

1. October 14, 2020 Town Council Agenda

Documents:

[101420TCA.COURTESY.REV.PDF](#)

2. October 14, 2020 Packet Materials

Documents:

[ITEM B1 - PROCLAMATION 2020-05 DOMESTIC VIOLENCE AWARENESS MONTH.PDF](#)

[ITEM B2 - BALANCED ROCK WATER TANK REMOVAL PROPOSAL.PDF](#)

[ITEM B3 - ZRC INDEPENDENT CONTRACTOR AGREEMENT.PDF](#)

[ITEM B4- SR-9 SIDEWALK PROJECT DESIGN ENGINEERING CONTRACT AWARD.PDF](#)



118 Lion Blvd PO Box 187 Springdale UT 84767 \* 435-772-3434 fax 435-772-3952

**AMENDED TOWN COUNCIL NOTICE AND AGENDA**

**THE SPRINGDALE TOWN COUNCIL WILL HOLD A REGULAR AN ELECTRONIC MEETING  
ON WEDNESDAY, OCTOBER 14, 2020**

~~ANCHOR LOCATION: THE CANYON COMMUNITY CENTER, 126 LION BLVD., SPRINGDALE, UTAH~~

**THE MEETING WILL BE BROADCAST VIA ZOOM AND BEGIN AT 5:00PM**

**This Council meeting will not have an anchor location and will be conducted entirely via electronic means.**

**Council members will connect remotely. The meeting will be available for live public viewing.**

**If you do not have access to the internet, you can join the audio via telephone.**

**\*\*Please see electronic login information below.**

**REGULAR MEETING:**

**Approval of the agenda**

**A. Announcements/Information**

1. General announcements
2. Zion National Park update – Superintendent Bradybaugh
3. Council Department reports
4. Community questions and comments

**B. Administrative Action Items**

1. Presentation and Proclamation 2020-05, establishing October 2020 as ‘Domestic Violence Awareness Month’ in the Town of Springdale - Tiffany Mower, Eastern Washington County Victim Advocate
2. Continued from September 9, 2020 – Discussion and possible action on a citizen-submitted proposal to remove ruins of the Balanced Rock Water tank on Town property – Al Tiley and Luke Wilson
3. Review and possible approval of an independent contractor agreement to fund a full-time coordinator position for the Zion Regional Collaborative
4. Bid award and contract approval for the SR-9 Sidewalk Design and Engineering Project (aka Tiley Hill sidewalk)
5. Discussion and possible action concerning the required use of face coverings in Springdale

**C. Administrative Non-Action Items**

1. General Council Discussion

**D. Consent Agenda**

1. Review of monthly invoices
2. Minutes: September 9<sup>th</sup>

**E. Adjourn**

Packet materials for agenda items are available on the Town website:  
<http://www.springdaletown.com/AgendaCenter/Town-Council-4>

*This notice is provided as a courtesy to the community and is not the official notice for this meeting/hearing. This notice is not required by town ordinance or policy. Failure of the Town to provide this notice or failure of a property owner, resident, or other interested party to receive this notice does not constitute a violation of the Town’s noticing requirements or policies.*

**\*\*Persons interested in accessing the meeting electronically can login using the following link:**

<https://us02web.zoom.us/j/83978705533?pwd=ZUU3OERaVDdUZHNRRXdyWmEyb1Q0QT09>

Meeting ID: 839 7870 5533  
 Passcode: S8VywP  
 One tap mobile  
 +16699009128,,83978705533#,,,,,0#,,789077# US (San Jose)  
 +12532158782,,83978705533#,,,,,0#,,789077# US (Tacoma)

Dial by your location  
 +1 346 248 7799 US (Houston)  
 +1 669 900 9128 US (San Jose)  
 +1 253 215 8782 US (Tacoma)

Meeting ID: 839 7870 5533  
 Passcode: 789077

*The Town of Springdale complies with the Americans with Disabilities Act by providing accommodations and auxiliary communicative aids and services for all those citizens in need of assistance. Persons requesting these accommodations for Town-sponsored public meetings, services, programs, or events should call Springdale Town Clerk Darci Carlson at 435-772-3434 at least 24 hours before the meeting.*



**PROCLAMATION 2020-05  
A PROCLAMATION OF THE SPRINGDALE TOWN COUNCIL ESTABLISHING  
OCTOBER 2020 AS DOMESTIC VIOLENCE AWARENESS MONTH**

**WHEREAS**, it is a basic human right to live a life free from violence and abuse; and

**WHEREAS**, domestic violence is a serious problem that occurs in all cultures and communities and does not discriminate by age, gender, social class, race, ethnicity, religious affiliation or sexual orientation; and

**WHEREAS**, one in three women and one in seven men in Utah will experience intimate partner violence in their lifetime; and that 60-75% of families with intimate partner violence have children who are also impacted by the violence; and

**WHEREAS**, seniors are also victims of domestic and sexual violence and are part of the most under-reported group, and

**WHEREAS**, domestic violence-related homicides account for over 40% of homicides in Utah; and 80 Utah children will witness the murder or attempted murder of their mother every year; and

**WHEREAS**, awareness and intentional collaboration are required to find solutions to abuse and intimate partner violence; and

**WHEREAS**, it is the role of local government to provide for the health, safety, and welfare of its citizens; and

**NOW THEREFORE** I, Stanley J. Smith, Mayor of the Town of Springdale, Utah, in partnership with DOVE Center, do hereby proclaim October as:

**DOMESTIC VIOLENCE AWARENESS MONTH**

in the Town of Springdale, we urge all residents to use October as Domestic Violence Awareness Month to learn how they can break the silence and end domestic violence in our community.

IN WITNESS WHEREOF, I have hereunto set my hand and caused to be affixed the Seal of the Town of Springdale, Utah this 14<sup>th</sup> day of October, 2020.

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Stanley J. Smith, Mayor

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Attest: Darci Carlson, Town Clerk



**Memorandum**

**To:** Town Council  
**From:** Thomas Dansie, Director of Community Development  
**Date:** **October 8, 2020**  
**Re:** **October 14, 2020 Town Council Meeting**  
**Water Tank Removal Proposal, Continued from September – Al Tiley and Luke Wilson**

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**Executive Summary**

In the last meeting the Council reviewed a citizen proposal to remove the decommissioned water tank and associated water lines on the landslide property near the Balanced Rock Hill subdivision. Two private citizens (Al Tiley and Luke Wilson) would contribute half the removal costs—the Town was requested to contribute the other half (\$11,000).

The Council expressed interest in having the tank removed, as well as concern over the potential impacts of removing the infrastructure on slope stability. The Council requested more information and professional analysis about the impact of removing the tank and water lines. Luke Wilson has provided opinion letters from two different geotechnical consultants regarding the project. Both state the tank can be safely removed from the property.

The Council needs to decide:

- 1- Whether or not to grant Luke Wilson access to the Town's water tank property to remove the decommissioned tank, and
- 2- Whether or not to participate in the costs to remove the tank (\$11,000).

**Background**

Sometime prior to 1992 the Town installed a concrete municipal water tank on the hillside above SR-9 in the vicinity of the Cliffrose Lodge. The tank was damaged beyond repair in the 1992 earthquake-triggered Springdale landslide. Since that time the remains of the tank and exposed pipes have been largely untouched.

The decommissioned water tank and pipes are unsightly and could present safety hazards.

Both Al Tiley and Luke Wilson have an interest in removing the remains of the water tank. The remains of the tank are a visual nuisance for Al Tiley. Luke Wilson owns the property surrounding the water tank and would like the tank removed.

Because removing the tank is a benefit to Mr. Wilson, he has offered to provide the equipment and labor to remove the tank at his cost. Mr. Wilson estimates his hard costs as a contractor will be \$22,000 to remove the tank. Mr. Tiley and Mr. Wilson have both offered to cover one-quarter of these hard costs (\$5,500 each). Mr. Tiley is requesting the Town to pay the remaining \$11,000 of the hard costs to remove the water tank.

The Council reviewed this item in September. At that time the Council expressed concern about slope failure, rockfall, and other potential hazards that could be triggered by the removal of the infrastructure. The Council requested additional analysis of the removal project from experts. Mr. Wilson has

submitted two opinion letters from geotechnical consultants (attached to this report). Both letters suggest the tank can be safely removed from the property, subject to following safety precautions to reduce the potential for accidental rockfall onto SR9 during the removal process.

The Council should review these opinion letters and determine if they provide enough information for the Council to make a decision on the proposal.



### **Summary**

The Council needs to determine whether or not to:

- 1) Allow removal of the water tank from the Town's property, and
- 2) Contribute \$11,000 to the costs of removing the tank.

Because the Town has not budgeted funds for the tank removal, if the Council decides to participate in removing the tank the Town will need to pass a budget amendment in a future meeting making these funds available.



September 23, 2020

Luke Wilson  
749 South 990 West  
Hurricane, UT 84737

Subject: Town of Springdale Water Tank and Pipeline Removal  
Landmark Project No. 20705

Luke:

We understand that the Town of Springdale has expressed concerns about removal of the existing, abandoned water tank and metal water line located at the crest of the existing Springdale landslide. Landmark was asked to address these concerns. No field investigation or landslide analysis was requested for this letter. Our opinions are based on our experience and knowledge of the project area.

#### **Proposed Activities**

It is our understanding that the abandoned concrete water tank located at 37.1973 North and 112.9930 West and the associated metal water pipeline descending from the water tank to Zion Park Boulevard is proposed to be removed. The site is west of the Tribal Arts Zion store located at 291 Zion Park Boulevard in Springdale, UT. It is our understanding that the water tank and water line have been abandoned since movement of the landslide in the 1992 earthquake. The water tank is approximately 65 to 70 feet from the crest of the slope of the landslide face.

We understand that removal of the water tank will require a trackhoe to break up the concrete tank and debris will be loaded into a dump truck to haul debris offsite. We understand that removal of the water line will be done by chaining sections of the water line pipe to a trackhoe, which will be at the top of the slope, and pulling the pipe up to where it will be dismantled and loaded for disposal.

#### **Geologic Conditions**

The water tank is at the east crest and the water line on the east slope of the Springdale (Balanced Rock) landslide and is still considered active. The site consists of native silty sand underlain by cobbles and boulders in excess of 3-feet in diameter. The site is underlain by lean to fat clay of the Petrified Forest Member of the Chinle Formation. The Petrified Forest Member is the basal unit upon which the landslide moved.

The Utah Department of Transportation recently completed an evaluation of cuts for retaining walls associated with widening of SR-9 where the landslide previously encroached onto SR-9. Their report indicates that the toe of the failure plane daylights at the base of the slope and does not extend under SR-9.

UDOT completed three borings along the toe of the landslide and suggested that the landslide failure plane is within the Moenave Formation and not at the contact with the Chinle Formation. Therefore, at the toe of the landslide the failure plane becomes somewhat horizontal and generally coincides with the toe of the slope.

It is our understanding that monitoring of the landslide has shown minimal movement since 1992. It is our opinion that removal of the water tank and pipeline will not cause destabilization of the landslide upon which it is founded. The removal of the concrete water tank structure will decrease the load at the top of the landslide thus decreasing the potential of movement of the landslide. We do not anticipate that the temporary load of the trackhoe and dump truck during removal of the tank and pipeline will result in mobilization of the landside mass.

**Removal Considerations**

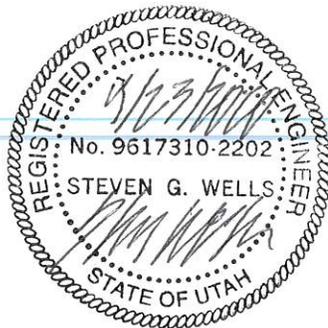
We recommend that the trackhoe and dump truck remain on the west side of the water tank during demolition and removal. During removal of the pipeline, we recommend that up to 20-foot sections be removed at a time. Any embedded section of the pipeline near the toe of the landslide should not be removed or pulled out of the soil slope. Embedded sections should be cut at the point of embedment and left in place. Removal of the pipeline may cause rockfall and sloughing of loose, surficial soil along the slope. Zion Park Blvd should be closed off to traffic within the affected area during removal of the pipeline to protect the public from any sloughing debris or minor rockfall. Consideration should be given to performing this work between the hours of 11pm and 6am or when deemed to have the least amount of traffic.

If you have any questions do not hesitate to call.

Sincerely,

**LANDMARK TESTING & ENGINEERING**

Steven Wells, PE  
Geotechnical Manager





**GEOTECHNICAL TESTING SERVICES, INC.**  
735 East Tabernacle Street; St. George, UT 84770  
(435) 628-9536 (435) 628-9589 – fax

October 5, 2020

Mr. Luke Wilson  
L. J. Wilson Inc.  
749 South 990 West Street  
Hurricane, UT 84737

**Subject:** Impact of Abandoned Water Tank Removal  
Tax Parcel Number S-134  
North of 358 Zion Park Blvd  
Springdale, Utah  
Project Number 12349

Dear Mr. Wilson:

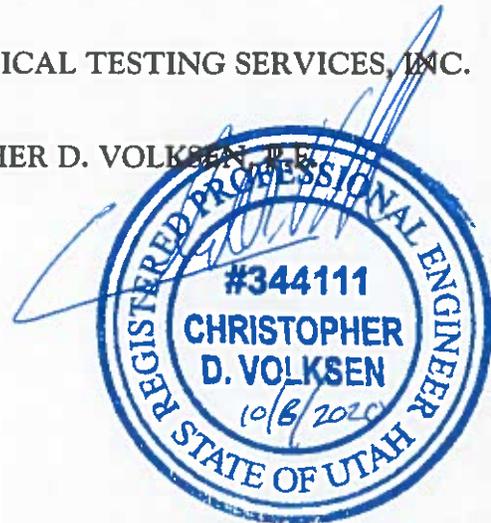
As requested, we are providing this letter for your submittal to the City of Springdale for their subsequent approval. It is our understanding that you wish to remove the abandoned concrete water tank located on the above noted parcel. We understand that the tank moved and was destroyed during the Balanced Rock Landslide event that occurred in 1992 during an earthquake. The City of Springdale is worried that removal of the tank might cause an overall instability of the slide. It is our opinion based upon the size of the landslide and the relative size of the water tank, the removal of the tank will not affect the stability of the slide. We recommend that the tank be removed from the up-hill side of the tank and no additional soil should be removed with the tank.

Thank you for using our services on this project, please call if there is any questions or additional information is needed.

**GEOTECHNICAL TESTING SERVICES, INC.**

**CHRISTOPHER D. VOLKSEN, P.E.**  
President

12349 - Water Tank Removal.wpd





**Memorandum**

**To:** Town Council  
**From:** Thomas Dansie, Director of Community Development  
**Date:** **October 9, 2020**  
**Re:** **October 14, 2020 Town Council Meeting**  
**ZRC Independent Contractor Agreement**

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**Executive Summary**

The Town is a principal participant in and contributor to the Zion Regional Collaborative (ZRC). In order to make the ZRC more effective and sustainable, the members of the ZRC have proposed hiring an independent contractor to serve as full-time coordinator.

Costs to hire the independent contractor are proposed to be shared among six member agencies: Washington County, Hurricane, La Verkin, Rockville, Zion Forever Project, and Springdale. The attached independent contractor agreement establishes the ZRC coordinator position, and commits the Town \$10,000 to help fund the position.

Staff recommends the Council approve the independent contractor agreement and authorize the Mayor to sign.

**Background and Analysis**

The Town of Springdale has played a key role in regional planning efforts in Zion Canyon. Regional planning and coordination benefits the Town, as many of the key issues the Town faces are best addressed regionally (transportation, visitation management, natural resource protection, etc.). Regional planning and coordination also allows the Town to develop networks and relationships that will return benefits to the Town.

The Town began formal regional planning efforts by helping organize and facilitate the Zion Canyon Coordinating Council (ZC3) in 2007. That regional group was active until 2015 when the Zion Regional Collaborative (ZRC) was formed as a successor to the ZC3. The Town provided funding, in kind assistance, and technical expertise to ensure the ZRC was well organized, and continues to contribute to the group's success.

ZC3 and ZRC regional planning success include:

- **National Scenic Byway program** – Corridor Management Plan, Interpretive Plan, and Scenic Byway Nomination for SR9.
- **Transit** – Rural Transit Feasibility Study, successful advocacy with UDOT to ensure \$10 million in recreation hotspot funding which has been directed to rural transit.
- **Regional Trail** – Feasibility study and ongoing progress toward developing a multi-use trail from La Verkin to Springdale.
- **Regional App** – Development of an app designed to give visitors to Zion information to plan their visit and reduce impacts on the surrounding communities.
- **Dispersed Camping Coordination** – Work with the BLM and other entities to develop a plan for regulation of dispersed camping on public lands in the region.

- **Studies** – A variety of studies addressing regional issues: Utah Geologic Survey Natural Hazards Study for SR9, Zion Corridor Futures Study, Virgin River Study and Best Practices Toolkit.
- **Increased communication and collaboration between ZC3 / ZRC member agencies.**

In order to build on these successes and help the ZRC become more sustainable and effective, ZRC members have proposed hiring an independent contractor to serve as full-time ZRC coordinator. The coordinator will facilitate ZRC workshops, advance ZRC projects and planning initiatives, participate in grant writing and other fundraising activities, and generally promote the objectives of the ZRC (which are primarily to promote more communication and collaboration between regional entities regarding regional issues).

The attached independent contractor agreement will establish the independent contractor position, and commit the Town to \$10,000 in funding for the contractor position. These funds are already budgeted for in the current budget. Other entities contributing to the position are: Hurricane (\$10,000), Washington County (\$9,500), Zion Forever Project (\$6,500), La Verkin (\$5,000), and Rockville (\$1,500). Funding amounts were determined based on an organization's ability and willingness to contribute to the position. One of the primary tasks for the contractor will be moving the ZRC toward a more organized and formal organization, including a more structure manner of determining ongoing cost sharing.

### **Summary**

The Town has participated in regional planning efforts for many years. These efforts bring benefits to the Town, and to the region. In order to advance more effective regional planning, staff recommends the Council approve the independent contractor agreement and authorize the Mayor to sign.

**Independent Contractor Agreement**  
Zion Regional Collaborative Coordinator

This INDEPENDENT CONTRACTOR AGREEMENT (“Agreement”) has an effective date of November 1, 2020 (the “Effective Date”) and is entered by and between \_\_\_\_\_, an individual (the “Coordinator”), and the following entities that will be collectively referred to in this Agreement as the “Clients”: **City of Hurricane**, a Utah municipal corporation (“Hurricane”); **City of La Verkin**, a Utah municipal corporation (“La Verkin”); **Town of Rockville**, a Utah municipal corporation (“Rockville”); **Town of Springdale**, a Utah municipal corporation (“Springdale”); **Washington County**, a political subdivision of the State of Utah (“Washington County”); and Zion Natural History Association, a Utah non-profit corporation doing business as **Zion Forever Project** (“Zion Forever Project”). The Coordinator and the Clients are referred to in this Agreement as the “Parties.”

**RECITALS**

A. The Zion Regional Collaborative (“ZRC”) is an informal association of municipalities, public land management agencies, state agencies, and other interested parties that provides regional planning and coordination in the Zion Canyon area;

B. The Clients actively participate in the ZRC, and they recognize ZRC’s value in promoting effective communication, addressing regional challenges, and developing regionally beneficial projects; and

C. The Clients have determined that the ZRC would be best served by engaging a ZRC coordinator who could serve as an independent contractor; and

D. The ZRC’s coordinating council approved this course of action during a June 2020 ZRC workshop; and

E. The Parties to this Agreement believe an independent contractor position would maintain the independence and sustainability of the ZRC; and

F. The Clients would like to engage the Coordinator to provide project management, workshop coordination, facilitation of regional communication, and other associated services under the terms and conditions of this Agreement; and

G. The Coordinator has the expertise, experience, and training to provide the services required under this Agreement; and

H. The Coordinator is willing to provide project management, workshop coordination, facilitation of regional communication, and other associated services under the terms and conditions of this Agreement.

## AGREEMENT TERMS

The Coordinator and the Clients agree to the following terms:

1. Independent Coordinator. Subject to the terms and conditions of this Agreement, the Clients hereby engage Coordinator as an independent Coordinator to perform the services identified in Section 2, and Coordinator hereby accepts this engagement. The “Term” of this Agreement begins on November 1, 2020 and ends on October 31, 2021, unless this Agreement is terminated earlier in accordance with its terms.

2. Coordinator’s Services. During the Term of this Agreement, Coordinator shall provide the following services (hereafter the “Services”):

a. Promote efforts that enhance or protect the Zion region’s assets, which include, but are not limited to community character and quality of life, economic vitality, quality of visitor experience, environmental well-being, natural assets, and scenic qualities, recreational opportunities, and historical, cultural, or archeological assets;

b. Coordinate communication among agencies and organizations regarding all projects and efforts of the ZRC and cooperate with state, federal, local governments, as well as private landowners and organizations to implement the purposes and goals of the ZRC coordinating council as broadly established in the ZRC’s Purpose and Protocols document, determined yearly as part of the Coordinator Work Plan, and/or defined by a consensus of the ZRC coordinating council during workshops;

c. Manage projects as directed by the ZRC, including but not limited to design and construction of the proposed regional, multi-use trail and development of the regional mobile application;

d. Strategic planning for the ZRC;

e. All of the scope of services outlined in **Exhibit A** to this Agreement;

f. Report monthly to the ZRC guiding subcommittee concerning progress on projects and Workshops and follow up with individuals who were not able to attend the Progress Check within one week; and

g. Additional projects at the request of the ZRC coordinating council.

3. Compensation. Coordinator’s monthly compensation for Services rendered during the Term of this Agreement shall be \$3,541.67. Compensation will be paid in accordance with this Section 3. Coordinator must submit a monthly invoice to Springdale for past Services rendered under this Agreement. Invoices will be submitted by the 15th of each month. Within 10 days of receipt of a timely monthly invoice for services rendered during the Term, Springdale will issue

payment of \$3,541.67 to Coordinator. If this Agreement is terminated early, Springdale will issue only a partial payment on a pro rata basis based on the number of days in the month the Agreement is terminated.

4. Travel and Reimbursement. The Coordinator will cover all costs of the Coordinator's transportation. The Clients will not compensate the Coordinator with any mileage reimbursement. Coordinator is not expected to contribute to supply costs of ZRC workshops or meetings. If Coordinator wishes to incur an expense related to the services, Coordinator must obtain prior approval of the expenditure from the ZRC. To obtain a reimbursement, the Coordinator shall submit documentation for the approval of the expenditure and a receipt, and Springdale will issue a reimbursement check to the Coordinator. The Clients agree to share equally in the cost of reimbursements paid under this Section 4.

5. Termination. This Agreement may be terminated upon any of the following grounds:

- a. Three or more of the Clients vote to terminate the Agreement;
- b. Death of Coordinator;
- c. Coordinator is unable to perform the Services because of a physical or mental disability;
- d. Coordinator fails to cure any breach of this Agreement within 10 days of receipt of written notice by one of the Clients to cure such breach; and
- e. An event or circumstance that is outside the control of the Parties prevents the Coordinator from performing the obligations of this Agreement

6. Coordinator's Status; Nonexclusive Contract. The Coordinator is an independent contractor. The Coordinator is not an agent of the Clients or any of the organizations who participate in the ZRC. The Coordinator shall not enter into any contract that has the effect of creating any obligation for any of the Parties. The Coordinator may undertake other employment during the Term of this Agreement only if that employment does not interfere with the Coordinator's Services provided under this Agreement. The Coordinator shall act in good faith in accepting employment that could overlap with the responsibilities and geographic area of this contract.

7. Contributions for Coordinator's Compensation. The Clients agree to share in the cost of the Coordinator's compensation in accordance with the following schedule:

<u>Participating Entity</u>	<u>Quarterly Contribution</u>	<u>Total Contribution</u>
Hurricane	\$2,500	\$10,000
La Verkin	\$1,250	\$5,000
Rockville	\$375	\$1,500
Springdale	\$2,500	\$10,000
Washington County	\$2,375	\$9,500
Zion Forever Project	\$1,625	\$6,500

These parties shall submit the quarterly contribution specified above to the Town of Springdale on or before December 1, 2020, March 1, 2021, June 1, 2021, and September 1, 2021. Alternatively, these parties may remit the total contribution to Springdale in one payment that must be received on or before December 1, 2020.

8. Nature of Independent Contractor Relationship. The Parties expressly acknowledge and agree to the following:

- a. The Clients and ZRC are entitled to all of the benefits arising from or incident to the Services performed by Coordinator under this Agreement;
- b. The Clients will not control the manner, means, or methods of the Services provided under this Agreement; and
- c. Coordinator will use Coordinator's best efforts to provide the Services to the satisfaction of the Clients and the ZRC.

9. Contractor's Payment of Taxes, Insurance, and other Expenses. Because the Coordinator is engaged on an independent contractor basis, and not as an employee, the Clients will not offer Coordinator any benefits, including medical insurance, unemployment insurance, worker's compensation insurance, dental insurance, or any other benefit offered. Additionally, the Clients will not pay any federal, state, or local taxes in connection with any amounts paid to Coordinator for the performance of the Services under this Agreement. Coordinator shall be responsible for the payment of all taxes payable with respect to all amounts paid to Coordinator under this Agreement. Coordinator shall assume all responsibility for payment of all federal, state, and local taxes or contributions imposed or required under unemployment insurance, social security and income tax laws.

10. Modifications. A modification of, or amendment to, any provision contained in this Agreement will be effective only if the modification or amendment is in writing and signed by the Parties. Any oral representation or modification concerning this Agreement shall be of no force or effect.

11. Assignment and Subcontracting. Coordinator shall not assign or subcontract any duties or responsibilities under this Agreement. Any attempted assignment of this Agreement is void.

12. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Utah and none other.

13. Waiver. No waiver of any provision of this Agreement shall be effective unless it is in the form of a writing. No waiver of any provision or consent to any prohibited action shall constitute a waiver of any other provision or consent to any other prohibited action.

14. Attorney's Fees and Costs. In the event that any legal action is filed to enforce the terms of this Agreement, the prevailing party shall be entitled to an award of costs and attorneys' fees from the non-prevailing party.

15. Segregation. In the event one or more of the provisions of this Agreement is, for any reason, held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions of this Agreement, and this Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

16. Further Assurances. Each Party hereto agrees upon request to execute in a timely manner any further documents or instruments reasonably necessary or desirable to carry out the purposes or intent of this Agreement.

17. Entire Agreement. This Agreement constitutes the entire understanding and agreement between the Parties with regard to the specific subject matter hereof, and no Party shall be liable or bound by any representation, warranty, covenant or agreement except as specifically set forth herein. Any previous agreement (whether written, oral or implied) among the Parties relative to the specific subject matter hereof is superseded by this Agreement.

18. Counterparts. This Agreement may be executed in counterparts, by original or facsimile signature, each of which will be considered an original.

**Town of Springdale**

**Town of Rockville**

\_\_\_\_\_  
Mayor Stanley Smith

\_\_\_\_\_  
Mayor Pam Leach

\_\_\_\_\_  
Attest

\_\_\_\_\_  
Attest

**City of Hurricane**

**City of La Verkin**

\_\_\_\_\_  
Mayor John Bramall

\_\_\_\_\_  
Mayor Richard M. Hirschi

\_\_\_\_\_  
Attest

\_\_\_\_\_  
Attest

**Washington County**

**Zion Natural History Association**, a Utah  
non-profit corporation

\_\_\_\_\_  
Victor Iverson, Chair  
Washington County Commission

\_\_\_\_\_  
By:  
Its:

\_\_\_\_\_  
Attest

## **EXHIBIT A SCOPE OF WORK**

### **Priority Projects**

1. *Evaluate 501(c)(3) non-profit designation as a potential structure for the ZRC.*
  - a. Consult with stakeholders about the value of 501(c)(3) designation; facilitate discussions during ZRC Workshops.
  - b. Complete steps to establish designation, if this course of action is approved by ZRC stakeholders.
2. *Facilitate communication between regional stakeholders and the Greater Zion Mobile Application development team.*
  - a. Collect feedback from stakeholders regarding desired app content.
  - b. Attend App Meetings in order to communicate stakeholder feedback to developers and provide app updates to stakeholders.
  - c. Facilitate data-sharing between app developers and stakeholders.
  - d. Assist the Regional App in securing development and maintenance funding.
3. *Collaborate with regional stakeholders in developing a regional recreational plan.*
  - a. Determine the ideal format for regional recreational planning.
  - b. Identify goals of regional recreational planning.
  - c. Evaluate financial or material needs with regards to regional recreational planning. If financial or material needs have not been met, work to secure funds and/or supplies.
  - d. Communicate progress regularly to regional stakeholders and ZRC members; facilitate coordination between entities.
4. *Help implement the 2020 Regional Multi-Use Trail Feasibility Study.*
  - a. Analyze the Trail Feasibility Study and determine next-steps.
  - b. Identify funding resources.
  - c. Apply to 4+ grants.
5. *Investigate opportunities to expand the positive impacts of the Zion Scenic Byway.*
  - a. Review the Zion Scenic Byway Interpretive Plan and identify potential projects.
  - b. Apply for grants to fund projects along the Byway.
  - c. Coordinate with local agencies and organizations to promote the Byway.

### **Ongoing Tasks and Concerns**

1. Engage all stakeholders whose actions could have potentially significant impacts on the region, or who may themselves be significantly impacted by what occurs in the region.
2. Design ZRC Workshops efficiently, plan them appropriately, and host them consistently.
3. Conduct effective public outreach.
4. Facilitate communication amongst stakeholders.
5. Support stakeholders' efforts concerning area beautification, community improvement, and visitor education.
6. Support the implementation of a St. George to Zion Public Transit System. Facilitate coordination and communication.

7. Engage with transit planning on the East Side of Zion National Park. Facilitate coordination and communication.
8. Support stakeholders' efforts to diversify the area's economy (industry type, visitor type, geographic spread, etc.) and increase its economic vitality.
9. Support stakeholders' efforts to sustainably manage and conserve the area's natural, cultural, and recreational resources and values.



**Memorandum**

**To:** Town Council  
**From:** Thomas Dansie, Director of Community Development  
**Date:** October 9, 2020  
**Re:** October 14, 2020 Town Council Meeting  
SR9 Sidewalk Project – Contract Award for Design Engineering

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**Executive Summary**

The Town desires to install sidewalk on the west side of SR9, from Hoodoo's Market to the Best Western hotel. This project will require detailed design and engineering due to the steep slopes adjacent to the project area. The Town issued an RFP to select a consultant to perform the design and engineering for the project.

The RFP selection committee recommends the Council select Alpha Engineering to perform the design and Engineering for the project. Alpha's cost to perform the design is \$23,030.

Staff recommends the Council select Alpha Engineering to perform the design work, and authorize the Mayor to enter into a contract with Alpha (attached) to perform the work.

**Note**

The contract includes design services, as well as bidding and construction engineering services. Staff recommends the Council only commit to design engineering (\$23,030) at this point. The Town can elect to engage the consultant for bidding and construction engineering as needed at a later date.



43 South 100 East, Suite 100 T 435.628.6500  
St George, Utah 84770 F 435.628.6553

alphaengineering.com

October 6, 2020

Town of Springdale  
c/o Tom Dansie  
PO Box 187  
118 Lion Boulevard  
Springdale, Utah 84767

**Re: Agreement to Provide Professional Civil Engineering Services for the Springdale SR9 Sidewalk Design and Engineering Project**

Dear Tom,

Alpha Engineering is pleased to submit this agreement to provide professional civil engineering services for the Springdale SR9 Sidewalk Design and Engineering Project. We look forward to working together with you as a team to improve access and walkability in the Town of Springdale.

Outlined on the following pages is our proposed agreement and scope of work to provide professional civil engineering services and the associated costs. In addition, we have provided construction management costs, if desired. We appreciate the opportunity to work with you on this project. Please let us know if you have any questions regarding this proposal.

Sincerely,

A handwritten signature in blue ink that reads "Brent E. Gardner".

Brent E. Gardner, P.E.  
Alpha Engineering Company

Attachments: Agreement



43 South 100 East, Suite 100 T 435.628.6500  
St George, Utah 84770 F 435.628.6553

alphaengineering.com

**ENGINEERING SERVICES AGREEMENT  
FOR PRELIMINARY DESIGN ENGINEERING**

**BETWEEN THE  
TOWN OF SPRINGDALE  
AND  
ALPHA ENGINEERING COMPANY**

**SPRINGDALE SR9 SIDEWALK DESIGN AND ENGINEERING PROJECT**

This AGREEMENT made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2020 by and BETWEEN the OWNER:

Town of Springdale  
PO Box 187  
118 Lion Boulevard  
Springdale, Utah 84767

Hereinafter referred to as the OWNER, and the ENGINEER:

Alpha Engineering Company  
43 South 100 East, Suite 100  
St. George, Utah 84770

Hereinafter referred to as the ENGINEER.

Witnesseth:

WHEREAS, the OWNER is desirous of placing sidewalk along the west side of SR9 from the Best Western Hotel property to the Hoodoo Market property, including retaining walls and,

WHEREAS, the ENGINEER is professionally qualified and able to assist the OWNER in the civil design and construction engineering of said sidewalk design and retaining wall design.

NOW THEREFORE, the parties hereto, each in consideration of the covenants set forth, do agree to the terms and conditions as hereinafter enumerated:

## ARTICLE 1

### DESIGN ENGINEERING SCOPE OF WORK

The general extent of design engineering work to be performed is outlined as follows:

- 1.1 Existing Conditions and Topographic Survey.** The ENGINEER will provide a detailed site survey of the sidewalk alignment and adjacent hillside. The survey will include location of UDOT right of way, irrigation ditch, curb, signage, parking meters and utilities along the alignment. In addition, the existing driveway on the south end of the alignment will be surveyed. The ENGINEER will survey with a combination of drone aerial survey equipment, GPS, and Robotic Total Station survey equipment.
- 1.2 Plan and Profile Drawings.** The ENGINEER will prepare plan and profile drawings for the sidewalk from data collected in Task 1.1. Plan and profile drawings will also include cross sections at sufficient intervals to determine the location and height of retaining walls necessary to accommodate the width of sidewalk selected and avoid existing utility infrastructure. The sidewalk will be initially designed to accommodate an 8-foot width unless it is determined that a smaller width sidewalk of 6 feet would substantially reduce costs related to retaining walls. Sidewalk layout will be coordinated with the Town of Springdale
- 1.3 Geotechnical Investigation.** A geotechnical investigation for the retaining structures will be conducted by Landmark Testing and Engineering to provide data for design as follows:

#### **Task 1 - Geotechnical Investigation**

Landmark will perform reconnaissance of the hillside, investigate retained slope soils, and investigate subgrade soils upon which the sidewalk will be constructed. The slope of the hillside at various locations and signs of landslide distress will be recorded. It is proposed to excavate two (2) test pits in locations at which retaining structures are to be constructed. Representative soil samples will be retained from the test pits, including relatively undisturbed samples using a hand sampler. If cohesive soils exist in the test pits, a pocket vane shear tester will be used to determine the estimated cohesion of the soil.

#### **Task 2 - Laboratory Testing**

Laboratory testing will be performed on soil samples retained from the site investigation to evaluate soil properties and to provide data for wall designs. Testing will include the following items:

- 1) Mechanical gradations and Atterberg Limits to assist in soil classification and for correlations with design parameters.
- 2) Unit weight and moisture content of relatively undisturbed samples.
- 3) Moisture density relationship (proctor).

#### **Task 3 - Geotechnical Investigation Report**

A final report will be issued to include the following:

- 1) Description of surface conditions encountered.
- 2) Geologic setting, geologic hazards, and seismic design parameters.

- 3) Results of laboratory tests including soil classifications, unit weights, and moisture contents.
- 4) Earthwork recommendations for sidewalk subgrade including excavation requirements, use of on-site materials, earthwork specifications, and compaction requirements.
- 5) Engineered concrete block wall analysis to determine whether adequate resistance can be provided for.
- 6) Lateral earth pressures for on-site and imported material including, active, at- rest, passive and coefficient of sliding friction. Coefficients will be also be provided for seismic loading for use in all wall designs.
- 7) Cut and fill slope recommendations.

**1.4 Retaining Wall Design.** Upon completion of the geotechnical investigation and review of the recommendations, the ENGINEER will meet with the Town and UDOT to discuss types of retaining walls that could be used to accommodate the existing soils conditions and their associated costs. These could include reinforced concrete, pre-cast block material, post and panel design, and possibly rock gabion structures. Detailed cross sections, details, and wall elevations will be provided and incorporated into the construction drawings. In addition, drainage will be evaluated specific to the wall design to ensure that the Town can easily access and maintain the walls. Drainage features such as waterways and inlet boxes and piping will be designed to protect the walls and facilitate maintenance.

**1.5 Right of Way.** After preliminary design is completed, the ENGINEER will determine if additional right of way may be required to allow construction of the desired design. We will coordinate additional right of way needs with the Town of Springdale and legal descriptions will be prepared for any additional right of way required for construction of the project

**1.6 Construction Plans and Specifications.** Construction drawings and project specifications will be prepared for the sidewalk and retaining walls. Construction drawings will include detailed grading, plan and profile drawings, cross sections, and details necessary for the sidewalk and retaining wall construction. The Construction drawings will address routing the walk around necessary objects such as streetlights and transformers. We understand the Town will relocate the parking meters once the construction is completed. Additionally, the private driveway will be evaluated and a designed that both provides for a walkway that meets the Town Code and Standards and minimizes impact to the private property owner.

**1.7 Town & UDOT Coordination.** The Construction drawings will be reviewed in-house to ensure compliance with the Town of Springdale Code and Construction Standards. Upon completion of our in-house review, plans and specifications will be provided to the Town for review. Any comments received from the Town will be addressed in the Construction documents. Upon completion of design work and coordination with the Town of Springdale, we will coordinate the design with UDOT. Any comments received from UDOT will be reviewed with the Town and addressed.

**1.8 Revisions.** After receiving comments from the OWNER and UDOT, the ENGINEER will modify the drawings, specifications, and contract documents to meet the reasonable requirements of the approving agencies.

## ARTICLE II

### CONSTRUCTION ENGINEERING

If desired the ENGINEER proposes to provide the following as it relates to construction engineering and management of the project:

- 2.1 Bid Advertisement.** The ENGINEER will prepare for the OWNER an Advertisement for Installation Bid for the project. The ENGINEER will also provide copies of the drawings, specifications, and contract documents required by prospective bidders and other interested parties but may charge for the actual cost of such copies.
- 2.2 Pre-Bid Meeting.** The ENGINEER will invite all potential bidders and conduct a pre-bid meeting. Elements of the contract will be discussed and presented to potential bidders to aid them in preparation of their bids.
- 2.3 Bid Opening.** The ENGINEER will attend the bid opening and tabulate the bid proposals and shall make an analysis of the bids and make recommendations for awarding contracts for construction.
- 2.4 Contract Award.** Upon award of the Contract, the ENGINEER will furnish to the OWNER, five (5) sets of contract plans and specifications for execution of the contract.
- 2.5 Preconstruction Conference.** The ENGINEER shall provide notification for and conduct a Preconstruction Conference for the project prior to beginning work. Invitations to the Preconstruction Conference shall be issued to the OWNER, Contractor, and others having specific interest in the project.
- 2.6 Weekly Construction Meetings.** The ENGINEER shall provide notification for and conduct a weekly construction meeting for the project. A site report and minutes will be provided to the contractor and OWNER each week.
- 2.7 Construction Staking.** The ENGINEER will provide construction staking for the project including excavation and fill limit and slope stakes, alignment, and retaining wall limits.
- 2.8 Contractor Partial Payments.** The ENGINEER will review the Contractor's applications for progress and final payment and, when approved, submit the same to the OWNER for payment.
- 2.9 Shop Drawings.** The ENGINEER will review and approve all shop drawings for all materials provided for the project.
- 2.10 Construction Observation.** The ENGINEER will provide part time inspection and oversight of the work to ascertain satisfactory completion of work performed. In addition, periodic testing including proctors to determine optimum density, density tests, gradations, and concrete testing will be performed by Landmark Testing. The ENGINEER does not guarantee the performance of the Contractor(s) by the ENGINEER's performance of said construction inspections. The ENGINEER's undertaking hereunder shall not relieve the Contractor of the obligation to perform the work in conformity with the drawings and specifications and in a workmanlike manner; shall not make the ENGINEER an insurer of the Contractor's performance; and shall not impose upon the ENGINEER any obligation to

see that the work is performed in a safe manner.

**2.11 Substantial Completion.** The ENGINEER will make a final review prior to the issuance of the statement of substantial completion of all construction and submit a written report to the OWNER. Prior to submitting the final pay estimate, the ENGINEER shall submit a statement of satisfactory completion to and obtain the written acceptance of the facility from the OWNER.

**2.12 Record Drawings.** The ENGINEER will provide the OWNER with one set of reproducible record drawings and two sets of prints to the OWNER. Such drawings will be based upon construction records provided by the Contractor during construction and reviewed by the ENGINEER and from the ENGINEER's as-built survey and construction data.

### ARTICLE III

#### BASIS OF COMPENSATION

The OWNER agrees to pay compensation to the ENGINEER for work performed on the project as specified below:

**3.1 Design Fee.** For all design engineering services as outlined in Article 1, "Design Engineering Scope of Work", the ENGINEER shall be compensated the fixed fee of: Twenty-Three Thousand Two Hundred and Thirty dollars, \$23,230.00. The design fee has been broken down for the different aspects of the project as follows:

3.1.1 Existing Conditions and Topographic Survey .....	\$2,036.00
3.1.2 Plan and Profiles .....	\$3,492.00
3.1.3 Geotechnical Investigation.....	\$2,750.00
3.1.4 Retaining Wall Design.....	\$5,998.00
3.1.5 Right of Way.....	\$1,885.00
3.1.6 Construction Plans and Specifications.....	\$3,764.00
3.1.7 Town and UDOT Coordination .....	\$2,088.00
3.1.8 Revisions.....	<u>\$1,217.00</u>
<b>Total Design Fee</b>	<b>\$23,030.00</b>

**3.2 Construction Engineering Fee.** For all construction engineering services as outlined in Article 2, paragraphs 2.1-2.12 "Construction Engineering Scope of Work", the ENGINEER shall be paid on an hourly rate basis in accordance with our *Standard Rate Schedule* (Attachment "A"). The following amounts are estimated assuming a 6-week (5 days/week) construction period with part time construction observation:

Item	Rate	Quantity	Cost
Principal Engineer, P.E. (2 hrs/week)	\$177	12	\$2,124.00
Project Engineer, P.E. (8 hrs/week)	\$98	48	\$4,704.00
Senior Licensed Surveyor (2 hrs/week)	\$122	12	\$1,464.00
Survey Crew (2 trips – 8 hrs each)	\$124	16	\$1,984.00
Mileage, Copies, Etc.	\$950	1	\$ 950.00
Geotechnical Testing and Materials <sup>1</sup>	\$12,904	1	\$12,904.00
<b>Total Estimated Construction Management</b>			<b>\$24,130.00</b>

<sup>1</sup>Includes 10% markup of proposed cost from Landmark Testing & Engineering attached.

The total construction management amount indicated is not to be exceeded without prior agreement between the ENGINEER and the OWNER.

- 3.3 Additional Services.** Additional work and reproduction expenses will be invoiced per our *Standard Rate Schedule* (Attachment "A"). No extra work will be performed without the consent of the OWNER.
- 3.4 Payment Schedule.** Progress payments shall be made in proportion to services performed as indicated and shall be due within 30 days of the ENGINEER's submittal of his invoice. Any amounts not paid within 30 days from date of presentation of the invoice shall commence to bear an interest of 18% per annum. If the amount is not paid and must be placed into the hands of a collector or attorney, additional charges will be due for the cost of collection, interest costs, and reasonable attorney's fees.

### ARTICLE III GENERAL CONDITIONS

- 4.1 Liability.** The ENGINEER shall provide and maintain during the existence of the AGREEMENT, for the protection of the ENGINEER and the OWNER the following insurance coverage:
- General Liability Insurance not less than One Million Dollars (\$1,000,000).
  - Professional Liability Insurance or Errors and Omissions Insurance not less than in the amount of Five Hundred Thousand Dollars (\$500,000) insuring against any negligent error or omission which may be committed by the ENGINEER in the performance of this AGREEMENT.
- 4.2 Utah Law.** The laws of the State of Utah will govern any litigation, controversy, or adversary proceeding.
- 4.3 Outside Costs.** The OWNER will pay the costs of all fees related to this project including checking, inspection, zoning, annexation, applications, assessments, permits, bond premiums, advertisements, title company charges, and all other charges not specifically covered under terms of this contract.
- 4.4 Progress.** The ENGINEER will begin work within one week after receipt of official notice to proceed and will perform the work diligently and to the OWNER's satisfaction. Failure of the ENGINEER to make progress satisfactory to the OWNER, except for valid reasons beyond the control of the ENGINEER, shall provide the OWNER the right to terminate this AGREEMENT, and such termination shall be in writing.
- 4.5 Termination.** In the event that the OWNER finds it expedient to terminate this AGREEMENT prior to the completion of all the services and materials required herein, an appraisal of the value of the work performed by the ENGINEER to the date of such termination shall be made upon a basis equitable to the OWNER and the ENGINEER. Final payment will be determined upon review of the amount of such appraisal. Upon such termination or abandonment and final payment to the ENGINEER, the ENGINEER will deliver all contract documents and records completed or partially completed and all unused materials supplied by OWNER, and these shall become the property of the OWNER.

**4.6 Contract Modifications.** This contract constitutes the entire AGREEMENT between the parties hereto. No modification hereof shall be effective unless and until such modifications are evidenced by a writing signed by both parties to this AGREEMENT.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this AGREEMENT in triplicate on the date first indicated.

ENGINEER:  
Alpha Engineering Company

OWNER:  
Town of Springdale

By: *Brent E. Gardner*  
Brent E. Gardner

By: \_\_\_\_\_

Its: President

Its: \_\_\_\_\_

Attachments:  
Attachment A – Alpha Engineering Hourly Rates  
Landmark Testing Construction Management Proposal





October 5, 2020

Alpha Engineering  
Attention: Todd Gardner  
43 South 100 East, Suite 100  
St. George, Utah 84770

Subject: Construction Materials Testing & Inspection  
Springdale SR9 Sidewalk Project  
Landmark Proposal No. YP3469

Todd:

Landmark Testing & Engineering is pleased to present this proposal to provide construction materials testing and inspection for the Springdale SR9 Sidewalk project. The proposed sidewalk alignment for this project is along the west side of SR9 from the Best Western Hotel property and Hoodoo Market property. The sidewalk is to be approximately 1,000 lineal feet and will include approximately 500 lineal feet of retaining wall. The anticipated construction period is 6 weeks.

### **SCOPE OF WORK**

Based on the lineal feet of sidewalk, we estimate 75 cubic yards of concrete will be placed on the sidewalk for the project. We anticipate that a set of 4 concrete cylinders will be required for each 50 cubic yards placed or portion thereof per day or a minimum of one set per day. Air entrainment, temperature, and slump will be tested for each set of cylinders cast. Concrete cylinders will be tested for compressive strength at 7 and 28 days. We anticipate that the sidewalk will be poured in 3 separate placements. The sidewalk subgrade soils will need to be tested for compaction prior to placement of roadbase. Samples of roadbase will be obtained one per 1,350 square feet for sieve analysis and compaction of roadbase will be tested a minimum of one test per 300 lineal feet.

We anticipate that compaction of wall backfill will be required on each one-foot lift and every 200 lineal feet. Depending on the type of wall constructed, an engineer will visit the site to ensure construction of the wall is according to design, including post and panel walls. If walls are to be cast-in-place, reinforced concrete walls, concrete cylinders will be cast for each 50 cubic yards placed or portion thereof per day or a minimum of one set per day. We estimate that cast-in-place walls will be poured in 4 placements. The foundations of the walls should be tested for compaction prior to placement of reinforcement and concrete or concrete blocks. If the walls are cast-in-place, reinforced concrete, reinforcement will be inspected prior to each concrete pour.

All field and laboratory testing and inspection will be in accordance with the Town of Springdale Construction Standards and contract documents.

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## **BASIS OF COMPENSATION**

Our estimated fees are based on one technician conducting sampling and testing on a part-time basis, as required by Town of Springdale Construction Standards or contract documents. Our estimated fees are based on a 6-week construction period and an assumed contractor schedule. Our estimated fees for construction materials testing and inspection are shown on the attached fee schedule.

If you have any questions do not hesitate to call.

Sincerely,

**LANDMARK TESTING & ENGINEERING**

A handwritten signature in black ink, appearing to read "Steven Wells", is written over the printed name.

Steven Wells, PE  
Geotechnical Manager



**Springdale SR9 Sidewalk Project**  
**Construction Materials Testing and Inspection**  
**Landmark Proposal YP3469**  
**Fee Schedule**

<i>Description</i>	<i>Quantity</i>	<i>Rate</i>	<i>Total</i>
Field Technician, hrs.	64	\$55.00	\$3,520.00
Concrete Technician, hrs.	49	\$55.00	\$2,695.00
Field Engineer, hrs.	20	\$90.00	\$1,800.00
Moisture Density Relationship (Proctor)	4	\$130.00	\$520.00
Sieve Analysis	5	\$60.00	\$300.00
Concrete Cylinder, Set of 4	8	\$60.00	\$480.00
Project Manager, hrs.	6	\$85.00	\$510.00
Final Report	1	\$250.00	\$250.00
Mileage	2,760	\$0.60	\$1,656.00
Estimated Total			\$11,731.00

# SPRINGDALE, UTAH SR-9 SIDEWALK DESIGN & ENGINEERING PROJECT

# PROPOSAL

AUGUST 2020





August 19, 2020

Sidewalk Design Project Selection Committee  
C/O: Town of Springdale  
PO Box 187  
118 Lion Boulevard  
Springdale, Utah 84767

**Re: Proposal to Provide Professional Civil Engineering Services for the Springdale SR9 Sidewalk Design and Engineering Project**

Ladies & Gentlemen:

Alpha Engineering is pleased to submit this proposal to provide professional civil engineering services for the Springdale SR9 Sidewalk Design and Engineering Project. Our contact information is as follows:

Brent E. Gardner, P.E., Principal  
43 South 100 East, Suite 100  
St. George, Utah 84770  
Phone: (435) 628-6500, Email: [brentgardner@alphaengineering.com](mailto:brentgardner@alphaengineering.com)

We feel we have the necessary qualifications to assist the Town of Springdale in the completion of this important project based on the following:

- **EXPERIENCE** – Our firm has designed multiple sidewalk and trail systems for communities throughout southern Utah, many of which included retaining walls similar to your project.
- **SERVICE** – Our project team is available for immediate assistance to keep the proposed project moving forward and on schedule, while maintaining a high standard of quality.
- **AVAILABLE RESOURCES** – We have highly qualified individuals in every aspect of civil design and land surveying. We have the required technology and expertise to complete an in-depth analysis and produce an effective design.

We appreciate the opportunity to provide our enclosed proposal. We would like to thank your staff for the time taken to meet with us on-site and help familiarize us with the proposed project. If you have any questions regarding this proposal, please feel free to contact me at (435) 628-6500.

Sincerely,

Brent E. Gardner, P.E., President  
ALPHA ENGINEERING COMPANY

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# Statement of Qualifications

Alpha Engineering Company is pleased to submit this proposal to provide professional engineering services for the Town of Springdale in response to the Request for Proposal for the Springdale SR9 Sidewalk Design and Engineering project. Established in 1989, Alpha Engineering Company has one principal office which is located in St. George, Utah, and specializes in providing civil engineering and land surveying services throughout Southern Utah. Alpha Engineering currently employs 18 professionals and support staff. The Alpha Team has a strong, proven track record that we feel will provide valuable insight to the Town of Springdale in the completion of the SR9 Sidewalk Design project. Alpha Engineering will complete the site survey and civil design work in house and will utilize a Geotechnical Engineering subcontractor, Landmark Testing & Engineering to complete the geotechnical investigation and recommendations for wall design for this project.

## ***Alpha Engineering Company Key Personnel***



### **MANAGING PRINCIPAL**

***Brent Gardner, P.E.***

***BS, Brigham Young University, 1980***

***Utah License Number 167981-2202***

A principal of Alpha Engineering, Mr. Gardner has a B.S. degree in Civil Engineering and has more than 40 years of civil engineering experience. He has had overall responsibility for multiple road, sidewalk and trail systems that have been completed by Alpha Engineering. Mr. Gardner has extensive experience coordinating with private property owners, State, and

Federal agencies for necessary permits and rights-of-way. He will have the overall responsibility of project oversight, quality assurance, quality control, and the submittal process.



### **PROJECT ENGINEER – PLAN REVIEW AND DESIGN COORDINATION**

***Glen E. Carnahan, P.E.***

***BS, Utah State University, 2001***

***Utah License Number 4855703-2202***

Mr. Carnahan has a B.S. degree in Civil Engineering and has 19 years of civil design experience with an emphasis in hydrology and hydraulic design. Mr. Carnahan has completed the Lizzie Lane Sewer project for the City of St. George which included trail design and the design of a pedestrian bridge over the Virgin River in conjunction with the sewer and water line crossing that

was part of the project. The re-routing of the trail to accommodate the new bridge required retaining wall design for this project. Mr. Carnahan has also completed design of projects that require retaining walls on several Washington County School District sites, including the concrete pedestrian access trail at Desert Hills High School that included pedestrian access trail and wall design, and is currently working on the new CTE High School site that has extensive retaining

wall design to accommodate the varied terrain and site conditions.



**PROJECT ENGINEER – CIVIL DESIGN – LEAD PROJECT MANAGER**

***Todd Gardner, P.E.***

***BS, University of Nevada Las Vegas, 2007***

***Utah License Number 8215989-2202***

Mr. Gardner has a B.S. degree in Civil Engineering and has 13 years of civil design experience. Mr. Gardner has an emphasis in hydrology and civil design with a background in field inspection and soils testing. Mr. Gardner has completed the first phase of the Brian Head Town Trail and is currently working on the Hurricane City 600 North Trail. Both trails have required retaining wall design and connection to existing features and coordination with sensitive lands similar to the Springdale SR9 Sidewalk project. He is proficient in computer-aided programs such as Water CAD and Flow Master and other design software such as AutoCAD Civil 3D. This project will require approximately 25% of his time during the project duration.



**PROJECT ENGINEER – CIVIL DESIGN**

***Jared Madsen, P.E.***

***BS, Utah State University, 2006***

***Utah License Number 5834913-2202***

Mr. Madsen has a B.S. degree in Civil Engineering and has 13 years of civil design experience. Mr. Madsen recently completed the design of the Tuacahn trail system in Ivins, Utah. In addition, Mr. Madsen has completed numerous site improvement projects, including trail systems, for the Washington County School District. Improvements for these sites include hydrology studies, site utilities, grading and storm drainage, and city review and coordination.



**PROJECT ENGINEER – CIVIL DESIGN**

***Jake Heward, P.E.***

***MS, University of Wyoming, 2015***

***Utah License Number 10873780-2202***

Mr. Heward has a M.S. degree in Civil Engineering and has 5 years of civil design experience. Mr. Heward recently completed the design of the 2450 South Roadway in St. George, Utah. In addition, Mr. Heward has completed numerous site improvement projects for the Washington County School District and Dixie State University. Improvements for these sites include hydrology studies, site utilities, grading and storm drainage, and city review and coordination. Mr. Heward recently completed the site design for the Springdale Elementary addition and is currently assisting on the retaining wall design for the new CTE High School site. He is excellent in computer-aided programs to accurately detail project designs to ensure they are successfully constructed.



**HEAD OF SURVEYING**

**Scott Woolsey, P.L.S.**

**Utah License Number 174919-2201**

Mr. Woolsey is a licensed surveyor with 30 years of experience in right-of-way surveys, legal descriptions, construction staking, and site plans. He has provided surveying expertise for construction, water resources, and utility mapping, and routinely utilizes GPS on a variety of projects. Under Mr. Woolsey's expertise, Alpha Engineering has three survey crews.

***Landmark Testing & Engineering Key Personnel – Sub Consultant***

Landmark currently employs three full-time professional engineers and one professional geologist. Key Landmark personnel are presented in the following table. Brief biosketches of key personnel are presented below:

<b>Name</b>	<b>Title</b>	<b>Certification</b>	<b>Utah License/ Certification</b>	<b>Other State License</b>	<b>Education Level</b>
Steven Wells	Geotechnical Manager	P.E.	9617310-2202	AZ. - 68537 NV. 026366	B.S.
John Anderson	Project Engineer	P.E.	374818-2202	AZ. - 63344 NV. - 025760	B.S.
Kent Nelson	Project Engineer	P.E.	9487201-2202	N/A	B.S. & M.S.
Chad Coffey	Project Engineer	N/A	N/A	CA EIT 161545	B.S.
Mark Owens	President	P.G.	5557832-2250	N/A	B.S.
Zac Bybee	Staff Geologist	N/A	N/A	N/A	B.S.

**Steven Wells, Geotechnical Manager, P.E. License Utah, Arizona, and Nevada** - Mr. Wells has a B.S. degree in engineering and over 16 years of experience in geotechnical field investigations and laboratory testing. Most recently Mr. Wells completed geotechnical design of driven H-piles according to AASHTO LRFD requirements for the SR-118 Sevier Bridge project. In addition, Mr. Wells has been the laboratory manager for Landmark Testing & Engineering, an ARML/CCRL certified materials testing lab. Mr. Wells has completed training courses through NHI in Soil Nail Walls and LRFD for Highway Bridge Substructures.

Mr. Wells has been the lead designer of HMA and SMA asphalt mix designs used on over 70 UDOT projects since 2004. Mr. Wells has a strong background in pavement section design and the analysis of existing pavements; both for reject asphalt mixes and for structural deficiencies.

**John Anderson, Project Engineer, P.E. License Utah, Arizona, and Nevada** - Mr. Anderson has a B.S. in Civil Engineering and has 21 years of experience in geotechnical investigations, engineering construction and inspection, and materials testing. He has been responsible for the quality acceptance and quality control testing programs on many projects. Mr. Anderson was responsible for geotechnical investigations, including bridge structures, on River Road, Riverside Drive to 1450, and most recently on I-15; MP 37 to 44, Climbing Lane and Bridge replacement. Mr. Anderson has completed training courses through NHI in Soil Nail Walls.

**Kent Nelson, Project Engineer, P.E., License Utah and Nevada**- Mr. Nelson has a B.S. and M.S. degree in civil engineering and 7 years of experience as a field and project Engineer. Mr. Nelson has completed training through UDOT on the AASHTO Mechanistic-Empirical Pavement Design Guide and has performed designs for Washington Fields Road and 3650 South in Washington. Kent has assisted in geotechnical investigations for several UDOT projects, most recently being I-15; MP 37 to MP 42 Climbing Lanes, and SR-143; Parowan Canyon.

## *Firm Experience and References*

The Alpha Team has a wide variety of project experience that uniquely qualifies us to assist the Town of Springdale in the design and construction of the SR9 Sidewalk Design, and has a proven track record in roadway, sidewalk and pedestrian trail design projects. Our most recent projects that have been completed with scopes similar in nature to the SR9 Sidewalk design are trail projects that all included retaining wall elements to adapt the pedestrian walkway to the existing topographic constraints. These trail projects included a combination of asphalt and concrete trails and are listed below:

### ***Brian Head Town Trail***

The project consisted of approximately one mile of shared use bicycle-pedestrian trail. The trail varied in width from 6-ft to 10-ft in width with 2-ft shoulders on each side. The trail connects portions of the existing trail system for Brian Head Town and provides access along the highway between the ski areas. The trail was constructed to take advantage of mountain views while maintaining a natural vegetation corridor. The trail design included signage, reinstallation of railing, extension of existing culverts or installation of new culverts, and other pertinent elements associated with trail construction.



***Brian Head Town Trail***

**Contact:** Mr. Aldo Biasi, Public Works Director (435) 586-0346

### ***East Bloomington Trail***

The East Bloomington Water project included a new pipeline and tank site to be located on a sensitive hillside east of I-15 adjacent to Bloomington. As part of this project, Alpha Engineering worked with the City and property owner to develop an alignment for a pipeline that would also serve as a future trail. The alignment of the trail and pipeline needed to be designed such that it provided a minimal scaring of the hillside. The cut on the trail was balanced using rock walls and followed the natural contour around the hill as much as possible. The trail was completed as part of this project to the tank site and will eventually connect to the master planned trail in the future development.

**Contact:** Mr. Scott Taylor, P.E., Water Department Director (435) 627-4850

### ***Ivins Tuacahn Drive Trail***

The project consisted of design of a new trail from Snow Canyon Parkway along Tuacahn Drive to the Tuacahn Arts Center for Ivins City. The project was required to be contained within the road rights of way due to the HCP area on both sides of the road. Retaining walls were designed for portions of the trail and Tortoise crossings were modified and extended to accommodate the new trail.

**Contact:** Mr. Tom Jorgensen, P.E., Assistant City Engineer (435) 634-0689

### ***Lizzie Lane Sewer Project (Included Trail and Pedestrian Bridge Design)***

This project was a sewer trunk line design project that included an aerial crossing of the Virgin River. The Aerial crossing was designed to support a 27” sewer line and an 18” water line and included a pedestrian bridge on top of the utility lines to interconnect the Riverside Drive trail system. The existing trails on both sides of the river were reconfigured to tie into the new bridge structure. The bridge design included caissons, abutments, and steel bridge design work. In addition, portions of the trail along the south side of the river were removed and re-designed with the new sewer line.



***Lizzie Lane Pedestrian Bridge***

**Contact:** Mr. Kade Bringham, P.E., Special Projects Manager (435) 627-4854

## ***Desert Hills High School Trail***

As part of the Desert Hills High School, Alpha Engineering worked with the Washington County School District and the City of St. George to install a master planned trail along the southern edge of the property. A portion of this trail was in extremely steep and unstable fill slopes created from the adjacent development. Alpha Engineering designed a system of retaining walls to address the slope and retaining issue and incorporated a trail into a portion of the retaining wall system. This trail was finished with concrete and included access into the school property.

**Contact:** Mr. Mel Ashcraft, Physical Facilities Coordinator (435) 652-4730 Ext. 301

## ***Additional Trail Projects***

- Snow Canyon Parkway Trail – City of St. George
- Riverside Drive Trail – City of St. George
- White Reef Park Trail Head – Washington County / BLM
- Virgin River Trail Phase III – City of St. George

# *Proposed Project Plan*

We have visited the project site with our geotechnical consultant and observed the proposed sidewalk alignment along the west side of SR9 from the Best Western Hotel property to the Hoodoo Market property. The sidewalk is anticipated to encroach on the toe of the hillside west of the sidewalk. This hill is mapped by the Utah Geologic Survey as having a high landslide susceptibility and has a slope of up to 30 degrees. This hillside has previously been disturbed by excavations and an abandoned canal traverses the hill west of the sidewalk alignment. We estimate that 165 feet of retaining wall up to 12 feet in height and 65 feet of retaining wall up to 6 feet in height will be required for construction of the sidewalk. The following is our proposed detailed scope of work based on our review of the RFP:



*Retaining wall Location*

## ***Sidewalk Design***

Alpha Engineering proposes to initiate site survey and geotechnical work immediately upon notice to proceed. The elements of this task are further broken down as follows:

### ***Topographic Survey***

We will begin the project with a detailed site survey of the sidewalk alignment and adjacent hillside. The survey will include location of UDOT right of way, irrigation ditch, curb, signage, parking meters and utilities along the alignment. In addition, the existing driveway on the south end of the alignment will be surveyed. We will survey with a combination of drone aerial survey equipment, GPS and Robotic Total Station survey equipment. We have prepared a preliminary exhibit showing the existing topography and proposed sidewalk layout for the project which has been included in the Appendix for reference.

### ***Plan & Profile Drawings***



*Tie in Location at South end of Project*

We will then proceed immediately to prepare the plan and profile drawings for the sidewalk. Plan and profile drawings will also include cross sections at sufficient intervals to determine where retaining will be necessary to accommodate the necessary width of sidewalk and avoid existing utility infrastructure. Sidewalk will be laid out to maximize the sidewalk width. We understand 8-ft width is desired, however we will evaluate options to reduce to 6-ft width if necessary to avoid obstructions and minimize

retaining wall height and cost. Sidewalk layout will be coordinated with the Town of Springdale.

### ***Geotechnical Investigation***

We propose to evaluate the hillside and subgrade soils upon which the sidewalk will be constructed. The slope of the hillside at various locations and signs of landslide distress will be recorded. Soil samples from various locations of the site will be collected by manual means.

### ***Laboratory Testing***

Laboratory testing will be performed on soil samples retained from our site investigation to evaluate soil properties and to provide data for wall designs. We anticipate that testing will include the following items:

- Mechanical gradations and Atterberg Limits to assist in soil classification and for correlations with design parameters.
- Moisture density relationship (proctor)

### ***Geotechnical Investigation Report***

A final report will be issued that will include:

- Description of surface conditions encountered.
- Geologic setting, geologic hazards, and seismic design parameters.
- Results of laboratory tests.
- Earthwork recommendations for sidewalk subgrade including excavation requirements, use of on-site materials, earthwork specifications, and compaction requirements.
- Engineered concrete block wall design.
- Lateral earth pressures for on-site and imported material including, active, at-rest, passive and coefficient of sliding friction. Coefficients will be also be provided for seismic loading.
- Cut and fill slope recommendations.

Slope stability analysis has not been included in our scope of work, however it can be added at a later time if the Town desires to explore slope stability options.

### ***Construction Plans and Specifications***



*Driveway at South end of Project*

Construction drawings and project specifications will be prepared for the sidewalk and retaining walls. Construction drawings will include detailed grading, plan and profile drawings, cross sections and details necessary for the sidewalk and retaining wall construction. The Construction drawings will address routing the walk around necessary objects such as streetlights and transformers. We understand the Town will relocate the parking meters once the construction is completed. Additionally, the private

driveway will be evaluated and a design provided that both provides for a walk that meets the Town Code and Standards and minimizes impact to the private property owner.

### ***Right of Way***

After preliminary design is completed, we will determine if additional right of way may be required to allow construction of the desired design. We will coordinate additional right of way needs with

the Town of Springdale and legal descriptions will be prepared for any additional right of way required for construction of the project.

### ***Retaining Wall Design***

Upon completion of the geotechnical investigation and review of the recommendations with the Town, the selected retaining wall system will be designed. Based on our site visit, it appears that the most cost effective and aesthetically pleasing material will be the pre-cast block material, however reinforced concrete may also be the best material for the wall. We have used both reinforced concrete or the pre-cast block material on several projects and it can be colored or stained to match the Town's preference,



*Transformer at North end of Project*

similar to what has been done with the other wall systems installed in Springdale along SR9. Another option we have used recently is gabion baskets that can be colored and filled with rock if that type of system is desired. Detailed cross sections, details, and wall elevations will be provided and incorporated into the construction drawings. In addition, drainage will be evaluated specific to the wall design to ensure that the Town can easily access and maintain the walls. Drainage features such as waterways and inlet boxes and piping will be designed to protect the walls and facilitate maintenance.

### ***Town of Springdale Coordination***

The Construction drawings will be reviewed in-house to ensure compliance with the Town of Springdale Code and Construction Standards. Upon completion of our in-house review, plans and specifications will be provided to the Town for review. Any comments received from the Town will be addressed in the Construction documents.

### ***UDOT Coordination***

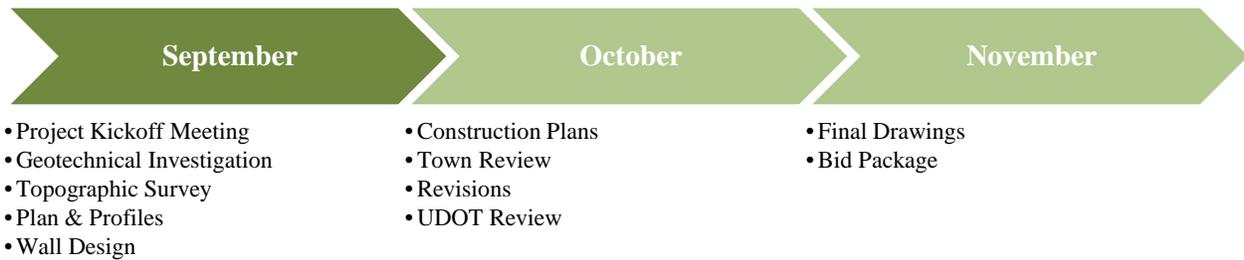
Upon completion of design work and coordination with the Town of Springdale, we will coordinate the design with UDOT. Any comments received from UDOT will be reviewed with the Town and addressed.

## Revisions

Upon completion of coordination with the Town of Springdale and UDOT, final revisions will be made to the Construction documents. Final construction documents will be provided to Springdale Town.

## Schedule

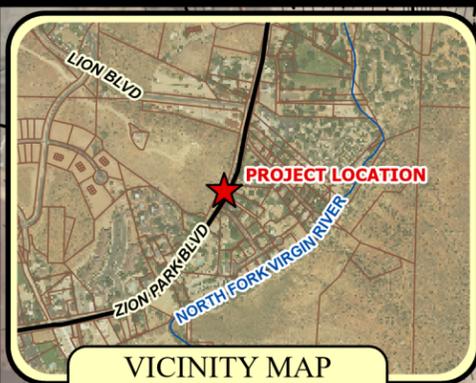
We understand the design is to be completed by November 20, 2020. We are committed to meeting this schedule and propose the following timeline for the different elements of design work that need to be completed:



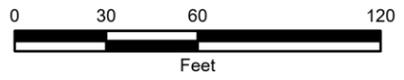
*Typical Parking Meter*

# *Appendices*

## *Project Exhibit*



VICINITY MAP  
SPRINGDALE, UTAH



- Legend**
- New Sidewalk
  - Existing Switch Gear
  - Washington County Parcels
  - Major Contour (5' Interval)
  - Minor Contour (1' Interval)

**ALPHA**  
ENGINEERING

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**Figure 1**

**SR9 Sidewalk Design**  
Springdale, Utah

<b>Spatial Reference:</b>	Utah State Plane NAD 83, feet
<b>Drawn By:</b>	JRH
<b>Scale:</b>	1" = 60 feet
<b>Date:</b>	August 18, 2020

P:\100-02-2020-55 Springdale\_Tilley Hill Sidewalk\GIS Exhibit\100-02-2020-55 Springdale Exhibit.aprx, AEBORDER 11x17, 8/19/2020 9:49 AM\_jneward



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alphaengineering.com

September 10, 2020

Sidewalk Design Project Selection Committee  
C/O: Town of Springdale  
PO Box 187  
118 Lion Boulevard  
Springdale, Utah 84767

**Re: Addendum One - Updated Proposal to Provide Professional Civil Engineering Services for the Springdale SR9 Sidewalk Design and Engineering Project**

Ladies & Gentlemen:

Alpha Engineering is pleased to submit this Addendum One to update our original proposal with the additional information requested. The following are the modifications to our original proposal:

The geotechnical investigation portion of the proposal has been modified as follows:

#### ***Geotechnical Investigation***

The investigation for the retaining structures will be conducted to provide data for design based on the following UDOT approach. On the SR-9 corridor, within Springdale, UDOT recommends any cuts into landslide susceptible hillsides be, “supported by a structure with a minimum capacity equal to the amount of resistance provided by the soil material that is removed. More specifically, the cut would require a retaining structure to provide as much support as the resistance offered by the excavated soil wedge. The object being that any cuts and associated retaining method would need to maintain the current level of stability.” The retaining structure would not be required to provide global stabilization of the entire landslide mass.

UDOT’s approach to design included:

- 1) Determining material properties of the retained soil and the subgrade soils from laboratory tests and correlation with material type.
- 2) Obtaining active and passive earth pressures of retained and subgrade soils for retaining structure design.
- 3) Determining the earth pressure that the retaining wall will have to account for in design and ensuring that design provides resistance that equals or exceeds the resistance from the soil that would be removed.

To meet these requirements, the following tasks are proposed:

#### ***Task 1 - Geotechnical Investigation***

Landmark proposes to perform reconnaissance of the hillside, investigate retained slope soils, and investigate subgrade soils upon which the sidewalk will be constructed. The

slope of the hillside at various locations and signs of landslide distress will be recorded. It is proposed to excavate two (2) test pits in locations at which retaining structures are to be constructed. Representative soil samples will be retained from the test pits, including relatively undisturbed samples using a hand sampler. If cohesive soils exist in the test pits, a pocket vane shear tester will be used to determine the estimated cohesion of the soil.

### ***Task 2 - Laboratory Testing***

Laboratory testing will be performed on soil samples retained from our site investigation to evaluate soil properties and to provide data for wall designs. We anticipate that testing will include the following items:

- Mechanical gradations and Atterberg Limits to assist in soil classification and for correlations with design parameters.
- Unit weight and moisture content of relatively undisturbed samples.
- Moisture density relationship (proctor).

### ***Task 3 - Geotechnical Investigation Report***

Landmark Testing & Engineering will issue a final report that will include:

- Description of surface conditions encountered.
- Geologic setting, geologic hazards, and seismic design parameters.
- Results of laboratory tests including soil classifications, unit weights, and moisture contents.
- Earthwork recommendations for sidewalk subgrade including excavation requirements, use of on-site materials, earthwork specifications, and compaction requirements.
- Engineered concrete block wall analysis to determine whether adequate resistance can be provided for.
- Lateral earth pressures for on-site and imported material including, active, at-rest, passive and coefficient of sliding friction. Coefficients will be also be provided for seismic loading for use in all wall designs.
- Cut and fill slope recommendations.

The retaining wall design portion of our proposal is being modified as follows:

### ***Retaining Wall Design***

Upon completion of the geotechnical investigation and review of the recommendations we will meet with the Town and UDOT to discuss types of retaining walls that could be used to accommodate the existing soils conditions and their associated costs. These could include reinforced concrete, pre-cast block material, post and panel design, and possibly rock gabion structures. Based on our site visit, it appears that the most cost effective and aesthetically pleasing material will be the pre-cast block material, however reinforced concrete or post and panel design may be the preferred alternative based on soil conditions. We have used both reinforced concrete or the pre-cast block or panel material on several projects and it can be

colored or stained to match the Town's preference, similar to what has been done with the other wall systems installed in Springdale along SR9. Detailed cross sections, details, and wall elevations will be provided and incorporated into the construction drawings. In addition, drainage will be evaluated specific to the wall design to ensure that the Town can easily access and maintain the walls. Drainage features such as waterways and inlet boxes and piping will be designed to protect the walls and facilitate maintenance.

The following statement is provided regarding schedule:

### ***Schedule***

We understand that Springdale would like to have this wall constructed during the winter months. The original engineer selection date was September 9<sup>th</sup>. We had a completion date of November 20<sup>th</sup> based on that start date. We anticipate an equal time period of 72 calendar days to complete our design with a new start date. However, if we can get quick turnaround times through the review and approval process from the Town and UDOT this time period could be reduced. We think if we can have bids obtained and Notice to Proceed for construction by January 18<sup>th</sup> and had a 90-day construction period it could be done by the end of April.

If you have any questions regarding this addendum, please feel free to contact me.

Sincerely,



Brent E. Gardner, P.E., President  
ALPHA ENGINEERING COMPANY