

INSPECTOR CHECKLIST: 504 - SOIL NAIL WALLS

Inspection Item		Yes	No	N/A	Remarks
PRE-CONSTRUCTION					
1	Shop Drawings/Safety Critical Plan submitted and approved?				
2	Contractor Qualifications and Construction Plan submitted?				
3	Materials per 504.25 (concrete class D, reinforcing steel, shotcrete, forms & falsework, geocomposite strip drains, and underdrains & pipes) submitted and approved?				
4	Have existing utilities been located? Marked? Deenergized? Protected? Conflicts resolved? Have equipment offsets from utilities been discussed?				
5	Has layout been completed? Limits of excavated limits? Hole locations? Are there offset stakes in place that can be used if other stakes are disturbed or destroyed?				
6	Does the Contractor have a plan to properly handle and maintain groundwater?				
7	Have bars been stored and handled properly? Do materials on site match those submitted and specifications?				
8	Have verification tests been performed to confirm Contractor's drilling and installation method and required pullout resistance?				
CONSTRUCTION					
9	Is the Contractor's qualified personnel on site during operation?				
10	Is the Contractor following "top-down" construction?				
11	Is Contractor only excavating within required limits and at height that will only be supported by nails per lift?				
12	Ensure Contractor has not started next lift until previous lift has been completed. Ensure grout has reached 1,000 PSI.				
13	Have any voids in excavated area or wall face been properly filled?				
14	Do locations, elevations, orientations, and lengths of soil nails match those in the plans?				
15	Have holes been grouted within 2 hours of drilling? Has grout been placed in one continuous operation?				
16	Have all components of drainage system been installed per plans?				
17	Has shotcrete been installed at proper thickness? Has proper finish been applied to surface?				
18	Have maturity meters been installed? Has grout met specified strength requirements?				
19	Has hardware been installed during initial set of shotcrete?				
20	Have nuts been hand-wrench tightened?				
21	Has testing apparatus been set up properly?				

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POST-CONSTRUCTION					
22	Has an excess of grout been used? Has the Engineer been notified of possible voids?				
23	Is there uniform contact between hardware and surface of shotcrete?				
24	Has proof testing been performed and do all results fall within specified limits? Have results been submitted to Engineer within 24 hours?				
<p>PLEASE NOTE THAT THE INTENT OF THESE CONSTRUCTION QUALITY ASSURANCE OBSERVATION CHECKLISTS ARE TO ASK QUESTIONS REGARDING OBSERVATION DUTIES THAT WILL PROMPT THE CONSTRUCTION OBSERVERS TO RESEARCH SOURCE DOCUMENTS TO DETERMINE ANSWERS. THEY DO NOT SERVE AS A REPLACEMENT TO REVIEWING AND KNOWING ALL SPECIFICATIONS AND SOURCE DOCUMENTS. SOURCE DOCUMENTS INCLUDE, BUT ARE NOT LIMITED TO: ATSSA QUALITY STANDARDS FOR WORK ZONE TRAFFIC CONTROL DEVICES; M&S STANDARDS; CONSTRUCTION BULLETINS; CONSTRUCTION MANUAL; SURVEY MANUAL; EROSION CONTROL MANUAL; HMA PAVING HANDBOOK; MUTCD; MATERIALS MANUAL; MATERIALS BULLETINS; PROJECT PLANS; STANDARD SPECIFICATIONS; PROJECT SPECIAL PROVISIONS; PROJECT STAND SPECIAL PROVISIONS; ETC. THE OBSERVER SHOULD ALSO CONSULT WITH THE CONSTRUCTION QUALITY ASSURANCE MANAGER AND OTHER EXPERIENCED PERSONNEL IF FURTHER CLARIFICATION IS REQUIRED.</p>					