

**AGREEMENT BETWEEN
HUBBELL, ROTH & CLARK, INC.
AND THE CITY OF ANN ARBOR
FOR PROFESSIONAL SERVICES**

The City of Ann Arbor, a Michigan municipal corporation, having its offices at 301 East Huron Street, Ann Arbor, Michigan 48107 ("City"), and Hubbell, Roth & Clark, Inc. ("Consultant") a Michigan Corporation with its address at 555 Hulet Drive, Bloomfield Hills, Michigan 48303-0824 agree as follows on this 3rd day of February, 2014.

The Consultant agrees to provide professional services to the City under the following terms and conditions:

I. DEFINITIONS

Administering Service Area/Unit means Project Management Services Unit.

Contract Administrator means Nicholas Hutchinson, P.E., acting personally or through any assistants authorized by the Administrator/Manager of the Administering Service Area/Unit.

Deliverables means all Plans, Specifications, Reports, Recommendations, and other materials developed for or delivered to City by Consultant under this Agreement

Project means Geddes Avenue Improvements Project; File No.: 2013-037.

II. DURATION

This Agreement shall become effective on February 3, 2014, and shall remain in effect until satisfactory completion of the Services specified below unless terminated as provided for in this Agreement.

III. SERVICES

- A. The Consultant agrees to provide professional engineering services ("Services") in connection with the Project as described in Exhibit A. The City retains the right to make changes to the quantities of service within the general scope of the Agreement at any time by a written order. If the changes add to or deduct from the extent of the services, the contract sum shall be adjusted accordingly. All such changes shall be executed under the conditions of the original Agreement.
- B. Quality of Services under this Agreement shall be of the level of professional quality performed by experts regularly rendering this type of service. Determination of acceptable quality shall be made solely by the Contract Administrator.
- C. The Consultant shall perform its Services for the Project in compliance with all statutory, regulatory and contractual requirements now or hereafter in effect as

may be applicable to the rights and obligations set forth in the Agreement.

- D. The Consultant may rely upon the accuracy of reports and surveys provided to it by the City except when defects should have been apparent to a reasonably competent professional or when it has actual notice of any defects in the reports and surveys.

IV. COMPENSATION OF CONSULTANT

- A. The Consultant shall be paid in the manner set forth in Exhibit B. Payment shall be made monthly, unless another payment term is specified in Exhibit B, following receipt of invoices submitted by the Consultant, and approved by the Contract Administrator. Total compensation payable for all Services performed during the term of this Agreement shall not exceed \$398,703.15.
- B. The Consultant will be compensated for Services performed in addition to the Services described in Section III, only when those additional Services have received prior written approval of the Contract Administrator. Compensation will be payable according to the fee schedule in Exhibit B. The Contract Administrator shall be the sole arbitrator of what shall be considered “reasonable” under this provision.
- C. The Consultant shall keep complete records of time spent and materials used on the Project so that the City may verify invoices submitted by the Consultant. Such records shall be made available to the City upon request and submitted in summary form with each invoice.

V. INSURANCE/INDEMNIFICATION

- A. The Consultant shall procure and maintain during the life of this contract, such insurance policies, including those set forth in Exhibit C, as will protect itself and the City from all claims for bodily injuries, death or property damage which may arise under this contract; whether the acts were made by the Consultant or by any subcontractor or anyone employed by them directly or indirectly. In the case of all contracts involving on-site work, the Contractor shall provide to the City, before the commencement of any work under this contract, documentation demonstrating it has obtained the policies required by Exhibit C.
- B. Any insurance provider of Consultant shall be admitted and authorized to do business in the State of Michigan and shall carry and maintain a minimum rating assigned by A.M. Best & Company’s Key Rating Guide of “A-“ Overall and a minimum Financial Size Category of “V”. Insurance policies and certificates issued by non-admitted insurance companies are not acceptable unless approved in writing by the City.
- C. To the fullest extent permitted by law, the Consultant shall indemnify, defend and hold the City, its officers, employees and agents harmless from all suits, claims,

judgments and expenses including attorney's fees resulting or alleged to result from any acts or omissions by the Consultant or its employees and agents occurring in the performance of or breach in this Agreement.

VI. COMPLIANCE REQUIREMENTS

- A. Nondiscrimination. The Consultant agrees to comply, and to require its subcontractor(s) to comply, with the nondiscrimination provisions of Section 209 of the Elliot-Larsen Civil Rights Act (MCL 37.2209) The Contractor further agrees to comply with the nondiscrimination provisions of Chapter 112 of the Ann Arbor City Code and to assure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity.

- B. Living Wage. The Consultant is a “covered employer” as defined in Chapter 23 of the Ann Arbor City Code and agrees to comply with the living wage provisions of Chapter 23 of the Ann Arbor City Code. The Consultant agrees to pay those employees providing Services to the City under this Agreement a “living wage,” as defined in Section 1:815 of the Ann Arbor City Code, as adjusted in accordance with Section 1:815(3); to post a notice approved by the City of the applicability of Chapter 23 in every location in which regular or contract employees providing services under this Agreement are working; to maintain records of compliance; if requested by the City, to provide documentation to verify compliance; to take no action that would reduce the compensation, wages, fringe benefits, or leave available to any employee or person contracted for employment in order to pay the living wage required by Section 1:815; and otherwise to comply with the requirements of Chapter 23.

VII. WARRANTIES BY THE CONSULTANT

- A. The Consultant warrants that the quality of its Services under this Agreement shall conform to the level of professional quality performed by experts regularly rendering this type of service.

- B. The Consultant warrants that it has all the skills, experience, and professional licenses necessary to perform the Services specified in this Agreement.

- C. The Consultant warrants that it has available, or will engage, at its own expense, sufficient trained employees to provide the Services specified in this Agreement.

- D. The Consultant warrants that it is not, and shall not become overdue or in default to the City for any contract, debt, or any other obligation to the City including real and personal property taxes.

VIII. TERMINATION OF AGREEMENT

- A. If either party is in breach of this Agreement for a period of fifteen (15) days following receipt of notice from the non-breaching party with respect to a breach, the non-breaching party may pursue any remedies available to it against the breaching party under applicable law, including but not limited to, the right to terminate this Agreement without further notice.
- B. The City may terminate this Agreement, on at least thirty (30) days advance notice, for any reason, including convenience, without incurring any penalty, expense or liability to the Consultant except the obligation to pay for Services actually performed under the Agreement before the termination date.
- C. Consultant acknowledges that, if this Agreement extends for several fiscal years, continuation of this Agreement is subject to appropriation of funds for this Project. If funds to enable the City to effect continued payment under this Agreement are not appropriated or otherwise made available, the City shall have the right to terminate this Agreement without penalty at the end of the last period for which funds have been appropriated or otherwise made available by giving written notice of termination to the Consultant. The Contract Administrator shall give the Consultant written notice of such non-appropriation within thirty (30) days after it receives notice of such non-appropriation.
- D. The remedies provided in this Agreement will be cumulative, and the assertion by a party of any right or remedy will not preclude the assertion by such party of any other rights or the seeking of any other remedies.

IX. OBLIGATIONS OF THE CITY

- A. The City agrees to give the Consultant access to the Project area and other City-owned properties as required to perform the necessary Services under this Agreement.
- B. The City shall notify the Consultant of any defects in the Services of which the Contract Administrator has actual notice.

X. ASSIGNMENT

- A. The Consultant shall not subcontract or assign any portion of any right or obligation under this Agreement without prior written consent from the City. Notwithstanding any consent by the City to any assignment, Consultant shall at all times remain bound to all warranties, certifications, indemnifications, promises and performances, however described, as are required of it under the Agreement unless specifically released from the requirement, in writing, by the City.
- B. The Consultant shall retain the right to pledge payment(s) due and payable under this Agreement to third parties.

XI. NOTICE

All notices and submissions required under this Agreement shall be delivered to the respective party in the manner described herein to the address stated in this Agreement or such other address as either party may designate by prior written notice to the other.

Notices given under this Agreement shall be in writing and shall be personally delivered, sent by next day express delivery service, certified mail, or first class U.S. mail postage prepaid, and addressed to the person listed below. Notice will be deemed given on the date when one of the following first occur: (1) the date of actual receipt; (2) the next business day when notice is sent next day express delivery service or personal delivery; or (3) three days after mailing first class or certified U.S. mail.

If Notice is sent to the CONTRACTOR, it shall be addressed and sent to:

Hubbell, Roth & Clark, Inc.
555 Hulet Drive, PO Box 824
Bloomfield Hills, MI 48303-0824
Attn: Nancy Faught, P.E.

If Notice is sent to the CITY, it shall be addressed and sent to:

City of Ann Arbor
301 E. Huron
Ann Arbor, Michigan 48107
Attn: Elizabeth Rolla, P.E.

XII. CHOICE OF LAW

This Agreement will be governed and controlled in all respects by the laws of the State of Michigan, including interpretation, enforceability, validity and construction. The parties submit to the jurisdiction and venue of the Circuit Court for Washtenaw County, State of Michigan, or, if original jurisdiction can be established, the United States District Court for the Eastern District of Michigan, Southern Division, with respect to any action arising, directly or indirectly, out of this Agreement or the performance or breach of this Agreement. The parties stipulate that the venues referenced in this Agreement are convenient and waive any claim of non-convenience.

XIII. OWNERSHIP OF DOCUMENTS

Upon completion or termination of this Agreement, all documents (i.e., deliverables) prepared by or obtained by the Consultant as provided under the terms of this Agreement shall be delivered to and become the property of the City. Original basic survey notes, sketches, charts, drawings, partially completed drawings, computations, quantities and other data shall remain in the possession of the Consultant as instruments of service unless specifically incorporated in a deliverable, but shall be made available, upon request, to the City without restriction or limitation on their use. The City acknowledges that the documents are prepared only for the Project. Prior to completion of the contracted Services the City shall have a recognized proprietary interest in the work product of the Consultant.

Unless otherwise stated in this Agreement, any intellectual property owned by Consultant prior to the effective date of this Agreement (i.e., preexisting information) shall remain the exclusive property of Consultant even if such Preexisting Information is embedded or otherwise incorporated in materials or products first produced as a result of this Agreement or used to develop Deliverables. The City's right under this provision shall not apply to any Preexisting Information or any component thereof regardless of form or media.

XIV. CONFLICT OF INTEREST

Consultant certifies it has no financial interest in the Services to be provided under this Agreement other than the compensation specified herein. Consultant further certifies that it presently has no personal or financial interest, and shall not acquire any such interest, direct or indirect, which would conflict in any manner with its performance of the Services under this Agreement.

XV. SEVERABILITY OF PROVISIONS

Whenever possible, each provision of this Agreement will be interpreted in a manner as to be effective and valid under applicable law. However, if any provision of this Agreement or the application of any provision to any party or circumstance will be prohibited by or invalid under applicable law, that provision will be ineffective to the extent of the prohibition or invalidity without invalidating the remainder of the provisions of this Agreement or the application of the provision to other parties and circumstances.

XVI. EXTENT OF AGREEMENT

This Agreement, together with any affixed exhibits, schedules or other documentation, constitutes the entire understanding between the City and the Consultant with respect to the subject matter of the Agreement and it supersedes, unless otherwise incorporated by reference herein, all prior representations, negotiations, agreements or understandings whether written or oral. Neither party has relied on any prior representations, of any kind or nature, in entering into this Agreement. This Agreement may be altered, amended or modified only by written amendment signed by the Consultant and the City.

FOR CONSULTANT

By _____
Its

FOR THE CITY OF ANN ARBOR

By _____
John Hieftje, Mayor

By _____
Jacqueline Beaudry, City Clerk

Approved as to substance

Steven D. Powers, City Administrator

Craig Hupy, Public Services Administrator

Approved as to Form and Content

Stephen K. Postema, City Attorney

EXHIBIT A

The Consultant shall provide all items listed in the Scope of Work for RFP (Request for Proposal) #879 and the Hubbell, Roth & Clark, Inc Proposal to RFP #879. Both of these documents are included below.

RFP #879 Scope of Work

The City of Ann Arbor plans to reconstruct this segment of Geddes Avenue and extend utilities (water and sanitary) beginning in the 2015 construction season. The Consultant will provide professional engineering to perform the necessary tasks to survey, design, and prepare detailed plans and specifications in accordance with City of Ann Arbor Standards in order to competitively bid and construct the project as described below. In addition, to help guide the design process, the Consultant will create and lead a robust public engagement process.

The first task for the Consultant will be to develop and recommend a project scope that best meets the overall vision of the City (e.g., non-motorized transportation, fiscal responsibility, engineering standards) and the desires of the community (i.e., through a public engagement process). The Consultant is also expected to be familiar with the City's applicable policies and guiding documents.

Improvements to be included in the final design:

- Reconstruction of the existing pavement from Arlington to Huron Parkway and possibly west of Arlington, with possible modifications to existing horizontal and vertical alignment as necessary to meet current AASHTO standards.
- Stabilization of the slope along the curve near Geddes Ridge Avenue to address sloughing and accommodate desired non-motorized facilities and possible guardrail installation. Conceptual designs for this area have called for a retaining wall.
- Design of a stormwater management system to comply with the requirements of the Green Streets Policy.
- Incorporation of non-motorized transportation elements as called for in the Non-Motorized Transportation Plan.
- Addition of sanitary sewer to service the Geddes Avenue properties, east of Huntington, and on Riverview Drive (see Map of Parcels Lacking Sanitary Service in the Appendix) and any other property that would best be served by a main within Geddes Ave or Riverview Drive. As part of this project, the scope of work will also include determining the method of serving the other non-served properties within the project influence that cannot feasibly be served by a main in Geddes Avenue or Riverview Drive (e.g., due to lack of access or unfavorable grades). The final designs for these properties are not required to be included in the base proposal. If the City elects to pursue these designs, it would be as an amendment to the Contract (see below).
- Addition of water main to service the Dover Court and Riverview properties from Geddes Ave to approximately 900-ft north. Ideally this main will be looped which would require an easement(s) from private property owners.

As with all City of Ann Arbor projects, it is critical the community be informed and included in the process of determining the scope and features. It will be the Consultant's responsibility to propose an appropriate public engagement process; they will be responsible for public meeting coordination and facilitation.

It is anticipated that the construction would begin in 2015 with possible phasing extending the work into two construction seasons. The phasing and schedule for construction will be proposed by the Consultant and will take into account seasonal restrictions and maintaining residential access, as well as other factors.

All work shall conform to current the City of Ann Arbor Standard Specifications for Design and Construction. (www.a2gov.org/standardspecifications)

The following items will need to be addressed by the consulting firm, in accordance with Section III of this request and the attached project schedule:

1. Preparation of visual aids and coordination of meetings to coordinate the design of the project with the private utility companies and other City Departments. Preparation of visual aids and coordination of public meetings to coordinate the design with City Council and other formal and informal committees, business owners, and general public.
2. Design and conduct a public engagement process to include all the various interest groups and the public at large. It is expected that the selected consultant will be sensitive to all the community organizations that will have an interest in this project and assure that those organizations are included in the process. This public involvement process will educate and inform the community about the project and will result in identification of those issues most important to the public with regard to construction and the final product. It is expected that the selected consultant will provide experienced professional public relations personnel to manage work with the general public and address their concerns. Public relations personnel experienced working within the City of Ann Arbor is desirable.
3. The Consultant shall attend project progress meetings as needed to ensure proper coordination of Consultant and City work throughout the entire design process. The Consultant will provide meeting minutes and action items for these meetings. Also, the Consultant shall coordinate their efforts with any other needed agencies, various City service units, private utility companies, other formal and informal committees, and the general public.
4. Preparation of all meeting summaries including summaries of public outreach efforts.
5. Additional soil and pavement exploration if the existing boring data is not sufficient. This includes possible additional geotechnical investigation for slope stabilization design.

6. Investigation into the precise location, both horizontally and vertically, of existing utilities. The Consultant will also be responsible to contact outside utility companies to assure the adequacy of their existing utility and also to coordinate any required improvements or upsizing prior to the completion of the road construction.
7. Perform topographical surveying tasks as necessary for the preparation of civil engineering construction plans in accordance with the City of Ann Arbor's Standard Specifications. The extent of any new survey and the possible incorporation of the City's existing survey are to be determined by the Consultant. The desired surveying services will include but not be limited to the gathering of topographical survey data for the project and providing digital submission. It is understood that the final work product will be a complete survey that will contain all known site features and will be ready for use as a base drawing for final engineering plans.
 - a. Data collection:
 - i. Topographic data for 1" = 20' scale plans.
 - ii. Digital copies of all files used to generate the topography data (i.e. breaklines, points and control files).
 - iii. All Right-of-Way (ROW) lines and monumentation to be located and shown.
 - iv. Location of all planimetric features within ROW, and 10' outside of the ROW.
 - v. Minimum of 1 on-site benchmark for every 600' of roadway shall be shown and described (minimum of 2 per project).
 - vi. All (public and private) utilities shall be located (overhead and underground).
 - Overhead information shall include:
 - Location and type of utility
 - Underground information shall include:
 - Type of structure
 - Location and type of utility
 - Size of structure
 - Measured casting elevation
 - Measured invert(s) elevation of pipe/top of pipe elevation
 - vii. All trees within the project area are to be located and include trunk diameter at breast height (DBH) and canopy diameter. There will be no minimum tree size limits within the ROW; however, outside of the ROW only trees 6" DBH or greater need be located along with trees whose canopy may impact the project area.
 - viii. Datum to be in the City's official vertical datum of NAVD88 and horizontal datum of NAD83 (Michigan State Plane coordinates, international feet).
 - ix. Sufficient ground elevations for digital terrain model (DTM) generation for 1' contours, including around curb radii and through intersections. Curb ramps should have all 4 corners of the "level landing" and 10 adjacent flags of the walk transition located.

- x. Where there is the potential of utilities crossing the project area, obtain utility information outside the project limits (i.e. locate downstream/upstream sanitary manholes that tie into manholes within project area).
- b. Digital submission. The City of Ann Arbor currently uses AutoCAD Civil 3D 2013 (C3D) design software for surface, profile, and cross section generation:
 - i. If using C3D, a template drawing, provided by the City, is to be used for importing survey data. Due to the fact that this template is frequently being updated, be sure to request this file upon award of survey.
 - ii. If not using C3D, point files and 3D breaklines must be compatible with this software. The preferred formats are a “.fbk” or “.txt” file (PNEZD comma delimited) for points (description key to be provided), and a “.dwg” file containing only the 3D polylines used to create breaklines and the TIN lines for computing contours. Planimetrics to be AutoCAD 2011 or earlier, (layering standards to be provided). All linework in “base topographic drawing” to be comprised of polylines with an elevation of 0. Text heights for labels to be 1.6 pt.
8. Preparation of pavement life cycle cost benefit analysis.
 9. Design of horizontal and vertical street alignments and roadway cross sections.
 10. Revised geometric designs for intersecting streets, if necessary to improve safety and capacity.
 11. Design of ADA compliant sidewalks and ramps.
 12. Determination of the need for additional right-of-way, easements, and grading permits. Drawings and legal descriptions shall be provided where such easements and permits are required.
 13. Design of sanitary sewer and water main extensions.
 14. Design of stormwater management system.
 15. Perform and prepare the hydraulic analyses and written report preparation, if needed, to obtain all required permits from the WCWRC and the MDEQ for the design and construction of stormwater improvements
 16. Obtain MDEQ water and sanitary permits.
 17. Preparation of complete, detailed and accurate construction traffic control plans. Phasing will be required and challenging. The Consultant must take into account the impact of detoured traffic on residential streets and the restrictions associated with

the unavailability of the nearby private street connecting Huntington Drive and Huntington Place.

18. Preparation of soil erosion and sedimentation control drawings.
19. Preparation of complete, detailed, and accurate construction drawings and specifications in accordance with City or other appropriate design standards for bidding purposes. The format of the drawings shall be completely compatible with the City's drawing preparation standards and layout(s). The City is using AutoCAD 2013 Civil 3D and it is expected that all drawings will be provided in a compatible format without the need to reconfigure drawings for plotting or other purposes. This shall include a proposed sequence of construction and schedule. Cross Sections shall be provided at a minimum every 50 feet and at each driveway and intersection. Cross Sections must extend past right-of-way and at least to the grading match point. Detail intersection sheets shall be provided for every sidewalk ramp and intersection to assure compliance with latest ADA requirements.
20. Determine the limits and phases of construction to coordinate with adjacent construction projects, if any.
21. Establish all needed pay items, quantities, and specifications for the proposed work. This will include unique pay items that properly detail all required work to be performed by the Contractor so that best management practices are followed in all areas of the proposed work. The City reserves the right of final determination regarding specific Items of Work and if Detailed Specifications will be required to the satisfactorily detail and describe the work.
22. Complete quantity take-offs and earthwork calculations for all items of work for which the Consultant is responsible (i.e., an "Engineer's Estimate"). This information shall be provided to the City in Excel spreadsheet format.

In general, the Consultant shall prepare to City of Ann Arbor Standard Specifications plan and profile sheets, at a horizontal scale of 1"=20' (horizontal) and 1"=2' (vertical) or larger. Other scales may be used with prior approval of the City. This shall include, but not be limited to, roadway, water main, storm system, sanitary sewer, curb and gutter, sidewalk, ramps, and intersection detail drawings, traffic control drawings, and any other plans or sketches required to properly complete the project.

C Proposed Work Plan

EXISTING CONDITIONS/PROJECT UNDERSTANDING

Geddes Avenue is currently a two lane road with very limited shoulders and curb type applications. The road is structurally deficient throughout the project area with signs of roadway settlement and severely deteriorated edges. The terrain is rolling residential wooded property with some steep slopes adjacent to the roadway. There are many parcels with enhanced landscaping immediately adjacent to the roadway that include rock walls, landscaping, fences and other improvements. In addition, there are many large trees, bushes and non-formal vegetation that also is close to the roadway.

Utility poles are on both sides of the roadway and are generally within 10 feet of the edge of road. These poles appear to be utilized for electrical, cable, phone and in some instances, street lighting.

There is an existing storm water conveyance system throughout the project area which appears to have lost much of its function. In many areas there is evidence of ditches that once were utilized, but have since been filled in. In addition, there are isolated locations of curb type elements, but with little or no catch basin system. Storm water from Huntington to Arlington generally flows south to north across Geddes into an existing enclosed storm system on Appleway that then proceeds through backyards to the northeast outletting into the Huron River.

A high point exists between Arlington and Heather Way and the storm water today generally drains directly to the Huron River utilizing a 48" diameter sewer. This system outlets to a 24" sewer that drains to the river. Due to the steep terrain most water that falls onto, or near, the road will traverse down the road until it finds an outlet. East of Heather Way, the right, or south, side of the road falls sharply off to homes below located on Devonshire Road.

From Huntington to the east there are numerous parcels that today do not have sanitary sewer services and utilize private septic systems. These parcels have homes fronting on Geddes and Riverview. The elevation of the houses compared to Geddes range from 40 feet higher to 40 lower than the road. At this time, it appears that of the 34 parcels requiring sanitary service, less than half will be able to reasonably be serviced with a gravity system to Geddes. This is due to the severe topographic challenges in this area.

Riverview Drive and Dover Place do not currently have City of Ann Arbor water service.

There is a narrow bituminous path/walk located on the north, or left, side of the roadway through much of the project from Huntington to Geddes Ridge Avenue. At Geddes Ridge a dedicated and well defined sidewalk is present that leads to Gallup Park. From Geddes Ridge to Hickory Lane no walk or non-motorized facilities exist. From Hickory Lane to Huron Parkway bike lanes and walks are present.

HRC understands that this project will be extremely challenging. In order to meet this challenge, HRC has developed a Work Plan with experienced staff to successfully navigate the difficult designs while balancing resident concerns and stakeholder needs. HRC has a strong reputation for delivering complex projects while promoting open public engagement and discussions. Based on HRC's understanding of this project and the past history of concerns, HRC has included Ms. Nancy Faught as Project Manager and Mr. Charles Hart as Design Manager in order to successfully implement and complete the Work Plan detailed herein. Both managers are experienced



Existing walk on north side of Geddes



Stakeholder goals: road diet with bike lanes, LED street lighting, tree plantings and stormwater management

in addressing challenging projects with diverse issues from a large number of stakeholders. HRC also firmly believes that, as consultants, the primary objective is to assist the City in successfully navigating a complex and potentially fluid project.

WORK PLAN

Per the RFP, the first task is to develop a scope of work that best meets the overall goals of the City and the community. HRC believes that this “first task” cannot be completed until after the Public Engagement Process is well under way. Therefore, the HRC Team has developed a proposal based on our experience with the City, similar projects and reviewing all available information. Our proposal meets the City’s vision and clearly identifies what we believe the scope of work will be at this time.

In preparation of this work plan, the HRC Team has reviewed all available information and made multiple site visits. In an attempt at brevity, items within the RFP will not be repeated here. HRC has broken this Work Plan in the following sections:

- Kick-off Meeting and Gathering of Information
- Public Engagement and Design Concept Development
- Design Tasks

With the City’s vision and such a large contingent of public opinions, it is probable that not every goal of every person will be met. However, HRC has experience in managing such projects that deliver a plan that most stakeholders would define as “good”. HRC’s management process has proven successful in developing high quality design documents that satisfy the stakeholders while also identifying and flushing out potential project issues. This process concentrates on clearly identifying the project goals, anticipating matters that need to be investigated more thoroughly and communicating early regarding any potential issues that may affect costs or meeting the project goals. HRC strongly believes that all issues raised are relevant and that preparing a successful plan, design or project will require thoughtful mitigation of these issues. HRC’s Project Manager, Nancy Faught, has extensive experience in projects similar to the Geddes Avenue that require a strong public engagement process. HRC’s process will include:

- Strong communication lines
- Exceptional understanding and skill while working with residents, stakeholders, City staff and the public
- A clear plan and schedule of how this project will proceed
- Sincere understanding of stakeholders’ priorities and a unique ability to mitigate these to arrive at an overall project that balances all needs
- Monthly reports that identify completed and upcoming tasks and any potential issues
- Immediate communication of potential issues with solutions
- Updated potential construction costs. Due to the variety of costs needed for this project, including City and individual property owner, this task is vital to the project success
- Technically sound designs, details and decisions

KICK-OFF MEETING AND GATHERING OF INFORMATION

The HRC Team will attend a kick-off meeting with City staff immediately after authorization. This meeting will provide the City an opportunity to fully inform HRC of the history of this area and past project attempts. In addition, HRC hopes to:

- Gather as-built plans, existing studies and other pertinent items
- Identify City staff, and their role, that will be involved in the project
- Discuss overall scheduling and financial goals
- Determine communication protocols that are acceptable to Ms. Rolla

For the Public Engagement phase of this project, the HRC Team will accomplish the following at this meeting:

- *Collect information gathered through previous road planning efforts.* The past efforts for roadway reconstruction along Geddes Avenue have revealed valuable information about issues that will need to be addressed during this project.
- *Refine public engagement approach.* The approach to gather information and gain consensus of residents outlined in further in this proposal should be refined to integrate the institutional knowledge of City Staff.
- *Organize resident groups and identify stakeholders.* To engage the property owners, this approach attempts to provide as much one-on-one interaction as possible in a comfortable, familiar setting. Property owners will be organized into small (6-8 properties) groups. These groups will meet several times to assess options and provide input. Residents who have special concerns will be able to set up a one-on-one interview. Other stakeholders, such as the Environmental Commission, cyclist clubs, private environmental groups, and the like will also be identified so that they may be engaged in a traditional public meeting setting.
- *Develop meeting schedule.* The series of resident group meetings, one-on-one interviews and public meetings will be organized to coincide with the concept plan development. At this kick-off meeting a general schedule will be established, however, the HRC Team understands that stakeholder involvement, and addressing their concerns, could alter this schedule.

In addition, HRC will schedule our initial interview for our Client Interview Process. This process identifies, documents, tracks and measures the goals of the City. Generally these goals are non-technical in nature but are those that will help determine if the City considers the project a success. Many of our Clients have told us that no other firm has ever solicited this input/feedback from them at the beginning and end of the projects. HRC has engaged City staff, including Ms. Rolla, in this process on previous projects and HRC has incorporated many of the structured comments and evaluations into current and future projects.

At the conclusion of these meetings and interviews, HRC should be well enough informed to begin the public engagement process and concept design and be more knowledgeable about the City's goals.

➤ Task Summary:

- Meetings: One kick-off meeting with City and one client interview
- City Staff Commitment: Provide information as stated and input on proposed resident/public engagement process and schedule. Assist in identifying resident groups and stakeholders. Estimated time commitment: 5-7 hours.
- Deliverables: Meeting minutes & Client Interview Results for future reference

PUBLIC ENGAGEMENT AND DESIGN CONCEPT DEVELOPMENT

Carlisle Wortman Associates, Inc. and Sharlan Douglas (Douglas Communications Group, LLC), a Public Relations Professional (identified in this proposal as included in CWA) will provide the expertise in information gathering, compiling comments and communicating with the public. CWA will work closely with HRC's design staff to effectively develop concepts that best represent the goals of all the stakeholders. Throughout the public engagement process, concepts will be developed and communicated back to the public. The HRC Team understands the history of this corridor and realizes that it will take back and forth communication with the public

to ultimately develop a plan worthy of their acceptance. It is understood that there may be competing public goals and some of these include:

- Limited or no disturbance to existing look vs. providing non-motorized facilities
- Provide City municipal utilities vs. keep property owner costs / impacts minimized
- Improve road surface vs. keep vehicle speeds low
- Project budget and costs vs. public desires

As stated previously, the proposed Public Engagement Plan will be fully discussed with the City at the kick-off meeting, however, at this time we offer the following:

- *Develop public relations messaging.* CWA and our Public Relations Professional will work with City Staff to craft messaging for the project introduction, initial concepts/options, and final concept plan design. Messages will be updated as necessary. This activity will be conducted before each stage of public meetings. Messaging will be integrated into the on-line tools and used throughout the public engagement process and in media interviews.
- *Develop on-line public engagement tools.* CWA will develop the content for a project webpage, including blog, and Twitter and Flickr links. City Staff will create the project webpage on their website. The project team will keep the project webpage content updated over the project duration (8 updates); post blog articles (5); develop and send Tweets (10); and gather photos and post to Flickr (3). Public Relations Professional will draft two (2) blog posts of residents and/or stakeholder group that support the project. Three (3) additional “feature story” blog posts will also be developed.
- *Develop news releases.* At key stages of the project, the Public Relations Professional will work with the City Staff to draft two (2) news releases. Possible releases could include: 1) Announce project, opportunities for public input, and available on-line information. 2) Describe project status after preliminary concept plans has been developed, opportunities for public input before final plans are developed, and available on-line information.
- *Conduct series of coffee hours/individual meetings with property owners and conduct a series of public meetings with stakeholders and City residents.* These meetings will be organized as follows:

1. Information Gathering:

- Coffee Hours.** Prepare for and facilitate six (6) coffee hours in private homes/Racquet Club for small resident groups. Present graphics illustrating project area, and describe desired road and utility improvements. Gather initial ideas and concerns regarding the project and implementation of the project, such as traffic control during construction. Offer option to have one-on-one discussion with project team member regarding specific issues with their property. Sign-up sheet could be distributed at coffee hour meeting; or residents who do not attend small group meeting could be contacted via phone with offer of private meeting. Provide written summary of meeting results to project team.



Stakeholders providing their input

- One-on-One Interviews.** Prepare for and hold up to ten (10) private interviews with individual property owners who desire one. Discuss concerns and ideas regarding project. Provide written summary of interview results to project team.

- iii. **Public Meeting.** Prepare for and facilitate one (1) stakeholder meeting. Present project goals and gather ideas / concerns from stakeholder groups and city-wide residents regarding non-motorized facilities, environmental protection and other topics. City Staff representative attends to provide City's perspective. Provide written summary of meeting results to project team.
- 2. Preliminary Concept Plans and Options: Project team uses initial information to prepare preliminary concepts and potential options for roadway, non-motorized, and utility design.
 - i. **Coffee Hours.** Preliminary concepts are presented to six (6) established resident groups at coffee hours in private homes/Racquet Club. Project Engineer and Planner present graphics illustrating proposed designs. It is recommended that City Staff representative attend to provide City's perspective. Graphics include elevations and perspective drawings to clearly illustrate the design concepts/alternatives. Answer questions and gather ideas and concerns regarding the preliminary concepts and options. Provide written summary of meeting results to project team.
 - ii. **One-on-One Interviews.** Prepare for and hold up to five (5) private interviews with individual property owners who desire one. City Staff representative attends, if desired, to provide City's perspective. Discuss concerns and ideas regarding preliminary design and options. Provide written summary of interview results to project team.
 - iii. **Public Meeting.** Prepare for and facilitate one (1) stakeholder meeting to present preliminary concepts and potential options for roadway, non-motorized facilities, and utility design. Project Engineer and Planner present information and answer questions. City Staff representative attends to provide City's perspective. Graphics will be used to illustrate the results of design concepts/alternatives. Gather ideas and comments regarding preliminary design and options. Provide written summary of meeting results to project team.
- 3. Final Concept Plans and Options: Project team uses public input to prepare final concepts and remaining options for project design.
 - i. **Coffee Hours.** Final concept plans are presented to six (6) established resident groups at coffee hours in private homes/Racquet Club. Project Engineer and Planner present graphics illustrating proposed designs. City Staff representative attends, if desired, to provide City's perspective. Graphics include elevations and perspective drawings to clearly illustrate results of design alternatives. Answer questions and gather ideas and concerns regarding the final concepts and options. Provide written summary of meeting results to project team.
 - ii. **One-on-One Interviews.** Prepare for and hold up to three (3) private interviews with individual property owners who desire one. City Staff representative attends, if desired, to provide City's perspective. Discuss concerns and ideas regarding final design and options. Provide written summary of interview results to project team.
 - iii. **Public Meeting.** Prepare for and facilitate one (1) stakeholder meeting to present final concepts and remaining options for roadway, non-motorized facilities, and utility design. Project Engineer and Planner present information and answer questions. City Staff representative attends to provide City's perspective. Graphics, as provided at coffee hours, will be used to illustrate the results of design alternatives. Gather ideas and comments regarding final design and options. Provide written summary of meeting results to project team.

The design team will be working with CWA throughout the entire public engagement process to discuss and develop feasible concepts. The HRC Team clearly understands that the possible proposed project elements of a new roadway, non-motorized facilities, watermain, sanitary sewer, private utility relocations, storm water

management, street lighting and others will impact the area. In addition, it is understood that many of these elements may not be desired by all. Therefore, it is the HRC Team's responsibility to inform the public entirely about all aspects of this project. For the public and City staff to make knowledgeable decisions this information must include:

- Graphical representation of concepts including cross sectional views
- Cost estimate for construction
- Cost estimate for individual property owners for proposed improvements
- City policies and ordinances that direct City staff, and their consultant, on project items
- No-build consequences for both the roadway and individual properties
- Potential easement requirements
- Proposed enhancements to lessen impacts

This proposal, per the RFP and information gathered at the pre-proposal meeting, is based on conceptually designing sanitary service to all properties as identified in the RFP. Full design of gravity sanitary sewer system only in the Geddes ROW is included in this proposal.

It should be noted that CWA will prepare graphics appropriate for the public utilizing HRC's concepts.

- Task Summary:
 - Meetings: Up to 18 coffee hours with resident groups; up to 18 individual interviews with property owners; and three public meetings for stakeholders and city-wide residents. HRC Team meetings with City prior to public meetings, 2 each. HRC Team meetings with City in development of design concepts, 2 each.
 - City Staff Commitment: Review and comment on public relations messaging, webpage content, news releases, meeting materials and attend City and HRC Team only meetings. Create webpage on City's website. If desired, City representative attends up to 12 coffee hours with resident groups; up to 18 one-on-one interviews; and 3 public meetings to provide City's perspective. Approve proposed design. Estimated time commitment 60-120 hours.
 - Deliverables: PR messaging, on-line public engagement tools and news releases; minutes/reports from all public meetings; design concepts and costs; final concept and confirming estimate for City approval
 - Proposer Suggested Elements:
 - CWA develops project webpage
 - CWA works with City to develop MiCommunity Remarks tool to allow on-line gathering of location-based comments in project area. MiCommunity Remarks tool will include mobile device tool. MiCommunity Remarks will include two phases: 1) Gather initial ideas/concerns about project impacts; and 2) Gather input on potential solutions. CWA monitors MiCommunity Remarks input, and prepares monthly report of results (8 monthly reports).
 - Public Relations Professional works with City staff to identify and prepare a media spokesperson for the project.
 - CWA develops interim reports to City Council describing public input gathered at each stage (information gathering, preliminary concepts, and final concepts.)

DESIGN TASKS

ADDITIONAL SURVEY AND GEOTECHNICAL INFORMATION

Survey:

HRC has reviewed the previously completed topographic survey and finds it acceptable to be utilized for this project. HRC does recommend that the following additional survey be done immediately.

- Additional topographic survey at the project POB and POE including the assumed project limits. This will include 200' west of Huntington to the limits of the existing survey as well as an extension of approximately 200' southeast of Hickory Lane where the existing survey ends. In addition to ensuring the project limits are surveyed, this will provide the additional data needed to design sufficient horizontal and vertical transitions for the roadway.
- Supplemental topographic survey along the slope between Geddes and the Conrail RR to ensure sufficient design data.
- Additional topographic survey of the vacant parcel along the southerly edge of the curve at Gallup Park. This survey data will be used to design potential storm water improvements in this City owned area that could be a natural feature for pedestrians.
- Additional topographic survey at the north end of Riverview needed for the water main connection to the Geddes Ridge Avenue main.
- One additional day of topographic survey for unidentified locations where more data is needed to further develop design concepts or detailed designs.

All survey along with as-built information and existing private utility information will be utilized to generate a base plan to assist the Team in development of design concepts and ultimately design bid documents.

Geotechnical Information:

Materials Testing Consultants, Inc. (MTC) will provide geotechnical expertise for this project which will include assistance in slope stabilization, utility bedding, storm water management and pavement design. The existing soil borings have been reviewed and evaluated and a site visit has been performed. MTC believes the test borings provided will be a valuable resource and will be incorporated into the geotechnical evaluations. In addition to the information and borings provided, HRC and MTC feel that additional investigation will be needed to adequately prepare the design details.

MTC will perform the following supplemental investigation:

- Test Borings (220 l.f.)
 - 4 borings at 25 ft depth in Geddes Avenue (2 in the pavement between Riverview Drive and the bottom of the hill and 2 in the area of the road settlement near the railroad embankment). The PSI borings in this area were 5 ft deep and not sufficient for utility design or evaluation of green street / storm water initiatives.
 - 2 borings at 20 ft depth in Riverview Drive for design of storm sewer and watermain.
 - 1 boring at 20 ft depth in city-owned lot (between 2981 and 2997) on Geddes Avenue for assessment of green street / storm water initiatives.
 - 3 borings at 20 ft depth at locations requested by HRC (as-needed).
 - Field engineering to coordinate and log test drilling, Utility clearance through Miss Dig and traffic control during test drilling.
- Laboratory Testing will be performed for use in evaluating infiltration rates and whether the native soil encountered is appropriate for bedding and backfill. MTC will evaluate and provide a report outlining their assessment of encountered conditions and recommendations regarding excavation, dewatering, bedding, backfill, foundation support, retaining walls and infiltration. For the purposes of this proposal MTC will provide 10 hours of as-needed consultation to assist in route selection, alternatives for construction and green street initiatives.
- Task Summary:
 - Meetings: One review if desired by the City.
 - City Staff Commitment: Attendance at review meeting and review of deliverables. Estimated time commitment: 4-7 hours.

- Deliverables: Digital submission of complete/combined topographic survey; geotechnical report; meeting minutes

UTILITY COORDINATION

HRC will initialize the coordination with utility companies immediately after authorization. HRC's utility coordination will include:

- Request information regarding existing facilities.
- Develop a Utility Coordination Spreadsheet to track contacts, correspondence, facilities and impacts throughout the project
- Hold an initial meeting with the utility companies to introduce the project and the potential project elements. Information regarding relocation requirements, or restrictions, will be discussed so future design concepts can be developed with private utility needs in mind.
- Identify any utilities in private easements which can adversely affect a project budget and schedule.
- If necessary during the design concept development, hold meetings with utilities to discuss potential design elements and their impacts to utilities.
- Hold meeting once City has approved proposed design, and possibly throughout the design phase, to coordinate all proposed project work with private utility needs. Work will include:
 - Showing existing and proposed utilities on design plans. This will include vertical information as provided by the utility company.
 - Show proposed relocated facilities on design plans.
 - Work with utility companies on scheduling work, and/or relocation, of their facilities. This coordination is essential to meeting the scheduling goals of the City since private utility relocation can take many months.
 - Continue to work with utility companies that are relocating to ensure that proposed work and schedules are adhered to.
 - Evaluate the impacts of utility relocations. This could include identifying potential tree removals or trimming required should overhead utility lines require relocation to accommodate the design concepts.



Utility pole immediately adjacent to Geddes

➤ Task Summary:

- Meetings: Coordination, at least 2 but up to 4
- City Staff Commitment: attend meetings. Estimated time commitment, 4-8 hours
- Deliverables: Utility meeting minutes, correspondence and regular updates of the utility coordination spreadsheet

PRELIMINARY PLAN DEVELOPMENT

This task will begin immediately after the City approves the design concepts and will continue until the development of the final plans. Most of the design will be done during this task utilizing the concepts developed during the Public Engagement phase.

For this proposal it is assumed that a two-lane roadway with bike lanes on both sides will be reconstructed. In addition, HRC has assumed the following to be included in this proposal:

- Walk on one side of the road
- Gravity sanitary sewer system within the Geddes Avenue ROW
- Watermain for Dover Court and Riverview Drive
- Stormwater management system consistent with the Green Streets Policy and meeting the goals of the SRF Project Plan

- Stabilization of the roadside slope along the railroad ROW including a structural grade separation

It is assumed that the project limits are from Huntington to Hickory Lane on Geddes Avenue. At Hickory Lane towards Huron Parkway, Geddes Avenue has recently been upgraded with bike lanes and sidewalk. Work on Riverview includes water main and road replacement for approximately 900 feet.

While it is difficult to determine a construction budget until the Public Engagement process begins, HRC has utilized the City’s CIP, our experience and information from the RFP to generate a range of probable costs. This range utilizes the cost per foot established in the CIP and projects it to the actual limits as stated in the RFP. HRC believes the construction costs for this project could be in the range of \$4M to \$6M.

Throughout the Preliminary Plan Development (detailed design), close attention will be paid to the desired scope resulting from the Public Engagement. Should the scope, costs or impacts substantially deviate from the concept and commitments determined during the Public Engagement additional coordination and meetings may be needed. This will be closely monitored and Ms. Rolla will be notified immediately should any concerns arise. This specific issue will be addressed regularly in HRC’s project monthly reports.

In addition to the topographic survey, geotechnical investigations and the utility coordination, the following detailed design tasks represent the majority of major details and efforts that will be completed during the Preliminary Plan Development.

Base Plan Development:

HRC will create the existing condition and base concept plans in accordance with the City of Ann Arbor Standard Specification for design and plan development. As detailed in the RFP, this will include existing condition, removal, road & storm and sanitary & water main plans at a 1”=20’ scale. These base plans will include existing information collected from the topographic survey, underground utilities, property lines and right of way drawings and other details. HRC is intimately familiar with the City’s design standards and the plans will include tabular data for existing facilities and the basic data for proposed driveways and sidewalk. The Base Plans will be submitted to the City for review.

Prepare Horizontal & vertical Alignments and Pavement Design:



*Potential design exception
for sight distance*

HRC will utilize the concept selected during the Public Engagement as well as the Base Plans to begin the detailed layout of the roadways including the horizontal and vertical alignments. In order to minimize impacts to adjacent properties and to achieve the optimal balance to both sides of the roadway, this is a critical step in the design phase. HRC will rely on its experienced road design staff to prepare design options for the City to review including to ensure the most appropriate balance to stakeholders while meeting the goals of this project. Due to the critical nature of this task, with most other work proceeding based on the end results, HRC will submit the preliminary vertical and horizontal alignments to the City for review. This will include identifying any potential design exceptions, grading and driveway impacts and an assessment of the drainage options within limited ROW. After the alignments have been reviewed and revised as needed, the majority of the design work will proceed.

HRC, working closely with MTC, will prepare proposed pavement life cycle analyses including both HMA and concrete roadway sections. The results of this analysis will include the pavement design for the roadway and facilitate completion of the base typical sections and begin the development of special grading details required to fit the desired cross section within the Geddes ROW corridor.

Municipal Utility Design:

HRC will prepare the preliminary layout and designs for the water main and sanitary sewer based on the concepts from the Public Engagement. Based on the available information, HRC has estimated that approximately 1,100 feet of water main and 3,500 feet of sanitary sewer (only with Geddes Avenue) will be included in the design project. During the initial design of these facilities, HRC will evaluate any potential trenchless technologies that may be used to minimize disruption to residents and natural features. HRC is a nationally recognized leader in trenchless technologies including directional drilling.

HRC will review with City Field Services staff the watermain construction with any valve closures and service interruptions to ensure valves are in working order and that the service interruption district is clearly identified to residents. HRC is experienced in minimizing service interruptions and will evaluate the use of line stops and other measures to minimize interruption.

HRC will also provide the profile for City review. Careful attention will be given to reasonable access for leads as well as access for residents. Due to the disruptive nature of utility installation, sound design principles will be applied to locate ideal areas for these facilities that will provide minimal disruption while keeping future access and maintenance in mind.

HRC is familiar with the City's design standards for sewer and water main layouts including manhole, hydrant and gate valve spacing as well as connection details. HRC will prepare the plans, profiles, connection details and tables for layout and cut sheet development during construction.

Develop Stormwater Management Plan & Concepts:

HRC is intimately familiar with the SRF Project Plan developed for the Geddes Road corridor, having served as the consultant to the Washtenaw County Water Resources Commissioner (WCWRC) for the preparation of the plan. HRC will continue to utilize the key staff from the plan for the design concepts for storm water management. HRC understands the City's Green Streets Policy as well as the new WCWRC standards for Stormwater management that focus heavily on first flush events.

Having prepared the design concepts in the SRF plan, HRC will review the planned concept of subsurface infiltration as well as other methods to achieve the new initiatives goals for storm water quality and peak flow attenuation. HRC is familiar with utilizing the void spaces of aggregate beds for the control, storage, and infiltration of urban runoff. Per the County's approved SRF Project Plan, it is our understanding that a subgrade infiltration bed was identified to be used on this project. HRC's design process of these systems includes a systematic review of the lateral and vertical geotechnical issues, geotextile fabric or geogrid applications, if needed, road sections and loadings, stone and void sizing, and water level control in addition to the analysis of storage volumes needed to manage for the first flush of runoff or larger storm events if warranted.

HRC will evaluate not only the options outlined in the SRF plan but also in-line flow attenuation, open channel conveyance systems and open surface detention or infiltration basins. HRC believes the existing vacant, City owned parcel near Gallup Park offers enticing opportunities to promote and highlight the new initiatives within a park setting that sees high volumes of pedestrian and bicycle users. Based on the final results of the geotechnical investigation, HRC will evaluate numerous options that, when combined, will meet or exceed the City's goals of improving storm water quality and satisfy the performance

requirements of the SRF plan, ensuring that funding resource. Another option may be to use perforated storm sewer with engineered trench to promote infiltration. In order to achieve the City's goals for stormwater management a combination of several options may be required due to the limited ROW and challenging terrain.

HRC will provide a summary of the Stormwater improvement options, including their benefits and potential drawbacks, for City review. After this review, HRC will revise and finalize the management plan that best meets the City's objectives and yet balances the needs of the residents and stakeholders.

Hydraulic Analysis & Report:

Based on the Stormwater Management Plan selected, HRC will prepare the detailed hydraulic analysis and calculations needed to fully design, specify and construct the system. This documentation and design will not only be used for the plans and specification, but also for coordination and permitting through regulatory agencies such as the MDEQ and WCWRC.

Retaining Wall Design

MTC has done an initial assessment of the road sloughing. Based on the topography and the nature of the road settlement, the initial assessment is the road sloughing is a result of settlement consolidation of probable loose fill or consolidation of underlying organic soil on which Geddes Avenue is supported. The fill is thickest along the north side of the road and minimal along the south side and it is the north side where the road has settled excessively and failed. The HRC Team envisions confirming the subgrade conditions and ultimately removing much of the loose fill and constructing a block retaining wall near the toe of the embankment with widened shoulder for non-motorized traffic. HRC's structural engineers will work with MTC to design a cost efficient facility that meets existing and future needs. Care will need to be taken to ensure limited or no impact to the railroad right-of-way. In addition, it is understood that there needs to be ample room at the toe of the slope for future non-motorized facilities. HRC will submit conceptual drawings to the City for review prior to beginning design. After the City reviews the concept an initial meeting with the railroad company will be held. This important step is necessary to get their comments and buy in for the proposed wall system. This meeting will also discuss accessibility for construction since it is anticipated that construction of this wall will need to be done from the bottom. In addition, HRC will request the assistance of the City when choosing material type and color for the proposed wall.

Sidewalk & ADA Design

For this proposal, HRC is assuming that a sidewalk will be constructed on the north side of Geddes Avenue only. This will require that pedestrians from the south cross Geddes at the 3 side streets within the project area. HRC will review the feasibility of adding 3 new crossings, however, it should be noted that sight distance is currently a safety issue along this corridor and while it is a goal to improve this situation it is unknown if that is possible. It will be HRC's goal to improve the safety of pedestrians crossing Geddes to get to the sidewalk. The existing crossing for Gallup Park will be reestablished in this project. Providing non-motorized facilities in this corridor will be a challenge. One of these challenges will be to educate the public on the actual existing ROW. As is typical, over time property owners will "creep" into the ROW with landscaping and other amenities. It is probable that the new walk will impact these amenities. HRC is very familiar with the City's ADA design and plan development standards and will incorporate these into the design documents.



Existing Gallup Park crossing of Geddes

Easement Document Development

Utilizing the easement evaluation prepared during the Public Engagement process HRC will further develop easement needs. HRC will identify the slope stake line (SSL) once the road, bike paths, sidewalk, and other limits of construction have been identified. This SSL will identify final easement needs. For this proposal HRC has estimated, and assumed, that up to 19 parcel drawings will be required for the acquisition of easements. HRC has assumed that the proposed cross section will likely require easements on the side where the proposed sidewalk will be constructed. HRC's base proposal and preliminary design review showed that the north side of Geddes seemed a logical side for the sidewalk. HRC will submit preliminary easement documents for the City review and incorporate any comments into the final documents.

Maintenance of Traffic Design

After municipal utility and storm water has been preliminarily designed, HRC will prepare maintenance of traffic (MOT) concepts. These concepts will be based on information gathered during the public engagement process. Typical construction of this type generally requires full closure of the road due to the limited space available and the depth of the proposed utilities being constructed. Complicating this MOT is the potential infiltration bed system. However, HRC understands the importance of access for all and the disruptive nature of detours through a neighborhood. HRC will develop concepts to be discussed with City and stakeholders that will include partial lane closures, segmented construction, maintaining one-way traffic only, and part width methods. The Team biggest challenge will be to balance access needs with the construction schedule so as to minimize construction duration.



Once a concept has been approved HRC will develop MOT plans that clearly identify construction staging. HRC's MOT plans will include high level detail regarding individual access, specific challenging areas as the scope dictates and sequencing. In addition, it is paramount to competitive bidding that the contractor has a firm understanding of the work zone space allowed to construct the work shown on the plans. HRC's experience is that inadequate MOT plans are the source of many contractor claims.

HRC will also develop the MOT specification for the project that will include the following:

Contractor needs space to construct utilities

- Work date/time restrictions (residential neighborhood)
- Emergency access and contact information
- Coordination with adjacent projects
- Stakeholder and agency coordination
- Detailed phasing of construction
- Special restrictions and access requirements (Public engagement results)
- Coordination with progress clause

Proposer Suggested Element: HRC highly recommends that a construction CPM schedule be developed identifying controlling items and specific item duration. This recommendation is due to the complexity of the maintenance of traffic, numerous municipal utilities to be built, private utility relocations anticipated and storm management aspects. This schedule is an invaluable tool when balancing the need of the contractor to complete the project in one year with the motoring public and surrounding residential

area. This schedule will be developed in conjunction with the MOT plans. This schedule will ensure that the construction duration and impacts communicated to residents and stakeholders will be met.

SESC Design

HRC will develop SESC plans in accordance with City specifications. For this project, HRC envisions a well trench silt fence system along with substantial slope stabilization measures for expedited growth. In addition to these measures, HRC will incorporate check dams, sediment traps, inlet filters and other midstream and downstream protection. Plans will also require the contractor to submit a thorough maintenance and clean out plan to ensure the systems are working properly throughout the length of construction.

Construction Estimate and Specifications for Preliminary Plans

HRC thoroughly understands the City requirements for the development of specifications. Once preliminary design is well under way, HRC will submit a list of probably specifications for City staff to review. This review should include staff from the Field Services Unit. HRC has found that this step is a quick and efficient use of time in an effort to provide a well-organized design package.

HRC's estimating process includes multiple steps including:

- Quantity takeoffs and QA/QC of takeoffs
- Review of current unit prices from numerous sources including local bidding results, supplier information and experienced senior HRC staff.
- Coordination of estimate, specifications and plans
- Final QA/QC from HRC Construction Engineer, Mr. DeFrain.

HRC has an exemplary record of developing accurate construction estimates. This step, which is sometimes discounted, is imperative for City staff and City Council to make knowledgeable decisions.

As previously stated, HRC will prepare construction estimates during the Public Engagement phase and a confirming estimate once a concept is approved by the City. HRC clearly understands how to develop these "early" estimates so budgets, funding and decisions can be determined as timely as possible.

Submit Preliminary Plans For City Review (75%)

Once the preliminary plans, specifications and estimate have been through a full QA/QC review by HRC staff, this package will be submitted to the City for review. A meeting will be held with the City to review all comments.

Public Meeting

HRC and CWA, along with City staff, will hold a public meeting at this stage of plan development. This meeting will provide the transparency of the design and to indicate to the stakeholders the City's commitment to adhering to the approved concept.

Submit Permit Applications

HRC anticipates the following permits and coordination efforts:

- Michigan DEQ watermain, sanitary and storm water
- Michigan Department of Public Health for sanitary
- Washtenaw County Water Resources Commission for storm water
- Soil Erosion and Sedimentation Control/NPDES
- Railroad

HRC will hold pre-application meetings with all agencies and draft submittals will be brought to get initial comments which will help to expedite the permit process. HRC will submit all permits in ample time, based on the agency, to receive permits prior to final plan completion.

Other Tasks

In addition to the tasks stated previously for Preliminary Plan Development, HRC will:

- Develop signing and pavement marking plans
 - Prepare layout, detail grading and alignment sheets for construction and cut sheet development
 - Continue to coordinate with private utilities
 - Continue to coordinate with permitting and other agencies
 - Field questions, and or concerns, from the stakeholders
 - Hold meetings with City departments, as needed, that may not be part of the regular progress meetings
 - Assisting City Project Manager, Ms. Rolla, with any outstanding decisions.
- Task Summary:
- Meetings: Review – 9; with agencies – 2-4; railroad – 2; public – 1; MOT concepts -1; other City Departments – 2;
 - City Staff Commitment: attend meetings; review submittals; provide direction, Estimated Time Commitment, 70 – 100 hours
 - Deliverables:
 - Plans & specifications for review
 - Preliminary horizontal and vertical road alignments
 - Life cycle pavement cost analysis
 - Preliminary layout of municipal utilities
 - Summary of stormwater options and final management plan
 - Information for adherence to MDEQ/SRF Project Plan
 - Hydraulic report
 - Retaining wall concept
 - Miscellaneous design (MOT, alignment, details, ...)
 - Preliminary and final easement documents
 - Permit applications and approved permits
 - Correspondence and Monthly Reports

FINAL PLAN DEVELOPMENT

Following the review meeting of the preliminary plans, HRC will immediately begin the development of the final plans. In addition HRC will:

- Follow up on permit submittals
- Follow up with utility companies regarding any relocations
- Incorporate any permit requirements into the plans or specifications
- Attend City review meetings

HRC will prepare final plans (90% complete) and bid documents (100% complete) in accordance with comments received from the City. These deliverables will be again reviewed by HRC staff prior to submittal to the City. It is anticipated that permits will be received prior to completing the Final Bid Documents so that any requirements can be included in the plans.

- Task Summary:
- Meetings: 2 review meetings

- City Staff Commitment: Review submittals and attend meetings. Estimated time commitment, 16-20 hours
- Deliverables: Final Plan and Bid Document submittals, approved permits, Monthly Report.

PUBLIC INFORMATION MEETING (PRIOR TO CONSTRUCTION BEGINNING).

CWA will conduct a public information meeting before construction begins. Written invitations provided to residents, and meeting advertised on webpage to reach stakeholders and city-wide residents. Meeting will inform residents of construction process and answer questions.

➤ **Task Summary:**

- Meetings: one public
- City Staff Commitment: attend meeting. Estimated time commitment, 2-4 hours
- Deliverables: Minutes/comments from public meeting

PERSON HOURS

HRC has provided the hours and costs in Exhibit B.

Geddes Avenue Improvements Project - Hours and Costs
City of Ann Arbor
RFP No. 879

Task	Hubbell, Roth & Clark (HRC)													
	Nancy Faught	Chuck Hart	James Burton	James Surhigh	Robert DeFrain	Brian Davies	Brad Shepler	Gary Chalice	Graduate Engineer	CADD Tech	Field Crew	Survey Supervisor	Struct Dept Head	Struct Engineer
Project Management Tasks	Hours													
Meetings (Kick-off, Monthly Progress & Misc)	36	46	4	4		30	4			30				
Agency Coordination	12	24	4	2										
Monthly Reports	5													
Public Engagement & Design Concept Development														
Kick-off Meeting and Informational Gathering	2													
Develop & Manage Messaging, PE Tools & News Releases	2													
Conduct Series of Coffee Hours/Individual Meetings	48													
Conduct Series of Public Meetings	9	9												
Preparation of 3 Interim Reports to City Council - CWA														
Development of Preliminary & Final Design Concepts w/ Costs	24	42	10	33		94				55				
Sanitary Service & Easement Evaluation		10		44		4		2		14				
Design Tasks														
Additional Survey & Geotechnical Information		6						2		12	64	30		
Utility Coordination		10				10			80	60				
Base Plan Development	1	6				40			60	120				
Horizontal & Vertical Road Alignments, Pavement Design		4				6			24					
Base Municipal Utility Design	2	4		4		18				20				
Develop Stormwater Management Plan & Concepts	1	4	16			16				8				
Hydraulic Analysis & Report	1	12					80		16	16				
Maintenance of Traffic Concepts	4	6				8				16				
Pre-application Meetings with Permitting Agencies		4	4											
Retaining Wall Design	2	8				12			16	48			20	40
Sidewalk & ADA Design		6				60				60				
Easement Document Development		4				8		19		152				
Maintenance of Traffic Design	4	10				40				40				
SESC Design		2				2			24					
Construction Estimate and Specifications for Preliminary Plans	2	8				45			32					
Construction Schedule	4					20								
QA/QC	6		4		12									
Development of Preliminary Plans (75%)	12	50	24	4		180			160	400				
Public Meeting	4	4												
Submit Permit Applications	2	12	2			48				42				
Development of Final Plans (90%)	4	25				75			60	125				
QA/QC	2		4		12									
Development Bid Documents (100%)	1	8				35			20	40				
QA/QC	4	12			2									
Development of Bid Documents		2				5			5	10				
Public Information Meeting Prior to Construction	4	8				4								
TOTAL HOURS	198	346	72	91	26	760	84	23	497	1268	64	30	20	40
Hourly Rate	\$ 47.50	\$ 44.00	\$ 45.00	\$ 43.00	\$ 48.00	\$ 29.00	\$ 38.00	\$ 40.00	\$ 25.00	\$ 27.00	\$ 29.00	\$ 38.00	\$ 49.00	\$ 30.00
Direct Costs	\$ 9,405.00	\$ 15,224.00	\$ 3,240.00	\$ 3,913.00	\$ 1,248.00	\$ 22,040.00	\$ 3,192.00	\$ 920.00	\$ 12,425.00	\$ 34,236.00	\$ 1,856.00	\$ 1,140.00	\$ 980.00	\$ 1,200.00

Geddes Avenue Improvements Project - Hours and Costs
City of Ann Arbor
RFP No. 879

December 19, 2013

Task	Carlisle Wortman (CWA)				Materials Testing Consultants (MTC)				Total Hours
	Richard Carlisle	Sally Elmiger	GIS/ Graphics	Sharlan Douglas	Steve Elliott	Melzar Coulter	Daniel Elliott	Technical Assistance	
Project Management Tasks									
Meetings (Kick-off, Monthly Progress & Misc)									154
Agency Coordination									42
Monthly Reports									5
Public Engagement & Design Concept Development									
Kick-off Meeting and Informational Gathering	3	10							15
Develop & Manage Messaging, PE Tools & News Releases	6	38	10	48					104
Conduct Series of Coffee Hours/Individual Meetings	48	135	58						289
Conduct Series of Public Meetings	12	64	40						134
Preparation of 3 Interim Reports to City Council - CWA	2	6	2						10
Development of Preliminary & Final Design Concepts w/ Costs									258
Sanitary Service & Easement Evaluation									74
Design Tasks									
Additional Survey & Geotechnical Information					30	15	38	22	219
Utility Coordination									160
Base Plan Development									227
Horizontal & Vertical Road Alignments, Pavement Design									34
Base Municipal Utility Design									48
Develop Stormwater Management Plan & Concepts									45
Hydraulic Analysis & Report									125
Maintenance of Traffic Concepts									34
Pre-application Meetings with Permitting Agencies									8
Retaining Wall Design									146
Sidewalk & ADA Design									126
Easement Document Development									183
Maintenance of Traffic Design									94
SESC Design									28
Construction Estimate and Specifications for Preliminary Plans									87
Construction Schedule									
QA/QC									22
Development of Preliminary Plans (75%)									830
Public Meeting		10	10						28
Submit Permit Applications									106
Development of Final Plans (90%)									289
QA/QC									18
Development Bid Documents (100%)									104
QA/QC									18
Development of Bid Documents									22
Public Information Meeting Prior to Construction	6	12	12						46
TOTAL HOURS	77	275	132	48	30	15	38	22	4,132
Hourly Rate	\$ 58.13	\$ 41.86	\$ 41.86		\$ 46.63	\$ 32.64	\$ 25.00	\$ 17.00	
Direct Costs	\$ 4,476.01	\$ 11,511.50	\$ 5,525.52	\$ -	\$ 1,398.90	\$ 489.60	\$ 950.00	\$ 374.00	

HRC Direct Costs	\$	111,019.00	
Indirect Costs/Overhead @ 2.00x	\$	222,038.00	
Total HRC Costs	\$	333,057.00	
Carlisle Wortman Direct Costs	\$	21,513.03	
Indirect Costs/Overhead @ 1.15x	\$	24,739.98	
Douglas Communication as sub to CWA	\$	4,560.00	
Total CWA Costs	\$	50,813.01	
Materials Testing Consultants Direct Costs	\$	3,212.50	
Indirect Costs/Overhead @ 1.78x	\$	5,718.25	
Total Labor Costs	\$	8,930.75	
Fixed Fee @ 11%	\$	982.38	
Direct Expense			
Sieve Analysis with LBW, 8 x \$120 each	\$	960.00	
Traffic control rental, 2 days x \$225/day	\$	450.00	
MATECO CME55Track Drill Rig & Crew, \$195/hr x 18 hrs	\$	3,510.00	
Total Direct Expense	\$	4,920.00	
Total MTC Costs	\$	14,833.13	
TOTAL COSTS	\$	398,703.15	

EXHIBIT C

INSURANCE REQUIREMENTS

Effective the date of this Agreement, and continuing without interruption during the term of this Agreement, Contractor shall provide certificates of insurance to the City on behalf of itself, and when requested any subcontractor(s). The certificates of insurance shall meet the following minimum requirements.

1. Professional Liability Insurance or Errors and Omissions Insurance protecting the Contractor and its employees in an amount not less than \$1,000,000.
2. Worker's Compensation Insurance in accordance with all applicable state and federal statutes. Further, Employers Liability Coverage shall be obtained in the following minimum amounts:

Bodily Injury by Accident - \$500,000 each accident
Bodily Injury by Disease - \$500,000 each employee
Bodily Injury by Disease - \$500,000 each policy limit
3. Commercial General Liability Insurance equivalent to, as a minimum, Insurance Services Office form CG 00 01 07 98 or current equivalent. The City of Ann Arbor shall be an additional insured. There shall be no added exclusions or limiting endorsements which diminish the City's protections as an additional insured under the policy. Further, the following minimum limits of liability are required:

\$1,000,000 Each occurrence as respect Bodily Injury Liability or Property Damage Liability, or both combined
\$2,000,000 Per Job General Aggregate
\$1,000,000 Personal and Advertising Injury
4. Motor Vehicle Liability Insurance, including Michigan No-Fault Coverages, equivalent to, as a minimum, Insurance Services Office form CA 00 01 07 97 or current equivalent. The City of Ann Arbor shall be an additional insured. There shall be no added exclusions or limiting endorsements which diminish the City's protections as an additional insured under the policy. Coverage shall include all owned vehicles, all non-owned vehicles and all hired vehicles. Further, the limits of liability shall be \$1,000,000 for each occurrence as respects Bodily Injury Liability or Property Damage Liability, or both combined.
5. Umbrella/Excess Liability Insurance shall be provided to apply in excess of the Commercial General Liability, Employers Liability and the Motor Vehicle coverage enumerated above, for each occurrence and for

aggregate in the amount of \$1,000,000.

- B. Insurance required under V.A 2 and V.A.3 of this contract shall be considered primary as respects any other valid or collectible insurance that the City may possess, including any self-insured retentions the City may have; and any other insurance the City does possess shall be considered excess insurance only and shall not be required to contribute with this insurance. Further, the Contractor agrees to waive any right of recovery by its insurer against the City.
- C. Documentation must provide and demonstrate an unconditional 30 day written notice of cancellation in favor of the City of Ann Arbor. Further, the documentation must explicitly state the following: (a) the policy number; name of insurance company; name and address of the agent or authorized representative; name and address of insured; project name; policy expiration date; and specific coverage amounts; (b) any deductibles or self-insured retentions which shall be approved by the City, in its sole discretion; (c) that the policy conforms to the requirements specified. An original certificate of insurance may be provided as an initial indication of the required insurance, provided that no later than 21 calendar days after commencement of any work the Contractor supplies a copy of the endorsements required on the policies. Upon request, the Contractor shall provide within 30 days a copy of the policy(ies) to the City. If any of the above coverages expire by their terms during the term of this contract, the Contractor shall deliver proof of renewal and/or new policies to the Administering Service Area/Unit at least ten days prior to the expiration date.