2025-2026
STUDNET CHAPTER COMPETITION

SARABETH GANDARA

U.S. Engineering Construction
Preconstruction Manager

BRIAN STATDFIELD

Helm Group
Senior Project Manager

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2025-2026 STUDENT CHAPTER COMPETITION

INTRODUCTION

MCAA Water Park

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KEY DATES

1

Competition Released

September 10, 2025

Documents are available on Procore

2

RFIs Due

December 3, 2025

Submit all RFIs through Procore.
Responses will be distributed to all teams.

3

Proposals Due

December 10, 2025 by 4PM Central

Final submission deadline for all proposal materials. Submit through Procore.

4

Final Four Presentations

March 17, 2026

Student Chapter Competition will take place at MCAA26 in Phoenix, AZ.

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PROJECT REQUIREMENTS

Cover + Student Chapter Contact Page

Pay attention to the required information on Cover + Contact Page.

- This is your **real contact information**
  - not your fictitious job titles and contact information
- **BEFORE** your table of contents

Segment 1

Prequalification Data

- Similar to last year's RFP
- Items have moved to Segment 2 and are ***project specific***

Segment 2

Project Specific Information

- **PROJECT SPECIFIC**
- Question if something needs to go into the Appendix
- Addition of BIM execution plan

Segment 3

Preventative Maintenance and Service Contract

- Present contract elements in alignment with requested information

COMMON MISTAKES TO AVOID

Procrastinating

Get a jump start! Ask RFIs early so you have time to prepare your proposal.

Ignoring guidelines

Follow formatting and submission requirements outlined in the RFP and the rules.

Recycling *too* much

Use last year's proposal as a starting place,
but make sure to scrub anything that doesn't apply to this year!

Generic instead of project specific

Proposals should illustrate **project specific** content.

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RESOURCES & SUPPORT

Ferguson Unit Pricing

Provided in the project documents on Procore.

Trimble Take-off Software

Choose the software that make sense for your team.

MCAA WebLEM

Utilize this to develop your labor.
Pay attention to the basic assumptions.

FERGUSON®

Trimble®

WebLEM+Plus

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LABOR PRODUCTIVITY EXAMPLE

12 hours

25 hp inline pump

1.0 MCAA Productivity Factor

HVAC Equipment, Pumps, Inline

Data last updated 05/04/2020

COMPONENT ID

SIZE (HP)	WEIGHT (LBS.)	LENGTH (IN.)	WIDTH (IN.)	HEIGHT (IN.)	LABOR HOURS
1/2	50	12	8	10	3.00
2	100	16	12	12	4.00
10	225	24	18	36	8.00
25	320	29	21	45	12.00
150	1390	49	32	67	24.00
500	5000	52	33	103	48.00

+0.24 hours

Installation on 4th floor

2% per floor above 3rd

III GRADE LEVEL AND ABOVE:

A. Piping installed between ten (10) feet and twenty (20) feet	1% to 2% per additional. feet of height above 10 ft.
B. Working off dirt floor (such as ladder work)	30% to 40%
C. Multi-story building above 3rd floor	1% to 2% per floor
Multi-story building above 20th floor	2% to 4% per floor

D. Other conditions to be considered but no factors suggested.

1. Piping above furred ceilings
2. Piping in furred vertical spaces
3. Piping in furred horizontal beams
4. Reducing height of scaffold for moving due to overload interference

12.24 hours

Total labor for component

1.03 MCAA Productivity Factor

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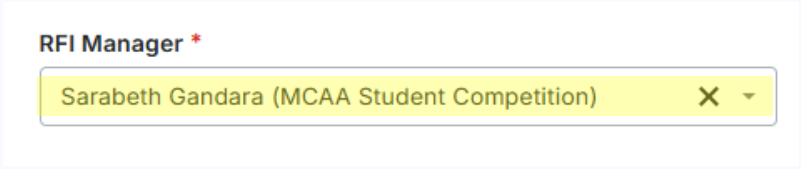
Submit RFIs

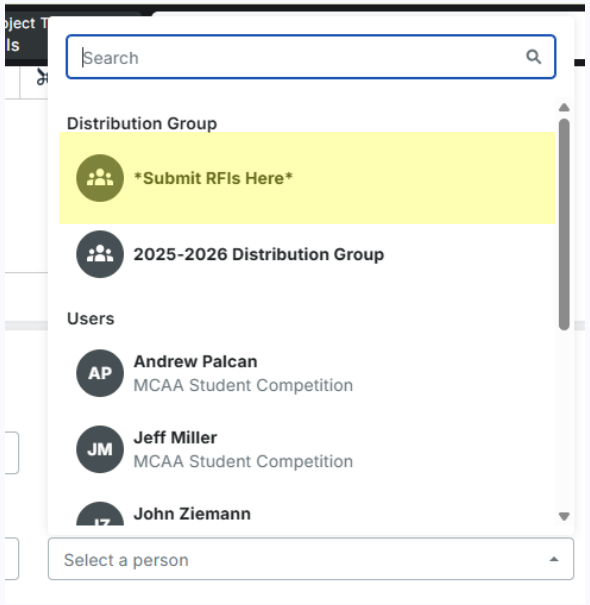
Formal RFIs will be processed through Procore and distributed to all teams.

RFI SUBMISSION REQUIREMENTS

RFI Manager



Assignees



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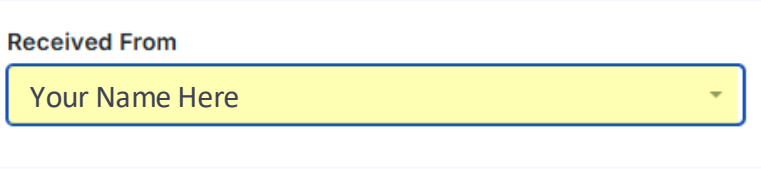

Open RFI

Create as Open

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Seek Guidance

Find alumni or support from your local MCAA chapter.

CAUTION: AI

Human verification required.
Take note of security of data.

FINAL SUBMISSION CHECK LIST

- [x] Check Table of Contents
- [x] Verify all links work properly
- [x] Review for spelling and grammar
- [x] Confirm alignment with RFP and Rules
- [x] Do all numbers match?

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Helm

- Senior Aquatic Project Manager
- Local 23 Pipefitter
- 3rd generation in the trades
- Worked with Helm for 28 years

Brian Statdfield

MCAA Water Park
3421 White Lake Blvd
Naples, FL 34117

2 LOCATION MAP
DETAIL VIEW

1 VICINITY MAP
DETAIL VIEW

WAVEFORM ARCHITECTURE

S&S ENGINEERS

MCAA Water Park

3421 White Lake Blvd
Naples, FL 34117

POOL A - WAVE POOL	PL110/PL210/PL310
POOL B - ACTIVITY POOL	PL120/PL220/PL320
POOL C - LAZY RIVER	PL130/PL230/PL330
WET DECK D - CHILDREN'S WET DECK	PL140/PL240/PL340
WET DECK E - PLAY STRUCTURE	PL150/PL250/PL350
POOL F - SLIDE COMPLEX	PL160/PL260/PL360
POOL G - OUTDOOR LEISURE POOL	PL170/PL270/PL370
POOL H - OUTDOOR WHIRLPOOL	PL180/PL280/PL380

REVISION SCHEDULE

ID	DATE	DESCRIPTION
	12/22/2021	95% CD
B	03/10/2022	ADDENDUM B
-	03/11/2022	100% CD
C	05/05/2022	ADDENDUM C

DATE	05/05/2022
PROJECT NO.	21249
DRAWN BY	T.A.
CHECKED BY	RIO
PHASE	PERMIT DRAWINGS

COVER

PL001

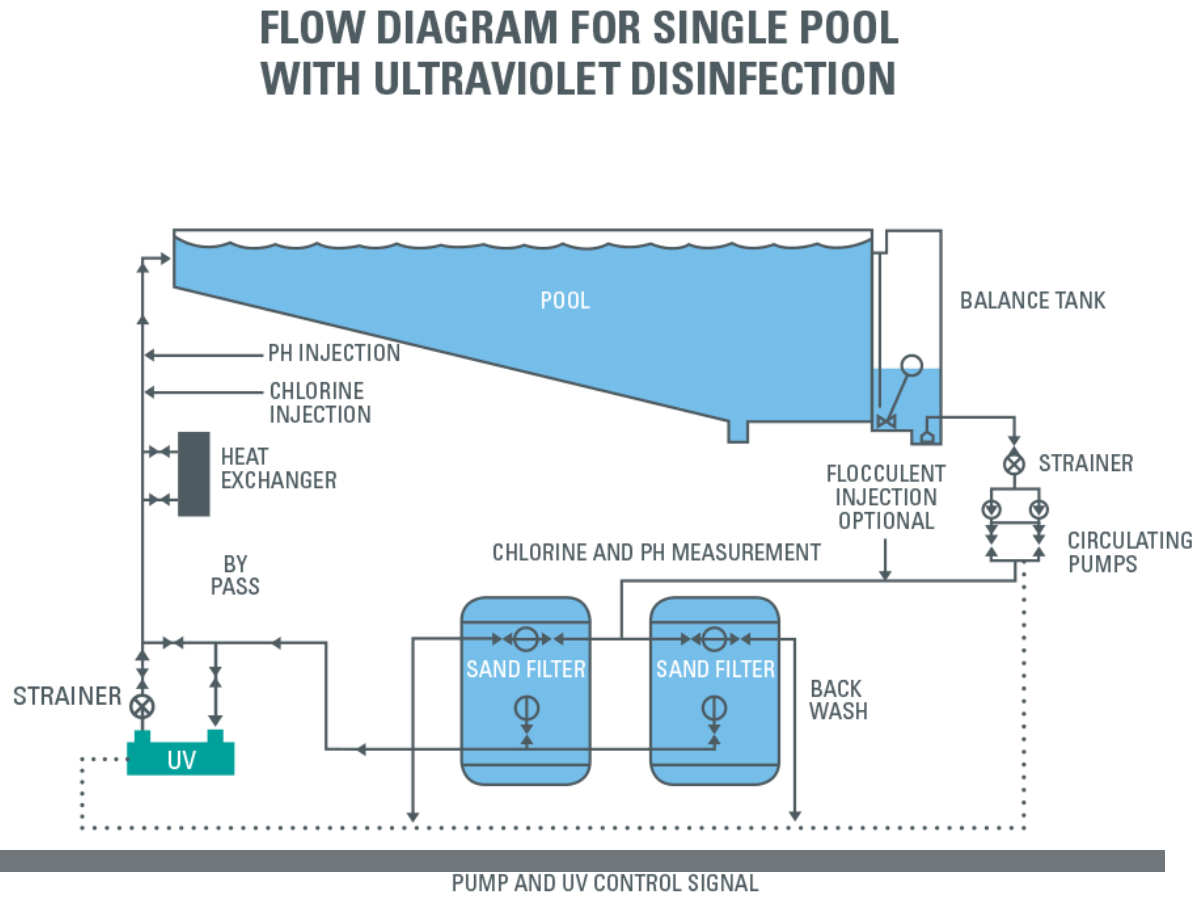
OVERALL OPERATION – SYSTEM

- Water flows thru the main drains, gutters into the surge tank

- Water is pumped from surge tank traveling thru H&L strainers to the main filter

- Once filtered, it can be treated by Ultraviolet Disinfection System

- Heated and finally treated with chlorine and pH control



SURGE TANKS

1

Allow storage of water that is displaced by swimmers

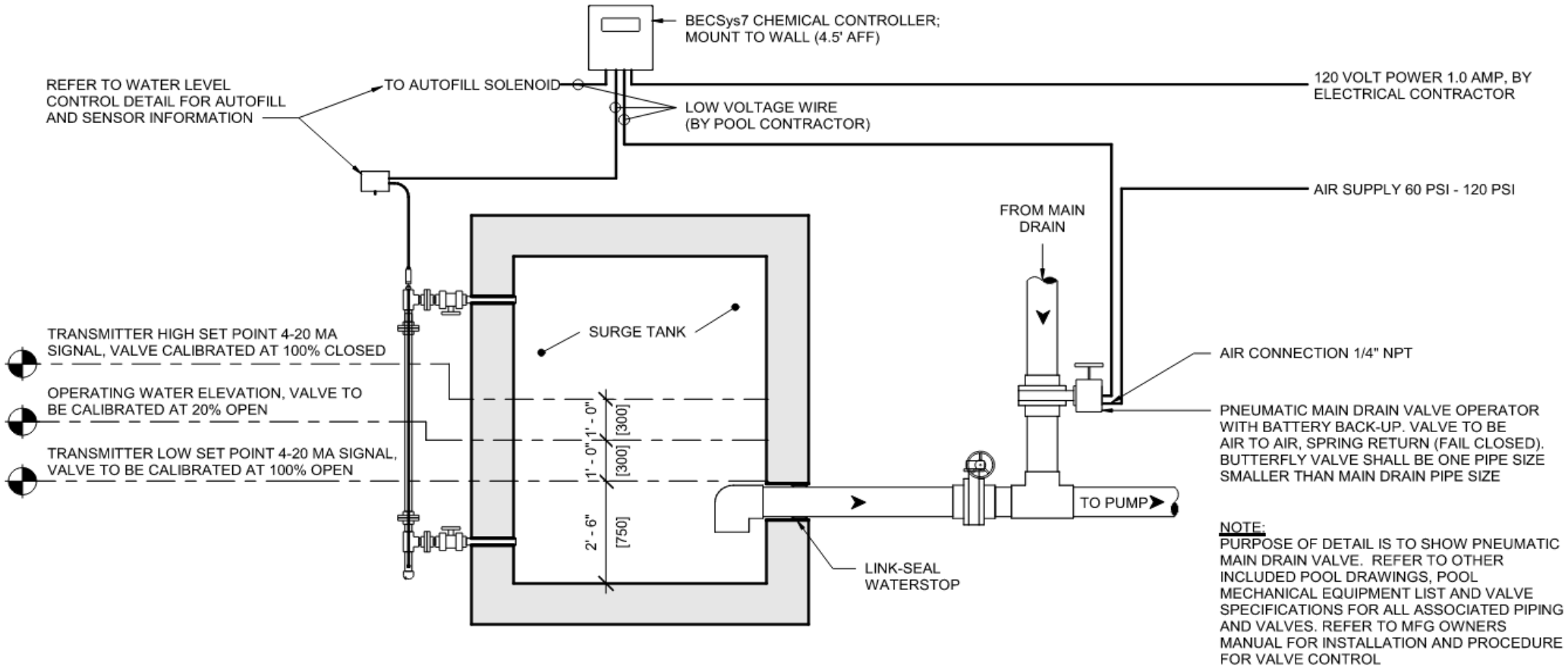
2

Hold back water thru the main drain with a modulating valve to allow water flowing back from the gutter into the surge tank.

3

Modulating valves can be with a float or pneumatic.

SURGE TANKS – DETAIL

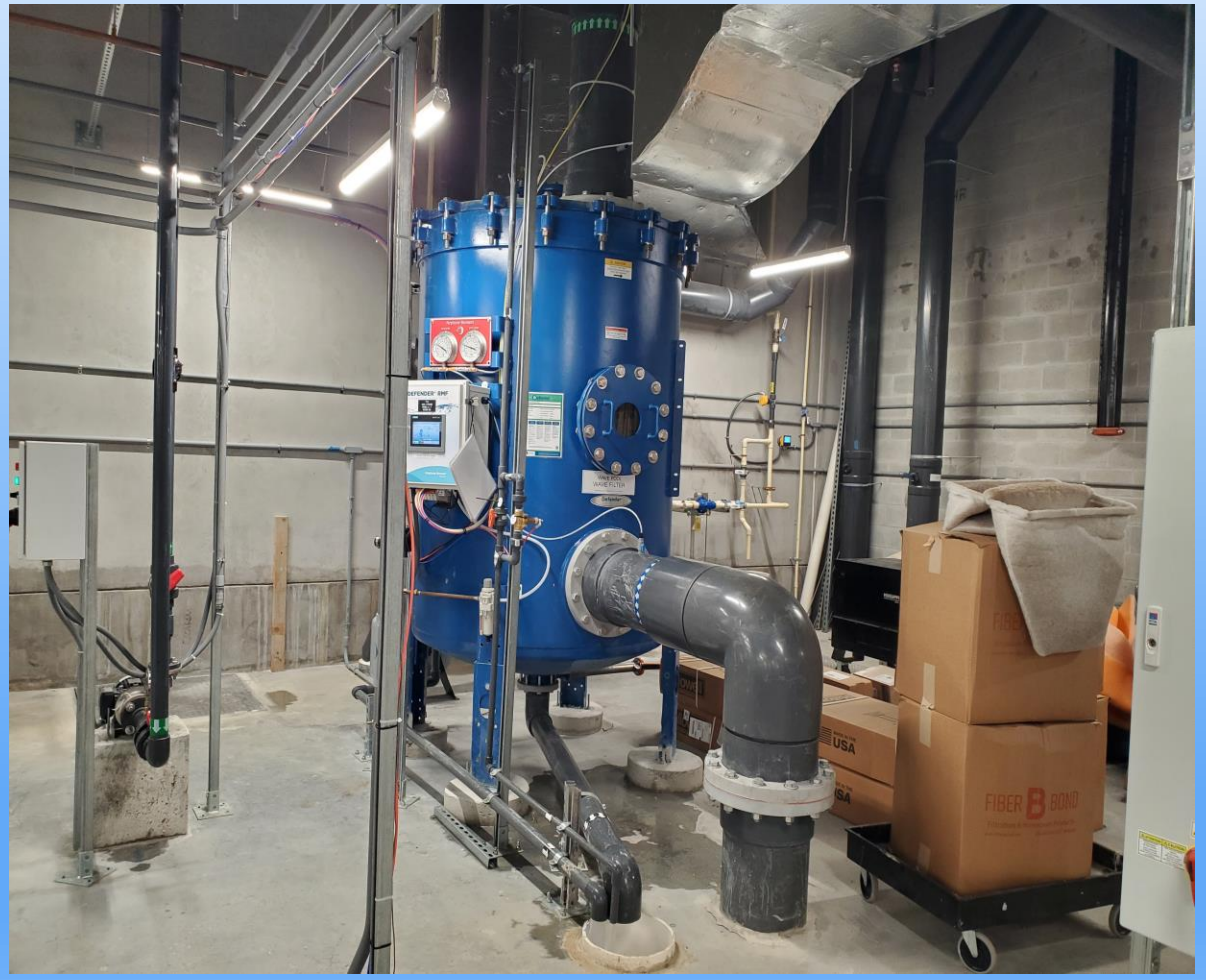


4 PL402 PNEUMATIC MAIN DRAIN
DETAIL VIEW
NOT TO SCALE

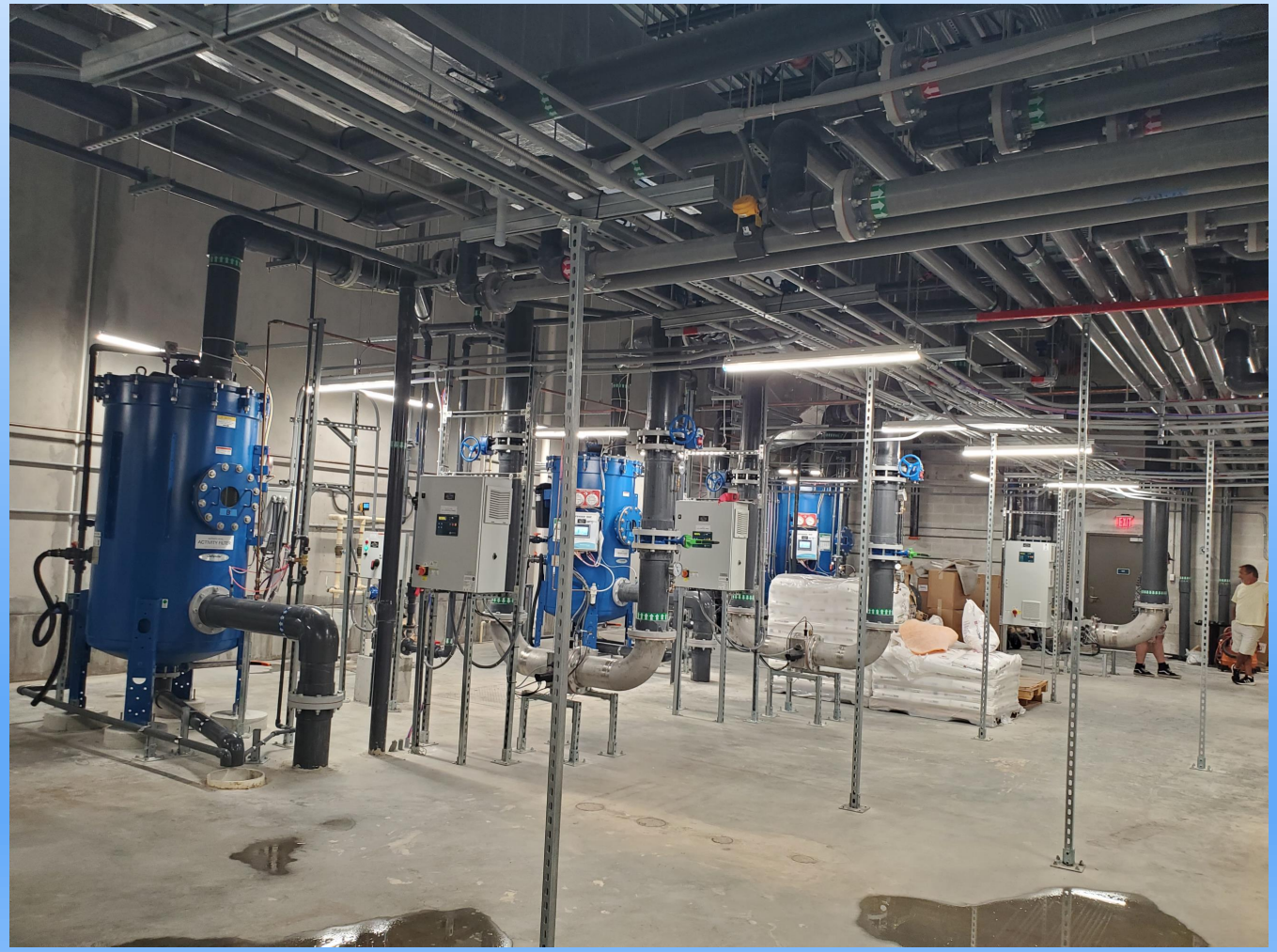
PUMPS AND BASKET STRAINERS

PUMPS AND PIPING

FILTRATION - REGEN FILTERS
MCAA WATER PARK



FILTRATION - REGEN FILTERS
MCAA WATER PARK

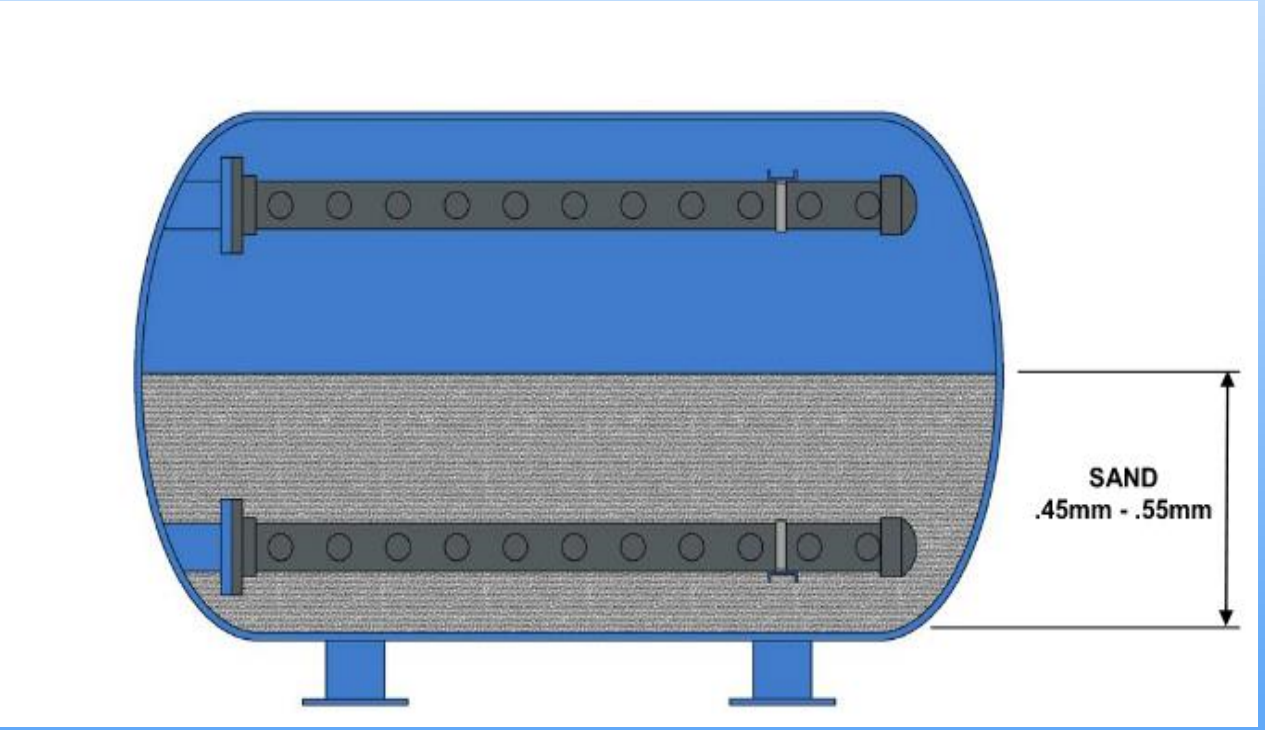


FILTRATION – SAND FILTERS

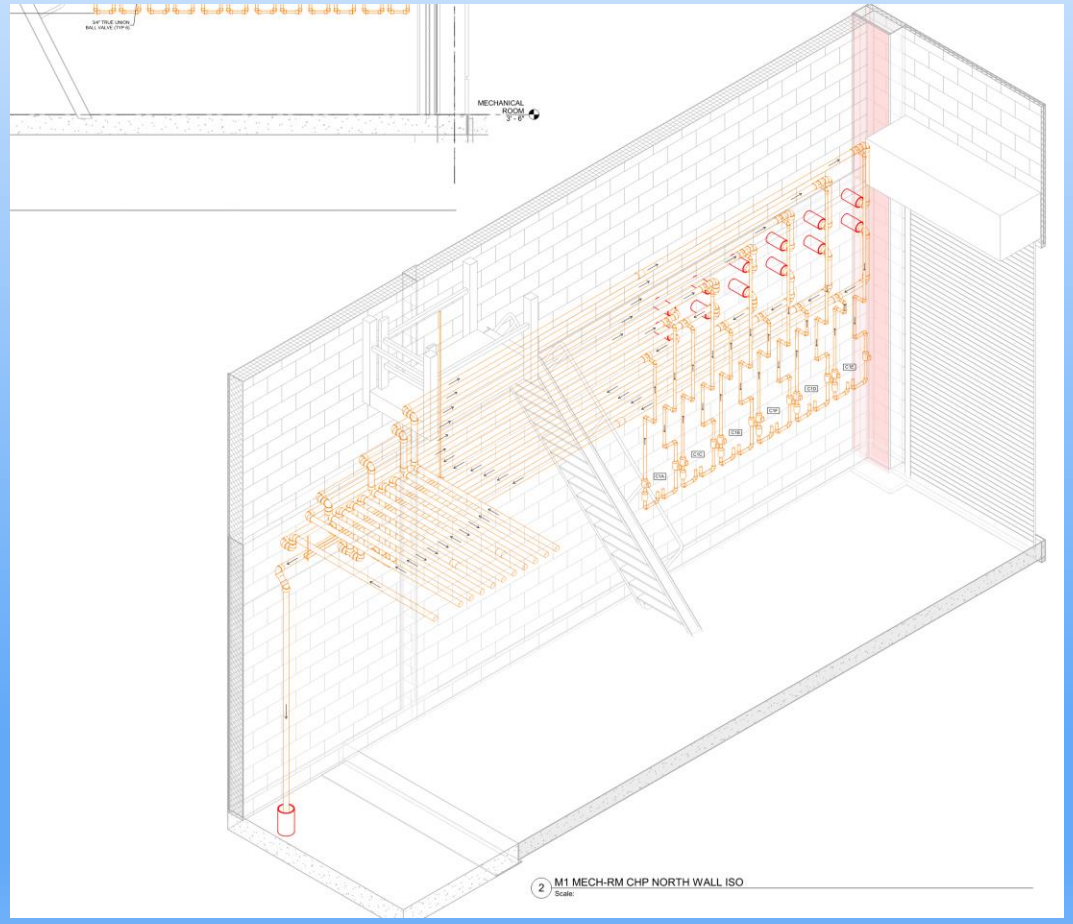
- Larger horizontal high-rate sand filters
- Double stacked
- Headered together
- Multi-linkage valving

FILTRATION – SAND FILTERS

- Inside a filter tank?
- Media – Sand
- .45mm To.55mm Silica
- Particles are large enough they won't pass thru the filter laterals



WATER TREATMENT SYSTEMS



MCAA Water Park

3421 White Lake Blvd
Naples, FL 34117

2 LOCATION MAP
DETAIL VIEW

1 VICINITY MAP
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WAVEFORM ARCHITECTURE

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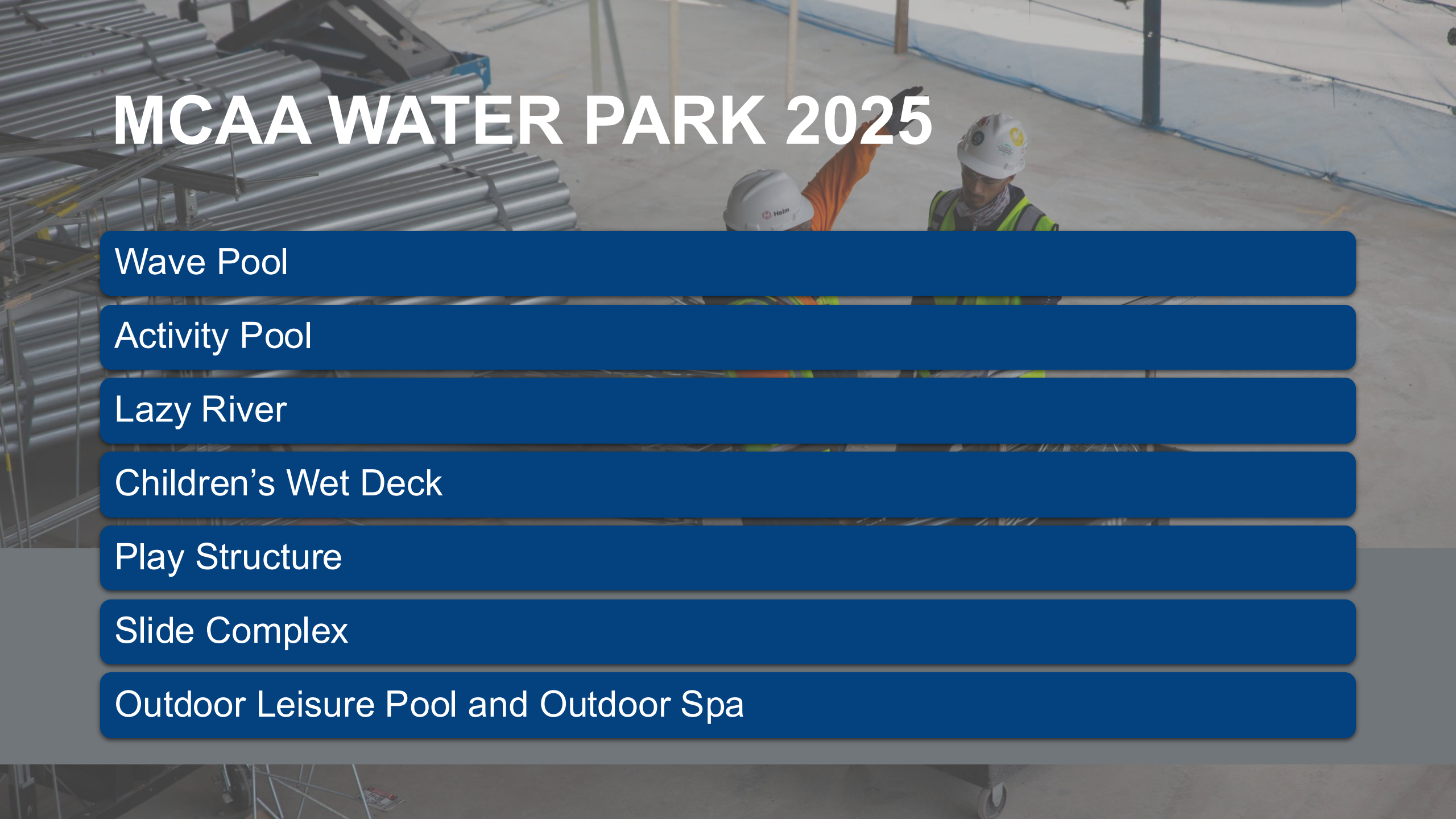
COVER

PL001



MCAA WATER PARK 2025

- Wave Pool
- Activity Pool
- Lazy River
- Children’s Wet Deck
- Play Structure
- Slide Complex
- Outdoor Leisure Pool and Outdoor Spa

MCAA WATER PARK 2025

- Grass roots site
- New water park, convention center, and hotel
- Scope of work is confined to the water park
- Different general contractor for the convention center and hotel

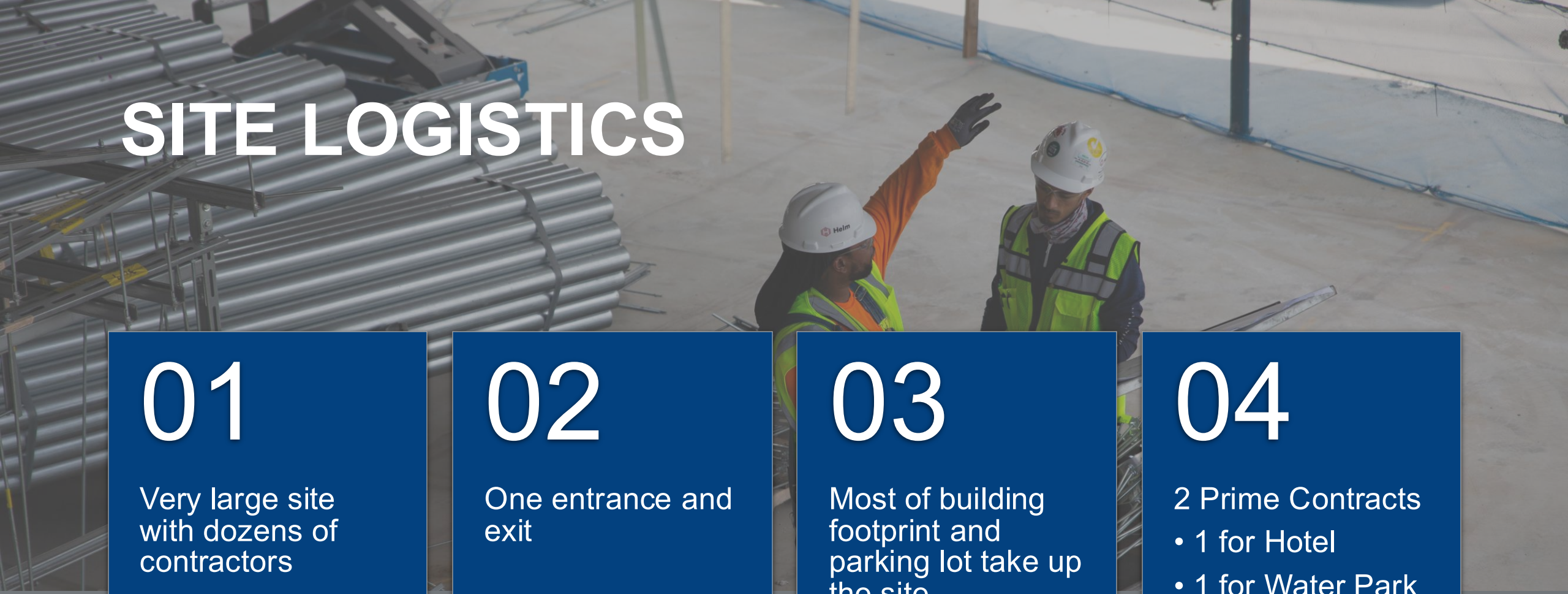
EQUIPMENT

- 8 Complete Filter Systems
- 32 Close Coupled End Suction Pumps
- 8 Regenerative Filter Systems
- 8 Ultra-violet Disinfection Systems
- 58 Flow Meters
- 26 Chemical Feeders
- 5,000 Gallons Of Chemical Storage – Chlorine And Acid

EQUIPMENT CONTINUED

- 4 Raft Ride Waterslides
- 2 Enclosed Body Slides
- Turbo Twister Tornado Slide
- Superbowl Slide
- Tube/Raft Conveyor
- Water Walk
- Dumping Bucket Play Structure

SITE LOGISTICS



01

Very large site with dozens of contractors

02

One entrance and exit

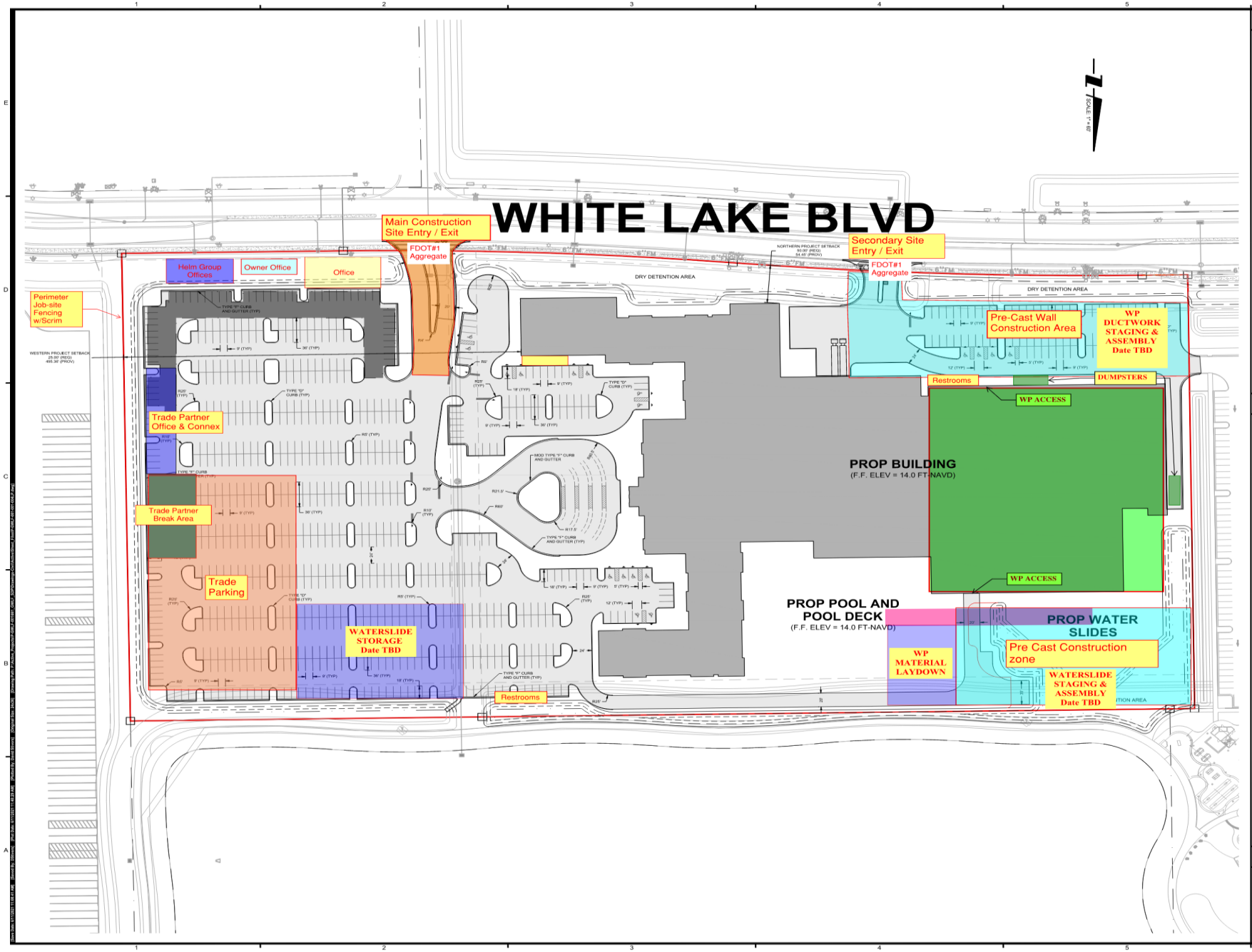
03

Most of building footprint and parking lot take up the site

04

2 Prime Contracts

- 1 for Hotel
- 1 for Water Park



GENERAL SHEET NOTES

1. XXXX

SETBACK TABLE

	REQUIRED	PROVIDED
FRONT YARD (NORTH)	50 FEET	54.5 FEET
SIDE YARD (EAST)	NOT REQUIRED	N/A
SIDE YARD (WEST)	25 FEET	495.4 FEET
REAR YARD (SOUTH)	NOT REQUIRED	N/A

DRY PRE-TREATMENT VOLUME CALCULATION

SITE AREA = 1,000

REQUIRED PRE-TREATMENT = 0.5" X SITE AREA

REQUIRED PRE-TREATMENT VOLUME = 0.50" × 1 ft / 12" × 1,000

=

PROVIDED PRE-TREATMENT

AREA	TOP AREA (AC)	BOTTOM AREA (AC)	DEPTH (FT)	STORAGE (AC-FT)

TABLES

SITE AREA SUMMARY

LOCATION	CATEGORY	SQUARE FOOTAGE	ACREAGE	PERCENTAGE OF TOTAL
IMPERVIOUS				
	ROOF / POOL	214,751	4.93	24.4%
	PAVEMENT/SIDEWALK	417,305	9.58	47.5%
	PAVEMENT / CURB	0	0.00	0.0%
	SIDEWALK / PATHS	0	0.00	0.0%
	PAVEMENT / CURB	0	0.00	0.0%
IMPERVIOUS (SUB-TOTAL)		632,056	14.51	71.9%
PERVIOUS				
	OPEN SPACE	146,797	3.37	16.7%
	DETENTION AREA	100,188	2.30	11.4%
PERVIOUS (SUB-TOTAL)		246,985	5.67	28.1%
TOTAL		879,041	20.18	100.0%

WATER MANAGEMENT SUMMARY

WATER MANAGEMENT PARAMETER	DRAINAGE AREAS	
	BASIN F	BASIN H
CONTROL ELEVATION (FT-NGVD)	7.23	7.23
10-YEAR, 1-DAY RAINFALL (INCHES)	7.00	7.00
25-YEAR, 3-DAY RAINFALL (INCHES)	11.50	11.50
100-YEAR, 3-DAY RAINFALL (INCHES)	14.50	14.50
PEAK 10-YEAR, 1-DAY STORM STAGE (FT-NGVD)	10.85	11.01
PEAK 25-YEAR, 3-DAY STORM STAGE (FT-NGVD)	11.35	11.28
25-YEAR, 3-DAY, ZERO DISCHARGE STORM STAGE (FT-NGVD)	0.00	0.00
PEAK 25-YEAR, 3-DAY STORM DISCHARGE (CFS)	0.00	0.00
PEAK 100-YEAR, 3-DAY ZERO DISCHARGE STORM STAGE (FT-NGVD)	0.00	0.00
EXISTING (2005) FEMA FLOOD ELEVATION (FT-NGVD)	0.00	0.00
PROPOSED FEMA ELEVATION (FT-NGVD)	0.00	0.00
MINIMUM REQUIRED ROAD ELEVATION (FT-NGVD)	11.33	11.33
MINIMUM REQUIRED FINISHED FLOOR ELEVATION (FT-NGVD)	12.00/12.50	12.50
MINIMUM PERIMETER BERM ELEVATION 25-YEAR, 3-DAY PEAK STAGE (FT-NGVD)	0.00	0.00

SHEET KEYNOTES

1. XXXX

ONSITE CIVIL ENGINEERS

PROJECT:

MCAA Water Park

TITLE:

ZONING DATA SHEET AND TABLES

OWNER/CLIENT/CONSULTANT:

REVISIONS:

No:	Revision:	Date:

NOTES:

PRELIMINARY
25% CONSTRUCTION DOCUMENTS
06/11/2021

DATUM NOTE:
ALL ELEVATIONS ARE BASED ON NAVD 88 (NORTH AMERICAN VERTICAL DATUM OF 1988).

Bar Scale: 1" = 60'

0 30 60 120 180

SEC: 35	TWP: 49	RGE:	26
City: NAPLES	County:	COLLIER	
Designed by:	JWS		
Drawn by:	DDD		
Date:	JUNE 2021		
Horizontal Scale:	1" = 60'		
Vertical Scale:	N.T.S.		
Project Number:	P-GWLF-001-001		
File Number:	P-GWLF-001-001-004LP		

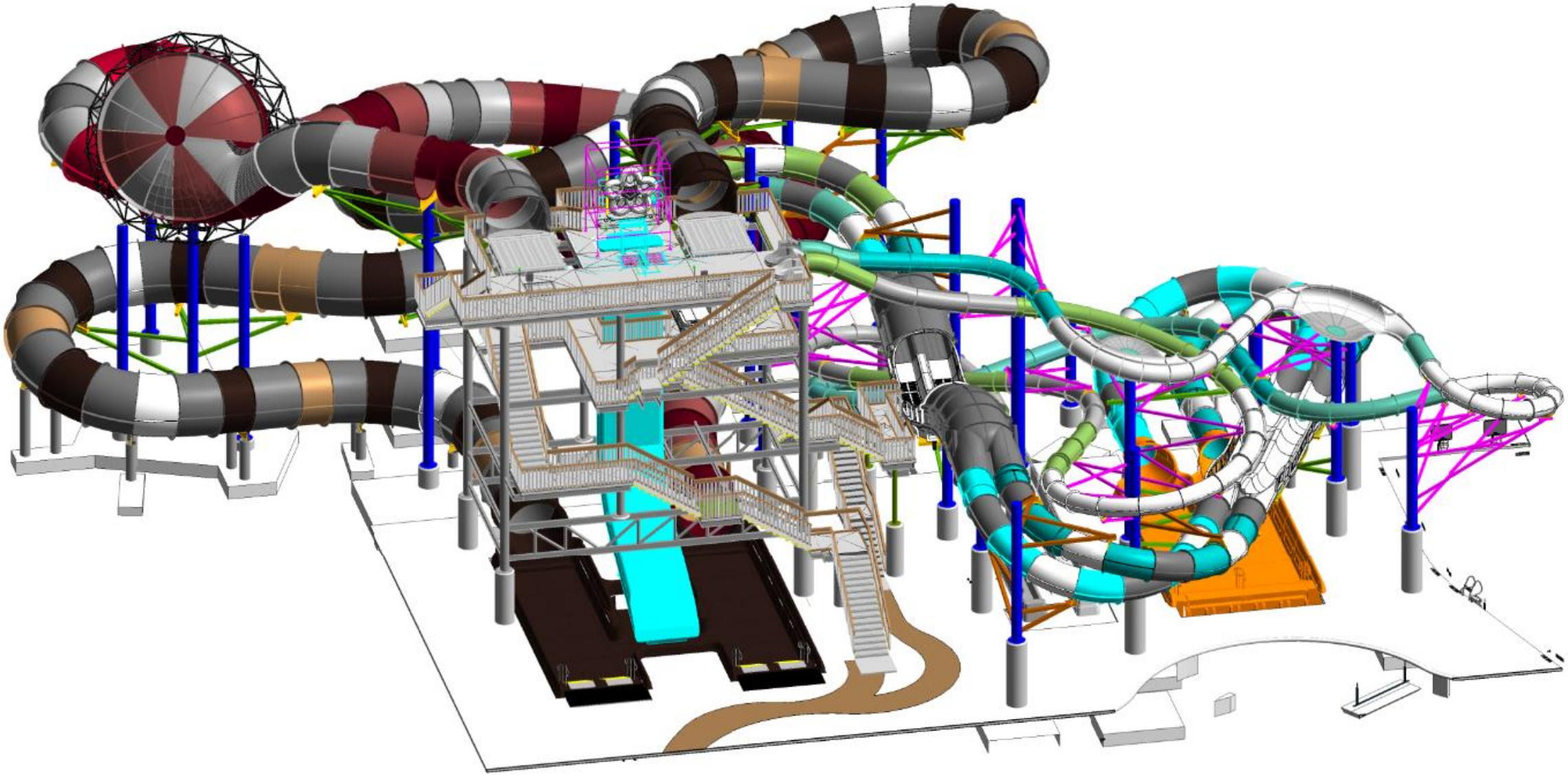
Sheet Number: ---- of

OWNER PROVIDED EQUIPMENT

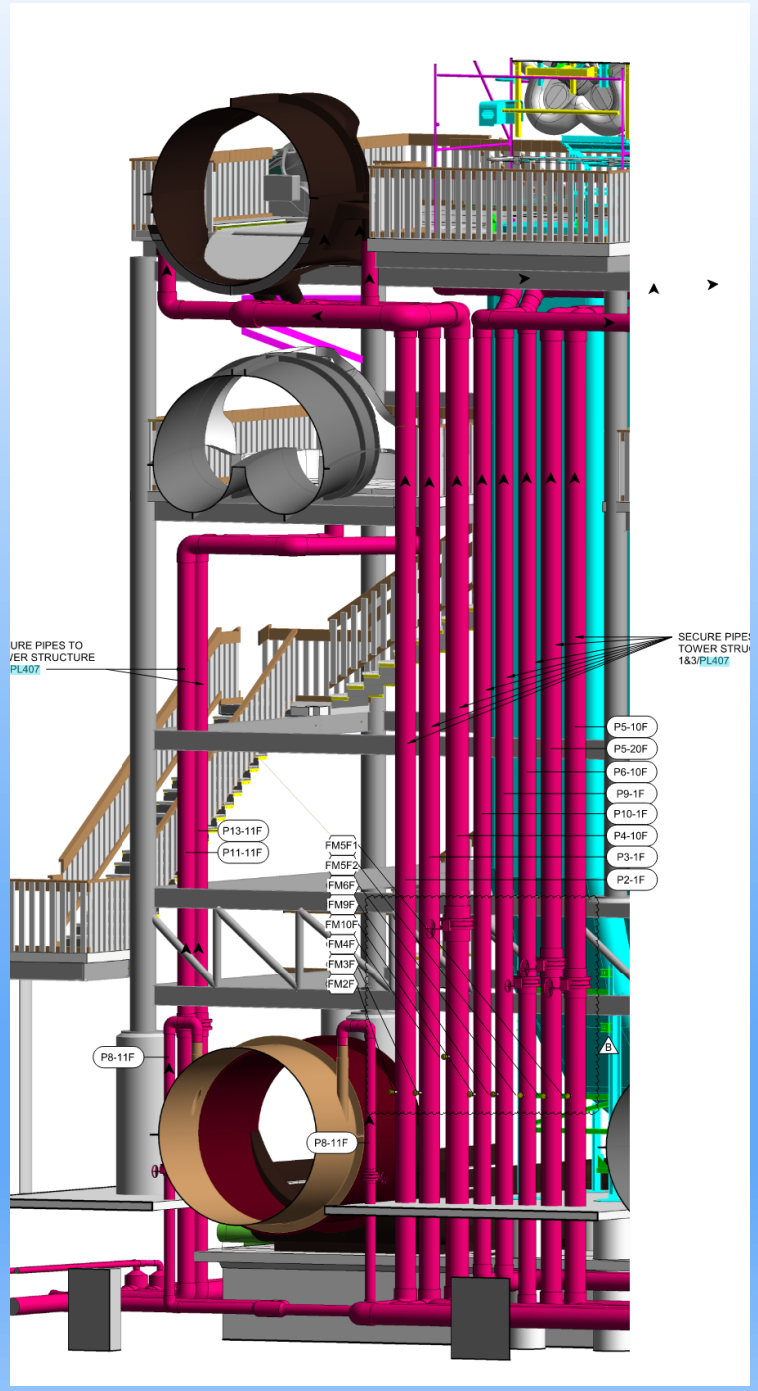
- Pool equipment on PL400 is provided by the Owner
- Installed by MCAA student chapter contractor
- Labor and equipment to unload, receive, and check in should be considered
- Once received, we own the equipment.

SLIDE TOWER ACCESS

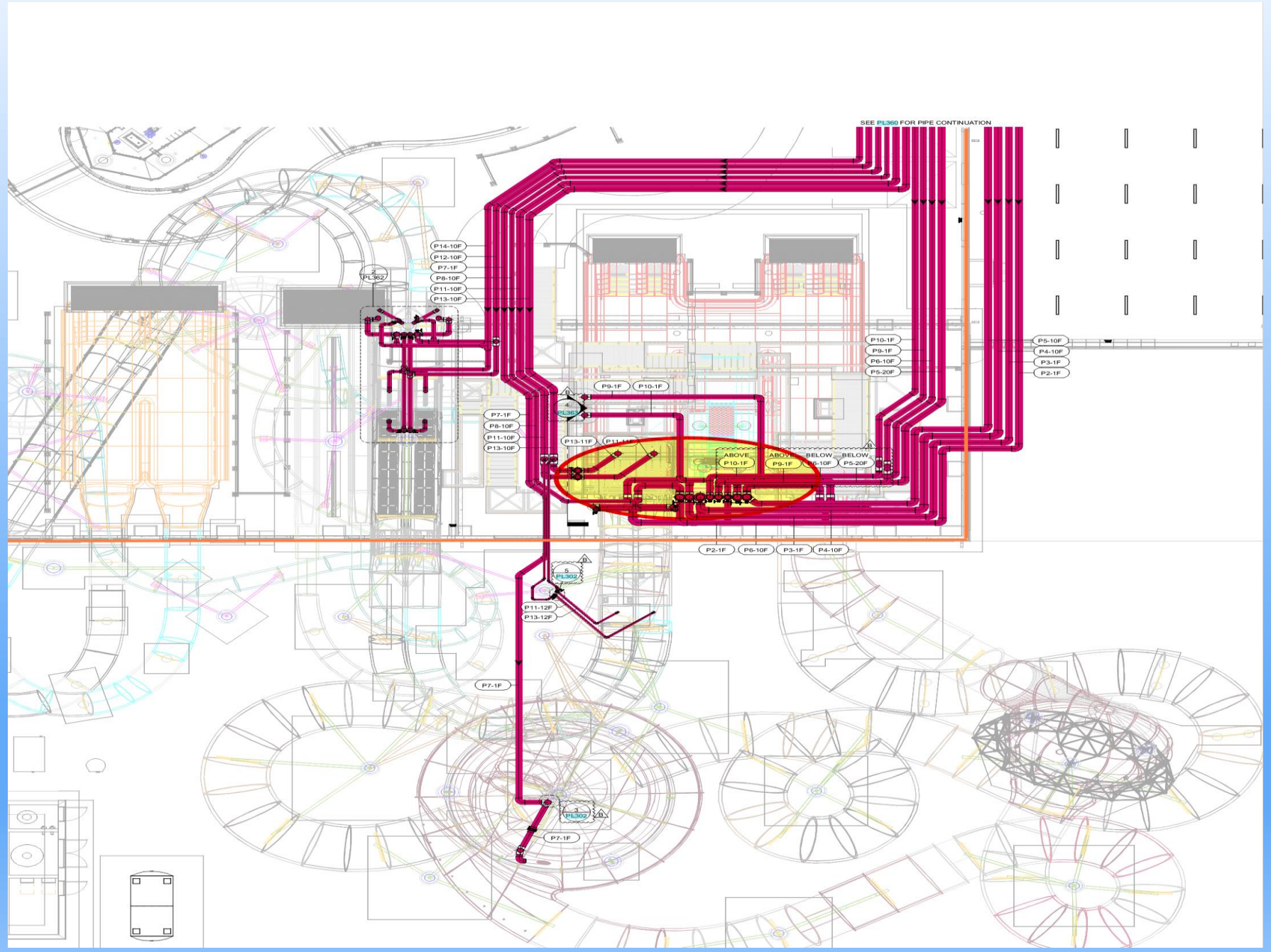
- Slide tower is approx. 60ft tall
- Supply piping running vertical up the tower on backside
- Access to tower is very limited
- Lifts and/or scaffolding are our responsibility



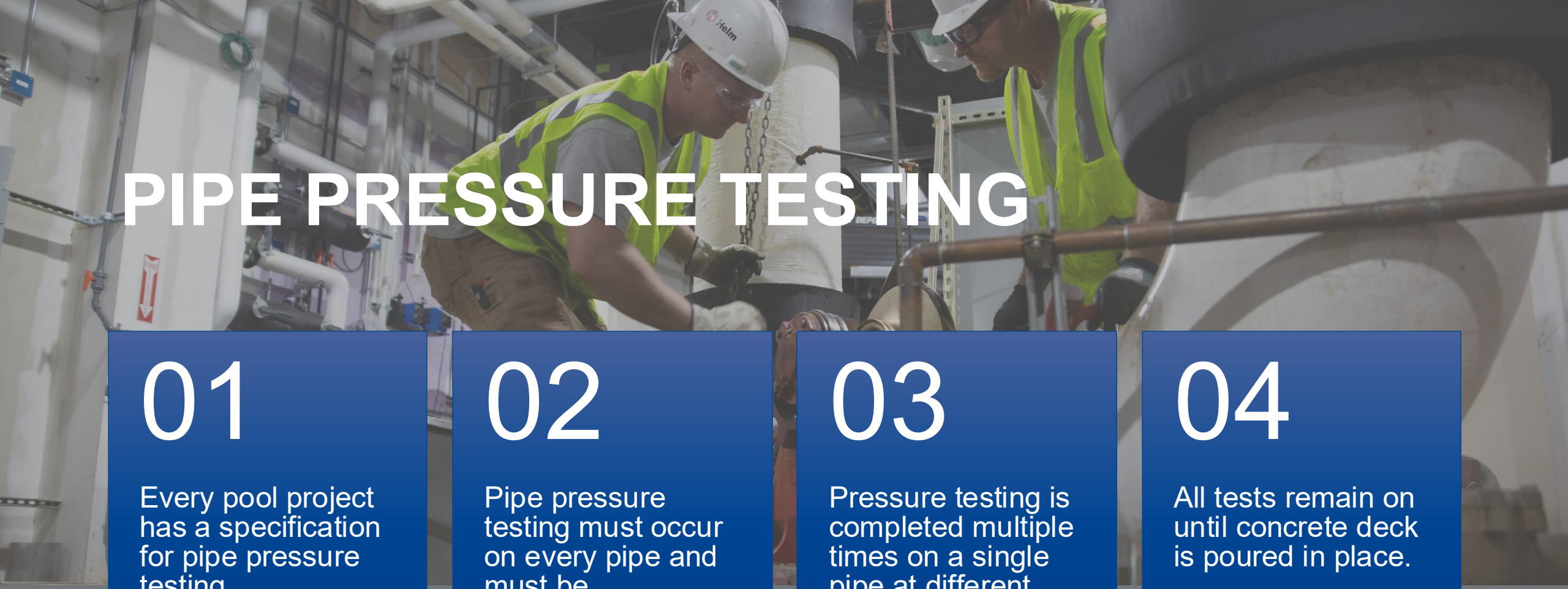
MODEL VS. REALITY



PLAN VIEW


SEE PL360 FOR PIPE CONTINUATION
P14-10F
P12-10F
P7-1F
P8-10F
P11-10F
P13-10F
PL362
P9-1F
P10-1F
PL360
P7-1F
P8-10F
P11-10F
P13-10F
P13-11F
ABOVE
P10-1F
ABOVE
P9-1F
BELOW
P6-10F
BELOW
P5-20F
P10-1F
P9-1F
P6-10F
P5-20F
P5-10F
P4-10F
P3-1F
P2-1F
P2-1F
P6-10F
P3-1F
P4-10F
PL302
P11-12F
P13-12F
P7-1F
PL302
P7-1F


Exit
Only
Exit
Only



PIPE PRESSURE TESTING

01

Every pool project has a specification for pipe pressure testing.

02

Pipe pressure testing must occur on every pipe and must be documented.

03

Pressure testing is completed multiple times on a single pipe at different stages of construction.

04

All tests remain on until concrete deck is poured in place.

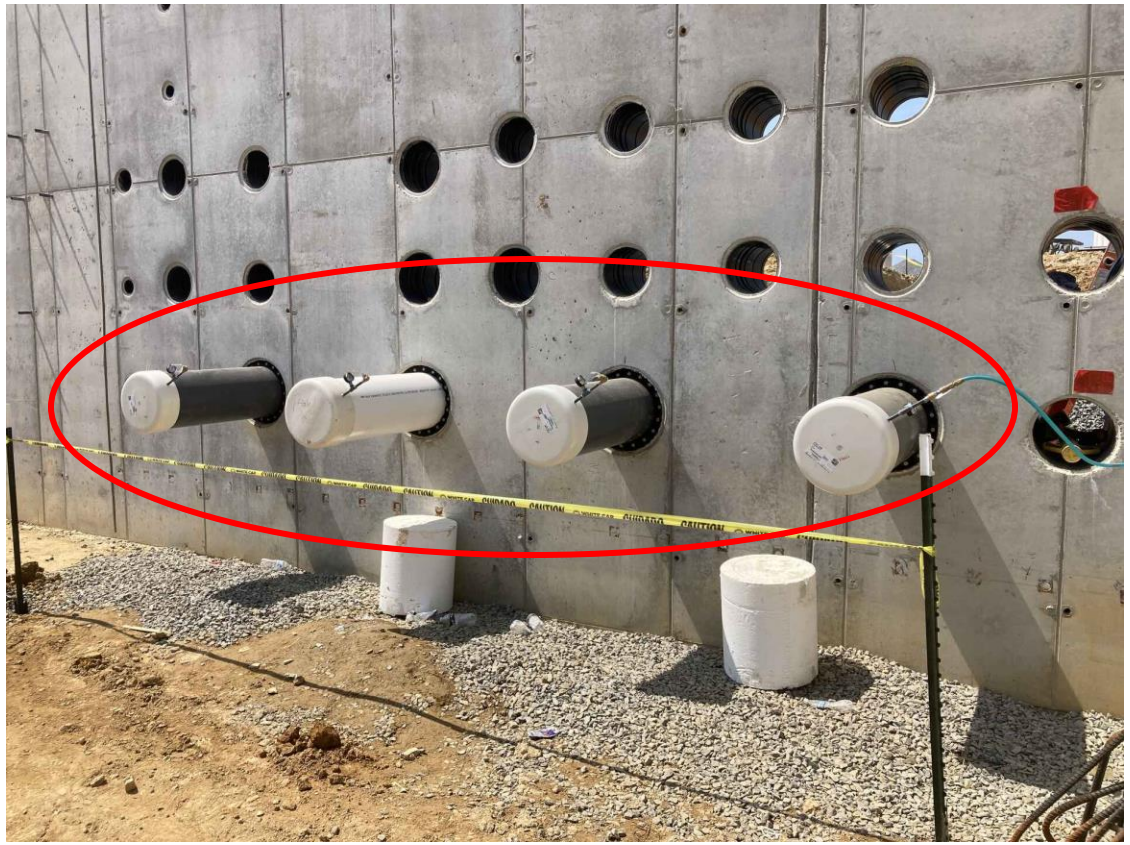
PIPE PRESSURE TESTING

- Testing can be completed with air or water.
- Water is not always available at project start.
- Air testing is completed at lower pressures than water.
- Testing is completed by welding on caps to either end of the pipe and installing a test gauge assembly.
- Leak test reports are filled out by the foreman including pipe ID #, type of test, test pressure, and signed off by GC/Inspector

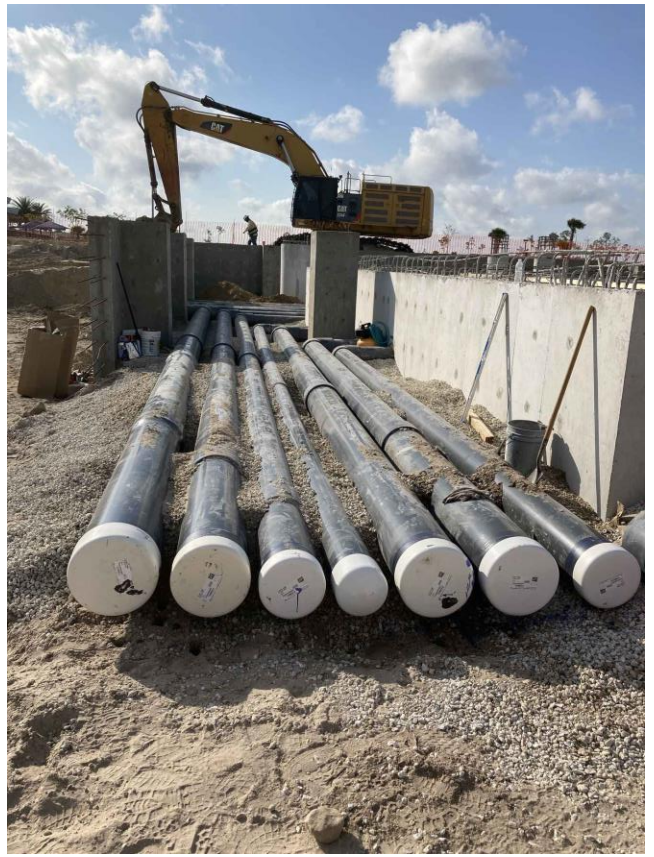
PIPE PRESSURE TESTING

Test Assemblies Installed

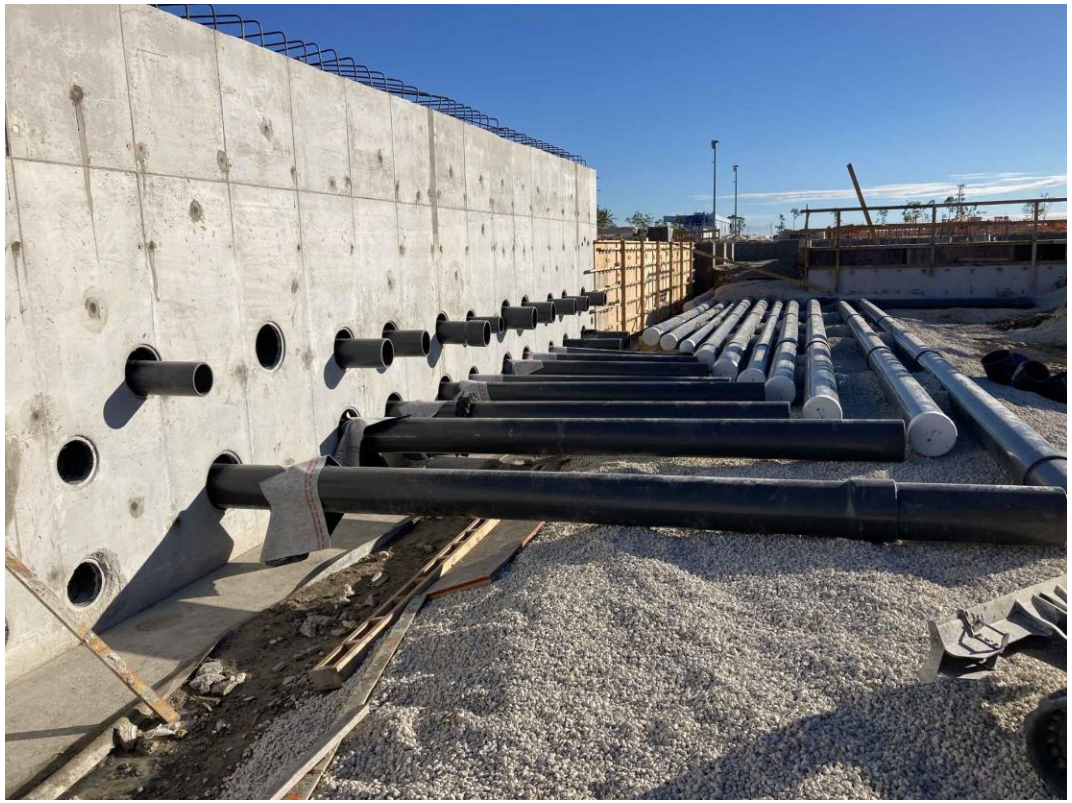
PIPE PRESSURE TESTING



MECHANCIAL ROOM WALL WITH SLEEVES INSTALLED



MECHANICAL ROOM WALL WITH PIPING THRU SLEEVES



UNDERGROUD PIPING TO SLIDE TOWER

QUESTIONS?

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Forum 2025