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Michael W. Hancock, P.E. Secretary

November 14, 2012

CALL NO. 105

CONTRACT ID NO. 121367

Addendum # 1

Subject:

GRAVES County, BRZ 0103 (303)

Letting November 16, 2012

(1) Revised - Special Note for Railroad Interest - Pages 17-42(b) of 96

Proposal revisions are available at http://transportation.ky.gov/Construction-Procurement

Plan Revisions are available at: http://www.lynnimaging.com/kytransportation/
If you have any questions, please contact us at (502) 564-3500.

Sincerely,

Ryan Griffith

Director

Division of Construction Procurement

RG:jj

Enclosures





SPECIAL NOTES FOR PROTECTION OF RAILROAD INTEREST

Illinois Central Railroad Company

I. AUTHORITY OF RAILROAD ENGINEER AND STATE ENGINEER:

- A. The authorized representative of the Railroad Company, hereinafter referred to as Railroad Engineer, shall have final authority in all matters affecting the safe maintenance of Railroad traffic of his Company including the adequacy of the foundations and structures supporting the Railroad tracks.
- B. The authorized representative of the State, hereinafter referred to as the Engineer, shall have authority over all other matters as prescribed herein and in the Project Specifications.

II. NOTICE OF STARTING WORK:

- A. The Contractor shall not commence any work on Railroad rights of way until he has complied with the following conditions:
 - 1. Given the Railroad written notice, with copy to the Engineer who has been designated to be in charge of the work, at least ten (10) days in advance of the date he proposes to begin work on Railroad rights of way. If flagging service is required, such notice shall be submitted at least thirty (30) days in advance of the date scheduled to commence work. The Railroad's Contact information is on the Summary Sheet.
 - 2. Obtain written authorization from the Railroad to begin work on Railroad rights of way, such authorization to include an outline of specific conditions with which he must comply and execution of the Railroad's standard right of entry agreement.
 - 3. Obtain written approval from the Railroad of Railroad Protective Insurance Liability coverage as required by paragraph 14 herein.
 - 4. Furnish a schedule for all work within the Railroad rights of way as required by paragraph 7, B, 1.
- B. The Railroad's written authorization to proceed with the work shall include the names, addresses, and telephone numbers of the Railroad's representatives who

are to be notified as hereinafter required. Where more than one representative is designated, the area of responsibility of each representative shall be specified.

III. INTERFERENCE WITH RAILROAD OPERATIONS:

- A. The Contractor shall so arrange and conduct his work that there will be no interference with Railroad operations, including train, signal, telephone and telegraphic services, or damage to the property of the Railroad Company or to poles, wires, and other facilities of tenants on the rights of way of the Railroad Company. Whenever work is liable to affect the operations or safety of trains, the method of doing such work shall first be submitted to the Railroad Engineer for approval, but such approval shall not relieve the Contractor from liability. Any work to be performed by the Contractor which requires flagging service or inspection service (watchman) shall be deferred by the Contractor until the flagging protection required by the Railroad is available at the job site.
- B. Whenever work within Railroad rights of way is of such a nature that impediment to Railroad operations such as use of runaround tracks or necessity for reduced speed is unavoidable, the Contractor shall schedule and conduct his operations so that such impediment is reduced to the absolute minimum.
- C. Should conditions arising from, or in connection with the work, require that immediate and unusual provisions be made to protect operations and property of the Railroad, the Contractor shall make such provisions. If in the judgment of the Railroad Engineer, or in his absence, the Engineer, such provisions are insufficient, either may require or provide such provisions, as he deems necessary. In any event, such unusual provisions shall be at the Contractor's expense and without cost to the Railroad or the State.

IV. TRACK CLEARANCES

- A. The minimum track clearances to be maintained by the Contractor during construction are shown on the Project Plans. However, before undertaking any work within Railroad rights of way, or before placing any obstruction over any track, the Contractor shall:
 - 1. Notify the Railroad's representative <u>at least 72 hours in advance</u> of the work.
 - 2. Receive assurance from the Railroad's flagging representative that arrangements have been made for flagging service as necessary.
 - 3. Receive permission from the Railroad's representative to proceed with the work.
 - 4. Ascertain that the Engineer has received copies of notice to the Railroad and of the Railroad's response thereto.

V. CONSTRUCTION PROCEDURES

A. General:

- 1. Construction work on Railroad property shall be:
 - a) Subject to the inspection and approval of the Railroad.
 - b) In accord with the Railroad's written outline of specific conditions.
 - c) In accord with the Railroad's general rules, regulations and requirements including those relating to safety, fall protection and personal protective equipment.
 - d) In accord with all Special Notes, Summaries, and Addendums.
- 2. The Railroad requires a submission of construction procedure that meets the requirements of these Special Notes and attachments. The Railroad's submittal review period is thirty (30) days. Resubmissions will be reviewed within 2 weeks.

B. Excavation and shoring:

- 1. The sub grade of an operated track shall be maintained with edge of berm at least 10'0" from centerline of track and not more than 18 inches below top of rail, and a 1 vertical to 1.5 horizontal slope from that point outwards. Contractor will not be required to make existing section meet this specification if substandard, in which case the existing section will be maintained.
- 2. The Contractor will be required to take special precaution and care in connection with excavating and shoring pits, and in driving piles, or sheeting for footings adjacent to tracks to provide adequate lateral support for the tracks and the loads which they carry, without disturbance of track alignment and surface, and to avoid obstructing track clearances with working equipment, tools or other material. The procedure for doing such work, including need of and plans for shoring, shall first be approved by the Engineer and the Railroad Engineer, but such approval shall not relieve the Contractor from liability.
- 3. The Contractor shall submit a detailed procedure for the installing of sheeting/shoring adjacent to Railroad Tracks.
- 4. Shoring protection shall be provided when excavating adjacent to an active track or railroad facility or as determined by the Railroad. Shoring will be provided in accordance with AREMA *Manual for Railway Engineering* Chapter 8, part 28; except as noted below.

- 5. Shoring may not be required if all of the following conditions are satisfied:
 - a. Excavation does not encroach upon a 1½ horizontal: 1 vertical theoretical slope line starting 1'-0" below top of rail and at 12'-0" minimum from centerline of the track (live load influence zone).
 - b. Track is on level ground or in a cut section and on stable soil.
 - c. Excavation does not adversely impact the stability of a Railroad facility (i.e. signal bungalow, drainage facility, undergrade bridge, building, etc.)
 - d. Shoring is not required by any governing construction code.
- 6. When the track is on an embankment, excavating the toe of the embankment without shoring may affect the stability of the embankment. Therefore, excavation of the embankment toe without shoring will not be permitted.
- 7. Trench boxes are prohibited for use on Railroad property within the theoretical live load influence zone.
- 8. The required protection is the cofferdam type that completely encloses the excavation. Where dictated by conditions, partial cofferdams with opened sides away from the track may be used. Cofferdams shall be constructed using steel piling, or when approved by the engineer, steel soldier piles with timber lagging. Wales and struts shall be provided and designed as needed. The following shall be considered when designing cofferdams:
 - a. Shoring shall be designed to resist a vertical lice load surcharge of 1,880 lbs. per square foot, in addition to active earth pressure. The surcharge shall be assumed to act on a continuous strip, 8'6" wide. Lateral pressures due to surcharge shall be computed using the strip load formula shown in AREMA *Manual for Railway Engineering*, Chapter 8, Part 20.
 - b. Allowable stresses in materials shall be in accordance with AREMA *Manual for Railway Engineering*, Chapter 7, 8, and 15.
 - c. A construction procedure for temporary shoring shall be shown on the drawing.
 - d. All shoring systems on or adjacent to Railroad right-of-way shall be equipped with railings or other approved fall protection.

- e. A minimum horizontal clearance of 10'-0" from centerline of the track to face of nearest point of shoring shall be maintained provided a 12'-0" roadbed is maintained with a temporary walkway and handrail system.
- 9. The Contractor shall submit the following drawings and calculations (all shall be signed/sealed by a Professional Engineer) for the Railroad's review and approval.
 - a. Six (6) sets of detailed drawings of the shoring systems showing sizes of all structural members, details of connections, and distances from centerline of track to face of shoring. Drawing shall show a section showing height of shoring and track elevation in relation to bottom of excavation.
 - b. Six (6) sets of calculations of the shoring design. The drawings and calculations shall be prepared by a Licensed Professional Engineer and shall bear the Engineer's seal and signature. Shoring plans shall be approved by the Railroad's construction engineering and inspection representative.
 - c. For sheeting and shoring within 18'-0" of the centerline of the track, the live load influence zone, and in slopes, the Contractor shall use interlocked steel sheeting (sheet pile).
 - d. Sheet pile installed in slopes or within 18'-0" of the centerline shall <u>not</u> be removed.
 - e. Sheet pile shall be cut off a minimum of 3'-0" below the finished grade, ditch line invert, or as directed by the Engineer. The ground shall be backfilled and compacted immediately after sheet pile is cut off.
 - f. A procedure for cutting off the sheet pile and restoring the embankment shall be submitted to the Engineer for review and acceptance.

C. Demolition Procedure:

- 1. Railroad tracks and other railroad property, including signals, structures, and other facilities, must be protected from damage during the procedure. No crane or equipment may be set on the rails or track structure and no material may be dropped on Railroad property.
- 2. The Contractor is required to submit a plan showing the location of cranes, horizontally and vertically, operating radii, with delivery or disposal locations shown. The location of all tracks and other railroad facilities as well as all obstructions such as wire lines, poles, adjacent structures, etc. must also be shown.
- 3. Crane rating sheets showing cranes to be adequate for <u>150% of the actual</u> <u>weight of the pick.</u> A complete set of crane charts, including crane, counterweight, and boom nomenclature is to be submitted.
- 4. Plans and computations showing the weight of the pick must be submitted. Calculations shall be made from plans of the existing and/or proposed structure showing complete and sufficient details with supporting data for the demolition or erection of the structure. If plans do not exist, lifting weights must be calculated from field measurements. If possible, field measurements shall be taken with a Railroad representative present.
- 5. A data sheet must be submitted listing the types, size, and arrangements of all rigging and connection equipment. The safe working load capacity of all rigging and connecting equipment shall be 150% above the calculated weight of the pick.
- 6. A complete procedure is to be submitted, including the order of lifts, time required for each lift, and any repositioning or re-hitching of the crane or cranes.
- 7. All erection or demolition plans, procedures, data sheets, etc. submitted must be prepared, signed and sealed by a Registered Professional Engineer.
- 8. The Railroad's representative must be present at the site during the entire demolition and erection procedure period.
- 9. All procedures, plans and calculations shall first be approved by the Engineer and the Railroad Engineer, but such approval does not relieve the Contractor from liability.
- 10. Loads shall not be supported while any trains are passing if that piece of equipment has the capacity to <u>foul a 50' envelope in the event of an</u> equipment failure.

- 11. The names and experience of the key Contractor personnel involved in the operation shall be included in the Contractor's means and methods submission.
- 12. Existing, obsolete, bridge piers shall be removed to a minimum of 3'-0" below the finished grade, final ditch line invert, or as directed by the Engineer.
- 13. A minimum quantity of 25 tons of Railroad approved track ballast may be required to be furnished and stockpiled on site by the Contractor, or as directed by the Engineer.
- 14. On-track or ground debris shields such as crane mats are prohibited.
- 15. Overhead Demolition Debris Shield Shall be installed prior to the demolition of a bridge deck or other relevant portions of the superstructure.
 - a. The demolition debris shield shall be erected from the underside of the bridge over the track area to catch all falling debris.
 - b. The Contractor shall include the demolition debris shield installation/removal means and methods as part of the proposed Controlled Demolition procedure submission.
 - c. The demolition debris shield shall provide 23'-0" minimum vertical clearance if the existing clearance is less than 23'-0" as approved by the Railroad. Horizontal clearance to the centerline of the track should not be reduced unless approved by the Engineer.
 - d. The vertical clearance ATR (above top of rail) is measured from the top of rail to the lowest point on the overhead shielding system measured within a distance of 8'-0" out from each side of the track centerline.
 - e. The demolition debris shield design and supporting calculations, all signed/sealed by a Professional Engineer, shall be submitted for review and acceptance.
 - f. The demolition debris shield shall have a **minimum** design load of 50 pounds per square foot **plus** the weight of the equipment, debris, personnel, and other loads to be carried.
 - g. The Contractor shall include the proposed bridge deck removal procedure in its demolition means and methods and shall verify that the size and quantity of the demolition debris generated by the procedure does not exceed the shield design loads.

- h. The contractor shall clean the demolition debris shield daily or more frequently as dictated either by the approved design parameters or as directed by the Engineer.
- 16. Vertical Demolition Shield This type of shield may be required for substructure removals in close proximity to track and other facilities, as determined by the Engineer.
 - a. Prior to commencing the demolition activity, the Contractor shall install a ballast protection system consisting of geotextile to keep the railroad ballast from becoming fouled with construction or demolition debris and fines. The geotextile ballast protection system shall be installed and maintained by the Contractor for the project duration in accordance with the attached plan, or with additional measures as directed by the Engineer.
 - b. The Contractor shall submit detailed plans, with detailed calculations, prepared and submitted by a Professional Engineer of the protection shield and ballast protection systems for approval prior to the start of demolition.
 - c. Blasting will not be permitted to demolish a structure over or within Railroad right-of-way.
- 17. The Controlled Demolition procedure must be approved by the Railroad Engineer prior to undertaking work on the project.
- 18. The Contractor shall provide timely communication to the Railroad Engineer when scheduling the demolition related work so that the Engineer may be present during the entire demolition procedure.
- 19. At any time during demolition activities, the Engineer may require revisions to the previously approved procedures to address weather, site conditions or other circumstances which may create a potential hazard to rail operations or Railroad facilities. Such revisions may require immediate interruption or termination of ongoing activities until such time the issue is resolved to the Engineer's satisfaction. The Railroad shall not be responsible for any additional costs or time claims associated with such revisions.

D. Erection Procedure:

The Contractor shall submit a detailed procedure for performing erection on/about Railroad property.

1. The Contractor shall submit six (6) copies of the detailed procedure for erection of the proposed structures over or adjacent to the tracks or right-of-way. This procedure shall include a plan showing the locations of cranes, horizontally and vertically, operating radii, with staging locations shown, including beam placement on ground or truck unloading staging plan. Plan should also include the location of all tracks, other railroad facilities; wires, poles, adjacent structures, or buried utilities that could be affected, showing that the proposed lifts are clear of these obstructions should be shown. No crane or equipment may be set on the rails or track structure.

2. Also included with this submittal the following information:

- a. As-Built Bridge Seat Elevations All as-built bridge seats and top of rail elevations shall be furnished to the Engineer for review and verification at least 30 days in advance of construction or erection, to ensure that minimum vertical clearances as approved in the plans will be achieved.
- b. Computations showing weight of picks must be submitted. Computations shall be made from plans of the structure beams being erected and those plans or sections thereof shall also be included in the submittal; the weight shall include the weight of concrete or other materials including lifting rigging.
- c. Crane rating sheets showing cranes to be adequate for 150% of the actual weight of the pick. A complete set of crane charts, including crane, counterweight, maximum boom angle, and boom nomenclature is to be submitted. Safety factors that may have been "built in" to the crane charts are not to be considered when determining the 150% Factor of Safety.
- d. A data sheet shall be prepared listing the type, size and arrangements of slings, shackles, or other connecting equipment. Include copies of a catalog or information sheets for specialized equipment. All specific components proposed for use shall be clearly identified and highlighted in the submitted documents. The safe working load capacity of the connecting equipment shall be 150% above the calculated weight of the pick.
- e. A complete written procedure is to be included that describes the sequence of events, indicating the order of lifts and any repositioning or rehitching of the crane or cranes.

- f. A time schedule for each of the various stages must be shown as well as a schedule for the entire lifting procedure. The proposed time frames for all critical sub tasks (i.e., performing aerial splices, installing temporary bracing, etc.) shall be furnished so that the potential impact(s) to Railroad operations may be assessed and eliminated or minimized.
- g. The names and experience of the key Contractor personnel involved in the operation shall be included in the Contractor's means and methods submission.
- h. Design and supporting calculations prepared by the Professional Engineer for items including the temporary support of components or intermediate stages shall be submitted for review. A guardrail will be required to be installed in a track where a temporary bent is located within twelve (12) feet from the centerline of that track.
- 3. The proposed Erection procedure must be approved by the Engineer prior to undertaking work on the project.
- 4. The Contractor shall provide timely communication to the Engineer when scheduling the erection related work so that the Engineer may be present during the entire erection procedure.
- 5. At any time during construction activities, the Engineer may require revisions to the previously approved procedures to address weather, site conditions or other circumstances which may create a potential hazard to rail operations or Railroad facilities. Such revisions may require immediate interruption or termination of ongoing activities until such time the issue is resolved to the Engineer's satisfaction. The Railroad shall not be responsible for any additional costs or time claims associated with such revisions.

E. Blasting:

- 1. The Contractor shall obtain advance approval of the Railroad Engineer and the Engineer for use of explosive on or adjacent to Railroad property. The request for permission to use explosives shall include a detailed blasting plan. If permission for use of explosives is granted, the Contractor will be required to comply with the following:
 - a) Blasting shall be done with light charges under the direct supervision of a responsible officer or employee of the Contractor and a licensed blaster.

- b) Electric detonating fuses shall not be used because of the possibility of premature explosions resulting from operation of two-way train radios.
- c) No blasting shall be done without the presence of an authorized representative of the Railroad. At least 10 days advance notice to the person designated in the Railroad's notice of authorization to proceed (see paragraph 2B above) will be required to arrange for the presence of an authorized Railroad representative and such flagging as the Railroad may require.
- d) Have at the job site adequate equipment, labor and materials and allow sufficient time to clean up debris resulting from the blasting without delay to trains, as well as correcting at his expense any track misalignment or other damage to Railroad property resulting from the blasting as directed by the Railway's authorized representative. If his actions result in delay of trains, the Contractor shall bear the entire cost thereof.
- e) Explosives shall not be stored on Railroad Property.
- f) At any time during the blasting activities, the Engineer may require revisions to the previously approved procedures to address weather, site conditions, or other circumstance which may create a potential hazard to rail operations or Railroad facilities. Such revisions may require immediate interruption or termination of ongoing activities until such time the issue is resolved to the Engineer's satisfaction. The Railroad shall not be responsible for any additional costs or time claims associated with such revisions.

2. The Railroad representative will:

- a) Determine the approximate location of trains and advise the Contractor the approximate amount of time available for the blasting operation and clean-up.
- b) Have the authority to order discontinuance of blasting if, in his opinion, blasting is too hazardous or is not in accord with these Special Notes.

F. Track Monitoring:

The Contractor shall submit for Railroad review and approval, a detailed track monitoring program to detect both horizontal and vertaical movement of the track and roadbed, a minimum of 30-days in advance of start of work.

- 1. For the installation of temporary or permanent shoring systems, including but not limited to soldier piles and lagging, and interlocked steel sheeting on or adjacent to the Railroad's right-of-way, the contractor may be required to submit a detailed track monitoring program for the Railroad's approval prior to performing any work near the Railroad's right-of-way.
- 2. The program shall specify the survey locations, the distance between the location points, and frequency of monitoring before, during, and after construction. The Railroad reserves the right to modify the survey locations and monitoring frequency as necessary during the project.
- 3. The survey data shall be collected in accordance with the approved frequency and immediately furnished to the Engineer for analysis.
- 4. If any movement has occurred as determined by the Engineer, the Railroad will be immediately notified. The Railroad, at its sole discretion, shall have the right to immediately require all contractor operations to be ceased, have the excavated area immediately backfilled and/or determine what corrective action is required. Any corrective action required by the Railroad or performed by the Railroad including monitoring of corrective action of the contractor will be at project expense.

G. Maintenance of Railroad Facilities:

- 1. The Contractor will be required to maintain all ditches and drainage structures free of silt or other obstructions which may result from his operations and provide and maintain any erosion control measures as required. The Contractor shall provide erosion control measures during construction and use methods that accord with applicable state standard specifications for road and bridge construction, including either (1) silt fence; (2) hay or straw barrier; (3) berm or temporary ditches; (4) sediment basin; (5) aggregate checks; and (6) channel lining. The Contractor will promptly repair eroded areas with Railroad rights of way and to repair any other damage to the property of the Railroad or its tenants at the Contractor's expense.
- 2. All maintenance and repair of damages due to the Contractor's operations shall be done at the Contractor's expense.

H. Storage of Materials and Equipment:

- 1. Materials and equipment shall not be stored where they will interfere with Railroad operations, nor on the rights of way of the Railroad Company without first having obtained permission from the Railroad Engineer, and such permission will be with the understanding that the Railroad Company will not be liable for damage to such material and equipment from any cause and that the Railroad Engineer may move or require the Contractor to move, at the Contractor's expense, such material and equipment. In no instance shall material be stored closer than 25-feet to the nearest rail.
- 2. All grading or construction machinery that is left parked near the track unattended by a watchman shall be effectively immobilized so that it cannot be moved by unauthorized persons. The Contractor shall protect, defend, indemnify and save Railroad, and any associated, controlled or affiliated corporation, harmless from and against all losses, costs, expenses, claim or liability for loss or damage to property or the loss of life or personal injury, arising out of or incident to the Contractor's failure to immobilize grading or construction machinery.

I. Cleanup:

1. Upon completion of the work, the Contractor shall remove from within the limits of the Railroad rights of way, all machinery, equipment, surplus materials, falsework, rubbish or temporary buildings of the Contractor, and leave said rights of way in a neat condition satisfactory to the Chief Engineer of the Railroad or his authorized representative.

VI. DAMAGES:

- A. The Contractor shall assume all liability for any and all damages to his work, employees, equipment and materials caused by Railroad traffic.
- B. Any cost incurred by the Railroad for repairing damages to its property or to property of its tenants, caused by or resulting from the operations of the Contractor, shall be paid directly to the Railroad by the Contractor.

VII. FLAGGING SERVICES:

A. When Required:

- 1. Flagging services will not be provided until the contractor's insurance has been reviewed & approved by the Railroad.
- 2. Under the terms of the agreement between the Department and the Railroad, the Railroad has sole authority to determine the need for flagging required to protect its operations. In general, the requirements of such services will be whenever the Contractor's personnel or equipment are likely to be, working on the Railroad's rights of way, or across, over, adjacent to, or under a track, or when such work has disturbed or is likely to disturb a railroad structure or the railroad roadbed or surface and alignment of any track to such extent that the movement of trains must be controlled by flagging. If any element (workers, equipment, tools, scaffolding, etc.) may exist or fall within 25-feet of the edge of track, a flagman is necessary.
- 3. Normally, the Railroad will assign one flagman to a project; but in some cases, more than one may be necessary, such as yard limits where three- (3) flagmen may be required. However, if the Contractor works within distances that violate instructions given by the Railroad's authorized representative or performs work that has not been scheduled with the Railroad's authorized representative, a flagman or flagmen may be required until the project has been completed.

B. Scheduling and Notification:

1. Not later than the time that approval is initially requested to begin work on Railroad rights of way, Contractor shall furnish to the Railroad and the Department a schedule for all work required to complete the portion of the project within Railroad rights of way and arrange for a job site meeting between the Contractor, the Department, and the Railroad's authorized representative. Flagman or Flagmen may not be provided until the job site meeting has been conducted and the Contractor's work scheduled.

- 2. The Cabinet's Engineer will be responsible for procuring flagmen, however, it is the Contractor's responsibility to notify the Engineer when they are needed. The Contractor will be required to give the Engineer at least 10 working days of advance written notice of intent to begin work within Railroad rights of way. If it is necessary for the Railroad to advertise a flagging job for bid, it may take up to 90-days to obtain **service**. Once begun, when work is suspended at any time for any reason, the Contractor will be required to give the Engineer at least 3 working days of notice before resuming work on Railroad rights of way. Such notice shall include sufficient details of the proposed work to enable the Railroad representative to determine if flagging will be required. If such notice is in writing, the Contractor shall furnish the Engineer a copy; if notice is given verbally it shall be confirmed in writing with copy to the Engineer. If flagging is required, no work shall be undertaken until the flagman, or flagmen is present at the job site. It may take up to 30 days to obtain flagging initially from the Railroad. When flagging begins the flagman is usually assigned by the Railroad to work at the project site on a continual basis until no longer needed and cannot be called for on a spot basis. If flagging becomes unnecessary and is suspended, it may take up to 10 days to again obtain flagging services from the Railroad. Due to labor agreements, it is necessary to give 5 working days notice before flagging service may be discontinued and responsibility for payment stopped.
- 3. If, after the flagman is assigned to the project site, emergencies arise which require the flagman's presence elsewhere, and then the Contractor shall delay work on Railroad rights of way until such time as the flagman is again available. Any additional costs resulting from such delay shall be borne by the Contractor and not the Department or Railroad.
- 4. When demobilizing, the Contractor shall contact the Engineer, who will in turn contact the flagman to avoid unnecessary flagging charges. This communication shall be documented.

C. Payment:

- 1. The Cabinet will be responsible for paying the Railroad directly for any and all costs of flagging, which may be required to accomplish the construction.
- 2. The estimated cost of flagging is listed on the Summary Sheet. The charge to the Cabinet by the Railroad will be the actual cost based on the rate of pay for the Railroad's employees, or it's contractor, who are available for flagging service at the time the service is required.
- 3. Railroad work involved in preparing and handling bills will also be charged

to the Cabinet. Charges to the Cabinet by the Railroad shall be in accordance with applicable provisions of 23 CRF 140, Subpart I and 23 CRF 646, Subpart B. Flagging costs are subject to change. The above estimates of flagging cost are provided for information only and are not binding in any way.

D. Verification:

- 1. The Department will review and sign the Railroad flagman's time sheet, attesting that the flagman was present during the time recorded. Flagman may be removed by Railroad if form is not signed. If flagman is removed, the Contractor will not be allowed to re-enter the Railroad rights of way until the issue is resolved. Any complaints concerning flagman or flagmen must be resolved in a timely manner. If need for flagman or flagmen is questioned, please contact the Railroad's Representative listed on the Project Summary Sheet. All verbal complaints must be confirmed in writing by the Contractor within 5 working days with copy to the Highway Engineer. All written correspondence should be addressed to the Railroad's Representative listed on the Project Summary Sheet.
- 2. The Railroad flagman assigned to the project will be responsible for notifying the Project Engineer upon arrival at the job site on the first day (or as soon thereafter as possible) that flagging services begin and on the last day that he performs such services for each separate period that services are provided. The Project Engineer will document such notification in the project records. When requested, the Project Engineer will also sign the flagman's diary showing daily time spent and activity at the project site.

VIII. HAUL ACROSS RAILROAD:

- A. Where the plans show or imply that materials of any nature must be hauled across a Railroad, unless the plans clearly show that the State has included arrangements for such haul in its agreement with the Railroad, the Contractor will be required to make all necessary arrangements with the Railroad regarding means of transporting such materials across the Railroad. The Contractor will be required to bear all costs incidental, including flagging, to such crossings whether services are performed by his own forces or by Railroad personnel.
- B. No crossing may be established for use of the Contractor for transporting materials or equipment across the tracks of the Railroad Company unless specific authority for is installation, maintenance, necessary watching and flagging thereof and removal, all at the expense of the Contractor, is first obtained from the Railroad Engineer. The approval process for an agreement normally takes 90-days.

IX. WORK FOR THE BENEFIT OF THE CONTRACTOR:

- A. All temporary or permanent changes in wire lines or other facilities which are considered necessary to the project are shown on the plans; included in the force account agreement between the State and the Railroad or will be covered by appropriate revisions to same which will be initiated and approved by the State and/or the Railroad.
- B. Should the Contractor desire any changes in addition to the above, then he shall make separate arrangements with the Railroad for same to be accomplished at the Contractor's expense.

X. COOPERATION AND DELAYS:

- A. It shall be the Contractor's responsibility to arrange a schedule with the Railroad for accomplishing stage construction involving work by the Railroad or tenants of the Railroad. In arranging his schedule he shall ascertain, from the Railroad, the lead time required for assembling crews and materials and shall make due allowance therefore.
- **B.** Train schedules cannot be provided to the Contractor. It is the Contractor's responsibility to contact the Railroad in order to arrange "Track Time." This "Track Time" will be an agreed upon prearranged time period that the Railroad will, without undue burden, schedule no train traffic to facilitate the Contractor's work on or near Railroad right-of-way. Due to track operations, there is no guarantee for track time. This track time must be arranged at least 7 days prior to the date of need.
- C. No charge or claims of the Contractor against either the Department or the Railroad will be allowed for hindrance or delay on account of railroad traffic; any work done by the Railroad or other delay incident to or necessary for safe maintenance of Railroad traffic or for any delays due to compliance with these Special Notes.
- D. The Contractor shall cooperate with others participating in the construction of the Project to the end that all work may be carried on to the best advantage.
- E. The Railroad does not assume any responsibility for work performed by others in connection with the Project. No claims of the Contractor against the Railroad for any inconvenience, delay, or additional cost incurred by the Contractor on account of operations by others.

XI. TRAINMAN'S WALKWAYS:

A. Along the outer side of each exterior track of multiple operated track, and on each side of single operated track, an unobstructed continuous space suitable for trainman's use in walking along trains, extending to a line not less than 10 feet from centerline of track, shall be maintained. Any temporary impediments to walkways and track drainage encroachments or obstructions allowed during work hours while Railroad's protective service is provided shall be removed before the close of each day. If there is any excavation near the walkway, a handrail, with 15'-0'' minimum clearance from centerline of track, shall be placed.

XII. GUIDELINES FOR PERSONNEL ON RAILROAD RIGHTS OF WAY:

- A. All persons shall wear hard hats. Appropriate eye and hearing protection must be used. Working in shorts is prohibited. Shirts must cover shoulders, back and abdomen. Working in tennis or jogging shoes, sandals, boots with high heels, cowboy and other slip on type boots is prohibited. Hard-sole, lace-up footwear, zippered boots cinched with straps which fit snugly about the ankle are adequate. Safety boots are required.
- B. No one is allowed within <u>50' of the centerline of the track</u> without specific authorization from the flagman.
- C. All persons working near track when train is passing are to look out for dragging bands, chains and protruding or shifting cargo.
- *D.* No one is allowed to cross tracks without specific authorization from the flagman.
- E. All welders and cutting torches working within <u>25' of track must stop when train</u> is passing.
- F. No steel tape or chain will be allowed to cross or touch rails without permission.

XIII. GUIDELINES FOR EQUIPMENT ON RAILROAD RIGHTS OF WAY:

- A. No crane or boom equipment will be allowed to set up to work or park within boom distance plus 15' of centerline of track without specific permission from railroad official and flagman.
- B. No crane or boom equipment will be allowed to foul track or lift a load over the track without flag protection and track time.
- C. All employees will stay with their machines when crane or boom equipment is pointed toward track.
- D. All cranes and boom equipment under load will stop work while a train is passing (including pile driving).

- E. Swinging loads must be secured to prevent movement while train is passing.
- F. No loads will be suspended above a moving train.
- G. No equipment will be allowed within <u>50' of centerline of track</u> without specific authorization of the flagman.
- H. Trucks, tractors or any equipment will not touch ballast line without specific permission from railroad official and flagman.
- I. No equipment or load movement within 50' or above a standing train or other equipment without specific authorization of the flagman.
- J. All operating equipment within <u>50' of track must halt operations when a train is</u> <u>passing</u>. All other operating equipment may be halted by the flagman if the flagman views the operation to be dangerous to the passing train.
- *K.* All equipment, loads and cables are prohibited from touching rails.
- L. While clearing and grubbing, no vegetation will be removed from railroad embankment with heavy equipment without specific permission from the Railroad Engineer and flagman.
- M. No equipment or materials will be parked or stored on Railroad's property unless specific permission is granted from the Railroad Engineer.
- N. All unattended equipment that is left parked on Railroad property shall be effectively immobilized so that it can not be moved by unauthorized persons.
- O. All cranes and boom equipment will be turned away from track after each work day or whenever unattended by an operator.

XIV. INSURANCE:

- A. In addition to any other forms of insurance or bonds required under the terms of the contract and specifications, the Contractor will be required to carry insurance of the following kinds:
 - 1. Commercial General Liability coverage at their sole cost and expense with limits of not less than \$5,000,000 in combined single limits for bodily injury and/or property damage per occurrence, and such policies shall name the Railroad as an additional insured. Contractor shall provide the Railroad with a complete waiver of subrogation, and remove any exclusion for coverage of work occurring within 50' of a railroad track pursuant to Endorsement CG 24.17.
 - 2. Statutory Worker's Compensation and Employers Liability Insurance with

- limits of not less than \$1,000,000, which insurance must contain a waiver of subrogation against the Railroad and its affiliates.
- 3. Commercial automobile liability insurance with limits of not less than \$1,000,000 combined single limit for bodily injury and/or property damage per occurrence, and such policies shall name the Railroad as an additional insured.
- 4. Railroad protective liability insurance with limits of not less than \$5,000,000 combined single limite for bodily injury and/or property damage per occurrence and an aggregate annual limit of \$10,000,000, which insurance shall satisfy the following additional requirements:
 - a. The Railroad Protective Insurance Policy must be on the ISO/RIMA Form of Railroad Protective Insurance Insurance Services Office (ISO) Form CG 00 35.
 - b. The Railroad must be the named insured on the Railroad Protective Insurance Policy
 - c. Name and Address of the Contractor must be shown on the Declarations page.
 - d. Description of operations must appear on the Declarations page and must match the Project description, including project or contract identification numbers.
 - e. Authorized endorsements must include the Pollution Exclusion Amendment CG 28 31, unless using form CG 00 35 version 96 and later.
 - f. Authorized endorsements may include:
 - (i). Broad form Nuclear Exclusion IL 00 21
 - (ii). 30-day Advance Notices of Non-renewal or cancellation
 - (iii). Required State Cancellation Endorsement
 - (iv). Quick Reference or Index CL/IL 240
 - g. Authorized endorsements may not include:
 - (i). A Pollution Exclusion Endorsement except CG 28 31
 - (ii). A Punitive or Exemplary Damages Exclusion
 - (iii). A "Common Policy Conditions" Endorsement
 - (iv). And endorsement that is not named in Section 4 (e) or (f) above.
 - (v). Poloicies that contain any type of deductible

- 5. All insurance companies must be A. M. Best rated A- and Class VII or better.
- 6. Such additional or different insurance as the Railroad may require.

B. Additional Terms:

- 1. Contractor must submit the original Railroad Protective Liability policy, Certificates of Insurance, and all notices and correspondence regarding the insurance policy to the contact listed on the Project Summary Sheet.
- 2. The Contractor may not begin work on the Project until it has received the Railroad's written approval or the required insurance.
- C. Insurance policies shall follow the requirements of 23 CRF 646, Subpart A.
- D. Evidence of insurance as required above shall be furnished to the address shown on the attached Summary Sheet for review by the Department and transmittal to the Railroad.
- E. If any part of the work is sublet, similar insurance and evidence thereof in the same amounts as required of the Prime Contractor shall be provided by or in behalf of the subcontractor to cover his operations. Endorsements to the Prime Contractor's policies specifically naming subcontractors and describing their operations will be acceptable for this purpose.
- F. All insurance herein before specified shall be carried until all work required to be performed under the terms of the contract has been satisfactorily completed within the limits of the rights of way of the Railroad as evidenced by the formal acceptance by the Department. Insuring Companies may cancel insurance by permission of the Department and Railroad or on thirty (30) days written notice to the Department and Railroad Insurance Contacts as listed on the Project Summary Sheet.

XV. FAILURE TO COMPLY:

- A. These Special Notes are supplemental and amendatory to the Kentucky Department of Highways' Standard Specifications for Road and Bridge Construction, Edition of 2008, and amendments thereof, and where in conflict therewith, these Special Notes shall govern.
- B. In the event the Contractor violates or fails to comply with any of the requirements of these Special Notes:
 - 1. The Railroad Engineer may require that the Contractor vacate Railroad property.
 - 2. The Engineer may withhold all monies due the Contractor on monthly statements.
 - 3. Any such orders shall remain in effect until the Contractor has remedied the situation to the satisfaction of the Railroad Engineer and the Engineer.

XVI. PAYMENT FOR COST OF COMPLIANCE:

A. No separate payment will be made for any extra cost incurred on account of compliance with these Special Notes. All such cost shall be included in prices bid for other items of the work as specified in the payment items.

XVII. CONTRACTOR'S RIGHT OF ENTRY AGREEMENT

A. Prior to entry onto Railroad right of way, the contractor will be required to enter into a Right of Entry Agreement with the railroad. The Contractor is responsible for garnering this agreement and executing any terms and conditions stated therein, including any and all fees associated with this agreement, which shall not exceed \$750.00. A blank agreement is provided in the bid package. When the contract is awarded, the Contractor shall sign the form and return it to the Cabinet with the contract before a work order is issued.



Forecasted Rate Increases: Rates will increase to

Kentucky Transportation Cabinet Division of Right of Way & Utilities

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SUMMARY FOR KYTC PROJECTS THAT INVOLVE A RAILROAD

Date: 4/11/2012 (enter using M/d/yyyy format)

This project actively involves the below listed railroad company. This Project Summary provides an abbreviated listing of project specific railroad data. The detailed needs of the specified railroad company are included in the Special Notes for Protection of Railroad Interest in the proposal package. By submitting a bid, the contractor attests that they have dutifully considered and accepted the provisions as defined in both documents.

GENERAL ROAD PROJECT INFORMATION (This section must be provided by KYTC)											
County:		<u>Graves</u>									
Federal Num											
State Number	er:	FD52 04	2 77253 01U								
Route:		CR 1430									
Project Desc	Description: Replace Bridge on White Mountian Road (CR-1430) over Illinois Central RR										
Item Numbe	er:	<u>1-1040.00</u>			Highway Milepost:						
GENERAL RAIL INFO	RMATION	(The belo	ow sections must be	provided by	Railroad	Company)					
Rail Compan	y Name:		Illinois Central Ra	ailroad							
AAR-DOT# (if applicable): 296 718K Railroad Milepost:											
Train Count	: <u>5</u>	Train Count (6p	m to 6am):	<u>4</u>	Train Count (24 hr total):	<u>9</u>					
			Maximur	m Train Spe	ed: <u>60</u> m	nph					
(This information is necessary to acquire the necessary insurances when working with Railroad Right of Way)											
INSURANCE REQUIREMENTS											
The named insured, description of the work and designation of the job site to be shown on the Policy are as											
follows:											
(a)	Named	Named Insured: Illinois Central Railroad									
(b)	The pro	project description should be as indicated in the General Road Project Information section.									
(c)	(c) The designation of the jobsite is the route, Milepost, and AAR-DOT# listed above.										
FLAGGING INFORMA	ATION										
Flagging Esti	mate:										
Flagging is to be paid by the Cabinet directly to the RR. Flagging is based on the number of days a flagman is required, at the											
base rate of \$1,000.00 per day (1-8 hours). Any hours in excess of 8 hours are billed at the rate of \$150.00 per hour. Weekend											
and Holiday flagman pretoection will be billed at the minimum rate of 8 hours at \$150.00 per hour, \$1,200.00.											
Hourly Rate: \$10 <u>0.00</u> per <u>hour</u> based on a <u>8</u> hour day effective as of the date of this document.											
	Work by a flagman in excess of 8 hours per day or 40 hours per week, but not more than 12 hours a day will result in overtime pay at 1 ½										
times the appropriate rate. Work by a flaaman in excess of 12 hours per day will result in overtime pay at 2 times the appropriate rate.											

\$0.00 per hour based on a 0 hour day effective _____ (enter using M/d/yyyy format).

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KENTUCKY TRANSPORTATION CABINET CONTACTS

(to be provided by KYTC)

(to be provided by Railroad Company)

RAILROAD CONTACTS

General Railroad Contact:

John Dinning
Illinois Central Railroad

2151 North Mill Street

Jackson, Mississippi 39202

(Phone) 601-592-1815

(Email) John.Dinning@cn.ca

Regional Representative (Roadmaster):

Insurance contact:

John Dinning
Illinois Central Railroad

2151 North Mill Street

Jackson, Mississippi 39202

(Phone) 601-592-1815

(Email) John.Dinning@cn.ca

Railroad Designer Contact:

Contractor or In-House Employee? <u>In-House</u>

<u>John Dinning</u>

Illinois Central Railroad

2151 North Mill Street

Jackson, Mississippi 39202

(Phone) 601-592-1815

(Email) John.Dinnng@cn.ca

Railroad Construction Contact:

Contractor or In-House Employee? In-House

MaryEllen Carmody

Audit Officer

Canandian National

2800 Livernois, Suite 220

Troy, Michigan 48083

(Phone) 248-740-6227

(Email) Maryellen.carmody@cn.ca

KYTC Railroad Coordinator:

Allen Rust, EIT
Div. of Right of Way & Utilities
Kentucky Transportation Cabinet
200 Mero Street, 5th Floor East
Frankfort, Kentucky 40622
(Phone) 502-564-3210
(Email) allen.rust@ky.gov

KYTC Construction Procurement Director:

Ryan Griffith, Director
Div. of Construction Procurement
Kentucky Transportation Cabinet
200 Mero Street, 3rd Floor West
Frankfort, Kentucky 40622
(Phone) 502-564-3500
(Email) ryan.griffith@ky.gov

KYTC Construction Director:

Steve Criswell, Director
Div. of Construction
Kentucky Transportation Cabinet
200 Mero Street, 3rd Floor West
Frankfort, Kentucky 40622
(Phone) 502-564-4780
(Email) steve.criswell@ky.gov



The project specific information provided herein is valid as of the date indicated. However, the specific information may be subject to change due to the normal business operations of all parties. The terms and conditions defined here, and in the bid proposal in its entirety, are inclusive and constant.

RIGHT OF ENTRY AGREEMENT

The III					npany (herei	nafte	r refer	red t	o as	the Ra	ailroac
(hereinafter ca	lled the	e Licens	see) l	icense aı	1						,
and expense,	to e	enter ti	1e F	Kanroad	Company s , for th	-					•

.2012

Licensee shall pay to Railroad Company upon execution of this letter agreement the sum of \$750.00 to cover preparation and administration of this agreement/for the privilege granted. The aforesaid sum is not refundable in the event Licensee elects not to enter upon Railroad Company's property or in the event Railroad Company elects to terminate this license for any reason whatsoever.

The Licensee shall not enter the Railroad Company's premises for the purpose as set forth above without having first given the Railroad Company's Engineering Superintendent or his authorized representative at least three (3) days' advance notice of the date the Licensee plans to commence the work.

Railroad Company shall have the right, but not the duty, to require Licensee to furnish detailed plans prior to entry upon the said premises and to view and inspect any activity or work on Railroad Company's property. If in the sole opinion of the authorized representative of the Railroad Company any said activity or work is undesirable for any reason, Railroad Company shall have the right to terminate this agreement and Licensee's license and permission at once. All work to be done shall be approved by Railroad Company's Engineering Superintendent prior to commencing work.

Railroad Company shall have the right, but not the duty, to restrict Licensee's activity on Railroad Company's property in any way that Railroad Company may, in its sole opinion, deem necessary from time to time and shall also have the right, but not the duty, to require Licensee to adopt and take any safety precautions that Railroad Company may, in its sole opinion, deem necessary from time to time. No work shall be performed or equipment located within fifty feet (50') of the centerline of the nearest railroad track, except as specifically approved by Railroad Company's Engineering Superintendent or his duly authorized representative, and then only when appropriate Railroad Company supervisory personnel and/or flagmen are present.

The Railroad Company may, at the Licensee's sole cost and expense, furnish whatever protective services it considers necessary, including, but not limited to, flagmen, watchmen and inspectors.

As a consideration and as a condition, without which this license would not have been granted, the Licensee agrees to indemnify the Railroad Company in accordance with the terms of "Exhibit A – Indemnity" attached hereto and made a part hereof.

Licensee shall furnish Railroad Company with a policy or policies of insurance acceptable to Railroad Company naming the Railroad Company as an insured party and protecting the Railroad Company against any and all liability for personal injury (including death) or property damage directly or indirectly resulting from the granting or exercise of this license and that said insurance be primary as it relates to this contract. Such insurance shall have a minimum combined single limit of \$5 million per occurrence with an aggregate limit of \$10 million and the insurance policy or policies must be furnished to and approved by Railroad Company prior to entry by Licensee upon Railroad Company's property.

Railroad Company's exercise or failure to exercise any rights under this agreement shall not relieve Licensee of any responsibility under this agreement, including, but not limited to, the obligation to indemnify Railroad Company as herein provided.

Cost and expense for work performed by Railroad Company, as referred to in this agreement, shall consist of the actual cost of labor and materials plus Railroad Company's standard additives in effect at the time the work is performed.

This license is revocable at the option and discretion of the Railroad Company upon advance notice to the Licensee and shall not be transferred or assigned. Unless sooner revoked by the Railroad Company, extended by written agreement or relinquished by act of Licensee, this license and permission shall terminate ____ months from the date of this letter.

Upon termination of this license, the Licensee shall remove all of its property, leaving the Railroad Company's premises in a neat and safe condition satisfactory to the Railroad Company's Engineering Superintendent or his authorized representative, failing in which the Railroad Company may do so at Licensee's sole cost, risk and expense.

Please indicate your acceptance in the space provided below and return both copies of this letter. A fully executed copy will be transmitted to you for your permanent files.

Sincerely,

<i>J</i> ,	
	ILLINOIS CENTRAL RAILROAD COMPANY
	By
	John W. Dinning
	Manager of Public Works
ACCEPTED:	
By	
Print Name:	
Title:	

EXHIBIT "A"

INDEMNITY

Licensee agrees to indemnify and save harmless Railroad Company, its parent, affiliates, and their directors, officers, employees and agents and to assume all liability for death or injury to any persons, including, but not limited to, officers, employees, agents, patrons and licensees of the parties hereto, and for all loss, damage or injury to any property, including, but not limited to, that belonging to the parties hereto, together with all expenses, attorneys' fees and costs incurred or sustained by Railroad Company, whether in defense of any such claims, demands, actions and causes of action or in the enforcement of the indemnification rights hereby conferred, in any manner or degree caused by, attributable to or resulting from the exercise of the rights herein granted, or the failure of the Licensee to conform to conditions of this license, work performed by the Railroad Company for the Licensee under the terms of this license or the construction, maintenance, repair, renewal, alteration, change, relocation, existence, presence, use, operation or removal of any structure incident thereto, or from any activity conducted on or occurrence originating on the area covered by this agreement, regardless of any negligence of Railroad Company, its officers, employees and agents. Said Licensee agrees also to release, indemnify and save harmless Railroad Company, its officers, employees and agents from all liability to Licensee, its officers, employees, agents or patrons, resulting from railroad operations at or near the area in which the license is to be exercised, whether or not the death, injury or damage resulting therefrom may be due to whole or in part to the negligence of the Railroad Company, its officers, employees or agents. At the election of Railroad Company, the Licensee, upon notice to that effect shall assume or join in the defense of any claim based upon allegations purporting to bring said claim within the coverage of this section.