | 4 | | |
| Engineer I | | | | | | | 50 | | | 37 | | | | | | 24 | | |
| Engineer II | | | | | | | | | | 265 | | | | | | 92 | | |
| Engineer III | | | | | | | | | | | | | | | | | | |
| Project Engineer I | | | | | | | | | | | | | | | | | | |
| Project Engineer II | 16 | | | 24 | | | 40 | | | | | | 16 | | | | | |
| Project Manager | | | | | | | | | | 111 | | | | | | 24 | | |
| Project Surveyor II | | | | 16 | | | | | | | | | | | | | | |
| Project Surveyor III | | | | | | | | | | | | | | | | | | |
| Senior Project Engineer | | | | | | | | | | | | | | | | | | |
| Senior Project Manager | | | | | | | 16 | | | | | | 24 | | | | | |
| Senior Project Manager (Trans.) | | | | | | | 16 | | | | | | | | | | | |
| Superintendent | | | | | | | | | | | | | | | | | | |
| Survey Crew | | | | | | | | | | | | | | | | | | |
| Technician I/II | | | | | | | | | | | | | | | | | | |
| Technician II | | | | | | | | | | | | | | | | | | |
| Scientist III | | | | | | | | | | | | | 16 | | | | | |
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| TOTALS | 16 | | | 40 | | | 122 | | | 365 | | | 56 | | | 149 | | |

## Manhour Summary

| PAYROLL CLASSIFICATION | Marley Creek Structure Hours | | | Construction Cost Hours | | | Hydraulic Report Hours | | | Special Waste Study (PESA) Hours | | | QA/QC Hours | | | Meetings/Agency Coordination Hours | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Administration I | | | | | | | | | | | | | | | | | | |
| Design Technician III | | | | | | | | | | | | | | | | | | |
| Division Director | | | | | | | | | | | | | | | | | | |
| Engineer I | | | | | | | 40 | | | | | | | | | | | |
| Engineer II | | | | | | | | | | | | | | | | | | |
| Engineer III | | | | | | | | | | | | | | | | | | |
| Project Engineer I | | | | 24 | | | 60 | | | | | | | | | 40 | | |
| Project Engineer II | | | | | | | 60 | | | 10 | | | | | | | | |
| Project Manager | | | | | | | | | | | | | | | | | | |
| Project Surveyor II | | | | | | | | | | | | | | | | | | |
| Project Surveyor III | | | | | | | | | | | | | | | | | | |
| Senior Project Engineer | 80 | | | | | | | | | | | | | | | | | |
| Senior Project Manager | 24 | | | | | | | | | | | | | | | | | |
| Senior Project Manager (Trans.) | | | | 16 | | | 24 | | | | | | 16 | | | 26 | | |
| Superintendent | | | | | | | | | | | | | | | | | | |
| Survey Crew | | | | | | | | | | | | | | | | | | |
| Technician I/II | | | | | | | | | | | | | | | | | | |
| Technician II | | | | | | | | | | | | | | | | | | |
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| TOTALS | 104 | | | 40 | | | 184 | | | 10 | | | 16 | | | 66 | | |

## Manhour Summary

| PAYROLL CLASSIFICATION | Outside Funding Application | | | Admin/Management | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Hours | | | Hours | | | Hours | | | Hours | | | Hours | | | Hours | | |
| Administration I | | | | | | | | | | | | | | | | | | |
| Design Technician III | | | | | | | | | | | | | | | | | | |
| Division Director | | | | | | | | | | | | | | | | | | |
| Engineer I | | | | | | | | | | | | | | | | | | |
| Engineer II | | | | | | | | | | | | | | | | | | |
| Engineer III | | | | | | | | | | | | | | | | | | |
| Project Engineer I | | | | | | | | | | | | | | | | | | |
| Project Engineer II | 32 | | | | | | | | | | | | | | | | | |
| Project Manager | | | | | | | | | | | | | | | | | | |
| Project Surveyor II | | | | | | | | | | | | | | | | | | |
| Project Surveyor III | | | | | | | | | | | | | | | | | | |
| Senior Project Engineer | | | | | | | | | | | | | | | | | | |
| Senior Project Manager | | | | | | | | | | | | | | | | | | |
| Senior Project Manager (Trans.) | | | | 32 | | | | | | | | | | | | | | |
| Superintendent | | | | | | | | | | | | | | | | | | |
| Survey Crew | | | | | | | | | | | | | | | | | | |
| Technician I/II | | | | | | | | | | | | | | | | | | |
| Technician II | | | | | | | | | | | | | | | | | | |
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| TOTALS | 32 | | | 32 | | | 0 | | | 0 | | | 0 | | | 0 | | |



PREPARED BY THE CONSULTANT

## Exhibit II

# V3 COMPANIES
# BILLING RATE SCHEDULE

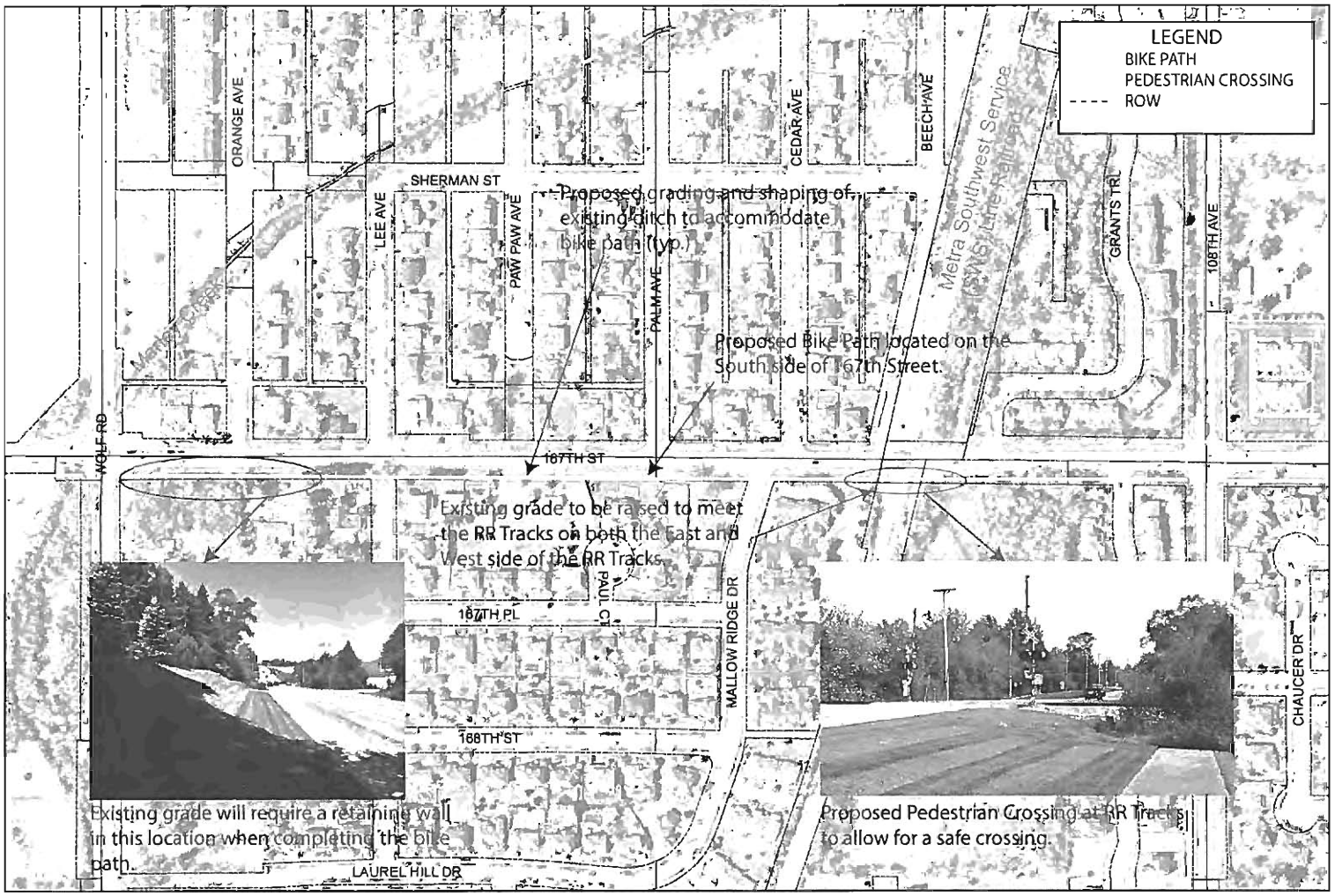
**(Rates effective January 1, 2019 through December 31, 2019)**

| Description | Hourly Rate |
|---|---|
| Principal/Director | 210.00 |
| Senior Project Manager | 200.00 |
| Senior Estimator | 190.00 |
| Superintendent | 170.00 |
| Resident Engineer II | 165.00 |
| Project Manager II | 160.00 |
| Resident Construction Manager II | 160.00 |
| Project Manager I | 150.00 |
| Resident Engineer I | 145.00 |
| Resident Construction Manager I | 145.00 |
| Senior Project Engineer | 140.00 |
| Construction Administrator III | 140.00 |
| Project Engineer II | 135.00 |
| Project Scientist II | 130.00 |
| Project Engineer I | 130.00 |
| Landscape Architect II | 120.00 |
| Senior Construction Technician | 120.00 |
| Project Scientist I | 115.00 |
| Landscape Architect I | 110.00 |
| Construction Technician III | 110.00 |
| Survey Crew Chief | 110.00 |
| Project Surveyor III | 110.00 |
| Engineer III | 105.00 |
| Project Surveyor I/II | 105.00 |
| Design Technician III | 100.00 |
| Construction Administrator II | 100.00 |
| Scientist III | 100.00 |
| Engineer II | 95.00 |
| Engineer I | 95.00 |
| Instrument Operator | 90.00 |
| Project Designer III | 90.00 |
| Scientist I/II | 90.00 |
| Technician II | 80.00 |
| Project Designer I/II | 80.00 |
| Estimating Technician | 80.00 |
| Project Coordinator | 60.00 |
| Technician I | 60.00 |


167TH STREET - 550'WEST OF WOLF ROAD TO WOLF ROAD
PROPOSED BIKE PATH IMPROVEMENTS
PROJECT LOCATION MAP
PAGE 1 OF 3
**EXHIBIT IV**

North

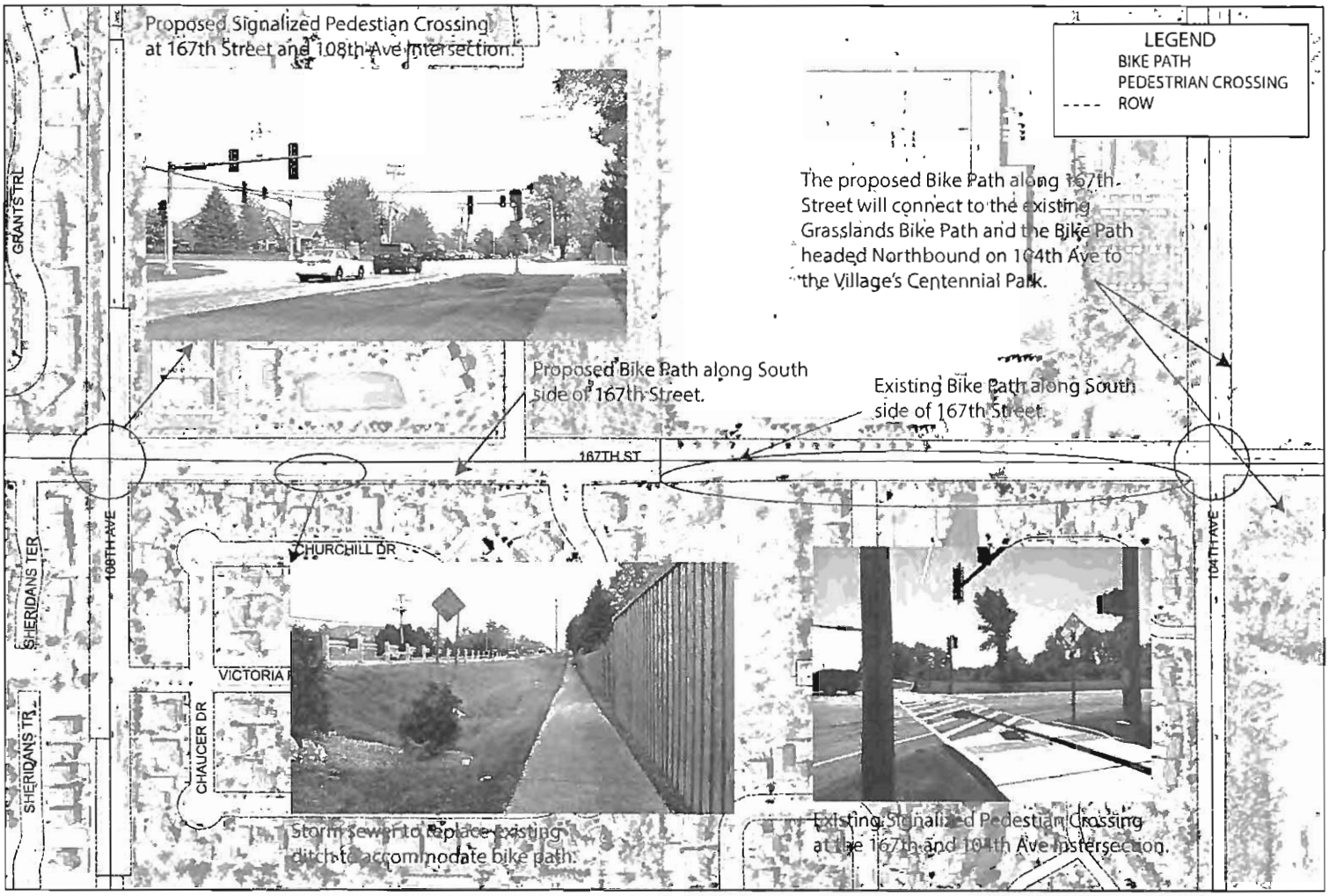
1 inch = 400 feet




167TH STREET - WOLF ROAD TO 108TH AVE
PROPOSED BIKE PATH IMPROVEMENTS
PROJECT LOCATION MAP
PAGE 2 OF 3
**EXHIBIT IV**

North

1 inch = 300 feet




167TH STREET - 108TH AVE TO 104TH AVE
PROPOSED BIKE PATH IMPROVEMENTS
PROJECT LOCATION MAP
PAGE 3 OF 3
**EXHIBIT IV**

North

1 inch = 300 feet