STANDARD PROFESSIONAL SERVICES AGREEMENT
AGREEMENT BETWEEN
SMITHGROUP
AND THE ANN ARBOR DDA
FOR PROFESSIONAL SERVICES

The Ann Arbor DDA, a Michigan municipal corporation, having its offices at 150 S. Fifth Ave., Ann Arbor, Michigan 48104 ("DDA"), and Smithgroup, Inc ("Consultant") a Michigan Corporation with its address at 201 Depot Street, Ann Arbor, MI 48104, agree as follows on this ___ day of ___ month___ 2020.

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

I. DEFINITIONS
Administering Service Area/Unit means Ann Arbor DDA

Contract Administrator means Susan Pollay, acting personally or through any appropriate staff member.

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


II. DURATION

This Agreement shall become effective on March 12, 2020 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 services ("Services") in connection with the Project as described in Exhibit A. The DDA 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 DDA 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 $1,337,124, plus $133,712 contingency if authorized in writing.

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 on the basis of reasonable time spent and reasonable quantities of materials used, according to the schedule of rates 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 DDA may verify invoices submitted by the Consultant. Such records shall be made available to the DDA 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 below, as will protect itself and the City of Ann Arbor and Ann Arbor DDA, and their officers, employees, and agents 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. The following insurance policies are required:
1. Professional Liability Insurance protecting the Consultant 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 policy limit  

3. Commercial General Liability Insurance equivalent to, as a minimum, Insurance Services Office form CG 00 01 07 98. The Ann Arbor DDA shall be added as additional insured. There shall be no added exclusions or limiting endorsements including, but not limited to: Products and Completed Operations, Explosion, Collapse and Underground Coverage or Pollution. 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. 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.3 and V.A.4 of this contract shall be considered primary as respects any other valid or collectible insurance that the DDA may possess, including any self-insured retentions the DDA may have; and any other insurance the DDA 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 DDA.
C. In the case of all contracts involving on-site work, the Consultant shall provide to the DDA, before the commencement of any work under this contract, documentation demonstrating it has obtained the above mentioned policies. Documentation must provide and demonstrate an unconditional 30 day written notice of cancellation in favor of the Ann Arbor DDA. 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 DDA, 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 Consultant supplies a copy of the endorsements required on the policies. Upon request, the Consultant shall provide within 30 days a copy of the policy(ies) to the DDA. If any of the above coverages expire by their terms during the term of this contract, the Consultant shall deliver proof of renewal and/or new policies to the Administering Service Area/Unit at least ten days prior to the expiration date.

D. 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 DDA.

E. To the fullest extent permitted by law, for any loss not covered by insurance under this contract, the Consultant shall indemnify, defend and hold the City of Ann Arbor and Ann Arbor DDA, its officers, employees and agents harmless from all suits, claims, judgments and expenses including attorney’s fees resulting or alleged to result, to its proportionate extent, from any negligent, grossly negligent, reckless and/or intentional wrongful or tortious acts or omissions by the Consultant or its employees and agents occurring in the performance of this Agreement.

VI. COMPLIANCE REQUIREMENTS

A. **Nondiscrimination.** The Consultant agrees to comply with the nondiscrimination provisions of Chapter 112 of the Ann Arbor City Code.

B. **Living Wage.** The Consultant agrees to comply with the living wage provisions of Chapter 23 of the Ann Arbor City Code.
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 DDA for any contract, debt, or any other obligation to the DDA 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 DDA may terminate this Agreement if it decides not to proceed with the Project by notice pursuant to Article XII. If the Project is terminated for reasons other than the breach of the Agreement by the Consultant, the Consultant shall be compensated for reasonable time spent and reasonable quantities of materials used prior to notification of termination.

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 DDA to effect continued payment under this Agreement are not appropriated or otherwise made available, the DDA 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 DDA

A. The DDA 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 DDA. Notwithstanding any consent by the DDA 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 DDA.

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 by personal delivery or by first-class mail, postage prepaid, to the address stated in this Agreement or such other address as either party may designate by prior written notice to the other. Notice shall be considered delivered under this Agreement when personally delivered to the Contract Administrator or placed in the U.S. mail, postage prepaid to the Administering Service Area/Unit, care of the Contract Administrator.

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 DDA. 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 DDA without restriction or limitation on their use. The DDA acknowledges that the documents are prepared only for the Project. Prior to completion of the contracted Services the DDA 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 DDA’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 DDA 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 DDA.
FOR CONSULTANT

Tom Mroz
Digitally signed by Tom Mroz
Date: 2020.04.07 14:39:18 -04'00'

By Tom Mroz, Senior Vice President

FOR THE ANN ARBOR DDA

By Keith Orr, DDA Board Chair

By Susan Pollay, Executive Director
EXHIBIT A
SCOPE OF SERVICES
STATE STREET & KEY STREETS PROJECT
SCOPE OF SERVICE OUTLINE

The following scope of service describes planning, analysis, design, and engineering tasks to be performed by the SmithGroup, Wade Trim, and Toole Design Group team. The project is organized in the following way:

- **Management Tasks** – including project coordination and engagement/outreach to run continuously over the duration of the project, support the Key Streets and State Street project in tandem.
- **Key Streets Project Tasks** – Includes an extensive downtown multi-modal network analysis, future street project exploration and prioritization, and preliminary design and supporting analysis work for selected key street projects.
- **State Street Project** – Includes streetscape, watermain / utility work, bicycle facilities, road resurfacing and supporting analysis and engineering tasks. Scope includes pre- and post-bid support and construction administration.

PART 1 - MANAGEMENT TASKS (Both Projects)

**Project Coordination**

Project coordination tasks, including approvals, to be shared across both the State Street and Key Streets project.

**Bi-Weekly Project Team Meetings**
- 26 meetings with the team leaders, DDA staff, and city staff.
- 2-hour meeting with time for prep.
- Time budgeted for additional staff to be involved as needed in a portion of the meetings
- Time and expense budgeted for at least one Toole Design member to have a monthly presence on the project, outside of additional time for workshops.

**Street Design Team Meetings**
- 5 street design team meetings at key milestones
- 2-hour meetings with prep.

**DDA CIC Meetings**
- 5 DDA CIC meetings
- 2-hours with prep by the team

**Approval Meetings**
- Up to six (6) approval meetings, with DDA board, City Council, or other boards/commissions as needed (i.e. Transportation commission)
Engagement & Outreach

Engagement and outreach tasks, including communication support, to be shared across both the State Street and Key Streets project. Engagement activities will emphasize project goals, including discussion of equity, safety, carbon neutrality and how these projects can achieve those outcomes.

Design Workshop 1
- 3-day long workshop with a combination of open house sessions, formal presentations, and invited stakeholder work sessions.
- Build on community goals and values – explain why these are important and essential.
- First workshop aimed at listening and generating initial ideas, to be reported out at the end of the workshop series
- State Street: Focus on understanding site conditions, user needs, property owner / business owner interests in needs, existing challenges. Build a structured feedback activity. Begin drawing conceptual ideas/options.
- Key Streets: Focused on understanding broader needs and obstacles to mobility downtown. Where are the barriers, missed opportunities, challenges, etc. Help verify and confirm goals/values for the downtown.

Design Workshop 2
- 3-days, same format as above.
- Review goals and values for common direction.
- Focused on reviewing draft plans and ideas. Refinement of ideas with public input. Reporting out on decision making steps, analysis work conducted, etc.

Stakeholder Engagement (State St.)
- Anticipate 16 meetings with key stakeholders. This includes downtown interest groups (Business area association, neighborhood groups) as well as regulatory agency meetings (MDOT, EGLE, etc.).
- 2-hour meetings with prep. Participation for a modest cross-section of project staff depending on the meeting.

Pop-up Engagement / Activities
- Facilitate and/or support up to six (6) additional special events or activities as part of outreach and engagement plan. Includes special pop-up workshops on-site, survey development or deployment, attending public events with a booth presence (Green Fair, etc.)

Outreach & Communication
- Supporting overall communication activities related to these projects – including models/illustrations. Small allowance to provide support to the City / DDA staff with updated graphics and developing an ESRI Story Map as a project information portal.
PART 2 – KEY STREETS MOBILITY and INFRASTRUCTURE PLANNING

The Key Streets project is structured around three primary tasks:
1. Downtown Network Analysis that will provide comprehensive suite of tools for decision making
2. Key Streets exploration and prioritization based on project goals— to identify and select key streets to advance forward
3. Key Streets conceptual design – to develop a clearer scope and cost for implementation.

Downtown Network Analyses (DDA)

Level of Traffic Stress Analysis
- We will perform a Level of Traffic Stress (LTS) analysis to quantify the comfort of bicycling. The LTS analysis assigns a score to a given segment of street or bicycle infrastructure based on its characteristics, such as the level of separation from traffic, road speeds, traffic volumes, and safe crossings on major roadways. An LTS score can range from one to four, with an LTS of one being appropriate for most ages and abilities while a three or a four are more appropriate for a confident bicyclist. Connection scenarios will be developed to enough detail to understand the opportunities and constraints presented by each. We will identify key intersections, potential modal conflict points, and areas of interest and concern. Particular attention will be paid to connections that use existing bicycle and pedestrian friendly streets; however, connections will not be limited to these streets if other reasonable connections present themselves, including on-road, off-road, and adjacent-to-road locations.

Multi-modal TDM Analysis
- Toole Design will use the PeopleForBikes Bicycle Network Analysis (BNA) tool to evaluate up to 10 “scenarios”, each comprised of a set of corridors to have bicycle facility improvements to create low stress (LTS < 3) conditions. The BNA tool measures low-stress connectivity of people to key destinations. Toole Design will work with the DDA to identify key destinations and to weight them appropriately for importance in overall network connectivity. Focusing on network connectivity helps to identify the relative importance of projects and can be flexible to weighting origin/destination pairs based on locally identified travel patterns such as the Washtenaw Area Transportation Study (WATS) models.

Framework & Plan Alignment (inc. equity, infrastructure, and carbon neutrality considerations)
- This planning task will be centered around synthesizing analyses, engagement work, existing and on-going city plans, and DDA/City staff coordination to determine where and how the framework should be modified and what priorities are needed to build a more equitable downtown environment.
- Our effort will utilize the equity data and measurements being developed for the Ann Arbor Transportation Master Plan and will provide an assessment of the impacts and benefits of the Key Streets mobility scenarios relative to community equity goals, considering access and prioritization of
users. Analysis described elsewhere in this proposal, including safety and traffic stress, will also be considered in light of equity goals.

- This task also considers sustainability and carbon-neutrality targets for the city and will examine how the State Street and Key Streets project can support these efforts.

**Origin-Destination Analysis**

- Origin-destination analysis will be used across the downtown corridor to understand broad movement patterns by mobility type. This will be aligned with WATS models and other predictive model tools.

**Downtown Safety Analysis / Vision Zero**

- Conduct a comprehensive assessment of downtown safety and a review of traffic data from the past 3-years (or TBD period). Understand key sources of severe injuries / fatalities and what countermeasures could be employed to those situations to provide a less injurious outcomes. Determining where and how countermeasures could be prioritized.

**Transportation Feasibility Study - Key Findings Documentation**

- Compile analysis results into a cohesive document for Downtown Ann Arbor. This document will provide guidance for prioritizing and evaluating projects based on an alignment with overarching goals and desired outcomes.

**Key Streets Exploration & Prioritization (DDA)**

**Opportunity identification**

- Building on framework plan and analysis, determine a range of candidate key street projects to be considered.
- Build an *evaluation framework* based on the goals and values to be used in assessing the potential opportunity and challenges of candidate streets.

**Field investigations & utility review**

- Conduct field visits/investigation of candidate projects to consider potential utility impacts, right of way constraints, adjacent property issues/opportunities, roadway condition, etc.

**Design direction & project scopes**

- Assess each candidate site and assemble a narrative and scoring matrix highlighting the pros and cons of each identified candidate route. Assemble in a presentation/report document. Narrative would include a scope of improvements and high-level cost assessment.

**Prioritization Work Session**

- Conduct a half-day work session to review candidate streets with the full project team and other critical decision-makers.
- Outcome of this work session is to confirm which street projects will be advanced further into design for the key streets project.
Top priority projects will be advanced into implementation as part of the "Key Streets Conceptual Design" task (below). Future, long-term, and subsequent street project opportunities will be noted for future study.

**Key Streets Conceptual Design (DDA)**

**Site Survey – Basic**
- Conduct a "basic" site survey for key streets. Establish survey controls and gather curb geometry, building edges, and property lines. Critical information needed for moving into preliminary design.
- Will need to gather additional survey information as part of the detailed engineering phase (future scope of work)

**Traffic and Safety Analysis for Key Streets**
- Conduct a traffic analysis on up to two of the Key Streets, as described in Appendix A.
- For other Key Streets not selected for a full traffic analysis, the consultant team will use the results of the Downtown Network Analysis and related available traffic data sources to assess the general efficacy, issues, and impacts of the anticipated Key Streets improvements to the mobility characteristics of each street.
- If needed, refine the safety analysis for selected key streets. Provide information on safety measures and their expected effectiveness for improving safety outcomes.

**Conceptual Design for Key Streets**
- Conduct a conceptual design for the key streets, including approximately layout and typical cross-sections for the overall corridor in schematic or graphic form.

**Costing & Implementation Plan**
- Develop a conceptual cost estimate that further refines the estimate prepared in the project scope and is more specific to the key street.
- Provide a narrative describing the implementation time frame, coordination with other projects (CIP, etc.) and potential cost shared between the City, DDA, or other partners.
The State Street project contains the following range of elements:
1. Core streetscape enhancements (State street from Washington to William)
2. Watermain upsizing/consolidation
   a. State Street from Washington to South University
   b. North University from State to Fletcher.
3. Street resurfacing
   a. State Street from Huron to South University
   b. North University from State to Fletcher
4. Potential streetscape enhancements (including bicycle infrastructure)
   a. State Street from Ann/Catherine to South University

**Mobility & Traffic Analysis**

**Traffic Analysis + Modeling**
- Conduct traffic analysis for State Street, including collection of existing pedestrian, bicycle, and vehicle volumes.
- Analysis will be used to support recommendations for any possible roadway reconfigurations or intersection control changes.
- **SEE APPENDIX B FOR ADDITIONAL DETAILS**

**Safety Analysis & Vision Zero**
• Conduct a more detailed safety analysis (can build on the broader safety analysis from Key Streets planning). Provide information on safety measures and their expected effectiveness for improving safety outcomes.

Site Survey

Site Survey
• Conduct a full site survey on State Street from Huron to South University, and on North University from State Street to Fletcher.
• Includes all utility data with inverts.

Preliminary Design

Design exploration and options
• Develop preliminary ideas and concepts in an illustrative form.
• Meetings to discuss/review/select a preferred alternative design in consideration of project goals, stakeholder/public engagement and analysis findings.

Schematic Design
• Schematic design to approximately 15% level.

Cost Analysis
• Cost analysis based on the schematic design.

Construction Documents

Site Prep / Management
• Cover sheets, notes
• Demolitions / removals sheets
• Erosion control
• Survey sheets

Traffic Controls
• Maintenance of Traffic plans
• Temporary controls

Watermain Engineering
• Watermain plans and profiles
• Watermain details
• STATE (Huron to South University)
  About 2000' of water main upsize and consolidation of UM watermain. There may be sanitary sewer issues which are assumed to be either point repairs that will be included in the plan set or sewer lining which would be performed under a separate contract. Assume NO stormwater management and sewer design. Assumed redesign of three traffic signals.
• NORTH UNIVERSITY (State to Fletcher)
  About 1000' wm upsize and consolidation of UM watermain. Assume NO some stormwater management and sewer design will be included.
• SEE APPENDIX A FOR ADDITIONAL DETAILS

**Stormwater Engineering**
- Stormwater plans and profiles
- Stormwater details
- Stormwater volume calculations and green streets alignment

**Roadway Engineering**
- Alignment
- Roadway layout and curbing
- Typical cross-sections
- Grading and profiles
- Includes striping + signage

**Bike Facility Engineering**
- Specific design elements related to bikeways

**Streetscape & Lighting**
- Streetscape layouts and enlargements
- Streetscape details
- Lighting and electrical plans
- IT conduit
- Landscape plans

**Signal Design/Engineering**
- Signal design, plans, and details

**Construction Administration Tasks**

**Specs and Bidding Support**
- Specifications
- Assemble bid documents
- Engineer's cost estimate
- Bid addendum and clarifications
- Bid review
- IFC construction document set with any modifications
APPENDIX A – KEY STREETS - Operational Analysis and Traffic Modeling Scope Details

A capacity analysis will be conducted to examine existing and future capacity of the roadway and guidance on roadway alternatives for up to two of the Key Street corridors. The scope will involve coordination on Key Streets to identify and prioritize select key streets to advance forward. The results of the traffic study will recommend preferred alternatives to be implemented in the Key Streets conceptual designs.

The focus of the traffic study may include geometric and operational changes such as addition of turn lanes, signal phasing improvements, and pedestrian/bicycle infrastructure improvements. The Key Streets will be incorporated into the State Street/Huron St corridor models developed by Wade Trim to add to the growing Synchro network. Tasks included in the scope of this project include the following:

- Collaboration with the project team in evaluation and exploration of Key Streets, from a traffic and mobility network and infrastructure standpoint
- Crash and safety analysis including nonmotorized review on Key Streets
- Collect traffic volume data
- Request signal timing permits from the City
- Create Existing condition Synchro models for AM, PM and Off-Peak periods, volume balance, calibrate and validate models, and simulate results using SimTraffic
- Develop warrant analyses for each intersection to determine appropriate traffic control
- Create Proposed Synchro models based on the preferred alternative for AM, PM and Off-Peak periods (one scenario) for design year only
- Prepare technical memo summarizing the safety, operational and capacity analysis results

Traffic Counts

All traffic counts will be collected by Quality Counts upon selection of Key Streets to be evaluated.

- Turning Movement Counts (TMC) will be collected on a typical weekday, non-holiday – 7-9AM, 11AM-1PM, 2-6PM, and will include pedestrians, bicyclists, scooters, vehicles and heavy vehicles at all intersections within the DDA limits.
- Nonmotorized Crossing Counts will be collected on a typical weekday, non-holiday – 7-9AM, 11AM-1PM, 2-6PM, including pedestrians, bicyclists and scooters.
- Automatic Traffic Recorders (ATR) counts for a 7-day period – volumes and vehicle class, and speed data at one location on each Key Street.

Perform Safety Analysis

Wade Trim will complete the crash and safety analysis for the selected Key Streets. This work will include analysis of crash history for the corridors along with crash summaries of selected features including signalized intersections, minor intersections, driveways, crash summaries for pedestrian, bicycle collisions, etc. Wade Trim will conduct conflict observations at areas of high crash rates, summarize existing conditions and provide a report of countermeasures and recommendations.

APPENDIX B - KEY STREETS – Utility Design Scope Details

10% Project Planning Phase
Develop Design Criteria
- Review/confirm condition of all water main on Key Streets with Troy Baughman from City of Ann Arbor per City Water Master Plan
- Identify need for replacement and/or upsize
- Determine need for water main consolidation

Request and receive record drawings of existing water main and utilities along Corridor

Review City standards for WM design

Review/Identify Storm Sewer/Drainage outlets along corridor

Review sanitary sewer condition with City and determine point repair, if required

Prepare concept alignment for watermain and sanitary sewer improvements

Prepare construction cost estimate

APPENDIX C – STATE & NORTH UNIVERSITY - Operational Analysis, and Traffic Modeling Scope Details

STATE & NORTH UNIVERSITY - OPERATIONAL ANALYSIS, AND TRAFFIC MODELING SCOPE

A capacity analysis will be conducted to examine existing and future capacity of the roadway and guidance on roadway alternatives for the State Street corridor. The focus will include geometric and operational changes such as addition of turn lanes, signal phasing improvements, and pedestrian/bicycle infrastructure improvements. Previously, Huron corridor models were submitted to MDOT by Wade Trim and these models will be expanded to include the State Street corridor. Tasks included in the scope of this project include the following:

- Request signal timing permits from the City
- Collect traffic volume data
- Field review and identify deficiencies in existing signal equipment
- Create Existing condition Synchro models for AM, PM and Off-Peak periods, volume balance, calibrate and validate models, and simulate results using SimTraffic
- Develop warrant analyses for each intersection to determine appropriate traffic control
- Create Proposed Synchro models based on the preferred alternative for AM, PM and Off-Peak periods (two scenarios), for design year
- Summarize MOEs and perform cost/benefit analysis (impacts on commuter traffic)
- Prepare technical memo summarizing the operational analysis and capacity analysis results

Traffic Counts

All traffic counts will be collected by Quality Counts. Turning Movement Counts will be collected on a typical weekday, non-holiday – 7-9AM, 11AM-1PM, 2-6PM, and will include pedestrians, bicyclists, scooters, vehicles and heavy vehicles at the following locations:

1. State St & Washington St
2. State St & Liberty St
3. State St & N. University
4. State St & William St
5. State St & S. University
6. State St & Madison St

Nonmotorized Crossing Counts will be collected on a typical weekday, non-holiday – 7-9AM, 11AM-1PM, 2-6PM, including pedestrians, bicyclists and scooters at the following locations:

1. North of S University
2. South of William at Trotter (currently no crosswalk exists at this location but there is a desire to place one here).

Automatic Traffic Recorders counts for a 7-day period – volumes and vehicle class (speed data is needed) at the following locations:

1. State St south of Washington
2. State St south of N. University
3. State St north of S. University

**Perform Safety Analysis**

Wade Trim will complete the crash and safety analysis for the entire study area. This work will include analysis of crash history for the corridors along with crash summaries of selected features including signalized intersections, minor intersections, driveways, crash summaries for pedestrian, bicycle collisions, etc. Wade Trim will conduct conflict observations at areas of high crash rates, summarize existing conditions and provide a report of countermeasures and recommendations.

**Develop the Construction Zone Traffic Control Concepts**

Wade Trim will work with the City to determine the best solution for maintaining traffic during construction and provide a conceptual plan.

**Develop Construction Traffic Control Plan**

A maintaining traffic plan will be developed that will be an acceptable plan for all users of the roadway including vehicles and pedestrians. We do not expect the need for traffic signal staging. We anticipate holding maintaining traffic meetings during the development of our plans to go over the details of our plans with the City.

**Develop Traffic Signal Plans**

It is anticipated that signal modifications will be recommended as a result of the traffic study. The traffic signal design scope for this project may include upgrades at three traffic signals within the project limits as follows:

1. State Street at Liberty St (potential signal improvements)
2. State Street at William St (potential signal improvements)
3. State Street at N University St (potential signal improvements)

Wade Trim has assumed these three (3) traffic signals may be impacted by the capacity, safety, and/or water main improvements on the project. No signal upgrades are anticipated at any other signalized intersections within the project limits.

The signal design entails the preparation of traffic signal modification plans at the three intersections listed above to accommodate any project improvements along State Street. The modifications may entail signal phasing modifications, shifting signal heads locations, and adjusting/adding pedestrian signal or pedestrian pushbutton improvements, but will not include any new poles or controllers and does not included development of timing permits. The signal design scope includes modifications only and does not include full traffic signal modernization. If full signal modernization becomes necessary
due the intersection improvements or is desired by the City or DDA, we will prepare a separate scope and fee for the additional work effort.

Since the work scope assumes that all existing poles will be reused, our Scope of Services does not include any geotechnical services for strain pole foundations. Our work scope also assumes that Smith Group will perform all ADA sidewalk ramp design at the signalized intersections.

The traffic signal modernization plans will be developed from the topographic survey and the road design plans for the project. The traffic signal plans at each intersection will include a removal plan, removal cabling diagram, traffic signal installation plan, installation cabling diagram, materials list, power company coordination notes, and wattage calculations. Pushbutton installation details and measurements will be noted on the ADA sidewalk ramp detail grades. A legend sheet, notes sheet, and traffic signal detail sheets will also be provided, as well as special provisions for construction and an Engineer’s Estimate.

The current signal design scope does not include the design of any RRFBs or HAWK signals at the midblock pedestrian crossings. If either of these improvements are recommended through the course of the capacity of safety analysis, we will provide a scope and fee for the design work at that time.

**Signing and Pavement Marking Plans**

Wade Trim will review and provide comments on the signing and pavement marking plans to be developed by SmithGroup.

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**APPENDIX D – STATE & NORTH UNIVERSITY – Utility Design Scope**

**Details**

For the water main project, the following is assumed:

1. Storm water and sanitary sewer design and construction will be limited to facilities that will be impacted by the construction of the water mains, and to spot repairs that may be identified by the City as necessary.
2. The consultants will coordinate with the University of Michigan as a community stakeholder. The work provided in this contract includes the design of new water services from the main to the edge of the right of way to service University facilities, where identified by the University as necessary. Work related to water service extensions beyond the limits of the street right of way will be considered an additional service.

**10% Project Planning Phase**

- Develop Design Criteria (assumptions)
  - Review/confirm sizing (upsizing) of all new water main on State Street and North University with Troy Baughman from City of Ann Arbor per City Water Master Plan
  - Upsize State Street to 12-inch; 12-inch on North University
  - Consolidate UM main into new upsized 12-inch main on both State Street and North University.

- Request and receive record drawings of existing water main and utilities along Corridor Review/Identify Storm Sewer/Drainage outlets along corridor
- Review City standards for WM design
- Review sanitary sewer condition with City and determine point repair, if required

**30% Geometric Review Phase**

- Develop preliminary water main alignment
  - Draft horizontal and vertical alignments
• Preliminary hydrant and valve locations
• Identify potential utility conflicts
• Confirm utility conflicts and contact franchise utility companies (i.e. send relocation letters, if necessary)
Identify Necessary Permits (i.e. Act 399 Water System Permit, SESC Permit, etc.)
Prepare draft cost estimate
Public Engagement as necessary

60% General Plan Review Phase
Refine water main alignment
• Solidify water main vertical and horizontal alignments based on feedback from 30% phase
• Draft technical specifications
Hold Utility Coordination meeting
Prepare draft list of pay items and quantities
Update cost estimate
Prepare Draft Permit Applications
• Identify any supporting documents for permit applications
Public Engagement as necessary

90% Preliminary Contract Review Phase
Finalize utility relocation schedules and plans with franchise utilities
Finalize Water Main plan and profiles
Update list of pay items and quantities
Finalize technical specifications
Submit Permit Applications to appropriate agencies
Update construction cost estimate
EXHIBIT B
COMPENSATION

Consultant shall be paid for those Services performed pursuant to the Agreement inclusive of all reimbursable expenses (if applicable), in accordance with Smithgroup's Agreement with the Ann Arbor DDA and the terms and conditions herein. Attached as Exhibit B are the cost summary and funding responsibilities for the projects. The total not-to-exceed amount shown in Section IV.A. of this contract includes these anticipated amounts and contingencies to cover unforeseen expenses. All contingency fees must first be authorized in writing, prior to proceeding with work.
<table>
<thead>
<tr>
<th>Contract Component</th>
<th>DDA Share</th>
<th>DDA Cost</th>
<th>City Share</th>
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**Total Contract Amount** $1,337,124

**Total Contract Amount + Contingency** $1,470,837
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**Key Streets Project Tasks**

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**Fee Management Tasks (Both Projects)**

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**Other Costs**

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## STATE STREET PROJECT

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## STATE STREET PROJECT TASKS

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### Engineering (State Street)

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### Implementation (State Street)

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<td>Specs and Bidding Support</td>
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### TOTAL HOURS + FEE

| TOTAL HOURS + FEE | $663,223 |
| TOTAL EXPENSES    | $21,345  |

**Total Planning/Design/Engineering**: $684,568