City of Oregon City Library and City Hall Energy Program

Meghan Gross

ARCH 549 Architectural Programming

Professor Jean von Bargen

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Thesis Statement

The City of Oregon City cannot afford to build a desperately needed City Hall. Available funding would double if the City Hall and Public Library build a combined center. Uniting the Library and the City Hall into a Civic Center will strengthen the effectiveness and increase the efficiency of both functions.

Energy Consumption Goals

- The City of Oregon City is committed to building a Sustainable Future. By focusing on energy savings, the City will role model sustainability to the members of the community.

- Saving energy during construction and during operation of the building aligns with this goal. Combining the City Hall and Public Library will save energy during construction as they will be built at the same time, requiring fewer crews and less machinery as if they were built separately.

- Fewer construction materials will be needed because the total square footage decreases as similar programs are merged.

City Hall and Library Use

- City Hall
  - Council Chambers
  - Offices
  - Conference Rooms
  - Record Storage
  - Support Spaces (copy room, locker room, etc.)
- Library
  - Staff Workstations
  - Collections (books, DVD's, video games)
  - Seating
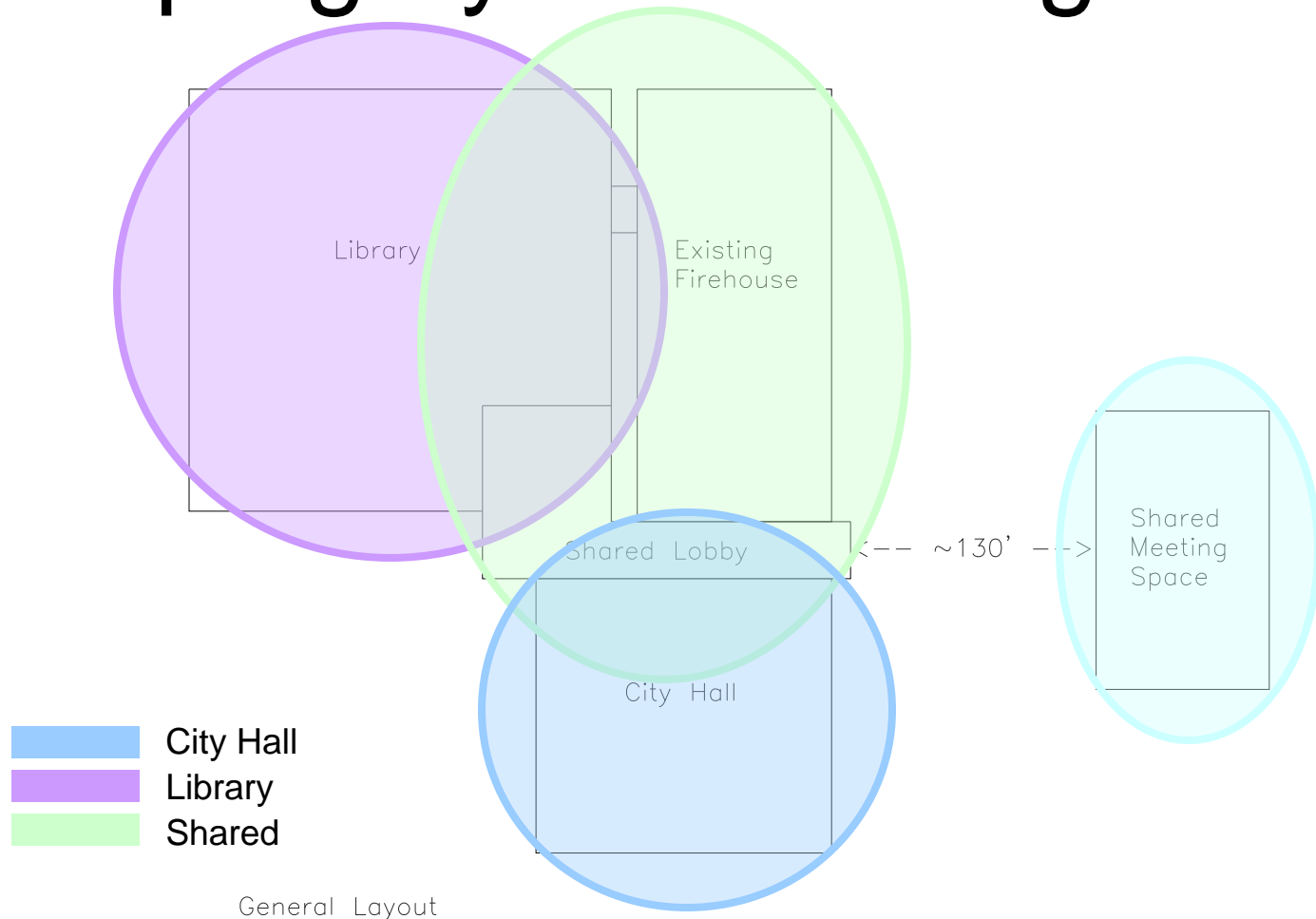 - Support Spaces (book return, café, etc.)

City Hall and Library Use Patterns

	8am	9am	10am	11am	12pm	1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm

Sunday
City Hall
Library

Monday
City Hall
Library

Tuesday
City Hall
Library

Wednesday
City Hall
Library

Thursday
City Hall
Library

Friday
City Hall
Library

Saturday
City Hall
Library

- **City Hall Hours**
- **City Hall After Hour Meetings**
- **Library Current Hours**
- **Library Future Extended Hours**

By combining the programs of the City Hall and the Library, the new building is occupied more hours of the day and more days of the week. The shared spaces are now taking advantage of the swing shift use pattern created by merging these two facilities.

Grouping by Scheduling Needs

Library

Existing
Firehouse

Shared Lobby

<−− ~130' −−>

Shared
Meeting
Space

City Hall

City Hall
Library
Shared

General Layout

The shared functions are centralized as they can be used at all times. The Library and City Hall functions are separated into individual wings so they can be closed off when they are not in use.

City Hall Space Needs for 2015

	No. of Rooms	Room Type	Room Dimensions	Typical Area	Total Area
City Hall Offices					
Commisioners	5	Office	20 x 10	200	1000
City Manager	1	Office	20 x 15	300	300
Mayor	1	Office	20 x 15	300	300
Mayor Assistants	1	Office	15 x 10	150	150
City Recorder	5	Office	20 x 10	200	1000
Human Resource	4	Office	10 x 10	100	400
Utility Billing	8	Office	10 x 10	100	800
Accounts Payable	2	Office	10 x 10	100	200
Accounts Recievable	6	Office	10 x 10	100	600
Chief Financial Officer	1	Office	10 x 10	100	200
Community Development	2	Office	10 x 10	100	200
Planning Department	16	Office	12 x 10	120	1920
Plan Reviewer	2	Office	12 x 10	120	240
Code Enforcement	8	Office	12 x 10	120	960
Building Department	12	Office	12 x 10	120	1440
City Inspector	2	Office	12 x 10	120	240
Building Inspectors	4	Office	12 x 10	120	480
Engineering Technician	2	Office	12 x 10	120	240
Engineering Manager	1	Office	12 x 10	120	120
Project Engineer	4	Office	12 x 10	120	480
City Engineers	2	Office	12 x 10	120	240
City Engineer Assistant	2	Office	10 x 10	100	200
Engineering Interns	4	Office	10 x 10	100	400
Parks Department	6	Office	10 x 10	100	600
GIS Managers	1	Office	12 x 10	120	120
GIS Specialist	2	Office	10 x 10	100	200
Engineering Technicans	2	Office	10 x 10	100	200
IT Office	2	Office	12 x 10	120	240
Circulation at 20%					2694
Total					16164

Library Space Needs for 2015

Library Offices					
Director	1	Office	20 x 15	300	300
Library Services Supervisor	2	Office	15 x 10	150	300
Technology Librarian	1	Office	20 x 10	200	200
Account Clerk	1	Office	12 x 8	96	96
Custodian	1	Office	10 x 8	80	80
Children's Librarian	1	Office	12 x 8	96	96
Young Adult/Outreach Librarian	1	Office	10 x 8	80	80
Reference Librarian	2	Office	12 x 8	96	192
Tech Services Coordinator	1	Office	12 x 8	96	96
Librarians (part-time)	1	Office	8 x 8	64	64
Library Assistant (ILL & Ref)	1	Office	12 x 8	96	96
Library Assistant (T.S. & Circ)	2	Office	12 x 8	96	192
Library Assistant (Circulation)	4	Office	6 x 6	36	144
Student Aides (shelving)	4	Office	6 x 4	24	96
Volunteer	8	Office	6 x 4	24	192

Library Spaces					
Collections Adult	1	Stacks	100 x 74	7400	7400
Adult Seating	1	Seating	100 x 25.7	2570	2570
Collections Youth	1	Stacks	75 x 34	2550	2550
Youth Seating	1	Seating	32 x 25	800	800
Other Periodicals	1	Stacks	75 x 38	2810	2810
Quiet Room	1	Seating	50 x 10	500	500
Computer Lab	1	Support	20 x 20	400	400
Support areas	1	Support	75 x 58	4300	4300

Circulation at 20%					4711
Total					28265

Shared Space Needs for 2015

	No. of Rooms	Room Type	Room Dimensions	Typical Area	Total Area
Shared Spaces					
Conference / Group Study / Tutoring Large	5	Group	20 x 15	300	1500
Conference / Group Study / Tutoring Small	10	Group	12 x 10	120	1200
Council Chambers / Community Meetings	1	Group	50 x 30	1500	1500
Kitchen / Lunchroom / Lounge	1	Support	50 x 40	2000	2000
Copy room	1	Support	20 x 15	300	300
Locker Rooms w/ Showers	2	Support	20 x 15	300	600
Bathrooms	2	Support	20 x 15	300	600
Combined Lobby	1	Support	100 x 20	100 x 20	2000
Circulation at 20%					1940
Total					11640
Total Library, City Hall, and Shared					56068

Shared Space Representation

The diagram shows spaces grouped around a central "Shared Lobby Circulation." Upper row spaces include: Showers, Bathrooms, Conf/Study/Tutor Small, Conf/Study/Tutor Large. Lower row spaces include: Kitchen, Lunchroom Lounge, Council Cham. Community Mtg. Labels "<-- Library" and "City Hall -->" flank the Shared Lobby Circulation.
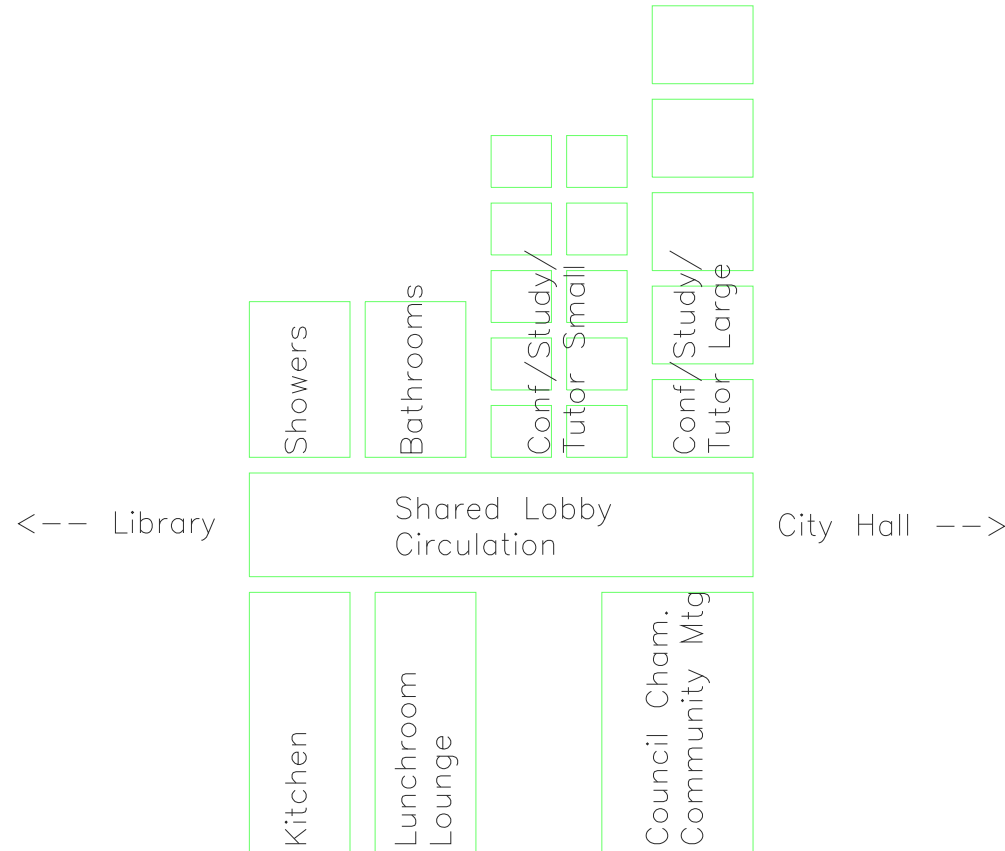
The Lobby is at the center of the facility. The shared functions are grouped together around the lobby on the first and second floors. The main circulation paths extend from the lobby and provide access to all shared functions.

Library Space Requirements

Collections Adult

Adult Seating

Third Floor

Support Services

Library Offices

Quite Room

Second Floor

Library Offices

Collections Youth

Other Periodicals

Youth Seating

Computer Lab

First Floor
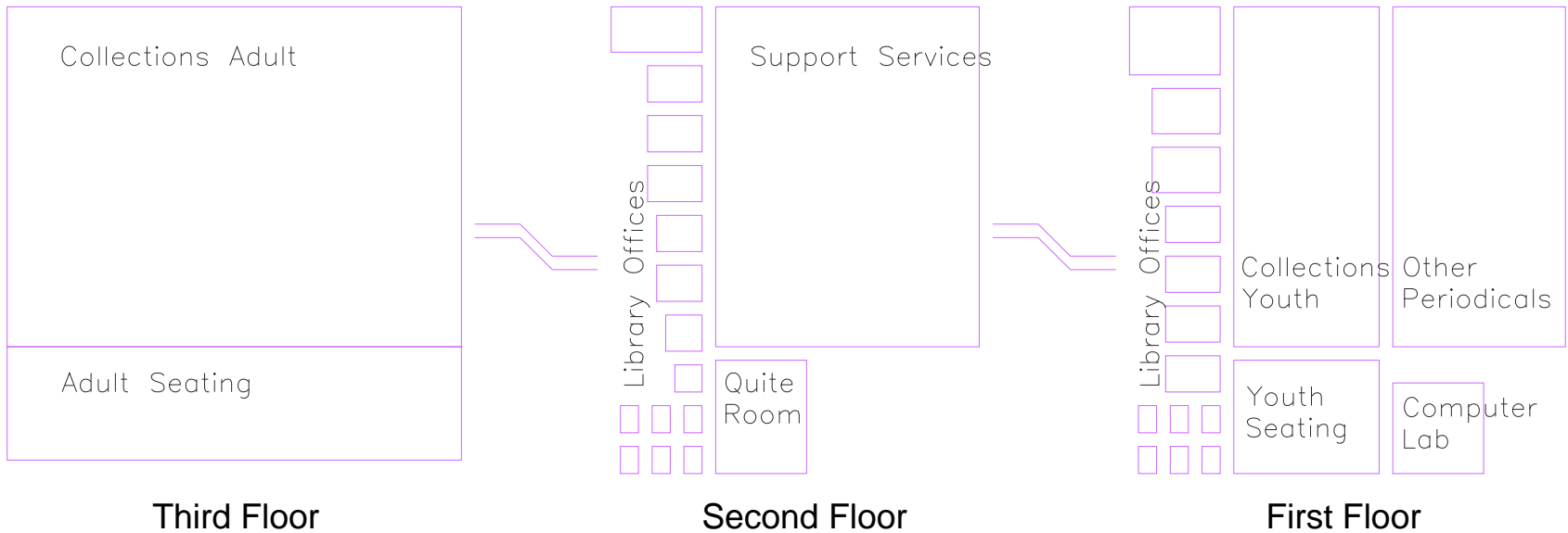
The new Library wing is placed in the 100' x 100' block to the NW of the existing Firehouse. The SW wall will be mostly glass to take advantage of the low sun in the winter for heating the building. There will be shading devices to block the high sun in the summer.   The 25' zone along this wall will have bare concrete floors for thermal mass. All open seating and reading zones are along this wall.

N

Library Scaled Program Diagram

Collections Adult

Adult Seating

Library Offices

Support Services

Quite Room

Library Offices

Collections Youth

Other Periodicals

Youth Seating

Computer Lab

N
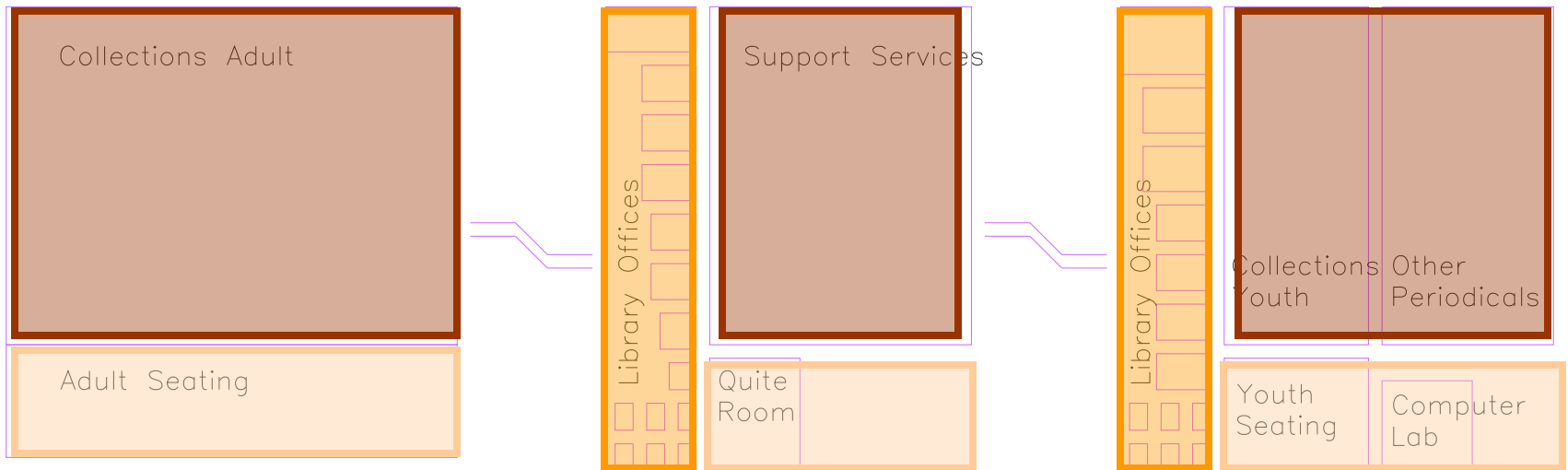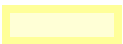
Open Seating and Reading Zones

Individual Offices and Workstations

Stacks and Support Services

Library Lighting

Collections Adult

Adult Seating

Library Offices

Support Services

Quite Room

Library Offices

Collections Youth

Other Periodicals

Youth Seating

Computer Lab

N
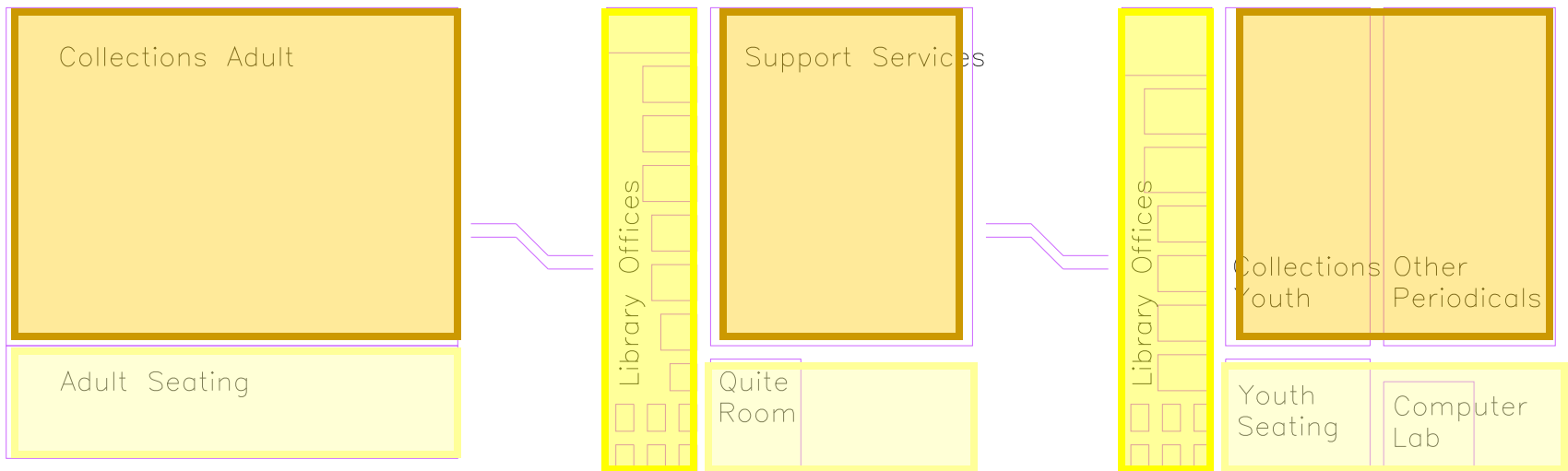
Day lighting with sensors for make-up lighting

High Task Lighting

Low Ambient Lighting arranged in line with stacks or as appropriate to support services

Library Temperature Range

Collections Adult

Adult Seating

Library Offices

Support Services

Quite Room

Library Offices

Collections Youth

Other Periodicals

Youth Seating

Computer Lab

N
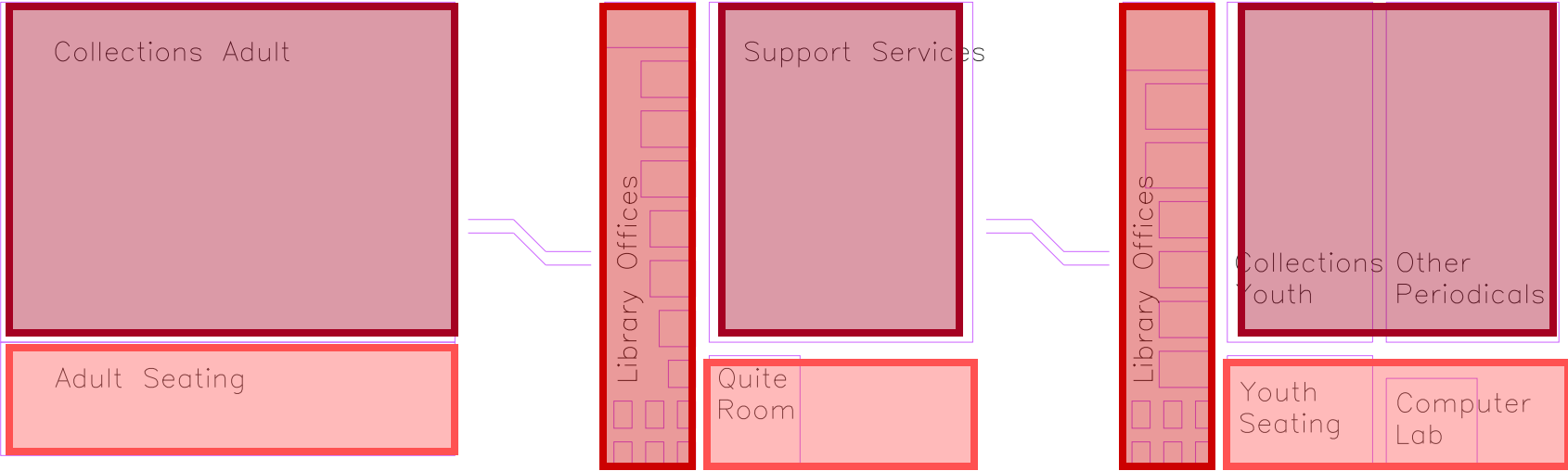
Solar Heating with make-up conditioning to maintain small range

Small Range 66F – 70F

Medium Range 62F – 72F
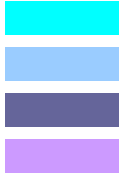
Library Room Sheet Details

Space Name	Computer Lab	Youth Seating	Quiet Room	Adult Seating	Offices	Stacks	Support
Space Use	Sedentary Research	Seating and Play area	Sedentary Reading	Sedentary Reading	Sedentary Computer and Filing	Research / Active	Active
SF	400	800	500	2570	2224	12760	4300
Program Notes	Extra electricity and cooling	Small chairs and tables for activities	Acoustically separate area	Chairs, tables, couches	Desks, chairs, file cabinets	Walking / standing; footstools	Multiple tasks; ex: log in books
Illuminance (lux)	500 (augmented w/ daylighting)	500 (augmented w/ daylighting)	500 (augmented w/ daylighting)	500 (augmented w/ daylighting)	500	300	300
Equipment	Computers				Computers, telephones		
Occupancy	15 sf / person 26 total	15 sf / person 53 total	15 sf / person 171 total	15 sf / person 33 total	1 person/office 31 total	100sf / person 127 total	100sf / person 43 total
Temperature Range	66F - 70F	66F - 70F	66F - 70F	66F - 70F	66F - 70F	62F - 72F	62F - 72F

2006 IBC Table 1004.1.1
Maximum floor area allowances per occupant

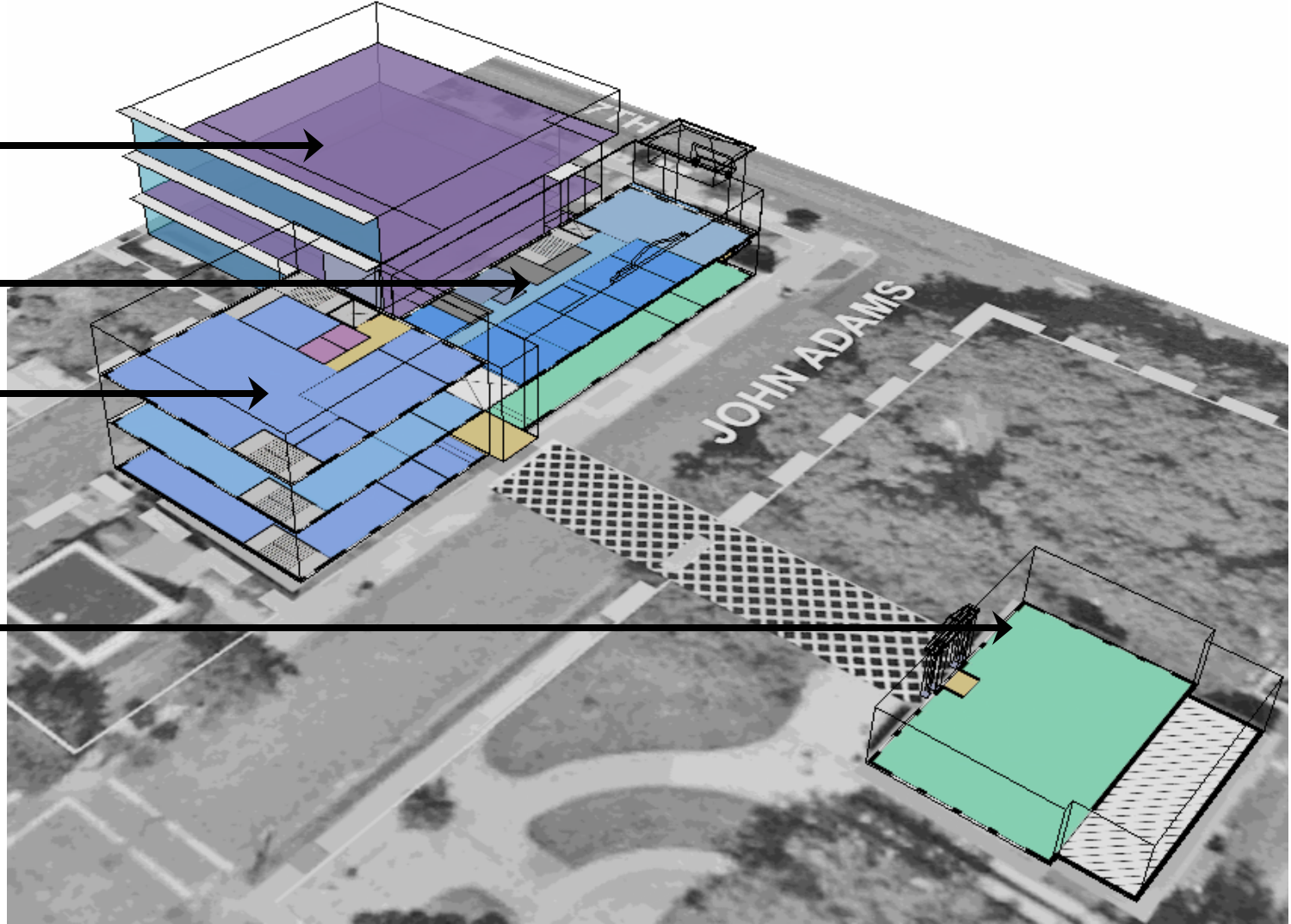| Functional of Space	Floor Area in sf / occupant
Assembly w/out fixed seats (tables and chairs)	15 net
Business Areas	100 gross
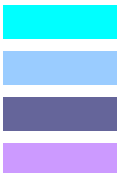
Architectural Ideas

New Library Addition

Existing Firehouse

New City Hall Addition

Existing Carnegie Library

JOHN ADAMS

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