


Municipality	LOCAL AGENCY	 Illinois Department of Transportation	CONSULTANT	Name Christopher B. Burke Engineering
Township				Address 9575 West Higgins Road, Suite 600
County Lake County – Division of Transportation		Preliminary Engineering Services Agreement For Non-Motor Fuel Tax Funds		City Rosemont, 60018
Section 09-00088-18-WR				State Illinois

THIS AGREEMENT is made and entered into this _____ day of _____, 2015 between the above Local Agency (LA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the improvement of the above SECTION. Non-Motor Fuel Tax Funds, allotted to the LA by the State of Illinois, under the general supervision of 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.

Section Description

Name Aptakisic Road Widening and Reconstruction

Route CH 33 Length 6075.00 Mi. 1.15 FT (Structure No. N/A)

Termini IL Route 83 to Buffalo Grove Road

Description:

Phase II Engineering, based on federal project development procedures, for the widening and reconstruction of Aptakisic Road.

Agreement Provisions

The Engineer Agrees,

1. To perform or be responsible for the performance of the following engineering services for the LA, in connection with the proposed improvements herein before described, and checked below:
 - a. ☒ Make such detailed surveys as are necessary for the preparation of detailed roadway plans
 - b. ☐ Make stream and flood plain hydraulic surveys and gather high water data, and flood histories for the preparation of detailed bridge plans.
 - c. ☒ Make or cause to be made such soil surveys or subsurface investigations including borings and soil profiles and analyses thereof as may be required to furnish sufficient data for the design of the proposed improvement. Such investigations are to be made in accordance with the current requirements of the DEPARTMENT.
 - d. ☐ Make or cause to be made such traffic studies and counts and special intersection studies as may be required to furnish sufficient data for the design of the proposed improvement.
 - e. ☒ Prepare Army Corps of Engineers Permit, **Lake County Stormwater Management Commission Permit**, Department of Natural Resources-Office of Water Resources Permit, Bridge waterway sketch, and/or Channel Change sketch, Utility plan and locations, and Railroad Crossing work agreements.
 - f. ☐ Prepare Preliminary Bridge design and Hydraulic Report, (including economic analysis of bridge or culvert types) and high water effects on roadway overflows and bridge approaches.
 - g. ☒ Make complete general and detailed plans, special provisions, proposals and estimates of cost and furnish the LA with **one (1) copy of each document in both hardcopy and electronic format**. Additional copies of any or all documents, if required, shall be furnished to the LA by the ENGINEER at the ENGINEER's actual cost for reproduction.
 - h. ☒ Furnish the LA with survey and drafts in **duplicate** of all necessary right-of-way dedications, construction easement and borrow pit and channel change agreements including prints of the corresponding plats and staking as required.
 - i. ☐ Assist the LA in the tabulation and interpretation of the contractors' proposals

- j. ☐ Prepare the necessary environmental documents in accordance with the procedures adopted by the DEPARTMENT's Bureau of Local Roads & Streets.
 - k. ☐ Prepare the Project Development Report when required by the DEPARTMENT.
 - l. ☒ **Services as included and/or defined in the attached Scope of Services.**
2. That all reports, plans, plats and special provisions to be furnished by the ENGINEER pursuant to the AGREEMENT, will be in accordance with current standard specifications and policies **of the LA of the DEPARTMENT**. It is being understood that all such reports, plats, plans and drafts shall, before being finally accepted, be subject to approval by the LA ~~and the DEPARTMENT~~.
 3. To attend conferences at any reasonable time when requested to do so by representatives of the LA ~~or the Department~~.
 4. In the event plans or surveys are found to be in error during construction of the SECTION and revisions of the plans or survey corrections are necessary, the ENGINEER agrees that the ENGINEER will perform such work without expense to the LA, even though final payment has been received by the ENGINEER. The ENGINEER shall give immediate attention to these changes so there will be a minimum delay to the CONTRACTOR.
 5. That basic survey notes and sketches, charts, computations and other data prepared or obtained by the ENGINEER pursuant to this AGREEMENT will be made available, upon request, to the LA ~~or the DEPARTMENT~~ without cost and without restriction or limitations as to their use.
 6. That all plans and other documents furnished by the ENGINEER pursuant to this AGREEMENT will be endorsed by the ENGINEER and will show the ENGINEER's professional seal where such is required by law.

The LA Agrees,

1. To pay the ENGINEER as compensation for all services rendered in accordance with this AGREEMENT according to the following method indicated by a check mark:
 - a. ☐ A sum of money equal to _____ percent of the awarded contract cost of the proposed improvement as approved by the DEPARTMENT.
 - b. ☐ A sum of money equal to the percent of the awarded contract cost for the proposed improvement as approved by the DEPARTMENT based on the following schedule:

Schedule for Percentages Based on Awarded Contract Cost

Awarded Cost	Percentage Fees	(see note)
Under \$50,000	_____	%
	_____	%
	_____	%

Note: Not necessarily a percentage. Could use per diem, cost-plus or lump sum.

2. To pay for all services rendered in accordance with this AGREEMENT at the actual cost of performing such work plus * percent to cover profit, overhead and readiness to serve - "actual cost" being defined as material cost plus payrolls, insurance, social security and retirement deductions. Traveling and other out-of-pocket expenses will be reimbursed to the ENGINEER at the ENGINEER's actual cost. Subject to the approval of the LA, the ENGINEER may sublet all or part of the services provided in section 1 of the ENGINEER AGREES. If the ENGINEER sublets all or part of this work, the LA will pay the cost to the ENGINEER plus an additional service charge of up to five (5) percent.

"Cost to Engineer" to be verified by furnishing the LA ~~and the DEPARTMENT~~ copies of invoices from the party doing the work. The classifications of the employees used in the work should be consistent with the employee classifications for the services performed. If the personnel of the firm, including the Principal Engineer, perform routine services that should normally be performed by lesser-salaried personnel, the wage rate billed for such services shall be commensurate with the work performed. ***See the CECs**

The Total Not-to-Exceed Contract Amount shall be \$824,761.74

3. That payments due the ENGINEER for services rendered in accordance with this AGREEMENT will be made as soon as practicable after the services have been performed. ~~in accordance with the following schedule:~~
- ~~a. Upon completion of detailed plans, special provisions, proposals and estimate of cost - being the work required by section 1 of the ENGINEER AGREES - to the satisfaction of the LA and their approval by the DEPARTMENT, 90 percent of the total fee due under this AGREEMENT based on the approved estimate of cost.~~
 - ~~b. Upon award of the contract for the improvement by the LA and its approval by the DEPARTMENT, 100 percent of the total fee due under the AGREEMENT based on the awarded contract cost, less any amounts paid under "a" above.~~
- By Mutual agreement, partial payments, ~~not to exceed 90 percent of the amount earned~~, may be made from time to time as the work progresses.
4. That, should the improvement be abandoned at any time after the ENGINEER has performed any part of the services provided for in sections 1 and 3 of the ENGINEER AGREES and prior to the completion of such services, the LA shall reimburse the ENGINEER for the ENGINEER's actual costs plus 125 percent incurred up to the time the ENGINEER is notified in writing of such abandonment - "actual cost" being defined as in paragraph 2 of the LA AGREES.
5. That, should the LA require changes in any of the detailed plans, specifications or estimates except for those required pursuant to paragraph 4 of the ENGINEER AGREES, ~~after they have been approved by the DEPARTMENT~~, the LA will pay the ENGINEER for such changes on the basis of actual cost plus 125 percent to cover profit, overhead and readiness to serve - "actual cost" being defined as in paragraph 2 of the LA AGREES. It is understood that "changes" as used in this paragraph shall in no way relieve the ENGINEER of the ENGINEER's responsibility to prepare a complete and adequate set of plans and specifications.

It is Mutually Agreed,

- 1. That any difference between the ENGINEER and the LA concerning their interpretation of the provisions of this Agreement shall be referred to a committee of disinterested parties consisting of one member appointed by the ENGINEER, one member appointed by the LA and a third member appointed by the two other members for disposition and that the committee's decision shall be final.
- 2. This AGREEMENT may be terminated by the LA 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 LA all surveys, permits, agreements, preliminary bridge design & hydraulic report, drawings, specifications, partial and completed estimates and data, if any from traffic studies and soil survey and subsurface investigations with the understanding that all such material becomes the property of the LA. The ENGINEER shall be paid for any services completed and any services partially completed in accordance with section 4 of the LA AGREES.
- 3. That if the contract for construction has not been awarded one year after the acceptance of the plans by the LA ~~and their approval by the DEPARTMENT~~, the LA will pay the ENGINEER the balance of the engineering fee due to make 100 percent of the total fees due under this AGREEMENT, based on the estimate of cost as prepared by the ENGINEER and approved by the LA ~~and the DEPARTMENT~~.
- 4. That the ENGINEER warrants that the ENGINEER has not employed or retained any company or person, other than a bona fide employee working solely for the ENGINEER, to solicit or secure this contract, and that the ENGINEER's has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the ENGINEER, any fee, commission, percentage, brokerage fee, gifts or any other consideration, contingent upon or resulting from the award or making of this contract. For Breach or violation of this warranty the LA shall have the right to annul this contract without liability.

IN WITNESS WHEREOF, the parties have caused the AGREEMENT to be executed in triplicate counterparts, each of which shall be considered as an original by their duly authorized officers.

Executed by the LA:

ATTEST:

By

Lake County

Clerk

(Seal)

County of Lake

(Municipality/Township/County)

of the

State of Illinois, acting by and through its

County Board

By

Title

Chairman of the County Board

RECOMMENDED FOR EXECUTION

Paula J. Trigg, P.E.
Director of Transportation/County Engineer
Lake County

Executed by the ENGINEER:

ATTEST:

By

Title

Engineering Firm

Street Address

City, State

By

Title

SCOPE OF SERVICES

Section 09-00088-18-WR
Aptakisic Road (C.R. A44)
IL Route 83 to Buffalo Grove Road
Lake County, Illinois

October 29, 2015

PHASE II – DESIGN ENGINEERING SERVICES

Christopher B. Burke Engineering, Ltd. (CBBEL) will perform Phase II Engineering Services for the improvement of Aptakisic Road from IL Route 83 to Buffalo Grove Road, in Lake County, a distance of approximately 1.15 miles. This project includes the reconstruction of Aptakisic Road from Sta. 8+00 to Sta. 61+00. The proposed typical section will be an urban arterial having two through lanes in each direction separated by a 12' two-way left turn lane with a 2' shoulder and curb and gutter. Current LCDOT standards will be considered for a 3' shoulder between the traffic lane and the proposed curb and gutter. A proposed multi-use path will extend further west than Sta. 8+00 to the IL Route 83 intersection near Sta. 0+80 where a pedestrian crossing is proposed on the Aptakisic Road leg of the intersection to connect the proposed multi-use path to an existing sidewalk. Construction is anticipated for the 2021 construction year. CBBEL will provide services for all permitting required for these improvements. A detailed scope of services is provided below.

Task 1 – Pick-Up Survey

CBBEL previously completed a topographic and stream survey for Aptakisic Road for the Phase I scope of work. The previous survey extended to the existing right-of-way beyond which the Lake County one-foot contour LiDAR mapping was used. Elevations were based on the Lake County NGVD 1929 vertical datum.

CBBEL will supplement the Phase I topographic survey with additional pick-up topographic survey. The anticipated pick-up survey is from the existing right-of-way to the proposed right-of-way or easement.

Additionally, CBBEL converted the Phase I topographic survey to the Lake County NAVD 1988 vertical datum and all new pick-up survey will be in this datum. CBBEL will compile all the above information into one base map at 1" = 20' scale that is representative of existing conditions for use in Phase II engineering work in developing the detailed plan, profile, and cross sections for the proposed improvement.

Once land acquisition has been completed for the project, CBBEL will set 5\8 x 24 inch iron rods (with survey caps) at all the corners of the right-of-way takes and permanent easements acquired and shown on the plat of highway.

Task 2 – Geotechnical Investigation and Analysis

CBBEL utilized Testing Service Corporation (TSC) for the geotechnical investigation and analysis for the roadway reconstruction including soil borings, and pavement cores in the Phase I engineering. CBBEL will review this information and incorporate design recommendations into the proposed plans.

TSC has been retained to conduct a geotechnical investigation and complete a report for the proposed noise walls located on the south side of Aptakisic Road near Brandywyn Lane in accordance with the IDOT Geotechnical Manual. The geotechnical investigation is anticipated to consist of performing a total of 13 structural soil borings to a minimum depth of 30 feet.

If a retaining wall is determined to be required near the Valentino Vineyards, CBBEL will retain TSC to conduct a geotechnical investigation and complete a report for the potential of the structural retaining wall located on the north side of Aptakisic Road near the center of the project in accordance with the IDOT Geotechnical Manual. The geotechnical investigation is anticipated to consist of performing a total of 5 structural soil borings to a minimum depth of 30 feet. CBBEL and TSC will attend a pre-bore meeting and a post-bore meeting with LCDOT.

The Boring Program, laboratory Testing, and Engineering Report will be completed as outlined in TSC's attached Proposal.

Task 3 – Drainage Studies

CBBEL will review data to be collected in Task 1 and the topographic survey in Task 2.

The drainage work will include:

- Review work previously completed by CBBEL in Phase I including a field review.
- Design of inlet spacing and storm sewers.
- Verify capacity of proposed ditch conveyance system carrying offsite flow.

All drainage items to be included in the plan preparation such as existing drainage removals, temporary drainage, proposed storm sewers, ditches, structures, and details are included within the plan preparation task.

Task 4 – Coordination

Coordination with the Village of Long Grove, the Village of Buffalo Grove, Long Grove park District, and Buffalo Grove Park District will be required throughout the project to coordinate this project with other possible projects and developments. Design elements that will be maintained by the Villages (landscaped medians, sidewalk and path along Aptakisic Road) will be sent to the Villages at appropriate design stages for coordination. We anticipate that four coordination meetings will be required for Village-maintained design elements (two per Village). We also anticipate one coordination meeting with each of the [park districts to coordinate design elements that impact their properties.

Coordination between the Aptakisic Road and Buffalo Grove Road projects is anticipated to confirm project limits, staging of adjacent project elements, drainage and review of Buffalo Grove Road detention basin design elements. Two coordination meetings are anticipated.

Drainage coordination with the Villages and adjacent Buffalo Grove Road project is anticipated in conjunction with aforementioned meetings.

Coordination will occur to satisfy SMC and the new COE requirements for water quality. We anticipate that four coordination meetings will be required for stormwater and wetland (two per SMC and COE).

The consultant shall be responsible for meeting with representatives from LCDOT and IDOT to

review the proposed scope of services and to determine specific design criteria required by LCDOT and IDOT for the proposed project. In addition, the consultant will review with LCDOT and IDOT design review comments and project letting requirements.

The consultant will meet with LCDOT to advise as to the status of the project and concerns regarding specific design elements. The meetings will also serve to clarify specific design requirements that LCDOT, IDOT, and other local agencies may want incorporated into the plans.

It is anticipated that coordination with the Village of Long Grove will be required concerning the potential retaining wall along the north side of Aptakisic Road at the Valentino Vineyards. CBBEL will coordinate a Type, Size and Location study for a retaining wall. One meeting with the Village is anticipated (in addition to the previously mentioned meetings) to discuss the maintenance and aesthetics of the potential retaining wall.

It is anticipated that coordination with the Village of Buffalo Grove will be required concerning the proposed noise walls along the south side of Aptakisic Road at Brandywyn Lane. LCDOT is in the process of determining a standard aesthetic for noise walls under their jurisdiction, and one meeting is anticipated (in addition to the previously mentioned meetings) with the Village to gain their viewpoint.

Task 5 – Corridor Landscaping

CBBEL will prepare options for the landscape development of the median near the Buffalo Grove Park District Twin Creeks Park entrance. There will be approximately 500 linear feet of landscaped median. CBBEL will develop a preliminary median landscaping plan and provide a planning level cost estimate to be presented to LCDOT and with approval, to the Village of Buffalo Grove.

In addition to the landscaped median, some existing specimen trees within the Village of Buffalo Grove north parkway will be removed as part of the roadway improvements. Coordination will occur with LCDOT and the Village for a preliminary landscaping plan along the project corridor. Approval of the preliminary landscaping plan by the Village and LCDOT will be the basis for developing final landscaping plans. A maintenance document will also be provided for the landscaping.

Task 6 – Traffic Maintenance Analysis

CBBEL will develop a preliminary maintenance of traffic staging concept that minimizes disruption to the traveling public while maintaining a satisfactory work zone for the contractor. Once the preliminary maintenance of traffic staging plan has been agreed to by LCDOT, it will serve as the basis for the development of detailed Maintenance of Traffic plans.

Task 7 – Retaining Wall (if needed) and Noise Wall Structural Design

A potential retaining wall with a railing at the top is being considered along the north side of Aptakisic Rd, from Sta. 33+00 to Sta. 37+00. CBBEL will review the existing condition, soils report, and proposed condition to design a retaining wall and railing. CBBEL will consider different retaining wall systems including Cast In Place (CIP) Concrete wall, Soldier Pile Walls with Precast panels, and CIP concrete panels, and different railing systems to select the most feasible, economical, and aesthetically pleasing wall and railing. CBBEL will study different options of form liner for an aesthetic wall and prepare a cost estimate for each wall system. The walls will be designed according to the ASSHTO LRFD 7th Ed, and railing will

be designed for safety of the pedestrian. CBBEL will coordinate with the geotechnical engineer to get the soil information for design and with LCDOT and IDOT to incorporate any comments. CBBEL will prepare a TS&L, including the plan, elevation, profile, design notes, and other required information. It is assumed that stage construction will not be required and will not be considered.

Two noise walls are proposed along the south side of Aptakisic Road approximately from Sta. 45+00 (Twin Oaks Boulevard) to Sta. 50+00 (West side of Brandywyn Lane) and Sta. 51+00 (East side of Brandywyn Lane) to Sta. 56+00 (wetland just west of neighborhood) to reduce the traffic noise impact on adjacent residents. CBBEL will review the existing condition, soils report, and proposed condition to design the noise barrier walls. CBBEL will consider different wall systems including CIP Concrete walls, Soldier Pile Walls with Precast panels, Timber walls, and Masonry wall to select the most feasible, economical, and aesthetically pleasing wall. The design of the wall will be controlled by wind loads. CBBEL will consider different options of form liner for an aesthetic wall and prepare a cost estimate for each wall system. CBBEL will coordinate with the geotechnical engineer to get the soil information for design and with LCDOT and IDOT to incorporate any comments. CBBEL will prepare a TS&L, including the plan, elevation, profile, design notes, and other required information. It is assumed that stage construction will not be required and will not be considered.

Coordination meetings are anticipated to discuss the design specifics of the proposed walls and received feedback from the property owners during the design phase. It is anticipated that the original opinion poll will be revisited. If the results of the opinion poll change the requirements for proposed noise walls, FHWA will be consulted to determine the documentation that would be needed to remove the noise walls from the contract. If significant work would be required to revisit the noise wall analysis such as a new Traffic Noise Analysis, that work would be perused under a change order.

Task 8 – Preliminary Plans and Cost Estimate (60%)

Based on the approved Phase I Preliminary Geometric Plans, CBBEL will prepare preliminary plans and an estimate of construction cost. Contract documents will be in accordance with IDOT federal letting standards and will be in English units.

The following drawings will be provided for preliminary review:

1 Sheet	Cover Sheet <ul style="list-style-type: none">▪ IDOT format▪ List of applicable LCDOT and State Highway Standards▪ Project location map
2 Sheet	General Notes <ul style="list-style-type: none">▪ Include notes needed to clarify project's intent▪ Index of sheets▪ Commitments▪ Utility Company and Village points of contact
3 Sheets	Summary of Quantities
20 Sheets	Schedules of Quantities (Submitted during Pre-Final)

	<ul style="list-style-type: none"> ▪ Schedules for all pay items will be included except lump sum and contingency items ▪ Schedules for traffic signal plans will follow standard LCDOT sheet layout
2 Sheets	<p>Typical Sections</p> <ul style="list-style-type: none"> ▪ Including existing and proposed utilities ▪ Covers main line and cross roads ▪ Extend from ROW to ROW line
3 Sheets	<p>Alignment, Ties and Benchmarks</p> <ul style="list-style-type: none"> ▪ Provides centerline alignment, horizontal and vertical control for the project ▪ Provides ties for the centerline alignment and control points.
31 Sheets	<p>Maintenance of Traffic (1"=20' plan sheets) 2 stages and sub stages</p> <ul style="list-style-type: none"> ▪ General Notes ▪ Will show the traffic control and staging of the work that minimizes the disturbance to existing traffic patterns ▪ Temporary drainage ▪ Cross-sections at critical area will be provided to determine limits of construction and staging constructability ▪ LCDOT TCP sheet with notes, speed limit, RWA locations, etc. ▪ Detour sheets
12 Sheets	<p>Existing Conditions and Removal Plans (1"=20' plan sheets)</p> <ul style="list-style-type: none"> ▪ Will show the traffic control and staging of the work that minimizes the disturbance to existing traffic patterns ▪ Cross-sections at critical area will be provided to determine limits of construction and staging constructability
12 Sheets	<p>Roadway Plan and Profile Sheets (1"=20' horizontal, 1"=5' vertical)</p> <ul style="list-style-type: none"> ▪ Existing and proposed plan view top, profile view bottom. ▪ Horizontal and vertical alignments ▪ Existing edges of pavement, medians, C&G, shoulders, driveways, lighting, signing, signals, guardrails, structures, etc. ▪ All existing storm sewers, cross road culverts, manholes, catch basins, inlets, headwalls, ditches, pump stations, etc. ▪ Station, offset, and elevation callouts to proposed elements. ▪ All known utilities plotted as accurately as possible including horizontal and vertical locations ▪ Identification, sizes and appurtenances on existing topography, proposed geometry, existing drainage, proposed drainage ▪ Edges of pavement, C&G, medians, driveways, sidewalks, retaining walls, structure locations, and identifications, etc.
5 Sheets	<p>Pavement Marking and Landscaping Plans (1"=50' plan sheets)</p>
2 Sheets	<p>Median Landscaping Plans (1"=20' plan sheets)</p>

14 Sheets	<p>Erosion and Sediment Control Plans and Details (1"=50' plan sheets) 2 stages</p> <ul style="list-style-type: none"> Will show erosion and sediment control for the main construction stages LCDOT ECP sheet with disturbed area, drainage basin map, notes, quantities, etc.
1 Sheet	<p>Intersection Details (1"=10' plan sheets)</p> <ul style="list-style-type: none"> Provide detailed horizontal and vertical control for the intersection of Aptakisic Road with Brandywyn Lane.
2 Sheet	<p>Sidewalk Curb Ramp Details (1"=5' plan sheets)</p> <ul style="list-style-type: none"> Provide detailed horizontal and vertical for the curbed ramp details.
12 Sheets	<p>Traffic Signal Modernization Plans – Aptakisic Road and Brandywyn Lane (1"=20' plan sheets)</p> <ul style="list-style-type: none"> Temporary Traffic Signal and Removal Plans Preliminary, pre-final, and final traffic signal modification plans Cable plan and schedule of quantities Phase designation diagrams Adaptive Signal Control Details Video or Loop detection details and general notes Traffic Signal interconnect plan Technical specifications employing LCDOT special provisions to the extent that they apply will be assembled
6 Sheets	<p>Traffic Signal Modernization Plans – Aptakisic Road and Brandywyn Lane (1"=20' plan sheets)</p> <ul style="list-style-type: none"> Permanent Temporary Traffic Signal Removal Plans Preliminary, pre-final, and final traffic signal modification plans Cable plan and schedule of quantities Phase designation diagrams Adaptive Signal Control Details
4 Sheets	<p>Traffic Signal Modernization Plans – Aptakisic Road and IL 83 (1"=20' plan sheets)</p> <ul style="list-style-type: none"> Preliminary, pre-final, and final traffic signal modification plans Cable plan and schedule of quantities Phase designation diagrams Technical specifications employing LCDOT special provisions to the extent that they apply will be assembled
4 Sheets	<p>Interconnect Plans (1"=50' plan sheets)</p> <ul style="list-style-type: none"> Interconnect schematic plan along Aptakisic Road connecting IL Route 83 to Brandywyn Lane and Brandywyn Lane to Buffalo Grove Road. Schedule of quantities.
4 Sheets	<p>Street Lighting Relocation Plans (1"=50' plan sheets)</p>

	<ul style="list-style-type: none"> ▪ Temporary lighting plan. ▪ Unit duct and cable plan. ▪ Details. ▪ Schedule of quantities.
2 Sheets	Compensatory Storage Grading Plans <ul style="list-style-type: none"> ▪ Existing and proposed contours
4 Sheets	Retaining Wall Structural Plans (if required)
6 Sheets	Noise Wall Structural Plans
7 Sheets	Construction Details (project specific)
34 Sheets	Cross-Sections <ul style="list-style-type: none"> ▪ At a scale of 1" = 5'-0" horizontal and vertical ▪ At 50' intervals ▪ At all entrances to verify easement need and constructability (satisfactory grades) ▪ At all proposed drainage structures ▪ All known utilities plotted and proposed ditching sufficiently complete to allow identification of utility conflicts ▪ Existing topography including drainage within the ROW shown on the nearest cross section
6 Sheets	IDOT D1 Standards
18 Sheets	LCDOT Standards
20 Sheets	IDOT Standards
Estimated 237 Total Sheets	

An estimate of construction cost will be submitted along with the preliminary plans to LCDOT and the local municipalities for review. The cost estimate will have costs broken out for items that will have cost sharing with the local municipalities.

Task 9 – Wetland Permitting

CBBEL has previously completed a wetland delineation. The jurisdictional determination will expire in November 2015, and will need to be updated prior to construction. The update will include wetland determination with associated field work, a revised wetland assessment, associated boundary verification and jurisdictional determination. It is anticipated this work will be scheduled for a time that will allow it to remain current through the anticipated construction once the construction time frame has been determined.

Permit Application Preparation and Submittals – The required exhibits, specifications, data and project information will be compiled and assembled in a permit application package to SMC and the U.S. Army Corps of Engineers (COE). Runoff reduction goal requirements of the COE will also be address in this submittal. We will coordinate development of documents with the project team. This task may require meetings with SMC, COE, IEPA, USFWS, IDNR and other

agencies to coordinate permitting activities.

Agency Coordination – During the permit Review process, follow-up meetings with the project team and regulatory agencies may be necessary to finalize the required information, submittals and documentation.

Task 10 – LCSMC Stormwater Calculations and Permit

A Watershed Development Permit (WDP) will be required from the Lake County Stormwater Management Commission (SMC). CBBEL will review and compile as necessary the stormwater management calculations associated with the existing conditions Based Flood Elevation (BFE) Determination, detention storage, compensatory storage, stormwater conveyance, water quality requirements and culvert sizing. CBBEL will schedule a pre-application meeting with SMC prior to permit submittals. Permit submittal support documentation included in this task are:

- Review and coordinate detention requirements. Coordination may be required with the Village of Buffalo Grove and Buffalo Grove Park District to document impervious area reduction credit for detention requirements associated with those agencies planning to remove sections of their multi-use paths.
- Sizing detention pond volumes to coordinate adjacent project.
- Updating the hydrologic and hydraulic modeling as necessary for the datum conversion and culvert analyses.
- Verify floodplain fill and compensatory storage calculations.
- Best Management Practices to be incorporated with the project to satisfy water quality requirements for both the WDP and the COE wetland permit.
- Wetland hydrology analysis for IWLC.
- Compliance with Watershed Development Ordinance runoff volume reduction requirements.

Task 11 – Utility Coordination

Once the utilities have verified the location of their facilities, CBBEL will identify potential conflicts, and will set up meetings to discuss necessary utility relocations or plan adjustments. The scheduling of the necessary utility relocation work will also be reviewed in the coordination meetings. We anticipate six meetings with individual utility companies will be required.

CBBEL will continue coordination with the Northwest Water Commission concerning their proposed plans for a new transmission line through the project corridor.

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 utility relocation plan permit submissions.

Task 12 – Pre-Final Plans and Cost Estimate (90%)

Based on comments provided by LCDOT, local municipalities, the permitting agencies, and coordination with utility companies, CBBEL will submit pre-final construction documents for review. CBBEL will write a separate disposition of comments to address each reviewing agency's preliminary comments. The cost estimate will identify federal funding codes, identify non-federal items, and breakout costs for local participation.

Due to the current funding being located late in LCDOT's Program, it is anticipated that there will be a significant amount of time between submittal of Pre-Final plans to LCDOT and submittal of Pre-Final plans to IDOT. Effort is included in this task to address the shut-down and start-up associated with this dormant period. Additionally, specifications, pay items, standards, and permitting regulations will be updated prior to submitting Pre-Final plans to IDOT.

Task 13 – Final Plans, Specifications and Cost Estimate (100%)

CBBEL will finalize the contract documents based on the pre-final review and current standards and pay items. The requested number of copies of plans and specifications will be submitted to LCDOT and IDOT. A final estimate of construction cost and estimate of required working days will also be submitted. Final bid documents shall be provided in IDOT format for a state letting.

Task 14 – Land Acquisition Services

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

In addition, Santacruz Associates will provide assistance in determining the cost of the loss of grape vines at the Valentino Vineyard. This information will be used to help assess if a retaining wall will be a cost effective option.

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

An estimate of value of lost grape vines is anticipated for Valentino's Vineyard to determine if it is more cost effective to build a wall to minimize impacts to grape vines or maintain the Temporary Construction Easement as shown in the Phase I report. This will not be a specialty report to be used in the appraisal since the property as a vineyard is not its highest and best use.

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 owner as needed.

It is estimated that approximately 27 parcels will be affected.

Task 15 – Preliminary Site Investigation

CBBEL will retain Huff & Huff, Inc. (H&H) to update the Preliminary Environmental Site Assessment (PESA) completed in Phase I. Once updated, H&H will perform up to seven soil borings and include analytical results from the borings in the Preliminary Site Investigation (PSI) report. The PSI will determine if the recognized environmental concern on the identified

potentially impacted property will have the potential to affect the condition of the soil encountered during construction. H&H will then complete and stamp Form 663 for portions of the project where uncontaminated soils are identified.

Task 16 – Phase III Support

CBBEL will provide assistance to IDOT/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.

Once the project reaches substantial completion, CBBEL will verify the iron rods at all the corners of the right-of-way takes and permanent easements previously set under Task 1 and reset 5/8 x 24 inch iron rods (with survey caps) as necessary.

Task 17 – QA/QC

The CBBEL QC/QA plan emphasizes an integrated project development process, with a guiding principal 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 QC/QA 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 QC/QA Manager, assigns qualified senior quality reviewers for pending deliverables as required.

Task 18 – 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 submittal of project invoices.



Payroll Escalation Table Fixed Raises

FIRM NAME Christopher B. Burke Engineering, Ltd.
PRIME/SUPPLEMENT _____

DATE 10/27/15
PTB NO. _____

CONTRACT TERM 52 MONTHS
START DATE 9/1/2015
RAISE DATE 1/1/2016

OVERHEAD RATE 125.26%
COMPLEXITY FACTOR 0
% OF RAISE 3.00%

ESCALATION PER YEAR

9/1/2015 - 12/31/2015	1/1/2016 - 12/31/2016	1/1/2017 - 12/31/2017	1/1/2018 - 12/31/2018	1/1/2019 - 12/31/2019
$\frac{4}{52}$	$\frac{12}{52}$	$\frac{12}{52}$	$\frac{12}{52}$	$\frac{12}{52}$
= 7.69%	23.77%	24.48%	25.22%	25.97%
= 1.0713				

The total escalation for this project would be:

7.13%

Payroll Rates

FIRM NAME Christopher B. Burke Engineering, Ltd. DATE 01/01/15
 PRIME/SUPPLEMENT _____
 PTB NO. _____

ESCALATION FACTOR 7.13%

CLASSIFICATION	CURRENT RATE	ESCALATED RATE
Engineer VI	\$70.00	\$70.00
Engineer V	\$60.06	\$64.34
Engineer IV	\$49.19	\$52.70
Engineer III	\$41.19	\$44.13
Engineer I/II	\$30.23	\$32.39
Env Res Specialist V	\$66.50	\$70.00
Env Res Specialist IV	\$50.58	\$54.19
Env Res Specialist III	\$38.37	\$41.11
Env Res Technician	\$34.00	\$36.43
Landscape Architect	\$50.00	\$53.57
Survey V	\$70.00	\$70.00
Survey IV	\$61.50	\$65.89
Survey III	\$52.50	\$56.25
Survey II	\$37.40	\$40.07
Survey I	\$25.88	\$27.73
CAD Manager	\$55.50	\$59.46
Asst. CAD Manager	\$47.00	\$50.35
CAD II	\$43.48	\$46.58
CAD I	\$33.25	\$35.62
Engineering Technician V	\$60.00	\$64.28
Engineering Technician IV	\$45.00	\$48.21
Engineering Technician III	\$41.02	\$43.95
Engineering Technician I/II	\$41.17	\$44.11
Engineering Intern	\$12.95	\$13.87
GSI Specialist III	\$43.00	\$46.07
GSI Specialist I/II	\$26.00	\$27.85
Administrative	\$29.15	\$31.23

EXHIBIT A

**Cost Estimate of
Consultant Services
(CPFF)**

Firm Christopher B. Burke Engineering, Ltd.
Route Aptakisic Rd Phase II
Section
County Lake
Job No. TBD
PTB & Item N/A

Date 10/29/15

Overhead Rate **125.26%**

Complexity Factor **0**

Item	Work Hours	Payroll	Overhead & Fringe Benefits	In-House Direct Costs *	Fixed Fee	Outside Direct Costs	Subs	Total (C+D+E+F+G+H)	% of Grand Total
Task 1 – Pick-Up Survey	204	8,088.35	10,131.46	395.50	2,872.09			21,487.40	2.61%
Task 2 – Geotechnical Investigation and Analysis	16	867.78	1,086.99		301.99		44,700.00	46,956.76	5.69%
Task 3 – Drainage Studies	208	9,871.81	12,365.43		3,435.39			25,672.63	3.11%
Task 4 – Coordination	132	6,910.99	8,656.71	158.20	2,427.96	997.00		19,150.87	2.32%
Task 5 – Corridor Landscaping	52	2,753.08	3,448.51		958.07	518.50		7,678.17	0.93%
Task 6 – Traffic Maintenance Analysis	64	3,044.83	3,813.96		1,059.60	232.50		8,150.89	0.99%
Task 7 – Retaining Wall and Noise Wall Structural Design	498	27,168.69	34,031.50		9,454.70			70,654.89	8.57%
Task 8 – Preliminary Plans and Cost Estimate (60%)	936	41,914.38	52,501.96	79.10	14,597.67	1,504.00		110,597.11	13.41%
Task 9 – Wetland Permitting	160	8,923.12	11,177.10		3,105.25			23,205.46	2.81%
Task 10 – LCSMC Stormwater Calculations and Permit	68	3,676.71	4,605.44		1,279.49			9,561.64	1.16%
Task 11 – Utility Coordination	80	3,790.14	4,747.53		1,318.97	1,129.00		10,985.64	1.33%
Task 12 – Pre-Final Plans and Cost Estimate (90%)	1176	51,620.59	64,659.95	79.10	17,975.43	611.50		134,946.56	16.36%
Task 13 – Final Plans, Specs, and Estimate (100%)	217	9,649.40	12,086.84	79.10	3,369.46	1,359.00		26,543.80	3.22%
Task 14 – Land Acquisition Services	204	9,578.46	11,997.97		3,333.30		189,750.00	214,659.73	26.03%
Task 15 – Preliminary Site Investigation and CCDD	12	610.41	764.59		212.42		13,935.62	15,523.04	1.88%
Task 16 – Phase III Support	234	12,317.96	15,429.47	79.10	4,298.12	1,140.00		33,264.65	4.03%
Task 17 – QA/QC	104	6,500.16	8,142.10		2,262.06			16,904.31	2.05%
Task 18 – Administration	168	11,081.35	13,880.50		3,856.31			28,818.17	3.49%
TOTALS	4533	218,368.21	273,528.01	870.10	76,118.30	7,491.50	248,385.62	824,761.74	100.00%

* Mileage Only. All other direct costs are "outside"

Avg Hrly: 48.17



EXHIBIT A

Average Hourly Project Rates

Route	Aptakisic Rd Phase II
Section	
County	Lake
Job No.	TBD
PTB/Item	

Consultant Christopher B. Burke Engineering, Ltd.

Date 10/29/15

Sheet 1 OF 4

Payroll Classification	Avg Hourly Rates	Total Project Rates			Task 1 – Pick-Up Survey			Task 2 – Geotechnical Investigation			Task 3 – Drainage Studies			Task 4 – Coordination			Task 5 – Corridor Landscaping		
		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	70.00	48	1.06%	0.74															
Engineer V	64.34	644	14.21%	9.14				8	50.00%	32.17	20	9.62%	6.19	40	30.30%	19.50	4	7.69%	4.95
Engineer IV	52.70	634	13.99%	7.37							94	45.19%	23.82	40	30.30%	15.97			
Engineer III	44.13	998	22.02%	9.72				8	50.00%	22.06	6	2.88%	1.27	40	30.30%	13.37	8	15.38%	6.79
Engineer I/II	32.39	722	15.93%	5.16							42	20.19%	6.54						
Env Res Specialist V	70.00	16	0.35%	0.25															
Env Res Specialist IV	54.19	144	3.18%	1.72															
Env Res Specialist III	41.11	0																	
Env Res Technician	36.43	0																	
Landscape Architect	53.57	44	0.97%	0.52										4	3.03%	1.62	40	76.92%	41.21
Survey V	70.00	36	0.79%	0.56	4	1.96%	1.37												
Survey IV	65.89	10	0.22%	0.15	4	1.96%	1.29												
Survey III	56.25	30	0.66%	0.37	6	2.94%	1.65												
Survey II	40.07	104	2.29%	0.92	80	39.22%	15.71												
Survey I	27.73	80	1.76%	0.49	80	39.22%	10.87												
CAD Manager	59.46	121	2.67%	1.59	30	14.71%	8.74				4	1.92%	1.14						
Asst. CAD Manager	50.35	388	8.56%	4.31							26	12.50%	6.29						
CAD II	46.58	486	10.72%	4.99															
CAD I	35.62	0																	
Engineering Technician V	64.28	0																	
Engineering Technician IV	48.21	0																	
Engineering Technician III	43.95	0																	
Engineering Technician I/II	44.11	0																	
Engineering Intern	13.87	0																	
GSI Specialist III	46.07	0																	
GSI Specialist I/II	27.85	12	0.26%	0.07							12	5.77%	1.61						
Administrative	31.23	16	0.35%	0.11							4	1.92%	0.60	8	6.06%	1.89			
		0																	
		0																	
TOTALS		4533	100%	\$48.17	204	100%	\$39.65	16	100%	\$54.24	208	100%	\$47.46	132	100%	\$52.36	52	100%	\$52.94



EXHIBIT A

Average Hourly Project Rates

Route	Aptakisic Rd Phase II
Section	
County	Lake
Job No.	TBD
PTB/Item	

Consultant Christopher B. Burke Engineering, Ltd.

Date 10/27/15

Sheet 2 OF 4

Payroll Classification	Avg Hourly Rates	Task 6 – Traffic Maintenance A			Task 7 – Retaining Wall and No			Task 8 – Preliminary Plans and			Task 9 – Wetland Permitting			Task 10 – LCSMC Stormwater C			Task 11 – Utility Coordination		
		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	70.00																		
Engineer V	64.34	8	12.50%	8.04	170	34.14%	21.97	36	3.85%	2.47				8	11.76%	7.57	8	10.00%	6.43
Engineer IV	52.70				188	37.75%	19.89	72	7.69%	4.05				60	88.24%	46.50			
Engineer III	44.13	32	50.00%	22.06	56	11.24%	4.96	288	30.77%	13.58							32	40.00%	17.65
Engineer I/II	32.39							216	23.08%	7.47									
Env Res Specialist V	70.00										16	10.00%	7.00						
Env Res Specialist IV	54.19										144	90.00%	48.77						
Env Res Specialist III	41.11																		
Env Res Technician	36.43																		
Landscape Architect	53.57																		
Survey V	70.00																		
Survey IV	65.89																		
Survey III	56.25																		
Survey II	40.07																		
Survey I	27.73																		
CAD Manager	59.46							36	3.85%	2.29									
Asst. CAD Manager	50.35							144	15.38%	7.75									
CAD II	46.58	24	37.50%	17.47	80	16.06%	7.48	144	15.38%	7.17							40	50.00%	23.29
CAD I	35.62																		
Engineering Technician V	64.28																		
Engineering Technician IV	48.21																		
Engineering Technician III	43.95																		
Engineering Technician I/II	44.11																		
Engineering Intern	13.87																		
GSI Specialist III	46.07																		
GSI Specialist I/II	27.85																		
Administrative	31.23				4	0.80%	0.25												
TOTALS		64	100%	\$47.58	498	100%	\$54.56	936	100%	\$44.78	160	100%	\$55.77	68	100%	\$54.07	80	100%	\$47.38



Average Hourly Project Rates

Route	Aptakisic Rd Phase II
Section	
County	Lake
Job No.	TBD
PTB/Item	

Consultant Christopher B. Burke Engineering, Ltd.

Date 10/29/15

Sheet 3 OF 4

Payroll Classification	Avg Hourly Rates	Task 12 – Pre-Final Plans and C			Task 13 – Final Plans, Specs, a			Task 14 – Land Acquisition Ser			Task 15 – Preliminary Site Inve			Task 16 – Phase III Support			Task 17 – QA/QC		
		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	70.00																16	15.38%	10.77
Engineer V	64.34	42	3.57%	2.30	12	5.53%	3.56	68	33.33%	21.45	4	33.33%	21.45	56	23.93%	15.40	40	38.46%	24.75
Engineer IV	52.70	84	7.14%	3.76	16	7.37%	3.89							48	20.51%	10.81	32	30.77%	16.22
Engineer III	44.13	336	28.57%	12.61	60	27.65%	12.20	68	33.33%	14.71	8	66.67%	29.42	56	23.93%	10.56			
Engineer I/II	32.39	336	28.57%	9.25	60	27.65%	8.95	68	33.33%	10.80									
Env Res Specialist V	70.00																		
Env Res Specialist IV	54.19																		
Env Res Specialist III	41.11																		
Env Res Technician	36.43																		
Landscape Architect	53.57																		
Survey V	70.00																16	15.38%	10.77
Survey IV	65.89													6	2.56%	1.69			
Survey III	56.25													24	10.26%	5.77			
Survey II	40.07													24	10.26%	4.11			
Survey I	27.73																		
CAD Manager	59.46	42	3.57%	2.12	9	4.15%	2.47												
Asst. CAD Manager	50.35	168	14.29%	7.19	30	13.82%	6.96							20	8.55%	4.30			
CAD II	46.58	168	14.29%	6.65	30	13.82%	6.44												
CAD I	35.62																		
Engineering Technician V	64.28																		
Engineering Technician IV	48.21																		
Engineering Technician III	43.95																		
Engineering Technician I/II	44.11																		
Engineering Intern	13.87																		
GSI Specialist III	46.07																		
GSI Specialist I/II	27.85																		
Administrative	31.23																		
TOTALS		1176	100%	\$43.90	217	100%	\$44.47	204	100%	\$46.95	12	100%	\$50.87	234	100%	\$52.64	104	100%	\$62.50



Average Hourly Project Rates

Route	Aptakisic Rd Phase II
Section	
County	Lake
Job No.	TBD
PTB/Item	

Consultant Christopher B. Burke Engineering, Ltd.

Date 10/27/15

Sheet 4 OF 4

Payroll Classification	Avg Hourly Rates	Task 18 – Administration																	
		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	70.00	32	19.05%	13.33															
Engineer V	64.34	120	71.43%	45.96															
Engineer IV	52.70																		
Engineer III	44.13																		
Engineer I/II	32.39																		
Env Res Specialist V	70.00																		
Env Res Specialist IV	54.19																		
Env Res Specialist III	41.11																		
Env Res Technician	36.43																		
Landscape Architect	53.57																		
Survey V	70.00	16	9.52%	6.67															
Survey IV	65.89																		
Survey III	56.25																		
Survey II	40.07																		
Survey I	27.73																		
CAD Manager	59.46																		
Asst. CAD Manager	50.35																		
CAD II	46.58																		
CAD I	35.62																		
Engineering Technician V	64.28																		
Engineering Technician IV	48.21																		
Engineering Technician III	43.95																		
Engineering Technician I/II	44.11																		
Engineering Intern	13.87																		
GSI Specialist III	46.07																		
GSI Specialist I/II	27.85																		
Administrative	31.23																		
TOTALS		168	100%	\$65.96	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00

Direct Cost Estimate

Task	In-House		Outside																
	Mileage		Messenger/Fed Ex		Car Rental (I-Go)		8 1/2 x 11 B/W Copies		8 1/2 x 11 Color Stock		11x17 B/W copies		22 x 34 Mylar		22 x 34 Bond		22 x 34 Color		Totals
	Miles @ 0.565	Cost	Each @ \$25	Cost	\$10/hr (\$55/day Max)	Cost	Pages @ 0.09	Cost	Pages @ 0.10	Cost	Pages @ 0.15	Cost	Pages @ 10.50		Pages @ 0.96	Cost	Pages @ 20	Cost	
Task 1 – Pick-Up Survey	700	\$395.50		\$0		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0	\$0.00
Task 2 – Geotechnical Investigation and Analysis		\$0.00		\$0		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0	\$0.00
Task 3 – Drainage Studies		\$0.00		\$0		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0	\$0.00
Task 4 – Coordination	280	\$158.20	4	\$100	30	\$300.00	100	\$9.00	250	\$25.00	100	\$15.00		\$0.00	50	\$48.00	25	\$500	\$997.00
Task 5 – Corridor Landscaping		\$0.00	2	\$50	12	\$120.00	50	\$4.50	125	\$12.50	50	\$7.50		\$0.00	25	\$24.00	15	\$300	\$518.50
Task 6 – Traffic Maintenance Analysis		\$0.00		\$0		\$0.00	25	\$2.25	25	\$2.50	25	\$3.75		\$0.00	25	\$24.00	10	\$200	\$232.50
Task 7 – Retaining Wall and Noise Wall Structural Design		\$0.00		\$0		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0	\$0.00
Task 8 – Preliminary Plans and Cost Estimate (60%)	140	\$79.10	2	\$50	12	\$120.00	100	\$9.00	100	\$10.00	500	\$75.00		\$0.00	250	\$240.00	50	\$1,000	\$1,504.00
Task 9 – Wetland Permitting		\$0.00		\$0		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0	\$0.00
Task 10 – LCSMC Stormwater Calculations and Permit		\$0.00		\$0		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0	\$0.00
Task 11 – Utility Coordination		\$0.00		\$0		\$0.00	100	\$9.00	100	\$10.00	1000	\$150.00		\$0.00	1000	\$960.00		\$0	\$1,129.00
Task 12 – Pre-Final Plans and Cost Estimate (90%)	140	\$79.10		\$0		\$0.00	100	\$9.00	100	\$10.00	750	\$112.50		\$0.00	500	\$480.00		\$0	\$611.50
Task 13 – Final Plans, Specs, and Estimate (100%)	140	\$79.10		\$0		\$0.00	200	\$18.00	200	\$20.00	1500	\$225.00		\$0.00	100	\$96.00	50	\$1,000	\$1,359.00
Task 14 – Land Acquisition Services		\$0.00		\$0		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0	\$0.00
Task 15 – Preliminary Site Investigation and CCDD		\$0.00		\$0		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0	\$0.00
Task 16 – Phase III Support	140	\$79.10		\$0	12	\$120.00		\$0.00	200	\$20.00		\$0.00		\$0.00		\$0.00	50	\$1,000	\$1,140.00
Task 17 – QA/QC		\$0.00		\$0		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0	\$0.00
Task 18 – Administration		\$0.00		\$0		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0	\$0.00
TOTALS:	1540	\$870.10	8	\$200.00	66	\$660.00	675	\$60.75	1100	\$110.00	3925	\$588.75	0	\$0.00	1950	\$1,872.00	200	\$4,000.00	\$7,491.50

PROPOSAL FOR LAND ACQUISITION SERVICES

Lake County Division of Transportation

Christopher B. Burke Engineering, Ltd.



**Aptakisic Road
from IL83 to Buffalo Grove Rd**

**Santacruz Land
Acquisitions**

2650 Valor Drive • Glenview, IL 60026
www.santacruz-associates.com

Contact:
J. Steve Santacruz
847-868-9620
jsteve@santacruz-associates.com

1

EXECUTIVE SUMMARY

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 the Uniform Relocation Assistance and Real Property Act of 1970, as amended (Uniform Act), IDOT land acquisition policies and procedures and FWA policies.

CRITICAL ISSUE 1: DELIVER THE RIGHT-OF-WAY ON-TIME TO MEET LETTING

Delivery of right of way on-time keeps the project on its letting schedule. We understand that nothing is more important to the LPA. We also know that keeping the land acquisition on-time and within budget is a measurement of success for the LPA. When a project does not meet its letting schedule, we know it can impact the budget for the LPA, causing scheduling conflicts with potential contractors and also affect other economic factors which govern the delivery of the overall roadway improvement program for the LPA.

Our solution is to assemble a team of industry leading right of way professionals that have years of experience working on land acquisition projects with the understanding of what needs to be done to complete an acquisition on time.

Santacruz Land Acquisitions 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 Aptakisic Road from IL 83 to Buffalo Grove Road (the “Project”) to assure that the goals are met. Beginning with waiver valuations on the appraisal side, we look for ways to reduce the time on the acquisition cycle. With years of right of way acquisition work, we have a large database of real estate representatives for corporate acquisitions to cut down the time spent in the initial steps of locating the real estate representative for each property.

All of these efficiencies lead to ways in which we minimize our time with an acquisition and translate to your project staying on schedule.

CRITICAL ISSUE 2: MANAGE THE ACQUISITION RISKS

Equally important as the scheduled letting is the acquisition budget for the Project. Cost overruns can jeopardize a project from moving forward. Because real estate costs can represent a significant portion of the budget for a transportation project, our team will suggest ways to minimize impacts and reduce costs in challenging acquisitions. We will also work with the LPA to minimize the condemnation referrals that impact the budget for this Project. By the same token, our team will quickly identify parcels in the very beginning of the process that have title issues that can only be resolved through condemnation.

Through experience, we know that a portion of the parcels will need to be acquired through condemnation. As such, your land acquisition consultant needs to have knowledge of the legal requirements necessary to position an agency for condemnation. Our team possesses that knowledge and has years of experience providing “expert witness” testimony in these matters.

Santacruz Land Acquisitions is made up of skilled right of way professionals with a vast background in real estate and civil engineering with respect to transportation projects which gives us the ability to recognize issues and resolve them before they create delays.

CRITICAL ISSUE 3: COMPLIANCE WITH GOVERNMENT REGULATIONS

All land acquisition services must be performed in accordance with the Uniform Relocation Assistance and Real Property Act of 1970, as amended (Uniform Act). In addition, we are familiar with IDOT’s land acquisition guidelines, policies and procedures.

WHY SANTACRUZ LAND ACQUISITIONS?

As you review our proposal, you will see that the team that Santacruz Land Acquisitions has assembled is versatile, experienced and qualified to deliver the full scope of the land acquisition needs for the LPA. What sets apart our team is:

- Years of successful on-time delivery of right of way land acquisition services to various other agencies
- Diverse set of real estate acquisition disciplines including backgrounds in law and civil engineering
- Extensive experience with complex valuations and acquisitions
- Title review experience, including familiarity with all types of recorded documents affecting real estate and knowledge on how to clear title
- Experience in reviewing plats and legal descriptions, as well as an ability to review and understand roadway construction plans
- Expertise with the Uniform Relocation Assistance and Real Property Act of 1970, as amended (Uniform Act), Illinois Eminent Domain Act (735 ILCS 30), IDOT Land Acquisition Guidelines.
- Familiarity with IDOT policies and procedures related to land acquisition and appraisals.

Our solution is to apply our team’s extensive collective decades of experience complying with federal and state laws and maximizing the team’s knowledge of the land acquisition policies of IDOT.

ADDITIONAL COMPONENT OF OUR PROPOSAL: BEP UTILIZATION

Santacruz Land Acquisitions is a BEP with Central Management Services, a DBE with IDOT and an MBE with Cook County and the City of Chicago.

TEAM ORGANIZATION

Santacruz Land Acquisitions has assembled a versatile team of professional right of way consultants with the experience to deliver successful land acquisition services and meet the letting dates of the project. J. Steve Santacruz, President of Santacruz Associates Ltd. d/b/a Santacruz Land Acquisitions will lead the team as Project Manager. The team brings a wealth of experience in land acquisition for governmental agencies and related real estate law and civil engineering disciplines to assure the proper handling of even the most complicated of acquisitions. Additionally, the key members of the Santacruz Land Acquisitions team have collaborated in the past on projects.

SUMMARY

With a long history of successful delivery of a variety of right of way projects on-time, within budget and to our client's satisfaction, we look forward to the opportunity to assist the LPA with its land acquisition needs

COMPENSATION

Santacruz Land Acquisitions shall be entitled to the compensation as shown on the attached schedule. Our cost proposal, based on an estimated **twenty seven (27)** projected parcels of right-of-way, is as follows:

<u>APPRAISALS:</u>	\$67,500.00.
<u>REVIEW APPRAISALS:</u>	\$33,750.00.
<u>NEGOTIATIONS:</u>	\$67,500.00.

One of the parcels involved in this project may require the services of a Specialty Engineer or other Consultant to assist in the valuation of unique attributes of real estate. To the extent

necessary, Santacruz will engage the services of such a consultant at a fee not to exceed \$5,000.00

As directed, Santacruz Land Acquisitions 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 Land Acquisitions shall include \$500.00 per parcel for these charges. Santacruz Land Acquisitions shall pay any such fees and charges in excess of the \$500.00 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.

Santacruz Land Acquisitions will attend and/or participate in up to ten (10) hours of meetings and conference calls for consultations on the project. This will include, without limitation, kick-off meetings, planning discussions, project strategy development and review of parcels with acquisition challenges.

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 a cost not to exceed of **\$189,750.00** as follows:

Land Acquisition Services	\$168,750.00
Specialty Engineering Services	\$5,000.00
Consultation/Meeting Services	\$2,500.00
Direct Billable Expenses	\$13,500.00

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TECHNICAL APPROACH

Santacruz Land Acquisitions shall perform all necessary services in the preparation of appraisals and review appraisals and the negotiation of the acquisition of necessary properties required for the completion of the Project. All services shall be performed at the direction of the LPA and Consultant 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").

Santacruz Land Acquisitions will review the highway construction plans with the LPA and/or the Consultant to understand the nature and purpose of the project.

Santacruz Land Acquisitions agrees to perform the services as set forth herein as well as furnish and deliver to the LPA the final reports accompanied by all necessary documents needed for recordation and/or necessary for eminent domain proceedings. **The process described in this section has been the roadmap to many successful right of way projects for Santacruz Land Acquisitions helping us help you keep your projects on-time and within budget.**

LAND ACQUISITION CRITICAL PATH STEPS – "OUR ROAD MAP"

Task 1: Notice to Proceed

Our services start within one week (or sooner, if requested) of an authorization to proceed from the LPA.

Task 2: Kick-off Meeting

Santacruz Land Acquisitions will meet with the LPA and/or Consultant to discuss the Project, identify issues and develop any necessary strategies to assure the timely completion of the Project. At that time, we will identify the subconsultants that shall be assigned to the Project to perform the appraisal and review appraisal functions.

Task 3: Delivery and Review of Project Information

The LPA or Consultant will provide Santacruz Land Acquisitions 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, the LPA or Consultant will also provide us with a set of project plans, including, (i) plan and profile, (ii) drainage and utilities, (iii) pavement markings and (iv) cross sections.

Task 4: Introductory Notice to Owners

The assigned Appraiser will notify the property owner of the proposed taking and the beginning the valuation process of the property. The notice will invite the property owner to be present during the inspection by the appraiser.

Task 5: Appraisal / Waiver Valuation

All appraisal work shall be completed within the time frame provided by the LPA at the time the project is assigned.

The Appraiser will review the plat of highways and the construction plans to determine the type of appraisal to be used for each parcel. The Appraiser will recommend the type of appraisal, which type shall be approved by IDOT. The types of appraisals to be used are the following:

- Waiver Valuation
- Non-complex – damages less than \$5,000
- Complex

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.

All appraisals shall be prepared using the forms as provided or outlined by IDOT's land acquisition division. Santacruz Land Acquisitions shall furnish and deliver two (2) hard copies and one (1)

electronic copy of the completed appraisal report for each parcel.

The Appraiser shall assist in analyzing and responding to valuation information provided by a property owner in support of a counter offer. At the request of the LPA or Consultant, Santacruz Land Acquisitions will furnish and deliver updated or revised appraisals resulting from a revision to the right of way or for condemnation purposes. Such requests will be pursuant to a separate work order.

We understand 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 such case, at the request of the 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. Such requests will be pursuant to a separate work order.

Task 6: 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.

The Review Appraiser will complete the Right of Way Appraisal Review Certification (using the form designated by IDOT) and a copy will be attached to each appraisal delivered by Santacruz Land Acquisitions.

At the request of the LPA or Consultant, Santacruz Land Acquisitions will furnish and deliver updated or revised appraisals resulting from a revision to the right of way or for condemnation purposes. Such requests will be pursuant to a separate work order.

Task 7: Negotiation and Acquisition

All negotiations and acquisition services shall be provided by Santacruz Land Acquisitions after approval by the LPA of the amount of just compensation to be offered to the property owner.

The Negotiator will not have any authority to determine administrative settlements. The Negotiator will consult with the LPA for approval of any counter offers and upon acceptance by the LPA of any such counter offer, Santacruz Land Acquisitions will prepare the necessary documentation for administrative settlement.

Prior to the start of negotiations, the Negotiator will review the plats of highway and appraisals for each parcel before the start of negotiations with a property owner to understand the valuation and impact to the property. Santacruz Land Acquisitions will also inspect 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 the LPA. Santacruz Land Acquisitions will direct any questions to the LPA or Consultant resulting from its review of the plans, plats, appraisals and title commitments so that Santacruz Land Acquisitions is prepared for any issues raised by the property owner during negotiations.

Before contacting the owner of a parcel, Santacruz Land Acquisitions will prepare and send the introductory letter to the property owner on the LPA's letterhead. This letter will provide a general statement of the Project, identify the property and the legal property owner, and briefly state the right of requirements necessary from the parcel. This letter shall also contain contact information for Santacruz Land Acquisitions and a representative of the LPA.

Santacruz Land Acquisitions will prepare an offer package for presentation to the owner at the first meeting. The offer package shall contain the Basis for Computing Total Approved Compensation and Offer to Purchase (in the

format approved by IDOT), a copy of the plat of highway with the acquisition areas highlighted and a copy of the legal descriptions of the parcels to be acquired. If, after repeated efforts to contact the property owner to schedule a meeting to present the offer, Santacruz Land Acquisitions is unable to make contact with the property owner, or if the property owner is located out of town, or at the request of the property owner to have the offer package mailed, Santacruz Land Acquisitions will send the offer package by certified mail so that a receipt of delivery can be established.

Santacruz Land Acquisitions will personally contact the property owner a minimum of three times before making a determination that the acquisition of the parcel cannot be successfully negotiated. In most cases, Santacruz Land Acquisitions will exceed the minimum number of contacts in an attempt to make all reasonable efforts to reach a settlement before recommending that the LPA commence condemnation proceedings. All contacts and efforts to make contact with the property owner shall be documented in the negotiator's report maintained by Santacruz Land Acquisitions for each parcel.

If, during its discussions with the property owner, errors in the plans are discovered or the property owner requests design changes, Santacruz Land Acquisitions will immediately notify LPA or 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 Land Acquisitions will cease negotiations on certain parcels until corrected information or further instruction is provided to Santacruz Land Acquisitions.

Upon successful negotiations with the property owner, Santacruz Land Acquisitions will prepare all necessary conveyance documents in the forms provided by and approved by IDOT in order to complete the acquisition and obtain title approval for the property. Santacruz Land Acquisitions 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 the LPA.

In the event that Santacruz Land Acquisitions, after having made every reasonable effort to contact and negotiate with the owner of a parcel, is unable to obtain a settlement on the approved appraisal amount, Santacruz Land Acquisitions shall prepare and submit to the LPA a completed parcel file with its recommendation to acquire the parcel by means of condemnation. In addition, the file will include the Negotiator's Log, copies of all correspondence with the property owner, title commitments, plats, and all other documentation as required by the LPA.

We understand 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 such case, at the request of the 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 will be pursuant to a separate work order.

PERSONNEL

The experience and talent of the right of way professionals that make up the team for Santacruz Land Acquisitions will, to a large extent, be the basis for the success of keeping this Project on-time and within budget. J. Steve Santacruz brings over twenty years of right of way acquisition experience to lead this team as its project manager. Steve has worked on thousands of acquisition parcels for ISTHA, IDOT, Cook, Kane, Lake, and Will Counties. He has also worked for numerous township and municipalities. Steve has a reputation in the right of community of being able to handle the most complex of land acquisition transactions.

The internal support team members for Santacruz Land Acquisitions include Robin Weber, a real estate paralegal with over twenty years of experience in closing residential and commercial real estate transactions, and Jonathan Abplanalp, a District 1 fee negotiator.

Each of our team members, including our subconsultants, have relevant experience working collaboratively with professionals of other disciplines and other agencies. They understand the importance of effective coordination throughout the land acquisition process.

PRIOR EXPERIENCE

Santacruz Land Acquisitions was founded in 1992 as Santacruz Associates Ltd. and has grown to be one of the most dependable right of way negotiation firms in IDOT's District 1. Since it opened, Santacruz Land Acquisitions has been providing comprehensive right of way solutions, including negotiation activities and the coordination of the valuations of parcels for various public agencies. Our proprietary database overlay allows us to handle hundreds of parcels at one time keeping deadlines organized for each of our different clients.

Our team brings an array of services and broad disciplines in real estate which give us a distinct advantage in handling even the most complex of your land acquisition projects. In addition, our team of subconsultants is not new to each other as we have collaborated together on various other projects.

Our team has delivered real estate solutions for its public agencies balancing risk management and letting dates on some of the largest and most intricate projects in the State.

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EXHIBITS

a. Pricing Schedule

Compensation for Services

Appraisal Services

Appraisals (Waivers)	\$1,700.00
Appraisals (Non-Complex)	\$2,500.00
Appraisals (Complex)	\$3,600.00
Revision to appraisal due to change in ROW or plans	\$1,500.00 - \$3,600.00

Review Appraisal Services

Review Appraisals (Non-Complex)	\$1,200.00
Review Appraisals (Complex)	\$1,800.00
Revision to review appraisal due to change in ROW or plans	\$750.00 - \$1,800.00

Negotiation Services

Negotiation and acquisition services for Right of Way including, without limitation, documentation of conveyance of property interest	\$2,500.00
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Witness Services

Rate for each ½ day in pretrial conference or in court for Negotiator	\$1,000.00
Rate for each ½ day in pretrial conference or in court for Appraiser	\$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

October 2, 2015

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



TESTING SERVICE CORPORATION

Corporate Office:

360 S. Main Place, Carol Stream, IL 60188-2404
630.462.2600 • Fax 630.653.2988

Local Office:

457 E. Gundersen Drive, Carol Stream, IL 60188-2492
630.653.3920 • Fax 630.653.2726

RE: P.N. 55,276B
Aptakisic Road Phase II
Noise Wall and Retaining Wall
Sta. 33+50 to 36+50 & 45+00 to 55+50
Lake County, IL

Dear Mr. Worman:

Testing Service Corporation (TSC) is pleased to submit this proposal to provide Geotechnical Engineering Services for the above captioned project. It addresses the noise wall and retaining wall to be constructed on the north and south sides of Aptakisic Road in Lake County, Illinois.

TSC has included additional time in this proposal for pre/post meetings and plan review prior to construction.

Our understanding of existing site conditions and the proposed scope of work are as follow:

Noise Wall

- Thirteen (13) structure borings are planned in connection with the noise retaining wall on the south side of Aptakisic Road, being spaced at 75 foot intervals.
- They will be typically extended 30 feet below existing grade, with a contingency for and extra 20 feet at about a third of the structure borings if poor soils are encountered (for a total of 470 lf).

Retaining Wall

- Five (5) structure borings are planned in connection with the potential retaining wall on the north side of Aptakisic Road, being spaced at 75 foot intervals.
- They will be typically extended 30 feet below existing grade, with a contingency for an extra 20 feet at two (2) of the structure borings if poor soils are encountered (for a total of 190 lf).

For the purposes of this proposal we have assumed that the boring locations will be accessible to conventional drilling equipment. Overhead wires and other utilities will require offsetting to some of the boreholes. No provisions have been made for tree/brush clearing or other obstruction removal should borehole access be impeded.

TSC will utilize personnel trained in layout procedures to mark core locations and stake the borings in the field. Ground surface elevations for each borehole and pavement core can be interpolated from topographic survey of the site, if provided. Utility clearance for the borings will be obtained by TSC

beforehand by contacting JULIE (Joint Utility Locating Information for Excavators). The utility clearance work outlined herein does not include secondary and private underground utilities that may be present, they will have to be marked by the property owner or their agents.

Assumptions for Permits and Traffic Control:

It is assumed that right-of-access permits will have to be obtained from Lake County Department of Transportation in connection with the borings and/or cores. Lane closures and the use of a flagman are anticipated in connection with the work on Aptakistic Road. It is otherwise assumed that the drilling work can be performed on weekdays between the hours of 9:00 AM and 3:00 PM (minimum). Lane closures will be performed by a professional firm.

Laboratory Testing:

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 and AASHTO 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. Other tests deemed to be necessary by TSC's Project Engineer may also be recommended for your approval. Representative subgrade samples will also be tested for Atterberg limits and grain size analysis in accordance with IDOT procedures.

Report of Data Obtained:

Upon completion of sampling and testing, you will receive an engineering report summarizing field and laboratory test data, including computer generated boring logs. The report will address anticipated soil conditions impacting the retaining wall and noise wall construction, based upon the information obtained from the soil borings.

Fees and Scope:

In accordance with the Cost Estimate attached, TSC is estimating a budget amount of Forty Four Thousand and Seven Hundred Dollars (\$44,700.00) to provide the Geotechnical Engineering Services outlined above. Our proposal is based on the understanding that: the boring locations are accessible to a conventional truck or skid mounted drilling equipment; none of the borings will be located in standing water; and that the work can be performed during standard business hours. Our fee is further subject to this proposal being accepted by you on or before June 30, 2016.

Should the study reveal unexpected subsurface conditions requiring a change in scope, you will be contacted before we proceed with further work. Our invoice would then be based on the unit rates given in the attached Cost Estimate or as otherwise agreed upon.

TSC's geotechnical investigation will not include services required to evaluate the likelihood of the site being contaminated by hazardous materials or other pollutants. Should an environmental investigation be desired by you, please contact the undersigned for a separate proposal.

Closure:

The geotechnical services being performed are subject to TSC's attached General Conditions. Unless stated otherwise, TSC fees include all state and federal taxes and permits that may be required; however, they do not include any license, permits or bond fees that local governments may impose. The local fees, if any, will be added to the invoice. Unless we receive written instructions to the contrary, invoices will be sent to:

Martin C. Worman, P.E.
Christopher B. Burke Engineering, Ltd.
9575 West Higgins Road Suite 600
Rosemont, IL 60018-4920
Phone (847) 823-0500
Fax (847) 823-0520
email: mworman@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. When also completing the attached Project Data form, kindly indicate 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

Prepared by,


Timothy R. Peceniak



Project Engineer

Michael D. Billings
Vice President

TRP:MDB:kw

Enc: Cost Estimate
General Conditions

Approved and accepted for _____ by:

(NAME)

(TITLE)

(DATE)

(DATE)

COST ESTIMATE
Aptakisic Road Phase II
Noise Wall and Retaining Wall
Sta. 33+50 to 36+50 & 45+00 to 55+50
Lake County, IL
TSC P.N. 55,276B

ITEM		UNITS	QTY	RATE	COST
STAKING AND UTILITY CLEARANCE SERVICES (It is our understanding boring elevations will be interpolated from cross sections or topographic plans.)					
1.1	Layout Crew Chief	Hour	8.0	110.00	\$ 880.00
OBTAIN PERMITS (It is our understanding that a Lake County permit will be required.)					
2.1	Administration of Engineer	Hour	0.0	1,250.00	\$ 0.00
2.2	Bonds, Permits, or Other Charges	At Cost	0	750.00	\$ 0.00
MOBILIZATION AND DEMOBILIZATION OF DRILL RIG AND CREW and BORINGS FOR SUBGRADE					
3.1	Drill Mounted on Truck and Two-Person Crew (Portal to Portal)	Days	7	2,900.00	\$ 20,300.00
TRAFFIC CONTROL BY PROFESSIONAL FIRM					
4.1	Lane Closure by Professional Firm, with 2-Man Flagging Crew Regular Time Based on Cost + 10%	Hours	38.0	275.00	\$ 10,450.00
4.2	Lane Closure by Professional Firm, with 2-Man Flagging Crew, Overtime. Based on Cost + 10%	Hours	0.0	270.00	\$ 0.00
LABORATORY TESTING					
5.1	Examine Samples to Describe by Textural System and Classify Using the Unified Soil Classification System	Each	244	4.00	\$ 976.00
5.2	Water Content Determination (Includes Pocket Penetrometer Reading on Cohesive Samples)	Each	244	7.00	\$ 1,708.00
5.3	Unconfined Compressive Strength of Cohesive Soils (or Torvane Shear Strength Measurement)	Each	75	14.00	\$ 1,050.00
5.4	Dry Unit Weight Determination	Each	36	7.00	\$ 252.00
5.5	Atterberg Limit Determinations	Each	4	100.00	\$ 400.00
5.6	Sieve Analysis with #200 Wash	Each	0	90.00	\$ 0.00
5.7	Sieve Analysis with Hydrometer	Each	4	130.00	\$ 520.00
5.8	Visual Classification and Water Content for Core Subgrade Samples	Sample	0	12.00	\$ 0.00

ITEM		UNITS	QTY	RATE	COST
5.9	Organic Content (L.O.I. & Wet Combustion)	Sample	2	110.00	\$ 220.00
PROJECT ADMINISTRATION, ENGINEERING, ANALYSIS AND REPORTING PERSONNEL					
6.1	Prepare Geotechnical Report with Pavement Design, Boring Logs and Location Plan	Lump Sum	1	6,500.00	\$ 6,500.00
6.2	Geotechnical Engineer to Attend Pre and Post Methods (Two 4 Hour Trips)	Hour	8.0	120.00	\$ 960.00
6.3	Geotechnical Engineer to Review Design Proposal	Hour	4.0	120.00	\$ 480.00
6.4	Senior Engineer to Consult or Attend Project Meetings	Hour	0.0	160.00	\$ 0.00
	ESTIMATED TOTAL:				\$ 44,696.00
	RECOMMENDED BUDGET:				\$ 44,700.00



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: _____

Project Manager: _____

E-Mail: _____

Telephone: _____

Fax: _____

Site Contact: _____

E-Mail: _____

Telephone: _____

Fax: _____

Send Invoice To:

Purchase Order Number: _____

Attention: _____

Company: _____

Address: _____

City / State / Zip: _____

E-Mail: _____

Telephone: _____

Fax: _____

Important Notes:

Completed By:

Signature: _____

Name: _____

Date: _____

Project Data Sheet

Distribute Reports as Follows:

Name: _____

Company: _____

Address: _____

City / State / Zip: _____

E-Mail: _____

Telephone: _____

Fax: _____

Name: _____

Company: _____

Address: _____

City / State / Zip: _____

E-Mail: _____

Telephone: _____

Fax: _____

Name: _____

Company: _____

Address: _____

City / State / Zip: _____

E-Mail: _____

Telephone: _____

Fax: _____

Name: _____

Company: _____

Address: _____

City / State / Zip: _____

E-Mail: _____

Telephone: _____

Fax: _____



915 Harger Road, Suite 330
Oak Brook, IL 60523
Phone (630) 684-9100
Fax (630) 684-9120
Website: <http://huffnhuff.com>

October 27, 2015

Martin C. Worman, PE
Assistant Head, Phase I Engineering
Christopher B. Burke Engineering, Ltd.
9575 W. Higgins Road, Suite 600
Rosemont, IL 60018

**Re: Preliminary Site Investigation (PSI) – Aptakisic Road Improvements
Buffalo Grove, Lake County, Illinois
Proposal No.: 81.PT00122.16**

Dear Mr. Worman:

Huff & Huff, Inc. (H&H), a subsidiary of GZA GeoEnvironmental, Inc. (Consultant) is pleased to submit this proposal to Christopher B. Burke, Engineering, Ltd. (Client) to perform a Preliminary Site Investigation (PSI) for the above referenced project. Specifically, the scope included within this proposal is to address the proposed improvements along Aptakisic Road from IL Route 83 to approximately 1,000 feet east of Buffalo Grove Road (approximately 7,600 feet in length).

Consultant has previously conducted a Preliminary Environmental Site Assessment (PESA), dated June 2013, which has been utilized as the basis for the scope within this proposal. Due to the age of this PESA, an update is required to confirm the original findings. This will include a database review and comparison to original findings and documentation within the PSI report. In addition, this proposal includes scope to also include assessment of project spoils and documentation for disposal consideration at a Clean Construction and Demolition Debris (CCDD) facility. This proposal presents our project approach, the scope of services, and cost.

1. PROJECT UNDERSTANDING

Consultant understands that the project scope is to reconstruct Aptakisic Road from a 2-lane rural roadway to a 5-lane urban roadway from IL Route 83 to Buffalo Grove Road. The PESA concluded that one (1) recognized environmental condition (REC) or potentially impacted property (PIP) exists along the corridor that has the potential to affect the reconstruction project with regard to construction worker safety, soil handling and soil disposal. Specifically, the Krouse site, located at 5163 Aptakisic Road was identified as a NIPC site identified for historic uncontrolled dumping.

2. SCOPE OF SERVICES

Task 1 – Preliminary Environmental Site Assessment (PESA) Update

Consultant will prepare a PESA Update for the added project area to the west of the previous western portion of the project corridor. The process will follow general protocols contained within:

- A Manual for Conducting Preliminary Environmental Site Assessments for Illinois Department of Transportation (IDOT) Highway Projects (Erdmann et al., 2012)
- ASTM International (ASTM) standard 1527-13
- The IDOTs Bureau of Design and Environment (BDE) Procedure Memorandum Number 10-07, *Special Waste Procedures*. This memo was incorporated into Chapter 27-3 of the IDOT BDE Manual in June 2012.
- IDOT Bureau of Local Roads and Streets (BLRS) Manual, Chapter 20-12, Special Waste, July 2013.
- Public Act 96-1416
- Clean Construction or Demolition Debris Fill Operations (CCDD) and Uncontaminated Soil Fill Operations: Amendments to 35 Illinois Administrative Code 1100. Effective on August 27, 2012.

A. Historical Research

Historical land use/ownership record will be developed from standard historical sources in the available reports. Either historical aerial photographs or historical maps, such as Sanborn Fire Insurance Maps, will be reviewed.

B. Site Evaluation

Current environmental features and conditions of sites adjacent to the ROW will be evaluated. A site walkover of potential right-of-way areas designated for excavation and/or acquisition will be conducted for first-hand evaluation of current environmental conditions within the project limits. All of the features and conditions listed above will be investigated and, as appropriate, documented in photographs. The land-use and housekeeping practices of adjacent properties also will be evaluated in accordance with ASTM protocols.

C. Database Search

A records review or database search will be conducted to update potential environmental concerns within the study area and compared to the findings of the 2011 PESA. It will include a search of standard state and federal environmental record databases in accordance with the specifications of ASTM standards. This search is based on the outline of the additional study area.

Specifically, Consultant will search each database to identify any potential sources requiring further investigation. As appropriate, Freedom of Information Act (FOIA) requests will be filed with the Illinois Environmental Protection Agency (IEPA) to obtain additional data pertaining to

identified sites. A local source, such as the fire department or building department, will be contacted regarding available records and area history.

D. Report Preparation

Consultant proposes to submit a brief memo style PESA update report citing the prior PESA document if there are changes to the original PESA findings. If conditions are consistent, the update will be contained within the PSI report.

Task 2 – Preliminary Site Investigation (PSI) and CCDD Sampling

Consultant utilized findings of the PESA to identify the scope/number of borings for the PSI and CCDD assessment. Based on historic information up to seven (7) soil borings are planned to address the findings of the PSI and for CCDD acceptance consideration.

Traffic control is anticipated when drilling along Aptakisic Road and Consultant has included costs for this service. Consultant also assumes that if local Village permits are required for the drilling activity that any fees associated with such permits would be waived.

The borings are planned for advancement to depths ranging from approximately 4 to 8 feet bgs, depending on the proposed improvement. These borings are needed to address soil management issues and soil samples will be collected by depth in the vicinity of the previously identified RECs, in 2 ft increments. Each individual sample will be screened with a Photoionization Detector (PID), and the highest results will be submitted for volatile organic compound (VOC) analyses. Samples, by depth, will be collected from the soil borings and, if appropriate, will be analyzed for the following parameters identified below.

A. Analytical

Boring locations where petroleum products or other volatile organic compounds represent the primary concern, samples will be field screened with a photoionization detector (PID). The sample with the highest PID reading in each boring will be analyzed for:

- **Volatile Organic Compounds** (up to 2 samples) – VOCs are volatile compounds found in gasoline and related to various solvents;
- **Benzene, Toluene, Ethyl benzene, and Xylene (BTEX)** (up to 2 samples) – BTEX are volatile compounds found in gasoline and other volatile petroleum-based products. Synthetic Precipitation Leaching Procedure (SPLP) lead analysis will be performed on the samples pending results for the total lead concentrations.
- **Polynuclear Aromatic Compounds (PNAs) and pH** (up to 4 samples) – PNAs are semi-volatile compounds commonly formed during incomplete combustion of organic compounds. PNAs can be formed by the combustion of wood, coal, and petroleum products. They are also found in less refined, nonvolatile petroleum products and can be used to identify potential for diesel or fuel oil contamination in soil.

Other field screening factors such as visual, or proximity to potential sources of known contamination to determine which samples will be analyzed to identify the presence of:

- **RCRA Heavy Metals** (up to 4 samples) – Federal environmental regulations identify eight (8) heavy metals as hazardous if present in a *solid waste* at concentrations above varying threshold concentrations. In addition, up to 2 select samples will be analyzed for SPLP/TCLP analysis for consideration as CCDD as necessary.

In addition, up to fourteen (14) samples will be analyzed for soil pH.

B. PSI Report Preparation

A PSI report summarizing the results of the soil sample collection activities and analytical results will be prepared.

Task 3 – CCDD Permitting

Since a REC/PIP was identified in the PESA, the PSI will further determine if this site and others identified in the PESA have the potential to affect the condition of soils encountered during the reconstruction project. Consultant will then complete and stamp Form 663 for portions of the project corridor where uncontaminated soils are identified, noting any exceptions based on results of both the PESA and PSI. The Client will contact Consultant if any odors, colors, etc. are noted during excavations or if a load is rejected from the areas certified clean.

Task 4 – QA/QC

Time will be allotted to conduct QA/QC reviews of the PSI report and CCDD document.

Task 5 – Project Management

This task covers items necessary to manage the project, scheduling, and coordination with the prime consultant. In addition, coordination with the laboratory and driller will be completed under this task.

3. PROJECT COSTS

The estimated man-hours and project costs are tabulated in the attached tables. It is assumed that the driller can access the boring locations. Traffic control costs have been included in the estimate with the assumption that this service will be required for work along Aptakisic Road. It is anticipated that all soil cuttings will be returned to the boring from which it originated. No disposal of waste material is anticipated from proposed soil borings.

4. SCHEDULE

We anticipate that work will begin for the PSI within 10 days of the Notice to Proceed and will be completed within 10 weeks from the start date.

Please indicate acceptance of this agreement by returning a signed copy of this agreement or a purchase order incorporating the terms of the agreement. We appreciate the opportunity to work with you and look forward to a successful completion of the project. If you have any questions concerning our proposed scope of services or fees, please contact us.

5. TERMS AND CONDITIONS FOR PROFESSIONAL SERVICES

© 2008 by GZA GeoEnvironmental, Inc.

Christopher B. Burke Engineering, Ltd.

Proposal No: 81.PT00122.16:

Site: Aptakisic Road - PSI

These Terms and Conditions, together with Consultant's Proposal, make up the Agreement between with Consultant, Christopher B. Burke Engineering, Ltd, named above.

1. Services. H&H will perform the services set forth in its Proposal and any amendments or change orders authorized by you. Any request or direction from you that would require extra work or additional time for performance or would result in an increase in H&H's costs will be the subject of a negotiated amendment or change order.

2. Standard of Care. H&H will perform the services with the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services at the same time under similar conditions in the same or similar locality. **NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING WARRANTY OF MARKETABILITY OR FITNESS FOR A PARTICULAR PURPOSE, IS MADE OR INTENDED BY H&H'S PROPOSAL OR BY ANY OF H&H'S ORAL OR WRITTEN REPORTS.**

3. Payment.

- a. Except as otherwise stated in the Proposal, you will compensate H&H for the services at the rates set forth in the applicable Proposal, amendment or change order; reimburse its expenses, which will include a communication fee calculated as a percentage of labor invoiced; and pay any sales or similar taxes thereon.
- b. Any retainer specified in H&H's Proposal shall be due prior to the start of services and will be applied to the final invoice for services.
- c. H&H will submit invoices periodically, and payment will be due within 20 days from invoice date. Overdue payments will bear interest at 1½ percent per month or, if lower, the maximum lawful rate. H&H may terminate its services upon 10 days' written notice anytime your payment is overdue on this or any other project and you will pay for all services through termination, plus termination costs. You will reimburse H&H's costs of collecting overdue invoices, including reasonable attorneys' fees.

4. Your Responsibilities.

- a. Except as otherwise agreed, you will secure the approvals, permits, licenses and consents necessary for performance of the services. If you are the owner or operator of the Site, you will provide H&H with all documents, plans, information concerning underground structures (including but not limited to utilities, conduits, pipes, and tanks), information related to hazardous materials or other environmental or geotechnical conditions at the site and other information that may be pertinent to the services or, if you are not the owner or operator of the Site, you agree to make reasonable efforts to obtain these same documents and provide them to H&H. Unless otherwise indicated in writing, H&H will be entitled to rely on documents and information you provide.
- b. If you use the services of a construction contractor at the Site, you agree to use best and reasonable efforts to include in your agreement(s) with the construction contractor provisions obligating the latter:
 - (i) to indemnify, defend and hold harmless, to the fullest extent permitted by law, you and H&H, its officers, employees and principals, for or on account of any claims, liabilities, costs and expenses, including attorneys' fees, arising out of or relating to the design or implementation of construction means, methods, procedures, techniques, and sequences of construction, including safety precautions or programs, of the contractor, or any of its subcontractors or any engineer engaged by it;

- (ii) to name you and H&H as additional insureds under general liability and builder's risk insurance coverages maintained by the contractor, or any of its subcontractors; and
- (iii) to require that all of its subcontractors agree and be bound to the obligations set forth in (i) and (ii) above.
- c. In the event that you are unable to secure such provisions in the agreement(s) with the construction contractor, you shall promptly notify H&H and H&H shall have the opportunity to negotiate with you reasonable substitute risk allocation and insurance indemnities and protections.

5. Right of Entry. You grant H&H and its subcontractor(s) permission to enter the site to perform the services. If you do not own the site, you represent and warrant that the owner has granted permission for H&H to enter the site and perform the services; you will provide reasonable verification on request; and you will indemnify H&H for any claims by the site owner related to alleged trespass by H&H or its subcontractors.

6. Reliance. The services, information, and other data furnished by you shall be at your expense, and H&H may rely upon all information and data that you furnish, including the accuracy and completeness thereof. You acknowledge that the quality of the services provided by H&H is directly related to the accuracy and completeness of the information and data that you furnish to H&H. **H&H's REPORTS ARE PREPARED FOR AND MADE AVAILABLE FOR YOUR SOLE USE. YOU ACKNOWLEDGE AND AGREE THAT USE OF OR RELIANCE UPON THE REPORT OR THE FINDINGS IN THE REPORT BY ANY OTHER PARTY, OR FOR ANY OTHER PROJECT OR PURPOSE, SHALL BE AT YOUR OR SUCH OTHER PARTY'S SOLE RISK AND WITHOUT ANY LIABILITY TO H&H.**

7. H&H Professionals. H&H employees or consultants may act as licensed, certified or registered professionals (including but not limited to Professional Engineers, Licensed Site or Environmental Professionals, or Certified Industrial Hygienists, collectively referred to in this section as "H&H Professionals") whose duties may include the rendering of independent professional opinions. You acknowledge that a federal, state or local agency or other third party may audit the services of H&H or other contractor/consultant(s), which audit may require additional services, even though H&H and such H&H Professionals have each performed such services in accordance with the standard of care set forth herein. You agree to compensate H&H for all services performed in response to such an audit, or to meet additional requirements resulting from such an audit, at the rates set forth in the applicable Proposal, amendment or change order.

8. Hazardous Materials; H&H "Not a Generator". Before any hazardous or contaminated materials are removed from the site, you will sign manifests naming you as the generator of the waste (or, if you are not the generator, you will arrange for the generator to sign). You will select the treatment or disposal facility to which any waste is taken. H&H will not be the generator or owner of, nor will it possess, take title to, or assume legal liability for any hazardous or contaminated materials at or removed from the site. H&H will not have responsibility for or control of the site or of operations or activities at the site other than its own. H&H will not undertake, arrange for or control the handling, treatment, storage, removal, shipment, transportation or disposal of any hazardous or contaminated materials at or removed from the site, other than any laboratory samples it collects or tests. You agree to defend, indemnify and hold H&H harmless for any costs or liability incurred by H&H in defense of or in payment for any legal actions in which it is alleged that H&H is the owner, generator, treater, storer or disposer of hazardous waste.

9. Limits on H&H's Responsibility. H&H will not be responsible for the acts or omissions of contractors or others at the site, except for its own subcontractors and employees. H&H will not supervise, direct or assume control over or the authority to stop any contractor's work, nor shall H&H's professional activities or the presence of H&H or its employees and subcontractors be construed to imply that H&H has authority over or responsibility for the means, methods, techniques, sequences or procedures of construction, for work site health or safety precautions or programs, or for any failure of contractors to comply with contracts, plans, specifications or laws. Any opinions by H&H of probable costs of labor, materials, equipment or services to be furnished by others are strictly estimates and are not a guarantee that actual costs will be consistent with the estimates.

10. Changed Conditions.

- a. You recognize the uncertainties relating to the furnishing of professional services, which often require a phased or exploratory approach, with the need for additional services becoming apparent during the initial services. You also

recognize that actual conditions encountered may vary significantly from those anticipated, that laws and regulations are subject to change, and that the requirements of regulatory authorities are often unpredictable.

- b. If changed or unanticipated conditions or delays make additional services necessary or result in additional costs or time for performance, H&H will notify you and the parties will negotiate appropriate changes to the scope of services, compensation and schedule.
- c. If no agreement can be reached, H&H will be entitled to terminate its services and to be equitably compensated for the services already performed. H&H will not be responsible for delays or failures to perform due to weather, labor disputes, intervention by or inability to get approvals from public authorities, acts or omissions on your part or any other causes beyond H&H's reasonable control, and you will compensate H&H for any resulting increase in its costs.

11. Documents and Information. All documents, data, calculations and work papers prepared or furnished by H&H are instruments of service and will remain H&H's property. Designs, reports, data and other work product delivered to you are for your use only, for the limited purposes disclosed to H&H. Any delayed use, use at another site, use on another project, or use by a third party will be at the user's sole risk, and without any liability to H&H. Any technology, methodology or technical information learned or developed by H&H will remain its property. Provided H&H is not in default under this Agreement, H&H's designs will not be used to complete this project by others, except by written agreement relating to use, liability and compensation.

12. Electronic Media. In accepting and utilizing any drawings, reports and data on any form of electronic media generated by H&H, you covenant and agree that all such electronic files are instruments of service of H&H, who shall be deemed the author, and shall retain all common law, statutory law and other rights, including copyrights. In the event of a conflict between the signed documents prepared by H&H and electronic files, the signed documents shall govern. You agree not to reuse these electronic files, in whole or in part, for any purpose or project other than the project that is the subject of this Agreement. Any transfer of these electronic files to others or reuse or modifications to such files by you without the prior written consent of H&H will be at the user's sole risk and without any liability to H&H.

13. Confidentiality; Subpoenas. Information about this Agreement and H&H's services and information you provide to H&H regarding your business and the site, other than information available to the public and information acquired from third parties, will be maintained in confidence and will not be disclosed to others without your consent, except as H&H reasonably believes is necessary: (a) to perform its services; (b) to comply with professional standards to protect public health, safety and the environment; and (c) to comply with laws and court orders. H&H will make reasonable efforts to give you prior notice of any disclosure under (b) or (c) above. You will reimburse H&H for responding to any subpoena or governmental inquiry or audit related to the services, at the rates set forth in the applicable Proposal, amendment or change order.

14. Insurance. During performance of the services, H&H will maintain workers compensation, commercial general liability, automobile liability, and professional liability insurance. H&H will furnish you certificates of such insurance on request.

15. Indemnification. You agree to hold harmless, indemnify, and defend H&H and its affiliates and subcontractors and their employees, officers, directors and agents (collectively referred to in this paragraph as "H&H") against all claims, suits, fines and penalties, including mandated cleanup costs and attorneys' fees and other costs of settlement and defense, which claims, suits, fines, penalties or costs arise out of or are related to this Agreement or the services, except to the extent they are caused by H&H's negligence or willful misconduct.

16. Limitation of Remedies.

- a. To the fullest extent permitted by law and notwithstanding anything else in this Agreement to the contrary, the aggregate liability of H&H and its affiliates and subcontractors and their employees, officers, directors and agents (collectively referred to in this paragraph as "H&H") for all claims arising out of this Agreement or the services is limited to \$50,000 or, if greater, 10% of the compensation received by H&H under this Agreement.
- b. You may elect to increase the limit of liability by paying an additional fee, such fee to be negotiated prior to the execution of this Agreement.

- c. Any claim will be deemed waived unless received by H&H within one year of substantial completion of the services.
- d. H&H will not be liable for lost profits, loss of use of property, delays, or other special, indirect, incidental, consequential, punitive, exemplary or multiple damages.
- e. H&H will not be liable to you or the site owner for injuries or deaths suffered by H&H's or its subcontractors' employees.
- f. You will look solely to H&H for your remedy for any claim arising out of or relating to this Agreement, including any claim arising out of or relating to alleged negligence or errors or omissions of any H&H principal, officer, employee or agent.

17. Disputes.

- a. All disputes between you and H&H shall be subject to non-binding mediation.
- b. Either party may demand mediation by serving a written notice stating the essential nature of the dispute, the amount of time or money claimed, and requiring that the matter be mediated within forty-five (45) days of service of notice.
- c. The mediation shall be administered by the American Arbitration Association in accordance with its most recent Construction Mediation Rules, or by such other person or organization as the parties may agree upon.
- d. No action or suit may be commenced unless mediation has occurred but did not resolve the dispute, or unless a statute of limitation period would expire if suit were not filed prior to such forty-five (45) days after service of notice.

18. Miscellaneous.

- a. Massachusetts law shall govern this Agreement.
- b. The above terms and conditions regarding Limitation of Remedies and Indemnification shall survive the completion of the services under this Agreement and the termination of the contract for any cause.
- c. Any amendment to these Terms and Conditions must be in writing and signed by both parties.
- d. Having received these Terms and Conditions, your oral authorization to commence services, your actions, or your use of the Report or Work Product constitutes your acceptance of them.
- e. This Agreement supersedes any contract terms, purchase orders or other documents issued by you.
- f. Neither party may assign or transfer this Agreement or any rights or duties hereunder without the written consent of the other party.
- g. Your failure or the failure of your successors or assigns to receive payment or reimbursement from any other party for any reason whatsoever shall not absolve you, your successors or assigns of any obligation to pay any sum to H&H under this agreement.
- h. These Terms and Conditions shall govern over any inconsistent terms in H&H's Proposal.
- i. The provisions of this Agreement are severable; if any provision is unenforceable it shall be appropriately limited and given effect to the extent it is enforceable.
- j. The covenants and agreements contained in this Agreement shall apply to, inure to the benefit of and be binding upon the parties hereto and upon their respective successors and assigns.

BOTH PARTIES HERETO WARRANT AND REPRESENT that they have full right, power, and authority to execute this Contract.

IN WITNESS THEREOF, the parties hereto have executed this Agreement as of the day and year first specified above.

CONSULTANT
HUFF & HUFF, INC.

CLIENT
CHRISTOPHER B. BURKE ENGINEERING LTD.



Signature

Signature

By Linda L. Huff, P.E.
Typed Name

Typed Name

Principal
Officer's Title

Officer's Title

October 27, 2015
Date

Date



Payroll Escalation Table
Fixed Raises

FIRM NAME Huff & Huff, Inc.
PRIME/SUPPLEMENT Christopher B. Burke Engineering

DATE 10/27/2015
PTB NO. _____

CONTRACT TERM 12 MONTHS
START DATE 11/1/2015
RAISE DATE 3/1/2016

OVERHEAD RATE 148.09%
COMPLEXITY FACTOR 0
% OF RAISE 3.00%

ESCALATION PER YEAR

11/1/2015 - 3/1/2016

3/2/2016 - 11/1/2016

4
12

8
12

= 33.33%

68.67%

= 1.0200

The total escalation for this project would be:

2.00%



Payroll Rates

FIRM NAME	Huff & Huff, Inc.
PRIME/SUPPLEMENT	<u>Christopher B. Burke Engineering</u>
PTB NO.	

DATE 10/27/2015

ESCALATION FACTOR	2.00%
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[illegible]



Illinois Department of Transportation

Cost Estimate of Consultant Services (CPFF)

Firm Huff & Huff, Inc.
Route Aptakisic Road
Section 09-00088-18-WR
County Lake
Job No.
PTB & Item

Date 10/27/2015

Overhead Rate 148.09%

Complexity Factor 0

Item	Manhours	Payroll	Overhead & Fringe Benefits	In-House Direct Costs	Fixed Fee	Outside Direct Costs	Services By Others	Total	% of Grand Total
PESA Update	16	530.51	785.64	57.33	199.15	195.00	0.00	1,767.63	12.68%
PSI/CCDD Sampling	50	1,636.38	2,423.31	105.20	603.91	1,818.00	4,000.00	10,586.79	75.97%
CCDD Permitting	7	230.33	341.09	11.70	84.55	0.00	0.00	667.67	4.79%
QA/QC	3	153.86	227.86	0.00	55.35	0.00	0.00	437.07	3.14%
Project Management	4	167.73	248.39	0.00	60.34		0.00	476.46	3.42%
TOTALS	80	2,718.81	4,026.28	174.23	1,003.30	2,013.00	4,000.00	13,935.62	100.00%

Method of Compensation:

- ☒ 14.5%[DL + R(DL) + OH(DL) + IHDC]
☐ 14.5%[DL + R(DL) + 1.4(DL) + IHDC]
☐ 14.5%[(2.3 + R)DL + IHDC]
☐ Specific Rate
☐ Lump Sum

Average Hourly Project Rates

Route Aptakisic Road
Section 09-00088-18-WR
County Lake
Job No.
PTB/Item

Consultant Huff & Huff, Inc.

Date 10/27/2015

Sheet 1 **OF** 1

Payroll Classification	Avg Hourly Rates	Total Project Rates			PESA Update			PSI/CCDD Sampling			CCDD Permitting			QA/QC			Project Management		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	70.00	1	1.25%	0.88										1	33.33%	23.33			
Senior Geotechnical Cons.	58.10	0																	
Senior Consultant	53.95	0																	
Senior Geologist PM	54.33	0																	
Senior Engineering PM	39.25	0																	
Senior Scientist PM	41.93	10	12.50%	5.24	1	6.25%	2.62	2	4.00%	1.68	1	14.29%	5.99	2	66.67%	27.95	4	100.00%	41.93
Senior Planning PM	44.38	0																	
Engineering PM	37.76	0																	
Geologist PM	39.24	0																	
Scientist PM II	33.60	0																	
Scientist PM I	40.46	0																	
Asst. PM Engineer II	37.27	0																	
Asst. PM Engineer I	29.43	0																	
Asst. PM Planning	31.39	0																	
Sr. Technical Specialist	42.67	2	2.50%	1.07	1	6.25%	2.67	1	2.00%	0.85									
Sr. CADD Specialist	30.90	5	6.25%	1.93	1	6.25%	1.93	4	8.00%	2.47									
Environmental Engineer	32.37	59	73.75%	23.88	12	75.00%	24.28	42	84.00%	27.19	5	71.43%	23.12						
Environmental Scientist E1	24.52	0																	
Environmental Scientist E2	22.56	0																	
Administrative Managers	38.01	0																	
Sr. Administrative Asst.	26.52	3	3.75%	0.99	1	6.25%	1.66	1	2.00%	0.53	1	14.29%	3.79						
Administrative Assistant	21.58	0																	
Senior PM II	58.84	0																	
Senior PM I	39.47	0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
TOTALS		80	100%	\$33.99	16	100%	\$33.16	50	100%	\$32.73	7	100%	\$32.90	3	100%	\$51.29	4	100%	\$41.93

HUFF & HUFF, INC.

SUMMARY OF INHOUSE DIRECT COSTS

Project: CBBEL - Aptakisic Rd PSI CCDD

DIRECT

Task 1 - PESA Update

Trips - Company	65 miles	x	1	x	\$	0.575	=	\$	37.38
Tolls			6	x	\$	1.00	=	\$	6.00
Reproduction	3 sets	x	100	x	\$	0.03	=	\$	9.00
Color copies	3 sets	x	10	x	\$	0.11	=	\$	3.30
Photo sheets	3 sets	x	5	x	\$	0.11	=	\$	1.65
			0	x	\$	-	=	\$	-
Task Total									\$ 57.33

Task 2 - PSI/CCDD Sampling

Trips - Company	65 miles	x	2	x	\$	0.575	=	\$	74.75
Tolls			12	x	\$	1.00	=	\$	12.00
Reproduction	3 sets	x	150	x	\$	0.03	=	\$	13.50
Color copies	3 sets	x	10	x	\$	0.11	=	\$	3.30
Photo sheets	3 sets	x	5	x	\$	0.11	=	\$	1.65
			0	x	\$	-	=	\$	-
Task Total									\$ 105.20

Task 3 - CCDD Permitting

Reproduction	3 sets	x	75	x	\$	0.03	=	\$	6.75
Color copies	3 sets	x	10	x	\$	0.11	=	\$	3.30
Photo sheets	3 sets	x	5	x	\$	0.11	=	\$	1.65
			0	x	\$	-	=	\$	-
Task Total									\$ 11.70

Task 4 - QA/QC

0	x	\$	-	=	\$	-
Task Total						\$ -

Task 5 -Project Management

0	x	\$	-	=	\$	-
Task Total						\$ -

GRAND TOTAL \$ 174.23

HUFF & HUFF, INC.

SUMMARY OF OUTSIDE DIRECT COSTS

Project: CBBEL - Aptakisic Rd PSI CCDD

					<u>OUTSIDE</u>
Task 1 - PESA Update					
Federal Express	1	x	\$	20.00	= \$ 20.00
Records Search	1	x	\$	175.00	= \$ 175.00
	0	x	\$	-	= \$ -
				Task Total	\$ 195.00
Task 2 - PSI/CCDD Sampling					
Federal Express	1	x	\$	20.00	= \$ 20.00
VOCs	2	x	\$	125.00	= \$ 250.00
BTEX	2	x	\$	65.00	= \$ 130.00
5035 kits (voc/btex)	4	x	\$	12.00	= \$ 48.00
PNAs	4	x	\$	105.00	= \$ 420.00
RCRA total	4	x	\$	85.00	= \$ 340.00
pH	14	x	\$	20.00	= \$ 280.00
RCRA SPLP	2	x	\$	165.00	= \$ 330.00
				Task Total	\$ 1,818.00
Task 3 - CCDD Permitting					
	0	x	\$	-	= \$ -
				Task Total	\$ -
Task 4 - QA/QC					
	0	x	\$	-	= \$ -
				Task Total	\$ -
GRAND TOTAL					\$ 2,013.00

HUFF & HUFF, INC.
SUMMARY OF SERVICES BY OTHERS
 Project: CBBEL - Aptakisic Rd PSI CCDD

OUTSIDE

Task 1 - PESA Update

	0 x	\$ -	=	\$ -	
		Task Total		\$ -	

Task 2 - PSI/CCDD Sampling

Driller (day)	1 x	\$ 2,000.00	=	\$ 2,000.00	
Traffic Control (day)	1 x	\$ 2,000.00	=	\$ 2,000.00	
		Task Total		\$ 4,000.00	

Task 3 - CCDD Permitting

	0 x	\$ -	=	\$ -	
		Task Total		\$ -	

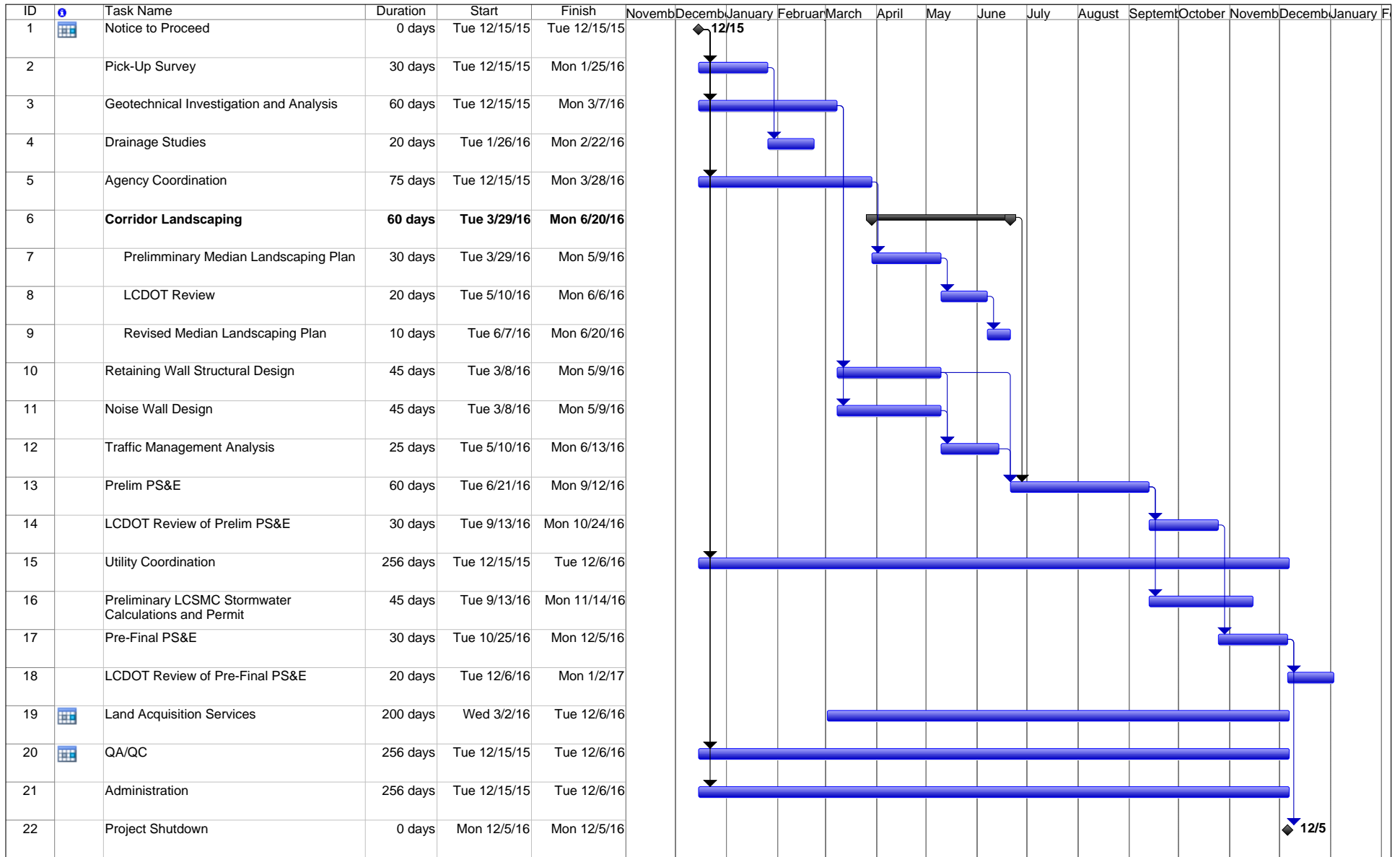
Task 4 - QA/QC

	0 x	\$ -	=	\$ -	
		Task Total		\$ -	

Task 5 -Project Management

	0 x	\$ -	=	\$ -	
		Task Total		\$ -	

GRAND TOTAL	\$	4,000.00
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Project: Project1.mpp
Date: Tue 10/27/15

Task

Split

Milestone

Summary

Project Summary

External Tasks

External Milestone

Inactive Task

Inactive Milestone

Inactive Summary

Manual Task

Duration-only

Manual Summary Rollup

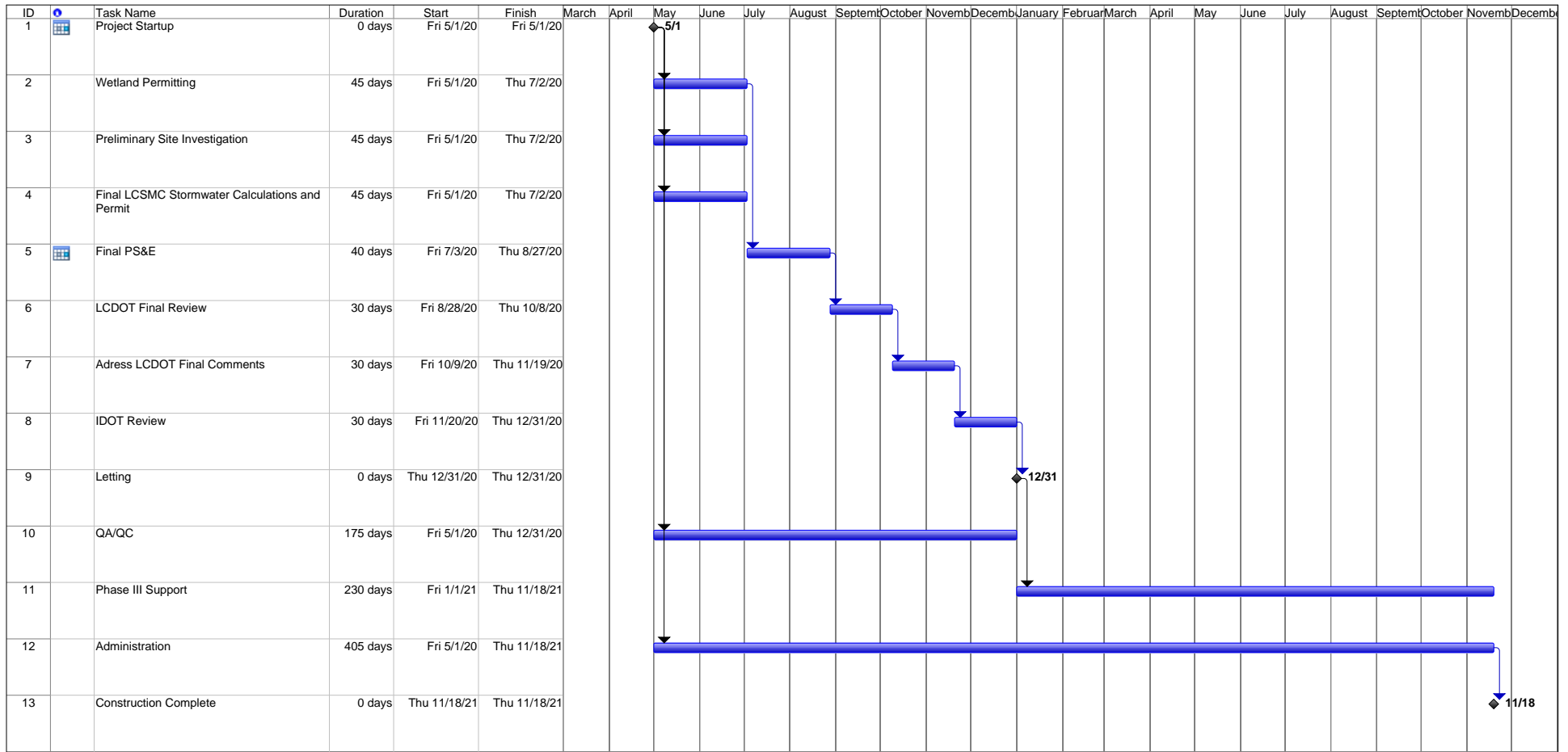
Manual Summary

Start-only

Finish-only

Progress

Deadline



Project: Project2.mpp
Date: Tue 10/27/15

Task

Split

Milestone

Summary

■

 Project Summary

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 External Tasks

◆

 External Milestone

■

 Inactive Task

■

 Inactive Milestone

■

 Inactive Summary

◆

 Manual Task

■

 Duration-only

◆

 Manual Summary Rollup

■

 Manual Summary

■

 Start-only

■

 Finish-only

■

 Progress

■

 Deadline

↓

Page 1