

EPDS – Visual Quality NCR Workflow Reference Card

Process Flow	Roles	Owner Inputs / Actions	EPDS Work Flow	Notifications	State
	Originator Visual Quality Manager	Input: - Title, Location, Description - Responsible Party - Date Reported - Custom Message * Please propose solution... Attach: - Supporting documents Notes: Only the Construction Manager may forward a VQM NCR to the Contractor	Ad-hoc Forward to Visual Quality Manager DRAFT Ad-hoc Forward to Construction Manager	CC: DPM of Construction NTTA Design Guidelines Mgr	DRAFT
	Construction Manager	Review: - Review Title, Location & Description Input: - Resolution Note - Custom Message * Propose a solution ...	Y Ad-hoc Forward to Contractor	CC: CM/PM NTTA Design Guidelines Mgr	DRAFT
	Contractor	Input: - Proposed Solution - Recommended Resolution - Custom Message * Please review the proposed solution...	ACTIVATE to Visual Quality Team R REACTIVATE to Visual Quality Manager	CC: CM/PM Construction Mngr	ACTIVE
	Visual Quality Manager	Review: - Recommended Resolution - Proposed Solution Rejected: - Input Dispute Notes - Custom Message * Rejection Comments Accepted: - Input Resolution Note - Custom Message * Accept/Reject statement	R SUSPEND to Construction Manager Y Go To "A" N Ad-hoc Forward to Construction Manager	CC: CM/PM DPM of Construction	SUSPEND
	Construction Manager	Review: - Recommended Resolution - Proposed Solution Input: - Resolution Note - Custom Message * Accept/Reject statement	N SUSPEND to Contractor Y Ad-hoc Forward to CM / PM	CC: Visual Quality Team DPM of Construction	SUSPEND
	Corridor Manager or Project Manager	Review: - Recommended Resolution - Proposed Solution Input: - Resolution Note - Custom Message * Accept/Reject statement	N SUSPEND to Construction Manager Y Ad-hoc Forward to NTTA Technical Oversight Leader	CC: Visual Quality Team DPM of Construction	SUSPEND
	NTTA Design Guidelines Leader	Review: - Recommended Resolution - Proposed Solution Input: - Resolution Note - Signed Off Date - Custom Message * Accept/Reject statement Notes: - May escalate to DPD or AED for approval	N SUSPEND to Construction Manager E Ad-hoc Forward to DPD and/or AED Y Ad-hoc Forward to Resident Engineer	CC: Visual Quality Team DPM of Construction CM/PM	SUSPEND
	Visual Quality Manager	Input: - Resolution Note - Custom Message * Proceed forward with approved solution... Attach: - Supporting documents Notes: Accept-As-is shall be closed and notifications sent <u>Rework / Repair / Replace</u> shall be submitted for closure to the Contractor via the Construction Manger	Y CLOSE to Construction Manager N SUBMIT FOR CLOSURE to Construction Manager	CC: DPM of Construction CM/PM NTTA Design Guidelines Mgr Contractor	CLOSE
	Construction Manager	Input: - Resolution Note - Custom Message * Proceed forward with approved solution...	Y Ad-hoc Forward to Contractor	CC: CM/PM NTTA Design Guidelines Mgr	DRAFT
	Contractor	Input: - Custom Message * Solution implemented Attach: - Supporting documents	Ad-hoc Forward to Visual Quality Team	CC: Construction Mngr	PENDING CLOSURE
	Visual Quality Manager	Input: - Inspection Log * Inspection Date/Notes - Custom Message * Closing statement Attach: - Supporting documents	N SUSPEND to Construction Manager Y CLOSE to Construction Manager	CC: DPM of Construction CM/PM Visual Quality Team PMO Quality Manager	SUSPEND
				CC: DPM of Construction CM/PM Contractor PMO Quality Manager	CLOSE

VISUAL QUALITY NCR QUICK NOTES

Purpose: The workflow is provided as a tool to implement the NTTA's process for the identification, resolution, and re-inspection of construction nonconformances for Visual Quality issues. This tool complies with QMS QM-09 Control of Nonconforming Product – Construction.

Definitions:

- Visual Quality nonconformances are defined as the failure to meet plans and/or specifications upon the completion of a discrete and measurable element of construction (i.e. individual pre-cast units, individual concrete placements, lift of earthwork, etc.). Subsequent work that builds upon an identified nonconforming element shall not proceed until approval of the proposed solution has been received
- Accept-As-Is – No actions needed, the defect is acceptable
- Repair - May meet the required functional use, but this action will not bring the nonconformance into compliance with original plans and specifications
- Rework – Upon completion the corrections made will bring the identified nonconformance into compliance with the original plans and specifications
- Replace - Remove and replace nonconformance at the Construction Contractor's expense

Responsibilities –

NCR Originator – Any individual who becomes aware of a nonconforming condition shall bring it to the attention of the Visual Quality Assurance Manager. The originator is responsible for ensuring that identified nonconforming products are segregated and controlled to prevent the inadvertent use or installation

Construction Contractor – The Construction Contractor is responsible for responding to all assigned NCRs to the Visual Quality Assurance Manager. The Construction Contractor shall:

- Propose a solution to the Resident Engineer on all NCRs assigned to them
- Notify the Visual Quality Assurance Manager of proposed solution for Visual Quality NCR
- Notify the Resident Engineer or Visual Quality Assurance Manager when the proposed solution has been implemented and aide in the verification of the actions taken

Visual Quality Assurance Manager – the Visual Quality Assurance Manager shall be responsible to determine if a NCR should be created with regard to visual quality and shall:

- Review all Visual Quality nonconforming conditions brought to them to determine if a NCR should be created
- Open new NCR when required
- Approve / Reject all Visual Quality NCR in accordance with Table I
- Forward to the Construction Manager when the Visual Quality NCR has a resolution of "Repair", "Rework" or "Accept-As-Is"
- Forward Final Approval of Visual Quality NCR to the Construction Manager for implementation
- Verify that the Construction Contractor has completed the action required by a Visual Quality NCR and then close the NCR

Construction Manager – The Construction Manager is responsible for monitoring and tracking all NCRs initiated by the contractor or construction management to ensure timely resolution. The Construction Manager shall:

- Communicate schedule delays or budget over runs to the CM / Project Manager
- Forward Visual Quality NCR to the Construction Contractor to obtain proposed solution
- Should the NCR result in a construction change order, it shall be handled in accordance with *CON-03, Construction Change Order Process*.
- Review and recommend for approval or rejection all NCRs categorized as "Rework", "Repair" or "Accept-As-Is"

Corridor Manager / Project Manager – The CM or Project Manager shall:

- Monitor all NCRs and report on any critical issues to the PMO Construction Manager, Project Delivery Office and the PMO Quality Manager
- Monitor all NCRs for potential schedule delays or budget over-runs and capture these in accordance with *PC-03, Exception Reporting* procedure
- Review and recommend approval or rejection of all NCRs categorized as "Repair" or "Accept-As-Is"

NTTA Design Guidelines Manager– The NTTA Design Guidelines Manager is responsible to review and provide final approval on all Visual Quality NCRs categorized as "Repair" or "Accept-As-Is" resolution. At their discretion, the NTTA Design Guidelines Manager may obtain the approval of the Director of Project Delivery and / or the AED of Project Delivery.

Disposition Approval Matrix and Response Time Requirements:

Resolution	Contractor	Visual Quality Assurance Manager	Construction Manager	Corridor Manager / Project Manager	NTTA Design Guidelines Manager	DPD & / or AED*
Accept-As-Is	N/A	Approve or Reject	Approve or Reject	Approve or Reject	Approve or Reject	Approve or Reject (*)
Repair	N/A	Approve or Reject	Approve or Reject	Approve or Reject	Approve or Reject	Approve or Reject (*)
Rework	N/A	Approve or Reject	Approve or Reject	N/A	N/A	N/A
Replace	N/A	Approve	N/A	N/A	N/A	N/A
Response Time (Business days)	5	2	2	2	2	N/A

*Approval is optional and may be requested by the NTTA Design Guidelines Manager

**FOR REFERENCE ONLY –
Refer to QMS procedure QM-09 for controlled version**

FOR PROCESS QUESTIONS –
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