

SCOTTSDALE

Unified School District

SITE & BUILDING PLAN ANALYSIS RECAP

orcutt|winslow

May 18, 2020

MEETING AGENDA

1. Site & Building Plan Exploration Review
2. Positive Attributes Analysis
3. Conceptual Massing, Colors & Textures Review
4. Questions & Feedback

GENERATED CONCEPTS

Through both the site and building charrettes, the visioning committee and community developed various layouts for analysis. These were studied to identify positive attributes that the future Kiva design should reflect.

















CONCEPT EXPLORATION



MEMORABLE GOALS

01 REVITALIZED TRADITIONS

- Develop a building design that fits within the residential scale of its surroundings and its community context
- Provide a project that cultivates the positive aspects of the existing campus, bringing those qualities forward in modern applications
- Retain the existing indoor/outdoor connection, provide accessible and useable outdoor learning opportunities
- Create an open campus feel, focusing on natural light, daylight, windows & ensuring interaction with the outdoors every day

02 FLEXIBLE & MODERN LEARNING ENVIRONMENTS

- Provide adequate space for all-school assemblies and community events
- Create flexible multi-purpose spaces that accommodate for a multitude of uses
- Provide a variety of learning environments for different uses, scales and student groupings
- Use strategies such as flexible furniture and collaboration areas to foster learner centric spaces, student agency and engagement

03 SAFETY & WELLNESS

- Intuitive site circulation & way-finding: create a well organized site arrangement that allows for safe arrival to and departure from campus, efficient parent drop-off, bus drop-off, parking, pedestrian and bicycle circulation, service entry, etc.
- Design for student emotional and social well being
- Design for student safety [CPTED (crime prevention through environmental design) concepts such as layers, controlled points of entry, line of sight & transparency for supervision, etc]

04 HIGH PERFORMANCE BUILDING DESIGN

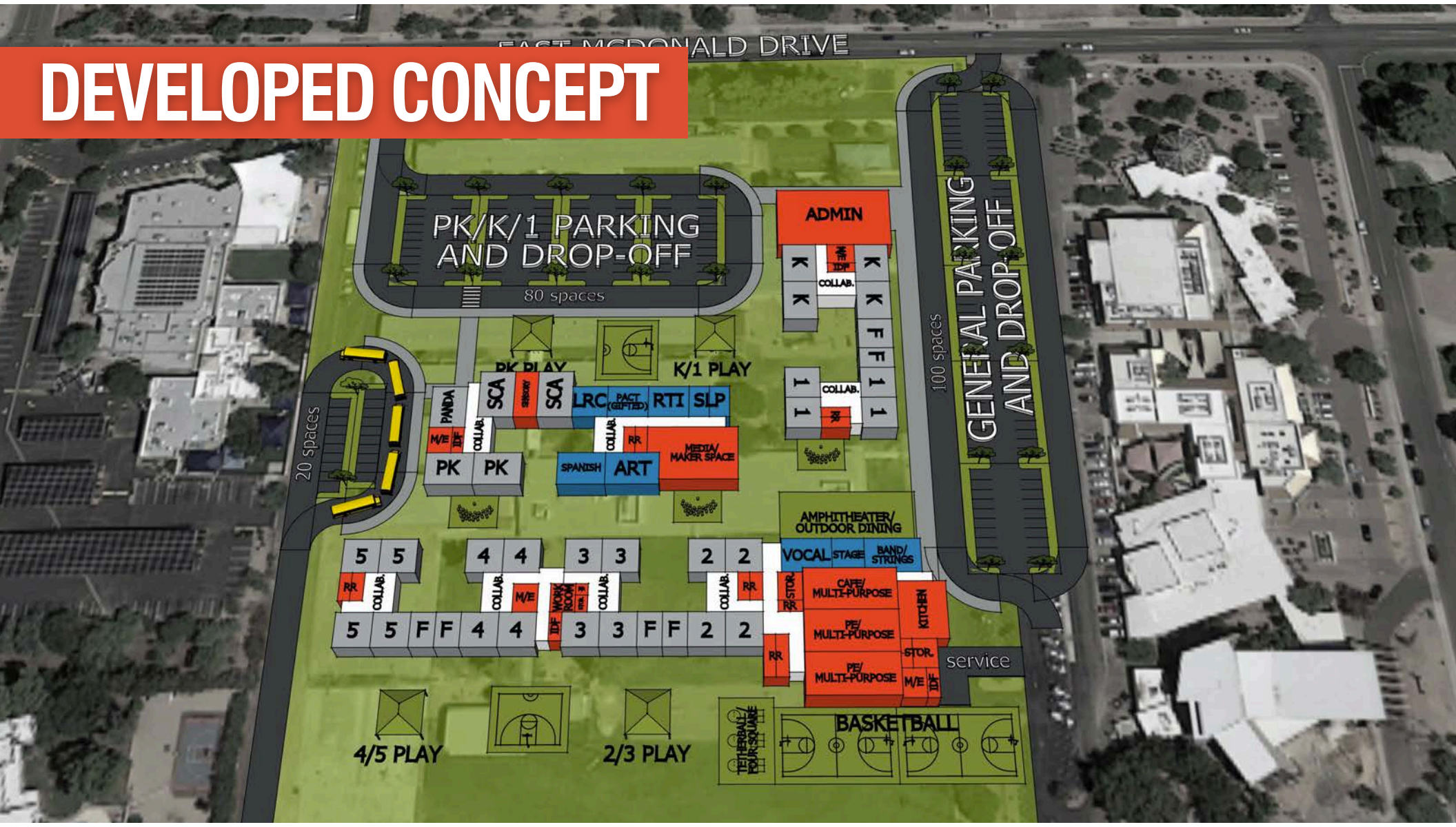
- Create an energy efficient facility with a focus on sustainability as a learning objective [Define sustainability for this context and identify learning objectives to incorporate in design]
- Provide a facility that has the needed infrastructure to support technology and future flexibility
- Focus on user comfort (healthy indoor environment, natural daylight & transparency, thermal, plumbing, etc.)

POSITIVE ATTRIBUTES

- Adequate Vehicular Queueing
- Administration Front and Center
- Discreet Service Access
- Physical Education Adjacent to Courts/Fields
- Curb Appeal
- Minimized Points of Access
- Large Assembly Capacity
- Age Clustered Learning
- Age Clustered Play
- Primary Age Cluster Accessibility
- Incorporate Views
- Passive Solar Design
- Line of Sight
- Pods
- Limit High Volumes
- Community Hub
- Engaging Outdoor Spaces
- Neighborhood Context
- Kiva Traditions
- Retain Existing Trees
- Limit Field Disturbance
- Garden Space
- Ease of Construction Phasing
- Acoustical Separation
- Bio Breaks
- SCA Separate From Public
- Convenient Pullout Spaces
- PTO Amenities
- Ease of Way-Finding
- Access to Core Spaces
- Pre-K & Panda Adjacency
- Dedicated Teachers Lounge
- Indoor/Outdoor Connection
- Security and Access Control
- Flexible Spaces
- Staff Parking Proximity
- Universal & Accessible

NOTE: This list is not prioritized

DEVELOPED CONCEPT



EXISTING



KIVA ELEMENTARY
OVERALL SITE PLAN

PHASE 01



KIVA ELEMENTARY
OVERALL SITE PLAN

PARTIAL DEMO



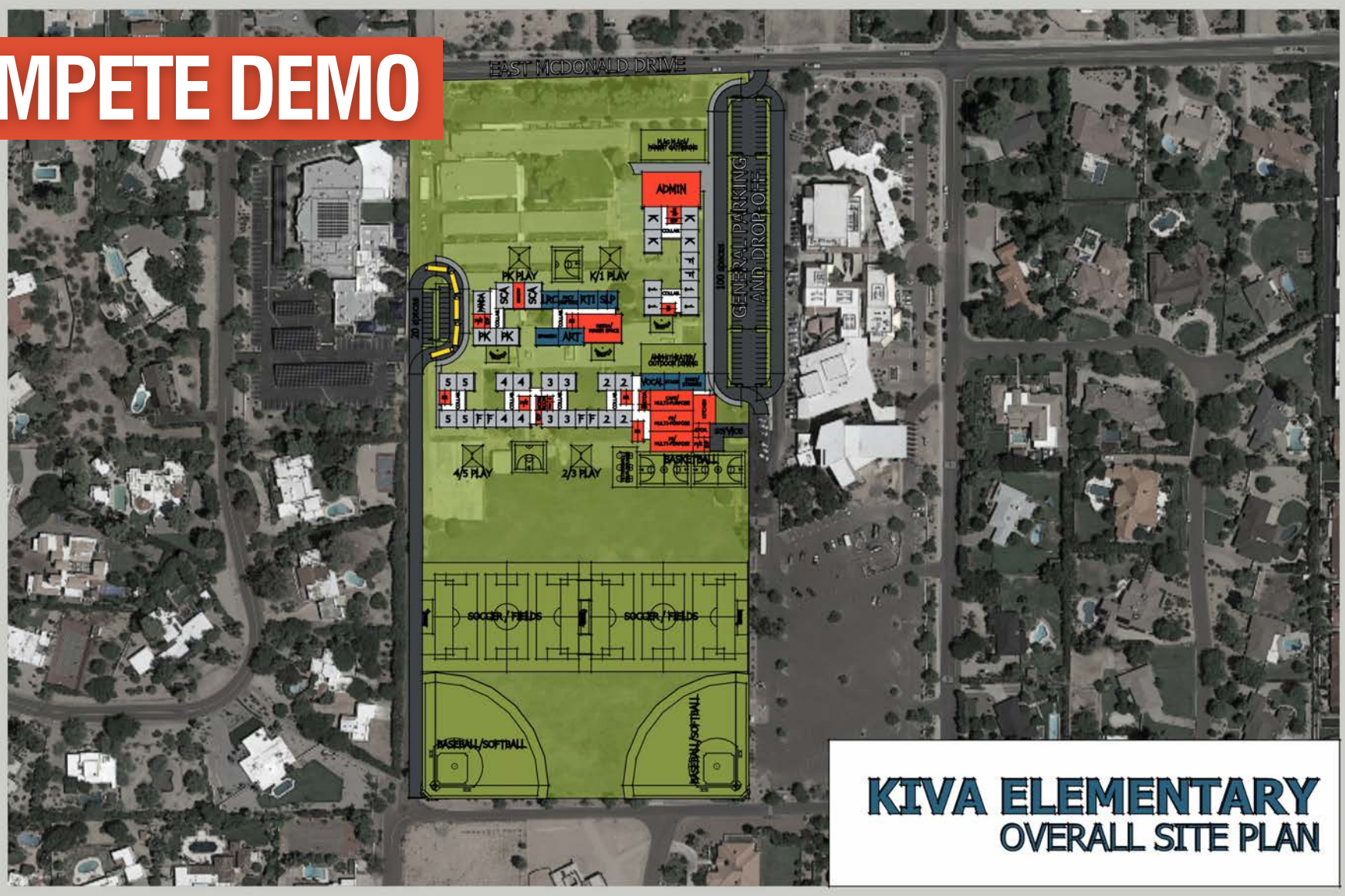
KIVA ELEMENTARY
OVERALL SITE PLAN

PHASE 02



KIVA ELEMENTARY
OVERALL SITE PLAN

COMPETE DEMO

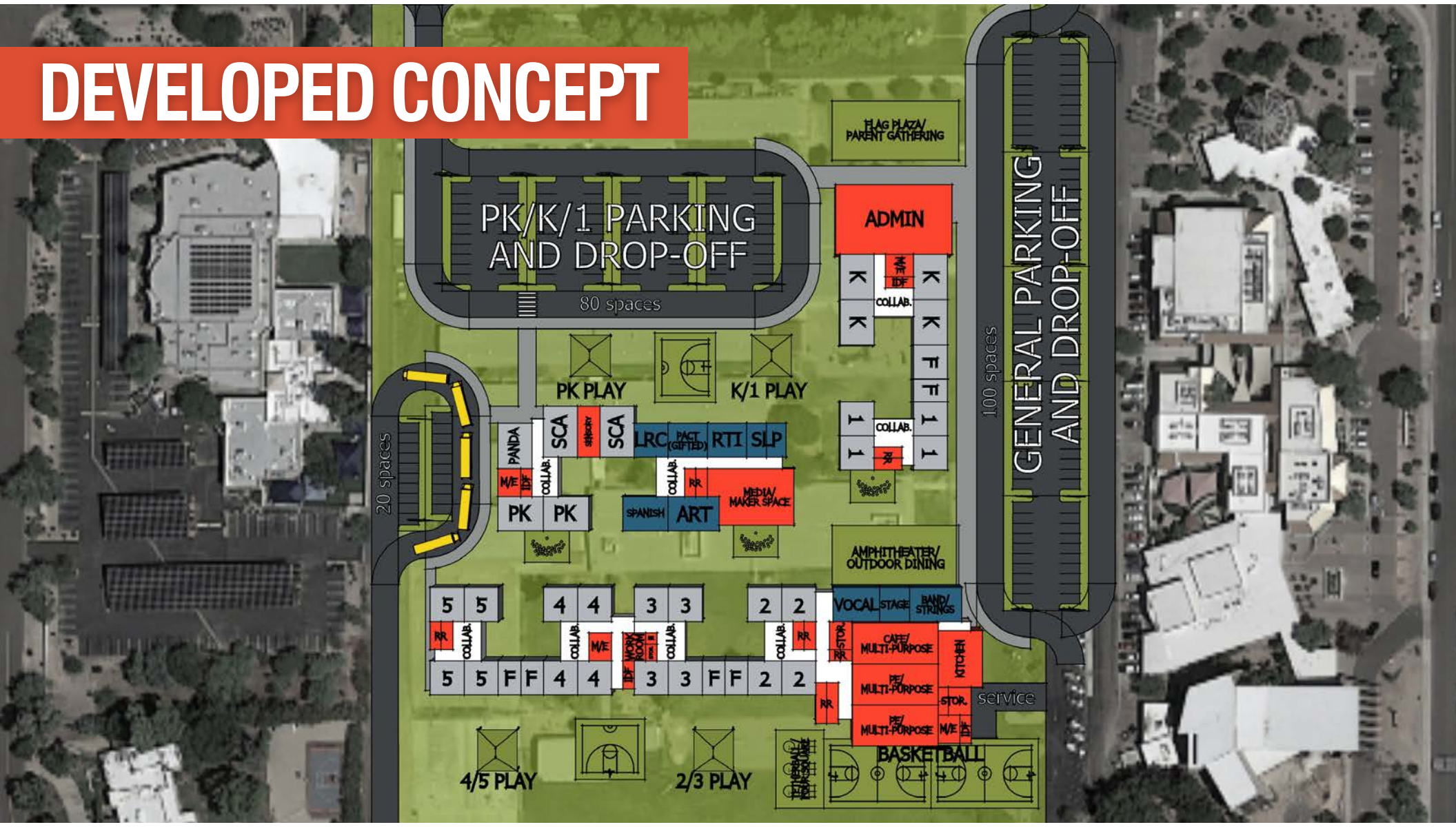


COMPLETION

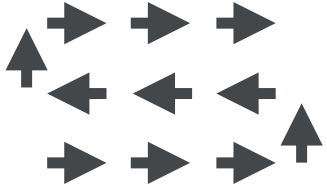


KIVA ELEMENTARY
OVERALL SITE PLAN

DEVELOPED CONCEPT

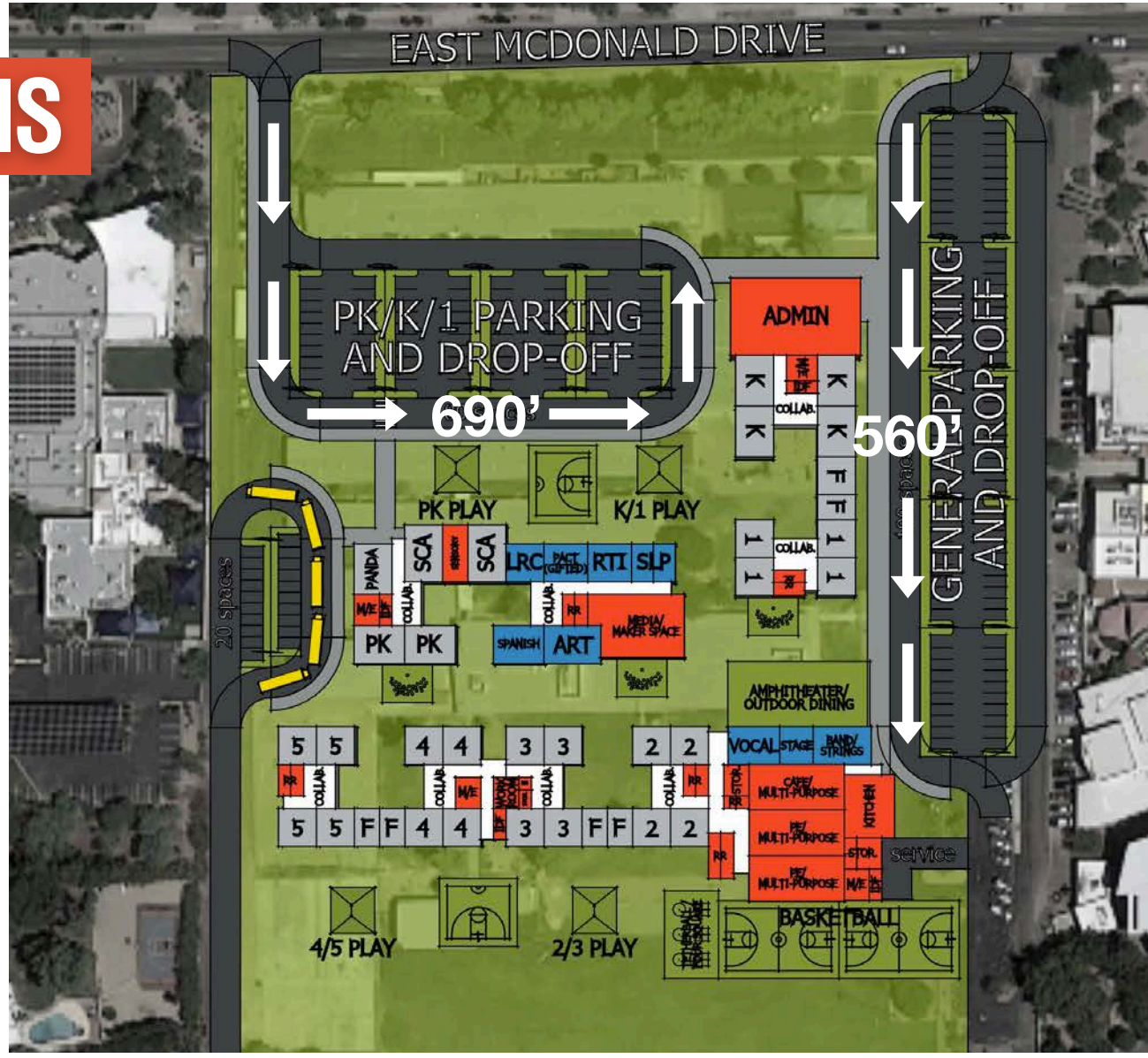


VIGNETTE ANALYSIS

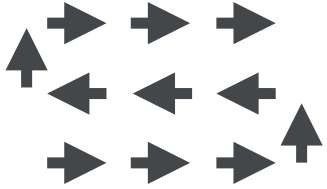


1 ADEQUATE VEHICULAR QUEUEING

The campus site design needs to respond to the shift of student arrival from bus to vehicular traffic. Provide an area for parent drop-off that is right-sized.



VIGNETTE ANALYSIS

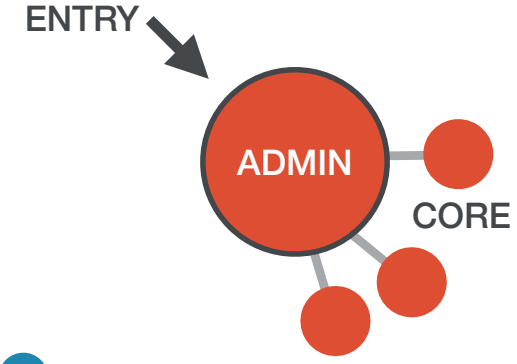


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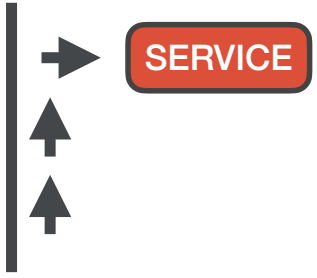


2 ADMINISTRATION FRONT AND CENTER

Administration should be positioned as a gate-keeper and also be in close proximity to core spaces that require additional supervision.

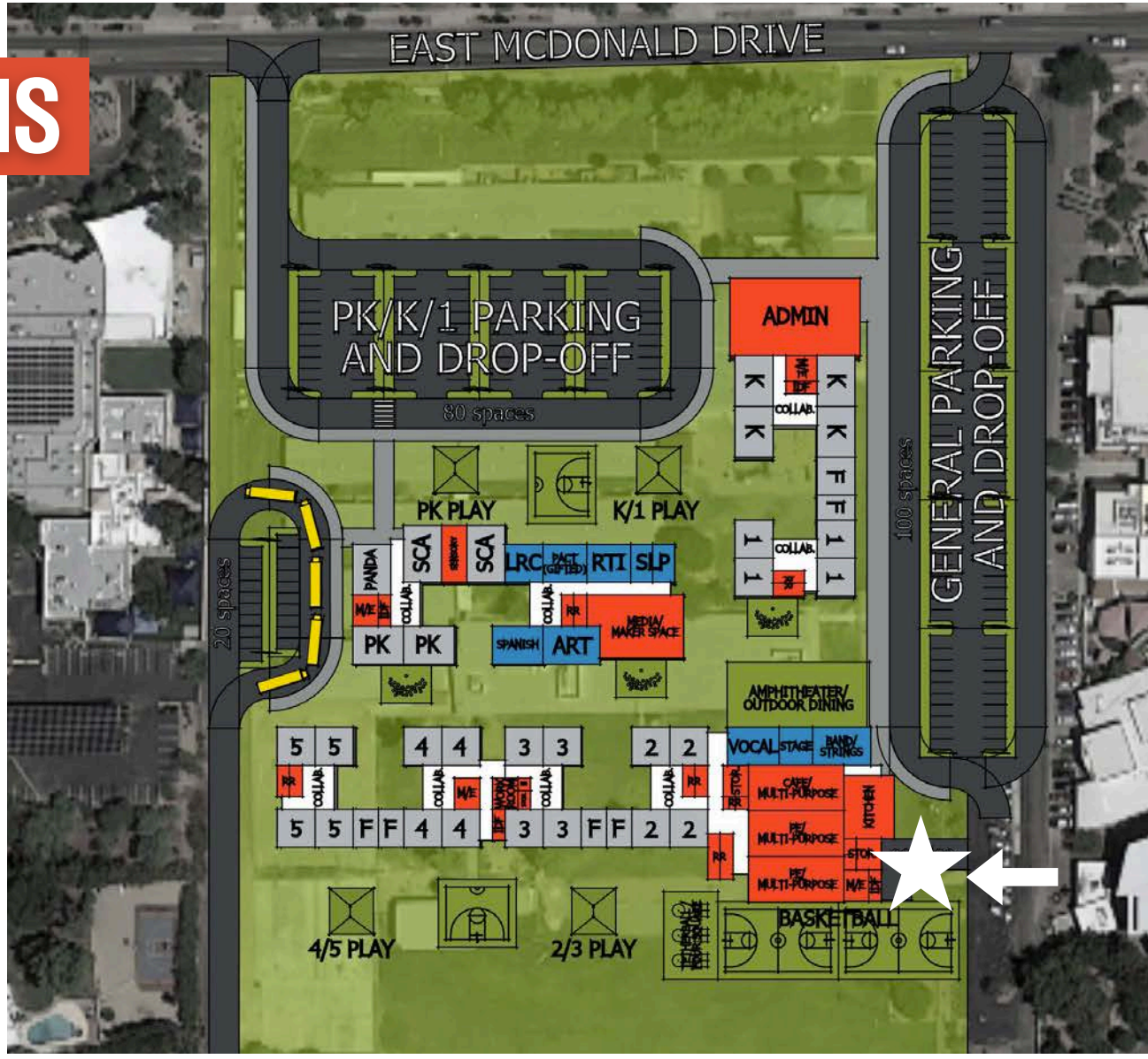


VIGNETTE ANALYSIS



3 DISCREET SERVICE ACCESS

While appropriate access to service areas such as loading and delivery areas and dumpsters are needed, they should not conflict with daily site circulation.



VIGNETTE ANALYSIS



4 PHYSICAL EDUCATION & COURTS/FIELDS

Based on their simultaneous use, the physical education space within the school should be located in very close proximity to the outdoor spaces that will be utilized for physical education.



VIGNETTE ANALYSIS

BUILDING

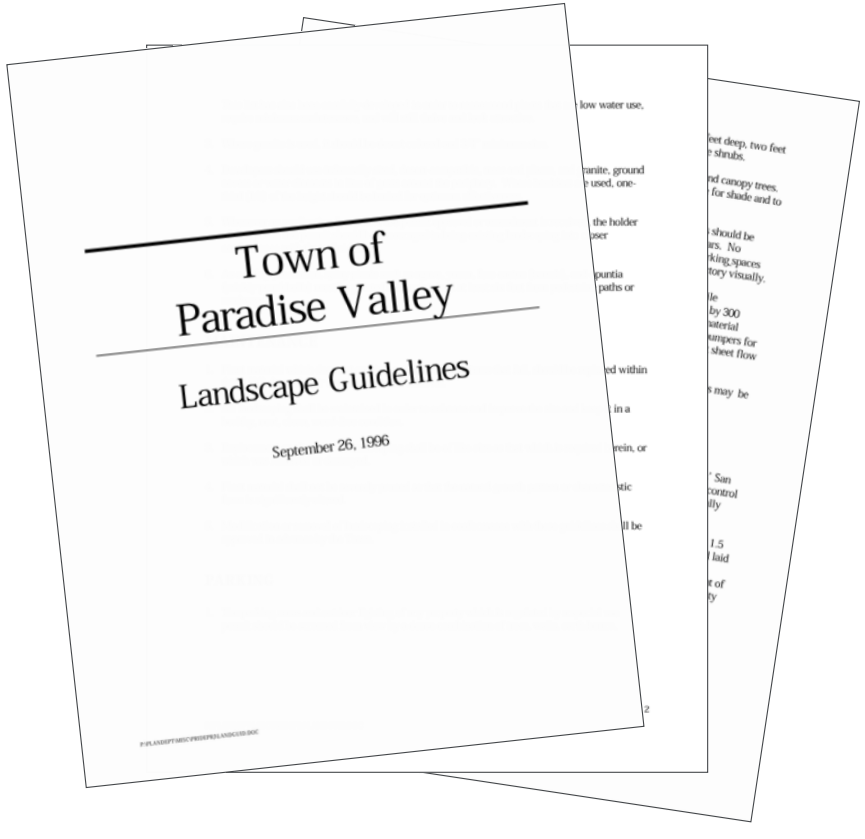
E MCDONALD DR

5 CURB APPEAL

Currently the building sits close to the street. The new facility should create an appropriate presence and brand appeal while being respectful to the surrounding context.



PARKING ANALYSIS



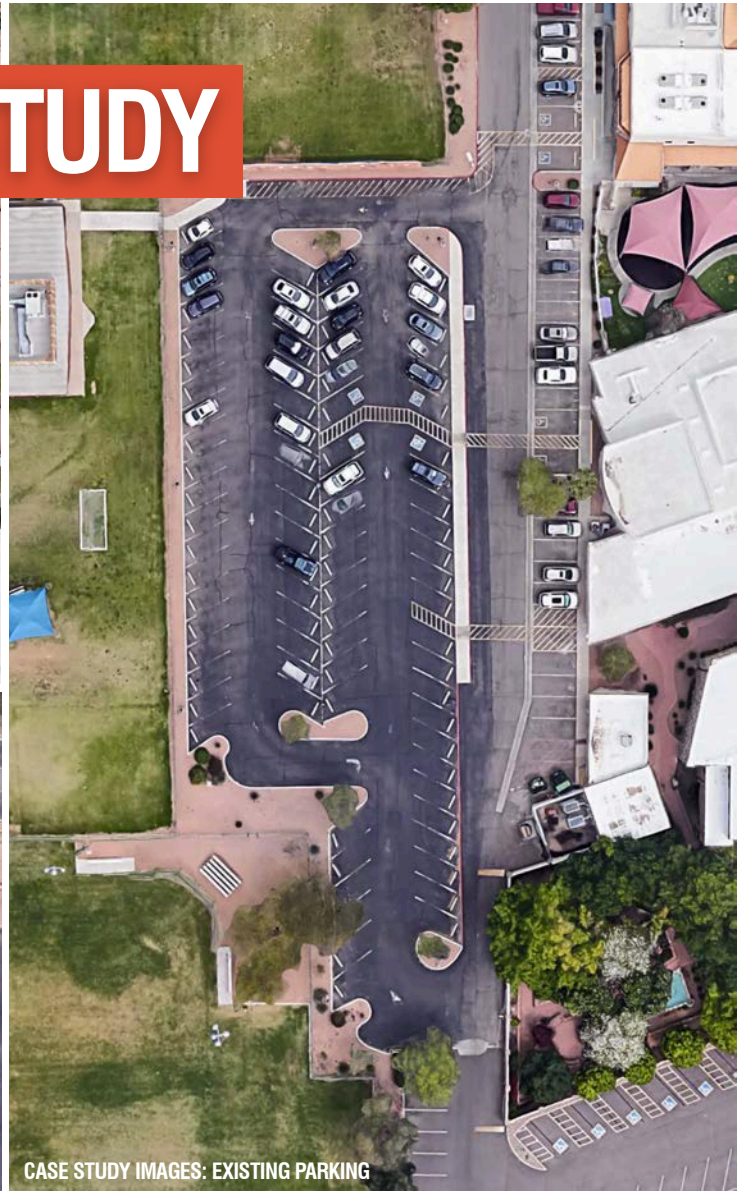
SUMMARY OF REQUIREMENTS

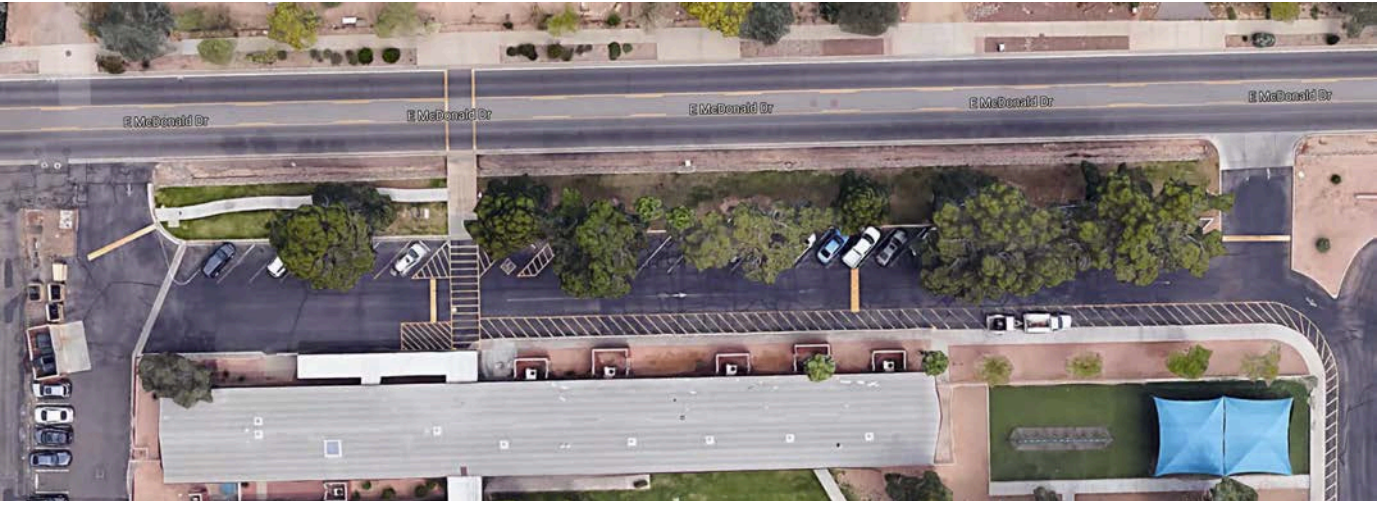
- Parking/Lighting should be screened by a combination of trees, walls, earth berms or bushes on all perimeters.
- Parking should be interspersed with islands planted with shrubs and canopy trees.
- One canopy tree per ten parking spaces(1/10). Every group of parking spaces should be interrupted by planting.
- Protect trees with permeable surroundings and intermittent curbs or bumpers.

PARKING/LANDSCAPING CASE STUDY









CASE STUDY IMAGES: EXISTING PARKING

PARKING/LANDSCAPING CASE STUDY

CASE STUDY ANALYSIS

- 311± total parking spaces
- 12 ADA accessible spaces
- 160 spaces located in front of the building.
- Canopy trees within the parking lot are Palo Verde and Mesquite. The tree species used are extremely high maintenance.
- Parking isles are oriented perpendicular to the main road, so that the cars do not create a “visual wall”.



PRECEDENT IMAGE: EXAMPLE OF WELL DISGUISED PARKING WITHIN TOWN OF PARADISE VALLEY

PARKING/LANDSCAPING CASE STUDY



PRECEDENT IMAGE: STREET VIEW



PRECEDENT IMAGE: TREE CANOPY & BUSH USAGE



PRECEDENT IMAGE: REAR PARKING



PRECEDENT IMAGE: PALO VERDE TREE MAINTENANCE ISSUE

VIGNETTE ANALYSIS

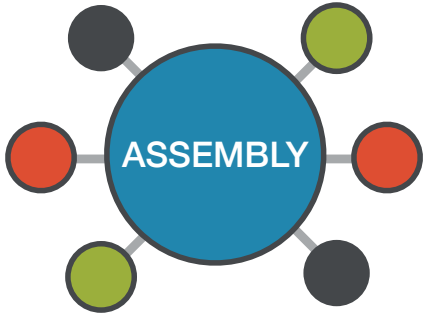
SCHOOL

6 MINIMIZED POINTS OF ACCESS

Minimizing points of access into the campus greatly increases the level of control and the ability to monitor who is on campus at any time. This is a security best practice.

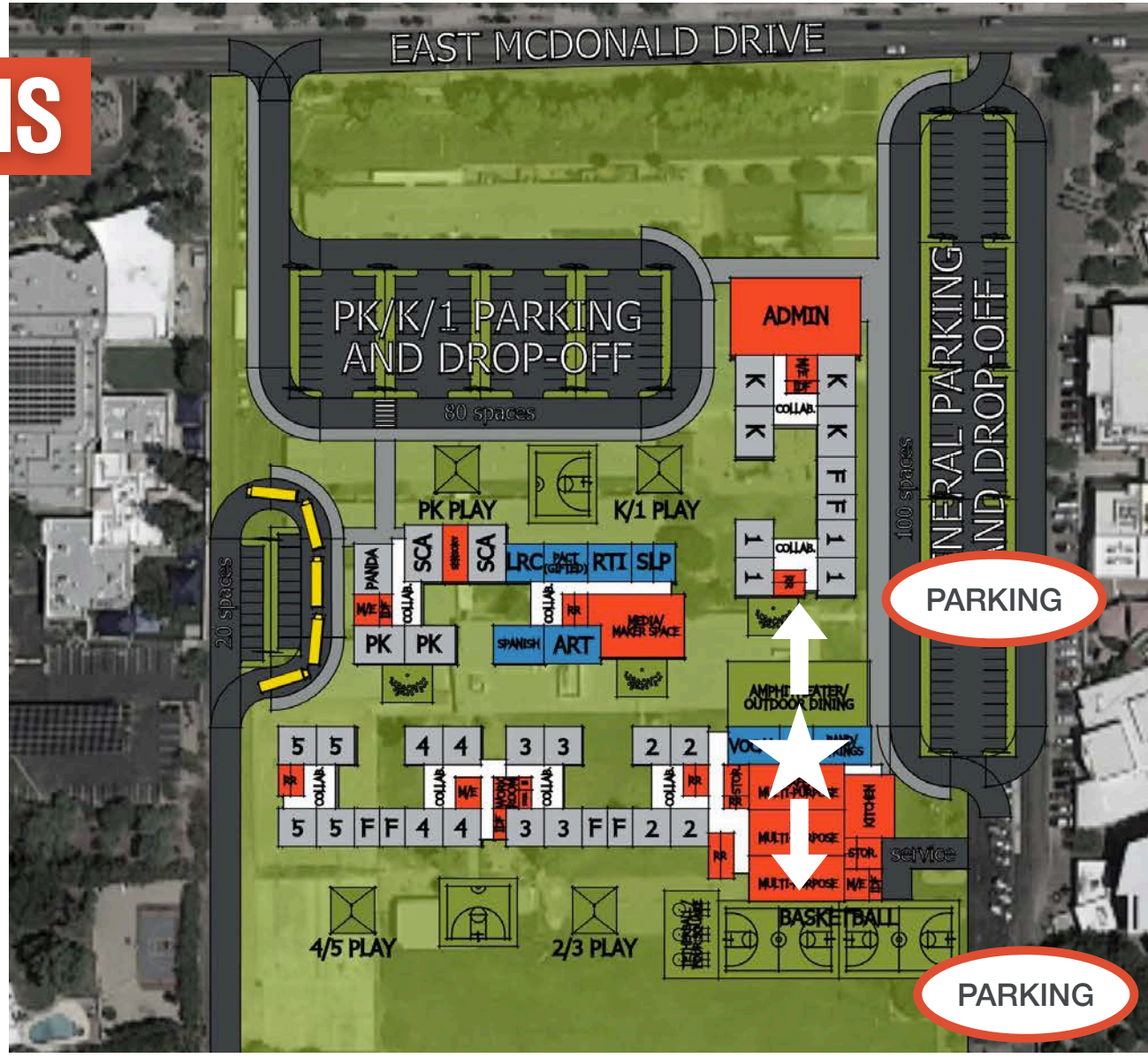


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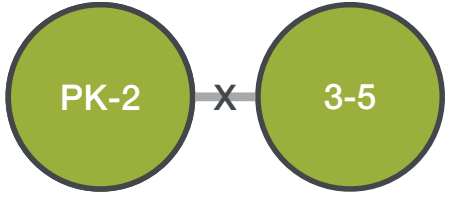


7 LARGE ASSEMBLY

The new facility should provide a space that is adequate for an all-school assembly. This space needs to reflect the potential capacity of 800± students and 100± additional faculty and parents.



VIGNETTE ANALYSIS

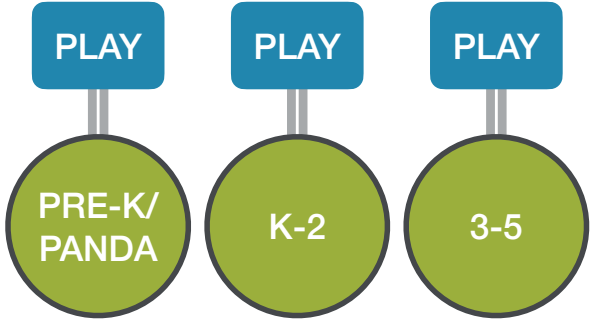


8 AGE CLUSTERS - LEARNING

It is desirable that the campus be organized such that the grades are clustered by age. 5th grader needs are significantly different than Kindergarten's needs.



VIGNETTE ANALYSIS

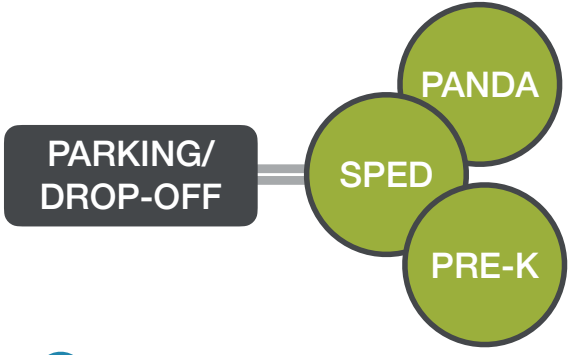


9 AGE CLUSTERS - PLAY

It is desirable that the playgrounds be located next to their respective age clusters. Separation of play between age clusters is important for safety and to provide age appropriate play opportunities.



VIGNETTE ANALYSIS



10 PRIMARY AGE ACCESSIBILITY

The younger population of the school, and the students with special requirements should be located in close proximity to a parking lot and drop-off lane for greatest accessibility.



VIGNETTE ANALYSIS

11 INCORPORATE VIEWS

Incorporating/ framing views within spaces allow for the campus to have a connection to nature.

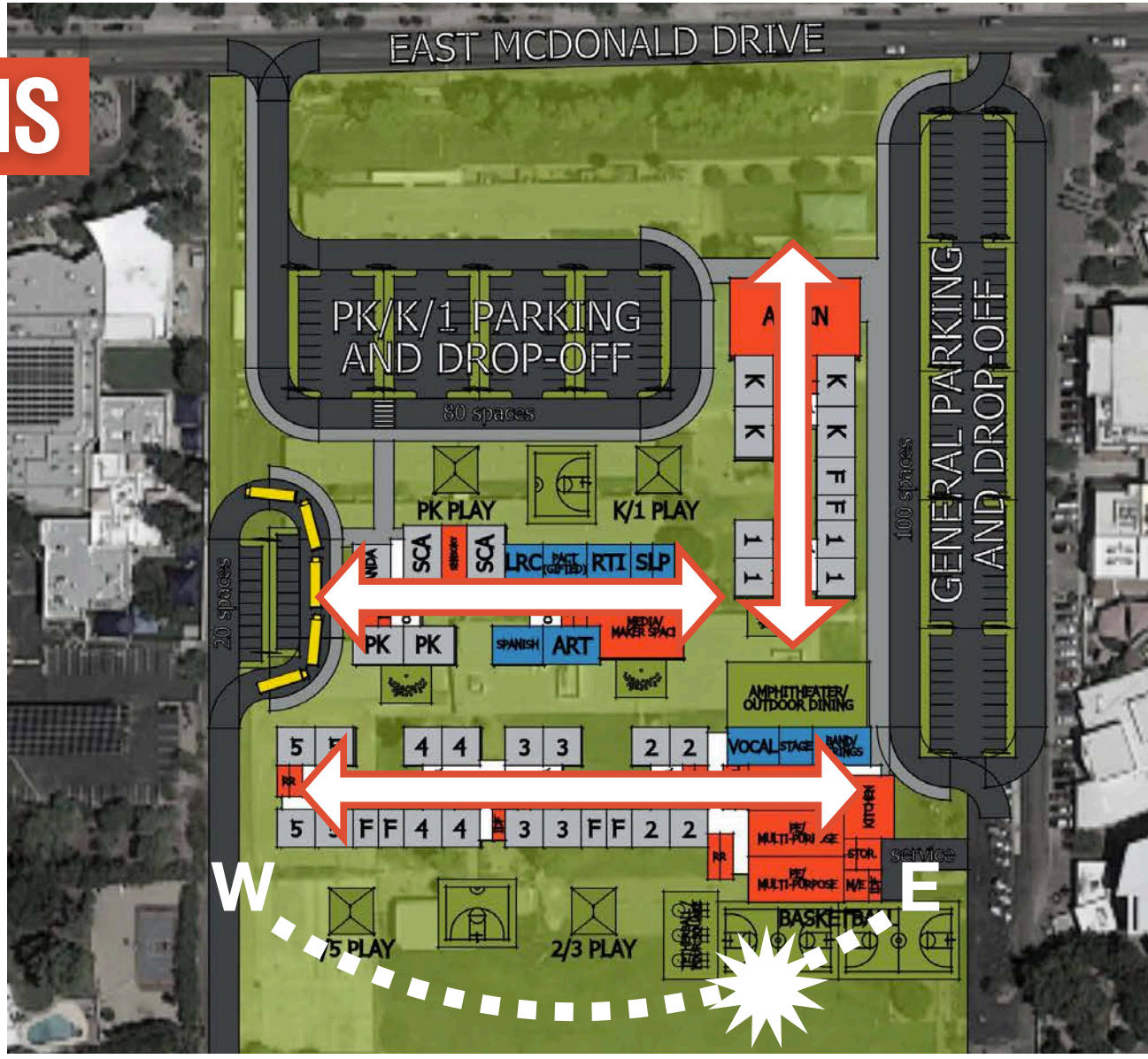


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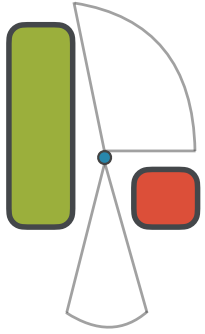


12 PASSIVE SOLAR DESIGN

Orienting the building on the east/west access allows spaces to be lit with even and natural day lighting while minimizing solar exposure and heat gain. Provide direct visual connection to the outdoors .

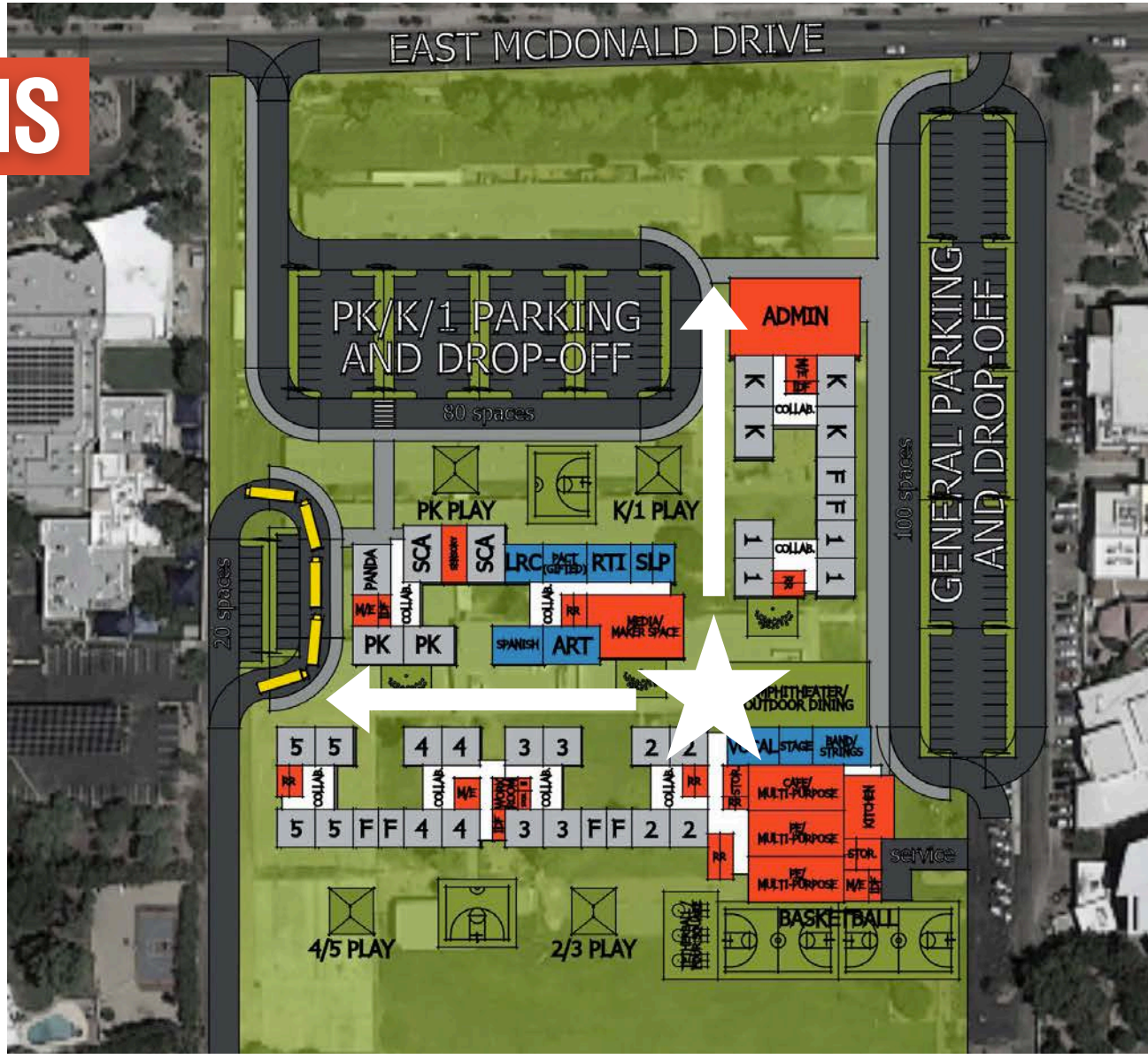


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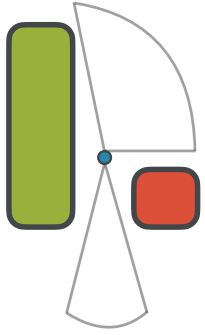


13 LINE OF SIGHT

For supervisory and security reasons, providing line of sight to the greatest extent possible is best practice. A building and campus design that allows for this is ideal.

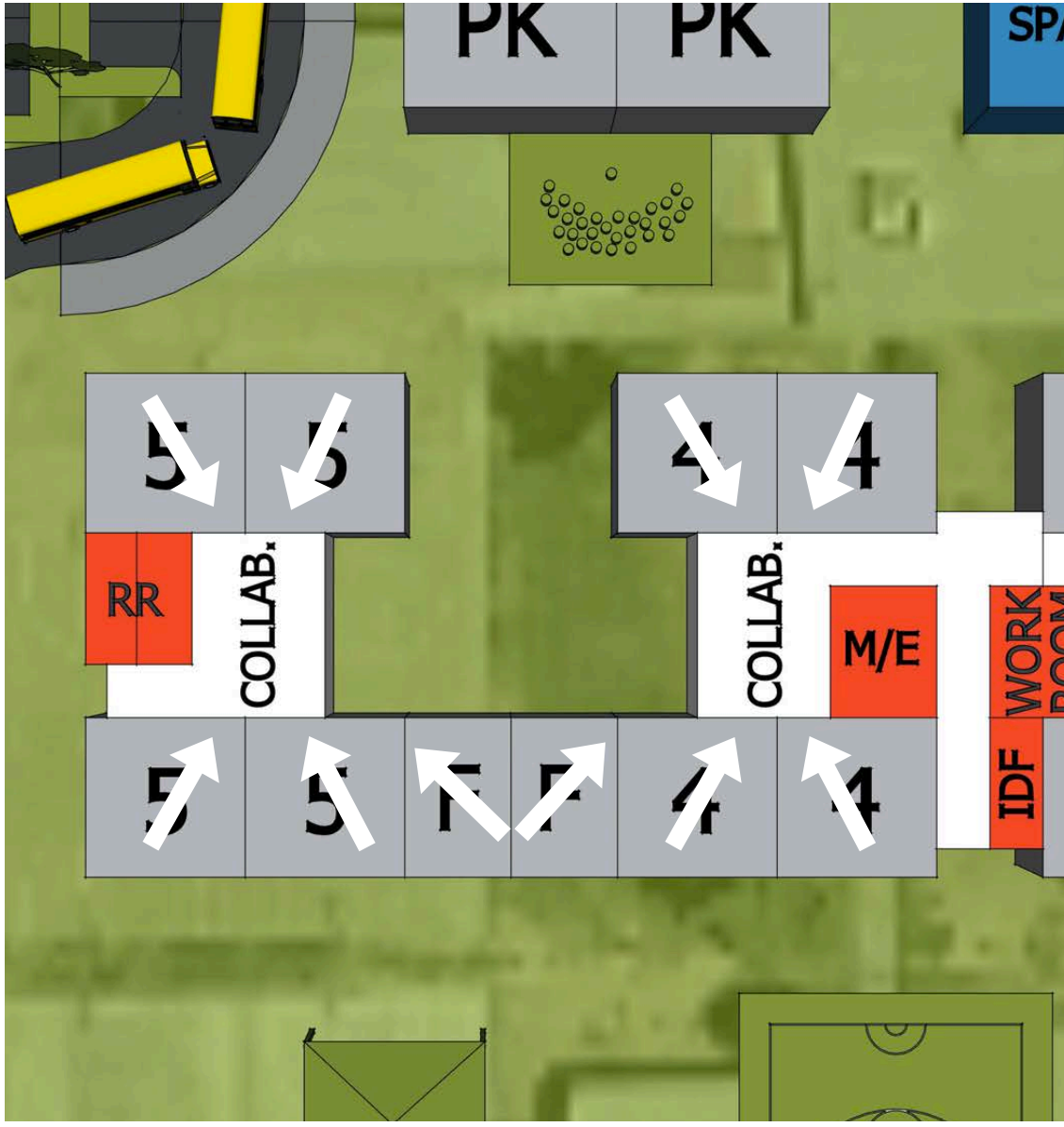


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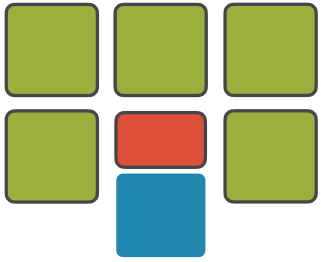


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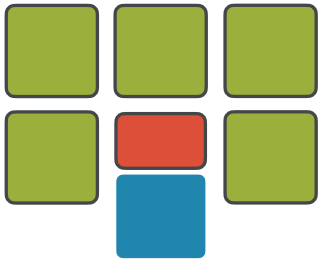


14 PODS

Arranging the building to create collaborative pods for the different age clusters is a priority. This central space is functional academic space that is utilized extensively.



CLUSTER OPTIONS



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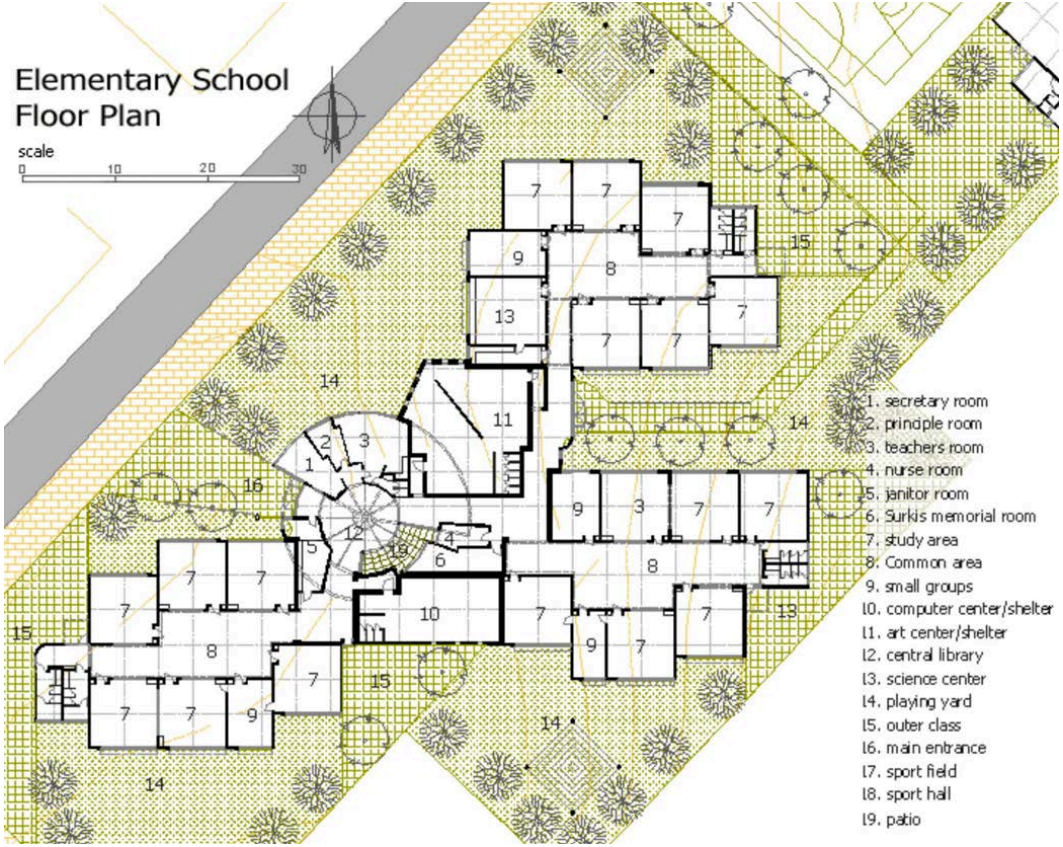
RELEVANT POSITIVE ATTRIBUTES

- Minimized Points of Access
- Passive Solar Design
- Line of Sight
- Engaging Outdoor Spaces
- Bio Breaks
- Convenient Pullout Spaces
- Ease of Way-Finding
- Indoor/Outdoor Connection
- Security and Access Control
- Flexible Spaces

ADDITIONAL CONSIDERATIONS

- Minimize separate buildings
- ***10 classrooms per cluster (equity of experience)***
- Efficient use of square footage

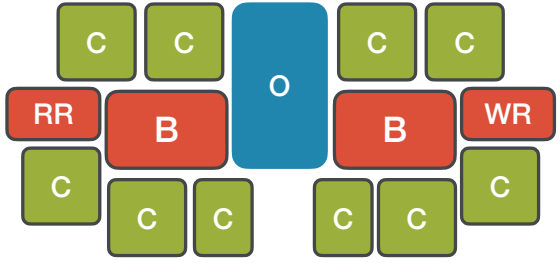
CLUSTER OPTIONS

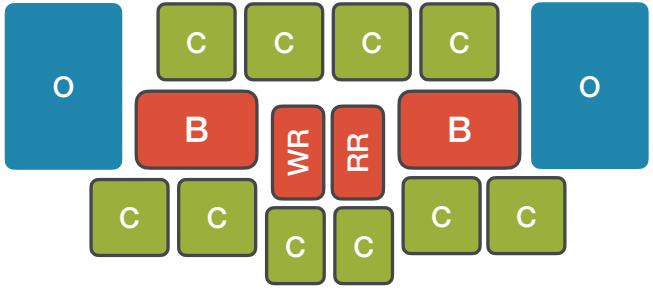




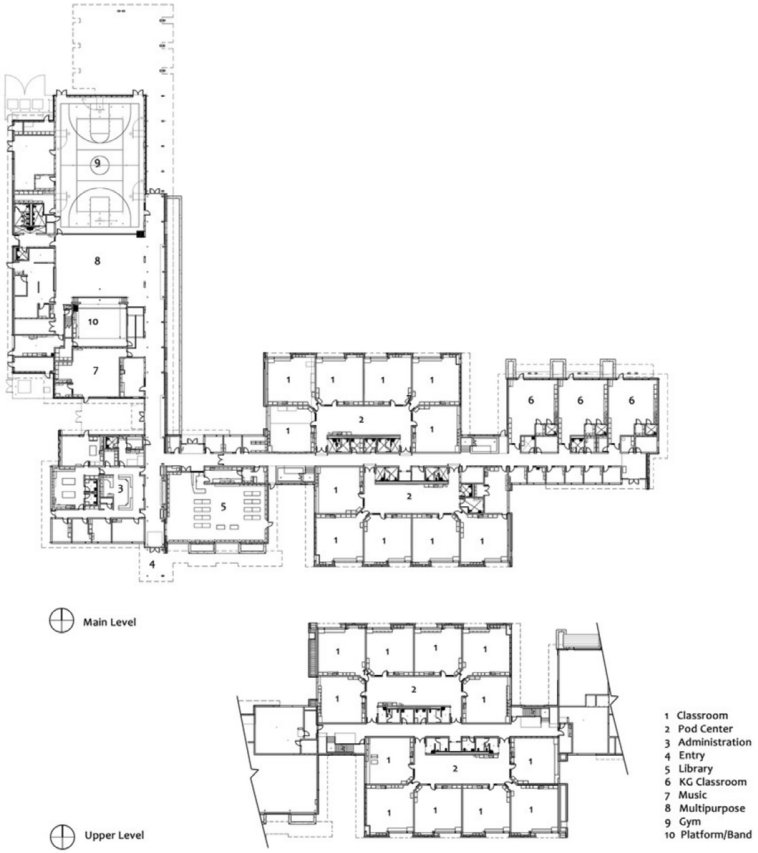
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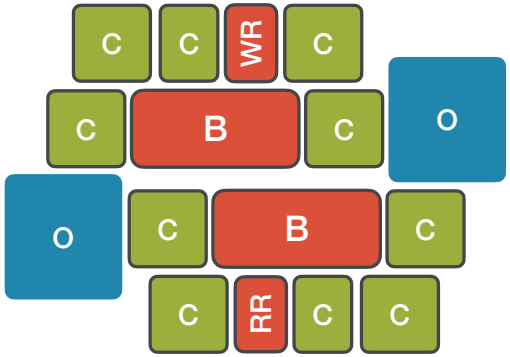
CLUSTER OPTIONS





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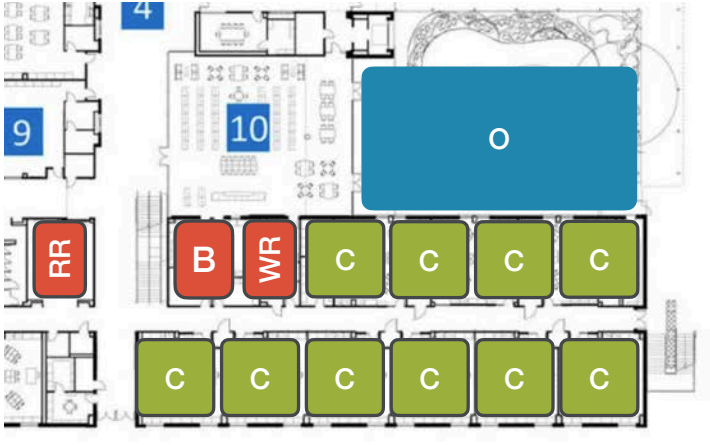
1 Kitchen
2 Serving Line
3 Dining
4 Lobby / Commons
5 Administration
6 Classrooms
7 Eco Pond
8 Gym
9 Music
10 Library

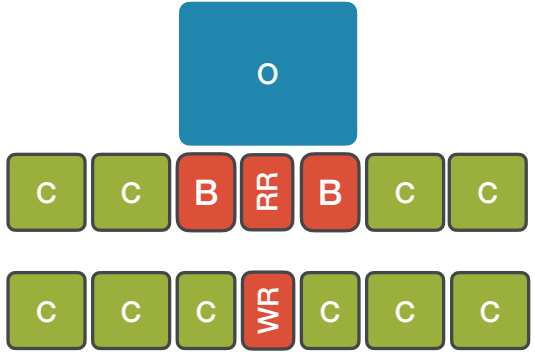


First Level Plan

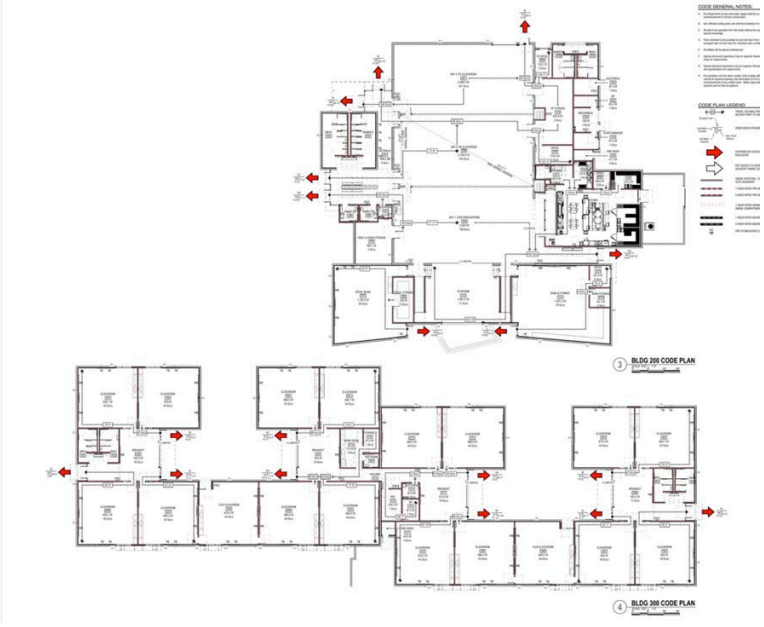


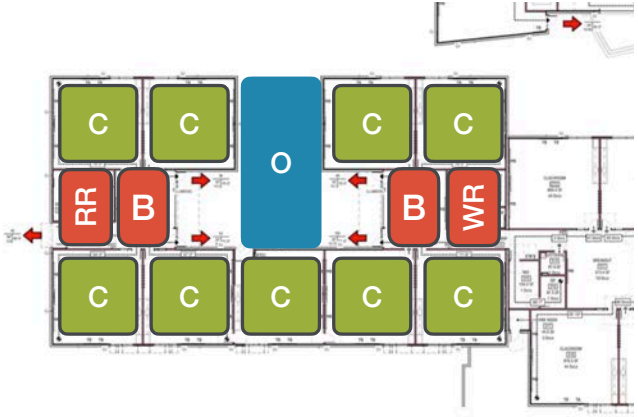
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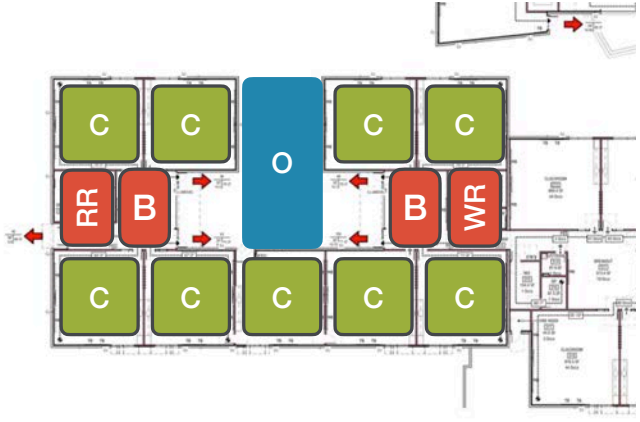


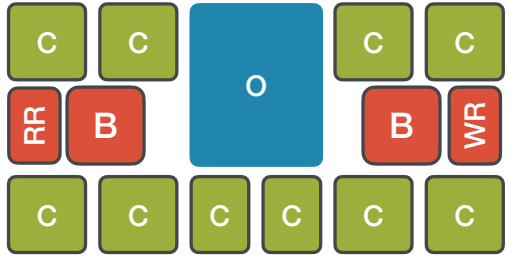
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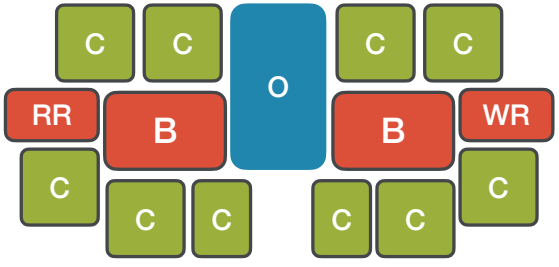


CLUSTER OPTIONS

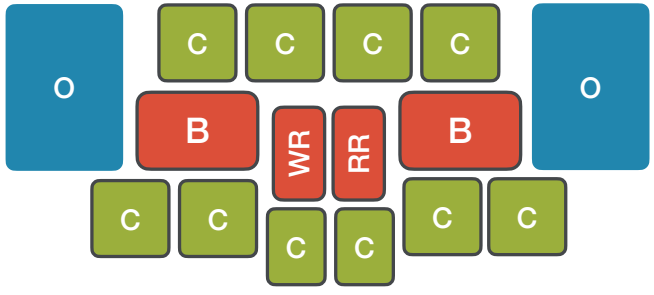




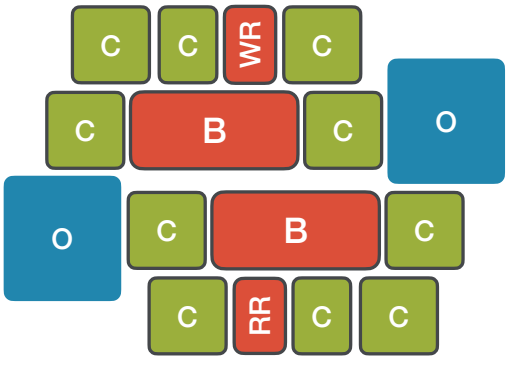
CLUSTER OPTIONS



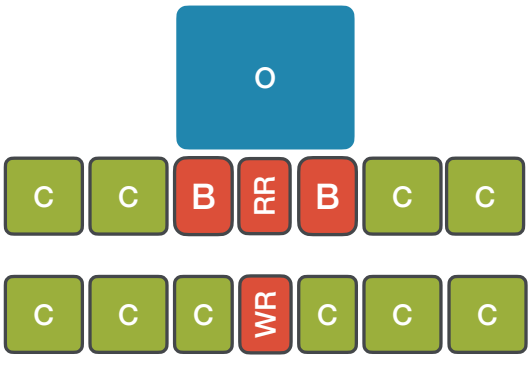
POD ARRANGEMENT A



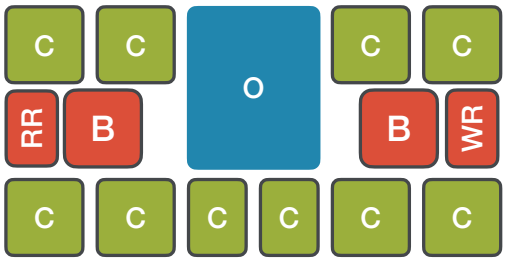
POD ARRANGEMENT B



POD ARRANGEMENT C

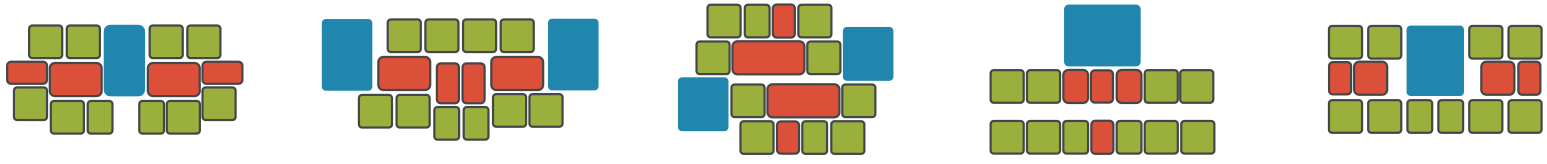


POD ARRANGEMENT D



POD ARRANGEMENT E

CLUSTER ANALYSIS

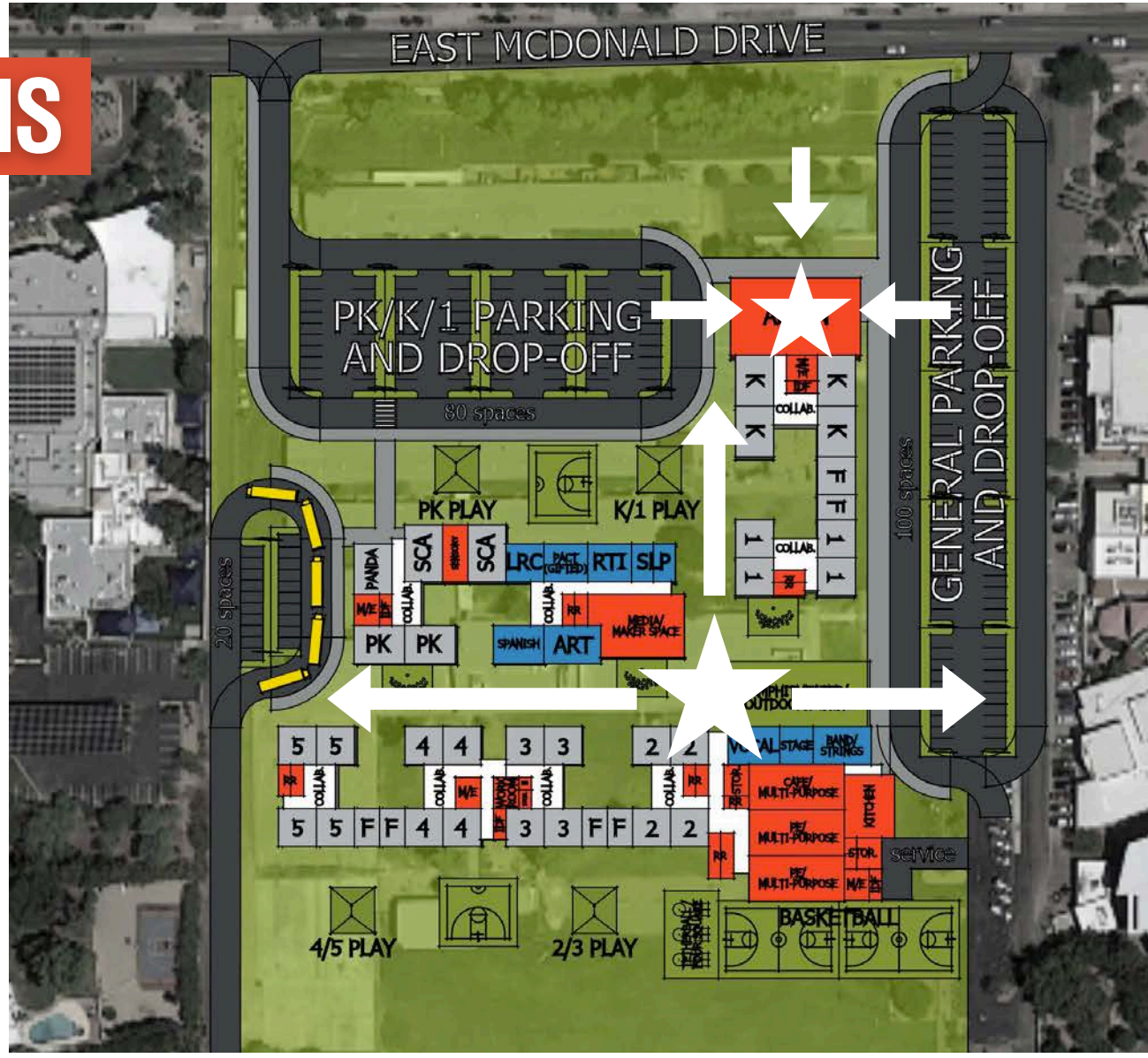


	Relevant Positive Attributes	A	B	C	D	E
6	Minimized Points of Acces	0	1	1	1	0
8	Age Clustered Learning	1	1	1	1	1
12	Passive Solar Design	1	1	0	1	1
13	Line of Sight	1	0	1	0	1
15	Ease of Way-Finding	1	1	1	1	1
17	Engaging Outdoor Spaces	1	1	0	1	1
25	Bio Breaks	1	0	0	1	1
27	Convenient Pullout Spaces	1	0	1	0	1
33	Indoor/Outdoor Connection	1	1	1	0	1
35	Flexibles Spaces	1	1	1	1	1
	Additional Considerations	**A**	**B**	**C**	**D**	**E**
A	Minimize separate buildings	1	1	1	1	1
B	10 classrooms (equity of experience)	1	0	1	0	1
C	Efficient use of square footage	0	1	0	1	1
	TOTAL	**11**	**9**	**9**	**9**	**12**

VIGNETTE ANALYSIS

15 EASE OF WAY-FINDING

Beyond good signage, the new campus should be intuitive and easy to navigate. This should happen both for vehicular traffic, but also the pedestrian experience.

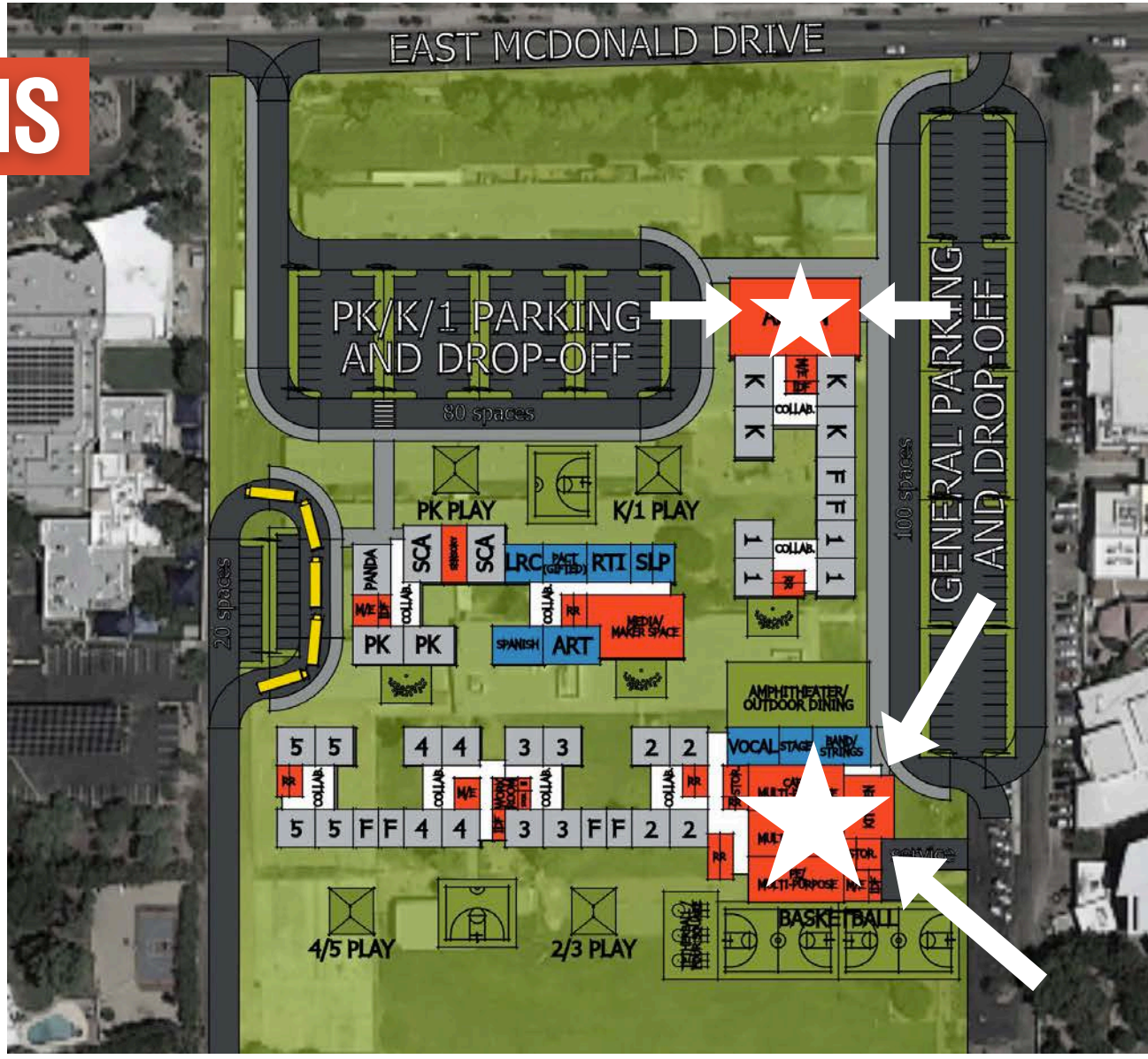


VIGNETTE ANALYSIS

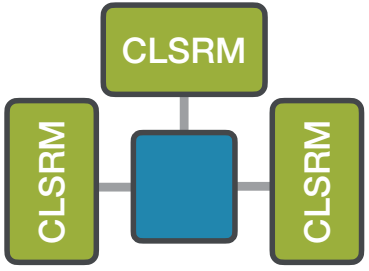


16 COMMUNITY HUB

Designing the school as a hub for the community enriches the relationship between students, teachers, families and community. Community spaces should be ease to identify and access.



VIGNETTE ANALYSIS

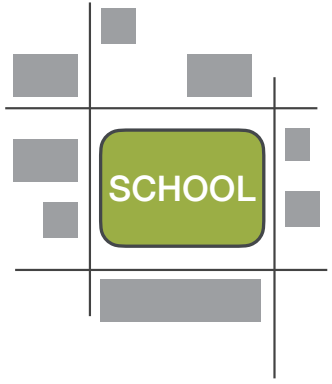


17 ENGAGING OUTDOOR SPACES

Create a variety of accessible outdoor spaces with classrooms and other opportunities for curriculum and play/ exploration.



VIGNETTE ANALYSIS



18 NEIGHBORHOOD CONTEXT

Kiva Elementary has a unique neighborhood context. The design of the school should reflect that context, and add positively to the surrounding community.



VIGNETTE ANALYSIS

19

KIVA TRADITIONS

There are distinct existing building elements and experiences that represent Kiva's culture and community. The new campus should incorporate these items within the design.



VIGNETTE ANALYSIS



20 RETAIN EXISTING TREES

The site currently has a variety of trees, some in better shape than others. It is the preference that we retain as many of the trees that are healthy as possible.



VIGNETTE ANALYSIS



21 LIMIT FIELD DISTURBANCE

The site currently has a variety of trees, some in better shape than others. It is the preference that we retain as many of the trees that are healthy as possible.



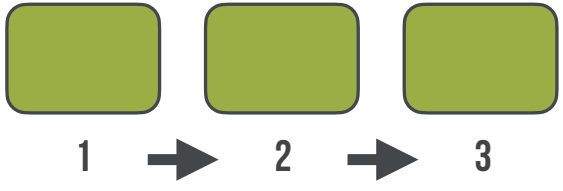
VIGNETTE ANALYSIS

22 GARDENS

Gardens are an excellent outdoor learning opportunity. Each age cluster could cater their gardens to their curriculum.



VIGNETTE ANALYSIS

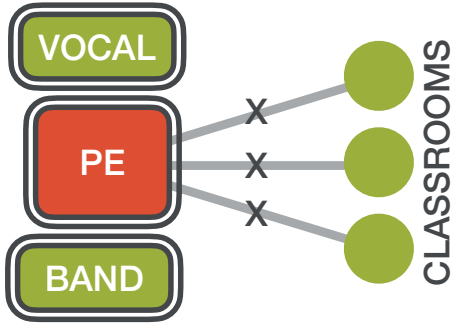


23 EASE OF CONSTRUCTION PHASING

Many variables affect construction schedules, especially on an active campus. The new design should try to make the sequencing and phasing of construction as simple as possible.

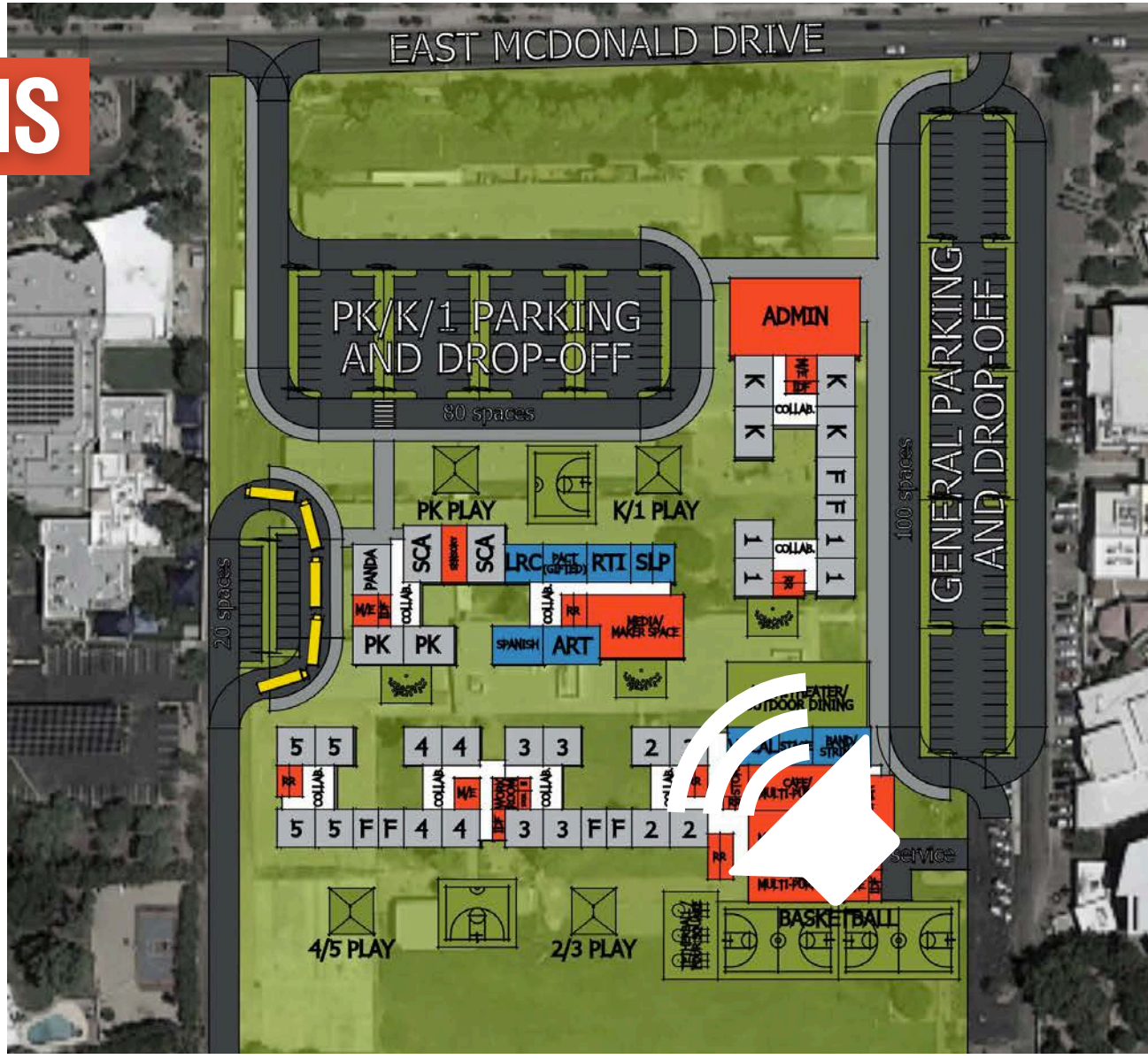


VIGNETTE ANALYSIS



24 ACOUSTICAL SEPARATION

Potentially loud spaces adjacent to classroom space is undesirable, and requires a strong acoustical separation from quiet learning spaces.



VIGNETTE ANALYSIS



25 **BIO BREAKS**

Restrooms should be located conveniently and close in proximity to all of the playgrounds, fields and courts.



VIGNETTE ANALYSIS

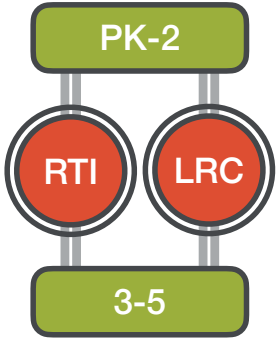
SCA X PARKING/ DROP-OFF

26 SCA SEPARATE FROM PUBLIC

Many variables affect construction schedules, especially on an active campus. The new design should try to make the sequencing and phasing of construction as simple as possible.

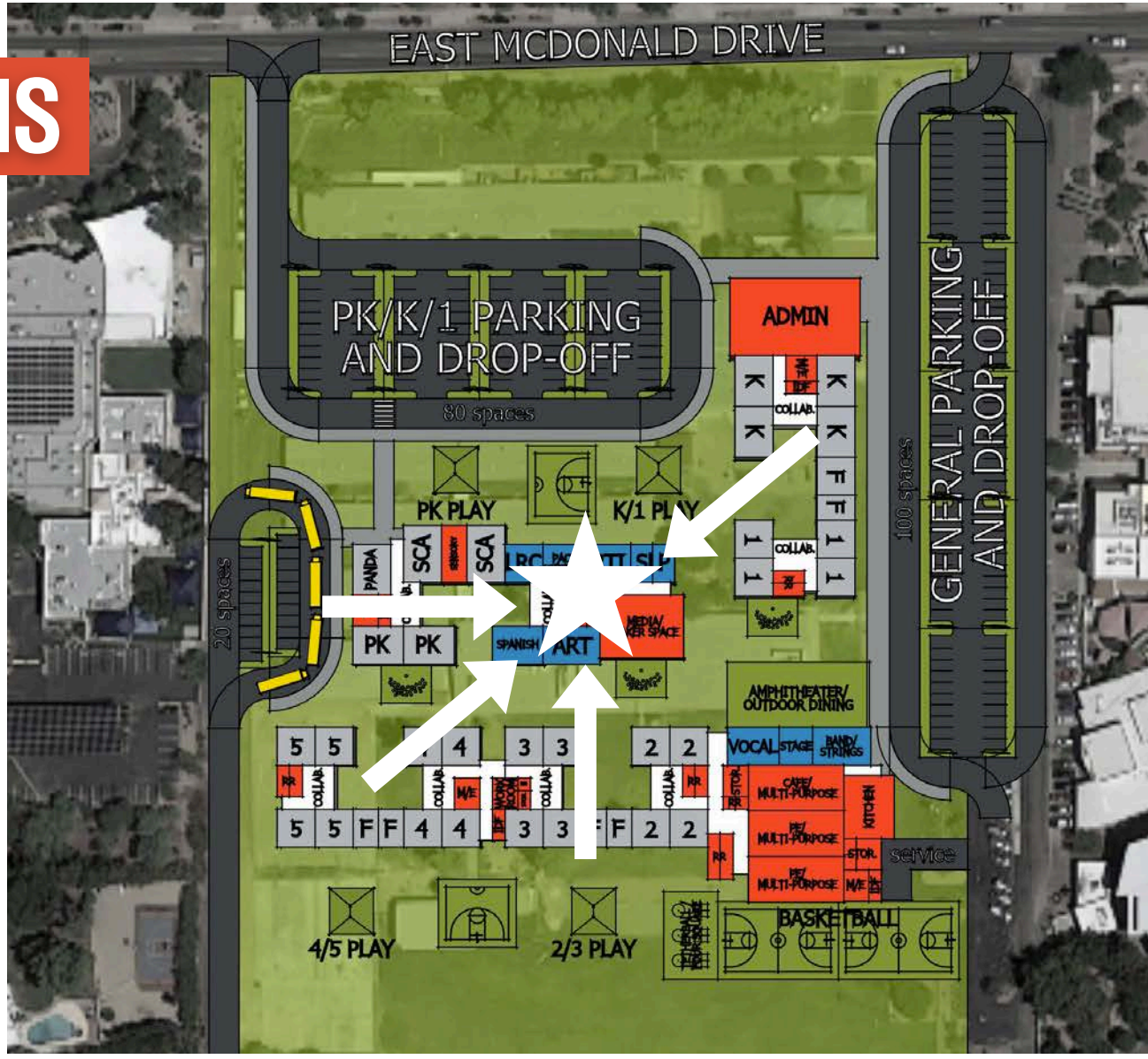


VIGNETTE ANALYSIS

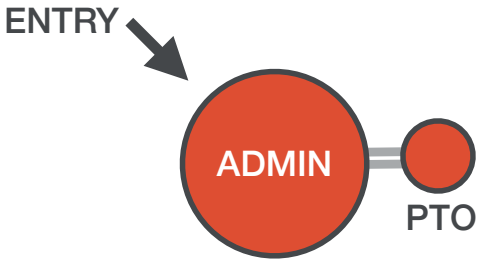


27 CONVENIENT PULLOUT SPACES

Areas such as the Socialization/Communication/Academics And Learning Resource Center should be placed as close as possible to the classrooms served. SCA & LRC need strong acoustic separation from quiet learning spaces.



VIGNETTE ANALYSIS



28 PTO AMENITIES

The parent teacher organization needs space that is easily accessible. Storage will need to be provided.



VIGNETTE ANALYSIS

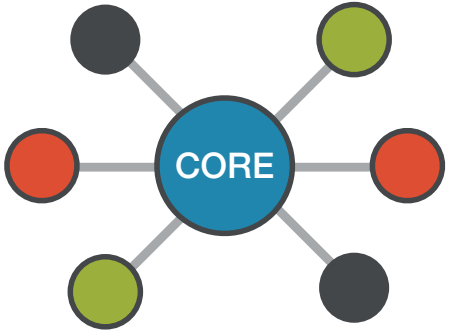


29 LIMIT HIGH VOLUMES

To the greatest extent possible, arrange the campus to reduce the scale of buildings adjacent to neighboring homes.

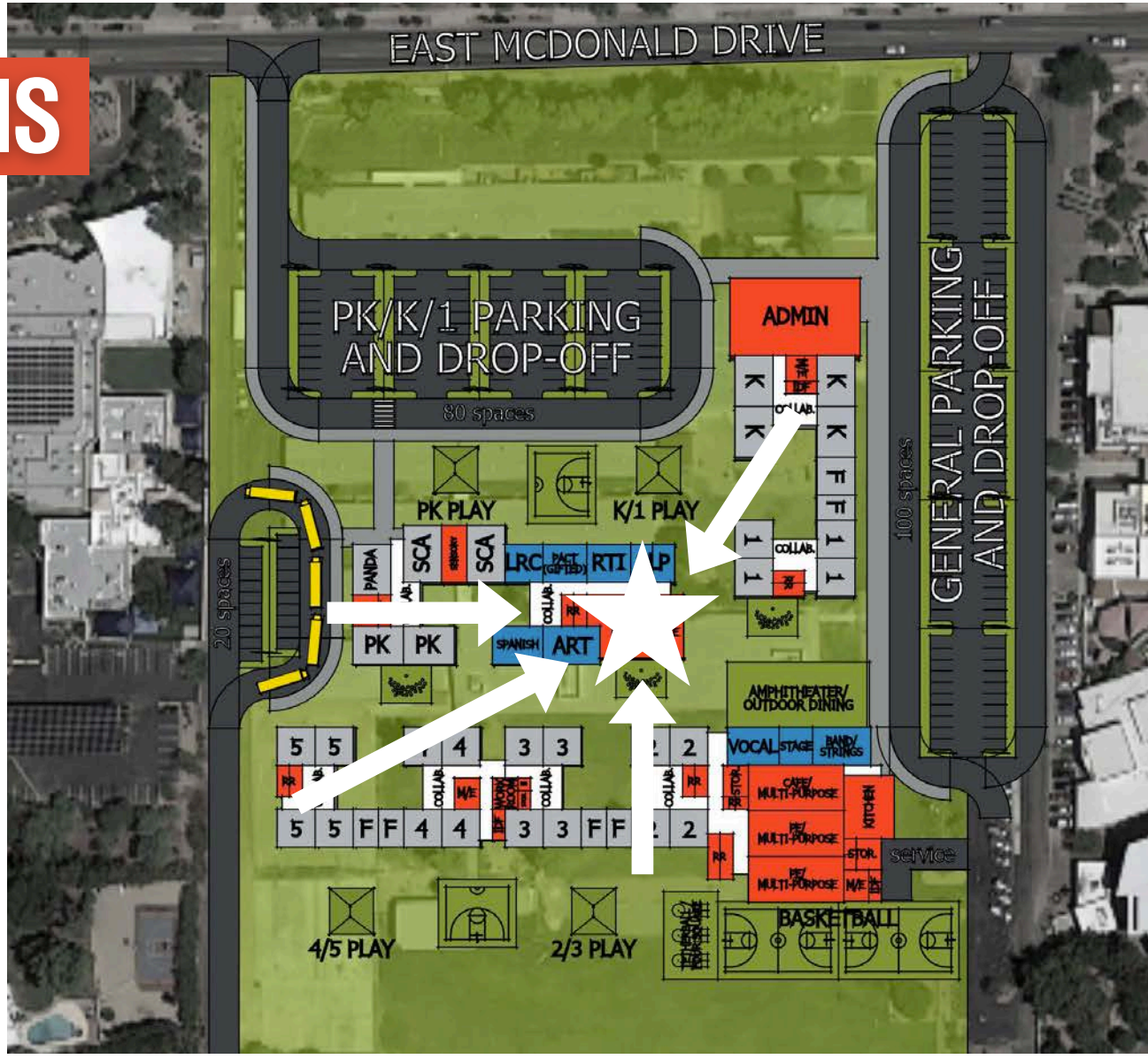


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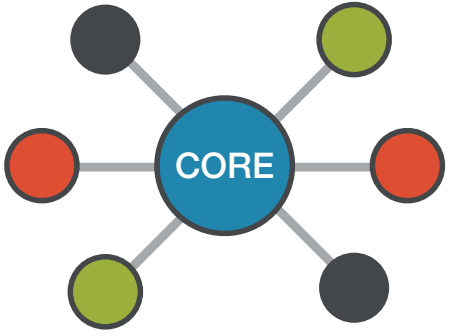


30 ACCESS TO CORE SPACES

All learning spaces on the campus need to be in reasonably close proximity to core spaces. This allows for ease of circulation for all students and staff.



VIGNETTE ANALYSIS

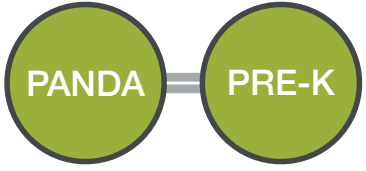


30 ACCESS TO CORE SPACES

All learning spaces on the campus need to be in reasonably close proximity to core spaces. This allows for ease of circulation for all students and staff.



VIGNETTE ANALYSIS



31 PRE-K & PANDA ADJACENCY

The tuition based portion of the campus needs to be consolidated and self contained. Pre-K and PANDA need to be located adjacent to each other.



VIGNETTE ANALYSIS

32 DEDICATED TEACHERS LOUNGE

A dedicated area that teachers can congregate and collaborate is high on the staff priority list.

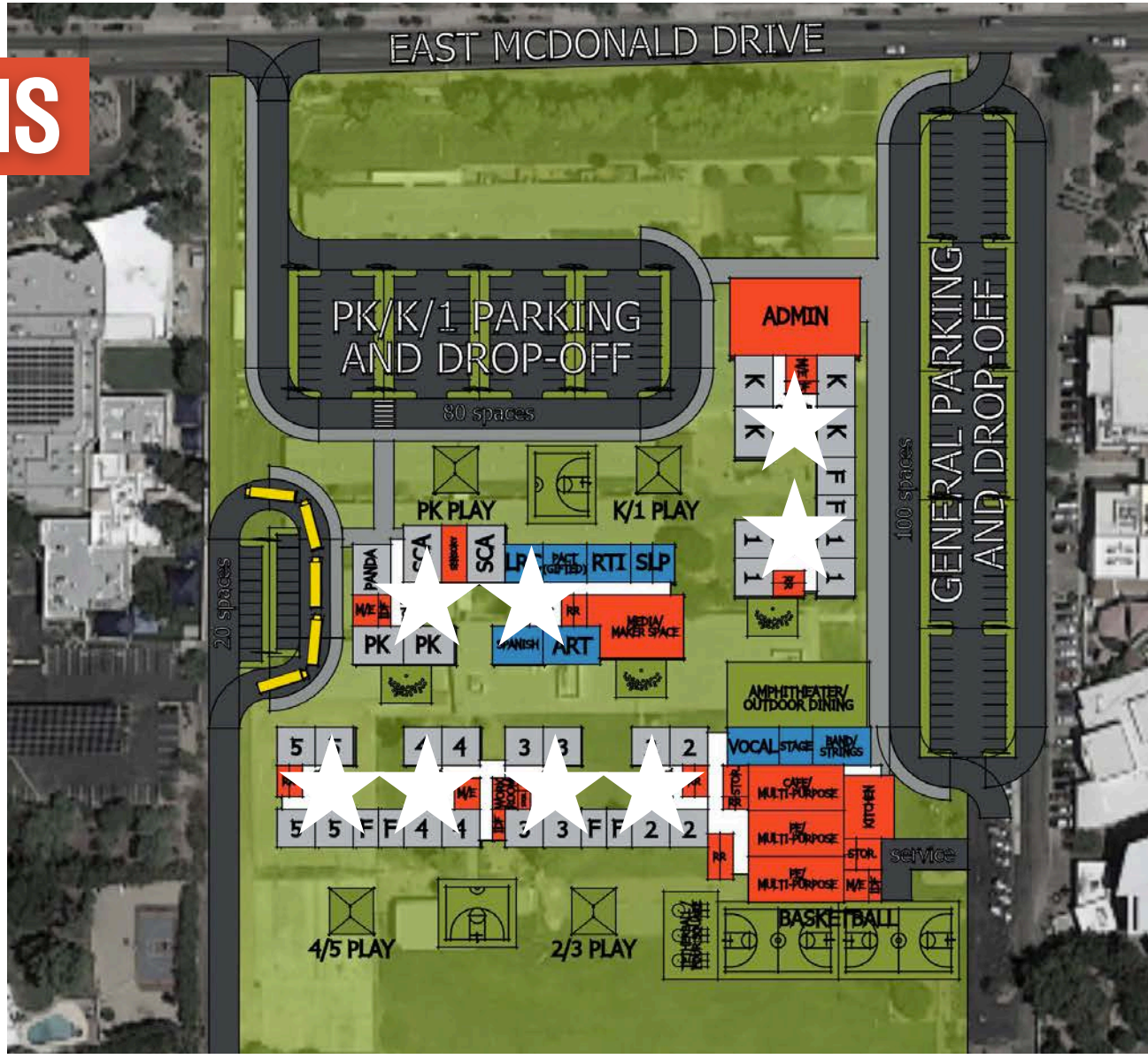


VIGNETTE ANALYSIS



33 INDOOR/OUTDOOR CONNECTION

A building design that reinforces the daily connection to the outdoors is highly desired by the staff and community.

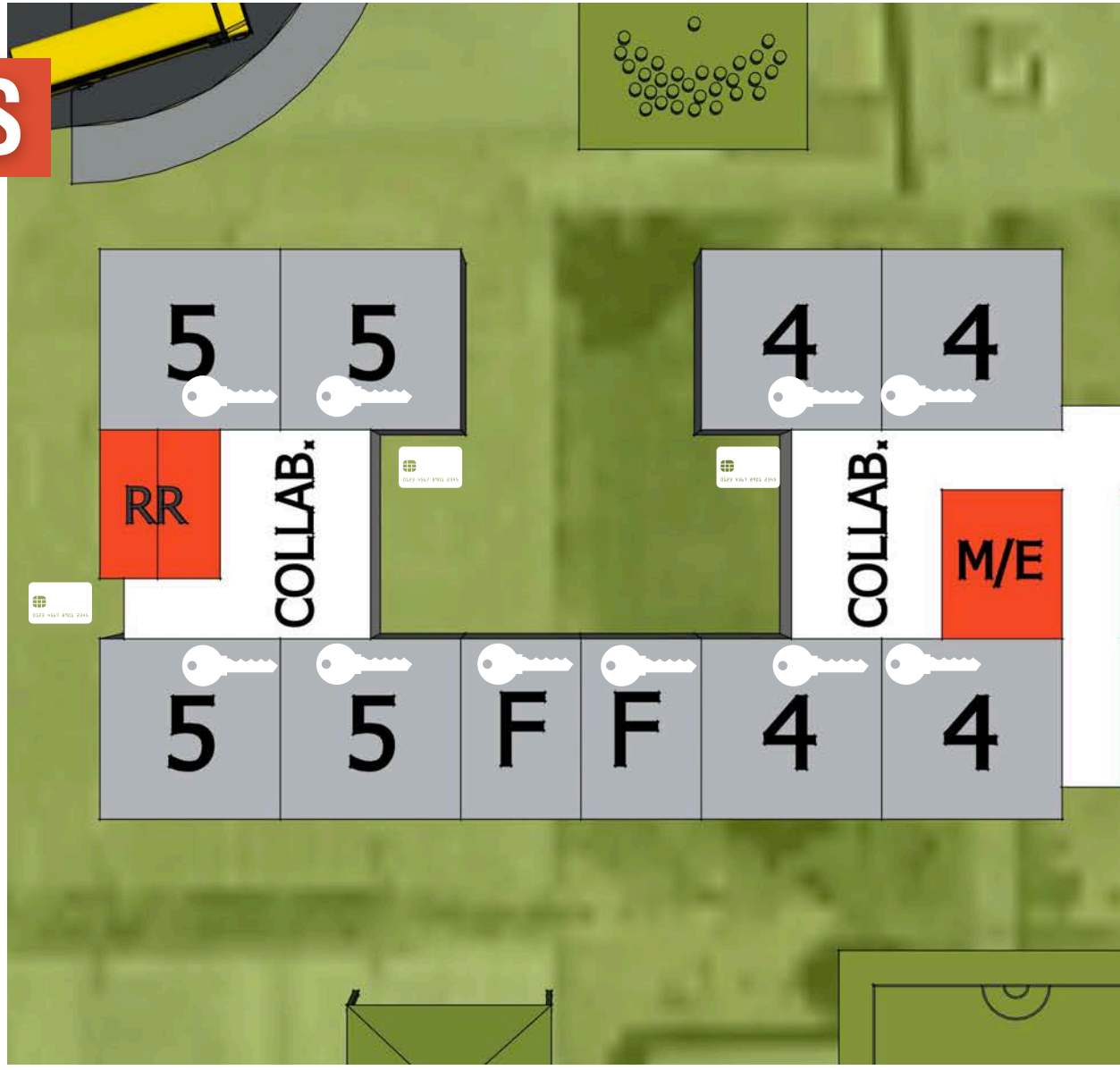


VIGNETTE ANALYSIS



34 SECURITY AND ACCESS CONTROL

RFID technology allows for flexibility in access control, a primary player in the discussion of security strategies. A customized solution that meets district standards should be provided.



VIGNETTE ANALYSIS



35 FLEXIBLE SPACES

Spaces throughout the campus should provide flexibility to be used in a variety of capacities, serving different purposes and different sizes of groupings of students.

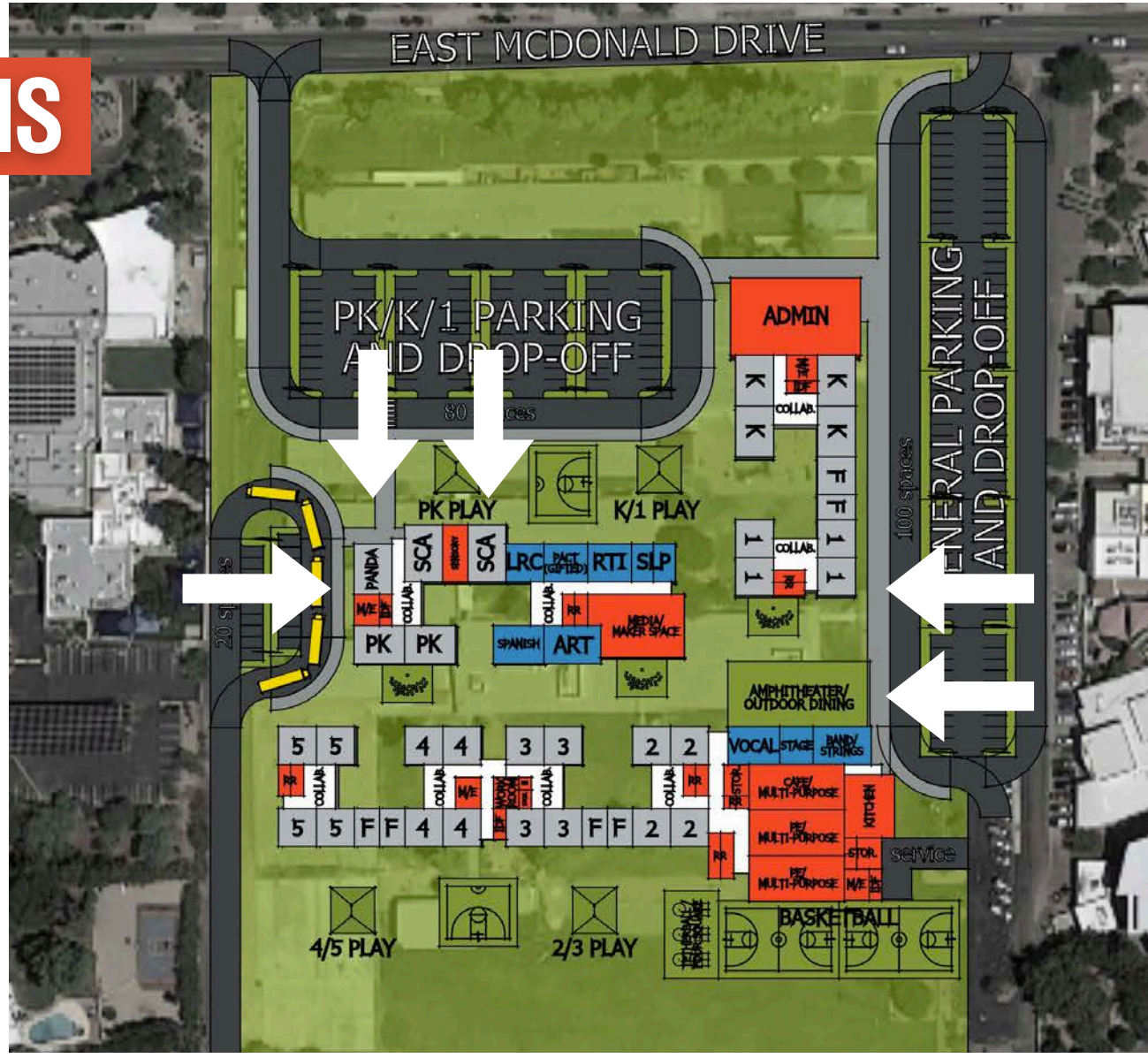


VIGNETTE ANALYSIS



36 STAFF PARKING PROXIMITY

Provide close and convenient parking for staff.



VIGNETTE ANALYSIS

37 UNIVERSAL & ACCESSIBLE

The design should focus on creating a facility that is accessible to all students. Strategies should be used to promote inclusivity in all campus experiences.



COMMITTEE FEEDBACK

A. FEEDBACK INCLUDED REQUESTS TO ACCOMMODATE PEDESTRIAN TRAVEL FROM THE NEIGHBORING CHURCH AND TEMPLE. A PEDESTRIAN CROSSWALK AND TRAFFIC CALMING STRATEGY WILL BE RESEARCHED.

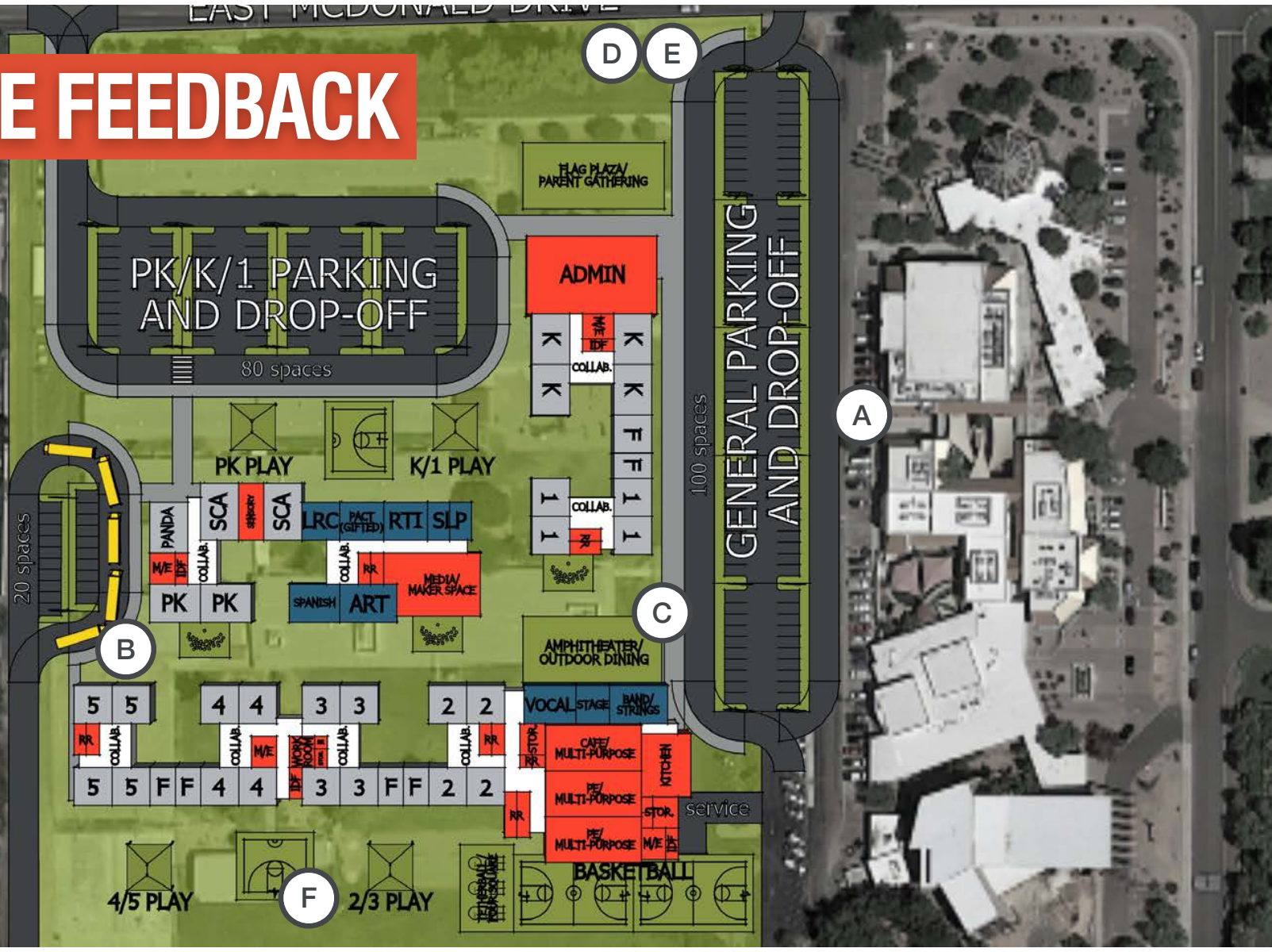
B. AESTHETIC TREATMENT OF VIEW CORRIDORS WAS AN AREA OF INTEREST, THE COMMITTEE WANTED TO MAKE SURE THESE WERE ATTRACTIVE.

C. NOISE AND VISUAL SCREENING WAS A REQUEST IN THE AREA WHERE THE AMPHITHEATER IS ADJACENT TO THE DROP-OFF AND PARKING.

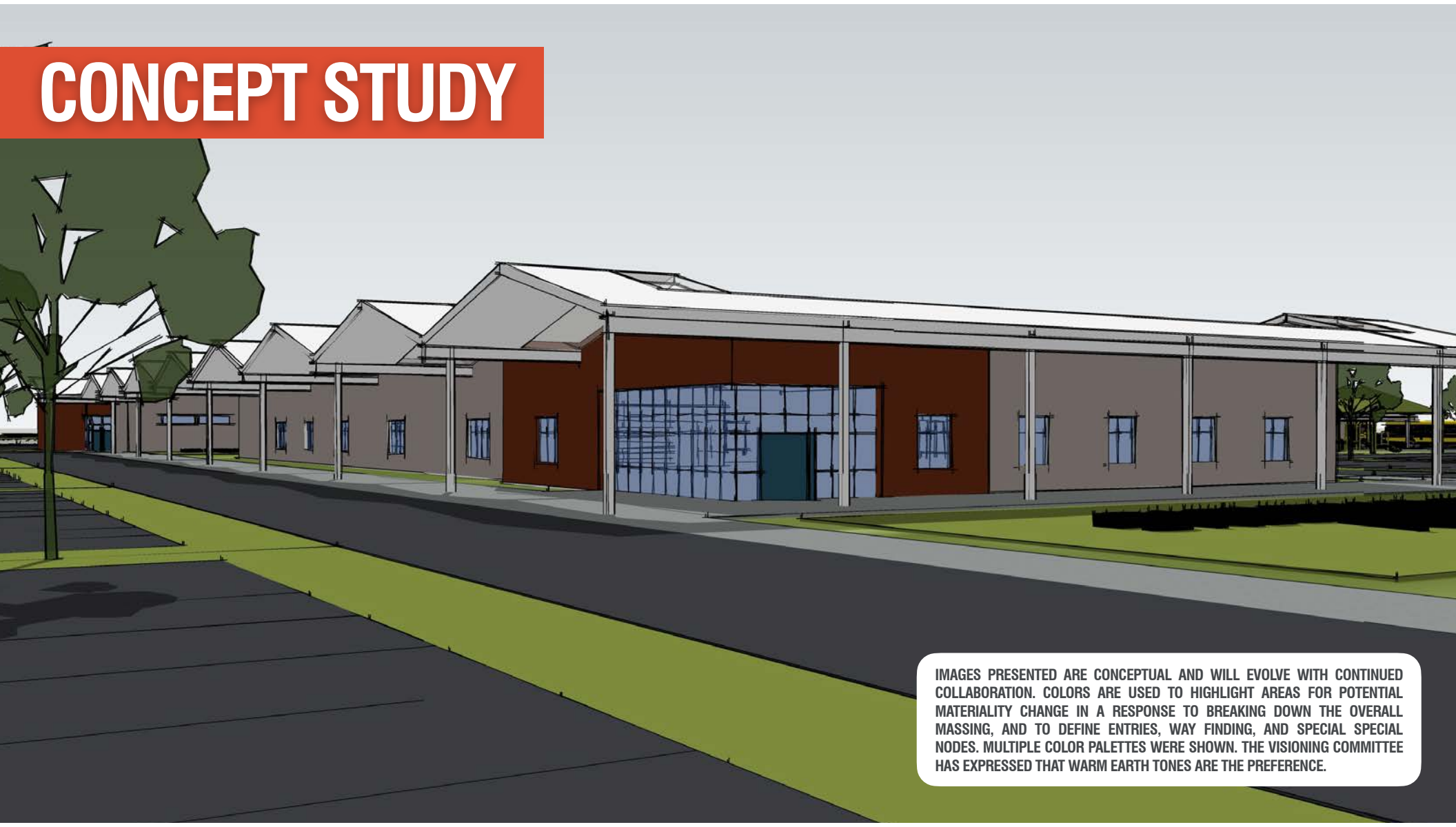
D. TRAFFIC IMPACTS ON EAST MCDONALD DRIVE AND THE USE OF THE EAST PARKING LOT WAS DISCUSSED IN TERMS OF MITIGATING CONGESTION. POSSIBLE SOLUTIONS LIKE ONE-WAY LEFT OR RIGHT EXITING WERE DISCUSSED.

E. SAFE PEDESTRIAN AND BIKE ACCESS TO THE SITE WAS AN AREA OF INTEREST. THIS WILL BE TAKEN INTO ACCOUNT WHEN THE TRAFFIC IMPACT ANALYSIS IS PERFORMED.

F. ADEQUATELY SEPARATED PLAY FOR APPROPRIATE AGE GROUPS WAS DISCUSSED, WHERE A RANGE OF AGES SHARE THE SAME AREA. CARE WILL BE TAKEN TO PROVIDE EASE OF SUPERVISION AND EQUITY OF PLAY OPPORTUNITIES.

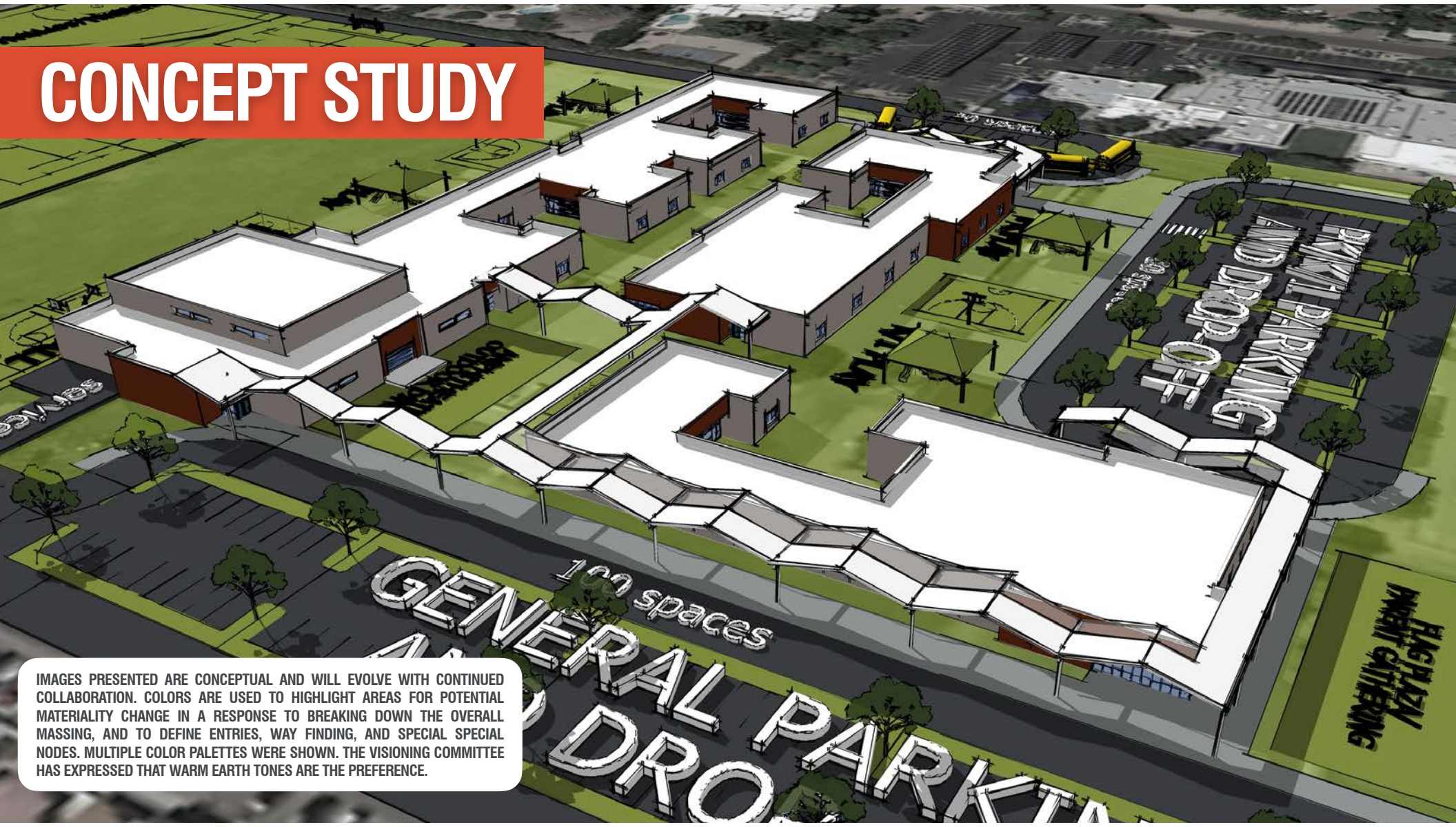


CONCEPT STUDY



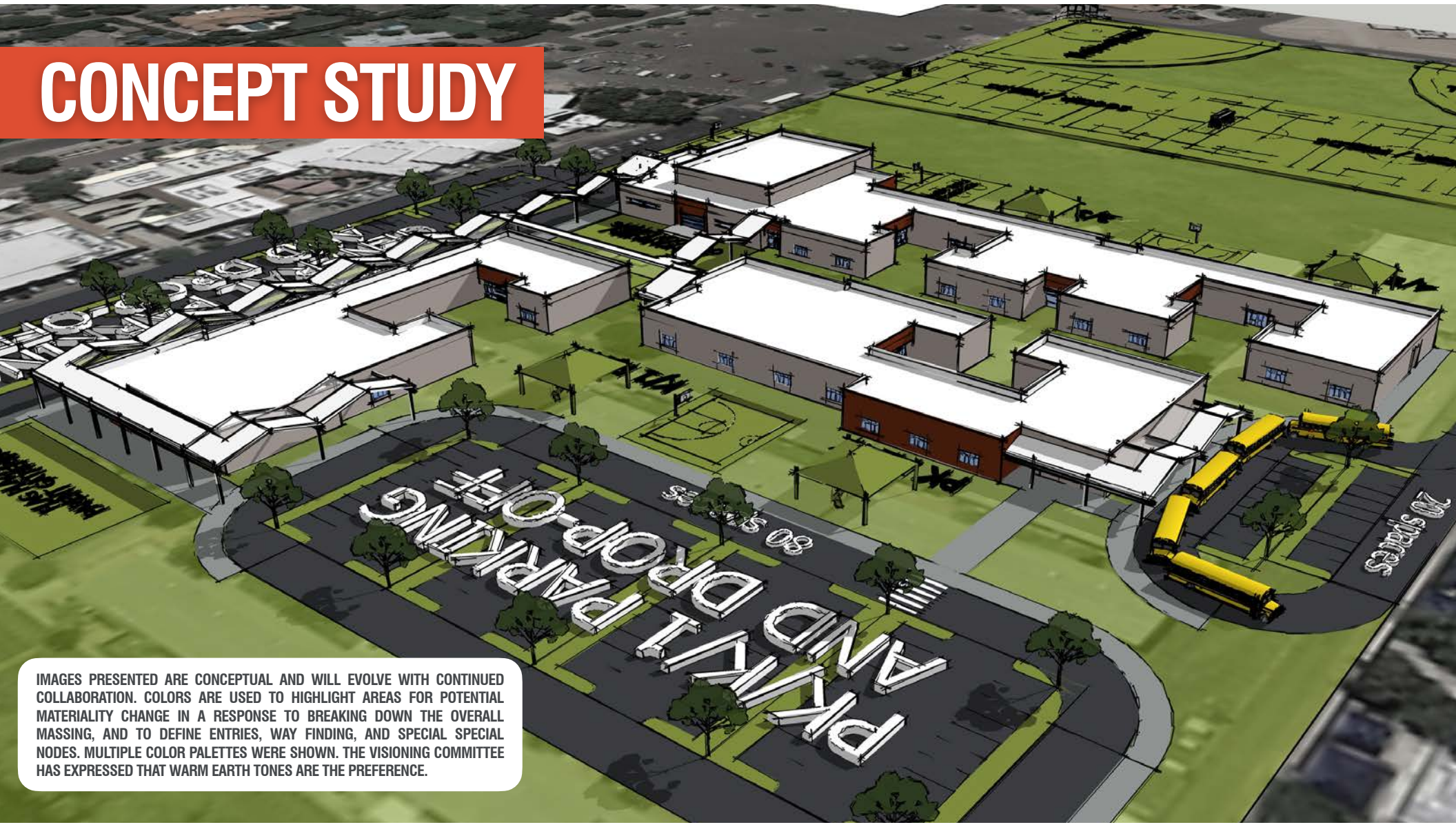
IMAGES PRESENTED ARE CONCEPTUAL AND WILL EVOLVE WITH CONTINUED COLLABORATION. COLORS ARE USED TO HIGHLIGHT AREAS FOR POTENTIAL MATERIALITY CHANGE IN A RESPONSE TO BREAKING DOWN THE OVERALL MASSING, AND TO DEFINE ENTRIES, WAY FINDING, AND SPECIAL SPECIAL NODES. MULTIPLE COLOR PALETTES WERE SHOWN. THE VISIONING COMMITTEE HAS EXPRESSED THAT WARM EARTH TONES ARE THE PREFERENCE.

CONCEPT STUDY



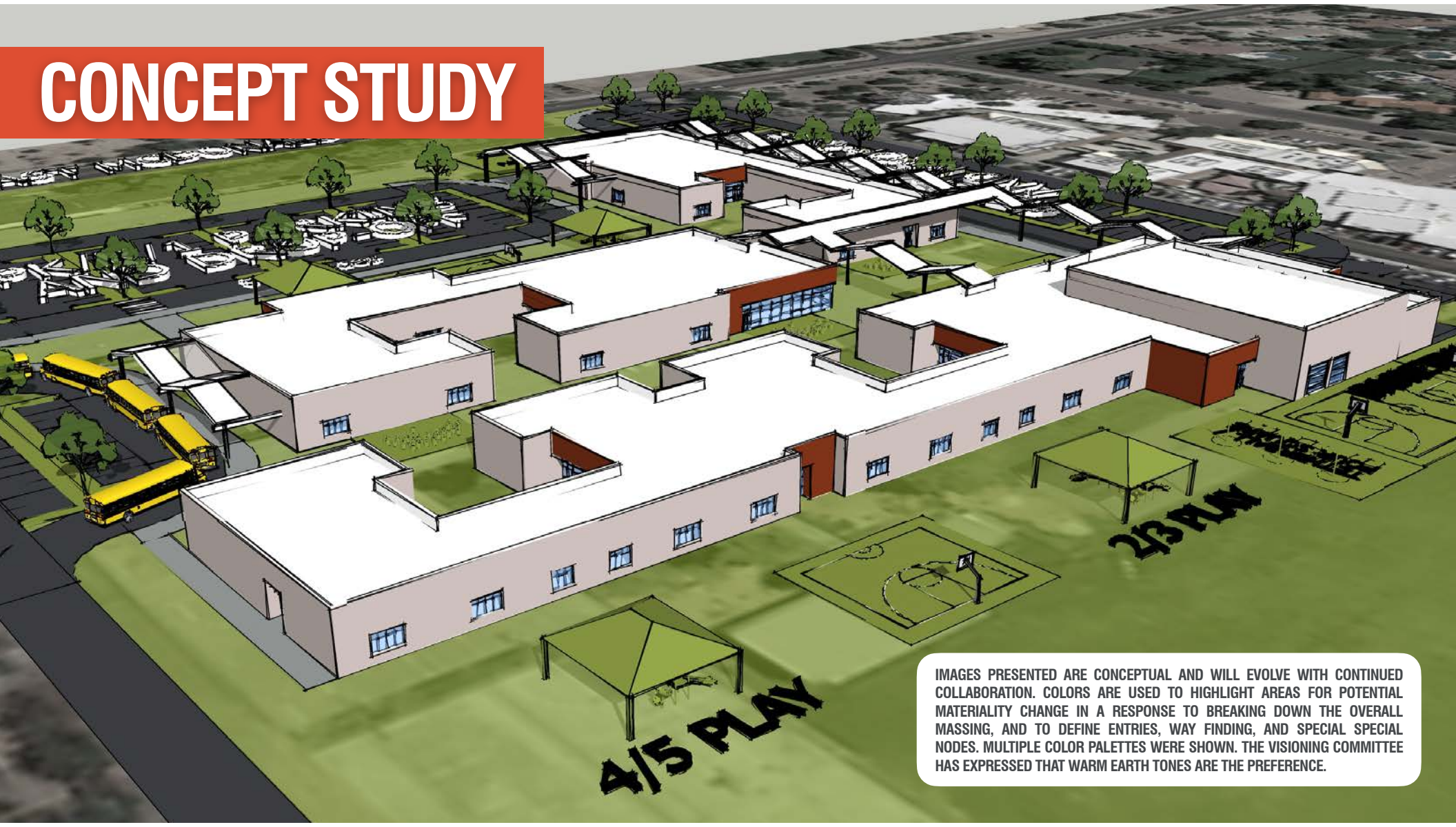
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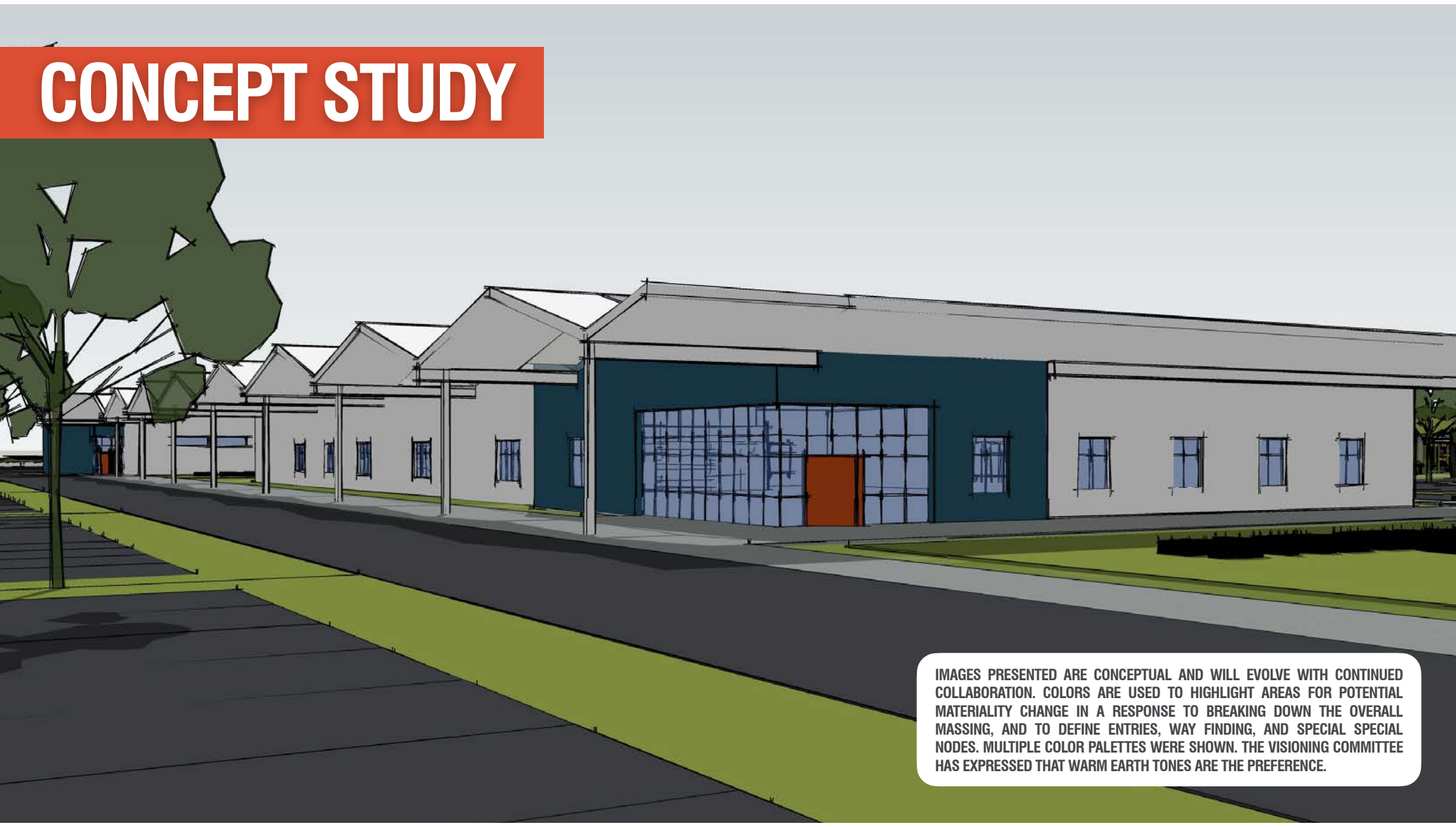
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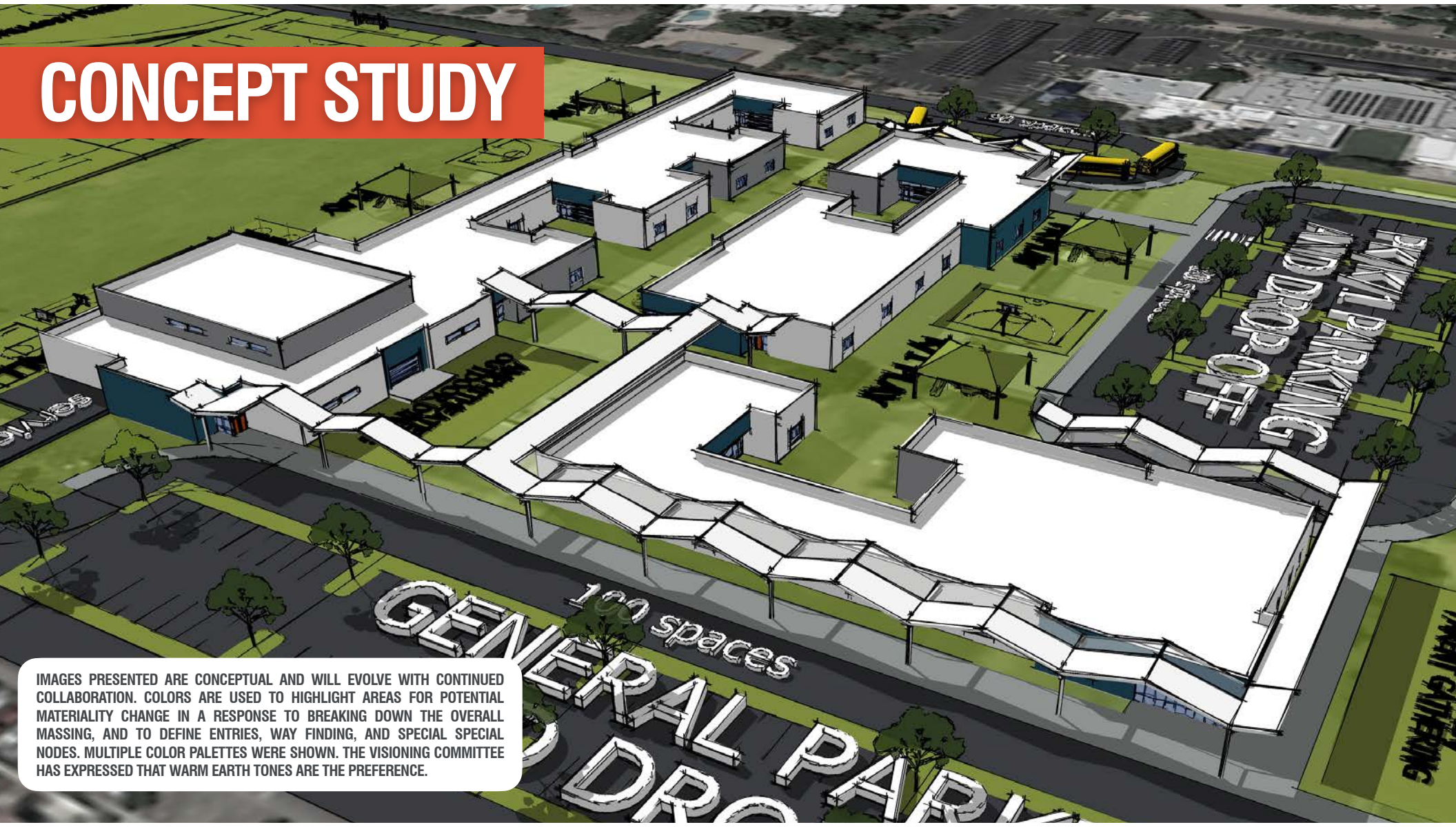
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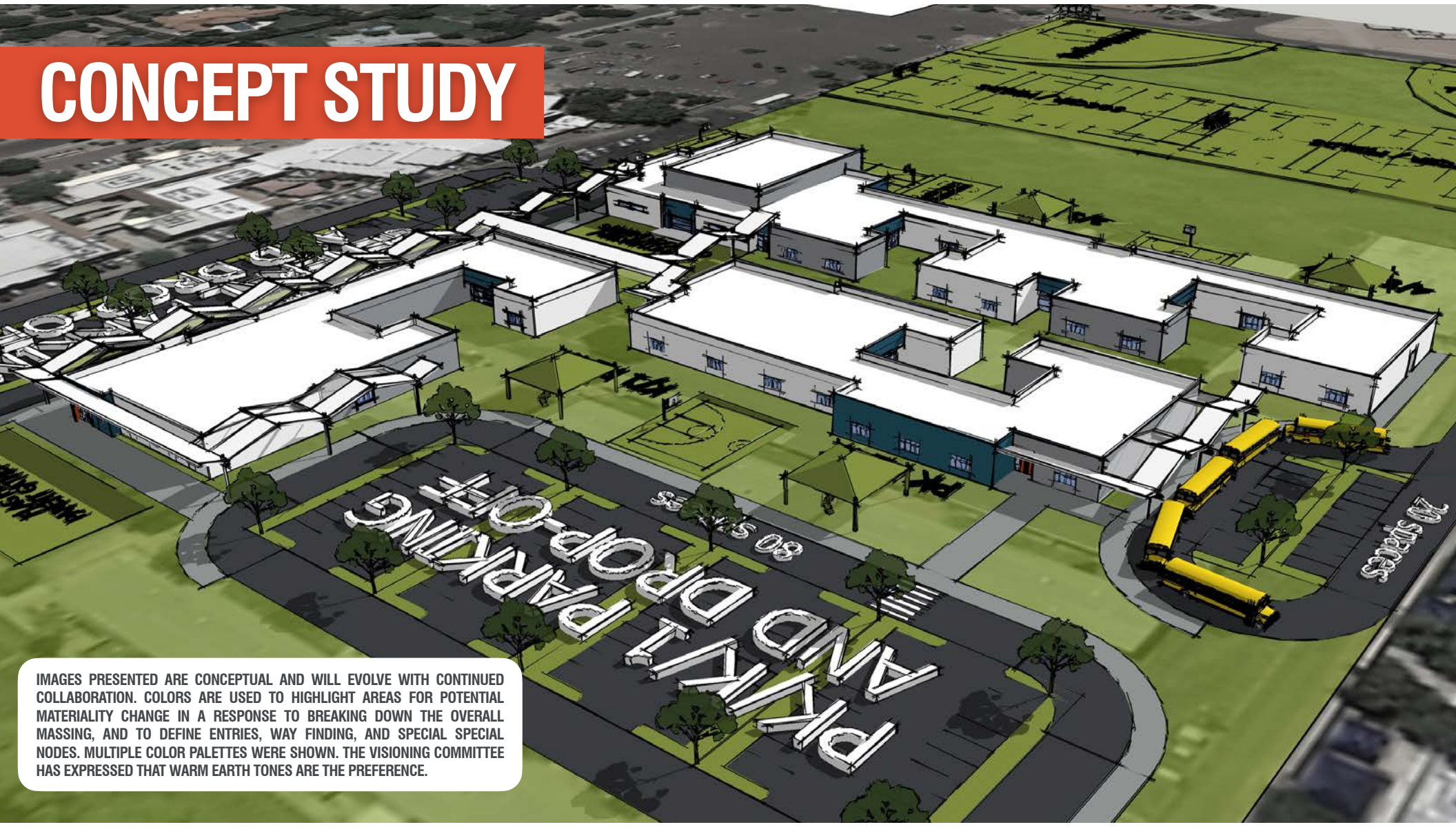
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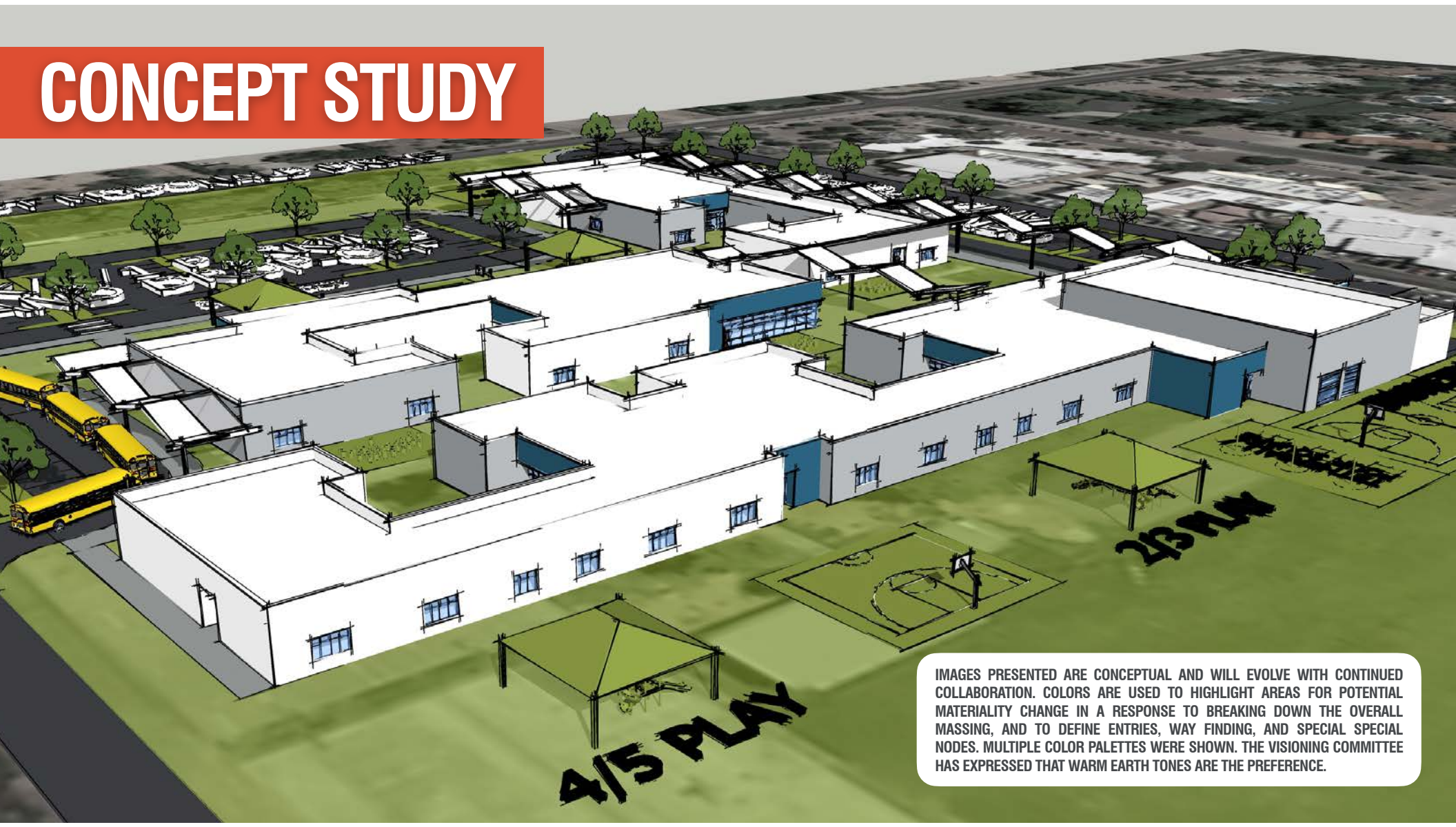
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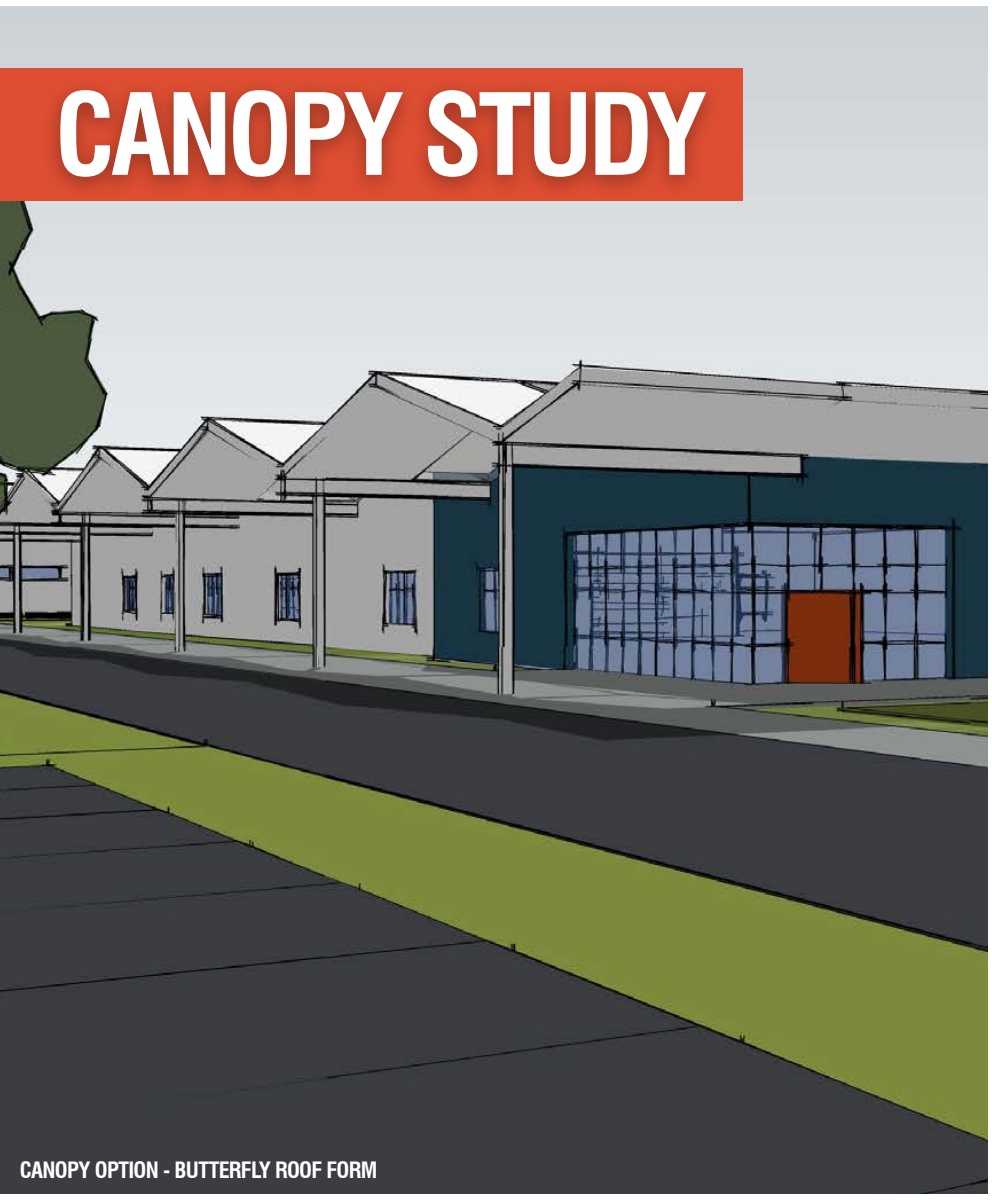
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CANOPY STUDY

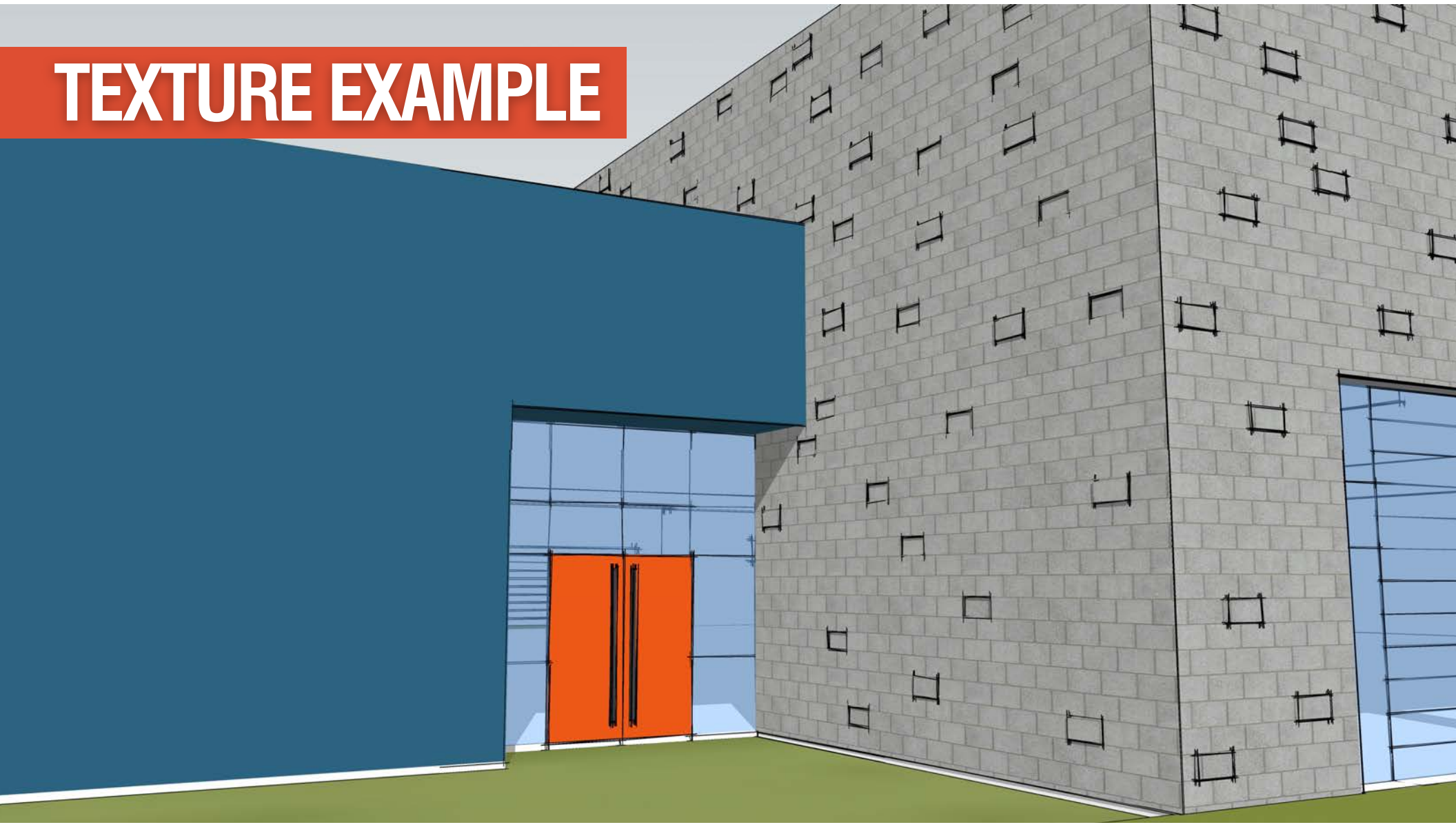


CANOPY OPTION - BUTTERFLY ROOF FORM



CANOPY OPTION - STANDARD ROOF RIDGE FORM

TEXTURE EXAMPLE




Thank you!
orcutt | winslow