

**WHATCOM COUNTY CONTRACT
INFORMATION SHEET**

Whatcom County Contract No.
202211007-2

Originating Department:	Public Works
Division/Program: <i>(i.e. Dept. Division and Program)</i>	907010 – Natural Resources/169121-Watershed Management Plan Implementation
Contract or Grant Administrator:	Chris Elder, Senior Planner
Contractor's / Agency Name:	Associated Earth Sciences, Inc.

Is this a New Contract? If not, is this an Amendment or Renewal to an Existing Contract? Yes No
 Yes No If Amendment or Renewal, (per WCC 3.08.100 (a)) Original Contract #: 202211007

Does contract require Council Approval? Yes No If No, include WCC: _____
 Already approved? Council Approved Date: _____ (Exclusions see: Whatcom County Codes 3.06.010, 3.08.090 and 3.08.100)

Is this a grant agreement?
 Yes No If yes, grantor agency contract number(s): _____ CFDA#: _____

Is this contract grant funded?
 Yes No If yes, Whatcom County grant contract number(s): Pending- Dept of Ecology

Is this contract the result of a RFP or Bid process? Contract
 Yes No If yes, RFP and Bid number(s): MRSC Roster Cost Center: 169121

Is this agreement excluded from E-Verify? No Yes If no, include Attachment D Contractor Declaration form.

If YES, indicate exclusion(s) below:

- Professional services agreement for certified/licensed professional. Goods and services provided due to an emergency
- Contract work is for less than \$100,000. Contract for Commercial off the shelf items (COTS).
- Contract work is for less than 120 days. Work related subcontract less than \$25,000.
- Interlocal Agreement (between Governments). Public Works - Local Agency/Federally Funded FHWA.

Contract Amount:(sum of original contract amount and any prior amendments):
 \$ 99,192.00
 This Amendment Amount:
 \$ 364,486.00
 Total Amended Amount:
 \$ 463,678.00

Council approval required for; all property leases, contracts or bid awards **exceeding \$40,000**, and professional service contract amendments that have an increase greater than \$10,000 or 10% of contract amount, whichever is greater, **except when:**

1. Exercising an option contained in a contract previously approved by the council.
2. Contract is for design, construction, r-o-w acquisition, prof. services, or other capital costs approved by council in a capital budget appropriation ordinance.
3. Bid or award is for supplies.
4. Equipment is included in Exhibit "B" of the Budget Ordinance
5. Contract is for manufacturer's technical support and hardware maintenance of electronic systems and/or technical support and software maintenance from the developer of proprietary software currently used by Whatcom County.

Summary of Scope: This amendment provides funding to complete the final two years of a three study to quantify the timing and magnitude of groundwater pumping on streamflow depletion.

Term of Contract: _____ Expiration Date: June 30, 2025

- Contract Routing:
- | | |
|---|-------------------------|
| 1. Prepared by: <u>Gary Stoyka</u> | Date: <u>10/5/23</u> |
| 2. Attorney signoff: <u>Chris Quinn</u> | Date: <u>10/10/2023</u> |
| 3. AS Finance reviewed: <u>A Martin</u> | Date: <u>10/23/2023</u> |
| 4. IT reviewed (if IT related): _____ | Date: _____ |
| 5. Contractor signed: <u>BSR</u> | Date: <u>11/16/2023</u> |
| 6. Executive contract review: _____ | Date: _____ |
| 7. Council approved (if necessary): <u>Carol J. Frantz</u> AB2023-710 | Date: <u>11/08/2023</u> |
| 8. Executive signed: _____ | Date: <u>11/16/2023</u> |
| 9. Original to Council: _____ | Date: _____ |

**WHATCOM COUNTY
PUBLIC WORKS DEPARTMENT**

**Elizabeth Kosa
Director**



NATURAL RESOURCES

322 N. Commercial, 2nd Floor
Bellingham, WA 98225
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MEMORANDUM

TO: The Honorable Satpal Singh Sidhu, Whatcom County Executive, and The Honorable Members of the Whatcom County Council, collectively serving in their capacity as the Whatcom County Flood Control Zone District Board of Supervisors

THROUGH: Elizabeth Kosa, Public Works Director

FROM: Gary Stoyka, Natural Resources Manager *GH* for GS
Chris Elder, Senior Planner

DATE: October 5, 2023

RE: Amendment No. 2 – Agreement Between Whatcom County Flood Control Zone District and Associated Earth Sciences, Inc. for Groundwater-Surface Water Interaction Study

Please find attached for your review a copy of the Amendment No. 2 to the Agreement Between Whatcom County Flood Control Zone District and Associated Earth Sciences, Inc. for Groundwater-Surface Water Interaction Study (Whatcom County Contract No. 202211007). The authorized agreement will be signed electronically through DocuSign.

Requested Action

Public Works respectfully requests that the Flood Control Zone District Board of Supervisors authorize the County Executive to sign this amendment to the contract.

Background and Purpose

This amendment provides funding to complete the final two years of a three-year investigation to quantify the timing and magnitude of groundwater pumping on streamflow depletion. Tasks include installation of monitoring wells, aquifer testing, groundwater and surface water level monitoring, data analysis, and incorporation of data into an existing groundwater model. This information is crucial to developing projects that will provide sufficient water to meet our out of stream needs while protecting and enhancing instream flows necessary to sustain our aquatic ecosystems.

Funding Amount and Source

This amendment to the agreement with Associated Earth Sciences, Inc. will provide an additional \$364,486 for a total budget of \$463,678 to support the groundwater-surface water interaction study. This amendment is fully funded through forthcoming grant agreement with the Department of Ecology as authorized in the 2024 Washington State Operating Budget. Although expenditures for this amendment are authorized to begin on July 1, 2023, reimbursement for expenditures will not be available until after the Department of Ecology files a general stream adjudication in Whatcom County Superior Court anticipated to happen in Spring 2024. Budget authority for 2023 expenditures were authorized by Council in Supplemental Budget Request #3967. Expenditures for 2024 are included in the 2024

proposed Flood Control Zone District budget. Expenditures for 2025 will be included in the 2025 Flood Control Zone District budget.

Differences from Previous Agreement/Contract

This amendment provides funding to complete the final two years of a three-year investigation to quantify the timing and magnitude of groundwater pumping on streamflow depletion. Tasks include installation of monitoring wells, aquifer testing, groundwater and surface water level monitoring, data analysis, and incorporation of data into an existing groundwater model. This amendment also extends the end date of the agreement from December 31, 2023 to June 30, 2025.

Please contact Chris Elder at extension 6225 or Gary Stoyka at extension 6218, if you have any questions or concerns regarding the terms of this agreement.

Encl.

Whatcom County Contract No.

202211007-2

Amendment No. 2
Whatcom County Contract No. 202211007
CONTRACT BETWEEN WHATCOM COUNTY FLOOD CONTROL ZONE DISTRICT AND
ASSOCIATED EARTH SCIENCES, INC

THIS AMENDMENT is to the Contract between Whatcom County Flood Control Zone District and Associated Earth Sciences, Inc., dated November 29, 2022 and designated "Whatcom County Contract No. 202211007". In consideration of the mutual benefits to be derived, the parties agree to the following:

This Amendment extends the term of this Agreement through June 30, 2025, and increases the maximum consideration by \$364,486 to a total consideration of \$463,678.

This Amendment also adds the following to the Scope of Work, Exhibit A:

TASK 2 – HYDROGEOLOGIC INVESTIGATIONS

- Conduct the hydrogeologic studies in accordance with the final approved Quality Assurance Project Plan (QAPP), cultural resources review, and surface water - groundwater monitoring plans. The studies are expected to include:
- The installation and instrumentation of up to six new groundwater monitoring wells (piezometers) to supplement the monitoring wells installed in Task 1.
- Complete aquifer tests of each pumping well using monitoring wells and staff gages as observation points.
- Installation (if necessary) of a water meter on the pumping wells.
- Sub-daily monitoring of groundwater and surface water levels using data logging pressure transducers.
- Quarterly site visits to download data loggers and manually measure groundwater levels and streamflow.
- Groundwater and surface water data will be collected through June 30, 2024.
- Prepare a draft and final monitoring report that document the methods and results of the field data collection. A draft report will be prepared and submitted to the Water Resource Inventory Area (WRIA) 1 Team for review and comment prior to preparing the final document.
- Prepare and submit the data collected during the hydrogeologic studies to the Washington Department of Ecology through their Environmental Information Management (EIM) database.

Task 2 Deliverables:

- Maps of additional monitoring locations
- Boring logs for additional monitoring well installations
- Draft and Final Monitoring Report
- Data deliverable to update and/or refine the Whatcom Groundwater Model (WGM).
- Data submittal to EIM

Task 2 Schedule: Task 2 shall be completed by June 30, 2024

TASK 3 – COLLECT ADDITIONAL DATA AND UPDATE/REFINE WGM

Collect additional monitoring data and utilize the data collected during the hydrogeologic investigations to update/refine the WGM:

- Quarterly site visits to download data loggers and manually measure groundwater levels and streamflow.
- Groundwater and surface water data will be collected through June 30, 2025.

- Prepare updated monitoring report that documents the methods and results of the field data collection. A draft report will be prepared and submitted to the WRIA 1 Team for review and comment prior to preparing the final document.
- Prepare and submit the data collected during the hydrogeologic studies to Ecology through their Environmental Information Management (EIM) database.
- Prepare electronic data and documentation in a format suitable for use to update and/or refine the WGM.
- Update parameterization of Sumas Aquifer (Layer 1) as necessary based on results of aquifer testing.
- Update surface water drainage parameterization (e.g. streambed hydraulic conductivity) to simulate surface water – groundwater interactions consistent with those observed during they hydrologic investigations.
- Prepare draft and final model update reports that document the WGM updates/refinements. A draft report will be prepared and submitted to the WRIA 1 Team for review and comment prior to preparing the final documents.

Task 3 Deliverables:

- Data deliverable to update and/or refine the WGM.
- Data submittal to EIM
- Draft and Final Monitoring Report
- Updated/refined WGM
- Draft and Final Modeling Report

Task 3 Schedule: Task 3 shall be completed by June 30, 2025

This amendment also adds the following to the Compensation, Exhibit B:

Task Title	Total	Consultant/Design Fees		
		AESI	SSP&A	Subcontractors ODCs
July 1, 2023 - June 30, 2024: Task 2 - Hydrogeologic Investigations				
Install 6 Groundwater Monitoring Wells	\$ 92,948	\$ 20,687	\$ -	\$ 72,261
72-hour Aquifer Tests	\$ 58,973	\$ 45,804	\$ 13,169	\$ -
Quarterly Groundwater Level and Streamflow Monitoring	\$ 43,967	\$ 43,967	\$ -	\$ -
Prepare Initial Annual Monitoring Report and EIM Data	\$ 18,472	\$ 11,582	\$ 6,891	\$ -
Project Management	\$ 1,733	\$ 1,733	\$ -	\$ -
Project Meetings	\$ 11,021	\$ 11,021	\$ -	\$ -
Total	\$227,116	\$ 134,795	\$ 20,060	\$ 72,261
July 1, 2024 - June 30, 2025: Task 3 - Groundwater Modeling and Ongoing Monitoring				
Prepare Data for Model Update	\$ 25,934	\$ 11,229	\$ 14,705	\$ -
Update Model	\$ 40,468	\$ 3,679	\$ 36,789	\$ -
Model Update Report	\$ 14,870	\$ 3,453	\$ 11,417	\$ -
Quarterly Groundwater Level and Streamflow Monitoring	\$ 33,407	\$ 33,407	\$ -	\$ -
Update Annual Monitoring Report and EIM Data	\$ 6,256	\$ 4,910	\$ 1,346	\$ -
Project Management	\$ 3,468	\$ 1,103	\$ 2,364	\$ -
Project Meetings	\$ 12,968	\$ 6,509	\$ 6,458	\$ -
Total	\$137,371	\$ 64,291	\$ 73,080	\$ -
Grand Total	\$364,486			

Hourly Rates

The labor rates shall be subject to renegotiations once annually upon written request of the contractor or the County. The written request must be made to the other party within ninety (90) days following the Contractors fiscal year end date. Conversely, if a timely request is made in the manner set forth above, the parties will commence negotiations to determine the new labor rates that will be applicable for the twelve (12) month period. Any agreed to renegotiated rates shall be memorialized in a final written acknowledgment between the Contractor and the County's Administrative Officer. Such final written acknowledgment shall be incorporated into, and become a part of, this agreement. If requested, the contractor shall provide current payroll register and classifications to aid in negotiations.

Detailed budget breakdown- project estimate

FY 2024- Task 2 - Hydrogeologic Investigations	PR	ASSOC	PRJ	SST	STF	CAD	GIS	CWP	Miles	Other	Hours	Fees	Sub MU	Total Fees	SR ASSOC	SR PRJ	Hours	Fees	Total Fees
Install 6 Groundwater Monitoring Wells	12		24	20	60		6		400	\$0	122	\$20,687	\$0	\$20,687			0	\$0	\$20,687
72-hour Aquifer Tests	12	26	36	48	144				200	\$0	266	\$44,487	\$1,317	\$45,804	8	24	56	\$13,169	\$58,973
Quarterly Groundwater Level and Streamflow Monitoring	24		60	24	72				2400	\$9,600	180	\$43,967	\$0	\$43,967			0	\$0	\$43,967
Prepare Initial Annual Monitoring Report and EIM Data	4		8	12	36		8			\$0	68	\$10,893	\$689	\$11,582	8	12	32	\$6,891	\$18,472
										\$0	0	\$0	\$0	\$0			0	\$0	\$0
Project Management	6									\$0	6	\$1,733	\$0	\$1,733			0	\$0	\$1,733
Project Meetings	36			4						\$0	40	\$11,021	\$0	\$11,021			0	\$0	\$11,021
Subcontractor - Well driller												\$72,262		\$72,262					\$72,262
Task 4 Totals	94	26	128	108	312	0	14	0	3000	\$9,600	682	\$132,789	\$2,006	\$134,795	24	40	100	\$23,289	\$227,115

FY 2025- Task 3 - Groundwater Modeling and Ongoing Monitoring	PR	ASSOC	PRJ	SST	STF	CAD	GIS	CWP	Miles	Other	Hours	Fees	Sub MU	Total Fees	SR ASSOC	SR PRJ	Hours	Fees	Total Fees
Prepare Data for Model Update	8			16	16		16			\$0	56	\$9,758	\$1,471	\$11,229	8	24	80	\$14,705	\$25,934
Update Model										\$0	0	\$0	\$3,679	\$3,679	16	100	188	\$36,789	\$40,468
Model Update Report	8									\$0	8	\$2,311	\$1,142	\$3,453	8	24	56	\$11,417	\$14,870
Quarterly Groundwater Level and Streamflow Monitoring	24		60	24	72				2400	\$0	180	\$33,407	\$0	\$33,407				\$0	\$33,407
Update Annual Monitoring Report and EIM Data	1		4	5.3	16		4			\$0	30.33	\$4,776	\$135	\$4,910	2	2	6	\$1,346	\$6,256
Project Management	3									\$0	3	\$867	\$236	\$1,103	8		8	\$2,364	\$3,468
Project Meetings	16			8						\$0	24	\$5,864	\$646	\$6,509	16	8	24	\$6,458	\$12,968
Task 5 Totals	60	0	64	53	104	0	20	0	2400	\$0	301.3	\$56,983	\$7,308	\$64,291	58	158	362	\$73,080	\$137,371

Associated Earth Sciences		
SPR	Senior Principal	\$ 310
PR	Principal	\$ 289
ASSOC	Associate	\$ 257
PRJ	Project	\$ 187
SST	Senior Staff	\$ 155
STF	Staff	\$ 139
CAD	CAD/GIS Operator	\$ 139
GIS	GIS Manager	\$ 171
CWP	Clerical, Word Processing	\$ 112

Mileage Rate = Current IRS Rate
0.63

Sub Markup = 10%
1.1

SSP&A		
SR ASSOC	Senior Associate	\$236
SR PRJ	Senior Project	\$216

Unless specifically amended by this agreement, all other terms and conditions of the original contract shall remain in full force and effect.

This Amendment takes effect: October 16, 2023, regardless of the date of signature.

IN WITNESS WHEREOF, Whatcom County Flood Control Zone District and Associated Earth Sciences, Inc. have executed this Amendment on the date and year below written.

DATED this 11/16/2023 day of _____, 20 .

Each person signing this Contract represents and warrants that he or she is duly authorized and has legal capacity to execute and deliver this Contract.

CONTRACTOR:

Associated Earth Sciences, Inc.

DocuSigned by:
Jay Chennault 11/15/2023
Jay Chennault, Principal Date

Physical Address:
508 South Second Street, Suite 101
Mount Vernon, WA 98273

Mailing Address:
911 5th Avenue, Suite 100
Kirkland, WA 98033

Contact Name: Jay Chennault
Contact Phone: (425) 827-7701
Contact Email: jchennault@aesgeo.com

WHATCOM COUNTY FLOOD CONTROL ZONE DISTRICT:

Recommended for Approval:

DocuSigned by:
Elizabeth Kosa 11/15/2023
Elizabeth Kosa, Public Works Director Date

Approved as to form:

DocuSigned by:
Christopher Quinn 11/16/2023
Christopher Quinn, Senior Deputy Prosecuting Attorney – Civil Division Date

Approved:

Accepted for Whatcom County:

DocuSigned by:
Carol Frazey 11/16/2023
By: Carol Frazey, Whatcom County Executive Pro Tempore Date