1.0 REGENERAL

1.1 SECTION INCLUDES

.1 Schedules, form, content, submission.
.2 Critical path scheduling.
.3 Progress photographs [and video].
.4 Submittals schedule.

1.2 RELATED SECTIONS

.1 Section 01 33 00 Submittal Procedures
.2 Section 01 78 39 Project Record Documents
.3 This section describes requirements applicable to all Sections within Divisions 01 to 33.

1.3 SCHEDULES

.1 Submit schedules as follows:

..1 Submittal Schedule for Shop Drawings, Product Data and Safety Data Sheets.
..2 Submittal Schedule for Samples.
..3 Submittal Schedule for timeliness of Owner-furnished Products.
..4 Product Delivery Schedule.
..5 Cash Allowance Schedule for acquiring Products only or Products and Installation, or Installation only.
..6 Shutdown or closure activity.

.2 Schedule Format

..1 Prepare schedule in form of a MS PROJECT horizontal [Gantt] bar chart.
..2 Provide a separate bar for each major [item of work] [subcontract] [or] [operation].
..3 Split horizontally for projected and actual performance.
..4 Provide horizontal time scale identifying [first] [last] Working Day of each week.
..5 Format for listings: [Table of Contents of the Project Manual] [chronological order of start of each item of work].
..6 Identification of listings: By [specification Section numbers] [specification subjects] [systems description].

.3 Schedule Submission

..1 Submit initial format of schedules within [15] [working] days after award of Contract.
..2 Submit schedules in electronic format, forward [on disc] [through e-mail] [through project web site] [_____] as [*.pdf] [*.gif] [*.tif] [*.bmp] [_____] files.
..3 Submit [one (1)] [_____] opaque reproduction, plus [two (2)] [_____] copies to be retained by Consultant.
..4 Consultant will review schedule and return review copy within [10] [_____] days after receipt.
..5 Resubmit finalized schedule within 7 days after return of review copy.
..6 Submit revised progress schedule with each application for payment.
.7 Distribute copies of revised schedule to:
    .1 Job site office.
    .2 Subcontractors.
    .3 Other concerned parties.
.8 Instruct recipients to report to Contractor within 10 days, any problems anticipated by timetable shown in schedule.

**1.4 CONSTRUCTION PROGRESS SCHEDULING**

.1 Submit initial schedule in duplicate within [fifteen (15)] [twenty (20)] [___] days after date of Owner-Contractor Agreement. [established in Notice to Proceed.]
.2 Revise and resubmit as required.
.3 Submit revised schedules with [each] [_______] Application for Payment, identifying changes since previous version.
.4 Submit a [computer generated] [horizontal bar] [_______] chart with separate line for each [major portion of Work or operation] [section of Work], identifying first work day of each week. [OR]
.5 Submit [computer generated] network analysis diagram using the [critical path] [PERT] method.
.6 Show complete sequence of construction by activity, identifying Work of separate stages and other logically grouped activities. Indicate the early and late start, early and late finish, float dates, and duration.
.7 Indicate estimated percentage of completion for each item of Work at each submission.
.8 Indicate submittal dates required for shop drawings, product data, samples, and product delivery dates, including those furnished by Owner and required by Allowances.
.9 Incorporate owner supplied items for coordination with construction schedule.
.10 Include dates for commencement and completion of each major element of construction as follows:
    .1 Site clearing.
    .2 Site utilities.
    .3 Foundation Work.
    .4 Structural framing.
    .5 Special Subcontractor Work.
    .6 Equipment Installations.
    .7 Finishes.
.8 [_______].
.11 Indicate projected percentage of completion of each item as of first day of month.
.12 Indicate progress of each activity to date of submission schedule.
.13 Indicate changes occurring since previous submission of schedule:
    .1 Major changes in scope.
    .2 Activities modified since previous submission.
.3 Revised projections of progress and completion.
.4 Other identifiable changes.

.14 Provide regular two week look-ahead schedules to plan manpower, tools and material to meet target milestones.

.15 Provide a narrative report to define:
.1 Problem areas, anticipated delays, and impact on schedule.
.2 Corrective action recommended and its effect.
.3 Effect of changes on schedules of other prime contractors.

1.5 CRITICAL PATH SCHEDULING
.1 Include complete sequence of construction activities. Ensure SFU EHRS policies are followed and adhered as these can have an impact on contractor schedule.

.2 Include dates for commencement and completion of each major element of construction [as follows].
.1 Site clearing.
.2 Site utilities.
.3 Foundation Work.
.4 Structural framing.
.5 Special Subcontractor Work.
.6 Equipment Installations.
.7 Finishes.
.8 [______].

.3 Show projected percentage of completion of each item as of first day of month.

.4 Indicate progress of each activity to date of submission schedule.

.5 Show changes occurring since previous submission of schedule:
.1 Major changes in scope.
.2 Activities modified since previous submission.
.3 Revised projections of progress and completion.
.4 Other identifiable changes.

.6 Provide a narrative report to define:
.1 Problem areas, anticipated delays, and impact on schedule.
.2 Corrective action recommended and its effect.
.3 Effect of changes on schedules of other prime contractors.

1.6 PROGRESS VIDEO
.1 [Provide internet-capable camera and an active web site, allowing off-site viewing of the Place of the Work 24 hours a day, 7 days a week. Submit web site address and security access codes to Consultant.]

.2 Submit [black and white] [colour] video [tapes] [files] in [VHS] [digital] format.

.3 Frequency: [monthly with progress statement] [at completion of: excavation] [foundation] [framing and services before concealment] [building]] [as directed by Consultant].
1.7 SUBMITTALS SCHEDULE

.1 Include schedule for submitting shop drawings, product data, samples [______].

.2 Indicate dates for submitting, review time, resubmission time, and last date for meeting fabrication schedule.

.3 Include dates when [submittals] [delivery] will be required for Owner-furnished products.

.4 Include dates when reviewed submittals will be required from Consultant.

***END OF SECTION***