CENTER FOR INNOVATIVE TEACHING

Sustainable Design Collaborative Atlanta_ Vision Project _July 2017

SDCA
Sustainable Design Collaborative Atlanta

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INTRODUCTION

INTRODUCTION

Welcome!

Sustainable Design Collaborative Atlanta is honored to select ArtsNOW and their Center for Innovative Teaching in collaboration with Barrow County School System for our 2017 project. The following pages outline each organization, our process and the final vision.

PARTICIPATING PROFESSIONAL ORGANIZATIONS SDCA

American Institute of Architects (AIA) Atlanta Chapter

American Society of Heating, Refrigeration and Air Conditioning Engineers
(ASHRAE) Atlanta Chapter

American Society of Interior Designers (ASID) Georgia Chapter

American Society of Landscape Architects

Construction Management Association of America (CMAA) South Atlantic Chapter

Construction Specifications Institute (CSI) Atlanta Chapter

International Interior Design Association (IIDA) Georgia Chapter

U.S. Green Building Council (USGBC) Georgia Chapter

PREPARED FOR

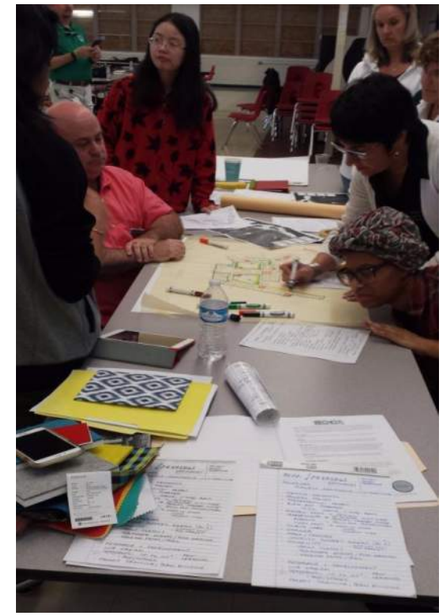
CENTER FOR INNOVATIVE TEACHING

DEVELOPED BY:

SUSTAINABLE DESIGN COLLABORATIVE ATLANTA

SDCA

Sustainable Design Collaborative | Atlanta



Our Vision:

Creating enhanced communities through equal access to cross-disciplinary sustainable design solutions.

Mission:

To provide a means for pooling talent, sharing ideas, and developing programs for the betterment of the community through integrative solutions for the built environment.

Who we Are:

We are an all volunteer organization with our members representing diverse building community organizations. Each member is a sustainable-minded professional. We are connected by our desire to provide professional design services to the 99% of the human race that does not normally have the opportunity to fund these types of services. We began in 2010 and generally complete one pro-bono project each year.

What we Do:

Our cross-disciplinary approach focuses on providing our partners, whose missions often focus on sustainability and community-enhancement, with a completed integrated design solution.

SDCA

We’re honored to work with ArtsNow for the Center for Innovative Teaching in collaboration with the Barrow County School System for this year’s project!

TEAM BREAKOUT CHARRETTE

SITE VISIT AND RESEARCH

FEEDBACK PRESENTATION

HISTORY

Now in its Seventh year, Sustainable Design Collaborative Atlanta, SDCA, gathered participants of organizations from Atlanta's sustainable and design community, including members of the American Institute of Architects (AIA | Atlanta), Atlanta Chapter of the American Society of Heating Refrigeration and Air Conditioning Engineers (ASHRAE), Georgia Chapter of the American Society of Interior Designers (ASID), Atlanta Chapter of the Construction Specifications Institute (CSI), Georgia Chapter of the International Interior Design Association (IIDA Georgia), the Georgia Chapter of the United States Green Building Council (USGBC) and Construction Managers Association of America (CMAA). SDCA has moved beyond the support of the one night celebration that was the source of funds for the organization to a full fledged non-profit.

This year, the Sustainable Design Collaborative Atlanta gathered once again to give back to the community. SDCA selected to work with ArtsNow Center for Innovative Teaching (CFIT) in collaboration with the Barrow County School System to provide design solutions to support their efforts to provide a comprehensive center for continued education, arts and sciences.

SDCA has provided, pro bono, professional services helping each client to elucidate their vision in a tangible way to solicit support and funds to meet the goals of the organization and implement the project vision.

SDCA provided a scope of the CFIT project which includes an evaluation of the building and the surrounding streetscapes. The following report will indicate recommendations to upgrade the building for sustainable public use, as well as detailed information to apply the principles learned from this study to any other property that the CFIT has the opportunity to improve. Recommendations and the design of the building have been proposed for the site, through design development phase, to provide connectivity to the surrounding community and to complement earlier studies that have been completed for this community

In previous years, SDCA provided detailed design solutions to meet the needs of organizations such as: The City of Atlanta Parks and Recreation; the Lithonia Women's Club and the City of Lithonia; the Lifecycle Building Center; the Friends of Refugees; and the Hagar Civilization Training Missionary Center.

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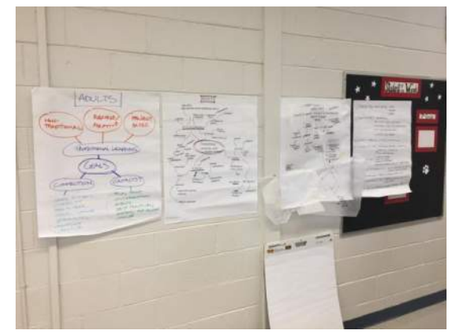
HISTORY

As a nationally recognized leader in the field of arts integration, ArtsNow: Teaching and Learning Across the Curriculum has successfully designed and delivered high-quality professional learning in schools across 24 Georgia school systems since 2006. ArtsNow engages a high-quality, senior-level team of coaches and consultants who provide professional learning for teachers and administrators that promotes the use of research-based, arts-integrated instructional strategies in all classrooms across all content areas. ArtsNow becomes a strategic partner with schools to help them achieve their goals, and offers programs customized to meet each school's improvement plan. ArtsNow has been cited as a "resourceful and innovative approach to arts learning" in the final recommendations from Governor Nathan Deal's *Arts Learning Task Force* (Georgia Council for the Arts, August 2015). ArtsNow has had a positive impact on teacher efficacy and school-wide transformation. We have found that students engaged in arts integrated learning increase their depth of knowledge, take more pride in their work, retain information at a higher rate, improve in critical and creative thinking skills, and have fewer discipline problems and absences.

ArtsNow®
Teaching and Learning Across the Curriculum

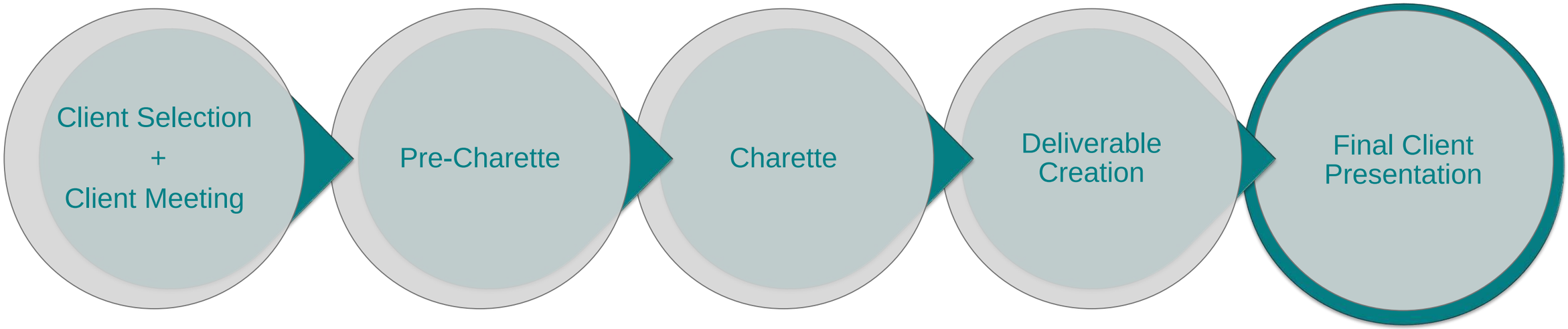
Vision
Barrow County School System: Boldly Committed to Student Success
Mission
Ensuring an exceptional education that leads each student to become a high achieving and responsible citizen.
We believe that a quality school system...
• Provides a world class education in a safe and caring environment which assures each student's success. • Enhances individual student achievement through real-world experiences and active learning. • Challenges students to exceed local, state, and national academic standards. • Nurtures the total well-being, independence, creativity, and talents of each student enabling them to be postsecondary and/or workforce ready. • Motivates students to develop exceptional critical thinking, reasoning, problem-solving and communication skills. • Prepares students to be technologically literate. • Develops continuous, collaborative relationships with students, parents, business partners, mentors and other community members. • Respects diversity and promotes cultural understanding among all students and employees in every environment while supporting hometown values. • Expects all school system employees to recognize that they are a major influence on our students.

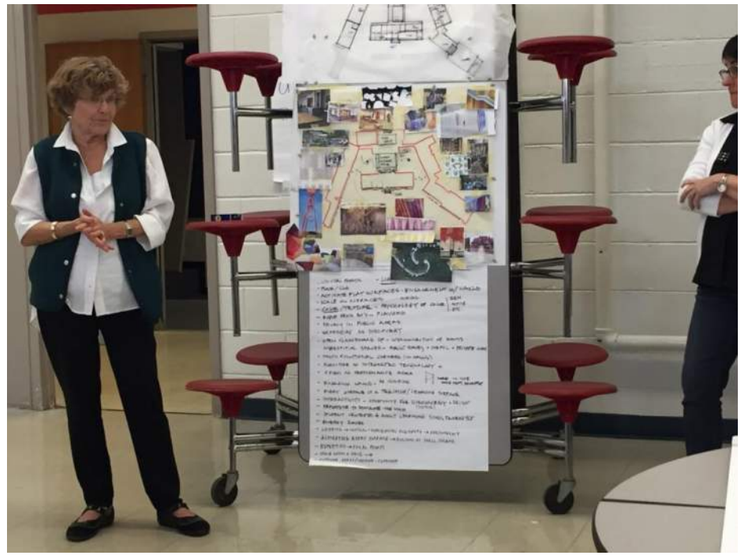
PROCESS



PROCESS

Our participatory process ensures all voices are heard. Through a series of meetings; volunteers, the client and diverse stakeholders work side-by-side to produce the final design vision.


Client Selection
+
Client Meeting
Pre-Charette
Charette
Deliverable
Creation
Final Client
Presentation



CLIENT MEETING AND PRE-CHARETTE

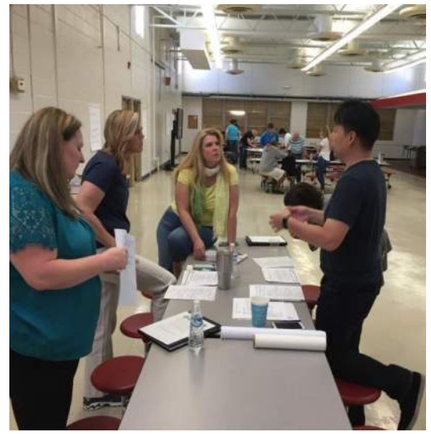
A participatory process is imperative to the strength of the final vision found within this report. The first meeting with the client involves a multi-hour facilitated conversation to understand the goals, opportunities and details of the project and all partners. Also included in the initial client meeting is a deep-dive tour of the existing facility.

The information gathered in the client meeting drive the design direction for the entire process. After the client meeting, the teams organize into smaller task forces such as site, systems and interiors to begin implementation of design creation. The process continues to be collaborative throughout with multiple group presentations for feedback and revision to ensure alignment with teams and solutions to project goals.

CHARETTE AND DESIGN VISION CREATION

Once the initial vision is created during the pre-charette, the entire group comes back together after doing research and task force work to detail the final direction of the design. The Charette meets on site so teams can understand more specific details of the building and site. Teams present their preliminary designs to the larger group for feedback and integration.

PROJECT GOALS, CONCEPT & DESIGN VISION OVERVIEW



Project Goals And Concept

The strength of our team is proportional to the preparedness of our client. Measurable goals and a clear and concise concept are paramount to any project's success.

Goals are supposed to be challenging yet realistic. They must include measurable outcomes and indicators for success

PROFESSIONAL LEARNING CENTER

- Develop a state-of-the-art campus that reflects arts, creativity, and innovation at every turn is envisioned. This building will become a “Center for Innovative Teaching” (CFIT) that allows for high quality professional learning and innovative, arts-integrated programming for students.
- Establish a satellite office to become a regional hub to develop educational resources.

PROGRAMMING FOR STUDENTS

- Design and Deliver programs that are reflective of rigorous, innovative teaching strategies for the 21st century learner. This engaging programming will include, but is not limited to, arts-integrated instruction, STEAM lessons/units, design challenges, and fine arts programming.
- Promote the incorporation of Project-Based Learning components, such as spaces where students and teachers can actively interact with an array of business, community, government, and postsecondary partners.

FUNDING FOR FULL POTENTIAL

- Given that funding must be secured to reach the full potential, our initial focus is to cast vision for the possibilities of transforming and refurbishing a vacant space into a state of the art artistic campus, and to attract donor interest to support the larger full-scale project.
- Other cutting edge spaces that support innovative teaching and learning are needed: Black Box Theater, dance studio, Makerspace, STEAM lab, digital arts lab, green screens, film and production area, and sculpture gardens.

PROJECTS GOALS & CONCEPT

Properly designed goals need a vehicle to push an organization forward. A well prepared concept will unify an organization and inform decisions.

This particular collaborative project builds upon a decade-long working relationship and common missions to positively, and boldly, support and improve teacher quality, build teacher leaders, provide administrative professional learning communities, and bring innovative instruction to students that yields successful outcomes. ArtsNow and Barrow County School System have a passion and commitment to collaboratively transform a vacant facility into a state-of-the-art Center for Innovative Teaching (CFIT). This center will house innovative programs that mutually benefit and advance the core work and educational goals of both organizations serving educators and students in Barrow County and beyond. The center will truly allow everyone involved to offer these unique teaching and learning experiences to teachers and students as well as the broader community. The transformation of the old middle school facility into a **bold and creative destination** for this work that also will serve as a teaching tool in and of itself is in many ways the most exciting piece of this visionary project.

BEST IN CLASS

ArtsNow equips educators with rigorous, innovative strategies for the 21st Century learner.

EQUIPPED FOR SUCCESS

Depth of knowledge, pride in work, information retention, creative thinking skills,

QUALITY RESULTS

Strengthen best practices, Positively impact student learning and engagement

DESIGN VISION OVERVIEW

Our process began for this project by overlaying the existing building with the new programming requirements, emphasizing the key learning goals. The main pieces of the Center For Innovative Teaching overlap where such that collaborative and multi-purpose space will be located with shared adjacencies. The functional spaces create a unified flow around these focal areas, which open up to the courtyards so integral to the campus. In order to strengthen community connections, a new front entrance, enhanced circulation and wayfinding, and garden and park areas create an extension to the city. The ArtsNow office is strategically located at the front of the building, providing adequate office and operational space while keeping the connectivity between ArtsNow and Barrow County Schools The ArtsNow space is designed with collaboration and outreach in mind. Business areas are located in the front spaces while innovative spaces will help to empower educators and multi-purpose areas can be joined for gatherings, community meetings, and celebrations.

The outcome is a building that will be a true community addition, putting in place of the existing middle school a new space that can serve multiple needs and various groups at the same time. The open floor plan will allow flexibility end to end and the colors and materials selected will allow future creativity for young people as their needs grow and change. The building systems will be highly sustainable and set the example as they work to accomplish the goal of being designed to last through the life of the building. The site will offer the same types of amenities, from access by the public to the gardens to the use of water detention, storage and reuse techniques. This will truly be a place everyone in the community can be proud of.

DESIGN VISION DETAILS

- SITE
- BUILDING
- INTERIORS
- SYSTEMS
- SUSTAINABILITY

SITE

The conceptual site plan for the Center details the re-use of the central multi-purpose field with additional adjacent uses to support the Center's classroom and outdoor programs. Additionally, portions of the campus become open to the local community for various activities and events.

SCALE: 1:1500

1 WATER PLAY

2 BIOSWALE BOARDWALK

3 ICON PORTAL

4 WOODLAND AMPITHEATRE

5 READING NOOK

6 DISPLAY CUBES

7 ENVIRONMENTAL CLASSROOM

8 SCREEN ON THE GREEN

9 EARTH SCULPTURE

10 THE TREE HOUSE

11 COMMUNAL

12 THE WILDFLOWER MEADOW

13 INTERACTIVE PLAY

14 FARM TO TABLE

15 THE ORCHARD

16 SCULPTURE GARDEN

17 SUSTAINABLE PARKING

Southeast Perspective

Farmers Market Perspective

SUSTAINABILITY

Sustainable design elements in the courtyards include rainwater harvesting,infiltration of stormwater, utilization of natural or low-embodied energy builiding materials, onsite food production via resource-efficient methods, habitat creation, and facilitation of environmental education.

Southwest Perspective

OVERALL SITE

COURTYARDS

The building's two courtyard spaces are designed to be utilized for a variety of functions supporting CFIT's programmatic objectives. The northern-most "Art Garden Courtyard" would support academic and social uses focused primarily on student artwork. This is consistent with the surrounding classrooms, which are dedicated to creative pursuits. It includes space for classes, event hosting, exhibition of student art, study, relaxation, and play. On the other side of the building, the "Farm to Table Garden Courtyard" is oriented more towards the sciences. Its various facilities would support biology, botany, zoology, and horticulture studies. It would serve the dual purpose of food production and environmental exploration and learning.

ART GARDEN COURTYARD

DECORATIVE METAL GATE 1

ART DISPLAY 2

- PORTABLE PEDESTAL TO DISPLAY A SCULPTURE OR MOUNT A CANVAS
- UTILIZE NATURAL MATERIALS

SHADE SAIL 3

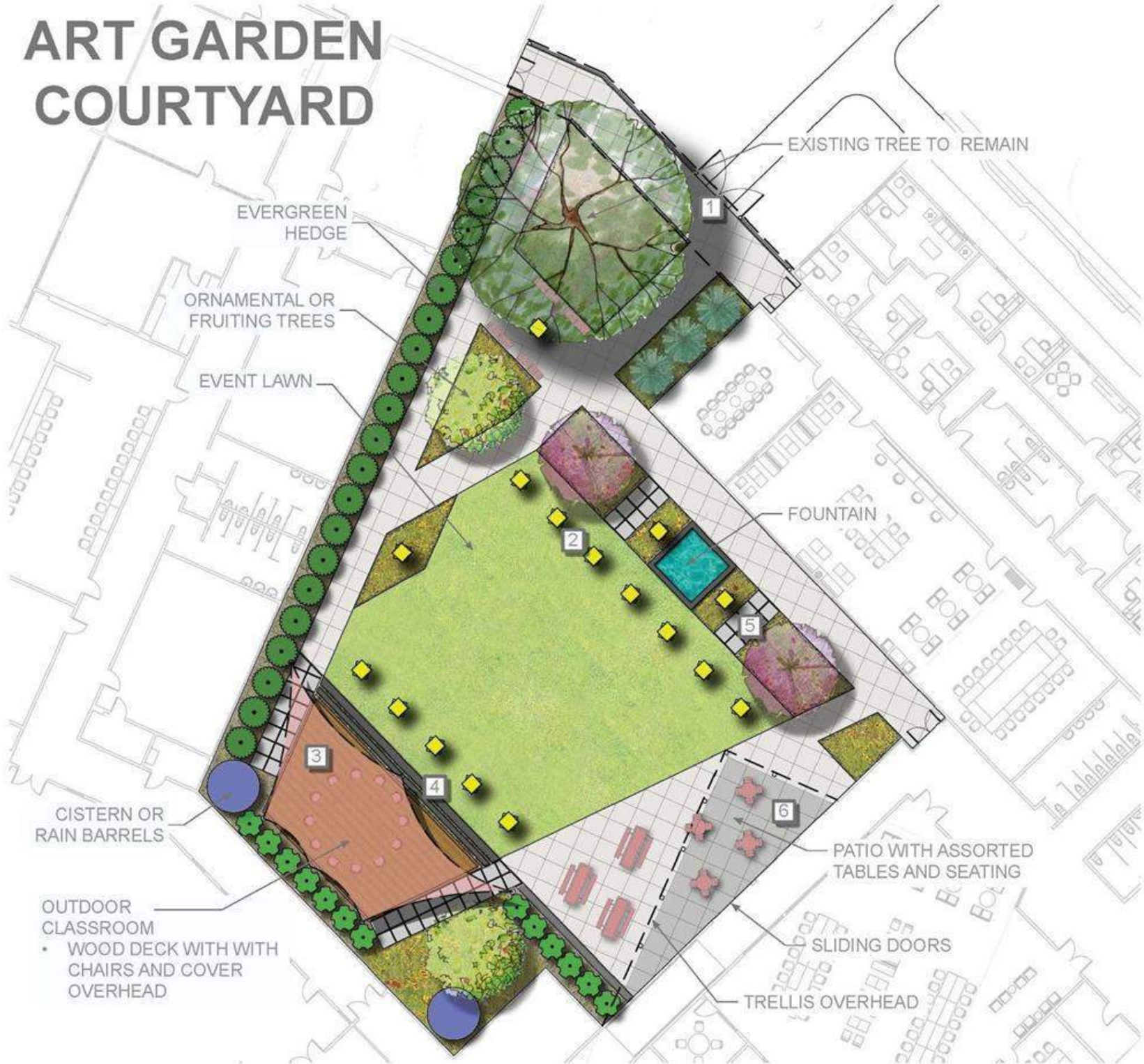
GREEN SCREEN AND SEATWALL 4

- PROVIDE ENCLOSURE FOR THE OUTDOOR CLASSROOM AND SEATING ALONG THE EVENT LAWN

STEP-STONE PAVERS 5

CONTRASTING CONCRETE COLORS 6

- COMPLEMENT ANGLED INTERIOR LAYOUT BY INCORPORATING FOOTPRINT INTO PATIO. DEFINE SHAPE USING COLORED CONCRETE.



FARM TO TABLE GARDEN COURTYARD

7 VERTICAL GARDEN

- SCATTERED VERTICAL GARDEN ELEMENTS OF VARIED SHAPE AND SIZE WITH SPACE BETWEEN FOR PLAY AND EXPLORATION

8 ESPALIER FRUIT TREES

9 CISTERN

- OR RAIN BARRELS

10 RAISED PLANTING BEDS

- 6'-WIDE "KEYHOLE" DESIGN KEEPS ALL PLANTS WITHIN ARMS-REACH FOR MAXIMUM EFFICIENCY
- "*HUGULKULTUR*" SOIL MEDIA LAYERING CAN HELP TO PROVIDE NUTRIENTS AND REDUCE IRRIGATION REQUIREMENTS

11 GARDEN WORKSTATION

- INCLUDE SINK, TABLES, PLANT NURSERY SPACE

12 HYDROPONICS HOUSE

13 BUTTERFLY HOUSE

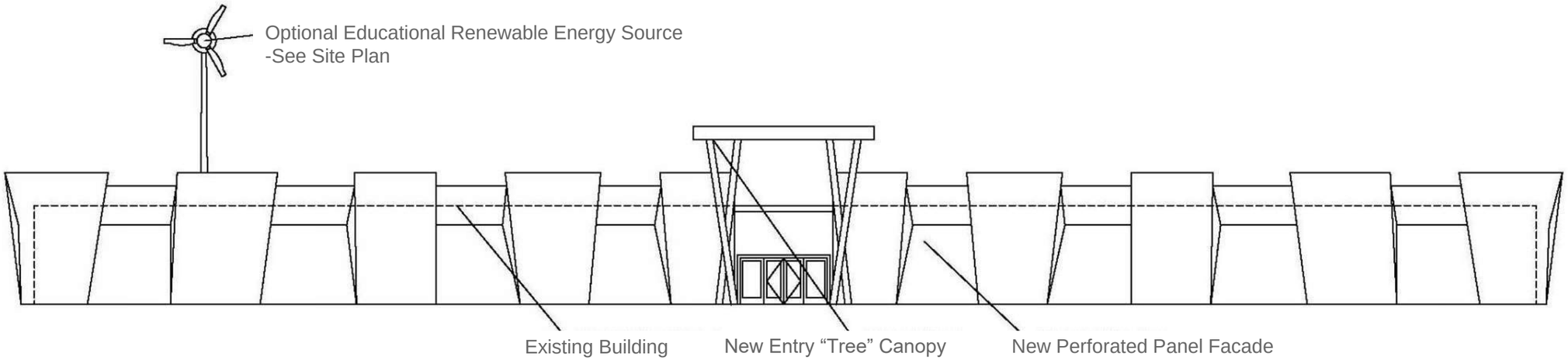
- WITH VIEWS THROUGH SCIENCE LAB WINDOWS

BUILDING

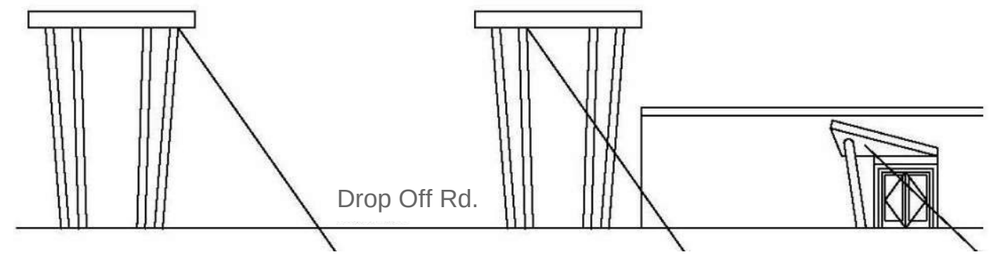
EXTERIOR DESIGN METHOD:

- Neighborhood friendly material / Blends into current neighborhood
- Using two or Three different material finishes on facade - Brick / Stone / Stucco (EIFS)
- Entrance : Accent figure / Feature shape
- Canopy / skylight - in and out feature without disconnection
- Main Entrance / Maker space / Robotic - Add more building height and ceiling height with transom windows or other transparent feature

Exterior Concept A:



Exterior Detail

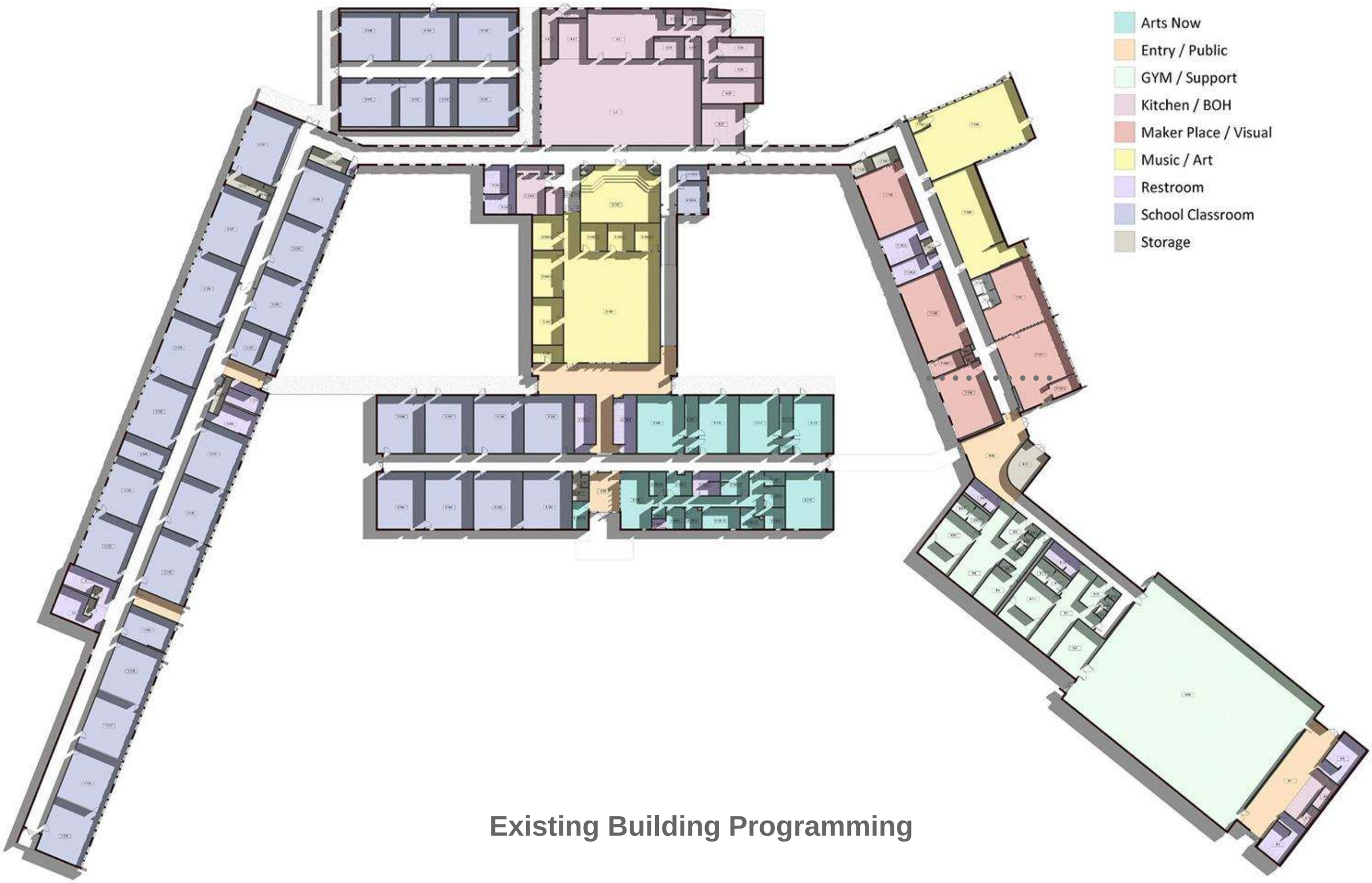


Exterior Detail

Exterior Concept B:

Building Exterior

Entrance Detail Concepts



Existing Building Programming

Arts Now		
5.1	Admin	790 SF
5.100.2	Storage	33 SF
5.100.3	Book keeper	135 SF
5.100.4	Office	91 SF
5.100.6	Office	101 SF
5.100.7	Storage	65 SF
5.100.8	Office	101 SF
5.100.9	Office	79 SF
5.100.10	Reception	92 SF
5.100.12	Staff Restroom	154 SF
5.100.14	Principals Office	102 SF
5.100.15	Office	189 SF
5.100.16	Office	91 SF
5.109	Class Room	657 SF
5.109.1	Storage	129 SF
5.11	Class Room	548 SF
5.110.1	Storage	48 SF
5.111	Class Room	547 SF
5.111.1	Storage	129 SF
5.112	Class Room	536 SF
5.112.1	Storage	48 SF
5.113	Class Room	640 SF
22 rooms		5306 SF

Entry / Public		
1.119	Entry / Public	196 SF
2.133	Entry / Public	159 SF
5	Main Lobby	288 SF
5.163	Entry / Public	1341 SF
8	Entry / Public	763 SF
8.01	Entry / Public	960 SF
6 rooms		3707 SF

GYM / Support		
8.1	GYM / Locker room	624 SF
8.100.1	GYM / Locker room	490 SF
8.100.2	GYM / Locker room	78 SF
8.100.3	GYM / Locker room	79 SF
8.100.5	GYM / Support	142 SF
8.100.10	GYM / Support	254 SF
8.100.11	GYM / Locker room	172 SF
8.101	GYM / Locker room	585 SF
8.101.1	GYM / Locker room	500 SF
8.101.2	GYM / Locker room	81 SF
8.101.3	GYM / Locker room	76 SF
8.101.5	GYM / Support	142 SF
8.102	GYM	8012 SF
8.102.1	GYM / Support	397 SF
14 rooms		11631 SF

Kitchen / BOH		
1.140.6	Vending	486 SF
4.1	Kitchen / BOH	3308 SF
4.2	Kitchen / BOH	947 SF
4.2.1	Kitchen / BOH	275 SF
4.2.7	Kitchen / BOH	241 SF
4.2.9	Kitchen / BOH	84 SF
4.3	Kitchen / BOH	191 SF
4.3.1	Kitchen / BOH	60 SF
6.24	Kitchen / BOH	199 SF
6.25	Kitchen / BOH	215 SF
6.26	Kitchen / BOH	362 SF
6.27	Kitchen / BOH	407 SF
8.03	Concession	217 SF
8.03.2	Kitchen / BOH	53 SF
14 roms		7044 SF

Maker Place / Visual		
7.135	Maker Place / Visual	752 SF
7.137	Maker Place / Visual	815 SF
7.137.1	Maker Place / Visual	1014 SF
7.137.3	Support	104 SF
7.138	Maker Place / Visual	941 SF
7.138.1	Support	128 SF
7.139	Maker Place / Visual	752 SF
7 rooms		4504 SF

Music / Art		
4.14	Media Room	1037 SF
5.16	Exhibition / Supprt	2728 SF
5.160.1	Exhibition / Supprt	173 SF
5.160.2	Exhibition / Supprt	172 SF
5.160.3	Exhibition / Supprt	251 SF
5.160.4	Exhibition / Supprt	337 SF
5.160.5	Exhibition / Supprt	165 SF
5.161	Exhibition / Supprt	339 SF
5.162	Exhibition / Supprt	123 SF
7.134	Performanc Art/Music	1659 SF
7.134.1	Main Lobby	59 SF
7.136	Performanc Art/Music	1192 SF
12 rooms		8234 SF

Restroom		
2.239	Restroom	25 SF
2.243	Restroom	205 SF
2.244	Restroom	222 SF
3.1	Restroom	254 SF
3.2	Restroom	298 SF
4.2.3	Restroom	75 SF
4.144	Boys Restroom	156 SF
4.145	Girls Restroom	193 SF
5.100.5	Staff Restroom	31 SF
5.100.11	Staff Restroom	151 SF
5.105.1	Boys Restroom	278 SF
5.105.2	Girls Restroom	294 SF
7.135.2	Restroom	217 SF
7.135.3	Media Room	292 SF
8.02	Restroom	288 SF
8.04	Restroom	288 SF
8.100.4	Restroom	150 SF
8.101.4	Restroom	153 SF
18 rooms		3570 SF

School Classroom		
1.115	Class Room	651 SF
1.116	Class Room	664 SF
1.117	Class Room	664 SF
1.118	Class Room	665 SF
1.133	Class Room	370 SF
2.119	Class Room	758 SF
2.12	Class Room	662 SF
2.121	Class Room	664 SF
2.122	Class Room	692 SF
2.123	Class Room	663 SF
2.124	Class Room	758 SF
2.125	Class Room	756 SF
2.126	Class Room	758 SF
2.127	Class Room	801 SF
2.128	Class Room	663 SF
2.129	Class Room	663 SF
2.13	Class Room	662 SF
2.131	Class Room	816 SF
2.132	Class Room	460 SF
2.245	Class Room	280 SF
4.140.4	Class Room	233 SF
5.101	Class Room	662 SF
5.102	Class Room	662 SF
5.103	Class Room	655 SF
5.104	Class Room	643 SF
5.105	Class Room	689 SF
5.106	Class Room	684 SF
5.107	Class Room	663 SF
5.108	Class Room	651 SF
9.148	Class Room	672 SF
9.149	Class Room	676 SF
9.15	Class Room	673 SF
9.151	Class Room	672 SF
9.152	Class Room	273 SF
9.153	Class Room	385 SF
9.154	Class Room	671 SF
36 rooms		22631 SF

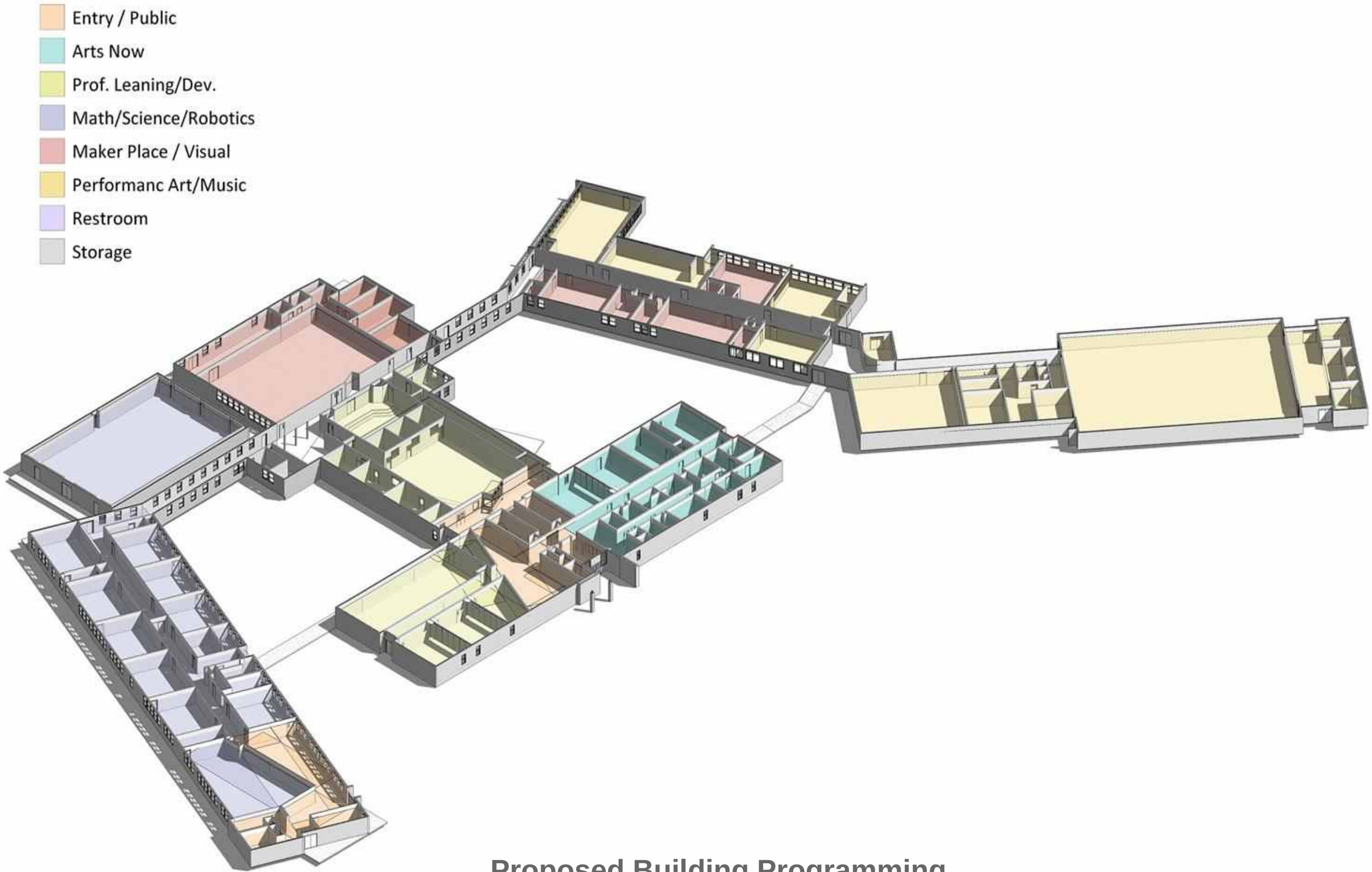
Storage		
2.131.1	Storage	125 SF
2.238	Storage	127 SF
2.24	Storage	39 SF
2.242	Jan.	83 SF
3.3	Jan.	21 SF
3.4	Jan.	31 SF
4.2.2	Storage	59 SF
4.2.4	Support	49 SF
4.2.8	Storage	154 SF
4.140.1	Storage	24 SF
4.140.2	Storage	24 SF
4.140.5	Storage	104 SF
5.201.1	Custodial	78 SF
5.201.2	Storage	21 SF
7.129	Storage	69 SF
7.135.1	Storage	80 SF
7.135.4	Jan.	39 SF
7.137.4	Storage	69 SF
7.137.5	Storage	78 SF
7.138.2	Storage	18 SF
7.139.1	Storage	19 SF
8.03.1	Storage	76 SF
8.100.6	Storage	21 SF
8.100.7	Storage	26 SF
8.100.8	Storage	19 SF
8.100.9	Storage	30 SF
8.101.6	Storage	21 SF
8.101.7	Storage	26 SF
8.101.8	Storage	19 SF
8.103	Support	280 SF
30 rooms		1830 SF

EXISTING S.F. INFORMATION

Total	68458 SF

Existing Building Programming

S.F. Information



Proposed Building Programming

Arts Now		
5.1	ArtsNow Admin / Office	946 SF
5.11	ArtsNow Admin / Office	91 SF
5.12	ArtsNow Admin / Office	79 SF
5.13	ArtsNow Admin / Office	189 SF
5.14	ArtsNow Admin / Office	118 SF
5.15	ArtsNow Admin / Office	123 SF
5.16	ArtsNow Admin / Office	217 SF
5.17	ArtsNow Admin / Office	146 SF
5.18	ArtsNow Admin / Office	145 SF
5.19	ArtsNow Admin / Office	135 SF
5.2	ArtsNow Admin / Office	91 SF
5.26	ArtsNow Admin / Office	536 SF
5.27	ArtsNow Admin / Office	48 SF
5.28	ArtsNow Admin / Office	129 SF
5.29	ArtsNow Admin / Office	547 SF
5.3	ArtsNow Admin / Office	1412 SF
16 rooms		4949 SF

Entry / Public		
1.1	Entry / Public	1958 SF
1.2	Entry Security	261 SF
5.1	Entry / Public	1649 SF
5.3	Entry / Public	102 SF
5.4	Entry / Public	78 SF
5.5	Entry / Public	1309 SF
6.0	Entry / Public	763 SF
8 rooms		6408 SF

Maker Place / Visual		
3.1	Maker Place / Visual	4163 SF
3.2	Maker Place / Visual	407 SF
3.4	Maker Place / Visual	215 SF
3.5	Maker Place / Visual	199 SF
3.6	Maker Place / Visual	241 SF
3.7	Maker Place / Visual	49 SF
3.9	Maker Place / Visual	59 SF
5.31	Maker Place / Visual	752 SF
5.32	Maker Place / Visual	941 SF
5.33	Maker Place / Visual	815 SF
11 rooms		8202 SF

Math/Science/Robotics		
2	Teamwork	1999 SF
2.01	Math	758 SF
2.02	Science Lab	664 SF
2.03	Math	756 SF
2.04	Science Lab	460 SF
2.05	Math	758 SF
2.07	Science Lab	663 SF

Math/Science/Robotics		
2	Teamwork	1999 SF
2.01	Math	758 SF
2.02	Science Lab	664 SF
2.03	Math	756 SF
2.04	Science Lab	460 SF
2.05	Math	758 SF
2.07	Science Lab	663 SF
2.08	Math	801 SF
2.09	Science Lab	662 SF
2.1	Math	816 SF
2.10.1	Support	125 SF
2.10.2	Support	39 SF
2.10.18	Robotics	4839 SF
14 rooms		14005 SF

Performanc Art/Music		
6.1	Performance Art/Music	1659 SF
6.2	Performance Art/Music	1192 SF
6.3	Performance Art/Music	1014 SF
6.3.1	Performance Art/Music	104 SF
6.4	Performance Art/Music	752 SF
6.5	Performance Art/Music	280 SF
6.9	Performance Art/Music	500 SF
6.1	Performance Art/Music	585 SF
6.11	Performance Art/Music	142 SF
6.12	Performance Art/Music	397 SF
6.13	Performance Art/Music	8012 SF
6.14	Performance Art/Music	960 SF
6.16	Performance Art/Music	217 SF
15 rooms		18022 SF

Prof. Leaning/Dev.		
4.2	Prof. Leaning/Dev.	165 SF
4.3	Prof. Leaning/Dev.	173 SF
4.4	Prof. Leaning/Dev.	172 SF
4.5	Prof. Leaning/Dev.	251 SF
4.6	Prof. Leaning/Dev.	337 SF
4.7	Prof. Leaning/Dev.	339 SF
4.8	Prof. Leaning/Dev.	123 SF
4.9	Prof. Leaning/Dev.	233 SF
4.1	Prof. Leaning/Dev.	104 SF
4.11	Prof. Leaning/Dev.	1037 SF
4.14	Prof. Leaning/Dev.	2002 SF
4.15	Prof. Leaning/Dev.	1839 SF
13 rooms		9531 SF

Restroom		
1.4	Restroom	254 SF
2.10.3	Restroom	222 SF
2.10.4	Restroom	205 SF
2.10.8	Restroom	25 SF
3.8	Restroom	75 SF
4.12	Restroom	193 SF
4.13	Restroom	156 SF
5.6	Restroom	278 SF
5.7	Restroom	294 SF
5.24	Restroom	154 SF
5.25	Restroom	151 SF
6.7	Restroom	153 SF
6.8	Restroom	161 SF
6.15	Restroom	288 SF
6.17	Restroom	288 SF
6.18	Restroom	292 SF
6.19	Restroom	217 SF
18 rooms		3708 SF

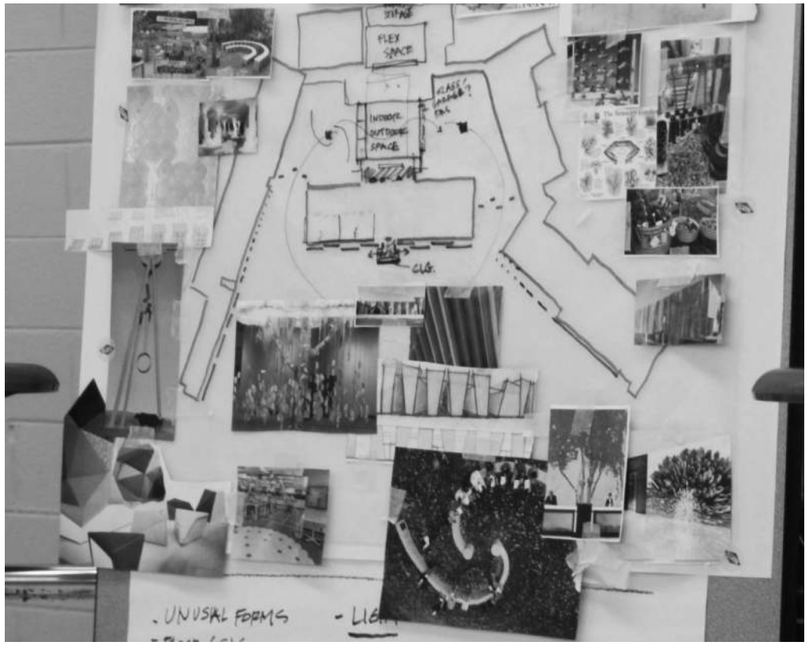
Storage		
1.5	Storage	21 SF
2.10.5	JAN. rm.	83 SF
2.10.6	Storage	225 SF
2.10.7	Storage	127 SF
3.1	Storage	885 SF
4.11.1	Storage	24 SF
4.11.2	Storage	24 SF
4.16	Storage	244 SF
5.4.1	Storage	21 SF
5.21	Storage	33 SF
5.22	Storage	31 SF
5.23	Storage	66 SF
5.31.1	Storage	69 SF
5.31.2	Storage	80 SF
5.32.1	Storage	128 SF
5.32.2	Storage	18 SF
6.26	Storage	69 SF
6.27	Storage	78 SF
6.4.1	Storage	19 SF
6.4.4	Storage	39 SF
6.11.1	Storage	21 SF
6.11.2	Storage	26 SF
6.11.3	Storage	19 SF
6.16.1	Storage	76 SF
6.16.2	Storage	53 SF
26 rooms		2509 SF

NEW FLOOR PLAN S.F. INFORMATION

Total	121 rooms	67334 SF

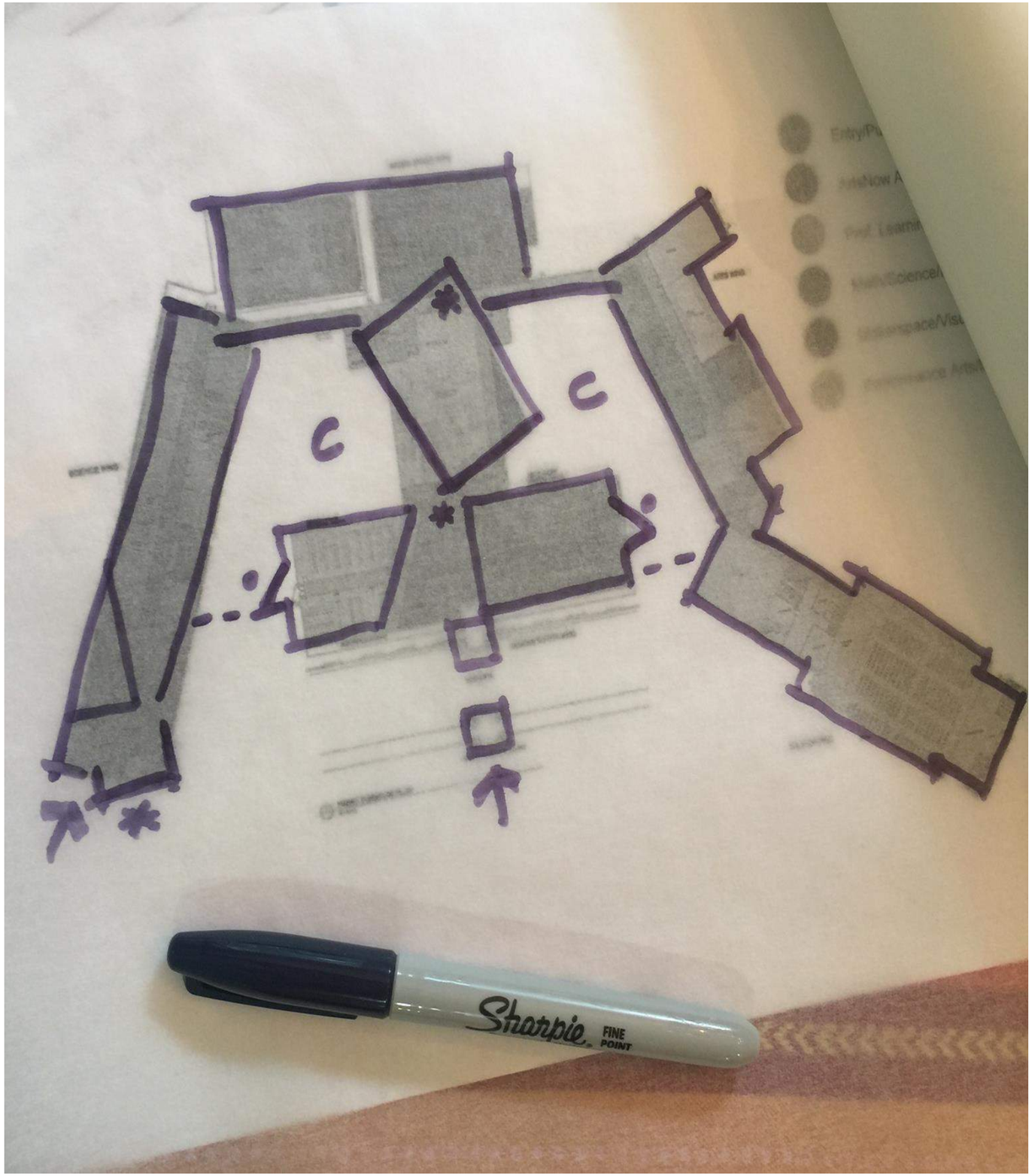
Proposed Building Programming

S.F. Information


FLEX SPACE
INDOOR OUTDOOR SPACE
UNUSAL FORMS


AHS
Art Facilitator:
Candace Bailey


BROOKE
Paint With Us
LOVE

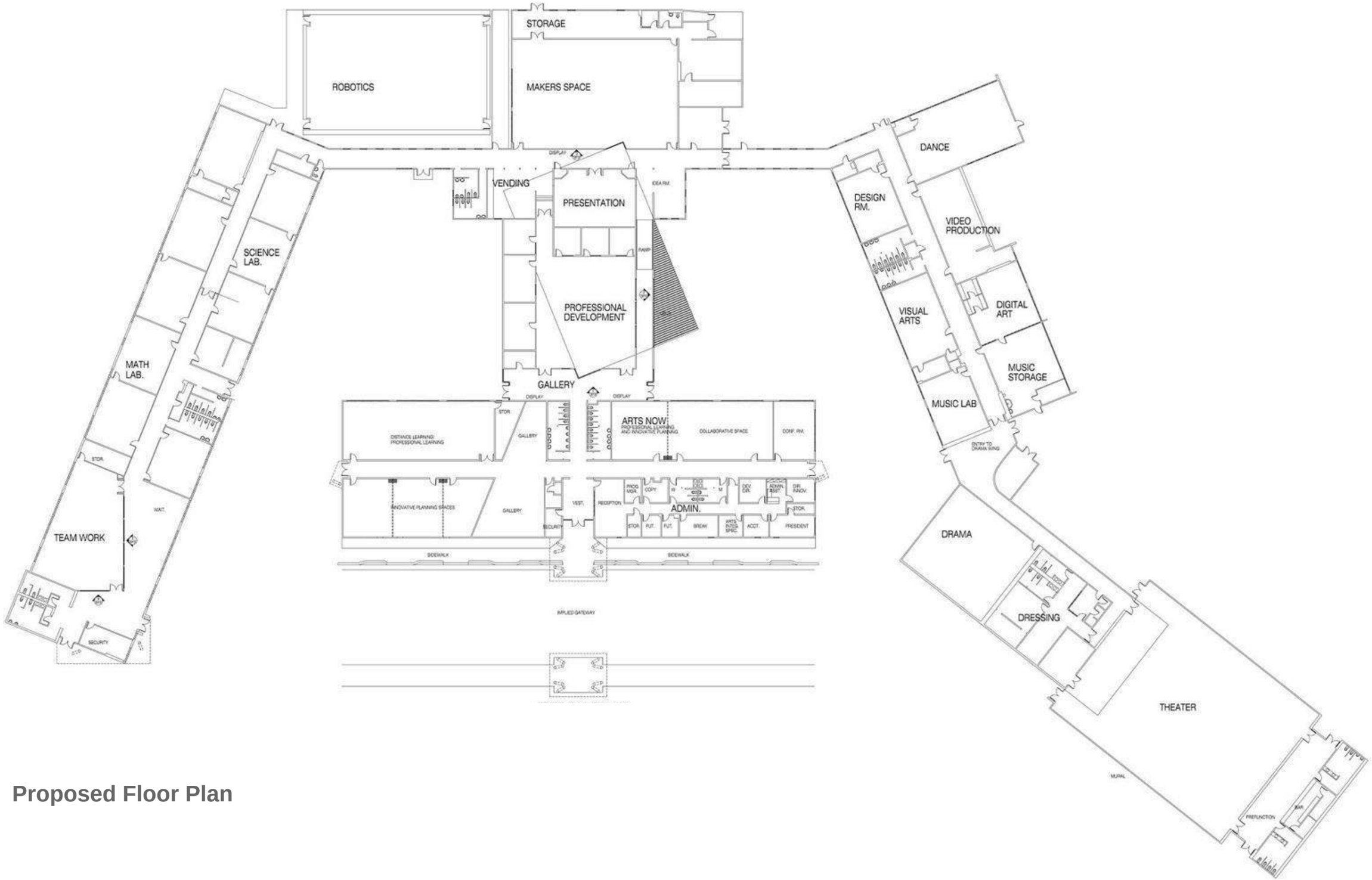


INTERIOR DESIGN

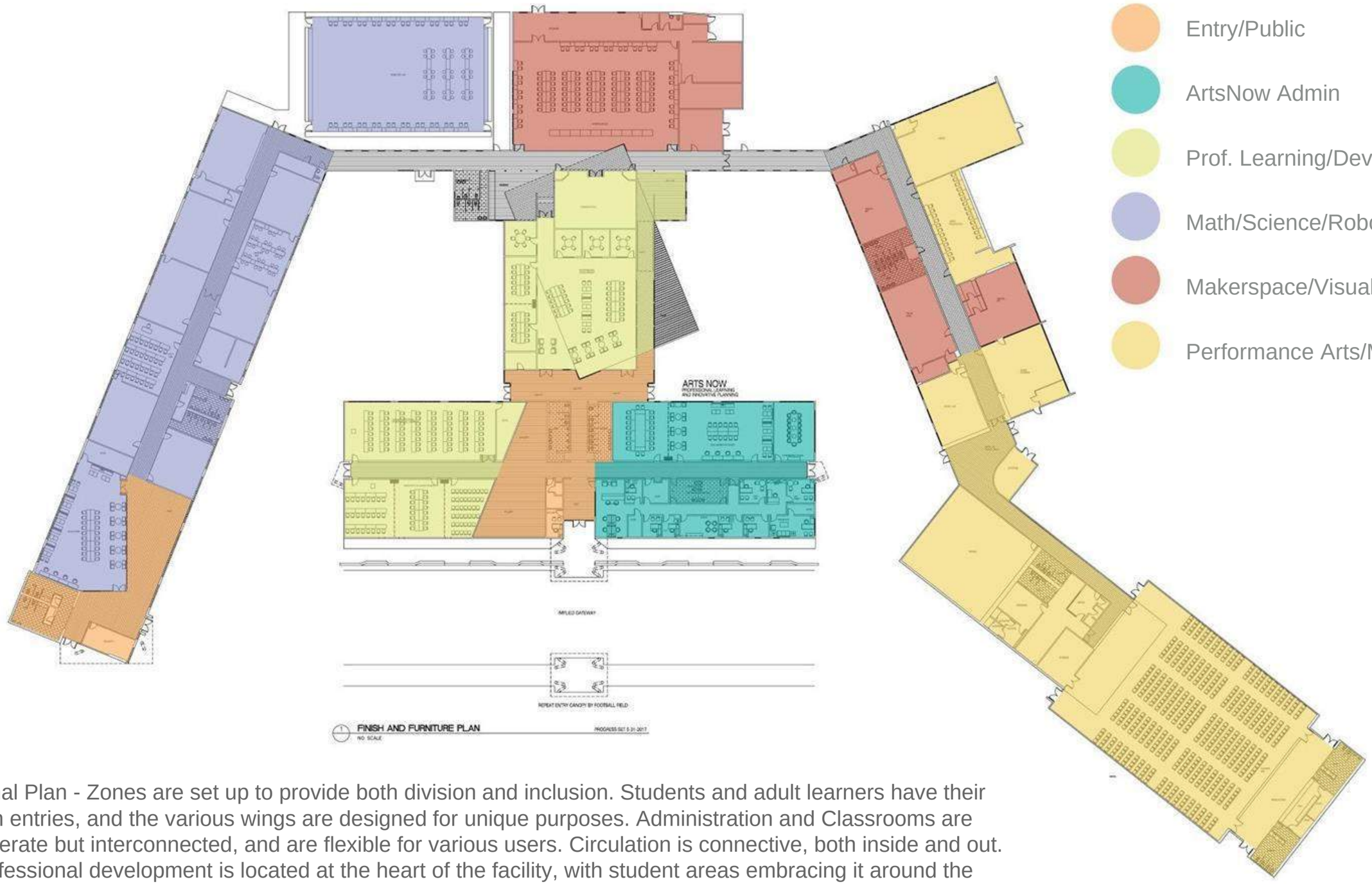
DESIGN CONCEPT & PARTI

The Center for Innovative Teaching (CFIT) provides a flexible, adabtable, and non-traditional environment for teachers, educators, specialists and administrators to learn and reflect upon teaching art based skills across the curriculum. It is also a learning hub for students.The design is based on this cross disciplinary approach.

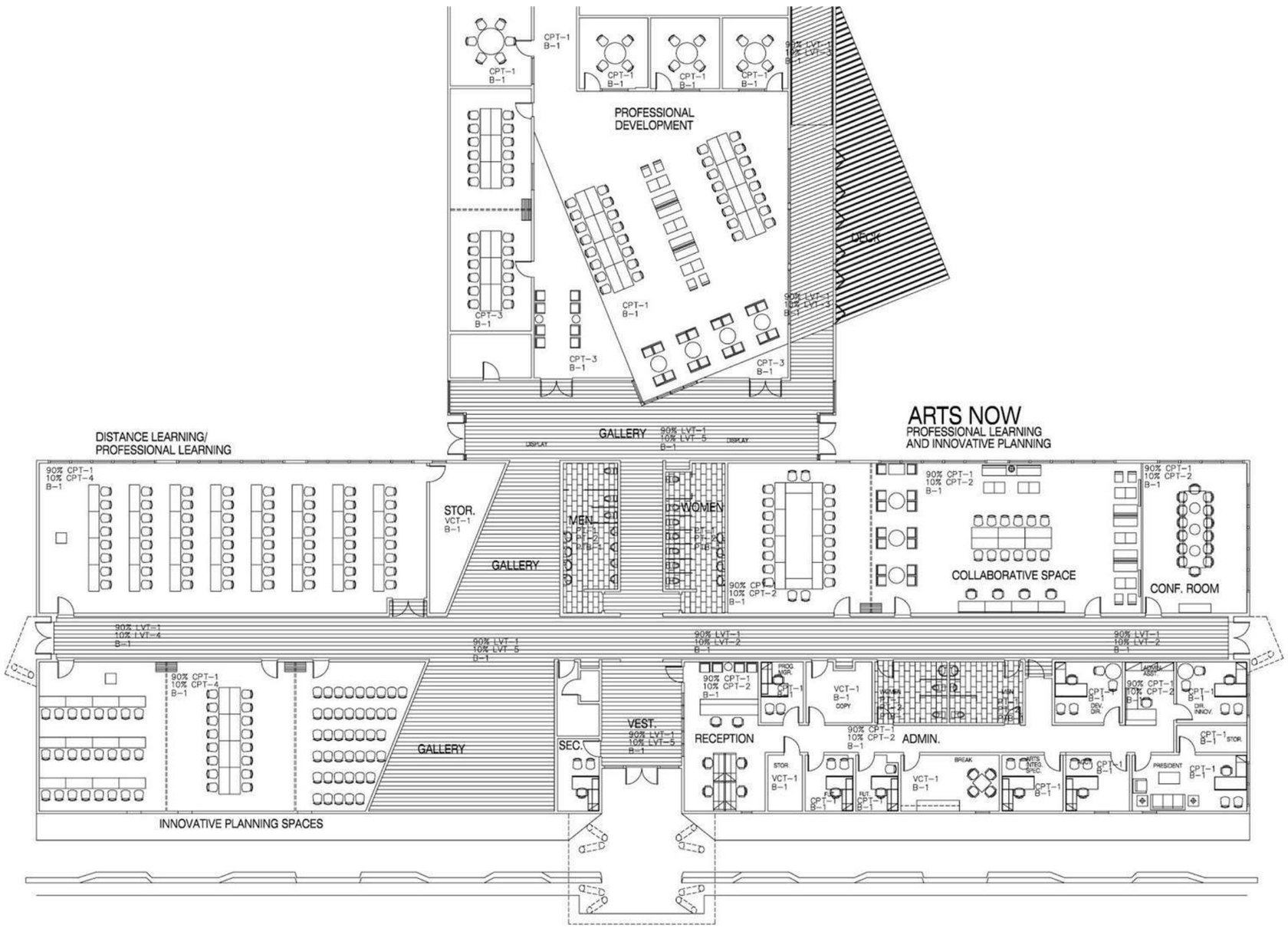
The point of departure (Parti) began at the center of the existing plan. A rotated grid breaks the rigidity of the rectilinear boxes and provides focal points at the end of the entry corridor, the rear corridor and new student gallery. This angular approach is carried out at the proposed main student entry in the front of the Science wing, and is followed through at each side entry into the center building.



Proposed Floor Plan



Zonal Plan - Zones are set up to provide both division and inclusion. Students and adult learners have their own entries, and the various wings are designed for unique purposes. Administration and Classrooms are seperate but interconnected, and are flexible for various users. Circulation is connective, both inside and out. Professional development is located at the heart of the facility, with student areas embracing it around the courtyards.



1 ADMINISTRATION WING - FINISH/ FUNITURE PLAN

NO SCALE

• • • • • • • • • •

The entry building serves as adult education at night and as administration. It houses distance/ professional learning, innovative planning spaces, collaborative spaces for Arts Now and display galleries for student work.
The central building includes professional development with flexible spaces for meetings and discussion, a presentation room, an idea room for brainstorming with students, and a multi-functional Maker Space.

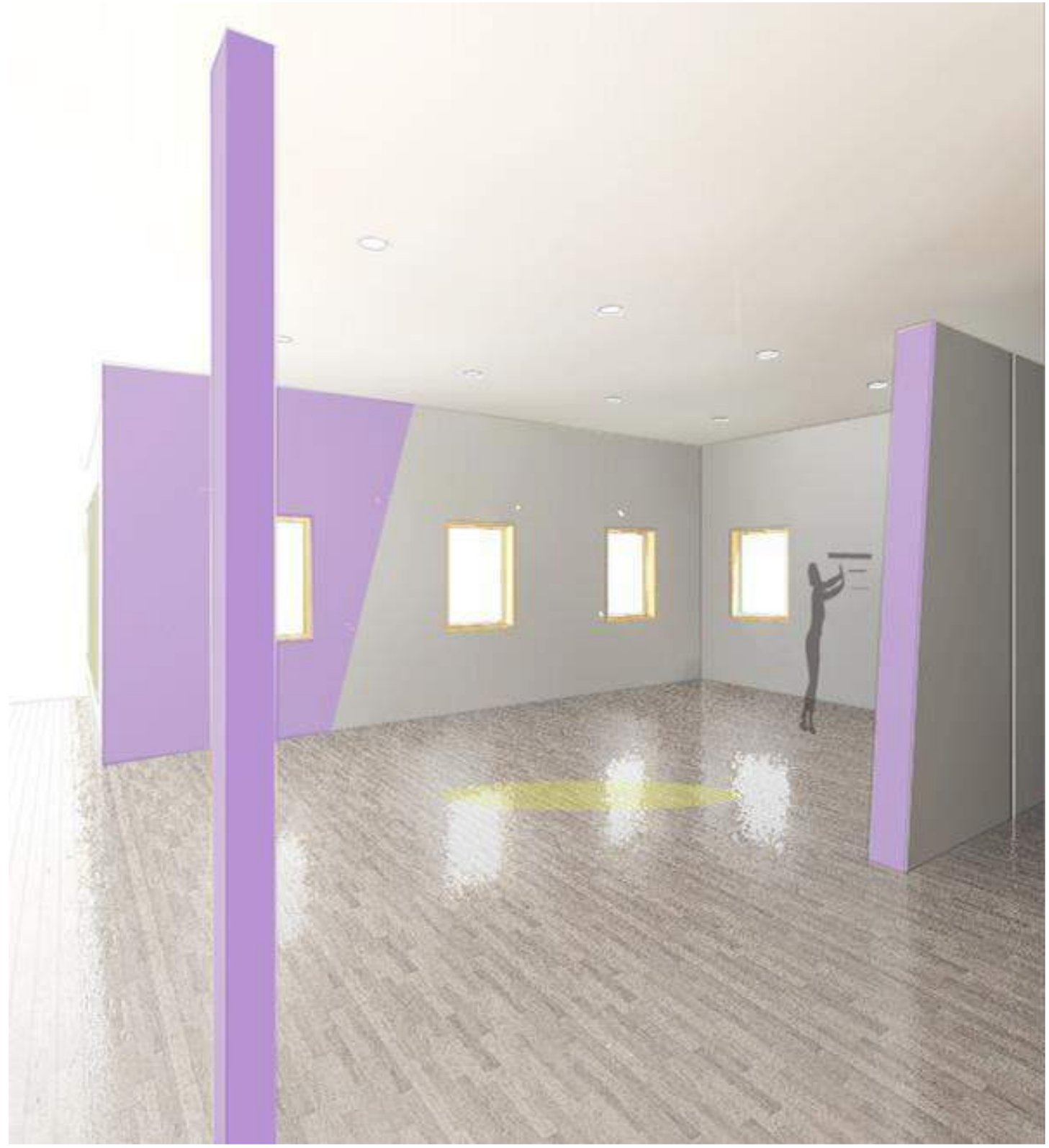
A separate but connected building contains the Robotics lab.

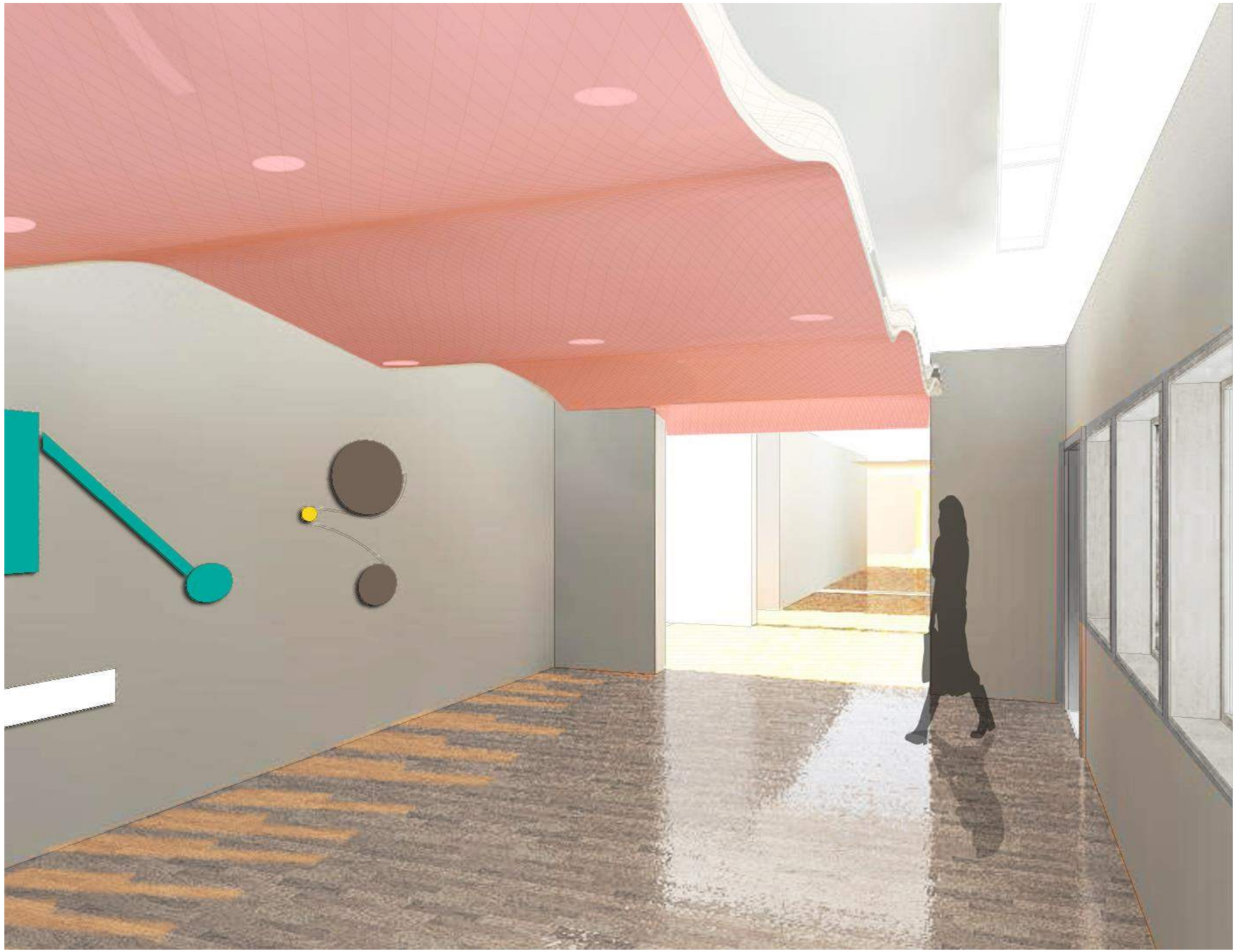
The wing to the left, includes the Science and Math labs. The wing to the right includes Dance, Design, Video production, Visual Arts, Music Lab and storage facilities.

Finally the Drama wing includes back of the house and a theater with public entrance and functions for 560 attendees.

THE IDEA CORNER

The former vice principal’s office is turned into a space for collaboration and ideation. Located between the professional development and the maker spaces, this is a touch down point for students and teachers alike to jot down ideas and to recieve feedback.

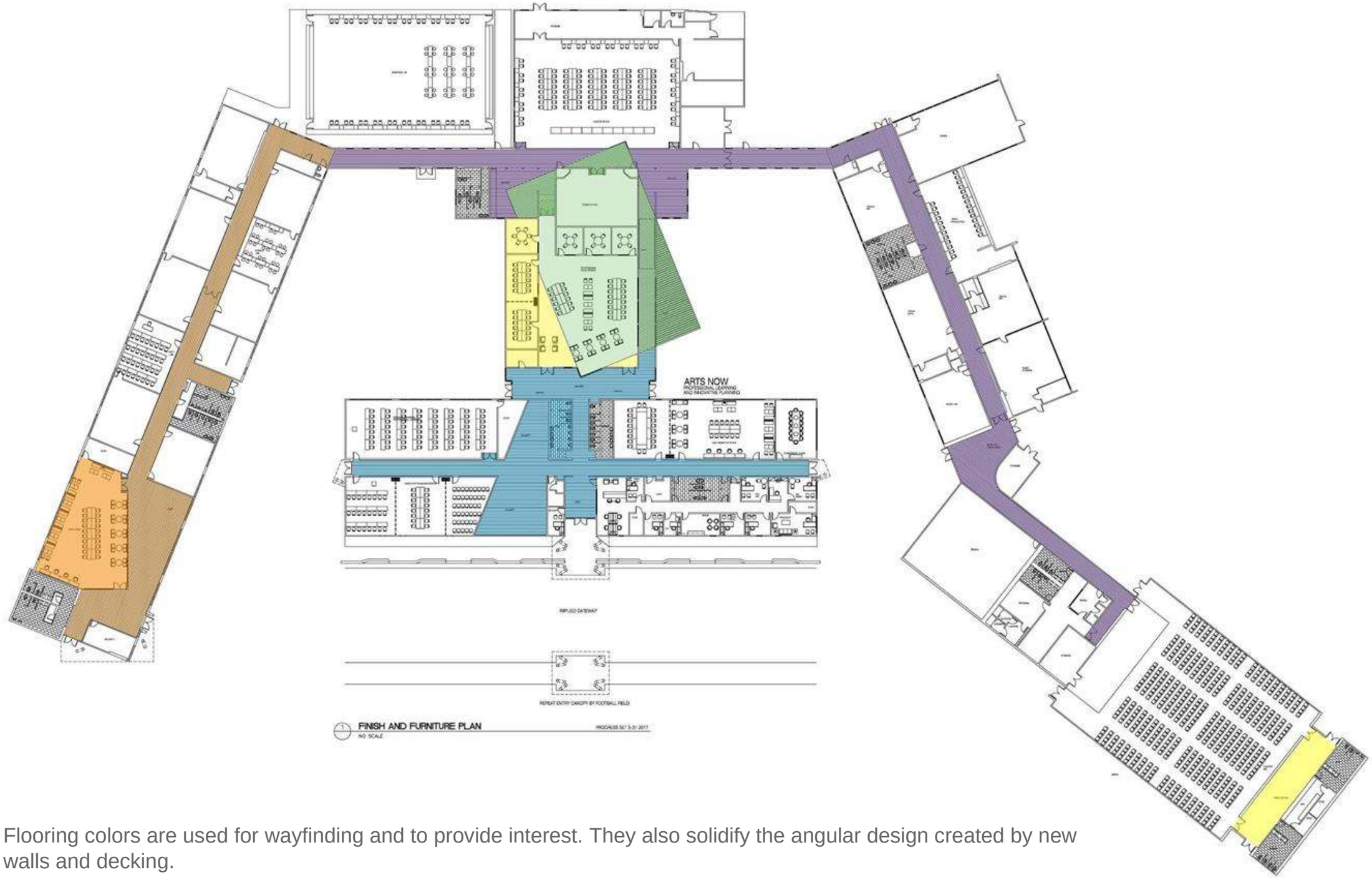




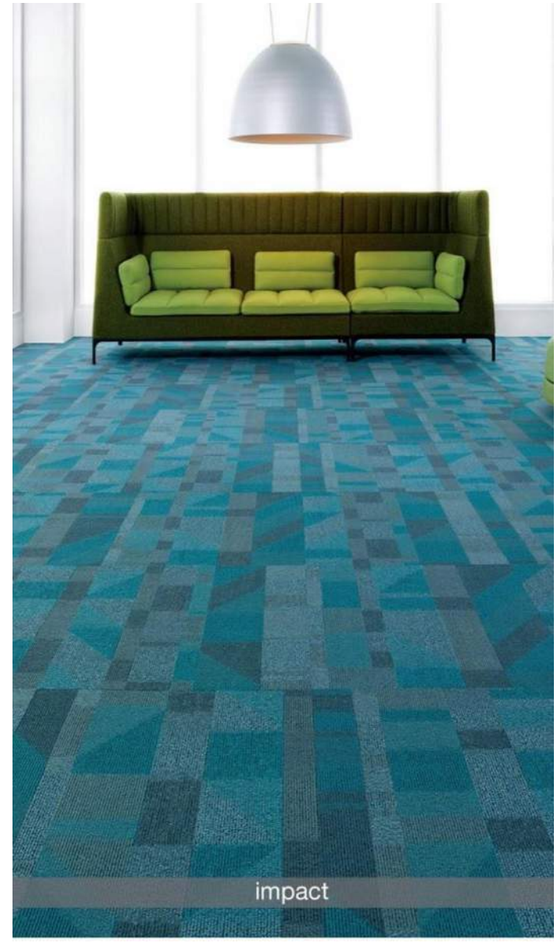
Interactive display wall at entry is “topped” by a red curvilinear floating ceiling that leads the visitor toward the main professional development area. Flooring colors are used for wayfinding throughout the hallways. Walls feature student work.

THE STUDENT GALLERY

While visitors and adults will enter the complex through the central building, the students will be dropped at the Science and Math Lab entry building. Having these two different entrances will help with the ease of circulation and safety of the student. The two area come together at the Student Gallery, located just outside the centrally located professional development space.



Flooring colors are used for wayfinding and to provide interest. They also solidify the angular design created by new walls and decking.



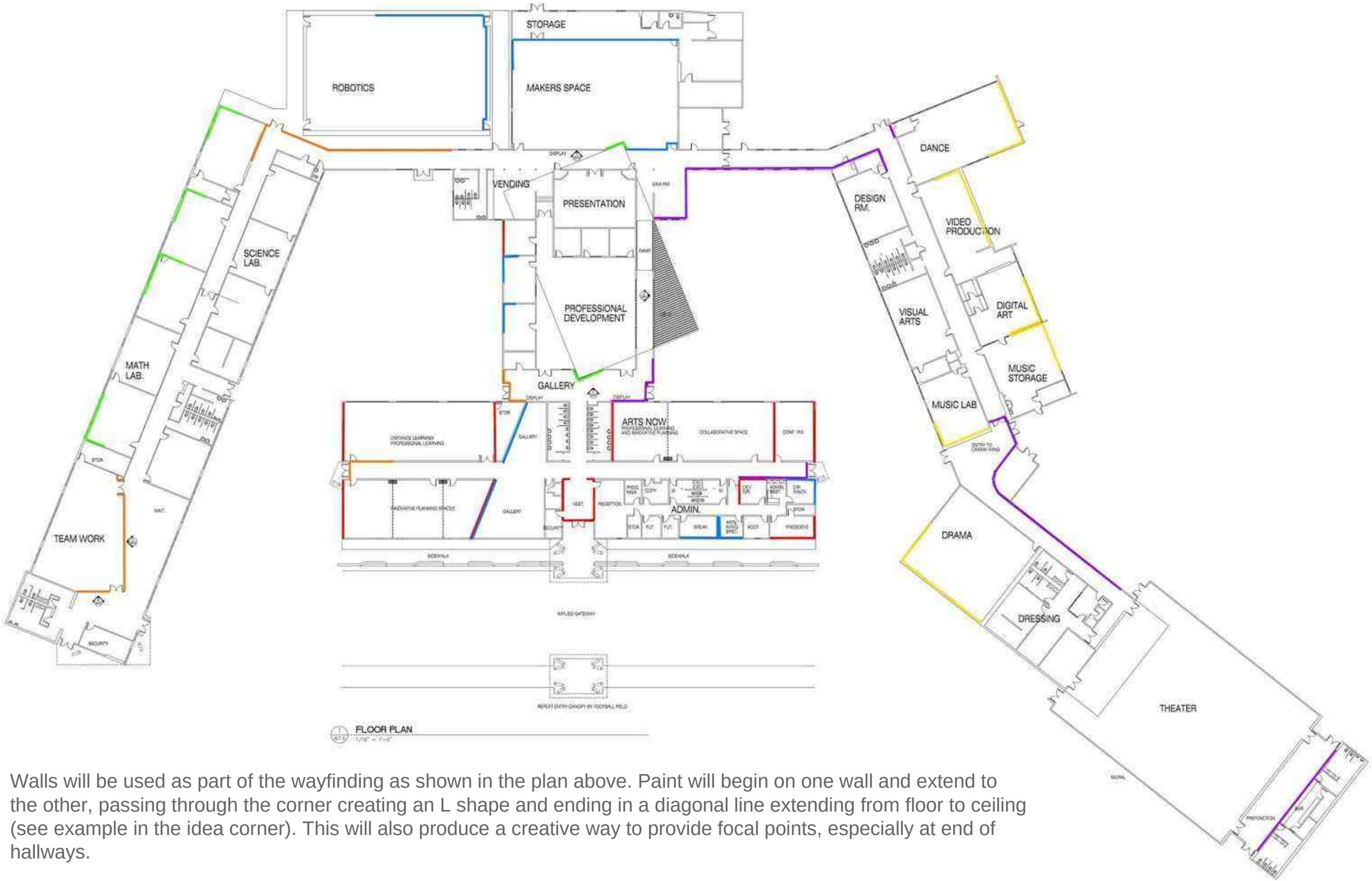
i5

i6

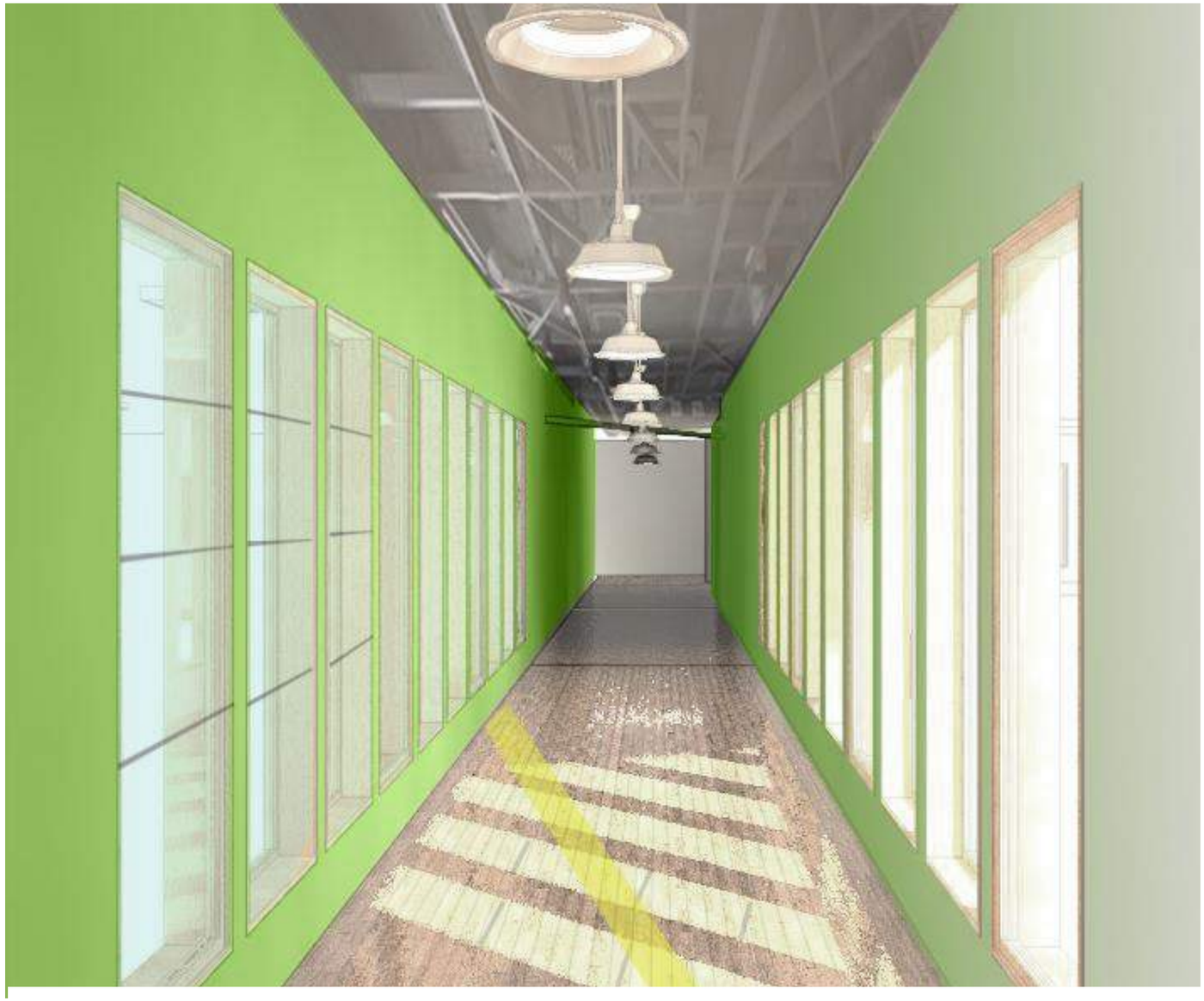
FLOORING

CFIT is a multifunctional space meant for students as well as educators. Luxury Vinyl Tile is used in the public hallways and display areas. Vinyl Composition Tile is used in classrooms. Porcelain Tile is used in Restrooms. Carpet Tile is used in conference rooms, offices and multi-functional rooms to control noise.

Using different colored carpet to indicate different areas will help visitors orient themselves and know where they are. Carpet tile (i11) and hard-surfaced luxury vinyl tile (i12) can allow more flexibility in installation as well as maintenance of high-use spaces. Additionally, these tiles come in a wide range of colors and can be arranged to create dynamic patterns.

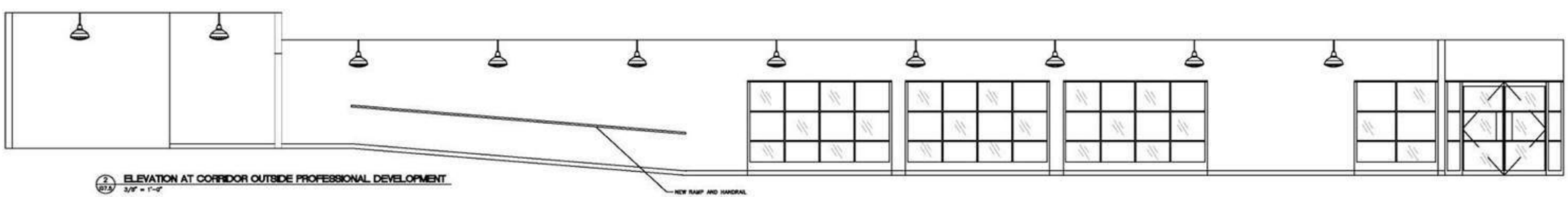


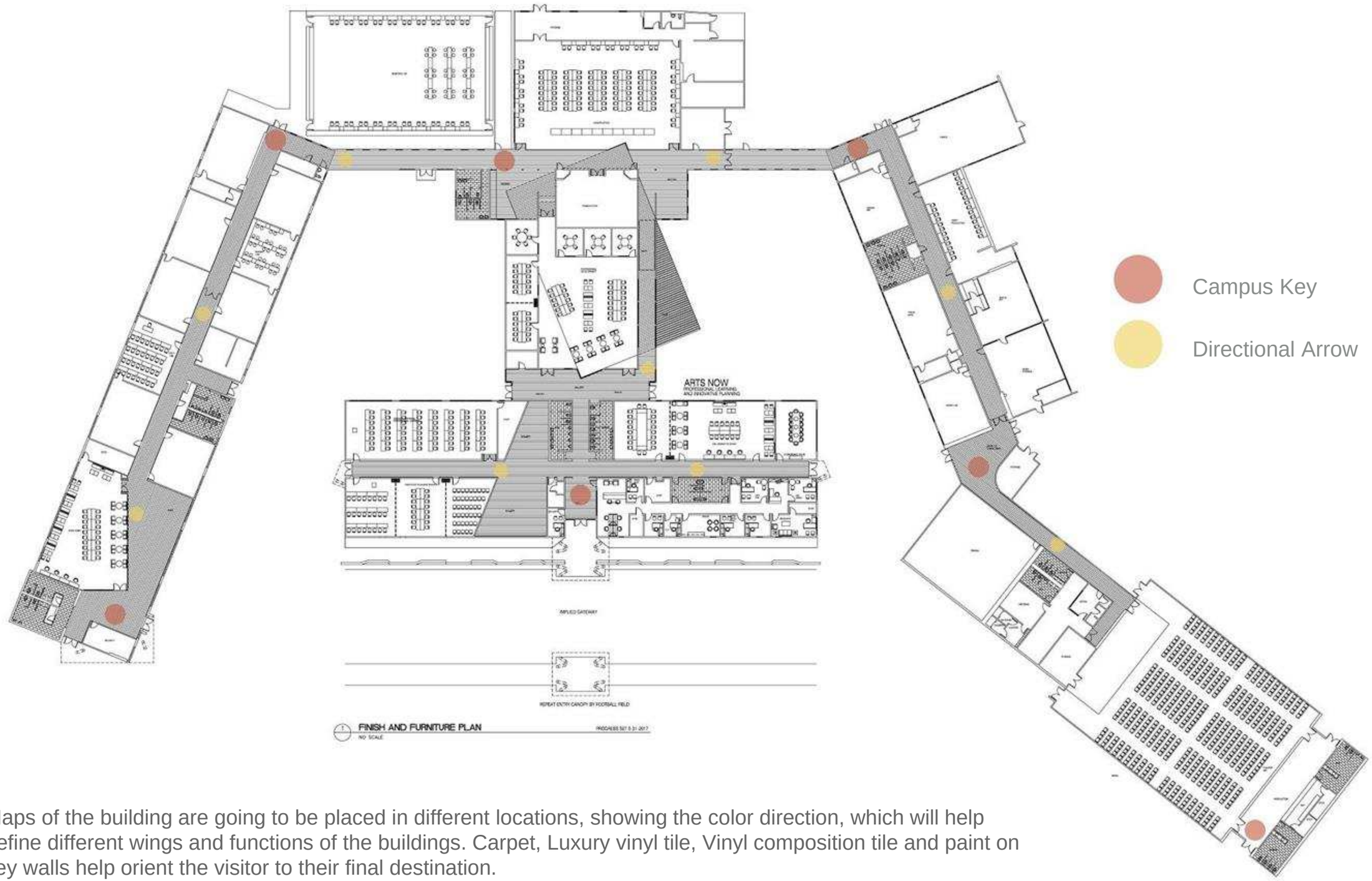
Walls will be used as part of the wayfinding as shown in the plan above. Paint will begin on one wall and extend to the other, passing through the corner creating an L shape and ending in a diagonal line extending from floor to ceiling (see example in the idea corner). This will also produce a creative way to provide focal points, especially at end of hallways.



INTERIOR OVERVIEW

The public hallways are left exposed to structure, showcasing new sprinkler, electrical, and mechanical systems that are documented through interactive signage displays. All other interior rooms will have acoustical ceiling tiles to control the sound. The walls in this hallway reflect that they are located in the rotated grid area, which is highlighted by the color green.
To create dynamic views in the linear hallways, interactive spaces are created for display of student work and white walls for process work. The center of the complex is flanked by gardens on either side. New windows and a deck were added to take advantage of the views and to reinforce the angles on the interior and exterior views. New floor to ceiling windows are introduced to break the solid walls and bring in daylight to the central professional development space.





Maps of the building are going to be placed in different locations, showing the color direction, which will help define different wings and functions of the buildings. Carpet, Luxury vinyl tile, Vinyl composition tile and paint on key walls help orient the visitor to their final destination.

i7

i8


i9


i10

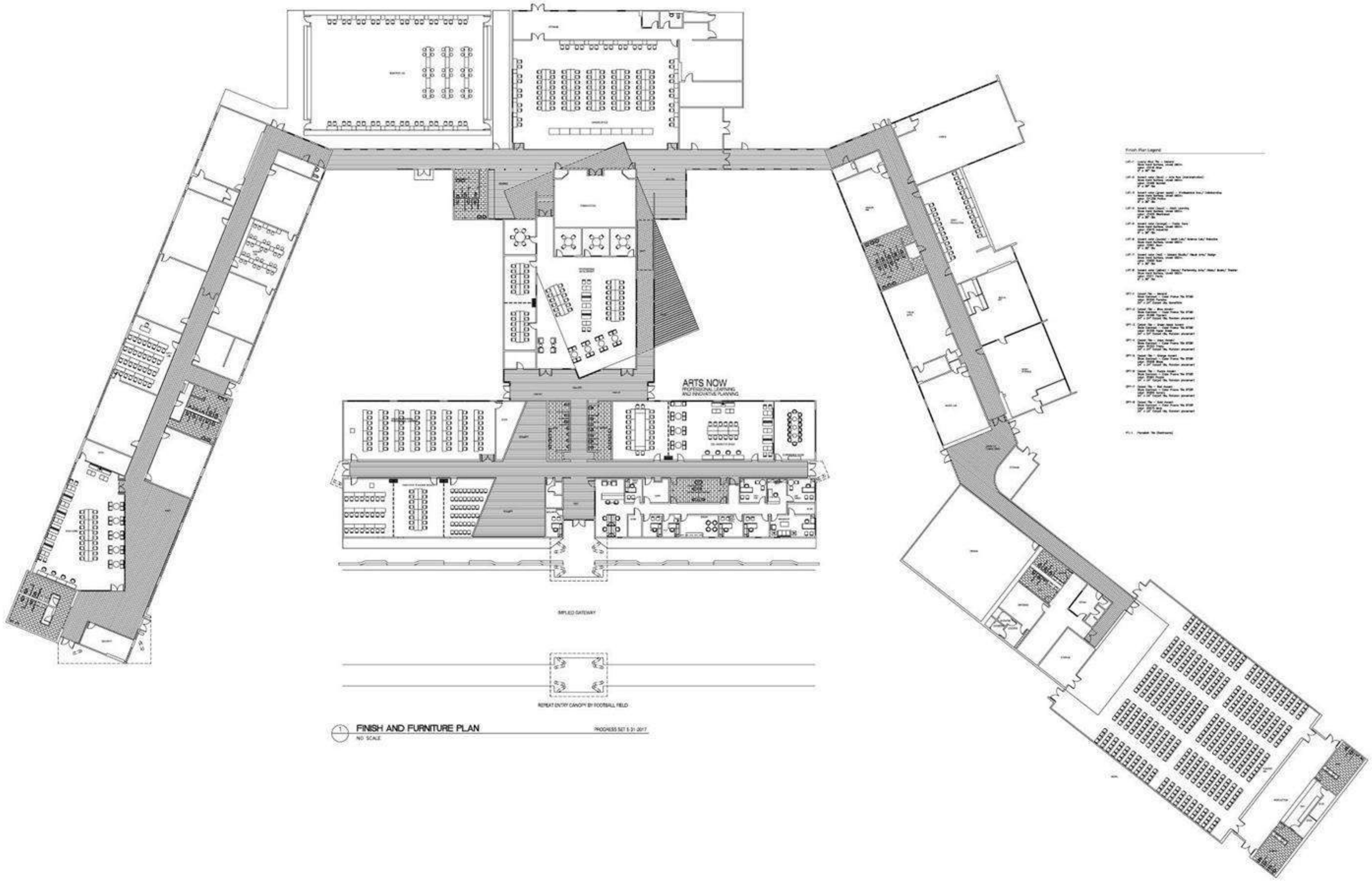

i11

i12

WAYFINDING

CFIT will be a place for both students and educators. It is a multifunction space with two wings. Therefore, helping visitors know where they are and how to get where they want to be is important.

i12



1 FINISH AND FURNITURE PLAN
NO SCALE

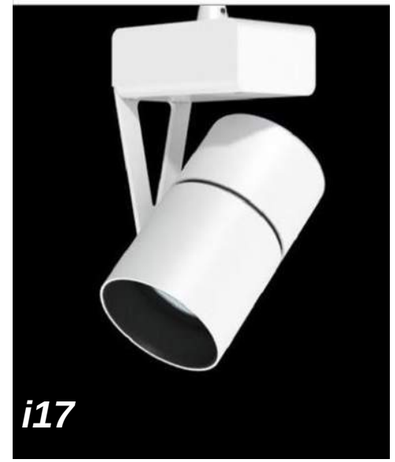
PROGRESS SET 5.31.2017

i15

i16

i13

i14



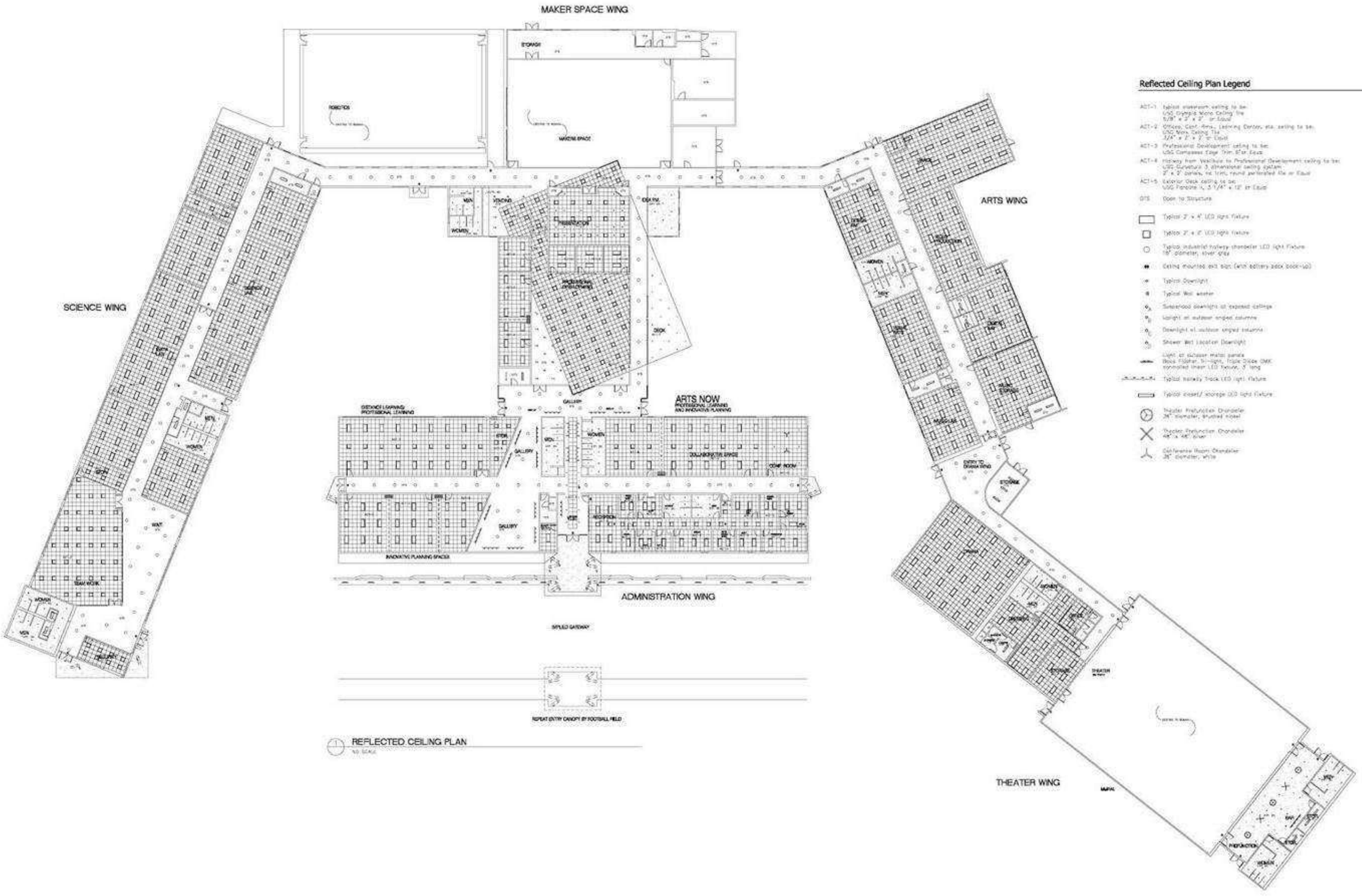
i17

i18

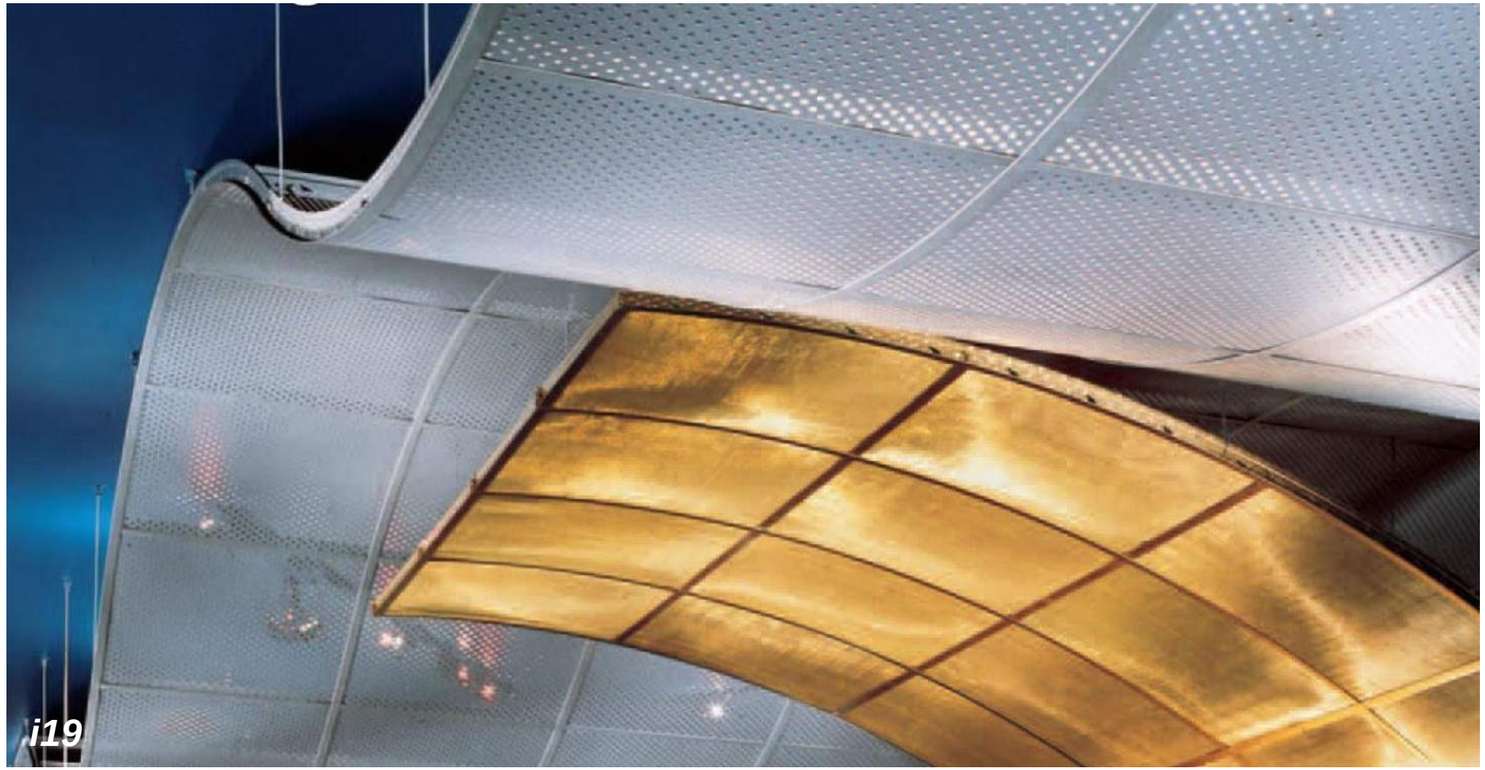
FURNITURE & LIGHTING

Furniture for the different areas had to carry different functions and so it has to be flexible. Some chairs are on casters, others are stackable for easy configuration and storage. Tables need to have folding legs. This helps when the function of the rooms changes from a lecture to a learning classroom with chairs and tablets to a conferencing and discussion room with face to face interaction.

Other rooms have specific functions like offices, conference rooms and laboratories where furniture is more static.



REFLECTED CEILING PLAN
NO SCALE



THE CEILING

The entry building has a curved, wavy metal ceiling creating a dramatic space for visitors. Catering to display student work, wall washers and directional lighting will help define areas. Shifting in ceiling grids and new angular walls makes the space more interesting.

Much of the rest of the ceiling is left exposed (in the hallways) or constructed of suspended acoustical ceiling tile (for the classrooms).

SYSTEMS

Sustainable Design Collaborative - Atlanta
Systems Review and Recommendations
Center for Innovative Teaching at Winder, GA
July 2017

This narrative addresses the sustainable strategies and systems recommended to be incorporated into the renovations of the existing Russell Middle School, Winder GA, into the Center for Innovative Teaching for ArtsNow. The existing buildings are a combination of various 1-story masonry and steel frame buildings that have been added onto over the years from the initial elementary school usage. The renovation will comprise a complete gut of some of the areas, leaving the basic structure intact, with selective demolition of the existing partitions, ceilings and finishes in other areas.

At the present time, the existing kitchen and bathrooms are anticipated to remain as-is. All new Heating, Ventilation and Air Conditioning systems (HVAC), Electrical and Lighting systems will be provided from existing utility services at the site. An all new Fire Protection Sprinkler system will also be installed for safety and code compliance, to include a new fire main from the site water supply. The building envelope will be addressed with a new roofing system throughout and replacement of the existing single pane windows.

We have approached our analysis and recommendations for this by looking at the different building systems that affect its energy and water usage. The images presented are to show the concepts and strategies and do not necessarily represent the actual products or designs for the building.

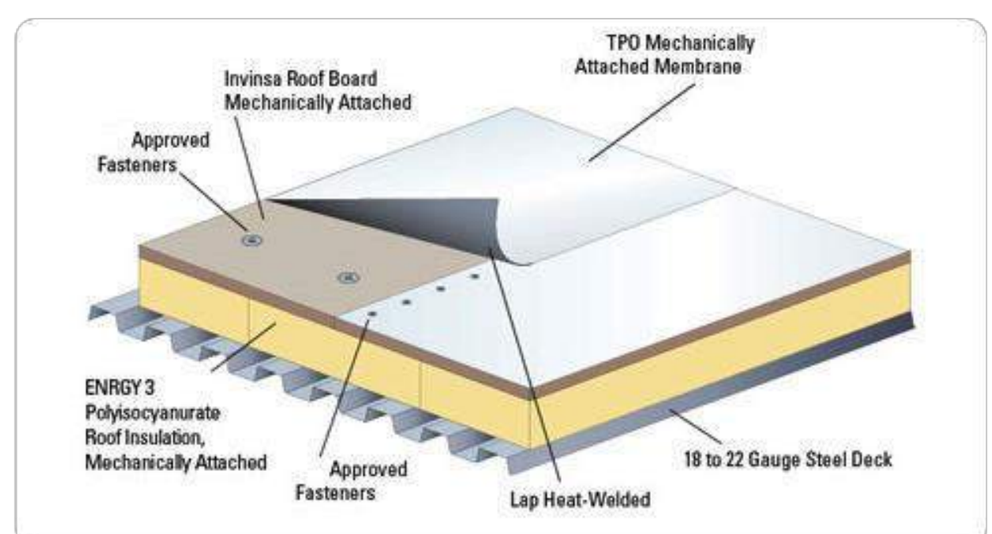
It is also anticipated that the renovations to these buildings will probably be phased and not all done at the same time. The separation of functions/areas in the different buildings lends itself well to this kind of approach. The main thing to consider when phasing is that the overall plan is known and planned for so that phased items do not conflict with or preclude later renovations and improvements.

Infrared scan of a building showing heat loss/gain before and after insulation

Building Envelope

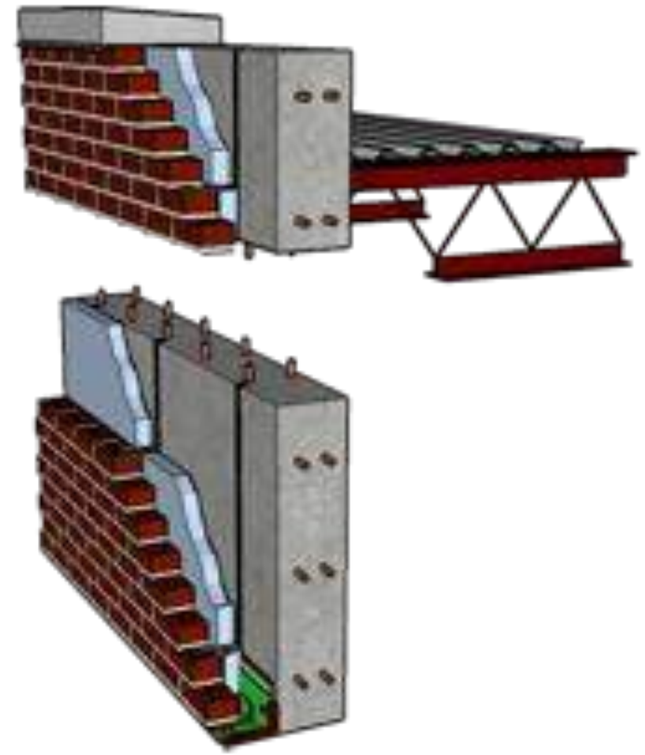
For energy, it is always best to start with the building's envelope (the skin, openings and roof of a building's exterior). The more efficient the envelope, the less energy will be required for conditioning of the interior spaces and the spaces will be much more comfortable to occupy. Another goal of this approach is to make the ongoing utility costs as low as possible (and thus concentrate more of the budget on services), as well as to make the buildings easy to maintain. Starting with the envelope – A new roofing system is proposed for the entire roof. While some areas of the building might be left intact, there is evidence of substrate movement and many of the areas appear to have reached their useful lifespan. There will be removal of existing equipment and new penetrations for the new systems to be installed that will necessitate extensive patching if it is not replaced. For these reasons, it is recommended that the existing roofing and insulation be removed and replaced with new rigid insulation over the existing metal roof deck and a new 80 mil reflective TPO membrane installed on top of that. The new system should achieve a minimum of R30. New roof drains, curbs, flashings and copings should be included in the replacement system.

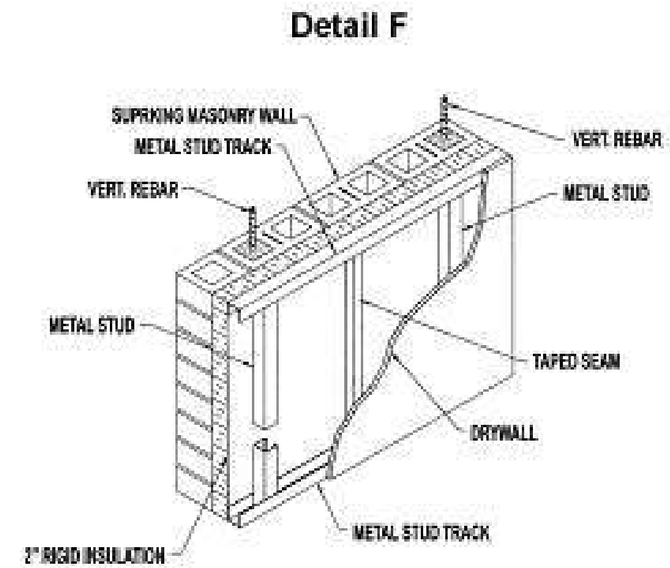
Typical TPO Roof



The exterior walls of the building appear to be all CMU with a brick veneer. From previous drawings, there does not appear to be insulation in the wall cavity. While a sturdy and long lasting system, it is not the most energy efficient wall system. We recommend that the interior renovations include the installation of a furred out interior wall with 1” rigid insulation against the CMU and then a 1/58” metal stud wall with impact resistant gypsum board for the finished interior surface.

All new replacement windows are recommended for the buildings. There are a few areas where new openings are a part of the design and many more where the existing exterior openings will remain the same. In either case, we recommend an aluminum window wall system (thermally broken) with 1” insulating glass and appropriate low-E coatings for the different facing elevations. New glass doors and walls would be of the same type. Single doors may be hollow metal with vision lights. At this time, we do not recommend operable windows, as this climate does not provide many times of the year where they can be effective and it would require some type of control system when outside conditions were not favorable.
Along some of the interior corridors, the ceilings are lower than the adjacent windows. In these instances, we recommend a fixed transom at the window heads that will accept the lower ceiling framing and a spandrel glass above to cover the exposed plenum space.





Wall Section - Rigid Insulation & Metal Stud

We do not believe the existing school walls have the insulation layer that is shown here

Insulated glazing with a low-E coating helps minimize heat transfer and solar gain

Mechanical Systems

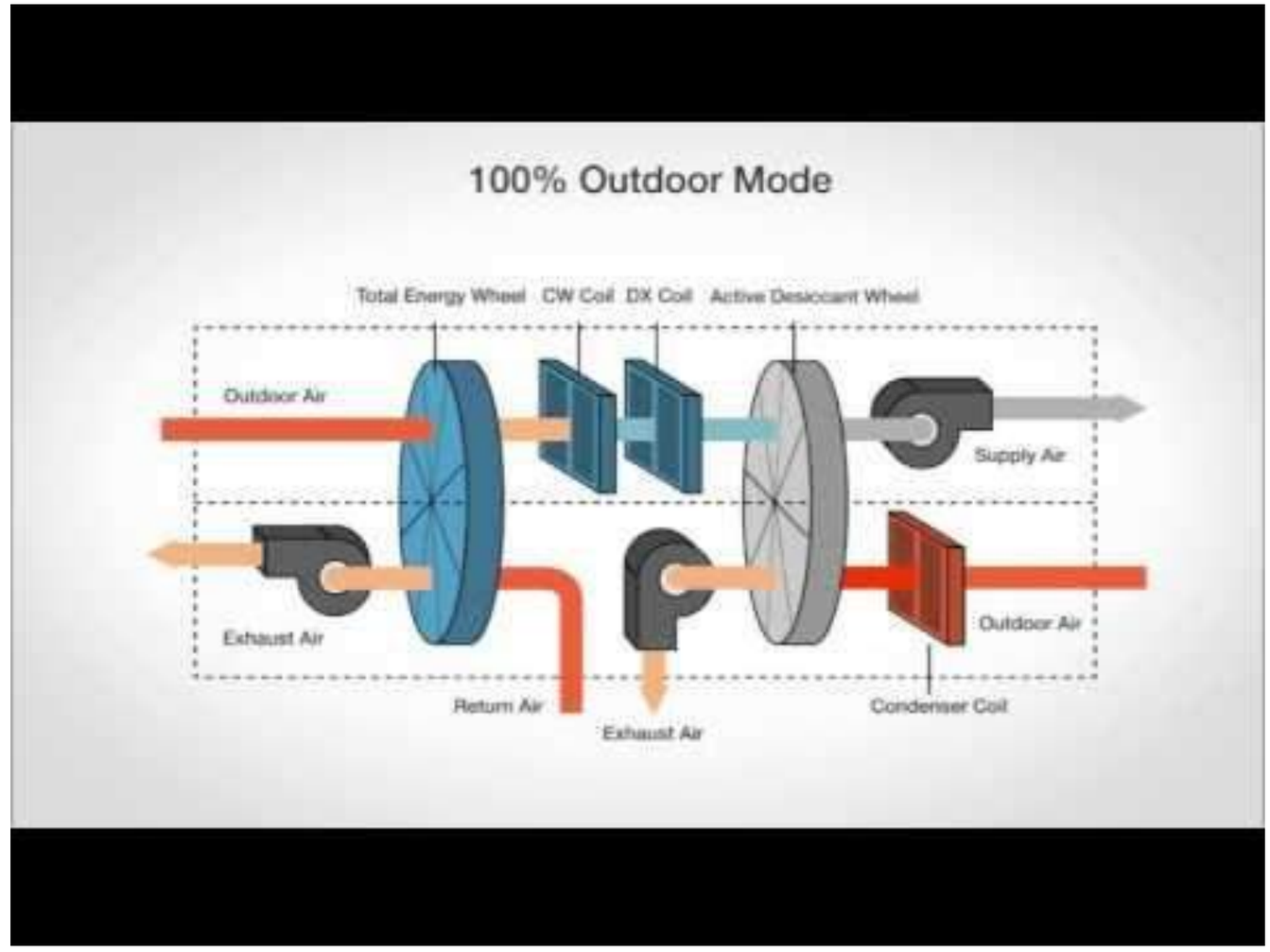
Heating, Ventilating and Air Conditioning (HVAC) – Most of the older existing equipment has reached its useful lifespan and should be replaced (e.g. The Bard units in the south wing). Some of the rooftop units are newer and might have some useful service left, but they would need to be reconfigured in most areas for the new layouts. We recommend replacing all the existing HVAC systems with new Variable Refrigerant Flow (VRF) systems. Exceptions to this would be in the larger volume spaces such as the Robotics, Makers, Dance, Drama and Theater spaces where the VRF might not be effective. In those areas, high efficiency Rooftop units might be the better choice.

VRF works on the same principle that most of our single family residences use. We are all familiar with the split systems that have that noisy condensing unit with the big rotating fan sitting outside which is linked to that indoor air handling unit that sits in our attic, basement or closet somewhere in our house and from which extend those octopus-like ducts into the various rooms. A VRF system combines one large outside condensing unit (usually much quieter too) with multiple indoor air handling units. Major efficiencies are gained because the “smart” units balance the cooling and heating needs of all the rooms together and thus require much less energy to operate. They can have individual air handling units mounted in each room, or they can also be connected to ductwork to supply more area.

VRF System and Components

The VRF system should work very well for all of the smaller classrooms, labs, offices and production spaces. These systems will require separate outside air systems to introduce conditioned fresh air to the rooms. These will be centralized and fresh air ducted to the spaces through the ceiling plenums. We recommend that these be tied into an energy recovery system from the bathroom exhausts.

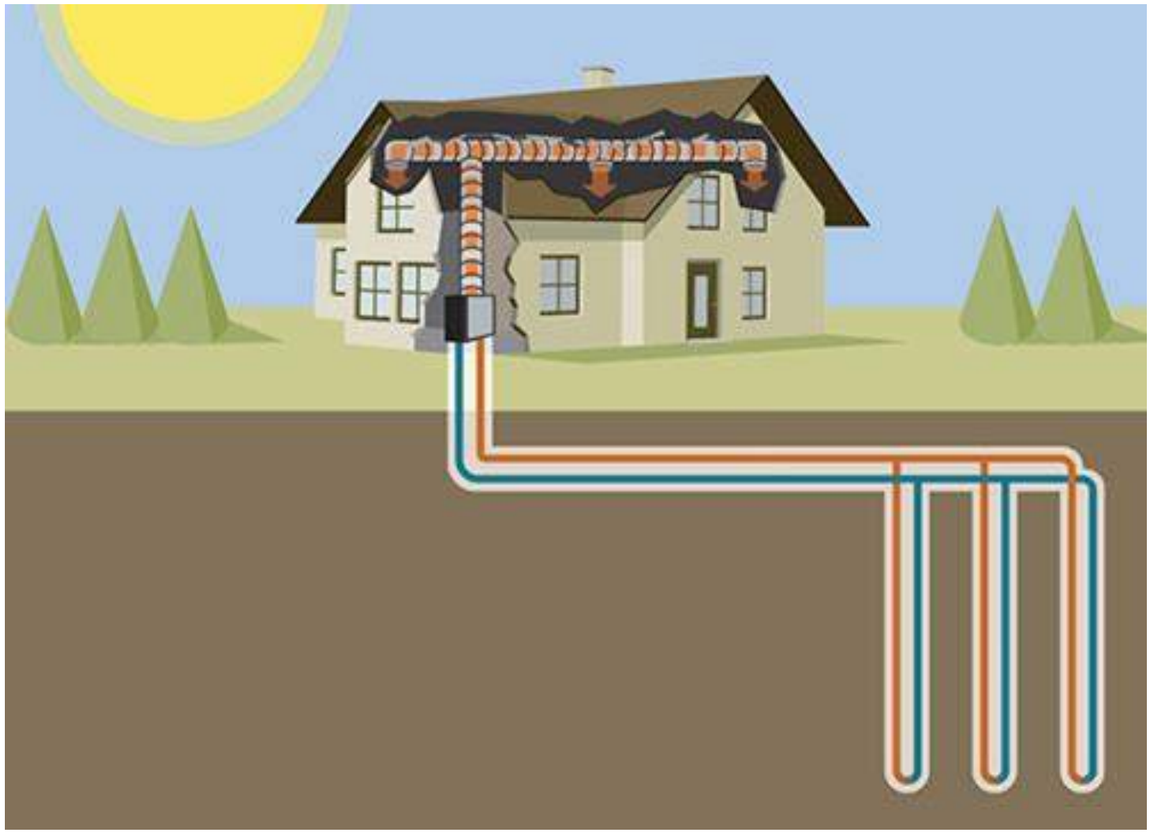
It has been noted that the existing steel bar joist roof members may not be large enough to support roof mounted HVAC equipment. There are many rooftop units existing, but the new equipment may be concentrated and thus larger than the existing. If this is the case, then the equipment can be mounted on the ground near the building, taking into account that screening and sound baffling may be needed as well. Some structural supports might also be added to accommodate roof mounted equipment.



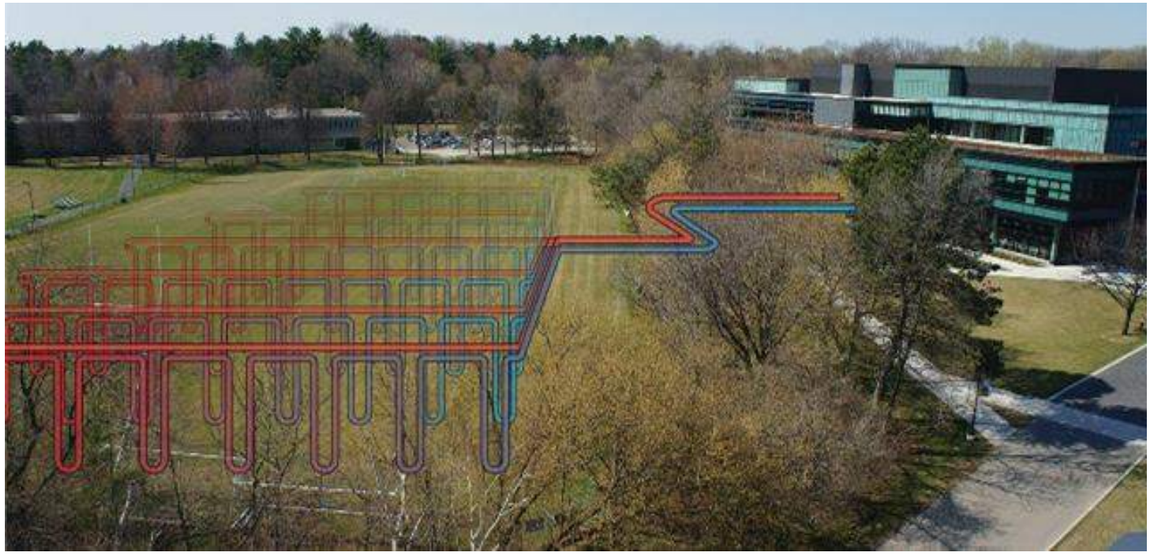
Dedicated Outdoor Air System with Energy Recovery

It would be worth considering using a water-cooled VRF system coupled with a geothermal loop field.

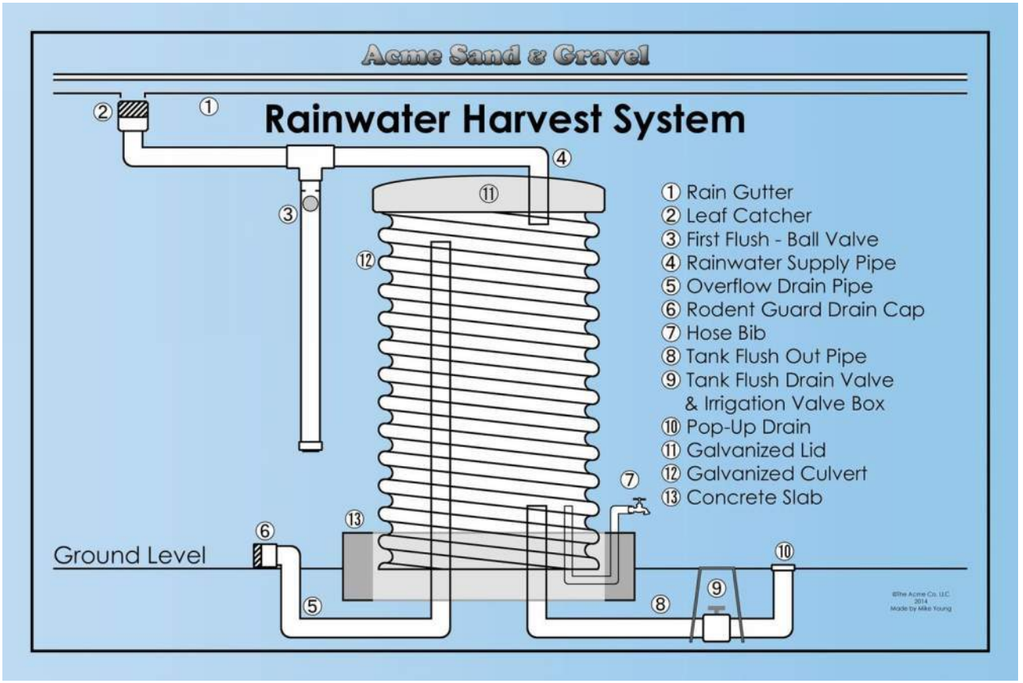
Geothermal is a means of obtaining heating and cooling from the relatively constant temperature of the earth. In this case, the existing football field could be used for drilling vertical wells into the earth where loop piping would be installed, down and back up, and then fed into the VRF equipment. These wells are usually in the neighborhood of 400’ deep and spaced about 25’ apart. The amount needed has yet to be determined. The field itself is totally useable again after installation and repair. The concept is that the loop piping runs a coolant down through the stable temperature of the earth (usually about 55 degrees) and either is cooled by or heated up depending on the season. This is then used to cool or heat the refrigerant in the VRF systems. This then makes an extremely efficient cooling and heating system, as most of the energy used is “free” from the earth.

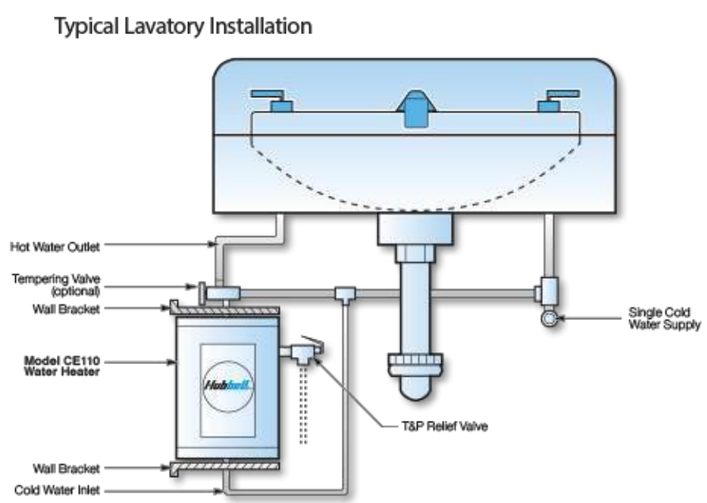


Coolant is piped through the wells and back to the building



Geothermal well field similar to the existing sports field





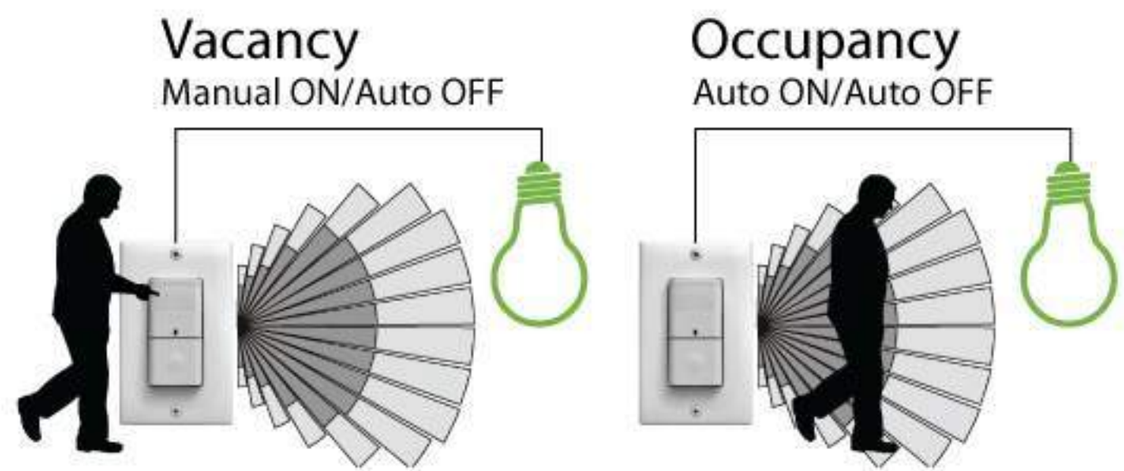
Plumbing – While we are not anticipating any changes to the existing bathrooms, we would recommend that changing the existing fixtures with new low flow fixtures would be a good idea. Toilets can be 1.28 gal/flush while urinals can utilize a 1 pint/flush. All faucets can be replaced with aerated faucets for less water usage. There should be some type of controls on the lavatory faucets to prevent them being left on inadvertently. This can be battery powered sensors, or a mechanical type of control. Dual-flush toilets can be utilized in single toilet rooms where adults are the main users.
The large low-sloped flat roofs will be ideal to collect rainwater, and the low side will be directed via gutters and leaders to an above-ground storage tank for on-site irrigation. We are proposing above-ground collection tanks at both courtyards. Ideally, they would be elevated on a stand under the gutter drain so that a gravity feed would take it to the point of use in these areas. This would also be a visible teaching example of how the system operates. A more ambitious system would pipe multiple gutter drains into a large underground storage tank, which would then be filtered and pumped to the various vegetated areas around the site for irrigation. We would love to see both systems utilized if possible.

There are also a number of ways to provide hot water for domestic use. There does not seem to be a need for large volumes of hot water, as the kitchen will not be used and there are no laundry or shower or large locker rooms anticipated (with exception of the gym, if this function is maintained). Point of use, in line instant hot water might be a good solution for this reason. If larger volumes are needed, we would recommend tankless hot water or a PV solar thermal system be used.

Electrical Systems

As most of the ceilings will be replaced with new dropped ceilings, we recommend installing all new LED lighting. There are many choices available recently and the cost has been dropping dramatically. We also recommend installing occupancy sensors in most occupied areas. This will help conserve both energy and maintenance costs. Daylight sensors might be installed in areas with extensive daylighting so electric lights could be dimmed or shut off when there was sufficient natural light.

With today's technologies and proliferation of electronic devices, it is imperative that sufficient power outlets and charging stations be incorporated into the design. It is assumed that the Center will have its own WiFi system for the users. There will also be some hardwired data ports needed for staff. Space utilization and furniture layouts should be carefully considered so that floor outlets can be accurately located for installation during the renovations. There is nothing more disruptive than having to come in after the fact to rip up and install outlets in a finished space. The IT system obviously needs to be a part of this planning. The various IDF and MDF rooms will affect the cooling needs for the HVAC systems.



Occupancy Sensors

Photovoltaic Panels

Sprinkler System

The flat roofs will easily accommodate solar photovoltaic (PV) panels to generate electricity for the Center, or feed back into the grid if more power is generated than is being used. This is called “net metering” and allows all of the power generated to be used. The roofs over the Administration/Development wing and South Classroom wing would be nicely situated for the installation of Photovoltaic panels. While these are not heavy and can be mounted on a ballasted support system, it should be verified that the existing roof system can handle this load.

As part of the upgrade to a fully safe and code-compliant building complex, a totally new sprinkler system should be installed throughout the buildings. This will include bringing a new fire water main from the nearest main line, providing a new valve room at the main entry point, and running sprinkler piping to semi-concealed heads in all of the rooms. The interior units will be a wet-pipe system, and a dry system would be needed under any new covered porch or walkways.

SUSTAINABILITY

Sustainability should be integrated throughout every project and has been a driver of this design vision. For ease of understanding a number of industry best practices have been outlined on the following pages for reference and integration. It's important to note that while these areas are outlined in different sections, sustainability is most successful when it's integrated as a systematic holistic approach starting with site design all the way through building systems such as HVAC through detailed furniture and finish selections.

This set of sustainable standards on the following pages were created to use as a resource as you begin implementing your project.

These recommendations are rooted in research and based around CFIT's expressed needs and goals of a **bold, creative and innovative** environment.

Please contact us at information@sdcatlanta.org with any questions.

Sustainability Outline

Professional and Construction Considerations

Site Considerations

Building System Specifications

Indoor Environmental Quality Considerations

Professional Considerations

To ensure low utility rates and minimal ecological impact with your project, work with professionals who have experience designing buildings with sustainability as a primary goal. For example, experience including working with Leadership in Energy and Environmental Design (LEED) certified projects and or professionals holding the LEED AP professional certification would qualify for this criteria.

- Have professional provide proof of experience working on a sustainable project to the project management.
- Ensure at least 1-2 professionals on each job have sustainable design and/or construction experience so they can teach the best practices to the other members of the team.

Construction Considerations

- **Follow Construction Management Association of America (CMAA) Standards**
  - To ensure project success and that all parties fulfill their contractual commitment use the resources such a contract templates and process documents provided by CMAA.
  - Visit cmaanet.org for detailed information
- **Recycle Construction Waste**
  - Recycle, AT MINIMUM, 50% of construction waste, 75 -100% is ideal
  - Consider donating materials that can be reused to reuse centers such as the Lifecycle Building Center of Greater Atlanta

Site Considerations

Using the site design provided, implement the below best practices to reduce potable water use, utility bills and maintenance costs.

- Use native plants for landscaping
- Reduce the use of turf for the site
- Design the site so you don't need an irrigation system. If one is absolutely necessary, implement a low water use drip irrigation system
- Use harvested rainwater for watering garden plants

SUSTAINABILITY

Building System Specifications

Table 1. Optimized Building Performance Implementation Requirements Table

Refer to below table for detail and level of achievement recommendations for each category.

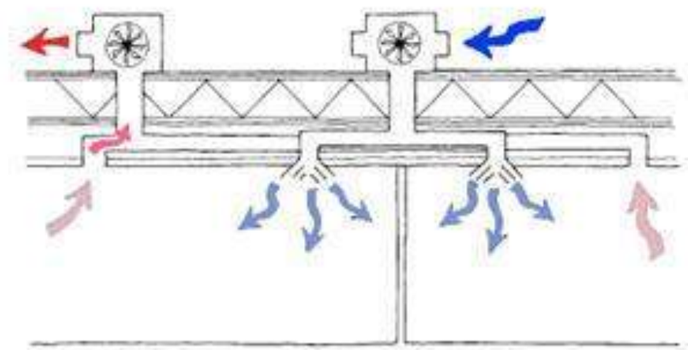
Building System	Prototype Specification	Value	Reference	System Description
Walls	R-Value	≥ 20	IECC 2012	3 inch rigid XPS
Roof	R-Value	≥ 30	IECC 2009	5.5 inches of closed-cell spray foam in truss cavity
Floor	R-Value	≥ 19	IECC 2012	Fiberglass-batts underneath floor, if applicable
Windows	U-Value	≤ 0.3	ENERGY STAR	NFRC Certified Window
	SHGC	≤ 0.25	ENERGY STAR	NFRC Certified Window
Air Leakage	ACH50	≤ 3	IECC 2012	Achieve continuous air barrier by sealing all wall, ceiling, and floor penetrations to the outside
Mechanical Ventilation	Constant CFM	20	ASHRAE 62.2	Energy Recovery Ventilator (ERV); ducts deliver fresh air
Space Conditioning	SEER	≥ 14.5	ENERGY STAR	Ductless mini-split heat pump
	HSPF	≥ 8.2	ENERGY STAR	
Water Heater	EF	≥ 0.90	ENERGY STAR	Tankless; gas
Appliances			ENERGY STAR	ENERGY STAR certified, if applicable
Lighting			ENERGY STAR	LED; ENERGY STAR certified
Plumbing fixtures	Gallons Per Minute (GPM)	0.5	WaterSense	Low-flow bathroom sinks
	Gallons Per Minute (GPM)	1.5	WaterSense	Low-flow kitchen sink/shower
	Gallons Per Flush (GPF)	≤ 1.28	WaterSense	Dual-flush water closets

Indoor Environmental Quality

Minimum Indoor Air Quality Performance

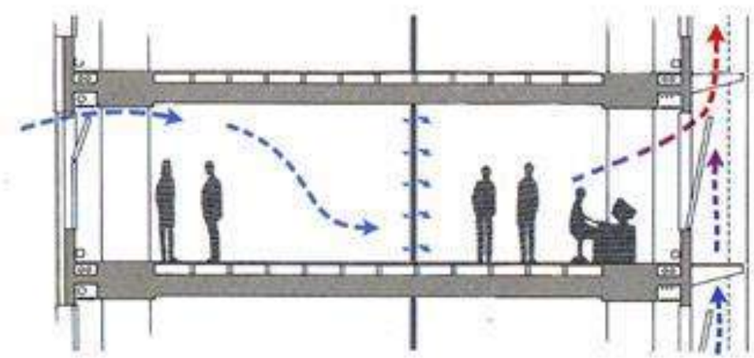
Ensure the final design of the building has suitable air quality for resident wellbeing.

- Meet at a minimum, ASHRAE 62.1 2010 performance requirements for the indoor air quality performance.
- Have the project's mechanical engineer conduct the calculations and provide confirmation of compliance.



Building Flushout

- Perform an entire Building Flushout: at the end of construction before occupancy.
  - *(Reduces the level of toxic chemicals building occupants are exposed by flushing them out of the space. These chemicals or material "off-gassing" are often left in the building and are caused by the off-gassing of non-sustainable materials used in the building during construction.)*
- Have your mechanical engineer determine how many days the flush-out needs to occur to meet the following conditions: 14,000 cubic feet of outdoor air per square foot of the floor area.
- Turn on all HVAC systems at full operation for the number of days determined needed for the flush-out and have windows open.
- Maintain and indoor temperature of 60 degrees Fahrenheit or GREATER during the flushout
- Maintain an indoor humidity level of 60% or LOWER during the flushout period
- Use a MERV 8 filter or greater during the flush out
- Replace the HVAC filter with at least a MERV 8 or greater (MERV 13 ideal) after the flushout period
- Provide routine checks on all HVAC systems
- Replace the MERV 8 or higher air filters regularly



Building Flushout

SUSTAINABILITY

Indoor Environmental Quality

- Require the person specifying products provide the specification sheet for each product showing the below labels or VOC thresholds.

Specify Volatile Organic Compound (VOC) Limits

Ensure that all products fall below the MAXIMUM VOC thresholds listed in the provided tables for each category.

Specify furniture with Greenguard Certification

Greenguard certified products go through testing to confirm they have low levels of chemical emission into the built environment.

Specify Floorscore and/or Green Label Plus Certification Flooring

These certifications confirm the product has been tested and emit low levels of chemicals into the built environment.

Specify no ADDED UREA-Formaldahyde wood

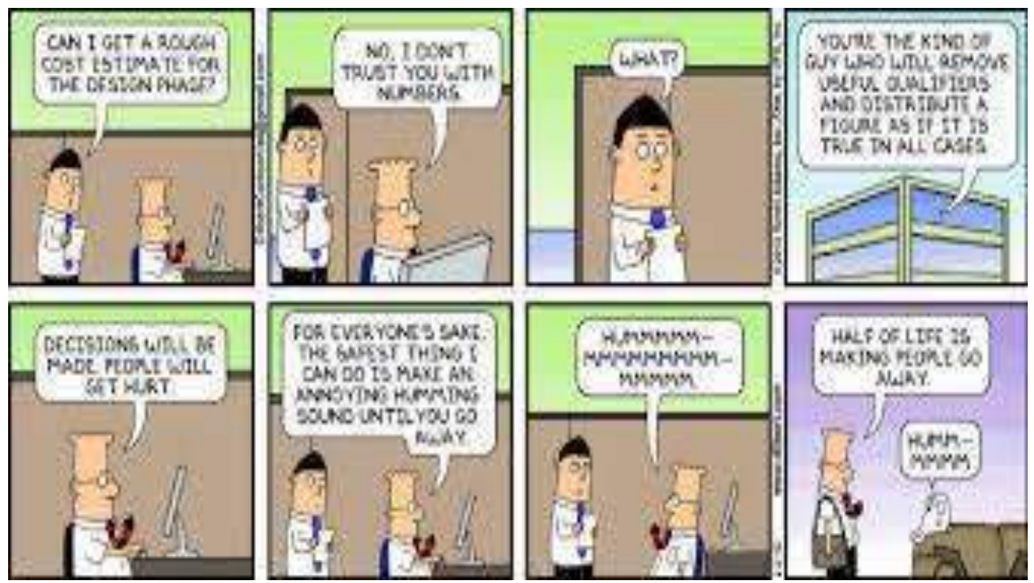
- When at all possible, specify only no ADDED Urea-Formaldehyde for all wood used inside the building envelope (paneling, doors, cabinets, blocking, etc.). Urea-Formaldehyde has been linked with multiple negative health effects such as respiratory and skin irritation. Additionally, it is a known carcinogen when people are exposed to high levels

*Product Category List **Paints and Coatings**	VOC Limit (g/L, minus water)
Interior Non-Flat Coating or Primer	150
Anti-Corrosive/Anti-Rust Paint	250
Clear Wood Finish: Lacquer	550
Clear Wood Finish: Sanding Sealer	350
Clear Wood Finish: Varnish	350
Clear Brushing: Lacquer	680
Floor Coatings	100
Sealers and Undercoaters	200
Shellac: Clear	730
Shellac: Pigmented	550
Stain	250
Concrete Curing Compounds	350
Japans/Faux Finishing Coatings	350
Magnesite Cement Coatings	450
Pigmented Lacquer	550
Waterproofing Sealers	250
Waterproofing Concrete/Masonry Sealers	400
Wood Preservatives	350
Low-Solids Coatings	120*
*VOC levels for Low-Solids Coatings are measured in grams of VOC per liter of material	

*Product Category List **Adhesives and Sealants**	VOC Limit (g/L, minus water)
Architectural Adhesives	
Indoor carpet adhesives	50
Wood flooring adhesives	100
Rubber floor adhesives	60
Subfloor adhesives	50
Ceramic tile adhesives	65
VCT and asphalt adhesives	50
Drywall and panel adhesives	50
Cove base adhesives	50
Multipurpose construction adhesives	70
Structural glazing adhesives	100
Specialty Adhesives	
PVC welding	510
CPVC welding	490
ABS welding	325
Plastic cement welding	250
Adhesive primer for plastic	550
Contact adhesive	80
Special purpose contact adhesive	250
Structural wood member adhesive	140
Sheet applied rubber lining operations	850
Top and trim adhesive	250
Substrate Specific Adhesives	
Metal to metal	30
Plastic foams	50
Porous material (except wood)	50
Wood	30
Fiberglass	80
Sealant Primers	
Architectural nonporous	250
Architectural porous	775
Other	750
Sealants	
Architectural	250
Nonmembrane roof	300
Roadway	250
Single-ply roof membrane	450
Other	420

PROJECT CONTROLS

PROJECT CONTROLS



Why Project Controls?

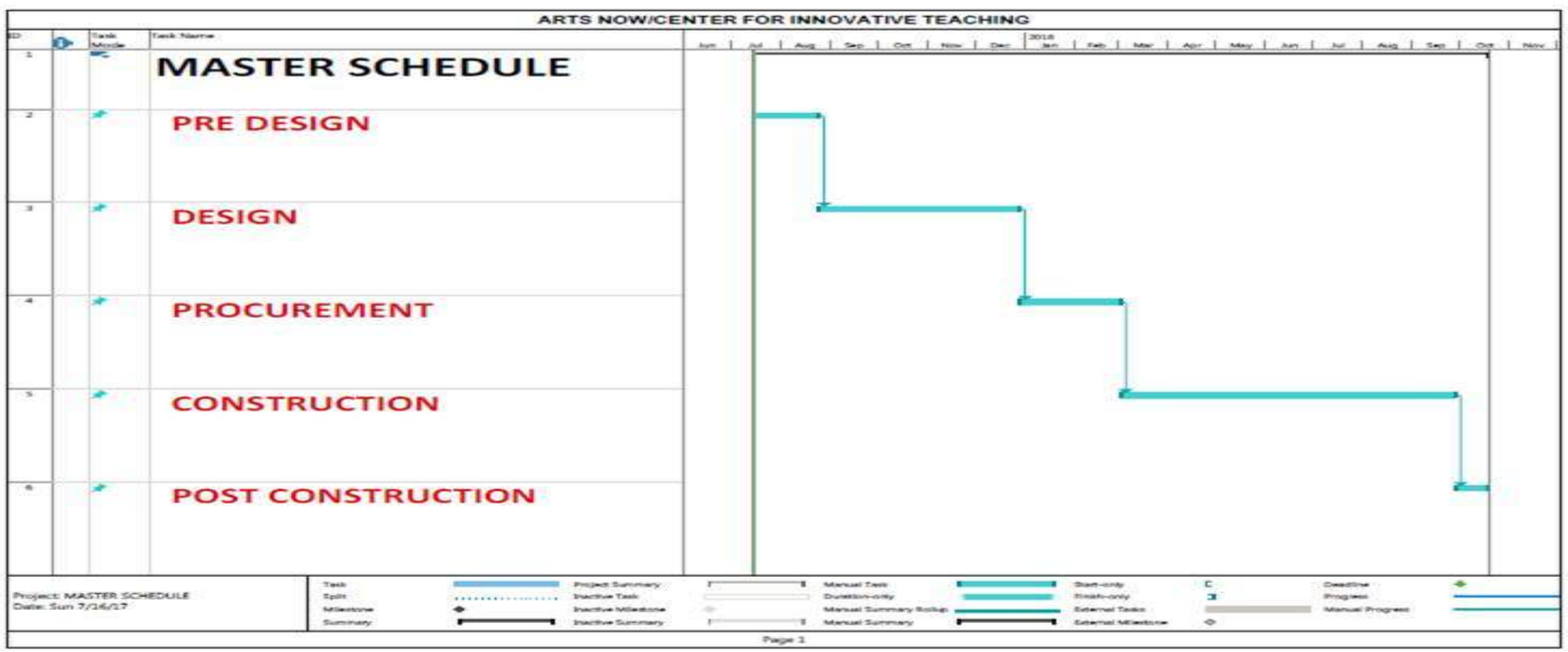
Saleh Mubarak in his 2010 book titled "Construction Project Scheduling and Controls " provides a explanation why:

"Once a project starts, certain aspects can easily deviate or go astray. This deviation can be overspending, a schedule slippage, a departure from the objective/scope, or something else. it is of utmost importance to know --at all times-- where you stand in relation to where you planned to be (the baseline). With any deviations you must know why and take corrective action to get back on track or, at least, minimize the deviation. Positive deviations show that results were better than expected. This process exemplifies Project Control. The concept of project controls covers all aspects of the plan (schedule, budget, quality, contract and safety)."

SCHEDULE

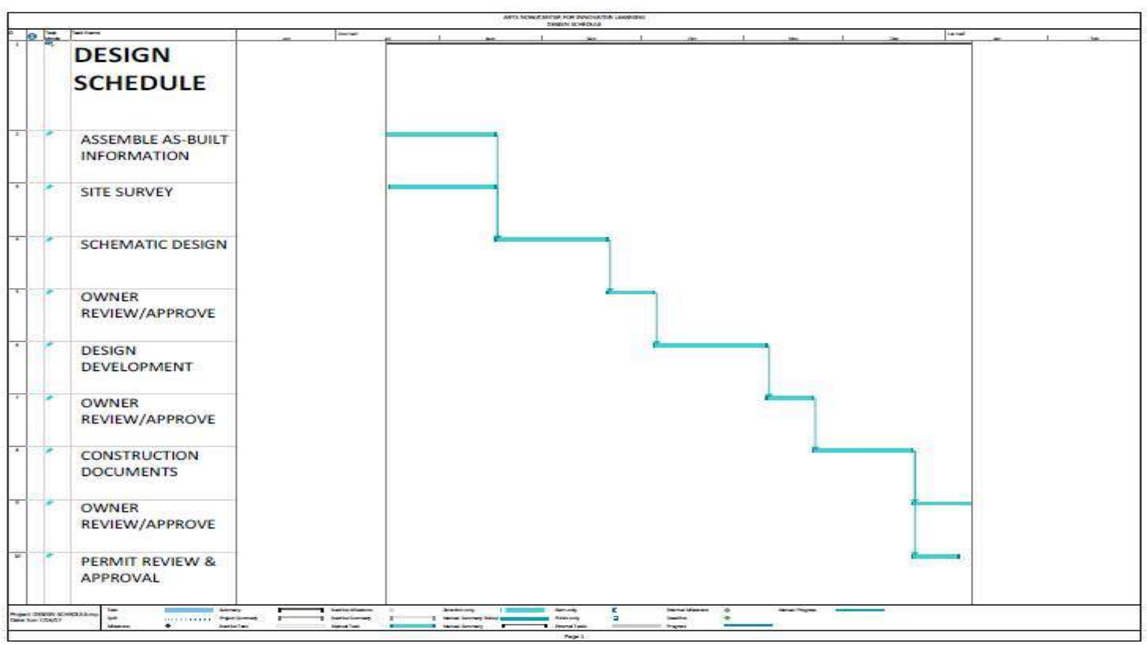
IN AN EFFORT TO INSURE THAT A PROJECT IS COMPLETED WITHOUT MAJOR DEVIATIONS, SCHEDULES ARE REQUIRED TO ANSWER THE ***WHEN*** QUESTION.

Master Schedule - provides a summarized view of the entire project rolled up into one schedule without the detail of a specific phase of the project. Allows the project team to review the relationships between each phase of the project. Provides the team a view of the entire project duration for future planning.used in conjunction with the budget to create cash flow projections.



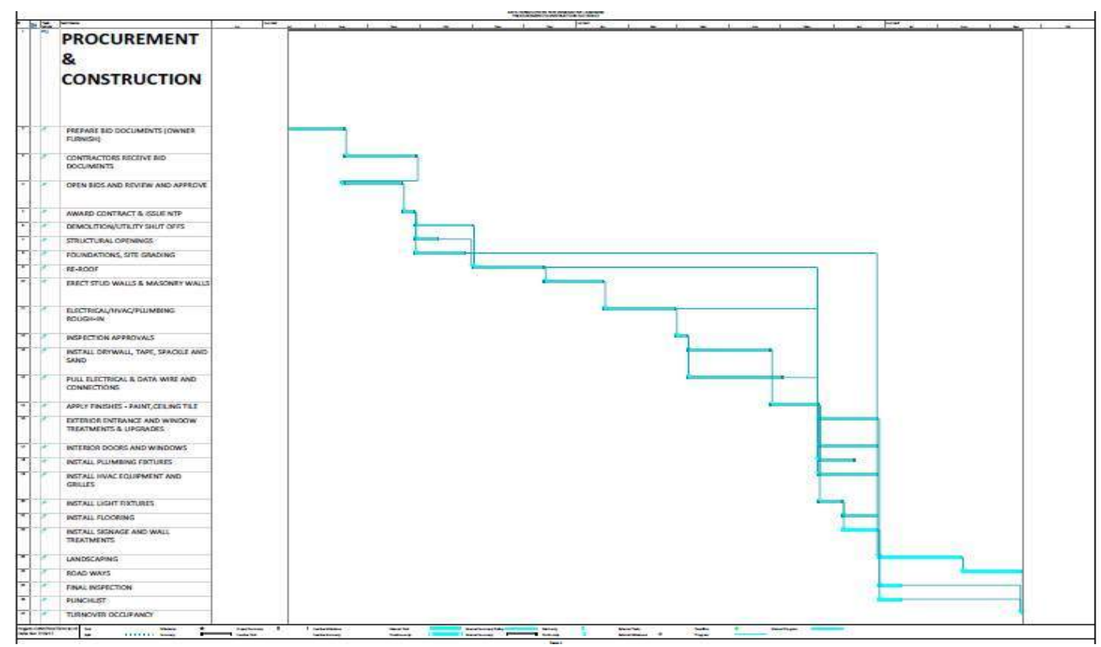
DESIGN SCHEDULE :

- Identify decisions to be made and the time required to make these decisions.
- Calculate the Project Completion Date
- Track the status of the design.
- Provides a baseline to measure progress



PROCUREMENT & CONSTRUCTION SCHEDULE:

- Calculate bid date and completion date
- Calculate the start and finish of a specific activity
- Provides a tool for coordination between the trades
- Useful tool to Predict and calculate cash flow
- Evaluate the effect of changes
- Identify the critical activities to keep the project on schedule
- Determines if the contractor has a reasonably accurate and realistic plan
- Verify delay claims
- Serves as an effective project monitoring tool



BUDGET

Cost Control is another project component that is used to either eliminate or manage deviations in the area that will make or break a project for the owner or contractor. Similar to the schedule tool all projects participants are required to assist in the development and implementation of the budget. Budgeting and estimating are predictions of future costs and are rational processes. But bidding can be irrational and unpredictable.

Many variables affect our predictions: Material costs, labor costs, competition or the lack of.

RECOMMENDATIONS

- Provide a line-item budget to maintain flexibility
- Estimate soon and often to make achievable budgets and design to them
- Establish cost categories that can be verified against future contracts
- Define project costs and program costs, and make sure everybody understands all the budget components
- Keep budgets updated as conditions change--in increasing levels of detail-- and manage them with insufferable attention

BENEFITS

- Develops trust
- Creates transparency
- Identifies scope increases(creep)
- Provides useful information for team members
- Economies of scale in large programs with multiple projects
- Never lose site of the bottom line
- Use to compare bids to determine if the bids are reasonable
- Change order and claims management

CONTRACT ADMINISTRATION

Because this project will be made up of very different components with a high probability of different funding sources, Construction Phasing is highly recommended. As part of that process, there are several key points that could be beneficial in planning for a long term project.

Clear roles and responsibilities are key to effective administration. This would involve a system of thorough documentation and construction monitoring. Clear lines of communication will ensure a common understanding. Continuity between the owner and the A/E team will ensure success.

Periodic meetings should be scheduled to reinforce the lines of communication and facilitate progress. This process should include a review of the submittal process, a key administrative activity that is where quality control starts. It is necessary no matter what project delivery method is used. The submittal process needs to be efficient and prompt. Site visits, observations and inspections should be clearly defined and properly documented. Outstanding items should be tracked accurately.

Quality assurance and quality control cannot be overstated. Quality assurance is the action of evaluating the contract documents before the execution of the work. Quality Control is the ability to evaluate completed elements and activities for compliance. Although critical components, they are not mutually exclusive. This key aspect will minimize the potential for the need of conflict resolution and interpretations/modifications

Claims and disputes will happen. Even ‘successful’ projects will have them. Using proper AIA contracts and forms will begin to mitigate them by setting a clear and concise path to resolution. Orderly and effective administration of these will lead to quick solutions and aid the progress of the overall project. Progress of a project should be measured carefully and accurately. There are many metrics to track and most of them involve progress payments. Making sure these factors are evaluated accurately, regularly, and efficiently are critical to progress success.

Finally, Project Closeout is as important of a stage as any of the others. It is an orderly stage of the owner occupying the project and ensuring all systems and components are running properly. It may include owner training, commissioning and balancing, and documentation (as-builts to occupancy). There will also be opportunities for post-occupancy evaluation and warranty repairs as necessary.

CONTRACT ADMINISTRATION

CONCLUSION AND PARTICIPANTS

CLOSING LETTER

Members of seven organizations that are invested in sustainable design once again came together to sit at the same table and work on a solution, each member respected for their offering of their knowledge and their volunteer spirit. These “weekend warriors” have provided a solution that is documented through this booklet and several presentations for a project that is close to all of our hearts, the Center for Innovative Teaching (CFIT).

This has been the seventh year in a row where a foundation of professionals called the SDCA board, along with some wonderful team leaders and volunteers, have collaborated together utilizing the “charrette” methodology to provide design services to those in need, in this case Arts Now and Barrow County. This hands-on approach, including on-ground face-to-face gatherings, pre-charrette meeting, charrette meeting, and post charrette meetings along with online communications over several months, provides the glue that keeps everyone on the same page. The energy provided by volunteer professionals, students, clients, and community, is what makes this process work so well. Volunteers accomplish this task while maintaining regular workloads and school hours, a testament to the volunteer spirit within the building and design communities.

Through this effort, we have expanded our services from the design development of the interior and exterior of the buildings, through the development of the landscape, including the productive design of the courtyards and surroundings. While the design needs to continue to be developed through construction documentation phase, we hope that we have laid the foundation to meet the immediate needs of CFIT, to assist in providing a vision for the future of this community, and to serve as a catalyst for change in the immediate surroundings.

We trust that you will find this booklet useful as you continue your fundraising efforts and that it will provide guidance in the years to come. We thank the members of Barrow County and Arts Now for their guidance and positive energy along the way. It has been a pleasure to work with you and your staff of believers. Our sincere hope is that this building will be under construction very soon.

Liset Arza Robinson, Executive Director SDCA

PROJECT PARTICIPANTS

THANK YOU for the hard work of everyone supporting this project! Below are some of the participants we'd like to highlight in particular. It's been an honor working with you and this project would not be possible without you.

Invaluable Volunteers

Chris Lazarek

Chris Morphis

Emilio Etchegoyen

Hannah Waits

Navita Gupta

Mashika Gallo

Pratisha Shakya

Shawn Williams

Stacey Flint

Tricia Wenke

Xin Wang

ARTsNow Leadership and Board

Carol McGrevin

Crystal Collins

Pam Walker

Patrick Fulbright

Barrow County School System

Chris McMichael

Gretchen Hollingsworth

Jan Mastngill

Joe Perno

Ken Greene

Lee Bane

Melinda Kay

Michael Jones

SDCA Board:

Bonnie Casamassima

Brent Redmon

George Harkness

Liset Robinson

Michael Dudley

Reed Thomas

Taejun Park

SPECIAL THANK YOU to ArtsNow, Barrow County School Systems, JE Dunn Construction and Southface for all of the hosting duties for the 2017 project

THANK YOU

For ongoing project information or for more details, please visit sdcatlanta.org or contact us at information@sdcatlanta.org.

PROJECT DISCLAIMER