SCHEDULE 4

DEVELOPMENT PHASE SCHEDULE REQUIREMENTS

SECTION A   GENERAL

A1.   Capitalized Terms

A1.1   Capitalized terms used in this Schedule 4 have the meanings set out in the Development Phase Agreement, unless otherwise expressed in this Schedule 4.

A2.   Definitions

A2.1   In this Schedule 4, the following terms have the following meanings:

(a)   "**Basis of Development Phase Schedule**" has the meaning given in Section B3.1;

(b)   "**Development Phase Schedule**" has the meaning given in Section B2.1; and

(c)   "**Development Phase Work Breakdown Structure**" or "**DP WBS**" has the meaning given in Section B1.1;

(d)   "**Key DPA Milestones**" means the dates for Stage Gate #1, Stage Gate #2 and Stage Gate #3; and

(e)   "**Schedule Recovery Plan**" has the meaning in Section B4.1.

SECTION B   DEVELOPMENT PHASE SCHEDULE REQUIREMENTS

B1.   Development Phase Work Breakdown Structure

B1.1   Development Partner shall work collaboratively to establish a work break down structure for the Development Phase (the "**Development Phase Work Breakdown Structure**" or "**DP WBS**") that clearly identifies major and minor work activities required to complete the Development Partner Scope of Work.

B1.2   The DP WBS shall include all activities required for the Development Partner Scope of Work.

B1.3   The DP WBS shall be organized by the defined structure as follows:

(a)   Level 1: Project

(b)   Level 2: Tasks;

(c)   Level 3: sub-tasks:

(i)   design activities by Development Partner; and

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   (ii) collaborative activities by City and Development Partner including Working Group activities;

  (d) Level 4: Area Code as defined in Section C.1.1.1.5 in the Draft DBA Schedule 18 – Technical Requirements

  (e) Level 5: by CSI Division (17 Divisions as per Draft DBA Schedule 18 – Technical Requirements, Appendix 18B – Specifications); and

  (f) Level 6 and above: specific design activities, DPA Submittals and other deliverables.

B1.4 Development Partner shall provide a written description of the Development Partner Scope of Work to be done for each work package in the DP WBS, which shall include:

  (a) a narrative of the work to be performed;

  (b) a list of major DPA Submittals and deliverables; and

  (c) a list of information needed (if any) from other parties to perform the subject work.

B1.5 The DP WBS shall be submitted to the City in accordance with Schedule 5 – Development Phase Submittal Review Process, and achieve a Submittal Endorsement of "Received" prior to Development Partner submitting the first Development Phase Schedule.

B1.6 Any subsequent changes to the DP WBS shall be submitted for review by the City in accordance with Schedule 5 – Development Phase Submittal Review Process, and achieve a Submittal Endorsement of "Received" prior to Development Partner submitting the next Development Phase Schedule submission, except for monthly updates.

B2. Development Phase Schedule

B2.1 The schedule for the Development Phase (the "**Development Phase Schedule**") shall outline the Development Partner Scope of Work in a sufficient level of detail to enable the City to interpret the schedule, facilitate collaboration between the Parties and monitor the progress of the work.

B2.2 Development Partner shall submit the Development Phase Schedule to the City for review in accordance with Schedule 5 – Development Phase Submittal Review Process and according to the timelines described in Schedule 3 – Development Phase Scope of Work.

B2.3 The Development Phase Schedule shall include, at a minimum:

  (a) Effective Date;

  (b) Start-up Period End Date;

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(c)   Preliminary Design Period End Date;

(d)   Stage Gate #3;

(e)   Design Build Agreement Execution Target Date;

(f)   Working Group meetings;

(g)   Workshops;

(h)   Stage Gate Meetings;

(i)   all tasks in DPA;

(j)   DPA submittal dates for all deliverables in DPA including allowances for City review periods;

(k)   all main design activities, including studies and models, in accordance with the Draft DBA Schedule 18 Technical Requirements - Appendix 18K – Special Studies and Models;

(l)   all additional site investigations;

(m)   all activities related to design for safety;

(n)   all other activities for compliance with the DPA to achieve the development partner services.

B2.4   The Development Phase Schedule shall be for the work based on a critical path method schedule that corresponds to the DP WBS. For each activity within the schedule, Development Partner shall assign a unique activity ID for each activity, which shall include:

(a)   identify all City review and approval activities with a "-cw" activity code suffix;

(b)   activity codes shall use an "Area Code" identifier aligned with defined in Section C.1.1.1.5 in the Draft DBA Schedule 18 – Technical Requirements;

(c)   activity codes, DP WBS codes and "Calendars" must be at the project level, and not at "EPS" or "Global" level;

(d)   unique and clear description for each activity;

(e)   activity duration, which shall include:

(i)   durations no longer than 15 calendar days, without prior approval;

(ii)   all review/approval activities must be separate and distinct activities; and

(iii)   review/approval response periods/durations to be as specified in the

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DPA;

(f)   Activity start date;

(g)   Activity finish date; and

(h)   responsible party or trade;

B2.5   The Development Phase Schedule shall clearly identify the interdependency with other activities. The use of finish to finish relationships for predecessors and start to start relationships for successors in task dependent activities shall be avoided. If necessary, an explanation why this logic is required is to be provided under a Primavera activity notebook category called "DPA – logic". Start to finish logic shall not be used.

B2.6   The time difference between the early finish date and the late finish date is defined as "float". The "float" belongs to the Project and may be used by the Development Partner or the City to benefit the Project. Changes or delays that influence activities in the network with "float" and do not extend the critical path shall not be justification for a time extension for performance. No float for the Development Partner Scope of Work shall be developed through the manipulations of calendars, extending activities durations, or any other such methodology. Activities shall not have any negative float.

B2.7   The Development Phase Schedule shall not have any open ended and/or protracted activities. In order to track multiple critical paths, the Development Phase Schedule can use more than one open ended successor for a milestone activity only. All other activities must have an appropriate predecessor(s) and a successor(s) necessary to execute the Development Partner Scope of Work except the first and last activities

B2.8   The Development Phase Schedule shall not have any constrained activities within the Development Phase Schedule unless previously approved. All approved constraints must include an explanation for the use of the constraint under a Primavera activity notebook category called "DPA - constraints"

B2.9   The Development Phase Schedule shall contain resource loading at appropriate DP WBS level at a minimum with key quantities, person hours or equipment hours (task dependent) and associated budget reconciled against the Development Phase Schedule, DP WBS, and financial reporting.

B2.10   The Development Phase Schedule shall incorporate activities that match the Key DPA Milestones and other key dates.

B2.11   The Development Phase Schedule shall add additional DP WBS and schedule levels to the Development Phase Schedule as required to effectively plan and implement the Development Partner Scope of Work.

B2.12   No lag shall be assigned to an activity under a Primavera activity without approval. Approved lag shall be noted in notebook category called "DPA-lag"

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B2.13　At the discretion of the Development Partner, include "schedule contingency" activity(s) in any required DP WBS level or contiguous groups of DP WBS levels. This contingency will be controlled by the Development Partner to account for identified schedule risk and will not be defined as float. These activities to be included in notebook category "DPA-contingency"

B2.14　The Development Phase Schedule shall include clearly defined critical path(s) .

B2.15　File names for native files and DPA Submittals shall be pre-approved to align with the Schedule 13 – Document Management Systems.

B2.16　Development Phase Schedule presentation shall be tabular, include the Gantt chart, and be able to produce complete logic diagrams.

B3.　　Basis of Development Phase Schedule

B3.1　Each Development Phase Schedule submission, except for the monthly updates, shall include basis of schedule document ("**Basis of Development Phase Schedule**")

B3.2　The Basis of Development Phase Schedule shall present key principles and concepts utilized during the development of each stage of the schedule.

B3.3　The Basis of Development Phase Schedule shall address key items including:

(a)　　Key DPA Milestones and dates;

(b)　　critical path including a narrative describing the reasons for sequencing the work in the chosen manner (timing of design activities, City approvals, etc.);

(c)　　Submittal dates;

(d)　　working hours;

(e)　　risks and opportunities;

(f)　　construction considerations;

(g)　　assumptions;

(h)　　exclusions;

(i)　　exceptions;

(j)　　float and lag;

(k)　　list and description of all activity codes and resource codes; and

(l)　　list and description of all calendars, if applicable.

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B4.   **Schedule Recovery Plan**

B4.1   Further to Section I.3.2 of the DPA, Development Partner agrees that whenever it becomes apparent that the actual progress of the Works have fallen behind schedule, such that the Key DPA Milestones are delayed, the Development Partner shall develop a schedule recovery plan (the "**Schedule Recovery Plan**") and submit in accordance with DPA Schedule 5 – Development Phase Submittal Review Process. The Schedule Recovery Plan shall include:

   (a)   a description of the reasons for the schedule delay;

   (b)   a description of how Development Partner will recover from the delay;

   (c)   a recovery Development Phase Schedule

   (d)   a description of any changes to management practices; and

   (e)   a description of additional equipment, resources, working hours, trades, subcontractors, etc. that will be used by Development Partner to regain the schedule.

B4.2   Development Partner shall submit the Schedule Recovery Plan with the next monthly update of the Development Phase Schedule.

B4.3   For clarity, the review of any Schedule Recovery Plan by the City under Schedule 5 – Development Phase Submittal Review Process shall not, under any circumstances whatsoever, constitute a change to the Development Phase Schedule, nor a change to the agreement.