

# Winnipeg Sewage Treatment Program Integrated Management System



## Project Document Numbering Standard

**DOCUMENT NUMBER: PG-RC-PC-05**

This document supersedes PG-RC-PC-03 Technical Document Numbering System.

Rev	Prepared by	Reviewed by	Date	Approved by	Date
2015-08-04	Curtis Reimer			Jackie Veilleux	2015-08-14
2016-02-02	Curtis Reimer			Jackie Veilleux	2016-02-04

Introduction

**TABLE OF CONTENTS**

1 Introduction..... 4

    1.1 Scope of the Document ..... 4

    1.2 Definitions..... 4

2 Document Numbering Formats ..... 5

3 Class A Documents ..... 6

    3.1 Description ..... 6

    3.2 Format..... 6

        3.2.1 Source Code ..... 7

        3.2.2 Facility Code..... 7

        3.2.3 Discipline Code..... 8

        3.2.4 Document Type ..... 9

        3.2.5 Area Code ..... 11

        3.2.6 Process Code ..... 12

        3.2.7 Sequence Number..... 12

        3.2.8 Sheet Number - Optional ..... 13

        3.2.9 Suffix ..... 13

    3.3 Additional Information Elements ..... 14

        3.3.1 Revision Number ..... 14

        3.3.2 Document Size ..... 14

    3.4 Special Cases and Clarifications..... 15

        3.4.1 Conceptual and Preliminary Design Documents ..... 15

    3.5 Organization and Referencing ..... 16

        3.5.1 Referencing Design Documents ..... 16

        3.5.2 Document Sorting..... 16

    3.6 Electronic File Name..... 17

        3.6.1 Single Documents ..... 17

        3.6.2 Document Snapshot Sets ..... 18

    3.7 Examples..... 19

4 General Project Documents ..... 20

    4.1 Description ..... 20

    4.2 Format..... 20

        4.2.1 Project Code..... 21

        4.2.2 WBS Code..... 21

**Introduction**

- 4.2.3 Category Code ..... 22
- 4.2.4 Discipline Code..... 23
- 4.2.5 Document Type Code..... 24
- 4.2.6 Sequence Number..... 29
- 4.2.7 Suffix ..... 29
- 4.3 Special Cases and Clarifications..... 29
  - 4.3.1 Class A Documents ..... 29
  - 4.3.2 Tender Documents ..... 29
  - 4.3.3 Specifications ..... 29
- 4.4 Example Project Documents..... 30
- 5 Contractor Submittal Documents ..... 31
  - 5.1 Description ..... 31
  - 5.2 Format..... 31
    - 5.2.1 Project Code..... 32
    - 5.2.2 WBS Code..... 32
    - 5.2.3 Category Code ..... 32
    - 5.2.4 Discipline ..... 32
    - 5.2.5 VDR Code ..... 32
    - 5.2.6 Sequence Number..... 34
    - 5.2.7 Suffix ..... 34
- 6 General Requirements..... 35
  - 6.1 Document Titles..... 35
  - 6.2 Revision Codes ..... 35
    - 6.2.1 Revision Description ..... 35
  - 6.3 Suffix Codes ..... 36
    - 6.3.1 Appendix Files ..... 36
    - 6.3.2 Commented Files ..... 36
    - 6.3.3 Native Format of the Document ..... 37
    - 6.3.4 Examples..... 38
- 7 Document Management System Implementation..... 39
  - 7.1 Metadata Fields..... 39
- 8 FAQ – Frequently Asked Questions..... 40

## Introduction

# 1 INTRODUCTION

## 1.1 Scope of the Document

This document is a procedure that implements a common document numbering standard for all project documents, including design documents and drawings within the scope of the Winnipeg Sewage Treatment Program (WSTP). The procedure will allow for consistent file naming in an organized fashion to allow for systematic storage of all project and contract related files.

Note that this document is not applicable to facilities outside of the scope of the WSTP.

The phasing of implementation is governed by procedure PG-RC-PC-04 Technical Document Numbering Systems Management Procedure.

## 1.2 Definitions

For the purpose of this standard, the following definitions are utilized in the document types:

Class A Document	A Class A document is required to be maintained as a facility lifecycle document for records and maintenance purposes. All Class A Documents should be “as-built” upon project completion and stored in an accessible location for Operations’ use.
DMS	Document Management System
List	A document containing a sequence of connected items, not related to a historical occurrence.
Log	A document containing a register (list) of an event, occurrence, issue, or status.
Plan	A document that outlines the processes and tasks required to implement a project or goal.
Procedure	A document that defines the specific instructions necessary to perform a task or process.
Record	An official document which permanently contains the particulars regarding a specific event, issue, or occurrence. For example, a worker orientation record that documents the orientation of a specific or group of workers. However, a document which tracks the orientation of all workers would be a log.
Report	A document which contains an account given of a particular subject, after thorough investigation or consideration by the author.
VDR	Vendor Document Requirement (See Section 5.2.4)
WBS	Work Breakdown Structure

## Document Numbering Formats

## 2 DOCUMENT NUMBERING FORMATS

Documents are numbered as per the format designated in Table 2-1.

**Table 2-1 : Document Numbering Formats**

<b>Document</b>	<b>Description</b>	<b>Reference</b>
Class A Documents	Technical design documents and drawings produced to describe the work and utilized as a facility lifecycle document for records and maintenance purposes. Most Class A documents are drawings, but they also include equipment lists, process control narratives, and other documents maintained throughout the facility life. Class A documents should be “as-built” upon project completion and stored in an accessible location for Operations use.	Section 3
Project Documents	Project documents are created for and utilized during the execution of projects. For example, contract administration documents would be under this format. They include many design documents, but exclude Class A documents (including drawings) and contractor submittals.	Section 4
Contractor Submittals	Contractor Submittal documents are typically shop drawings and product datasheets produced by the contractor or other vendors. The submittals indicate specific manufacturing and construction details, but not overall design concepts.	If project uses a DMS: Section 4. If the project does not use a DMS:Section 5

**Class A Documents**

**3 CLASS A DOCUMENTS**

**3.1 Description**

Class A Documents are technical design documents and drawings produced to describe the work and utilized as a facility lifecycle document for records and maintenance purposes. Most Class A documents are drawings, but they also include equipment lists, process control narratives, and other documents. Class A documents should be “as-built” upon project completion and stored in an accessible location for Operations use.

**3.2 Format**

The organization, structure and coding of the design documents and drawings is derived from the City Drawing Standard numbering system, with some additions and/or changes introduced to fulfill the system objectives. These are explained in the following sections.

See Table 3-1 for the Class A Document number format.

**Table 3-1 : Document Number Format – Class A Documents**

Field	Source Code		Facility Code		Discipline Code	Document Type		Area Code	Process Code	Sequence Number		Sheet Number (Optional)		Suffix (Optional)
<b>Format</b>	C	-	NNNN	-	L	LLL	-	L	C	NN	-	CC	_	*
<b>Example</b>	1	-	0102	-	C	GAD	-	A	1	01	-	01	_	C01

**Legend: N= numeral, L= Letter, C= character (i.e. =N or L), \* = Multiple Characters**

**Notes:**

1. The file extension, such as “.docx” or “.pdf” would be appended to the end of the filename, but is not technically considered to be part of the document number.
2. The suffix is separated by an underscore ( \_ ), not a hyphen (-).
3. The suffix is technically not part of the document number, but rather an extension to be utilized in special case scenarios.

## Class A Documents

### 3.2.1 Source Code

See Table 3-2 for a list of Source Codes and their definition.

**Table 3-2 : Source Codes**

Code	Description
-	Drawings
1	Design drawings
<del>2</del>	<del>Manufacturer's drawings (See Note 2)</del>
<del>3</del>	<del>Construction drawings (See Note 3)</del>
<del>4</del>	<del>Demolition drawings (See Note 3)</del>
-	Non-Drawings
A	Design documents (Class A)
<del>C</del>	<del>Construction documents (See Note 3)</del>

**Notes:**

1. Sections of the table are shown in strikethrough format to show change from the previous Technical Document Numbering Standard. Where a project has been started with source codes 2, 3, 4, or C coordinate with the City Project Manager for specific direction.
2. Number manufacturer's drawings as per Section 5.
3. Temporary construction and demolition drawings/documents shall be indicated via the Process Code, as described in Section 3.2.6.1.

**Implementation Note:**

1. The use of the Source Code has been reworked to provide more logical document sorting.

### 3.2.2 Facility Code

The Class A Document Numbering System uses the same facility codes as the City Water and Waste Drawing Standard, and in addition introduces the code "0100" as a virtual facility for Program standard documents that are not specific to a particular site.

**Table 3-3 : WSTP Facility List**

Code	Description
0100 to 0109	Wastewater Treatment Facilities
0100	WSTP standard documents (not specific to a site)
0101	NEWPCC (North Plant)
0102	SEWPCC (South Plant)
0103	WEWPCC (West Plant)

(Other codes for facilities not included in the Program do not pertain to this document).

## Class A Documents

### 3.2.3 Discipline Code

The disciplines are coded as per Table 3-4. The discipline should generally be chosen based upon the group responsible for creating and/or implementing the work. For example: A motor starter schematic is an electrical document, even though it might be associated with a unit of process equipment.

In the event that a discipline is not applicable, or the document is truly multi-disciplinary, the *D - General* discipline code should be selected.

**Table 3-4 : Discipline Codes**

Code	Discipline	Examples
A	Automation	Instrumentation and Control including Control system block diagrams, instrument loop diagrams, networking drawings (if associated with automation system), control system functional requirements specification.
B	Building-Architectural	General architectural including building layouts and architectural finishes.
C	Civil-Geotechnical	Civil surveys, erosion control, grading, roads, fencing, landscaping, underground utilities.
D	General	Legends, code summary, General site plan, orientation maps, staging areas.
E	Electrical	Electrical site plans, grounding drawings, lighting, motor starter schematics, telecommunications, hazardous location plans.
I	Internal	Utilize for internal documents
M	Mechanical ( <i>Includes HVAC/Plumbing</i> )	Domestic water plumbing, sanitary and storm drainage, ductwork, air handling equipment, HVAC piping, fire protection systems.
O	Operations	Area Manual, Operating and Maintenance Manual, Standard Operating Procedures.
P	Process ( <i>Process and Process Mechanical</i> )	Process Flow Diagrams, Process and Instrumentation Diagrams, Process Equipment General Arrangement, Process Piping, Process hydraulics, Odour Control General Arrangement.
S	Structural	Structural Site Plan, Foundations, Reinforcement, Piers, Piling, Slabs and Retaining Walls, Structural Framing, Floor and Roofs.
Y	Commissioning	Commissioning Design Plan, Commissioning Calculations.



### Class A Documents

#### 3.2.4 Document Type

##### 3.2.4.1 Drawings

The Document Type coding for drawings is as per Table 3-5.

**Table 3-5 : Document Type - Drawings**

Code	Description	Discipline Codes									
		A	B	C	D	E	M	O	P	S	Y
		Automation	Building / Architectural	Civil	General	Electrical	Mechanical	Operations	Process	Structural	Commissioning
AAA	Legend & General Notes <i>(sort first)</i>	1	1	1	1	1	1	1	1	1	1
BDG	Block diagram	1				1					1
CBD	MCC / Cabinets drawing	1				1					1
CDW	Cable drawing	1				1					1
CTR	Cable Trays / Conduit / Cable Routing	1				1					
DRN	Drains			1							
DTL	Discipline Specific Standard details	1	1	1	1	1	1	1	1	1	1
ENV	Environmental			1							
FAF	Fixture and Furniture		1								
FAS	Fire Alarm System					1					
FDW	Foundation drawings									1	
FNC	Fencing			1							
GAD	General Arrangement drawing <i>(including section views)</i>	1	1	1	1	1	1	1	1	1	1
GRD	Earthing/grounding					1					1
HLC	Hazardous Location Classification <i>(Plans / Sections)</i>					1		1			1
HYD	Hydraulic line								1		1
IDW	Installation drawing	1				1	1				1
IFS	Instrumentation Fieldbus Segment Drawings	1									1
ILD	Instrumentation Loop Diagrams	1									1
ISO	Piping isometrics						1		1		1
LSC	Landscaping			1							

## Class A Documents

Code	Description	Discipline Codes									
		A	B	C	D	E	M	O	P	S	Y
		Automation	Building / Architectural	Civil	General	Electrical	Mechanical	Operations	Process	Structural	Commissioning
LTG	Lighting Drawings ( <i>Plan and schematics</i> )					1					
LYT	Layout			1							1
MCL	Motor Control ( <i>Includes, motor starter schematics and connection diagrams</i> )	1				1					
MOD	3D Models		1	1	1	1	1		1	1	
MST	Master/Extraction Files		1	1	1	1	1		1	1	
NET	Networking	1				1					
PCC	Precast concrete									1	
PFD	Process Flow Diagram							1	1		1
PID	Process and Instrumentation Diagram								1		1
RDW	Reinforcement drawing									1	
RSW	Roads and sidewalks			1							
SCH	Discipline Specific Schedules ( <i>Door, Hardware, Luminaire, HVAC, etc.</i> )	1	1	1	1	1	1	1	1	1	1
SCY	Security	1				1					
SDW	Form drawings.									1	
SLD	Single line diagram					1					1
SST	Structural steel									1	
SVY	Survey			1							
TDW	Terminal drawing					1					1
TLD	Three-line diagram					1					1
UTY	Utilities ( <i>site utilities such as buried piping and electrical services</i> )			1							
WDG	Wiring / connection diagram	1				1					1

**Class A Documents**

**3.2.4.2 Class A Documents Other Than Drawings (Technical Documents)**

The Document Type coding for Class A Documents, other than drawings, is as per Table 3-6.

**Table 3-6 : Document Types – Class A Documents Other Than Drawings**

Code	Description	Discipline Codes									
		A	B	C	D	E	M	O	P	S	Y
		Automation	Building / Architectural	Civil	General	Electrical	Mechanical	Operations	Process	Structural	Commissioning
DTS	Datasheet (Equipment/Instrument)	1	1	1	1	1	1		1	1	1
FRS	Functional (Requirements) Specification	1									
MAN	Manual (i.e. Area Manual)							1			
PCN	Process Control Narrative / Process Control Philosophy								1		
SOP	Standard Operating Procedure							1			
SUR	Survey (Report)			1	1	1					
TLI	Technical List (Equipment, Instruments, I/O, cables etc)	1	1	1	1	1	1		1	1	1

**3.2.5 Area Code**

The area code is composed of a single letter, which represents a specific location in the Facility. Where a document is not specific to an area, then the following general area code shall be used:

A General or area not applicable

For area codes specific to each facility, refer to the following documents:

- NEWPCC CD-RC-RF-01 NEWPCC Facility Process Areas
- SEWPCC CD-RC-RF-02 SEWPCC Facility Process Areas
- WEWPCC CD-RC-RF-03 WEWPCC Facility Process Areas

**Class A Documents**

**3.2.6 Process Code**

For most Class A documents, the *Process Code* is a single digit that refers to a specific process within each area (Area Code). The set of *Process Codes* are unique for each Area Code within each facility and the same digit will typically represent different processes within different areas. However, standard process codes are also available for certain scenarios, as described below.

**3.2.6.1 Standard Process Codes**

Standard process codes are shown in Table 3-7

**Table 3-7 : Standard Process Codes**

Code	Title	Description
0	General	The document / drawing is not associated with a specific process, or is associated with multiple processes.
1 – 9	Specific	See Section 3.2.6.2.
D	Demolition	The document / drawing is a demolition document.
T	Temporary Construction	The document / drawing is a temporary construction document that will have no purpose after the construction is complete.

**3.2.6.2 Specific Process Codes**

The Process Code digits 1 – 9 are reserved for specific codes, unique for each Area Code within each facility. The same digit will typically represent different processes within different Area Codes. For example:

- 1-0102-PPID-G101 Process Code 1 represents Raw Sewage Pumping in the SEWPCC G area.
- 1-0102-PPID-R101 Process Code 1 represents Tanks, Mixing and Chemicals in the SEWPCC R area

For process codes specific to each facility and area, refer to the following documents:

- NEWPCC CD-RC-RF-01 NEWPCC Facility Process Areas
- SEWPCC CD-RC-RF-02 SEWPCC Facility Process Areas
- WEWPCC CD-RC-RF-03 WEWPCC Facility Process Areas

**3.2.7 Sequence Number**

The sequence number is two digits long and identifies the individual documents within the document numbering scheme. The user may chose non-sequential numbering if deemed appropriate for the situation.


**Class A Documents**

**3.2.8 Sheet Number - Optional**

The sheet number is a two digit field used for multiple sheet drawings. Multiple sheet drawings are utilized when the content cannot fit within one drawing sheet. Multiple sheet drawings shall have the same title. If it is desired to have a different title, then a new document number shall be utilized. Some examples of situations where multi-sheet drawing are appropriate are as follows:

- A complicated motor starter schematic that cannot fit on one drawing.
- Document lists that cannot fit on one drawing.
- A room layout plan that cannot fit on one drawing.

Documents without multiple sheets shall have a sheet number indicated as a (Blank) on the document itself. However, the DMS may require that the number 00 be entered in the Sheet number field, if multiple sheets do not exist. For example:

 <b>THE CITY OF WINNIPEG</b> WATER AND WASTE DEPARTMENT			
SOUTH END WATER POLLUTION CONTROL CENTRE SEWPCC UPGRADING/EXPANSION PROJECT PROCESS AND INSTRUMENTATION DIAGRAM HRC LAMELA AIR SCOUR BLOWER			
CITY DRAWING NUMBER	SHEET	REV.	SIZE
1-0102-PPID-K003		B0	A1

Sheet number blank if drawing does not have multiple sheets

For non-drawing Class A documents, the number of sheets will typically not be utilized; however it may be utilized to manage large documents that are split into multiple parts. For example, a large engineering list could be split as follows to allow for smaller file sizes (for e-mailing):

- A-0102-DELI-A005-01      Part 1 of a technical list.
- A-0102-DELI-A005-02      Part 2 of a technical list.

Sheet numbers shall not be utilized to attach documents together, which are otherwise intended to be identified as separate documents.

**3.2.9 Suffix**

Implement the suffix as per Section 6.3.

## Class A Documents

### 3.3 Additional Information Elements

The following additional information elements are not part of the actual document number; however, they provide useful metadata which will be utilized for tracking documents. This information should be attached as metadata when supported by the document management system (DMS).

#### 3.3.1 Revision Number

Implement as per Section 6.2.

**Implementation Note:**

1. *The superseded Technical Document Numbering System utilized a specific coding system to indicate the level of design stage. To provide consistency with the other document numbering formats in this standard, which do not have revisions that correspond to the level of design stage; the design stage specific revision codes have been eliminated. For existing documents, at the next revision stage implement the next appropriate revision code as per this standard. For example, a drawing might have last been released as a D1 revision, and is being subsequently revised during the design stage. Select the appropriate revision level as per Section 6.2, which would be a preliminary P series revision, such as PE.*

#### 3.3.2 Document Size

The document size shall be shown on all drawings, and recorded in the metadata of the DMS. Typically the size is shown on the border of the drawing.

**Table 3-8 : Document Size Code**

Code	Size
A	8.5 x 11 Inches (215.9 x 279.4 mm)
B	11 x 17 Inches (279.4 x 431.8 mm)
A2	420 x 594 mm (16.5 x 23.4 Inches )
A1	594 x 841 mm (23.4 x 33.1 Inches )
B1	707 x 1000 mm (27.8 x 39.4 Inches )
A0	841 x 1189 mm (33.1 x 46.8 Inches )

**Notes:**

1. *Sizes refer to true ANSI Engineering or true ISO formats*
2. *Dimensions in brackets indicate approximate measurement*

**Class A Documents**

**3.4 Special Cases and Clarifications**

**3.4.1 Conceptual and Preliminary Design Documents**

Documents created for conceptual or preliminary design stages, which are not likely to be directly utilized for construction, will not be filed within the City’s drawing management system for Operations’ use. Thus, these preliminary technical documents shall utilize a slightly modified document number where the *Source Code* and *Facility Code* are removed, as follows:

**Table 3-9 : Document Number Format – Class A Documents**

Field	Preliminary Code		Discipline Code	Document Type		Area Code	Process Code	Sequence Number		Sheet Number (Optional)		Suffix (Optional)
<b>Format</b>	PD	-	L	LLL	-	L	C	NN	-	CC	_	*
<b>Example</b>	PD	-	C	GAD	-	A	1	01	-	01	_	C01

**Legend: N= numeral, L= Letter, C= character (i.e. =N or L), \* = Multiple Characters**

Utilizing this system will avoid tying up document numbers for documents which may never need to be referenced by Operations.

For example, this shortened document numbering system would be utilized if a consultant were engaged to provide a preliminary design, but not the detailed design of a facility. In the event that the same party were providing both the preliminary and detailed design documents, full document numbers may be utilized at the preliminary design stage if the documents will be carried over into the design and construction.

## Class A Documents

### 3.5 Organization and Referencing

#### 3.5.1 Referencing Design Documents

Design documents may be referenced within the body of any base document within an overall design package.

When referenced in a base document within the same design package, the first 2 fields (source code and facility code) of the document that are common to the base document are optional. Additional information fields are not indicated.

Example 1:

Full document number of reference: 1-0102-AGAD-P601

Document reference shown:           AGAD-P601

Example 2:

Full document number of reference: 1-0102-AILD-R101-02

Document reference shown:           AILD-R101-02

#### 3.5.2 Document Sorting

The sorting of documents outside the DMS should be alphabetical from left to right, within a given document package or set. This provides the most intuitive system for people to find documents and will match computer sorting of the documents. However, document filtering may be utilized to package documents by other criteria, such as area code.

Examples are indicated below:

##### Document Package – No Filtering

1-0102-AGAD-P001  
1-0102-AGAD-S001  
1-0102-EGAD-P001  
1-0102-EGAD-S001  
1-0102-PGAD-P001  
1-0102-PGAD-S001  
4-0102-BGAD-P001

##### Document Package – Area Code P

1-0102-AGAD-P001  
1-0102-EGAD-P001  
1-0102-PGAD-P001  
4-0102-BGAD-P001

##### Document Package – Area Code S

1-0102-AGAD-S001  
1-0102-EGAD-S001  
1-0102-PGAD-S001

Minimum Requirement: Unless otherwise indicated, document snapshot sets should be filtered and packaged by area code.



**Class A Documents**

**3.6 Electronic File Name**

**3.6.1 Single Documents**

**3.6.1.1 General Case within a Document Management System**

**Table 3-10 : File Name Format – Within DMS**

Field	Document Number	Extension
Format	As per Table 3-1	.LLL(L)
Examples	1-0102-CGAD-B601	.pdf
	1-0102-CGAD-B602-01	.pdf

**Note:**

1. The Revision Code is not included as document revision management is handled within the DMS system.

**3.6.1.2 General Case for Documents Managed Manually in a Windows Environment**

This case is applicable when documents are managed in a standard file-based network drive.

**Table 3-11 : File Name Format – Managed Manually**

Field	Document Number	Revision	Extension
Format	As per Table 3-1	_RNN	.LLL(L)
Examples	1-0102-CGAD-B601	_R00	.pdf
	1-0102-CGAD-B602-01	_R02	.pdf

**Implementation Note:**

1. The inclusion of the *\_R* code in front of the Revision Code to allow for consistency with Tender Drawing filenames.

**3.6.1.3 Tender Drawings**

When drawings are included within a tender package posted on the City Materials Management web site, the file name convention must be modified to meet the Materials Management naming convention (refer to Materials Management document “Bid Opportunity document file naming convention) adapted as in the following example;

**Table 3-12 : File Name Format – Tender Drawings**

Field	Prefix	Document Number	Revision	Extension
Format	####-YYYY_Drawing_	As per Table 3-1	_RNN	.LLL(L)
Examples	682-2014_Drawing_	1-0102-CGAD-B601	_R00	.pdf
	682-2014_Drawing_	1-0102-CGAD-B602-01	_R02	.pdf

## Class A Documents

### 3.6.2 Document Snapshot Sets

Document snapshot sets (also known as document sets) allow for multiple documents to be contained within a single file. The snapshot set is not to be considered an official document, and in no way eliminates the requirements in the other parts of this document. The use of document snapshot sets in no way eliminates the requirement to load individual documents into the DMS.

The most common use of a document set is to package multiple drawings in a single PDF file to allow for simplified distribution. All of the documents within a document set shall still have unique document numbers and be tracked by revision.

The following rules shall apply to document snapshot sets:

- The documents within a set shall be applicable to a single Source Code.
- The documents within a set shall be applicable to a single Facility.
- The documents within a set may be applicable to either a single or multiple disciplines. If multiple disciplines are within the set, a lowercase “x” character shall be utilized for the Discipline Code in the set filename.
- The documents within a set may have either a single or multiple Document Types. If multiple disciplines are within the set, a lowercase “xxx” document type shall be utilized in the set filename.
- The documents within a set may have a single or multiple Area Codes. Where multiple Area Codes are in the set, the Area Codes shall be coded as “x” in the set filename.
- The documents within a set may have a single or multiple Process Codes. Where multiple Process Codes are in the set, the Process Code shall be coded as “x” in the set filename.
- The Sequence Number for the set shall be indicated as “xx” to reflect that multiple documents are in the set.
- The document snapshot set does not have a revision, but rather a date. The documents within the set shall be the most recent published versions on the date that the snapshot set is created. The date shall be included in the set filename in “YYYY-MM-DD” format, after the “SET\_” prefix.
- Document snapshot sets shall not be loaded into the Technical Document Library of the DMS. An alternate storage location will be provided.

Example: File with a set of mechanical drawings for the SEWPCC facility.

SET\_2014-08-01\_1-0102-Mxxx-xxxx.pdf

Example: File with a set of Bioreactor P&ID drawings for the SEWPCC facility.

SET\_2014-08-01\_1-0102-PPID-Rxxx.pdf

## Class A Documents

### 3.7 Examples

Examples of Class A document numbers are indicated below:

<b>Document Number</b>	<b>Title</b>
A-0102-ETLI-S001	SEWPCC – Secondary Clarifier Area – Electrical Load List
A-0103-CSUR-Y001	WEWPCC – Yard – Survey of West Field
1-0102-PPID-G105	SEWPCC Raw Sewage Pumping P&ID
1-0102-BGAD-K011	SEWPCC – HRC – Architectural Section D

**General Project Documents**

**4 GENERAL PROJECT DOCUMENTS**

**4.1 Description**

Project documents are created for and utilized during the execution of projects, and are not design documents, submittals, or quality test results. For example, contract administration or construction documents would be under this format.

**4.2 Format**

The document number format for general project documents is shown in Table 4-1, with a description of each field in the subsequent sections.

**Table 4-1 : Document Number Format – General Project Documents**

Field	Project Code		WBS Code	Category Code	Discipline Code		Document Type Code		Sequence Number		Suffix (Optional)
<b>Format</b>	LNNNN	-	NN	L	L	-	LLL	-	NNNN	_	*
<b>Examples</b>	S0926	-	01	C	D	-	CCN	-	0001	_	R01
	S0926	-	00	P	F	-	BUD	-	0001		

**Legend: N = numeral, L= Letter, \* = Multiple Characters.**

**Notes:**

1. The file extension, such as “.docx” or “.pdf” would be appended to the end of the filename, but is not technically considered to be part of the document number.
2. The suffix is separated by an underscore (\_), not a hyphen (-).
3. The suffix is technically not part of the document number, but rather an extension to be utilized in special case scenarios.

## General Project Documents

### 4.2.1 Project Code

The *Project Code* is the City of Winnipeg project number assigned by Records Management, without a hyphen and with four numeric digits. Examples of Records Management assigned project numbers and the corresponding *Project Code* are shown below.

Records Project Number	Project Code for Use in Document Numbering Standard
S-926	S0926
S-1521	S1521
S-2111	S2111

### 4.2.2 WBS Code

A Work Breakdown System (WBS) Code is provided for medium and large sized projects, to provide an organizational structure to the documents. It is a two digit code that is set up by the Project Manager on a case-by-case basis. For small projects, the WBS Code may be fixed at 00, if so decided by the project manager.

The WBS may follow the contract structure of the project, but may follow another logical organization, as applicable for the work. It would be desirable, but not mandatory, that the WBS Code follow the high level work-breakdown structure utilized for project management. Three example WBS coding structures are shown in Table 4-2 below.

**Table 4-2 : Sample WBS Code Structures**

WBS Code	Description
<b>Small Projects WBS</b>	
00	All aspects of the project are grouped under a single WBS item.
<b>Contract-Based WBS</b>	
00	General Project Development
01	Consultant Contract
02	Civil Works Contract
03	Building Construction Contract
04	Electrical / Mechanical Installation Contract
11	Equipment Supply Contract 1
12	Equipment Supply Contract 2
21	Chemical Delivery Contract 1
<b>Work-Based WBS</b>	
00	General Project Development
01	NEWPCC RAS Gallery Pipe Replacement
02	WEWPC Secondary Flushing Water Pipe Replacement
03	WEWPC Perimeter Road Water Pipe Replacement

## General Project Documents

### 4.2.3 Category Code

The *Category Code* provides an organizational structure to the document numbering system. See Table 4-3 for a list of *Category Codes*.

**Table 4-3 : Category Codes**

Code	Description	Notes
B	Bid and Contract	Bid Opportunity or RFP bids as well as associated evaluation documents.
C	Construction	Documents associated with the implementation of construction. The audience of these documents would typically include the design team and possibly the contractor. Example: Daily construction reports
D	Design Documents – Project	Documents which may or may not be of a technical nature associated with the specific project design, but would not necessarily be utilized for the operation and maintenance of the facility.
-	Drawings (Class A)	Drawings (Class A) are required for operation and maintenance of the facility. Use Class A Document Numbering System as per Section 3.
-	Technical Documents (Class A)	Technical Documents (Class A) are required for operation and maintenance of the facility. Use Class A Document Numbering System as per Section 3.
P	Project Management	Management of the overall project or a specific contract. Includes meeting minutes, correspondence, contract change orders, invoices, etc.
S	Contractor Submittals	Shop drawings and product datasheets produced by the contractor or other vendors. The submittals indicate specific manufacturing and construction details, but not overall design concepts. If project uses a DMS, Submittal documents are numbered as per Section 4. If the project does not use a DMS, Submittal documents are numbered as per Section 5.
Q	Quality	If project uses a DMS, Quality documents are numbered as per Section 4, If the project does not use a DMS, Quality documents are numbered as per Section <b>Error! Reference source not found..</b>

## General Project Documents

### 4.2.4 Discipline Code

The disciplines for Project Documents are coded as per Table 3-4. Note that the disciplines are the same as those for Class A documents, as per Section 3.2.3; however additional codes are included for Project Documents. The discipline should generally be chosen based upon the group responsible for creating and/or implementing the work. For example: a structural technical memo should be identified with a structural discipline code even though it may be associated with a building.

In the event that a discipline is not applicable, or the document is truly multi-disciplinary, the *D - General* discipline code should be selected. For example, most *Minutes of Meetings* will have a *D- General* discipline.

**Table 4-4 : Discipline Codes**

Code	Discipline
A	Automation
B	Building-Architectural
C	Civil-Geotechnical
D	General
E	Electrical
F	Financial
I	Internal (See Notes 1, 2)
M	Mechanical ( <i>Includes HVAC/Plumbing</i> )
O	Operations
P	Process ( <i>Process and Process Mechanical</i> )
R	Safety
S	Structural
Y	Commissioning

**Note:**

1. *The Internal discipline should only be utilized when it is desired to separate internal documents from official project documents, to allow sequence numbering to be maintained. For example, if a Contractor is performing a construction inspection for their own internal use, and does not wish to interfere with the sequencing of the official construction inspections, the I – Internal discipline may be utilized. Please note that the DMS may sequentially number I – Internal documents, regardless of organization. Thus, if a contractor creates an internal document and the City creates an internal document, they cannot have the same document number.*
2. *The Internal discipline should be used only in scenarios where required. It should not take precedence over other discipline codes. For example, just because a document is an internal document, does not mean that it should have an I-Internal discipline assigned.*

## General Project Documents

### 4.2.5 Document Type Code

The *Document Type Code* describes the general subject or nature of the document. Note that the *Document Type Code* does not describe the detailed document content, which should be identified in the Document Title as per Section 6.1. For example, the following documents are both coded with the same type code (Project Management Plan), but have different titles.

Document Number	Title
S5812-00PD-PLA-0001	WEWPCC Bioreactor Project Charter
S5812-00PD-PLA-0002	WEWPCC Bioreactor Project Plan

The document types are coded as per Table 4-5.

Table 4-5 : Document Type Codes

Code	Description	Typical Category	Description / Examples
ACC	Contract Change Order Approved Contract Change / Consultant Services Change Order	P	Includes both contractor and consultant change orders.
ADD	Addendum		
BCA	Business Case	P,D	
BDC	Tender Document / Bid Document	B	Bid Opportunity or RFP documents. See Section 4.3.2.
BID	Bid / Bid Submission	B	The bid documents submitted by the bidders.
BOD	Basis of Design	D	
BUD	Budget	P	
BUL	Bulletin	C	Notice to employees / contractor regarding a safety issue.
CCN	Contemplated Change Notice / Proposed Change Notice	P	Includes both consultant and contractor contemplated / proposed change notices.



### General Project Documents

Code	Description	Typical Category	Description / Examples
CER	Certificate	P	Examples: Certificate of Substantial Performance Certificate of Total Performance Certificate of Acceptance
		C	Examples: Certificate of Equipment Delivery Certificate of Readiness to Install Certificate of Satisfactory Installation Certificate of Commissioning Completion Certificate of Equipment Satisfactory Performance Certificate of Satisfactory Process Performance
CIR	(Construction) Inspection Report	Q	
CLA	Claim	P	Contractor Claims
COR	Correspondence	B, P	Formal and informal correspondence. Note that document numbering of informal correspondence (i.e. e-mails) is not mandatory. Examples: Letters (i.e. bid clarification, formal consultant notice), memos.
CON	Contract	B	Letter of Intent, Contract Award, POs
CRD	Daily Report	C	Daily Construction Report
DCA	Design Calculations and Analysis	D	
EST	Estimate	P, C	Typically financial estimate.
EVA	Bid Evaluation	B	Bid evaluation documents, bid clarification analysis.
FIN	Field Instruction / Design Field Instruction	C	Instruction from the design team to the contractor.
FOR	Form / Template	P	Forms and other templates
FWA	Field Work Authorization	P	Authorizes the contractor to proceed with a limited contract change to expedite the contract change process.

### General Project Documents

Code	Description	Typical Category	Description / Examples
GEN	General / Miscellaneous	P	Document that does not fall under any other document type.
INS	Insurance	P	Insurance documents.
INV	Invoice	P	
IRC	Incident Report	C	Example: Near Miss Report
JSA	Job Safety Analysis / Job Hazard Assessment	C	
LIC	Licence / Regulatory	P	Any document associated with a regulatory licence. Example: Sewage Treatment Licence, Licence Clarification
LIS	List	B, C, D, P, Q	Any type of list document that is not a record (log of event that has occurred)
LOG	Log	B, C, D, P, Q	A document which a register (list) of an event, occurrence, issue, or status.
MAG	Meeting Agenda	P	
MOM	Meeting Minutes	P	
NCR	Non-Conformance Report / Quality Deficiency Report	Q	
OER	Over Expenditure Report	P	City internal document to approve a contract change. This document type is not implemented on the DMS. If uploading over-expenditure reports on the DMS, utilize the <i>Report</i> document type.
PER	Permit	C	Construction permit, building permits and other government permits.
PES	Progress Payments / Progress Estimate	P	Contractor Progress Estimate (Basis of Payment)
PHO	Photograph	B, C, D, P, Q	

### General Project Documents

Code	Description	Typical Category	Description / Examples
PLA	Plan	C	Example: Traffic Management Plan Contractor Safety Manual, Safe Work Plan, Emergency Response Plan
		P	Any plan document written from a project management perspective. Examples: Consultant Services Management Plan, Project Charter, Project Plan
		Q	Quality Plan
POR	Purchase Order	B	A purchase order associated with a contract. For example, a chemical purchase.
PRE	Presentation	C,D,P	Presentation (i.e. PowerPoint)
PRO	Procedure / Protocol	P	Project Management Procedure
		D	Design Procedure or Protocol: Example: Inspection Procedure
		C	Construction Procedure or Protocol: Example: Construction shutdown procedure Safety Procedure: Examples: Lockout/Tag out Procedure Commissioning procedure (Discipline Y)
		Q	
PRP	Progress Report	P	Progress reports and status reports.
PRR	Press Release	P	
PTW	Permit to Work / Work Permit	C	Safety work permit. Examples: Confined Space Permit, Critical Lift Permit, Hot Work Permit
QTR	(Quality) Test Result	Q	Examples: Concrete strength testing, acoustic noise testing, electrical insulation testing result
QUO	Quote	C, P	A quotation for a product or services, that is not associated with a CCN. CCN quotes shall be included and attached to the CCN.
REF	Reference Document	D	A document that is a reference for a design. Examples include a technical paper or vendor data.

### General Project Documents

Code	Description	Typical Category	Description / Examples
RFI	Request for Information	C, D, P	Contractor or designer request and response. Note that Materials Management compliant naming may be required for procurement RFIs.
RIS	Risk Register	P	
RPM	Technical Memorandum / Report - Memorandum	D	Small reports including technical memorandums.
RPT	Report	B, C, D, P, Q	Reports including design reports, award reports and general reports other than those identified with a specific document type code.
SCD	Schedule	P	Any project time schedule document. Example: Commissioning Schedule. See Note 2
SPC	Specification	D	Construction Specifications. See Section XXX
SKT	Sketch	C, D	
SUB	Submittal	S	Contractor Technical Submittal (i.e. shop drawings and product data) – Used for DMS projects only. Use Section 5 for non-DMS projects.
TRA	Transmittal	P	May not be a document type within a DMS as the DMS generates an internal transmittal.
TRC	Training Attendance (Record)	C	Example: Worker Orientation Record
VID	Video	C	
WAR	Warranty	C	Contract warranty documents

**Note:**

1. *It is required that the Document Types for General Project Documents do not conflict with the Document Types for Class A Documents.*
2. *The Code SCD was utilized rather than SCH for the Project Schedule document type as the SCH document type is utilized in Table 3-5.*

## General Project Documents

### 4.2.6 Sequence Number

The *Sequence Number* is a four digit number to uniquely identify the specific document, with a given *Project Code*, *Category Code* and a specific *Document Type Code*. It is usually assigned in a sequential manner with the first document assigned a *Sequence Number* of 0001 and the next document 0002.

#### **Notes:**

1. *Where documents are not auto-numbered (outside of the DMS), assignment of the Sequence Number will typically be performed by searching for the last document with the given Project Code and Document Type Code, and incrementing the sequence number. For example, if the last meeting minutes document for S0924 was S0924-00PD-MOM-0014 the next meeting minute document would be identified as S0924-00PD-MOM-0015.*
2. *If not auto-numbered via a DMS, The project manager may assign a specific coding system to the sequence number for a specific project, if so required. For example 1000 series document may be associated with phase one of the project and 2000 series documents may be associated with phase two of the project.*

### 4.2.7 Suffix

See Section 6.3.

## 4.3 Special Cases and Clarifications

### 4.3.1 Class A Documents

Class A Documents will be identified as per Section 3. Class A Documents are technical design documents and drawings produced to describe the work and utilized as a facility lifecycle document for records and maintenance purposes.

### 4.3.2 Tender Documents

Tender (Bid Opportunity and Request for Proposal) documents will be identified as per Materials Management file naming convention, as described in [Naming\\_conventions.pdf](#).

### 4.3.3 Specifications

Specifications in NMS / MasterSpec format will be numbered in accordance with Materials Management file naming convention. Specifications should be broken out into one file per division for delivery to the City or posting to Materials Management.

Examples:

601-2015\_NMS\_Division-10

601-2015\_NMS\_Division-26

## General Project Documents

### 4.4 Example Project Documents

The following examples demonstrate correct application of this standard to project documents.

<b>Document Number</b>	<b>Title</b>	<b>Description</b>
S0926-01CF-CCO-0003	New SF-G652	(Contract Change Order)Approved Contract Change 0003, which is regarding a new supply fan SF-G652 for project contract 1 (123-2014).
S0926-01CF-CCO-0003_APP01	SF-G652 Datasheet	Appendix to CA-ACC-0003
S0926-01CF-CCN-0001_RES01	Additional Concrete	Contractor response (quote) to S0926-01CF-CCN-0001 document regarding Additional Concrete.
S0926-01F-PES-0015_S	2014-10-31	Signed copy of Progress Estimate 15 for the period ending 2014-10-31.
S0926-02PD-MOM-0001	2014-09-10 Progress Meeting	Minutes of Meeting for the Contractor Progress Meeting dated 2014-09-10.
S0926-11CY-PRO-0001	Commissioning Procedure	
253-2015_NMS_Division-03	Division 03 Specifications	Division 03 specifications for the contract represented by the project WBS code 02.
S0926-02SE-SUB-0020	Panel board submittal	Format to be utilized only in a DMS environment.
S0926-02PF-RPT-0002	Over Expenditure Report	City internal document to approve a contract change.

Contractor Submittal Documents

## 5 CONTRACTOR SUBMITTAL DOCUMENTS

**CAUTION: Utilize this section only for non-DMS projects.**

### 5.1 Description

Contractor Submittal documents are typically shop drawings and product datasheets produced by the contractor or other vendors. The submittals indicate specific manufacturing and construction details, but not overall design concepts. Design documents (including drawings), produced either by a consultant, or as part of a design build project, shall be numbered as per the Class A Document format shown in Section 3 or the Project Document format shown in Section 4, as appropriate.

If utilizing a DMS for the project, see Section 4 for appropriate numbering.

### 5.2 Format

The document number format for Contractor Submittal documents is shown in Table 5-1, with a description of each field in the subsequent sections. This format is applicable to projects not utilizing the DMS. For projects utilizing DMS the format will be as per Section 4.

Table 5-1 : Contractor Submittal Document Number Format

Field	Project Code		WBS Code	Category Code	Discipline		VDR Code (See Note 2)		Sequence Number		Suffix (Optional)
Format	LNNNN	-	NN	L	L	-	[L]CCC[CCC]	-	NNN	_	*
Example	S0926	-	11	S	E	-	001	-	001	_	R01

Legend: N = numeral, L= Letter, C= character (i.e. =N or L), \* = Multiple Characters

**Notes:**

1. The Category Code is always S for project Contractor Submittal documents.
2. Two alternatives for VDR Codes are presented in Section 5.2.4.
3. The file extension, such as “.docx” or “.pdf” would be appended to the end of the filename, but is not technically considered to be part of the document number.
4. The suffix is separated by an underscore (\_), not a hyphen (-).

## Contractor Submittal Documents

5. *The suffix is technically not part of the document number, but rather an extension to be utilized in special case scenarios.*

### 5.2.1 Project Code

The *Project Code* is implemented as per Section 4.2.1.

### 5.2.2 WBS Code

The *WBS Code* is implemented as per Section 4.2.2.

### 5.2.3 Category Code

The *Category Code* is implemented as per Section 4.2.3. The *Category Code* is always S for Contractor Submittal documents.

### 5.2.4 Discipline

Select the appropriate discipline as per Section 4.2.4.

### 5.2.5 VDR Code

The Vendor Document Requirement (VDR) Code is a number that uniquely identifies each submittal package required from the Contractor. The *VDR Code* is to be between three and six numbers, depending upon the coding system utilized on the project. The two available VDR coding systems are described in the following sections.

#### 5.2.5.1 VDR Code Scenario 1 – Custom VDR List

In this scenario, the project manager has decided that a custom Vendor Document Requirement (VDR) list is created and that the submittal requirements are to be organized and referenced based upon a custom list for the project. This list shall include discipline coding, as per Table 3-4. The discipline should generally be chosen based upon the primary group responsible for creating and/or implementing the work. For example: A process pump datasheet is a process document, even though it might have electrical motor data included.

Scenario 1 is the recommended format for large projects, to ensure that submittals are not missed. Example document numbers for this scenario are shown below, based on the sample VDR schedule shown in Table 5-2.

Document Number	Title
S0926-12SS-S104-01	Structural - HRC Building Foundation Concrete mix design
S0926-12SS-S104-02	Structural - HRC Building Wall Concrete mix design
S0926-12SS-E103-01	Electrical - Distribution Panel DP-G701 submittal
S0926-12SS-E104-01	Electrical - Distribution Panel PNL-S702 submittal



**Contractor Submittal Documents**

**Table 5-2 : Sample VDR Schedule**

VDR	Discipline	Description	
S1**	Structural	Head works and Grit	
S101		Excavation Plan	
S102		Shoring Plan / Shop Drawings	
S103		Piles	
S104		Concrete Mix Design	
S2**		High-Rate Clarifier Building	
S201		Excavation Plan	
S202		Shoring Plan / Shop Drawings	
S203		Piles	
S204		Concrete Mix Design	
E1**		Electrical	Headworks and Grit
E101			Transformers - MV
E102	Transformers - LV		
E103	Panelboards – 600V		
E104	Panelboards – 120/208V		
E2**	High-Rate Clarifier Building		
E202	Transformers - LV		
E203	Panelboards – 600V		
E204	Panelboards – 120/208V		

**5.2.5.2 VDR Code Scenario 2 – VDR Based upon Construction Specification Reference**

In this scenario, the project manager has decided that no custom Vendor Document Requirement (VDR) list is created and that the submittal requirements are to be organized and referenced purely upon the specification reference number. The specification reference number is typically based on the Construction Specifications Institute (CSI) format, which is sometimes referred to as National Master Specifications (NMS) format. Examples for this scenario are shown below.

Document Number	Title
S0926-12SS-033000-001	Structural - HRC Building Foundation Concrete mix design
S0926-12SS-033000-002	Structural - HRC Building Wall Concrete mix design
S0926-12SE-262417-001	Electrical - Distribution Panel DP-R701 submittal
S0926-12SE-262417-002	Electrical - Distribution Panel DP-S702 submittal

## Contractor Submittal Documents

### 5.2.6 Sequence Number

The *Sequence Number* is a three digit number to uniquely identify the specific document, with a given *Project Code*, *WBS Code*, *Category Code* and *VDR Code*. It is usually assigned in a sequential manner with the first document assigned a Sequence Number of 001 and the next document 002.

### 5.2.7 Suffix

Implement the suffix as per Section 6.3.

**General Requirements**

## 6 GENERAL REQUIREMENTS

The general requirements apply to all documents.

### 6.1 Document Titles

Every document shall have a document title clearly indicated on the cover of the document. The document number and document title are independent fields. Where a DMS is utilized, the title shall also be entered into the DMS document metadata.

Document titles should contain concise descriptive information regarding the content of the document, without duplicating information that is found in the document type. The information, together with the document number should provide users with sufficient information to identify the document. Where dates are applicable, they shall be in YYYY-MM-DD format.

### 6.2 Revision Codes

Every document shall clearly have a revision code indicated on the cover page of the document. The revision shall be in the format as per Table 6-1.

**Table 6-1 : Revision Codes**

Code	Description
PA - PZ	Preliminary / Draft Release
00	First Official Revision (Tender / Construction)
01 - 99	Subsequent Official Released Revisions
##[A-Z]	A draft release of changes to the ## revision release, which when approved would be incremented to the next release. For example: revision 01B is the second draft of the changes to the 01 release document, and when approved, would later become the 02 release document.

The revision code is not part of the document number, but shall be shown on the cover page / title block of all documents.

#### 6.2.1 Revision Description

All documents should indicate a Revision Description, to indicate the purpose of the issue, or the changes made. Examples are indicated below:

Revision	Revision Description
PA	Initial Concept
PC	Issued for 60% Review
00	Issued for Tender
01	Modified pump horsepower

## General Requirements

### 6.3 Suffix Codes

The *Suffix Code* is technically not part of the document number, but rather an optional extension to be utilized in special case scenarios. The *Suffix Code* consists of one to three letters and an optional subsequent sequence number. While the information in the suffix is limited, it should be noted that the document title should be utilized to fully describe the document. See Table 6-2 for a list of *Suffix Codes* and their definition.

**Table 6-2 : Suffix Code Designations**

Code	Description	Applicable With DMS
APP	Appendix	Yes
C	Commented version of the document	No (See Note 2)
NAT	Native format of the document	Yes
RES	Response to document. (Example – CCN Quote)	No
R	Revision of a document	No
S	Signed / approved version of the document	No

**Note:**

1. *Stacking of multiple suffix codes is acceptable where required to indicate the document content. The suffixes are to be separated utilizing an underscore character.*
2. *For commented versions of the document, responses to documents, revisions of documents and signed versions of the document in a DMS environment, simply replace / supercede the previous version of the document with the revised / response / commented / signed version. The original version of the document is still available on the DMS by accessing previous revisions.*

#### 6.3.1 Appendix Files

Appendix files are additional documents appended to a main document. In some cases they may have a completely independent document number, but in other cases it is appropriate to number the document as an appendix to the main document by utilizing the APP suffix code.

**Note:**

1. *For the Aconex DMS, implementation of Appendix files will require the use of the Bulk Processing Tool to allow the auto-numbering for a document to be overridden and allow the use of the suffix.*

#### 6.3.2 Commented Files

During project implementation, documents are reviewed and commented on. The comments can either be integrated into the native document, such as Microsoft Word comments, or into a PDF file. The commented files are not official versions of the document, and thus require a separate filename. The filename is to be appended with

## General Requirements

“\_C#”, where # is a sequential number to be applied. Multiple comment files can be produced with respect to a single document. Where a comment file is applicable to a single revision, the revision number should also be included in the filename.

**Note:**

1. *If the DMS incorporates a commenting system, it shall be utilized rather than the use of commented files.*

### 6.3.3 Native Format of the Document

#### 6.3.3.1 Microsoft Windows Implementation

It is acceptable to have both native file and PDF versions of the document with the same document number. The filename could be the same, except for different filename extensions.

#### 6.3.3.2 DMS Implementation

Where a DMS cannot have the multiple files linked to the same document numbers, a document number suffix should be utilized to differentiate the native file from the published (PDF) file. Native files are the original Word, AutoCAD, Excel or other application data files that were utilized to generate the document. For example, document S0926-10PD-ACC-0001 is a signed document with some sketches integrated into the PDF file, it may still be desired to upload the original Word document. In this case, the Word document would be identified with a \_NAT suffix (S0926-10PD-ACC-0001\_NAT).

**Note:**

1. *The requirement to upload both native and PDF files shall be based upon the specific project contractual requirements and the direction of the Project Manager.*
2. *This does not mandate that all native files shall have the \_NAT suffix. It is acceptable to load only the native (i.e. Word, Excel) files on the DMS, provided this does not contradict contractual requirements. The suffix shall be utilized when the primary file is in a different format (i.e. PDF).*
3. *For the Aconex DMS, implementation of native file suffix will require the use of the Bulk Processing Tool to allow the auto-numbering for a document to be overridden and allow the use of the suffix.*
4. *In the event that a native file is uploaded as a document (i.e. S0926-10DD-RPT-0001) and then at a later that the PDF file is uploaded, the document numbering should be corrected to meet the above standard. For this example, S0926-10DD-RPT-0001 should be assigned to the PDF file and S0926-10DD-RPT-0001\_NAT to the native file.*

## General Requirements

### 6.3.4 Examples

The following examples demonstrate correct application of suffixes.

<b>Document Number With Suffix Extension</b>	<b>Title</b>	<b>Description</b>
S0924-01DE-RPT-0001_C0		Excel review log on a design report that is applicable to all revisions of the document
S0924-11PF-PES-0015_S	2014-10-31	Signed copy of Progress Estimate 15 for the period ending 2014-10-31.
S0924-12CF-CCO-0003_APP01	SF-G652 Datasheet	Appendix to CA-CCO-0003
S0924-12CF-CCN-0001_RES01	Additional Concrete	Contractor response (quote) to CA-CCN-0001 document regarding Additional Concrete.
S0924-12PF-PES-0015_S	2014-10-31	Signed copy of Progress Estimate 15 for the period ending 2014-10-31.
S0924-12PD-MOM-0001_NAT	2014-09-10 Progress Meeting	Native Word File for the Progress Meetings
S0924-12PD-MOM-0001_R01	2014-09-10 Progress Meeting	Revision 01 of the Minutes of Meeting for the Contractor Progress Meeting dated 2014-09-10.
1-0102-CGAD-B601_RPA_C0		1 <sup>st</sup> Commented file on PA rev.
1-0102-CGAD-B601_RPB_C0		1 <sup>st</sup> Commented file on PB rev
1-0102-CGAD-B601_RPB_C1		2 <sup>nd</sup> Commented file on PB rev
S0924-11DD-RPT-0001_C0	Document Comments	Excel comment file applicable to all revisions of the document (alternative to examples above)

## Document Management System Implementation

# 7 DOCUMENT MANAGEMENT SYSTEM IMPLEMENTATION

## 7.1 Metadata Fields

The following metadata fields shall be tracked for each document within the DMS:

**Table 7-1 : DMS Metadata Fields**

<b>Field</b>	<b>Mandatory</b>	<b>Notes</b>
Document Number	Y	Drawings (Class A) are numbered manually. The document number for most project documents is auto generated.
Project Code	Y	Should be automatically entered for each document without user intervention. See Section 4.2.1.
WBS Code	Y	WBS codes are configured in the DMS as set up by the PM. For Class A documents, select the most appropriate WBS code, as per Section 4.2.2, even though the WBS code is not within the document number.
Document Type	Y	Corresponds to the Document Type Code. For project documents this is as per Section 4.2.5. For drawings (Class A), only a generic Drawing document type needs to be selected, however the appropriate document type shall be coded in the document number as per Section 3.2.4.1. For Class A Technical Documents, the document type shall be selected as per Section 3.2.4.2.
Category	Y	The Category shall be selected as per Section 4.2.3.
Discipline	Y	The Discipline shall be selected as per Section 4.2.4.
Area Code	N	The Area Code, while not mandatory, should be selected for all documents that are specific to an area code. See Section 3.2.5.
Status	Y	Refers to document status. Refer to the DMS documentation.

## FAQ – Frequently Asked Questions

### 8 FAQ – FREQUENTLY ASKED QUESTIONS

#### **Why do Class A Documents have a different coding system than General Project Documents?**

Class A Documents have a different lifecycle than General Project Documents. Project documents, such as a progress estimate or meeting minutes, do not typically need to be referenced past the life of the project. However, Class A Documents, including drawings, have a life for as long as the facility is in service. Thus, Class A Documents have a document number coded by facility and area rather than by project.

#### **How should a HAZOP workshop report be numbered?**

Workshop reports are not considered to be design documents, and thus should be numbered as General Project Documents per Section 4. For example, a valid project document number would be:

S0926-05DD-RPT-0005      HRC Building HAZOP Report

#### **What should the Revision Code be for a preliminary drawing, sealed by a professional engineer for costing purposes?**

Preliminary drawings should be coded with a Revision Code in the PA to PZ series, regardless of whether the drawing is an authenticated sealed drawing. An example is shown below:

Document Number:	1-0102-PPID-S201
Revision	PC
Revision Description:	Issued for Costing

#### **What should the Revision Code be for a drawing issued for tender, but not sealed by a professional engineer?**

A drawing issued for tender is an official release. If this is the first official release of the drawing, it should have a Revision Code of 00. A subsequent revision to issue the drawing for construction and seal the document would have a Revision Code of 01.



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### **A drawing is currently at the as-built stage and changes are proposed as part of a new construction package. Should a new document be created? How should the Revision Code be applied?**

If the changes to the document are minor and do not change the overall design intent, then modify the existing drawing. The following is an example sequence of drawings revisions, which would be appropriate for the indicated situation:

Document Number	Revision	Revision Description
1-0101-PPID-D521	02	As-Built – Bid Opp. 123-2015
1-0101-PPID-D521	02A	Proposed Modifications
1-0101-PPID-D521	02B	Issued for City Review
1-0101-PPID-D521	03	Issued for Tender – Bid Opp. 456-2018

### **How should National Master Specification (NMS) format specifications be numbered?**

*Response to be developed.*

### **How should Construction Inspections by the Engineer be numbered?**

Construction inspections reports by the engineers are considered to be Construction documents, not Quality Test Results. Construction documents are organized by discipline, as per Table 4-3. The Document Type Code for construction inspection reports is found in Table 4-5 to be CIR. Thus, for a structural inspection report for project S-924 and WBS Code 11, the document code would be:

S0924-11CS-CIR-0001

Where 0001 is the next available incremental number.

### **If a project is in the construction stage, and the contract administrator holds a meeting with the City, how should the meeting minutes be numbered?**

Meeting minutes of meeting held with the contractor during the contract administration phase are typically numbered with a discipline of *D - General* as follows:

S0924-21PD-MOM-0001, S0924-21PD-MOM-0002, etc.

The concern is that a meeting held without the contractor should not interrupt the official meeting number sequence. Thus, if internal meetings are held without the other party, it is recommended to utilize the *I – Internal* discipline to differentiate the meetings as follows:

S0924-21PI-MOM-1001, S0924-21PI-MOM-1002, etc

### **How can I tell which organization created the document for the document number?**

The document number does not indicate who created the document. The document's originator should be shown on the document's title page. In addition, if a DMS is utilized on the project, the DMS should have a metadata field for the document's originator.

### FAQ – Frequently Asked Questions

#### **What is the document number for a single comment file that applies to a large group of drawings?**

The document number should utilize the LIS (List) document type. For example:

S0976-11DD-LIS-0001      WSTP Level 2 Design Report Comment List