

PROFESSIONAL SERVICES AGREEMENT

This PROFESSIONAL SERVICES AGREEMENT ("Agreement") dated June 16, 2015 is made by and between the **City of Franklin**, acting by and through its Redevelopment Commission ("OWNER") and **HWC Engineering (HWC)**, ("CONSULTANT") an Indiana corporation organized under the laws of the State of Indiana.

RECITALS

WHEREAS, OWNER wishes to hire CONSULTANT to provide certain professional services with respect to **Franklin King Street and I-65 Gateway Design** ("Project"); and

WHEREAS, CONSULTANT has extensive experience, knowledge and expertise relating to these services and has expressed a willingness to furnish the services in connection therewith, subject to the terms and conditions set forth in this Agreement.

NOW, THEREFORE, in consideration of the promises, the mutual covenants and undertakings herein contained and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

Section I – Services by HWC

The engineering services to be performed by CONSULTANT are described in the Fee Proposal letter dated January 31, 2014 and presented as Appendix "A", which is attached hereto, and made a part hereof, and are referred to herein as the "Services".

Section II – Information and Services to be furnished by OWNER

The information and services to be furnished by OWNER are as set out in Appendix "B", which is attached to this Agreement, and incorporated herein by reference. **OWNER provides access and permission to work within the Right of Way associated with the project limits set forth in Appendix "E".**

Section III – Commencement of Services and Schedule

CONSULTANT shall commence performance under this Agreement and shall provide the Services hereunder in accordance with the Schedule contained in Appendix "B", which is attached to this Agreement, and incorporated herein by reference.

Section IV – Compensation

For all Services rendered by CONSULTANT under this Agreement, OWNER agrees to pay CONSULTANT on the basis of fees and charges established in Appendix "C" and "D", which is attached to this Agreement, and incorporated herein by reference.

Section V – Term and Termination

1. Term

This Agreement shall commence upon execution by the parties and shall continue until completion of the Services and deliverables as set forth in Appendix “C” or unless terminated as set forth below.

2. Termination

OWNER reserves the right to terminate or suspend this Agreement upon five days advance written notice to CONSULTANT. Upon termination of this Agreement, CONSULTANT shall deliver all Work Product (as defined herein) to OWNER. The dollar amount for any earned but unpaid Services performed by CONSULTANT shall be based upon an estimate of the portions of the total Services completed by CONSULTANT through the effective date of termination, which estimated shall be as made by OWNER in the exercise of its honest and reasonable judgment for all Services to be paid for on a lump sum basis and shall be based upon an audit by OWNER of those Services to be paid for on a cost basis or a cost plus fixed fee basis as described in Section IV hereof.

Section VI – General Provisions

1. Subcontracting

It is recognized that CONSULTANT may engage subconsultants to perform a portion of the work under this Agreement. The engagement of subconsultants by CONSULTANT shall not relieve CONSULTANT of any responsibility for the fulfillment of this Agreement. No subconsultant shall subcontract any portion of its work under this Agreement.

2. Ownership of Documents

All reproducible materials prepared by CONSULTANT or its subconsultants in connection with this Agreement, alone or in combination with others, on any and all media, in whole or in part, and all copies thereof, whether created before, during, or after the term of this Agreement (collectively, the “Work Product”) will be the property of the OWNER.

CONSULTANT shall be allowed to retain copies of all documents included in the Work Product, unless prohibited for reasons of security and as mutually agreed by both parties.

CONSULTANT agrees that written agreements with any and all subconsultants used by CONSULTANT to fulfill CONSULTANT’s obligations hereunder shall contain language substantially similar to that of this Subsection to assign OWNER all Work Product by such subconsultants, and to require cooperation with CONSULTANT on the same terms and conditions as set forth herein.

The provisions of this Subsection shall survive the expiration, suspension, abandonment, termination, or completion of this Agreement.

3. Access to Records

Full access to the work during the progress of the Services shall be available to the OWNER. CONSULTANT and its subconsultants shall maintain all books, documents, papers, accounting records and other evidence pertaining to the cost incurred under this Agreement and shall make such materials available at its respective offices at all reasonable times during the period of this Agreement and for three (3) years from the date of final payment for Services is made by OWNER to CONSULTANT.

4. Liability for Damages

CONSULTANT assumes all risk of loss, damage or destruction to the Work Product, to all of its materials, tools, appliances and property of every description, and for injury to or deaths of its employees or agents arising out of or in connection with the performance of this Agreement, excluding that which occurs due to the acts or failure to act of any third party, and excluding that which is caused by the OWNER.

5. General Liability Insurance

a. Amounts of Coverage. CONSULTANT shall procure and maintain at its expense insurance of the kind and in the amounts set forth below by companies authorized to do such business in the State of Indiana covering all Services and related activities performed by CONSULTANT.

<u>Coverage</u>	<u>Limits</u>
a. Workmen's Compensation And Disability	Statutory Requirements
b. Employer's Liability Bodily Injury by Accident	\$500,000 each accident
Bodily Injury by Disease	\$500,000 policy limit
Bodily Injury by Disease	\$500,000 each employee
c. Commercial General Liability (Occurrence Basis) Bodily Injury, personal injury, property Damage, contractual liability, Products-completed operations	\$1,000,000
General Aggregate Limit (other than Products/Completed Operations	\$2,000,000
Products/Completed Operations Aggregate	\$2,000,000
Personal & Advertising Injury Limit	\$1,000,000
Each Occurrence	\$1,000,000

Fire Damage (any one fire)	\$50,000
Medical Expense (any one person)	\$5,000
d. Comprehensive Auto Liability (single Limit, owned, hired and non-owned)	\$1,000,000 each accident
Bodily injury and property damage	\$1,000,000
Umbrella Excess Liability	\$2,000,000 each Occurrence and
The Deductible on the Umbrella Liability	\$10,000 shall not be more than

- b. Evidence of Insurance. Before commencing its Services, CONSULTANT shall furnish to OWNER a certificate, or certificates, showing that it has complied with this Section VI.5.b, which certificate or certificates, shall also designate OWNER as an additional named insured. Certificate shall include in the comments section of the document verbiage indicating that "The City of Franklin is Additionally Insured". The policies shall not be changed or canceled unless thirty (30) days prior written notice has been given to OWNER.

6. Worker's Compensation

CONSULTANT shall be responsible for providing all necessary unemployment and Worker's Compensation Insurance for its employees. CONSULTANT shall provide the OWNER with a certificate of insurance indicating that it has complied with this requirement.

7. Changes in Work

- a. Prior Approval. CONSULTANT shall not commence any additional services or change of scope until authorized by OWNER.

- b. Additional Services. Additional services may include, but not be limited to:

- i. Services associated with significant changes in the scope, extent, or character of the portions of the Project required by, but not limited to, changes in scope, complexity or schedule and revisions required by changes in applicable laws and regulations or due to any other causes beyond CONSULTANT's control.
- ii. Preparing to serve or serving as a consultant or witness for OWNER in any litigation or other dispute resolution process related to the Project that

does not involve a claim against CONSULTANT or a claim that is based on an alleged act of negligence or breach of contract by CONSULTANT.

- iii. Subject to other provisions of this Agreement, additional or extended services during the Project made necessary by (1) emergencies or Acts of God endangering the Project site, (2) an occurrence of a hazardous environmental condition, (3) damages to OWNER's facilities caused by fire, flood or other cause, (4) acceleration or deceleration of the Schedule involving services beyond normal working hours, (5) significant delays, changes, or price increases occurring as a direct or indirect result of materials, equipment, or energy shortages and (6) default or failure to perform by other consultants.

8. Non-Discrimination

CONSULTANT and its subconsultants, if any, shall not discriminate against any employee or applicant for employment, to be employed in the performance of the Services under this Agreement, with respect to hire, tenure, terms, conditions or privileges of employment or any matter directly or indirectly related to employment, because of race, color, religion, sex, handicap, national origin or ancestry. Breach of this covenant may be regarded as a material breach of the Agreement.

9. Safety

- a. Responsibility. CONSULTANT shall be directly responsible for the safety requirements and programs applicable to its own employees, its subconsultants and other parties with whom it has contracted to perform Services with respect to the Project.
- b. Compliance. CONSULTANT's safety program shall comply with applicable federal, state and local statutes, rules, regulations and ordinances. CONSULTANT shall report to OWNER, in writing, any injury or accident at the Project site involving its employees, its subconsultants or other parties for which it is responsible, within forty-eight (48) hours or a shorter period of time if required by law.
- c. Notification. CONSULTANT shall not be responsible for the safety requirements or programs applicable to any other person or entity involved with the Project other than CONSULTANT and its subconsultants.

10. Independent Contractor

OWNER and CONSULTANT are acting in an individual capacity in the performance of this Agreement and will not act as agents, employees, partners, joint venturers or associates of one another. The employees or agents of one party shall not be deemed or construed to be the employees or agents of the other party for any purpose whatsoever. Neither party will assume any liability for any injury (including death) to any persons, nor damage to any property, arising out of the acts or omissions of the agents, employees, or

subconsultants of the other party. CONSULTANT shall be responsible for providing all necessary unemployment and worker's compensation insurance for its employees.

11. Indemnification

CONSULTANT agrees to indemnify OWNER, its officials, and employees, and to hold each of them harmless from claims and suits, including court costs, attorney's fees, and other expenses caused by any negligent act, effort or omission of, or by any recklessness or willful misconduct by CONSULTANT, its employees, or subconsultants. CONSULTANT's indemnification and defense obligations hereunder shall extend to Claims occurring after this Agreement is terminated as well as while it is in force, and shall continue until it is finally adjudicated.

12. Notification

All written notices required by this Agreement shall be sent to the parties at the following addresses by certified mail, return receipt:

To OWNER; **City Engineer**
 70 East Monroe Street
 Franklin, Indiana 46124

To CONSULTANT: **HWC Engineering**
 151 N. Delaware St., Suite 800
 Indianapolis, IN 46204

13. Authority to Bind Consultant

CONSULTANT warrants that it has the necessary authority to enter into this Agreement. The signatory for CONSULTANT represents that he/she has been duly authorized to execute this Agreement on behalf of CONSULTANT and has obtained all necessary or applicable approval to make this Agreement fully binding upon CONSULTANT when his/her signature is affixed hereto.

14. Successors and Assignees

This Agreement is binding upon and shall inure to the benefit of OWNER and CONSULTANT and their respective successors and permitted assigns. CONSULTANT shall not assign this Agreement without the written consent of OWNER.

15. Entire Agreement; Amendments

This Agreement and its Appendices, each of which is incorporated herein by reference and made a part of this Agreement, constitutes the entire Agreement of the parties with regard to the subject matter hereof and supersedes all prior discussions or agreements concerning any subject matter related hereto. This Agreement may only be amended, supplemented or modified by a written document executed in the same manner as this Agreement.

16. Governing Law

This Agreement shall be governed by and construed in accordance with the laws of the State of Indiana, without giving effect to principles respecting conflicts of laws. Subject to Section 19, any action pursuant to this Agreement shall be brought and tried in a court of competent jurisdiction in Johnson County, Indiana, and each party hereby irrevocably consents to the personal and subject matter jurisdiction of any such court and waives any objection to such jurisdiction and venue.

17. Non-Waiver

It is agreed and acknowledged that no action or failure to act by OWNER or CONSULTANT as to a breach, act or omission of the other shall constitute a waiver of any right or duty afforded either of them under this Agreement, as to any subsequent breach, act or omission of the other nor shall any such action or failure to act constitute an approval of or acquiescence in any breach thereof, except as may be specifically agreed in writing. No right conferred on either party under this Agreement shall be deemed waived and no breach of this Agreement excused unless such a waiver or excuse shall be in writing and signed by the party claimed to have waived such right.

18. Invalid Provisions

If any part of this Agreement is later found to be contrary to, prohibited by, or invalid under applicable law, rules or regulations, that provision shall not apply and shall be omitted to the extent so contrary, prohibited or invalid, but the remainder of this Agreement shall not be invalidated and shall be given full force and effect insofar as possible.

19. Dispute Resolution

Any dispute arising out of this Agreement that cannot be resolved through informal discussions between the parties, shall be subject to this Section.

- a. The parties agree that the existence of a dispute notwithstanding, the parties shall continue without delay to carry out all of their respective responsibilities under this Agreement.
- b. Should any dispute arise with respect to this Agreement that cannot be resolved through informal discussions between the parties, a party shall serve written notice to the other party outlining the details of the dispute and demanding mediation. No later than twenty (20) days from the date of the notice demanding mediation, the parties shall confer to discuss the selection of the mediator and agree upon other mediation procedures.
- c. Submission of a dispute under this Agreement to a mediation procedure shall be a condition precedent to filing litigation. No litigation shall be initiated by either party unless the mediation has been completed (unsuccessfully) or a party has failed to participate in a mediation procedure.

20. Employment Eligibility Verification

CONSULTANT affirms under the penalties of perjury that it does not knowingly employ an unauthorized alien.

CONSULTANT shall enroll in and verify the work eligibility status of all its newly hired employees through the E-Verify program as defined in IC 22-5-1.7-3. CONSULTANT is not required to participate should the E-Verify program cease to exist. Additionally, CONSULTANT is not required to participate if CONSULTANT is self-employed and does not employ any employees.

CONSULTANT shall not knowingly employ or contract with an unauthorized alien. CONSULTANT shall not retain an employee or contract with a person that CONSULTANT subsequently learns is an unauthorized alien.

CONSULTANT shall require its subconsultants, who perform work under this Agreement, to certify to CONSULTANT that the subconsultant does not knowingly employ or contract with an unauthorized alien and that the subconsultant has enrolled and is participating in the E-Verify program. CONSULTANT agrees to maintain this certification throughout the duration of the term of an agreement with a subconsultant.

OWNER may terminate for default if CONSULTANT fails to cure a breach of this provision no later than thirty (30) days after being notified by OWNER.

21. No Investment in Iran

As required by IC 5-22-16.5, CONSULTANT certifies that it is not engaged in investment activities in Iran. Providing false certification may result in the consequences listed in IC 5-22-16.5-14, including termination of this Agreement and denial of future agreements, as well as an imposition of a civil penalty.

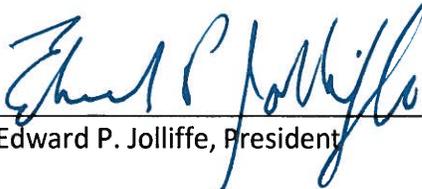
[Signature page follows]

Non-Collusion.

The undersigned attests, subject to the penalties for perjury, that he/she is the CONSULTANT, or that he/she is the properly authorized representative, agent, member or officer of the CONSULTANT, that he/she has not, nor has any other member, employee, representative, agent or officer of the CONSULTANT, directly or indirectly, to the best of his/her knowledge, entered into or offered to enter into any combination, collusion or agreement to receive or pay, and that he/she has not received or paid, any sum of money or other consideration for the execution of this Agreement other than that which appears within this Agreement.

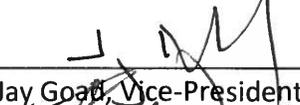
In Witness Whereof, the CONSULTANT and the OWNER have, through duly authorized representatives, entered into this Agreement. The parties having read and understand the forgoing terms of this Agreement do by their respective signatures dated below hereby agree to the terms thereof.

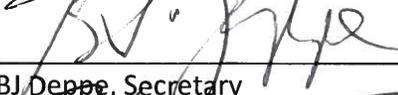
HWC ENGINEERING
(HWC)

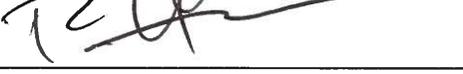

Edward P. Jolliffe, President

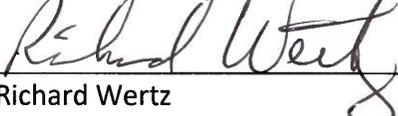
CITY OF FRANKLIN
REDEVELOPMENT COMMISSION
FRANKLIN, INDIANA
(OWNER)


Bob Heuchan, President


Jay Goan, Vice-President


BJ Depp, Secretary


Rob Henderson


Richard Wertz

Attest:



Signee Name and Title

Attest:



(Signature)

TRAVIS UNDERHILL
(Print or type name and title) *City Engineer*

APPENDIX A

Scope of Services

King Street and I-65 Gateway Design City of Franklin, Indiana

June 1, 2015

Project Description

In General this agreement is for HWC Engineering (HWC) to provide design, construction administration, and construction inspection services to the City of Franklin (OWNER) for the construction of key improvements along the King Street corridor between Interstate 65 (I-65) and the Eastview Drive roundabout project. All project designs will be based on improvements identified during the recently completed King Street Corridor Conceptual Design process (Concept Development) and included in the final Concept Development drawings presented to the City on April 22, 2015.

As identified during the Concept Development, it is the desire of the OWNER for the King Street corridor to function as a gradual gateway into Franklin with an emphasis on enhanced roadway amenities such as curbed and planted medians, reduced lane widths and an enhanced visual experience. Trail improvements will be added along the north and south side of King Street to provide additional access to the project location for pedestrians and bicyclists. The intended roadside character should take the form of a 'linear park' style setting reflective of classic landscape architectural roadway treatments found in parkways and boulevards.

This project also includes improvement and an extension of the existing Paris Drive roadway corridor north from the King Street intersection. The character and alignment for the new Paris Drive extension will be derived from the final concept master plan as defined in the recently completed Interstate 65 Interchange Economic Development Plan. Below is a summary of the major project components identified for design under this agreement:

- Rehabilitation of approximately 4,800 lineal feet (LFT) of the existing King Street corridor between the western I-65 interchange ramp termini and connecting to the eastern limits of the proposed Eastview Drive roundabout project.
- Modifications to the configuration of existing intersections along the King Street corridor to include the following:
 - North Side Intersection Treatments:
 - No changes to the current Paris Drive intersection configuration.
 - New right in/right out intersection at Fairway Lakes Drive.
 - Closure of the existing Golfview Drive intersection.
 - New Country Club Lane driveway approach onto King Street.
 - Closure of the existing Fairway Court Intersection.
 - No changes to the N. Milford Dr. intersection.
 - South Side King Street Intersection Treatment:
 - No changes to the current Lover's Lane intersection configuration.
 - Review of options to relocate the Franklin Cove Court intersection further west towards the existing fire station driveway.
 - No changes to the S. Milford Drive intersection.
- A new typical roadway cross section to replace the existing rural cross section with new curb and gutter the entire length of the corridor.
- A new raised median with curb and gutter and limited cuts for traffic.



- Modification of the existing stormwater infrastructure to accommodate proposed cross section changes.
- Pavement rehabilitation to include the following:
 - Full depth patching of the existing concrete pavement section where needed.
 - New HMA overlay on the existing concrete roadway surface.
- Design of a 10' wide trail along the north side of the King Street.
- Design of an 8' wide trail along the south side of King Street.
- Design of up to three trail side rest nodes on the north side of King Street.
- Design of up to 1,200 LFT of structural retaining wall along the north side of King Street.
- New roadway lighting based on the following assumptions:
 - The current city ornamental lighting standard will be used for all ornamental roadway lighting.
 - Corridor lighting between the I-65 ramps and the Paris Drive/Lover's Lane intersection will be single arm poles along the north and south exterior edge of the corridor.
 - Corridor lighting between the Paris Drive/Lover's Lane intersection and the Eastview Drive roundabout and along the new Paris Drive extension will be dual arm poles along the center raised median.
- Installation of new decorative signal poles and arms at the Paris Drive/Lover's Lane intersection.
- Ornamental accent lighting along the exterior faces of structural retaining walls and within the trailside rest nodes.
- Corridor landscaping treatment to include new shade trees, shrubs, perennial plants, and bulbs.
- Installation of up to two gateway monument structures to be located on the northwest and southwest corners of the Paris Drive/Lover's Lane intersection.
- Rehabilitation of the existing Paris Drive segment north of King Street including the design of a new typical cross section, a new mid-point roundabout, and new alignment north of the roundabout.
- Removal of existing Paris Drive pavement east of the existing outbuildings.
- New drinking water and wastewater utilities along the improved Paris Drive corridor and abandonment of existing utility services, as necessary.
- Extension of the existing Longest Drive corridor between Paris Drive and Fairway Lakes Drive.

Project Phasing

The project will be designed based on the project phasing depicted in Appendix E and on the following plan development standards and construction budget and project bidding assumptions:

- *Phase 1: Country Club Lane driveway improvements*
 - Phase 1 will be a locally bid project, designed to local standards.
 - The total project construction budget is: \$277,000 (including a 10% construction contingency).
- *Phase 2: King Street improvements from I-65 to Fairway Lakes Drive*
 - Phase 2 includes the Paris Drive rehabilitation and extension and the Longest Drive extension between Paris Drive and Fairway Lakes Drive.
 - Phase 2 will be a locally bid project, designed to local standards.
 - The total project construction budget is: \$4,950,000 (including a 15% construction contingency).
- *Phase 3: Two Gateway Monument Structures*
 - Phase 3 will be a locally bid project, designed to local standards.
 - The total project construction budget is: \$640,000 (including a 15% construction contingency).
- *Phase 4: King Street rehabilitation from Fairway Lakes Drive to the eastern limits of the Eastview Drive roundabout.*
 - Phase 4 will be an Indiana Department of Transportation (INDOT) bid project, designed to INDOT standards.



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Franklin King Street and I-65 Gateway Design

Appendix A: Scope of Services

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- The total project construction budget is: \$4,400,000 (including a 20% construction contingency).

Scope of Services

Following is a detailed description of the services which will be provided to the OWNER by HWC:

- **Site Survey**
 - Existing survey information was previously obtained by the OWNER along King Street. Under this agreement HWC will use the existing survey as a base and will amend the information to collect required additional boundary and topographical data required for the design.
 - Additional survey information will be obtained under a separate agreement which will be used by HWC as base information to inform the completion of design work under this agreement.
 - No additional survey field work is included under this agreement.
- **Right of Way (Row) Services**
 - HWC will provide ROW services necessary to obtain full property ownership transfer between the OWNER and private property owners associated with the proposed Paris Drive extension and will also provide ROW services required for Right of Entry access between the OWNER and private property owner for the Longest Drive extension between Paris Drive to Fairway Lakes Drive.
 - See Appendix F for a more detailed description of the ROW services provided under this agreement.
- **Environmental Review**
 - HWC will prepare all required environmental documentation. It is anticipated that a Categorical Exclusion (level 1) will be required.
 - The Area of Potential Effect (APE) for the environmental review will be considered to occur within the limits of existing INDOT ROW between Paris Drive/Lover's Lane and the proposed Eastview Drive roundabout. The limits of the APE will be sufficient to complete required coordination with INDOT and FHWA to allow for locally funded work to occur adjacent to and separately from the INDOT funded westernmost portion of the project improvements.
 - See Appendix F for a more detailed description of the environmental review services provided under this agreement.
- **Geotechnical Engineering**
 - HWC will provide roadway geotechnical surveys, landslide investigations, and other special investigations and foundation exploration borings related to required INDOT roadway pavement design technical requirements and the structural design of the gateway monument towers. Work under this task shall be as described below:
 - Prior to entering upon private property for performing the work, notices will be issued to the local property owner, following the "Instruction for Entering Upon Private Property" as established by Legislative Acts of 1963.
 - The work shall be performed in accordance with the requirements set out in the current INDOT Geotechnical Manual.
 - HWC will obtain and preserve samples of the subsoil as required, perform the necessary laboratory tests, perform the required geotechnical engineering analyses and prepare and furnish the necessary reports and provide project specific recommendations.
 - HWC will provide one pavement design analysis and obtain approval from the INDOT pavement design department.
 - See Appendix F for a more detailed description of the geotechnical engineering services provided under this agreement.



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Franklin King Street and I-65 Gateway Design

Appendix A: Scope of Services

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- **Pavement Design**
 - HWC will provide one pavement design which will encompass recommendations for pavement treatments for both the King Street corridor and the new Paris Drive extension.
 - The pavement design calculations will be completed in compliance with 2015 INDOT pavement design requirements.
 - See Appendix F for a more detailed description of the pavement design services provided under this agreement.
- **Utility Coordination**
 - HWC will provide utility coordination services for the following potentially impacted utilities:
 - Phone: Century Link
 - Fiber Optic: Metronet
 - Cable TV: Comcast
 - Electric: Duke Energy
 - Natural Gas: Vectren Energy Delivery
 - Water: Indiana American Water
 - Sanitary Sewer: City of Franklin Department of Public Works
 - HWC will request utility locates prior to the project survey and will coordinate with the potentially impacted utilities on the location of their existing facilities within the project area.
 - If conflicts with existing facilities cannot be avoided, HWC will work with the OWNER and any impacted utilities to determine the best approach to mitigate utility impacts for all parties.
 - All utility coordination will be completed using 2015 INDOT coordination requirements, including the following documentation:
 - HWC will issue grade review plans to utilities to confirm locates shown on plans are correct.
 - Coordination with all utilities prior to preparation of Stage 1 plans, to avoid any expensive conflicts within expected construction limits.
 - Issue invitation to all impacted utilities to participate in one on-site preliminary field check meeting.
 - Following field check, HWC will distribute a preliminary construction schedule for all project phases to the impacted utilities.
 - HWC will prepare written documentation of required utility relocations and will review all utility relocation plans to confirm the plans will work within roadway design.
 - HWC will issue written utility notice to proceed associated with required with service relocation efforts.
 - HWC will provide each utility with one copy of final design plans and the project schedule for all project phases at least 90 days prior to scheduled bid or letting dates.
- **Sanitary and Drinking Water Utility Design**
 - Schedule and conduct an on-site Project Scoping Meeting with HWC staff, designated CLIENT representatives, and representatives of the City of Franklin and Indiana American Water.
 - Develop plan locations of new proposed structures, piping, sewers, water man (including valves and hydrants) and develop preliminary quantities and layout of all work described herein for review by the CLIENT and Indiana American Water.
 - Prepare preliminary design plans and summary of all sanitary utility and water improvements for review by CLIENT and Indiana-American Water.
 - Coordinate design and approval with Indiana American Water as required.
 - Prepare plan for relocation of all existing services to be installed on the new mains.
 - Identify any temporary or permanent easements necessary for services and prepare descriptions of easements for acquisition by others.



- Prepare final construction drawings based on approval of preliminary design including plan/profiles of all gravity sewers and water main and details.
- Completion of specifications, bidding and contract documents.
- Prepare an opinion of probable cost based on the final design of the project.
- Prepare applications for all non-local necessary permits for construction of the improvements, including if applicable:
 - IDEM Sanitary Sewer Construction Permit
 - IDEM Notice of Intent to Construct Water Main Extension
- ENGINEER will submit applications to agencies after CLIENT signatures.
- Establish baselines for locating the work together with a suitable number of benchmarks adjacent to the work as shown in the contract documents.
- **Stormwater Design**
 - HWC will provide plans, details, and specifications sufficient for the bidding of the following stormwater design elements within the project limits:
 - For this project it is assumed that all outlets of collected stormwater will continue to drain along historic drainage patterns and drain to existing swale system on the south side of King Street.
 - HWC will design new curb and gutter to direct runoff from the new street cross section to proposed storm sewers for conveyance of projected flow to historic drainage patterns and roadside swales along the south side of King Street
 - HWC will size the storm sewers in anticipation of built out development where current and future watershed areas are likely to require a drainage path across King Street.
 - HWC's design approach will include the integration of green infrastructure such as rain gardens, hybrid ditches, and bio-infiltration swales contingent on City approval and the available space adjacent to the project limits.
 - HWC will complete one drainage and hydraulics report for the proposed projects and provide it to the OWNER for review.
 - One submittal of the report will be made for any potential INDOT Hydraulics review, if required
- **Roadway Design**
 - HWC will provide plans, details, and specifications sufficient for the bidding of the following roadway design elements:
 - HWC will provide roadway design services, to INDOT standards, for the rehabilitation of the King Street corridor using the final Concept Development typical roadway cross section as the basis for the design.
 - The design will utilize the existing concrete pavement on King Street as a base and specify the required thickness of new HMA overlay based on the approved INDOT pavement design.
 - HWC will design the new Paris Drive extension and roundabout based on the alignment identified in the I-65 Economic Development Study and using a typical 2 lane roadway cross section with a raised median design.
 - HWC will also design a single lane roundabout at the existing t intersection of Paris Drive to connect with the existing east/west approaches and the new Paris Drive extension to the north. The roundabout will be designed to accommodate a WB-50 design vehicle.
 - All roadways and approaches will be designed using the INDOT design manual requirements or AASHTO green book design guidelines.

Traffic Signal Design

- HWC will provide plans, details, and specifications sufficient for the design and bidding of the following traffic signal design elements:



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Franklin King Street and I-65 Gateway Design
Appendix A: Scope of Services

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- HWC will design the replacement of the existing signal, to INDOT standards, at the intersection of King Street and Paris Drive intersection. The replacement will be limited to the replacement of existing poles and lights with new decorative poles.
- HWC will coordinate with the city on the type of decorative signal display and support components to be utilized at the intersection.
- The traffic signal design will utilize the existing detector and controller components and does not include relocation of existing cabinets/vaults or design and installation of new cabinets/vaults.
- **Trail Design**
 - HWC will provide plans, details, and specifications sufficient for the design and bidding of the following trail elements:
 - Trail Design will be based on INDOT Design Standards and will include horizontal and vertical alignment design for a 10' wide asphalt trail on the north side of King Street and an 8' wide asphalt trail on the south side of King Street.
 - HWC will design the north side trail along a meandering alignment which takes advantage of the existing ROW width and existing topographical features.
 - HWC will design the south side trail using a straight alignment with a minimum constant offset of 5' from the proposed back of curb location.
 - The trail will connect with the trails being constructed during the pending Eastview Roundabout project and will match the constructed elevations of the trail at the connection points.
 - HWC will also design a sidewalk along the length of the new Paris Drive extension. The sidewalk will have a width and offset which matches the minimum requirements as defined in the City of Franklin Unified Development Ordinances.
- **Corridor Enhancement Design**
 - HWC will provide plans, details, and specifications sufficient for the design and bidding of the following aesthetic elements:
 - Up to three rest nodes to be located along the north side asphalt trail including accent walls, decorative paving, and site furnishings.
 - Directional and Regulatory Signage including the use of commercially available ornamental poles, bases, finials, and frames.
 - Site Furnishings to include the following commercially available products:
 - Trash Receptacles
 - Dog Waste Receptacles
 - Benches
 - Bicycle Racks
 - Retaining and Accent Walls along the north side trail corridor:
 - Wall construction methods will be determined based on structural design recommendations and will utilize natural facing materials and/or natural products.
 - Interpretive Panel Features:
 - Design of interpretive panel features will include metal frame design and graphic panel designs utilizing 3-form or other similar material.
 - Panel designs will include coordination with OWNER staff to determine content and messaging. One draft of proposed content will be provided to the OWNER for review and comment and one final panel content design will be completed based on OWNER draft content comments.
 - Content creation for up to six interpretive panels is included. Only one typical frame design is included, which will be used for all panels.
 - Landscaping treatment within the roadway median and along the north and south sides of the corridor.



- **Gateway Monument Design**
 - HWC will provide plans, details, and specifications sufficient for the design and bidding of the following gateway monument elements:
 - Two identical gateway monument structures to be located on the northwest and southwest corners of the Paris Drive/Lovers Lane and King Street intersection.
 - The gateway monuments will be designed based on the OWNER approved design identified during the Concept Development. In general, the design includes two architecturally identical 34' high towers. The towers will be of masonry construction, and will feature decorative panels and metal elements.
 - HWC design services include architectural detailing, structural design, and electrical/lighting design.
- **Structural Design**
 - HWC will provide structural design recommendations and details for the following project elements:
 - Gateway monument footings, reinforcement, and structural core.
 - Decorative signal pole foundations.
 - Retaining and accent walls.
 - See Appendix F for a more detailed description of the structural design services provided under this agreement.
- **Lighting Design**
 - HWC will provide plans, details, and specifications sufficient for the design and bidding of roadway and accent lighting based on the following:
 - HWC will provide roadway lighting design services. Roadway lighting design will adhere to applicable 2015 INDOT lighting design standards
 - HWC will also provide Accent and Ornamental Lighting along the north side of the trail corridor in the following specific locations:
 - Along accent and retaining walls,
 - At rest nodes,
 - Within proposed interpretive panel features (internally edge lit)
 - And along the proposed trail corridors, if required per INDOT standards.
 - See Appendix F for a more detailed description of the lighting design services provided under this agreement.
- **Bidding Services**
 - HWC will provide the OWNER with bidding services related for up to four prime construction contracts:
 - Phase 1 (Local)
 - Phase 2 (Local)
 - Phase 3 (Local)
 - Phase 4 (INDOT)
 - HWC will prepare one notice to bidders and submit it to the OWNER for approval prior to publication for project phases 1 through 3.
 - HWC will coordinate the advertisement of up to two public notices in the Daily Journal for project phases 1 through 3.
 - HWC will coordinate the distribution of plans and specifications to bidders for project phases 1 through 3.
 - Under this task HWC will attend one pre-bid meeting, compile bidder questions and issue required addendums, attend one bid opening and one bid award meeting and provide one certified bid tabulation and one bid award recommendation for Phase 1 through Phase 3.
 - In addition, HWC will provide the OWNER with services relating to information required for one INDOT bid letting for project Phase 4. INDOT letting coordination will occur after the required project Final Tracing submittal and will consist of the following services:



- Coordination with the INDOT Project Manager and other INDOT reviewers to help provide requested information in preparation for the project letting.
 - Review of the contractor bids, as supplied by INDOT, and coordination with the OWNER on evaluation of the bids and recommendation for contract award.
 - An HWC designer will attend one INDOT pre-construction conference.
- **Construction Administration**
 - HWC will provide the following construction administration services to the OWNER for project phases 1 through 3:
 - Review contractor shop drawings and submittals for all project phases.
 - Facilitate one pre-construction conference.
 - Review requests for change orders for all project phases.
 - Review requests for information from the contractor.
 - Issue a weekly status report to the Local Team
 - One HWC staff member will attend up to ten construction progress meetings.
 - One HWC staff member will conduct up to ten construction site which shall coincide with the construction progress meetings.
 - Attend two other meetings with the OWNER or at the job site during the construction phase.
 - Attend one project walk through and develop a punch list based on outstanding issues identified at the project walk through.
 - Review contractor's applications for payment.
 - Prepare as-built construction drawings. The as-built plans shall be based on plan markups provided to HWC by the Contractor. No field verification of as-built information by HWC is included.
 - Attend one final inspection of the project.
- **Construction Inspection Services**
 - HWC will provide full time construction observation on project Phase 2 to monitor the contractor's workmanship and general compliance with the project plans and specifications. Inspection services will be provided thru the completion of the construction of the project.
 - HWC will provide on-call construction inspection services on project Phase 1 and Phase 3 to assist the CLIENT with construction related needs up to the limits defined in Appendix C. The CLIENT will have primary responsibility for overseeing construction related activities on these project phases and HWC will not provide full time inspection related services under this agreement.
 - The duties and responsibilities of the Resident Project Representative (RPR) are as follows:
 - *General:* RPR is Engineer's representative at the Site. RPR's dealings in matters pertaining to the Contractor's work in progress shall in general be with Engineer and Contractor.
 - *Conferences and Meetings:* Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings, and prepare and circulate copies of minutes thereof.
 - *Review of Work and Rejection of Defective Work:* Conduct on-Site observations of Contractor's work in progress to assist Engineer and Owner in determining if the Work is in general proceeding in accordance with the Contract Documents.
 - **Records:**
 - Maintain at the Site orderly files for correspondence, reports of job conferences, reproductions of original Contract Documents including all change orders, field orders, work change directives, addenda, additional Drawings issued subsequent to the execution of the Construction Contract, Engineer's clarifications and interpretations of the Contract Documents, progress reports, Shop Drawing and



- Sample submittals received from and delivered to Contractor, and other Project-related documents.
 - Prepare a daily report or keep a diary or log book, recording Contractor's hours on the Site, weather conditions, data relative to questions of change orders, field orders, work change directives, or changed conditions, Site visitors, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to Engineer. Prepare a weekly report summarizing the project activities, to be submitted to the Owner.
 - Record names, addresses, fax numbers, e-mail addresses, web site locations, and telephone numbers of all Contractors, Subcontractors, and major Suppliers of materials and equipment.
 - Maintain records for use in preparing Project documentation.
 - **Reports:**
 - Furnish to Engineer and Owner copies of all inspection, test, and system start-up reports.
 - Immediately notify Owner of the occurrence of any Site accidents, emergencies, acts of God endangering the Work, damage to property by fire or other causes.
 - **Payment Requests:** Review applications for payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Engineer.
 - **Completion:**
 - Participate in visits to the Project to determine Substantial Completion, assist in the determination of Substantial Completion and the preparation of lists of items to be completed or corrected.
 - Participate in a final visit to the Project in the company of Engineer, Owner, and Contractor, and prepare a final list of items to be completed and deficiencies to be remedied.
 - Observe whether all items on the final list have been completed or corrected and make recommendations to Engineer concerning acceptance and issuance of the Notice of Acceptability of the Work.
- **Project Management, Coordination & Public Meetings**
 - It is anticipated that required daily project coordination will be conducted remotely via e-mail and/or telephone.
 - HWC will also schedule and attend regular project coordination meetings with the OWNER to review project progress and discuss upcoming deliverables.
 - One project coordination meeting will be scheduled to occur every month, on average, throughout the duration of the project design, which is assumed to last approximately 28 months.
 - One HWC staff member will attend up to 30 client coordination meetings during the design phase of this scope.
 - One HWC staff member will also attend one meeting with INDOT project staff on a quarterly basis throughout the duration of the project. Up to ten meetings with INDOT are included.
 - HWC will facilitate up to two public information meetings under this agreement. One meeting will occur during Phase 2 design and one meeting will occur during Phase 4 design.
 - Public meetings will occur between the 60% and 95% complete design progress to facilitate any changes which may occur due to public comments received at the meetings.
- **On-Call Coordination Assistance**
 - It is anticipated that additional coordination may be required with adjacent property owners, business owners, and potential developers.



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- HWC will provide general on-call management services under this agreement to assist the client with unexpected or unanticipated coordination meetings which occur during the course of the project design.
- For this task HWC will send one staff member to attend up to twenty additional coordination meetings, at the client's request.

Project Deliverables

Each previously described project phase will have individual deliverables based on independent bid letting dates and independent review processes. The initial corridor layout will be developed in a single base file prior to first phase plan development and will then be used as the base file for all subsequent project phases. A more detailed breakout of the specific deliverable milestones and associated deliverables for each project phase is described below:

- **20% Design - Conceptual Line and Grade Establishment**
 - HWC will prepare one CADD base file for the project corridor based on the work previously completed during Concept Development. The base file will be updated with the latest concept information and additional survey base information.
 - Upon completion of draft base file HWC will attend one line/grade review meeting with the OWNER to establish the final project edge of pavement and rough grading approach.
 - HWC will make one revision to the updated base file after the OWNER meeting.
- **Phase 1, 2, & 3 Submittal Packages – Locally Bid Projects**
 - The Phase 1 project work will consist of an independent bid package for the addition of the Country Club Lane Driveway onto King Street.
 - Phase 1 has a target contract letting date for late fall of 2015.
 - The Phase 2 project work will consist of the development of a single independent bid package for improvements to the King Street corridor from I-65 to Fairway Lakes Drive, completion of the new Paris Drive extension, and extension of Longest Drive from Paris Drive to Fairway Lakes Drive.
 - Phase 2 has a target contract letting date of February 2016.
 - The Phase 3 project work will consist of the development of a single independent bid package for the gateway monument structures.
 - Phase 3 has a target contract letting date of March 2016 and will occur after the successful bid and award of the Phase 2 construction contract.
 - The deliverable milestones Phases 1, 2, & 3 project work will consist of the following elements for each phase:
 - Submittal of one set of electronic PDF review documents at a 30% complete design milestone including the following items (Phases 2 & 3 only):
 - Design conformance check.
 - Abbreviated Engineers Assessment report
 - Preliminary design computations, including hydraulic calculations (if required).
 - Draft plan sheets, including title sheet, typical sections, plan/profiles, typical detail sheets and cross sections
 - One preliminary construction cost estimate
 - HWC will schedule and attend on on-site preliminary filed check meeting to review preliminary plans and conduct preliminary utility coordination.
 - Submittal of one set of electronic PDF review documents at a 60% complete design milestone including the following items:
 - Title sheet
 - Complete plan/profile sheets
 - Draft structure data table
 - Complete cross sections



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Franklin King Street and I-65 Gateway Design

Appendix A: Scope of Services

Page 10 of 13

- Preparation of one draft contract book including ACEC front end contract documents and project special conditions.
 - One revised construction cost estimate
 - HWC will schedule and attend one on-site review meeting with the OWNER to discuss the 60% complete plans and any required design changes.
 - Submittal of one set of electronic PDF review documents at a 95% complete design milestone including the following items:
 - Finalize all plan sheets previously prepared
 - Finalize all quantity calculations
 - Preparation of the final project contract book including ACEC front end contract documents, special conditions, and detailed project specifications.
 - Prepare one final construction cost estimate
 - Submittal of one hard copy set of the final project construction plans and the contract book to the OWNER.
- **Phase 4 Submittal Package - INDOT Letting**

The Phase 4 project work will consist of the development of a single independent bid package for the King Street corridor improvements between Fairway Lakes Drive and the eastern terminus of the pending Eastview Drive roundabout project. Phase 4 is currently scheduled for the July 2018 INDOT contract letting. The deliverable milestones for this phase of work will consist of the following elements:

 - Prepare Stage 1 Review plans (25% complete), including the following items:
 - Design conformance check
 - Abbreviated Engineers Assessment report
 - Level One checklist and design computations
 - Plan sheets, including title sheet, typical sections, plan/profiles, detail sheets and cross sections
 - Hydraulic calculations (if required)
 - HWC will schedule and conduct one preliminary field check meeting on site.
 - Prepare Stage 2 Review plans (55% complete), including the following items:
 - Stage 2 plan submittals will be for review and coordination purposes between HWC and the CLIENT only, no documentation will be submitted to INDOT unless required by environmental review process.
 - Finalize Title sheet
 - Complete plan/profile sheets
 - Prepare structure data table
 - Complete cross sections
 - Prepare preliminary cost estimate
 - HWC will also meet public hearing requirements, if required. This effort shall meet the INDOT guidelines for conducting a public hearing in conjunction with the Environmental Coordination process.
 - HWC will schedule and conduct one on-site final field check meeting.
 - HWC will Prepare Stage 3 Review plans (95% complete), including the following:
 - Finalize all plan sheets previously prepared
 - Finalize all quantities
 - Prepare final cost estimate
 - Conform with all INDOT design requirements
 - HWC will prepare and electronically submit one final tracings documentation package.
 - Preparation of the information required for the INDOT quarterly reports is included in this task. HWC shall provide this information in electronic format on a quarterly basis to the City Engineer in advance of the report deadlines.

- **Additional Project Deliverables:**

In addition to the major deliverables described above HWC will provide the OWNER with the following deliverables related to other design services:

- Survey: One digital copy of the final project survey will be provided to the OWNER in CADD format.
- ROW: One digital PDF copy and one printed black and white copy of all ROW documentation will be provided to the OWNER.
- Environmental Review: One digital PDF copy of the draft and final environmental document will be provided to the OWNER. In addition one black and white printed copy of the final approved environmental document will be provided.
- Pavement Design: One digital PDF copy of the final pavement design recommendations will be provided.
- Utility Coordination: The OWNER will be included in all digital correspondence relating to HWC's utility coordination efforts. In addition one digital PDF copy of all utility coordination correspondence will be compiled and provided to the OWNER.
- Deliverables related to Utility Design services, Roadway Design Services, Signal Design services, Trail Design Services, Corridor Enhancement Design Services, Gateway Monument Design, Structural Design Services and Lighting Design Services will be included with the phased project deliverables described above.
- Bidding Services: HWC will provide the OWNER with the following deliverables related to bidding services:
 - HWC will provide one printed set of final plans and contract documents to the OWNER for all project phases.
 - HWC will provide digital PDF copies of all project bid documents including meeting agendas and meeting minutes to the OWNER.
- HWC will provide digital PDF copies of certified Bid Tabulations and Bid Award Recommendations for each locally bid project phases.
- *Construction Administration*: HWC will provide digital PDF copies of all construction administration documents including meeting agendas and meeting minutes to the OWNER.
- On Call General Management: On call services will require written pre-approval of the OWNER prior to commencement of activities. Scope of work and deliverables will be determined on an as needed basis for work completed under this task.

Project Assumptions and Exclusions:

- All work will be completed according to the applicable design standards as described in this agreement. If the OWNER intends to use design standards other than those described under this agreement HWC shall be notified in writing prior to commencement of any related design activities.
- EJCDC front end contract documents will be used for locally bid projects. The OWNER shall provide HWC with an editable digital copy of the desired version of the contract front end documents prior to the initial draft of the Phase 1 contract book.
- All roadway design will be completed using INDOT design standards, unless local standards are requested and provided by client.
- Services defined within this agreement are scoped based on the assumed project budgets outlined within the agreement. If construction cost changes occur during the course of completion of design work which will impact the final project design then the scope of services and compensation outlined under this agreement are subject to renegotiation.
- Cost estimating will be completed with each successive project deliverable package and design decisions shall be made at that time to account for necessary changes to keep the projects within budget.



- The environmental scope of services assumes preparation of a CE-1 level document and does not include archaeological services. If archeological sites are identified in the initial research, an investigation will be required for each specific site. Archaeological investigation services can be provided on an as-needed basis but are not included under this agreement.
- Services associated with the creation, facilitation, or coordination of public artwork is not included under the terms of this agreement.
- Design of the Eastview Drive roundabout will be completed in a separate project by another consultant and is not included under this project scope. If design and construction of the Eastview Drive roundabout is delayed it could materially impact the ability of HWC to deliver this scope of services as described and may require a modification of this agreement.
- No wetlands determination or delineation is included.
- Stormwater design will be based on the assumption that no temporary or permanent regional detention facility will be required to meet applicable design and permitting requirements.
- The coordination, negotiation, acquisition and staking (unless requested) of needed easements shall be by others unless requested as an additional service.
- Legal services and/or representation at legal proceedings including but not limited to property rezoning, plan commission submittals, etc. are not included.
- Engineer's services under the Survey and Design phases shall be considered complete when the Engineer submits bidding/construction ready plans and specifications to the overall HWC Project Manager and the CLIENT requesting authorization to proceed with bidding.
- Bidding services described under this agreement are limited to one bid process per each project phase. If rebid of a project is requested by the OWNER for any reason these services will be provided by HWC upon written agreement from the OWNER for the provision of additional services and compensation.
- The bidding phase shall be considered complete upon issuance of a Notice of Award to the Contractor, or 90 days following the receipt of bids.
- No pedestrian lighting design is included along either trail corridor.
- No design for future conduit, wiring, handholes, etc. beyond what is needed to complete the project lighting design is included in this scope of services.
- Construction Staking and other construction engineering services are not included in this scope of services.
- Construction Testing shall be provided by the contractor.
- All fees for permit applications, legal publishing, and other such fees shall be paid by others.
- Additional work associated with permit protests is not included.



APPENDIX B

Time Schedules

King Street and I-65 Gateway Design City of Franklin, Indiana

June 1, 2015

Following is a schedule of the activities to be completed under this contract and the scheduled completion date for the activity. Completion schedules are based upon the time elapsed from Notice to Proceed by the Utility for the respective task(s). Completion dates assume a one week timeframe for client review and comment and account for holidays which may occur. Completion dates assume receipt of a written notice to proceed (NTP) by July 24, 2015. Completion dates will be adjusted based on actual HWC receipt date of NTP from CLIENT.

Schedule*

Task/Activity	Phase Completion Schedule (date)
Phase 1: Country Club Drive Entrance	
60% Complete Plans	25 working days after NTP (08/31/15)
Final Plans	15 working days after Receipt of final CLIENT review comments (09/28/15)
Target Letting Timeframe	November 2015
Phase 2: King Street Improvements to Fairway Lakes including Paris Drive Extension (Local Project)	
30% Complete Plan Submittal	30 working days after NTP (09/07/15)
60% Complete Plan Submittal	40 working days after approval of 30% design concept (11/09/15)
90% Complete Plans	50 working days after CLIENT approval of 60% Complete Plans (01/25/15)
Final Plans	20 working days after submittal of 90% complete plans (02/29/16)
Target Letting Date	April 2016
Phase 3: Gateway Towers (Local Project)	
30% Complete Plan Submittal	Concurrent with Phase 2 30% schedule (09/07/15)
60% Complete Plan Submittal	Concurrent with Phase 2 60% Schedule (11/09/15)
90% Complete Plans	60 working days after CLIENT approval of 60% Complete Plans (02/08/16)
Final Plans	20 working days after Receipt of final CLIENT review comments (03/14/16)
Target Letting Date	April 2016
Phase 4: King Street Improvements Between Fairway Lakes Dr. and Eastview Roundabout (INDOT Project)	
Environmental Documentation	May 2016
Stage 1 Plans (30% Complete)	December 2015
Preliminary Field Check	20 working days after completion of Phase 2 Final Plans (04/04/16)
Stage 2 Plans (60% Complete)	July 2016
Stage 3 Plans (90% Complete)	December 2016
Final Tracings	April 2017
Target INDOT Letting Date	INDOT Fiscal Year 2018 (July 2017 or later)

* The proposed schedule is dependent upon the ability of the CLIENT to complete milestone reviews within one week of submittal by HWC. Schedule is subject to change and is dependent upon CLIENT schedule in securing appropriate right of way and/or property acquisition.



APPENDIX C

Compensation

**King Street and I-65 Gateway Design
Franklin, Indiana**

June 1, 2015

Following is a schedule of the compensation amount, including reimbursable expenses, for each activity and the form of the compensation. Hourly work and reimbursable expenses shall be billed in accordance with the rates identified in Appendix D. Please note; the rates identified in this Agreement are subject to change each December 31st without notification or modification to this Agreement. All additional services authorized by the OWNER shall be provided per the Hourly Rate Schedule as set forth in Appendix D.

Compensation

Project Phase		
Task/Activity	Compensation Amount	Compensation Type
Phase 1: Country Club Drive Entrance		
Design & Bidding Services	\$63,066	Lump Sum
Construction Inspection	\$5,000	Hourly Not To Exceed
<i>Phase 1 Total Fee</i>	\$68,066	
Phase 2: King Street Improvements to Fairway Lakes including Paris Drive Extension (Local Project)		
Design & Bidding Services	\$567,304	Lump Sum
Construction Administration	\$47,042	Lump Sum
Construction Inspection	\$472,000	Hourly Not To Exceed
<i>Phase 2 Total</i>	\$1,086,346	
Phase 3: Gateway Towers (Local Project)		
Design & Bidding Services	\$187,701	Lump Sum
Construction Administration	\$22,305	Lump Sum
Construction Inspection	\$10,000	Hourly Not To Exceed
<i>Phase 3 Total</i>	\$220,006	
Phase 4: King Street Improvements Between Fairway Lakes Dr. and Eastview Roundabout (INDOT Project)		
Design & Bidding Services	\$679,803	Lump Sum
Construction Administration	Future Contract	
Construction Inspection	Future Contract	
<i>Phase 4 Total</i>	\$679,803	
Total Project Compensation	\$2,054,221	



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Franklin King Street and I-65 Gateway Design

Appendix C: Compensation

Page 1 of 1

APPENDIX D

2015 Hourly Billing Rates

King Street and I-65 Gateway Design
City of Franklin, Indiana

June 1, 2015

Below is a summary of HWC's 2015 hourly billing rates. Please note; the rates identified in this Agreement are

	<u>2015 Billing Rates</u>
Principal	\$201.00
Senior Project Manager	\$196.00
Project Manager	\$155.00
Project Engineer	\$120.00
Landscape Architect	\$115.00
Designer/Technician	\$100.00
Draftsman	\$85.00
Clerical Support	\$67.00
Construction Inspection Manager	\$110.00
Construction Inspector I	\$95.00
Construction Inspector II	\$85.00
Survey Crew Leader	\$98.00
Survey Crew Member I	\$77.00
Survey Crew Member II	\$57.00

REIMBURSABLE EXPENSES

- Direct Travel Expense - including mileage (the current rate allowed by the IRS), air fare, car rental, lodging, meals, large blueprint and copying runs, etc. These rates are for services performed during the 2015 calendar year.
- Large format black and white prints at \$.375 per square foot.
- Plots at \$2.00 per square foot.
- Black and white copies at \$.10 per sheet.
- Color copies at \$.50 per sheet
- CD's at \$25.00 each.
- Actual cost of long distance telephone calls, expense charges, photographs and postage.
- Actual cost of survey stakes, flagging, etc.
- Expenses will be billed at cost plus a 10% administrative fee.
- Hours worked in excess of 8 hours per day or 40 hours per week will be billed at an overtime rate of 1.5 times the rates listed for non-exempt employees.



APPENDIX E

Project Phasing Exhibit

**King Street and I-65 Gateway Design
City of Franklin, Indiana**

June 1, 2015

On the Following page is an exhibit depicting the approximate boundaries for each phase of the project identified in the scope of services.



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Franklin King Street and I-65 Gateway Design
Appendix E: Project Phasing Exhibit

Page 1 of 1

CITY OF FRANKLIN, IN - KING STREET & I-65 GATEWAY DESIGN

Exhibit E:

PROJECT PHASING OVERVIEW MAP

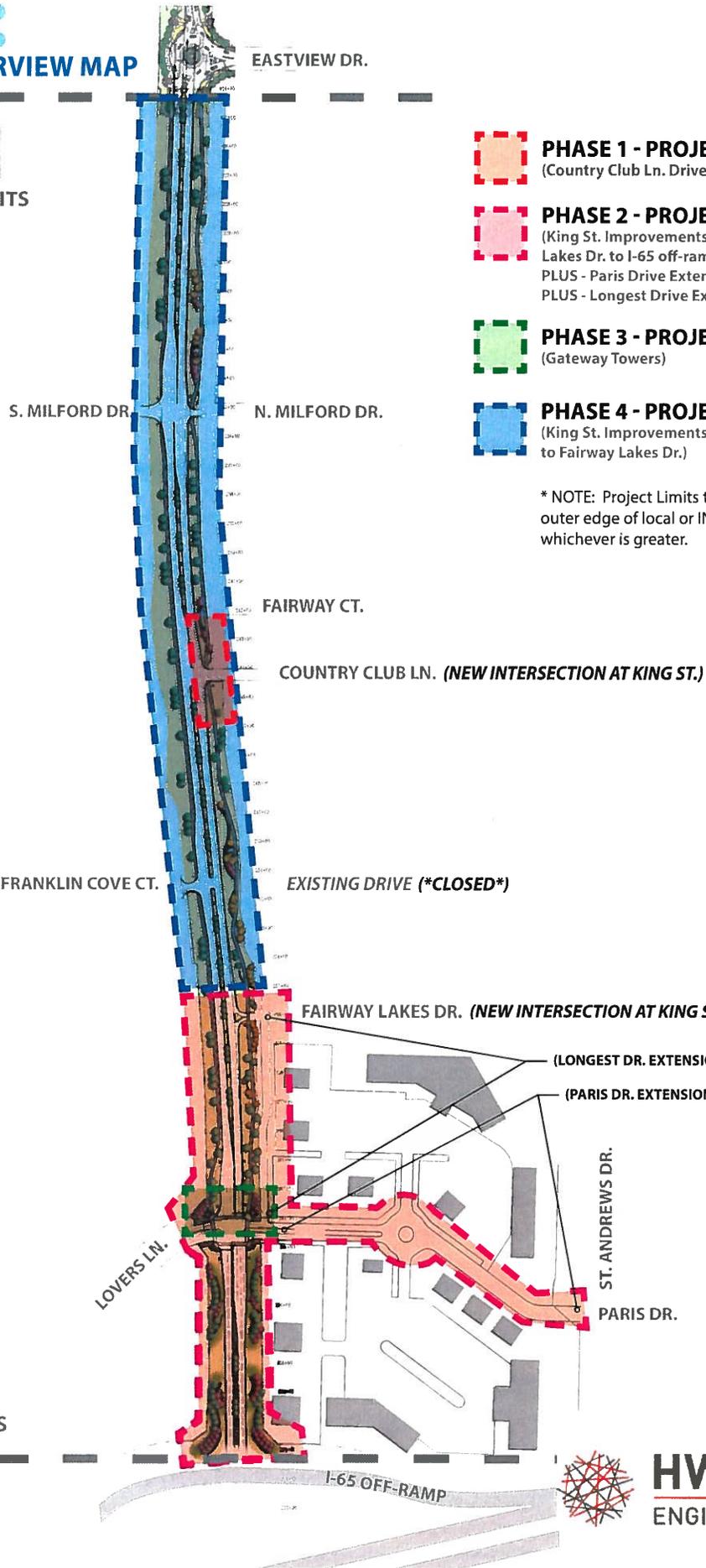
BEGIN

BEGIN PROJECT LIMITS



END

END PROJECT LIMITS



PHASE 1 - PROJECT AREA
(Country Club Ln. Driveway)



PHASE 2 - PROJECT AREA
(King St. Improvements - Fairway Lakes Dr. to I-65 off-ramp,
PLUS - Paris Drive Extension,
PLUS - Longest Drive Extension)



PHASE 3 - PROJECT AREA
(Gateway Towers)



PHASE 4 - PROJECT AREA
(King St. Improvements - Eastview Dr. to Fairway Lakes Dr.)

* NOTE: Project Limits terminate at outer edge of local or INDOT R.O.W., whichever is greater.



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APPENDIX F

Scope of Service – Supplementary Information

**King Street and I-65 Gateway Design
City of Franklin, Indiana**

June 1, 2015

On the Following pages is more detailed information relating to services provided under this agreement. This Exhibit, along with Appendix A is intended to constitute the complete scope of services provided by HWC to the CLIENT under this agreement.



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Consulting Engineers

5925 Lakeside Blvd.
Indianapolis, IN 46278
Phone (317) 290-9549
Fax (317) 290-9560

6949 Kennedy Avenue
Unit F
Hammond, IN 46323
Phone (219) 844-6752
Fax (219) 844-6795

May 7, 2015

Lewie Allen, P.E.
Project Manager
HWC Engineering
792 White Street
Scottsburg, IN 47170

RE: Franklin King Street (former SR 44)
Transportation Improvements

Dear Lewie,

Thank you for the opportunity to assist you on this project. The survey will be in accordance with the scope of work provided and made part of this document by reference as Exhibit "A".

~~The topographic survey for this project is described via aerial photographs and attached as Exhibit "B". The total costs for these tasks are described in the attached man hour justification as Exhibit C..~~

~~Topographic Survey Lump Sum \$32,000.00~~

Additionally, it is proposed that several parcels may be needed for right of way. The parcel breakdown is attached as Exhibit "D"

Right of way Engineering Unit Cost \$3925/ parcel
Estimated 8 parcels Not to Exceed Total \$31,400.00

Please feel free to call if you have any questions

Sincerely,

Benson G. Hinshaw P.S.

STREETS – HIGHWAYS – TRAFFIC – STRUCTURES – WATER – SEWER – SURVEYING – RIGHT-OF-WAY SERVICES

ACTIVE MEMBERSHIPS:



EXHIBIT "A"

Survey

- ~~Using survey information provided by HWC provide additional topographic survey of areas as defined in attached aerial exhibits. Elements to be identified will be the existing utilities, pavements, buildings, ground contours, drainage conditions, and all topographic features included in the defined survey limits.~~
- ~~Verify existing r/w lines along King Street in file provided by HWC.~~
- ~~Pick up additional property owner information and property line on all parcels adjoining King Street and Longest Drive. Define property lines inside Paris Drive Development Area~~
- ~~Set/establish reference points and benchmarks through the project corridor. Set 6 points along King Street, 3 Points along Paris Drive and 2 points near Country Club Lane and King Street~~
- ~~Locate all drainage structures within defined survey limits. Identify pipe type, size and outlet and inlet elevations~~
- ~~Locate and identify all utilities within defined survey limits.~~
- ~~Survey Letters to be sent to residential owners affected, no commercial properties. (This is still to be determined.)~~
- ~~Provide a 3D base file with breaklines and random points of the requested data in Microstation compatible format.~~
- ~~Provide a text file of the topographic survey points.~~
- ~~Survey work in the area of Country Club Lane needs to be completed and submitted to HWC before other areas are surveyed.~~
- ~~Stake proposed r/w as needed.~~

R/W Engineering

- Phase 1 – Country Club lane Approach- Possible r/w acquisition on 2 parcels in this area. To be determined once survey obtained. Funding is 100% local
- Phase 2 – Paris Drive extension – Property transfer of existing road right of way to new proposed r/w. This should include legal descriptions, appraisals and all documentation necessary for property transfer. Funding is 100% local
- Phase 2- Extension road from Paris Drive to Fairway lakes. The city of Franklin wants to look at the feasibility of acquiring an easement for this extension road, without the purchase of land acquisition. Funding is 100% local
- Phase 2- King Street from Fairway Lakes Drive to Western Ramps termini of I-65- Possible acquisition on the south side of King Street at the Lovers Lane Intersection and at Fairway Lakes Road. Funding is 100% local
- Phase 3- King Street from East view to Fairway lakes Drive- No acquisition is anticipated for this phase. Any right of way that would need to be acquired would have to be done according to Indot guidelines.



September 10, 2014

Mr. Randy Hancock, P.E.
Director, Transportation Engineering
HWC Engineering
792 White Street
Scottsburg, Indiana 47170

Re: Designation (DES) Number: Unknown
SR 44 Improvements Project, Franklin, Indiana
Preliminary Assessment and Fee Justification

Dear Mr. Hancock,

Proposed Action – The proposed project would reconstruct former SR 44 (King Street) from the western I-65 ramps to Eastview Drive in Franklin, Indiana. The City of Franklin plans to add a 10-foot wide multi-use path along the north side of the road with landscaping improvements, a gateway monument, resting areas, etc., and a new 5-foot wide sidewalk along the south side. In addition, King Street would be reconstructed from the current 2 24-foot lanes with a paved median and 10-foot paved outside shoulders to a raised median with curbs on the outside of the edges of the pavement. All of the work will occur in the existing right of way, which was disturbed when SR 44 was constructed.

Preliminary Investigation – A preliminary Red Flag Investigation was completed Lochmueller Group in order to identify any potential environmental concerns located within the area of the proposed project. The proposed project will be within existing right-of-way and previously disturbed soils. Land use in the area is commercial and residential. The project area was screened using 53 Geographic Information System (GIS) layers for the preliminary investigation. Two underground storage tanks (USTs) are mapped near the project area and represent gas stations both north and south of King Street. The Hillview County Club, a private golf course, is located north of King Street and west of I-65. No other environmental resources were mapped within the project area.

The *National Register of Historic Places* (NRHP) and the *Indiana Register of Historic Sites and Structures* (State Register) were checked using the *State Historic Architectural and Archaeological Research Database* (SHAARD) and SHAARD Geographic Information System (SHAARD GIS); no resources in the project vicinity were identified on either list. The *Johnson County Interim Report* (1985) was also examined; one "Contributing" property (Needham Township School, 081-222-35023) was identified near the project area; however it may not be extant. The *Indiana Historic Bridge Inventory Volume 2: Listing of Historic and Non-Historic Bridges* (February 2009) by Mead & Hunt was reviewed; no historic bridges were identified near the project area.

Environmental Documentation Scope of Work – The project is currently scoped as a Categorical Exclusion Level 1 (CE-1). The scope of work for completing the CE document will include the below tasks:

1. **Project Organization/Coordination** – This task includes all file management, review of project budget, and general project management activities.
2. **Identify Property Owners and Send Notice of Entry for Survey or Investigation Letters** – This

- task includes identifying existing nearby property owners and mailing them letters prior to field work. Property owner information will be identified using an online county GIS website.
3. **Field Inspection(s)** – This task includes a field inspection(s) of the proposed area by a biologist to document potential environmental resources, including streams, wetlands, recreational facilities, hazardous materials, etc. A field inspection will also be conducted by a historian to document any above-ground structures within the above-ground Area of Potential Effects (APE). This includes developing maps prior to the field inspection and photographic documentation. This task does not include a Phase I Environmental Site Assessment (ESA) for hazardous.
 4. **Red Flag Investigation** – A Red Flag Investigation will be prepared and included in the CE document.
 5. **Early Coordination** – Early coordination packages (including letters, Red Flag Investigation maps, photographs, and project plans [if available from designer]) will also be developed and sent to resource agencies.
 6. **Historic Properties Short Report** – This task includes preparation of a Historic Properties Short Report (HPSR). A short report is anticipated because no properties rated “Contributing” or higher are anticipated to be within the Area of Potential Effect (APE). This task also includes a Phase 1a archaeological records check. This documentation will be sent to the State Historic Preservation Officer (SHPO) and consulting parties for review. Cultural Resource Analysts (CRA) will be the sub-consultant for this service. This task does not include a long HPR with a historic context or an archaeology survey.
 7. **800.11(d) Documentation/Effect Finding** – This task includes preparation of the 800.11(d) documentation and “No Historic Properties Affected” finding which summarizes the Section 106 consultation and is required by the INDOT Section 106 process. This documentation will be sent to the SHPO and consulting parties for review. A public notice will also be published in the local newspaper.
 8. **Categorical Exclusion (CE)** – This task includes the preparation, approval, and distribution of the CE and associated appendices. The project is currently scoped as a CE-1 because no new right-of-way is anticipated and a Section 106 “No Historic Properties Affected” finding is also anticipated. This task also includes preparation of the commitments spreadsheet.
 9. **Meetings** – This task includes preparation for and attendance at two meetings. Meetings may include HWC Engineering, City of Franklin, or INDOT/Federal Highway Administration (FHWA).

Environmental Documentation Fee – Using the above information, a fee for **\$16,850** has been developed. This fee does include notification to property owners, field inspection(s), Red Flag Investigation, early coordination with resource agencies, Historic Properties Short Report, Phase 1a archaeological records check, 800.11(d) documentation and approval of the CE-1 document.

This fee does not include a Waters of the US Report, wetland delineation, wetland mitigation or permitting, Phase I ESA, karst surveys/coordination with karst MOU agencies, Section 106 consultation for a “No Adverse Effect” or “Adverse Effect” finding, preparation of a Section 106 Memorandum of Agreement (MOA), archaeology surveys, Section 4(f) evaluation or completion of a CE-2 or higher.

Environmental Documentation Schedule – It is anticipated the *draft* environmental document could be submitted to INDOT for initial review within approximately 6 months of a Notice to Proceed. This will be dependent upon the availability of design information. It also assumes a “No Historic Properties Affected” finding for historic properties and timely coordination with the SHPO. This cost is good for one year.

Environmental Documentation “If Necessary” Tasks – The following tasks may or may not be required depending upon the project impacts. These tasks will only be billed if determined necessary and with permission of HWC Engineering.

Section 106 Consultation for No Adverse Effect Finding and CE-2 Preparation - The cost for these tasks is **\$4,690**.

1. **Section 106 Consultation for a “No Adverse Effect” Finding** – This task would be necessary if a historic property on or eligible for the National Register is identified within the project APE. This task includes consultation with the State Historic Preservation Office (SHPO) and consulting parties for a “No Adverse Effect” finding. It includes one letter describing effects to historic properties. This task assumes the project will not have an “Adverse Effect” to any historic property.
2. **CE-2** – A Section 106 “No Adverse Effect” finding would increase the CE level from a CE-1 to a CE-2. This task includes the additional effort required to prepare the longer CE-2 form.

Sincerely,



Kia M. Gillette
Environmental Manager
Lochmueller Group

Cost Estimate

King Street and I-65 Gateway Design
Franklin, Johnson County, Indiana

	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
<u>GEOTECHNICAL FIELD</u>			
1. Mobilization and Field Coordination			
a. SPT Rig	1 ea	\$240.00	\$240.00
b. CPT	ea	\$405.00	
c. Field and utility coordination	1 LS	\$310.00	\$310.00
d. Field coordination with property owners			
i. 1 - 10	1 LS	\$280.00	\$280.00
ii. 11 - 25	LS	\$460.00	
iii. Over 25	LS	\$640.00	
e. Mileage	65 mi	\$3.15	\$204.75
2. Truck mounted borings with split spoon sampling	295 ft	\$17.10	\$5,044.50
3. Truck mounted borings with drilling fluid	ft	\$17.00	
4. Truck mounted core drilling	ft	\$35.40	
5. Truck mounted borings			
a. Truck mounted borings through bedrock or boulders or concrete pavement	ft	\$35.00	
b. Bridge deck coring and restoration	ea	\$310.00	
6. Cone penetrometer testing			
a. Set up	ea	\$68.00	
b. Subsurface profiling	ft	\$11.00	
c. Profiling with pore pressure measurement			
i. Piezometric Saturation	ea	\$85.30	
ii . Penetration	ft	\$13.15	
iii. Pore water dissipation test	hr	\$175.00	
iv. Hydraulic conductivity and consolidation	ea	\$65.00	
d. Profiling with Shearwave Velocity Measurement	ft	\$14.50	
e. Sample	ea	\$21.00	
7. Hand or truck soundings	30 ft	\$11.00	\$330.00
8. Hand auger drilling	ft	\$11.50	
9. Skid mounted borings with split spoon sampling	ft	\$27.25	
10. Skid mounted borings using drilling fluid	ft	\$27.50	
11. Skid mounted core drilling	ft	\$39.00	
12. Skid mounted boring through bedrock or boulders	ft	\$41.00	
13. Skid mounted soundings	ft	\$15.60	
14. Skid Mounted Cone Penetrometer Testing (CPT)			

	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
a. Set up	ea	\$102.00	
b. Subsurface profiling	ft	\$17.00	
c. Profiling with pore pressure measurement			
i. Piezometric Saturation	ea	\$130.00	
ii. Penetration	ft	\$20.00	
iii. Pore Water Dissipation Test	hr	\$260.00	
iv. Hydraulic Conductivity and Consolidation	ea	\$79.00	
d. Profiling with Shearwave Velocity Measurement	ft	\$22.00	
e. Sample	ea	\$33.00	
15. Furnishing of a boat		Actual Cost	
16. Barge set-up expenses			
a. Navigable water			
i. Barge set-up	ea	\$5,200.00	
ii. Rental of support equipment and/or boat		Actual Cost	
iii. Drill rig down time	hr	\$132.00	
b. Non-navigable water barge set-up	ea	\$4,500.00	
17. Additional disassembly and reassembly			
a. Navigable water	ea	\$1,900.00	
b. Non-navigable water	ea	\$1,700.00	
18. Barge mounted borings with split spoon sampling	ft	\$29.75	
19. Barge mounted core drilling	ft	\$40.25	
20. Barge mounted boring through bedrock or boulders	ft	\$44.50	
21. Barge mounted soundings	ft	\$17.60	
22. Casing through water	ft	\$7.75	
23. Uncased sounding through water	ft	\$5.00	
24. Set up for borings and machine soundings			
a. Borings and machine soundings less than 20 ft deep	23 ea	\$64.00	\$1,472.00
b. Rock core borings	ea	\$110.00	
25. Additional 2-in. split spoon sampling	7 ea	\$19.00	\$133.00
26. 3-in. split spoon samples	ea	\$21.00	
27. 3-in. Shelby tube samples	ea	\$57.00	
28. Bag samples			
a. 300-lb sample	1 ea	\$105.00	\$105.00
b. 25-lb sample	ea	\$46.00	
c 5-lb sample	ea	\$40.00	
29. Field vane shear test	ea	\$102.00	
30. 4½-in. cased hole	ft	\$11.30	
31. Installation of Geotechnical Instruments			

	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
a. Inclinometer casing installation	ft	\$13.40	
b. Piezometer installation up to 25 ft below surface	ea	\$230.00	
c. Piezometer installation deeper than 25 ft below surface	ea	\$260.00	
d. Metal protective outer cover for inclinometer and piezometer casings	ea	\$113.00	
32. Geotechnical engineer	8 hr	\$105.00	\$840.00
33. Railroad expenses		Actual Cost	
34. Twenty-four hour water levels			
a. Field measurements per borehole	10 ea	\$34.75	\$347.50
b. PVC slotted pipe	ft	\$5.30	
35. Special borehole backfilling			
a. 0 to 30 ft			
i. SPT	25 ea	\$97.00	\$2,425.00
ii. CPT	ea	\$43.00	
b. More than 30 ft			
i. SPT	ft	\$6.00	
ii. CPT	ea	\$1.75	
c. Pavement restoration	25 ea	\$52.00	\$1,300.00
36. Dozer rental		Actual Cost	
37. Traffic control			
a. Flag crew	day	\$550.00	
b. Equipment Rental		Actual Cost	
c. Flag crew with equipment	4 day	\$665.00	\$2,660.00
38. Centerline surveying		Invoice Cost	
		Subtotal (Geotechnical Field)	\$15,691.75
<u>GEOTECHNICAL LABORATORY</u>			
39. Sieve analysis for soils	5 ea	\$44.00	\$220.00
40. Hydrometer analysis	5 ea	\$50.50	\$252.50
41. Sieve analysis for Aggregates			
a. Analysis by Washing (AASHTO T-11)	ea	\$70.00	
b. Analysis by Using (AASHTO T-27)	ea	\$125.00	
42. Liquid limit	5 ea	\$31.00	\$155.00
43. Plastic limit & plasticity index	5 ea	\$22.50	\$112.50
44. Liquid Limit Ratio	ea	\$70.00	
45. pH test	5 ea	\$13.80	\$69.00
46. Loss on Ignition Test			
a. Loss on Ignition Test (Conventional)	ea	\$22.00	
b. Loss on Ignition Test (Sequential)	ea	\$50.00	

	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
47. Moisture Content Tests			
a. Moisture Content Test (Conventional)	100 ea	\$6.00	\$600.00
b. Moisture Content Test (Microwave)	ea	\$12.00	
48. Expansion Index of Soils	ea	\$240.00	
49. Specific Gravity Test	1 ea	\$32.50	\$32.50
50. Unit weight determination	20 ea	\$16.15	\$323.00
51. Hydraulic Conductivity Test			
a. Constant Head	ea	\$210.00	
b. Falling Head	ea	\$260.00	
52. a. Unconfined Compression Test	6 ea	\$42.00	\$252.00
b. Remolding of soil samples with chemical admixtures in chemical soil modification/stabilization (3 samples is equal to 1 unit)	ea	\$105.00	
c. Point Load Strength Index of Rock	ea	\$40.00	
53. Compressive Strength and Elastic Moduli of Intact Rock			
a. Compressive Strength of Intact Rock	ea	\$100.00	
b. Elastic Moduli of Intact Rock	ea	\$400.00	
54. Consolidation Test	ea	\$410.00	
55. Triaxial test			
a. Unconsolidated - Undrained (UU)	ea	\$320.00	
b. Consolidated - Undrained (CU)	ea	\$475.00	
c. Consolidated - Drained (CD)	ea	\$650.00	
d. Pore Pressure measurement with a. or b. and use of back pressure for saturation	ea	\$230.00	
56. Direct Shear Test	ea	\$550.00	
57. Moisture-Density Relationship Test			
a. Standard Proctor	1 ea	\$128.00	\$128.00
b. Modified Proctor	ea	\$140.00	
58. Soil Support Testing			
a. California Bearing Ratio Test	ea	\$490.00	
b. Subgrade Resilient Modulus	2 ea	\$460.00	\$920.00
59. Collapse Potential Evaluation Test			
a. Silty Soil (Loess)	ea	\$352.00	
b. Cohesive or Expansive Soils	ea	\$420.00	
60. Water Soluble Sulfate Test	4 ea	\$100.00	\$400.00
61. Water Soluble Chloride Test	ea	\$100.00	
62. Soil Resistivity Test	ea	\$125.00	
63. a. Slake Durability Index Test	ea	\$120.00	

	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
b. Jar Slake Test	ea	\$12.00	
Subtotal (Geotechnical Laboratory)			\$3,464.50

GEOTECHNICAL ENGINEERING

64. Geotechnical profile and related work			
a. Without soil subgrade drawings			
First mile	LS	\$1,100.00	
Each additional mile	mi	\$500.00	
b. With soil subgrade drawings			
First mile	LS	\$1,300.00	
Each additional mile	mi	\$570.00	
c. Soil subgrade drawings (only)			
First mile	LS	\$335.00	
Each additional mile	mi	\$210.00	
65. Geotechnical report			
a. Without soil subgrade investigation			
First mile	1 LS	\$1,750.00	\$1,750.00
Each additional mile	mi	\$650.00	
b. With soil subgrade investigation			
First mile	LS	\$1,775.00	
Each additional mile	mi	\$740.00	
c. Soil subgrade investigation (only)			
First mile	LS	\$550.00	
Each additional mile	mi	\$340.00	
66. Settlement analysis and recommendations for embankment			
a. Proposed embankment	ea	\$470.00	
b. Proposed and existing embankment	ea	\$520.00	
67. Ground modification design	ea	\$1,375.00	
68. Slope stability analysis			
a. C, ϕ or C & ϕ analysis	ea	\$735.00	
b. Corrective measures	ea	\$735.00	
c. Stage construction corrective method	ea	\$1,275.00	
69. Foundation analysis and recommendations			
a. Shallow foundation (towers)	2 ea	\$450.00	\$900.00
b. Deep foundation			
i. Deep foundation analyses	ea	\$800.00	
ii. Wave equation analyses	ea	\$310.00	
iii. Liquefaction analysis	ea	\$250.00	
iv. Group - 3D analysis	ea	\$400.00	

	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
c. Settlement analysis for bridge pier foundation			
i. Bridge pier	ea	\$360.00	
ii. Embankment plus pier	ea	\$400.00	
iii. Embankment plus pier plus all other loads	ea	\$460.00	
d. Foundation on bedrock	ea	\$350.00	
70. Retaining structure analysis recommendations			
a. Conventional retaining structures and other types such as MSE Walls and Bin walls			
i. Shallow foundation	3 ea	\$820.00	\$2,460.00
ii. Deep foundation	ea	\$1,080.00	
iii. Settlement analysis for retaining wall foundation	ea	\$350.00	
b. Pile retaining structure analysis and recommendations			
i. Free standing structure	ea	\$950.00	
ii. Retaining structure with tie-back system	ea	\$1,380.00	
c. Drilled-in-pier retaining structure analysis			
i. Free standing structure	ea	\$975.00	
ii. Retaining structure with tie-back system	ea	\$1,400.00	
d. Soil nailing wall analysis	ea	\$940.00	
71. Seepage analysis	ea	\$1,320.00	
72. Deep dynamic compaction analysis	ea	\$1,330.00	
		Subtotal (Geotechnical Engineering)	\$5,110.00

CONSTRUCTION INSPECTION AND MONITORING

73. Mobilization of testing equipment	LS	\$150.00	
74. a. Monitoring geotechnical instrumentation	hr	\$70.00	
b. Filed Inspector	hr	\$70.00	
75. Integrity testing		Actual Cost	
76. Field Compaction Testing			
a. Dynamic Cone Penetration Test (DCPT)	hr	\$70.00	
b. Light Weight Deflectometer Test (LWD)	hr	\$70.00	
77. Dynamic pile analysis	ea	\$975.00	
78. Static load test	ea	\$975.00	
79. Dynamic pile load test		Actual Cost	
80. CAPWAP-C analysis	ea	\$450.00	
81. Final construction inspection report	ea	\$875.00	

Subtotal (Construction Inspection and Monitoring)

FOUNDATION EVALUATION BY NON-DESTRUCTIVE METHODS

82. a. Surface test/Pier or foundation		Actual Cost	
b. Borehole test/Pier or foundation		Actual Cost	

	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
<u>GEOPHYSICAL INVESTIGATION</u>			
83. Geophysical Investigations			Invoice Cost
<u>GEOTECHNICAL PROJECT MANAGEMENT</u>			
84. Project Management			
a. Project Coordination	mi	\$1,600.00	
b. Project Website	LS	\$3,100.00	
85. Geotechnical Review			
a. Structure Report	ea	\$310.00	
b. Roadway Report	mi	\$260.00	
<u>PAVEMENT INVESTIGATION</u>			
1. Mobilization of coring equipment	LS	\$200.00	
2. Mobilization mileage for coring equipment	mi	\$1.70	
3. Pavement core (partial depth)	ea	\$120.00	
4. Pavement core (full depth)	20 ea	\$180.00	\$3,600.00
5. Sub-base sample	20 ea	\$59.00	\$1,180.00
6. Cement concrete pavement core density determination	ea	\$31.00	
7. Cement concrete core compressive strength test	ea	\$30.00	
8. Bituminous extraction test	ea	\$80.00	
9. Sieve analysis of extracted aggregate test	ea	\$53.50	
10. Recovery of asphalt from solution by Abson method	ea	\$315.00	
11. Theoretical maximum specific gravity test	ea	\$67.00	
12. Bulk specific gravity test	ea	\$29.00	
13. Air voids calculation	ea	\$27.00	
14. Core report for partial depth core	ea	\$32.00	
15. Core report for full depth core	20 ea	\$40.00	\$800.00
16. Pavement analysis and report	ea	\$730.00	
		Subtotal (Pavement Investigation)	\$5,580.00

Summary of Fees

Geotechnical Field	\$15,691.75
Geotechnical Laboratory	\$3,464.50
Geotechnical Engineering	\$5,110.00
Construction Inspection and Monitoring	
Pavement Investigation	\$5,580.00
Pavement Investigation	\$11,770.00
Estimated Total	\$41,616.25

June 1, 2015

Mr. Cory J. Daly, RLA, LEED AP
Partner
HWC Engineering
151 N. Delaware Street, Suite 800
Indianapolis, IN 46204

Re: King Street - Franklin, IN - Structural Engineering Services Proposal

Dear Mr. Daly,

Cornerstone Engineering, Inc. (CEI) appreciates the opportunity to present our proposal for Structural Engineering Services for the above referenced project. We will work closely with you and your representatives to help expedite this project in a timely fashion. We have included within this proposal the following:

1. Understanding of Project Requirements
2. Services Assumed to be Provided by Others
3. Supplemental Services
4. Proposed Fee
5. Standard Engineering Rate Schedule

1. **Understanding of Project Requirements (Basic Services):**

Our understanding of the project requirements needing Structural Engineering Services are as follows:

- a. The City of Franklin has obtained jurisdiction over State Road 44 just west of the intersection of I-65 and SR 44 and is interested in creating a pedestrian friendly corridor westward into the city. The project limits start from the I-65 'off ramp' to approximately Eastview Drive. The project is proposed to be broken down in four separate phases of which Phase 2, 3, and 4 will require structural engineering services. Our understanding of the specific role in each of the phases is better described below:

General

1. Coordinate with Geotechnical Consultant on appropriate foundation requirements. This will include preliminary loading information given to the said consultant for their analysis.
2. Design the retaining walls per INDOT specifications.
3. Detail drawings for the retaining walls per INDOT specifications.
4. All design meetings are assumed to be held in Indianapolis.
5. Provide AutoCAD drafting services for all elements designed/detailed by us and coordinate requirements with HWC. File sharing of information will be at the direction of HWC.
6. Provide intermittent design drawings for review. We have included two review drawings per phase.
7. Final Construction Documents will be signed and sealed by a Professional Engineer registered in the State of Indiana.
8. Provide specifications for materials designed by us.
9. Provide opinions of probable cost for items designed by us on each phase of the project.

Phase 2

Phase 2 consists of primarily of the design of two decorative signal light foundations located at the intersection of Paris Drive and King Street. The proposed traffic signal poles are atypical from INDOT standard specifications, therefore careful coordination between the proposed manufacturer, geotechnical engineer and INDOT specifications will need to be performed. We have assumed that independent foundation/concrete design will need to be completed as well as complete detailing of the foundations. We have also assumed two design meetings for this phase.

Phase 3

Phase 3 consists of the design of two gateway tower structures measuring approximately 34 feet in height with an approximate base area of 100 square feet (10' x 10'). We have assumed that the tower superstructure will consist of a steel frame truss structure with brick/stone cladding. We will work closely with HWC on the development of this structure on how best to support the proposed cladding system. The structure will either be supported by a shallow spread footing or deep foundations. Coordination with the Geotechnical Engineer will be essential to providing the Owner with cost effective solution.

Phase 3 also consists of approximately 170 linear feet of retaining walls to be designed (four walls in total). It has been assumed that these walls will have an exposure limit of approximately five feet and will retaining soil and minor overburden pressure (light vehicular traffic). The material has been assumed to be cast-in-place concrete, however, we understand (as will be the case for all retaining walls on the project) there may potentially be some investigation/analysis on our part for different material options (i.e. boulders, brick facing, cobble facing, keystone-type walls, etc.).

We have also assumed four design meetings for this phase.

Phase 4

Phase 4 consists of approximately 1000 linear feet of retaining walls to be designed (15 walls in total). It has been assumed that these walls will have an exposure limit of approximately five feet and will retaining soil and minor overburden pressure (light vehicular traffic). The material has been assumed to be cast-in-place concrete, however, we understand (as will be the case for all retaining walls on the project) there may potentially be some investigation/analysis on our part for different material options (i.e. boulders, brick facing, cobble facing, keystone-type walls, etc.).

We have also assumed four design meetings for this phase.

- b. Construction Administration Phase Services are NOT included within our proposed fee.
- c. We have based our proposal on the information that we received via an email dated May 6th, our in-person meeting on May 6th and our phone conversation on May 28th. We also understand that it is the intent of the Owner to design all phases of the project concurrently, however will be let through INDOT at different times.

2. Services Assumed to be Provided by Others:

Additional services/information beyond this scope are necessary to perform our services. The below partial list of items have been assumed to be supplied by the client or other consultants.

- a. Geotechnical Report depicting the allowable bearing pressure and geotechnical information pertinent for this type of project.
- b. All pertinent INDOT specifications/drawings that we will be required to adhere to.
- c. Architectural drawings of the Towers including cladding options, sections, details depicting the exact layout of the towers, wall sections, etc.
- d. All pertinent AutoCAD requirements that we will be required to adhere to.

3. Supplemental Services:

The following professional services are not included in our fee for Basic Services. Supplemental services, when approved by your firm, will be tracked separately from Basic Services and invoiced monthly using the hourly rates per the Schedule in Section 5 of this proposal.

- a. Design or field observation(s) of shoring and bracing for excavations and buildings or underpinning of adjacent structures. These services are typically performed by the General Contractor or their sub-consultants.
- b. Construction Administration services.
- c. Special Structural Inspection Services for the towers.
- d. Services resulting from participation in a Peer Review process in which an outside consultant, which is not chosen by Cornerstone Engineering, Inc., has been selected to review our design documentation.
- e. Analysis of slabs or framing systems for temporary or construction loads such as lift trucks, vehicle loads, etc., other than defined in our Basic Services.
- f. Services resulting from changes of scope or magnitude of the project as described above or after the drawings are substantially complete (typically after 50% design review has been completed by the client).
- g. Structural engineering services for Change Orders resulting from requests by the Owner or Client.
- h. Structural engineering services resulting from corrections or revisions required due to errors or omissions in construction by the General Contractor or their sub-contractors.
- i. Additional site visits/meetings in excess of the quantity included in our Basic Services.
- j. Construction Administration Services as noted above.
- k. Geotechnical Analysis.

4. Proposed Fee:

Our proposed lump sum fee for the above mentioned items for this project is \$84,510, this does not include any reimbursable expenses occurred. Reimbursable expenses, incurred in connection with this project, will be tracked and billed separately in addition to our professional fee. Reimbursable expenses include, but are not limited to, mileage.

- a. Our fee can be itemized per the following:
 - i. Phase 2 = \$10,940
 - ii. Phase 3 = \$40,510
 - iii. Phase 4 = \$33,060

5. **Standard Engineering Hourly Rate Schedule:**

Our standard hourly rates are given below. These rates will apply to the following professional services that are not included in our fee for Basic Services:

- | | |
|-----------------------|----------|
| a. Principal Engineer | \$145/hr |
| b. Project Manager | \$135/hr |
| c. Project Engineer | \$95/hr |
| d. CAD Technician | \$65/hr |

Again, Cory, thank you so much for the opportunity to propose on this project. We look forward to working with you. If you should have any questions or need additional information, please feel free to contact me at (317) 579-9100 or on my cell (317) 498-9948.

Thank you so much for your consideration,



Brad L. Bobich, PE
Regional Manager
Cornerstone Engineering, Inc.

May 28, 2015

Mr. Cory Daly
HWC Engineering
151 N. Delaware Street, Suite 800
Indianapolis, IN 46204

RE: Franklin King Street - Gateway / Streetscape Project
Enverity No. 15063

Dear Cory:

Enverity Engineering is pleased to have the opportunity to provide engineering services for the Franklin, Indiana Gateway/Streetscape project. The following is an outline of our understanding of the project scope and our proposed professional fees for the project.

1. PROJECT SCOPE

- 1.1 We understand the scope of the project per your emails on May 14, 2015 and May 15, 2015 and our subsequent phone discussions. In short the project is a streetscape/gateway enhancement project at King Street from I-465 off ramp to Eastview Drive in Franklin, Indiana . This project is in two parts with one part funded as an INDOT project.

2. ENVERITY SCOPE OF SERVICES

Our proposed professional fee for the project includes design, bid and construction administrative services for the project scope described above. Enverity will provide partial design for electrical systems.

2.1 Electrical Scope:

- 2.1.1 Develop recommendations for selection of lighting fixtures for the Gateway Structures, Interpretative panels and low landscape walls. Develop illumination analysis and renderings for review.
- 2.1.2 Develop electrical plans to power lighting fixtures we are specifying. HWC will specify street / roadway lighting, coordinate with utility for power and specify power cabinets and controls. Enverity will simply identify circuit connections for lighting we have specified.
- 2.1.3 Develop electrical specifications for bidding and construction, using INDOT standard specifications or unique special provisions as appropriate.
- 2.1.4 Develop a detailed opinion of probable electrical construction cost to meet INDOT grant requirements including INDOT pay items with backup as appropriate. Determination of pay items as line items or lump sum will be determined with the design team for each item of work scope and provided as agreed upon.
- 2.1.5 INDOT Requirements: As noted throughout the proposal and restated here for clarity. Our proposal includes all required design calculations, pay items, quantity calculations and data for submission to INDOT for review as required and expected on an INDOT project.

2.2 Deliverables:

- 2.2.1 Narrative with cut sheets and costs for selection of lighting fixtures.
- 2.2.2 Photometric Plan: Drawing that documents the proposed location of lighting fixtures and the resulting illumination for review and approval.
- 2.2.3 Construction Documents (90%): Drawings, specifications and estimate of probable cost for final coordination, QA/QC and Owner review and comment.
- 2.2.4 Construction Documents (100%): Drawings, specifications and estimate of probable cost suitable for bidding and construction.
- 2.2.5 We anticipate two sets of Construction Documents will be prepared as part of our scope of work. One set of documents will be used for the INDOT funded portion of the project and the second set of documents will be used for the non-INDOT funded portion of the project.

2.3 Services:

2.3.1 Design Phase:

- 2.3.1.1 Attend up to (2) coordination meetings in Indianapolis at HWC Engineering.
- 2.3.1.2 Prepare and present deliverables in electronic format.

2.3.2 Bid Phase:

- 2.3.2.1 Prepare addendum items as requested and respond to bidder questions.
- 2.3.2.2 Review bid tabulations and supplier/subcontractor list and make recommendations for project award.

2.3.3 Construction Phase:

- 2.3.3.1 Review shop drawings and product data to confirm compliance with the contract documents.
- 2.3.3.2 Respond to contractors Requests for Information (RFI).
- 2.3.3.3 Prepare and issue Engineer Supplemental Instructions (ESI) as required.
- 2.3.3.4 Review reports from the Resident Project Representative (RPR) and offer input regarding electrical questions or concerns during construction.
- 2.3.3.5 Visit the site during construction at an appropriate time to observe work in progress and attend a construction meeting.
- 2.3.3.6 Visit the site at the completion of construction to review the electrical installation for compliance with the contract documents. Prepare a report of any discrepancies (Punchlist) for the contractor to resolve.

3. OUTSIDE SERVICES

The following expenses and tasks are by others and are not included in Enverity's scope of services:

- 3.1 None

4. COMPENSATION

The professional fees for the scope of work described above will be a fixed fee of Twelve Thousand Five Hundred Dollars (\$12,500.00) Billings will be submitted monthly based on the percentage of work completed within the phased fee structure indicated below. Reimbursables are not included in this fee and will be billed at cost. (We have estimated a budget of \$250.00 for reimbursable expense primarily consisting of mileage costs.)

SEQUENTIAL BILLING STRUCTURE

Construction Documents Phase	\$11,000.00
Bid Phase	\$250.00
Construction Administration Phase	\$1,250.00
TOTAL FEES	\$12,500.00

5. ADDITIONAL SERVICES

Additional services are not anticipated, but if required, will be billed at Enverity's standard hourly rates, attached. The architect shall be notified in writing prior to incurring billable time for such additional services.

5.1 Site visits during design or construction beyond those identified within the proposal.

6. PROJECT SCHEDULE

6.1 We anticipate design work will occur in late 2015 and early 2016 with construction occurring during 2016.

We would like to express our gratitude for the opportunity to assist with this project. We look forward to continuing our relationship with HWC Engineering and the completion of another challenging and successful project. Please do not hesitate to call if you have any questions or concerns.

Respectfully,

ENVERITY ENGINEERING



Barry K. Simpson, PE
Director of Electrical Engineering

AGENCY CUSTOMER ID: _____

LOC #: _____



ADDITIONAL REMARKS SCHEDULE

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AGENCY Arthur J. Gallagher Risk Management Services, Inc.		NAMED INSURED Hannum Wagle & Cline Engineering Rick Dickey 151 Delaware Street #800 Indianapolis IN 46220	
POLICY NUMBER		EFFECTIVE DATE:	
CARRIER	NAIC CODE		

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,
FORM NUMBER: 25 FORM TITLE: CERTIFICATE OF LIABILITY INSURANCE

Commerical General Liability:

- Form: BP 79 96 07 13
- (Blanket Additional Insured (Owners, Contractors or Lessors))

Commercial Automobile Policy

- Form: CA 88 10 01 10
- (Additional Insured by Contract, Agreement or Permit)

Commercial Umbrella Policy

- Umbrella is a follow form policy
- City of Franklin is listed as Additional Insured as required by written agreement under the General Liability and Automobile Liability.