TASK ORDER

This Task Order pertains to an Agreement by and between the South Washington Watershed District, (SWWD; "OWNER"), and Houston Engineering, Inc., ("ENGINEER"), dated December 11, 2012, ("the Agreement"). Engineer shall perform services on the project described below as provided herein and in the Agreement. This Task Order shall not be binding until it has been properly signed by both parties or a representative of the Owner provides written authorization to proceed. Upon execution, this Task Order shall supplement the Agreement as it pertains to the project described below.

TASK ORDER NUMBER: 2022-002
PROJECT NAME: Trout Brook Phase 3 – Task 2

PART 1.0 PROJECT DESCRIPTION:

The purpose of this task order is to provide engineering services for the 90% and 100% design drawings, bidding, construction management, and construction observation and staking of stabilization practices and culvert installation.

The Project is located on Vail properties at the Afton Alps Ski Area and on MnDNR Property. See **Attachment A.** The MnDNR has specified goals for improving Trout Brook including; increased longitudinal connectivity from the mouth to the crossing at St. Croix trail South, improved water quality and increased floodplain connectivity in Trout Brook, increased in-stream habitat to improve biological communities in Trout Brook, and increased recreational opportunities for state park users and the public in general.

Phases 1 and 2 of the Project have been completed through partnerships with Great River Greening (GRG), SWWD, the MnDNR and Vail Properties. Previous phases were designed by Inter-Fluve, Inc.

Task 1 of Phase 3 included developing designs for SWWD and project stakeholders to create 30% and 60% preliminary drawings that achieve the project goals for work areas 1, 2, 3, and 4. Task 1 also included regulatory coordination. Partners involved in Phase 3 of the Project are SWWD, GRG, MnDNR, and Vail Properties.

This scope includes: 90% and final plans and specifications, as well as assistance with bidding, construction management, and construction observation and staking.

PART 2.0 SCOPE OF SERVICES TO BE PERFORMED BY ENGINEER:

The Engineer will complete the following tasks for Phase 3 of the Project during execution of this Task Order.

See **Attachment B** for detailed tasks and associated costs.

Tasks	Estimated Hours	Estimated Cost
Task 2.1: Final Construction Documents	**180**	**$27,800**
Work completed under this task will include: • HEI will build upon the previously developed 60% design plan sheets to develop 90% plans. The plans are assumed to include a coversheet (1), a site access and staging sheet (1), plan and profile sheets (7), typical cross section sheets (6), detail sheets (5), box culvert general plan (1), box culvert typical section (1), box culvert plan and profile (1), box culvert details (1), planting and final stabilization (4), and a SWPPP (1). • Specification will be developed for the 90% design plans. • If necessary, HEI will update the HEC-RAS model to the 90% and 100% design features and evaluate impacts to water surface elevations, shear stress, and velocity. • HEI will update the basis of design memo, which will include design assumptions, estimate opinion of probable construction costs, and project impacts. • The draft plans and basis of design memo will be provided to stakeholders and HEI will lead a virtual meeting with project stakeholders and distribute meeting notes. HEI will prepare an agenda in advance of the meeting. • Comments from the stakeholder meeting will be used to provide revised 100% plans and specifications and a revised 100% basis of design memorandum. Final drawings will be signed by a licensed professional engineer. <u>Assumptions:</u> • The plan set will be 29 pages as described above. • The stakeholder meeting will not have a prepared presentation. Comment will be solicited via discussion. • Stakeholders will respond to a meeting request in a timely manner. • One unified set of comments will be provided from project stakeholders. • MnDOT's Standard Specifications for Construction, 2020 Edition and any applicable Special Provisions (Division S) shall be utilized. • Culvert plans will be provided in accordance with the standard MnDOT format regarding details, sheets, plan information organization, etc. <u>Deliverables:</u> • Draft 90% design plan set and specifications • Draft 90% Basis of Design Memorandum • Stakeholder meeting agenda, facilitation, and notes. • Revised 100% design plan set and specifications Revised Basis of Design Memorandum		
Task 2.2: Bidding Services	**31**	**$5,700**
Work completed under this task will include: • HEI will solicit public bids for project construction using construction plans and specifications (bid package). The online bidding service QuestCDN (www.questcdn.com) will be used to advertise the project. • Virtual bidding will be set up and coordinated on QuestCDN vBid, and a bid opening meeting will be conducted on a virtual platform. • HEI will address contractor questions that arise during the bidding process which may be addressed with one bid addenda. • A pre-bid meeting will be held on-site to explain the project and items of concern to potential bidders. • A bid abstract will be prepared, tabulating the bids received, and a Recommendation of Award provided to SWWD.		

Tasks	Estimated Hours	Estimated Cost
Assumptions: 1. One solicitation of bids 2. A total of 8 hours was assumed for addressing bidder questions and issuing 1 addendum. 3. One onsite pre-bid meeting. 4. A virtual bid opening meeting. 5. SWWD will post bid advertisement within Pioneer Press or local newspaper. Deliverables: 1. Pre-Bid meeting; agenda facilitation, and notes 2. Up to 1 addendum Bid tabulation memorandum		
Task 2.3: Construction Management Services	**91**	**$16,300**
Work completed under this task will include: • HEI will prepare a Notice of Award for the board approved bidder and coordination with the selected contractor to obtain necessary contract documents. HEI will review and approve the documents. After Board approval to proceed with the project, HEI will prepare the Notice to Proceed for the contractor. • HEI will process technical submittals (shop drawings, material testing, etc.) that will be required by the contract before and during construction. • Prior to construction activity, HEI will hold a pre-construction meeting on-site with the project partners, and the contractor. We will prepare a pre-construction meeting agenda and minutes following the meeting. • During construction, HEI will review payment applications, issue field orders, and change orders, to the contractor. • HEI will be responsible for reviewing pay applications and providing a recommendation letter and payment summary to SWWD. Assumptions: • Review of no more than four (4) technical submittals. • One onsite pre-construction meeting. • Processing four (4) payment requests, two (2) field orders, and two (2) change orders. • 2.5 hours per week of phone-call coordination with SWWD staff Deliverables: • Recommendation of Award, Notice of Award, Notice to Proceed • Review of contractor submittals (shop drawings) • Payment Recommendations (4) • Field orders (2) and change orders (2)		
Task 2.4: Staking, Observation, and Record Drawings	**399**	**$68,500**
Work completed under this task will include: • HEI will provide technical assistance and construction observation during significant construction activities. HEI will provide construction observation for 26 days on site (excluding construction meetings, averaging six hours per day on-site. If additional construction observation time is desired (due to prolonged construction or other factors), additional fees will be incurred. • HEI's construction observation will include site visits during of the construction period to verify construction is completed per plans and the bid package. Project communication during the entire construction period will be coordinated by HEI, including immediate communication on urgent issues with SWWD.		

Tasks	Estimated Hours	Estimated Cost
• HEI will prepare weekly progress reports that will include a summary of work completed during the week, documentation of problems encountered, summary of work schedule for the next week, and documentation of any changes authorized to the original construction documents. The progress report will also include photos of the work completed during the week. • Onsite progress meetings will be held with contractor and project partners on a weekly or bi-weekly basis, depending on pace of construction. • Construction staking will be coordinated with the contractor, with the assumption that HEI's survey crew will complete staking in 3 trips. • After construction activities are complete, HEI will provide an as-built survey and record drawings to SWWD for your records. • Prior to project acceptance and final payment, HEI will conduct a site visit with staff, project partners, and the contractor to create a final punch list of items needing completion prior to closeout. Subsequently, one final inspection will verify the completion of the punch list items prior to final payment. <u>Assumptions:</u> • Construction will be completed in a 14-week period. • Observation services assume 26 days at 6 hours per day onsite and documentation. • Three trips totaling 32 hours for construction staking. • One day trip for as-built survey. • Completion of record drawings locating critical site features. • Weekly progress reports will be provided as part of the observation services. • Eight (8) on site construction coordination meetings • One onsite punch list meeting and one final inspection. • 12 weeks of construction will occur in 2022 and 2 weeks in 2023. <u>Deliverables:</u> • Weekly observation services and progress reports • Final punch-list • Record drawings		
Task 2 Total (this task order):	**701**	**$118,300**

PART 3.0 OWNER'S RESPONSIBILITIES:

The estimated compensation for the completion of the tasks identified within *Scope of Services to be performed by Engineer on the Project* is based upon the following assumptions and owner responsibilities:

1. The OWNER will be responsible for all assumptions and client obligations as stated.
2. OWNER staff shall review and provide all written or oral comments concerning the draft work products in a timely manner allowing sufficient time for incorporation into the final work products:
    a. 90 % Plans and Specifications
3. The OWNER shall be responsible for landowner communication, meetings, and coordination.
4. The OWNER shall attend construction meetings and provide timely response to construction contracting items such as payments, change orders, and written questions.

PART 4.0 PERIODS OF SERVICE:

Initiating one or more tasks as described within *Scope of Services to be Performed by Engineer on the Project* occurs at the time of execution of this Task Order or written email notification by the OWNER. Work described within this Task Order shall be completed by December 31, 2023.

Anticipated Schedule for the time of completion of associated tasks:

Task		Completion Date
Phase 1		
	Task 1.1 -1.6	Complete
	Task 1.7 60% Design Stream Features	February/March, 2022
	Task 1.8 60% Design Bridge	February/March, 2022
	Task 1.9 Regulatory, Permitting, Environmental Coordination	June, 2022
Phase 2		
	Final Plans and Construction Documents	May, 2022
	Bidding/Contractor Contract	May/June, 2022
	Construction Management	July 2022 – Dec 2023

PART 5.0 PAYMENTS TO ENGINEER:

ENGINEER will perform the professional services identified within *Scope of Services to be Performed by Engineer on the Project* on a time and materials basis up to a maximum amount not-to-exceed **$118,300** (i.e., Total Compensation) for Phase 3 Task 2 of the Project. ENGINEER shall not exceed the Total Compensation during the completion of the tasks described within this Task Order without prior authorization from the OWNER's designated representative. ENGINEER reserves the right to move dollars across tasks, while remaining within/below the Total Compensation identified within this Task Order.

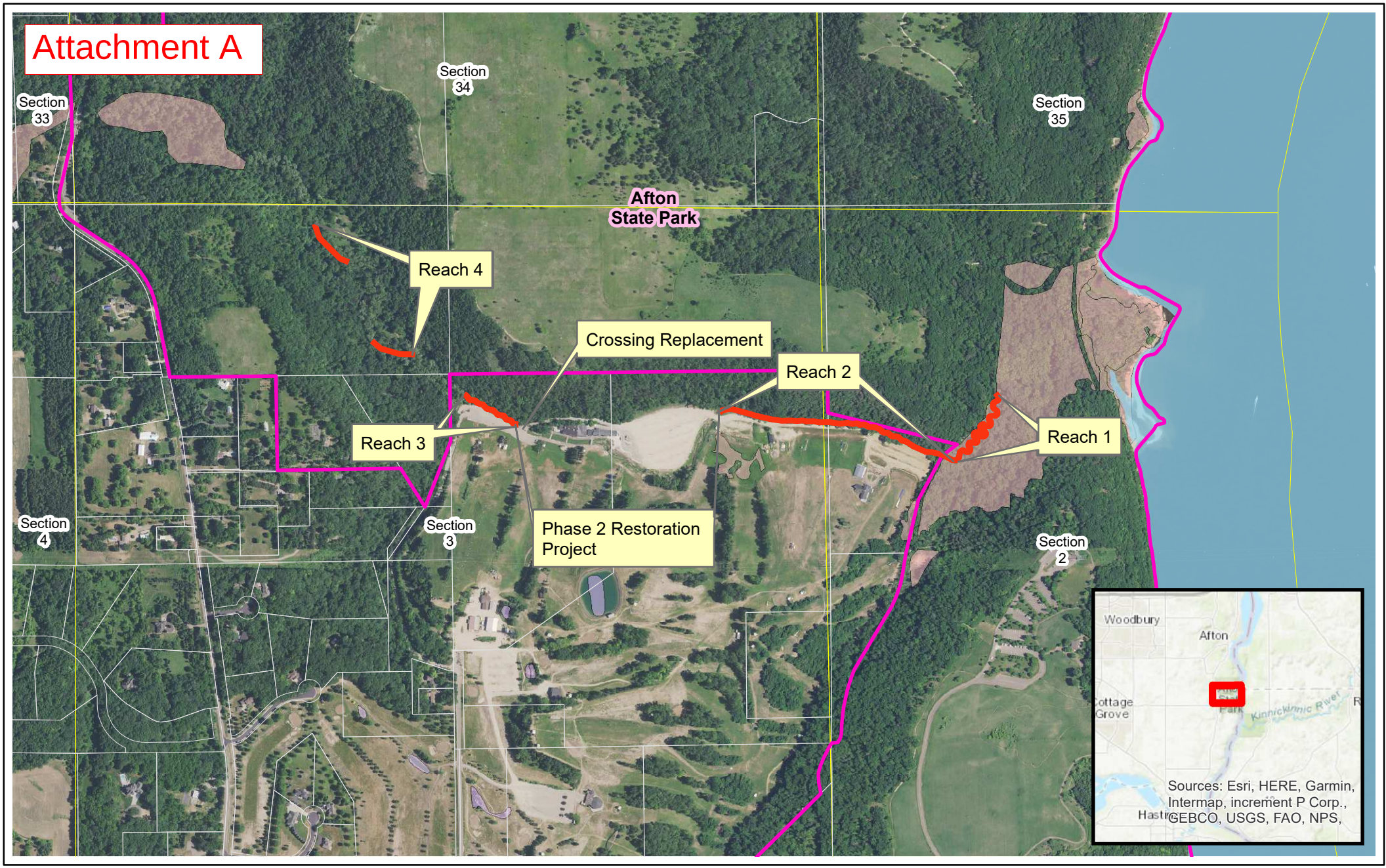
PART 6.0 OTHER:

OWNER's designated representative for this project is Mr. John Loomis. ENGINEER's designated representative for this project is Mr. Greg Bowles. The designated representative is responsible for the technical work executed under this Task Order.

PART 7.0 SIGNATURES:

This Task Order is executed this 9th day of February, 2022.

South Washington Watershed District "OWNER"		Houston Engineering, Inc. "ENGINEER"	
BY:		BY:	Barton A. Schultz
NAME:	Brian Johnson	NAME:	Bart Schultz, PE
TITLE:	Board President	TITLE:	Office Manager
ADDRESS:	2302 Tower Dr Woodbury, MN 55105	ADDRESS:	7550 Meridian Cir N, Suite 120 Maple Grove, MN 55369



Legend

- Project Location
- Afton State Park Boundary
- Parcels
- Sections
- Public Waters Basins
- Type 1, 2, 6, 7, and 8 Wetlands
- Type 3, 4, and 5 Wetlands

0 300 600 1,200 Feet

N W E S

South Washington Watershed District

South Washington Watershed District
Trout Brook Phase 3
Location Map

Scale:	Drawn by:	Checked by:	Project No.:	Date:	Sheet:
AS SHOWN	ESN	LDO	4876-0051	1/28/2022	1

Houston Engineering Inc.
Maple Grove
P: 763.493.4522
F: 763.493.5572

ATTACHMENT B

Trout Brook Phase 3 - Task 2

Prepared by: L. Odens
Date prepared: 1-28-2022
Checked by: G. Bowles

Estimated Total Cost: $118,319

		2022 Rate	$ 202.00	$ 184.00	$ 166.00	$ 146.00	$ 140.00	$ 170.00	$ 175.00	$ 97.00	$ 167.00	$ 197.00	$ 0.59	$ 0.79	$ 25.00				
		Total Hours	119.5	148.5	22.0	22.0	243.0	6.0	34.0	53.0	5.0	48.0	3,710.0	636.0	36.0	701.0			
TASK DESCRIPTION			**Engineer 10**	**Engineer 8**	**Engineer 6**	**Engineer 4**	**Engineer 3**	**Technician 10**	**Engineer 7 CAD**	**CAD Tech II**	**Scientist 5**	**2-Person Crew**	**Expenses Mileage Regular**	**Expenses Mileage Survey**	**Expenses GPS**	**Estimated hours**	**Cost Labor**	**Expenses**	**Estimated Cost**
Task 2: Final Design and Construction Management			**119.5**	**148.5**	**22.0**	**22.0**	**243.0**	**6.0**	**34.0**	**53.0**	**5.0**	**48.0**	**3710.0**	**636.0**	**36.0**	**701.0**	114749.0	$3,570	$118,319
Task 2.1 90% Design & Plans (Next Phase Stream and Culvert)			17.0	30.0	15.0	22.0	20.0	0.0	34.0	37.0	5.0	0.0	0.0	0.0	0.0	180.0	**27830**	**$0**	**$27,830**
		Cover Sheet								1.0						1.0	97.0	$0	$97
		Site Access and Staging Sheet		1.0					1.0							2	359.0	$0	$359
		Plan and Profile		2.0					16.0	12.0						30	4332.0	$0	$4,332
		Typical Cross Sections		1.0					2.0	2.0						5	728.0	$0	$728
		Detail Sheets								2.0						2	194.0	$0	$194
		Structural Sheets	1.0		6.0	16.0				12.0						35	4698.0	$0	$4,698
		Erosion Control Details								1.0						1	97.0	$0	$97
		SWPPP (2)	1.0							1.0						2	299.0	$0	$299
		Specifications	2.0	12.0	6.0	6.0	20.0		4.0							50	7984.0	$0	$7,984
		QAQC	6.0													6	1212.0	$0	$1,212
		Finalize Design Memorandum (cost estimate, basis of design)	1.0	6.0					2.0							9	1656.0	$0	$1,656
		Address comments from Stakeholders and Permitting (Update design and plans)	1.0	2.0					2.0	2.0	2.0					9	1448.0	$0	$1,448
		100% Final Plans	1.0	2.0					4.0	4.0						11	1658.0	$0	$1,658
		Virtual Stakeholder Meeting (Agenda and Notes)	1.0	1.0	1.0				1.0		1.0					5	894.0	$0	$894
		General Project Management	1.0	1.0												2	386.0	$0	$386
		Internal Team Meetings	2.0	2.0	2.0				2.0		2.0					10	1788.0	$0	$1,788
Task 2.2 Bidding			7.0	21.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.0	**5698**	**$0**	**$5,698**
		Advertisement for Bids by Posting to Quest.CDN		5.0												5.0	920.0	$0	$920
		Pre Bid Meeting (agenda, meeting, notes)(onsite)	3.0	8.0												11	2078.0	$0	$2,078
		Bidder Questions / Addendums	2.0	6.0												8	1508.0	$0	$1,508
		Bid Opening (virtual meeting)	1.0	1.0												2	386.0	$0	$386
		Bid tabulation and contractor selection memorandum	1.0	1.0			3.0									5	806.0	$0	$806
																0	0.0	$0	$0
Task 2.3 Contract Management			28.5	40.5	6.0	0.0	12.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	91.0	**16273**	**$0**	**$16,273**
		Contract Documents	1.0	4.0												5	938.0	$0	$938
		Review shop drawings	1.0	1.0	6.0											8	1382.0	$0	$1,382
		2 Change Orders, 2 Field Orders	2.0	6.0						4.0						12	1896.0	$0	$1,896
		Pre-construction meeting (Engineer and Inspector)	3.0	4.0			4.0									11	1902.0	$0	$1,902
		Processing Pay Requests (4 requests, include progress report)	4.0	8.0			8.0									20	3400.0	$0	$3,400
		Coordination with SWWD during construction (30 minutes per day for 14 weeks)	17.5	17.5												35	6755.0	$0	$6,755
																0	0.0	$0	$0
Task 2.4 Staking and Inspection			67.0	57.0	1.0	0.0	208.0	6.0	0.0	12.0	0.0	48.0	3710.0	636.0	36.0	399.0	**64948**	**$3,535**	**$68,483**
		Staking (assume 3 days of survey)	2.0					4.0				32.0		424.0	24.0	38	7388.0	$922	$8,310
		Part-Time Construction Observation (26 days on site; assuming 6 hours on-site + 2 hours driving	20.0	20.0			208.0						2756.0			248	36840.0	$1,598	$38,438
		Weekly construction meetings (8 meetings, 6 hours on-site + 2 hours driving)	36.0	36.0									848.0			72	13896.0	$492	$14,388
		Punch list site visit	8.0										106.0			8	1616.0	$61	$1,677
		As-built Survey						2.0				16.0		212.0	12.0	18	3492.0	$461	$3,953
		Record Drawings	1.0	1.0	1.0					12.0						15	1716.0	$0	$1,716
																0	0.0	$0	$0