



Laramie County Community College
Children's Discovery Center Expansion Planning

Board of Trustees Presentation
7 Jan 2022

By Architectural Means, PC



AGENDA



Laramie County Community College :

Children's Discovery Center



Expansion Planning

Vision Statement & Goals

Capacity Overview

Program

Process

Planning – Site Options In Campus Context

Building Options

Opportunities

Master Plan Budgets

CDC Impacts

Discussion

Conclusion

VISION STATEMENT

Laramie County Community College seeks to transform and expand space for the Children's Discovery Center to elevate its ability to serve families in the Cheyenne community with a strong nationally accredited early childhood development program, yielding facilities that enhance the educational opportunities for young children.

GOALS

To accomplish this vision LCCC seeks to accomplish the following goals:

- 1) Provide expansion space for all age levels, thus building capacity to serve the Cheyenne community. Enable CDC to gain operational efficiency with increased enrollments to support families within the community.
- 2) Co-locate all children/programs to one location with site configuration that facilitates safety for parent drop off/pickup activity.
- 3) Provide secure & nurturing environment that facilitates teacher's ability to focus on children.

GOALS

To accomplish this vision LCCC seeks to accomplish the following goals:

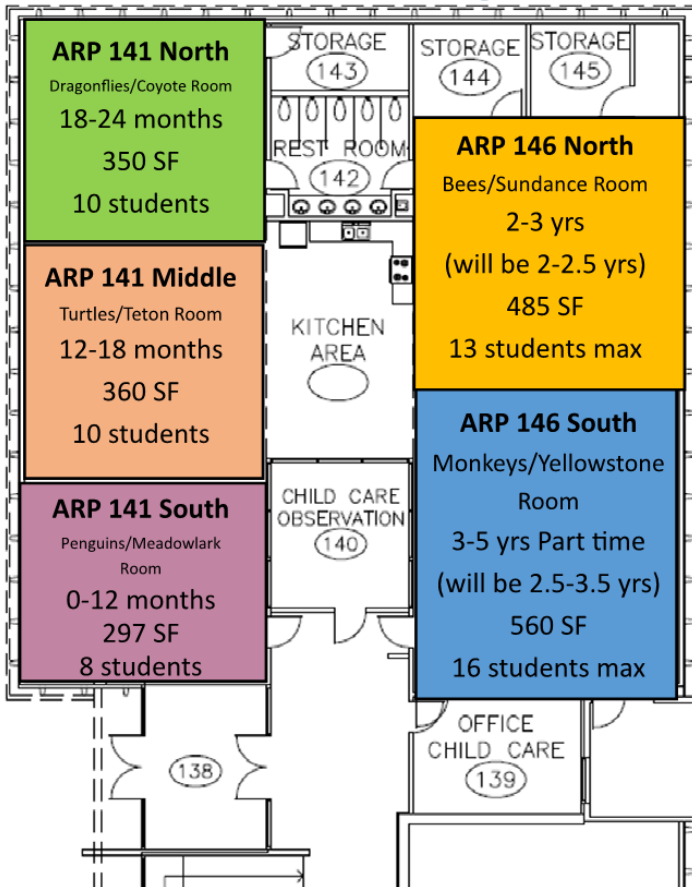
- 4) Provide space and support functions that are staff efficient while meeting NAEYC accreditation requirements.
- 5) Provide multi-purpose flex space that supports functional & operational needs while providing expanded educational opportunities for children.
- 6) Improve building infrastructure support of CDC functional needs (access to sinks, lighting controls, age-appropriate restrooms).

GOALS

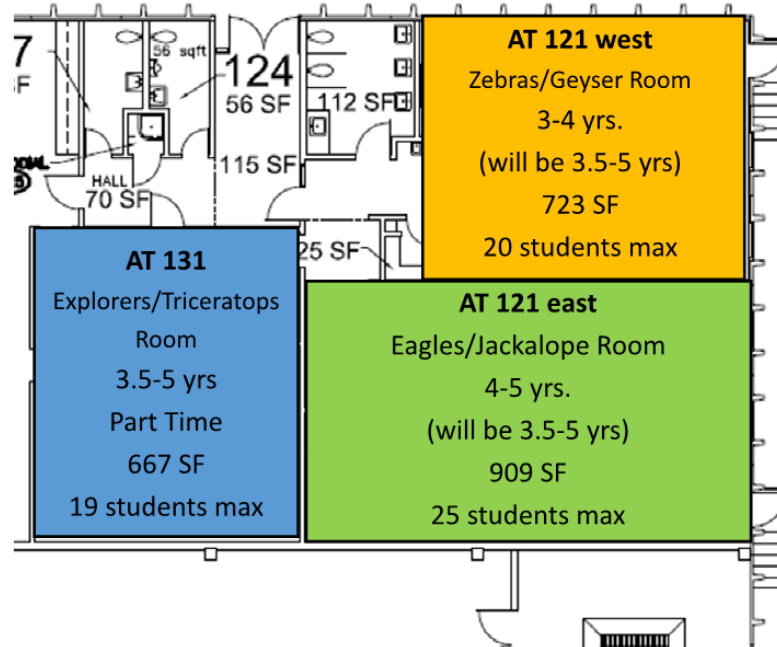
To accomplish this vision LCCC seeks to accomplish the following goals:

- 7) Improve handicap accessibility for classrooms and outdoor play area.
- 8) Create flexibility so CDC can adapt for future challenges, such as the recent pandemic (COVID-19).
- 9) Create flexibility to allow support for a potential future LCCC offered optional lunch and other potential future programs.

Children's Discovery Center ARP Building



Children's Discovery Center AT Building



Playground

Current Enrollment
115-120 students

Current Waiting List Count(s)
50-75 currently on wait list
Infant – program full until
June 2022

Planned Future Enrollment

192 with the addition of
1 classroom per age level

Total Existing CDC Space Allocation both ARP + AT 8515 gsf



Existing Facility Capacity Overview + Future Enrollment Projection

Program Summary

I.D.	Space	Qty.	ASF	Children/ Students	Notes
PROGRAM SUMMARY					
1.0	Reception		250	0	
2.0	Infant Care Areas		1,150	16	
3.0	Toddler Care Areas		2,015	40	
4.0	Young Child Care Areas		2,890	56	
5.0	Pre-Kindergarten		3,660	80	
6.0	Shared / Flex Discovery Space		1,325	0	
7.0	School Age Programs/Future Class		0	0	Summer Program- use Flex Discovery Space
8.0	Administration		430	0	
9.0	Shared Resources		930	0	
10.0	Building Support		1,000		some dependency on campus steam/ch. water
	Subtotal		13,650		
	NASF (circulation, structure, mechanical)		4,950		potential site influence on area
	Building Efficiency Factor		1.35		
	TOTAL		18,600 gsf	192	children = total capacity
		rounded	18,600 gsf		



UPDATED PROGRAM SUMMARY



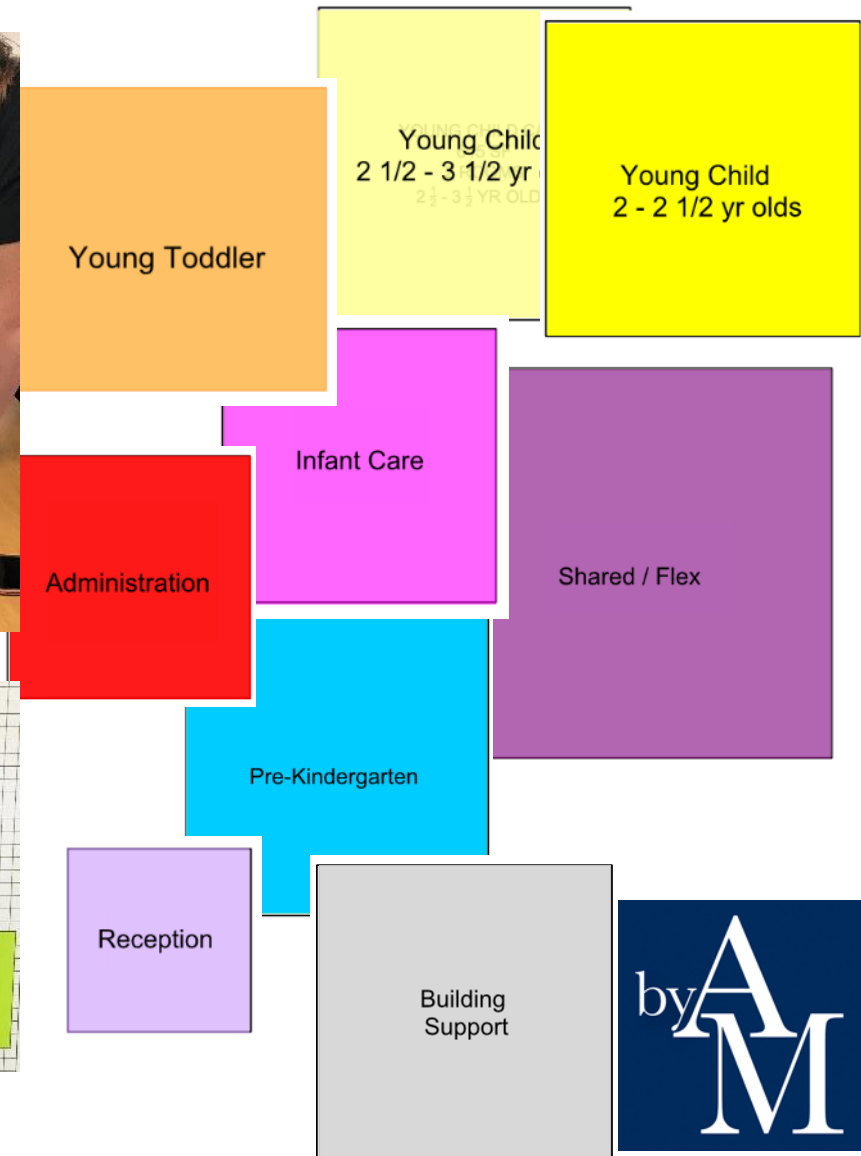
3.0 Toddler Care Areas		4 :Planned # of Rooms				
Planned # of Children/ Room		10				
		Qty	# Ch		Area (sf)	Total # Ch Notes
3.1	Young Toddler (12-18 months)	2	10	40	800	20 w/sink, Cubbies
	Evacuation Cribs	2		30	60	
3.2	Toddler (18-24 months)	2	10	40	800	20 w/sink, Cubbies
3.3	Toddler Diaper change	1		125	125	Hand sink, Gate, Open above counter to rm
3.4	Toddler Shared Storage	2		60	120	
3.5	Toddler Diaper change/toilet training (1 toilets)	1		110	110	Diaper change w/sink, Child toilet & sink, Gate, Open above counter to room
					2,015	40
4.0 Young Child Care Areas		4 :Planned # of Rooms				
Planned # of Children/ Room		12 & 16				
		Qty	St.		Area (sf)	Total # Ch Notes
4.1	Children - 2 to 2.5 yr old's	2	12	45	1,080	24 w/sink, Cubbies
4.2	Children - 2.5 to 3.5 yr old's	2	16	45	1,440	32 w/sink, Cubbies
4.3	Shared storage	4		30	120	
4.4	Diaper change/Toilet training (2 toilets)	2		125	250	Diaper change w/sink, Child toilet & sink, Gate, Open above counter to room
					2,890	56



PROGRAM Excerpt (sample) – Toddlers & Young Children

Program

1.0	Reception	250	0
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Building Efficiency Factor		1.35	
TOTAL		18,600 gsf	192 children



Noah



Grace

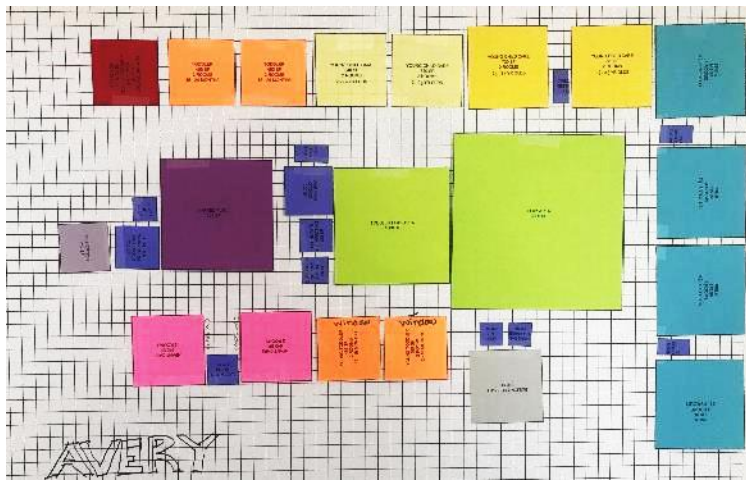
PLANNING CHARRETTES – “Kit of Spaces” w/Hands on Planning



Planning- Charrettes

Laramie County Community College : Children's Discovery Center Expansion Planning

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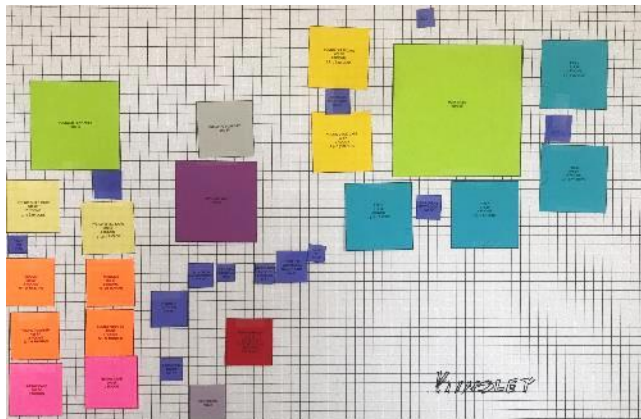
Avery



Noland



Grace



Kinsley



Noah

Building Concept – Teachers & Director

GENERAL

- Fits within Campus Master Plan Vision
- Parent Convenience
 - Drop off Friendly
- Identity of Structure
- Potential First Impression
- Future Expansion Impacts?
- Good Stewardship of Public Funds
 - Cost Efficient: Initial & Long Term
- Operational
 - Utility costs, snow removal
 - Other
- Access to Campus Resources
- Access to Mall (center spine) walks
- Potential parent exposure to LCCC
- Access to Nature
- Safety
 - Potential Cell Tower Proximity
 - Other Safety Factors

SITE PLANNING

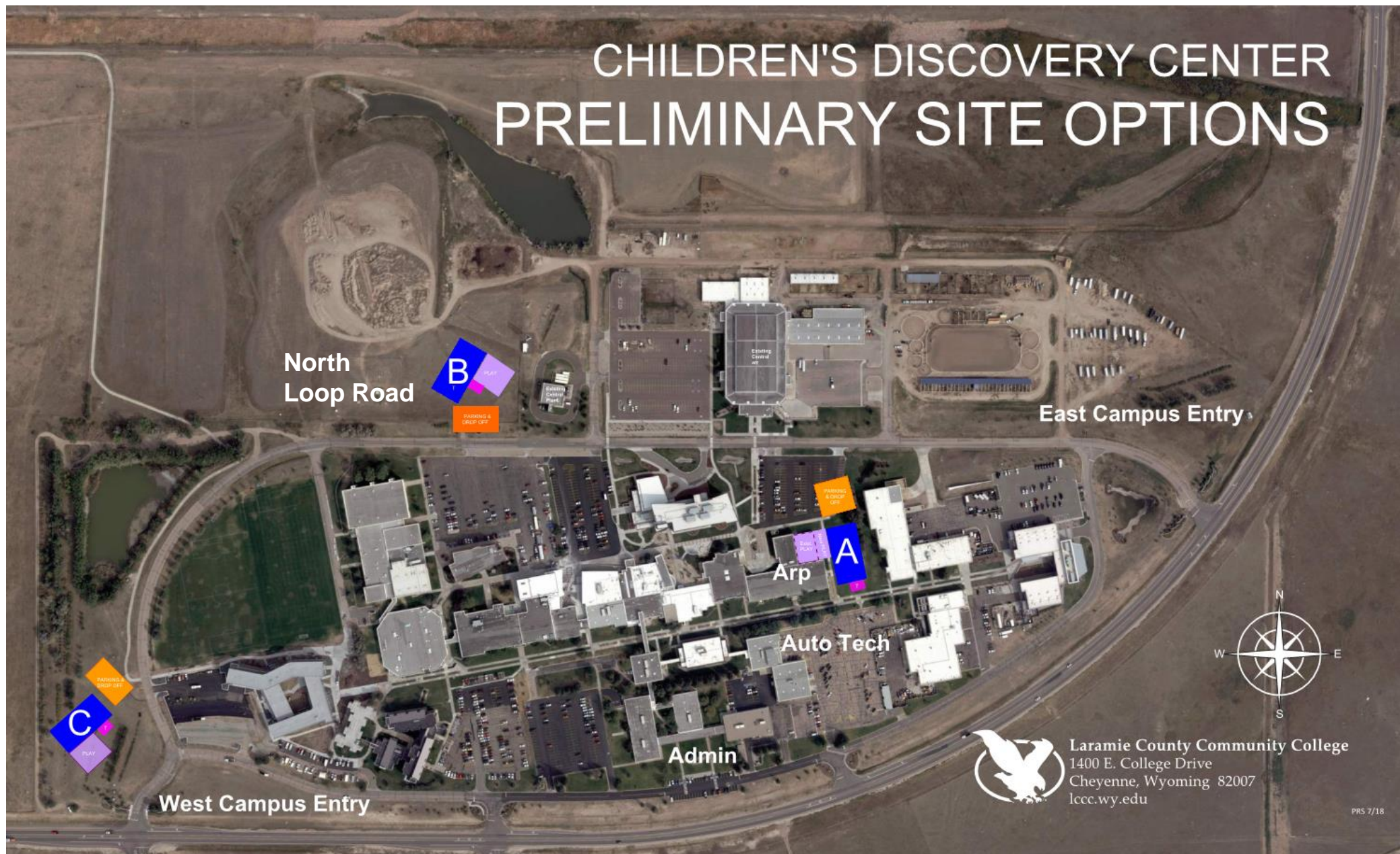
- Ease of Site Development
- Utility – Water
- Utility – Sewer
- Utility – Elec/Gas
- Campus IT Backbone
- Grading/Drainage
- Site Functionality
 - Parking
 - Drop off
 - Site Fit
- Traffic Safety
 - Drop Off Cueing

BUILDING PLANNING

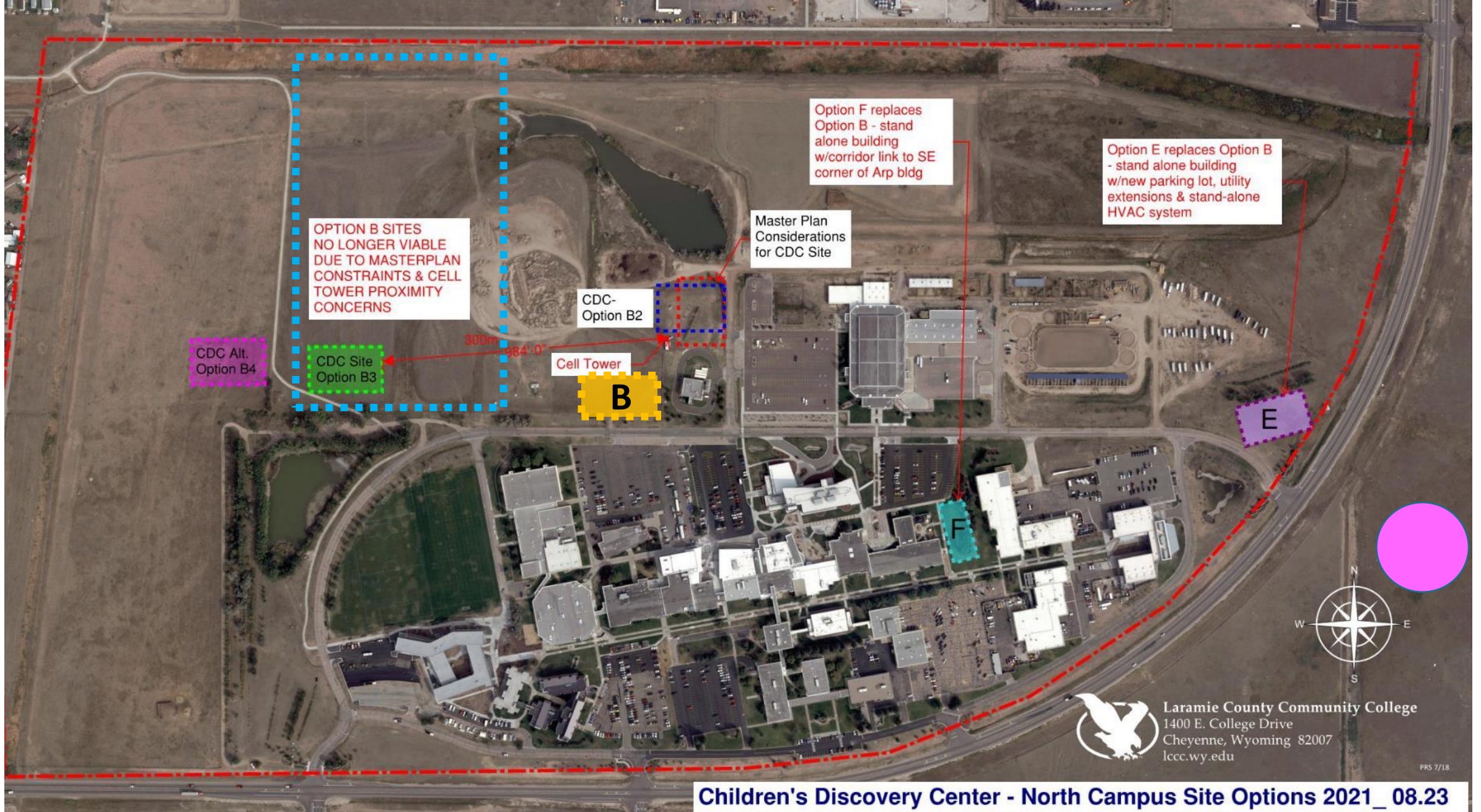
- Security for CDC
- Building Orientation
 - Maximize Daylighting
- Disruption
 - Construction activities
 - Ongoing Maintenance activities
- Building /Program Identity
- Playground Access
- Site Space to allow Building to Protect Playground

SITE EVALUATION - INITIAL CRITERIA

CHILDREN'S DISCOVERY CENTER PRELIMINARY SITE OPTIONS



INITIAL SITE OPTIONS



SITE OPTIONS - FURTHER CONSIDERATIONS



Option D

Arp Building Renovation

Southeast Wing +
Building Addition

Extend Campus Corridor



Option E

New Building –

Near East Campus Entry Drive
Stand Alone Building HVAC

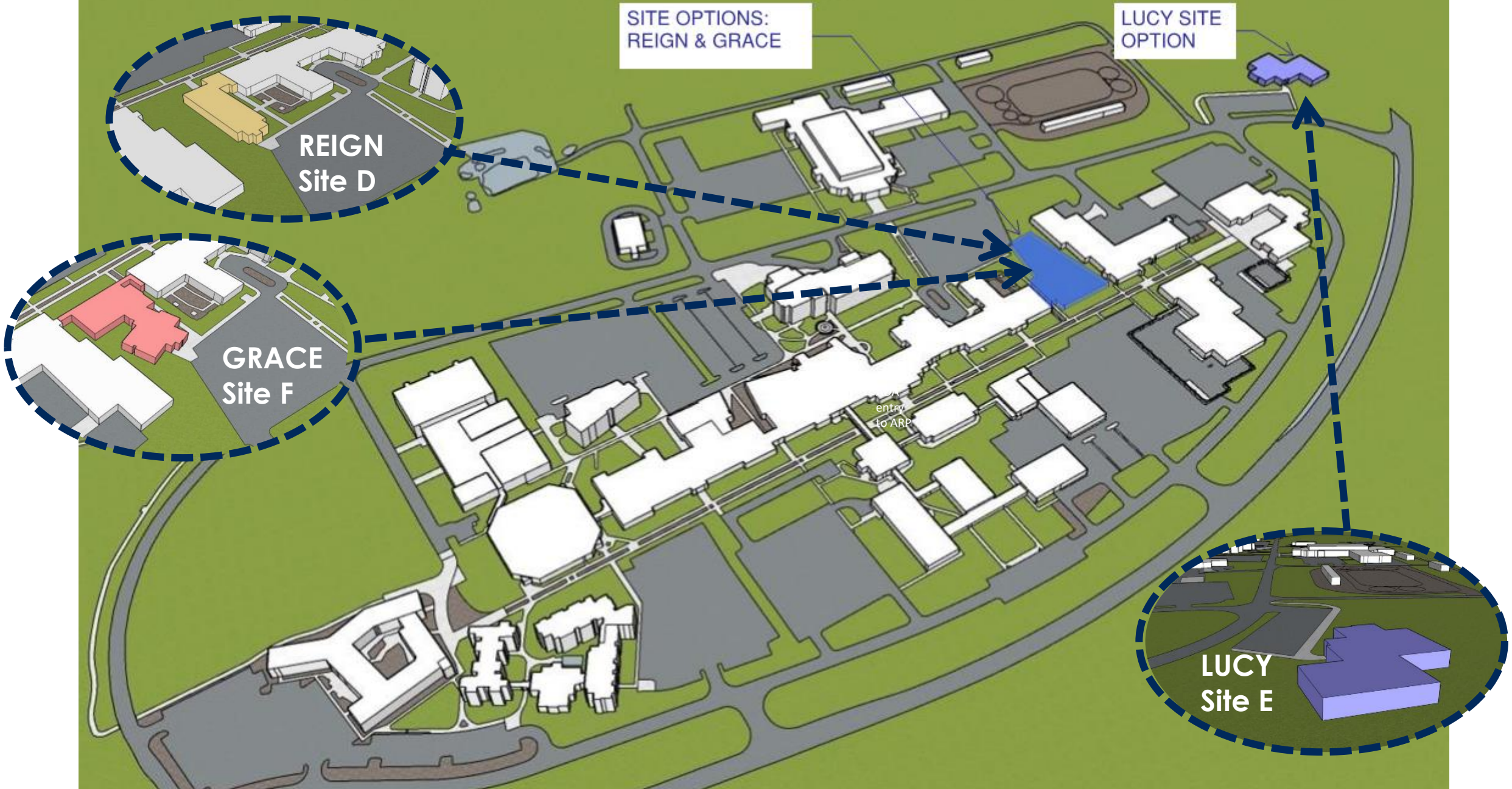


Option F

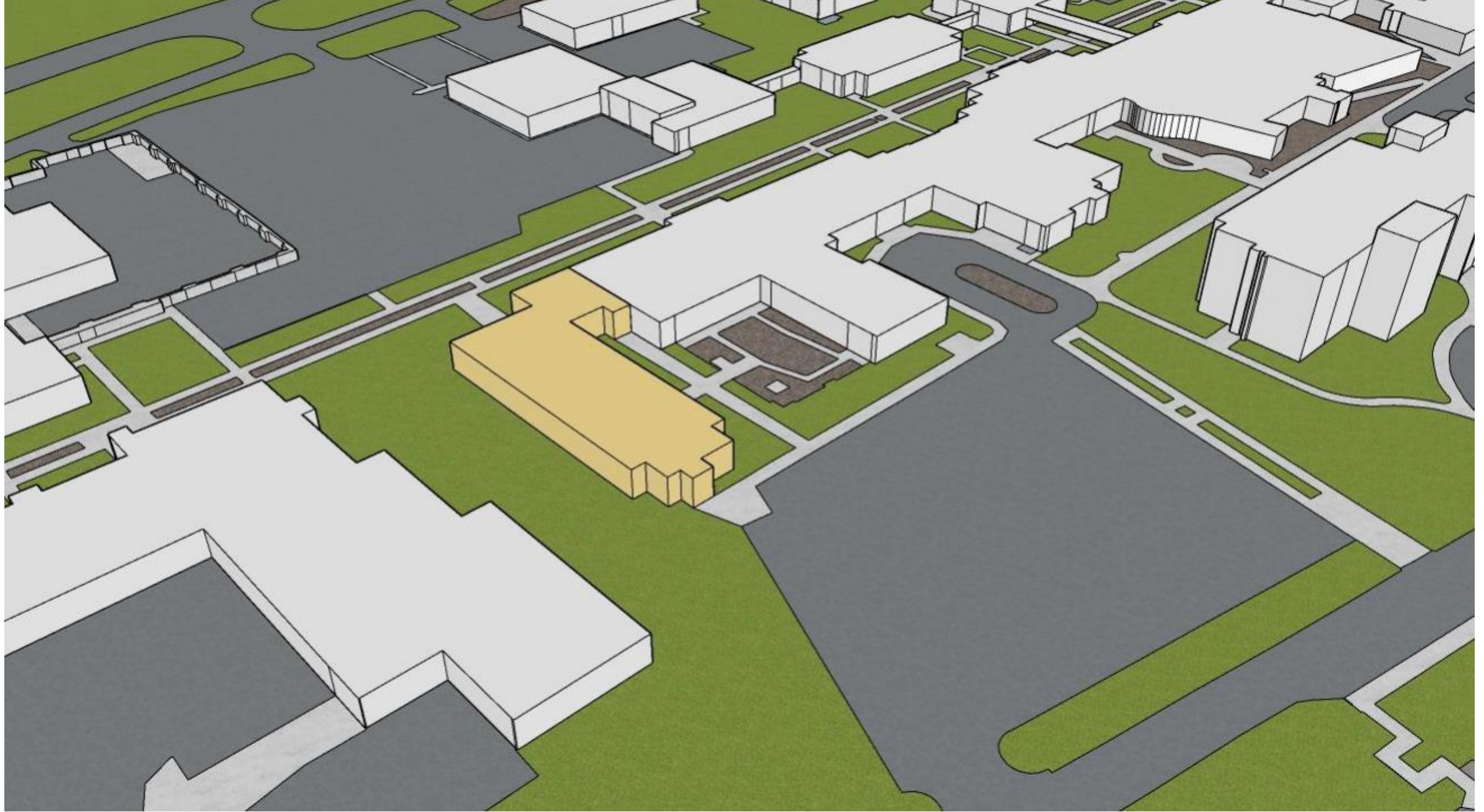
New Building –

East of Arp – Potential
Connecting Corridor
Campus Heat/Cooling

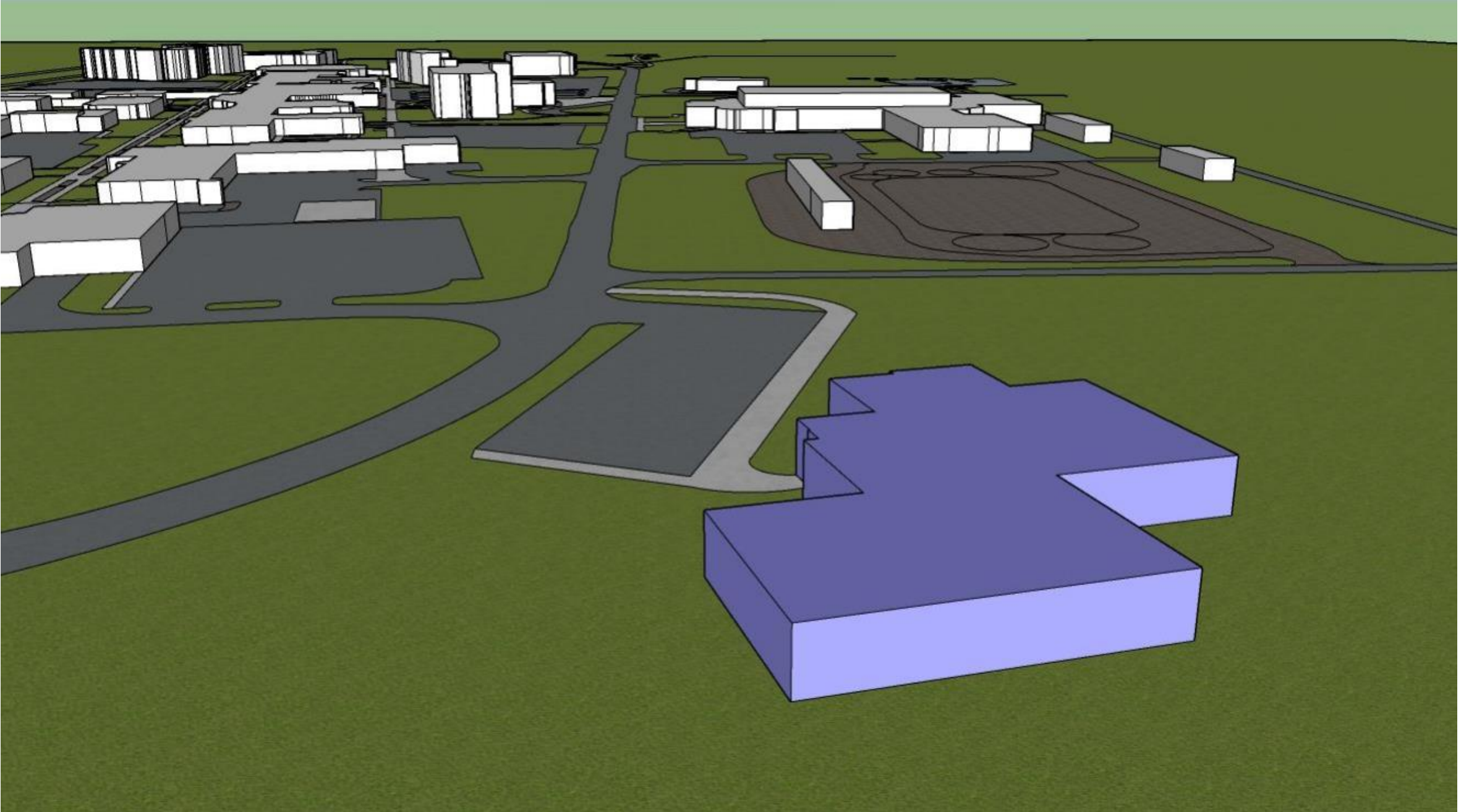
SITE OPTIONS AFTER FURTHER EVALUATION



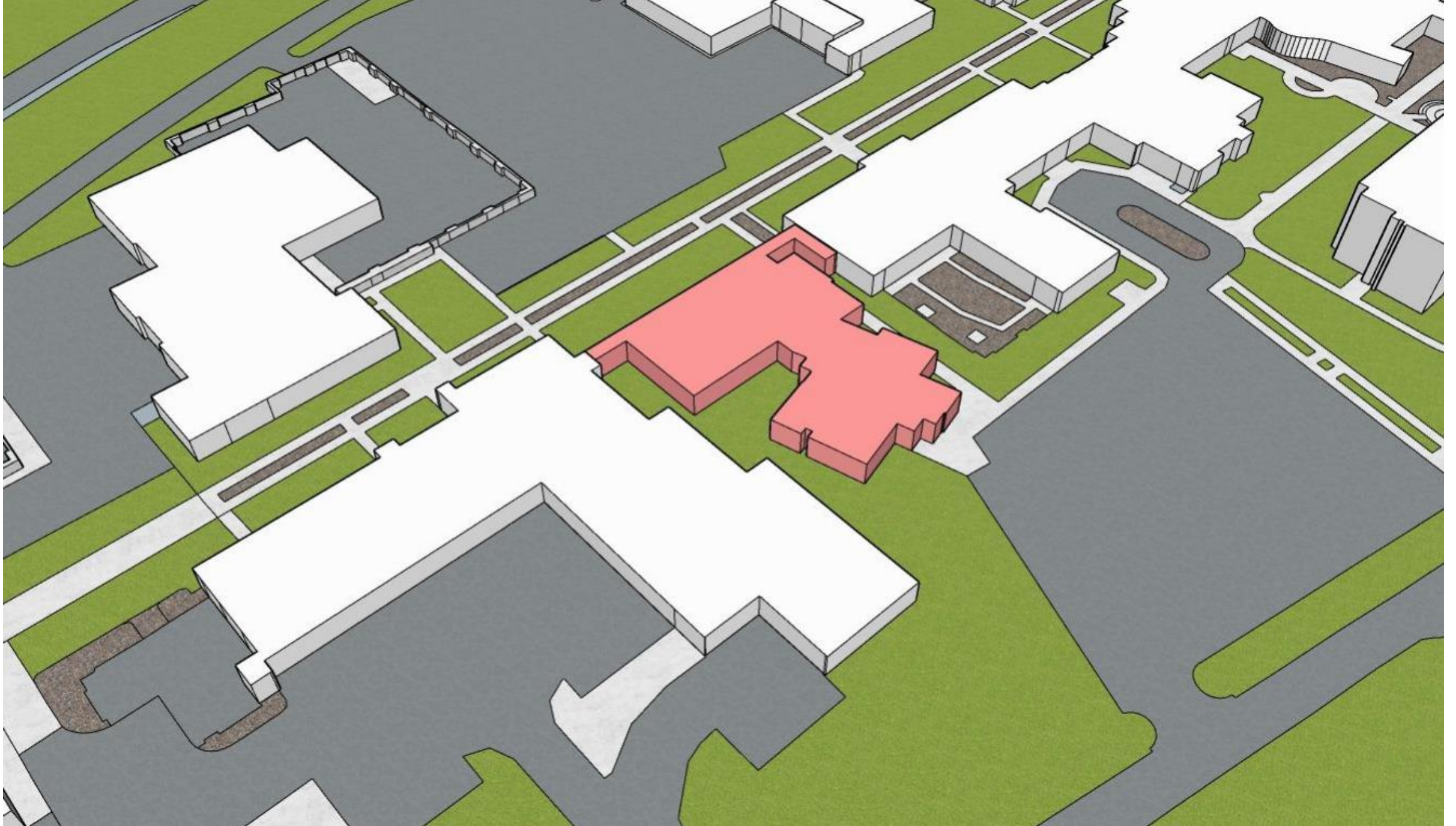
SITE OPTIONS – REIGN, LUCY & GRACE IN CAMPUS CONTEXT



SITE OPTION D – REIGN IN “CAMPUS NEIGHBORHOOD CONTEXT”



SITE OPTION E – LUCY IN “CAMPUS NEIGHBORHOOD CONTEXT”



SITE OPTION F – GRACE IN “CAMPUS NEIGHBORHOOD CONTEXT”



Site Option D

Plan Concept:

- **REIGN**
 - Arp Building Renovation
 - SE Wing + Building Addition
 - Extend Campus Corridor

Site Option E

Plan Concept:

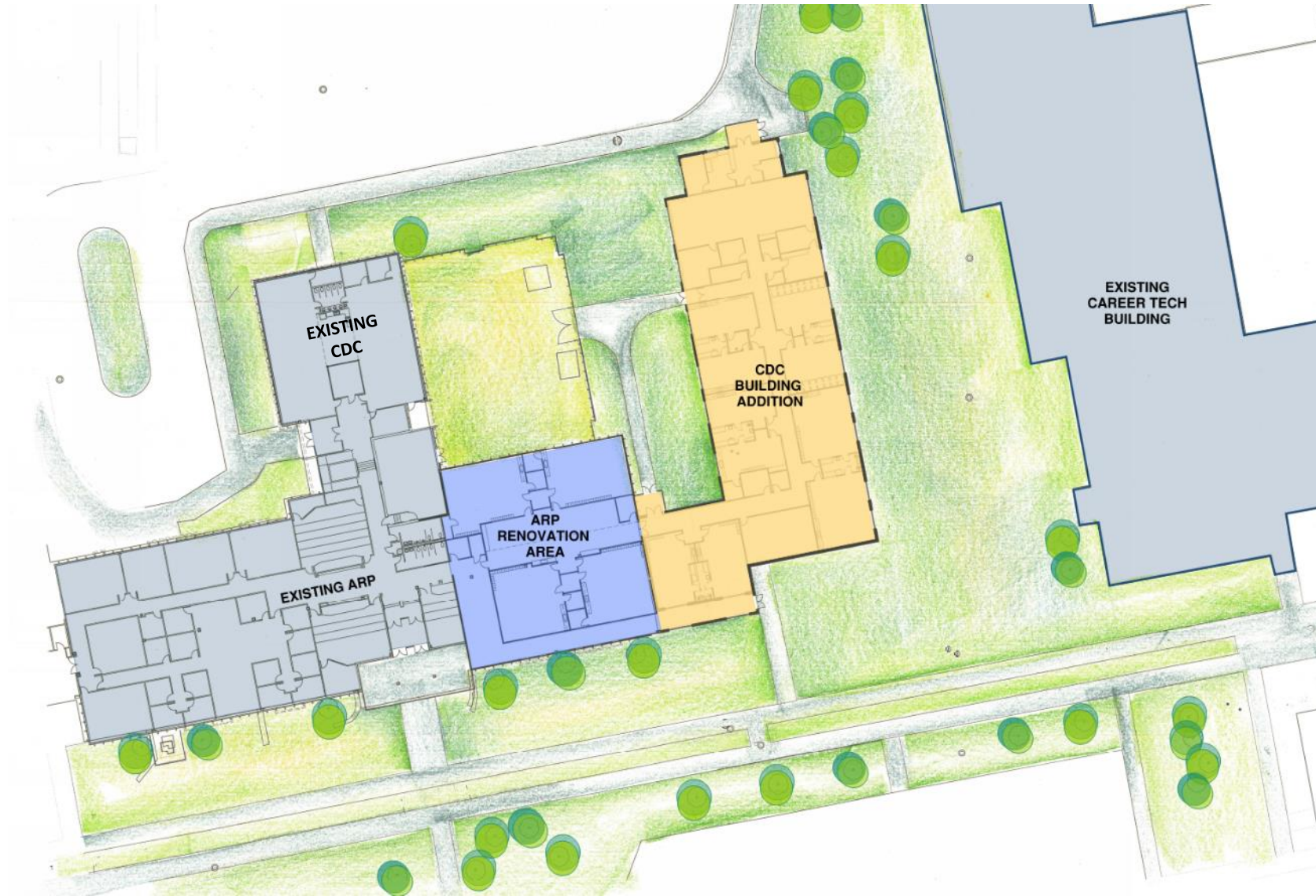
- **LUCY**
 - New Building
 - Near East Campus Entry Drive
 - Stand Alone Building HVAC

Site Option F

Plan Concept:

- **GRACE**
 - New Building
 - East of Arp/Campus Corridor
 - Campus Heat/Cooling

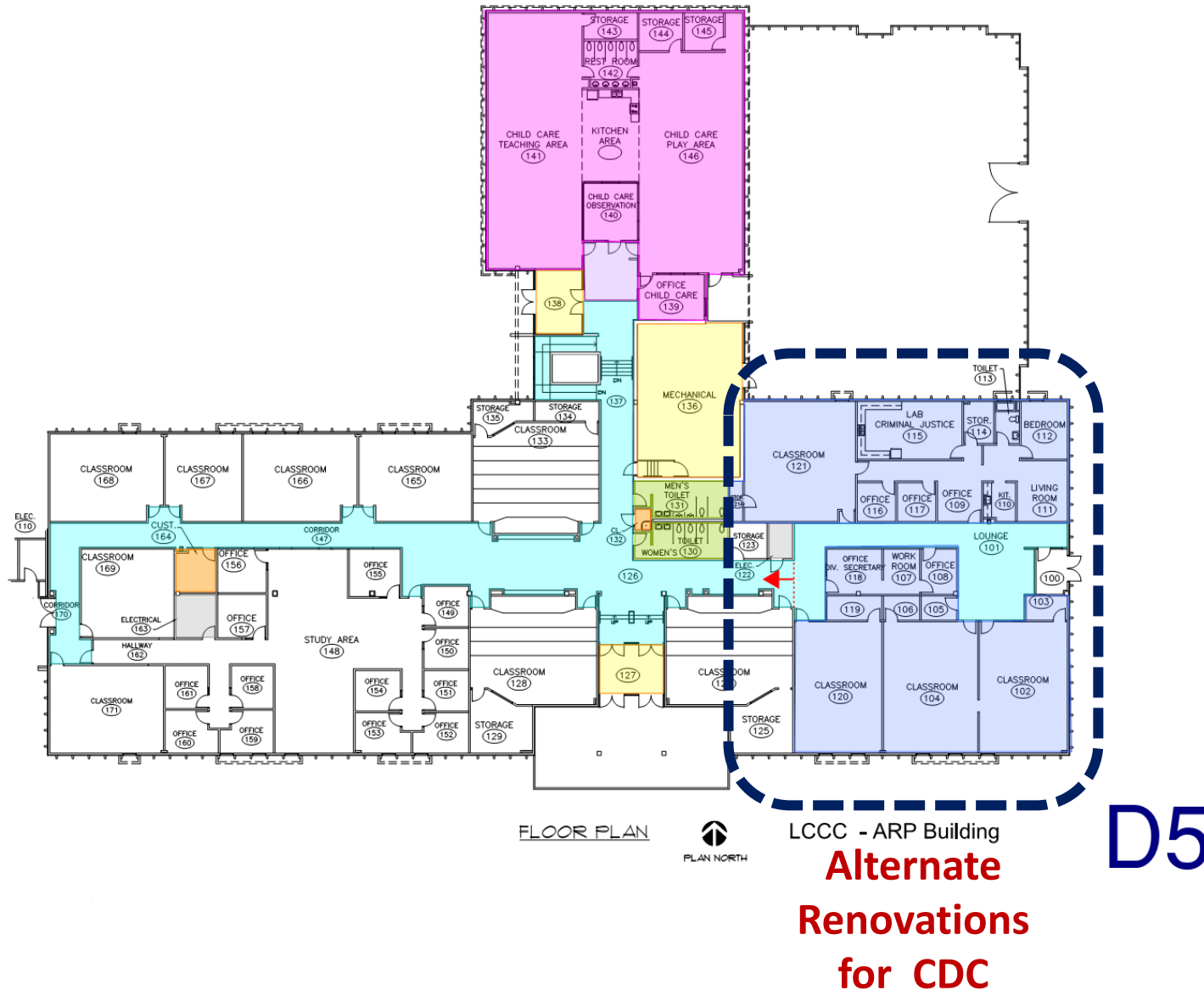
Option D : Arp Partial Building Renovation + Building Addition + Extend Campus Corridor



Site Option: D w/ Reign Plan

Building Options - Site D: Building Renovation + Addition

Existing CDC



Renovation Logistics:

CDC Move - Temporary Location for Duration of Construction

- **Duration** – Estimated 12-15 months
 - dependent on phasing & constraints
- **Location**
 - Potential Temporary Facility Enhancement
 - Sinks?
 - Toilets
 - Power needs – refrigerators, laundry, Flat Panels Displays
- **Moving Costs & Logistics**
- **Disruption Issues?**

CDC to Remain in Place: Current Arp Classrooms

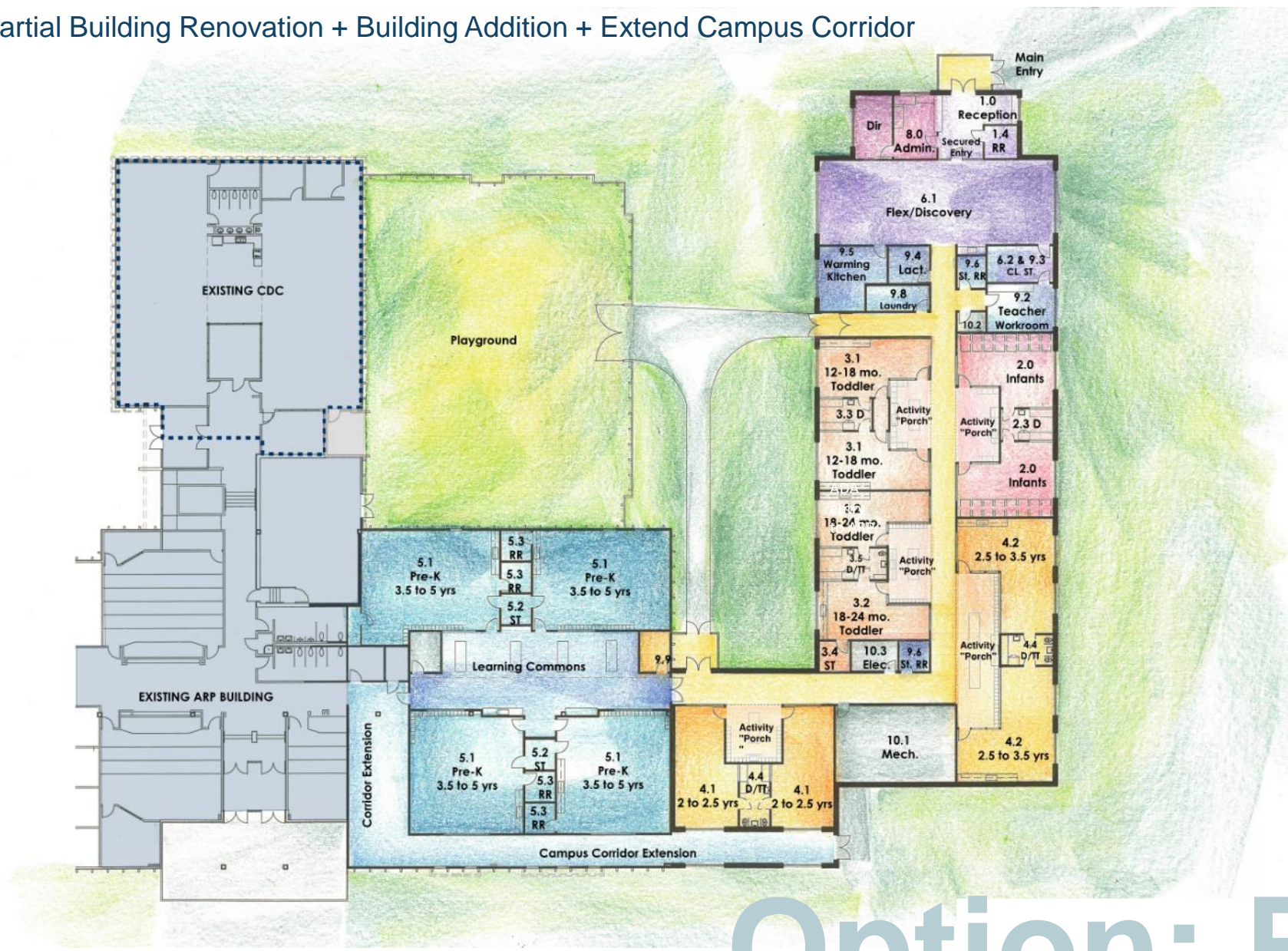
- **Dictate Facility Design to Accommodate**
 - Pull building addition out from Existing building
 - Broad implications- supervision, lack of cohesiveness
 - Options to minimize implications
- **Dictate Construction to Accommodate**
 - Night Construction Schedule?
 - Premium labor rates
 - more temporary heat costs,
 - less efficient construction effort
 - Higher Construction Cost

Parameters to Minimize Impacts for CDC (Remain in Place)

During Construction of Building Addition

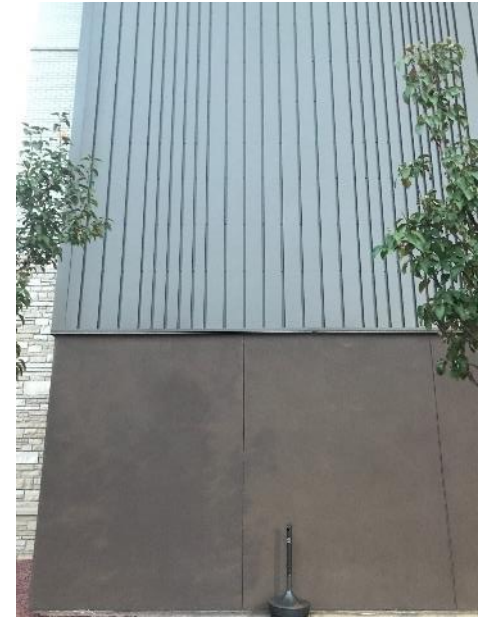
- Noise Controls
- Construction Separation
 - Parent Drop Off/Pickup
 - Safety
 - Dust and Fumes

Option D : Arp Partial Building Renovation + Building Addition + Extend Campus Corridor



Option: Reign

Preferred Building Option - Site D: Building Renovation + Addition



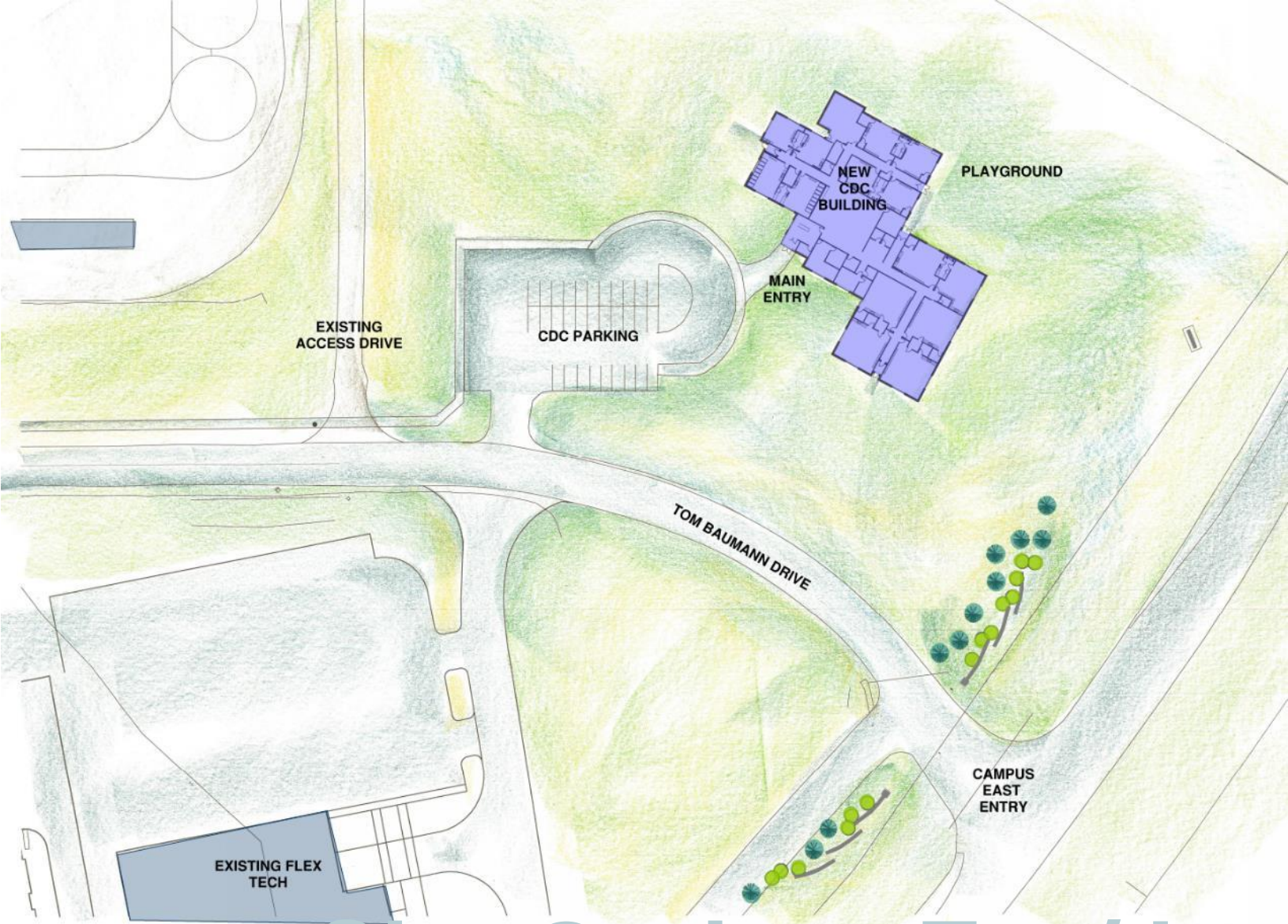
Campus Material Palette

Character Sketch – Main Entry Elevation



Option: Reign

Character Sketch – Main Entry Elevation



Site Option: E w/ Lucy Plan

Preferred Building Option - Site E



Option: Lucy

Character Sketch – Main Entry Elevation

Option F : Grace Building East of Arp Building + Extend Campus Corridor



Site Option: F w/ Grace Plan

Building Options - Site F: New Building



Option: Grace

Preferred Building Option - Site F: New Building East of Arp



Option: Grace

Character Sketch – Main Entry Elevation



Conceptual Plan



Character Sketch

Option: Reign

CONCEPTUAL PLAN & CHARACTER SKETCH



Conceptual Plan



Character Sketch

Option: Lucy

CONCEPTUAL PLAN & CHARACTER SKETCH

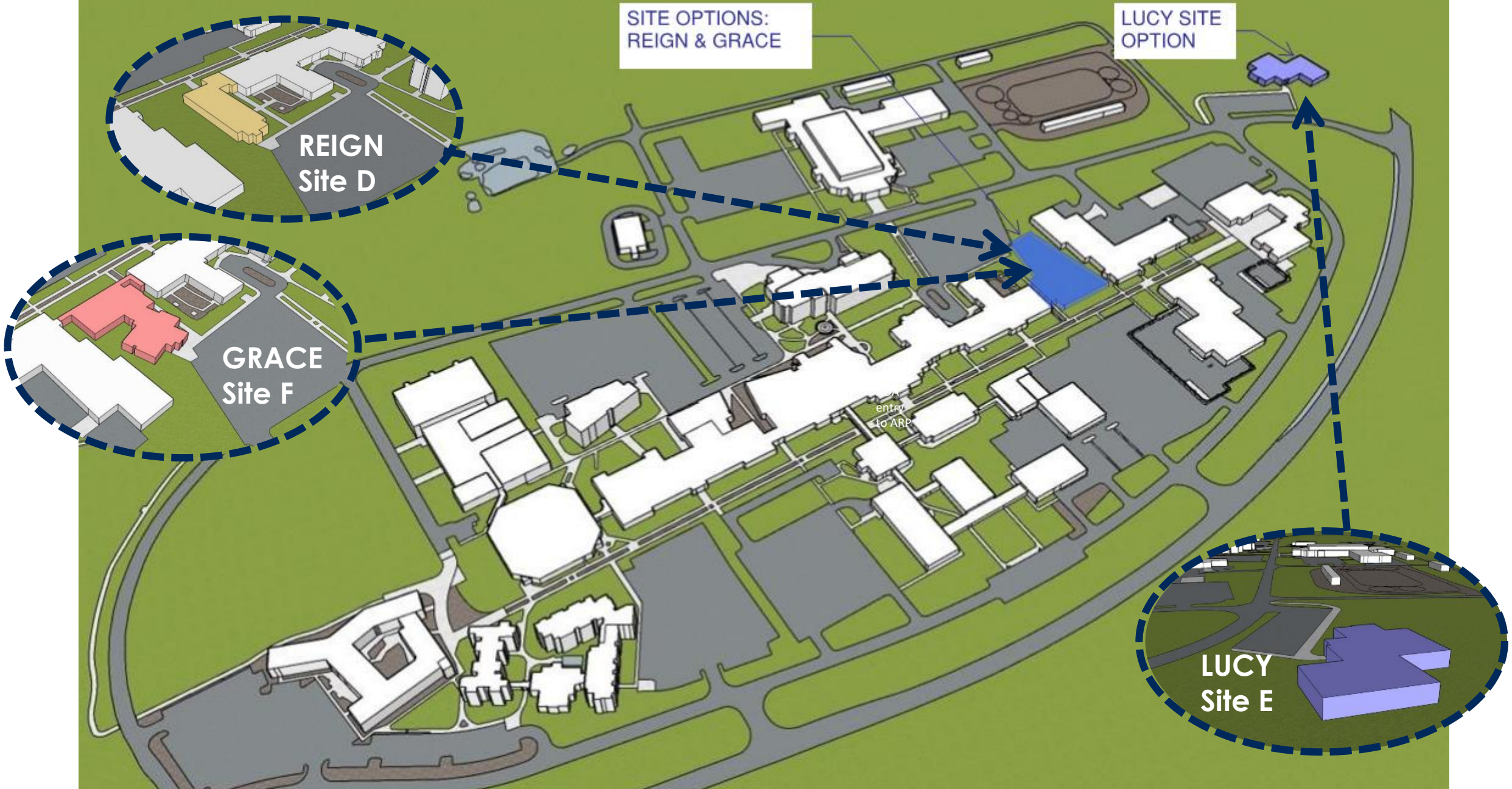


Conceptual Plan

Character Sketch

Option: Grace

CONCEPTUAL PLAN & CHARACTER SKETCH



SITE OPTIONS – REIGN, LUCY & GRACE IN CAMPUS CONTEXT



Children's Discovery Center Expansion Planning

INTERIOR OPPORTUNITIES



consider children's lives for a moment.
what do you see?



experiential learning

Envisioning Early Childhood Education

- **ENJOYABLE ACTIVITIES**
Dopamine release **enhances learning** naturally and chemically, while also **reducing stress hormones** that **impede learning and increase anxiety**.
- **FUN + CHALLENGING**
Effective approaches combine FUN with progressively increasing CHALLENGES.
- **EXERCISE IMPROVES LEARNING**
PHYSICAL ACTIVITY improves academic performance.
- **THE WHOLE CHILD**
SOCIAL & EMOTIONAL development **accelerates** school achievement as much as academic subjects.



- A child's **INTERNAL MOTIVATION** is one of the most powerful tools for learning.



source:
"Welcome to Your Child's Brain: How the Mind Grows From Conception to College"

Neuroscience

Should Have -
pragmatic needs or
required for certification

Should Be –
desired feel, aesthetics &
impacts for desired child
focused outcomes



should have . . . should BE

When we think of the interior spaces

should have:
classroom space



should BE:
welcoming, kid-friendly, allow
choice...with spaces that promote
individual play . . .
While others promote play with peers



should have : should BE

should have:
play space



should BE:
welcoming, kid-friendly, allow
choice...with spaces that promote
individual play . . .
While others promote play with peers



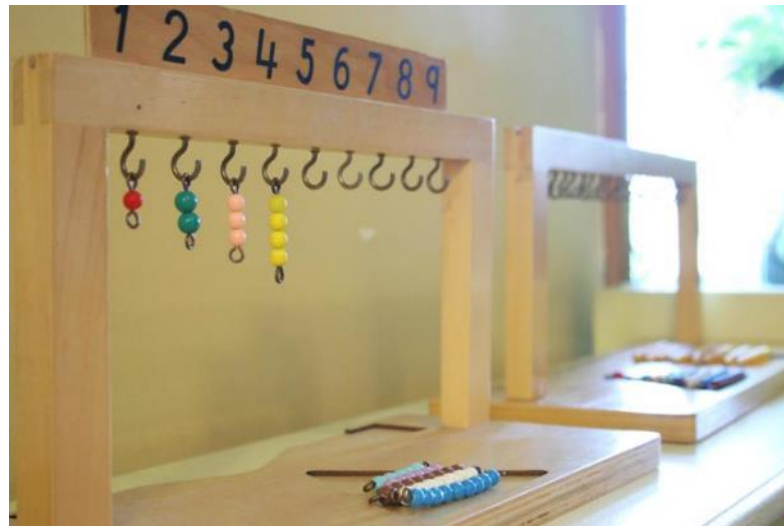
should have : should BE



Children's Discovery Center Expansion Planning

OPPORTUNITIES





Opportunities - Age Appropriate



Opportunities for Rich Learning Environments



Opportunities for Rich Learning Environments



Children's Discovery Center Expansion Planning

COST PROJECTIONS MASTER PLAN BUDGET



MASTER PLAN PROJECT BUDGET COMPARISON SYNOPSIS

FACILITY OPTION	TOTAL CONSTRUCTION COSTS (Category A : Site & Building)	OTHER PROJECT COSTS (Categories B+C+D)	OWNER FINANCING RESERVE & FUND COSTS (Category E)	PROJECT TOTALS
Reign Facility Concept (Site D)	\$9,120,000	\$2,280,000	\$0	\$11,400,000
Lucy Facility Concept (Site E)	\$9,195,000	\$2,217,000	\$0	\$11,412,000
Grace Facility Concept (Site F)	\$8,683,000	\$2,186,000	\$0	\$10,869,000

MASTER PLAN BUDGET COMPARISON

TOTAL CONSTRUCTION COSTS

Includes:

- 1) “Bricks & Mortar Costs”
 - Assumes a CMAR Delivery Method
 - Includes Building Design Contingency
- 2) Market Condition Allowance
 - Unusual Time for Predicting Costs
- 3) Inflation to Mid-Point of Construction in 2023
- 4) Bid Inflation based on Bidding Spring 2023



OTHER PROJECT COSTS

Includes:

- 1) Professional Services
 - Design Fees
 - Entitlement Process (County Planning)
 - Drainage Study
- 2) Owner Construction Related Costs
 - Project Contingency
 - Site Survey/Soils Investigation
 - Water & Sewer Development Fees
 - Construction Testing Services
 - Building Permit Fees
 - Miscellaneous Administrative Costs
- 3) Owner Related Building Costs
 - Furniture & Equipment, Moving Costs

COST PROJECTIONS/ MASTER PLAN BUDGET

Early Childhood Development



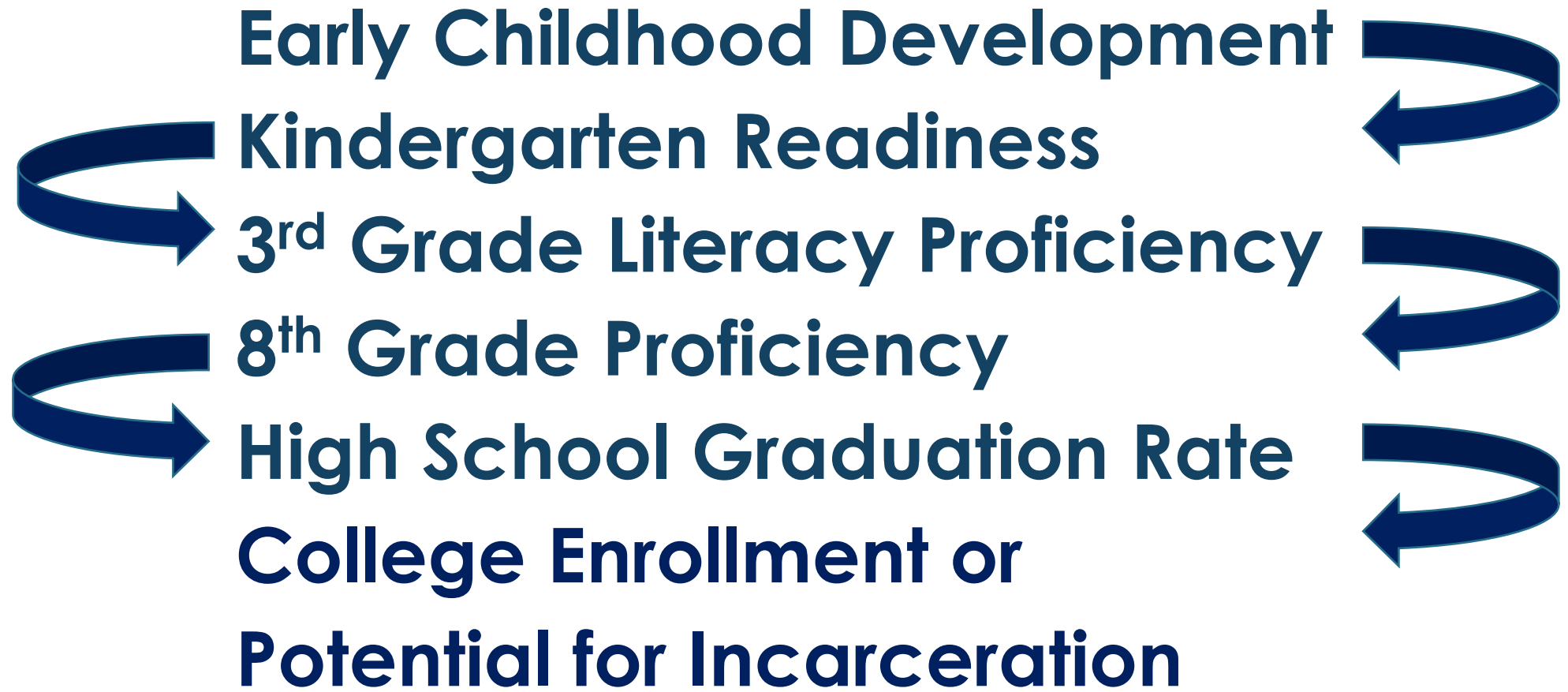
Kindergarten Readiness

Impact of CDC

IMPORTANCE OF EARLY CHILDHOOD DEVELOPMENT

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Impact of CDC

IMPORTANCE OF EARLY CHILDHOOD DEVELOPMENT

VISION STATEMENT

Laramie County Community College seeks to transform and expand space for the Children's Discovery Center to elevate its ability to serve families in the Cheyenne community with a strong nationally accredited early childhood development program, yielding facilities that enhance the educational opportunities for young children.

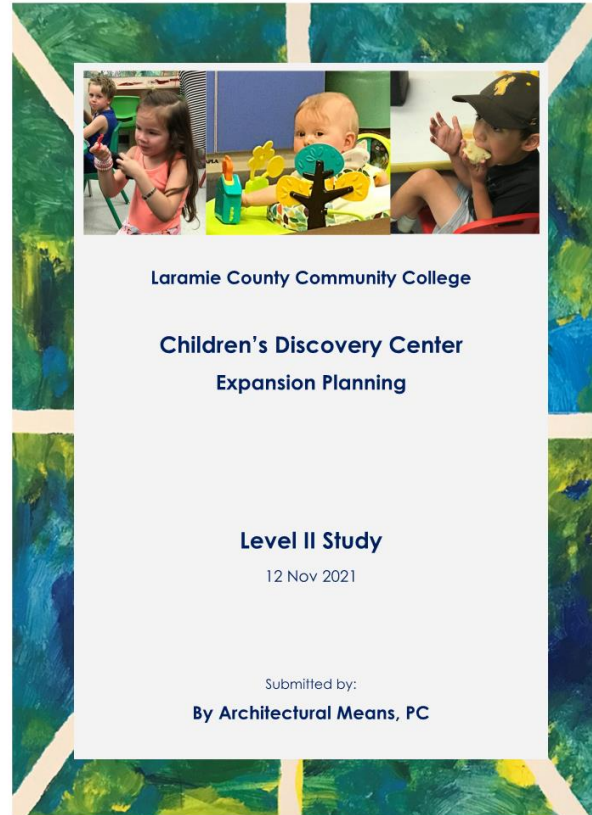
... ELEVATE THE ABILITY TO SERVE CHEYENNE FAMILIES



Laramie County Community College

Children's Discovery Center Expansion Planning

Questions?





Laramie County Community College
Children's Discovery Center Expansion Planning

Thank You!

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