

**ADVERTISED BID
CITY OF ST. LOUIS**

OFFICE OF THE SUPPLY COMMISSIONER
1200 MARKET ST RM 324
ST LOUIS MO 63103-2842



REQUEST FOR QUOTE
42012Q0497

PAGE
1

ADDRESS CORRESPONDENCE TO

... We agree to furnish the following articles to the City of St. Louis, free of any extra charges, in the quantity named and at the prices respectively stated:

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LAMBERT AIRPORT
P O BOX 10036
ST LOUIS MO

63145

SEE TERMS AND CONDITIONS ON THE REVERSE SIDE OF THIS QUOTATION SHEET.

DATE PRINTED 07/09/12	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
--------------------------	---------------	----------	--------	---------------

REPLY DUE BY: 08/07/12 12:00 O'CLOCK NOON

NEEDED BY DATE	QUANTITY	UNIT	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
	REQ LINE NUMBER : 0001					
	4	EA	AIRP	12R049701		
	LED VIDEO WALL WITH RELATED EQUIPMENT & INSTALLATION					
	PER ATTACHED PROJECT MANUAL					
	BID BOND IN THE AMOUNT OF \$12,000 IS DUE ON 8/7/12 WHEN BID IS SUBMITTED.					
	A PERFORMANCE BOND IN THE AMOUNT OF 100 % OF THE BID IS DUE 15 WORKING DAYS AFTER NOTIFICATION OF AWARD.					
	PROGRESSIVE PAYMENT SCHEDULE IS NEGOTIABLE.					
	THERE WILL BE A MANDATORY PRE-BID AND WALK THROUGH AT 10:30 AM ON JULY 24, 2012 AT: LAMBERT ST. LOUIS INTERNATIONAL AIRPORT TERMINAL 1 (TICKETING LOBBY) 10701 LAMBERT INTERNATIONAL BLVD. ST. LOUIS, MO 63145					
	INITIAL QUESTIONS ARE DUE BY NOON ON WEDNESDAY, JULY 18, 2012 - ANSWERS AT PRE-BID					
	FINAL QUESTIONS DUE BY: NOON ON JULY 27, 2012 - ANSWERS ON 8/1/12					
	ALL QUESTIONS MUST BE SUBMITTED TO neylandro@stlouis-mo.gov AND ALSO TO crawfordl@stlouis-mo.gov					
	***** WEBSITE INFORMATION *****					
	* * * * *					
	* TO DOWNLOAD SUPPLY BIDS GO TO: * * * * *					
	* * * * *					
	* HTTP://STLOUIS-MO.GOV/SUPPLY/BID-NOTICES.CFM * * * * *					
	* * * * *					
					TOTAL →	

NAME OF FIRM	STATE DELIVERY:	COMPTROLLER	Date
ADDRESS	CALENDAR DAYS		
CITY	STATE	SIGNED BY:	SUPPLY COMMISSIONER
PHONE	Area Code ()		Date

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REPLY DUE BY: 08/07/12 12:00 O'CLOCK NOON

NEEDED BY DATE	QUANTITY	UNIT	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
				NOTICE RE: ORDINANCE #60643		
				A CITY OF ST. LOUIS BUSINESS LICENSE IS REQUIRED IF YOU MEET ANY OF THE FOLLOWING (CHECK AS APPROPRIATE):		
				----- BUSINESS IS LOCATED WITHIN THE CITY LIMITS		
				----- DELIVERY WITHIN CITY LIMITS IS BY COMPANY TRUCK		
				----- SALES CALLS MADE WITHIN THE CITY LIMITS		
				PLEASE TYPE NAME OF CONTACT PERSON FOR THIS BID:		
				NAME: -----		
				FAX: -----		
				E-MAIL: -----		
					
				BIDS WILL BE AWARDED BASED ON OFFICIAL SPECIFICATIONS PROVIDED BY SUPPLY DIVISION ONLY & ANY RELATED ADDENDA. ALL INQUIRIES MUST BE IN WRITING (LETTER/E-MAIL/FAX) TO THE FOLLOWING BUYER:		
				crawford1@stlouis-mo.gov and neylandro@stlouis-mo.gov		
				FAX# 314-622-4141 PHONE# 314-622-4716		
					
				TOTAL →		

NAME OF FIRM	STATE DELIVERY:	COMPTROLLER	Date
ADDRESS	CALENDAR DAYS		
CITY	STATE	SIGNED BY:	SUPPLY COMMISSIONER Date
PHONE	Area Code ()		

CITY OF ST LOUIS, MISSOURI
INSTRUCTION TO BIDDERS (for request for quotations - RFQs)

VENDORS SHOULD CAREFULLY READ THE FOLLOWING INSTRUCTIONS AND TERMS AND CONDITIONS, BEFORE SUBMITTING QUOTATION. **CAUTION: THIS IS NOT AN ORDER**

- Quotations will only be accepted on this form which must be returned in a **sealed envelope**. The upper left corner of the envelope must include the following information: Vendor Name, Quotation Number and the Due By Date. This information is also required on any mail delivered next day or overnight.
- Quotations should be typewritten or in ink. Altered or erased unit price(s) must be initialed. One copy of Quotation Sheet must be submitted, please retain a copy for your files.
- The Supply Commissioner reserves the right to reject any or all bids.
- The Supply Commissioner reserves the right to make awards on an item basis or on a total basis.
- Bidders must quote Unit Price(s) and Extension on each item. When an error appears on an extension, the Unit Price(s) will govern.
- When Quotation Sheet requests item(s) by brand name and your quote is for an alternate brand - show brand name(s) with model number(s) and attach full specifications.
- When Quotation Sheet has only a general description(s) of item(s) required - show brand name with model number(s) and attach full specifications.
- Suppliers shall not offer more than one bid on each item. Two or more quotations on the same item may cause a rejection of the bid. Suppliers must determine which one of their many styles or types fully meet the specification.
- Freight or delivery charges must be included in quote, or shown separately on quote, so bid can be evaluated.
- **Bids must arrive no later than NOON** on the date stated or will be rejected. Faxed or E-mailed bids are not accepted unless specifically requested.
- Bids will be publicly opened on the date specified beginning at NOON.
- Prices quoted will be considered firm.
- Bids having an acceptance limit of less than 30 days after opening date may be rejected.
- Time of proposed delivery must be stated in definite terms.
- Failure of Bidder to understand the item(s) requested or any part of the specifications will not be a valid reason for bidding on the wrong item(s). Any questions regarding description of item(s) requested should be cleared with the Buyer listed in the bid document.
- **Samples** when requested must be delivered before actual time of bid opening with each sample plainly tagged showing the name of Bidder, Quotation Number, Brand Name and lot number or quality. Submission of samples does not relieve bidder from meeting the specifications as outlined in the Bid Documents unless the bidder specifically states they are bidding on an alternate.
- All samples are to be submitted to the address listed below unless otherwise stated in Bid Documents.
- Deliveries must be accompanied by a packing slip or invoice, listing the Department, Quotation Number, and the exact quantities of each item included in the shipment.
- ONLY U.S.P., N.F., OR N.N.D. DRUGS ARE ACCEPTABLE. ALL DRUGS MUST COME IN MANUFACTURER'S ORIGINAL PACKAGES, PROPERLY SEALED.
- In the event the successful bidder fails to make delivery of any item or items that meet the conditions and requirements as outlined in this proposal within 7 days of time stated by bidder on face of this quotation sheet, the City reserves the right to purchase said item or items on the "OPEN MARKET" and charge any costs above the BID PRICE to the bidder.
- The laws of the State of Missouri provide that the City of St. Louis pay no State Sales or Use Tax or Federal Excise Taxes and these taxes should be excluded from your bid price. Federal Excise Tax Exemption Certificates will be furnished to successful bidder.
- Suppliers shall save harmless the City of St. Louis from the payment of any and all claims or demands arising out of any infringement, alleged infringement, or use of any patent or patented device, article, system, arrangement, material or process used by him in the execution of this contract.
- Supply Division hours are Monday through Friday - 8:00 A.M. to 5:00 P.M. Main Number: 314-622-4580.

All bids must be submitted in a SEALED ENVELOPE and mailed to:

SUPPLY COMMISSIONER
1200 MARKET ST RM 324
ST LOUIS MO 63103-2842



**CITY OF ST. LOUIS
DEPARTMENT OF FINANCE
OFFICE OF THE SUPPLY COMMISSIONER**

FREDDIE L. DUNLAP
SUPPLY COMMISSIONER

FRANCIS G. SLAY
MAYOR

1200 MARKET STREET
ROOM 324
ST LOUIS, MO 63103-2819
(T): (314) 622-4580
(F): (314) 622-4141

ATTENTION BIDDERS

Please carefully review all information requested in this bid package.

Failure to submit requested samples, literature or any other requested information may result in disqualification of your bid or any portion of your bid.

Also the reasons indicated below may disqualify your bid. If you have any questions, call the buyer indicated in this bid package.

This form must be returned with your bid.

- Two or more bids submitted for one item, unless instructed to do so. (item rejected)
- Signature missing on bid or any required form.
- Buy American Form not completed or returned. (may be rejected)
- M/WBE Form not completed or returned. (may be rejected)
- Altered or erased unit prices must be initialed.
- Faxed bid, unless specifically requested (will be rejected).
- FOR CONTRACTS ONLY: Please provide your DUNS # _____
- FOR CONTRACTS ONLY: Failure to submit required Bond by the date indicated.

I certify that I have read and understand the information above.

Manual Signature

Date

ST. LOUIS DOMESTIC PRODUCTS PROCUREMENT ACT

The City of St. Louis has enacted an ordinance relating to the purchase of domestic products by City government, with penalty provisions. The ordinance amends Section 5.58.010 Revised Code of the City of St. Louis, 1986, as amended by adding thereto new subsections dealing with the requirement that the Supply Commissioner or his designee give preference to goods or commodities manufactured in the United States of America, stating exceptions to said policy. Sections one through six are reprinted below.

Section One. Section 5.58.010 Revised Code of the City of St. Louis is hereby amended by adding the following language: Each solicitation to bid and the method of describing the items to be bid upon of any goods or commodities sought to be purchased by the Office of Supply Commissioner, and any contract entered into by and on behalf of the City of St. Louis and executed by the Mayor and/or the Comptroller of the City of St. Louis wherein the construction, alteration, repair or maintenance of any public works is the subject of the contract so executed, shall contain a provision that the goods or commodities furnished or used in the furtherance of said project by any contractor or subcontractor, manufacturer or supplier as the case may be, shall be manufactured, assembled or produced in the United States, and said requirement as defined above shall be stated in said bid.

Section Two. The provision of Section One of this Ordinance shall not apply in the following instances:

- (i) Where the item purchased as the contract entered into for repairs or renovation is less than One Thousand (\$1,000.00) Dollars.
- (ii) Where no line of a particular good or product is manufactured, assembled or produced in the United States.
- (iii) Where the acquisition of United States manufactured or produced goods would increase the cost by more than (10%) percent.

Section Three. The certificate required by this section shall specify the nature of the contract, the product being purchased or leased, the names and addresses of the United States manufacturers and producers contracted by the Commissioner or the project architect or engineer, and an indication that such manufacturers or producers could not supply sufficient quantities or that the price of the products would increase the cost of the contract by more than ten percent.

Section Four. No public agency may authorize, provide for, or make any payment to any vendor or contractor upon any contract in violation of section 2 of this act. Prior to the awarding of the bid and before any public agency authorizes, provides, or makes payment to any vendor or contractor upon any contract to which section 2 or 6 of this act applies, the vendor or contractor shall provide proof of compliance with section 2, and, if applicable, section 6 of this act. Any vendor or contractor who knowingly misrepresents any material fact to the public agency concerning the origin of any manufactured goods or commodities shall be guilty of a Class A misdemeanor.

Section Five. Sections 1 to 6 of this act shall apply only to contracts and subcontracts entered into after the effective date of this act, and shall not limit the use or supply of manufactured goods or commodities purchased or leased prior to the effective date of this act.

Section Six. Nothing in sections 1 or 6 of this act is intended to contravene any existing treaty, law, agreement, or regulation of the United States. All contracts under section 1 or 6 of this act shall be entered into in accordance with existing treaty, law, agreement, or regulation of the United States including all treaties entered into between foreign countries and the United States regarding export-import restrictions and international trade and shall not be in violation of sections 1 to 6 of this act to the extent of such accordance.

Interpretations and Guidelines

Section One: "Shall be manufactured" is interpreted to mean to make or process a raw material into a finished product or to turn-out in a mechanical manner. "Assembled" is interpreted to mean to fit or to join together the parts, gather, or to congregate in a manufacturing environment. "Produced" is interpreted to mean to create by manual or physical effort, to make or yield to customary product or products.

Section Two (I) This is interpreted to mean less than one thousand dollars in aggregate (total purchases).

(iii) When applying this subsection, multiply the cost of the foreign product by ten percent and compare the cost to the American product. If the American product cost is less than the sum of the cost of the foreign product plus ten percent, the award will be made to the vendor bidding the American product. The price paid by the City of St. Louis will be the actual price bid by the winning bidder.

Section Three: "Could not supply sufficient quantities" is interpreted to mean in order to meet the using agency's delivery schedule and in quantity specified.

Section Four: The vendor's authorized representative must complete a self-certification form, as required by the existing procedures previously indicated. These certification forms will be used to determine whether the manufacturer or producers could, or could not supply sufficient quantities, or the cost of the products would increase the contract by more than ten percent.

Prior to the City awarding the bid, the vendor shall provide certification that the product being bid is manufactured, assembled or produced in the United States or there is an existing treaty, law or regulation whereby the product bid shall be treated the same as product manufactured, assembled or produced in the United States. The procuring agency shall accept the self certification in order to apply the percentage differential that is applicable under this law. Failure to provide certification shall cause the city to presume that such product is not American made and preference shall not be considered for that product.

CERTIFICATION FORM ST. LOUIS DOMESTIC PRODUCTS PROCUREMENT ACT (BUY AMERICAN)

Bidders are advised of legislation enacted by the City of St. Louis which requires all manufactured goods or commodities used or supplied in the performance of this contract or any subcontract to be manufactured, assembled or produced in the United States, unless obtaining American made products would increase the cost of this contract by more than ten percent.

Section Four requires the vendor or contractor to certify his compliance with this legislation and if applicable, Section Six, if preference is claimed.

This legislation does not apply if the total bid is less than one thousand dollars (\$1,000.00).

Bids received will be evaluated on the basis of this legislation. Certificates of compliance must be completed and returned to be considered for preference. Failure to provide certification shall cause the City to presume that such product is not American made.

CERTIFICATION

If **all** the specified goods or products are manufactured, assembled or produced in the United States, check box at left and complete certification at the bottom of this form.

SECTION SIX CERTIFICATION

If any or all of the specified goods or products are manufactured, assembled or produced in a country other than the "United States", and exemption is requested because such product is Fair Trade Product: (a) list the country, other than the United States, where each good or product you propose to furnish is manufactured, assembled or produced; (b) check box at left of this paragraph and list corresponding commodities and (c) complete Section Six Documentation portion below.

Item Number(s)

Location Where Item Manufactured, Assembled or Produced

SECTION SIX DOCUMENTATION

The specified goods or products are treated as manufactured, assembled or produced in the United States under an existing treaty, law, agreement or regulation of the United States regarding export-import restrictions and international trade. List item Number(s) and Treaties covering item below.

DEFINITIONS

- MANUFACTURED** - to make or process a raw material into a finished product; create, or to produce or to turn-out in a mechanical manner.
- ASSEMBLED** - to fit or join together the parts in a manufacturing environment.
- PRODUCED** - create by manual or physical effort, to make or yield the customary product or products.

MUST BE COMPLETED AND SIGNED

I hereby certify that the above information is true and correct and further certify that this statement complies with all provisions of Section 5.58.010 Revised Code of the City of St. Louis, 1985, as amended.

FIRM NAME: _____

ADDRESS: _____

CITY: _____ **STATE:** _____ **ZIP:** _____

BY: _____

(SIGNATURE and TITLE)

**CITY OF ST. LOUIS/SUPPLY DIVISION
MINORITY/WOMEN BUSINESS ENTERPRISES FORM
(M/WBE FORM)**

A. Mayor's Executive Order #28, Section Six - Supply Contracts

1. The goal of the City of St. Louis is that 25% of the value of all contracts let and purchases made by the Supply Commissioner shall be let or made with Minority Business Enterprises (MBEs) and that 5% of the value of all contracts let and purchases made by the Supply Commissioner shall be let or made with Women's Business Enterprises (WBEs).
2. All contracts let by the Supply Division for the purchase or lease of materials, equipment, supplies, commodities or services, the estimated cost of which exceeds \$500, shall be subject to this goal.
3. The methods by which the Supply Commissioner shall pursue this goal shall include but not be limited to the following:
 - a. The Supply Commissioner shall solicit bids from minority business enterprises and women's business enterprises certified to supply the required materials, equipment, supplies or services;
 - b. St. Louis Airport Authority (SLAA) shall provide the Supply Commissioner with a list of minority business enterprises and women's business enterprises qualified to provide each of those commodities that the Supply Commissioner indicates are required by the City;
 - c. The Supply Commissioner shall notify SLAA prior to solicitation of bids whenever no such qualified businesses are available;
 - d. SLAA shall attempt to identify such qualified businesses, and if successful, shall notify the Supply Commissioner of their availability; and
 - e. The Supply Commissioner shall provide such minority business enterprises and women's business enterprises every practical opportunity to submit bids.
4. Joint ventures or mentor-protégé relationships between prime contractors and subcontractors with local MBE and WBE firms are encouraged.
5. Participation of MBE and WBE firms located outside the St. Louis Metropolitan Statistical Area (SMSA) shall not count toward the goals established in this order.

B. SUPPLY DIVISION POLICY

It is the policy of the Supply Division that all bids/contracts awarded adhere to the Mayor's Executive Order #28. All vendors are encouraged to comply with this policy and all other provisions of Executive Order #28. A copy of Executive Order #28 is available upon request. Each Vendor/Contractor (bidder) must complete, sign and return this M/WBE Form. Failure to complete, sign and return the M/WBE Form will result in the bid being declared non responsive and your bid may be eliminated.

C. OBLIGATION

The bidder agrees to make a good faith effort to ensure that M/WBE businesses have an opportunity to participate in the performance of contracts or subcontracts financed in whole or in part with City funds. The bidder will take all necessary and reasonable steps to ensure that said businesses have an opportunity to compete for and perform under this bid/contract. The bidder shall not discriminate on the basis of race, color, national origin or sex in the award and performance of bids/contracts. The Directory of Disadvantaged, Minority and Women Owned Business Enterprises certified by the City of St. Louis, can be viewed at www.mwdbe.org.

**CITY OF ST. LOUIS / SUPPLY DIVISION
MINORITY/WOMEN BUSINESS ENTERPRISES FORM
(M/WBE FORM)**

D. BID/CONTRACT IDENTIFICATION

Bid #: _____ or Contract Name: _____ Opening Date: _____ Your Bid Total: \$ _____ If your bid is \$500 or higher, please complete Section 'E'. We are NOT requesting information on how your company currently supports M/WBE suppliers. We want to know if there are opportunities you might consider to work with M/WBE suppliers for THIS SPECIFIC bid/contract.
--

E. ASSURANCE MBE/WBE Goal: 25% MBE and 5% WBE (Minimum Participation)

I, acting in my capacity as an officer of the undersigned bidder(s) if a joint venture, hereby assure the City of St. Louis that on this bid/contract my company will: **(CHECK ONLY ONE)**

Meet or exceed the M/WBE goal with: _____% MBE and _____% WBE Participation

Proposed MBE Vendor Name: _____ Amount \$ _____ Item or materials to be supplied by MBE Vendor: _____ Proposed WBE Vendor Name: _____ Amount\$ _____ Item or materials to be supplied by WBE Vendor: _____

Fail to meet the M/WBE goal, but made a good faith effort to meet the goals as follows:

_____ % MBE and _____ % WBE Participation (Enter Proposed Vendor information above.)

Not meet the M/WBE goal for the following reasons(s):(Check All That Apply)

	Our Company is an MBE certified by the State of:
	Our Company is a WBE certified by the State of:
	We have contacted suppliers listed in the SLAA Directory but have received no reply
	There are no subcontracting opportunities for this bid/contract
	We are a Dealer and the order will be drop-shipped from the manufacturer to the user
	We are the manufacturer and the order will be drop-shipped from the factory to the user
	A letter of explanation is attached
	Other reason: _____ _____

FIRM NAME: _____	FEDERAL ID NUMBER: _____
SIGNATURE: _____	FAX NUMBER: _____
PRINTED NAME: _____	DATE: _____
TITLE: _____	E-MAIL: _____



**Lambert-St. Louis International
Airport**

**LED Video Wall
for Airport Display
& Related Equipment**

Project Manual

JULY 10, 2012

TABLE OF CONTENTS

Project Title LED Video Wall and Related Equipment
Lambert St. Louis International Airport

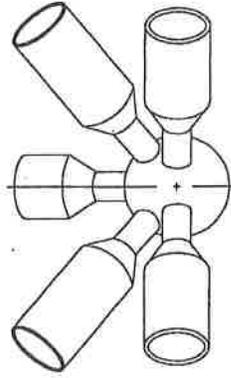
Division	Section Title	Division - Pages
<u>INTRODUCTORY INFORMATION</u>		
	Title Page	
00001	Table of Contents	00001-2
00002	List of Drawings & Information Issued for Reference	00002-1
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	• Photo of Existing Screens	
	• Existing MUFID Operating System	
	• Plan of Video Walls Location	
	• Schematic Typical Elevation	
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LAMBERT-ST LOUIS INTERNATIONAL AIRPORT

ST LOUIS, MISSOURI

OMNI*HUB



APPROVED
R. P. DUNCAN

SHOP DRAWING REVIEW FOR
GENERAL CONFORMANCE ONLY

REVIEWED AS NOTED
 REVISE AND RESUBMIT
 NOT ACCEPTABLE

LAMBERT-ST. LOUIS
INTERNATIONAL AIRPORT

BY: *R. P. D.* DATE: *10/10/06*

498 NORTH LOOP 336 EAST CONROE, TX 77301
Phone: (936) 539 1747 FAX : (936)-539 5355

LAMBERT-ST LOUIS INTERNATIONAL AIRPORT

DRAWING	DESCRIPTION
D-0	COVER PAGE
D-00	INDEX AND GENERAL NOTES
D-01	STRUCTURE ISOMETRIC VIEW @ MTG, ENTRY
D-02	STRUCTURE PLAN VIEW @ MTG, ENTRY
D-03	END ELEVATION @ MTG, ENTRY
D-04	SIDE ELEVATION @ MTG, ENTRY
D-05	ANCHOR BASE PL VIEW @ MTG, ENTRY
D-06	STRUCTURE ISOMETRIC VIEW @ BURGER K.
D-07	STRUCTURE PLAN VIEW @ BURGER KING
D-08	END ELEVATION @ BURGER KING
D-09	SIDE ELEVATION @ BURGER KING
D-10	ANCHOR BASE PL VIEW @ BURGER KING
D-11	TYP. SPACE FRAME, MULLION CORNER DETAIL
D-12	TYP. SPACE FRAME, MULLION DETAIL "F"
D-13	TYP. SPACE FRAME, MULLION DETAIL "G"
D-14	TYP. SPACE FRAME DETAIL "H"
D-15	TYPICAL TAB LOCATIONS
D-16	TYP. OMNI*HUB, TRIM COLLAR DETAIL "J"
D-17	SIDE ELEVATION TAB @ BURGER KING

1. GENERAL NOTES:

✓ A) ALL DIMENSIONS MEASURED FROM CENTERLINES UNLESS SHOWN OTHERWISE.

2. MATERIALS:

- ✓ A) STRUCTURAL SECTION: 6061-T6 ALUMINUM ALLOY
- ✓ B) HARDWARE: STEEL SAE GRADE 5 OR GRADE 8 PLATED
- ✓ C) ANCHOR PLATES: 6061-T6 ALUMINUM

3. FINISHES:

✓ A) PAINTED KYNAR. ST LOUIS SILVER AS PER APPROVED CHIP.

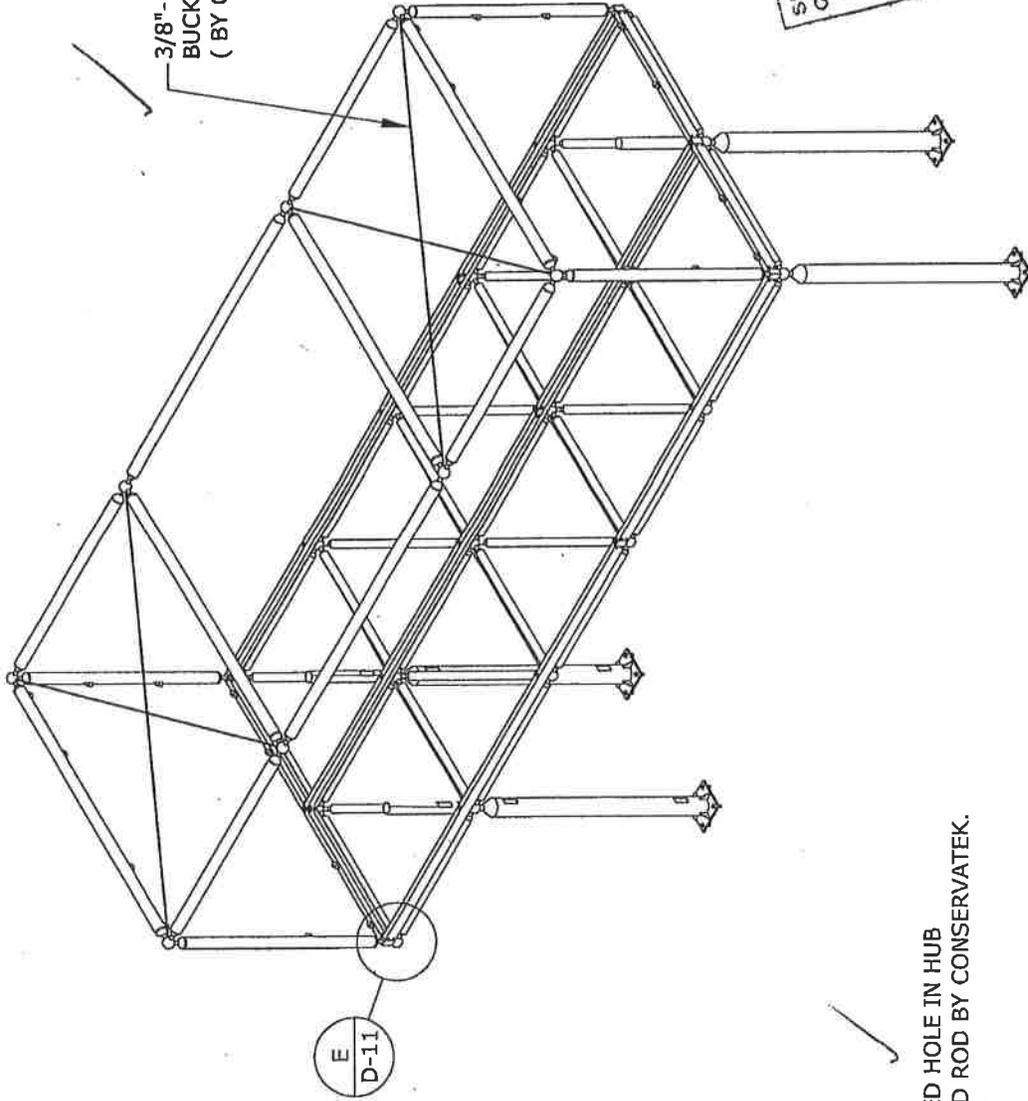
SHOP DRAWING REVIEW FOR GENERAL CONFORMANCE ONLY
 REVIEWED AS NOTED
 REVISE AND RESUBMIT
 REVISE AND RESUBMIT
 NOT ACCEPTABLE
 LAMBERT-ST. LOUIS INTERNATIONAL AIRPORT
 DATE: 9-13-06
 BY: [Signature]

CONSERVATEK
 ARCHITECTURAL SYSTEMS
 498 NORTH LOOP 336 EAST CONROE, TX. 77301 USA
 PHONE: 936-539-1747 FAX: 936-539-5355
THESE DRAWINGS ARE THE PROPERTY OF CONSERVATEK. THE INFORMATION CONTAINED ON THESE DRAWINGS IS PROPRIETARY AND IS NOT TO BE REPRODUCED OR DISTRIBUTED WITHOUT WRITTEN PERMISSION OF CONSERVATEK.

**LAMBERT-ST LOUIS INT. AIRPORT
 SAINT LOUIS, MISSOURI**

INDEX AND GENERAL NOTES

DRAWING BY : GP	DATE : 9-13-06
CHECKED BY :	REV. DATE :
PROJECT No. : 206051	REVISION : 0
DRAWING No. : D-00	SCALE : N.T.S.



3/8"-16 THREADED ROD W/ TURN
BUCKLES FOR ADJUSTMENTS
(BY OTHERS) SEE NOTE

E
D-11

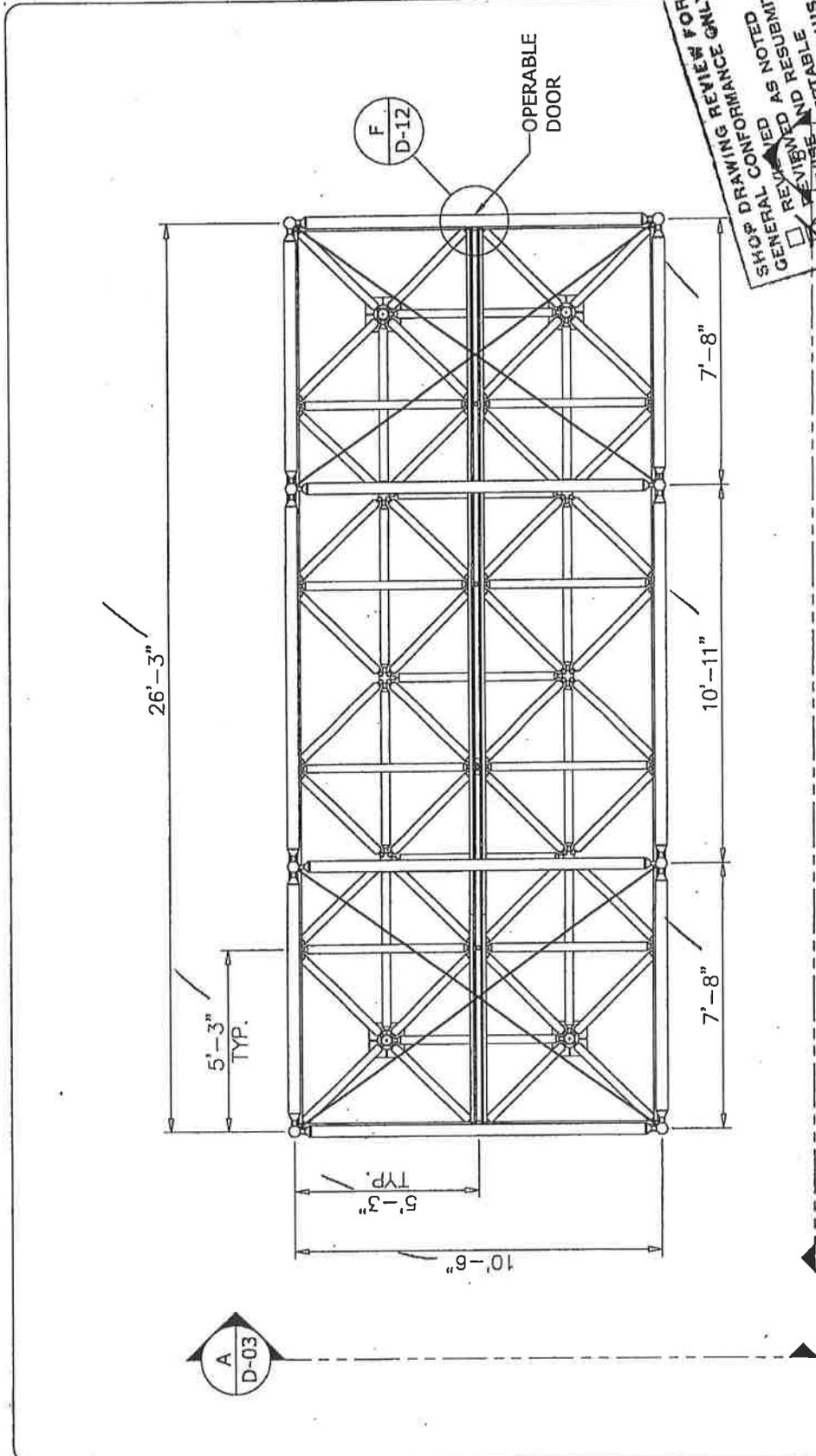
NOTE :
3/8"-16 TAPPED HOLE IN HUB
FOR THREADED ROD BY CONSERVATEK.

SHOP DRAWING REVIEW FOR
GENERAL CONFORMANCE ONLY
 REVIEWED AS NOTED
 REVISED AND RESUBMIT
 NOT ACCEPTABLE
 LAMBERT-ST. LOUIS
 INTERNATIONAL AIRPORT
 BY: [Signature] DATE: 9-13-06

DRAWING BY : GP.	DATE : 9-13-06
CHECKED BY :	REV. DATE :
PROJECT No. : 206051	REVISION : 0
DRAWING No. : D-01	SCALE : N.T.S.

LAMBERT-ST LOUIS INT. AIRPORT
SAINT LOUIS, MISSOURI
STRUCTURE ISOMETRIC VIEW
@ MTG, ENTRY

CONSERVATEK
ARCHITECTURAL SYSTEMS
498 NORTH LOOP 336 EAST PHONE: 936-539-1747
CONROE, TX 77301 USA FAX: 936-539-5355
THESE DRAWINGS ARE THE PROPERTY OF CONSERVATEK. THE
INFORMATION CONTAINED ON THESE DRAWINGS IS PROPRIETARY
AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM
WITHOUT WRITTEN PERMISSION OF CONSERVATEK.

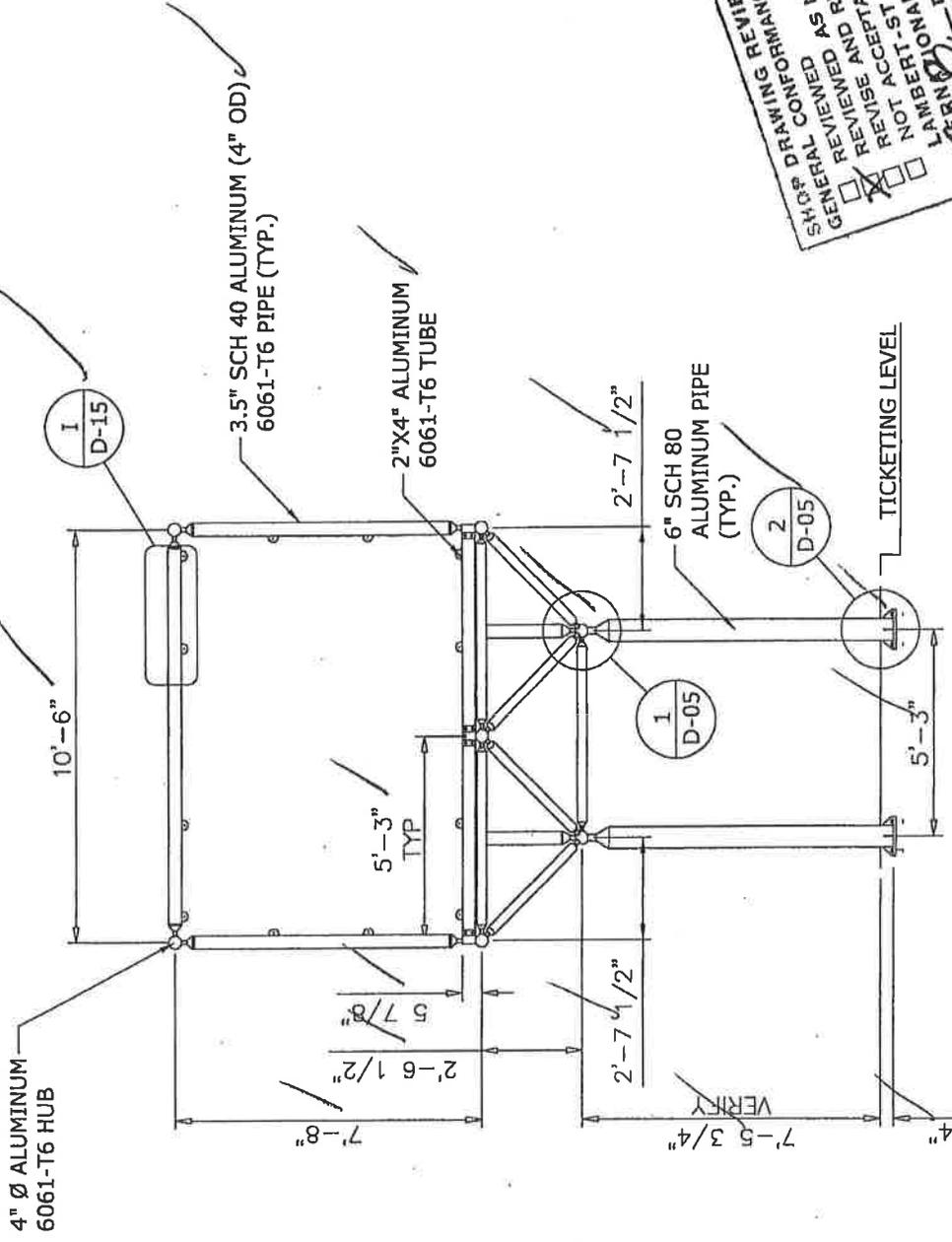


SHOP DRAWING REVIEW FOR
 GENERAL CONFORMANCE ONLY
 REVIEWED AS NOTED
 REVISED AND RESUBMIT
 REVISE AND RELEASABLE
 NOT ACCEPTABLE
 LAMBERT-ST. LOUIS
 INTERNATIONAL AIRPORT
 DATE: 9-13-06
 BY: [Signature]

DRAWING BY : GP.	DATE : 9-13-06
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PROJECT No. : 206051	REVISION : 0
DRAWING No. : D-02	SCALE : N.T.S.

LAMBERT-ST LOUIS INT. AIRPORT
SAINT LOUIS, MISSOURI
STRUCTURE PLAN VIEW
@ MTG, ENTRY

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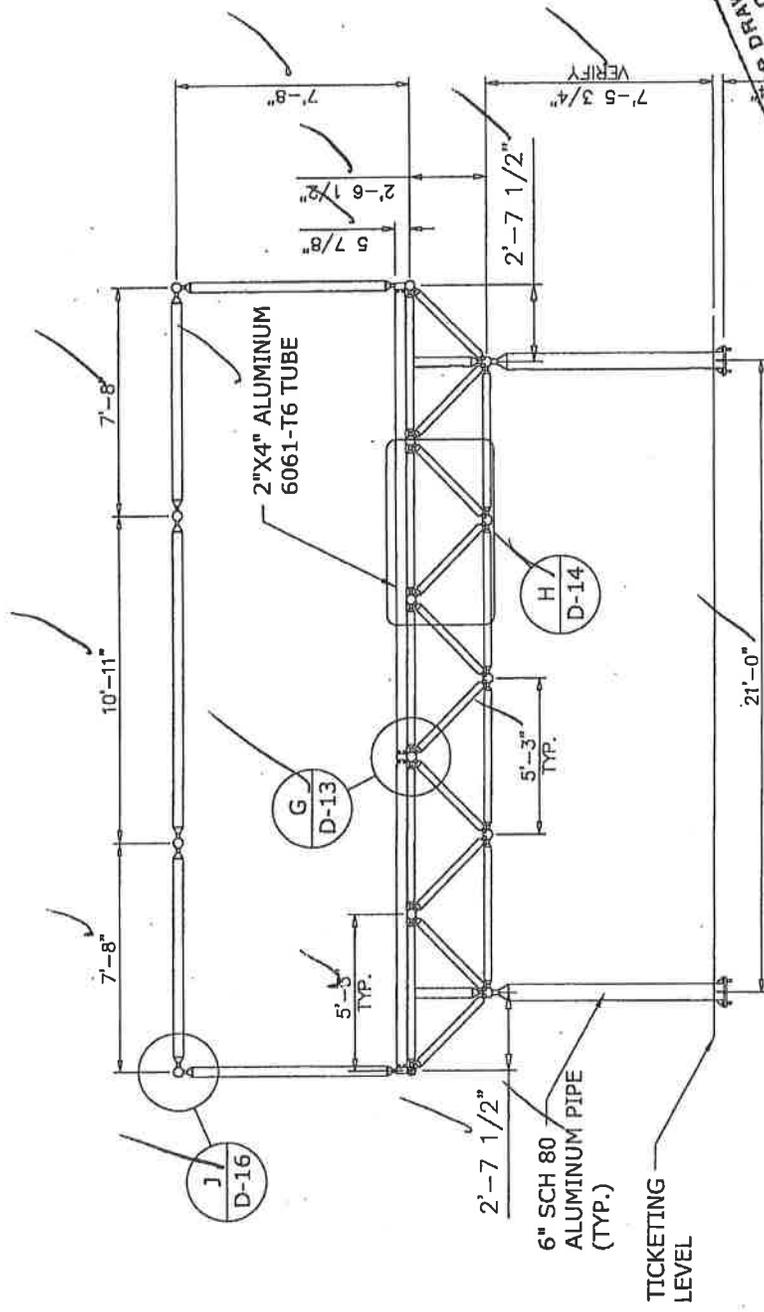


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DRAWING No. : D-03	SCALE : N.T.S.

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SAINT LOUIS, MISSOURI
STRUCTURE END ELEVATION
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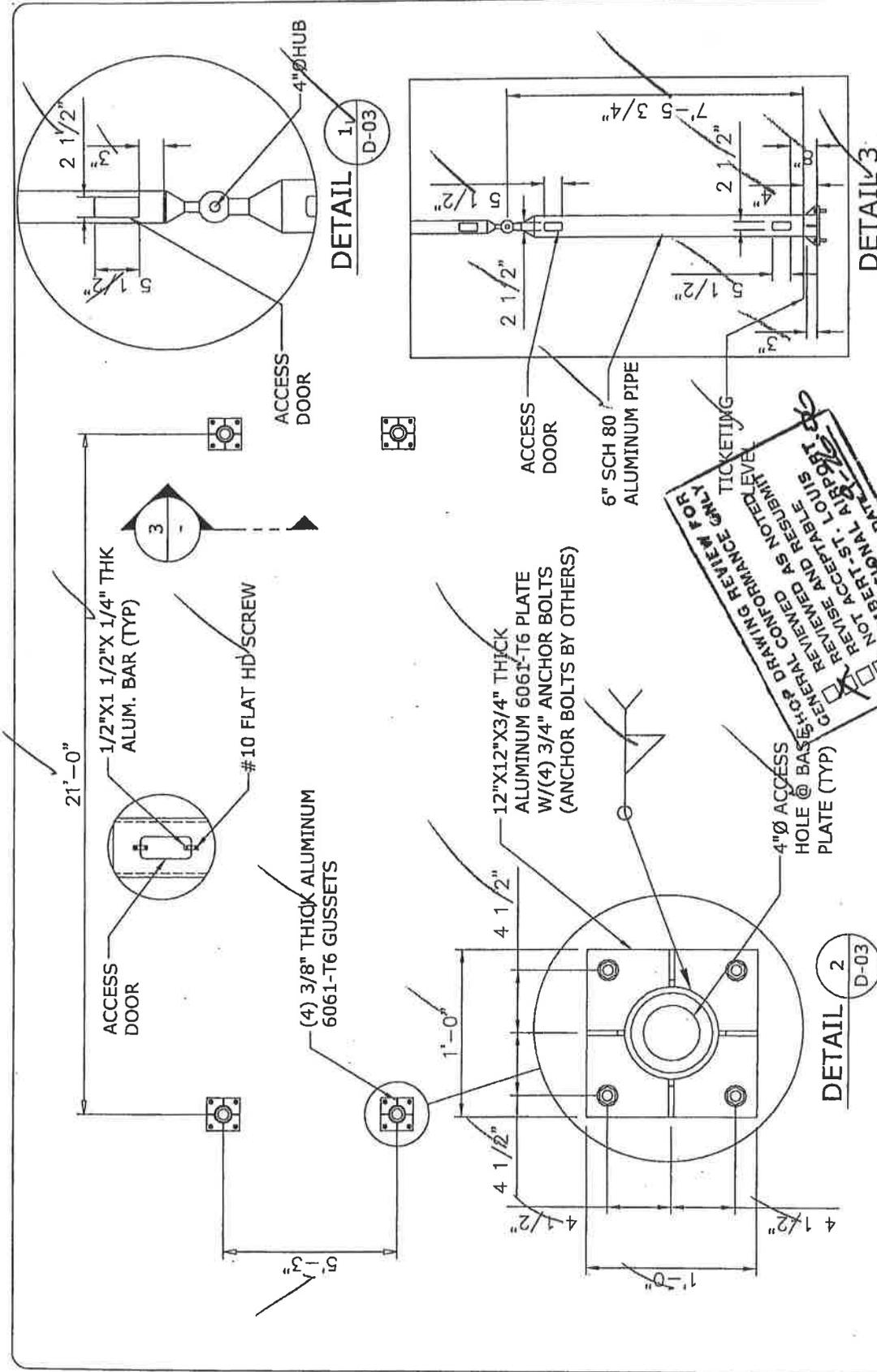


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 DATE: 9-13-06

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DRAWING No. : D-04	SCALE : N.T.S.

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SAINT LOUIS, MISSOURI
STRUCTURE SIDE ELEVATION
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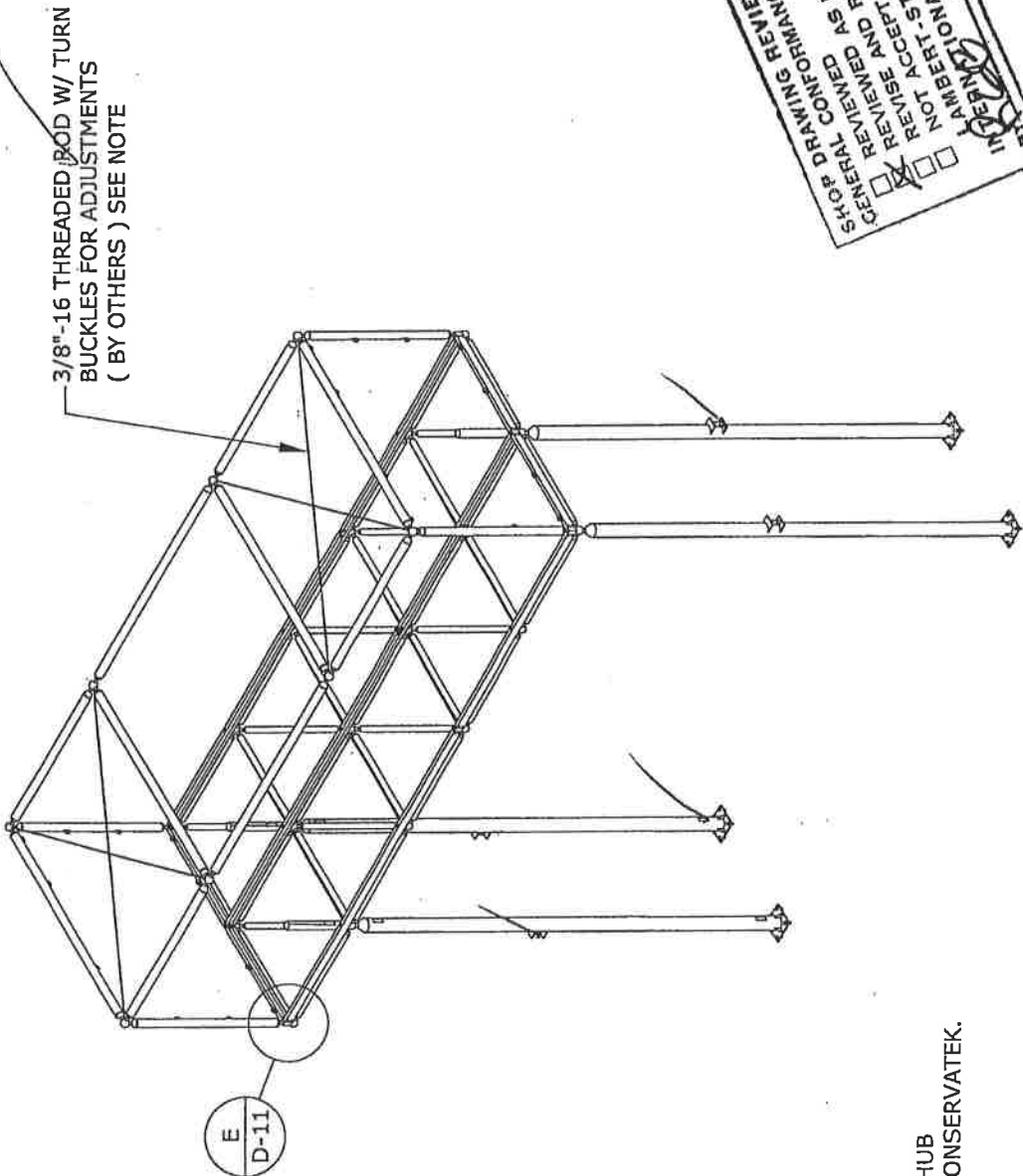


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SAINT LOUIS, MISSOURI
ANCHOR BASE PLAN VIEW
@ MTG, ENTRY

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3/8"-16 THREADED ROD W/ TURN
BUCKLES FOR ADJUSTMENTS
(BY OTHERS) SEE NOTE

E
D-11

NOTE :
3/8"-16 TAPPED HOLE IN HUB
FOR THREADED ROD BY CONSERVATEK.

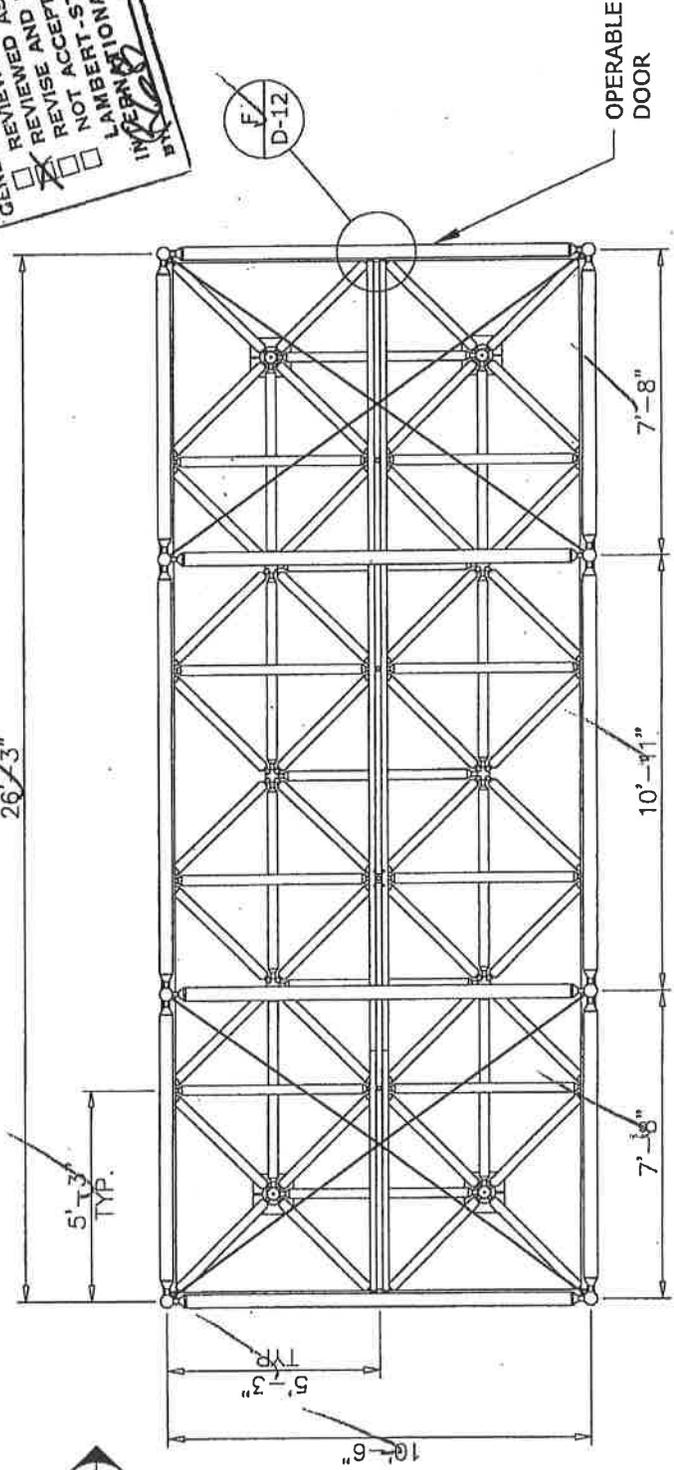
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PROJECT No. : 206051	REVISION : 0
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LAMBERT-ST LOUIS INT. AIRPORT
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STRUCTURE ISOMETRIC VIEW
@ BURGER KING

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 BY: *[Signature]*



C
 D-08

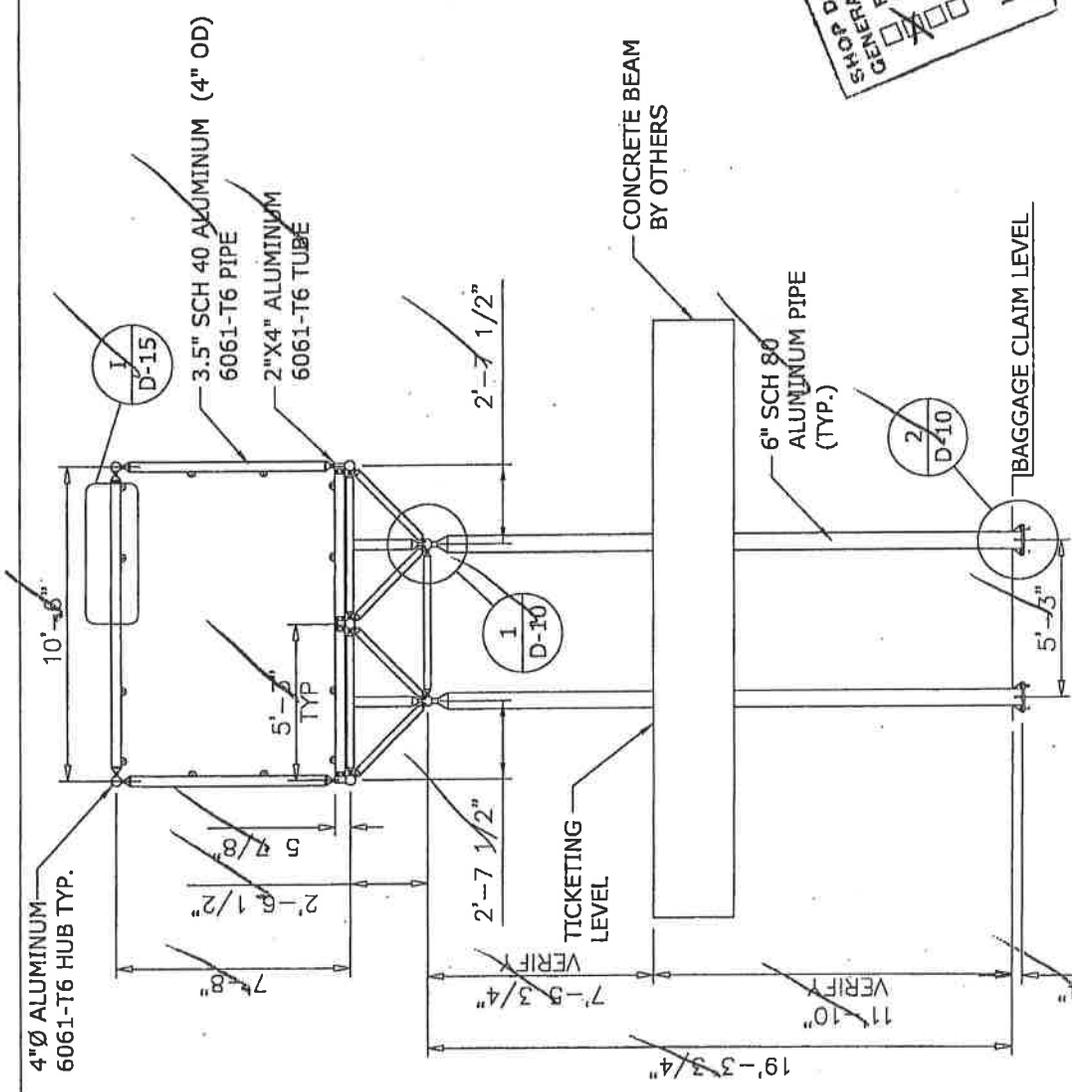
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PROJECT No. : 206051	REVISION : 0
DRAWING No. : D-07	SCALE : N.T.S.

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SAINT LOUIS, MISSOURI
STRUCTURE PLAN VIEW
@ BURGER KING

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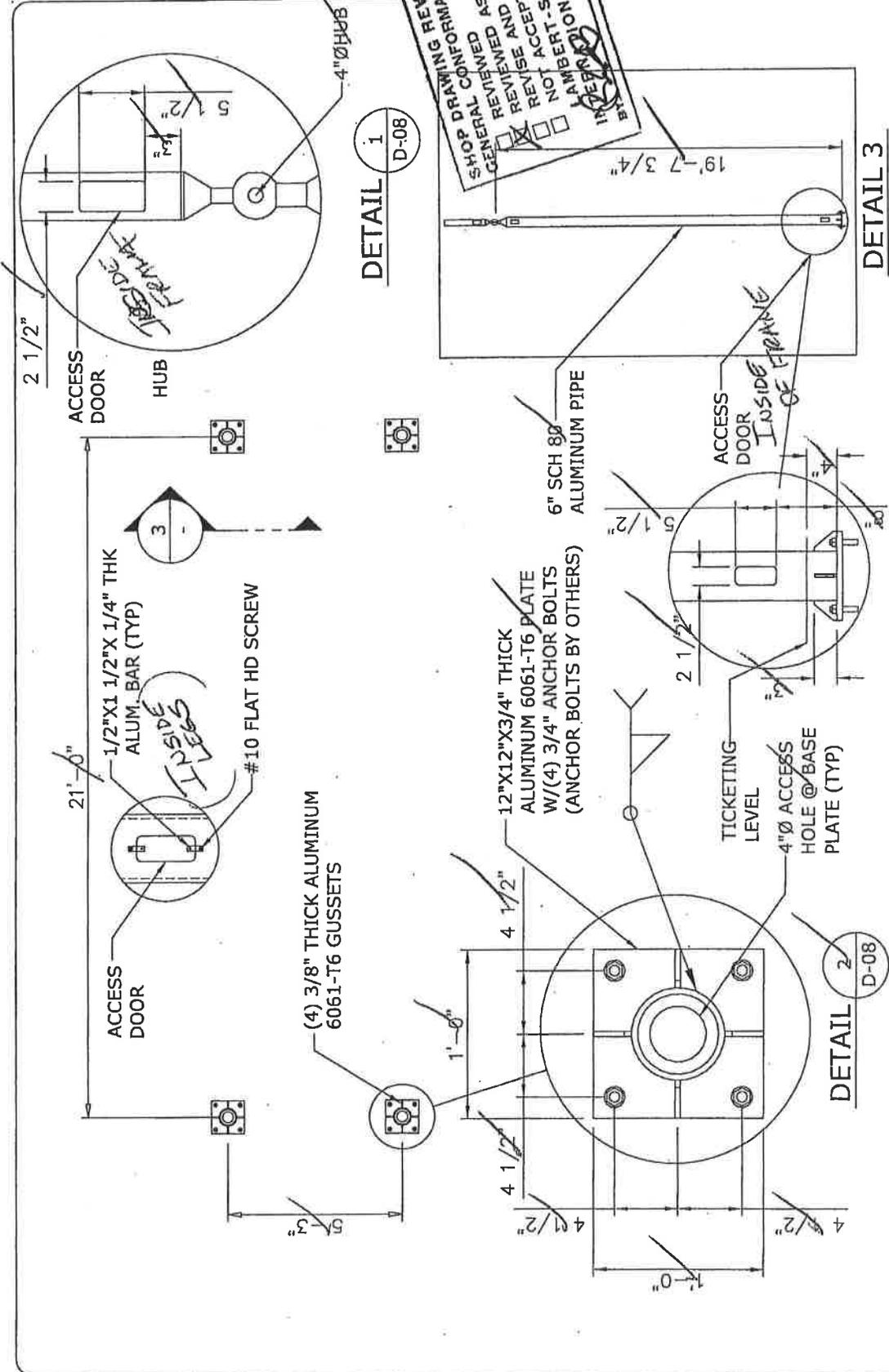


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LAMBERT-ST LOUIS INT. AIRPORT
SAINT LOUIS, MISSOURI
STRUCTURE END ELEVATION
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DETAIL 1
D-08

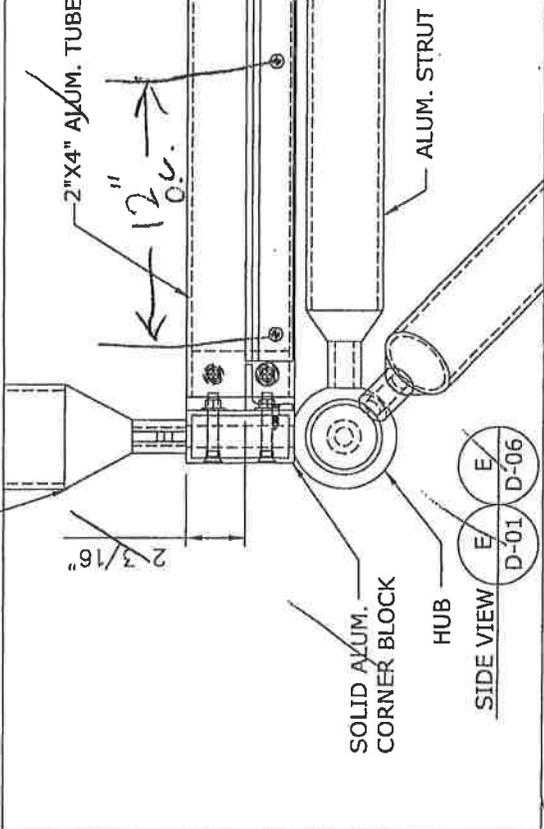
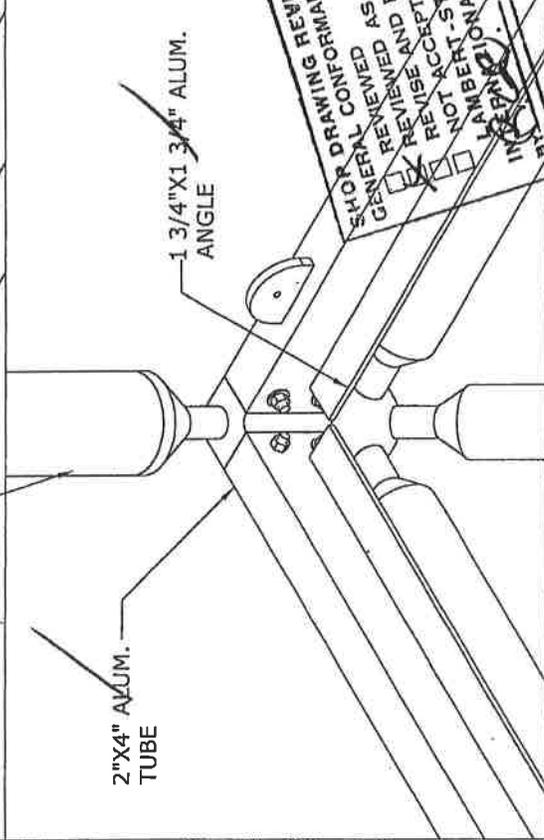
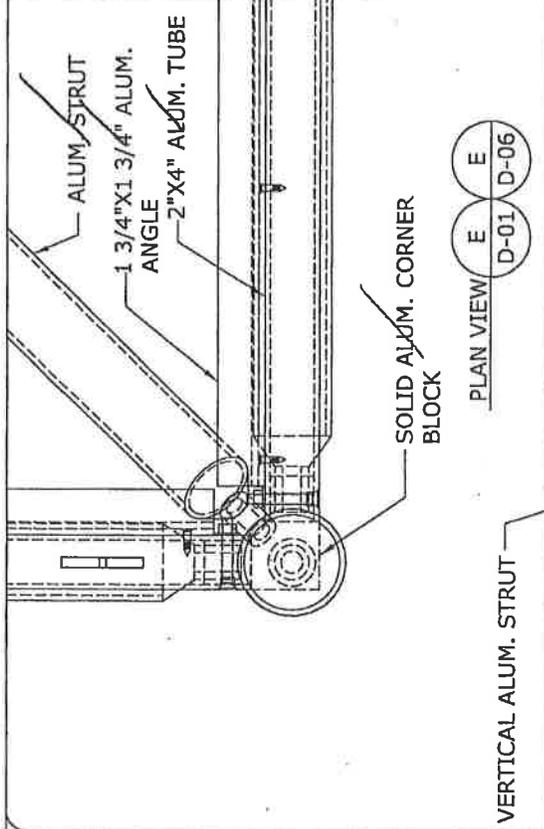
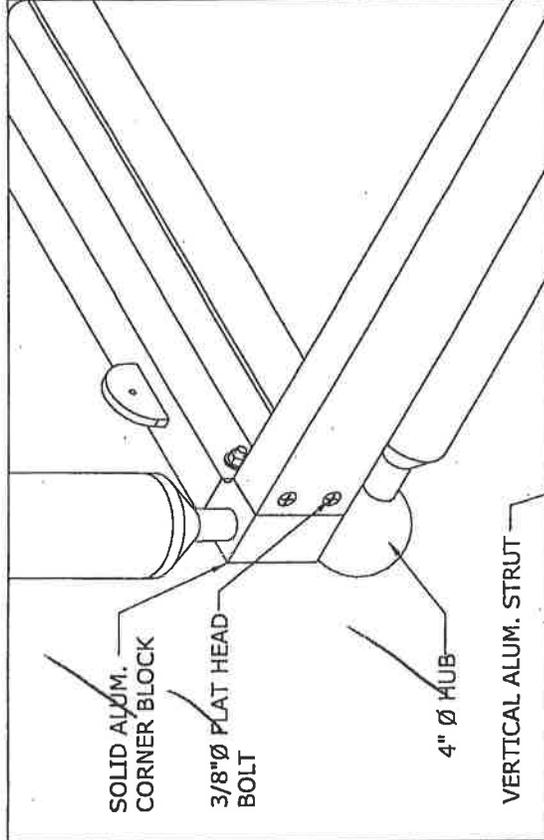
DETAIL 3

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LAMBERT-ST LOUIS INT. AIRPORT
 SAINT LOUIS, MISSOURI
 ANCHOR BASE PLAN VIEW
 @ BURGER KING

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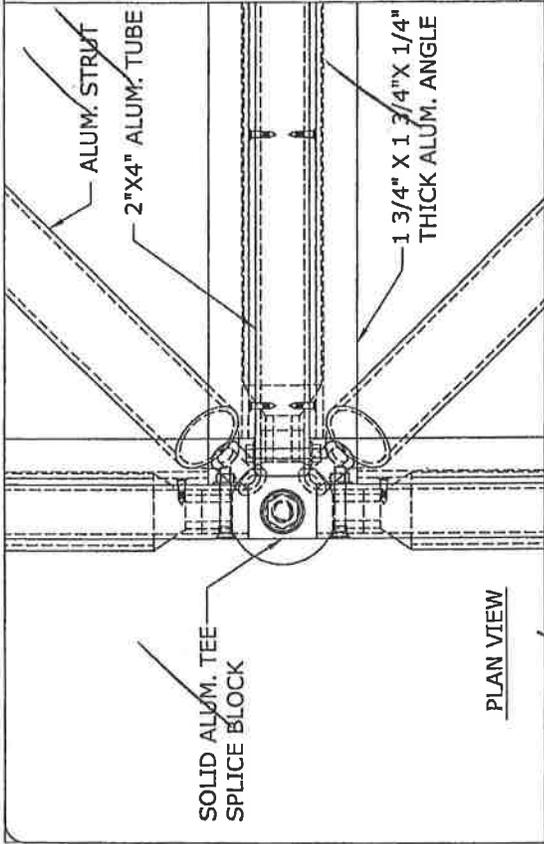


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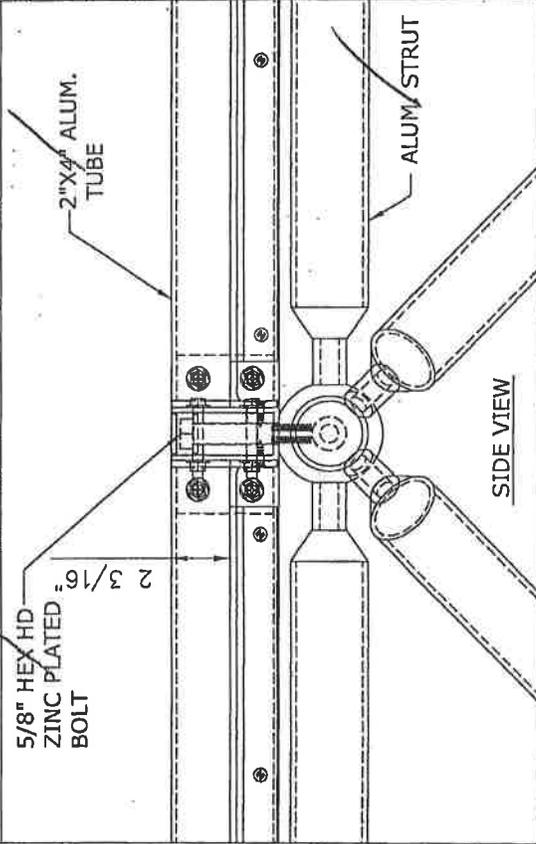
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PROJECT No. : 206051	REVISION : 0
DRAWING No. : D-11	SCALE : N.T.S.

LAMBERT-ST LOUIS INT. AIRPORT
SAINT LOUIS, MISSOURI
TYP. SPACE FRAME, MULLION
CORNER DETAIL "E"

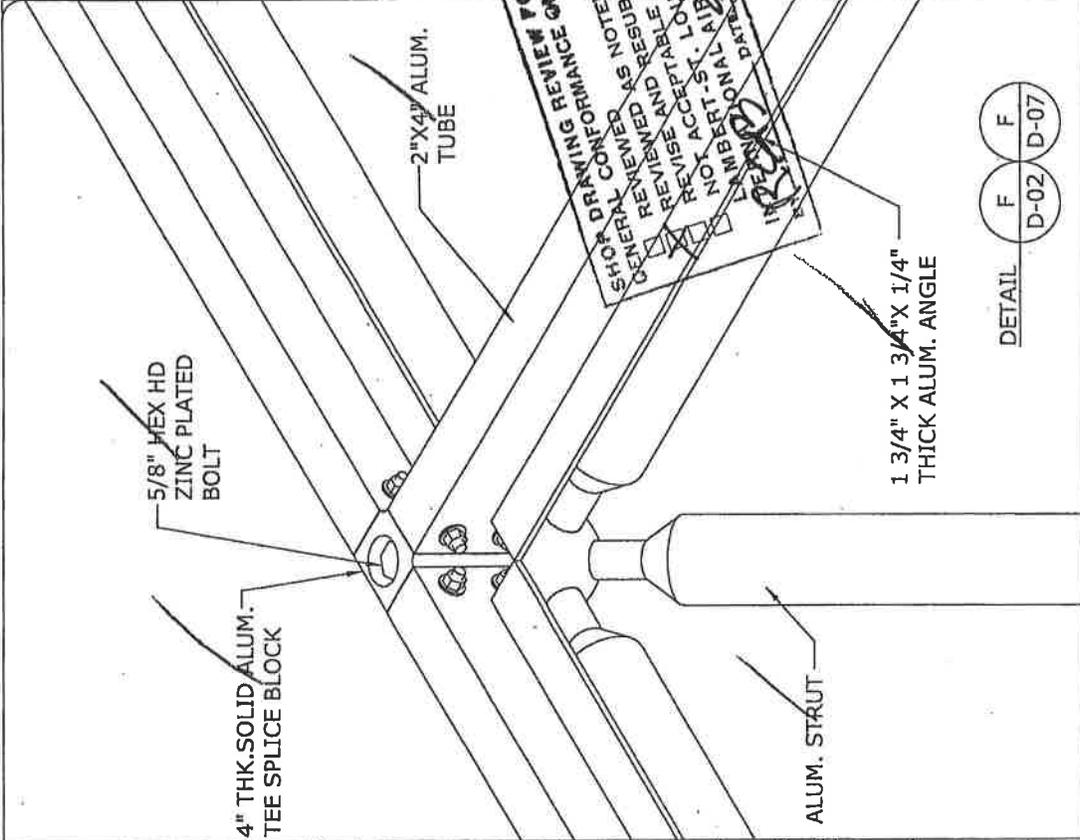
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PLAN VIEW



SIDE VIEW



DETAIL F F
D-02 D-07

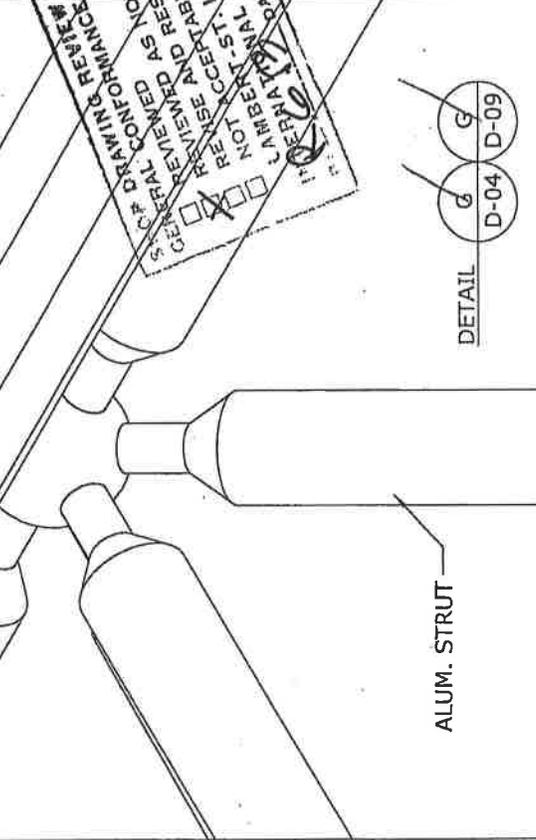
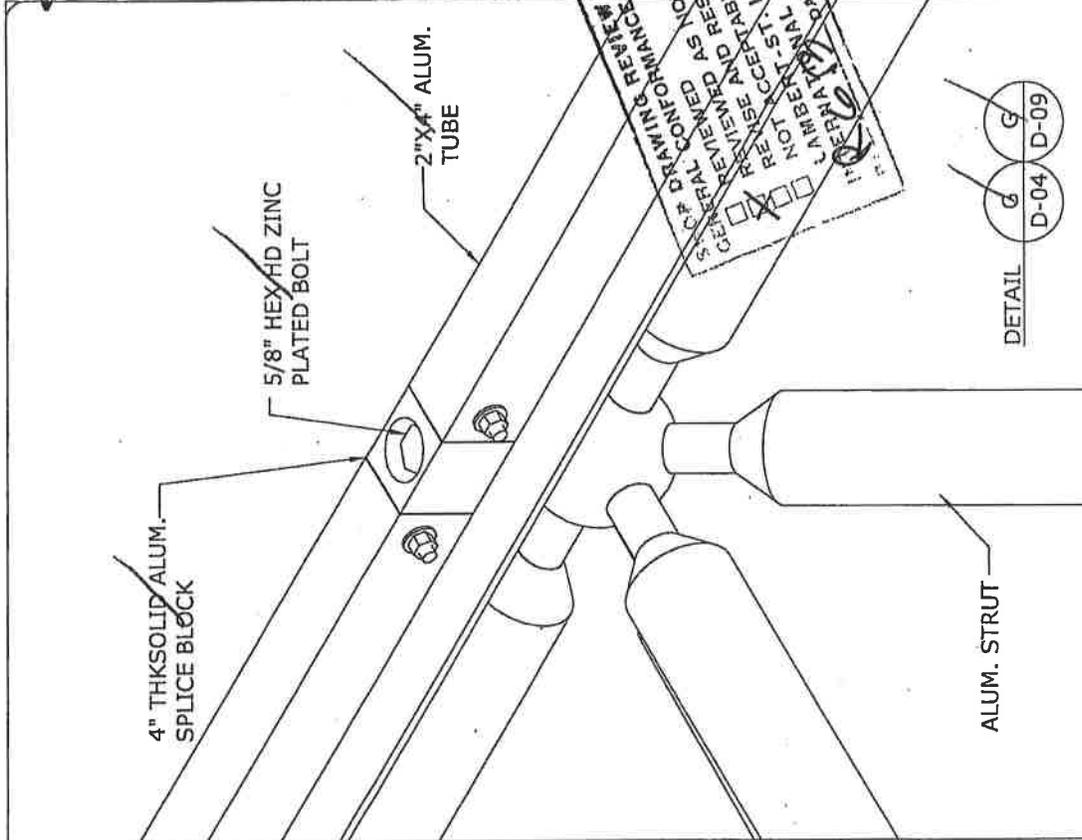
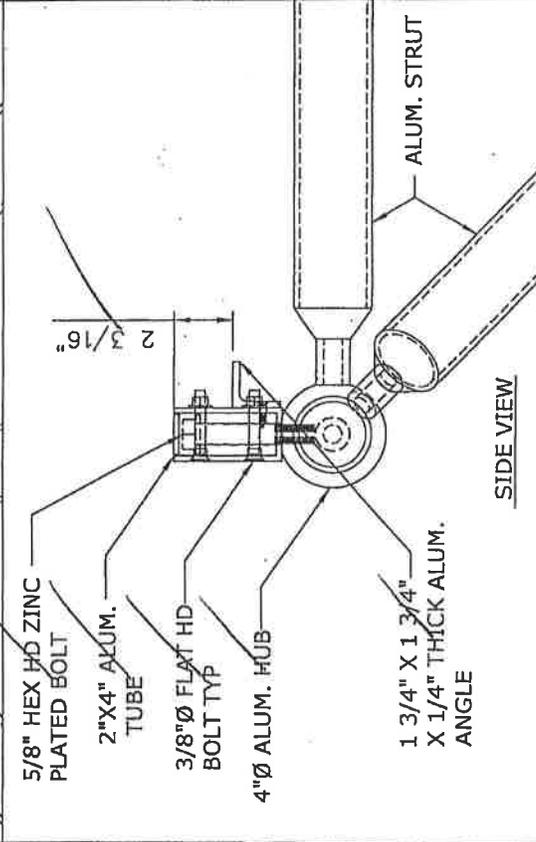
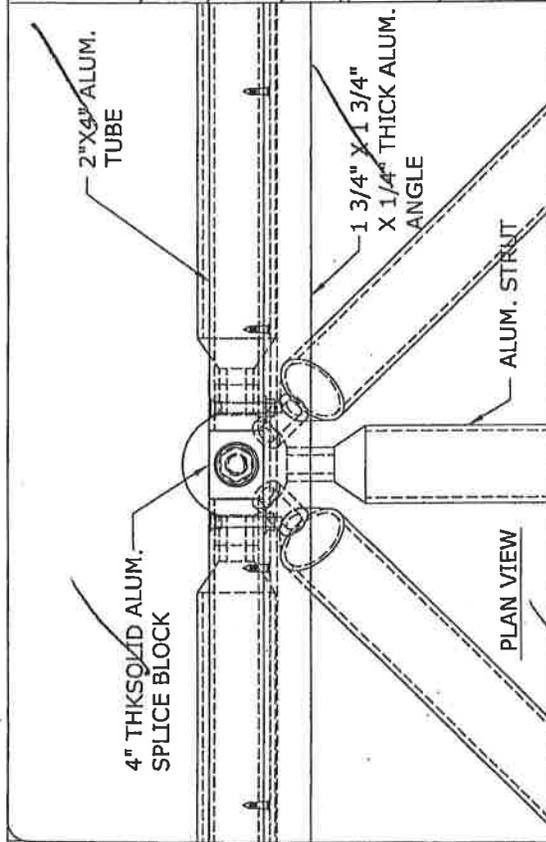
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LAMBERT-ST LOUIS INT. AIRPORT
SAINT LOUIS, MISSOURI

TYP. SPACE FRAME, MULLION
DETAIL "F"

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DRAWING No. : D-12	SCALE : N.T.S.

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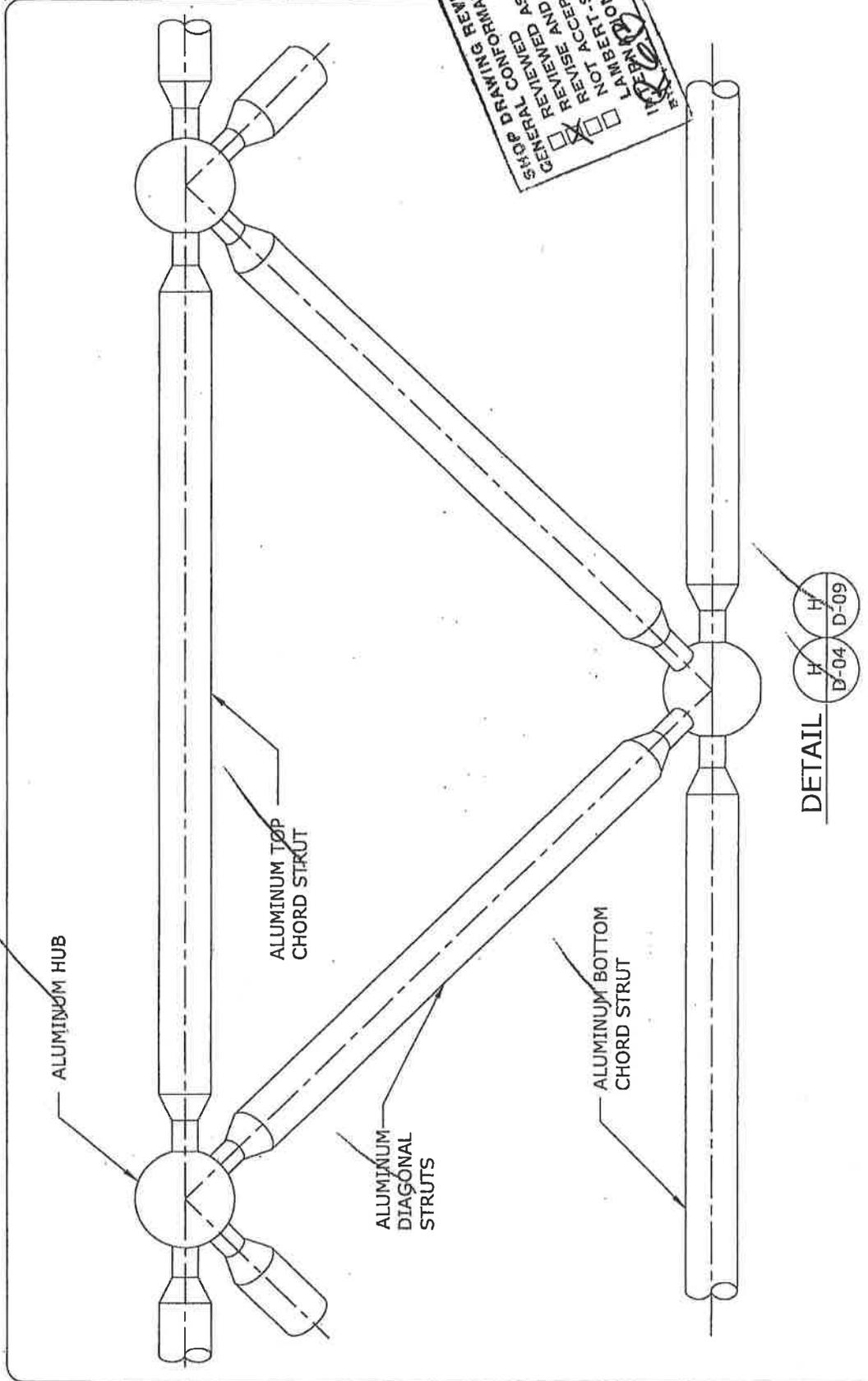
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LAMBERT-ST LOUIS INT. AIRPORT
SAINT LOUIS, MISSOURI
TYP. SPACE FRAME, MULLION
DETAIL "G"

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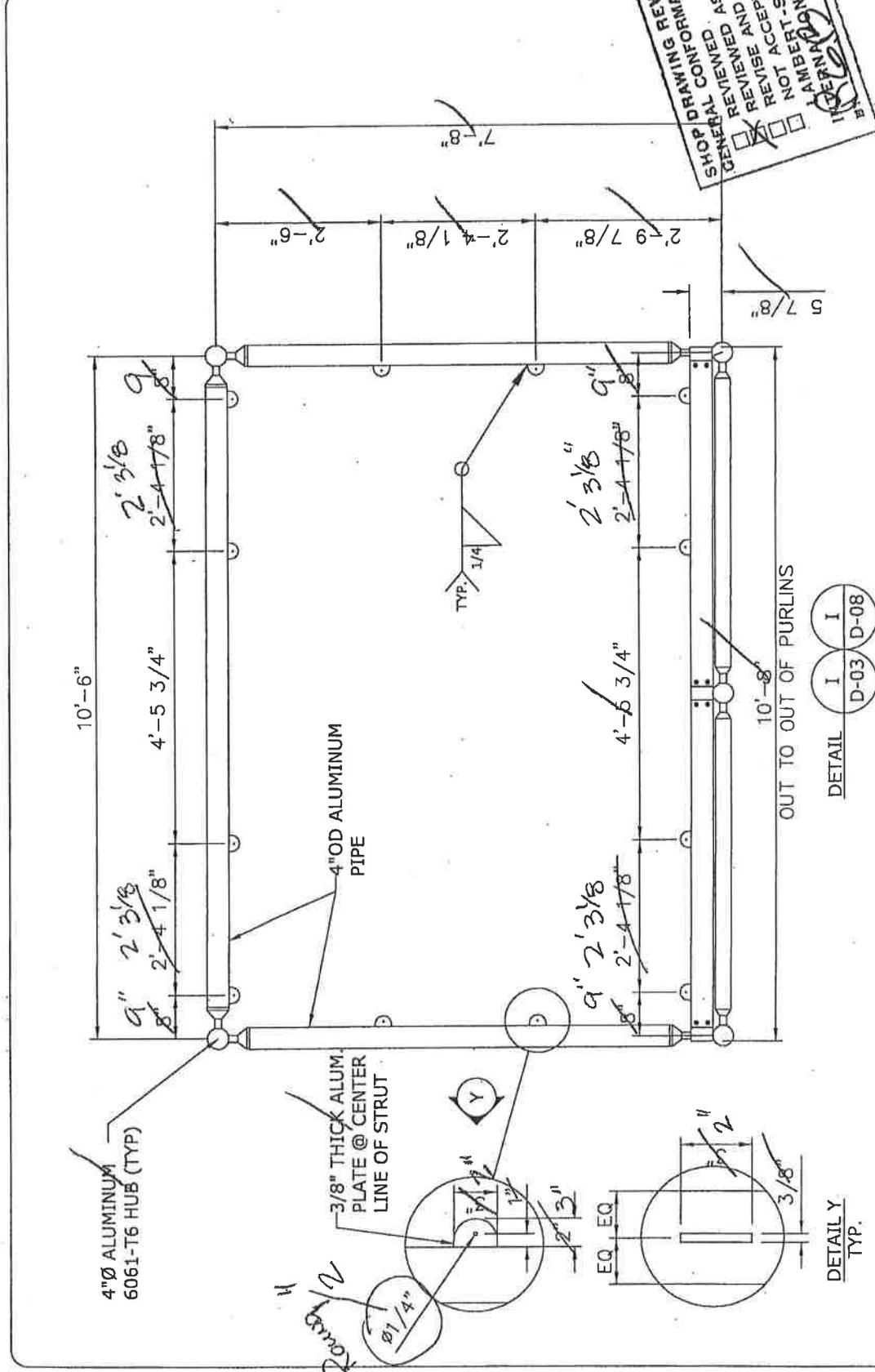
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LAMBERT-ST LOUIS INT. AIRPORT
SAINT LOUIS, MISSOURI
SPACE FRAME
DETAIL " H "

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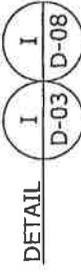
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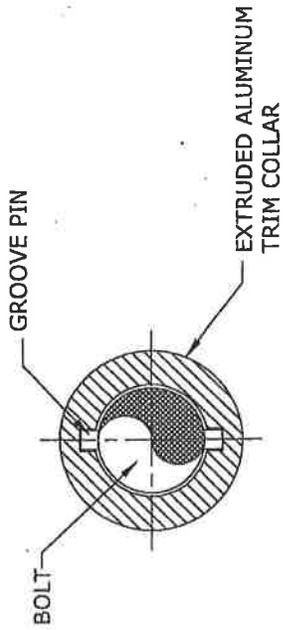
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SAINT LOUIS, MISSOURI
TYPICAL TAB LOCATIONS

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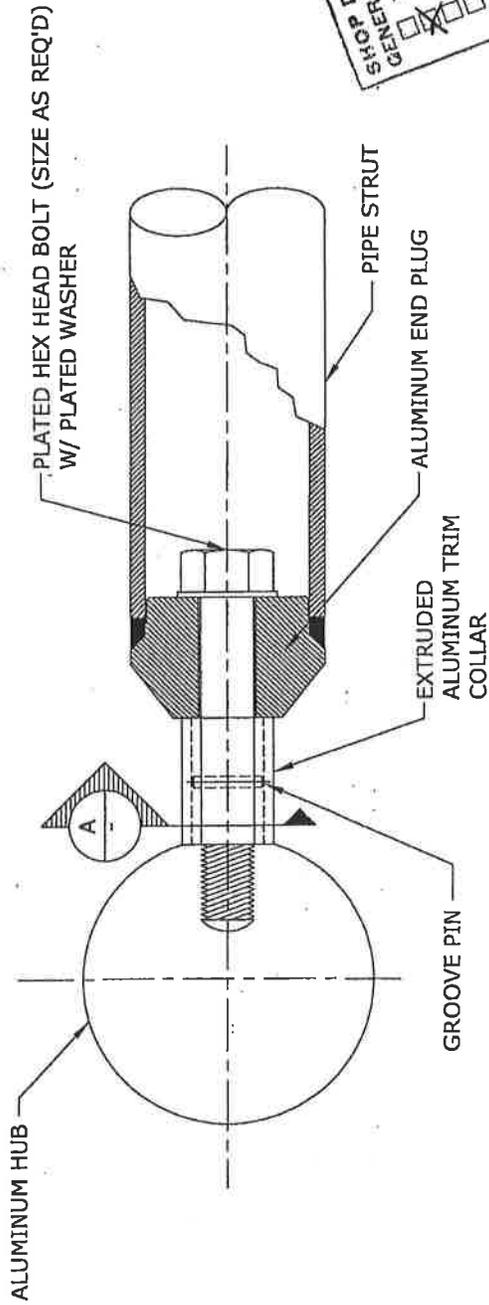
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DETAIL Y
 TYP.



SECTION A



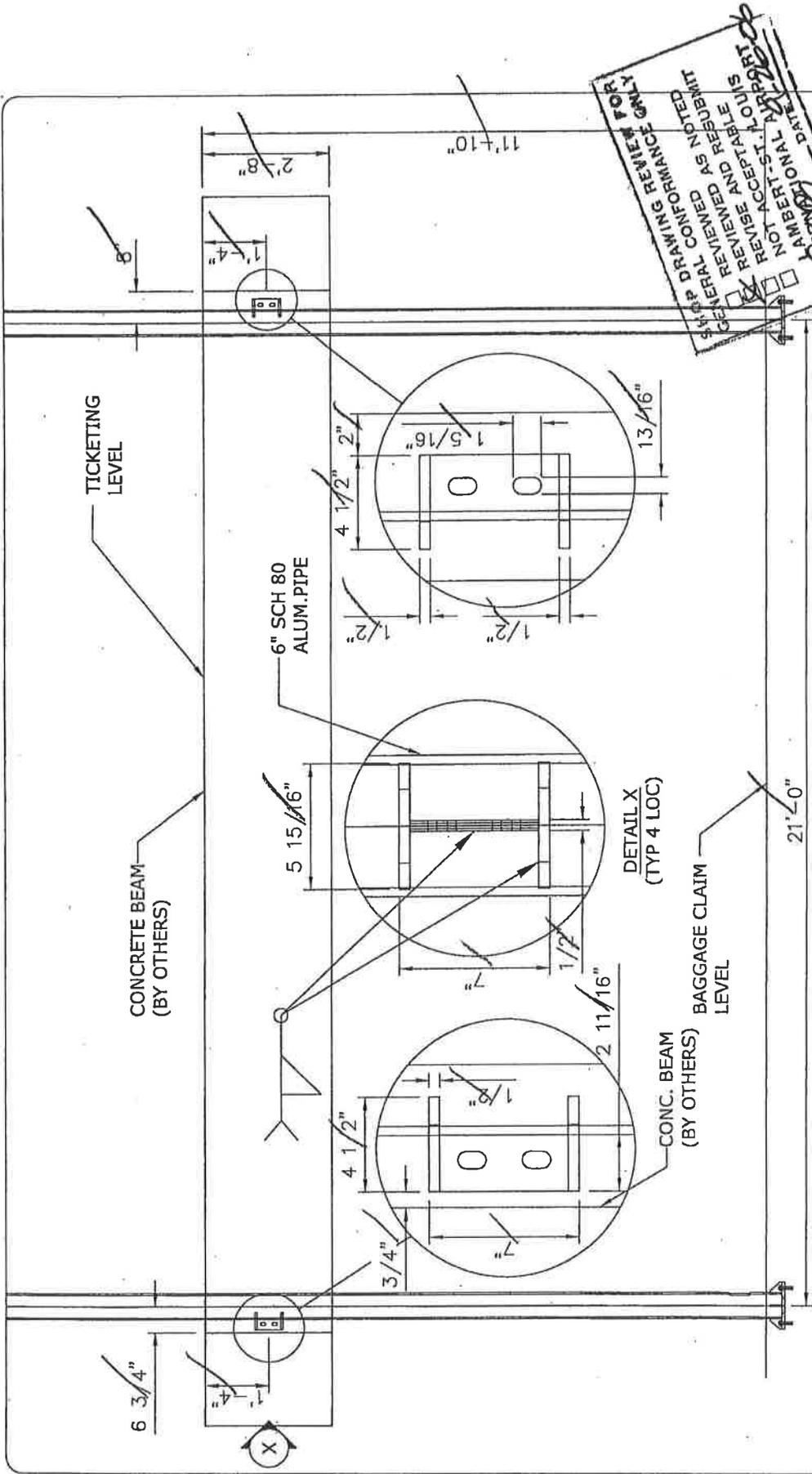
DETAIL J J
D-04 D-09

DATE: 9-13-06
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PROJECT No. : 206051	REVISION : 0
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LAMBERT-ST LOUIS INT. AIRPORT
 SAINT LOUIS, MISSOURI
 OMNI* HUB
 TRIM COLLAR
 DETAIL

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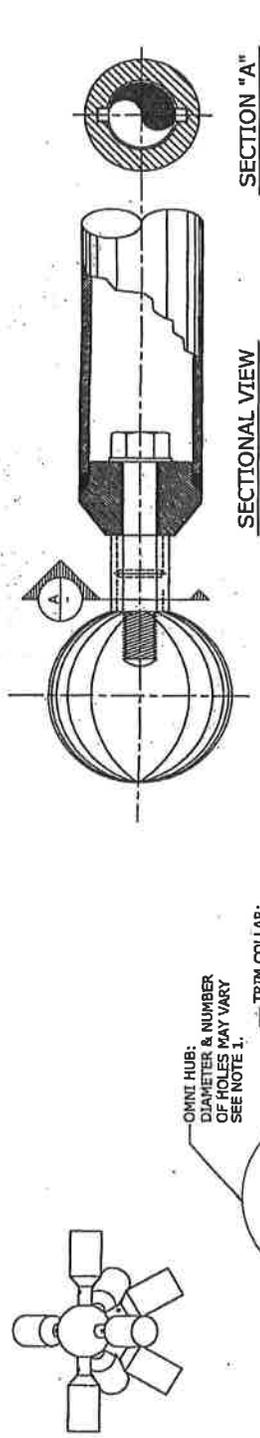
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LAMBERT-ST LOUIS INT. AIRPORT
SAINT LOUIS, MISSOURI
STRUCTURE SIDE ELEVATION
TAB @ BURGER KING

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DETAIL K
 D-09

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 SAINT LOUIS, MISSOURI
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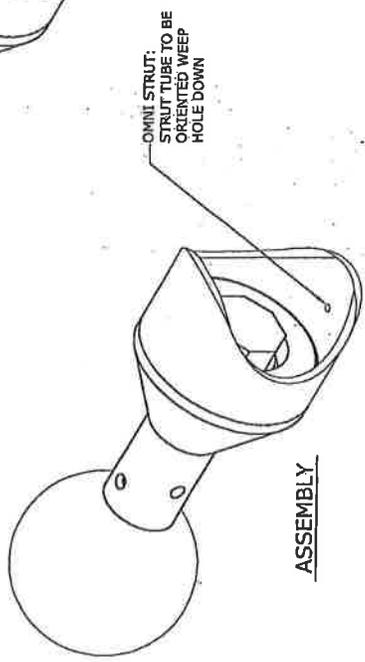


SECTION "A"

SECTIONAL VIEW

NOTES:
 1.-THE HUB HOLE THAT IS MARKED WITH THE HUB
 # AND DENOTED BY THE TWO TOOLING HOLES IS
 THE ORIENTATION HOLE ALSO CALLED THE NORTH POLE HOLE
 THIS HOLE CORRESPONDS WITH THE "*" ON THE ASSEMBLY
 UNLESS OTHER WISE NOTED.
 THE ORIENTATION REPRESENTS THE DIRECTION THAT THE NORTH
 POLE HOLE FACES IN RELATION TO THE STRUTS.
 2.- THE THROUGH-HOLE IN TRIM COLLAR GOES TOWARD HUB.
 3.- THE BOLT IS TIGHTENED BY ROTATING THE COLLAR WITH
 AN "OMNI-WRENCH", UNTIL FULL ENGAGEMENT IS ACHIEVED

EXPLODED ASSEMBLY



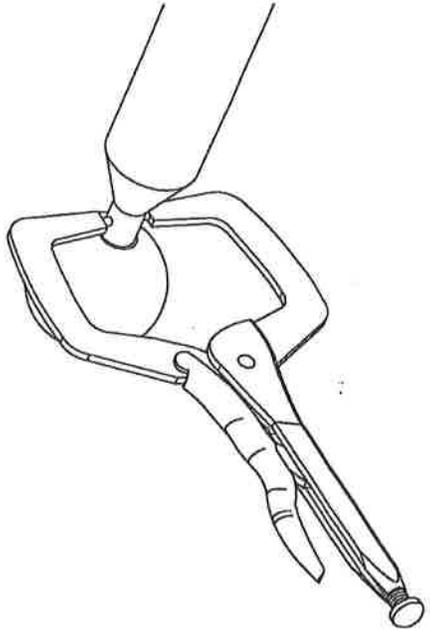
ASSEMBLY

TYPICAL MATERIAL	
HUBS	6061-T6 ALUM.
STRUTS	6061-T6 ALUM.
TRIM COLLARS	6061-T6 ALUM.
BOLTS	SAE GRADE 5

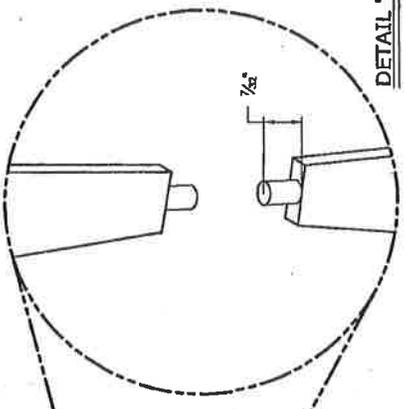
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LAMBERT-ST LOUIS INT. AIRPORT
SAINT LOUIS, MISSOURI
OMNI-WRENCH

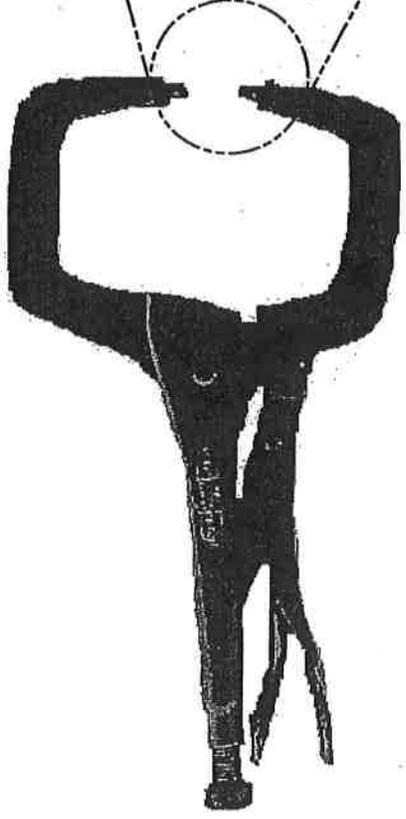
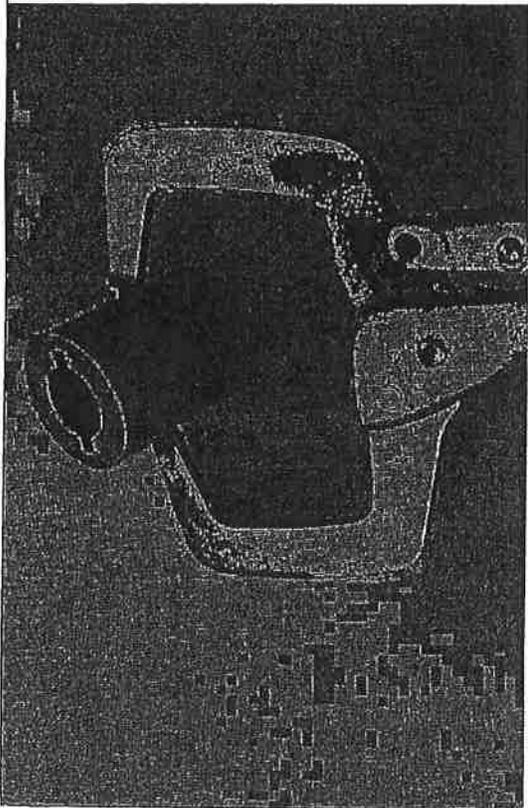
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PROJECT No. : Z06091	REVISION : 0
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- NOTES**
- 1.-THE OMNI-WRENCH IS A MODIFIED LOCKING C-CLAMP VISE GRIP
 - 2.-THE VISE GRIP CAN BE ORDERED FROM GRAINGER - ORDER # FOR A GR IS "3A516" OR "3A517" FOR AN 11R
 - 3.-A "6R" & "11R" VISE GRIPS MAY ALSO BE FOUND AT HOME DEPOT
 - 4.-THE TIPS ARE TO BE GROUNDED TO 1/4" Ø AND 7/32" LONG AS SHOWN IN DETAIL "C".



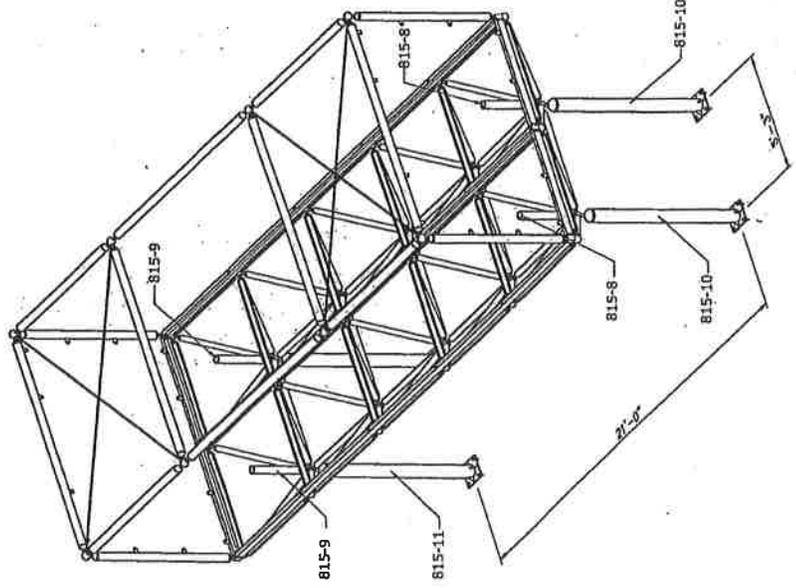
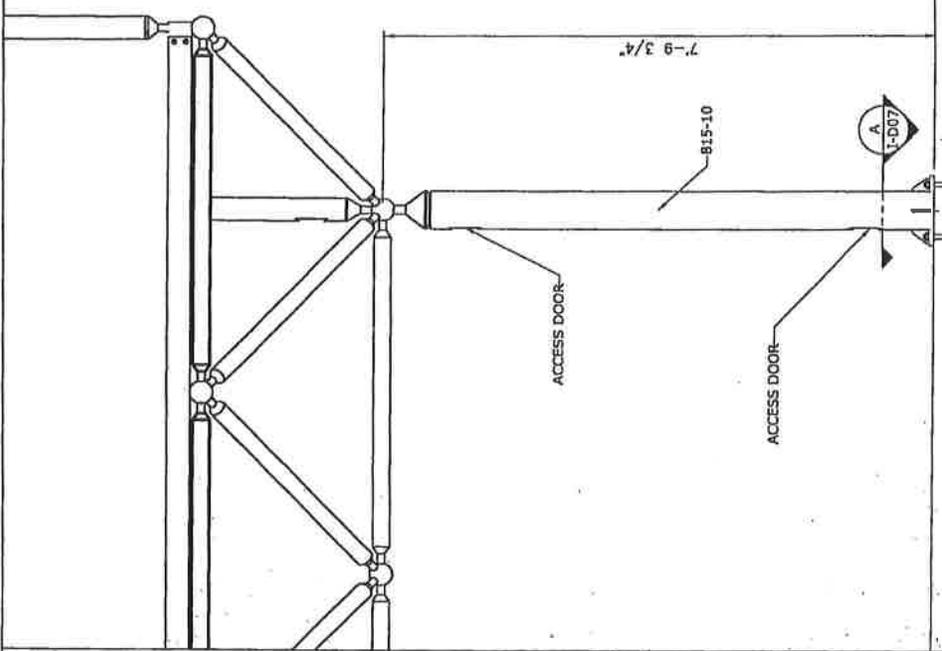
DETAIL "C"



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**LAMBERT-ST LOUIS INT. AIRPORT
 SAINT LOUIS, MISSOURI
 MTG, ENTRY COLUMN ASSEMBLY**

DRAWING NO.: 11-D01
 SCALE: N.T.S.
 PROJECT NO.: 206051
 REVISION: 0
 CHECKED BY:
 REV. DATE:
 DRAWING BY: G.P.
 DATE: 11-27-06

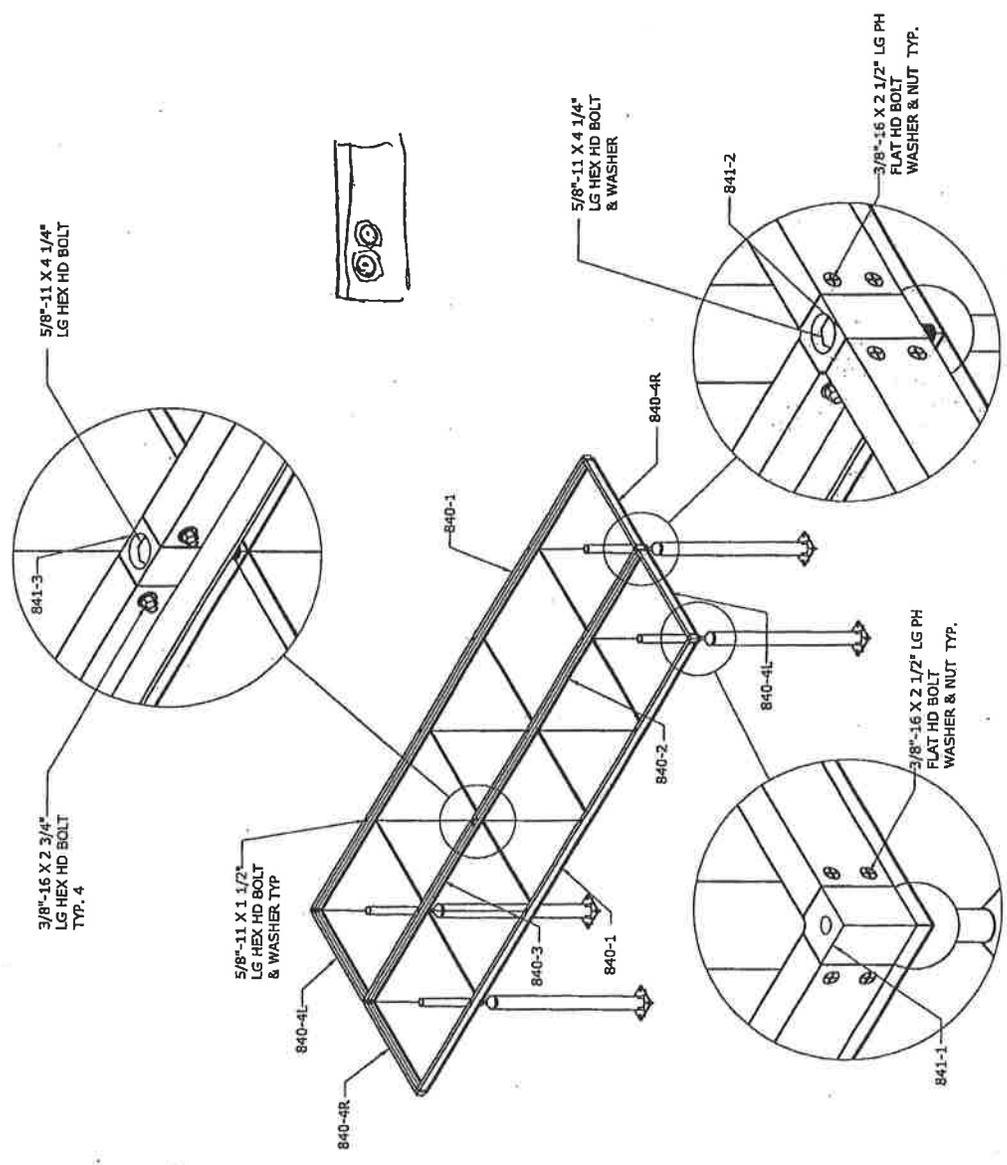


NOTE:
 1. USE COLLAR GROUP 2 FOR COLUMNS
 & GROUP 1 FOR OTHERS

CONSERVATEK
 ARCHITECTURAL BRASSING
 490 NORTH LOOP 236 EAST MOORE, MISSOURI 63051
 PHONE: 936-529-1242 FAX: 936-529-5355
 10000 W. 100th St. Suite 100, Overland Park, MO 66214
 PHONE: 913-666-1111 FAX: 913-666-1112

LAMBERT-ST LOUIS INT. AIRPORT
SAINT LOUIS, MISSOURI
MTG. ENTRY & BURGER KING
MULLIONS ASSEMBLY

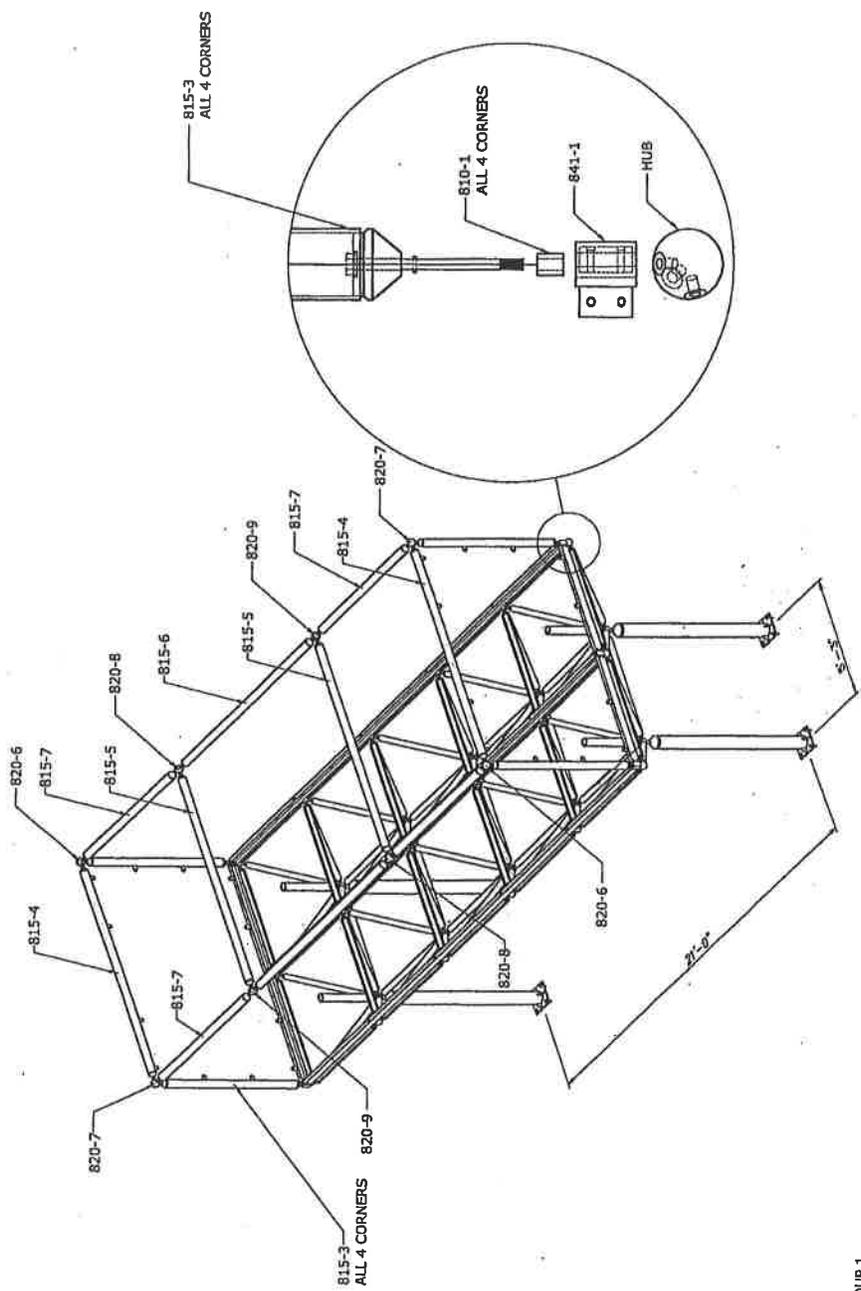
DRAWING BY: G.P. DATE: 11-27-06
 CHECKED BY: REV. DATE:
 PROJECT No.: 206051 REVISION: 0
 DRAWING No.: 11-D02 SCALE: N.T.S.



CONSERVATEK
 ARCHITECTURAL SYSTEMS
 488 HICKORY LANE, SUITE 200, FORT WORTH, TEXAS 76104
 PHONE: 817-335-1242 FAX: 817-335-1243
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**LAMBERT-ST LOUIS INT. AIRPORT
 SAINT LOUIS, MISSOURI
 MTG, ENTRY & BURGER KING
 UPPER FRAME ASSEMBLY**

DRAWING BY: G.P. DATE: 11-27-06
 CHECKED BY: REV. DATE:
 PROJECT NO.: 206051 REVISION: 0
 DRAWING NO.: 1-D03 SCALE: N.T.S.

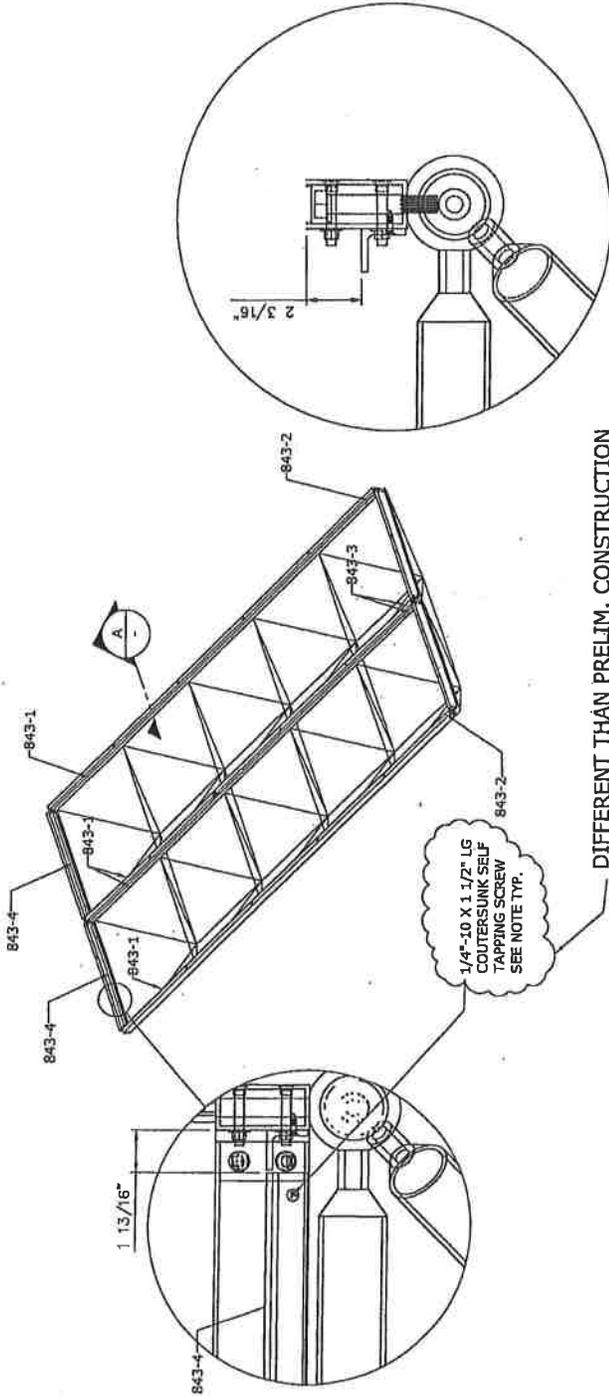


NOTE:
 1. USE COLLAR GROUP 1

DRAWING BY: G.P.	DATE: 11-27-06
CHECKED BY:	REV. DATE:
PROJECT NO.: 206051	REVISION: 0
DRAWING NO.: I-004	SCALE: N.T.S.

LAMBERT-ST LOUIS INT. AIRPORT
 SAINT LOUIS, MISSOURI
 MTG. ENTRY & BURGER KING
 1 3/4 X 1 3/4 ANGLE ASSEMBLY

CONSERVATEK
 ARCHITECTURAL SYSTEMS
 488 NORTH LOOP 336 EAST
 COMMERCE, TX 77201 USA FAX: 536-539-3355
 PHONE: 536-539-1747
 THE COMPANY AND THE QUALITY OF CONSERVATEK'S
 PRODUCTS ARE GUARANTEED BY CONSERVATEK'S
 10 YEAR WARRANTY PROGRAM (SEE DRAWING)



DETAIL A

DIFFERENT THAN PRELIM. CONSTRUCTION
 DRAWINGS

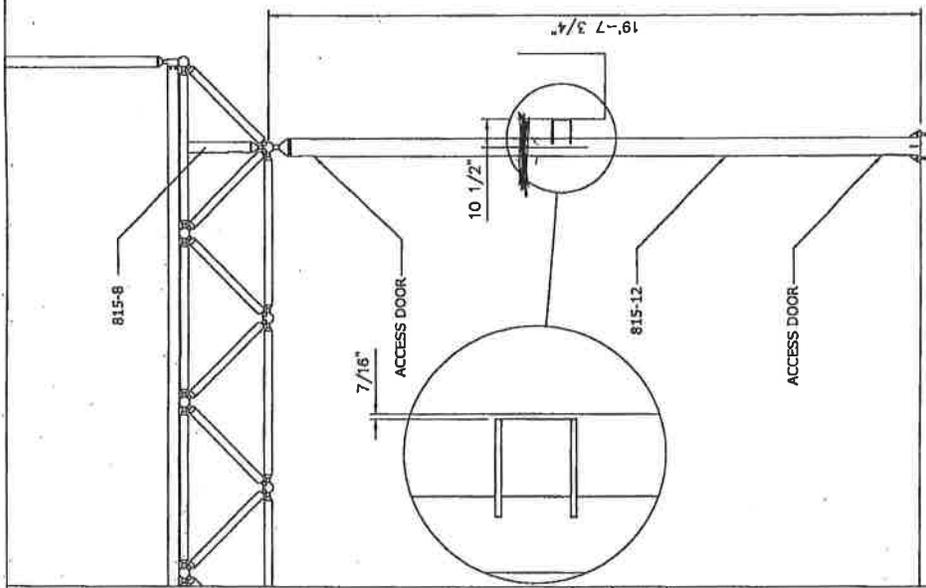
1/4\"-10 X 1 1/2\" LG
 COUNTERSINK SELF
 TAPPING SCREW
 SEE NOTE 11P.

NOTE:
 1. FIELD TO MATCH DRILL PILOT HOLES
 IN MULLION USING THE PRE-DRILLED
 HOLES IN THE ANGLE. A DRILL BIT
 DIAMETER OF 11/64\" MUST BE USED

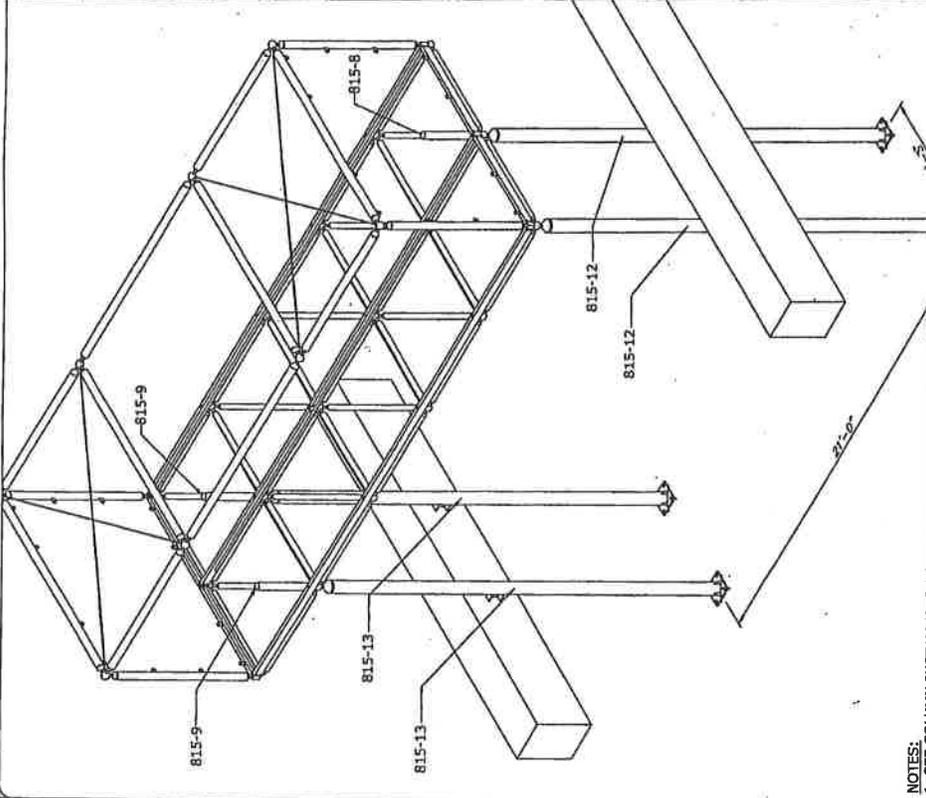
CONSERVATEK
 ARCHITECTURAL SYSTEMS
 498 NORTH LOOP 206 EAST PHOENIX 850-354-1429
 COMPANY TEL: 724 551 1800 FAX: 856-539-4335
 AND WEBSITE: WWW.CONSERVATEK.COM
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**LAMBERT-ST LOUIS INT. AIRPORT
 BURGER KING
 COLUMN ASSEMBLY**

DRAWING NO.: 11-D05
 PROJECT NO.: 206051
 REVISION: 0
 CHECKED BY:
 REV. DATE:
 DATE: 11-27-06
 DRAWING BY: G.P.



SEE DRAWING T-D06
 FOR MORE INFO

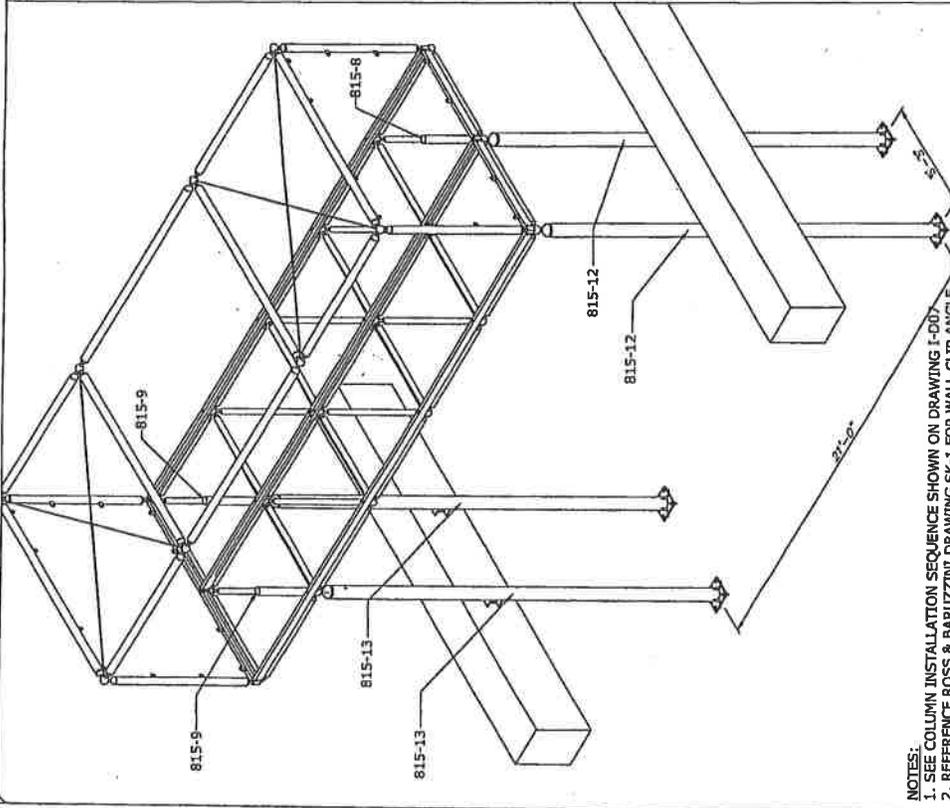
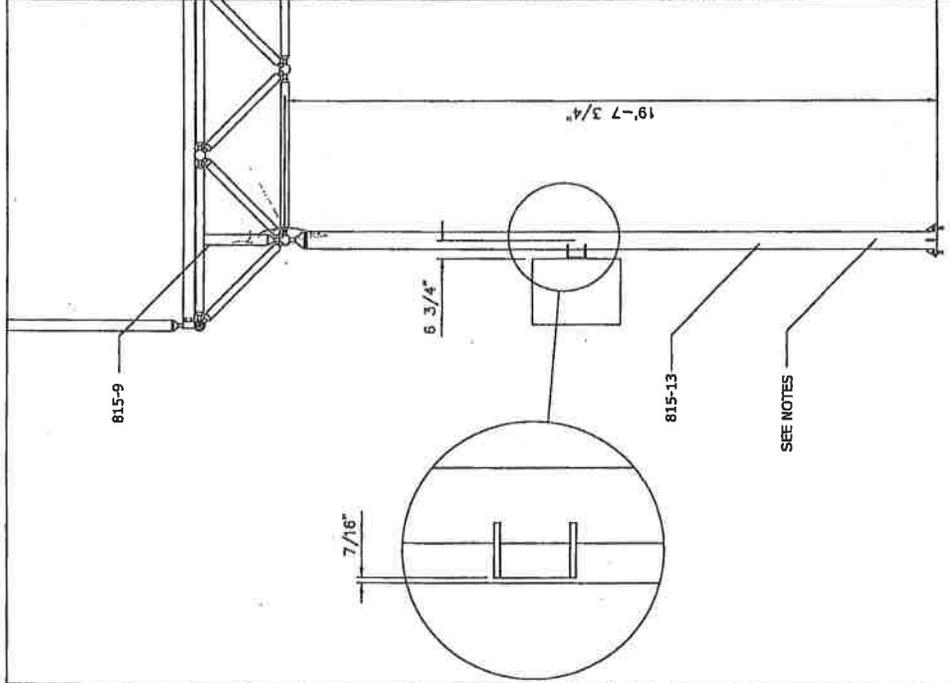


- NOTES:**
1. SEE COLUMN INSTALLATION SEQUENCE SHOWN ON DRAWING T-D07
 2. REFERENCE ROSS & BARUZZINI DRAWING SK-1 FOR WALL CLIP ANGLE DETAILS. VERIFY THAT ALL DIMENSIONS SHOWN ON SK-1 MATCH THE ACTUAL WALL CLIP ANGLE DELIVERED TO SITE. IF CLIPS DO NOT MATCH CONTACT CONSERVATEK'S ENGINEERING DEPARTMENT. DO NOT INSTALL CLIPS.
 2. USE COLLAR GROUP 2 FOR COLUMNS & GROUP 1 FOR OTHERS.

CONSERVATEK
 ARCHITECTURAL BRITAINS
 498 NORTH LOOP EAST SUITE 200
 HOUSTON, TEXAS 77002
 PHONE: 281-255-1247
 FAX: 281-255-1247
 WWW.CONSERVATEK.COM

**LAMBERT-ST LOUIS INT. AIRPORT
 BURGER KING
 COLUMN ASSEMBLY**

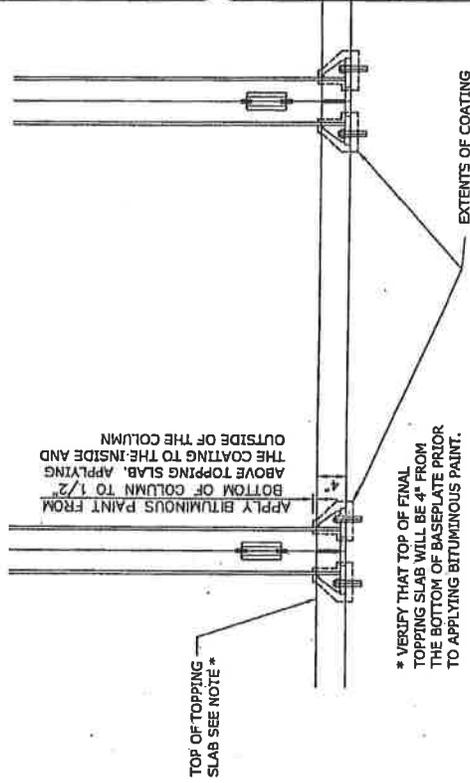
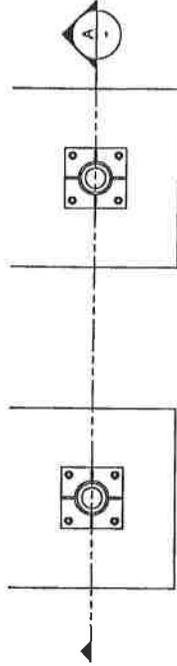
DRAWING BY: G.P. DATE: 11-27-06
 CHECKED BY: REV. DATE:
 PROJECT No.: 206051 REVISION: 0
 DRAWING No.: 1-006 SCALE: N.T.S.



- NOTES:**
1. SEE COLUMN INSTALLATION SEQUENCE SHOWN ON DRAWING I-001
 2. REFERENCE ROSS & BARUZZINI DRAWING SK-1 FOR WALL CLIP ANGLE DETAIL'S. VERIFY THAT ALL DIMENSIONS SHOWN ON SK-1 MATCH THE ACTUAL WALL CLIP ANGLE DELIVERED TO SITE. IF CLIPS DO NOT MATCH CONTACT CONSERVATEK'S ENGINEERING DEPARTMENT. DO NOT INSTALL CLIPS.
 2. USE COLLAR GROUP 2 FOR COLUMNS & GROUP 1 FOR OTHERS.

IMPORTANT NOTE:

THE MEETING ENTRANCE SIGN AND THE BURGER KING SIGN MUST HAVE THE COLUMN BASES COATED WITH BITUMINOUS PAINT.



* VERIFY THAT TOP OF FINAL TOPPING SLAB WILL BE 4" FROM THE BOTTOM OF BASEPLATE PRIOR TO APPLYING BITUMINOUS PAINT.

NOTES:

1. COAT COLUMN BASE WITH ALKALI RESISTANT BITUMINOUS PAINT. APPLY A HEAVY COAT OF PAINT ON THE INSIDE AND OUTSIDE OF THE COLUMN. THE COATING SHALL BE AT LEAST 12 MIL TO 15 MIL THICK. ALL SURFACES SHALL BE COATED; NO ALUMINUM SHOULD BE EXPOSED. THE COLUMN'S LEVEL OF THE TOPPING SLAB (USE CT1120 COAL TAR COATING DISTRIBUTED BY AMERICAN COATINGS, INC.-CONTACT ROY MORSE AT 281-351-1776 OR CONSERVATEK ENGINEERING DEPARTMENT'S APPROVED EQUAL).
2. POSITION COLUMNS IN CORRECT LOCATION.
3. TEMPORARILY SECURE COLUMNS.
4. PLACE WALL CLIP ANGLES ON WALL AND ON THE COLUMN'S VERTICAL CONNECTION PLATE.
5. MARK HOLE LOCATIONS ON CONNECTION PLATE USING THE PREDRILLED HOLES IN THE WALL CLIPS AS GUIDES.
6. LOWER COLUMN AND DRILL 7/16" ϕ HOLES IN CONNECTION PLATE IN THE CORRECT LOCATION.
7. INSTALL CLIP ANGLES TIGHTENING BOLTS DOWN * SNUG TIGHT*. SNUG TIGHT MEANS THAT ALL PILES OF THE JOINT SHALL BE IN FIRM CONTACT. THIS CONDITION CAN BE OBTAINED BY USING A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF A MAN USING AN ORDINARY SPUD WRENCH. BOLTS SHALL BE TIGHTENED IN SUCH AN ORDER THAT ALL BOLTS ARE EFFECTIVE.
8. RAISE COLUMN BACK INTO POSITION.
9. MATCH DRILL THE CONCRETE FOR THE ANCHOR BOLTS. IF THE CONCRETE CANNOT BE MATCH DRILLED DUE TO DRILL CLEARANCE PROBLEMS WITH THE COLUMN, MARK THE HOLE LOCATION ON THE WALL, LOWER THE COLUMN, INSTALL THE ANCHORS, AND RAISE THE COLUMN BACK INTO POSITION. AFTER THE ANCHOR BOLTS HAVE CURED, IF THE HOLES CAN BE MATCH DRILLED, THEN MATCH DRILLING IS THE BEST OPTION.
10. MATCH DRILL CONCRETE ANCHORS AT BASE.
11. REPEAT FOR ALL 4 COLUMNS.

DRAWING BY: GP DATE: 11-27-06
 CHECKED BY: REV. DATE:
 PROJECT No.: 209051 REVISION: 0
 DRAWING No.: I-007 SCALE: N.T.S.

LAMBERT-ST LOUIS INT. AIRPORT
 SAINT LOUIS, MISSOURI
 MTG, ENTRY & BURGER KING
 COLUMN INSTALLATION SEQUENCE

CONSERVATEK
 ARCHITECTURAL, ENGINEERS
 488 NORTH LOUIS 326 EAST PHONE: 336-539-1747
 COLUMBIA, MO 65201 FAX: 336-539-5395
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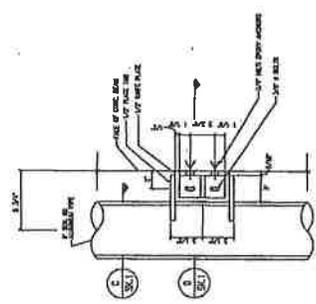
ARCHURIS
 10000 10th Street, N. Golden, CO 80401
 (303) 440-1000
 www.archuris.com

POSS
 1608-598
 1608-598
 1608-598

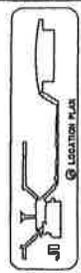
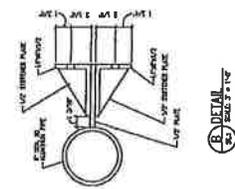
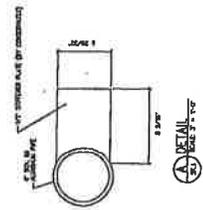
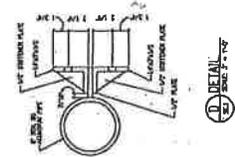
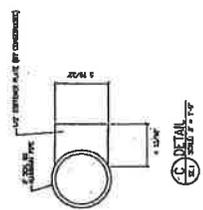
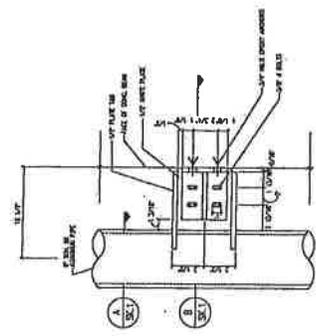
LAMBERT - St. Louis International Airport
 MULTI-USER FLIGHT INFORMATION DISPLAY SYSTEM

31/27/2006
 SK.1

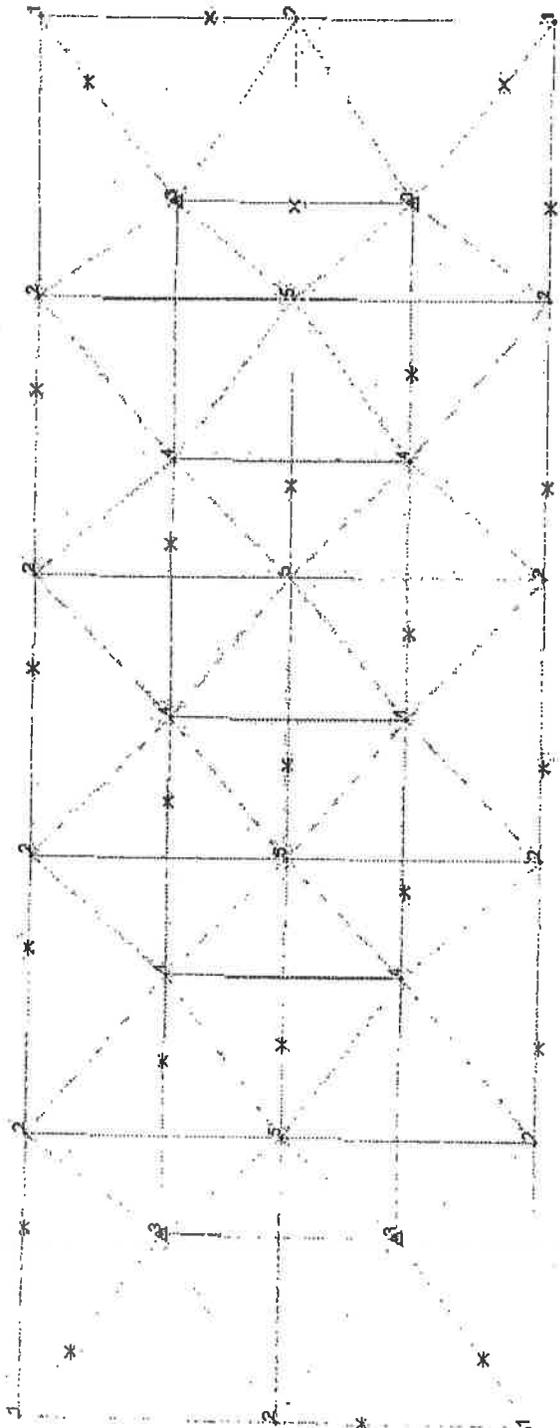
NORTH COLUMNS



SOUTH COLUMNS



DESIGNER'S RESPONSIBILITY
 ARCHURIS ARCHITECTS
 10000 10th Street, N. Golden, CO 80401
 (303) 440-1000

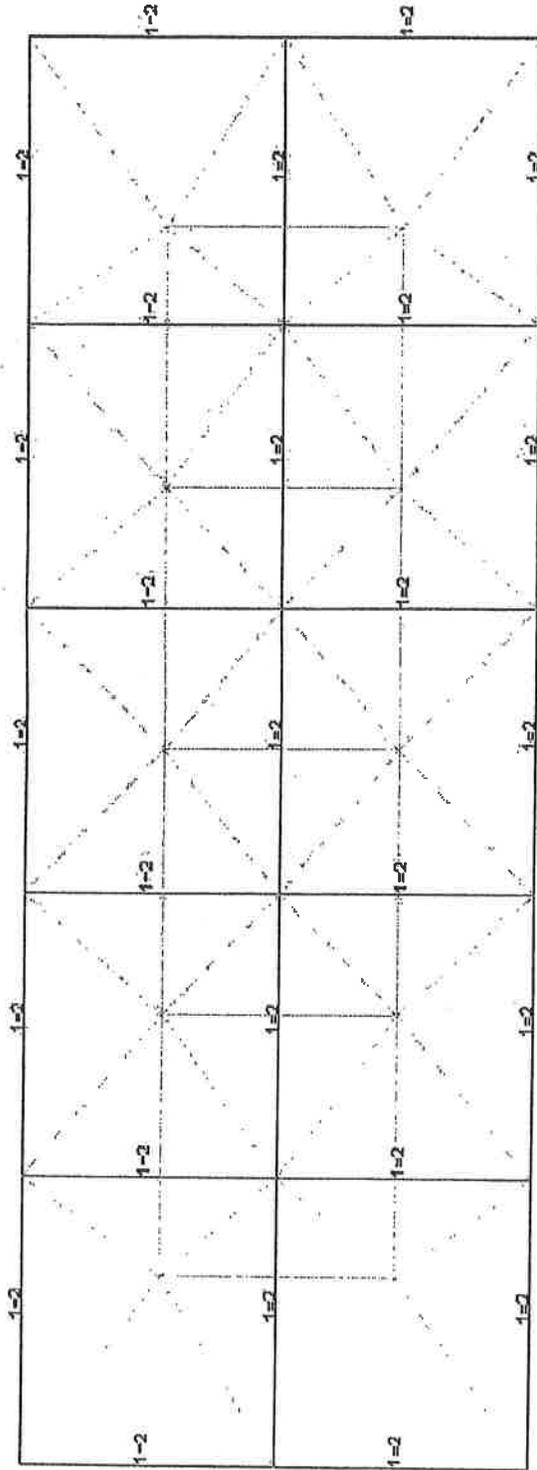


TEKCAD INSTALLATION DRAWING #002-1
 Top and Bottom Hubs and North poles
 St Louis - Lambert Airport #206051-1,2
 November 7, 2008



CORPORATE HEADQUARTERS
 488 North Loop 338 East | Conroe, TX 77301
 Ph: 936-539-1747 | Fax: 936-539-5355

ORLANDO OFFICE
 1200 W. SR 434 Suite 130 | Leeswood, FL 32750
 Ph: 407-830-1199 | Fax: 407-830-1877

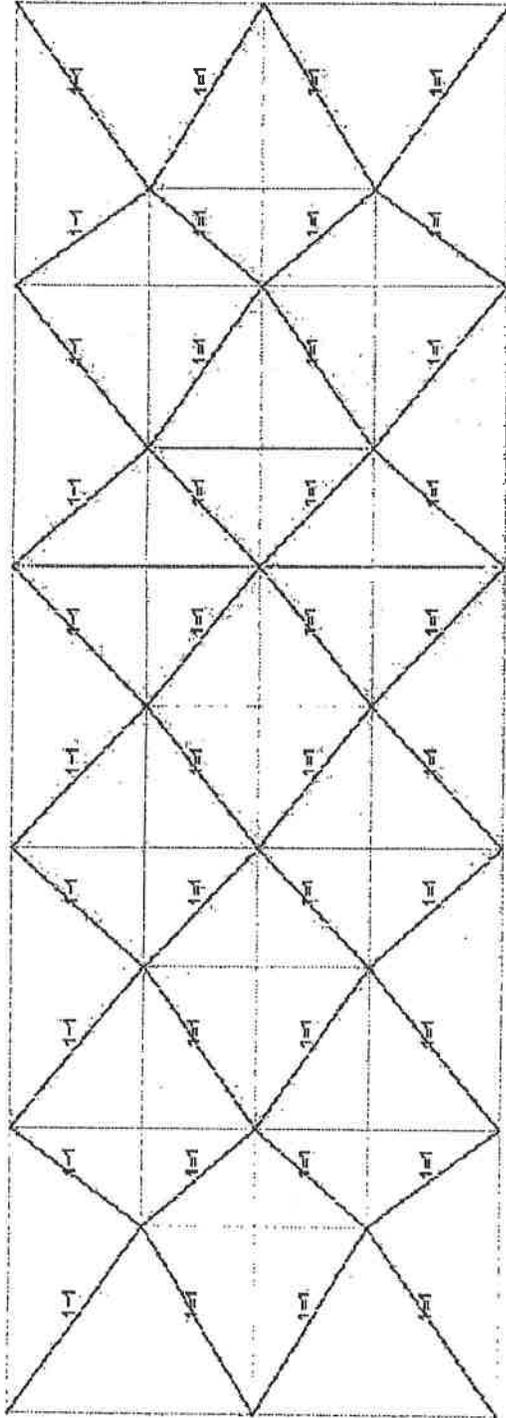


TEKCAD INSTALLATION DRAWING #602-4
 Top Struts and collars
 St. Louis - Lambert Airport #208051-1,2
 November 7, 2006



CORPORATE HEADQUARTERS
 498 North Loop 336 East | Conroe, TX 77381
 Ph: 936-639-1747 | Fax: 936-639-5365

ORLANDO OFFICE
 1200 W. SR 434 Suite 130 | Longwood, FL 32750
 Ph: 407-890-1199 | Fax: 407-890-1817

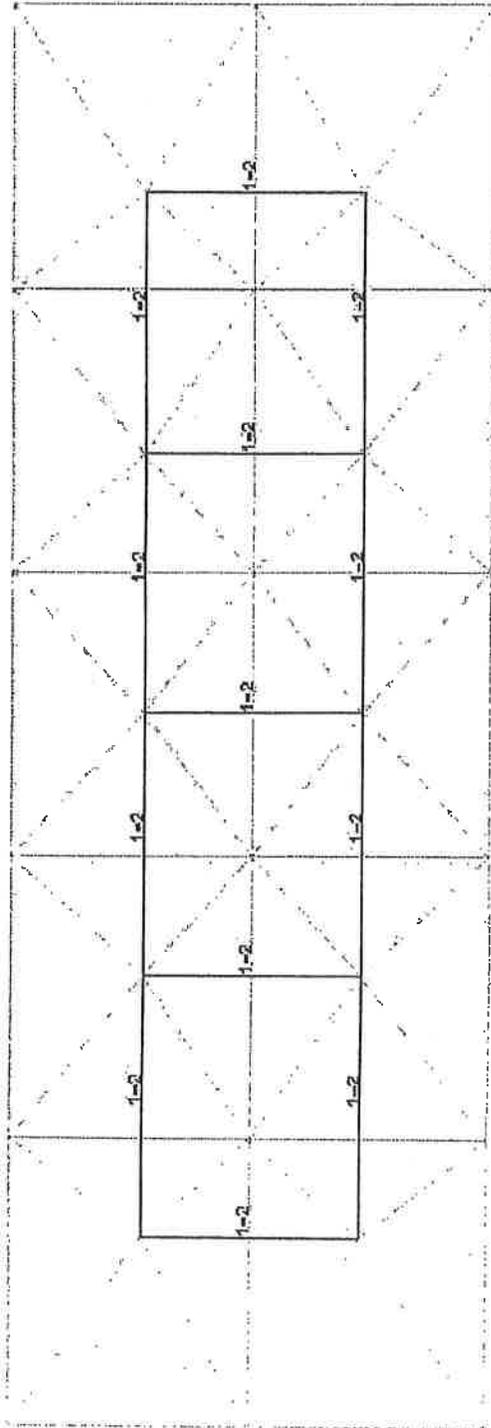


TEKCAD INSTALLATION DRAWING #802-3
 Diagonal struts and collars
 St Louis - Lambert Airport #206061-1,2
 November 7, 2005



CORPORATE HEADQUARTERS
 498 North Loop 336 East | Conroe, TX 77301
 Ph: 936-535-1747 | Fax: 936-535-5355

ORLANDO OFFICE
 1200 W. SR 434 Suite 130 | Longwood, FL 32760
 Ph: 407-330-1199 | Fax: 407-330-1877

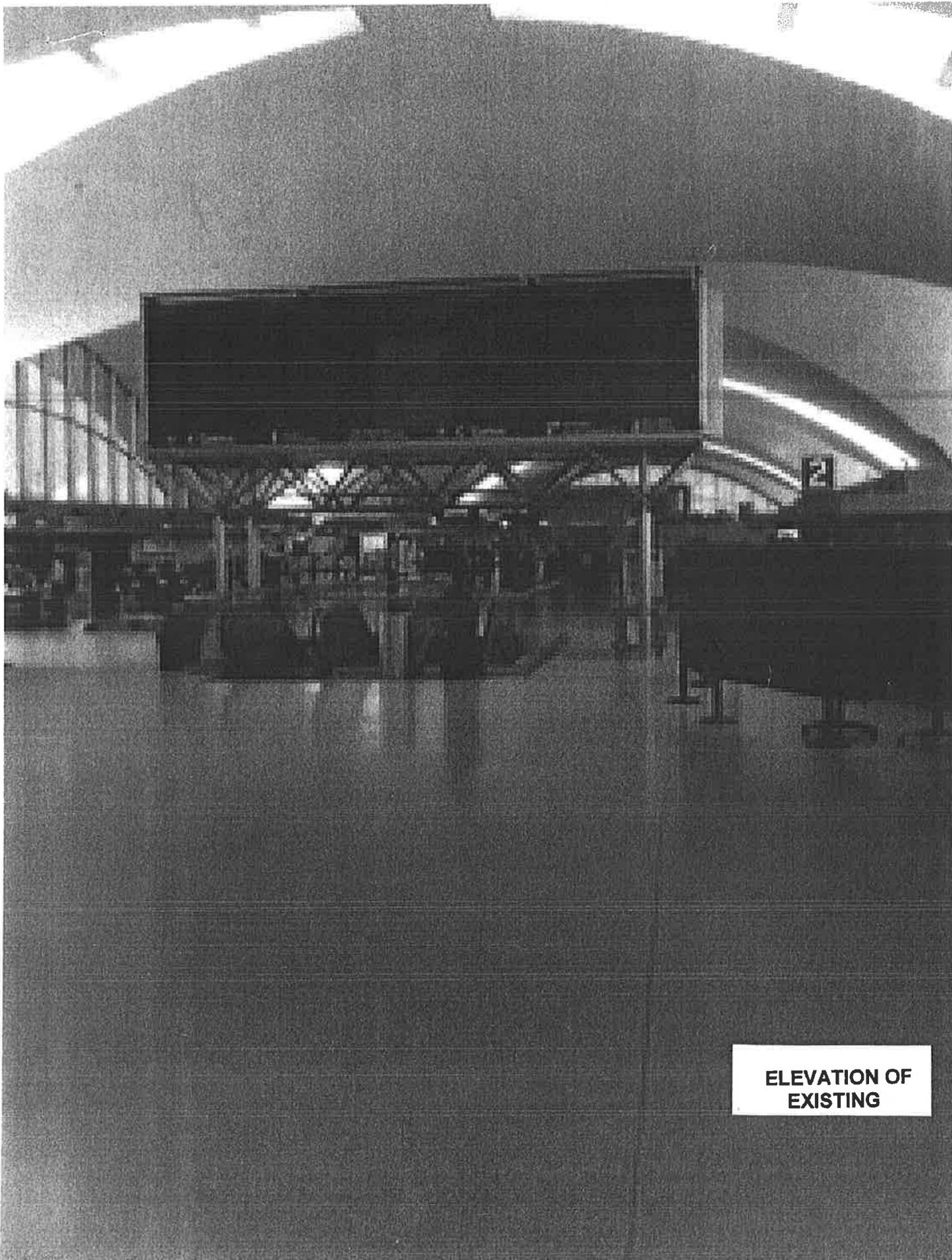


TEKCAD INSTALLATION DRAWING #602-2
 Bidon Struts and collars
 St Louis - Lambert Airport #206051-12
 November 7, 2006

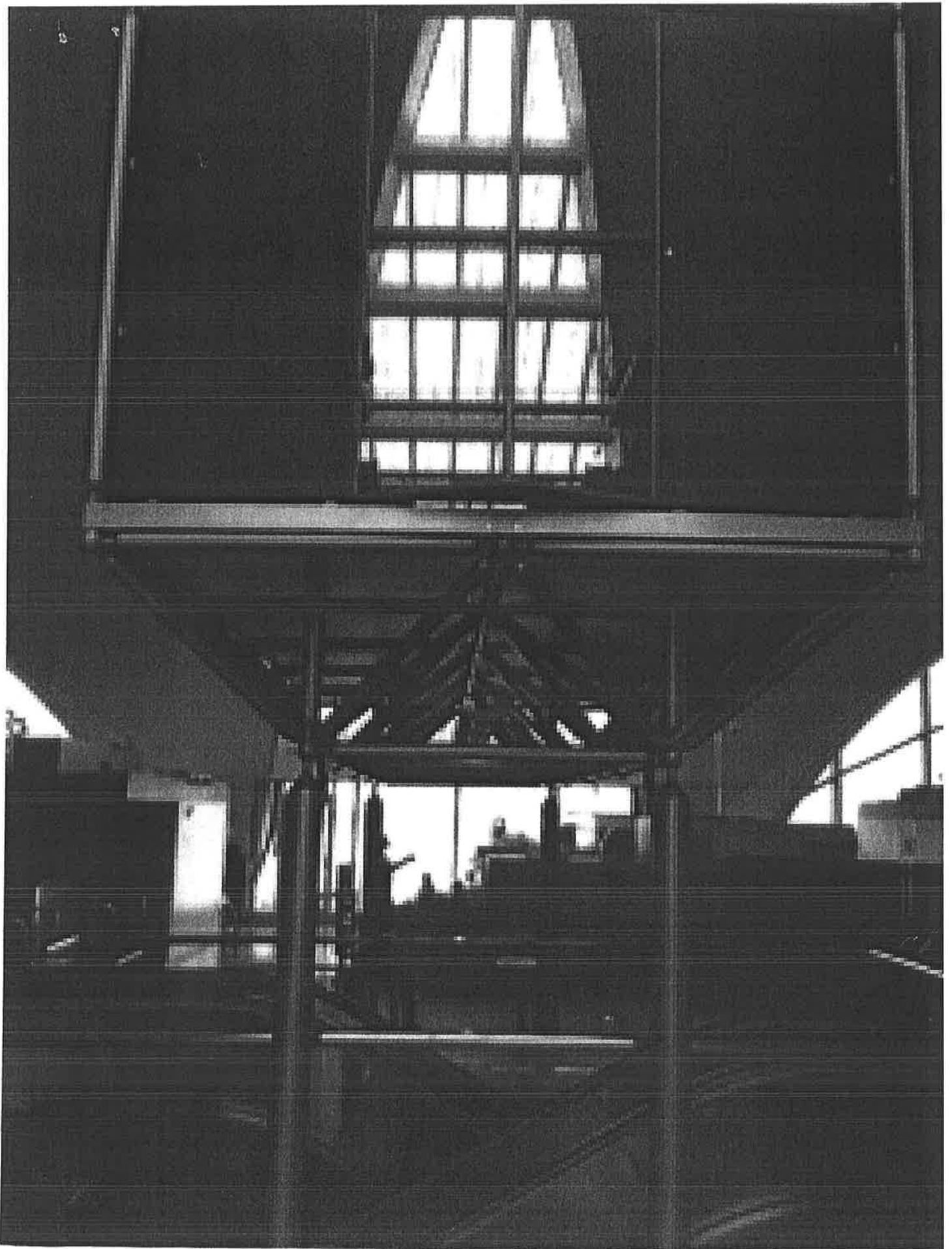


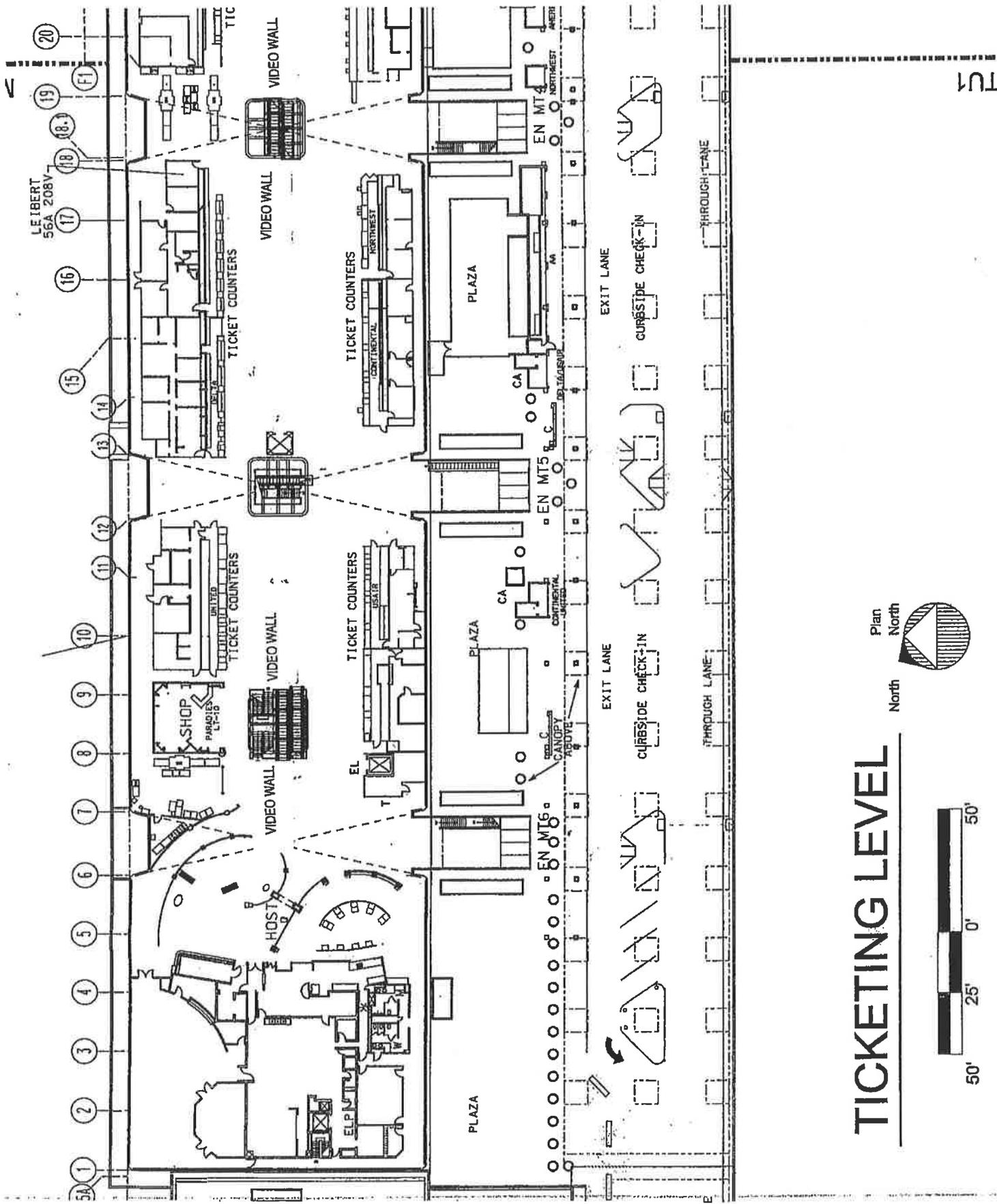
CORPORATE HEADQUARTERS
 488 North Loop 336 East | Conroe, TX 77301
 Ph: 336-638-1747 | Fax: 336-638-6365

ORLANDO OFFICE
 1200 W. SR 434 Suite 130 | Longwood, FL 32750
 Ph: 407-850-1199 | Fax: 407-850-1817

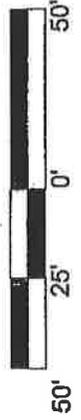


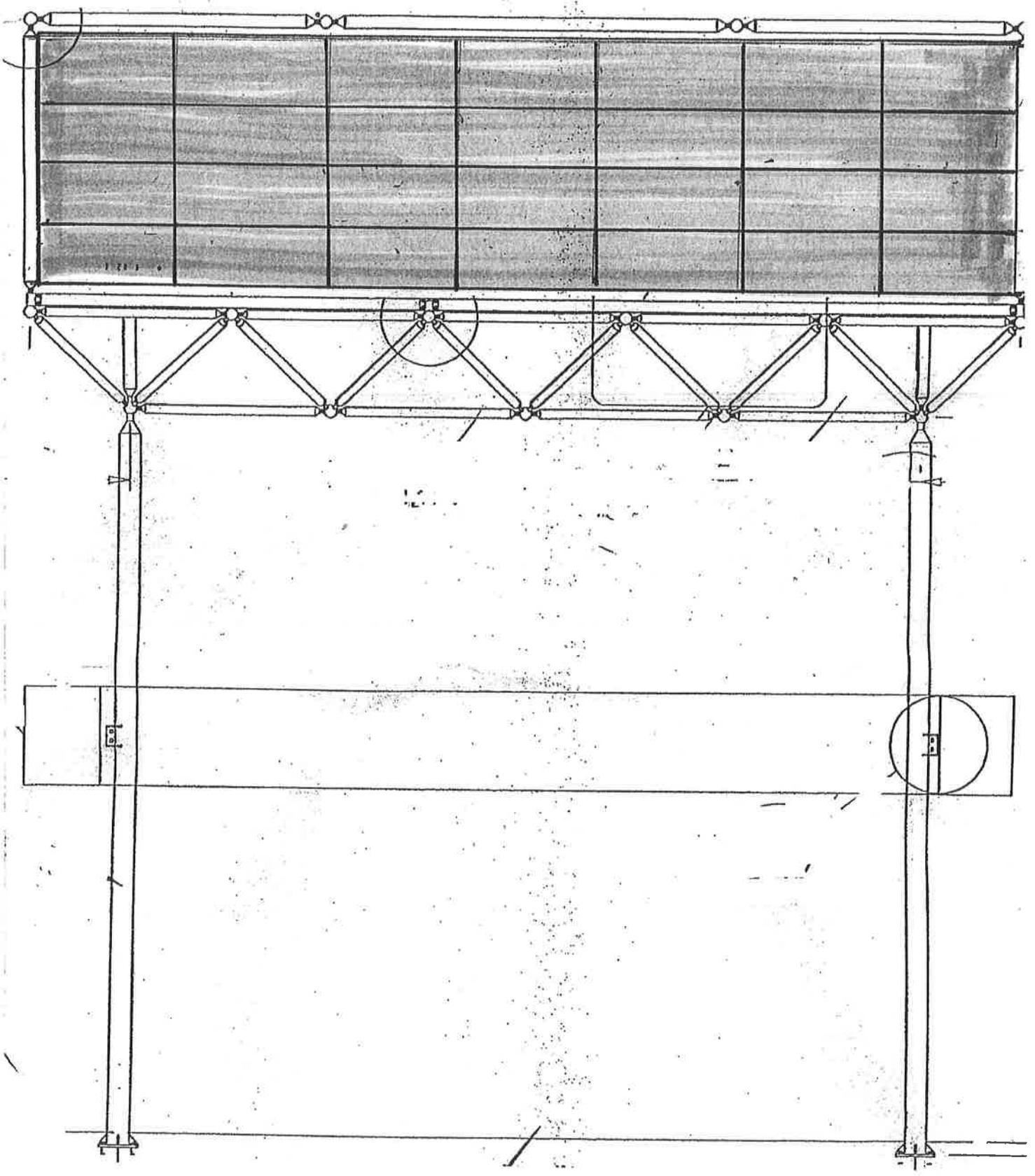
**ELEVATION OF
EXISTING**





TICKETING LEVEL





**SCHEMATIC OF
NEW VIDEO WALL**

00100
INSTRUCTIONS TO BIDDERS

Project Title LED Video Wall & Related Equipment
Lambert St. Louis International Airport

Lambert St. Louis International Airport
St. Louis, MO

1. Sealed proposals for all work for construction of the above captioned project will be received by Freddie Dunlap, Supply Commissioner, Supply Division, Room 324, 1200 Market Street, St. Louis, 63103, until 12:00 p.m., Local Time, **AUGUST 7, 2012**.

2. The drawings and specifications, together with all necessary forms and other contract documents for bidders may be obtained at the following:

Lambert St. Louis International Airport
Engineering Department
11495 Navaid Rd. (Formerly Natural Bridge Rd.)
Bridgeton, MO 63044

OR

City of St. Louis
Supply Division
1200 Market Street, Room 324
St. Louis, MO 63103

3. **INTERPRETATIONS BY ADDENDUM ONLY:** If any bidder is in doubt as to true meaning, spirit and intent of the specifications, or any part of the Contract Documents, he may make request for interpretation thereof, provided said request is received by the Owner's Project Representative 10 days prior to bid date to issue an addendum. Any interpretation of Contract Documents, if made, will be by Addendum only, duly issued to each bidder receiving a copy of said documents. The Owner and the Owner's Project Representative are not responsible for any other explanations or interpretations made prior to closing time for receipt of bids. No explanations or interpretations made orally will be considered binding.

4. **BIDDERS' QUALIFICATIONS**

Contractors submitting proposals for this project shall have qualifications as follows:

1. Shall be a reputable, recognized organization with at least five (5) years successful experience on work of this type.
2. Shall have a license where required by public authorities.
3. Shall have ample financial resources for work of this magnitude.

5. Before submitting all proposals, bidders shall carefully examine the site and read all divisions of the specifications and all contract documents in order to avoid omissions or duplications and to insure a complete job. Bidders should also visit premises, verify site conditions and conditions under which work under this contract must be conducted. Submission of proposal signifies that bidder has visited premises, has made examinations and verifications and is fully conversant with all conditions. No claims for

additional compensation will be considered or paid to any Contractor, due to said Contractor's failure to be so informed.

Site Visit and Mandatory Pre-bid Meeting is scheduled for **July 24, 2012, at 10:30 a.m.** at Lambert St Louis International Airport, Terminal 1 (Ticketing Lobby), 10701 Lambert International Blvd. St Louis, MO 63145.

6. Proposals shall be submitted in triplicate on forms provided by the City and shall be delivered in sealed, opaque envelopes bearing the following inscriptions:

Proposal for 4 Airport Video Walls

Address all Proposals to: Freddie Dunlap, Supply Commissioner
Supply Division, 1200 Market Street - Room 324
St. Louis, MO 63103

7. All work specified in the Contract Documents shall be completed by 11/5/12 except for minor replacements, correction, or adjustment items which do not interfere with the complete operation and utilization of all parts of the contracted work. Once started, the Contractor shall remain on site and diligently pursue completion of the work and shall maintain a local representative to maintain all barricades, lights and passenger traffic control devices.
8. The Contractor: "shall be solely responsible for construction means, methods, techniques, sequences and procedures"; "shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work"; "shall take all reasonable precautions for safety of all persons who might be affected, including employees of the Contractor and Sub-contractor".
9. The Contractor shall obtain and file with the Owner prior to the commencement of any work, the certificates of all insurance required.
10. **INSURANCE:** The Contractor shall not commence the work under this Contract until it has filed with the City and the City has approved Certificates of Insurance stating the name of the job and showing that it has fulfilled the requirements of this Article. The insurance afforded by the Contractor shall be primary and non-contributory insurance.

All insurance policies relating to the Work shall provide for reinstatement of full coverage after payment of any claim, if requested by the City.

Without limiting its liability under this Contract, the Contractor shall procure and maintain at its expense during the life of this Contract, insurance of the types and minimum amounts stated below:

- a. Workmen's Compensation insurance in full compliance with Workmen's Compensation laws of Missouri, and Employer's Liability coverage in the amount of \$1,000,000.00 for each occurrence.

11. All proposals, notifications, claims and statements shall be signed as follows:
 - (a) Corporations: Signature of officials shall be accompanied by a certified copy of resolution of the Board of Directors authorizing the individual signing to bind the corporation. Affix official corporate seal.
 - (b) Partnerships: Signature of official shall be accompanied by a certified copy of the Power of Attorney authorizing the individual signing to bind all partners.
12. Where items of equipment and/or materials are specifically identified by a manufacturer's name, model or catalog number, only such specified items shall be used in the base bid.
13. The Contractor shall pay all sales, consumers, use and other similar taxes if required by law.
14. The owner reserves the right to accept or reject any and all bids, to waive irregularities, and to accept a bid which in the owner's opinion, is in the owner's best interests.
15. PREVAILING WAGE

"Contractor stipulates and agrees that not less than the Missouri prevailing hourly rate of wages shall be paid to all workmen performing work under this purchase order. Contractor shall timely provide the City with required affidavits and certified payroll records prior to final payment."

16. PURCHASES EXEMPT FROM SALES TAX

Purchases of tangible personal property and materials to be incorporated into or consumed of this project are not subject to Missouri sales tax and may be made on a sales tax exempt basis. Said purchases may not be made until a Notice to Proceed is forthcoming from the Supply Commissioner or his authorized representative and a Tax Exempt Certificate has been issued. The City will not be liable for taxes on purchases made by a Contractor or Subcontractor who has not been issued a Tax Exempt Certificate.

EVALUATION OF PROPOSALS

1. It is the intent of the Lambert-St. Louis International Airport to award a contract to the most qualified Bidder. The LSLIA reserves the right, at its sole discretion, to request clarification of supplemental information relating to the information submitted as part of the Proposal. The Bidder shall furnish to the LSLIA such data or information as the LSLIA may request for this purpose.
2. The LSLIA reserves the right to reject any Proposal if the evidence submitted by or the investigation of the Bidder fails to satisfy the LSLIA that the Bidder is properly qualified to supply the Goods and Services.

3. In evaluating the Proposal, other than clarification sought by LSLIA of information contained within the written Proposal, the Bidder's written proposal will be considered the primary source of Proposal information.
4. The LSLIA's decisions regarding Proposal evaluation and Contract Award are at the sole discretion of the LSLIA.

SCHEDULE OF VALUES

1. Contractor shall submit a schedule of values at time of contract award.

SCHEDULE SUMMARY

Project Title LED Video Wall
Lambert St. Louis International Airport

Listed below are the dates and times related to the activities of the Project.

<u>EVENT</u>	<u>DATE</u>
Request For Bid Issued	Tuesday, July 10, 2012
MANDATORY	
Pre-bid Meeting & Walk Through at 10:30 AM Lambert St. Louis International Airport - Terminal 1 (Ticketing Lobby) 10701 Lambert International Blvd. St. Louis, MO 63145	Tuesday, July 24, 2012
Questions from Bidders due by 12:00 PM	Wednesday, July 18, 2012
Response to Bidder's Questions/ Addendum (if required)	Tuesday, July 24, 2012 Follow-up questions may be submitted to crawfordl@stlouis-mo.gov until 7/27/12 @ NOON – Answers on 8/1/12
Receive Proposals from Bidder's until 12:00 PM Supply Division, 1200 Market Street-Room 324 St. Louis, MO 63103	Tuesday, August 7, 2012
Review and Award by the Supply Division	TBD (To be determined)
Issue Notice to Proceed	Upon Submittal of Approved Bonds and Insurance
Completion	Monday, November 5, 2012

00130
PROPOSAL

Project Title LED Video Wall and Related Equipment

2012 VW Project Lambert St. Louis International Airport

Gentlemen:

The undersigned, having familiarized themselves with the local conditions affecting the cost of the work and having examined the Contract Documents hereby propose to furnish all labor, materials, equipment, and services for the proper completion in a workmanlike manner of the following:

Four (4) Commercial quality large video walls for Airport Display

BID

In connection with the 2012 Video Wall and Related Equipment, project for the Owner, in accordance with the Contract documents, including all addenda issued thereto, for the sum of:

_____ Dollars (\$ _____)

* List of Recommended Spare Parts \$ _____

* Provide a List of Spare Parts & attic stock Needed for 3 years
(Include a bid price)

TOTAL BID \$ _____

ACKNOWLEDGMENT OF ADDENDA

The following addenda have been received, are hereby acknowledged, and their execution is included in the above proposal amount:

Addendum No. _____ Dated _____

Addendum No. _____ Dated _____

If awarded this contract, the undersigned agrees to commence work within seven (7) days from date of issuance of written notice of award of contract, which shall be considered as the notice to proceed.

Respectfully submitted,

(if a corporation, affix seal)

By _____

Title _____

Official Address _____

Telephone No. (____) _____

Date of Proposal _____

Lambert St. Louis International Airport

LED Video Wall and Related Equipment

00515

**APPLICATION & CERTIFICATION FOR
PAYMENT & CONTINUATION SHEETS**

Project Number _____

Project Title LED Video Wall and Related

CONTRACTOR: _____ Application Number: _____
Address: _____ Date: _____
Ordinance/Resolution Number: _____

Application for Work Accomplished Through the Date of: _____

Original Contract Price	[1] \$	_____
Net Change by Change Orders _____ through _____	[2] \$	_____
Current Contract Price (1 + 2)	[3] \$	_____
Completed Work	[4] \$	_____
Stored Material	[5] \$	_____
Total Completed and Stored to Date (4+5)	[6] \$	_____
Previous Payments	[7] \$	_____
Previous Retainage	[8] \$	_____
Total Previous Applications (7+8)	[9] \$	_____
Amount This Application (6-9)	[10] \$	_____
Less Retainage This Application	[-] [11] \$	_____
Release of Retainage	[12] \$	_____
Due This Application (10-11+12)	[13] \$	_____

Accompanying Documentation: Attached Schedule of Values

CONTRACTOR'S Certification:

The undersigned CONTRACTOR certifies that (1) all previous progress payments received from OWNER on account of Work done under the Contract referred to above have been applied on account to discharge CONTRACTOR'S legitimate obligations incurred in connection with Work covered by all prior Applications for Payment; (2) title of all Work, materials and equipment incorporated into said Work or otherwise listed in or covered by this Application for Payment will pass to OWNER at time of payment free and clear of all Liens, security interests and encumbrances. All Work covered by this Application for Payment is in accordance with the Contract Documents and not defective.

Dated: _____ CONTRACTOR

By: _____

STATE OF _____)

COUNTY OF _____)

Subscribed and Sworn to before me this ____ day of _____, _____

My commission expires: _____
Notary Public

ENGINEER'S Certification for Payment

In accordance with the Contract Documents, based on on-site observations and the data comprising this application, the Design Professional certifies to the Owner that to the best of the Design Professional's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED \$ _____

(Attach explanation if amount certified differs from the amount applied for. Initial all figures on this Application and on the Schedule of Values that are changed to conform to the amount certified.)

ENGINEER:

By: _____ Date: _____
OWNER'S Approval

The amount previously certified is approved for payment.

By: _____ Date: _____
OWNER'S Representative

Approved By: _____ Date: _____

DIVISION 1 – GENERAL REQUIREMENTS

Project Title LED Video Wall and Related Equipment
Lambert St. Louis International Airport

01000 SUMMARY OF WORK

01010.1 Work Covered by Contract Documents

- A. The Work of this Contract (LED Video Wall for Airport Display) comprises manufacture, supply and installation of four (4) large commercial-professional grade video walls located in the ticketing hall of Terminal 1 at Lambert St. Louis International Airport.
1. The design application must use a very narrow bezel between units and produce a precision alignment of the screens. This Turn-Key contact includes the removal of the existing display units for salvage by the airport and the installation of the new customized video walls using the existing "space frame" support system. The installation takes place in an active passenger – 24/7/365 ticketing area and therefore construction must be coordinated to minimize disruption to the traveling public.
- B. Execution of the Contract signifies that the contractor is fully conversant with all requirements of contract document. No claims for additional compensation will be entered or paid to the Contractor on account of his failure to be fully informed of all requirements of all documents.

01011 Contracts

- A. Construct the Work under a single unit price contract.
- B. The Contractor shall carefully examine all contract documents, existing conditions and shall include all work required for a complete project.
- C. The Contractor must be fully informed about conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve a successful bidder of his obligation to furnish all material and labor necessary to carry out the provisions of his contract.
- D. Any claim by the Contractor of an inability to meet any requirement set forth on the Contract Documents, or that any requirement of these documents is impractical or unreasonable, will not be recognized, unless the claim was made in writing at the time his proposal was submitted and specific provision is made for such claim in the Agreement between Owner and Contractor.

01020 COORDINATION

01021 Project Coordination

01021.1 General

- A. It shall be the full responsibility of the Contractor to coordinate and expedite all phases of the project work.
- B. The Contractor shall verify all dimensions shown and obtain all measurements required for proper execution of work.
- C. The Contractor shall see that conduits and similar items shall be correctly placed and are kept in their proper positions not displaced by other construction work.
- D. Before commencing work, Contractor shall examine all spaces, surfaces and areas indicated on drawings, or otherwise identified by contract documents, to receive their work. Report necessary corrections in writing immediately to the Engineer. Do not proceed until corrections (if any required) have been made. Commencing work signifies the Contractor's acceptance of said spaces, surfaces, areas and of job conditions.
- E. In case of emergency, the Contractor shall make every effort to remove the equipment and personnel from the affected area and abide by any decisions concerning equipment and personnel made by the owner or his/her representative. The Contractor shall also immediately notify the Airport Communications Center at (314) 426-8040 of any accident or emergency.
- F. The Contractor shall provide the engineer with the name(s) and telephone number(s) for contacting the Contractor at any time, 24 hours per day, for use in emergencies. The contact person(s) shall have the authority to immediately correct any safety or security deficiency caused by the Contractor or construction activities, as identified by the owner.
- G. The Contractor shall coordinate activities through the project engineer.

01021.2 Construction, Organization and Start-Up

- A. The Contractor shall establish on-site lines of authority and communications.
 - 1. Attend the pre-construction meeting.
 - 2. Attend weekly progress meetings.
 - 3. Control the use of the Site:
 - a. Monitor the use of the site during construction.
 - b. The Engineer will not be responsible for and will not have control or charge of, or have authority over the Contractor

for construction means, methods, techniques, or procedures, or for safety precautions and programs in connection with the Work, except as specified, and will not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents. The Engineer will not be responsible for or have control or charge over the acts or omissions of the Contractor, Sub-contractors or any of their agents or employees, or any other persons performing any of the Work.

01021.3 Contractor's Duties

- A. Prepare and submit schedule for Owner's review and approval at Pre-construction meeting.
- B. Process shop drawings, product data and samples.
- C. Inspect the work to assure that it is performed in accordance with requirements of contract documents.

01021.4 Contractor Close-Out Duties

- A. At completion of the work, conduct an inspection to assure that:
 - 1. Specified cleaning has been accomplished.
 - 2. Temporary facilities have been removed from the site.
- B. Substantial Completion
 - 1. Conduct an inspection to confirm a list of work to be completed or corrected after installation of each Video Wall.
 - 2. Assist Engineer in his inspection.
 - 3. Supervise the correction and completion of work as established in the Certificate of Substantial Completion.
- C. Final Completion
 - 1. When the work is complete, conduct an inspection to verify completion.
 - 2. Assist Engineer in his inspection.
- D. Administration of Contract Closeout
 - 1. Transmit final submittals to Engineer.
 - 2. Train Staff on proper operation of equipment.

END OF SECTION

01030 CUTTING AND PATCHING

01031 GENERAL

01031.1 SUMMARY

A. Section Includes:

1. Administrative requirements for cutting and patching.
2. Procedure requirements for cutting and patching.

01031.2 SYSTEM DESCRIPTION

A. General:

1. The Contractor shall be responsible for cutting, fitting, or patching required to complete the work or to make its parts fit together properly. The Contractor shall not damage any portion of work which is fully or partially completed construction of the Owner or separate contractors by cutting, altering such construction or by excavation.

B. Design Requirements:

1. Do not cut and patch construction exposed to the exterior in occupied spaces in a manner that would, in the opinion of the Owner's Representative, reduce the building's aesthetic qualities, or result in visual evidence of cutting and patching.
2. Remove and replace Work cut and patched in a visually unsatisfactory manner, to result in a condition acceptable to the Owner's Representative.

C. Performance Requirements:

1. Do not cut and patch operating elements or safety related components in a manner that would result in reducing their capacity to perform as intended, or result in increased maintenance or decreased operational life or safety.

01031.3 SUBMITTALS

A. Submit in accordance with Section 01090 unless otherwise indicated.

B. Quality Control Submittals:

1. Notification of cutting and patching.
2. Cutting and Patching Proposal: Submit written proposal in advance of cutting or alteration, describing location of affected Work, necessity for cutting or alteration, description of proposed Work and Products to be

used, alternatives to cutting and patching, effect on work of OWNER and OWNER's separate contractors, written permission of affected separate contractors, date and time cutting or alteration will be executed, and requesting approval to proceed, for Work affecting the following areas:

- a. Structural integrity of any element of Project.
- b. Efficiency, maintenance, or safety of any operational element.
- c. Visual qualities of exposed-to-view elements.

01032 PRODUCTS

01032.1 MATERIALS

A. Use materials that are identical to existing materials.

1. If identical materials are not available or cannot be used where exposed surfaces are involved, use materials that match existing adjacent surfaces to the fullest extent possible with regard to visual effect.
2. Use materials whose installed performance will equal or surpass that of existing materials.

01033.1 EXAMINATION

A. Verification of Conditions: Examine areas and conditions under which Work is to be performed and identify conditions detrimental to proper and timely completion.

1. Do not proceed until unsatisfactory conditions have been corrected.
2. Beginning of cutting or patching means acceptance of existing conditions.

01033.2 PREPARATION

A. Prior to proceeding with cutting and patching, meet with Owner's Representatives and parties involved.

1. Review areas of potential conflict and interface and coordinate procedures to eliminate conflicts.
2. Temporary Support: Provide temporary support of Work to be cut to assure structural integrity of Work and surroundings.

C. Protection: Protect existing construction during cutting and patching to prevent damage.

1. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.

01033.3 INSTALLATION

- A. Execute cutting, fitting and patching, to accomplish the following.
 - 1. Complete Work.
 - 2. Fit the several parts together, to integrate with other Work.
 - 3. Provide openings in elements of Work for penetrations of mechanical and electrical Work.
- B. Perform cutting using methods which will avoid damaging elements to be retained or adjoining construction.
- C. Execute cutting by method which avoid damage to other Work, and provide proper surfaces to receive patching and finishing.
- D. Cut rigid material using hand or small power tools designed for sawing and grinding, not hammering and chopping.
- E. Cut holes and slots neatly to size required with minimal disturbance of adjacent surfaces.
- F. Restore Work with new products in accordance with requirements of Contract Documents.
- G. Maintain integrity of floor, wall, and ceiling construction.
 - 1. Completely seal voids.
 - 2. Maintain fire-resistance or sound transmission ratings at applicable locations in conformance with governing standards.
- H. Refinish surfaces to match adjacent finishes.
 - 1. Refinish continuous surfaces to nearest intersection.
 - 2. Refinish entire unit of an assembly.
 - 3. Identify hazard substances or conditions exposed during Work to Owner's Representative for decision or remedy.

01033.4 FIELD QUALITY CONTROL

- A. Test: Perform test required by other Sections.
- B. Inspections: Arrange for inspections required by other Sections.

END OF SECTION

01060 EQUAL OPPORTUNITY FOR EMPLOYMENT (Missouri)

- A. The Contractor shall comply with all applicable provisions of the Federal Civil Rights Act and the Missouri Fair Employment Practices Act, and the violation of either shall be cause for cancellation of this contract.
- B. The Contractor and his Sub-contractor, in accordance with the Missouri Fair Employment Practices Act, to the extent such act is applicable, shall not discriminate against any employee or applicant for employment, to be employed in the performance of such contract, with respect to the hire, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment because of race, color, religion, national origin or ancestry (or age or sex, except where based on a bona fide occupational qualification).
- C. City of St. Louis requirements for MWBE.

Contract Assurance (§26.13) - The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy, as the recipient deems appropriate.

Prompt Payment (§26.29) - The prime contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than 15 days from the receipt of each payment the prime contractor receives from the City. The prime contractor agrees further to return retainage payments to each subcontractor within 15 days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the City. This clause applies to both WMDBE and non-WMDBE subcontractors.

END OF SECTION

01070 MEASUREMENT AND PAYMENT

01071 Application for Payment

- A. Submit Application for Payment to the Engineer in accord with the schedule established by Conditions of the Contract and Agreement between Owner and Contractor. Submit a pencil copy to the Engineer for review prior to submitting the final application.

END OF SECTION

01080 PROJECT MEETINGS

01081 Pre-Construction Meeting (Called by the Engineer)

- A. The Contractor and all subcontractors shall attend a pre-construction meeting at the terminal building. At the pre-construction meeting, the Contractor shall submit his/her plan of operation and schedule of work to the engineer and owner for review and approval. The Contractor's plan of operation shall indicate, in detail, the amount of construction planned and the number of shifts and/or overtime operations he/she proposes to use. His/Her schedule of work shall clearly indicate the sequence of work to be performed. The Contractor shall conform at all times with the requirements of these provisions and with current safety practices, rules, regulations and security requirements of the Lambert St. Louis International Airport.

01082 Progress and Safety/Security Meetings

- A. The Engineer shall schedule and administer progress and safety/security meetings on a weekly basis and specially called meetings at the site throughout the progress of the work to determine the degree of completion, and to expedite progress of the work and to emphasize safety/security issues.
- B. The contractor's superintendent shall attend a construction progress and safety/security meeting on a weekly basis throughout the duration of the project or as reasonably requested by the owner. The meetings will be held at a location on airport property to be designated at the pre-construction meeting.

END OF SECTION

01140 WORK RESTRICTIONS

01141 General

00141.1 Use of Premises

Use of Site: Limit use of premises to work in areas indicated. Do not disturb portions of site beyond areas in which the Work is indicated.

- A. Limits: Confine constructions operations within are defined on plans as limit of construction.
- B. Owner Occupancy: Allow for Owner occupancy of site.

01141.2 Execution

Work Sequencing

The Contractor will be performing work in continuously operating airport. Refer to specification Section 01010 – Summary for Work for additional scheduling and work sequencing requirements established in specifications.

Contractor's Staging Area

The Contractor shall limit all activities to the project site. At the conclusion of the project the staging are shall be cleared of debris, temporary materials, and other construction materials.

All staging areas shall be returned to their original condition.

01782 OPERATION AND MAINTENANCE DATA

01782.1 General

A. Summary

This Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:

1. Operation and maintenance documentation directory
2. Operation manuals for systems, subsystems, and equipment
3. Maintenance manuals for the care and maintenance of products, systems and equipment

B. Submittals

Initial Submittal: Submit 2 draft copies of each manual at least 15 days before requesting inspection for Substantial Completion. Include a complete operation and maintenance directory. Program Manager will return 1 copy of draft and mark whether general scope and content of manual are not acceptable.

Final Submittal: Submit 1 copy of each manual in final form at least 15 days before final inspection. Program Manager will return copy with comments within 15 days after final inspection.

Correct and modify each manual to comply with Program Manager's comments. Submit 3 copies of each corrected manual within 15 days of receipt of Architect/Engineer of Record comments.

C. Coordination

Where operation and maintenance documentation includes information on installations by more than factory-authorized service representative, assemble and coordinate information furnished by representatives and prepare manuals.

01782.2 Products

A. Operation and Maintenance Documentation Directory

Organization: Include a section in the directory for each of the following:

1. List of documents
2. List of systems
3. List of equipment
4. Table of contents

B. MANUALS, GENERAL

Organization: Unless otherwise indicated, organize each manual into a separate section, system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:

1. Title Page
2. Table of contents
3. Manual contents

Title Page: Enclose title page in transparent plastic sleeve. Include the following information:

- a. Subject matter included in manual
- b. Name and address of Project
- c. Name and address of Owner
- d. Date of submittal
- e. Name, address, and telephone number of Contractor
- f. Name and address of Architect/Engineer of Record
- g. Cross-reference to related systems in other operation and maintenance manual

Table of Contents: List each product included in manual, identified by product name, the content of the volume.

If operation or maintenance documentation requires more than one volume to accommodate include comprehensive table of contents for all volumes in each volume of the set.

Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems and components of one system into a single binder.

Binders: Heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch (115-by-280-mm) paper; with sleeve on spine to hold label describing contents and with pockets inside covers to hold oversize sheets.

Content: In addition to requirement sin this Section, include operation date required in individual Specification Sections and the following information:

1. System, subsystem, and equipment descriptions.
2. Performance and design criteria if Contractor is delegated design responsibility
3. Operating standards

4. Operating procedures
5. Operating logs
6. Wiring diagrams
7. Control diagrams
8. Precautions against improper use
9. License requirements including inspection and renewal dates.

Descriptions: Include the following:

1. Product name and model number
2. Manufacturer's name
3. Equipment identification with serial number of each component
4. Equipment function
5. Operating characteristics
6. Limiting conditions
7. Performance curves
8. Engineering data and tests
9. Complete nomenclature and number of replacement parts

Operating Procedures: Include the following, as applicable:

1. Startup procedures
2. Equipment or system break-in procedures
3. Routine and normal operating instructions
4. Regulation and control procedures
5. Instructions on stopping
6. Normal shutdown instructions
7. Required sequences for electric and electronic systems

Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed

C. PRODUCT MAINTENANCE MANUAL

Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.

Product Information: Include the following, as applicable:

1. Product name and model number
2. Manufacturer's name

Maintenance Procedures: Include manufacturer's written recommendations and the following:

1. Inspection procedures

2. Types of cleaning agents to be used and methods of cleaning
3. List of cleaning agents and methods of cleaning detrimental to product
4. Schedule for routine cleaning and maintenance
5. Repair instructions

Repair Materials and Sources: Include lists of materials and local sources of materials and related services.

Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

Include procedures to follow and required notifications for warranty claims.

D. SYSTEMS AND EQUIPMENT MAINTENANCE MANUAL

Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.

Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:

Revise list below to suit Project.

1. Standard printed maintenance instructions and bulletins
2. Drawing, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly
3. Identification and nomenclature of parts and components
4. List of items recommended to be stocked as spare parts

Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:

Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.

Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds. Include procedures to follow and required notifications for warranty claims.

01782.3 Execution

A. MANUAL PREPARATION

Operation and Maintenance Documentation Directory: Prepare a separate manual that provides an organized reference to emergency, operation, and maintenance manuals.

Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material and finish incorporated in the Work.

Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.

1. Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
2. Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by Owner's operating personnel.

Manufacturers' Data: Where manuals contain manufacturer' standard printed data, include only sheets pertinent to product of component installed. Mark each sheet to identify each product or component incorporated into the Work. If data included more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.

1. Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.

DIVISION II - EQUIPMENT

Project Title LED Video Wall and Related Equipment
Lambert St. Louis International Airport

02000 GENERAL

02000.1 Description:

A. Commercial Video Wall for Airport Display

1. Work shall consist of furnishing all labor, equipment, supplies and materials, unless otherwise specified, necessary for the installation of complete turn-key large LED video wall. The work shall also include the completion of those details of electrical work not mentioned or shown which are necessary for the successful operation.
2. Drawings are diagrammatic, but shall be followed as closely as actual construction of the building will permit?
3. NFPA 70 – National Electrical Code (NEC)
4. International Building Code
5. Definitions: "Provide" shall mean "furnish and install". "Furnish" means to supply all materials, labor, equipment, testing apparatus, controls, tests, accessories and all other items customarily required for the proper and complete application. "Install" means to join, unit, fasten, link, attach, set up or otherwise connect together before testing and turning over to Owner, complete and ready for regular operation.

B. Drawings:

1. The drawings indicate the general arrangement. Information shown on the drawings is schematic.
2. Each bidder shall examine the bidding documents carefully, and not later than 10 days prior to the date of receipt of bids, shall make written request to the City for interpretation or correction of any discrepancies, ambiguity, inconsistency, or error therein which he may discover. Any interpretation or correction will be issued as an addendum. Only a written interpretation or correction by addendum shall be binding.

02000.2 Permits, Fees & Notices

- A. Obtain and pay for all necessary permits, inspections and certificates that may be necessary for the full completion of the work.**

02000.3 Tests

- A. Upon completion of all work and adjustment of all equipment, provide complete operational tests of all electrical equipment provided under this division.

02000.4 Warranty

- A. Guarantee that all work shall be free of defects in workmanship, materials and parts for a period of one (1) year after written acceptance. Promptly repair, revise, and replace defects as directed with no additional cost to the Owner.

02000.5 Record Drawings

- A. Maintain a current set of electrical drawings at the site. Neatly mark all changes and deviations from the original drawings.

02000.6 Projective Conditions

- A. Prior to submitting a bid, visit the site of job and ascertain all conditions affecting the proposed installation and adjust all work accordingly. Make provisions for these costs.

02001 GENERAL

02001.1 Standards for Materials

- A. All materials shall conform to current applicable industry standards. Workmanship and neat appearance shall be as important as the electric operation.
- B. Listing of Equipment: The Contractor shall submit, within thirty days after the award of the contract, a complete typewritten list of items of equipment which will be furnished under this contract. Include the name or description of the item, name of manufacturer, model, type, and catalog number.
- C. Present shop drawing submittal data at one time, bound in three-ring binders, indexed in a neat and orderly manner. Partial submittals will not be accepted.
- D. Submit five (5) copies of shop drawings and layouts.
- E. Processed shop drawings shall not be construed as change orders. The shop drawings shall demonstrate that the Contractor understands the design concept, indicate which equipment and materials he intends to provide, and detail the fabrication and installation methods he intends to use.
- F. Contractor shall be responsible for dimensions (which he shall confirm and correlate at the job site). The Contractor shall check and verify all measurements and review shop drawings before submitting them and sign a statement on the shop drawings which signifies that they are suitable for the application.

02002 EXECUTION

02002.1 Workmanship and Completion of Installation

- A. Contractor's personnel and subcontractors selected to perform the work shall be well versed and skilled in the trades involved.
- B. Coordinate electrical equipment and materials installation with other building components.
- C. Upon completion of work, all equipment and materials shall be installed complete, thoroughly checked, correctly adjusted, and left ready for intended use or operation. All work shall be thoroughly cleaned and all residue shall be removed from surfaces. Exterior surfaces of all material and equipment shall be delivered in a perfect, unblemished condition.
- E. Contractor shall provide a complete installation, including all required labor, insurance, permits, and taxes.

02003 PRODUCTS

02003.1 The basis of design for LED Video Display Unit is NEC Monitors X463UN:

- A. Monitors are proposed in landscape format consisting of four (4) rows and seven (7) columns creating a maximum of twenty eight (28) monitors for each of four (4) video walls. The Airport concept assumes a maximum total of one hundred and twelve (112) monitors for video wall, plus four (4) monitors for attic stock for a grand total of (114) monitors.
- B. The primary use of the video wall is MUFIDS Multi-User Flight Information Display System. The provider of the monitors must be completely compatible with the current MUFIDS operating system. It is envisioned that the 28 monitors (video wall) will be configured to use all or part of the total surface to display flight information, general, airport information, or advertising.
- C. Basis of Design (See Page 4)
- D. The right 12 Departure Monitors and left 12 Arrivals Monitors would both be fed from one pc DVI port for each bank with a DVI splitter amplifier and DVI daisy chain option along with using the monitor's built-in software to "tile" the image across the 12 monitors of each FIDS display. The middle column of 4 monitors would use one pc with a quad video card to drive them directly.
- E. The Monitors can be controlled with a standard 10/100 mb Ethernet connection. AIT has a program running on a server to send the power off and power on signal to each NEC monitor currently in service every night and any substitution monitor vendor would be required to provide the code to accomplish this automated power management feature from a central server.

- G. The ability to create a single video wall from one PC DVI video source without external equipment (other than a signal splitter/AMP). This is accomplished by the built-in Tilematrix system in each of the NEC monitors along with the addition of a DVI 1 to 4 signal splitter and amplifier. AIT requires that each video wall will operate as one big display and the proposed TILEmatrix implementation would reduce the number of computers in the system with Quad video cards from 24 to 8 computers with standard DVI output.

Basis of Design – Video Wall Monitor

	Specifications	MODEL X463UN
LCD MODULE	A. Panel Technology	SPVA (P-DID)
	B. Viewable Image Size	46"
	C. Native Resolution	1920 x 1080
	D. Brightness (Typical)	500 cd/m ²
	E. Contrast Ratio (Typical)	3500:1
	F. Viewing Angle	178° Vert., 178° Hor. (89U/89D/89L/89R) @ CR>10
	G. Response Time (white to black)	8ms
	H. Aspect Ratio	16:9
	I. Active Screen Area (W x H)	40.1 x 22.5 in. / 1018.1 x 572.7mm
	J. Orientation	Landscape/Portrait
	K. Displayable Colors	More than 16.7 million
CONNECTIVITY	A. PC/Mac Signal Compatibility	Yes
	B. Input Terminals	
	1. Digital	Display Port, HDMI, DVI-D
	2. Analog	VGA 15-pin D-sub, 5 BNC (RGBHV, DVD/HD or Video), BNC Composite, S-Video
	3. Audio	RCA Audio, Stereo Mini-Jack (2), HDMI Audio
	4. External Control	RS-232C, IR Remote
POWER CONSUMPTION	A. On (Typical)	120W
	B. ECO Mode Standby	<1W
PHYSICAL SPECIFICATIONS	A. Bezel Width (L/R, T/B)	0.15 in./0.075 in., 0.15 in./0.075 in.; 3.8mm/1.9mm,3.8mm/1.9mm
	B. Net Dimensions (without stand; WxHxD)	40.3 x 22.8 x 4.6 in. / 578.6 x 1024 x 118.1mm
	C. Net Weight (without stand)	53.6 lbs. / 24.3 kg
	D. VESA Hole Configuration	300 x 300mm (4-hole)
ENVIRONMENTAL CONDITIONS	A. Operating Temperature	41-104°F / 5-40°C
	B. Operating Humidity	20 – 80%
	C. Operating Altitude	13,780 ft. / 4200m
LIMITED WARRANTY	3 years parts and labor, including backlight*	