

**104TH AVENUE MULTI-USE PATH
159TH STREET TO 163RD PLACE**

**PHASE II SCOPE OF SERVICES
AND COST ESTIMATE OF CONSULTANT SERVICES**

VILLAGE OF ORLAND PARK

September, 2017

PREPARED BY:

LOCHNER

Village of Orland Park

104th Avenue Multi-Use Path

Phase II Design Services

**Scope of Services
September 11, 2017**

Phase II Design Engineering Services

This work will comprise the preparation of plans, specifications, and estimates for the construction of a new multi-use path and associated modifications to 104th Avenue from 159th Street to 163rd Place. This work will also include geotechnical engineering and obtaining the necessary permitting and clearances required for the regulatory approval of the proposed improvements. This Scope of Services has been prepared by H. W. Lochner, Inc. (HWL) and the following sub-consultants: Geo Services, Inc. (GSI) for geotechnical items and Huff & Huff, Inc. (H&H), a subsidiary of GZA GeoEnvironmental, Inc. for environmental and permitting services,

The Phase II scope is based on the Phase I plans being completed to an approximately 30% level of detail. Three (3) submittals are considered (60%, 90% and final) for this scope of services.

The scope of the Phase II Design for the construction of a new multi-use path and associated modifications to 104th Avenue from 159th Street to 163rd Place includes the preparation of following major items:

Title Sheet

The location map on the title sheet will be developed based on maps available on IDOT's website.

Typical Sections

Existing and proposed typical sections will be provided for the roadway modifications and multi-use path.

Alignment, Ties & Benchmarks

A plan sheet indicating control points and benchmarks will be provided.

Notes/Index/Standards

General Notes will be included for the proposed work. Standards will be updated at each submittal.

Summary of Quantities

HWL will provide and update the SOQ at each of 3 submittals.

Schedule of Quantities

HWL will provide and update the Schedule at each of 3 submittals.

Plan and Profile Sheets (3 sheets at 1" = 50')

HWL will prepare 3 plan and profile sheets for the roadway modifications and multi-use path. Removal items and drainage and utility items will be shown on the plan and profile sheets.

Maintenance of Traffic

HWL will prepare maintenance of traffic plans for 104th Street assuming that 104th will be open for traffic during construction. 1 major stage of traffic will be assumed. Staging plans will consist of a General Notes Sheet, Typical Sections for each stage, and 1"=50' plan sheets for each stage.

Pavement Markings and Signing (3 sheets at 1" = 50')

HWL will provide plan sheets containing final pavement markings and signing.

Erosion and Sediment Control Plans

HWL will provide plan sheets for Erosion and Sediment Control for each stage of construction (1" = 50'). These plans will include standard erosion and sediment details from the Illinois Urban Manual.

Drainage Schedules

Prepare schedules for proposed drainage structures and sewers.

Special Details

Lochner will prepare special details for the following:

- Modification to twin barrel 5'x 7' box culvert located approximately 500' south of 159th Street per findings of Bridge Condition Report
- Modification to 72" diameter concrete culvert located approximately 500' north of 163rd Place
- Slope Stabilization Details
- Details for construction of embankment in areas adjacent to wetlands/standing water
- Special Grading Details for compensatory storage

Cross sections

HWL will provide cross sections at 100' intervals at the following locations (1 major construction stage assumed):

- Full Sections every 100' along 104th Street
- Half sections at each driveway
- Full sections at cross road culverts

Earthwork tables will be provided, including topsoil and unsuitable soil on project cross sections.

Drainage Calculations

The drainage design scope items are limited to the following:

- Any necessary modifications to the Phase 1 inlet spacing calculations
- Storm sewer sizing calculations
- Compensatory Storage Calculations

Barrier Warrants

HWL will prepare a barrier warrant analysis for the proposed guardrail construction.

Coordination with Cook County Department of Transportation and Highways

HWL will coordinate with Cook County Department of Transportation and Highways to address outstanding review comments/issues from the Phase I study. HWL will meet with the County and coordinate design issues during the Phase II design process.

Potential Geometric Modifications to 104th Avenue

HWL will study potential geometric modifications to 104th Avenue due to potential concerns regarding the use of a steep (1.5:1 H:V in lieu of 1:2) stabilized embankment foreslope along the east side of the proposed multi-use path. The steeper slope is proposed to be used for approximately 900 feet at the north project limits to avoid narrowing lane widths on 104th Avenue, narrowing the median, narrowing the shoulder, or constructing a retaining wall on very poor soils. The steeper slope will not require extending the existing load transfer platform and would limit the floodplain and wetland impacts.

HWL and Geo Services, Inc. will coordinate with Cook County and the Village of Orland Park to address concerns regarding the proposed stabilized steep slope. At the request of the County and as directed by the Village, potential geometric modifications will be investigated to avoid the use of the steeper foreslope. The primary modification would be to narrow the median as much as feasible and provide required tapers to allow for the multi-use path to be shifted to the west.

Special Provisions

HWL will review and provide current check sheets at each of 3 submittals. HWL will review the list of coded pay items at each submittal and develop project-specific special provisions as needed, including the Stormwater Pollution Prevention Plan.

Estimate of Time and Estimate of Cost

HWL will provide and update the estimate at each of 3 submittals

Bid Document Coordination with IDOT

HWL will coordinate with IDOT Local Roads on the preparation of necessary bid document forms and any required updates to special provisions at the time of letting.

Meetings / Field Checks / Coordination

This scope is limited to the following meetings and field checks:

Field Checks

Performing a maximum 2 Field Checks

Coordination Meetings

Attendance at 10 meetings total which includes IDOT, Cook County Department of Transportation and Highways, the Village of Orland Park Local agencies, Regulatory/Permitting Agencies, and Utility Companies.

Geotechnical

See attached scope of services from Geo Services Inc.

Environmental and Permitting

See attached scope of services from Huff & Huff, Inc. (H&H), a subsidiary of GZA GeoEnvironmental, Inc.

QA/QC

The project QA/QC will be provided in accordance with the approved project QA/QC plan.

Administration/Management

HWL will provide Administration and Management consisting of the following:

- Invoicing & Progress reports
- Correspondence & Documentation
- Sub-Consultant Monitoring
- Sub-Consultant Coordination
- Disposition of Comments

Exclusions

The following services are excluded from the engineering scope of services to be provided:

- Plat and Legals (no land acquisition needed)
- Design of modifications to the existing load transfer platform
- Phase III Services
- Value Engineering Study
- Design of Utility Relocations
- Pavement Design
- Intersection Design Studies
- Phase II Intersection Design
- Lighting Design
- Landscaping Design
- 3D Model
- Public Involvement
- Developing Intergovernmental Agreements
- Structure Condition Reports
- Preliminary Bridge Design and Hydraulic Report

**104TH AVENUE MULTI-USE PATH
159TH STREET TO 163RD PLACE**

COST ESTIMATE OF CONSULTANT SERVICES

PAYROLL ESCALATION TABLE
FIXED RAISES
COST PLUS FIXED FEE

FIRM NAME Lochner
PRIME/SUPPLEMENT Prime

CONTRACT TERM
START DATE
RAISE DATE

12 MONTHS
10/1/2017
7/1/2018

DATE 09/11/17
PTB NO.

OVERHEAD RATE
COMPLEXITY FACTOR
% OF RAISE

170.44%
0
3.00%

ESCALATION PER YEAR

10/1/2017 - 7/1/2018
9
12

7/2/2018 - 10/1/2018
3
12

= 75.00%
= 1.0075

25.75%

The total escalation for this project would be:

0.75%

PAYROLL RATES

FIRM NAME
PRIME/SUPPLEMENT
PSB NO.

Lochner
Prime

DATE
09/11/17

ESCALATION FACTOR 0.75%

CLASSIFICATION	CURRENT RATE	CALCULATED RATE
Senior Project Manager	\$75.00	\$75.56
Project Manager	\$61.73	\$62.19
Project Engineer	\$50.44	\$50.82
Engineer	\$35.15	\$35.41
Structural Engineer	\$35.75	\$36.02
CAD Technician	\$32.43	\$32.67
Clerical	\$33.65	\$33.90

Subconsultants

FIRM NAME Lochner
PRIME/SUPPLEMENT Prime
PSB NO. _____

DATE 09/11/17

NAME	Direct Labor Total	Contribution to Prime Consultant
Geo Services, Inc.	8,934.84	893.48
Huff & Huff, Inc.	16,161.59	1,616.16
Total	25,096.43	2,509.64

COST PLUS FIXED FEE COST ESTIMATE OF CONSULTANT SERVICES

FIRM

Lochner

DATE

09/11/17

PSB

PRIME/SUPPLEMENT

OVERHEAD RATE

1.7044

Prime

COMPLEXITY FACTOR

100

DBE 5.45%

AVERAGE HOURLY PROJECT RATES

FIRM Lochner
PSB
PRIME/SUPPLEMENT Prime

DATE 09/11/17

SHEET 1 OF 1

**104TH AVENUE MULTI-USE PATH
159TH STREET TO 163RD PLACE**

SUBCONSULTANTS

**PAYROLL ESCALATION TABLE
FIXED RAISES**

FIRM NAME
PRIME/SUPPLEMENT

Geo Services, Inc.
Prime

DATE 09/11/17
PTB NO.

CONTRACT TERM
START DATE
RAISE DATE

12 MONTHS
10/1/2017
7/1/2018

OVERHEAD RATE
COMPLEXITY FACTOR
% OF RAISE

197.97%
0
3.00%

ESCALATION PER YEAR

10/1/2017 - 7/1/2018

7/2/2018 - 10/1/2018

9
12

3
12

= 75.00%
= 1.0075

25.75%

The total escalation for this project would be:

0.75%

PAYROLL RATES

FIRM NAME
PRIME/SUPPLEMENT
PSB NO.

Geo Services, Inc. DATE
Prime

09/11/17

ESCALATION FACTOR 0.75%

CLASSIFICATION	CURRENT RATE	CALCULATED RATE
Principal Engineer	\$70.00	\$70.53
Principal Geotechnical Eng.	\$70.00	\$70.53
Project Manager	\$63.25	\$63.72
Senior Geotechnical Eng.	\$56.00	\$56.42
CADD Supervisor	\$43.25	\$43.57
Engineering Geologist	\$42.75	\$43.07
Senior Project Engineer	\$38.00	\$38.29
Project/Field Engineer	\$34.50	\$34.76
Admin. Assistant	\$26.25	\$26.45

COST PLUS FIXED FEE COST ESTIMATE OF CONSULTANT SERVICES

**FIRM
PSB
PRIME/SUPPLEMENT**

Geo Services, Inc.

OVERHEAD RATE COMPLEXITY FACTOR

DATE

DF-824-039
09/11/12/04

DBE 100.00%

DBE

AVERAGE HOURLY PROJECT RATES

FIRM	<u>Geo Services, Inc.</u>
PSB	<u>Prime</u>
PRIME/SUPPLEMENT	

DATE 09/11/17

SHEET 1 OF 1



A Subsidiary of GZA

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August 25, 2017

Andy McKenna, P.E., CFM, CPESC
H.W. Lochner, Inc.
225 West Washington Street, 12th Floor
Chicago, IL 60606

**Re: Environmental Services for
104th Avenue Multi-Use Path from 159th to 163rd Place – Phase II Engineering
Village of Orland Park, Cook County, Illinois
Proposal No.: 81.PT00100.18**

Dear Mr. McKenna:

Huff & Huff, Inc. (H&H) a subsidiary of GZA GeoEnvironmental, Inc. is pleased to submit this proposal to H.W. Lochner, Inc. (Client) to provide environmental services for the proposed multi-use path on 104th Street from 159th Street to 163rd Place in the Village of Orland Park, Cook County, Illinois.

In 2016, H&H completed wetland delineations and a Preliminary Environmental Site Assessment (PESA) as part of Phase I of the proposed project. This proposal presents our project approach, the scope of services, cost, and schedule for completing the project.

1. PROJECT UNDERSTANDING

The Village of Orland Park is proposing a bike path along 104th Avenue connecting an existing bike path along 104th Avenue, south of 163rd Place, to a bike path along 159th in the Village of Orland Park, Cook County, Illinois. It is anticipated STP funding will be provided for this project and Right-of-Way (ROW) acquisition will occur. H&H has been requested to provide the following services:

- U.S. Army Corps of Engineers (USACE) wetland permitting
- Endangered species review
- Cook County Metropolitan Water Reclamation District (MWRD) wetland permitting
- Illinois Department of Natural Resources (IDNR) Office of Water Resources (OWR) floodway permitting
- Preliminary Site Investigation (PSI)

Based on a 2016 wetland delineation conducted by H&H, wetland impacts to Sites 1 and W1 are anticipated and a permit from the U.S. Army Corps of Engineers (USACE) will be needed. Additional permitting needs may be required with the MWRD and the IDNR OWR for floodway compensatory storage issues.

A 2016 PESA by H&H recommended that a PSI would not be required. However, an October 2016 PESA by the Illinois State Geological Survey (ISGS) indicated that a PSI would be required if the proposed project will include excavation or subsurface utility relocation on existing ROW adjoining a Recognized Environmental Conditions (REC) site. Specifically, ISGS PESA #3296 identified site # 3296-4 (Pond and Vacant Land present on IEMA list, located at the southeast

corner of 159th Street and 104th Avenue) as a site containing a REC. In addition, if construction spoils are anticipated for remaining portions of the corridor under local jurisdiction, assessment of the spoils for off-site final disposition consideration at a clean construction and demolition debris (CCDD) facility is necessary.

2. SCOPE OF SERVICES

Task 1 – USACE Wetland Permitting

Permits for impacts to jurisdictional “Waters of the U.S.” (WOUS) and/or wetlands are issued through the Chicago District, USACE in Cook County. It is anticipated that impacts to Sites 1 and W1 are under the jurisdiction of the Chicago District, USACE. This scope of work includes the tasks necessary to obtain a Regional Permit (RP).

H&H will complete and submit the Joint Application form and other necessary information to obtain a permit from the USACE for impacts to WOUS and/or wetlands. The USACE will coordinate with the following agencies during the review of the Joint Application as required:

- U.S. Army Corps of Engineers (USACE)
- U.S. Fish & Wildlife Service (FWS)
- Illinois Department of Natural Resources (IDNR)
- Illinois Department of Natural Resources/Office of Water Resources (IDNR/OWR)
- Illinois Environmental Protection Agency (IEPA)
- Illinois Historic Preservation Agency (IHPA)

The Chicago District of the USACE has a RP program meant to simplify and expedite specific types of projects. Most RPs have automatically authorized Section 401 Water Quality Certification (WQC) from the IEPA. It is anticipated that this project will qualify for a RP. If the project does not qualify for a RP, an individual permit (IP) will be required. IPs require a public notice period as well as separate Water Quality Certification (WQC) from the IEPA. The IP process can take significantly more time than the RP process. This scope of work assumes the project will qualify under the RP program. This scope does not include an IP.

Within the regional permit program, permits are classified as either Category I or Category II. Category I includes activities with minimal impacts requiring review by the USACE. Category II includes activities with minimal impacts requiring more rigorous review by the USACE and coordination with the resource agencies.

RP 2 authorizes the construction of recreation projects, including golf courses, sports fields, playgrounds, parks and multi-use trails and associated infrastructure, such as roads, utilities, and detention areas. To meet the requirements of the regional permit, impacts to WOUS shall not exceed 1.0 acre and impacts over 0.10 acre require compensatory mitigation. It is anticipated that the proposed multi-use trail would meet the conditions of RP2.

It is H&H’s understanding that if necessary, impacts to wetlands will be mitigated via a purchase of wetland bank credits. H&H will identify wetland mitigation banks with available credits and facilitate the purchase of the credits by Client. Costs associated with developing mitigation plans or maintenance and monitoring plans are not included.

This scope includes a pre-application meeting with the USACE.

This task includes costs for one initial submittal and one re-submittal of the Section 404 permit application, if necessary. This task also assumes that the permit submittal to the USACE will be completed electronically through the USACE online portal and that one paper copy will be provided to the USACE.

Task 2 – Endangered Species Review

Endangered species review is also required through the FWS under Section 7 of the Federal Endangered Species Act if a federal action is undertaken (the USACE issuing a permit). The FWS no longer conducts project-by-project review upon request; rather, the applicant is required to conduct an assessment and determine if impacts to federally listed species will occur as a result of the proposed project. To conduct this review, applicants are required to conduct the FWS Section 7 Consultation and document their findings. H&H will prepare the Section 7 Consultation letter.

Coordination with the IDNR for state threatened and endangered species is initiated through the submittal of the Ecological Compliance Assessment Tool (EcoCAT), requesting information on project threatened or endangered species. A fee of \$500 may be assessed by the IDNR for the use of EcoCAT. The EcoCAT fee, if assessed by the IDNR, will be paid by Client.

Based on the initial review of the FWS threatened and endangered species list for Cook County, Illinois, threatened and endangered species are not anticipated to be impacted by the proposed multi-use bike path. If species surveys are required, they can only be completed during certain portions of the year, depending on the species. Because of the uncertainty of the types of species possibly present, estimating costs for surveys at this time is not possible. Therefore, if surveys are required by the agencies after coordination, a more suitable cost estimate can be prepared at that time.

It is H&H's understanding that Client has requested biological clearances through the IDOT's Environmental Survey Request (ESR), which would include necessary coordination for the FWS Section 7 Consultation and IDNR EcoCAT. If needed, H&H will provide any additional endangered species review coordination.

Task 3 – Cook County MWRD Wetland Permitting

On July 10, 2014, Cook County passed the *Cook County Watershed Management Ordinance* which regulated isolated wetlands in Cook County. As a result, the MWRD regulates all isolated wetlands and WOUS not under the jurisdiction of the USACE. Impacts to isolated wetlands and WOUS will require a permit through MWRD and this task includes coordination with MWRD as/if necessary for the riparian submittal. It is not anticipated that isolated wetlands will be impacted as part of this project.

The *Cook County Watershed Management Ordinance* permit process is initiated by the submittal of a Watershed Management Permit Application Form, required for developments that result in any of the following:

- Impacts to flood protection areas,
- Direct and indirect impacts to isolated wetlands and/or WOUS not under the jurisdiction of the USACE,
- One half (0.5) acre of disturbance,
- And developments that substantially improve the regulatory floodplain when altering existing buildings.

For activities that have minimal wetland impacts (less than 0.10 acre of impact to non-HQAR wetlands), a standard isolated wetland submittal is required. For activities with impacts to isolated wetlands and/or WOUS greater than

or equal to 0.10 acre or activities that impact HQAR isolated wetlands and/or WOUS, a more rigorous review is required. No mitigation plans are included in this scope of services.

H&H will review and provide guidance to Client for the wetland, riparian, and buffers portion of the stormwater ordinance permit submittals.

Task 4 – IDNR OWR Floodway Permitting

Any proposed activities in the Public Waters of the state and/or in the floodways of Illinois streams must apply for a permit from the IDNR OWR in accordance with the Rivers, Lakes and Streams Act (see 615 ILCS 5/35).

A permit under Part 3708 is required for construction activities within the floodway of streams draining one square mile or greater in an urban area or ten square miles or greater in a rural area in Cook (excluding City of Chicago), DuPage, Kane, Lake, McHenry, and Will Counties. In general, the applicant must demonstrate that the appropriate use will not reduce floodway conveyance or storage, and will not increase velocities and flood heights. Some minor construction activities regulated under the Part 3708 rules are automatically authorized by Regional Permit No. 3.

H&H will compile the IDNR OWR permit and the Client will provide all engineering and hydrologic analysis to show the project will not reduce floodway conveyance or storage, and will not increase velocities and flood heights.

On January 15, 2014, a new permit application fee went into effect at the IDNR OWR. All applications and written inquiries received will be reviewed free of charge to determine whether or not the Public Water, dam and/or floodway work proposed requires authorization by the Department, so long as sufficient information is provided for the Department to make that determination. Any fees associated with the permit application fee will be paid by Client.

Task 5 – Soil and Water Conservation District Coordination

The Will-South Cook County Soil and Water Conservation District (WSCSWCD) is required to review projects in Will and Cook counties for erosion and sedimentation control measures. If wetland impacts are unavoidable, the WSCSWCD reviews the entire project for erosion control protection (not just the wetland areas). The USACE issuance of a permit to impact wetlands will be contingent upon approval of the erosion and sediment control plan by the WSCSWCD. The WSCSWCD review is initiated under a separate application process.

H&H will assist Client and compile the erosion control submittal to the WSCSWCD. Client will provide soil erosion and sediment control plans. Any fees associated with the erosion control submittal will be paid by Client.

Task 6 – Preliminary Site Investigation (PSI) and CCDD Sampling

H&H utilized the findings of PESA(s) to identify locations for soil sampling related to PIPs identified along the corridor. The specific focus for soil sampling activities will be in areas of proposed excavation and will also account for completing appropriate CCDD LPC-Form documentation (LPC-663 for contaminants of concern associated with identified sites and soil pH only for areas of without PIPs).

Based on our understanding of the project corridor and a preliminary review of information related to PIPs, we have budgeted for a single-day of field effort to conduct a series of soil borings to account for the PIP(s) and also to provide coverage for CCDD documentation. Soil samples will be collected for laboratory analysis of

contaminants of concern associated with identified PIP(s) and also soil pH. In addition, non-PIP areas with excavation will also be sampled for soil pH for CCDD purposes.

Due to the nature of this roadway, direct costs for traffic control services have been included for safety while working within the right-of-way. It is currently unknown if local permits are necessary for conducting the borings. If so, it is understood that Client will assist H&H in coordination with Orland Park to obtain any necessary permits and that any fees would be waived.

Task 7 – Analytical

Since the sampling protocol will be based on the findings of the PESA(s), below is presented for budgetary purposes and is also based on a preliminary review of sites that are evident along the project corridor. Soil samples will be field screened with a photoionization detector (PID) and the sample with the highest PID reading in each boring will be analyzed for:

- **Volatile Organic Compounds (VOCs)** (up to 1 sample) – VOCs are volatile compounds found in gasoline and related to various solvents;
- **Benzene, Toluene, Ethyl benzene, and Xylene (BTEX)** (up to 1 samples) – BTEX are volatile compounds found in gasoline and other volatile petroleum-based products; and
- **Polynuclear Aromatic Compounds (PNAs)** (up to 2 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:

- **Select Total RCRA Metals** (up to 2 samples) – Federal environmental regulations identify eight (8) heavy metals as hazardous if present in a *solid waste* at concentrations above varying threshold concentrations. Select soil samples collected for this project will be analyzed for the presence of metals believed to be present and associated with the RECs (PIPs). Total lead is the only metal associated with LUST sites. No other metals will be analyzed. These select samples will be analyzed for consideration as Clean Construction and Demolition Debris (CCDD).
- **SPLP Metals** (up to 1 sample) – The SPLP, or Synthetic Precipitation Leaching Procedure is designed to determine the mobility of both organic and inorganic analytes present in solid wastes. This analytical method will only be used if required to determine final disposition of spoils if a sample indicates elevated levels of metals which require further analysis for disposal.

In addition, multiple soil samples will be analyzed for pH using a field meter, consistent with CCDD sampling requirements, to evaluate the acidic or alkaline characteristics of a liquid or solid, with select samples submitted for laboratory analysis confirmation (up to 6). High concentrations of either acid or alkaline materials introduced into the environment can impair the effected environment. Soil pH is important in assessing metal concentrations relative to migration to groundwater according to TACO Tier 1 objectives and the CCDD Maximum Allowable Concentrations (MACs).

Task 8 – PSI Report Preparation (Including LPC-Form Documentation)

One report summarizing the results of the PSI will be prepared, which will also include the LPC-Form documentation necessary for CCDD disposal consideration, if applicable based upon analytical results. If portions of the project area have results that do not achieve the CCDD Maximum Allowable Concentration (MAC) values, these exclusion zones will be identified for Client to incorporate into the bidding documents to aid in determining the quantities, pay items, and special provisions.

The following information will be included in this report:

- a) The project location and description
- b) Historical uses of corridor.
- c) The area geology and hydrology.
- d) The environmental status of sites adjacent to the corridor regarding chemical use and storage, underground and aboveground storage tanks, solid waste, special waste, and hazardous waste, and PCBs.
- e) An analysis of the site inspection.
- f) A summary of the findings regarding any environmental concerns. This will include IDOT's per Memo 66-10 and identification of Potentially Impacted Properties (PIPs) per Subpart F, Section 1100, 35 IAC, related to Clean Construction Demolition Debris management.
- g) A summary of the PSI procedures, boring locations, analytical results, and comparison to applicable remedial objectives (ROs) and/or the MAC values.
- h) LPC-Form documentation for CCDD facility disposal consideration. If portions of the project area have results that do not achieve the CCDD Maximum Allowable Concentration (MAC) values, these exclusion zones will be identified for Client to incorporate into the bidding documents to aid in determining the quantities, pay items, and special provisions.

Task 9 – Project Management

For this task, the scope of work includes time necessary to manage the project, including scheduling and coordination with the prime consultant, drillers, and environmental laboratories.

Task 10 – QA/QC

Time under this task includes QA/QC time for the permitting materials and correspondence as described above. All permitting documents will be forwarded to Client for review prior to formal submittals.

3. PROJECT COSTS

Costs for these services are presented in the Cost Estimate for Consultant Services.



4. TERMS AND CONDITIONS FOR PROFESSIONAL SERVICES

CONDITIONS OF ENGAGEMENT

The conditions of engagement are described in the attached Terms and Conditions for Professional Services. H&H's report will be prepared on behalf of and for the exclusive use of Client. Client acknowledges and agrees that the report and the findings in the report shall not, in whole or in part, be disseminated or conveyed to any other party, or used or relied upon by any other party, in whole or in part, except for the specific purpose and to the specific parties alluded to above, without the written consent of H&H. H&H would be pleased to discuss the conditions associated with any additional dissemination, use, or reliance by other parties.

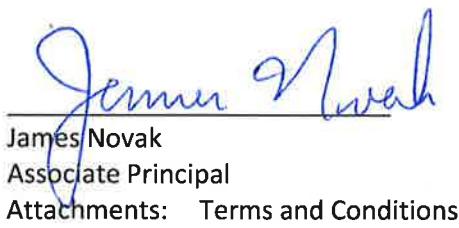
ACCEPTANCE

This agreement may be accepted by signing in the appropriate space below and returning one complete copy to H&H. Issuance of a Purchase Order implicitly acknowledges acceptance of this proposal. This proposal is valid for a period of 30 days from the date of issue.

We appreciate the opportunity to submit this proposal. Please feel free to contact the undersigned at (630) 684-9100 with any questions.

Very truly yours,

Huff & Huff, Inc.



James Novak

Associate Principal

Attachments: Terms and Conditions

This Proposal for Services, Schedule of Fees and Terms and Conditions for Professional Services are hereby accepted and executed by a duly authorized signatory, who by execution hereof, warrants that he/she has full authority to act for, in the name, and on behalf of _____.

By: _____

Title: _____

Printed/Typed Name: _____

Date: _____

The Proposal for Services, Schedule of Fees and Terms and Conditions for Professional Services may be executed in two or more counterparts, each of which together shall be deemed an original, but all of which together shall constitute one and the same instrument. In the event that any signature is delivered by facsimile transmission or by an e-mail delivery of a document in ".pdf" format, each such signature shall create a valid and binding obligation

of the party executing the document, or on whose behalf each document is executed, with the same force and effect as if each such facsimile or ".pdf" signature were an original thereof.

TERMS AND CONDITIONS FOR PROFESSIONAL SERVICES

© 2016 by Huff & Huff, Inc., a Subsidiary of GZA GeoEnvironmental, Inc.

These Terms and Conditions, together with H&H's Proposal, make up the Agreement between H&H and you, Client, named in the attached proposal.

BEFORE SIGNING THE PROPOSAL, BE SURE YOU READ AND UNDERSTAND THE PARAGRAPHS ENTITLED "INDEMNIFICATION" AND "LIMITATION OF REMEDIES" WHICH DEAL WITH THE ALLOCATION OF RISK BETWEEN YOU AND H&H.

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. Illinois 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.

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.



Average Hourly Project Rates

Route 104th Street Multi-Use Path
 Section 159th to 163rd Place
 County Cook
 Job No. P-91-142-16
 PTB/Item

Date 8/24/2017

Consultant Huff & Huff, Inc.

Sheet 1 OF 2

Payroll Classification	Avg Hourly Rates	Total Project Rates Hours	% Part.	Wgt'd Avg	USACE Permitting Hours	% Part.	Wgt'd Avg	Endangered Species Review Hours	% Part.	Wgt'd Avg	Cook County Permitting Hours	% Part.	Wgt'd Avg	IDNR OWIR Permitting Hours	% Part.	Wgt'd Avg	SWCD Coordination Hours	% Part.	Wgt'd Avg		
Senior Principal Principal	70.00	0																			
Associate Principal II	70.00	0																			
Associate Principal I	54.34	5	3.25%	1.76																	
Senior Consultant	67.94	0																			
Senior Geotechnical Consultant	62.84	0																			
Senior Project Manager III	58.56	0																			
Senior Project Manager II	41.54	0																			
Senior Landscape Architect	51.82	0																			
Senior Planning PM	46.58	0																			
Senior Geologist PM	41.42	6	3.90%	1.61																	
Senior Technical Specialist	43.90	1	0.65%	0.29																	
Senior Scientist PM II	45.42	0																			
Senior Scientist PM I	37.12	14	9.09%	3.37		6	12.50%	4.64	2	20.00%	7.42	2	16.67%	6.19	2	18.18%	6.75	2	15.38%		
Senior Technical Scientist	35.55	0																			
Senior CADD Specialist	32.94	6	3.90%	1.28		2	4.17%	1.37													
Scientist PM	41.94	0																			
Geologist PM	35.17	0																			
Engineer PM	40.46	0																			
Planning PM	34.46	0																			
Architect PM	34.20	0																			
Assistant PM Engineer II	38.58	0																			
Assistant PM Engineer I	33.58	40	25.97%	8.72																	
Assistant PM Scientist	27.31	77	50.00%	13.66		38	79.17%	21.62	8	80.00%	21.85	10	83.33%	22.76	8	72.73%	19.86	10	76.92%		
Engineer I	30.90	0																			
Scientist EI	25.14	0																			
Administrative Managers	39.62	4	2.60%	1.03		2	4.17%	1.65									1	9.09%	3.60	1	7.69%
Senior Administrative Assistant	27.45	1	0.65%	0.18																	
Intern	15.73	0																			
TOTALS		154	100%	\$31.91		48	100%	\$29.29	10	100%	\$29.27	12	100%	\$28.95	11	100%	\$30.21	13	100%	\$29.77	



Average Hourly Project Rates

Route 104th Street Multi-Use Path
 Section 159th to 163rd Place
 County Cook
 Job No. P-91-142-16
 PTB/Item

Date 8/24/2017

Consultant Huff & Huff, Inc.

Sheet 2 OF 2

Classification	Avg Hourly Rates	PSI & CCDD Sampling Hours	% Part.	Wgtd Avg	Analytical Hours	% Part.	Wgtd Avg	PSI Report Hours	% Part.	Wgtd Avg	Project Management Hours	% Part.	Wgtd Avg	GAIQC Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Senior Principal Principal	70.00																		
Associate Principal II	70.00																		
Associate Principal I	54.34																		
Senior Consultant	67.94																		
Senior Geotechnical Consultant	62.84																		
Senior Project Manager III	58.56																		
Senior Project Manager II	41.54																		
Senior Landscape Architect	51.82																		
Senior Planning PM	46.58																		
Senior Geologist PM	41.42	1	5.88%	2.44		1	100.00%	43.90		1	3.33%	1.38	2	40.00%	16.57	2	28.57%	11.83	
Senior Technical Specialist	43.90																		
Senior Scientist PM II	45.42																		
Senior Scientist PM I	37.12																		
Senior Technical Scientist	35.55																		
Senior CADD Specialist	32.94																		
Scientist PM	41.94																		
Geologist PM	35.17																		
Engineer PM	40.46																		
Planning PM	34.46																		
Architect PM	34.20																		
Assistant PM Engineer II	38.58																		
Assistant PM Engineer I	33.58	16	94.12%	31.60															
Assistant PM Scientist	27.31																		
Engineer I	30.90																		
Scientist EI	25.14																		
Administrative Managers	39.62																		
Senior Administrative Assistant Intern	27.45																		
TOTALS		17	100%	\$34.04	1	100%	\$43.90	30	100%	\$33.55	5	100%	\$32.96	7	100%	\$50.65	0	0%	\$0.00

HUFF & HUFF, INC.
SUMMARY OF INHOUSE DIRECT COSTS
 Lochner 104th Street Multi-Use Path

<u>DIRECT</u>						
Task 01 - USACE Permitting						
Trips - Company	50 miles	x	1 x \$ 0.535	= \$ 26.75		
Tolls			4 x \$ 1.50	= \$ 6.00		
Reproduction	1 sets	x	200 x \$ 0.03	= \$ 6.00		
Color copies	1 sets	x	50 x \$ 0.11	= \$ 5.50		
			0 x \$ -	= \$ -		
				Task Total	\$ 44.25	
Task 02 - Endangered Species Review						
			0 x \$ -	= \$ -		
				Task Total	\$ -	
Task 03 - Cook County Permitting						
			0 x \$ -	= \$ -		
				Task Total	\$ -	
Task 04 - IDNR OWR Permitting						
Reproduction	1 sets	x	200 x \$ 0.03	= \$ 6.00		
Color copies	1 sets	x	50 x \$ 0.11	= \$ 5.50		
			0 x \$ -	= \$ -		
				Task Total	\$ 11.50	
Task 05 - SWCD Coordination						
Reproduction	1 sets	x	150 x \$ 0.03	= \$ 4.50		
Color copies	1 sets	x	50 x \$ 0.11	= \$ 5.50		
			0 x \$ -	= \$ -		
				Task Total	\$ 10.00	
Task 06 - PSI & CCDD Sampling						
Trips - Company	50 miles	x	2 x \$ 0.535	= \$ 53.50		
Tolls			8 x \$ 1.50	= \$ 12.00		
Field Kit			1 x \$ 30.00	= \$ 30.00		
PID Rental			1 x \$ 50.00	= \$ 50.00		
pH Meter			1 x \$ 10.00	= \$ 10.00		
			0 x \$ -	= \$ -		
				Task Total	\$ 155.50	
Task 07 - Analytical						
			0 x \$ -	= \$ -		
				Task Total	\$ -	
Task 08 - PSI Report						
Reproduction	3 sets	x	150 x \$ 0.03	= \$ 13.50		
Color copies	3 sets	x	25 x \$ 0.11	= \$ 8.25		
			0 x \$ -	= \$ -		
				Task Total	\$ 21.75	
Task 09 - Project Management						
			0 x \$ -	= \$ -		
				Task Total	\$ -	
Task 10 - QA/QC						
			0 x \$ -	= \$ -		
				Task Total	\$ -	

GRAND TOTAL \$ 243.00

HUFF & HUFF, INC.
SUMMARY OF OUTSIDE DIRECT COSTS
 Lochner 104th Street Multi-Use Path

	<u>OUTSIDE</u>
Task 01 - USACE Permitting Federal Express	$1 \times \$ 20.00 = \$ 20.00$ $0 \times \$ - = \$ -$ <hr/>
Task 02 - Endangered Species Review	$0 \times \$ - = \$ -$ <hr/>
Task 03 - Cook County Permitting	$0 \times \$ - = \$ -$ <hr/>
Task 04 - IDNR OWR Permitting Federal Express	$1 \times \$ 20.00 = \$ 20.00$ $0 \times \$ - = \$ -$ <hr/>
Task 05 - SWCD Coordination Federal Express	$1 \times \$ 20.00 = \$ 20.00$ $0 \times \$ - = \$ -$ <hr/>
Task 06 - PSI & CCDD Sampling	$0 \times \$ - = \$ -$ <hr/>
Task 07 - Analytical VOC BTEX PNAs RCRA total RCRA SPLO pH	$1 \times \$ 138.00 = \$ 138.00$ $1 \times \$ 55.00 = \$ 55.00$ $2 \times \$ 105.00 = \$ 210.00$ $2 \times \$ 85.00 = \$ 170.00$ $1 \times \$ 165.00 = \$ 165.00$ $1 \times \$ 20.00 = \$ 20.00$ $0 \times \$ - = \$ -$ <hr/>
Task 08 - PSI Report Federal Express	$1 \times \$ 20.00 = \$ 20.00$ $0 \times \$ - = \$ -$ <hr/>
Task 09 - Project Management	$0 \times \$ - = \$ -$ <hr/>
Task 10 - QA/QC	$0 \times \$ - = \$ -$ <hr/>
	GRAND TOTAL \$ 838.00



Payroll Escalation Table
Fixed Raises

FIRM NAME PRIME/SUPPLEMENT	Huff & Huff, Inc.	DATE PTB NO.	DATE PTB NO.
		<u>8/24/2017</u>	<u>8/24/2017</u>

CONTRACT TERM	MONTHS	OVERHEAD RATE
START DATE RAISE DATE	<u>12</u> <u>9/1/2017</u> <u>3/1/2018</u>	COMPLEXITY FACTOR % OF RAISE

ESCALATION PER YEAR

9/1/2017 - 3/1/2018	3/2/2018 - 9/1/2018	1.50%
<u>6</u> <u>12</u>	<u>6</u> <u>12</u>	

$$= \frac{50.00\%}{1.0150} = 51.50\%$$

The total escalation for this project would be:



Payroll Rates

FIRM NAME
PRIME/SUPPLEMENT
PTB NO.

Huff & Huff, Inc.

DATE 8/24/2017

ESCALATION FACTOR 1.50%

CLASSIFICATION	CURRENT RATE	ESCALATED RATE
Senior Principal	\$70.00	\$70.00
Principal	\$70.00	\$70.00
Associate Principal II	\$70.00	\$70.00
Associate Principal I	\$53.54	\$54.34
Senior Consultant	\$66.94	\$67.94
Senior Geotechnical Consultant	\$61.91	\$62.84
Senior Project Manager III	\$57.69	\$58.56
Senior Project Manager II	\$40.93	\$41.54
Senior Landscape Architect	\$51.05	\$51.82
Senior Planning PM	\$45.89	\$46.58
Senior Geologist PM	\$40.81	\$41.42
Senior Technical Specialist	\$43.25	\$43.90
Senior Scientist PM II	\$44.75	\$45.42
Senior Scientist PM I	\$36.57	\$37.12
Senior Technical Scientist	\$35.02	\$35.55
Senior CADD Specialist	\$32.45	\$32.94
Scientist PM	\$41.32	\$41.94
Geologist PM	\$34.65	\$35.17
Engineer PM	\$39.86	\$40.46
Planning PM	\$33.95	\$34.46
Architect PM	\$33.69	\$34.20
Assistant PM Engineer II	\$38.01	\$38.58
Assistant PM Engineer I	\$33.08	\$33.58
Assistant PM Scientist	\$26.91	\$27.31
Engineer I	\$30.44	\$30.90
Scientist EI	\$24.77	\$25.14
Administrative Managers	\$39.03	\$39.62
Senior Administrative Assistant	\$27.04	\$27.45
Intern	\$15.50	\$15.73
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00
		\$0.00