



**DRAFT**

**Local Public Agency  
Engineering Services Agreement**

Agreement For  Agreement Type

Using Federal Funds?  Yes  No

**LOCAL PUBLIC AGENCY**

Local Public Agency	County	Section Number	Job Number
Lake	Lake	23-00999-95-RS	
Project Number	Contact Name	Phone Number	Email
	Michael Burke	(847) 377-7462	Mjburke@lakecountyil.gov

**SECTION PROVISIONS**

Local Street/Road Name	Key Route	Length	Structure Number
Old McHenry Road	CH 32	3.69 mi	N/A
Location Termini			Add Location
Cuba Road to Quentin Road			Remove Location

Project Description

The resurfacing of Old McHenry Road from Cuba Road to Quentin Road. Proposed work includes bituminous paving, culvert replacements, bicycle friendly shoulders, and other related work.

Engineering Funding  MFT/TBP  State  Other

Anticipated Construction Funding  Federal  MFT/TBP  State  Other

**AGREEMENT FOR**

Phase I - Preliminary Engineering  Phase II - Design Engineering

**CONSULTANT**

Prime Consultant (Firm) Name	Contact Name	Phone Number	Email
Christopher B. Burke Engineering	Josh Sitrick	(847) 823-0500	jsitrick@cbbel.com
Address	City	State	Zip Code
9575 West Higgins Road, Suite 600	Rosemont	IL	60018

THIS AGREEMENT IS MADE between the above Local Public Agency (LPA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the improvement of the above SECTION. Project funding allotted to the LPA by the State of Illinois under in coordination with the State Department of Transportation, hereinafter called the "DEPARTMENT," will be used entirely or in part to finance ENGINEERING services as described under AGREEMENT PROVISIONS.

Since the services contemplated under the AGREEMENT are professional in nature, it is understood that the ENGINEER, acting as an individual, partnership, firm or legal entity, qualifies for professional status and will be governed by professional ethics in its relationship to the LPA and the DEPARTMENT. The LPA acknowledges the professional and ethical status of the ENGINEER by entering into an AGREEMENT on the basis of its qualifications and experience and determining its compensation by mutually satisfactory negotiations.

WHEREVER IN THIS AGREEMENT or attached exhibits the following terms are used, they shall be interpreted to mean:

- Regional Engineer: Deputy Director, Office of Highways Project Implementation, Regional Engineer, Department of Transportation
- Resident Construction Supervisor: Authorized representative of the LPA in immediate charge of the engineering details of the construction PROJECT
- In Responsible Charge Contractor: A full time LPA employee authorized to administer inherently governmental PROJECT activities Company or Companies to which the construction contract was awarded

## AGREEMENT EXHIBITS

The following EXHIBITS are attached hereto and made a part of hereof this AGREEMENT:

- EXHIBIT A: Scope of Services
- EXHIBIT B: Project Schedule
- EXHIBIT C: Qualification Based Selection (QBS) Checklist
- EXHIBIT D: Cost Estimate of Consultant Services (BLR 05513 or BLR 05514 )
- EXHIBIT \_\_\_ : Direct Costs Check Sheet (attach BDE 436 when using Lump Sum on Specific Rate Compensation)
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

### I. THE ENGINEER AGREES,

1. To perform or be responsible for the performance of the Scope of Services presented in EXHIBIT A for the LPA in connection with the proposed improvements herein before described.
2. The Classifications of the employees used in the work shall be consistent with the employee classifications and estimated staff hours. If higher-salaried personnel of the firm, including the Principal Engineer, perform services that are to be performed by lesser-salaried personnel, the wage rate billed for such services shall be commensurate with the payroll rate for the work performed.
3. That the ENGINEER shall be responsible for the accuracy of the work and shall promptly make necessary revisions or corrections required as a result of the ENGINEER'S error, omissions or negligent acts without additional compensation. Acceptance of work by the LPA or DEPARTMENT will not relieve the ENGINEER of the responsibility to make subsequent correction of any such errors or omissions or the responsibility for clarifying ambiguities.
4. That the ENGINEER will comply with applicable Federal laws and regulations, State of Illinois Statutes, and the local laws or ordinances of the LPA.
5. To pay its subconsultants for satisfactory performance no later than 30 days from receipt of each payment from the LPA.
6. To invoice the LPA, The ENGINEER shall submit all invoices to the LPA within three months of the completion of the work called for in the AGREEMENT or any subsequent Amendment or Supplement.
7. The ENGINEER or subconsultant shall not discriminate on the basis of race, color, national origin or sex in the performance of this AGREEMENT. The ENGINEER shall carry out applicable requirements of 49 CFR part 26 in the administration of US Department of Transportation (US DOT) assisted contract. Failure by the Engineer to carry out these requirements is a material breach of this AGREEMENT, which may result in the termination of this AGREEMENT or such other remedy as the LPA deems appropriate.
8. That none of the services to be furnished by the ENGINEER shall be sublet, assigned or transferred to any other party or parties without written consent of the LPA. The consent to sublet, assign or otherwise transfer any portion of the services to be furnished by the ENGINEER shall be construed to relieve the ENGINEER of any responsibility for the fulfillment of this AGREEMENT.
9. For Preliminary Engineering Contracts:
  - (a) To attend meetings and visit the site of the proposed improvement when requested to do so by representatives of the LPA or the DEPARTMENT, as defined in Exhibit A (Scope of Services).
  - (b) That all plans and other documents furnished by the ENGINEER pursuant to the AGREEMENT will be endorsed by the ENGINEER and affixed the ENGINEER's professional seal when such seal is required by law. Such endorsements must be made by a person, duly licensed or registered in the appropriate category by the Department of Professional Regulation of the State of Illinois. It will be the ENGINEER's responsibility to affix the proper seal as required by the Bureau of Local Roads and Streets manual published by the DEPARTMENT.
  - (c) That the ENGINEER is qualified technically and is thoroughly conversant with the design standards and policies applicable for the PROJECT; and that the ENGINEER has sufficient properly trained, organized and experienced personnel to perform the services enumerated in Exhibit A (Scope of Services).
10. That the engineering services shall include all equipment, instruments, supplies, transportation and personnel required to perform the duties of the ENGINEER in connection with this AGREEMENT (See DIRECT COST tab in BLR 05513 or BLR 05514).

### II. THE LPA AGREES,

1. To certify by execution of this AGREEMENT that the selection of the ENGINEER was performed in accordance with the Professional Services Selection Act (50 ILCS 510) (Exhibit C).
2. To furnish the ENGINEER all presently available survey data, plans, specifications, and project information.
3. To pay the ENGINEER:
  - (a) For progressive payments - Upon receipt of monthly invoices from the ENGINEER and the approval thereof by the LPA, monthly payments for the work performed shall be due and payable to the ENGINEER, such payments to be equal to the value of the partially completed work minus all previous partial payments made to the ENGINEER.
  - (b) Final payment - Upon approval of the work by the LPA but not later than 60 days after the work is completed and reports have been made and accepted by the LPA and DEPARTMENT a sum of money equal to the basic fee as determined in this AGREEMENT less the total of the amount of partial payments previously paid to the ENGINEER

shall be due and payable to the ENGINEER.

(c) For Non-Federal County Projects - (605 ILCS 5/5-409)

- (1) For progressive payments - Upon receipt of monthly invoices from the ENGINEER and the approval thereof by the LPA, monthly payments for the work performed shall be due and payable to the ENGINEER. Such payments to be equal to the value of the partially completed work in all previous partial payments made to the ENGINEER.
- (2) Final payment - Upon approval of the work by the LPA but not later than 60 days after the work is completed and reports have been made and accepted by the LPA and STATE, a sum of money equal to the basic fee as determined in the AGREEMENT less the total of the amount of partial payments previously paid to the ENGINEER shall be due and payable to the ENGINEER.

4. To pay the ENGINEER as compensation for all services rendered in accordance with the AGREEMENT on the basis of the following compensation method as discussed in 5-5.10 of the BLR Manual.

Method of Compensation:

- Percent
- Lump Sum
- Specific Rate
- Cost plus Fixed Fee:

Total Compensation = DL + DC + OH + FF

Where:

DL is the total Direct Labor,

DC is the total Direct Cost,

OH is the firm's overhead rate applied to their DL and

FF is the Fixed Fee.

Where FF = ( 0.33 + R ) DL + %SubDL, where R is the advertised Complexity Factor and %SubDL is 10% profit allowed on the direct labor of the subconsultants.

The Fixed Fee cannot exceed 15% of the DL + OH.

5. The recipient shall not discriminate on the basis of race, color, national origin or sex in the award and performance of any US DOT-assisted contract or in the administration of its DBE program or the requirements of 49 CFR part 26. The recipient shall take all necessary and reasonable steps under 49 CFR part 26 to ensure nondiscrimination in the award and administration of US DOT-assisted contracts. The recipient's DBE program, as required by 49 CFR part 26 and as approved by US DOT, is incorporated by reference in this agreement. Implementation of this program is a legal obligation and failure to carry out its terms shall be treated as violation of this AGREEMENT. Upon notification to the recipient of its failure to carry out its approved program, the Department may impose sanctions as provided for under part 26 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31 U.S.C 3801 et seq.).

### III. IT IS MUTUALLY AGREED,

1. To maintain, for a minimum of 3 years after the completion of the contract, adequate books, records and supporting documents to verify the amount, recipients and uses of all disbursements of funds passing in conjunction with the contract; the contract and all books, records and supporting documents related to the contract shall be available for review and audit by the Auditor General, and the DEPARTMENT; the Federal Highways Administration (FHWA) or any authorized representative of the federal government, and to provide full access to all relevant materials. Failure to maintain the books, records and supporting documents required by this section shall establish a presumption in favor of the DEPARTMENT for the recovery of any funds paid by the DEPARTMENT under the contract for which adequate books, records and supporting documentation are not available to support their purported disbursement.
2. That the ENGINEER shall be responsible for any all damages to property or persons out of an error, omission and/or negligent act in the prosecution of the ENGINEER's work and shall indemnify and save harmless the LPA, the DEPARTMENT, and their officers, agents and employees from all suits, claims, actions or damages liabilities, costs or damages of any nature whatsoever resulting there from. These indemnities shall not be limited by the listing of any insurance policy.  

The LPA will notify the ENGINEER of any error or omission believed by the LPA to be caused by the negligence of the ENGINEER as soon as practicable after the discovery. The LPA reserves the right to take immediate action to remedy any error or omission if notification is not successful; if the ENGINEER fails to reply to a notification; or if the conditions created by the error or omission are in need of urgent correction to avoid accumulation of additional construction costs or damages to property and reasonable notice is not practicable.
3. This AGREEMENT may be terminated by the LPA upon giving notice in writing to the ENGINEER at the ENGINEER's last known post office address. Upon such termination, the ENGINEER shall cause to be delivered to the LPA all drawings, plats, surveys, reports, permits, agreements, soils and foundation analysis, provisions, specifications, partial and completed estimates and data, if any from soil survey and subsurface investigation with the understanding that all such materials becomes the property of the LPA. The LPA will be responsible for reimbursement of all eligible expenses incurred under the terms of this AGREEMENT up to the date of the written notice of termination.

4. ~~In the event that the DEPARTMENT stops payment to the LPA, the LPA may suspend work on the project. If this agreement is suspended by the LPA for more than thirty (30) calendar days, consecutive or in aggregate, over the term of this AGREEMENT, the ENGINEER shall be compensated for all services performed and reimbursable expenses incurred prior to receipt of notice of suspension. In addition, upon the resumption of services the LPA shall compensate the ENGINEER, for expenses incurred as a result of the suspension and resumption of its services, and the ENGINEER's schedule and fees for the remainder of the project shall be equitably adjusted.~~
5. This AGREEMENT shall continue as an open contract and the obligations created herein shall remain in full force and effect until the completion of construction of any phase of professional services performed by others based upon the service provided herein. All obligations of the ENGINEER accepted under this AGREEMENT shall cease if construction or subsequent professional services are not commenced within 5 years after final payment by the LPA.
6. That the ENGINEER shall be responsible for any and all damages to property or persons arising out of an error, omission and/or negligent act in the prosecution of the ENGINEER's work and shall indemnify and have harmless the LPA, the DEPARTMENT, and their officers, employees from all suits, claims, actions or damages liabilities, costs or damages of any nature whatsoever resulting there from. These indemnities shall not be limited by the listing of any insurance policy.
7. The ENGINEER and LPA certify that their respective firm or agency:
  - (a) has not employed or retained for commission, percentage, brokerage, contingent fee or other considerations, any firm or person (other than a bona fide employee working solely for the LPA or the ENGINEER) to solicit or secure this AGREEMENT,
  - (b) has not agreed, as an express or implied condition for obtaining this AGREEMENT, to employ or retain the services of any firm or person in connection with carrying out the AGREEMENT or
  - (c) has not paid, or agreed to pay any firm, organization or person (other than a bona fide employee working solely for the LPA or the ENGINEER) any fee, contribution, donation or consideration of any kind for, or in connection with, procuring or carrying out the AGREEMENT.
  - (d) that neither the ENGINEER nor the LPA is/are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal department or agency,
  - (e) has not within a three-year period preceding the AGREEMENT been convicted of or had a civil judgment rendered against them for commission of fraud or criminal offense in connection with obtaining, attempting to obtain or performing a public (Federal, State or local) transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property.
  - (f) are not presently indicated for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph and
  - (g) has not within a three-year period preceding this AGREEMENT had one or more public transaction (Federal, State, local) terminated for cause or default.

Where the ENGINEER or LPA is unable to certify to any of the above statements in this clarification, an explanation shall be attached to this AGREEMENT.

8. In the event of delays due to unforeseeable causes beyond the control of and without fault or negligence of the ENGINEER no claim for damages shall be made by either party. Termination of the AGREEMENT or adjustment of the fee for the remaining services may be requested by either party if the overall delay from the unforeseen causes prevents completion of the work within six months after the specified completion date. Examples of unforeseen causes included but are not limited to: acts of God or a public enemy; acts of the LPA, DEPARTMENT, or other approving party not resulting from the ENGINEER's unacceptable services; fire; strikes; and floods.

If delays occur due to any cause preventing compliance with the PROJECT SCHEDULE, the ENGINEER shall apply in writing to the LPA for an extension of time. If approved, the PROJECT SCHEDULE shall be revised accordingly.

9. This certification is required by the Drug Free Workplace Act (30 ILCS 580). The Drug Free Workplace Act requires that no grantee or contractor shall receive a grant or be considered for the purpose of being awarded a contract for the procurement of any property or service from the DEPARTMENT unless that grantee or contractor will provide a drug free workplace. False certification or violation of the certification may result in sanctions including, but not limited to suspension of contract on grant payments, termination of a contract or grant and debarment of the contracting or grant opportunities with the DEPARTMENT for at least one (1) year but not more than (5) years.

For the purpose of this certification, "grantee" or "Contractor" means a corporation, partnership or an entity with twenty-five (25) or more employees at the time of issuing the grant or a department, division or other unit thereof, directly responsible for the specific performance under contract or grant of \$5,000 or more from the DEPARTMENT, as defined the Act.

The contractor/grantee certifies and agrees that it will provide a drug free workplace by:

- (a) Publishing a statement:
  - (1) Notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance, including cannabis, is prohibited in the grantee's or contractor's workplace.
  - (2) Specifying actions that will be taken against employees for violations of such prohibition.
  - (3) Notifying the employee that, as a condition of employment on such contract or grant, the employee will:
    - (a) abide by the terms of the statement; and
    - (b) notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than (5) days after such conviction.
- (b) Establishing a drug free awareness program to inform employees about:
  - (1) The dangers of drug abuse in the workplace;

- (2) The grantee's or contractor's policy to maintain a drug free workplace;
- (3) Any available drug counseling, rehabilitation and employee assistance program; and
- (4) The penalties that may be imposed upon an employee for drug violations.
- (c) Providing a copy of the statement required by subparagraph (a) to each employee engaged in the performance of the contract or grant and to post the statement in a prominent place in the workplace.
- (d) Notifying the contracting, or granting agency within ten (10) days after receiving notice under part (b) of paragraph (3) of subsection (a) above from an employee or otherwise, receiving actual notice of such conviction.
- (e) Imposing a sanction on, or requiring the satisfactory participation in a drug abuse assistance or rehabilitation program.
- (f) Assisting employees in selecting a course of action in the event drug counseling, treatment and rehabilitation is required and indicating that a trained referral team is in place.

Making a good faith effort to continue to maintain a drug free workplace through implementation of the Drug Free Workplace Act, the ENGINEER, LPA and the Department agree to meet the PROJECT SCHEDULE outlined in EXHIBIT B. Time is of the essence on this project and the ENGINEER's ability to meet the PROJECT SCHEDULE will be a factor in the LPA selecting the ENGINEER for future projects. The ENGINEER will submit progress reports with each invoice showing work that was completed during the last reporting period and work they expect to accomplish during the following period.

- 10. Due to the physical location of the project, certain work classifications may be subject to the Prevailing Wage Act (820 ILCS 130/0.01 et seq.).
- 11. For Preliminary Engineering Contracts:
  - (a) That tracing, plans, specifications, estimates, maps and other documents prepared by the ENGINEER in accordance with this AGREEMENT shall be delivered to and become the property of the LPA and that basic survey notes, sketches, charts, CADD files, related electronic files, and other data prepared or obtained in accordance with this AGREEMENT shall be made available, upon request to the LPA or to the DEPARTMENT, without restriction or limitation as to their use. Any re-use of these documents without the ENGINEER involvement shall be at the LPA's sole risk and will not impose liability upon the ENGINEER.
  - (b) That all reports, plans, estimates and special provisions furnished by the ENGINEER shall conform to the current Standard Specifications for Road and Bridge Construction, Bureau of Local Roads and Streets Manual or any other applicable requirements of the DEPARTMENT, it being understood that all such furnished documents shall be approved by the LPA and the DEPARTMENT before final acceptance. During the performance of the engineering services herein provided for, the ENGINEER shall be responsible for any loss or damage to the documents herein enumerated while they are in the ENGINEER's possession and any such loss or damage shall be restored at the ENGINEER's expense.

**AGREEMENT SUMMARY**

Prime Consultant (Firm) Name	TIN/FEIN/SS Number	Agreement Amount
Christopher B. Burke Engineering	36-3468939	\$518,467.00
<b>Subconsultants</b>		
Santacruz Land Acquisitions	36-3851733	\$29,400.00
Testing Services Corporation	35-0937582	\$22,870.00
HBK Engineering	36-4304016	\$57,741.00
	<b>Subconsultant Total</b>	<b>\$110,011.00</b>
	<b>Prime Consultant Total</b>	<b>\$518,467.00</b>
	<b>Total for all work</b>	<b>\$628,478.00</b>

**AGREEMENT SIGNATURES**

Executed by the LPA:

Attest: The 

Local Public Agency Type
County

 of 

Local Public Agency
Lake

By (Signature & Date)  

--

By (Signature & Date)  

--

Local Public Agency
Lake

Local Public Agency Type
County

 Clerk

Title
Chair, Lake County Board

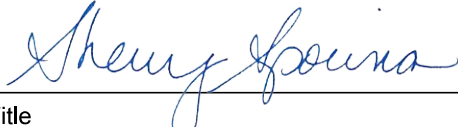
(SEAL)

Executed by the ENGINEER:

Attest: 

Prime Consultant (Firm) Name
Christopher B. Burke Engineering


By (Signature & Date)  


---

  
Title  

Vice President
----------------

By (Signature & Date)  


---

  
Title  

President
-----------

APPROVED:

Regional Engineer, Department of Transportation (Signature & Date)  

N/A
-----

Recommended for Execution
_____ Shane Schneider, P.E. Director of Transportation/County Engineer

Local Public Agency	Prime Consultant (Firm) Name	County	Section Number
Lake	Christopher B. Burke Engineering	Lake	23-00999-95-RS

**EXHIBIT A  
SCOPE OF SERVICES**

To perform or be responsible for the performance of the engineering services for the LPA, in connection with the PROJECT herein before described and enumerated below

## SCOPE OF SERVICES

### Old McHenry Road Resurfacing

Section No. 23-00999-95-RS  
Lake County, Illinois

September 1, 2023

### PHASE II – DESIGN ENGINEERING SERVICES

Christopher B. Burke Engineering, Ltd. (CBBEL) will perform Phase II Engineering Services for the resurfacing of Old McHenry Road from Cuba Road to Quentin Road in Lake County. The resurfacing project will omit the thru lanes of IL 22. It is anticipated that a permit will be required for the resurfacing within State ROW. Earthwork is not anticipated within State ROW and Special Waste screening through the IDOT Environmental Survey Request process is not included in this proposal.

The resurfacing of Old McHenry Road is anticipated to include:

- Mill 2 ¼"; Resurface 1 ½" Surface Course and ¾" Leveling Binder.
- N50 hot-mix asphalt design from Cuba Rd to IL 22; N70 hot-mix asphalt design from IL 22 to Bonnie Ln.
- Centerline and Shoulder/Edge Line rumble strips.
- Install longitudinal joint sealant at all surface pavement joints.
- Replace pavement markings with grooved thermoplastic.
- Install recessed pavement markers at existing locations between Prairie Wind Rd and Woods End Rd.
- Contingent quantity of 5% for patching.
- Remove and replace shoulders with bike friendly HMA Shoulder (1 ½" Surface Course over 4 ½" of Binder Course)
- Determine feasibility of extending curb and gutter between Prairie Wind Rd and Woods End Rd.
- Estimate quantity of curb and gutter removal and replacement with new B-6.24.
- Excavate and reconstruct aggregate shoulders in 3 lane sections
- Remove the bypass lane and add a left turn lane at the entrance of the Kemper Lakes Golf Course
- Ditch reshaping based on initial field review (to be verified with LCDOT in design)
  - West side ditch, north and south of Prairie Wind Rd; Sta 74+00 to 79+00
  - East and west side ditches between Ridgewood Ln and Woods End Rd; Sta 88+50 to 92+50
  - West side ditch near 3985 Old McHenry Rd; Sta 118+00 to 121+00
  - West side ditch near 23552 Old McHenry Rd; 152+50 to 157+50
  - West side ditches near N Forest Dr; Sta 228+00 to 231+00
  - East side flat ditch near N Lake Side Dr, Sta 221+00 to Sta 223+50
- Side Street / Driveway culverts to be removed and replaced. Driveway grading and ditch reshaping based on field review (to be verified with LCDOT in design)
  - Country Ln; Sta 60+50
  - Prairie Wind Rd; Sta 75+40 West Side



- 3333 Old McHenry Road; 74+20 West Side
- 3372 Old McHenry Road; 77+40 East Side
- 117, 119 Old McHenry Road; 217+70 West Side
- 24313 Old McHenry Rd; 228+50 West Side
- Roadway culverts 626 through 635 will be televised by LCPW. CBBEL will review tapes and provide recommendations to LCDOT to replace, line, or leave culverts in place. Upon LCDOT's approval, CBBEL will survey the applicable culverts, provide appropriate drainage analysis, and add modifications to the roadway plans. HBK Engineering will obtain SUE Level B locates at spot locations for any culverts to be replaced and will obtain potholes (SUE Level A locates) at any potential conflicts.
- Remove and install new guardrail with HMA stabilized base (CBBEL to field measure height of existing guardrail)
  - Between Prairie Wind Rd and Ridgewood Ln
  - Between IL 22 and Patricia Dr.
- Repair damaged chain link fence on the west side of the road between Prairie Wind Rd and Ridgewood Ln.
- Detector loops replaced on the north and south legs of Old McHenry Road at IL 22 with standard IDOT spec.
- Install survey monuments at existing locations.

The project is currently scheduled for a January 2025 letting. The letting may change due to land acquisition delays but must take place no later than June 2025. CBBEL will provide services for all permitting required for the improvements. A detailed scope of services is provided below.

### **Task 1 – Meetings and Coordination**

Coordination with the Village of Long Grove, LCDOT, LCPW, IDOT, Twin Orchards Country Club, JCC Chicago Day Camp, and Kemper Lakes Golf Club will be required throughout the project to coordinate this project with other projects, developments, and events that may impact construction. Design elements that will impact the local agencies will be sent at appropriate design stages for coordination.

We anticipate three meetings with the County, which will consist of a Kick-Off Meeting and two coordination meetings. All project meetings will be scheduled in advance with a prepared agenda distributed to attendees prior to the meeting. CBBEL will prepare meeting minutes and distribute them to all attendees.

Once preliminary plans are completed, CBBEL will conduct a plan-in-hand review of the project to verify work identified and to determine if any work items are missing. LCDOT staff, including Maintenance, will be invited to attend this meeting.

Coordination will be completed with LCSMC throughout the project. Once the drainage calculations are complete, CBBEL will reach out to LCSMC for a pre-application meeting to discuss the project and facilitate appropriate submittals for the required permit.

CBBEL will prepare a permit submittal to IDOT Permits for the resurfacing to the IL 22 through lane in the State ROW. Coordination with IDOT Permits is anticipated for detector loop replacement. CBBEL will prepare the permit and address questions during IDOT's review.

CBBEL will prepare for and attend a Pre-Construction Public Meeting for the Old McHenry Road Resurfacing. The purpose of this meeting will be to explain the project to the public and to present the traffic control and project schedule.

### **Task 2 – Utility Coordination**

CBBEL will identify potential conflicts, coordinate with utilities, and set up meetings to discuss necessary utility relocations or plan adjustments.

Proposed utility relocations determined through coordination will be shown in plan view, profile view, and on cross sections. CBBEL will coordinate the design with utility companies and provide CADD files to utility companies when requested. CBBEL will assist LCDOT with review of utility relocation plan permit submissions.

### **Task 3 – Topographic Survey**

CBBEL will pick up full topographic survey within the existing right-of-way of Old McHenry Road for approximately 5,300' +/- (Station 73+25 to 95+50, Station 174+00 to 190+00, and Station 214+00 to 224+00).

CBBEL will also pick up Parkway Topographic Survey within 4 selected areas for approximately 1,800 feet (from EOP to existing ROW). CBBEL will pick up topographic survey at these locations to revise existing culverts and correct ditch flow, as necessary.

Horizontal Control: Utilizing state plane coordinates, CBBEL will set recoverable primary control utilizing state of the art GPS equipment based on Lake County & NGS Control Monumentation.

Vertical Control: CBBEL will establish benchmarks and assign elevations to the horizontal control points. This will be based on GPS observed Lake County & NGS Control Monumentation (NAVD'88 vertical control datum).

Existing Right-of-Way: CBBEL will establish the approximate existing right-of-way of the roadways within the project limits based on monumentation found in the field, plats of highways, subdivision plats and any other available information.

Topographic Survey: CBBEL will field locate all pavements, driveways, bike path, curb and gutters, pavement markings, signs, manholes, utility vaults, drainage structures, utilities, driveway culverts, crossroad culverts, etc. within the project limits (as per attached exhibit). Field location of all above ground utilities including, but not limited to water, sanitary sewer, storm sewer & adjacent connecting storm sewer structures, telephone, electric, cable and gas, etc. Identify size, type, rim, and invert elevations.

Cross Sections: CBBEL will survey cross sections along the project limits at 50' intervals, at driveways, and at all other grade controlling features within the areas of full and parkway topographic survey, as described above. Survey will be obtained for 10 feet beyond the existing right-of-way line, where possible.

Utility Survey and Coordination: All existing storm and sanitary sewers will be surveyed to determine rim and invert elevations and pipe sizes. Above ground facilities of any additional underground utilities including water main, gas, electric, cable, etc. will also be located. No J.U.L.I.E. Utility Survey Coordination is included in this task.

Tree Survey: CBBEL will locate all trees over 6” inches in diameter within the existing right-of-way in order to assess potential tree impacts, if any, associated with the project. The located trees will be identified by species (deciduous or coniferous) and the size and condition determined as appropriate.

Base Mapping: CBBEL will compile all of the above information onto base maps at 1”=20’ scale that is representative of existing conditions for use as the base sheet for the construction of any public or private improvements..

Supplemental Topographic Survey: CBBEL will supplement the initial topographic survey with pick-up topographic survey. Supplemental survey will occur at areas outside of those described above where field visits/LCDOT Maintenance determine that ditch grading, the addition of curb and gutter, or other improvements are necessary that require survey.

#### **Task 4 – Plats and Legals**

Reconnaissance: CBBEL will field recon project area in an attempt to discover sufficient right-of-way, property line and Section \ Quarter line evidence within the project limits. Research will be performed at the Lake County Recorder’s office. Current title commitments will be ordered for each property affected by the proposed easements for this project.

Parcel Surveys: CBBEL will field locate all property and section\ quarter line evidence discovered during Task 1.1. CBBEL will also locate the existing buildings within the parcels affected by the proposed easements as required for Task 1.4.

Parcel Calculations: Utilizing the information and physical evidence found in Task 1.1 and 1.2, CBBEL will compute the location of the existing property and Section \ Quarter lines along with the proposed easement lines for this project.

Drafting of the “Parcel Plats”: CBBEL will compile all the information gathered in Task 1.1 thru 1.3 on the “Parcel Plats” in a format suitable for submittal to and approval by LCDOT.

Prepare Written Legal Description: CBBEL will prepare written legal descriptions of all temporary easements suitable for submittal to and approval by LCDOT.

Proposed Right-of-Way Staking: CBBEL will set 5\8 x 24-inch iron rods (with survey caps) at all the corners of the right-of-way takes acquired and shown on the plat of highway drafted in Task 1.4.

#### **Task 5 – Drainage Studies**

CBBEL will review data collected in Task 3 (Topographic Survey) and the Roadway Geotechnical Report.

The drainage work will include:

- Review ditch grading to ensure existing drainage patterns are maintained.
- Review culvert replacements to ensure existing drainage patterns are maintained.
- Review flooding records and provide solutions within Existing ROW as needed.
- Verify floodplain and floodway impacts associated with the crossing for Old McHenry Road over South Branch Indian Creek (Culvert 627), Forest Lake Drain (Culvert 634), and near Forest Lake. No proposed modeling will be required at these

locations as it is assumed all work will be done above the 100-year floodplain elevation.

- A detailed Hydrologic and Hydraulic analysis will be required to determine peak flows, HWE, and floodplain impacts with Old McHenry Road crossing with Tributary to South Branch Indian Creek (Culverts 628 and 629). This modeling will be done per the Lake County Stormwater Management Commission (LCSMC) Watershed Development Ordinance.
- It is assumed that no detention design will be required per the LSCMC WDO.

### **Task 6 – Wetland Delineation and Permitting**

Field Reconnaissance: An investigation of the project site will be completed to identify the limits of wetlands and Waters of the United States present. The delineation will be completed based on the methodology established by the U.S. Army Corps of Engineers. Also, during the site visit, wildlife and plant community qualities will be assessed. The limits of the wetland communities will be field staked so that they can be professionally surveyed by others in relation to the project coordinate system. We also will locate the delineated boundaries using a submeter accuracy handheld GPS unit.

Letter Report: The results of the field reconnaissance will be summarized in a letter report suitable for U.S. Army Corps of Engineers and Lake County permitting. The wetlands' generalized quality ratings, according to the Swink and Wilhelm Methodology (1994), will be included along with exhibits depicting the approximate wetland and project boundaries, National Wetland Inventory, Soil Survey, floodplain, USGS topography, site photographs and their locations, and the U.S. Army Corps of Engineers Routine On-Site Data Forms. If the delineation is field surveyed, that will be used as our base wetland boundary map, otherwise we will use the best available aerial photograph.

Request for Jurisdictional Determination and Boundary Confirmation: CBBEL will prepare and submit a request for a Jurisdictional Determination to the Lake County SMC or U.S. Army Corps of Engineers to determine which agency will regulate any onsite waters or wetland. CBBEL staff will also contact Lake County to request a wetland boundary confirmation site visit.

Note that there will be a review fee for this task which is not included with this proposal. The fee can be billed as a direct cost with your approval.

US Army Corps of Engineers Nationwide Permit 14 Application: CBBEL Environmental Resources Staff will prepare the U.S. Army Corps of Engineers Permit Application for a Nationwide Permit 14 – Transportation Projects. This information will include the required exhibits, specifications, data and project information. This task may require meeting with the U.S. Army Corps of Engineers, Illinois Environmental Protection Agency, U.S. Fish and Wildlife Service, Illinois Department of Natural Resources, City and potentially other federal, state and local agencies to coordinate permitting activities. This information will also be compiled and assembled for placement in a permit application package to the Illinois Environmental Protection Agency, if necessary.

Please note that this proposal is based on submittal of a Nationwide Permit 14 request. The U.S. Army Corps of Engineers can take discretionary authority over any wetland impacts and require the project to be reviewed under a lengthy Individual Permit process. Although unlikely,

a supplemental proposal will be required if the U.S. Army Corps of Engineers requires an Individual Permit for the project.

Lake County Wetland and Buffer Impact Permit Application: The required exhibits, specifications, data and project information will be compiled and assembled for inclusion in the Lake County Stormwater Management permit application package to the Lake County Stormwater Management Commission. We will coordinate development of the documents with you and other project team members. This task may require meeting with the Lake County Stormwater Management Commission.

Wetland Review Agency Coordination: If necessary, during the permit review process, we expect to have to prepare responses to comments received during the U.S. Army Corps of Engineers and Lake County wetland impact review process. We have budgeted for attendance at one meeting and include budget to cover the cost of submittal of two responses to comments. If additional meetings, or responses to comments, are required they will be billed on a time and materials basis.

### **Task 7 – LCSMC Stormwater Calculations and Permit**

A Watershed Development Permit (WDP) will be required from the LCSMC. CBBEL will review and compile the stormwater management calculations associated with the existing conditions Base Flood Elevation (BFE) Determination, compensatory storage, stormwater conveyance, water quality requirements, and culvert sizing as necessary. Detention storage is not anticipated to be needed based on the added impervious areas will fall below the requirement threshold. CBBEL will schedule a pre-application meeting with LCSMC before permit submittals. The time for the meeting is covered under Task 1 – Meetings and Coordination.

Permit submittal support documentation included in this task includes:

- Complete LCSMC application forms and compile supporting documentation.
- BFE Determination for Unnamed Tributary to South Branch
- Summarize Wetland Impacts
- Summarize Floodplain Impacts or lack thereof for the four potential floodplain crossings.
  1. South Branch Indian Creek
  2. Tributary to South Branch Indian Creek
  3. Forest Lake Drain
  4. Forest Lake

### **Task 8 – Preliminary Plans, Special Provisions and Cost Estimate (60%)**

CBBEL will prepare preliminary plans and an estimate of construction cost. The plans and specifications will be in English units and will be prepared according to the requirements of the LCDOT Plan Preparation Guidelines.

The following drawings will be provided for preliminary review:

- |           |   |
|-----------|---|
| 1 Sheet   | Cover Sheet <ul style="list-style-type: none"><li>▪ LCDOT format</li><li>▪ Index of sheets</li><li>▪ List of applicable LCDOT and State Highway Standards</li><li>▪ Project location map</li></ul>  |
| 2 Sheets  | General Notes <ul style="list-style-type: none"><li>▪ LCDOT base notes</li><li>▪ Notes needed to clarify project's intent</li><li>▪ Commitments</li><li>▪ Utility Company and Village points of contact</li></ul>   |
| 2 Sheets  | Summary of Quantities   |
| 5 Sheets  | Typical Sections <ul style="list-style-type: none"><li>▪ Covers mainline Old McHenry Road</li><li>▪ Extend from ROW to ROW</li></ul>  |
| 12 Sheets | Schedules of Quantities (Submitted during Pre-Final) <ul style="list-style-type: none"><li>▪ Schedules for all pay items will be included, with the exception of lump sum and contingency items</li><li>▪ Schedules will follow standard LCDOT sheet layout</li></ul>   |
| 8 Sheets  | Alignment, Ties and Benchmarks (1"=50' double plan sheets) <ul style="list-style-type: none"><li>▪ Provides centerline alignment, horizontal and vertical control for the project</li><li>▪ Provides ties for the centerline alignment and control points.</li></ul>  |
| 16 Sheets | Existing Conditions and Removal Plans (1"=20' double plan sheets) <ul style="list-style-type: none"><li>▪ Will show property lines, PIN, property owners, commercial and private entrances</li><li>▪ Existing edges of pavement, medians, C&amp;G, shoulders, driveways, lighting, signing, signals, guardrails, structures, etc.</li><li>▪ All existing storm sewers, cross road culverts, manholes, catch basins, inlets, headwalls, ditches, pump stations, etc.</li><li>▪ All known utilities plotted as accurately as possible including horizontal and vertical locations</li><li>▪ Identification, sizes and appurtenances on existing topography, proposed geometry, existing drainage, proposed drainage</li></ul> |

- 9 Sheets      Roadway Plan and Profile Sheets (1"=20' horizontal, 1"=2' vertical)
- Proposed plan (top view), profile (bottom view) for roadway widening or ditch profile re-grading
  - Existing edges of pavement, medians, C&G, shoulders, driveways, lighting, signing, signals, guardrails, structures, etc
  - All known utilities plotted as accurately as possible including horizontal and vertical locations
  - Horizontal alignments
  - Vertical alignments for ditches where applicable
  - Station and offset callouts to proposed elements.
  - Edges of pavement, C&G, medians, driveways, sidewalks, etc.
  - Proposed drainage structures, culverts and drainage schedules
  - Pavement marking and landscaping
- 12 Sheets      Roadway Plan Sheets (1"=20' double plan sheets)
- Plan view only for areas where improvements do not require any regrading, including pavement resurfacing/shoulder widening only
  - Existing edges of pavement, medians, C&G, shoulders, driveways, lighting, signing, signals, guardrails, structures, etc
  - Horizontal locations of all known utilities plotted as accurately as possible
  - Horizontal alignments
  - Station and offset callouts to proposed elements.
  - Edges of pavement, C&G, medians, driveways, sidewalks, etc.
  - Proposed drainage structures, culverts and drainage schedules
  - Pavement marking and landscaping
- 9 Sheets      Traffic Control Plan (1"=50')
- LCDOT TCP General Notes including a list of applicable IDOT and LCDOT standards
  - Traffic control plan with speed limit, advanced warning signs, etc.
- 19 Sheets      Erosion and Sediment Control Plans and Details (1"=50')
- LCDOT ECP General Notes sheet with disturbed area, drainage basin map, notes, etc.
  - Erosion control features, limits of construction, and existing contours (from topographic survey or GIS County Contours)
  - Erosion control details
- 1 Sheet      Detector Loop Replacement Plan at IL 22
- 3 Sheets      Construction Details (project specific)
- 25 Sheets      Cross-Sections
- At a scale of 1" = 5'-0" horizontal and vertical
  - At 50' intervals on even stations at ditch regrading locations, pavement widening, or curb and gutter construction
  - At all driveways with culvert replacements

- At all roadway culverts
- All known utilities plotted and proposed ditching sufficiently complete to allow identification of utility conflicts
- Existing topography within the within the construction limits including trees, bushes, landscape areas and other vegetation boundaries; wetland, water and flood plain boundaries; above and below ground utilities; point and longitudinal items e.g. signs; fences; pillars etc., and any other appurtenances. Point items shall be shown on the nearest cross section.

20 Sheets	LCDOT Standards (Submitted during Pre-Final)
5 Sheets	IDOT D1 Standards (Submitted during Pre-Final)
<u>15 Sheets</u>	IDOT Standards (Submitted during Pre-Final)
164	Total Estimated Sheets

Preliminary special provisions (LCDOT, CBBEL, a list of applicable LCDOT/IDOT Standards, and an estimate of construction cost will be submitted along with the preliminary plans to LCDOT for review.

**Task 9 – Pre-Final Plans, Special Provisions and Cost Estimate (95%)**

The preliminary plans will be revised based on comments received from LCDOT and permitting agencies, and coordination with utility companies. CBBEL will write a separate disposition of comments to address reviewing agency’s preliminary comments. The cost estimate will include breakout costs for local participation.

The following plan sheets and specifications will be added for the pre-final submittal:

Plans

- 20 Sheets – LCDOT Standards
- 5 Sheets – IDOT D1 Standards
- 15 Sheets – IDOT Standards

Specifications:

- Front end specs (Local Public Agency Formal Contract Proposal, Affidavit of Availability, etc)
- D-1 special provisions, BDE special provisions, Local Roads Special Provisions
- SWPPP
- Updated Cost Estimate
- Estimate of Time

**Task 10 – Final Plans, Special Provisions and Cost Estimate (100%)**

CBBEL will finalize the contract documents based on the pre-final review and current standards and pay items. CBBEL will submit an initial final submittal for LCDOT to review and a bid document submittal with any remaining comments addressed. The requested number of copies of plans and specifications will be submitted to LCDOT. A final estimate of construction cost and estimate of required working days will also be submitted.



### **Task 11 – Phase III Support**

CBBEL will aid LCDOT during the bid process. CBBEL will address questions from bidders and, if necessary, will compile an addendum to be issued to bidders. In addition, CBBEL will provide shop drawing review for LCDOT during construction and will clarify design intent to the RE if questions arise.

CBBEL will prepare exhibits for and attend the Phase III Kickoff Public Meeting as discussed under Task 1 – Meetings and Coordination.

### **Task 12 – QA/QC**

The CBBEL QA/QC plan emphasizes an integrated project development process, with a guiding principle to ensure cost effective and practical infrastructure management that advocates a safe, constructible, and cost-effective design solution that minimizes change orders and schedule delays.

The QA/QC Manager will perform a comprehensive evaluation of the following items throughout the design process.

- Scoping/field checks
- Submittals
- Design calculations
- Computer inputs/outputs
- Documentation of decisions and directives
- Pay items and quantity calculations
- Project records
- Compliance statements
- Pre-Final and Final Plan format and content

The Project Manager manages the overall project quality control's process and, through the QA/QC Manager, assigns qualified senior quality reviewers for pending deliverables as required.

### **Task 13 – Project Management & Administration**

This task will include overall project administration and work force planning/allocation.

This task also includes development of monthly progress reports which will be submitted to LCDOT each month in conjunction with the submittal of project invoices.

### **Task 14 – Land Acquisition Services**

CBBEL will use Santacruz Associates to perform land acquisition services for the project. These services will include appraisals and negotiation services for the project. The timing of this work will be discussed at the Local Agency Kickoff Meeting.

Testimony in court by the appraiser, and negotiator as witness on behalf of LCDOT, if applicable, during eminent domain trials is not included in this proposal.

It is anticipated that some changes to the plans will come out of the land acquisition negotiation

process. CBBEL will provide support during the land acquisition process including revisions to the construction documents and meetings with property owners as needed.

It is assumed that four parcels will require temporary easements for grading and/or culvert construction. CBBEL will design culverts and ditches to avoid land acquisition altogether if possible. See Santacruz Associates' proposal below.

**STAFF HOUR BREAKDOWN (SECTION 23-00999-95-RS)**  
**LAKE COUNTY DIVISION OF TRANSPORTATION**  
**OLD MCHENRY ROAD RESURFACING - PHASE II ENGINEERING**

		Total	Engineer VI	Engineer V	Engineer IV	Engineer III	Engineer I/II	Survey V	Survey IV	Survey III	Survey II	Survey I	CAD Manager	Environmental Resource Specialist V	Environmental Resource Specialist IV	Environmental Resource Technician
<b>1. Meetings and Coordination</b>																
	<b>Meetings and Coordination</b>															
	Prepare Agenda, Exhibits, etc & Attend Kick-off Meeting with County	12		4	8											
	Coordination with Village of Long Grove, Hawthorn Woods, & Lake Zurich	14		6	8											
	Coordination with LCDOT / LCPW	32		8	24											
	Coordination with Twin Orchards Country Club, JCC Chicago Day Camp, and Kemper Lakes Golf Club	12		4	8											
	Prepare for and Meet with LCDOT (assume 2 meetings x 4 hrs/meeting x 2 persons/meeting)	16		4	12											
	Coordination with Subconsultants (Santacruz Land Acquisition, HBK, and TSC)	16			16											
	LCSMC pre-application meeting	12		4		8										
	Plan-in-hand review (One with County & One CBBEL Only)	40		8	16		16									
	Pre-Construction Meeting	4			4											
	<b>Task Total:</b>	<b>158</b>	<b>0</b>	<b>38</b>	<b>96</b>	<b>8</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**STAFF HOUR BREAKDOWN (SECTION 23-00999-95-RS)  
LAKE COUNTY DIVISION OF TRANSPORTATION  
OLD MCHENRY ROAD RESURFACING - PHASE II ENGINEERING**

		Total	Engineer VI	Engineer V	Engineer IV	Engineer III	Engineer I/II	Survey V	Survey IV	Survey III	Survey II	Survey I	CAD Manager	Environmental Resource Specialist V	Environmental Resource Specialist IV	Environmental Resource Technician
<b>2. Utility Coordination</b>																
	<b>Utility Coordination</b>															
	Pre-Final PS&E Utility Coordination Letters	12			4		8									
	Utility Conflict Analysis	12			12											
	Final PS&E Utility Outreach Letters	8			4		4									
	Follow Up with Utilities (E-Mails, Phone Calls, Field Meetings)	12			12											
	Utility Relocation Plan Reviews	16		4	12											
	<b>Task Total:</b>	<b>60</b>	<b>0</b>	<b>4</b>	<b>44</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**STAFF HOUR BREAKDOWN (SECTION 23-00999-95-RS)  
LAKE COUNTY DIVISION OF TRANSPORTATION  
OLD MCHENRY ROAD RESURFACING - PHASE II ENGINEERING**

		Total	Engineer VI	Engineer V	Engineer IV	Engineer III	Engineer I/II	Survey V	Survey IV	Survey III	Survey II	Survey I	CAD Manager	Environmental Resource Specialist V	Environmental Resource Specialist IV	Environmental Resource Technician
<b>3. Topographic Survey</b>																
	<b>Topographic Survey</b>															
	Full Topographic Survey (ROW to ROW) for 4,830 LF (Station 73+00 to 95+30, 174+00 to 190+00, and 214+00 to 224+00)	232						4	8	12	80	80	48			
	Parkway Topographic Survey EOP to R/W at locations to revise existing culverts and correct ditch flow if necessary (Approx. 1,800 LF Total)	46						1	2	3	16	16	8			
	Establish existing right-of-way of the roadways within the project limits based on field, plats of highways, subdivision plats, etc	164						4	32	4	50	50	24			
	Horizontal and Vertical Control Network	139						4		25	55	55				
	Supplemental Topographic Survey	136						4	8	16	40	40	28			
	<b>Task Total:</b>	<b>717</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>50</b>	<b>60</b>	<b>241</b>	<b>241</b>	<b>108</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>4. Plats and Legals</b>																
	<b>Plat of Highways and Legal Descriptions</b>															
	Field Survey, Right-of-Way Research, Legal Descriptions, Calculations and Drafting of Plats for 4 Parcels	212						4	50	6	60	60	32			
	<b>Task Total:</b>	<b>212</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>50</b>	<b>6</b>	<b>60</b>	<b>60</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>0</b>

**STAFF HOUR BREAKDOWN (SECTION 23-00999-95-RS)  
LAKE COUNTY DIVISION OF TRANSPORTATION  
OLD MCHENRY ROAD RESURFACING - PHASE II ENGINEERING**

		Total	Engineer VI	Engineer V	Engineer IV	Engineer III	Engineer I/II	Survey V	Survey IV	Survey III	Survey II	Survey I	CAD Manager	Environmental Resource Specialist V	Environmental Resource Specialist IV	Environmental Resource Technician
<b>5. Drainage Studies</b>																
	<b>Drainage Studies</b>															
	Review ditch grading and culvert replacement to ensure existing drainage patterns are maintained	40		8		20	12									
	BFE Determination for Unnamed Tributary to South Branch Indian Creek (Culverts 628 and 629) (Assume 40 hours per crossing)	80		16		40	24									
	Verify floodplain and floodway impacts and hydraulic analysis to determine peak flows, HWE, and floodplain impacts	40		8		20	12									
						0										
	<b>Task Total:</b>	<b>160</b>	<b>0</b>	<b>32</b>	<b>0</b>	<b>80</b>	<b>48</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>6. Wetland Delineation and Permitting</b>																
	<b>Wetland Delineation and Permitting</b>															
	Field Reconnaissance	32												16	16	
	Letter Report	38												28		10
	Request for Jurisdictional Determination and Boundary Confirmation	12												12		
	US Army Corps of Engineers Nationwide Permit 14 Application	32												22	10	
	Lake County Wetland and Buffer Impact Permit Application	16												16		
	Wetland Review Agency Coordination	20												20		
	<b>Task Total:</b>	<b>150</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>114</b>	<b>26</b>	<b>10</b>

**STAFF HOUR BREAKDOWN (SECTION 23-00999-95-RS)  
LAKE COUNTY DIVISION OF TRANSPORTATION  
OLD MCHENRY ROAD RESURFACING - PHASE II ENGINEERING**

	Total	Engineer VI	Engineer V	Engineer IV	Engineer III	Engineer I/II	Survey V	Survey IV	Survey III	Survey II	Survey I	CAD Manager	Environmental Resource Specialist V	Environmental Resource Specialist IV	Environmental Resource Technician
<b>7. LCSMC Stormwater Calculations and Permit</b>															
LCSMC Stormwater Calculations and Permit															
Floodway / Floodplain Evaluation (10 hours per floodplain, 4 floodplains: South Branch Indian Creek, Forest Lake Drain, Unnamed Trib to South Branch Indian Creek, and Forest Lake)	40		8	20	12										
Lake County Permit (Drainage & Submittal / Responses)	60		12	30	18										
<b>Task Total:</b>	<b>100</b>	<b>0</b>	<b>20</b>	<b>50</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**STAFF HOUR BREAKDOWN (SECTION 23-00999-95-RS)  
LAKE COUNTY DIVISION OF TRANSPORTATION  
OLD MCHENRY ROAD RESURFACING - PHASE II ENGINEERING**

		Total	Engineer VI	Engineer V	Engineer IV	Engineer III	Engineer I/II	Survey V	Survey IV	Survey III	Survey II	Survey I	CAD Manager	Environmental Resource Specialist V	Environmental Resource Specialist IV	Environmental Resource Technician
<b>8. Preliminary Plans, Specs, and Cost Estimate (60%)</b>																
Roadway Plans - <b>18,800'</b> Project Length (Inc. <b>1,340'</b> Resurfacing Omission at Darlington Drive)																
Resurfacing Only / No Topographic Survey - <b>12,460'</b>																
Resurfacing With Additional Analysis (Culvert Replacement, Ditch Re-Grading, Guardrail Replacement, Curb and Gutter Extension, etc.) - <b>3,900'</b>																
Roadway Widening to Remove By-Pass Lane at Kemper Lakes - <b>1,050'</b>																
<b>Subtotal:</b>		1268	0	16	143	249	856	0	0	0	0	0	4	0	0	0
<b>Sheet Name</b>	<b># Sheets</b>															
Cover Sheet	1	5			1		4									
General Notes	2	6			4		2									
Summary of Quantities	2	10			2		8									
Typical Sections (9 Typical Sections)	5	70			12	12	46									
Schedule of Quantities (Submitted with Pre-Final)	0	0														
Alignment, Ties and Benchmarks (1"=50')	8	64			8		56									
Existing Conditions and Removal Plan (1"=20')	16	192			40	76	76									
Roadway Plan and Profile (Ditch grading, roadway widening, etc.) (1"=20')	9	288			25	38	225									
Roadway Plan (Resurfacing & Bike Friendly Shoulder Only) (1"=20' Double Plan)	12	288			25	38	225									
Traffic Control General Notes	1	10		2	8											
Traffic Control Plans (1"=50' Double Plan)	8	64			4	12	48									
Erosion Control General Notes	1	6			2		4									
Erosion Control Plans (1"=20' Double Plan)	16	96				32	64									
Erosion Control Details	2	12				4	8									
Detector Loop Replacement	1	6		2									4			



**STAFF HOUR BREAKDOWN (SECTION 23-00999-95-RS)**  
**LAKE COUNTY DIVISION OF TRANSPORTATION**  
**OLD MCHENRY ROAD RESURFACING - PHASE II ENGINEERING**

		Total	Engineer VI	Engineer V	Engineer IV	Engineer III	Engineer I/II	Survey V	Survey IV	Survey III	Survey II	Survey I	CAD Manager	Environmental Resource Specialist V	Environmental Resource Specialist IV	Environmental Resource Technician
Construction Details	3	36				12	24									
Cross Sections (50' Centers, Driveways, Culverts; 3,900' requiring X-Sects, 100 X-Sections/4 X-Sects per Sheet)	25	75				25	50									
LCDOT Standard Detail Sheets (Submitted with Pre-Final)	0	0														
IDOT District 1 Standard Detail Sheets (With Pre-Final)	0	0														
IDOT Standard Detail Sheets (Submitted with Pre-Final)	0	0														
Barrier Warrant Analysis		24		4	4		16									
Evaluate Sewer / Culvert Televised Pipes and Provide Recommendations to County		16		8	8											
<b>Quantities Subtotal:</b>		124	0	0	24	24	76	0	0	0	0	0	0	0	0	0
Roadway		76			16	20	40									
Earthwork / Non-Special Waste Determination		20			4		16									
Drainage		10			2		8									
Pavement Marking and Signing		18			2	4	12									
<b>Special Provisions &amp; Cost Estimates Subtotal:</b>		42	0	0	34	8	0	0	0	0	0	0	0	0	0	0
Special Provisions (D-1, BDE, LCDOT, CBBEL)		32			32											
Estimate of Cost		10			2	8										
<b>Task Total:</b>		1434	0	16	201	281	932	0	0	0	0	0	4	0	0	0

**STAFF HOUR BREAKDOWN (SECTION 23-00999-95-RS)  
LAKE COUNTY DIVISION OF TRANSPORTATION  
OLD MCHENRY ROAD RESURFACING - PHASE II ENGINEERING**

		Total	Engineer VI	Engineer V	Engineer IV	Engineer III	Engineer I/II	Survey V	Survey IV	Survey III	Survey II	Survey I	CAD Manager	Environmental Resource Specialist V	Environmental Resource Specialist IV	Environmental Resource Technician
<b>9. Pre-Final Plans, Specs, and Cost Estimate (95%)</b>																
<b>Plans</b>	<b>Subtotal:</b>	237	0	4	78	0	155	0	0	0	0	0	0	0	0	0
	<b>Sheet Name</b>	<b># Sheets</b>														
	LCDOT Standard Detail Sheets	20	8		4		4									
	IDOT District 1 Standard Detail Sheets	5	3		1		2									
	IDOT Standard Detail Sheets	15	6		1		5									
	Schedules of Quantities	12	96		16		80									
	Address comments from LCDOT (from Preliminary Submittal)	100		4	32		64									
	Comment Response Form	24			24		0									
	<b>Special Provisions &amp; Cost Estimates</b>	<b>Subtotal:</b>	84	0	0	60	0	0	0	0	0	0	0	24	0	0
	Front End Specs	40			40											
	Update Base Special Provisions (D-1, BDE, LCDOT, CBBEL)	8			8											
	Update Estimate of Cost	4			4											
	Estimate of Time	4			4											
	Compile Permits	4			4											
	SWPPP (BDE 2342)	24												24		
	<b>Task Total:</b>	<b>321</b>	<b>0</b>	<b>4</b>	<b>138</b>	<b>0</b>	<b>155</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>0</b>

**STAFF HOUR BREAKDOWN (SECTION 23-00999-95-RS)**  
**LAKE COUNTY DIVISION OF TRANSPORTATION**  
**OLD MCHENRY ROAD RESURFACING - PHASE II ENGINEERING**

		Total	Engineer VI	Engineer V	Engineer IV	Engineer III	Engineer I/II	Survey V	Survey IV	Survey III	Survey II	Survey I	CAD Manager	Environmental Resource Specialist V	Environmental Resource Specialist IV	Environmental Resource Technician
<b>10. Final Plans, Specs, and Cost Estimate (100%)</b>																
	<b>Final PS&amp;E</b>															
	Address comments from LCDOT	100		4	32		64									
	Comment Response Form	24			24											
	Update Schedules	48			8		40									
	Update Cost Estimate	4			4											
	Update Specs	24			24											
	Compile Submittal (Initial Final Submittal and Bid Documents)	40			40											
	<b>Task Total:</b>	<b>240</b>	<b>0</b>	<b>4</b>	<b>132</b>	<b>0</b>	<b>104</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>11. Phase III Support</b>																
	<b>Phase III Support</b>															
	<b>Subtotal:</b>															
	Respond to RFI's	18		2	16											
	Utility Relocation Reviews	10		2	8											
	Construction Revisions	44		4	40											
	<b>Task Total:</b>	<b>72</b>	<b>0</b>	<b>8</b>	<b>64</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>12. QA/QC</b>																
	<b>QA/QC</b>															
	<b>Subtotal:</b>															
	Roadway Plans (Includes Drainage) (3 Submittals)	36	12	24												
	Drainage (SMC Permit and Calculations)	20		20												
	Bid Documents Submittal (All Disciplines) (1 Submittal)	36	12	24												
	<b>Task Total:</b>	<b>92</b>	<b>24</b>	<b>68</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**STAFF HOUR BREAKDOWN (SECTION 23-00999-95-RS)  
LAKE COUNTY DIVISION OF TRANSPORTATION  
OLD MCHENRY ROAD RESURFACING - PHASE II ENGINEERING**

	Total	Engineer VI	Engineer V	Engineer IV	Engineer III	Engineer I/II	Survey V	Survey IV	Survey III	Survey II	Survey I	CAD Manager	Environmental Resource Specialist V	Environmental Resource Specialist IV	Environmental Resource Technician
<b>13. Project Management &amp; Administration</b>															
<b>Project Management &amp; Administration Subtotal:</b>															
Project Administration	40	8		32											
Project Management	40	8		32											
Invoice Preparation (36 Invoices x 1 Hr/Invoice)	36			36											
Work Plan	24		8	16											
Project Startup	16		8	8											
<b>Task Total:</b>	<b>156</b>	<b>16</b>	<b>16</b>	<b>124</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL HRS</b>	<b>3872</b>	<b>40</b>	<b>210</b>	<b>849</b>	<b>399</b>	<b>1267</b>	<b>21</b>	<b>100</b>	<b>66</b>	<b>301</b>	<b>301</b>	<b>144</b>	<b>138</b>	<b>26</b>	<b>10</b>

Local Public Agency	Prime Consultant (Firm) Name	County	Section Number
Lake	Christopher B. Burke Engineering	Lake	23-00999-95-RS

**EXHIBIT B  
PROJECT SCHEDULE**

--

Old McHenry Road Resurfacing  
 Cuba Road to Quentin Road  
 Section No. 23-00999-95-RS  
 Design (Phase II) Schedule

Task	2023		2024												2025					
	November	December	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	
CBBEL Awarded Contract by County Board - November 14, 2023	█																			
Notice to Proceed - November 27, 2023. Kick-Off Meeting with County		█																		
Topographic Survey, Utility Coordination, Soil Borings, Draft Existing Conditions		█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	
Wetland Delineation		█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	
Prepare Preliminary (60%) PS&E			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	
LCDOT Review of Preliminary PS&E										█	█	█	█	█	█	█	█	█	█	
Prepare Plats & Legals for Land Acquisition (If Necessary)									█	█	█	█	█	█	█	█	█	█	█	
*Land Acquisition Appraisal & Negotiations (If Necessary) - by Santacruz Land Acquisitions										█	█	█	█	█	█	█	█	█	█	
US Army Corps of Engineers Nationwide Permit, LCSMC Permit, and IDOT Permit									█	█	█	█	█	█	█	█	█	█	█	
Address County Comments from Preliminary PS&E and Submit Pre-Final (95%) PS&E											█	█	█	█	█	█	█	█	█	
Non-Special Waste Geotech Sampling / LPC-663 / Pre-Authorization Letters												█	█	█	█	█	█	█	█	
LCDOT Review of Pre-Final PS&E													█	█	█	█	█	█	█	
Address County Comments from Pre-Final PS&E and Submit Final (100%) PS&E															█	█	█	█	█	
Final PS&E to County - February 7, 2025																			█	
LCDOT Letting - March 11, 2025																				█
Begin Construction - May 26, 2025																				█

\* Land Acquisition May Delay Letting  
 \* Assuming LCDOT Maintenance will remove trees in Winter of 2024/2025

Local Public Agency	Prime Consultant (Firm) Name	County	Section Number
Lake	Christopher B. Burke Engineering	Lake	23-00999-95-RS

**Exhibit C  
Qualification Based Selection (QBS) Checklist**

The LPA must complete Exhibit D. If the value meets or will exceed the threshold in 50 ILCS 510, QBS requirements must be followed. Under the threshold, QBS requirements do not apply. The threshold is adjusted annually. If the value is under the threshold with federal funds being used, federal small purchase guidelines must be followed.

Form Not Applicable (engineering services less than the threshold)

**Items 1-13 are required when using federal funds and QBS process is applicable. Items 14-16 are required when using State funds and the QBS process is applicable.**

		No	Yes								
1	Do the written QBS policies and procedures discuss the initial administration (procurement, management and administration) concerning engineering and design related consultant services?	<input type="checkbox"/>	<input type="checkbox"/>								
2	Do the written QBS policies and procedures follow the requirements as outlined in Section 5-5 and specifically Section 5-5.06 (e) of the BLRS Manual?	<input type="checkbox"/>	<input type="checkbox"/>								
3	Was the scope of services for this project clearly defined?	<input type="checkbox"/>	<input type="checkbox"/>								
4	Was public notice given for this project?	<input type="checkbox"/>	<input type="checkbox"/>								
5	Do the written QBS policies and procedures cover conflicts of interest?	<input type="checkbox"/>	<input type="checkbox"/>								
6	Do the written QBS policies and procedures use covered methods of verification for suspension and debarment?	<input type="checkbox"/>	<input type="checkbox"/>								
7	Do the written QBS policies and procedures discuss the methods of evaluation?	<input type="checkbox"/>	<input type="checkbox"/>								
Project Criteria		Weighting									
8	Do the written QBS policies and procedures discuss the method of selection?	<input type="checkbox"/>	<input type="checkbox"/>								
Selection committee (titles) for this project											
<table border="1"> <tr> <td colspan="2">Top three consultants ranked for this project in order</td> </tr> <tr> <td>1</td> <td></td> </tr> <tr> <td>2</td> <td></td> </tr> <tr> <td>3</td> <td></td> </tr> </table>				Top three consultants ranked for this project in order		1		2		3	
Top three consultants ranked for this project in order											
1											
2											
3											
9	Was an estimated cost of engineering for this project developed in-house prior to contract negotiation?	<input type="checkbox"/>	<input type="checkbox"/>								
10	Were negotiations for this project performed in accordance with federal requirements.	<input type="checkbox"/>	<input type="checkbox"/>								
11	Were acceptable costs for this project verified?	<input type="checkbox"/>	<input type="checkbox"/>								
12	Do the written QBS policies and procedures cover review and approving for payment, before forwarding the request for reimbursement to IDOT for further review and approval?	<input type="checkbox"/>	<input type="checkbox"/>								
13	Do the written QBS policies and procedures cover ongoing and finalizing administration of the project (monitoring, evaluation, closing-out a contract, records retention, responsibility, remedies to violations or breaches to a contract, and resolution of disputes)?	<input type="checkbox"/>	<input type="checkbox"/>								
14	QBS according to State requirements used?	<input type="checkbox"/>	<input type="checkbox"/>								
15	Existing relationship used in lieu of QBS process?	<input type="checkbox"/>	<input checked="" type="checkbox"/>								
16	LPA is a home rule community (Exempt from QBS).	<input checked="" type="checkbox"/>	<input type="checkbox"/>								



<b>Local Public Agency</b> Lake County Division of Transportation	<b>County</b> Lake	<b>Section Number</b> 23-00999-95-RS
<b>Prime Consultant (Firm) Name</b> Christopher B. Burke Engineering, Ltd.	<b>Prepared By</b> Josh Sitrick/Steve Sugg	<b>Date</b> 9/1/2023
<b>Consultant / Subconsultant Name</b> Christopher B. Burke Engineering, Ltd.	<b>Job Number</b>	

Note: This is name of the consultant the CECS is being completed for. This name appears at the top of each tab.

**Remarks**

**PAYROLL ESCALATION TABLE**

<b>CONTRACT TERM</b>	12	<b>MONTHS</b>	<b>OVERHEAD RATE</b>	131.31%
<b>START DATE</b>	11/1/2023		<b>COMPLEXITY FACTOR</b>	
<b>RAISE DATE</b>	1/1/2024		<b>% OF RAISE</b>	2.00%
<b>END DATE</b>	10/31/2024			

**ESCALATION PER YEAR**

Year	First Date	Last Date	Months	% of Contract
0	11/1/2023	1/1/2024	2	16.67%
1	1/2/2024	11/1/2024	10	85.00%



**Local Public Agency** County **Section Number**

Lake County Division of Transportation | Lake | 23-00999-95-RS

**Consultant / Subconsultant Name** **Job Number**

Christopher B. Burke Engineering, Ltd.

**PAYROLL RATES**

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET FIXED RAISE

<b>MAXIMUM PAYROLL RATE</b>	<b>86.00</b>
<b>ESCALATION FACTOR</b>	<b>1.67%</b>

<b>CLASSIFICATION</b>	<b>IDOT PAYROLL RATES ON FILE</b>	<b>CALCULATED RATE</b>
Engineer VI	\$84.21	\$85.61
Engineer V	\$71.16	\$72.35
Engineer IV	\$58.38	\$59.35
Engineer III	\$46.57	\$47.35
Engineer I/II	\$33.60	\$34.16
Survey V	\$81.89	\$83.25
Survey IV	\$74.00	\$75.23
Survey III	\$64.75	\$65.83
Survey II	\$53.00	\$53.88
Survey I	\$37.56	\$38.19
Engineering Technician V	\$70.17	\$71.34
Engineering Technician IV	\$61.81	\$62.84
Engineering Technician III	\$38.25	\$38.89
Engineering Technician I/II	\$23.33	\$23.72
CAD Manager	\$68.83	\$69.98
CAD Technician II	\$51.81	\$52.67
GIS Specialist III	\$56.00	\$56.93
Landscape Architect	\$63.00	\$64.05
Landscape Designer I/II	\$36.50	\$37.11
Environmental Resource Specialist V	\$73.70	\$74.93
Environmental Resource Specialist IV	\$60.58	\$61.59
Environmental Resource Specialist III	\$51.25	\$52.10
Environmental Resource Specialist I/II	\$29.13	\$29.62
Environmental Resource Technician	\$44.00	\$44.73
Engineering Intern	\$18.67	\$18.98



**Local Public Agency**

Lake County Division of Transportation

**County**

Lake

**Section Number**

23-00999-95-RS

**Consultant / Subconsultant Name**

Christopher B. Burke Engineering, Ltd.

**Job Number**

**DIRECT COSTS WORKSHEET**

List ALL direct costs required for this project. Those not listed on the form will not be eligible for reimbursement by the LPA on this project.  
EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

ITEM	ALLOWABLE	QUANTITY	CONTRACT RATE	TOTAL
Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost (Up to state rate maximum)			\$0.00
Lodging Taxes and Fees (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost			\$0.00
Air Fare	Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval			\$0.00
Vehicle Mileage (per GOVERNOR'S TRAVEL CONTROL BOARD)	Up to state rate maximum	500	\$0.66	\$327.50
Vehicle Owned or Leased	\$32.50/half day (4 hours or less) or \$65/full day			\$0.00
Vehicle Rental	Actual Cost (Up to \$55/day)			\$0.00
Tolls	Actual Cost			\$0.00
Parking	Actual Cost			\$0.00
Overtime	Premium portion (Submit supporting documentation)			\$0.00
Shift Differential	Actual Cost (Based on firm's policy)			\$0.00
Overnight Delivery/Postage/Courier Service	Actual Cost (Submit supporting documentation)			\$0.00
Copies of Deliverables/Mylars (In-house)	Actual Cost (Submit supporting documentation)			\$0.00
Copies of Deliverables/Mylars (Outside)	Actual Cost (Submit supporting documentation)			\$0.00
Project Specific Insurance	Actual Cost			\$0.00
Monuments (Permanent)	Actual Cost			\$0.00
Photo Processing	Actual Cost			\$0.00
2-Way Radio (Survey or Phase III Only)	Actual Cost			\$0.00
Telephone Usage (Traffic System Monitoring Only)	Actual Cost			\$0.00
CADD	Actual Cost (Max \$15/hour)			\$0.00
Web Site	Actual Cost (Submit supporting documentation)			\$0.00
Advertisements	Actual Cost (Submit supporting documentation)			\$0.00
Public Meeting Facility Rental	Actual Cost (Submit supporting documentation)			\$0.00
Public Meeting Exhibits/Renderings & Equipment	Actual Cost (Submit supporting documentation)			\$0.00
Recording Fees	Actual Cost			\$0.00
Transcriptions (specific to project)	Actual Cost			\$0.00
Courthouse Fees	Actual Cost			\$0.00
Storm Sewer Cleaning and Televising	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Traffic Control and Protection	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Aerial Photography and Mapping	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Utlility Exploratory Trenching	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Testing of Soil Samples	Actual Cost			\$0.00
Lab Services	Actual Cost (Provide breakdown of each cost)			\$0.00
Equipment and/or Specialized Equipment Rental	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Title Reports (4 Parcels)	Actual Cost	4	\$700.00	\$2,800.00
Copies of Record Documents	Actual Cost			\$0.00
				\$0.00
				\$0.00
<b>TOTAL DIRECT COSTS:</b>				<b>\$3,127.50</b>



**Local Public Agency**

Lake County Division of Transportation

**County**

Lake

**Section Number**

23-00999-95-RS

**Consultant / Subconsultant Name**

Christopher B. Burke Engineering, Ltd.

**Job Number**

**AVERAGE HOURLY PROJECT RATES**

**EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET**

SHEET 1 OF 3

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			Meetings and Coordination			Utility Coordination			Topographic Survey			Plats and Legals			Drainage Studies		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Engineer VI	85.61	40.0	1.03%	0.88															
Engineer V	72.35	210.0	5.42%	3.92	38	24.05%	17.40	4	6.67%	4.82							32	20.00%	14.47
Engineer IV	59.35	849.0	21.93%	13.01	96	60.76%	36.06	44	73.33%	43.53									
Engineer III	47.35	399.0	10.30%	4.88	8	5.06%	2.40										80	50.00%	23.67
Engineer I/II	34.16	1,267.0	32.72%	11.18	16	10.13%	3.46	12	20.00%	6.83							48	30.00%	10.25
Survey V	83.25	21.0	0.54%	0.45							17	2.37%	1.97	4	1.89%	1.57			
Survey IV	75.23	100.0	2.58%	1.94							50	6.97%	5.25	50	23.58%	17.74			
Survey III	65.83	66.0	1.70%	1.12							60	8.37%	5.51	6	2.83%	1.86			
Survey II	53.88	301.0	7.77%	4.19							241	33.61%	18.11	60	28.30%	15.25			
Survey I	38.19	301.0	7.77%	2.97							241	33.61%	12.84	60	28.30%	10.81			
Engineering Technician V	71.34	0.0																	
Engineering Technician IV	62.84	0.0																	
Engineering Technician III	38.89	0.0																	
Engineering Technician I/II	23.72	0.0																	
CAD Manager	69.98	144.0	3.72%	2.60							108	15.06%	10.54	32	15.09%	10.56			
CAD Technician II	52.67	0.0																	
GIS Specialist III	56.93	0.0																	
Landscape Architect	64.05	0.0																	
Landscape Designer I/II	37.11	0.0																	
Environmental Resource S	74.93	138.0	3.56%	2.67															
Environmental Resource S	61.59	26.0	0.67%	0.41															
Environmental Resource S	52.10	0.0																	
Environmental Resource S	29.62	0.0																	
Environmental Resource T	44.73	10.0	0.26%	0.12															
Engineering Item	18.98	0.0																	
		0.0																	
		0.0																	
<b>TOTALS</b>		3872.0	100%	\$50.35	158.0	100.00%	\$59.32	60.0	100%	\$55.18	717.0	100%	\$54.22	212.0	100%	\$57.80	160.0	100%	\$48.39

**Local Public Agency**

Lake County Division of Transportation

**County**

Lake

**Section Number**

23-00999-95-RS

**Consultant / Subconsultant Name**

Christopher B. Burke Engineering, Ltd.

**Job Number**

**AVERAGE HOURLY PROJECT RATES**

**EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET**

SHEET 2 OF 3

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Wetland Delineation and Permitting			LCSMC Stormwater Calcs & Permit			Preliminary PS&E (60%)			Pre-Final PS&E (95%)			Final PS&E (100%)			Phase III Support		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Engineer VI	85.61																		
Engineer V	72.35				20	20.00%	14.47	16	1.12%	0.81	4	1.25%	0.90	4	1.67%	1.21	8	11.11%	8.04
Engineer IV	59.35				50	50.00%	29.68	201	14.02%	8.32	138	42.99%	25.52	132	55.00%	32.64	64	88.89%	52.76
Engineer III	47.35				30	30.00%	14.20	281	19.60%	9.28									
Engineer I/II	34.16							932	64.99%	22.20	155	48.29%	16.49	104	43.33%	14.80			
Survey V	83.25																		
Survey IV	75.23																		
Survey III	65.83																		
Survey II	53.88																		
Survey I	38.19																		
Engineering Technician V	71.34																		
Engineering Technician IV	62.84																		
Engineering Technician III	38.89																		
Engineering Technician I/II	23.72																		
CAD Manager	69.98							4	0.28%	0.20									
CAD Technician II	52.67																		
GIS Specialist III	56.93																		
Landscape Architect	64.05																		
Landscape Designer I/II	37.11																		
Environmental Resource Spe	74.93	114	76.00%	56.95							24	7.48%	5.60						
Environmental Resource Spe	61.59	26	17.33%	10.68															
Environmental Resource Spe	52.10																		
Environmental Resource Spe	29.62																		
Environmental Resource Tec	44.73	10	6.67%	2.98															
Engineering Item	18.98																		
<b>TOTALS</b>		150.0	100%	\$70.60	100.0	100%	\$58.35	1434.0	100%	\$40.80	321.0	100%	\$48.51	240.0	100%	\$48.65	72.0	100%	\$60.80

**Local Public Agency**

Lake County Division of Transportation

**County**

Lake

**Section Number**

23-00999-95-RS

**Consultant / Subconsultant Name**

Christopher B. Burke Engineering, Ltd.

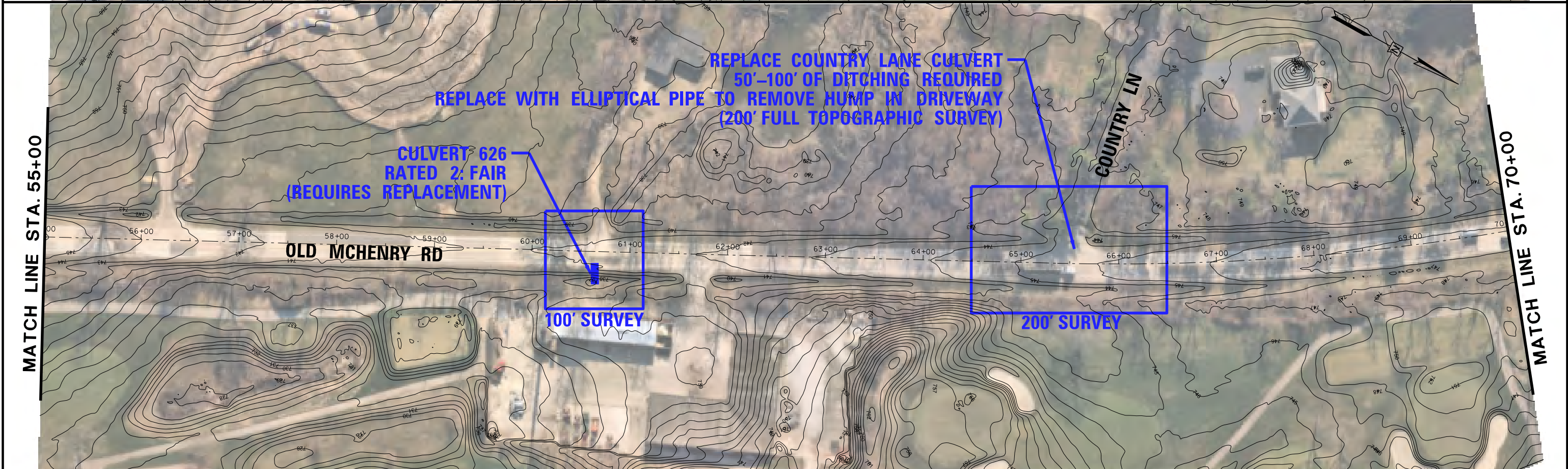
**Job Number**

**AVERAGE HOURLY PROJECT RATES**

**EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET**

SHEET 3 OF 3

PAYROLL CLASSIFICATION	AVG HOURLY RATES	QA/QC			Project Management & Administration			Appraisals & Negotiations (Santacruz)			SUE Level B (HBK Engineering)			Geotech Borings & Pvmt Cores (TSC)			CCDD (LPC-663) Investigation (TSC)		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Engineer VI	85.61	24	26.09%	22.33	16	10.26%	8.78												
Engineer V	72.35	68	73.91%	53.47	16	10.26%	7.42												
Engineer IV	59.35				124	79.49%	47.18												
Engineer III	47.35																		
Engineer I/II	34.16																		
Survey V	83.25																		
Survey IV	75.23																		
Survey III	65.83																		
Survey II	53.88																		
Survey I	38.19																		
Engineering Technician V	71.34																		
Engineering Technician IV	62.84																		
Engineering Technician III	38.89																		
Engineering Technician I/II	23.72																		
CAD Manager	69.98																		
CAD Technician II	52.67																		
GIS Specialist III	56.93																		
Landscape Architect	64.05																		
Landscape Designer I/II	37.11																		
Environmental Resource Spe	74.93																		
Environmental Resource Spe	61.59																		
Environmental Resource Spe	52.10																		
Environmental Resource Spe	29.62																		
Environmental Resource Tec	44.73																		
Engineering Item	18.98																		
<b>TOTALS</b>		92.0	100%	\$75.81	156.0	100%	\$63.38	0.0	0%	\$0.00	0.0	0%	\$0.00	0.0	0%	\$0.00	0.0	0%	\$0.00



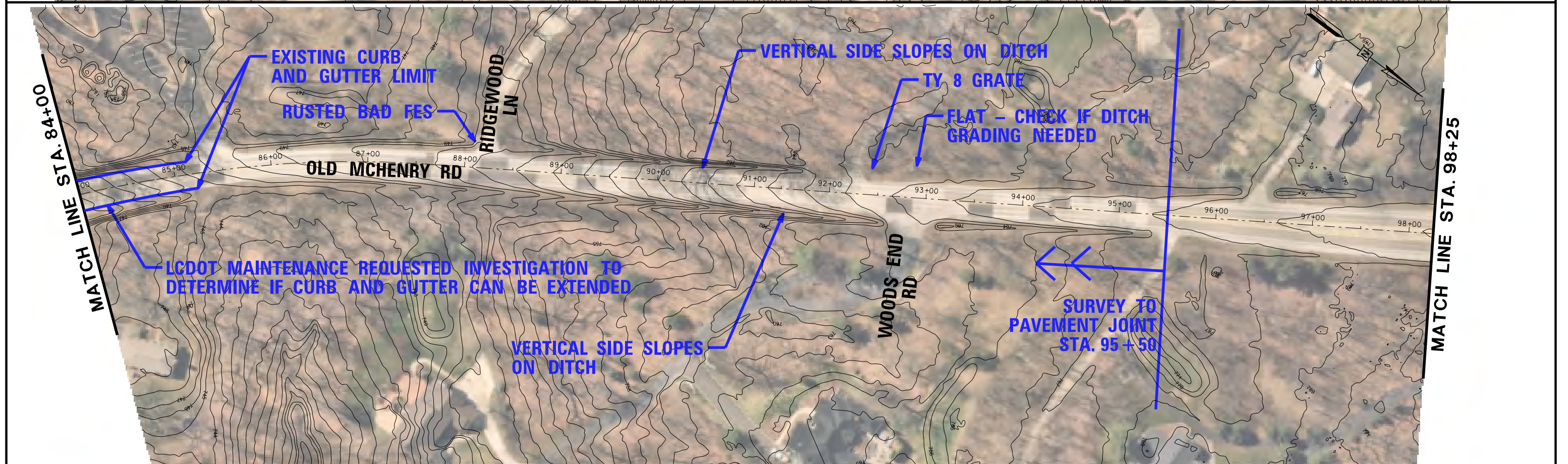
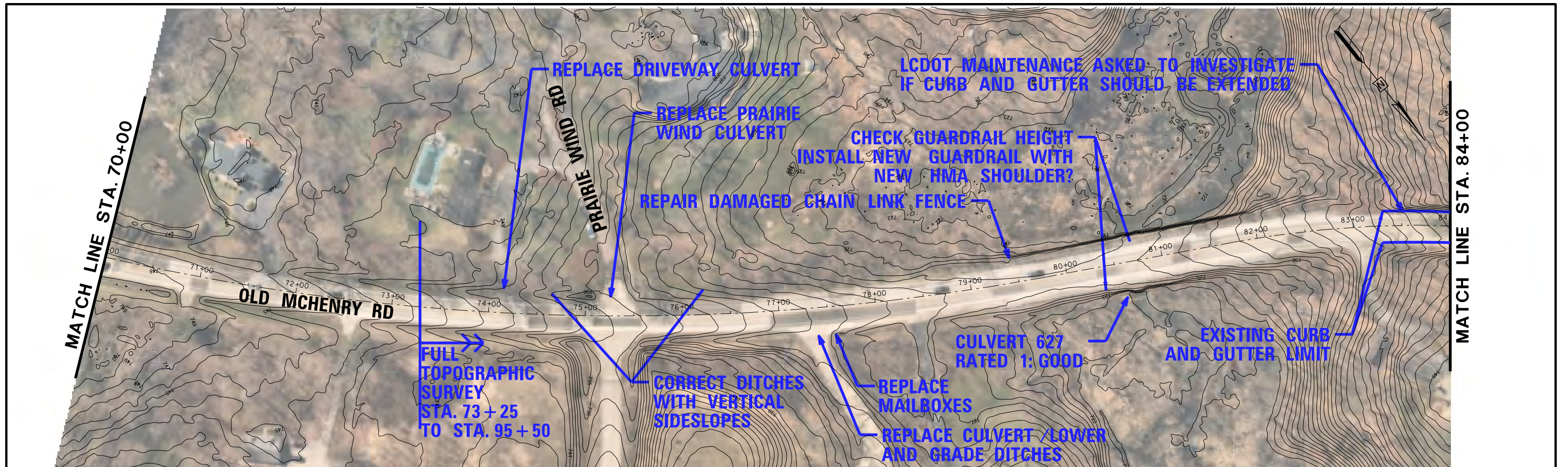
REVISIONS / REMARKS		DATE	BY	SURVEYOR:
NO.	DESCRIPTION			
				DSG NR/LIAISON:
				PLOTTED BY:  strick#8DAT###



**OLD MCHENRY RESURFACING  
SCOPE OF IMPROVEMENTS**

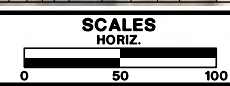
ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
		23-00999-95-RS	01	07





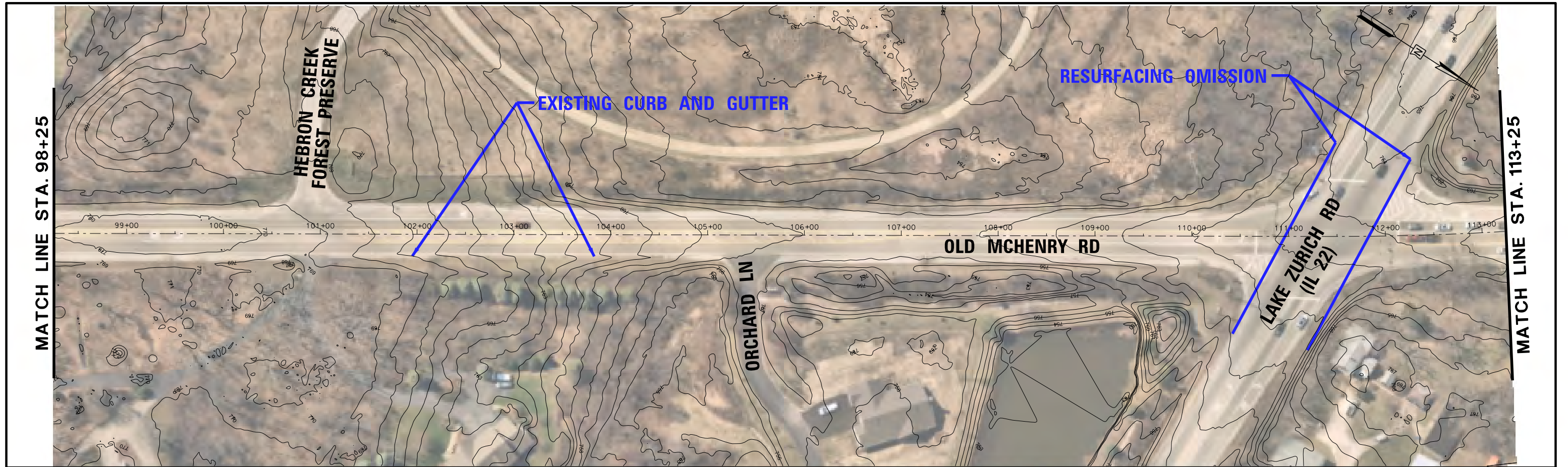
REVISIONS / REMARKS			
NO.	DESCRIPTION	DATE	BY

FILE NAME: N:\LCDOT\170458\Civil\Exhibits\Old Mchenry Resurfacing Scope\PLAN.MCHENRY.01.sht



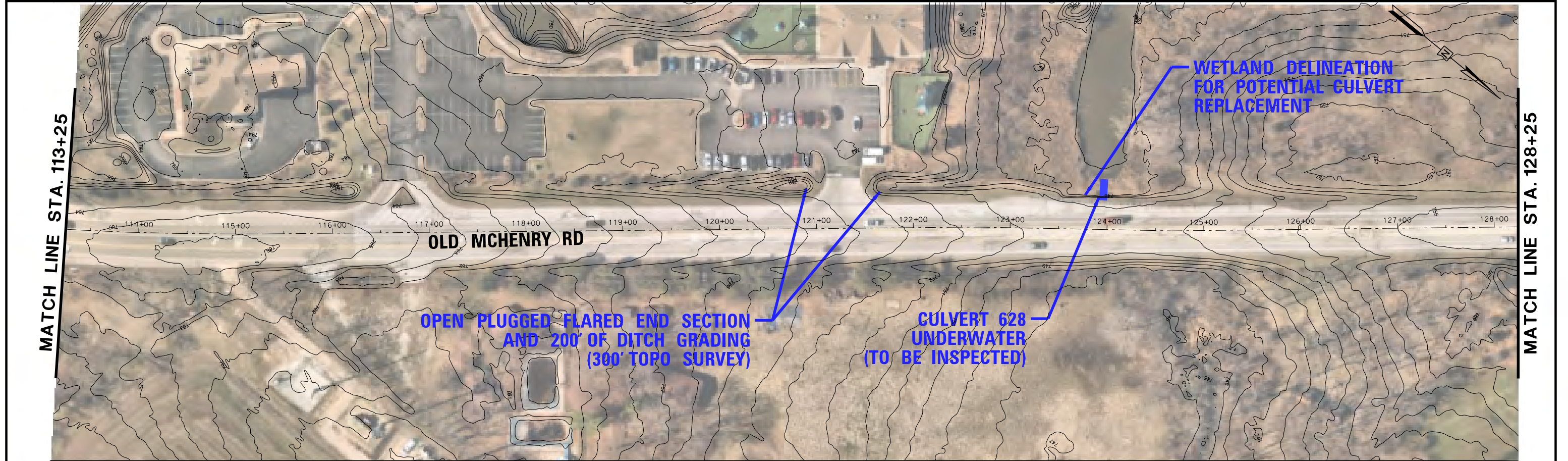
**OLD MCHENRY RESURFACING  
SCOPE OF IMPROVEMENTS**

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
		23-00999-95-RS	02	07



MATCH LINE STA. 98+25

MATCH LINE STA. 113+25



MATCH LINE STA. 113+25

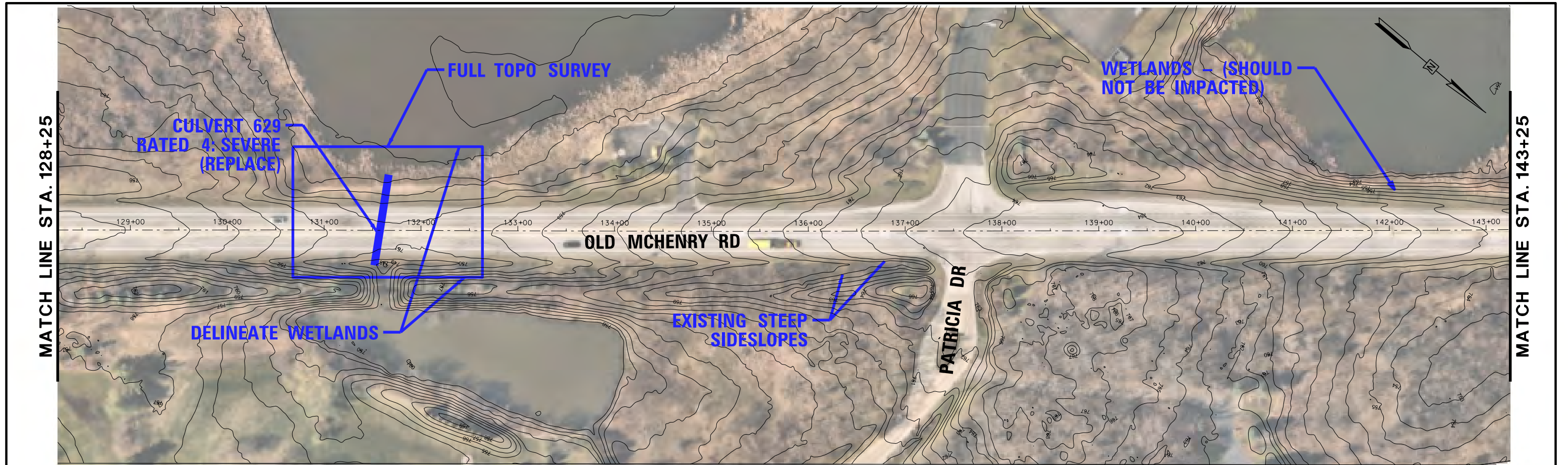
MATCH LINE STA. 128+25

REVISIONS / REMARKS		DATE	BY	SURVEYOR:
NO.	DESCRIPTION			
				DSGMR/LIAISON:
				PLOTTED BY: sltrick**\$DAT**\$



**OLD MCHENRY RESURFACING  
SCOPE OF IMPROVEMENTS**

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
		23-00999-95-RS	03	07



MATCH LINE STA. 128+25

MATCH LINE STA. 143+25



MATCH LINE STA. 143+25

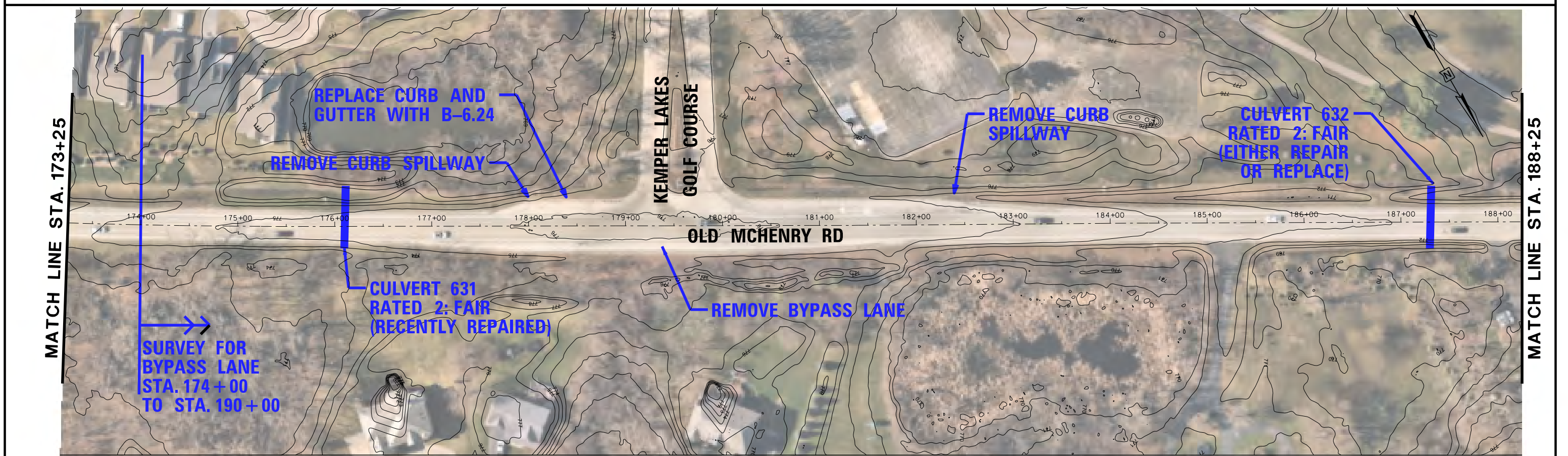
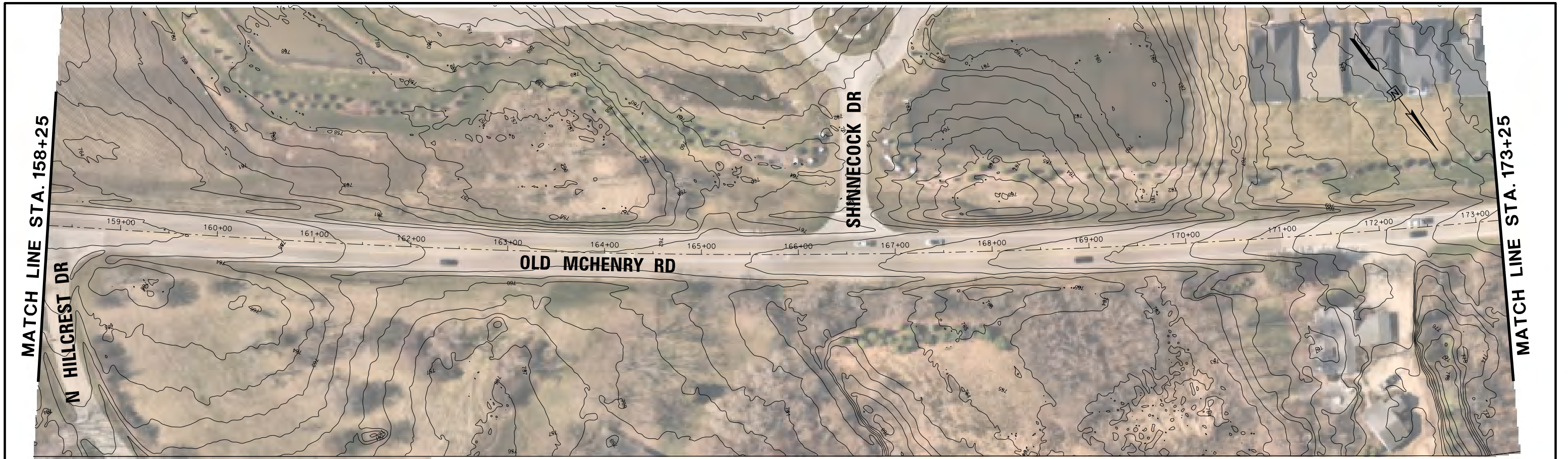
MATCH LINE STA. 158+25

REVISIONS / REMARKS		DATE	BY	SURVEYOR:	
NO.	DESCRIPTION			DSGMR/LIAISON:	
				PLOTTED BY:	isitrick##DAT###

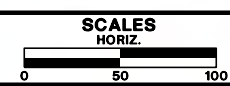


**OLD MCHENRY RESURFACING  
SCOPE OF IMPROVEMENTS**

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
		23-00999-95-RS	04	07

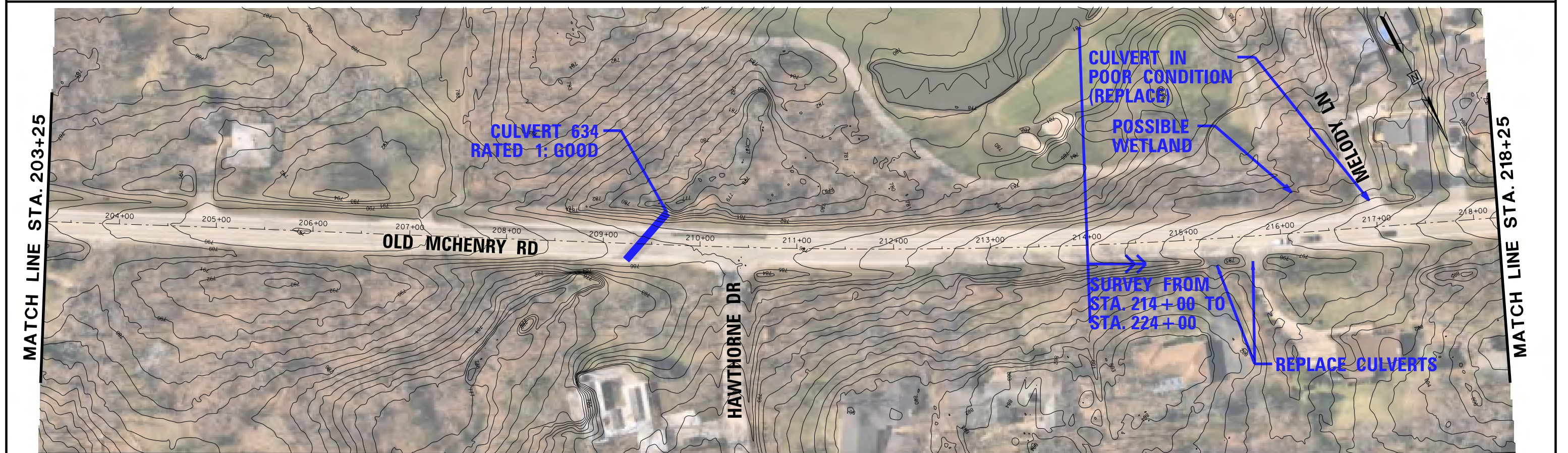
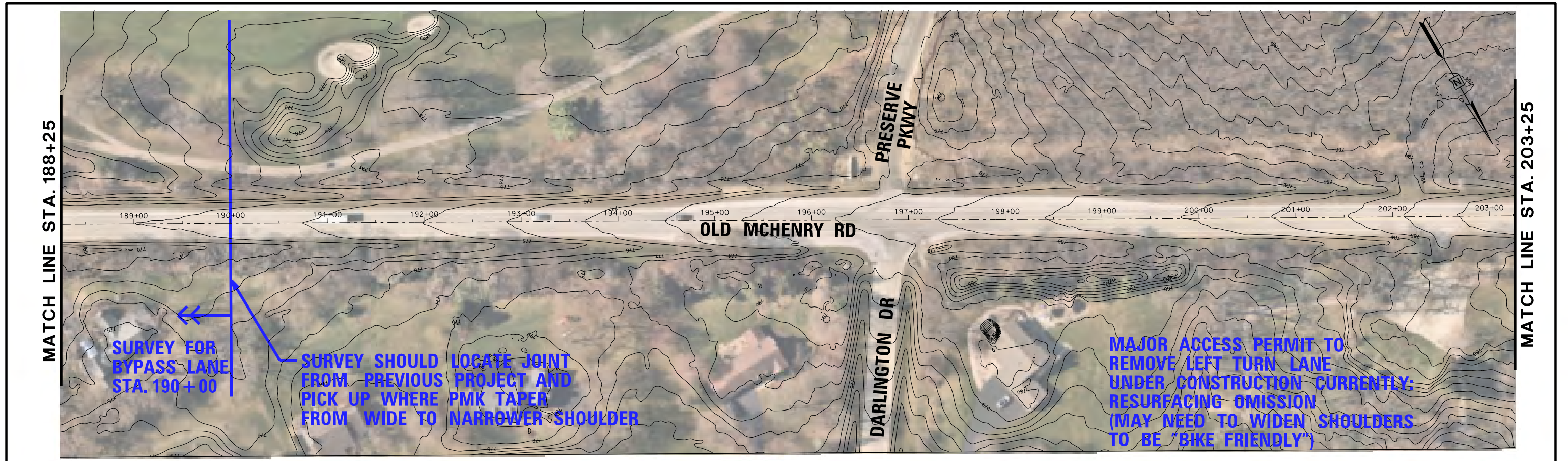


REVISIONS / REMARKS		DATE	BY	SURVEYOR:
NO.	DESCRIPTION			
				DSGMR/LIAISON:
				PLOTTED BY: sitrck**DAT****

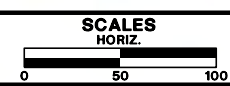


**OLD MCHENRY RESURFACING  
SCOPE OF IMPROVEMENTS**

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
		23-00999-95-RS	05	07

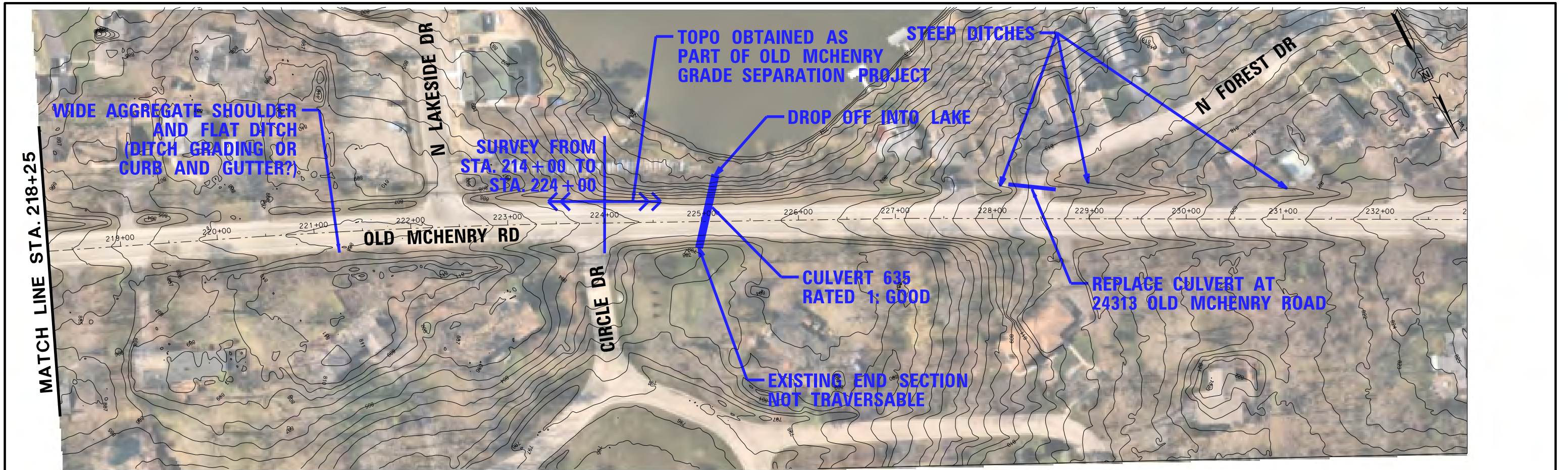


REVISIONS / REMARKS		DATE	BY	SURVEYOR:	
NO.	DESCRIPTION			DSGSR/LIAISON:	
				PLOTTED BY:	isitrack**DAT****



**OLD MCHENRY RESURFACING  
SCOPE OF IMPROVEMENTS**

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
		23-00999-95-RS	06	07



REVISIONS / REMARKS				
NO.	DESCRIPTION	DATE	BY	SURVEYOR:



**OLD MCHENRY RESURFACING  
SCOPE OF IMPROVEMENTS**

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
		23-00999-95-RS	07	07

*Providing Right-of-Way Acquisition services since 1992*

## PROPOSAL FOR LAND ACQUISITION SERVICES

### **Old McHenry Road from Cuba Road to Quentin Road Christopher B. Burke Engineering Ltd. for the benefit of Lake County Division of Transportation**

**Santacruz Land Acquisitions** specializes in negotiating and acquiring parcels of land for right-of-way use by governmental bodies in roadway construction and other public infrastructure projects. Founded in 1992, we have been helping our clients acquire right-of-way on budget and in a timely manner to keep their projects on schedule. We have worked extensively with the Illinois Department of Transportation (IDOT), the Illinois State Toll Highway Authority (ISTHA), Cook County, Lake County, Will County and other local municipalities in facilitating property owners through the acquisition process with great success.

Having extensive experience with right of way projects, we understand the importance of keeping on schedule. On-time lettings gives the Lake County Division of Transportation, the Local Public Agency (“LPA”) the best use of its resources and strengthens the efficiencies in the implementation of its roadway improvement program. To achieve your goals, it is critical that your land acquisition consultant understands the importance and addresses three critical issues in your acquisition of right of way:

- Deliver the right of way on-time to meet the letting.
- Manage the acquisition risks, including the cost of condemnation litigation.
- Compliance with land acquisition policies and procedures and FWA policies that affect the certification and funding of your project.

Santacruz Land Acquisitions (“Santacruz”) will work with the staff for the LPA and/or, Christopher B. Burke Engineering Ltd., Engineer for the LPA, (“Consultant”) to develop a land acquisition plan for the reconstruction of Old McHenry Road from Cuba Road to Quentin Road (the “Project”) to assure that the goals are met.

*Santacruz Land Acquisitions is certified as a Disadvantaged Business Enterprise (DBE) by the State of Illinois, Department of Transportation and a Minority Business Enterprise (MBE) with the City of Chicago and Cook County.*

## COMPENSATION

Santacruz shall be entitled to compensation, based on **four (4)** projected parcels of right-of-way, as follows:

<b>APPRAISALS:</b>	<b>\$13,600.00</b>
<b>NEGOTIATIONS:</b>	<b>\$13,200.00</b>

As directed, Santacruz shall invoice the LPA or Consultant for any fees and charges related to the acquisitions including, without limitation, (i) the cost of the later date title commitments, (ii) the cost of title insurance policies obtained on the parcels to be acquired, (iii) the cost of recording any necessary documents to complete the conveyance and obtain clear title, (iv) lender’s fees related to the processing of any partial releases needed to provide clear title, and (v) land trustee processing fees. Santacruz shall include **\$650.00** per parcel for these charges. Santacruz shall pay any such fees and charges in excess of the **\$650.00** per parcel allowance for which Santacruz Land Acquisitions shall be entitled to additional compensation in the amount of any such payments pursuant to a separate work order issued.

Based on the projected total number of parcels of right-of-way to be acquired for the Project, the land acquisition negotiation services provided herein are offered at a cost not to exceed **\$29,400.00** as follows (per the pricing schedule attached):

<b>Land Acquisition Services</b>	<b>\$26,800.00</b>
<b>Estimated Direct Billable Expenses</b>	<b>\$2,600.00</b>

**The pricing on this proposal shall be good for twelve months of the date of this proposal: August 28, 2023.**

*See attached for Scope of Services and Team resumes.*

We look forward to the opportunity of serving you on this project. If you have any questions, do not hesitate to contact Javier Steve Santacruz at 847-868-9620 or via email at [javier@santacruz-associates.com](mailto:javier@santacruz-associates.com).

Sincerely,



Javier Steve Santacruz



**PRICING SCHEDULE**

**Appraisal Services (per parcel)**

Appraisals	\$3,400.00
Revision to appraisal due to change in ROW or plans <sup>1</sup>	\$1,500.00 - \$3,400.00

**Review Appraisal Services (per parcel)**

Review Appraisals	\$1,700.00
Revision to review appraisal due to change in ROW or plans <sup>1</sup>	\$1,000.00 - \$1,700.00

**Negotiation Services (per parcel)**

Negotiation and acquisition services for Right of Way including, without limitation, documentation of conveyance of property interest	\$3,300.00
Additional negotiations due to change in ownership or plans <sup>1</sup>	\$2,000.00 - \$3,200.00

**Witness Services (if applicable)**

Rate for each ½ day in pretrial conference or in court for Negotiator <sup>1</sup>	\$1,000.00
Rate for each ½ day in pretrial conference or in court for Appraiser <sup>1</sup>	\$1,000.00
Hourly rate for consultation not otherwise specifically provided for herein	\$250.00

**Title Services (if applicable)**

Later date commitment – In addition to actual recording costs + Administrative fee	\$25.00
Title insurance policies – In addition to actual recording costs + Administrative fee	\$25.00
Recording of Documents – In addition to actual recording costs + Administrative fee	\$25.00
Copies of recorded documents – In addition to actual copying costs & research fees + Administrative fee	\$25.00

<sup>1</sup> Requires supplemental work order.

**LAND ACQUISITION SCOPE OF SERVICES**

Santacruz Land Acquisitions (“Santacruz”) shall provide Right-of-Way Acquisition Services as follows:

- Project Management
- Appraisals and review appraisals
- Negotiations

All services shall be performed at the direction of the County and in accordance with the policies and procedures of IDOT, as applicable, the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (“Uniform Act”), as amended (49 CFR Part 24), the Illinois Eminent Domain Act (735 ILCS 30) (“Eminent Domain Act”), and the Illinois Code of Civil Procedure (“Code of Civil Procedure”).

- **Notice to Proceed.** Our services start after authorization to proceed from LPA and IDOT (as necessary).
- **Kick-off Meeting.** Santacruz will meet with LPA and Consultant to discuss the Project, identify issues and develop any necessary strategies to assure the timely completion of the Project.
- **Delivery and Review of Project Information.** LPA or Consultant will provide Santacruz with plats of highway, legal descriptions, the most recent title commitments and any other pertinent information regarding the property owner for each parcel assigned for acquisition. In addition, LPA or Consultant will also provide Santacruz with a set of project plans, including, (i) plan and profile, (ii) drainage and utilities, (iii) pavement markings and (iv) cross sections.
- **Introductory Notice to Owners.** The appraiser will notify the property owner of the proposed taking and will invite the property owner to be present during the inspection by the appraiser.
- **Appraisal.** The appraiser shall make a detailed inspection of the properties and make such investigations and studies as are consistent with industry standard and necessary to derive sound conclusions for the preparation of appraisal reports. As necessitated by a change of ownership, a revision to the right of way or for condemnation purposes, Santacruz will furnish and deliver updated or revised appraisals pursuant to a separate or supplemental work order.
- **Review Appraisal.** All appraisals will be reviewed by the review appraiser assuring that all items affecting the value of the property have been considered in the appraisal. As necessitated by a change of ownership, a revision to the right of way or for condemnation purposes, Santacruz will furnish and deliver updated or revised appraisals pursuant to a separate or supplemental work order.
- **Negotiation and Acquisition.** Santacruz shall commence negotiations after approval by LPA of the appraisals and the amount of just compensation to be offered to the property owner.
  - Before contacting the property owner, Santacruz will prepare and send the introductory letter to the property owner on the LPA’s letterhead.
  - Santacruz will present the property owner with an offer package, which shall contain the Offer to Purchase and other documents to assist the property owner with reviewing the right-of-way request.
  - Santacruz will make all reasonable efforts to complete the acquisition of the right-of-way from the property owner.
  - Santacruz will not have any authority to determine administrative settlements. Santacruz will consult with LPA for approval of any counter offers and upon acceptance by LPA of any such counter-offer, Santacruz will prepare the necessary documentation for administrative settlement.
  - Santacruz will review the title commitment provided for each parcel to determine the liens and encumbrances that will need to be addressed in order to complete the acquisition process for LPA.

- If, during its discussions with the property owner, errors in the plans are discovered or the property owner requests design changes, Santacruz will immediately notify LPA and Consultant with this information. At any time during negotiations for situations involving design changes, errors in plans or for any other reason, if requested by LPA or Consultant, Santacruz will cease negotiations on certain parcels until corrected information or further instruction is provided to Santacruz.
- Upon successful negotiations with the property owner, Santacruz will prepare all necessary conveyance documents in order to complete the acquisition and obtain title approval for the property. Santacruz will submit the completed parcel file with original conveyance documents, any documents necessary for title clearance, the Negotiator's Log documenting all negotiation activities, copies of all correspondence with the property owner, title commitments, plats, and all other documentation as required by LPA and IDOT (if applicable).
- **Project Management.** Santacruz shall appoint a Project Manager for this project. The Project Manager will provide proposed project time-line with milestones on delivery. The Project Manager will coordinate all deliverables, keep project on schedule and maintain the channels of communication with the LPA. The Project Manager will attend project kick-off meetings and project status meetings. In addition, when needed, the Project Manager will review construction plans and provide comments. The Project Manager shall provide QA/QC oversight for this contract. In addition to monthly status reports prepared for our clients in which we review the progress of each parcel, Santacruz meets on a bi-weekly basis with its production team to assure that projects are on schedule and proceeding to letting.

The paralegal team at Santacruz reviews every title commitment to alert the negotiator of title concerns and to prepare for title clearance. Also, all conveyance documents prepared by the paralegals are reviewed by the head paralegal and/or the negotiator. Finally, all final packages of settled or condemned parcels are compiled using QA/QC checklist and reviewed by the Project Manager to assure proper completion.

- **Condemnation Support.** Santacruz understands that appearances in court and/or pretrial conferences, which may include depositions, and preparation for litigation or pre-trial conferences may be required by the LPA so that it may complete the acquisition of the property through condemnation. In the event, after making every reasonable effort to contact and negotiate with a property owner, Santacruz is unable to obtain a settlement for the acquisition of the right-of-way, Santacruz shall refer the parcel to the LPA for acquisition by condemnation.

In such case, at the request of LPA or its trial counsel, the Appraiser assigned to appraise the parcel shall make any such appearances or complete such preparation work in order to assist with this process. In addition, at the request of LPA or its trial counsel, the Negotiator assigned to negotiate the parcel shall make any such appearances or complete such preparation work in order to assist with this process. Such requests for trial appearances or condemnation support will be pursuant to a separate or supplemental work order.

## **THE TEAM**

### ***Javier Steve Santacruz – President and Project Manager***

Javier has more than 25 years of experience in providing right-of-way services for a variety of governmental agencies. He has assisted on planning of right-of-way during plan development stages, as well as worked as a right-of-way agent in the acquisition and facilitation of right-of-way necessary for the completion of a project. He has extensive experience working with the Illinois Department of Transportation and the Illinois State Toll Highway Authority gaining a thorough understanding of the policies and procedures of those agencies in meeting their right-of-way requirements. Javier has his B.S. in Accounting and a Juris Doctorate from DePaul University.

### ***Jonathan Abplanalp – Vice President and Negotiator***

Jonathan graduated from the University of Illinois with a B.S. in Architectural Studies. He has been with Santacruz since 2011 and has experience in all aspects of the land acquisition process. He is approved by IDOT – District 1 as a fee negotiator.

***Dylan Santacruz – Negotiator***

Dylan graduated cum laude from Miami University in Oxford, OH where he obtained a B.S. in Business Analytics. He joined Santacruz in 2021. He is approved by IDOT – District 1 as a fee negotiator.

***Agafya Gerovoy – Real Estate Paralegal***

Agafya has been with Santacruz since 2017 and is realtor with extensive experience real estate and right-of-way transactions.

August 30, 2023



Mr. Josh Sitrick  
Christopher B. Burke Engineering, Ltd.  
9575 West Higgins Road Suite 600  
Rosemont, IL 60018-4920

**TESTING SERVICE CORPORATION**

Corporate Office

360 South Main Place, Carol Stream, IL 60188-2404  
Phone 630.462.2600

RE: P.N. 71,669  
Geotechnical Exploration  
Old McHenry Road Improvements  
Cuba Road to Quentin Road  
Lake County, IL

Dear Mr. Sitrick:

Testing Service Corporation (TSC) is pleased to submit this proposal to provide Geotechnical Engineering Services for the above captioned project. It is in response to your email dated August 23, 2023. The objectives of the Geotechnical Study are to explore soil and groundwater conditions and provide recommendations for roadway improvements along Old McHenry Road.

**Project Description:**

- Improvements extend along Old McHenry Road from Cuba Road to Quentin Road, i.e. about 3.6 miles.
- Roadway Widening for 1500 lf.
- The majority of the improvements consist of resurfacing with shoulder reconstruction.
- Culvert Replacements and ditch regrading.

**Boring Program:**

As requested ten (10) soil borings and ten (10) pavement cores are to be taken as part of our Geotechnical Exploration. The soil borings are to be extended to 10 feet below existing grade. Total drilling footage on this basis is estimated to be about 100 lineal feet.

For the purposes of this proposal, we have assumed that the boring locations will be accessible to a conventional truck or ATV-mounted drill. In this regard, they should not be located in standing water, within wooded areas or on steeply sloping ground. No provisions have been made for tree/brush clearing or other obstruction removal should borehole access be impeded. Landscape restoration (if required) is also not included in the project budget.

TSC will utilize personnel who are trained in layout procedures to stake the borings in the field. Ground surface elevations for each borehole will be determined by GPS using a Trimble R12 GNSS receiver. Utility clearance for the borings will be obtained by contacting JULIE (Joint Utility Locating Information for Excavators). Private underground utility lines will have to be marked by the property owner or their agents; a private locator can be hired for an added cost if necessary.

The cores of the asphalt and/or P.C. concrete surface will be taken using a 4-inch diameter core barrel, with auger samples also obtained of underlying base course/subbase materials. No samples of the upper soil subgrade will be taken.



Soil samples from the soil borings will be obtained by standard split-spoon (ASTM D 1586) methods at each subgrade boring location in accordance with IDOT procedures. Special circumstances (trees, slopes, power lines, etc.) may dictate the use of a small drill rig where soil samples will be obtained by geo-probe methods. Subgrade borings will be sampled continuously in the upper 5 feet and not exceed 2½-foot intervals below this level unless unforeseen circumstances present themselves. A representative portion of the split-spoon samples will be placed in a glass jar with a screw-type lid for transportation to our laboratory. Groundwater observations will also be made during and following completion of drilling operations, with any boreholes in pavement areas to be backfilled immediately and patched at the surface.

**Assumptions for Permits:**

Old McHenry Road is a county highway therefore a Lake County permit will be needed to drill the soil borings and pavement cores in this area.

**Traffic Control:**

The soil borings and pavement cores are located along Old McHenry Road. The roadway generally consists of 2 lanes, with narrow shoulders and occasional turn lanes. It is anticipated that the shoulder and/or one traffic lane will have to be temporarily blocked at each boring/core location using professional traffic control with flagmen or specific traffic control measures. This proposal includes a provision for lane closures by a professional traffic control firm. If it is determined that traffic control is not needed you will not be charged for this service.

Please note that our cost estimate for this project is based on the assumption that TSC will be able to perform all borings and cores during weekdays (Monday through Friday) beginning no later than 9:00 AM and ending no sooner than 3:00 PM. If it is determined that traffic control is not needed you will not be charged for this service.

**Laboratory Testing:**

The pavement cores will be examined by a materials technician in the laboratory, who will accurately measure and describe the various pavement courses.

Samples obtained from the borings will be examined by experienced laboratory personnel in order to verify field descriptions as well as to visually classify in accordance with the Unified Soil Classification System. Laboratory testing will include moisture content and dry unit weight determinations as well as measurements of unconfined compressive strength by direct or indirect methods, as appropriate. Representative subgrade samples will be tested for Atterberg limits and grain size analysis in accordance with IDOT procedures. Other tests deemed to be necessary by TSC's Project Engineer may also be recommended for your approval. It should be noted that our scope of work does not include any tests for Illinois Bearing Ratio (IBR) on representative subgrade samples.

**Engineering Report:**

A geotechnical engineering report will be prepared upon completion of field and laboratory testing, to include pavement core results, typed boring logs and a location plan. The report will provide a summary of soil and groundwater conditions as well as address their impact on the proposed site development. It will also provide recommendations to guide design and specification preparation



pertaining to geotechnical issues relevant to the structure or purpose described in this proposal. These may include the following as applicable:

- General earthwork and construction considerations.
- Remedial work and/or treatment of unstable or unsuitable soil types.
- Fill placement and compaction requirements.
- Foundation type, capacity and depth/elevation.
- Anticipation and management of groundwater.

The following are not a part of or scope of work:

- Illinois Bearing Ratio (IBR).
- Soil profile sheets.

### **Fees and Scope:**

In accordance with the Cost Estimate attached, TSC is proposing a not-to-exceed budget amount of **Twelve Thousand Two Hundred Dollars (\$ 12,200.00)** to provide the Geotechnical Exploration outlined above. Our proposal is based on the understanding that the boring locations are accessible to conventional drilling equipment and the work can be performed during standard business hours. Our fee is further subject to this proposal being accepted by you on or before December 31, 2023.

Should the study reveal unexpected subsurface conditions requiring a change in the scope of work, you will be contacted before we proceed with any additional work. Our invoice would then be based on our standard unit rates given in the attached Cost Estimate or as otherwise agreed upon. While our quoted fee does not include earthwork, excavation, and/or footing observations during the construction phase, the project budget should include a provision for these services. Plan review, preconstruction meetings and/or other consulting and professional services that are provided subsequent to the delivery of TSC's report would be covered by separate invoice.

TSC's geotechnical investigation does not include services required to evaluate the likelihood of the site being contaminated by hazardous materials or other pollutants. Analytical testing which would be required in connection with IEPA Form LPC-663, Uncontaminated Soil Certification is also not included. Should environmental and/or analytical testing be desired, please contact the undersigned for additional details and/or associated costs.

### **Closure:**

The geotechnical engineering services being performed are subject to TSC's attached General Conditions. TSC charges include all state and federal taxes that may be required. However, unless stated otherwise they do not include license, permit or bond fees that local governments may impose, if any to potentially be added to our invoice. The invoice will be sent to the following unless written instructions to the contrary are received:

Mr. Josh Sitrick  
Christopher B. Burke Engineering, Ltd.  
9575 West Higgins Road Suite 600  
Rosemont, IL 60018-4920  
Tel: (847) 823-0500  
Email: jsitrich@cbbel.com



If this proposal meets with your approval, please indicate your acceptance by signing one copy and returning it to our Carol Stream, Illinois office. It would be helpful if you could also complete the attached Project Data form indicating who is to receive copies of TSC's report and other related information.

Your consideration of our proposal is appreciated. We look forward to being of service to you on this project.

Respectfully submitted,

TESTING SERVICE CORPORATION

A handwritten signature in blue ink, appearing to read "T. Peceniak".

Timothy R. Peceniak, P.E.  
Geotechnical Engineer

Enc: Cost Estimate  
General Conditions  
Project Data Sheet

Approved and accepted for \_\_\_\_\_ by:

\_\_\_\_\_  
(NAME)

\_\_\_\_\_  
(TITLE)

\_\_\_\_\_  
(DATE)





**COST ESTIMATE**  
 Old McHenry Road Improvements  
 Cuba Road to Quentin Road  
 Lake County, IL

ITEM		UNIT	QTY	RATE	COST
<b>STAKING AND UTILITY CLEARANCE</b>					
1.1	Layout Person to Mark Boring Locations, Obtain Surface Elevations and Arrange for Clearance of Underground Utilities	Hour	6.0	110.00	\$ 660.00
1.2	Utility Locator to Mark Private Underground Lines incl. Inside Existing Buildings	Cost + 10%	0	Est. 750.00	\$ 0.00
<b>DRILLING AND SAMPLING</b>					
2.1	Drill Mounted on Truck or ATV with Two-Person Crew (Portal-to-Portal)	Lump Sum	1	4,150.00	\$ 4,150.00
2.2	Core Van with One-Person Crew (Portal to Portal)	Lump Sum	1	2,350.00	\$ 2,350.00
2.3	Bit Wear - Per Inch of Asphalt Pavement	Inch	60.00	5.00	\$ 300.00
<b>LABORATORY TESTING</b>					
3.1	Materials Technician to Measure and Describe Core Sample in Laboratory	Each	10	20.00	\$ 200.00
3.2	Visual Classification and Water Content of Core Subgrade Sample (Includes Pocket Penetrometer Reading on Cohesive Samples and Dry Unit Weight Determination on fill materials)	Each	50	20.00	\$ 1,000.00
3.3	Atterberg Limit Determination	Each	2	125.00	\$ 250.00
3.4	Sieve Analysis with Hydrometer	Each	2	140.00	\$ 280.00
3.5	Loss-On-Ignition and Wet Combustion (Organic Content)	Each	2	125.00	\$ 250.00
<b>ENGINEERING SERVICES</b>					
4.1	Prepare Geotechnical Report with Typed Boring Logs and Location Plan	Lump Sum	1	2,000.00	\$ 2,000.00
4.2	Senior Geotechnical Engineer to Consult or Attend Lake County Project Meetings	Hour	4.0	200.00	\$ 800.00
ESTIMATED TOTAL					\$ 12,240.00
<b>RECOMMENDED BUDGET</b>					<b>\$ 12,200.00</b>



## TESTING SERVICE CORPORATION

# GENERAL CONDITIONS Geotechnical and Construction Services

**1. PARTIES AND SCOPE OF WORK:** If Client is ordering the services on behalf of another, Client represents and warrants that Client is the duly authorized agent of said party for the purpose of ordering and directing said services, and in such case the term "Client" shall also include the principal for whom the services are being performed. Prices quoted and charged by TSC for its services are predicated on the conditions and the allocations of risks and obligations expressed in these General Conditions. Unless otherwise stated in writing, Client assumes sole responsibility for determining whether the quantity and the nature of the services ordered by Client are adequate and sufficient for Client's intended purpose. Unless otherwise expressly assumed in writing, TSC's services are provided exclusively for client. TSC shall have no duty or obligation other than those duties and obligations expressly set forth in this Agreement. TSC shall have no duty to any third party. Client shall communicate these General Conditions to each and every party to whom the Client transmits any report prepared by TSC. Ordering services from TSC shall constitute acceptance of TSC's proposal and these General Conditions.

**2. SCHEDULING OF SERVICES:** The services set forth in this Agreement will be accomplished in a timely and workmanlike manner. If TSC is required to delay any part of its services to accommodate the requests or requirements of Client, regulatory agencies, or third parties, or due to any cause beyond its reasonable control, Client agrees to pay such additional charges, if any, as may be applicable.

**3. ACCESS TO SITE:** TSC shall take reasonable measures and precautions to minimize damage to the site and any improvements located thereon as a result of its services or the use of its equipment; however, TSC has not included in its fee the cost of restoration of damage which may occur. If Client desires or requires TSC to restore the site to its former condition, TSC will, upon written request, perform such additional work as is necessary to do so and Client agrees to pay to TSC the cost thereof plus TSC's normal markup for overhead and profit.

**4. CLIENT'S DUTY TO NOTIFY ENGINEER:** Client represents and warrants that Client has advised TSC of any known or suspected hazardous materials, utility lines and underground structures at any site at which TSC is to perform services under this Agreement. Unless otherwise agreed in writing, TSC's responsibility with respect to underground utility locations is to contact the Illinois Joint Utility Locating Information for Excavators for the location of public, but not private, utilities.

**5. DISCOVERY OF POLLUTANTS:** TSC's services shall not include investigation for hazardous materials as defined by the Resource Conservation Recovery Act, 42 U.S.C. § 6901, et, seq., as amended ("RCRA") or by any state or Federal statute or regulation. In the event that hazardous materials are discovered and identified by TSC, TSC's sole duty shall be to notify Client.

**6. MONITORING:** If this Agreement includes testing construction materials or observing any aspect of construction of improvements, Client's construction personnel will verify that the pad is properly located and sized to meet Client's projected building loads. Client shall cause all tests and inspections of the site, materials and work to be timely and properly performed in accordance with the plans, specifications, contract documents, and TSC's recommendations. No claims for loss, damage or injury shall be brought against TSC unless all tests and inspections have been so performed and unless TSC's recommendations have been followed.

TSC's services shall not include determining or implementing the means, methods, techniques or procedures of work done by the contractor(s) being monitored or whose work is being tested. TSC's services shall not include the authority to accept or reject work or to in any manner supervise the work of any contractor. TSC's services or failure to

perform same shall not in any way operate or excuse any contractor from the performance of its work in accordance with its contract. "Contractor" as used herein shall include subcontractors, suppliers, architects, engineers and construction managers.

Information obtained from borings, observations and analyses of sample materials shall be reported in formats considered appropriate by TSC unless directed otherwise by Client. Such information is considered evidence, but any inference or conclusion based thereon is, necessarily, an opinion also based on engineering judgment and shall not be construed as a representation of fact. Subsurface conditions may not be uniform throughout an entire site and ground water levels may fluctuate due to climatic and other variations. Construction materials may vary from the samples taken. Unless otherwise agreed in writing, the procedures employed by TSC are not designed to detect intentional concealment or misrepresentation of facts by others.

**7. DOCUMENTS AND SAMPLES:** Client is granted an exclusive license to use findings and reports prepared and issued by TSC and any sub-consultants pursuant to this Agreement for the purpose set forth in TSC's proposal provided that TSC has received payment in full for its services. TSC and, if applicable, its sub-consultant, retain all copyright and ownership interests in the reports, boring logs, maps, field data, field notes, laboratory test data and similar documents, and the ownership and freedom to use all data generated by it for any purpose. Unless otherwise agreed in writing, test specimens or samples will be disposed immediately upon completion of the test. All drilling samples or specimens will be disposed sixty (60) days after submission of TSC's report.

**8. TERMINATION:** TSC's obligation to provide services may be terminated by either party upon (7) seven days prior written notice. In the event of termination of TSC's services, TSC shall be compensated by Client for all services performed up to and including the termination date, including reimbursable expenses. The terms and conditions of these General Conditions shall survive the termination of TSC's obligation to provide services.

**9. PAYMENT:** Client shall be invoiced periodically for services performed. ~~Client agrees to pay each invoice within thirty (30) days of its receipt. Client further agrees to pay interest on all amounts invoiced and not paid or objected to in writing for valid cause within sixty (60) days at the rate of twelve (12%) per annum (or the maximum interest rate permitted by applicable law, whichever is the lesser) until paid and TSC's costs of collection of such accounts, including court costs and reasonable attorney's fees.~~

**10. WARRANTY:** TSC's professional services will be performed, its findings obtained and its reports prepared in accordance with these General Conditions and with generally accepted principles and practices. In performing its professional services, TSC will use that degree of care and skill ordinarily exercised under similar circumstances by members of its profession. In performing physical work in pursuit of its professional services, TSC will use that degree of care and skill ordinarily used under similar circumstances. This warranty is in lieu of all other warranties or representations, either express or implied. Statements made in TSC reports are opinions based upon engineering judgment and are not to be construed as representations of fact.

~~Should TSC or any of its employees be found to have been negligent in performing professional services or to have made and breached any express or implied warranty, representation or contract, Client, all parties claiming through Client and all parties claiming to have in any way relied upon TSC's services or work agree that the maximum aggregate amount of damages for which TSC, its officers, employees and agents shall be liable is limited to \$50,000 or the total amount of the fee paid to TSC for its services performed with respect to the project, whichever amount is greater.~~

~~In the event Client is unwilling or unable to limit the damages for which TSC may be liable in accordance with the provisions set forth in the preceding paragraph, upon written request of Client received within five days of Client's acceptance of TSC's proposal together with payment of an additional fee in the amount of 5% of TSC's estimated cost for its services (to be adjusted to 5% of the amount actually billed by TSC for its services on the project at time of completion), the limit on damages shall be increased to \$500,000 or the amount of TSC's fee, whichever is the greater. This charge is not to be construed as being a charge for insurance of any type, but is increased consideration for the exposure to an award of greater damages.~~

**11. INDEMNITY:** Subject to the provisions set forth herein, TSC and Client hereby agree to indemnify and hold harmless each other and their respective shareholders, directors, officers, partners, employees, agents, subsidiaries and division (and each of their heirs, successors, and assigns) from any and all claims, demands, liabilities, suits, causes of action, judgments, costs and expenses, including reasonable attorneys' fees, arising, or allegedly arising, from personal injury, including death, property damage, including loss of use thereof, due in any manner to the negligence of either of them or their agents or employees or independent contractors. In the event both TSC and Client are found to be negligent or at fault, then any liability shall be apportioned between them pursuant to their pro rata share of negligence or fault. TSC and Client further agree that their liability to any third party shall, to the extent permitted by law, be several and not joint. The liability of TSC under this provision shall not exceed the policy limits of insurance carried by TSC. Neither TSC nor Client shall be bound under this indemnity agreement to liability determined in a proceeding in which it did not participate represented by its own independent counsel. The indemnities provided hereunder shall not terminate upon the termination or expiration of this Agreement, but may be modified to the extent of any waiver of subrogation agreed to by TSC and paid for by Client.

**12. SUBPOENAS:** TSC's employees shall not be retained as expert witnesses except by separate, written agreement. Client agrees to pay TSC pursuant to TSC's then current fee schedule for any TSC employee(s) subpoenaed by any party as an occurrence witness as a result of TSC's services.

**13. OTHER AGREEMENTS:** TSC shall not be bound by any provision or agreement (i) requiring or providing for arbitration of disputes or controversies arising out of this Agreement or its performance, (ii) wherein TSC waives any rights to a mechanics lien or surety bond claim; (iii) that conditions TSC's right to receive payment for its services upon payment to Client by any third party or (iv) that requires TSC to indemnify any party beyond its own negligence. These General Conditions are notice, where required, that TSC shall file a lien whenever necessary to collect past due amounts. This Agreement contains the entire understanding between the parties. Unless expressly accepted by TSC in writing prior to delivery of TSC's services, Client shall not add any conditions or impose conditions which are in conflict with those contained herein, and no such additional or conflicting terms shall be binding upon TSC. The unenforceability or invalidity of any provision or provisions shall not render any other provision or provisions unenforceable or invalid. This Agreement shall be construed and enforced in accordance with the laws of the State of Illinois. In the event of a dispute arising out of or relating to the performance of this Agreement, the breach thereof or TSC's services, the parties agree to try in good faith to settle the dispute by mediation under the Construction Industry Mediation Rules of the American Arbitration Association as a condition precedent to filing any demand for arbitration, or any petition or complaint with any court. Paragraph headings are for convenience only and shall not be construed as limiting the meaning of the provisions contained in these General Conditions.



TESTING SERVICE CORPORATION

General Information: \_\_\_\_\_

Project Name: \_\_\_\_\_

Project Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

County: \_\_\_\_\_

Project Manager: \_\_\_\_\_

Email: \_\_\_\_\_

Telephone: \_\_\_\_\_

Site Contact: \_\_\_\_\_

Email: \_\_\_\_\_

Telephone: \_\_\_\_\_

Send Invoice to: \_\_\_\_\_

Purchase Order Number: \_\_\_\_\_

Attention: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Email: \_\_\_\_\_

Telephone: \_\_\_\_\_

Cell Phone: \_\_\_\_\_

If waivers are required, please provide the Owner's name here \_\_\_\_\_

IMPORTANT NOTES: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Completed by: \_\_\_\_\_

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Distribute Reports as Follows:

Name: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Email: \_\_\_\_\_

Telephone: \_\_\_\_\_

Cell Phone: \_\_\_\_\_

Name: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Email: \_\_\_\_\_

Telephone: \_\_\_\_\_

Name: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Email: \_\_\_\_\_

Telephone: \_\_\_\_\_

Name: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Email: \_\_\_\_\_

Telephone: \_\_\_\_\_



**TESTING SERVICE CORPORATION**

Corporate Office

360 South Main Place, Carol Stream, IL 60188-2404  
Phone 630.462.2600

September 6, 2023

Mr. Josh Sitrick, P.E.  
Christopher B. Burke Engineering, Ltd.  
9575 West Higgins Road, Suite 600  
Rosemont, IL 60018-4920

RE: P.N. 71,735  
Environmental Analysis for LPC-662/663 Form  
Old McHenry Road Resurfacing  
Old McHenry Road from Cuba Road to Quentin Road  
Ela Township, IL

Dear Mr. Sitrick:

Testing Service Corporation (TSC) is pleased to submit this proposal to perform a "Potentially Impacted Property" (PIP) evaluation, sampling and laboratory analyses for completion of the LPC-662 Form and, if necessary, provide sampling and laboratory analyses for completion of the LPC-663 Form at the above captioned project. The proposal was prepared in response to your email request dated August 31, 2023.

Uncontaminated soil including uncontaminated soil mixed with clean construction or demolition debris (CCDD) accepted at a CCDD fill operation must be certified to be uncontaminated soil in accordance with Section 22.51(f)(2)(B) of the Environmental Protection Act [415 ILCS 5/22.51(f)(2)(B)]. Uncontaminated soil accepted at an uncontaminated soil fill operation (USFO) must be certified to be uncontaminated soil in accordance with Section 22.51a(d)(2)(B) of the Environmental Protection Act [415 ILCS 5/22.51a(d)(2)(B)]. These certifications must be made by a licensed professional engineer or geologist (PE/PG) using the LPC-663 Form when the soil is removed from a source site which is determined by the PE/PG to be a "Potentially Impacted Property" (PIP) based on review of readily ascertainable property history, environmental databases and site reconnaissance. Uncontaminated soil from a source site which is not identified as a PIP by the PE/PG may be certified by either the source site owner or operator using LPC-662 with pH analysis only.

**Project Description:**

Our understanding of the existing site conditions and the proposed construction project are as follows:

- Resurfacing of Old McHenry Road will generate excess spoils for disposal offsite. Additionally, the client has requested that TSC also research three CCDD/USFO locations, including Thelen Sand & Gravel, for soil disposal.

**Records Review:**

In conducting the PIP evaluation TSC will evaluate current Federal and State environmental agency records for the source site and vicinity by obtaining a First Report from Environmental Data Resources, Inc. (EDR). Review of the EDR First Report assists in identifying potential contamination sources, both at the source site and from adjoining properties which may cause the source site to be considered a PIP. Historical aerial photographs and topographic maps will be reviewed to identify the approximate development date and current and previous usage of the source site and adjoining properties. TSC will

also perform a site reconnaissance to evaluate the property for evidence of the use or release of hazardous substances or petroleum products and to collect soil for analysis of pH.

Based on the results of this review, the TSC Professional Geologist will conclude if the source site is a PIP. If the source site is not identified as a PIP and pH analysis meet requirements, TSC will prepare a letter discussing the reviewed information and conclusion that the source site is not a PIP and recommend that the Owner or Operator sign the prepared LPC-662 Form certifying that the site is not a PIP and the soil is presumed to be uncontaminated. The LPC-662 Form is acceptable at most CCDD/USFO facilities.

Initial review indicates there is at least one existing adjacent potentially impacting property to the site likely causing the site to be identified as a PIP and that an LPC-663 form will be utilized.

#### LPC-663 Analytical Testing (if required)

In the event that the source site (or portions thereof) is identified as a PIP, the owner/operator is unwilling to sign the LPC-662 Form or the prospective USFO facility selected for disposal of the soil requires analysis for acceptance of the soil, TSC will perform additional soil analysis for completion of the LPC-663 form at additional costs outlined in this proposal. Shallow soil samples are to be collected by direct push mechanical methods from zones to be excavated as part of the proposed site improvements. The soil samples will be screened with a photo-ionization detector (PID) used to check for the presence of volatile organic vapors. Selected samples will be placed in laboratory supplied jars and preserved in vials using Method 5035 and properly preserved in a cooler on ice. They will be shipped to an analytical laboratory following standard chain-of-custody procedures.

**The number of samples analyzed and the parameters of the analytical testing will be based upon the Potentially Impacted Property evaluation.** For proposal purposes, it is assumed that five (5) samples will be analyzed for volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PNAs), total RCRA Metals and pH. If additional samples or analytical parameters are appropriate in the judgement of the PG based on the records review, site reconnaissance or PID screening, additional samples will be collected at that time, however the costs of analysis will be discussed with the client prior to analysis.

Additionally, the client has requested that the Site be assessed for soil disposal at Thelen Sand & Gravel, which has very specific testing requirements for acceptance of soil. TSC provided the project map and initial Site review results to Thelen to request their requirements for acceptance. Thelen's representative responded that they would require seven (7) specific locations that they provided on a marked up aerial. They require analysis for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), total RCRA Metals, iron, and pH.

The list of analytical parameters noted is acceptable at the majority of local CCDD/USFO facilities although analysis of additional parameters may be required by some USFO facilities. If possible, we recommend that the CCDD/USFO facility destination to be used for a particular project be contacted to verify that the analytical parameters proposed will be sufficient. In particular, Elmhurst Chicago Stone requires analysis of additional parameters of the full MAC list, listed as an optional item in Cost Estimate.

The analytical results will be compared to Maximum Allowable Concentrations of Chemical Constituents in Uncontaminated Soil Used as Fill Material at Regulated Fill Operations (MACs) as presented in 35 IAC 1100.Subpart F.

It should be noted that if one or more total metals concentrations exceed their respective MAC, additional analysis of the TCLP or SPLP extract may be performed for those metals. In accordance with 35IAC1100.610(b)(3)(C), as an alternative to the MAC value, compliance verification may be determined by comparing soil sample extraction results by TCLP or SPLP to the respective TACO Class 1 Soil Component of the Groundwater Ingestion Exposure Route Objective in 35IAC742 Appendix B, Table A. TSC will recommend this additional analysis be performed if all other parameters with the exception of the metal(s) meet the MACs and has included an allowance for two sample in the Cost Estimate.

A summary report will be prepared which describes the sampling procedures and results of the analytical laboratory testing. If all analytical results meet their respective MACs, Form LPC-663 will be filled out and signed by a Licensed Professional Geologist. The LPC-663 Form will be included as an attachment to the report.

Please note that our signing of the LPC-663 Form is contingent upon all constituents meeting their respective MACs. If any constituent exceeds the MACs, the Licensed Professional Geologist will not be able to certify the soil as uncontaminated or may exclude areas from the LPC-663 Form.

*If the analytical results exceed the MACs or TACO Objective which prevent certification of the soil as uncontaminated, additional analysis may be required in connection with disposal of the soil at a Subtitle D landfill. There will likely be an additional charge for associated consulting, analytical testing and completion of the waste profile.*

#### **Fees and Turnaround Time:**

The estimated costs of the outlined scope of services are presented on the Cost Estimate attached. Completion of the PIP Evaluation, sampling and analysis for the completion of the LPC-662 or LPC-663 Form can be expected in approximately two (2) weeks following authorization to proceed at standard laboratory turnaround time of 5-7 business days, or three (3) weeks if follow-up TCLP/SPLP metals analysis is required. If expedited turnaround is needed, 2-3 business day turnaround can be obtained from the laboratory at a surcharge of 100%. Please notify TSC to authorize this additional charge.

#### **Closure:**

The environmental services being performed are subject to TSC's attached General Conditions. Unless we receive written instructions to the contrary, invoices will be sent to:

Mr. Josh Sitrick, P.E.  
Christopher B. Burke Engineering, Ltd.  
9575 West Higgins Road, Suite 600  
Rosemont, IL 60018-4920  
Tel: (847)-823-0500  
Email: [jsitrick@cbbel.com](mailto:jsitrick@cbbel.com)

If this proposal meets with your approval, please indicate your acceptance by signing one copy and returning it to our Carol Stream, Illinois office. It would be helpful if you could also complete the attached Project Data form indicating who is to receive copies of TSC's report and other related information.

Your consideration of our proposal is appreciated. We look forward to being of service to you on this project.

Respectfully submitted,

TESTING SERVICE CORPORATION



Aaron Ulrey, P.G.  
Project Geologist

Enc: Cost Estimate  
General Conditions  
Project Data Sheet

Approved and accepted for \_\_\_\_\_ by:

\_\_\_\_\_  
(NAME)

\_\_\_\_\_  
(TITLE)

\_\_\_\_\_  
(DATE)

**NON-THELEN COST ESTIMATE  
 PIP EVALUATION FOR LPC-662 AND LPC-663 ANALYSIS**

ITEM	UNITS	QTY	RATE	COST
<b>STEP 1: STAKING AND UTILITY CLEARANCE</b>				
1.1	Layout Person to Mark Boring Locations and Arrange for Clearance of Underground Utilities	Hour	2.5	110.00 \$ 275.00
<b>STEP 2: DRILLING AND SAMPLING</b>				
2.1	Core Van and One-Person Crew (Portal-to-Portal)	Lump Sum	1	1,500.00 \$ 1,500.00
<b>STEP 3: RECORDS REVIEW, SITE RECONNAISSANCE &amp; PH ANALYSIS FOR PIP EVALUATION</b>				
3.1	PIP Evaluation, Collect Samples for PID Screening and Analysis, Completion of LPC-662 Form for Owner's Signature if Site is not Identified as a PIP, CCDD/USFO Research	Lump Sum	1	2,290.00 \$ 2,290.00
<b>STEP 4: IF A PIP IS IDENTIFIED, BELOW ARE ADDITIONAL COSTS FOR LPC-663 ANALYSIS</b>				
<b>ANALYTICAL TESTING FOR LPC-663 FORM</b>				
4.1	VOCs, PNAs, RCRA Metals & pH @ Standard 5 to 7 Business Day Turnaround (Analysis Dependent on Contaminants of Concern Identified in PIP Evaluation)	Each	5	525.00 \$ 2,625.00
4.2	Surcharge for Expedited 2-3 Business Day Turnaround	Each	0	100% \$ 0.00
4.3	TCLP/SPLP Analysis of Metals which exceed MACs, if required. (Cost dependent on specific metals analyzed)	Each	3	150.00 \$ 450.00
4.4	Analytical testing per sample for full MAC list, required at some CCDD/USFO facilities @ Standard 5 to 7 Business Day Turnaround	Each	0	1,750.00 \$ 0.00
<b>STEP 5: REPORTING SERVICES</b>				
5.1	Professional Geologist for Project Management and Prepare Summary Report, with P.G. Signed Form LPC-663, if uncontaminated.	Lump Sum	1	500.00 \$ 500.00
5.2	Additional Analytical Testing and Completion of Waste Profile if Soil is Landfilled	Est.	0	2,000.00 \$ 0.00
<b>COST OF PIP EVALUATION AND LPC-662 FORM</b>				\$ 4,065.00
<b>ADDITIONAL ESTIMATED COST OF SERVICES FOR COMPLETION OF LPC-663 SERVICES IF PIP IS IDENTIFIED (STANDARD TAT):</b>				\$ 3,575.00
<b>ESTIMATED TOTAL COST FOR PIP EVALUATION &amp; LPC-663 SERVICES (STANDARD TAT):</b>				\$ 7,640.00

- Does not include additional analysis for disposal at Elmhurst Chicago Stone facilities



**THELEN COST ESTIMATE  
 PIP EVALUATION FOR LPC-663 ANALYSIS**

ITEM	UNITS	QTY	RATE	COST
<b>STEP 1: STAKING AND UTILITY CLEARANCE</b>				
1.1	Layout Person to Mark Boring Locations and Arrange for Clearance of Underground Utilities	Hour	2.5	110.00 \$ 275.00
<b>STEP 2: DRILLING AND SAMPLING</b>				
2.1	Core Van and One-Person Crew (Portal-to-Portal)	Lump Sum	1	1,500.00 \$ 1,500.00
<b>STEP 3: RECORDS REVIEW, SITE RECONNAISSANCE &amp; PH ANALYSIS FOR PIP EVALUATION</b>				
3.1	PIP Evaluation, Collect Samples for PID Screening and Analysis, CCDD/USFO Research	Lump Sum	1	2,290.00 \$ 2,290.00
<b>STEP 4: IF A PIP IS IDENTIFIED, BELOW ARE ADDITIONAL COSTS FOR LPC-663 ANALYSIS</b>				
<b>ANALYTICAL TESTING FOR LPC-663 FORM</b>				
4.1	VOCs, SVOCs, RCRA Metals, iron, & pH @ Standard 5 to 7 Business Day Turnaround (Analysis Dependent on Contaminants of Concern Identified in PIP Evaluation)	Each	7	715.00 \$ 5,005.00
4.2	Surcharge for Expedited 2-3 Business Day Turnaround	Each	0	100% \$ 0.00
4.3	TCLP/SPLP Analysis of Metals which exceed MACs, if required. (Cost dependent on specific metals analyzed)	Each	7	170.00 \$ 1,190.00
4.4	Analytical testing per sample for full MAC list, required at some CCDD/USFO facilities @ Standard 5 to 7 Business Day Turnaround	Each	0	1,750.00 \$ 0.00
<b>STEP 5: REPORTING SERVICES</b>				
5.1	Professional Geologist for Project Management and Prepare Summary Report, with P.G. Signed Form LPC-663, if uncontaminated.	Lump Sum	1	500.00 \$ 500.00
5.2	Additional Analytical Testing and Completion of Waste Profile if Soil is Landfilled	Est.	0	2,000.00 \$ 0.00
<b>COST OF PIP EVALUATION</b>				\$ 4,065.00
<b>ESTIMATED COST OF SERVICES FOR COMPLETION OF LPC-663 SERVICES IF PIP IS IDENTIFIED (STANDARD TAT):</b>				\$ 6,695.00
<b>ESTIMATED TOTAL COST FOR PIP EVALUATION &amp; LPC-663 SERVICES (STANDARD TAT):</b>				\$ 10,760.00

August 30, 2023

Josh Sitrick, P.E.  
Project Engineer II, Civil Design Department  
Christopher B. Burke Engineering, LTD.  
9575 W Higgins Road, Suite 600  
Rosemont, IL 60018

Re: Scope and Fee for Subsurface Utility Engineering along Old McHenry Road,  
Long Grove, Kildeer, Forest Lake & Hawthorn Woods, IL  
HBK Engineering, LLC – 23-5007 – Phase 008

Dear Mr. Sitrick,

HBK Engineering, LLC, is pleased to present this proposal to Christopher B. Burke Engineering, LTD. This Phase I & II Engineering Study and Design centers around roadway improvements along Old McHenry Road in Lake County, Illinois. This project will require the designation and survey of existing utilities at select locations within the project limits, potential test hole locates, and base map drafting of the collected data.

The total proposal cost estimate is **\$57,741.00**. HBK's scope and fees for the project are broken into three (4) components, as follows:

Utility Designation (QL-B) and Survey

Pricing Total: \$9,569.00

Coordination & Data Request

Pricing Total: \$4,200.00

Utility Base Mapping

Pricing Total: \$8,197.00

Utility Locating (QL-A)

Pricing Total: \$35,775.00

HBK appreciates the opportunity to assist Christopher B. Burke Engineering, LTD. on this project. Please contact me if there are questions or if you need additional information. Upon acceptance of this proposal, HBK Engineering will provide a Professional Services Agreement for execution.

Sincerely,



Anthony R. D'Angelo  
Design Engineer

cc: Bethany Turk, PE and Dan Zeman, PE

(CBBEL\_OMR from Cuba Rd to Quentin Rd\_HBK\_235007-PH008\_CoverLtr\_SUE\_20230830.doc)

# Old McHenry Road from Cuba Road to Quentin Road (23-00999-95-RS) Phase I & II Resurfacing and Drainage Improvements– Lake County, Illinois

At the request of Christopher B. Burke Engineering, LTD (Consultant), **HBK Engineering, LLC (HBK)** has prepared a scope of services for Subsurface Utility Engineering (SUE) for Old McHenry Road corridor improvements in Lake County, Illinois. A manhour and fee estimate for this project is also attached.

## Project Limits

The project limits and all work will occur in and regarding the project area along Old McHenry Road as described below (see attached exhibit):

### Project Area

- Along Old McHenry Road from east ROW line of Cuba Road to the west ROW line of Lagoon Drive

All work for this project will be completed by HBK, as a subconsultant to Christopher B. Burke Engineering, LTD.

## Project Tasks

Based on the expectation that utility conflicts are likely to be a substantial challenge with respect to design and construction of the proposed improvements, a SUE investigation will be completed for the project by HBK. The information gathered by HBK will be incorporated into the project plans as appropriate. All work will be performed within the following tasks.

### Utility Designation and Survey

Descriptions of SUE quality levels are derived from the American Society of Civil Engineers (ASCE) Standard 38-22, *Standard Guideline for Investigating and Documenting Existing Utilities*. There are four recognized quality levels of underground utility information ranging from Quality Level QL-D (the lowest level) to Quality Level QL-A (the highest level).

HBK will perform SUE Quality Level B designation of any utility facilities located within the project limits. Quality Level D information will be obtained from the utility company atlases, JULIE requests, and other reliable sources. Qualified HBK staff will perform Level B designation of underground utilities within the project limits. The Level B designation will be performed along strategically selected locations within the project limit as dictated by planned improvements as described below:

Areas for Level B Designation (~2600' of full ROW & ~1000' of half ROW)

- o 1600' of full ROW as dictated by LCDOT and/or Consultant
- o Length of 50' on each side (100' total) of full ROW at ten (10) proposed roadway culverts (1000') as dictated by LCDOT and/or Consultant
- o Length of 50' from center on each side (100' total) of half ROW at ten (10) proposed driveway culverts (1000') as dictated by LCDOT and/or Consultant

HBK will perform SUE Level D and B designation of electric, telecommunication, gas, underground traffic control facilities at signalized intersections, interconnections between intersections, street lighting facilities, and water facilities within the limits of the improvement project as described above.

HBK will survey the located utilities utilizing state plane coordinates. HBK will survey all designated and, if applicable, potholed utilities utilizing GPS equipment. It is assumed that the coordinates or field information will be on Illinois State Plane East, NAD83 (2011).

It is assumed that either Consultant has benchmarks available in the vicinity of the project or that HBK will be allowed to establish vertical control (NAVD88) utilizing GPS and the nearest NGS vertical monuments. Consultant will provide the benchmark(s) and control data for HBK's use in its data collection.

Survey will include existing visible utility structures, including telecommunication, gas, electric, watermain, and other utilities noted previously found within the project limits.

#### Coordination and Data Request

The proposed improvements will require coordination with public and private utilities that have facilities within the project corridor. HBK will coordinate with any utility companies/agencies found to have facilities located within the vicinity of the project limits through a JULIE Design Stage/Planning Information Request. A request will be made for these utilities to provide any available maps of existing facilities.

Additionally, HBK will have at least one (1) representative attend five (5) progress meetings, as requested by and to be led by the Consultant.

#### Utility Base Mapping

HBK will compile all the above information into one base map MicroStation drawing suitable for plotting at 1"=20' scale that is representative of existing utility locations for use in all engineering work in developing the detailed plan, profile, and cross sections for the preferred alternative. Survey base map drawing will be generated in MicroStation V8i.

HBK will coordinate with the roadway designer so that utilities can be depicted accurately in the survey data and utility base maps. This shall include time allotted for utility base map QA/QC.

#### Utility Locate and Survey

HBK will oversee the excavation and collection of data for as many as ten (10) Level A test holes of a typical size (see attached fee exhibit). These test holes are to be performed only at the request of, or with the concurrence of, the Consultant. HBK will have qualified staff on hand to observe a sub-contracted excavation crew and collect field measurements and other data. The data will be added to the utility base map. This data will be used to refine the project team's understanding of existing subsurface utilities and required potential need for relocations.

#### Exclusions

- Permitting fees are NOT included in this proposal and, if assessed, shall be considered a pass-through cost

End of Document



EXHIBIT D  
 COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET  
 ANNIVERSARY RAISE

<b>Local Public Agency</b> Lake County Division of Transportation	<b>County</b> Lake	<b>Section Number</b> 23-00999-95-RS
<b>Prime Consultant (Firm) Name</b> Christopher B. Burke Engineering, LTD	<b>Prepared By</b> Anthony D'Angelo	<b>Date</b> 8/30/2023
<b>Consultant / Subconsultant Name</b> HBK Engineering, LLC	<b>Job Number</b> 	

Note: This is name of the consultant the CECS is being completed for. This name appears at the top of each tab.

**Remarks**

**PAYROLL ESCALATION TABLE**

<b>CONTRACT TERM</b>	18	MONTHS	<b>OVERHEAD RATE</b>	117.52%
<b>START DATE</b>	11/1/2023		<b>COMPLEXITY FACTOR</b>	0
<b>RAISE DATE</b>	ANNIVERSARY		<b>% OF RAISE</b>	2.00%

**ESCALATION PER YEAR**

**DETERMINE THE MID POINT OF THE AGREEMENT**

9

**CALCULATE THE ESCALATION FACTOR TO THE MIDPOINT OF THE CONTRACT**

1.50%

**The total escalation for this project would be:** 1.50%



**Local Public Agency**

Lake County Division of Transportation

**County**

Lake

**Section Number**

23-00999-95-RS

**Consultant / Subconsultant Name**

HBK Engineering, LLC

**Job Number**

**DIRECT COSTS WORKSHEET**

List ALL direct costs required for this project. Those not listed on the form will not be eligible for reimbursement by the LPA on this project.  
EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET ANNIVERSARY RAISE

ITEM	ALLOWABLE	QUANTITY	CONTRACT RATE	TOTAL
Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost (Up to state rate maximum)			\$0.00
Lodging Taxes and Fees (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost			\$0.00
Air Fare	Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval			\$0.00
Vehicle Mileage (per GOVERNOR'S TRAVEL CONTROL BOARD)	Up to state rate maximum	100	\$0.66	\$65.50
Vehicle Owned or Leased	\$32.50/half day (4 hours or less) or \$65/full day	12	\$65.00	\$780.00
Vehicle Rental	Actual Cost (Up to \$55/day)			\$0.00
Tolls	Actual Cost			\$0.00
Parking	Actual Cost			\$0.00
Overtime	Premium portion (Submit supporting documentation)			\$0.00
Shift Differential	Actual Cost (Based on firm's policy)			\$0.00
Overnight Delivery/Postage/Courier Service	Actual Cost (Submit supporting documentation)			\$0.00
Copies of Deliverables/Mylars (In-house)	Actual Cost (Submit supporting documentation)			\$0.00
Copies of Deliverables/Mylars (Outside)	Actual Cost (Submit supporting documentation)			\$0.00
Project Specific Insurance	Actual Cost			\$0.00
Monuments (Permanent)	Actual Cost			\$0.00
Photo Processing	Actual Cost			\$0.00
2-Way Radio (Survey or Phase III Only)	Actual Cost			\$0.00
Telephone Usage (Traffic System Monitoring Only)	Actual Cost			\$0.00
CADD	Actual Cost (Max \$15/hour)			\$0.00
Web Site	Actual Cost (Submit supporting documentation)			\$0.00
Advertisements	Actual Cost (Submit supporting documentation)			\$0.00
Public Meeting Facility Rental	Actual Cost (Submit supporting documentation)			\$0.00
Public Meeting Exhibits/Renderings & Equipment	Actual Cost (Submit supporting documentation)			\$0.00
Recording Fees	Actual Cost			\$0.00
Transcriptions (specific to project)	Actual Cost			\$0.00
Courthouse Fees	Actual Cost			\$0.00
Storm Sewer Cleaning and Televising	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Traffic Control and Protection	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Aerial Photography and Mapping	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Utlility Exploratory Trenching	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Testing of Soil Samples	Actual Cost			\$0.00
Lab Services	Actual Cost (Provide breakdown of each cost)			\$0.00
Equipment and/or Specialized Equipment Rental	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Construction Estimating	Actual Cost			\$0.00
SUE Excavation Cost (services by others)	Actual Cost		\$27,936.00	\$0.00
				\$0.00
				\$0.00
<b>TOTAL DIRECT COSTS:</b>				<b>\$845.50</b>





**Local Public Agency**

Lake County Division of Transportation

**County**

Lake

**Section Number**

23-00999-95-RS

**Consultant / Subconsultant Name**

HBK Engineering, LLC

**Job Number**

**AVERAGE HOURLY PROJECT RATES**

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET ANNIVERSARY RAISE

SHEET 1 OF 1

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			Utility Designation (QL-B) and Survey			Coordination & Data Request			Utility Base Mapping			Utility Locating (QL-A)					
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Program Manager	76.25	10.0	3.68%	2.80	2	2.44%	1.86	4	11.11%	8.47	2	2.56%	1.96	2	2.63%	2.01			
Senior Project Manager	58.95	22.0	8.09%	4.77	8	9.76%	5.75	8	22.22%	13.10	4	5.13%	3.02	2	2.63%	1.55			
Senior Engineer	51.57	0.0																	
Project Manager	47.35	32.0	11.76%	5.57	8	9.76%	4.62	8	22.22%	10.52	8	10.26%	4.86	8	10.53%	4.98			
Engineer	41.64	32.0	11.76%	4.90	8	9.76%	4.06				16	20.51%	8.54	8	10.53%	4.38			
Associate 1	32.73	16.0	5.88%	1.93				16	44.44%	14.55									
Associate 2	38.42	160.0	58.82%	22.60	56	68.29%	26.24				48	61.54%	23.64	56	73.68%	28.31			
Permit Coordinator	29.76	0.0																	
Analyst 1	28.43	0.0																	
Analyst 2	42.73	0.0																	
Licensed Professional Surveyor	54.34	0.0																	
Field Lead	38.72	0.0																	
Field Technician	25.72	0.0																	
Locator 1	22.55	0.0																	
Locator 2	23.33	0.0																	
Locator 3	27.27	0.0																	
Designer 1	30.33	0.0																	
Designer 2	31.44	0.0																	
Designer 3	41.32	0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
<b>TOTALS</b>		272.0	100%	\$42.56	82.0	100.00%	\$42.53	36.0	100%	\$46.64	78.0	100%	\$42.02	76.0	100%	\$41.23	0.0	0%	\$0.00

**Excavation Contractor Example**

**2023 Rates**

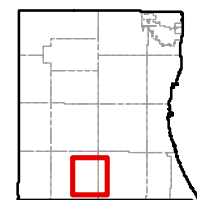
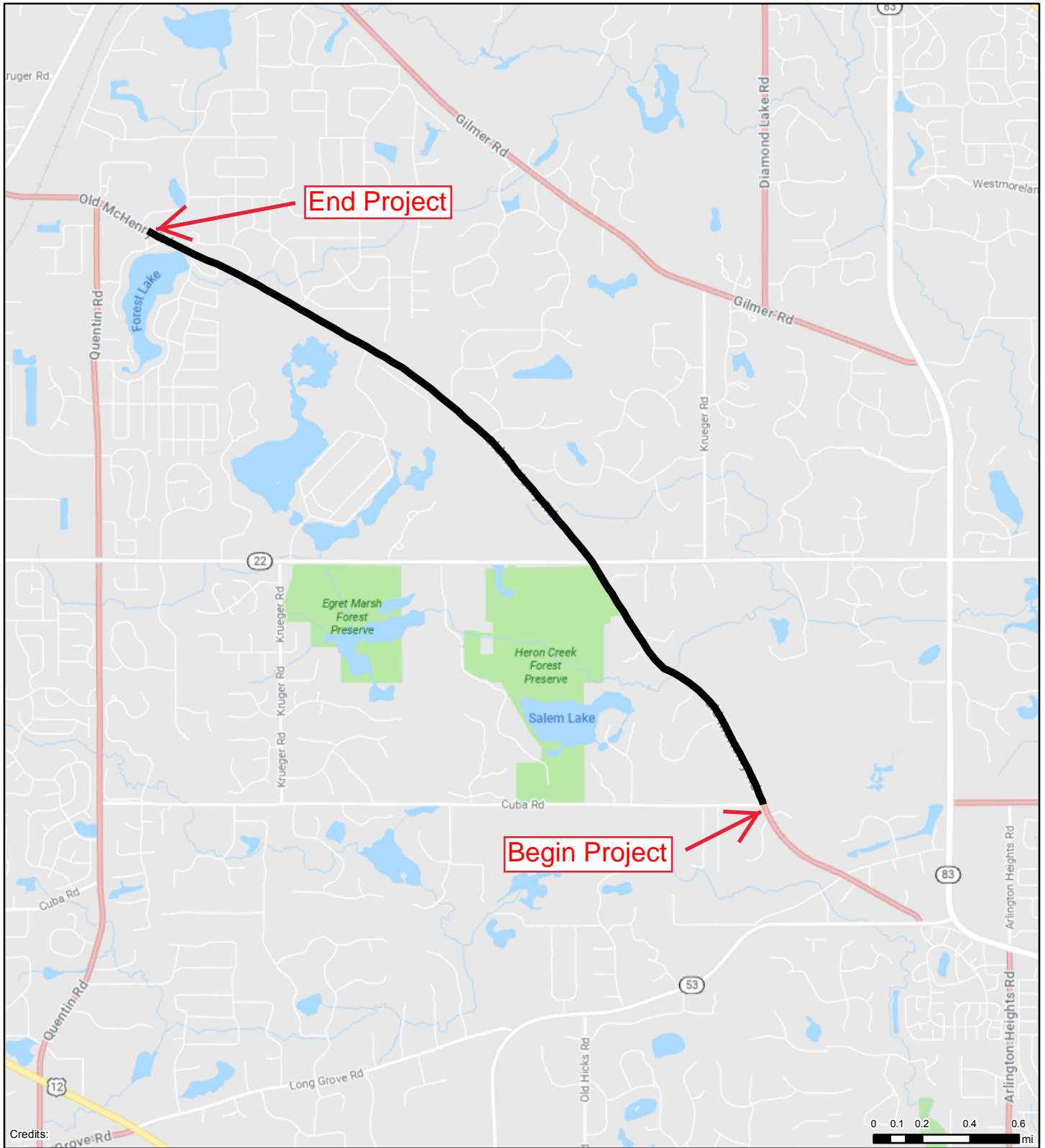
Item	Rate	Qty	Sub-total
1-man (ST hourly)	\$ 255.00	32	\$ 8,160.00
1-man (OT hourly)	\$ 300.00	16	\$ 4,800.00
2-man (ST hourly)	\$ 110.00	32	\$ 3,520.00
2-man (OT hourly)	\$ 136.00	16	\$ 2,176.00
Support truck (day)	\$ 155.00	4	\$ 620.00
TBF (pallet sand)	\$ 390.00	10	\$ 3,900.00
Disposal Charge	\$ 350.00	5	\$ 1,750.00
Water (per load)	\$ 83.00	5	\$ 415.00
Remote Hose (per ft)	\$ 3.10	100	\$ 310.00
Consumables	\$ 42.00	4	\$ 168.00
		Sub-Total=	\$ 25,819.00
Fuel Fee (5.5%)	\$ 0.082	1	\$ 2,117.16
		<b>Total=</b>	<b>\$ 27,936.16</b>

**Other Misc. Charges (not included in pricing)**

Item	Rate	Qty	Sub-total
Stand pipe (10' section)	\$ 45.10	0	\$ -
Pipe couplers (each)	\$ 11.67	0	\$ -

<b>10 potholes (3/day)</b>		<b>1</b>	<b>\$ 27,936.16</b>
----------------------------	--	----------	---------------------

# Location Map- Old McHenry Rd



LCDOT GIS  
3/16/2023



Credits: