

# Table of Contents

## Section 27

### Notes

	Page
Note 1. Sampling and Testing Small Quantities of Non-Critical Materials .....	1
Note 2. Asphaltic Oils, Asphalt Binders and Emulsified Asphalts .....	2
Note 2A. Payment for Asphaltic Oil and Emulsified Asphalt .....	3
Note 3. Asphaltic Concrete Small Quantities .....	4
Note 4. Quality Tests of Aggregates .....	4
Note 5. Crushed Rock Aggregate Inspected at the Source .....	4
Note 6. Portland Cement Concrete .....	5
Note 7. Air Entraining Agents and Concrete Admixtures .....	5
Note 8. Liquid Curing Compounds .....	6
Note 9. Reinforcing Steel, Bars and Fabric .....	6
Note 10. Beam and Cable Guard Rail and Fittings .....	6
Note 11. Metal Culvert Pipe Field Inspection and Reporting .....	7
Note 12. Bolts, Nuts and Washers and Structural Fasteners .....	7
Note 13. Precast and Prestressed Concrete Units (Bearing Piling, Sheet Piling, Girders, etc.) .....	7
Note 14. Steel Bearing Piling, Steel Sheet Piling and Steel Shells for Cast-In-Place Piling....	8
Note 15. Structural Steel for Superstructure, Substructure and Handrail .....	8
Note 16. Combination Mast Arm Signal and Lighting Poles, Mast Arm Signal Poles, Span Wire Poles, Pedestal Traffic Signal Poles and Light Poles.....	8
Note 17. Electrical Items .....	9
Note 18. Gray Iron Castings (Cast Iron Grates, Frames, Pull Box Frames and Covers, Junction Boxes, etc).....	9
Note 19. Source of Certificate of Compliance.....	9
Note 20. Luminaire Settings .....	9
Note 21. Signing Items .....	10
Note 22. Reflectors and Fasteners .....	10
Note 23. Delineator Posts .....	10
Note 24. Right Of Way Markers .....	10
Note 25. Treated and Untreated Timber Piling, Treated Timber Sheet Piling, Fence Posts, Treated and Untreated Lumber, Treated and Untreated Timber, Wood Guard Rail Posts, Offset Blocks, Treated Poles and Sign Posts.....	11
Note 26. Rock Riprap and Gabion Stone Fill .....	11

## **Note 1**

### **Sampling and Testing Small Quantities of Noncritical Materials**

Certain exceptions to the normal sampling and testing procedures may be made where quantities of noncritical items or materials are too small to justify the cost of testing or inspection. These exceptions in sampling and testing are intended for small quantities of materials whose positions on the project are not structurally critical. Such procedures are not to be permitted in materials for major structures, permanent mainline or ramp pavements, or other structurally critical items where use of unsound materials might significantly influence the performance, strength or durability of that item, or the public safety.

By submitting a "LETTER OF CERTIFICATION BY PROJECT MANAGER" (DR Form 181) to the Materials and Research Division, the Project Manager may waive their respective sampling and testing requirements where quantities of noncritical items or materials are too small to justify the cost of testing or inspection. When this method is used, records must be documented as provided in Paragraph 1(a) and/or (b) and Paragraph 2 of Dr Form 181.

The following tabulation indicates the approximate maximum quantities of material, excepting Portland cement concrete and asphaltic concrete that may be accepted under the methods indicated above:

- a. Aggregates (except those for Portland cement concrete and asphaltic concrete) – Not to exceed approximately 75 cubic yard per day nor more than approximately 375 cubic yard per project. Rock riprap and Gabion stone fill shall not exceed 500 tons per project.
- b. Bituminous Mixtures (cold mix) – Not to exceed approximately 50 tons per day nor more than approximately 250 tons per project.
- c. Asphaltic Oils for Miscellaneous Uses – Not to exceed approximately 100 gallons of each type per project.
- d. Paint – Not to exceed approximately five gallons of each type per project. Brand name paints of the color specified and the weights and analysis on the container label should be the basis for acceptance.
- e. Dimensional Lumber – (2x4, 1x6, etc) Recognized commercial grades only may be used.
- f. Masonry Items – Not to exceed approximately 100 pieces of each item. Acceptance should be based on physical measurements for nominal size and visual inspection. Masonry items may include but are not exclusive to bricks, concrete blocks, etc.

Portland cement concrete for the items and approximate quantities listed below may be accepted by entering a sample in SiteManager and selecting the "Small Quantities of Non-Critical Materials" Test Method:

- a. Sidewalks –not to exceed 200 cubic yards per day
- b. Bikeway – not to exceed 200 cubic yards per day
- c. Median Surfacing – not to exceed 200 cubic yards per day
- d. Concrete Base Course – not to exceed 200 cubic yards per day
- e. Concrete Base Course Widening – not to exceed 200 cubic yards per day
- f. Curb and Gutter – not to exceed approximately 500 lineal feet per project, or 50 cubic yards per day, for more than two consecutive days
- g. Temporary Pavement - not to exceed 5000 square yards per project
- h. Slope paving and headers – not to exceed 50 cubic yards

- i. Paved ditch (intermittent water flow)
- j. Single culvert headwalls and collars
- k. Catch basins, manhole bases and inlets
- l. Concrete ditch checks
- m. Post hole concrete (fence and guardrail)
- n. Miscellaneous Concrete – Concrete placements of five cubic yards or less and which are non-critical. Non-critical refers to placements that will not be subject to traffic loading and for which failure is not likely to disrupt traffic or pose a threat of harm to the traveling public.

Acceptance under this system shall be based on the following:

- a. Delivery tickets shall accompany each load
- b. The concrete plant must comply with the specifications
- c. Only state tested and approved aggregates, cements and admixtures may be used.
- d. Project personnel will perform necessary testing on any material they feel may be of inferior quality
- e. The Project Manager will determine that the concrete for these items is from a known reliable source and fulfills the requirements for the purpose intended.

The above system is intended to provide a method whereby the Project Manager may be relieved of sampling and testing small quantities of material which in his judgement are placed in such a location within the project that the absence of sampling and testing does not materially affect the principle of sound engineering control. This program includes, but is not exclusive to, the items in the list above. Many other miscellaneous minor items (e.g., 3 or 4 posts, a few bolts, washers, nuts, a few pieces of pipe, short pieces of wire, a few pieces of reinforcing steel, a few feet of fencing material, etc) will be within the definition of the above but cannot all be listed inasmuch as location on the project will determine the need to sample and test.

A word of caution: this system should not be used as a means of reducing sampling and testing of materials by adjusting daily delivery of quantities, nor to allow the contractor to provide non-specifications materials. It is intended that all materials shall comply with specification requirements but that this compliance is determined by experience and judgement and that the Project manager shall retain absolute control over the determination of items to be accepted without the usual engineering controls.

## **Note 2**

### **Asphaltic Oils, Asphalt Binders, and Emulsified Asphalt**

#### **Acceptance Procedures:**

General – The Project Manager must send his address to each supplier which is expected to ship asphaltic material to projects under his supervision.

Since payment for the asphalt materials is based on the number of net gallons shown on the supplier's certificate of compliance, it is important that the Project Manager check each truck to make sure that it has been completely emptied.

The suppliers who may furnish asphaltic material to the state have been instructed to furnish a copy of their certificate of compliance to the Project Manager for each truck shipped to his project.

The certificate of compliance is to be sent with the truck driver for delivery to the Project Manager. The certificate of compliance must meet the requirements of the Special Provisions as stated in the contract.

A certificate of compliance is required and must show the specific gravity of the material, mixing and compaction temperatures, and any special handling/storage requirements. It must also show the net gallons at 60° F of the shipment, and it must certify that the material meets the specification requirements for that grade. Certificates of compliance must be signed by an authorized employee of the supplier.

Asphaltic materials may be used immediately on the basis of the supplier’s certificate of compliance.

Samples shall be taken in accordance with the Nebraska Standard Method of Tests NDR T 40 – Sampling Bituminous Materials.

The contractor’s certified sampling technician, under the supervision and direction of Nebraska Department of Roads personnel, will sample bituminous materials.

The contractor’s certified sampling technician will fill out the Certified Sample Registration form whenever a sample is taken. The Certified Sample Registration form will be located at the plant site. Contact the Materials & Research Division at (402) 479-4774 if the form is not available.

Asphaltic oil and emulsified asphalt shall have a representative sample taken from each truck as soon as possible after a shipment is received.

Emulsified asphalt that is not on the NDOR Approved Products List shall have a representative sample taken from each truck as soon as possible after a shipment is received.

Performance Graded Binders shall be sampled from the line between the storage tank and the mixer. Samples are not required for individual truckloads.

## **Note 2A**

### **Payment for Asphaltic Oil and Emulsified Asphalt**

Asphaltic oil and emulsified asphalt that comply with the specification requirements shall be paid for at the contract unit price. Asphaltic oil and emulsified asphalt outside the specified property ranges shall be paid for at the contract unit price multiplied by the product of the pay factors determined by the following pay factor table:

	<b>Specified Property</b>	
<b>Pay Factor</b>	<b>Upper Limit</b>	<b>Lower Limit</b>
1.00	+1% to +10%	-1% to -10%
0.95	+11% to +15%	-11% to -15%
0.90	+16% to +20%	-16% to -20%
0.80	+21% to +25%	-21% to -25%
0.70	+26% to +30%	-26% to -30%
0.40 or Reject	+31% and Higher	-31% and Higher

If the resultant pay factor for the material is less than 0.70, the material shall be rejected if not already used. If incorporated in work that is judged to be unsatisfactory, the material shall also be rejected.

If the pay factor is less than 0.70 and the material has been incorporated in work that is allowed to remain in place, the pay factor for the material shall be 0.40.

The pay factors are applicable to the asphaltic oil and emulsified asphalt properties as shown in the following table.

Property	Asphaltic Oil		Emulsified Asphalt	
	Original Material	Dist. Residue	Original Material	Dist. Residue
Viscosity	X		X**	X*
Penetration		X		X*
Distillation to 437° F	X			
Distillation to 500° F	X			
Distillation to 600° F				
Elastic Recovery				X
Percent Residue	X		X	
Float Test				X

\* Penalties can not be based on tests made on Residue by Evaporation.

\*\* No penalties will be assessed if more than fourteen days have elapsed between the sampling and the testing of the material.

### **Note 3**

#### **Asphaltic Concrete Small Quantities**

The testing requirements of asphaltic concrete identified in the contract for quantities of less than one lot (3750 tons) may be modified by the District Construction Engineer.

When testing requirements are modified, the method of acceptance, with agreement of the Contractor, will be established by the Engineer.

### **Note 4**

#### **Quality Tests of Aggregates**

In order to reduce the duplication of quality tests of aggregates from the same source by the Lincoln Laboratory, it is requested that DR Form 324, "AGGREGATE SOURCES AND SAMPLES REQUIRED FOR QUALITY TESTS", be completed by the Project Manager for each project or purchase order. After recording the necessary information, this form should be forwarded to the Materials and Research Division prior to actual production of any aggregate.

After review by the Materials and Research Division, this form will be returned indicating if it will be necessary to submit large samples to the Lincoln Laboratory for quality tests or if quality tests will be waived.

Quality test results obtained by the Lincoln Laboratory for aggregates from the various sources throughout the state will be kept on file in the Lincoln Laboratory.

### **Note 5**

#### **Crushed Rock Aggregate Inspected at the Source**

Crushed rock aggregates from eastern Nebraska which are inspected at the source by Department personnel or by the producers' Certified Inspector are governed as follows:

The scale weigh ticket accompanying truck shipments will show information pertinent to the material and will also certify that the material was from stock tested by approved methods. The State Inspector will forward to the Project Manager DR Forms 155A, "Stockpile Report for Crushed Rock", and DR Form 156, "Aggregate Shipments". These forms will furnish test results, record of shipment, and other pertinent information. When received on the project, the same procedure as outlined previously regarding the use of the aggregate should be observed.

Should any type or class of crushed rock be received without a Certification of Inspection tag, the Materials and Research Division should be contacted for verification of whether or not the material is acceptable for use.

## **Note 6**

### **Portland Cement Concrete**

The minimum frequency for determining the yield and air content of plastic concrete and the gradation of the aggregates used is based on an average daily production facility. It is difficult, however, to apply this rate of testing to all phases of concrete construction. In some instances, for adequate control, it may be necessary to perform the required tests more often than the minimum frequency specified. In any case, the frequency of control tests should be based in part upon the rate of concrete production and in part upon maintaining proper mix control.

Concrete Cylinders for Pavement – A set of four cylinders will be made for each day's placement.

If the pavement is not cored and no intervals are designated by the engineer, the cylinders will be tested at 7, 10, 14, and 28 days. If the specified strength is attained, the remaining cylinders do not need to be tested. One cylinder from each set must be retained for a possible 28-day break.

If the pavement is cored and no intervals are designated by the engineer, the cylinders will be tested at 7, 10, and 14 days. If the specified strength is attained, the remaining cylinders do not need to be tested. If needed, the fourth cylinder will also be tested at 14 days and the average strength of the two cylinders reported.

Concrete Cylinders for Structures – A set of three cylinders will be made for the first 100 cubic yards placed. A second set of three cylinders will be made for the daily placement that is in excess of 100 cubic yards. If the daily placement does not exceed 150 cubic yards, one set of three cylinders is acceptable.

If no intervals are designated by the engineer, the cylinders will be tested at 7, 14, and 28 days. If the specified strength is attained, the remaining cylinders do not need to be tested. One cylinder from each set must be retained for a possible 28-day break.

Note: If for any reason two cylinders are broken at the same age, an average of the two compressive strengths will be reported.

## **Note 7**

### **Air-Entraining Agents and Concrete Admixtures**

Approved air-entraining agents and concrete admixtures are on the Approved Products List that can be viewed on the Materials and Research website.

A sample must be entered in SiteManager to report the type and brand of admixtures used.

If an air-entraining agent or a concrete admixture is of a questionable nature, the ready mix producer must contact the company representative to address the concerns regarding the admixture. The findings of this investigation will be given to the Project Manager who must give his approval before the admixture can be used.

## **Note 8**

### **Liquid Curing Compound**

This material is pretested by the Materials and Research Laboratory with samples coming directly from the manufacturer. Approved lot numbers can be obtained by the Department of Roads' personnel through the Materials and Research website. Curing compound lot numbers not found must be sampled and tested and approved before being used. The Project Manager will notify the Materials and Research Division as to which project the material is to be used on.

## **Note 9**

### **Reinforcing Steel, Bars and Fabric**

Reinforcing steel, supplied by Nebraska jobbers or fabricators, is usually sampled and tested by the Lincoln Laboratory, which maintains a stock record of tested material at these plants. The Materials and Research Division is notified by the fabricator when fabrication has been completed for a shipment to a state project. Department of Roads' inspection tags (Form TL-5401) are then attached to the shipment by an inspector from the Materials and Research Division. Inspection tags will usually show the project, report number, size, manufacturer and, if possible, the station and type of structure where the steel is to be used. Shipments of reinforcing steel having Department of Roads' inspection tags attached are approved for immediate use.

A "Report of Shipment of Steel for Concrete Reinforcement" is issued by the Materials and Research Division to cover each shipment to a project.

Reinforcing steel is sometimes supplied from sources outside the state. In this case, it may be tested by a testing agency of the state in which it originates and the shipments tagged by that agency. Reports covering the tests for these shipments are sent to the Materials and Research Division from which copies will be distributed. The material should not be used until the results shown on the test reports are received. Some agencies tag all material with an identification number tag before the material is tested. This identification tag does not indicate the acceptability of the material; therefore, the test report must be checked for the results.

Reinforcing steel may occasionally be furnished directly to the project from a jobber without being previously tested. In this case, samples and certificates should be submitted to the Lincoln Laboratory as prescribed by the "Materials Sampling Guide". Reinforcing steel furnished under these circumstances should not be used until tests are completed and approved.

## **Note 10**

### **Beam and Cable Guard Rail and Fittings**

Beam and Cable guardrail and associated hardware furnished by each supplier is tested once each year to check their respective stock of material. Any material shipped from the tested stock of these suppliers to State Projects will not require any additional sampling, testing, or certification. Shipping reports showing the material shipped will be distributed by the Materials and Research Division to the Project Manager and others concerned.

When the supplier's tested stock is exhausted, he may continue to ship additional material to State Projects, however, this material must be covered by the type of certification shown in this sampling guide for the particular item involved. The certifications and supplier's shipping report will be sent to Materials and Research Division for approval and distribution to the Project Manager and others concerned.

Occasionally, guardrail material may be sampled on the project for a supplier's stock. In this case, the Project Manager will be notified by the Materials and Research Division concerning the samples required.

When steel posts (end posts, special posts, mounting brackets, etc.) used with beam guard rail are shipped to a project on the basis of certificates of compliance, they will be field checked by the Project Manager for correct dimensions and for the amount of zinc coating or paint thickness. A report showing the number of posts, the measurements, and coating thickness will be sent to the Materials and Research Division for distribution.

## **Note 11**

### **Metal Culvert Pipe Field Inspection and Reporting**

The random sampling procedure at the pipe fabricators plant requires the supplier to send a copy of his shipping report with the truck delivering the materials. The report will be addressed to "Project Manager". If the Project Manager or his inspector is not present when the material is unloaded, the report will be left with the contractor, if he is present, for transmittal to the Project manager. Should the material be stockpiled at a site where neither the contractor nor his inspector is present, the truck driver will return the report to his office and it will be mailed to the Project Manager.

The shipping report may be either a Form MT-750 or a fabricator's bill of lading and will show the following information for the culvert pipe in the shipment: Quantity (lineal feet), size, heat number, thickness of sheets for each size of pipe, brand, and the fabricator's certification of compliance.

The pipe may be approved for use as soon as the Project Manager verifies that the material received is as described on the shipping report and that the pipe has not been damaged in shipment or handling. Any corrections or notes should be made on the Project Manager's copy of the shipping report that should then be sent to the Materials and Research Division. A copy of the project report covering the shipment will be sent to the Project Manager by the Materials and Research Division.

Refer to the Approved Products List, Section 6 – Miscellaneous, for additional corrugated metal pipe information.

## **Note 12**

### **Bolts, Nuts and Washers, and Structural Fasteners**

Tested and approved stock will be tagged with a Department of Roads' white inspection tag (TL-5401) inside or outside of the container. Shipments so tagged may be used immediately. Shipment reports referencing to the stock test will be issued by Materials and Research.

## **Note 13**

### **Precast and Prestressed Concrete Units (Bearing Piling, Sheet Piling, Girders, Etc.)**

Precast and prestressed concrete units are usually produced by commercial plants within the state. Inspection of these units is generally provided by Department of Roads' personnel.

When shipment from the fabricating plant is made to a project, a shipping report (Form DR 214, Report of Shipment of Precast and Prestressed Concrete Units from Tested Stock) is completed by the inspector with copies to the Materials and Research Division, Division Engineer, and the Project Manager. A preliminary copy shall accompany the units with the driver of the hauling vehicle.



The shipping report gives the inspector's coding of each unit shipped and is verification of acceptability provided the units shipped show no evidence of damage incurred through handling enroute to the project.

No unit received on the project shall be used in the work until the Project Manager has checked the inspector's identification as shown on the shipping report with that shown on the units.

### **Note 14**

## **Steel Bearing Piling, Steel Sheet Piling and Steel Shells for Cast-in-Place Piling**

These items are accepted at the time of manufacture. The contractor shall be required to supply the Project Manager with the certified test reports when the material is delivered to the project. The Project Manager shall check the heat numbers shown on these reports with those on the piling. He shall forward the mill test reports to the Materials and Research Division where the chemical analysis will be checked and approved and copies distributed. The Project Manager shall not accept the piling for use until he has received copies of the approved mill test reports from the Materials and Research Division, or approval to use this material.

### **Note 15**

## **Structural Steel for Superstructure, Substructure, and Handrail**

Structural steel is accepted for use on the basis of physical and chemical tests made at the time of manufacture. The Department Inspector at the fabrication plant will obtain from the fabricator the certified mill tests representing the structural shapes being fabricated. He will obtain a certificate of compliance listing all other items, which are considered as miscellaneous and for which mill tests cannot be obtained. These miscellaneous items include tie rods and turnbuckles, bearing devices, nose angles, roadway devices and dam plates, armor angles, floor drains, and all bolts except high strength bolts, etc. He will review all mill tests for compliance with the specifications and approval will be stamped or written and signed by him. The Project Manager shall not accept for use any structural steel shapes until he has received the shop inspection reports and approved mill tests or certificates of compliance from Materials and Research Division, or approval to use this material. All mill test report sheets shall show the project number for which material will be used.

### **Note 16**

## **Combination Mast Arm Signal and Lighting Poles, Mast Arm Signal Poles, Span Wire Poles, Pedestal Traffic Signal Poles and Light Poles**

The Standard Specifications require that the manufacturer of the pole shall supply the anchor bolts, anchor bolt covers, pole bases, and all miscellaneous hardware. The pole manufacturer shall furnish a certificate stating that the poles and anchor bolts shall be capable of supporting the required load under the specified design criteria and shall withstand the specified wind and ice load. Upon request by the Project Manger, the pole manufacturer shall furnish mill tests of any materials used in the manufacturer of the pole and its accessories.

The specific requirement for each of the pole types and accessories is shown in the Standard Specifications.

## **Note 17**

### **Electrical Items**

Electrical items are accepted for use on the basis of sample inspection and testing, receipt of certified test reports, or certificates of compliance. Where required, certified tests or certificates of compliance shall be furnished by the contractor to the Project Manager. The Project Manager shall forward the certified tests and/or certificates of compliance to the Materials and Research Division for review and distribution.

The Project Manager shall not accept or permit the installation of any electrical items until he has received the required tests and/or certification documents indicating approval for use through communication with the Materials and Research Division, Traffic Engineering or concerned authority, pending receipt of the documentation. Special attention shall be given to those items which will not be readily available to inspection during or after completion of the work or where removal and replacement under adverse conditions such as under traffic, etc. would be an inconvenience to the contractor, the state, or the traveling public.

## **Note 18**

### **Gray Iron Castings (Cast Iron Grates, Frames, Pull Box Frames and Covers, Junction Boxes, etc.)**

When these items are furnished from the Lincoln or Omaha area, they will probably be supplied from a tested pour representing stock at the foundry. Shipments to projects from these stocks will be reported to the Materials and Research Division by the foundries. Castings will usually be identified by a letter or symbol representing the foundry, followed by numbers representing the date the casting was poured. The Materials and Research Division will issue a "Report of Shipment of Gray Iron Castings" which will include a list of the items shipped to the project, the quantity, identification and references to the stock tests. This report constitutes approval of the tensile strength of the iron used in these castings. Since the finished castings are not inspected prior to shipment, acceptance should be based on field inspection showing good workmanship and compliance with the dimensional and weigh requirements specified in the contract documents.

Cast Iron materials furnished from other sources may not be supplied from tested stocks. In this case, the Project Manager shall obtain the manufacturer's certificate of compliance for this material from the contractor prior to installation.

## **Note 19**

### **Source of Certificate of Compliance**

The certificate of compliance must be from the manufacturer, not the supplier.

## **Note 20**

### **Luminaire Settings**

Luminaire sockets have adjustments that provide for a choice of light distribution patterns. The Project Manager shall inspect the settings on each luminaire socket and report this setting to the Lighting Engineer. Adequate descriptive literature is provided with each type of luminaire to determine the setting. The report may be in the form of a letter, sketch, etc.

## **Note 21**

### **Signing Items**

Signing items are accepted for use on the basis of sample inspection, testing and receipt of certified test reports, and certificates of compliance. Sample inspection and testing will be performed by Traffic Engineering and Materials and Research Divisions. Where required, certified tests or certificates of compliance shall be furnished by the contractor to the Project Manager. The Project Manager shall forward the certified tests and certificates of compliance to the Materials and Research Division for approval and distribution.

The Project Manager shall not accept signing items for use until he has received the required tests and/or certification documents indicating approval for use or has verified acceptability of the signing items for use through communication with the Materials and Research Division, the Traffic Engineering Division, or concerning authority, pending receipt of the documentation.

## **Note 22**

### **Reflectors and Fasteners**

When shipment is made from approved stock, inspection tags will be attached to or placed within the container. Units can be used upon delivery to the project on the basis of the inspection tag. The Materials and Research Division will issue an acceptance report upon shipment of the units.

Enter the brand of reflector used in SiteManager.

## **Note 23**

### **Delineator Posts**

When delineator posts are delivered to a project from a tested and approved stock, the bundles will be tagged with a Department of Roads' white inspection tag (TL-5401). The Project Manager does not need to notify the Materials and Research Division and can use this material upon delivery to the project. A shipment report will be issued by the Materials and Research Division which will refer to the stock test report numbers covering the posts and show the sizes and quantities represented.

Posts delivered to a project which are not supplied from a previously tested and approved stock should not be used until they have been tested and approved by the Materials and Research Division.

## **Note 24**

### **Right of Way Markers**

These units are usually produced by commercial plants within the state. Inspection of these units is generally provided by department personnel.

When shipment from the fabricating plant is made to a project, a shipping report (Report of Shipment of Precast Concrete ROW Markers From Approved Stock) is completed by the inspector with copies to the Materials and Research Division, District Engineer, and Project Manager.

The shipping report gives the lot number and quantity shipped and is verification of acceptability provided the units shipped show no evidence of damage incurred through handling enroute to the project.

**Note 25**  
**Treated and Untreated Timber Piling,  
Treated Timber Sheet Piling, Fence Posts, Treated and  
Untreated Lumber, Treated and Untreated Timber,  
Wood Guard Rail Posts, Offset Blocks,  
Treated Poles and Sign Posts**

These materials are normally accepted on the basis of Certificates of Compliance from the producer and treater or Certificates of Inspection and Treatment from a commercial testing laboratory arranged for by the supplier and approved by the Materials and Research Division.

Materials accepted on the basis of Certificates of Compliance from the producer and treater will usually not have any identifying hammer mark on the end.

Materials accepted on the basis of Certificate of Inspection and Treatment from a commercial testing laboratory will have a hammer mark on the end of each piece.

Wood materials may be used upon delivery to the project provided they have not been damaged and the proper identifying hammer mark is on the end of each piece and the report covering the inspection is on hand or the Project Manager has received from the Materials and Research Division the approved Certificates of Compliance for the materials delivered.

If material is delivered to the project prior to receipt of the test reports or Certificate of Compliance, the Project Manager shall notify the Materials and Research Division promptly, giving all pertinent data such as project number, name of Jobber or supplier, the mill or treating plant, car number, hammer mark, number of pieces, and any other information available. Action can then be started to obtain the test report of Certificate of Compliance in the event it has not been received at the laboratory.

Wood items are sometimes tested and placed in stock at jobber's plants. The Materials and Research Division has the test reports supplied by the commercial testing agency or the Certificates of Compliance from the producer and treater for any material which they have inspected and approved for the Department. When the jobber makes a shipment to a State project, he submits a shipment report (Form TL-5162) to the Materials and Research Division showing the project number and other pertinent information. If the material shown on the shipment report is as specified for the project and reports covering the inspection and approval of the material are on file at the Materials and Research Division, the report is signed by Materials and Research and sent to the Project Manager.

**Note 26**  
**Rock Riprap and Gabion Stone Fill**

The sampling of rock riprap and gabion stone fill is not required if the material is received from any of the following sources:

- Concrete Materials Company (Sioux Falls, SD)
- Fisher Sand & Gravel (Mitchell, SD)
- Ft Calhoun Stone Company (Ft Calhoun, NE)
- Guernsey Stone Company (Guernsey, WY)
- Hills Materials Company (Hot Springs, SD)
- Kerford Limestone (Weeping Water, NE)
- L. G. Everst (Del Rapids, SD)
- Martin Marietta Aggregates (Weeping Water, NE)

Meridian Aggregates (Granite Canyon, WY)  
Spencer Quarry (Spencer, SD)

Since acceptance will be at the source, field inspection will normally be limited to observation for cleanliness and segregation problems. A delivery ticket for each load of rock riprap or gabion stone fill delivered to the project or work site should include the name of the producer, the date, the location of the quarry, the quantity delivered (in tons), the name of the contractor and the project number. The delivery ticket should be given to the Department representative at the time of arrival. At the completion of the project, the Project Manager should advise the Materials and Research Division as to the producer, the location of the quarry, and the date shipped.

If rock riprap or gabion stone fill is shipped from quarries other than those specified above, one 60-pound bag of material representative of the rock riprap or gabion stone used, for each 2,000 tons or fraction thereof, shall be shipped to the Materials and Research Division in Lincoln for testing purposes.