

Graphics

**Sample Graphics Prepared by
Long International**

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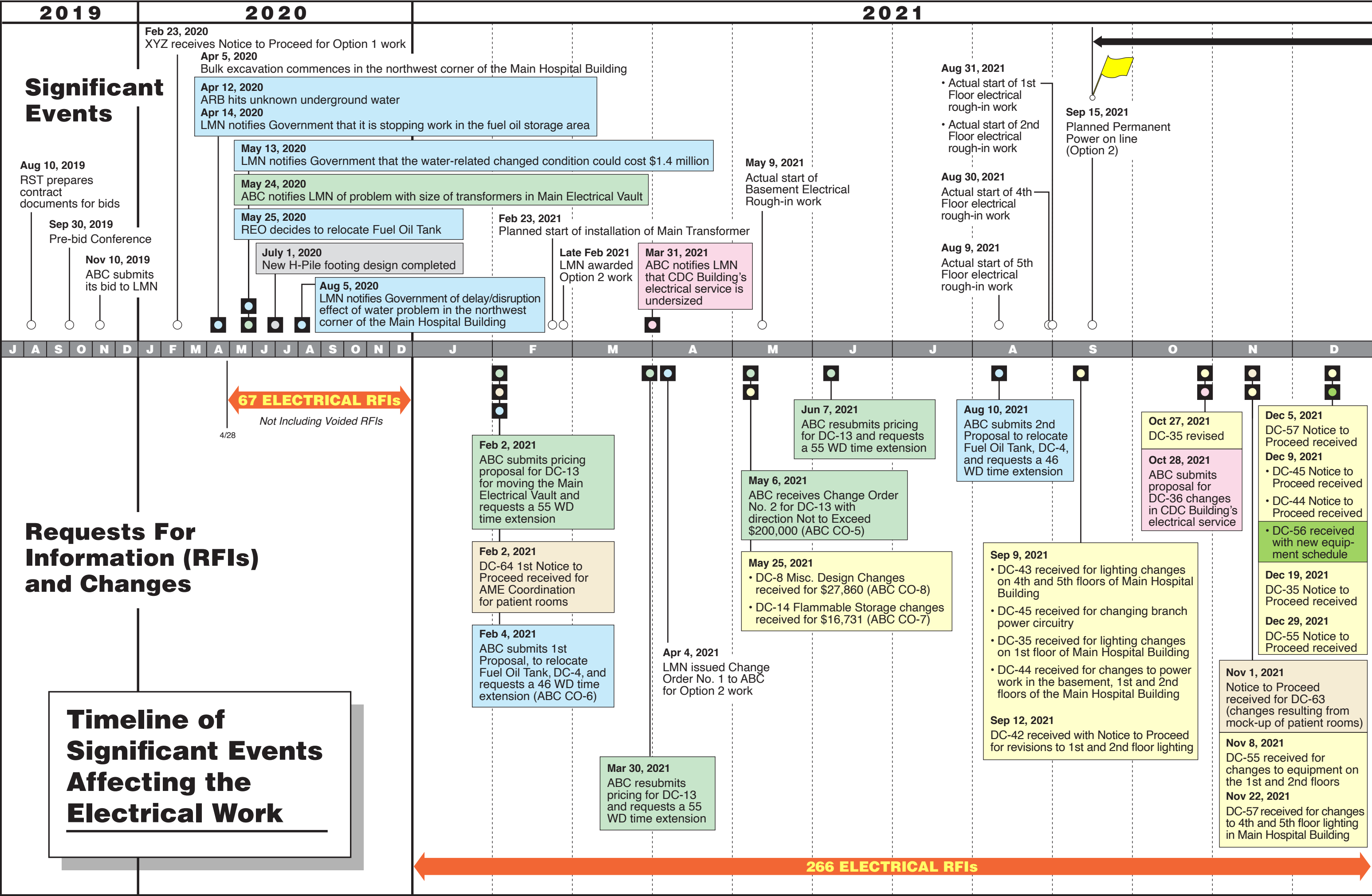


LONG INTERNATIONAL



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TIMELINES



TIMELINE OF SIGNIFICANT EVENTS – QUARRY TILE DEMOLITION

2019

April May June July Aug Sep Oct Nov Dec

CONTRACTOR ACTIONS

April 22

Contractor issued RFC #138 to determine if quarry tile in the center of room 3125 was to be removed (not shown on plans).

June 27

Rather than continuing to wait for an ICO, Contractor issued a cost proposal for this work (\$4,746).

July 16

Contractor responded that work must be performed by hand. Desired equipment cannot be used due to limited access to work area.

July 30

Contractor notified Engineer that its subcontractor had refused to perform the work using this procedure stating, "We've been burned by Tom before."

July 30 – August 8

Contractor had to perform the work instead, tracking its time and materials (T&M).

October 6

Contractor submitted its T&M costs (\$3,824).

November 25

Contractor stated that the inspector did not know the work was T&M and did not sign the sheets for 2 days. Equipment rental rates were provided. Contractor revised its cost to \$3,776, a difference of \$48.

April 23

Engineer responded that the quarry tile was to be removed.

July 15

Engineer assigned ICO #58 to this changed work. Engineer stated that Contractor's proposal seemed excessive.

July 15

Engineer again rejected the proposal and directed Contractor to proceed with the work at the value of its estimate (\$2,124) – Contractor and its subcontractors retained the right to file a claim for the disputed work.

July 24

Engineer again rejected the proposal and directed Contractor to proceed with the work at the value of its estimate (\$2,124) – Contractor and its subcontractors retained the right to file a claim for the disputed work.

November 21

Engineer rejected the costs stating that, "You have incorporated charges that were not approved by the inspector and are not billable." It also disputed the compressor rental charges.

December 5

Engineer accepted the equipment charges, but did not accept the unsigned timesheets.

Dec. 23

State signed change order for this work (\$3,776).

Dec. 8

Inspector signed for disputed hours.

**DIRECTION TO PROCEED
3 MONTHS**

**COST RESOLUTION
2 MONTHS**

STATE ACTIONS



LONG INTERNATIONAL

FLOWCHARTS

Genesis of Change Orders, Field Change Requests and Lessons Learned for Italy, Brazil, and Germany

Canada: LL from the Canada Project were incorporated into the subsequent design and construction of the Italy, Brazil, and Germany Projects. 6 Italy COs originated from Canada, 1 Germany CO originated directly from Canada, and 1 Brazil CO/FCR originated directly from Canada.

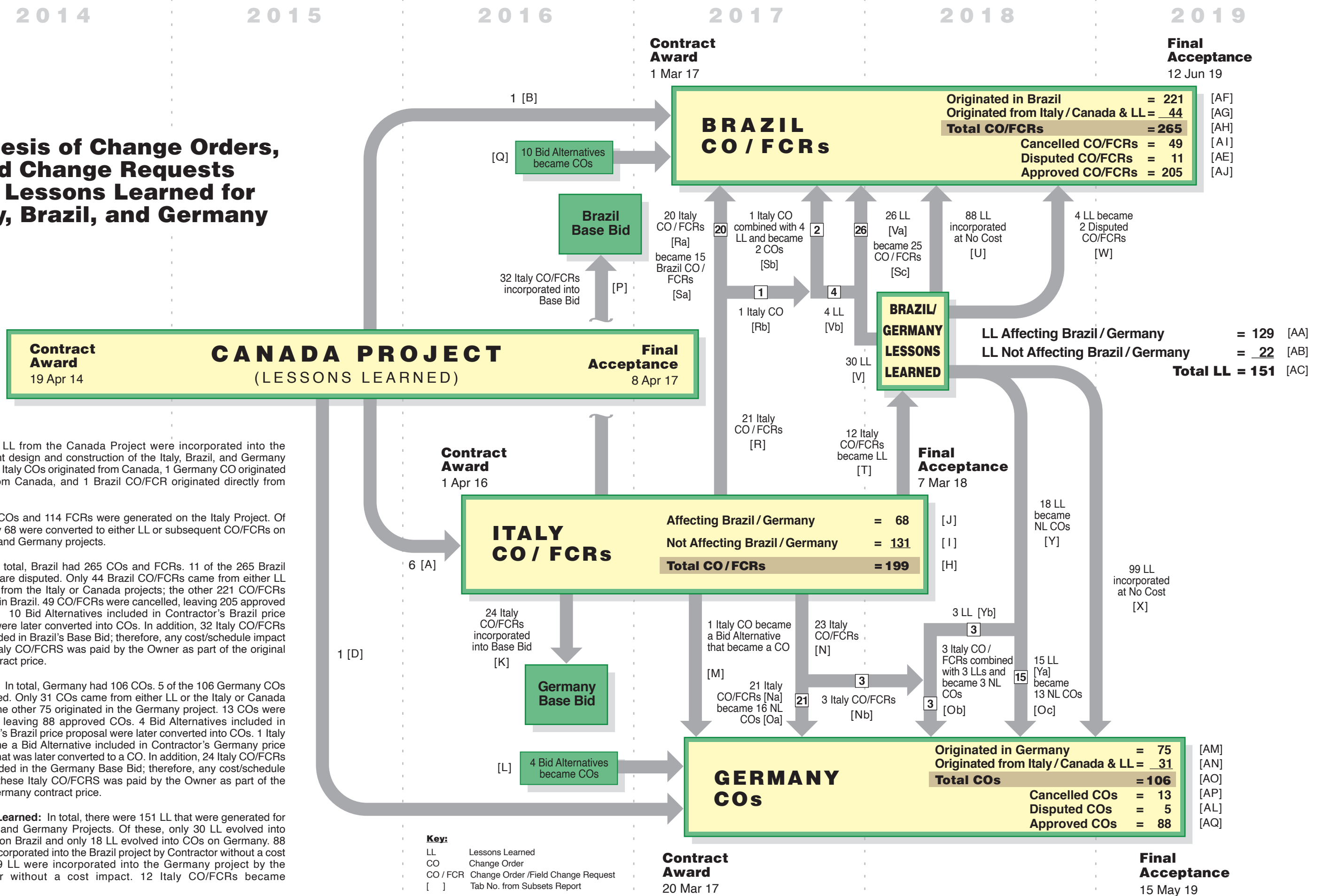
Italy: 85 COs and 114 FCRs were generated on the Italy Project. Of these, only 68 were converted to either LL or subsequent CO/FCRs on the Brazil and Germany projects.

Brazil: In total, Brazil had 265 COs and FCRs. 11 of the 265 Brazil CO/FCRs are disputed. Only 44 Brazil CO/FCRs came from either LL or directly from the Italy or Canada projects; the other 221 CO/FCRs originated in Brazil. 49 CO/FCRs were cancelled, leaving 205 approved CO/FCRs. 10 Bid Alternatives included in Contractor's Brazil price proposal were later converted into COs. In addition, 32 Italy CO/FCRs were included in Brazil's Base Bid; therefore, any cost/schedule impact of these Italy CO/FCRs was paid by the Owner as part of the original Brazil contract price.

Germany: In total, Germany had 106 COs. 5 of the 106 Germany COs are disputed. Only 31 COs came from either LL or the Italy or Canada projects; the other 75 originated in the Germany project. 13 COs were cancelled, leaving 88 approved COs. 4 Bid Alternatives included in Contractor's Brazil price proposal were later converted into COs. 1 Italy CO became a Bid Alternative included in Contractor's Germany price proposal that was later converted to a CO. In addition, 24 Italy CO/FCRs were included in the Germany Base Bid; therefore, any cost/schedule impact of these Italy CO/FCRs was paid by the Owner as part of the original Germany contract price.

Lessons Learned: In total, there were 151 LL that were generated for the Brazil and Germany Projects. Of these, only 30 LL evolved into CO/FCRs on Brazil and only 18 LL evolved into COs on Germany. 88 LL were incorporated into the Brazil project by Contractor without a cost impact. 99 LL were incorporated into the Germany project by the Contractor without a cost impact. 12 Italy CO/FCRs became LL items.

Key:
LL Lessons Learned
CO Change Order
CO / FCR Change Order /Field Change Request
[] Tab No. from Subsets Report



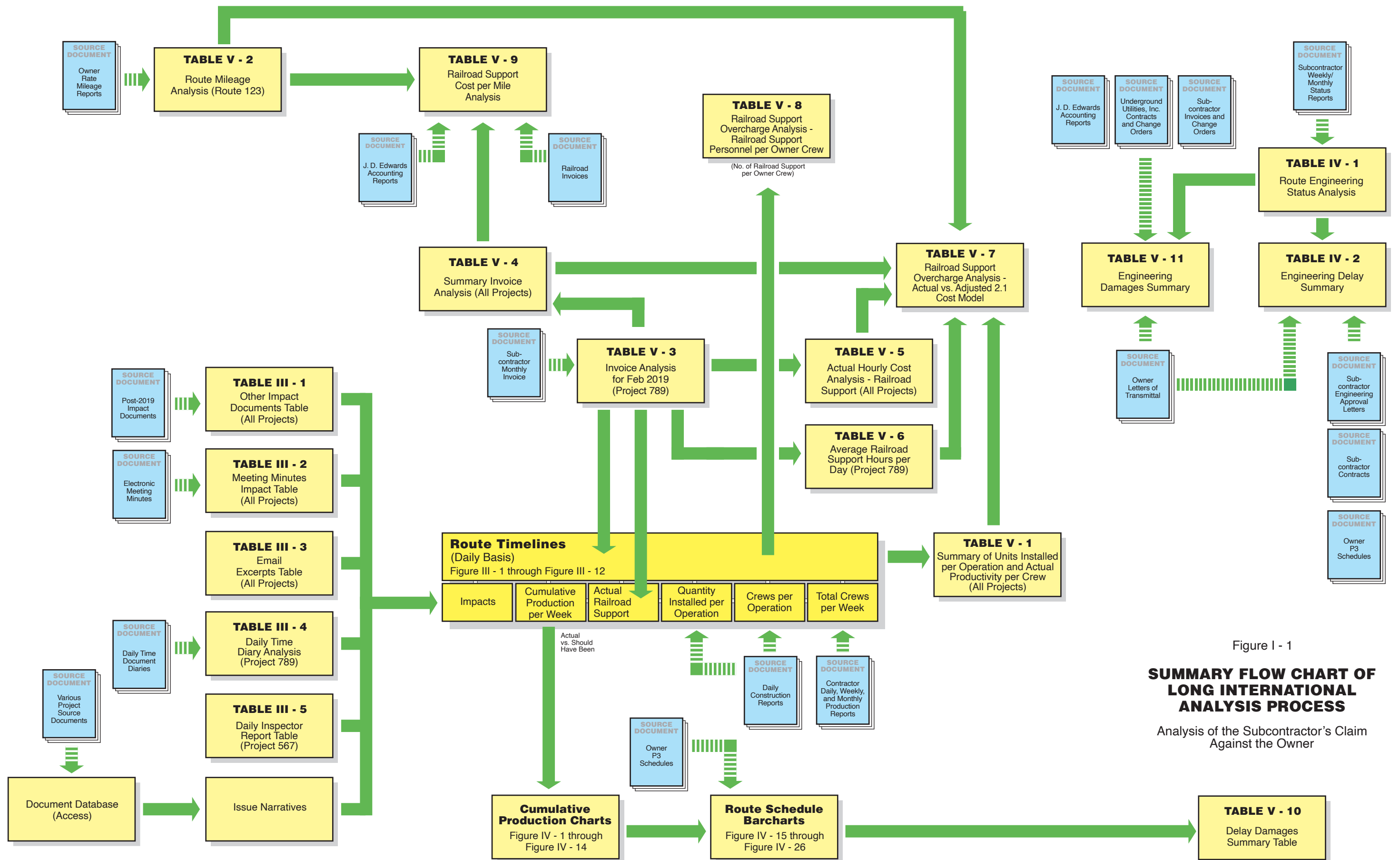
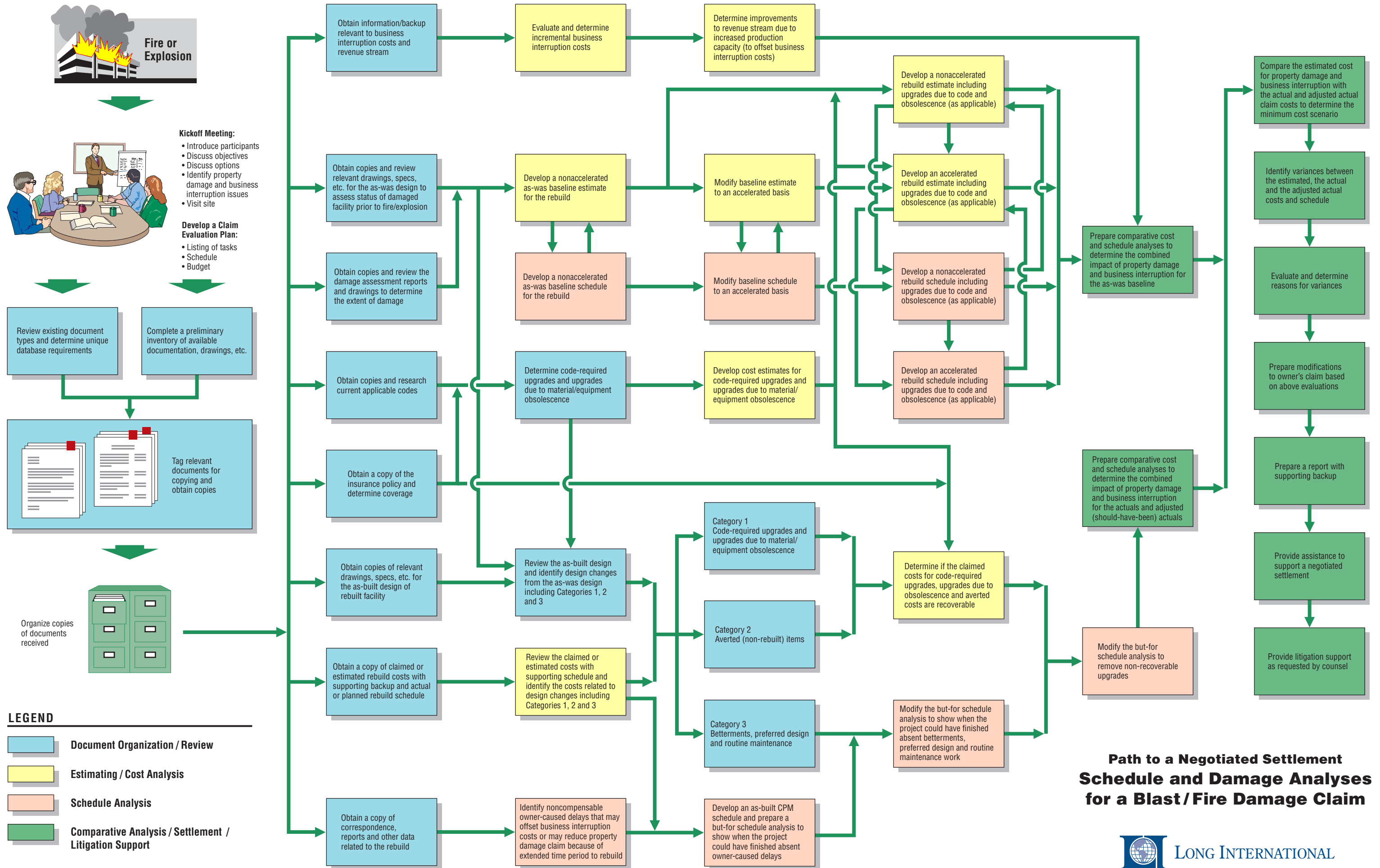


Figure I - 1

SUMMARY FLOW CHART OF LONG INTERNATIONAL ANALYSIS PROCESS

Analysis of the Subcontractor's Claim Against the Owner





North and South Railroad Corp. – Route 789

DETAILED FLOWCHART – ANALYSIS OF OWNER INVOICE AND
SUBCONTRACTOR CREW PRODUCTION AND UNITS INSTALLED DATA

(PAGE 12 OF 15)

07/23/19 FRI 08:49 FAX 002

North and South Railroad Corp.

James E. Smith
Vice President, Operations
Acorn Corporation
12345 E. Fourth Street
Los Angeles, CA 9067

INVOICE

INVOICE NO. 60711061

12607 UPON RECPT
11/30/17

DATE: 11/30/17
REFERENCE NUMBER:
TRANSACTION DESCRIPTION: PRT SEG 4 SAFETY MATERIAL (see attached detail) (W/E 0798728)
AMOUNT: \$44,064.30

IN ACCORDANCE WITH YOUR AGREEMENT WE ARE ASSESSING LATE PAYMENT PENALTIES ON PAST DUE BALANCES.
Checks must have a customer name and invoice number to be credited to your account.

INVOICE NO. 60711061
CUSTOMER COPY
PLEASE RETAIN THIS PORTION FOR YOUR RECORDS

JUL 23 '19 10:11

PAGE 02

Source Documents:
Subcontractor Invoice



TABLE VII - 5
SUBCONTRACTOR ANALYSIS FOR PROJECT 789
Route 789 – North and South Railroad Corp.

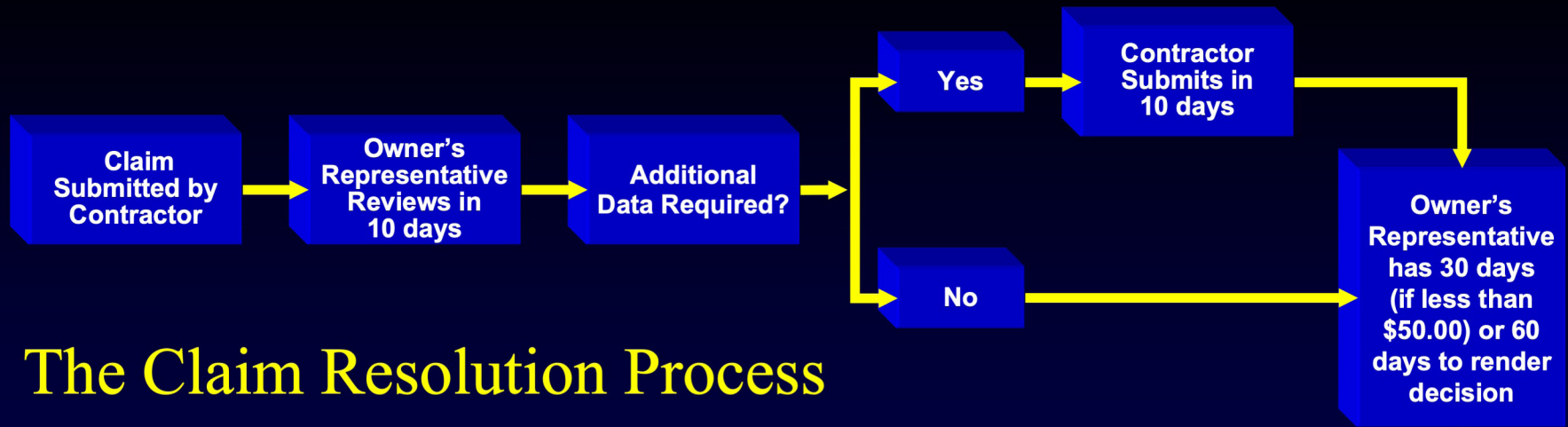
Invoice Number	Date	Invoice Amount	Transaction Description	Back Up ¹	Billing Period	Notes	
99887711061	11/30/17	\$ 44,064.30	PRT SEG 4 SAFETY MATERIAL	YES	10/1/17-10/31/17	789	Sub Totals Per Month
99887711060	11/30/17	\$ 112,366.22	PRT SEG 4 DUCT PREP SUP	YES	10/1/17-10/31/17	789	Oct-17 \$ 189,656.80
99887711062	11/30/17	\$ 779.16	PRT SEG 1 VEHICLES QWEST	YES	10/1/17-10/31/17	789	
99887711064	11/30/17	\$ 5,267.13	PRT SEG 4 SAFETY MATERIAL	YES	10/1/17-10/31/17	789 ALL VEHICLES	
99887711063	11/30/17	\$ 1,356.00	PRT NEC MISC MATERIAL	YES	10/1/17-10/31/17	789 ALL VEHICLES	Nov-17 \$ 203,994.26
99887711041	11/30/17	\$ 25,823.99	SAFETY TRAINING & PROTECTION SERVICES	YES	10/1/17-10/31/17	789	
99887712090	12/31/17	\$ 22,059.48	PRT SEG 4 SAFETY MATERIAL	DETAIL COVER ONLY	11/1/17-11/30/17	789	
99887712066	12/31/17	\$ 1,257.58	PRT SEG 4 VEHICLES	DETAIL COVER ONLY	11/1/17-11/30/17	789 ALL VEHICLES	
99887712067	12/31/17	\$ 984.01	PRT NEC SAFETY MATERIAL	DETAIL COVER ONLY	11/1/17-11/30/17	789 ALL VEHICLES	Dec-17 \$ 238,158.46
99887712065	12/31/17	\$ 3,905.29	PRT NEC MISC MATERIAL	DETAIL COVER ONLY	11/1/17-11/30/17	60%-789 40%-96480 TOTAL- \$6508.82	
99887712064	12/31/17	\$ 628.79	PRT SEG 2 VEHICLES	DETAIL COVER ONLY	11/1/17-11/30/17	789	
99887712062	12/31/17	\$ 1,487.71	PRT SEG 4 SAFETY MATERIAL	DETAIL COVER ONLY	11/1/17-11/30/17	789 ALL VEHICLES	
99887712061	12/31/17	\$ 18,832.71	PRT SEG 4 DUCT REPAIR SUPPORT	DETAIL COVER ONLY	11/1/17-11/30/17	789	Jan-18 \$ 410,236.04
99887712051	12/31/17	\$ 144,834.04	PRT SEG 4 DUCT PREP SUP	DETAIL COVER ONLY	11/1/17-11/30/17	789	
9706712047	12/31/17	\$ 10,004.65	SAFETY TRAINING & PROTECTION SERVICES	ONLY	11/1/17-11/30/17	789	
9860701078	01/31/18	\$ 40,483.44	PRT SEG 4 DUCT REPAIR SUPPORT	DETAIL COVER ONLY	12/01/17-12/31/17	789	
9860701067	01/31/18	\$ 401.86	PRT NEC SAFETY MATERIAL	DETAIL COVER ONLY	12/01/17-12/31/17	789 ALL VEHICLES	
9860701066	01/31/18	\$ 2,284.45	PRT SEG 4 VEHICLES	DETAIL COVER ONLY	12/01/17-12/31/17	789 ALL VEHICLES	
9860701064	01/31/18	\$ 1,448.97	PRT SEG 2 VEHICLES	DETAIL COVER ONLY	12/01/17-12/31/17	789 ALL VEHICLES	
9860701062	01/31/18	\$ 953.14	PRT SEG 4 SAFETY MATERIAL	DETAIL COVER ONLY	12/01/17-12/31/17	789 ALL VEHICLES	Feb-18 \$ 262,124.00
9860701051	01/31/18	\$ 192,586.60	PRT SEG 4 DUCT PREP SUP	DETAIL COVER ONLY	12/01/17-12/31/17	789	
9860702048	02/28/18	\$ 53,476.08	PRT SEG 2 INSTALL CABLE SUPPORT	SOME	01/01/18-01/31/18	789	
9860702046	02/28/18	\$ 1,047.68	PRT SEG 2 DUCT PREP SUP	DETAIL COVER ONLY	01/01/18-01/31/18	789 EQUIPMENT ONLY	
9860702051	02/28/18	\$ 661.00	PRT SEG 2 COMPOUND SUPPORT	DETAIL COVER ONLY	01/01/18-01/31/18	789	
9860702061	02/28/18	\$ 23,688.48	PRT SEG 3 INSTALL CABLE SUPPORT	SOME	01/01/18-01/31/18	789	Mar-18 \$ 354,767.63
9860702062	02/28/18	\$ 194,740.91	PRT SEG 4 DUCT PREP SUP	SOME	01/01/18-01/31/18	789	

789-NS Analysis

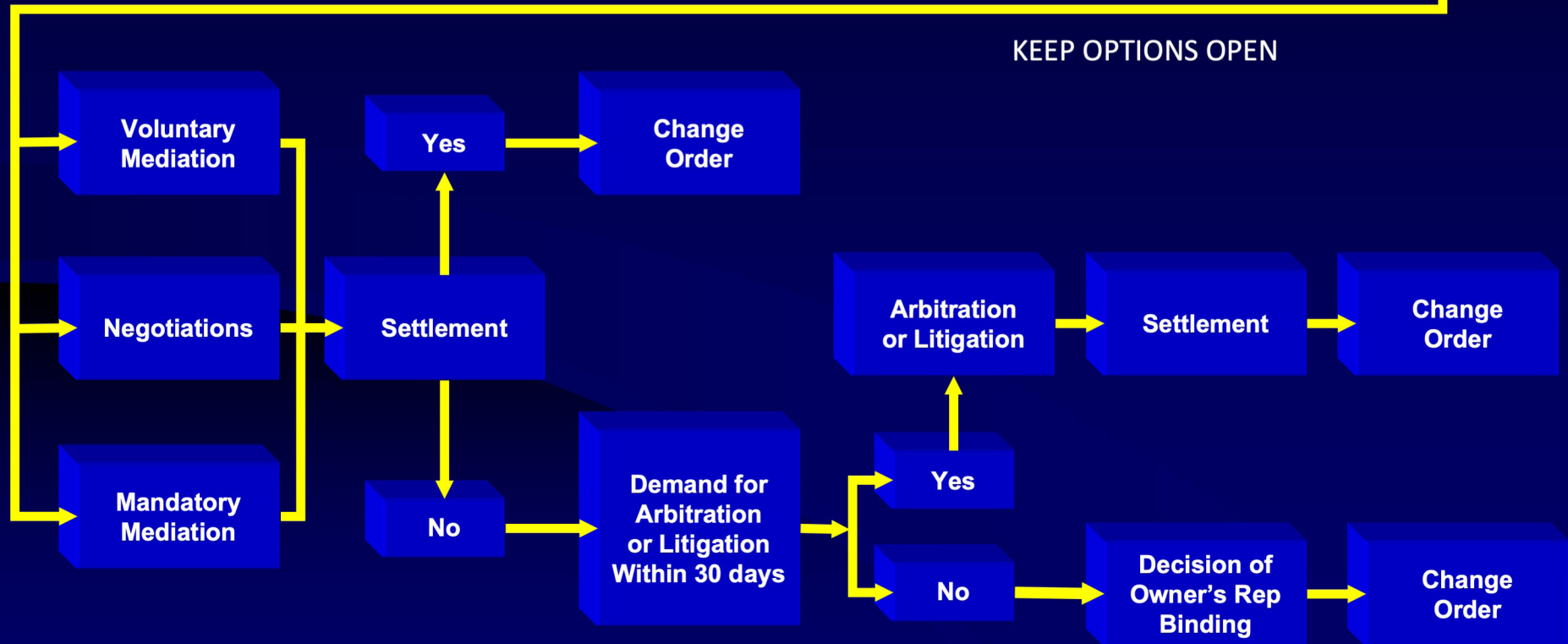
Apr-18	\$ 213,658.40	main amount	\$ 107,819.72				
Jun-18	\$ 75,013.33	half amount	\$ 37,506.67				
Jul-18	\$ 5,244.03	none	\$ -				
Aug-18	\$ -	none	\$ -				
Oct-18	\$ 74,515.15	none	\$ -				
Total	\$ 2,029,549.13	Revised Invoice Amount	\$ 1,626,979.76				
		Route Length: 138 miles					
		Cost per Mile	\$ 11,789.71				

789-NS Analysis Page 3 of 3 7/13/19

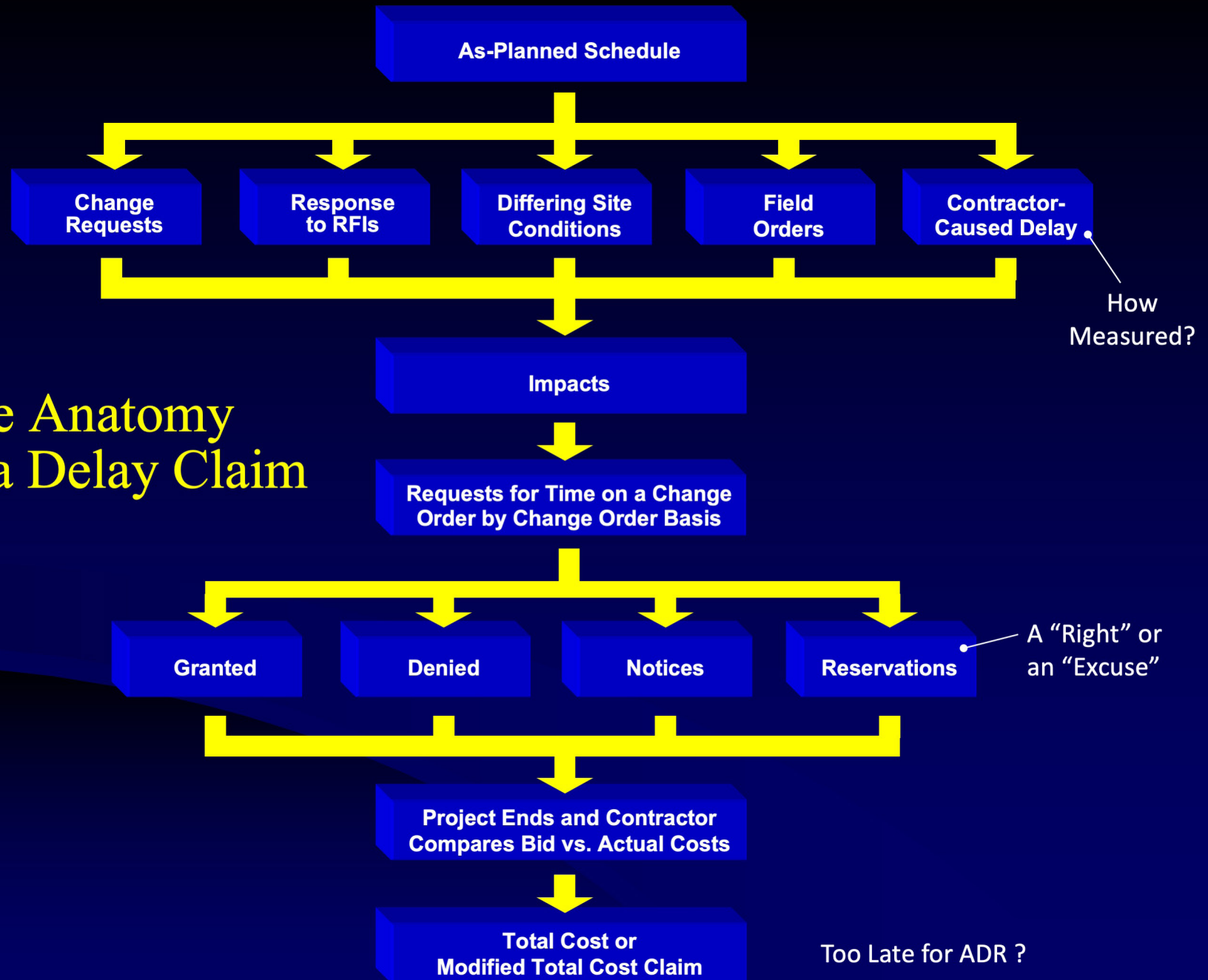
To Table VII - 6



The Claim Resolution Process



The Anatomy of a Delay Claim

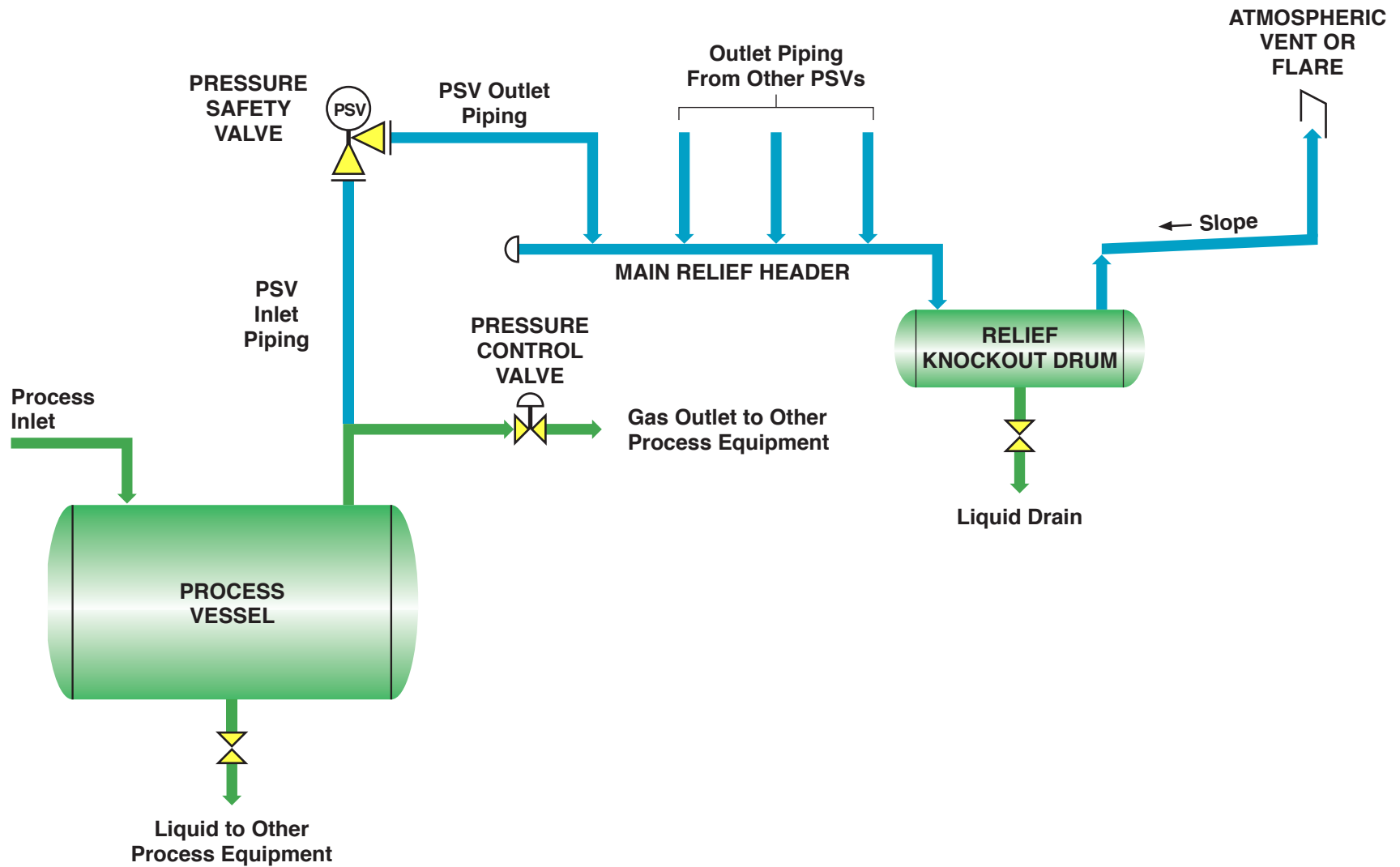




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PROCESS FLOW DIAGRAMS

Typical Design of a Safety Relief System





LONG INTERNATIONAL

DIAGRAMS

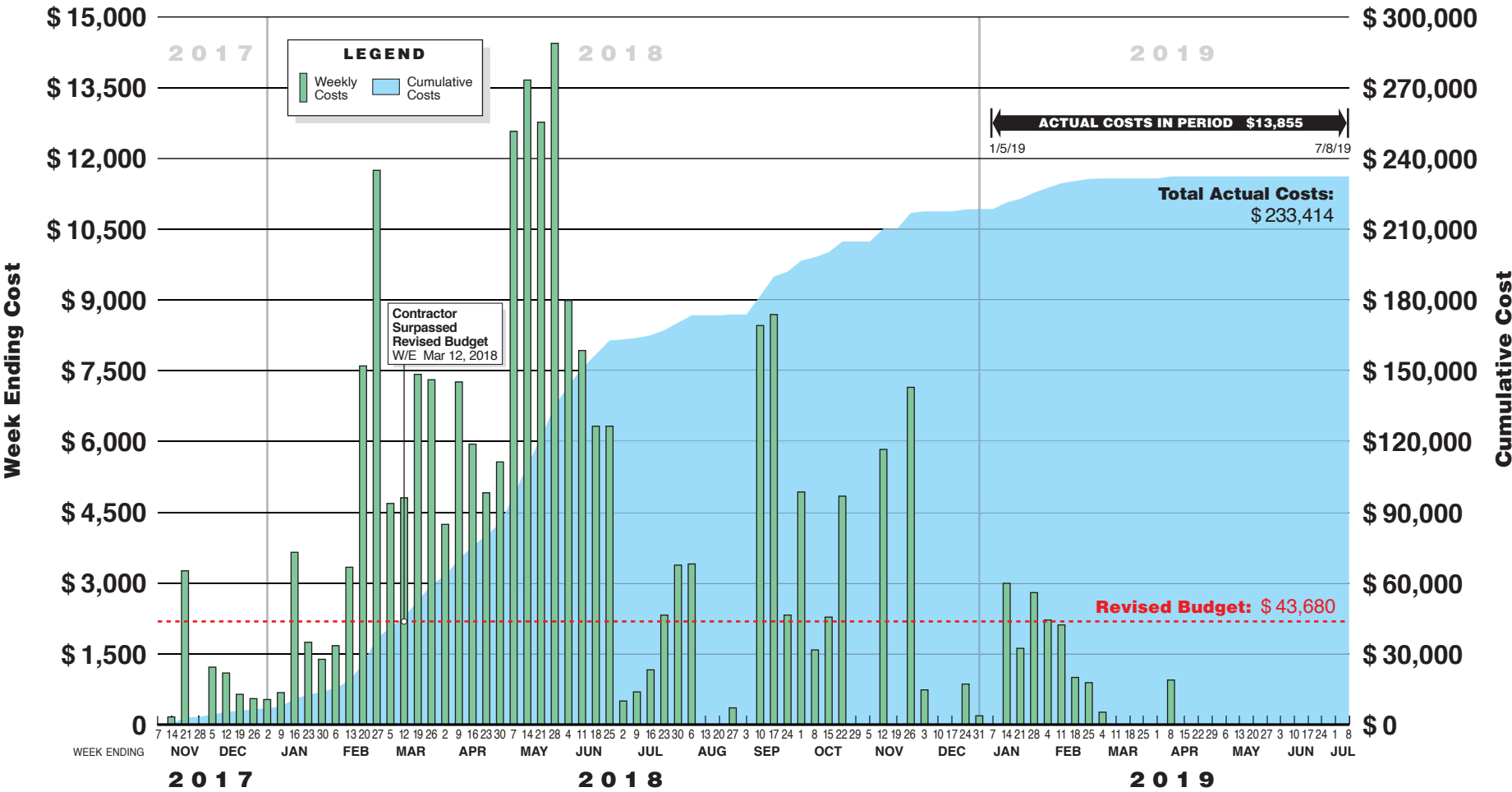
COST / MAN-HOUR VARIANCE

WG 5404 - WP#4 Piping Isos, Engineering Direct Labor

Cost Code	Description	Current Budget		Actual MHs, Costs		Variance		Claimed	
		MHs	Costs	MHs	Costs	MHs	Costs	MHs	Costs
5404-50405	WP#4 Piping Iso's	960	\$43,680	4,226	\$233,414	(3,266)	(\$189,734)	(1,816)	(\$98,155)
Subtotals		960	\$43,680	4,226	\$233,414	(3,266)	(\$189,734)	(1,816)	(\$98,155)

Source: Table V - 17

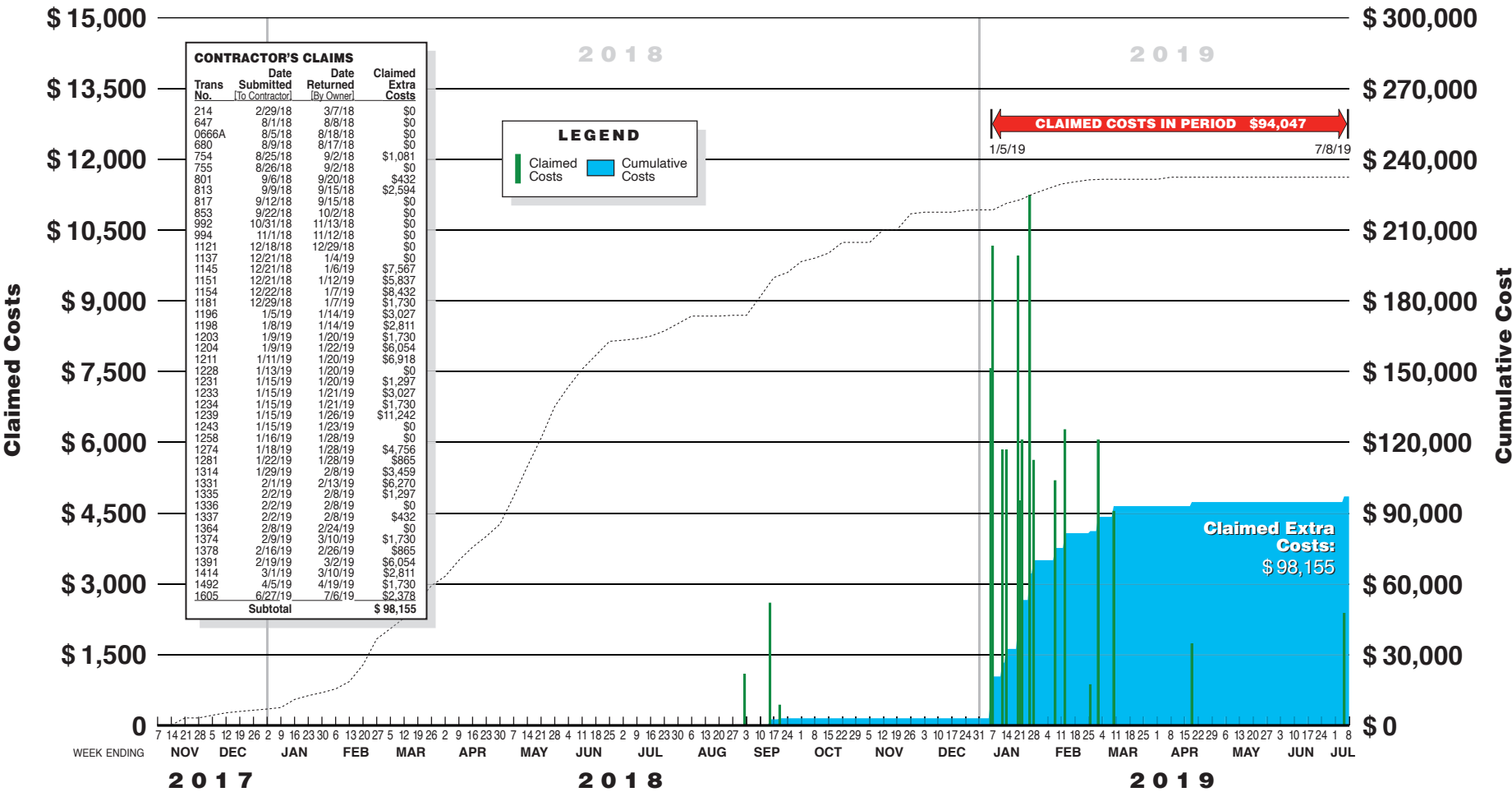
ACTUAL CONTRACTOR WEEK ENDING AND CUMULATIVE COSTS BY TIME



Source: Table V - 20

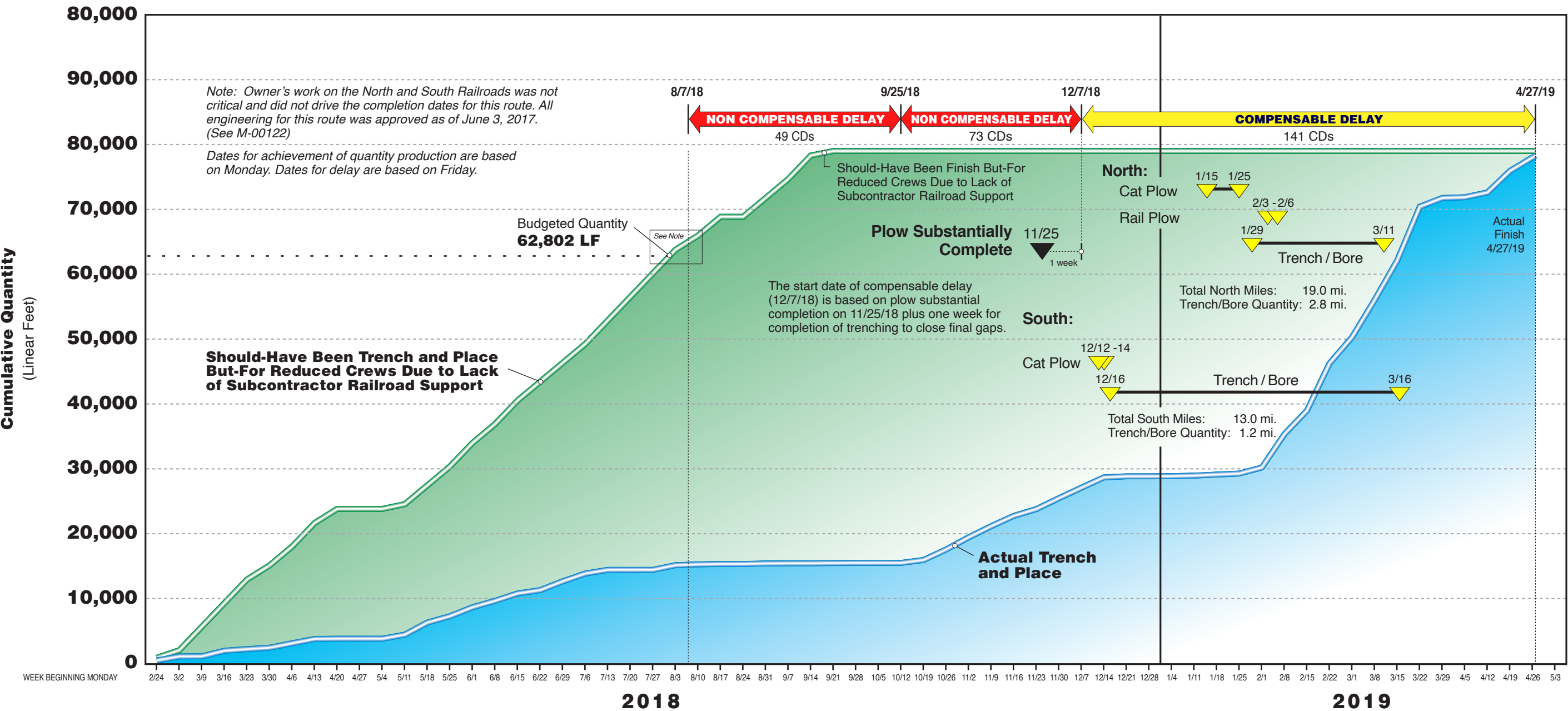
CONTRACTOR'S CLAIMED COSTS BY TIME

Note: Claimed costs plotted on the day that transmittal comments were returned to Contractor.

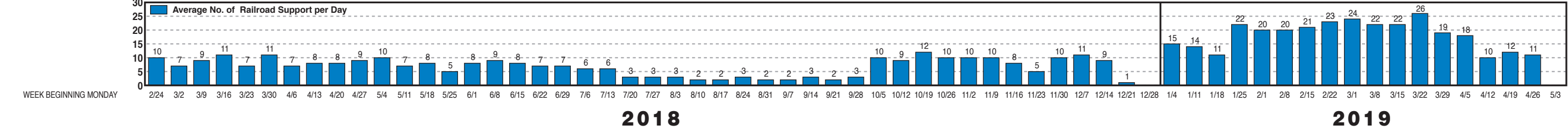


Source: Table V - 8

North and South Railroad Corp. – Route 789
CUMULATIVE TRENCH PRODUCTION
Actual vs. Should-Have Been

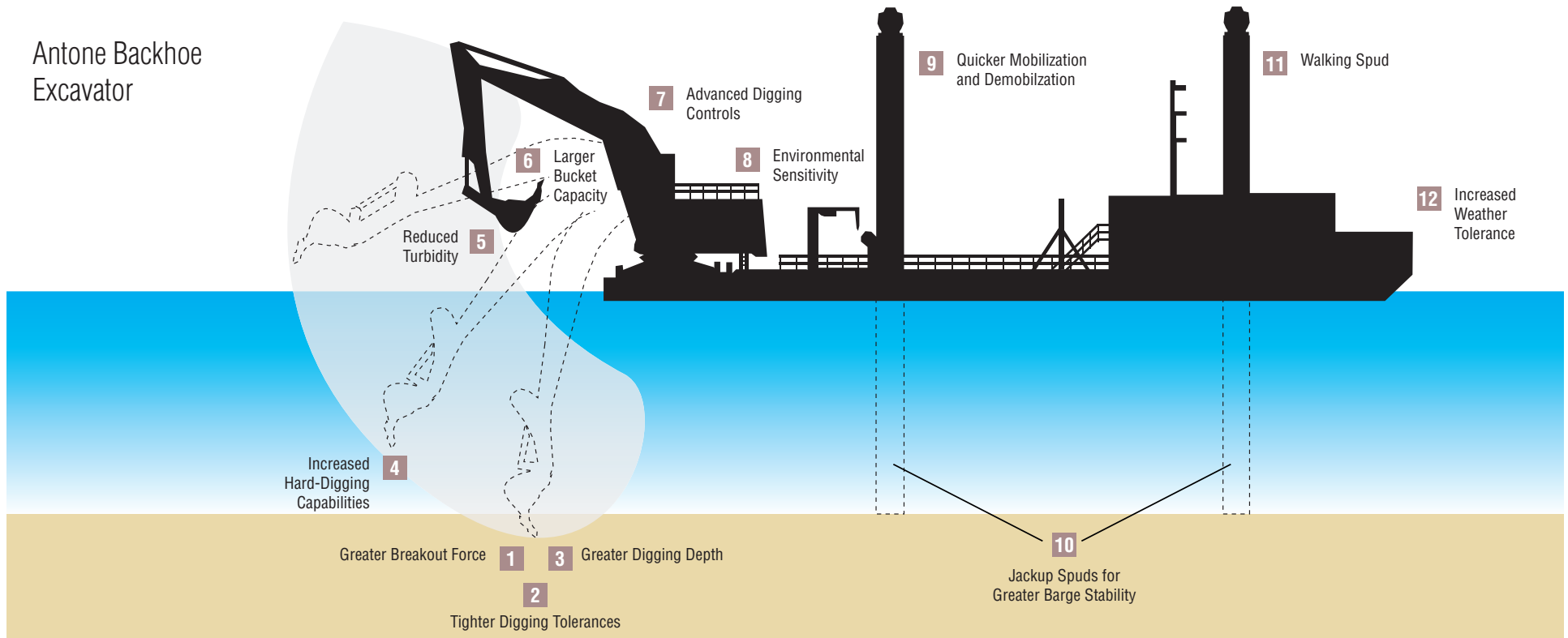


Average Number of Railroad Support Personnel per Day

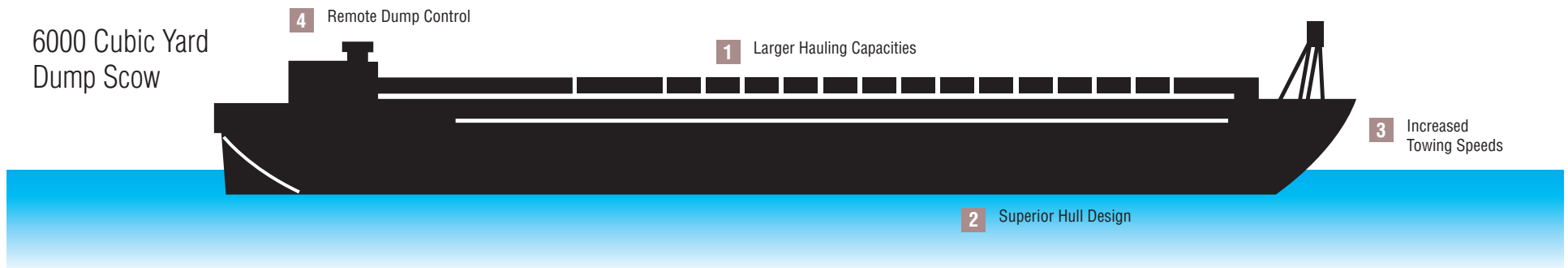


Backhoe Dredge and Barge System Equipment Advantages

Antone Backhoe
Excavator

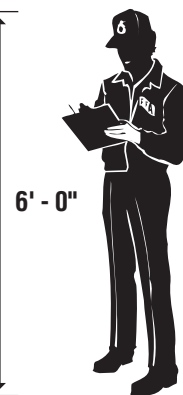
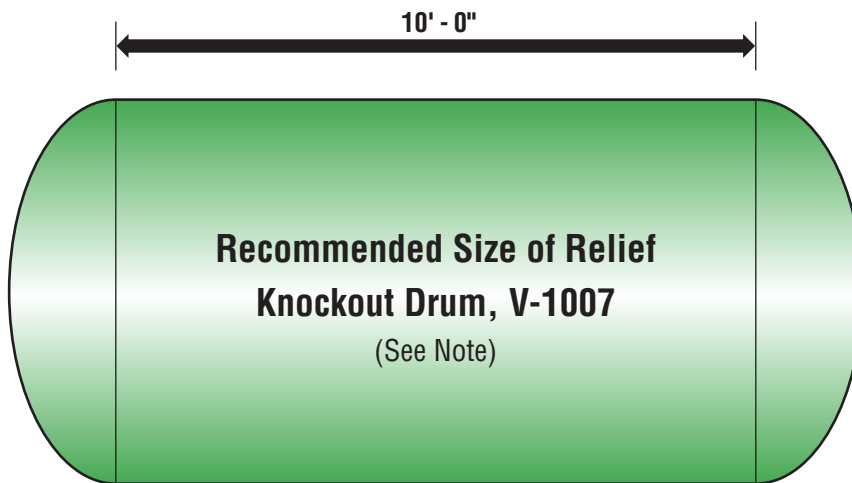
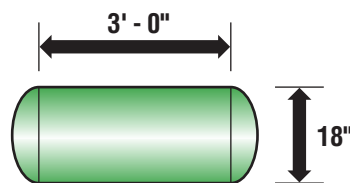


6000 Cubic Yard
Dump Scow



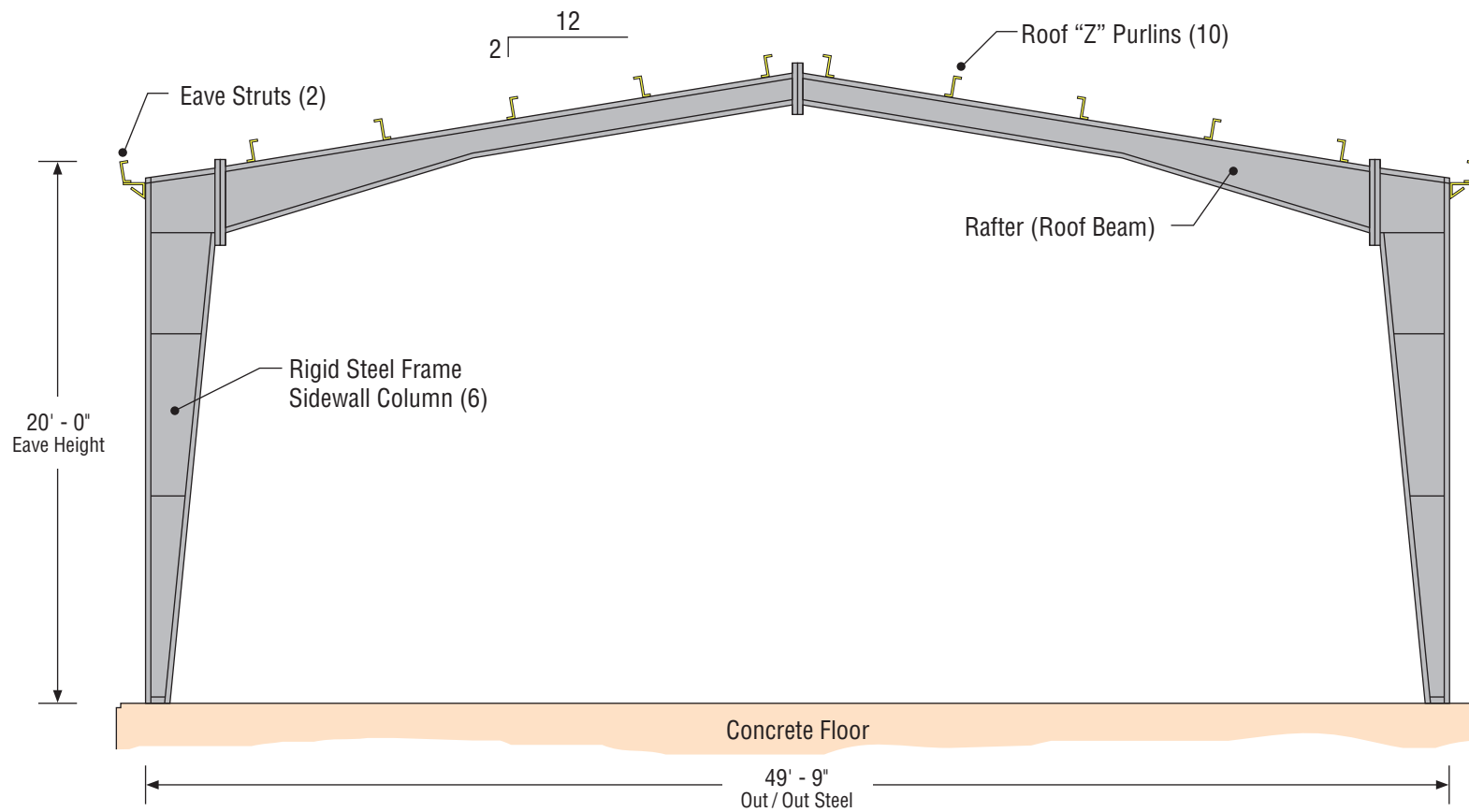
Comparison of Relief Knockout Pot / Drum Sizes

**Size of Relief Knockout
Pot, V-1007, Provided
by Engineer**



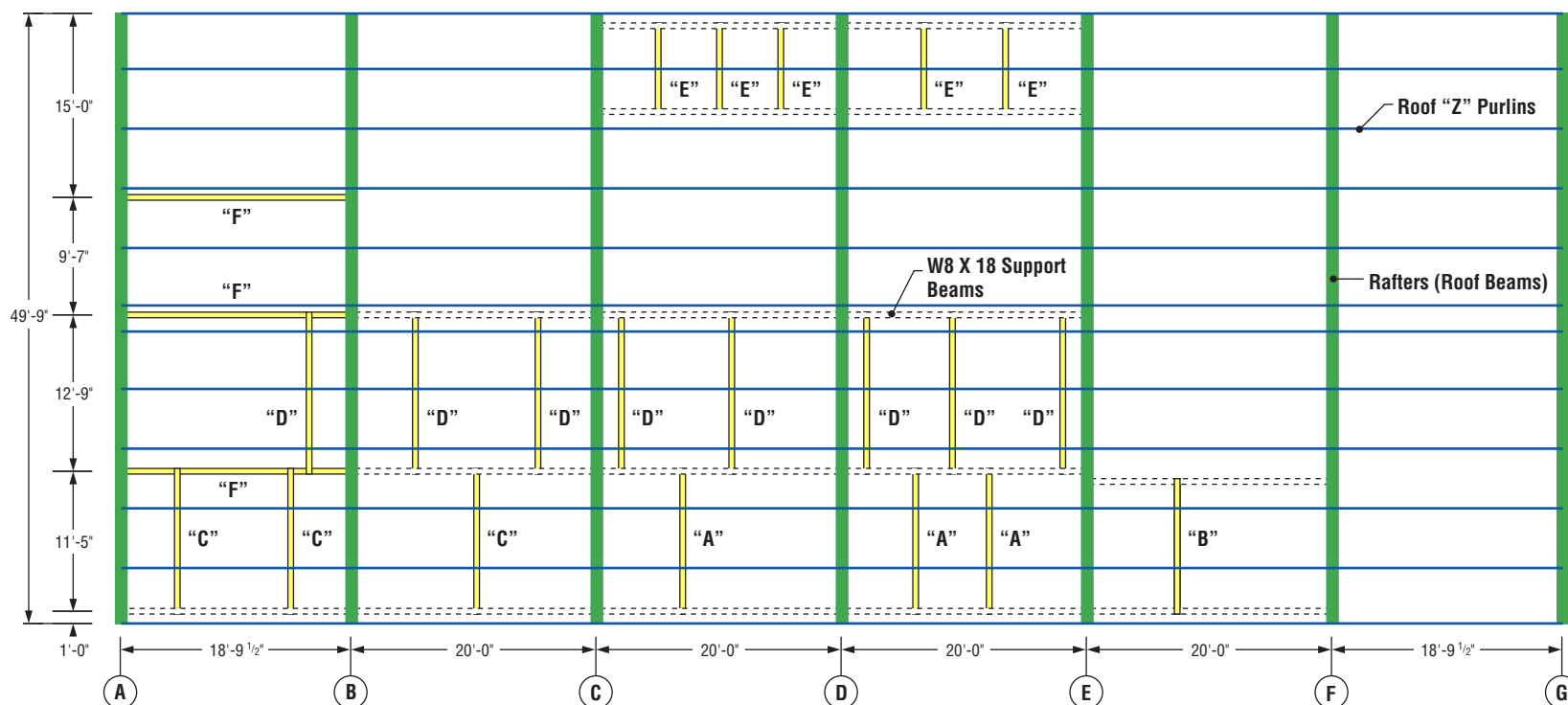
Note: Contractor actually purchased a Relief Knockout Drum that is 6' - 0" in diameter by 12' - 0" tangent to tangent, based on the availability for quicker delivery from the vendor.

Graphical Illustration of Rigid Steel Frames and Roof Purlins



Note: Detail on columns, beams and "Z" purlins is diagrammatic and is exaggerated to show detail.

Location of New Pipe Hangers by Type on W8 x 18 Roof Beam Supports

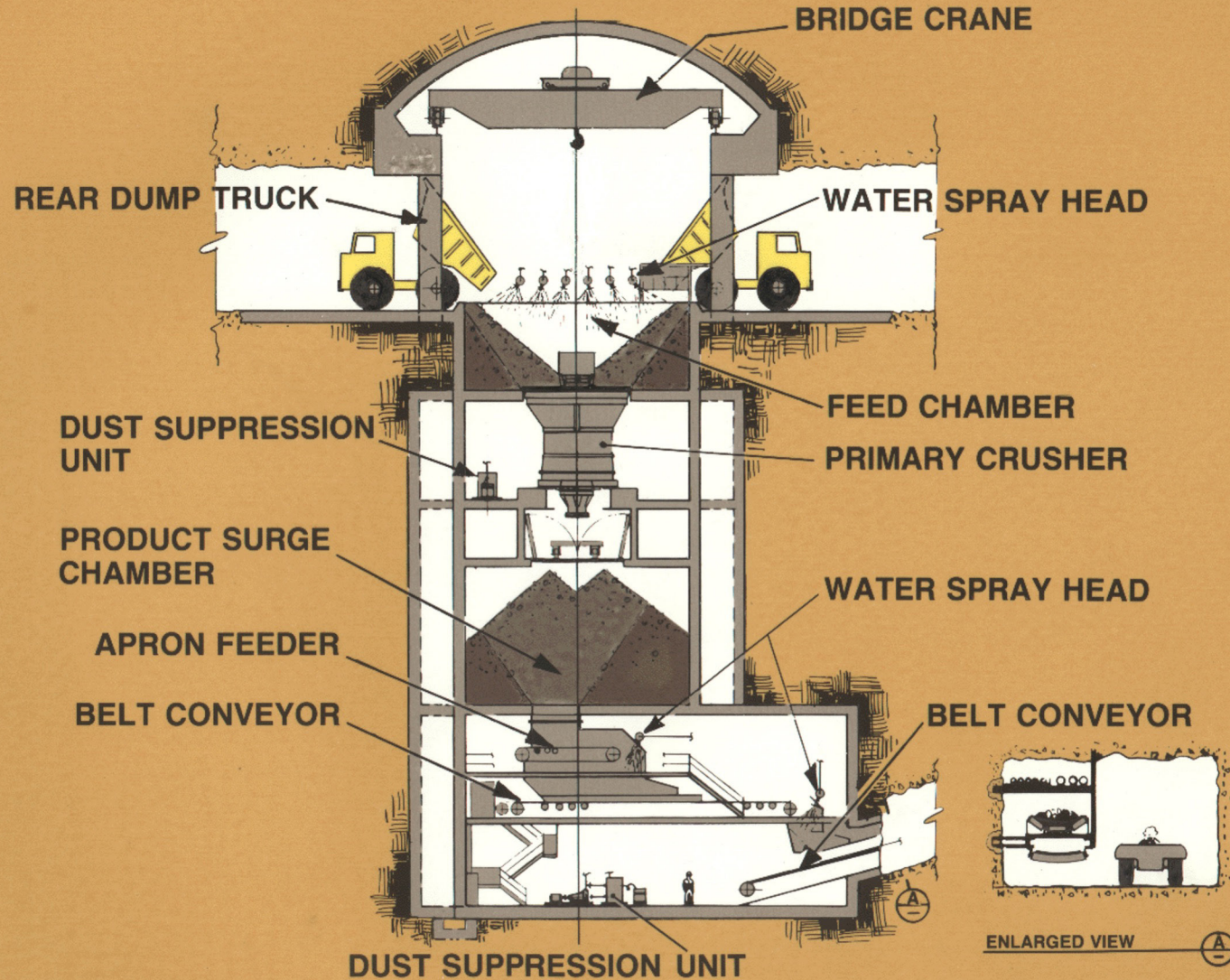


No.	Type	Hanger Rod Size	Hanger Size	No.	Unistrut	Other Components
3	"A"	5/8" Diameter A-36	L4 x 4 x 3/8"	2	P-1001	—
1	"B"	5/8" Diameter A-36	L4 x 4 x 3/8"	3	—	—
3	"C"	5/8" Diameter A-36	L4 x 4 x 3/8"	1	—	Conduit Support* & Fire Water Header
8	"D"	5/8" Diameter A-36	L4 x 4 x 3/8"	1	—	Conduit Support*
5	"E"	5/8" Diameter A-36	L4 x 4 x 3/8"	1	P-1001	—
3	"F"	—	—	—	—	Conduit Support*

* Conduit supports, as required, installed by electrical contractor.

Note: Width of roof beams and "Z" purlins is diagrammatic and is exaggerated to show detail.





TYPICAL UNDERGROUND PRIMARY CRUSHING STATION — BLOCKS A, B AND C

STEEL
COMPLETE
EL. 72.800

L.P.T.O.S.
EL. 72.800

SECTION B

System 83 / 84a – Briquetting and Sintering System

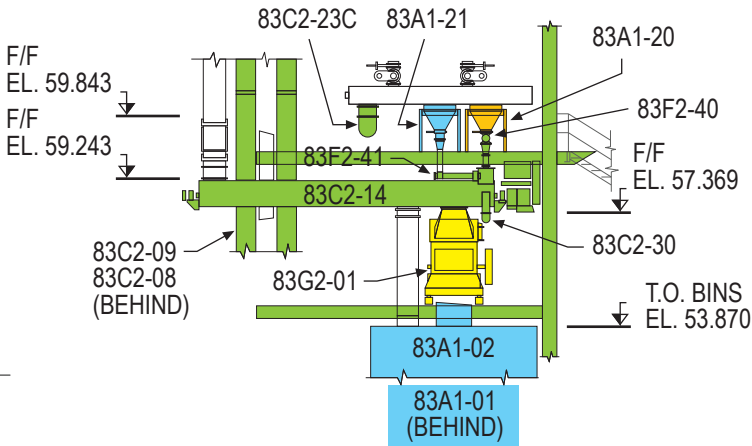
As-Built Window No. 6: July 1, 2019 to September 30, 2020

Section B and Section Q

SECTION Q

KEY

- Work In Progress in this Period
- Work Substantially Completed in Prior Period
- Work Has No Schedule Activity
- Work Has No As-Built Information



T.O. FLOOR
EL. 66.800

T.O. FLOOR
EL. 62.200

T.O. FLOOR
EL. 58.800

T.O. FLOOR
EL. 54.450

T.O. STEEL
EL. 51.900

T.O. STEEL
EL. 47.100

T.O. STEEL
EL. 41.700

F/F
EL. 31.025

GROUND
FLOOR
EL. 27.500

BOT / PIT
EL. 24.750

SUMP

EQUIP NO.	DESCRIPTION	EQUIP NO.	DESCRIPTION
83A1-01	CAUSTIC BIN	83C2-23A	SCREW CONVEYOR
83A1-02	PREDENSIFIED MATERIAL BIN	83C2-23B	SCREW CONVEYOR
83A1-03	RECYCLE MATERIAL BIN	83C2-23C	SCREW CONVEYOR
83A1-05	DEAERATION FEED CHUTE #2	83C2-30	SCREW CONVEYOR
83A1-06	DEAERATION FEED CHUTE #3	83C2-32	SCREW CONVEYOR
83A1-10	DIVERTER CHUTE	83D1-01	BAG HOUSE FILTER
83A1-11	DIVERTER CHUTE	83F2-20	VIBRATING FEEDER
83A1-12	DIVERTER CHUTE	83F2-21	VIBRATING FEEDER
83A1-13	GREEN BRIQUETTE BIN	83F2-22	VIBRATING FEEDER
83A1-20	WEIGH HOPPER	83F2-26	ROTARY VANE FEEDER
83A1-21	WEIGH HOPPER	83F2-27	ROTARY VANE FEEDER
83C2-03	SCREW CONVEYOR	83F2-29	VIBRATING FEEDER
83C2-04	SCREW CONVEYOR	83F2-40	ROTARY VANE FEEDER
83C2-05	SCREW CONVEYOR	83F2-41	ROTARY VANE FEEDER
83C2-07	DRAG CHAIN CONVEYOR	83G2-01	PREDENS. MAT. IMPACT MILL
83C2-09	BUCKET ELEVATOR	83G2-02	SPECIAL VIBRATION ISOLATOR MOUNTS FOR 83G2-01/02
83C2-10	BUCKET ELEVATOR	83L2-02	ELECTRIC HOIST - 83L2-02A/B
83C2-11	SCREW CONVEYOR	83L2-02A	MONORAIL
83C2-12	SCREW CONVEYOR	83L2-02B	MONORAIL
83C2-13	DRAG CHAIN CONVEYOR	83L2-04A	MONORAIL
83C2-14	SCREW CONVEYOR	83L2-05B	MONORAIL
83C2-16	DRAG CHAIN CONVEYOR	83L2-02	ELECTRIC HOIST - 83L2-02A/B
83C2-17	SCREW CONVEYOR	83S2-01	VIBRATING SCREEN
83C2-18	COOLING SCREW CONVEYOR	83S2-03	VIBRATING SCREEN
83C2-19	COOLING SCREW CONVEYOR	83Z2-02	BRIQUETTING PRESS #2
83C2-20	SCREW CONVEYOR	83Z2-03	BRIQUETTING PRESS #3
83C2-22	SCREW CONVEYOR		

System 83 / 84a – Briquetting and Sintering System

As-Built Window No. 7:
October 1, 2019 to December 31, 2019
Section J

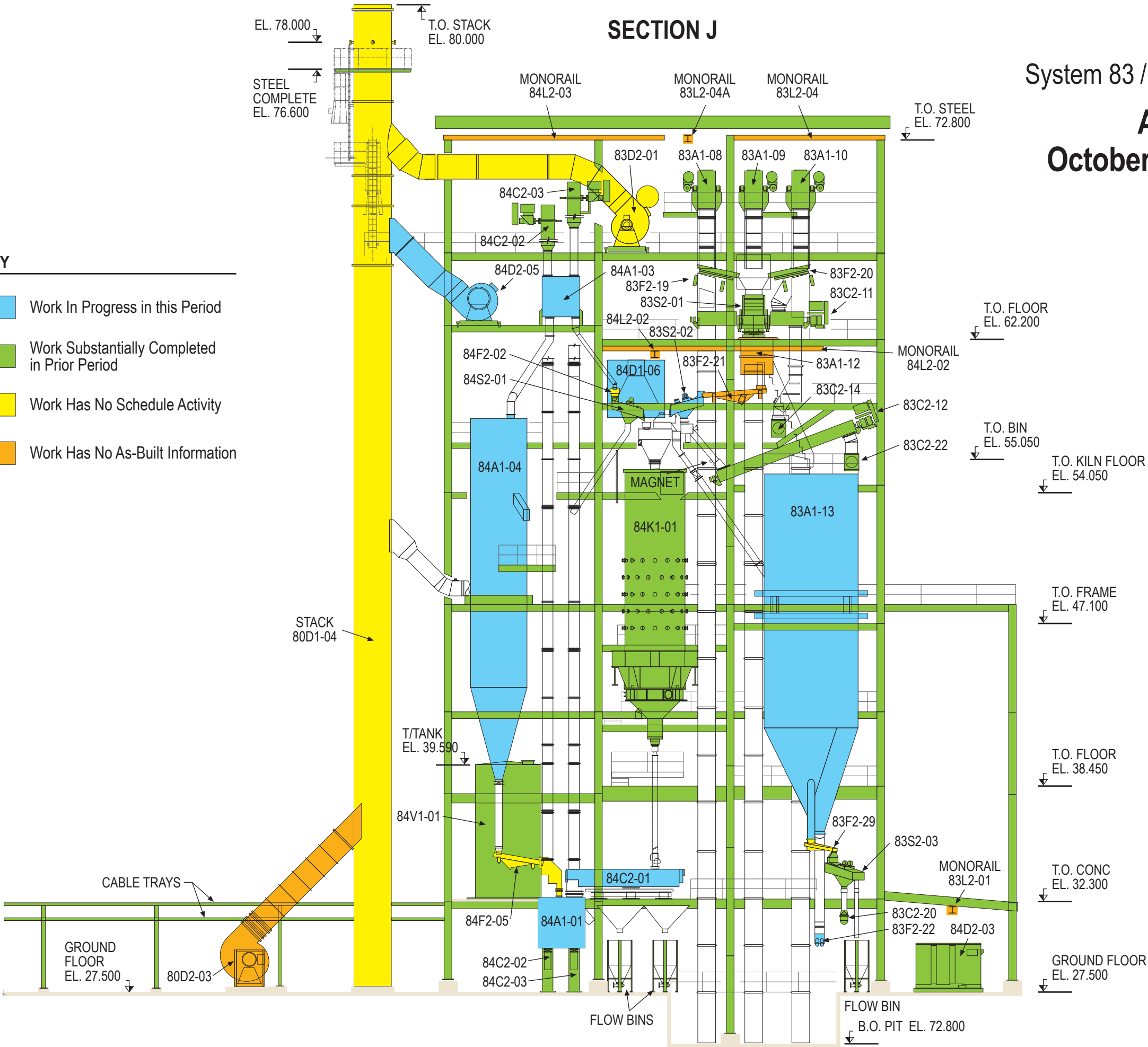
KEY

Work In Progress in this Period

Work Substantially Completed in Prior Period

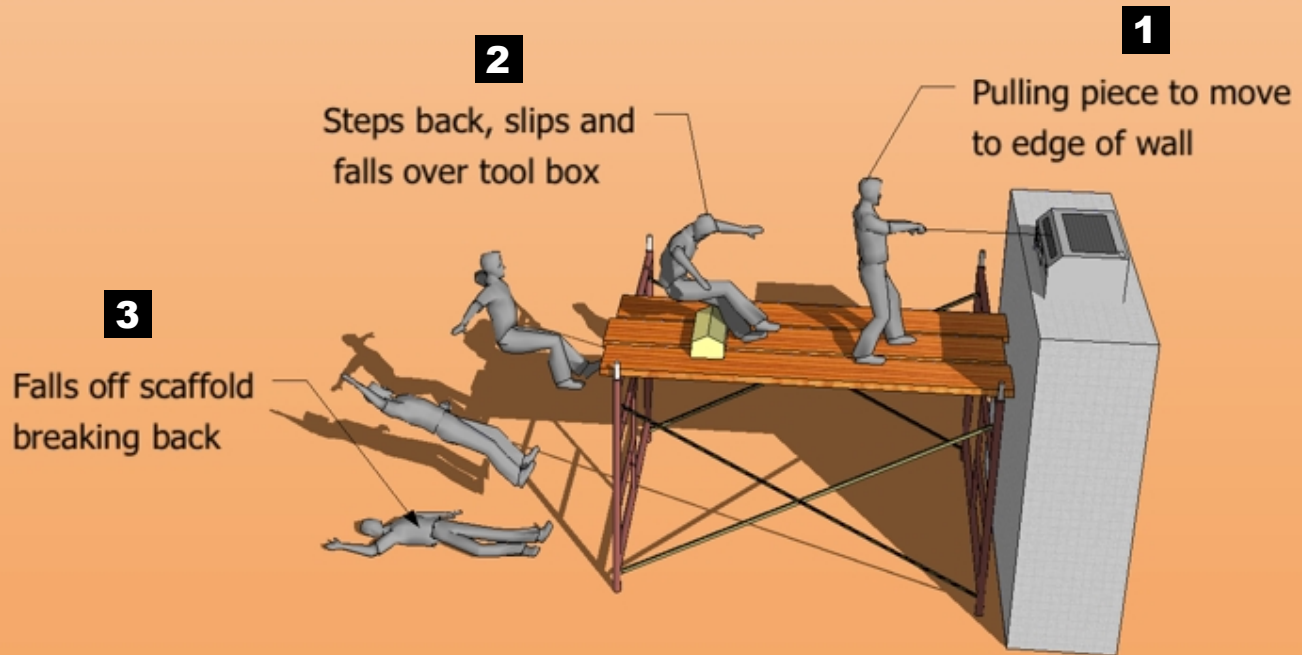
Work Has No Schedule Activity

Work Has No As-Built Information



EQUIP NO.	DESCRIPTION
80D1-04	STACK
80D2-03	I.D. FAN
83A1-03	RECYCLE MATERIAL BIN
83A1-08	FEED DIVERTER
83A1-09	DIVERTER CHUTE
83A1-10	DIVERTER CHUTE
83A1-12	DIVERTER CHUTE
83A1-13	GREEN BRIQUETTE BIN
83C2-11	SCREW CONVEYOR
83C2-12	SCREW CONVEYOR
83C2-14	SCREW CONVEYOR
83C2-20	SCREW CONVEYOR
83C2-22	SCREW CONVEYOR
83D2-01	EXHAUST AIR FAN
83F2-19	VIBRATING FEEDER
83F2-20	VIBRATING FEEDER
83F2-21	VIBRATING FEEDER
83F2-22	VIBRATING FEEDER
83F2-29	VIBRATING FEEDER
83L2-01	ELECTRIC HOIST
83L2-04	MONORAIL
83L2-04A	MONORAIL
83S2-01	VIBRATING SCREEN
83S2-02	VIBRATING SCREEN
83S2-03	VIBRATING SCREEN
84A1-01	DIVERTER HOPPER
84A1-04	RECYCLE BIN
84C2-01*	SINTER DISCHARGE CONVEYOR
84C2-02	BUCKET ELEVATOR
84C2-03	BUCKET ELEVATOR
84D1-06	DROP-OUT BOX
84D2-03	PRIMARY AIR COMPRESSOR
84D2-05	BAG HOUSE I.D.FAN
84F2-02	VIBRATING FEEDER
84F2-05	VIBRATING FEEDER
84K1-01	SINTERING KILN
84L2-02	ELECTRIC HOIST
84L2-03	ELECTRIC HOIST
84S2-01	RECYCLE SCREEN
84V1-01	TREATED COOL WATER TANK

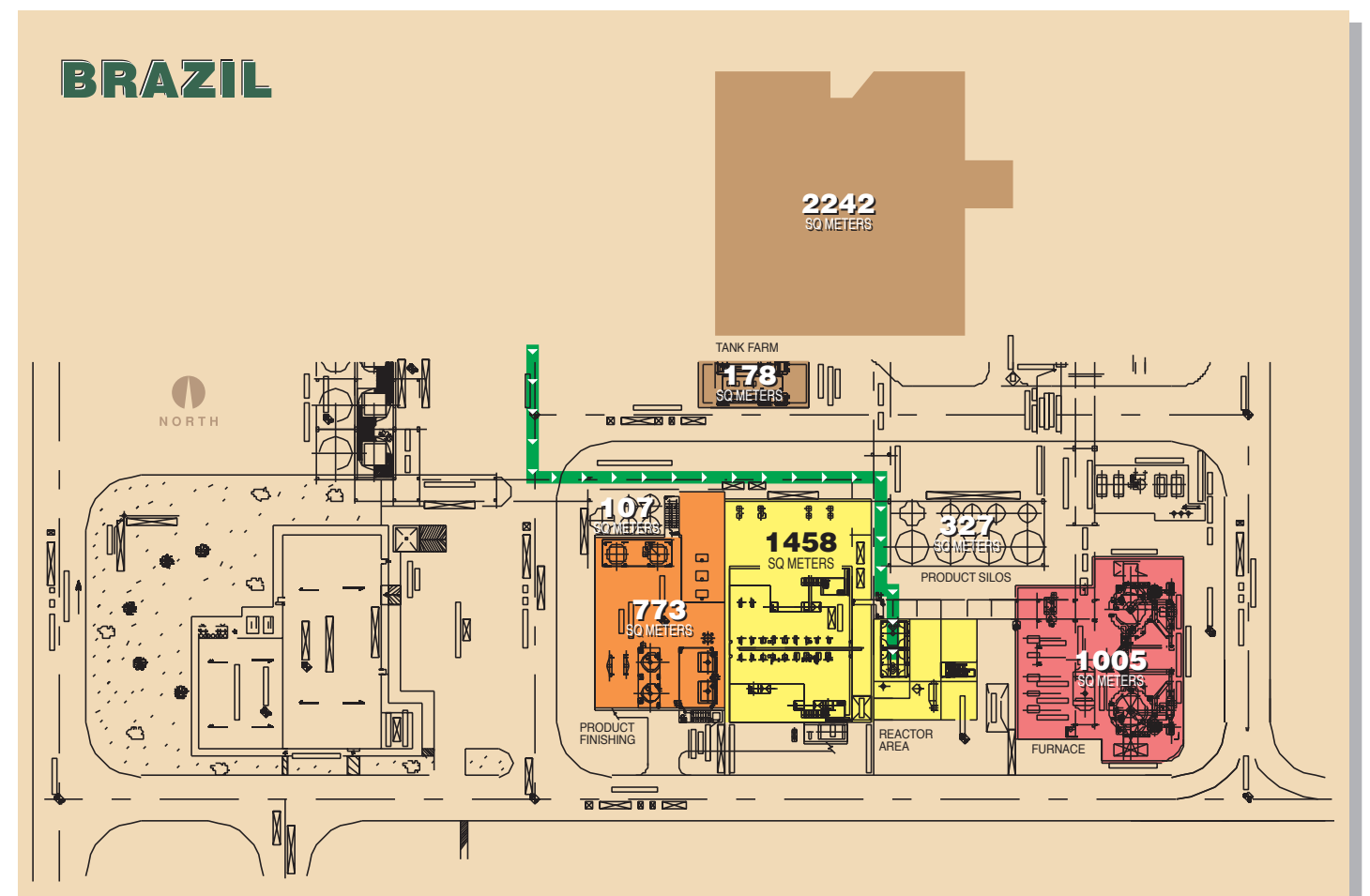
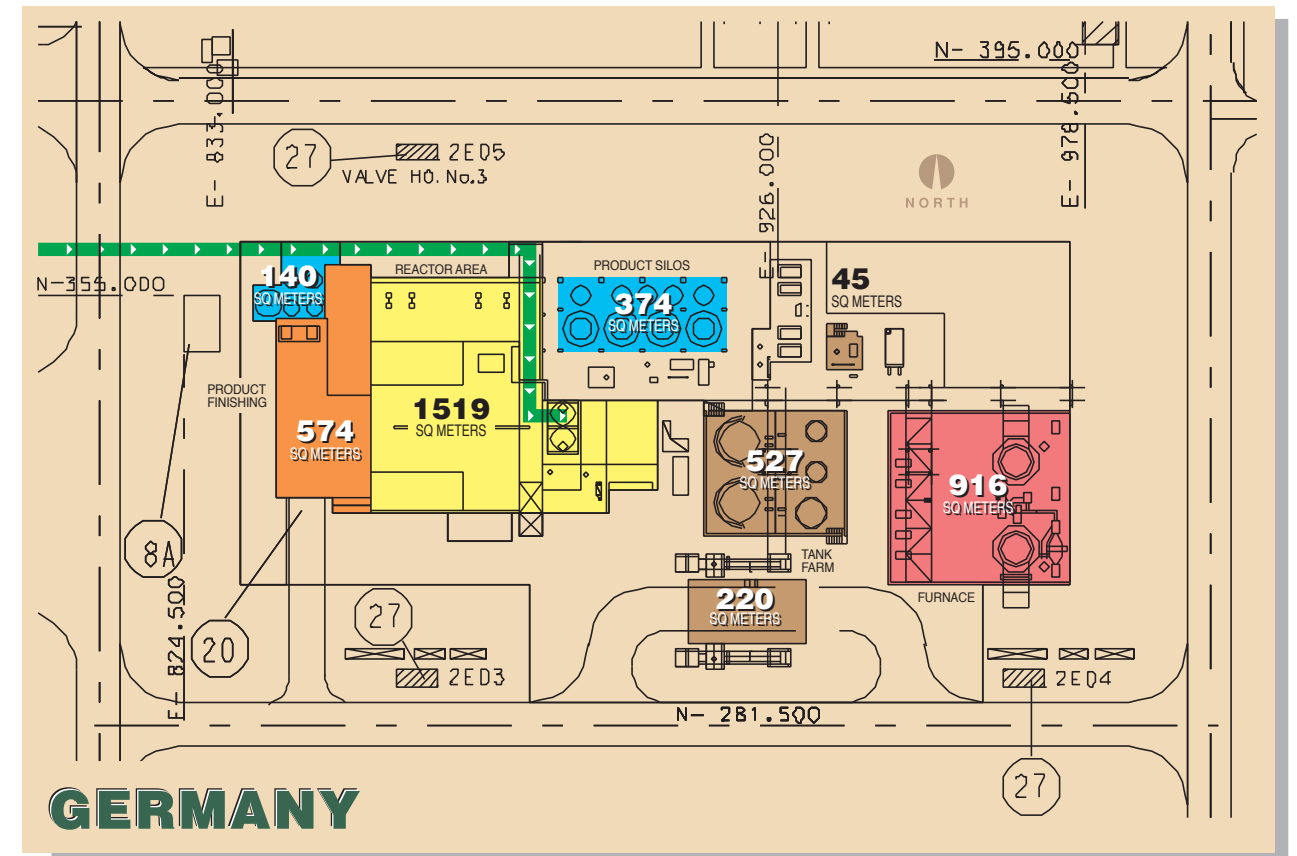
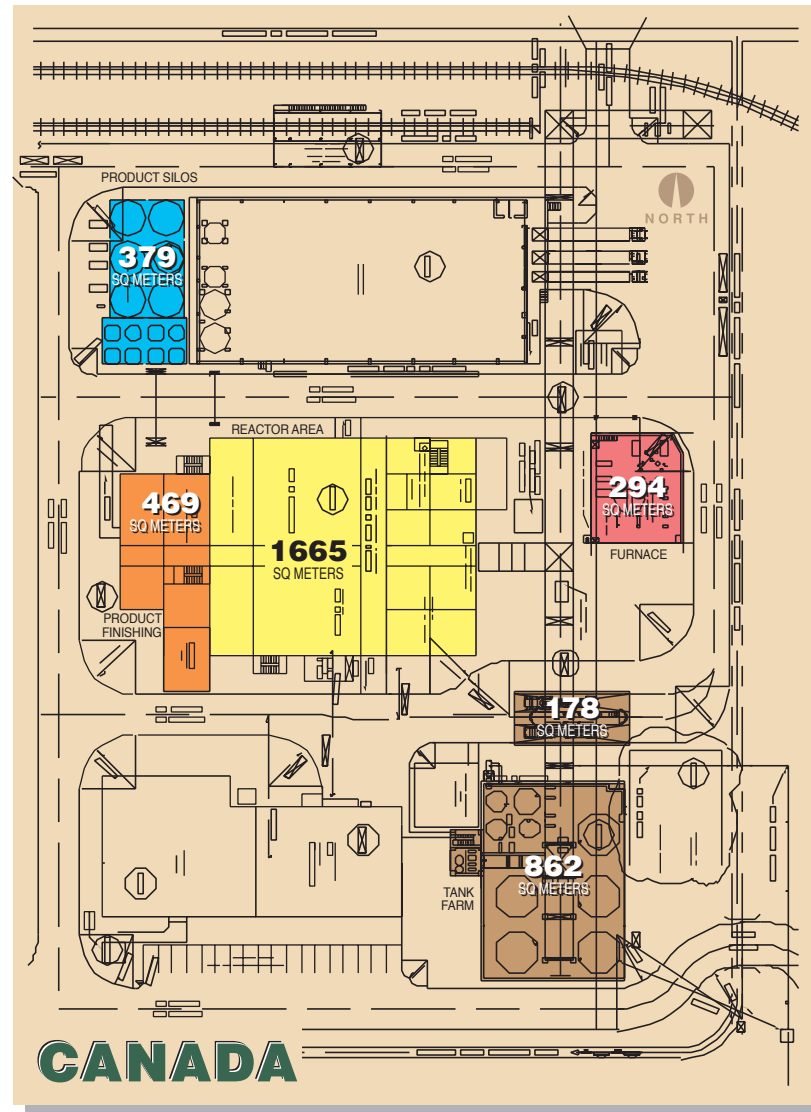
Scaffold Accident





LONG INTERNATIONAL

PLANT LAYOUTS



Process Plant Product Areas Comparison for Canada, Italy, Germany, and Brazil

(Diagrammatic – Approximate areas in square meters)

Area	Canada	Italy	Germany	Brazil
Reactor Area	1665 sq m	1314 sq m	1519 sq m	1458 sq m
Product Finishing	469 sq m	813 sq m	574 sq m	773 sq m
Tank Farm A	862 sq m	2360 sq m	527 sq m	2242 sq m
Tank Farm B	178 sq m	141 sq m	220 sq m	178 sq m
Tank Farm C	–	–	45 sq m	–
Product Silo A	379 sq m	373 sq m	374 sq m	327 sq m
Product Silo B	–	95 sq m	140 sq m	107 sq m
Furnace	294 sq m	771 sq m	916 sq m	1005 sq m

SCALE
(Approximate Scale in Meters)

0 5 10 15 20 25 30 m

LEGEND

- Reactor Area
- Product Finishing
- Tank Farm
- Product Silo
- Furnace
- Direction of Incoming Feedstock

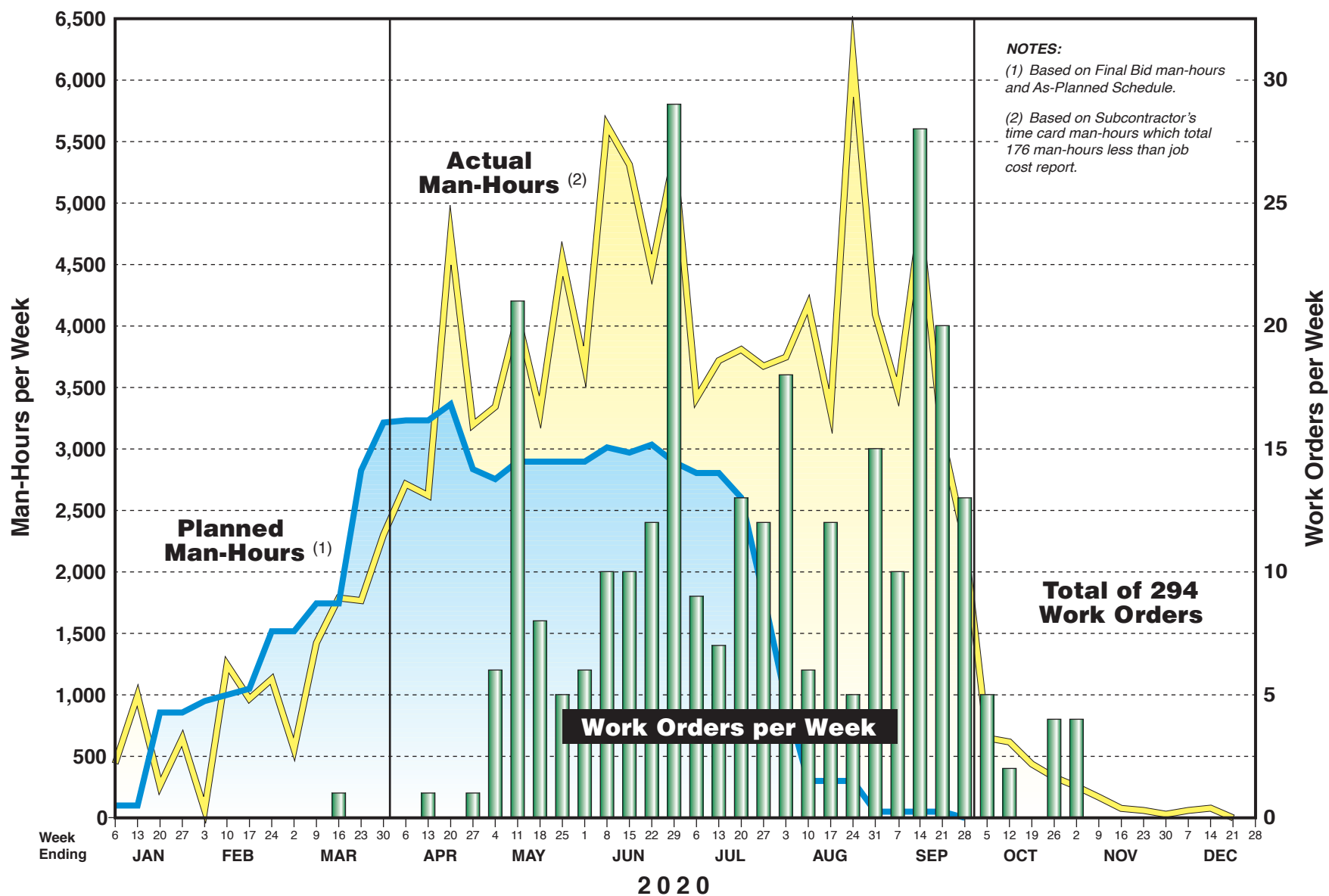




LONG INTERNATIONAL

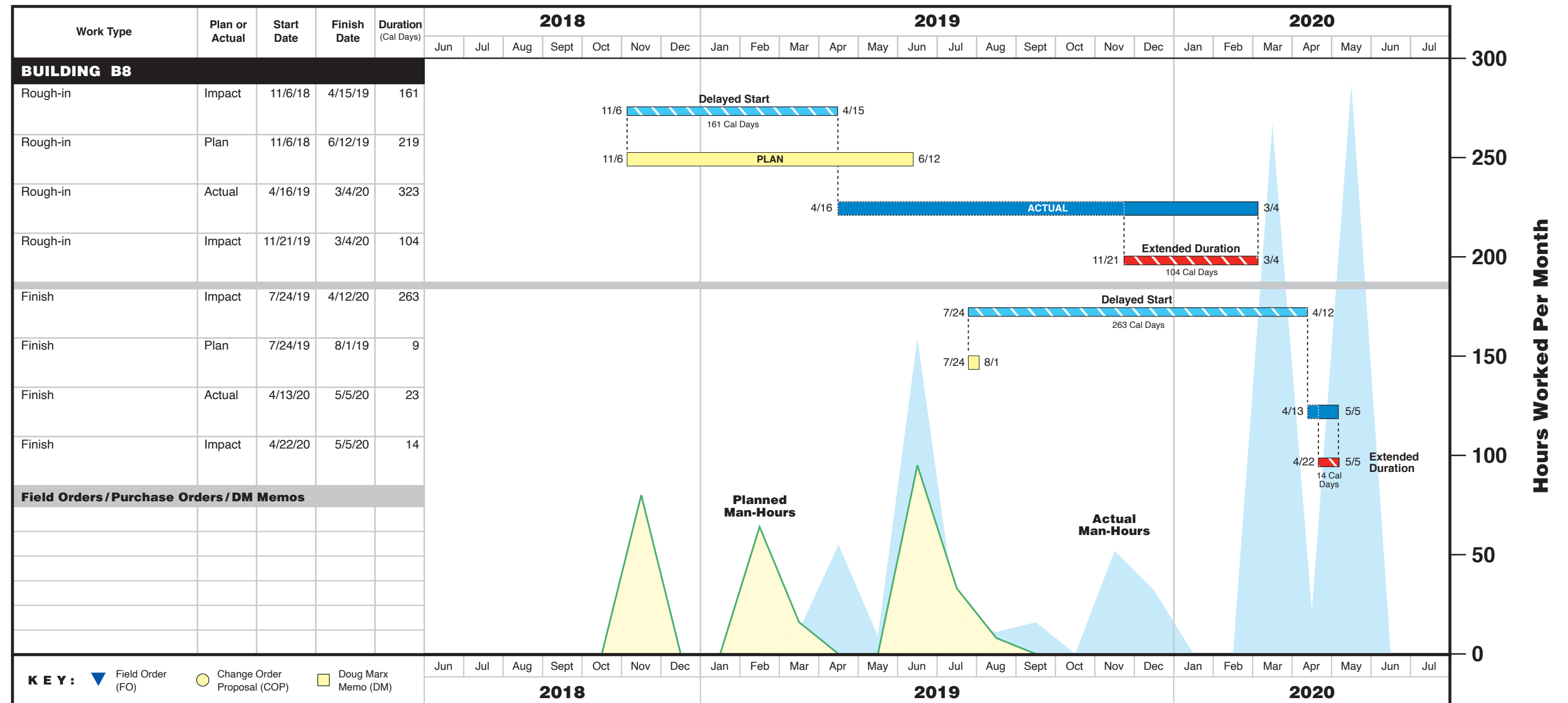
LINE CHARTS

WORK ORDERS AND SUBCONTRACTOR PLANNED AND ACTUAL MAN-HOURS



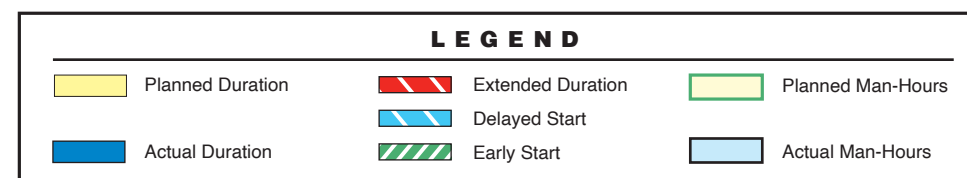
PLANNED VS. ACTUAL ROUGH-IN AND FINISH SCHEDULE SHOWING EARLY START, LATE START, EXTENDED WORK DURATIONS AND IMPACTS TO WORK FORCE MANLOADING

Bid Package No. 8
Electronic Systems Installation Subcontract
Federal Correctional Complex

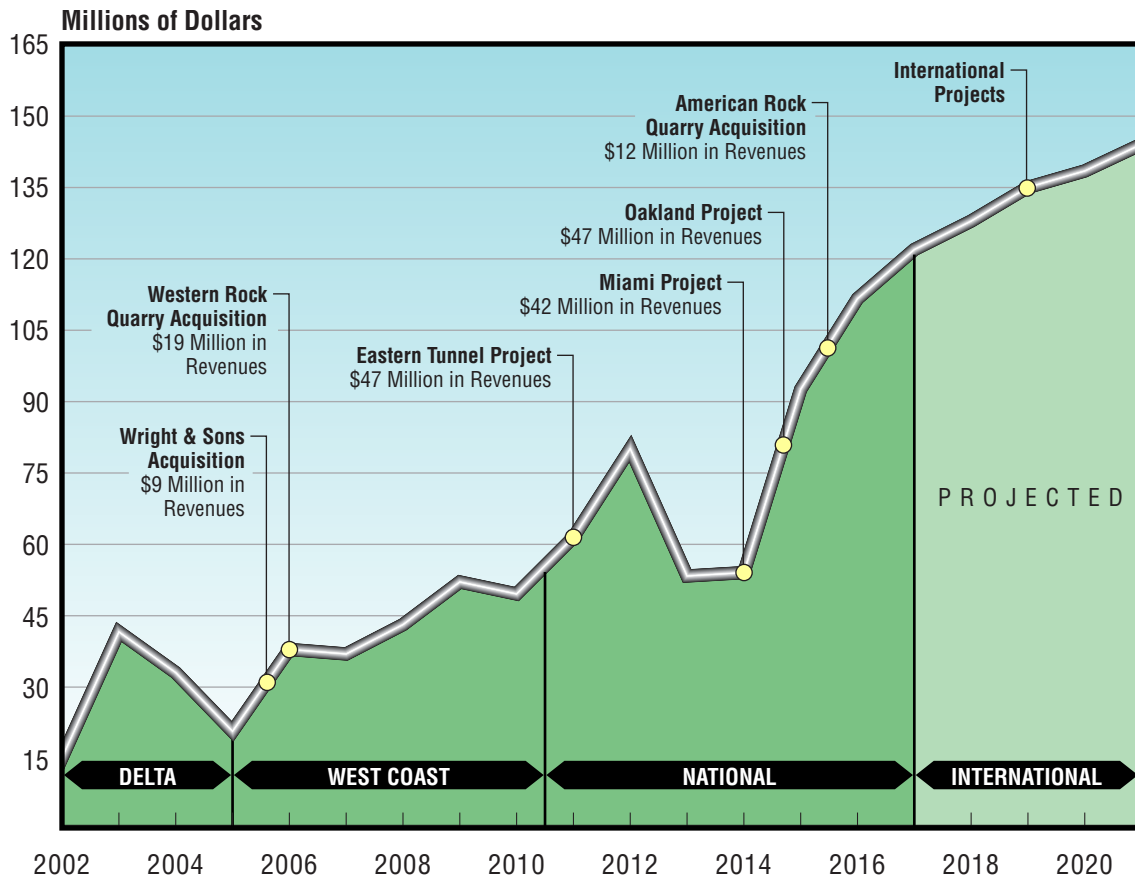


NOTES:

1. As-built dates and projected dates (April 27, 2020 and later) are derived from subcontractor's FCM statused schedule, data date 25 April 2020.
2. As-planned dates are derived from subcontractor's FMAg schedule, data date 8 April 2018.
3. Finish dates do not include Test activities.

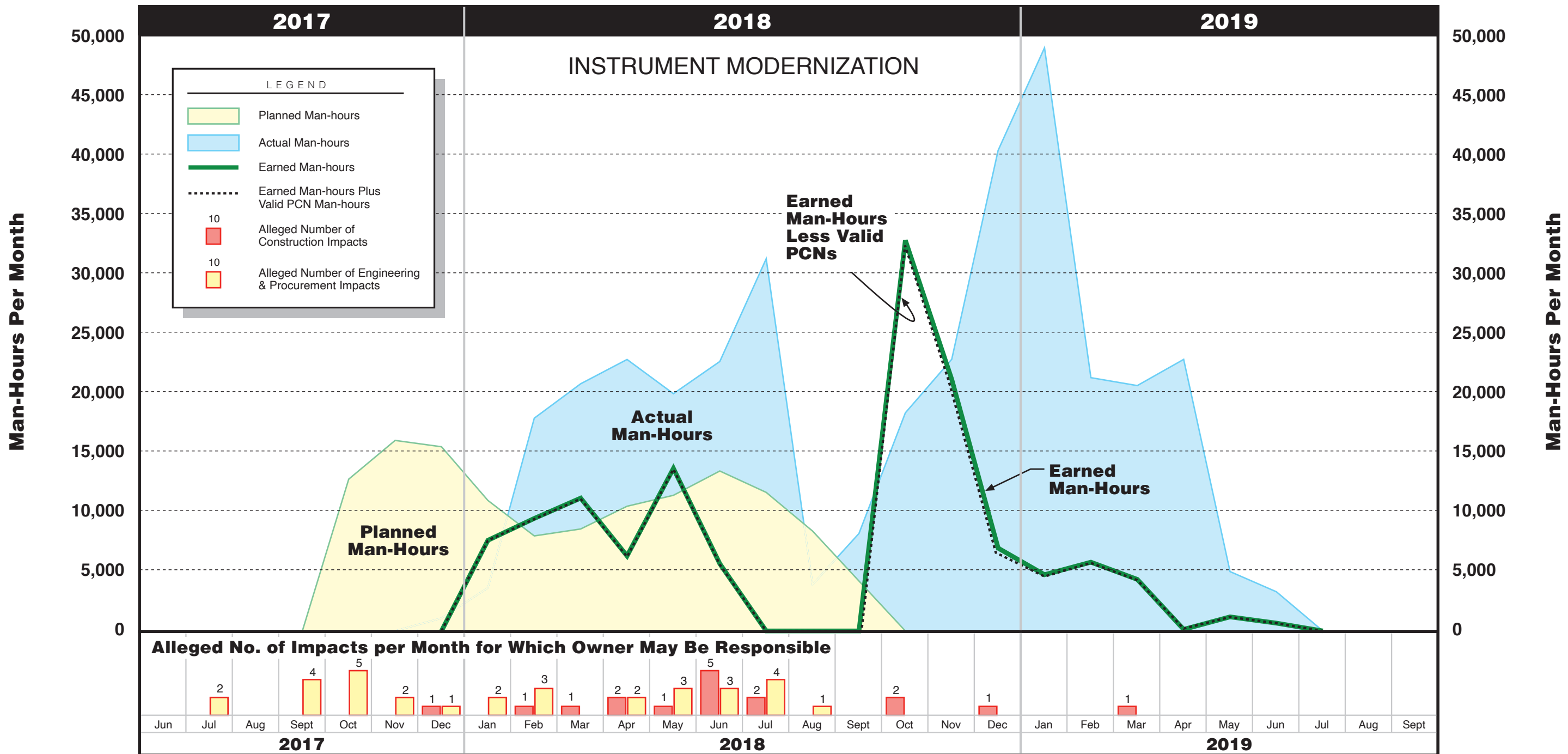


Evolution of the ABC Group – 2002 through 2020



Source: Financial statements of Projected Statement of Income, 10/7/16.

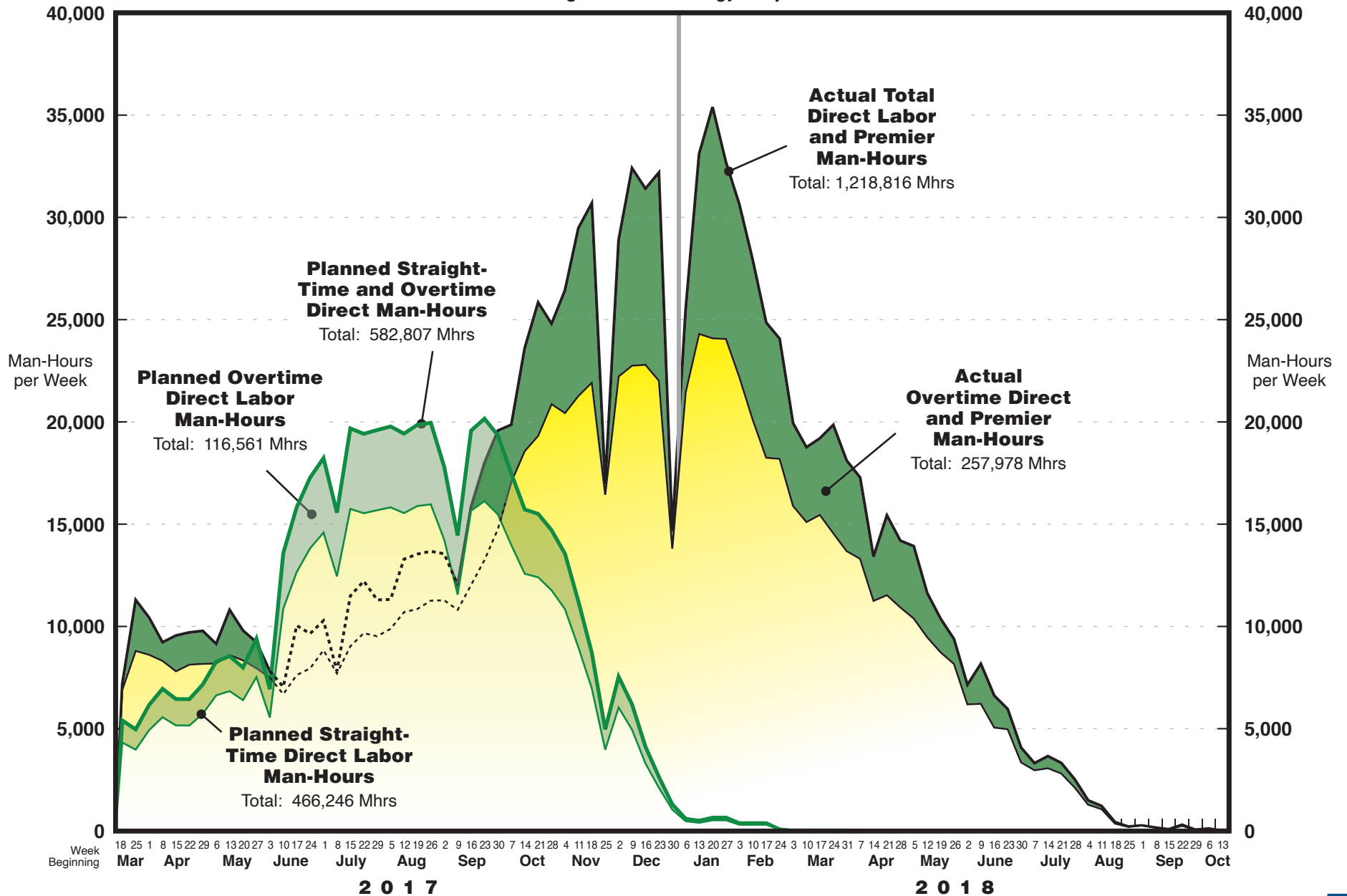
COMPARISON OF PLANNED, ACTUAL, EARNED AND EARNED PLUS VALID PCN CONSTRUCTION LABOR MAN-HOURS vs. ALLEGED MONTHLY CONSTRUCTION AND ENGINEERING & PROCUREMENT IMPACTS



Instrument Modernization	6/1/17	7/1/17	8/1/17	9/1/17	10/1/17	11/1/17	12/1/17	1/1/18	2/1/18	3/1/18	4/1/18	5/1/18	6/1/18	7/1/18	8/1/18	9/1/18	10/1/18	11/1/18	12/1/18	1/1/19	2/1/19	3/1/19	4/1/19	5/1/19	6/1/19	7/1/19	8/1/19	9/1/19	Totals
Actual Man-hours	0	0	0	0	0	0	1,075	3,617	17,859	20,746	22,787	19,916	22,618	31,238	3,901	8,181	18,307	22,804	40,337	48,948	21,260	20,595	22,793	4,983	3,287	-	-	-	355,252
Planned Man-hours	0	0	0	0	12,743	15,993	15,460	10,955	7,977	8,559	10,466	11,386	13,425	11,631	8,383	4,191	0	0	0	0	0	0	0	0	0	-	-	-	131,170
Earned Man-hours	-	0	0	0	0	0	0	7,608	9,444	11,149	6,296	13,642	5,640	-	-	-	32,793	21,118	6,952	4,722	5,771	4,329	(131)	1,181	656	-	-	-	131,170
Valid PCN Man-hours	-	-	-	-	-	-	-	(14)	(55)	(64)	(71)	(62)	(70)	-	-	-	(191)	(71)	(125)	(152)	(66)	(64)	(71)	(15)	(10)	-	-	-	(1,100)
Earned - Valid PCN Mhrs	-	-	-	-	-	-	-	7,594	9,389	11,085	6,226	13,580	5,570	-	-	-	32,602	21,048	6,827	4,571	5,706	4,265	(202)	1,165	646	-	-	-	130,070

CONTRACTOR'S PLANNED AND ACTUAL OVERTIME MAN-HOUR CURVES

Cogeneration Energy Project



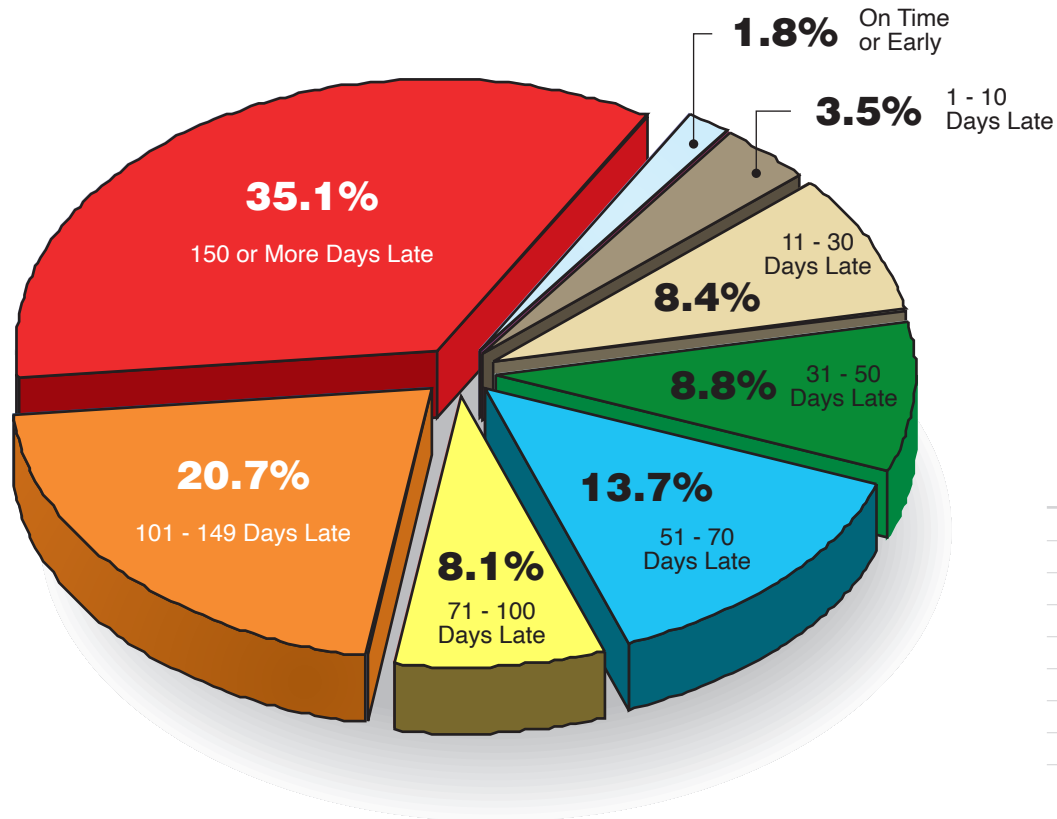


LONG INTERNATIONAL

PIE CHARTS

DISTRIBUTION OF DELAYS TO THE COMPLETION AND APPROVAL OF SYSTEM TURNOVER PACKAGES

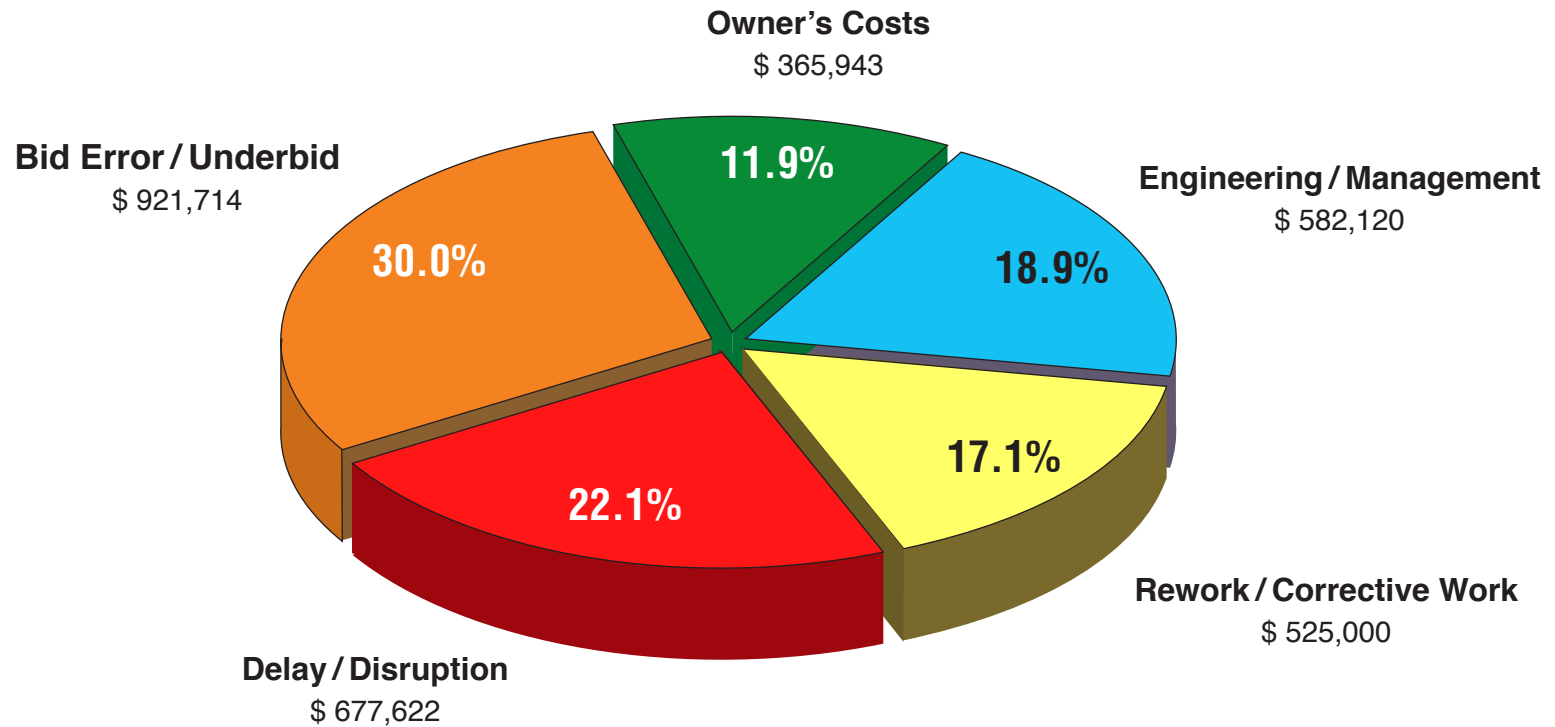
Cogeneration Energy Project



No. of Turnover Systems	Delay	Percent
5	On time or early	1.8%
10	1 - 10 days late	3.5%
24	11 - 30 days late	8.4%
25	31 - 50 days late	8.8%
39	51 - 70 days late	13.7%
23	71 - 100 days late	8.1%
59	101 - 149 days late	20.7%
100	150 or more days late	35.1%
285		100.0%

Note: For turnover systems that are not complete as of May 23, 2018, delay is calculated based on a June 30, 2018 completion.

Summary of Compensable Damages



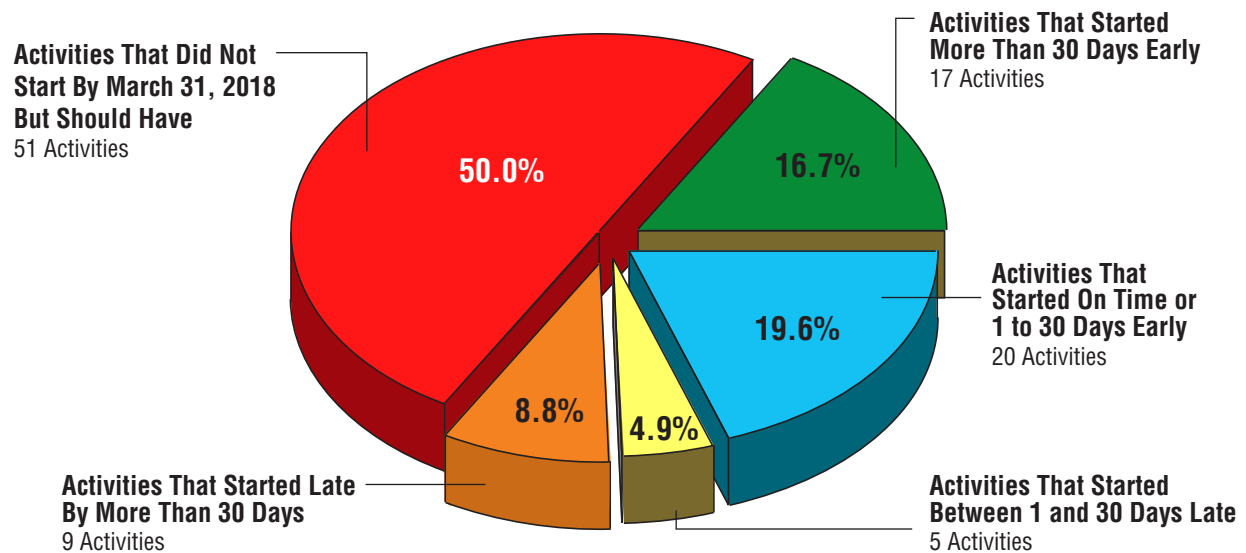
Total Compensable Damages
\$ 3,072,399



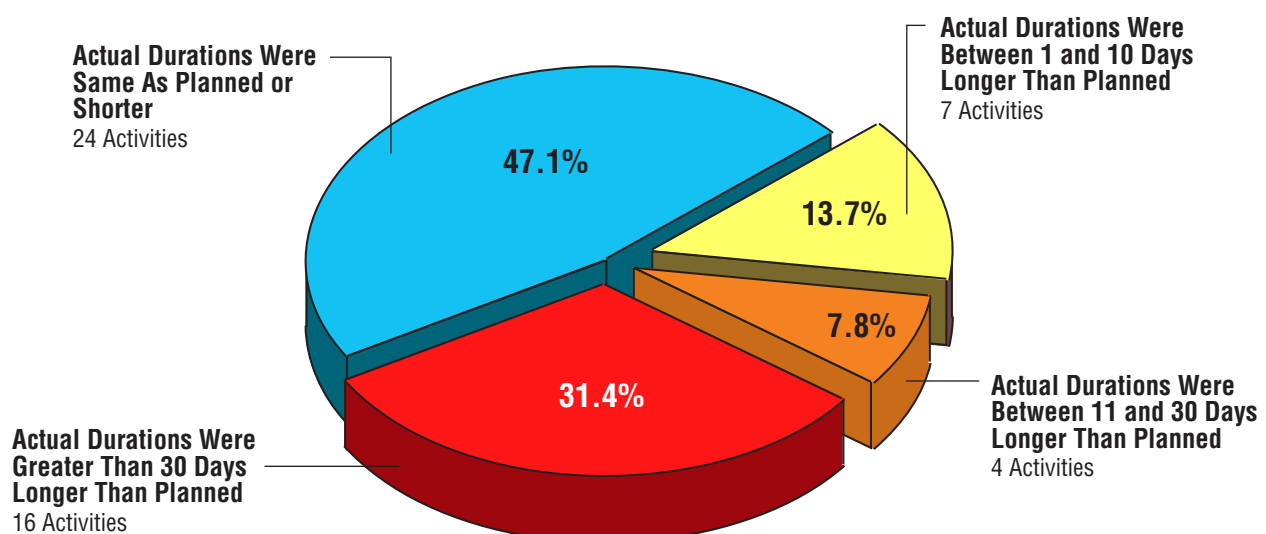
Analysis of Start Dates and Durations for Option 1 Electrical Activities

(Based on Progress Through March 31, 2018)

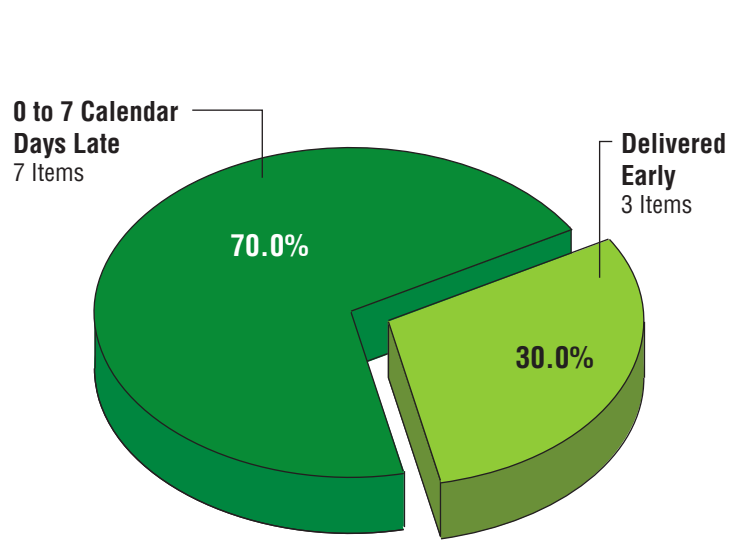
Start Dates



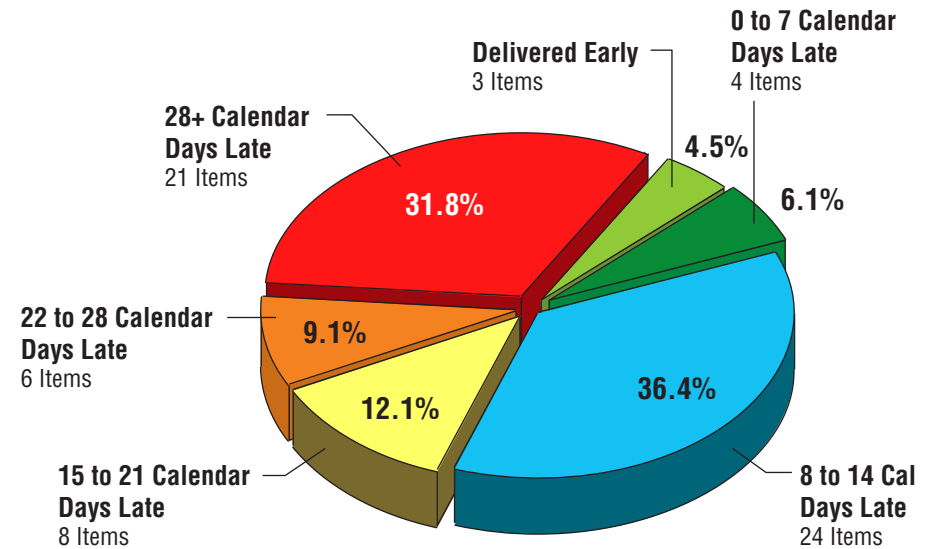
Durations



BUILDING EQUIPMENT DELIVERY DELAYS



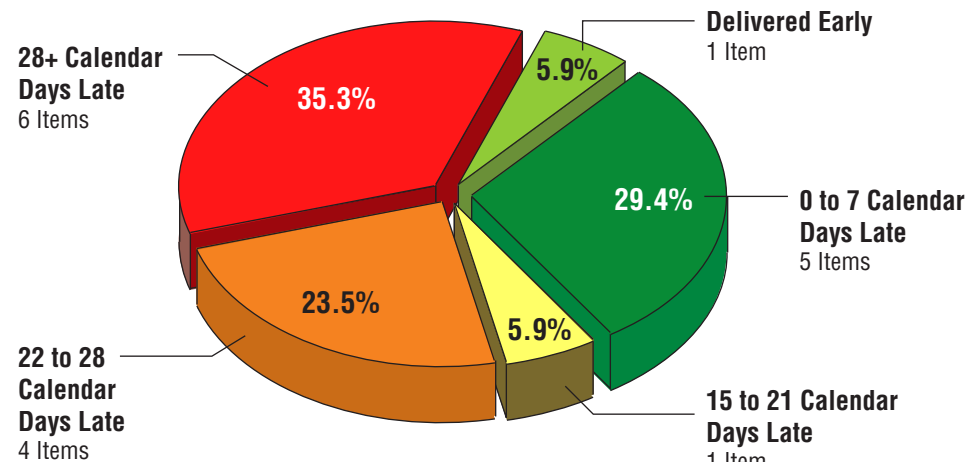
Contractor Equipment



Licensor Equipment

LEGEND

Early Delivery	■
0 to 7 Cal Days Late	■
8 to 14 Cal Days Late	■
15 to 21 Cal Days Late	■
22 to 28 Cal Days Late	■
28+ Cal Days Late	■



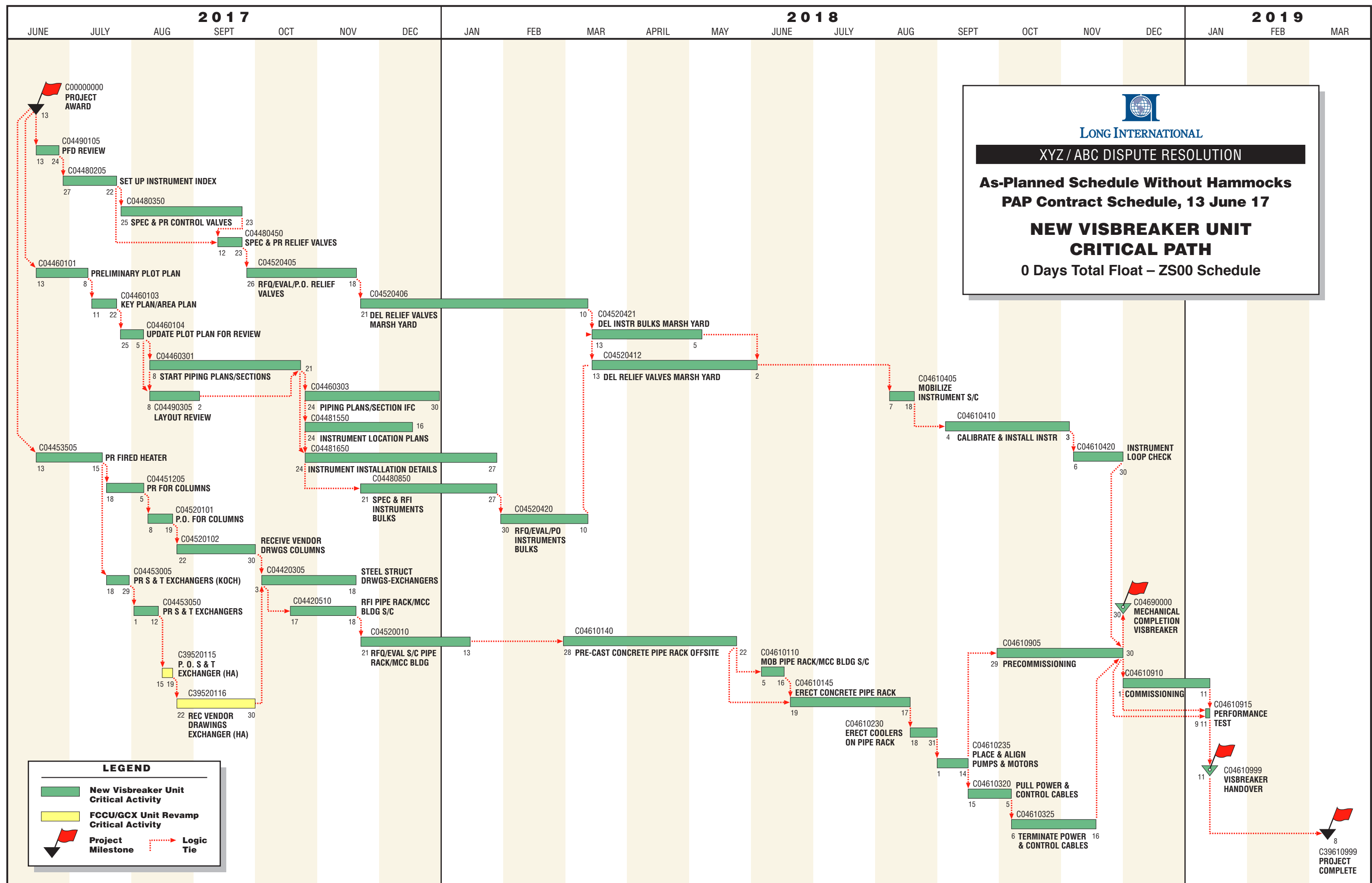
Owner Equipment





LONG INTERNATIONAL

SCHEDULES



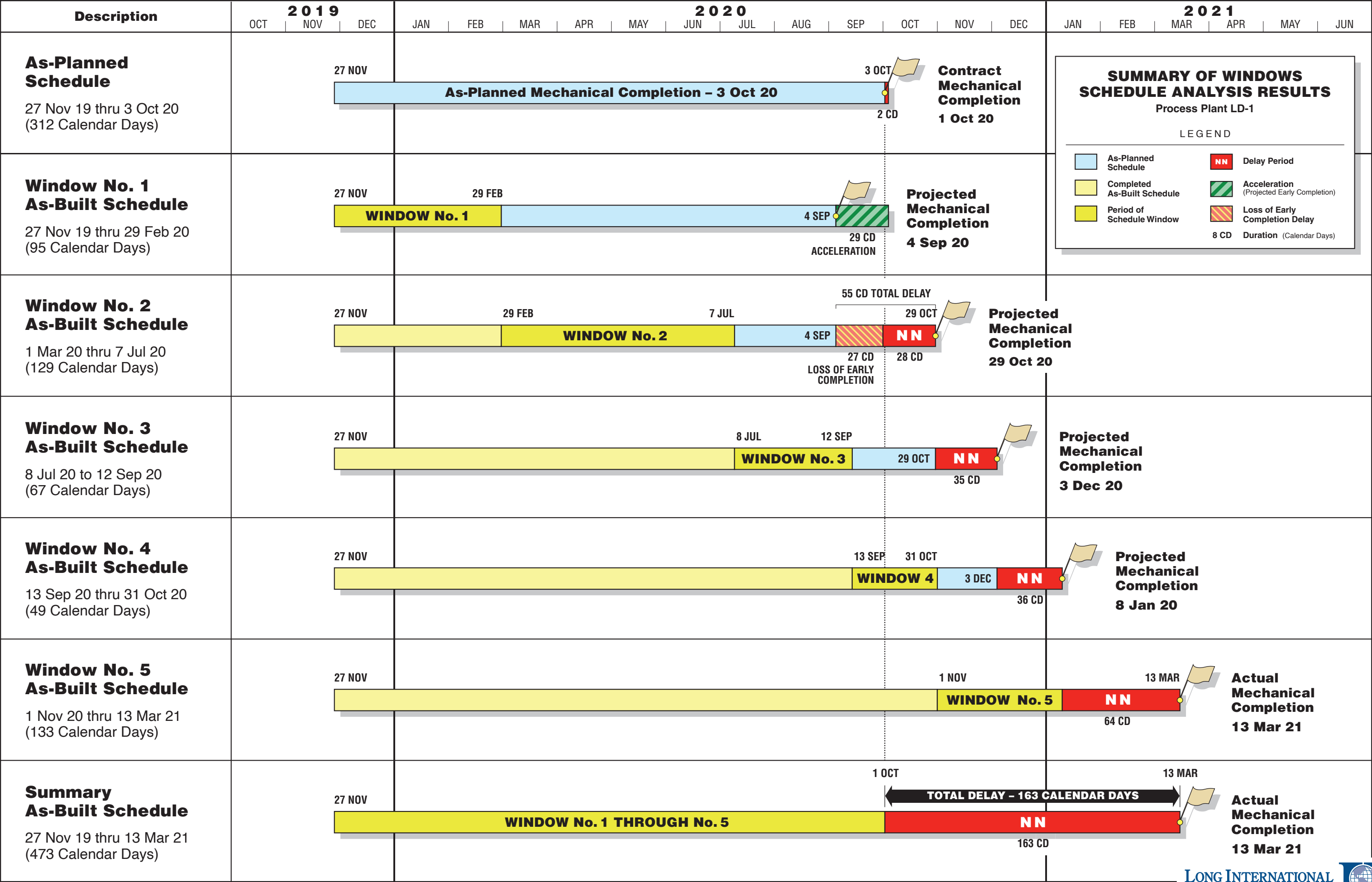
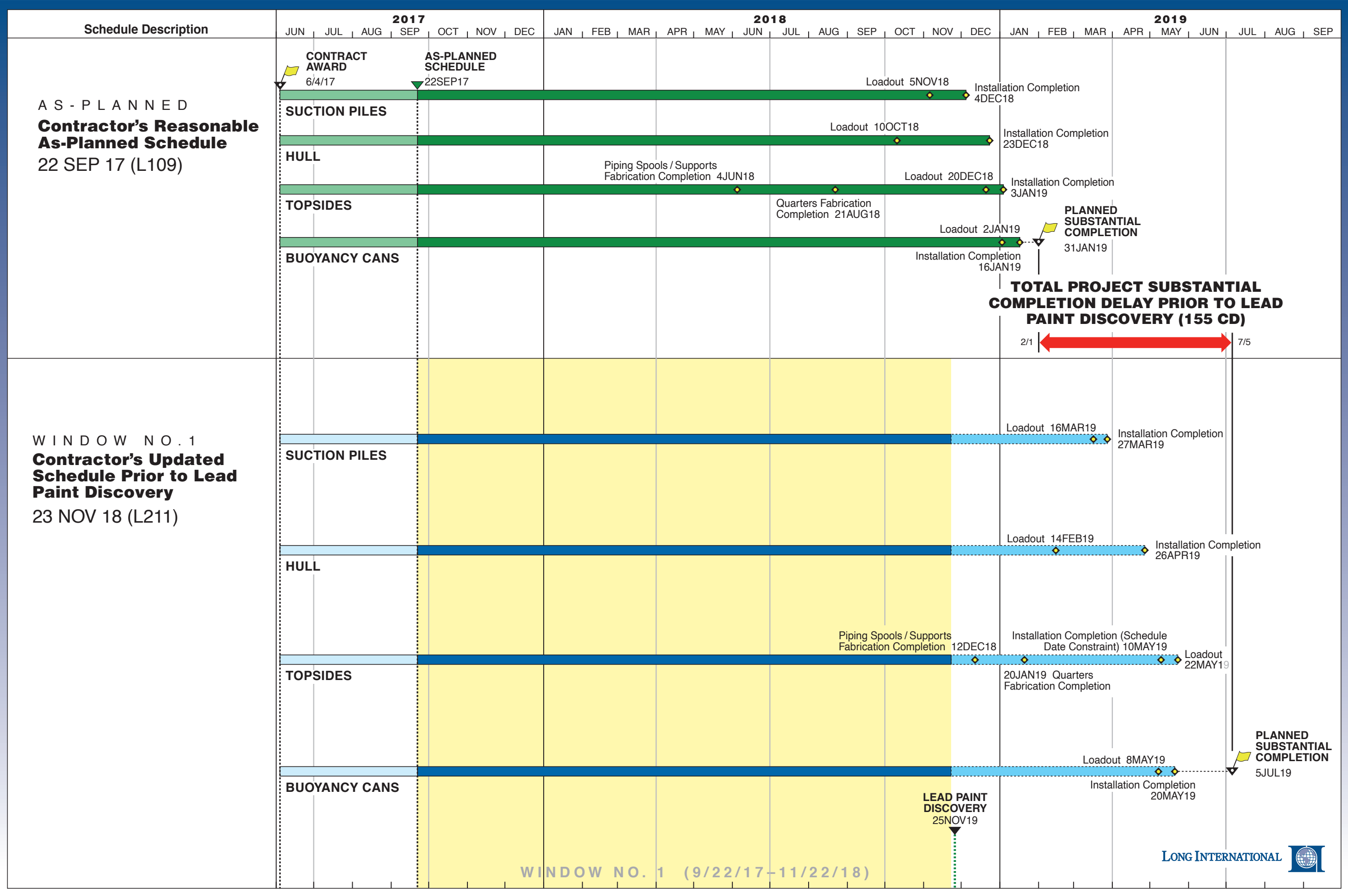
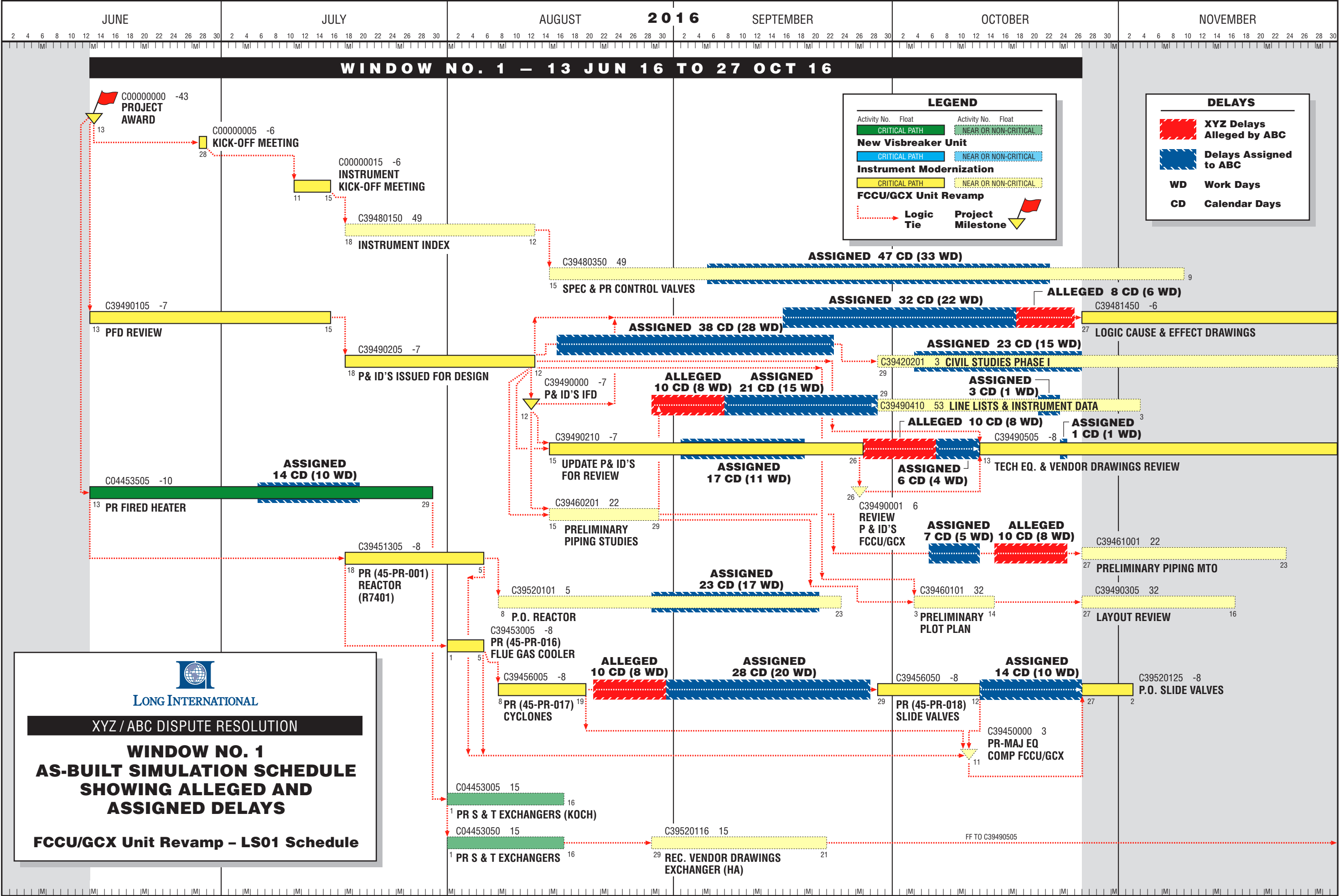


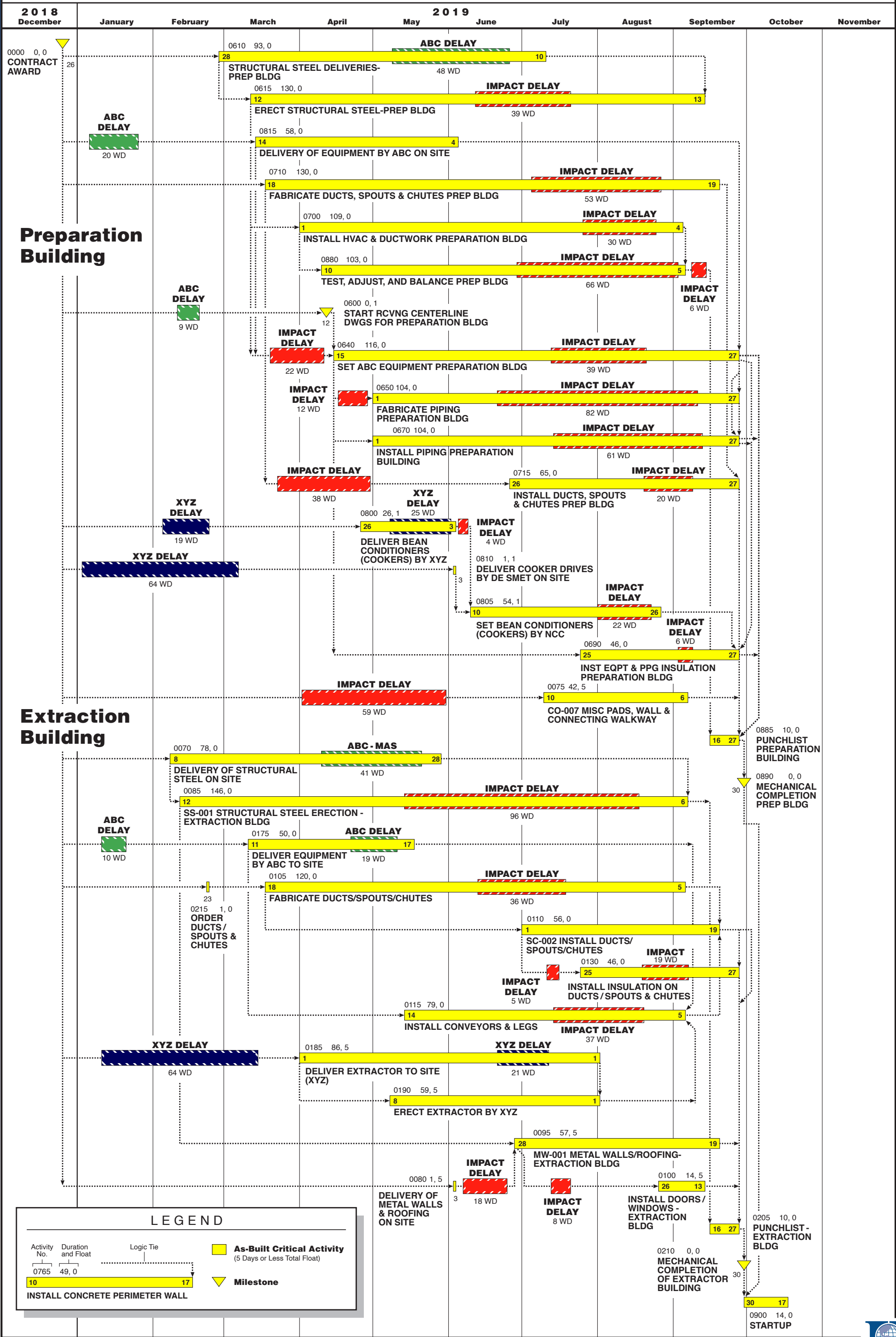
Figure VI - 10
Overall Delays – Window No. 1

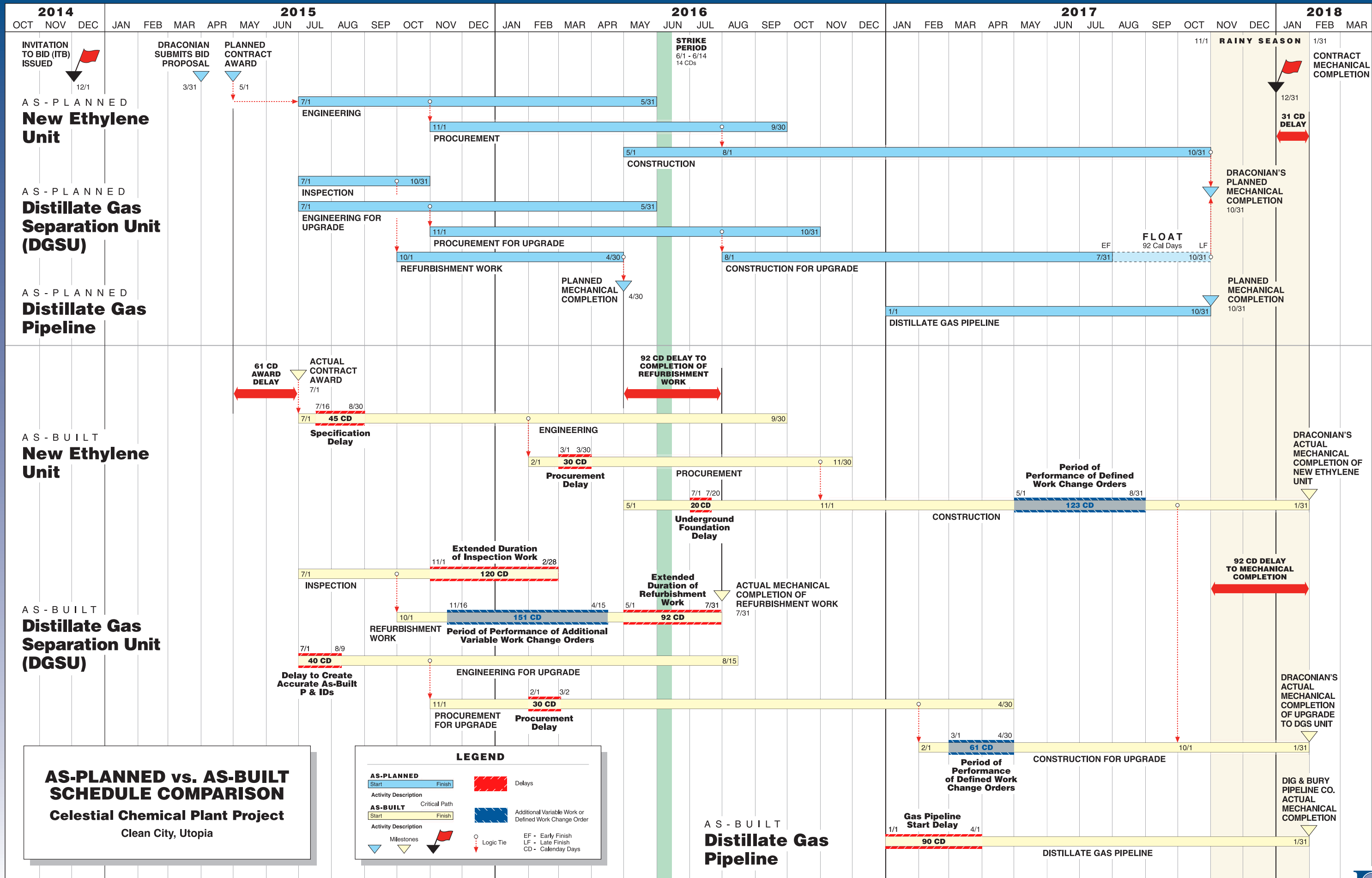


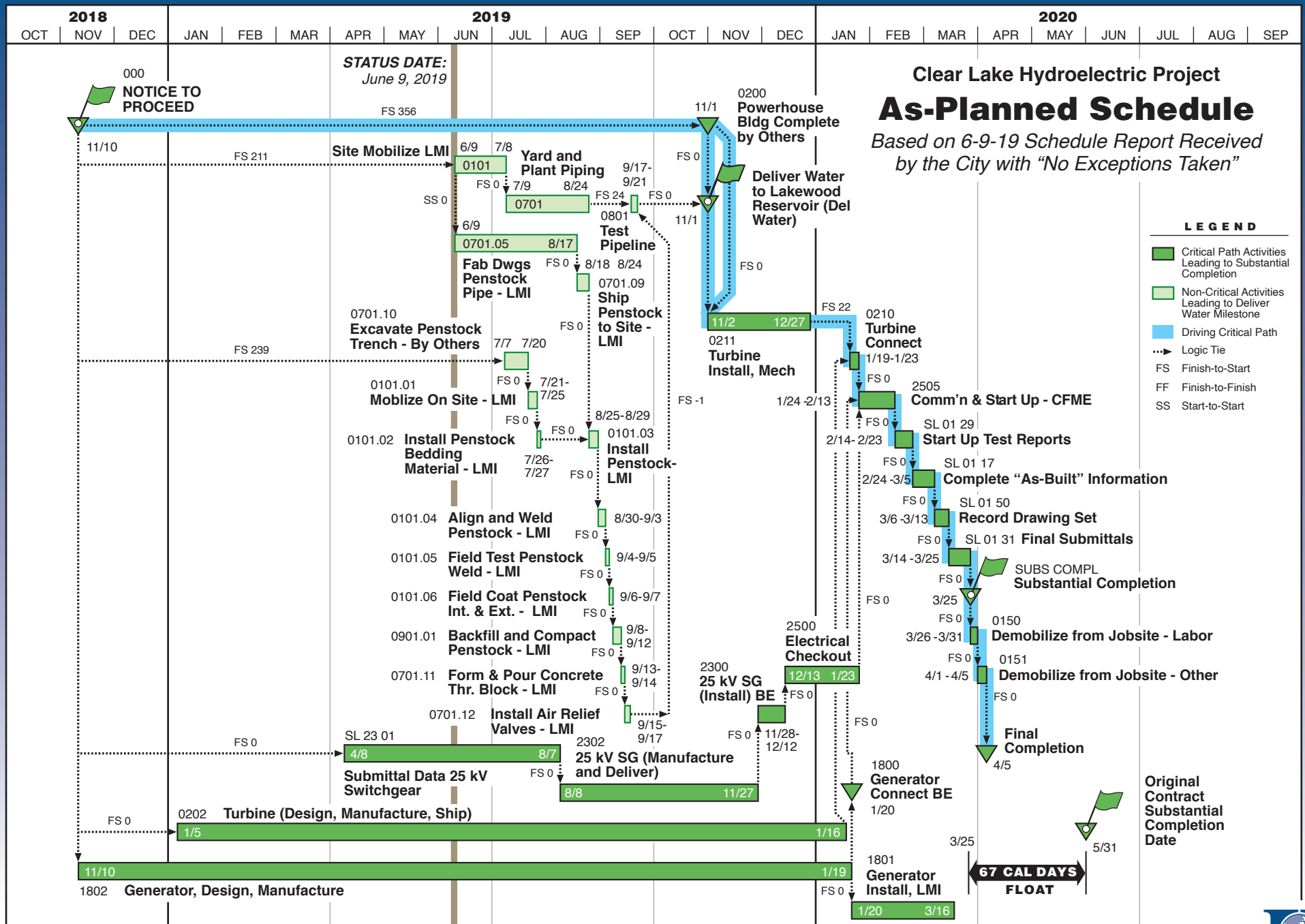


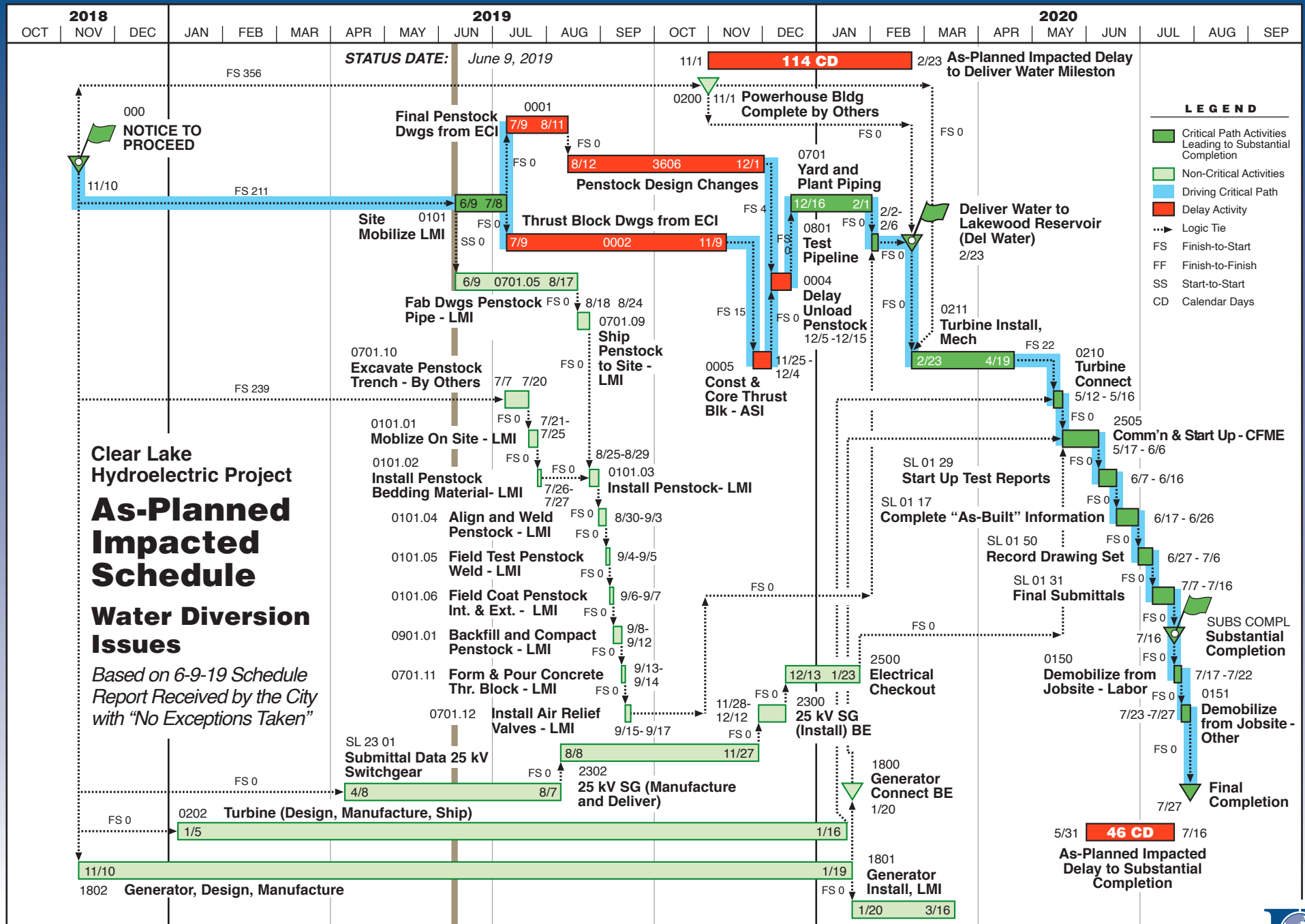
AS-BUILT SCHEDULE CRITICAL PATH ACTIVITIES EXTRACTION BUILDING AND PREPARATION BUILDING

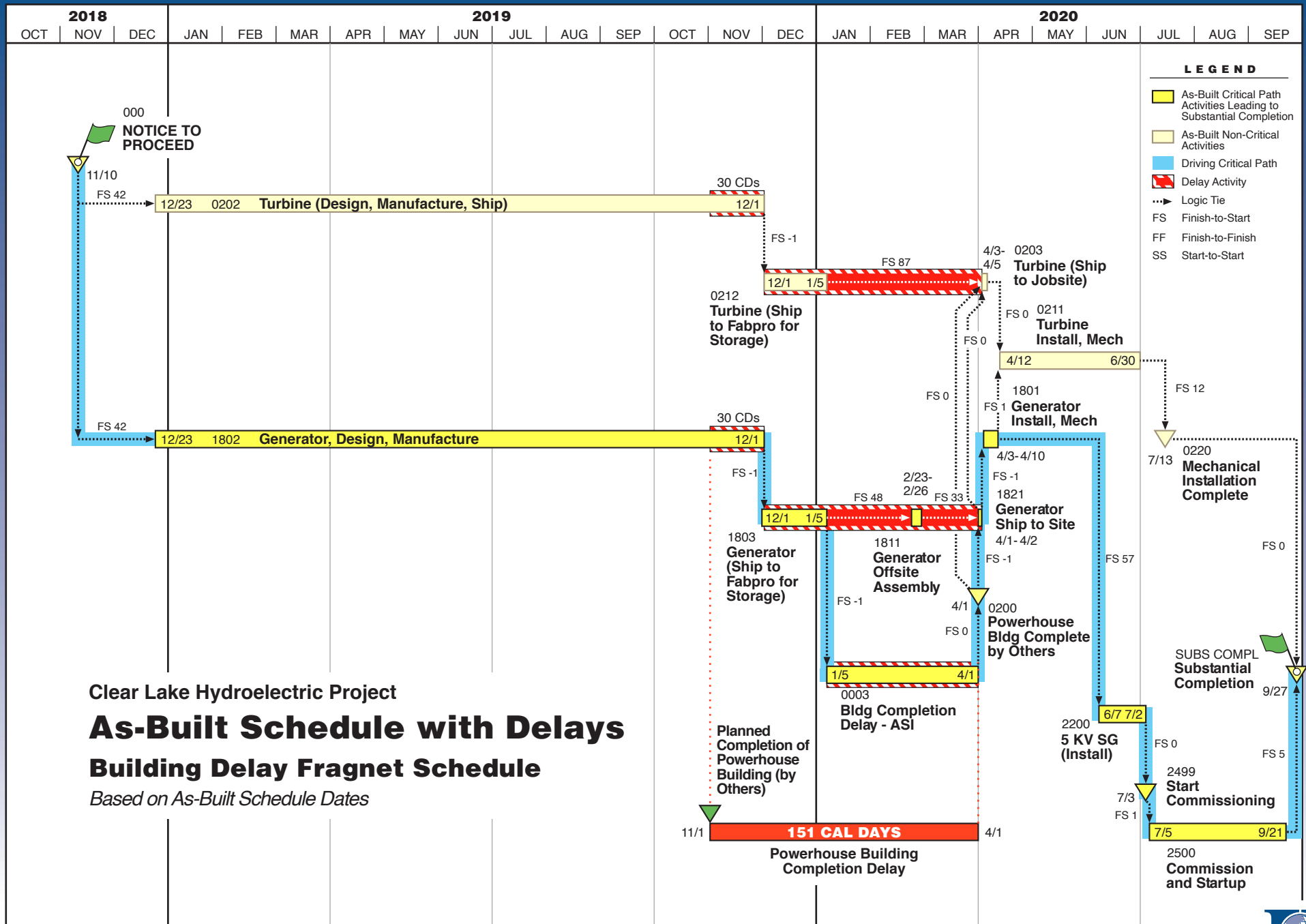
Processing Plant Project











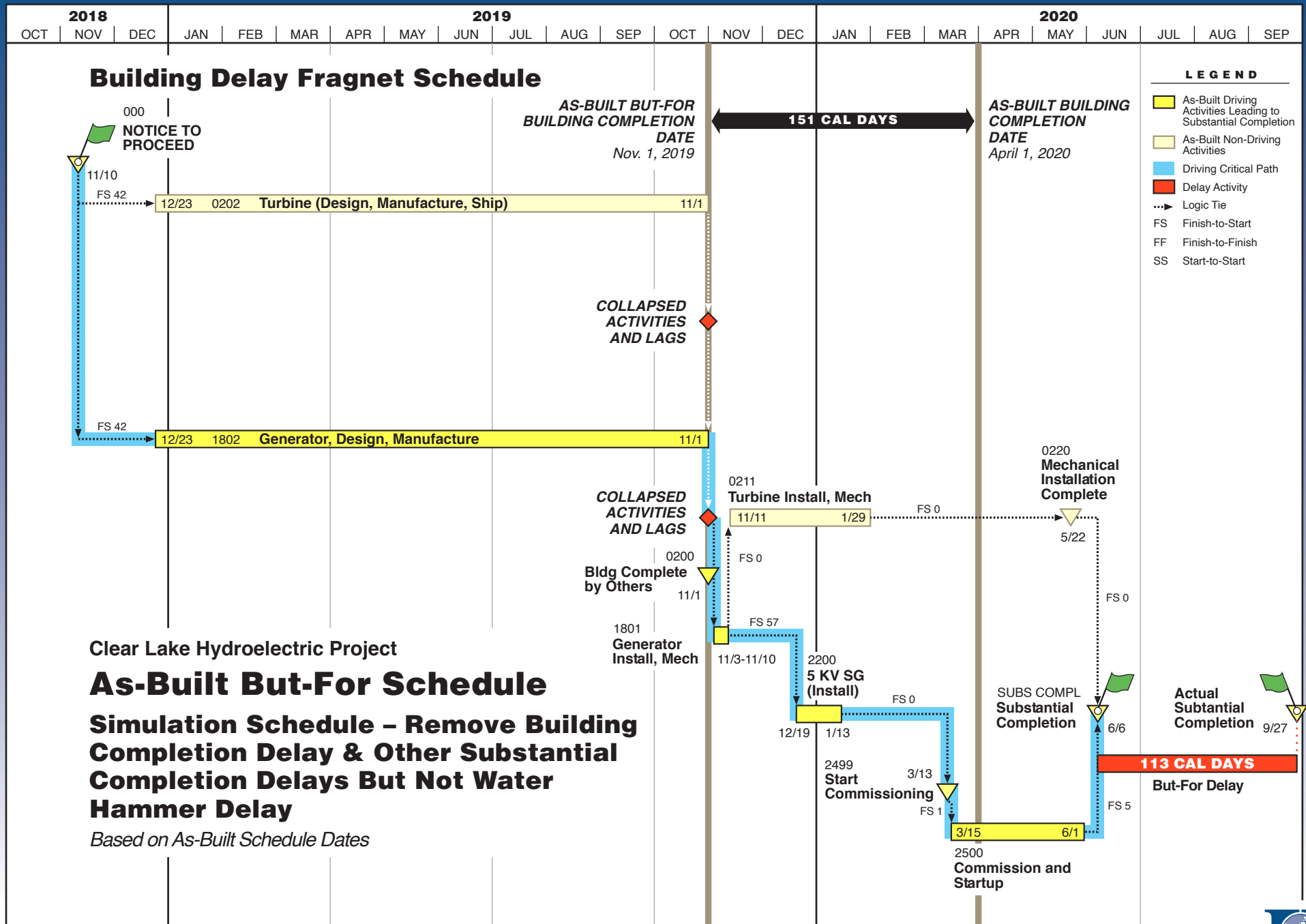
Clear Lake Hydroelectric Project

As-Built Schedule with Delays

Building Delay Fragnet Schedule

Based on As-Built Schedule Dates

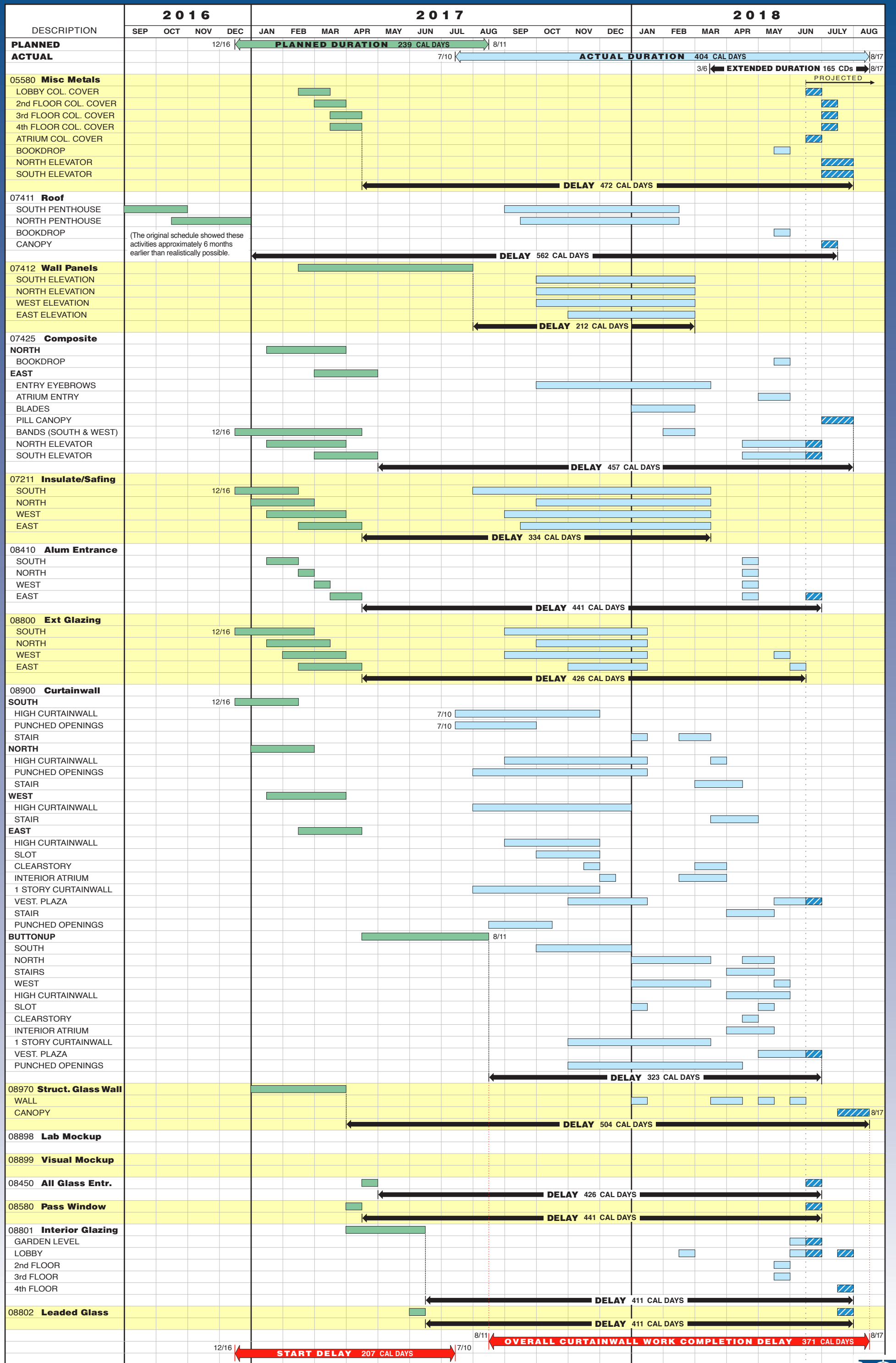




Washington County Library Project

Contractor Schedule Activities

Contract Schedule vs. As-Built Schedule



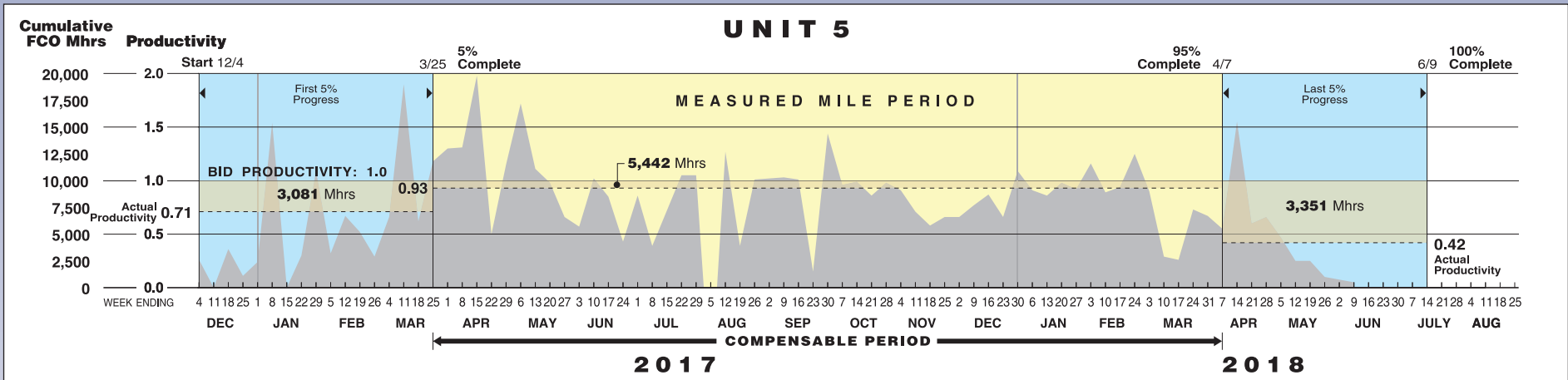
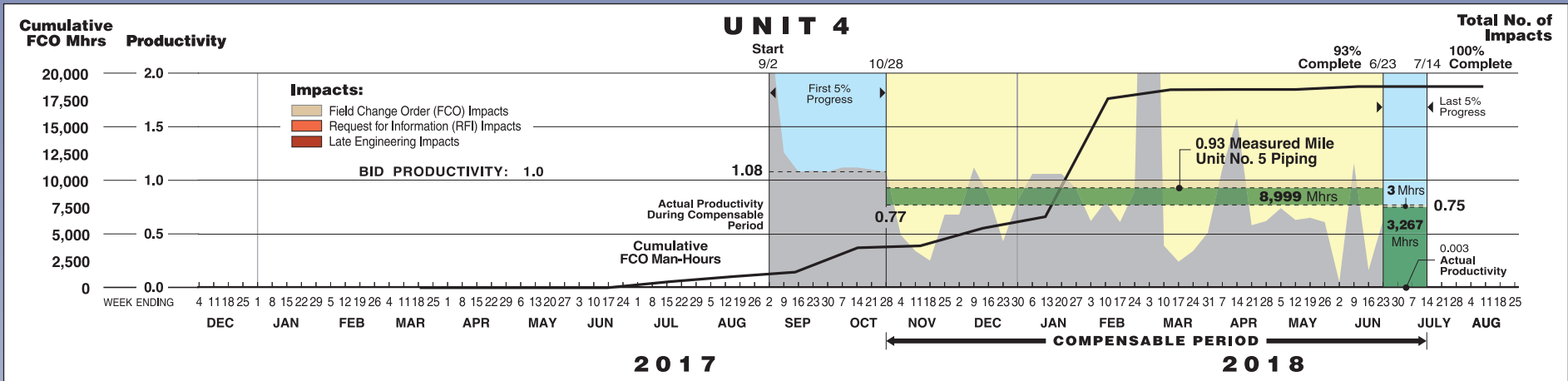
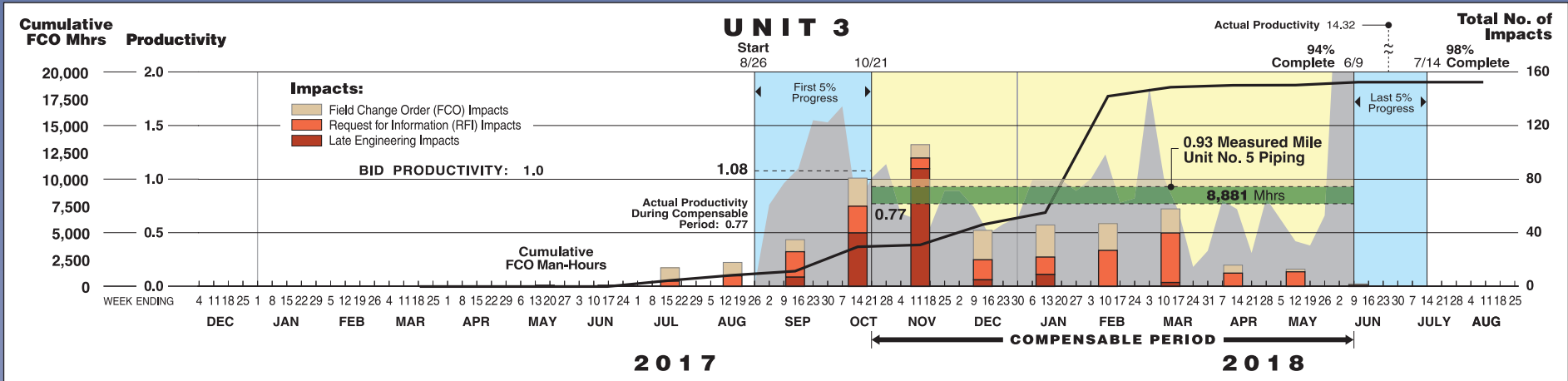
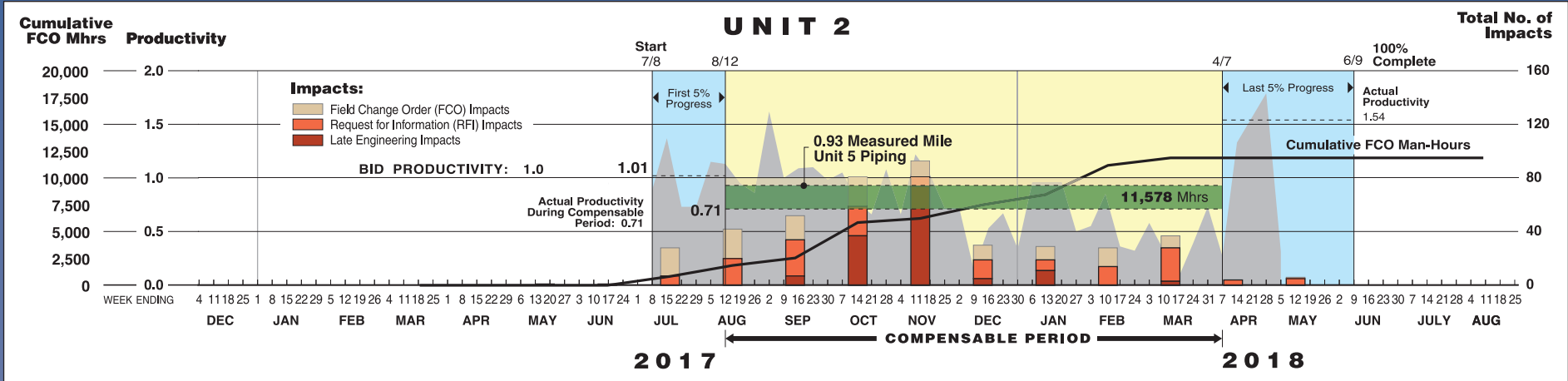
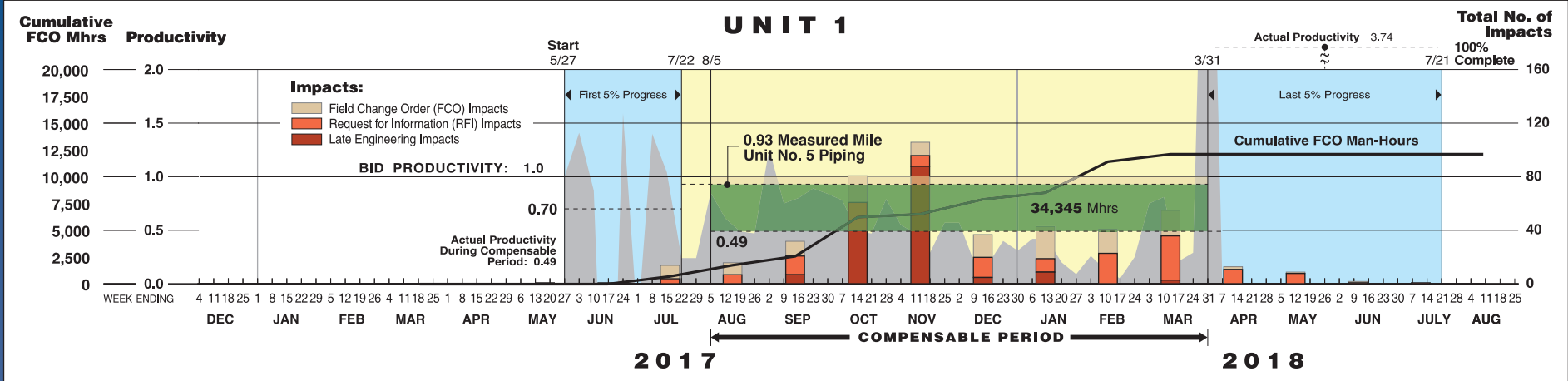


LONG INTERNATIONAL

DAMAGE CHARTS

Process Plant Project

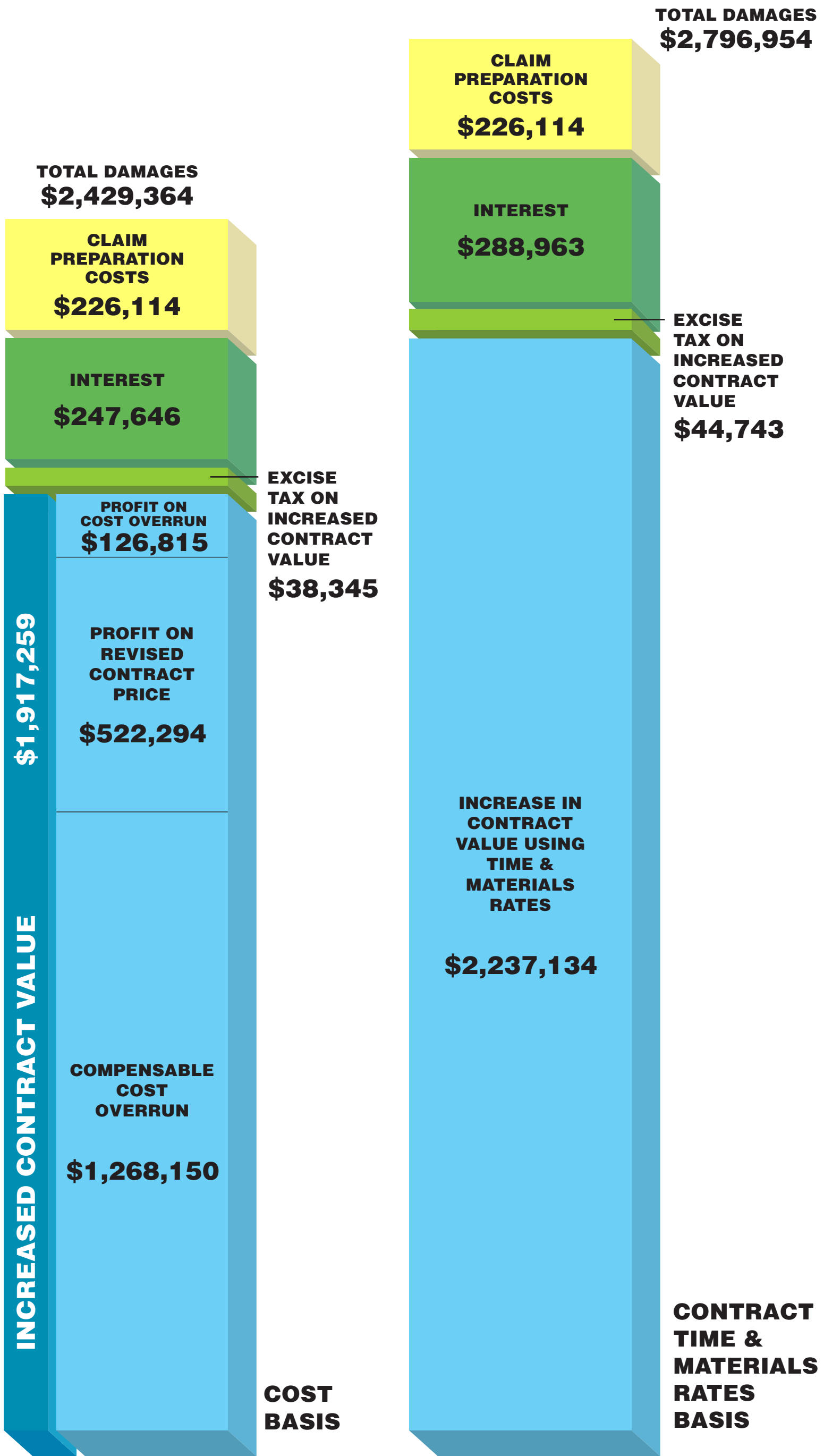
Measured Mile Productivity Analysis
Piping Man-hours – Unit Nos. 1, 2, 3, 4 and 5

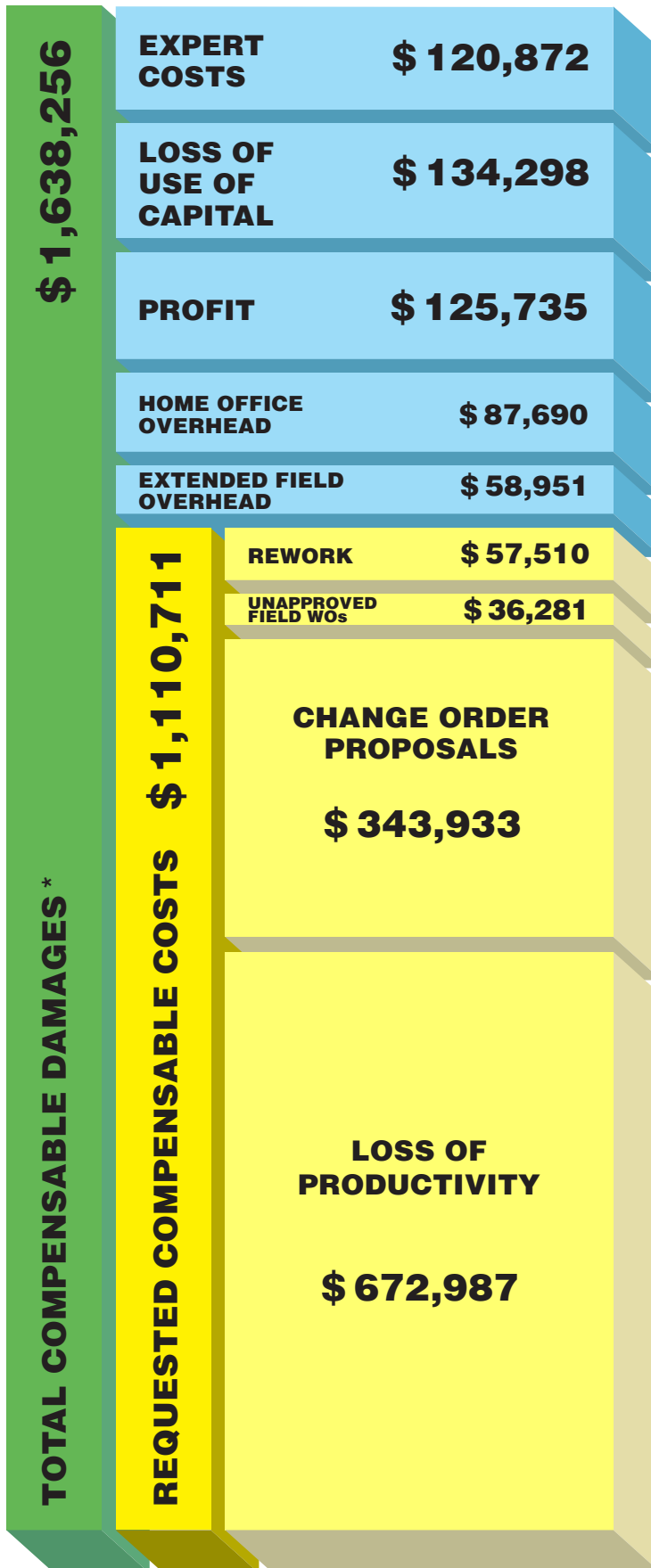


Unit No. 1 – Piping Impacts						Unit No. 2 – Piping Impacts						Unit No. 3 – Piping Impacts						Unit No. 4 – Piping Impacts					
Date	Late Engineering	RFIs	FCOs	Monthly FCO Mhrs	Cumulative FCO Mhrs	Date	Late Engineering	RFIs	FCOs	Monthly FCO Mhrs	Cumulative FCO Mhrs	Date	Late Engineering	RFIs	FCOs	Monthly FCO Mhrs	Cumulative FCO Mhrs	Date	Late Engineering	RFIs	FCOs	Monthly FCO Mhrs	Cumulative FCO Mhrs
Mar 17	0	0	0	0	0	Mar 17	0	0	0	0	0	Mar 17	0	0	0	0	0	Mar 17	0	0	0	0	0
Apr 17	0	0	0	0	0	Apr 17	0	0	0	0	0	Apr 17	0	0	0	0	0	Apr 17	0	0	0	0	0
May 17	0	1	0	0	0	May 17	0	1	0	0	0	May 17	0	1	0	0	0	May 17	0	1	0	0	0
Jun 17	0	4	1	3	3	Jun 17	0	1	0	0	0	Jun 17	0	1	0	0	0	Jun 17	0	1	0	0	0
Jul 17	0	3	11	717	720	Jul 17	0	7	21	832	832	Jul 17	0	4	10	567	567	Jul 17	0	4	10	567	567
Aug 17	0	19	21	1,047	1,767	Aug 17	0	20	22	1,025	1,857	Aug 17	0	8	10	490	1,057	Aug 17	0	7	9	471	1,038
Sep 17	7	33	19	832	2,599	Sep 17	7	27	18	694	2,551	Sep 17	7	19	9	378	1,435	Sep 17	7	14	11	418	1,456
Oct 17	37	35	21	3,649	6,248	Oct 17	37	22	22	3,309	5,860	Oct 17	40	20	21	2,275	3,710	Oct 17	40	21	20	2,275	3,731
Nov 17	74	13	14	290	6,538	Nov 17	74	7	12	389	6,249	Nov 17	88	8	10	179	3,889	Nov 17	88	8	10	179	3,910
Dec 17	5	18	13	1,379	7,917	Dec 17	5	14	11	1,268	7,517	Dec 17	5	15	22	1,896	5,785	Dec 17	5	15	17	1,644	5,554
Jan 18	11	14	9	616	8,533	Jan 18	11	8	10	945	8,462	Jan 18	9	13	24	1,121	6,906	Jan 18	9	10	24	1,075	6,629
Feb 18	0	16	14	2,900	11,433	Feb 18	0	14	14	2,739	11,201	Feb 18	0	27	20	10,864	17,770	Feb 18	0	23	18	11,028	17,657
Mar 18	3	26	10	699	12,132	Mar 18	3	25	9	699	11,900	Mar 18	3	37	18	842	18,612	Mar 18	3	33	19	833	18,490
Apr 18	0	4	0	0	12,132	Apr 18	0	4	0	0	11,900	Apr 18	0	10	6	180	18,792	Apr 18	0	11	2	23	18,513
May 18	0	5	1	0	12,132	May 18	0	5	1	0	11,900	May 18	0	11	2	17	18,809	May 18	0	8	1	0	18,513
Jun 18	0	0	0	0	12,132	Jun 18	0	0	0	0	11,900	Jun 18	0	1	1	275	19,084	Jun 18	0	1	1	275	18,788
Jul 18	0	0	0	0	12,132	Jul 18	0	0	0	0	11,900	Jul 18	0	0	0	0	19,084	Jul 18	0	1	0	0	18,788
Aug 18	0	0	0	0	12,132	Aug 18	0	0	0	0	11,900	Aug 18	0	0	0	0	19,084	Aug 18	0	0	0	0	18,788
Total	137	191	134	12,132	12,132	Total	137	155	140	11,900	11,900	Total	152	175	153	19,084	19,084	Total	152	158	142	18,788	18,788

COMPENSABLE MHS NOT INCLUDING PREMIUM MHS
RECOVERY NOT JUSTIFIED

SUMMARY OF DAMAGES





SUMMARY OF DAMAGES

Bid Package No. 8

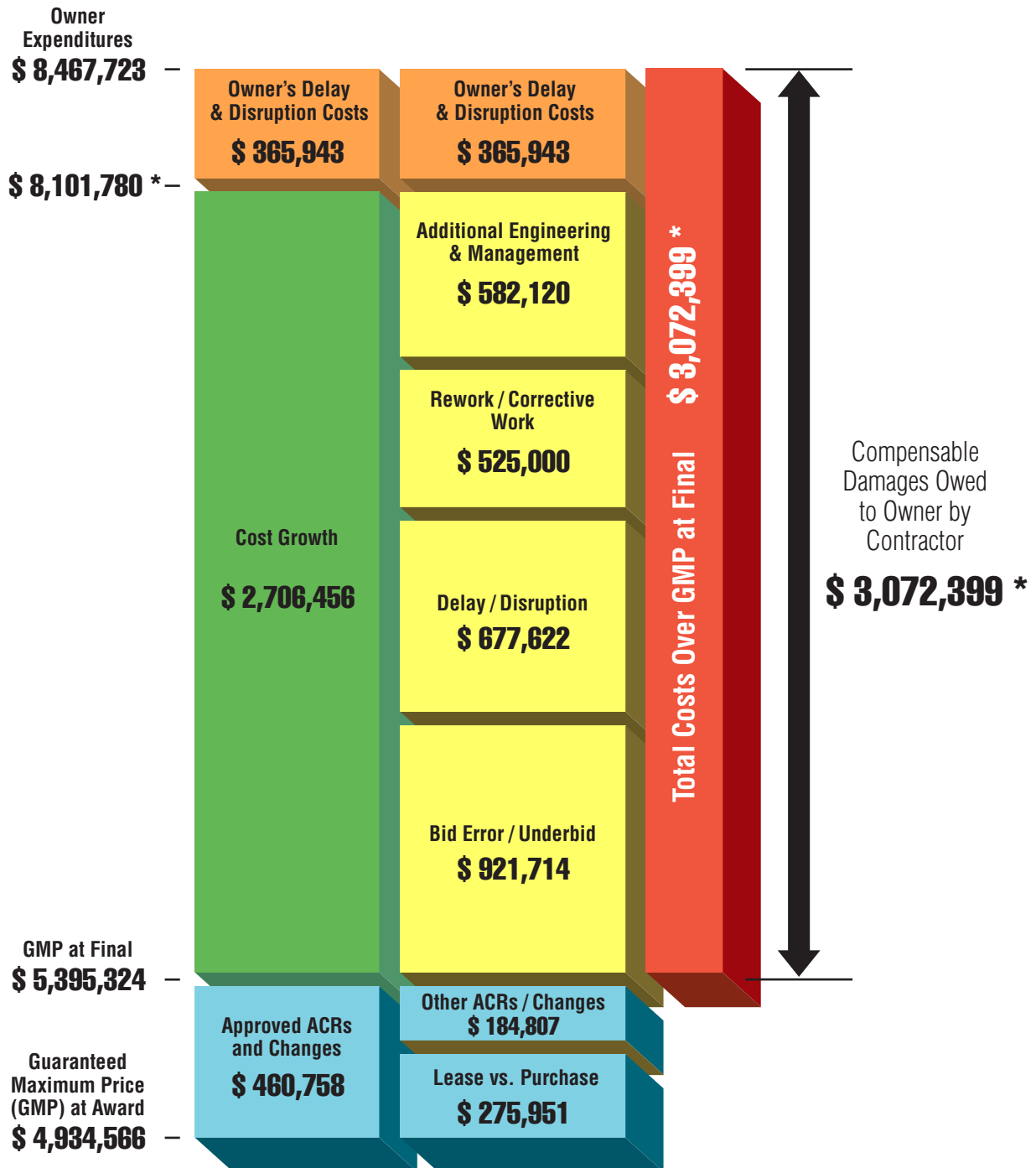
Electronic Systems
Installation Subcontract

Federal Correctional
Complex

* Damages do not include unpaid amounts of approved change orders and approved field work orders.



Summary of Project-Related Costs



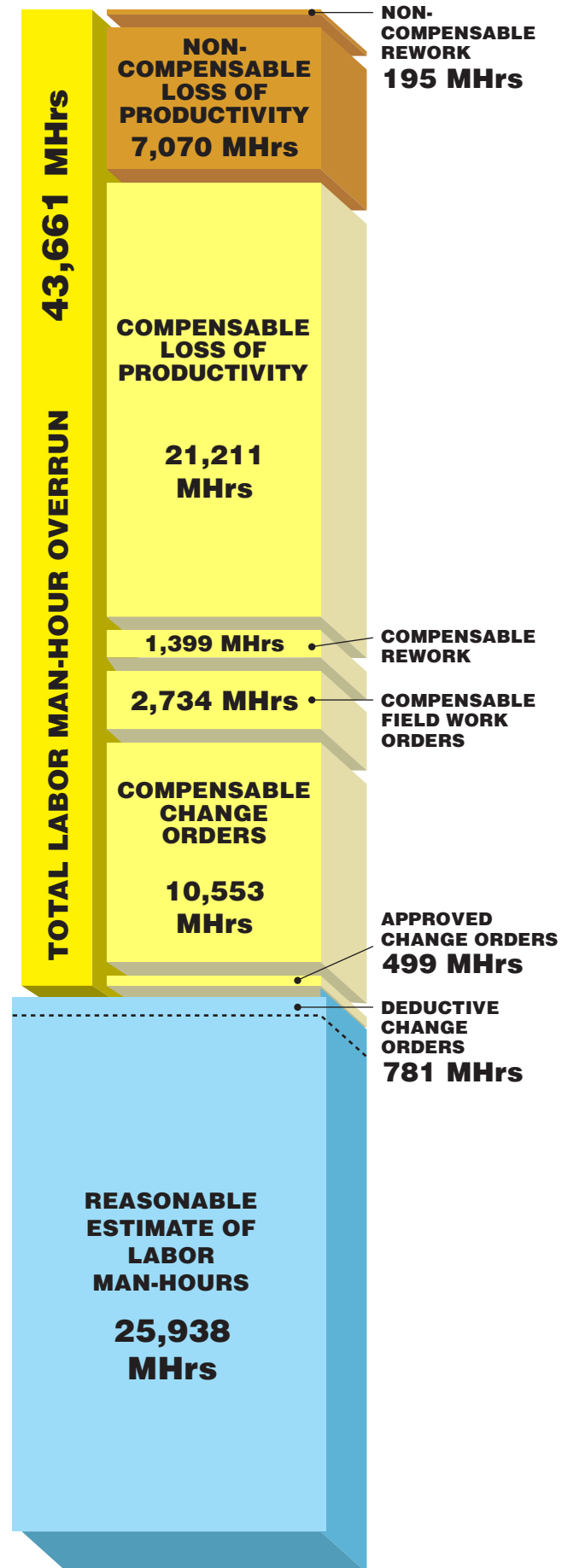
* Excludes \$ 13,774 in post-termination modifications.



68,818 MHrs
TOTAL ACTUAL
MAN-HOURS

ALLOCATION OF LABOR MAN-HOUR OVERRUNS

Bid Package No. 8
Electronic Systems
Installation Subcontract
Federal Correctional
Complex



SUMMARY OF DAMAGES

TOTAL REQUESTED
CLAIM AMOUNT
\$19,278,943

Escalated Labor Rates	\$540,932
	\$389,912
	\$268,574

Additional Holiday
\$85,777
Project/Construction
Management Extension
of Time
(Post Mechanical
Completion)
Project/Construction
Management Loss
of Productivity

Engineering
Loss of Productivity
\$1,791,084

Management Costs
to Reduce Delay
\$726,044

Project/Construction
Management
Extension of Time
(Pre-Mechanical
Completion)

\$4,573,474 ⁽¹⁾

OVERSTATED
CLAIM AMOUNT
\$17,323,172

Construction
Labor Loss of
Productivity

\$10,903,146

ASSESSED
CLAIM VALUE
\$1,955,771

Management Costs to Reduce Delay	\$754,493
Construction Labor Loss of Productivity	\$612,868

Additional Holiday
\$9,570
Escalated Labor Rates
\$272,036
Engineering Loss of Productivity
\$105,841
Project /Construction
Management Extension
of Time (Pre-Mechanical
Completion)
\$200,963

LIQUIDATED
DAMAGES
\$2,853,652

Liquidated Damages	\$2,853,652
--------------------	-------------

REQUESTED CLAIM AMOUNT

ASSESSED CLAIM VALUES

LIQUIDATED DAMAGES

(1) Includes \$57,354 for strike demob / remob costs included in ABC's claim calculations but not added in claim totals.





LONG INTERNATIONAL

BUILDING LAYOUTS

1 2 3 4 5 6 7 8 9 10 11 12

KEY



AA

A

B

C

D

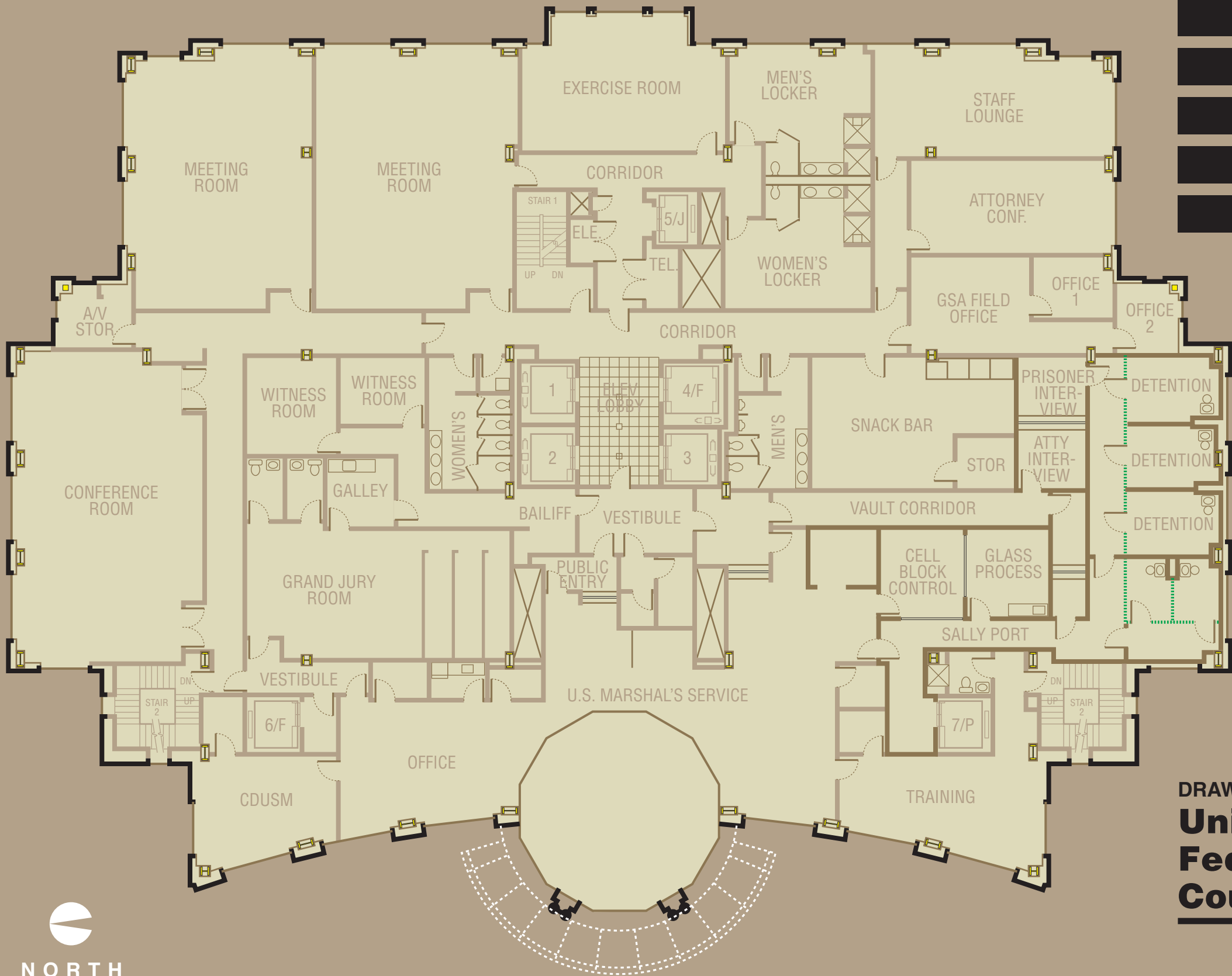
E

F

G

H

J



DRAWING A2.03 – SECOND FLOOR
**United States
Federal Building &
Courthouse**

1 2 3 4 5 6 7 8 9 10 11 12

KEY

1 1/8" DC#28 DIMENSION CHANGES



DRAWING A2.03 – SECOND FLOOR
**United States
Federal Building &
Courthouse**



AA
A
B
C
D
E
F
G
H
J

1 2 3 4 5 6 7 8 9 10 11 12

WALL TYPES
SYMBOL DEPTH HEIGHT

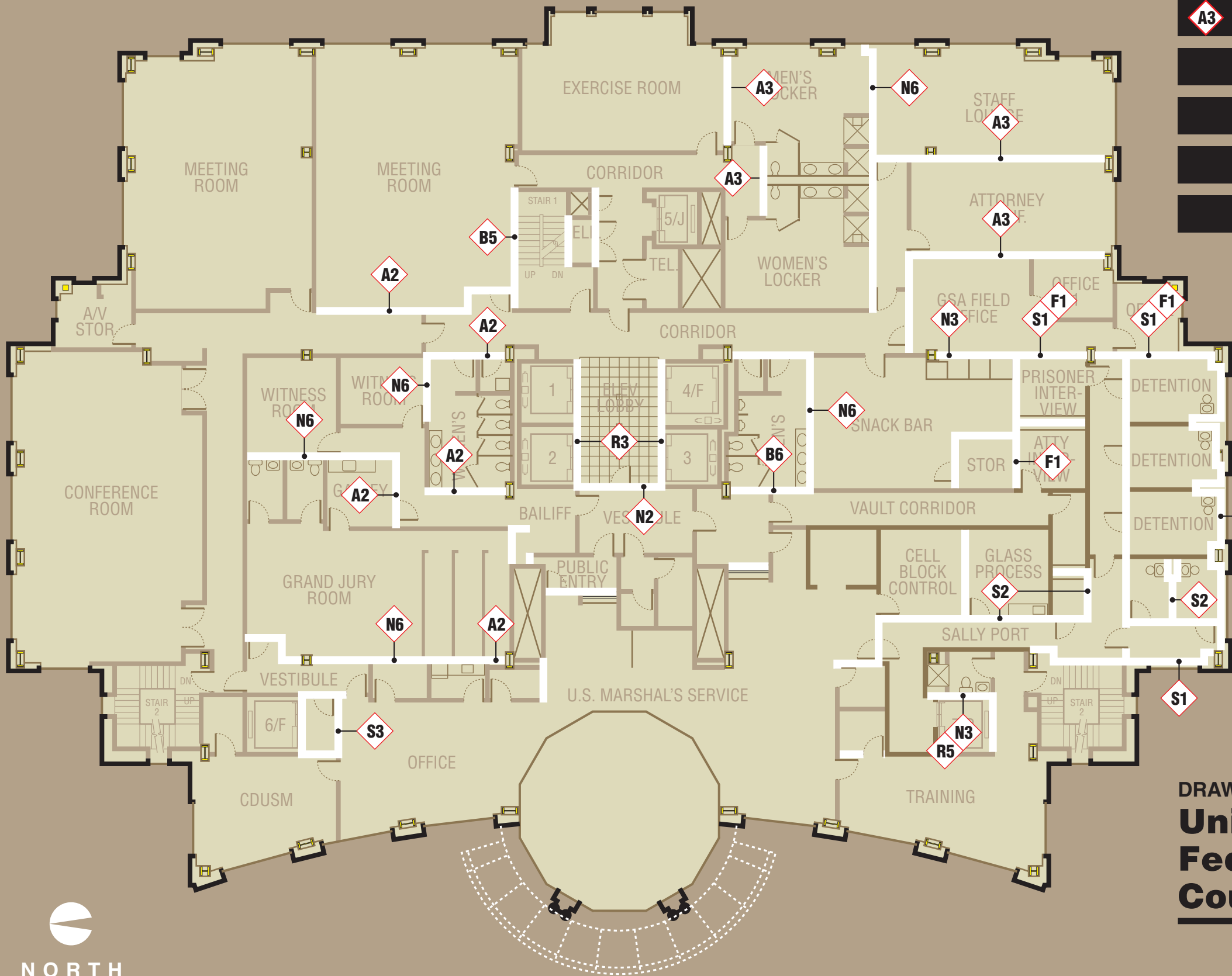
A2	6 1/8"	F
A3	4 7/8"	F
B5	6 3/8"	F
B6	8 1/2"	F
F1	2 1/8"	A
N2	8"	F
N3	7 1/4"	A
N6	8 1/2"	F
S1	7 3/4"	F
S2	7 7/8"	F
S3	5 3/4"	F
R3	5"	F
R5	5 1/8"	F

A Extend studs to underside of structure above and gyp wall to 12" above the ceiling.

F Extend assembly to underside of structure above.

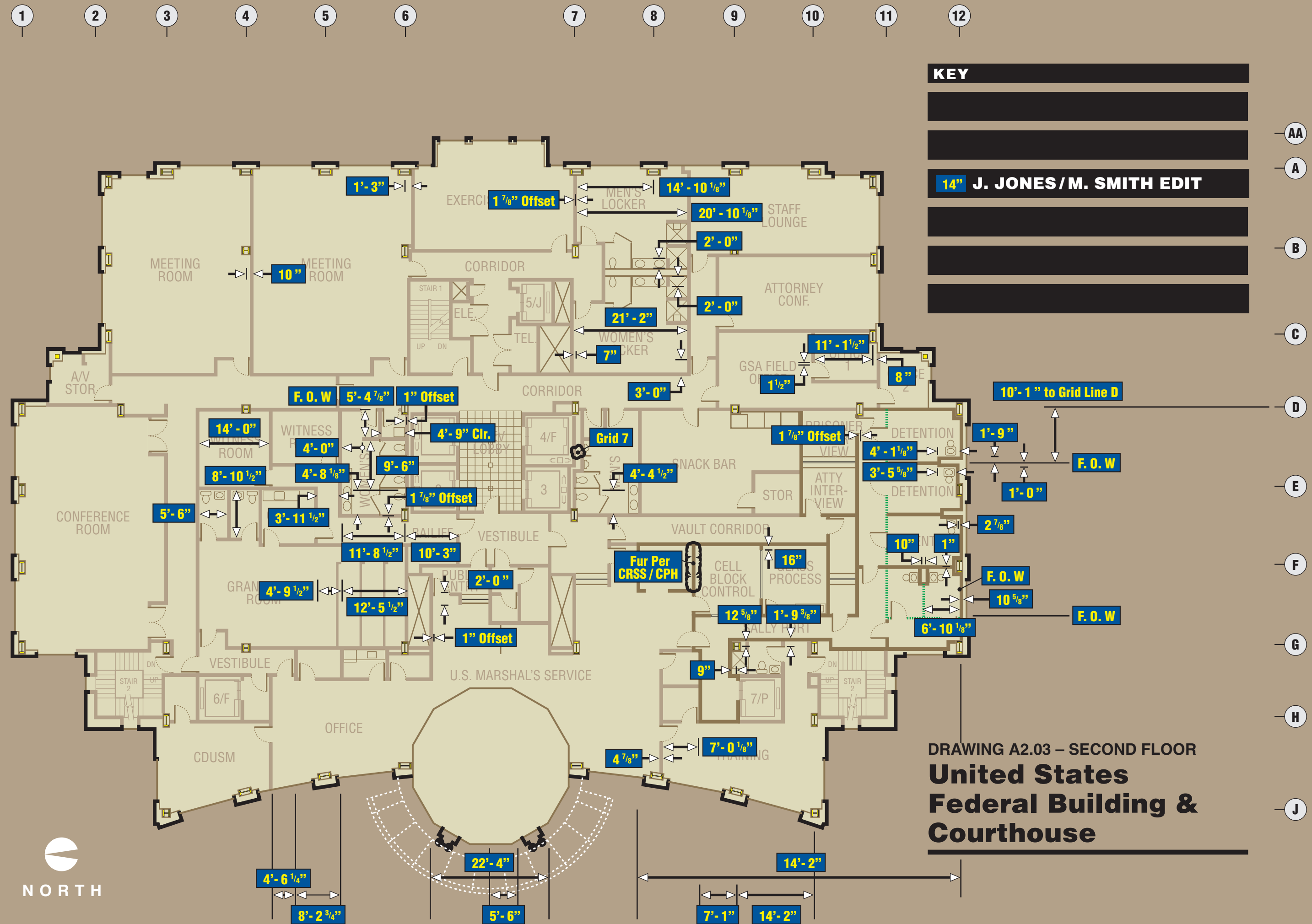
KEY

A3 DC#28 WALL TYPE CHANGES



DRAWING A2.03 – SECOND FLOOR
**United States
Federal Building &
Courthouse**



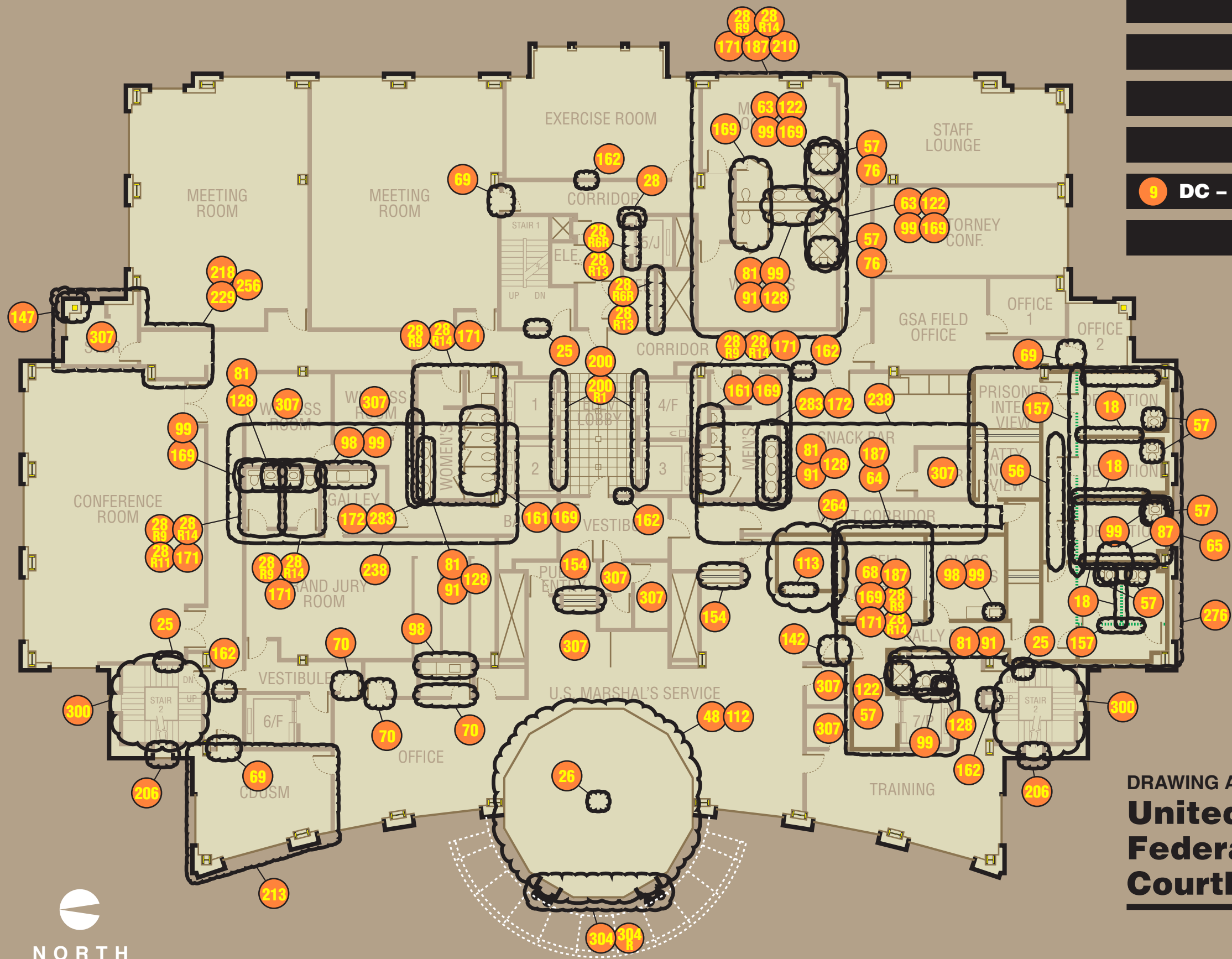


1 2 3 4 5 6 7 8 9 10 11 12

KEY

9 DC – DESIGN CLARIFICATION

AA
A
B
C
D
E
F
G
H
J



DCs Affecting the Entire Floor

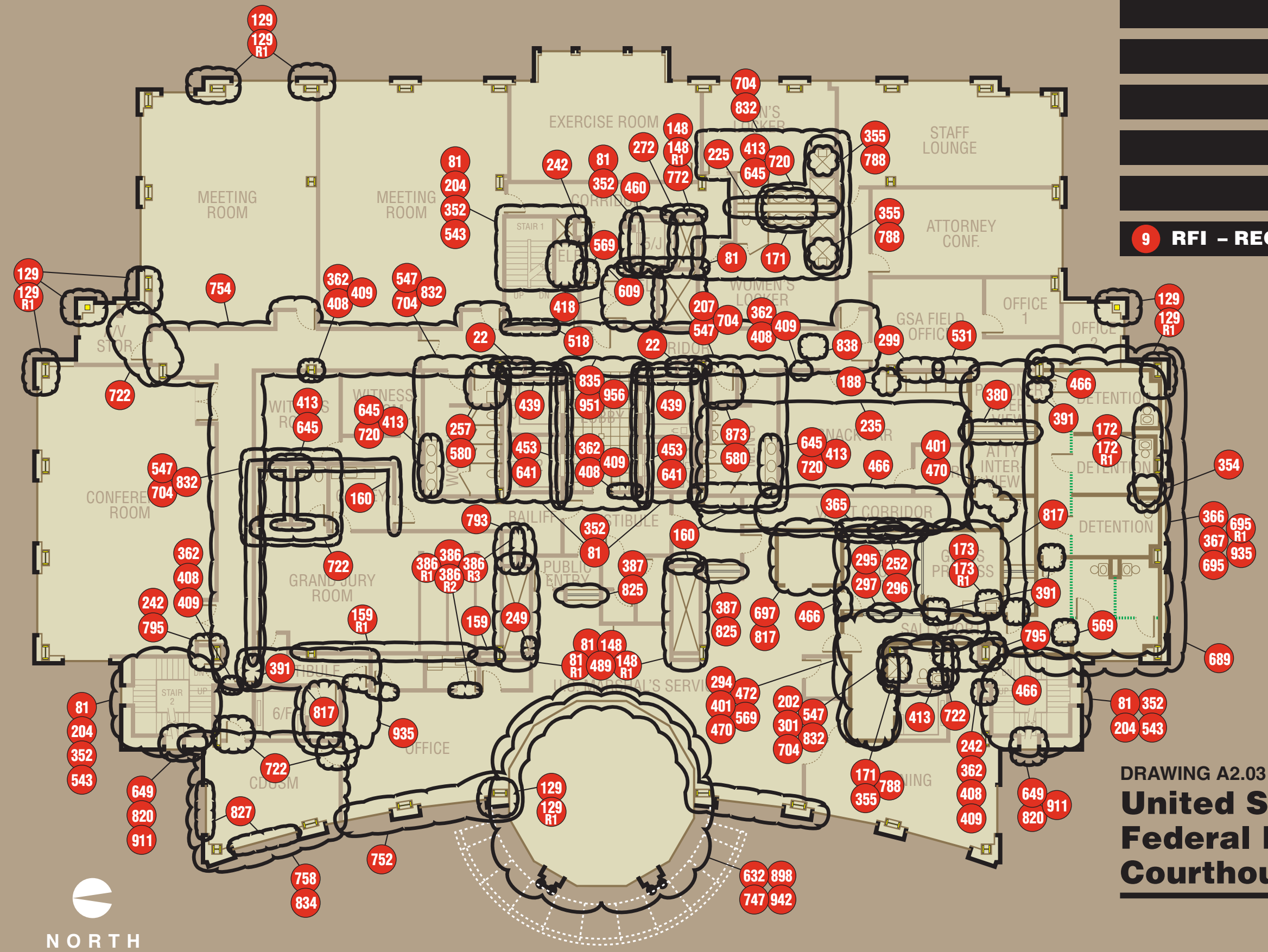
- | | | | | |
|--------|-----|--------|-----|--------|
| 28 R1 | 180 | 189 | 233 | 316 R1 |
| 28 R2 | 181 | 208 | 315 | 316 R2 |
| 28 R14 | 185 | 213 R1 | 316 | |



DRAWING A2.03 – SECOND FLOOR
**United States
Federal Building &
Courthouse**

KEY

9 RFI – REQUEST FOR INFO



RFIs Affecting the Entire Floor

136	341	537	651	833
197	363	566	672	879
255	414	596	673	890
280	432	621	680	891
292	488	627	701	896
292 R1	492	629	727	907
315	504	634	826	

DRAWING A2.03 – SECOND FLOOR
**United States
Federal Building &
Courthouse**



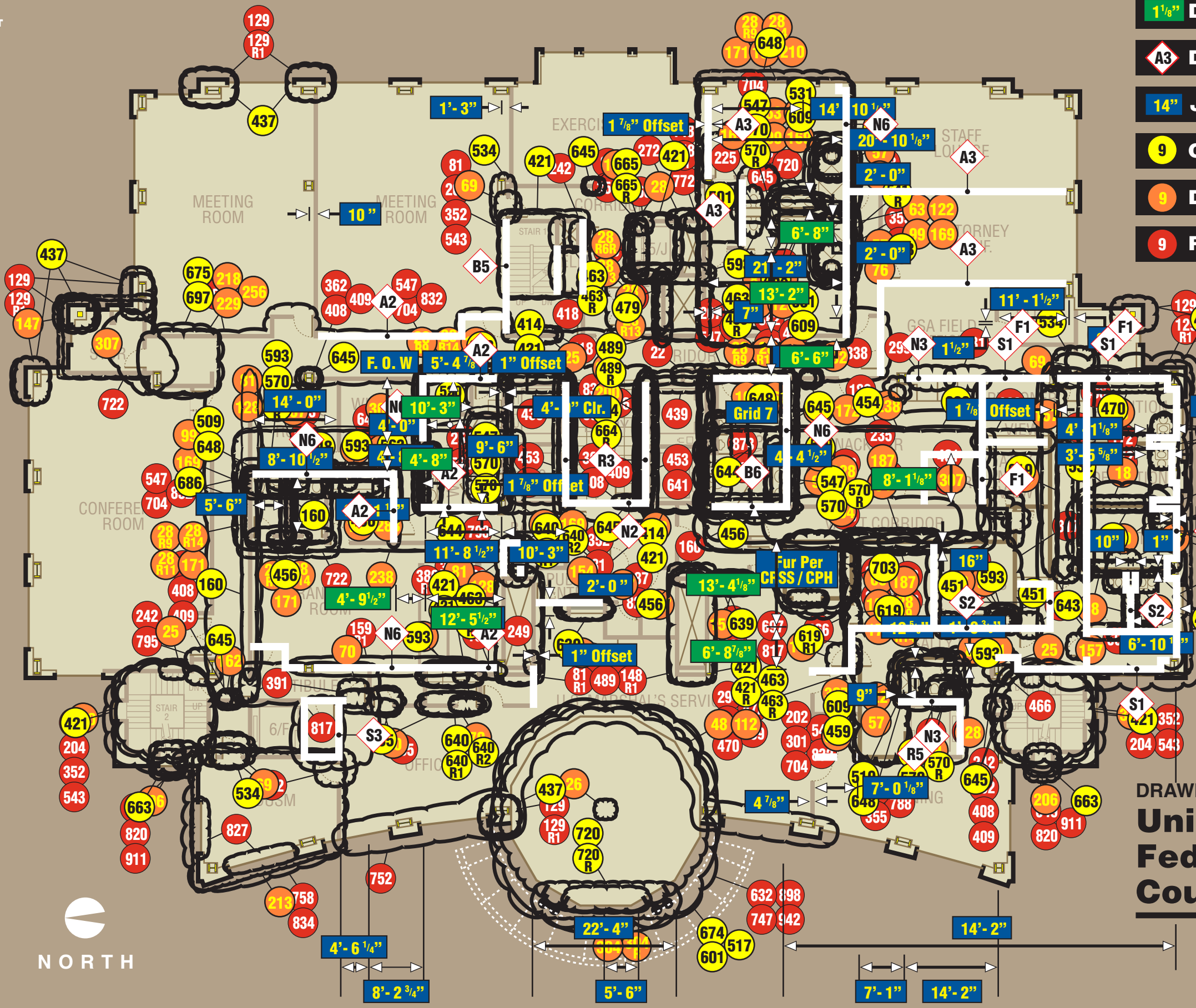
1 2 3 4 5 6 7 8 9 10 11 12

WALL TYPES
SYMBOL DEPTH HEIGHT

A2	6 1/8"	F
A3	4 7/8"	F
B5	6 3/8"	F
B6	8 1/2"	F
F1	2 1/8"	A
N2	8"	F
N3	7 1/4"	A
N6	8 1/2"	F
S1	7 3/4"	F
S2	7 7/8"	F
S3	5 3/4"	F
R3	5"	F
R5	5 1/8"	F

A Extend studs to underside of structure above and gyp wall to 12" above the ceiling.

F Extend assembly to underside of structure above.



KEY

- 1 7/8" DC#28 DIMENSION CHANGES
- A3 DC#28 WALL TYPE CHANGES
- 14" J. JONES / M. SMITH EDIT
- 9 CD - CONSECUTIVE DRAWING
- 9 DC - DESIGN CLARIFICATION
- 9 RFI - REQUEST FOR INFO

683 CD Which Affects the Entire Floor

DCs Affecting Entire Floor

RFIs Affecting the Entire Floor

28 R1	180	189	233	316 R1
28 R2	181	208	315	316 R2
F. O. W	185	213 R1	316	
136	341	537	651	833
197	363	566	672	879
255	414	596	673	890
F. O. W	432	621	680	891
280	488	627	701	896
292 R1	492	629	727	907
315	504	634	826	

DRAWING A2.03 - SECOND FLOOR
**United States
Federal Building &
Courthouse**