

The following checklists are designed to assist quality assurance (QA) inspectors in performing inspections of construction of NRCS projects. The checklists may not include every item that must be inspected to verify compliance with the applicable contract requirements. Checklists should be completed as the work progresses or at milestones during the contract performance period. Maintain completed checklists at the jobsite with the inspection records, and submit them to the contracting officer's representative (COR)/government representative (GR) along with the job diary after work is completed. Document in the job diary when each checklist is completed.

Each checklist is designated NEH 645 CL #.#. The first number corresponds to the NEH 645 chapter to which the checklist is directly associated. The second number corresponds to the number of the checklist(s)

Appendix A

Inspection Checklists

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NEH 645 CL 3.1 Quality Assurance Inspection Checklist

This checklist is intended to be a guide for an NRCS QA inspector in preparation for and in performance of the inspection of construction of NRCS projects. It may not address all items required of the QA inspector, and some parts of the checklist may not be applicable to a particular project.

Project Name: _____ Project #: _____

Location: _____ Date: _____

Field Inspector: _____

Work Inspected: _____

No.	Task	Completed		
		Yes	No	NA
	Prior to contract award			
1	Review appointment letter and fully understand responsibilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Review QA plan and prepare equipment and supplies needed to conduct tests and inspect work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Review the contract and seek clarification from COR/GR for items not completely understood.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Begin the job diary at the initial site showing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Mark changes on field copies of bid schedule, drawings, and specifications as per contract addendum or amendment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Obtain current copy of reference standards needed to perform inspection duties.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Prior to beginning construction			
7	Make diary entry at the preconstruction conference.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Photograph pre-work site conditions such as ingress/egress road and all structures.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Verify existence of an approved safety officer and safety plan.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Review safety checklist with contractor.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	See that the contractor conducts a safety meeting prior to the start of work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	Verify at least one person from each foreman's work crew has a current first-aid card.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Verify that all postings required by the contract (EEO posters, emergency contact information, NPDES permit notice, etc.) are maintained and are legible and visible to all contractor personnel.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	Verify all known cultural resources and properties of historical significance are identified and protected.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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No.	Task	Completed		
		Yes	No	NA
15	Verify SWPPP will be implemented at beginning of work and other NPDES requirements are addressed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	Verify sanitation facilities are operational.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	Verify the specified hard hat sign is prominently displayed at site entrances.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	Verify utilities and existing works are identified and protected.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	Verify utility owners are notified as applicable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	Verify contractor has a notice-to-proceed prior to beginning any work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
During construction				
21	Recognize and immediately report, to the COR/GR, potential cultural resources and properties that may be of historical significance whenever such resources or properties will be disturbed by construction activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22	Verify and document that all erosion and pollution control requirements are carried out in accordance with contract requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23	Verify and document that all safety and sanitary requirements are maintained in accordance with the contract.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24	Verify and document that the contractor has done everything possible to identify and protect all utilities that exist in the general work area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25	Schedule government/owner performed surveys with COR/GR to ensure that contractor's production is not impeded by lack of surveys.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26	Determine that satisfactory material samples and certifications have been furnished and materials are approved by COR/GR before incorporated into the work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27	Perform tests to verify the adequacy of the contractor's quality control system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28	See that the work is performed in accordance with the terms and conditions of the contract.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29	Maintain a field copy of drawings and specifications showing all changes (as-built plans).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30	Notify the contractor if work does not meet contract requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31	Notify the COR/GR if unsatisfactory work is not immediately corrected.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32	Document noncompliance and all related correspondence.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33	Verify contractor compliance with minimum wage rate requirements where applicable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34	Maintain an accurate and complete chronological record of the project in the job diary.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35	Support the job diary with photographic documentation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36	Keep track of work accomplished, review contractor's invoices, and inform COR/GR of discrepancies between record of work accomplished and invoices.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37	Where allowed and when authorized, issue suspend and resume work orders on behalf of the CO.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38	Immediately report disputes, differing site conditions, and unusual occurrences to the COR/GR.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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No.	Task	Completed		
		Yes	No	NA
39	On Federal contracts, if delegated authority by the CO, suspend the contractor's right to proceed if there is imminent danger to the health or safety of the public or government personnel; if not delegated authority, notify COR/GR immediately.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40	Elevate questions, issues, and concerns to the COR/GR whenever an answer is unknown or disputes cannot be resolved.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41	Schedule check-prior-to-final inspection with COR/GR and prepare a list of items remaining to be accomplished to be reviewed during the inspection.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42	When final surveys are the responsibility of the government/owner, schedule final surveys to document completion of work and provide data for as-built plans.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43	Verify that all items listed during the check-prior-to-final inspection are completed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44	Verify that all temporary erosion control measures are removed as specified.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45	Schedule the final inspection with COR/GR and prepare a list of items remaining to be accomplished to be reviewed during the inspection.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments: _____

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NEH 645 CL 4.1 Construction Safety Checklist

This checklist is intended to be used as a guide for periodically assessing safety on construction projects. Its use is optional. It may not address all potential hazards that could exist, and some parts of this checklist may not be applicable to a particular project. Results of safety assessments should be shared with the contractor's supervisory personnel.

Project Name: _____ Project #: _____

Location: _____ Date: _____

Work Period: _____ A.M./P.M. to _____ A.M./P.M.

Field Inspector: _____

Work Inspected: _____

Fill out sections I and II at start of project. Complete sections I and II again only when a factor has changed.

I. General requirements

Written safety program received (date): _____

Preconstruction safety meeting held (date): _____

Safety supervisor: _____ Alternate: _____

Scheduled weekly safety (tailgate) meeting (day/time): _____

No.	Inspection item	Yes	No	NA
1	Contractor requires subcontractors to comply with all safety requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Communications and transportation facilities available at jobsite to handle injury situations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	New employees given safety instructions for their jobs and the jobsite.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments: _____

II. Contractor's employees with first aid training certification (Red Cross, Bureau of Mines or equivalent):

Name: _____ Title: _____

Name: _____ Title: _____

Name: _____ Title: _____

III. Technical requirements

No.	Inspection item	Yes	No	NA
1. Medical services and first aid				
1.1	Phone numbers of offsite medical attention and ambulance service posted outside first aid facility and all jobsite offices. (OSHA 1926.50(f) and NRCS OSHA Supplement)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.2	Locations of first aid kits and other medical supplies posted conspicuously on signs outside first aid facility and all jobsite offices. (NRCS OSHA Supplement)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.3	Complete first aid kits available, compliant with ANSI Z308.1–1998 Type III. Minimum of 1 kit per 25 employees. (OSHA 1926.50(d)(1) and (2) and NRCS OSHA Supplement)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4	Employee with a valid certificate in first aid is assigned during each work shift. (OSHA 1926.50(c))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.5	At least one stretcher and two blankets available at jobsite.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Sanitation				
2.1	Potable water supply available at jobsite. (OSHA 1926.51(a))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.2	Potable water dispensers clearly marked; each equipped with tight cover and tap. (OSHA 1926.51(a)(2))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.3	No common drinking cups. (OSHA 1926.51(a)(4))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.4	Waste receptacles available for disposable cups and other litter, if single service cups are supplied. (OSHA 1926.51(a)(5))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.5	Electrolyte supplements available as needed. (NRCS OSHA Supplement)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.6	Adequate toilets provided at jobsite. Number of toilets and urinals required are listed in OSHA 1926.51(c), table D–1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Head protection				
3.1	Hard hats worn by all persons entering any part of jobsite. (NRCS OSHA Supplement)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.2	Hard hat area signs, 3- by 4-foot minimum size, erected at all jobsite access locations. (NRCS OSHA Supplement)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Noise exposure				
4.1	Ear protection devices worn when noise exceeds allowable exposure. (OSHA 1926.101)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Illumination				
5.1	Worksites, offices, shops, and storage areas lighted as required. (OSHA 1926.56)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Eye and face protection				
6.1	Eye and face protection provided for hazardous jobs. (OSHA 1926.102)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.2	Goggles or other protective equipment kept clean and in good repair. (OSHA 1926.102(a)(4))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Inspection item	Yes	No	NA
7. Respiratory protection				
7.1	Respirators are worn when dust concentrations exceed safe hygienic levels. (OSHA 1910.134)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.2	Employees protected from other hazardous concentrations. (OSHA 1910.134)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.3	Respirators kept clean and in good condition. Respirators inspected regularly. (OSHA 1910.134)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Fall protection (OSHA 1926 Subpart M)				
8.1	Employees protected by safety belts and lines when working on steep slopes or unguarded heights. (NRCS OSHA Supplement)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.2	Employees working on surfaces 6 feet or higher with an unprotected side or edge are protected from falling. (OSHA 1926.501(b)(1))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Working over or near water				
9.1	U.S. Coast Guard-approved life jackets or vests worn by employees if there is danger of drowning. (OSHA 1926.106(a))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2	Protective equipment inspected for defects that would alter the buoyancy and strength. (OSHA 1926.106(b))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.3	Ring buoys and 90-foot lifelines readily available for rescue operations. (OSHA 1926.106(c))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Fire protection				
10.1	Fire extinguisher with 10B rating required within 50 feet when more than 5 gallons of combustible liquid are used. (OSHA 1926.150(c)(1)(vi))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2	Portable extinguishers serviced and maintained. (OSHA 1926.150(c)(1)(viii))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.3	Fire extinguishers have been listed or approved by a nationally recognized testing laboratory. (OSHA 1926.150(c)(1)(ix))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Fire prevention				
11.1	Combustion engine exhaust kept clear of combustible materials. (OSHA 1926.151(a)(2))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.2	Signs posted at and around operations having fire hazards, "NO SMOKING OR OPEN FLAME." (OSHA 1926.151(a)(3))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.3	Storage area kept free of weeds, grass, and other combustible materials.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.4	Materials stored indoors are handled and piled in ways that minimize fire hazard. (OSHA 1926.151(d)(3))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Flammable and combustible liquids				
12.1	Metal safety cans (smaller than 5-gal capacity) used to store or handle flammable liquids. (OSHA 1926.152(a)(1))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.2	Storage of flammable liquids in open room or trailer limited to 25 gallons.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.3	Storage of liquids in any one cabinet limited to 60 gallons flammable and 120 gallons combustible. (OSHA 1926.152(b)(3))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.4	Cabinet containing such liquids labeled conspicuously, "FLAMMABLE—KEEP FIRE AWAY." (OSHA 1926.152(b)(2)(iii))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.5	Outdoor portable storage tanks positioned at least 20 feet away from any building. (OSHA 1926.152(c)(4)(i))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.6	Portable storage tanks equipped with vents. (OSHA 1926.152(i)(2)(iv)(A))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.7	Containers, tanks, and hoses interconnected (bonded) electrically when transferring liquids. (OSHA 1926.152(e)(2))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Inspection item	Yes	No	NA
12. Flammable and combustible liquids—continued				
12.8	Dispensing devices and nozzles for flammable liquids shall be of an approved type. (OSHA 1926.152(e)(5))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.9	Flammable liquids kept in closed containers when stored. (OSHA 1926.152(f)(1))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.10	Portable fire extinguishers with 20 BC rating required within 75 feet of refueling truck or station. (OSHA 1926.152(g)(11))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.11	Motors of all equipment shut off during refueling. (OSHA 1926.152(g)(10))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.12	Sign at refueling area posted conspicuously, "NO SMOKING OR OPEN FLAME WITHIN 50 FT." (OSHA 1926.152(g)(8))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Temporary heating devices				
13.1	Adequate fresh air provided to ensure personnel safety. (OSHA 1926.154(a)(2))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.2	Solid noncombustible material used to support heating units. Material extends 2 feet beyond each side of heater. (OSHA 1926.154(b)(3))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.3	Minimum 10-foot clearance provided in temporary job enclosures between heater and combustible coverings. (OSHA 1926.154(b)(4))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.4	Oil-fired heaters equipped with safety oil stop for protection during possible flame out. (OSHA 1926.154(e)(1))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Signs, signals, and barricades				
14.1	Barricades erected and legible traffic signs posted at hazardous locations. (OSHA 1926.200(b)(1)); (Federal Highway Administration Manual on Uniform Traffic Control Devices (MUTCD))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.2	Signs posted and barricades installed to prevent public access.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.3	Nighttime signs and barricades lighted or reflectorized.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.4	Flaggers used when working conditions warrant.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.5	Red flags or sign paddles 18-inches square used by flaggers to make hand signals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.6	Reflectorized safety vests or coats worn by flaggers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.7	Detour signs posted on streets and highways. Sign types and placement meet State and local regulations and codes. (OSHA 1926.200(g)(2))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Material handling, storage, use, and disposal				
15.1	Storage areas kept approximately level, well arranged, and free of flammable materials.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.2	Construction material stacked, racked, or blocked to prevent movement. (OSHA 1926.250(a)(1))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.3	Lifelines with safety belts used by workers entering hoppers or tanks. (OSHA 1926.250(b)(2))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.4	Excess material not stored on scaffolds or runways. (OSHA 1926.250(b)(5))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.5	All nails removed from used lumber. (OSHA 1926.250(b)(8)(i))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.6	Material to be handled by crane stored in area clear of overhead power lines.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Rigging equipment for material handling				
16.1	Equipment inspected before use and during material handling. (OSHA 1926.251(a)(1))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.2	Equipment is adequate to handle loads. (OSHA 1926.251(a)(2))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.3	Tagged equipment (determined by the contractor to be defective) removed or replaced.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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No.	Inspection item	Yes	No	NA
17. Chains				
17.1	Steel alloy chains identified by size, grade, and capacity. (OSHA 1926.251(b)(1))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.2	Hooks, rings, and other attachments not shop-made. Capacity of hooks, rings, and other attachments at least as great as chain capacity. (OSHA 1926.251(b)(3))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.3	Hoisting hooks equipped with safety keepers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Wire rope				
18.1	Eye splices made with at least three full tucks. (OSHA 1926.251(c)(4)(i))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18.2	Protruding splice ends covered or blunted. (OSHA 1926.251(c)(2))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18.3	Hoisting or pulling liner made of one continuous rope with no knots or splices. (OSHA 1926.251(c)(4)(ii))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18.4	Wire rope replaced when 10% of strands are broken in any length that equals 8 diameters of the rope. (OSHA 1926.251(c)(4)(iv))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18.5	U-bolt clips are correct size and spaced properly. (OSHA 1926.251(c)(4)(iv))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18.6	U-section attached to dead-end rope. (OSHA 1926.251(c)(5)(i))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Fiber rope				
19.1	Fiber rope rings meet requirements. (OSHA 1926.251(d)(1))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19.2	Repairs made with splices; knots prohibited. (OSHA 1926.251(d)(2)(v))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19.3	Coding for manufacturer, type of material, and capacity of rating shown on synthetic webbing. (OSHA 1926.251(e)(1))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19.4	Shackles and hooks meet requirements. (OSHA 1926.251(f))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Waste material disposal				
20.1	Scrap lumber, waste, and rubbish removed as work progresses. (OSHA 1926.252(c))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20.2	Solvent waste, oily rags, and flammable material stored in covered metal containers until removed from jobsite. (OSHA 1926.252(e))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Power and hand tools				
21.1	Power tools equipped with guards (as manufactured) over all exposed moving parts. (OSHA 1926.300(b)(1))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21.2	Handheld power tools equipped with pressure control switches. (OSHA 1926.300(d)(3))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21.3	Goggles and other protective equipment worn by workers as required. (OSHA 1926.300(c))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21.4	Tools with mushroomed heads or defective handles prohibited. (OSHA 1926.301(c) and (d))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21.5	Electric-powered tools double insulated or grounded with 3-wire conductors.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Grinders				
22.1	Machines equipped with guards and tool rests. (OSHA 1926.303(b))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22.2	Grinding wheels checked for cracks and defects. (OSHA 1926.303(c)(7))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22.3	Grinder spindles operated at safe speeds.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Gas welding and cutting				
24.1	Gas cylinders meet U.S. Department of Transportation requirements. (49 CFR-178-C) and (OSHA 1926.350(c)(2))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Inspection item	Yes	No	NA
24. Gas welding and cutting—continued				
24.2	Hose lines distinguished either by color (such as, fuel is red, oxygen is green) or by surface texture. Oxygen and fuel lines shall not be interchangeable (OSHA 1926.350(f)(1))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24.3	Cylinders placed upright when stored or in use, chained to prevent overturning, and capped tightly when not in use. (OSHA 1926.350(a))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24.4	Cylinders kept upright when moved (tilt and roll on bottom edge) and anchored to pallet before hoisting. (OSHA 1926.350(a)(3))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24.5	Cylinders protected from excessive heat or cold and from electric currents.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24.6	Defective gauges, regulators, valves, and hoses repaired or replaced.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24.7	Friction lighters used to ignite gas torches. Matches prohibited. (OSHA 1926.350(g)(3))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24.8	Welding and cutting done only by authorized operators.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24.9	Goggles or shields worn by welders and helpers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Arc welding and cutting				
25.1	Handgrips and jaws insulated for maximum ground voltage. (OSHA 1926.351(a)(2))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25.2	Cables and connectors rubber covered. Splices not made within 10 feet of electrode holders. (OSHA 1926.351(b)(2))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25.3	Framer of welding units grounded with 3-wire conductors or with separate wires at source. (OSHA 1926.351(c)(5))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25.4	Protective eye shields used by welders and helpers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25.5	Other workers near arc protected by screens or goggles. (OSHA 1926.353(d)(1)(ii))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25.6	Precautions taken to prevent fires. Fire extinguisher is available. (OSHA 1926.352(a))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Electrical				
26.1	Hot circuits de-energized or equipped with guards before starting work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26.2	Hot voltage circuits equipped with guards. Signs posted, "DANGER-HIGH VOLTAGE." (OSHA 1926.404(d)(2)(ii))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. Grounding and bonding				
27.1	Portable plug-in equipment double insulated or grounded with 3-wire conductors. (OSHA 1926.404(f)(3))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27.2	Metal parts and frames of fixed equipment grounded. (OSHA 1926.404(f)(3))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27.3	Hand lamps equipped with handles. Guard attached to each handle. (OSHA 1926.405(j)(1)(iii)(B))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27.4	Extension cords kept clear of walkways, sharp corners, and projections.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27.5	Worn or frayed electric conductors not permitted.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27.6	Fuses or circuit breakers provided for overcurrent protection. (OSHA 1926.404(e)(1)(vi))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. Ladders (OSHA 1926.1053)				
28.1	Ladders provided for access to work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28.2	Ladders meet requirements of OSHA 1926.1053.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28.3	Portable ladders set on solid bare ground. Space around top and bottom of each ladder kept clear.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Inspection item	Yes	No	NA
28. Ladders (OSHA 1926.1053)—continued				
28.4	Portable ladders tied or blocked to prevent movement.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28.5	Minimum dimensions of job-made wooden ladders are: 2- by 4-inch side rails, 16 feet long, 3/4- by 3-inch cleats 18 to 23 inches long, and 12 inches between cleats. Rails notched to fit cleats, or fill blocks used to secure cleats.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28.6	Length between supports (base and top landing) of job-made ladders does not exceed 30 feet.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28.7	Top of each ladder extends at least 36 inches above top landing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. Scaffolding				
29.1	Guardrails, sides, and ends installed on all platforms that are 45 inches wide or less and built more than 4 feet aboveground or adjoining surfaces and on all platforms built more than 10 feet aboveground or adjoining surfaces.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29.2	Guardrail dimensions are 2- by 4-inch rails installed 42 inches above floor, 1- by 6-inch intermediate rail, 4-inch-high toeboard, and 2- by 4-inch supports at 8-foot spacing. (OSHA 1926.451(b)(4))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29.3	Platform planking extended at least 6 inches over supports. Planking overlapped 12 inches or anchored.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29.4	Ladders provided for access.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29.5	Overhead protection provided in hazardous areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29.6	Platform surfaces kept clean so workers are not in danger of tripping.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29.7	Design and construction of wooden scaffolds meet requirements. (OSHA 1926.451)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29.8	Metal tube and coupler scaffolds meet requirements. Scaffolds erected as specified by manufacturers. Expected loading meets minimum safety factor. (OSHA 1926.451)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29.9	Metal scaffolds installed plumb and level, and anchored to structure. Maximum scaffold dimensions are 30 feet horizontal by 26 feet vertical.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. Floor and wall openings and stairways				
30.1	Floor openings covered on all sides except at entrances protected by covers or guardrails. (OSHA 1910.23(a)(1))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30.2	Guardrails built if wall openings are less than 3 feet above floors, and drops are more than 4 feet.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30.3	Toeboards built if wall openings are more than 3 inches above floors.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30.4	Guardrails built along open-sided floors that are 6 feet or more aboveground.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30.5	Handrails built along stairways that have at least four risers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30.6	Handrails placed 30 to 34 inches above the top of each riser. Raised handrail built along open side of stairs and landings. (OSHA 1910.23(e)(2))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30.7	Smooth surfaces of handrail material positioned on top and sides. Handrail mounted at least 3 inches from sidewalls.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30.8	Stairs interrupted every 12 feet (vertical distance) with 30-inch landing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. Conveyor				
31.1	Operators' stations equipped with start and stop controls. (OSHA 1926.555(a)(2))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31.2	Warning signal included in conveyor equipment. Signals tested before conveyors are started. (OSHA 1926.555(a)(1))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31.3	Access ladders, platforms, and walkways with guardrails and handrails provided.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Inspection item	Yes	No	NA
31. Conveyor—continued				
31.4	All moving parts properly guarded. (OSHA 1926.555(a)(4))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31.5	Screen installed to protect workers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31.6	Conveyors locked out and tagged during repairs. (OSHA 1926.555(a)(7))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. Motor vehicles and mechanized equipment				
32.1	Lights or reflectorized barricades placed around equipment parked adjacent to highways or streets. (OSHA 1926.600(a)(1))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32.2	Safety tire cages used when inflating tires on split or lock-type rims. (OSHA 1926.600(a)(2))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32.3	Before repairs are started, controls set in neutral, brakes set, and motor shut off. (OSHA 1926.600(a)(3)(i))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32.4	Blocking and cribbing provided to prevent movement of equipment during repairs. (OSHA 1926.600(a)(3)(ii))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32.5	Safety precautions to be taken with all parked equipment include: setting brakes, chocking wheels, and fully lowered blades, buckets, and dump beds. (OSHA 1926.600(a)(3)(i))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32.6	Special caution taken in changing and charging batteries to prevent acid contact with eyes and skin.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32.7	Passengers transported only in cabs or vehicles. Mounting and dismounting from moving vehicles not allowed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. Pile driving equipment				
33.1	Boilers, compressors, and piping systems maintained in good condition. Equipment has protective guards. (OSHA 1926.603(a)(1))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33.2	Stop block positioned in leads to prevent hammer from striking head block. (OSHA 1926.603(a)(4))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33.3	Safety block inserted in leads to support hammer when workers are below hammer. (OSHA 1926.603(a)(5))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33.4	Cable guards installed across head block sheaves. (OSHA 1926.603(a)(6))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33.5	Fixed leads equipped with rings for attaching safety belt lanyards. (OSHA 1926.603(a)(8))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33.6	Work platforms and leads protected by guardrails.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33.7	Safety chains (1/2-in-diameter) attached at steam and air hose connections and to hammers. (OSHA 1926.603(a)(10))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33.8	Steam and air lines equipped with two controls—one has quick-action capability and is at operator's station. (OSHA 1926.603(a)(11))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33.9	Guys, outriggers, and counter balances installed to stabilize equipment. (OSHA 1926.603(a)(12))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33.10	Piles secured to hoisting lines for placement in leads.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33.11	Employees kept clear of area when piles are hoisted. (OSHA 1926.603(c)(4))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33.12	Pile driving operations stopped during cutoff of adjacent piles if within a distance equal to two times the length of the longest pile.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33.13	Pit walls sloped or sheet piling placed, and braced before each pile is driven.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33.14	Only authorized personnel allowed in work area during driving operations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. Excavations, trenching, and shoring				
34.1	Walkways and runways kept clear of excavated material. (OSHA 1926.651(a))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Inspection item	Yes	No	NA
34. Excavations, trenching, and shoring—continued				
34.2	Walkway planks placed parallel to length of walk, closely spaced, fastened to prevent displacement, and cleaned if slick conditions will prevail. (OSHA 1926.651(c)(1)(ii))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.3	Reflectorized vests worn by flagmen and others exposed to traffic. (OSHA 1926.651(d))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.4	Personnel not permitted under loads being handled by power equipment. (OSHA 1926.651(e))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.5	Truck and other haul-unit operators kept clear of units during loading (exception allowed if cab is braced and shielded).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.6	Wells, pits, and shafts covered or barricaded to protect all personnel.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.7	Underground utilities located and staked before excavation. (OSHA 1926.651(b)(2))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.8	Utilities left in place are protected by barricade, shoring, or suspension. (OSHA 1926.651(b)(4))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.9	Excavations sloped to stable angles or shored and braced.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.10	Cribbing and shoring installed in accordance with design performed by licensed engineer. (OSHA 1926.652(b)(4)(i))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.11	Excavated material placed and other material stored at least 2 feet from excavation edges.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.12	When work is done below hazardous rock slopes, workers and equipment protected by scaling slopes as necessary to minimize danger, bolting rocks and affixing wire mesh after scaling, and placing timber or wire mesh barricades.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.13	Scalers equipped with safety belts or boatswain chairs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.14	Scalers' lifelines tied to at least two secure objects.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.15	Workers not permitted to work one above the other in rock material.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.16	Rock removed from top downward on steep slopes. Access to slope is from top only.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.17	Sides of steep excavations shored and braced when heavy equipment operated close to excavation edges.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.18	Dust controlled to acceptable levels.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.19	Guardrails built along walkways over excavations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.20	Workers in trenches 5 feet deep or more protected with shields or by sloping or shoring and bracing excavation banks. (OSHA 1926.652(a)(1))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.21	Trench bracing and shoring installed during excavation: cross braces or jacks placed horizontally, spaced vertically, and secured to prevent unintended movement.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.22	Trench supports removed from bottom upward. Ropes used to remove jacks in unstable soil.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.23	Ventilation provides adequate oxygen and applicable specified atmospheric conditions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.24	Ladders or steps installed no more than 25 feet apart in trenches more than 4 feet deep.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. Concrete, concrete forms, and shoring				
35.1	Excavations sloped or shored so forms and concrete materials can be installed safely. (OSHA 1926.652(a))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.2	Work platforms provided or safety belts worn by workers when reinforcing steel is placed in walls, piers, and columns. (OSHA 1926.501(b)(5))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Inspection item	Yes	No	NA
35. Concrete, concrete forms, and shoring—continued				
35.3	Work not allowed above unprotected vertical-protruding reinforcing steel. (OSHA 1926.701(b))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.4	Vertical steel is guyed or supported to prevent collapse. (OSHA 1926.703(d)(1))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.5	Wire mesh rolls are secured at both ends to prevent recoiling.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.6	Access points at all work areas accessed for safety by contractor before concrete placing begins.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.7	Silos and bulk storage bins for concrete built with tapered bottoms and equipped with vibrators to start flow. (OSHA 1926.702(a)(1))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.8	Bull float handles made of nonconductive material. (OSHA 1926.702(h))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.9	Powered concrete trowels equipped with hand-release shutoff switches. (OSHA 1926.702(c))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.10	Handles on concrete buggies do not extend beyond wheels. (OSHA 1926.702(d))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.11	When pump-creting is used, hose lines and discharge pipe are supported and joints and connectors are protected with safety chains or by other positive methods.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.12	Cranes used to position concrete buckets. Crane cable equipped with safety hook. (OSHA 1910.179)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.13	Personnel prohibited from riding concrete buckets for any purpose.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.14	Placing and vibrating crews not allowed under suspended buckets.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.15	Wheels chocked and brakes set on concrete trucks when discharging on slopes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.16	Protective eye and face equipment worn by workers placing pneumatically applied concrete.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.17	Forms and shoring material are free of splits, rots, cuts, or other defects.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.18	Forms installed that will support all concrete loads safely. (OSHA 1926.703(a)(1))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.19	Nails and other accessories removed from stripped forms before stockpiling. (OSHA 1926.25(a))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.20	Slings fastened securely to gang forms if forms moved by crane.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.21	Workers vacated from lower levels before forms are released and moved.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.22	Personnel not permitted to ride forms being raised or moved.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.23	Face helmets, goggles, or airline hoods worn by sand blasting crews. (OSHA 1910.94(a)(1)(iii); 1926.57(f)(1)(ii); 1926.57(f)(2)(i))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.24	Eye protection worn by finishers doing chipping or grinding repairs. (OSHA 1926.28(a))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.25	Concrete heating units and accessories meet safety requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.26	Heating units placed to provide safe clearance from enclosure frames and coverings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.27	Concrete enclosures lighted and ventilated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. Blasting and the use of explosives				
36.1	Only authorized personnel permitted to handle or use explosives.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36.2	Blasting personnel required to furnish evidence of competency in handling and using explosives. (OSHA 1926.901(c))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36.3	Smoking, matches, open flame, sparks, firearms, and other heat-producing devices prohibited near storage magazines and during transport and use of explosives. (OSHA 1926.904(c))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Inspection item	Yes	No	NA
36. Blasting and the use of explosives—continued				
36.4	All explosives stored in locked magazines when not being used. (27 CFR Part 55, Subpart K)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36.5	Storage magazines ventilated. Magazines are fire resistant, weatherproof, and bullet resistant. (27 CFR Part 55, Subpart K)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36.6	Contractors maintain inventory and use records of all explosives. (27 CFR Part 55, Subpart K)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36.7	Appropriate authorities notified of loss or theft or of entry into magazines. (27 CFR Part 55.30, Subpart C)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36.8	Explosives transported to jobsite in original containers. (OSHA 1926.903(q))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36.9	Blasting caps not transported in same vehicle with other explosives. (OSHA 1926.903(p))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36.10	Signs, flags, and barricades erected and other precautions taken to ensure employee and public safety. (OSHA 1926.909(c))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36.11	Blasting operations restricted to daylight hours.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36.12	All personnel removed from blasting areas during electrical storms.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36.13	Warning signs, 4-inch red letters on white backgrounds, reading "BLASTING AREA—RADIO TRANSMITTING PROHIBITED," posted on all roads within 1,000 feet of blasting areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36.14	Radio transmitters prohibited within 100 feet of electric blasting caps.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36.15	Empty explosive boxes and paper wrappings destroyed by burning.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36.16	Utility companies and owners or operators of adjacent properties notified before blasting; necessary precautions taken to prevent property damage.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36.17	All blasts fired electrically except in areas of extraneous electric currents. (OSHA 1926.906(e))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. Transporting explosives				
37.1	No other material, including blasting caps, transported with explosives. (OSHA 1926.903(p))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37.2	Vehicles are in good condition, and floors are tight with no exposed spark-producing metal.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37.3	Warning signs, 4-inch red letters on white backgrounds, reading "EXPLOSIVES," posted on front, rear, and sides of vehicles. (OSHA 1926.902(h))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37.4	Charged extinguisher with 10 ABC rating carried with each vehicle.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37.5	Vehicles not repaired or serviced in shops while carrying explosives or caps.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. Loading and wiring				
38.1	Drill holes are sufficiently large to permit free insertion of cartridges of explosives. (OSHA 1926.905(b))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38.2	Tamping sticks made of wood or other nonmetallic material. (OSHA 1926.905(c))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38.3	Drilling or heavy equipment prohibited within 50 feet of loaded holes. (OSHA 1926.905(h))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38.4	Explosives loaded only in holes to be fired in next round of blasting. (OSHA 1926.905(d))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38.5	Blasting wires kept clear of energized electric conduits or wiring. (OSHA 1926.905(j))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38.6	Blasting cap wires kept short-circuited until connected for firing. (OSHA 1926.906(a))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Inspection item	Yes	No	NA
38. Loading and wiring—continued				
38.7	Caps for single blast determined to be all of same style and manufacture. (OSHA 1926.906(c))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38.8	Connecting and lead wires are well insulated and have adequate capacity. (OSHA 1926.906(f))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38.9	Number of connected caps does not exceed rated capacity of blasting machines. (OSHA 1926.906(o))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38.10	Blasting galvanometers used to test circuits to charged holes. (OSHA 1926.906(q))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38.11	Adequate audible warning signals given before and after firing. (OSHA 1926.909(b))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. Inspection after firing				
39.1	Firing lines disconnected from blasting machines immediately after firing. (OSHA 1926.906(t))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39.2	All wires traced and checked for misfires by the blasting foreman. (OSHA 1926.911(a))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39.3	If misfires occur, all employees evacuated from blasting areas and kept away for 1 hour.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. Blasting agents				
40.1	Blasting agents handled and stored properly (OSHA 1910.109)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40.2	Containers kept dry. Storage areas kept well ventilated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40.3	Workers instructed to evacuate all people from jobsite if there is fire.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41. Field mixing of fuel-sensitized ammonium nitrate				
41.1	Mixing areas kept clean and free of spilled fuel oil and ammonium nitrate or other explosive materials.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41.2	Ammonium nitrate stored away from fuel oils.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41.3	High volatility fuels such as gasoline not used for mixing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41.4	Maximum of 8 percent fuel oil used in blasting agents.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41.5	Smoking prohibited in mixing areas. Signs posted: "NO SMOKING."	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41.6	Mixing equipment grounded and bonded.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41.7	Vertical holes loaded by pouring the premixed agent into holes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41.8	Safety precautions observed for wiring and shooting (same precautions taken for conventional explosives).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41.9	Maximum of 1 day's production of field-mixed ammonium nitrate blasting agent permitted in or near mixing area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments: _____

NEH 645 CL 5.1 Construction Surveying Checklist

This checklist is intended to be a guide for an NRCS QA inspector in preparation for and in performance of the inspection of construction surveying for NRCS engineering projects. It may not address all items required of the QA inspector, and some parts of the checklist may not be applicable to a particular project.

Project Name: _____ Project #: _____

Location: _____ Date: _____

Work Period: _____ A.M./P.M. to _____ A.M./P.M.

QA Inspector: _____

QC Inspector: _____

Surveyor: _____

Items Surveyed (include contract item number where applicable): _____

No.	Inspection item	Yes	No	NA
1. Equipment and materials				
1.1	Equipment and materials are adequate for staking the work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.2	Equipment and materials are adequate for capturing and recording ground line topography if required by the specification.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.3	Electronic data collector is functioning properly and is accurately recording and storing survey data.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4	Inspector's surveying equipment and materials are maintained in proper working condition and are adequate for performing staking, checking, and note keeping necessary to inspect the work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Quality of work				
2.1	Stakes are accurately placed and clearly marked to define the work for construction to the specified lines and grades.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.2	Survey detail is adequate to accurately represent the ground line or feature surveyed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Primary control				
3.1	Primary control is available and maintained during the performance of the work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.2	The proper bench marks and markers are referenced.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.3	All benchmarks and reference markers established from primary control are accurate within the specified or otherwise acceptable degree of error.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Inspection item	Yes	No	NA
4. Staking and quantity surveys				
4.1	Submittals that must be submitted prior to surveying have been submitted prior to beginning construction surveying operations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.2	The surveying plan seems reasonable and is revised, as needed, to align with the current construction schedule.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3	The number and location of stakes is adequate to define the work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4	Stakes are legibly marked and the markings are complete and accurate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.5	Stakes are being maintained and promptly replaced by the contractor when damaged.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.6	All quantity surveys necessary for computing final pay quantities are adequate to thoroughly and accurately define the specified pay limits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Checking, interim staking, and interim quality surveys				
5.1	QC personnel are checking to verify construction to the specified line and grade.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.2	Blue tops are set and maintained to the specified line and grade until no longer needed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.3	Alignment and grade stakes for structures are set, marked, and maintained as required.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.4	Interim quantity surveys are adequate for estimating quantities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Engineering notes				
6.1	All notes, sketches, and other data are presented as specified.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.2	All engineering notes are transmitted to the COR/GR within the specified time frame.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. As-built surveys				
7.1	Are made where necessary to document changes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.2	Document construction to the lines and grades shown on the drawings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.3	Represent the as-built conditions including any changes from the original plans.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.4	Accurately capture and document the specified pay limits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. As-built records				
8.1	A neat and legible field copy of as-built drawings is maintained.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.2	All changes have been included in the as-built records.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.3	All as-built records are submitted to the engineer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.4	Contractor performed as-built drawings meet specification requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments: _____

NEH 645 CL 5.2 Quantity Computations Checklist

This checklist is intended to be a guide for an NRCS QA inspector when performing or inspecting the performance of quantity computations for NRCS engineering projects. It may not address all items required of the QA inspector, and some parts of the checklist may not be applicable to a particular project.

Project Name: _____ Project #: _____

Location: _____ Date: _____

Work Period: _____ A.M./P.M. to _____ A.M./P.M.

QA Inspector: _____

QC Inspector: _____

Final computations performed by: ☐ Contractor ☐ Sponsor ☐ NRCS

Items computed (include contract item number where applicable): _____

No.	Inspection item	Yes	No	NA
1. Format				
1.1	The heading contains sufficient information to: <ul style="list-style-type: none"> – fully identify the project and the computations – indicate the name of the person performing the computations and the date performed – indicate the name of the person checking the computations and the date checked 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.2	Sketches, explanations, and references are adequate to explain the computation method.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.3	Computations are broken down into simple steps.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4	Computations include the four basic parts: 1. Description, 2. Data origin, 3. Pay limits, and 4. Solution.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.5	State format is used where applicable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.6	Computations are neat, legible, concise, and well organized.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Units and precision				
2.1	All measurement, computation, and conversion units are shown.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.2	Computation precision is consistent with data precision.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.3	Computation precision is consistent with the accepted practice.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Inspection item	Yes	No	NA
3. Linear computations				
3.1	Linear measurements are made as specified (based on slope distance or horizontal distance).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.2	Linear computations are consistent with specified measurement and payment method.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Area computations				
4.1	Area measurements are made as specified (based on slope distance or horizontal distance).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.2	The correct equation or mathematical process is applied to arrive at the answer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Volume computations				
5.1	The specified or otherwise correct equations or mathematical processes are applied to arrive at the answers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.2	Data for computations are representative of the groundline.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.3	The frequency of surveyed sections complies with specifications.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.4	Curve corrections are made when applicable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Weight				
6.1	A copy of all delivery tickets for items to be paid on a weight basis are obtained.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.2	All delivery tickets are submitted to be filed in the contract "quantities" folder.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.3	Delivered and installed quantities for each day or reporting period along with cumulative delivered and installed quantities are documented in the job diary.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Interim quantities				
7.1	Interim quantities are recorded in a legible and orderly fashion.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.2	Interim quantity records are kept until the contract has been finalized.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Computations performed by the contractor				
8.1	When quantity computations are to be performed with computer software, survey activities do not begin until software identification, vendor's name, version number, and other pertinent data has been provided to the engineer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.2	All quantity computations are performed and presented in the specified manner.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.3	Computations are submitted within the specified time frame.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments: _____

NEH 645 CL 7.1 Foundation Preparation Checklist

The following checklist provides guidance for examining the quality of foundation preparation. The checklist does not address all of the conditions that may exist related to foundation preparation. The checklist should be used for guidance only as the inspector examines the work and should not be relied upon as a comprehensive list of items to check. Inspectors should also use their own experience and knowledge for guidance on what to examine and look for during inspections. Some items may not be listed. Some listed items may not apply to every project.

Project Name: _____ Project #: _____

Location: _____ Date: _____

Work Period: _____ A.M./P.M. to _____ A.M./P.M.

QA Inspector: _____

QC Inspector: _____

Work Inspected (include contract item number where applicable): _____

No.	Inspection item	Yes	No	NA
1. Clearing and grubbing				
1.1	The limits for clearing and grubbing are clearly marked.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.2	Surveys are completed prior to clearing and grubbing when necessary for computing quantities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.3	All materials are removed and disposed of as specified.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4	The contractor's operation does not damage adjacent property.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.5	The contractor's operation does not damage trees that shall remain.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.6	Burning is performed according to local ordinances and job specifications.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.7	The timing and rate of clearing conforms to specifications.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Structural removal				
2.1	Structural removal limits are clearly identified.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.2	All materials are removed and either salvaged or disposed of as specified.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.3	The removal operation does not damage adjacent property.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.4	Burning is performed according to local ordinances and job specifications.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Stripping				
3.1	The areas to be stripped are staked per plans.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.2	Stripping is performed to the minimum specified limits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Inspection item	Yes	No	NA
3. Stripping—continued				
3.3	All unsuitable materials are removed and disposed of as specified.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.4	Surveys are performed as needed for quantity computations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.5	The responsible engineer is consulted if there are uncertainties about the suitability of stripped materials for construction.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.6	Stripping below the specified lower limits is quantified and paid for as foundation excavation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Scarifying				
4.1	All holes or depressions are filled.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.2	Materials used to fill holes are compacted as specified.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3	The foundation is scarified to the specified extent.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4	Large rocks brought to the surface are removed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Dispersive, collapsible, and soluble materials				
5.1	The foundation and surrounding areas are visually inspected for signs of dispersive, collapsible, or soluble materials.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.2	Tests to verify the existence of dispersive, collapsible, or soluble materials are conducted when applicable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.3	The responsible engineer is contacted whenever the presence of dispersive, collapsible, or soluble materials is suspected.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.4	All dispersive, collapsible, and soluble materials are removed from the foundation to the depth and extent specified or as otherwise directed by the engineer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.5	Surveys to quantify the amount of dispersive, collapsible, and soluble materials are completed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.6	Documentation is obtained as necessary to compensate the contractor for added work caused by removal of dispersive, collapsible, and soluble materials.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Foundation compaction and moisture control				
6.1	The moisture and density of the foundation meets or exceeds the specified requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.2	Adequate numbers of moisture/density tests are taken to document that specification requirements are met.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	The responsible engineer is consulted if it is necessary to deviate from the specification requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Preparing rock foundations				
7.1	All loose undesirable materials are removed and the foundation surface is cleaned as specified.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.2	All cracks, crevices, and overhangs are cleaned and concreted or grouted and there are no negative slopes or overhangs remaining on the foundation surface.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.3	All loose and weathered materials are removed from the foundation surface.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.4	Subsurface grouting is performed as specified.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5	The responsible engineer is notified of discrepancies between design and field conditions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.6	The geologist and the responsible engineer are consulted to determine the full extent of documentation needed to adequately document foundation preparation measures and procedures.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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No.	Inspection item	Yes	No	NA
8. Cutoff trench				
8.1	The cutoff trench is staked at the specified location and quantity surveys are attained to define the upper limits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.2	The trench is excavated to the specified or modified limits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.3	The trench extends to or into the specific layer of material shown on the drawings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.4	Changes to the lower limits are documented and approved by the responsible engineer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.5	When applicable, lower limits are surveyed for quantity computations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.6	Foundation materials are at the specified moisture and density at the time of backfill placement.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.7	Only specified and suitable materials are placed in the cutoff trench.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.8	Materials are placed at the specified moisture and compacted to the specified density.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Foundation drains				
9.1	Foundation drains are staked and drainfill quantity surveys attained.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2	Foundation drains are constructed to the specified limits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.3	Segregation of drainfill materials is prevented.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.4	Internal perforated pipes are undamaged, clear of obstructions, and placed at the proper location.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.5	Drainfill materials are compacted to meet specification requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Final foundation preparation				
10.1	All unsuitable materials have been removed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2	The cutoff trench is installed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.3	Drainage features are installed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.4	Just prior to placing earthfill, the moisture content and density of the foundation meet specification requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.5	All subsurface grouting has been completed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.6	All rock surfaces are cleaned and grouted.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.7	All loose and drummy rock has been removed from the surface	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.8	All negative slopes have been corrected.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments: _____

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NEH 645 CL 7.2 Removal of Water Checklist

The following checklist provides guidance for examining the quality of implementation of the removal of water plan. The checklist does not address all of the conditions that may exist related to removal of water. The checklist should be used for guidance only as the inspector examines the work, and should not be relied upon as a comprehensive list of items to check. Inspectors should also use their own experience and knowledge for guidance on what to examine and look for during inspections. Some items may not be listed. Some listed items may not apply to every project.

Project Name: _____ Project #: _____

Location: _____ Date: _____

Work Period: _____ A.M./P.M. to _____ A.M./P.M.

QA Inspector: _____

QC Inspector: _____

Work Inspected (include contract item number where applicable): _____

No.	Inspection item	Yes	No	NA
1. General				
1.1	The accepted plan for removal of water is implemented.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.2	Required permits have been obtained prior to beginning work in or around streams or wetlands, including the U.S. Army Corps of Engineer's 404 Permit and EPA or State stormwater permit.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.3	Details of equipment installation and performance of plan are documented in the diary.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4	Removal of water efforts are adequate to allow the performance of the work as specified.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.5	Contractor is made aware of inadequate removal of water efforts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.6	Removal of water efforts do not adversely affect the stability of slopes or the foundation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.7	Neither surface or ground water is being polluted by removal of water efforts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.8	Precautions are taken to protect the environmental aspects of the stream or wetlands, including required pollution control measures.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.9	Contractor is made aware of concerns of instability and pollution and related discussions with contractor are well documented.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.10	Responsible engineer is consulted when contractor's removal of water efforts are inadequate or result in slope instability or pollution.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Inspection item	Yes	No	NA
1. General—continued				
1.11	Invoiced amounts for removal of water are consistent with documented performance of work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.12	Quantity of pumped water is documented in the diary for each reporting period.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.13	When payment is based on quantity of water pumped, pump accuracy is verified by the contractor and is checked periodically or when accuracy is suspect.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.14	All temporary works for the removal of water are removed and disposed of in a manner that does not adversely impact the permanent structure or the environment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Surface water				
2.1	Dewatering and drainage control systems are correctly installed according to the removal of water plan.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.2	Dewatering and drainage control systems are maintained and functioning to allow work to be performed as specified.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.3	If water pumped from dewatering systems is muddy or contains fine sand, wells are sealed and wellpoints with an adequate filter system are installed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.4	Backup power and standby pumps are immediately available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.5	Diversion outlets empty in a nonerosive manner into the same drainage way that the water would have reached had it not been diverted.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.6	Dikes and mounds of soil in the borrow area are graded as the work progresses to blend in and avoid leaving shallow areas within the pool.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.7	When a dam is being constructed, the top of the dam is maintained as near level as possible to allow flow to uniformly spread across the full width of the dam should the uncompleted dam be overtopped.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.8	Cofferdams are maintained and not repeatedly emptied by breaching and allowing water to flow through the worksite.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.9	Compliance with requirements that diverted surface water must be returned to its original drainage way before leaving the site or owner's property.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.10	Borrow areas are maintained as the work progresses so that dikes are knocked down to avoid leaving shallow areas within the pool.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.11	Emergency outlets are located so that their function will not result in flow being concentrated over any part of the dam.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.12	Embankment is maintained approximately level during construction.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.13	All avenues for surface water to enter an internal drainage system are sealed as the work progresses and those that must remain unsealed to facilitate construction are sealed when it appears eminent that a runoff event could result in surface flow or inundation at the opening.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Groundwater				
3.1	Dewatering and drainage control systems are correctly installed according to the removal of water plan.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.2	Dewatering and drainage control systems are maintained and functioning to allow work to be performed as specified.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.3	If water pumped from dewatering systems is muddy or contains fine sand, wells are sealed and wellpoints with an adequate filter system are installed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.4	Backup power and standby pumps are immediately available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.5	Concrete is not placed on a wet foundation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.6	Standing or flowing water does not come in contact with concrete until it has achieved its initial set.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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No.	Inspection item	Yes	No	NA
4. Erosion, pollution control, and removal of temporary works				
4.1	Required permits have been obtained and, when required, copies are available on the jobsite prior to beginning work in or around streams or wetlands.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.2	Best management practices (BPMs) are installed and maintained as required by the Stormwater Pollution Prevention Plan (SWPPP).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3	Precautions are taken to protect environmentally sensitive streams during stream diversion and associated construction activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4	Water is diverted from slopes and slopes are protected to reduce erosion.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.5	Care is exercised when removing dewatering system filter components to minimize the loss of trapped sediment, debris, and other pollutants.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments: _____

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Daily Diary (Excavation Example)Report No. *34*Date *June 19, 2012*Weather *Sunny*Min. Temp *58°*Max. Temp *75°*Precipitation *0*

Inches

Storm Period

A.M.
P.M.A.M.
P.M.Shift No. *—*

App. Time

A.M.
P.M.

To

A.M.
P.M.

Work Period

*7:30*A.M.
P.M.*5:00*A.M.
P.M.

Work Force

Superintendent *C.J. Manning*

Skilled

Laborer

Foreman *M.H. Brown**3**4*

Estimated Quantities of Pay Work Accomplished

Item No.	Item	Unit	Quantity
<i>6</i>	<i>Excavation, Rock, Aux Spillway</i>	<i>yd³</i>	<i>200/650</i>
<i>7</i>	<i>Excavation, Aux Spillway</i>	<i>yd³</i>	<i>1500/8500</i>
<i>9</i>	<i>Earthfill, common</i>	<i>yd³</i>	<i>3000/20000</i>

Narrative

Contractor and I arrived at 7:00 a.m. Contractor resumed aux spillway excavation at AS Sta. 3+40. Blaster onsite to finish loading holes and preparing for 10:00 blast. At 9:00 blaster finished loading holes. At 9:30 Contractor ceased excavation in AS. Blast performed at 10:00 (see WS 7.3 dated today). Contractor immediately resumed AS excavation, including removing blasted rock between AS Sta. 5+00 and 5+50 left of AS CL. Usable excavated SC material being transported from AS to dam at approx lift elevation 713 and placed in Zone 2 upstream of Zone 1. Rocky material being removed from AS and stockpiled upstream along planned left descending shoreline. CL material from borrow area approx 200 to 300 feet upstream of dam CL sta 6+50 to

Daily Diary (Excavation Example)—continued

10+50 being placed in dam Zone 1. 12:00 – 1:00 lunchbreak. Excavation and fill operations continued until 5:00. At 4:00, Contractor began shaping and smooting borrow area and building a diversion to divert water away from borrow pit in anticipation of rain. Contractor left at 5:30 p.m. I left site at 5:30 p.m.

J.D. Douglas

NEH 645 CL 13.1 RCC Construction Checklist

The following checklist provides guidance for examining the quality of RCC construction. The checklist does not address all of the conditions that may exist related to RCC construction. The checklist should be used for guidance only as the inspector examines the work, and should not be relied upon as a comprehensive list of items to check. Inspectors should also use their own experience and knowledge of RCC and conventional concrete for guidance on what to examine and look for during inspections. Some items may not be listed. Some listed items may not apply to every project.

Project Name: _____ Project #: _____

Location: _____ Date: _____

Field Inspector: _____

Work Inspected: _____

No.	Inspection item	Yes	No	NA
1. Materials				
1.1	Types of cement and pozzolan used in the RCC mix is in accordance with the job mix.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.2	Temperature of cement and pozzolan at time of delivery is at or below the specified maximum.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.3	Cement and pozzolan are maintained in an uncontaminated dry condition..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4	Combined (coarse and fine) aggregate used in the mix is graded in accordance with the job mix.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.5	Quality of the mix water complies with specified requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.6	Admixture is in accordance with the job mix.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Mix design				
2.1	Mix proportions are in accordance with the job mix.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.2	Other than minor reductions in water content, the job mix does not change without the engineer's concurrence.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Test section				
3.1	Contractor's test section plan has been submitted and concurred with by the engineer prior to beginning the test section.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.2	Test section is constructed at the approved location.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.3	Approved job mix is the only mix placed in the test section.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.4	Production roller and special compaction equipment used in the test section meet specified requirements and are the same planned for use during RCC production.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.5	Compaction equipment is operated at normal operating speeds.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Inspection item	Yes	No	NA
3. Test section—continued				
3.6	For soil foundations, a minimum of two 12-inch lifts are placed below the lift where the AMD is determined.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.7	TAFD is accurately determined for the field mix used in the test section.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.8	Prior to determining the AMD, all RCC is compacted to a density equal to or greater than 96 percent of the TAFD.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.9	AMD is determined as per the process specified in Spec 3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.10	Any modifications to the job mix are concurred with by the engineer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.11	After the AMD is determined, all RCC incorporated into the structure is compacted to the specified density.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.12	Air content and density of the mix are documented.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.13	Fifteen cylinders are made from the mix.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.14	Ten cores are made 13 days or more after the RCC is placed in the test section.			
3.15	Curing is demonstrated to conform to Spec 36.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.16	If the test section is not incorporated into the structure, it is disposed of as specified.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.17	All test section operations, including the pre- and post-test section briefings, are well documented.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Batching and mixing				
4.1	Plant operator's experience is documented and the operator exhibits the capability to oversee the batching and mixing operation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.2	Batching equipment is in good condition, has adequate capacity, and hoppers discharge completely	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3	Drums are inspected and cleaned as needed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4	Specified minimum quantities of aggregates are maintained on site during production.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.5	Adequate quantities of all ingredients (aggregates, cement, pozzolan, water, and admixtures) are available on site to allow uninterrupted production.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.6	Only nonsegregated aggregates are introduced into the mixer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.7	Aggregate moisture is monitored and adjustments made to the mix at least once each shift or as needed to comply with job mix moisture requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.8	Drum mixers are not overcharged.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.9	Transit mixers are not used for mixing RCC.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.10	Admixtures are metered at the specified rate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.11	Plant operator visually inspects the mix for uniformity on a continuous basis.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.12	Periodic visual inspections for mix uniformity are being made by quality control personnel.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.13	Mix appears uniform or uniformity testing is conducted to verify uniformity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.14	Causes of uniformity are isolated and corrected.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.15	Mix uniformity is documented periodically and before and after uniformity problems are corrected.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Conveying				
5.1	Consistency or workability of RCC is maintained during conveyance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.2	Belt conveyors are of ample width.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Inspection item	Yes	No	NA
5. Conveying—continued				
5.3	RCC mixture is protected during conveyance from excessive drying or rain.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.4	Conveyor wipers and brushes are maintained in good working order.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.5	Drop chutes of sufficient length and diameter are provided where necessary to prevent segregation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.6	Free fall is limited to 5 feet or less.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.7	Long, inclined chutes are not used.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.8	Hauling equipment does not contaminate or damage recently placed RCC surfaces.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.9	Conveyance time does not exceed the maximum specified time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.10	Critical conveyor components are accessible for machine removal.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Wet Weather				
6.1	There is no mud or standing water on the bonding surface at the time of placement.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.2	Placement ceases if changes in mix consistency indicate a significant increase in mix moisture.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.3	Unhardened RCC is protected from erosive high intensity rainfall.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.4	RCC is not placed in rain falling at a rate equal to or greater than 0.1 inch in 20 minutes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Cold Weather				
7.1	RCC is not placed when the air temperature drops below 35 °F or the RCC mix is less than 40 °F.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.2	When there is potential for cold weather, all materials, labor, and equipment needed for adequate protection are on hand and ready for use prior to beginning placement.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.3	RCC temperature is maintained at or above 35 °F for a protection period equal to the curing period plus 7 days.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.4	Air and RCC temperatures are monitored and documented.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5	When required by the specifications, the RCC is insulated if the air temperature is 25 °F cooler than that of the RCC during the protection period.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.6	When specified, the RCC temperature does not drop more than 20 °F within the first 24 hours after insulation is removed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Hot Weather				
8.1	If misters are used for cooling, a fine mist is used to avoid adding too much moisture to the fine aggregate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.2	Mix placement temperature is monitored and documented and RCC is placed at a temperature at or below the maximum specified placement temperature.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.3	All ice added for cooling is melted and distributed throughout the mix before being discharged from the tilting drum or compulsory mixer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.4	Curing is begun immediately after compaction.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Foundation preparation				
9.1	Foundation is excavated or filled to the specified lines and grades.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2	Density of earthen foundation is uniform and meets specified requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.3	For rock foundations, all grouting is complete and surface irregularities are filled as specified.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Inspection item	Yes	No	NA
9. Foundation preparation—continued				
9.4	Rock foundations are clean.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.5	Foundation temperature is greater than or equal to 35 °F.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.6	Foundation is moist but free of standing water.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Forming				
10.1	Forms conform to the plan for obtaining vertical surfaces.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2	Forms are set to the planned line and grade and are well anchored and braced.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.3	Form oil is uniformly applied but not allowed to contact any bonding surface.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.4	Care is taken in the removal and resetting of forms to avoid damage to the previously placed RCC.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Spacing and spreading				
11.1	Foundation or lift joint preparation is complete as specified	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.2	Forms are set to specified line and grade, well anchored, and oiled.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.3	Care is taken to prevent damage to previously placed RCC when setting forms or conducting other operational.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.4	Lifts are of a uniform thickness to produce the designed grade within allowable tolerances.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.5	Equipment does not contaminate or damage the lift surface.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.6	Mix is deposited away from forms.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.7	Mix is deposited in a manner to limit segregation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.8	Mix is placed as near to its final location as possible.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.9	Mix is spread quickly and in a manner to limit segregation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.10	Mix is placed in a configuration that limits edge joints.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.11	Segregated mix is remixed or wasted.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.12	Tests are conducted to verify and document specification compliance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Compaction				
12.1	Production roller and special compaction equipment meet the specified requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.2	Production roller is used where possible.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.3	Special compaction rollers are only used where absolutely necessary.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.4	Lift thickness is controlled to prevent surface damage caused by over compacting.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.5	RCC is compacted to the specified density.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.6	Requirement for uniformity of density is met.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.7	Compaction is accomplished as soon as possible after the RCC is placed, and within the specified time limit.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Joints				
13.1	All transverse edge joints are spaced a minimum of 20 feet apart.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.2	All edge joints are trimmed as specified.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.3	All joints are treated as specified.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.4	All joints are kept moist and clean.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Inspection item	Yes	No	NA
13. Joints—continued				
13.5	Specified neat cement grout or bonding mortar is used.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.6	Bonding materials are evenly distributed and spread to the specified thickness.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.7	Bonding materials are not disturbed after placement.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.8	Bonding materials are not exposed longer than specified.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.9	Bonding materials do not set up or dry out before being covered with RCC.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Curing				
14.1	Prior to beginning RCC placement, curing equipment and materials are onsite and ready to be deployed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.2	Curing begins immediately after compaction.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.3	Curing continues until the RCC has been maintained at or above 40 °F for 14 days.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.4	Curing of repairs begins immediately after repair completion.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.5	Repair curing continues until the repair has been maintained at or above 40 °F for 7 days.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.6	Application of curing water does not erode the surface.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.7	Coverings are secured to prevent the movement of air between the RCC and the covering.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.8	Only white or reflective coverings are used during hot weather.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.9	Curing compounds are not applied to bonding surfaces or areas to be repaired.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.10	Curing compounds conform to specification requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.11	Surface is kept continuously moist until the curing compound is applied.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.12	All standing water is removed prior to applying the curing compound.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.13	Continuously agitating sprayers are used to apply curing compound.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.14	Manual hand pump sprayers are not used.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.15	Curing compound is reapplied every 7 days during the curing period.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.16	Where curing compound is used, the entire surface is uniformly covered at the specified rate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Protection				
15.1	RCC is protected against erosive rainfall.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.2	RCC is protected from cold weather damage.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.3	Vehicular traffic is prohibited if it causes damage to the RCC.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.4	Form removal is accomplished without damage to the RCC.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.5	Flows are diverted from the structure as needed to prevent damage.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments: _____

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