



HOUSTON CHINESE CHURCH

MASTER PLAN



10305 S Main St, Houston, TX 77025

4-27-21



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Site Analysis:







Existing Site Aerial Rendering & Existing Conditions
Existing First & Second Area Usage Analysis
First & Second As-builts Floor Plan











EXISTING SITE AERIAL RENDERING AND EXISTING CONDITIONS

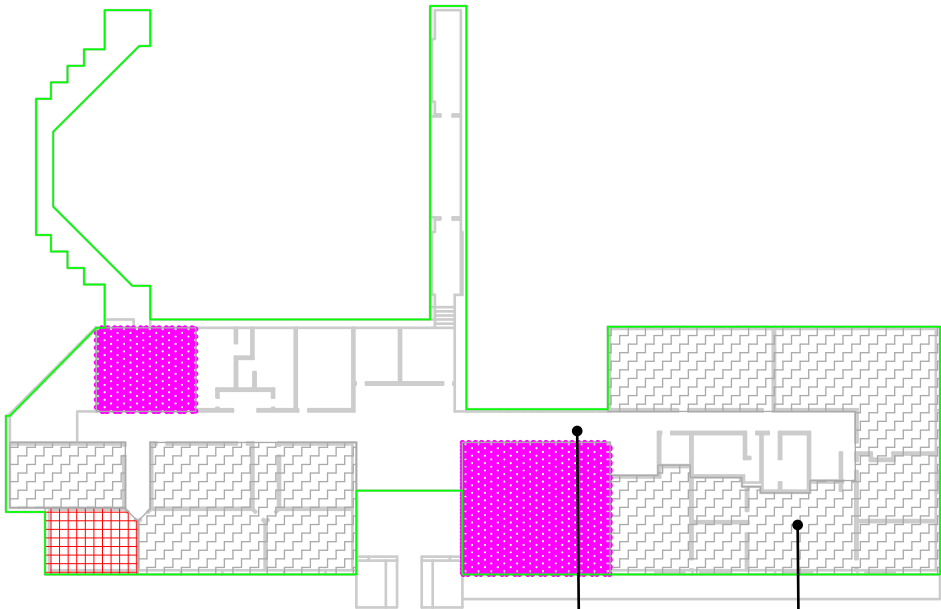
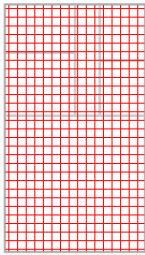
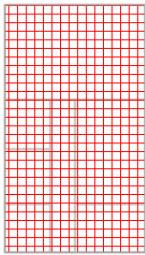
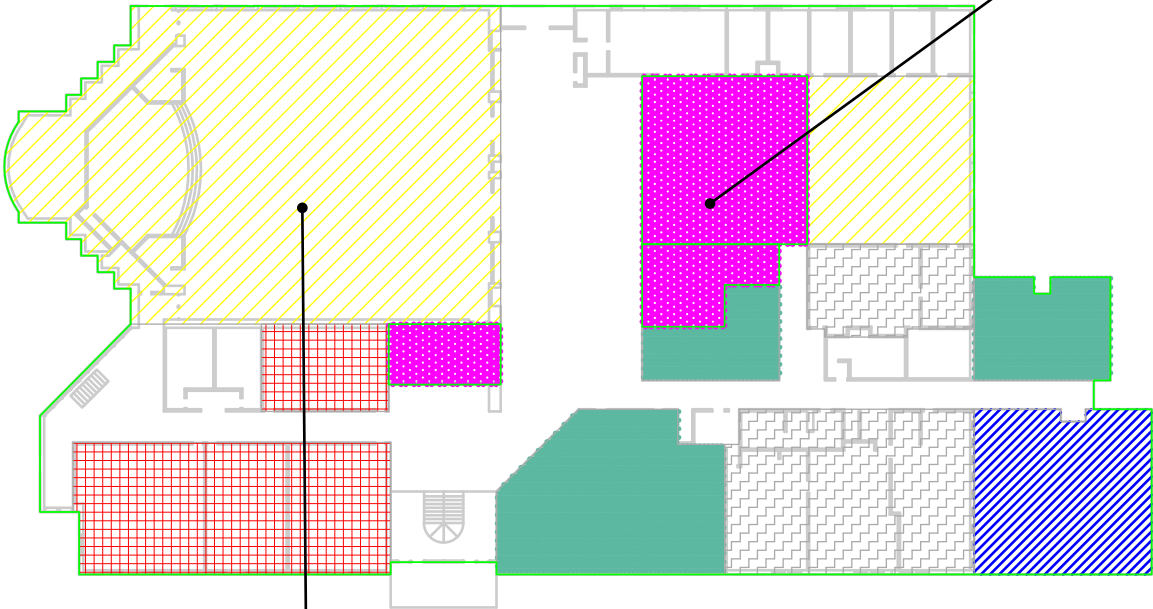
EXISTING FIRST FLOOR PLAN
AREA USAGE ANALYSIS

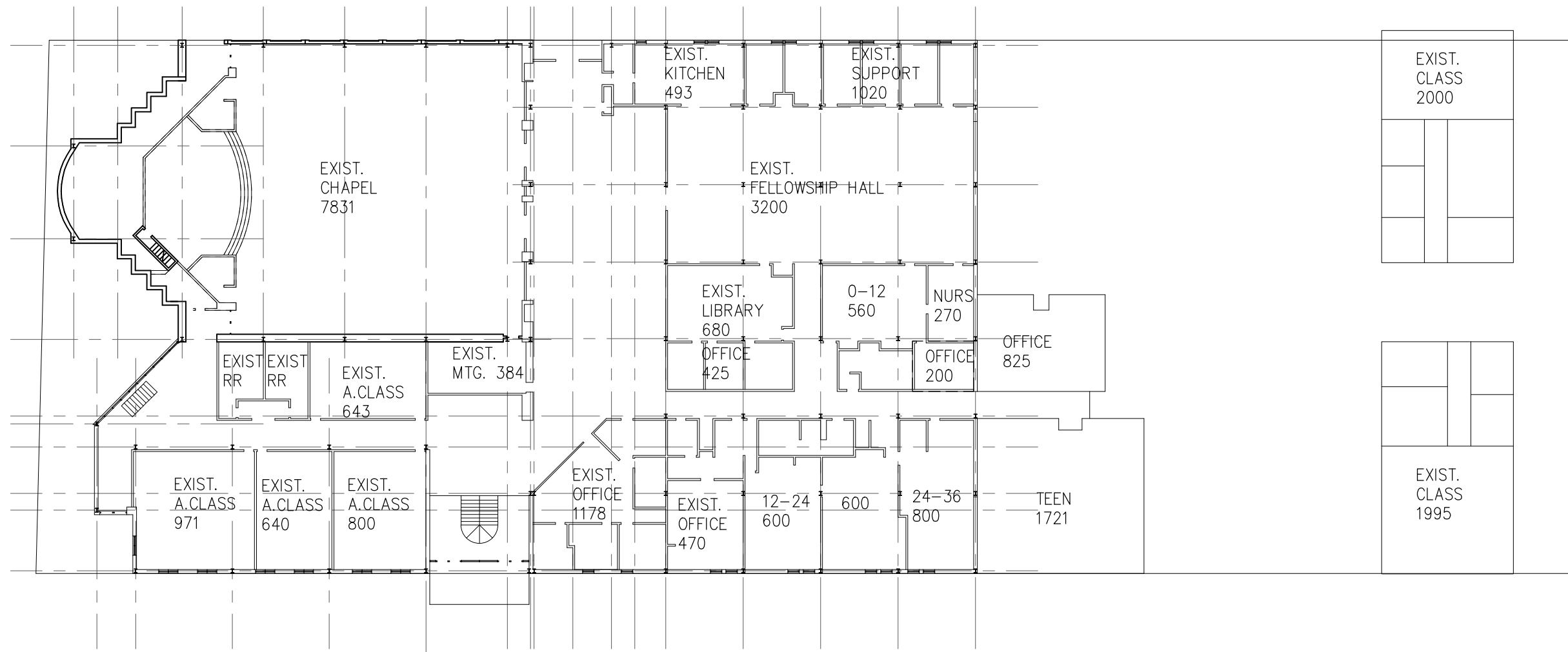
	CHILDREN SUNDAY SCHOOL USAGE	3262 SF
	YOUTH SUNDAY SCHOOL USAGE	1703 SF
	WORSHIP USAGE	9667 SF
	ADMIN. USAGE	3293 SF
	ADULT SUNDAY SCHOOL USAGE	7173 SF
	SUNDAY SHARE USE	2558 SF
SUPPORT / CIRCULATION FIRST FLOOR AREA		5497 SF 33,153 SF



EXISTING SECOND FLOOR PLAN
AREA USAGE ANALYSIS

	CHILDREN SUNDAY SCHOOL USAGE	5912 SF
	YOUTH SUNDAY SCHOOL USAGE	0 SF
	WORSHIP USAGE	0 SF
	ADMIN. USAGE	0 SF
	ADULT SUNDAY SCHOOL USAGE	358 SF
	SUNDAY SHARE USE	1633 SF
SUPPORT / CIRCULATION SECOND FLOOR AREA		6,851 SF 14,754 SF





EXISTING LEVEL 1 FOOTPRINT - 33,153 SF
PORTABLE BUILDING - 4080 SF

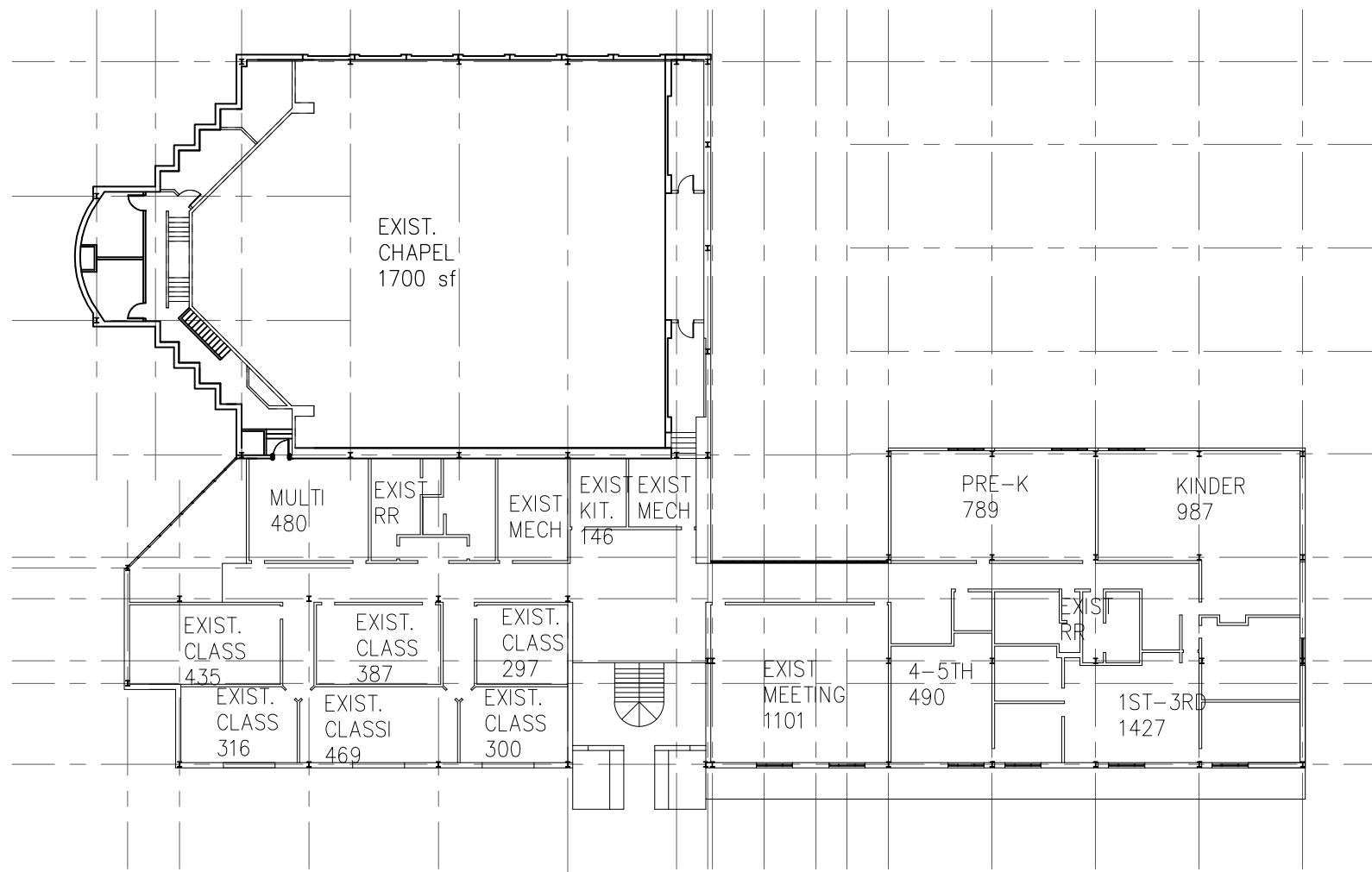
EXISTING LEVEL 2 FOOTPRINT - 14,754 SF

TOTAL BUILDING AREA - 51,987 SF

AS-BUILTS LEVEL 1 FLOOR PLAN

HOUSTON CHINESE CHURCH - MASTER PLAN

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AS-BUILTS LEVEL 2 FLOOR PLAN

HOUSTON CHINESE CHURCH - MASTER PLAN

4-27-2021

Building Analysis:

Current Attendance Numbers & Growth Projections
Master Plan Program



HCC - Attendance Numbers & Growth Projections

	Children		Youth	Adult	
Friday (7:30pm - 10pm)	20	PreK	60	60	Cantonese
	30	K-2nd		40	English
	30	3rd-5th		160	Mandarin
Total	80		60	260	
Sunday	10	Infants	80	80	Cantonese
	25	PreK-K		120	English
	65	1st - 5th		135	Mandarin
Total	100		90	335	

25% Growth Projection - Sunday

Peak Service	12	Infants	112	100	Cantonese
	32	PreK-K		150	English
	82	1st - 5th		170	Mandarin
Total	126		112	420	

Peak attendance design criteria			903		
Volunteers & Staff			90		
Total	People		993	93K sf	2 - 2.5 Acres
	2.0persons/car		500	Spaces	3.5 - 4 Acres

Houston Chinese Church
Master Plan Program



•This program is based on information provided by HCC

Education Spaces

Program	Sq. Ft.
Children Education (130 kids)	
Check-in	200
Classroom (0-11m) 10 kids	400
Classroom (11-23m) 10 kids	400
Classroom (24-36m) 10 kids	400
PreK-3 Classroom 20 kids	440
PreK-4 Classroom 20 kids	440
Kinder Classroom 20 kids	440
1st - 5 th Grade (6 @ 250 sf per room)	1,500
Resource Room	500
Storage	400
Nurse / Nursing room	90
Large Groups (80 kids)	1,600
Large Groups (50 kids)	1,000
Stage (2)	600
AV booth (2)	300
Recreational Area	800
Indoor Playground	800
Sub-Total	10,310

Youth (125 youth)	Sq. Ft.
Check-in	200
Youth Worship (125 youth)	2,500
AV booth	150
Stage	400
Recreational Area with Kitchenette	1,500
Youth Small Classroom (10 @ 15 per classroom)	3,000
Youth Medium Classroom (30 per classroom)	600
Resource Room	400
AV Storage	150
Storage	300
B.O.H. (Back of House)	500
Sub-Total	9,700

Adult Classrooms (420 adults)	Sq. Ft.
Small Classrooms (16 @ 10 per classroom)	4,000
medium Classrooms (4 @ 20 per classroom)	1,600
Large Multi-Purpose Classroom with divider (3 @ 50 per classroom)	3,000
Newcomers Room (20 ppl)	300
Ministry Storage (5 @ 200 SF)	1,000
Sub-Total	9,900

Large Assembly & Multi-purpose	Sq. Ft.
Chapel (200 seat)	2,000
Stage & B.O.H.	750
AV booth	150
Waiting Room / Bridal Room with restroom (15 ppl)	300
Storage & AV storage	200
Multipurpose Hall (500 seat)	7,500
Stage & B.O.H.	1,000
AV booth	150
Storage & AV storage	600
Kitchen	900
Sub-Total	13,550

Common & Misc. Spaces	Sq. Ft.
Lobbies with Welcome Booth & Seating Area	7,000
Restrooms, Janitor, Electrical / Mechanical Room	2,000
Reading Room / Resource Center / Café	1,500
Counseling Rooms (3 @ 4 per room)	150
Sub-Total	10,650

Office Suite	Sq. Ft.
Main Office (4 @ 150 sf)	600
Ministry Staff Office (12 @ 100 sf)	1,200
Administrative Space (2 @ 100 sf)	200
Intern Staff Office (4 @ cubicle)	300
Conference Room	400
Breakroom / Workroom with restroom	250
Sub-Total	2,950

Sanctuary Upgrade	Sq. Ft.
Choir Room	600
Rehearsal room with piano (2 @ 4 ppl)	300
Baptismal Dressing Rooms with restroom (share as nursing room)	80
Production Room (9' x 4')	54
Cry Room	250
Sub-Total	1,034

Existing Sanctuary Renovation	Sq. Ft.
Sanctuary & B.O.H.	9,667
Sub-Total	9,667
Total Net SF	77,037
Circulation Grossing Factor of 15%	11,556
Total Gross SF	88,593

Other Components

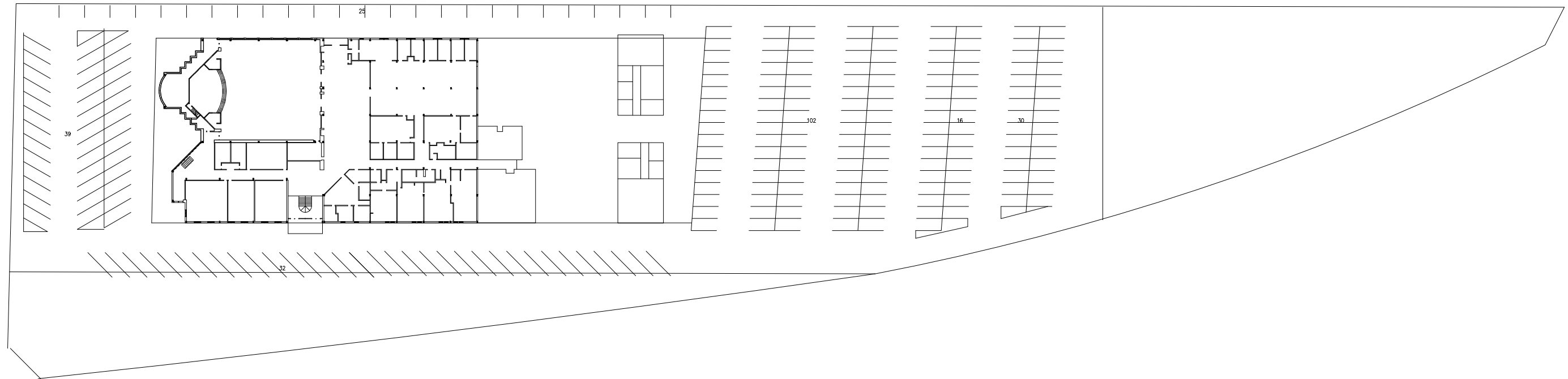
	Sq. Ft.
Surface Parking - 500 cars @ 335sf/car	167,500



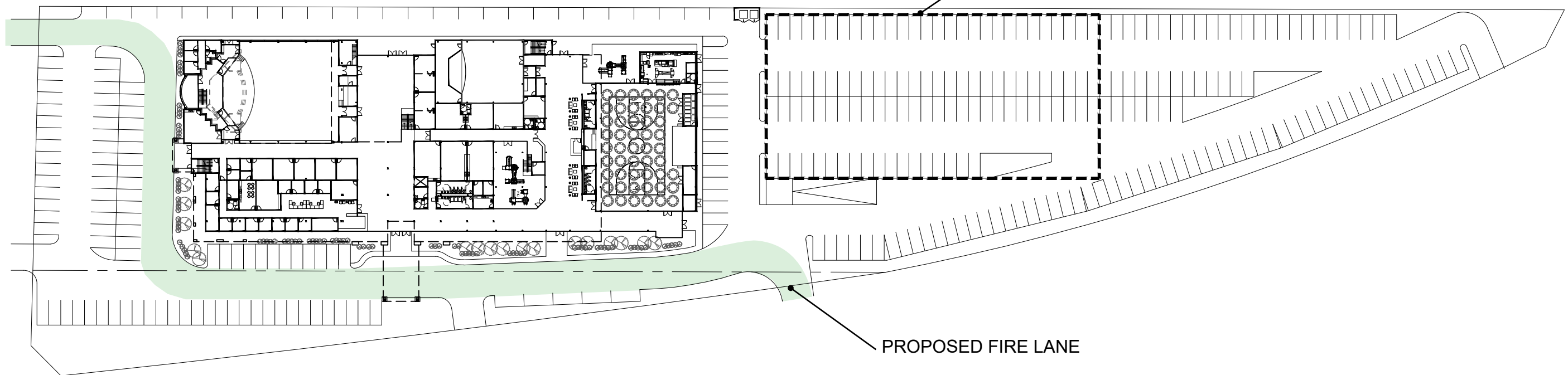
Master Plan Studies:

Existing Site Plan & Proposed Master Plan
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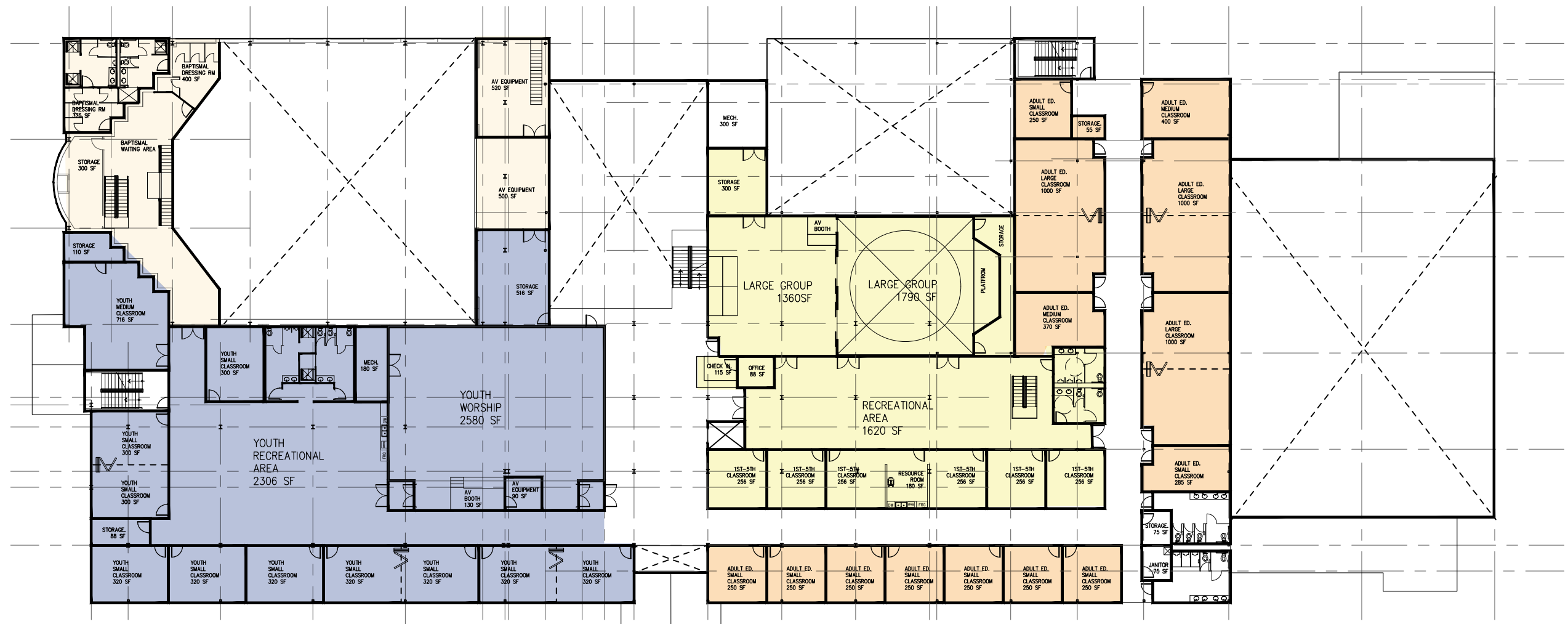
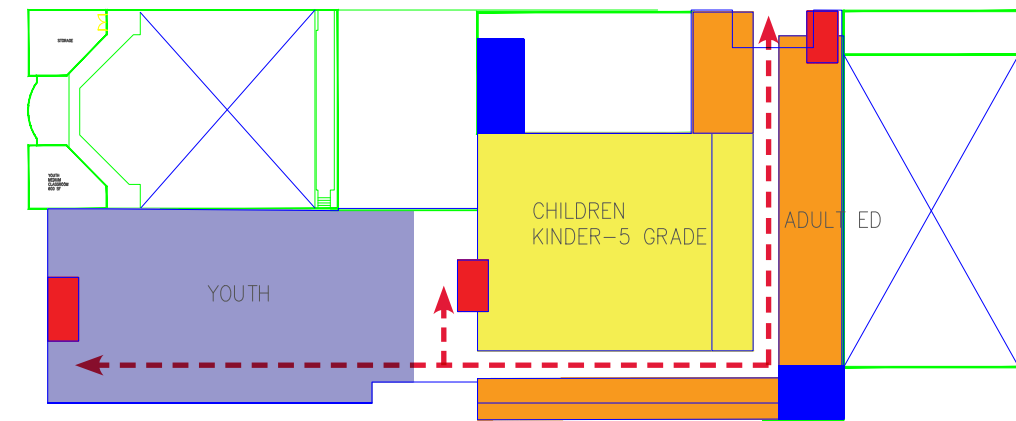
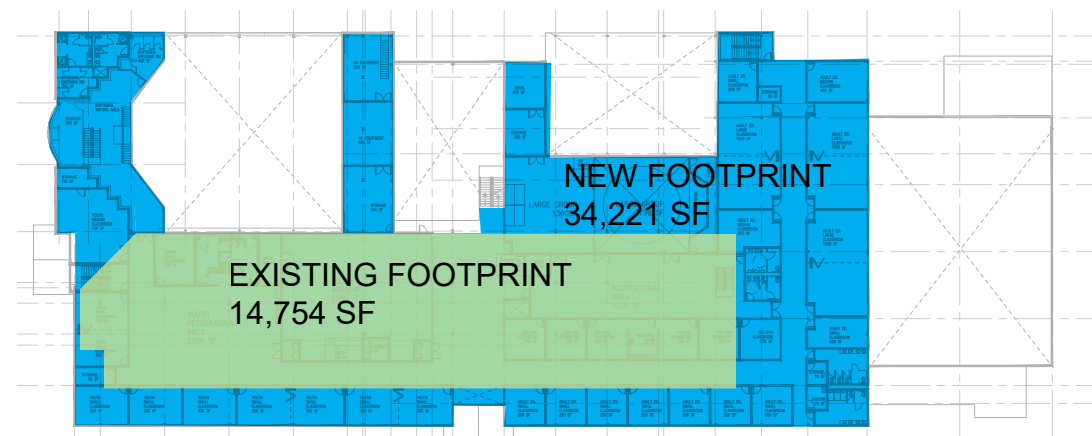


EXISTING SITE PLAN (103,290 SF PAVED PARKING LOT)
246 GROUND PARKING SPACES



PROPOSED SITE PLAN (127,393 SF PAVED PARKING LOT)
337 GROUND PARKING SPACES
96 PARKING DECK SPACES (PER DECK)





CODE ANALYSIS:

LOCAL BUILDING CODE: 2012 (IBC) & HOUSTON BUILDING CODE
FIRE CODE: 2012 (IFC) HOUSTON FIRE CODE
ENERGY CODE: 2015 IECC OR ASHRAE 90.1–2007
MECHANICAL CODES: 2012 (UMC) UNIFORM MECHANICAL CODE
ELECTRICAL CODES: 2020 (NEC) NATIONAL ELECTRICAL CODE
PLUMBING CODES: 2012 (UPC) UNIFORM PLUMBING CODE
ACCESSIBILITY CODE: TAS

OCCUPANCY GROUP:

A–3 (ASSEMBLY WORSHIP) & E (EDUCATION)
EXISTING BUILDING CONSTRUCTION TYPE: 2B, NON SPRINKLE

TYPE 2B (A–3) ALLOWABLE HEIGHT & BUILDING AREA:

(2 = NON–COMBUSTIBLE MATERIAL; B = NON FIRE PROTECTED STRUCTURE, EXTERIOR & INTERIOR WALLS)

A–3 = TWO STORY 9,500 SF, 55 FT MAX
E = TWO STORY 1400 SF, 55 FT MAX

TYPE 2A (A–3) ALLOWABLE HEIGHT & BUILDING AREA:

(2 = NON–COMBUSTIBLE MATERIAL; A = 1HR FIRE PROTECTED STRUCTURE, EXTERIOR & INTERIOR WALLS FOR A–3)

A–3 = 3 STORY 15,500 SF, 65 FT MAX
E = 3 STORY 26,500 SF, 65 FT MAX

CITY OF HOUSTON PARKING SPACE REQUIREMENT:

CHURCH – 1 PER 5 FIXED SEAT X 760 FIXED SEAT = 150 PARKING SPACES
1 PER 40 SF = 110 PARKING SPACES

CITY OF HOUSTON PLUMBING FIXTURE REQUIREMENT:

CHURCH – 1620 OCCUPANTS
WOMEN 1 PER 75 X 810 = 10 FIXTURES
MEN 1 PER 150 X 810 = 6 FIXTURES
LAVATORY 1 PER 200 X 1620 = 8 FIXTURES
DRINKING FOUNTAIN 1 PER 1000 = 2 FIXTURES

BUSINESS – 295 OCCUPANTS
WOMEN = 4 FIXTURES
MEN = 4 FIXTURES
LAVATORY = 6 FIXTURES

ALLOWABLE AREA & HEIGHT INCREASE BY EQUIPPING SPRINKLER SYSTEM:

A–3 (TYPE 2B): 9,500 SF + (frontage increase 9,500 SF) + (200% X 9,500) = 38,000 SF/FLOOR, 2 STORY AT 75 FT MAX

* MATCHING EXISTING TYPE 2B WILL REQUIRE FIRE SEPARATION AT MULTIPURPOSE HALL & KITCHEN, CHAPEL & SANCTUARY.

ALLOWABLE AREA & HEIGHT INCREASE BY EQUIPPING SPRINKLER SYSTEM:

A–3 (TYPE 2A): 15,500 SF + (frontage increase 15,500 SF) + (200% X 15,500) = 62,000 SF/FLOOR, 4 STORY AT 85 FT MAX

* SWITCHING TO TYPE 2A WILL REQUIRE FIRE PROOFING ON NEW & EXISTING WALLS & STRUCTURE

PROPOSED AREA:

LEVEL 1 = 52396 SF
LEVEL 2 = 34221 SF

PROPOSED PARKING SPACE COUNT:

SURFACE PARKING LOT = 337 PARKING SPACES
PARKING DECK = 96 PARKING SPACES

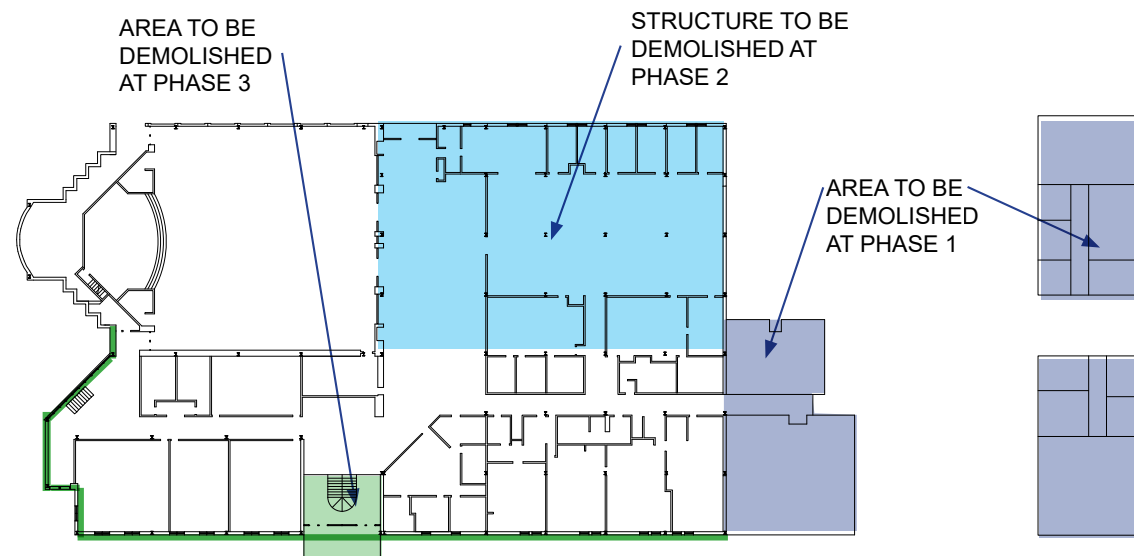
PROPOSED PLUMBING FIXTURE COUNT:

WOMEN = 24 FIXTURES
MEN = 23 FIXTURES
LAVATORY = 37 FIXTURES
DRINKING FOUNTAIN = 2 FIXTURES

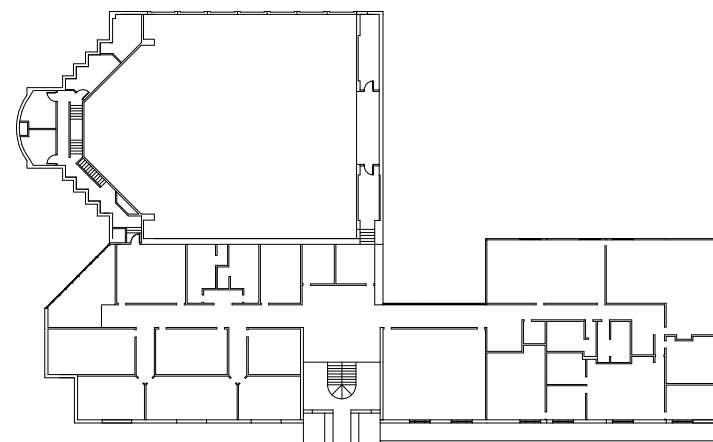
Master Plan Phasing:

Demolition Plans & Phase 1 Plans
Phase 2 & 3 Plans



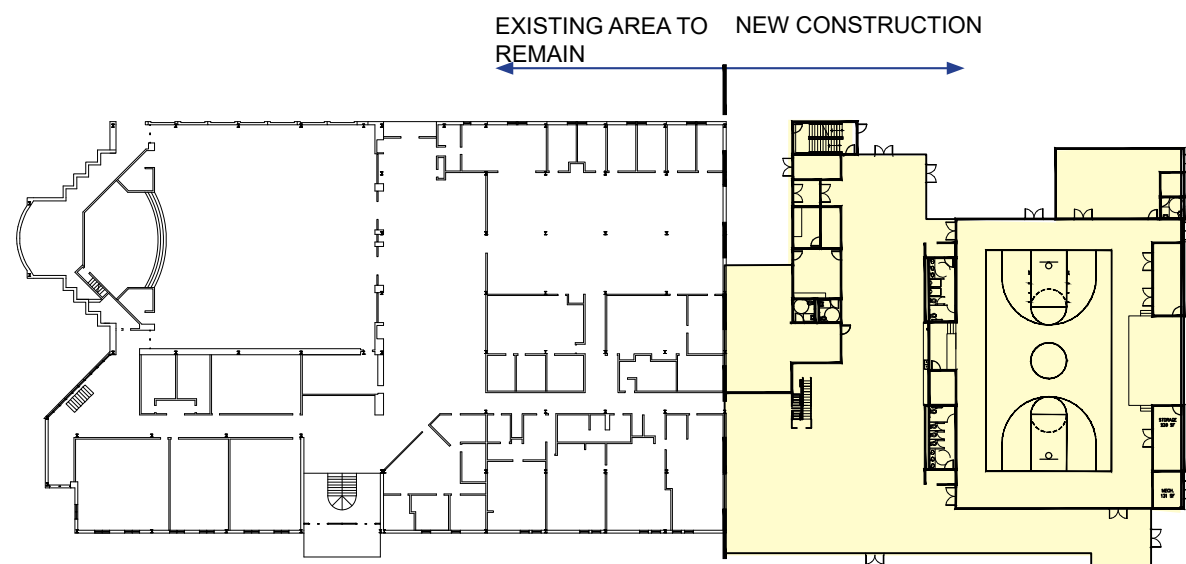


EXISTING - 1ST FLOOR DEMOLITION PLAN

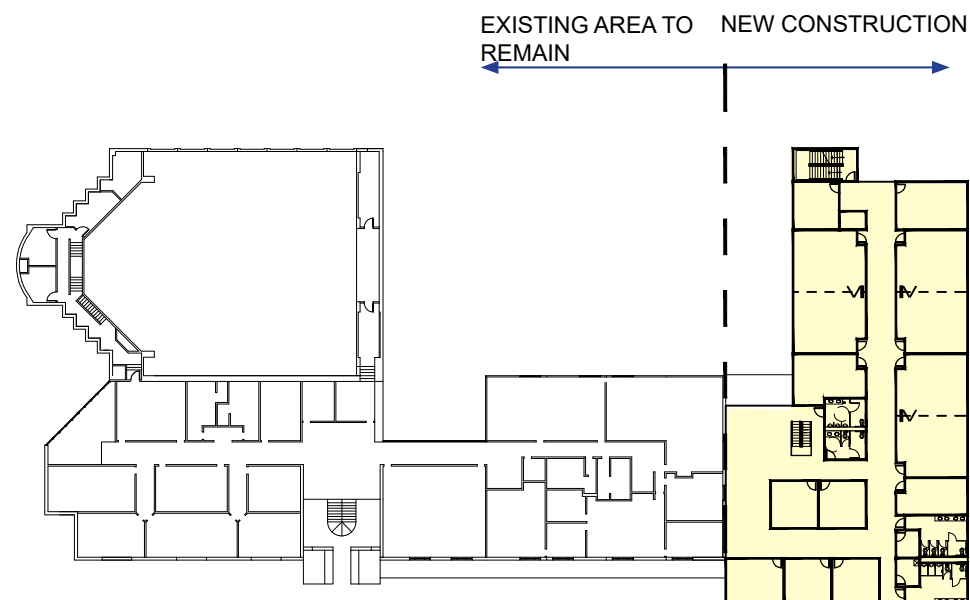


EXISTING - 2ND FLOOR DEMOLITION PLAN

EXISTING BUILDING	
FIRST FLOOR AREA	- 33,153 SF
PORTABLE BUILDING	- 4080 SF
SECOND FLOOR AREA	- 14,754 SF
TOTAL BUILDING AREA	- 51,987 SF

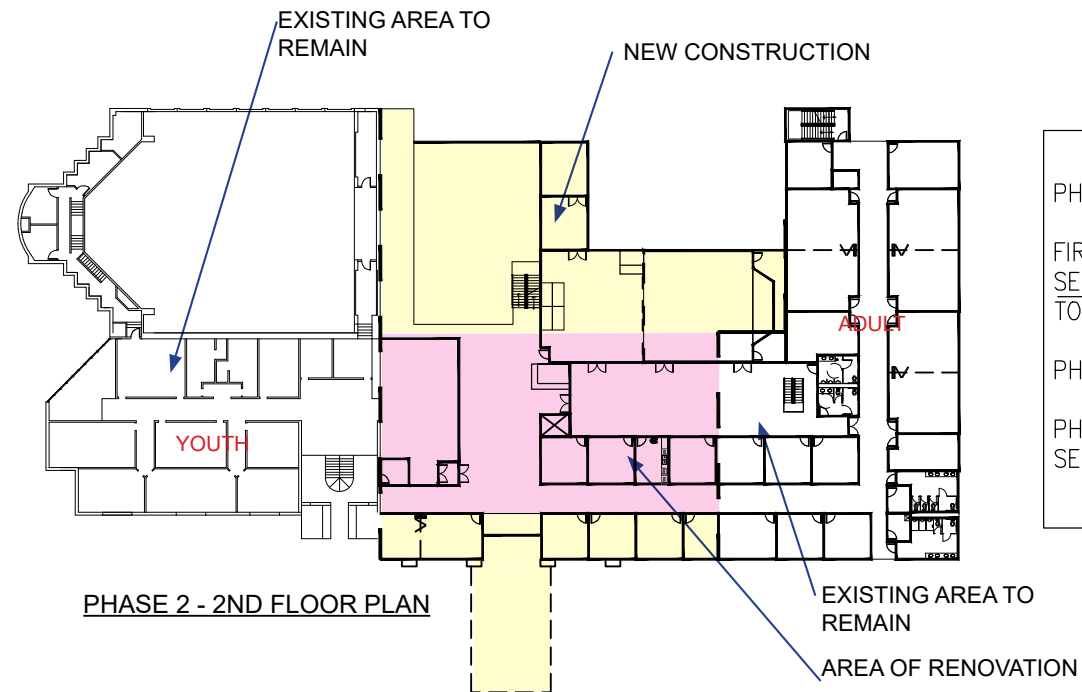
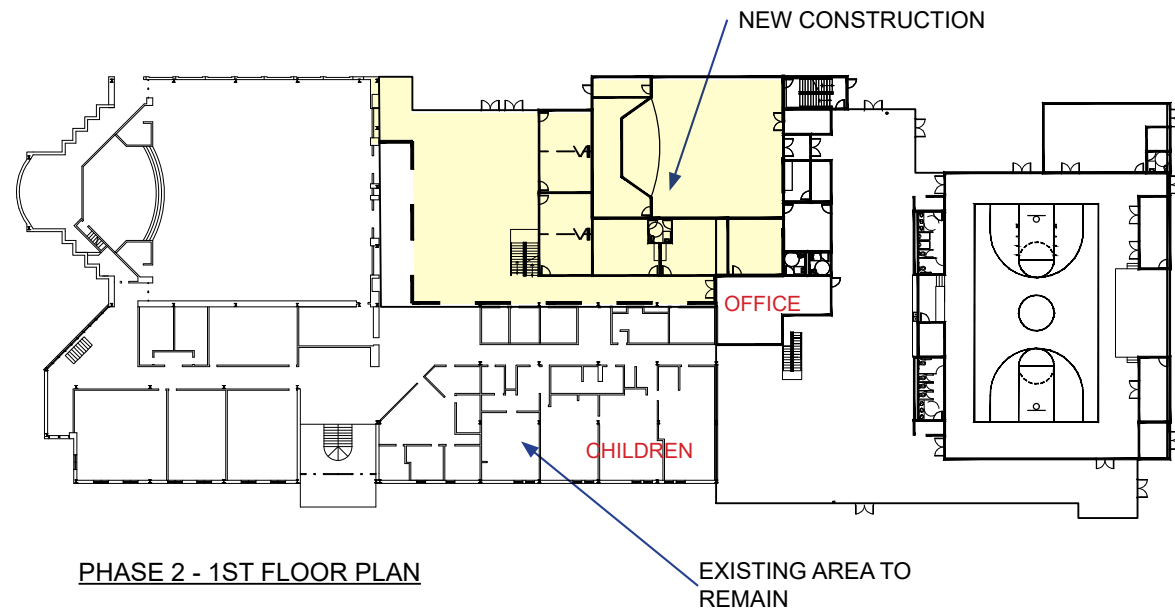


PHASE 1 - 1ST FLOOR PLAN



PHASE 1 - 2ND FLOOR PLAN

PHASE 1 NEW CONSTRUCTION	
FIRST FLOOR AREA	- 18,903 SF
SECOND FLOOR AREA	- 9,783 SF
TOTAL NEW AREA	- 28,686 SF

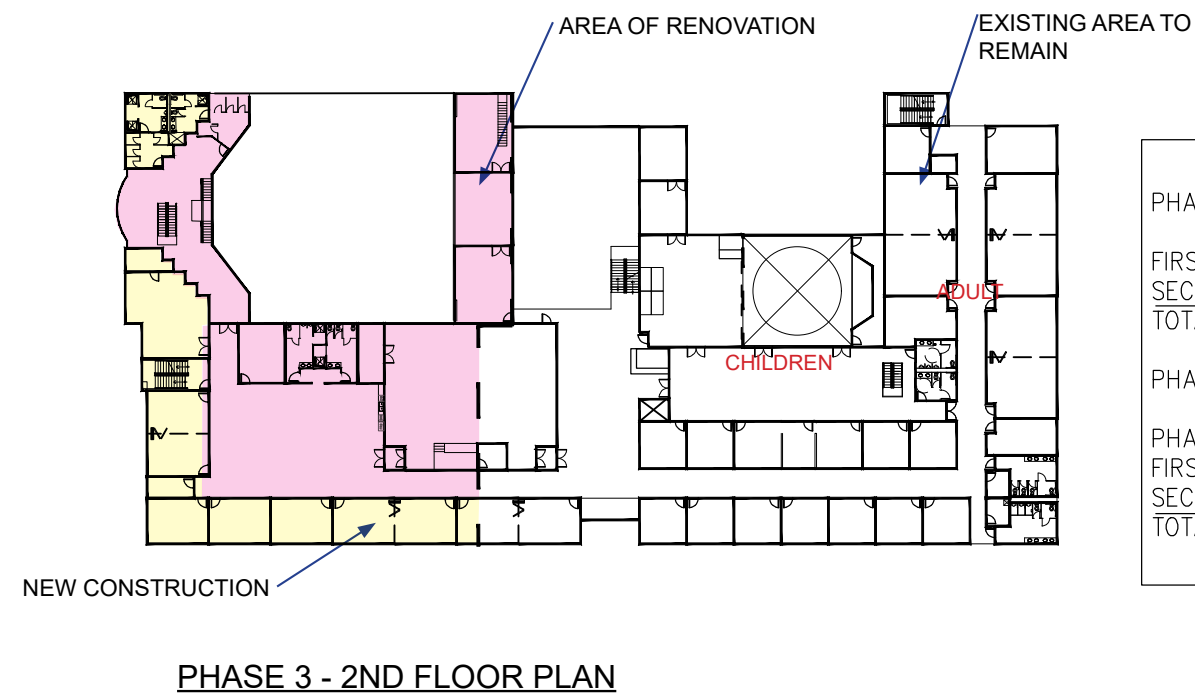
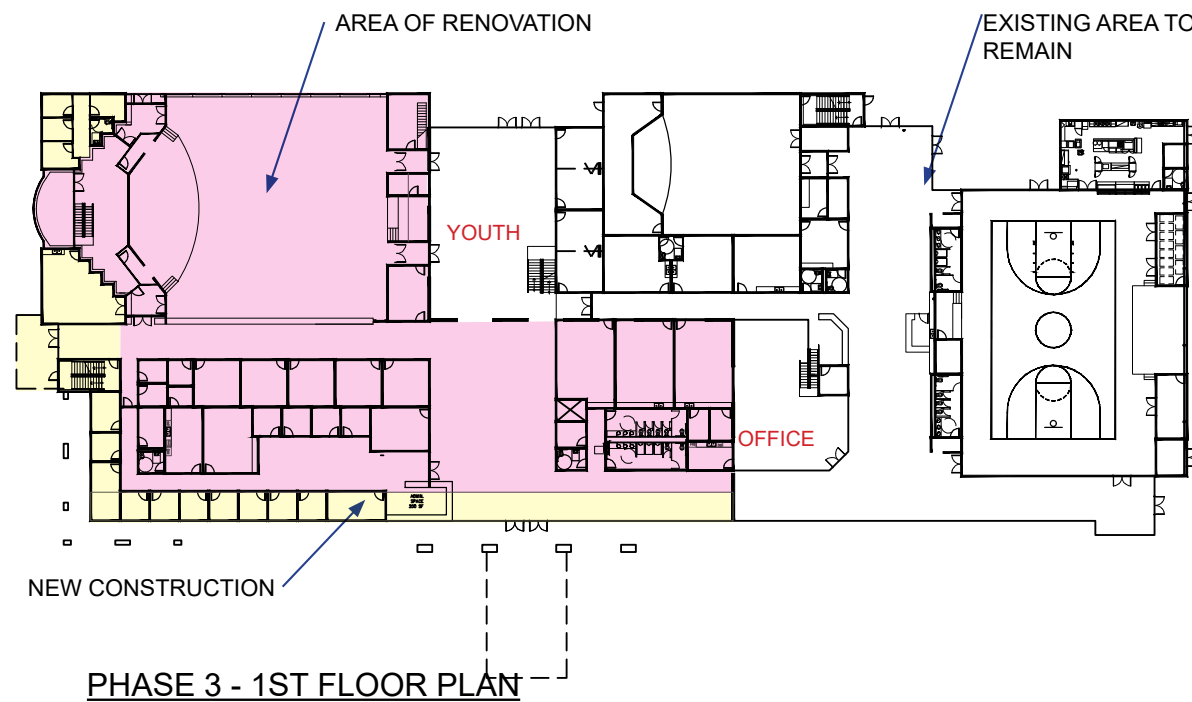


PHASE 2 NEW ADDITION

FIRST FLOOR AREA	- 9,296 SF
SECOND FLOOR AREA	- 6,894 SF
TOTAL NEW AREA	- 12,330 SF

PHASE 2 DROP OFF CANOPY - 1152 SF

PHASE 2 RENOVATION	
SECOND FLOOR AREA	- 7040 SF



PHASE 3 NEW ADDITION

FIRST FLOOR AREA	- 2,897 SF
SECOND FLOOR AREA	- 3,188 SF
TOTAL NEW AREA	- 6,085 SF

PHASE 3 CANOPY - 300 SF

PHASE 3 RENOVATION	
FIRST FLOOR AREA	- 22,540 SF
SECOND FLOOR AREA	- 8,658 SF
TOTAL RENO. AREA	- 31,225 SF

Master Plan Illustration:

Elevation Scheme 3C Exterior Renderings
Elevation Scheme 3C Interior Renderings





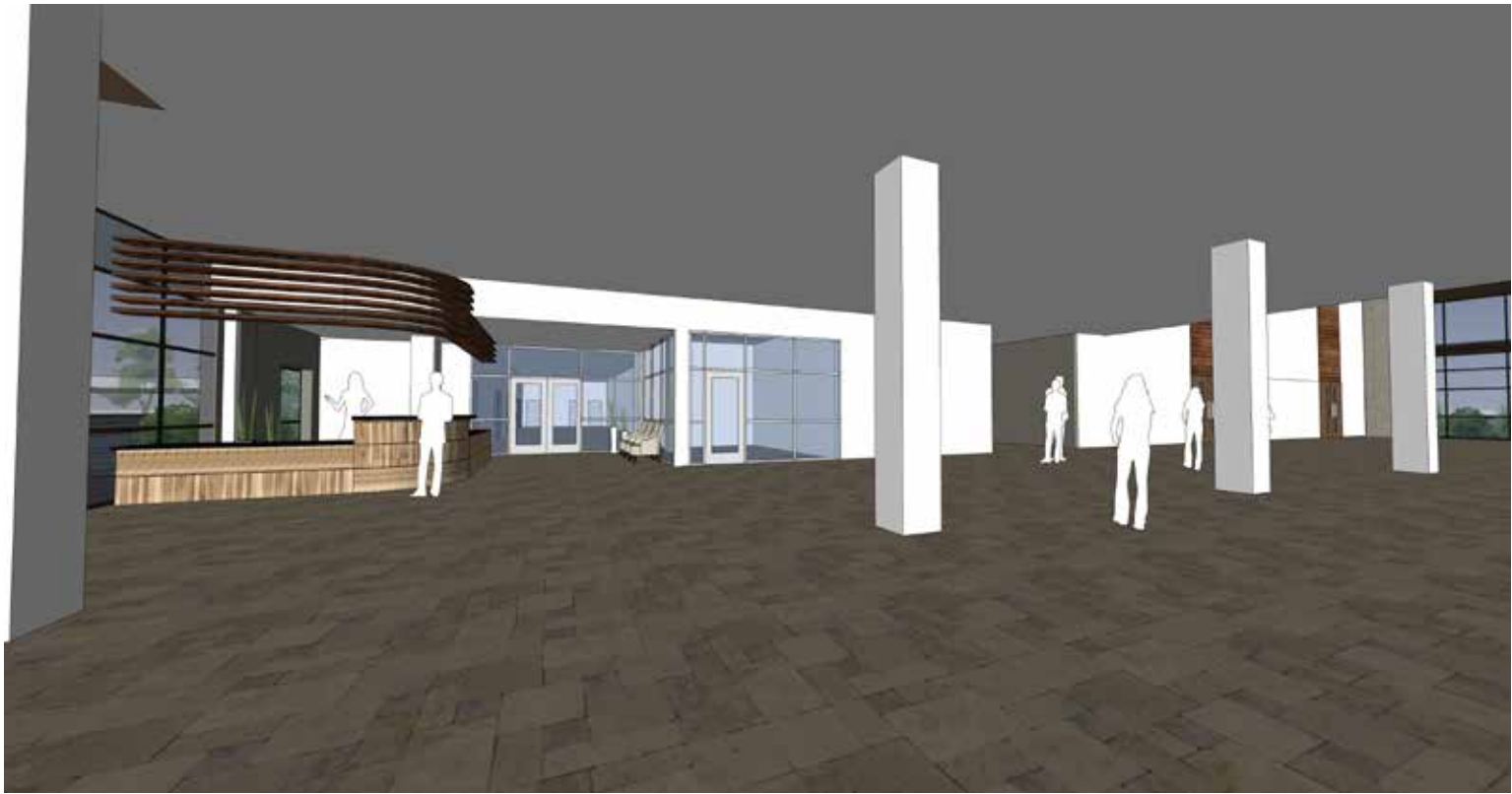
SCHEME 3C - AERIAL VIEW RENDERINGS



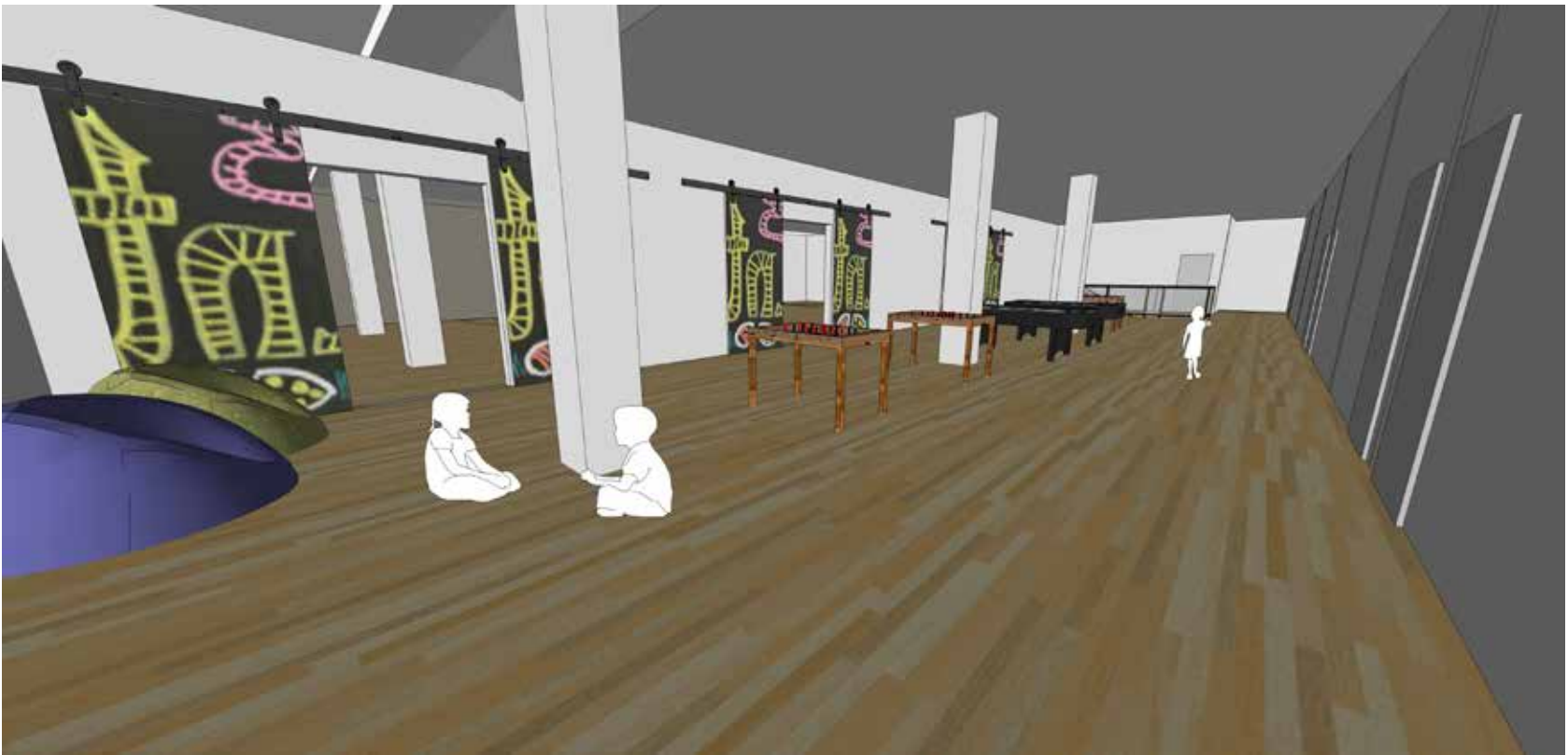
SCHEME 3C - VIEWS FROM STREET & FREEWAY



SCHEME 3C - BUILDING ENTRANCE



SCHEME 3C - LOBBY & CHECK-IN RENDERINGS



SCHEMEM 3C - COMMON SPACES & PLAYGROUND

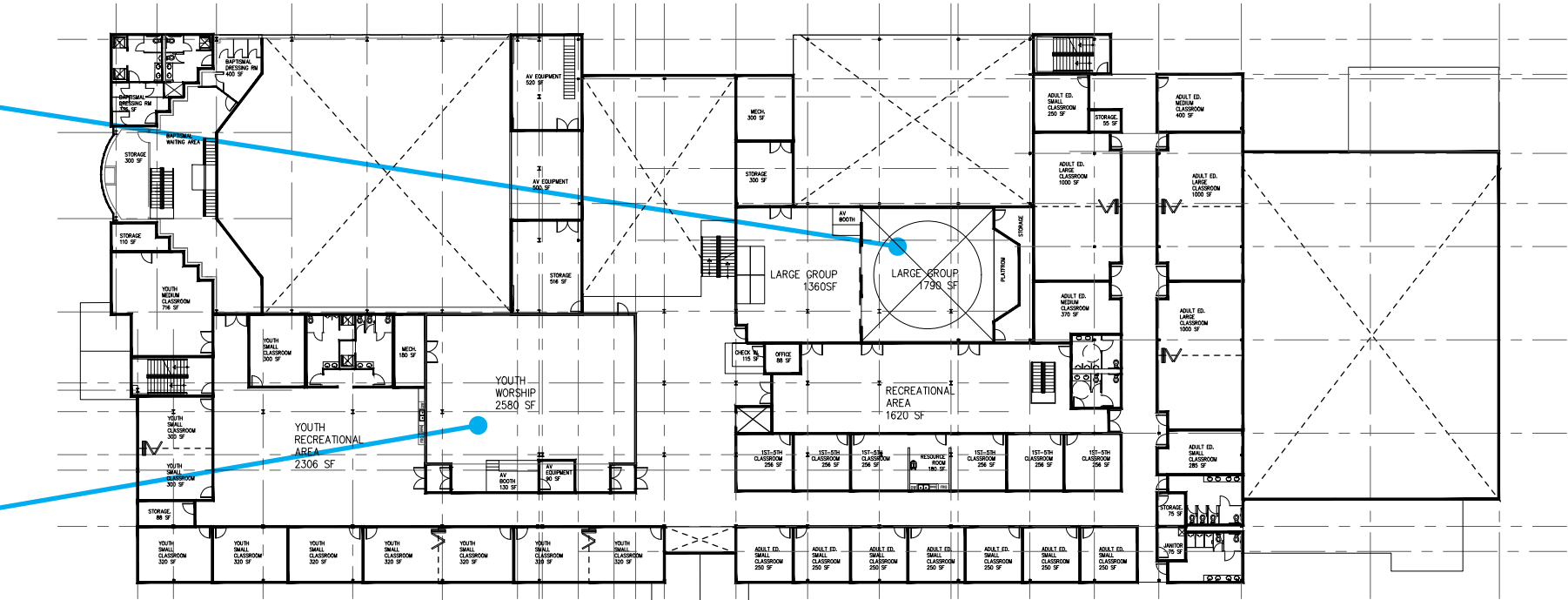
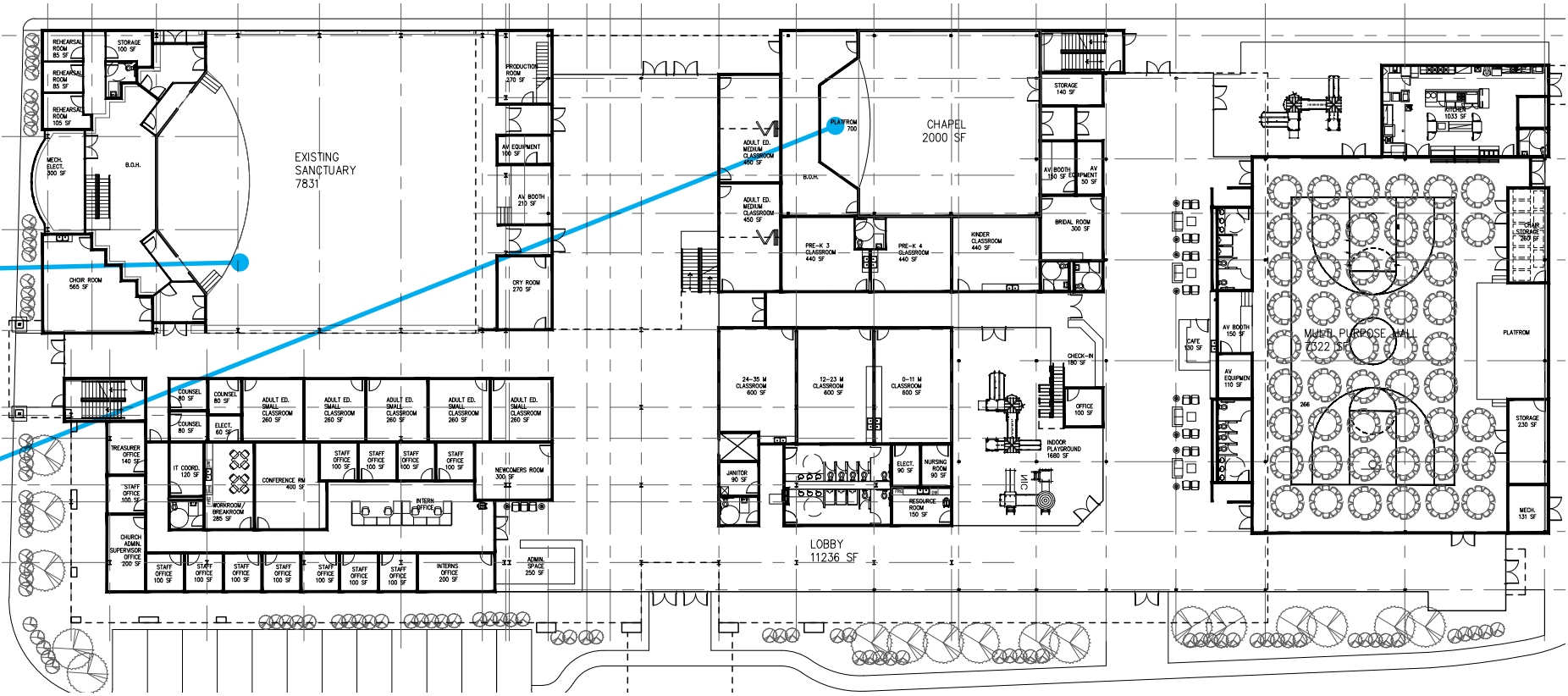
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Precedent Images - Worship Spaces
Precedent Images - Common Spaces

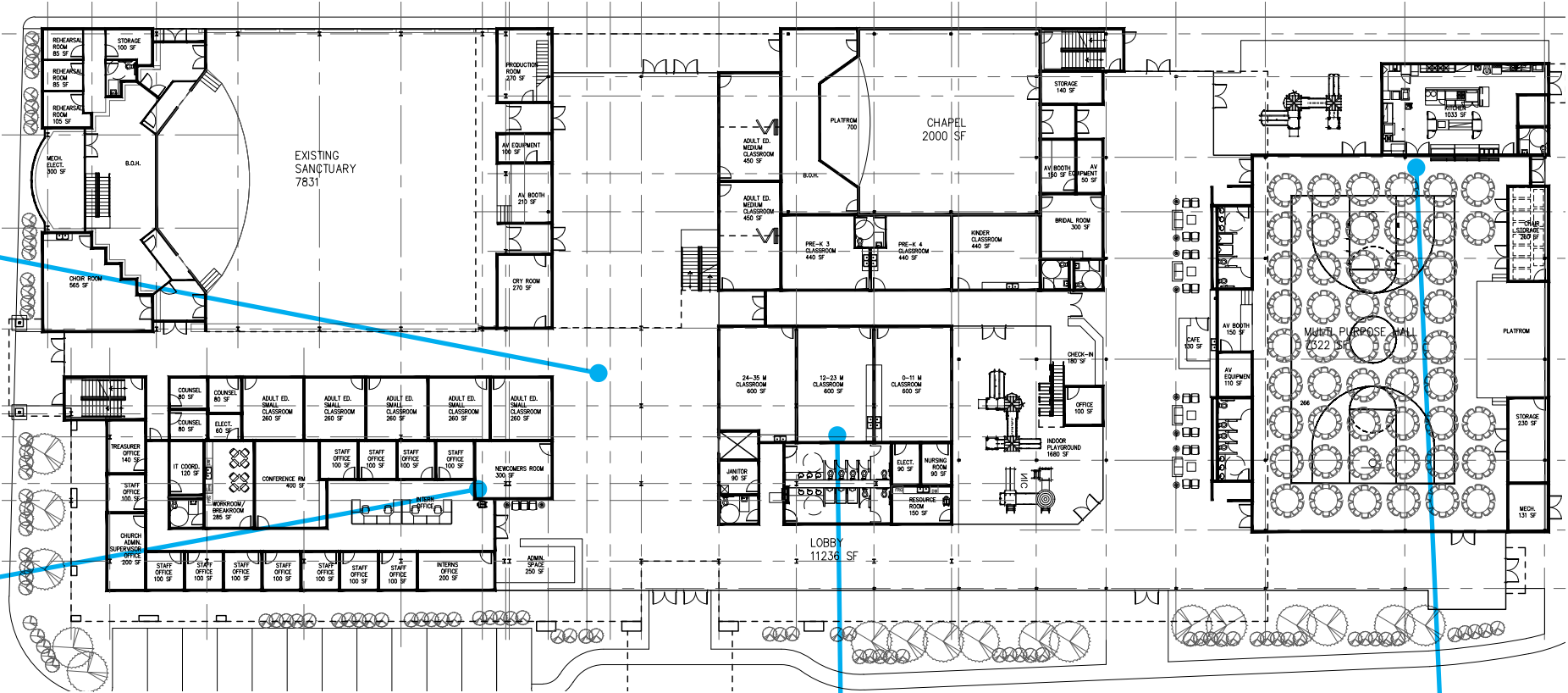




PRECEDENT IMAGES - URBAN LANDSCAPING & EXTERIOR



PRECEDENT IMAGES - WORSHIP SPACES



PRECEDENT IMAGES - COMMON SPACES

Phase 1, 2 & 3 :

Phase 1 - 3 Preliminary Budget Estimate
Phase 1 Construction Time Line



PHASE 1 PRELIMANARY BUDGET:

SITE:	
SURFACE PAVED PARKING LOT	\$1,401,323
SITE DETENTION	\$500,000
PARKING LOT DEMOLITION	\$103,290
PARKING DECK	\$1,176,000
PHASE 1 DEMOLITION	\$20,439
PHASE 1 NEW CONSTRUCTION	\$6,454,350
TOTAL:	\$9,655,402

PHASE 2 PRELIMANARY BUDGET:

PHASE 2 DEMOLITION	\$47,895
PHASE 2 NEW ADDITION	\$2,774,250
PHASE 2 DROP OFF CANOPY	\$86,400
PHASE 2 RENOVATION	\$880,000
TOTAL:	\$3,788,545

PHASE 3 PRELIMANARY BUDGET:

PHASE 3 DEMOLITION	\$93,675
PHASE 3 NEW ADDITION	\$1,369,125
PHASE 3 CANOPY	\$22,500
PHASE 3 RENOVATION	\$3,903,125
TOTAL:	\$5,388,425

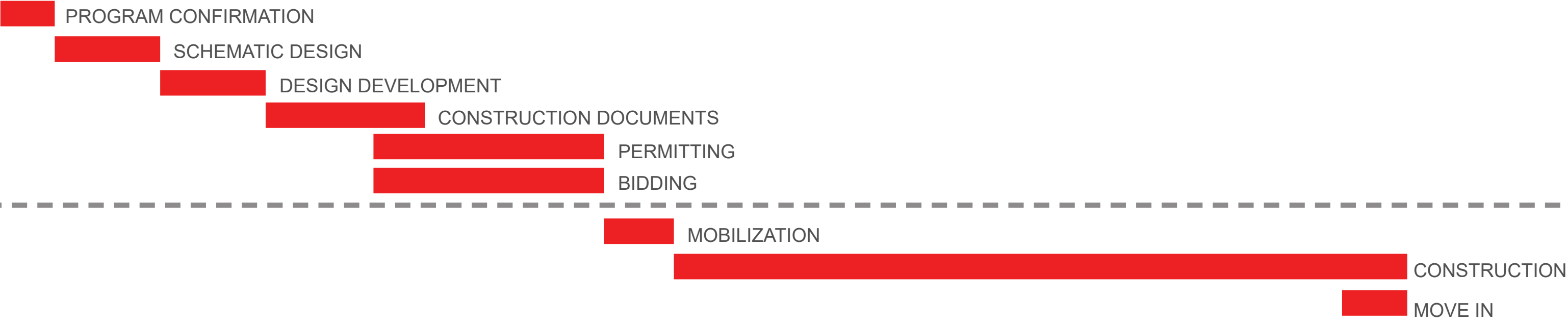
Preliminary Budget Estimate

MONTH

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DESIGN

CONSTRUCTION

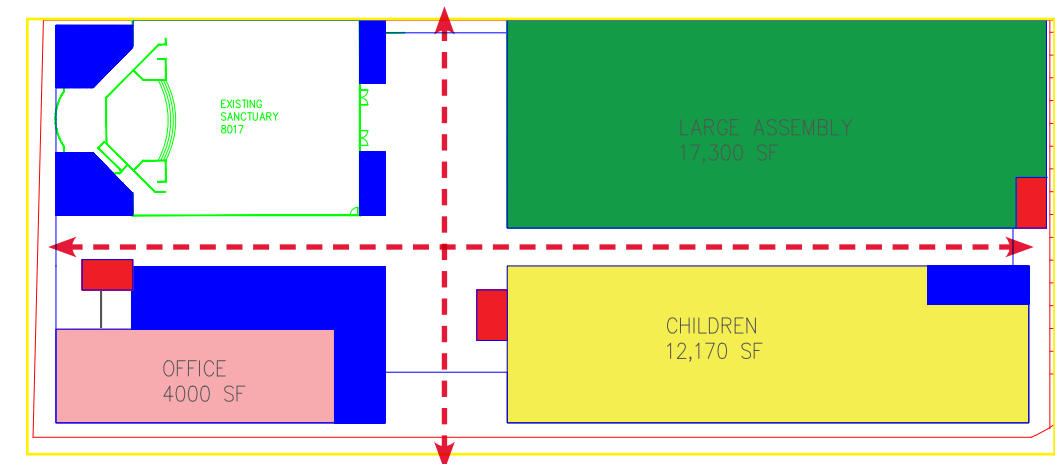
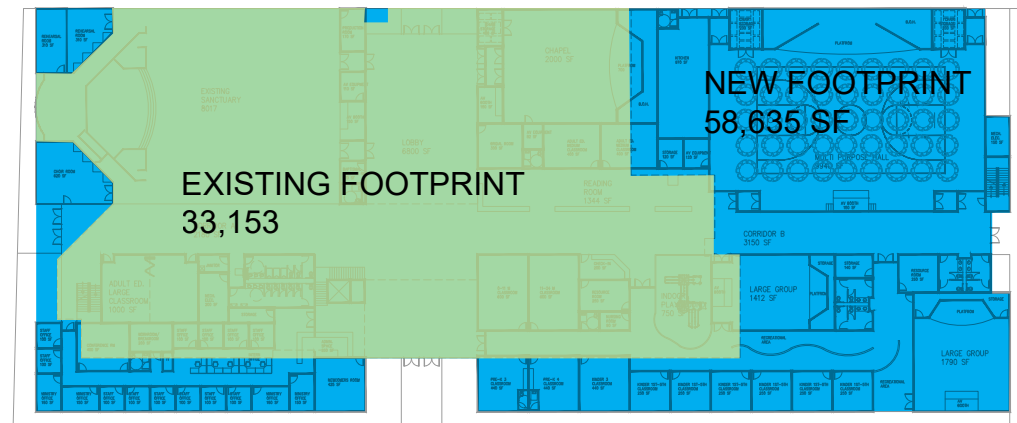


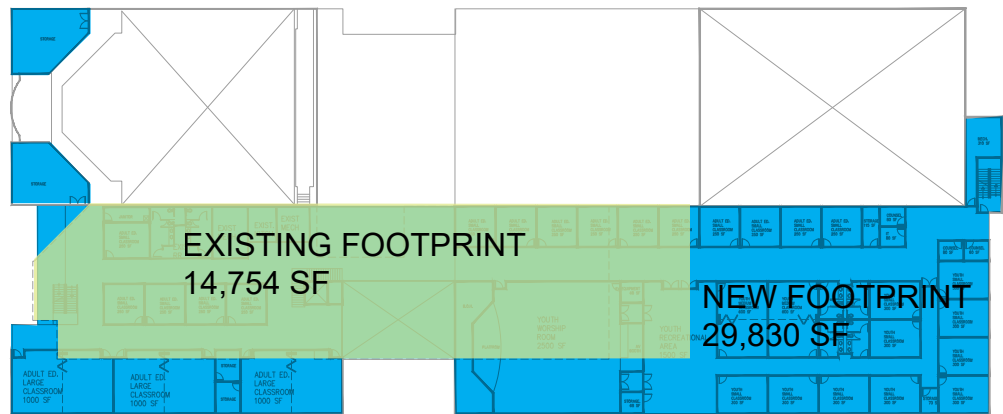
CONSTRUCTION TIMELINE - NEW CONSTRUCTION

Previous Plans & Elevations Studies:

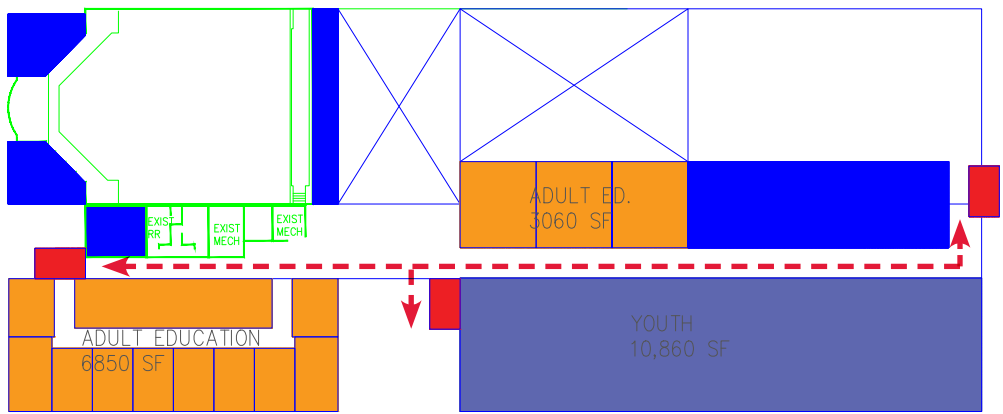
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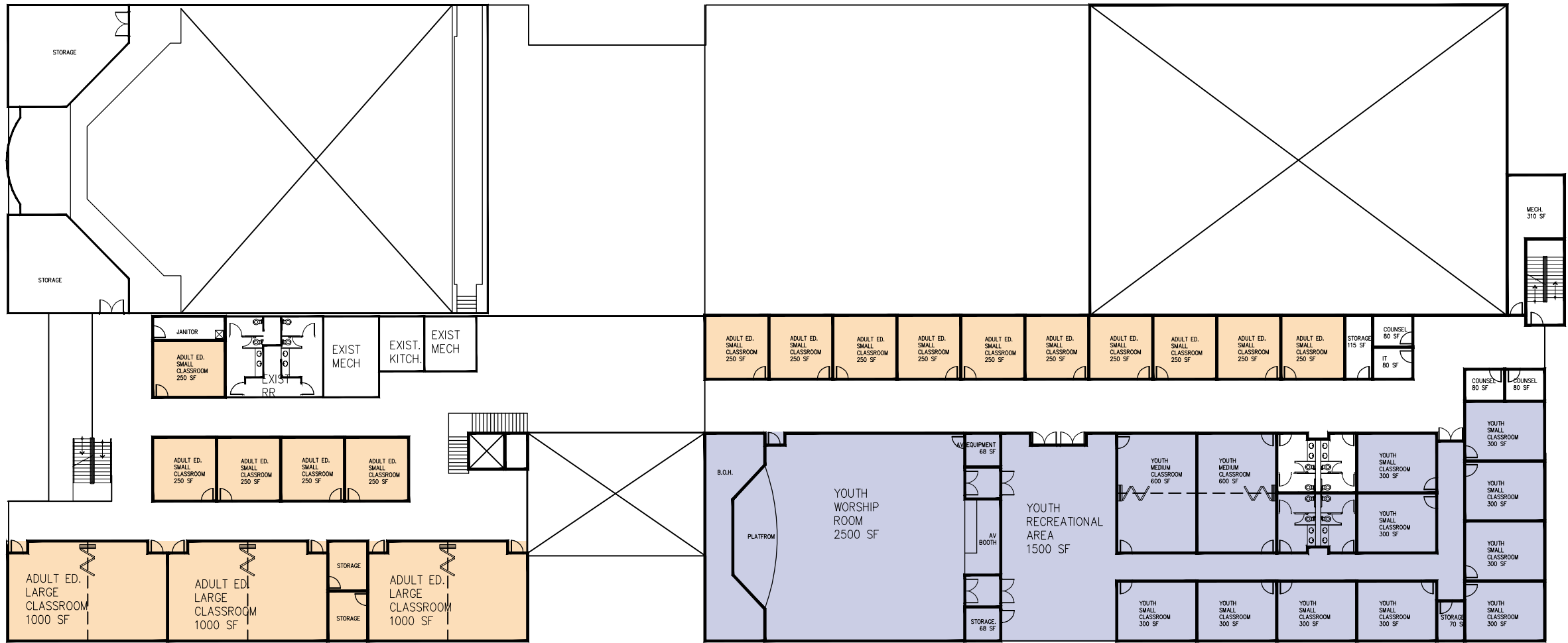




EXISTING & NEW FOOTPRINT OVERLAY DIAGRAM



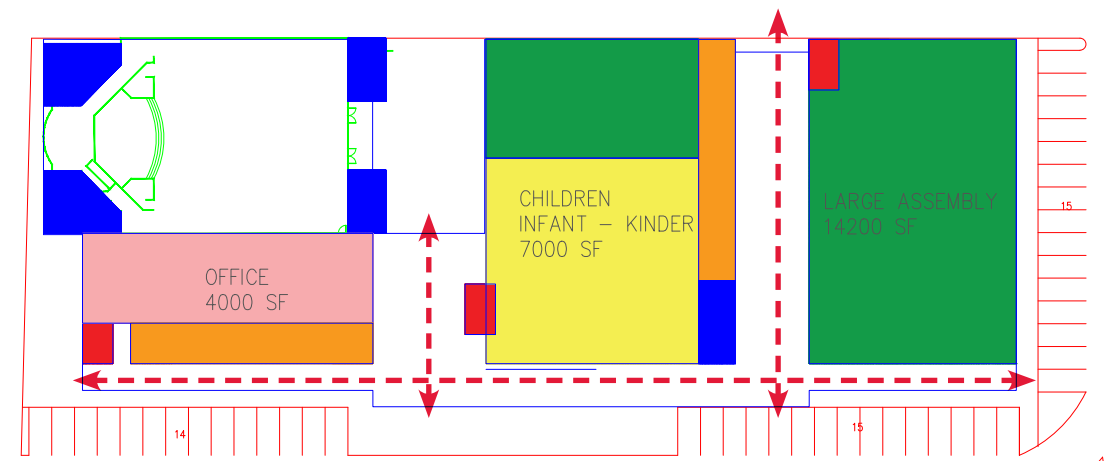
ADJACENCY & CIRCULATION DIAGRAM



STUDY 1 - LEVEL 2 FLOOR PLAN

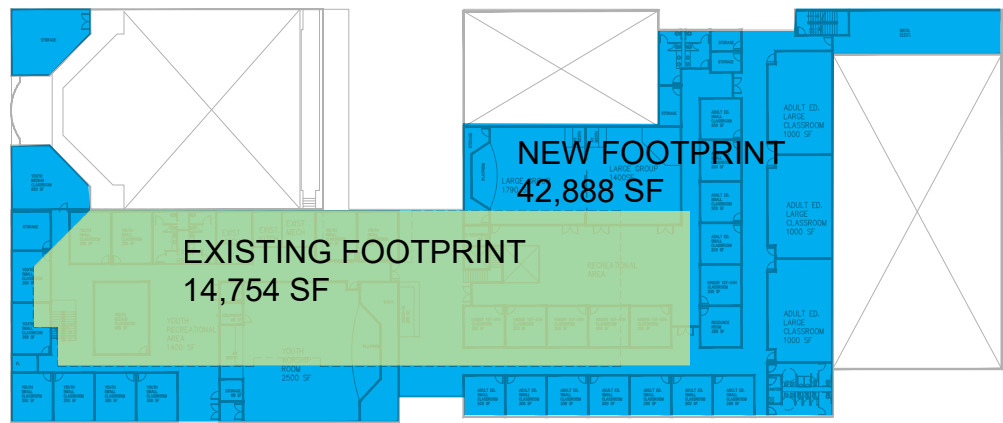


EXISTING & NEW FOOTPRINT OVERLAY DIAGRAM

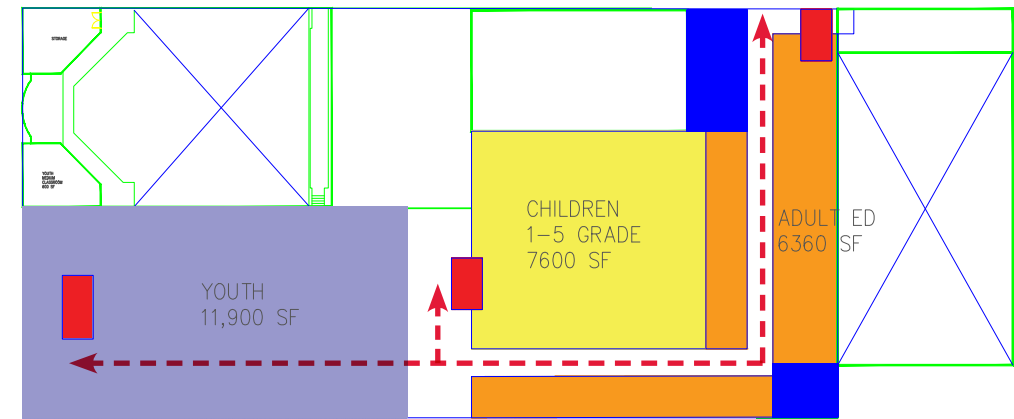


ADJACENCY & CIRCULATION DIAGRAM

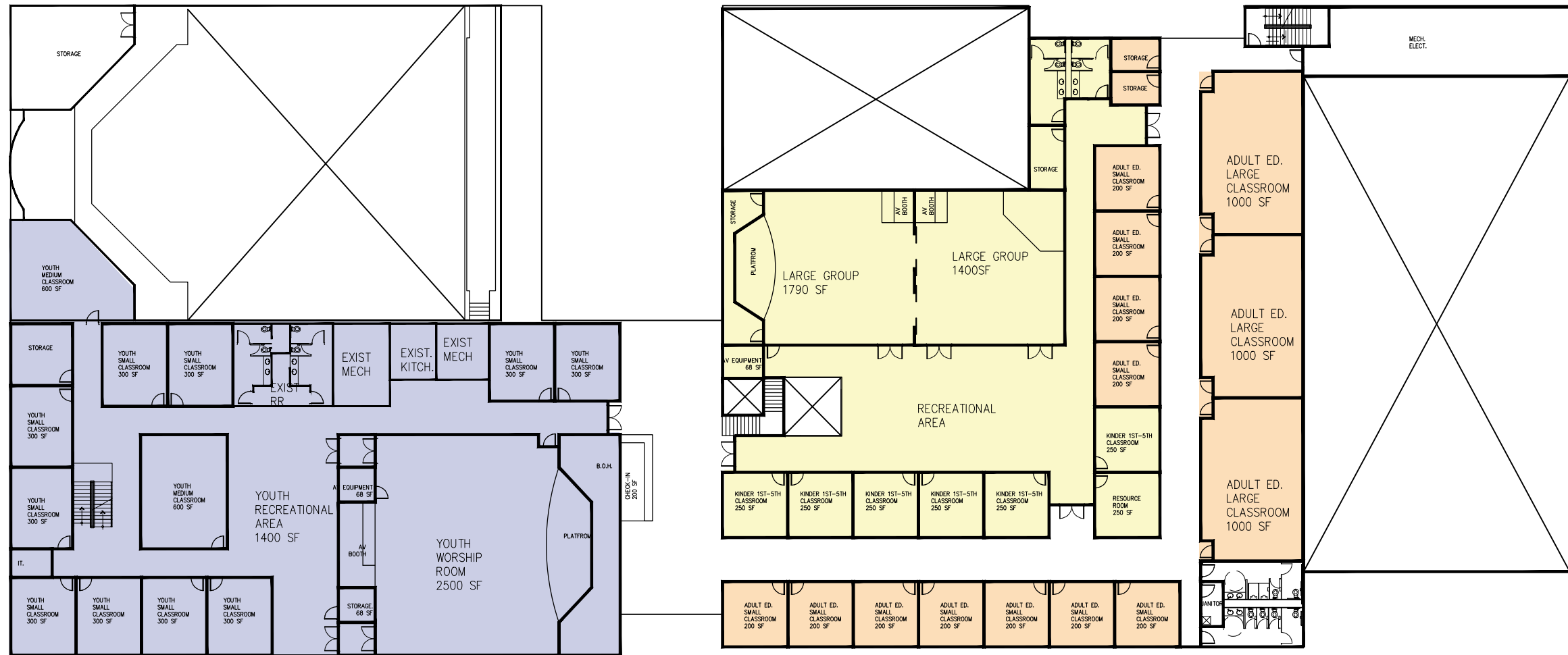




EXISTING & NEW FOOTPRINT OVERLAY DIAGRAM



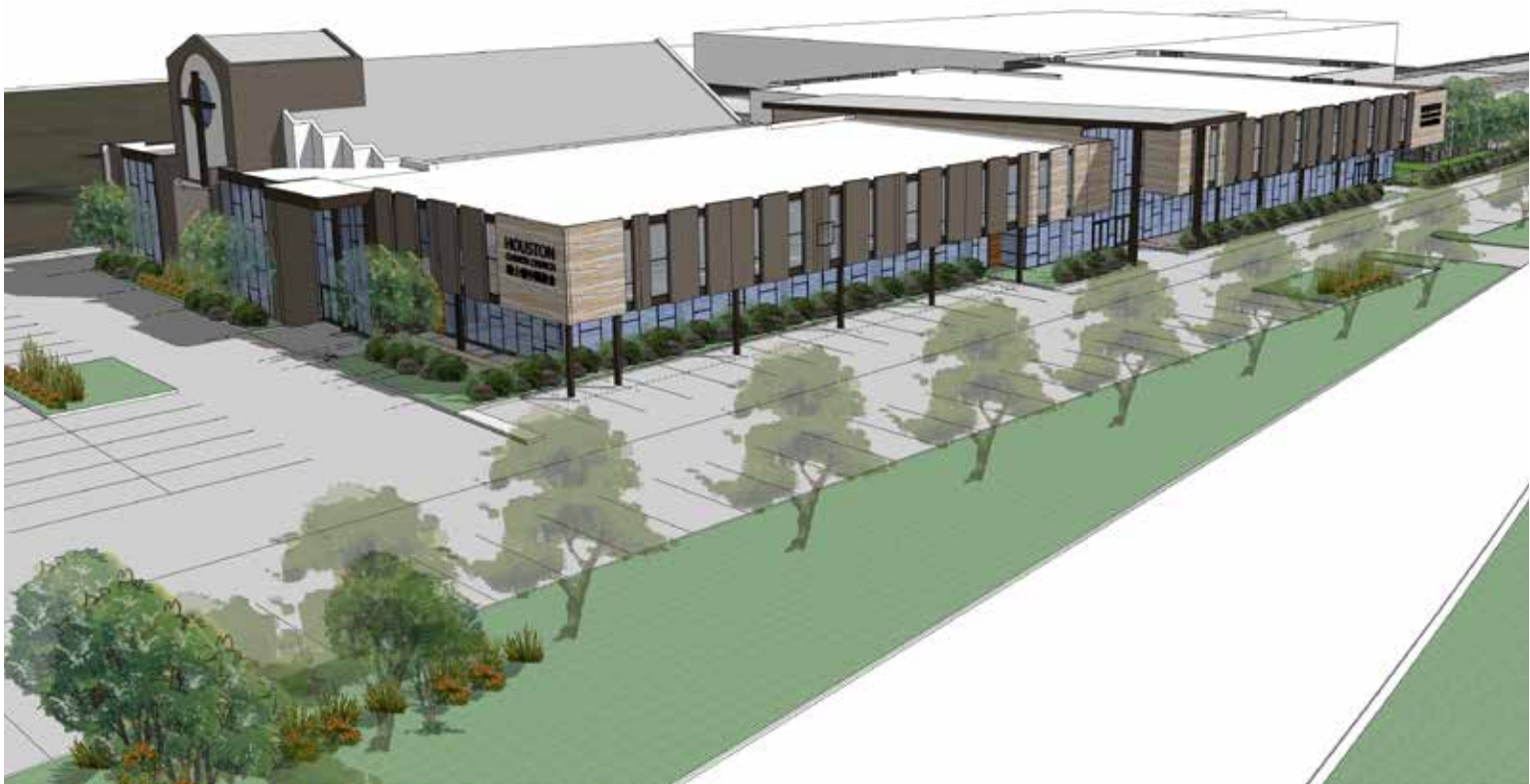
ADJACENCY & CIRCULATION DIAGRAM



STUDY 2 - LEVEL 2 FLOOR PLAN



SCHEME 3A - STREET VIEW RENDERINGS



SCHEME 3A - AERIAL VIEW RENDERINGS



SCHEME 3B - STREET VIEW RENDERINGS



SCHEME 3B - AERIAL VIEW RENDERINGS