Center for Innovative Teaching

Sustainable Design Collaborative Atlanta_ Vision Project _ 2020

SDCA
Sustainable Design Collaborative Atlanta

TABLE OF CONTENTS

INTRODUCTION

Sustainable Design Collaborative Atlanta

BARROW COMMUNITY FOUNDATION

BARROW COUNTY SCHOOL SYSTEM

ArtsNow®

Teaching and Learning Across the Curriculum

Welcome!

Sustainable Design Collaborative Atlanta is honored to select Barrow Community Foundation in conjunction with ArtsNow and the Barrow County School System for our 2020 project. The following pages outline our organization, our process, and the final vision.

PARTICIPATING ORGANIZATIONS

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 (ASLA) Georgia Chapter

Construction Specifications Institute (CSI) Atlanta Chapter

International Interior Design Association (IIDA) Georgia Chapter

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

PREPARED FOR:

Barrow Community Foundation
ArtsNow
Barrow County Schools System

DEVELOPED BY:

Sustainable Design Collaborative Atlanta

VISION & MISSION

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 population 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.

Acknowledgement

We are honored to have been able to select Barrow Community Foundation for this year's project. In partnership with ArtsNow and the Barrow County School System, we will revisit the previous project in light of the recent community engagement. The members of SDCA have become part of a solution for the growing issue of homelessness in Atlanta. It is our privilege to design a project for those who are creating a community hub of learning and instilling an inovative arts based education into the curriculum of so many deserving students with the result of adding to their knowledge base, retention and increasing their
creative thought process..

Team Breakout Charrette

Site visit

Inspiration Imagery/Concept Development

HISTORY

Now in its tenth year, Sustainable Design Collaborative Atlanta (SDCA) has 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), Georgia Chapter of the American Society of Landscape Architects (ASLA GA), and the Georgia Chapter of the United States Green Building Council (USGBC).** SDCA has moved from a volunteer committee supported by a one night celebration called Red and Green Scene Holiday Party, to a full fledged non-profit in the State of Georgia.

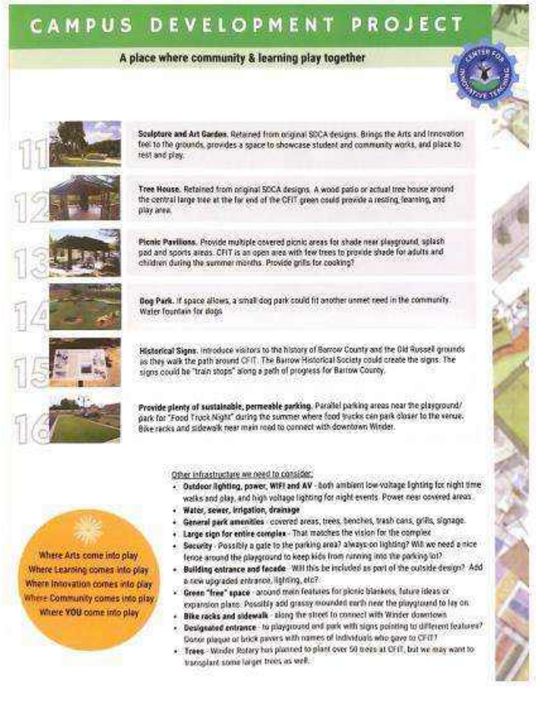
.

SDCA provides pro bono professional services that help each of our clients illustrate their vision in a tangible way in order for them to solicit support and funds to meet the goals of their organization and implement their project vision.

In previous years, the SDCA team has provided detailed design solutions to meet the needs of many organizations, including 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; the Hagar Civilization Training Missionary Center; as well as Solomons Temple Shelter..

This year, the Sustainable Design Collaborative Atlanta crew gathered once again to give back to the community. SDCA selected to work with the Barrow Community Foundation (in partnership with ArtsNow and the Barrow County School System to provide design solutions to support their efforts to provide a unique destination to enhance the Center For Innovative Teaching and the City of Winder.

This year SDCA provided a scope for the Barrow Community Foundation project which included an evaluation of the surrounding Site Design and the current building. The following report includes building upgrade renovations and sustainable landscaping, while providing an aesthetically appealing, evidence-based approach to the design. Landscape recommendations and functional building design have been proposed for the site, through design development phase, to provide connectivity to the surrounding community, a sense of place for the users, and to complement any earlier studies that have been completed for this building.



HISTORY

For over 13 years, Barrow Community Foundation has served as a positive force for giving in Barrow

Barrow Community Foundation was formed in 2006 following a countywide gathering of business, educational, elected and spiritual leaders. Through an intense two day session, guidance was created for three distinct paths that we needed to on-board: Economic Development, Community Development, and Workforce Development.

As a part of Community Development, it was recommended that a community foundation was needed, as an outlet and as a community support vehicle. Many times, residents looked for a place to contribute to their community, but had no recourse. Many times, there were needs within the community that couldn't be met. The Foundation was the way to accomplish both requirements. The Foundation was established and approved through the Internal Revenue Service as a 501(c) 3 Tax Exempt organization.

The Foundation has grown over the years, mostly through directed holdings given to be used as scholarships. More recently however, the Foundation's growth has accelerated through a renewed interest in giving across Barrow County, as well as generous donations from private donors, businesses and organizations

BARROW COMMUNITY FOUNDATION

Bring People Together, Inspire Them to Give

Barrow Community Foundation connects donors that care with causes that make a difference in our community. We inspire others to give and make Barrow a better place through the power of philanthropy.

Our Mission

Barrow Community Foundation enhances quality of life by focusing on the educational, social, environmental, and economic needs of the residents of Barrow County, Georgia. We connect donors who care with causes that matter in our community.

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

BARROW COUNTY SCHOOL SYSTEM

Vision

Barrow County School System: Boldly Committed to Student Success

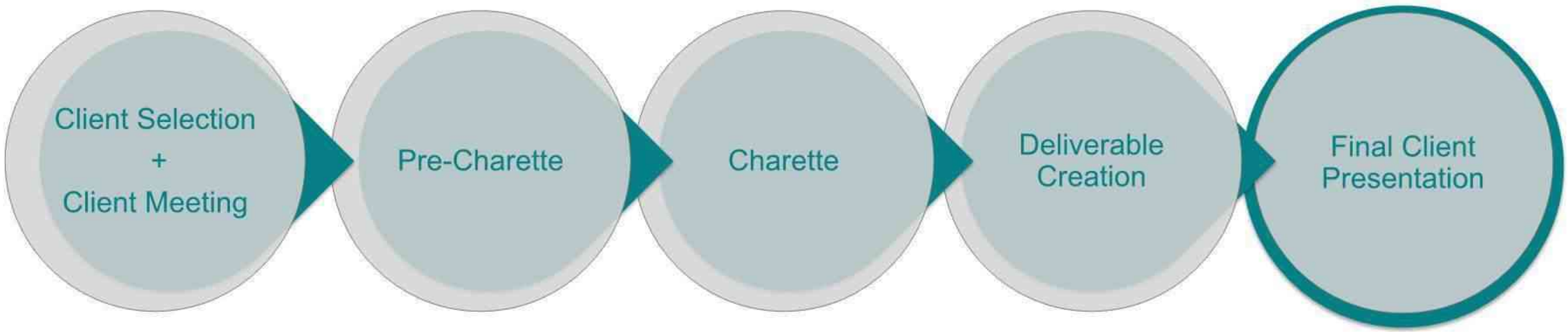
Mission

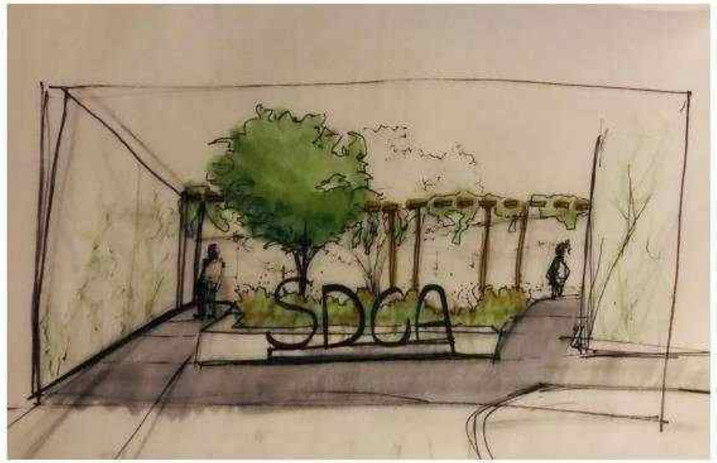
Ensuring an exceptional education that leads each student to become a high achieving and responsible citizen.

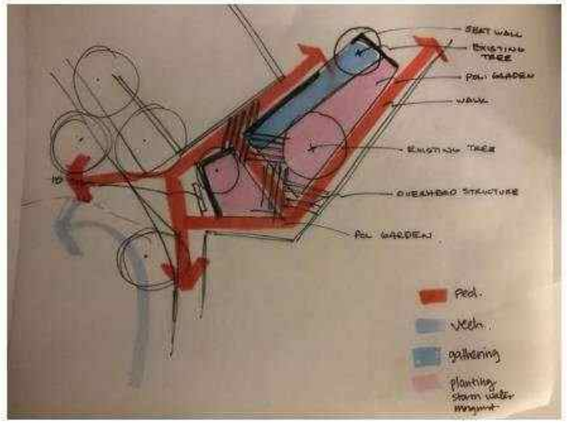
We believe that a quality school system...

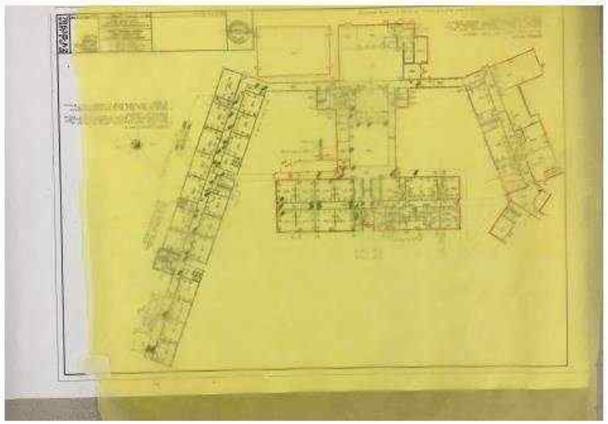
• Provides a world class education in a safe and caring environment which assures each student's success. • Enhances individual student achievement through real-world experiences and active learning. • Challenges students to exceed local, state, and national academic standards. • Nurtures the total well-being, 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


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







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 MEETING AND PRE-CHARETTE

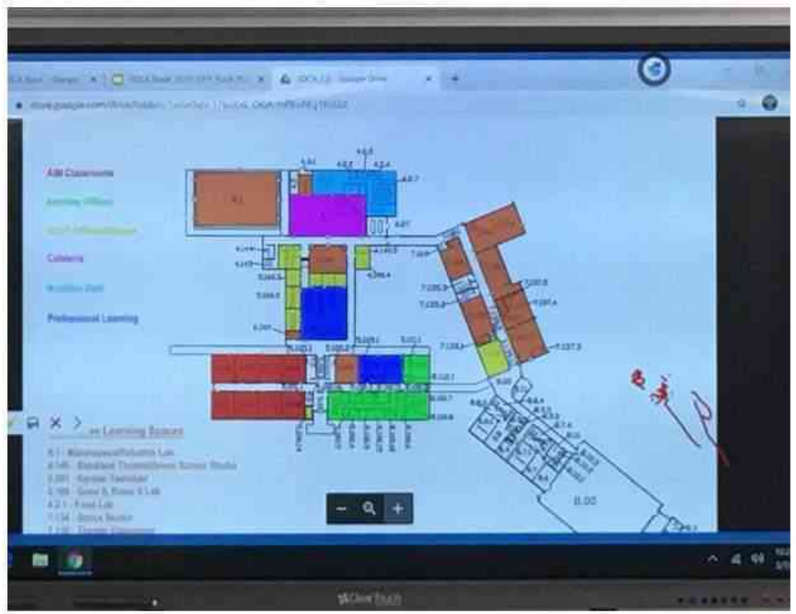
A participatory process is imperative to the strength of the final vision found within this report. The first meeting with the client involves a multi-hour facilitated conversation to understand the goals, opportunities, and details of the project and all partners. Also included in the initial client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

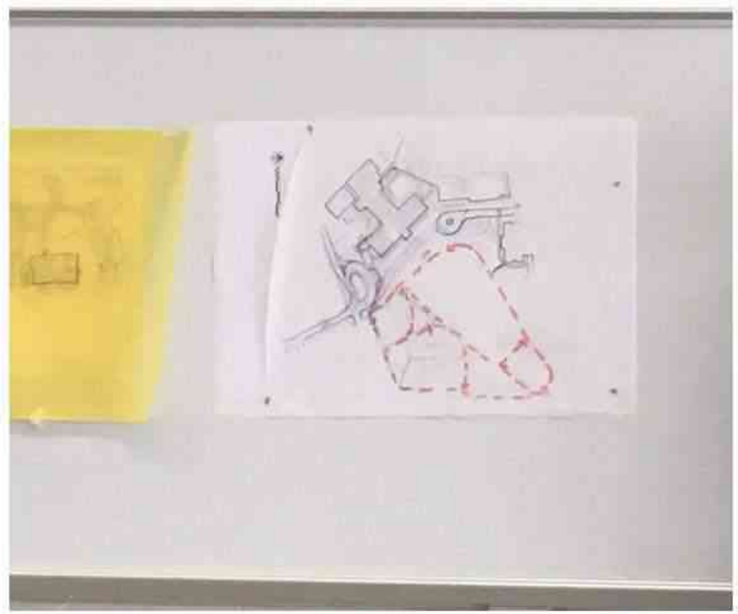
The information gathered in the client meeting drives the design direction for the entire process. After the client meeting, the teams organize into smaller task forces, such as site, systems, and interiors, to begin implementation of design creation. The process continues to be collaborative throughout, 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 convenes, after doing research and task force work, to detail the final direction of the design. The charette meets on location so teams can understand more specific details of the building and site, and field verify existing building elements. Teams present their preliminary designs to the larger group for feedback and integration.

PROJECT GOALS AND CONCEPT





The strength of our team is proportional to the preparedness of our client. Measurable goals, along with a clear and concise concept, are paramount to any projects success.

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

DESTINATION FOR THE COMMUNITY

- Creation of a connected and welcoming green space that becomes a destination for the surrounding community. Embracing the environment at every turn is envisioned. The Center for Innovative Teaching will become both an example for and a leader in sustainable solutions.
- Establish a Series of connected plazas to unify the various entrances for the building with the inside. Sustainable Spaces for markets and festivals as well as incorporating the rich history of the City of Winder.

PROGRAMMING FOR SUCCESS

- Continue to facilitate and deliver innovative programs that are reflective of rigorous, innovative teaching strategies for the 21st century learner. The professional learning will extend into an after school and summer curriculum in a community hub of learning to include supporting a residency program.
- Connect the Arts and Innovation occurring on the inside of the building with the cultural innovation being developed on the outside. The primary vision has not changed from active interaction with business, community, and educational partners.

FUNDING FOR FULL POTENTIAL

- Given that funding must be secured to reach the full potential, our initial focus is to cast a vision for the possibilities of transforming the Center for Innovative Teaching into a holistic campus to facilitate their progressive mission and to attract donor interest to support the larger full-scale project.
- Other collaborative spaces that support stability and maximize potential are needed, such as a professional space, additional computer labs, outdoor gallery space, a multi-purpose studio, and outdoor environments.

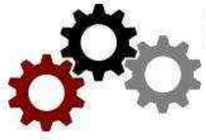
Properly designed goals need a vehicle to push an organization forward.
A well-prepared concept will unify an organization and inform decisions.

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. The Barrow Community Foundation, ArtsNow, and Barrow County School System have a passion and commitment to collaboratively transform the **Center for Innovative Teaching (CFIT)** campus into a unique destination that not only serves the local community but also the entire region collaboratively.

This CFIT campus will house innovative features and 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 teaching and learning experiences to teachers and students as well as engage the broader community. The transformation of the campus site plan 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

Barrow Community Foundation emphasized the unique community hub to spur economic development.



EQUIPPED FOR SUCCESS

Meet the needs of the community with quality programming and a destination with a connection to downtown

QUALITY RESULTS

Harness the energy of the students and the captivation of the community to create a positive impact on learning and engagement.

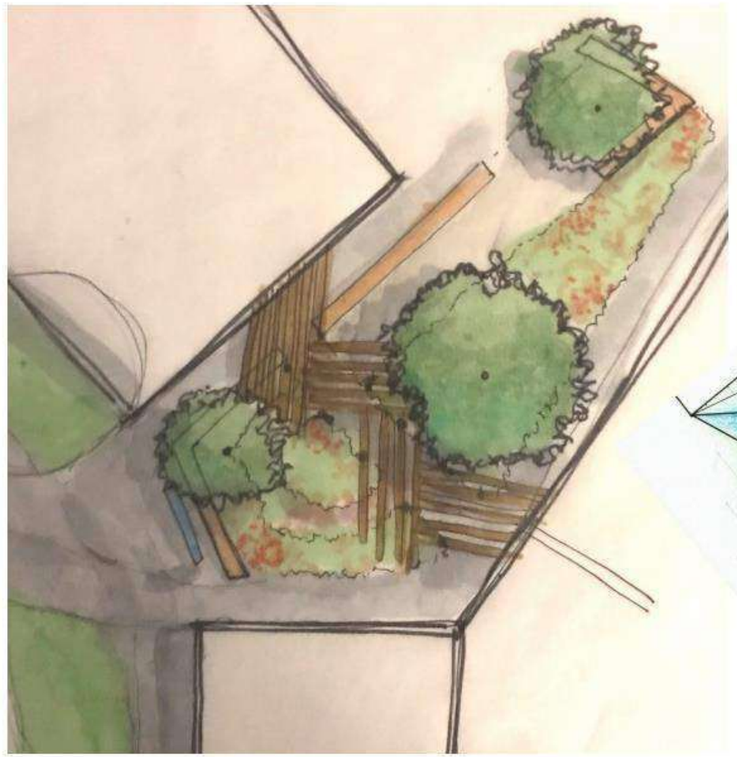
DESIGN VISION OVERVIEW

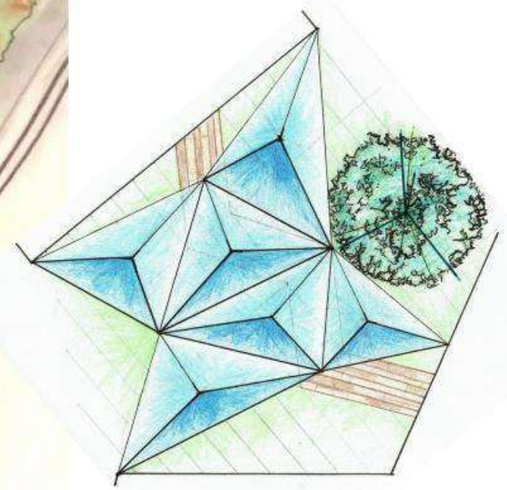
The design process began with a study of all of the existing conditions, including, site, interiors and systems. Maximizing outdoor circulation and providing for functional spatial needs were crucial aspects to consider. Being able to accommodate the flow of staff, students, the community, and visitors was the biggest challenge. The next step was to understand the programming requirements and establish workable activity zones. The key goal of creating collaborative spaces between the community and the CFIT facility was provided through shading structures at the entrances. The CFIT building continues to house the professional and educational spaces which will provide formality when necessary while fostering inclusiveness when appropriate.

On the exterior, the campus development components are created through the input of the community as well as the use of natural elements, specific branding, connectivity and thoughtful space planning. The outdoor elements are designed to provide a variety of spaces for open gathering, flexible collaboration, active play, solitude, and exploration. The multi-purpose spaces around the campus will provide areas for collaboration while allowing for smooth circulation around communal spaces. The ample green space will afford the opportunity for enhanced community outreach. The building and site systems will utilize best practices in environmentally friendly design and maintenance. This is key for establishing a resource of superior value.

Both CFIT patrons and community visitors of all ages will feel invited and engaged in the unified purpose of the Barrow Community Foundation. The outcome is a campus that provides spaces for individuals to enjoy and for a community to gather together and grow. It will be an iconic place that can serve the needs of an expanding and active population.

.





SITE


MIDLAND AVENUE
CHURCH STREET
BELLVIEW STREET
RELOCATED HISTORIC FIRE ENGINE
WILDFLOWER / POLLINATOR MEADOW
BIORETENTION
TREE HOUSE
READING NOOKS
PICNIC PAVILIONS
BIOSWALE/NATURALIZED EPHEMERAL DRAINAGE
WALKING PATH WITH HISTORICAL SIGNAGE
OPEN FIELD AREA
BIORETENTION INLET FROM BUILDING DRAINS
PEDESTRIAN CONNECTION TO LIBRARY
WOODLAND AMPHITHEATER / OUTDOOR CLASSROOM
ADA RAMP
OUTDOOR WORK STATIONS
TENSILE CANOPY
ARTS NOW / COMMUNITY ENTRANCES
ART GARDEN COURTYARD
ENTRY SIGNAGE
DOG PARK
PARKING WITH L.I.D. STORM-WATER CONTROLS
PLAYGROUND
HALF-COURT BASKETBALL AND VOLLEYBALL COURT
POND & FOUNTAIN
FIELD HOUSE
MARKET AREA
REINFORCED TURF VEHICLULAR ACCESS & FOOD TRUCK PARKING
ADA PARKING
BUS DROPOFF
TENSILE CANOPY
CFIT ENTRANCE
FIRE LANE
SCULPTURE / ART GARDEN
STAGE / GREENSCREEN
BIOPHILIC ATRIUM

SITE PLAN

SITE PLAN

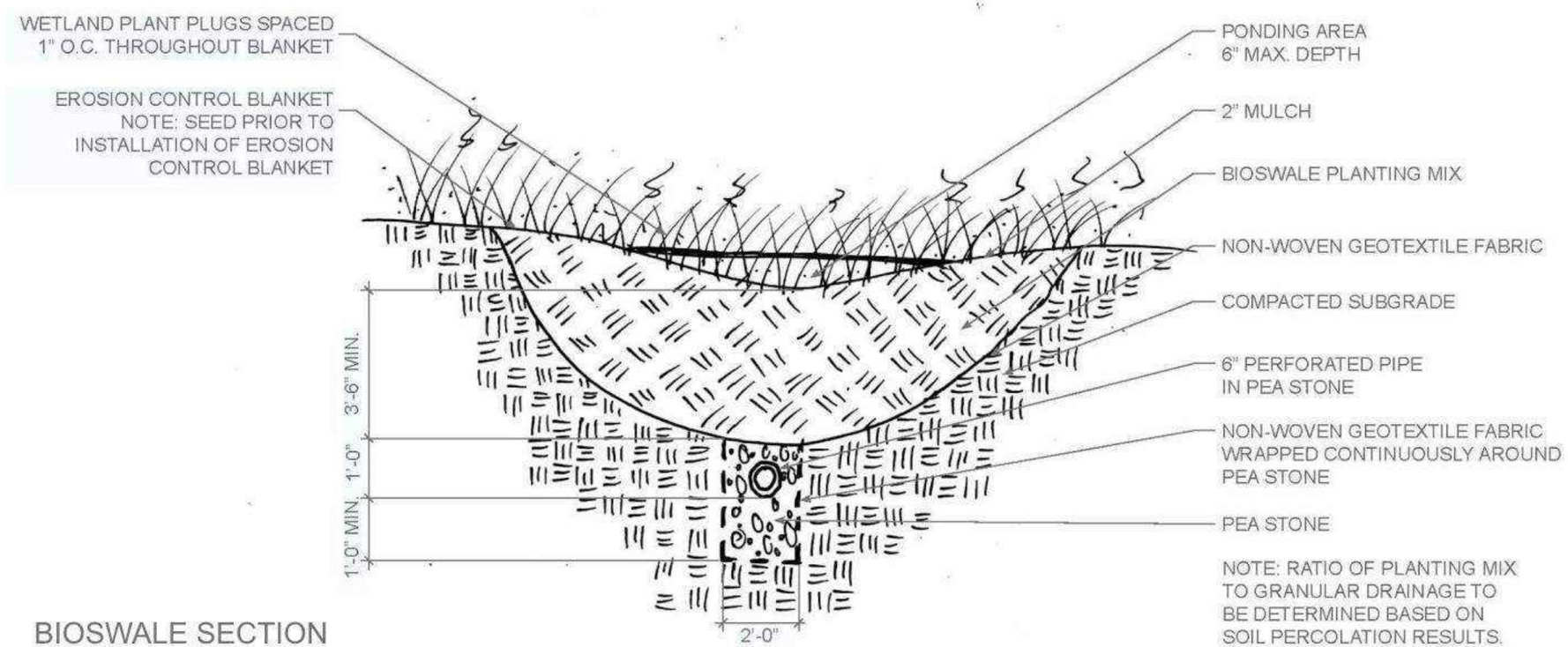
The conceptual site plan for the Center details the re-use of the central multi-purpose field with additional adjacent uses to support the Center's classroom and outdoor programs. Additionally, the campus becomes open to the local community for events and recreation. New main entrances are established for the CFIT building, and the campus is divided into zones of use serving students and ArtsNOW staff in combination with the broader Winder and regional communities. Major alterations to the building orientation and accompanying site circulation were developed by SDCA and project stakeholder participants during the project's collaborative charrette session. The proposed site enhancements and amenities are the consensus of CFIT representatives and community advocates.

The orientation of the building is altered by the elimination of the existing front entrance, along with the canopy, sidewalk, and driveway between the building and field. A new CFIT school entrance is established. Site driveway entries from Midland Avenue and Church Street provide vehicular access to parking and a motorcourt dropoff. This allows for turnaround or through-access around the back of the building to Bellview Street. The new entrance is fronted by an entry plaza, and wrapped by a welcoming lawn and garden area with capacity for passive recreation, outdoor work, receptions and events, and art display. The lawn connects to a patio with wide passages to the entry hall.

The community and ArtsNOW entrance, accessible from Bellview Street, also has dedicated parking and a circular drop-off. The flat area adjacent to the building between the two entrances becomes developed with a series of small outdoor work spaces, shaded by trees and separated by vegetated buffers. The area also contains a plaza overlooking the field where a stage or screen can be erected. Fire lane access is retained with a clear corridor along the front of the building, with a concrete sidewalk and reinforced turf.

Downslope from the building, the existing field and surrounding open space becomes a park-like area with a host of amenities. The grounds are meant to be a regional attraction. It is large and diverse, including elements appropriate and accessible for all ages and abilities. The active areas are colorful and echo the arts and creativity of CFIT. It incorporates niches for stimulating various senses, nature immersion, and educational elements for music, arts, sciences, and technology. Paved walking paths surround the park grounds and connect all campus elements. Integration of train elements and other historic features provides thematic and educational stops. Other amenities include abundant trees and naturalistic plantings, benches, assorted seating and tables, trash cans, grills, signage, bike racks, lights, and security features. The campus will be furnished where necessary with utilities for power, WIFI, AV, water, sewer, irrigation, and drainage.

Drainage from the building and parking areas can become a unique amenity if treated properly. The best practice for stormwater runoff is to retain water for short periods of time and allow it to soak into the ground. This is good for the environment because it reduces downstream erosion while enhancing water quality and groundwater supplies. It also creates an attractive amenity that adds diversity and interest to the landscape. Green infrastructure-based stormwater management practices such as bioswales and bioretention can be readily maintained and are often comparable in cost to more conventional storm drainage infrastructure. Drainage structures should be planted with native grasses and perennials and reinforced with river stones. Proper landscaping will allow the basins to become attractive garden features, and also provide habitat for frogs, salamanders, and pollinators. It can serve as relaxing scenery, an opportunity for nature play, and an educational element for visitors to learn about water and ecology.



BIOSWALE SECTION

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

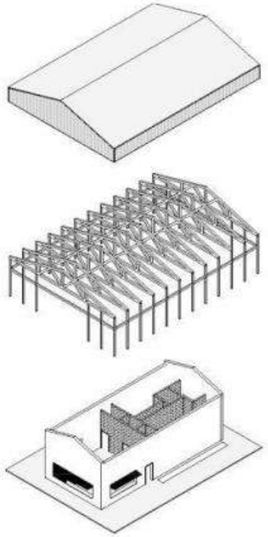
STEP-STONE PAVERS 5

CONTRASTING CONCRETE COLORS 6

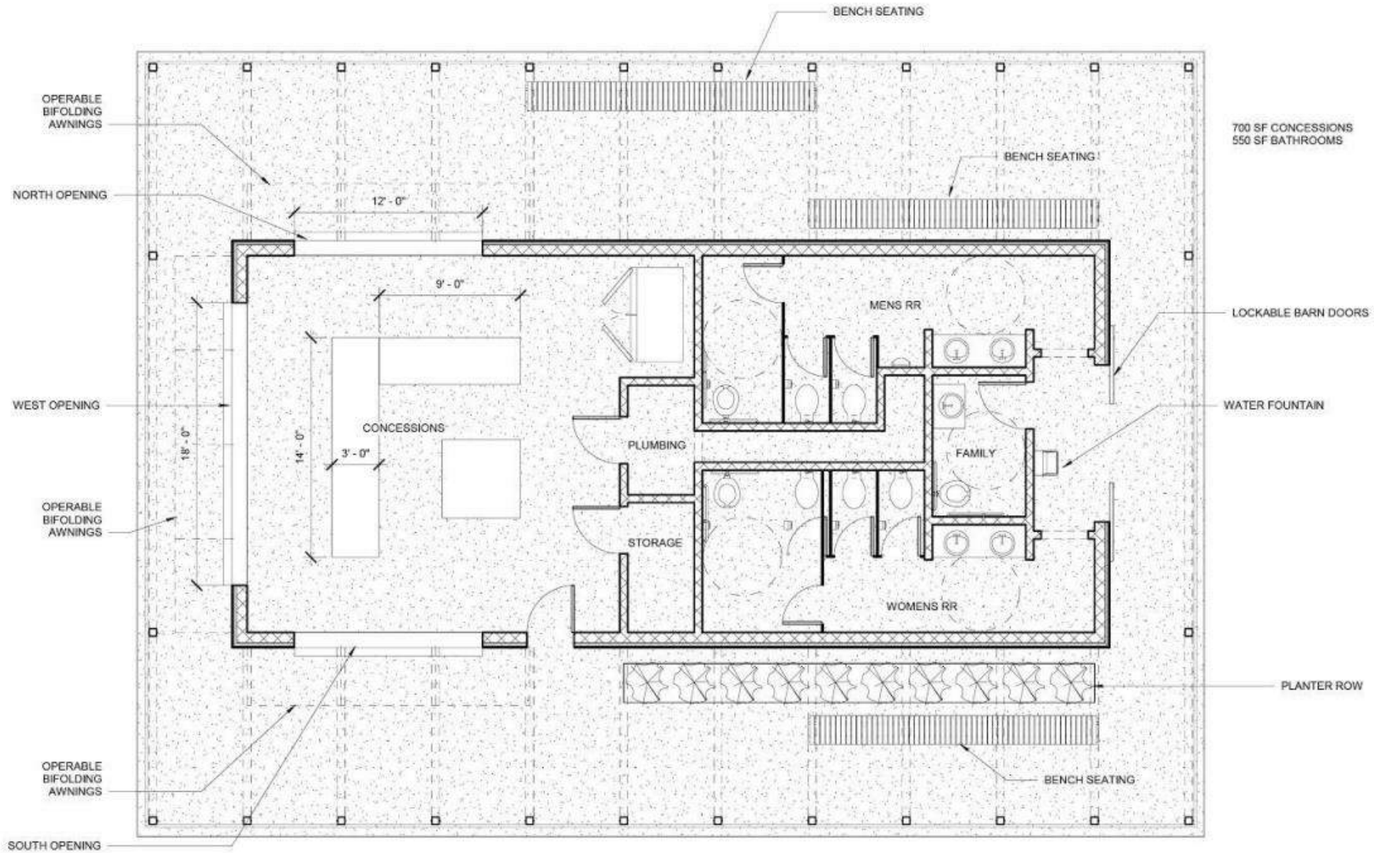
- COMPLEMENT ANGLED INTERIOR LAYOUT BY INCORPORATING FOOTPRINT INTO PATIO. DEFINE SHAPE USING COLORED CONCRETE.

FIELD HOUSE DESIGN

Light, history, shelter
and shade.



INSPIRATIONS



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

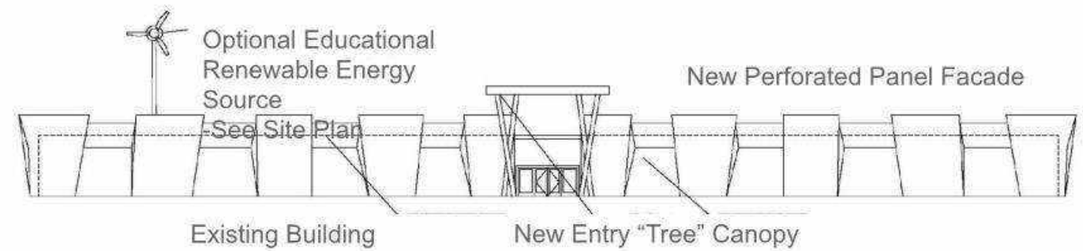
Exterior Concept A:

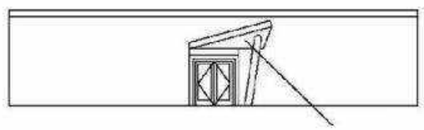
Main Entrance w New Lobby

Entrance Connection Canopy Concepts

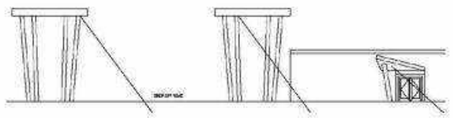
Exterior Concept B:

Exterior Detail

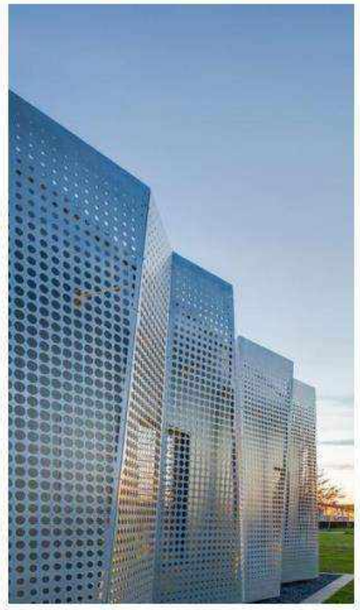




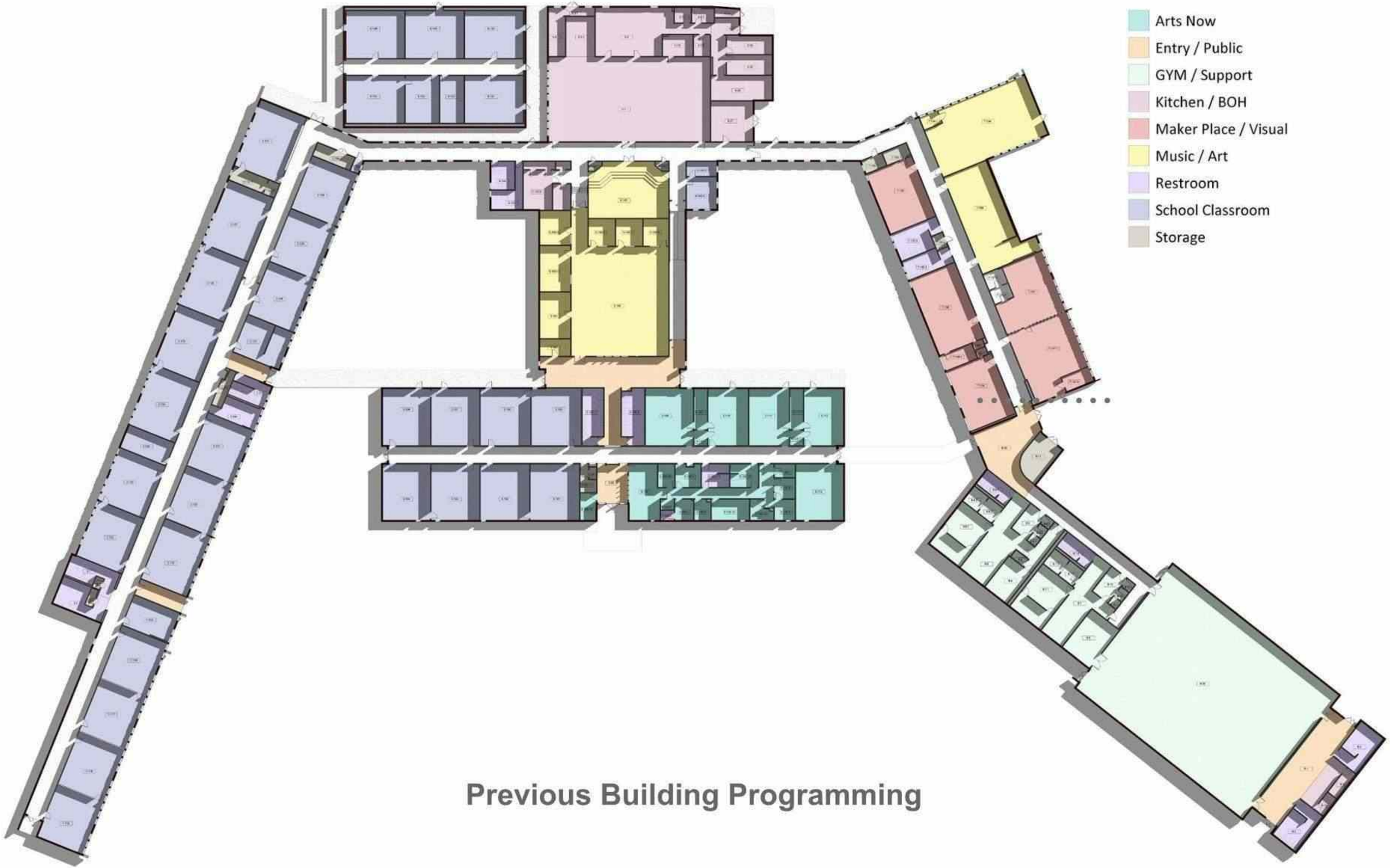
New Canopy at Side Entrance



New “Tree” Canopy and Side Entrance



Exterior Detail



Previous 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

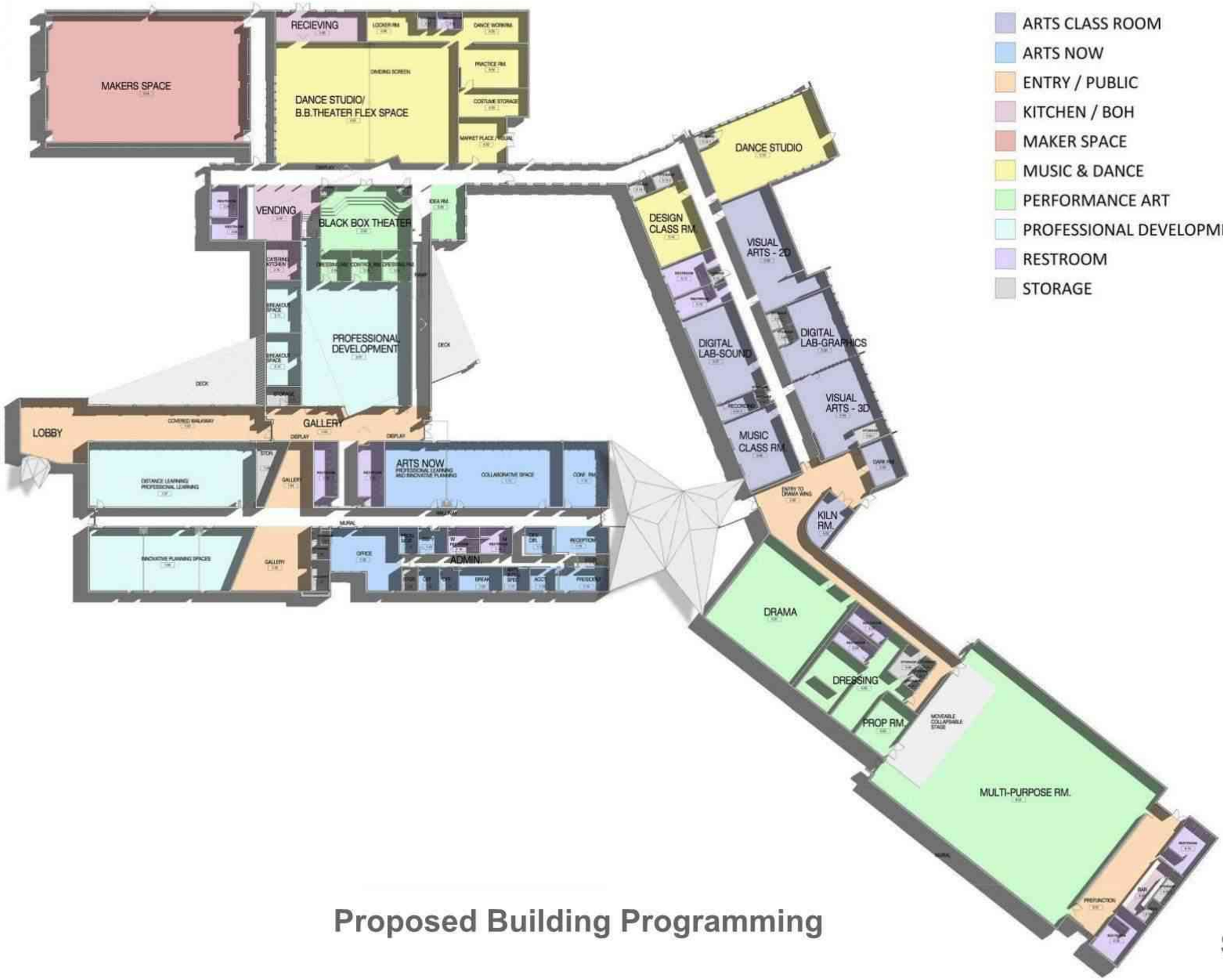
Storage		
2.131.1	Storage	125 SF
2.238	Storage	127 SF
2.24	Storage	39 SF
2.242	Jan.	83 SF
3.3	Jan.	21 SF
3.4	Jan.	31 SF
4.2.2	Storage	59 SF
4.2.4	Support	49 SF
4.2.8	Storage	154 SF
4.140.1	Storage	24 SF
4.140.2	Storage	24 SF
4.140.5	Storage	104 SF
5.201.1	Custodial	78 SF
5.201.2	Storage	21 SF
7.129	Storage	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 CLASS ROOM		
5.02	KILN RM.	280 SF
5.03	DARK RM.	266 SF
5.04	VISUAL ARTS - 3D	1,014 SF
5.05	DESIGN CLASS RM.	752 SF
5.06	DIGITAL LAB-GRAPHICS	815 SF
5.07	DIGITAL LAB-SOUND	941 SF
5.07.2	RECORDING	128 SF
5.09	VISUAL ARTS - 2D	1,192 SF
8 rooms		5,388 SF

ARTS NOW		
1.11	COLLABORATIVE SPACE	2,165 SF
1.12	CONF. RM.	536 SF
1.13	RECEPTION	265 SF
1.14	PRESIDENT	217 SF
1.15	DEV. DIR.	145 SF
1.16	ACCT.	123 SF
1.17	ARTS INTEG. SPEC.	118 SF
1.2	BREAK ROOM	189 SF
1.21	OFFICE	79 SF
1.22	OFFICE	91 SF
1.23	COPY	135 SF
1.25	PROG. MGR.	91 SF
1.26	OFFICE	694 SF
13 rooms		4,848 SF

ENTRY / PUBLIC		
1.01	LOBBY	772 SF
1.02	COVERED WALKWAY	1,186 SF
1.03	GALLERY	994 SF
1.04	GALLERY	445 SF
1.05	GALLERY	822 SF
5	ENTRY TO DRAMA WING	1,856 SF
6.07	PREFUNCTION	960 SF
7 rooms		7,035 SF

KITCHEN / BOH		
2.07	VENDING	658 SF
2.1	CATERING KITCHEN	251 SF
4.09	RECIEVING	509 SF
6.09	BAR	217 SF
4 rooms		1,635 SF

MAKER SPACE		
3.01	MAKER SPACE	4,798 SF
1 room		4,798 SF

MUSIC & DANCE		
4.01	DANCE STUDIO / B.B. THEATER FLEX SPACE	4,163 SF
4.02	MARKET PLACE / VISUAL	407 SF
4.03	COSTUME STORAGE	362 SF
4.04	PRACTICE RM.	567 SF
4.05	DANCE WORK RM.	382 SF
4.08	LOCKER RM.	370 SF
5.13	DANCE STUDIO	1,659 SF
5.14	MUSIC CLASS RM.	752 SF
8 rooms		8,662 SF

PERFORMANCE ART		
2.02	DRESSING RM.	165 SF
2.03	CONTROL RM.	173 SF
2.04	DRESSING RM.	172 SF
2.05	BLACK BOX THEATER	1,037 SF
2.06	IDEA RM.	356 SF
5.01	DRAMA	2,210 SF
6.01	MULTI-PURPOSE RM.	8,012 SF
6.02	PROP. RM.	397 SF
6.03	DRESSING	1,091 SF
9 rooms		13,613 SF

PROFESSIONAL DEVELOPMENT		
1.06	INNOVATIVE PLANNING SPACES	1,839 SF
1.07	DISTANCE LEARNING / PROFESSIONAL LEARNING	2,002 SF
2.01	PROFESSIONAL DEVELOPMENT	2,757 SF
2.11	BREAKOUT SPACE	337 SF
2.12	BREAKOUT SPACE	339 SF
5 rooms		7,274 SF

RESTROOM		
1.09	RESTROOM	278 SF
1.1	RESTROOM	294 SF
1.18	RESTROOM	154 SF
1.19	RESTROOM	151 SF
2.08	RESTROOM	156 SF
2.09	RESTROOM	193 SF
4.06	RESTROOM	75 SF
5.1	RESTRROM	217 SF
5.11	RESTROOM	292 SF
6.04	RESTROOM	161 SF
6.05	RESTROOM	153 SF
6.08	RESTROOM	288 SF
6.1	RESTROOM	288 SF
13 rooms		2,700 SF

STORAGE		
1.08	STORAGE	244 SF
1.14.1	STORAGE	66 SF
1.24	STORAGE	67 SF
1.27	SECURITY	102 SF
1.28	STORAGE	78 SF
1.28.1	STORAGE	21 SF
2.13	STORAGE	123 SF
4.07	STORAGE	59 SF
4.11.1	STORAGE	24 SF
4.11.2	STORAGE	24 SF
5.04.1	STORAGE	104 SF
5.05.1	STORAGE	19 SF
5.06.1	STORAGE	69 SF
5.06.2	STORAGE	78 SF
5.07.3	STORAGE	18 SF
5.12	STORAGE	39 SF
5.13.1	STORAGE	59 SF
5.14.1	STORAGE	69 SF
5.14.2	STORAGE	80 SF
6.06	STORAGE	142 SF
6.06.1	STORAGE	19 SF
6.06.2	STORAGE	26 SF
6.06.3	STORAGE	21 SF
6.09.1	STORAGE	53 SF
6.09.2	STORAGE	76 SF
25 rooms		1,680 SF

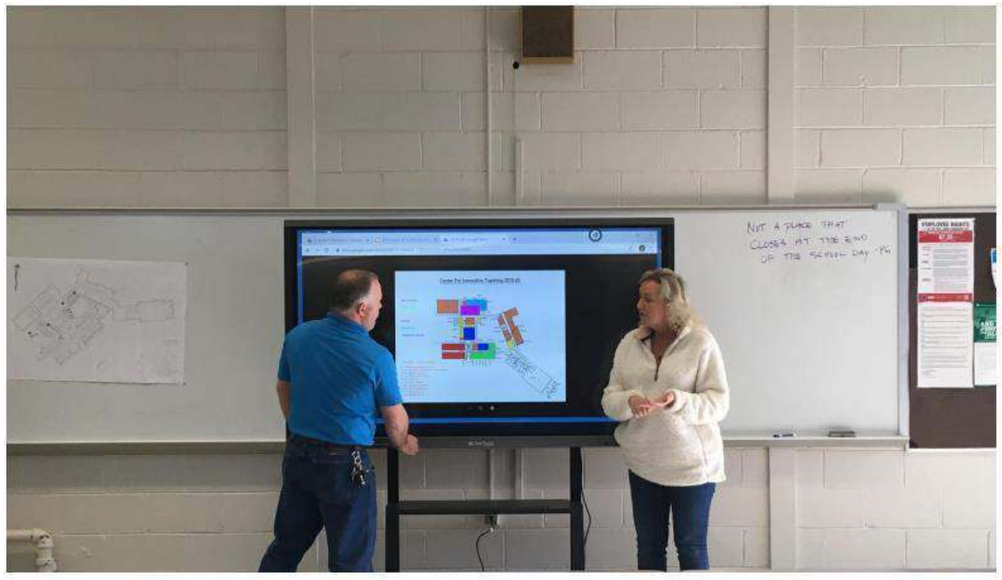
NEW FLOOR PLAN S.F. INFORMATION		
TOTAL	93 ROOMS	57,633 SF

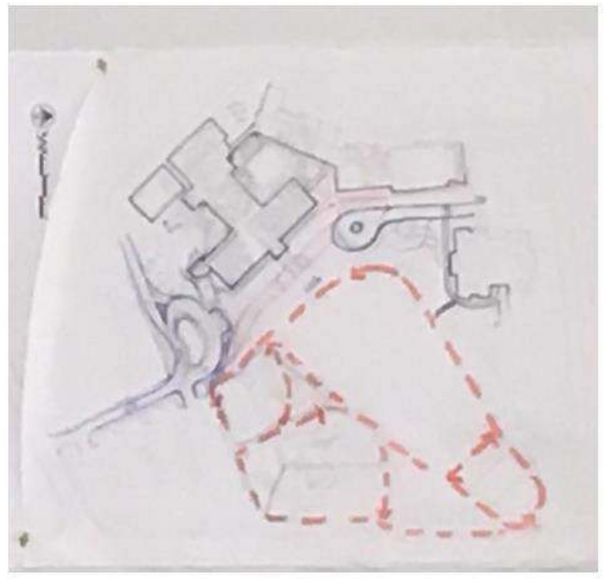
Proposed Building Programming

S.F. Information

INTERIORS


NOT A PLACE THAT
CLOSES AT THE END
OF THE SCHOOL DAY
CENTER FOR INNOVATIVE TEA
SDCA


NOT A PLACE THAT
CLOSES AT THE END
OF THE SCHOOL DAY



PROGRAM

The interior programming addresses the needs of both the Center for Innovative Teaching (CFIT) and ArtsNow. Each group have different hours and different needs. We are proposing two separate entrances, one for ArtsNow to be used during regular business hours, and a second for CFIT, which will be open in the evenings and weekends.

The interior programming for CFIT need to provide classrooms and spaces for creative learning for both students and teachers. The current programs are very popular, and there is existing need for a larger dance studio, as well as digital lab and visual arts classroom.

ArtsNow, which is currently headquartered in the building, needs both office spaces and meeting rooms for its staff. ArtsNow also host conferences and professional development activities, and need spaces that addresses these needs.

CFIT

Lobby
Gallery Spaces
Professional Development
Breakout Spaces
Catering Kitchen
Blackbox Theater
(control & dressing rooms)
Dance Theater
Makerspace
Visual Arts Classroom
Digital Lab
Music Room
Drama Space
Multipurpose Space

ArtsNow

Reception
Offices (min 5)
Breakroom/lounge
Storage
Copy room
Conference Room
Collaborative Space
Innovative Learning Spaces
Restrooms

DESIGN CONCEPT

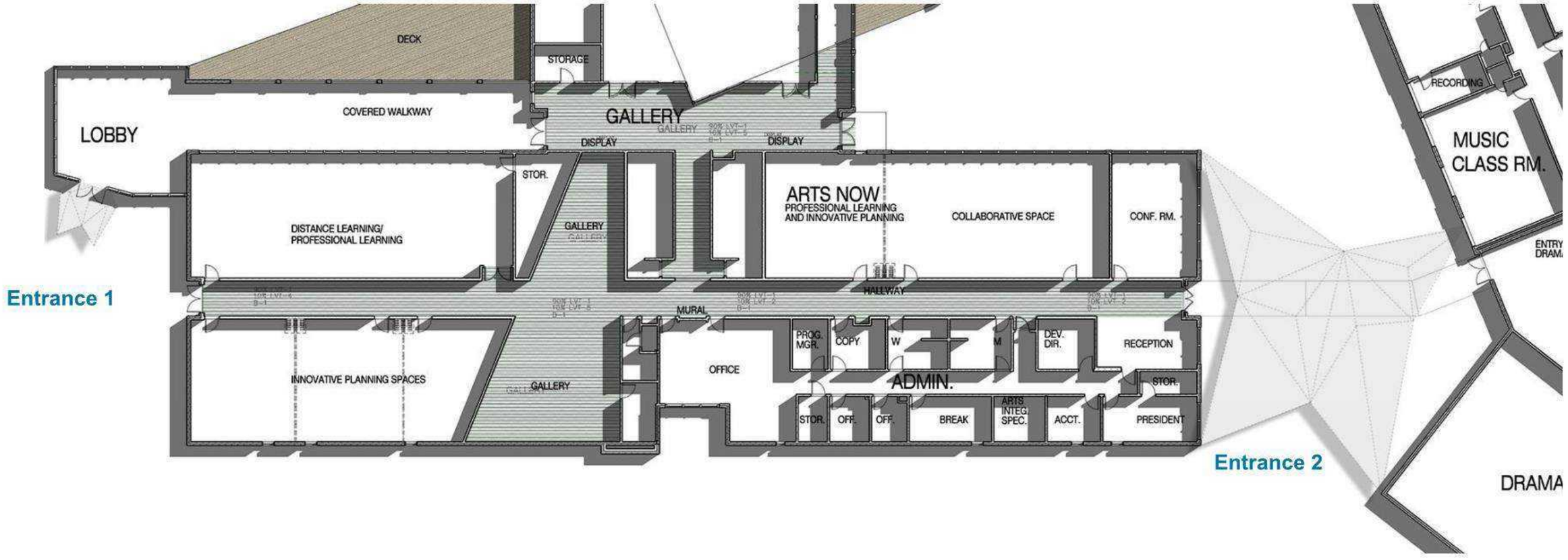
The Center for Innovative Teaching (CFIT) continues to provide a flexible, adaptable, and non-traditional environment for teachers, educators, specialists and administrators to learn and reflect upon teaching art based skills across the curriculum. It has grown into a substantial learning hub for students and the community has equally embraced the potential.

The point of departure (Parti) was generated at the entry courtyards and the desire to bring the art and the innovation to the outside and across the site. Breaking up the rigidity of the rectilinear boxes and providing focal points across the site intended to attract visitors both local and regional. The objective is an intentional bookend to the Fort Yargo state park and the magnificent downtown Winder in between

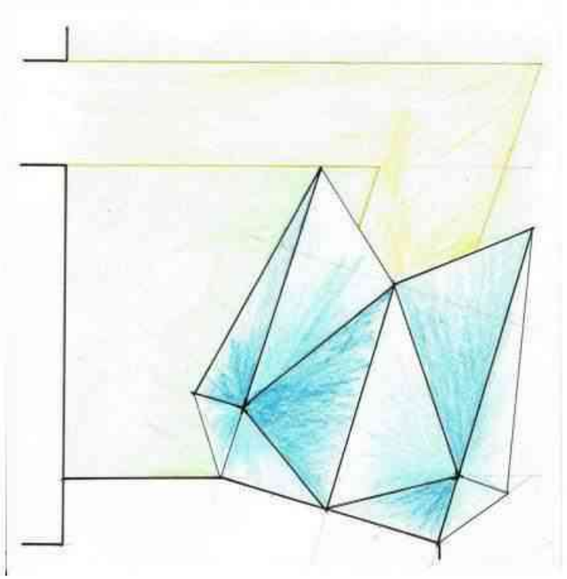
ENTRIES

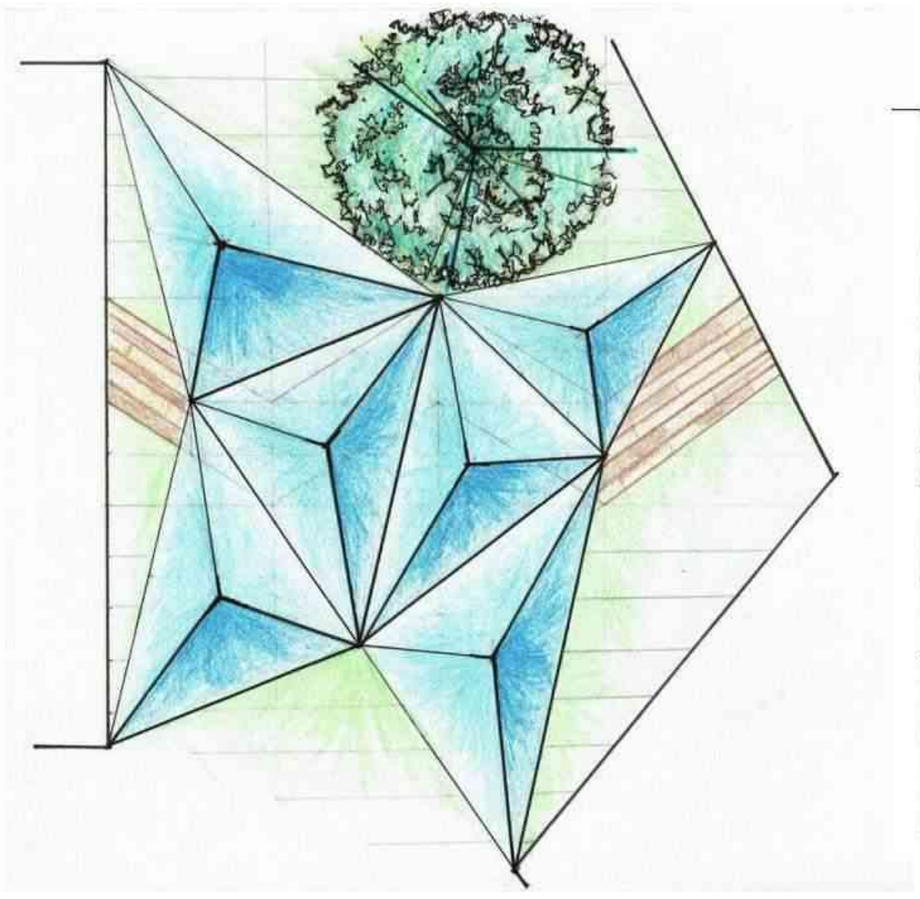
Entrance 1 leads to a lobby and long gallery space and porch. This acts as the entrance for the Center for Innovative Teaching. The center wraps around into a left wing which houses the music room, visual arts classrooms, audio labs, drama classroom, and a multipurpose room large enough for 500.

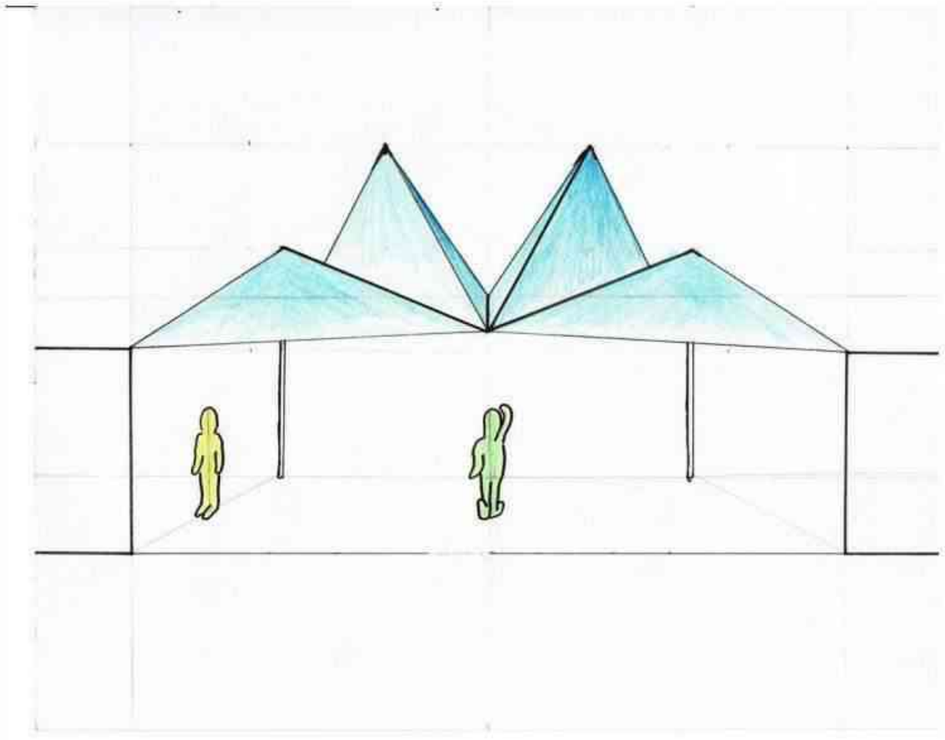
Entrance 2 leads to the central ArtsNow wing, which serves as the ArtsNow headquarters. It houses distance/ professional learning, innovative planning spaces, collaborative spaces for Arts Now and display galleries for student work. It also includes professional development with flexible spaces for meetings and discussion, a presentation room, an idea room for brainstorming with students, and a multi-functional Maker Space.



ENTRIES



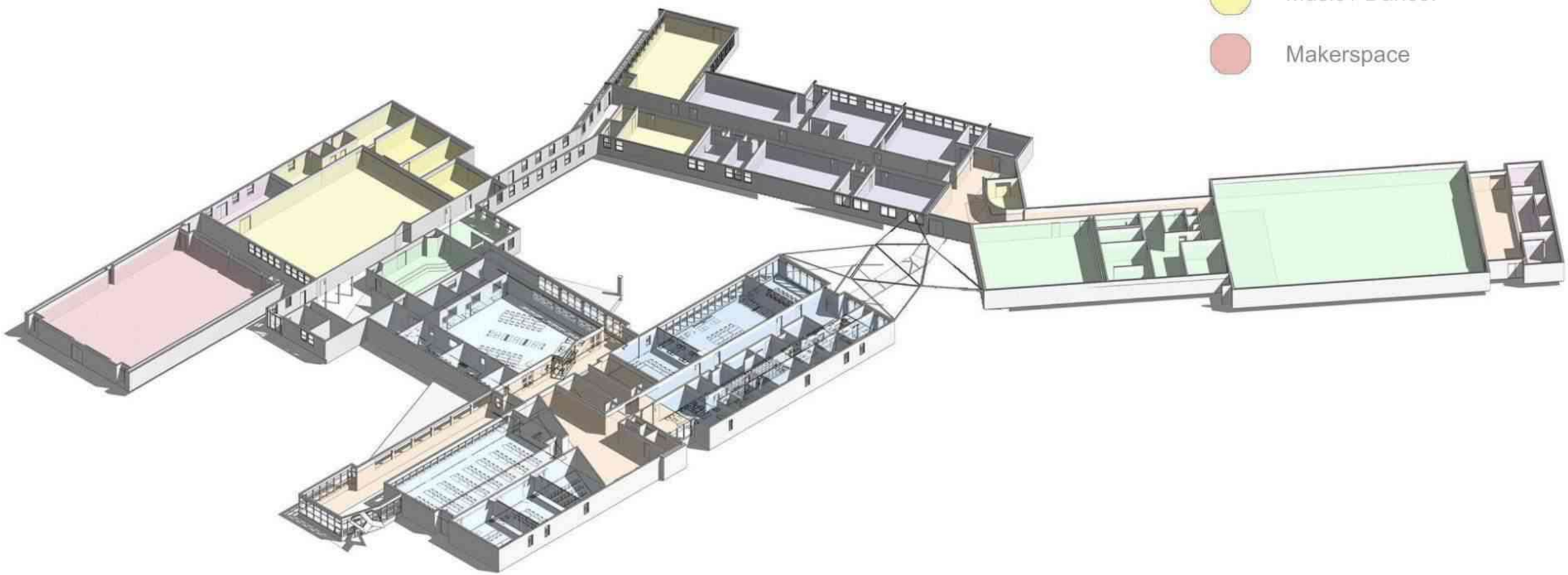




The entrance to the ArtsNow wing is a courtyard with two building entries and access to the Art Garden Courtyard. A tensile canopy and small trees provide shade and cover, while abundant seat walls address grade changes and provide structured spaces with vistas to garden plantings and artwork.

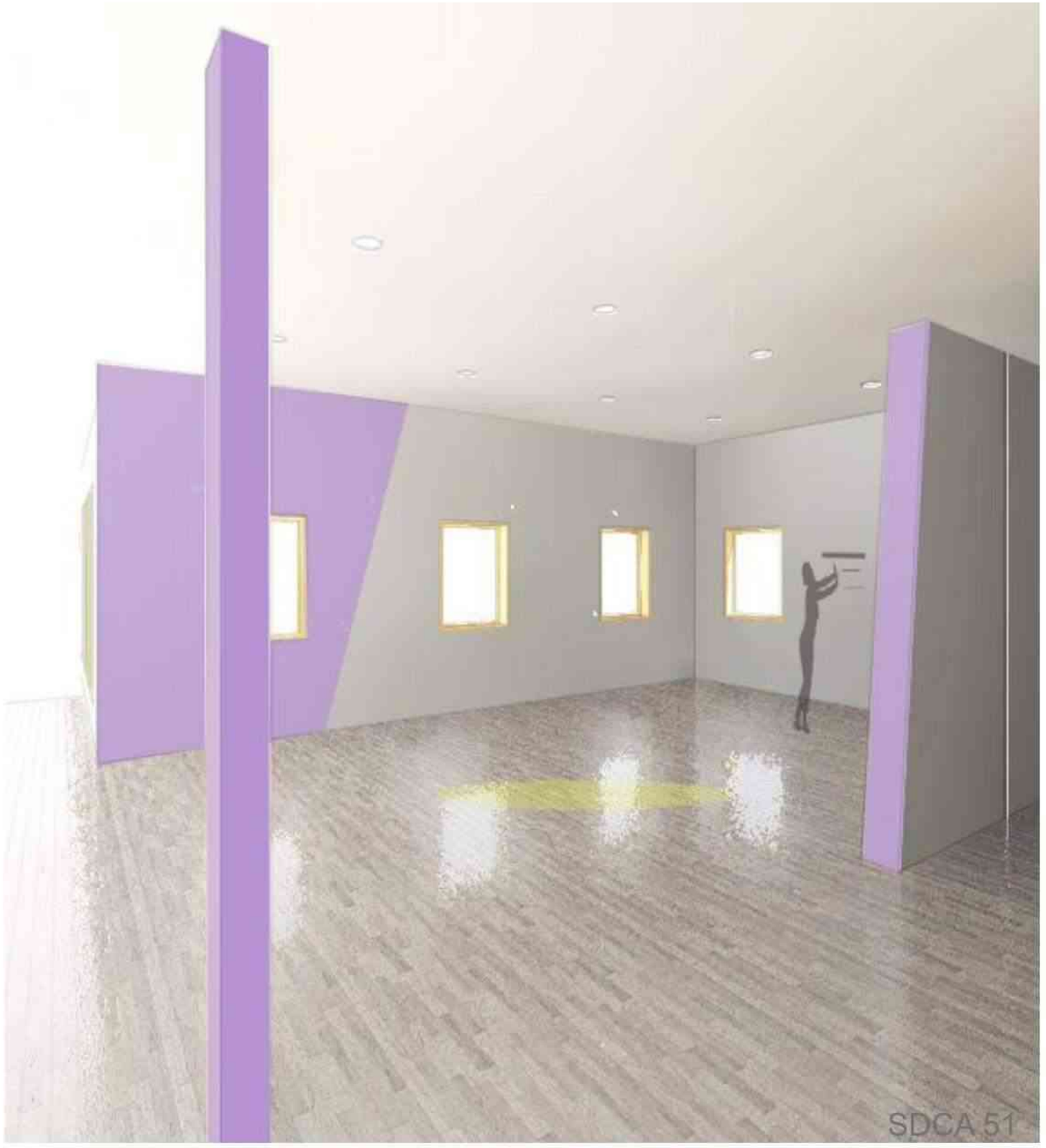
Zonal Plan - Zones are set up to provide both division and inclusion. Students and adult learners have their own entries, and the various wings are designed for unique purposes. Administration and Classrooms are seperate but interconnected, and are flexible for various users. Circulation is connective,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

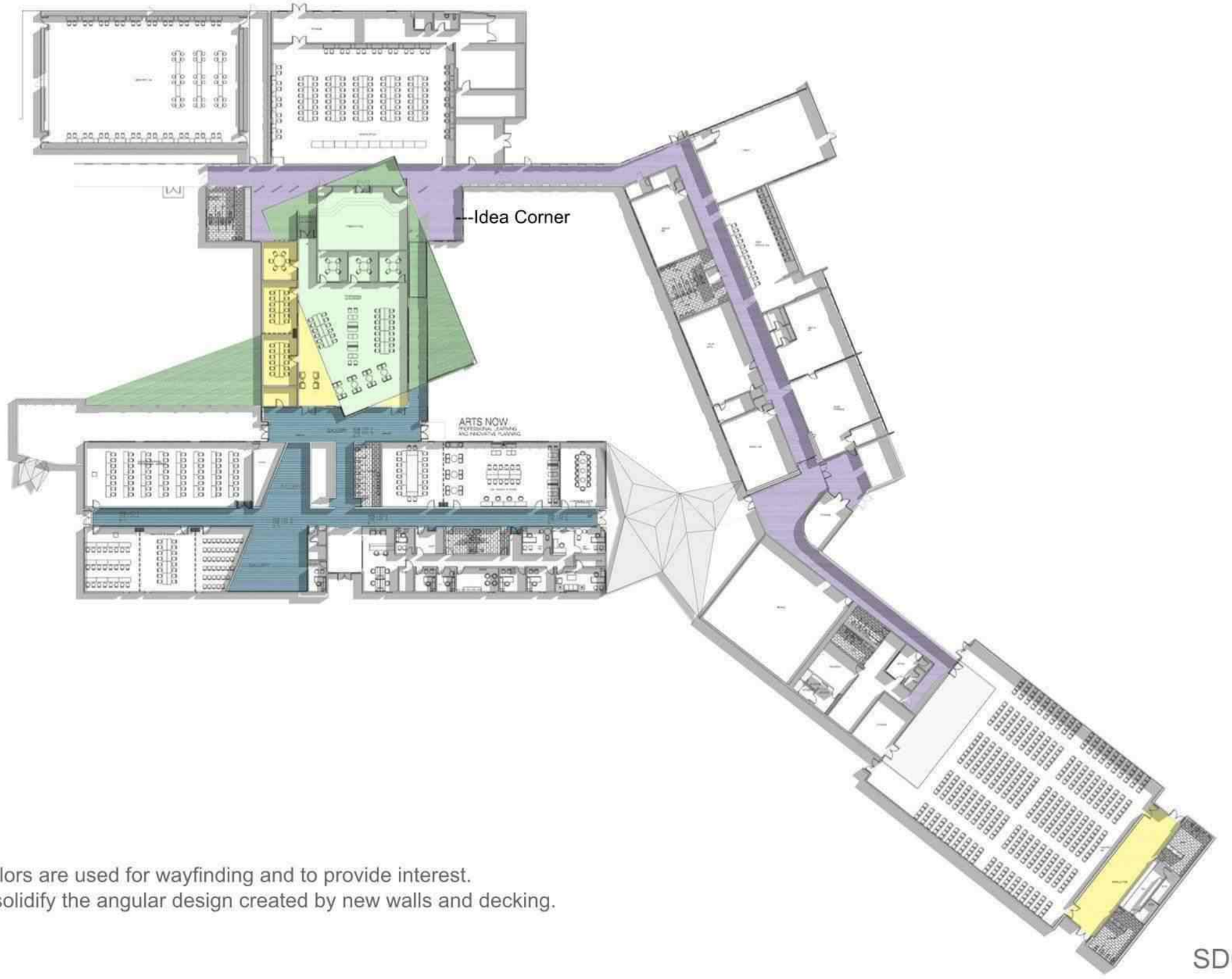
- Entry / Public
- ARTs Now Administration
- Professional Development
- Arts Now Classrooms.
- Performance Art
- Music / Dance.
- Makerspace



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.This space can also serve for presentation and critique.





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

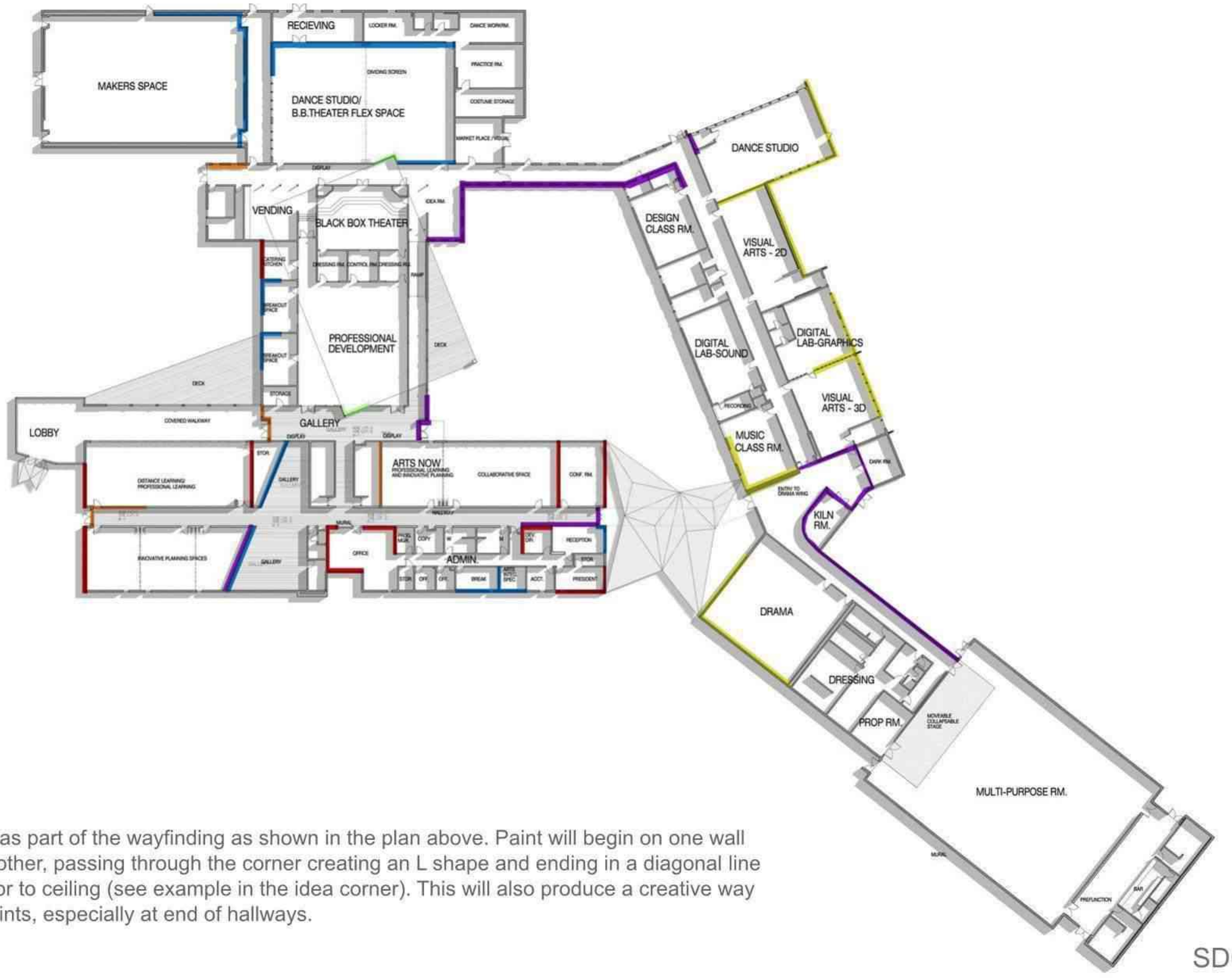
i5

i6

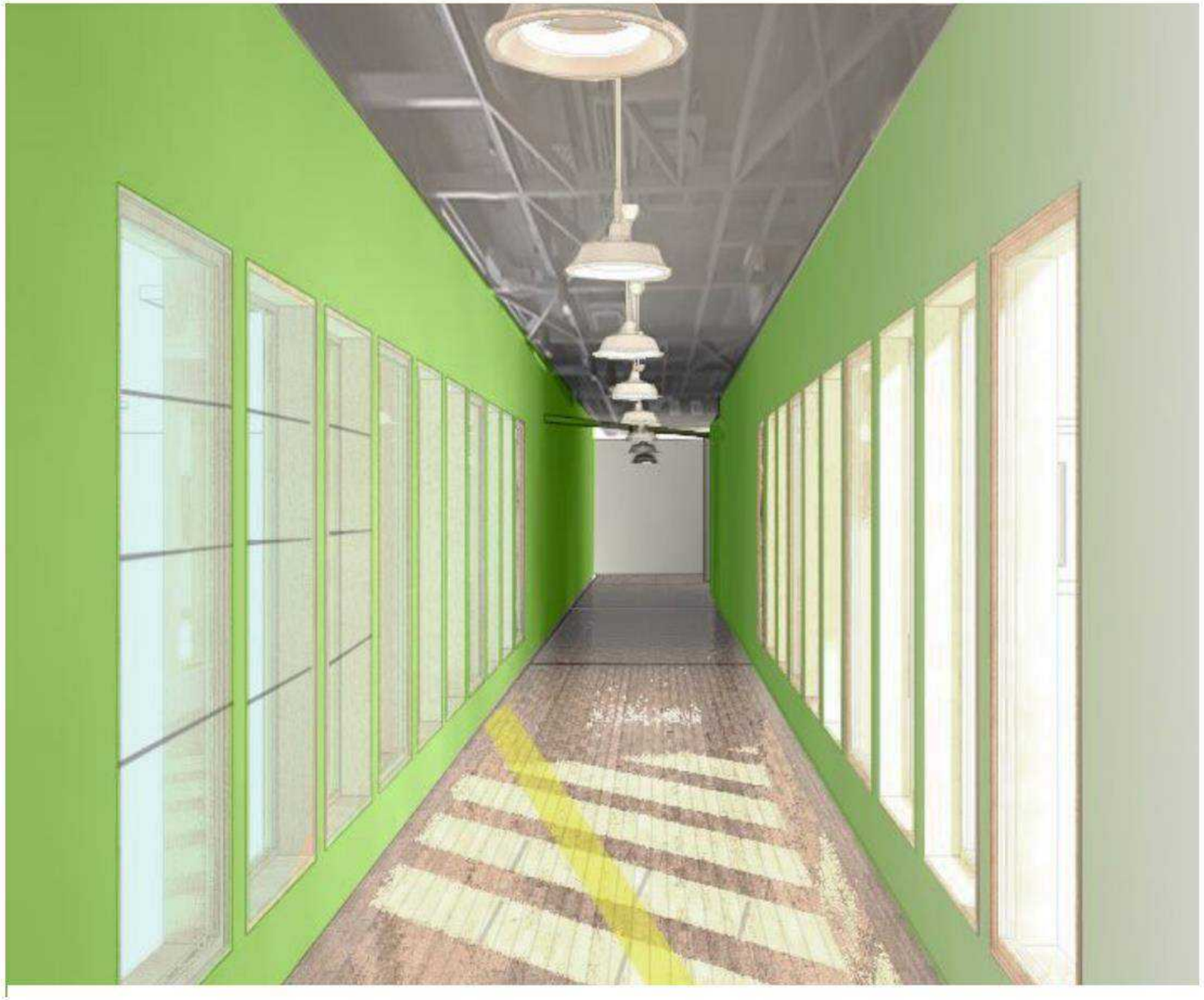
FLOORING

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.

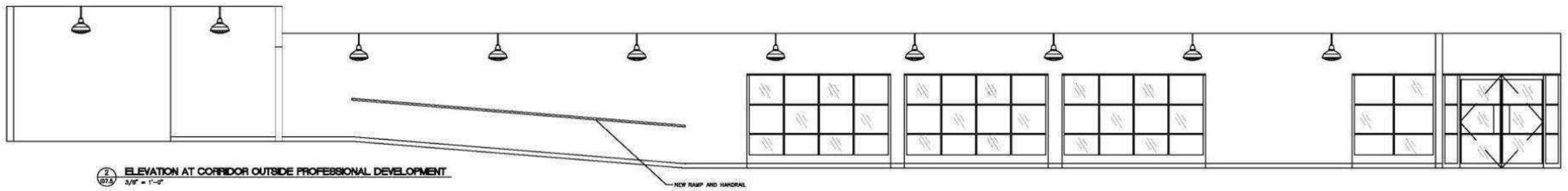


Walls will be used as part of the wayfinding as shown in the plan above. Paint will begin on one wall and extend to the other, passing through the corner creating an L shape and ending in a diagonal line extending from floor to ceiling (see example in the idea corner). This will also produce a creative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



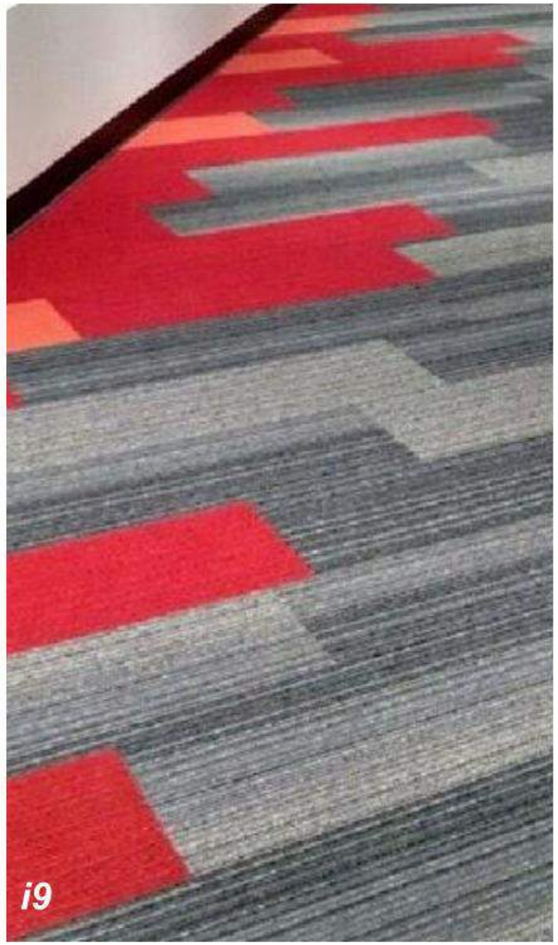
Campus Key

Directional Arrow

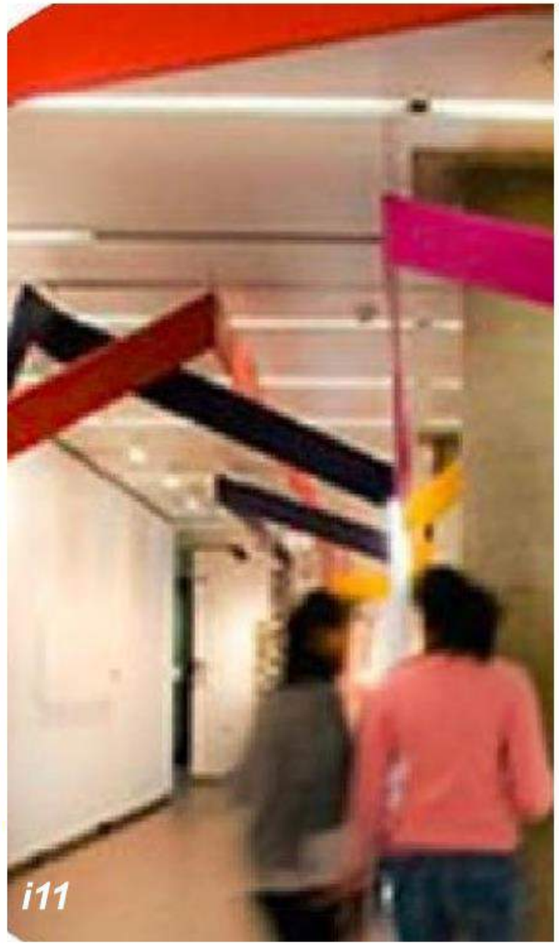
Maps of the building are going to be placed in different locations, showing the color direction, which will help define different wings and functions of the buildings. Carpet, Luxury vinyl tile, Vinyl composition tile and paint on key walls help orient the visitor to their final destination.

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

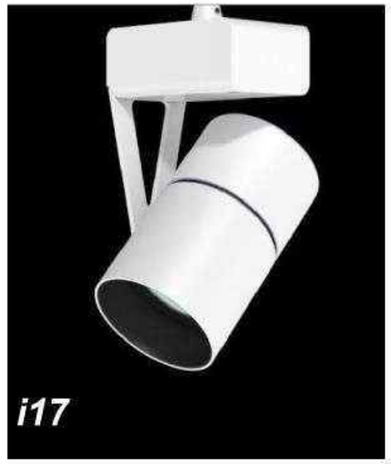
i15

i16

PD22735-WH

i13

i14



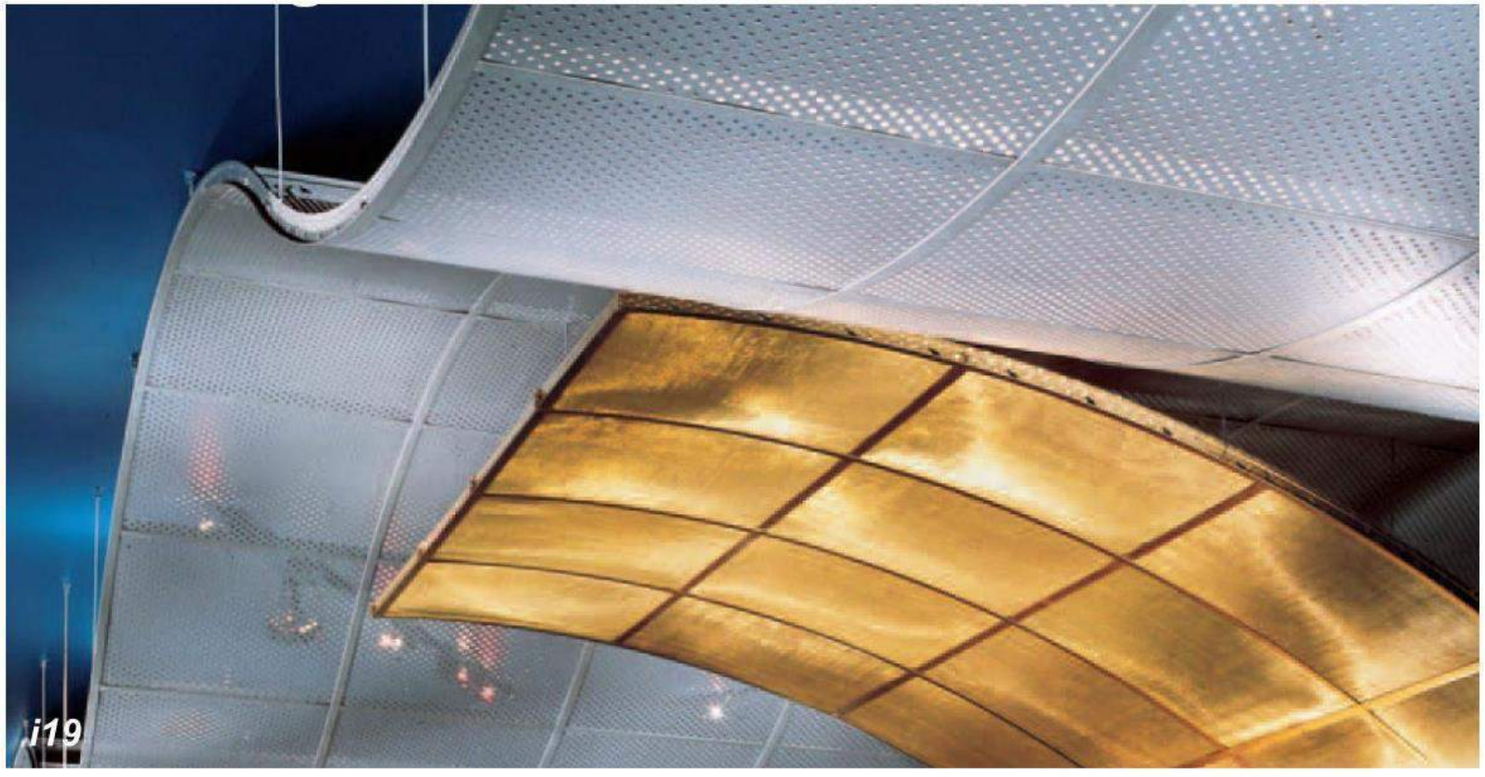
i17

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.



i19

THE CEILING

i20

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).

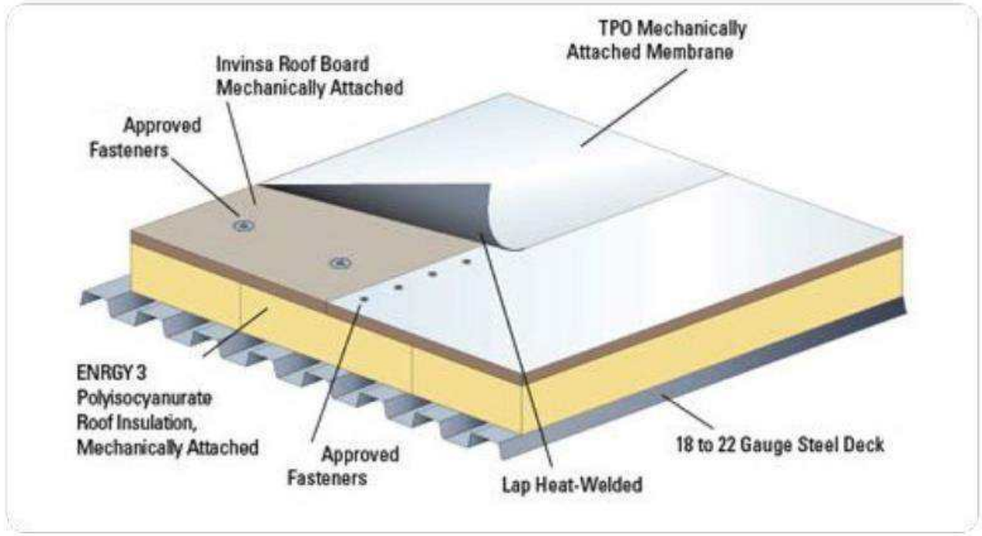
Sustainable Design Collaborative - Atlanta
Systems Review and Recommendations
Center for Innovative Teaching at Winder, GA
APRIL 2020

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.

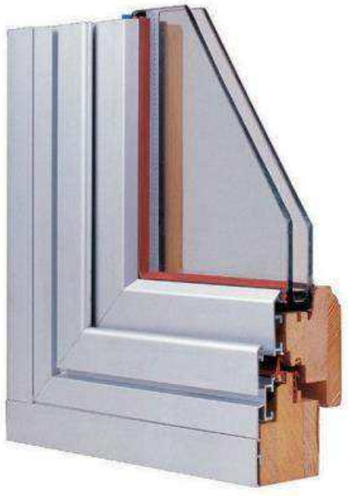


BUILDING ENVELOPE

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 more comfortable and easy to maintain. Although the existing windows are insulating glass in aluminum frames, they are old and not in great condition and are not as energy efficient as current ones. The windows and exterior doors should all be replaced with new, energy efficient glazing systems. A thermally broken, aluminum clad wood type system with insulating glass and low-e coatings would be appropriate for this building. They could be operable, with measures to limit child accessibility, or not.

The exterior brick seems to be in pretty good condition, but there were a few areas where penetrations for HVAC piping were not properly sealed and some deterioration of the brick joints has occurred. It is recommended to patch and seal any deteriorated joints and openings.



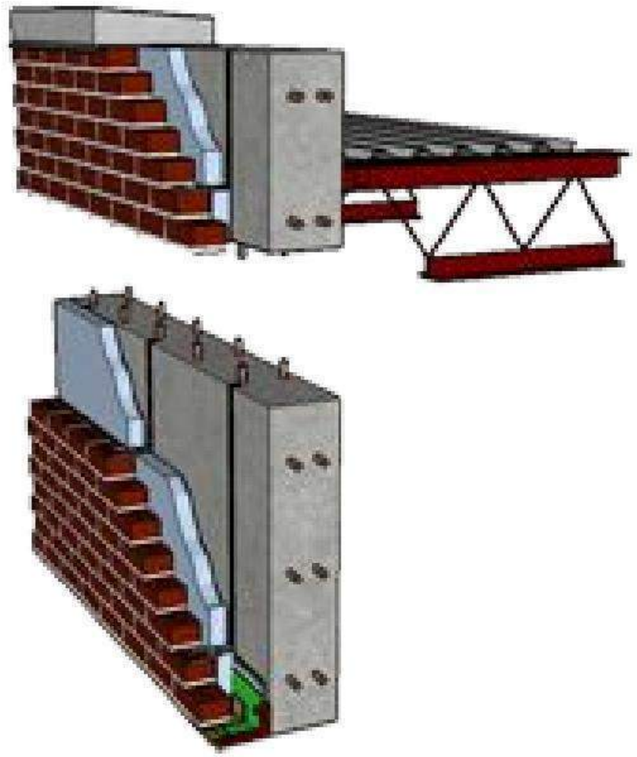
New aluminum clad wood window section

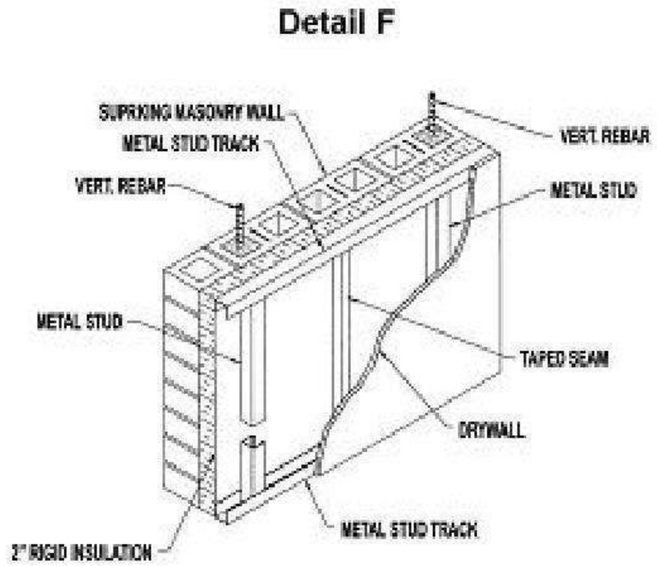
Existing windows showing condensation

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

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

VRF System and Components

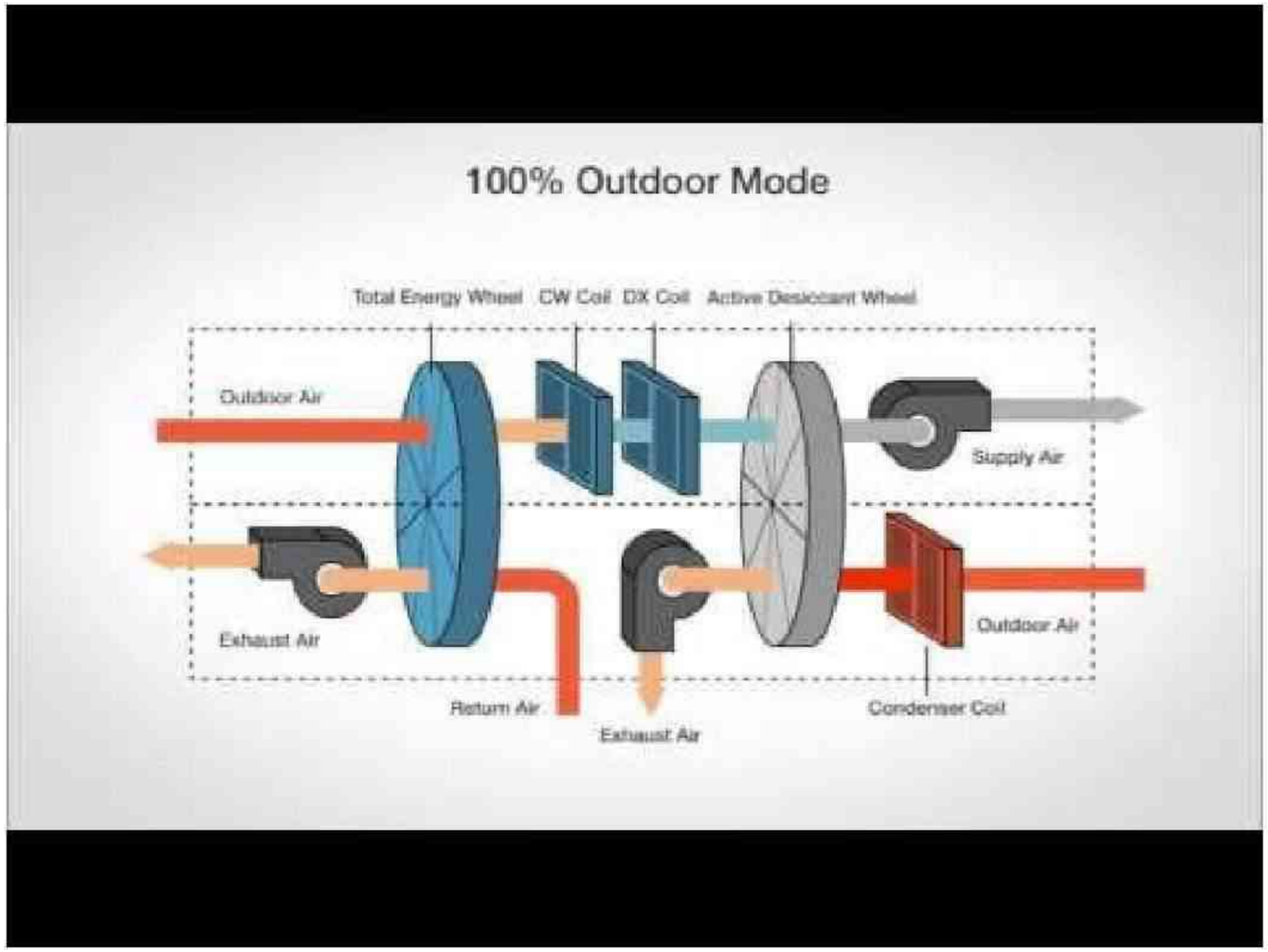
Mechanical Systems

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.

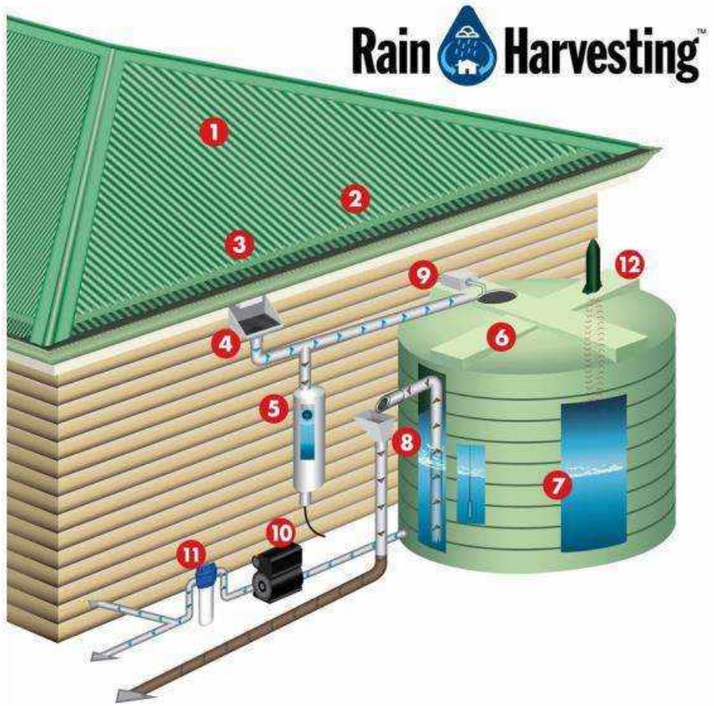
VRF works on the same principle that most of our single family residences use. We are all familiar with the split systems that have that noisy condensing unit with the big rotating fan sitting outside which is linked to that indoor air handling unit that sits in our attic, basement or closet somewhere 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.

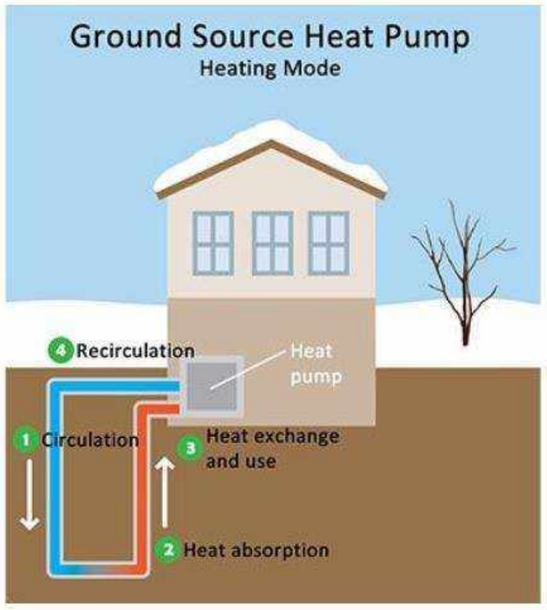
The VRF system should work very well for all of the smaller classrooms, labs, offices and production spaces. These systems will require separate outside air systems to introduce conditioned fresh air to the rooms. These will be centralized and fresh air ducted to the spaces through the ceiling plenums.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

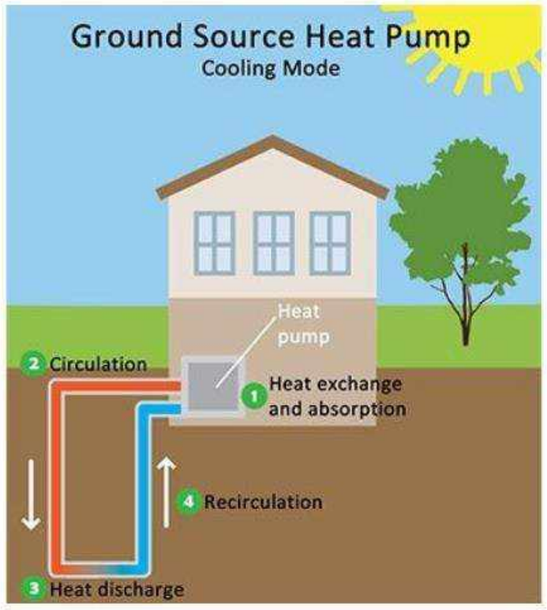
It has been noted that the existing steel bar joist roof members may not be large enough to support roof mounted HVAC equipment. There are many rooftop units existing, but the new equipment may be concentrated and thus larger than the existing. If this is the case, then the equipment can be mounted on 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





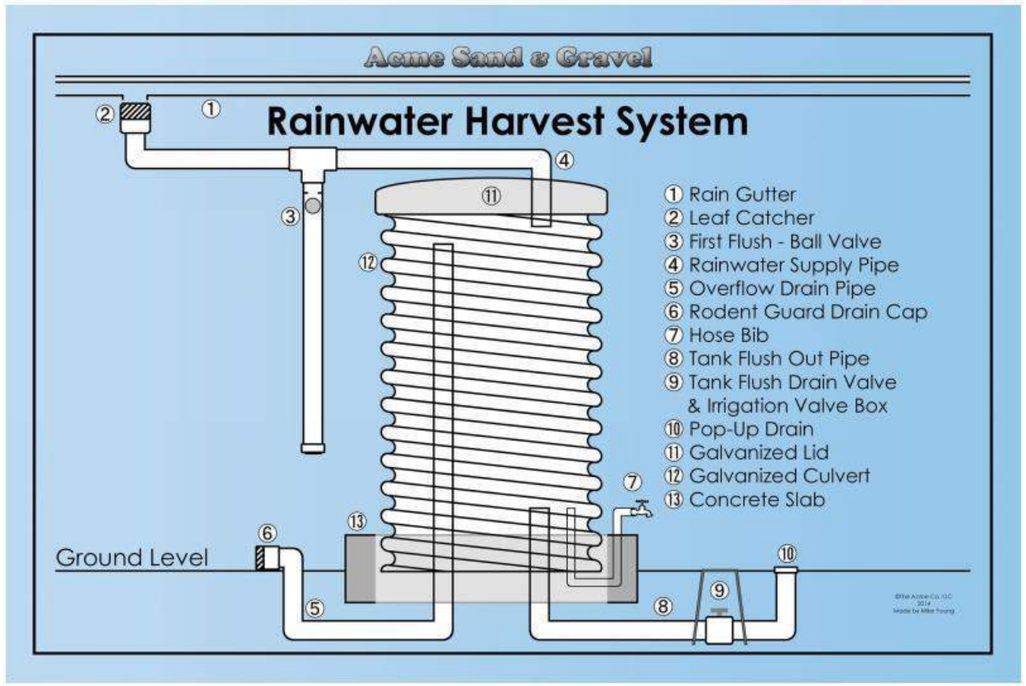


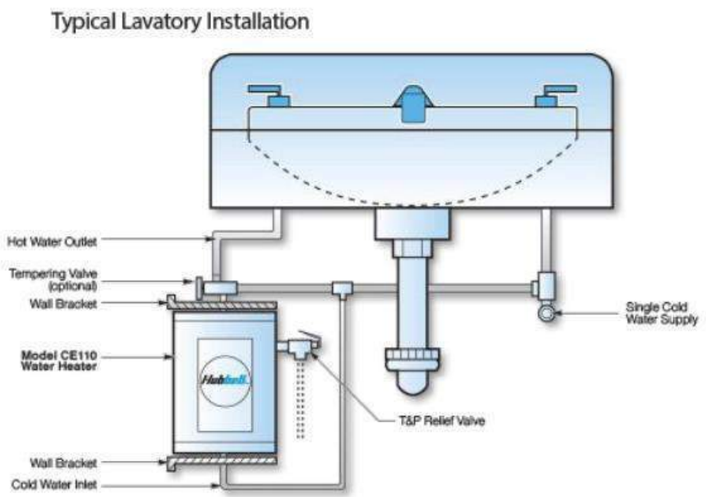
This building will have the best opportunity to achieve energy and water efficiencies. In fact, we recommend that we strive for a net zero building, meaning that the building will produce as much energy and collect as much water as it will use.

The envelope will be critical in this goal. Whatever the building design becomes, the skin will need to be highly energy efficient.

The same with HVAC. We recommend exploring using a geothermal well system to provide heating and cooling energy for this new building. This would be coupled with a water source heat pump system or a VRF system to heat and cool the building.

All plumbing fixtures and faucets would be very low flow and water saving. The debate continues on waterless urinals, but we believe a one-pint flush urinal is a good solution. The roof should be designed to be able to collect rainwater and store it for re-use in the building. It would need special filtering and treatment to be able to use for drinking water, so that may be a compromise in this goal.





Plumbing Systems

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.

Security is also a major component and needs to be designed and incorporated with any renovations. Will a paging system be needed?
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. These various IT requirements will affect the cooling needs for the HVAC systems as well.

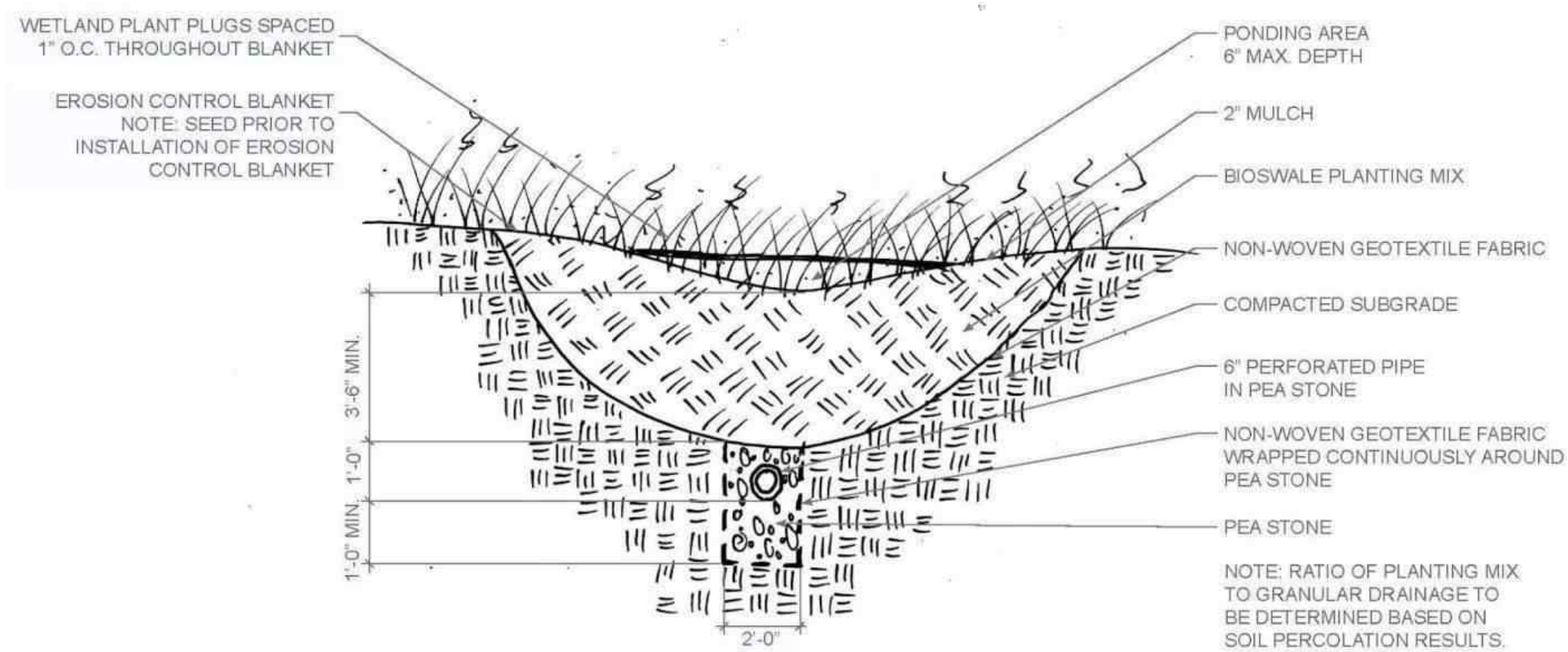
Access Control

The existing facility has plenty of oppertunity for access control systems. There are multiple solutins that could be implemented and supported to make this both serviceable and code compliant. We believe this work is in progress and should be considered for current deficiencies.

There are many opportunities with the rear gardens to improve the sustainability of the facility. Our landscape group has a good handle on this (See Landscape).

Rain gardens and bioswales located strategically through the gardens will reduce the runoff and improve ground infiltration.

Rainwater storage areas can be used for irrigation in conjunction with any water salvaged from the Annex.
Community gardens for vegetables will be incorporated into the layouts.
Shaded areas will be designed and enhanced for natural cooling and ventilation.



Lastly, there could also be some possibilities for ground mounted photovoltaic solar panels. These could double as shading devices, especially over any open parking areas.

BIOPHILIC DESIGN

BIOPHILIC DESIGN:

How We Used the Wellbeing Science of Nature and Captured the Love of Life in Your Project

Our process utilized many research-driven approaches such as environmental psychology and wayfinding to support your goals, the learning success of your collaborators and the overall wellbeing of everyone in your space.

One of the bodies of research used was the field of Biophilia-specifically Biophilic Design. Literally translated, Biophlia means the Love of Life.

Biophilic design can be described as the healing science of nature. Imagine how you feel when you are in nature. Biophilic design seeks to pull that experience - that sense of intrigue, wonder and awe - into the spaces where we spend our lives.

Integrating biophilia as a design driver for a project's site, building and interior design has been shown to reduce stress, increase learning and productivity rates, reduce time it takes to heal from surgery, and support the growth of our overall wellbeing.

When we are in spaces that inspire us - we know it. We feel it. Biophilic design is the research-driven science of how to pull the healing aspects of nature into our everyday spaces.

The field of biophilia goes far beyond plants, expanding into over 73 attributes. The goal is not to integrate all 73 of course. The goal instead, is to identify the essence of this projects' sense of place and align this with the project goals for organizational success. This is done best through a collaborative and integrative process involving key project stakeholders throughout the design process-like the one used for this project.

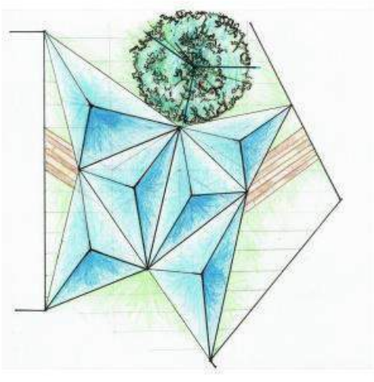
Your organization is doing such inspiring work. Below are some of the many ways we incorporated the healing benefits of the essence of nature throughout your site, building and interior to support your goals and overall quality of life.

- Site plan that encourages a sense of play, creativity and wonder designed to inspire people to linger and explore in nature individually as well as in groups.
- Strong indoor-outdoor connection through elements such windows providing optimal views from occupied spaces.
- Integration of natural materials throughout the site, building and interior.
- Sustainability strategies integrated throughout to reduce energy and water use which educates us on the importance of caring for our environment.
- Hands-on learning opportunities such as edible portions of the site landscaping. This allows the opportunity to integrate the site into course curriculum. This can help highlight the growth cycle of life and care taking to connect students with nature-driven concepts and an ecosystem larger than themselves.

If you have any questions on the integration of biophilia, its benefits and project or course-curriculum integration approaches please contact Bonnie Casamassima at bonnie@InterweavePeoplePlace.com or 404.953.9037. I'm happy to speak to your class or share a lunch and learn conversation.

.

BIOPHILIC DESIGN INTEGRATION



SUSTAINABILITY

Sustainability Outline

Professional and Construction Considerations

Site Considerations

Building System Specifications

Indoor Environmental Quality Considerations

INTRODUCTION

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 integrated approach has been taken with the design of the overall project.

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 your expressed needs and goals.

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

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

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

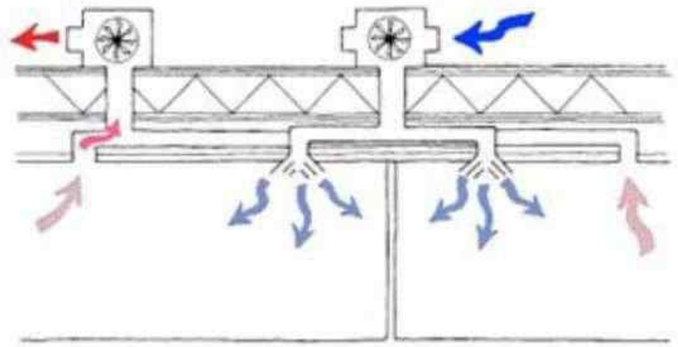
Minimum Indoor Air Quality Performance

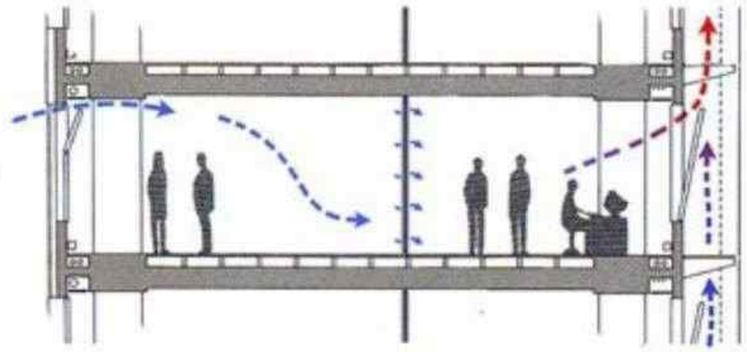
Ensure the final design of the building has suitable air quality for resident wellbeing.

- 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

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

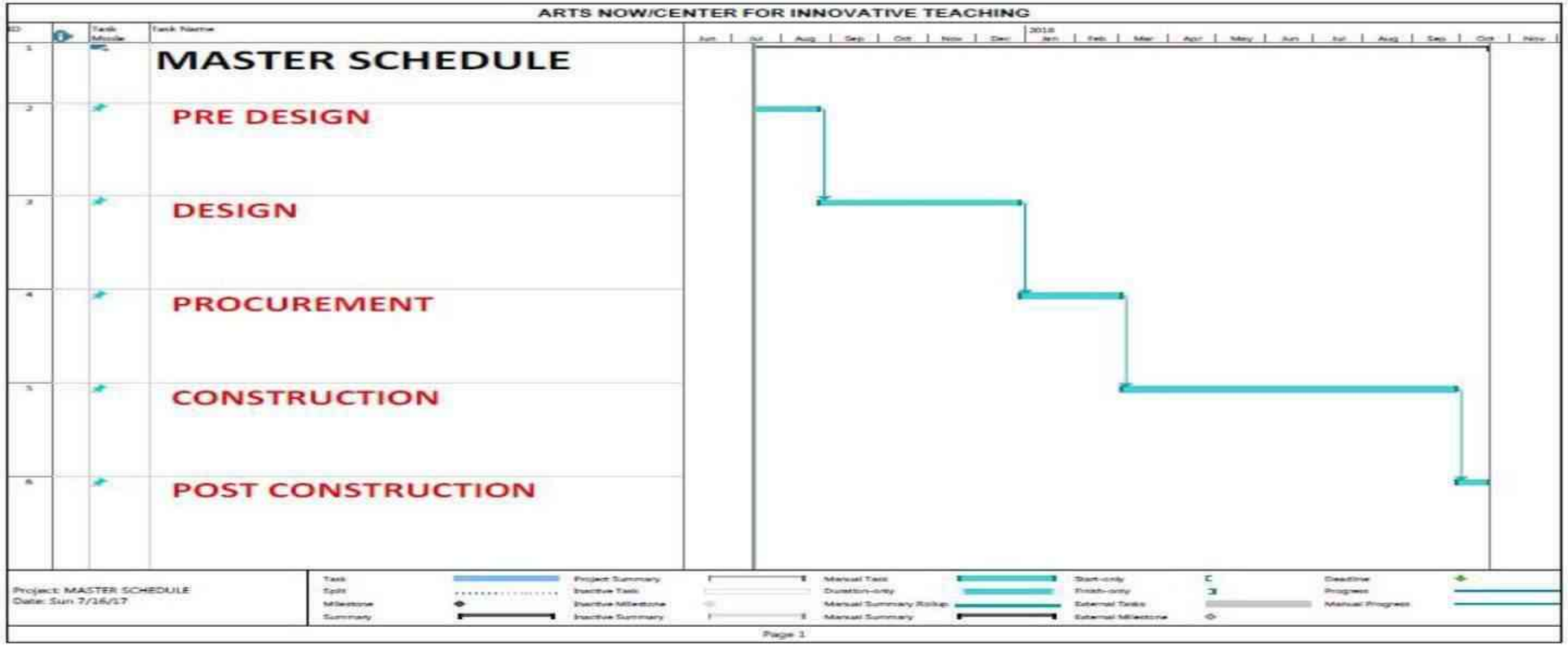
Why Project Controls?

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).”

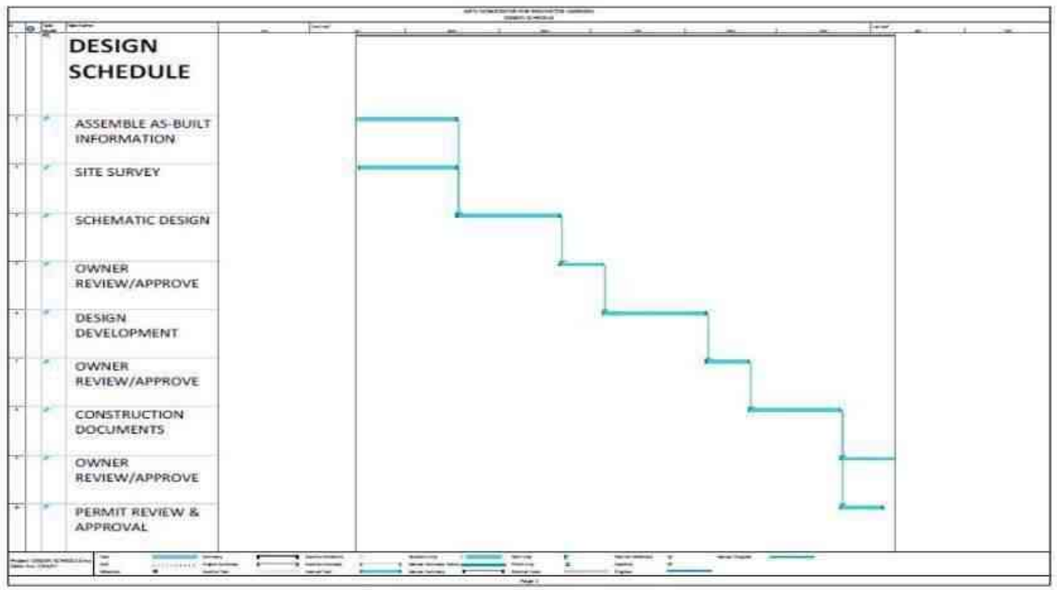
IN AN EFFORT TO INSURE THAT A PROJECT IS COMPLETED WITHOUT MAJOR DEVIATIONS,
SCHEDULES ARE REQUIRED TO ANSWER THE ***WHEN*** QUESTION.

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.



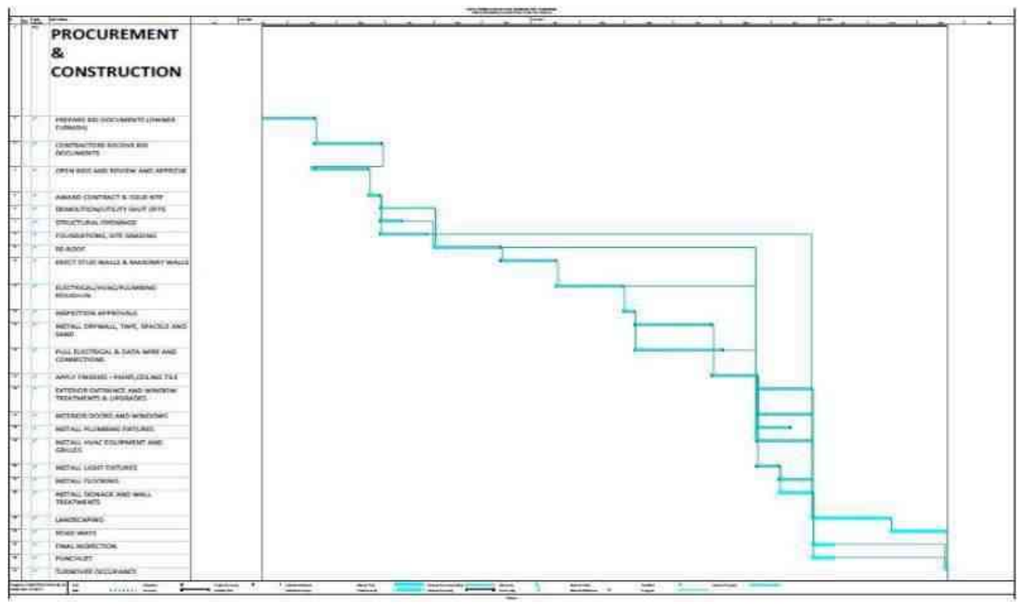
DESIGN SCHEDULE

- 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



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.

BUDGET

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.

CONCLUSION

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 the 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 revisioning of the Center for Innovative Teaching (CFIT).

This has been the tenth 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 the Barrow Community Foundation, 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 exterior site and interior 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 as well as the community at large..

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 Community Foundation, Barrow County Schools 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 project will be under construction very soon.

Liset Arza Robinson, Executive Director SDCA

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

Brian Betz

Catina Anderson

Dyesha Holmes

Eloisa de Leon

Emilio Etchegoyen

Hannah Waits

Joanna Frauca

Juhha Jang

Robert Huber

Stephen Busch

Yazoan Navabi

Barrow Community Foundation

Beth McIntyre

Debi Krause

Doug Mitchell

LeAnne Akin

Lynn Stevens

Maddison Dean

Phillip Gossling

ARTsNow Leadership and Board

Carol McGrevin

Crystal Collins

Pam Walker

Shawn Williams

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

Chris Morphis

Delaram Tafreshian

George Harkness

Liset Robinson

Ian Hunter

Reed Thomas

Taejun Park

Xin Wang

THANK YOU

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

PROJECT DISCLAIMER

Sustainable Design Collaborative Atlanta_ Vision Project _ 2020

SDCA
Sustainable Design Collaborative Atlanta