DIGON – Custom Reports Guide

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INTRODUCTION

BUILDER offers a suite of reports available for customization by individual clients. These reports provide users with the ability to visualize and organize their data to support infrastructure management decision-making. This guide provides a detailed explanation of each BUILDER custom report developed and currently available from DIGON Systems, a distribution, training, support and consulting partner for the BUILDER, ROOFER and RAILER asset management tools within the Sustainment Management System (SMS).

HOW ARE CUSTOM REPORTS ACCESSED?

In BUILDER, Custom Reports are accessed in the Inventory Module from the toolbar above the content pane as shown in Figure 1, **not** by clicking the "Reports" button in the Menu Bar. There are currently no reports available for generation under the Condition or Functionality Modules.

Custom reporting is available at the Organization (🛡️), Site (⛰️), Complex (🏢), and Building (🏬) levels of the BUILDER hierarchy. Not all reports may be available at each level of the hierarchy, however. The reports will generate at whichever level in the hierarchy you have selected and will include all data organized below it in the tree. In the example of Figure 1, the reports will generate at the Site level and include only data for the complexes/assets organized under "123 - SPIRE Site" such as assets "1 - Warehouse 1" and "101 - SPIRE Facility A1." After selecting an Organization, Site, Complex, or Building, click "Custom" in the Reports drop-down.

Figure 1: Custom Report Access
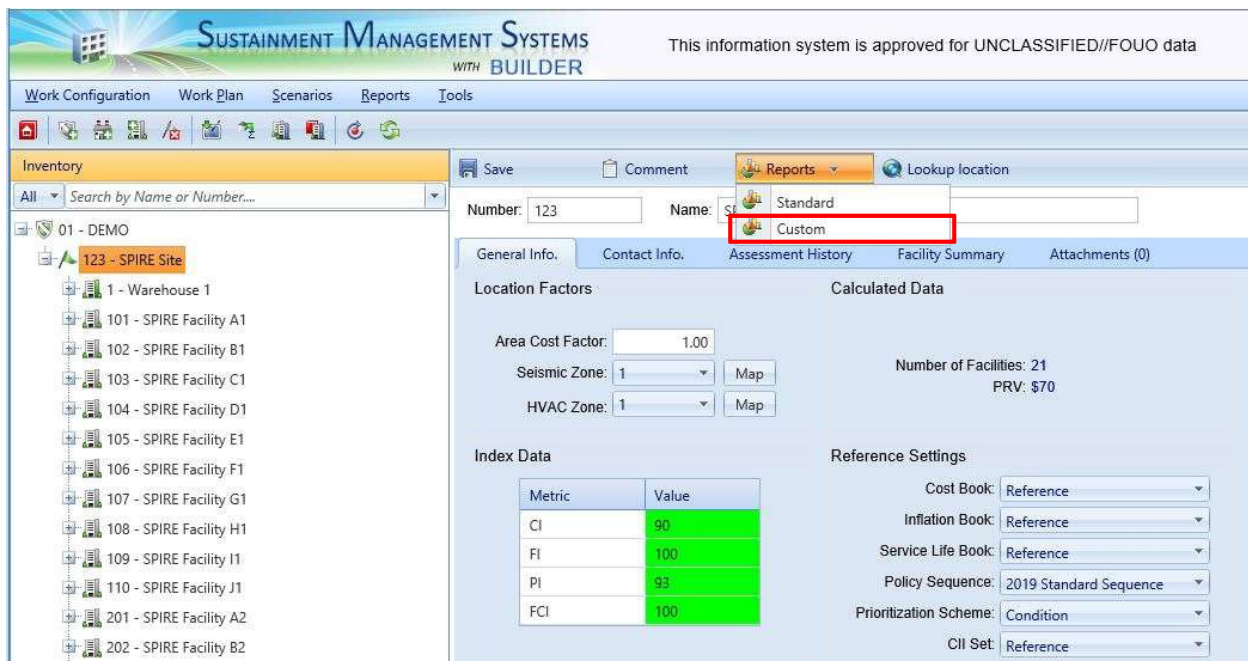
A Custom Reports window will appear. Select the desired report and click the "Run Report" button (Figure 2). This will generate a report preview.

Figure 2: Custom Reports Window
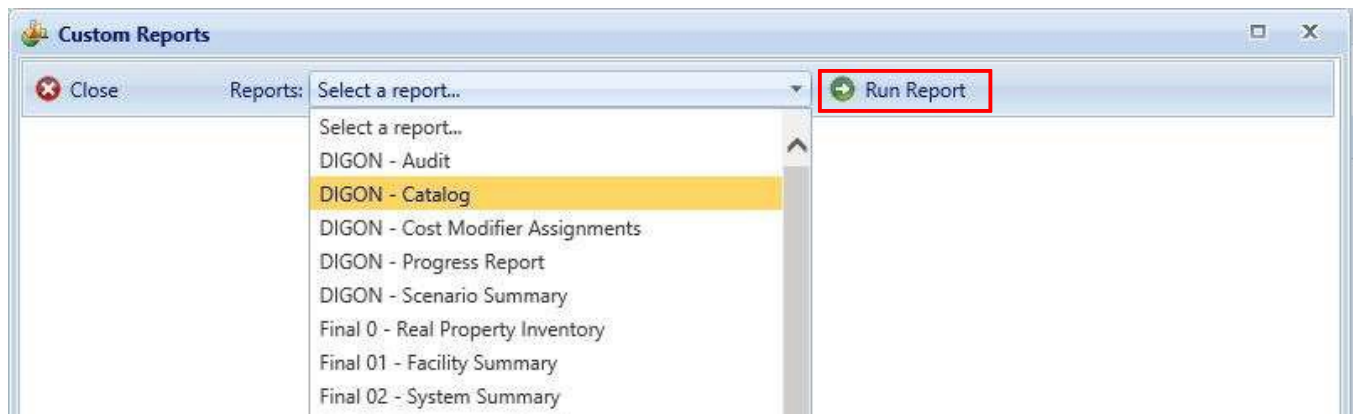
Some reports have parameters that can be selected to further define report output. Select the desired parameter values and then click the "View Report" button, as shown in Figure 3. This is located on the right side of the window, and you may need to scroll over to see it.

Figure 3: Set Report Parameters
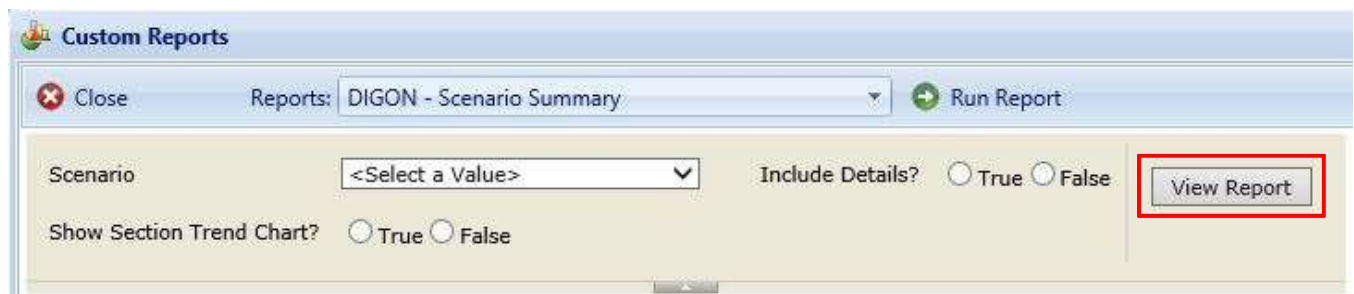
The report can be exported by clicking the blue diskette icon and selecting the desired output (Figure 4). Some reports are designed to be printable and exportable to PDF for printing or distributing. Other reports are tabular in nature and are designed to be exportable to Excel. Refer to each report description to determine the ideal output to use.

Figure 4: Report Export
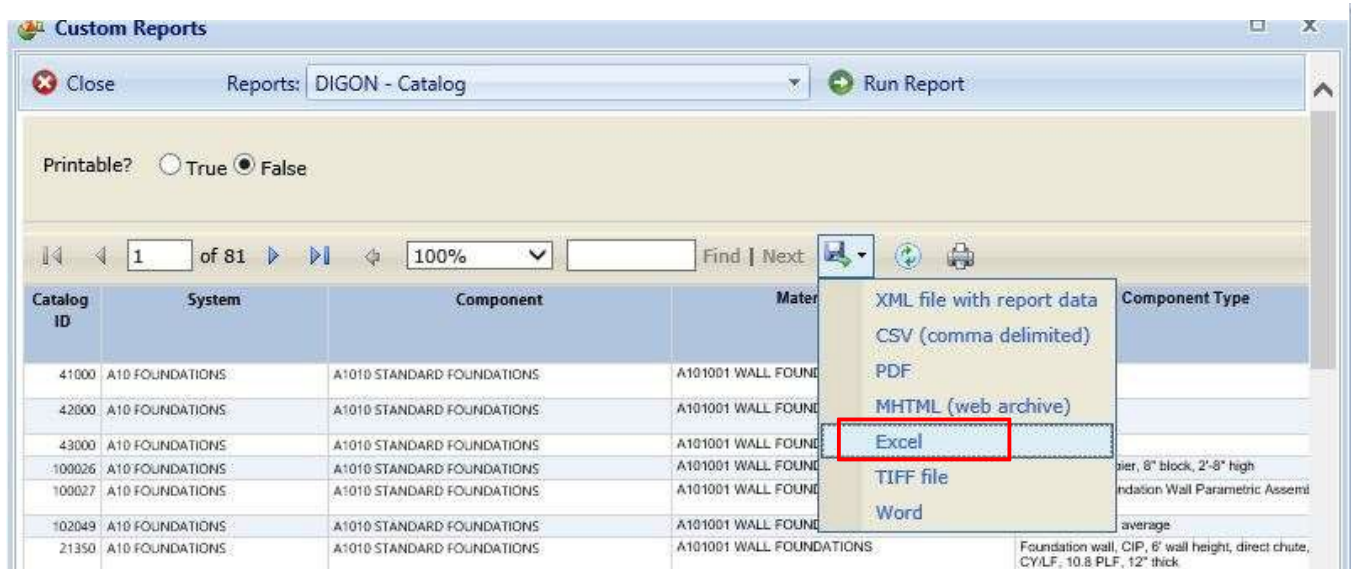
SUMMARY OF AVAILABLE DIGON CUSTOM REPORTS

REPORT NAME	BUILDER Levels Report Is Available				Formatted For
	ORG	SITE	CPLX	BLDG	
DIGON – Audit	X				EXCEL
DIGON – Catalog	X	X			EXCEL/PDF
DIGON – Cost Modifier Assignments	X	X	X	X	EXCEL
DIGON – QA Review		X	X	X	EXCEL
DIGON – QA Review Details		X	X	X	EXCEL
DIGON – Scenario Summary	X	X			EXCEL
DIGON – Site Report *(avail. customized per client)*		X			PDF
SPIRE – Building Create		X			CSV
SPIRE – Building Update		X	X		CSV
SPIRE – Inspection Create				X	CSV
SPIRE – Inspection Update		X	X	X	CSV
SPIRE – Inventory Create				X	CSV
SPIRE – Inventory Update		X	X	X	CSV

DIGON – AUDIT

DESCRIPTION:

This report provides a list of specific actions that have been performed in BUILDER, including the date/time, user, type of event, database table affected, and Building. Click the + symbols on the left side of the report to expand an action and view the field(s) created or modified along with the old and new values (where applicable). This can provide valuable visibility into a user action history between a specific date range.

ANSWERS THE QUESTIONS:

- How can I see who has done what in BUILDER? For example:
    - How many inspections were added by this person in June?
    - My scores seem strange this week. What sections have been updated in the last 7 days?

AVAILABLE BUILDER LEVELS:

- Organization

PARAMETERS TO FILTER DATA:

- **Site(s):** Select one or more Sites
- **Tables:** Choose which database tables to display
- **Start Date/End Date:** Choose a data range
- **Users:** Select one or more BUILDER users
- **Offset Rowcount:** Declare how many rows of data to ignore before beginning to return records. Default value is 0.
- **Batch Size:** How many total records you allow the report to return.

RECOMMENDED FORMAT: Excel

Figure 5: Sample DIGON - Audit Report

DIGON – CATALOG

DESCRIPTION:

This report provides a list of all catalog items and their Sub-Components, Unit of Measure, Design Life, cost information, and the number of times used in the Organization or Site for which the report is run. When run at the Site level, the Area Cost Factor is included.

ANSWERS THE QUESTIONS:

- How can I see all the cost, service life, and other attributes to the catalog items that are available to me?
- How many times have we picked a certain section catalog item within my organization?

AVAILABLE BUILDER LEVELS:

- Organization
- Site

PARAMETERS TO FILTER DATA:

- **Printable:** Choose a printable version pre-formatted to 8.5" x 11". The printable version displays fewer fields than the full version of the report, focusing on key data for a printed report.

RECOMMENDED FORMAT: If **Printable** is selected, recommended format is PDF; otherwise, Excel

Figure 6: Sample DIGON - Catalog Report (full)

0020 - Hoth Operations

Catalog ID	System	Component	Material Category	Component Type	Sub Component(s)	UoM	Design Life	Baseline Unit Cost	Baseline Cost Year	Inflation Multiplier	General Multiplier	Adjusted Unit Cost (Without Area Factor)	Edited by User?	Metric-To-SAE Multiplier	Component Importance (CII)	Number Of Times In Use
41000	A10 FOUNDATIONS	A1010 STANDARD FOUNDATIONS	A101001 WALL FOUNDATIONS	General	Reinforcement Surface	LF	100	$64	2011	1.18082	1.25	$94	No	3.281	0.50	2
42000	A10 FOUNDATIONS	A1010 STANDARD FOUNDATIONS	A101001 WALL FOUNDATIONS	Other	Reinforcement Surface	LF	100	$64	2011	1.18082	1.25	$94	No	3.281	0.50	0
43000	A10 FOUNDATIONS	A1010 STANDARD FOUNDATIONS	A101001 WALL FOUNDATIONS	Unknown		LF	100	$64	2011	1.18082	1.25	$94	No	3.281	0.50	0
30212	A10 FOUNDATIONS	A1010 STANDARD FOUNDATIONS	A101001 WALL FOUNDATIONS	Foundation Wall	Reinforcement Surface	SF	100	$8	2011	1.18082	1.25	$11	No	10.764	0.50	0
21351	A10 FOUNDATIONS	A1010 STANDARD FOUNDATIONS	A101001 WALL FOUNDATIONS	Grade Beams	Reinforcement Surface	LF	100	$144	2011	1.18082	1.25	$213	No	3.281	0.63	0
21350	A10 FOUNDATIONS	A1010 STANDARD FOUNDATIONS	A101001 WALL FOUNDATIONS	Strip Footing	Reinforcement Surface	LF	100	$64	2011	1.18082	1.25	$94	No	3.281	0.63	0
41001	A10 FOUNDATIONS	A1010 STANDARD FOUNDATIONS	A101002 COLUMN FOUNDATIONS & PILE CAPS	General	Reinforcement	EA	100	$2,325	2011	1.18082	1.25	$3,432	No	1.000	0.50	0
42001	A10 FOUNDATIONS	A1010 STANDARD FOUNDATIONS	A101002 COLUMN FOUNDATIONS & PILE CAPS	Other	Surface	EA	100	$2,325	2011	1.18082	1.25	$3,432	No	1.000	0.50	0
43001	A10 FOUNDATIONS	A1010 STANDARD FOUNDATIONS	A101002 COLUMN FOUNDATIONS & PILE CAPS	Unknown		EA	100	$2,325	2011	1.18082	1.25	$3,432	No	1.000	0.50	0
30001	A10 FOUNDATIONS	A1010 STANDARD FOUNDATIONS	A101002 COLUMN FOUNDATIONS & PILE CAPS	Column Pier	Connections Reinforcement Surface	EA	100	$2,325	2011	1.18082	1.25	$3,432	No	1.000	0.63	0

Figure 7: Sample DIGON - Catalog Report (printable)

0020 - Hoth Operations

Catalog ID	System	Component	Material Category	Component Type	UoM	Design Life	Adjusted Unit Cost (Without Area Factor)	Number Of Times In Use
41000	A10 FOUNDATIONS	A1010 STANDARD FOUNDATIONS	A101001 WALL FOUNDATIONS	General	LF	100	$94	2
42000	A10 FOUNDATIONS	A1010 STANDARD FOUNDATIONS	A101001 WALL FOUNDATIONS	Other	LF	100	$94	0
43000	A10 FOUNDATIONS	A1010 STANDARD FOUNDATIONS	A101001 WALL FOUNDATIONS	Unknown	LF	100	$94	0
30212	A10 FOUNDATIONS	A1010 STANDARD FOUNDATIONS	A101001 WALL FOUNDATIONS	Foundation Wall	SF	100	$11	0
21351	A10 FOUNDATIONS	A1010 STANDARD FOUNDATIONS	A101001 WALL FOUNDATIONS	Grade Beams	LF	100	$213	0
21350	A10 FOUNDATIONS	A1010 STANDARD FOUNDATIONS	A101001 WALL FOUNDATIONS	Strip Footing	LF	100	$94	0
41001	A10 FOUNDATIONS	A1010 STANDARD FOUNDATIONS	A101002 COLUMN FOUNDATIONS & PILE CAPS	General	EA	100	$3,432	0
42001	A10 FOUNDATIONS	A1010 STANDARD FOUNDATIONS	A101002 COLUMN FOUNDATIONS & PILE CAPS	Other	EA	100	$3,432	0
43001	A10 FOUNDATIONS	A1010 STANDARD FOUNDATIONS	A101002 COLUMN FOUNDATIONS & PILE CAPS	Unknown	EA	100	$3,432	0
30001	A10 FOUNDATIONS	A1010 STANDARD FOUNDATIONS	A101002 COLUMN FOUNDATIONS & PILE CAPS	Column Pier	EA	100	$3,432	0
30002	A10 FOUNDATIONS	A1010 STANDARD FOUNDATIONS	A101002 COLUMN FOUNDATIONS & PILE CAPS	Column Pier - Concrete	EA	100	$29,521	0

DIGON - COST MODIFIER ASSIGNMENTS

DESCRIPTION:

This report provides an overview of all cost modifier assignments and the level (scope) at which they were assigned. It displays all assigned modifiers rather than all inherited modifiers. This report will be available for BUILDER 3.5.x and later versions, which include the Cost Modifier feature.

ANSWERS THE QUESTIONS:

- How can I validate that all modifier assignments are complete and correct without having to click the Cost Modifiers tab for every hierarchy element?
- How can I view all modifiers assigned in my Organization, Site, Complex, or Building?
- What is the estimated impact of each modifier on Section costs?

AVAILABLE BUILDER LEVELS:

- Organization
- Site
- Complex
- Building

PARAMETERS TO FILTER DATA:

- N/A

RECOMMENDED FORMAT: Excel

Figure 8: Sample DIGON - Cost Modifier Assignments Report

Site No	Site Name	Complex No	Complex Name	Building No	Building Name	Alternate ID	System	Component	Section Category	Section Subtype	Section Name	Modifier Scope	Modifier Type	Modifier Name	Modifier Value	Est Modifier Impact	Modifier Description	Assignment Comment
5001	SiteOne											Site	Multiplier	DemoModifier01	1.0650	$376,304,613.23	Demo Modifier Description01	Demo Assignment Comment01
5001	SiteOne		ComplexOne									Complex	Multiplier	DemoModifier02	1.1000	$520,513.20	Demo Modifier Description02	Demo Assignment Comment02
5001	SiteOne		ComplexOne	3001	BuildingOne	3001						Building	Multiplier	DemoModifier03	0.3100	($1,742.59)	Demo Modifier Description03	Demo Assignment Comment03
5001	SiteOne		ComplexTwo	3001	BuildingOne	3001	D30 HVAC	D3040 DISTRIBUTION SYSTEMS	D304008 AIR HANDLING UNITS	AHU, rooftop, cool/heat coils, constant volume, filters, 2,000 CFM	HVAC-AHU	Section	Multiplier	DemoModifier04	6.0000	$163,043.15	Demo Modifier Description04	Demo Assignment Comment04
5001	SiteOne		ComplexTwo	3002	BuildingTwo	3001						Building	Multiplier	DemoModifier05	1.3000	$108,594.22	Demo Modifier Description05	Demo Assignment Comment05
5001	SiteOne		ComplexTwo	3002	BuildingTwo	3001	D30 HVAC	D3030 COOLING GENERATING SYSTEMS	D303001 CHILLED WATER SYSTEMS	Chiller, centrifugal, water cooled, packaged hermetic, standard controls, 400 ton, assembly, includes piping, and valves	REF-CHU (Trane)	Section	Multiplier	DemoModifier06	2.0000	$588,540.00	Demo Modifier Description06	Demo Assignment Comment06
5001	SiteOne		ComplexTwo	3002	BuildingTwo	3001	D30 HVAC	D3060 CONTROLS & INSTRUMENTATION	D306001 HVAC CONTROLS	Control components/DDC system, DDC controller (average 50' run in conduit), mechanical room, 32 point controller, incl. 120V/1 phase power supply	REF (Chiller Plant)	Section	Multiplier	DemoModifier07	2.0000	$4,611.25	Demo Modifier Description07	Demo Assignment Comment07
5001	SiteOne		ComplexTwo	3002	BuildingTwo	3001	D30 HVAC	D3060 CONTROLS & INSTRUMENTATION	D306001 HVAC CONTROLS	Control components/DDC system, DDC controller (average 50' run in conduit), mechanical room, 32 point controller, incl. 120V/1 phase power supply	REF (Chiller Plant)	Section	Multiplier	DemoModifier08	5.0000	$18,445.00	Demo Modifier Description08	Demo Assignment Comment08

DIGON – QA REVIEW

DESCRIPTION:

This report is a comprehensive Section-level report that contains Building data, Section Inventory data, Inspection data from the latest inspection, relevant Section-level metrics calculated by BUILDER, current year work items, and space to put reviewer comments or action items.

ANSWERS THE QUESTIONS:

- How can I see all the inventory, inspection, and work details for a given Section?
- Where can I perform QA on the assessment details with easy ability to sort and filter section data?

AVAILABLE BUILDER LEVELS:

- Site
- Complex
- Building

PARAMETERS TO FILTER DATA:

- **Cost Modifier Details:** The ability to add cost modifiers is a feature that can be enabled in BUILDER 3.5.x and later versions. When enabled, cost multipliers and adders can be applied at multiple BUILDER levels to adjust section replacement costs. Modified costs will roll up the hierarchy and also affect CI roll-up weights, work plan item costs, and scenario costs. For the DIGON – QA Review report:
  - **True** = Select when cost modifiers have been applied to your data; Costs section of report will display *Catalog Unit Cost, Original Replacement Cost, Total Cost Multipliers, Total Cost Adders,* and *Replacement Cost*.
  - **False** = Select when **no** cost modifiers have been applied to your data; Costs section of report will display *Catalog Unit Cost* and *Replacement Cost*.

RECOMMENDED FORMAT: Excel

Figure 9: Sample DIGON - QA Review Report

INSPECTION DATA (from latest Inspection)					BUILDER CALCS - Section-Level Metrics						COSTS					NOTES
Inspection Type	Inspection Date	Inspector	Inspection Comments	Inspector Rating	Expected CI	Difference Between Expected CI and Inspector Rating	Current Estimated CI	Design Life	Age	Remaining Service Life	Catalog Unit Cost	Original Replacement Cost	Total Cost Multipliers	Total Cost Adders	Replacement Cost	QA Reviewer Notes
					97	97	97	100	27	72	$8	$119	1.0000	$0	$119	
Direct	4-15-2021	Demo User		71	93	22	71	70	27	32	$3	$4,617	1.0000	$0	$4,617	

DIGON – QA REVIEW DETAILS

DESCRIPTION:

This report expands upon the DIGON – QA Review report, adding Section Details such as Equipment ID, Serial No., and Location.

A row is displayed for each Section Detail. When a Section contains more than one detail, the additional rows are highlighted in gray to help identify all details belonging to a Section. In the example below (Figure 10), D302001 contains four Section Details, so the extra rows are gray. **NOTE:** DIGON recommends filtering, rather than sorting, data so that the grouping of Section Details per Section is preserved.

ANSWERS THE QUESTIONS:

- How can I see all the Section Detail information for a Section?
- Where can I perform QA on the assessment details with easy ability to filter section data?

AVAILABLE BUILDER LEVELS:

- Site
- Complex
- Building

PARAMETERS TO FILTER DATA:

- **Cost Modifier Details:** The ability to add cost modifiers is a feature that can be enabled in BUILDER 3.5.x and later versions. When enabled, cost multipliers and adders can be applied at multiple BUILDER levels to adjust section replacement costs. Modified costs will roll up the hierarchy and also affect CI roll-up weights, work plan item costs, and scenario costs. For the DIGON – QA Review report:
  - **True** = Select when cost modifiers have been applied to your data; Costs section of report will display *Catalog Unit Cost, Original Replacement Cost, Total Cost Multipliers, Total Cost Adders,* and *Replacement Cost*.
  - **False** = Select when **no** cost modifiers have been applied to your data; Costs section of report will display *Catalog Unit Cost* and *Replacement Cost*.

- **Compressed Output:** Used to compress the report and allow it to process more quickly if the output is too large.

RECOMMENDED FORMAT: Excel

Figure 10: Sample DIGON - QA Review Details Report

System	Component	Section Category	Section Subtype	Section Name	Qty	UoM	Section Year
			INVENTORY				
D30 HVAC	D3020 HEAT GENERATING SYSTEMS	D302001 BOILERS	Electric, Hot Water	N/A	4	EA	2000
D30 HVAC	D3020 HEAT GENERATING SYSTEMS	D302001 BOILERS	Electric, Hot Water	N/A	4	EA	2000
D30 HVAC	D3020 HEAT GENERATING SYSTEMS	D302001 BOILERS	Electric, Hot Water	N/A	4	EA	2000
D30 HVAC	D3020 HEAT GENERATING SYSTEMS	D302001 BOILERS	Electric, Hot Water	N/A	4	EA	2000
D30 HVAC	D3020 HEAT GENERATING SYSTEMS	D302002 FURNACES	Electric, 34.1 MBH	N/A	10	EA	2002
D40 FIRE PROTECTION	D4010 FIRE ALARM AND DETECTION SYSTEMS	D401001 FIRE ALARM DISTRIBUTION	Control equipment - combination fire alarm and mass notification , addressable	N/A	45,000	SF	1991

Equipment ID	EQ. Type	EQ. Make	Serial No	Model	Capacity	Manufacturer	Warranty Company	Warranty Date	Warranty Company2	Warranty Date2	Location
						SECTION DETAILS					
PLCC814			22245789			General Electric					
PLCC815			22245788			General Electric					
PLCC816			22245787			General Electirc					
PLCC817			22245786			General Electric					
PLCC815											
PLCC816											

DIGON – SCENARIO SUMMARY

DESCRIPTION:

This report shows work summary requirements related to a Scenario, including the costs, Condition Index, Functionality Index, Performance Index, and Facility Condition Index projected for each year by Building over the life of the selected Scenario. Additional tabs include:

- **Work Item Details:** Displays one row per work item with details such as Work Activity, Funding FY, Work Status, Actual Cost, Priority Score, Current CI/RSL, and information from the last inspection.
- **System Totals:** Aggregates total unique work costs per building per system; only includes columns for systems that contain work items.

NOTE: A work item may be repeated for multiple years of a constrained scenario if it is awaiting funds. The Total Unique Work Cost sum includes each work item only once, using the highest cost occurrence.

ANSWERS THE QUESTIONS:

- How can I see the results and impacts of a Scenario to my facility metrics over time?
- How can I see inspection comments right next to the work item details to understand why this needs work?

AVAILABLE BUILDER LEVELS:

- Organization
- Site

PARAMETERS TO FILTER DATA:

- **Scenarios Run Between Start Date/End Date:** Specify date range in which a scenario was run; this limits which scenarios are available to select in the **Scenario** drop-down list. Defaults to scenarios run in the last seven days.
- **Select from All Child Scenarios:** Checkbox toggle to enable Scenario drop-down list to include all child scenarios for the level at which the report is run; default is not checked, so only scenarios for that level are displayed.
- **Scenario:** Select a Scenario from the drop-down list. The Organization/Site at which the scenario was created is displayed in brackets before the scenario name. Ex: [Ft Collins Site] FCS 5 Yr Unconstrained **NOTE:** If you do not see a scenario listed, try expanding the Start Date/End Date.
- **Include Details?:** Choose whether to include Work Item Details tab.
- **Include FI/PI?:** Choose whether to include Functionality Index (FI) and Performance Index (PI) on the Scenario Summary tab.
- **Include System Totals?:** Choose whether to include System Totals tab.
- **Section Status:** Select from a drop-down list to filter by Section Status what Sections are displayed.

RECOMMENDED FORMAT: Excel

Figure 11: Sample DIGON - Scenario Summary Report (Summary Tab)

[DM] - Region8 Configuration for Regional Org Eight (Region8)				
Date	6-30-2021	Policy Sequence	Policy Sequence	
User Name	Demo User	Funding Restricted	No	
Years	1	Cost Book	Reference	
Copy Tactical Y1?	No	Service Life Book	Reference	

Org	Org2/Site	Building No	Building Name	Building Alternate ID	Area (SF)	Year Const.	MDI	PRV	FY Work Cost	BCI	FI	PI	FCI	Facility ID
DemoORG	Regional Org Eight - Site 8.31	1234	a03dc62f-ebc3-49c5-8690-26d7f89aead0	baa6e14f-b4d4-4bad-9d24-7bdd7f6ab2e1	54	1994	1	$200,001	-	95		96	100	1268bb3c-abdf-4a10-8636-018efdb9e172
DemoORG	Regional Org Eight - Site 8.31	1234	f248be0c-1f61-457f-926f-8f94c5972d28	fd38f41a-cb35-424d-8484-308fd4d76c31	11	1994	1	$200,001	-	94		96	100	1889d9d9-e034-41db-bf56-018f5f13b1c9
DemoORG	Regional Org Eight - Site 8.31	1234	daca9d80-ecf5-483b-8f54-6513c6a186d9	72d2803b-3b78-4665-b472-7f7acac90ba1	54	1994	1	$200,001	$44,371,823	95		96	100	517635e6-0019-4717-8673-8dd8bf923e78
DemoORG	Regional Org Eight - Site 8.31	1234	c296ff11-9ef1-4aa2-a512-ac51ab5a28a7	cc1e5acc-257e-4202-b232-1d1cebda6211	11	1994	1	$200,001	-	96		97	100	e9d35c16-d4db-4926-8d98-9039e1959e39
DemoORG	Regional Org Eight - Site 8.31	1234	b5f5f066-2605-477c-bff6-a106d6eba865	b0e48418-a62a-469b-9b17-be88b5d9246c	54	1994	1	$200,001	-	96		97	100	f6ab96ed-290e-4b5e-a2ad-921efbf4bae9
DemoORG	Regional Org Eight - Site 8.31	1234	3eb651d1-5ce5-41d7-a25f-2e002a61d044	112d6ee9-1fba-4c56-8d22-385148ec978f	54	1994	1	$200,001	-	94		96	100	7d87ea0b-83ae-499e-ad94-44907487903f
DemoORG	Regional Org Eight - Site 8.31	1234	d1b02f73-a254-4c27-9fb6-14e5a7131abd	8e7f5529-804a-42ad-84c4-8d8fec97400d	16	1994	1	$200,001	$81,741,880	95		97	100	169f73aa-18af-434d-8386-4723ee934a41
DemoORG	Regional Org Eight - Site 8.31	1234	8728aa9b-ad14-4394-b929-32029be1a352	45902a4e-c97f-486c-8915-87cbe1b0cc29	54	1994	1	$200,001	-	95		96	100	cee0ca76-6c57-4a4c-9d94-63d68f2709d7
DemoORG	Regional Org Eight - Site 8.31	1234	7f7307ef-e7fe-449f-b4f2-ae46c7ad9b72	a46fadc2-8419-4f11-bcf0-37e1d3a0d3c5	54	1994	1	$200,001	$105,401,940	97		98	100	e1be9f94-a445-42e1-8970-64282a5ec365
DemoORG	Regional Org Eight - Site 8.31	1234	417eb51f-d855-4c9b-ac4f-f70b19add118	c559a30b-40d5-411c-92ff-101da78023f2	54	1994	1	$200,001	-	94		96	100	35c0216f-6259-4e16-bba4-185c4f8ea175
DemoORG	Regional Org Eight - Site 8.31	1234	02fbeafb-b982-4686-9c43-1dc3a2dbf4a8	2cfcf894-1840-4fec-a445-d88e2de21b55	54	1994	1	$200,001	-	95		97	100	4d338764-b24b-4c7e-a298-abb6edf60c84
DemoORG	Regional Org Eight - Site 8.31	1234	f9639545-a72f-4c5a-86aa-0433731d6dff	a8f969e0-d4fe-4ccf-9134-3b5621306941	11	1994	1	$200,001	-	95		96	100	c96ef8da-b58c-40a3-849c-adace4ecfb96
DemoORG	Regional Org Eight - Site 8.31	1234	f5d9099d-a4aa-400d-b667-f39f5f76285a	7e7ea6cb-9f0f-4d04-aed9-215f995bc09b	11	1994	1	$200,001	-	97		98	100	dbe6beba-b265-456b-9e58-ecc2ddb1a064
DemoORG	Regional Org Eight - Site 8.31	1234	df967573-4bba-4a72-a245-c68912800d3d	c4e4801c-676f-4de0-b6f5-112396c2351d	11	1994	1	$200,001	-	95		96	100	d52ec776-ddc7-49ef-b7f5-79f3d82abdbf
DemoORG	Regional Org Eight - Site 8.31	1234	b145ddcc-6b15-4314-bb1c-47ac79280679	dce2f516-3f32-461e-98d7-3831f11c58f5	54	1994	1	$200,001	$31,991,921	95		97	100	fff530ea-064b-4c5d-958d-7b264cbfee65
DemoORG	Regional Org Eight - Site 8.31	1234	910b1cc5-fdde-4ac4-a9ea-38a2bfa01e01	2f8c15f8-30df-4de9-b950-f946e9b2a5d4	11	1994	1	$200,001	-	94		96	100	bfd1a820-969e-439f-92e5-287bdf53f11e

Figure 12: Sample DIGON - Scenario Summary Report (Work Item Details Tab)

Section Category	Section Subtype	Section Name	Section Alternate ID	Section Status	Section Year	Qty	UOM	Work Activity	Funding FY	Work Status	Actual Cost	Priority Score	Current CI	Current RSL	Projected CI	Projected RSL	Last Inspected Type	Last Inspection Date	Last Inspected Rating	Inspection Comments	Equipment ID	Facility ID	Section ID	Work Item ID
B30 1090 OTHER ROOFING	General	Test Section Name2	...	Active	2015	45	SF	Repair	2021	Budgeted	$73	0	74	3	72	3						...	...	...
B30 1090 OTHER ROOFING	Unknown	Test Section Name2	...	Active	2015	45	SF	Repair	2021	Budgeted	$73	0	74	3	72	3						...	...	...
B30 1090 OTHER ROOFING	Walkway Protection	Test Section Name2	...	Active	2015	117	SF	Repair	2021	Budgeted	$211	0	74	3	72	3					...	...	...	...
B30 1090 OTHER ROOFING	General	Test Section Name2	...	Active	2015	45	SF	Repair	2021	Budgeted	$73	0	74	3	72	3					...	...	...	...
B30 1090 OTHER ROOFING	Unknown	...	...	Active	2015	117	SF	Repair	2021	Budgeted	$195	0	62	4	61	4					...	...	...	...
B30 1090 OTHER ROOFING	General	...	...	Active	2015	117	SF	Repair	2021	Budgeted	$195	0	62	4	61	4					...	...	...	...
B30 1090 OTHER ROOFING	Unknown	...	...	Active	2015	117	SF	Repair	2021	Budgeted	$195	0	62	4	61	4					...	...	...	...

Figure 13: Sample DIGON - Scenario Summary Report (System Totals Tab)

Org	Org2/Site	Building No	Building Name	Building Alternate ID	B30 ROOFING	C30 INTERIOR FINISHES	D20 PLUMBING	D30 HVAC	D50 ELECTRICAL	E10 EQUIPMENT	E20 FURNISHINGS	G20 SITE IMPROVEMENTS	Facility ID
DemoORG	Regional Org Eight - Site 8.31	1234	425d3364-7e96-4bdb-9ec5-a4da710060af	ec382d9a-305e-44c9-ba35-5e0a87ac1a2d	$146	$253	$21,357,700	$8,893,050	$5,600	$127,700		$3,745	8d1dd915-636f-4b2f-a4c9-2f59cd211a6
DemoORG	Regional Org Eight - Site 8.31	1234	eba3a816-b462-4b3e-9958-11cf1a96234a	20fa41b7-f1e2-4ce4-8fb2-5e2ebf6d8e4f	$283		$27,274,000	$10,631,600		$115,400	$6,500	$1,470	6aa89ae6-a52b-4b23-8ea4-a29bb17229ae
DemoORG	Regional Org Eight - Site 8.31	1234	7f7307ef-e7fe-449f-b4f2-ae46c7ad9b72	a46fadc2-8419-4f11-bcf0-37e1d3a0d3c5	$315	$2,125	$63,061,000	$41,123,100	$24,300	$422,000		$14,100	e1be9f94-a445-42e1-8970-64282a5ec365
DemoORG	Regional Org Eight - Site 8.31	1234	4830c756-9c63-4694-bbf1-ef2660eb0f17	0ebd0374-babd-4ad7-a2c9-ab831013cfa4	$219	$537	$19,067,700	$9,324,250		$96,300	$2,300	$1,595	1250c0f4-c2fb-42df-ae77-970e436b3068

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DIGON – SITE

DESCRIPTION:

This report provides an overview of the physical conditions at a Site using the data in BUILDER SMS. Typically, clients prefer for this report to be customized to meet their specific needs. The baseline report includes an executive summary for the Site with Site comments; a Buildings summary with metrics such as CI, PI, FI, FCI, and work item totals; a Systems summary with the Condition Index for every system in the Site; a Scenario summary showing the cost of all projected work items by Building each year of the selected scenario; and Condition Index and Facility Condition Index trends for the Site.

You may also choose to include detailed information about each Building, including Amber or Red Sections. In addition, appendices provide information on BUILDER in general, condition ratings, terms and abbreviations, and Work Configuration specific to the Site.

Notes on Photos and Comments:
- **Site and Building Photos**—You can include a single photo of the Site on the cover page of the report and of a Building on its individual Building Summary page. To do so, in the BUILDER UI, add an image attachment with the Title of "**MAIN**" at the Site level for a site photo and at the Building level for a building photo. The name of the source file for the image does not need to be "MAIN," only the Title in BUILDER. The photo will then be automatically displayed in the Site Report. If "MAIN" does not exist, the report will pull the most recent photo if one or more is attached.
- **Inspection Photos**—One photo can be displayed for each amber or red Section in the Low-Condition Sections area of the report. If the most recent inspection for a Section has one or more photos attached, the report will display the most recent photo.
- **Comments**—If a Site or Building has a Comment specified in BUILDER, the Site Report will include the text in a Comments section. Site comments are included after the Site Executive Summary; Building comments are included after the individual Building Summary.

ANSWERS THE QUESTIONS:

- How can I see a high-level summary of the condition and work item costs of all Buildings in a particular Site?

AVAILABLE BUILDER LEVELS:

- Site

PARAMETERS TO FILTER DATA:

- **Select a Scenario:** Choose from the list of available scenarios for this Site; choose N/A if you do not want to include scenario-based data in the report.
- **Display Individual Building Reports**: If you want to include detailed information on each Building, select **True**; otherwise, select **False** and only the Site summary information will be included.
- **Select Building Data to Display:** If the above parameter (**Display Individual Building Reports**) is set to **True**, a drop-down list of available Building information is displayed. Select the items you want to include in the report.

- **Display Low-Condition Sections**:
  - **Red – Inspected Only**: Display Sections in this Building that have been inspected and currently have a CI of Red.
  - **Amber or Red – Inspected Only:** Display Sections in this Building that have been inspected and currently have a CI of Amber or Red.
  - **Red – All:** Display all Sections in this Building with a CI of Red, including those that are age-based.
  - **Amber or Red – All:** Display all Sections in this Building with a CI of Amber or Red, including those that are age-based.
  - **None**: Do not include Low-Condition Sections in the report.
- **Include Photos for Low-Condition Sections?** Select **True** to include an inspection photo, when available.
- **Display Appendices**: If you want to include the standard appendices in the report, select **True**; otherwise, select **False**.

RECOMMENDED FORMAT: PDF

Figure 14: Sample DIGON - Site Report
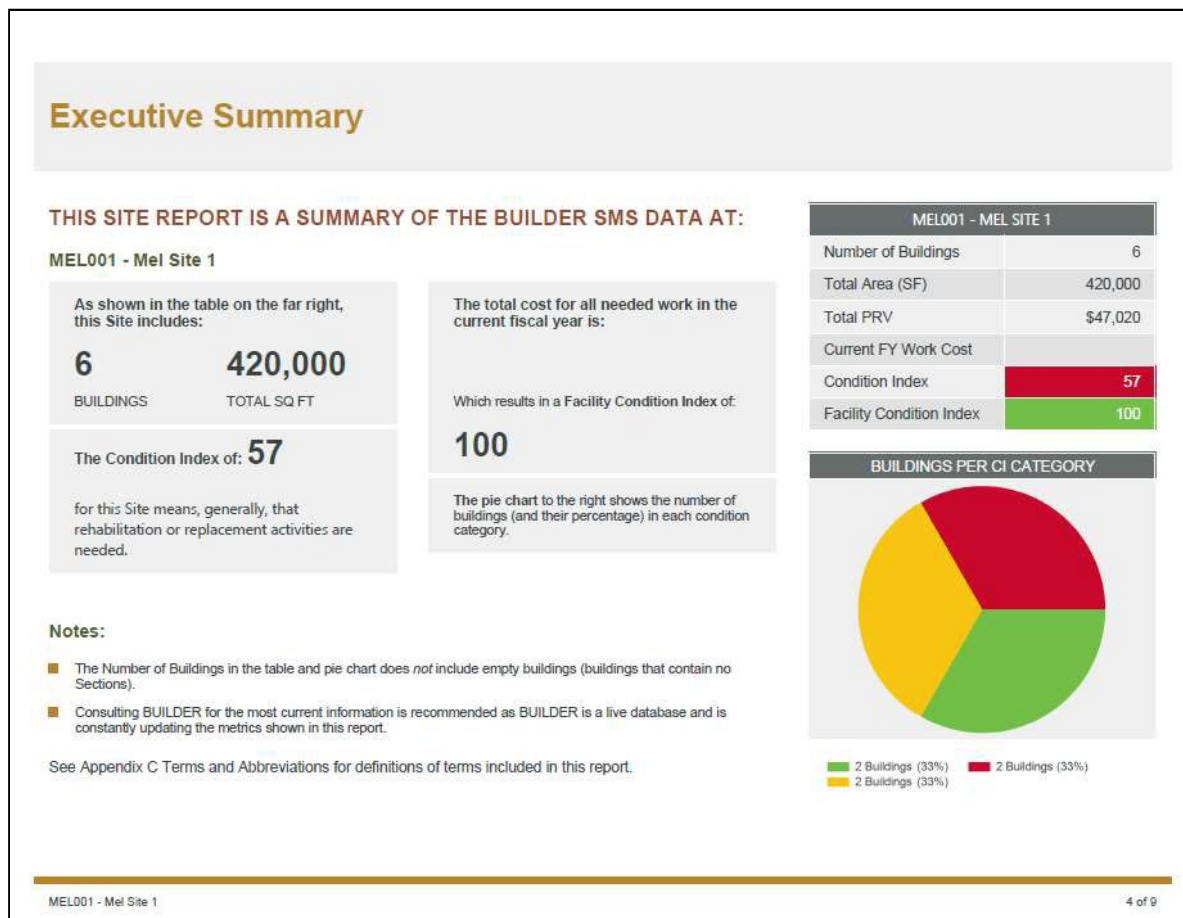
SPIRE REPORTS

DESCRIPTION:

SPIRE is an integration tool developed by DIGON that offers real-time data synchronization between BUILDER and other facilities management systems. The SPIRE Web Portal offers a user-friendly interface for processing updates via spreadsheet batch files.

Files uploaded via the Portal must be in comma-separated values (CSV) file format that conform to specific guidelines. Several DIGON custom reports are available in BUILDER that can help you build files for Building, Inventory Detail, or Inspection syncs:

- o SPIRE – Building Create
  - Runs at the Site level
  - Populates the following fields with existing BUILDER data: ComplexId
  - **Parameters** - Allows you to specify Current Status, Number of Floors, and Construction Type
- o SPIRE – Building Update
  - Runs at the Site and Complex level
  - Populates fields with existing BUILDER data for each Building
  - **Parameters** – N/A
- o SPIRE - Inventory Create
  - Runs at the Building level
  - Populates the following fields with existing BUILDER data: BldgAltId, ComplexId, BuildingId
  - **Parameters** – Allows you to specify number of rows to populate in the CSV (e.g., if you are creating five Section Details, specify "5").
- o SPIRE - Inventory Update
  - Runs at the Site, Complex, or Building level and includes all Sections within that level
  - Populates fields with existing BUILDER data for each Section Detail
  - **Parameters** – N/A
- o SPIRE - Inspection Create
  - Runs at the Building level
  - Populates the following fields with existing BUILDER data: BldgAltId, BuildingId
  - **Parameters** – Allows you to specify number of rows to populate in the CSV (e.g., if you are creating three inspections, specify "3").
- o SPIRE - Inspection Update
  - Runs at the Site, Complex, or Building level and includes inspections for all Sections within that level
  - Populates fields with existing BUILDER data for each inspection
  - **Parameters** – Allows you to specify Inspections Included Per Section. Select "Latest Inspection Only" to include only the most recent inspection for a Section. Select "All Inspections" to include all inspections for a Section. **NOTE:** The report does not include the original inspection created on the date the Section was installed.

AVAILABLE BUILDER LEVELS:

- Site
- Complex
- Building

PARAMETERS TO FILTER DATA:

- See report descriptions above

RECOMMENDED FORMAT: CSV

TERMS AND ABBREVIATIONS

Term	Acronym	Definition
Activity		See Work Activity.
Actual (Work) Cost		The actual cost of a work item after completion. Defaults to Estimated Cost.
Adder		A specific cost in dollars that can be applied at multiple BUILDER levels to adjust section replacement costs.
Age		In the DIGON – QA Review and DIGON – QA Review Details reports, the age in years of a Section.
Alternate ID		A user-specified ID for a Building; typically the Real Property Unique Identifier (RPUID).
Amber Condition Rating		**Amber (+)** Section serviceability or reliability is degraded but adequate. A very few major subcomponents may suffer from moderate deterioration with perhaps a few minor subcomponents suffering from severe deterioration. **Amber** Section serviceability or reliability is definitely impaired. Some, but not a majority of, major subcomponents may suffer from moderate deterioration with perhaps many minor subcomponents suffering from severe deterioration. **Amber (-)** Section has significant serviceability or reliability loss. Most subcomponents may suffer from moderate degradation or a few major subcomponents may suffer from severe degradation.
Area Cost Factor		A multiplier that adjusts national average labor/material/equipment costs to local costs. Generally a number between 0.8 and 1.2 for continental U.S. locations but can be even greater than 2.0 in high-cost geographic locations.
Building Condition Index	BCI	A condition rating for the overall Building. For each Building, the BCI is computed by taking the average of its Systems' CIs, weighted by replacement cost.
Building Functionality Index	BFI	The BFI measures the functionality of a building as a whole through a functionality assessment. The higher the BFI the better.

Building Performance Index	BPI	The BPI measures the overall performance of a building. BPI is a combination of the CI and FI, weighted more heavily on the lower of the two. The split weighting is 0.71 and 0.29. Therefore, if CI is lower than PI, the equation would be BPI = (CI*0.71) + (FI*0.29).
Building Use		Building/Asset Use Category.
Capacity		The equipment capacity (such as gallons, horsepower, or MBH, depending on equipment type).
Catalog ID		BUILDER Unique Identifier for individual catalog items. This value matches codes listed in the RO_CMC table, used internally to describe component types.
Component		Component classification as associated with UNIFORMAT Level 3. Components are used to help the organize the records of the actual physical items (Sections) within a System.
Component Importance Index	CII	This index may be used to rank the relative importance of components against one another. An example of use is in Work Configuration to hold different Component-Sections to different thresholds or to prioritize them differently based on relative importance.
Component-Section Condition Index	CSCI	CSCI is the fundamental metric used in BUILDER. The CSCI is a condition rating for the Component-Section that is aggregated to every other level in the facility hierarchy.
Component Type		See Section Subtype.
Condition Index	CI	CI is BUILDER's primary condition measure. The CI for each Component-Section is computed from inspection data that records the type, severity, and density of each distress found.
Cost Book		Cost Books provide inventory replacement cost data.
Cost Modifier		A multiplier or adder that can be applied at multiple BUILDER levels to adjust section replacement costs. Modified costs will roll up the hierarchy and also affect CI rollups, work plan item costs, and scenario costs.
Current CI		CI on the date the report is run. See Condition Index.
Current Estimated CI		CI on the date the report is run. See Condition Index.

Current RSL		RSL on the date the report is run. See Remaining Service Life.
Direct Rating		A color rating describing a Section's condition.
Each	EA	EA is a unit of count defining the number of items regarded as separate units.
Engineering Research and Development Center-Construction Engineering Research Laboratory	ERDC-CERL	ERDC-CERL helps solve our Nation's most challenging problems in civil and military engineering, geospatial sciences, water resources, and environmental sciences for the Army, Department of Defense, civilian agencies, and our Nation's public good.
Equipment ID	Equip ID	User-specified equipment ID for a Section Detail. Required for individual items of equipment; not used for non-equipment types of Section Detail items. Typical examples include barcode and/or equipment ID from computerized maintenance management system (CMMS).
Estimated (Work) Cost		The estimated cost of a work item.
Est Modifier Impact		The financial impact of a modifier assignment. For example, if a $1,000 adder is assigned to a Component containing three Sections, the financial impact would be $3,000 ($1,000 adder inherited by three Sections). **NOTE:** This value reflects only the impact of each individual modifier if it were solely applied. However, when several multipliers are inherited or assigned, the result will be greater than the individual impacts. For example, if the Building multiplier is 2, the System multiplier is 2, and the Section multiplier is 2, the Section cost will be multiplied by a factor of 8 (2x2x2).
Facility Condition Index	FCI	The FCI is the current maintenance, repair, and replacement deficiencies of the facility divided by the current replacement value of the facility. The higher the FCI, the better. The FCI calculation is (1-(Deferred Work/Current Replacement Value)) *100.
Facility ID		See Alternate ID.
Fiscal Year	FY	The 12-month period that an organization uses for budgeting, forecasting, and reporting. Although many organizations follow the calendar year, a fiscal year can start at any point in the year and end 12 months later.

Floors		The number of floors in a Building.
Functionality Index	FI	FI is the primary functionality measure and uses a 0 to 100- point scale in keeping with the SMS Sustainment Management System design philosophy. The functionality index is computed from assessment data that records the functionality issues present in the building and the severity and density of those issues.
Funding FY		Fiscal year that the work item was or will be funded. **NOTE**: For work items, Funding FY affects CI; Work FY does not.
General Multiplier		A multiplier used in all cost computations; specified in a BUILDER Cost Book.
Globally Unique Identifier	GUID	Unique native ID from BUILDER.
Green Condition Rating		**Green (+)** Entire Section free of observable or known distress. **Green** No Section serviceability or reliability reduction. Some, but not all, minor subcomponents may suffer from slight degradation or a few major subcomponents may suffer from slight degradation. **Green (-)** Slight or no serviceability or reliability reduction overall to the Section. Some, but not all, minor subcomponents may suffer from minor degradation, or more than one major subcomponent may suffer from slight degradation.
Heating, Ventilation and Air Conditioning	HVAC	The HVAC system is used to provide heating and cooling services to buildings.
Inflation Multiplier		An adjustment applied to cost computations to account for inflation; specified in a BUILDER Inflation Book.
Is Year Estimated?		"Yes" if **Estimated** is checked in BUILDER for a Section's Year Install/Renewed; otherwise, this report field is blank.
Linear Feet	LF	LF is typically used to quantify components which are much larger in one dimension than the other. As examples: curbing, trim, flashing, and gutters are measures in linear feet. Measured in regular feet. No conversion is necessary. If something is 6 linear feet tall, it is 6 feet tall.
Material Category		See Section Category.

Mission Dependency Index	MDI	A 0-100 index that measures the relative importance of a Building.
Modifier Scope		The level in the BUILDER hierarchy at which a modifier was assigned.
Modifier Type		A modifier can either be a multiplying factor (Multiplier) or a fixed cost (Adder) that is applied to all child Sections below the parent level at which the modifier is assigned.
Modifier Value		The value of the modifier; a multiplying factor for Multipliers or a fixed cost dollar value for Adders.
Multiplier		A multiplying factor that can be applied at multiple BUILDER levels to adjust section replacement costs.
Performance Index	PI	The PI is a combination of BCI and FI. The performance index is a useful metric that gives planners an idea of a building's overall performance by assigning a point value calculated from both the condition and functionality of a building. The PI equation is: PI = (CI*0.71) + (FI*0.29).
Plant Replacement Value	PRV	The PRV refers to the amount that an entity would have to pay to replace an asset at the present time, according to its current worth. The building PRV is the cost to replace the entire facility.
Policy Sequence		After work configuration standards and policies have been defined, one or more policy sequences will determine the priority order in which the policies are applied by BUILDER.
Priority Score		A score assigned to a work item if a work plan has been prioritized. The default value is 0.000, indicating that work items have not been prioritized. The priority is based on business rules established in the Prioritization Scheme.
Real Property Unique Identifier	RPUID	The RPUID is the unique identification number assigned to each facility in the Real Property Database.
Red Condition Rating		**Red (+)** Section has significant serviceability or reliability reduction. A majority of subcomponents are severely degraded and others may have varying degrees of degradation. **Red** Severe serviceability or reliability reduction to the Section such that it is barely able to perform. Most subcomponents are severely degraded. **Red (-)** Overall Section degradation is total. Few, if any, subcomponents

		salvageable. Complete loss of Section or serviceability.
Remaining Service Life	RSL	The RSL is the remaining service life in years of a section.
Replacement Cost (Building)	Repl Cost	The current replacement cost for a Building of the current Building's use and size under current construction standards.
Replacement Cost (Section)	Repl Cost	The cost to replace a Component-Section. Generally, cost is determined by this formula: Total Cost = ((Quantity) x (Unit Cost) x (Area Cost Factor) x (General Multiplier) x (Aggregate Specific Multiplier) x (Inflation Factor) x (Cost Multipliers)) + Cost Adders
Scenario		BUILDER's Scenarios simulation tool allows you to project facilities sustainment work requirements for up to ten years in the future. Scenarios simulate change in your inventory over a 1- to 10-year period, starting at the date the Scenario is run.
Section		Building Sections are the key structures in a BUILDER inventory. Building Sections actually represent the physical items of a Building.
Section Category		Section Category classification as associated with UNIFORMAT Level 4.
Section Subtype		Section Subtype classification as associated with BUILDER Level 5.
Section Year		The year the Section was a) built or installed, or b) renewed.
Service Life Book		Service Life Books provide data on the service life expectancy, in years, of Component-Sections.
Site Condition Index	Site CI	A condition rating for the target Site. The Site CI is computed by taking the average of the BCIs of each Building at the Site, weighted by replacement cost.
Square Feet	SF	SF is a unit of area measurement equal to a square measuring one foot on each side.
Sustainment Management System	SMS	SMS is a suite of web-based software applications developed by ERDC's Construction Engineering Research Laboratory (CERL) to help facility engineers, technicians, and managers decide when, where, and how to best maintain the building infrastructure.

System		System classification as associated with UNIFORMAT Level 2. Systems are used to help organize the records for the actual physical items in a Building.
System Condition Index	SCI	The SCI measures the condition of a system as a whole. The higher the SCI, the better.
System Replacement Cost		Cost to replace an entire System.
Total Cost Adders		The total value of all cost adders applied to a Section's replacement cost.
Total Cost Multipliers		The total multiplying factor applied to a Section's replacement cost. For example, if the Building multiplier is 2, the System multiplier is 2, and the Section multiplier is 2, the Section cost will be multiplied by a factor of 8 (2x2x2).
Total Unique Work Cost		A work item may be repeated for multiple years of a constrained scenario if it is awaiting funds. The Total Unique Work Cost sum includes each work item only once, using the highest cost occurrence.
UNIFORMAT		UNIFORMAT is a standard developed through an industry and government consensus for classifying building specifications, cost estimating, and cost analysis in the U.S. and Canada.
Unit of Measure	UM UoM	Standard unit or system of units by means of which a quantity is accounted for and expressed. Examples: Square Feet, Each, Linear Feet.
Work Activity		Work item activity. The activity associated with a work item, most commonly Repair or Replace.
Work Item		A Section-level work item is an individual record of maintenance, repair, or replacement work on a Section in your BUILDER inventory. The work item stores basic information about what work is planned, including the type of work, description, estimated cost, funding year, and quantity.
Work Item Cost		In the DIGON – Site report, the estimated cost of the work item. See also Actual Cost and Estimated Cost.
Work Item Score		See Priority Score.

Work Status/Work Item Status		The current status of a work item, such as Awaiting Funds or Completed. The status will change over time as the work item moves from planning to completion.
Year Built/Constructed	Year Const.	Original Building/Asset construction year.