

The logo for DLR GROUP, featuring a red square with a white cross on the left, followed by the text "DLR GROUP" in white, uppercase letters.

# UCF Creative School for Children

November 12, 2024





- 01 Who We Are | *Ability to Provide Service*
- 02 The Fundamentals | *Understanding the Project*
- 03 Our Process | *Approach and Method*
- 04 Our Value | *Why DLR Group?*

AGENDA

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 **DLR GROUP**

# *Ability to Provide Service*



10 points





**33 Locations**  
*World-Wide*

**In-house  
Integrated Design**

Architecture  
Engineering  
Interiors  
Planning

Acoustic Design  
Audiovisual Systems Design  
BOLD  
Development Management  
Services  
Experiential Graphic Design  
High Performance Design  
Landscape Architecture  
Lighting Design  
Reality Capture  
Renewables  
Science+Technology  
Smart Buildings  
Sustainability  
Telecom+Security Systems  
Design  
Theater Design

**1,700+**  
*Employee-Owners*

**Education**  
*is our passion*

**Ranked #1**  
*Primary & Secondary  
Education Firm In The World*

 **DLRGROUP**

ABILITY TO PROVIDE SERVICE

# Project Team

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Nicole Nichols, AIA  
Project Executive/Principal



Mo Arthur, AIA, NCARB  
Project Manager



Ian Kilpatrick, AIA, NCARB  
K-12 Education Design Expert



Dr. Marilyn Denison, Ed.D  
Educational Learning Designer



Aranya Mom, AIA, LEED AP  
Project Architect



Mandy Wannan, LEED AP, EDAC  
Interior Designer  
Kaleidoscope Interior Design

# Team Structure

*A Proven Team of K-12  
Education & Reggio Emilia  
Approach Experts*



## Core Team

Nicole Nichols, AIA  
*Project Executive/Principal*

Modupe Arthur, AIA, NCARB  
*Project Manager*

Aranya Mom, AIA, LEED AP  
*Architect of Record*

Ian Kilpatrick, AIA, NCARB  
*K-12 Education Design Expert*

Marilyn Denison, Ed. D.  
*Educational Learning Designer*

## Engineering

Mark Kirby, PE, LEED AP  
*Lead Engineer*

Jason Scott  
*Mechanical Designer*

Ben Bush, PE  
*Electrical Engineer*

Luis Bedoya, PE  
*Structural Engineer*  
*BBM CONSULTING*

Dion Marsham, PE  
*Civil Engineer*  
*Harris Civil Engineers*

## Specialty Services

Josh Erhart, PLA, ASLA  
*Landscape Architect*

Mandy Wannan, LEED AP,  
EDAC, ALEP  
*Interior Designer*  
*Kaleidoscope Interior Design*

Anita Carlsson Trout  
*Cost Estimator*  
*Carlsson Incorporated*

ABILITY TO PROVIDE SERVICE

# Campus Partnership

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AGENDA

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 DLRGROUP

# *Understanding the Project*



10 points





“By using the right questioning techniques, we ignite our youngest learners’ imaginations, guiding them into moments of discovery and learning.”

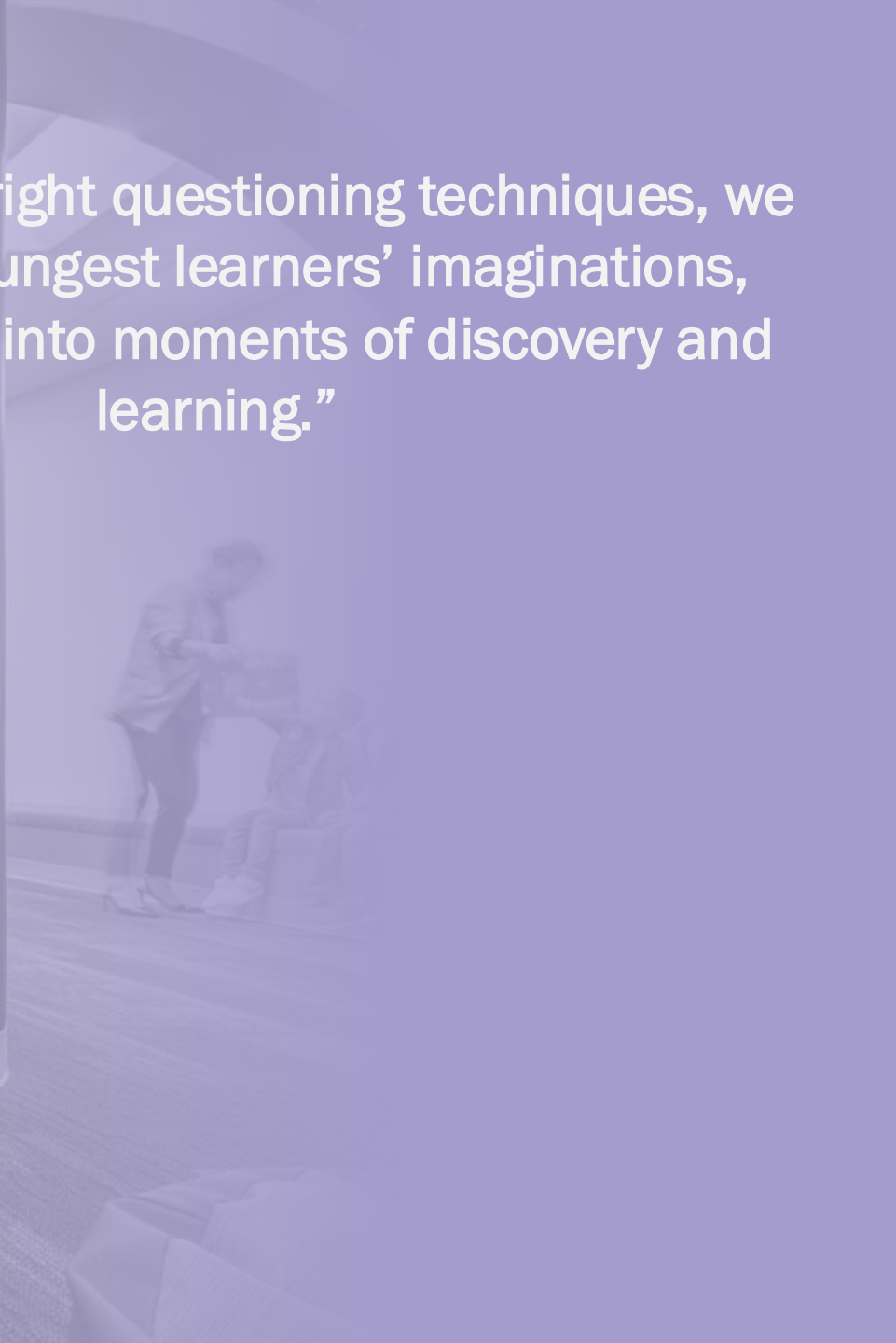


Image of child

Project-based inquiry

Environment  
3<sup>rd</sup> teacher

Researcher  
Facilitator



# PROVOCATION: WHY SHOULD WE CARE ABOUT SCHOOL DESIGN?



## What impacts student learning progress?

Individual student variability = **50%**

Teacher effectiveness = **30%**

Physical learning environment = **16%**

Hattie, John. "Visible learning: A synthesis of over 800 meta-analyses relating to achievement." (2008)

Nye, Barbara, Spyros Konstantopoulos, and Larry Hedges. "How large Are Teachers effects?" *Educational Evaluation and Policy Analysis* 26, no. 3 (2004): 237-57

Barrett, Peter, Fay Davies, Yufan Zhang, and Lucinda Barrett. "The impact of classroom design on pupils' learning: Final results of a holistic, multi-level analysis." *Building and Environment* 89 (2015): 118-133.

# Conservation Academy (Zoo School)

Henry Doorly Zoo  
Omaha, NE



Child-centered  
Learning

Learning through  
Exploration

Access to Outdoors

Natural Materials

Visibility

School as a Tool

# Amazon Playground

Culver City USD  
Culver City, CA



Inspiring/Fun

Reflective Practice

Curiosity/Play

Connecting with  
Nature

Collaboration with  
Families

AGENDA

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 **DLR**GROUP

# *Approach and Method*



10 points



## listen.DESIGN.deliver

### Design Process:

- **Engage** team & all stakeholders
- **Envision** and verify your program
- **Evaluate** needs, wants, & goals
- **Experiment** with design solutions
- **Estimate** and verify costs
- **Execute** the design to realize YOUR vision





# 360 Engagement Process

ENGAGEMENT, ADVOCACY,  
BUY-IN, AND DECISION-MAKING

*Developing  
an inclusive and  
engaged process*

## Start by asking:

- Who needs a **voice** in the process?
- Who will have the power and **influence** to make decisions?





# Engagement occurs at all levels – to achieve buy in.

## Project Leadership Team

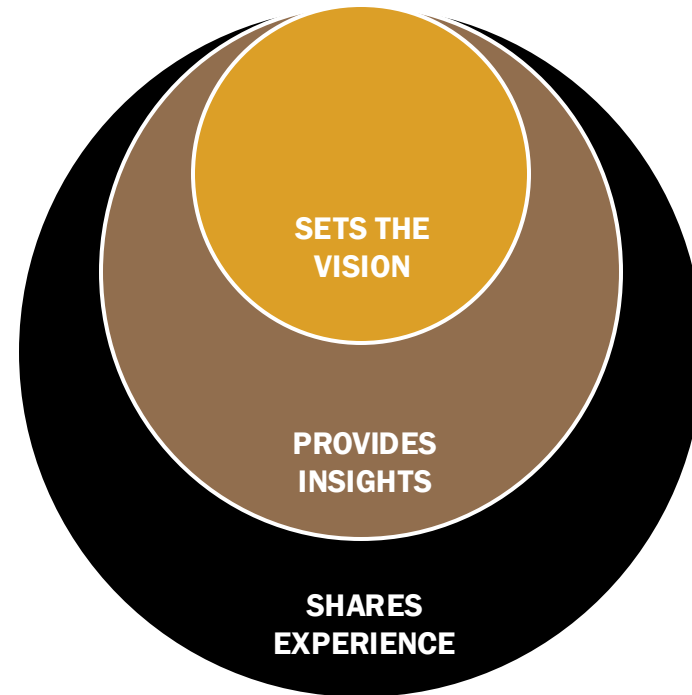
- Leadership and Key Stakeholder Reps

## Focus and User Groups

- Facilities Staff
- Faculty/Staff Focus Group
- College Representatives
- Others to fit your priorities

## Broad Engagement

- Students
- Faculty
- Staff
- Community



*From Engaging Broadly to Engaging Deeply, we will develop trust and connection with your campus community.*



Personal Conversations



Focus and User Groups



Interactive Workshops



Digital Outreach



Open Houses + Town Halls



Community Outreach



# Working with UCF

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## UCF Standards & Processes

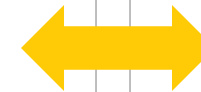
- UCF Design, Construction, and Renovation Standards
- Professional Services Guide
- Standards Deviation Forms
- Critical Needs Checklist
- CS&T Design Standards
- e-builder Platform

## DLR Group Integrated Design Process

- Design Phase QA/QC checklist
- Project comment log
- Comprehensive Owner-Architect-Contractor Meeting Minutes
- Weekly Team Coordination Meetings
- 3rd Party Review
- Real Time Coordination
- Code Review Checklist

## Parallel Best Practices

- LEED Goals & Sustainability initiatives
- CPTED principles
- E-verification
- Drug-free workplace policies



# A Balanced Project

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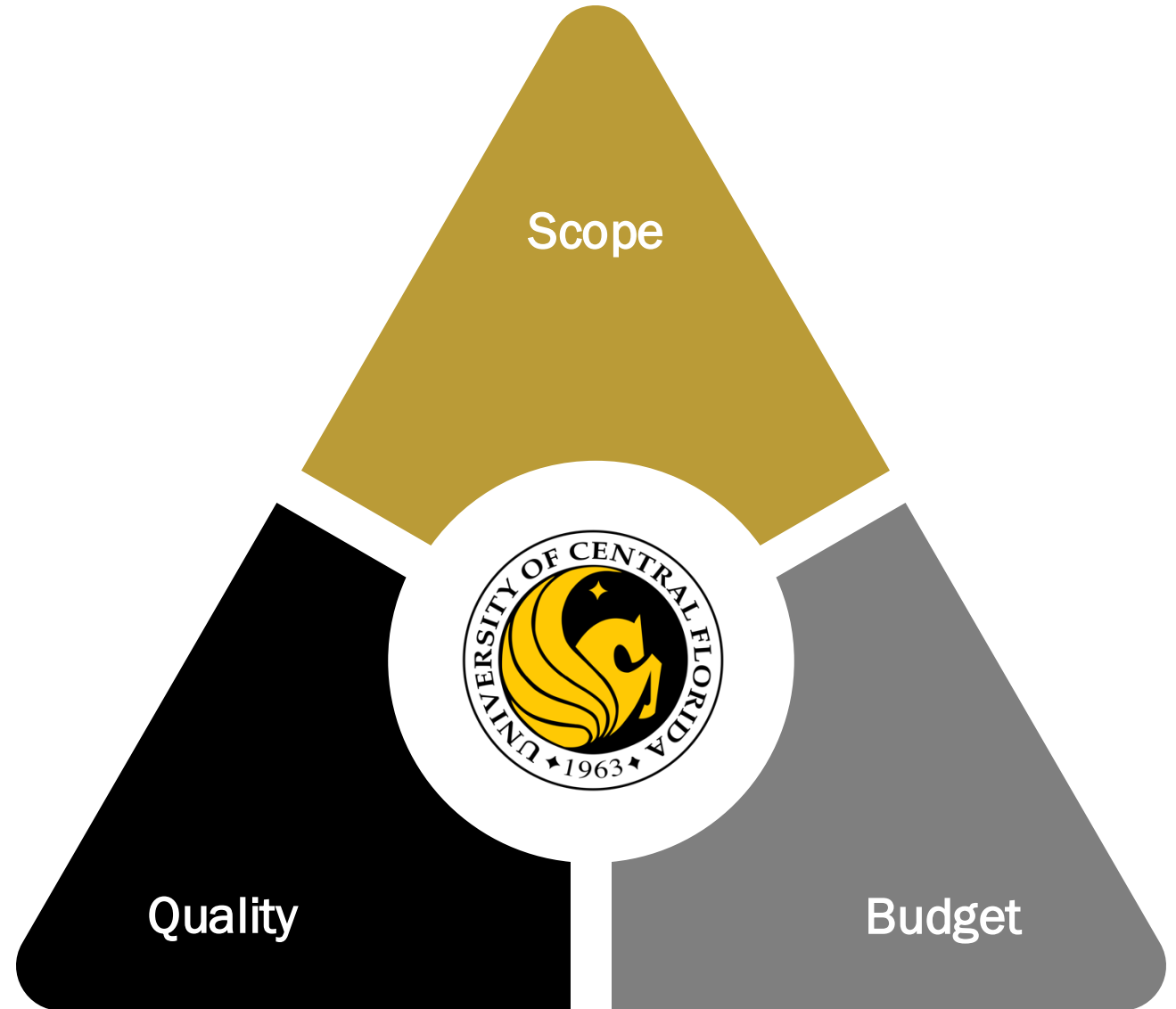
## Your Scope

+ Your Budget

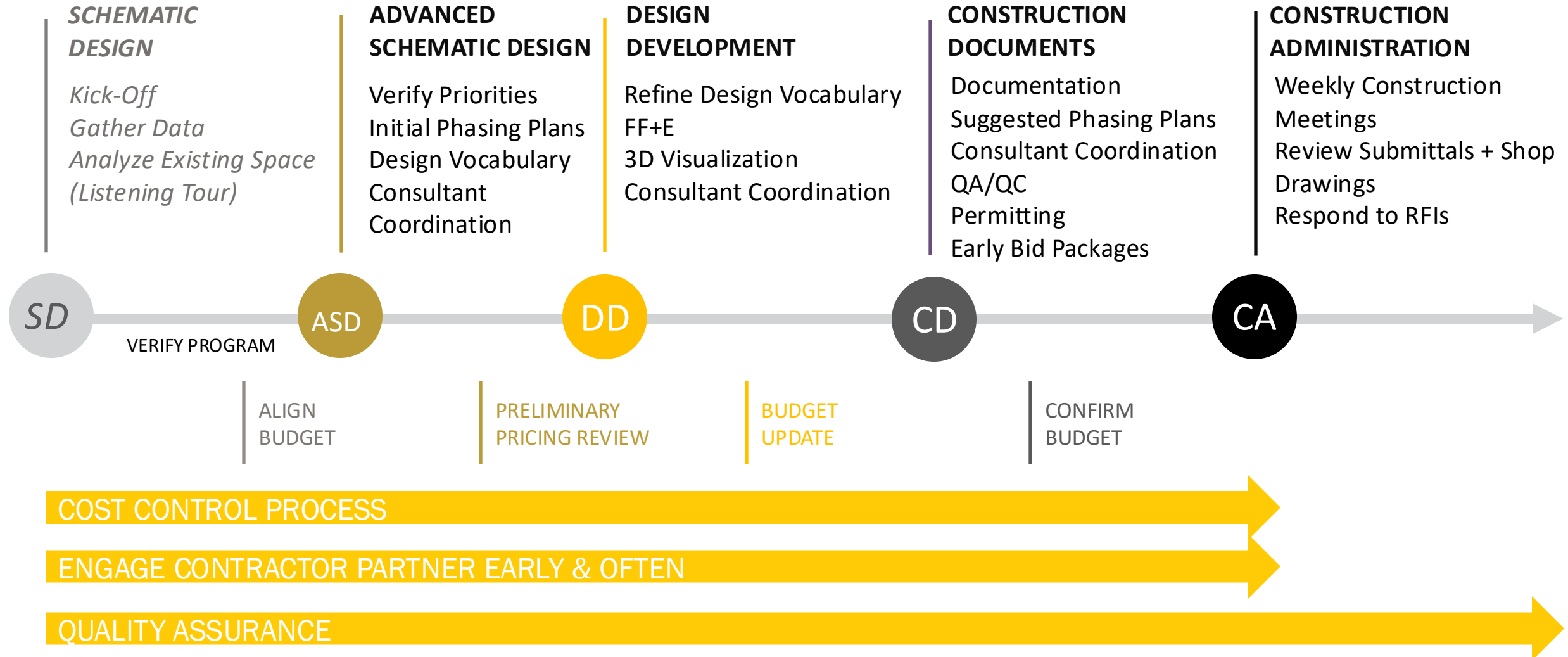
= What is most critical to ensure success

## Detailed work plan

- Look-ahead w/ setting milestones
- Meetings (client and design team)
- Deadlines (internal and external)
- Presentations
- QC checks
- Project Submittals

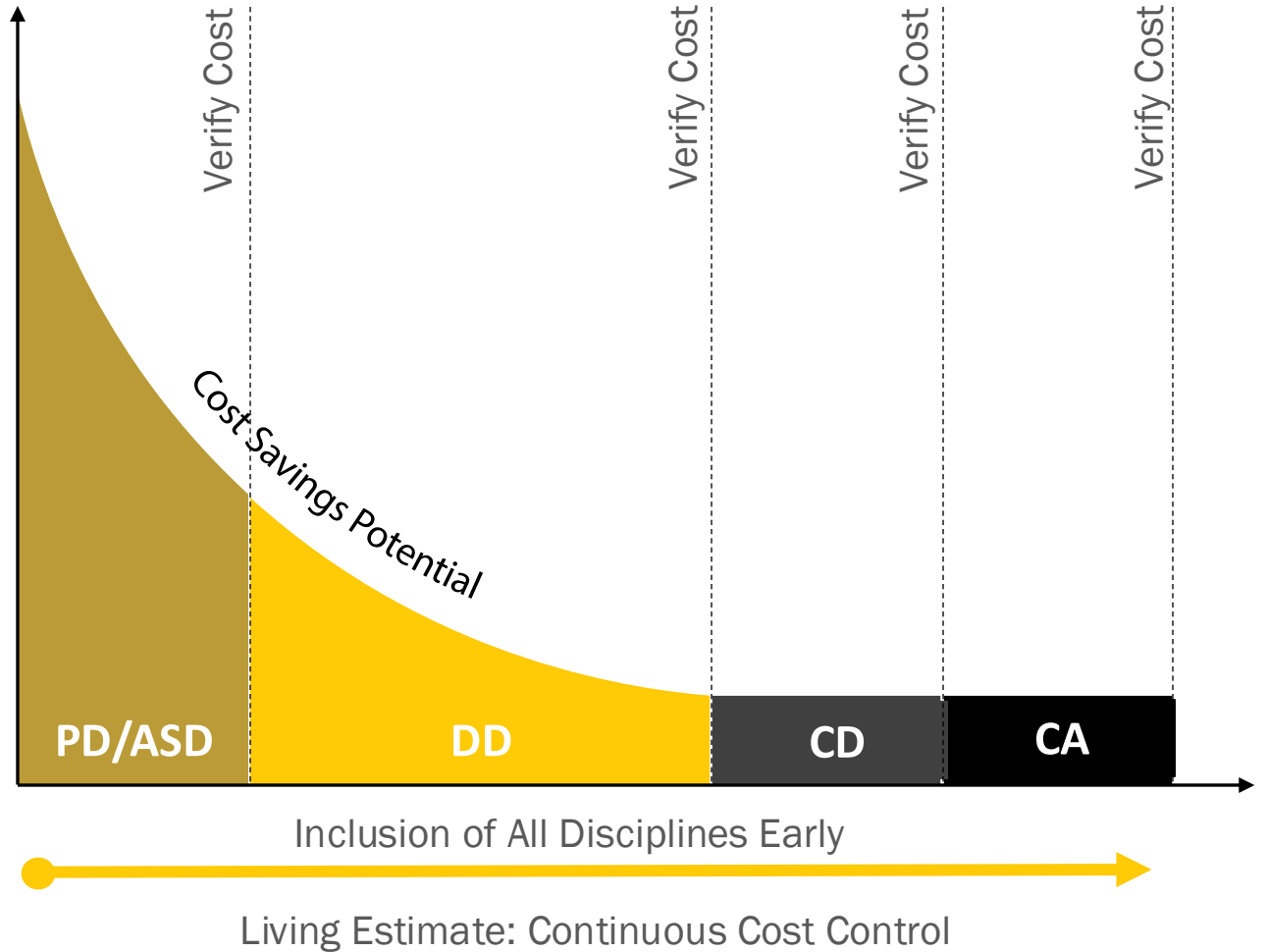


# Integrated Design Process

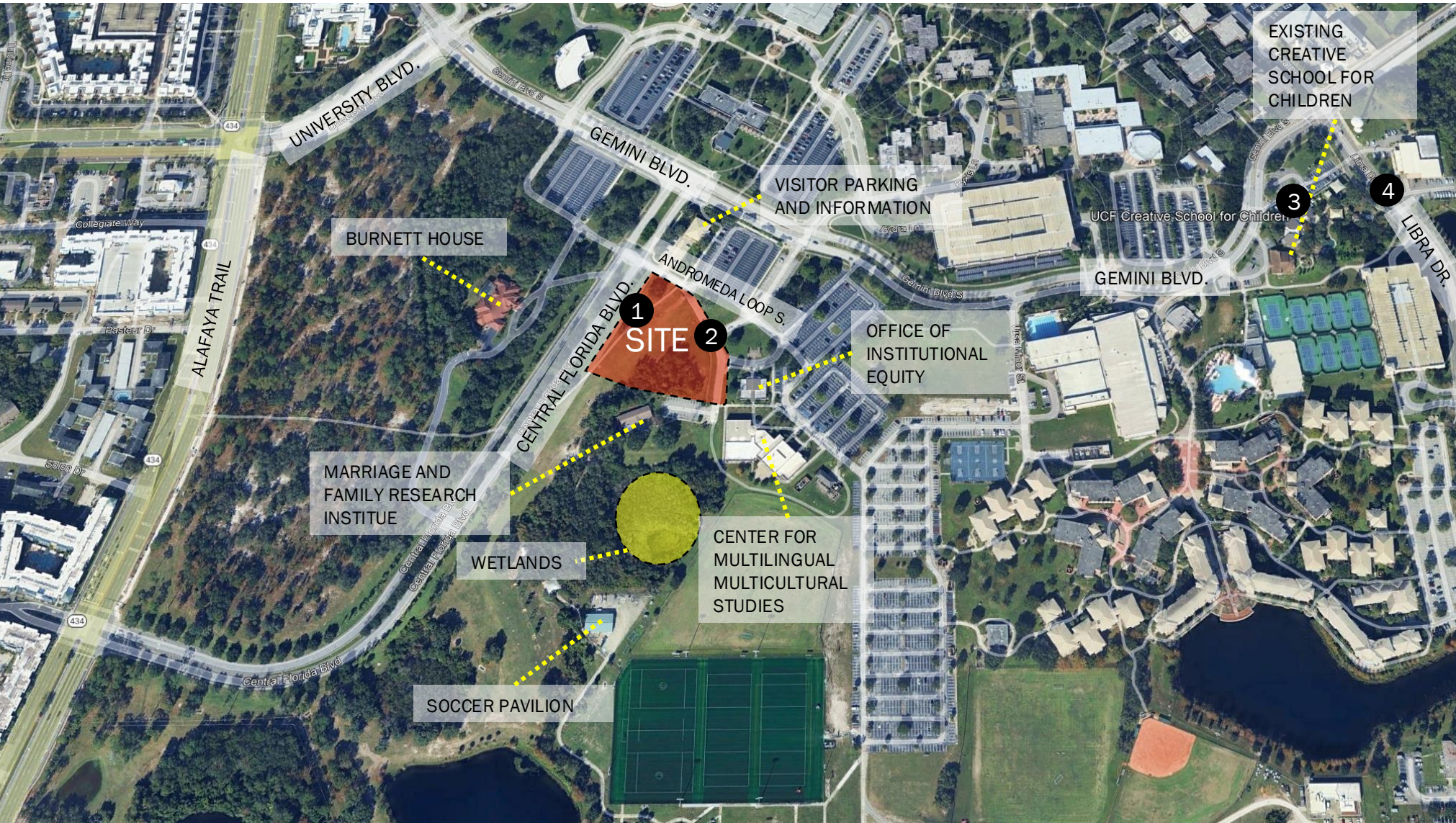


# Effective Cost Control: Early Scope & Budget Alignment

- Aligning Scope to Budget
- Prioritize Non-Negotiables (Code Requirements)
- Integrated Design Options
- Building Systems Equipment Evaluation
- Minimizes Redesign for Missing or Inadequate Scope

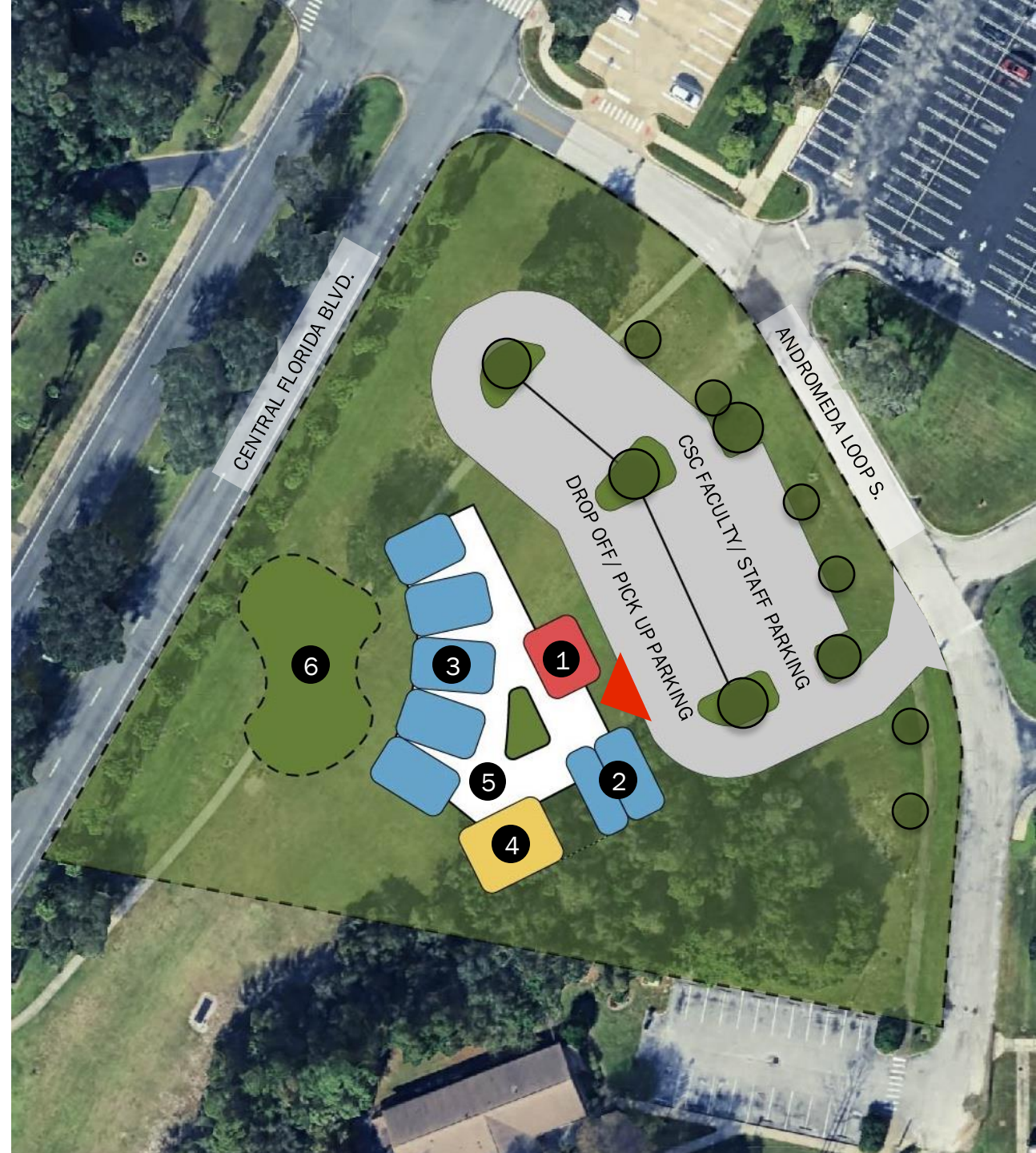


# Site Analysis



# Option 01

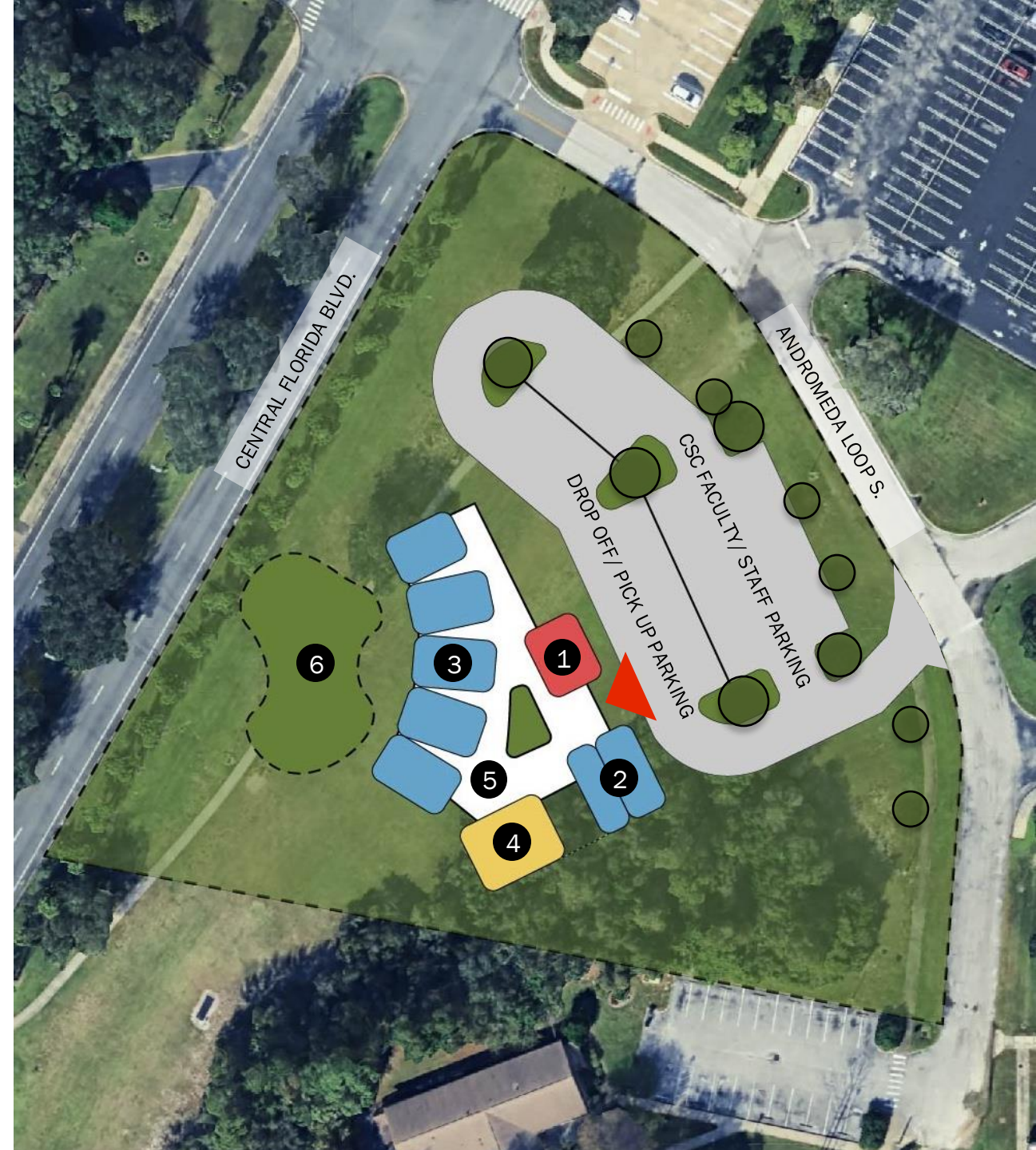
- 1 Administration
  - 2 Classroom (Infant - 2 yo)
  - 3 Classroom (2 - 5 yo)
  - 4 Multipurpose
  - 5 Discovery
  - 6 Outdoor Learning
- ▲ Main Entry



APPROACH & METHOD

# Option 01

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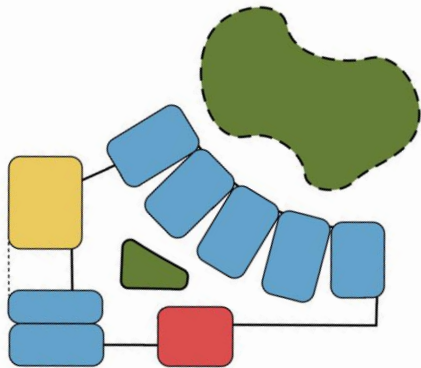




APPROACH & METHOD

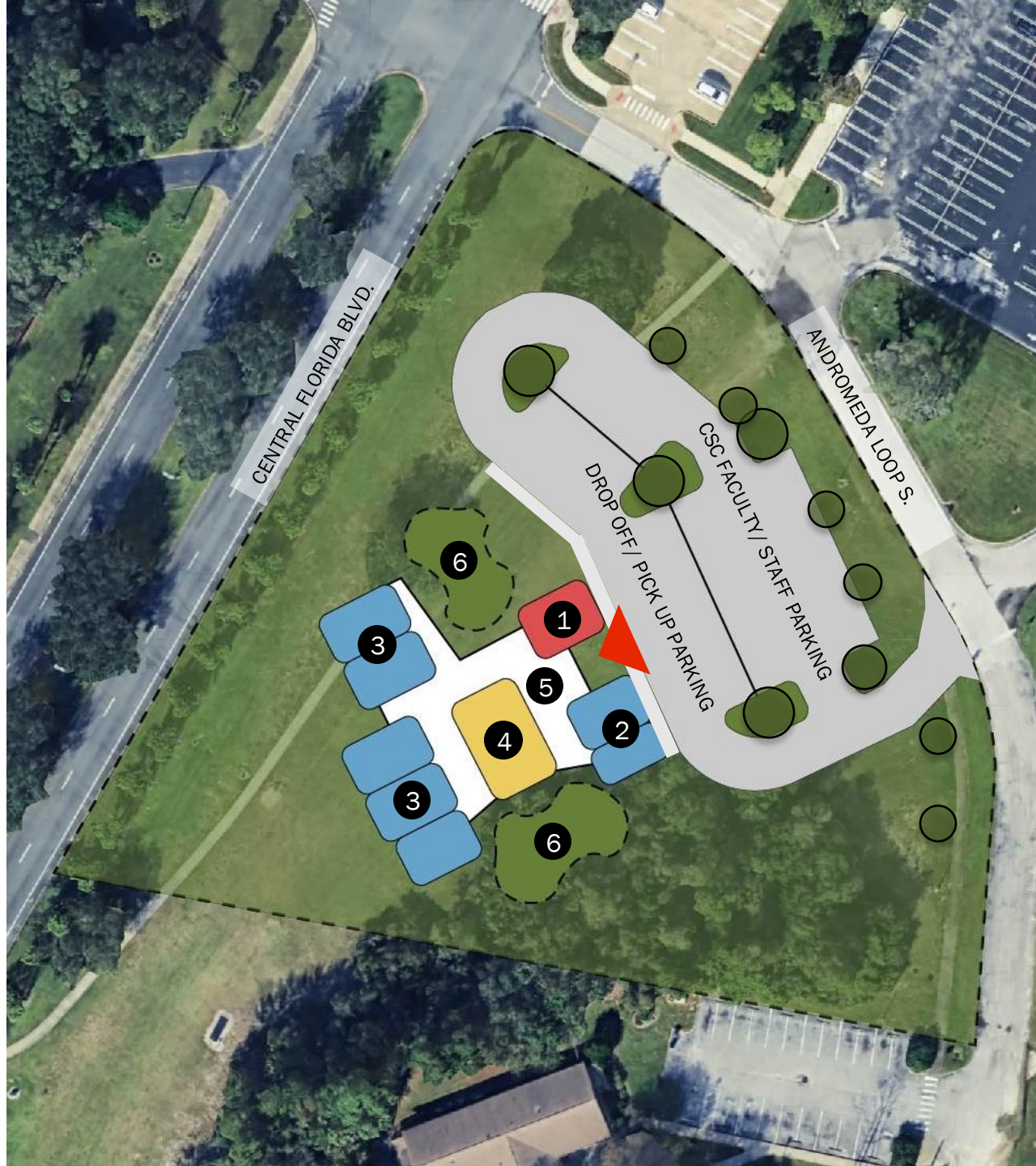
# Option 01

-  Administration
-  Classroom
-  Multipurpose
-  Discovery



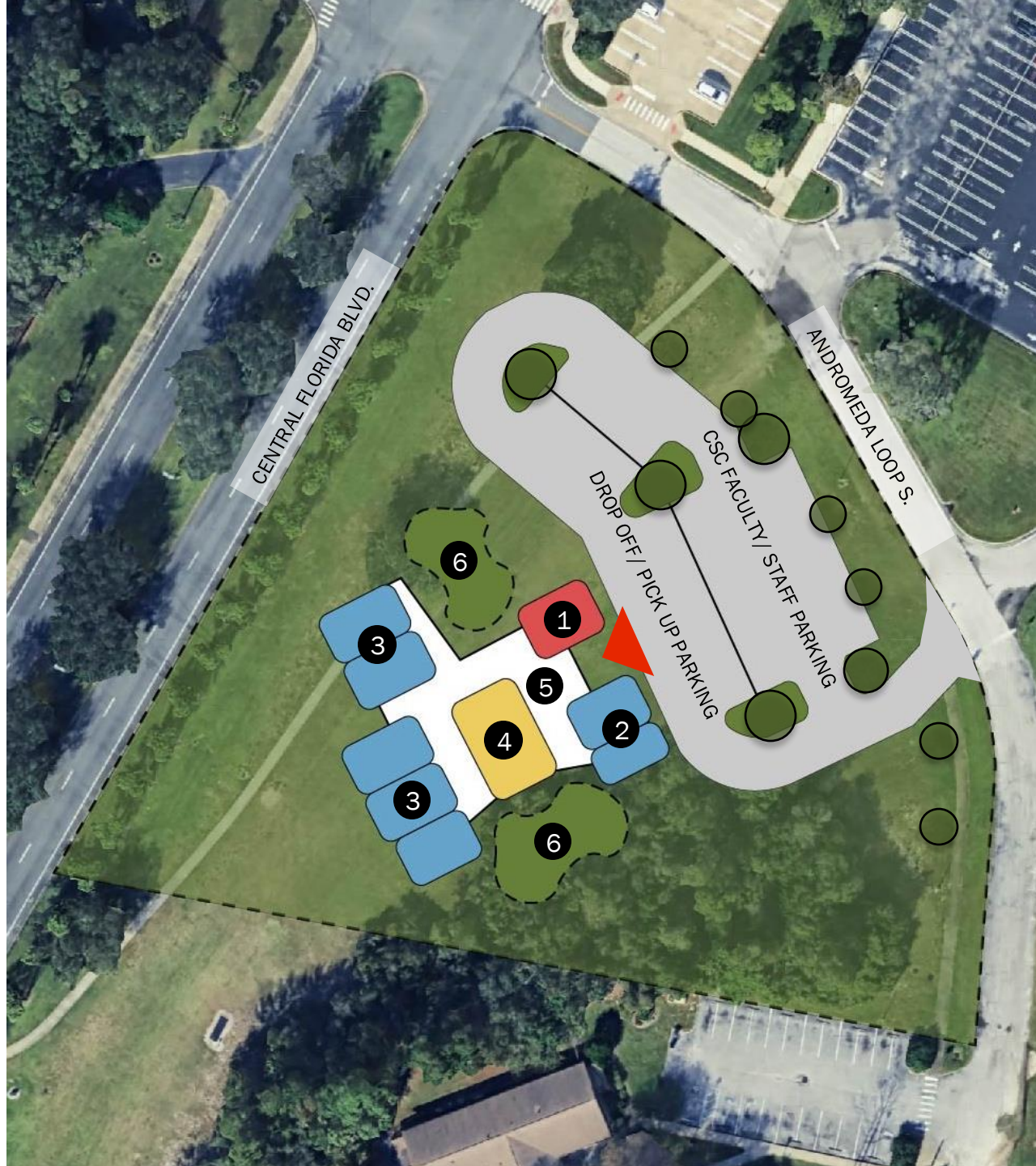
## Option 02

- 1 Administration
  - 2 Classroom (Infant - 2 yo)
  - 3 Classroom (2 - 5 yo)
  - 4 Multipurpose
  - 5 Discovery
  - 6 Outdoor Learning
- ▲ Main Entry



APPROACH & METHOD

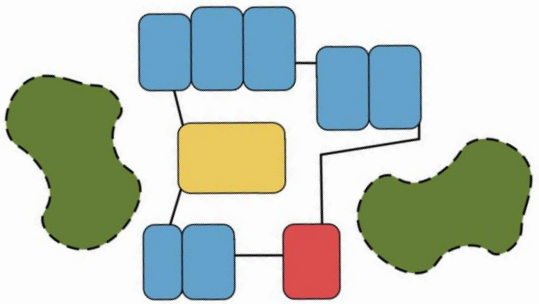
# Option 02



APPROACH & METHOD

# Option 02

-  Administration
-  Classroom
-  Multipurpose
-  Discovery



# QA/QC Process

- **Organized** approach to quality management and document review: an established QA/QC process.
- Use of DLR Group's **Integrated Design Process (InDePro)** and Checklists for all Phases (example right)
- **Continuity of Team Members** from design start through construction completion
- **Internal 3rd Party QC Reviews** for every Design Deliverable
- **Document design decisions** in meeting minutes, but also in NewForma, BlueBeam markup sessions, Teams shares, and with CM/GC input when available.

Classification	Occupancy	Description	Occupant Load			Water Closets (Urinals: See §419.2)				Lavatories				Bathhubs / Showers		Drinking Fountain (See §410)		Service Sink		Kitchen Sink		Clothes Washer Connection			
			Total	Male	Female	Male	Female	Male	Female	Male	Female	per dwelling unit	per dwelling unit	per dwelling unit	per dwelling unit	per dwelling unit	per dwelling unit	per dwelling unit	per dwelling unit	per dwelling unit	per dwelling unit	per dwelling unit	per dwelling unit		
Residential	R-2	Apartment house	Number of Dwelling Units			1	per	dwelling unit	0.00	1	per	dwelling unit	0.00	1	per	dwelling unit	0.00	1	per	100	0.00	1	per	20	0.00
	R-3	Congregate living facilities with 16 or fewer persons	0	0	0	1	per	10	0.00	1	per	10	0.00	1	per	10	0.00	1	per	8	0.00	1	per	-	-
	R-3	One- & two-family dwellings & lodging houses with five or fewer guestrooms	Number of Dwelling Units			1	per	dwelling unit	0.00	1	per	dwelling unit	0.00	1	per	dwelling unit	0.00	1	per	dwelling unit	0.00	1	per	dwelling unit	0.00
Storage	S-1	Structures for the storage of goods, warehouses, storehouse & freight depots. Low & Moderate Hazard	0	0	0	1	per	100	0.00	1	per	100	0.00	1	per	100	0.00	1	per	100	0.00	1	per	-	-
	S-2	Structures for the storage of goods, warehouses, storehouse & freight depots. Low & Moderate Hazard	0	0	0	1	per	100	0.00	1	per	100	0.00	1	per	100	0.00	1	per	100	0.00	1	per	-	-

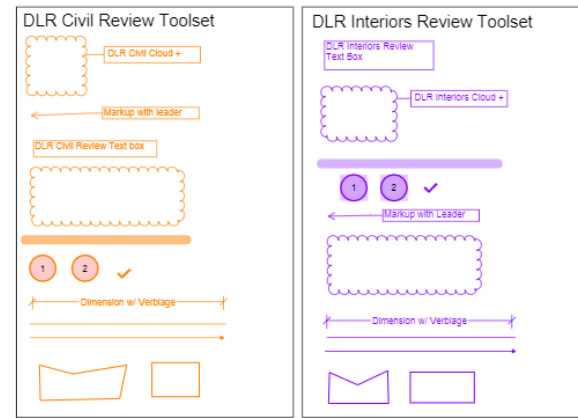
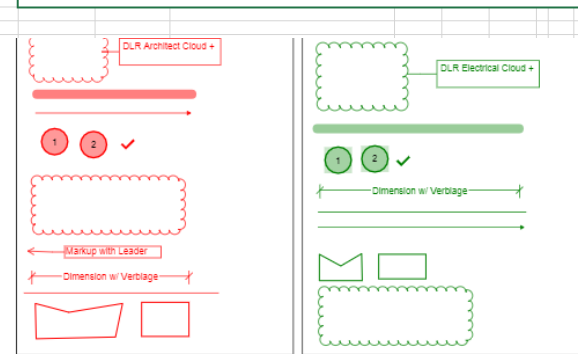
- The fixtures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction of the number of persons indicated. The number of occupants shall be determined by the Florida Building Code, Building.
- Toilet facilities for employees shall be separate from facilities for inmates or care recipients.
- A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient sleeping units shall be permitted provided that each patient sleeping unit has direct access to the toilet room and provision for privacy for the toilet room user is provided.
- The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.
- For business and mercantile occupancies with an occupant load of 15 or fewer, service sinks shall not be required.

OVERALL REQUIRED NUMBER OF UNITS												Other										
Total	Occupant Load		Water Closets (Urinals: See §419.2)				Lavatories				Bathhubs / Showers	Drinking Fountain (See §410)	Service Sink	Kitchen Sink		Clothes Washer Connection						
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female				Total	0		Total	0	Total	0.00		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	
NO. OF UNITS			NON-GENDER TOTAL				NON-GENDER TOTAL				TOTAL		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL	

URINALS (§419.2)	Occupancy Group	Urinal Substitution Rate	Permitted Urinal Substitutions	
			Total WC	Permitted Urinals
	Assembly and Educational Occupancies	67% of Required Water Closets	0	0
	All Other Occupancies	Not More Than 50% of Water Closets	0	0

§419.2 Substitution for Water Closets  
In each bathroom or toilet room, urinals shall not be substituted for more than 67 percent of the required water closets in assembly and educational occupancies. Urinals shall not be substituted for more than 50 percent of the required water closets in all other occupancies.

§2902.1.1 Fixture calculations.  
To determine the occupant load of each sex, the total occupant load shall be divided in half. To determine the required number of fixtures, the fixture ratio or ratios for each fixture type shall be applied to the occupant load of each sex in accordance with Table 2902.1. Fractional numbers resulting from applying the fixture ratios of Table 2902.1 shall be rounded up to the next whole number.



Section	Use	Groups																										
		A-1	A-2	A-3	A-4	A-5	B	E	F-1	F-2	H-1	H-2	H-3	H-4	H-5	I-1	I-2	I-3	I-4	M	R-1	R-2	R-3	R-4	S-1	S-2	U	
303	Assembly	303.2	303.3	303.4	303.5	303.6																						
304	Business	304.1																										
305	Educational	305.1																										
306	Factory & Industrial	306.2	306.3																									
307	High Hazard	307.3	307.4	307.5	307.6	307.7																						
308	Institutional	308.3	308.4	308.5	308.6																							
309	Mercantile	309.1																										
310	Residential	310.3	310.4	310.5	310.6																							
311	Storage	311.2	311.3																									
312	Utility	312.1																										

Section	Use	Section	Use
403	High-Rise Buildings	416	Application of Flammable Finishes
404	Atriums	417	Drying Rooms
405	Underground Buildings	418	Organic Coatings
406	Motor-Vehicle-Related Occupancies	419	Live/Work Units
407	Group I-2	420	Groups I-1, R-1, R-2, R-3 and R-4
408	Group I-3	421	Hydrogen Fuel Gas Rooms
409	Motion Picture Projection Rooms	422	Ambulatory Care Facilities
410	Stages, Platforms & Technical Production Areas	423	Storm Shelters
411	Special Amusement Buildings	424	Children's Play Structures
412	Aircraft-Related Occupancies	425	Hyperbaric Facilities
413	Combustible Storage	426	Combustible Dust, Grain Processing & Storage
414	Hazardous Materials		

Section	Use	Protected		Unprotected		Primary Structural Frame	Exterior Bearing Walls	Interior Bearing Walls	Exterior Nonbearing Walls & Partitions	Interior Nonbearing Walls & Partitions	Floor Construction & Associated Secondary Members	Roof Construction & Associated Secondary Members
		A	B	A	B							
602.2	Type I	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NC	NC	NC	NC	NC	NC	NC
602.2	Type II	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NC	NC	NC	NC	NC	NC	NC
602.3	Type III	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	C	NC	AM	NC	AM	C	C

# Your **Advocate** During Construction

## Field Report

DATE: 8/21/2024  
VISIT NAME: Field Report 002  
REPORT NO: FR002

Aranya Mom

DLR Group

## Constant Communication

- Proactive & Early partnership
- On-site for immediate resolution
- Review all contractor submittals and RFI's and provide action recommendations
- Scrutinize contractor actions
- Identify Any Early Package Needs
- Communication
- Continuity of Project Leadership through Project Completion

**DLR PROJECT CHANGE ORDERS: <1%**  
(INDUSTRY STANDARD: 3-5%)

### OBSERVATIONS

Although this report may include photographs, the architect or engineer is not undertaking to create a comprehensive photographic record of project progress or any particular condition.

ITEM:  
**FOR 014-001**

SUBJECT: Structural

SPACE:  
-



REMARKS:  
Columns at entry and entry canopy in place. Steel erection continuing at main entry location.



AGENDA

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 **DLR GROUP**

# *Why DLR Group*



20 points

**T**he **Ke** **R** **i** **n** **G** **LAB**



OUR VALUE

# What Our Team Brings | *Elements for Success*

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Research-Based Design



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UCF Campus Partnership



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Program Type Experts



# THANK YOU!

 **DLRGROUP**



# Q & A DISCUSSION

 **DLR GROUP**

