



# Urban Yard Project Proposal

Prepared By: **G-FOUR**

Elms Realty Corp



# Agenda

- Project Understanding and Approach
- Firm Introduction
- Relevant Projects
- Team Organizational Chart
- Milestone Project Schedule
- Sample 2-week look ahead
- Staffing Chart
- Summary Estimate
- Detailed Trade Take-off
- Value Engineering Proposal
- Construction Site Logistics Plan
- Constructability Review
- Quality Assurance/ Quality Control Plan
- Construction Site Safety Plan
- Sustainable Construction Plan
- Construction Technology Initiatives



# Project Understanding

**Project Name:** Urban Yard

**Project Address:** 40-09 21st St.

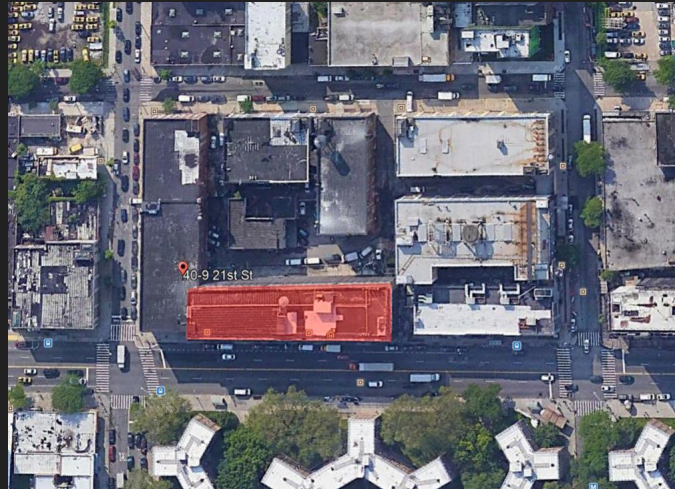
**Long Island City, NY 11101**

**Owner:** Elms Realty

**Architect:** Murdock Solon Architects

**Structural Engineer:** Bluesky  
Design

**MEP Engineer:** 2LS Consulting  
Engineering





# Project Understanding

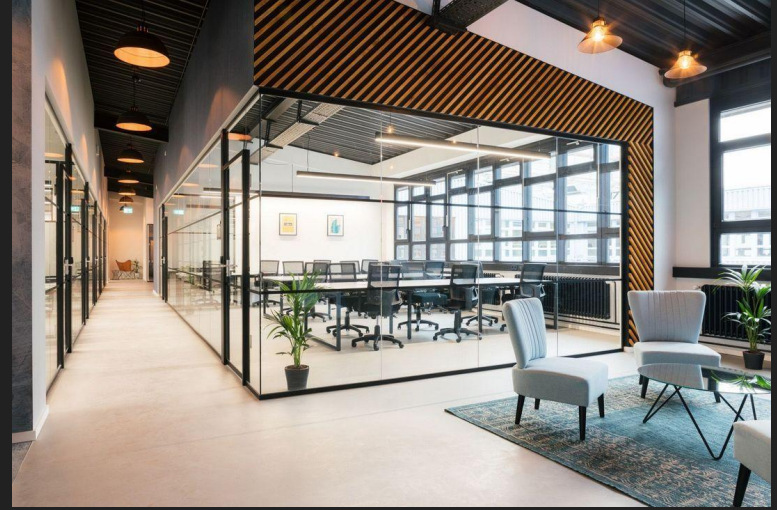
## Scope of Work:

- Project floor area: 86,040 sqft
- Installation of 2 new elevators
- Lobby Renovation
- Tenant Amenity Center, new roof bulkhead
- Public restrooms, main fire stairwell
- MEP systems
- Signage, Flooring, and windows



# Firm Introduction

- Founded in 1985 by Hassan Qamar
- Firm Location: 3541 Steinway Street  
Long Island City, NY 1101
- Firm Size: \$200 Million Annually
- 225 Full-time Staff
- Internship Program
- LEED accredited professionals



# Relevant Projects

## Gantry Point, 25-11 49th Ave, Long Island City, NY

- Office building
- 9 stories, 240,000 sq.ft office space
- Architect: STUDIOS
- Completion: 2020
- Existing building renovation and new construction
- Old industrial building and modern glass building interlocked





# Relevant Projects

## 129 Lafayette Street, New York, NY

- Building Use: Residential
- Size: 81,000 sq.ft
- Year of Renovation: 2004

Interior renovation of existing building originally built in 1900

New systems, elevators, new structural roof.



# Relevant Projects

## 5 Court Square, Long Island City, New York, NY 11101

- Building Use: Apartment building
- Size: 80,000 sq.ft, 11 stories
- Architect: My Architect PC
- Year of Completion: 2019
- Demolition of existing structure, new building
- Modernistic glass facade
- 60 luxury apartments, with 10ft ceiling height





# Relevant Projects

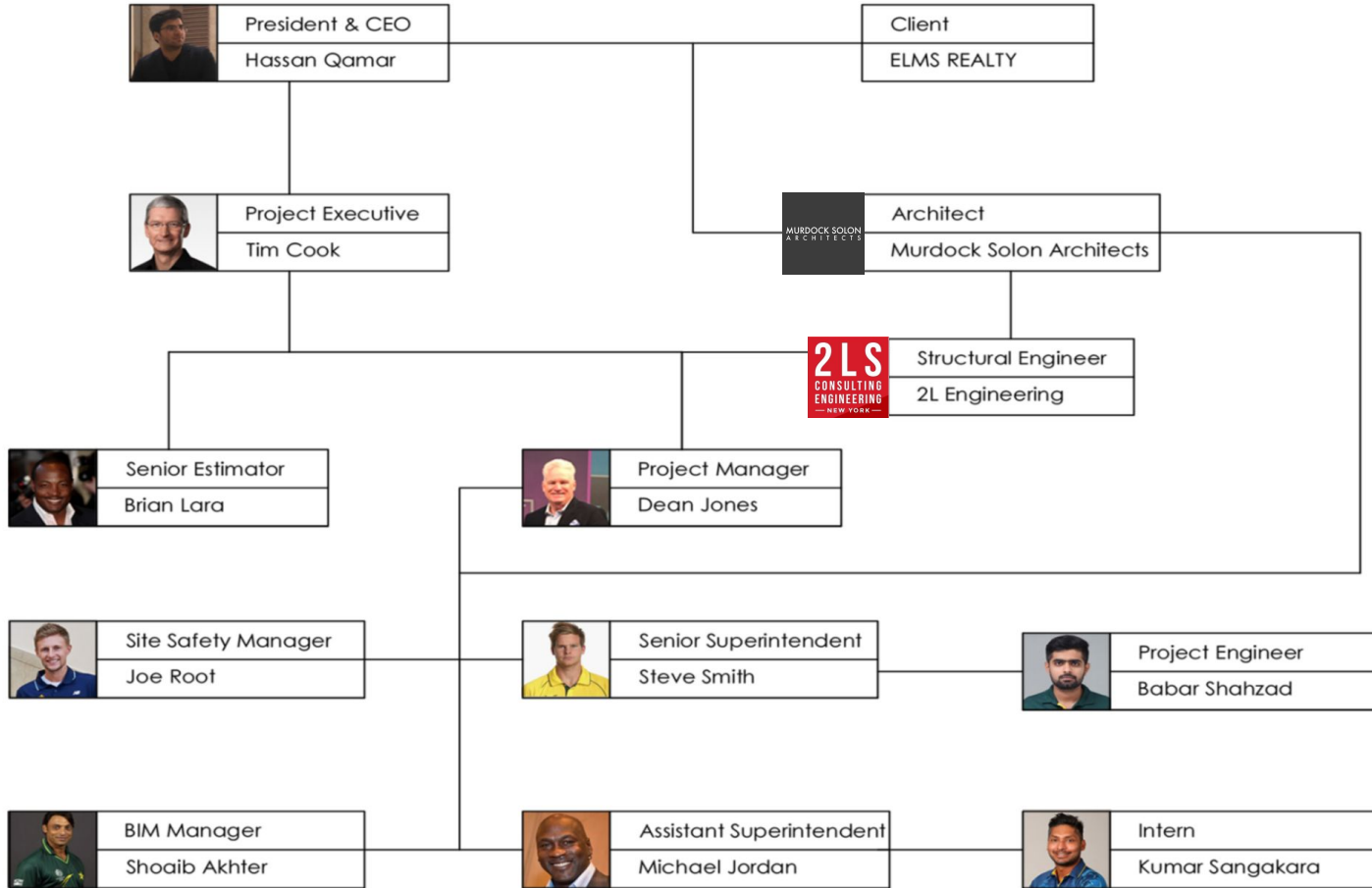
## Pratt Institute - Student Union

- Location: 200 Willoughby Ave, Brooklyn, NY 11205
- Completion: October 26th, 2019
- Size: 60,856 sq.ft
- Original Masonry Structure built in 1887

Bright atmosphere, lighting fixtures installed, conference rooms



# Team Organizational Chart



# Milestone Schedule







# 2-Week look ahead

40-09 21 St Two Week Look Ahead											
Interior Renovation	May-25	May-26	May-27	May-28	May-29	May-30	May-31	Jun-01	Jun-02	Jun-03	Jun-04
Mobilization	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
Site Fencing	X	X	X	X	--	--	X	X	X	--	--
Temporary site office	X	X	X	X	--	--	X	X	X	--	--
Site Preparation	X	X	X	X	--	--	X	X	X	--	--
<b>Earth work</b>					--	--					
Demolishing	--	X	X	X	--	--	X	X	X	X	X
Excavation	--	X	X	X	--	--	X	X	X	X	X





# Staffing Chart

Name	Role	2022		
		Avg Hours	Total	% age Of
Hassan Qamar	Principal /CEO	6	66	4%
Tim Cook	Project Executive	15	180	10%
Dean Jones	Project Manager	62	747	41%
Brian Lara	Senior Estimator	26	312	17%
Steve Smith	Senior Superintendent	152	1.820	100%
Michael Jordan	Asst. Superintendent	152	1.820	100%
Babar Shahzad	Project Engineer	147	1.760	97%
Joe Root	Site Safety Manager	152	1.820	100%
Shoaib Akhtar	BIM Manager	18	210	12%
Kumar Sangakara	Intern	35	415	23%
<b>Total</b>		<b>765</b>	<b>9.150</b>	



Project URBAN YARD  
 Address 40-09 21 St Long Island City, NY 11101  
 Firm: G-Four Construction Group  
 Address 3541 Steinway Street,  
 Long Island City, NY 11101

Date: 04/26/2021

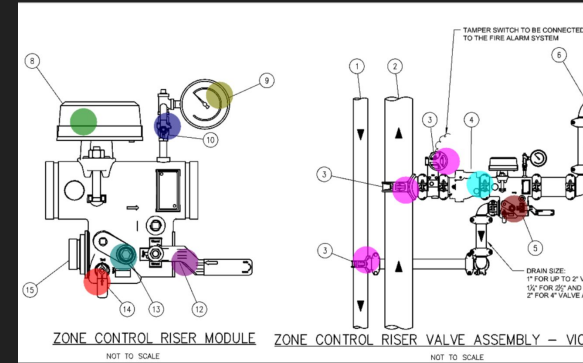
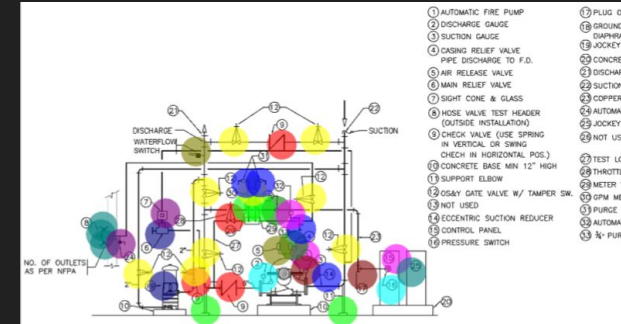
Project Area: 86,040/-

DIVISION	TRADE DISCRIPTION	COST (\$)	COST/SFT	%
1	GENERAL REQUIREMENTS	604,987.56	7.03	6.68%
2	EXISTING CONDITIONS	106,869.06	1.24	1.18%
3	CONCRETE	604,081.89	7.02	6.67%
4	MASONRY	327,852.54	3.81	3.62%
5	METALS	914,726.70	10.63	10.10%
6	WOOD, PLASTICS & COMPOSITIONS	158,492.25	1.84	1.75%
7	THERMAL & MOISTURE PROTECTION	259,927.29	3.02	2.87%
8	OPENINGS	153,058.23	1.78	1.69%
9	FINISHINGS	270,795.33	3.15	2.99%
10	SPECIALTIES	100,529.37	1.17	1.11%
11	EQUIPMENTS	177,511.32	2.06	1.96%
12	FURNISHINGS	534,345.30	6.21	5.90%
13	SPECIAL CONSTRUCTIONS	211,926.78	2.46	2.34%
14	CONVEYING EQUIPMENTS	167,548.95	1.95	1.85%
21	FIRE SUPPRESSION	704,611.26	8.19	7.78%
22	PLUMBING	498,118.50	5.79	5.50%
23	HEATING, VENTILATING & A/C	1,484,393.13	17.25	16.39%
26	ELECTRICAL	901,141.65	10.47	9.95%
27	COMMUNICATIONS	96,906.69	1.13	1.07%
28	ELECTRONIC SAFETY & SECURITY	208,304.10	2.42	2.30%
31	EARTHWORK	135,850.50	1.58	1.50%
32	EXTERIOR IMPROVEMENTS	217,360.80	2.53	2.40%
33	UTILITIES	217,360.80	2.53	2.40%
<b>TRADE SUBTOTAL</b>		<b>9,056,700.00</b>	<b>105.26</b>	<b>100.00%</b>
BUILDING PERMIT FEES		271,701	3.16	3%
GENERAL CONDITIONS-REIMBURSEABLES		452,835	5.26	5%
CM STAFF		724,536	8.42	8%
OVERHEAD AND PROFIT		905,670	10.53	10%
INSURANCE		362,268	4.21	4%
<b>FEE SUBTOTAL</b>		<b>2,717,010</b>	<b>31.58</b>	<b>30%</b>
<b>TOTAL</b>		<b>11,773,710.00</b>	<b>136.84</b>	

# Summary Estimate



# Detailed Sprinkler Take-off



PROJECT:

Interior Renovation Project

ADDRESS

40-09 21St Street Long Island City Ny 11101

DATE 4/26/2021

SR #	CSI SECT	DESCRIPTION	QUANTITY	WASTAGE (5%)	QTY WITH WASTAGE	UNIT OF MEASUREMENT	UNIT LABOR COST	UNIT MATERIAL COST	TOTAL LABOR COST	TOTAL MATERIAL COST	TOTAL ITEM COST	TOTAL TRADE COST
<b>DIV. 02 DEMOLITION</b>												\$ 25,674
<b>DEMOLISH THE EXISTING CONDITION</b>												
1		Remove Existing Piping And Sprinkler Heads In This Area.	16,980	0%	16,980	SF	\$ 1.3		\$ 22,074.0	\$ -	\$ 22,074	
2		Existing Sprinkler Heads To Be Removed And Replace.	240	0%	240	EA	\$ 15.0		\$ 3,600.0	\$ -	\$ 3,600	
<b>DIV. 21 FIRE SUPPRESSION</b>												\$ 92,468
<b>FIRE SPRINKLER PIPES</b>												
3		1" Dia Sprinkle Pipe	524	5%	550	LF	\$ 2.7	\$ 11.3	\$ 1,502.0	\$ 6,200.8	\$ 7,703	
4		1-1/2" Dia Sprinkler Pipe	101	5%	106	LF	\$ 3.0	\$ 12.5	\$ 320.5	\$ 1,323.2	\$ 1,644	
5		1-1/4" Dia Sprinkler Pipe	475	5%	499	LF	\$ 3.1	\$ 12.9	\$ 1,556.1	\$ 6,423.9	\$ 7,980	
6		2" Dia Sprinkler Pipe	40	5%	42	LF	\$ 3.9	\$ 16.1	\$ 163.8	\$ 676.2	\$ 840	
7		4" Dia Sprinkler Pipe	635	5%	667	LF	\$ 4.9	\$ 20.1	\$ 3,250.4	\$ 13,418.3	\$ 16,669	
8		6" Dia Fire Sprinkler Pipe	512	5%	538	LF	\$ 5.4	\$ 22.1	\$ 2,882.9	\$ 11,901.1	\$ 14,784	
9		2" Dia Sprinkler Drain Pipe	68	5%	71	LF	\$ 3.9	\$ 16.1	\$ 278.5	\$ 1,149.5	\$ 1,428	
10		3" Dia Dry Sprinkler Pipe	20	5%	21	LF	\$ 4.6	\$ 18.9	\$ 96.2	\$ 397.3	\$ 494	
<b>FIRE SPRINKLER PIPE JOINTS</b>												
11		1" Dia Elbow Joint	15	0%	15	EA	\$ 8.8	\$ 36.2	\$ 131.6	\$ 543.4	\$ 675	
12		1-1/4" Dia Elbow Joint	15	0%	15	EA	\$ 9.4	\$ 38.6	\$ 140.4	\$ 579.6	\$ 720	
13		2" Dia Elbow Joint	6	0%	6	EA	\$ 9.8	\$ 40.3	\$ 58.5	\$ 241.5	\$ 300	
14		3" Dia Elbow Joint	2	0%	2	EA	\$ 10.7	\$ 44.3	\$ 21.5	\$ 88.6	\$ 110	
15		6" Dia Elbow Joint	10	0%	10	EA	\$ 11.3	\$ 46.7	\$ 113.1	\$ 466.9	\$ 580	
16		4" Dia Elbow Joint	18	0%	18	EA	\$ 10.9	\$ 45.1	\$ 196.6	\$ 811.4	\$ 1,008	
17		4" Dia Elbow 45* Joint	7	0%	7	EA	\$ 8.8	\$ 36.2	\$ 61.4	\$ 253.6	\$ 315	
18		6" X 6" X 6" Dia Tee Joint	3	0%	3	EA	\$ 8.8	\$ 36.2	\$ 26.3	\$ 108.7	\$ 135	
19		6" X 6" X 4" Dia Tee Joint	1	0%	1	EA	\$ 7.8	\$ 32.2	\$ 7.8	\$ 32.2	\$ 40	
20		6" X 6" X 4" Dia Tee Joint	1	0%	1	EA	\$ 7.8	\$ 32.2	\$ 7.8	\$ 32.2	\$ 40	
21		4" X 4" X 4" Dia Tee Joint	2	0%	2	EA	\$ 6.6	\$ 27.4	\$ 13.3	\$ 54.7	\$ 68	
22		4" X 4" X 2" Dia Tee Joint	1	0%	1	EA	\$ 6.6	\$ 27.4	\$ 6.6	\$ 27.4	\$ 34	
23		4" X 4" X 1-1/4" Dia Tee Joint	10	0%	10	EA	\$ 6.2	\$ 25.8	\$ 62.4	\$ 257.6	\$ 320	
24		2" X 2" X 2" Dia Tee Joint	6	0%	6	EA	\$ 5.9	\$ 24.2	\$ 35.1	\$ 144.9	\$ 180	
25		2" X 1" X 2" Dia Tee Joint	1	0%	1	EA	\$ 5.9	\$ 24.2	\$ 5.9	\$ 24.2	\$ 30	



26	1-1/2" X 1-1/4" X 4" Dia Tee Joint	1	0%	1	EA	\$	5.5	\$	22.5	\$	5.5	\$	22.5	\$	28
27	1" X 1-1/4" X 1" Dia Tee Joint	6	0%	6	EA	\$	5.5	\$	22.5	\$	32.8	\$	135.2	\$	168
28	1-1/4" X 1-1/2" X 1" Dia Tee Joint	1	0%	1	EA	\$	4.9	\$	20.1	\$	4.9	\$	20.1	\$	25
29	1-1/4" X 1-1/4" X 1" Dia Tee Joint	5	0%	5	EA	\$	4.9	\$	20.1	\$	24.4	\$	100.6	\$	125
30	1-1/2" X 2" X 1-1/2" Dia Tee Joint	1	0%	1	EA	\$	4.7	\$	19.3	\$	4.7	\$	19.3	\$	24
31	1" X 1" X 1" Dia Tee Joint	5	0%	5	EA	\$	3.5	\$	14.5	\$	17.6	\$	72.5	\$	90
32	1" X 1" X 1" Dia Tee Joint	2	0%	2	EA	\$	3.5	\$	14.5	\$	7.0	\$	29.0	\$	36
33	1" X 1-1/4" X 1" Dia Tee Joint	1	0%	1	EA	\$	3.1	\$	12.9	\$	3.1	\$	12.9	\$	16
34	Ground Face Union-Non Corrosive Diaphragm 3/32" Orifice	1	0%	1	EA	\$	3.9	\$	16.1	\$	3.9	\$	16.1	\$	20
<b>FIRE SPRINKLER HEADS</b>															
35	Concealed Pendant Sprinkler Head, Manufacturer: Tyco, Model No: Tyco-	29	0%	29	EA	\$	23.4	\$	96.6	\$	678.6	\$	2,801.4	\$	3,480
36	Pendant Sprinkler Head, Manufacturer: Tyco, Model No: Tyco-	150	0%	150	EA	\$	24.4	\$	100.6	\$	3,656.3	\$	15,093.8	\$	18,750
<b>FIRE SPRINKLER VALVES</b>															
37	6" Dia Ball Valve	21	0%	21	EA	\$	16.6	\$	68.4	\$	348.1	\$	1,436.9	\$	1,785
38	4" Dia Ball Valve	6	0%	6	EA	\$	12.7	\$	52.3	\$	76.1	\$	314.0	\$	390
39	6" Dia Double Check Detector Assembly	1	0%	1	EA	\$	29.3	\$	120.8	\$	29.3	\$	120.8	\$	150
40	6" Dia Check Valve	2	0%	2	EA	\$	21.5	\$	88.6	\$	42.9	\$	177.1	\$	220
41	6" Dia Os&Y Gate Valve With Tamper Switch	10	0%	10	EA	\$	34.1	\$	140.9	\$	341.3	\$	1,408.8	\$	1,750
42	3" Dia Dry Valve	1	0%	1	EA	\$	14.6	\$	60.4	\$	14.6	\$	60.4	\$	75
43	Check Valve For Pump	4	0%	4	EA	\$	16.6	\$	68.4	\$	66.3	\$	273.7	\$	340
44	Butterfly Valve For Pump	3	0%	3	EA	\$	14.6	\$	60.4	\$	43.9	\$	181.1	\$	225
45	Throttle Valve-O,S&Y Valve For Pump	1	0%	1	EA	\$	16.6	\$	68.4	\$	16.6	\$	68.4	\$	85
46	Os&Y Gate Valve With Tamper Switch For Pump	8	0%	8	EA	\$	34.1	\$	140.9	\$	273.0	\$	1,127.0	\$	1,400
47	Shutoff Valve For Pump	1	0%	1	EA	\$	29.3	\$	120.8	\$	29.3	\$	120.8	\$	150
48	Floor Control Valve Assembly	7	0%	7	EA	\$	32.2	\$	132.8	\$	225.2	\$	929.8	\$	1,155
49	Casing Relief Valve	1	0%	1	EA	\$	19.5	\$	80.5	\$	19.5	\$	80.5	\$	100
50	Air Release Valve	1	0%	1	EA	\$	18.5	\$	76.5	\$	18.5	\$	76.5	\$	95
51	Main Relief Valve	1	0%	1	EA	\$	17.6	\$	72.5	\$	17.6	\$	72.5	\$	90
52	Test And Drain Valve	1	0%	1	EA	\$	26.3	\$	108.7	\$	26.3	\$	108.7	\$	135
53	Automatic Air Vent Valve	1	0%	1	EA	\$	19.5	\$	80.5	\$	19.5	\$	80.5	\$	100
54	Meter Valve	2	0%	2	EA	\$	16.6	\$	68.4	\$	33.2	\$	136.9	\$	170
55	Isolation Valve For Pressure Gauge	1	0%	1	EA	\$	14.6	\$	60.4	\$	14.6	\$	60.4	\$	75
56	Hose Valve Test Header	3	0%	3	EA	\$	28.3	\$	116.7	\$	84.8	\$	350.2	\$	435
57	3/4" Dia Purge Valve	3	0%	3	EA	\$	21.5	\$	88.6	\$	64.4	\$	265.7	\$	330
<b>METERS</b>															
58	Bypass Meter	1	0%	1	EA	\$	126.8	\$	523.3	\$	126.8	\$	523.3	\$	650
59	Gpm Meter-Venturi Package	1	0%	1	EA	\$	146.3	\$	603.8	\$	146.3	\$	603.8	\$	750
60	Discharge Gauge	1	0%	1	EA	\$	24.4	\$	100.6	\$	24.4	\$	100.6	\$	125
61	Suction Gauge	1	0%	1	EA	\$	23.4	\$	96.6	\$	23.4	\$	96.6	\$	120
62	Pressure Gauge	1	0%	1	EA	\$	19.5	\$	80.5	\$	19.5	\$	80.5	\$	100

<b>CONTROL SWITCHES</b>												
63	Pressure Switch	1	0%	1	EA	\$ 24.4	\$ 100.6	\$ 24.4	\$ 100.6	\$ 125		
64	Discharge Water flow Switch	1	0%	1	EA	\$ 26.3	\$ 108.7	\$ 26.3	\$ 108.7	\$ 135		
65	Flow Switch	1	0%	1	EA	\$ 25.4	\$ 104.7	\$ 25.4	\$ 104.7	\$ 130		
<b>FIRE SPRINKLER SYSTEM PUMPS</b>												
66	Jockey Pump, Manufacturer: Starite, Model No: Hp10D3-02, Gpm: 7.5, Hd: 84, Rpm: 3500, Hp: 0.75, Volt: 208/3/60	1	0%	1	EA	\$ 102.4	\$ 422.6	\$ 102.4	\$ 422.6	\$ 525		
67	Automatic Fire Pump, Manufacturer: Pentair 911 Series, Model No: 383-7B, Gpm: 400, Hd: 65Psi, Rpm: 3600, Hp: 25, Volt: 208/3/60	1	0%	1	EA	\$ 92.6	\$ 382.4	\$ 92.6	\$ 382.4	\$ 475		
<b>PUMP CONTROLLER</b>												
22	Jockey Pump Controller	1	0%	1	EA	\$ 29.3	\$ 120.8	\$ 29.3	\$ 120.8	\$ 150		
68	Fire Pump Control Panel	1	0%	1	EA	\$ 24.4	\$ 100.6	\$ 24.4	\$ 100.6	\$ 125		
<b>MISCELLANEOUS</b>												
69	Elbow Supports	2	0%	2	EA	\$ 6.8	\$ 28.2	\$ 13.7	\$ 56.4	\$ 70		
70	Plug Or Pet Cock	1	0%	1	EA	\$ 14.6	\$ 60.4	\$ 14.6	\$ 60.4	\$ 75		
71	Site Glass	1	0%	1	EA	\$ 48.8	\$ 201.3	\$ 48.8	\$ 201.3	\$ 250		
72	Sign Cone And Glass	1	0%	1	EA	\$ 43.9	\$ 181.1	\$ 43.9	\$ 181.1	\$ 225		
73	Zone Control Drain	1	0%	1	EA	\$ 63.4	\$ 261.6	\$ 63.4	\$ 261.6	\$ 325		
							<b>TOTAL MATERIAL COST</b>	<b>\$ 74,437</b>				
							<b>TOTAL LABOR COST</b>	<b>\$ 43,705</b>				
<b>SUB TOTAL</b>									<b>\$ 118,142</b>	<b>\$ 118,142</b>		
<b>OVERHEAD &amp; PROFIT (20%)</b>									<b>20%</b>	<b>20%</b>	<b>23,628.37</b>	<b>23,628.37</b>
<b>TOTAL BID</b>									<b>\$ 141,770</b>	<b>\$ 141,770</b>		

# Value Engineering Proposal: LT7 light fixture

- Brand: Oracle
- Wall mount linear light
- Available in white
- Dimensions: L 2' W 2",4"
- Luminaire Lifetime: L70 at 50,000 hrs

- Brand: Limelight
- Wall mount linear light
- Available in white, black, silver
- Dimensions: L 2' W 2",4"
- Luminaire Lifetime: L70 at 72,000 hrs



# LT7 light fixture

## Oracle

- Cost per unit: \$180
- Quantity: 25
- Total Cost: \$4500

## Limelight

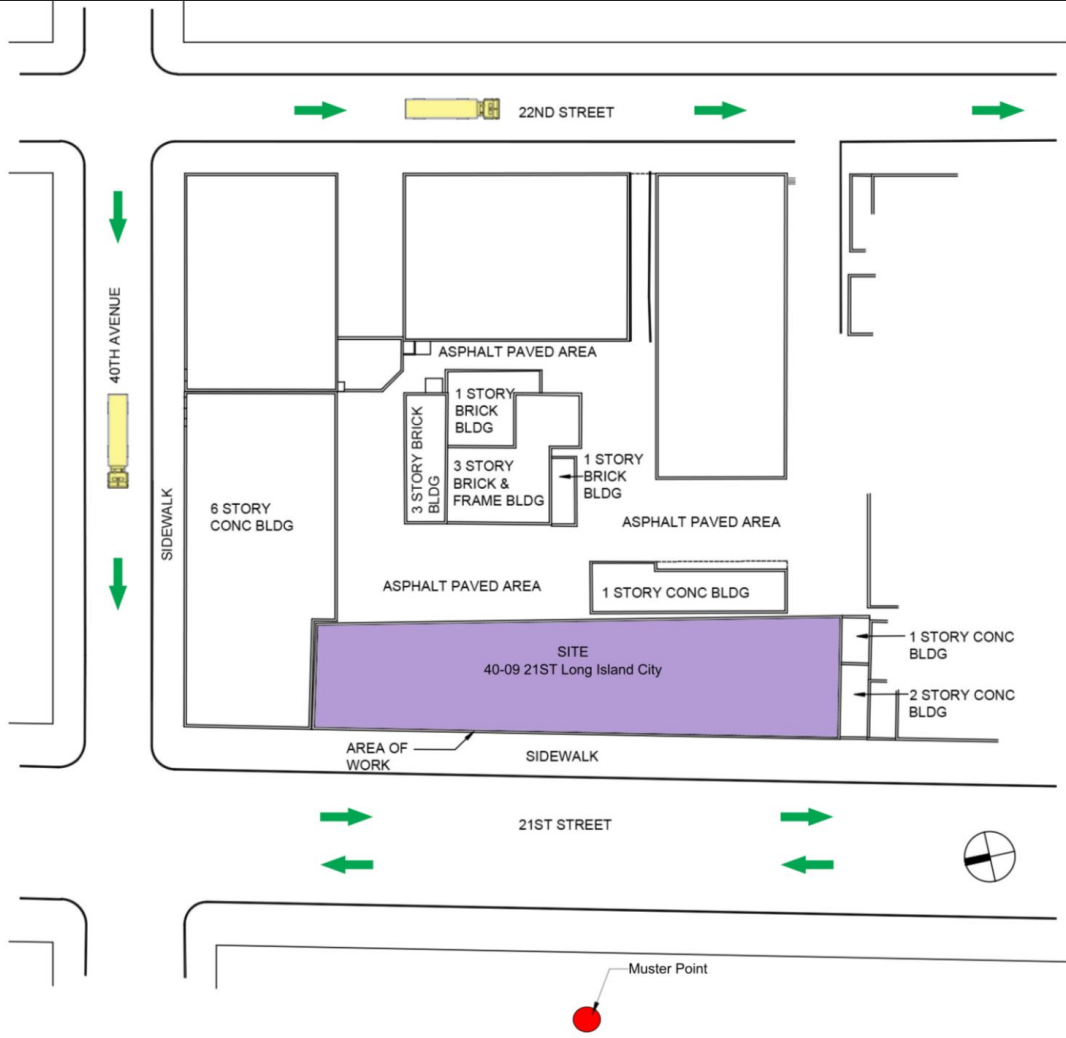
- Cost per unit: \$150
- Quantity: 25
- Total Cost: \$3759
- Cost Savings: \$750
- Percentage Saving: 20%



# Site Logistics Plan

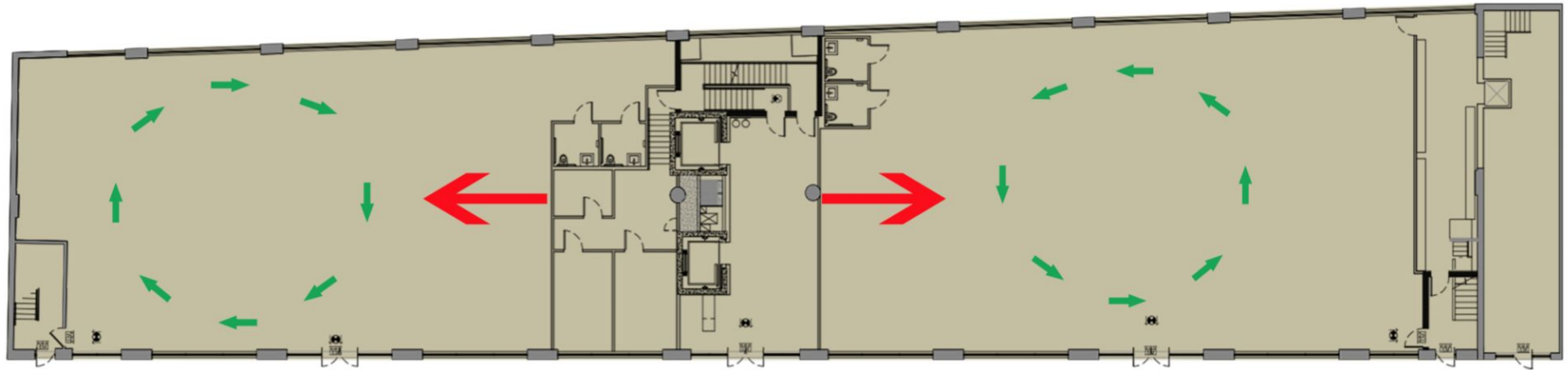








# Flow of Work



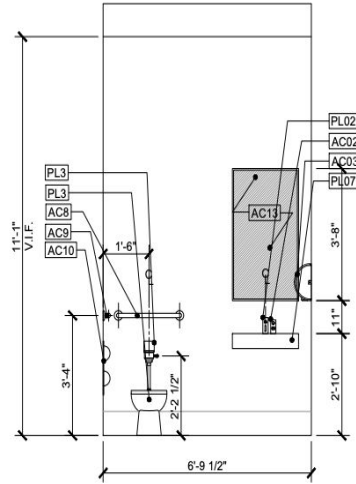
# Constructability Review

## Issue 1: ADA BATHROOM COMMERCIAL, TYP.

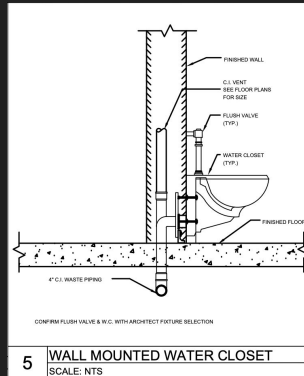
- A-403.00 indicating floor-mounted toilet

## Review Drawing

- P-403.00 wall-mounted toilet
- Bowl height adjusted between 15-19"
- Adv: Space Saving, cleaning



**06** ADA BATHROOM COMMERCIAL, TYP.  
SCALE: 3/8" = 1'- 0"



**5** WALL MOUNTED WATER CLOSET  
SCALE: NTS

## Request for Interpretation:

1. Issuance of CD drawings for ADA bathroom in architectural drawing set.

Project: Urban Yard 40-09 21<sup>st</sup> Street

To: Murdock Solon Architects

From: G-Four Construction

Date: May 30<sup>th</sup> 2021

RFI Number: 2021.05.30-001

Spec Section: A-403.00 & P-403.00

Specification Paragraph: n/a

Response:

453541 Steinway Street Long Island City, NY 11101. 646.220.8475

## Purpose of RFI 001.0

The following document is signed by the Project Manager and requests the architect at Murdock Solon to provide the CD drawing for the ADA bathroom. As per section A-403.00 a floor-mounted toilet is shown in the ADA BATHROOM COMMERCIAL, TYP. Section P-403.00 in the plumbing CD shows a wall-mounted toilet. We request if you can please review the specifications and CD drawings and make the following revision in the architectural drawing section A-

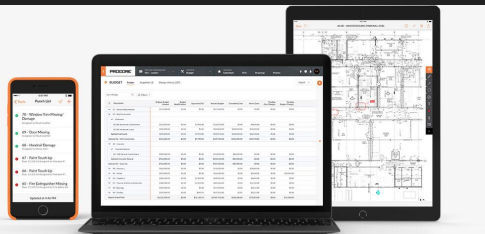
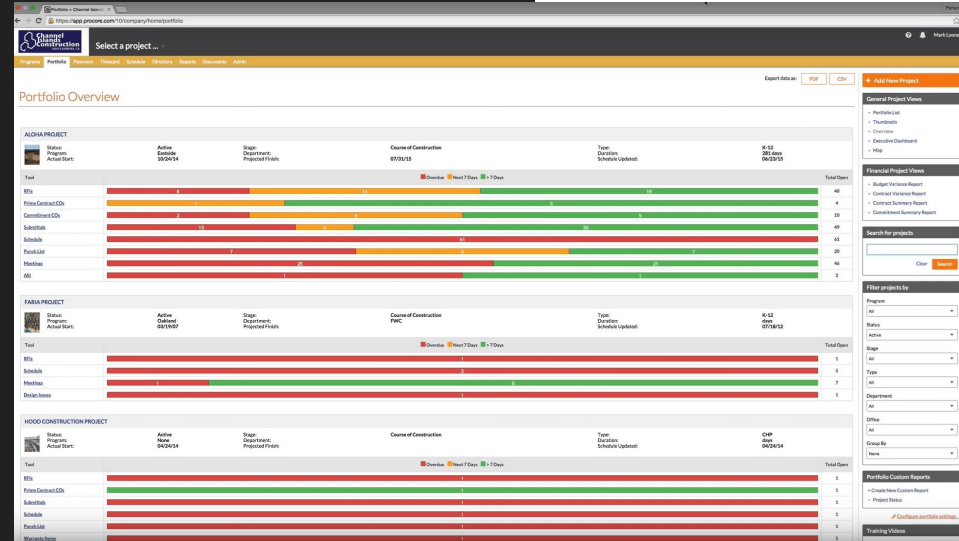


# Quality Assurance & Quality Control



## Quality Assurance:

- Submittals
- Sustainability
- Mock-ups and Sampling

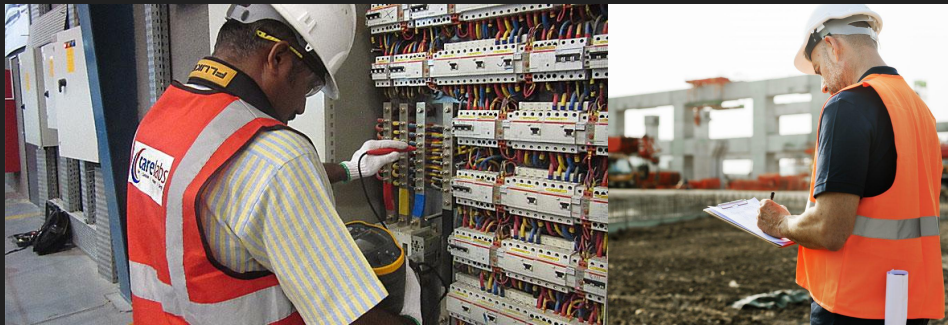




# Quality Assurance & Quality Control

## Quality Control:

- Delivery Inspection
- Pre-Inspection Checklist
- Material Testing and Inspections
- Commissioning



### STANDARD INSPECTION FORM GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY

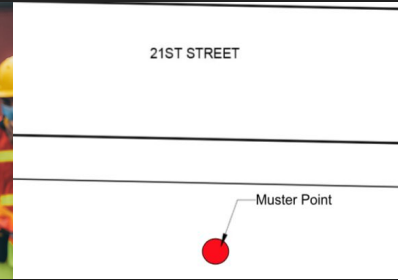
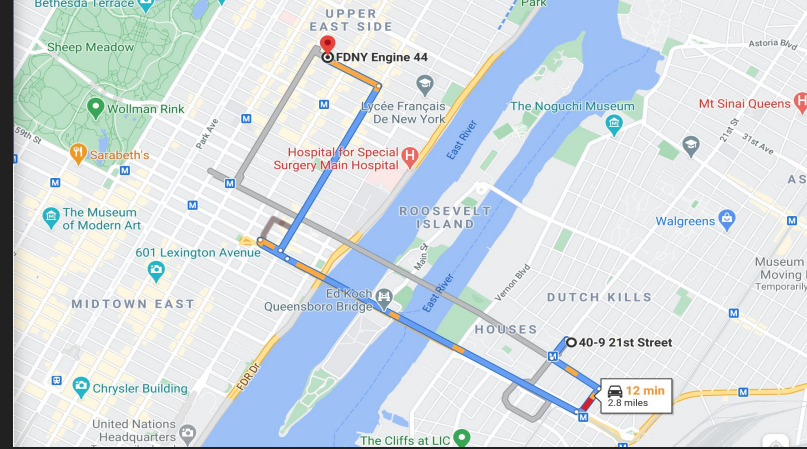
General Information	
Project Name	
Permittee	
NOI #	Date of Inspection
Start Time	End Time
Inspector's Name(s)	
Green Card Certification #	
Inspector's Contact Information	
Describe present phase of construction	
<input type="checkbox"/> Clearing/Grubbing <input type="checkbox"/> Rough Grading <input type="checkbox"/> Infrastructure <input type="checkbox"/> Demolition <input type="checkbox"/> Building Construction <input type="checkbox"/> Final Grading <input type="checkbox"/> Final Stabilization Notes:	
Type of Inspection:	
<input type="checkbox"/> Weekly routine <input type="checkbox"/> Pre-storm event <input type="checkbox"/> During storm event <input type="checkbox"/> Post-storm event <input type="checkbox"/> Due to a discharge of significant amounts of sediment	
Has there been a storm event since the last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If yes, provide: Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):	

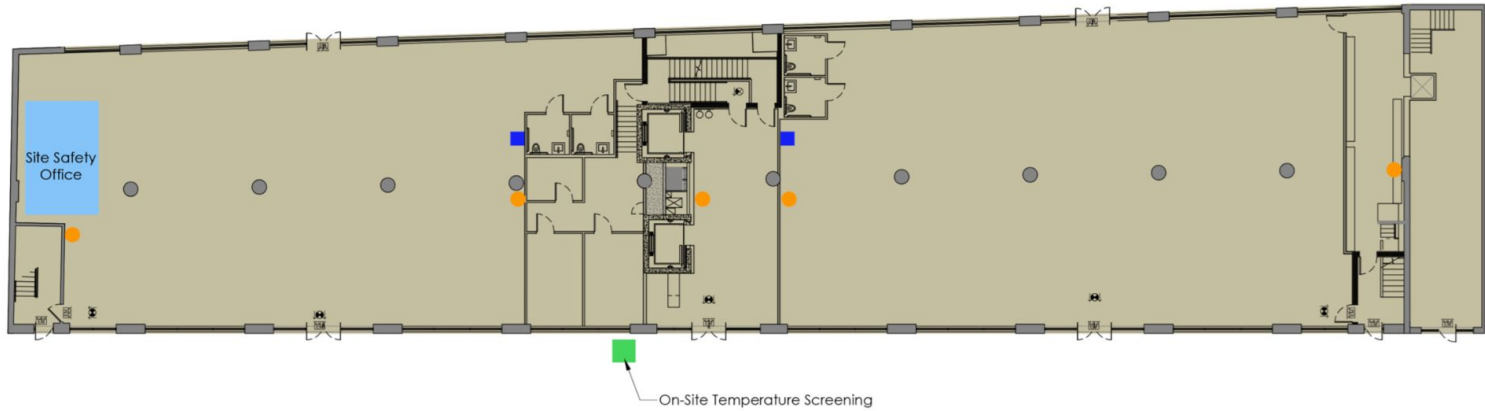
Permit Coverage and Plans			
Subject	Status	Corrective Action Needed and Notes	Date Corrected
1 Was an NOI submitted for all disturbed acres?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
2 Is the permittee listed above still in control of permitted activities at the site? (If no, submit a Transfer of Authorization form to MDE).	<input type="checkbox"/> Yes <input type="checkbox"/> No		
3 Do the approved plans reflect current site conditions?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
4 Are the approved E&S and SWM plans maintained at the site?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
5 Have the E&S or SWM plan approvals expired?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
6 Are all inspection reports and enforcement actions on file at the site?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
7 Is the site permanently stabilized, temporary erosion and sediment controls are removed or set to be removed, and stormwater discharges from construction activity are eliminated?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
8 If #6 is Yes, has a Notice of Termination been submitted to MDE?	<input type="checkbox"/> Yes <input type="checkbox"/> No		



# Construction Site Safety Plan

- 0.80 EMR (Experience Modification Rate)
  - Weekly feedback, site safety meetings
  - Training on handling equipment and machinery
  - Risk assessment
  - Emergency Muster Point across 21st Street
  - FDNY: Engine 44, 221 E 75th St, NY
- 
- COVID 19: On-Site temperature screening
  - Social Distancing on site





Legend:

- On-Site Temperature Screening
- Site Safety Office
- Eyewash/Handwash Station
- Fire Extinguisher



# Construction Site Safety Plan

## Fall Prevention:

- Guardrail Systems
- Safety Nets
- Protection from falling objects
- Personal Fall Arrest System (PFA)





# Construction Site Safety Plan

## Sidewalk: Pedestrian Safety

- Proper Signage
- Work will only be performed once correct signage is applied to detour pedestrians from the site until the scaffolding is fully erected.





# Construction Site Safety Plan

## Crane and Hoist:

- Daily Inspections
- PPE
- Crane loading capacity
- Crane Management System.



# Sustainability

- Buildings generate 40% annual ghg emissions
- Effective sustainability measures at G-FOUR :
  1. Noise Mitigation
  2. Waste Management
  3. Air Quality Control
  4. Fundamental Commissioning



# Sustainability

## Construction Noise Mitigation

- Sound Baffles
- Ear Protection
- Low-noise equipment options (acoustic insulators, porous materials such as cloths)



## Waste Management

- Labelled waste disposals
- Debris chute
- Recyclable materials (Glass, plastics, corrugated cardboard)



# Sustainability

## Dust & Air Quality Control

- Dust barrier system
- Air purifier
- HVAC ducts wrapped in adhesive blue plastic



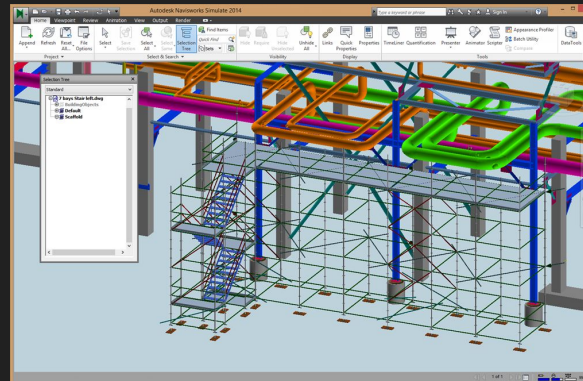
# Construction Technology

## Autodesk Revit-VDC

- 3D Modelling
- Work-In-Place Tracking
- Quality Control

## Navisworks

- Scheduling
- Work-In-Place Tracking
- Quality Control

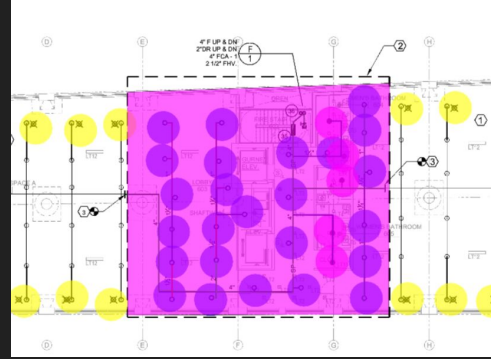




# Construction Technology

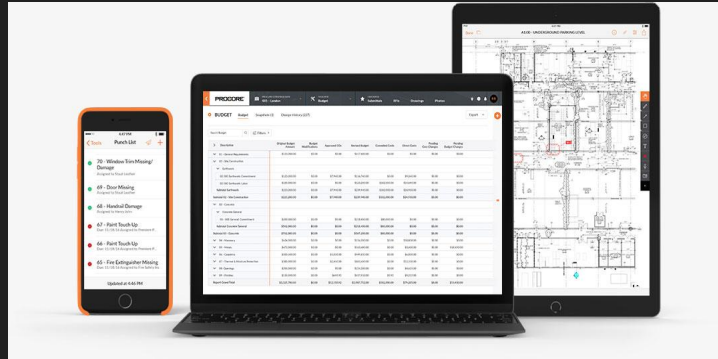
## Planswift

- Estimating
- Track Changes, plan overlays



## Procore

- Document Management
- Submittals
- Budgeting
- RFI Tracking
- IOS & Android Phone App



# Construction Technology

## Leica BLK360

- Scanning the entire building as well as the external envelope
- Scan result within a matter of hours
- Scan uploaded on cloud provided by Procore
- MEP and HVAC trades: overlapping the cloud drawings and see difference between the scanned result and the existing drawings.



Thank you!

Questions? Comments? Concerns?

