

## **Appendix A Lead Unit (Project Engineer) Project Specific Quality Control Plan**

The Lead Unit PSQC Plan addresses instilling quality throughout the various phases that make up the project development process from project identification through RTL. For each phase, a specific Quality Milestone (QM) is discussed followed by the Quality Control Elements (QCE) that build to that QM. Following the narrative are diagrams of the lead unit's PSQC Plan showing the interaction between the QCEs and the QMs for each of the four phases.

### **Project Initiation Document Phase**

**Begin Functional Unit Task:** Achieving this milestone provides a quality assurance that the project has been defined and that the Local Agencies and PDT understand and agree with its definition. The needs for specific functional unit products have been identified and requests have been initiated. The functional unit confirms that the request has been received and reviewed for completeness. The PE and technical specialist are both in agreement as to the product required. This milestone occurs at various times during the PID process; some requests will occur at the start of the phase (traffic forecast, accident analysis), and some later in the process (structural section, TMP data sheets). Each request initiates a cycle of coordinating specific needs, submitting the request/information and following up to ensure the appropriate information was relayed and received.

**PDT Kickoff Meeting:** The PDT meets to kick-off the PID phase. The PM, with input and concurrence from the project sponsor, Design Engineer (DE) or Advance Planning Engineer and PE will identify the appropriate Functional Units and local agencies for representation on the initial PDT and document the members selected. The Program Advisor, PM and DE will develop an initial document or charter covering expectations for scope, need & purpose, plus a preliminary workplan for presentation at the kickoff meeting. The initial PDT members will then discuss the project's scope, cost, schedule, and assigned resources to provide feedback.

**Organize PDT:** With input from the kickoff meeting, the PM will identify additional Functional Units and local agencies for representation on the team and document all PDT members selected. A schedule for future PDT meetings, whether held monthly, quarterly, or at other intervals, is established (usually at the kick-off meeting). A field review is conducted to familiarize the PDT with the project features. New members to the PDT, both internal and external, are brought up to date on the project status at the regularly scheduled PDT meetings.

**Set Baseline Project Quality Matrix (PQM):** The PQM is initially developed by the PE, with concurrence from the DE. The PQM should address the initial expectations of the project charter and is tailored to the type of project, the anticipated issues (environmental, structures, traffic, etc), and the experience level of personnel assigned. The PQM is presented to the PDT for their review and approval. The PQM would specifically cover the activities planned during the PID phase; activities anticipated during subsequent phases could also be identified and added to the PQM.

**PDT Concurrence:** The PDT confirms the customer's expectations for the project. The PDT understands and concurs with the project scope, cost, schedule, and resources.

**Local Agency Concurrence:** Prominent project features are presented to Local Agency representatives to confirm concurrence with project scope, cost, schedule, and resources/participation. Local agencies typically include the project stakeholders: the Regional Transportation Planning Agency, and cities and counties within the project limits. Regulatory agencies, local developers, and major traffic generators/destinations may also be involved depending on the type of project and funding sources.

**Initiate Functional Unit Task Requests:** The PE, or delegated staff, prepares a request to the functional unit specifying the product desired. The PQM lists the numerous functional unit requests that could be necessary during this phase. Prior to submitting the request, the DE reviews not only the request but also the project design to date that is the basis of the information in the request. The number of requests made prior to Management Concurrence varies with the size, type and complexity of the project being developed. Initiation of tasks will be proportionate to the information required to prepare for and present to management for concurrence, while some tasks will be requested after Management endorsement.

**Management Concurrence:** Achieving this milestone provides a quality assurance that the appropriate staff resources are assigned to this phase of the project; the project staff are familiar with the project features and issues, and are empowered to provide direction relative to their specialty; the PQM has been developed by the PE and reviewed and approved by the rest of the PDT; and the project stakeholders concur with the project's purpose, need and associated scope. This milestone provides an opportunity for Executive Management to confirm project viability and endorse further development.

**Coordinate/Follow-up with Functional Unit Needs:** Lead Unit staff discusses with the individual functional unit the specific information that it needs from the lead unit, and how that information will be used. Most functional units have developed request forms to elicit the information that they require. At a minimum, the PE should insure that the latest version of the request form is being used. Typically additional mapping accompanies the request. The PE should coordinate with the functional unit specialist to ensure the mapping is produced in a format and scale usable by the specialist. After requests are submitted, the PE follows up with the Functional Unit technical specialist to confirm that the information in the request is sufficient and there is a clear understanding of the product requested.

**Ensure Local Agency Involvement:** Proposed Changes to or addition of items that involve or impact agreements/participation of Local Agencies should be shared and documented to maintain their concurrence.

**Conduct Scheduled PDT Meetings:** The PDT should use their meetings to keep everyone informed of the status of the project, as well as introduce potential changes or new issues that need resolution. The Lead Unit can also call unscheduled meetings when the PE or Functional Senior feels they are warranted.

**Ensure All Preliminary Issues Are Documented/Addressed:** The PE, with corroboration of the DE, TM, and the PM, confirms that all preliminary issues and risks have been considered and presented in the draft PID such that it acts as a tool for Management to make an informed decision on viability and further development.

**Updated Project Presentation For Management Endorsement:** The Lead Unit and the PM will present the project to Management for concurrence. This can range from a sit down meeting with key decision makers to a formal presentation to all of Executive Management and is dependant on the project type, complexity and priority.

**Draft Circulation and Review:** Achieving this milestone provides a quality assurance that the draft Project Initiation Document contains the appropriate information to allow project stakeholders to decide whether to approve the project. The project assumptions have been reviewed and validated. The design elements have been reviewed and approved for conformance with design standards. The functional unit product delivered to the Lead Unit meets the project's needs and conforms to scope, cost and schedule. Delivery includes a quality assurance statement in the transmittal memo from the Functional Manager indicating that the product conforms to their QC/QA plan.

Achieving this milestone also provides a quality assurance that most, if not all functional deliverables have been received, that they have been reviewed both during development and at delivery and have been incorporated into a final draft that is ready for circulation. Prior to district circulation, a PE peer review, Branch & Office Chief review, PDT review, Safety and Constructability Review as appropriate are completed as outlined in the Baseline PQM. Finally, Local Agencies will have completed a review to assure that agreements outlined in the document match their expectations.

**Complete Functional Unit Requests/Review Draft Functional Deliverables:** The PE should confirm that all Functional Unit requests have been made and continue with ongoing reviews of draft deliverables to ensure they meet requirements set forth in the request.

**Preliminary Geometric Approval Drawings (GAD):** The proposed roadway geometrics are reviewed and approved. The PE has completed the design checklist included in Design Information Bulletin (DIB) 78-01. The PE has reviewed the design with the Headquarters Traffic Liaison, the Design Reviewer, and the Design Coordinator. Exceptions to design standards and ADA standards have been prepared and approved.

**Storm Water Data Report (SWDR) Review and Approval:** A SWDR for the PID phase is prepared identifying the Best Management Practices (BMP) proposed or required for permanent treatment of storm water, as well as the temporary BMPs proposed to be employed during construction. Cost estimates for these BMP have been developed. The concepts in the SWDR are discussed with representatives from the appropriate Regional Water Quality Control Board for their concurrence. The SWDR is reviewed and approved by the District Storm Water Coordinator, the Project Manager and representatives from Landscape Architecture and Maintenance.

**Value Analysis (VA) Study:** If appropriate, a VA Study is conducted to provide an independent review of the proposed alternatives. Additional alternatives that provide cost savings or performance enhancements are suggested. After concurrence by the stakeholders, the PDT incorporates the new alternatives.

**Assemble Draft for Review:** A draft version of the PID is prepared for a number of different reviews. The first is a peer review done by an experienced PE. This is followed by reviews by the Branch Chief and Office Chief, or their designates. A PDT review by all members follows, focusing on how the elements related to their specific specialty fit with the project as a whole. A Safety Review is completed, followed by the District/Constructability Review. With each review, comments and their resolution should be documented and placed in the project files.

**Local Agency Review:** Proposed improvements are presented to Local Agency representatives for their comments and ultimately their concurrence. Preliminary cost estimates and construction schedule are provided. Impacts to local facilities and proposed mitigation are discussed, including issues requiring maintenance by the Local Agency. Improvements requiring a Cooperative Agreement are identified. Conceptual Cooperative Agreements, Maintenance Agreements, and Utility Sharing Agreements are included.

**Document Approval and Signature:** Achieving this milestone provides a quality assurance that the document is complete, has gone through a number of quality assurance reviews, that Local Agency concerns have been addressed, comments have been documented and resolved, that a Management Circulation has been completed and final comments have been addressed. Circulation for signature provides an approved document that is ready for distribution.

**Finalize Outstanding Functional Unit Deliverables:** Any deliverables that have not been completed must be finalized before document approval and signature.

**Address Local Agency concerns:** Concerns raised during review must be resolved prior to document approval and signature.

**Incorporate Comments and Document Decisions with Comment Resolution Table:** Again, all comments should be addressed and their resolution documented by the PE. A comment resolution table (or similar documentation) is distributed to the reviewers for their information and satisfaction.

**Circulate for Management Review/Complete Final Comment Resolution:** Management should be presented with a document for final review prior to signature circulation. Any comments should be resolved and a final document prepared for signature.

**Circulate Document for Signature:** The District Director should be presented with a completed document and a summary of major issues resolved during review.

**Project Initiation Document (PID):** Achieving this milestone provides a quality assurance that the PID identifies alternatives and improvements that fully meet the project's purpose and need at a reasonable cost. The project's potential effects on the environment have been identified and possible mitigation determined.

**Update Project Quality Matrix (PQM):** The matrix, prepared at the start of the PID phase and tracked during the phase, is reviewed for performance and applicability during the PID phase. The plan is updated as necessary.

**Circulate Approved Copies:** Approved copies of the report should be distributed to the appropriate recipients. A list is maintained by the District Advanced Planning unit.

**Forward Project Binders & Updated PQM to Responsible Design Unit:** If a design unit has not been identified, Advanced Planning retains all records until a unit is assigned.

**PID Complete:** This completes the PID phase of the Project Development process.

## **Project Approval & Environmental Document Phase**

**Management Concurrence:** Achieving this milestone provides a quality assurance that the appropriate functional units are represented on PDT. Any new staff assigned to the project have been introduced. The PQM has been updated for the PA&ED phase based on information learned during the PID phase. The current project stakeholders concur with the project's purpose, need and associated scope.

**Organize PDT:** The PDT meets to kick-off the PA&ED phase. The PDT membership is reviewed to assure continued representation by all functional areas involved. New members to the PDT are introduced and their role discussed. The project's scope, cost, schedule and planned resources are reviewed. The PDT meeting schedule is established and a field review scheduled.

**Validate Project Quality Matrix (PQM):** The PQM developed during the PID Phase is reviewed for validity and updated, at a minimum, for activities planned during the PA&ED Phase.

**PDT Concurrence:** The PDT confirms the customer's expectations for the project. The PDT understands and concurs with prior commitments for the project scope, cost, schedule, and resources. Potential changes shall be evaluated by the PDT.

**Local Agency Concurrence:** The proposed improvements are presented to Local Agency representatives to confirm concurrence with the proposed scope, cost, schedule and resources. Occasionally new local representatives are elected, or new regulations are adopted by an agency with jurisdiction over a component of the project. In these instances, renewed concurrence with the project features is critical for quality.

**Begin Functional Unit Task:** Achieving this milestone provides a quality assurance that the request and appropriate supporting information has been transmitted to the functional unit. As with the PID phase, this milestone occurs at various times during the PA&ED phase.

**Coordinate Functional Unit Needs:** The PE and functional unit specialist need to communicate prior to the request being prepared/submitted. Typically request made during the PA&ED phase require more detail to be provided to the functional units. Good coordination ensures that the appropriate needed information is identified and submittal formats and scales are acceptable. The PQM includes a listing of possible functional unit requests as prompts for the PE.

**Submit Functional Unit Task:** The PE prepares the request to the functional unit specifying the product desired. The design to date, which is the basis for the detailed information provided to the functional units, must be reviewed by the Functional Manager prior to the request being submitted.

**Follow-up:** Similar to the QCE in PID phase, good communication between the PE and the functional unit specialist is essential for quality.

**Complete Functional Unit Task:** Achieving this milestone provides a quality assurance that the functional unit product delivered to the lead unit meets the project's needs and conforms to the scope, cost and schedule. The product will be delivered with a quality assurance statement from the Functional Manager indicating that the product conforms to their QC/QA plan. As with the PID phase, this milestone occurs at various times during the PA&ED phase.

**Review Draft Functional Unit Task:** The PE reviews a draft version of the product for conformance with the request and the project's scope.

**Receive Functional Unit Deliverable:** The PE receives the final product from the functional unit, with any previously requested revisions included. After reviewing deliverables received the PE incorporates the functional unit's deliverable into the overall project.

**Ready to Circulate:** Achieving this milestone provides a quality assurance that the Project Report (or Draft Project Report) contains the appropriate information to allow project stakeholders to decide whether to advance the project to the design and construction phases. The report is complete, and contains the necessary supporting data developed by the functional units. The report and supporting information has been reviewed by the PDT. The intermediate approvals (VA implementation, design exceptions) have been obtained, as needed. The cost estimate captures the items of work and includes contingencies appropriate for the estimate's level of detail.

**Geometric Approval Drawings:** The proposed roadway geometrics developed during the PA&ED phase are reviewed and approved. The PE has reviewed the updated geometrics with the Headquarters Traffic Liaison, the Design Reviewer, and the Design Coordinator. Any additional exceptions to design standards and ADA standards have been prepared and approved.

**Storm Water Data Report Review and Approval:** A SWDR for the PA&ED phase is prepared. The information and assumptions contained in the PID version of the SWDR are reviewed and updated. Cost estimates for the proposed BMP are updated. Any significant changes to the previously approved concepts are discussed with representatives from the appropriate Regional Water Quality Control Board for their concurrence. The SWDR is reviewed and approved by the District Storm Water Coordinator, the Project Manager and representatives from Landscape Architecture and Maintenance.

**Value Analysis Study:** If appropriate, a VA Study is conducted to provide an independent review of the proposed alternatives.

**Draft Cooperative Agreement Conceptual Approval:** Project features which will require a Cooperative Agreement, a Maintenance Agreement, or a Freeway Agreement are identified. These features are discussed with the affected agency and an agreement-in-principle negotiated. A draft agreement, as appropriate, is prepared for inclusion in the Project Report.

**Reviews:** A draft version of the Draft Project Report or Project Report (depending on the type of environmental document prepared) is reviewed by the lead unit and the PDT prior to circulation. The first review is a peer review done by an experienced PE. This is followed by reviews by the DE and Office Chief, or their designates. Finally, the PDT members review the document, focusing on how the elements related to their specific specialty fit with the project as a whole.

**Comment Resolution:** Comments received during the reviews are documented by the PE along with their proposed disposition. This comment resolution table is distributed to the reviewers for their information and satisfaction.

**Project Approval/Environmental Document (PA&ED):** Achieving this milestone provides a quality assurance that the Project Report identifies improvements that fully meet the project's purpose and need at a reasonable cost. The project's effects on the environment have been evaluated in accordance with applicable environmental regulations and potential adverse impacts, where unavoidable, have been mitigated to an acceptable level. The project roadway geometrics have been reviewed and any necessary exceptions approved. Project staging issues have been resolved and an updated cost estimate prepared. The right-of-way needs and utility impacts, along with their associated costs, have been identified.

**Reviews:** A draft version of the report and the preliminary plans are distributed for concurrent review. Constructability review is conducted as well as a districtwide review.

**Comment Resolution:** Comments received during the reviews are documented by the PE along with their proposed disposition. This comment resolution table is distributed to the reviewers for their information and satisfaction.

**Update Project Quality Matrix (PQM):** The PQM, updated at the start of the PA&ED phase and tracked during the phase, is reviewed for performance and applicability during the PA&ED phase. The plan is updated, if necessary.

### **Draft Plans Specifications & Estimate Phase**

**Management Concurrence:** Achieving this milestone provides a quality assurance that the appropriate functional units are represented on PDT. Any new staff assigned to the project have been introduced. The PQM has been updated for the PA&ED phase based on information learned during the PID phase. The current project stakeholders concur with the project's purpose, need and associated scope.

**Organize PDT:** The PDT meets to kick-off the design phase. New members to the PDT are introduced and their role discussed. The project's scope, cost, schedule and planned resources are reviewed. The PDT meeting schedule is established and a field review scheduled.

**Validate Project Quality Matrix (PQM):** The PQM updated during the PA&ED Phase is reviewed for validity and updated, at a minimum, for activities planned during the design Phase.

**PDT Concurrence:** The PDT confirms the customer's expectations for the project. The PDT understands and concurs with the project scope, cost, schedule, and resources.

**Local Agency Concurrence:** The proposed improvements are presented to Caltrans Management and Local Agency representatives to confirm concurrence with the proposed scope, cost, schedule and resources.

**Begin Functional Unit Task:** Achieving this milestone provides a quality assurance that the request and appropriate supporting information has been transmitted to the functional unit. As with the PID & PA&ED phases, this milestone occurs at various times during the Design phase.

**Coordinate Functional Unit Needs:** The PE and functional unit specialist need to communicate prior to the request being prepared/submitted. Request made during the design phase are typically for products to be inserted directly into the plan set (electrical plans, signing and striping plans). The PQM includes a listing of possible functional unit requests as prompts for the PE.

**Submit Functional Unit Task:** The PE prepares the request to the functional unit specifying the product desired. The design to date, which is the basis for the detailed information provided to the functional units, must be reviewed by the DE prior to the request being submitted.

**Follow-up:** Good communication between the PE and the functional unit specialist is essential for quality.

**Intermediate Checkpoints:** Achieving this milestone provides a quality assurance that the proposed design features have been reviewed and approved and that quality plan production is under way. The preliminary plans from the functional units have been reviewed for conformance with the overall product. Preliminary staging plans have been developed to sufficient detail to verify constructability. Utility conflicts have been identified and conflict maps sent to the affected utility companies. The preliminary plans and cross sections (60% plans) have been reviewed and the comments resolved.

**Review Functional Unit Progress:** The functional units provide a preliminary version of their final product to design for review. Some functional units product final plans, and others prepare contract documents or acquire permits. The PE reviews the functional unit's preliminary product to ensure conformance with the overall project.

**Final Geometric Approval Drawings:** The final proposed roadway geometrics are reviewed and approved. The PE has reviewed the updated geometrics with the Headquarters Traffic Liaison, the Geometric Reviewer, and the Project Development Coordinator. Any additional exceptions to design standards and ADA standards have been prepared and approved.

**Execute Cooperative Agreement:** The Cooperative Agreement, if required, is prepared and reviewed by Caltrans and the local agency. Comments are resolved and the agreement is executed. Any other agreements that are required, a Maintenance Agreement or a Freeway Agreement, are prepared and approved.

**Reviews:** The preliminary plans and cross sections are reviewed by the lead unit and the PDT prior to circulation. The first review is a peer review done by an experienced PE. This is followed by reviews by the DE and Office Chief, or their designates. Finally, the PDT members review the document, focusing on how the elements related to their specific specialty fit with the project as a whole. After the PDT review, the comments are resolved. The plans and cross sections are circulated for concurrent safety and constructability reviews.

**Comment Resolution:** Comments received during the reviews are documented along with their disposition proposed by the responsible party. This comment resolution table is distributed to the reviewers for their information and satisfaction.

**Functional Unit Delivery:** Achieving this milestone provides a quality assurance that the functional units have completed their work and delivered their product to the lead unit. Accompanying the delivery is their quality assurance certification. The PE has reviewed the draft product prior to delivery, and any comments have been resolved by the functional unit. The PQM has been updated.

**Review Draft Functional Unit Delivery:** The PE reviews a draft version of the functional unit final product. The PE ensures that the product conforms to the scope and cross checks with the other plan sheets. The draft permits contains provisions that are buildable and appropriate for the project. The functional units resolve the comments.

**Functional Unit Delivery Meeting:** A meeting is held with the various functional units providing a product for the RTL phase. The components of the various products are discussed to ensure that the individual pieces fit together.

**Update Project Quality Matrix (PQM):** The PQM, updated at the start of the design phase and tracked during the phase, is reviewed for performance and applicability during the design phase. The plan is updated, if necessary.

## Ready to List Phase

**Initiate North Region Office Engineer (NROE):** Achieving this milestone provides a quality assurance that a complete, quality set of plans and estimates, reports, specialty specifications, and supporting information is delivered to NROE.

**Incorporation of Functional Unit Delivery:** The PE incorporates the functional unit's product into the overall plans. The PE reviews the plans as a whole, ensuring consistency and continuity between the design plans and the various functional unit products. The required permits have been secured, or conditionally approved pending paperwork by the regulatory agency. Final Utility Plans have been received from the utility companies and all conflicts resolved. The right-of-way contracts are signed and any required temporary easements cover

the anticipated construction period. The PE reviews the special provisions prepared by the functional units for conformance with the project scope.

**Storm Water Data Report (SWDR) Review and Approval:** The final SWDR is prepared. The information and assumptions contained in the PA&ED version of the SWDR are reviewed and updated. Cost estimates for the proposed BMPs are updated. Any significant changes to the previously approved concepts are discussed with representatives from the appropriate Regional Water Quality Control Board for their concurrence. The SWDR is reviewed and approved by the District Storm Water Coordinator, the Project Manager and representatives from Landscape Architecture and Maintenance. The PE signs and seals the final report.

**Reviews:** The preliminary plans, estimate and cross sections are reviewed by the lead unit and the PDT prior to submittal to NROE. The first review is a peer review done by an experienced PE. This is followed by reviews by the DE and Office Chief, or their designates. Finally, the PDT members review the document, focusing on how the elements related to their specific specialty fit with the project as a whole.

**Comment Resolution:** Comments received during the reviews are documented along with their disposition proposed by the responsible party. This comment resolution table is distributed to the reviewers for their information and satisfaction.

**Validate Project Quality Matrix (PQM):** The PQM updated during the design phase is reviewed for validity and updated for activities planned during the RTL phase.

**Complete Functional Unit tasks:** Achieving this milestone provides a quality assurance that all of the functional unit components are completed. The package has been reviewed by the lead unit and the PDT for conformance with the project scope and cost.

**Reviews:** The first review is a peer review done by an experienced PE. This is followed by reviews by the DE and Office Chief, or their designates. Finally, the PDT members review the document, focusing on how the elements related to their specific specialty fit with the project as a whole.

**Comment Resolution:** Comments received during the reviews are documented along with their disposition proposed by the responsible party. This comment resolution table is distributed to the reviewers for their information and satisfaction.

**Draft PS&E Circulation:** Achieving this milestone provides a quality assurance that complete, quality draft plans, specifications and estimate are ready for circulation to the district for final reviews. The plans are complete and in agreement with the estimate. The specifications include all of the nonstandard items as well as the specifications prepared by functional units. The draft permits and Right of Way (R/W) certification indicate that constraints are cleared or almost cleared. The PE has reviewed the draft specifications, permits and R/W certification to assure consistency and continuity.

**Reviews:** The first review is a peer review done by an experienced PE. This is followed by reviews by the DE and Office Chief, or their designates. Finally, the PDT members review

the document, focusing on how the elements related to their specific specialty fit with the project as a whole.

**Comment Resolution:** Comments received during the reviews are documented along with their disposition proposed by the responsible party. This comment resolution table is distributed to the reviewers for their information and satisfaction.

**Review Draft Permits:** The draft permits are reviewed by the PDT for conformance with the plans, specifications and estimate. Proposed permit requirements and restrictions are reviewed to ensure that the requirements are contained in the PS&E and are biddable and buildable.

**Review R/W Certification:** The R/W Certification is reviewed by the PE for conformance with the plans, specifications and estimate. The R/W contracts are reviewed to verify that any commitments made to property owners have been included in the PS&E.

**RTL Certification:** By certifying that the project is ready to list, the lead unit is assuring that the PS&E was prepared in accordance with the NR QMP, that the project estimate conforms to the programmed amount, and that the project is biddable, buildable, and cleared of all constraints. The draft PS&E was distributed for reviews, and the comments resolved. The final PS&E produced and readied for transmittal to headquarters for advertisement.

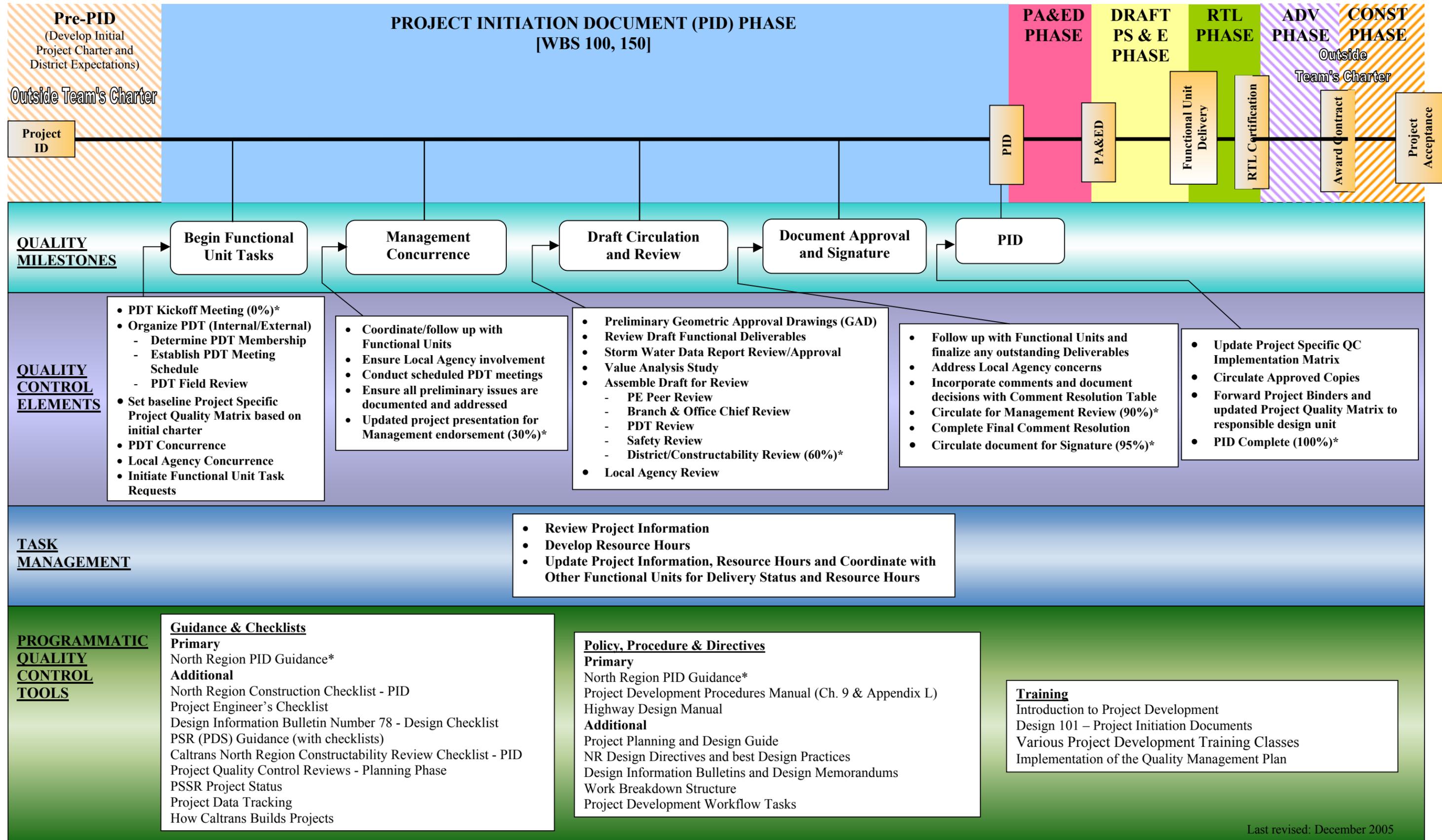
**Reviews:** The draft PS&E is distributed for concurrent review. Safety reviews and constructability reviews are conducted as well as a districtwide review.

**Comment Resolution:** Comments received during the reviews are documented by the PE along with their proposed disposition. This comment resolution table is distributed to the reviewers for their information and satisfaction.

**Complete Project Quality Matrix (PQM):** The PQM that was begun at project initiation is completed. The PDT meets to review the completed PQM and evaluates the level of quality ultimately instilled into the project. Decisions where opportunities to instill quality were redirected based on decisions made by the PDT, input from Executive Management, etc., are identified to provide lessons learned. The completed PQM is converted to an electronic format and a link to it is provided on a website (to be determined). The completed PQM's can be used as examples for future projects.

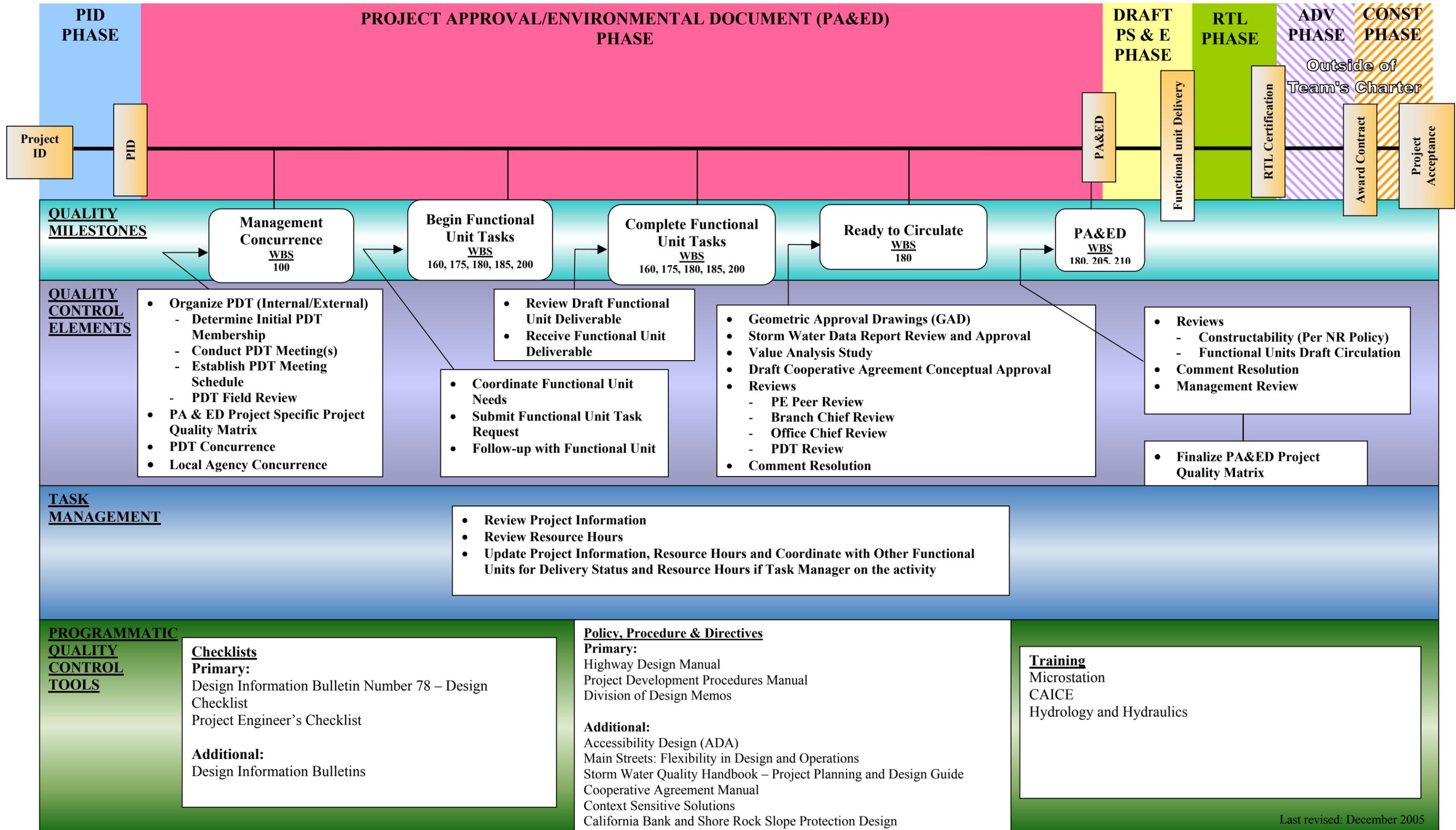
# NORTH REGION QUALITY MANAGEMENT PLAN

## Lead Unit Project Specific Quality Control Plan -PID PHASE-



# NORTH REGION QUALITY MANAGEMENT PLAN

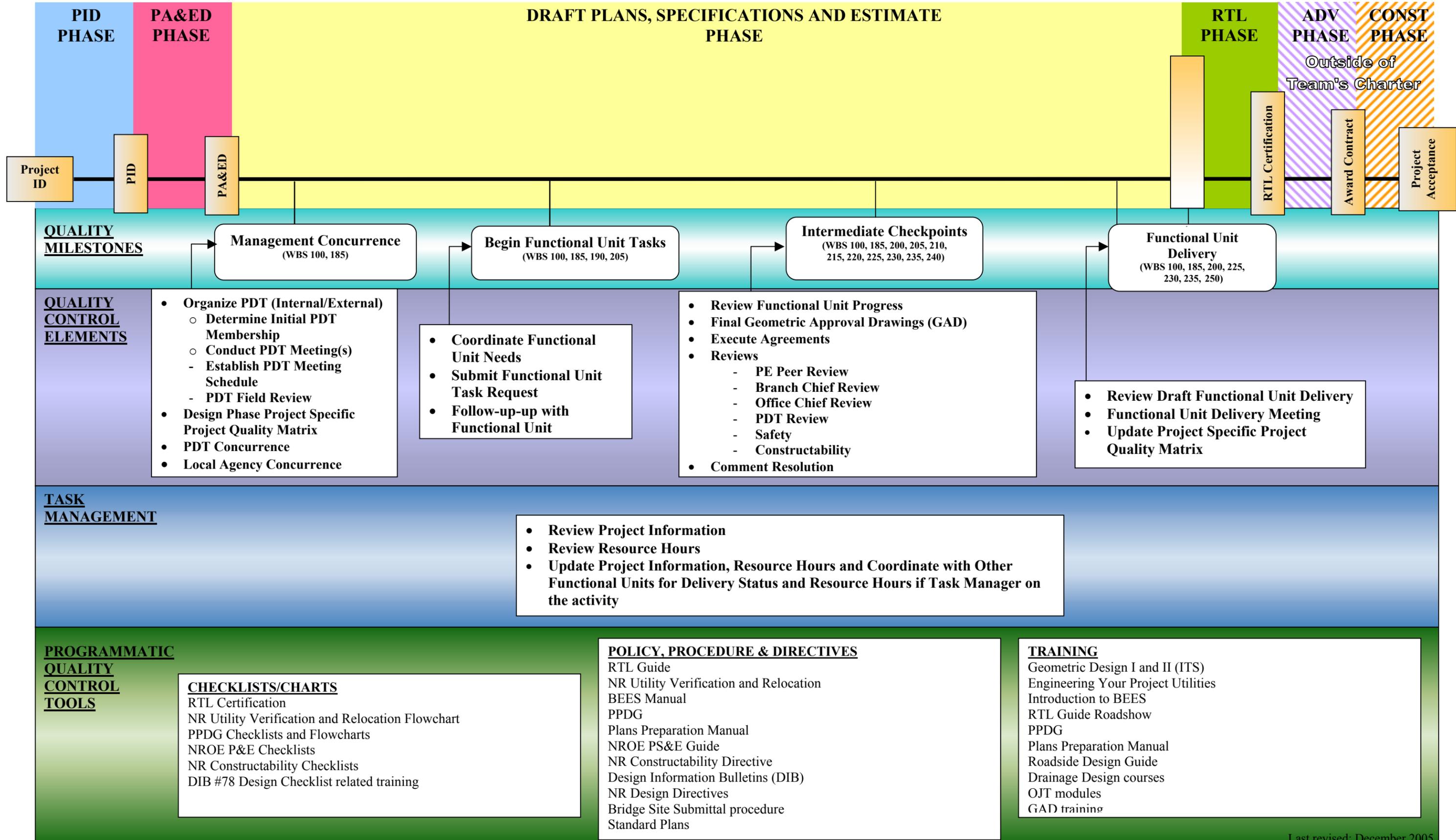
## Lead Unit Project Specific Quality Control Plan -PA&ED PHASE-



# NORTH REGION QUALITY MANAGEMENT PLAN

## Lead Unit Project Specific Quality Control Plan

**-DRAFT PS & E PHASE-**



# NORTH REGION QUALITY MANAGEMENT PLAN

## Lead Unit Project Specific Quality Control Plan -RTL PHASE-

