CONSTRUCTION ON RAILROAD RIGHT OF WAY 5-393.550

5-393.551 GENERAL

The Project Engineer and the Bridge Inspector should familiarize themselves with the Plans, Specifications and Special Provisions pertaining to the construction as it affects the Railroad. A copy of the Agreement between the Railroad and Mn/DOT covering the project should be obtained for information as to how railroad work will be carried out, maintained, removed and paid for.

The inspector and Engineer should strive for cooperation and coordination with the Railroad. They should become familiar with provisions of the FHWA PPM 30-3, and should obtain names and addresses of railroad authorities to be contacted for information or notified in case of emergency. They should also become acquainted with railroad personnel responsible for maintenance and operation of the section of Railroad involved and coordinate the various phases of work with them.

Information contained in the Maintenance Manual, Section 5-791.358, Maintenance of Safety and Traffic Control Devices (Signals), should be reviewed as it may pertain to grade crossings on the job.

Particular attention is called to Specification 1708 and Special Provisions for railroad work.

5-393.552 DIARIES AND REPORTS

Railroad force account work should be written in the daily diary in such a way as to be readily identified. It should indicate the number of men and hours worked, materials and equipment used and work performed. The Weekly Construction Diary (Form TP-02120-02) should be submitted to the Office of Freight and Commercial Vehicle Operations, Rail Administration Section, covering periods of work with the Railroad doing the force account work listed as the Contractor.

Differences between the inspector's records and the Railroad report should be settled while issues are current. Additional notes regarding phases of work should be placed on the report by the Engineer.

A record of the Railroad's inspecting engineers and officials should be kept, along with any discussions, decisions, or instructions pertaining to the work.

5-393.553 SURVEYING

The Railroad should be notified as far in advance as possible before lay out and staking of centerline and the subgrade elevations of the shoofly embankment and track alignment. Coordinate with the Railroad for centerlines and grades on all temporary structures.

Alignment and elevations for permanent work should be compared and coordinated with plans for railroad facilities, prior to construction.

5-393.554 CLEARANCES

Specification 1708 as it pertains to notification of railroads for private crossings and work on railroad right of way must be followed explicitly.

Legal side and overhead clearances, as shown in the Plans, must be observed and, when encroachments are necessary, approval must be obtained by submission of 10 prints of proposed methods of construction to the Railroad.

Prints of proposed methods of construction must be approved by the Railroad and by the Mn/DOT Director of Railroad Administration prior to construction involving temporary encroachment on plan clearances.

All provisions for warning of restricted clearances such as signs, lights, tell tales or other means of protection shown on the approved working drawings must be strictly complied with.

Operation of equipment and movement of materials, in the vicinity of the tracks, requires close attention. Such operations must not be permitted when encroachment on minimum clearances is likely except with the knowledge and approval of the Railroad.

The inspector should observe the track and trainmen's walk area when construction operations are nearby. Any fallen debris in this area should be removed by the Contractor immediately.

5-393.555 PILE DRIVING

The kind, length and size of piling, the length driven below cut-off elevation, and the computed safe bearing of all piling driven, should be recorded. This information is required for both temporary and permanent structures, whether driven by the Railroad or a contractor.

Pile driving reports (see Section <u>5-393.150</u>) must be completed for each unit requiring piling. The original should be transmitted to the Mn/DOT Bridge Office. One copy should be sent to the Railroad company.

Pile driving must be carried out so that it does not endanger train operations. Flagging protection, including the proper personnel, must be maintained through arrangements with the Railroad whenever necessary. (See Section <u>5-393.557</u>.)

5-393.556 EXCAVATION

Protective measures such as barricades, handrails, covering, lights and other means must be used as protection when excavations are made on Railroad right-of-way.

When cofferdams or temporary bridging are to be used under or in the vicinity of railroad trackage, the Contractor must submit 10 prints of proposed methods of construction. These prints must be approved by the Railroad and the Department prior to starting the work (See Specification 1708 and the Special Provisions).

5-393.557 FLAGGING PROTECTION

Flagging protection should be provided as required under Specification 1708 whenever operations create close side or overhead clearances, traffic obstruction, or other hazards to the Railroad's property and equipment. Unless otherwise provided in the Special Provisions, it is the Contractor's obligation to bear the cost of flagging required as a result of his or her operations. It is also the Contractor's responsibility to make advance arrangements with the Railroad when flagging services are necessary.

5-393.558 MATERIAL RECORDS

Material records should be very precise and thorough. Some force account construction by the Railroad is of a temporary nature and, after removal, cannot be accounted for without a complete record. Joint inventories with the Railroad are very helpful in this respect. Inventory of all track, signal, communication and electrical materials in place should be made prior to starting any work. It would be prudent to include in the inventory an area somewhat larger than that for which the work is planned.

Track material can best be recorded with the assistance of a single line drawing as indicated in example Figure A 5-393.558. Where rail joints are staggered, station pluses should be taken as an average, along centerline of track. Ties, rails, spikes, tie plates, angle bars etc. may be checked easily. Track thrown, track removed, track replaced and new track placed should be recorded in the notes by track feet and stationing, and should also be shown on the sketch. When track ballast is furnished by the Railroad, it should be recorded as brought to the site, with car numbers, amounts, and dates received and unloaded.

Material furnished by the Railroad for temporary trestles should be recorded, and the quantity and quality agreed upon with the Railroad Bridge Foreman or other authorized representative of the Railroad.

Signal, communication and electric line changes should be recorded. Old lines removed, new lines placed and permanent lines restored should all be indicated, with station pluses and distances shown in the notes and on the sketch.

Buildings, water and sewer lines etc. which are altered or constructed should be recorded in notes and shown on sketch.

Salvage from railroad materials used in temporary and/or permanent construction is to be accounted for either as suitable for reuse or as scrap as the Railroad company may decide. A joint review by representatives of the Railroad company and the Department will be necessary to properly record the classification of these items.

In some instances the Railroad Agreement or Special Provisions will stipulate that certain materials are to be disposed of by the Department or Contractor. Records shall be kept of such materials. In some cases, records will be kept by the Office of Railroad Administration when work is performed by the Railroad. In this event, the name of the Mn/DOT representative should be noted in the project file.

5-393.559 FORCE ACCOUNT AND LABOR

The Railroad labor force should be recorded in the daily diary each day, showing the number of men, classifications, hours worked, and phase of the work performed.

5-393.560 EQUIPMENT AND RENTAL

Use of equipment should be recorded in the daily diary showing type of equipment, hours used and hours on the job.

When equipment not owned by the Railroad is to be used by them for force account work, authorization must be obtained from the Department and the Federal Highway Administration (when Federal funds are involved) unless specifically provided for in the written agreement with the Railroad.

5-393.561 WORK NOT COVERED BY AGREEMENT

When work not included or covered by the agreement with the Railroad becomes necessary, all parties to the Agreement should be contacted for approval.

After approval has been obtained, work may be done by the Railroad, by contract awarded to the lowest bidder, or work may be done by the contractor as Extra Work.

5-393.562 CERTIFICATION AND FINAL FORCE ACCOUNT BILLS

A final bill will be submitted to the Railroad Administration Section, Office of Freight and Commercial Vehicle Operations, by the Railroad, listing quantities of material, labor and equipment used. The various billings must be grouped under headings shown in the Agreement estimate, and in accordance with PPM 30-3 sample bill. The Railroad Administration Section will check the final bill and, if there are discrepancies or possible discrepancies, these items will be called to the attention of the State's Auditor for checking at time of audit.

The Project Engineer or authorized representative of the Office of Freight and Commercial Vehicle Operations, Rail Administration section shall certify that the work contemplated by the agreement has been properly completed by the Railroad company.

