

**CITY OF BLAINE**  
**REQUEST FOR COUNCIL ACTION**  
**MEETING DATE:** January 23, 2006

**SUBJECT:** Professional Services Agreement S06-01  
East Blaine Infrastructure Master Plan

**SUBMITTING DEPT:** Public Works

**PREPARED BY:** Stephen R. Banham, Director 

**AGENDA LOCATION:** Comments/Communications ☐; Consent ☐; Committee Reports ☐  
Unfinished Business ☐; Council Action ☒; Public Hearing ☐; Standing Committees ☐

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**ATTACHMENTS:** 1) Professional Services Agreement S06-01 (CHS Engineers, LLC)

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**ANALYSIS/SUMMARY:** On November 4, 2005 the Public Works Department solicited Statements of Qualifications (SOQs) from qualified engineering firms to perform the following services:

- Prepare integrated transportation, water distribution, stormwater management, and sanitary sewage collection and conveyance systems master plans to accommodate maximum build out potential in the 1200 acre East Blaine annexation area, as well as upsizing that would be required to the downstream and connected systems.
- Consult & coordinate with the Community Development Department's land use planning consultant.
- Develop construction cost estimates to budget level accuracy for each system.
- Recommend logical sequencing of improvements to keep pace with anticipated growth rates.
- Assist the City in evaluating various funding mechanisms for financing infrastructure improvements, including Public Facilities Construction Agreements, Local Improvement Districts, LIDs and impact fees.
- Provide third-party review of major development proposals.

Six firms submitted SOQs. The City's consultant selection committee interviewed the top three short-listed firms, and selected CHS Engineers, LLC as best qualified. City staff and CHS Engineers, LLC representatives have negotiated the attached mutually acceptable Agreement.

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**RECOMMENDATION:** ☒ Waive 2<sup>nd</sup> Reading: Staff recommends that City Council authorize the City Manager to execute Professional Services Agreement S06-01 in an amount not to exceed \$178,300 for development of the subarea infrastructure plan and review of developer plans.

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**FISCAL ANALYSIS:** Compensation for services performed under this Agreement will derive from Fund 320 East Blaine Capital Improvement Project. A portion of this funding will be transferred from the LID Guaranty Fund assets. Compensation for Task No 2 will derive from Developer reimbursements for services rendered. The Agreement expires on December 31, 2006.

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**REVIEWED BY:** City Manager: \_\_\_\_\_ Finance Dir: \_\_\_\_\_ City Clerk: \_\_\_\_\_

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**COUNCIL ACTION:**

☐ Approved ☐ Denied ☐ Tabled/Deferred ☐ Assigned to: \_\_\_\_\_

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**COUNCIL ACTION:** \_\_\_\_\_

**CITY OF BLAINE  
PROFESSIONAL SERVICES AGREEMENT**

**ENGINEERING SERVICES**

**EAST BLAINE INFRASTRUCTURE MASTER PLAN**

**Agreement No: S06-01**

**THIS AGREEMENT** is between the City of Blaine, a municipal corporation (hereinafter referred to as "City") and CHS Engineers, LLC (hereinafter referred to as "Consultant").

**W I T N E S S E T H:**

**1. SCOPE**

Consultant agrees to provide consulting engineering services to City for infrastructure master planning within the East Blaine Annexation Area. A more detailed description of the scope of services is attached hereto as Exhibit "A" and incorporated herein by this reference.

**2. TERM**

This Agreement shall commence on January 23, 2006, and will terminate on December 31, 2006, unless extended by separate amendment to this Agreement.

**3. COMPENSATION, INVOICING, PAYMENT**

A. City shall pay Consultant on a time and material basis not to exceed **One Hundred Seventy Eight Thousand Three Hundred and No One-Hundredths Dollars (\$178,300)** for completed work and services rendered under this Agreement as provided in Exhibit "B" attached hereto, and by this reference made part of this Agreement. City shall not pay Consultant separately for indirect or normal business overhead costs (e.g., office rental, office supplies, postage, telephone, fax, business insurance, office utilities, routine correspondence preparation, invoicing, or payment receipt processing and accounting).

B. Consultant shall submit monthly invoice statements to Public Works Department / 1200 Yew Avenue / Blaine, WA 98230 and shall include the following information:

1. For direct professional services:
  - a. An itemized short description of the task performed and the specific time period,
  - b. The name(s) of the corresponding person(s) performing the task,
  - c. The corresponding hourly reimbursement rate(s) of the person(s) performing the task,
  - d. The corresponding hours, to the nearest quarter of an hour, spent performing each task,
  - e. Work task subtotal cost (hours x hourly rate), and
  - f. Subtotal for direct professional services.
2. For any other direct charges:
  - a. Qualified mileage charges: A short description of the trip's purpose, date, mileage for the trip, mileage reimbursement rate, and total charge (mileage x rate).
  - b. All other charges: An itemized short description explaining the charge, the reimbursable cost, and a subtotal of all such charges.
  - c. Subtotal for indirect or other charges.
3. Any past-due amounts.
4. Uninvoiced balance remaining on each work task.
5. Total amount of the invoice.

City shall review these submitted invoices and make payment based thereon for work completed to City's satisfaction. City shall pay Consultant all undisputed amounts within 30 days of receipt of Consultant's invoice. Such payment shall be full compensation for work performed or services rendered and for all

labor, materials, supplies, equipment, and incidentals necessary to complete the work specified in the Scope of Services. City shall promptly notify Consultant of any disputed invoice amounts.

**4. RELATIONSHIP OF PARTIES**

Consultant and its personnel shall act as independent contractors and not as employees of City. As such, they have no authority to bind City or control employees of City, contractors, or other entities. This Agreement does not create a partnership or joint venture between Consultant and City.

**5. PROJECT OVERSIGHT**

Within the performance of these duties, Consultant shall work under the direction of the Public Works Director. Consultant specifically understands that no City employee other than the Public Works Director is authorized to direct the work of Consultant unless the Public Works Director designates in writing another representative of City to provide such direction. The Public Works Director may, at any time, issue written directions within the general scope of this Agreement. If any such direction causes an increase or decrease in the cost of this Agreement or otherwise affects any other provision of this Agreement, then Consultant shall immediately notify the Public Works Director and take no further action concerning those written directions until such time as the parties have executed a written change order.

**6. LICENSE AND TAXES**

Consultant shall possess a current Blaine Business License and any regulatory license(s) required to fulfill its obligations under this Agreement. Furthermore, Consultant agrees to pay when due all taxes, assessments, levies or tariffs.

**7. INSURANCE AND HOLD HARMLESS**

Prior to and during the performance of the work covered by this Agreement, Consultant shall provide to City evidence that it has obtained and maintains in full force and effect during the term of this Agreement:

- (a) A policy of professional insurance, providing coverage of at least One Million Dollars (\$1,000,000) against professional liability for errors and omissions in connection with the work to be performed by Consultant under this Agreement;
- (b) Workers' Compensation Insurance as required by law with an all-states endorsement;
- (c) Employer's Liability Insurance (bodily injuries) with a limit of One Hundred Thousand Dollars (\$100,000) per occurrence with an insurance company authorized to write such insurance in Washington State; and
- (d) Comprehensive General Liability Insurance and Automobile Liability Insurance covering all owned and non-owned automobiles and vehicles used by or on behalf of Consultant with One Million Dollars (\$1,000,000) combined single limit for bodily injury and/or property damage per occurrence and an annual aggregate limit of One Million Dollars (\$1,000,000).

City shall be provided thirty (30) days' written notice of any cancellation of said professional liability insurance. City shall be listed as an additional insured on policies listed in (d) above.

Consultant agrees to indemnify City, its officers, council members, employees and agents for any claims, damages, losses, and costs, including, but not limited to, reasonable attorney's fees and litigation costs, arising out of claims by any third parties for property damage or bodily injury, including death, to the extent arising from the negligence or willful misconduct of Consultant, Consultant's employees, affiliated corporations, and subcontractors in connection with the project.

City agrees to indemnify Consultant from any claims, damages, losses, and costs, including, but not limited to, reasonable attorney's fees and litigation costs, arising out of claims by third parties for property damage or bodily injury, including death, to the extent arising from the negligence or willful

misconduct of City, or its employees or contractors (other than Consultant) in connection with the project.

**8. WARRANTY**

Consultant warrants that their services will conform to the standard of care applicable to the services covered by this Agreement, and that they shall be performed with the degree of skill and diligence normally employed by professional consultants performing the same or similar work.

**9. REMEDIES**

In the event of a default hereunder, or in the event that Consultant fails to perform the Project work in conformance with the standard of care set forth in Section 8, Warranty, then City may, in addition to exercising all of those rights and remedies available to it in law and equity, (i) terminate the Contract, (ii) cure any defect arising from Consultant's negligence, recklessness or willful misconduct and charge the cost of such repair back to Consultant, and/or (iii) seek specific remedial performance under the Contract at no additional cost to City. The remedies provided for herein are cumulative.

**10. GENERAL CONDITIONS**

- A. Reports and Information.** Consultant, at such times and in such forms as City may require, shall furnish City such reasonable periodic reports and documents as it may request pertaining to the work or services undertaken pursuant to this Agreement, the costs and obligations incurred or to be incurred in connection herewith, and any other matters covered by this Agreement.

Consultant will maintain accounting records in accordance with generally accepted accounting principles and practices to substantiate all invoiced amounts. All plans, drawings, reports, specifications, data, information or other documents provided to Consultant and/or prepared or assembled under this Agreement are and shall remain the sole property of City. Consultant explicitly waives all claims to propriety ownership and/or copyrights associated with any work product produced under this Agreement. Consultant shall retain all such documentation generated in conjunction with the undertaking of the Project, and Consultant shall, upon completion, termination, expiration and/or conclusion of the Project, provide same to City.

- B. Entire Agreement.** This Agreement constitutes the entire agreement between the parties and both parties acknowledge that there are not other agreements, written or oral, that have not been fully set forth in the text of this Agreement.
- C. Amendments.** The parties hereby further agree that this Agreement cannot be amended or modified without the written concurrence of both parties.
- D. Notices.** Any notices required to be given by City to Consultant or by Consultant to City shall be in writing and delivered to the parties at the following addresses by certified mail, return receipt requested:

Blaine City Clerk  
344 H Street  
Blaine, WA 98230

CHS Engineers, LLC  
12507 Bel-Red Road, Suite 101  
Bellevue, WA 98005-2500

With a copy to:  
Blaine Public Works Director  
1200 Yew Street  
Blaine, WA 98230

- E. **Waiver.** Failure to insist upon strict compliance with any terms, covenants or conditions of this Agreement shall not be deemed a waiver of such, nor shall any waiver or relinquishment of such right or power at any time be taken to be a waiver of such, nor shall any waiver or relinquishment of such right or power at any time be taken to be a waiver of any other breach.
- F. **Compliance with State, Local and Federal Laws.** Consultant agrees to comply with all applicable local, state and federal laws in performance of all services under this Agreement.
- G. **Applicable Law; Venue.** This Agreement shall be construed and interpreted in accordance with the laws of the State of Washington, and in the event of dispute, the venue of any action brought hereunder shall be in Whatcom County Superior Court.
- H. **Attorney Fees.** The substantially prevailing party in any litigation arising hereunder shall be entitled to its reasonable attorney's fees and court costs, including appeals, if any.
- I. **No Conflict of Interest.** Consultant covenants that it presently has no interest and shall not acquire an interest, directly or indirectly, which would conflict in any manner or degree with its performance under this Agreement. Consultant further covenants that in the performance of this Agreement, no person having such interest shall be employed by any of its subcontractors or sub-consultants.
- J. **Payment of Subcontractors and Sub-Consultants.** At the time of completion of the Work, Consultant agrees to certify to City that all subcontractors and sub-consultants have been paid in full. Consultant shall be responsible for the performance of any subcontractor or sub-consultant. All such subcontractors or sub-consultants shall possess all licenses and insurance as required by the laws of the State of Washington and as are required of Consultant under this Agreement. City may, in its sole discretion, withhold final payment until receipt of such certification.
- K. **Confidentiality.** Any reports, documents, questionnaires, records, computer files, information and/or data given to or prepared or assembled under this Agreement shall not be made available by Consultant to any individual or organization without prior written approval of City except as may be required by law, rule, regulation, or ordered by a court of competent jurisdiction. The provisions of this section shall survive the expiration or earlier termination of this Agreement. No reports, records, questionnaires, information, data, software programs and/or computer files provided by City or other documents produced in whole or in part by Consultant under this Agreement, shall be the subject of an application for copyright by or on behalf of Consultant.
- L. **Public Disclosure.** Correspondence, reports and other written work product will be generated during the course of the relationship created by this Agreement, and third parties may request such information pursuant to the Washington State Public Disclosure Act (RCW 42.17.250 *et. seq.*). Consultant agrees that in the event that such a request is filed, Consultant will promptly notify City. Consultant further agrees that it will not disclose any such requested material until at least ten (10) business days after providing notification to City. This clause shall survive the termination or expiration of this Agreement.

## **11. NONDISCRIMINATION**

Consultant shall not discriminate in employment or services to the public on the basis of sex, race, color, creed, national origin, age, marital status, physical, mental or sensory handicap except an employment action based on a bona fide occupational qualification.

## **12. ARBITRATION**

In an effort to resolve any conflicts that arise during the design or construction of the project or following the completion of the project, City and Consultant agree that all disputes between them arising out of or relating to this Agreement shall be submitted to non-binding mediation, unless the parties mutually agree otherwise.

City and Consultant further agree to include a similar mediation provision in all agreements with independent contractors and consultants retained for the project and so on at all sublevels, thereby providing for mediation as the primary method for dispute resolution between the parties to those agreements.

**13. TERMINATION**

- A. **For Convenience**. City may, but is not obligated to, unilaterally terminate this Contract for convenience if funds become unavailable, or if Consultant suffers a business operation discontinuity or interruption (e.g., bankruptcy, dissolution, merger, hostile takeover), or if any of the personnel that Consultant originally proffered to perform the Scope of Services changes.
- B. **For Non-Compliance**. City or Consultant may unilaterally terminate this Contract if either party fails substantially to perform, through no fault of the other, and does not commence correction within five (5) days of written notice and diligently complete the correction thereafter. Upon such termination, City will be entitled to reports showing the status of all matters upon which Consultant was advising City as of the effective date of termination.

IN WITNESS WHEREOF the parties hereto have executed this Agreement the date and year indicated.

**CONSULTANT:**

\_\_\_\_\_  
Larry T. McAndrews  
Principal

\_\_\_\_\_  
Date

**CITY OF BLAINE:**

\_\_\_\_\_  
Gary R. Tomsic  
City Manager

\_\_\_\_\_  
Date

**DEPARTMENTAL APPROVAL:**

\_\_\_\_\_  
Stephen R. Banham  
Public Works Director

\_\_\_\_\_  
Date

**ATTEST:**

\_\_\_\_\_  
Sheri Sanchez  
City Clerk

\_\_\_\_\_  
Date

**Exhibit A**

**SCOPE OF SERVICES**

**ENGINEERING SERVICES**

**EAST BLAINE INFRASTRUCTURE MASTER PLAN**

See pages A1 through A7

## **EXHIBIT A – Scope of Work**

### **City of Blaine, Public Works**

This scope of work describes engineering work and deliverables to be provided to the City of Blaine for three specific task assignments related to the a study area known as East Blaine:

Task 1 - Preparation of a master plan report that addresses sewer, water, stormwater drainage and streets,

Task 2 - Provide (third-party) development plan reviews for East Maple Ridge project,

Task 3 - Develop detailed funding and financing strategies for utilities and streets infrastructure.

These tasks will be completed in the context of a broader effort by the City to update the City's Comprehensive Plan and to continue discussions and collaboration with developers and land owners in East Blaine. Each task will be authorized individually by the City.

The proposed scope of engineering services is as follows:

### **TASK 1 – EAST BLAINE INFRASTRUCTURE MASTER PLAN**

#### **Subtask A - Data Gathering and Research**

CHS will obtain various documents and references that are necessary to prepare a concept-level master plan for utilities and streets in the study area. Documents and references might include but are not limited to the following:

- AutoCAD mapping of topography, critical areas, aerial photos and land ownership of parcels,
- Relevant engineering studies, plans and reports,
- City of Blaine Comprehensive Plan and planning area population forecasts,
- Developers' preliminary site plans and phasing sequence,
- Existing inventory and mapping for utilities and roads systems,
- Water use and fire flow criteria,
- Sewer flow data,
- Soils reports and geotechnical data,
- City codes and service area policies, and
- Other documents as determined by the City or requested by CHS.

The main objective is to develop a long-range strategy for providing adequate level of utility service to East Blaine. Initial phases need to serve the pending development projects while recognizing that there is some acreage that will likely remain undeveloped for a long time. Most of the previous water and sewer engineering master plans done to date for this study area have been based on a traditional "backbone" trunk lines extending out from the City. Preliminary site plans prepared by developers have already suggested some specific street configurations and stormwater drainage facilities. Many of the above documents have already been provided to CHS and arrangements to obtain the remaining documents and references will be coordinated with the City. Upon completion of the data gathering effort of this subtask, CHS will participate



in a full-day workshop with the City to review all proposed concepts and alternatives with City staff. Subtask B – Concept Development will then be initiated upon concurrence on alternatives, constraints and issues. Furthermore, it is assumed that CHS will be permitted to communicate with other consultants working for the City when necessary or as otherwise directed by the City.

### **Subtask B - Concept Development**

CHS will develop a series of concept-level plans for each of four separate infrastructure categories (sewer, water, stormwater drainage and streets). This subtask will produce a Draft master plan report that outlines the alternatives, identifies the preferred alternatives, illustrates the alternatives on maps, discusses the advantages/disadvantages, considerations, risks and order-of-magnitude cost estimates. In addition, CHS will suggest possible funding methods. A Plan preliminary outline is listed in Subtask C. When CHS has accomplished the initial development of system functions and map layouts for all of the alternatives, (approximately 25% to 35% progress) the City and CHS will participate in a half-day workshop to review and screen the alternatives in an effort to identify the preferred alternatives, and to refine the Plan preliminary outline.

The concept-level planning for this task is anticipated to consist of the following:

#### **Sewer:**

Centralized (Traditional): Collection system and trunk main conveyance westerly along H Street Rd. and continuing through the City's existing system to a central WWTP in Blaine. Collection sewers are anticipated to be predominately gravity mains with pump stations and forcemains as needed. Alternative sewer collection methods (low pressure grinders or STEP units) might be suggested for small portions of the service area where unique constraints preclude a conventional collection sewer network.

Decentralized with Reuse: This is an alternative approach that would involve building one or more small wastewater treatment plants (MBR process) to serve the study area together with beneficial reuse of the reclaimed water also within the study area. Collection sewers are anticipated to be predominately gravity mains with pump stations and forcemains as needed. Alternative sewer collection methods (low pressure grinders or STEP units) might be suggested for small portions of the service area where unique constraints preclude a conventional collection sewer network. We anticipate that a limited portion of the westerly part of the study area (East Maple Ridge development and the existing residential neighborhoods) might best be served by gravity and conveyed into the City's existing sewer system to the central WWTP.

#### **Assumptions and City Responsibilities (sewer):**

1. CHS will perform limited computer modeling to characterize the hydraulics and conduit sizing for new trunk sewers in East Blaine only.
2. Hydraulic modeling of existing sewage collection and conveyance networks within the City system will be performed by others; however CHS will perform basic hydraulic calculations as needed for limited sewer reaches subject to the City or other consultants providing existing available data.

3. The option involving decentralized treatment and reuse would require concurrence by the City and the developers and would be driven by opportunities and economics.
4. The City will define the timeline and schedule for available sewer treatment capacity.
5. The City will define the timeline and schedule for upgrading sewer conveyance bottlenecks (if any) within the existing City system.
6. Dialogue with the City will determine the need to retire existing septic systems or otherwise sewer existing areas.
7. Planning and designs will conform to the current edition of Washington State Department of Ecology's (DOE's) Orange Book.

#### Water:

Traditional: New water system infrastructure and pressure zones to serve the study area are anticipated to be as defined by previous water plans and studies. Initial and intermediate phases to serve new developments will be developed by CHS.

Downsized: This alternative approach is associated with decentralized sewer treatment and effluent reuse as defined above and is based on using reclaimed water for landscaping irrigation such that potable water demands are significantly reduced. The pressure zones and water infrastructure would be similar to the "traditional" system above except that some components would be smaller in size.

#### Assumptions and City Responsibilities (water):

1. CHS will perform limited computer modeling to characterize the hydraulics and main sizing for new transmission and distribution pipes in East Blaine only.
2. Except for simple single-line conveyance pipes, hydraulic modeling involving existing water distribution networks within the City system will be performed by others.
3. The option involving downsized water system infrastructure is dependent upon adopting the decentralized treatment and reuse option for sewer. That would require concurrence by the City and developers and would be driven by favorable opportunities and economics in comparison to the other option.
4. The City will define the timeline and schedule for available supply capacity.
5. The City will define the timeline and schedule for upgrading water supply deficiencies (if any) within the existing City system.
6. Water source quality issues will not be addressed.

#### Stormwater Drainage:

##### Conventional, Onsite Systems:

Stormwater collection, treatment and conveyance would be done by individual developments and generally reflects the approach depicted in the preliminary site plans for the two pending development projects. The basis would be aligned with the current thinking that is expressed in DOE's *Stormwater Management Manual for Western Washington*. This option does not emphasize use of low impact development (LID) nor attempt to accomplish aquifer recharge.

#### Regional Facilities:

This option involves the use of one or more regional stormwater facilities to serve all or a portion of the study area. This option does not emphasize use of LID nor attempt to accomplish aquifer recharge.

#### Low Impact:

This option explores the use of LID methods and new BMPs for stormwater collection, treatment and infiltration technologies. Potential Whatcom County regulations related to LID will also be considered. Besides the manual referenced above, two studies that were prepared for the East Blaine annexation will be reviewed during development of the Plan: *Hydrogeological Characterization Study* and *Evaluation of Aquifer Vulnerability*. Input from a hydrogeologist may be sought to discuss the feasibility of proposed guidelines as policies are being developed, e.g., whether the soils and geology in the area are suitable for on-site infiltration and aquifer recharge.

#### Assumptions and City Responsibilities (stormwater):

1. CHS will perform limited computer modeling to characterize the hydraulics and pipe sizing for new storm flow pipes or channels in East Blaine only.
2. The extent that wetlands are utilized for stormwater discharge is uncertain.
3. Preventing degradation of the local aquifer will be considered under all scenarios.
4. The services of a hydrogeologist are not included in this scope.

#### Streets:

Overview: Development in East Blaine is expected to occur at close to the maximum density and likely will include some clustering of the dwelling units. Main arterials will be planned as described below. CHS will work with the City as it updates the comprehensive plan to learn what types of dwelling densities will be permitted in order to address street design issues for the different scenarios. Considerations for street improvements will include emergency vehicle access, mass transit provisions, LID design opportunities as appropriate, sidewalks, landscaping and trails. Achieving satisfactory vehicle and pedestrian/bicycle circulation and connectivity will be a primary objective.

#### Upgrade H Street:

Under this option, existing H Street would be upgraded as the main arterial for traffic in an east-west direction. This option generally reflects the street network that is presented on the preliminary site plans for the two large development projects.

#### New Alignments:

This option would make relatively minor upgrades to H Street and new east-west traffic corridors would be established elsewhere such as through the center of the study area or on the far north side paralleling and adjacent to the US/Canada border.

#### Assumptions and City Responsibilities (streets):

1. CHS will not perform new traffic studies.
2. The City will assist with getting input from the local bus agency on potential mass transit planning issues.

3. The City will assist with obtaining traffic planning information from the State and County if necessary.
4. The City will assist with obtaining input from the Homeland Security Department, the Border Patrol, and Canadian authorities related to a roadway corridor on the border.

**Cost Estimates:**

Concept-level cost estimates for the capital facilities identified for the above infrastructure options will be prepared by CHS. The estimates will be itemized to reflect major work categories and will include appropriate contingency amounts, taxes and normal allied costs. Where phasing is predicted to be important for implementation, estimates will show the cost of the respective phased implementation costs.

**Assumptions and City Responsibilities:**

1. Operating and maintenance (O&M) costs will not be estimated.
2. Where land acquisition costs are to be included, the City will assist with determining real estate values.

CHS will provide the following deliverables:

Draft Plan (approximately 50% progress): 6 printed copies of the plan with some appendices

The Draft Plan will include preliminary text, rough maps, and order-of-magnitude cost estimates for most infrastructure.

**Subtask C – Infrastructure Master Plan (Near Final Report):**

The Infrastructure Master Plan will be a “stand alone” document. A preliminary table of contents follows, however CHS will organize the plan in any way desired by the City. At the end of this phase of our work, CHS will participate in another half-day work session with the City, and City-selected developers and property owners to obtain input prior to producing the final report.

PRELIMINARY OUTLINE  
EAST BLAINE INFRASTRUCTURE MASTER PLAN

**EXECUTIVE SUMMARY****CHAPTER 1 – INTRODUCTION****CHAPTER 2 – SERVICE AREA, CRITERIA, POPULATION AND LAND USE****CHAPTER 3 – SEWER SYSTEMS****CHAPTER 4 – WATER SYSTEMS****CHAPTER 5 – STORMWATER FACILITIES****CHAPTER 6 – STREETS AND ROADS****APPENDICES**

Hydraulic Modeling Output

Key Correspondence

Supplemental data and maps

Excerpts from key documents  
References to key documents

Near-Final Plan (approximately 95% progress): 6 printed copies of the plan with all appendices

The Near-Final Plan will include all information listed for the final deliverable plan and is subject to review and comment by the City.

#### **Subtask D – Infrastructure Master Plan (Final Report)**

Upon City review of the Near Final edition of the plan, CHS will meet with the City and execute the final changes and edits necessary for a complete and final edition of the plan. Each section will now include additional discussion on: funding mechanisms, more detailed cost estimates, phasing discussions and the interrelationship with other systems. CHS will use figures, tables and graphs to tie the information together for the reader.

CHS will provide the following deliverables:

Final Plan: 6 printed copies of the plan with appendices and 6 CDs with electronic files of the plan in MS Word and .pdf formats including maps, figures, tabulations and exhibits.

#### **Subtask E - Special Meetings:**

CHS will participate in up to 3 special meetings as directed by City. Examples might include; presentations at City Council Meetings, coordination with developers and conducting public meetings or workshops. Travel time for CHS staff to attend meetings will be limited to not more than 2 hours per person per meeting.

#### **Schedule:**

The overall timeframe for accomplishing preparation, review and final issuance of the plan is 6 months following authorization and official notice to proceed. An itemized schedule will be developed following project initiation and input from the City on review periods, meeting dates and milestones.

## **TASK 2 – DEVELOPMENT PLAN REVIEW FOR EAST MAPLE RIDGE**

CHS will assist the City in analysis and review of specific development projects as they are proposed. CHS will compare the submittal to the East Blaine Infrastructure Master Plan as well as to the current and in-place City codes and standards. Task 2A will be to compare the East Maple Ridge submittal to the East Blaine Master Plan objectives. Task 2B will be for CHS to assist City staff in review of the preliminary plat of East Maple Ridge. Our review will result in a staff report and recommended conditions of approval. This effort is anticipated to comprise approximately 25% of the total review effort.

A subsequent detailed review will be done on the developers' submittal of civil designs and specifications that will be used for construction and permitting. This effort is anticipated to comprise approximately 75% of the total review effort.

### **TASK 3 – FUNDING AND FINANCING STRATEGIES**

The specific scope of work and budget estimate for this task will be determined at a later time. Based upon the results of Task 1 and direction from the City, CHS will provide detailed options and recommendations for funding and financing methods that would enable implementation of the proposed capital improvements associated with development of East Blaine. The following topics are anticipated to be addressed in the report generated by this task:

- Funding Alternatives
- Cost Estimates for Capital Facilities
- Grant and Loan Opportunities
- Phasing
- Interrelationship with other systems (strategic implementation)

**Exhibit B**

**FEE SCHEDULE**

**ENGINEERING SERVICES**

**EAST BLAINE INFRASTRUCTURE MASTER PLAN**

Page 1:	Task 1 Project Fee Estimate, Organized by Subtask
Page 2:	Task 1 Project Fee Estimate, Organized by Utility Type
Page 3:	Task 2 Project Fee Estimate
Page 4:	Task 3 Project Fee Estimate
Page 5:	Schedule of Labor Billing Rates





Sheet: 1 of 5  
 By: D. Voigt  
 Date: 2006.01.20 Job # 270602

**EXHIBIT B - PROJECT FEE ESTIMATE (Page 1 of 5)**

PROJECT: **City of Blaine, Public Works**

**Task 1 - East Blaine Subarea Master Plan for Utilities and Streets**

SUBTASKS, LABOR HOURS	1. Scott, Larry	2. Dave	3. Eli, Susan, Jena	4.	5. Nate	6. Allison	Subtotal Hours
	PRINCIPAL	PROJ. MGR/ENGR	ENGINEER	SURVEY CREW	CAD/TECH	CLERICAL	
<b>A Data Gathering, Research</b>							
Project Initiation	8	8	0		0	4	20
Maps, Drawings, Graphics, Photos	4	4	0		5	0	13
Reports, Studies, Plans	8	8	16		0	0	32
Communication, Meetings	12	34	0		0	0	46
Full-Day Workshop w/ staff	12	12	0		4	0	28
<b>Subtotal Hours</b>	<b>44</b>	<b>66</b>	<b>16</b>	<b>0</b>	<b>9</b>	<b>4</b>	<b>139</b>
<b>B Concept Development, Costs</b>							
Sewer, Centralized	12	43	75		16	2	147
Sewer, Decentralized w/ Reuse	12	43	75		16	2	147
Water, Traditional	11	32	55		16	2	115
Water, Downsized (irrigation reuse)	11	32	55		16	2	115
Stormwater, Conventional On-site	7	11	59		11	1	88
Stormwater, Regional Facilities	7	11	59		11	1	88
Stormwater, Low Impact	7	11	59		11	1	88
Streets, H Street Upgrade	7	13	74		16	2	112
Streets, New Alignments	7	13	74		16	2	112
<b>Subtotal Hours</b>	<b>78</b>	<b>210</b>	<b>584</b>	<b>0</b>	<b>128</b>	<b>12</b>	<b>1012</b>
<b>C Plan Prep (Near Final)</b>							
Near Final (95%)	6	28	84		8	4	130
<b>Subtotal Hours</b>	<b>6</b>	<b>28</b>	<b>84</b>	<b>0</b>	<b>8</b>	<b>4</b>	<b>130</b>
<b>D Plan Prep (Final)</b>							
Final	8	20	60		8	4	100
<b>Subtotal Hours</b>	<b>8</b>	<b>20</b>	<b>60</b>	<b>0</b>	<b>8</b>	<b>4</b>	<b>100</b>
<b>E Special Meetings</b>							
Public Workshops (2 mtgs)	20	36	0		8	0	64
<b>Subtotal Hours</b>	<b>20</b>	<b>36</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>64</b>
<b>Task 1 Subtotal Hours</b>	<b>156</b>	<b>360</b>	<b>744</b>	<b>0</b>	<b>161</b>	<b>24</b>	<b>1445</b>

**FEES**

LABOR & FEE ESTIMATE	HOURS	RATE	COSTS
1. PRINCIPAL	156	\$ 138.92	\$ 21,672
2. PROJ. MGR/ENGR	360	\$ 130.00	\$ 46,800
3. ENGINEER	744	\$ 116.75	\$ 86,860
4. SURVEY CREW	0	\$ 170.00	\$ -
5. CAD/TECH	161	\$ 84.00	\$ 13,524
6. CLERICAL	24	\$ 60.00	\$ 1,440
	1445	SUBTOTAL	\$ 170,296

**EXPENSES**

Subconsultant	\$0
Copy, Reprod, Printing	\$1,204
Mileage	\$1,000
<b>EXPENSES SUBTOTAL</b>	<b>\$ 2,204</b>

**TASK 1 TOTAL ESTIMATED FEE** **\$ 172,500**



Sheet: 2 of 5  
By: D. Voigt  
Date: 2006.01.20 Job # 270602

EXHIBIT B - PROJECT FEE ESTIMATE (Page 2 of 5)

PROJECT: City of Blaine, Public Works

Task 1 - East Blaine Subarea Master Plan for Utilities and Streets

		1. Scott, Larry	2. Dave PROJ.	3. Eli, Susan, Jena	4. SURVEY CREW	5. Nate CAD/TECH	6. Allison CLERICAL	Subtotal Labor Hours	Mileage	Copy & Print	Subtotals
SUBTASKS, LABOR HOURS and COST		PRINCIPAL	MGR/ENGR	ENGINEER							
SEWER											
A	Data Gathering, Research	11	17	4		2	1	35	\$150	\$75	\$ 4,614
B	Concept Development	23	86	150		32	3	294	\$50	\$155	\$ 34,960
C	Cost Estimates	2	7	21		2	1	33			\$ 3,798
D	Report Preparation Draft	1	3	8		1	1	13			\$ 1,454
D	Report Preparation Near Final	1	2	6		1	0	10		\$38	\$ 1,200
D	Report Preparation Final	0	1	2		0	0	3		\$38	\$ 328
	Subtotal Hours	38	115	190	0	38	6	386			
	Subtotal Labor Cost	\$ 5,210	\$ 14,885	\$ 22,182	\$ -	\$ 3,213	\$ 360	\$ 45,850	\$ 200	\$ 305	\$ 46,355
WATER											
A	Data Gathering, Research	11	17	4		2	1	35	\$150	\$75	\$ 4,614
B	Concept Development	21	64	110		32	3	230	\$50	\$155	\$ 27,153
C	Cost Estimates	2	7	21		2	1	33			\$ 3,798
D	Report Preparation Draft	1	3	8		1	1	13		\$0	\$ 1,454
D	Report Preparation Near Final	1	2	6		1	0	10		\$38	\$ 1,200
D	Report Preparation Final	0	1	2		0	0	3		\$38	\$ 328
	Subtotal Hours	36	93	150	0	38	6	322			
	Subtotal Labor Cost	\$ 4,932	\$ 12,025	\$ 17,512	\$ -	\$ 3,213	\$ 360	\$ 38,042	\$ 200	\$ 305	\$ 38,547
STORMWATER DRAINAGE											
A	Data Gathering, Research	11	17	4		2	1	35	\$150	\$75	\$ 4,614
B	Concept Development	20	34	176		32	3	265	\$50	\$120	\$ 30,784
C	Cost Estimates	2	7	21		2	1	33			\$ 3,798
D	Report Preparation Draft	1	3	8		1	1	13		\$0	\$ 1,454
D	Report Preparation Near Final	1	2	6		1	0	10		\$38	\$ 1,200
D	Report Preparation Final	0	1	2		0	0	3		\$38	\$ 328
	Subtotal Hours	35	63	216	0	38	6	357			
	Subtotal Labor Cost	\$ 4,793	\$ 8,125	\$ 25,217	\$ -	\$ 3,213	\$ 360	\$ 41,708	\$ 200	\$ 270	\$ 42,178
STREETS											
A	Data Gathering, Research	11	17	4		2	1	35	\$150	\$75	\$ 4,614
B	Concept Development	14	26	148		32	3	223	\$50	\$120	\$ 25,642
C	Cost Estimates	2	7	21		2	1	33			\$ 3,798
D	Report Preparation Draft	1	3	8		1	1	13		\$0	\$ 1,454
D	Report Preparation Near Final	1	2	6		1	0	10		\$38	\$ 1,200
D	Report Preparation Final	0	0.5	2		0	0	3		\$38	\$ 328
	Subtotal Hours	29	55	188	0	38	6	315			
	Subtotal Labor Cost	\$ 3,959	\$ 7,085	\$ 21,948	\$ -	\$ 3,213	\$ 360	\$ 36,566	\$ 200	\$ 270	\$ 37,036
E Special Meetings Public Workshops											
		20	36	0		8	0	64	\$200	\$54	\$ 8,384
		20	36	0	0	8	0	64			
	Subtotal Hours										
	Subtotal Labor Cost	\$ 2,778	\$ 4,680	\$ -	\$ -	\$ 672	\$ -	\$ 8,130	\$ 200	\$ 54	\$ 8,384
	Task 1 Total Hours	156	360	744	0	161	24	1445			
	Task 1 Total Labor Cost	\$ 21,672	\$ 46,800	\$ 86,860	\$ -	\$ 13,524	\$ 1,440	\$ 170,296	\$ 1,000	\$ 1,204	\$ 172,500



Sheet: 3 of 5  
 By: L. McAndrews  
 Date: 2006.01.20 Job # 270603

**EXHIBIT B - PROJECT FEE ESTIMATE (Page 3 of 5)**

**PROJECT: City of Blaine, Public Works**

**Task 2 - Development Plan Review for East Maple Ridge**

SUBTASKS, LABOR HOURS	1. Larry	2. Dave	3. Ell, Susan, Jena	4.	5. Nate	6. Allison	Subtotal Hours
	PRINCIPAL	PROJ. MGR/ENGR	ENGINEER	SURVEY CREW	CAD/TECH	CLERICAL	
East Maple Ridge Development Preliminary Plan Review							0
Review for Plat Objectives	10	10					20
							0
Preliminary Plat Review	10	10			2	2	24
							0
							0
<b>Subtotal Hours</b>	<b>20</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>44</b>
<b>SUBTOTAL</b>	<b>20</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>44</b>

**FEES**

LABOR & FEE ESTIMATE	HOURS	RATE	COSTS
1. PRINCIPAL	20	\$ 142.00	\$ 2,840
2. PROJ. MGR/ENGR	20	\$ 130.00	\$ 2,600
3. ENGINEER	0	\$ 125.00	\$ -
4. SURVEY CREW	0	\$ 170.00	\$ -
5. CAD/TECH	2	\$ 84.00	\$ 168
6. CLERICAL	2	\$ 60.00	\$ 120
	44	<b>SUBTOTAL</b>	<b>\$ 5,728</b>

**EXPENSES**

Subconsultant	\$ -
Subconsultant	\$ -
Copy, Reprod, Printing	\$ 22.00
Mileage, misc expenses	\$ 50.00
<b>EXPENSES SUBTOTAL</b>	<b>\$ 72.00</b>

**TOTAL ESTIMATED FEE** **\$ 5,800**



Sheet: 4 of 5  
 By: D. Voigt  
 Date: 2006.01.20 Job # 270604

**EXHIBIT B - PROJECT FEE ESTIMATE (Page 4 of 5)**

**PROJECT: City of Blaine, Public Works**

**Task 3 - Funding Strategies**

SUBTASKS, LABOR HOURS	1. Scott, Larry	2. Dave	3. Eli, Susan, Jena	4.	5. Nate	6. (unnamed)	Subtotal Hours
	PRINCIPAL	PROJ. MGR/ENGR	ENGINEER	SURVEY CREW	CAD/TECH	CLERICAL	
<b>A (to be determined at a later date)</b>							
<b>Subtotal Hours</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>B (to be determined at a later date)</b>							
<b>Subtotal Hours</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>C (to be determined at a later date)</b>							
<b>Subtotal Hours</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>D (to be determined at a later date)</b>							
<b>Subtotal Hours</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>SUBTOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**FEES**

LABOR & FEE ESTIMATE	HOURS	RATE	COSTS
1. PRINCIPAL	0	\$ 142.00	\$ -
2. PROJ. MGR/ENGR	0	\$ 130.00	\$ -
3. ENGINEER	0	\$ 125.00	\$ -
4. SURVEY CREW	0	\$ 170.00	\$ -
5. CAD/TECH	0	\$ 84.00	\$ -
6. CLERICAL	0	\$ 60.00	\$ -
	0	<b>SUBTOTAL</b>	<b>\$ -</b>

**C. EXPENSES**

Subconsultant	\$ -
Subconsultant	\$ -
Copy, Reprod, Printing	\$ -
Mileage, misc expenses	\$ -
<b>EXPENSES SUBTOTAL</b>	<b>\$ -</b>

**TOTAL ESTIMATED FEE** **\$ 0**  
 (to be determined at a later date)

**EXHIBIT B** (Page 5 of 5)

**CHS ENGINEERS, LLC  
SCHEDULE OF LABOR BILLING RATES FOR 2006**

**City of Blaine**

<b>Staff Name</b>	<b>Title</b>	<b>2006</b>
Scott Christensen, P.E.	Principal	\$ 130.00
Rodney Langer, P.E.	Principal	\$ 130.00
Larry McAndrews, P.E.	Principal	\$ 142.00
Evan Henke, P.E.	Principal	\$ 130.00
John Nottingham, P.E.	Principal	\$ 130.00
David Voigt, P.E.	Project Manager	\$ 130.00
Tom Partanen, P.E.	Project Manager	\$ 130.00
Mary Dahl, P.E.	Project Manager	\$ 130.00
Susan Gardner, P.E.	Project Engineer	\$ 130.00
Diane Pottinger, P.E.	Project Engineer	\$ 130.00
Jena Gilman, P.E.	Project Engineer	\$ 120.00
Eli Zehner, P.E.	Design Engineer	\$ 105.00
Darrel Frame, P.E.	Design Engineer	\$ 105.00
Matthew Bateman	Design Engineer	\$ 105.00
Christopher Shaff	Design Engineer	\$ 105.00
Nic Schmidt	Design Engineer	\$ 105.00
David Jensen	Sr. Designer/Inspector	\$ 105.00
Vicki Galdo	CAD Technician	\$ 84.00
Josh Korakis	CAD Technician	\$ 84.00
Nathan Hickok	CAD Technician	\$ 84.00
Bud Condrey, P.L.S.	Survey Manager	\$ 125.00
John Leonard	Crew Chief	\$ 84.00
Boyka Georgieva	Survey	\$ 84.00
Two-Man Crew	Survey	\$ 135.00
Three-Man Crew	Survey	\$ 170.00
Caryl Turner	Clerical	\$ 60.00
Allison Crase	Clerical	\$ 60.00
Eva Gramer	Administration	\$ 60.00