

## **Addendum for RFB 0917335037**

Project Name: IVH – 2017 Roadway Improvements & Utility Tunnel Repair

DAS RFP #: 0917335037

DAS Project #: 8940.00

Date: 06/28/2017

Addendum #02:

- Cover Page – Questions and Clarifications (1 page)
- Pre-Bid Agenda (3 pages)
- Pre-Bid Sign-in Sheet (1 page)
- Bid Forms (6 pages)
- Approved Substitution Request Form (6 pages)

Questions and Clarifications:

- It shall be the responsibility of the contractor to procure services for construction surveying throughout the project. A revised bid form will be incorporated with this addendum to include construction surveying.
- LUMCA Inc. has been approved as a manufacturer for the light poles and fixtures. See attached substitution request.
- Q – How long must the concrete top cure prior to applying the waterproofing sealant?

A – The waterproofing sealant shall be applied per manufacturers specifications. For the two products identified in the specifications the cure time is 14 days for the Masterseal HLM 5000 by BASF and 24 hours for the Mel-Rol LM by WR Meadows

- Q- Since this is a private facility, will the property owner be responsible for all utility locates throughout the project?

A – Utility locates shall be coordinated with both the Owner as well as local One-Call services. The Owner will perform their own locates. A campus wide utility plan is available with approximate locations of utilities.

- Q – Is there a construction estimate for this scope of work?

A – Engineers estimate for construction is \$743,998.55

- Q – Do bid bonds need to be provided on a ConsensusDocs form?

A – No, other standard forms of bid bonds are acceptable to the State of Iowa.

**Pre-Bid Meeting: June 15<sup>th</sup> 10:00 AM CDT**

**Owner/DAS/CM Team Introductions:**

Facility – Iowa Veterans Home  
Construction Manager – DCI Group  
Iowa Department of Administrative Services (DAS) – Jennie Elliott  
Engineer – AECOM  
DOT – Jeremy Vortherms  
DAS Purchasing Agent – Steve Oberbroeckling  
Reprographics – Beeline & Blue

**General Project Description/Overview:**

Base Bid – Constitution Avenue circle removal/replacement, Liberty Lane intersection removal/replacement, Memorial Drive overlay, and utility tunnel repair/road replacement.

**Tour** – Lead by DCI Group and IVH at conclusion of meeting.

**Bid Package Process:**

Overview of Instructions to Bidders – DCI Group

**BIDS DUE: Friday, June 30<sup>th</sup> 2017 by 2:00 PM**

**MAKE SURE IT IS SUBMITTED TO DAS AS THE REQUEST FOR PROPOSALS READS**

1. Proposal Process
  - a. All questions after this meeting and prior to 12:00 PM June 26<sup>th</sup>, to be submitted to Steve Oberbroeckling [steve.oberbroeckling@iowa.gov](mailto:steve.oberbroeckling@iowa.gov) . Do not contact IVH, A/E, DOT, or DCI Group directly for questions.
2. Schedule
  - a. An addendum will be issued via Beeline & Blue and DAS Procurement this week following the Pre-Proposal Meetings
  - b. Final addendum will be issued no later than June 28<sup>th</sup>, 2017 by 2:00 PM CST or no later than 48 hours prior to proposals being due.
  - c. Proposals due June 30<sup>th</sup> by 2:00 PM CST
  - d. Tentatively an NOI will be issued July 3<sup>rd</sup>, 2017
  - e. Anticipated construction work to take place July 2017 through December 2018.
    - i. A scheduling meeting will be held shortly after execution of contracts to further develop the construction schedule. All prime contractors, subcontractors, and key suppliers shall attend.
    - ii. One week prior to this meeting, contractors shall provide a preliminary schedule of their activities and activities of their subcontractors with durations and sequencing.

**Scope of Work:**

3. Administrative
  - a. This RFB will result in one successful contract.
  - b. EADOC project management software
  - c. Pre-construction meetings and submittals.
    - i. Prime contractor shall submit a submittal schedule within five business days of receipt of Owner/Prime Contractor Agreement. See section 00 7303.17 for requirements. A template with A/E identified submittals will be provided to contractors.
4. Construction
  - a. Construction schedule.
  - b. Utility tunnel scope of work.
  - c. All areas shall be clean and put back to existing conditions prior to substantial completion.
  - d. Staging and storage of materials.
  - e. Contractor shall maintain accurate as-built construction records throughout the project.
  - f. Daily logs/Weekly Report/Safety Meetings and meeting requirements.
  - g. Onsite supervision by Prime Contractor at all times work by that contractor or their subcontractors/suppliers is taking place.
5. Close Out
  - a. Complete, clean, and legible copies of the as-built construction records to be provided to DCI Group upon completion of work. Electronic and hard copies of all O&M's and as-built drawings to be submitted. Refer to spec. section 01 7700 for more details.

**IVH Worksite Rules:**

1. All personnel to check in at the Sheeler building each morning to receive contractor's badges and check them back in at the end of each work day.
2. Michael Martin & David Hokel with DCI Group will be onsite and your main point of contact.
3. IVH will tag out the fire alarm system each day in the areas that work is being performed. Contractors to provide notice to DCI Group for tag out requests.
4. All tools, ladders, materials, and equipment should be in constant view. If a contractor is working above ceiling all tools and etc. should be locked and stored away or another employee should be in the area to watch all tools and etc.
5. Do not allow residents to follow you into construction areas.
6. It is of the utmost importance to show respect and courtesy to all residents and staff at all times.
7. Clean all debris, materials, and bring all finishes back to existing conditions in the area they were working in prior to moving to the next area.
8. All work should be fully completed in one area prior to moving to the next or leaving for the day.
9. No smoking or smokeless tobacco use onsite

**General Discussion:**

1. Bid Form




**DAS Project Name:** IVH- 2017 Roadway Improvements & Utility Tunnel Repair 8940

**Meeting Purpose:** Pre-Bid Meeting

**Date:** 06/21/2017

**Attendees**

In Attendance (Initial)	Name	Company	Phone Number	E-Mail Address
	Michael Steen	DCI Group	515-975-8384	<a href="mailto:MichaelS@dcigroupia.com">MichaelS@dcigroupia.com</a>
X	Michael Martin	DCI Group	515-393-1851	<a href="mailto:Michaelm@dcigroupia.com">Michaelm@dcigroupia.com</a>
X	David Hokel	DCI Group	515-979-3187	<a href="mailto:DavidH@dcigroupia.com">DavidH@dcigroupia.com</a>
	Bradley VanBaale	IVH	(641) 750-0039	<a href="mailto:Bradley.VanBaale@ivh.state.ia.us">Bradley.VanBaale@ivh.state.ia.us</a>
	Matt Crouse	OEL Const.	(641) 868-2222	<a href="mailto:mcrouse@oelconstruction.com">mcrouse@oelconstruction.com</a>
	Jason Spooner	Manatt's	641 792 7500	<a href="mailto:jasons@manatts.com">jasons@manatts.com</a>
	Cliff Rhoads	Jasper Const	641-792-8650	<a href="mailto:cliff@jasperco.com">cliff@jasperco.com</a>
	Jennifer Vogel	AECOM	763-498-4510	<a href="mailto:jennifer.vogel@aecom.com">jennifer.vogel@aecom.com</a>

**SECTION 00 4116**

**BID FORM**

RFB #0917335037

BID FORM for CONSTRUCTION CONTRACT  
for  
Iowa Veterans Home  
1301 Summit Street, Marshalltown, Iowa 50158  
Project 8940.00

Iowa Department of Administrative Services  
GSE-Central Procurement Bureau  
Hoover State Office Building, Level 3  
1305 East Walnut Street  
Des Moines, Iowa 50319-0105

The following documents are to be completed and submitted with your bid.

1. Bid Proposal Form (Required)
2. Non Discrimination Clause Form
3. Contractor Targeted Small Business Enterprise Pre-Bid Contract Information Form
4. Bid Security – 5% of total Bid amount (Is to be submit in separate envelope) (Required)

**Authorized Representative:**

The undersigned Bidder, in response to your Request for Bid for construction of the above project, having examined the Drawings, Specifications, and other Bidding Documents dated May 12th, 2017, and Addenda issued and acknowledged below as received and being familiar with all the conditions surrounding the construction of the proposed project including the availability of materials and labor, hereby proposes to furnish all labor, materials, equipment and supplies to perform all work to construct the project in strict accordance with the proposed Contract Documents, within the time and at the prices stated below. Prices are to cover all expenses incurred in performing the work required under the proposed Contract Documents, of which this bid is a part.

Bidder acknowledges receipt of the following Addenda which are a part of the Bidding Documents and for which any effect on cost of the Work is included in the bid amounts indicated:

Number      \_\_\_\_\_

Dated        \_\_\_\_\_

Note that the State of Iowa is exempt from State and Local sales and use taxes (including local option and school option) for this project. Taxes on construction materials shall NOT be included in the bid amounts.

Amounts shall be indicated in both words and figures. In case of discrepancy, the amount indicated in words shall govern.

**BID PACKAGES:**

BP #01

Description: IVH- 2017 Roadway Improvements and Utility Tunnel Repair

Bidder proposes and agrees to perform all work as described in the Construction Documents for the sum of: \_\_\_\_\_ Dollars  
(\$ \_\_\_\_\_).

UNIT PRICES:

Fill in the below table with the associated cost per unit for each item. Bidder proposes and agrees to perform all additional or deductive work, by means of change order and to meet the requirements as described in the Construction Documents, at the below proposed unit price adds/deducts:

Item No.	Item Code	Item	Unit	Cost
1	2101-0850002	CLEARING AND GRUBBING	UNIT	
2	2102-2710090	EXCAVATION, CLASS 10, WASTE	CY	
3	2105-8425005	TOPSOIL, FURNISH AND SPREAD	CY	
4	2109-8225100	SPECIAL COMPACTION OF SUBGRADE	STA	
5	2115-0100000	MODIFIED SUBBASE	CY	
6	2121-7425010	GRANULAR SHOULDERS, TYPE A	TON	
7	2123-7450000	SHOULDER CONSTRUCTION, EARTH	STA	
8	2214-5145150	PAVEMENT SCARIFICATION	SY	
9	2301-1033050	STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CLASS C, CLASS 3 DURABILITY, 5 IN.	SY	
10	2301-1033080	STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CLASS C, CLASS 3 DURABILITY, 8 IN.	SY	
11	2303-1032500	HOT MIX ASPHALT STANDARD TRAFFIC, INTERMEDIATE COURSE, 1/2 IN. MIX	TON	
12	2303-1033500	HOT MIX ASPHALT STANDARD TRAFFIC, SURFACE COURSE, 1/2 IN. MIX, NO SPECIAL FRICTION REQUIREMENT	TON	
13	2303-1258283	ASPHALT BINDER, PG 58-28S, STANDARD TRAFFIC	TON	
14	2401-6745356	REMOVAL OF CONCRETE FOOTINGS OF LIGHT POLES	EACH	
15	2401-6745765	REMOVAL OF LIGHT POLES	EACH	
16	2401-6750001	REMOVALS, AS PER PLAN	LS	
17	2402-0875150	COMPACTION WITH MOISTURE CONTROL (STRUCTURES)	CY	
18	2402-2720000	EXCAVATION, CLASS 20	CY	
19	2403-0100000	STRUCTURAL CONCRETE (MISCELLANEOUS)	CY	

20	2404-7775005	REINFORCING STEEL, EPOXY COATED	LB	
21	2435-0250104	INTAKE, SW-501, TOP ONLY	EACH	
22	2435-0250704	INTAKE, SW-507, TOP ONLY	EACH	
23	2435-0250904	INTAKE, SW-509, TOP ONLY	EACH	
24	2435-0600020	MANHOLE ADJUSTMENT, MAJOR	EACH	
25	2435-0600120	INTAKE ADJUSTMENT, MAJOR	EACH	
26	2502-8212034	SUBDRAIN, LONGITUDINAL, (SHOULDER) 4 IN. DIA.	LF	
27	2502-8221303	SUBDRAIN OUTLET, DR-303	EACH	
28	2510-6745850	REMOVAL OF PAVEMENT	SY	
29	2510-6750600	REMOVAL OF INTAKES AND UTILITY ACCESSES	EACH	
30	2511-6745900	REMOVAL OF SIDEWALK	SY	
31	2511-7526004	SIDEWALK, P.C. CONCRETE, 4 IN.	SY	
32	2511-7526006	SIDEWALK, P.C. CONCRETE, 6 IN.	SY	
33	2511-7528101	DETECTABLE WARNINGS	SF	
34	2518-6910000	SAFETY CLOSURE	EACH	
35	2519-3300600	FENCE, SAFETY	LF	
36	2523-0000100	LIGHTING POLES	EACH	
37	2523-0000200	ELECTRICAL CIRCUITS	LF	
38	2523-6765009	REMOVE AND REINSTALL LIGHT POLE AND LUMINAIRE	EACH	
39	2524-6765010	REMOVE AND REINSTALL SIGN AS PER PLAN	EACH	
40	2527-9263109	PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT-BASED	STA	
41	2528-8445110	TRAFFIC CONTROL	LS	
42	2529-5070110	PATCHES, FULL-DEPTH FINISH, BY AREA	SY	
43	2529-5070120	PATCHES, FULL-DEPTH FINISH, BY COUNT	EACH	
44	2533-4980005	MOBILIZATION	LS	
45	2601-2639010	SODDING	SQ	
46	2601-2643110	WATERING FOR SOD, SPECIAL DITCH CONTROL, OR SLOPE PROTECTION	MGAL	
47	2601-2643300	MOBILIZATION FOR WATERING	EACH	
48	2601-2643412	TURF REINFORCEMENT MAT, TYPE 2	SQ	
49	2601-2700020	TRANSITION MAT	SF	
50	2602-0000312	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 12 IN. DIA.	LF	
51	2602-0000320	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 20 IN. DIA.	LF	
52	2602-0000350	REMOVAL OF PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE	LF	



53	2602-0000400	TEMPORARY INTAKE OR MANHOLE COVER ASSEMBLY	EACH	
54	2602-0000410	MAINTENANCE OF TEMPORARY INTAKE OR MANHOLE COVER ASSEMBLY	EACH	
55	2602-0000420	REMOVAL OF TEMPORARY INTAKE OR MANHOLE COVER ASSEMBLY	LF	
56	2602-0000500	OPEN-THROAT CURB INTAKE SEDIMENT FILTER	EACH	
57	2602-0000510	MAINTENANCE OF OPEN-THROAT CURB INTAKE SEDIMENT FILTER	EACH	
58	2602-0000520	REMOVAL OF OPEN-THROAT CURB INTAKE SEDIMENT FILTER	EACH	
59	2602-0000530	GRATE INTAKE SEDIMENT FILTER BAG	EACH	
60	2602-0000540	MAINTENANCE OF GRATE INTAKE SEDIMENT FILTER BAG	EACH	
61	2602-0000550	REMOVAL OF GRATE INTAKE SEDIMENT FILTER BAG	EACH	
62	2602-0010010	MOBILIZATIONS, EROSION CONTROL	EACH	
63	2602-0010020	MOBILIZATIONS, EMERGENCY EROSION CONTROL	EACH	
64	2526-8285000	CONSTRUCTION SURVEYING	LS	

Bidder hereby certifies that:

1. This bid is genuine and is not made in the interest of or on behalf of any undisclosed person, firm or corporation;
2. Bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid; Bidder has not solicited or induced any person, firm or corporation to refrain from bidding; and Bidder has not sought by collusion to obtain any advantage over any other bidder or over the Owner.
3. Bidder hereby certifies that the Bidder is registered with the Iowa Labor Commissioner as a Contractor as required by Chapter 91C, Code of Iowa.
4. Bidder agrees to comply with all Federal and State Affirmative Action/Equal Employment Opportunity requirements concerning fair employment and will not discriminate between or among them by reason of race, color, religion, sex, national origin or physical handicap.
5. All construction under this Contract shall conform to the requirements of the *Iowa State Building Code*.
6. Bidder agrees that this bid shall remain valid and shall not be withdrawn for a period of thirty (30) calendar days after the date for receipt of bids.
7. Bidder agrees that if written notice of acceptance of this bid is mailed, emailed, or delivered to the undersigned within thirty (30) days after the date in which bids are due, or at any time thereafter before it is withdrawn, the undersigned will sign and return the Contract Agreement, prepared in accord with the Bidding Documents and this bid as accepted; and will also provide proof of insurance coverage and required surety bonds.
8. Bidder understands that the Owner reserves the right to reject any and all bids, and to waive irregularities or informalities and enter into a contract for the work, as the Owner deems to be in the best interest of the State.

Subcontractors:

The Trade Contractor must identify all Subcontractors and Suppliers within 48 hours of the published date and time for which bids must be submitted, in accordance with Iowa Code Section 8A311, as amended by

House File 646 in 2011. Subcontractors and suppliers may not be changed without the approval of the Owner. Requests for changing a Subcontractor or supplier must identify the reason for the proposed change, the name of the new Subcontractor or supplier, and the change in the subcontractor or supplier price as a result of the change. Any reduction in subcontractor or supplier price as a result of the change, if the change is approved by the Owner, shall be deducted from the Trade Contract Price via a deductive Change Order. Any such changes, if approved by the Owner, which result in an increase in the Trade Contract Price shall be borne by the Trade Contractor.

**Enforcement of Reciprocal Resident Bidder Preference, per Iowa Code 73A.21.**

All bidders shall either check the box next to "Resident Bidder" or check the box next to "Nonresident Bidder" and by doing so and signing thereafter certifies and attests to the same. All information requested must be provided. Seek out the advice of an attorney if you have questions.

"Resident Bidder" means a person or entity authorized to transact business in of the State of Iowa and having a place of business for transacting business within the State of Iowa at which it is conducting and has conducted business for at least three years prior to the date of the first advertisement for the public improvement. Note, however, that if a nonresident bidder's state or foreign country has a more stringent definition of a resident bidder, the more stringent definition is applicable as to bidders from that state or foreign country.

Resident Bidder

☐

Name of Resident Bidder: \_\_\_\_\_

By: \_\_\_\_\_  
Authorized Agent and Signatory of Resident Bidder

**OR:**

Nonresident Bidder

☐

Name of Nonresident Bidder: \_\_\_\_\_

Name of State or Foreign Country of Nonresident Bidder: \_\_\_\_\_

Particularly identify and describe any preference, labor preference, or any other type of preferential treatment, in effect in the nonresident bidder's state or foreign country at the time of this bid:

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**NOTICE:** Nonresident Bidders domiciled in a state or country with a resident labor force preference shall make and keep, for a period of not less than three years, accurate records of all workers employed on the public improvement. The records shall include each worker's name, address, telephone number when available, social security number, trade classification, and the starting ending time of employment.

By: \_\_\_\_\_  
Authorized Agent and Signatory of Nonresident Bidder

Bid Form shall be signed by an officer of the company with authority to bind in a contract.

Notice of acceptance of this bid, or request for additional information by the Department of Administrative Services, may be addressed to the undersigned at the address set forth below:

Legal Name of Firm: \_\_\_\_\_

Date: \_\_\_\_\_

Signature of Bidder: \_\_\_\_\_

Title: \_\_\_\_\_

Typed Name of Signatory: \_\_\_\_\_

Email: \_\_\_\_\_

Business Address:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Telephone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

Federal Tax Identification Number: \_\_\_\_\_

Iowa Contractor Registration Number: \_\_\_\_\_

Bidder Safety Manager Name: \_\_\_\_\_

For an out-of-state Bidder, Bidder certifies that the Resident Preference given by the State or

Foreign Country of Bidder's residence, \_\_\_\_\_, is \_\_\_\_\_ %.

**END OF SECTION**

## SUBSTITUTION REQUEST FORM

Marshalltown DAS IVH Roadway Improvements Utility

Project:

Substitution Request Number:

From: Lighting Solutions of Iowa

To: Steve Oberbroeckling

Date: 6-15-2017

A/E Project Number:

Re:

Specification Title: Bid form & Sheet numbers P.2 & P.1

Description: Lighting Layout Sheets

Section: 00 4116

Page: 3

Article/Paragraph: #36 2523-0000100

Proposed Substitution:

2645-A, Ave Watt

Manufacturer: Lumca

Address: Quebec, QC

Phone: 1-877-650-1693

Trade Name: Lighting Mfg

GIP 3T2 Canada

Model No.:

History: ☐ New product ☐ 2-5 years old ☐ 5-10 yrs old ☒ More than 10 years old

Differences between proposed substitution and specified product: None

☐ Point-by-point comparative data prepared by contractor and attached - REQUIRED BY A/E

Reason for not providing specified item:

Similar Installation:

Project:

Architect:

Address:

Owner:

Date Installed:

Proposed substitution affects other parts of Work: ☐ No ☐ Yes; explain

---

Supporting Data Attached: ☐ Drawings ☒ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ \_\_\_\_\_

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The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

Submitted by: Pete Veren

Signed by: Pete Veren

Firm: Lighting Solutions of Iowa

Address: 1250 SW State Street Ste D  
Ankeny, IA 50023

Telephone: 515-965-8773

Attachments: Submittals.

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#### A/E's REVIEW AND ACTION

- ☐ Substitution approved - Make submittals in accordance with Specification Section 01 3300.  
☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01 3300.  
☐ Substitution rejected - Use specified materials.  
☐ Substitution Request received too late - Use specified materials.

Signed by: \_\_\_\_\_

Date: \_\_\_\_\_

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Additional Comments: ☐ Contractor ☐ Subcontractor ☐ Supplier ☐ Manufacturer ☐ A/E ☐ \_\_\_\_\_

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**END OF SECTION**

Lighting Solutions of Iowa  
1250 SW State St Ste D  
Ankeny IA 50023  
Phone: (515) 965-8773  
Fax: (515) 965-8759

**Date: Jun 12, 2017**

Job Name  
**Marshalltown Iowa Veterans Home - DAS IVH 2017 Roadway Improvements**  
LSI17-35263  
Marshalltown IA

Bid Date  
Jun 30, 2017

Submittal Date  
Jun 12, 2017

*Engineer:*  
AECOM  
501 SYcamore ST  
Waterloo IA 50703

Jun 12, 2017

Steve Oberbroeckling  
Iowa Department of Transportation  
Office of Facilities Support  
Ames IA 50010

**RE:** Marshalltown Iowa Veterans Home - DAS IVH 2017 Roadway Improvements  
Marshalltown IA

Dear Steve

Qty	Type	MFG	Part
11	L	Lumca Lighting	CP1B401-54-LED07-120W-40K-L3-277-BK
11	POLE	Lumca Lighting	AP04-10-WB11

Remarks:

Signed: Pete Veren We are submitting for your approval and respectfully request consideration of the following lighting fixtures which we propose as equal to the specified fixtures for the above project. Enclosed you will find catalog sheets and specification data for the fixtures proposed. Thank you for your consideration.

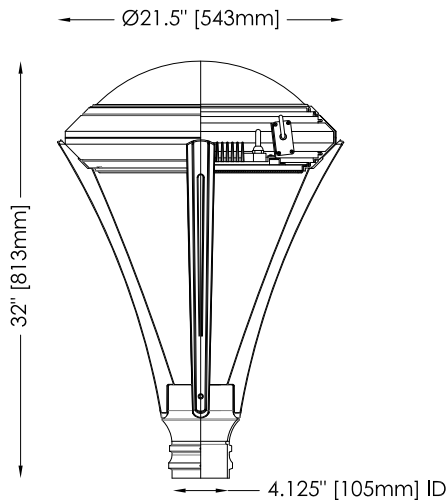
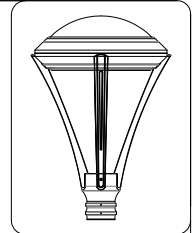
Sincerely,

Pete Veren

Outside Sales  
Lighting Solutions  
1250 SW State St | Suite D | Ankeny, IA 50023  
P: 515.965.8773 | F: 515.965.8759 | C: 515.250.3440 | [www.lsiowa.com](http://www.lsiowa.com)

## CP1B401

Concept 60



**EPA:** 0.79 pi<sup>2</sup>  
**Weight:** 32 lb - 14.5 kg

### Specifications

#### CONSTRUCTION

**MOUNTING ARM :** Decorative cast aluminium cage, supporting the luminaire housing, using alloys improving structural resistance and slip fitting on a Ø4" [102mm] pole or tenon, mechanically secured by (3) 5/16-18 UNC allen set screws disposed at 120°.

**HOUSING :** One piece extruded aluminium core topped with a heavy gauge spun aluminium hinged cover containing the optical system.

A tool-less access to the inner components is provided by the means of a push button. A silicon gasket protects the luminaire housing from rain, insects and dust in accordance with international standard IP65.

All cast aluminium pieces are in alloy 356.1, free of any porosity or foreign material. The minimum wall thickness of all castings is 0.188" [4.7mm]. Extruded aluminium parts are in alloy 6063-T4.

All hardware is in stainless steel.

**OPTICAL SYSTEM :** The optical system consists of a flat tempered glass, an aluminium heat sink dissipator and high intensity white light emitting diodes (LED) divided in 1 to 4 light bars. A hermetic sealing meeting the international standard IP66 protects against lumen depreciation due to dust or insects infiltration, maintaining a higher lumen output over the years and eliminating periodic cleaning of the lens.

Light distributions available in type III (L3) and V (L5) (**see chart**) according to the *Illuminating Engineering Society's* standards.

**DRIVER :** High power factor constant current electronic LED driver featuring a -35°C [-31°F] to 70°C [158°F] operating capacity and a power factor exceeding 97%. Rated by UL class 2 operation for maintenance. Line voltage available is 120 to 277 (Other voltages available, consult factory).

**FINISH :** All metallic parts are pretreated using an environmentally friendly organic phosphating technology (PLAFORIZATION) before a polyester powder coating is electrostatically applied. The finish is of 100 microns minimal thickness and meets the ASTM B117 regulation related to salt spray and the ASTM D2247 regulation related to the resistance of the finishes exposed to a 100% relative humidity. RAL and Custom colour matches available.

**COLOUR :** Black

Configuration	Modules QTY	Current (mA)	System consumption	CCT (°K)	Distribution type	CRI	Average Lumens	Lm/W
18	1	700 (07)	40W	4000 (40K)	L2 - L3 - L3FL - L5	73	3525	88
36	2		80W				7007	87.5
54	3		120W				10407	86.7
72	4		150W				13793	91.9

\* Lumens may vary depending on the light distribution (refer to IES finder online).

Lumca reserves the right to modify the elements on this technical data sheet without prior notice.

PROJECT #: LS-16994	NAME: MARSHALLTOWN DAS IVH ROADWAY IMPROVEMENT UTILITY	STATUS <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR INFORMATION
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<b>LUMCA INC</b> 2645-A WATT QUÉBEC TEL : 418-650-1693 FAX : 418-650-1896 www.lumca.com - lumca@lumca.com	CAT.# <b>CP1B401</b>	54	LED07	120W	40K	L3	277	BK
	CONFIG.	SOURCE	WATTAGE	CCT	DIST TYPE	VOLTAGE	COLOUR	
	DRAWN BY: VD	QTY: 1	<b>OPTIONS :</b>		-	-	-	-
	LAST REVISED: 17/06/12	SCALE: N/A	COLOUR: Black		TYPE: -			

**Lumca**

LS-16994



## Job Name:

Marshalltown Iowa Veterans Home - DAS IVH  
2017 Roadway Improvements  
Engineer: AECOM (Waterloo)

## Catalog Number:

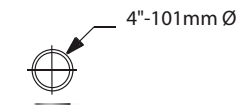
AP04-10-WB11

Notes:

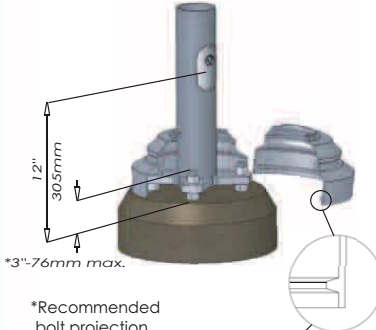
## Type:

POLE

LSI17-35263



4"-101mm Ø

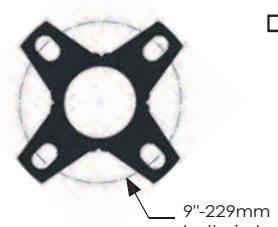


12"  
305mm

\*3"-76mm max.

\*Recommended bolt projection

Base cover held captive by means of a lip sliding underneath the base plate.



9"-229mm bolt circle

## AP04 round aluminium poles

### Classic

**ROUND ALUMINIUM POLES - AP04**

- 4" o.d. (101mm) extruded aluminium
- 6063-T6 alloy


**SPECIFICATIONS**

- Anchor base plate welded inside and outside the perimeter of the tube.
- 3" x 5" (76mm x 127mm) cast aluminium access door.
- Copper ground lug.
- Two-piece injection molded aluminium base cover held captive by the anchor base plate
- Stainless steel hardware.
- All poles are chemically pre-treated using an environmentally friendly organic phosphating technology (PLAFORIZATION) before a polyester powder is electrostatically applied.
- Four (4) galvanized steel 3/4" o.d. x 15" (19mm x 381mm) anchor bolts with eight (8) washers and nuts. (9.95 lbs - 4.52 kg)

**ACCESSORIES / OPTIONS**

- ☐ - Single banner arm (LR-S) ☐ Double banner arm (LR-D)
- ☐ - Duplex receptacle with weatherproof cover (DR)
- ☐ - Duplex receptacle with weatherproof cover and ground fault interrupter (GFR)
- ☐ - Button type photocell (BTP)

**WB9** □




12 lbs  
5.5 kg

17 1/2"  
444mm

15" Ø  
381mm Ø

**WB11** □




6 lbs  
2.7 kg

6 1/4"  
158mm

13" Ø  
330mm Ø

**WB13** □

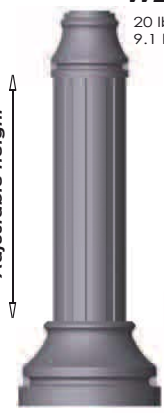


15 lbs  
6.8 kg

29 1/2"  
749mm

15" Ø  
381mm Ø

**WB14** □



20 lbs  
9.1 kg

Desired height  
"Standard height 42" - 1067mm"

15" Ø  
381mm Ø

cat-nb	HEIGHT		THICKNESS		BOLT CIRCLE		WEIGHT		EPA MAX (ft²)*				
									Wind (mph)				
		ft	m	in	mm	in	mm	lbs	kg	70	80	90	100
AP04-10 <input checked="" type="checkbox"/>	10	3.1	.188	4.8	9	229	30	13.5	13.3	9.6	8.2	6.0	
AP04-12 <input type="checkbox"/>	12	3.7	.188	4.8	9	229	35	15.8	10.2	7.1	6.0	4.1	
AP04-14 <input type="checkbox"/>	14	4.3	.188	4.8	9	229	40	18.0	7.9	5.2	4.3	2.7	
AP04-16 <input type="checkbox"/>	16	4.9	.188	4.8	9	229	45	20.4	6.0	3.7	2.8	1.4	
AP04-18 <input type="checkbox"/>	18	5.5	.188	4.8	10	254	50	22.6	4.4	2.4	1.6	0.4	
AP04-20 <input type="checkbox"/>	20	6.1	.188	4.8	10	254	56	25.4	3.1	1.2	0.5	---	

\* INCLUDING A GUST FACTOR OF 1.3

Lumca reserves the right to modify the elements on this technical data sheet without prior notice

PROJECT #:  
LS-16994

NAME:

MARSHALLTOWN DAS IVH ROADWAY IMPROVEMENT UTILITY

STATUS

☐ FOR APPROVAL ☒ FOR INFORMATION

## LUMCA INC

2645-A WATT QUÉBEC  
QUÉBEC - CANADA - G1P-3T2  
TEL : 418-650-1693 FAX : 418-650-1896  
www.lumca.com



CAT. #

AP04-10

HEIGHT

WB11

BASE COVER

OPTION

OPTION

OPTION

OPTION

OPTION

DRAWN BY: SG

LAST REVISED: 11/12/08

QTY: 1

SCALE: N/A

TYPE:

COLOUR: Black

