

ARCHITECTURAL DESIGN ASSOCIATES, P.C.
7501 'O' STREET, SUITE 105
LINCOLN, NE. 68510

October 23, 2014
LINCOLN PUBLIC SCHOOLS
LPS SEACREST ACTIVITIES COMPLEX
LINCOLN, NEBRASKA

ADDENDUM #2

This addenda is issued by the Architect to all known bidders before receipt of proposals. Bidders shall acknowledge the receipt of this Addendum on their bid form and all information and instructions given herein shall become a part of the Contract Documents.

GENERAL:

Item No. 2-1: **Addenda No. 1**

- A. At the Addenda No. 1, Pre-Bid Meeting Agenda, under 'Project Organization', item No. 2, 'Data and Fiber Optic Wiring' add the following clarification: "The Contractor is to provide all data cabling. Fiber optic wiring will be provided by LPS."
- B. At the Addenda No. 1, Pre-Bid Meeting Agenda, under 'Project Organization', item No. 2, 'Scoreboard and Controls' add the following clarification: "The Contractor is responsible to include new wire to the existing scoreboard and make existing scoreboard operational, also, include new raceway only to the new scoreboard base."

SPECIFICATIONS:

Item No. 2-2: **00 01 10 – Table of Contents**

- A. Add specification section '32 90 00 – Planting' to the table of contents.

Item No. 2-3: **00 21 13 – Instructions To Bidders**

- A. Attached please find pages 3 and 4 of the Instructions to Bidders. These 2 pages were missing from some specifications books.

Item No. 2-4: **00 43 22 – Unit Prices Form**

- A. Delete the 'Unit Prices Form' in the specification book and substitute the attached 'Unit Prices Form'. The attached 'Unit Prices Form' includes Unit Price No. 6.

Item No. 2-5: **00 73 00 – Supplementary Conditions**

- A. At section 1.03 'Modifications to General Conditions' add the following sentence: "B. ARTICLE 3: CONTRACTOR; Section 3.20.2 SALVAGE AND RECYCLING OF NONHAZARDOUS MATERIAL; 3.20.2.4 Regarding paragraphs 3.20.2.1 and 3.20.2.2, note that it is not the Owner's intent to salvage construction waste items but the Owner may salvage select items that have value to the Owner."

Item No. 2-7: **01 21 00 – Allowances**

- A. At section 1.02 'Discovery Allowance', delete item B and substitute the following: "B. Allowance Modification Directives authorizing use of funds from the Discovery Allowance will include Contractor's costs for products, delivery, installation, labor and equipment rental. Contractor's costs for overhead, profit, insurance, taxes and bonding will not be included.

Item No. 2-6: **01 22 00 – Unit Prices**

- A. At 1.07 'Schedule of Unit Prices', add the following: "F. Unit Price 6: In the proposal to the Owner, state the unit price cost, per cubic yard, to re-work or to remove and replace unsuitable subgrade areas below proposed pavement, when encountered."

Item No. 2-8:

03 30 00 – Cast-In-Place Concrete

- A. At section 3.11 'Concrete Surface Repairs', under item 'D' Surfaces exposed to public view', add the following:
- “1. Smooth-Formed Finish: Repair and patch tie holes, defects and voids greater than 1/4” in any direction. Remove fins and other projections on formed-surfaces.
2. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces, unless otherwise indicated.”

Item No. 2-9:

08 11 16 – Aluminum Doors and Frames

- A. At section 2.02 'Doors and Frames', item A 'Flush Doors with Aluminum Faces', change the door type from a flush door to a wide style aluminum door with a 1” insulated metal window panel as follows:
1. Doors: Provide manufacturer's standard 1-3/4-inch- thick glazed doors with minimum 0.125-inch- thick, extruded tubular rail and stile members. Equal to Kawneer 500 Wide-Stile Door.
 2. Insulated Metal Window Panel: 1 inch thick laminated metal faced panel equal to Mapes R panel.
 - a. Exterior Finish: Embossed Clear Anodized Aluminum.
 - b. Interior Finish: Embossed Clear Anodized Aluminum.
 - c. Interior and Exterior Substrates: Tempered Hardboard.
 - d. Core: Isocyanurate
 - e. Tolerances - .8% of panels dimension length and width - (+/-) 1/16" thickness
 - f. Panel Thickness – 1 inch
 - g. R-Value – 6.41 and U-Value – 0.156

Item No. 2-10:

12 36 61.16 – Solid Surfacing Countertops

- A. At section 2.01, 'Countertop Assemblies', at item B-5 'End Splashes', note that the end splashes are to be approximately 3” tall. Field verify height to fit under window sills.

Item No. 2-11:

13 34 23 – Aluminum Stadium Bench Seating - Revised

- A. At section 1.02 'Quality Assurance' add the following: “C. Code Requirements: Seating system shall meet all applicable codes including the latest version of the ICC 300 code.
- B. At section 2.02 'Stadium Seating', Item A-1-c (1) 'Channel End Caps', add the following note: “End caps shall be extruded anodized aluminum or anodized aluminum channels.

Item No. 2-12:

32 90 00 - Planting

- A. Add the attached specification section 32 90 00 – Planting.

Item No. 2-13:

32 92 00 – Turf and Grasses

- A. At section 1.07 'Maintenance Service', at item A-1 'Seeded Turf', revise the maintenance time period from 60 days, to the following: “Seeded Turf: Maintain until the grass matures to the 3rd mowing and has reached the level of 'Satisfactory Turf' noted in section 3.05.”

DRAWINGS:

Item No. 2-14:

Sheet A0.0

- A. At the 'Project Data', add the following Governing Code: “ICC 300 – latest version”.

Item No. 2-15:

Sheet C1.6

- A. At the 'Demolition Plan', at the north end of the east parking lot, a 39.4' long section of north-south fence is shown to be removed. At the fence to the east of this demo fence, add the following note: “Remove section of fence and gate approximately 118 feet long immediately east of the fence demo shown – field verify exact length.”

Item No. 2-16:

Sheet C1.8

- A. At the Layout/Utility Plan, at the 4” paint stripe at each of the two the drop off lanes, add a second paint strip the same length in line with the drop curb line.

Item No. 2-17:**Sheet C1.11**

- A. At Sheet Note No. 4, add the following: "When unsuitable subgrade areas below proposed pavement are discovered, rework or remove and replace these areas, according to the specifications. The cost of reworking or removing and replacing unsuitable subgrade below paving areas will be paid for through a change order, change directive or discovery allowance directive, based on Unit Price No. 6. Carefully document the extent of unsuitable subgrade and notify the Architect and Owner of the work required prior to starting additional work. Note that the over excavation and compacted fill required at the Press Box is to be included in the base bid."
- B. At the Wedgewood Lake truck access drive through the west parking lot, add the following note: "The Wedgewood Lake Contractor is not responsible for restoring the subgrade at the Wedgewood Lake truck access drive. This contractor is responsible for restoring the subgrade to meet the specifications, prior to pavement installation."
- C. At the 'Grading Plan', at the west parking lot, add the following note: "The top of curb at the south edge of the west parking lot shall be 6" above the top of parking lot paving."
- D. At the 'Grading Plan', at the east parking lot, add the following note: "The top of curb at the south edge of the east parking lot shall be 6" above the top of parking lot paving if Alternates 2 or 5 are taken."

Item No. 2-18:**Sheet C1.12**

- A. At Enlarged Plan View #1 and # 2, at the south stairs and at the north ramps, add the following note: "Include a swale above the high north-south retaining walls to ensure water run-off is adequately diverted away from the retaining walls."
- B. At Enlarged Plan View # 1, at the west retaining wall of the north ADA ramp, revise the top of wall elevation 1265.2 to 1266.2 and change the top of wall elevation 1264.8 to 1265.8; also, change the grade elevation 1264.7 to 1265.7 and change the grade elevation 1264.3 to 1265.3.
- C. At Enlarged Plan View # 2, at the east retaining wall of the north ADA ramp, revise the top of wall elevation 1266.2 to 1267.2 and change the top of wall elevation 1265.8 to 1266.8; also, change the south grade elevation 1265.7 to 1266.7 and change the north grade elevation 1265.7 to 1266.2.
- D. At Enlarged Plan Views #1 and #2, at the south stairs, add the following note: "See detail 7, sheet A7.1 for the top of retaining wall elevations around the stairs."

Item No. 2-19:**Sheet C2.0**

- E. At Details 3, 4, 6 8 and 9, delete the note 'Compacted Subgrade' and substitute the following: "When unsuitable subgrade is discovered, rework or remove and replace these areas, according to the specifications."

Item No. 2-20:**Sheet C2.1**

- A. At Detail 4, at the subgrade location, add the following note: "When unsuitable subgrade is discovered, rework or remove and replace these areas, according to the specifications."

Item No. 2-21:**Sheet A1.2**

- A. At the window type '7' between Media Booth 201 and Video Booth 202 and between Video Booth 202 and Media Booth 203, revise the window type '7' to window type '6'.
- B. At the Press Box 'First Floor Plan', add a note to include a 1/2" sealant joint at each structural stoop to floor slab connection.

Item No. 2-22:**Sheet A1.3**

- A. At Detail 1, add the following note: "Include backer rod and sealant at the control joints at the ramp landing and at each ramp slab at 4'-0" on center."
- B. At Detail 6, add the following note: "Include backer rod and sealant at the joint between the ADA wheelchair seating area and the adjacent walls to the north, south and west. See attached revised detail A13 on sheet S3.2."

Item No. 2-23:**Sheet A2.1**

- A. At door type A, delete the words 'Flush Aluminum' and substitute the words "Wide Style Aluminum with 1" Insulated Metal Window Panels". Also, show a wide style door at door type A with metal window panels.

Item No. 2-24: **Sheet A3.1**

- A. At General Note D, add the following: "The portion of the east parking lot west of the chain link construction fence (used for the contractor's access drive and staging area) does not need to be turned over to the Owner until July 31, 2015."

Item No. 2-25: **Sheet S2.1**

- A. At Detail A, 'Enlarged Ramp Foundation Plan, add the following note: "Include control joints in the ramp slab at every 4'-0" on center. Control joints to be 1/2" wide by 1" deep block-outs."
- B. At the west wall of the low handicap seating area (see detail indicator A13, S3.2), change the west wall of the handicap seating area from a wall type 12A to a wall type 16A.

Item No. 2-26: **Sheet S2.3**

- A. At the east wall of the low handicap seating area (see detail indicator A13, S3.2), change the east wall of the handicap seating area from a wall type 12A to a wall type 16A.

Item No. 2-27: **Sheet S3.1**

- A. At Detail A, at the east foundation wall of the Press Box, note that the top of foundation wall can be adjusted from elevation 94'-0" to elevation 95'-4". Note that reinforcing will also need to be adjusted accordingly.
- B. At Details B and C, at the east foundation wall of the Press Box, note that the top of foundation wall can be adjusted from elevation 94'-0" to elevation 94'-8". Note that reinforcing will also need to be adjusted accordingly.

Item No. 2-28: **Sheet S3.2**

- A. At Detail L9 'CIP Endwall Section', add the following note: "Include a 1/2" wide by 1" tall block-out for backer rod and sealant between the cast-in-place wall and the bleacher structure.
- B. At Details E10 'Ramp Slab Section' and H13 'Ramp Landing Section', add a note to include a 1/2" wide by full depth compressible filler between the cast-in-place wall and the ramp slab. See Arch. for sealant requirements.
- C. At Detail H13 'Ramp Landing Section', add a note that the control joint block-out at the ramp to landing joint shall be 1/2" wide by 1" deep.
- D. At Detail E5, 'Typical CIP Stair Section', add the following note: "Include 1/2" radius on each stair nose and slope stair risers 1" from nose to tread as shown."
- E. At Detail A13, 'Section at Handicap Seating', delete this detail and add the attached revised detail A13, S3.2 on SDG attachment SA-1.

Item No. 2-29: **Sheet S3.3**

- A. At Detail M1, add the following note: "Include a 1/2" wide by full depth compressible filler at each cast-in-place wall to ramp slab connection. See Architectural for sealant requirements."

Item No. 2-30: **Sheet S3.4**

- A. At Detail E14, add a note to include 1/2" x full depth compressible filler between the stoop and the floor slab.

Item No. 2-31: **Sheet S3.5**

- A. At Detail A7 'Foundation Section' and A10 'Foundation Section', add the following note: "Include 3/4" rigid insulation extruded polystyrene between the Press Box structure and the Bleacher structure. Hold the top of insulation down approximately 1" for backer rod and sealant. 3/4" rigid insulation is typical at all Bleacher to Press Box joints."

END OF ADDENDUM NO. 2

**SECTION 00 43 22
UNIT PRICES FORM**

PARTICULARS

1.01 THE FOLLOWING IS THE LIST OF UNIT PRICES REFERENCED IN THE BID SUBMITTED BY:

1.02 (BIDDER) _____

1.03 DATED _____ AND WHICH IS AN INTEGRAL PART OF THE BID FORM.

**1.04 THE FOLLOWING ARE UNIT PRICES FOR SPECIFIC PORTIONS OF THE WORK AS LISTED,
AND ARE APPLICABLE TO AUTHORIZED VARIATIONS FROM THE CONTRACT
DOCUMENTS.**

A. See Section 01 22 00 - Unit Prices for a complete description of each unit price.

UNIT PRICE LIST

**2.01 UNIT PRICE NO. 1: FOUR INCH THICK CONCRETE SLAB-ON-GRADE:
_____ PER SQUARE FOOT.**

**2.02 UNIT PRICE NO. 2: FIVE INCH THICK CONCRETE SLAB-ON-GRADE:
_____ PER SQUARE FOOT.**

**2.03 UNIT PRICE NO. 3: SEVEN INCH THICK CONCRETE SLAB-ON-GRADE:
_____ PER SQUARE FOOT.**

**2.04 UNIT PRICE NO. 4: CONCRETE SLAB-ON-GRADE DEMOLITION:
_____ PER SQUARE FOOT.**

**2.05 UNIT PRICE NO. 5: PIPE BOLLARDS:
_____ PER EACH BOLLARD.**

**2.06 UNIT PRICE NO. 6: REWORK UNSUITABLE SUBGRADE BELOW PROPOSED PAVEMENT:
_____ PER EACH CUBIC YARD.**

END OF SUPPLEMENT

3.05 PRODUCT/ASSEMBLY/SYSTEM SUBSTITUTIONS

- A. Where the Bid Documents stipulate a particular product, substitutions will be considered up to 10 days before receipt of bids.
- B. When a request to substitute a product is made, Architect/Engineer may approve the substitution and will issue an Addendum to known bidders.
- C. In submission of substitutions to products specified, bidders shall include in their bid all changes required in the Work and changes to Contract Time and Contract Sum to accommodate such substitutions. A later claim by the bidder for an addition to the Contract Time or Contract Sum because of changes in work necessitated by use of substitutions shall not be considered.
- D. The submission shall provide sufficient information to determine acceptability of such products.
- E. Provide complete information on required revisions to other work to accommodate each proposed substitution.
- F. Provide products as specified unless substitutions are submitted in this manner and accepted.
- G. See Section 01 60 00 - Product Requirements for additional requirements.

SITE ASSESSMENT

4.01 SITE EXAMINATION

- A. Examine the project site before submitting a bid.
- B. A visit to the project site has been arranged for bidders as follows: See Advertisement for Bids for Pre-Bid Meeting.

4.02 PREBID CONFERENCE

- A. A bidders conference has been scheduled for 10:00 a.m. on the 14th (Tuesday) day of October at the location of the project: Seacrest Activities Complex, 7400 "A" Street, Lincoln, NE in the Cople Activities Center, north end of the field.
- B. All general contract and subcontract bidders and suppliers are invited.
- C. Representatives of Architect/Engineer will be in attendance.
- D. Information relevant to the Bid Documents will be recorded in an Addendum, issued to Bid Document recipients.

BID SUBMISSION

5.01 SUBMISSION PROCEDURE

- A. Bidders shall be solely responsible for the delivery of their bids in the manner and time prescribed.
- B. Submit one copy of the executed offer on the Bid Forms provided, signed and sealed with the required security in a closed opaque envelope, clearly identified with bidder's name, project name and Owner's name on the outside.
- C. An abstract summary of submitted bids will be made available to all bidders following bid opening.

5.02 BID INELIGIBILITY

- A. Bids that are unsigned, improperly signed or sealed, conditional, illegible, obscure, contain arithmetical errors, erasures, alterations, or irregularities of any kind, may at the discretion of the Owner, be declared unacceptable.
- B. Bid Forms, Appendices, and enclosures that are improperly prepared may, at the discretion of Owner, be declared unacceptable.
- C. Failure to provide security deposit, bonding or insurance requirements will, at the discretion of Owner, invalidate the bid.

BID ENCLOSURES/REQUIREMENTS

6.01 SECURITY DEPOSIT

- A. Bids shall be accompanied by a security deposit as follows:
 - 1. Bid Bond of a sum no less than 5 percent of the Bid Amount on AIA A310 Bid Bond Form.
- B. Endorse the Bid Bond in the name of the Owner as obligee, signed and sealed by the principal (Contractor) and surety.
- C. The security deposit will be returned after delivery to the Owner of the required Performance and Payment Bond(s) by the accepted bidder.
- D. Include the cost of bid security in the Bid Amount.
- E. After a bid has been accepted, all securities will be returned to the respective bidders .
- F. If no contract is awarded, all security deposits will be returned.

6.02 PERFORMANCE ASSURANCE

- A. Accepted Bidder: Provide a Performance and Payment bond as described in _____.
- B. Include the cost of performance assurance bonds in the Bid Amount .

6.03 BID FORM REQUIREMENTS

- A. Complete all requested information in the Bid Form and Appendices.

6.04 SALES AND USE TAXES

- A. This project is exempt from Nebraska State sales tax. The Owner will provide a Nebraska Exempt Sales Certificate and Purchase Agent Appointment forms for sales tax exemption.

6.05 FEES FOR CHANGES IN THE WORK

- A. Include the fees for overhead and profit on own Work and Work by subcontractors, identified in Document 00 72 00 - General Conditions.

6.06 BID FORM SIGNATURE

- A. The Bid Form shall be signed by the bidder, as follows:
 - 1. Sole Proprietorship: Signature of sole proprietor in the presence of a witness who will also sign. Insert the words "Sole Proprietor" under the signature.
 - 2. Partnership: Signature of all partners in the presence of a witness who will also sign. Insert the word "Partner" under each signature.
 - 3. Corporation: Signature of a duly authorized signing officer(s) in their normal signatures. Insert the officer's capacity in which the signing officer acts, under each signature. Affix the corporate seal. If the bid is signed by officials other than the president and secretary of the company, or the president/secretary/treasurer of the company, a copy of the by-law resolution of their board of directors authorizing them to do so, must also be submitted with the Bid Form in the bid envelope.
 - 4. Joint Venture: Each party of the joint venture shall execute the Bid Form under their respective seals in a manner appropriate to such party as described above, similar to the requirements of a Partnership.

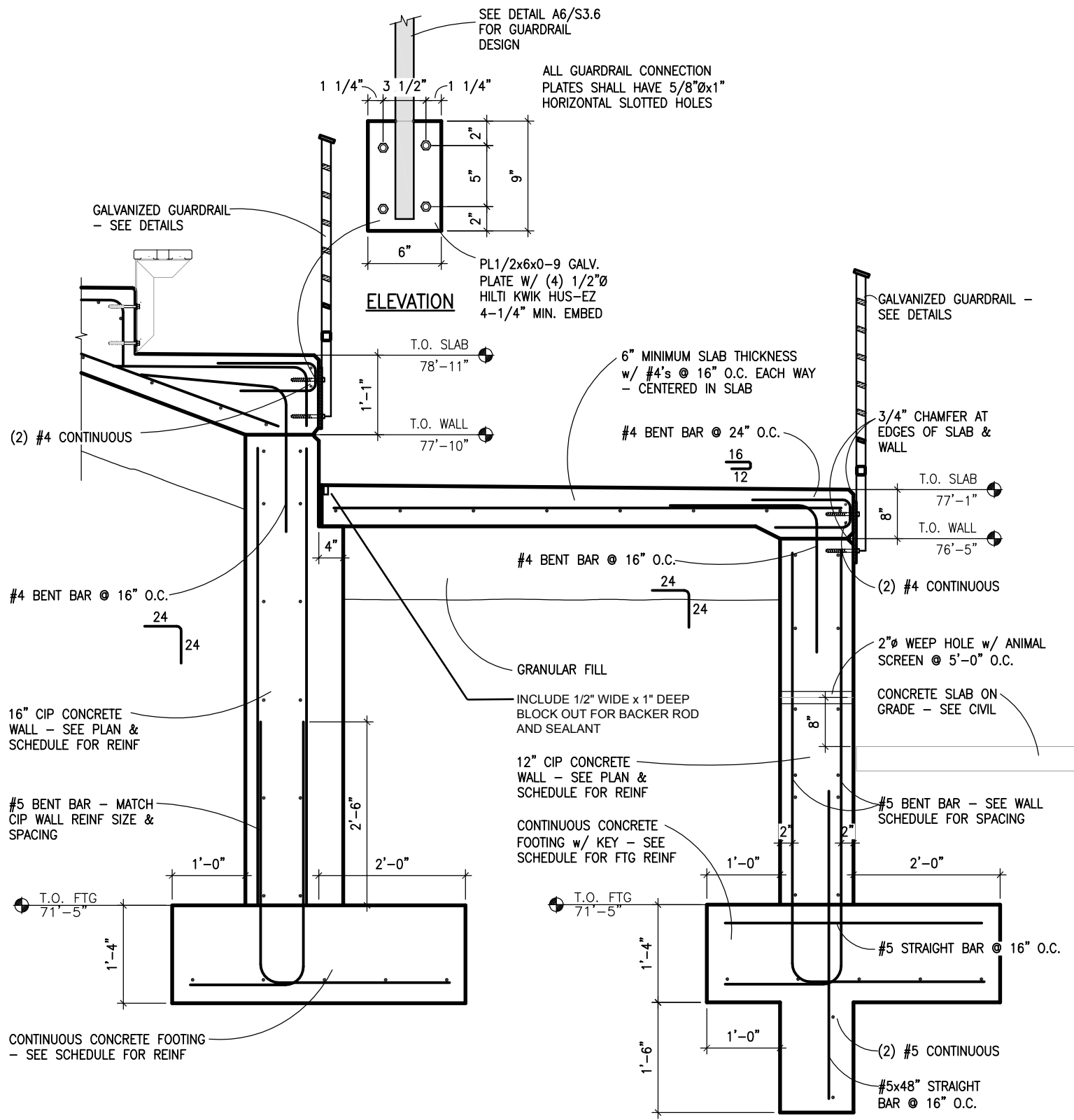
6.07 ADDITIONAL BID INFORMATION

- A. Submit the following Supplements concurrent with bid submission:
 - 1. Document 00 43 22 - Unit Prices: Include a listing of unit prices specifically requested by the Contract Documents.
 - 2. Document 00 43 23 - Alternates Form: Include the cost variation to the Bid Amount applicable to the Work described in Section 01 23 00 - Alternates.

OFFER ACCEPTANCE/REJECTION

7.01 DURATION OF OFFER

- A. Bids shall remain open to acceptance and shall be irrevocable for a period of forty-five (45) days after the bid closing date.



A REVISED DETAIL A13/S3.2
SCALE: N.T.S.



structural[design]group, inc.
410 S 7th
lincoln, nebraska 68508
402-438-7788
402-438-7790

LPS SEACREST ACTIVITIES
COMPLEX
ADDENDA 2

DATE: 23-Oct-14
PROJECT: SA-1
14-191
SCALE: 3/4" = 1' - 0"

SECTION 32 90 00

PLANTING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specifications, apply to this Section.

1.02 DESCRIPTION OF WORK

- A. Work included: Provide and install all plantings (i.e. trees) as shown on the Drawings, and as specified herein. Provide soil preparation, fertilizing, watering and maintenance as specified.
- B. Substitutions: Do not make substitutions, unless specifically approved by the Architect. If a specified plant material is not obtainable, submit to Architect proof of non-availability and submit proposal for use of equivalent material. When the proposal is approved, adjustment of the Contract Sum, if required, will be made by Change Order.
- C. Related work described elsewhere:
 - 1. Division 31 Section "Earth Moving" for subgrade and fine grading with topsoil.

1.03 QUALITY ASSURANCE

- A. Qualifications of workmen: Provide at least one person who shall be present at all times during execution of this portion of the Work, who shall be thoroughly familiar with the type of materials being installed and the proper materials and methods for their installation, and who shall direct all work performed under this Section.
- B. Standards:
 - 1. All plants and planting materials shall meet or exceed the specifications of Federal, State, and County laws requiring inspection for plant disease and insect control.
 - 2. Quality and size shall conform with the current edition of "Horticultural Standards" for number one grade nursery stock as adopted by the American Association of Nurserymen.
 - 3. All plants shall be true to name. One of each bundle or lot shall be tagged with the name and size of the plants in accordance with the standards of practice of the American Association of Nurserymen. In all cases, botanical names shall take precedence over common names.
- C. Trees and shrubs: Provide freshly dug, healthy, vigorous stock grown under climatic conditions similar to the conditions in the locality of the project. Planting materials shall be free of disease, insects, eggs, larvae, and defects such as knots, sun-scald, injuries, abrasions or disfigurement. Do not provide trees or shrubs which have been in cold storage or heeled-in.
- D. Warranty: Guarantee all plants for 1 year from date of substantial completion. Replace any plant that does not survive for this period of time.

1.04 SUBMITTALS

- A. General: Submit electronic (PDF) format submittals according to the Conditions of the Contract and Division 1 Specification Sections.
- B. Materials list: Submit a complete list of all materials proposed to be furnished and installed under this Section, demonstrating complete conformance with the requirements specified.
- C. Certificates: Deliver all certificates to the Architect.

1.05 PRODUCT HANDLING

- A. Deliver and storage:
 - 1. Deliver all items to the job site in their original containers with all labels intact and legible at time of Architect's inspection.
 - 2. Immediately remove from the site all plants which are not true to name, and all materials which do not comply with the specified requirements.
 - 3. Use all means necessary to protect plant materials before, during and after installation and to protect the work and materials of all other trades.
- B. Replacements: In the event of damage, immediately make all repairs and replacements necessary to the approval of the Architect and at no additional cost to the Owner.

PART 2 - PRODUCTS

2.01 FERTILIZER

- A. General: Provide commercial balanced fertilizer, delivered to the site in bags labeled with the manufacturer's guaranteed statement of analysis. Provide fertilizer of a uniform composition, dry and free flowing.
 - 1. If stored at the site, protect fertilizer from the elements at all times. Remove any fertilizer which becomes caked or otherwise damaged, making it unsuitable for use.
- B. Fertilizer for trees and shrubs shall contain not less than 11% total nitrogen, 8% phosphorus and 4% potassium.

2.02 SOIL AMENDMENT

- A. Provide wood sawdust fortified with organic nitrogen, or a commercial soil amendment subject to the approval of the Architect.

2.03 MULCH

- A. Plantings: Provide 3" deep shredded hardwood mulch in Owner selected color, with weed liner barrier mat at all planting areas.
 - 1. Mulch Color: To be selected by Architect from manufacturer's full range of colors.

2.04 WEED LINER – WEED BARRIER MAT

- A. Composite Fabric: Woven, needle-punched polypropylene substrate bonded to a nonwoven polypropylene fabric, 4.8 oz./sq. yd minimum. Fabric shall be inert to biological degradation and resist naturally-encountered chemicals, alkalis, and acids.

2.05 PLANT MATERIALS

- A. General: Provide all plant materials as indicated on the Plant Schedule in the Drawings.
- B. Deciduous trees: Provide single stem trees of height and caliper listed in the Drawings with a well balanced branching configuration. Provide balled and burlapped (B&B) trees.
- C. Coniferous and broadleafed evergreens: Provide evergreens of the sizes shown on the Drawings. Dimensions indicate minimum spread for spreading and semi-spreading type evergreens and height for other types, such as globe, dwarf, cone, pyramidal, broad up-right, and columnar. Provide balled and burlapped (B&B), normal quality evergreens with well-balanced form. Container grown evergreens will be acceptable subject to the specified limitations for container grown stock.

2.06 TOP SOIL

- A. Top Soil: Provide clean, black top soil free of vegetation, trash, 1" and larger stones, clay and other deleterious materials.
 - 1. Topsoil: ASTM D 5268, pH range of 5.5 to 7, a minimum of 4 percent organic material content; free of stones 1 inch or larger in any dimension and other extraneous materials harmful to plant growth.
 - 2. Topsoil Source: Reuse surface soil stockpiled on-site. Verify suitability of stockpiled surface soil to produce topsoil. Clean surface soil of roots, plants, sod, stones, clay lumps, and other extraneous materials harmful to plant growth.
 - a. Supplement with imported or manufactured topsoil from off-site sources when quantities are insufficient. Obtain topsoil displaced from naturally well-drained construction or mining sites where topsoil occurs at least 6 inches deep; do not obtain from bogs or marshes.

2.07 WRAPPING

- A. Tree-wrap tape shall not be less than 4" wide, designed to prevent bore damage and winter freezing.

2.08 STAKES AND GUYS

- A. Provide stakes and deadmen of sound new hardwood, treated softwood, or redwood free of knot holes and other defects. Provide wire ties and guys of 2-strand, twisted, pliable galvanized iron wire not lighter than 12 gauge. Provide new 2-ply garden hose, cut to required lengths to protect tree trunks from damage by wires.

PART 3 - EXECUTION

3.01 INSPECTION

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to the proper and timely completion of the Work. Do not proceed until unsatisfactory conditions have been corrected.

3.02 SPREADING OF TOP SOIL

- A. Finish grading will be performed under Division 31 Earthmoving Section.
- B. Fine grading: Upon completion of finish grading, perform all fine grading in all planting areas.

- C. Planter beds: Backfill with a mixture consisting of two parts top soil and one part specified soil amendment by volume.
 - 1. Existing top soil can be used if it meets the requirements of this specification. If it does not, provide imported top-soil.
 - 2. Place the backfill mixture not less than 6 inches compacted depth, in all planting bed areas. Compact each layer by thorough saturation with water to prevent future settlement.

3.03 MULCH

- A. General: Provide 3" deep shredded hardwood mulch on weed liner barrier mat at each planting area.

3.04 PLANTING OF TREES AND SHRUBS

- A. General: Plant nursery stock immediately upon delivery to the site. If this is not possible, cover all bare roots and balled materials with damp soil and protect from sun and wind. Regularly water all nursery stock in containers, and place them in a cool area protected from sun and drying winds.
- B. Excavation: Excavate pits, beds and trenches with vertical sides and with bottom of excavation slightly raised at center to provide proper drainage. Loosen hard subsoil in bottom of excavation. Provide planting holes of the following dimensions:
 - 1. For balled and burlapped (B&B) trees and shrubs, make excavations at least twice as wide as the ball diameter and equal to the ball depth, plus a 6" allowance for setting of ball on a layer of compacted backfill;
 - 2. For container grown stock, excavate as specified for balled and burlapped stock, adjusted to size of container width and depth;
 - 3. Fill excavations for trees and shrubs with water and allow to percolate out before planting.
- C. Planting:
 - 1. Fill holes with backfill mixture consisting of 3 parts of top soil and one part specified soil amendment, by volume. Mix in specified fertilizer at the rates recommended.
 - 2. Fill hole to proper height to receive plant, and thoroughly tamp before setting the plant.
 - 3. Set plant in upright position in the center of the hole, and compact the backfill mixture around the ball or roots. Thoroughly water each plant when the hole is 2/3 full.
 - 4. After watering, tamp the soil in place until the surface of the backfill is level with the surrounding area and the crown of the plant is at the finished grade of the surrounding area. Build up a temporary watering basin around the base of each tree and shrub.
 - 5. Wrap tree trunks of 2" caliper and larger. Cover trunk to height of first branches. Inspect tree trunks for injury, improper pruning and insect infestation and take corrective measures required before wrapping.
 - 6. Guy and stake trees immediately after planting and install mulch around trees and shrubs as required.
 - 7. Mulch placement: Install mulch 3" at areas around trees and shrubs as indicated.
 - 8. Edging: Install edging at all lines between mulch and seed or lawn areas and as shown on drawings. Install per manufacturer's directions. Coordinate with downspouts and splashblock placement, to prevent damming of water or directing to foundations and walks.

3.05 ARCHITECT'S INSPECTIONS

- A. Schedule and conduct the following inspections, giving the Architect at least 24 hours prior notice of readiness for inspection:
 - 1. Inspection of plants in containers prior to planting;
 - 2. Inspection of plant locations, to verify compliance with the Drawings;
 - 3. Final inspection after completion of planting. Schedule this inspection sufficiently in advance, and in cooperation with the Architect, so that final inspection may be conducted within 24 hours after completion of planting.
 - 4. Final inspection at the end of the maintenance period, provided all previous deficiencies have been corrected.

3.06 MAINTENANCE

- A. General: Begin maintaining all plantings immediately after each area is planted and continue as noted below:
 - 1. Maintain all planted areas for a minimum of 30 days and until project Substantial Completion, as determined by Architect.
- B. Trees and shrubs:
 - 1. Maintain trees, shrubs and other plants by watering, pruning, cultivating and weeding as required for healthy growth. Spray as required to keep plantings free of insects and disease.
 - 2. Tighten and repair stake and guy wire supports and reset trees and shrubs to proper grades or vertical position as required. Restore planting saucers as required and restore any damaged wrappings.
- C. When initial maintenance period has not elapsed before end of planting season, or if turf is not fully established, continue maintenance during next planting season.
- D. Replacements:
 - 1. At the end of the maintenance period, all plant material shall be in a healthy growing condition.
 - 2. During the maintenance period, should the appearance of any plant indicate weakness and probability of dying, immediately replace that plant with a new and healthy plant of the same type and size, without additional cost to the Owner.
 - 3. Replacements required because of vandalism or other causes beyond control of the Contractor are not part of the Contract.

END OF SECTION 32 90 00