

Durham County Youth Home Program Study



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INTRODUCTION

EXECUTIVE SUMMARY

O'Brien Atkins Associates worked with Durham County Youth Home and Engineering and Environmental Services staff to determine the future needs of the Durham County Youth Home facility. This study includes a complete Space Program that outlines the operational needs and follows the standards provided by the North Carolina Administrative Code 10A NCAC 14J, Rules and Laws Governing the Operations, Surveillance, and Monitoring of Jail Facilities; and the American Correctional Association Standards for Juvenile Detention Facilities. The future space needs total 32,521 gross square feet.

The existing Youth Home has been located on the 2500 Broad Street site since 1983 and the County's goal is to continue using the same site. In the current Durham City/County UDO, the Youth Home is considered a Congregate Living Facility and permitted within the Office/Institutional (OI) zoning district. Future improvements and new construction with the same use designation are permitted on the existing site.

This document includes a Conceptual Site Plan that demonstrates how the Space Program could lay out on the existing site. The plan follows design criteria established by the Durham UDO.

A Conceptual Cost Estimate provided by Bree and Associates determined a unit cost range of \$268 - \$370 per square foot for a new Youth Home facility. The total probable cost estimate in February 2018 is \$13,186,141.

PROGRAM STRUCTURE

DEFINITIONS

Count	Number of spaces required
Capacity	Number of people per space
Assignable Area	Area per person as determined by function or established standards
Area per Space	Net area per space (Capacity x Assignable Area)
Net Area	Usable space (Count x Area per Space)
Space Gross	Factor added to Net Areas for circulation, walls, and building structure
Building Gross	Factor added to Area Totals for building circulation, walls, and building structure
Area Total	Calculated space for each program component (Net Area x Space Gross)

METHODOLOGY

A kick-off meeting for the Youth Home Program and Site Master Plan was held in August 2017 with the O'Brien Atkins (OBA) team, Durham County Engineering and Environmental Services, Youth Home representatives, General Services, and the County Manager's office. This meeting established the goals and objectives for Durham County, and the process the design team would use to gather information and data.

OBA created a program survey asking for the department's purpose, staff information, program operations, group meeting space needs, and any items unique to Durham County. Space guidelines for student housing, detention, medical services, food services, security, and facility operations follow North Carolina Administrative Code 10A NCAC 14J, Rules and Laws Governing the Operations, Surveillance, and Monitoring of Jail Facilities; and the American Correctional Association Standards for Juvenile Detention Facilities. Youth Home staff also provided an organization chart.

OBA developed a draft program based on the above information. Each space was discussed and vetted with DCYH, and Engineering staff, and revisions were made further incorporating their operational guidelines. The design team also toured the existing facility to understand how DCYH currently utilizes its space. These discussions provided more insight into how the County intends for the facility to function. A final draft was given to Durham County representatives for verification and confirmation of the program.

PROGRAM

	Count	Capacity	Assignable Area	Area per Space	Net Area	
Juvenile Housing						
Male Rooms	16	1	70	70	1,120	1 handicap accessible
Toilets	2	1	15	15	30	1 per 12 male juveniles, minimum of 2
Wash Basins	2	1	12	12	24	1 per 12 juveniles
Showers	2	1	24	24	48	1 per 8 juveniles
Female Rooms	8	1	70	70	560	1 handicap accessible
Toilet	2	1	15	15	30	1 per 8 female juveniles, minimum of 2
Wash Basins	1	1	12	12	12	1 per 12 juveniles
Showers	1	1	24	24	24	1 per 8 juveniles
Female Dayroom	1	8	100	800	800	35 SF per juvenile minimum, includes dining
Special Needs Housing	2	1	70	70	140	Separate from general population
Segregation Room	2	1	50	50	100	Padded room, suicide watch
Primary Dayroom	1	24	100	2400	2,400	35 SF per juvenile minimum, includes dining
Staff Station	1	1	64	64	64	Inside dayroom
Janitor Closet	1	1	50	50	50	Emergency eyewash
Staff Toilets	1	1	64	64	64	
					5,466	
				Space Gross	30%	
Total					7,106	

	Count	Capacity	Assignable Area	Area per Space	Usable Net Area	
Security						
Control Room	1	3	100	300	300	
Staff Toilet	1	1	64	64	64	
Electronic Security Equipment	1	1	100	100	100	
Intake	1	1	400	400	400	
Juvenile Property Storage	1	1	200	200	200	
Toilet/ Shower/ Changing	1	1	96	96	96	
Sally ports	10	1	28	28	280	Throughout facility
					1,440	
				Space Gross	30%	
Total					1,872	

	Count	Capacity	Assignable Area	Area per Space	Usable Net Area	
Medical						
Examine Room	1	1	120	120	120	
Doctor Office	1	1	120	120	120	
Nurse Station	1	2	100	200	200	Includes waiting area
Toilet/ Shower	1	1	96	96	96	
Secure Storage	1	1	50	50	50	Refrigerator
					586	
				Space Gross	30%	
Total					762	

PROGRAM

Program and Service Areas	Count	Capacity	Assignable Area	Area per Space	Usable Net Area	
Student Activity						
Indoor Activity Area	1	24	100	2400	2,400	100 SF per juvenile
Outdoor Activity Area						See outdoor area
Equipment Storage	1	1	100	100	100	
Student Toilet	2	1	64	64	128	Male, Female
Visitation						
Contact Visiting / Interview	4	3	25	75	300	Confirm numbers
Visitor Storage	1	1	50	50	50	Locker alcove for visitor items, adjacent to waiting
Student Spaces						
Classroom Large	0	24	28	672	0	with operable partition
Classroom Small	3	12	33	396	1,188	with computer stations against the wall
Table and Chair Storage	1	1	297	297	297	25% of classroom space
Classroom Supplies	1	1	50	50	50	
Teacher (Full-time)	1	3	100	300	300	In student area, shared office
Food Service						
Kitchen	1	1	500	500	500	
Dry Storage	1	1	150	150	150	
Cold Storage	2	1	100	100	200	Refrigerator, Freezer
Storage	2	1	100	100	200	
Toilet	1	1	64	64	64	
Kitchen Office	1	1	80	80	80	
Janitor Closet	1	1	75	75	75	With washer and dryer
Service						
Clothing/ Lining Storage/ Hygiene	1	1	120	120	150	
Laundry Room	1	1	250	250	250	50lb capacity commercial washer and dryer
Soiled Linens	1	1	35	35	35	
Building Service						
Janitor Closets	2	1	50	50	100	One per program area
Building Maintenance Storage	1	1	100	100	100	
Water Heater	1	1	60	60	60	
Telecom Room	1	1	80	80	80	
Main Electrical Room	1	1	200	200	200	
IT Closet	1	1	80	80	80	
Server Room	1	1	120	120	120	
Receiving	1	1	250	250	250	With loading dock
					7,507	
				Space Gross	30%	
Total					9,759	

PROGRAM

	Count	Capacity	Assignable Area	Area per Space	Usable Net Area	Notes
Administration and Staff						
Regular Schedule Staff						
Director	1	1	250	250	250	
Staff (Full-time)	3	1	120	120	360	
Administration Assistant	1	1	120	120	120	Receptionist
Future Staff Space	1	1	120	120	120	
Shift Schedule Staff						
Manager	1	2	100	200	200	Shared Office
Supervisor	1	2	100	200	200	Shared Office
Detention Counselors	8	0	0	0	0	No Space Assignment
Staff (Part-time)	7	0	0	0	0	No Space Assignment
Subtotal	23					
Conference Room	1	8	33	264	264	
Staff Lounge	1	6	50	300	300	
Workroom	1	1	150	150	150	
Storage	2	1	150	150	300	Records, Office Supply
Public Toilet	2	1	64	64	128	
Main Entrance	1	1	300	300	300	
Waiting Area	2	6	25	150	300	Main and Visitor combined
Staff Locker Room/ Showers	2	1	300	300	600	
Staff Entrance	1	1	150	150	150	
					3,742	
				Space Gross	30%	
Total					4,865	

	Count	Capacity	Assignable Area	Area per Space	Usable Net Area	Notes
Assessment Center						
Staff (Full-time)	4	1	120	120	480	
Administration Assistant	1	1	120	120	120	
Large Conference Room	1	8	33	264	264	
Small Conference Room	2	4	33	132	264	
Workroom	1	1	150	150	150	
Storage	1	1	100	100	100	
Public Toilet	2	1	64	64	128	
Assessment Entrance	1	1	300	300	300	
Waiting Area	1	6	25	150	150	
Assessment Break Area	1	1	150	150	150	
					2,106	
				Space Gross	30%	
Total					2,738	

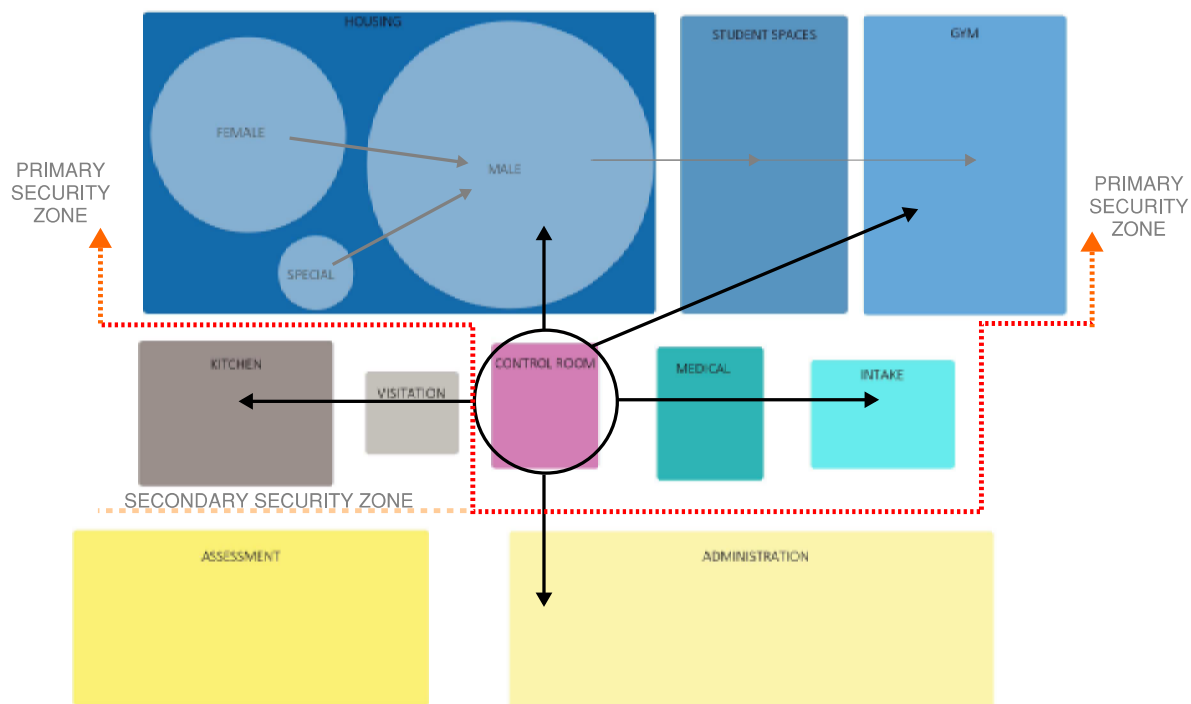
Gross Area	
Summary	
Juvenile Housing	7,106
Security	1,872
Medical	762
Program and Service Areas	9,759
Administration and Staff	4,865
Assessment Center	2,738
	27,101
Building Gross	20%
Building Total	32,521

ORGANIZATIONAL DIAGRAM

The desired organization for the Youth Home facility is divided into two zones, a secure zone and non-secure zone.

The non-secure zone includes Administrative/ Staff Areas and the Assessment Center. Both of these areas consist of offices and the associated workspace for Youth Center staff. Each area would have separate entrances as they serve different functions, but will interact internally. The Assessment Center may operate outside normal business hours.

All access to the secure zone is through the controlled sallyports. Program elements in this zone include Juvenile Housing, Medical, Program, and Service Areas. The day to day activities of the juveniles occur in this area. Male and female juveniles are separated in the housing area, but are allowed to interact in the other activity areas.



SITE INFORMATION

The Durham County Youth Home is located at 2500 Broad Street on two parcels of land. Parcel 128478 is 4.65 acres and Parcel 128491 is 3.40 acres, totaling 8.1 acres. The Youth Home shares the site with the Durham County Fire Marshal's and Emergency Management Office. Durham City/County records indicate the site is zoned Office/Institutional (OI) and within the Urban Development Tier. The use category is Residential, Group Living, Congregate Living Facility per UDO Section 5.2.3B.

In Zone OI, Congregate Living Facilities are permitted subject to limitations (L). The limitations are described in Section 5.3.2B. Item 2 references limitations to the allowed density of the site. Section 6.10.2.B establishes the residential density of the district at 14 people/acre and that is applied to the 4.65 acres of Parcel 128478.

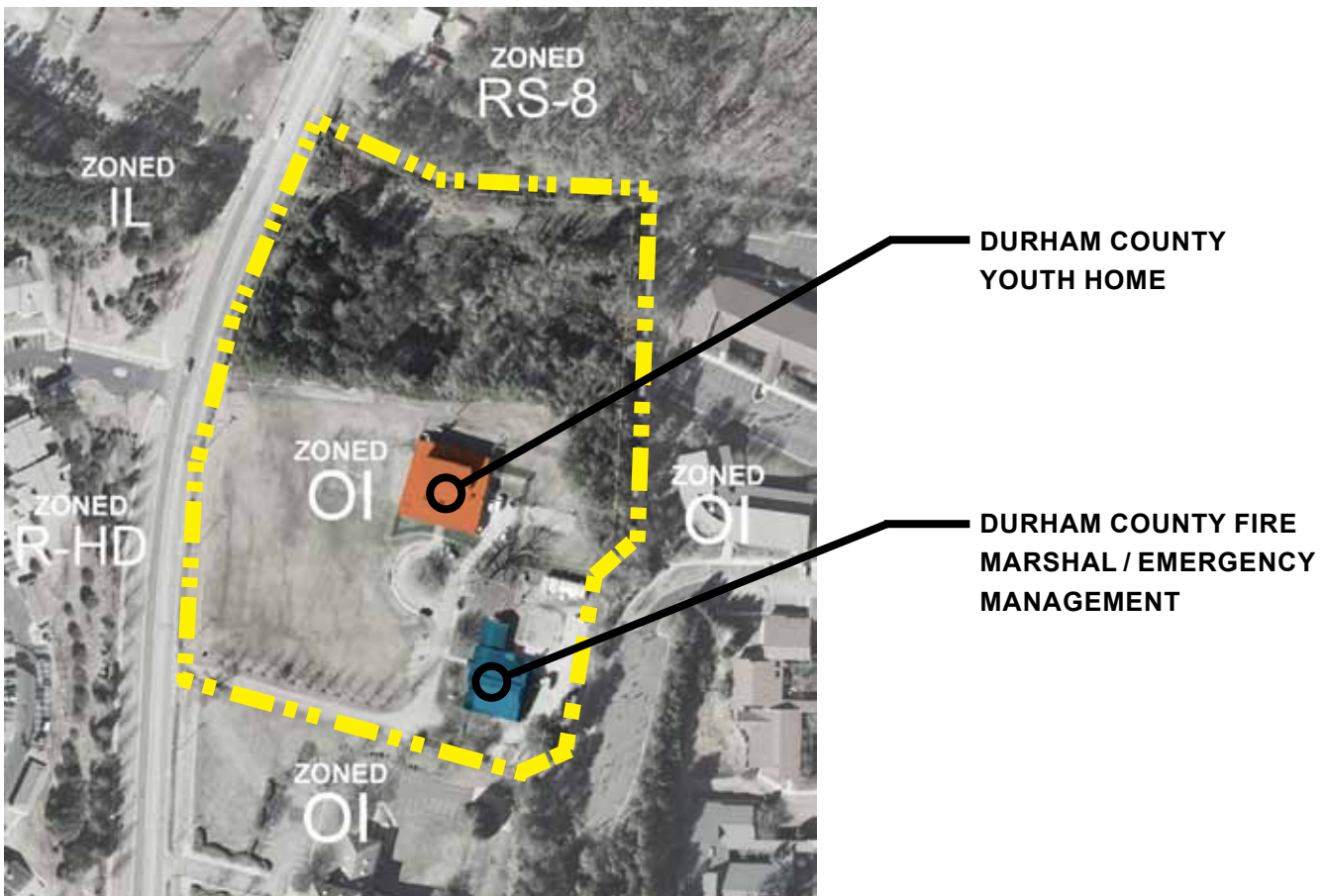
Density Calculations:

4.65 acres x 14 residents/acre = 65 residents

65 residents x 1 1/2 allowed increase = 97 residents

Program Total = 24 residents < allowed base density of site

Provided all conditions of Sections 5.3.2B are met, no Special Use Permit is required.



DURHAM CITY/COUNTY PLANNING CONSIDERATIONS

UDO SECTION 5.1 - USE TABLE

		RESIDENTIAL						NONRESIDENTIAL								PLANNED					DESIGN			
USE CATEGORY	SPECIFIC USE	RR	RS	RS-M	RU	RU-M	RC	U	CN	OI	CG	SRP	SRP-C ³	IL	I	PDR	UC	CC	IP	MU	DD	CD	NOTES:	
AGRICULTURAL USES (City Only)																								
Agriculture	All agriculture, except as listed below	L	L							P		P	P	P	P	P	P	P	P	P	P	P	P	5.3.1A
	Apiculture	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	
	Commercial crop production	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	5.3.1A
	Forestry	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	5.3.1B
RESIDENTIAL USES																								
Household Living	Single-family	L	L	L	L	L	L		L							‡					‡	L	L	6.2.1, 6.3.2, 6.4.2, 6.5.2, 6.10.2, 6.11.3, 6.11.7, 6.12, 7.1.2, 7.1.3, 7.1.4, 7.1.5, 7.1.6
	Two-family			L	L	L	L									‡					‡	L	L	6.3.2, 6.4.2, 6.5.2, 6.12, 7.1.7
	Multifamily			L	L	L	L	L	L	L	L	L	L	L		‡		‡L		‡	L	L	L	6.3.2, 6.4.2, 6.5.2, 6.10.2, 6.11.3, 6.11.5, 6.11.7, 6.12, 7.1.8, 7.1.9, 7.1.10
	Family care home	L	L	L	L	L	L		L		L					L‡				L‡		L	L	5.3.2C, 6.2.1, 6.3.2, 6.4.2, 6.5.2, 6.9.1, 6.10.2, 6.11.3, 6.11.7, 7.1.2
Household Living	Manufactured Home	L																						5.3.2D
	Manufactured home park or subdivision															‡L								5.3.2E
	Upper story residential							L	L	L	L	L	L			‡		‡L		‡	L	L	L	6.10.2, 6.11.3, 6.11.5, 6.11.7, 6.12
Group Living	All group living, except as listed below			m	m	m	m	m	m		m					‡m				‡m	m			
	Commercial dorm			L/m		L/m	L/m	L / m	L/m	L/m							‡L					L	L/m	5.3.2A
	Congregate living facility			L/m	L/m	L/m	L/m	L	L	L	L					‡L/m				‡L/m	L	L	5.3.2B	
	Group home		L/m	L/m	L/m	L/m	L/m	L	L	L	L					‡L/m				‡L/m	L	L	5.3.2C	
	Independent Living Facility			m	m	m	m	P	P	P	P					‡m				‡	P	P		

UDO SECTION 5.3.2B - CONGREGATE LIVING FACILITIES

B. Congregate Living Facility

Congregate living facilities shall be permitted in accordance with the use table in Sec. 5.1, Use Table, subject to the following:

- Residential suites or assisted living units without cooking facilities shall be permitted to be constructed at the same density as the base density for dwelling units with each room or suite considered a dwelling unit.
- Facilities with the following on-site common use facilities: dining, recreation, health care, a convalescent center, and multifamily units; shall not exceed 1½ times the allowed multifamily base density of the district, with each unit counted separately, except in the DD District where there is no limit on the multifamily base density.
- Facilities with the following on-site common use facilities: dining, recreation, health care, and a convalescent center; shall not exceed two times the allowed base density for the district, with each room or suite considered a dwelling unit, except in the DD District where there is no limit on the multifamily base density.
- Density limits indicated above may be exceeded with approval of a minor special use permit pursuant to Sec. 3.9, Special Use Permit.

DURHAM CITY/COUNTY PLANNING CONSIDERATIONS

UDO SECTION 6.10.2.B - RESIDENTIAL DENSITY FORMULAS

B. Residential Density

- The residential density shall be based only on that portion of the tract dedicated to the residential use and the maximum residential density (shown as units per acre) allowed shall be as shown in the table below:

District	Rural	Suburban	Urban	Compact
CI	---	---	14 ^{1,2}	14 ^{1,2}
CN	0.2	8 ^{1,3}	11 ^{1,2}	14 ^{1,2}
OI	---	11 ^{1,3}	14 ^{1,2}	18 ^{1,2}
CG	0.2	11 ^{1,3}	14 ^{1,2}	18 ^{1,2}
(County Only) SRP-C	---	20 ⁴	---	---

¹ Density can be increased through use of the Sec. 6.6, Affordable Housing Bonus.

² Density can be increased through use of the options available under paragraph 6.4.3, Residential Density.

³ For multifamily development, density can be increased through use of paragraph 6.3.3B, RS-M District Major Roadway Density Bonus.

⁴ Density in the SRP-C District can be calculated based upon the gross area of the contiguous district, including areas typically precluded from consideration for density in Article 8, Environmental Protection.

UDO SECTION 6.10.1.C.1 - DESIGN STANDARDS

2. Standards for the CN, OI, and CG Districts

Dimensional Standard	CN		OI		CG	
	Min.	Max.	Min.	Max.	Min.	Max.
Site Area (square feet)	5,000	---	20,000	---	20,000	---
Project Floor Area (square feet)	---	20,000	---	---	---	---
Lot Width (feet)	50	---	50	---	100	---
Street Yard ¹						
From ROW (feet)	---	15	---	15	---	15
Side Yard (feet)	10	---	10	---	15	---
Rear Yard (feet)	25	---	25	---	25	---
Building Coverage (%) ²	---	60	---	60	---	60
Height (feet)	---	35	---	90	---	50

¹ Street yard may be modified using the provisions of paragraph 6.10.1E, Street Yard Variations.

² Building coverage may be further restricted by the impervious surface requirements of paragraph 8.7.2B, Impervious Surface Limits.

- Structure(s) shall be oriented such that at least one of the following standards is met:
 - The longest building facade is parallel to and within the maximum street yard; or
 - The street-facing building facade occupies at least 60% of the total street frontage for the development.
- Rear yards can be reduced by up to 50% if adjacent to a railroad right-of-way.
- Additional height in the OI and CG Districts, up to 145 feet, is allowed if approved through the issuance of a minor special use permit pursuant to Sec. 3.9, Special Use Permit.
- A development within the CN District with new project floor area over 5,000 square feet, no development plan, and residential zoning districts adjacent (including directly across a public right-of-way) to two or more property lines requires a Minor Special Use Permit pursuant to Sec. 3.9, Special Use Permit. The applicant shall hold a neighborhood meeting pursuant to paragraph 3.2.3, Neighborhood Meeting, unless it previously held one for the development at issue.

DURHAM CITY/COUNTY PLANNING CONSIDERATIONS

UDO SECTION 6.10.1E - STREET YARDS

E. Street Yard Alternatives

A new structure or modifications to an existing structure shall not be required to conform to the street yard requirements of the district in the following circumstances:

1. Where 50% or more of the lots on the same linear block as the lot in question are developed with less than the required street yard, the average setback of the buildings on the developed lots on the block with less than the required street yard shall be observed as the minimum setback for a new structure;
2. Where the lot on which the new structure is proposed is between two adjacent existing developed lots with less than the required street yard, the average setback of the buildings of both adjacent lots shall be observed as the minimum street yard;
3. Where a linear block of less than 500 feet is split into more than one zoning district, the zoning district with the most frontage shall determine the minimum street yard setback. However, this provision shall not apply if the street right-of-way is less than 50 feet wide and property on the opposite side of the street is residentially used or zoned, in which case the provisions of paragraph 6.8.3A, Street Yards, shall be applied;
4. In the Urban and Compact Neighborhood tiers, excluding Design Districts, the applicable street yard of a multiple-frontage lot shall be applied to the frontage with the predominant orientation of existing structures along the blockface. The other frontage shall be considered a side or rear as applicable; or
5. In the Urban and Compact Neighborhood tiers, except within CD districts, the maximum street yard shall be considered a minimum street yard for the following primary uses:
 - a. Fuel sales.
 - b. Vehicle sales.

CONCEPTUAL SITE PLAN

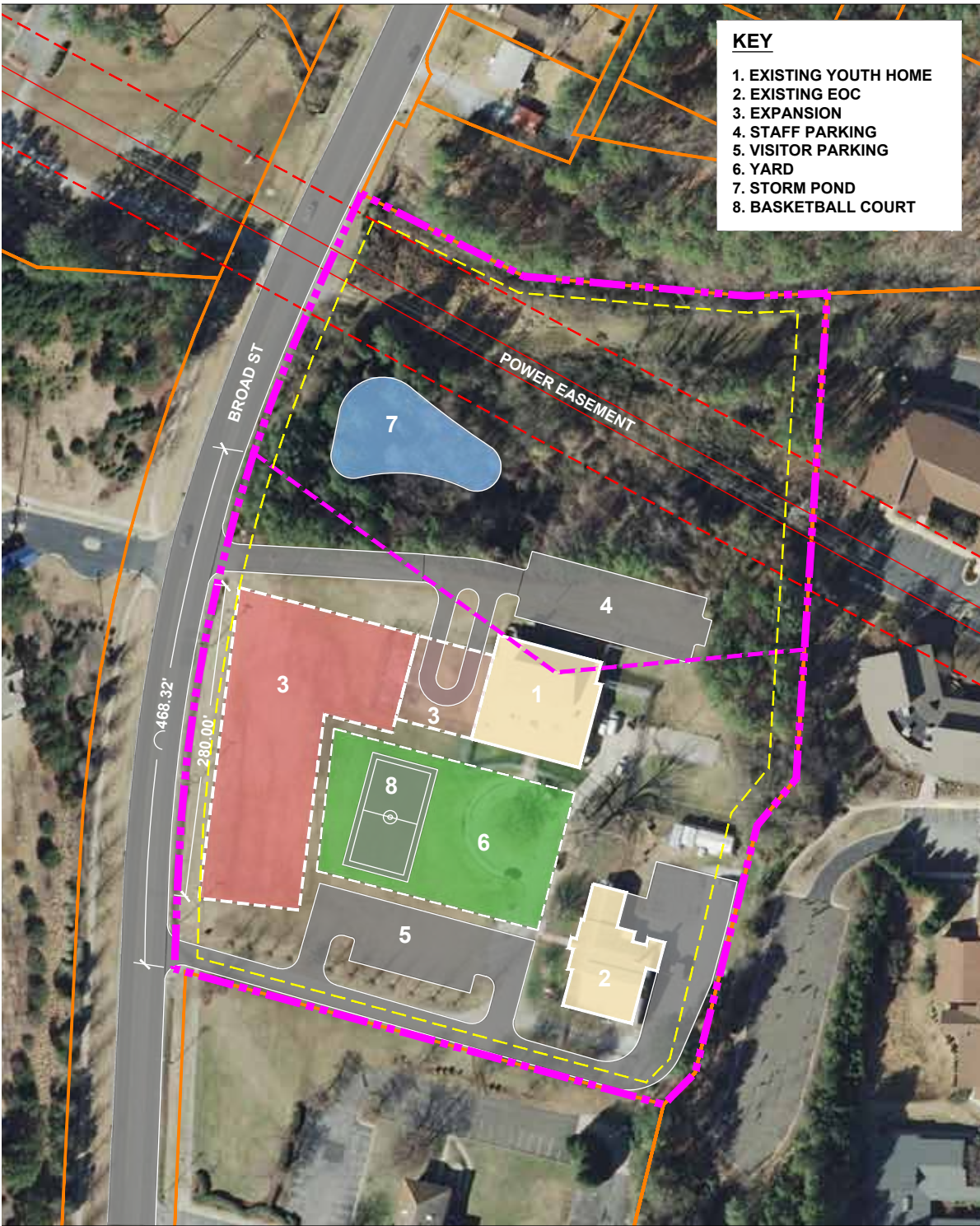
The Conceptual Site Plan represents a potential site layout for the Youth Home program on the Broad Street site and demonstrates the site has the capacity to support the program elements. It also demonstrates compliance with the UDO Design Standards outlined in the previous section.

The majority of the facility faces Broad Street to provide a street presence and simultaneously screens the housing and outdoor activity areas as required by State statute for detention facilities. Parking shown is to the side and rear of the site. The intent with parking is to separate staff, visitors, and the juvenile intake areas from one another.

This conceptual plan also demonstrates how the site can accommodate a new facility while leaving the existing Youth Home and Fire Marshal's buildings in place. Further exploration into the needs of the Youth Home and Durham County's Long Range Master Plan may determine one or both facilities are not necessary and can be removed from the site.

If a scenario is pursued that replaces the existing Youth Home, the design and layout of the new Youth Home facility must also consider phasing the new construction so the existing facility remains fully operational. Once the new facility is complete, the existing structure can be demolished.

CONCEPTUAL SITE PLAN



CONCEPTUAL COST ESTIMATE



Summary of Estimated Cost
 Project: Durham County Youth Home
 Brief Project Description: New 32,521 SF Facility
 Stage of Estimate: Building Program

Column1	Column2	Column3	Column4
Div.	Description	Average	High
General Requirements Subgroup		\$	
BUILDING		\$ 5,902,562	\$ 7,837,562
	Building	\$ 5,073,276	\$ 6,422,898
	Equipment	\$ 829,286	\$ 1,414,664
Mechanical and Electrical		\$ 2,813,068	\$ 4,195,210
	Plumbing	\$ 926,849	\$ 1,219,538
	Heating Ventilation and Air Conditioning	\$ 861,807	\$ 1,674,832
	Electrical	\$ 1,024,412	\$ 1,300,840
Site Improvements and Utilities		\$ 1,153,369	\$ 1,153,369
	Sitework	\$ 1,153,369	\$ 1,153,369
Total Construction Costs (October 2017 \$s)		\$ 9,868,999	\$ 13,186,141

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Update: 3/07/2018

OPINION OF PROBABLE COST - SCHEMATIC DOCUMENTS

Project: Durham County Youth Home

Location		Quantity	Unit	Net usable	Unit	Room Net to Gross Add	Gross	Unit	Building Gross
JV Housing									
	Rooms (Male)	16	EA	1120	SF	130%	1,456		
	Rooms (Female)	8	EA	560	SF	130%	728		
							-		
	Day Rooms						-		
	Female	1	EA	800	SF	130%	1,040		
	Primary	1	EA	2400	SF	130%	3,120		
							-		
	Special Needs	2	EA	140	SF	130%	182		
	Segregation Room	2	EA	100	SF	130%	130		
							-		
	Staff station	1	EA	64	SF	130%	83		
	Janitor Closet	1	EA	50	SF	130%	65		
							-		
	Restrooms						-		
	Male	1	EA	102	SF	130%	133		
	Fixtures						-		
	WC	2	EA				-		
	Lav	2	EA				-		
	Showers	2	EA				-		
	Female			66	SF	130%	86		
	WC	2	EA				-		
	Lav	1	EA				-		
	Showers	1	EA				-		
	Staff	1	EA	64	SF	130%	83		
				5466	SF		7,106	SF	120% 8,527

CONCEPTUAL COST ESTIMATE

Location	Quantity	Unit	Net usable	Unit	Room Net to Gross Add	Gross	Unit	Building Gross
Security								
Contral room	1		300	SF	130%	390		
Electronic equipment	1		100	SF	130%	130		
equipment	1	EA				-		
Intake	1		400	SF	130%	520		
JV property Storage	1		200	SF	130%	260		
Sally Ports	10		280	SF	130%	364		
						-		
Restrooms						-		
Staff	1		64	SF	130%	83		
Changing	1		96	SF	130%	125		
Toilet						-		
Shower						-		
			1440			1,872	SF	120% 2,246
Medical								
Examine	1	EA	120	SF	130%	156		
Dr Office	1	EA	120	SF	130%	156		
Nurse Station	1	EA	200	SF	130%	260		
Secure Storage	1	EA	50	SF	130%	65		
						-		
Rest Room	1	EA	96	SF	130%	125		
Toilet						-		
Shower						-		
			586	SF		762	SF	120% 914
Service Area								
Student Activity								
Indoor Activity Area	1	EA	2400	SF	130%	3,120		
Equipment Storage	1	EA	100	SF	130%	130		
Visitation								
Contact Visiting / interview	4	EA	300	SF	130%	390		
visitor storage	1	EA	50	SF	130%	65		
student spaces								
classroom (small)	3	EA	1188	SF	130%	1,544		
table and stair storage	1	EA	297	SF	130%	386		
classroom supplies	1	EA	50	SF	130%	65		
teacher (full time)	1	EA	300	SF	130%	390		

Location		Quantity	Unit	Net usable	Unit	Room Net to Gross Add	Gross	Unit	Building Gross
Food Service						130%	-		
	Kitchen	1	EA	500	SF	130%	650		
	Drystorage	1	EA	150	SF	130%	195		
	Cold Storage	2	EA	200	SF	130%	260		
	Storage	2	EA	200	SF	130%	260		
	kitchen office	1	EA	80	SF	130%	104		
	Janitor Closet	1	EA	75	SF	130%	98		
Service						130%	-		
	Clothing/Lining Storage/Hygiene	1	EA	150	SF	130%	195		
	laundry room	1	EA	250	SF	130%	325		
	soiled linens	1	EA	35	SF	130%	46		
Building Services						130%	-		
	Janitor Closet	2	EA	100	SF	130%	130		
	Building Maintenance Storage	1	EA	100	SF	130%	130		
	water Heater	1	EA	60	SF	130%	78		
	Telecom Room	1	EA	80	SF	130%	104		
	Main Electrical Room	1	EA	200	SF	130%	260		
	Server Room	1	EA	60	SF	130%	78		
	Receiving	1	EA	250	SF	130%	325		
Restrooms						130%	-		
	Student Toilet	2	EA	128	SF	130%	166		
	food service toilet	1	EA	64	SF	130%	83		
				7367			9,577	SF	120% 11,493

	Location	Quantity	Unit	Net usable	Unit	Room Net to Gross Add	Gross	Unit	Building Gross
	Base								
	Clear								
	Total Site Area	8	Acre						
	Undeveloped	5	Acre	750.00		3,750.00			
	Developer Area	3	Acre	2,500.00		7,500.00			
	Demolition								
	Structure removal and disposal	7,000	SF	3.50		24,500.00			
	Storm Water Management								
	Pond, piping and structures	1	LS	150,000.00		150,000.00			
	Site prep area	130,680	SF	1.5		196,020.00			
	Site Improvements								
	Visitor Parking	2,265	SY	40		90,613.33			
	Staff Parking & Drive	2,265	SY	40.00		90,613.33			
	Site Fence	2,500	LF	55.00		137,500.00			
	Security Fence	900	LF	193.00		173,700.00			
	BasketBall court	1	EA						
	(94x50) Fence back boards etc	4,700	SF	15.00		70,500.00			
	Outdoor Area (Yard)	20,918	SF	4.00		83,672.00			
						-			
	Site Improvements	20,000	SF	2.50		50,000.00			
						-			
	Utilities								
	Electrical	1	LS	25,000.00		25,000.00			
	Sanitary	1	LS	25,000.00		25,000.00			
	Water	1	LS	25,000.00		25,000.00			
	Total Site Base					1,153,368.67			

CONCEPTUAL COST ESTIMATE

Durham County Youth Home	Cost/ SQ. FT.	Cost/ SQ. FT.				
Building Building	156.00	-	197.50			
Equipment	25.50		43.50			
Plumbing	28.50		37.50			
HVAC	26.50		51.50			
Electrical	31.50		40.00			
Total	268.00		370.00			
Security Doors (Jail)		6,930.00	EA			
Security Fixtures						
WC/LAV (incl Rough in)		4,750.00	EA			
WC (incl rough in)		3,196.50	EA			
LAV (incl Rough in)		2,650.00	EA			
Shower (36x 369 x 88)		6,830.00	EA			
Total Site Area	8	Acre				
Developer	3	Acres				
Parking Area	40	Parking Spaces	\$650	SF for Space	\$ 26, 000	Parking

Unit Cost Page 8 of 9

Site Plan Area Assumptions

	Existing home	9,949	SF
Area 1			
Area 2	Existing EOC	6,905	SF
Area 3	Expansion Area	37,507	SF
Area 4	Staff Parking & Drive	20,388	SF
Area 5	Visitor parking	33,084	SF
Area 6	Yard	20,918	SF
Area 7	Storm water Pond	9,868	SF
Area 8	Basket Ball court	6,300	SF

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