

QMS MANUAL Procedure Definition

NTTA Projects	Original Issue Date: 04/28/2011	VQ-02	
Resource: Visual Quality	Revision: 4 Issue Date: 07/09/2025	Page 1 of 3	
Title: Construction Site Visual Quality Inspection			

1.0 PURPOSE:

The purpose of this procedure is to describe the Visual Quality inspection, documentation and reporting required of the Visual Quality Manager/Inspector prior to the placement of structural concrete for cast-in-place and precast structure elements when NTTA Special Specification 850 is a contractual requirement.

2.0 RESPONSIBILITIES:

- 2.1 Visual Quality Manager/ Inspector (VQMI) The VQMI shall be a qualified individual with experience in concrete construction on transportation or architectural building projects, knowledgeable of heavy construction materials and techniques, in particular concrete materials and concrete work with aesthetic requirements and successfully complete visual quality training. Although, not required but beneficial if the VQMI possess field testing certification from the Precast/Prestressed Concrete Institute (PCI), American Concrete Institute (ACI) or allied groups. The VQMI Inspector shall:
 - Serve as the primary on-site point-of-contact with construction managers and is responsible for daily visual quality inspection and documentation of concrete work, including bridges, walls and traffic barriers.
 - Be responsible for performing, documenting and submitting visual quality inspections daily on form (VQ-02-F1) and that the reports are technically accurate.
 - Be responsible for the review of precast concrete products to ensure cast concrete color is within the prescribed approved tolerance.
 - Be responsible for conducting forensic investigation activities to help improve processes for casting, curing, repair of cast-in-place and precast concrete related to color, quality of surface finishes and other appearance characteristics, should this be necessary.
 - Review all Visual Quality nonconforming conditions brought to them to determine if a NCR should be created.
 - Open a Visual Quality NCR as required for work that is deemed nonconforming product in accordance with VQ-03.

3.0 SCOPE/APPLICABILITY:

- **3.1** All NTTA projects shall comply with the NTTA Design Guidelines (DG) unless otherwise directed by the NTTA.
- 3.2 All NTTA projects shall comply with NTTA Special Specification Item 850 Gray Concrete Color and Finish.



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4.0 REFERENCES:

- NTTA Design Guidelines Manual
- NTTA Special Specification 850 for Gray Concrete Color and Finish
- DM-02 Project Delivery Record Management Requirements
- VQ-03 Visual Quality Control of Nonconforming Product

5.0 DEFINITIONS & ACRONYMS:

N/A

6.0 PROCEDURES:

- 6.1 All exposed cast-in-place and precast concrete structures that are required to meet NTTA Special Specification Item 850 Gray Concrete Color and Finish shall be thoroughly inspected and accepted for visual quality prior to the placement of concrete and immediately after placement. Activities to be inspected shall include installation of aesthetic form liners, installation of reinforcement steel and embedments, form installation, form cleanliness, form surface smoothness, and verification of concrete manufacture plant and delivery preparation for precast and cast-in-place elements. This inspection is to ensure that the concrete structures are complying with quality requirements that will offer the best opportunity for production and constructability of uniform product in terms of color, workability and formed surface characteristics.
- 6.2 Upon completion of concrete placement and removal of form and curing blankets, a visual quality inspection shall be performed of all exposed concrete for compliance with Special Specification 850. The VQMI will conduct the required visual quality checks and inspections of the concrete elements to ensure conformance to the plans, specifications and approved mockup. In addition, to the completion of the visual quality site inspection form, the visual quality check and/or inspection will be verified as having been accomplished by submitting a completed Construction Site Visual Quality Inspection Report (CSVQIR) Form (VQ-02-F1).
- 6.3 In accordance with VQ-03, any corrective action deemed necessary to bring concrete elements into conformance with the plans, specification requirements and approved mockup will need to be satisfactorily completed and will be verified by the VQMI prior to final acceptance of concrete elements.

7.0 REGULATORY REQUIREMENTS:

N/A

8.0 RELATED BOARD POLICY:

N/A



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9.0 COMPONENT DOCUMENTS:

• VQ-02-F1 Construction Site Visual Quality Inspection Report

10.0 FLOWCHART:

N/A

11.0 REVISION HISTORY:

Revision	Revised by:	Date Issued	DRN NO.	Reason for Revision
0	Bryan Dennis	04/28/2011	10258	Original Release
1	Bryan Dennis	10/11/2011	10339 & 10363	Replace QM-09 with VQ-03 in this procedure. QM-09 became obsolete and was split into two separate procedures, VQ-03 and CON-07. Updated 1.0 Purpose, 2.0 Responsibilities, and 6.0 Procedures. Deleted irrelevant references from 4.0 References.
2	Bryan Dennis	09/19/2016	10604	Change 850.1 to 850. This change would eliminate the need to update this procedure every time a newer version of 850 is issued.
3	Bryan Dennis	04/3/2017	10642	Updated title of SS 850 to reflect spec title revision.
4	Tony Lucido	07/09/2025	11128	Updated title and procedures.