AMENDMENT NO. 2

185252

CONTRACT NO. 30000701

FOR

A/E Services for New Construction for The Emergency Coordination Center

Pursuant to Ordinance No: 183110

This Contract was made and entered into on the 1st day of September, 2009 by and between MICHAEL WILLIS ARCHITECTS, hereinafter called Contractor, and the City of Portland, a municipal corporation of the State of Oregon, by and through its duly authorized representatives, hereinafter called City.

- 1. A Request for Proposals for architectural and engineering services for new construction for the Emergency Coordination Center was issued on April 22, 2009. Six proposals were received on May 21, 2009. A selection committee reviewed the proposals and recommended award of contract to Michael Willis Architects as they were the highest scoring proposer.
- 2. Contract No. 30000701 provides for architectural and engineering services in the amount of \$957,819 to design a new ECC facility directly adjacent to the existing Portland Communications Center located in southeast Portland. There are three main components of this project; a new ECC building, new parking lot, and realignment of a section of SE Bush Street. Expiration date of Contract No. 30000710 is June 1, 2012.
- 3. The new building will serve as the City's Emergency Coordination Center and house the Portland Bureau of Emergency Management (PBEM), Portland Water Bureau (PWB) Emergency Management, and Security staff.
- 4. Amendment No 1 in the amount of \$166,251.25 was previously issued against this Contract in March 2011.
- 5. Additional architectural and engineering services described in the attached letter dated March 12, 2012 (Attachment No. 1) is necessary to allow Consultant to provide the following:
 - Structural & Architectural Value Engineering (VE) Revisions to the roof design to reduce anticipated cost of construction;
 - Surveying charges for misc items: Qwest Easement relocation, Right-of-Way dedication, Water Main locate;
 - o Radio Frequency Tower Permit set and Geotechnical investigation;
 - Additional drawings and documentation required for Permit Review beyond those anticipated in the Contract;
 - Milestone plots of Project drawings and specifications that exceeded the original Contract amount;
 - o Contract Extension of 18 months.
- 6. The City of Portland and the Contractor wish to amend Contract No. 30000701 for an additional \$86,767.66 to allow for additional architectural and engineering services described in #5 above for a new total contract amount of \$1,210,837.91 and to extend the expiration to January 1, 2014.

All other terms and conditions shall remain unchanged and in full force and effect.

Contract No. 3	30000701 Amendmer	nt/Change O	rder No. 2
Contract Title:	A/E Services for A/E Services for New Construction f Center	or The Emer	gency Coordination
CONTRACTO	DR SIGNATURE:		
	amendment may be signed in two (2) or more counterp nd which, when taken together, shall constitute one and		
	gree the City and Contractor may conduct this transacti nic signatures.	ion by electro	onic means, including the
MICHAEL WIL	LIS ARCHITECTS		
ву:	m	Date:_	15 MARCH 2012
Name:	JEFF M'GRAW, ALA	***************************************	
Title:	RINCIPAL		
Address: 7	O NW COUCH, SUITE 401 PORTLAND, OR 9720	9	
Telephone:	503-973-5151		
CITY OF POR	RTLAND SIGNATURES:	·	
D	·	Data	
By: Purc	chasing Agent	Date:	
By: <u>N/A</u> Elec	eted Official	Date:	
Approved:			
		Date:	
Offic	ce of City Auditor	Date.	
Annroyad as to	APPROVED AS TO FORM		
Approved as to	James H. Van Dykel	Date:	3/24/ho12
Offic	ce of City Attorney CITY ATTORNEY		

MWA Architects



70 NW Couch Street Suite 401 Portland, OR 97209

> tel: (503) 973 5151 fax: (503) 973 5060

www.mwaarchitects.com

Additional Services Request 03

Date:

03.12.2012

To:

Jim Coker

From:

Ioshua Stein

Project No:

City of Portland - Emergency Coordination Center (ECC)/200924

Dear Jim,

The following is our additional services proposal for the City of Portland's Emergency Coordination Center (ECC) project. The scope of services covers the following:

- Structural & Architectural Value Engineering (VE) Revisions to the roof design due to 90% CD cost estimate.
- Surveying Charges for Misc Items: Qwest Easement, Right-of-Way Dedication, Water Main Locate
- Radio Frequency Tower Permit Set and Geotechnical Investigation
- Geotechnical Special Inspections during Construction.
- Additional Drawings and Documentation Required for Permit Review beyond those anticipated in the Contract.
- Milestone Plots that exceeded original contract amount.
- Contract Extension of 18 months.

The total lump sum fee is \$ 86,767.66. Please see below and the following attachments for a cost breakdown.

1. Structural/Architectural VE Revisions:	\$14,070.00
2. Surveying Charges:	\$ 2,837.50
3. RF Tower Permit Set/Geotechnical:	\$27,545.00
4. Geotechnical Special Inspections	\$23,400.00**
5. Permit Review Drawings/Documents	\$ 7,140.00
6. Project Milestone Plots	\$14,152.16
7. Project Schedule Extension	\$ <u>13,523.00</u>

^{**} Geotechnical Construction Inspection Credit: (Subtract this amount from Item 4)

-\$ 15,900.00

1. Structural / Architectural Value Engineering Cost Reductions:

MWA was asked by the City to look at building cost–reduction options after the 90% CD milestone to keep project costs within the anticipated budget. The selected option was to revise the ECC building's upper roof design. This required additional structural and architectural work for redesigning the roof and for incorporating the changes into the design documents. Structural work involved redesigning and recalculating the roof framing and documenting the corresponding changes into the structural design drawings. Architectural work involved changes to the roof water collection design, building exterior design, and minor changes to the building details.

ABHT requested amount (see Exhibit 2):	\$ 9,840.00
MWA requested amount (see Exhibit 1):	\$ 4,230.00

2. Surveying Charges: Qwest Easement, Right-of-Way Dedication, and Water Main Locate:

MWA was asked by the City to provide surveying and documentation for three project site conditions that were outside the original contracted surveying scope. This work was performed by KPFF Consulting Engineers who are subcontracted to MWA as part of this project. The following is a brief description of the work requested:

A. Qwest Easement:

The City renegotiated the size and location of an existing Qwest easement within the project property. Surveying work required the preparation of a legal description of the easement for recording this change.

B. Right-of-Way Dedication:

The Portland Bureau of Transportation (PBOT) is requiring a 2-foot Right-of-Way dedication from the project property along SE 99th Ave and a small portion along SE 100th Ave. Surveying work required the preparation of a legal description of the 2-foot dedication for recording this change.

C. Water Main Locate / Potholing.

The Portland Water Bureau excavated ("potholed") a portion of an existing water main adjacent to the project property so its location could be verified and documented on the property survey. Surveying work required measuring and recording the potholed water main.

<u> KPFF requested amount - Qwest Easement (see Exhibit 3):</u>	\$ 7	<u> 200.00, 1</u>
KPFF requested amount - R.O.W. Dedication (see Exhibit 5):	\$ 1	1,200.00
KPFF requested amount - Water Main Potholing (T&M):	\$	437.50

3. RF Tower Permit / Geotechnical Work:

An on-site Radio Frequency Tower structure will be submitted for permitting as a separate drawing/specification set for the project. MWA and its sub consultants were asked by the City to prepare separate documents for this portion of work. The following is a brief description of the work requested:

A. Geotechnical Investigation and Report:

The selected RF Tower location is outside of the project boundary that was investigated in the original geotechnical report for this project. The RF Tower manufacturer requires geotechnical data for the specific tower location, which necessitated an additional geotechnical investigation and report.

B. Civil Scope - RF Tower:

212381

MWA's contracted civil engineer will design, prepare, and submit permit documents for the required Civil site work at the RF Tower location. This will include grading, sidewalks, curbing, drainage system design, and associated modifications to an existing stormwater garden swale to accommodate the tower equipment and structure. Surveying work is also required to confirm that an existing drywell will not interfere with the RF tower foundation system.

C. Landscape Scope - RF Tower:

MWA contracted landscape architect will prepare and submit permit documents for the required landscape screening required by zoning code at the RF Tower location.

D. Architectural Scope - RF Tower:

MWA will provide project management and coordination for drawing, compiling, and submitting the RF Tower documents for permit review through CA. Services include permit submittal and checksheet responses for the successful permit review of the RF Tower, Bidding responses (assume 2 Addenda), and CA services for the above work. Deliverables include permit and zoning compliance drawings and specifications required or permitting, bidding, and construction.

Hart Crowser requested amount (see Exhibit 7):	\$ 12, <u>300.00</u>
KPFF requested amount (see Exhibit 4):	\$ 7,150.00
Lango Hansen requested amount (see Exhibit 6):	\$ 1,805.00
MWA requested amount (see Exhibit 1):	\$ 6,290.00

4._Geotechnical Special Inspections:

The City is requesting that MWA's geotechnical engineering consultant provide special inspection services for the geotechnical work required during construction. An allowance for this work was contained in the original contract amount, but the full scope of this work could not be accurately determined at that time. A revised fee estimate and scope of services based on the current

100% CD contract documents are described on the attached proposal from Hart Crowser (formerly Pacific Geotechnical).

Hart Crowser requested amount (see Exhibit 8):

\$ 7,500.00

Note: The above amount applies a credit of \$15,900 from the Allowance contained in the original contract amount.

5. Additional Permit Review Drawings/Documents

MWA was asked by the City's Plans Examiner during permit review to provide a number of diagrams and additional information for approval that was not anticipated at the inception of the project. This included a complete review of the existing adjacent 911/PCC building for fire–rated construction and fire life safety. The requested information required three additional drawing sheets and a considerable amount of time to compile. Two (2) administrative appeals were also required. These appeals required time to research, coordinate, write, and refine for approval. MWA scoped their services based on the perceived workload that this project would require based on past projects of similar size and scope that were successfully permitted by the City. The time and effort required for approval can vary depending on new code provisions and the current requirements of the specific reviewing authorities. The complexities of this project necessitated considerably more documentation then we could reasonable anticipate at the beginning of the project.

MWA requested amount (see Exhibit 1)

\$ 7,140,00

6. Project Milestone Plots:

MWA scoped milestone plots of the construction drawings and specifications as an allowance, which has exceeded the original allowance amount. Due to the unknown number of recipients to receive plots, it was not possible to accurately predict what the milestone plotting costs would be at the inception of the project. MWA intended to bill milestone plots required outside of their design team as a separate reimbursable charge to the City. This separate charge in excess of the original allowance is contained in this ASR document as follows:

- Milestone Plots were produced at the 30%, 60%, 90%, and 100% CD phases.
- Milestone Plots & Bound Application Booklets were produced for the Conditional Land Use Submittal.
- MWA contracted allowance amount for these plots currently is: \$750.
- Requested amount below covers all plots/booklets in excess of the MWA contracted amount stated above.

MWA requested amount (see Exhibit 1)

\$ 14,152.16

7. Project Contract Extension:

The existing Contract between MWA and the City (Contract 30000701) is set to expire on June 1, 2012. Due to items not foreseen at the time of Contract negotiations and beyond the scope and control of MWA Architects, the original contract schedule requirement cannot be met. The City has requested an extension to the existing Contract to a termination date of January 2014. This contract time extension is required to cover the anticipated construction schedule during which MWA will perform Contract Administration services, the scope of which is defined in the existing Contract.

MWA is requesting an additional service fee to cover increases in billing prices to MWA and its Subconsultants due to the unanticipated Contract time extension of 18 months. Current Contract billing prices were based on projections from July 2009 to cover the original contract duration. Contract Administration is the remaining task that will be completed during the contract extension. The additional service fee listed below covers increases to the billing prices for the Contract Administration task, assuming no change in scope for this task from that described on the original contract.

MWA requested amount (see Exhibit 1):

\$ 13,523.00

Sincerely,

Digitally algored by Johnson J Stein - Digitally algored by Johnson J Stein - Only Complete Manager.

Joshua Stein



Att: Exhibit 1: MWA - Architectural Fee Estimate - ASR 03; 2011.03.12

Exhibit 2: ABHT Fee Proposal – Emergency Coordination Center – High Roof Framing Revisions; 2011.04.15

Exhibit 3: KPFF - Additional Service Request 03 (Qwest Easement); 2011.04.26

Exhibit 4: KPFF - Additional Service Request 04 (RF Tower); 2011.08.17

Exhibit 5: KPFF - Additional Service Request 05 (ROW Dedicate); 2011.08.22

Exhibit 6: Lango Hansen – Additional Fee Request for RF Tower; 2011.08.15 w/revision dated 2012.03.12

Exhibit 7: Hart Crowser (Pacific Geotech) – Change Order No 2 (RF Tower); 2011.11.30

Exhibit 8: Hart Crowser (Pacific Geotech) - Change Order No 1 (Special Inspections); 2011.09.26

Exhibit 9: Milestone/Conditional Use Plots - Precision Images; 2012.01.09

Exhibit 10: ECC Project Schedule; 2012.01.13

FEE MATRIX

12-Mar-12 Citý of Portland - Emergency Coordination Center ASR 03 - Architectural Fee Estimate

Project Manager Project Architect Technical II /Designer Interior Designer (\$115/hr) ** (\$115/hr) ** (\$90/hr) ** (\$85/hr) **

** Current Contract Billing rates Applied -All work completed during current Contract Duratio

88	STREET, STREET	
	AND DESCRIPTION OF THE PERSON	

Exhibit 1

chitectural Value Engineering Cost Reductions:		
	PM PArch T-II Int Des Subt	otals TOTALS
ASE:	S115 \$115 \$90 \$85	
90% CD Phase ASK 1.0: Architectural Cost Reduction Revisions: Roof Design, Exterior design, & Detailing	4 14 24 0 \$4.2	30
· · · · · · · · · · · · · · · · · · ·	Subtotal 1.	\$4,23
DTAL FEE - Architectural Value Engineering Cost Reductions:		\$4,236
Tower - Architectural Scope:	tarini sa mendalakan hari samakan	ONG BAND
Requirements TEM 1.0: Pennit Drawings, Construction Administration, & Consultant Management	0: 40 16: 0 \$6,0	40
rints for RF Tower Permit Drawings and Specs - Assume (1) additional submittal to Client after permitt	Subtotal 1.	\$6,04 \$25
OTAL FEE - RF Tower - Architectural Scope:	• •	\$6,290
ditional Permit Review Drawings/ Documents:		
Requirements		100000000000000000000000000000000000000
EM 1.0: Additional Time for unanticipated Permit Review Documents and 2 Code Appeals	8: 40 18: 0 \$7.1 Subtotal 1.	40 \$7,14
•		
TAL FEE - Additional Permit Review Drawings/ Documents:		\$7,140
oject Milestone Plots :	anna an ann an Faireadh Angailt Saochalain An	
		1.0200000000000000000000000000000000000
Requirements EM 1.0: 30% CD Milestone Plots		\$2,024.70
EM 2.0: Conditional Use Plots & Submittals		\$788.6
EM 3.0; 60% CD Milestone Plots		\$3,325.6
EM 4.0: 90% CD Milestone Plots		\$4,268.6
EM 5.0: 100% CD Milestone Plots EM 6.0: Contract Allowance Credit for Milestone Plots		\$4,494.4 (\$750.0
Dill of State (Motor of State) in Milosophia (State)	Subtotal 1.	\$14,152.1
TAL FEE - Project Milestone Plots:		\$14,152.1
piect Contract Extension :		17/2012/20
Requirements		
EM 1.0: Billing Rate Changes to Cover Extended Contract Time WA		\$8,04
ivil (KPFF)	•	\$70
EP (Interface Engineering) andscape (Lango Hansen)		\$1,505 \$824
ommissioning (EPE)		\$1,067
EED (Brightworks)		\$1,18
coustical Consult (Listen Acoustics)		\$200
	Subtotal 1.	\$13,52
<u></u>		
TAL FEE - Project Contract Extension:		\$13,52

Exhibit 2 ABHT STRUCTURAL ENGINEERS

1640 NW Johnson Street Portland, OR 97209 Tel 503.243.6682 Fax 503.243.6622 www.abht-structural.com

April 15, 2011

Mr. Josh Stein

Michael Willis Architects
70 NW Couch St. Suite 401

Portland, OR 97209

RE: Emergency Coordination Center - High Roof Framing Revisions

Dear Josh,

We are pleased to submit the following fee proposal for structural engineering services related to the Emergency Coordination Center – high roof framing revisions project in Portland, OR. We understand that the roof framing will be simplified by removing the cantilevered framing along the east edge, removing the custom gutter framing along the north and south edges, and removing a portion of the cantilevered framing along the west edge.

The proposed roof revisions will require re-engineering of select roof framing elements for snow drift due to new parapet walls, re-design of the exterior metal stud back up steel, and updating plans, elevations and details as well as design of new details as necessary.

Our fee for the work related to the high roof framing revisions would be a lump sum amount of \$9,840 (including reimbursable expenses).

We will bill for our services once a month, based on the percentage of work completed. Additional or extra services will be billed at the hourly rates listed below. We will not proceed with any additional services without your approval.

Reimbursable expenses, as described in AIA Document C141, will be billed at our direct cost.

2011 Hourly Rates

Principal	\$130/hr
Project Manager	\$100/hr
Design Engineer	\$90/hr
CADD Drafter	\$70/hr
Administrative	\$50/hr

Michael Willis Architects

RE: Emergency Coordination Center - High Roof Framing Revisions

April 15, 2011

Page 2 of 2

If this proposal is acceptable, please sign below and return a copy for our files. Please call me if you have any questions or need further information. We look forward to the opportunity to work with you on this project.

Sincerely,	Agreed to by:	
Clinton J. Ambrose, P.E., S.E.	· .	
Principal	Signed (for Michael Willis Architects)	Date
	Printed Name and Title	

[CJA:cja/k/projects/2009/17209.03/ASR fee proposal 4-15-11.doc]

208781

Exhibit 3



Additional Service Request (ASR) No. 03

PROJECT:

Emergency Coordination Center

Date: 4/26/2011

CLIENT:

MWA

Project No. 309113

ENGINEER:

KPFF Consulting Engineers

111 SW Fifth Avenue, Suite 2500

Portland, OR 97204

KPFF hereby requests that the additional civil engineering services described below be added to the **CONTRACT** for the above referenced project. The scope of civil engineering services is described in KPFF's proposal dated September 7th, 2009, which is attached to the consultant agreement dated September 15, 2009 between MWA and KPFF. Upon approval by MWA, this Additional Service Request will become a part of the consultant agreement.

		Total
Original Contract Amount (not including reimburseables)		\$108,630
Additional Services (associated with widening of Bush Street between 100th and 101st Ave):		
 Additional Survey Scope: KPFF Survey will prepare a legal description and exhibit for a 20-foot by 20-foot Qwest easement. 	\$1,200	
TOTAL Proposed Additional Fee (This ASR only)	\$1,200	
Total Approved Previous Additional Service Requests	,	\$9,000
REVISED CONTRACT AMOUNT	_	\$118,830

To be valid, this ADDITIONAL SERVICE REQUEST m	nust be approved by the follow	ving:
Requested by:		Associate
KPFF Consulting Engineers	Signature /	Title
	Date 4/26/204	
Agreed to by:		
MWA	Signature	Title
	Date	

\$35681

Exhibit 4



U.S. Bancorp Tower, 111 SW 5th Avenue, Suite 2500 Portland, OR 97204 (503) 227-3251 FAX (503) 274-4681

Additional Service Request (ASR) No. 04

PROJECT:

Emergency Coordination Center

Date: 08/17/2011

CLIENT:

MWA

Project No. 309113

ENGINEER:

KPFF Consulting Engineers

111 SW Fifth Avenue, Suite 2500

Portland, OR 97204

KPFF hereby requests that the additional civil engineering services described below be added to the **CONTRACT** for the above referenced project. The scope of civil engineering services is described in KPFF's proposal dated September 7th, 2009, which is attached to the consultant agreement dated September 15, 2009 between MWA and KPFF. Upon approval by MWA, this Additional Service Request will become a part of the consultant agreement.

		Total
Original Contract Amount (not including reimburseables)		\$108,630
Additional Services (associated with Tower Site/Rain Garden Modifications):		
Additional Civil Scope:	\$4,750	
 Prepare grading, drainage and horizontal control site design for tower site (tower footings, appurtenances and locations to be designed by others) Revise rain garden configuration to accommodate utility transformer location. 		
Prepare supporting drainage calculations and stormwater report modifications.		
Prepare construction documents.		
Additional Survey Scope:	\$2,400	•
KPFF Survey will extend the existing mapping to include the area shown as "additional survey limits" on the attached exhibit A.		
Assumptions:		
 A separate construction document set will be prepared for this work. 	-	
All proposed modifications can be accomplished on private property. Therefore public improvement plans will not be required.		

37338

ASR No. 04 08/17/2011

Page 2 of 2

		:
TOTAL Proposed Additional Fee (This ASR only)	\$7,150	
Total Approved Previous Additional Service Requests		\$10,200
REVISED CONTRACT AMOUNT		\$125,980

To be valid, this ADDITIONAL SERVICE REQUEST m	nust be approved by the following:
Requested by:	Mill Shel Principa
KPFF Consulting Engineers	Signature - Light hiller
Agreed to by:	
(MWA)	Signature Title
	Date

EXHIBIT 'A'

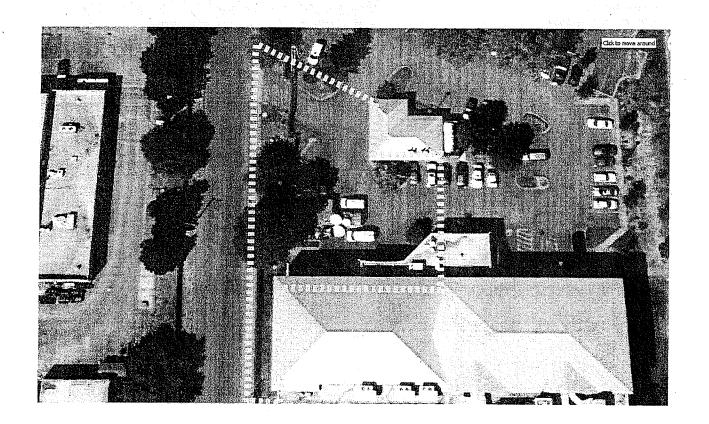


Exhibit 5



U.S. Bancorp Tower, 111 SW 5th Avenue, Suite 2500 Portland, OR 97204 (503) 227-3251 FAX (503) 274-4681

Additional Service Request (ASR) No. 05

PROJECT:

Emergency Coordination Center

Date: 8/22/2011

CLIENT:

MWA

Project No. 309113

ENGINEER:

KPFF Consulting Engineers

111 SW Fifth Avenue, Suite 2500

Portland, OR 97204

KPFF hereby requests that the additional civil engineering services described below be added to the **CONTRACT** for the above referenced project. The scope of civil engineering services is described in KPFF's proposal dated September 7th, 2009, which is attached to the consultant agreement dated September 15, 2009 between MWA and KPFF. Upon approval by MWA, this Additional Service Request will become a part of the consultant agreement.

		Total
Original Contract Amount (not including reimburseables)		\$108,630
Additional Services:		
Additional Survey Scope:	\$1,200	
 KPFF Survey will prepare a legal description and exhibit for a 2 foot right-of-way dedication. 		
TOTAL Proposed Additional Fee (This ASR only)	\$1,200	
Total Approved Previous Additional Service Requests		\$12,700
REVISED CONTRACT AMOUNT		\$122,530

To be valid, this ADDITIONAL SERVICE REQUEST must be approved by the following:

Requested by:

KPFF Consulting Engineers

Signature

Title

Agreed to by:

MWA

Signature

Title

Date

EE 03.12.2812

Exhibit 6

lango hansen

1100 nw glisan #3B portland OR 97209 T 503 295.2437 F 503 295.2439

LANDSCAPE ARCHITECTS PC

MEMORANDUM

TO:

Josh Stein/Michael Willis Architects

FROM:

Jane Hansen

DATE:

August 15, 2011

PROJECT:

SE Emergency Center

RE:

Additional Fee Request for RF Tower

Please find below our request for additional fee for the landscape work required to separate out the RF Tower work as a stand-alone project. As we discussed, the planting design around the RF Tower is complete. However, you mentioned that a new vault will need to be located in a swale area which may require some planting redesign in that area. Costs have been included for the design of this additional planting area.

Irrigation at the RF Tower, which has not yet been designed, is assumed to be connected to the existing adjacent system. It is additionally assumed that some irrigation lines will need to be rerouted around the new vault location. Since we do not have irrigation as-built information for this area, we suggest that the irrigation design for these two small areas be design/build by the contractor. However, if that is not desired by the Client and irrigation as-built information is available for that area, I have included a line item cost for the irrigation design for those areas.

You also mentioned having a team site visit to assess the existing conditions, and that has been included below as well. Labor has been itemized by hour according to task as follows:

<u>Task</u>	Jane Hansen/\$100hr	Technical Staff/\$65/hr	Total
Site Visit	1hr	1hr	7
Reformat CD drawings and spec	s. 2hr	8hr	
Planting revisions at swale	2hr	8hr	
Irrigation design	2hr	8hr	
Observation during construction	2hr		
Total	9hr/\$900	25hr/\$1625	\$2525 \

For the construction documents, the following deliverables are assumed:

- Planting Plan
- Imigation Plan
- Planting and Irrigation Details as required
- Soil Preparation, Planting and Irrigation specifications

In documentation of this work the following assumptions have been made:

- The civil engineer will determine the new swale area configuration and provide stormwater calculations as required.
- If imigation design is desired by Client, existing imigation as-built plans will be provided.
- No paving improvements are assumed.

Thank you for the opportunity to provide this add service request. Please call if you have any questions or comments regarding this proposal.

Thank you.

Exhibit 7



www.hartcrowser.com

November 30, 2011

Michael Willis Architects
70 NW Couch Street, Suite 401
Portland, Oregon 97201

Re: Change Order No 2 - Radio Frequency Tower
City of Portland Emergency Coordination Center
Portland, Oregon
15900-16

Attention: Mr. Joshua Stein

INTRODUCTION AND PROJECT UNDERSTANDING

At your request, Hart Crowser, Inc. (Hart Crowser) submits this change order to complete geotechnical engineering services for a Radio Frequency (RF) Tower at the proposed City of Portland (City) Emergency Coordination Center (ECC) in Portland, Oregon. Pacific Geotechnical completed a geotechnical report for the project, dated January 8, 2010. Hart Crowser recently purchased Pacific Geotechnical and the contract between Michael Willis Architects and Pacific Geotechnical has been assigned to Hart Crowser.

We understand that the RF tower will be constructed at the northwest corner of the existing 911 building. The tower will be a 150-foot tall metal lattice tower supported by three drilled pier foundations. The tower plan is an isosceles triangle with 19-foot legs. The nearest boring from our original geotechnical report is about 270 feet to the south; therefore, we recommended additional explorations be completed. The tower will be designed by Valmont Industries, Inc. (Valmont). You provided a document from them titled "Recommended Soil Report Information" which we have used in preparing our scope of work.

The following presents our proposed scope of work and estimated fee to complete a supplemental geotechnical engineering report for this project.



15900-16 Page 2

SCOPE OF SERVICES

The purpose of our services is to evaluate soil and groundwater conditions as a basis for developing geotechnical design criteria for the proposed project. Our proposed scope of services is written based on our experience in the area, our understanding of the project, and the Valmont recommendations and includes the following:

- Review existing available subsurface soil and groundwater information, including geologic maps, water well logs, our geotechnical report for the proposed ECC building, and other information pertinent to the site.
- Coordinate clearance of existing site utilities via the required One-Call Service and a private utility locator.
- Explore subsurface soil and groundwater conditions at the site by drilling two borings as near as practical to the proposed footprint of the RF tower. The borings will be drilled to a depth of between 40 and 50 feet below ground surface (bgs), or refusal, whichever is shallower. The borings will be backfilled as required by state law, and surface disturbance minimized to the extent practical. Borings will be completed with a truck-mounted drill rig and drilled cuttings will be drummed and removed from the site.
- Obtain samples at representative intervals from the explorations, observe groundwater conditions, and maintain detailed logs in general accordance with the American Society for Testing and Materials (ASTM) Test Method D 2488. Qualified staff from our office will observe and document field activities.
- Perform laboratory tests on selected soil samples obtained from the explorations to evaluate pertinent engineering characteristics. We anticipate that the laboratory test program will include the following:
 - Up to 20 moisture content and/or density determinations in general accordance with ASTM Test Method D 2216 and D 2937, respectively
 - Up to six gradation tests in general accordance with ASTM Test Method D 6913.
 - One direct shear test in general accordance with ASTM Test Method D 3080
- Provide a geotechnical evaluation of the site and design recommendations in a supplemental geotechnical report that will address the following geotechnical components:
 - A general description of site topography, geology, and subsurface conditions and their affect on the project.



15900-16 Page 3

- An opinion as to the adequacy of the proposed development from a geotechnical standpoint.
- Recommendations for drilled shaft construction, including recommendations for dewatering
 if shallow groundwater is encountered.
- Recommendations for support of the proposed structures, including design soil bearing
 pressures, coefficient of friction and passive earth pressures, internal angle of friction, skin
 friction in uplift and compression, and settlement estimates (total and differential).

Our geotechnical work will be directly supervised by a geotechnical engineer (GE) licensed in the state of Oregon. Our engineer will apply his professional seal to the document.

ASSUMPTIONS AND LIMITATIONS

In preparing this proposal we have made the following assumptions:

- We will be provided full access to the site,
- Drilling can be completed with a truck mounted drill rig,
- Concrete coring will not be required,
- Contaminated soils will not be encountered, and
- Foundation design will be completed by others using design parameters provided in our report.

PROJECT SCHEDULE AND BUDGET

We will schedule our work immediately after receiving your authorization to proceed. Depending upon the availability of a drilling subcontractor, our subsurface exploration work can normally begin within approximately 1 to 2 weeks of receiving authorization to proceed. The fieldwork should take 1 day to complete, unless unanticipated conditions are encountered. We plan to issue our final work product approximately 2 to 3 weeks after completing the fieldwork.

The professional services listed above will be performed for a lump sum fee of \$12,300 (see Table 1 below) in accordance with the terms of our existing agreement with Michael Willis Architects for this project. We will not complete additional work without prior authorization.

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15900-16 Page 4

Table 1. Breakdown of Charges

Task	Est	imated H			
lask	Principal	PM	Staff/CAD	Lump Sum Fee	
Geotechnical Evaluation and Design					
Field Services	0	4	16	\$2,300	
Exploration Subcontractor		p		\$4,900	
Laboratory Services				\$1,100	
Engineering Analysis	2	4	6	\$1,500	
Final Report	4	6	12	\$2,500	
Total Lump Sum Fee			-	\$12,300	

The scope of work outlined above will be billed on a lump sum basis at the end of each month as a percent of project completed. Our services will be performed in accordance with the standard of care of our profession. If project requirements change, requiring additional work, we will notify you and seek your approval for an addendum to the lump sum cost.

Written authorization is necessary for us to begin work. Authorization can be provided by signing this change order and returning a copy to us. Authorization by fax or e-mail is acceptable and will facilitate starting our work. If you authorize by fax or e-mail, please also send a signed original by mail to complete our files.

We appreciate the opportunity to submit this change order to you. Please contact us if you have any questions or need additional information.

Sincerely,

HART CROWSER, INC.

GREG A. LANDAU, PE, GE

Senior Associate

Geotechnical Engineer

TIMOTHY W. BLACKWOOD, PE, GE, CEG

Principal

Geotechnical Engineer

Attachments:

Contract Change Form

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15900-16 Page 5

ACCEPTED FOR MICHAEL WILLIS ARCHITECTS BY:

ll	11-30-2011
Signature	Date
JOSHUA STEIN / PROTE	ECT MANAGER, MWA ARCHITECTS
Name/Title - Please Print	· · · · · · · · · · · · · · · · · · ·



www.hartcrowser.com

CONTRACT CHANGE

CHANGE NO.	2		Date: _	11/30/2011
CLIENT	Michael Willis Arch	nitects		,
JOB NO.	1590016			
PROJECT	City of Portland Em	nergency Coordination Ce	enter	
		Description of Work		
Task 1				
Additional Engineerin	g Services for RF Tower			
Costs for Task 1				
Field Services				\$2,300
Exploration subcontra	ictor			\$4,900
Laboratory Services				\$1,100
Engineering Analysis				\$1,500
Final Report				\$2,500
Total-				\$12,300
Total Costs			· · · · · · · · · · · · · · · · · · ·	\$12,300
Geotechnical, Inc	.) dated September	15, 2009, under Hart Crod ditions apply to this Contr	wser job	art Crowser (formerly Pacific number 1590016. Except nge. To indicate your
ACCEPTED FOR CLIENT By:	Ja &		Date:	11-30-2011
Printed Name:	Joshua	STEIN		
HART CROWSER	, INC. By:	. L. rell	Date:	11/30/2011
Printed Name:	Timothy W. Bl	ackwood, PE, GE, CEG		

Exhibit 8



September 26, 2011

Michael Willis Architects 70 NW Couch Street, Suite 401 Portland, Oregon 97201

Attention:

Mr. Joshua Stein

Subject:

Change Order No. 1 - Construction Observation Services

City of Portland Emergency Coordination Center

Portland, Oregon

Project No: 1320-001-00

INTRODUCTION AND PROJECT UNDERSTANDING

At your request, Pacific Geotechnical, Inc. (Pacific Geotechnical) submits this change order to complete construction observation services for the proposed City of Portland (City) Emergency Coordination Center (ECC) in Portland, Oregon. Pacific Geotechnical completed a geotechnical report for the project dated January 8, 2010. The following presents our proposed scope of work and estimated fee to provide construction observation services for the project.

SCOPE OF SERVICES

The purpose of our services is to assist the design team during the construction process and confirm that our recommendations for the project related to foundation construction and earthwork are met during construction. Anticipated services for this project are included below.

- 1. Review design documents for compliance with our geotechnical recommendations.
- 2. Meet with the design and construction team and other involved parties to coordinate project requirements and field activities.
- 3. Provide project management including design memoranda and responses to information requests by the project team, as needed.

Phone: 503 656-0156/fax: 503 656-0186/www.PacGeoCorp.com

985252

City of Portland – Emergency Coordination Center September 26, 2011 Page 2

- 4. Provide part-time observation and testing to evaluate subgrade preparation prior to placement of fill materials. Provide recommendations for removal of unsuitable material.
- 5. Determine a moisture-density relationship on material to be used as structural fill in accordance with ASTM Test Method D 1557.
- 6. Evaluate the compaction of structural fill by conducting in-situ density and moisture content measurements and observing proofrolling.
- 7. Conduct density testing of site base rock and pavements.
- 8. Prepare field reports summarizing our observations after completion of each site visit and provide copies to members of the design and construction team and the City of Portland, as required.
- 9. Prepare a final summary letter for construction observation activities.

Our work will be directly supervised by a geotechnical engineer (GE) licensed in the State of Oregon. Our engineer will apply his professional seal to the final letter.

PROJECT SCHEDULE AND BUDGET

The cost for construction related services is difficult to predict due to factors beyond our control such as the specific services provided, weather, changes in final design and the contractor's schedule and progress. We would perform construction observation services on a time and expense basis in accordance with the terms of our existing agreement with Michael Willis Architects for this project and the attached fee schedule. A typical cost for a part-time site visit (2 hours onsite) and full-time site visit (8 hours onsite) is approximately \$500 and \$1,100, respectively and includes travel costs, equipment, field report preparation and technical review. In addition to costs related to site visits specifically, additional costs incurred will include costs related to meetings, laboratory tests, engineering support and our final letter to the City of Portland. Our estimated fee for construction support and inspection services is provided in Table 1.

Estimated Units Quantity **Estimated Cost Extended Price** Scope Item Part-time site visit 28 EA \$ 500 \$14,000 Full-time site visit EA 4 \$1,100 \$4,400 Meetings, Laboratory Tests, LS \$5,000 \$5.000 **Engineering Support and Final** Letter **Total Estimated Cost** \$ 23,400

Table 1. Fee Estimate for Construction Support Services

Services beyond those described in this scope of work will be completed in accordance with the attached Schedule of Charges. We will not complete additional work without prior authorization.

Project File: 1320-001-00

City of Portland – Emergency Coordination Center September 26, 2011 Page 3

AUTHORIZATION

Written authorization is necessary for us to begin work. Authorization can be provided by signing this agreement and returning a copy to us. Authorization by fax or e-mail is acceptable and will facilitate starting our work. If you authorize by fax or e-mail, please also send a signed original by mail to complete our files.

We appreciate the opportunity to submit this change order to you. Please contact us if you have any questions or need additional information. We hope to receive a positive response from you regarding our proposal.

Sincerely,

Pacific Geotechnical, Inc.

Greg A. Landau, PE, GE

Vice President

The scope of services, fees and conditions described in this proposal are acceptable and Pacific Geotechnical, Inc. is authorized to proceed.

Name JOSHUA STEIN
Signature

Date 11-30-2011

Document ID: 1320-001-00CO1.doc

Attachments: 2011 Schedule of Charges

Project File: 1320-001-00



2011 SCHEDULE OF CHARGES

Pacific Geotechnical provides our services on a fixed fee basis whenever practical. Where this is not practical, or where a client prefers to pay for services on an hourly basis, we offer a simple rate schedule with the following charges. These rates include all computer and software charges, accounting fees, copies, faxes and other incidental costs, unless specifically noted otherwise in our services agreement with you.

Labor Billing Rates

Position	Hourly Rate ¹
Principal	\$145
Project II Engineer/Geologist	\$130
Project I Engineer/Geologist	\$120
Staff II Engineer/Geologist	\$105
Staff I Engineer/Geologist	\$95
Technician II	\$80
Technician I	\$70
CAD	\$75
Administrative Assistant	\$50

Weekend and holiday work at the client's request charged at 1.5 times the listed rates. Deposition and court time will be charged at 1.5 times the listed rates.

Laboratory Charges

Test (ASTM Designation)	Unit Cost
Moisture/Density (D-2216)	\$25.
Atterberg Limits (D-4318)	\$135
Mechanical Sieve Analysis (D-422)	\$100
#200 Wash (D-1140)	\$75
Hydrometer (D-422)	\$150
Consolidation Test (D-2435)	\$300
Direct Shear Test (D-3080)	\$400
Proctor (D-1557)	\$225

Field Equipment Charges

Field Equipment	Dally Cost		
Inclinometer Probe	\$100		
GPS/Survey Equipment	\$100		
Manometer	\$50		
Drilling supplies	\$100		
Water Level Indicator	\$20		
Nuclear Density Gauge	\$20/half day (min), \$40/full day		

Reimbursable expenses including drilling and excavation subcontractors, rental equipment, specialized laboratory testing and other material not listed above will be billed at cost plus 10 percent. Per Diem and travel expenses will be billed at cost plus 10 percent. Mileage will be billed at the IRS or local agency approved rate.

Phone: 503 656-0156 / Fax: 503 656-0186 / www.PacGeoCorp.com

Exhibit 9

MILESTONE PLOTS CONDITIONAL USE SUBMITTE PORTLAND ECC - PROT 200921

Precision Images 900 S.E. Sandy Blvd Portland, OR 97214 ompany:

0132625 Michael Willis Architects 301 Howard Street Suite 500 San Francisco, CA 94105-6603 Attn:

porti	ng period from $01/01/10$ to 01	/09/12						
		Gross Amount	Freight Su	rcharge	Discount	Sales Tax	Total Amount	
	Project: 0000000000200752	161.50	0.00	0.00	0.00	0.00	161.50	
	Special Dept: Invoice: 0000104780 01/13/1		Ordered By	: CHRIS HENDE	0.00	0.00	101.94	
	Special Dept: Invoice: 0000104833 01/14/1	Charge: 863.10	Ordered By	: CHRIS HENDE	0.00	0.00	863.10	
	Special Dept: 03/09/16	Charge: 134.90	Ordered By 0.00	: CHRIS HENDR	0.00	0.00	134,90	
	Special Dept: Invoice: 0000113403 05/04/24	Charge: 41.25	Ordered By 0.00	: CHRIS HENDR	0.00	0.00	41.25	
. :	Project: 0000000000200911	1,141.19	0.00	0.00	0,00	0.00	1,141.19	
3(Special Dept: 0 Invoice: 0000116513 06/14/10	Charge: 1,346.76	Ordered By 0.00	: Josh Stein 0.00	0.00	0.00	1,346.76	1.
30°0c	Special Dept: 000116714 06/16/16	Charge: 388.84	Ordered By 0.00	: JOSH STEIN 0.00	0.00	0.00	388.84	
D	Special Dept: (0	Charge: 289.16	Ordered By 0.00	JOSH STEIN 0.00	0.00	0.00	289.16	
Ĉ	Special Dept: (0 Invoice: 0000121251 08/18/10	Charge: 39.12	Ordered By 0.00	JOSH STEIN 0.00	0.00	0.00	39.12	
Coup. Us	Special Dept: 0 Invoice: 0000121259 08/18/10		Ordered By	JOSH STEIN 0.00	0.00	0.00	70.50	<i>)</i>
m	Special Dept: 0000121264 08/18/10	Charge: 678.99	Ordered By:	BILL LANNIN	G 0.00	0.00	678.99	
	Special Dept: Colored Colored		Ordered By: 0.00	JOSH STEIN 0.00	0.00	0.00	33.12	1
%CD	Special Dept: 0 Invoice: 0000125372 10/13/10		Ordered By: 0.00	JOSH STEIN 0.00	. 0.00	0.00	613.15	<i> </i> ·
_								

SUMMARY

30% CD: \$ 2024. 3

COND. USE: \$ 788.61

60% CD: \$ 3325.62

90% CD: \$ 4268.69

100% CD: \$ 449 4.49

\$ 14,90Z.16

(CONTRACT)

- 750. ∞

→ \$14,15Z.16

ompany: Precision Images emit to: 900 S.E. Sandy Blvd Portland, OR 97214

00132625 Michael Willis Architects 301 Howard Street Suite 500 San Francisco, CA 94105-6603 Attn:

eporting period from 01/01/10 to 01/09/12

		Gro	ess Amount		Surcharge	Discount		Total Amount
	Special Dept: Invoice: 0000127052		1,394.20	Ordered	By: JOSH STEI 0.00	N	0.00	1,394.20
60	Special Dept: Invoice: 0000127927	Charge: 11/17/10	435.51		By: JOSH STEI 0.00	N 0.00	0.00	435.51
<u>5</u>	Special Dept: Invoice: 0000129069				By: JOSH STEI	N 0.00	0.00	256.93
0	Special Dept: Invoice: 0000129343				By: JOSH STEIN	N 0.00	0.00	140.35
	Special Dept: Invoice: 0000129612	Charge: 12/16/10	161.60		By: JOSH STEIN	N 0.00	0.00	161.60
-0	Special Dept: Invoice: 0000136555		180.45		By: JOSH STEIN	N 0.00	0.00	180.45
70%	Special Dept: Invoice: 0000136557		804.67		By: JOSH STEIN	N . 0.00	0.00	<u>804.67</u>
CD	Special Dept: Invoice: 0000136569		536.02		By: JOSH STEIN	0.00	0.00	536.02
	Special Dept: Invoice: 0000136848		136.61		By: JOSH STEIN 0.00		0.00	136.61
	Special Dept: Invoice: 0000141872		220.97		By: JOSH STEIN 0.00	0.00	0.00	220.97
8	Special Dept: Invoice: 0000142200		139.08		By: JOSH STEIN 0.00	0.00	0.00	139.08
0% CD	Special Dept: Invoice: 0000142926	Charge: 06/16/11	603.10		By: Josh Steim 0.00	0.00	0.00	603.10
	Special Dept: Invoice: 0000142927	Charge: 06/16/11	297.26		By: Josh Stein 0.00	0.00	0.00	297,26
	Special Dept: Invoice: 0000143896	Charge: 06/29/11	535.97		By: Josh Stein 0.00	0.00	0.00	535.97
	Special Dept:	Charge:		Ordered	By: JOSH STEIN	I		

: Precision Ymages o: 900 S.E. Sandy Blvd Portland, OR 97214

2625 Michael Willis Architects 301 Howard Street Suite 500 San Francisco, CA 94105-6603 Attn:

ing period from 01/01/10 to 01/09/12

		Gross Amount	Freight	Surcharge	Discount	Sales Tax	Total Amount	
1	Invoice: 0000144861 07/12/11	305.23	0.00	0.00	0.00	0.00	305.23	
	Special Dept: Cha Invoice: 0000145633 07/22/11	rge: 905.14	Ordered 0.00	By: JOSH STEI 0.00	0.00	0.00	905.14	\
Į	Special Dept: Cha Invoice: 0000155285 12/15/11	rge: 1,487.74	Ordered 0.00	By: JOSH STEI 0.00	0.00	0.00	1,487.74	
>	Special Dept: Cha Invoice: 0000155410 12/16/11	rge: 213.20	Ordered 0.00	By: JOSH STEI	0.00	000	200	
	12016362100000000000000	22/203567	0.00	0.00	0.00	0.00	12,213.67	
	Special Dept: Cha Invoice: 0000122617 09/03/10	rge:	Ordered 0.00	By: KAREN HAD 0.00	0.00	0.00	143.58	
	Special Dept: Cha Invoice: 0000128925 12/03/10	rge: 285.46	Ordered 0:00	By: CASSANDRA 0.00	LANDRY 0.00	0.00	285.46	
	Special Dept: Cha Invoice: 0000130279 12/29/10	81.60	Ordered 0.00	By: CASSANDRA 0.00	LANDRY 0.00	0.00	81.60	
	Project: 000000000200934	510.64	0.00	0.00	0.00	0.00	510.64	
	Special Dept: Cha Invoice: 0000111096 04782/10	rge: 86.91	Ordered 0,00	By: CHRIS HEN 0.00	0.00	0.00	86.91	
	Special Dept: Cha Invoice: 0000125684 10/18/10	rge! 138.50	Ordered 0.00	By: IAN FLOGO	0.00	0.00	138,50	
	Special Dept: Char Invoice: 0000125795 10/19/10	rge:	Ordered 0.00	0.00	0.00	0.00	318.50	
	Special Dept: Char Invoica: 0000125796 10/19/10	270.00	Ordered 0.00	By: IAN FLOOD 0.00	0.00	0.00	270.00	
	Special Dept: Cha: Invoice: 0000154300 11/30/11	rge: 1,023.20	Ordered 0.00	By: IAN FLOOD 0.00	0.00	0.00	023.20	

Precision Images 900 S.E. Sandy Blvd Portland, OR 97214 ompany: emit to:

)00132625 Michael Willis Architects 301 Howard Street Suite 500 San Francisco, CA 94105-6603 Attn:

sporting period from 01/01/10 to 01/09/12

		Gr	oss Amount	Freight	Surcharge	Discount	Sales Tax	Total Amount
	Project: 200752.05	** ** **	194.51	0.00	0.00	0.00	0.00	194.51
	Special Dept: Invoice: 0000122551		69.60	Ordered 0.00	By: JOSH STE	0.00	0.00	69.60
	Project: 200840.02		69.60	0.00	0.00	0.00	0.00	69.60
	Special Dept: Invoice: 0000104177	Charge: 01/05/10	1,956.04	Ordered 0.00	By: CHRIS HE	NDRYX 0.00	0.00	1,956.04
	Project: 2009-11	Mi MA	1,956.04	0.80	0.00	0,00	0.00	1,956.04
	Special Dept: Invoice: 0000109636		58.32	Ordered 0.00	By: CHRIS HE	NDRYX 0.00	0.00	58.32
	Special Dept: Invoice: 0000111650		10.80	Ordered 0.00	By: CARYN HA 0.00	0.00	0.00	10.80
	Special Dept: Invoice: 0000112245	Charge: 04/19/10	46.60	Ordered 0.00	By: CHRIS HE 0.00	NDRYX 0.00	0.00	46.60
	Special Dept: Invoice: 0000113889	Charge: 05/11/20	182.65	Ordered 0.00	By: CHRIS HE 0.00	NDRYX 0.00	0.00	18265
	Project: 200911.00		298.37	0.00	0.00	0,00	0.00	298.37
000	Special Dept: Invoice: 0000127184		290.76	Ordered 0.00	By: JOSH STE 0.00	IN 0.00	0.00	290.76
9	Special Dept: Invoice: 0000135775	Charge: 03/15/11	125.90	Ordered 0.00	By: MARGAUX 0.00	DAVIS 0.00	0.00	125.90
90% CD	Special Dept: Invoice: 0000135865	Charge: 03/16/11	2,485.03	Ordered 0.00	By: MARGAUX 0.00	DAVIS 0.00	0.00	2,485.03

