



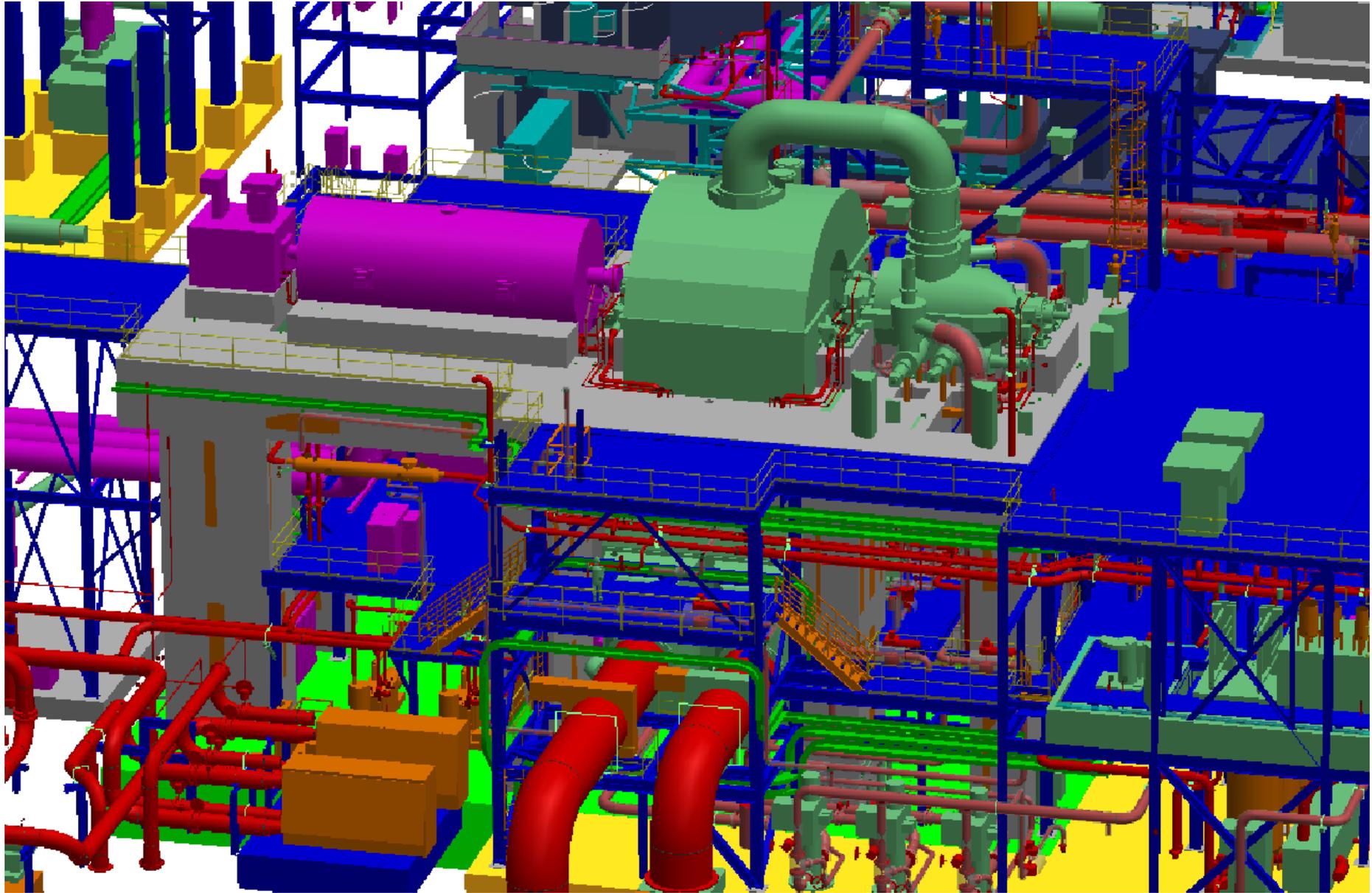
Rebar Modeling

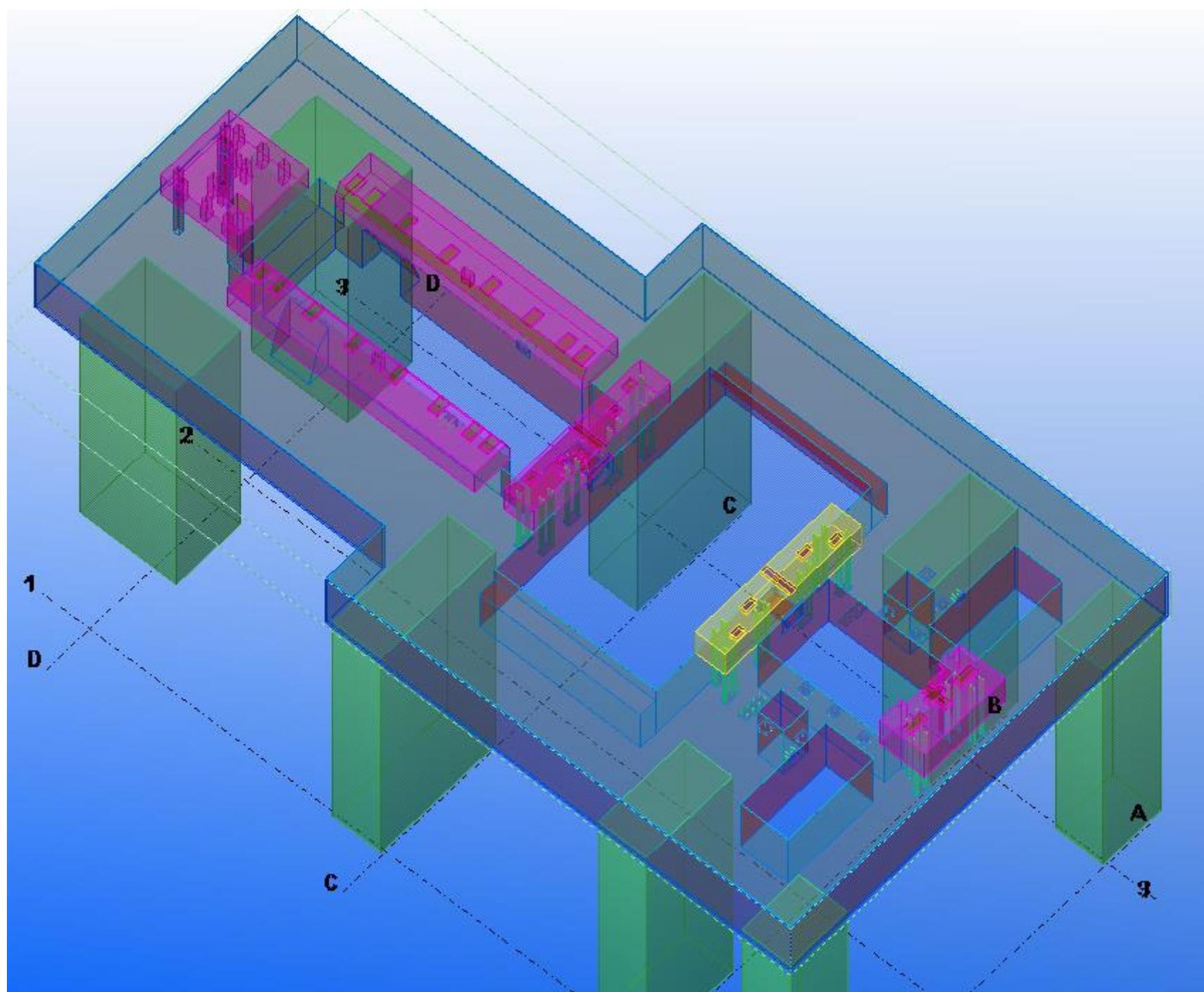
Developing a new work process

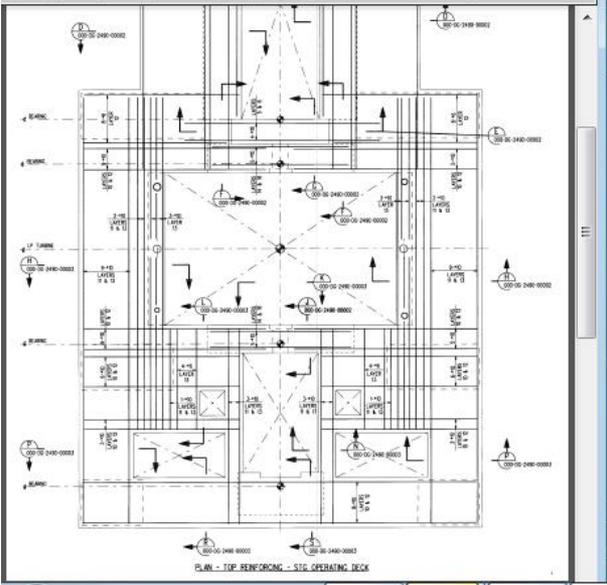
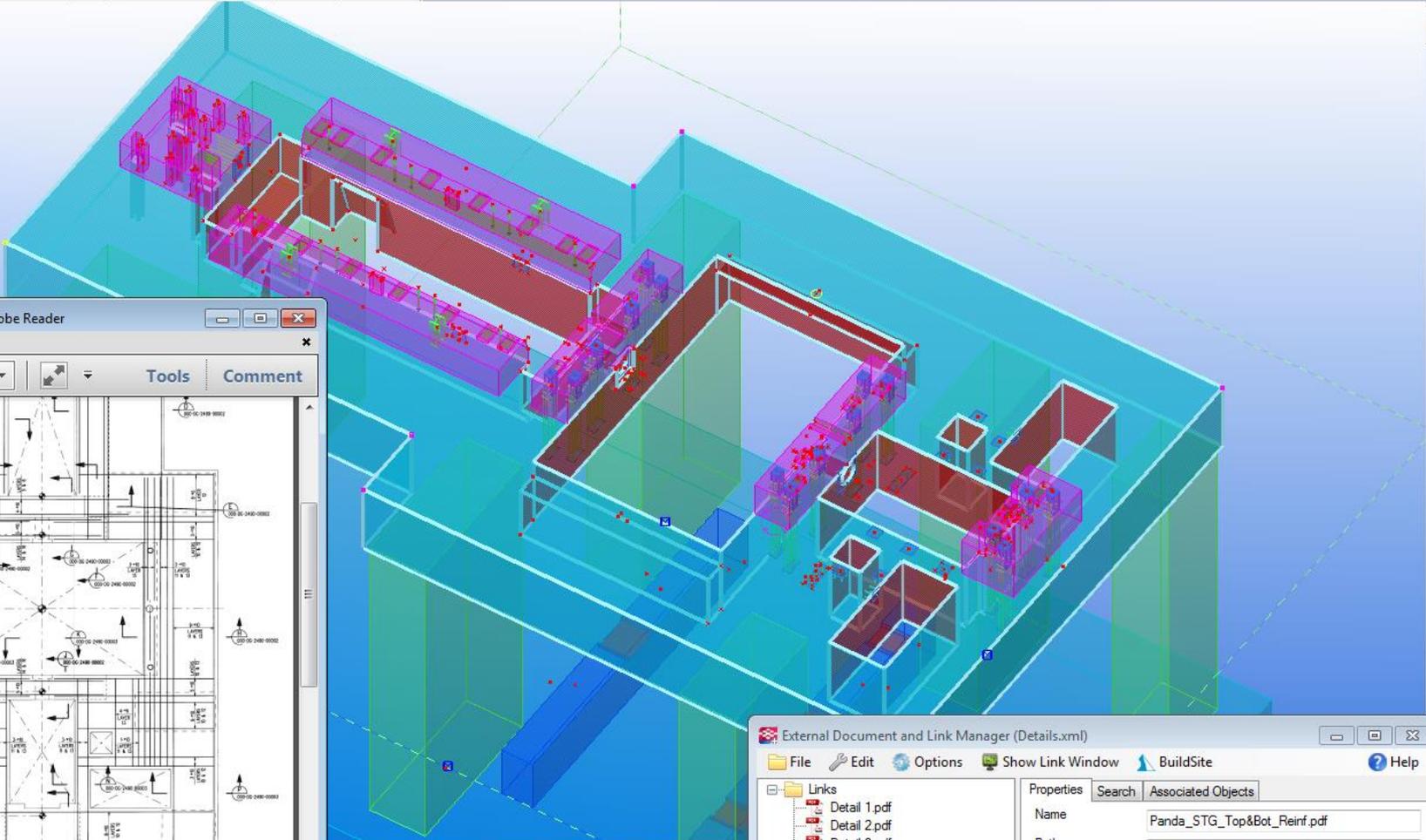
# BIM Use Case

- Focused cross-functional application
- An information enabled work process
- A targeted deliverable
- Measureable results
- Possibly run in parallel with current work process

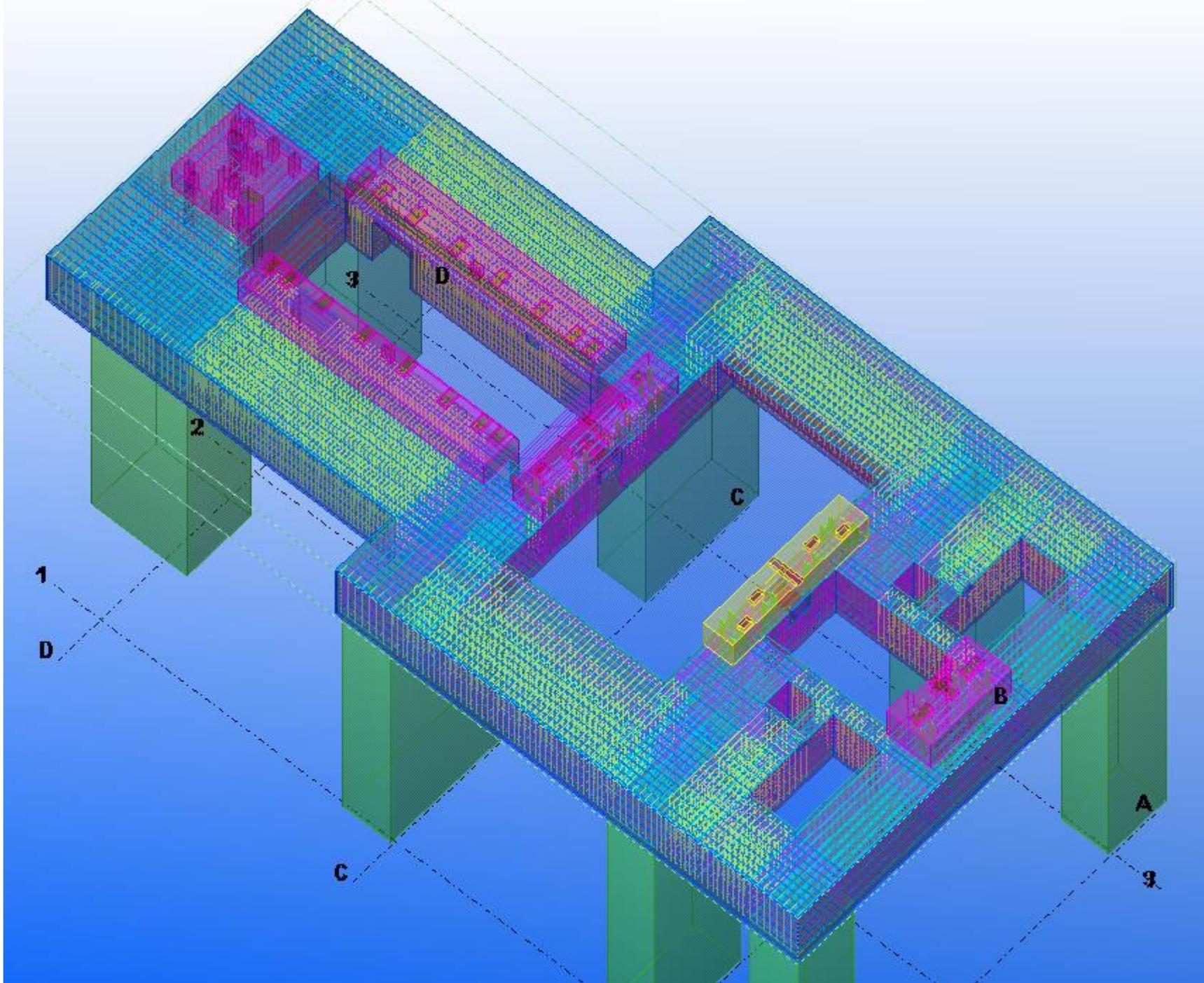
# Communicating Design Intent

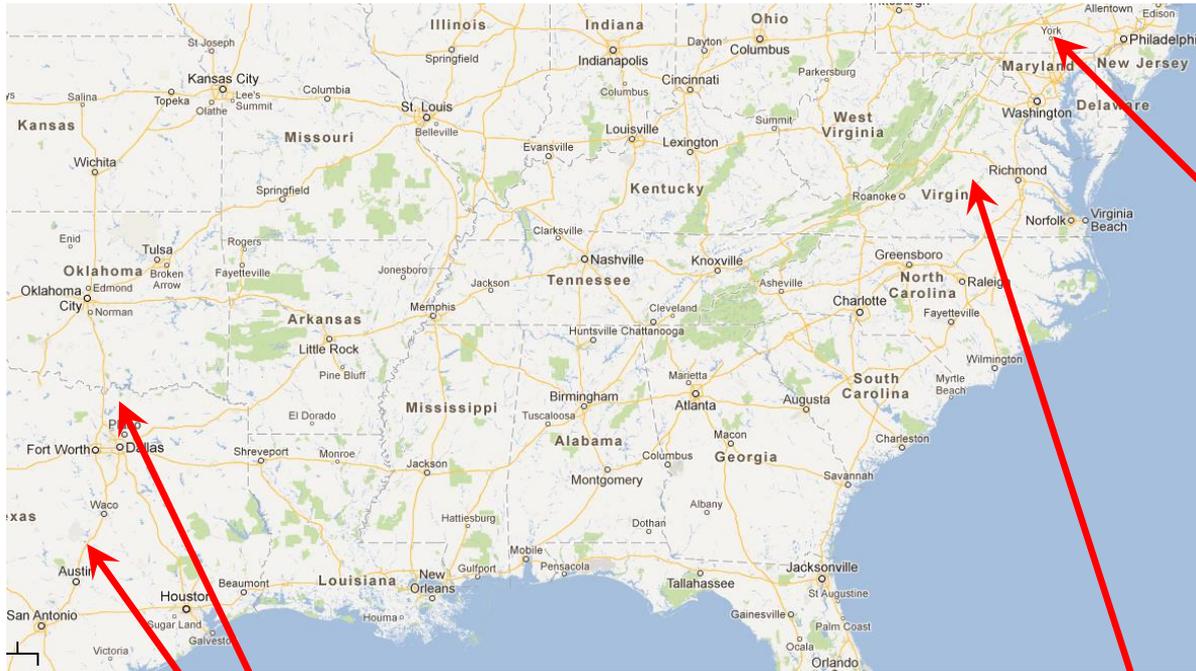


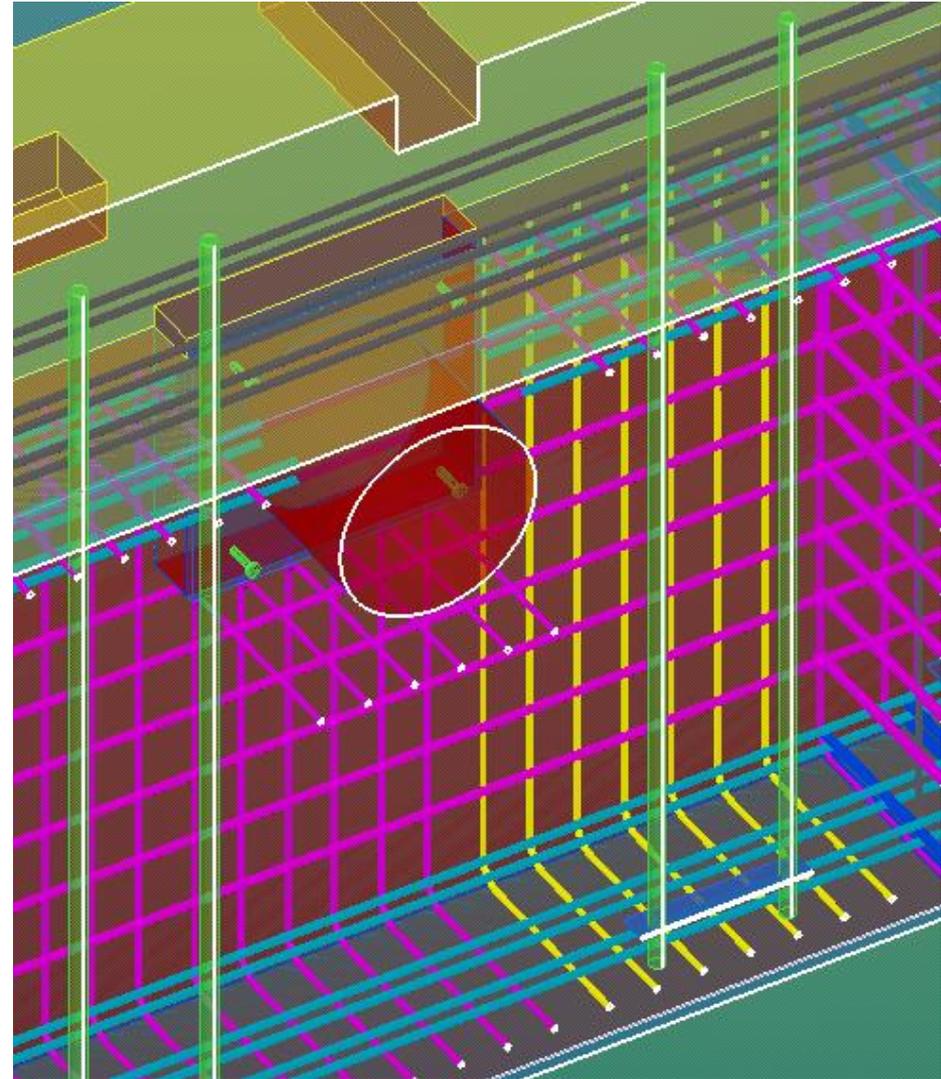
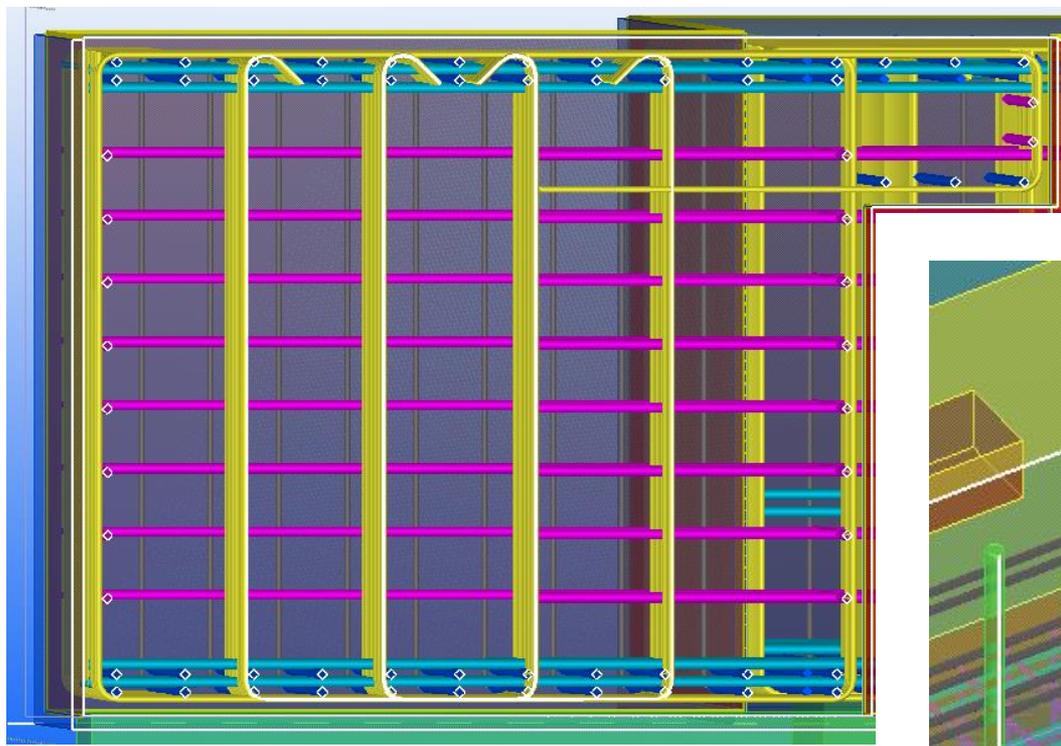




Links	Properties	Search	Associated Objects
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Detail 2.pdf	Path		.\Details\Panda_STG_Top&Bot_Reinf.pdf
Detail 3.pdf	Description		
Detail 4.pdf			
Detail 5.pdf			
Detail 6.pdf			
Panda_STG_Top&Bot_Reinf.pdf			

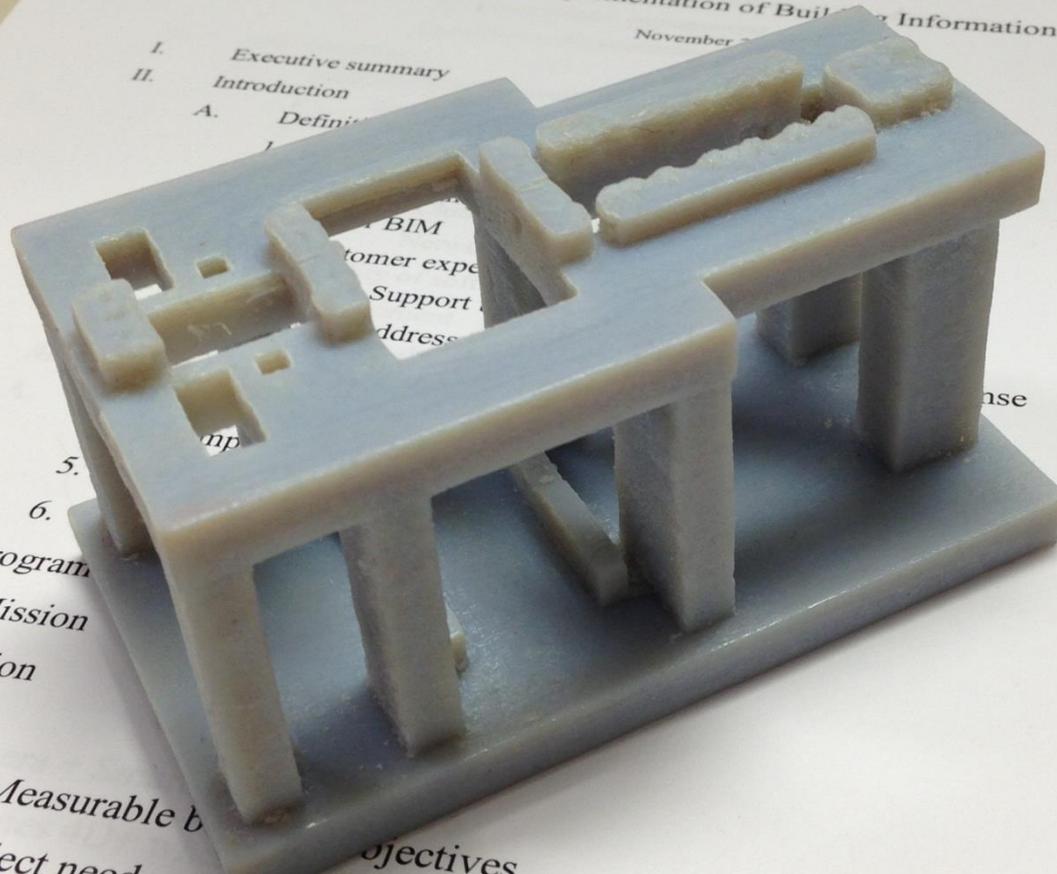






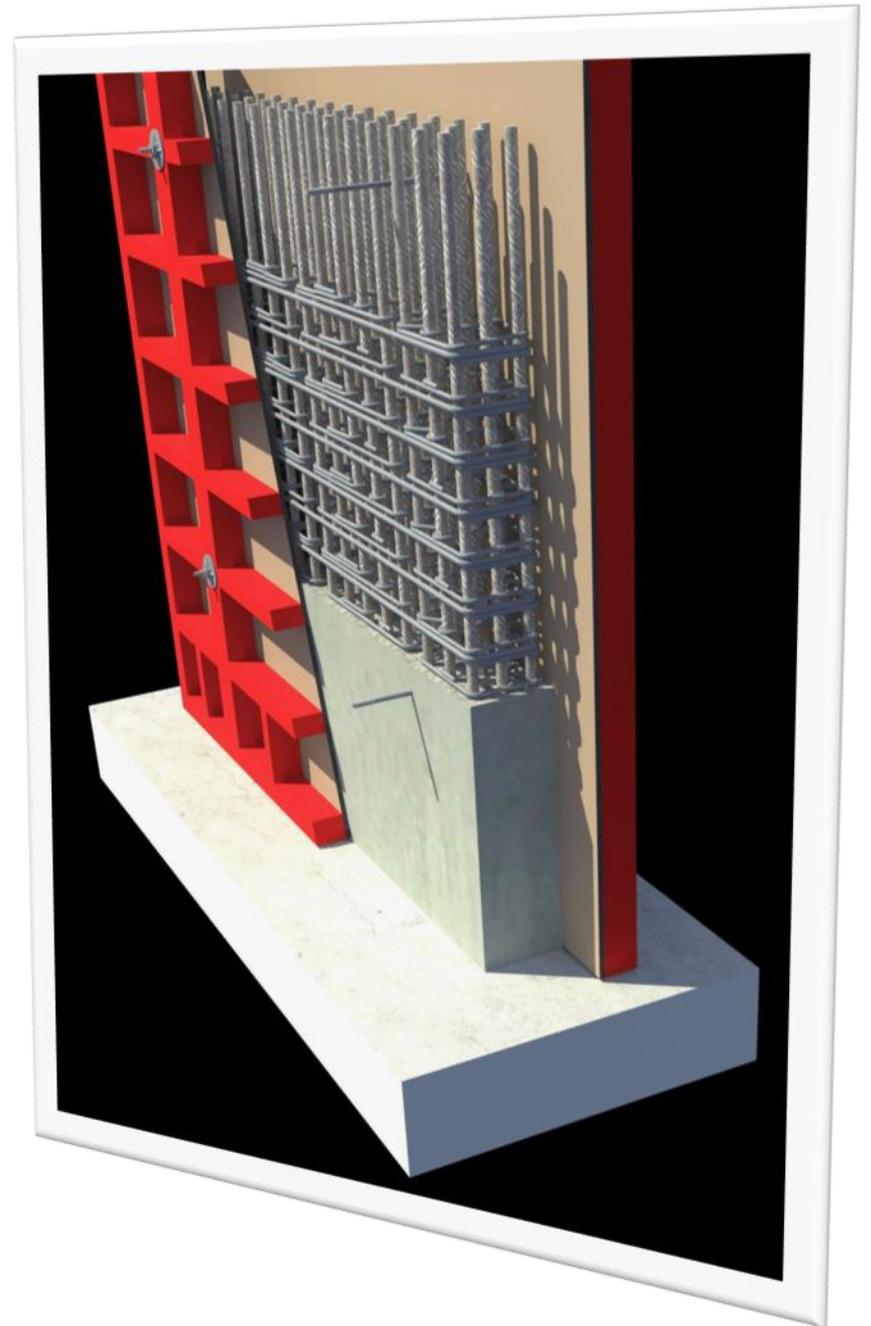
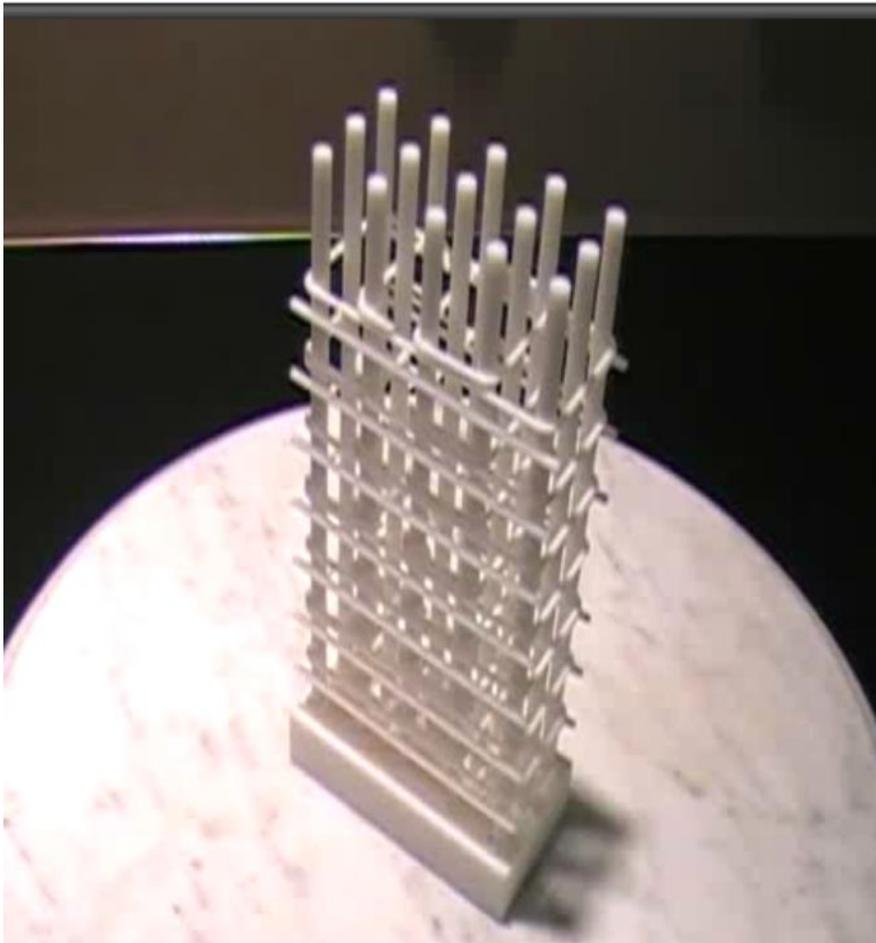
A Strategic Plan for Implementation of Building Information Modeling  
November 2010

- I. Executive summary
- II. Introduction
  - A. Definition



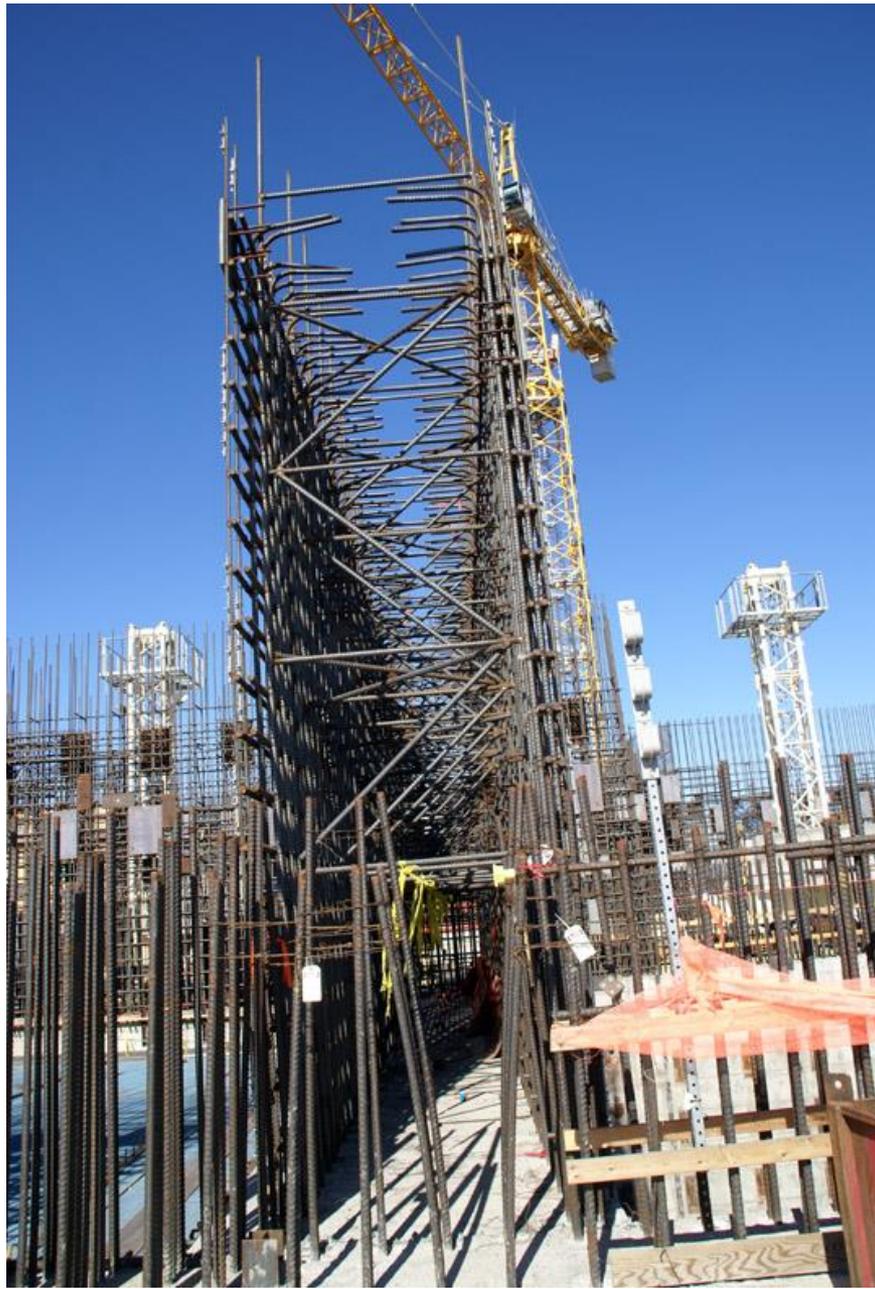
5.  
6.  
BIM Program  
A. Mission  
Vision  
Goals

1. Measurable business objectives  
Every project needs a BIM and Technology Plan  
Relationship of BIM plan to Project Automation Plan  
THE SHIPS - Drawings no longer  
change the



Courtesy of Klorman Construction





# Material Management



Applied Systems Associates, Inc. New York, NY

**Production Summary** Job: 000014 Job Site: New York, NY Job Date: 04/20/2001

Rev: 04/20/01 Job Shift: 1 Client:

**Ctrl Code Summary**

CC	ICD	Color/Shape	Job	Release	Customer	Job	Material Description	Weight Summary - Lbs		
								Shelf	Light	Heavy
AKG8	000070	5	Security Cell/Control/Pass		Washington Center (single)	PHWELPFR 34810P	34800	0	400	
AKG8	000080	2	Authentic Lockset		Temple Interchange (S&I)	BRDCE#1 - (S&I) (S&I)	21000	0	0	
AKG8	000090	5	RM Interchange		PRQ Research Center	RCRF03000FR (S&I) (S&I) #	9300	0	3,570	
AKG8	000099	5	Threat Collection		Shaw Development Center	PHWELPFR 34810P	34700	0	400	
AKG8	000000	0	Signal/Intercom, Inc.		THANNE (S&I) (S&I)	FOUNDATION (S&I) (S&I)	17,007	1,338	8,874	

Applied Systems Associates, Inc. New York, NY

**Cutting List** Job: 000014 Job Site: New York, NY Job Date: 04/27/2001

Rev: 04/27/01 Job Shift: 1 Client:

Use: 5 Item: 8 Order: 80 Item: 37 Orderline: 1 Quantity: 15 Page: 19 of 61

Sub Length: 11 11-08

Quantity	Length	Ctrl Code	Revol/Class	Priority	Mark	Tag Qty	Lbs	Time
2	21-01	AKG8	0	0	GA10	2	85	1.0
2	10-00	AKG8	0	0		2	50	1.0
2	16-01	AKG8	3	0	GA21	1	80	1.0
20	14-07	AKG8	0	0		20	450	1.0
2	14-00	AKG8	0	0		2	45	1.0
3	14-00	AKG8	0	0		3	45	1.0
151	10-08	AKG8	0	0	1C1	3,024	22.0	
5	10-00	AKG8	0	0		5	176	2.0

Systems of America Marysville

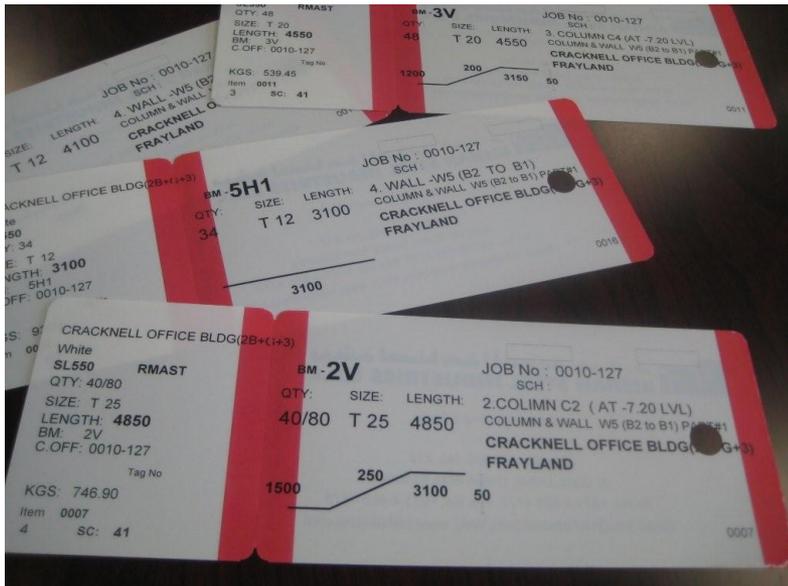
**Item Bundle Check List** Job: 000024 Job Site: Marysville Job Date: 06/11/2001

Rev: 06/11/01 Job Shift: 1 Client:

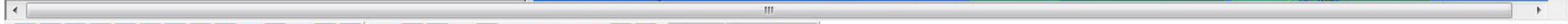
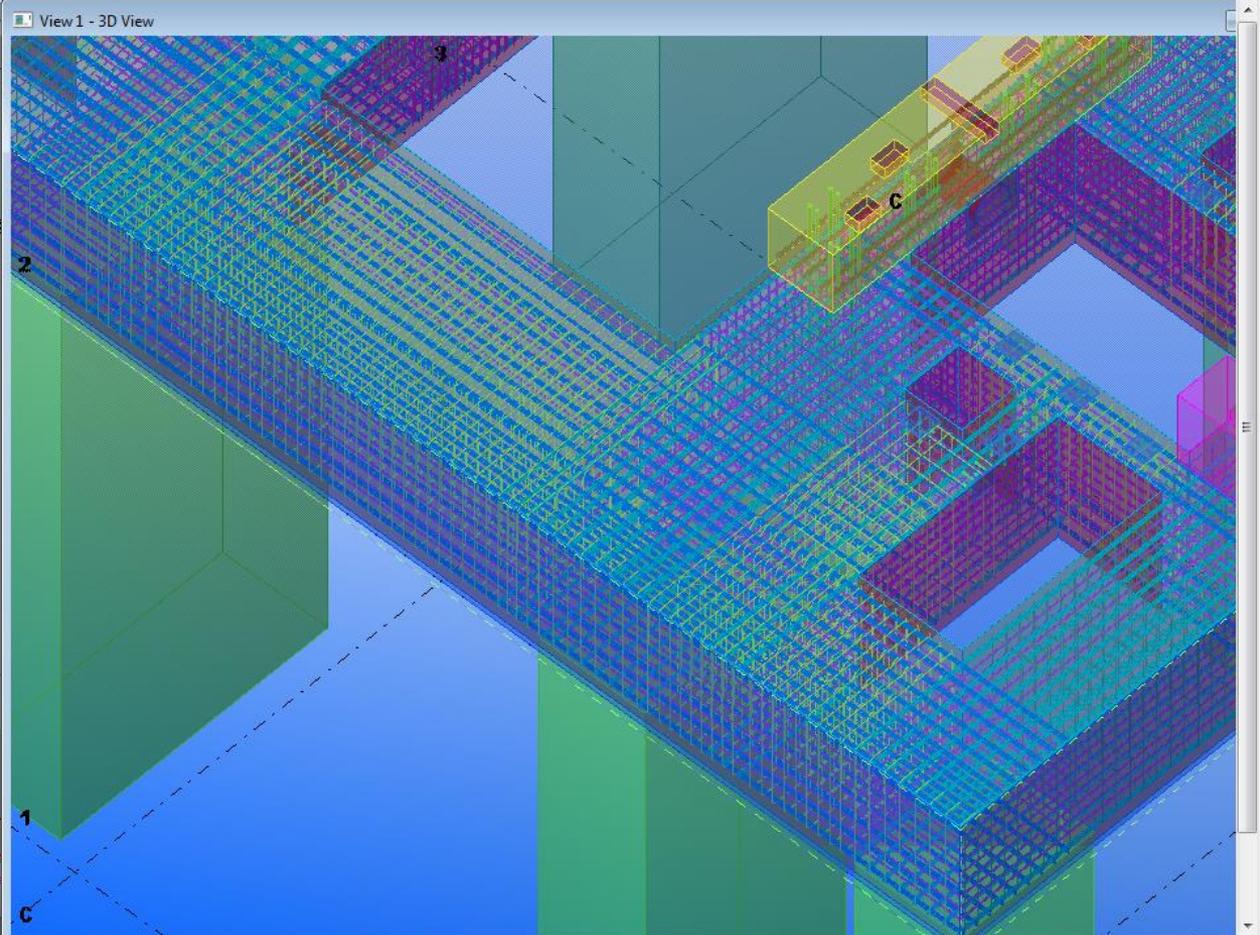
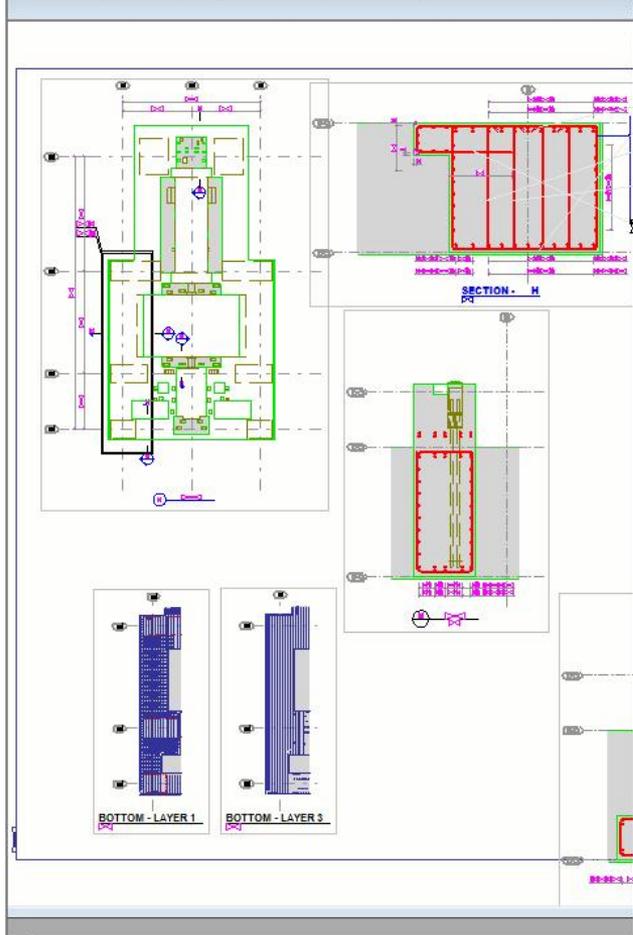
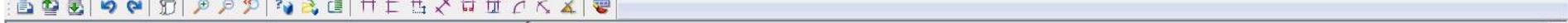
**22N7** Job Name: Tracking Bldg 7 Job: 00-206 Description: FOUNDATION STEEL

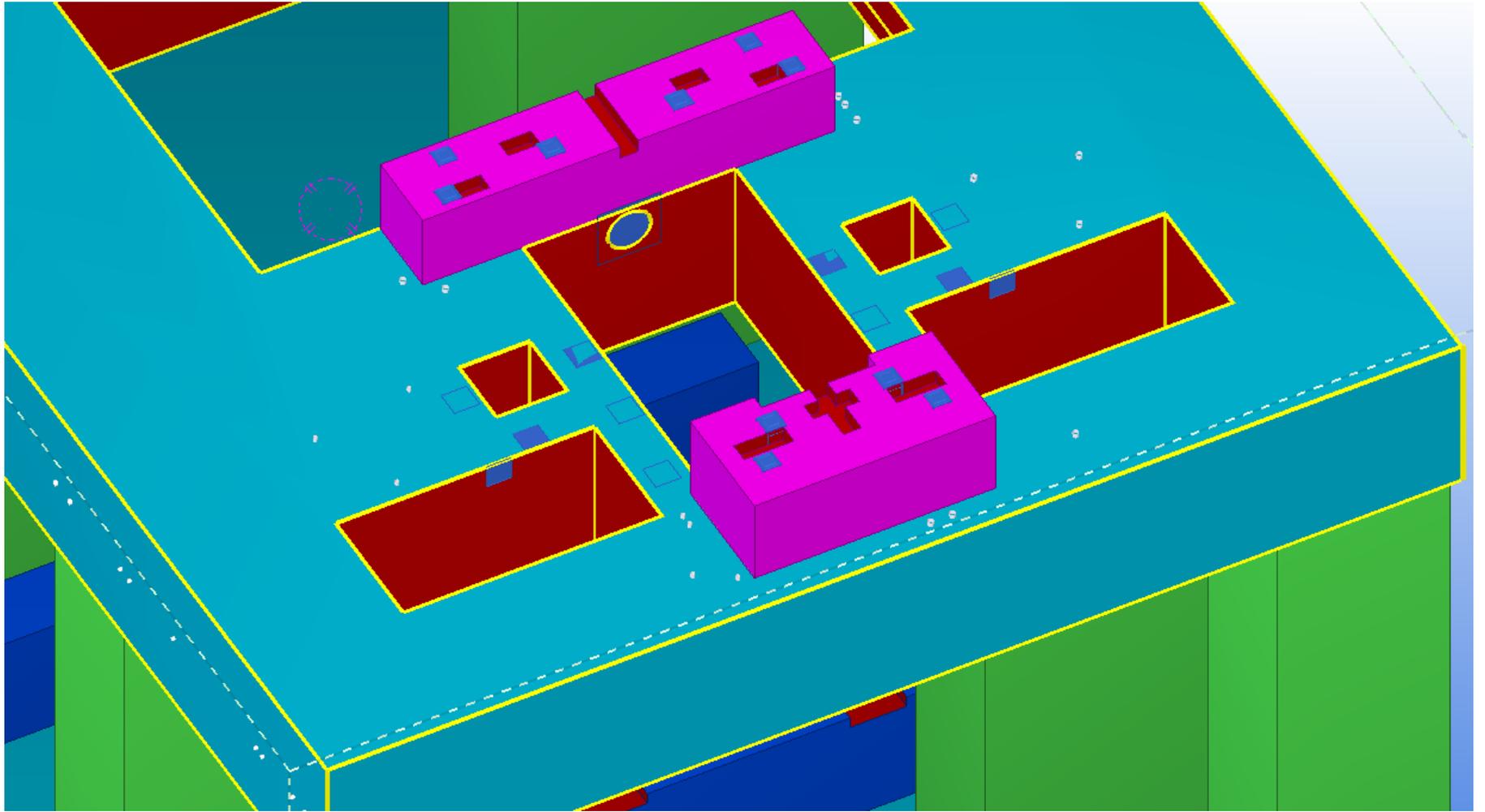
Customer: A.A.M. Steel Release: R-001 Job Date:

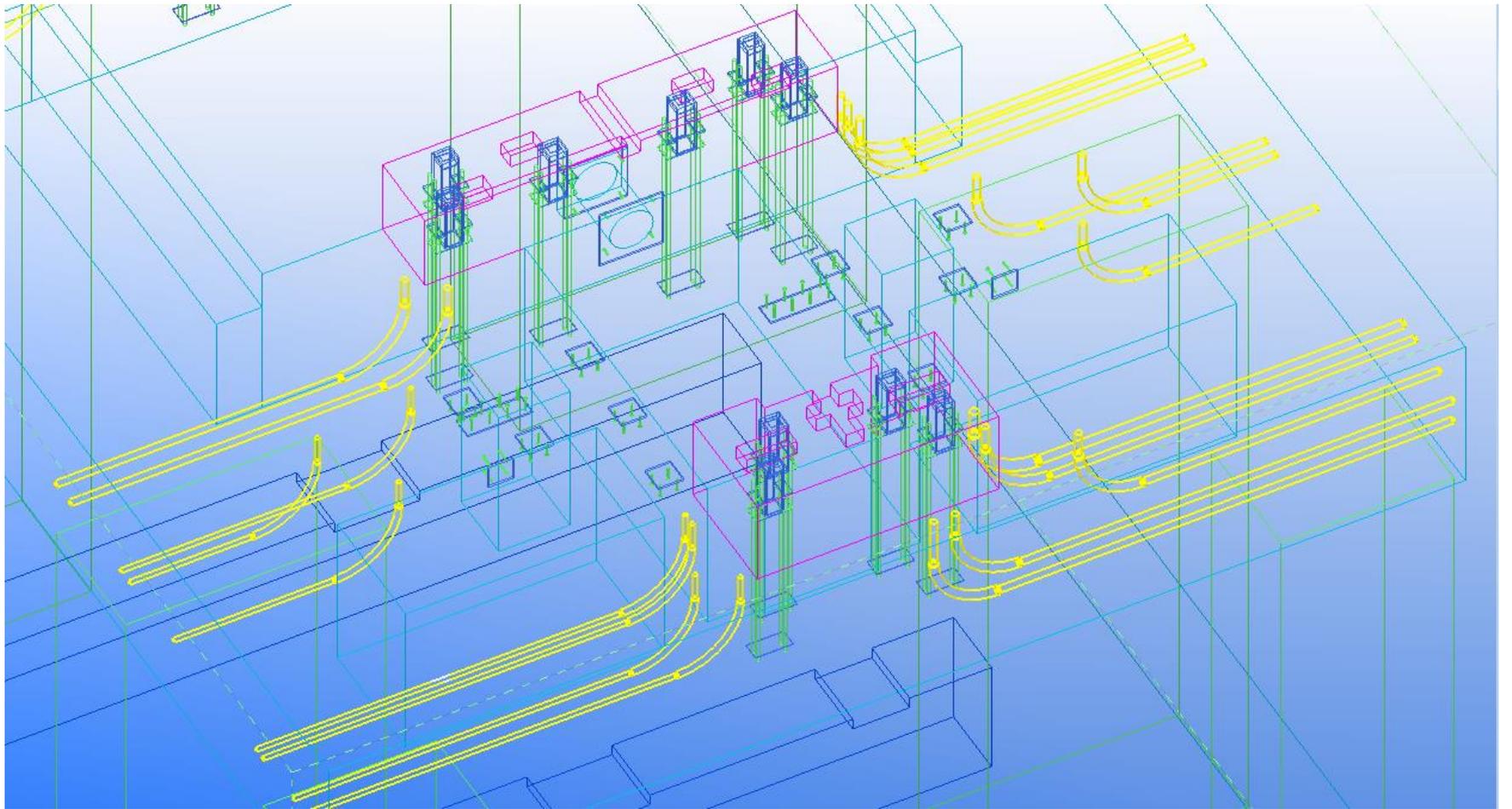
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<b>Bent</b>											
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2		10	16-00	10A12	31	1,131	00	A	11 2	11 2	
3		8	10	10-00	10A10	31	276	00	A	11 3	11 3
4		12	10	9-00	10A10	2	403	00	A	11 4	11 7
5		20	10	8-10	10A1	2	822	00	A	11 5	11 8
6		12	10	8-00	10A12	2	328	00	A	11 6	11 9
11		2	8	26-00	8A10	2	160	00	A	11 11	31 1
12		2	8	33-00	8A10	2	176	00	A	11 12	31 2
14		12	8	15-00	8A10	31	264	00	A	11 14	31 6
15		6	8	15-00	8A10	31	267	00	A	11 15	31 7
16		4	8	13-00	8A11	31	152	00	A	11 16	31 9
16		14	8	13-00	8A11	31	405	00	A	11 16	31 8
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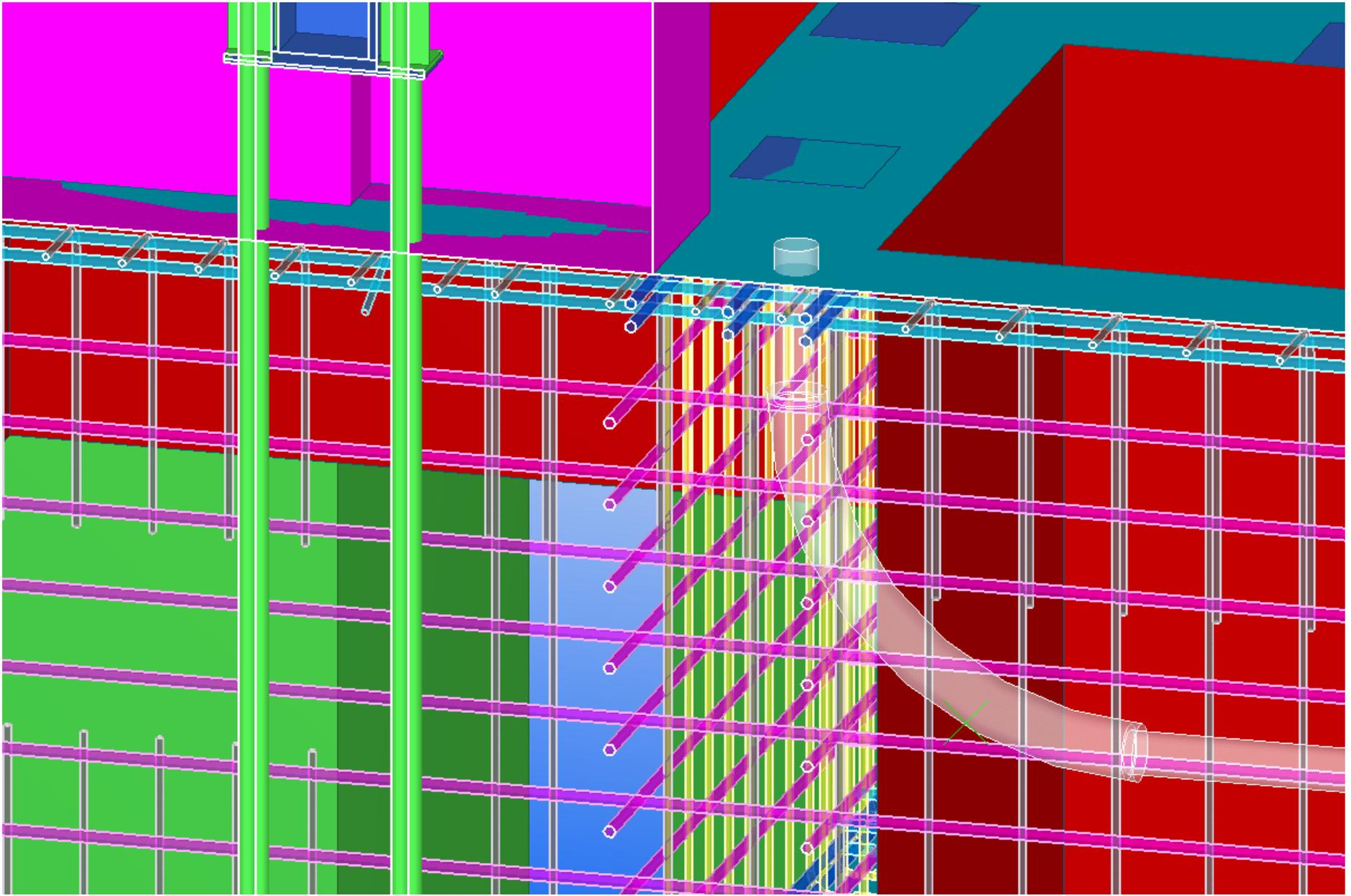


Courtesy of aSa



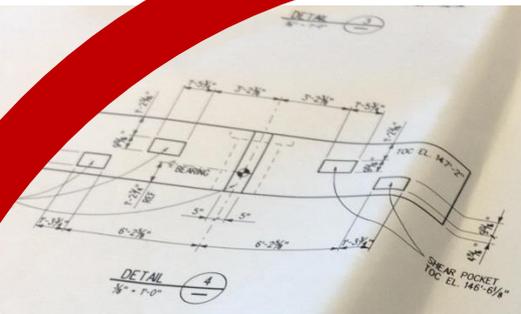
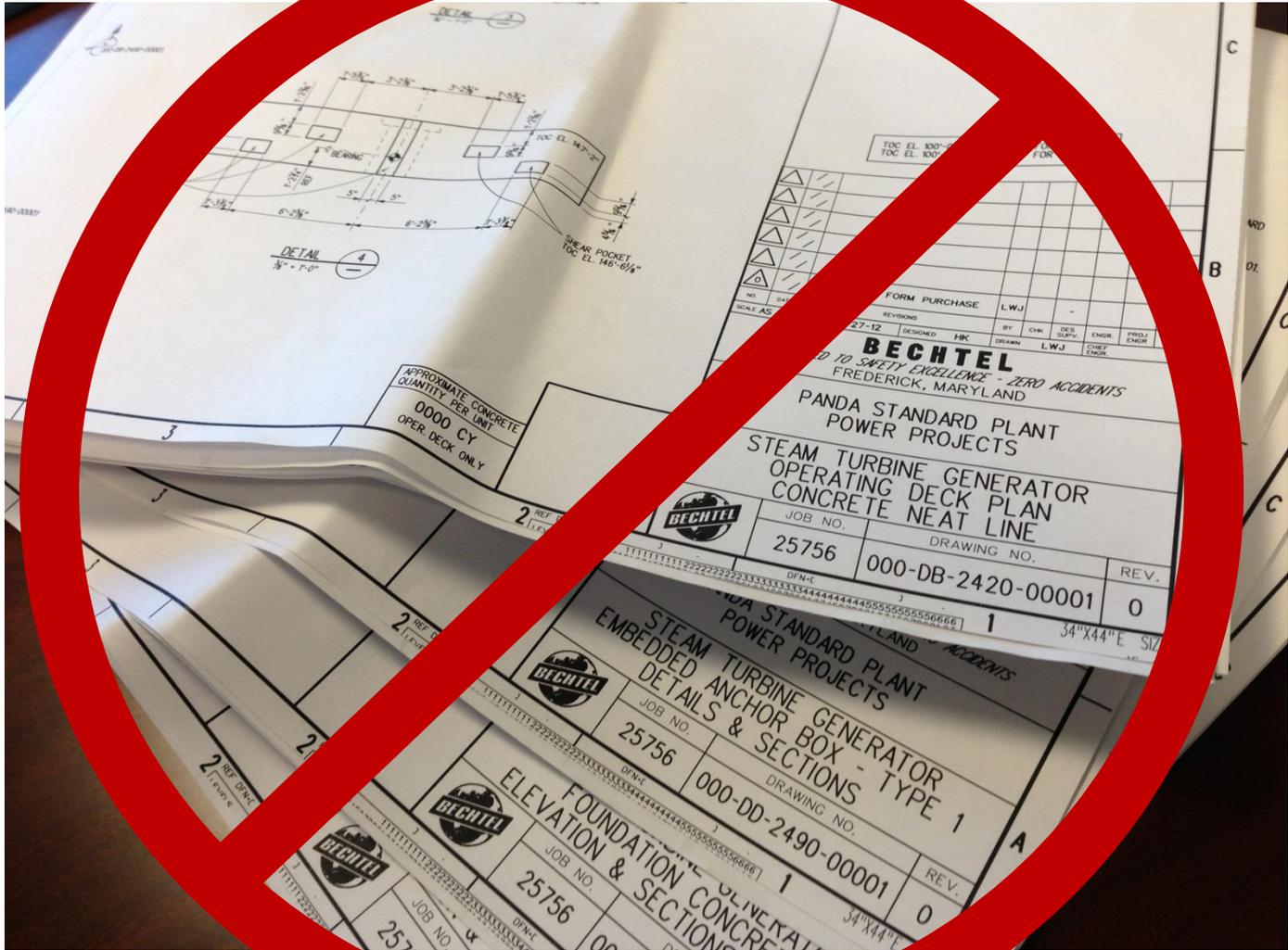






# Return On Investment

- Estimated 20% savings on field labor - J. Wills, Lead Civil Field Engineer
- Unit Rate 19.68 hrs/ton
- Approximately 185 tons of rebar per unit
- Savings per unit = 728 hours of field labor
- Three units – total savings over 2000 hours



APPROXIMATE CONCRETE QUANTITY PER UNIT  
0000 CY  
OPER. DECK ONLY

NO.	DATE	BY	CHK	DES	ENGR.	PROJ
27-12		DESIGNED	HK	DRAWN	L.W.J.	CHIEF ENGR.

FORM PURCHASE L.W.J.

**BECHTEL**  
COMMITTED TO SAFETY EXCELLENCE - ZERO ACCIDENTS  
FREDERICK, MARYLAND

PANDA STANDARD PLANT  
POWER PROJECTS

STEAM TURBINE GENERATOR  
OPERATING DECK PLAN  
CONCRETE NEAT LINE

JOB NO. 25756  
DRAWING NO. 000-DB-2420-00001  
REV. 0

34"X44" E SIZE

PANDA STANDARD PLANT  
POWER PROJECTS

STEAM TURBINE GENERATOR  
EMBEDDED ANCHOR BOX - TYPE 1  
DETAILS & SECTIONS

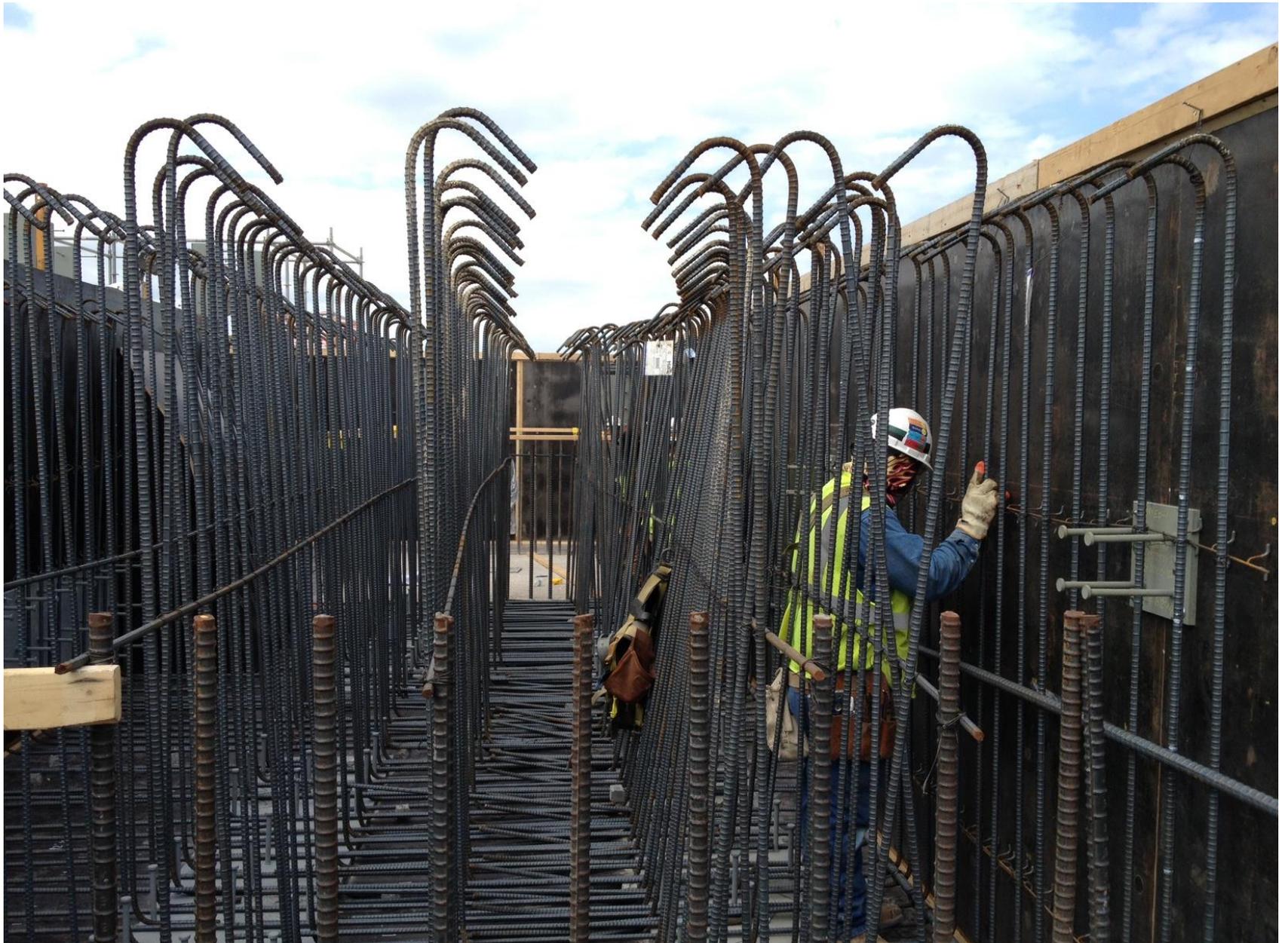
JOB NO. 25756  
DRAWING NO. 000-DD-2490-00001  
REV. 0

34"X44" E SIZE

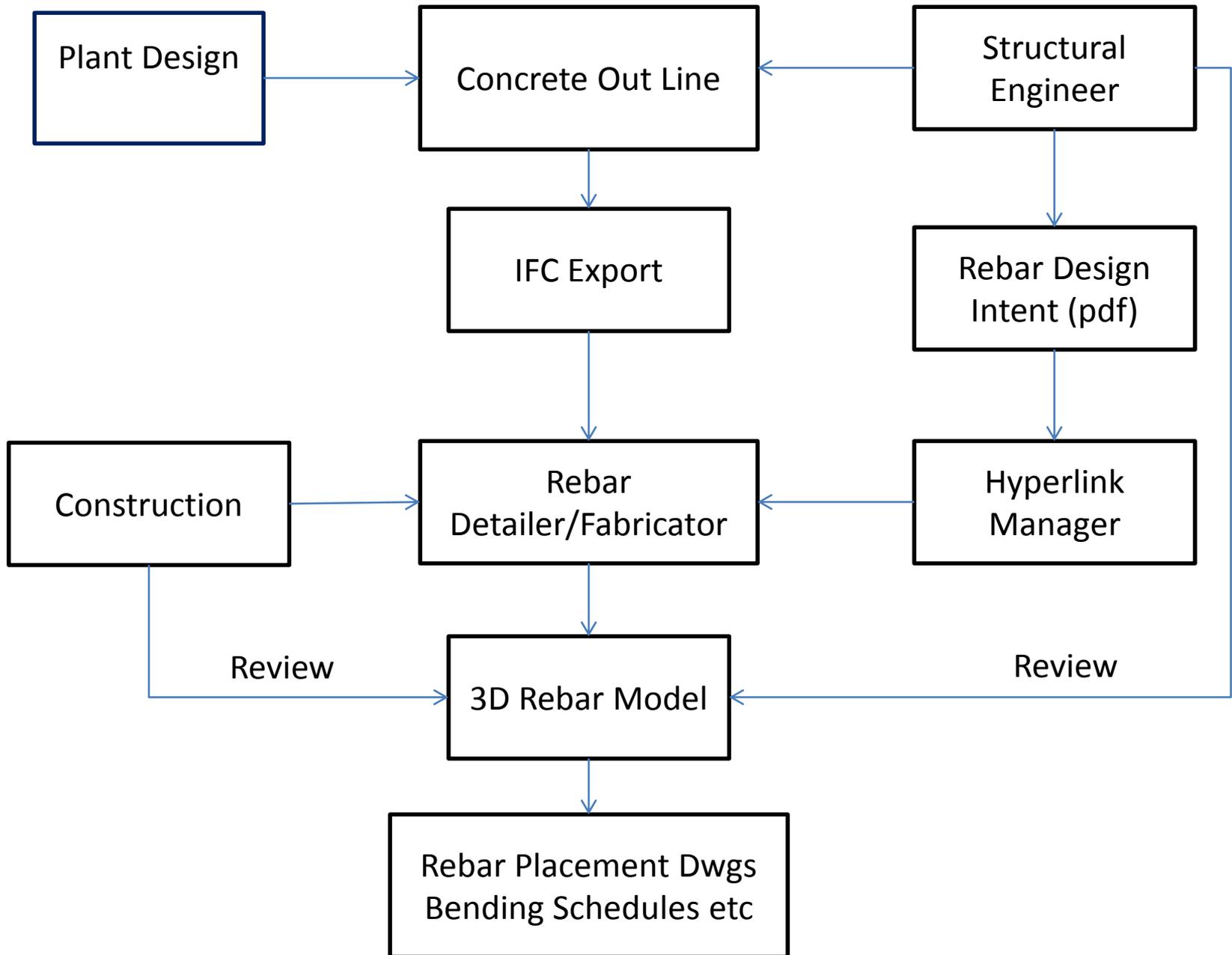
FOUNDATION CONCRETE  
ELEVATION & SECTIONS

JOB NO. 25756  
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REV. 0

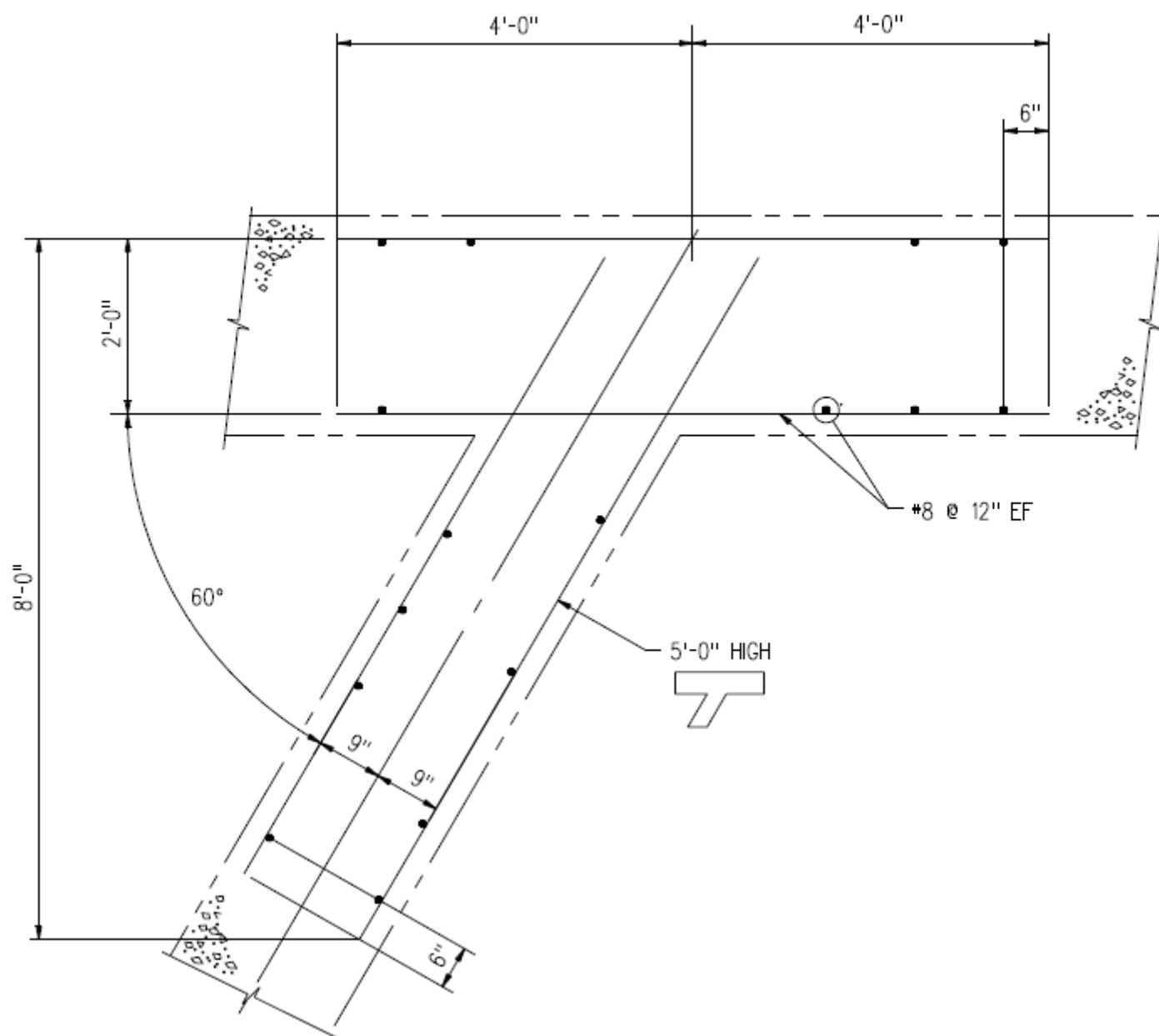
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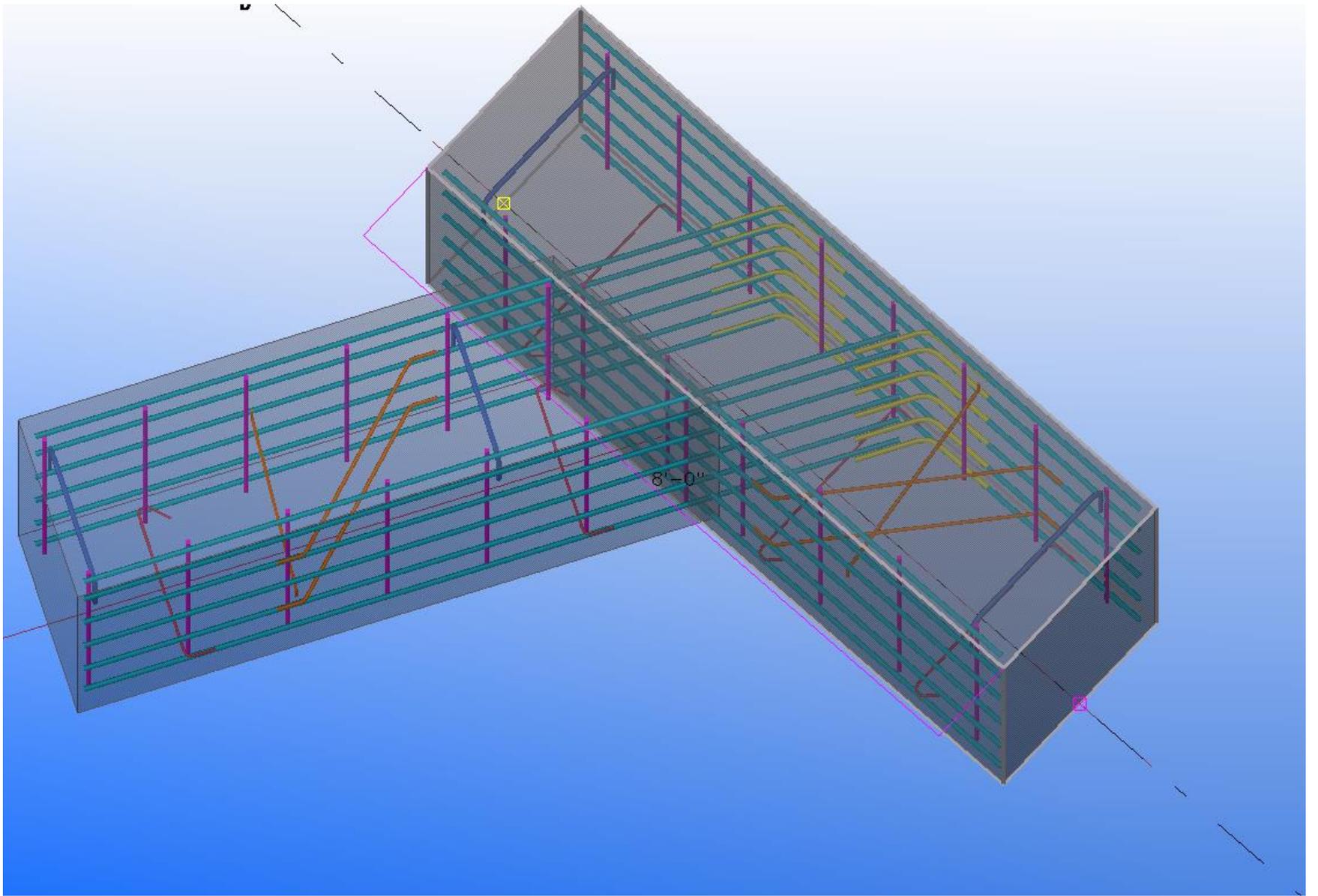






# From Model to Field and Back



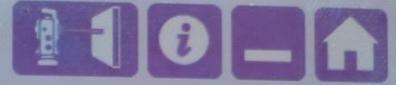




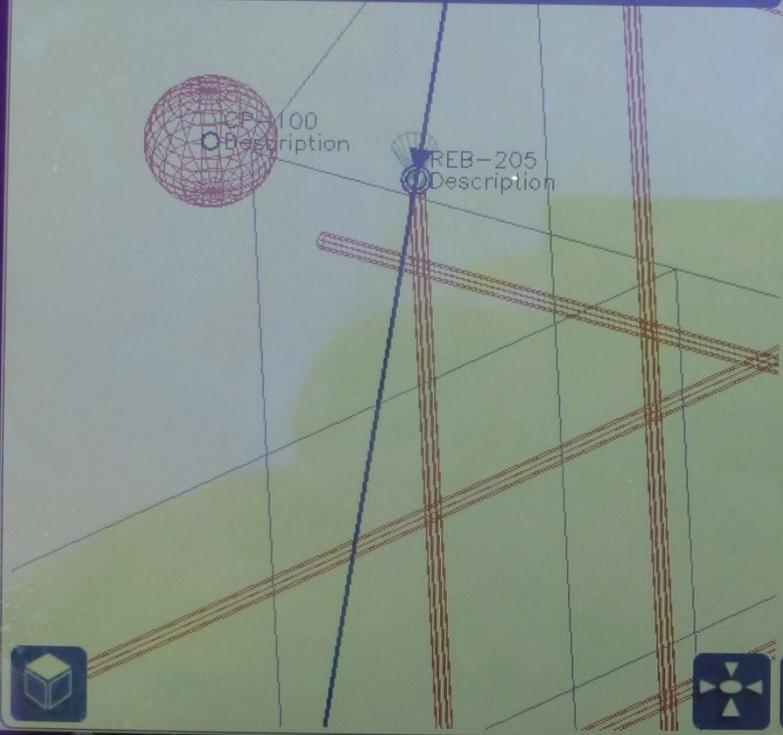




# Trimble Field Link: layout2



Forward: 44' 3/8"    Left: 0 ft    Up: 9 1/2"



Point    Lay Out

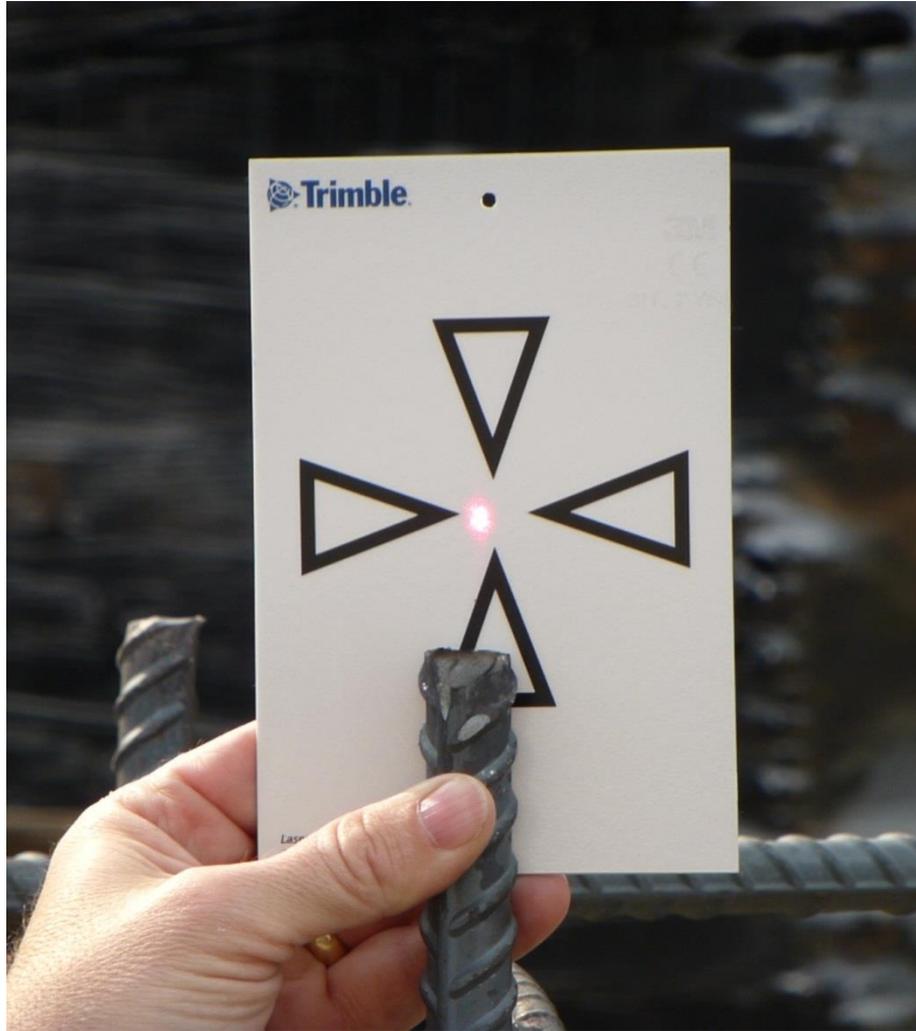
REB-205    Description

Aim    Stake

REB-205	Description	<input checked="" type="checkbox"/>	+
REB-200	Description	<input checked="" type="checkbox"/>	+
REB-206 1	Description	<input checked="" type="checkbox"/>	+
REB-201	Description	<input checked="" type="checkbox"/>	+
CP-102	Description	<input type="checkbox"/>	+
REB-202	Description	<input type="checkbox"/>	+

Total: 7    Remaining: 3







Trimble

LL5061202750  
IP address  
172.17.0.206  
Serial number  
208-883,204-0

BXS



