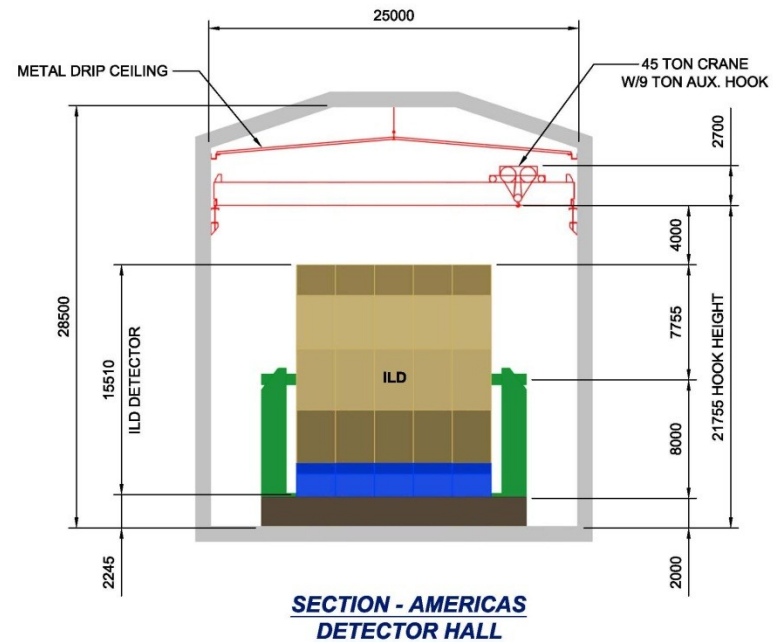


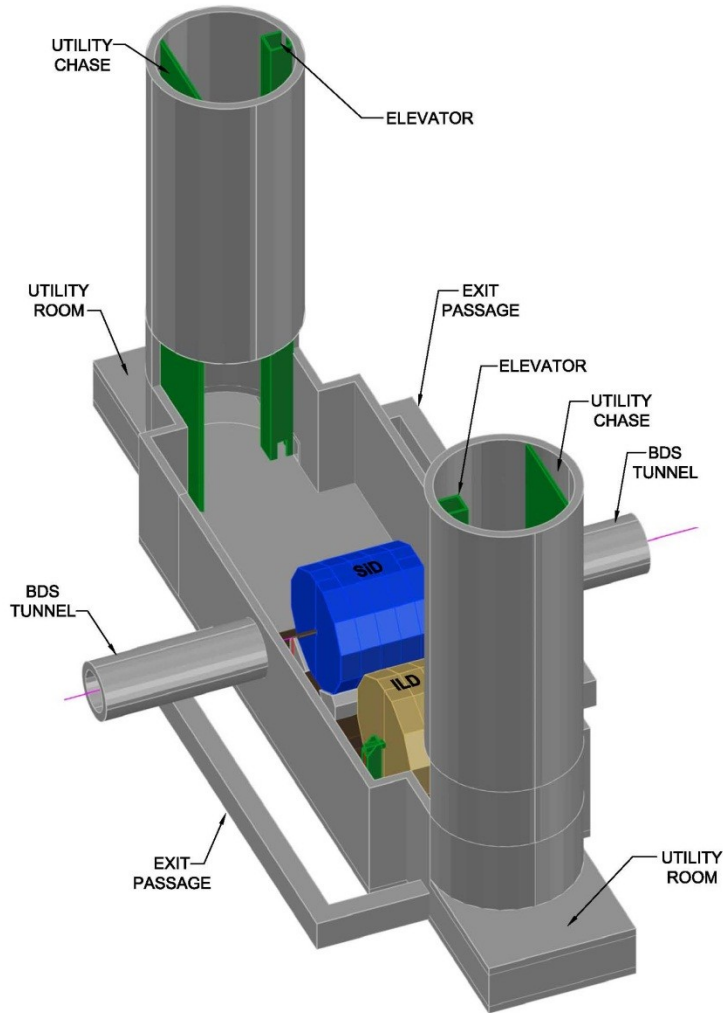
SiD AMERICAS

ILD AMERICAS

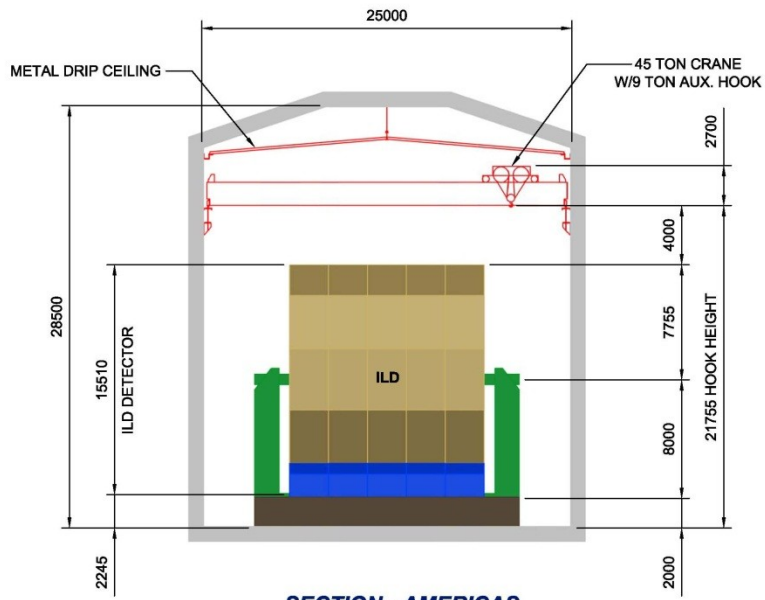
OFF-LINE AMERICAS

- Hall roof span is a simple span
 - Rock bolts provide the structural support
 - Drip Ceiling provides a dry and clean space.
- Walls and floor use rock bolts for structural support, concrete lined.

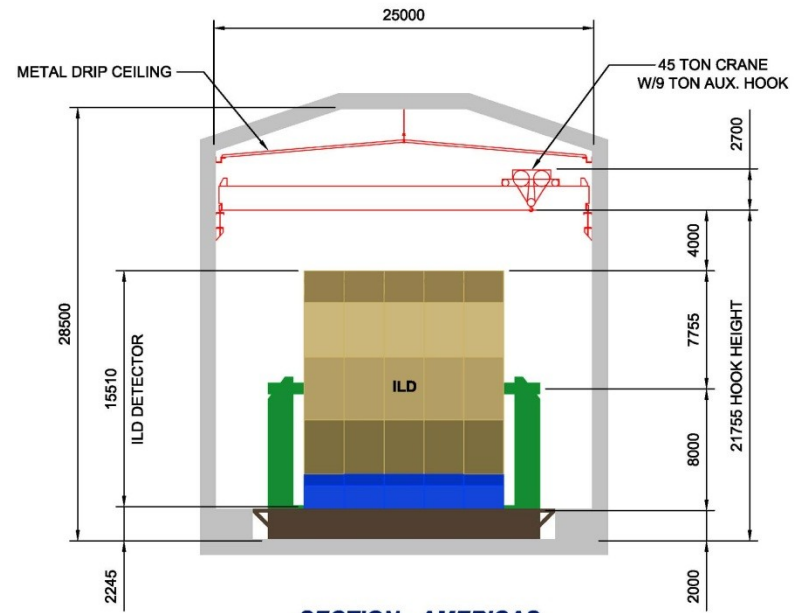




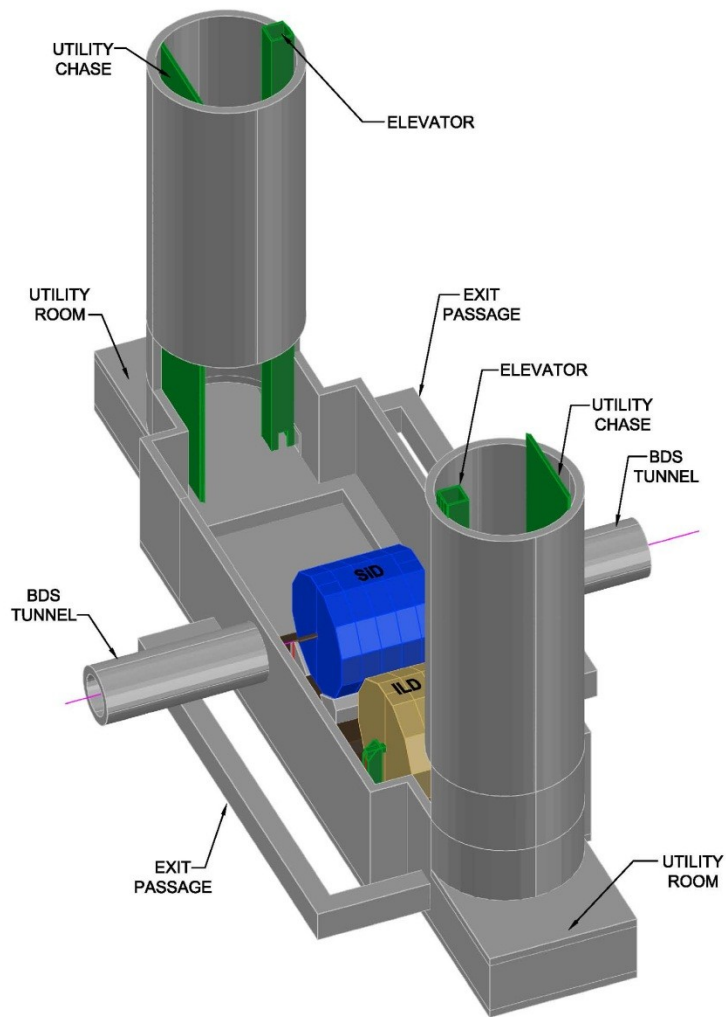
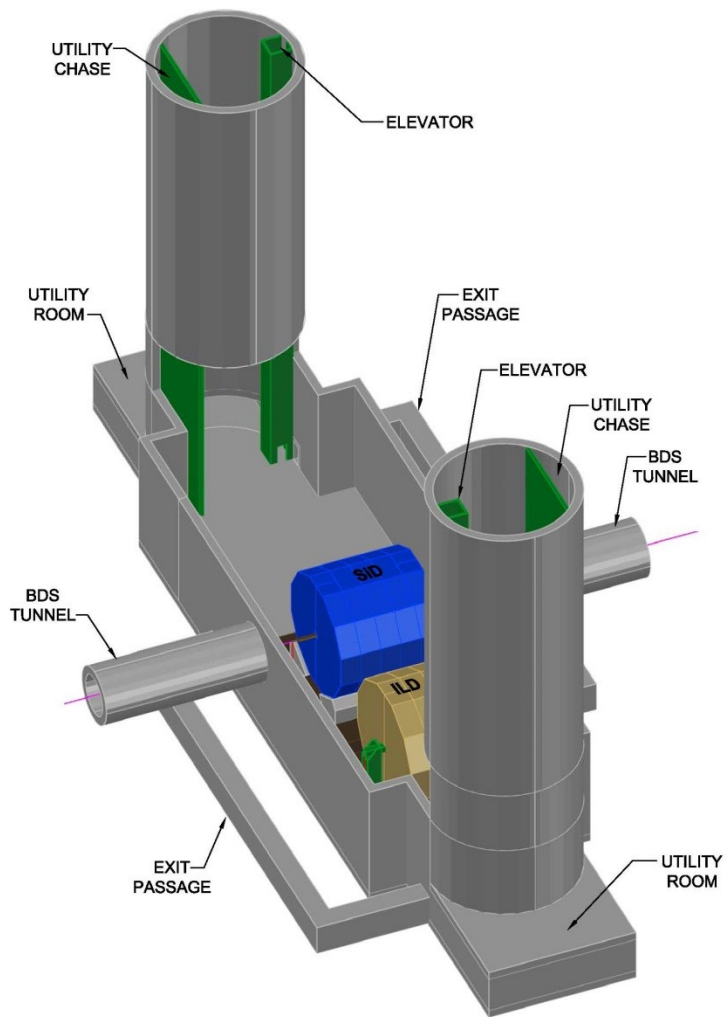
- Simple rock massing
- Uninterrupted roof spans and wall supports.



**SECTION - AMERICAS
DETECTOR HALL**

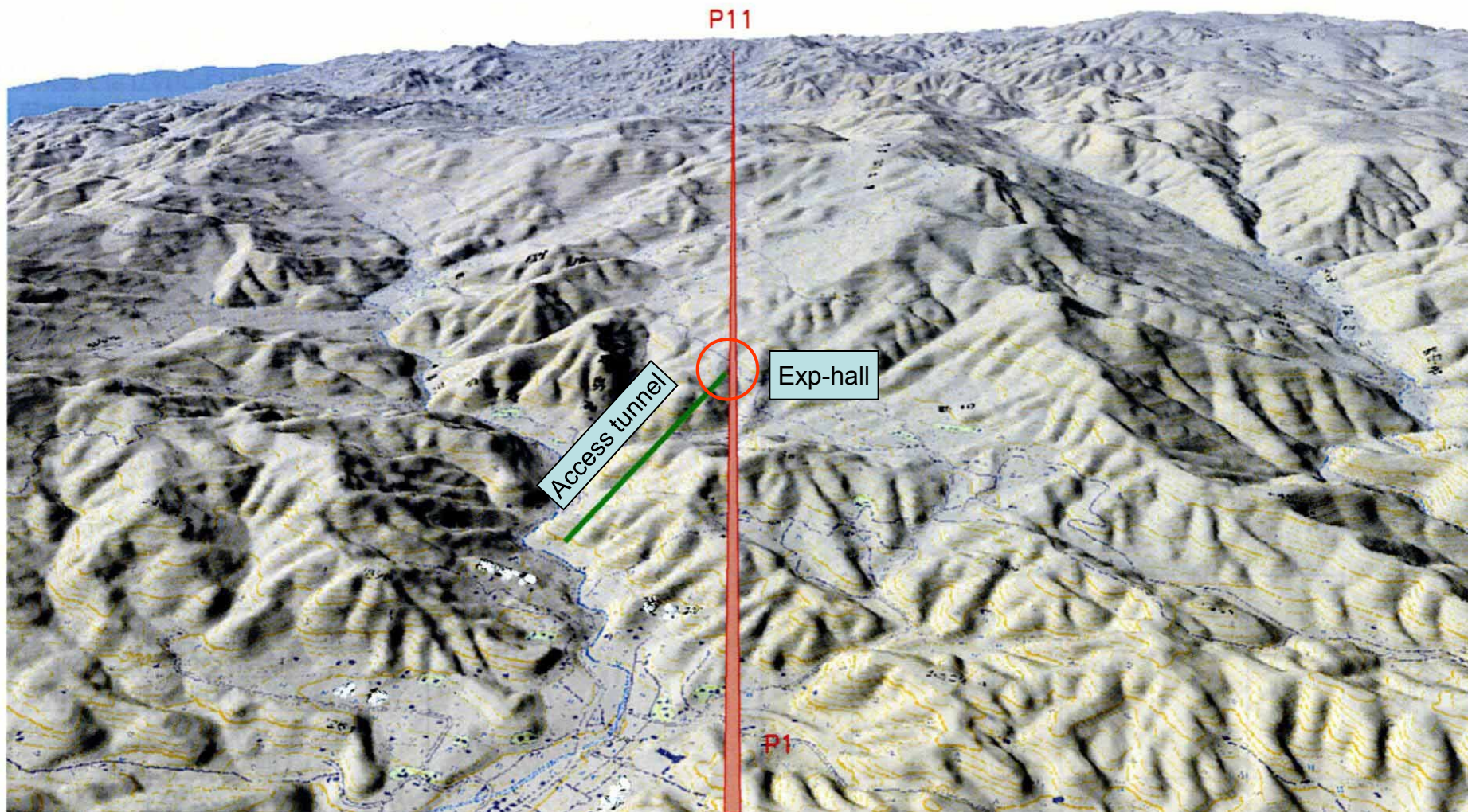


**SECTION - AMERICAS
DETECTOR HALL**

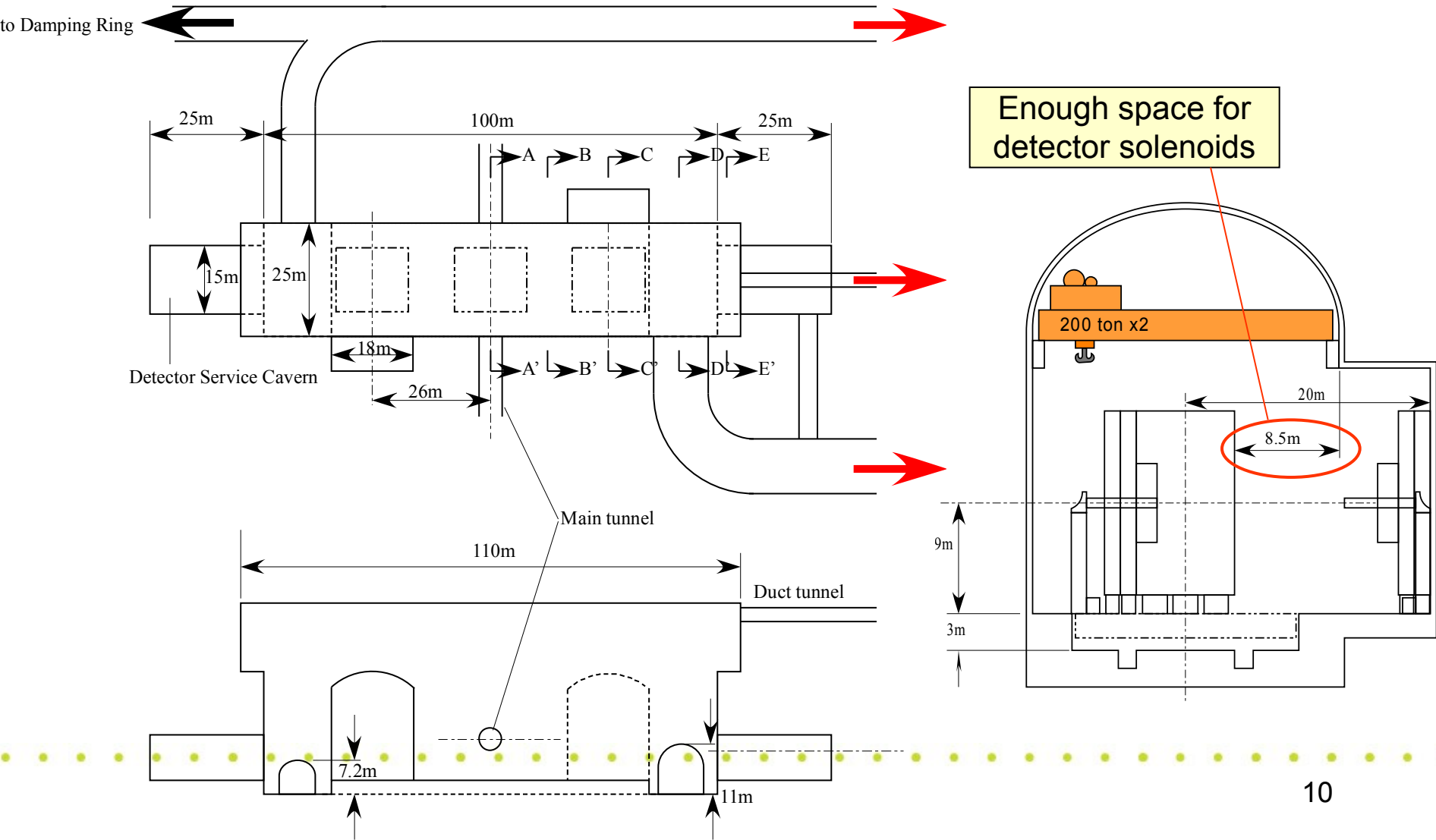


DETECTOR CONVENTIONAL PARAMETERS

ITEM	ILC	SID
Underground Hall		
Detector Dimensions		
Lenght (Between PacMan)		
Lenght (in Open Position in Beam)		
Lenght (in open Position in Garage)		
Width Transverse to beam	15.51	
Detector Height Above Beam	7.755	
Platforms		
Height		
Distance Below Beam		
Width (Between PacMan)		
Transverse to beam		
Stiffness Requirements		
Platform Moveing System		
Provides final alignment of detector wrt beam		
Weights		
Total		
(Plan view load diagrams are needed to design platform. Diagrams are needed for anticipated configurations)		
Crane		
Main Hook Capacity		
Aux Hook Capacity		
Hook Height above Detector		
Occupancy		
During Installation		
During Operations		
During Maintenance		
Control Room		



Japan - Sample site



Draft of “engineering specifications”, 20 May 2011

Engineering Specifications (2) : Experimentnal Hall	RDR	SiD	ILD	ILD in Mtn. site
<i>Parameters that define the underground hall volume</i>				
IR Hall Area(m) ; (W x L)	25x120			
Beam height above IR hall floor (m)	8.6	9(7.5)	8(9)	9
IR Hall Crane Maximum Hook Height Needed(m)	20.5	5m above top of detector	20.5	20.5
Largest Item to Lift in IR Hall (weight and dimensions)	400t	100t PACMAN	55t, 3x3x1.5m	400t
IR Hall Crane	400t+2*20t	100t/10t	80t	400t
IR Hall Crane Clearance Above Hook to the roof (m)	14.5(includes arch)		6	
Survive caverns(m) ; (W x L xH)	none			15x25x11
Resulted total size of the collider hall (W x L x H)	25x120x39	28x48x30		
<i>Parameters that define dimensions of the IR hall shaft and the shaft crane</i>				
Largest Item; Heaviest item to Lower Through IR Shaft (weight and dimensions)	9x16m, 2000t	600t	3411t, 15.7x8m (ring 2.7m thick)	-
IR Shaft Size : diameter(m)	16	9	16	-
IR shaft fixed surface gantry crane. If rented, duration	1.5 years	1.5 years	1.5 years	-
Surface hall crane should serve IR shaft	Yes	Yes	Yes	-
Other shafts near IR hall for access	No	Yes	No	-
Elevator and stairs in collider hall shaft	Yes	?	Yes	
Size of access tunnel at Mtn. site (W x H, m)	-	-	-	11x11, 10.2x7.2
<i>Parameters that define dimensions of the surface assembly building and its crane</i>				
Surface Assembly Building Area ((W x L , m)	25 x 100		30x60	27x100
Largest Item to Lift in SurfAsm. Bldg. (weight and dimensions)	400t	70t	180t	180t
Surface Assembly Crane	400t+2*20t	100t/10t	2x80t	400t
SurfAsm. Crane Maximum Hook Height Needed(m)	18	20	19	25
SurfAsm. Crane Clearance Above Hook to the roof (m)	7		5m to ceiling	
Resulted volume of surface assembly building (W x L x H, m)	25 x 100 x 25		30x60x24	
<i>Parameters that define crane access area and clearance around detector</i>				
SurfAsm. crane accessible area (needed) / available (W x L, m)	20 x 102		28x56	
IR hall crane accessible area (needed) / available (W x L, m)	22 x 98		28x41	18x39
Maximum Detector Height(m)		16.15	15.74	15.74
Detector Width (m)		18.53(14.334)	15.665	15.665
Minimum Detector Clearance (W x L H, m)			15.67x13.26x15.74	15.67x13.26x15.74
<i>FILL IN OTHER IMPORTANT PARAMETERS WHICH ARE MISSING</i>				
Electronic hut size			18x9x10m	
Electronic hut location				
When the electronic hut is installed underground				