

NDSP Project Update

Presentation to the Correctional Facility Review Committee

**Criminal Justice Institute
January 29, 2008**



DMJM H&N



Parametrix, Inc.

Criminal Justice Institute Team Presenters

- George Camp, Criminal Justice Institute
- Lou Ragozzino, Louis Berger Group
- Jeff Buck, DMJM Design

Meeting Agenda

- Update Project Schedule
- Review Project Objective and Provide Perspective
- Apply the Conceptual Model of a 1,085 bed facility to the Penitentiary site, and to four alternative sites.
- Apply the Conceptual Model to NDSP - the Reuse Option.
- Discussion - Questions and Answers

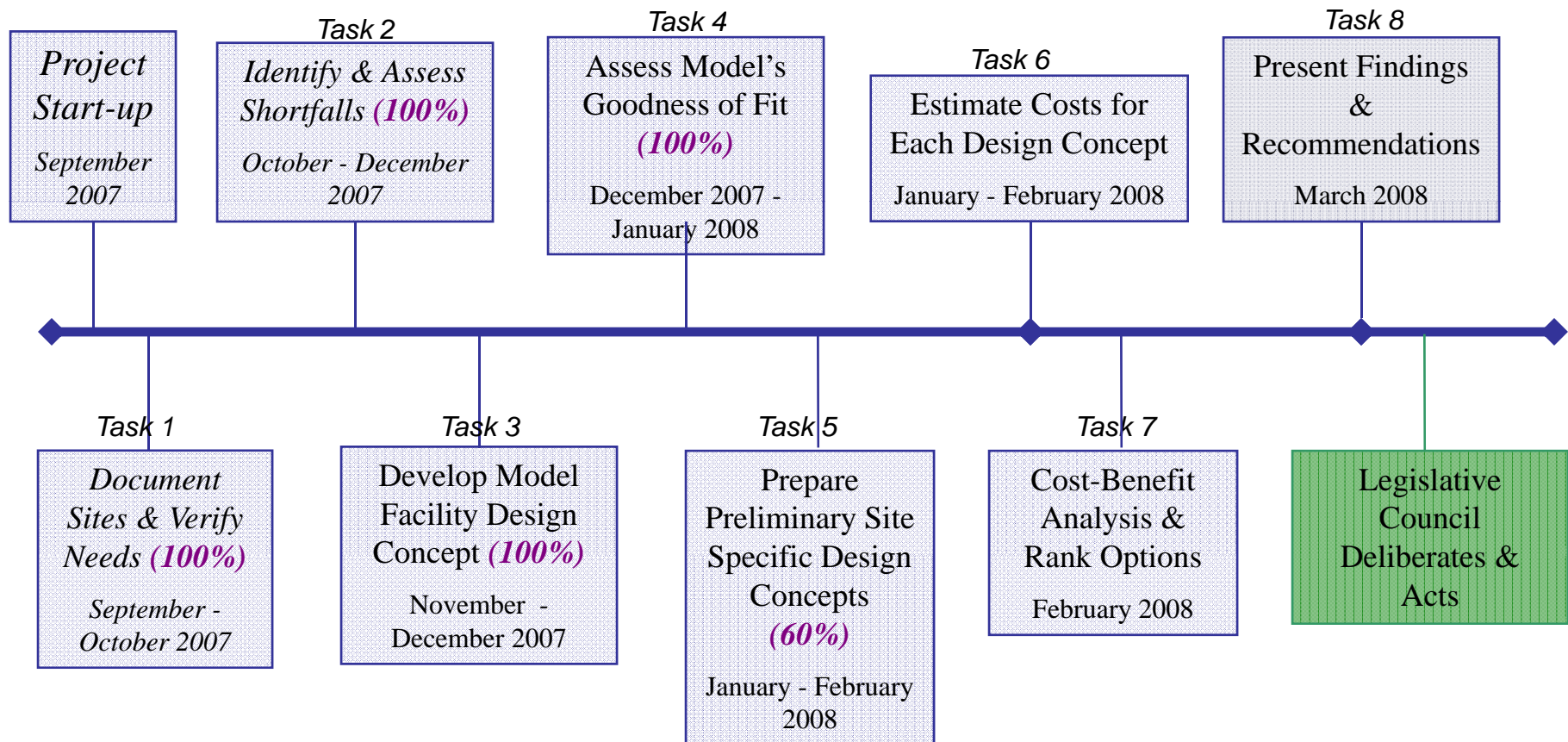


DMJM H&N



Parametrix, Inc.

Project Task Timeline



North Dakota Corrections

- Project Objective: Determine the most effective and cost-efficient option for meeting the needs and requirements of 1,000 NDSP/MRCC inmates.
- Just One Piece of the Correctional Pie: North Dakota has many other significant ongoing initiatives to meet its entire range of objectives.
 - Probation & Parole
 - Non-traditional, non-institutional confinement
 - Contracting for Female Offenders
 - Juvenile Offender Programs

A Balanced Approach to Corrections

Facts to Bear in Mind

- The number of probationers has increased from 2,756 at the end of 1999 to **4,490** near the end of 2007;
- The number of inmates in community corrections programs has increased from 59 in 1999 to **236** at the end of last year;
- The number of male transitional housing beds are anticipated to increase by 35 (from 105 to **140** between now and July 1, 2009).
- North Dakota's female incarceration rate is **214** (per 100,000 female residents), one of the lowest in the country (Only three states were lower - ME, NH, and RI.).
- North Dakota's male incarceration rate is **377** (per 100,000 male residents), one of the lowest in the country (Only two states were lower - ME and MN.)
- North Dakota has not built any new prison beds since **1992** when new beds were built at MRCC, and has not constructed any high security segregation beds for approximately **50** years.

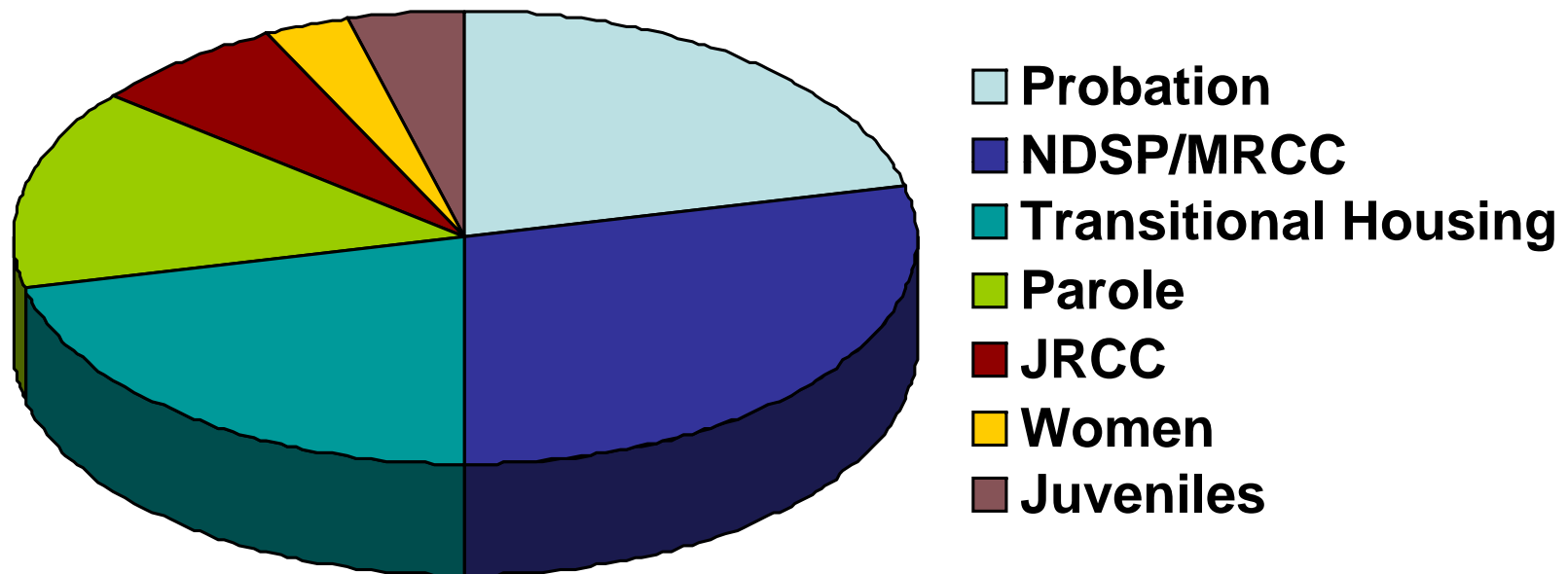


DMJM H&N



Parametrix, Inc.

Overview: Putting North Dakota Corrections in Perspective



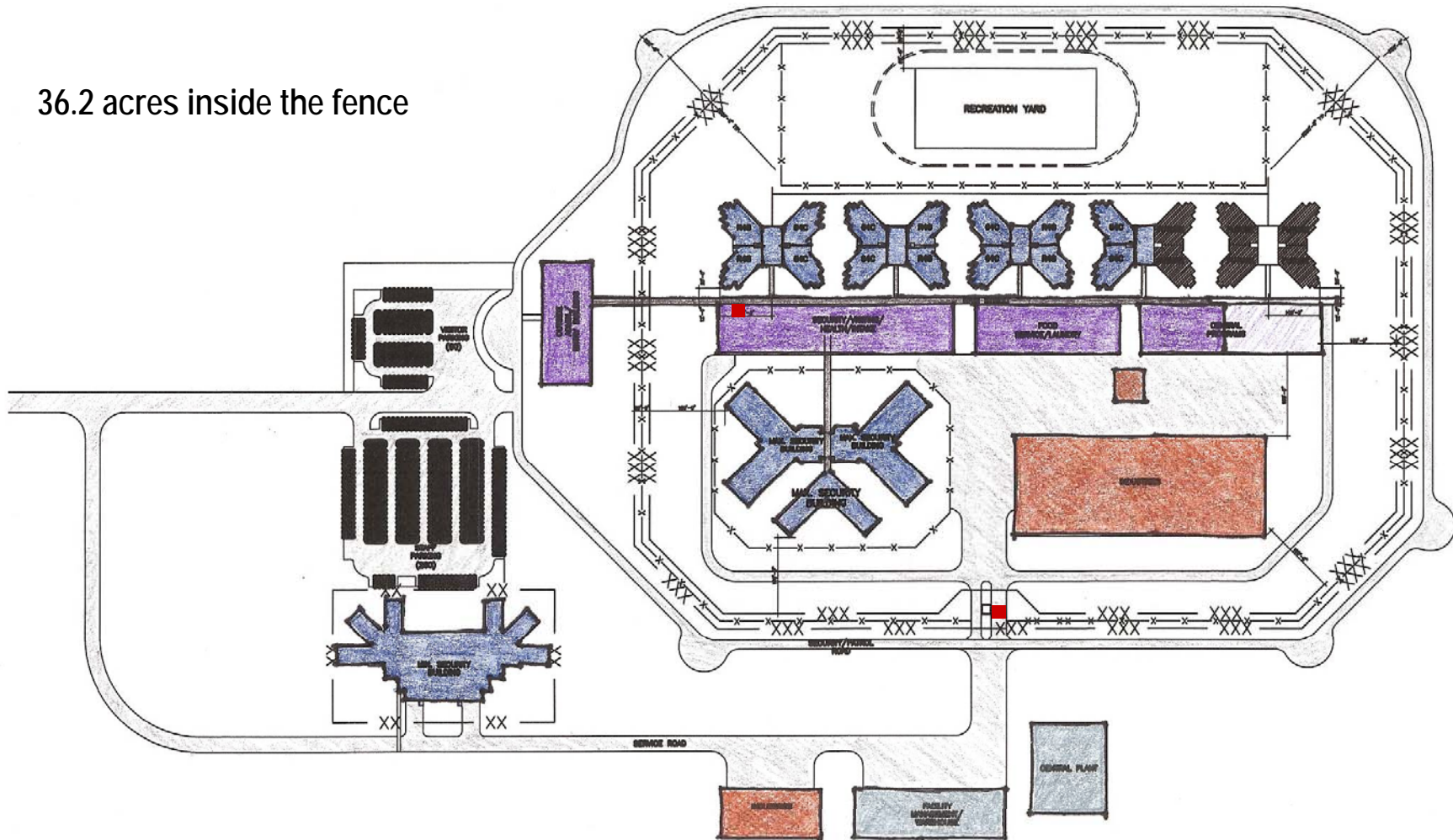
Today's Presentation

- Current Task: Based on the spaces required and configurations developed in the Model Program, as well as knowledge gained from assessing potential sites, determine how well the Model Program fits on each site.
 - Apply the Conceptual Model to five sites (Two of the Three Options)
 - MRCC
 - Landfill
 - Airport
 - Sunny Farm; and to the
 - Penitentiary;
 - Modify the Conceptual Model to Maximize Use of Existing NDSP Buildings and Housing (Third Option)



Recall: Initial Site Development Concept

36.2 acres inside the fence

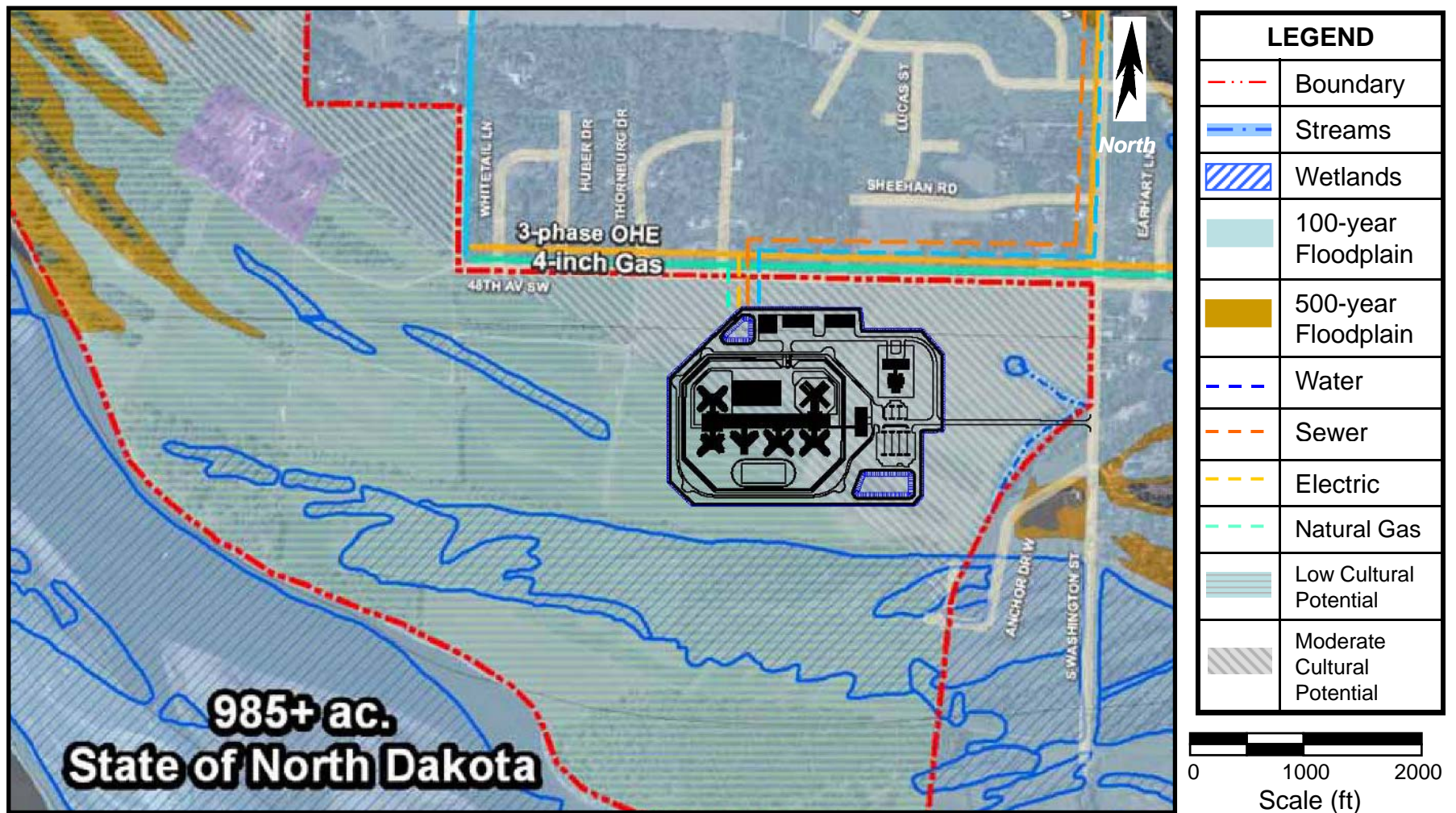


Alternative Site Comparison

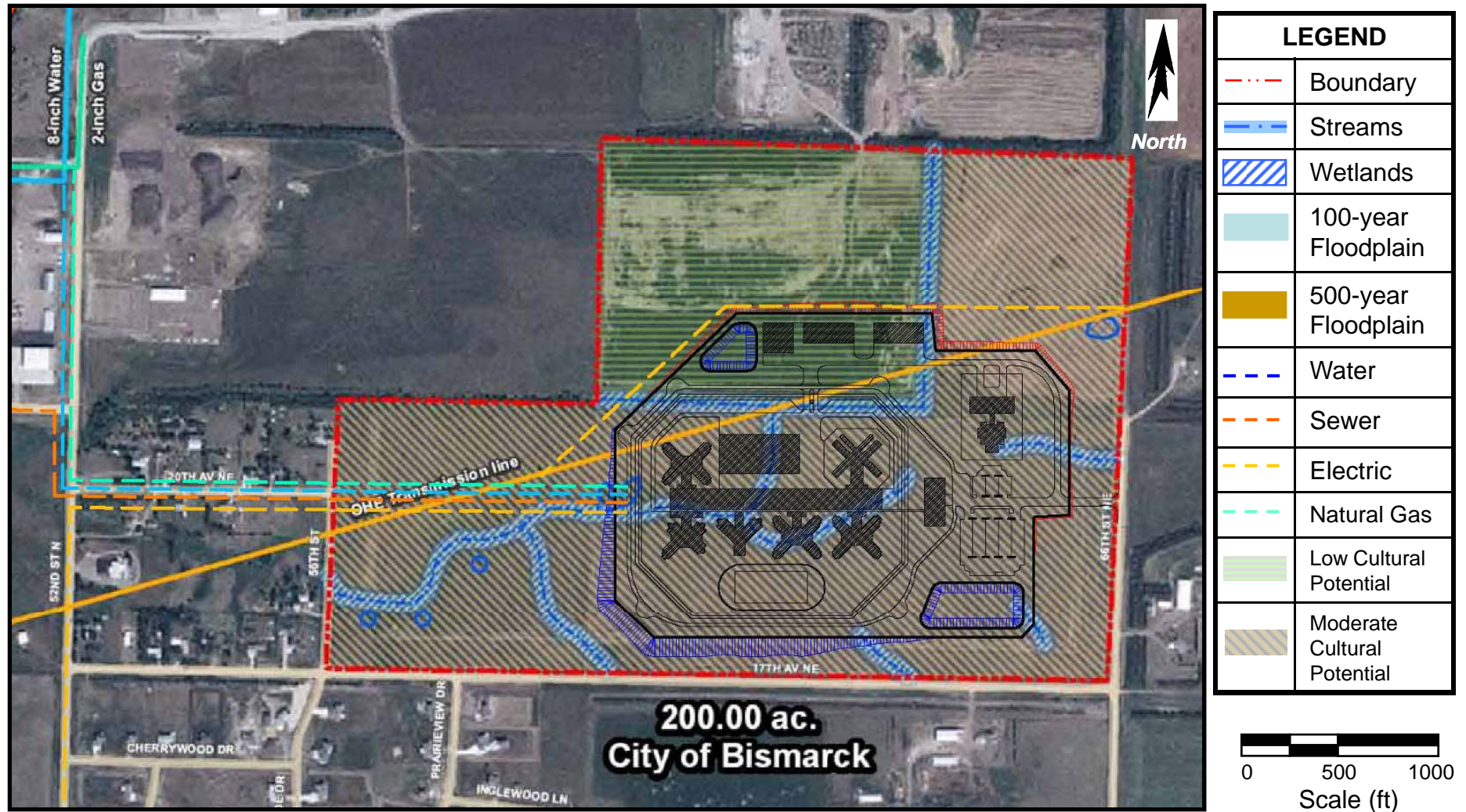
Site		Existing Penitentiary Site	Missouri River Correctional Center Site	Landfill Site	Airport Site	Sunny Farm Site		
Land Area		225.34 acres	985 acres	200 acres	308.4 acres	1,419.37 acres		
Alternative Site Plan		-	-	-	-	Alt 1	Alt 2	Alt 3
Wetland Impacts	Permanent (acres)	2.45	0.11	10.79	1.51	0	1.15	0
	Construction/Temporary (acres)	1.3	0.11	1.38	0	0	0.23	0
Stream Impacts (linear feet)		2,132	50 ft	4,700	0	0	500	0
100-year Floodplain Impacts (acres)		2 acres	75 acres	0	0	0	0	0
Cultural Resource Impacts (acres)		31 ac (Low) 36 ac (Moderate)	15 ac (Low) 60 ac (Moderate)	14 ac (Low) 67 ac (Moderate)	31 ac (Low) 48 ac (Moderate)	75 ac (Low) 31 ac (High)	56 ac (Moderate) 33 ac (High)	31 ac (Moderate) 54 ac (High)
Cut/Fill Volume (CY)		263,200 cy (Cut) 251,900 cy (Fill)	877,100 cy (Fill)	727,500 cy (Cut) 713,700 cy (Fill)	205,800 cy (Cut) 192,100 cy (Fill)	253,800 cy (Cut) 238,100 cy (Fill)	1,842,800 cy (Cut) 1,689,500 cy (Fill)	1,579,500 cy (Cut) 1,443,500 cy (Fill)
Off-site Utility Costs	Water Supply	1,900 ft	8,200 ft	4,300 ft	2,400 ft	13,900 ft	10,500 ft	7,900 ft
	Wastewater Collection	1,700 ft	8,200 ft	4,300 ft	4,300 ft	15,500 ft	12,100 ft	9,500 ft
	Electric Power	500 ft	500 ft	4,600 ft (Supply line) 3,200 ft (High Voltage Line relocation)	550 ft	9,900 ft	6,500 ft	4,100 ft
	Natural Gas	2,700 ft	500 ft	4,300 ft	1,400 ft	10,100 ft	6,700 ft	4,300 ft
Access-Road Improvements		100 ft	1,300 ft	350 ft	850 ft	500 ft	4,000 ft	1,650 ft
Land Acquisition (acres)		20.5 ac (Family Forest)	0	0	10.0 ac (United Tribes land)	0	0	0



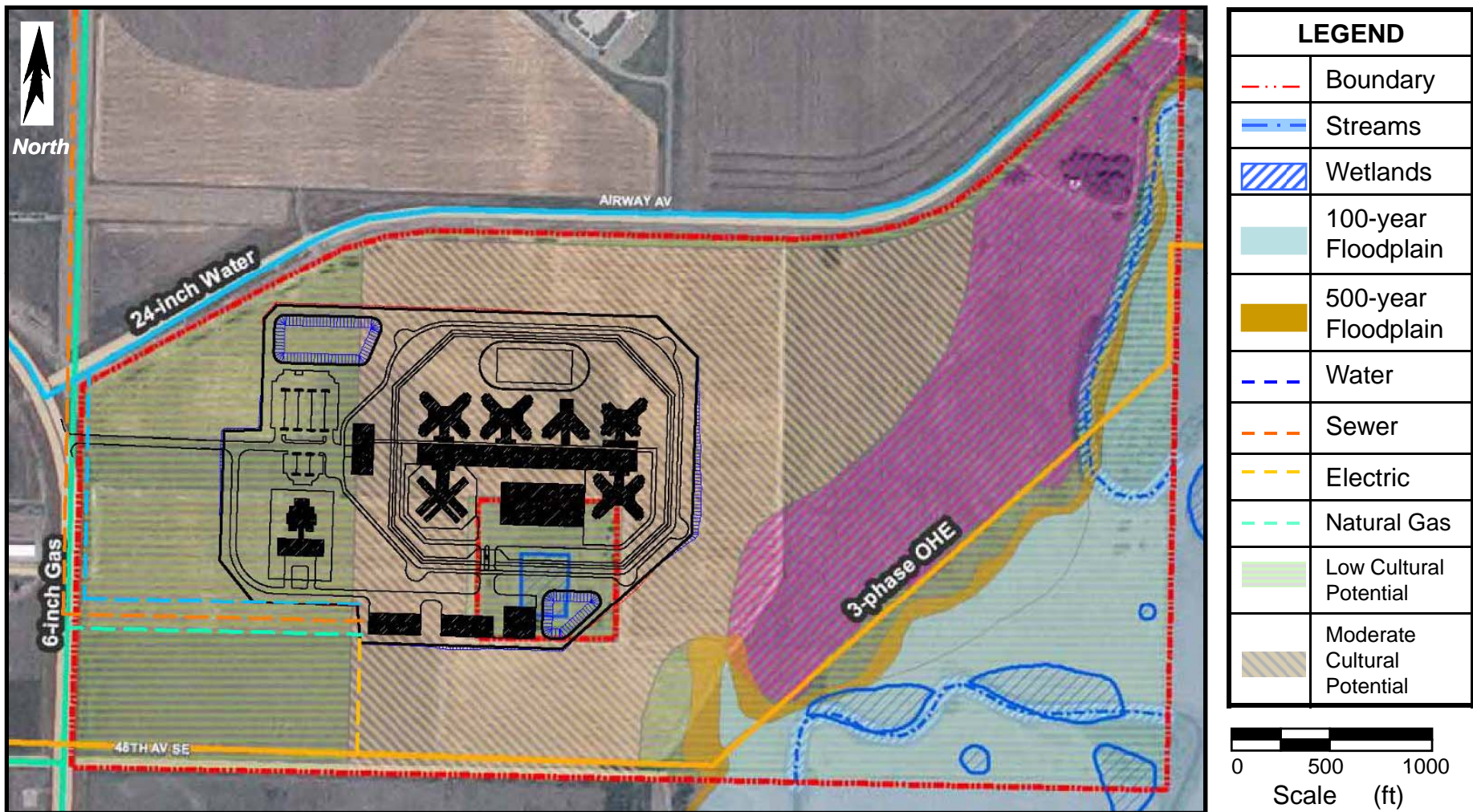
MRCC Site Layout



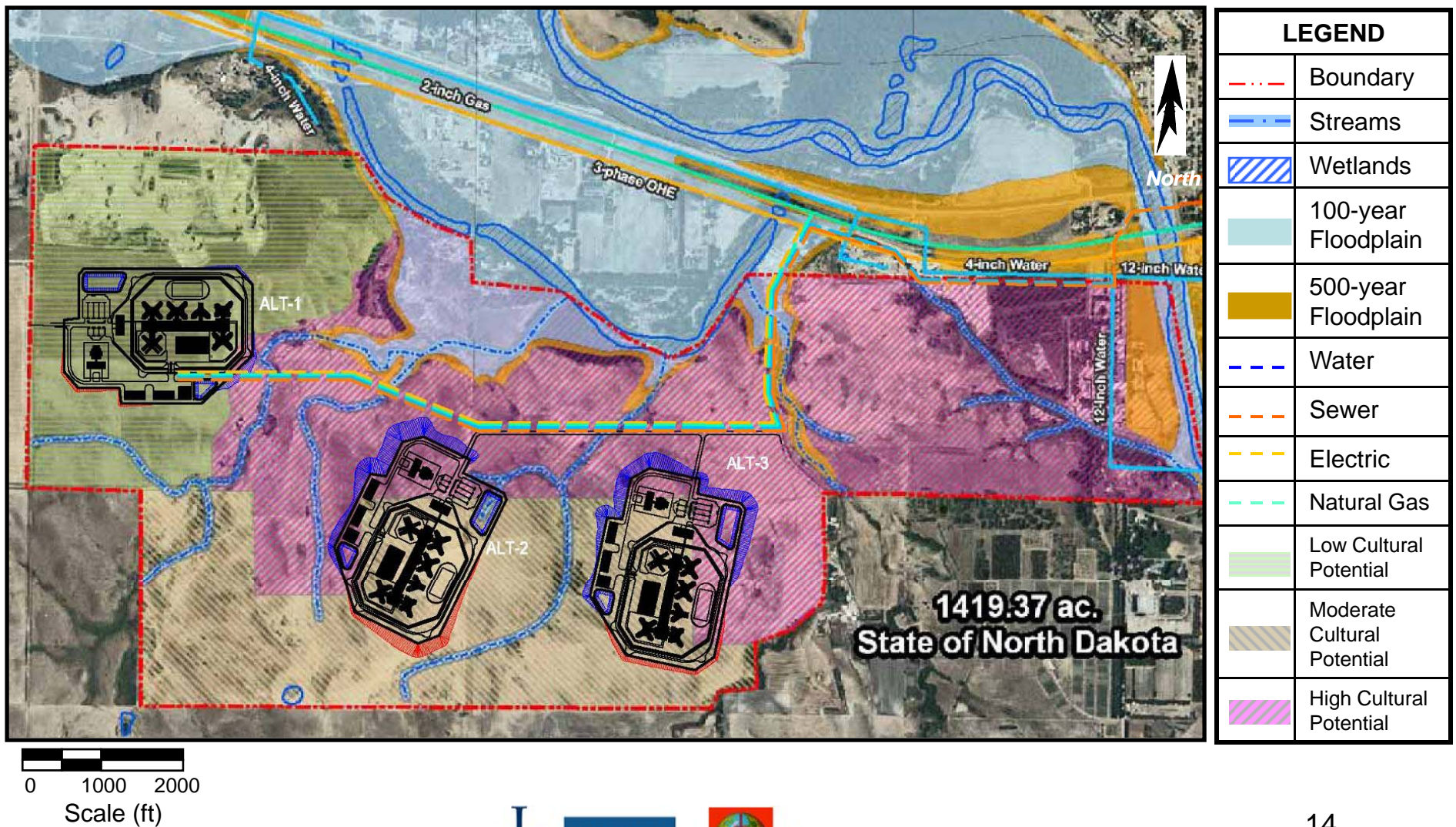
Landfill Site Layout



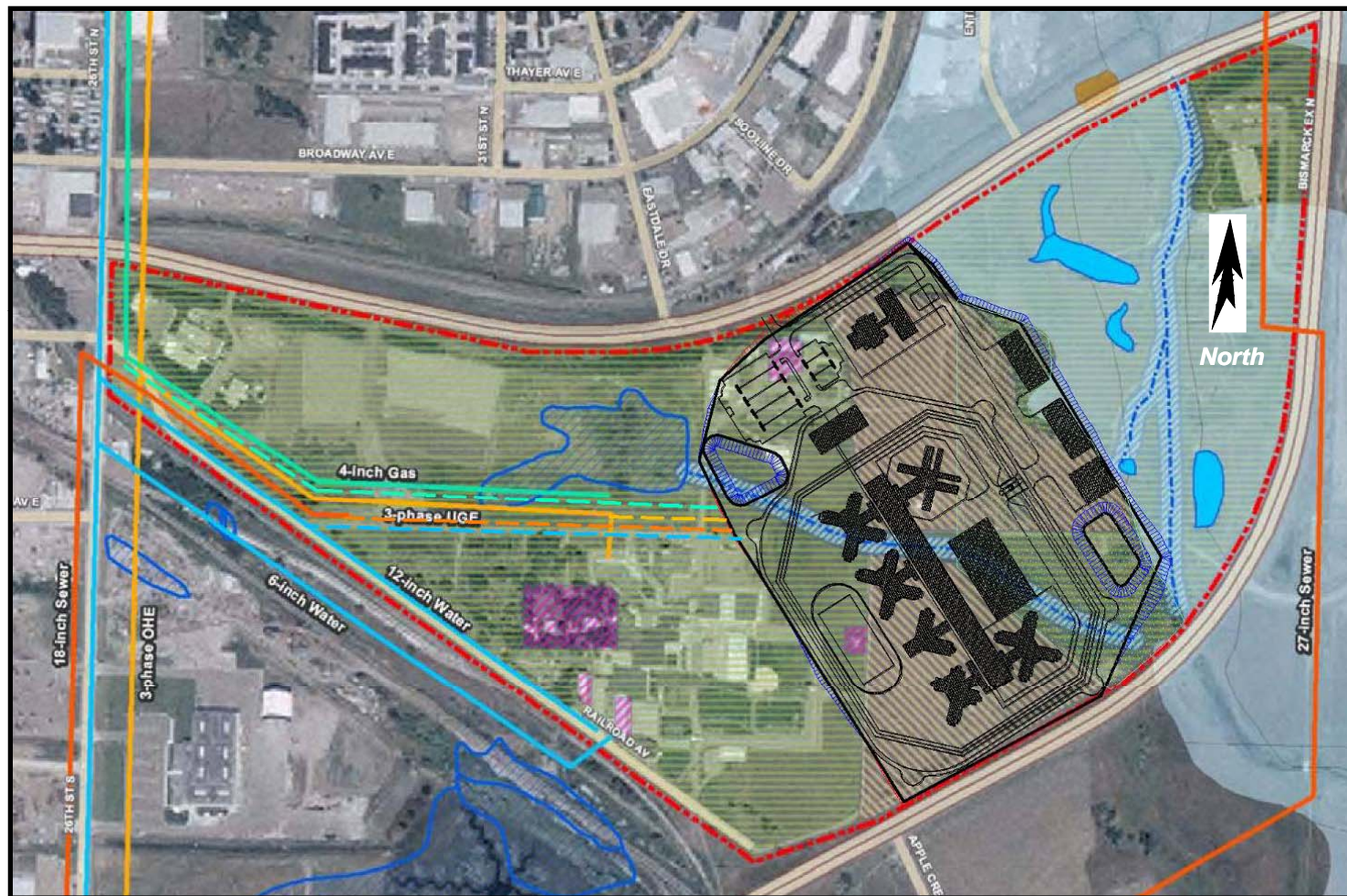
Airport Site Layout



Sunny Farm Site Layout



Penitentiary Site Layout



LEGEND	
---	Boundary
---	Streams
	Wetlands
	100-year Floodplain
	500-year Floodplain
---	Water
---	Sewer
---	Electric
---	Natural Gas
	Low Cultural Potential
	Moderate Cultural Potential
	High Cultural Potential

0 500 1000
Scale (ft)



DMJM H&N



Parametrix, Inc.

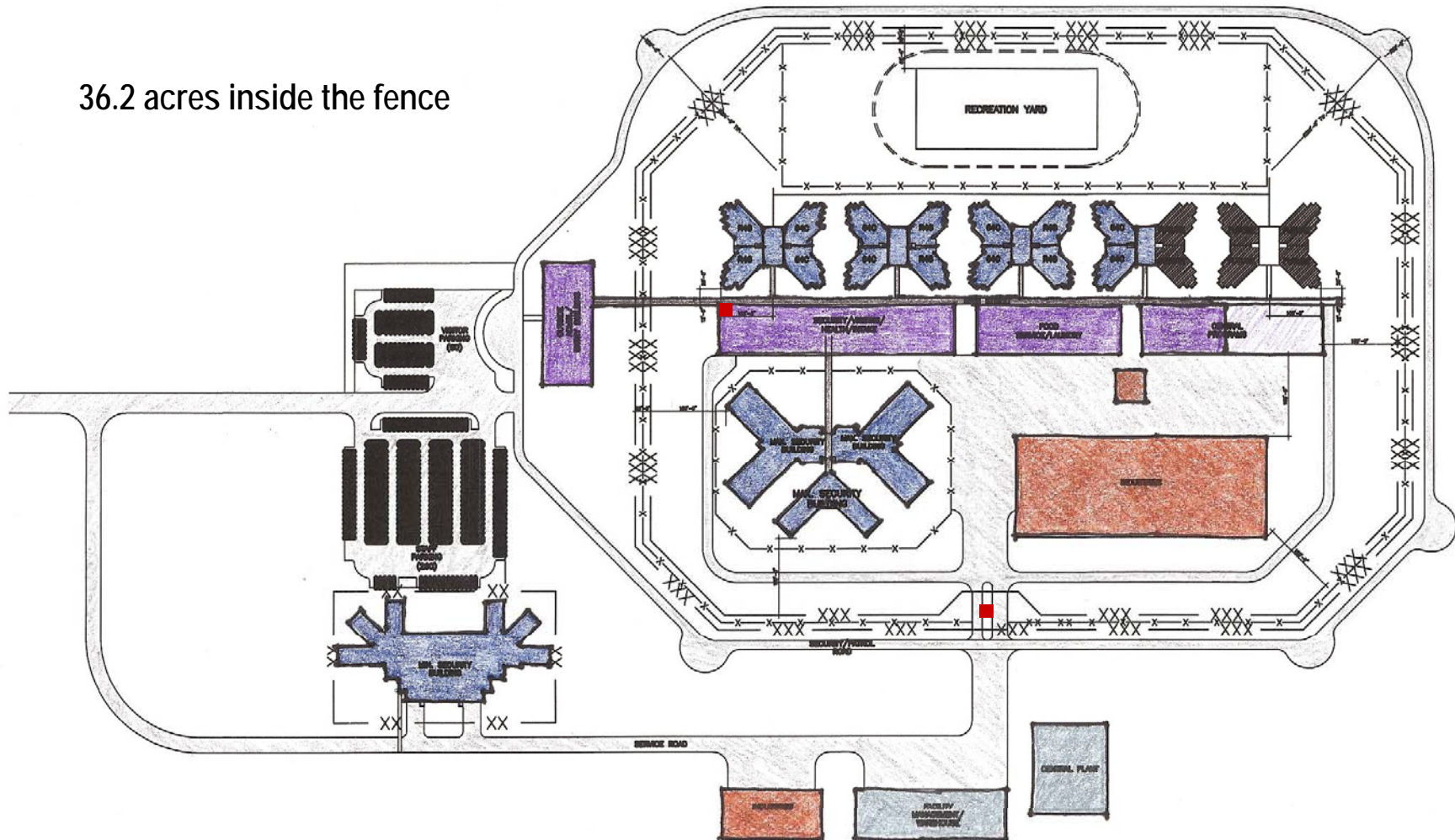
Alternative Site Comparison

Site		Existing Penitentiary Site	Missouri River Correctional Center Site	Landfill Site	Airport Site	Sunny Farm Site		
Land Area		225.34 acres	985 acres	200 acres	308.4 acres	1,419.37 acres		
Alternative Site Plan		-	-	-	-	Alt 1	Alt 2	Alt 3
Wetland Impacts	Permanent (acres)	2.45	0.11	10.79	1.51	0	1.15	0
	Construction/Temporary (acres)	1.3	0.11	1.38	0	0	0.23	0
Stream Impacts (linear feet)		2,132	50 ft	4,700	0	0	500	0
100-year Floodplain Impacts (acres)		2 acres	75 acres	0	0	0	0	0
Cultural Resource Impacts (acres)		31 ac (Low) 36 ac (Moderate)	15 ac (Low) 60 ac (Moderate)	14 ac (Low) 67 ac (Moderate)	31 ac (Low) 48 ac (Moderate)	75 ac (Low) 31 ac (High)	56 ac (Moderate) 33 ac (High)	31 ac (Moderate) 54 ac (High)
Cut/Fill Volume (CY)		263,200 cy (Cut) 251,900 cy (Fill)	877,100 cy (Fill)	727,500 cy (Cut) 713,700 cy (Fill)	205,800 cy (Cut) 192,100 cy (Fill)	253,800 cy (Cut) 238,100 cy (Fill)	1,842,800 cy (Cut) 1,689,500 cy (Fill)	1,579,500 cy (Cut) 1,443,500 cy (Fill)
Off-site Utility Costs	Water Supply	1,900 ft	8,200 ft	4,300 ft	2,400 ft	13,900 ft	10,500 ft	7,900 ft
	Wastewater Collection	1,700 ft	8,200 ft	4,300 ft	4,300 ft	15,500 ft	12,100 ft	9,500 ft
	Electric Power	500 ft	500 ft	4,600 ft (Supply line) 3,200 ft (High Voltage Line relocation)	550 ft	9,900 ft	6,500 ft	4,100 ft
	Natural Gas	2,700 ft	500 ft	4,300 ft	1,400 ft	10,100 ft	6,700 ft	4,300 ft
Access-Road Improvements		100 ft	1,300 ft	350 ft	850 ft	500 ft	4,000 ft	1,650 ft
Land Acquisition (acres)		20.5 ac (Family Forest)	0	0	10.0 ac (United Tribes land)	0	0	0



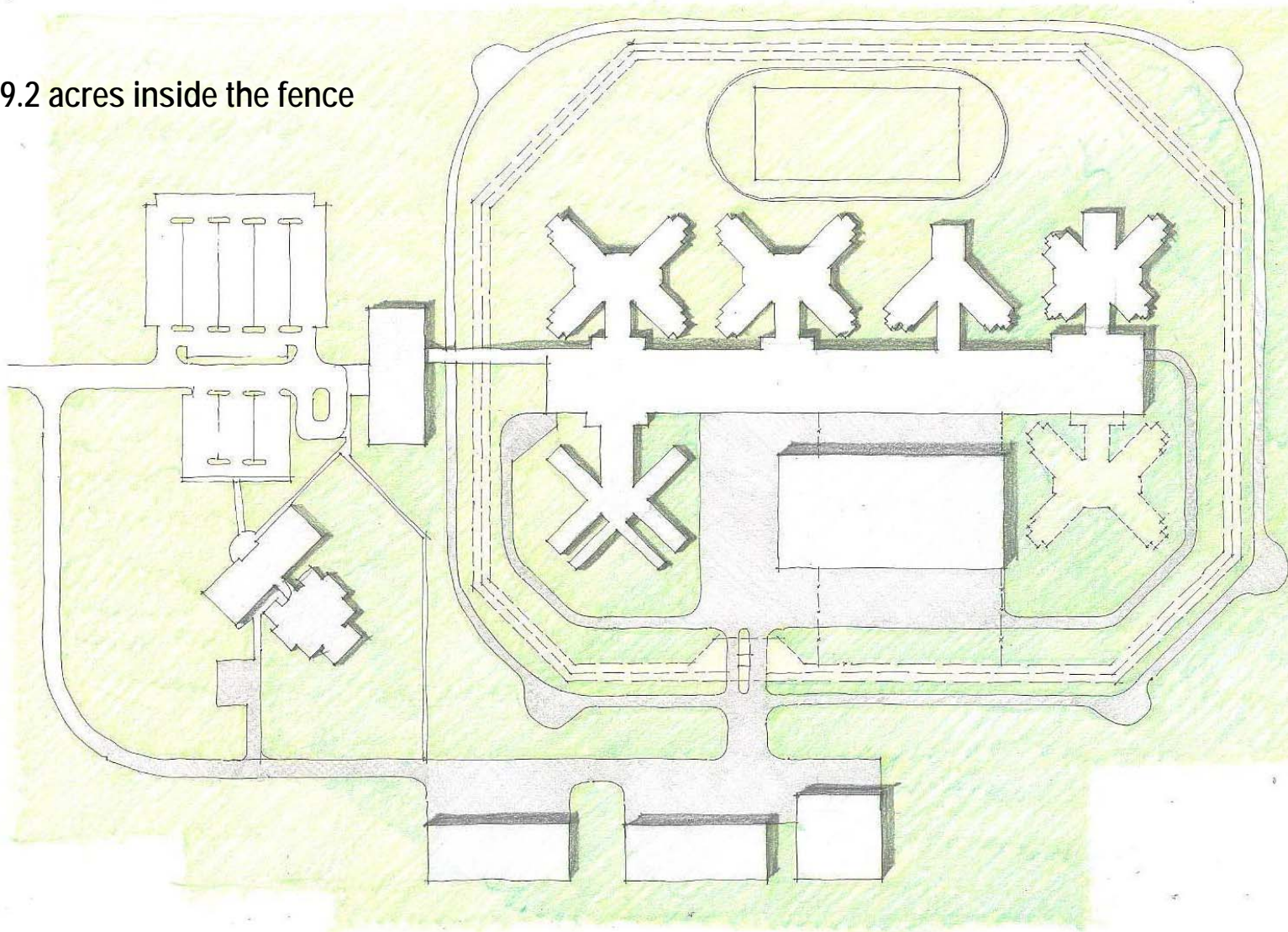
Initial Site Development Concept Revisited

36.2 acres inside the fence

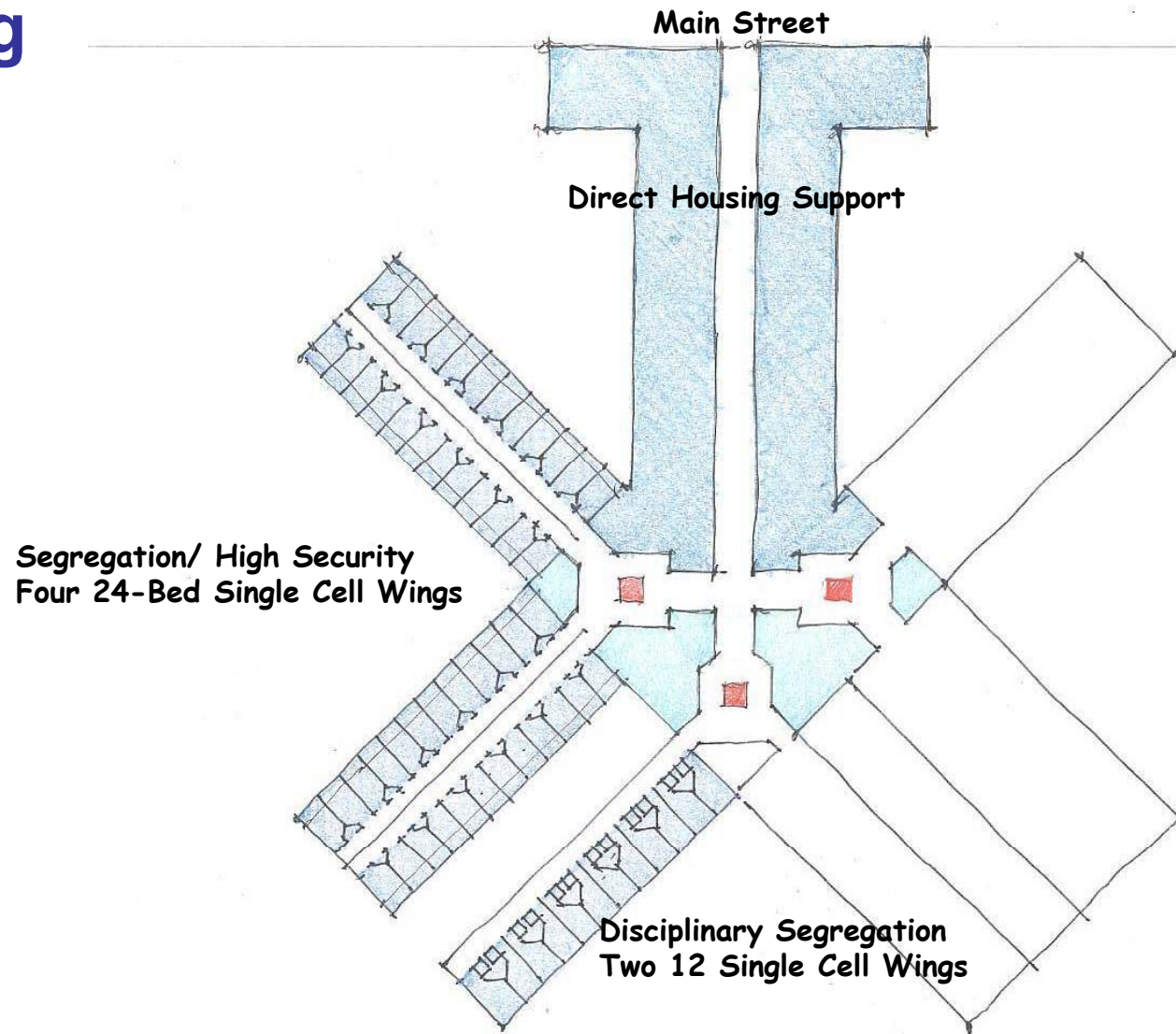


Refined Replacement Facility Concept

29.2 acres inside the fence

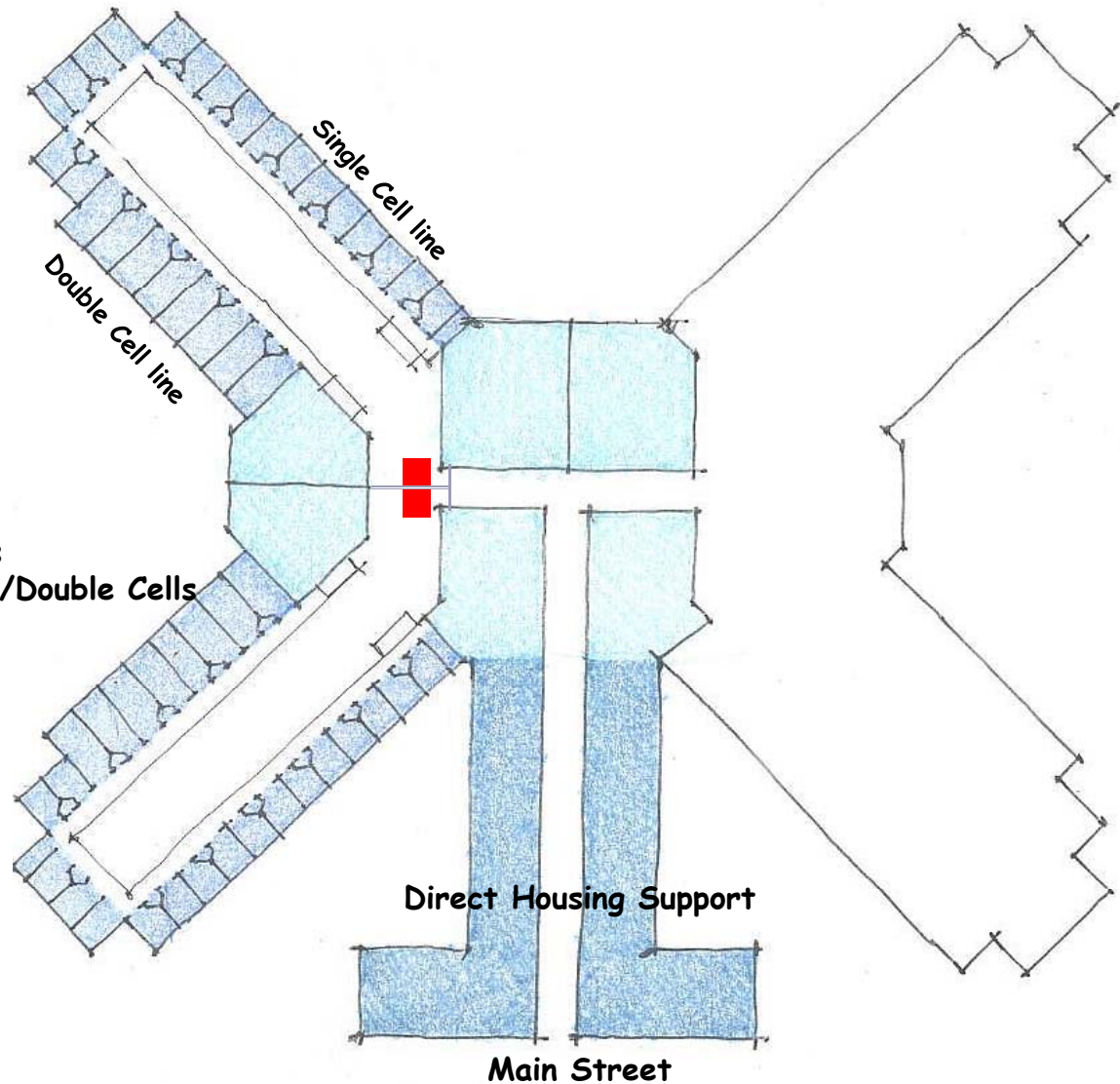


Housing Units: Zone 1



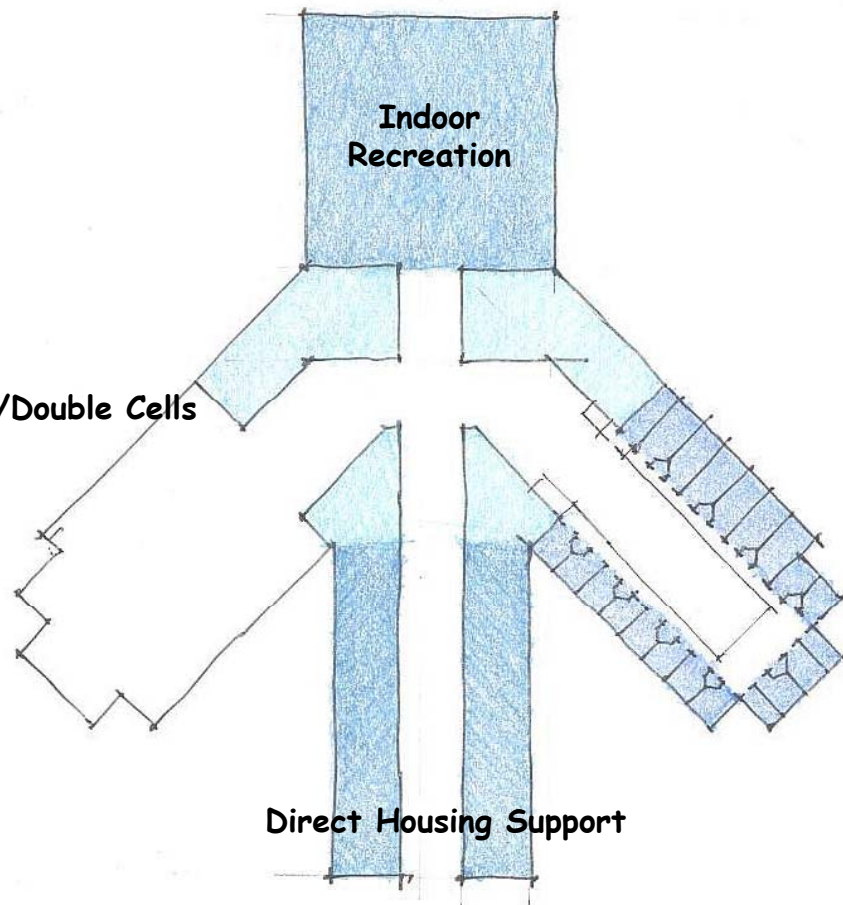
Housing Units: Zones 2 & 3

General Population
Medium/Maximum
Four 64-bed Units
Combination Single/Double Cells

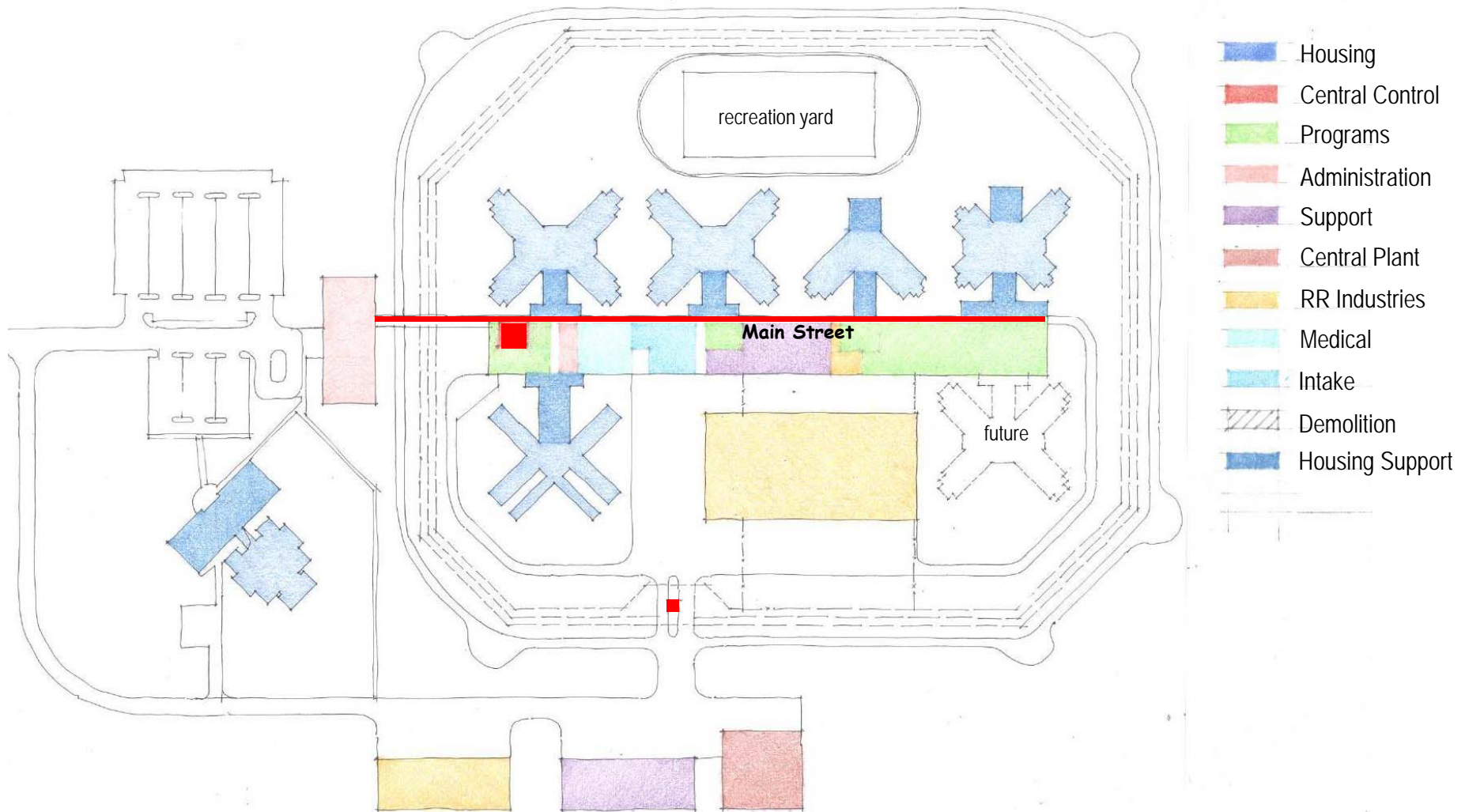


Housing Units: Zone 4

Reception Housing
Medium/Maximum
Two 48-bed Units
Combination Single/Double Cells



Replacement Facility Component Diagram



Proposed Replacement Facility Capacity

1,085 Beds

	New Facility for 1000 Inmates			
	Total	Flex	Net Op.	Use
Utilization	Beds	Beds	Capacity	
Administrative Seg				
General Population				
General Population				
Admission & Orientation				
Disciplinary Detention				
Awaiting Placement				
General Population (Honor)				
Drug & Alcohol Program				
Sick				
Special Needs				
Disciplinary Detention				
Disciplinary Detention	24	12	12	Max (2 12's)
Administrative Segregation	96	10	86	Max (2 48's)
Admission & Orientation	96	2	94	MxMd Comb (2 48's)
Maximum Security GP	512	24	488	MxMd Comb (8 64's)
Gang Renunciation Unit			0	in above
Transition (Step Down) Unit	48	4	44	MxMd Doubles (48)
Criminal Thinking TC	48	4	44	MxMd Doubles (48)
Substance Abuse TC	48	4	44	MxMd Doubles (48)
Medium Security GP			0	in above
Minimum Security GP	192	4	188	Min (3 64's)
Medical Infirmary	10	10	0	Max
Medical Chronic Care				
Medical Segregation	4	4	0	Max
Mental Health	7	7	0	Max
TOTAL	1,085	85	1,000	
PERCENT	100%	7.8%	92.2%	



Parametrix, Inc.

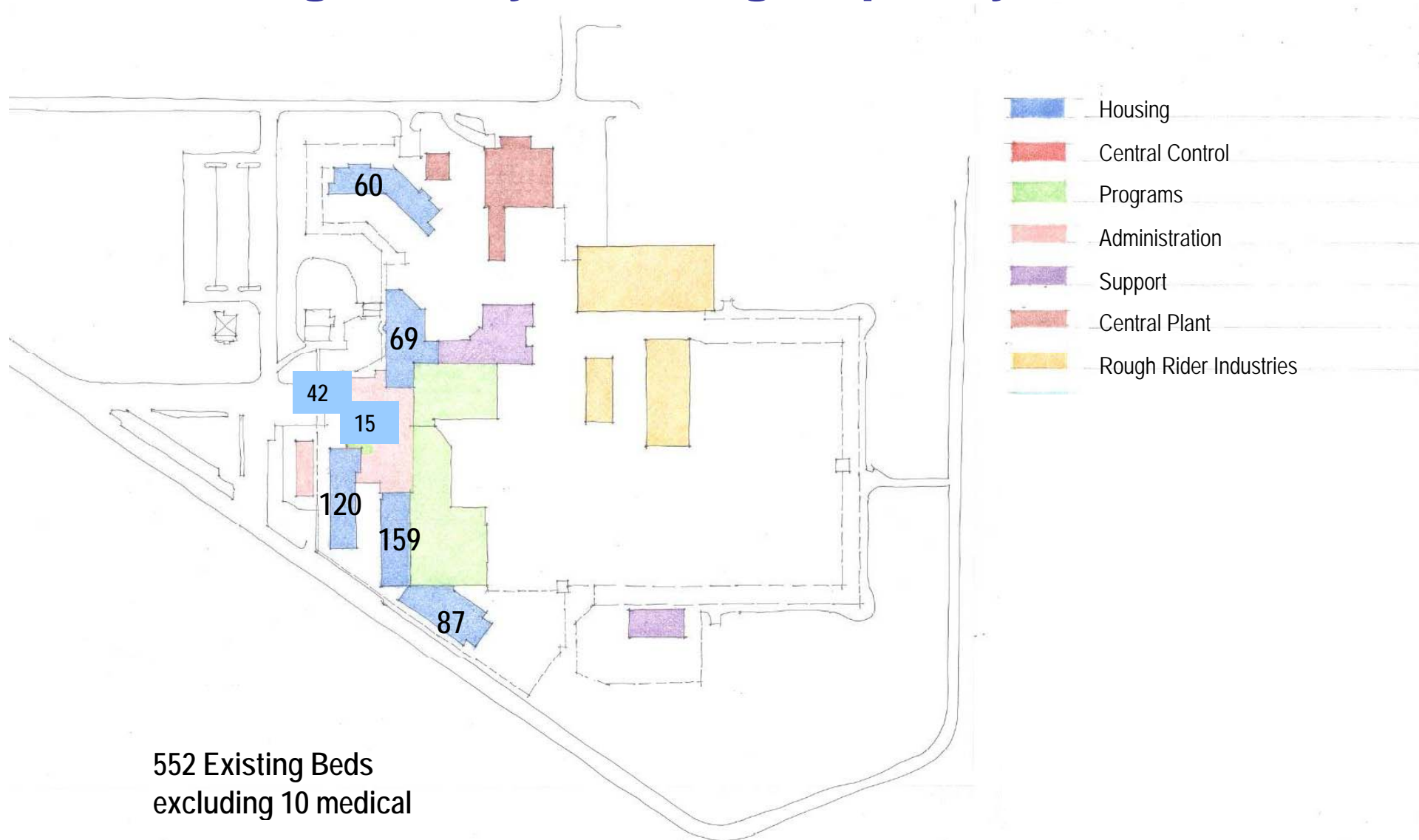
Current Capacity

562 Total Beds

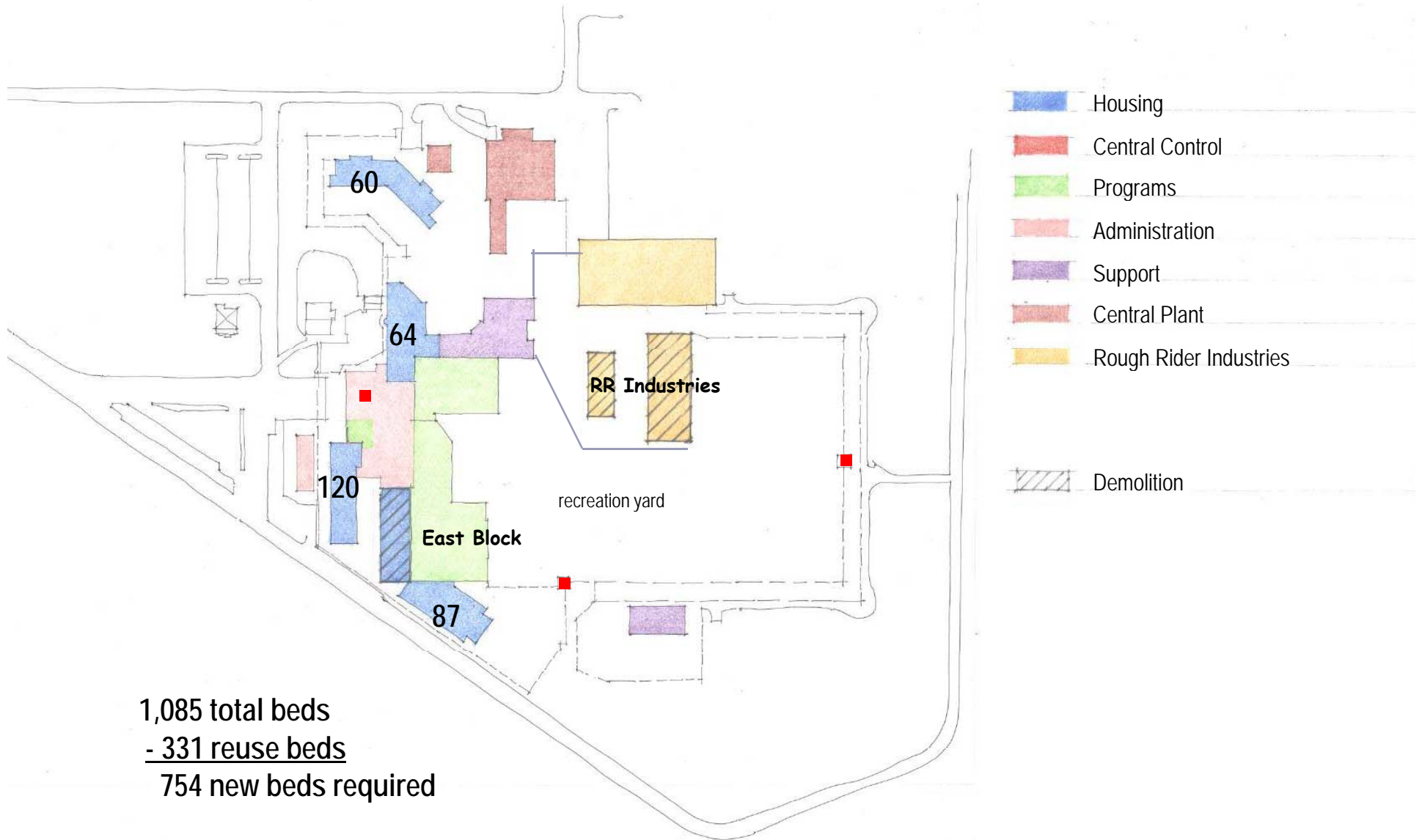
Inmate Housing Areas	Security Level	Current Utilization	Current Capacity		
			Total Beds	Flex Beds	Net Op. Capacity
West Cell Block	Maximum	Administrative Seg	60	5	55
West Cell Block	Maximum	General Population	60	2	58
East Cell Block	Maximum	General Population	159	3	156
North Unit	Medium	Admission & Orientation	65	5	60
North Unit	Maximum	Disciplinary Detention	4	4	0
Overflow Unit	Minimum	Awaiting Placement	42	0	42
South Unit	Medium	General Population (Honor)	87	6	81
Treatment Unit	Minimum	Drug & Alcohol Program	60	0	60
Infirmary	Medium	Sick	6	6	0
Infirmary Observation	Maximum	Special Needs	4	4	0
Infirmary Detention	Maximum	Disciplinary Detention	15	15	0
		Disciplinary Detention			
		Administrative Segregation			
		Admission & Orientation			
		Maximum Security GP			
		Gang Renunciation Unit			
		Transition (Step Down) Unit			
		Criminal Thinking TC			
		Substance Abuse TC			
		Medium Security GP			
		Minimum Security GP			
		Medical Infirmity			
		Medical Chronic Care			
		Medical Segregation			
		Mental Health			
		TOTAL	562	50	512
		PERCENT	100%	8.9%	91.1%



Existing Facility Housing Capacity



Existing Facility Reuse Capacity

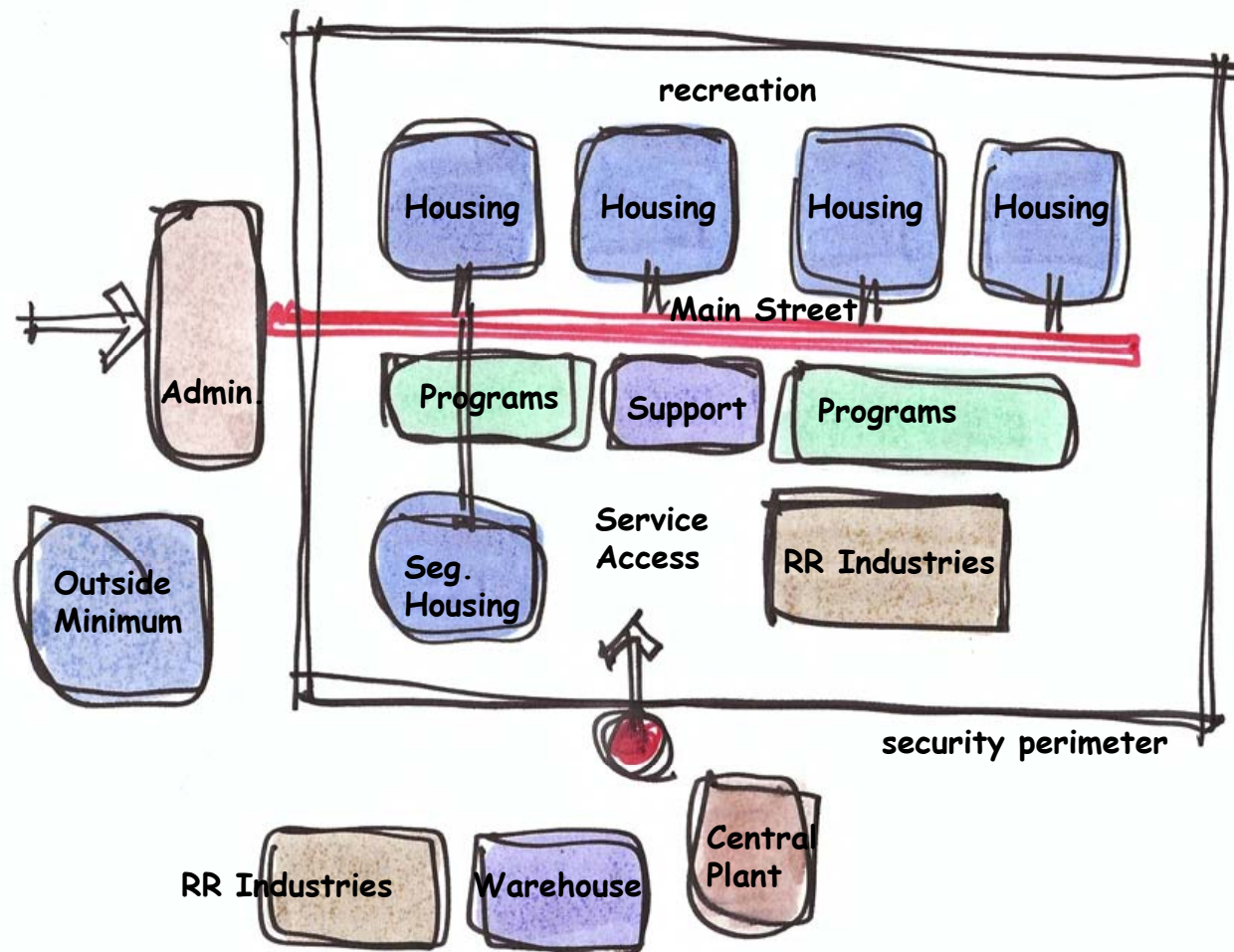


Capacity Distribution Comparison

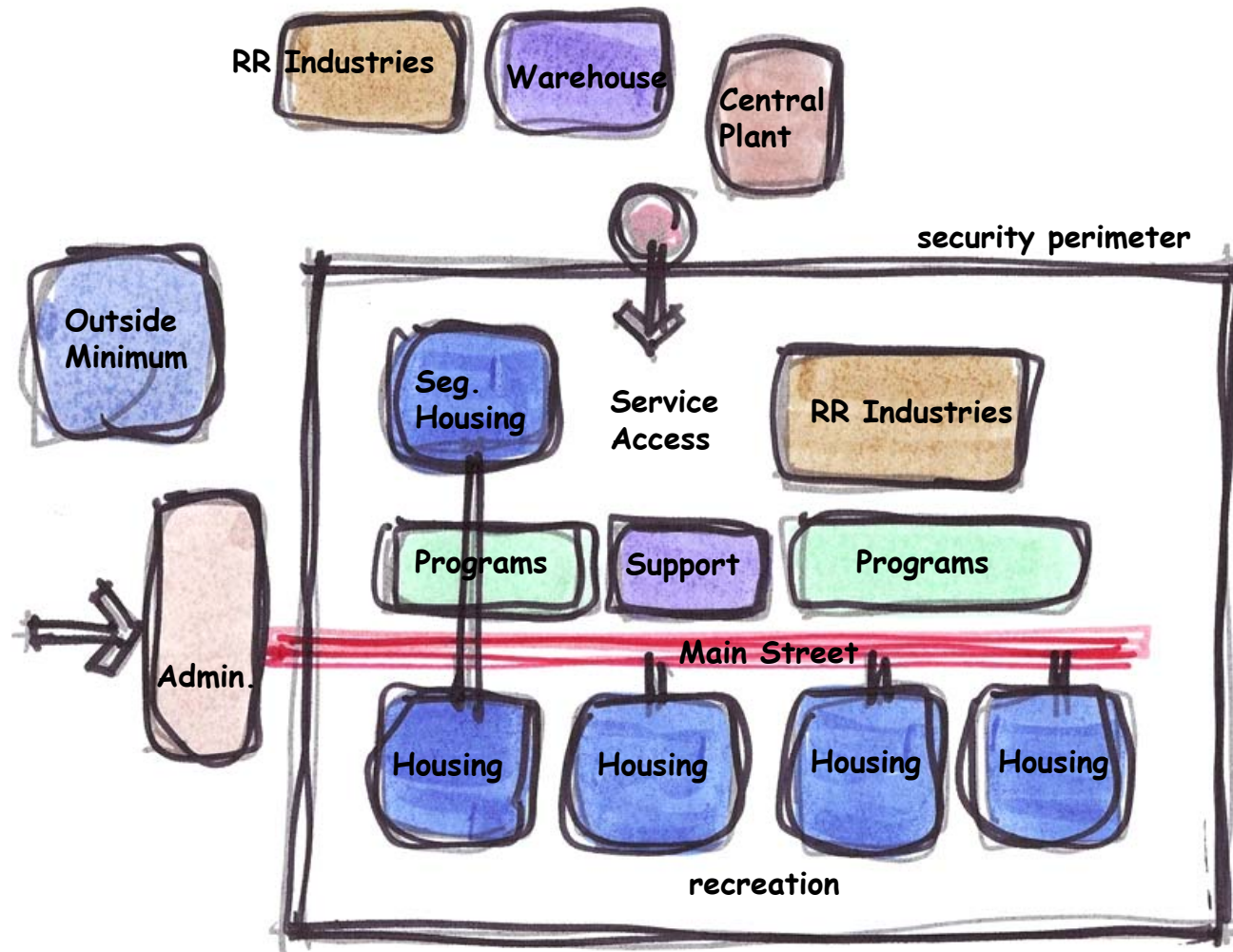
Utilization	Current Capacity			Reuse/Expansion Plan for 1,000 Inmates				New Facility for 1000 Inmates			
	Total	Flex	Net Op.	Total	Flex	Net Op.	Use	Total	Flex	Net Op.	Use
	Beds	Beds	Capacity	Beds	Beds	Capacity		Beds	Beds	Capacity	
Administrative Seg	60	5	55	60	2	58	Max GP				
General Population	60	2	58	60	2	58	Medium GP				
General Population	159	3	156								
Admission & Orientation	65	5	60	60	2	58	Med TC SA				
Disciplinary Detention	4	4	0	4	4	0	Max TC SA				
Awaiting Placement	42	0	42								
General Population (Honor)	87	6	81	87	2	85	Medium GP				
Drug & Alcohol Program	60	0	60	60	2	58	Min. Reentry				
Sick	6	6	0								
Special Needs	4	4	0								
Disciplinary Detention	15	15	0								
Disciplinary Detention				24	12	12	Max (2 12's)	24	12	12	Max (2 12's)
Administrative Segregation				96	10	86	Max (2 48's)	96	10	86	Max (2 48's)
Admission & Orientation				112	6	106	MxMd Comb (1 48/1 64)	96	2	94	MxMd Comb (2 48's)
Maximum Security GP				256	10	246	MxMd Comb (4 64's)	512	24	488	MxMd Comb (8 64's)
Gang Renunciation Unit				0		0	in above			0	in above
Transition (Step Down) Unit				48	4	44	MxMd Doubles (48)	48	4	44	MxMd Doubles (48)
Criminal Thinking TC				48	4	44	MxMd Doubles (48)	48	4	44	MxMd Doubles (48)
Substance Abuse TC						0	in existing North Unit	48	4	44	MxMd Doubles (48)
Medium Security GP				0		0	in above			0	in above
Minimum Security GP				144	4	140	Min (3 48's's)	192	4	188	Min (3 64's)
Medical Infirmary				10	10	0	Max	10	10	0	Max
Medical Chronic Care						0					
Medical Segregation				4	4	0		4	4	0	Max
Mental Health				7	7	0	Max	7	7	0	Max
TOTAL	962	90	912	1,080	85	995		1,085	85	1,000	
PERCENT	100%	8.9%	91.1%	100%	7.9%	92.1%		100%	7.8%	92.2%	



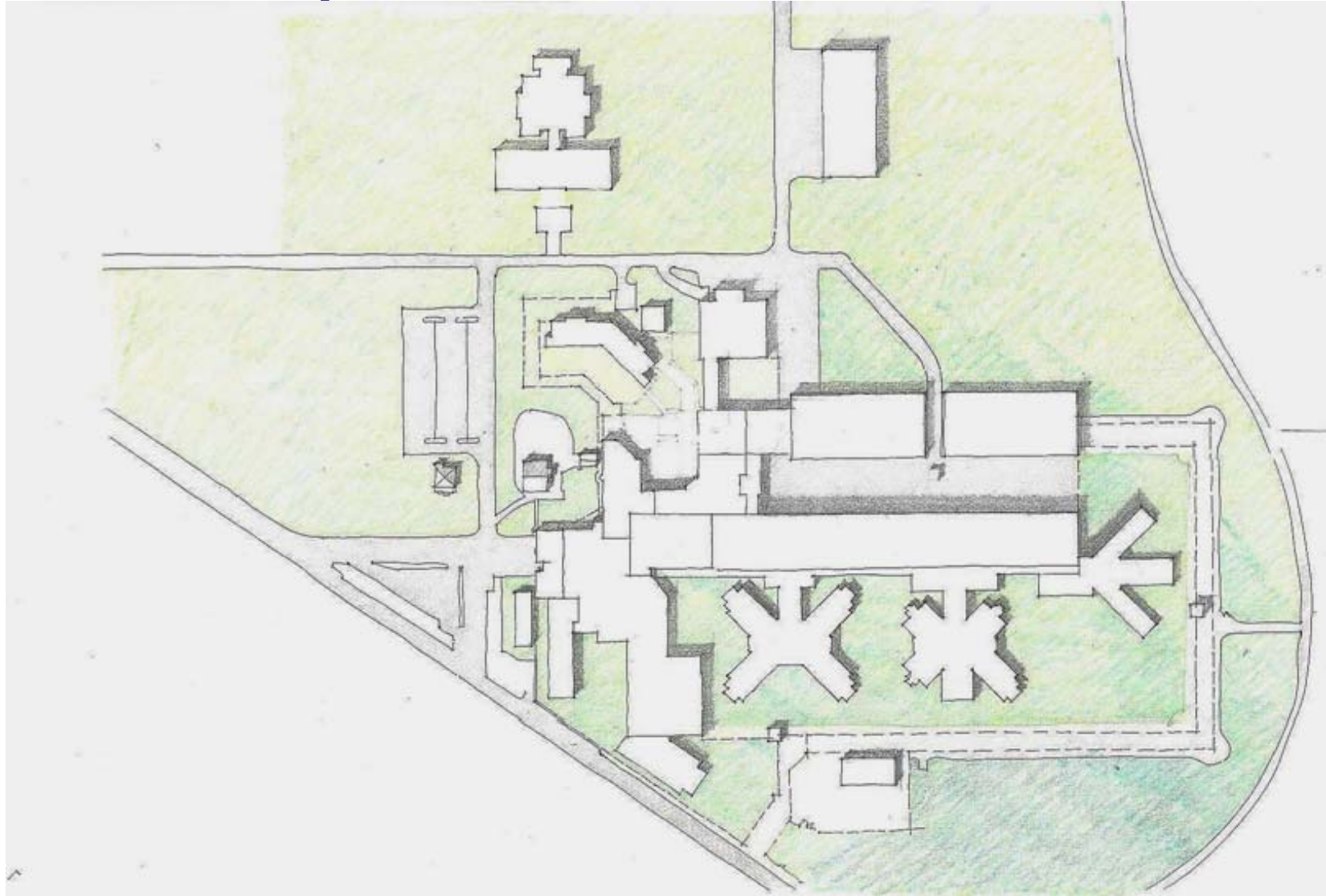
Replacement Facility Concept



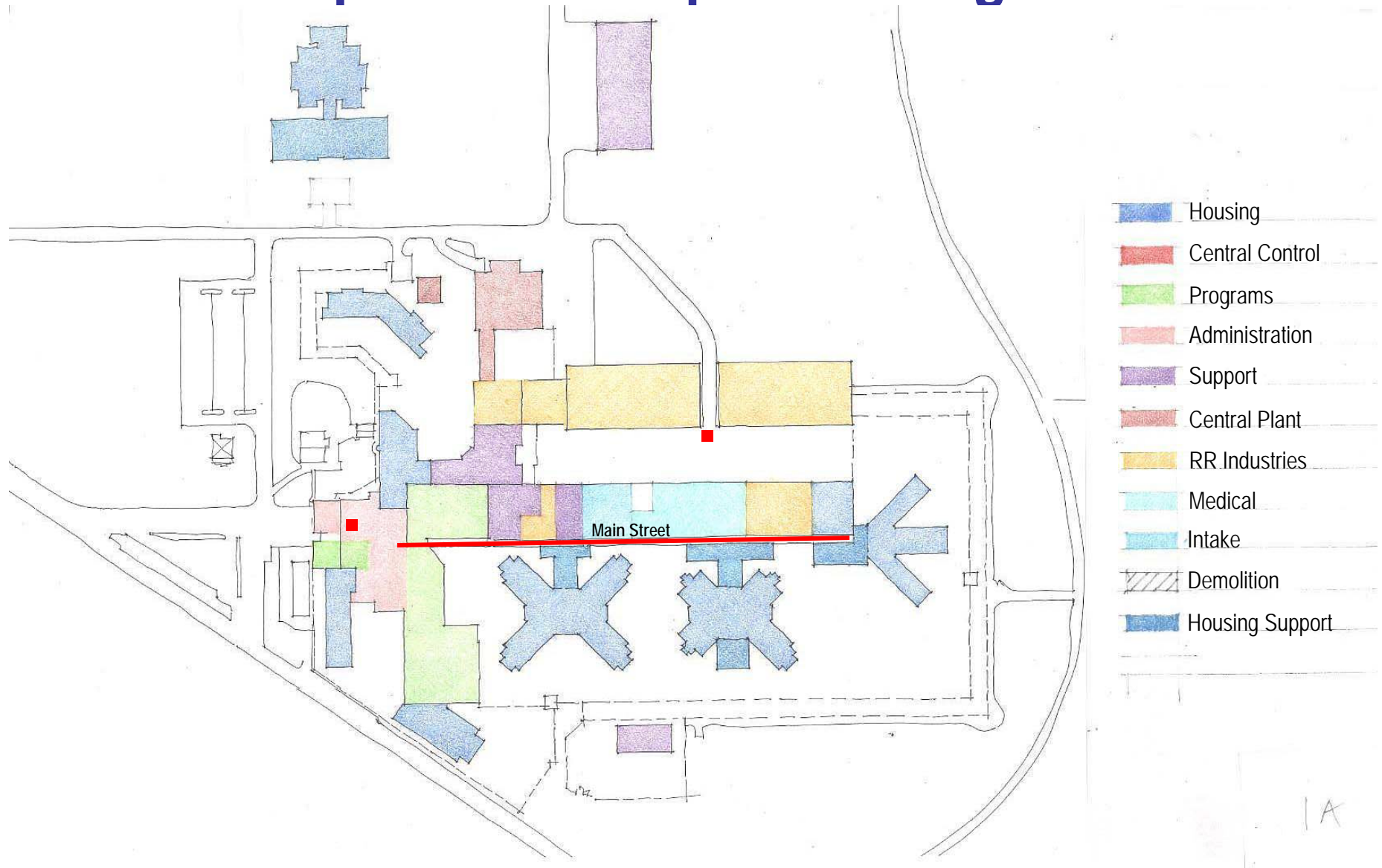
Flipped Concept Diagram



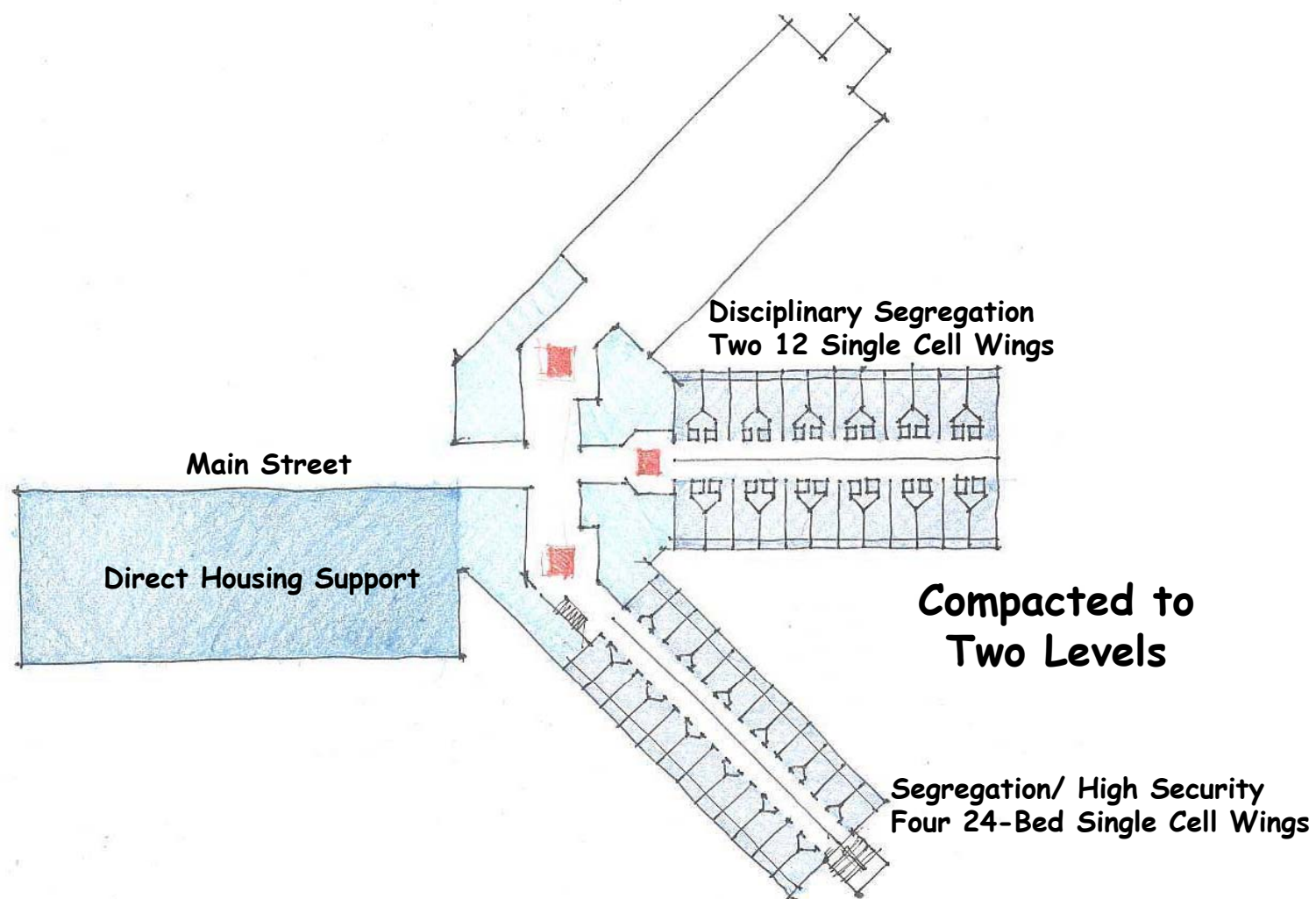
Reuse/Expansion Site Plan



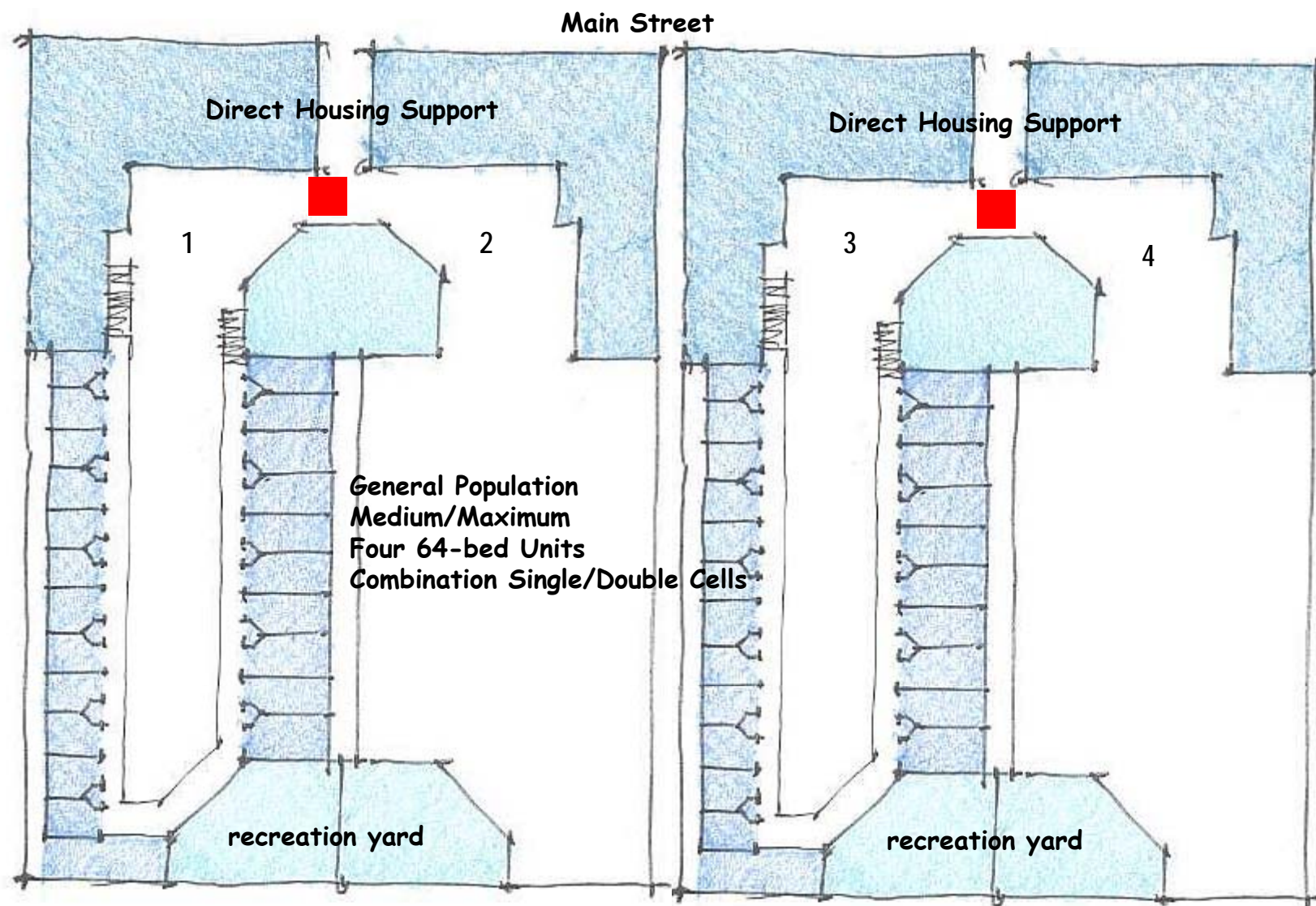
Reuse/Expansion Component Diagram



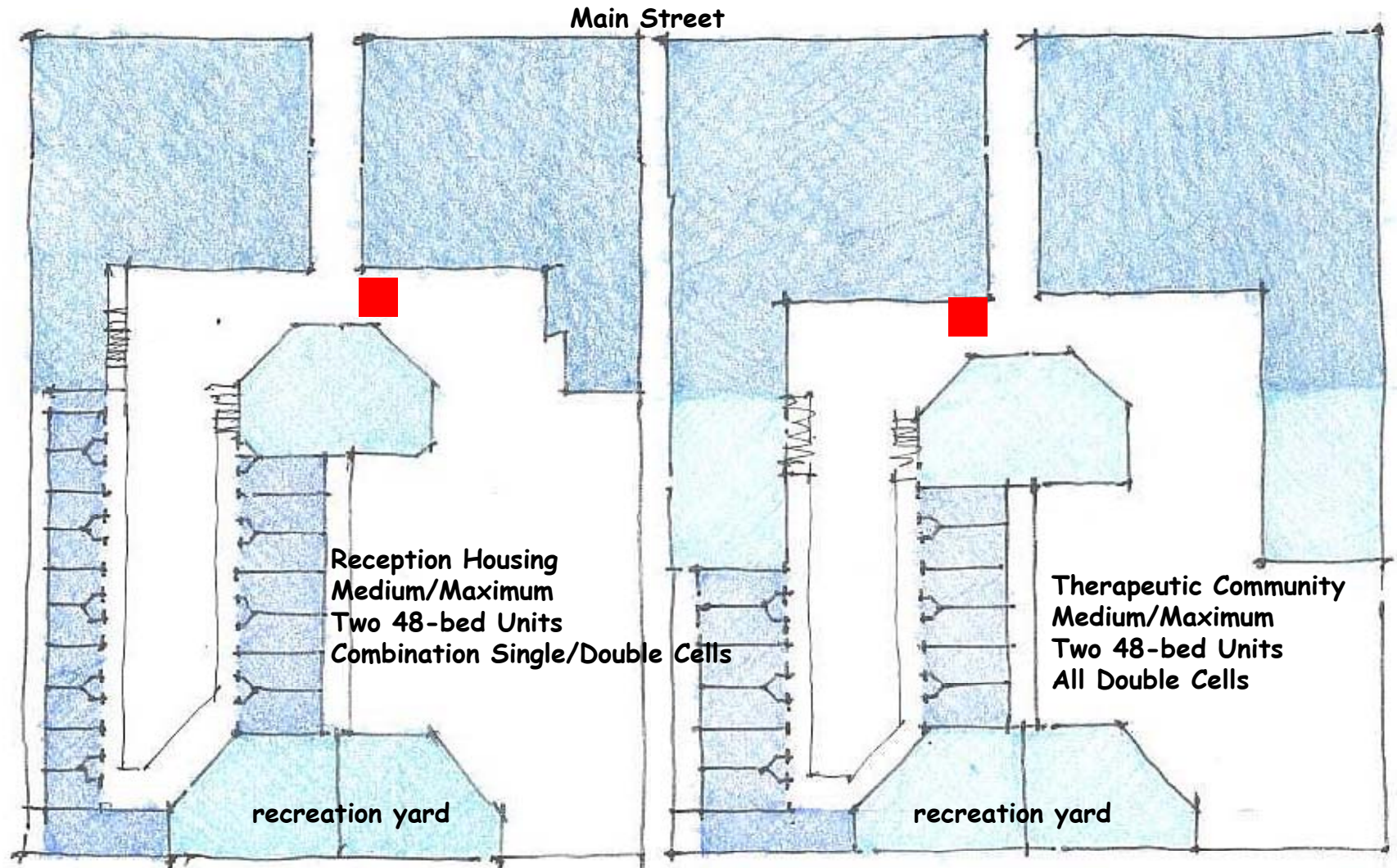
Compact Segregation Housing



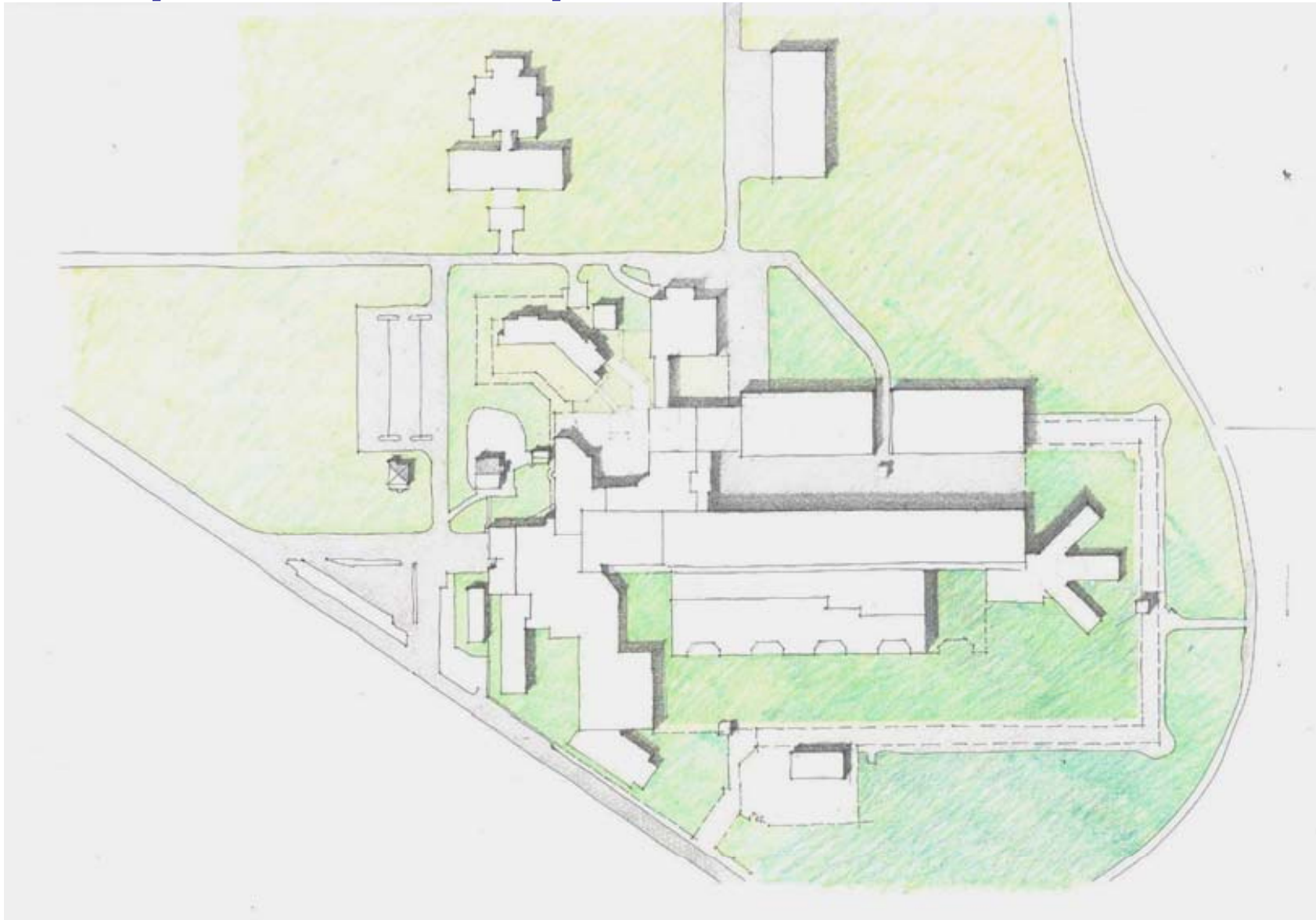
Compact Housing Units: Zones 2 & 3



Compact Housing Units: Zones 4, 5



Compact Reuse/Expansion Plan



Compact Reuse/Expansion Site Plan



Reuse Plan Summary

Project Element		
ID	Component Name	Notes
1	Site Development	Modify as Required
2	Entry Area	Front End Addition
3	Central Administration	Demolish Existing/Renovation of Main Admin.
4	Facility Administration	Renovation of Existing Areas
5	Staff Services/ Training	Front End Addition
6	Central Control	Renovation of Existing Areas
7	Intake/Transfer/Release	New Construction
8	Classification	New Construction
9	Visitation	Front End Addition
10	Commissary	Expand in Place
11	Library	Existing to Remain
12	Education/ Programs	Existing to Remain; New Vocational Shops
13	Treatment	Existing to Remain
14	Recreation	Existing to Remain
15	Health Services	
A	Administration	New Construction
B	Outpatient Clinic	New Construction
C	Inpatient Infirmary	New Construction
16	Food Service	Expand Dining, Storage
17	Laundry	Relocate
18	Outside Warehouse	Keep Existing; Build New Space
19	Rough Rider Industries	
A	Administration/Sales	New or Expand
B	Processing/ Support	New
C	Industries Shops	Demolish some; Expand Total Area
D	Outside Industry Area	New
20	Central Plant/ Maintenance	Expand
21	Reception Housing	New Construction
22	Disciplinary Segregation	New Construction
23	Segregation Housing	New Construction
24	General Population Housing	Reuse + Additional Units
25	Therapeutic Community	Reuse + Additional Units
26	Inside Minimum GP	Reuse + Additional Units
27	Housing Zone Support	With New Housing Units
28	Minimum Security Housing	New Construction Outside Perimeter
29	Minimum Security Support	New Construction Outside Perimeter

Evaluation Criteria

- Life Cycle Cost
 - Capital Construction Cost
 - Annual Operational Cost
 - Financing Cost
- Housing Fit
- Phasing Capability
- System Configuration/ Efficiency



DMJM H&N



Parametrix, Inc.

Next Steps – February 19, 2008

- **Options Investigation**
 - Evaluation of the Various Options to Determine Operational and Construction Costs of Each, and Related Evaluation Criteria.

Next Steps – March 3, 2008

- **Final Report/ Recommendations**
 - Documentation of Process and Findings, including “Best Option” for the State



Parametrix, Inc.