Attachment 1.3 Project Development Plans

1 Project Development Plans

General

- a) The general requirements for Project Development Plans (PDPs) are noted in Section 1.3 of the Technical Requirements.
- b) The PDPs shall be consistent with ISO principles (ISO 9001:2000 Quality Management Systems- Requirements; ISO 9004:2000 Quality Management Systems Guidelines for Performance Improvement; ISO 9000:2000 Quality Management Systems- Fundamentals and Vocabulary; ISO:19011:2004 Guidelines for Quality and/or Environmental Management Systems Auditing; ISO 14001:2004 Environmental Management Systems-Specifications with Guidance for Use).
- c) The PDPs shall comply with the requirements of the NEXT Contract Documents including the Technical Requirements, and shall ensure that when implemented, the Work covered by the Plans will comply with such requirements.

1.1 Design-Builder Management Plan

- a) The purpose of the Design-Builder Management Plan is to provide the Concessionaire with a clear view of the project management approach undertaken by the Design-Builder for all aspects and tiers of the Project. It shall clearly identify responsibilities and procedures for each Project management activity and demonstrate a thorough understanding of the Contract Documents and Project requirements.
- b) The Design-Builder Management Plan shall reference and consider all other PDPs and link their relevance to each other and to the management approach.
- c) The Design-Builder Management Plan is an umbrella document that describes the Design-Builder's managerial approach, strategy, and quality procedures to design, build, operate and maintain the Project and achieve all requirements of the Contract Documents. The Design-Builder Management Plan shall include an organization chart outlining the basic structure of the Design-Builder's Project organization including well defined roles for the design, construction, operations and maintenance; sub-organizations (such as consulting, subcontractors, suppliers) and a description of the roles; relationship with the Concessionaire and third parties; organizational chart with responsibilities, professional qualifications, and Work to be accomplished by each member of the management team and each sub-organization, including identified subcontractors and suppliers.
- d) The Design-Builder Management Plan shall describe how all PDPs fit within the overall quality management system, responsibilities for developing and maintaining the plans and the schedule for implementation.
- e) The Design-Builder Management Plan shall address the Design-Builder's schedule and procedures for preparation of amendments and submission of amendments to any part of the PDP.

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f) The Design-Builder Management Plan shall be linked to the QMSP.

1.2 Document Management Plan

- a) The Document Management Plan will define the document management approach for all Project documentation and will address:
 - i. the document management system;
 - ii. document management procedures;
 - iii. requirements for records retention;
 - iv. electronic and hardcopy data transmission, storage and sharing;
 - v. a logical, auditable and Project-compatible tracking system of all Project correspondence and documents for all phases of the Project.
- b) The Document Management Plan shall clearly define document management applicable to all aspects of the Project-management structure, tracking, updates, originator/recipient, document approvals tracking, searchable database, links amongst various documents, hard-copy and electronic filing.
- c) The Document Management Plan shall be appropriately structured to consider roles and participation by VDOT, the Lender's Technical Advsior, Concessionaire, Design-Builder, and third parties participating and having input regarding the Project.
- d) The Plan shall also provide for electronic data management and storage, and electronic access to project documents remotely, with the required electronic security procedures.
- e) The Document Management Plan shall be linked to the QMSP.

1.3 Quality Management System Plan

- a) The Quality Management System Plan (QMSP) will define the quality management systems during the design, construction and operations and maintenance. The Design-Builder shall or shall cause to be completed all quality assurance and quality control activities required to manage its own processes as well as those of its Contractors, and suppliers of any tier. The QMSP shall:
 - i. be fully compliant with VDOT's Minimum Requirements for Quality Assurance & Quality Control on Design-Build & Public-Private Transportation Act Projects (revised July 2018);
 - ii. be developed consistent with ISO 9001 principles and clearly demonstrate how it will lead to continuing improvement;
 - iii. define the Quality Management System roles and auditing responsibilities and procedures (internal and external);
 - iv. establish quality objectives that are measurable and quantifiable;

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- v. provide an organizational chart with roles, responsibilities and professional qualifications applicable to all stages of the project;
- vi. describe how the relevant requirements of the contract will be met;
- vii. integrate the services of the Lender's Technical Advisor for selected portions of the Work;
- viii. require any Contractor, or supplier employed by the Design-Builder for design, construction, maintenance or operation activities to develop, implement and maintain a quality management system compatible with the requirements of the Contract Documents;
- ix. be able to provide reports on quality with a tracking system, which at a minimum, includes:
 - 1. searchable data
 - 2. summary of inspection and quality control activities
 - 3. internal and external quality audits performed
 - 4. non-conformances and their status, such as quality item description; date opened; date closed; status (open, closed, pending, follow-up required); disposition (repair, reject, rework); status; corrective actions
 - 5. how the non-conformity has been accepted by the Concessionaire, if applicable
 - 6. updates to the QMSP
- x. provide a means and procedure for "escalating" quality concerns of the Concessionaire or the Design-Builder;
- xi. provide a linkage amongst relevant Project Development Plans and address all quality-related items in those plans;
- xii. provide a document management system;
- xiii. be updated regularly and produce a track-able record and reports of quality control, assurance and audits;
- xiv. explain the corrective action process for workmanship related quality issues in order to minimize the recurrence of such errors and quality problems.

1.4 Design Quality Management Plan

- a) The Design Quality Management Plan (DQMP) shall provide the organization, relationship and procedures that define clear lines of responsibility and well defined approach for meeting Project requirements and innovation in design approach.
- b) The Design Quality Management Plan shall be linked to the QMSP.

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- c) The Design Quality Management Plan shall define the design approach, flow charts and activities for the design of the Project and will address:
 - i. the design organization, responsibilities and professional certification;
 - ii. a drawing tier indicating organization and hierarchy of the Design-Builder's drawings;
 - iii. the design basis (e.g. design criteria, design standards and specifications);
 - iv. design validation, ensuring that the intended design meets its intended use;
 - v. stages where design reviews are conducted and design work is certified by appropriate design professionals, including Professional Engineers registered in the State;
 - vi. work zone and worker safety review during design;
 - vii. quality assurance and control;
 - viii. the breakdown of the Project design into design packages;
 - ix. the process the engineering consultants and subconsultants will use to design and seal each design package;
 - x. the system engineering process for the design of the systems components;
 - xi. the proposed strategy for integrating the facilities and systems component into the design process; design deliverables;
 - xii. design control-design input reviews, output reviews and verifications (design checks and professional review and seals) to ensure requirements have been;
 - xiii. design changes;
 - xiv. internal and external audits;
 - xv. document management;
 - xvi. provide regularly updated quality records and a tracking record of all quality control, quality assurance and audit records and a log of items and how they have been addressed, such as conformance, non-conformance, corrective actions and preventative actions;
 - xvii. the process by which the Design-Builder's team, the Lender's Technical Advisor, and the Concessionaire will be involved in the design review process;
 - xviii. reporting and documentation mechanism;
 - xix. linkage to other relevant PDPs and the QMSP.

1.5 Construction Quality Management Plan

a) The Construction Quality Management Plan will define the construction approach and activities for the construction of the Project and will address:

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- i. the construction organization and responsibilities including the contractors and subcontractors;
- ii. roles and professional qualifications of persons responsible for various aspects of the project;
- iii. outline of procedures and schedules;
- iv. sequence of construction activities;
- v. Project permitting and coordination with VDOT, the Concessionaire and external agencies;
- vi. safety during construction;
- vii. site security and access;
- viii. environmental management;
- ix. quality as outlined in the QMSP, specific to the construction phase;
- x. the breakdown of the Project construction into construction areas/segments;
- xi. the general construction sequence;
- xii. site temporary facilities and storage areas;
- xiii. field equipment and materials management;
- xiv. coordination with other projects, stakeholders, and impact of permitting;
- xv. compliance with the Contract Documents;
- xvi. reporting and documenting changes;
- xvii. industrial relation;
- xviii. as-built documents;
- xix. reporting and documentation mechanism;
- xx. the process for conducting all activities related to achieving Substantial Completion including the representative inspection and documentation verification steps of all parties;
- xxi. linkage to other relevant PDPs and the QMSP.

1.6 Environmental Management Plan

- a) The Design-Builder shall develop and implement a thorough approach to environmental management. The Design-Builder shall or shall cause to be maintained and updated an Environmental Management Plan that shall include:
 - i. procedures and a contingency plan (emergency response plan) for reporting, immediate actions, and Remedial Actions to be taken in the event of a potential environmental permit violation, dump, discharge, or spill of Hazardous Substances, including, as required by Law, the development and implementation of a Spill Prevention, Control and Countermeasures (SPCC) plan(s);

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- ii. plans for investigation, handling, monitoring, discharge, release, storage, removal, remediation transportation, tracking, reporting, and other disposition of any Hazardous Substance encountered or used on the Project, whether or not the presence of such Hazardous Substances constitutes a Hazardous Environmental Condition;
- iii. plans for initiating Remedial Actions in respect of any Hazardous Substances encountered on or used on the Project that constitute or could reasonably be expected to constitute a Hazardous Environmental Condition;
- iv. procedures for coordination with the Concessionaire and other emergency response-related agencies and organizations; and
- v. procedures for submission of "incident" reports for releases of Hazardous Substances.
- b) The Environmental Management Plan shall include the procedure and the party responsible for obtaining the required Governmental Approvals, interface with Governmental Authorities, and identifying and controlling the permit conditions to assure environmental compliance.
- c) The Environmental Management Plan shall define the environmental activities required during the design and construction of the Project and shall address:
 - i. compliance (monitoring, control, follow-up and audits) with the environmental requirements and regulations;
 - ii. erosion and sediment control plans, including monitoring and approach to erosion and sediment control,
 - iii. stormwater management plans;
 - iv. stormwater pollution prevention;
 - v. environmental impact avoidance, minimalization, and mitigation measures;
 - vi. identify environmental monitoring and recording requirements;
 - vii. on-going monitoring and compliance records tracking system;
 - viii. compatible with ISO 19011:2004 Guidelines for Quality and/or Environmental Management Systems Auditing; and ISO 14001:2004 Environmental Management Systems- Specifications with Guidance for Use; and
 - ix. linkage to other relevant PDPs, including the QMSP.
- d) The Environmental Management Plan shall identify and track progress of all NEPA and third-party agency environmental mitigation commitments.

1.7 ROW Acquisition and Relocation Plan

a) The ROW Acquisition and Relocation Plan will define the approach to acquisition of the Project ROW and will address:

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- i. the roles and responsibilities of the Design-Builder and the Concessionaire for ROW acquisition;
- ii. the ROW acquisition process and procedures;
- iii. applicable guidelines and Laws;
- iv. the ROW acquisition services;
- v. coordination with the Concessionaire and property owners;
- vi. ROW acquisition costs management;
- vii. the use of RUMS;
- viii. the utility acquisition and relocation schedule;
- ix. environmental concerns;
- x. document management; and
- xi. linkage with other relevant PDPs and the QMSP.

1.8 Utilities Plan

- a) The Utilities Plan will define the utility coordination, adjustment, and relocation activities during the design and construction of the Project and will address:
 - i. the roles and responsibilities of the Design-Builder, the Concessionaire, and Utility companies/owners;
 - ii. Utility agency coordination plans and process;
 - iii. the Utility Relocation and adjustment process;
 - iv. applicable guidelines, laws and regulation;
 - v. the application of prior rights and cost allocations;
 - vi. the utility easement acquisition process
 - vii. utility agreements including VDOT Master Utility Agreement ("MUA") and/or the development of Project specific utility relocation agreements;
 - viii. Relocations and adjustments of utility facilities included in the Design-Builder's Contract;
 - ix. Relocations and adjustments of utility facilities performed by the utility company or their contractor;
 - x. the coordination with the Design-Builder, the Concessionaire, Utilities, Utilities' designers, and contractors;
 - xi. the identification and resolution of utility conflicts and interdisciplinary coordination;
 - xii. the development and maintenance of a Utility tracking report;

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- xiii. the process for revising utility plan and estimates;
- xiv. the process of payment of utility company progress and final billings.
- xv. the process for close out of utility relocations and processing as-built land use permit applications
- xvi. identify monitoring and recording requirements;
- xvii. on-going monitoring and compliance records tracking system;
- xviii. the roles and responsibilities related to Design-Builder provided MOT services for utilities and/or their contractors.
- xix. regularly updated impact on project schedule;
- xx. reporting and documentation mechanism;
- xxi. linkage to other relevant PDPs and the QMSP.

1.9 Project-Wide Maintenance of Traffic (MOT) Plan

- a) The Design-Builder shall develop a Project-wide MOT Plan pursuant to Section 1.9 of the Technical Requirements. The Project-wide MOT Plan will consider the impact of construction activities on the access and egress of traffic to the I-495 Corridor within the immediate construction zone and provide for a proactive approach to address the impact of such activities on the traveling public and transit providers.
- b) The MOT Plan shall be consistent with, and complement the VDOT-administered Transportation Management Plan for the Project NEXT corridor.
- c) The MOT Plan shall include:
 - i. construction phasing plans (including diagrams and narratives);
 - ii. detours and timeline schedules;
 - iii. emergency access plans for first responders and facilities such as hospitals, police stations, and fire stations;
 - iv. incident management coordination with the Concessionaire;
 - v. a description of the Design-Builder's proposed approach for the development of detailed maintenance of traffic and traffic control plans;
 - vi. coordination with the Communications, Public Outreach, and Community Engagement Plan for the dissemination of construction-related communications;
 - vii. a description of the process to be used for ongoing reviews of active work zones;

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- viii. a description of the process to ensure all persons responsible for design, implementation, and inspection of work zone traffic controls are qualified and properly trained; and
- ix. coordination with other relevant PDPs.

1.10 Communications, Public Outreach, and Community Engagement Plan (Communications Plan)

- a) The Design-Builder is expected to develop and maintain an efficitive communications plan throughout the Project, including during the Operating Period. The Design-Builder will deliver a Communications Plan that integrates Communications, Public Outreach, and Community Engagement and at a minimum does the following:
 - i. provides an effective framework for communication between the Design-Builder and stakeholders;
 - ii. effectively engages the community in the design, construction and operation of the Project to minimize negative impacts, and maximize positive outcomes;
 - iii. builds a strong and enduring relationship with stakeholders and the community within the I-495 Corridor over the life of the Project;
 - iv. identifies and manages risks associated with the Project;
 - v. develops a strong and enduring brand relationship among the communities, I-495 Corridor drivers and the owners and operators of the Project;
 - vi. maximizes public awareness of features and benefits of the HOT Lanes;
 - vii. ensures the public understands how best to use the HOT Lanes, and the requirements for travel on the system;
 - viii. will be consistent with the goals for the Project;
 - ix. provides a detailed outline of communication tools and strategies to be employed during each phase of the Project development, delivery and operation, including:
 - 1. Project branding
 - 2. Market research and analysis
 - 3. Media outreach
 - 4. Stakeholder outreach and information
 - 5. Concessionaire interface and liaison
 - 6. Project communication team
 - 7. Design-Build phase–public information and involvement
 - 8. Pre-operations phase public education and awareness
 - x. develop a Crisis Communications Plan and Procedures, addressing coordination with the Concessionaire and responsiveness to the media

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- xi. reporting and documentation mechanisms;
- xii. linkage to other PDPs and the QMSP.
- b) The Design-Builder shall or shall cause to be developed a Public Information Plan (PIP) for the Work period as part of its overall Communication Plan.
- c) The PIP will fit within the context of the broader Communications Plan and will address:
 - i. The identification of stakeholders and the outreach tactics that will be used to engage them
 - ii. Training of relevant Project personnel in crisis communications, media relations and community outreach techniques
 - iii. Development of a Community Engagement Program, outlining the approach to consulting with the community about design and construction matters, including:
 - 1. Mechanism to engage and communicate applicable design and construction activities to the community
 - 2. Communicate mitigation measures to directly impacted properties (dust, noise, access constraints, utility impacts, etc.)
 - 3. Hosting community information meetings to provide updated Project information as required
 - 4. Education and awareness related to public safety surrounding the work zone
 - iv. The approach to communication with the public about construction activities, including:
 - 1. Notification of forthcoming construction activity to surrounding homes and businesses
 - 2. Commitment of key Project staff to participate in community outreach activities such as public meetings and media interviews
 - 3. Commit to provide information to assist VDOT in responding to inquiries received through VDOT's various hotlines
 - 4. Facilitation and maintenance of Project signage, including information to pedestrians and cyclists, and Project branding and information
 - 5. Planning for and communicating project activities impacting the public, such as changes to traffic patterns
 - v. Provision of information to motorists and stakeholders to facilitate the Maintenance of Traffic (MOT) during construction. This will include:
 - 1. Packaging of all MOT information, such as anticipated delays and lane closures, for provision to the Project Communication Team on a

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- regular basis, to facilitate communication to the media, stakeholders and the broader community
- 2. Communication with direct impact area property owners
- 3. Communication with elected officials and other key stakeholders
- 4. Coordination with local agencies
- 5. Notification program to inform motorists and the broader community about expected traffic changes/delays (such as on-road signage, SMS and email alerts)
- 6. Information to stakeholders about events in the area that may be affected by construction activities
- vi. Coordination of construction-related information for inclusion on all Project communication material as developed under the Communications, Plan (including web, bulletins, etc.)
- vii. Management of construction site tours, including stakeholder events
- viii. Recording of Project progress through photography
- ix. Packaging and timely delivery to the Concessionaire of information on expected, major traffic changes for inclusion in the Concessionaire public advertising, online communications and media outreach programs. The Concessionaire will manage and execute all advertising related specifically to construction-relatedlane closures and anticipated delays
- x. Reporting and documentation mechanism
- xi. Linkage to other relevant PDPs and the QMSP.

1.11 DBE/SWaM and Workforce Plan

- a) The DBE/SWaM and Workforce Plan will define the approach to meet the DBE/SWaM and workforce development participation goals and will address:
 - i. the proposed method to achieve the DBE/SWaM participation goal or demonstrate a good faith effort to meet the goal;
 - ii. a proactive DBE/SWaM outreach program for DBE/SWaM participation;
 - iii. the use of On-The-Job trainees:
 - iv. the Design-Builder's plan for the recruitment, hiring, training, and retention of veterans and local workers in accordance with the Special Provision for Local and Veteran Hiring Program for Design-Build Projects;
 - v. the reporting requirements to the Concessionaire regarding DBE/SWaM and local and veterans hiring participation;
 - vi. regular updates on the progress in meeting DBE/SWaM and workforce development requirements;

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- vii. on-going tracking of efforts and corrective actions required and how they have been met;
- viii. reporting and documentation mechanism; and
- ix. linkage to the other PDPs and the QMSP.

1.12 Health, Safety and Security Plan

- a) The Health, Safety and Security Plan will define the health, safety and security activities required during the design and construction of the Project and will address:
 - i. the health and safety policy for the Project;
 - ii. the health and safety goals for the Project;
 - iii. the organization and responsibilities of the various positions related to health, safety and security;
 - iv. construction occupational health and safety;
 - v. the Project health and safety rules and regulations;
 - vi. site security;
 - vii. documented procedures on meeting the health and safety requirements for the Design-Builder and its Contractors and suppliers;
 - viii. on-going tracking of efforts and corrective actions required and how they have been met;
 - ix. reporting and documentation mechanism;
 - x. linkage to other relevant PDPs and the QMSP.

1.13 Sustainability Plan

- a) The Sustainability Plan will identify the methods, systems and procedures whereby the Design-Builder will comply with the Section 1.14 of the Technical Requirements and achieve, at minimum, a Silver Award rating as recognized by the EnvisionTM Sustainable Infrastructure Rating System of the Institute for Sustainable Infrastructure.
- b) The Sustainability Plan shall be consistent with, or include as a component, the Envision Guidance Manual, Envision Credit Cover Sheets, and Envision Pre-Assessment Checklist.

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Execution Version

2 Submission Timetable

Project Development Plans are to be prepared and updated in accordance with the following table, or earlier if required by the Contract Documents.

Project Development Plan	PDP Submission Requirements	Updates*
Design-Builder Management Plan	Submitted and approved as a condition for issuance of the Work Notice to Proceed.	Annually (during the Contract Term)
Document Management Plan	Submitted and approved as a condition for issuance of the Work Notice to Proceed.	Quarterly, if required (during the Construction Period)
Quality Management System Plan	Submitted and approved as a condition for issuance of the Work Notice to Proceed.	Monthly reporting & quarterly updates, if required (during the Construction Period)
Design Quality Management Plan	Submitted and approved as a condition for issuance of the Work Notice to Proceed.	Quarterly, if required (during the Construction Period)
Construction Quality Management Plan	Submitted and approved as a condition for issuance of the Construction Segment Approval.	Quarterly, if required (during the Construction Period)
Environmental Management Plan	Submitted and approved as a condition for issuance of the Construction Segment Approval.	Quarterly, if required (during the Construction Project)
ROW Acquisition and Relocation Plan	Submitted and approved as a condition for issuance of the Work Notice to Proceed.	Quarterly, if required (during the Construction Period)
Utilities Plan	Submitted and approved as a condition for issuance of the Work Notice to Proceed.	Quarterly, if required (during the Construction Period)
Project-Wide Maintenance of Traffic Plan	Submitted and approved as a condition for issuance of the Construction Segment Approval.	Quarterly, if required (during the Construction Period)
Communications Plan	Submitted and approved as a condition for issuance of the Work Notice to Proceed.	Annually, if required (during the Contract Term)
DBE/SWaM and Workforce Plan	Submitted and approved as a condition for issuance of the Work Notice to Proceed.	Quarterly, if required (during the Contract Term)
Health, Safety and Security Plan	Submitted and approved as a condition for issuance of the Construction Segment Approval.	Quarterly, if required (during the Construction Period)

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Part 2 – Technical Requirements

Execution Version

Project Development Plan	PDP Submission Requirements	Updates*
Sustainability Plan	Submitted within 60 days of Limited Notice to Proceed and approved as a condition for issuance of the Construction Segment Approval.	As required, (during the Construction Period)

^{*} Plans, records and logs shall be available for review by the Concessionaire on an ongoing basis in accordance with the Contract Documents. Changes as required will be in accordance with these Technical Requirements. The term "updates" in this column means revisions and additions to the already-approved PDPs.

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