

BOARD OF SUPERVISORS AGENDA ITEM REPORT CONTRACTS / AWARDS / GRANTS

Requested Board Meeting Date: 02/06/18

* = Mandatory, information must be provided

or Procurement Director Award

*Contractor/Vendor Name/Grantor (DBA):

Borderland Construction Company, Inc.

*Project Title/Description:

Construction Manager at Risk for Aerospace Parkway Widening (4AERO2)

*Purpose:

Amendment: Contract No. CT-PW-17-328, Amendment No. Three (3). This amendment is for Phase 2 of the construction phase of the contract and extends the term of the contract to 09/28/18, amends the scope of work, and increases the contract amount by \$2,330,178.08 through the incorporation of an accepted Guaranteed Maximum Price 2 (GMP) Phase 2, schedule, and scope of work. Administering Department: Public Works.

*Procurement Method:

Pursuant to Solicitation for Qualifications No. 247692, on 05/02/17, the Board of Supervisors awarded a contract for this project in the amount of \$183,369.91 for preconstruction services for a contract term of 05/02/17 to 05/01/18. Previous Amendment No. 1 totaling \$1,418,833.86 has been approved by the Board of Supervisors to incorporate an accepted GMP 1 Phase 1, schedule, and scope of work. Amendment No. 2 totaling \$120,058.65 was approved by the Procurement Director to avoid installation of both a temporary and final signal installation.

Attachment: Amendment No. Three (3)

*Program Goals/Predicted Outcomes:

This contract is for the CMAR to provide preconstruction and construction services for the entire Aerospace Parkway Widening Project, including intersection improvements at Nogales Highway and Raytheon Parkway. The preconstruction services phase includes value engineering, constructibility reviews, and a cost model development. The CMAR will develop multiple GMPs for each of the phases to construct the project throughout the term of the Contract and incorporate into this Contract by Amendment. This amendment adds GMP 2 for Phase 2 for widening Aerospace Parkway in the general vicinity of the Raytheon Parkway intersection and includes the initial mass earthwork for widening Aerospace Parkway between Eisenhower Road and the Eastern Project limits.

*Public Benefit:

The construction of this expansion will provide the infrastructure needed for both the commercial and industrial growth being promoted in the area of the Aerospace corridor, including known increased traffic needs at Raytheon and Vector Space. The result of this development will be to support growth in the local economy which will benefit the entire region.

*Metrics Available to Measure Performance:

Performance will be measured using the contractor evaluation process as outlined in BOS Policy D29.1.F.III.F at the end of the preconstruction phase, the CMAR will provide GMP(s), which will be incorporated into this Contract by Amendment, showing the project will be constructed within the estimated budget. GMP 2 for Phase 2 will continue to be evaluated within the contractor evaluation process with emphasis on alternative delivery implementation of partnering principles.

*Retroactive:

No.

Procure Dept 01/23/*18 PMO4:03

Revised 8/2017 To: CoB - 1-24.18

Page 1 of 2

Contract / Award Informatio			
Document Type:		:	
	Termination Date:	Prior Contract Number (Synergen/CMS):	
Expense Amount: \$*		Revenue Amount: \$	· · · · · · · · · · · · · · · · · · ·
*Funding Source(s) require	d:		· · · · · · · · · · · · · · · · · · ·
Funding from General Fund?	OYes ONo If Yes \$	%	
Contract is fully or partially full *is the Contract to a vendor	nded with Federal Funds? or subrecipient?	Yes No	
Were insurance or indemnity	clauses modified?	☐ Yes ☐ No	
If Yes, attach Risk's approv	a <i>i</i>		
Vendor is using a Social Secu	urity Number?	Yes No	
If Yes, attach the required for	rm per Administrative Procedure	22-73.	
Amendment / Revised Awar	rd Information		
•	Department Code: PW	Contract Number (i.e.,15-123): 17	_32¤
Amendment No.: Three (3)		AMS Version No.: Nine (9)	
Effective Date: 02/06/18		New Terrainelies Date: 00/08/48	
		Prior Contract:No. (Synergen/GMS):	
● Expense or ○ Revenue		The second secon	
Is there revenue included?		_ 	00
*Funding Source(s) require		/es \$	
· anamy oouroe(e) roquie		<u> </u>	
Funding from General Fund?	OYes No If If If If If If If If	/es\$ %	
Grant/Amendment Informat	ion (for grants acceptance and	awards)	ent .
Document Type:	Department Code:	Grant Number (i.e.,15-123):	
Effective Date:	Termination Date:	Amendment Number:	
		Revenue Amount: \$	
*All Funding Source(s) requ	ired:		
*Match funding from Gener	al Fund? OYes ONo If	/es \$ %	
*Match funding from other s *Funding Source:	sources? OYes ONo If	/es\$%	
	ed, is funding coming directly sed through other organization		
Contact: Matt Sage, Procure	ement Officer MHS	- Thesexx	1-19-18
Department: Procurement	Ma god	1/14/19 Telephone: 520-72	4-8586
Department Director Signatu	ure/Date:	es 1/00/18	1 1
Deputy County Administrato	r Signature/Date:	1	122/18
County Administrator Signal (Required for Board Agenda/Addendu		Jun 192810	>

PIMA COUNTY PUBLIC WORKS ADMINISTRATION

PROJECT:

Construction Manager At Risk Services

for Aerospace Parkway Widening

(4AERO2)

CONTRACTOR: Borderland Construction Company, Inc.

P.O. Box 27406

Tucson, Arizona 85726

CONTRACT NO.: CT-PW-17-328

AMENDMENT NO .: Three (3)

FUNDING:

HURF 12.6%

ORIGINAL CONTRACT AMOUNT:

invoices,

documents contract.

183.369.91

and

this

TERMINATION PRIOR AMENDMENT: 06/30/2018

CONTRACT TERM: 05/02/2017 - 05/01/2018 **TERMINATION THIS AMENDMENT: 09/28/2018**

\$ PRIOR AMENDMENT(S): \$ 1,538,892.51 AMOUNT THIS AMENDMENT: \$ 2,330,178.08

CONTRACT

NO. CT. PW-17-328

correspondence

pertaining

This number must appear

REVISED CONTRACT AMOUNT:

\$ 4,052,440.50

CONSTRUCTION CONTRACT AMENDMENT

WHEREAS, at its regularly scheduled meeting on May 2, 2017, the Board of Supervisors approved the award of a Construction Manager at Risk Contract by COUNTY to CONTRACTOR for the above-named Project; and

WHEREAS, construction of the project was anticipated to be conducted in multiple phases; and

WHEREAS, Guaranteed Maximum Price (GMP) 2 shall pertain to project Phase 2; and

WHEREAS, CONTRACTOR and COUNTY have completed the majority of pre-construction services for Phase 2 and have mutually agreed upon an acceptable GMP 2, to include the schedule and scope of work for the construction of Phase 2 of the Project; and

WHEREAS, Solicitation for Qualifications No. 247692, upon which the procurement for this Contract was based, provided that COUNTY would establish the goal for Small Business Enterprise (SBE) utilization for the construction under this Contract in conjunction with the establishment of each GMP; and

WHEREAS, CONTRACTOR and COUNTY have reviewed all required documentation regarding available subcontracting opportunities, the certified SBE's who are ready, willing, able and qualified to perform the construction, and have agreed to the establishment of an SBE goal of 1.5% for GMP 2, Phase 2 of this project; and

WHEREAS, CONTRACTOR and COUNTY now agree to incorporate the GMP 2, Phase 2 SBE goal, and contractual provisions, conditions, terms, agreements and related documents required for the construction phase of the Project into the Contract, and

WHEREAS, COUNTY and CONTRACTOR, pursuant to Article 1, have agreed to extend the Term of the Contract to September 28, 2018; and

WHEREAS, COUNTY and CONTRACTOR, pursuant to Article 2, have agreed to incorporate GMP 2 into the Contract for Phase 2 activities; and

WHEREAS, COUNTY and CONTRACTOR pursuant to Article 3 have agreed to increase the Contract amount as identified in GMP 2, Phase 2; and

WHEREAS, COUNTY's acceptance of GMP 2, Phase 2, is subject to the understanding of the Parties that all other elements of future GMPs, if any, are and remain negotiable.

NOW, THEREFORE, it is agreed as follows:

CHANGE: <u>ARTICLE 1 – TERM</u>

FROM: "This Contract, as approved by the Board of Supervisors, commences on May 2, 2017 and terminates

on June 30, 2018, unless sooner terminated or further extended for Project completion. COUNTY may, with written notice to CMAR, extend this Contract for such additional period or periods as may be

required for Project completion."

TO: "This Contract, as approved by the Board of Supervisors, commences on May 2, 2017 and terminates

on September 28, 2018, unless sooner terminated or further extended for Project completion. COUNTY may, with written notice to CMAR, extend this Contract for such additional period or periods as may be

required for Project completion."

CHANGE: ARTICLE 2 - SCOPE OF WORK

Add the following paragraphs:

"K. The parties agree to proceed to the Construction Services Phase 2. The Construction Provisions, Scope of Work and GMP 2 for Phase 2 of Construction are hereby included in Appendix "F-2" to the Contract.

"L. The SBE Goal for GMP 2, Phase 2 is 1.5% of the total cost of Construction"

CHANGE: Paragraph A of <u>ARTICLE 3 - PRECONSTRUCTION PHASE FEE AND GUARANTEED MAXIMUM</u>

PRICE as follows:

FROM: "COUNTY will pay CMAR a Pre-construction Services Fee for Pre-construction Services. The CMAR's

Construction Services Fee, plus the cost of the Work (direct construction cost) including CMAR contingency, bonds, insurance and taxes (indirect construction costs) will comprise the GMP(s) to be established in compliance with Appendix "B" Supplemental Provisions – Construction Costing (10 pages), Appendix "C" General Conditions (45 pages), and Appendix "E" – Small Business Enterprise Requirements (2 pages), Appendix "F" GMP 1, Phase 1 (15 pages), and Appendix "F-1" GMP 1, Phase 1 (17 pages). Unless otherwise agreed, CMAR's GMP will include all required sales, use, franchise and other taxes in effect on the date of COUNTY approval of the GMP, as well as all applicable bond and

insurance costs."

TO: "COUNTY will pay CMAR a Pre-construction Services Fee for Pre-construction Services. The CMAR's Construction Services Fee, plus the cost of the Work (direct construction cost) including CMAR

contingency, bonds, insurance and taxes (indirect construction costs) will comprise the GMP(s) to be established in compliance with Appendix "B" Supplemental Provisions – Construction Costing (10 pages), Appendix "C" General Conditions (45 pages), and Appendix "E" – Small Business Enterprise Requirements (2 pages), Appendix "F" GMP 1, Phase 1 (15 pages), and Appendix "F-1" GMP 1, Phase 1 (17 pages), and Appendix "F-2" GMP 2, Phase 2 (16 pages). Unless otherwise agreed, CMAR's GMP will include all required sales, use, franchise and other taxes in effect on the date of COUNTY

approval of the GMP, as well as all applicable bond and insurance costs."

CHANGE: Paragraph B of <u>ARTICLE 3 – PRECONSTRUCTION PHASE FEE AND GUARANTEED MAXIMUM</u>

PRICE as follows:

FROM: "The Preconstruction Services Phase Fee will not exceed One Hundred Eighty-Three Thousand Three

Hundred Sixty-Nine Dollars and Ninety-One Cents (\$183,369.91). CMAR Construction Phase 1 Fee, that includes the Cost of the Work (direct construction cost), CMAR contingency, bonds, insurance and taxes (indirect construction costs) which comprises GMP 1, in the amount of One Million Five Hundred Thirty-Eight Thousand Eight Hundred Ninety-Two Dollars and Fifty-One (\$1,538,892.51) inclusive of Thirty-Seven Thousand Five Hundred Sixty-Three Dollars and Fifty-Two Cents (\$37,563.52) for COUNTY (Owner) contingency is hereby included in Appendix "F-1". COUNTY's acceptance of GMP 1, Phase 1 is subject to the understanding of the Parties that all other elements of future GMPs, if any, are

and remain negotiable."

TO: "The Preconstruction Services Phase Fee will not exceed One Hundred Eighty-Three Thousand Three Hundred Sixty-Nine Dollars and Ninety-One Cents (\$183,369.91). CMAR Construction Phase 1 Fee, that includes the Cost of the Work (direct construction cost), CMAR contingency, bonds, insurance and

taxes (indirect construction costs) which comprises GMP 1, in the amount of One Million Five Hundred

Thirty-Eight Thousand Eight Hundred Ninety-Two Dollars and Fifty-One (\$1,538,892.51) inclusive of Thirty-Seven Thousand Five Hundred Sixty-Three Dollars and Fifty-Two Cents (\$37,563.52) for COUNTY (Owner) contingency is hereby included in Appendix "F-1". **CMAR Construction Phase 2**Fee, that includes the Cost of the Work (direct construction cost), CMAR contingency, bonds, insurance and taxes (indirect construction costs) which comprises GMP 2, in the amount of Two Million Three Hundred Thirty Thousand One Hundred Seventy-Eight Dollars and Eight Cents (\$2,330,178.08) inclusive of One Hundred Ten Thousand Nine Hundred Sixty Dollars and Eighty-Six Cents (\$110,960.86) for COUNTY (Owner) contingency, is hereby included in Appendix "F-2". COUNTY's acceptance of GMP 2, Phase 2 is subject to the understanding of the Parties that all other elements of future GMPs, if any, are and remain negotiable."

ADD: The following documents to the Contract:

APPENDIX "F-2" - GMP 2, Phase 2 (16 Pages)

APPENDIX "F-2": Construction Manager at Risk (CMAR) Services for Aerospace Parkway Widening GMP-2 Construction of Phase 2, proposal dated January 18, 2018 (16 pages, attached).

This Amendment shall be effective on February 6, 2018.

Date

All other provisions of the Contract, not specifically changed by this Amendment, shall remain in effect and be binding upon the Parties.

IN WITNESS WHEREOF, the Parties have affixed their signatures to this Amendment on the dates written below.

APPROVED:	CMAR/
Chairman, Board of Supervisors	Signature Andy Worth Vice President
Date	Name and Title (Please Print) 1/22/18 Date
ATTEST:	Date
Clerk of the Board	
APPROVED AS TO FORM:	
Deputy County Attorney	
TOBIN ROSEN	
Name (Please Print)	
1/19/18	

APPENDIX "F-2"

Construction Manager at Risk (CMAR) Services for Aerospace Parkway Widening

GMP 2, Phase 2

Proposal Dated January 18, 2018

(16 pages)



GMP #2 - SUMMARY

Pima County Project Management Office Aerospace Parkway Widening Pima County Project Number: 4AERO2

GMP#2 - CONSTRUCTION OF PHASE 2 (Raytheon Pkwy/Aerospace Pkwy Intersection)

Dated: January 18, 2018

CONSTRUCTION		AMOUNT
CONSTRUCTION COSTS:		
I. Cost of Construction	\$	1,653,827.64
II. CMAR Contingency	\$	82,691.38
SUBTOTAL	\$	1,736,519.02
(Direct Construction Costs)	,	1,730,313.02
INDIRECT CONSTRUCTION COSTS:		
III. General Conditions	\$	76,512.00
IV. Overhead	\$	168,974.49
V. Railroad Insurance	\$	2,500.00
VI. General Liability Insurance	\$_	5,992.45
VII. Payment and Performance Bonds	\$	12,132.25
SUBTOTAL (Direct Cons. Cost + Gen Cond + Overhead + Insurance + Bonds)	\$	2,002,630.21
VIII. Construction Fee	\$	99,100.28
SUBTOTAL (Direct Cons. Cost + Gen Cond + Overhead + Insurance + Bonds + Fee)	\$	2,101,730.49
IX. Arizona Gross Receipts Tax	\$	117,486.73
GUARANTEED MAXIMUM PRICE (GMP)	\$	2,219,217.22
OTHER PROJECT COSTS:		
X. Owner's Contingency	\$	110,960.86
TOTAL CONTRACT COST	\$	2,330,178.08

For supporting documention - see also:

Attachment #1 - Schedule of Values

Attachment #2 - Scope of Work

Attachment #3 - Clarifications, Assumptions, and Exclusions to the scope of work

Attachment #4 - Anticipated Construction Schedule

Attachment #5 - Cash-flow Forecast

Attachment #6 - Subcontractor List (w/anticipated SBE Summary)



ATTACHMENT #1 - SCHEDULE OF VALUES

GMP#2 - CONSTRUCTION OF PHASE 2 (Raytheon Pkwy/Aerospace Pkwy Intersection)

Line	Item	In a Barrieria	11-24	0	Unit	Extended
No.	No.	Item Description	Unit	Quantity	Cost	Amount
1	I. COST OF	CONSTRUCTION - LINE ITEMS				
2	1090010	Fuel Adjustment Allowance	FA	10000	\$ -	\$ -
3	2010004	Preservation Fencing	LF	989	\$ 2.69	\$ 2,660.41
4	2010010	Clearing and Grubbing (Noxious and Invasive Species Control Allowance)	FA	1000	\$ 1.00	\$ 1,000.00
5	2010011	Clearing and Grubbing	ACRE	20	\$ 1,006.01	\$ 20,120.20
6	2020001	Removal of Structures and Obstructions	LS	1	\$ 9,489.72	\$ 9,489.72
7	2020007	Removal of Miscellaneous Concrete	LS	1	\$ 1,007.72	\$ 1,007.72
8	2020029	Removal of Bituminous Pavement	SY	2221	\$ 8.77	\$ 19,478.17
9	2020030	Removal of Bituminous Pavement (2" Milling Aerospace/Raytheon Intersection)	SY	1959	\$ 3.65	\$ 7,150.35
10	2020132	Removal And Salvage Riprap	CY	1044	\$ 24.31	\$ 25,379.64
11	2030300	Roadway Excavation	CY	3091	\$ 22.73	\$ 70,258.43
12	2030401	Drainage Excavation	CY	3907	\$ 5.27	\$ 20,589.89
13	2030405	Drainage Excavation (Detention Basin)	CY	6044	\$ 7.27	\$ 43,939.88
14	2030901	Borrow	CY	16216	\$ 14.75	\$ 239,186.00
15	3030003	Aggregate Base	CY	3665	\$ 31.51	\$ 115,484.15
16	4040111	Tack Coat	TON	6	\$ 869.53	\$ 5,217.18
17	4060001	Asphaltic Concrete (Mix No. 1)	TON	3055	\$ 53.08	\$ 162,159.40
18	4060002	Asphaltic Concrete (Mix No. 2)	TON	2310	\$ 55.89	\$ 129,105.90
19	4060510	Bituminous Material Price Adjustment Allowance	FA	10000	\$ 1.00	\$ 10,000.00
20	5011010	Pipe, Reinforced Concrete, Class II, 18"	LF	221	\$ 86.17	\$ 19,043.57
21	5011022	Pipe, Reinforced Concrete, Class II, 24"	LF	288	\$ 84.85	\$ 24,436.80
22	5014124	Concrete End Section, 18" (ADOT C-13.20)	EACH	1	\$ 1,108.32	\$ 1,108.32



ATTACHMENT #1 - SCHEDULE OF VALUES

GMP#2 - CONSTRUCTION OF PHASE 2 (Raytheon Pkwy/Aerospace Pkwy Intersection)

Line	Item	Item Description	Unit	Quantity	Unit	Extended
No.	No.	<u> </u>			 Cost	Amount
23	5014124	Concrete End Section, 24" (ADOT C-13.20)	EACH	2	\$ 1,443.40	\$ 2,886.80
24	5030015	Catch Basin, PAG Std Dtl 308, (Type 3, L=8' ,D=<8')	EACH	1	\$ 6,100.68	\$ 6,100.68
25	5030016	Catch Basin PAG Std Detail 308 (TY 3, L=8, D=<8)(Modified Base)	EACH	1	\$ 6,859.58	\$ 6,859.58
26	5030032	Catch Basin, PC/COT Std. Dtl. 309 (Type 4, Off Road)	EACH	1	\$ 5,833.00	\$ 5,833.00
27	5080001	Flow Management Plan No 1 (Manhole Reconstruction and Adjustments)	LS	1	\$ 4,406.03	\$ 4,406.03
28	5080086	Sewer Pipe 8" (PVC) (System Betterment)	LF	125	\$ 58.19	\$ 7,273.75
29	5090010	Sewer MH Modified (System Betterment)	EACH	1	\$ 3,289.80	\$ 3,289.80
30	5090020	Sewer Manhole, Conc Collar RWRD Std Dtl 211 & 212	EACH	15	\$ 541.57	\$ 8,123.55
31	5090100	Sewer Manhole, Reconstruct (Including Concrete Collar)	LF	97	\$ 484.75	\$ 47,020.75
32	5090110	Sewer Manhole, Adjust (Including Concrete Collar)	EACH	1	\$ 1,778.84	\$ 1,778.84
33	5090140	Sewer Manhole 4' Diameter, RWRD 205 (Including Concrete Collar)	EACH	1	\$ 4,853.60	\$ 4,853.60
34	5090500	Manhole Rehab Coating	SF	1270	\$ 46.30	\$ 58,801.00
35	5101112	Potable Water Pipe, DI, 12" (CL 350)	LF	51	\$ 196.81	\$ 10,037.31
36	5101408	Potable Water Pipe, PVC, 8" (CL200) (Developer Funded)	LF	121	\$ 155.69	\$ 18,838.49
37	5101608	Potable Water Pipe, Copper 2" W/fittings	LF	150	\$ 76.45	\$ 11,467.50
38	5102112	Potable Water, Tapping Sleeve & Valve 12"x8"	EACH	1	\$ 4,093.00	\$ 4,093.00
39	5102208	Potable Water, Gate Valve 8"	EACH	1	\$ 1,193.00	\$ 1,193.00



ATTACHMENT #1 - SCHEDULE OF VALUES

GMP#2 - CONSTRUCTION OF PHASE 2 (Raytheon Pkwy/Aerospace Pkwy Intersection)

Line	Item	Itam Description	Unit	Quantitu		Unit	 Extended
No.	No.	Item Description	Unit	Quantity	Cost		Amount
40	5102212	Potable Water, Gate Valve 12"	EACH	1	\$	2,011.75	\$ 2,011.75
41	5102604	Potable Water, Combo ARV 1"	EACH	2	\$	2,344.72	\$ 4,689.44
42	5102802	Potable Water, Drain Valve Assembly	EACH	2	\$	3,010.09	\$ 6,020.18
43	5102803	Potable Water, DVA (Developer Funded)	EACH	1	\$	2,735.84	\$ 2,735.84
44	5103101	Potable Water, Adjust Existing Valve Box and Cover	EACH	16	\$	385.96	\$ 6,175.36
45	5105012	Potable Water Pipe, Remove And Dispose 12" & Larger	LF	51	\$	18.83	\$ 960.33
46	5106012	Potable Water, Connections, 12"	EACH	2	\$	3,105.98	\$ 6,211.96
47	5108138	Potable Water, Service Line Renewal (S) 2"	EACH	1	\$	2,243.05	\$ 2,243.05
48	5150004	Relcoate Pull Box (Cox)	EACH	5	\$	2,688.04	\$ 13,440.20
49	5150005	Utility Potholing, Depth <12'	EACH	15	\$	423.93	\$ 6,358.95
50	6016087	Concrete Headwall (ADOT SD 6.30-2)	EACH	1	\$	9,450.45	\$ 9,450.45
51	6016100	Concrete Pipe Collar (ADOT C-13.80)	EACH	4	\$	820.48	\$ 3,281.92
52	6016201	Transition Structure (PAG Std Dtl 312)	EACH	0	\$	1,800.00	\$ -
53	6016211	Junction Structure (Dtl D2)	EACH	0	\$	7,100.00	\$
54	7010001	Maintenance and Protection of Traffic	LS	1	\$	41,542.80	\$ 41,542.80
55	7010007	Construction Area Elements	LS	1	\$	30,000.00	\$ 30,000.00
56	8100001	AZPDES/NPDES (Original)	LS	1	\$	22,377.18	\$ 22,377.18
57	8100011	AZPDES/NPDES (Modified)	FA	1	\$	1.00	\$ 1.00
58	9010001	Mobilization	LS	1	\$	26,392.80	\$ 26,392.80
59	9080001	Concrete Curb, (PC/COT Std. Dtl. 209) (Type 1)	LF	3406	\$	10.39	\$ 35,388.34
60	9080090	Concrete Curb Terminal Section (PC/COT Std. Dtl. 212)	EACH	14	\$	729.60	\$ 10,214.40



ATTACHMENT #1 - SCHEDULE OF VALUES

GMP#2 - CONSTRUCTION OF PHASE 2 (Raytheon Pkwy/Aerospace Pkwy Intersection)

Line	Item	Itary Description	Unit	Ouantitu	Unit		Extended
No.	No.	Item Description	Unit	Quantity	Cost Amou		Amount
61	9080201	Concrete Sidewalk	SF	402	\$ 5.10	\$	2,050.20
62	9080280	Curb Access Ramp, PC/DOT Std. Dtl. 207 (Type I)	EACH	1	\$ 1,717.04	\$	1,717.04
63	9080283	Curb Access Ramp, ADOT C-05.30 (Type C)	EACH	1	\$ 1,703.48	\$	1,703.48
64	9080291	Detectable Warning Strip (Pads on Sidewalk, No Ramp)	EACH	6	\$ 485.00	\$	2,910.00
65	9080502	Concrete Ford Wall (6"x2')	LF	58	\$ 24.40	\$	1,415.20
66	9090002	Survey Monument (Including Frame and Cover)	EACH	1	\$ 435.96	\$	435.96
67	9130001	Riprap (Dumped)	CY	43	\$ 77.77	\$	3,344.11
68	9130002	Rip Rap Place Salvage Dumped	CY	884	\$ 46.68	\$	41,265.12
69	9130100	Concrete Channel Lining (Drop Inlet)	SY	40	\$ 69.50	\$	2,780.00
70	9232002	Joint Use Utility Trench (New) (Including 5-4" PVC) (PCIT/ITS)	LF	626	\$ 49.70	\$	31,112.20
71	9232100	Trench, 2' width, 0-4.9' deep (For Cox Conduit Extension)	LF	145	\$ 46.52	\$	6,745.40
72	9233055	Relocate No. 9 Handhole/Vault (PC ITS/IT)(5-4" PVC)	EACH	2	\$ 1,065.88	\$	2,131.76
73	9233056	Remove And Salvage No. 9 Handhole/Vault (PC ITS/IT) (Couple Exist Conduits)	EACH	1	\$ 1,100.56	\$	1,100.56
74	9233056	Relocate No. 7 Pull Box (PC ITS)(2-4" Spare)	EACH	3	\$ 964.99	\$	2,894.97
75	9233056	No. 7 Pull Box W/ Extn (PC ITS) (2-4" Spare)	EACH	1	\$ 3,829.64	\$	3,829.64
76	9236001	Manhole Adjustment To Final Grade (TEP)	EACH	6	\$ 953.73	\$	5,722.38
77	9250001	Construction Survey & Layout	LS	1	\$ 32,000.00	\$	32,000.00
78	9260001	Engineer's Field Office	LS	0	\$ 10,350.00	\$	
79	9290010	Casing Pipe (20") (UPRR)	LF	80	\$ 112.81	\$	9,024.80
80	9290020	Boring and Jacking (UPRR)	LF	80	\$ 1,143.25	\$	91,460.00



ATTACHMENT #1 - SCHEDULE OF VALUES

GMP#2 - CONSTRUCTION OF PHASE 2 (Raytheon Pkwy/Aerospace Pkwy Intersection)

Line No.	Item No.	Item Description	Unit	Quantity		Unit Cost	Extended Amount
81	9322003	Joint Use Trench (Relocation) (Including 6-4" AND 2-6" PVC)	LF	338	\$	70.27	\$ 23,751.26
82	9322004	Joint Use Trench (Relocation) (2-4" PVC)	LF	300	\$	35.88	\$ 10,764.00
83	9322005	Joint Use Trench (Relocation) (3-4" PVC)	LF	160	\$	42.35	\$ 6,776.00
84	9322006	Joint Use Trench (Relocation) (1-2.5" PVC) (PC IT)	LF	70	\$	30.36	\$ 2,125.20
85	9330003	Handrail (PAG Std Dtl 105)	LF	32	\$	237.50	\$ 7,600.00
86							
87		COST OF CONS	TRUCTI	ON - LINE IT	EMS	SUBTOTAL	\$ 1,653,827.64
88	II. CMAR C	ONTINGENCY					
	UNFORESE	EN CONDITIONS	l				
89	LOD400 PL	ANS	LS	1	\$	82,691.38	\$ 82,691.38
	(5% of LINI	E ITEM SUBTOTAL)	<u> </u>				
90			A. (DIR	ECT CONSTR	UCT	ION COSTS)	\$ 1,736,519.02
91	INDIRECT	CONSTRUCTION COSTS					
92		AL CONDITIONS					
93	CLEAN UP		LS	1	\$	2,000.00	 2,000.00
94		RESTROOMS	LS	1	\$	3,500.00	\$ 3,500.00
95	SMALL TO	OLS	LS	1	\$	2,000.00	\$ 2,000.00
96	PERMITS		LS	1	\$	4,500.00	\$ 4,500.00
97	SUPERINT		WK	14	\$	2,574.00	\$ 36,036.00
98	PROJECT E		WK	14	\$	2,034.00	\$ 28,476.00
99	SUBTOTAL B. (III. GENERAL CONDITIONS)						\$ 76,512.00
100		SUBTOTAL C. (DIRE	CT COS	TS + GENERA	AL CC	ONDITIONS)	\$ 1,813,031.02



ATTACHMENT #1 - SCHEDULE OF VALUES

GMP#2 - CONSTRUCTION OF PHASE 2 (Raytheon Pkwy/Aerospace Pkwy Intersection)

Line	Item	Itara Description	Linit	Quantity		Unit		Extended
No.	No.	Item Description	Unit	Quantity	Cost			Amount
101	IV. CMAR	OVERHEAD	LS	1	\$	168,974.49	\$	168,974.49
101	(9.32% of S							
102		SUBTOTAL D. (DIRECT COSTS + G	ENERAL	. CONDITION	5+	OVERHEAD)	\$	1,982,005.51
103	VIII. CONS	TRUCTION FEE	LS	1	Ś	99,100.28	\$	99,100.28
103	(5% of Sub				Ļ			
104	V. RAILRO	AD INSURANCE (Utility Boring)	LS	1	\$	2,500.00	\$	2,500.00
105	VI. GENER	AL LIABILITY INSURANCE	LS	1	\$	5,992.45	\$	5,992.45
103	(0.2876% c	of Subtotal D + V + VIII)			Ť	3,332.43	-	3,332.13
106	VII. PAYMI	ENT AND PERFORMANCE BONDS	LS	1	\$	12,132.25	\$	12,132.25
107		SUBTOTAL	E. (SUB	TOTAL D + V	' + V	I + VII + VIII)	\$	2,101,730.49
100	IX. SALES T	ΓΑΧ	1.6	1	,	117 406 73	,	117 496 72
108	(City of Tue	cson 8.6% at 65% of Subtotal E)	LS 	1	\$	117,486.73	\$	117,486.73
109		GUARANTEI	ED MA	XIMUM	PRI	CE (GMP)	\$	2,219,217.22
110	X. OWNER	'S CONTINGENCY						
111	UNFORESE	EN CONDITIONS - LOD400 PLANS	LS	1	\$	110,960.86	\$	110,960.86
112		SUBT	OTAL F	. (OWNER'S	COI	VTINGENCY)	\$	110,960.86
113			TC	OTAL CON	TRA	ACT COST	\$	2,330,178.08



ATTACHMENT #2 - SCOPE OF WORK

GMP#2 - CONSTRUCTION OF PHASE 2 (Raytheon Pkwy/Aerospace Pkwy Intersection)

Dated: January 18, 2018

BRIEF DESCRIPTION OF WORK:

THIS PROJECT CONSISTS OF WIDENING AEROSPACE PARKWAY IN THE GENERAL VICINITY OF THE RAYTHEON PARKWAY INTERSECTION (APPROXIMATE STA.333+55 TO STA.350+00). THIS PROJECT ALSO INCLUDES THE INITIAL MASS EARTHWORK FOR WIDENING AEROSPACE PARKWAY BETWEEN EISENHOWER ROAD AND THE EASTERN PROJECT LIMITS. SEE ATTACHMENT 3 FOR ADDITIONAL EXCLUSIONS AND CLARIFICATIONS

	LIST OF PLANS & SPECIFICATIONS USED FOR GMP						
1	Document:	Prepared By:	Date:				
: 2	AEROSPACE PARKWAY WIDENING: PHASE 2 AEROSPACE PARKWAY GMP2 SUBMITTAL FOR FINAL REVIEW (LOD400 Sheets)	KITTELSON	12/21/17				
3	AEROSPACE PARKWAY WIDENING: PHASE 2 AEROSPACE PARKWAY LOD400 GMP2 Cross Sections	KITTELSON	12/21/17				
4	AEROSPACE PARKWAY WIDENING: PHASE 2 AEROSPACE PARKWAY GMP2 Bid Item List/Quantity Estimate	KITTELSON	12/21/17				
5							
6							
7							
8							
9							
10							



ATTACHMENT #3 - CLARIFICATIONS, ASSUMPTIONS, EXCLUSIONS

GMP#2 - CONSTRUCTION OF PHASE 2 (Raytheon Pkwy/Aerospace Pkwy Intersection)

Dated: January 18, 2018

	CLARIFICATIONS, ASSUMPTIONS, AND EXCLUSIONS TO THE SCOPE OF WORK:
1	Clarification: GMP#2 is intended to match the LOD400 plan sheets provided in Kittelson's $12/21/2017$ plan submittal. Areas within the $12/21/17$ plans that have been grayed out are not included in GMP#2 proposal unless specifically noted below.
2	Clarification: GMP#2 includes the mass earthwork (onsite cut-to-fill and offsite borrow) from Eisenhower Road to the eastern project limits. While these limits are additional to what is shown in the Kittelson 12/2/21/17 plans, we believe inclusion of the expanded area will increase earthwork activity efficiency and minimize impacts to traveling public and adjacent landowners.
3	Clarification: GMP#2 includes underground utility improvements (JUT, Water, and Sewer) from Nogales Highway to the eastern project limits, as shown ins sheets JT01-JT06, SS01-SS13, and 183-198 of Kittelson's 12/21/17 plans submittal. We believe inclusion of the these improvements in GMP#2 will ensure earthwork activity efficiency and minimize impacts to traveling public and adjacent landowners.
4	Clarification: GMP#2 includes drainage crossing improvements at pipe crossing numbers 336, 341, and 349 per the Kittelson 12/21/17 plan submittal. These specific storm drain improvements will ensure initial mass earthwork activities can be completed efficiently. All other storm drains and cross drains are excluded from GMP#2 and will be part of a future GMP package.
5	Clarification: Borderland has assumed all onsite excavated materials are suitable for roadway embankments, trench backfill, and borrow. If onsite materials from the Phase 2 project cannot be utilized, there will be additional costs for embankments, trench backfill, and offsite borrow (i.e. import) needed for the project.
6	Clarification: Borrow costs are based on the use of offsite source.
7.	Clarification: Borderland has assumed onsite material will be suitable for trench backfill material (excluding bedding, shading) from 1' above pipe to subgrade.
8	Clarification: Item 4060510 - Bituminous Material Price Adjustment Allowance: This allowance is not applicable if paving occurs prior to September 30, 2018. If for some reason beyond our control paving takes place after September 30, 2018 asphalt market conditions may require an escalation in the unit cost for bituminous materials.
9	not used
10	Assumption: As part of boring new utilities under the existing railroad tracks in UPRR ROW, it has been assumed that a UPRR Contractors Right-of-Entry application fee of \$500 will be paid by Borderland. Our GMP#2 also assumes the cost of UPRR insurance and UPRR flaggers during the boring activities. No other UPRR costs (license agreements, fees, etc.) have been included in our proposal - it is assumed those costs (if required) are being negotiated and settled as part of the utility crossing agreement and/or public atgrade crossing agreements between UPRR and Pima County.
11	Assumption: Sales Tax Rate - Assumed City of Tucson rates for GMP #2.



ATTACHMENT #3 - CLARIFICATIONS, ASSUMPTIONS, EXCLUSIONS

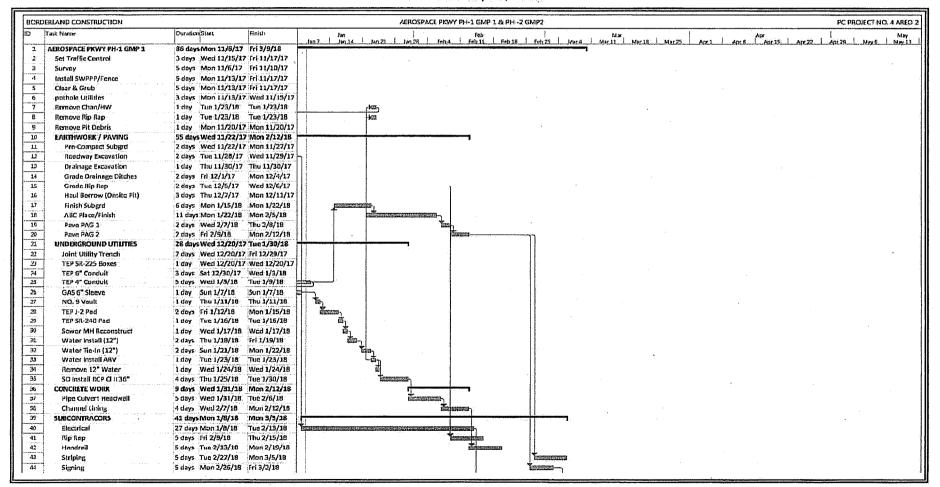
GMP#2 - CONSTRUCTION OF PHASE 2 (Raytheon Pkwy/Aerospace Pkwy Intersection)

	CLARIFICATIONS, ASSUMPTIONS, AND EXCLUSIONS TO THE SCOPE OF WORK:
12	not used
13	Exclusion: The cost for the bored casing across UPRR does not include annular filling of the casing - it includes conduit spacers only.
14	Exclusion: Borderland has excluded all over excavation and/or compaction/replacement of onsite soils (other than typical subgrade preparation).
15	Exclusion: Borderland is excluding a contractor/owner job trailer for the GMP#2 project.
16	Exclusion: Borderland has not included any costs for QA/QC testing for the GMP#2 project
17	Exclusion: The existing JUT system contains empty conduits, as such the new JUT conduit costs exclude the cost of innerducts (no innerduct were shown in LOD400 plans and/or special provisions to the contrary were not yet provided)



ATTACHMENT #4 - ANTICIPATED CONSTRUCTION SCHEDULE

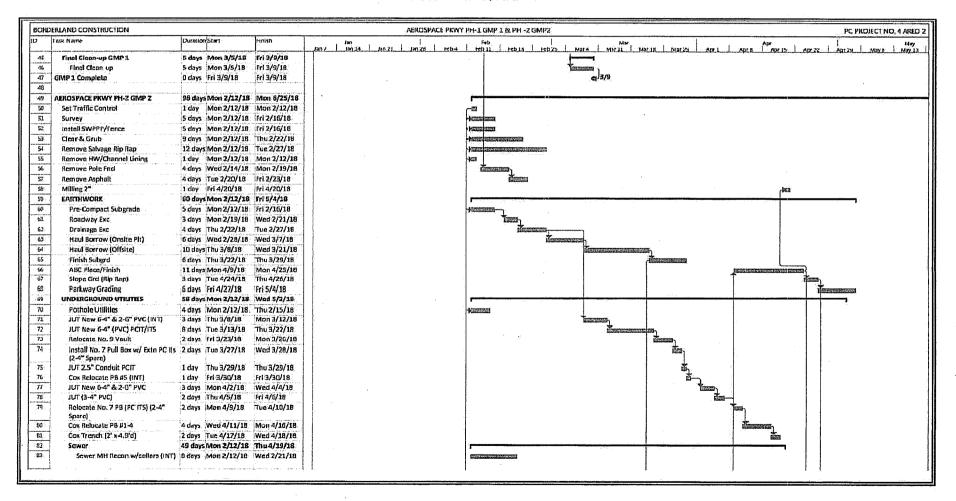
GMP#2 - CONSTRUCTION OF PHASE 2 (Raytheon Pkwy/Aerospace Pkwy Intersection)





ATTACHMENT #4 - ANTICIPATED CONSTRUCTION SCHEDULE

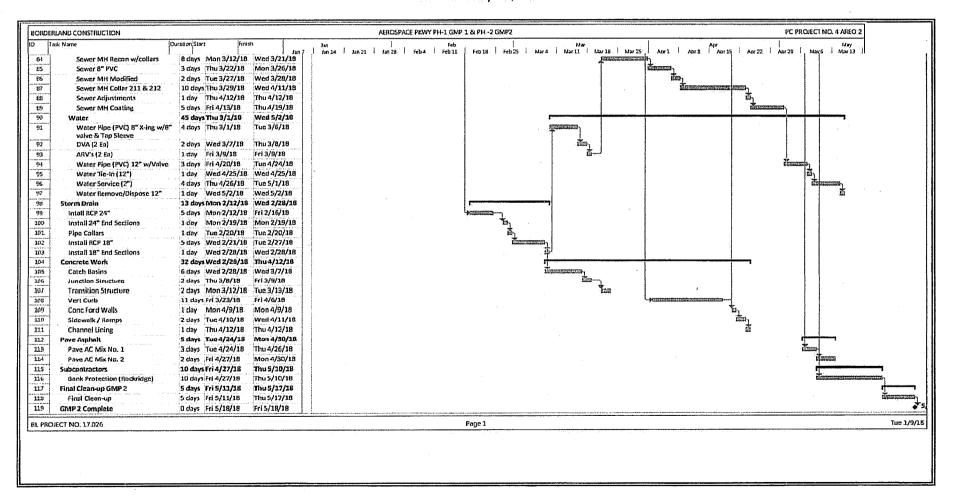
GMP#2 - CONSTRUCTION OF PHASE 2 (Raytheon Pkwy/Aerospace Pkwy Intersection)





ATTACHMENT #4 - ANTICIPATED CONSTRUCTION SCHEDULE

GMP#2 - CONSTRUCTION OF PHASE 2 (Raytheon Pkwy/Aerospace Pkwy Intersection)





ATTACHMENT #5 - CASH-FLOW FORECAST

GMP#2 - CONSTRUCTION OF PHASE 2 (Raytheon Pkwy/Aerospace Pkwy Intersection)

			FY17-18	Q VA/A	rk			
Major Work Items	Work Performed: Feb-18 To be Invoiced:		Work Performed: Mar-18 To be Invoiced: Apr-18		Work Performed: Apr-18 To be Invoiced: May-18		Work Performed: May-18 To be Invoiced: Jun-18	
	Mar-18							
Mobilization			-					
Traffic Control								
SWPPP	\$ 700,000.00							
Removals	\$ 700,000.00							
Storm Drain								
Earthwork								
JUT Install								
Sewer								
Water		\$	700,000.00					
Junction Structure		>	700,000.00					
Transition Structure								
Vertical Curb								
Rip Rap								
ABC								
Finish ABC		1			7.			
Pave PAG 1					-41			
Pave PAG 2								
Sidewalk/Ramps				\$	780,000.00			
Finalize JUT					- 1			
Water Tie-in/Service								
Sewer MH/Coating			100					
Ford Walls								
Channel Lining								
Bank Protection								
Cleanup/ Substantial Completion						\$	39,217.2	
Monthly Subtotals	\$ 700,000.00	\$	700,000.00	\$	780,000.00	\$	39,217.2	
Total***			\$2,219	,217.	22			

^{**}Estimated amounts reflect anticipated installations/work completed by end of prior month

^{***}Forecast Total does NOT include unencumbered Owners Contingency amount of \$110,960.86



ATTACHMENT #6 - SUBCONTRACTORS LIST

GMP#2 - CONSTRUCTION OF PHASE 2 (Raytheon Pkwy/Aerospace Pkwy Intersection)

				Anticipated Participation				
	Company	Scope of Work:	Selection Based on:	Status (SBE?)		Anticipated Subcontract Value	Anticipated % Participation	
1	Rockridge Construction, Inc.	Rip Rap/ Shotcrete	Qualifications and Price	SBE	\$	33,379.15	1.50%	
2	Hunter Guardrail	Handrail	Qualifications and Price	-	\$	7,600.00	0.34%	
3	Gonzales Boring & Tunneling	Boring	Qualifications and Price	-	\$	60,000.00	2.70%	
4	WLB Surveying	Survey	Qualifications and Price	-	\$	32,000.00	1.44%	
5							0.00%	
		Anticipated S	Subcontractor Tot	al Value	\$	132,979.15	5.99%	
Anticipated Self-Performance Total Value					\$	2,086,238.07	94.01%	

UMMARY		
AMOUNT	=	\$2,219,217.22
ROJECT (%)	=	1.50%
HASE 2 (\$)	=	\$33,288.26
ble above)	=	\$33,379.15
n Total (%)	=	1.50%
t (Yes/No)	=	YES

TRAVELERS

POWER OF ATTORNEY

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company Travelers Casualty and Surety Company Travelers Casualty and Surety Company of America United States Fidelity and Guaranty Company

Attorney-In Fact No.

230030

Certificate No. 007239975

KNOW ALL MEN BY THESE PRESENTS: That Farmington Casualty Company, St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company are corporations duly organized under the laws of the State of Connecticut, that Fidelity and Guaranty Insurance Company is a corporation duly organized under the laws of the State of Iowa, and that Fidelity and Guaranty Insurance Underwriters, Inc., is a corporation duly organized under the laws of the State of Wisconsin (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint

Joseph C. Dhuey, Tina K. Nierenberg, Tina Marie Berger, and Patrick Howey

of the City of	Tucson		. State of	Arizona		, their true and la	awful Attorney(s)-in-Fact,
						nds, recognizances, cor	ditional undertakings and
			f of the Companies in the ertakings required or perm				eeing the performance of
contracts and exe	cuting of guara	inteering bonds and unde	rtakings required or peril	nited in any action	is or proceedings a	nowed by law.	
	be.						
97.	D. 5- 3						25th
IN WITNESS Y	PHEREOF, the	e Companies have cause 2017	d this instrument to be si	gned and their con	porate seals to be h	nereto affixed, this	2541
day of Wilay	100						
, i	2011	Farmington Casual	tv Company		St. Paul Mer	cury Insurance Comp	anv
		Fidelity and Guara	nty Insurance Company		Travelers Ca	sualty and Surety Con	npany
-			nty Insurance Underwr Iarine Insurance Compa			sualty and Surety Cor s Fidelity and Guaran	2 -
			Insurance Company	any	Office States	s ridenty and Guaran	ry Company
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(A)	CAN NO.	The same of	SUFANCE 15	- AMYON	- 1	This East	AM STO
						2	2
						All ith	
State of Connects				By:		Solling	
City of Hartford	SS.				Robe	rt L. Raney, Senior Vice P	resident
	05.1			2015			
On this the	25th	day of May					acknowledged himself to
							Inderwriters, Inc., St. Paul urety Company, Travelers
							o, executed the foregoing
instrument for the	e purposes there	ein contained by signing	g on behalf of the corpora	tions by himself as	s a duly authorized	l officer.	
			& C. TETRE	1	_	0 4	1 to a. 01
		set my hand and offici	al seal.	E)		Janu C.	Jamoure
My Commission	expires the 30t	h day of June, 2021.	A PURITO	*		Marie C. Tetreault	Notary Public

58440-5-16 Printed in U.S.A.

WARNING: THIS POWER OF ATTORNEY IS INVALID WITHOUT THE RED BORDER

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Company, St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, and Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary, of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 22 day of \(\sqrt{a} \)

day of January

__, 20 (_____

Kevin E. Hughes, Assistant Secretary



















To verify the authenticity of this Power of Attorney, call 1-800-421-3880 or contact us at www.travelersbond.com. Please refer to the Attorney-In-Fact number, the above-named individuals and the details of the bond to which the power is attached.



Obligee: Pima County

130 W Congress Street Tucson, AZ 85701

INCREASE CERTIFICATE

Principal: Borderland Construction Company, Inc.
400 E 38th Street
Tucson, AZ 85713

Bond No. 106656604
License No.
Amount of Bond: \$1,602,203.77
Hereby increased to: \$4,052,440.50

Travelers Casualty and Surety Company of America

By

Patrick Howey
Attorney-in-Fact

I hereby consent to the above increase.

Witness my hand and seal this 23 day of Jacuary, 2017

Borderland Construction Company, Inc.

Principal (Seal)

INSTRUCTIONS TO AGENTS - IMPORTANT

Do not deliver this certificate to the Obligee until it has been dated and signed by the Principal. One signed copy must be returned to the Surety.