

PROJECT NOTES
HUDSON ADMINISTRATION CENTER, PASCO BUILDING SPACE UTILIZATION STUDY
PROJECT NO. 17087

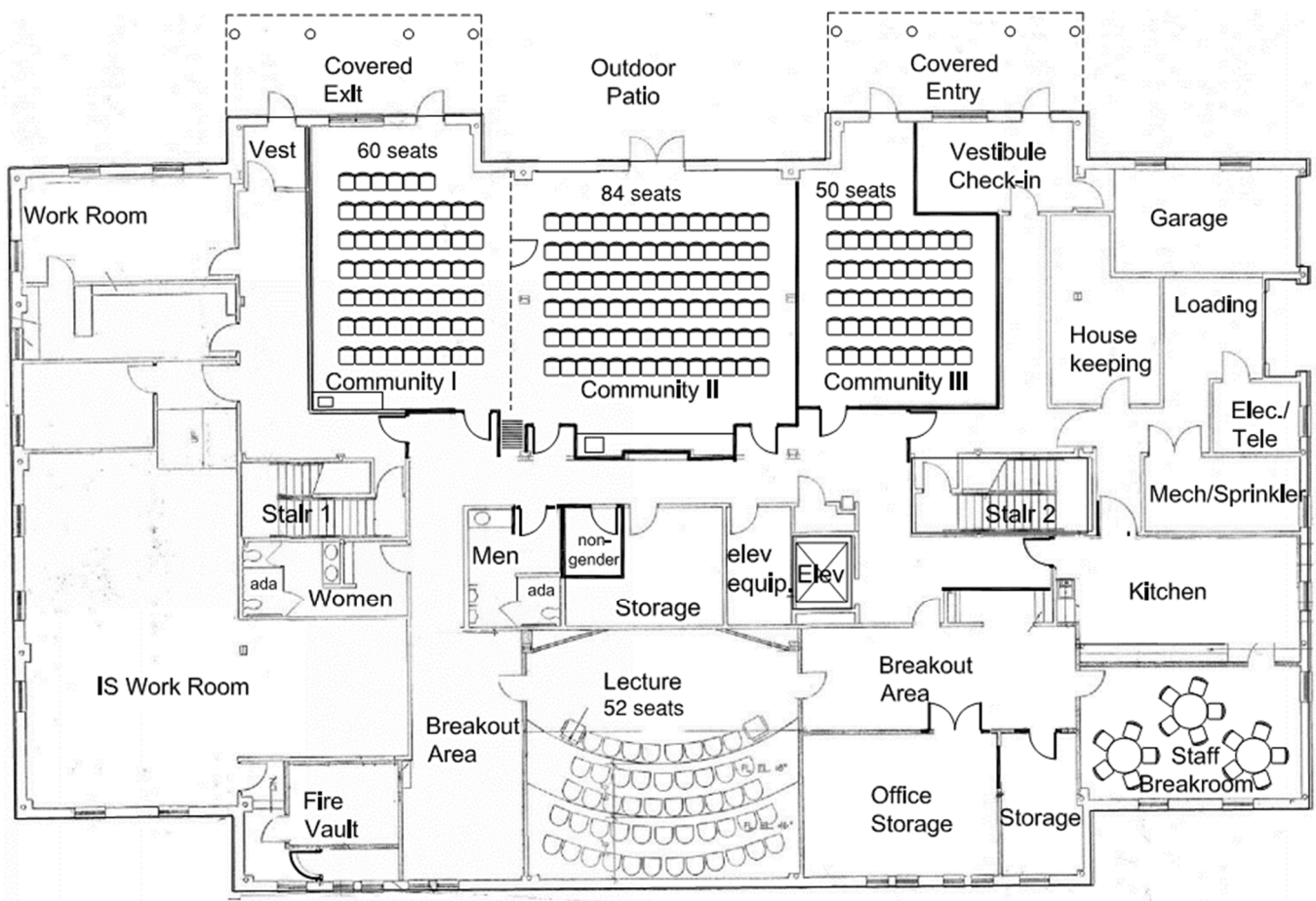
OCCUPANCY AND RESTROOM COUNTS

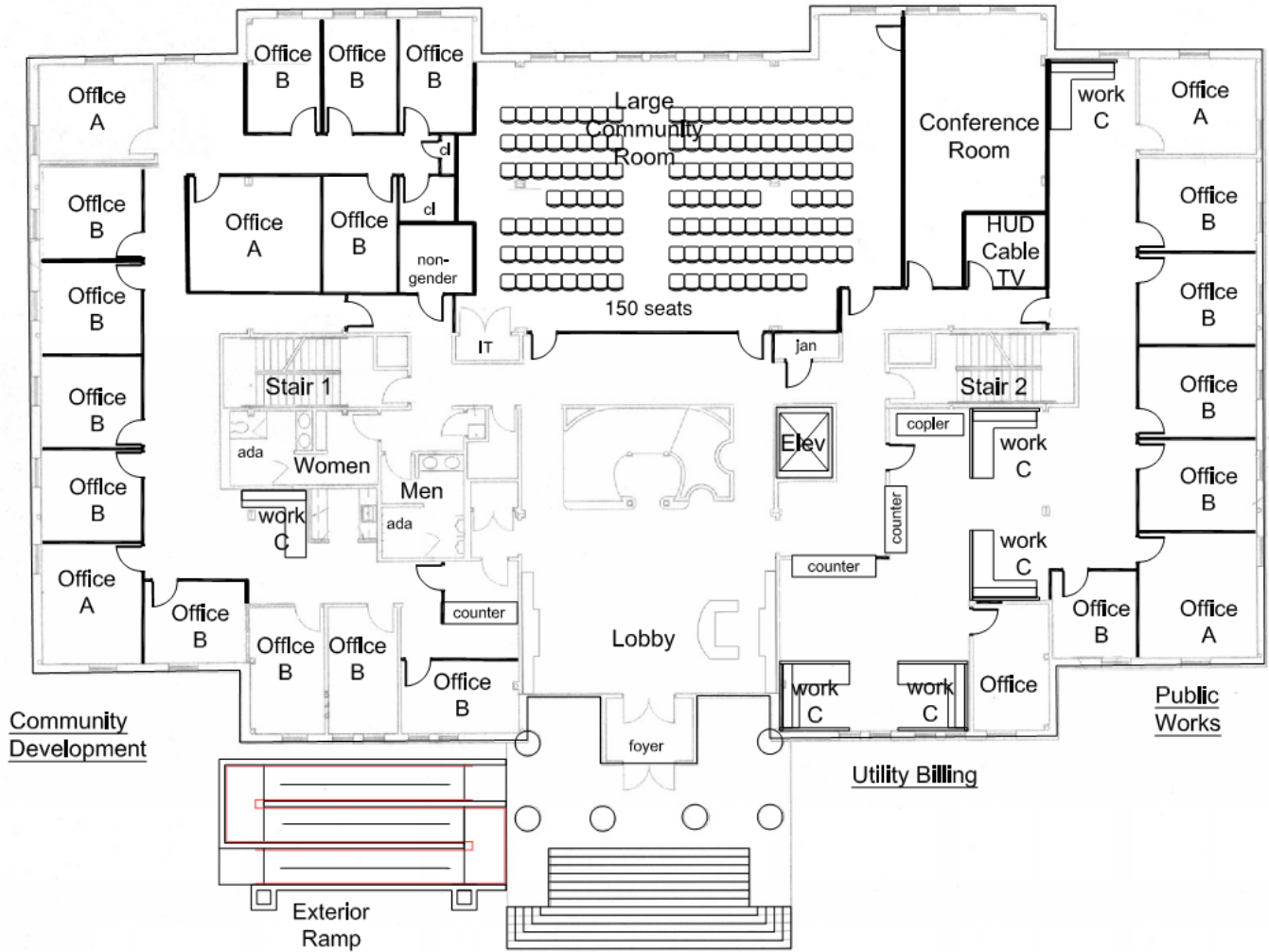


JUNE 23, 2017

1. Occupancy and Plumbing Fixture Counts

- a. The challenge is both working within the confines of an existing building as well as justifying occupancy counts based on actual numbers versus the calculations required by code.
- b. See attached Concept Building Space Program that reflects the Concept Diagrams prepared for the space utilization study.
 - i. There is a column for occupancy based on calculations from the 2015 OBC, as well as a column for actual or posted occupancy.
 - ii. The total occupancy using the OBC calculations is 881 persons.
 - iii. The anticipated actual or posted occupancy is 578 persons.
 - 1. These numbers for office areas reflect staff counts per offices or individual workstations.
 - 2. These numbers for community rooms reflect actual seating layouts – see below.





c. Plumbing Fixture Counts: There are also two different uses in the building: A3 for community rooms and B for the remainder. The areas of A3 are 15% of the total. If they were 10% or less, they would be an accessory use to the B (Business) use.

i. Plumbing Fixture Requirements for A3 are:

Men's water closets:	1:125
Women's water closets:	1:65
Lavatories:	1:200

ii. Plumbing Fixture Requirements for B are:

Men's water closets:	1:50
Women's water closets:	1:50
Lavatories:	1:80

iii. If we use the actual/posted occupancies recommended, the following counts apply, and the planned fixtures are adequate:

	<u>WC req'd</u>	<u>WC actual</u>	<u>Lav req'd</u>	<u>Lav actual</u>
Men	5	7	3	3
Women/Non-gender	6	8	3	8

iv. If we use the occupancy determined strictly from the code area calculations, we will need 1 more men's toilets, 2 more women's toilets, and 2 more men's lavs in the building.

	<u>WC req'd</u>	<u>WC actual</u>	<u>Lav req'd</u>	<u>Lav actual</u>
Men	8	7	5	3
Women/Non-gender	10	8	5	8

- v. The other consideration is that the community rooms may not be in use at the same time that the staff offices will be occupied. In that case we may be able to argue non-concurrent use and provide for the most restrictive use.

2. Accessible Restrooms

- a. 2015 OBC Chapter 11 Accessibility, 1109.2 Toilet and Bathing Facilities states: "Each toilet room and bathing room shall be accessible. "
- b. 2015 OBC Plumbing Code, Section 403.3.3 States:
"Location of toilet facilities in occupancies other than malls. In occupancies other than covered and open mall buildings, the required public and employee toilet facilities shall be located not more than one story above or below the space required to be provided with toilet facilities, and the path of travel to such facilities shall not exceed a distance of 500 feet."
 - i. Following this code statement, we could argue that since restrooms are not required for each floor, having those restrooms accessible may not be required. In that case we would recommend providing accessible restrooms on the two public floors: Lower Level and First Floor. HOWEVER – since there are restroom provided on each floor, the code official may require that each be accessible.
 - ii. The space utilization plan allowed for each floor to have accessible restrooms.

3. RECOMMENDATION:

- a. We recommend that the city provide the fixture count required for the actual or posted occupancy. We also recommend that each restroom is made to be handicapped accessible.



CONCEPT BUILDING SPACE PROGRAM
Hudson Administration Center
Hudson, Ohio

3/21/2018

Space Description	Notes	Qty	Program Net (Each)	Program Net (Total)	Occupant Load/sf	Occupants by Code	Posted/Actual Occupants
1.00 GROUND FLOOR							
1.01 Vestibule 1		1	50	50			
1.01 Vestibule/Check-in		1	180	180			
1.03 Stair 1		1	160	160			
1.04 Stair 2		1	170	170			
1.05 Elevator		1	56	56			
1.05 Elevator Equip		1	98	98			
1.06 Garage		1	250	250	300	1	1
1.07 Loading Area		1	130	130	300	1	1
1.08 Elec/Tele		1	80	80	300	1	1
1.08 Mechanical		1	150	150	300	1	1
1.08 Housekeeping		1	228	228	300	1	1
1.09 IS Work Room		1	1,353	1,353	300	5	5
1.09 IS Office		1	140	140	100	1	1
1.10 Fire Vault		1	130	130	300	1	1
1.11 Restrooms							
Men	ADA 1 Toilet, 2 Urinals, 1 sinks	1	140	140			
Women	ADA 2 Toilets, 2 sinks	1	160	160			
Non-gender	ADA 1 toilet, 1 sink	1	60	60			
1.12 Work Room		1	286	286	100	3	0
1.13 Copy Room		1	200	200	100	2	0
1.14 Lecture Room	Tiered seating: 52 at chairs	1	896	896		52	52
1.15 Breakout Area 1	Adjacent to Lecture Room	1	360	360			
1.16 Breakout Area 2	Adjacent to Lecture Room	1	360	360			
1.17 Office Storage		1	354	354	300	1	1
1.17 Storage		1	150	150	300	1	1
1.18 Staff Break Room		1	380	380	15	25	18
1.19 Kitchen		1	360	360	100	4	4
1.20 Community Room 1	Capacity: 60 at chairs	1	714	714	7	102	60
1.21 Community Room 2	Capacity: 84 at chairs	1	930	930	7	133	84
1.22 Community Room 3	Capacity: 50 at chairs	1	620	620	7	89	50
1.23 Storage		1	180	180	300	1	1
Subtotal Net Square Footage				9,325		423	283
Circulation, Walls, Chases				2,722			
Subtotal Gross Square Footage				12,047			
2.00 FIRST FLOOR							
2.01 Vestibule		1	76	76			
2.02 Lobby/Reception	Reception Desk	1	317	317	7	45	45
2.03 Stair 1		1	158	158			
2.04 Stair 2		1	170	170			
2.05 Elevator		1	56	56			
2.06 Restrooms							
Men	ADA 1 Toilet, 2 Urinals, 1 sinks	1	130	130			
Women	ADA 2 Toilets, 2 sinks	1	160	160			
Non-gender	ADA 1 toilet, 1 sink	1	60	60			
2.07 Utility/Billing				593	100	6	3
Private Office		1	137	137			
Work Area / Workstations	2 workstations, public counter	1	456	456			
2.07 Public Works				622	100	6	3
Private Office		1	109	109			
Work Area / Workstations	2 workstations, public counter	1	513	513			
2.07 Administrative Support				1,320	100	13	7
Private Office A		1	200	200			
Private Office B		5	120	600			
Work Area / Workstation	1 workstation	1	520	520			
2.10 Community Development				1,189	100	12	7
Public Counter		1	135	135			
Private Office A		1	160	160			
Private Office B		4	130	520			
Work Area	1 workstation	1	374	374			
2.08 Engineering				2,176	100	22	11
Private Office A		2	190	380			
Private Office B		4	130	520			
Private Office C		4	124	496			
Work Area		1	630	630			
Secure Storage		2	75	150			
2 Meeting Rooms				2,240			
Large Community Room	Capacity: 150 at chairs	1	1,700	1,700	7	243	150
Conference Room	Capacity: 30 at table	1	540	540	15	36	30
Subtotal Net Square Footage				9,267		383	256
Grossing Factor: Circulation, Mech, Walls, Chases				2,685			
Subtotal Gross Square Footage				11,952			

Space Description	Notes	Qty	Program Net (Each)	Program Net (Total)	Occupant Load/sf	Occupants by Code	Posted/Actual Occupants
3.00 SECOND FLOOR							
3.01 Stair 1		1	158	158			
3.02 Stair 2		1	170	170			
3.03 Elevator		1	56	56			
3.04 Restrooms							
Men	ADA 1 Toilet, 1 sink	1	80	80			
Women	ADA 1 Toilet, 1 sink	1	80	80			
3.05 City Manager				798	100	8	3
Private Office A		1	267	267			
Private Office B		1	180	180			
Private Restroom	1 toilet, 1 sink	1	26	26			
Workstation/Circulation		1	325	325			
3.08 Administrative Directors				1,083	100	11	6
Private Office A		2	200	400			
Private Office B		3	130	390			
Work Area/Circulation		1	293	293			
3.06 IS/Broad Band				1,588	100	16	7
Private Office A		1	190	190			
Private Office B		5	150	750			
Work Area/Circulation		1	648	648			
3.07 Finance/HR				1,790	100	18	8
Private Office A		1	190	190			
Private Office B		5	150	750			
Work Area/Circulation		1	520	520			
Conference Room	Capacity: 12 at table	1	230	230			
Secure Storage		1	100	100			
3.09 Conference Room	Capacity: 15 at table	1	336	336	15	22	15
Subtotal Net Square Footage				6,139		75	39
Walls, Chases				2,129			
Subtotal Gross Square Footage				8,268			
Total Gross Square Footage				32,267		881	578

CONCEPT BUILDING SPACE PROGRAM: PLUMBING FIXTURES PER ACTUAL OCCUPANCY

PLUMBING FIXTURE COUNTS	<u>wc rate M</u>	<u>wc rate W</u>	<u>lav rate</u>
use group A3	1:125	1:65	1:200
use group B	1:50	1:50	1:80

ACTUAL / POSTED OCCUPANCY

Ground Floor

plumbing fixtures	occupants	wc rate	wc req	lav rate	lav req
men - A3	123	1:125	0.98	1:200	0.62
women - A3	123	1:65	1.89	1:200	0.62
men - B	19	1:50	0.37	1:80	0.23
women - B	19	1:50	0.37	1:80	0.23
	men		1.35		0.85
	women		2.26		0.85

1st floor

plumbing fixtures	occupants	wc rate	wc req	lav rate	lav req
men - A3	75	1:125	0.60	1:200	0.38
women - A3	75	1:65	1.15	1:200	0.38
men - B	53	1:50	1.06	1:80	0.66
women - B	53	1:50	1.06	1:80	0.66
	men		1.66		1.04
	women		2.22		1.04

2nd floor

plumbing fixtures	occupants	wc rate	wc req	lav rate	lav req
men	20	1:125	1	1:200	1
women	20	1:65	1	1:200	1

TOTAL BUILDING

	water closets		lavatories	
	reqd	actual	reqd	actual
men	4	7	3	3
women	5	8	3	8

CONCEPT BUILDING SPACE PROGRAM: PLUMBING FIXTURES PER CODE AREA CALCULATIONS

PLUMBING FIXTURE COUNTS		wc rate M	wc rate W	lav rate		
use group A3		1:125	1:65	1:200		
use group B		1:50	1:50	1:80		
CODE CALCULATIONS						
Ground Floor						
plumbing fixtures	occupants	wc rate	wc req	lav rate	lav req	
men - A3	188	1:125	2	1:200	1	
women - A3	188	1:65	3	1:200	1	
men - B	24	1:50	1	1:80	1	
women - B	24	1:50	1	1:80	1	
	men		3		2	
	women		4		2	
1st floor						
plumbing fixtures	occupants	wc rate	wc req	lav rate	lav req	
men - A3	121	1:125	2	1:200	1	
women - A3	121	1:65	3	1:200	1	
men - B	70	1:50	2	1:80	1	
women - B	70	1:50	2	1:80	1	
	men		4		2	
	women		5		2	
2nd floor						
plumbing fixtures	occupants	wc rate	wc req	lav rate	lav req	
men	37	1:125	1	1:200	1	
women	37	1:65	1	1:200	1	
			reqd	actual	reqd	actual
	men		8	7	5	3
	women		10	8	5	8