

# Reliable Structures Inc

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November 20, 2015 – Rev 1

This proposal is hereby submitted to:

Mr. Morris J. Reyna, Engineering Dept.  
Town of Marana  
11555 West Civic Center Drive  
Marana, AZ 85653

For soils structural repairs at:

Town ROW at Eight Residences  
North Mountain Stone Pine Way  
Marana, AZ 85743

**Reliable Structures** and the individuals or entities designated as **Owner(s) or Agent(s)** above enter into this agreement as follows:

Reliable Structures will provide all labor, materials, Workers' Compensation Insurance, Liability Insurance and supervision to perform the following:

## SITUATION

The **town ROW** areas at six of the eight residences require some degree of additional soils structural repair. Based on information provided by Mr. Reyna in early November, the sand/rock materials pit that was backfilled to allow construction of this neighborhood was deeper than the 25' that was the original basis for Reliable's recent deep soils structural-stabilization work. So, there is a need to extend the repair zone to somewhere between 25' and 35' deep, depending upon the residence location. Reliable's experience with the original round of work indicates that Lots [REDACTED] and [REDACTED] do not need deeper work, so this proposal addresses only Lots [REDACTED] and [REDACTED].

## SCOPE OF WORK

Once the underground utilities within the work zone have been located and marked and the homeowners have removed their vehicles from the street, the urethane deep injection grid pattern (approx 4'-4" staggered, horizontal centers) will be laid out and marked, 3/4" dia injection pipe pathway holes will be drilled through the sidewalk, curb/gutter and street pavements and 3/4" dia pre-drilled injection pipes will be inserted and driven/advanced such that the urethane injection zone/range occurs between 20' and 35' deep. The pipes will be located to a best-fit position between the original pipes while avoiding the underground utilities.

An extra-deep pipe successfully driven to the new target depth will be injected with water and urethane (Spetec H-40 or equivalent) to the point of refusal and will be identified as a "full pipe."

A pipe driven to beyond the previously completed injection depth, but not to the new target depth due to a sub-grade obstacle will be injected with water and urethane to the point of refusal and will be identified as a "pro-rata pipe."

A pipe driven to less than the previously completed injection depth, but not beyond due to a sub-grade obstacle will not be injected with urethane, but rather will be abandoned and identified as a "zero pipe."

A record will be generated containing the information of each injection pipe type, final depth and location within each ROW area.

It is planned that an average of 60 extra-deep pipes will be utilized for each residence ROW.

After the deep injections are completed, the injection pipes will be cut flush with the pavement surface.

A matrix of previously completed injection depths along with the new or revised injection depths at each residence ROW is enclosed as Exhibit X.

*Permanent Engineered Solutions for Unstable Foundations, Broken Concrete and Leaky Structures*

Scope of Work Notes and Conditions

- A. It is not expected that local jurisdictional agency(s), including the HOA will require the deep soils stabilization or slab lifting repair work be permitted, therefore costs for preparing engineering drawings and/or for obtaining, managing and closing out a permit are not included in this proposal. If it is determined a permit is required, then the related agreement cost and timeline impacts will be determined and adjusted at that time.
- B. The work will be accomplished between the hours of 6:00 AM to 6:00 PM, Monday through Sunday, holidays excepted. The work areas will be safety barricaded and construction debris will be cleared at the end of each work period.
- C. A rental restroom will be placed and maintained on site for Reliable crew use.
- D. Reliable will locate and mark all existing sub-grade utility systems within the work zone that can be found with conventional location technology and Reliable shall be liable for any located utility damage that is caused by their work. However, Reliable has no responsibility for damage that they cause to any unknown sub-grade utility system or for additional damage to utility or structural systems that were weakened or compromised as a result of the soils collapse conditions.

**ESTIMATED COST & SCHEDULE**

Pricing is per injection pipe (tax included):

Full Pipe	\$	225.00
Pro-Rata Pipe	\$	31.00 to 224.00
Zero Pipe	\$	30.00

Not to Exceed Price for each Residence ROW (tax included) \$ 13,000.00

Not to Exceed Total Price for six Residence ROWs (tax included) \$ 78,000.00

The project duration for this additional work is estimated at 12 to 15 working days on site.

Thank you for your interest in Reliable Structures and for the opportunity to submit a plan/proposal on this deep soils structural repair program. We would be glad to meet with you in person or on the phone to discuss these items in greater detail. Please let us know if you have any questions. We look forward to providing superior service and excellent results.

Sincerely,

Greg G. Walliman  
Project Manager

**Exhibit X**

<u>address</u>	<u>lot #</u>	<u>section of ROW area</u>	<u>revised pit depth(ft)</u>	<u>previously completed inj depth(ft)</u>	<u>revised inj depth(ft)</u>	<u>additional depth to be injected(ft)</u>
█	█	north	35.00	13.00	31.00	18.00
█	█	south	25.00	13.00	21.00	8.00
█	█	all	35.00	15.00	31.00	16.00
█	█	all	35.00	18.00	31.00	13.00
█	█	north	30.00	20.00	26.00	6.00
█	█	south	34.00	20.00	30.00	10.00
█	█	north	31.00	15.00	27.00	12.00
█	█	south	35.00	15.00	31.00	16.00
█	█	north	28.00	15.00	24.00	9.00
█	█	south	31.00	15.00	27.00	12.00

**RELIABLE STRUCTURES INC.**

Agreement Terms

**1 / CHANGES:** Changes to the scope of work will be performed only with a written change order signed on behalf of the Agent and Reliable.

**2 / PAYMENT TERMS:** Fifty percent (50%) of the total Agreement amount is due at the Agreement signing. The fifty percent (50%) balance is due within seven calendar days after project completion. Finance charges at a rate of 3% monthly will accrue on delinquent balances.

**3 / DEEP SOILS REPAIR LIMITED WARRANTY:** The deep soils urethane structural stabilization repair work is warranted on the basis of materials and workmanship for a period of ten (10) years from the date of completion of the Work. The sole remedy that Reliable Structures is obligated to provide under this warranty is the injection of additional urethane at those otherwise unmodified and/or undamaged area(s) of injected deep soils where there is evidence that the injected deep soils have experienced collapse or consolidation from their post-repair conditions.

This proposal may be withdrawn if not accepted within 30 days.

Signature \_\_\_\_\_  
Greg G. Walliman  
Reliable Structures Inc.  
Arizona License # ROC247805  
Date \_\_\_\_\_



ACCEPTANCE OF PROPOSAL: The prices, specifications and conditions are satisfactory and are hereby accepted. Reliable is authorized to accomplish the work as specified.

Signature \_\_\_\_\_  
Owner  
Date \_\_\_\_\_  
Signature \_\_\_\_\_  
Owner  
Date \_\_\_\_\_