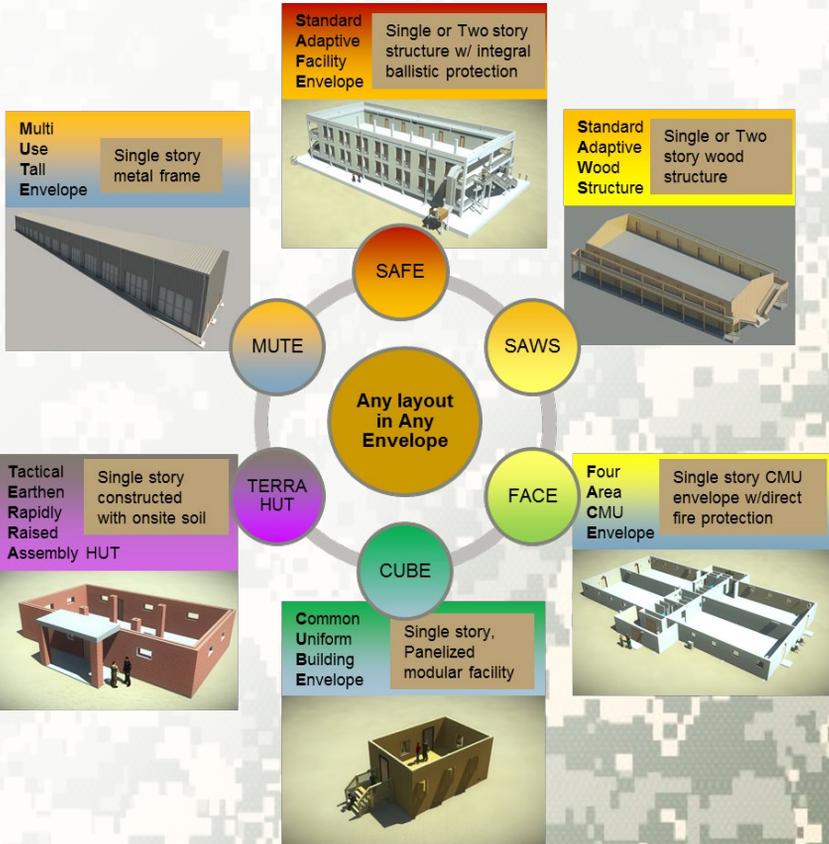




US Army Corps
of Engineers®

Center of Standardization for Non-Permanent Facilities Catalog



Program Description

Our Vision

Eliminate the adage – if you have seen one FOB you've seen one FOB. We are dedicated to eliminating the custom design paradigm of designing a unique facility to perform a single mission

Our Mission

Our mission is to ensure UFC compliance of all non-permanent facilities and they safety of existing facilities in support of military operations; while meeting current and future contingency operational needs

We maintain a library of non-permanent facility standards for use worldwide and create designs based upon these standards.

Our Guiding Principles

- Maximizing use of local materials and methods
- Minimizing use of heavy equipment
- Elimination of fire sprinklers
- Troop constructability
- Minimizing maintenance inventory
- Non-load bearing interior walls

Services We Offer

- Functional space analysis to match customer needs to Center of Standardization designs
- Ballistically protected facilities
- Facility envelope designs available in a range of materials
- Base camp layouts utilizing standard building designs
- Full construction estimates and itemized material listings for each facility and compound design
- Custom designs based on COS standard designs
- Model for 3D printing
- High resolution 3D modeling/animation
- Compliance reviews per ECB No. 2016-18 to ensure life safety in accordance with UFC 1-201-01,
- Consultation and Inspections for existing facilities per UFC 1-201-02
- Consultation for design of facilities for Host Nation use per UFC 1-202-01.

1. “Off the Shelf” Designs:

CoS NPF receives 1% of the Construction PA prior to sending designs for Oversight, Q&A, and Quality Assurance.

2. Assembly Designs/OTS design modifications:

Varies based on the changes. Costs typically range between \$80k - \$120k, depending on the extent of changes.

3. Site Adaptation of Designs:

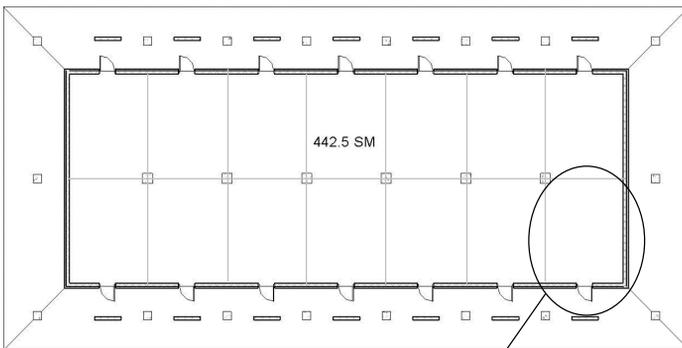
At cost of geographical district, CoS, or other entity

How to use this Catalog

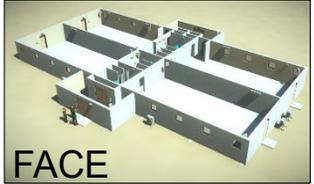
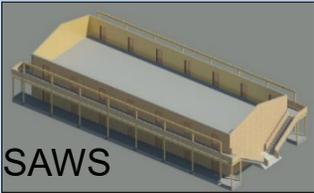
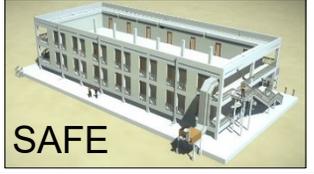
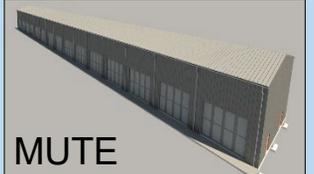
All facilities are designed to be elongated or shorted by the standard “bay” length, and are based on the same size for flexibility to meet all mission requirements

- 1. Select an Envelope** based on the parameters (i.e available materials, timeframe, duration of facility need). CoS NPF offers 6 different exteriors for <5 year operations, single story, 2 story, or warehouse space
- 2. Select an Interior Layout.** Choose from one of our 28 “off the Shelf” designs, or build your own layout from our pre-designed assemblies
- 3. Calculate the Cost.**

Rough Order of Magnitude (ROM) = (Envelope Cost + Assembly Cost) * Area Cost Factor * 1% (CoS Oversight)



A “Bay” = 7.3m x 4.9m (35.77m²).
Standard Envelopes have 14 Bays

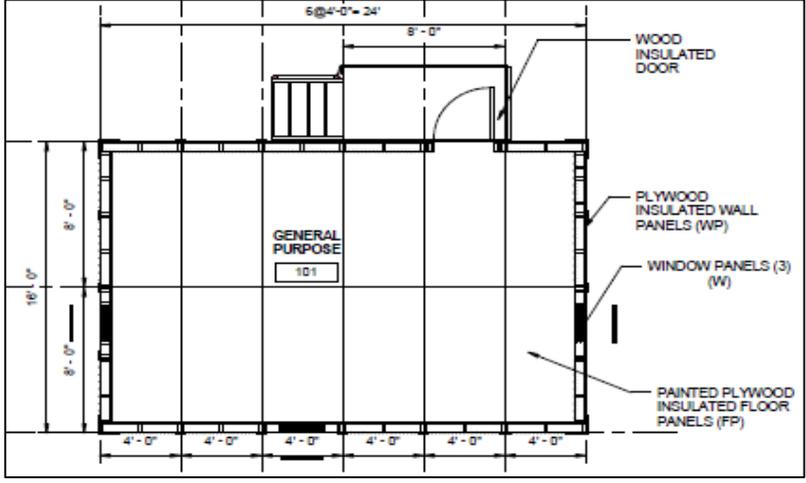
ENVELOPES	Occupied Duration	Construction Material
 <p>CUBE</p>	<p>Up to 5 years (NTOE: can be up to 25 years with increased exterior finishes)</p>	<p>Panelized Wood</p>
 <p>TERRA HUT</p>	<p>Up to 25 years</p>	<p>Compressed Earth Block Structure</p>
 <p>FACE</p>	<p>Up to 25 years</p>	<p>CMU</p>
 <p>SAWS</p>	<p>Up to 25 years</p>	<p>Wood</p>
 <p>SAFE</p>	<p>Up to 25 years</p>	<p>Concrete Framing w/ CMU infill</p>
 <p>MUTE</p>	<p>Up to 25 years</p>	<p>Metal</p>

Default Dimensions	Stories	Envelope ROM Contractor	Envelope ROM Troop Labor
1 Bay, 7.3m x 4.9m 35.77m ²	Single	\$15k	\$10k
14 Bay, 9.8m x 34.3m 442.5m ²	Single	\$549k	\$422k
14 Bay, 9.8m x 34.3m 442.5m ²	Single	\$649k	\$390k
14 Bay, 9.8m x 34.3m 442.5m ²	Two Story	\$400k	\$340k
14 Bay, 9.8m x 34.3m 442.5m ²	Single/ Two Story	Single - \$700k Two - \$1200k	Single - \$378k Two - \$654k
14 Bay, 12.4m x 90.5 1122.2 m ²	Single	\$1700k	\$1340k

Envelopes

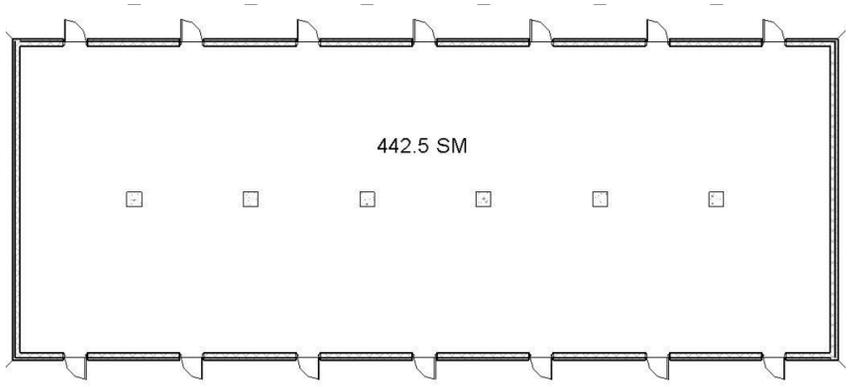
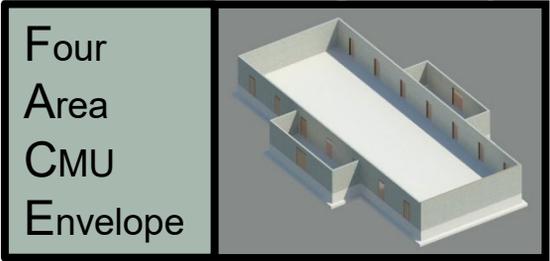
ENVELOPES Temporary < 5 Years

Common
Uniform
Building
Envelope



Description	
Occupied Duration	Up to 5 years
Construction Material	Panelized Wood
Default Dimensions	1 Bay, 7.3m x 4.9m, 35.77m ²
Stories	Single
Envelope ROM (ACF of 1.0) Contractor	\$15K
Envelope ROM (ACF = 1.0) Troop Labor	\$10K
R-value	Wall – 20; Roof & Floor - 40

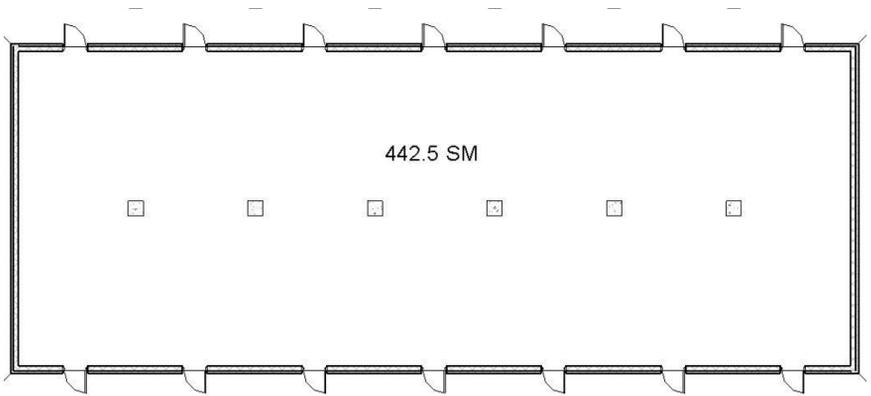
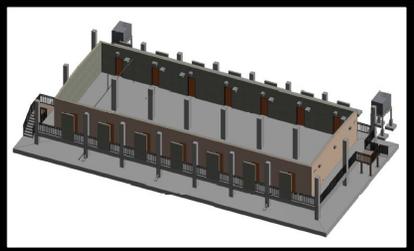
ENVELOPES – Single Story



Description	
Occupied Duration	Up to 25 years
Construction Material	CMU
Default Dimensions	14 Bay, 9.8m x 34.3m, 442.5 m2
Envelope ROM (ACF of 1.0) Contractor	\$694K
Envelope ROM (ACF = 1.0) Troop Labor	\$390K
R-Value	Wall – 20; Roof 40

ENVELOPES – Single Story

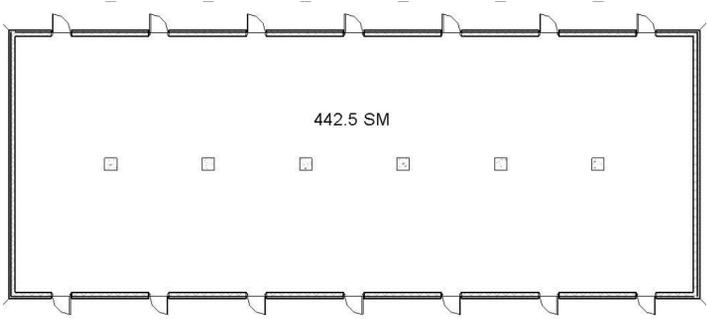
Standard
Adaptive
Facility
Envelope
1



Description	
Occupied Duration	Up to 25 years
Construction Material	Concrete Framing w/ CMU infill
Default Dimensions	14 Bay, 9.8m x 34.3m, 442.5 m2
ROM - Contractor	Single - \$700k
ROM - Troop Labor	Single - \$378k
R-Value	Wall – 21; Roof 40

ENVELOPES – Single Story

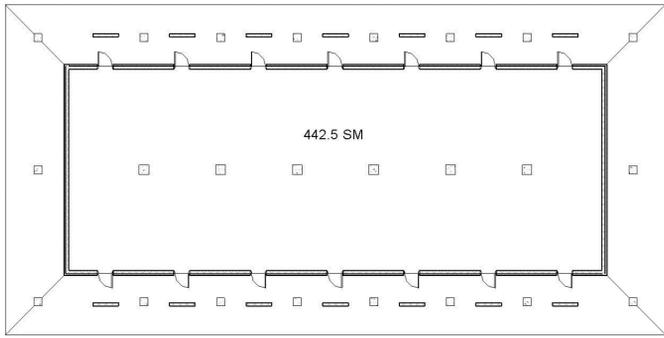
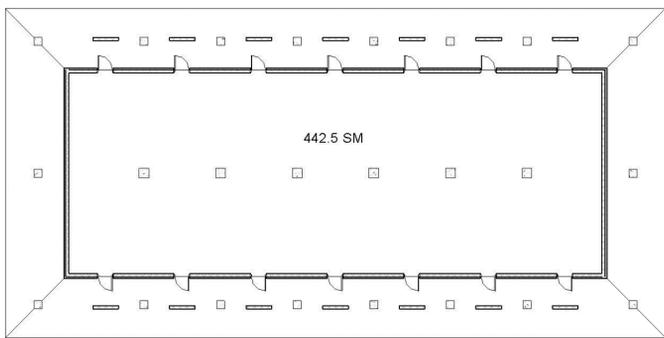
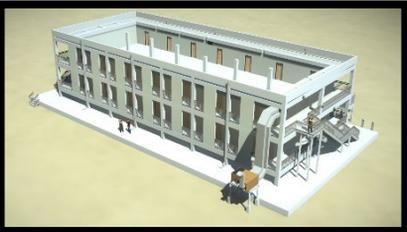
Tactical
Earthen
Rapidly
Raised
Assembly
HUT



Description	
Occupied Duration	Up to 25 years
Construction Material	Compressed Earth Block Structure, with Wood Roof Frame
Default Dimensions	6 Bay, 9.8m x 14.7m, 118.3m ²
Envelope ROM (ACF of 1.0) Contractor	\$549k
Envelope ROM (ACF = 1.0) Troop Labor	\$422k
R-Value	Wall – 20; Roof 40

ENVELOPES – Two Story

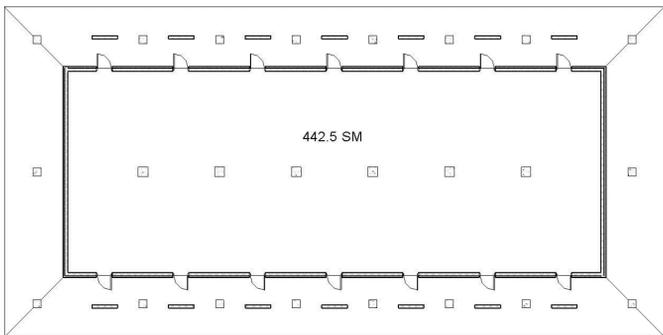
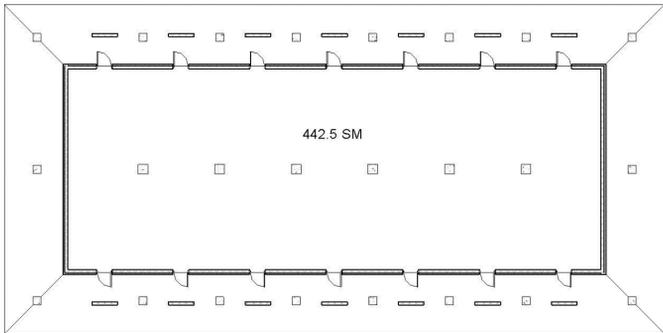
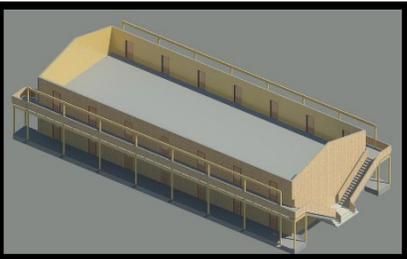
Standard
Adaptive
Facility
Envelope



Description	
Occupied Duration	Up to 25 years
Construction Material	Concrete Framing w/ CMU infill
Default Dimensions	14 Bay, 9.8m x 34.3m, 442.5 m2
ROM - Contractor	Two Story - \$1200k
ROM - Troop Labor	Two Story - \$654k
Thermal Resistance Value (R-Value)	Wall – 21; Roof - 40

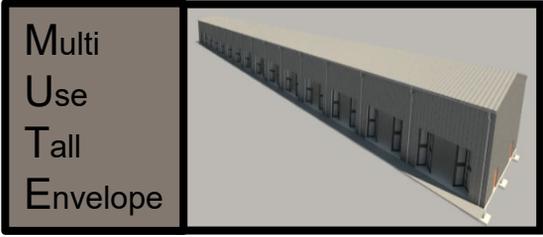
ENVELOPES – Two Story

Standard
Adaptive
Wood
Structure

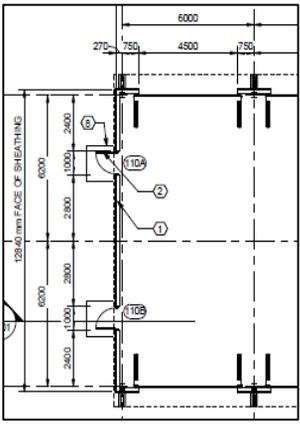


Description	
Occupied Duration	Up to 25 years
Construction Material	Wood
Default Dimensions	14 Bay, 9.8m x 34.3m, 442.5 m2
ROM - Contractor	Two Story - \$400k
ROM - Troop Labor	Two Story - \$340k
Thermal Resistance Value (R-Value)	Wall – 20: Roof - 40

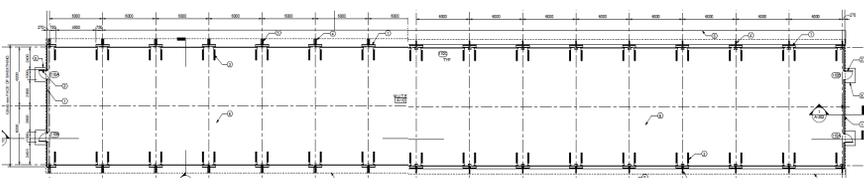
ENVELOPES



Multi
Use
Tall
Envelope



Single Bay Layout



Description	
Occupied Duration	Up to 25 years
Construction Material	Metal
Default Dimensions	14 Bay, 12.4m x 90.5m, 1122.20 m2
Stories	Single
Envelope ROM (ACF of 1.0) Contractor	\$1700k
Envelope ROM (ACF = 1.0) Troop Labor	\$1340k
Thermal Resistance Value (R-Value)	Wall – 20: Roof - 40

Interior Layouts

“Off The Shelf” Designs

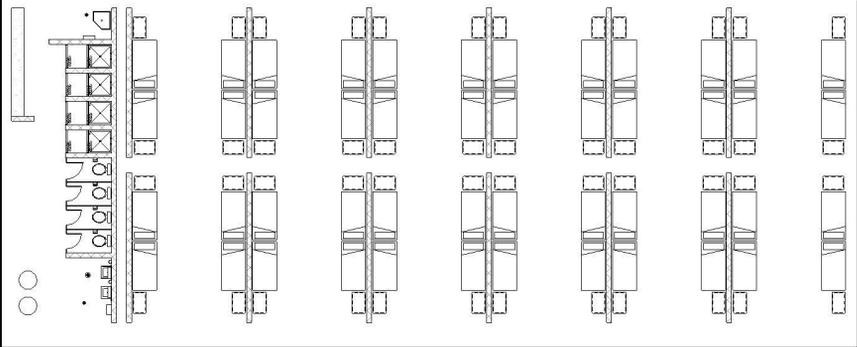
Designs		# of Options
1	Billeting	2
2	Low Density Barracks	3
3	Operations Center	2
4	Headquarters	1
5	DFAC	3
6	Joint Operations Center	2
7	Fitness	1
8	Latrine	1
9	Laundry	1
10	Religious	2
11	Medical Facility	3
12	Lounge Area	5
13	Weapons Storage	1
14	Tactical Operations Center	1

“Off the Shelf” Designs

INTERIOR LAYOUTS *Off the Shelf Designs*

Billeting

Option 1: 14 Bay, Full Floor with Latrine/Shower



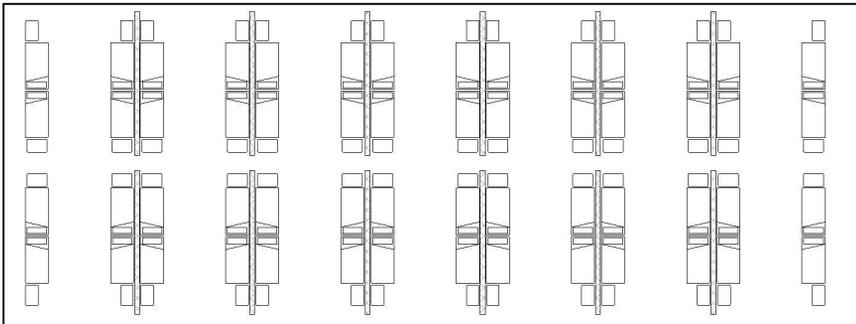
Billeting Option 1 Floor Plan

Description	
Size	48 PN
Details	Semi open bay with Latrine & Showers
ROM with Contractor Labor	\$305k
ROM with Troop Labor	\$235k

INTERIOR LAYOUTS *Off the Shelf Designs*

Billeting

Option 2: 14 Bay, Full Floor



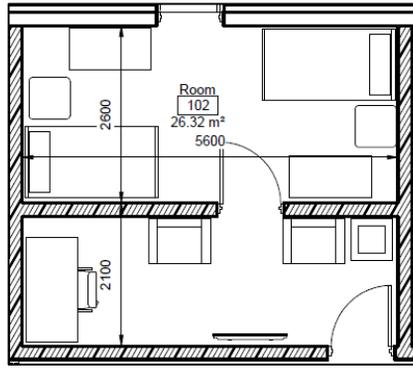
Billeting Option 2 Floor Plan

Description	
Size	56 PN
Details	Semi open bay
ROM with Contractor Labor	\$255k
ROM with Troop Labor	\$197k

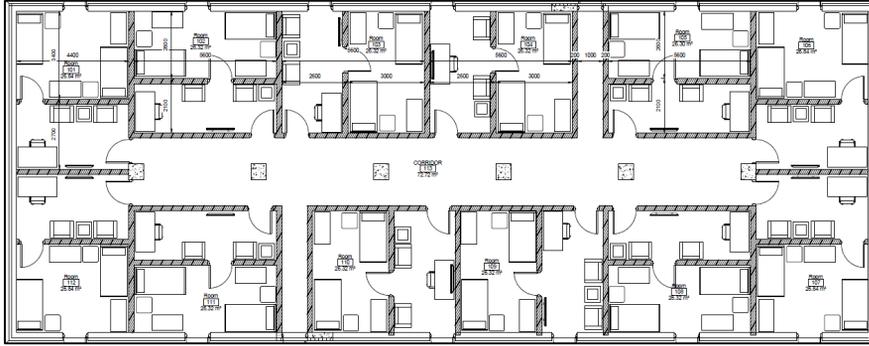
INTERIOR LAYOUTS *Off the Shelf Designs*

Low Density Barracks

Option 1: 14 Bay, Dry Facility



Room Layout



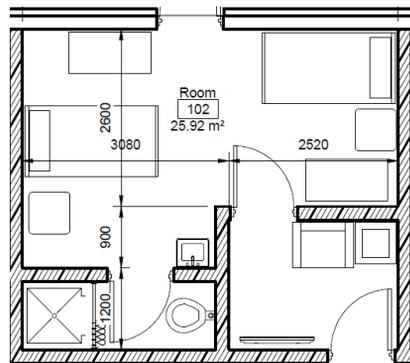
Low Density Barracks Option 1 Floor Plan

Description	
Size	24 PN
Details	2 Beds per room, with Office Area
ROM with Contractor Labor	\$465k
ROM with Troop Labor	\$358k

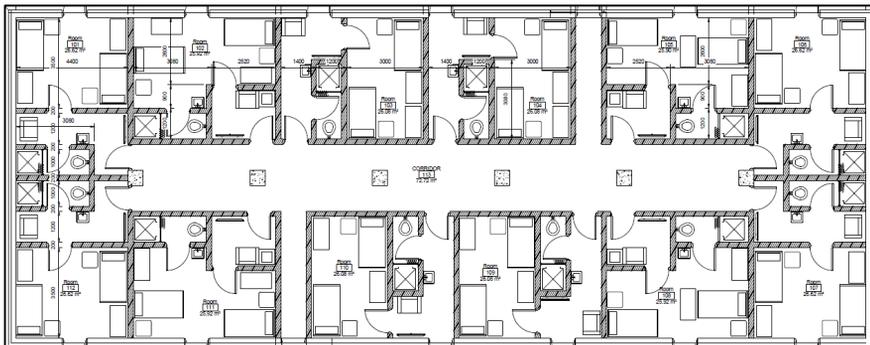
INTERIOR LAYOUTS *Off the Shelf Designs*

Low Density Barracks

Option 2: 14 Bay with Bathrooms



Room Layout



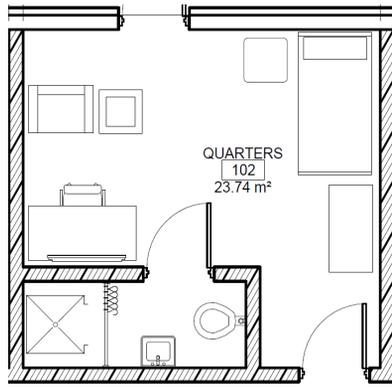
Low Density Barracks Option 2 Floor Plan

Description	
Size	24 PN
Details	2 Beds per room, with Office Area & Bathrooms
ROM with Contractor Labor	\$545k
ROM with Troop Labor	\$418k

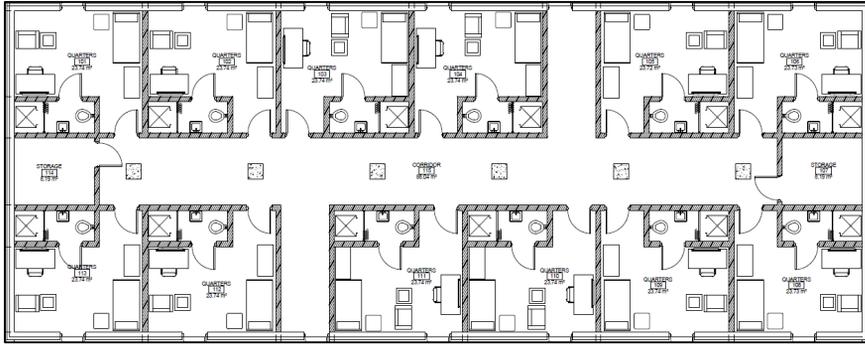
INTERIOR LAYOUTS *Off the Shelf Designs*

Low Density Barracks

Option 3: 14 Bay Wet Facility



Room Layout



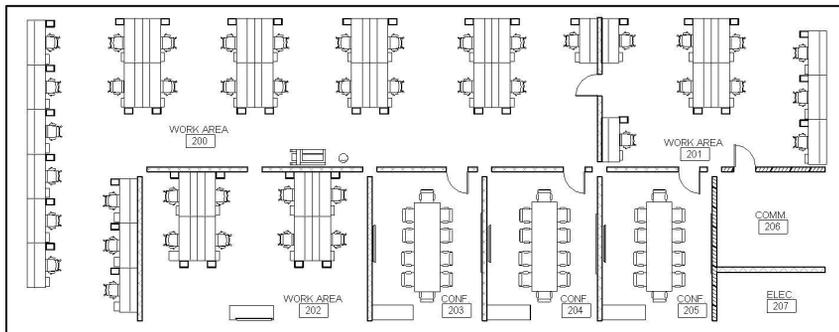
Low Density Barracks Option 3 Floor Plan

Description	
Size	12 PN
Details	1 Beds per room, with Office Area & Bathrooms
ROM with Contractor Labor	\$545k
ROM with Troop Labor	\$418k

INTERIOR LAYOUTS *Off the Shelf Designs*

Operations Center

Option 1: 14 Bay Open Floor, W/Conference Rooms



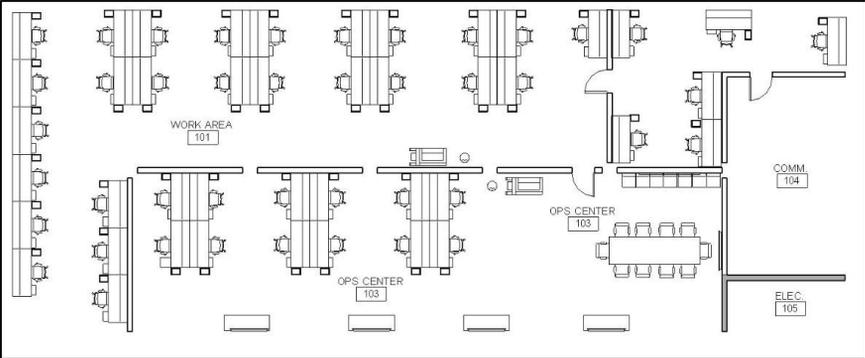
Operations Center, Option 1 Floor Plan

Description	
Size	43 PN
Details	Open Office Area with 3 Conference Rooms
ROM with Contractor Labor	\$372k
ROM with Troop Labor	\$286k

INTERIOR LAYOUTS *Off the Shelf Designs*

Operations Center

Option 2: 14 Bay Open Floor



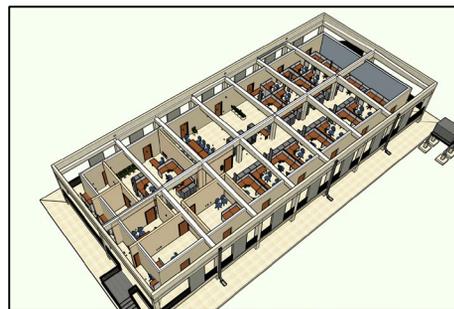
Operations Center, Option 2 Floor Plan

Description	
Size	44 PN
Details	Open Office Area with Conference Space
ROM with Contractor Labor	\$372k
ROM with Troop Labor	\$286k

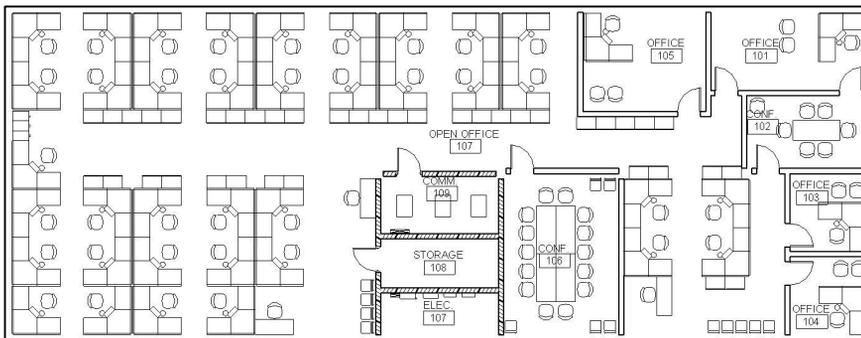
INTERIOR LAYOUTS *Off the Shelf Designs*

Headquarters

Option 1: 14 Bay Open Floor
w/Office Space



3D Layout



Headquarters, Option 1 Floor Plan

Description	
Size	44 PN
Details	Open Area seating, 4 offices, and multiple conference space
ROM with Contractor Labor	\$429k
ROM with Troop Labor	\$330k

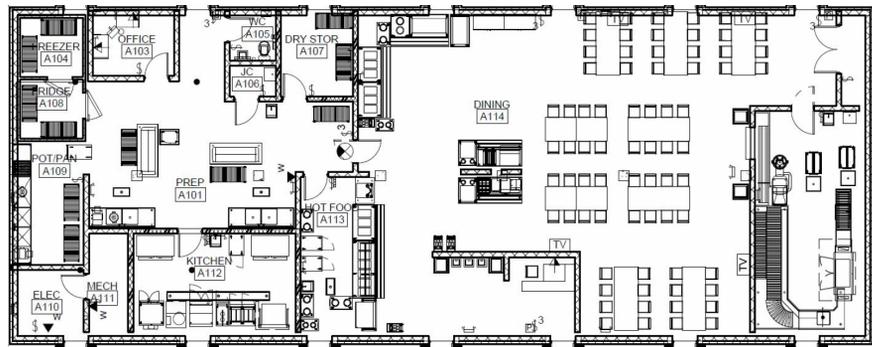
INTERIOR LAYOUTS *Off the Shelf Designs*

Dining Facility

Option 1: 14 Bay, Open Seating with Kitchen



3D Layout



Dining Facility, Option 1 Floor Plan

Description	
Size	500 PN
Details	Open Seating with kitchen & Serving space
ROM with Contractor Labor	\$500k
ROM with Troop Labor	\$385k

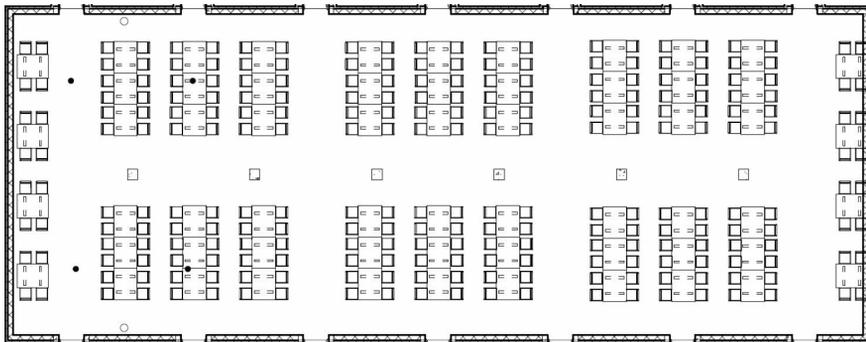
INTERIOR LAYOUTS *Off the Shelf Designs*

Dining Facility

Option 2: 14 Bay, Open Seating



3D Layout



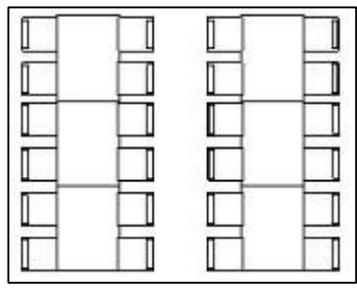
Dining Facility, Option 2 Floor Plan

Description	
Size	224 PN
Details	Open Seating
ROM with Contractor Labor	\$286k
ROM with Troop Labor	\$220k

INTERIOR LAYOUTS *Off the Shelf Designs*

Dining Facility

Option 3: DFAC for the CUBE



Dining Facility, Option 3 Floor Plan

Description	
Size	24 PN
Details	Open Area seating, to be used with the CUBE
ROM with Contractor Labor	\$3k
ROM with Troop Labor	\$3.9k

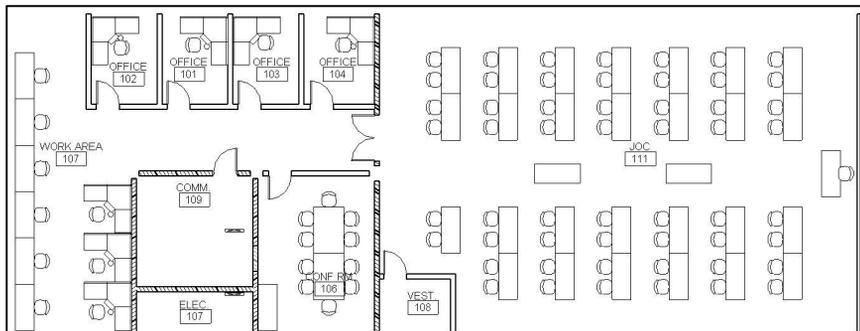
INTERIOR LAYOUTS *Off the Shelf Designs*

Joint Operations Center

Option 1: 14 Bay, Open Seating
with Offices



3D Layout



JOC, Option 1 Floor Plan

Description	
Size	107 PN
Details	Open Seating with Offices and Conference Rooms
ROM with Contractor Labor	\$393k
ROM with Troop Labor	\$302k

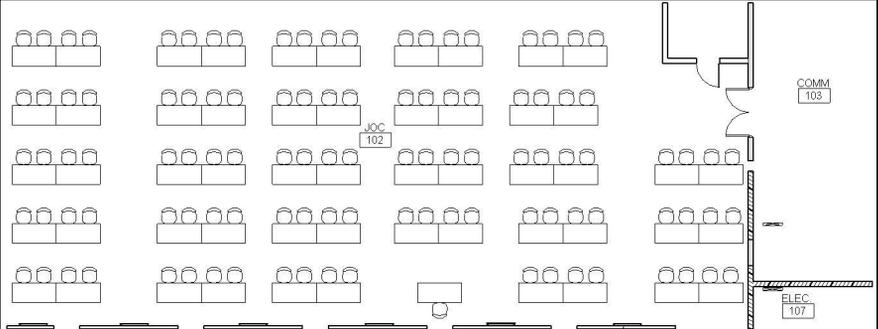
INTERIOR LAYOUTS *Off the Shelf Designs*

Joint Operations Center

Option 1: 14 Bay, Open Seating with Offices



3D Layout



JOC, Option 1 Floor Plan

Description	
Size	109 PN
Details	Open Seating
ROM with Contractor Labor	\$357k
ROM with Troop Labor	\$275k

INTERIOR LAYOUTS *Off the Shelf Designs*

Fitness

Option 1: 14 Bay, Open Fitness Area



Fitness Center, Option 1 Floor Plan

Description	
Size	442.5m2
Details	Open Area with HVAC, TVs, & Laundry Room
ROM with Contractor Labor	\$250k
ROM with Troop Labor	\$192k

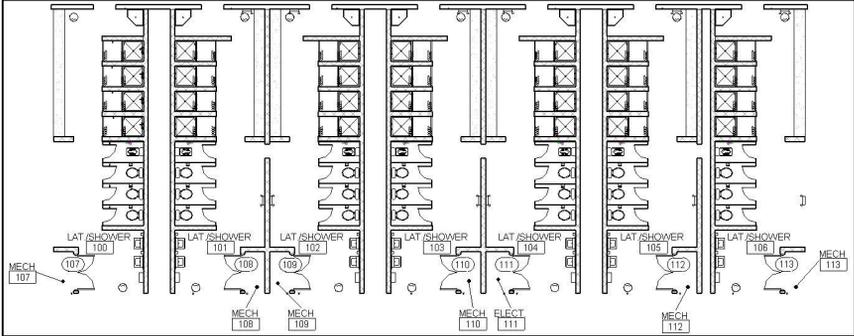
INTERIOR LAYOUTS *Off the Shelf Designs*

Latrine

Option 1: 14 Bay, 7 Section
Latrine Space



3D Layout



Latrine, Option 1 Floor Plan

Description	
Size	240 PN
Details	7 separate latrine areas, inclusive of showers, toilets, and wash areas
ROM with Contractor Labor	\$450k
ROM with Troop Labor	\$346k

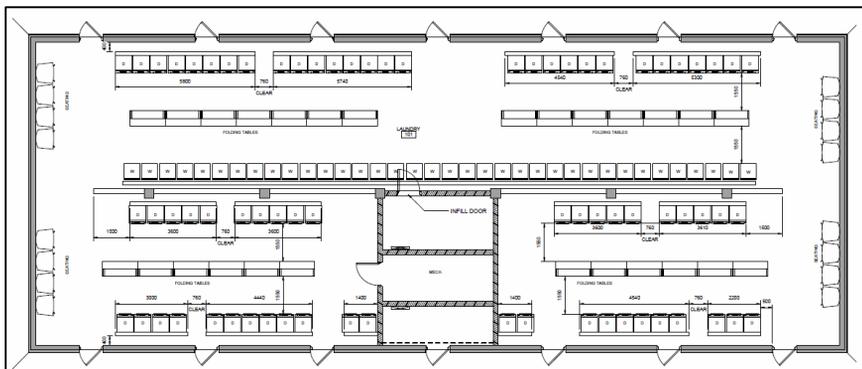
INTERIOR LAYOUTS *Off the Shelf Designs*

Laundry

Option 1: 14 Bay Open Area



3D Layout



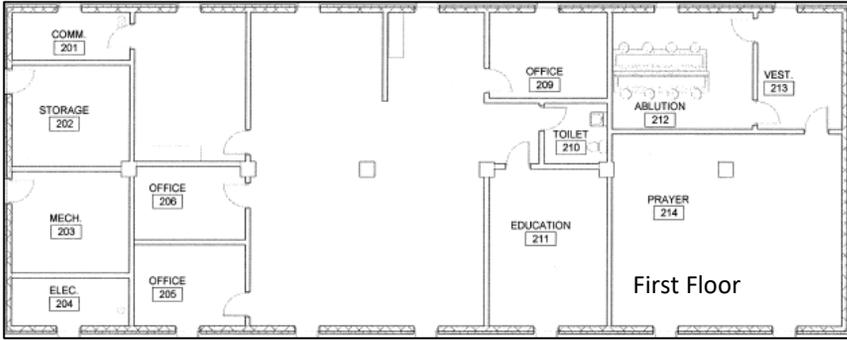
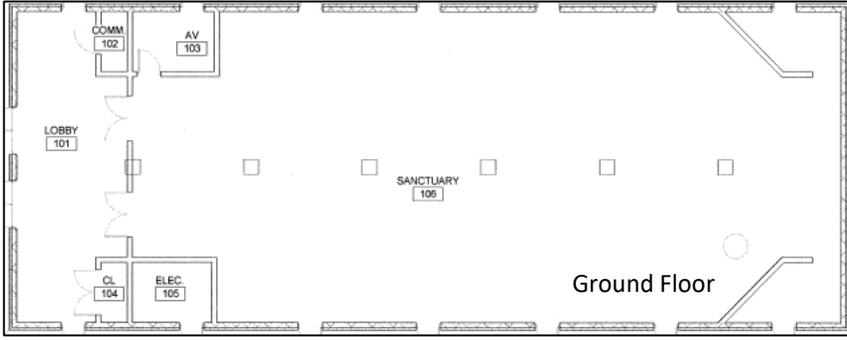
Laundry, Option 1 Floor Plan

Description	
Size	900 PN
Details	Open Laundry Space
ROM with Contractor Labor	\$443k
ROM with Troop Labor	\$341k

INTERIOR LAYOUTS *Off the Shelf Designs*

Religious Facility

Option 1: 14 Bay 2 Floor, Open Sanctuary with Offices



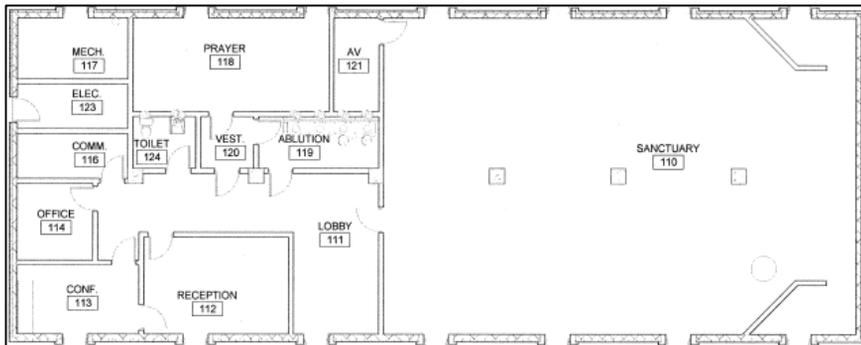
Religious Facility, Option 1 Floor Plan

Description	
Size	850m2
Details	Open Seating Sanctuary on Ground Floor and Offices/Classrooms/Storage/Prayer on First Floor
ROM with Contractor Labor	\$572k
ROM with Troop Labor	\$440k

INTERIOR LAYOUTS *Off the Shelf Designs*

Religious Facility

Option 2: 14 Bay, 1 Floor, Open
Sanctuary with Offices



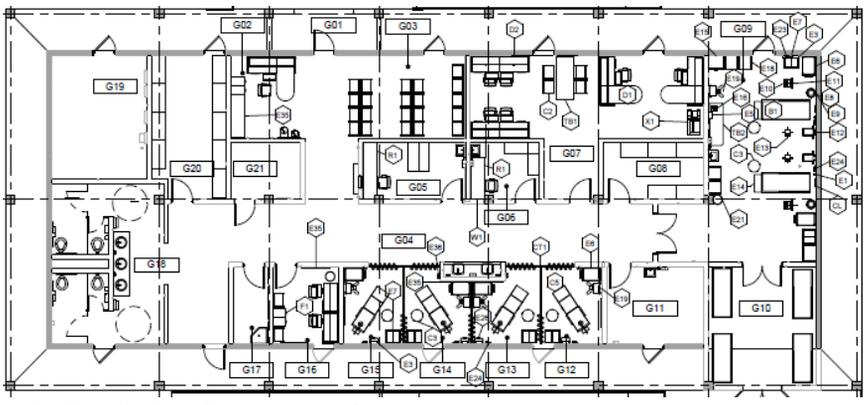
Religious Facility, Option 2 Floor Plan

Description	
Size	442.5m2
Details	Open Sanctuary, with offices, restrooms, prayer room, and conference room
ROM with Contractor Labor	\$286k
ROM with Troop Labor	\$220k

INTERIOR LAYOUTS *Off the Shelf Designs*

Medical Facility

Option 1 14 Bay, Role 1 Medical Facility



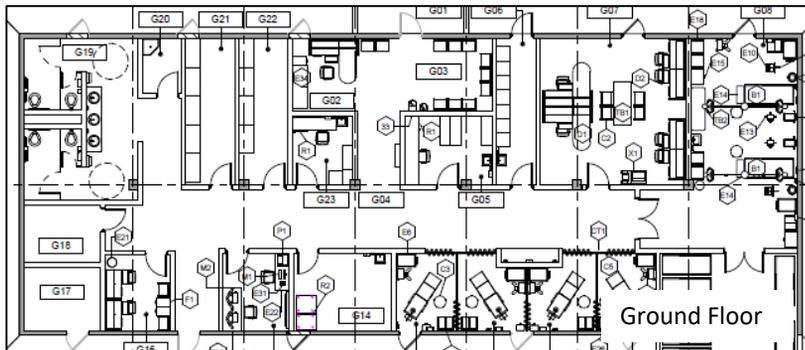
Medical Facility, Option 1 Floor Plan

Description	
Size	442.5m2
Details	Trauma Room, Exam Rooms, Pharmacy, Utilities, Laboratory
ROM with Contractor Labor	\$536M
ROM with Troop Labor	\$412k

INTERIOR LAYOUTS *Off the Shelf Designs*

Medical Facility

Option 2: 14 Bay 2 Floor, Role 2 Medical facility



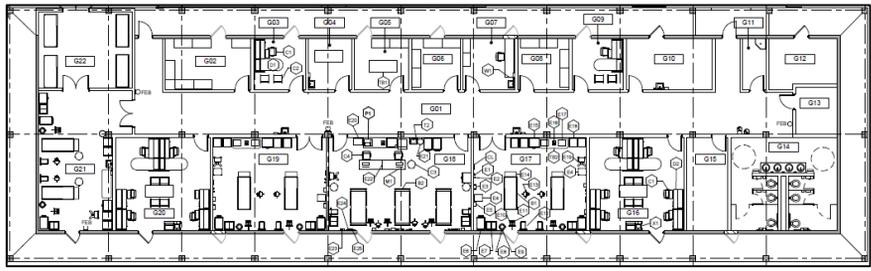
Medical Facility, Option 2 Floor Plan

Description	
Size	850m2
Details	Trauma Room, Exam Rooms, X-Ray, Blood Storage, Utilities, Laboratory
ROM with Contractor Labor	\$1.07M
ROM with Troop Labor	\$825k

INTERIOR LAYOUTS *Off the Shelf Designs*

Medical Facility

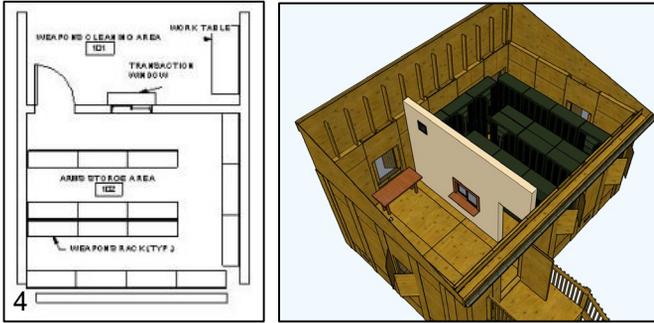
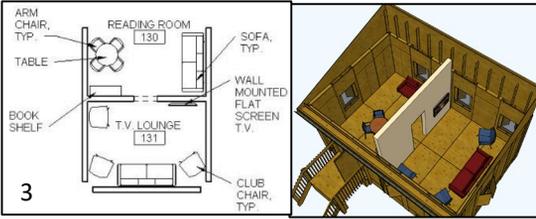
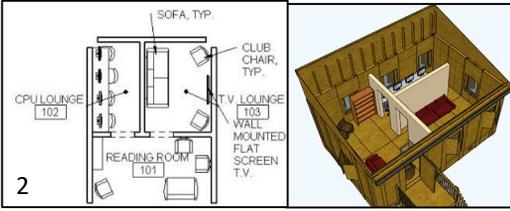
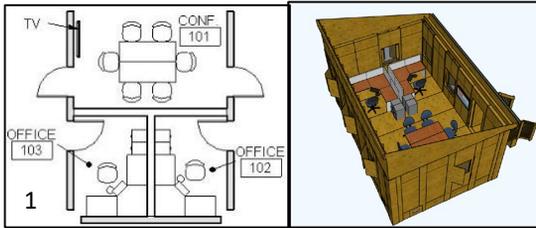
Option 3 24 Bay, Role 2+ Medical Facility



Medical Facility, Option 3 Floor Plan

Description	
Size	665m2
Details	Trauma Room, Exam Rooms, Operating Room, Recovery, Utilities, Laboratory
ROM with Contractor Labor	\$750k
ROM with Troop Labor	\$525k

INTERIOR LAYOUTS *Off the Shelf Designs for The CUBE*

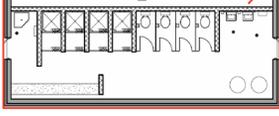


CUBE Designs	
1	Tactical Operations Center
2	Lounge Area Option 1
3	Lounge Area Option 2
4	Weapons Storage

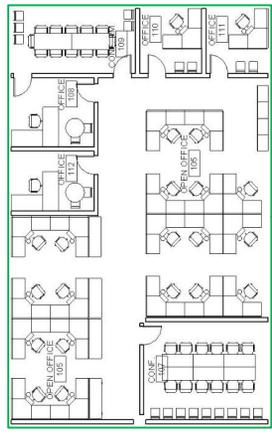
Several Other Options are available upon request

ASSEMBLIES

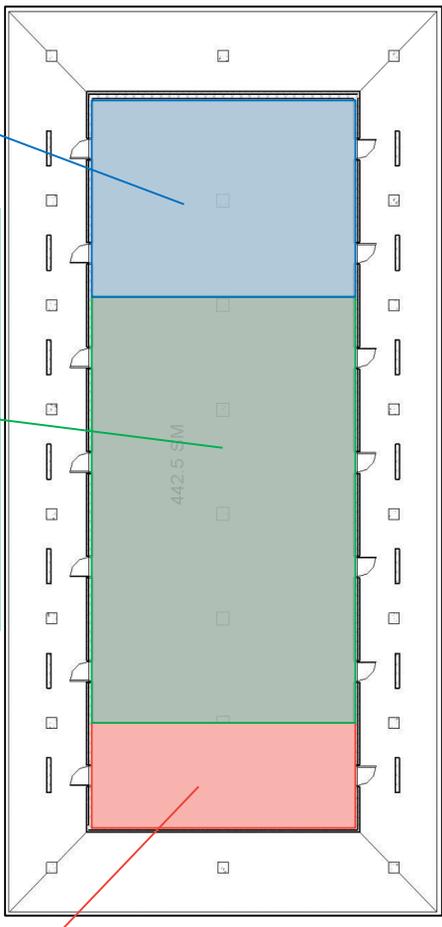
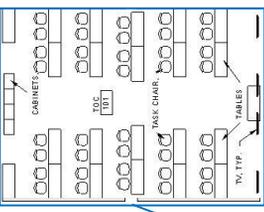
Latrine



Office/Cubical/Conference



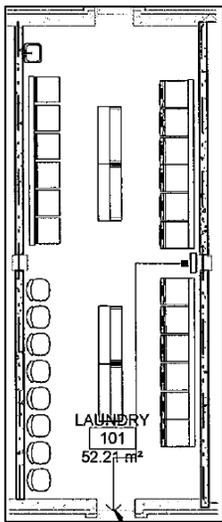
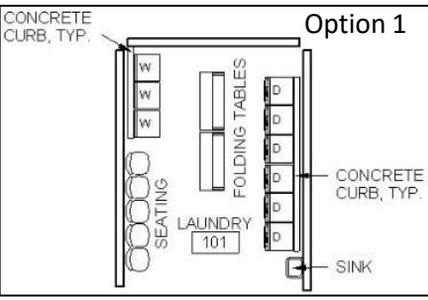
Open Seating



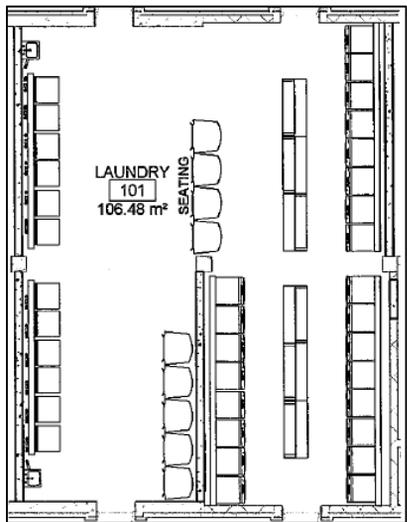
Assemblies

ASSEMBLIES

Laundry



Option 2

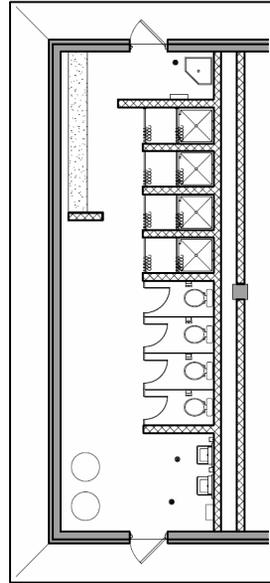


Option 3

	Description	ROM with Contractor Labor	ROM with Troop Labor
Laundry - Option 1	Single Bay, 75 PN	\$54k	\$38k
Laundry - Option 2	2 Bay, 150 PN	\$84k	\$59k
Laundry - Option 3	4 Bay, 300 PN	\$165k	\$116k

ASSEMBLIES

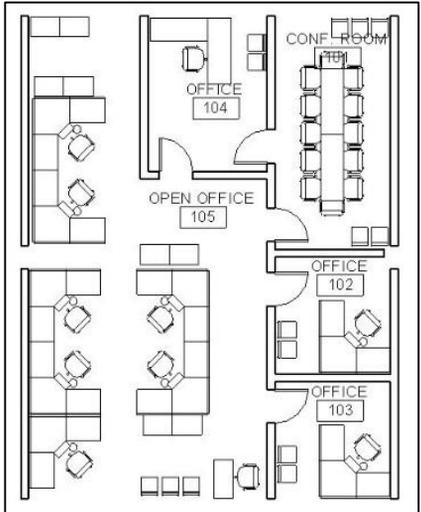
Latrine



	Description	ROM with Contractor Labor	ROM with Troop Labor
Latrine	2 Bay, 4 showers, 4 toilets	\$50k	\$35k

ASSEMBLIES

Headquarters

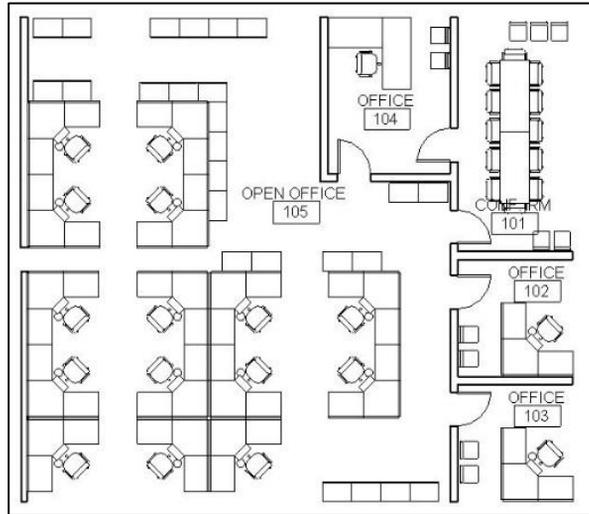


Option 1

	Description	ROM with Contractor Labor	ROM with Troop Labor
HQ - Option 1	4 Bay, 11 PN	\$135k	\$95k

ASSEMBLIES

Headquarters

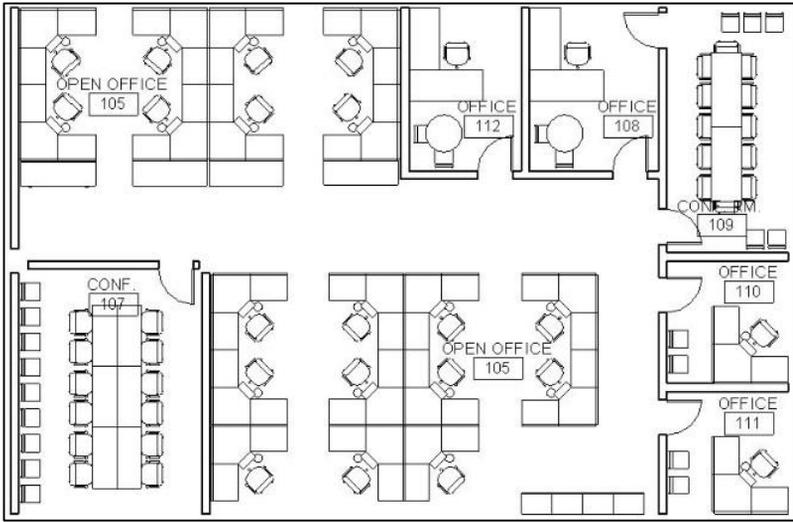


Option 2

	Description	ROM with Contractor Labor	ROM with Troop Labor
HQ - Option 2	6 Bay, 18 PN	\$184k	\$129k

ASSEMBLIES

Headquarters

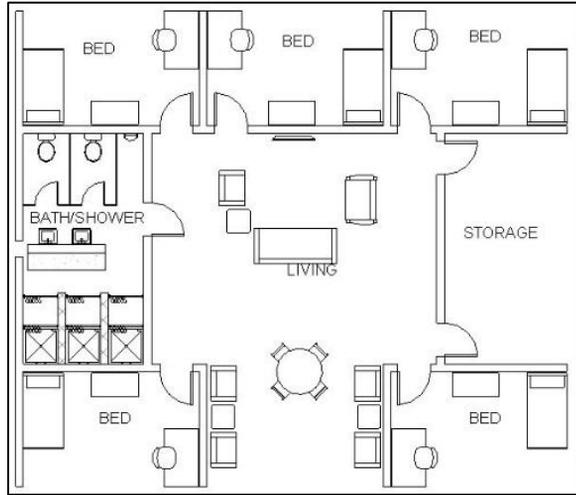


Option 3

	Description	ROM with Contractor Labor	ROM with Troop Labor
HQ - Option 3	8 Bay, 300 PN	\$230k	\$161k

ASSEMBLIES

Low Density Quarters

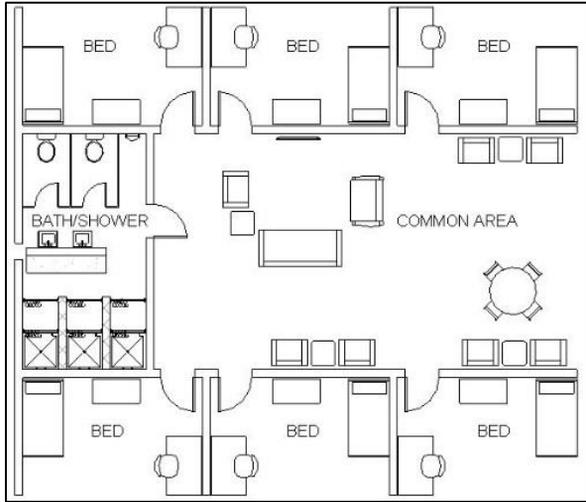


Option 1

	Description	ROM with Contractor Labor	ROM with Troop Labor
Officers Quarters - Option 1	6 Bay, 5 PN	\$200k	\$154k

ASSEMBLIES

Low Density Quarters

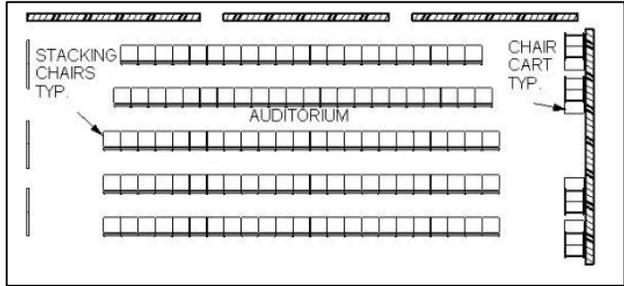


Option 2

	Description	ROM with Contractor Labor	ROM with Troop Labor
Officers Quarters - Option 2	6 Bay, 6 PN	\$200k	\$154k

ASSEMBLIES

Assembly/Briefing

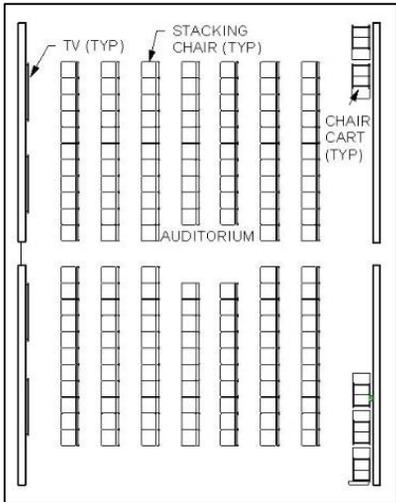


Option 1

	Description	ROM with Contractor Labor	ROM with Troop Labor
Assembly - Option 1	3 Bay, 112 PN	\$34k	\$24k

ASSEMBLIES

Assembly/Briefing

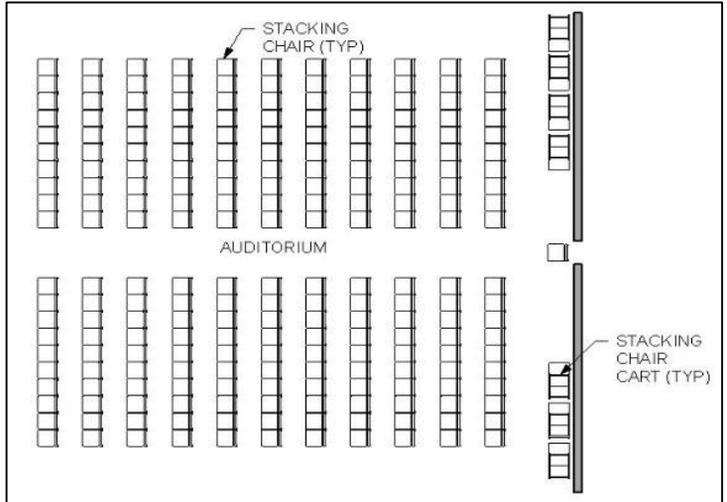


Option 2

	Description	ROM with Contractor Labor	ROM with Troop Labor
Assembly – Option 2	4 Bay, 160 PN	\$37k	\$26k

ASSEMBLIES

Assembly/Briefing

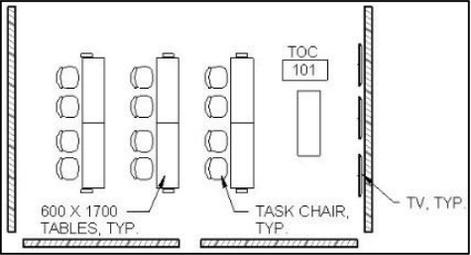


Option 3

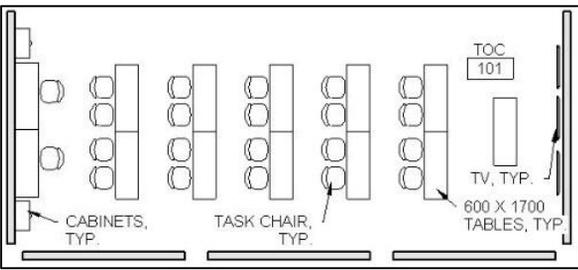
	Description	ROM with Contractor Labor	ROM with Troop Labor
Assembly – Option 3	6 Bay, 225 PN	\$43k	\$31k

ASSEMBLIES

Tactical Operations Center



Option 1

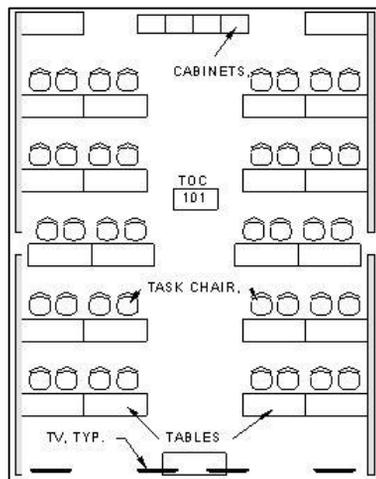


Option 2

	Description	ROM with Contractor Labor	ROM with Troop Labor
TOC - Option 1	2 Bay, 12 PN	\$44k	\$31k
TOC - Option 2	3 Bay, 22 PN	\$61k	\$43k

ASSEMBLIES

Tactical Operations Center

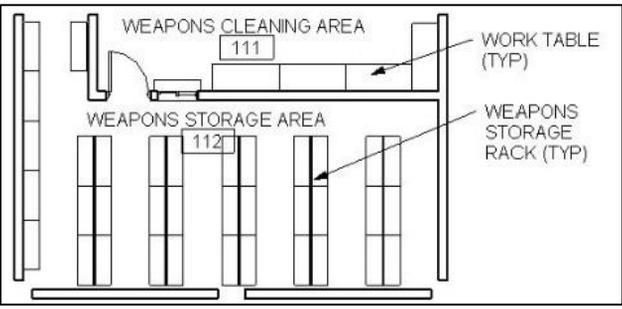


Option 3

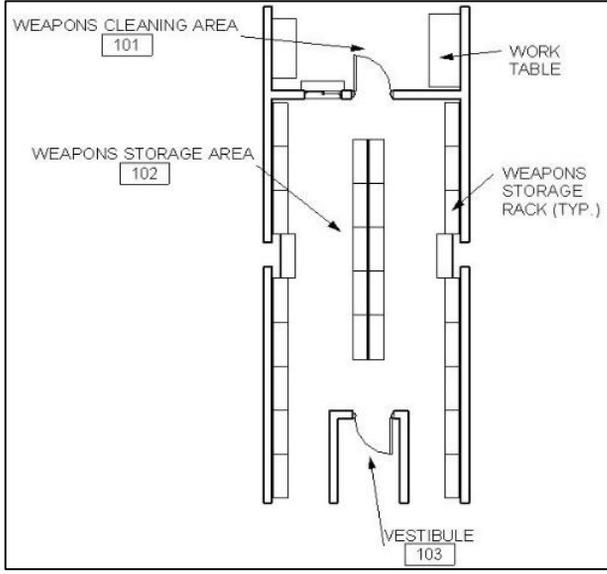
	Description	ROM with Contractor Labor	ROM with Troop Labor
TOC – Option 3	4 Bay, 40 PN	\$75k	\$53k

ASSEMBLIES

Weapons Storage



Option 1



Option 2

	Description	ROM with Contractor Labor	ROM with Troop Labor
Weapons Storage-Option 1	2 Bay, 22 PN	\$13k	\$9.1k
Weapons Storage-Option 2	2 Bay, 40 PN	\$20k	\$14k

Area Cost Factors

Alabama	0.89
Alaska	2.17
Arizona	0.95
Arkansas	0.82
California	1.25
Colorado	1.06
Connecticut	1.13
Delaware	1.08
Florida	0.87
Georgia	0.88
Hawaii	2.39
Idaho	1.04
Illinois	1.03
Indiana	0.95
Iowa	1.05
Kansas	0.96
Kentucky	0.87
Louisiana	0.87
Maine	1.03
Maryland	0.99
Massachusetts	1.17
Michigan	1.10
Minnesota	1.17
Mississippi	0.83
Missouri	0.98
Montana	1.04
Nebraska	0.97
Nevada	1.17
New Hampshire	0.99
New Jersey	1.21
New Mexico	0.90
New York	1.11
North Carolina	0.84
North Dakota	1.05
Ohio	0.95
Oklahoma	0.88
Oregon	1.12
Pennsylvania	1.07
Rhode Island	1.15
South Carolina	0.90
South Dakota	0.94
Tennessee	0.83
Texas	0.88
Utah	1.01
Vermont	1.00

Virginia	0.92
Washington	1.08
Washington DC	1.06
West Virginia	1.01
Wisconsin	1.08
Wyoming	0.94
Afghanistan	1.61
Albania	1.06
American Samoa	2.10
Argentina	0.89
Australia	1.59
Azerbaijan	1.03
Azores	1.53
Bahamas	1.54
Bahrain	1.31
Belgium	1.41
Belize	1.13
Bolivia	1.20
Bosnia	1.02
Brazil	1.09
Bulgaria	0.89
Cambodia	1.27
Chile	0.98
Columbia	0.89
Costa Rica	1.03
Crete	1.13
Croatia	0.99
Cuba	1.91
Czech Republic	0.97
Diego Garcia	2.94
Ecuador	1.11
Egypt	1.10
El Salvador	1.01
Estonia	1.13
Georgia Republic	0.90
Germany	1.07
Greece	1.08
Greenland	3.06
Guam	2.57
Guatemala	1.00
Guyana	1.17
Haiti	1.22
Honduras	0.90
Horn Of Africa	1.80

Hungary	0.98
Iceland	2.06
India	0.94
Iraq	1.56
Israel	1.33
Italy	1.30
Japan	2.11
Jordan	1.80
Kenya	1.49
Korea	1.14
Korea	1.12
Kosovo	1.05
Kuwait	1.25
Kwajalein	2.65
Latvia	1.02
Lebanon	1.26
Lithuania	1.01
Netherlands	1.25
Nicaragua	0.93
Northern Marianas	2.63
Oman	1.25
Panama	1.01
Paraguay	0.86
Peru	0.84
Philippines	1.65
Poland	1.00
Puerto Rico	1.12
Qatar	1.22
Romania	1.05
Saudi Arabia	1.18
Singapore	1.24
Spain	1.02
Thailand	0.86
Turkey	1.08
Ukraine	0.99
United Arab Emirates	1.24
United Kingdom	1.20
Uruguay	0.93

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