

Appendix III–2 Program Area Tables

Program Area Tables

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III - 1.A PROGRAM AREA TABLE							
Space ID	Space	Quantity	Personnel	Module	Program SF	Total SF	Notes
				121			
DISTRICT 6 (D6) - Lab							
1.11	Open Lab	1		13.5	1,634	1,634	Includes areas within lab for sorting/logging, aggregates, and soils
1.11.1	Aggregate	1		2.5	303		Snorkel Qty-1
1.11.4	Soils	1		4.5	545		Snorkel Qty-2
1.11.5	Sort/ Log	1		5	605		
1.11.6	Concrete Lab	1		1.5	182		Snorkel Qty-1
1.12	Aggregate Isolation Room	1		1.5	182	182	Mary Ann Shakers & Gibson Shaker, Snorkel Qty-1
1.13	Repair Isolation Room	1		1.5	182	182	Sandblaster located here. Canopy dust collection
1.14	HMA Isolation Room	1		1	121	121	Large & Small Wet Saws, Snorkel Qty-1
1.15	Soils Isolation Room	1		1.5	182	182	Two Mixers, Crusher, Proctor Testing, Snorkel Qty-1
1.16	Nuclear Storage	1		2	242	242	
1.17	Nuclear Workstation	1		1	121	121	
1.18	Storage	1		12	1,452	1,452	Possibly 14 Modules
1.23	Open HMA Lab	1		12	1,452	1,452	Includes 2 additional modules for future expansion
1.23.1	Hamburg Wheel	1		2	242		
1.23.2	I-FIT	1		1.5	182		
1.23.3	Specific Gravity	1		2	242		
1.23.4	Mixture Prep	1		4	484		Fume exhaust canopies over mixing table and parts washer
1.23.5	TSR	1		1.5	182		
1.23.6	Sample Staging	1		1	121		
1.24	HMA Extraction/Ignition Room	1		2.5	303	303	Fume hood Qty-1, Snorkel Qty-1
1.25	Calibration/Repair Room	1		2	242	242	
					Subtotal	6,111	
DISTRICT 6 (D6) - Offices							
			6				
1.19	Standard Office	1			120	120	Supervisory
1.20	Small Workstation	6			36	216	5WS Non-Supervisory, 1WS for copy area
1.21	Small Conference	1			165	165	
1.22	Small Break Room	1			150	150	
					Subtotal	651	

III - 1.B PROGRAM AREA TABLE

Space ID	Space	Quantity	Personnel	Module	Program SF	Total SF	Notes
BUREAU OF PROGRAMMING (BP)							
Traffic Instrumentation Lab							
2.11	Open Lab	1		7	847	847	Includes areas within lab for packaging, soldering, rework, and cataloging. 6 work stations @ 1module each. Truck Storage included under shared program spaces
2.11.1	Packaging	1		1	121		
2.11.2	Soldering	1		1	121		
2.11.3	ReWork	1		1	121		
2.11.4	Permanent Counters	1		1	121		
2.11.5	Cataloging	1		1	121		
2.11.6	Future	1		1	121		
2.11.7	Future	1		1	121		
2.12	Storage	1		5	605	605	Clearance for pallet jack
2.13	Roof Access for Antenna	1		1	121	121	Needs pathway to roof
					Subtotal	1,573	
Traffic Instrument Lab - Offices							
			4				
4.11	Standard Office	2			120	240	Supervisory
4.12	Small Workstation	2			36	72	Non-Supervisory
					Subtotal	312	

III - 1.C PROGRAM AREA TABLE

Space ID	Space	Quantity	Personnel	Module	Program SF	Total SF	Notes
CENTRAL BUREAU OF MATERIALS (CBM)							
Metals & Miscellaneous Products Lab							
2.21	Metals Lab	1		12	1,452	1,452	Includes areas within lab for hydraulic press, sorting/logging, pipe storage, nut/bolt storage
2.21.2	Universal Test Machine Area	1		6	726		Includes 600K Universal Testing Machine (requires pit) and other Universal Testing Machines (do not require pits).
2.21.4	Sort/ Log	1		2	242		
2.21.5	Failed Storage	1		4	484		
2.22	Miscellaneous Products Lab	1		4	484	484	
2.23	Machine Shop	1		20	2,420	2,420	Create partitions to control noise
2.23.1	Nuts/ Bolts Storage	1					1 Module
2.23.2	Welding Station	1					
2.23.3	Paint Area	1					
2.24	Pipe Storage/ Cutting	1		4	484	484	Includes testing & pipe cutting stations
					Subtotal	4,840	
Metals & Miscellaneous Products Lab - Offices			9				
4.11	Standard Office	1			120	120	Supervisory
4.12	Small Workstation	8			36	288	Non-Supervisory
					Subtotal	408	

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III - 1.D PROGRAM AREA TABLE

Space ID	Space	Quantity	Personnel	Module	Program SF	Total SF	Notes
CENTRAL BUREAU OF MATERIALS (CBM)							
Nuclear Lab							
2.31	Diagnostics/ Shop	1		5	605	605	Includes areas within lab for calibration, soldering, and workstation
2.31.1	Calibration Station	1		1.25	151		
2.31.2	Source Rod Inspection Station	1		1.25	151		
2.31.3	Soldering Station	1		1.25	151		
2.31.4	Work Station	1		1.25	151		
2.32	Hot Room	1		1	121	121	At least match existing size - up to 80 gauges in new space. 2 tiered
2.33	Storage	1		2	242	242	
2.34	Calibration Lab	1		3	363	363	
2.34.1	Bay 1	1		1	121		Check RDS for sizes
2.34.2	Bay 2	1		1	121		Check RDS for sizes
					Subtotal	1,331	
Nuclear Lab - Offices			2				
4.11	Standard Office	1			120	120	Supervisory
4.12	Small Workstation	1			36	36	Non-Supervisory
					Subtotal	156	

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III - 1.E PROGRAM AREA TABLE

Space ID	Space	Quantity	Personnel	Module	Program SF	Total SF	Notes
CENTRAL BUREAU OF MATERIALS (CBM)							
Concrete Lab							
2.41	Open Lab	1		36	4,356	4,356	Includes areas within lab for sample receiving, products, raw material, mixing, casting/moulding, curing, and testing
2.41.1	Mixing	1		4.5	545		
2.41.2	Casting/ Molding	1		4.5	545		
2.41.3	Curing Compound	1		3	363		
2.41.4	Compression/ Flexural Testing	1		3	363		
2.41.5	Sample Receiving	1		2	242		2 modules, if not part of main building dock
2.41.6	Sorting and Logging	1		9.5	1,150		*Requires further refinement
2.41.6.a	<i>Small Commercial Products</i>	1		2	242		
2.41.6.b	<i>Large Commercial Products</i>	1		3	363		
2.41.6.c	<i>Raw Material</i>	1		4.5	545		Includes bulk aggregate. Match closely to existing
2.42	Polymer Testing	1		1	121	121	Floor mounted-fumehood in room
2.43	Salt Scale (Freezer Room)	1		2	242	242	
2.44	Moist/Cure Area	1		2	242	242	
2.44.1	Utility Room for Moist	1		1	121	121	
2.45	Freeze/Thaw Testing	1		12	1,452	1,452	
2.45.1	Tempering Tank	1		11	1,331		
2.45.2	Length Measurement	1		1	121		Open area inside freeze/thaw testing room
2.45.3	Reservoir Tank	1		3	363		Reservoir tank located outside. Not included in building square footage
2.46	Tool Storage	1		1	121	121	
					Subtotal	6,655	
Concrete Lab - Offices			5				
4.11	Standard Office	1			120	120	Supervisory
4.12	Small Workstation	4			36	144	Non-Supervisory
					Subtotal	264	

III - 1.F PROGRAM AREA TABLE

Space ID	Space	Quantity	Personnel	Module	Program SF	Total SF	Notes
CENTRAL BUREAU OF MATERIALS (CBM)							
Cement Lab							
2.51	Open Lab	1		8.5	1,029	1,029	Includes areas within lab for logging/breakdown, sample storage, mixing, enclosed moisture rooms, compression, permeability, length measurement, and disposal
2.51.1	Sample Logging/ Breakdown	1		2	242		
2.51.1.a	Sample Storage	1					
2.51.3	Mixing/ Time Sets/ Autoclaves	1		1	121		
2.51.3.a	Sample Holding	1					
2.51.4	Mixing/ ASR	1		1	121		
2.51.4.a	Sample Holding	1					
2.51.5	Mixing/ CS/ Air Content	1		1	121		
2.51.5.a	Sample Holding	1					
2.51.6	Length Measuring Area	1		1	121		3 ovens
2.51.7	Compression	1		0.5	61		Could be 1 module. Verify.
2.51.8	Disposal	1		1	121		
2.52	Moist	1		1	121		Space for reach-ins within lab
2.53	Air Permeability	1		1	121	121	Can be part of open lab if temperature/RH can be maintained
					Subtotal	1,150	
Cement Lab - Offices							
4.11	Standard Office	1			120	120	Supervisory
4.12	Small Workstation	2			36	72	Non-Supervisory
					Subtotal	192	

III - 1.G PROGRAM AREA TABLE

Space ID	Space	Quantity	Personnel	Module	Program SF	Total SF	Notes
CENTRAL BUREAU OF MATERIALS (CBM)							
Soils Lab							
2.61	Open Lab	1		6	726	726	Includes areas within lab for write-up, cold storage, compression, Shelby Tube, classification, triaxial, and consolidometers
2.61.1	Classification	1		1	121		Hydrometer baths, sinks, Resistivity, dessicators
2.61.2	Consolidometers	1		1	121		
2.61.3	Equipment Zone/ Small Shelby Tube Area	1		1	121		Includes freezer. Locate near the breakdown room
2.61.4	Write-up Area	1		1	121		Should be outside of lab (adjacent)
2.61.5	Compression Area	1		1	121		
2.61.7	Triaxial Area	1		1	121		
2.62	Breakdown Room	1		7	847	847	Includes area for storage
2.62.1	Storage	1			0		2-3 tiers of shelving. Coordinate with lifting solutions
2.62.2	Proctor Area	1			0		
2.63	EFA Room	1		1	121	121	Includes area for Shelby Tube prep
2.63.1	Shelby Tube Prep Area	1			0		Includes Control Computer
2.64	Vibratory Lab	1		1	121	121	Possibly need gantry crane or Hydraulic table
					Subtotal	1,815	
Soils Lab - Offices							
4.11	Standard Office	1	3		120	120	Supervisory
4.12	Small Workstation	2			36	72	Non-Supervisory
					Subtotal	192	

III - 1.H PROGRAM AREA TABLE

Space ID	Space	Quantity	Personnel	Module	Program SF	Total SF	Notes
CENTRAL BUREAU OF MATERIALS (CBM)							
Chemistry Labs							
2.71	Instrument Lab	1		6	726	726	Fume hood Qty-1, Snorkel Qty-5
2.71.1	Sample Prep Lab	1		2	242	242	Fume hood Qty-2
2.71.2	Instrument Support	1		1	121	121	X-Ray Chiller and UPS
2.72	Bituminous Lab (QC)	1		18	2,178	2,178	Chem storage is shared amongst all Chem Labs (shown in diagrams as 3 modules).
2.72.1	Sort/ Log	1		1	121		Includes areas within lab for sorting/logging, prep, hot pour sealer, emulsified asphalt, cut back testing, and PG asphalt
2.72.2	Prep Area	1		0	0		Prep areas within each zones is needed.
2.72.3	Hot Pour Sealer	1		3	363		Needs integrated Prep Area, Fume hood Qty-2
2.72.4	Emulsified Asphalt	1		4	484		Needs integrated Prep Area, Fume hood Qty-2
2.72.5	Cutback Testing	1		3	363		Needs integrated Prep Area, Fume hood Qty-2
2.72.6	PG Asphalt	1		7	847		Needs integrated Prep Area, Fume hood Qty-2
2.72.7	Sample Store	1		1.5	182	182	must hold 2000 qt cans on average. Room Temperature
2.72.8	Naptha Bath	1		1.5	182	182	Use as a parts washer as well. Sink and drying rack
2.73	Analytical Lab	1		12	1,452	1,452	Includes areas within lab for sorting/logging, cemetitious and 'everything else'
2.73.1	Sort/ Log	1		1	121		
2.73.2	Cementitious	1		5	605		Fume hood Qty-6, Snorkel Qty-6
2.73.3	"Everything Else"	1		5	605		
2.73.4	Weather Lab	1		1	121		AA and PA stays in this lab
2.73.5	Photometric Lab	1		6	726	726	60'x8'x6' currently
2.73.6	Analytical Salt Lab	1		0.5	61	61	Snorkel Qty-1
2.73.7	Analytical Thermoplastic Lab	1		0.5	61	61	
2.74	Chemical Storage (Shared)	1		1	121	121	Fume hood Qty-3, Snorkel Qty-1
2.75	PPE Stor (Shared)	1		1	121	121	
2.76	Cylinder Storage (Shared)	1		1	121	121	BL 4 in use and 3 back. In 3 in use. AC - 2 in use.
					Subtotal	6,292	

III - 1.I PROGRAM AREA TABLE - CONTINUED

Space ID	Space	Quantity	Personnel	Module	Program SF	Total SF	Notes
CENTRAL BUREAU OF MATERIALS (CBM)							
Instrument Chemistry Lab - Offices			3				
4.11	Standard Office	1			120	120	Supervisory
4.12	Small Workstation	2			36	72	Non-Supervisory
					Subtotal	192	
Bituminous Chemistry Lab - Offices			5				
4.11	Standard Office	1			120	120	Supervisory
4.12	Small Workstation	4			36	144	Non-Supervisory
					Subtotal	264	
Analytical Chemistry Lab - Offices			5				
4.11	Standard Office	1			120	120	Supervisory
4.12	Small Workstation	4			36	144	Non-Supervisory
					Subtotal	264	

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III - 1.J PROGRAM AREA TABLE

Space ID	Space	Quantity	Personnel	Module	Program SF	Total SF	Notes
CENTRAL BUREAU OF MATERIALS (CBM)							
Hot Mix Asphalt Lab							
2.81	Open Lab	1		13	1,573	1,573	Includes areas within lab for mixing, ovens, compaction, and testing
2.81.1	Mix	1		2	242		Includes areas for Loose Mix and Compacted Mix, Fume Hood Qty-2 (1 Bench top, 1 Floor Hood)
2.81.1.a	Compacted Mix	1					
2.81.1.b	Loose Mix	1					
2.81.2	Ovens	1		3	363		5-6 ovens. 4' wide. Coordinate with survey. Candidate for growth.
2.81.3	Mixing/Splitting/Compacting	1		4	484		
2.81.4	Testing	1		4	484		
2.81.4.a	Microsurfacing Tech Station	1		0	0		
2.81.4.b	Instrument	1		0	0		
2.83	Receiving	1		5	605	605	
2.83.1	Logging/ Storage	1		1	121		If Storage is separate, more logging space required
2.83.2	Pallet/ Large Storage			4			need space for 18 pallets (use of pallet racks). Double stack. Coordinate with lifting method
2.84	Loose Aggregate Sizing/Cutting	1		3	363	363	Dust Collection Hood/System
2.85	Extraction	1		5	605	605	Fume hood Qty-5
2.85.1	Release Agents	1					
					Subtotal	3,146	
Hot Mix Asphalt (HMA) Lab - Offices							
4.11	Standard Office	1	6		120	120	Supervisory
4.12	Small Workstation	5			36	180	Non-Supervisory
					Subtotal	300	

III - 1.K PROGRAM AREA TABLE

Space ID	Space	Quantity	Personnel	Module	Program SF	Total SF	Notes
CENTRAL BUREAU OF MATERIALS (CBM)							
Aggregate Lab							
2.91	Staging	1		12	1,452	1,452	
2.92	Breakdown Room	1		4	484	484	
2.93	Specific Gravity	1		2	242	242	
2.94	Open Lab	1		10	1,210	1,210	Includes areas within lab for soundness test, wash/oven, LA abrasion, prep, micro deval
2.94.1	LA Abrasions	1		2	242		
2.94.2	Prep Area	1		2	242		
2.94.3	Micro Deval	1		2	242		
2.94.4	Wash/ Oven	1		2	242		
2.94.5	Soundness Test	1		2	242		
2.94.5.a	Moisture Room	1		1.5	182	182	
2.95	Count Lab	1		3	363	363	
2.95.1	AIMS	1		1	121		Includes areas within lab for AIMS, heavy media, and deleterious count
2.95.2	Deleterious Count	1		1	121		
2.95.3	Heavy Media	1		1	121		
					Subtotal	3,933	
Aggregate Lab - Offices			7				
4.11	Standard Office	1			120	120	Supervisory
4.12	Small Workstation	6			36	216	Non-Supervisory
					Subtotal	336	

III - 1.L PROGRAM AREA TABLE

Space ID	Space	Quantity	Personnel	Module	Program SF	Total SF	Notes
CENTRAL BUREAU OF MATERIALS (CBM)							
Coordinator of Tests			2				
3.11	Work Area	1			200	200	Proximity to mini-van parking
3.12	Standard Office	1			120	120	Other Supervisory
3.13	Small Workstation	1			36	36	Non-Supervisory
					Subtotal	356	
CBM Lab Offices							
4.11	Standard Office	See Lab	See Lab		See Lab	See Lab	Other Supervisory
4.12	Small Workstation	See Lab	See Lab		See Lab	See Lab	Non-Supervisory
					Subtotal	2,568	
4.13	Standard Office (Field Operations Chemist)	1	1		120	120	Adjacent to Instrument & Bituminous Chemistry Lab Offices
4.14	Medium Huddle	1			100	100	
4.15	Large Break Room	1			378	378	
					Subtotal	598	
CBM Tech & Admin Offices			35				
5.11	Executive Office	1			200	200	Bureau Chief
5.12	Medium Office	2			150	300	Section Chief
5.13	Standard Office	13			120	1,560	Other Supervisory
5.14	Large Workstation	12			64	768	Non-Supervisory
5.15	Small Workstation	7			36	252	Non-Supervisory
5.16	Medium Conference	1			273	273	
5.17	Medium Huddle	1			100	100	
5.18	Medium Break Room	1			255	255	
					Subtotal	3,708	

III - 1.M PROGRAM AREA TABLE

Space ID	Space	Quantity	Personnel	Module	Program SF	Total SF	Notes
BUREAU OF RESEARCH (BR)			25				
6.11	Executive Office	1			200	200	Bureau Chief
6.12	Medium Office	2			150	300	Section Chief
6.13	Standard Office	11			120	1,320	Other Supervisory
6.14	Large Workstation	4			64	256	Non-Supervisory
6.15	Medium Workstation	7			48	336	Non-Supervisory
6.16	Small Conference	1			165	165	
6.17	Medium Break Room	1			255	255	
6.18	Library Stacks	1			800	800	
					Subtotal	3,632	

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III - 1.N PROGRAM AREA TABLE

Space ID	Space	Quantity	Personnel	Module	Program SF	Total SF	Notes
SHARED PROGRAM SPACES							
7.11	Medium Training/Conference Center	1			760	760	Adjacent lobby & restrooms
7.12	Large Training/Conference Center	1			1,520	1,520	Adjacent lobby & restrooms
7.13	Shipping + Receiving	1		10	1,210	1,210	
7.14	Sample Storage	1		12	1,452	1,452	Adjacent shipping/receiving
7.15	Hazardous Material Storage	1		5	605	605	Adjacent shipping/receiving
7.16	Filing	1			1,000	1,000	Centralized
7.17	Workroom	3			120	360	
7.18	Secure Equipment Storage	1		1	121	121	
7.19	Traffic Inst. Truck Storage	1		5	605	605	Truck is 26' bumper to bumper
					Subtotal	7,633	
					Total Program Area	56,303	
CIRCULATION + SERVICES (C+S) - 36%*							
8.11	Entry Lobby & Office Circulation						*Design/Build team verify multiplier with approved LEED path requirements for mechanical/electrical square footages.
8.11.1	Materials Distribution Paths						
8.12	Lactation/Wellness Room						
8.13	Men's Restrooms						
8.14	Women's Restrooms						
8.15	All Gender Restrooms						
8.16	Mechanical Rooms						
8.17	Electrical Rooms						
8.18	IDF/MDF Closets						
8.19	Janitor Closets						
					C+S Subtotal	20,269	
					Total Building Area	76,571	
					Total Personnel	121	