

EXHIBIT A.9

BID ANALYSIS, QUOTES & BACKUP

**Construction Manager at Risk for Pima County Regional
Wastewater Reclamation Department - North Rillito Interceptor
Rehabilitation Project No. 3NRI14**

See the following attached bids and quotes from material suppliers, vendors, etc.:



SUBCONTRACTOR BID FORM - 10.10.2014 Revision

Office: 520-207-8228 | Fax 623-582-3761
1904 W. Prince Rd., Tucson, AZ 85705
www.bfcontracting.com | License # AZ ROC-039744

To: B&F Contracting, Inc.

From: Insituform Technologies, LLC

17988 Edison Ave, Chesterfield, MO 63005

Phone: 636.530.8000

Email: dcarroll@insituform.com

RE: Construction Manager at Risk Services for North Rillito Interceptor Rehabilitation
Pima County Project No. 3NRI14

Subject: Bid Due Date: Monday 10/13/2014
Time: 3:00 PM
Location: B&F Tucson Office
1904 W. Prince Rd., Tucson, AZ

General Information:

B&F Contracting, Inc., acting as the CM@Risk Contractor is requesting proposals from approved contractors interested in furnishing subcontractor services for the project.

Plan Availability:

Electronic Copies of Project drawings and Specifications will be available for pickup at the B&F Tucson Office

**Bids will be received and opened privately by B&F with PCRWRD

1 Special Instructions to Bidders

- 1.01 Instruction to Bidders are provided for the purpose of clarifying the Subcontractor Bid Form. Each prospective Bidder shall review the below instructions and all documents prior to submission of their respective bid.
- 1.02 If prospective bidder elects not to bid, please inform B&F Contracting Inc. in writing immediately via fax or email.
- 1.03 Bids can be submitted electronically (dfoley@bfcontracting or tomf@bfcontracting.com), fax (623.582.3761) or hand delivered at the B&F Tucson Office by 3:00 PM Arizona time Monday October 13, 2014, located at 1904 W. Prince Rd., Tucson, AZ.
- 1.04 Any bids received after 3:00 PM on October 13, 2014 will be considered non-responsive and not be read at the bid opening. Telephone bids will not be accepted, email or fax bids are acceptable. Fax bids will be sent to 623.582.3761. If the bidding contractor elects to fax or email their bid it will be their responsibility to call and confirm receipt of your faxed or emailed bid before the bid due time.
- 1.05 Any and all questions related to this bid shall be directed in writing via email to Dan Foley at the email addresses listed above. The last day for questions to be answered will be Friday October 3, 2014.
- 1.06 Bids are required to be submitted on the 'Subcontractor Bid Form'. Please Insert N/A on bid items outside your scope.
- 1.07 Receipt and review of Addenda and/or Amendments shall be acknowledged by the Bidders on their completed Subcontractor Bid Form.
- 1.08 B&F to provide electronic copies of plans, specifications, as-builts, pre-videos, inspection reports, etc., to bidding contractors on usb flash drive. Bidding contractors to return flash drives after bid period is complete.
- 1.09 Pima County Regional Wastewater Reclamation Department and B&F Contracting reserve the right to accept or reject any and/or all Bids.
- 1.1 Pima County Regional Wastewater Reclamation Department and B&F Contracting reserve the right to waive any informality in any Bid.
- 1.11 Prospective bidders are to refrain from contacting the Owner or Designer with questions regarding the Bid. All questions are to be directed to B&F Contracting, Inc.
- 1.12 Bids received after the bid due date/time will not be considered. Any bid modification received after the bid date/time will not be considered.
- 1.13 Contractor selection criteria for the rehabilitation work will be based on the following criteria; Price, Qualifications and Schedule.

- 1.14 The bidder assumes full responsibility for timely delivery at the location specified for receipt of bids.
- 1.15 Bids which modify any of the provisions of the Bidding or Contract documents will not be considered.
- 1.16 A Bid that is in the possession of B&F Contracting Inc. may be withdrawn by the bidder up to the time of the bid opening.
- 1.17 Each Bidder shall provide unit prices in accordance with the required Bid Schedule
- 1.18 Bid pricing shall include but is not limited to the following: Any and all costs for fabrication, delivery and expeditious delivery, layout, supervision, labor, materials, equipment, uncrating, setting, hoisting, installation, parking, storage, insurance, permits, engineering, supervision tools, payroll taxes, escalation, overhead, profit, shop drawings, submittals, samples, mock ups, overtime or weekend work and any other costs necessary to complete the work required in accordance with all associated project documents per the provided construction schedule.
- 1.19 Bid prices shall be based on earliest attainable delivery without incurring additional costs to the owner.
- 1.20 The successful Bidder will be notified only after a thorough review and evaluation of all the bids that have been made to the PCRWRD and B&F Contracting. Bid evaluations will be based on but not limited to: Scope, price qualifications and ability to meet the construction schedule. A post bid interview may also be required.
- 1.21 CIPP Lining Contractors are required to submit CIPP shot schedule with bid documents. Failure to submit CIPP shot schedule with the bid documents will result in the rejection of your bid proposal. Please include Reach I.D., Length, Thickness, Inversion/Tail MH's, Etc.
- 1.22 Each bidder shall include overtime rates/pricing into their bid. This project will have a 24/7 schedule with 7-day work weeks to meet the construction schedule provided with the bid documents. B&F will not accept additional costs for overtime rates.
- 1.23 CIPP & Manhole Contractors are to submit crew availability and quantities to B&F Contracting with their bid. A Microsoft Word document will be acceptable.
- 1.24 CIPP Lining & MH Rehab Contractors are to commit and maintain a single, consistent crew and foreman for each of the phases. The interchanging of crew and personnel from phase to phase will not be accepted on this project.
- 1.25 CIPP & Manhole Contractors are to submit a list including key personnel on the project (Superintendent & Project Manager) to B&F Contracting Inc. for review with the bid documents.
- 1.26 CIPP & Manhole Contractors are to submit a list showing your current workload in the Southwest Region, where crews specific to AZ are currently being utilized. Please list project name, size, schedule and crew commitments.
- 1.27 No more than 1 major intersection may be blocked at a time by either the CIPP, Manhole Rehab or Bypass Pumping contractor.
- 1.28 CIPP Lining contractors are to refrain and/or limit inversion in private properties where access is limited (i.e. backyard, driveway, landscaped areas) All manholes residing in these areas will need to be used as "Tail Manholes" or "Thru Manholes" for the liner.
- 1.29 Bypass Pumping for the NRI sewer flows and all incoming lateral flows will be handled by B&F Contracting. Please do not include these costs in your bid.
- 1.30 Manhole Rehab Contractor to provide and place their own plugs as required to complete their own scope of work, and to maintain a dry work environment.
- 1.31 It is B&F Contracting's intent to award the CIPP lining contract for the entire project to one (1) Contractor
- 1.32 Manhole Rehabilitation Contractor to verify that their product is on the PCRWRD's Approved Product List.
- 1.33 The MH Coating/Rehab work could possibly be split between two (2) contractors due to SBE/DBE Compliance with Pima County Procurement.
- 1.34 Temperature sensor cable to continuously monitor the cure temperature of CIPP liner along the entire length of pipe, to be provided by the CIPP contractor
- 1.35 MH Coating to provide sandbagging or plugging for nuisance water during all MH underlayment and Coating operations at each individual MH. B&F to provide all mainline flow management for 8-inch and larger flows, but cannot guarantee a completely dry manhole condition.
- 1.36 CIPP & Manhole Coating Contractors are required to field verify existing conditions of sewer and manhole diameters prior to bidding this project. It is expected that any variation from the B&F provided bid schedule be included within your unit cost. It is up to the bidding contractor to confirm existing sizes of the Interceptor and manholes, and cross reference with the Pima County GIS System, As-Builts and MH Inspection Reports.
- 1.37 Manhole Coating Rehabilitation work includes, but is not limited to: Surface Preparation Work, Build-Back, Re-Work of Invert and/or Channels, Chipping, Demolition Re-Profiling and Corrosion Resistant Coatings as called out on the Manhole Inspection Report provided on the USB drive. Please pay attention to Brown & Caldwell's specific recommendations for repair at each manhole and include them with your VF pricing.
- 1.38 Please provide a list of your current workload in Arizona, Nevada and California with the assigned key personnel managing those projects.
- 1.39 B&F will require full time supervision from the MH Coating and CIPP Lining Contractors. It is a requirement to provide full time onsite supervision throughout the course of this project.

- 1.40 A pre-liner is required for CIPP Lining of existing Coated ACP sewer lines. B&F has provided initial quantities below on the bid schedule but the CIPP contractor is tasked with field verifying those quantities.
- 1.41 CIPP Lining & MH Coating Contractors are required to provide a Payment/Performance Bond on this project per Item 12 below. Please include this cost under the 'Bond' section of this bid for consideration (do not include in your unit cost).
- 1.42 Water Cure is the only acceptable curing/inversion method on this project. Air/Steam will not be accepted and is grounds for disqualification if included in your bid.
- 1.43 MH Rehabilitation/Coating Contractor to provide five (5) year warranty bond with their bid. Contractor to provide breakout pricing for this cost on the bottom of the bid schedule below (not in the VF unit pricing).
- 1.44 Lining Contractors to provide all styrene monitoring per the RWRD Specifications.
- 1.45 B&F to provide all new manhole frame/covers and concrete collars.
- 1.46 MH rehabilitation/Coating Contractor to pay close attention to new MH Coatings Specifications provided for this project. This specification is brand new for the county and has not been used in the past. Please review the revised cleaning, underlayment, finish and testing requirements outlined.
- 1.47 CIPP Lining Contractors are not to include costs for cleaning, pre and post video in your unit prices. B&F to provide. B&F expects the CIPP Lining Contractor to take part in the coordination and scheduling process for the clean/cctv subcontractor.
- 1.48 MH Coating Contractor to provide costs for removal of existing steps and replacement with new in their VF unit pricing on the bid schedule below.
- 1.49 MH Coating Contractor to remove any T-Lock as necessary at existing manholes.
- 1.50 CIPP Lining Contractor to provide all 'End Seals' using Neopoxy or similar product to complete their own scope of work
- 1.51 MH Coating Contractor scope of work includes coating of the invert to match the thickness of the CIPP Lining. Also include costs for coating and Tie-In to CIPP liner at "Lined Through Manholes" and "Tail End" with compatible product.
- 1.52 CIPP Lining contractor to provide their own construction water for CIPP lining operations, including, but not limited to; hydrant meters, piping, valves permits, water ramps, etc.. If any trenching is required for roadway crossings, please provide the areas and dimensions on an extra sheet with your bid.
- 1.53 CIPP Lining contractor to furnish and install hydrophilic seals between the host pipe and new CIPP Liner at each manhole.
- 1.54 MH 8716-04 to 8716-03 in Phase 1 has been previously CIPP lined on a recent project. Please do not include CIPP costs for this reach.
- 1.55 MH Coating contractor to review Sabino Creek Siphon Inlet & Outlet Structure As-built Drawings for rehabilitation and coating work at 4466-IN & 4466-OUT. Work scope includes, but is not limited to, cleaning, coating and new redwood diversion stop logs. B&F remove and replace existing concrete lids with new precast material that will need to be coated.
- 1.56 CIPP & MH Coating Contractors are to provide daily cleanup of the jobsite and manholes/reaches. It is expected for MH Contractors to cleanup all debris generated from cleaning, preparation and coating activities.
- 1.57 CIPP & MH Coating Contractor to provide a letter from your bonding company that you have the capacity to provide a payment/performance bond for this project.
- 1.58 Bidding Contractors to adhere to Pima County, 2012 Engineering Design Standards and Standard Specifications and Details for Construction 2012

2 Mandatory Pre-Bid Meeting

A Mandatory Pre-Bid Conference has been scheduled for 9/30/2014 at 10:00 am and will be held at the PCRWRD Conveyance Office located at 3355 N. Dodge Blvd., Tucson, AZ

3 Project Schedule:

Bid Documents available to Subcontractors	29-Sep-14
Mandatory Pre-Bid Meeting	30-Sep-14
Final Day for Questions	3-Oct-14
Bid Due Date	13-Oct-14
Bid Review	October 13 through October 17
Subcontractor Notification of Selection	17-Oct-14
Submittal Due Date	29-Oct-14
Notice to Proceed	5-Nov-14

4 North Rillito Interceptor - As-Builts

Electronic copies have been made available for the as-builts associated with the NRI Rehab Project. Please review these to verify shot lengths, dimensions, manhole sizes, structures, pipe materials and interior diameter prior to the bid and ordering of materials.

5 North Rillito Interceptor - Manhole Inspection Report

Electronic copies of the manhole inspection report have been made available to all potential MH & CIPP contractors prior to the bid. Please pay particular attention to the notes and photos of the manholes in regards to the condition of the existing channels and benches. The costs for rehabilitating these will need to be included in your VF price for manhole rehabilitation.

6 Flow Management Plans - Phase 1, 2, & 5

8&F will make available electronic copies of our flow management plans for Phase 1, 2 & 5, as they have been developed and approved at this point. The limits of Phases 3, 4 & 6 will be shown on a conceptual map. Phase 3 is tentatively from Sabino Canyon Rd. to Craycroft. Phase 4 Craycroft to Swan. Phase 6 is from Alvernon Way to Campbell Rd.

7 Project Sequence & Scheduling

This project will be broken into six (6) separate Rehabilitation Phases along the Rillito River. With the anticipation of each phase lasting 3-4 months for all rehabilitation and repair type work (New MH's, CIPP, Structures, Point Repairs, etc.). It is anticipated that there will be lags between each phases of roughly one (1) month to allow for the FMP installation, where there will be no CIPP or MH Rehab work taking place. See below for the phase limits:

Phase 1 - Woodland Rd. to the Sabino Creek

Phase 2 - Sabino Creek to 800' west of Sabino Canyon Rd.

Phase 3 - Sabino Canyon Rd. to Craycroft Rd.

Phase 4 - Craycroft Rd. to Swan Rd.

Phase 5 - Swan Rd. to Alvernon

Phase 6 - Alvernon to Campbell Rd.

Phase 1 Rehabilitation Section

This section encompasses the CIPP lining and Manhole Rehab work from (MH's 8716-20 to SIPHON 4466-IN). Approximately from Woodland Rd. to west of Tanque Verde Rd. ending at the Sabino Creek

Phase 2 Rehabilitation Section

This phase encompasses the CIPP Lining and Manhole Rehab work from MH's (4466-OUT to 1700-04). Approximately from the Sabino Creek to just west of Sabino Canyon Rd.

Phase 3 Rehabilitation Section

This phase encompasses the CIPP lining and Manhole Rehab work from MH's (1700-04 to 5033-03). Approximately from west of Sabino Canyon Road to just west of Craycroft Rd.

Phase 4 Rehabilitation Section

This phase encompasses the CIPP Lining and Manhole Rehab work from MH's (5033-03 to 1712-01). Approximately from west of Craycroft Rd. to east of Swan Rd.

Phase 5 Rehabilitation Section

This phase encompasses the CIPP Lining and Manhole Rehab work from MH's (1712-01 to 1710-05). Approximately from east of Swan Rd. to Alvernon Way.

Phase 6 Rehabilitation Section

This phase encompasses the CIPP Lining and Manhole Rehab work from MH's (1710-05 to 8809-01). Approximately from Alvernon Way to west of Campbell Rd.

8 Bid Schedule

A. Phase 1 Rehabilitation Section - Woodland Rd to Sabino Creek Siphon (MH 8716-20 to 4466-IN)						
Item Number & Description	Pipe Material	Quantity	Unit	Unit Price	Total	

CIPP LINING REHABILITATION - PHASE 1

1	Mobilization		1	LS	12,900.00	12,900.00
2	15" CIPP Lining (MH 8716-20 to 8716-10)	Coated ACP	5,100	LF	31.70	161,670.00
3	15" Pre-Liner for CIPP Lining	Coated ACP	5,100	LF	3.90	19,890.00
4	18" CIPP Lining (MH 8716-10 to MH 8716-02)	Coated ACP	3,009	LF	42.80	128,785.20
5	18" Pre-Liner for CIPP Lining	Coated ACP	3,009	LF	4.50	13,540.50
6	24" CIPP Lining (MH 8716-02 to 4466-IN)	VCP	416	LF	76.00	31,616.00

SUBTOTAL - CIPP LINING REHABILITATION 368,401.70

MANHOLE REHABILITATION & COATING - PHASE 1

1	Rehabilitate & Coat Existing Manholes		181	VF		
2	Rehabilitate & Coat Existing Base for MH Structural Inserts (MH 8716-05 & 8716-04)		2	EA		
3	Coat New CIP MH Base for 72" Manhole Removal/Replacement (MH 8716-07, 8716-06, 8716-03)		3	EA		
4	Specification Item E.3.1 - Efforts for cosmetic finish work to provide irregularity free uniform finish, free from trowel marks, voids, depressions, ripples, waves, bubbles, bumps or cracking in the final coating layer using an approved repair method. To provide uniform profile for coating.		120	HR		
5	1-inch additional underlayment application for extremely deteriorated manholes		45	VF		

SUBTOTAL - MH REHABILITATION & COATINGS

**Please List Your Installation Days Required to Complete Your Own Scope of Work (Calendar Days):

CIPP Lining 7

MH Coatings

Please List any MH's That Require CIPP Inversion Access, Cone/Barrel Removals or Base Modifications Below:

See attached spreadsheets

B. Phase 2 Rehabilitation Section - Sabino Creek Siphon to Sabino Creek Road (4466-OUT to 1700-04)						
Item Number & Description	Pipe Material	Quantity	Unit	Unit Price	Total	

CIPP LINING REHABILITATION - PHASE 2

1	Mobilization		1	LS	12,900.00	12,900.00
2	21" CIPP Lining (1811-01A to MH 1700-16)	Coated ACP	278	LF	72.70	20,210.60
3	21" Pre-Liner for CIPP Lining	Coated ACP	278	LF	5.30	1,473.40
4	24" CIPP Lining (4466-OUT to 1811-01A)	VCP	155	LF	110.80	17,174.00
5	27" CIPP Lining (1700-16 to 1700-15 & 6295-01 to 1700-04)	Coated ACP	5,304	LF	75.20	398,880.80
6	27" Pre-Liner for CIPP Lining	Coated ACP	5,304	LF	5.30	28,111.20
7	27" CIPP Lining (1700-15 to 6295-01)	VCP	852	LF	75.20	64,070.40
SUBTOTAL - CIPP LINING REHABILITATION						542,800.40

MANHOLE REHABILITATION & COATING - PHASE 2

1	Rehabilitate & Coat Existing Manholes		160	VF		
2	Rehabilitate & Coat Existing Base for MH Structural Insert (MH 1700-12)		1	EA		
3	Coat New CIP MH Base for 60" Manhole Removal/Replacement (MH 1700-07)		1	EA		
4	Coat New CIP MH Base for 84" Manhole Removal/Replacement (MH 1700-15, 6295-01, 1700-11, 1700-09, 1700-08)		5	EA		
5	Specification Item E.3.I - Efforts for cosmetic finish work to provide irregularity free uniform finish, free from trowel marks, voids, depressions, ripples, waves, bubbles, bumps or cracking in the final coating layer using an approved repair method. To provide uniform profile for coating.		96	HR		
6	1-inch additional underlayment application for extremely deteriorated manholes		44	VF		
SUBTOTAL - MH REHABILITATION & COATINGS						

**Please List Your Installation Days Required to Complete Your Own Scope of Work (Calendar Days):

CIPP Lining 9

MH Coatings _____

**Please List any MH's That Require CIPP Inversion Access, Cone/Barrel Removals or Base Modifications Below:

See attached

C. Phase 3 Rehabilitation Section - Sabino Canyon Rd. to Craycroft Rd (MH 1700-04 to 5033-03)					
Item Number & Description	Pipe Material	Quantity	Unit	Unit Price	Total

CIPP LINING REHABILITATION - PHASE 3

1	Mobilization		1	LS	12,900.00	12,900.00
2	27" CIPP Lining (MH 1700-04 to MH 1714-12)	Coated ACP	1,857	LF	77.90	144,660.30
3	27" Pre-Liner for CIPP Lining (MH 1700-04 to MH 1714-12)	Coated ACP	1,857	LF	5.30	9,842.10
4	30" CIPP Lining (MH 1714-12 to MH 1714-08 and MH 1714-07 to MH 5033-03)	Unlined RCP	7,938	LF	84.50	670,761.00
5	30" CIPP Lining (MH 1714-08 to MH 1714-07)	VCP	883	LF	81.80	72,229.40
SUBTOTAL - CIPP LINING REHABILITATION						910,392.80

MANHOLE REHABILITATION & COATING - PHASE 3

1	Rehabilitate & Coat Existing Manholes		423	VF		
Specification Item E.3.i - Efforts for cosmetic finish work to provide irregularity free uniform finish, free from trowel marks, voids, depressions, ripples, waves, bubbles, bumps or cracking in the final coating layer using an approved repair method. To provide uniform profile for coating.						
2			184	HR		
3	1-inch additional underlayment application for extremely deteriorated manholes		106	VF		
SUBTOTAL - MH REHABILITATION & COATINGS						

****Please List Your Installation Days Required to Complete Your Own Scope of Work (Calendar Days):**

CIPP Lining 12

MH Coatings _____

****Please List any MH's That Require CIPP Inversion Access, Cone/Barrel Removals or Base Modifications Below:**

See attached

D. Phase 4 Rehabilitation Section - Craycroft Rd to Swan Rd (MH 5033-03 to 1712-01)						
Item Number & Description	Pipe Material	Quantity	Unit	Unit Price	Total	

CIPP LINING REHABILITATION - PHASE 4

1	Mobilization		1	LS	12,900.00	12,900.00
2	30" CIPP Lining (MH 5033-03 to MH 1712-06)	Unlined RCP	2,681	LF	91.80	246,115.80
3	33" CIPP Lining (MH 1712-06 to MH 1712-01)	Unlined RCP	2,761	LF	95.70	264,227.70
SUBTOTAL - CIPP LINING REHABILITATION						523,243.50

MANHOLE REHABILITATION & COATING - PHASE 4

1	Rehabilitate & Coat Existing Manholes		141	VF		
Specification Item E.3.1 - Efforts for cosmetic finish work to provide irregularity free uniform finish, free from trowel marks, voids, depressions, ripples, waves, bubbles, bumps or cracking in the final coating layer using an approved repair method. To provide uniform profile for coating.						
2			80	HR		
1-inch additional underlayment application for extremely deteriorated manholes						
3			36	VF		
SUBTOTAL - MH REHABILITATION & COATINGS						

****Please List Your Installation Days Required to Complete Your Own Scope of Work (Calendar Days):**

CIPP Lining 8

MH Coatings _____

****Please List any MH's That Require CIPP Inversion Access, Cone/Barrel Removals or Base Modifications Below:**

See attached

E Phase 5 Rehabilitation Section - Swan Rd to River and Alvernon Way (MH 1712-01 TO 1710-05)						
Item Number & Description	Pipe Material	Quantity	Unit	Unit Price	Total	

CIPP LINING REHABILITATION - PHASE 5

1	Mobilization		1	LS	12,900.00	12,900.00
2	33" CIPP Lining (MH 1712-01 to MH 1710-05)	Unlined RCP	5,383	LF	111.10	598,051.30
SUBTOTAL - CIPP LINING REHABILITATION						610,951.30

MANHOLE REHABILITATION & COATING - PHASE 5

1	Rehabilitate Existing Sewer Manholes		220	VF		
Specification Item E.3.1 - Efforts for cosmetic finish work to provide irregularity free uniform finish, free from trowel marks, voids, depressions, ripples, waves, bubbles, bumps or cracking in the final coating layer using an approved repair method. To provide uniform profile for coating.						
2			80	HR		
3	1-inch additional underlayment application for extremely deteriorated manholes		55	VF		
SUBTOTAL - MH REHABILITATION & COATINGS						

****Please List Your Installation Days Required to Complete Your Own Scope of Work (Calendar Days):**

CIPP Lining 9

CIPP Test Section Lab Test Result Turnaround Time 3

MH Coatings _____

****Please List any MH's That Require CIPP Inversion Access, Cone/Barrel Removals or Base Modifications Below:**

See attached

F Phase 6 Rehabilitation Section - River and Alvernon Way to West of Campbell (MH 1710-05 TO 8809-01)						
Item Number & Description	Pipe Material	Quantity	Unit	Unit Price	Total	

CIPP LINING REHABILITATION - PHASE 6

1	Mobilization		1	LS	12,900.00	12,900.00
2	33" CIPP Lining (MH 1710-05 to MH 1710-01)	Unlined RCP	2,397	LF	103.20	247,370.40
3	33" CIPP Lining (MH 1710-01 to MH 5117-05)	X-Lock RCP	2,715	LF	98.40	267,156.00
4	36" CIPP Lining (MH 5117-05 to MH 1708-13)	T-Lock RCP	9,686	LF	124.20	1,203,001.20
SUBTOTAL - CIPP LINING REHABILITATION						1,730,427.60

MANHOLE REHABILITATION & COATING - PHASE 6

1	Rehabilitate Existing Sewer Manholes		653	VF		
2	Coat New CIP MH Base for 84" Manhole Removal/Replacement (MH 1708-34A)		1	EA		
3	Coat New CIP MH Base for 120" Manhole Removal/Replacement (MH 1708-36, 1708-34, 1708-25)		3	EA		
4	Specification Item E.3.1 - Efforts for cosmetic finish work to provide irregularity free uniform finish, free from trowel marks, voids, depressions, ripples, waves, bubbles, bumps or cracking in the final coating layer using an approved repair method. To provide uniform profile for coating.		280	HR		
5	1-Inch additional underlayment application for extremely deteriorated manholes		164	VF		
SUBTOTAL - MH REHABILITATION & COATINGS						

**Please List Your Installation Days Required to Complete Your Own Scope of Work (Calendar Days):

CIPP Lining 25

MH Coatings _____

**Please List any MH's That Require CIPP Inversion Access, Cone/Barrel Removals or Base Modifications Below:

See attached

NORTH RILLITO INTERCEPTOR REHABILITATION BID RECAP

Phase 1 Rehabilitation Section TOTAL BASE BID (ITEM A) _____

Phase 2 Rehabilitation Section TOTAL BASE BID (ITEM B) _____

Phase 3 Rehabilitation Section TOTAL BASE BID (ITEM C) _____

Phase 4 Rehabilitation Section TOTAL BASE BID (ITEM D) _____

Phase 5 Rehabilitation Section TOTAL BASE BID (ITEM E) _____

Phase 6 Rehabilitation Section TOTAL BASE BID (ITEM F) _____

MH Coatings - 5 Year Warranty/Maintenance Bond COST _____

PROJECT TOTAL _____

G ADD ALTERNATES

Item Number & Description	Quantity	Unit	Unit Price	Total
1 Rehabilitate & Coat Existing Sabino Creek Siphon Inlet & Outlet Structure. Including new redwood diversion stop logs. (*B&F to provide new precast structure lids and openings)	1	LS		
2 CIPP lining repair for removal of bumps, or wrinkles using an epoxy product in coated ACP Reaches	1	EA	881.30	881.30
3 HCS Reinstatement	1	EA		

9 Items to Include with Bid

1. CIPP Shot Schedule
2. Crew Availability & Crew Size
3. Key Personnel
4. Current Workload
5. List of MH's that require modification for CIPP Lining Access
6. List of trenching requirements for CIPP construction water and supply pipe (if required)

10 Project Duration

Time is of the essence. Bidder agrees to complete their own scope of work in the allotted Calendar Days listed above on the bid schedule. Failure to meet this schedule due to non-performance will result in Liquidated Damages.

11 Total Installation Days - Phases 1 to 6

CIPP INSTALLATION CALENDAR DAYS

70

MH COATING INSTALLATION CALENDAR DAYS

12 Bond

Total amount (or percentage) to be added to this Bid if Bidder is required to provide Performance and Payment Bond is 0.0%. The subcontractor must list their bonding company and agent with a phone number and contact name.

Surety Company: Travelers Casualty and Surety Company of America

Agent/Firm: JW Terrill

Agent Name/Phone Number: Dana Dragoy 314.594.2655

13 2nd & 3rd Tier Subcontractors (Subs to Subcontractors)

The following Tiered-Subcontractors are proposed to perform work on this Project. This list is complete and no additional subcontractors shall be allowed on the project site without prior approval:

Company	Phone	Scope of Work

14 Approved Suppliers/Vendors

The following Suppliers/Vendors and Products will be used to complete this Project. This list is complete and no changes shall be allowed prior to approval (CIPP bidder shall include proposed liner design and mill thickness, liner manufacturer and resin supplier below).

Approved Supplier/Vendor

Product/Materials Supplied

Insite form/Manhole

CIPP material

CIPP Bidder has included proposed liner and resin specification with Bid:

Yes ☒ No ☐

CIPP Bidder has included proposed liner mill thickness with Bid:

Yes ☒ No ☐

CIPP Bidder has include pre-liner material with Bid:

Yes ☒ No ☐

Manhole Rehab Contractor has Included Performance History per the Technical Specifications

Yes ☐ No ☐

15 Insurance

Bidders insurance coverage meets or exceeds the PCRWRD's contract requirements:

Yes ☒ No ☐

The subcontractor must list their insurance company and agent with a contact name and number.

Insurance Company: Liberty Mutual

Agent/Firm: Lockton Companies

Agent Name / Phone Number: Nancy Mueller 314.812.3294

16 Pollution Insurance

CIPP Bidder shall furnish a Contractor's Pollution Liability coverage, with limits of liability no less than \$2,000,000 / event and \$4,000,000 aggregate. Bidders' pollution liability insurance coverage meets or exceeds this requirement.

Yes ☒ No ☐

17 Proposal Documents

Project Drawings - PCRWRD Project No. 3NRI14 dated 2/05/2013

Technical Specifications - PCRWRD Project No. 3NRI14 dated 2/05/2013

CCTV Pre-Video

NRI As-Builts

ACP CIPP Lining Investigation Videos (Pre & Post Lining)

Manhole Investigation Report performed by Brown and Caldwell

Manhole Investigation Photos of MH Interior

Flow Management Plan provided by B&F Contracting Inc. (Phase 1, 2 & 5)

18 Liquidated Damages

Additional installation days for CIPP or MH Coating Work, outside of your Calendar Days listed above will result in liquidated damages to cover the costs of the Flow Management System. Liquidated Damages are calculated as follows:

CIPP Lining = \$11,192.00 per calendar day

MH Coatings = \$2,680.00 per calendar day

19 Acknowledgments

Addendum #1 Dated 10/2/2014

Addendum

Dated

Addendum #2 Dated 10/7/2014

Addendum

Dated

Addendum #3 Dated 10/9/2014

Addendum

Dated

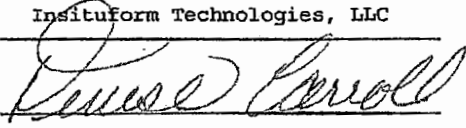
Bidder Acknowledgement:

Bidder acknowledges the above addenda and once submitted, this Bid may not be altered, amended or withdrawn for a period of (90) days without prior written consent of B&F Contracting, Inc.

20 Signature

Bidder herein agrees that if awarded the work on the basis of this Bid Proposal, he will enter into and execute a sub-contract agreement with B&F Contracting Inc.

Company / Bidder: Insituform Technologies, LLC

Signature: 

Title: Denise Carroll, Contracting and Attesting Officer

Date: October 13, 2014

Arizona Contractors License No: 277787

NRI REHABILITATION PIMA COUNTY PROJECT NO. 3NR14
GIPP SHOT SCHEDULE

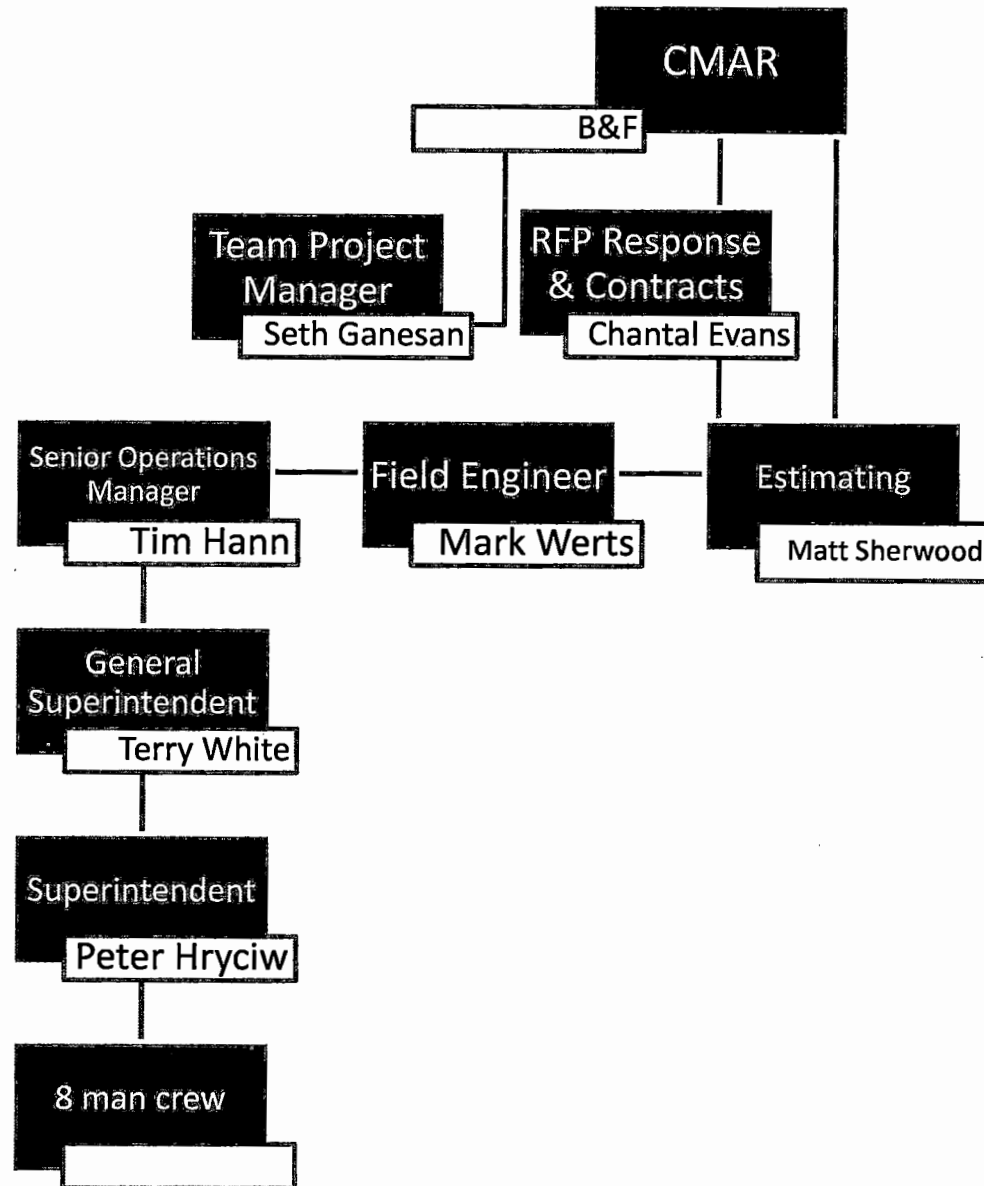


Phase	Duration (in Days)	Shot (Reach) ID	Import P6		Inversion Direction	Inversion MH	Tail MH	MH requiring CIPP Inversion access, cast barrel removal or base modification	Jetstream Depth (VF)	Downstream Depth (VD)	Fall (LF)	Street	Diameter (Inches) Minimum Thickness NOT DESIGN (mm)	Run Length (LF)	Shot Length (LF)
			Upstream MH	Downstream MH											
1	7	1	8716-20	8716-19	Downstream	8716-20	8716-17	Need minor tree trimming on MH 8716-20	12.38	10.8	5.98	E Woodland Rd	18	740	697
			8716-19	8716-18					10.5	12.3	0	E Woodland Rd	18	740	819.97
		2	8716-18	8716-17					12.3	12.88	1.58	E Woodland Rd	18	740	518.67
			8716-17	8716-16					12.88	12.71	2.29	E Woodland Rd	18	740	532.28
		3	8716-15	8716-15		8716-17	8716-14	None	12.71	12.31	2.47	E Woodland Rd	18	740	495
			8716-15	8716-14					12.31	12	2.30	E Woodland Rd	18	740	505.95
		4	8716-14	8716-13					12	11.45	2.51	E Woodland Rd	18	740	605.27
			8716-13	8716-12					11.45	11.48	0.7	E Woodland Rd	18	740	156.13
		5	8716-12	8716-11					11.48	11.39	0.87	E Woodland Rd	18	740	246.25
			8716-11	8716-10					11.39	11.2	3.41	E Woodland Rd	18	740	489.5
2	9	6	8716-10	8716-09	Downstream	8716-14	8716-10	None	11.2	11.26	2.17	E Woodland Rd	18	740	494.26
			8716-09	8716-08					11.26	10.9	2.04	E Woodland Rd	18	740	577.38
		7	8716-08	8716-07		8716-10	8716-07	None	10.9	10.9	1.77	E Woodland Rd	18	740	580.18
			8716-07	8716-06					10.9	10.89	2.12	Tanque Verde	18	750	616.43
		8	8716-06	8716-05		8716-04	8716-07	None	10.89	11.25	0.89	Tanque Verde	18	740	155.25
			8716-05	8716-04					11.25	11.1	4.18	Tanque Verde (dist version)	18	760	484.95
		9	8716-04	8716-03		8716-02	8716-03	None	11.1	11.1	4.18	assessment	18	750	264.77
			8716-03	8716-02					10.72	9.8	2.21	assessment	24	800	410
		10	8716-02	8716-01		8716-02	8716-01	None	10.61	11.3	0.01	assessment	24	800	150
			8716-01	8716-00					11.3	15.89	-4.19	assessment	21	800	278
3	12	11	1700-18	1700-15	Downstream	1700-16	1700-13	None	15.88	13.65	4.24	North Portano Rd	27	1050	433.17
			1700-15	1700-14					13.65	14.04	-0.24	assessment	27	1050	39.12
		12	1700-14	1700-13		1700-16	1700-13	None	14.04	11.87	2.89	assessment	27	1050	294.27
			1700-13	1700-12					11.87	12.32	1	assessment	27	1050	375.16
		13	1700-12	1700-11		1700-16	1700-13	None	12.32	13.01	0	assessment	27	1050	141.4
			1700-11	1700-10					13.01	11.8	1.08	assessment	27	1050	249.99
		14	1700-10	1700-09		1700-16	1700-13	None	11.8	11.9	2.54	assessment	27	1050	686.8
			1700-09	1700-08					11.9	11.9	1.6	assessment	27	1050	711
		15	1700-08	1700-07		1700-08	1700-06A	None	11.3	12.9	-0.92	assessment	27	1050	288.57
			1700-07	1700-06					12.9	10.99	2.99	assessment	27	1050	439.5
16	1700-06	1700-05	1700-08	1700-06A		None	10.99	10.71	0.73	assessment	27	1050	145.94		
	1700-05	1700-04					10.71	10.04	3.27	assessment	27	1050	783.11		
17	1700-04	1700-03	1700-08	1700-06A		None	9.04	6.83	3.14	assessment	27	1050	266.6		
	1700-03	1700-02					6.83	12.56	-2.95	assessment	27	1050	202.49		
18	1700-02	1700-01	1700-08	1700-06A		None	12.56	13.72	1.72	assessment	27	1050	354.69		
	1700-01	1700-00					13.72	14.88	1.32	assessment	27	1050	484.95		
19	1700-00	1700-00	1700-08	1700-06A		None	14.88	0	2480.61	assessment	27	1050	376		
	1700-00	1700-00					0	18.01	-2475.59	assessment	27	1050	781		
20	8240-01	1700-02	1700-04	8240-01		None	18.01	17.42	-0.87	assessment	27	1200	173		
	1700-02	1700-01					17.42	17.0	2478.18	assessment	27	1200	412		
21	8240-01	1714-12	1714-12	8240-01	None	17.42	17.48	-2473.97	assessment	27	1200	467			
	1714-12	1714-11				17.48	22.48	-2473.97	assessment	30	1500	470.75			
22	8240-01	1714-11	1714-12	8240-01	None	22.48	21.48	2.4	assessment	30	1500	139.43			
	1714-11	1714-10				21.48	20.78	1.58	assessment	30	1500	300			
23	8240-01	1714-10	1714-12	8240-01	None	20.78	16.0	4.93	assessment	30	1500	300			
	1714-10	1714-09				16.0	16.68	2.63	assessment	30	1500	649			
24	8240-01	1714-09	1714-12	8240-01	None	16.68	13.84	3.68	assessment	30	1500	241.48			
	1714-09	1714-08				13.84	14.29	1	assessment	30	1500	750.62			
25	8240-01	1714-08	1714-12	8240-01	None	14.29	12.55	3.6	assessment	30	1500	750.62			
	1714-08	1714-07				12.55	13.78	-0.97	assessment	30	1500	56.2			
26	8240-01	1714-07	1714-09	8240-01	None	13.78	15.99	0.26	assessment	30	1500	822.43			
	1714-07	1714-06				15.99	11.33	7.15	assessment	30	1500	953			
27	8240-01	1714-06	1714-09	8240-01	None	11.33	9.26	7.58	assessment	30	1500	840			
	1714-06	1714-05				9.26	11.38	-1.05	assessment	30	1500	180.51			
28	8240-01	1714-05	1714-09	8240-01	None	11.38	8.88	6.24	assessment	30	1500	737.78			
	1714-05	1714-04				8.88	13.4	-2.73	assessment	30	1500	204.08			
29	8240-01	1714-04	1714-09	8240-01	None	13.4	14.92	-1.98	assessment	30	1500	204.08			
	1714-04	1714-03				14.92	14.86	1.9	assessment	30	1500	654			
30	8240-01	1714-03	1714-09	8240-01	None	14.86	20.3	21.8	assessment	30	1500	264.7			
	1714-03	1714-02				20.3	34.72	4.61	assessment	30	1500	89.42			
31	8240-01	1714-02	1714-09	8240-01	None	34.72	29.72	10.88	assessment	30	1500	61			
	1714-02	1714-01				29.72	24.45	0	assessment	30	1500	203			
32	8240-01	1714-01	1714-09	8240-01	None	24.45	10.79	10.79	assessment	30	1500	248			
	1714-01	1714-00				10.79	10.83	7.72	assessment	30	1500	835			
33	8240-01	1714-00	1714-09	8240-01	None	10.83	10.48	2.09	assessment	30	1500	692			
	1714-00	1713-99				10.48	15.99	0.82	assessment	30	1500	685			
34	8240-01	1713-99	1714-09	8240-01	None	15.99	9.78	8.13	assessment	30	1500	820.29			
	1713-99	1713-98				9.78	11.7	-0.77	assessment	30	1500	891			
35	8240-01	1713-98	1714-09	8240-01	None	11.7	12.62	0.43	assessment	30	1500	463			
	1713-98	1713-97				12.62	12.85	2.01	assessment	30	1500	590			
36	8240-01	1713-97	1714-09	8240-01	None	12.85	14.45	1.47	assessment	30	1500	496			
	1713-97	1713-96				14.45	16.82	-0.78	assessment	30	1500	835			
37	8240-01	1713-96	1714-09	8240-01	None	16.82	16.81	2.39	assessment	30	1500	711			
	1713-96	1713-95				16.81	20.3	-0.30	assessment	30	1500	267			
38	8240-01	1713-95	1714-09	8240-01	None	20.3	34.72	4.61	assessment	30	1500	89.42			
	1713-95	1713-94				34.72	29.72	10.88	assessment	30	1500	61			
39	8240-01	1713-94	1714-09	8240-01	None	29.72	24.45	0	assessment	30	1500	203			
	1713-94	1713-93				24.45	10.79	10.79	assessment	30	1500	248			
40	8240-01	1713-93	1714-09	8240-01	None	10.79	10.83	7.72	assessment	30	1500	835			
	1713-93	1713-92				10.83	10.48	2.09	assessment	30	1500	692			
41	8240-01	1713-92	1714-09	8240-01	None	10.48	15.99	0.82	assessment	30	1500	685			
	1713-92	1713-91				15.99	9.78	8.13	assessment	30	1500	820.29			
42	8240-01	1713-91	1714-09	8240-01	None	9.78	11.7	-0.77	assessment	30	1500	891			
	1713-91	1713-90				11.7	12.62	0.43	assessment	30	1500	463			
43	8240-01	1713-90	1714-09	8240-01	None	12.62	12.85	2.01	assessment	30	1500	590			
	1713-90	1713-89				12.85	14.45	1.47	assessment	30	1500	496			
44	8240-01	1713-89	1714-09	8240-01	None	14.45	16.82	-0.78	assessment	30	1500	835			
	1713-89	1713-88				16.82	16.81	2.39	assessment	30	1500	711			
45	8240-01	1713-88	1714-09	8240-01	None	16.81	20.3	-0.30	assessment	30	1500	267			
	1713-88	1713-87				20.3	34.72	4.61	assessment	30	1500	89.42			
46	8240-01	1713-87	1714-09	8240-01	None	34.72	29.72	10.88	assessment	30	1500	61			
	1713-87	1713-86				29.72	24.45	0	assessment	30	1500	203			
47	8240-01	1713-86	1714-09	8240-01	None	24.45	10.79	10.79	assessment	30	1500	248			
	1713-86	1713-85				10.79	10.83	7.72	assessment	30	1500	835			
48	8240-01	1713-85	1714-09	8240-01	None	10.83	10.48	2.09	assessment	30	1500	692			
	1713-85	1713-84				10.48	15.99	0.82	assessment	30	1500	685			
49	8240-01	1713-84	1714-09	8240-01	None	15.99	9.78	8.13	assessment	30	1500	820.29			
	1713-84	1713-83				9.78	11.7	-0.77	assessment	30	1500	891			
50	8240-01	1713-83	1714-09	8240-01	None	11.7	12.62	0.43	assessment	30	1500	463			
	1713-83	1713-82				12.62	12.85	2.01	assessment	30	1500	590			
51	8240-01	1713-82	1714-09	8240-01	None	12.85	14.45	1.47	assessment	30	1500	496			
	1713-82	1713-81				14.45	16.82	-0.78	assessment	30	1500	835			
52	8240-01	1713-81	1714-09	8240-01	None	16.82	16.81	2.39	assessment	30	1500	711			
	1713-81	1713-80				16.81	20.3	-0.30	assessment	30	1500	267			
53	8240-01	1713-80	1714-09	8240-01	None	20.3	34.72	4.61	assessment	30	1500	89.42			
	1713-80	1713-79				34.72	29.72	10.88	assessment	30	1500	61			
54	8240-01	1713-79	1714-09	8240-01	None	29.72	24.45	0	assessment	30	1500	203			
	1713-79	1713-78				24.45	10.79	10.79	assessment	30	1500	248			
55	8240-01	1713-78	1714-09	824											



NRI Rehabilitation Pima County Project No. 3NRI14 - B & F Contracting, Inc
Insituform's List of Current Workload in AZ, NV and CA with the assigned key personnel (Ref - Bid Form 1.38)

Project in Backlog	Contract Value	Timeline	Project Manager	Field Engineer	General Superintendent	Superintendent
City of Phoenix Small Diameter Rehab (AZ)	\$1.55 million	Sep 2014 to Jan 2015	Seth Ganesan	Mark Werts	Terry White	Peter Hryciw until NRI Start/ Tempe Crew 2 from NRI start
SEI Rehab Phase II Simpson Street	\$0.4 million	Nov/ Dec 2014	Seth Ganesan	Mark Werts	Terry White	Peter Hryciw and/ or Tempe Crew 2 depending on NRI Schedule
PIMA County JOC Work Orders (AZ)	As released	Oct 2014 to Oct 2015	Seth Ganesan	Mark Werts	Terry White	Peter Hryciw between NRI phases/ Tempe Crew 2 during NRI
Scottsdale JOC Work Orders (AZ)	As released	Jan 2015 to Dec 2015	Seth Ganesan	Mark Werts	Terry White	Peter Hryciw between NRI phases/ Tempe Crew 2 during NRI
Nevada Irrigation District M2013-03 (NV)	\$0.13 million	Nov-14	Richard Gann	Cory Wagner	JD Horton	Todd McMillan
LA County Sanitation District # 5 (CA)	\$10.6 million	Sep 2014 to Jan 2015	Roberto Rizo	Ben Smith	Michael Gallegos	Raul Ruiz
Orange County Sanitation District/ Kiewit Newport Beach Force Main Ph 1 (CA)	\$2.56 million	Jan 2015 to Mar 2015	Roberto Rizo	Yan Therube	Mark Hairston	Fernando Avila
Orange County Sanitation District/ Kiewit Newport Beach Force Main Ph 2 (CA)	\$2 million	Oct 2015 to Jan 2016	Roberto Rizo	Yan Therube	Mark Hairston	Fernando Avila
Imperial Irrigation	\$0.07 million	Q4 2014	Roberto Rizo	Yan Therube	Michael Gallegos	Fernando Avila
Merced, CA #1140009 HWY 59	\$0.53 million	Oct-14	Richard Gann	Cory Wagner	JD Horton	Todd McMillan
Beale Air Force Base	\$0.52 million	Q3 and Q4 2015	Richard Gann	Cory Wagner	JD Horton	Todd McMillan
Ross Valley Sanitary District Magnolia Avenue Truck Rehab	\$0.17 million	Nov-14	Richard Gann	Cory Wagner	JD Horton	Todd McMillan
Sacramento Area Sewer District CA Franklin Blvd	\$0.19 million	Nov-14	Richard Gann	Cory Wagner	JD Horton	Todd McMillan
Napa Sanitation District North Napa Cipp Lining	\$0.53 million	Dec-14	Richard Gann	Cory Wagner	JD Horton	Todd McMillan
Palo Alto, CA Sanitary Sewer Rehab Project	\$0.17 million	Dec-14	Richard Gann	Cory Wagner	JD Horton	Todd McMillan





Insituform[®]
Technologies, LLC.

NRI Rehabilitation Pima County Project No. 3NRI14 - B & F Contracting, Inc
List of Trenching requirements for CIPP construction water and supply pipe

Manhole	Purpose of trench	Location
1710-06	For inversion water	Cut from south side of River Rd to center
1710-03	For inversion water	Cut from south side of River Rd to center
1708-36	For inversion water	Cut from south side of River Rd to center
1708-28A	For inversion water	North cut from River Rd to center median
1708-26	For inversion water	South side cut River Rd to center mendian

CONTRACTOR EXPERIENCE FORM

Provide list of experience per the requirements of Section 713, Paragraph 713.5 of the Special Provisions.

Failure to provide complete information on this form may deem your bid non-responsive.

1. PROJECT: Palm Desert Trunk Sewer Rehab DATE COMPLETED: Sept. 2014
NAME OF OWNER: Coachella Valley Water District
CONTACT PERSON: Luis Tamaiz PHONE NUMBER: 562-755-0535
SIZE OF CIPP INSTALLED: 33&36" TOTAL LENGTH INSTALLED: 16,882 FEET
LONGEST INDIVIDUAL LENGTH OF CIPP INSTALLED: 1300 FEET

2. PROJECT: Coachella Ave 62 DATE COMPLETED: May 2014
NAME OF OWNER: Coachella Valley Water District
CONTACT PERSON: Luis Tamaiz PHONE NUMBER: 562-755-0535
SIZE OF CIPP INSTALLED: 20,33,42 TOTAL LENGTH INSTALLED: 27,000 FEET
LONGEST INDIVIDUAL LENGTH OF CIPP INSTALLED: 800 FEET

3. PROJECT: Central Trunk Sanitary Rehab DATE COMPLETED: Sept 2010
NAME OF OWNER: Sacramento Area Sewer District
CONTACT PERSON: Amber Parmer PHONE NUMBER: 916-876-5996
SIZE OF CIPP INSTALLED: 42,48,54,60" TOTAL LENGTH INSTALLED: 41,665 FEET
LONGEST INDIVIDUAL LENGTH OF CIPP INSTALLED: 2600 FEET

4. PROJECT: Gravity Main DIP Rehab DATE COMPLETED: Feb 2013
NAME OF OWNER: City of Vista CA
CONTACT PERSON: Tony White PHONE NUMBER: 619-212-3554
SIZE OF CIPP INSTALLED: 36 TOTAL LENGTH INSTALLED: 10,000 FEET
LONGEST INDIVIDUAL LENGTH OF CIPP INSTALLED: 800 FEET

5. PROJECT: SARI Repairs to RCP reaches IVA to IVB DATE COMPLETED: Nov 2011
NAME OF OWNER: Santa Ana Watershed Project Authority
CONTACT PERSON: David Rhuel PHONE NUMBER: 951-354-4223
SIZE OF CIPP INSTALLED: 24 TOTAL LENGTH INSTALLED: 24,669 FEET
LONGEST INDIVIDUAL OF CIPP LENGTH INSTALLED: 2200 FEET

SUPERINTENDENT QUALIFICATION FORM

Provide the name of the construction superintendent/superintendents to be assigned to the above stated project. Each qualified superintendent shall have a minimum of three (3) years CIPP lining supervisory field experience on a least 3 successfully completed projects containing at least a total of 3,000 LF of 6"-10" or larger CIPP liner including three (3) years flow diversion supervisory field experience per the requirements of Section 713, Paragraph 713.5 of Special Provisions.

Failure to provide complete information on this form may deem your bid non-responsive.

SUPERINTENDENT NAME: Peter Hryciw

1. PROJECT: Palm Desert _____ DATE COMPLETED _____

NAME & ADDRESS OF OWNER: -----See Contractor Form

Coachella Valley Water - 75525 Hovley Ln E, Palm Desert, CA 92211

CONTACT PERSON: _____ PHONE NUMBER _____

SIZE OF CIPP INSTALLED: 33 _____ TOTAL TIME ACTING AS SUPERINTENDENT: 1.5 _____ MONTHS

INCLUDED FLOW DIVERSION? CHECK ONE ☐ YES ☐ NO

2. PROJECT: Coachella 62 _____ DATE COMPLETED _____

NAME & ADDRESS OF OWNER: ----See Contractor Form

Coachella Valley Water - 75525 Hovley Ln E, Palm Desert, CA 92211

CONTACT PERSON: _____ PHONE NUMBER _____

SIZE OF CIPP INSTALLED: 42 _____ TOTAL TIME ACTING AS SUPERINTENDENT: 1 _____ MONTHS

INCLUDED FLOW DIVERSION? CHECK ONE ☐ YES ☐ NO

3. PROJECT: Pima County JOC—B&F and KE&G 70,881' _____ DATE COMPLETED 2012-Current

NAME & ADDRESS OF OWNER: Pima County Wastewater

CONTACT PERSON: Dan Foley/Brian Janski PHONE NUMBER 520-840-9785/520-940-8423

SIZE OF CIPP INSTALLED: 6,8,10,12,15,24,&60" TOTAL TIME ACTING AS SUPERINTENDENT: 24 MONTHS

INCLUDED FLOW DIVERSION? CHECK ONE ☐ YES ☐ NO

4. PROJECT: Phoenix JOC _____ DATE COMPLETED Dec 2013 _____

NAME & ADDRESS OF OWNER: City of Phoenix, 200 W. Washington Street Floor 9, Phoenix AZ 85003 _____

CONTACT PERSON: Steve Fernandez _____ PHONE NUMBER 602-495-0724

SIZE OF CIPP INSTALLED: 8-15" _____ TOTAL TIME ACTING AS SUPERINTENDENT: 36 MONTHS

INCLUDED FLOW DIVERSION? CHECK ONE ☐ YES ☐ NO

SUPERINTENDENT QUALIFICATION FORM CONTINUED

5. PROJECT: _____ DATE COMPLETED _____
NAME & ADDRESS OF OWNER: _____

CONTACT PERSON: _____ PHONE NUMBER _____
SIZE OF CIPP INSTALLED: _____ TOTAL TIME ACTING AS SUPERINTENDENT: _____ MONTHS
INCLUDED FLOW DIVERSION? CHECK ONE ☐ YES ☐ NO

6. PROJECT: _____ DATE COMPLETED _____
NAME & ADDRESS OF OWNER: _____

CONTACT PERSON: _____ PHONE NUMBER _____
SIZE OF CIPP INSTALLED: _____ TOTAL TIME ACTING AS SUPERINTENDENT: _____ MONTHS
INCLUDED FLOW DIVERSION? CHECK ONE ☐ YES ☐ NO

7. PROJECT: _____ DATE COMPLETED _____
NAME & ADDRESS OF OWNER: _____

CONTACT PERSON: _____ PHONE NUMBER _____
SIZE OF CIPP INSTALLED: _____ TOTAL TIME ACTING AS SUPERINTENDENT: _____ MONTHS
INCLUDED FLOW DIVERSION? CHECK ONE ☐ YES ☐ NO

8. PROJECT: _____ DATE COMPLETED _____
NAME & ADDRESS OF OWNER: _____

CONTACT PERSON: _____ PHONE NUMBER _____
SIZE OF CIPP INSTALLED: _____ TOTAL TIME ACTING AS SUPERINTENDENT: _____ MONTHS
INCLUDED FLOW DIVERSION? CHECK ONE ☐ YES ☐ NO

9. PROJECT: _____ DATE COMPLETED _____
NAME & ADDRESS OF OWNER: _____

CONTACT PERSON: _____ PHONE NUMBER _____
SIZE OF CIPP INSTALLED: _____ TOTAL TIME ACTING AS SUPERINTENDENT: _____ MONTHS
INCLUDED FLOW DIVERSION? CHECK ONE ☐ YES ☐ NO

USE SEPARATE SHEET FOR EACH DESIGNATED SUPERINTENDANT

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FORMS_9-02-11.doc



Insituform[®]
Technologies, Inc.

CIPP Felt Liner Material
Manufactured by Insituform Technologies, Inc.

"The ITI CIPP tubes comply with the industry standards as stipulated within ASTM F1216 and ASTM D5813. The needled polyester felt sewn seam tube construction exceeds all strengths required within standard D5813: Sections 5. Materials and Manufacture and 6.1 Requirements, Fabric Tube Strength. "

-Felt Density ~ 1.38 g/cc; flexible membrane density ~ 0.93g/cc; void volume ~ 85%



Insituform
an AEGION company

17999 Edison Ave.
Chesterfield, MO 63005

CERTIFICATE OF COMPLIANCE

Date: October 10, 2014

Project: NRI Rehabilitation Pima County Project No. 3NRI14

102T/TA is a resin that is manufactured in the United States of America and has been approved by Insituform Technologies, LLC. for use in Insituform projects. 102T/TA resin has a successful history in both lab conditions and actual field installations and meets the chemical resistance recommendations of ASTM F1216 and ASTM D5813. We recommend the following physical properties for Insituform design when using the 102T/TA polyester resin system:

Flexural Modulus of Elasticity.....	500,000 psi
Flexural Strength	4,500 psi
Flexural Modulus Reduction to Account For Long-term Effects.....	50%

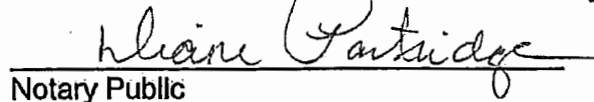
The above values were derived from samples tested in accordance with modified ASTM D-790 when used and installed in accordance with procedures recommended by Insituform Technologies, LLC.

INSITUFORM TECHNOLOGIES, LLC.


Eugene Zaltsman
Sr. Applications Engineer

STATE OF MISSOURI
COUNTY OF ST. LOUIS

Subscribed and sworn to before me on Friday, October 10, 2014.


Notary Public





Insituform
Global Pipeline Protection

17988 Edson
Chesterfield, MO 63005

Tel: 636-530-8000
Fax: 636-530-8744
www.insituform.com

CERTIFICATE OF COMPLIANCE

Date: October 10, 2014

Project: NRI Rehabilitation Pima County Project No. 3NRI14

To Whom It May Concern:

This letter certifies that Insituform tubes are manufactured in Batesville, Mississippi, USA, by Insituform Technologies, LLC and meet all relevant specifications for a cured-in-place pipe product: ASTM D 5813, ASTM F 1216, and ASTM F 1743. Insituform tubes have been manufactured in the USA since 1981.

The finished tube is manufactured using multiple layers of polyester felt, with one layer coated with Polypropylene plastic. The layers are cut/slit to the desired width, and sewn concentrically to form the final tube. The coated layer is also sealed at the seam, using an extrusion or taping process. The extrusion process is used on the standard (inverted) tubes. The standard (inverted) tubes are manufactured with the coated layer on the outside.

Felt production is achieved by a non-woven needle punch process using Polyester fiber. The finished product is tested for thickness under a specified load and for tensile strength in accordance with ASTM D 5813. The fabric tube has a minimum tensile strength of 750 psi (5 MPa) in both the longitudinal and the transverse direction. The seam strength of the tube is also tested on a regular basis and also meets or exceeds the minimum tensile strength of 750 psi (5 MPa) in both longitudinal and transverse direction. For Quality Assurance purposes, the material is also tested for weight and thickness.

All standard (inverted) tubes are run through a dye bath prior to shipment to ensure there are no leaks. Following the inspection process all tubes are printed with yard marks.

All tubes with tapers, transitions, or any change in tube diameter or thickness are produced under the same specifications, with the same materials, and meet the same material testing requirements as the standard tube.


The quality system used by Insituform Technologies, LLC is ISO 9001:2008 certified.

The end use of the Insituform tube is to rehabilitate sewer and drainage pipes to increase the life of the pipe and prevent a dig and replacement of a pipe.

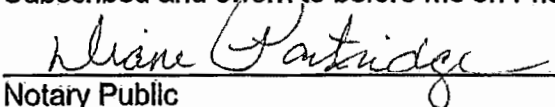
Please contact us directly with any questions you may have.

Sincerely,

INSITUFORM TECHNOLOGIES, LLC


Eugene Zaltsman
Sr. Applications Engineer
STATE OF MISSOURI
COUNTY OF ST. LOUIS

Subscribed and sworn to before me on Friday, October 10, 2014.


Notary Public

DIANE PARTRIDGE
Notary Public - Notary Seal
STATE OF MISSOURI
St. Louis County
My Commission Expires: July 8, 2016
Commission # 12595471



Insituform

An Aegion Company

Worldwide Pipeline 17999 Edison Ave.

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**102T Series
Polyester Resin
October 2014**

**Polyester Resin for Gravity
CIPP Applications**

Insituform's 102T Series is a family of polyester resins for gravity sanitary and storm sewer applications. Resins currently approved for the 102T Series include:

AOC L758
Interplastic COR78-AT-559/5XX
AOC L721
Insituform 102T

Typical Resin/Felt Properties

Flexural Strength, psi/MPa	4,500/31.5	ASTM D 790
Flexural Modulus, psi/MPa	500,000/2,760	ASTM D 790

Description

Insituform's 102T Series resins are comprised of filled, thixotropic polyester resins and are excellent applications for sanitary and storm sewers. These resins can also be used in some industrial applications. Polyester resins provide the corrosion resistance required for sanitary sewer applications and also provide the durability needed for long-term applications.

Features

Good physical properties, corrosion resistant, durable, good long-term properties, excellent catalyzed pot life, high heat distortion temperature and high molecular weight.

Safety

Safety guidelines are available in the appropriate Material Safety Data Sheet.

Detailed Information

Detailed information for any of the approved resins in the 102T Series can be provided upon request.



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**102T Series
Polyester Resin
October 2014**

**Corrosion Testing for Gravity
CIPP Applications**

Insituform's 102T Series is a family of polyester resins for gravity sanitary and storm sewer applications. Resins currently approved for the 102T Series include:

AOC L758
Interplastic COR78-AT-559/5XX
AOC L721
Insituform 102T

Typical Resin/Felt Properties

Flexural Strength, psi/MPa	4,500/31.5	ASTM D 790
Flexural Modulus, psi/MPa	500,000/2,760	ASTM D 790

Chemical Resistance Testing

CIPP laminates made from each of Insituform's 102T Series resins are tested for chemical resistance in accordance with ASTM F1216 for one month exposure and ASTM D5813 for one year exposure.

Test Results

The results of the ASTM F 1216 and D 5813 chemical corrosion testing are shown in the attached data sheets ASTM F 1216 CORROSION TESTING RESULTS and ASTM D 5813 CORROSION TESTING RESULTS, respectively.

Detailed Information

Detailed information for any of the approved resins in the 102T Series can be provided upon request.

INSITUFORM TECHNOLOGIES
102T SERIES POLYESTER RESIN
ASTM D 5813 CORROSION TESTING RESULTS

	AOCL721-LTA		AOCL758-LTI		COR 78-AT-559/5XX		INSITUFORM 102T	
	RETENTION VALUE	REQUIREMENT 80%	VALUE	REQUIREMENT 80%	RETENTION VALUE	REQUIREMENT 80%	RETENTION VALUE	REQUIREMENT 80%
CONTROL SAMPLE								
Flexural Modulus, psi	619,000		668,000		666,000		742,000	
1% NITRIC ACID								
Flexural Modulus, psi	533,000		561,000		620,000		700,000	
% Retention	86%	PASSED	84%	PASSED	93%	PASSED	94%	PASSED
5% SULFURIC ACID								
Flexural Modulus, psi	562,000		572,000		637,000		728,000	
% Retention	91%	PASSED	86%	PASSED	96%	PASSED	98%	PASSED
100% ASTM FUEL C								
FLEXURAL MODULUS, psi	587,000		666,000		595,000		744,000	
% Retention	95%	PASSED	100%	PASSED	89%	PASSED	100%	PASSED
100% VEGETABLE OIL								
FLEXURAL MODULUS, psi	634,000		665,000		674,000		753,000	
% Retention	102%	PASSED	100%	PASSED	101%	PASSED	101%	PASSED
0.10% DETERGENT								
Flexural Modulus, psi	550,000		591,000		638,000		633,000	
% Retention	89%	PASSED	89%	PASSED	96%	PASSED	85%	PASSED
0.10% SOAP								
Flexural Modulus, psi	553,000		651,000		645,000		654,000	
% Retention	89%	PASSED	98%	PASSED	97%	PASSED	88%	PASSED

June 2014

INSITUFORM TECHNOLOGIES
102T SERIES PLOYESTER RESIN
ASTM F 1216 CORROSION TESTING RESULTS

	AOC L721-LTA		AOC L758-LTI		COR 78-AT-559/5XX		INSITUFORM 102T	
	RETENTION	REQUIREMENT	RETENTION	REQUIREMENT	RETENTION	REQUIREMENT	RETENTION	REQUIREMENT
	VALUE	80%	VALUE	80%	VALUE	80%	VALUE	80%
CONTROL SAMPLE								
FLEXURAL STRENGTH, psi	6,650		6,048		8180		6,896	
FLEXURAL MODULUS, psi	590,000		722,710		665887		750,666	
TAP WATER								
FLEXURAL STRENGTH, psi	7,602		6,353		7896		6,703	
% RETENTION	114%	PASSED	100%	PASSED	97%	PASSED	97%	PASSED
FLEXURAL MODULUS, psi	551,706		632,142		648714		730,936	
% RETENTION	94%	PASSED	88%	PASSED	97%	PASSED	97%	PASSED
5% NITRIC ACID								
FLEXURAL STRENGTH, psi	7,464		5,924		7858		6,281	
% RETENTION	112%	PASSED	98%	PASSED	96%	PASSED	91%	PASSED
FLEXURAL MODULUS, psi	568,565		616,116		640045		755,552	
% RETENTION	96%	PASSED	85%	PASSED	96%	PASSED	101%	PASSED
10% PHOSPHORIC ACID								
FLEXURAL STRENGTH, psi	7,623		6,291		7709		7,177	
% RETENTION	115%	PASSED	100%	PASSED	94%	PASSED	104%	PASSED
FLEXURAL MODULUS, psi	544,623		678,126		663334		757,194	
% RETENTION	92%	PASSED	94%	PASSED	100%	PASSED	101%	PASSED
10% SULFURIC ACID								
FLEXURAL STRENGTH, psi	7,557		6,236		7774		6,989	
% RETENTION	114%	PASSED	100%	PASSED	95%	PASSED	101%	PASSED
FLEXURAL MODULUS, psi	575,028		646,307		667650		745,008	
% RETENTION	97%	PASSED	90%	PASSED	100%	PASSED	99%	PASSED
100% GASOLINE								
FLEXURAL STRENGTH, psi	8,397		6,576		8527		7,639	
% RETENTION	126%	PASSED	100%	PASSED	104%	PASSED	111%	PASSED
FLEXURAL MODULUS, psi	599,527		695,498		656421		765,138	
% RETENTION	102%	PASSED	96%	PASSED	99%	PASSED	102%	PASSED
100% VEGETABLE OIL								
FLEXURAL STRENGTH, psi	7,852		6,460		8039		6,772	
% RETENTION	118%	PASSED	100%	PASSED	98%	PASSED	98%	PASSED
FLEXURAL MODULUS, psi	624,613		685,065		675249		759,969	
% RETENTION	106%	PASSED	95%	PASSED	101%	PASSED	101%	PASSED
0.1% DETERGENT								
FLEXURAL STRENGTH, psi	7,125		6,396		7697		6,712	
% RETENTION	107%	PASSED	100%	PASSED	94%	PASSED	97%	PASSED
FLEXURAL MODULUS, psi	548,941		682,070		638719		737,963	
% RETENTION	93%	PASSED	94%	PASSED	96%	PASSED	98%	PASSED
0.1% SOAP								
FLEXURAL STRENGTH, psi	6,771		5,906		7778		7,164	
% RETENTION	101%	PASSED	98%	PASSED	95%	PASSED	104%	PASSED
FLEXURAL MODULUS, psi	562,800		649,337		644970		767,237	
% RETENTION	95%	PASSED	90%	PASSED	97%	PASSED	102%	PASSED



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**102T Series
Polyester Resin
October 2014**

**Flexural Creep Testing for Gravity
CIPP Applications**

Insituform's 102T Series is a family of polyester resins for gravity sanitary and storm sewer applications. Resins currently approved for the 102T Series include:

AOC L758
Interplastic COR78-AT-559/5XX
AOC L721
Insituform 102T

Typical Resin/Felt Properties

Flexural Strength, psi/MPa	4,500/31.5	ASTM D 790
Flexural Modulus, psi/MPa	500,000/2,760	ASTM D 790

Flexural Creep Testing

CIPP laminates made from each of Insituform's 102T Series resins were tested for flexural creep in accordance with ASTM D2990 for 10,000 hours.

Test Results

The results of tests for each group of laminates were plotted from 100 hours to 10,000 hours on a log/log graph, and a linear trend line was created. The 50 year flexural creep modulus was estimated by extending the linear regression to 50 years.

Safety

Safety guidelines are available in the appropriate Material Safety Data Sheet.

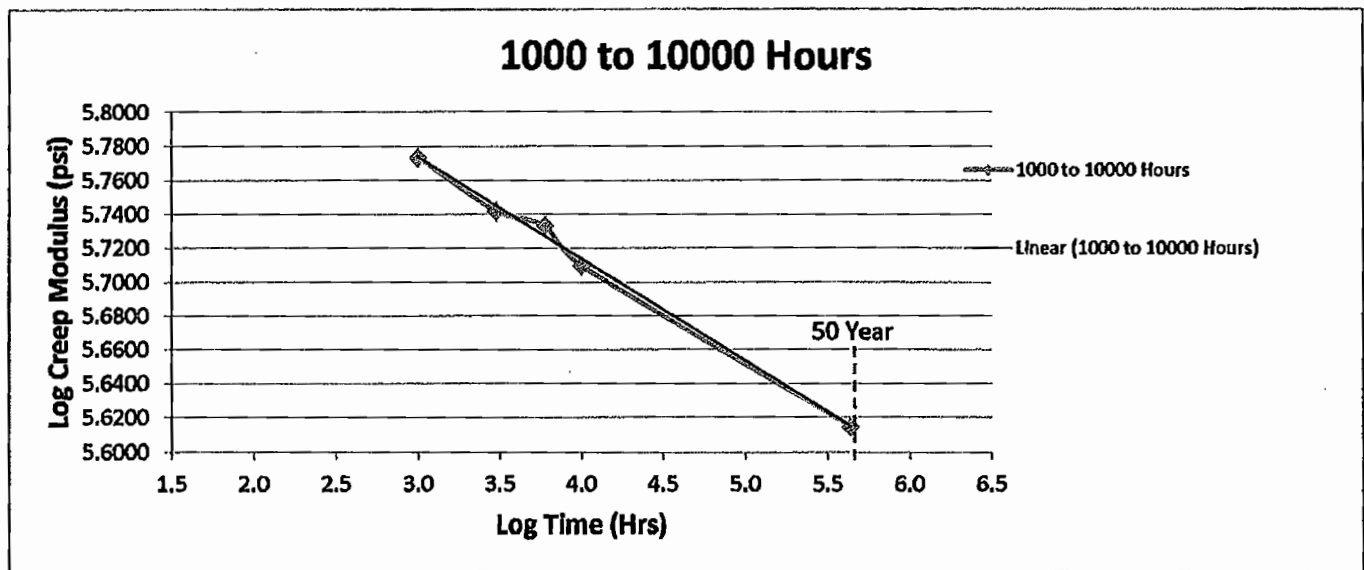
Detailed Information

Detailed information for any of the approved resins in the 102T Series can be provided upon request.

ASTM D 2990 Creep Modulus Data
Insituform 102 T/TA Polyester Resin
Insituform-102 Series Resin
CENTRE for ADVANCEMENT of TRENCHLESS TECHNOLOGIES
May 1, 2005

Elapsed Time (hours)	Flex Displ Avg (in)	Flex Creep Mod Avg (psi)	Log Values	
			Time	Modulus
1000	0.7240	593614	3.0000	5.7735
3000	0.7767	552208	3.4771	5.7421
6000	0.7920	541394	3.7782	5.7335
10000	0.8350	512511	4.0000	5.7097
438000		412000	5.6415	5.6149

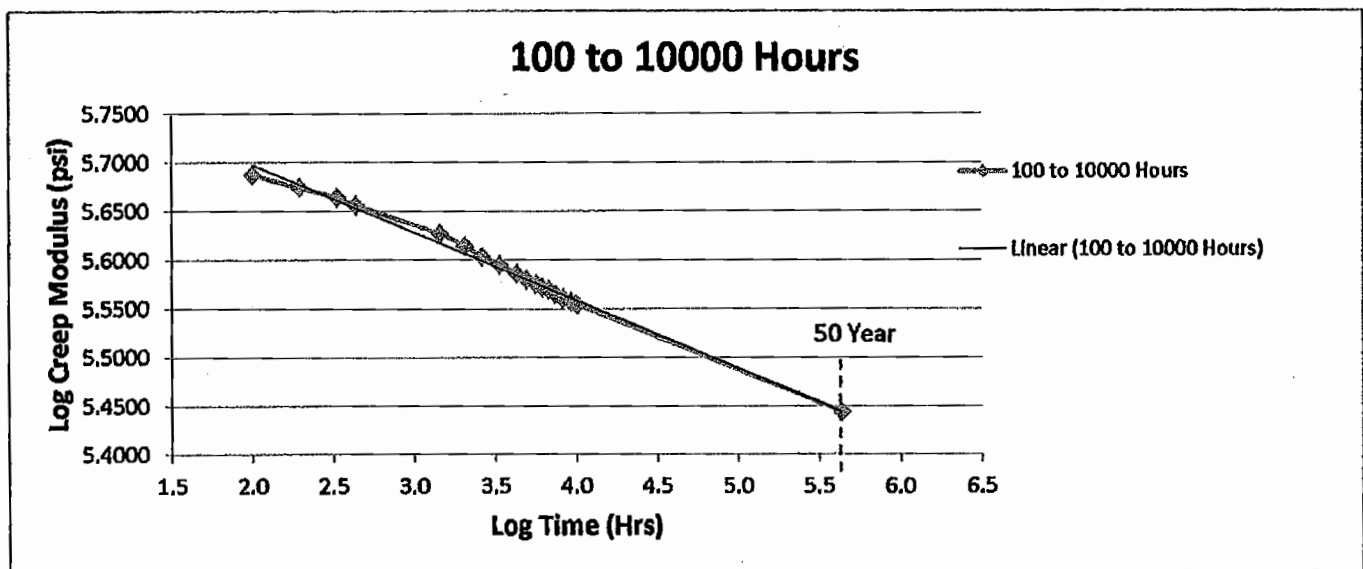
50-year projected creep modulus = 412,000 psi
 Note: Data available in full report



ASTM D 2990 Creep Modulus Data
AOC L721-LT Polyester Resin
Insituform 102 Series Resin
Microbac
December 13, 2011

Elapsed Time (hours)	Flex Displ Avg (in)	Flex Creep Mod Avg (psi)	Log Values	
			Time	Modulus
100	0.4277	486685	2.0004	5.6872
196	0.4268	472531	2.2911	5.6744
335	0.4260	461658	2.5244	5.6643
437	0.4254	453185	2.6404	5.6563
1441	0.4231	423727	3.1586	5.6271
2043	0.4220	411252	3.3102	5.6141
2620	0.4211	401484	3.4183	5.6037
3362	0.4203	393836	3.5266	5.5953
4293	0.4195	385482	3.6328	5.5860
4892	0.4190	380492	3.6895	5.5803
5640	0.4185	375809	3.7513	5.5750
6122	0.4182	373235	3.7869	5.5720
6718	0.4180	371235	3.8272	5.5696
7415	0.4175	367127	3.8701	5.5648
8230	0.4171	363806	3.9154	5.5609
9270	0.4168	360535	3.9671	5.5569
9913	0.4166	359357	3.9962	5.5555
10179	0.4165	358178	4.0077	5.5541
438000		278,100	5.6415	5.4442

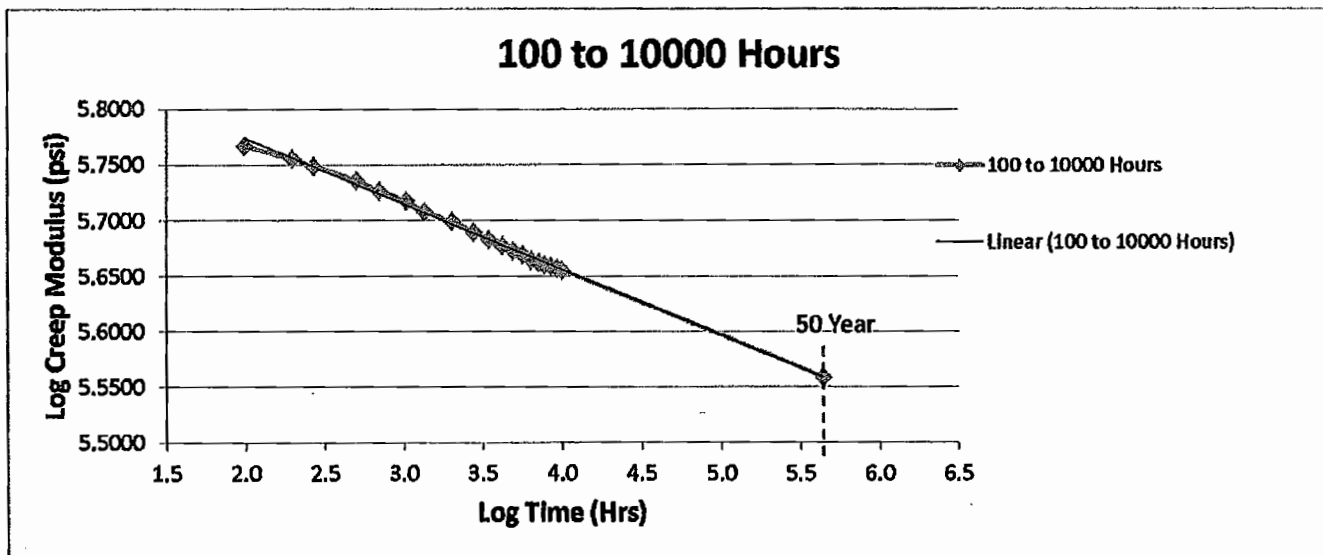
50-year projected creep modulus = 278,100 psi



ASTM D 2990 Creep Modulus Data
AOC L758-LTI Polyester Resin
Insituform 102 Series Resin
Hauser Laboratories Boulder, CO
August 17, 2005

Elapsed Time (hours)	Displacement Avg (in)	Creep Modulus Avg (psi)	Log Values	
			Time	Modulus
99	0.0290	584660	1.9948	5.7669
197	0.0298	569260	2.2953	5.7553
268	0.0303	560940	2.4285	5.7489
500	0.0312	544620	2.6993	5.7361
698	0.0318	533000	2.8440	5.7267
1037	0.0325	522140	3.0157	5.7178
1343	0.0932	510740	3.1281	5.7082
2014	0.0339	500180	3.3040	5.6991
2758	0.0346	489720	3.4406	5.6899
3458	0.0352	482240	3.5388	5.6833
4200	0.0356	476220	3.6233	5.6778
4925	0.0360	471140	3.6924	5.6731
5637	0.0363	467240	3.7510	5.6695
6381	0.0367	462120	3.8049	5.6648
7102	0.0369	459640	3.8514	5.6624
7751	0.0371	457380	3.8894	5.6603
8493	0.0372	456440	3.9291	5.6594
9262	0.0373	454440	3.9667	5.6575
10011	0.0375	452500	4.0005	5.6556
438000		362300	5.6415	5.5591

50-year projected creep modulus = 362,300 psi



ASTM D 2990 Creep Modulus Data
Interplastic COR 78-AT-559/5XX Polyester Resin
Insituform-102 Series Resin
Interplastic Corporation Thermoset Resins Division
Test Reporting Date September 18, 2012

Elapsed Time (hours)	Displacement Avg (in)	Creep Modulus Avg (psi)	Log Values	
			Time	Modulus
100	no data	527400	2.0000	5.7221
196	available	516500	2.2923	5.7131
500		486900	2.6990	5.6874
700		474600	2.8451	5.6763
1004		463100	3.0017	5.6657
2012		443300	3.3036	5.6467
3019		433900	3.4799	5.6374
4028		424900	3.6051	5.6283
5036		422000	3.7021	5.6253
6044		420400	3.7813	5.6237
7052		414400	3.8483	5.6174
8059		409400	3.9063	5.6121
9000		402700	3.9542	5.6050
10003		397800	4.0001	5.5997
438000		320200	5.6415	5.5054

50-year projected creep modulus = 320,200

