



TURISTM

BIM Today and Tomorrow

Toys or Tools



Background

- Architect
- Construction Industry
- Technology Consultant
- Favorite Quote:
 - *“The reasonable man adapts himself to the world; the unreasonable one persists in trying to adapt the world to himself. Therefore all progress depends on the unreasonable man.”*

George Bernard Shaw, 1903



TURIS

- What we are not:
 - Designers/Engineers/Architects
 - BIM software sellers
- What we are:
 - Technology Consultants
 - BIM Application
 - Solution Developers



Services

- BIM for Construction
- Reality Capture
- BIM for Facilities
- Facility Information Management
- Visualization (AR/VR)



Our tools

A word cloud of software tools used in the industry. The most prominent tools are:

- UNITY
- RECAP
- CIVIL3D
- 3DSMAX
- ILLUSTRATOR
- PHOTOSHOP
- AUTOCAD
- AKITABOX
- NAVISWORKS
- SKETCHUP
- BACKBURNER
- MESHLAB
- REVIT
- SCENE
- FARO
- BLUEBEAM
- AFTEREFFECTS
- INDSIGN

Agenda

- BIM Tools
 - Design applications
 - Construction applications
 - Facility operations
- Technology Toys
- Future?



Today's "Tools"



Visualization - Renders



Visualization - Animations



Quantification

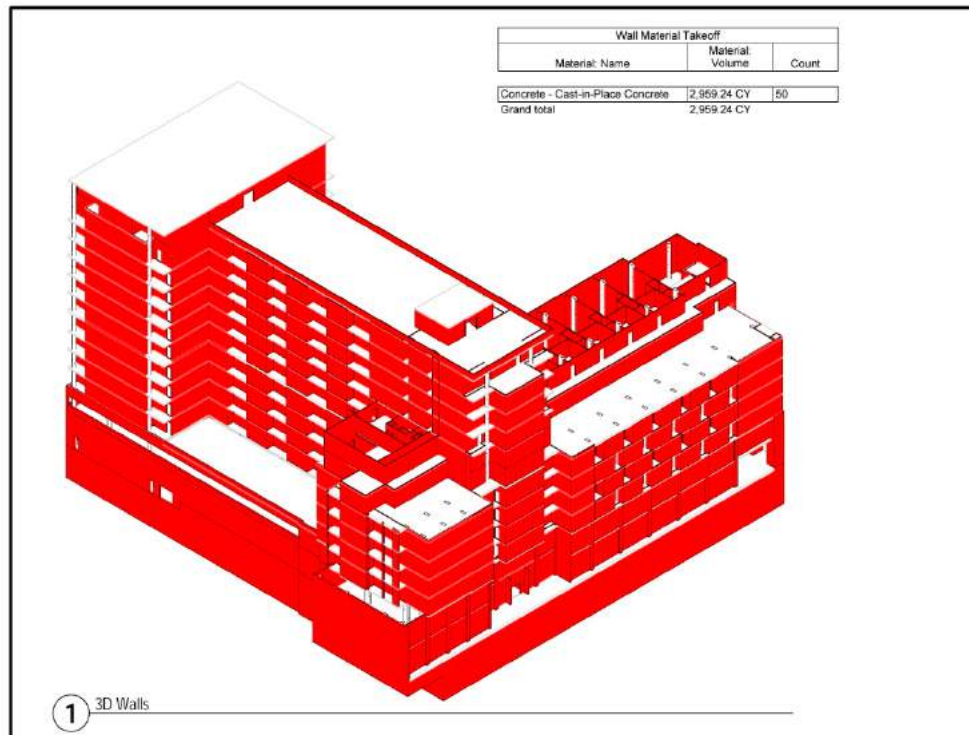
PAVING FLOOR TAKEOFF LEVEL B1-7

Type	Level	Perimeter	Volume
JAF Concrete PT Concrete Slab -12"	Level 01 - 142'-0"	142'-0"	30.51 CY
JAF Concrete Slab -12"	Level 01 - 142'-0"	478'-0"	264.85 CY
JAF Concrete PT Concrete Slab -12"	Level 01 - 100'-0"	379'-0"	75.02 CY
JAF Concrete Slab -12"	Level 01 - 100'-0"	312'-0"	184.85 CY
JAF Concrete PT Concrete Slab -12"	Level 02 - 115'-0"	172'-0"	35.14 CY
JAF Concrete Slab -12"	Level 02 - 115'-0"	572'-0"	340.71 CY
JAF Concrete PT Concrete Slab -12"	Level 04 - 133'-0"	117'-0"	140.74 CY
JAF Concrete PT Concrete Slab -12"	Level 04 - 144'-0"	367'-0"	133.84 CY
JAF Concrete PT Concrete Slab -12"	Level 04 - 154'-0"	367'-0"	133.84 CY
JAF Concrete PT Concrete Slab -12"	Level 07 - 163'-0"	367'-0"	133.84 CY
JAF Concrete Slab -12"	Level 07 - 163'-0"	1443'-0"	2660.62 CY

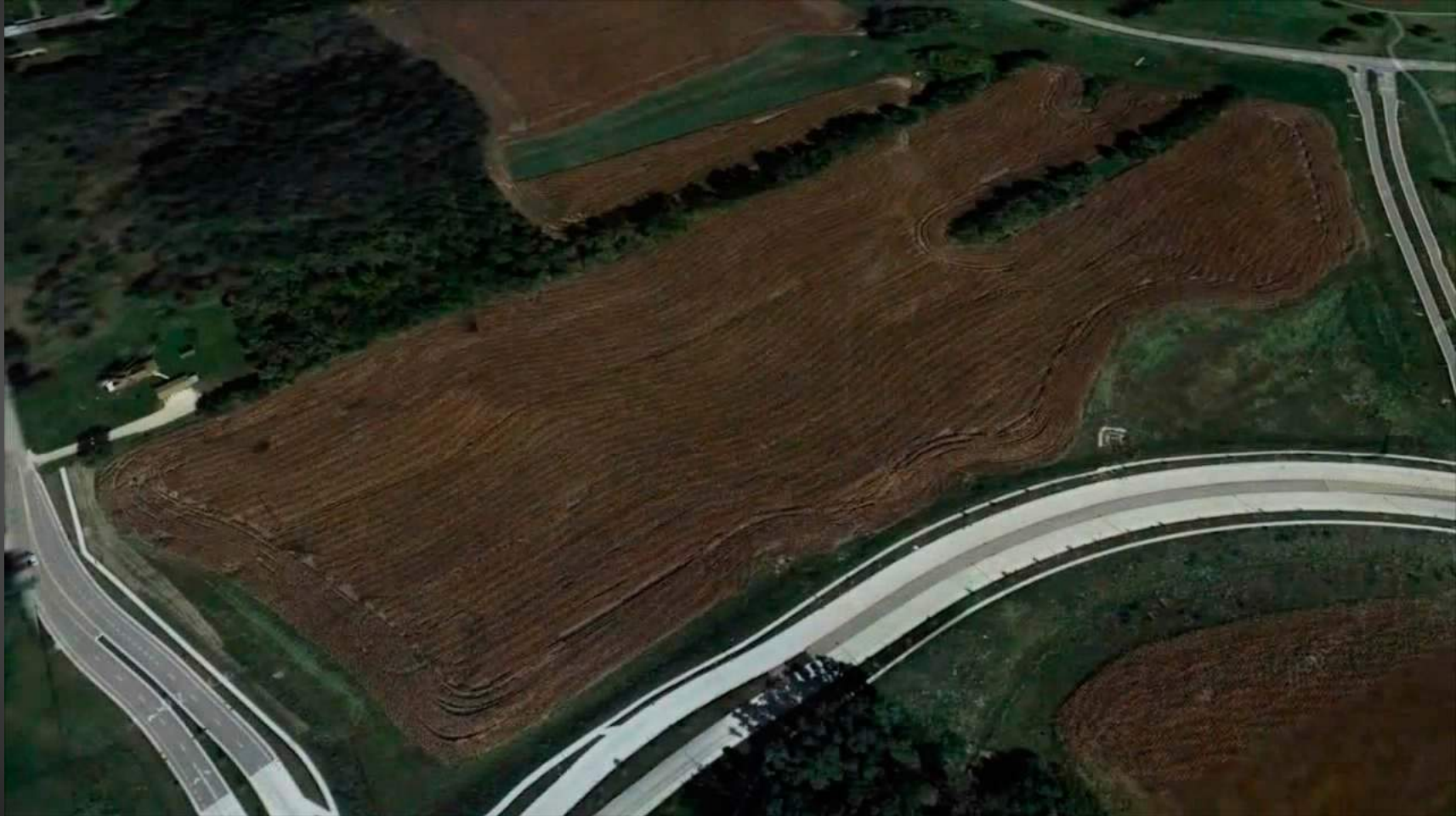
APARTMENT FLOOR TAKEOFF LEVEL B-2

Type	Level	Perimeter	Volume
JAF Concrete PT Concrete Balcony - 9"	Level 08 - 174'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 08 - 174'-0"	487'-0"	422.22 CY
JAF Concrete PT Concrete Balcony - 9"	Level 08 - 165'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 08 - 165'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 10 - 190'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 10 - 190'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 11 - 217'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 11 - 217'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 12 - 210'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 12 - 210'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 13 - 229'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 13 - 229'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 14 - 240'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 14 - 240'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 15 - 251'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 15 - 251'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 15 - 262'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 15 - 262'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 17 - 272'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 17 - 272'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 18 - 284'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 18 - 284'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 19 - 295'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 19 - 295'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 20 - 300'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 20 - 300'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 21 - 317'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 21 - 317'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 22 - 330'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 22 - 330'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 23 - 350'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 23 - 350'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 24 - 350'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 24 - 350'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 25 - 361'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 25 - 361'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 26 - 370'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 26 - 370'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 27 - 380'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 27 - 380'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 28 - 390'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 28 - 390'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 29 - 400'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 29 - 400'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 30 - 410'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 30 - 410'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 31 - 420'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 31 - 420'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 32 - 430'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 32 - 430'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 33 - 440'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 33 - 440'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 34 - 450'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 34 - 450'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 35 - 460'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 35 - 460'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 36 - 470'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 36 - 470'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 37 - 480'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 37 - 480'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 38 - 490'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 38 - 490'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 39 - 500'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 39 - 500'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 40 - 510'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 40 - 510'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 41 - 520'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 41 - 520'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 42 - 530'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 42 - 530'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 43 - 540'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 43 - 540'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 44 - 550'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 44 - 550'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 45 - 560'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 45 - 560'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 46 - 570'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 46 - 570'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 47 - 580'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 47 - 580'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 48 - 590'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 48 - 590'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 49 - 600'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 49 - 600'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 50 - 610'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 50 - 610'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 51 - 620'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 51 - 620'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 52 - 630'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 52 - 630'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 53 - 640'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 53 - 640'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 54 - 650'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 54 - 650'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 55 - 660'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 55 - 660'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 56 - 670'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 56 - 670'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 57 - 680'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 57 - 680'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 58 - 690'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 58 - 690'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 59 - 700'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 59 - 700'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 60 - 710'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 60 - 710'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 61 - 720'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 61 - 720'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 62 - 730'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 62 - 730'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 63 - 740'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 63 - 740'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 64 - 750'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 64 - 750'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 65 - 760'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 65 - 760'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 66 - 770'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 66 - 770'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 67 - 780'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 67 - 780'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 68 - 790'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 68 - 790'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 69 - 800'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 69 - 800'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 70 - 810'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 70 - 810'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 71 - 820'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 71 - 820'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 72 - 830'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 72 - 830'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 73 - 840'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 73 - 840'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 74 - 850'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 74 - 850'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 75 - 860'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 75 - 860'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 76 - 870'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 76 - 870'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 77 - 880'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 77 - 880'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 78 - 890'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 78 - 890'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 79 - 900'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 79 - 900'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 80 - 910'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 80 - 910'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 81 - 920'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 81 - 920'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 82 - 930'-0"	188'-4"	11.00 CY
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JAF Concrete PT Concrete Balcony - 9"	Level 83 - 940'-0"	188'-4"	11.00 CY
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JAF Concrete PT Concrete Slab -12"	Level 84 - 950'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 85 - 960'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 85 - 960'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 86 - 970'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 86 - 970'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 87 - 980'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 87 - 980'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 88 - 990'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 88 - 990'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 89 - 1000'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 89 - 1000'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 90 - 1010'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 90 - 1010'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 91 - 1020'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 91 - 1020'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 92 - 1030'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 92 - 1030'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 93 - 1040'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 93 - 1040'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 94 - 1050'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 94 - 1050'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 95 - 1060'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 95 - 1060'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 96 - 1070'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 96 - 1070'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 97 - 1080'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 97 - 1080'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 98 - 1090'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 98 - 1090'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 99 - 1100'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 99 - 1100'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 100 - 1110'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 100 - 1110'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 101 - 1120'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 101 - 1120'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 102 - 1130'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 102 - 1130'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 103 - 1140'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 103 - 1140'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 104 - 1150'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 104 - 1150'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 105 - 1160'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 105 - 1160'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 106 - 1170'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 106 - 1170'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 107 - 1180'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 107 - 1180'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 108 - 1190'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 108 - 1190'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 109 - 1200'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 109 - 1200'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 110 - 1210'-0"	188'-4"	11.00 CY
JAF Concrete PT Concrete Slab -12"	Level 110 - 1210'-0"	487'-0"	419.90 CY
JAF Concrete PT Concrete Balcony - 9"	Level 111 - 1220'-0"	188'-4"	11.00

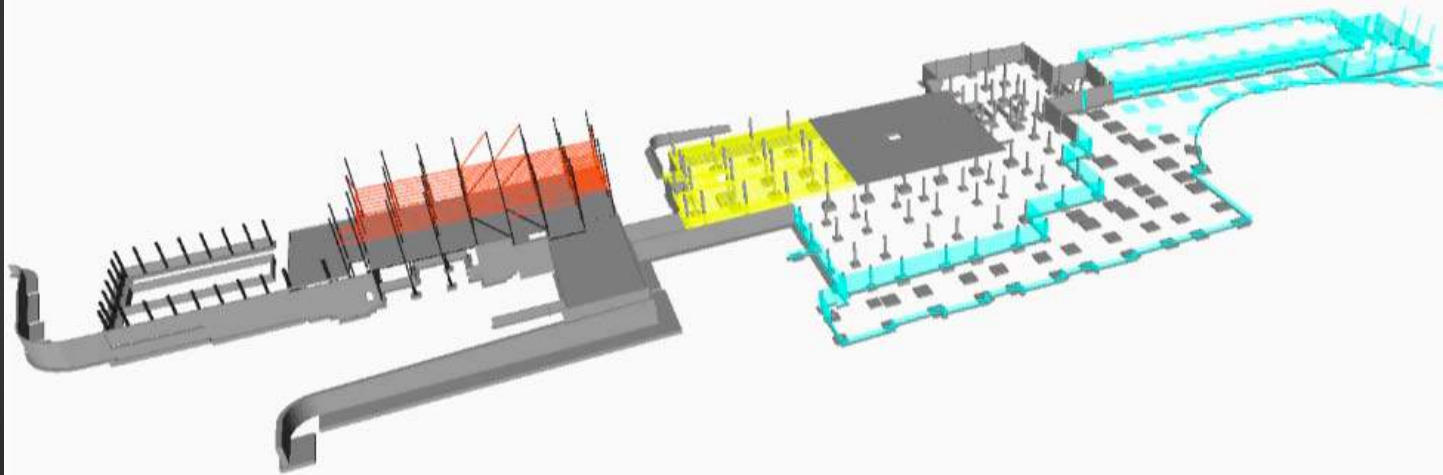
Quantity Extraction



Schedules



Schedules

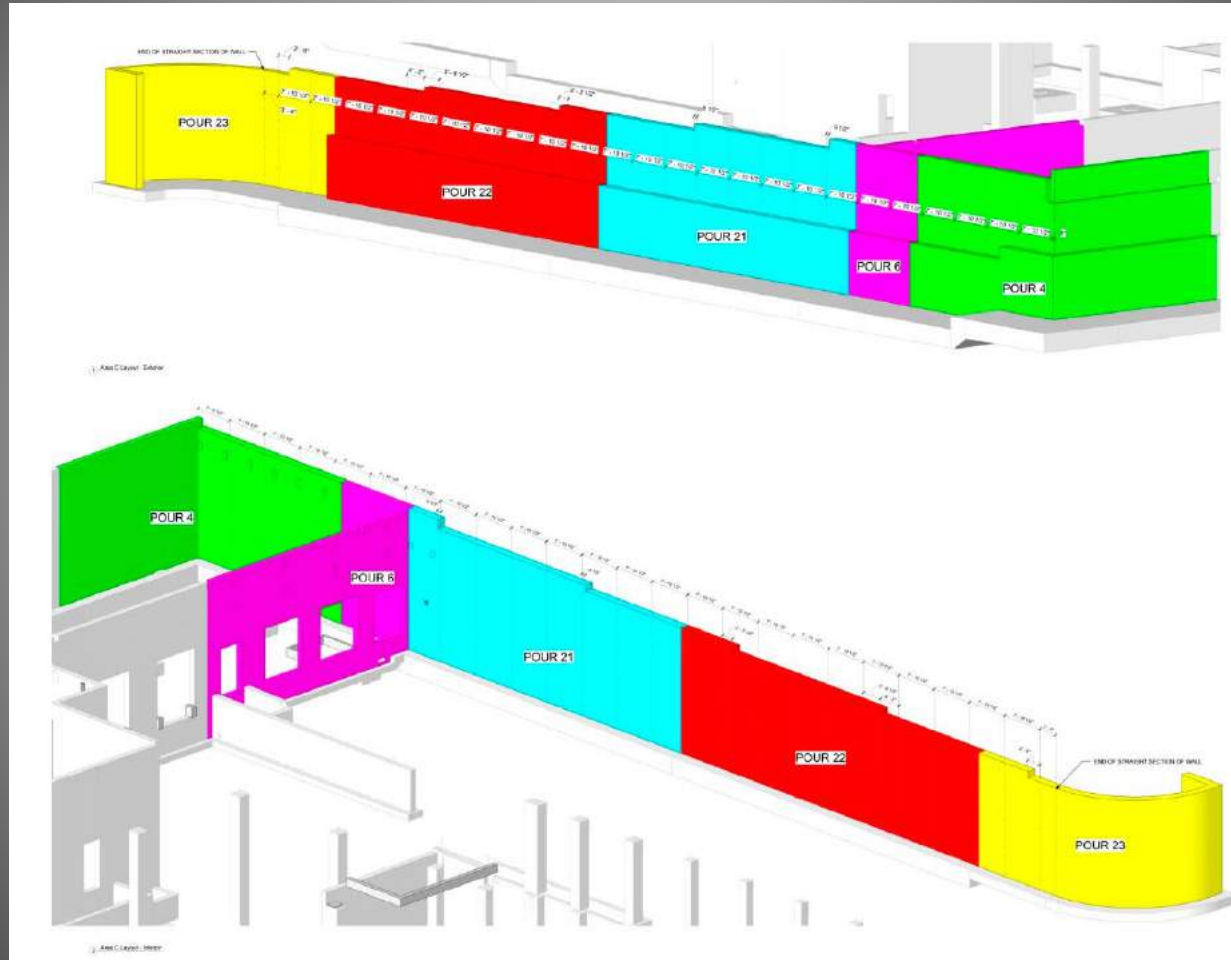


Saturday 7th 2013 Week=12

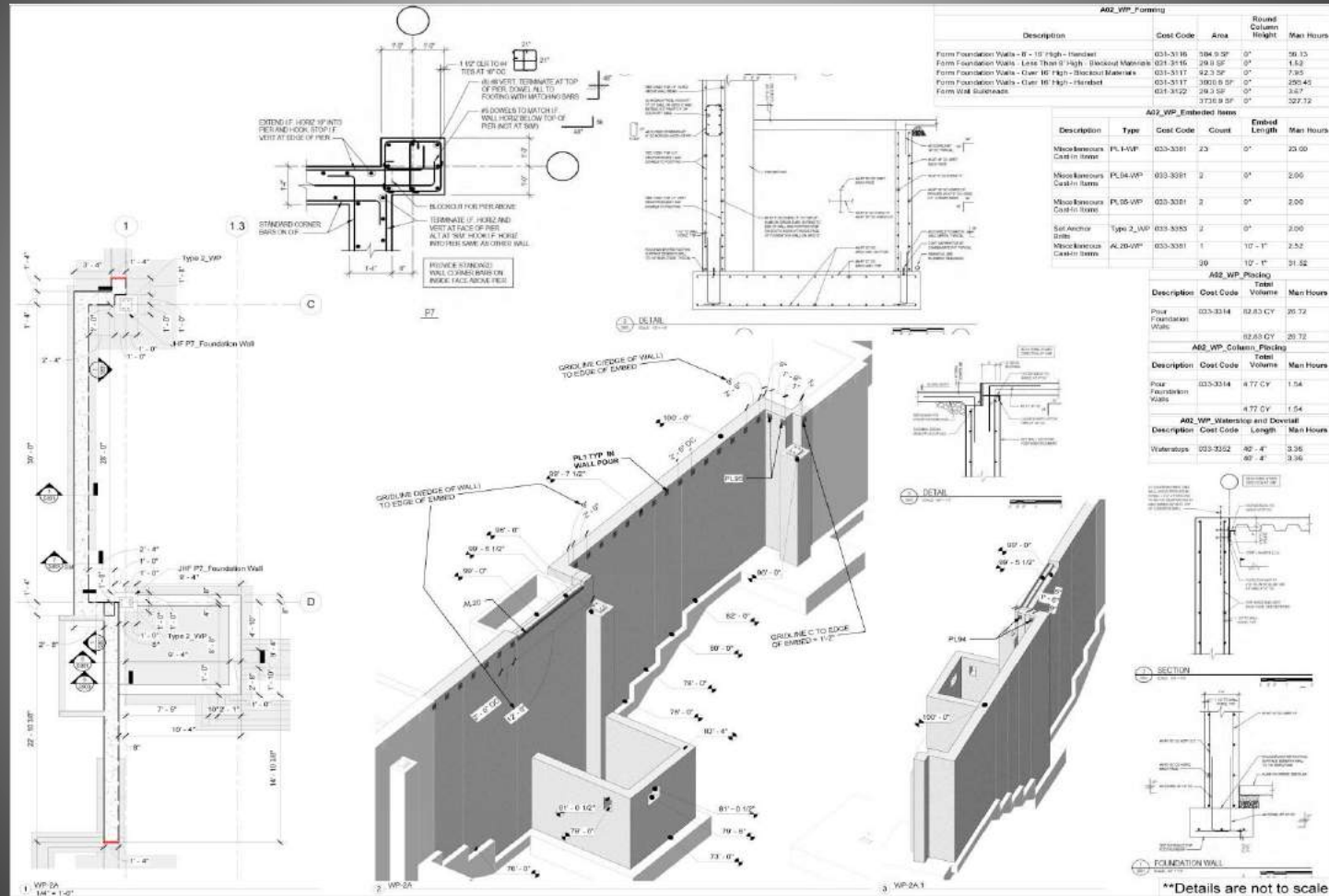
Concrete – Installation Details



Lift Drawings



Lift Drawings



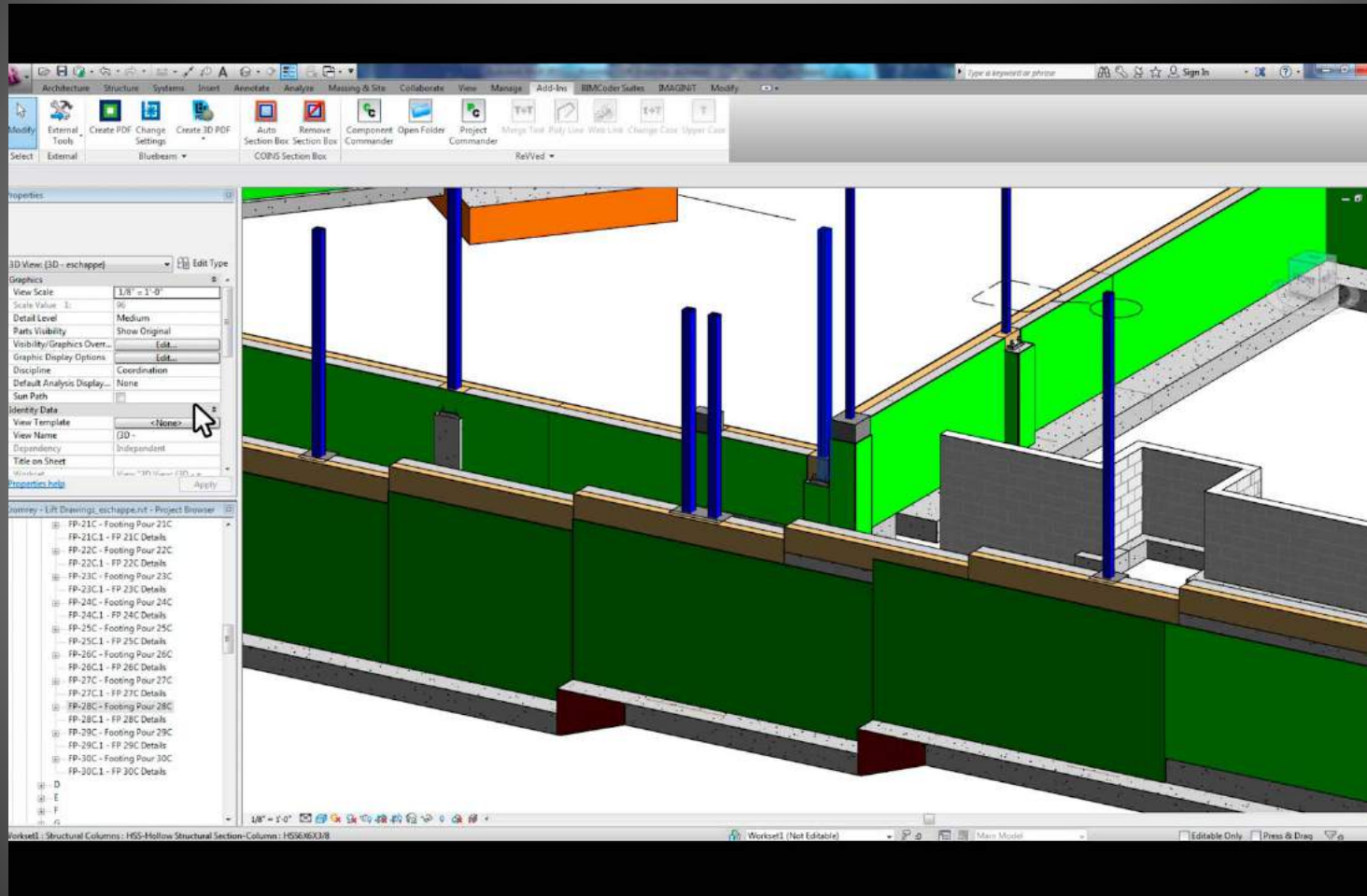
Concrete Lift Drawings

H27_WP_Forming					
Description		Cost Code	Area	Man Hours	
Form Foundation Walls - Less Than 8' High - Blockout Materials		031-3115	324.3 SF	22.13	
Form Foundation Walls - Less Than 8' High - Handset		031-3115	247.6 SF	21.82	
Form Special Walls - Curved, Battered, etc		031-3121	344.7 SF	49.24	
Form Special Walls - Curved, Battered, etc - Blockout Materials		031-3121	343.2 SF	49.03	
Form Wall Bulkheads		031-3122	10.8 SF	1.34	
			1270.5 SF	143.55	
H27_WP_Embeded Items					
Description	Type	Cost Code	Count	Embed Length	Man Hours
Set Anchor Bolts	Area H - Base Plate Type A_WP	033-3353	4	0"	4.00
			4	0"	4.00
H27_WP_Placing					
Description		Cost Code	Total Volume	Man Hours	
Pour Foundation Walls		033-3314	9.94 CY	3.03	
			9.94 CY	3.03	
H27_WP_Column_Placing					
Description		Cost Code	Total Volume	Man Hours	
Pour Foundation Walls		033-3314	7.28 CY	2.34	
			7.28 CY	2.34	

LEDGE

LEDGE

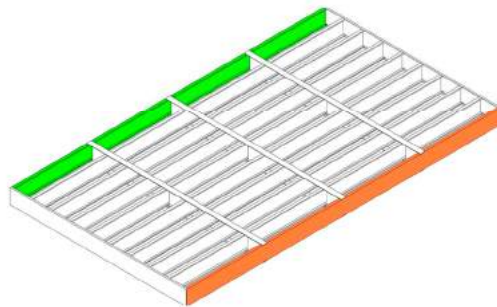
Data to Cloud



Pre-Fab & Wall Panels

Lbl	Qty	Member	Length	W(lbs)
A0	6	1200S200-54	1' 1"	21.06
A1	3	1200S200-54	1' 2"	11.34
B0	2	1200S200-68	21' 5"	173.9034
B1	6	Bridging Strap	12' 0"	0
J0	8	1200S200-68	21' 5"	695.6136
T0	2	1200T125-68	12' 0"	84.24
-	-	-	Grand Total:	986.157

② Bill of Material
1/4" = 1'-0"



③ 3D View



① Framing Plan
1/4" = 1'-0"



Madison Office:
2802 Cahoe St.
Madison, WI 53713
Main Phone: 608-318-5600
www.Turissystems.com

Project Title:
Metreau Apartments - Metal Framing

Project Address:
Green Bay, WI

Project number: ###

Metreau Apt.

FloorPanel57

Sheet Number: 57(1)

Date:

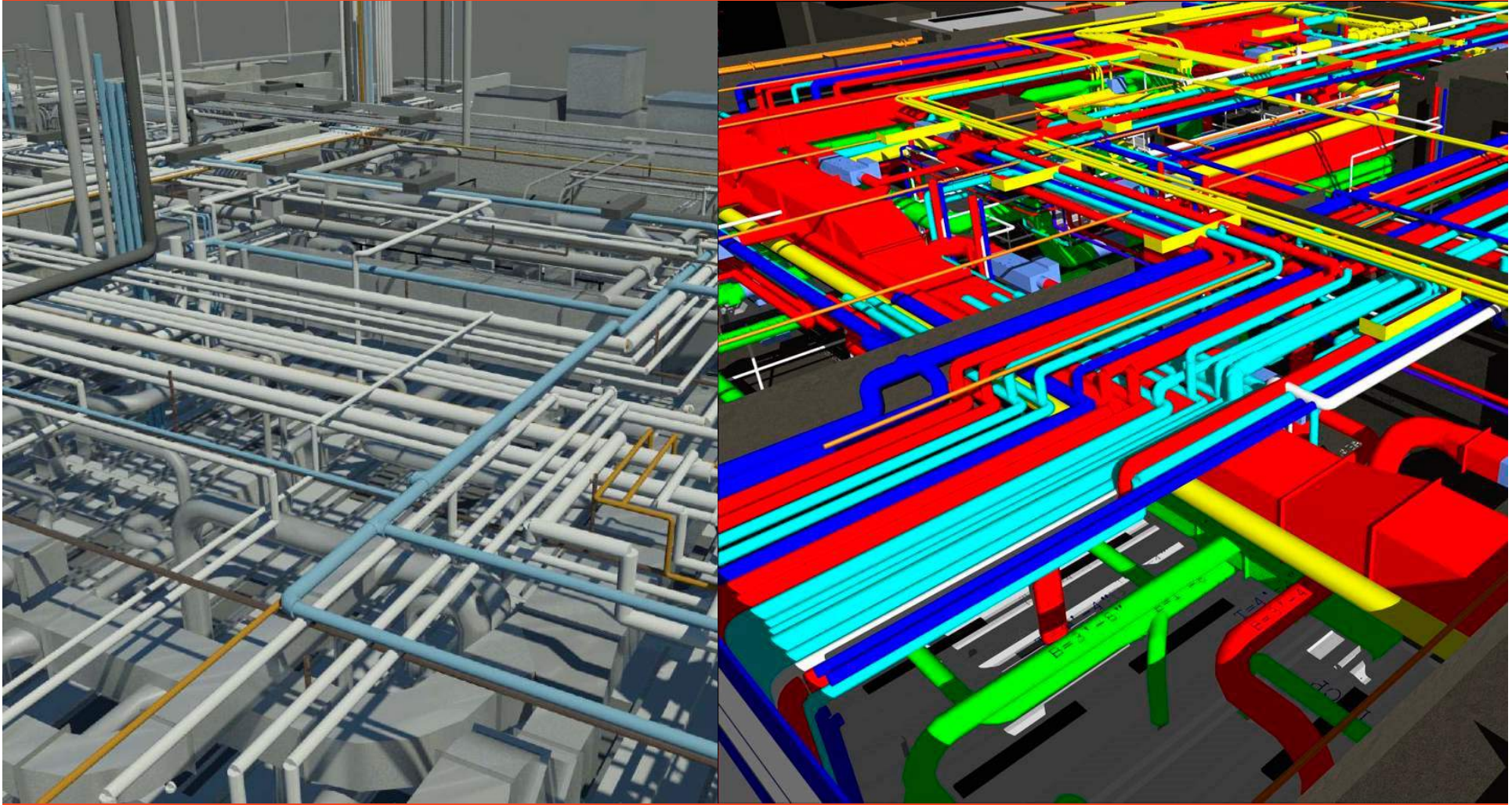
Drawn by:

Supt.:

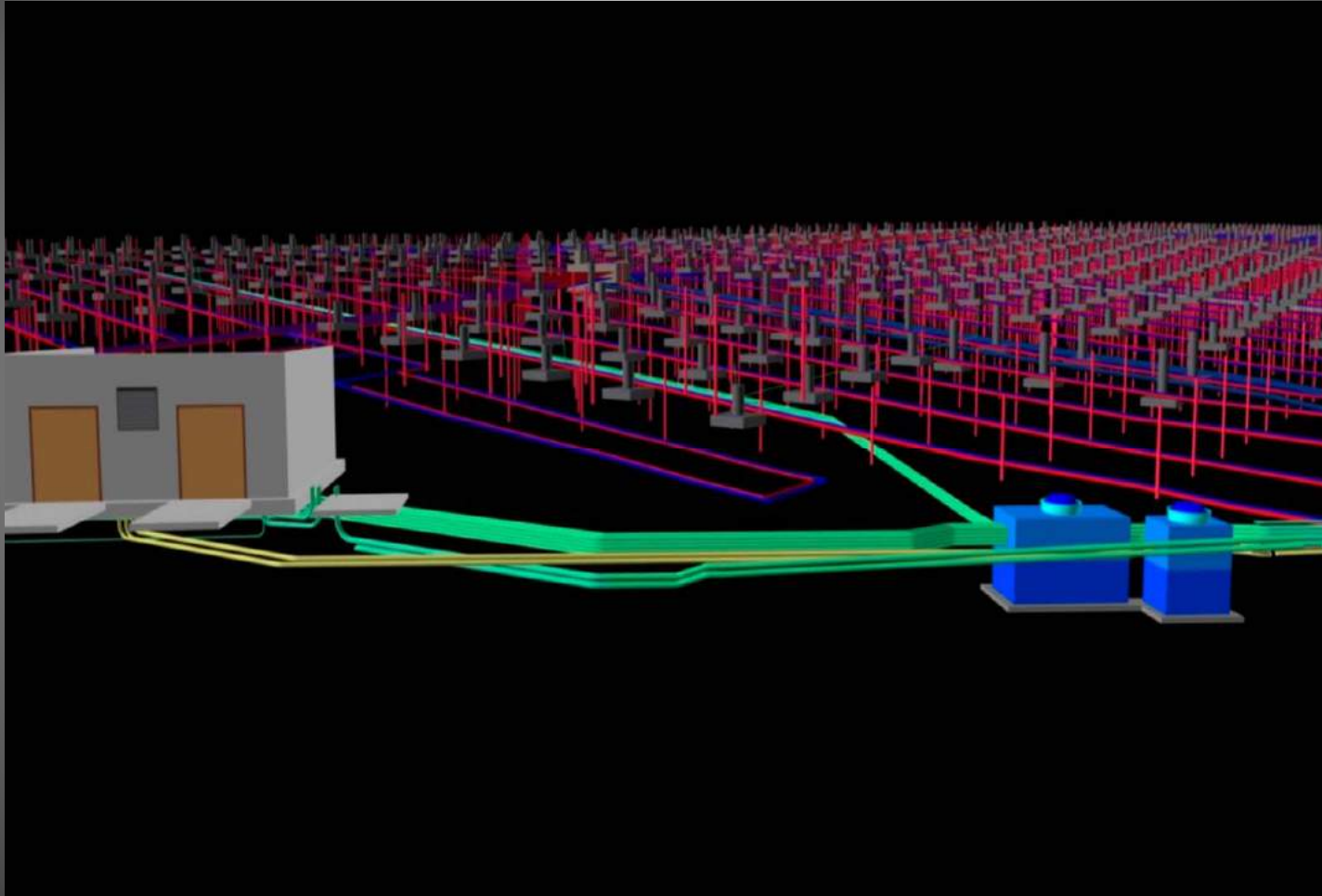
Foreman:

Scale: 1/4" = 1'-0"

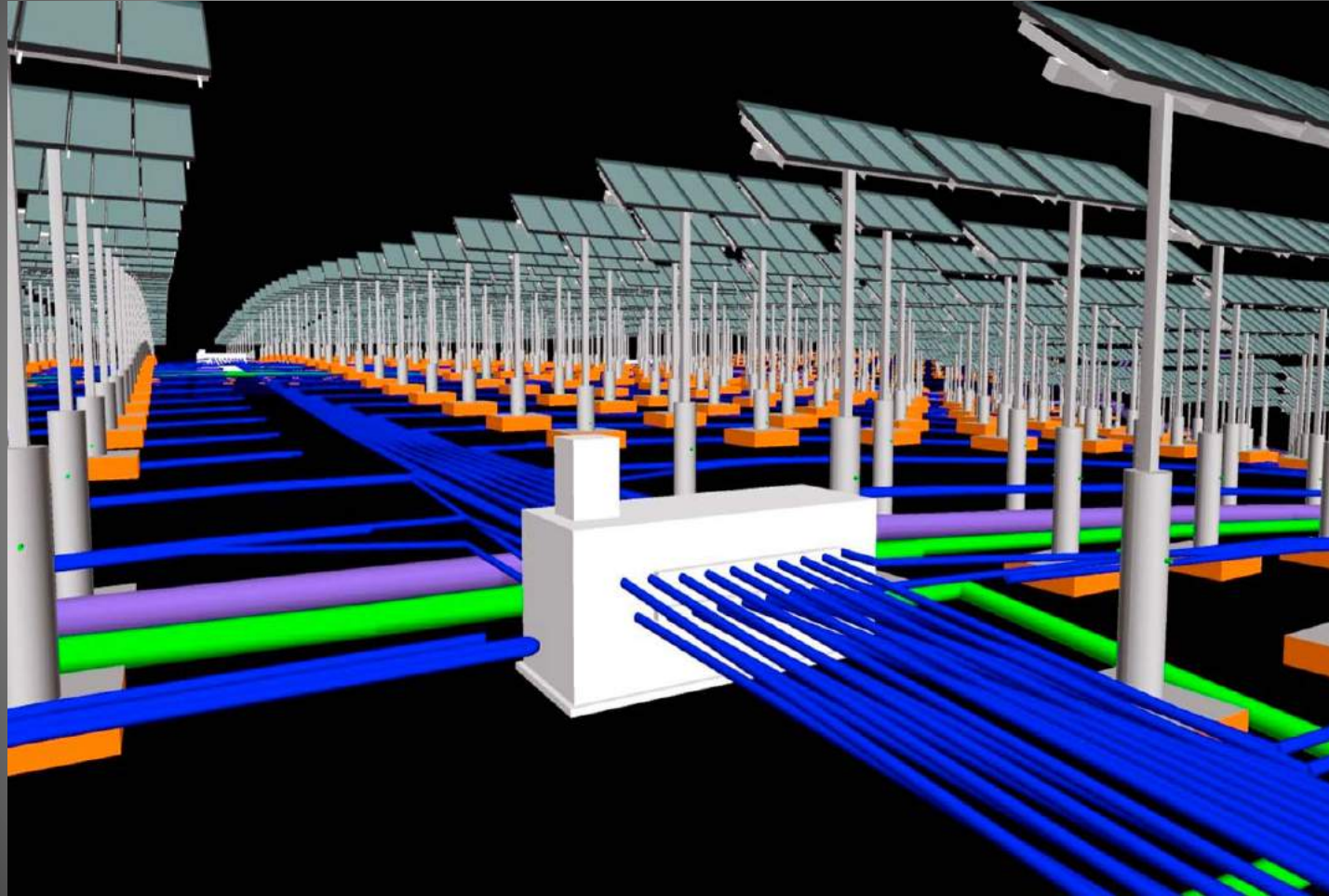
MEP Coordination



MEP/ GPS Coordination



MEP/GPS Coordination



MEP/GPS Coordination



Laser Scanning



Construction Scanning



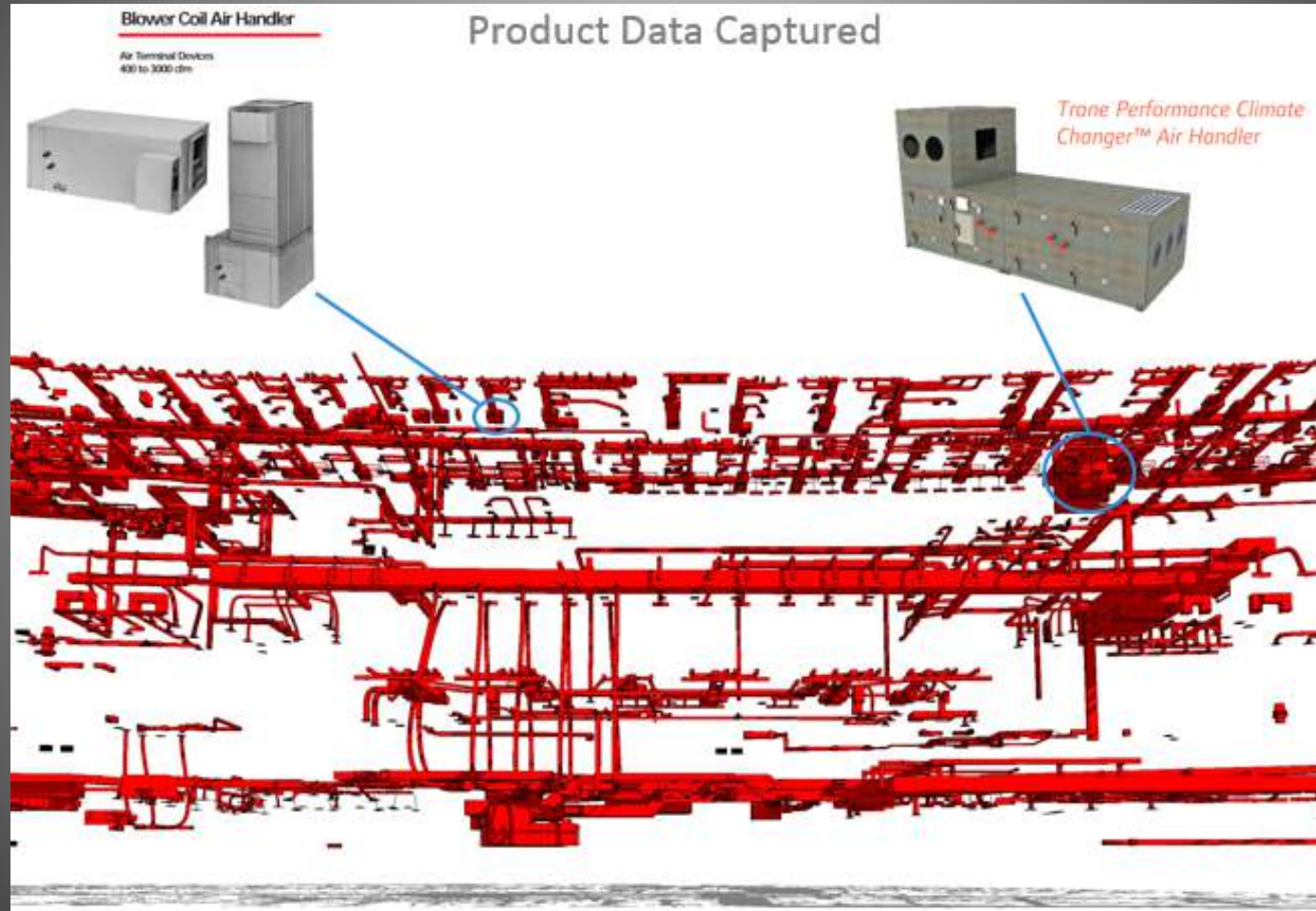
Documentation



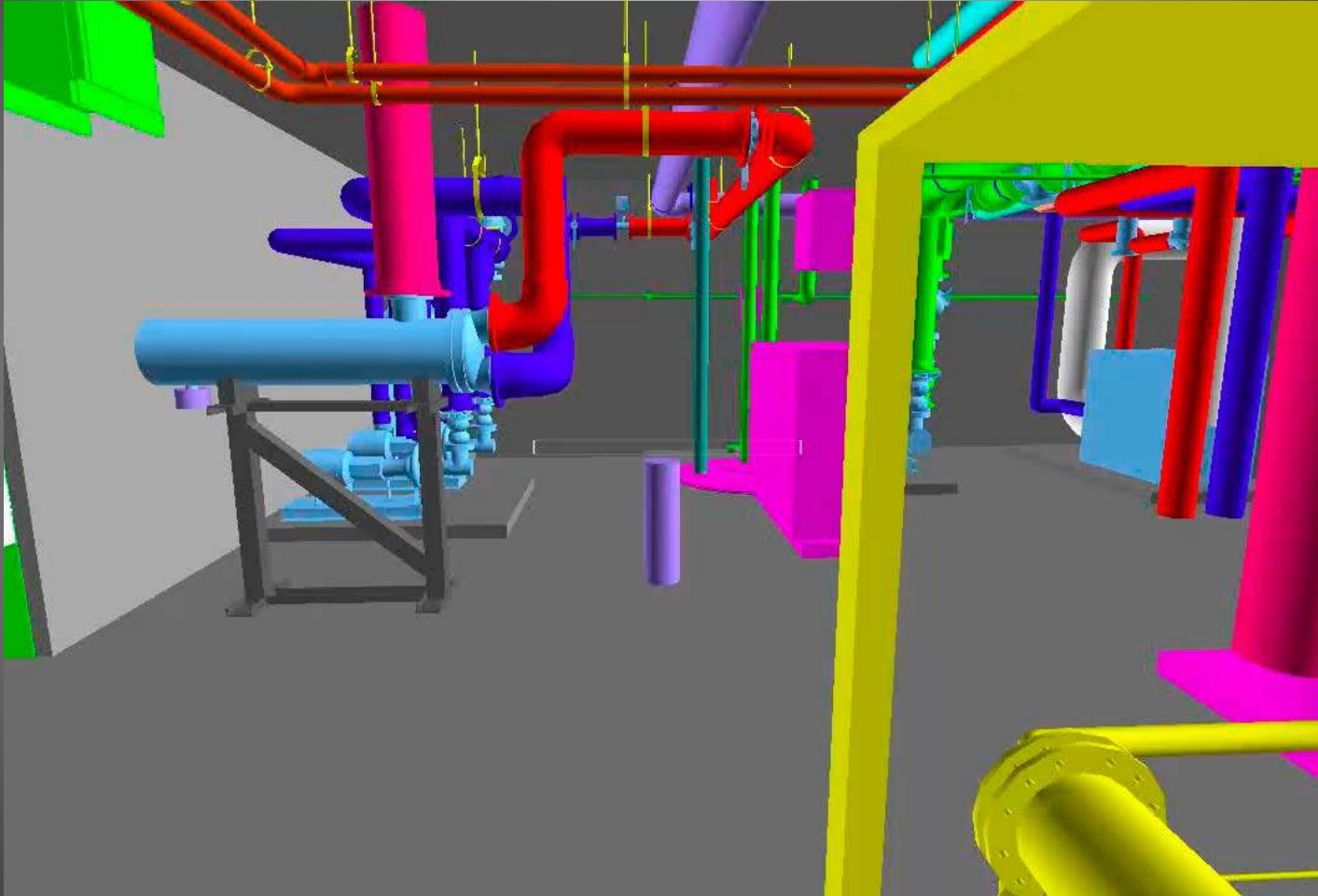
Scan to BIM



Data Loading



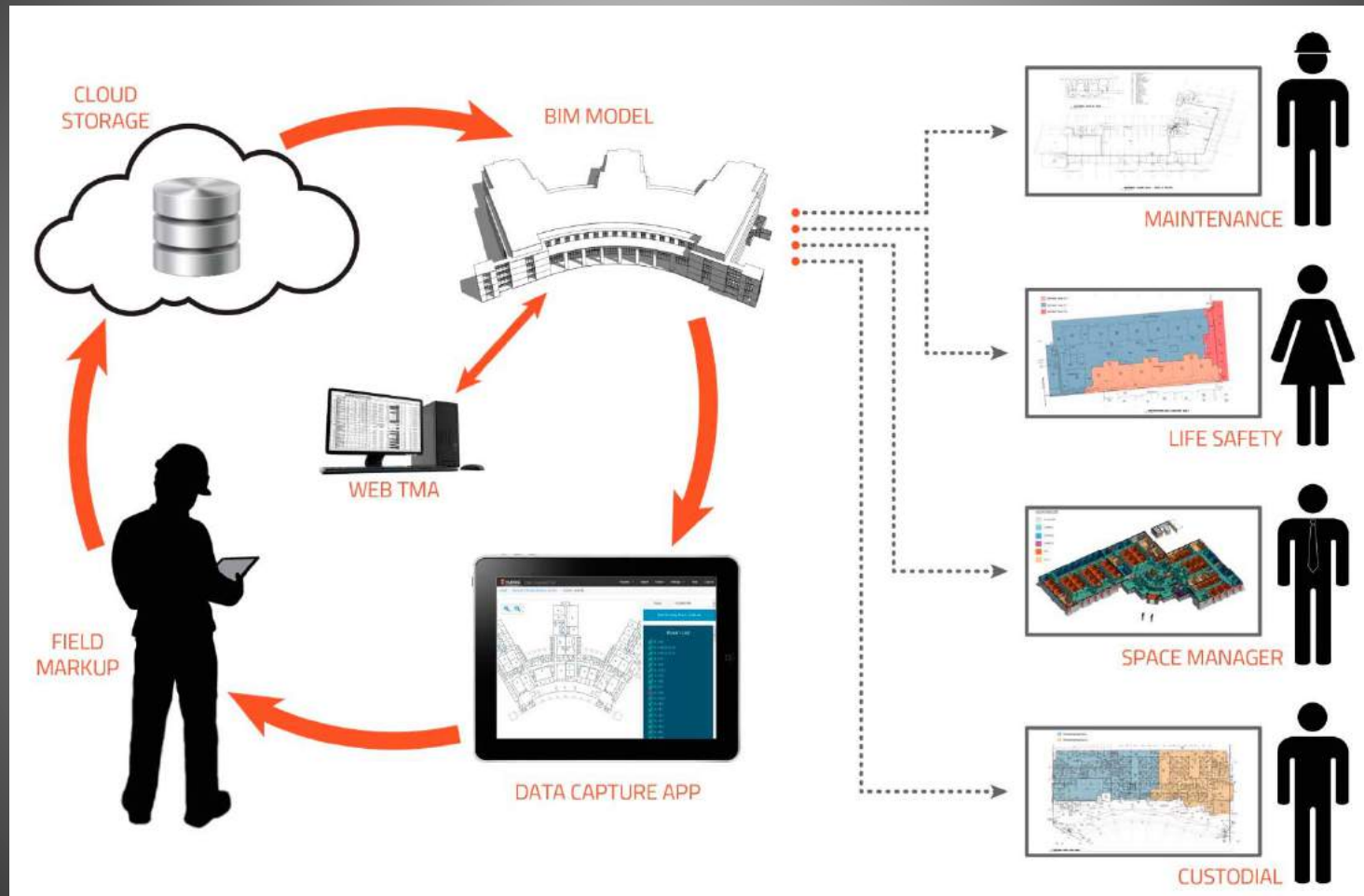
Operational Applications



QR Code to Data



BIM Throughout Lifecycle



Facility Data Capture

Buildings / Baylor - Paul L. Foster Campus for Innovation & Business / Files / HSB_Mechanical Operations Data.pdf CURRENT VERSION ▾

⚙️ VAV-01-SE-74 – [Rename](#) [Move](#)
Pin Type: [Baylor Mechanical Data](#)
Pin Data Set: [Mechanical Operations Data](#)

► Data
▼ Documents
+ O&M – [Edit Upload](#)



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Leave us a message!

Today's "Toys"



Interactive BIM with Game Engines



AUTODESK
REVIT



GRAPHISOFT
ARCHICAD



Pre-Rendered vs Real-time Rendering



Integrated Tools to Build Apps



Game Engine Applications



UNREAL
ENGINE

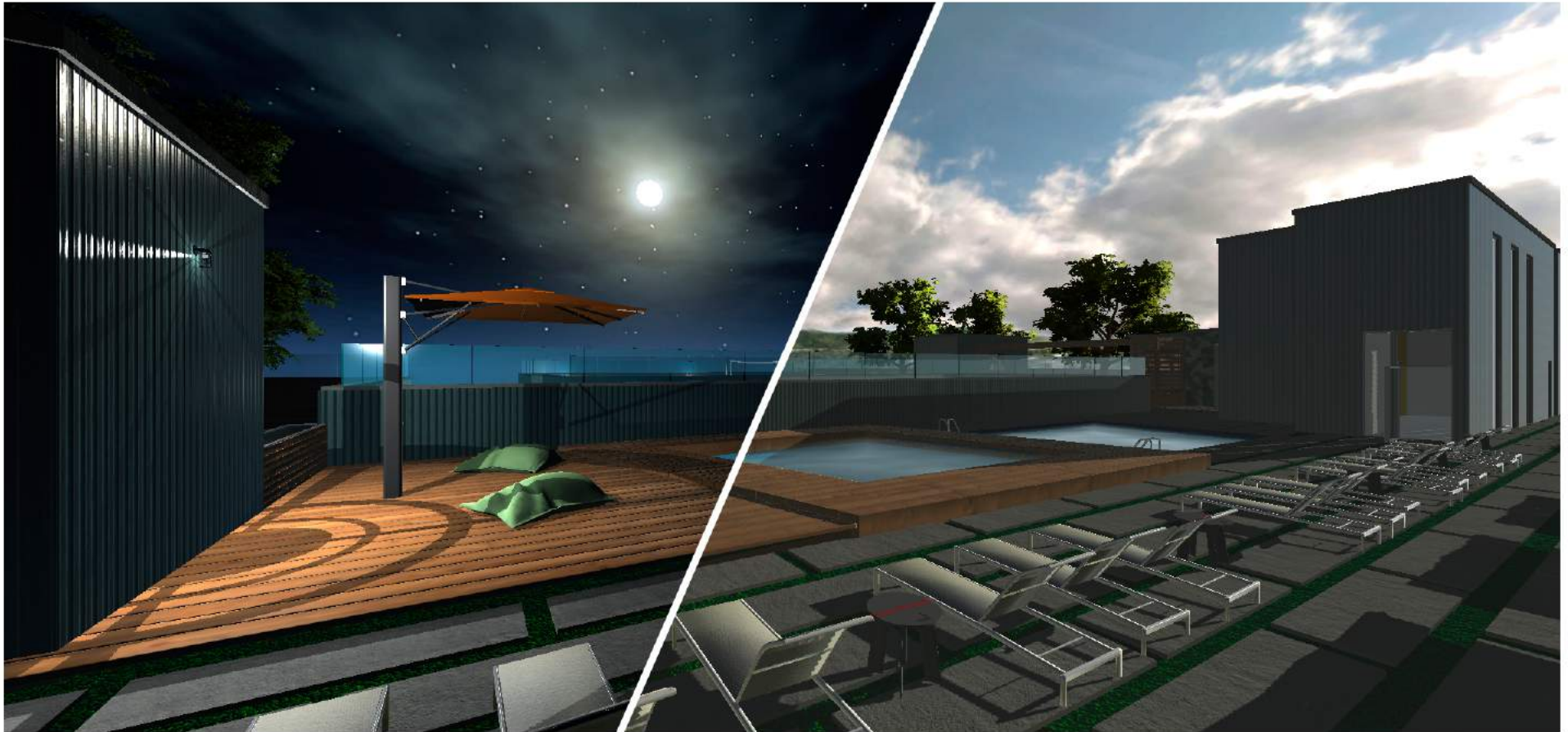


CRYENGINE 3



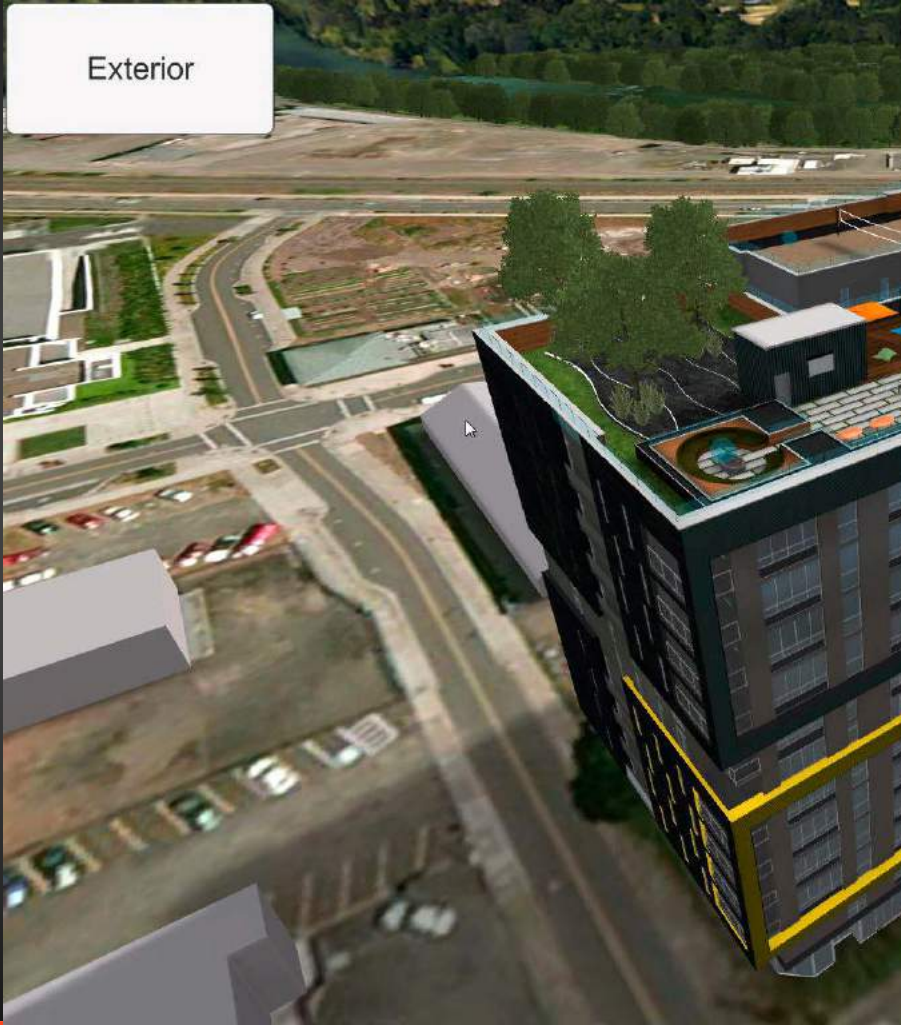
AUTODESK® STINGRAY

User Controlled



Click to Move Through the Space

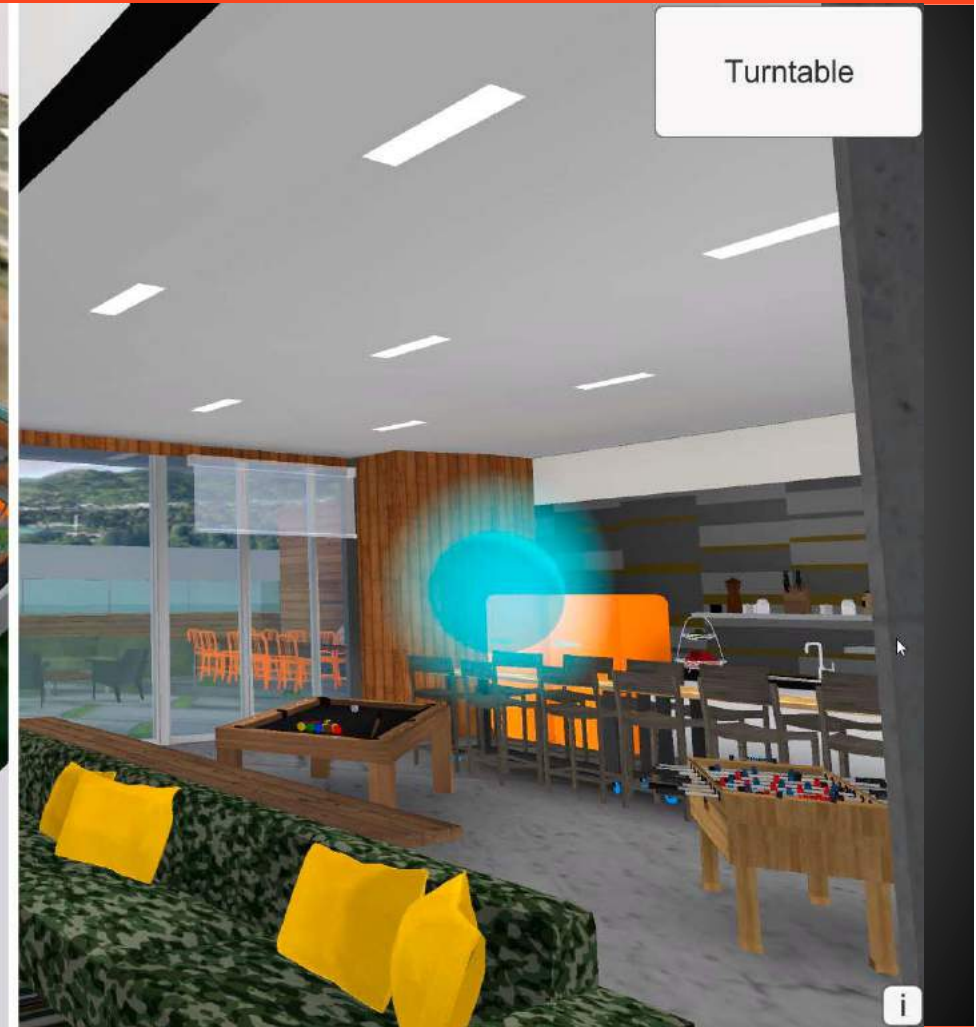
Exterior



Turntable



Use the Menu to View Other Spaces



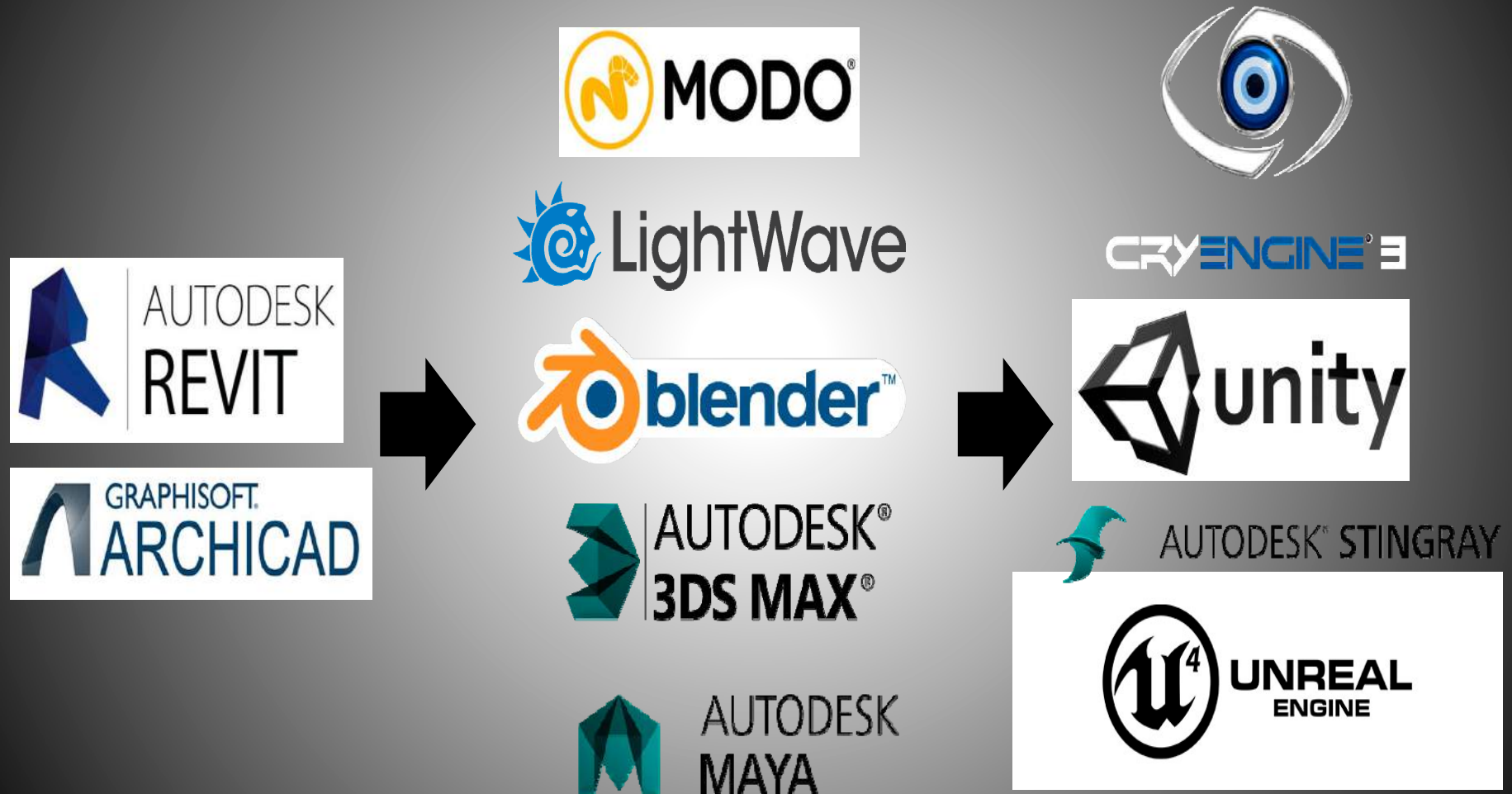
View from a Room Before it's Built



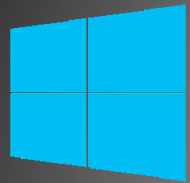
Simplifying Interactive Visualization



BIM to Game Engine Process



Deploy to Virtually Any Platform



Windows



XBOX ONE



PS4™



Linux



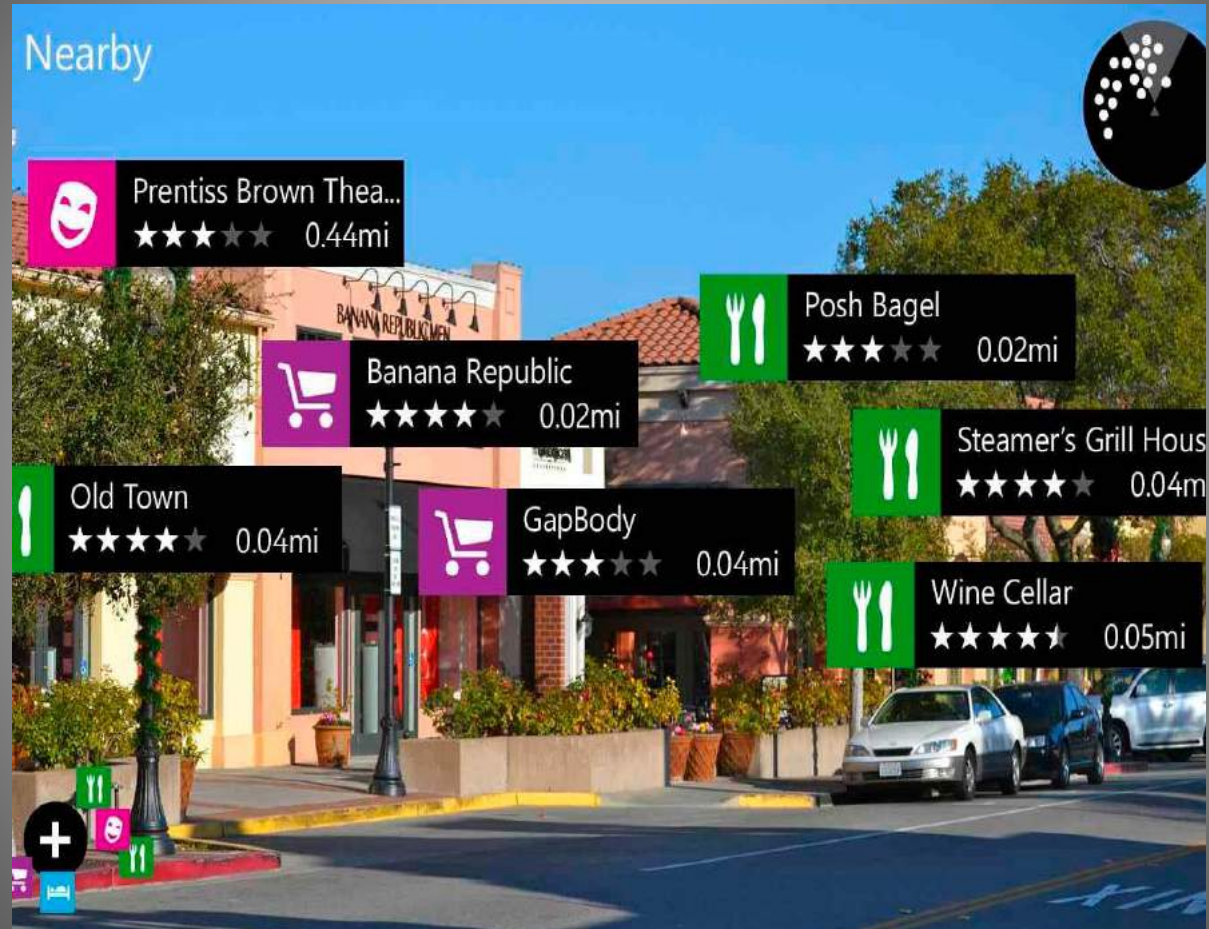
ANDROID



AR Enters the Mainstream



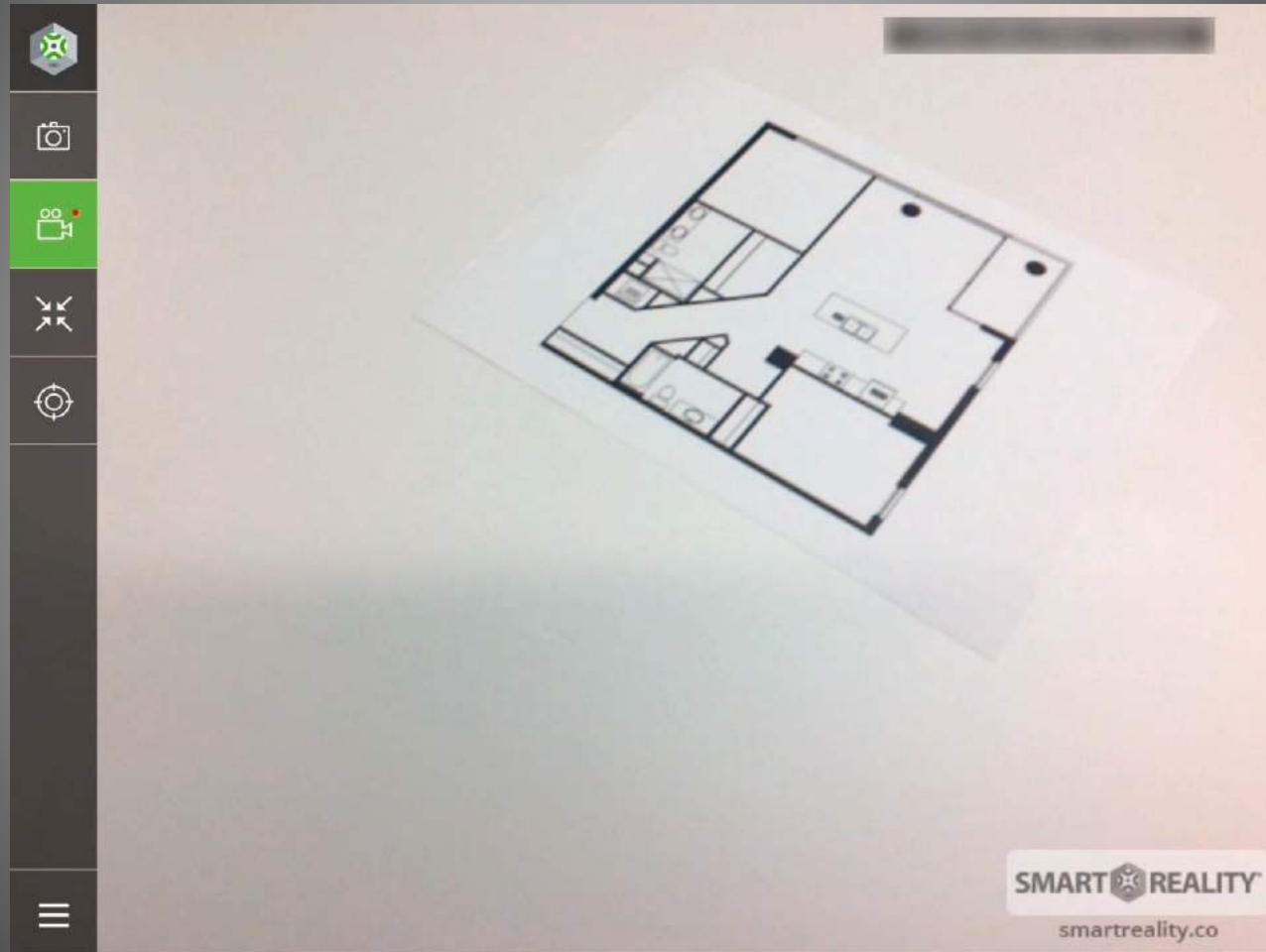
What is Augmented Reality



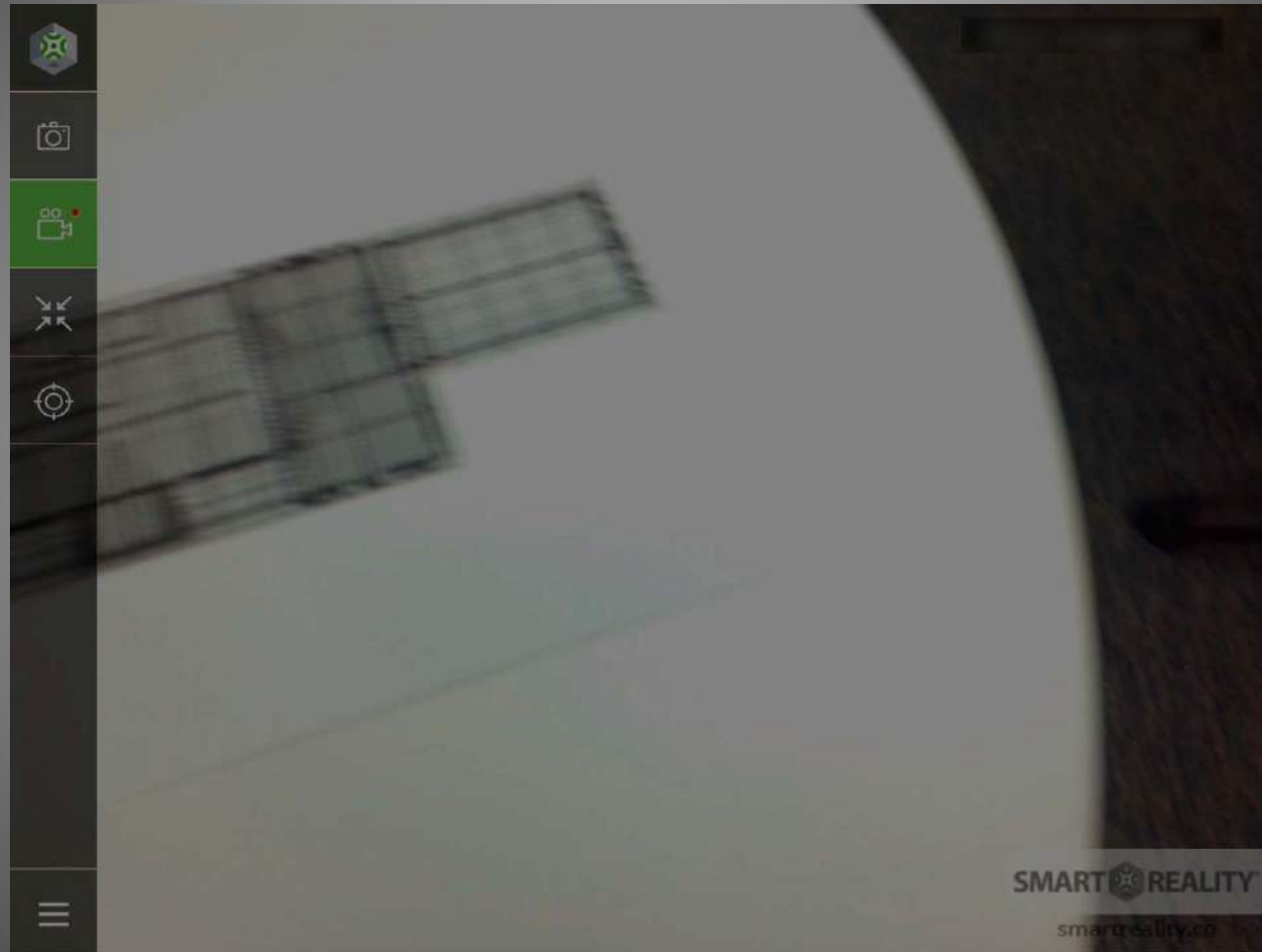
What is Augmented Reality?



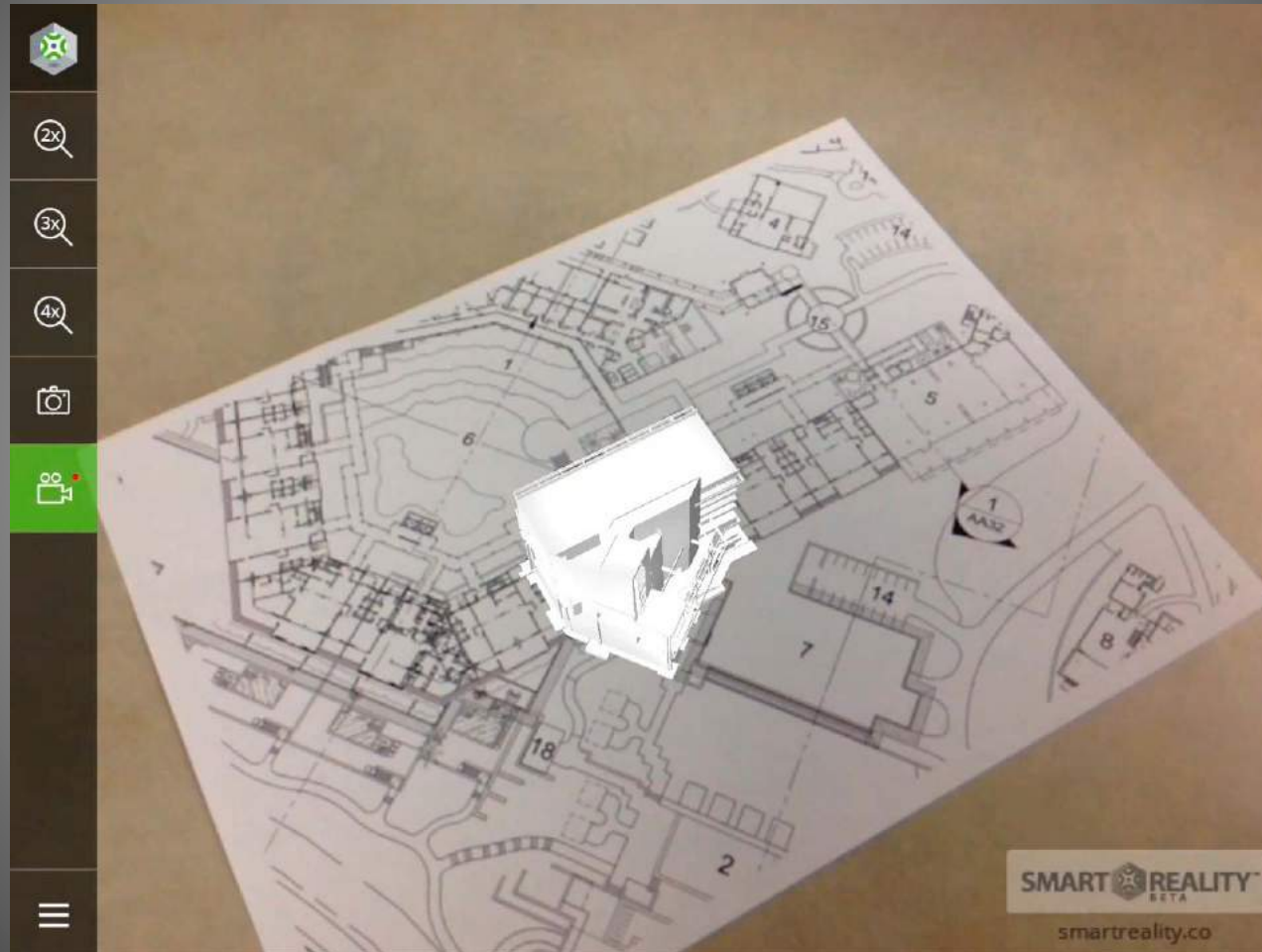
Visualize Plans



Visualize Elements of a Building



Simplify Demo/Construction Schedule



Next-Gen Hardware



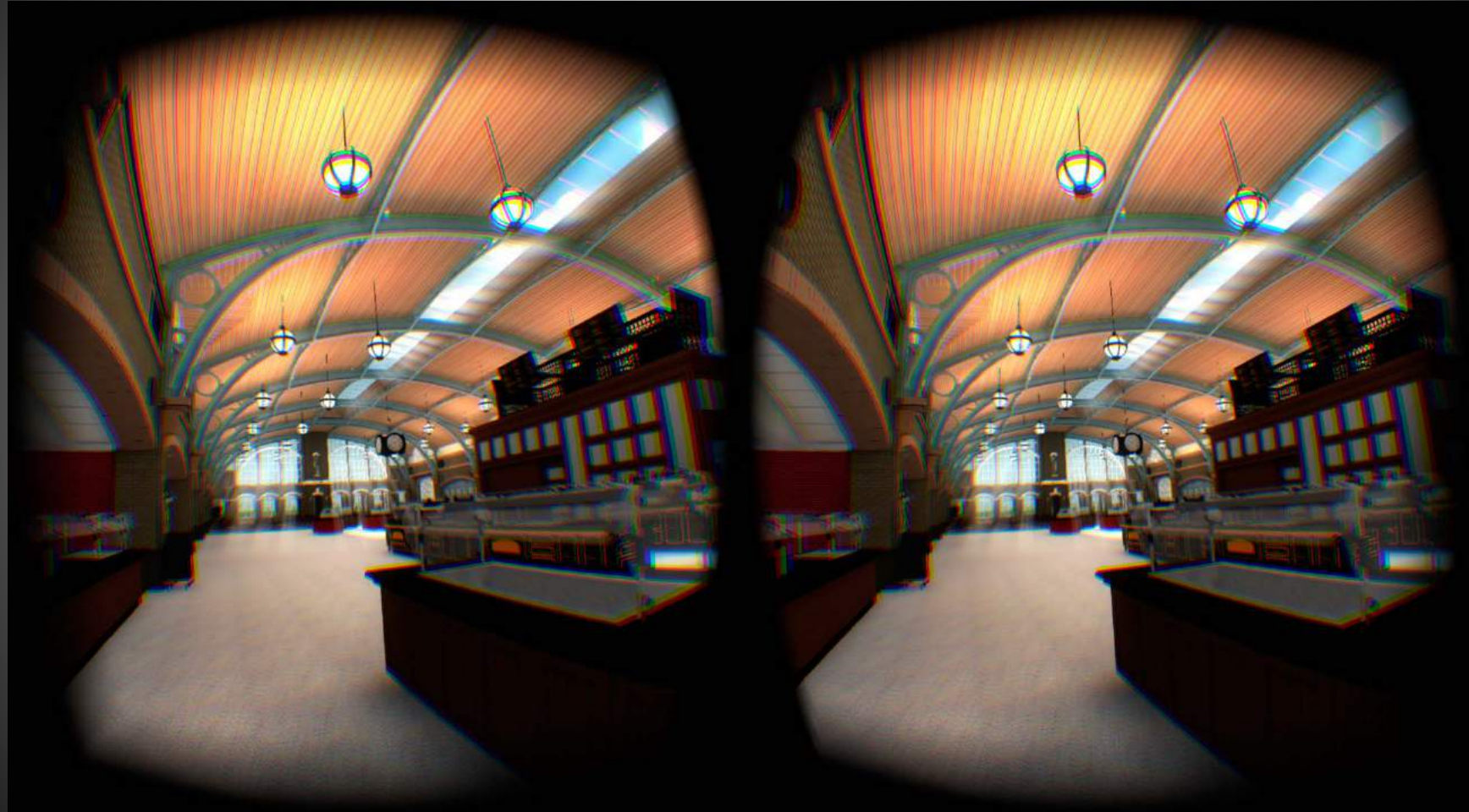
Others Jump in the Game



VR and BIM



VR and BIM



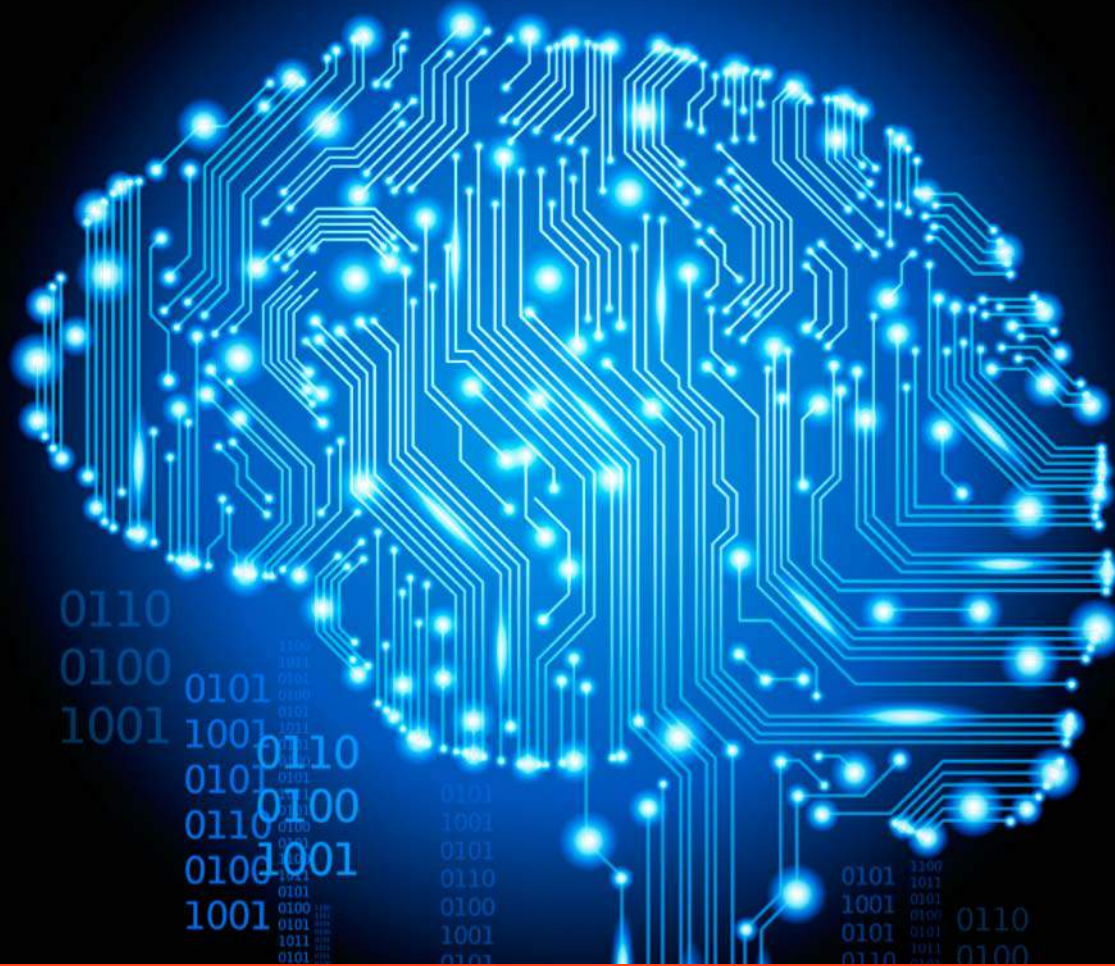
VR Before Construction



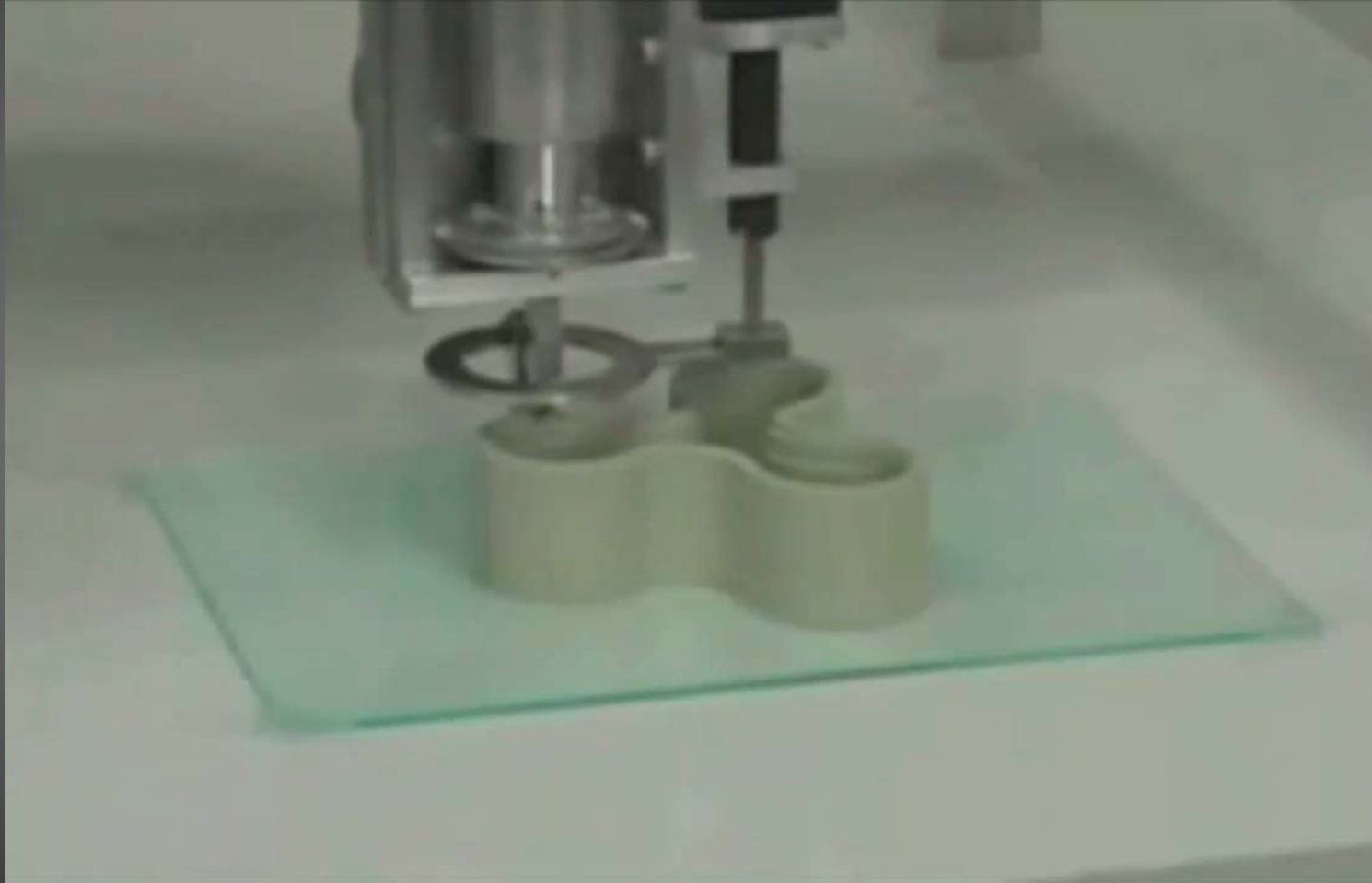
UI Integration of BIM Data



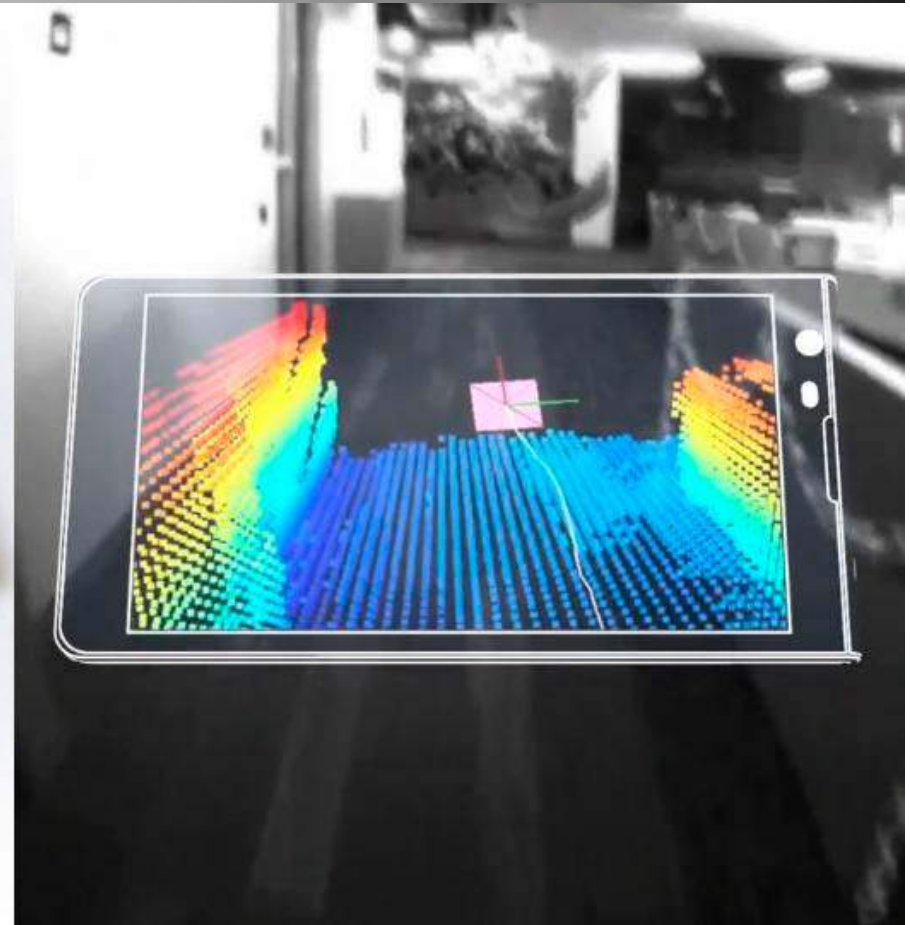
Future



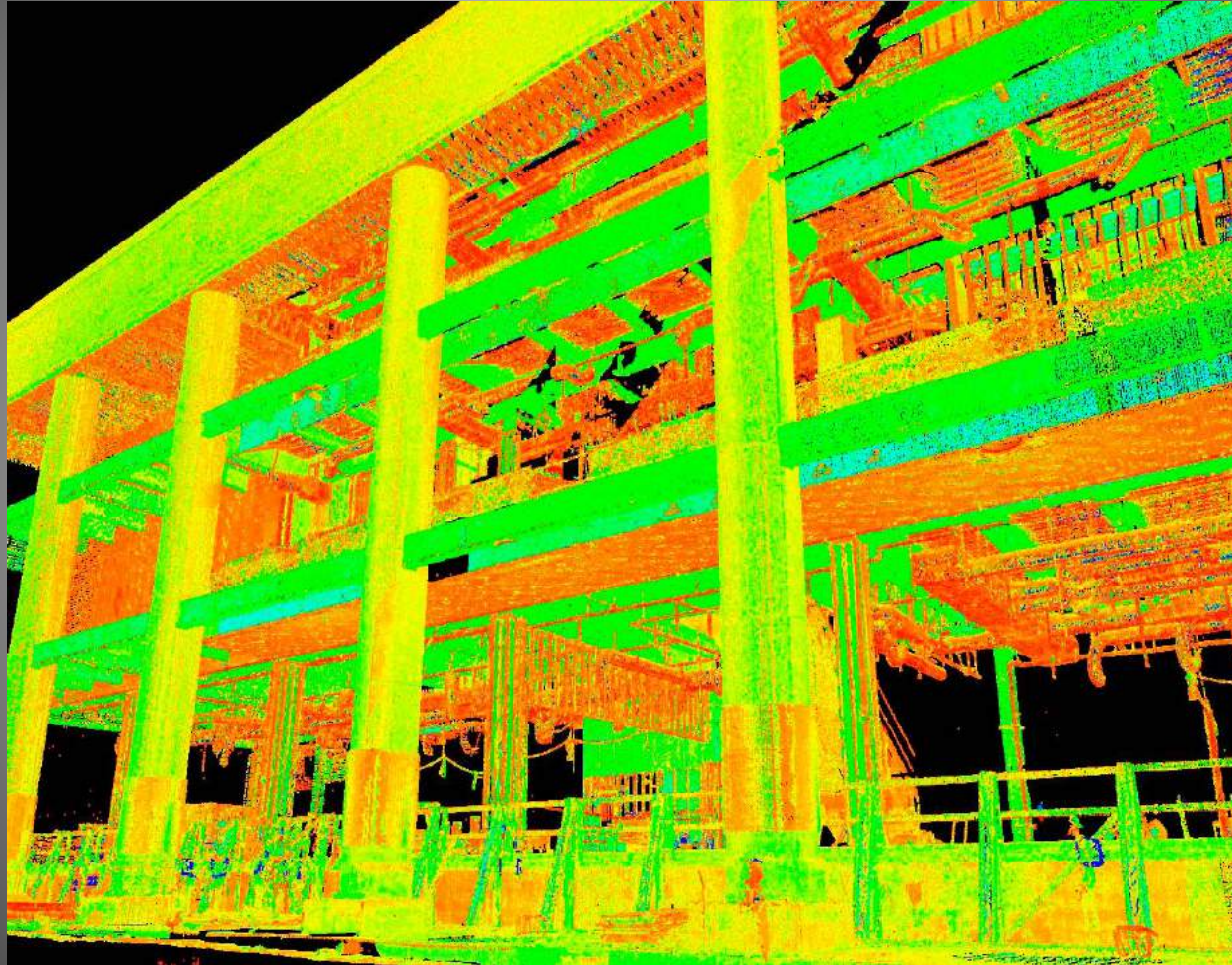
BIM Feeding 3D Printing



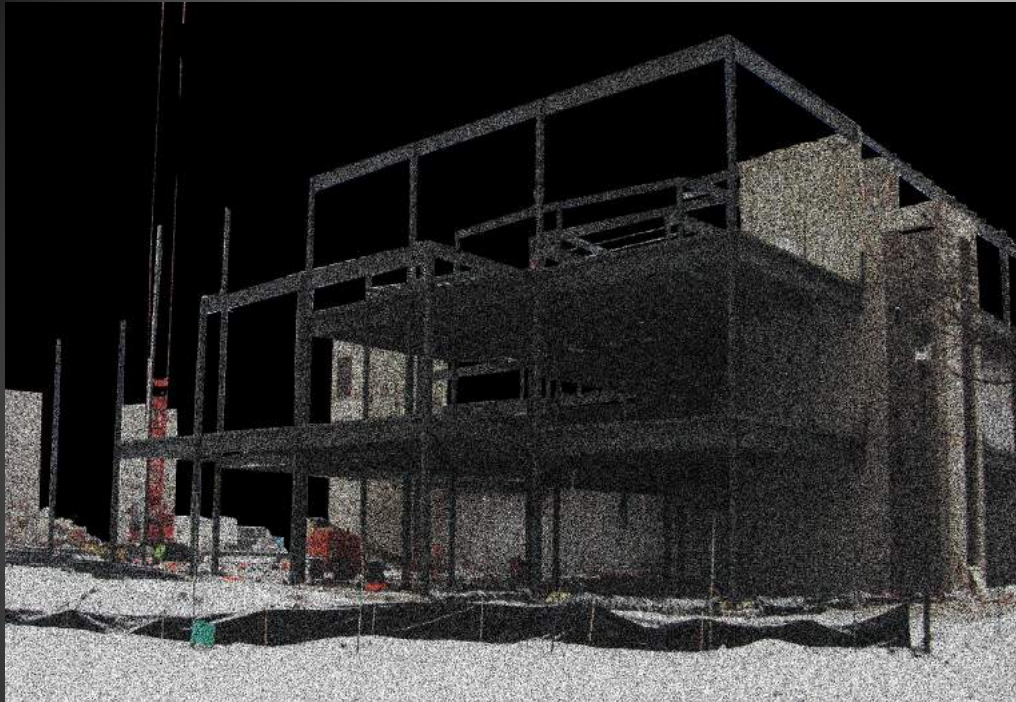
3D Scanning In Your Pocket



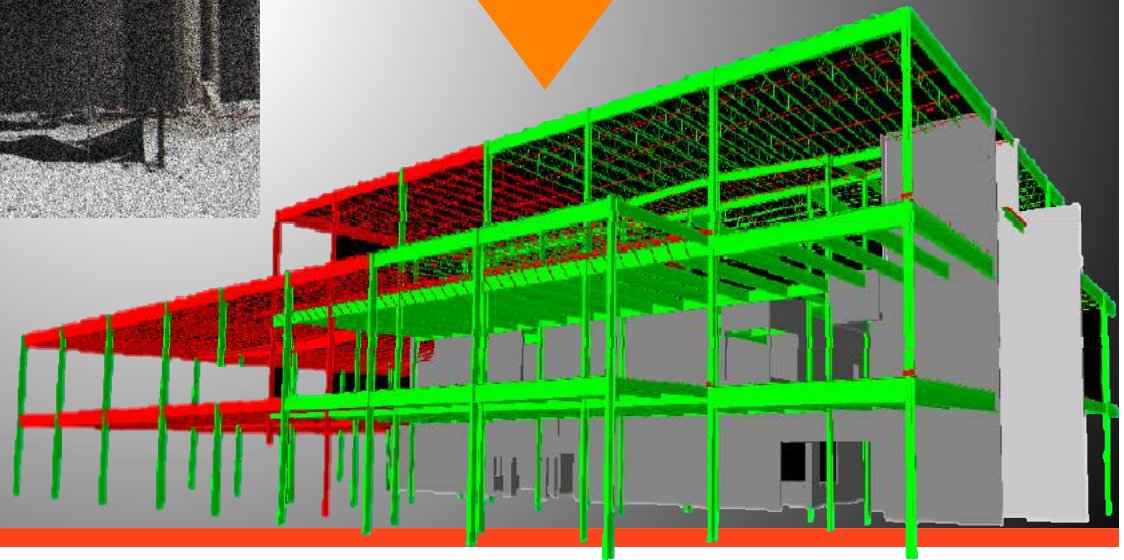
Coordination



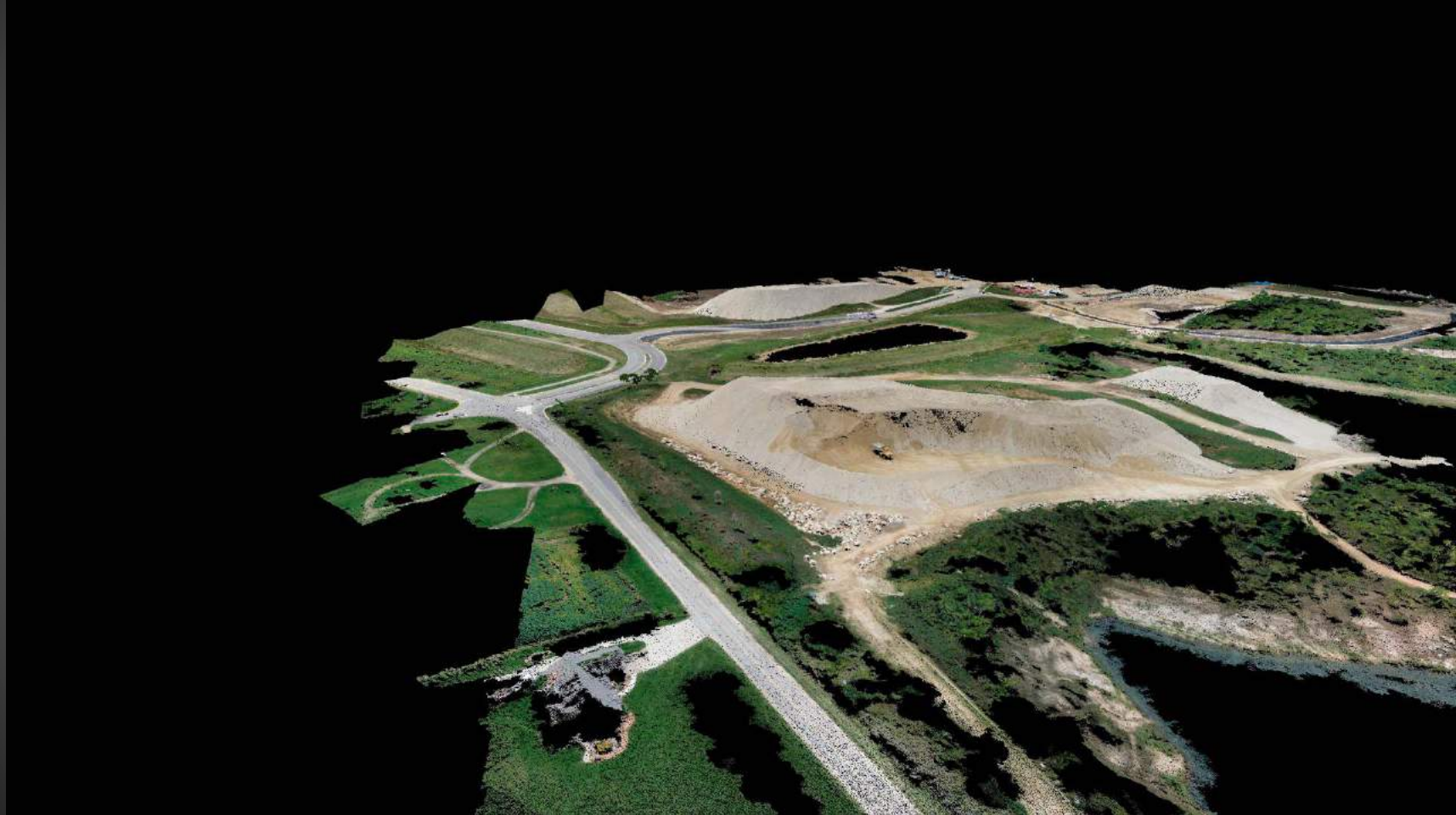
Verification



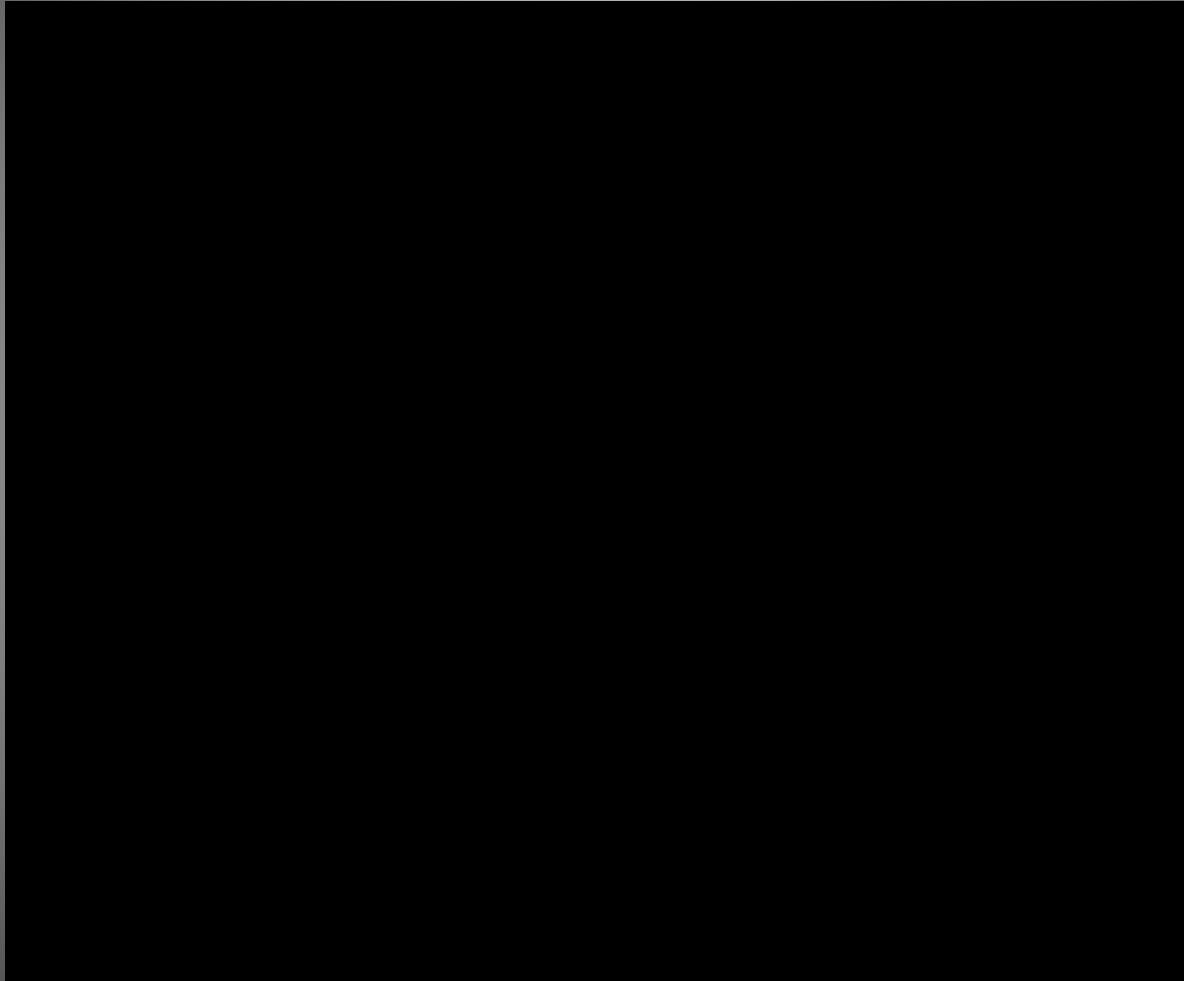
72% Complete



Scan to Quantity Verification

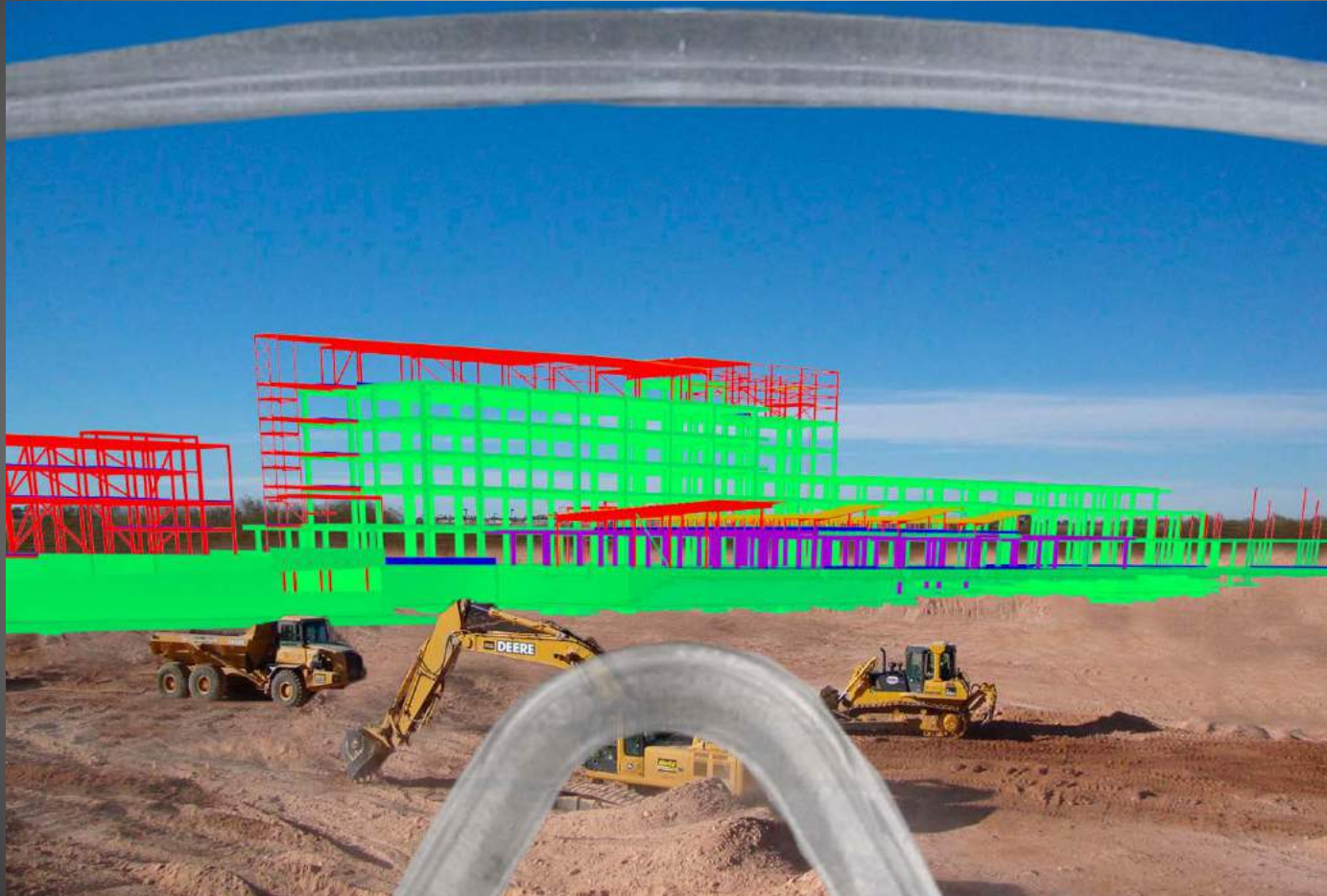


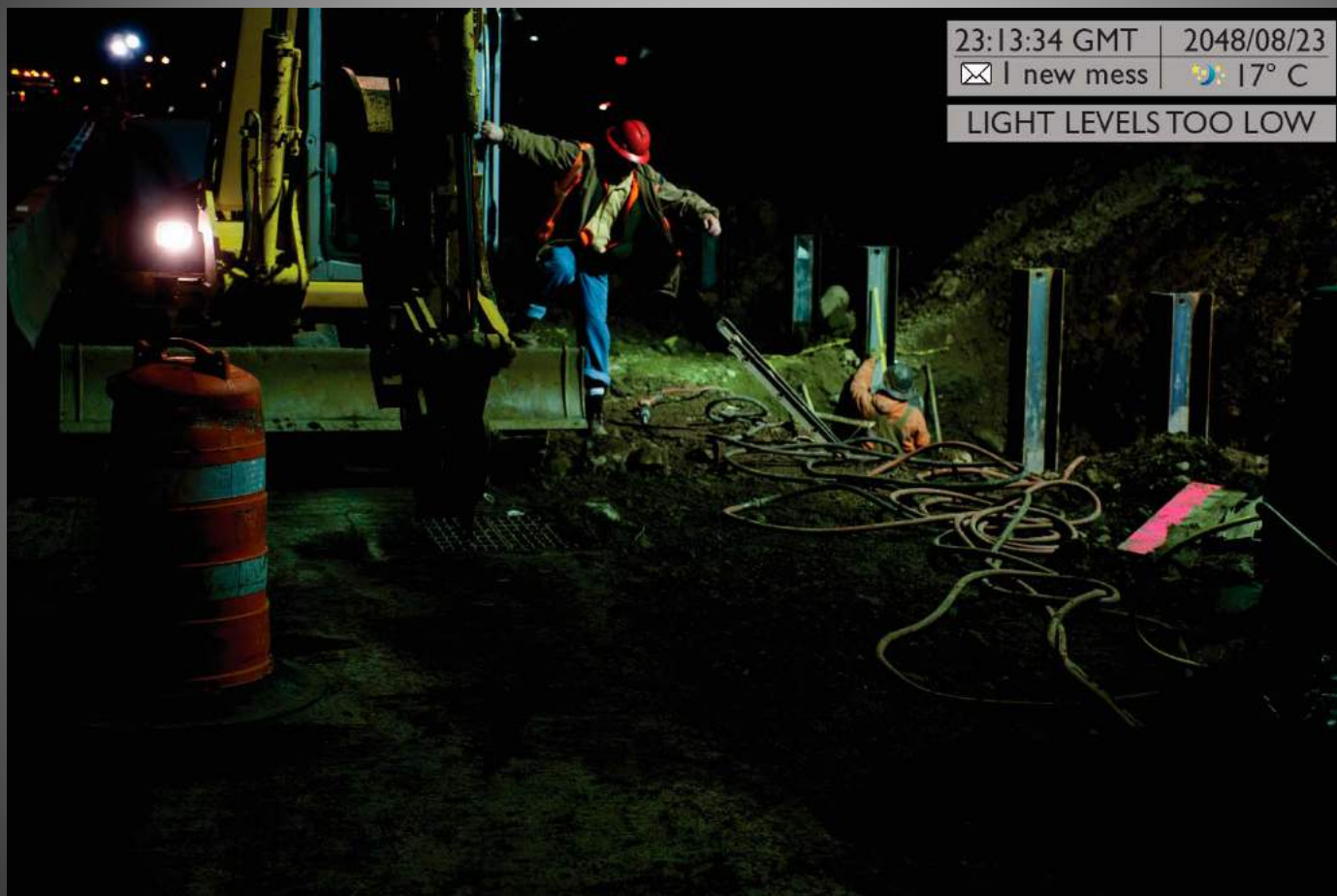
Fabrication



AR Integrated into Hardhats









23:13:34 GMT | 2048/08/23
✉ | new mess | 🌤️ 17° C
HEADLAMP ENGAGED

Smart Hardhat



Smart Hardhat



Smart Hardhat



Indoor Wayfinding



Overlay Instructions



The Future is What We Can Imagine



Questions/Comments



Mike Whaley

mwhaley@turissystems.com

*"The true sign of intelligence is not
knowledge, but imagination."*

Albert Einstein





TURISTM