SEDGWICK COUNTY, KANSAS
DIVISION OF FINANCE
PURCHASING DEPARTMENT
525 N. Main, Suite 823 ~ Wichita, KS 67203
Phone: 316 660-7255 Fax: 316 383-7055

www.sedgwickcounty.org/finance/purchasing.asp

Request for Proposal
Fabric Membrane Salt Storage Structure and Foundation
#15-0075

July 8, 2015

Sedgwick County, Kansas (hereinafter referred to as "County") is seeking proposals for qualified service provider(s) to design, fabricate, supply and install a fabric covered steel frame building with a tensioned fabric membrane cover to be supported by a constructed asphalt foundation for Sedgwick County. The County may choose more than one vendor to perform the services requested. It is anticipated that an official contract or purchase order will be issued after Board of County Commission approval of the recommended proposal. It should be noted, however, that the County cannot guarantee the purchase of the services described herein.

PRE-PROPSOAL MEETING

A **mandatory pre-proposal meeting** will be held on site. Interested proposers are to meet at the North Yard office located at 10530 East 37th Street North, Wichita, KS 67226 beginning at 10:00 a.m. CDT on Friday, July 24, 2015.

Attendance is mandatory. Sign-in is required. This will be the only time to meet directly with county staff to answer questions concerning this project. General contractors are encouraged to have their subcontractors attend this meeting to view the site conditions.

Firms interested in submitting a response meeting all terms, conditions, and requirements, shall provide an original, one electronic copy (Word or PDF) and four (4) copies of the attached *Response Form,* and requested supplemental information on or before **Tuesday, August 18, 2015 at 1:45 p.m. CDT**. Proposals must be sealed in an envelope and marked with the firm's name and address, proposal number, proposal opening date, and proposal opening time. Late responses will not be accepted and will not receive award consideration. The time clock stamp in the Purchasing Department will determine the time of receipt.

Proposed base pricing for services may be disclosed at a public meeting to receive and file responses of this and other solicitations, and at the Sedgwick County Board of Bids and Contracts meeting. It should be noted that other information provided in your response will be considered proprietary and will not be divulged during the proposal review process. More than one (1) proposal option may be submitted for consideration. Because purchases or contractual agreements of this nature require the expenditure of public funds and/or use of public facilities, the successful proposer will understand that portions (potentially all) of their proposal (including any final contracts) will become public record after its acceptance by the Board of County Commissioners. Accept our assurance that the information provided will be used for evaluating the ability of your firm to handle this account and will not be shared with any persons not involved with the selection process.

_____
Kimberly Evans
Purchasing Agent

1. ABOUT THIS DOCUMENT

This document is a Request for Proposal. It differs from a Request for Bid/Quotation in that the County is seeking a solution, as described on the cover page and in the following Background Information section, not a bid/quotation meeting firm specifications for the lowest price. As such, **the lowest price proposed will not guarantee an award recommendation.** As defined in Charter Resolution No. 65, Competitive Sealed Proposals will be evaluated based upon criteria formulated around the most important features of a product or service, of which quality, testing, references, availability or capability may be overriding factors, and price may not be determinative in the issuance of a contract or award. The proposal evaluation criteria should be viewed as standards, which measure how well a vendor's approach meets the desired requirements and needs of the County. Those criteria that will be used and considered in evaluation for award are set forth in this document. The County will thoroughly review all proposals received. The County will also utilize its best judgment when determining whether to schedule a pre-proposal conference, before proposals are accepted, or meetings with vendors, after receipt of all proposals. A Purchase Order/Contract will be awarded to a qualified vendor submitting the best proposal. **Sedgwick County reserves the right to select, and subsequently recommend for award, the proposed equipment/service which best meets its required needs, quality levels, and budget constraints.**

The nature of this work is for a public entity and will require the expenditure of public funds and/or use of public facilities, therefore the successful proposer will understand that portions (potentially all) of their proposal may become public record at any time after receipt of proposals. Proposal responses, purchase orders and final contracts are subject to public disclosure after award. All confidential or proprietary information should be clearly denoted in proposal responses and responders should understand this information will be considered prior to release, however no guarantee is made that information will be withheld from public view.

2. GENERAL & BACKGROUND INFORMATION

Sedgwick County, located in south-central Kansas, is one of the most populous of Kansas' 105 counties with a population estimated at nearly 503,000 persons. It is the sixteenth largest in area, with 1008 square miles, and reportedly has the second highest per capita wealth among Kansas counties. Organizationally, the County is a Commission/Manager entity, employs nearly 2,900 persons, and hosts or provides a full range of municipal services, e.g. - public safety, public works, criminal justice, recreation, entertainment, cultural, human/social, and education.

Sedgwick County Public Works (SCPW) is in need of a new salt and sand storage building for its North Yard located at 10530 East 37th Street North, Wichita, KS 67226. SCPW has evaluated different types of structures and has determined that this published specification for a fabric membrane building structure is best suited for its needs in terms of quality and features. This specification shall not be interpreted as restrictive but rather as a measure of quality and performance against which all other fabric membrane structures will be compared.

The existing building and foundation has already been eradicated and the area is rough graded. The proposed fabric membrane structure is to occupy the same approximate location. The work will include:

1. Design and construct a fabric membrane structure of appropriate size to house a minimum of 3,500 tons of salt and sand mixture stored in piles not to exceed 14 feet in height.
2. Design and construct a 10 inch thick asphalt foundation meeting the specifications for commercial grade hot mix asphalt (see special provision attachment).
3. Design and construct a concrete loading ramp adjacent to the fabric building according to the approximate dimensions shown in the attachment.
4. Provide and install exterior lighting around the structure to adequately illuminate the structure and immediate surrounding area for nighttime operations.

5. Provide and install erosion control structures around the construction area as necessary. Grade all disturbed ground to drain to the drainage swales. Regrade drainage swales to drain if disturbed.

The specifications for performing these functions are detailed in the attached special provisions.

Attached to this RFP for proposer's use is a vicinity map indicating the location of the Sedgwick County North Yard. A site plan indicating the general location for the building footprint and loading ramp are also included, as is a sketch showing the nominal dimensions of the concrete loading ramp to aid in developing an accurate proposal.

3. QUESTIONS and CLARIFICATIONS

Any questions regarding this document must be submitted in writing to Kim Evans at Kimberly.J.Evans@sedgwick.gov by 5:00 p.m. (CDT), Friday, July 31, 2015. Any questions of a substantive nature will be answered in written form as an addendum and posted on the purchasing website at www.sedgwickcounty.org/finance/purchasng.asp under Current RFPs/RFQs; to the right of the RFP number by Friday, August 12, 2015 by 5:00 p.m. (CDT). **Vendors are responsible for checking the website and acknowledging any addenda on their response form.**

4. SCOPE OF SERVICES

Engineer, design, fabricate, supply, construct, install and erect as specified herein for the new open-end fabric covered steel frame building structure, foundation, lighting, and loading ramp to include:

1. Provision of a new fabric covered steel frame building structure.
2. Engineering and development of construction drawings for new asphalt building foundation.
3. Calculations and development of construction drawings for a new, open-end fabric covered steel building structure.
4. Engineering and development of construction drawings for external electric lighting of the building and surrounding area.
5. Engineering and development of construction drawings for new concrete loading ramp.
6. Fabrication, construction, and erection of fabric covered steel frame building structure.
7. Installation of exterior lighting.
8. Construction of concrete loading ramp.
9. General grading of all disturbed areas to ensure positive drainage.

5. MINIMUM REQUIREMENTS

The successful proposer(s) must meet the following requirements in order to provide a proposal:

- **Pre-Proposal Meeting:** Attend a mandatory pre-proposal meeting to be held onsite. Interested proposers are to meet at the North Yard office located at 10530 East 37th Street North, Wichita, KS 67226 beginning at 10:00 a.m. CDT on Tuesday, July 24, 2015.
- **Single-source Responsibility**: Obtain the fabric covered steel frame structure components, including structural framing, from one source. Proposer must list the manufacturer's name at the time of the bid opening. Upon award of contract, quoted manufacturer must be utilized without substitution.
- **Manufacturer's Qualifications**: The fabricator of the building or building components shall be regularly engaged in the fabrication of the type of structure specified in the attached special provision. They shall show evidence of having an adequate manufacturing facility, equipment, and quality control equipment. The fabricator must provide evidence that they have produced a minimum of five (5) similar fabric structures for the purpose of salt storage in the most previous 12 months. Provide the business name, address, contact name, phone number, e-mail address, and a brief description of products/services provided for at least three (3) of the clients.

- **Installer's Qualifications**: The building installer shall be regularly engaged in the erection of fabric covered buildings similar to that specified in the attached special provision. The installer must provide evidence that they have erected and installed similar fabric structures regularly for a minimum of five (5) years. Provide the business name, address, contact name, phone number, e-mail address, and a brief description of products/services provided for at least three (3) of the clients.
- **Engineer's Qualifications**: Engage a Professional Engineer licensed in the State of Kansas and experienced in the design of fabric covered steel frame structures similar to that specified in the attached special provision (Fabric Covered Building Structure).

  Engage a Professional Engineer licensed in the State of Kansas and experienced in the design of electric lighting systems similar to that specified in the attached special provision (Electric Lighting Systems).

  Engage a Professional Engineer licensed in the State of Kansas and experienced in the design of concrete structures similar to that specified in the attached special provision (Concrete Loading Ramp).
- Have knowledge of and comply with all applicable federal, state and local laws, statutes, ordinances, rules and regulations. All laws of the State of Kansas, whether substantive or procedural, shall apply to the contract, and all statutory, charter, and ordinance provisions that are applicable to public contracts in the County shall be followed with respect to the contract.
- Be duly qualified to do business in the State of Kansas upon contract award. Domestic (Kansas) corporations shall furnish evidence of good standing in the form of a Certificate signed by the Kansas Secretary of State. Foreign (non-Kansas) corporations shall furnish evidence of authority to transact business in Kansas in the form of a Certificate signed by the Kansas Secretary of State. In addition, the successful firm shall furnish a Corporate Resolution evidencing the firm's authority to execute the Contract Documents and be legally bound by same.
- Must provide secured handling of all County records and materials.
- Identify a single point of contact for concerns and/or questions.
- Discuss any current local, state or federal violations and any ongoing litigation that may cause conflicts or affect the ability of the vendor to provide services and/or products.

6. SEDGWICK COUNTY'S RESPONSIBILITIES

To assist the successful respondent, Sedgwick County will do the following:

- Provide information, as legally allowed, in possession of the County, which relates to the County's requirements for this project or which is relevant to this project.
- Designate a person to act as the County's contract manager with respect to the work to be performed under this contract.

7. SELECTION CRITERIA

The selection process will be based on the responses to this Request for Proposal and any interviews required verifying the ability of the respondent to provide the services this document requires. A committee of County staff will judge each vendor's response based on the following criteria:

1. Meeting or exceeding all Request for Proposal conditions and miscellaneous instructions as outlined herein, and the clarity, completeness and comprehensiveness of the proposal.
2. References verifying ability to provide the proposed services.
3. Implementation plan and services proposed.
4. Proposing services described herein with the most advantageous and prudent methodology and cost to the County.

Information provided by respondents in response to this Request for Proposal will be considered confidential by the County throughout the selection process, to the extent permitted by law.

Those submitting a proposal do so entirely at their expense. There is no expressed or implied obligation by Sedgwick County to reimburse any individual or firm for any cost incurred in preparing or submitting proposals, providing additional information when requested by Sedgwick County or for participating in any selection interviews.

The review committee will select the proposals, which appear most beneficial. These respondents may be asked to provide a presentation to the review committee during the evaluation period. No negotiations, decisions, or actions shall be initiated by any firm as a result of any verbal discussion with any County employee prior to the opening of responses to this document.

Sedgwick County reserves the right to select the service(s) and/or provider(s), and subsequently recommend for award, the proposed services that best meets required needs, quality levels, and budget constraints.

8. CONTRACT TERM

This is a Calendar Completion Date contract. The Contractor shall complete installation and construction, all remaining, unfinished contract pay items, subsidiary items, incidental work, final cleanup, and final punch list on or before **NOVEMBER 6, 2015**. If installation and construction, all remaining, unfinished contract pay items, subsidiary items, incidental work, final cleanup, and final punch list are not completed on or before **NOVEMBER 6, 2015**, the Contractor shall be liable for liquidated damages per the attached special provision.

9. PAYMENT TERMS

Payments for all specified services will be made with the following criteria taken into consideration:

1. Board of County Commission approval of the recommended proposal.
2. Regular payments will be made no more frequently than monthly, based on work completed.
3. Regular payments may be withheld until completion of agreed upon project milestones.
4. Payments will be made from correct and detailed invoices submitted for completed services.

Please see all payment and invoice provisions here:
http://www.sedgwickcounty.org/purchasing/payment_and_invoice_provisions.pdf

10. CONFIDENTIAL MATTERS and DATA OWNERSHIP

The successful proposer agrees all data, records and information, which the proposer, its agents and employees, which is the subject of this proposal obtain access, remains at all times exclusively the property of Sedgwick County. The successful proposer agrees all such data, records, plans and information constitutes at all times proprietary information of Sedgwick County. The successful proposer agrees that it will not disclose, provide, or make available any of such proprietary information in any form to any person or entity. In addition, the successful proposer agrees it will not use any names or addresses contained in such data, records, plans and information for the purpose of selling or offering for sale any property or service to any person or entity who resides at any address in such data. In addition, the successful proposer agrees it will not sell, give or otherwise make available to any person or entity any names or addresses contained in or derived from such data, records and information for the purpose of allowing such person to sell or offer for sale any property or service to any person or entity named in such data. Successful proposer agrees it will take all reasonable steps and the same protective precautions to protect Sedgwick County's proprietary information from disclosure to third parties as with successful proposer's own proprietary and confidential information. **Proposer agrees that all data, regardless of form that is generated as a result of this Request for Proposal is the property of Sedgwick County.**

11. INSURANCE COVERAGE

The Provider shall provide a certificate of insurance naming Sedgwick County as an "additional insured" in the minimum amounts as specified herein. All insurance must be with an insurance company with a minimum

BEST rating of A-VIII and licensed to do business in the State of Kansas. It is the responsibility of the Provider to ensure that any and all approved subcontractors meet the minimum insurance requirements.

The successful vendor shall furnish the county with certificates of insurance effecting coverage required by this clause. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements are to be received and approved by the county before work commences. Renewal of expiring certificates shall be furnished to the county 30 days prior to expiration.

Worker's Compensation:	
Applicable State Statutory Employer's Liability	
Employer's Liability Insurance:	$100,000.00
Contractor's Liability Insurance:	
Form of insurance shall be by a Commercial General Liability and include Automobile comprehensive/liability	
Bodily Injury:	
Each Occurrence	$500,000.00
Aggregate	$500,000.00
Property Damage:	
Each Occurrence	$500,000.00
Aggregate	$500,000.00
Personal Injury:	
Each Person Aggregate	$500,000.00
General Aggregate	$500,000.00
Automobile Liability-Owned, Non-owned and Hired	
Bodily Injury Each Person	$500,000.00
Bodily Injury Each Occurrence	$500,000.00
Professional Liability	$500,000.00

12. INDEMNIFICATION

To the fullest extent of the law, the provider, its subcontractor, agents, servants, officers or employees shall indemnify and hold harmless Sedgwick County, including, but not limited to, its elected and appointed officials, officers, employees and agents, from any and all claims brought by any person or entity whatsoever, arising from any act, error, or omission of the provider during the provider's performance of the agreement or any other agreements of the provider entered into by reason thereof. The provider shall indemnify and defend Sedgwick County, including, but not limited to, its elected and appointed officials, officers, employees and agents, with respect to any claim arising, or alleged to have arisen from negligence, and/or willful, wanton or reckless acts or omissions of the provider, its subcontractor, agents, servants, officers, or employees and any and all losses or liabilities resulting from any such claims, including, but not limited to, damage awards, costs and reasonable attorney's fees. This indemnification shall not be affected by any other portions of the agreement relating to insurance requirements. The provider agrees that it will procure and keep in force at all times at its own expense insurance in accordance with these specifications.

13. TERMINATION

The County reserves the right to cancel the award before signing the contract without liability. The proposer assumes the risk for costs incurred, materials ordered, or work started before the County signs the contract. In the event of termination of this agreement as a result of a breach by contractor hereunder, the County may hire another contractor, use County force, require the Surety, or any combination thereof to complete the contract.

The County, Surety, or third party completing the contract may appropriate and use all materials on the project site and all materials paid for and stored off site. If the County hires a third party or uses the County's own forces to complete the contract, the Contractor and Surety are liable to the County for extra costs the County incurs to complete the contract. These costs include construction costs that exceed the original contract price and administrative costs that rise from the Contractor's breach. The County will deduct these costs from the contract funds. If the costs exceed the amount of contract funds, the Contractor and Surety shall pay the County the deficit. If the costs are less than the contract funds remaining, the County will pay the Contractor or Surety the balance.

14. TENTATIVE TIMELINE

The following dates are provided for informational purposes and are subject to change without notice:

Distribution of Request for Proposal to interested parties	**July 8, 2015**
Pre-Proposal Meeting 10:00 a.m. CDT	**July 24, 2015**
Questions and clarifications submitted in writing by 5:00 p.m. CDT	**July 31 2015**
Addendum Issued	**August 12, 2015**
Sealed Proposal due before 1:45 p.m. CDT	**August 18, 2015**
Evaluation Period	**August 19-26, 2015**
Board of Bids and Contracts Recommendation	**August 27, 2015**
Board of County Commission Award	**September 2, 2015**

15. GENERAL CONTRACT PROVISIONS

http://www.sedgwickcounty.org/purchasing/General_Contractual_Provisions_2013.pdf

16. PROPOSAL CONDITIONS

http://www.sedgwickcounty.org/purchasing/RfqRfq/rfpcond.pdf

17. PROPOSAL CONTENT

Proposal response must include the following:

1. Proposal Response Form completed and signed. Acknowledge any addenda issued on response form page.
2. Provide a brief overview and history of your company.
3. Detailed information outlining responses to our proposal request and the services you provide. Narrative should clearly address all items listed in Section 4 (Scope of Services) and Section 5 (Minimum Requirements) as outlined in this document. Discuss your company's experience providing similar services and capacity to provide services to County.
4. Include a complete payment schedule listing the services proposed and rate for each service (including any additional fees or charges or minimum billable requirements).
5. Detail the assistance to be required by employees of Sedgwick County.
6. Provide three (3) references for which your organization has conducted similar services during the last five (5) years. Include name of business, address, phone number, contact person and title.
7. Any additional information necessary to assist the County in evaluating your proposal.

Proposal Response Form

Fabric Membrane Salt Storage Structure and Foundation
#15-0075

The undersigned, on behalf of the Proposer, certifies that: (1) this offer is made without previous understanding, agreement or connection with any person, firm, or corporation submitting a proposal on the same project; (2) is in all respects fair and without collusion or fraud; (3) the person whose signature appears below is legally empowered to bind the firm in whose name the proposal is entered; (4) they have read the complete Request for Proposal and understands all provisions; (5) if accepted by the County, this proposal is guaranteed as written and amended and will be implemented as stated; and (6) mistakes in writing of the submitted proposal will be their responsibility.

NAME _____

DBA/SAME_____

CONTACT _____

ADDRESS _____ CITY/STATE _____ ZIP _____

PHONE _____ FAX _____HOURS _____

TAX PAYER I.D. NUMBER _____ STATE INCORPORATED_____

COMPANY WEB SITE ADDRESS _____ E-MAIL _____

NUMBER OF LOCATIONS _____ NUMBER OF PERSONS EMPLOYED _____

TYPE OF ORGANIZATION: Public Corporation _____ Private Corporation_____ Sole Proprietorship _____

LLC ____ LLP _____Not For Profit _____ Partnership _____ Small Business _____ Manufacturer _____

Distributor _____ Retail _____ Dealer_____ Other (Describe): _____

BUSINESS MODEL: Small Business _____ Manufacturer _____ Distributor _____ Retail _____ Dealer _____

Other (Describe): _____

General Nature of Business _____ FEIN/SS # _____ W-9 included _____

Not a Minority Owned Business _____ Minority Owned Business: _____ Certification # _____

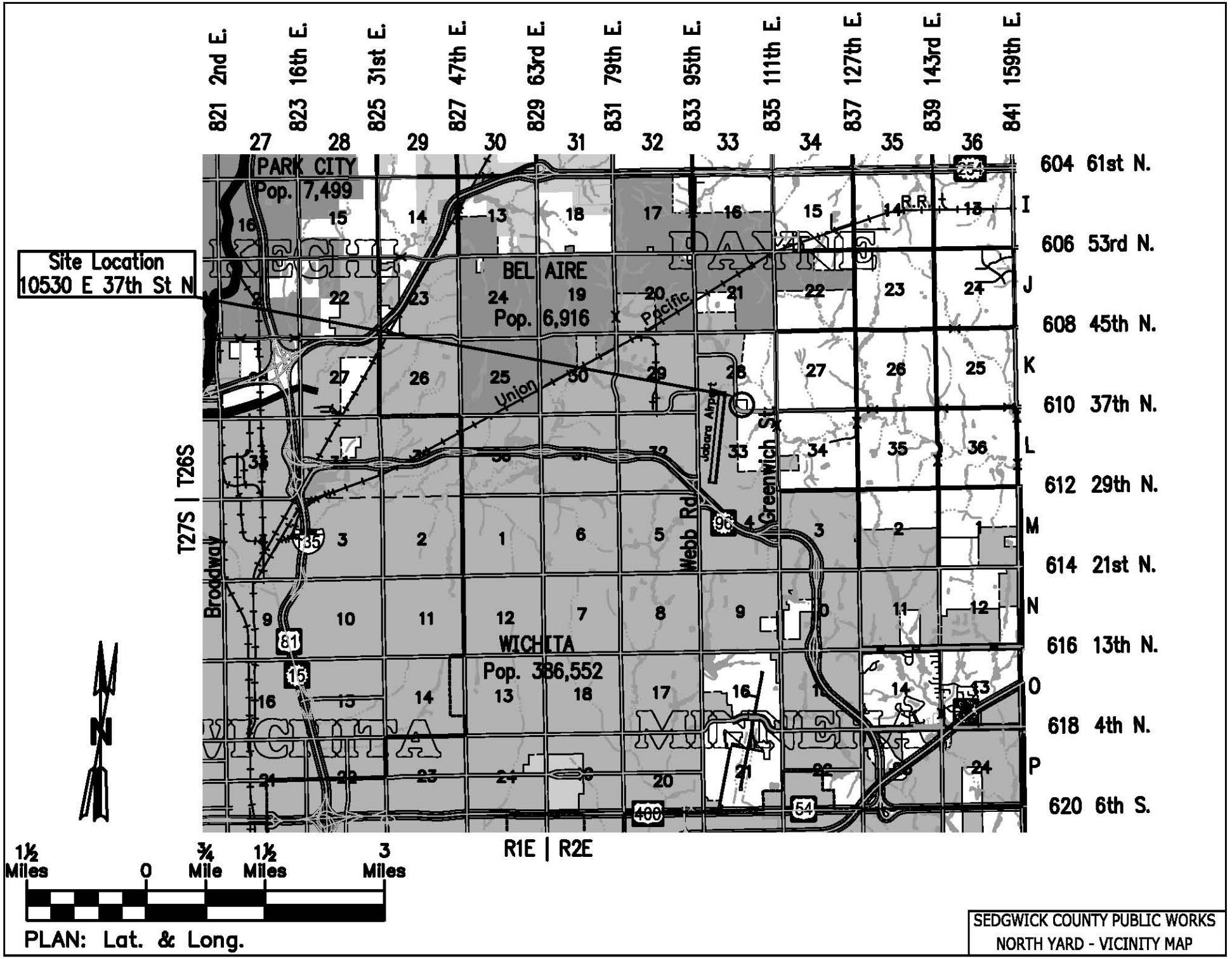
African American ____ Asian ____ Hispanic _____ Native American _____ Other ____ Woman Owned Business _____

ACKNOWLEDGE RECEIPT OF ADDENDA: All addendum(s) are posted to our RFQ/RFP web page and it is the vendor's responsibility to check and confirm all addendum(s) related to this document by going to https://ssc.sedgwickcounty.org/RFQRFPWebApp/RFP2.aspx.

NO._____, DATED _____; NO._____, DATED_____; NO._____, DATED_____

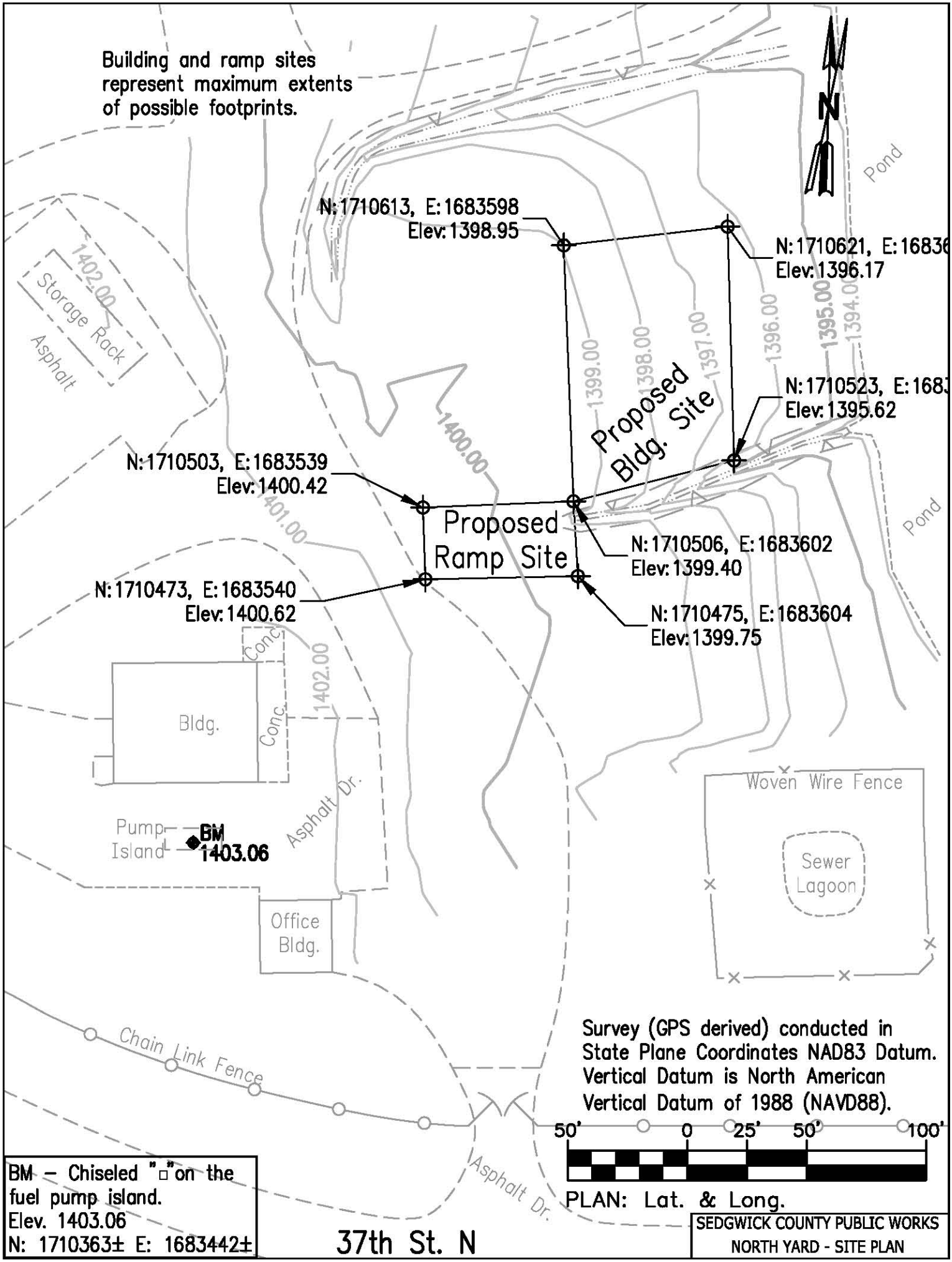
Signature_____ Title_____

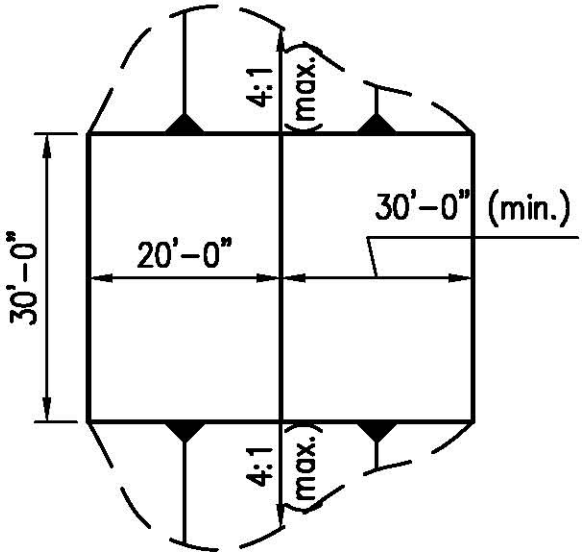
Print Name_____ Dated _____



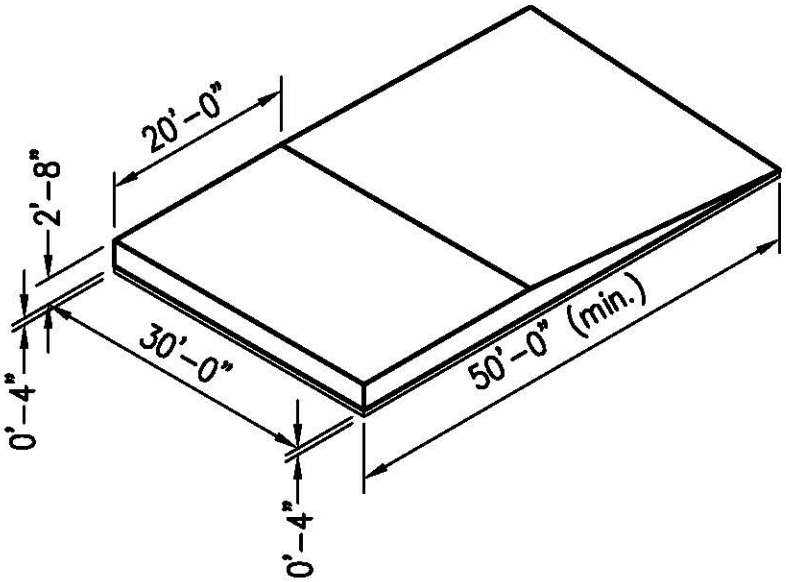
PLAN: Lat. & Long.

SEDGWICK COUNTY PUBLIC WORKS
NORTH YARD - VICINITY MAP

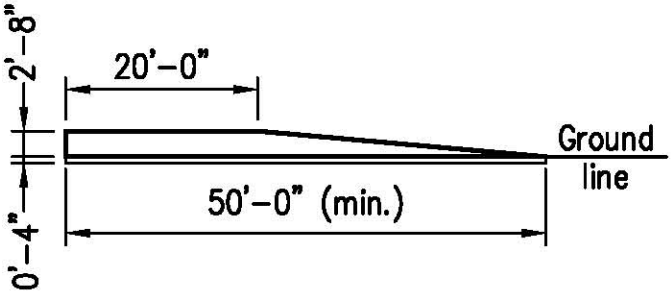

Building and ramp sites represent maximum extents of possible footprints.
N
Pond
N: 1710613, E: 1683598
Elev: 1398.95
N: 1710621, E: 16836
Elev: 1396.17
1402.00
Storage Rack
Asphalt
1399.00
1398.00
1397.00
1396.00
1395.00
1394.00
Proposed Bldg. Site
N: 1710523, E: 1683
Elev: 1395.62
1400.00
N: 1710503, E: 1683539
Elev: 1400.42
1401.00
Proposed Ramp Site
N: 1710506, E: 1683602
Elev: 1399.40
Pond
N: 1710473, E: 1683540
Elev: 1400.62
N: 1710475, E: 1683604
Elev: 1399.75
Conc.
1402.00
Bldg.
Conc.
Asphalt Dr.
Woven Wire Fence
Pump Island
BM
1403.06
Sewer Lagoon
Office Bldg.
Chain Link Fence
Asphalt Dr.
Survey (GPS derived) conducted in State Plane Coordinates NAD83 Datum. Vertical Datum is North American Vertical Datum of 1988 (NAVD88).
50' 0 25' 50' 100'
PLAN: Lat. & Long.
BM – Chiseled "□" on the fuel pump island.
Elev. 1403.06
N: 1710363± E: 1683442±
37th St. N
SEDGWICK COUNTY PUBLIC WORKS
NORTH YARD - SITE PLAN



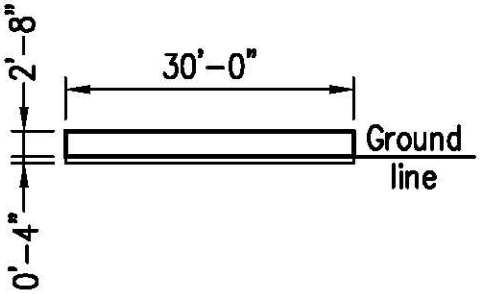
TOP



ISOMETRIC



SIDE



FRONT

SCALE:
NTS

SEDGWICK COUNTY PUBLIC WORKS
NORTH YARD - CONCRETE RAMP PLAN

SPECIAL PROVISION

NOTE: This special provision is generally written in the imperative mood. The subject, "the *Contractor*" is implied. Also implied in this language are "*shall*", "*shall be*", or similar words and phrases. The word "*will*" generally pertains to decisions or actions of Sedgwick County Public Works.

GENERAL NOTES

Contractor Prequalification Waiver

Sedgwick County reserves the right to accept bids from contractors who are not prequalified by KDOT for the work to be performed on this project.

Specifications

All construction work and materials shall comply with the Kansas Department of Transportation Standard Specifications for State Road and Bridge Construction (2007 Edition) and project special provisions unless otherwise noted. These specifications can be found at https://www.ksdot.org/bureaus/burConsMain/specprov/2007SSDefault.asp.

Temporary Project Water Pollution Control

Adequate erosion prevention and sediment control Best Management Practices (BMPs) shall be employed for all land-disturbing activities of any size. Land-disturbing or construction activities of any size that discharge sediment or sediment-laden stormwater runoff to the Municipal Separate Storm Sewer System (MS4), to surface waters directly, or discharges onto adjacent properties are a violation of Section 23-270 of the Sedgwick County Stormwater Code.

SPECIAL PROVISION

NOTE: This special provision is generally written in the imperative mood. The subject, "the *Contractor*" is implied. Also implied in this language are "*shall*", "*shall be*", or similar words and phrases. The word "*will*" generally pertains to decisions or actions of Sedgwick County Public Works.

WORK SCHEDULE; SPECIFIED CALENDAR COMPLETION DATES; LIQUIDATED DAMAGES

I. PROJECT DEIFNED; NATURE OF PROJECT

The primary operation to be undertaken in this project consists of the fabrication, installation and construction of a fabric covered steel frame building structure with tensioned fabric membrane cover to be supported by an asphalt foundation in Sedgwick County, KS.

II. NOTICE TO PROCEED

A. The Engineer will issue the notice to proceed after the Contractor executes the Contract and has participated in the pre-construction conference held by Sedgwick County for the Project.

III. CALENDAR COMPLETION DATE OF NOVEMBER 6, 2015 FOR COMPLETION OF ALL WORK INCLUDING CLEANUP; LIQUIDATED DAMAGES

A. **Subsection 108.4c** of the Kansas Department of Transportation Standard Specifications for State Road and Bridge Construction (2007 Ed.) (Standard Specifications) does not apply to this Contract. Instead, the Contractor shall complete the remaining, unfinished contract pay items, subsidiary items, incidental work, final cleanup, and final punch list on or before **NOVEMBER 6, 2015**.

B. Liquidated Damages. If all remaining, unfinished contract pay items, subsidiary items, incidental work, final cleanup, and final punch list is not completed on or before **November 6, 2015**, the Contractor shall be liable for liquidated damages. Excluding Sundays and legal Holidays, the liquidated damages charged and owing shall be **four hundred dollars ($400.00)** per day for each calendar day, or part thereof, that the project is not complete after **November 6, 2015**.

SPECIAL PROVISION

NOTE: This special provision is generally written in the imperative mood. The subject, "the *Contractor*" is implied. Also implied in this language are "*shall*", "*shall be*", or similar words and phrases. The word "*will*" generally pertains to decisions or actions of Sedgwick County Public Works.

FABRIC COVERED BUILDING STRUCTURE

1. DESCRIPTION

This work consists of providing all materials, labor, and equipment necessary to engineer, design, fabricate, supply, construct and erect an open-end fabric covered steel frame building structure for bulk storage of salt to be supported by a new asphalt foundation.

BID ITEM	**UNITS**
Fabric Covered Steel Frame Building Structure	Lump Sum

2. MATERIALS

All materials shall be new, without defects and free of repairs. The quality of the materials used shall be such that all items are in conformance with the performance requirements as specified herein.

2.1. Hot Mix Asphalt for foundation. The asphalt mixture must be approved by the Engineer. This approval will generally be based upon the following conditions:

(1) Furnish all materials by recognized producers.

(2) Provide a recognized type of HMA plant.

(3) Produce the mixture to meet the SR-12.5A mix design requirements in Section 611of the Kansas Department of Transportation Standard Specifications for State Road and Bridge Construction (latest revision of the 2007 Edition). The mixture may utilize up to twenty-five percent (25%) Reclaimed Asphalt Pavement (RAP).

2.1.1. Following approval of the mix, the Contractor may commence delivery of the mix to the project.

(1) Provide a workable mixture capable of being spread without tearing or flushing under compaction.

(2) Asphalt for tack may be any asphalt approved by the Engineer.

(3) Certify the mixture produced for use meets the requirements of the approved mix design.

2.2. Fabric Cover. Provide a fabric membrane cover that complies with the minimum specifications listed in **TABLE 1** below.

Table 1

Minimum Fabric Cover Specifications

Test	Value	Testing Standard
Coated Weight	12.1 oz/S.Y.	
Base Fabric Weight	4 mils average, each side	
Finished Thickness	23 mils	ASTM D5199
Grab Tensile Strength	446 lbs Weft 414 lbs Warp	ASTM D5304 ASTM D5035
Tongue Tear Strength	108lbs Weft	ASTM D2261

	94 lbs Warp	ASTM D2261
Mullen Burst	661 psi	ASTM D3786
Cold Crack Resistance	-76°F (-60°C)	ASTM D2136
Resistance to UV & Weathering	90% retention after 2000 hr.	
Flame Retardency	Pass	NFPA 701
Flame Spread	Class A	ASTM E84
Intermittent Flaming	Class A	ASTM E108

2.2.1. In order to provide for a good finished appearance and to insure weather tightness, the membrane shall be assembled and tensioned, in a manner to minimize wrinkles in hot and cold temperatures. The structure membrane shall be constructed in way so that each bay is equipped with its own individual membrane which will be attached to the upper cord of the steel truss system.

2.2.2. The structure membrane must be designed to shed snow before the design load is exceeded, or alternatively provide structural capacity to meet or exceed required roof snow load requirements of specified site. The architectural membrane shall be continuous from the base of the structure to the peak and manufactured in such a way that no eave will exist.

2.2.3. The structure supplier will provide all materials and methods necessary to fully tension and seal the membrane material around all doors, ventilation and other openings as well as around the structure perimeter below the main tensioning system. This seal shall provide a neat and finished appearance and eliminate any loose membrane cladding that could otherwise be damaged by flapping or abrasion. When a membrane base skirt is required, this shall be supplied and attached at the base perimeter to allow a reasonable seal against air and water intrusion.

2.2.4. The structure membrane shall not be designed to function as a structural member such that, should any damage to or penetrations of the membrane occur, the integrity of the structural framework shall not be affected.

2.2.5. All membranes used shall be water and mildew resistant, insect proof, and UV stabilized. They are to withstand extreme climatic variations and contain ultra-violet inhibitors to reduce degradation by the sun's rays. Manufacturer is to provide a minimum 16-year warranty of the fabric membrane.

2.2. Structural Steel Framing. The main structure shall consist of welded trusses with parallel tubes separated apart by tube webs.

- All bolts, anchors, and washers used shall have a minimum Grade 5 specification and shall be Hot- Dip Galvanized.
- Hot-Dip Galvanizing must meet ASTM 123 and occur after fabrication. The Hot-Dip Galvanizing must be fully attained inside and outside of the truss and tubing. The manufacturer is to provide a 3 year warranty against chipping or flaking of the coating.
- Main structural components shall be steel with bolts, splices, anchors, and washers being the only exceptions considered. Include all parts needed for complete and operational system.
- All truss members shall be fabricated from high-strength structural steel, ASTM A500 Grade B. All steel angles and plates shall be ASTM A36. All cold-formed framing should be in accordance with ASTM A569 and A568.
- The fabrication of the steel shall be in accordance with guidelines set forth in the AISC steel design manual and with the AWS code of structural welding.
- All major structural steel shall have the following structural properties:

Minimum yield stress: 44 KSI
Minimum tensile stress: 50 KSI

- All welds shall be in accordance with the AWS code of structural welding. All welding to be done before galvanizing with complete weld around joint. No welding shall be performed in the field unless authorized in writing by the Engineer.
- All Steel framework and welds to be coated after fabrication.
- All welds shall be full, not crimped, for maximum truss strength.
- All cross bracing between arches shall be accomplished with the use of threaded steel bars. Cable cross-bracing shall not be accepted
- Grind all corners and sharp edges.
- Painting of steel components shall only be utilized if necessary for field repairs and shall not be employed as a factory finish. Should field repair be necessary, a zinc rich field coat (93% zinc) shall be applied with a minimum thickness of 2 mils.
- The manufacturer shall provide a minimum 16-year warranty for the steel truss framework.

2.3. Cables and Fittings.

- Cables and fittings shall be Hot Dip Galvanized.
- All structural wire rope shall be made from Wire Rope conforming to AISI Steel Cable Manual requirements with a Class A galvanized coating or approved substitute.
- Wire rope shall be a minimum of 5/16" galvanized improved plow steel 6 x 19 commercial grade.
- All cable terminations and connectors shall be Hot-Dip Galvanized for corrosion protection.
- Cables shall be designated with a minimum safety factor of 2 on breaking strength.
- Cables with are designated to be prestretched shall be prestretched per ASTM A603 for wire rope. Cables of the same type shall have the same modulus of elasticity.
- All cables and end fittings shall be delivered clean and dry.
- All swaged and speltered fittings shall be designated and attached to develop the full breaking strength of the cable. Thimble end fittings shall develop a minimum of 110% of the cable breaking strength.
- Swaged end fittings, pins, nuts and washers shall be electro-galvanized.
- Speltered end fittings shall be Hot-Dip Galvanized.

2.4. Aluminum Membrane Plates and Clamps**.**

- Aluminum shall conform to alloy 6061-T6.
- All components will be welded or stamped with appropriate part number in a manner that will still be visible after powder coating is applied.
- The aluminum shall be polyester powder painted to a minimum of 3 mils.

2.5. Bolts and Related Fasteners.

- Fasteners and hardware accessories shall be Hot-Dip Galvanized or stainless steel and be of the sizes best suited for the purpose as recommended by the Professional Engineer sealing and signing the construction plans and shop drawings.
- Fasteners used on main structural members shall be Hot-Dip Galvanized high-strength bolts including nuts and washers, and conforming to ASTM A325 or A490 as applicable. All other fasteners shall be adequately sized and either Hot-Dip Galvanized or stainless steel.
- Concrete anchor bolts shall conform to ASTM F1554 Grade 36 and be Hot-Dip Galvanized.

3. ENGINEERING REQUIREMENTS

Engage a Professional Engineer licensed in the State of Kansas and experienced in the design of fabric covered steel frame structures similar to that specified here. Develop construction plans for the concrete end walls, asphalt foundation, grading, and erection of the fabric covered steel frame building structure.

Submit three (3) copies of the construction plans to County for approval.

4. STRUCTURAL REQUIREMENTS

4.1. Truss Framework tubing shall be Hot-Dip Galvanized per the requirements stated above. The Hot-Dip Galvanizing must meet ASTM 123. The manufacturer is to provide a 3 year warranty against chipping or flaking of the coating. Hot-Dip Galvanizing shall occur post-fabrication.

4.2. All purlins used in the building must be a minimum of 2 7/8 inches and be attached to the truss using a double bolted configuration directly to the dog bone of the truss. Saddle brackets are not a suitable attachment as they allow rotational movement to occur.

4.3. Building must utilize cross cables to prevent racking. Cables must be a minimum of 5/16 inch galvanized improved plow steel 6 x 19 commercial grade, must be secured to the trusses using a solid bolted connection, and they must be tensioned with a turnbuckle.

4.4. All tie down pipe that is used to fasten the cover to the building must be secured by a lashing winch at every truss. The winch shall be rated at least 5-ton Minimum Breaking Strength (MBS).

4.5. The fabric roof material must consist a single cover unless the length required exceeds 140 feet long. The cover must be securely attached at ends and sides. Field welding is acceptable.

4.6. Design Loads. Sedgwick County has adopted The International Building Code (IBC), as published by the International Codes Council, Inc., 2006 Edition. Amendments are presented in the Wichita/Sedgwick County Unified Building and Trade Code ("Code") and are available online at www.sedgwickcounty.org. The following design factors are from the latest edition of the Code. The Code and any opinions or decisions of the Metropolitan Area Building and Construction Department will supersede any conflicts or contradictions noted here.

4.6.1.	Building Occupancy Category	I
4.6.2.	Ground Snow Load	15 PSF
	Roof Snow Load	Per IBC, 2006 Edition
	Snow Exposure Factor	0.9
	Snow Thermal Factor	1.2
	Snow Importance Factor	0.8
4.6.3.	Basic Wind Speed	90 MPH
	Wind Speed Conversion	76 MPH
	Exposure Category	C
	Wind Importance Factor	0.87
4.6.4.	Roof Live Load	5 PSF

4.6.5. Load combinations shall be as required by the IBC, 2006 Edition

5. SITE CONDITIONS

The Contractor shall visit the site and examine and note all conditions as to character and extent of work involved. No extra compensation will be allowed for conditions visible by inspection or conditions determinable from the Contract Documents.

Information and data provided by the County shall be verified by the Contractor. Any discrepancies shall be brought to the attention of the Engineer prior to construction operations.

6. REGULATORY REQUIREMENTS

6.1. Conform to applicable code for fire resistance rating for fabric covered steel frame system covering.

6.2. Life Safety: All fabric structures shall ensure that no life safety issue is created in the event of a loss of the fabric. The structural support members shall not rely on the fabric for structural stability.

6.3. Permits: Apply for and acquire all permits necessary to construct the project. The Contractor shall also arrange for and obtain a Certificate of Occupancy. All costs shall be subsidiary to the Fabric Covered Building Structure bid item.

7. DELIVERY, STORAGE, AND HANDLING

7.1. Delivery and Storage: Deliver materials to the site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer. Store materials in accordance with manufacturer's instructions, in a clean, dry, well ventilated area, above ground on blocking, and do not allow materials to become wet, stained, or dirty.

7.2. Handling: Handle materials so as to protect materials, coatings, and finishes during transportation and installation to prevent damage or staining. Handle fabric in accordance with manufacturer's instructions. Use care in handling of fabric to avoid damage to fabric material and coating. Do not damage, crush, or kink cables.

8. CONSTRUCTION REQUIREMENTS

8.1. Asphalt Foundation

8.1.1. Use equipment and construction methods as described in Section 4.0 and 5.0 of the Plant Mix Asphalt Construction-Commercial Grade special provision.

8.1.2. Construct an asphalt foundation with a depth of 10”. The perimeter shall extend 5 feet beyond all structure walls.

8.1.3. Construct an asphalt approach apron the length of the structure opening and appropriate width to ensure a smooth transition from the existing ground to the structure foundation.

8.2. Fabric Building Structure

8.2.1. The fabric covered steel frame building structure manufacturer will prepare a full and comprehensive assembly procedure guide prior to installation.

8.2.2. Comply with manufacturer recommendations, the approved shop drawings, and the Wichita/Sedgwick County Unified Building and Trade Code.

8.2.3. Open-End Structure. Erect the building structure such that the front, open-end faces south.

8.2.4. Weather Conditions: Proceed with installation of the fabric and associated work only when existing and forecasted weather conditions will permit work to be performed in accordance with manufacturer's recommendations. The fabric covered structure shall not be installed when wind conditions are deemed in excess of manufacturer's determination of safe wind speed erection conditions. It shall be the manufacturer's sole discretion to determine acceptable and safe wind condition for installation.

8.2.5. Framing and structural members: Anchor bolts shall be accurately set. Uniform bearing under base plates shall be provided using non-shrink grouting compound where applicable. Members shall be accurately set to assure proper fitting and covering. As erection progresses, the work shall be securely fastened to resist the dead load and wind and erection stresses. Erected structural frame work shall be adequately guyed and secured to resist all possible loads due to wind and the installation process.

8.2.6. Fabric: Prior to start of installation; check all surfaces of framing members and other rigid construction elements to be in contact with fabric to ensure that all edges are smooth and well rounded. Remove any potential causes for snagging or tearing of the fabric. Properly install all connections and provide all materials and equipment required for the erection and stressing of

the fabric. Unroll the fabric in such a manner as to avoid snagging or dragging the fabric over sharp objects during installation. Adequate fabric prestress shall be confirmed by the fabric structure manufacturer and the appearance of the fabric membrane roof shall be smooth and wrinkle free. Creasing or folding the fabric around sharp corners shall be avoided at all times.

8.2.7. Fabric tensioning system: Cables shall be free of all kinks and bends. Care shall be taken not to damage cables during installation. Bolt holes shall be 1116" larger than the bolt, unless otherwise indicated.

8.2.8. No exterior purlins, guy ropes or cables shall be used for anchoring the structure.

8.2.9. The interior of the structure below the main trusses shall be a clear span free of any structural support members and shall provide unobstructed floor space.

8.2.9.1. Minimum vertical clearance shall be 21'-6" measured from the inside edge of the foundation floor. An interior clearance dimension must be maintained at a minimum of 24"-0" of height to provide room for loading and unloading of salt. This dimension shall be maintained as wide as possible across the structure opening.

8.2.10. Ventilation. Suitable openings shall be located at the back of the structure near the highest portion of the roof or walls to provide sufficient vent area for the structure. Each ventilation opening shall be weatherproof.

8.3. Concrete End Walls. Concrete end walls shall be employed of sufficient height to ensure the vertical clearances specified in § 8.2.8.1.

8.3.1. Concrete mix and construction methods shall meet the appropriate specifications of Division 700 of the Kansas Department of Transportation Standard Specifications for State Road and Bridge Construction (latest revision of the 2007 Edition).

8.3.2. Reinforcing steel for concrete end walls shall be epoxy-coated. The Contractor shall comply with the construction requirements of Section 711 of the Kansas Department of Transportation Standard Specifications for State Road and Bridge Construction (latest revision of the 2007 Edition)

8.3.3. A topical concrete waterproofing system shall be applied to all concrete surfaces exposed to view. Use a clear, breathable, high performance silane concrete sealer with an oliophobic additive for protecting new concrete surfaces.

8.4. Contractor shall grade the surrounding disturbed area to ensure positive drainage and minimize erosion potential to the satisfaction of the Engineer.

9. MAINTENANCE MANUAL

9.1. Upon completion of the project, the Contractor shall supply the County with three (3) copies of a manual detailing the manufacturer's suggested periodic maintenance for the complete fabric covered steel frame building structure, including but not limited to, the care and maintenance of the fabric cover, truss structures, and cable tensioning.

10. MEASUREMENT AND PAYMENT

The Engineer will measure the fabric covered building structure by the lump sum. Excavation, backfilling and grading are subsidiary. The asphalt foundation and concrete end walls are subsidiary.

Engineering services, plan development, and construction plan submittals are subsidiary. Any cost for necessary permits is subsidiary.

Payment for "Fabric Covered Building Structure" at the contract unit price is full compensation for specified work.

SPECIAL PROVISION

NOTE: This special provision is generally written in the imperative mood. The subject, "the *Contractor*" is implied. Also implied in this language are "*shall*", "*shall be*", or similar words and phrases. The word "*will*" generally pertains to decisions or actions of Sedgwick County Public Works.

CONCRETE LOADING RAMP

1. DESCRIPTION

Design and construct a concrete loading ramp used to elevate and provide a working landing for front-end loaders and similar equipment in order to simplify filling of hoppers.

BID ITEM	**UNITS**
Concrete Loading Ramp	Each

2. MATERIALS

Provide materials that comply with the applicable requirements of the Kansas Department of Transportation Standard Specifications for State Road and Bridge Construction (2007 Edition).

Grade 4.0 Concrete .....DIVISION 400
Concrete Curing Materials .....DIVISION 1400
Joint Sealing Compounds .....DIVISION 1500
Type B Preformed Expansion Joint Filler .....DIVISION 1500
Preformed Elastomeric Compression Joint Seals .....DIVISION 1500
Epoxy-Coated Reinforcing Steel …….....DIVISION 1600

3. ENGINEERING REQUIREMENTS

Engage a Professional Engineer licensed in the State of Kansas and experienced in the design of concrete structures. Develop plans to support the anticipated dead and live loads of the ramp. A sketch of approximate dimensions has been provided as an attachment.

Submit three (3) copies of the construction plans to County for approval.

4. CONSTRUCTION REQUIREMENTS

a. **Reinforcing Steel**. Use epoxy-coated reinforcing steel meeting the construction requirements of SUBSECTION 711.3 of the Kansas Department of Transportation Standard Specifications for State Road and Bridge Construction (2007 Edition).

b. **Excavation**. Excavate to the required depth and to a width that will permit the installation and bracing of the forms. Shape the foundation and compact to a firm even surface conforming to the section shown in the approved plans. Remove all soft and yielding material and replace with acceptable material.

c. **Forms**. Extend forms for the full depth of the concrete. Use straight forms, free from warp and of sufficient strength to resist the pressure of the concrete without springing. Brace and stake forms so the forms remain true to line and grade until their removal.

d. **Mixing and Placing Concrete**. Unless shown otherwise in the approved plans, construct concrete ramp in a single course of Grade 4.0 concrete. Thoroughly moisten the foundation immediately prior to the placing of concrete. Place concrete according to DIVISION 400.

   Finish the surface with a wooden float. Finish all outside edges of the slab and all joints with a ¼ inch radius edging tool.

e. **Reinforcement**. Place reinforcing steel for the ramp as shown in the approved plans.

f. **Curing**. Immediately after the finishing operation, cure the ramp according to DIVISION 700.

g. **Contraction, Construction and Expansion Joints**. Form contraction joints at intervals shown in the approved plans. If not shown, form by placing a metal template having a minimum thickness of ⅛ inch into the concrete a minimum of ⅓ of the depth of the concrete, or by cutting entirely through the fresh concrete with a trowel.

   Construct expansion joints as shown in the Contract Documents.

   Round the edges of contraction, construction and expansion joints with a ¼ inch radius edging tool.

h. **Backfilling**. Backfill the area adjacent to the new ramp and satisfactorily compact with suitable material. Observe adequate precautions to prevent injury to the ramp during the compacting operations.

   Dispose of excess excavated material as directed by the Engineer.

5. MEASUREMENT AND PAYMENT

The Engineer will measure each concrete ramp. Excavation and steel reinforcement for the construction of ramps will not be measured separately for payment, but will be considered subsidiary work.

Engineering services, plan development, and construction plan submittals are subsidiary.

Payment for "Concrete Loading Ramp" at the contract unit price is full compensation for the specified work.

SPECIAL PROVISION

NOTE: This special provision is generally written in the imperative mood. The subject, "the *Contractor*" is implied. Also implied in this language are "*shall*", "*shall be*", or similar words and phrases. The word "*will*" generally pertains to decisions or actions of Sedgwick County Public Works.

ELECTRIC LIGHTING SYSTEM

1. DESCRIPTION

Design, supply, and install an exterior electric lighting system to illuminate a fabric membrane structure and immediate surrounding area for nighttime operations.

BID ITEM	**UNITS**
Electric Lighting System	Lump Sum

2. MATERIALS

All materials shall be new, without defects and free of repairs. The quality of the materials used shall be such that all items are in conformance with the performance requirements as specified herein.

a. **General**. Provide equipment and materials for an electric lighting system that complies with DIVISION 1700 of the Kansas Department of Transportation Standard Specifications for State Road and Bridge Construction (2007 Edition). Provide all parts necessary to complete the electric lighting system. Before starting any construction activities, submit for the Engineer's approval, a schedule of all equipment and materials for the lighting system. Submit 3 copies of catalog cuts, diagrams and drawings to Sedgwick County Public Works. The Engineer will accept or reject the equipment or materials within 2 weeks.

   For concrete foundations, use Grade 3.0 concrete that complies with DIVISION 400, and steel reinforcement that complies with DIVISION 1600, unless shown otherwise in the Contract Documents.

b. **Standard Fabrication**. Fabricate the standards as approved. Provide straight standards with a maximum variation of 1 inch at the mid-point of 30 to 45 foot standards and ¾ inch at the mid-point of 20 to 30 foot standards. A maximum static deflection (without wind load) of 4 inches is permitted for poles less than 30 feet in height and 4 ½ inches for poles 30 feet or greater in height. Measure static deflections with mast arms and luminaries in place.

   The design of the standard, the mast arm and method of attaching the mast arm to the standard must be approved by the Engineer.

3. ENGINEERING REQUIREMENTS

Engage a Professional Engineer licensed in the State of Kansas and experienced in the design of electric lighting systems. Develop plans to adequately illuminate a fabric membrane structure from the exterior to allow nighttime operations within the building. The height and location of light standards should also provide illumination of the immediate area surrounding the building structure.

Submit three (3) copies of the construction plans to County for approval.

4. CONSTRUCTION REQUIREMENTS

a. **Codes and Regulations**. Perform all electrical work according to:

- National Electric Code.
- National Electric Safety Code.
- Regulations of the National Board of Fire Underwriters.

- Local ordinances.
- Details in the Contract Documents

b. **General.**

(1) Provide and install all incidental parts which are necessary to complete the electrical system. All utility hookups are subsidiary.

(2) Provide continuous welds that develop the full strength of the member.

(3) Perform welds by the submerged arc process.

(4) Grind exposed welds flush with the base material.

(5) Smoothly finish all exposed edges of plates which make up the base assembly. Round all exposed corners of such plates to ⅛ inch radius.

c. **Excavations**. Limit the excavation for the conduits, foundations and other appliances to that necessary for the installation of the equipment and materials. Do not excavate until immediately before installing the equipment and materials.

Place plastic warning tape (12 inches below the surface) directly over conduit.

Place excavated material where the least damage and obstruction to vehicles and pedestrian traffic will occur. Do not impede surface drainage.

At the end of each day's work and at all times when construction operations are suspended, remove all equipment and other obstructions from the portion of the maintenance yard that may hinder operations.

d. **Backfill**. Place the backfill material in uniform layers (maximum 6 inches compacted) evenly on all sides of the structure. Compact the backfill using pneumatic tampers, vibratory compactors or other equipment approved by the Engineer. Compact each layer of the backfill until no further consolidation is observed.

Remove surplus excavated material from the project and dispose on sites approved by the Engineer. Ensure the areas disturbed by the excavations are graded to drain appropriately.

e. **Replacing Damaged Improvements**. Replace all sidewalks, curbs, gutters, pavements and improvements removed or damaged during installations of the lighting systems. Replace or reconstruct the removed or damaged improvements with the same type and quality of materials originally used. If part of an existing slab of concrete pavement or square of sidewalk is removed or damaged, replace the entire slab or square.

f. **Foundations**.

(1) Concrete Foundations. Form the foundations and place the concrete according to DIVISION 700. Hold conduit ends and anchor bolts securely in the proper position when the concrete is placed.

Cure the concrete foundations with wet burlap or polyethylene for a period of 72 hours. Prevent concrete temperatures from falling below 32ºF.

Do not attach poles until the concrete has cured for 14 days.

If a foundation cannot be constructed where designed because of an obstruction, the Contractor's engineer will determine how to construct the foundation.

(2) Screw-In Foundation Anchors. Pre-drilling holes for screw-in foundation anchors is prohibited. As the foundation anchors are screwed into the ground, make sure they are plumb. The pole base of the screw-in foundation anchor shall be level when the installation is complete.

Use the connectors to make minor leveling adjustments on poles with breakaway connectors. Use galvanized or cadmium plated shims or washers (maximum thickness ¼ inch) to make minor leveling adjustments on other types of poles. Only 1 shim or washer is allowed on any 1 anchor bolt, with a maximum of 2 shims or washers on any pole.

g. **Conduit**.

(1) Run all conductors between standard locations, either in duct or conduit. Use conduit of the size and type shown in the Contract Documents. If desired, use larger size conduit at no additional cost to County. Use the large size conduit for the entire length of the run from outlet to outlet. Do not use reducing couplings.

When PVC or HDPE is specified, install according to the manufacturer's instructions.

When steel conduit is used, ream the ends of all conduits to remove burrs and rough edges. Make field cuts square and true so the ends will match for the full diameter. Do not use slip joints or running threads for coupling conduit. Use an approved threaded union conduit, if a standard coupling cannot be used. Before couplings are made up, paint threads on all conduits with a rust preventative paint. Fit and tighten all couplings until the end of the conduits are brought together. Paint any damaged coating on conduit with rust preventative paint.

Thread and cap all steel conduit ends with standard pipe caps, until wiring is started. When caps are removed, provide threaded ends with approved conduit bushings.

Except factory bends, use conduit bends with a radius of greater than or equal to 6 times the inside diameter of the conduit. Where factory bends are not used, make conduit bends without crimping or flattening, using the longest radius practicable.

(2) Conduit Entrenched. Where possible, install the electrical conduit on straight lines and cover with compacted earth. Place conduit as shown in the approved plans at a minimum depth of 24 inches below natural ground level.

(3) Vertically extend conduit set in standard bases approximately 3 inches above the foundation, or slope towards the base opening where transformer bases are used. Locate conduit entering through the bottom of a pull box near the ends to leave the major portion of the box clear. Terminate conduit entering concrete pull boxes 2 inches inside the box wall and 2 inches or greater above the bottom and slope to facilitate pulling of cable. At all outlets, enter the conduit from the direction of the run.

Conduit runs shown in the approved plans may be changed with approval of the Engineer to avoid underground obstructions.

h. **Electric Service Boxes**. Install electric service boxes as shown in the approved plans.

i. **Pull Boxes**. Install pull boxes as shown in the approved plans. To facilitate work, additional pull boxes may be used at the Contractor's expense.

j. **Wiring**. Neatly arrange and lace up wiring within junction boxes, transformer bases and on standards, etc. Do not splice cable in conduit or outside of pull boxes, splice boxes or standards, unless shown in the approved plans. When not fastened to existing structure or carried through conduit, lay conductor cable to the depth shown in the approved plans.

Use powdered soapstone, talc or other approved lubricant when inserting conductors in conduit.

Pencil, trim to conical shape and roughen conductor insulation before applying splice insulation.

When conductors and cables are pulled into the conduit, tape all ends to exclude moisture until the splices are made or terminal appliances are attached.

k. **Bonding and Grounding**. When a closed system enclosed in conduit is used, bond metallic cable sheaths, conduit and metal standards to form a continuous system, and effectively ground. When an open system such as an overhead wiring or direct burial underground is used, effectively ground only standards and service points, except where conduit runs used under pavement cross a water system.

Install ground electrodes as shown in the Contract Documents.

l. **Operating Instructions**. Provide all operating instructions to the Engineer.

5. MEASUREMENT AND PAYMENT

The Engineer will measure electric lighting systems by the lump sum. Excavation, backfilling and Grade 3.0 concrete are subsidiary. Each electric service box is subsidiary.

Engineering services, plan development, and construction plan submittals are subsidiary.

Payment for "Electric Lighting System" at the contract unit price is full compensation for specified work.

SPECIAL PROVISION

NOTE: This special provision is generally written in the imperative mood. The subject, "the *Contractor*" is implied. Also implied in this language are "*shall*", "*shall be*", or similar words and phrases. The word "*will*" generally pertains to decisions or actions of Sedgwick County Public Works.

PLANT MIX ASPHALT CONSTRUCTION-COMMERCIAL GRADE

1.0 DESCRIPTION

Construct the Plant Mix Asphalt Mixture-Commercial Grade asphalt pavement and patching, as shown in the approved plans. The Contractor is permitted to use WMA unless otherwise shown on the plans.

BID ITEMS

No bid items. Asphalt construction is subsidiary.

2.0 MATERIALS

a. **Requirements**. The asphalt mixture must be approved by the Engineer. This approval will generally be based upon the following conditions:

(1) Furnish all materials by recognized producers.

(2) Provide a recognized type of HMA plant.

(3) ***Produce the mixture to meet the SR-12.5A mix design requirements in Section 611 of the KDOT Standard Specifications for State Road and Bridge Construction (latest revision of the 2007 Edition). The mixture may utilize up to twenty-five (25%) Reclaimed Asphalt Pavement (RAP).***

b. Following approval of the mix, the Contractor may commence delivery of mix to the project.

(1) Provide a workable mixture capable of being spread without tearing or flushing under compaction.

(2) Asphalt for tack may be any asphalt approved by the Engineer.

(3) Certify the mixture produced for use meets the requirements of the approved mix design.

3.0 PROCESS CONTROL

a. **General.** During construction, the Engineer may conduct tests for gradation to verify compliance of the approved mix design. Non-compliance will be subject to removal of the asphalt and replacement at the sole opinion of the Engineer.

b. **Basis of Acceptance and Payment.** The Engineer will accept the mixture based on test results of samples taken from each 500 tons produced.

Calculated values for acceptance test results for gradations will be shown to the nearest hundredth percent.

The absolute value of the deviation between the acceptance test results and the design job-mix single point will be determined for the #4, #8, #30 and #200 sieve, whichever results in the greatest price reduction.

4.0 EQUIPMENT

Use laydown, compacting, hauling and truck weighing equipment specified in **DIVISION 150 of the KDOT Standard Specifications for State Road and Bridge Construction**, except that approval by the Kansas Department of Agriculture, Division of Weights and Measures will satisfy all accuracy requirements of truck weighing equipment.

5.0 CONSTRUCTION REQUIREMENTS

Accomplish rolling of the mixture using a minimum of 2 rollers. On incidental and miscellaneous work and on patching, the Engineer may waive the minimum roller requirements if conditions warrant. Perform all compaction using standard and recognized techniques. Except for variations approved by the Engineer, complete final rolling while the temperature of the mixture is approximately 175°F or above (165°F for WMA). Tack between lifts as directed by the Engineer.

6.0 WEATHER LIMITATIONS

Do not place HMA/WMA on any wet or frozen surface or when weather conditions otherwise prevent the proper handling and finishing of the mixture.

Only place HMA/WMA when either the minimum ambient air temperature or the road surface temperature shown in **TABLE 602-13** is met. The Engineer may waive the temperature and weather condition requirements if warranted.

TABLE 602-13: MINIMUM HMA/WMA PLACEMENT TEMPERATURES

Paving Course (inches)	Thickness (inches)	Air Temperature (ºF)	Road Surface Temperature (ºF)
Surface	All	50	55
Subsurface	<1.5	50	55
Subsurface	≥1.5 and < 3	40	45
Subsurface	≥ 3	30	35

7.0 WARM MIX ASPHALT

a. **Additives**. Provide Warm Mix Asphalt (WMA) additives or processes that comply with KDOT Special Provision 07-12002 (latest revision). The Contractor is permitted to use WMA unless otherwise shown on the plans.

   For mixes containing WMA additives, submit for the Engineer's review and approval, the additive or process used, the recommended rate of application, and the temperature ranges for mixing and compaction.

Mixing temperature range is provided by the Asphalt Binder Supplier. When using WMA, the mixing temperature may be reduced no more than 30ºF from WMA water foaming processes, and no more that 70ºF for WMA chemical and organic additives. The minimum mixing temperature for WMA is 220ºF.

If WMA additives are added at the Contractor's plant, install a "totalizer" to monitor the quantity of WMA additive being added. Provide a method for the Engineer to monitor the percent of additive being added.

b. **Anti-Strip Additives**. If liquid anti-strip additives are added at the Contractor's plant, install a "totalizer" to monitor the quantity of anti-strip additive being added. The Engineer may approve alternative methods for including anti-strip additives in a batch plant. If added at the plant, the anti-strip will be added in line with the asphalt binder as it is being transferred from the transit unit to the asphalt binder storage tank. Provide a method for the Engineer to monitor the percent of additive being added.

   If hydrated lime is added, mix it in an approved pug mill to coat the combined aggregates. Moisten the combined virgin aggregate to a minimum of 3% above the saturated surface dry condition prior to, or during, the addition of the hydrated lime.

c. End of Day Quantities. At the end of each day of production provide the Engineer with a document signed by the Plant Foreman or the Project Manager listing the dry weight of each aggregate, mineral filler, RAP, and WMA chemical or organic additive; the tons of asphalt binder, the tons of anti-strip agent used for the project during the day, and the tons of water used in the WMA foaming process. The dry weight is the tons of the material less the water content.

8.0 MEASUREMENT AND PAYMENT

The Engineer will not measure Plant Mix Asphalt Mixture-Commercial Grade separately, but shall consider the work subsidiary to other contract bid items.

Notwithstanding, commercial scale tickets completed by the producer will be acceptable, and turned over to the Engineer for records.