

CITY OF KNOXVILLE
REQUEST FOR PROPOSALS
Fall Arrest System

Proposals to be Received by 11:00:00 a.m., Eastern Time
July 21, 2017

Submit Proposals to:
City of Knoxville
Office of Purchasing Agent
City/County Building
Room 667-674
400 Main Street
Knoxville, Tennessee 37902

**CITY OF KNOXVILLE
Request for Proposals**

Fall Arrest System

Table of Contents

Item	Page Number
Statement of Intent	3
RFP Timeline	3
Background	3
General Conditions	4
Scope of Service	5
Contract Requirements.....	8
Instructions to Submitting Entities	15
Evaluation Criteria.....	18
Submission Forms.....	20
Appendix.....	31

**City of Knoxville
Request for Proposals**

Fall Arrest System

I. Statement of Intent

The City of Knoxville is requesting proposals from responsible firms or teams to design, fabricate, and install a fall arrest system for the interior ceiling of the Knoxville Civic Coliseum. Note that only those submissions from Contractors who have teamed or will team with a properly licensed structural engineer or engineering firm will be accepted.

II. RFP Time Line

Availability of RFPJune 30, 2017

Mandatory Pre-proposal Site Visit.....July 11, 2017

Time and Location: 10:00 a.m. at the Knoxville Civic Coliseum; 500 E. Church Avenue; Knoxville, Tennessee. Attendees will convene in the lobby and move to the arena.

Deadline for questions to be submitted in writing to the
Purchasing Agent July 13, 2017

Proposals Due DateJuly 21, 2017

IMPORTANT NOTICE: Proposers are advised that the pre-proposal conference/site visit scheduled for July 11, 2017, is **mandatory**. Proposers who have not had representation at the pre-proposal meeting will not be considered for award.

This timetable is for the information of submitting entities. These dates are subject to change. **However, in no event shall the deadline for submission of the proposals be changed except by written modification from the City of Knoxville Purchasing Division.**

III. Background

At present, the Knoxville Civic Coliseum has a non-certified fall arrest system (FAS) that the City wishes to replace with a certified fall arrest system.

A structural evaluation of the roof framing over the Coliseum area was performed in 2011. The resulting report made recommendations as to rigging load tolerances; that report may be found in the Appendix. Note that the report is provided to potential proposers as a point of departure only and is not intended to obviate the need for a thorough evaluation of the present condition of the Coliseum roof framing by the awarded Contractor.

The Appendix also contains:

1. Drawings of east/west length of roof arches; roof framing; and beam, column, and joist schedules.
2. A dasher layout for the project site.
3. Laser measurements of the arena from floor to ceiling, measured from east to west.

IV. General Conditions

4.1 The following data is intended to form the basis for submission of proposals to provide professional services for the Knoxville Civic Coliseum fall arrest system.

4.2 This material contains general conditions for the procurement process, the scope of service requested, contract requirements, instructions for submissions of proposals, and submission forms that must be included in the proposal. The RFP should be read in its entirety before preparing the proposal.

4.3 All materials submitted pursuant to this RFP shall become the property of the City of Knoxville.

4.4 To the extent permitted by law, all documents pertaining to this Request for Proposals shall be kept confidential until the proposal evaluation is complete and a recommendation submitted to City Council for review. No information about any submission of proposals shall be released until the process is complete, except to the members of the Evaluation Committee and other appropriate City staff. All information provided shall be considered by the Evaluation Committee in making a recommendation to enter into an agreement with the selected consultant.

4.5 Any inquiries, suggestions or requests concerning interpretation, clarification or additional information pertaining to the RFP shall be made **in writing and be in the hands of the Assistant Purchasing Agent by the close of the business day on July 13, 2017**. Questions can be submitted by letter, fax (865-215-2277), or email to jmcclelland@knoxvilletn.gov. The City of Knoxville is not responsible for oral interpretations given by any City employee, representative, or others. The issuance of written addenda is the only official method whereby interpretation, clarification, or additional information can be given. If any addenda are issued to this Request for Proposals, the Purchasing Division will post them to the City's website at www.knoxvilletn.gov/purchasing. Submitting organizations are strongly encouraged to view this website often to see if addenda are posted. Failure of any proposer to receive such addendum or interpretation shall not relieve such Proposer from any obligation under his proposal as submitted. All addenda so issued shall become part of the Contract Documents.

4.6 The City of Knoxville reserves the right to (a) accept or reject any and/or all submissions of proposals; (b) to waive irregularities, informalities, and technicalities; and (c) to accept any alternative submission of proposals presented which, in its opinion, would best serve the interests of the City. The City shall be the sole judge of the proposals, and the resulting negotiated agreement that is in its best interest, and its decision shall be final. The City also reserves the right to make such investigation as it deems necessary to determine the ability of any submitting entity to perform the work or service requested. Information the City deems necessary to make this determination shall be provided by the submitting entity. Such information may include, but

is not limited to, current financial statements by an independent CPA, verification of availability of equipment and personnel, and past performance records.

4.7 Included in the Contract Documents is an affidavit that the undersigned has not entered into any collusion with any person with respect to this proposal. The proposer is required to submit this affidavit with their proposal submission.

4.8 Subsequent to the Evaluation Committee's review and the Mayor's recommendation of a firm(s), Knoxville City Council approval may be required before the final contract may be executed.

4.9 All expenses for making a submission of proposal shall be borne by the submitting entity.

4.10 Any submission of proposals may be withdrawn up until the date and time for opening of the submissions. **Any submission not so withdrawn shall, upon opening, constitute an irrevocable offer for a period of 120 days to the City of Knoxville for the services set forth in the Request for Proposals until one or more of the submissions have been duly accepted by the City.**

4.11 Prior to submitting their proposals, proposers are to be registered with the Purchasing Division by setting up a Vendor Self-Service Account. Instructions for registering on-line are available at www.knoxvilletn.gov/purchasing. **Proposals from un-registered proposers may be rejected.**

4.12 **NO CONTACT POLICY:** After the posting of this solicitation to the Purchasing Division's website, any contact initiated by any proposer with any City of Knoxville representative concerning this proposal is strictly prohibited, unless such contact is made with the Purchasing Division representative listed herein or with said representative's authorization. Any unauthorized contact may cause the disqualification of the proposer from this procurement transaction. Proposals must include a notarized No Contact/No Advocacy Affidavit (to be found in the "Submission Forms" section of this document).

4.13 **INCLEMENT WEATHER:** During periods of inclement weather, the Purchasing Division will enact the following procedures with regard to solicitations and weather delays:

- If City offices are closed due to inclement weather on the date that bids/proposals/qualifications/letters of interest are due into the Purchasing Office, all solicitations due that same day will be moved to the next operational business day.
- The City of Knoxville shall not be liable for any commercial carrier's decision regarding deliveries during inclement weather.

V. Contractor Requirements and Scope of Service

5.1 Contractor Requirements

Contractor shall have no fewer than five (5) years of experience in designing, fabricating, and installing fall arrest systems in arena/entertainment venues. **Submission must contain**

references with current contact information for no fewer than five (5) comparable design/installations in an arena environment.

Important Note: Because the City expects that a structural inspection and analysis of the Coliseum roof will be a part of the ultimate Scope of Service, the City will consider for this project only those submissions from Contractors who have teamed/subcontracted or will team/subcontract with an engineer or engineering firm licensed as a professional service firm in the State of Tennessee. **Such a relationship must be affirmed by submission of a fully executed "Licensure Affidavit of Prime Proposer" found in the Submission Forms section of this solicitation document.** Proposal must include license information and resume of the proposed engineer. Contractor must use the services of the proposed engineer unless Contractor has written approval to do so by the City of Knoxville. Furthermore, proposed engineer for the awarded contractor will be required to provide the City with approved evidence of Professional Liability/Errors & Omissions insurance coverage as specified herein (see Paragraphs 6.26 below).

Do note that the proposal requires a cost proposal. Since certain design professionals are prohibited from quoting pricing, such professionals will need to team/sub-contract with and FAS specialist who will be the lead proposer.

5.2 Project Procedure

The process by which the contractor will be selected and the project accomplished shall be as follows. More information regarding milestones is outlined in Paragraph 5.7.

1. Evaluation of Proposal: Proposal shall offer a basic design, offering a solution that best meets the system requirements outlined in Paragraph 5.3; award will be based upon this basic design and other evaluation criteria outlined in Section VIII below;
2. Awarded contractor shall work with a properly licensed structural engineer or engineering firm to determine the structural loadbearing capacity of the arena roof and provide a report of those findings to the City.
 - A. If the structural analysis concludes that the arena can adequately support the fall protection loads, or can be made to support the fall protection loads with the application of supplemental structural steel, the City will determine if the project will proceed to a preliminary design.
 - B. If the structural analysis concludes that the arena cannot support, or cannot be made to support, the fall protection loads, the City will decide at that time if the project is to proceed further. If the City elects to stop the project, the contractor shall be paid for the structural analysis/report at the contracted price for that project milestone and the contract terminated.
3. The City may or may not ask for modifications to the preliminary design;
4. A final design, signed and stamped by a properly licensed engineer, will be submitted to the City;
5. Installation of the FAS;
6. Training; and
7. Final acceptance of the contracted product and services by the City.

5.3 General Project Information

1. The contractor will be permitted to drive fork lifts and boom lifts onto the ice surface during installation.
2. The quantity of user equipment to be provided is ten.
3. Because of scheduling commitments, the City cannot guarantee uninterrupted access to the arena during normal business hours for the duration of the installation. The City anticipates, however, that the arena will be largely available through the month of September.

5.4 System Requirements

The City desires the design, fabrication, and installation of a fall arrest system (FAS) for the Knoxville Civic Coliseum.

1. The FAS shall be OSHA compliant and shall be fall arrest by design;
2. The FAS shall be primarily a horizontal lifeline system;
3. Contractor shall furnish and install supplementary structural steel for direct support of the FAS;
4. Main cables shall be equipped with "hands free" capability, eliminating the need for workers to detach at intermediate supports;
5. All cables shall be designed for two (2) users per sub-span;
6. Contractor shall provide one set of rescue equipment;
7. If system requires a special devise to attach to the life line, Contractor shall provide adequate lanyards with the appropriate attachment to accommodate 10 riggers.

The City is contemplating the feasibility of building a new arena; the awarded Contractor will therefore be able to design a system for which some or all of the installed materials/components can be moved to the new arena.

5.5 Timetable

Proposal must include a timetable showing the number of days necessary to provide each of the deliverables to the City (see following paragraph); timetable must be expressed in number of days following issuance of the City's Notice to Proceed. The City will consider the timetable to be provisional in the event that scheduling of the arena requires adjustment to the timetable.

5.6 Pricing

Project pricing shall be broken down by project milestones, as outlined in Paragraph 5.7 below.

5.7 Project Milestones

The structural analysis and report are key to whether or not the project can proceed through all milestones listed below to project completion. Milestones for an approved system shall include, at minimum, the following:

1. Structural Analysis and Report. Report must confirm that the existing roof structure has

- the ability to resist the applied loads or recommend what structural steel additions would be necessary to bring the roof structure to the appropriate loadbearing capacity.
2. Preliminary Design. Preliminary design shall be subject to revision and re-submission to the City.
 3. Final Design. The final design will include all City-approved changes made to the preliminary design. Drawings of final design must be signed and stamped by an engineer properly licensed in the State of Tennessee.
 4. Installation of the FAS.
 5. Training. Contractor to provide to City personnel no less than one (1) full business day of training in proper use, care, and maintenance of the FAS. Contractor also shall provide written rescue procedures and training of City personnel in rescue plan.

VI. Contract Requirements

Submitting entities, if selected, must be willing to sign a contract with the City which will include certain provisions, among which are the following:

- 6.1 Contract Documents. The contract shall consist of (1) the RFP; (2) the proposal submitted by the contractor to this RFP; and (3) the contract. In the event of a discrepancy between the contract, the RFP and the submitted proposal, the terms that provide the greater benefit to the City and/or impose the greater obligation to the contractor will prevail.
- 6.2 Administration. The contract will be administered by the manager of the City of Knoxville Public Assembly Facilities or designee.
- 6.3 Invoices. Invoices for services will be submitted to the City in accordance with the contract terms.
- 6.4 Independent Contractor. The relationship of contractor to the City will be that of independent contractor. The contractor will be solely and entirely responsible for its acts and for the acts of its agents, employees, servants and subcontractors done during the performance of the contract. All services performed by the contractor shall be provided in an independent contractor capacity and not in the capacity of officers, agents, or employees of the City.
- 6.5 Assignment. The contractor shall not assign or transfer any interest in this contract without prior written consent of the City of Knoxville.
- 6.6 Indemnification and Hold Harmless. The successful proposer will be required to sign a contract with the City which contains the following indemnification clause. This indemnification clause will not be altered in any way. Failure to agree with this indemnification clause in the contract may result in the City moving to the next responsible responsive proposer.

Contractor shall defend, indemnify and hold harmless the City, its officers, employees and agents from any and all liabilities which may accrue against the City, its officers, employees and agents or any third party for any and all lawsuits, claims, demands, losses or damages alleged to have arisen from an act or omission of Contractor in performance of this Agreement or from Contractor's failure to perform this Agreement using ordinary care and skill, except where such

injury, damage, or loss was caused by the sole negligence of the City, its agents or employees.

Contractor shall save, indemnify and hold the City harmless from the cost of the defense of any claim, demand, suit or cause of action made or brought against the City alleging liability referenced above, including, but not limited to, costs, fees, attorney fees, and other expenses of any kind whatsoever arising in connection with the defense of the City; and Contractor shall assume and take over the defense of the City in any such claim, demand, suit, or cause of action upon written notice and demand for same by the City. Contractor will have the right to defend the City with counsel of its choice that is satisfactory to the City, and the City will provide reasonable cooperation in the defense as Contractor may request. Contractor will not consent to the entry of any judgment or enter into any settlement with respect to an indemnified claim without the prior written consent of the City, such consent not to be unreasonably withheld or delayed. The City shall have the right to participate in the defense against the indemnified claims with counsel of its choice at its own expense.

Contractor shall save, indemnify and hold City harmless and pay judgments that shall be rendered in any such actions, suits, claims or demands against City alleging liability referenced above.

The indemnification and hold harmless provisions of this Agreement shall survive termination of the Agreement.

6.7 Termination. The City may terminate this Agreement at any time, with or without cause, by written notice of termination to the Contractor.

If the City terminates this Agreement, and such termination is not a result of a default by the Contractor, the Contractor shall be entitled to receive as its sole and exclusive remedy the following amounts from the City, and the City shall have no further or other obligations to the Contractor: the amount due to the Contractor for work executed through the date of termination, not including any future fees, profits, or other compensation or payments which the Contractor would have been entitled to receive if this Agreement had not been terminated.

The City may, by written notice of default to the Contractor, terminate the whole or any part of this Agreement if the Contractor fails to perform any provisions of this Agreement and does not cure such failure within a period of ten (10) days (or such longer period as the Purchasing Agent may authorize in writing) after receipt of said notice from the Purchasing Agent specifying such failure. If this Agreement is terminated in whole or in part for default, the City may procure, upon such terms and in such manner as the Purchasing Agent may deem appropriate, supplies or services similar to those terminated.

6.8 Insurance. When applicable and prior to the commencement of the contract, contractor must, at its sole expense, obtain and maintain in full force and effect for the duration of the Agreement and any extension hereof at least the following types and amounts of insurance for claims which may arise from or in connection with this Agreement. Contractor shall furnish the City of Knoxville with properly executed certificates of insurance which shall clearly evidence all insurance required by the City. All insurance must be underwritten by insurers with an A.M. Best rating of A-VIII or better. Such insurance shall be at a minimum the following:

- A. **Commercial General Liability Insurance;** occurrence version commercial general liability insurance, and if necessary umbrella liability insurance, with a limit of not less than two million dollars each occurrence for bodily injury, personal injury, property damage, and products and completed operations. If such insurance contains a general aggregate limit, it shall apply separately to the work/location in this Agreement or be no less than \$3,000,000.

Such insurance shall:

(a.) Contain or be endorsed to contain a provision that includes the City, its officials, officers, employees, and volunteers as additional insureds with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts, or equipment furnished in connection with such work or operations. The coverage shall contain no special limitations on the scope of its protection afforded to the above-listed insureds. Proof of additional insured status up to and including copies of endorsements and/or policy wording will be required.

(b.) For any claims related to this project, Contractor's insurance coverage shall be primary insurance as respects the City, its officers, officials, officers, employees, and volunteers. Any insurance or self-insurance programs covering the City, its officials, officers, employees, and volunteers shall be excess of Contractor's insurance and shall not contribute with it.

(c.) At the sole discretion of the City, dedicated limits of liability for this specific project may be required.

- B. **Automobile Liability Insurance;** including vehicles owned, hired, and non-owned, with a combined single limit of not less than \$1,000,000 each accident. Such insurance shall include coverage for loading and unloading hazards. Insurance shall contain or be endorsed to contain a provision that includes the City, its officials, officers, employees, and volunteers as additional insureds with respect to liability arising out of automobiles owned, leased, hired, or borrowed by or on behalf of Contractor.

- C. **Workers' Compensation Insurance.** Contractor shall maintain workers' compensation insurance with statutory limits as required by the State of Tennessee or other applicable laws and employers' liability insurance with limits of not less than \$500,000. Contractor shall require each of its subcontractors to provide Workers' Compensation for all of the latter's employees to be engaged in such work unless such employees are covered by Contractor's workers' compensation insurance coverage.

- D. **Other Insurance Requirements.** Contractor shall:

- Prior to commencement of services, furnish the City with original certificates and amendatory endorsements effecting coverage required by this section and provide that

such insurance shall not be cancelled, allowed to expire, or be materially reduced in coverage except on 30 days' prior written notice to the City Attorney of Knoxville; P.O. Box 1631; Knoxville, Tennessee 37901. Proof of policy provisions regarding notice of cancellation will be required.

- Upon the City's request, provide certified copies of endorsements and policies if requested by the City in lieu of or in addition to certificates of insurance. Copies of policies will only be requested when contracts are deemed to be extremely or uniquely hazardous, include a dollar amount that is significant to the overall budget of the City or a City Department, or the coverage(s) may not follow standard insurance forms. A policy will only be requested after the City's Risk Manager has reviewed the contract and proof of coverage has been provided. Should the certificate of insurance refer to specific coverage wording or endorsements(s), proof of such policy wording or endorsement(s) will be required.
- Replace certificates, policies, and endorsements for any such insurance expiring prior to completion of services.
- Maintain such insurance from the time services commence until services are completed. Failure to maintain or renew coverage or to provide evidence of renewal may be treated by the City as a material breach of contract.
- If Contractor cannot procure insurance through an insurer having an A.M. Best rating of A-VIII, Contractor may, in the alternative, place such insurance with insurer licensed to do business in Tennessee and having A.M. Best Company ratings of no less than A. Modification of this standard may be considered upon appeal to the City Law Director.
- Require all subcontractors to maintain during the term of the Agreement Commercial General Liability insurance, Business Automobile Liability insurance, and Workers' Compensation/Employer's Liability insurance (unless subcontractor's employees are covered by Contractor's insurance) in the same manner as specified for Contractor. Contractor shall furnish subcontractors' certificates of insurance to the City without expense immediately upon request.
- Large Deductibles; Self-Insured Retentions. Any deductibles and/or self-insured retentions greater than \$50,000 must be disclosed to and approved by the City of Knoxville prior to the commencement of services. Use of large deductibles and/or self-insured retentions may require proof of financial ability as determined by the City.
- Waiver of Subrogation Required. The insurer shall agree to waive all rights of subrogation against the City, its officers, officials, and employees for losses arising from work performed by Contractor for the City. Proof of waiver of subrogation up to and including copies of endorsements and/or policy wording will be required.

- Occurrence Basis Requirement. All general liability policies must be written on an occurrence basis, unless the Risk Manager determines that a claims made basis is reasonable in the specific circumstance. Use of policies written on a claims made basis must be approved by the City. Risk Manager and retroactive dates and/or continuation dates must be provided to the City prior to commencement of any work performed. Professional Liability and Environmental Liability (Pollution Coverage) are most commonly written on a claims made basis and are generally acceptable in that form.

6.9 Ethical Standards. Attention of all firms is directed to the following provisions contained in the Code of the City of Knoxville: Chapter 24, Article II, Section 24-33 entitled “Debts owed by persons receiving payments other than Salary;” Chapter 2, Article VIII, Division 11. the Contractor hereby takes notice of and affirms that it is not in violation of, or has not participated, and will not participate, in the violation of any of the following ethical standards prescribed by the Knoxville City Code:

A. Section 2-1048. Conflict of Interest.

It shall be unlawful for any employee of the city to participate, directly or indirectly, through decision, approval, disapproval, recommendation, preparation of any part of a purchase request, influencing the content of any specification or purchase standard, rendering of advice, investigation, auditing or otherwise, in any proceeding or application, request for ruling or other determination, claim or controversy or other matter pertaining to any contract or subcontract and any solicitation or proposal therefore, where to the employee’s knowledge there is a financial interest possessed by:

- (1) the employee or the employee’s immediate family;
- (2) A business other than a public agency in which the employee or member of the employee’s immediate family serves as an officer, director, trustee, partner or employee; or
- (3) Any person or business with whom the employee or a member of the employee’s immediate family is negotiating or has an arrangement concerning prospective employment.

B. Section 2-1049. Receipt of Benefits from City Contracts by Council Members, Employees and Officers of the City.

It shall be unlawful for any member of council, member of the board of education, officer or employee of the city to have or hold any interest in the profits or emoluments of any contract, job, work or service, either by himself or by another, directly or indirectly. Any such contract for a job, work or service for the city in which any member of council, member of the board of education, officer or employee has or holds any such interest is void.

C. Section 2-1050. Gratuities and Kickbacks Prohibited.

It is unlawful for any person to offer, give or agree to give to any person, while a city employee, or for any person, while a city employee, to solicit, demand, accept or agree to accept from another person, anything of a pecuniary value for or because of:

- (1) An official action taken, or to be taken, or which could be taken;
- (2) A legal duty performed, or to be performed, or which could be performed; or
- (3) A legal duty violated, or to be violated, or which could be violated by such

person while a city employee.

Anything of nominal value shall be presumed not to constitute a gratuity under this section.

Kickbacks. It is unlawful for any payment, gratuity, or benefit to be made by or on behalf of a subcontractor or any person associated therewith as an inducement for the award of a subcontract or order.

D. Section 2-1051. Covenant Relating to Contingent Fees.

(a) Representation of Contractor. Every person, before being awarded a contract in excess of ten thousand dollars (\$10,000.00) with the city, shall represent that no other person has been retained to solicit or secure the contract with the city upon an agreement or understanding for a commission, percentage, brokerage or contingent fee, except for bona fide employees or bona fide established commercial, selling agencies maintained by the person so representing for the purpose of securing business.

(b) Intentional Violation Unlawful. The intentional violation of the representation specified in subsection (a) of this section is unlawful.

E. Section 2-1052. Restrictions on Employment of Present and Former City Employees.

Contemporaneous employment prohibited. It shall be unlawful for any city employee to become or be, while such employee, an employee of any party contracting with the particular department or agency in which the person is employed.

For violations of the ethical standards outlined in the Knoxville City Code, the City has the following remedies:

- (1) Oral or written warnings or reprimands;
- (2) Cancellation of transactions; and
- (3) Suspension or debarment from being a Contractor or subcontractor under city or city-funded contracts.

The value of anything transferred in violation of these ethical standards shall be recoverable by the City from such person. All procedures under this section shall be in accord with due process requirements, included but not limited to a right to notice and hearing prior to imposition of any cancellation, suspension or debarment from being a Contractor or subcontractor under a city contract.

6.10 Firms must comply with the President's Executive Order No. 11246 and 11375 which prohibit discrimination in employment regarding race, color, religion, sex or national origin. Firms must also comply with Title VI of the Civil Rights Act of 1964, Copeland Anti-Kick Back Act, the Contract Work Hours and Safety Standards Act, Section 402 of the Vietnam Veterans Adjustment Act of 1974, Section 503 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990, all of which are herein incorporated by reference.

6.11 Firms shall give consideration to the inclusion of minority firms or individuals in this project, and shall advise the city in this proposal of their efforts to do so.

6.12 Firms shall give consideration to the use of environmentally sustainable best practices, and shall advise the city in this submittal of qualifications of their efforts to do so.

6.13 Federal, State, and Local Requirements. Each submitting entity is responsible for full compliance with all laws, rules and regulations which may be applicable.

6.14 Licenses. Before a contract is signed by the City, the submitting entity, if selected, **must** provide the City Purchasing Division with a copy of its valid business license **or** with an affidavit explaining why it is exempt from the business licensure requirements of the city or county in which it is headquartered. If a contract is signed, the contractor's business license shall be kept current throughout the duration of the contract, and the contractor shall inform the City of changes in its business name or location. The contractor must be a licensed professional as required by the state of Tennessee, see T.C.A. Sections 62-2-101 et. seq., for any services in this contract requiring such licensure.

6.15 Funding. The City's performance and obligation to pay under this contract is subject to funding contingent upon an annual appropriation.

6.16 Governing Law and Venue. This Agreement shall be governed by and construed in accordance with the substantive laws of the State of Tennessee and its conflict of laws provisions. Venue for any action arising between the City and the Contractor from the Agreement shall lie in Knox County, Tennessee.

6.17 Subcontracts to the Agreement. Contractor shall not enter into a subcontract for any of the services performed under this Agreement without obtaining the prior written approval of the City.

6.18 Amendments. This Agreement may be modified only by a written amendment or addendum that has been executed and approved by the appropriate officials shown on the signature page of the Agreement.

6.19 Captions. The captions appearing in the Agreement are for convenience only and are not a part of the Agreement; they do not in any way limit or amplify the provisions of the Agreement.

6.20 Severability. If any provision of the Agreement is determined to be unenforceable or invalid, such determination shall not affect the validity of the other provisions contained in the Agreement. Failure to enforce any provision of the Agreement does not affect the rights of the parties to enforce such provision in another circumstance, nor does it affect the rights of the parties to enforce any other provision of this Agreement at any time.

6.21 No Benefit for Third Parties. The services to be performed by the Contractor pursuant to the Agreement with the City are intended solely for the benefit of the City, and no benefit is conferred hereby, nor is any contractual relationship established herewith, upon or with any person or entity not a party to the Agreement. No such person or entity shall be entitled to rely on the Contractor's performance of its services hereunder, and no right to assert a claim against

the City or the Contractor, its officers, employees, agents, or contractors shall accrue to the Contractor or to any subcontractors, independently retained professional consultant, supplier, fabricator, manufacturer, lender, tenant, insurer, surety, or any other third party as a result of this Agreement or the performance or non-performance of the Contractor's services hereunder.

6.22 Non-Reliance of Parties. Parties explicitly agree that they have not relied upon any earlier or outside representations other than what has been included in the Agreement. Furthermore, neither party has been induced to enter into this Agreement by anything other than the specific written terms set forth herein.

6.23 Force Majeure. Neither party shall be liable to the other for any delay or failure to perform any of the services or obligations set forth in this Agreement due to causes beyond its reasonable control, and performance times shall be considered extended for a period of time equivalent to the time lost because of such delay plus a reasonable period of time to allow the parties to recommence performance of their respective obligations hereunder. Should a circumstance of force majeure last more than ninety (90) days, either party may by written notice to the other terminate this Agreement. The term "force majeure" as used herein shall mean the following: acts of God; strikes, lockouts or other industrial disturbances; acts of public enemies; orders or restraints of any kind of the government of the United States or of the State or any of their departments, agencies or officials, or any civil or military authority; insurrections, riots, landslides, earthquakes, fires, storms, tornadoes, droughts, floods, explosions, breakage or accident to machinery, transmission pipes or canals; or any other cause or event not reasonably within the control of either party.

6.24 EEO/AA. The City of Knoxville is an EE/AA/Title VI/Section 504/ADA/ADEA Employer.

6.25 By submitting a proposal, the submitting entity agrees to all terms and conditions established in this RFP, including its contract requirements. This Agreement shall be governed by and construed in accordance with the substantive laws of the State of Tennessee and its conflict of laws provisions. Venue for any action arising between the City and the Contractor from the Agreement shall lie in Knox County, Tennessee.

6.26 Professional Liability (including Errors & Omissions) for Subcontractor(s) employed by the prime contractor for the performance of the services requested in this RFP must maintain professional liability insurance covering claims arising from real or alleged errors, omissions, or negligent acts committed in the performance of professional services under this contract with limits of \$1,000,000.

VII. Instructions to Submitting Entities

All submissions of proposals shall comply with the following instructions. These instructions ensure that (1) submissions contain the information and documents required by the City RFP and (2) the submissions have a degree of uniformity to facilitate evaluation.

7.1 General

Submission forms and RFP documentation may be obtained on or after June 30, 2017, at no charge from:

City of Knoxville Purchasing Division
City/County Building
400 Main Street, Room 667
Knoxville, Tennessee 37902

between 8:30 a.m. and 4:30 p.m. (Eastern Time), Monday through Friday or by calling 865/215-2070. Forms and RFP information are also available on the City web site at www.knoxvilletn.gov/purchasing where it can be read or printed using Adobe Acrobat Reader software.

7.2 Submission Information

Proposals shall include four (4) hard copies (one original and three duplicates—**mark the original as such**) and one electronic copy of the proposal (.pdf format on CD only—**mark the storage device with the company name**); the electronic version shall be an exact duplicate of the original, and the electronic version will be the official document exhibited in the contract. **Electronic submissions must be included with the sealed submissions; do not email your submission.**

IMPORTANT NOTE: A minimum of one of the submitted proposals must bear an original signature, signed in ink (duplicated signatures substituted for original ink signatures may result in rejection of the proposals). This document is the official, original submission; the required copies may have copied signatures. The signature must be entered above the typed or printed name and title of the signer. All proposals must be signed by an officer of the company authorized to bind the firm to a contract.

Proposals will be received until 11:00:00 a.m. (Eastern Time) on July 21, 2017. Each proposal must be submitted in a sealed envelope addressed to:

City of Knoxville Purchasing Division
City/County Building
400 Main Street, Room 667
Knoxville, TN 37902

IMPORTANT NOTE: Each mailing envelope or carton containing a proposal or multiple copies of the proposal must be sealed and plainly marked on the outside “Fall Arrest System.” Proposers are reminded that the Purchasing Division receives many bids and proposals for any number of solicitations; **unlabeled submissions are extremely difficult to match to their appropriate solicitations and therefore may be rejected.**

Any proposals received after the time and date on the cover sheet will not be considered. It shall be the sole responsibility of the submitting entity to have the proposal delivered to the City of Knoxville Purchasing Division on or before that date.

Late proposals will not be considered. Proposals that arrive late due to the fault of United States Postal Service, United Parcel Service, DHL, FEDEX, any delivery/courier service, or any other carrier of any sort are still considered late and shall not be accepted by the City. Such proposals shall remain unopened and will be returned to the submitting entity upon request.

7.3 Format

The City is committed to reducing waste. Submissions of qualifications must be typed on 8.5 x 11 inch wide white paper, printed on both sides. DO NOT BIND the document; instead, staple or binder clip the submission together and place in a sealed envelope (see Paragraph 7.2). Pages must be consecutively numbered. A table of contents must be included in the proposal immediately after the title page, and each of the following numbered sections must be tabbed.

Proposals shall be structured as follows. Numbered items listed below should have a numbered tab page:

1. Title Page
2. Table of Contents
3. Submission Forms:
 - A. Form S-1
 - B. Non-Collusion Affidavit
 - C. No Contact/No Advocacy Affidavit
 - D. Licensure Affidavit of Prime Proposer
 - E. Iran Divestment Act Certification of Noninclusion
 - F. Child Crime Affidavit
 - G. Drug Free Workplace Affidavit
 - H. Diversity Business Enterprise Program
4. Body of Proposal: Information which addresses the items outlined in Sections V and VIII

NOTE: All required submission forms may be found in this solicitation document.

7.4 Evaluation of Proposals

All qualified submissions received by the deadline will be analyzed by the Evaluation Committee according to the criteria outlined in these specifications. Failure to comply with the provisions of the RFP may cause any proposal to be ineligible for evaluation. Each submittal of proposals will be initially analyzed and judged according to the evaluation criteria below. The maximum score is 100 points.

The City reserves full discretion to determine the capability of proposing entities. Proposers, if asked, will provide, in a timely manner, any and all information that the City deems necessary to make such a decision. In addition to materials provided in the written responses to this RFP, the Committee may request additional material, information, references, a site visit, or a live test demonstration from the submitting entity or others.

The Evaluation Committee may or may not decide to interview any or all proposing entities at a time and date determined by the City in order to address questions and more fully ascertain how

the solution to this project satisfies the evaluation criteria. Firms and/or teams responding to this Request for Proposals shall be available for interviews with the Evaluation Committee. Discussions may be conducted with responsible submitting entities for purposes of clarification to assure full understanding of and conformance to the RFP requirements. Selection shall be based on the firms' qualifications applicable to the scope and nature of the services to be performed per this request for proposals. Determination of firms' qualifications shall be based on their written responses to this Request for Proposals and information presented to the Evaluation Committee during oral interviews, if any.

In addition to materials provided in the written responses to this Request for Proposals, the Committee may request additional material, information, or references from the submitting entity or others.

Provided it is in the best interest of the City of Knoxville, the firm or team determined to be the most responsive to the City of Knoxville, taking into consideration the evaluation factors set forth in this Request for Proposals, will be selected to begin contract negotiations. The firm or team selected will be notified at the earliest practical date and invited to submit more comprehensive information if necessary. If no satisfactory agreement can be reached with the "most responsive firm," the City may elect to negotiate with the next best and most responsive firm or team.

VIII. Evaluation Criteria

An evaluation team, composed of representatives of the City, will evaluate proposals on a variety of quantitative and qualitative criteria. Upon receipt of proposals, the City will review to determine whether the proposal is acceptable or non-acceptable based on the criteria outlined below. Proposers are reminded that the City's evaluation will be deliberative and thorough, and the scores and rankings ascribed to each proposal shall reflect that process, and the City's decision shall be final.

The criteria and the associated weights upon which the evaluation of the proposals will be based include, but are not limited to, the following:

- 1. Qualifications/Experience of Proposer and Key Personnel – 25 points:** Proposal shall include information regarding venues of similar size and scope for which the proposer has provided the type of FAS required. Proposer additionally shall provide a minimum of five (5) references with current contact information.
- 2. Quality of System Design – 25 points:** Functionality and features must provide safe and efficient protections for users in the conduct of their duties. Portion of system must be moveable in the event of arena change.
- 3. Project Management Skills – 25 points:** Proposal must include evidence of having successfully designed, fabricated, and installed similar fall arrest systems on time and within budget. Proposal must detail the staff who will be dedicated to this project.

4. **Pricing/Cost – 25 points:** All quoted pricing must be inclusive of design, fabrication, delivery, and installation of the City-approved FAS. Pricing shall be for a turn-key, professional job.

Submission Forms

**CITY OF KNOXVILLE
REQUEST FOR PROPOSALS**

Fall Arrest System

Submission Form S-1

Proposals to be Received by 11:00:00 a.m., Eastern Time; July 21, 2017; in Room 667-674, City/County Building; Knoxville, Tennessee.

IMPORTANT: Proposals shall include four (4) hard copies (one original and three duplicates—**mark the original as such**) and one electronic copy of the proposal (.pdf format on CD only—**mark the storage device with the company name**); the electronic version shall be an exact duplicate of the original, and the electronic version will be the official document exhibited in the contract. **Electronic submissions must be included with the sealed submissions; do not email your submission.**

Please complete the following:

Legal Name of Proposer: _____

Address: _____

Telephone Number: _____

Fax Number: _____

Contact Person: _____

Email Address: _____

Signature: _____

Name and Title of Signer: _____

Note: Failure to use these response sheets may disqualify your submission.

NON-COLLUSION AFFIDAVIT

State of _____

County of _____

_____, being first duly sworn, deposes and says that:

- (1) He/She is the _____ of _____, the firm that has submitted the attached Proposal;
- (2) He/She is fully informed respecting the preparation and contents of the attached Proposal and of all pertinent circumstances respecting such Proposal;
- (3) Such Proposal is genuine and is not a collusive or sham Proposal;
- (4) Neither the said firm nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly, with any other vendor, firm or person to submit collusive or sham proposal in connection with the contract or agreement for which the attached Proposal has been submitted or to refrain from making a proposal in connection with such contract or agreement, or collusion or communication or conference with any other firm, or, to fix any overhead, profit, or cost element of the proposal price or the proposal price of any other firm, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against the City of Knoxville or any person interested in the proposed contract or agreement; and
- (5) The proposal of service outlined in the Proposal is fair and proper and is not tainted by collusion, conspiracy, connivance, or unlawful agreement on the part of the firm or any of its agents, representatives, owners, employees, or parties including this affiant.

(Signed): _____

Title: _____

Subscribed and sworn to before me this _____ day of _____, 20__.

NOTARY PUBLIC

My Commission expires _____

No Contact/No Advocacy Affidavit

State of _____

County of _____

_____, being first duly sworn, deposes and says that:

(1) He/She is the owner, partner, officer, representative, or agent of _____
_____, the Proposer that has submitted the attached Proposal;

(2) The Proposer _____ swears or affirms that he/she will abide by the following "No Contact" and "No Advocacy" clauses:

- a) **NO CONTACT POLICY:** After the posting of this solicitation to the Purchasing Division's website, any contact initiated by any proposer with any City of Knoxville representative concerning this proposal is strictly prohibited, unless such contact is made with the Purchasing Agent (Boyce H. Evans) or Assistant Purchasing Agent (Janice McClelland). Any unauthorized contact may cause the disqualification of the proposer from this procurement transaction.

- b) **NO ADVOCATING POLICY:** To ensure the integrity of the review and evaluation process, companies and/or individuals submitting proposals for any part of this project, as well as those persons and/or companies representing such proposers, may not lobby or advocate to the City of Knoxville staff including, but not limited to, members of City Council, Office of the Mayor, Department of Public Assembly, or any other City staff, nor any SMG staff.

Any company and/or individual who does not comply with the above stated "No Contact" and "No Advocating" policies may be subject to having their proposal rejected from consideration.

Signed: _____

Title: _____

Subscribed and sworn to before me this _____ day of _____, 2_____.

My commission expires: _____

DRUG-FREE WORKPLACE AFFIDAVIT

State of _____

County of _____

_____, being duly sworn, deposes, and says that:

- (1) He/She is a principal officer of _____, the firm that has submitted the attached Proposal, his or her title being _____ of the firm; and
- (2) He/She has personal knowledge of the policies of the above-named firm with respect to the maintenance of a drug-free workplace; and
- (3) He/She certifies that all provisions and requirements of the Tennessee Drug-Free Workplace Program, as established by Tenn. Code Ann. §§ 50-9-100 et. seq., have been met and implemented.

(Signed)

(Title)

Subscribed and sworn to before me this ____ day of _____, 20__.

Notary Public _____

My Commission expires _____

Child Crime Affidavit

State of _____

County of _____

_____, being first duly sworn, deposes and says that:

(1) He/She is the owner, partner, officer, representative, or agent of _____
_____, the Bidder that has submitted the attached Bid;

(2) The Bidder _____ will abide by the following if chosen as
the successful bidder:

The Bidder _____ agrees not to allow any employee or
volunteer who is awaiting trial or has been convicted of a felony crime involving the sexual
exploitation of children, sexual offenses involving children or violent crimes to participate in this
Agreement at sites where children may be present. Failure by the Bidder to comply with this
requirement is grounds for immediate termination of the Agreement.

Signed: _____

Title: _____

Subscribed and sworn to before me this _____ day of _____, 2_____.

My commission expires: _____

LICENSURE AFFIDAVIT OF PRIME PROPOSER

The undersigned "prime proposer" hereby states that any and all sub-contractors employed by the prime proposer in the performance of the services requested in this RFP are licensed as professional service firms in the State of Tennessee where said sub-contractors will perform services that are considered professional in nature.

Signed: _____

Title: _____

Subscribed and sworn to before me this ____ day of _____, 2____.

My commission expires: _____

IRAN DIVESTMENT ACT

Certification of Noninclusion

NOTICE: Pursuant to the Iran Divestment Act, Tenn. Code Ann. § 12-12-106 requires the State of Tennessee Chief Procurement Officer to publish, using creditable information freely available to the public, a list of persons it determines engage in investment activities in Iran, as described in § 12-12-105. Inclusion on this list makes a person ineligible to contract with the state of Tennessee; if a person ceases its engagement in investment activities in Iran, it may be removed from the list. A list of entities ineligible to contract in the State of Tennessee Department of General Services or any political subdivision of the State may be found here:

[https://www.tn.gov/assets/entities/generalservices/cpo/attachments/List of persons pursuant to Tenn. Code Ann. 12-12-106, Iran Divestment Act-July.pdf](https://www.tn.gov/assets/entities/generalservices/cpo/attachments/List_of_persons_pursuant_to_Tenn_Code_Ann._12-12-106_Iran_Divestment_Act-July.pdf)

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to T.C.A. § 12-12-106.

Vendor Name (Printed)	Address
By (Authorized Signature)	Date Executed
Printed Name and Title of Person Signing	

NOTARY PUBLIC:

Subscribed and sworn to before me this _____ day of _____, 2_____.

My commission expires: _____

DIVERSITY BUSINESS ENTERPRISE (DBE) PROGRAM

The City of Knoxville strongly encourages prime contractors to employ diverse businesses in the fulfillment of contracts/projects for the City of Knoxville.

The City of Knoxville's Fiscal Year 2017 goal is to conduct 3.33% of its business with minority-owned businesses, 9.21% of its business with woman-owned businesses, and 45.5% with small businesses.

While the City cannot engage (pursuant to state law) in preferential bidding practices, the City does **strongly encourage** prime contractors to seek out and hire diverse businesses in order to help the City meet its goals as stated above. As such, the City encourages prime contractors to seek out and consider competitive sub-bids and quotations from diverse businesses.

For DBE tracking purposes, the City requests that prime contractors who are bidding, proposing, or submitting statements of qualifications record whether or not they plan to employ DBE's as sub-contractors or consultants. With that in mind, please fill out, sign and submit (with your bid/proposal) the following sub-contractor/ consultant statement.

CITY OF KNOXVILLE DIVERSITY BUSINESS DEFINITIONS

Diversity Business Enterprise (DBE's) are minority-owned (MOB), women-owned (WOB), service-disabled veteran-owned (SDVO), and small businesses (SB), who are impeded from normal entry into the economic mainstream because of past practices of discrimination based on race or ethnic background. These persons must own at least 51% of the entity and operate or control the business on a daily basis.

Minority: A person who is a citizen or lawful admitted permanent resident of the United States and who is a member of one (1) of the following groups:

- a. African American, persons having origins in any of the Black racial groups of Africa;
- b. Hispanic American, persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race;
- c. Native American, persons who have origin in any of the original peoples of North America ;
- d. Asian American, person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands.

Minority-owned business (MOB) is a continuing, independent, for profit business that performs a commercially useful function, and is at least fifty-one percent (51%) owned and controlled by one (1) or more minority individuals.

Woman-owned business (WOB) is a continuing, independent, for profit business that performs a commercially useful function, and is at least fifty-one percent (51%) owned and controlled by one (1) or more women.

Service Disabled Veteran-owned business (SDOV) is a continuing, independent, for profit business that performs a commercially useful function, owned by any person who served honorably on active duty in the armed forces of the United States with at least a twenty percent (20%) disability that is service connected. Meaning such disability was incurred or aggravated in the line of duty in the active military, naval or air service, and is at least fifty-one percent (51%) owned and controlled by one (1) or more service disabled veteran.

Small Business (SB) is a continuing, independent, for profit business which performs a commercially useful function and has total gross receipts of not more than ten million dollars (\$10,000,000) average over a three-year period or employs no more than ninety-nine (99) persons on a full-time basis.

Subcontractor/Consultant Statement
(TO BE SUBMITTED IN THE BID/PROPOSAL ENVELOPE)

We _____ do certify that on the
(Bidder/Proposer Company Name)

_____ (Project Name)
\$ _____
(Amount of Bid)

Please select one:

Option A: Intent to subcontract using Diverse Businesses

A Diversity business will be employed as subcontractor(s), vendor(s), supplier(s), or professional service(s). The estimated **dollar value** of the amount that we plan to pay is:

\$ _____
Estimated Amount of Subcontracted Service

Diversity Business Enterprise Utilization			
Description of Work/Project	Amount	Diverse Classification (MOB, WOB, SB, SDOV)	Name of Diverse Business

Option B: Intent to perform work "without" using Diverse Businesses

We hereby certify that it is our intent to perform 100 % of the work required for the contract, work will be completed without subcontracting, or we plan to subcontract with non-Diverse companies.

DATE: _____ COMPANY NAME: _____

SUBMITTED BY: _____ TITLE: _____
(Authorized Representative)

ADDRESS: _____

CITY/STATE/ZIP CODE: _____

TELEPHONE NO: _____

Appendix

November 30, 2011

Mr. Dale Dunn
City of Knoxville
Knoxville Auditorium-Coliseum
PO Box 2603
Knoxville, TN 37901

**Re: Roof Framing Evaluation for Rigging Loads
Knoxville Coliseum Roof Framing Evaluation and Scoreboard Relocation
Knoxville, Tennessee
CWE Project No. 2009145.00**

Dear Mr. Dunn,

The purpose of this letter is to convey and summarize the results of our structural evaluation of the roof framing over the coliseum area and to provide you with updated recommendations for the safe application of rigging loads for future events.

CWE conducted an initial walk-thru observation of the coliseum on Monday, June 6, 2011 with a follow-up framing observation on Friday, June 10, 2011 from the boom lift supplied and operated by Doug Simmons, Facility Operations Manager.

During our initial walk-thru, it was noted that the cantilever concrete frames which support the steel arch section of the roof had visible cracking as seen in photos 1 and 2. The exact extent of the cracking was partially masked by the painting conducted a few years ago. These cracks appear to have been present for a relatively long period of time. Coliseum personnel were not aware of their existence, and painting contractors had not brought it to their attention. These cracks appear to be fairly tight with no evidence of recent significant movement. However, given their critical location within primary framing members that possess no redundancy, we recommend that these cracks be closely monitored. We are available to assist in the development of a system and schedule for the monitoring and recording of any movements. We recommend cracks be monitored for a minimum period of a year. Readings should be recorded on a monthly cycle, after the application of rigging loads from each significant event/show, and during each significant snow occurrence. If significant movement occurs, these cracks should be further evaluated. Alternatively, CWE can provide the monitoring of cracks on an hourly rate or negotiated basis.

During our observation, we did not find any signs of steel corrosion or any permanent deformation/damage of individual structural steel framing members or connections. The recent "black-out" painting of the steel framed portion of the roof may have masked/covered-up any mild corrosion. The focus of our observation was on the primary W24x76 steel arches, the conventional steel trusses which span between the arches, and the underside of the bulb-tee purlins spanning between the trusses. During the observation, steel member sizes and orientations

were randomly verified with that shown on the original structural construction drawings. A significant deviation in the web member layout of the conventional steel trusses was observed and noted. Refer to the attached Intermediate Truss Profile sketch depicting the observed deviation. Our computer analysis model was adjusted accordingly, and based on our results, it is our opinion that the actual layout does not adversely affect the intended structural performance of these trusses.

As previously noted, a computer model of the steel framing system was generated to aid in the analysis of multiple scenarios for applied rigging loads and their effects on the structural system. A few screenshots of the analytical computer model have been included for your reference. During our review of the structural construction documents, we were unable to confirm the required material specification used for the design and construction of the steel portion of the roof framing system. Therefore, in our analysis model we have assumed the ultimate and yield strengths of the steel members to be 60,000 psi and 33,000 psi, respectively. This assumption was based on the wide use of material specification ASTM A7 for structural steel buildings from the late 1930's until the early 1960's. We also conducted a quick review of the critical section of the concrete frames, located in the cantilever roof beam at the face of the concrete column, supporting each side of the arches.

It is our opinion that the 4" diameter steel pin connections at each end of the steel arches are the limiting component for the entire system. Using the steel strength assumption, it appears these pins do not have significant reserve capacity beyond what is required to safely support the required load combinations of dead loads, roof live loads, wind loads, and snow loads. Therefore, we concur with the general rigging load restriction shown on the previous long used rigging guidelines (Refer to Attachment #1). This general restriction stated that suspended rigging loads from the roof structure shall not be concurrent with snow, heavy rain, or high wind events which may produce additional loads on the roof framing system.

As a starting point for our rigging load evaluation, we used information provided by a rigging contractor commonly used by the facility and Attachment #1. Based on multiple trial analyses using different rigging load configurations, we have provided updated guidelines for the safe application of rigging loads. Please refer to the Arch Loading Profiles noted for a depiction of these guidelines.

- A single suspended load of up to 2500lb applied directly to the arch at one small truss location.
 - "Arch Loading Profile – A".
- Four or five suspended loads of no more than 1500lb applied directly to the arch at every fourth small truss location.
 - "Arch Loading Profile – B" OR
 - "Arch Loading Profile – C".
- Multiple suspended loads of no more than 800lb applied directly to the arch at every other small truss location.
 - "Arch Loading Profile – D"

Page 3 of 11
Knoxville Coliseum Rigging Loads
November 30, 2011

- Multiple suspended loads of no more than 400lb applied directly to the arch at every small truss location.
 - "Arch Loading Profile - E"

For the typical roof trusses, a maximum single load of 500 lb may be applied at any panel point. Do not hang loads greater than 6" away from panel points that would produce bending in the bottom chords. Refer to Roof Truss Loading Profile - F attached.

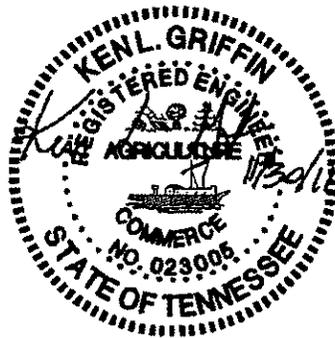
We are available for any discussion regarding these findings.

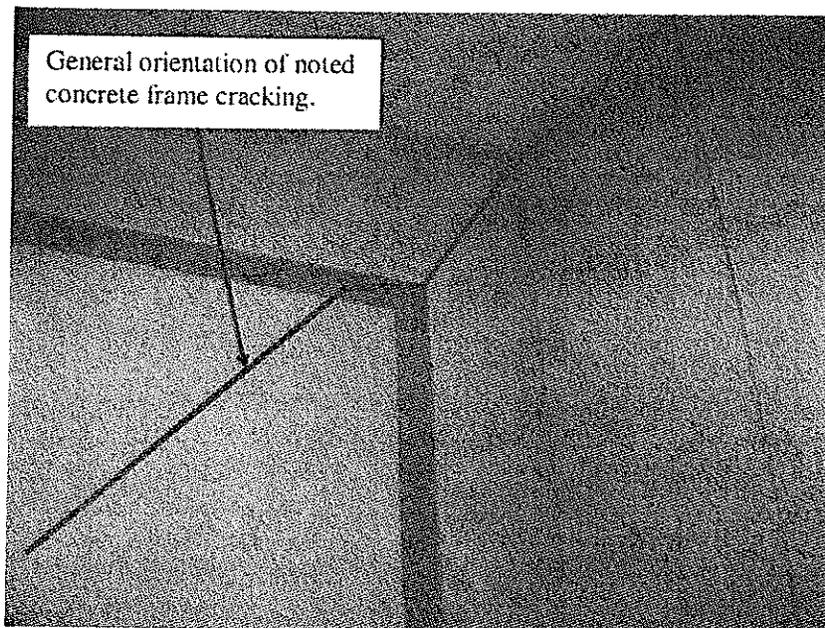
Sincerely,
CARPENTER WRIGHT ENGINEERS, P.L.L.C.



Michael R. Radcliffe, P.E.

Ken L. Griffin, P.E.
Principal



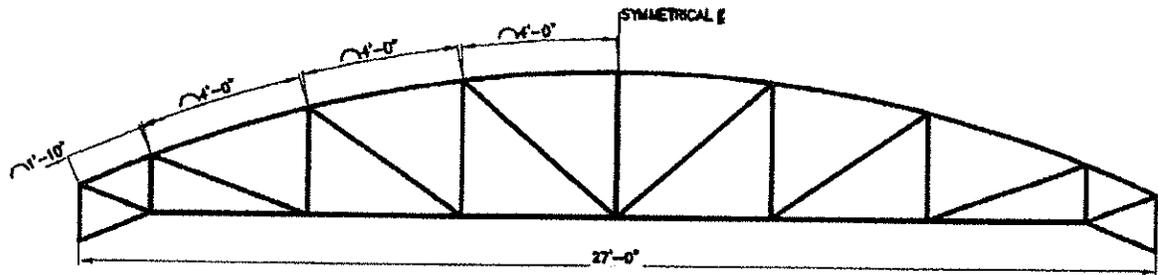


**Photo 1 – Sample Sketch of Concrete Frame Cracking at Fixed end of Cantilever
(actual cracks have been painted over and are not visible in this photo)**

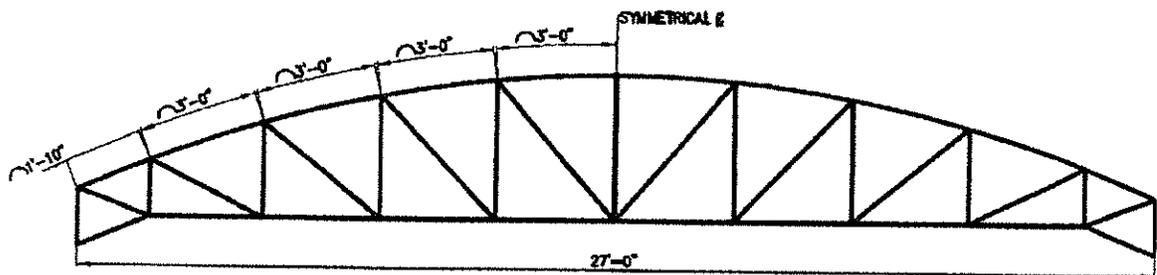


Photo 2 – Sample of Concrete Frame Cracking at Fixed end of Cantilever

INTERMEDIATE TRUSS PROFILE

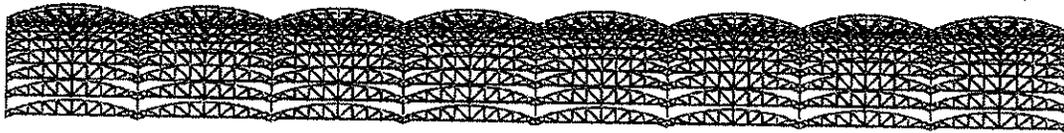


AS DETAILED ON CONSTRUCTION DRAWINGS



AS DETERMINED FROM ACTUAL FIELD OBSERVATION

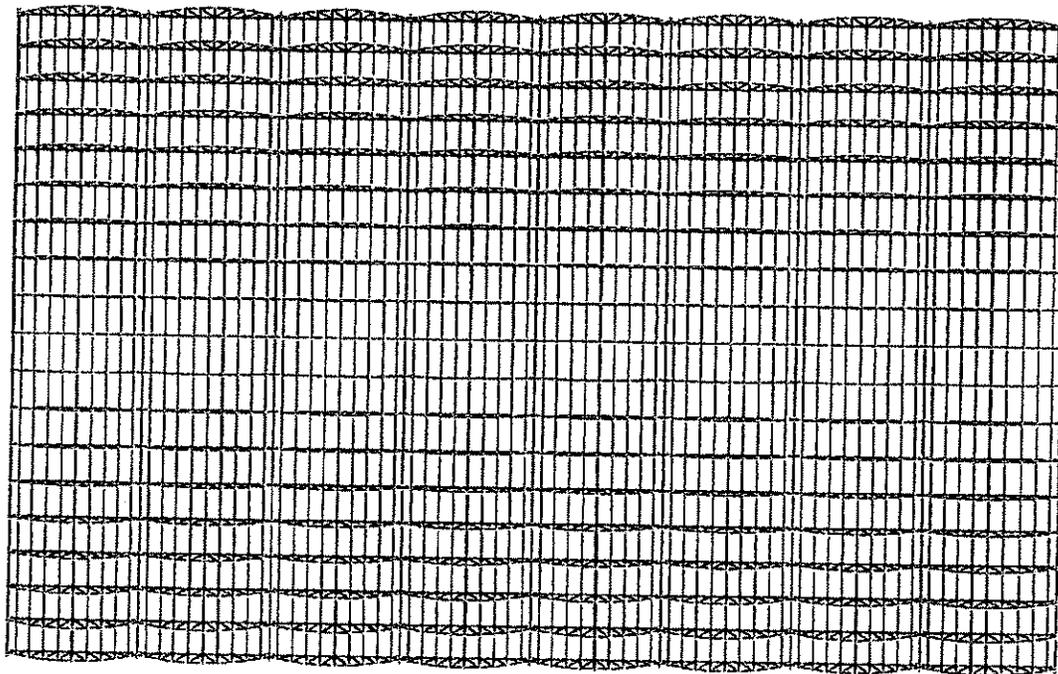
SCREENSHOTS OF ANALYTICAL COMPUTER MODEL



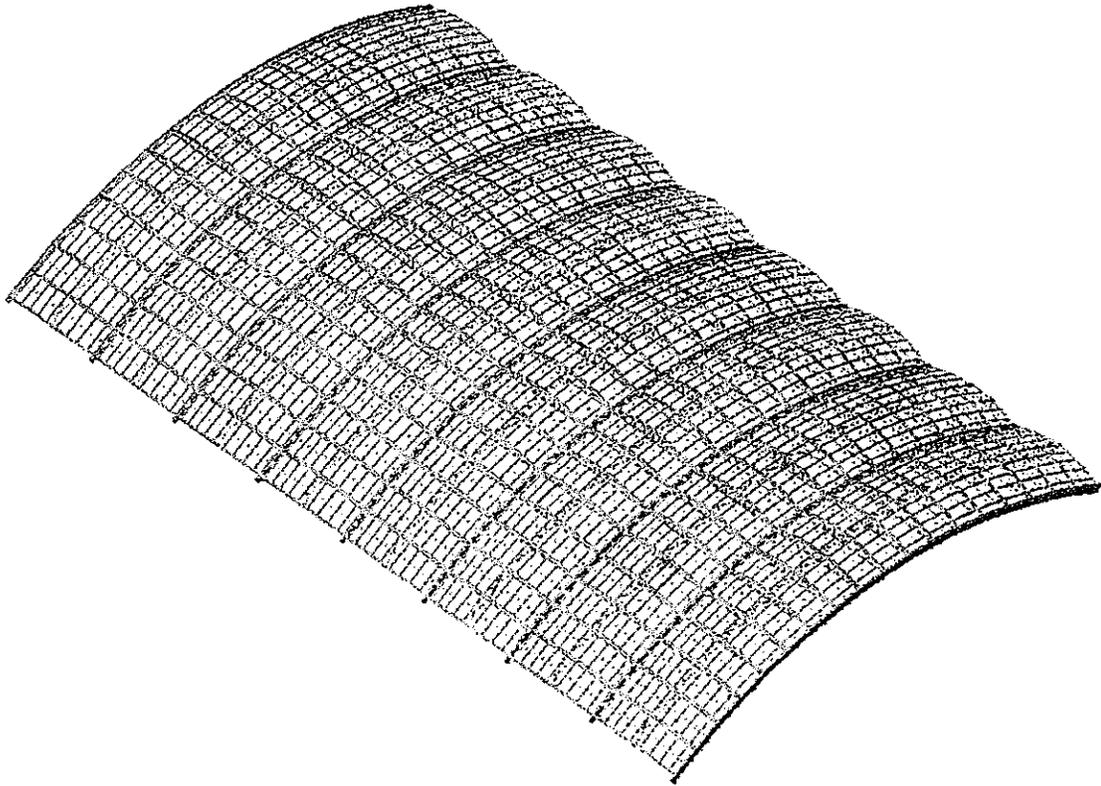
Side View of Computer Model



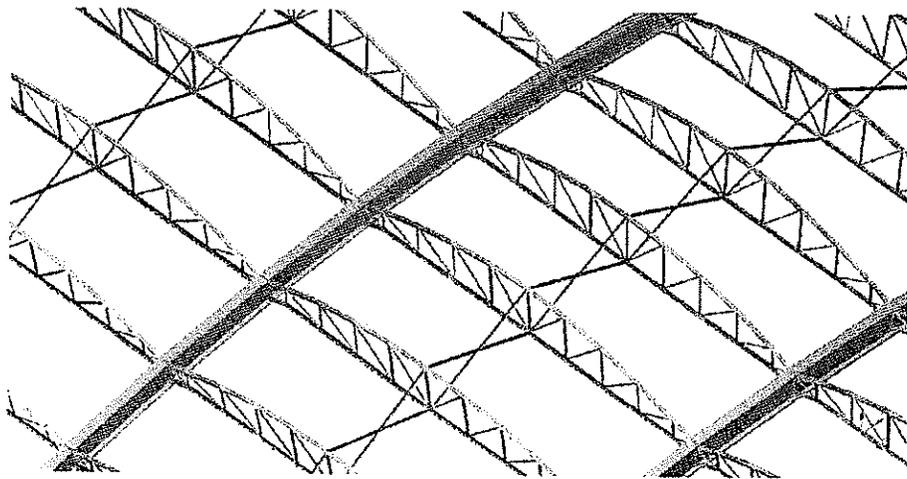
End View of Computer Model



Top View of Computer Model

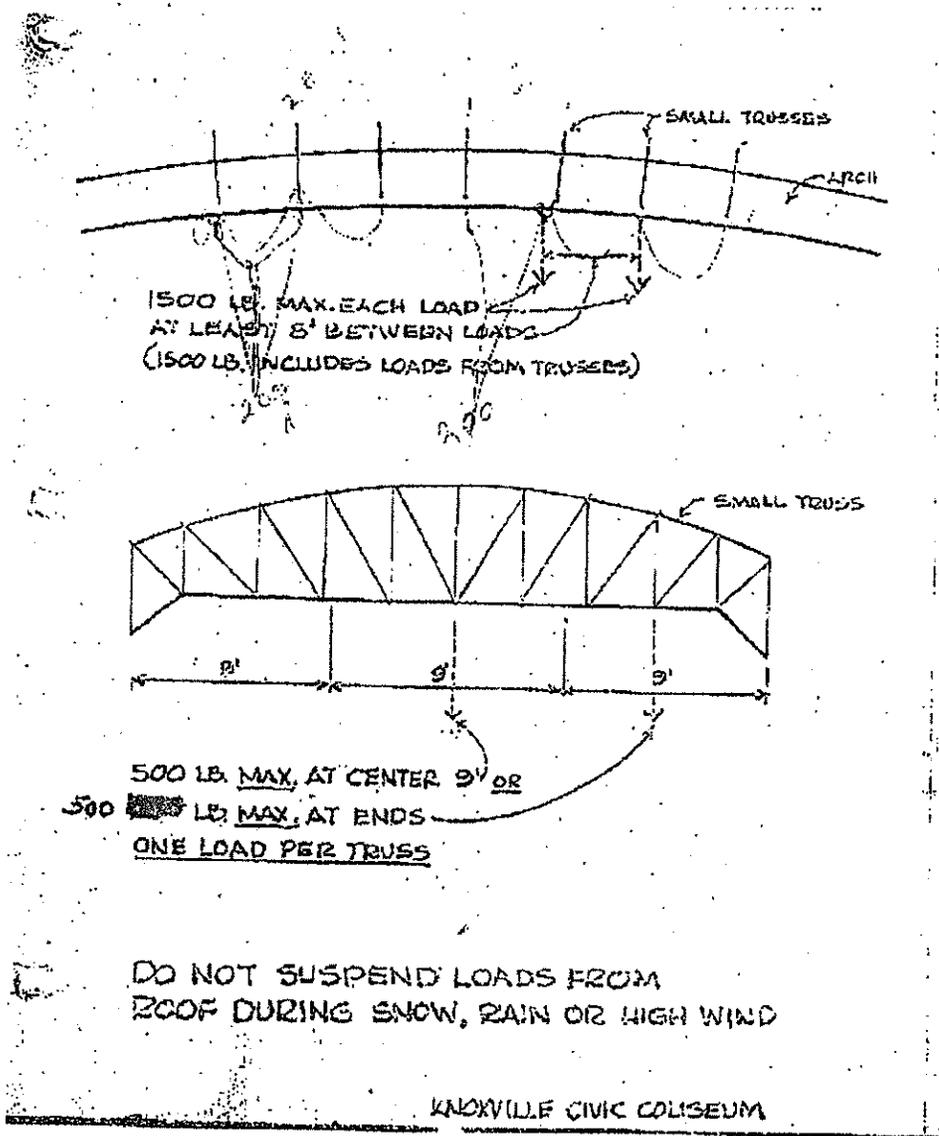


Rendered Isometric View of Eight Bay Model

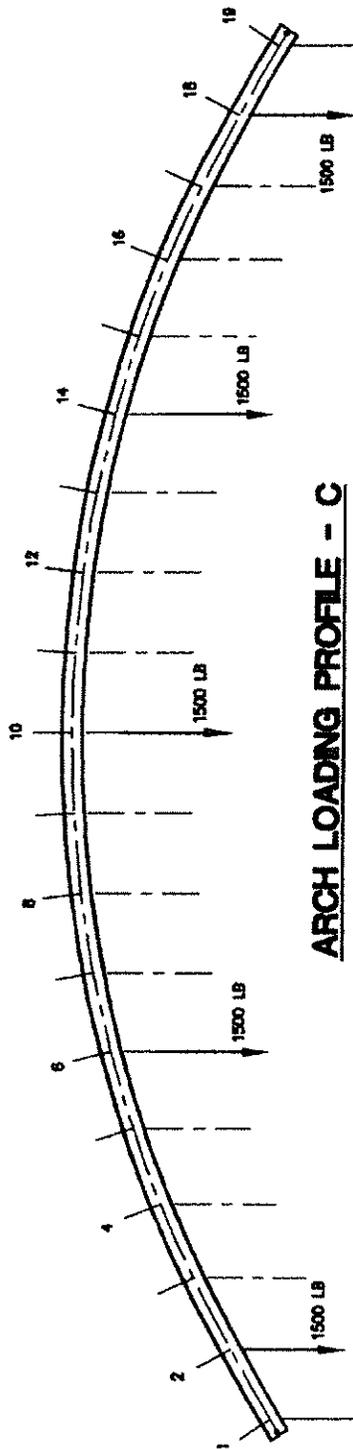
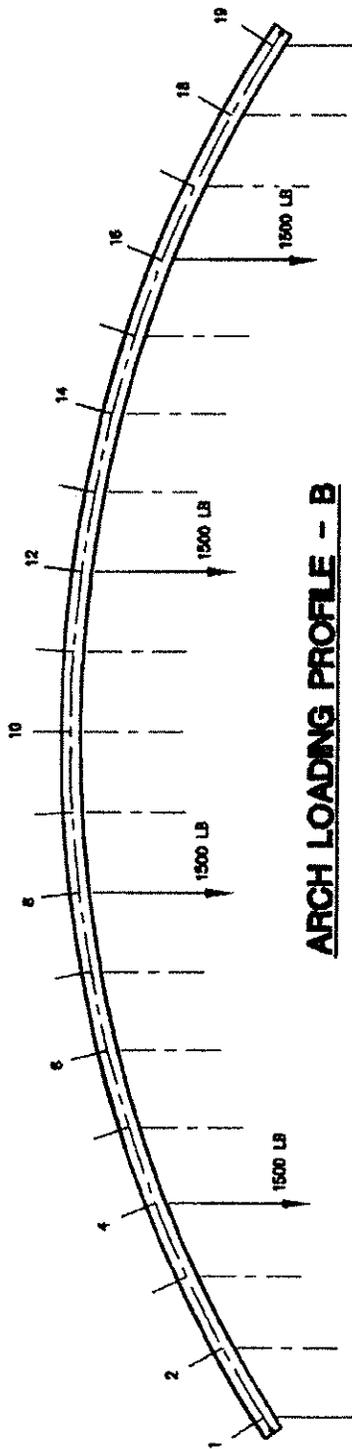
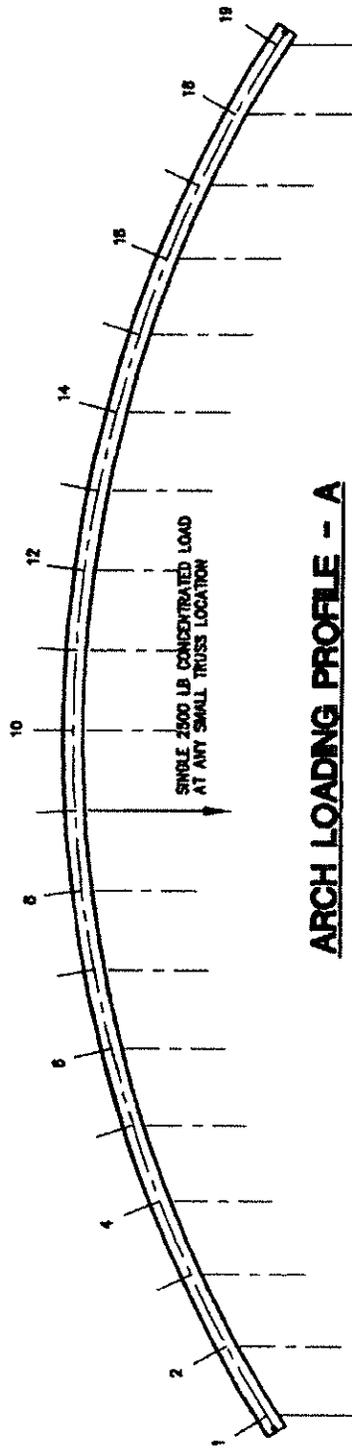


Rendered Isometric View Close-Up of Eight Bay Model
(Roof Deck & 'Bulb-T' Purlins Not Shown for Clarity)

ATTACHMENT #1 PREVIOUS RIGGING GUIDELINES



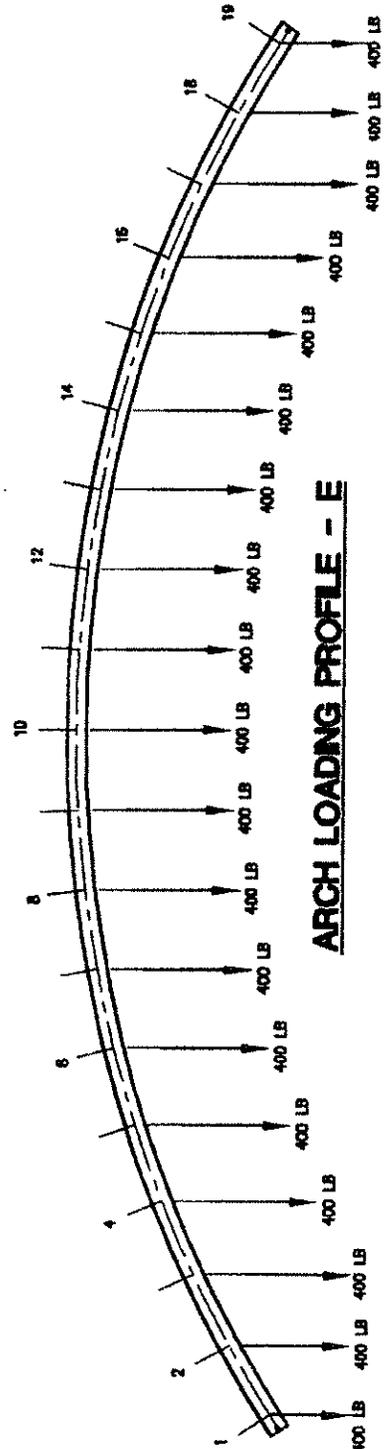
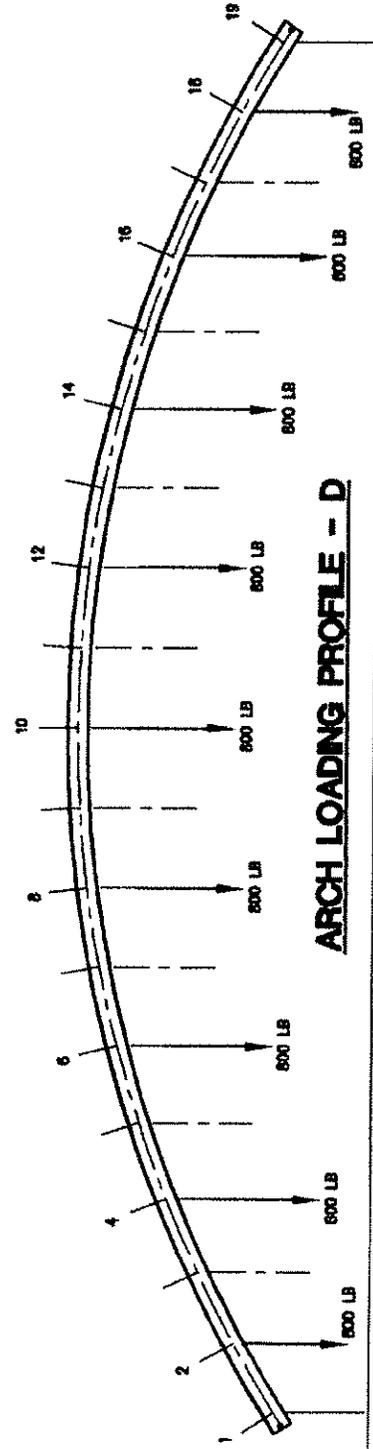
LOADS SHOWN TO INCLUDE ANY RIGGING LOADS IMPOSED ON TRUSSES.



PROJECT Knoxville Civic Coliseum NO. 2008146.00
 COMPUTED BY MFR DATE 11/30/11 CHECKED BY _____ DATE _____
 SUBJECT Allowable Steel Arch Loading Profiles SHT 10 OF 11

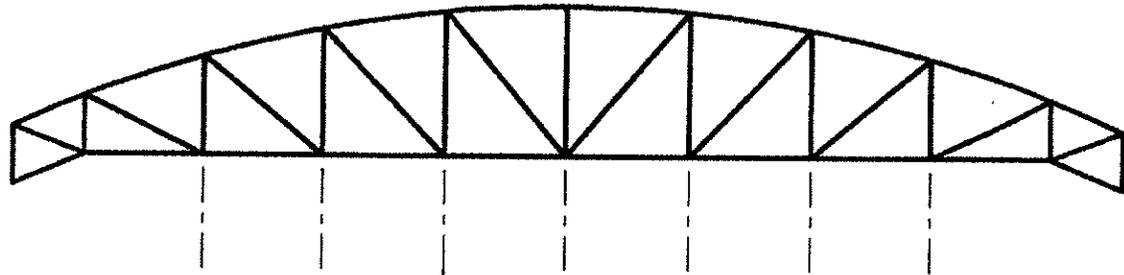
**Carpenter
Wright
Engineers** **CWE**
 Structural Consultants

LOADS SHOWN TO INCLUDE ANY RIGGING LOADS IMPOSED ON TRUSSES.



PROJECT Knoxville Civic Coliseum NO. 2009145.00
COMPUTED BY MRR DATE 11/30/11 CHECKED BY _____ DATE _____
SUBJECT Allowable Roof Truss Loading Profile SHT. 11 OF 11

**Carpenter
Wright
Engineers** **C
W
E**
Structural Consultants



SINGLE 800 LB CONCENTRATED
LOAD AT ANY PANEL POINT

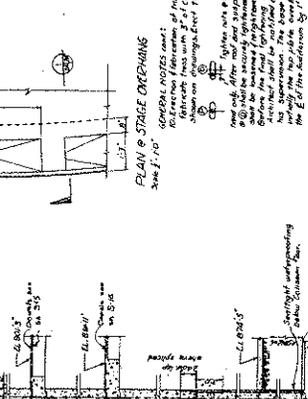
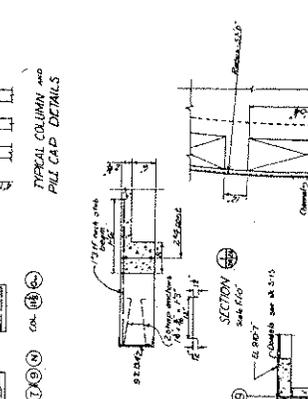
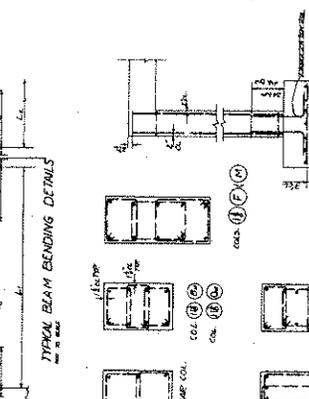
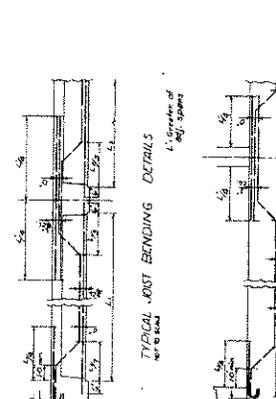
ROOF TRUSS LOADING PROFILE - F

DO NOT APPLY CONCENTRATED
LOADS BETWEEN PANEL POINTS
THAT WILL PRODUCE BENDING
OF TRUSS CHORDS.

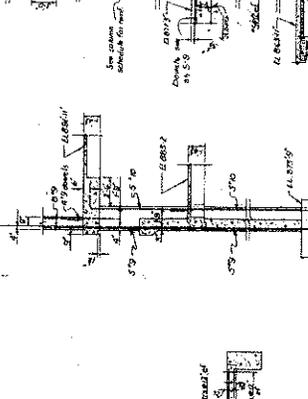
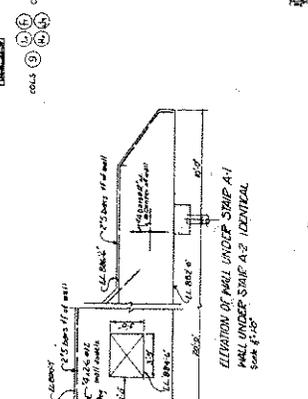
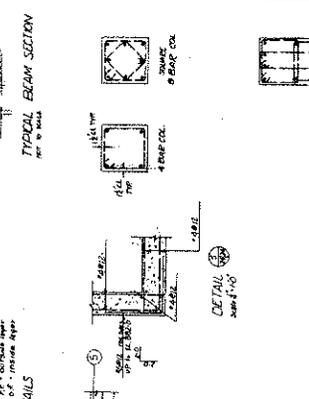
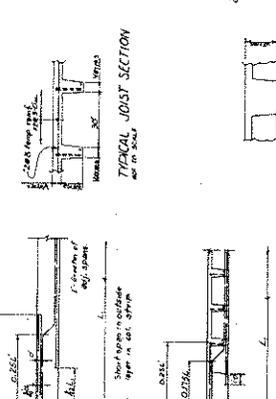
JOIST SCHEDULE

MARK	D	B	SPACING	REMARKS
1	12"	4"	12"	1/4" top flange
2	12"	4"	12"	1/4" top flange
3	12"	4"	12"	1/4" top flange
4	12"	4"	12"	1/4" top flange
5	12"	4"	12"	1/4" top flange
6	12"	4"	12"	1/4" top flange
7	12"	4"	12"	1/4" top flange
8	12"	4"	12"	1/4" top flange
9	12"	4"	12"	1/4" top flange
10	12"	4"	12"	1/4" top flange
11	12"	4"	12"	1/4" top flange
12	12"	4"	12"	1/4" top flange
13	12"	4"	12"	1/4" top flange
14	12"	4"	12"	1/4" top flange
15	12"	4"	12"	1/4" top flange
16	12"	4"	12"	1/4" top flange
17	12"	4"	12"	1/4" top flange
18	12"	4"	12"	1/4" top flange
19	12"	4"	12"	1/4" top flange
20	12"	4"	12"	1/4" top flange
21	12"	4"	12"	1/4" top flange
22	12"	4"	12"	1/4" top flange
23	12"	4"	12"	1/4" top flange
24	12"	4"	12"	1/4" top flange
25	12"	4"	12"	1/4" top flange
26	12"	4"	12"	1/4" top flange
27	12"	4"	12"	1/4" top flange
28	12"	4"	12"	1/4" top flange
29	12"	4"	12"	1/4" top flange
30	12"	4"	12"	1/4" top flange
31	12"	4"	12"	1/4" top flange
32	12"	4"	12"	1/4" top flange
33	12"	4"	12"	1/4" top flange
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97	12"	4"	12"	1/4" top flange
98	12"	4"	12"	1/4" top flange
99	12"	4"	12"	1/4" top flange
100	12"	4"	12"	1/4" top flange

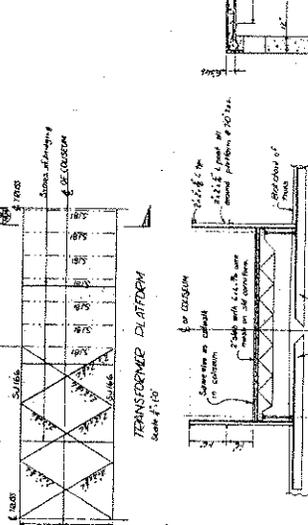
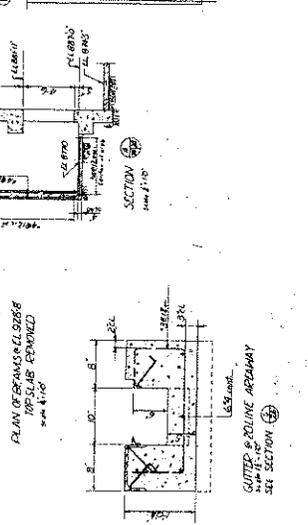
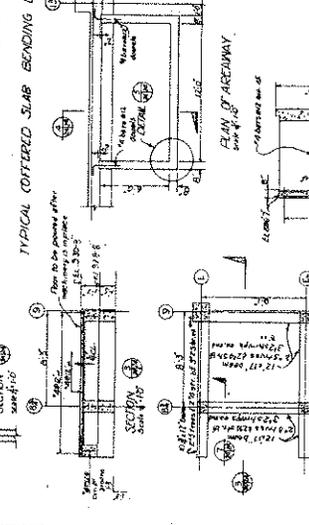
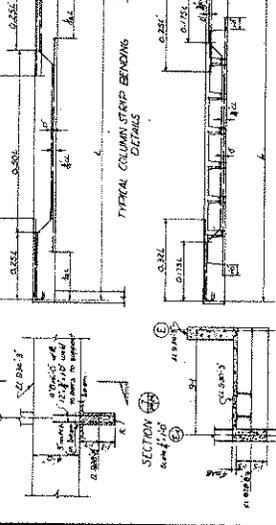
GENERAL NOTES:
 1. All members shall be of the same grade unless otherwise specified.
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DESCRIPTION	QUANTITY
PANELS TO BE ORDERED: 6, 10, 14, 20, 28, 30, 36, 42, 48, 54, 60, 66, 72, 78, 84, 90, 96, 102, 108, 114, 120, 126, 132, 138, 144, 150, 156, 162, 168, 174, 180, 186, 192, 198, 204, 210, 216, 222, 228, 234, 240, 246, 252, 258, 264, 270, 276, 282, 288, 294, 300, 306, 312, 318, 324, 330, 336, 342, 348, 354, 360, 366, 372, 378, 384, 390, 396, 402, 408, 414, 420, 426, 432, 438, 444, 450, 456, 462, 468, 474, 480, 486, 492, 498, 504, 510, 516, 522, 528, 534, 540, 546, 552, 558, 564, 570, 576, 582, 588, 594, 600, 606, 612, 618, 624, 630, 636, 642, 648, 654, 660, 666, 672, 678, 684, 690, 696, 702, 708, 714, 720, 726, 732, 738, 744, 750, 756, 762, 768, 774, 780, 786, 792, 798, 804, 810, 816, 822, 828, 834, 840, 846, 852, 858, 864, 870, 876, 882, 888, 894, 900, 906, 912, 918, 924, 930, 936, 942, 948, 954, 960, 966, 972, 978, 984, 990, 996, 1002, 1008, 1014, 1020, 1026, 1032, 1038, 1044, 1050, 1056, 1062, 1068, 1074, 1080, 1086, 1092, 1098, 1104, 1110, 1116, 1122, 1128, 1134, 1140, 1146, 1152, 1158, 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