# REQUEST AUTHORIZATION FOR MAYOR AND FINANCE OFFICER TO SIGN PROFESSIONAL SERVICES AGREEMENT **OR AMENDMENT**

Date:12/20/06

**Project Name & Number:** Major Drainage Facilities Overview Report Project No. DR07-1614 CIP #: 50665

**Project Description:** Consolidate and update the drainage information located in the 20 Drainage Basin Design Plans

and amendments to those plans.

Consultant: enVision Design, Inc.

Original Original Original

Cont	tract Amount:	\$49,997.0	0	Contract Date:	12/19/06	Completion Date:	August, 2007
	ndment Numbe						
Current Contract Amount:  Change Requested:  New Contract Amount:				Current	Completion Date:		
				\$0.00 New Completion Date:			
Fund	ding Source Th	is Request:	•	ī			
	Amount	Dept.	Line Item	Comments			
-	\$49,997.00	108	4294	Public Works o	perating budge	t account 0101-0108-429	94
	\$49,997.00	Total					
				Agreement Rev	riew & Approva	ls	
Proje	ect Manager			Date	Division Manager		Date
Depa	rtment Director			Date	City Attorney		Date
ROUTING INSTRUCTIONS					FINANCE OFFICE USE ONLY		

Route two originals of the Agreement for review and signatures. Finance Office - Retain one original
Project Manager - Retain second original for delivery to Consultant Public Works Engineering Project Manager

(Note to Finance: Please write date of Agreement in appropriate space in the Agreement document)

	Date	Initials	Approved	
Appropriation			Υ	N
Cash Flow			Υ	N

# SHORT FORM OF AGREEMENT BETWEEN OWNER AND ENGINEER FOR PROFESSIONAL SERVICES

THIS IS AN AGREEMENT effective as of	("Effective Date") between
City of Rapid City, 300 Sixth Street, Rapid City, South Dakota 57701	("Owner")
and enVision Design, Inc., 706 West Boulevard, Rapid City, South Dakota	<b>57701</b> ("Engineer")
Engineer agrees to provide the services described below to Owner for:	
Rapid City Major Drainage Facilities Overview Report	("Project").

#### **Description of Engineer's Services:**

Based on the project understanding and technical approach included as Appendix I with this contract (dated 12/18/2006), the Engineer offers the following description of Engineer's Services:

#### Data Search/Inventory/Review:

- 1. Review 20 Drainage Basin Design Plans (DBDPs) to get familiar with each area.
- 2. Preliminary review of digital DBDP element data with City data for accuracy and completeness.

#### Data Planning/Design:

- 1. Design geodatabase file using City's spatial reference.
- 2. Set up feature library for data collection.
- 3. Print maps for use during field review and data collection.

#### Data Creation:

- 1. Review digital data of DBDP elements by drainage basin add elements that can be added, adjust existing elements if needed.
- 2. Data quality assurance/quality control.
- 3. Prepare raw GPS (non-survey grade) data for inclusion in geodatabase.
- 4. Calculate area and volume of detention ponds using GPS data (non-survey grade) in CAD.
- 5. Generate detention pond centroid points for inclusion in geodatabase.

#### Data Attribution:

1. Add attribute values to geodatabase for specified fields.

#### Data Collection – Engineer Review:

- 1. Engineer review identify elements to collect using non-survey grade GPS; get familiar with drainage basin elements; add attribute values from DBDPs.
- 2. Engineer review walk drainages to collect element condition, dimensions, photos; add data field attributes; collect non-survey grade GPS location data for selected elements.

#### Metadata Creation:

1. Production of metadata for data layers delivered.

#### Delivery on CD/DVD:

- 1. Geodatabase of mapped drainage elements.
- 2. Digital photos of drainage elements.
- 3. MS Excel file of drainage elements and attributes (exported from geodatabase).
- 4. CAD data produced during calculation of area and volume of detention ponds.

## Reports:

1. Data collection and maintenance manual with descriptions of data collected, data collection procedures, data dictionary, data maintenance procedures, and GIS software related directions for use.

#### Meetings:

1. Informal coordination and update meetings with City staff, including draft and final report presentations during these meetings.

#### Survey:

- 1. Train surveyors on identifying drainage elements.
- 2. Non-survey grade GPS data collection (field survey of select drainage elements); conversion to GIS data format.

#### Project Administration:

- 1. Quality assurance/quality control of overall project by Principal.
- 2. Coordination and project management.

Owner and Engineer further agree as follows:

#### 1.01 Basic Agreement

A. Engineer shall provide, or cause to be provided, the services set forth in this Agreement, and Owner shall pay Engineer for such Services as set forth in Paragraph 9.01.

#### 2.01 Payment Procedures

- A. *Preparation of Invoices*. Engineer will prepare a monthly invoice in accordance with Engineer's standard invoicing practices and submit the invoice to Owner.
- B. *Payment of Invoices*. Invoices are due and payable within 45 days of receipt. If Owner fails to make any payment due Engineer for services and expenses within 45 days after receipt of Engineer's invoice, the amounts due Engineer will be increased at the rate of 1.5% per month from said forty-fifth day. In addition, Engineer may, without liability, after giving seven days written notice to Owner, suspend services under this Agreement until Engineer has been paid in full all amounts due for services, expenses, and other related charges. Payments will be credited first to interest and then to principal.

#### 3.01 Additional Services

- A. If authorized by Owner, or if required because of changes in the Project, Engineer shall furnish services in addition to those set forth above.
- B. If additional services are required, the Owner and Engineer agree to negotiate equitable fees for such services upon recognition of need.

#### **4.01 Termination or Suspension**

A. The obligation to provide further services under this Agreement may be terminated:

#### For cause,

- 1. If the Owner fails to make payments to the Engineer in accordance with this Agreement, such failure shall be considered substantial nonperformance and cause for termination or, at the Engineer's option, cause for suspension of performance of services under this Agreement. If the Engineer elects to suspend services, prior to suspension of services, the Engineer shall give seven days' written notice to the Owner. In the event of a suspension of services, the Engineer shall have no liability to the Owner for delay or damage caused the Owner because of such suspension of services. Before resuming services, the Engineer shall be paid all sums due prior to suspension and any expenses incurred in the interruption and resumption of the Engineer's services. The Engineer's fees for the remaining services and the time schedules shall be equitably adjusted.
- 2. If the Project is suspended by the Owner for more than 30 consecutive days, the Engineer shall be compensated for services performed prior to notice of such suspension. When the Project is resumed, the Engineer shall be compensated for expenses incurred in the interruption and resumption of the Engineer's services. The Engineer's fees for the remaining services and the time schedules shall be equitably adjusted.

- If the Project is suspended or the Engineer's services are suspended for more than 90 consecutive days, the Engineer may terminate this Agreement by giving not less than seven days' written notice.
- 4. This Agreement may be terminated by either party upon not less than seven days' written notice should the other party fail substantially to perform in accordance with the terms of this Agreement through no fault of the party initiating the termination.
- 5. This Agreement may be terminated by the Owner upon not less than seven days' written notice to the Engineer for the Owner's convenience and without cause.
- 6. In the event of termination not the fault of the Engineer, the Engineer shall be compensated for services performed prior to termination, together with Reimbursable Expenses then due.
- 7. Notwithstanding the foregoing, this Agreement will not terminate as a result of a substantial failure if the party receiving such notice begins, within seven days of receipt of such notice, to correct its failure and proceeds diligently to cure such failure within no more than 30 days of receipt of notice; provided, however, that if and to the extent such substantial failure cannot be reasonably cured within such 30 day period, and if such party has diligently attempted to cure the same and thereafter continues diligently to cure the same, then the cure period provided for herein shall extend up to, but in no case more than, 60 days after the date of receipt of the notice.

#### 5.01 Controlling Law

A. This Agreement is to be governed by the law of the state in which the Project is located.

#### 6.01 Successors, Assigns, and Beneficiaries

- A. Owner and Engineer each is hereby bound and the partners, successors, executors, administrators, and legal representatives of Owner and Engineer (and to the extent permitted by paragraph 6.01.B the assigns of Owner and Engineer) are hereby bound to the other party to this Agreement and to the partners, successors, executors, administrators, and legal representatives (and said assigns) of such other party, in respect of all covenants, agreements, and obligations of this Agreement.
- B. Neither Owner nor Engineer may assign, sublet, or transfer any rights under or interest (including, but without limitation, moneys that are due or may become due) in this Agreement without the written consent of the other, except to the extent that any assignment, subletting, or transfer is mandated or restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement.

#### 7.01 General Considerations

- A. The standard of care for all professional engineering and related services performed or furnished by Engineer under this Agreement will be the care and skill ordinarily used by members of the subject profession practicing under similar circumstances at the same time and in the same locality. Engineer makes no warranties, express or implied, under this Agreement or otherwise, in connection with Engineer's services. Engineer and its consultants may use or rely upon the services of others, including, but not limited to, contractors, manufacturers, and suppliers.
- B. Engineer neither guarantees the performance of any contractor nor assumes responsibility for any contractor's failure to furnish and perform its work in accordance with the contract between Owner and such contractor.
- C. Engineer shall not be responsible for the acts or omissions of any contractor, subcontractor, or supplier, or of any contractor's agents or employees or any other persons (except Engineer's own employees) for furnishing or performing any of Project work or for any decision made on interpretations or clarifications of the Project contract given by Owner without consultation and advice of Engineer.
- D. All electronic data, code, and documents prepared or furnished by Engineer are instruments of service, and Engineer shall retain ownership and property interest (including the copyright and the right of reuse) in such electronic data, code, and documents, whether or not the Project is completed. This clause shall in no way limit the Owner's use of the data, code, and documents for the purpose for which they were originally intended.

E. To the fullest extent permitted by law, Owner and Engineer (1) waive against each other, and the other's employees, officers, directors, agents, insurers, partners, and consultants, any and all claims for or entitlement to special, incidental, indirect, or consequential damages arising out of, resulting from, or in any way related to the Project, and (2) agree that Engineer's total liability to Owner under this Agreement shall be limited to \$50,000 or the total amount of compensation received by Engineer, whichever is greater.

#### 8.01 Total Agreement

A. This Agreement (consisting of pages 1 to 4 inclusive together with any expressly incorporated appendix), constitutes the entire agreement between Owner and Engineer and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, modified, or canceled by a duly executed written instrument.

#### 9.01 Payment (Lump Sum Basis)

- A. Using the procedures set forth in paragraph 2.01, Owner shall pay Engineer as follows:
  - 1. A Lump Sum amount of forty-nine thousand nine hundred ninety-seven and no/100 dollars. \$49,997.00
- B. Excepting schedule elongation due to the fault of the Engineer, the Engineer's compensation is conditioned on the time to complete the Project not exceeding <u>8</u> months. This period includes a maximum of 30 days for which snow cover exists, making the field work of the Agreement impossible. If, through no fault of the Engineer, the project schedule is increased beyond 8 months or the project is delayed or put on hold for more than 90 days, the Engineer will be entitled to equitable adjustment of the compensation upon recommencement, so long as the Engineer can show material cause for such adjustment. Material cause would include but not be limited to an increase in expenses required to complete such as salary adjustments occurring during the period of project inactivity, overhead expenses for closing and restarting the project, change of personnel involved in the project, change in expenses for travel, office supplies, etc.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, the Effective Date of which is indicated on page 1.

OWNER:	ENGINEER:
By:	By:
Title:	Title:
Date Signed:	Date Signed:
Address for Giving Notices:	Address for Giving Notices: enVision Design, Inc. 706 West Boulevard Rapid City, SD 57701

# Appendix I Major Drainage Facilities Overview Report Project Project Understanding and Technical Approach 12/18/06

#### **Project Understanding**

The City of Rapid City Public Works Department has identified a need to consolidate and partially update the information included in 20 Drainage Basin Design Plans (DBDPs) and amendments to those plans. The DBDPs to be used for this project include South Canyon – Lime Creek, Old Lime Creek, Deadwood Avenue, Morningside, Haines Avenue, Knollwood, Perrine, Unnamed Territory, Race Track, County Heights, East Highway 79/Landfill, South Truck Route, South Robbinsdale, Meade-Hawthorne, Downtown, Jackson Boulevard, Red Rock, Red Dale, Wonderland, and Arrowhead. This project does not include drainage elements located in parts of Rapid City that do not have DBDPs.

The goal of this project is to have select information from the 20 DBDPs summarized in a way that provides easier access and interpretation of drainage information to both the Public Works Department and other City Departments. Based on a field survey of design elements in each basin that will be conducted as part of this project, information on existing design elements will be updated, including information on size and condition. The final products will include GIS data layers of the drainage elements with attached relevant information in a database, and photos of drainage elements collected during the field survey.

#### **Technical Approach:**

#### Task 0300 – Data Development

#### (01) Data Search/Inventory/Review

- 1. Review 20 DBDPs to get familiar with each area.
- 2. Preliminary review of digital DBDP element data with City data for accuracy and completeness.

#### (08) Data Planning/Design

- 1. Design geodatabase file using City's spatial reference (fields to be input by enVision Design, Inc. are shown in bold).
  - Data fields:
    - o Unique element identifier
    - o Type of element
    - o Element height
    - o Element width

- o Element diameter
- o Element condition
- o Element area (detention pond only)
- o Element volume (detention pond only)
- o Basin name
- o Element status (existing or proposed)
- Improvement recommended? (Y/N) (This info comes from DBDP)
- Recommendation description (as described in DBDP)
- o Element description (comment field)
- Photo1 (unique photo name based on unique element identifier and date; this field can then be used by the City to hyperlink photos)
- Photo2 (unique photo name based on unique element identifier and date; this field can then be used by the City to hyperlink photos)
- Photo3 (unique photo name based on unique element identifier and date; this field can then be used by the City to hyperlink photos)
- Photo4 (unique photo name based on unique element identifier and date; this field can then be used by the City to hyperlink photos)
- o Hydrologic Schematic for Existing Conditions (unique name of scanned drainage basin schematic for existing conditions; use field to set up hyperlinks to drainage basin schematic map)
- Hydrologic Schematic for Design Plan (unique name of scanned drainage basin schematic for design plan; use field to set up hyperlinks to drainage basin schematic map)
- o Design flow at build out 2 year
- o Design flow at build out 10 year
- o Design flow at build out 100 year
- o Outfall? (Y/N)
- o Creek or lake outfall name
- o Loss of life potential (10 or 0)
- Loss of property potential (5 or 0)
- Nuisance flooding potential (2 or 0)
- o Evaluation matrix sum
- Date of information collection
- o General comments (place for additional comments)
- o Latitude for non-survey grade GPS point
- o Longitude for non-survey grade GPS point
- Elevation for non-survey grade GPS point
- 2. Set up feature library for data collection (data fields from geodatabase and appropriate values for each field).
- 3. Print maps (by drainage basin) for use in the field review and data collection.

#### (12) Data Creation

- 1. Review digital data of DBDP elements by drainage basin add elements that can be added, adjust existing elements if needed.
- 2. QA/QC of data (by drainage basin).
- 3. Prep raw GPS data (non-survey grade) for inclusion in geodatabase.
- 4. Calculate area and volume of detention ponds using GPS data (non-survey grade) in CAD.
- 5. Generate detention pond centroid points for inclusion in geodatabase, snap line features to detention pond points (not edge of polygon).

### (14) Data Attribution

1. Add attribute values to geodatabase for data fields that are highlighted in bold under Subtask (08) Data Planning/Design.

#### (51) Data Collection – Engineer Review

- 1. Engineer review identify elements for surveyor to collect using non-survey grade GPS, get familiar with drainage basin elements, add attribute values from DBDPs.
- 2. Engineer walk drainages collect element condition, dimensions, photos; add attributes into data table; collect non-survey grade GPS location data for selected elements.

#### (19) Metadata Creation

1. Production of metadata for data layers delivered.

#### (40) Delivery on CD/DVD

- 1. Geodatabase of mapped drainage elements.
- 2. Digital photos of drainage elements.
- 3. MS Excel file of drainage elements and attributes (exported from geodatabase).
- 4. CAD data produced during calculation of area and volume of detention ponds.

#### (41) Reports

- 1. Data collection and data maintenance manual (draft and final report to be submitted):
  - Description of what data was collected.
  - Data collection procedures.
  - Data dictionary (attribute fields and their possible values).
  - Data maintenance procedures and recommendations.
  - Directions on labeling drainage elements for maps.
  - Mapping: how to print a map.
  - How to export geodatabase info to excel spreadsheets.
  - How to scan images for use as hyperlinked images.

# (42) Meetings

1. Informal coordination and update meetings with City staff, including draft and final report presentations during these meetings.

# (46) Project Administration

- 1. Q/A Q/C of overall project by Principal.
- 2. Coordination and project management.

# Task 0600: Survey

# (20) Train Surveyors for Data Collection

1. Train surveyors on identifying drainage elements.

# (21) Non-Survey Grade GPS Data Collection

1. Non-survey grade GPS data collection (field survey of drainage elements); conversion to GIS data.