

LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT CONTRACT CHANGE ORDER Page 1 of 2	Date:	November 2, 2015	
	Project:	PSOC Radio Tower	
	Location:	115 Cisco Road	
To (Contractor): Airbus DS Communications 1301 President George Bush Hwy., Suite 150 Richardson, TX 75080	Contract No.	0507-2015	
	Original Contract Amt.	\$1,542,083.00	
	Cumulative Amount of Previous Change Orders	\$0.00	
	Percent Change - Previous Change Orders		0.00%
	Total Contract Amount Prior to this Change Order	\$1,542,083.00	
	Change Order No.	1	

You are hereby requested to comply with the following changes from the contract plans and specification;

Current Change Order

Item No.	Description of changes-quantities, unit prices, change in completion date, etc.	Decrease in contract price	Increase in contract price	
1	Order heavier tower to accommodate antennas		\$17,688.00	
	Total decrease	\$0.00		
	Total increase		\$17,688.00	
	Net Amount of this Change Order	\$17,688.00		
	New Contract Amount Including this Change Order	\$1,559,771.00		
	Percent Change - This Change Order			1.13%
	Percent Change - All Change Orders			1.15%

The time provided for the completion in the contract and all provisions of the contract will apply hereto.

Recommended by Derek R. Gaudin (Proj. Engr.) Date 11/2/15
 Accepted by Derek R. Gaudin (Contractor) Date 11/2/15
 Approved by Robert Stack (Director) Date 11/4/15
 Approved by K. Armstrong (Commissioner) Date 11/4/15
 Approved by [Signature] (Mayor or CAO) Date 12/3/15

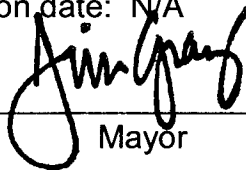
JUSTIFICATION FOR CHANGE

PROJECT: PSOC Radio Tower

CONTRACT NO. 0507-2015

CHANGE ORDER: 1

1. Necessity for change: Additional antennas placed on the tower to support the Emergency Operations Center and Chemical Stockpile Emergency Preparedness Plan (CSEPP) will leave little capacity for additional antennas in the future. CSEPP is funding the cost difference for a heavier tower that will provide load capacity for additional antennas in the future.
2. Is proposed change an alternate bid? ___ Yes X No
3. Will proposed change alter the physical size of the project? ___ Yes X No
If "Yes", explain.
4. Effect of this change on other prime contractors: N/A
5. Has consent of surety been obtained? ___ Yes X Not Necessary
6. Will this change affect expiration or extent of insurance coverage? ___ Yes X No
If "Yes", will the policies be extended? ___ Yes ___ No
7. Effect on operation and maintenance costs: N/A
8. Effect on contract completion date: N/A



Mayor

12/3/15

Date

PROJECT CHANGE NOTICE

To: Lexington-Fayette Urban County Government 200 E. Main St., Room 313 Lexington, KY 40507 ATTN: Robert Stack, Director, Division of E911	CR Date:	October 26, 2015
	CR #	LXP-001
	Project Name:	Lexington PSOC
	Purchase Order #:	LF00131163
	Originator:	Robert Stack
	Project Manager:	Greg Senter

DESCRIPTION OF CHANGE

Modify the PSOC tower and tower foundation to accommodate additional antenna loadings as specified by Mission Critical Partners

NEED & NECESSITY

The PSOC tower included in the contracted proposal was designed to accommodate 5 antennas (3 800 MHz omni antennas for P25 and 2 Microwave dishes) with 20% additional capacity. Mission Critical Partners has requested to install 6 additional antennas on the tower which reduces most of the remaining capacity of the tower. The proposed change will accommodate the additional antennas specified by Mission Critical Partners and provide the additional capacity still required for future needs.

IMPACTS

Technical Impact to Specifications, Performance or Operational Requirements:
 Proposed designs for the original tower and redesigned tower are included as part of the attached file **LXP_Tower_Comparison_2015OCT17.pdf**

Impact on Project Schedule and Potential Mitigation Steps:
 Delays associated with finalizing the tower and tower foundation design are impacting the project construction schedule by a day-for-day slip. The project team is working to maintain existing 2Q2016 project completion dates.

Impact on Project Cost and Potential Mitigation Steps:
 \$17,688 cost impact to the LFUCG

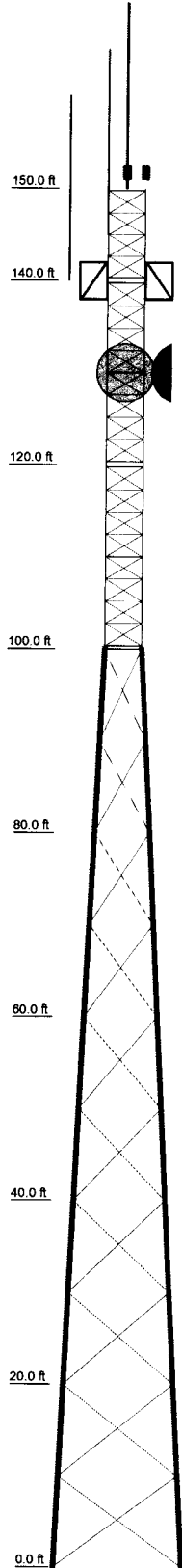
Customer Acceptance Signature Approval:

Authorized by: *Jim Gray*
 Printed name: JIM GRAY
 Date: 12/3/15

Airbus DS Communications Signature Approval:

Authorized by: *Derek R Gamble*
 Printed name: Derek R Gamble
 Date: 12/15

Section	T1	T2	T3	T4	T5	T6	T7	T8
Legs	SR 1 1/4	SR 1 1/2	SR 2	A572-58	#12Z0-58 - 1.25" - 1.00" conn. (Pivad 194434)	L3 1/2x3 1/2x3/16	A36	N.A.
Diagonals	SR 3/4	A572-50	SR 7/8	L3x3x3/16	N.A.	N.A.	N.A.	N.A.
Diagonal Grade								
Top Girts	SR 7/8	SR 7/8	SR 7/8	SR 3/4				
Mid Girts	N.A.							
Bottom Girts								
Horizontals								
Face Width (ft)				6	10	10	12	14
# Panels @ (ft)								
Weight (K)	4 @ 2.35417	0.8	1.1	1.9	1.9	2.0	2.0	2.1



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
21' LRE with 7'-6" lightning rod (arm=11.5')	150	6' Bogner Mount Standard Duty BMR12	140
Beacon	150	BMR12 (20% additional loading)	140
Beacon	150	6' Bogner Mount Standard Duty (20% additional loading)	140
BMR12	150	BMR12 (20% additional loading)	140
6' Bogner Mount Standard Duty	150	6' Bogner Mount Standard Duty (20% additional loading)	140
TMA (12"x12"x8")	150	6' Bogner Mount Standard Duty (20% additional loading)	140
BMR12 (20% additional loading)	150	PAR6-59 w/o Radome	130
6' Bogner Mount Standard Duty (20% additional loading)	150	PAR6-59 w/o Radome	130
TMA (12"x12"x8") (20% additional loading)	150	PAR6-59 w/o Radome (20% additional loading)	130
6' Bogner Mount Standard Duty	140	PAR6-59 w/o Radome (20% additional loading)	130
BMR12	140		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-58	58 ksi	75 ksi	A36	36 ksi	58 ksi
A572-50	50 ksi	65 ksi			

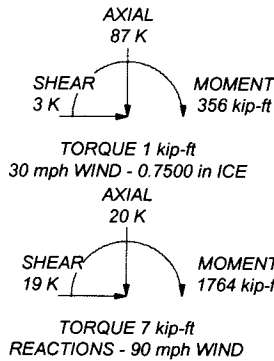
TOWER DESIGN NOTES

1. Tower is located in Fayette County, Kentucky.
2. Tower designed for Exposure C to the TIA-222-G Standard.
3. Tower designed for a 90 mph basic wind in accordance with the TIA-222-G Standard.
4. Tower is also designed for a 30 mph basic wind with 0.75 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Structure Class III.
7. Topographic Category 1 with Crest Height of 0.00 ft
8. TOWER RATING: 88.7%

ALL REACTIONS ARE FACTORED

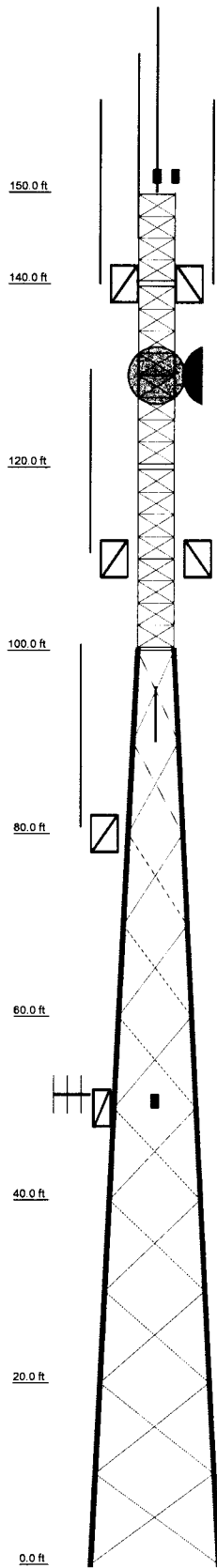
MAX. CORNER REACTIONS AT BASE:

DOWN: 151 K
 UPLIFT: -137 K
 SHEAR: 14 K



<p>valmont STRUCTURES</p> <p>1545 Pidco Drive Plymouth, IN 46563</p> <p>Valmont Structures, Inc. - Specialty Structures Group Phone: (574) 936-4221 FAX: (574) -936-6458</p>	<p>Job: Quotation 295734-01</p> <p>Project: U-14 x 150' - Fayette County, KY</p>
	<p>Client: Tower Systems, Inc. Drawn by: CRF1 App'd:</p>
	<p>Code: TIA-222-G Date: 06/17/15 Scale: NTS</p>
	<p>Path: Dwg No. E-1</p>
	<p><small>Project: U-14 x 150' - Fayette County, KY Date: 06/17/15 Scale: NTS</small></p>

Section	11	12	13	14	15	16	17	18
Legs	SR 1 1/4	SR 1 1/2	SR 2	#12ZG-58 - 1.25" - 1.00" conn. (Pirod 19434)	#12ZG-58 - 1.25" - 1.00" conn. (Pirod 19434)	#12ZG-58 - 1.50" - 1.00" conn. (Pirod 19510)	#12ZG-58 - 1.50" - 1.00" conn. (Pirod 19510)	A
Leg Grade	SR 3/4	SR 7/8	SR 7/8	A572-58	A572-58	A572-58	A572-58	L3 1/2x3 1/2x5/16
Diagonal Grade	A572-50	A572-50	A572-50	L3x3x3/16	L3x3x3/16	L3x3x3/16	L3x3x3/16	L3 1/2x3 1/2x5/16
Top Girts	SR 7/8	SR 7/8	SR 7/8	SR 1	SR 1	SR 1	SR 1	N.A.
Mid Girts	N.A.	SR 7/8	SR 7/8	SR 1	SR 1	SR 1	SR 1	N.A.
Bottom Girts	SR 7/8	SR 7/8	SR 7/8	SR 1	SR 1	SR 1	SR 1	N.A.
Horizontal	SR 3/4	SR 3/4	SR 3/4	SR 3/4	SR 3/4	SR 3/4	SR 3/4	N.A.
Face Width (ft)	4	4	4	6	6	10	10	12
# Panels	4	4	4	6	6	10	10	12
Weight (K)	2.35417	2.42708	2.42708	2.3	2.3	2.8	3.0	3.5



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
21' LRE with 7'-6" lightning rod (arm=11.5')	150	6' Pivot Side Arm (50" pipe)	110
Beacon	150	Diamond X200A (20% Additional Load)	110
Beacon	150	6' Pivot Side Arm (50" pipe) (20% Additional Load)	110
BMR12	150	ANT135F2	90
6' Bogner Mount Standard Duty	150	6' Pivot Side Arm (50" pipe)	90
TMA (12"x12"x8")	150	ANT135F2 (20% Additional Load)	90
BMR12 (20% additional loading)	150	6' Pivot Side Arm (50" pipe) (20% Additional Load)	90
6' Bogner Mount Standard Duty (20% additional loading)	150	ANT150F6 - 138-151 MHZ	80
TMA (12"x12"x8") (20% additional loading)	150	6' Pivot Side Arm (50" pipe)	80
6' Bogner Mount Standard Duty	140	ANT150F6 - 138-151 MHZ (20% Additional Load)	80
BMR12	140	6' Pivot Side Arm (50" pipe) (20% Additional Load)	80
6' Bogner Mount Standard Duty	140	Buckmaster Center Insulator	50
BMR12 (20% additional loading)	140	10' Standoff	50
6' Bogner Mount Standard Duty (20% additional loading)	140	Rope	50
BMR12 (20% additional loading)	140	Rope	50
6' Bogner Mount Standard Duty (20% additional loading)	140	Buckmaster Center Insulator (20% Additional Load)	50
PAR6-59 w/o Radome	130	10' Standoff (20% Additional Load)	50
PAR6-59 w/o Radome (20% additional loading)	130	Rope (20% Additional Load)	50
PAR6-59 w/o Radome (20% additional loading)	130	Rope (20% Additional Load)	50
PAR6-59 w/o Radome (20% additional loading)	130	101108-1	50
ANT150F6 - 138-151 MHZ	110	3' Pivot Side Arm (50" pipe)	50
6' Pivot Side Arm (50" pipe)	110	101108-1 (20% Additional Load)	50
ANT150F6 - 138-151 MHZ (20% Additional Load)	110	3' Pivot Side Arm (50" pipe) (20% Additional Load)	50
6' Pivot Side Arm (50" pipe) (20% Additional Load)	110	1/2 of V Antenna	50
6' Pivot Side Arm (50" pipe) (20% Additional Load)	110	1/2 of V Antenna	50
Diamond X200A	110	1/2 of V Antenna (20% Additional Load)	50
		1/2 of V Antenna (20% Additional Load)	50

SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	#12ZG-58 - 1.75" - 1.00" conn.-TR1-(Pirod 195214)		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-58	58 ksi	75 ksi	A36	36 ksi	58 ksi
A572-50	50 ksi	65 ksi			

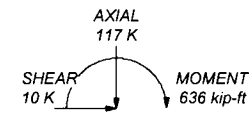
TOWER DESIGN NOTES

1. Tower is located in Fayette County, Kentucky.
2. Tower designed for Exposure C to the TIA-222-G Standard.
3. Tower designed for a 90 mph basic wind in accordance with the TIA-222-G Standard.
4. Tower is also designed for a 30 mph basic wind with 0.75 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Structure Class III.
7. Topographic Category 1 with Crest Height of 0.00 ft
8. TOWER RATING: 91.5%

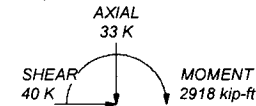
ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE:

DOWN: 250 K
 UPLIFT: -222 K
 SHEAR: 28 K



TORQUE 19 kip-ft
 30 mph WIND - 0.7500 in ICE



TORQUE 139 kip-ft
 REACTIONS - 90 mph WIND

	1545 Pidco Dr. Plymouth, IN		
	Valmont Industries, Inc. - Specialty Structures Group Phone: (574) 936-4221 FAX: (574) 936-6458		
Job: Quotation 295734-02 Project: U-14 x 150' - Fayette County, KY Client: Tower Systems, Inc. Code: TIA-222-G Path:	Drawn by: JAK Date: 10/12/15	App'd: Scale: NTS Dwg No: E-1	