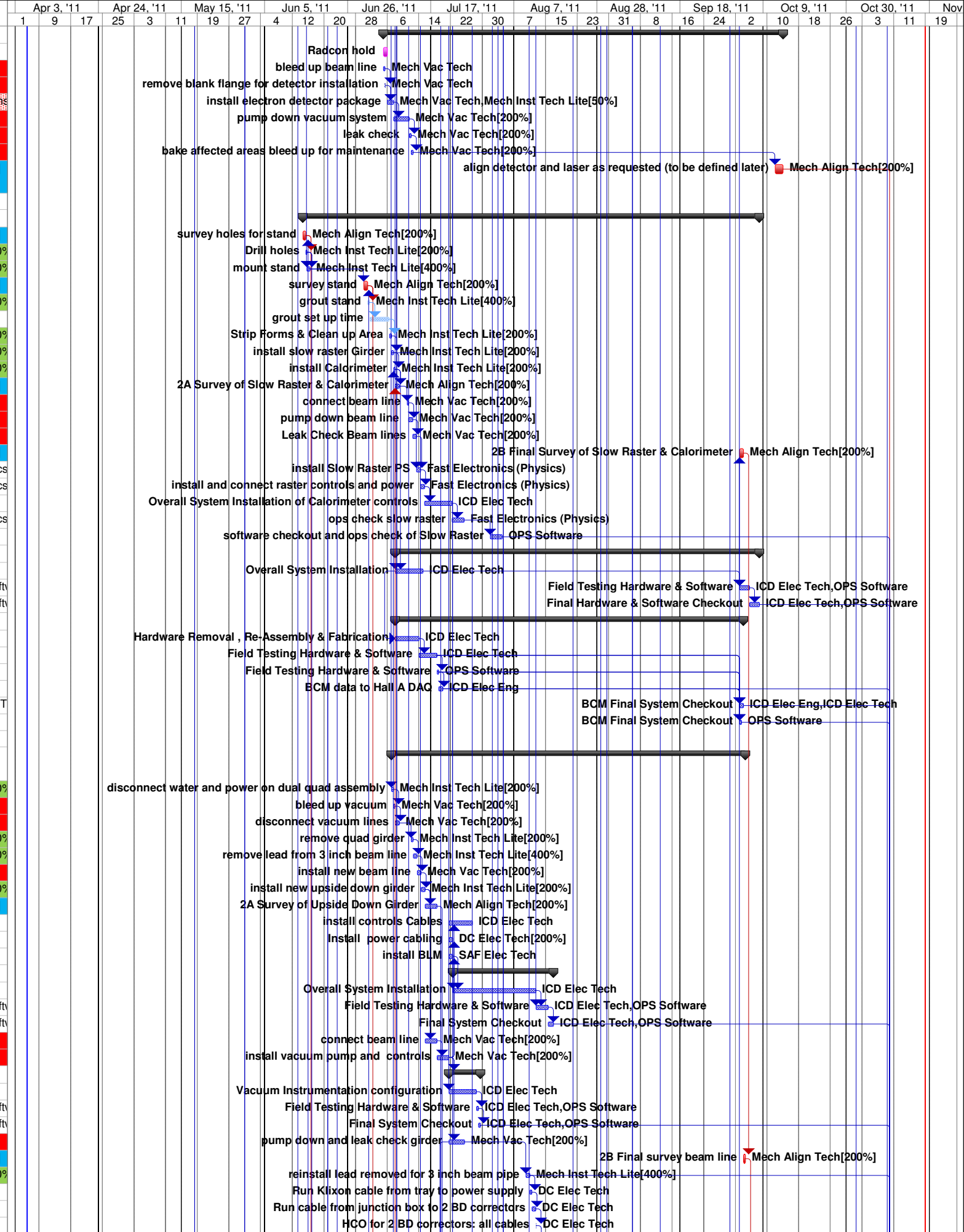


ID	Task Name	Start	Finish	Predecessor	Successor	Duration	Work	Resource Names
72	Compton maintenance	Tue 7/5/11	Thu 10/13/11			72 days	96 hrs	
73	Radcon hold	Tue 7/5/11	Tue 7/5/11			1 day	0 hrs	
74	bleed up beam line	Tue 7/5/11	Tue 7/5/11			2 hrs	2 hrs	Mech Vac Tech
75	remove blank flange for detector installation	Tue 7/5/11	Tue 7/5/11	74	76	2 hrs	2 hrs	Mech Vac Tech
76	install electron detector package	Wed 7/6/11	Thu 7/7/11	74	77	12 hrs	12 hrs	Mech Vac Tech, Mech Inst Tech, Mech Ins
77	pump down vacuum system	Thu 7/7/11	Mon 7/11/11	76	78	16 hrs	32 hrs	Mech Vac Tech[200%]
78	leak check	Mon 7/11/11	Mon 7/11/11	77	79	4 hrs	8 hrs	Mech Vac Tech[200%]
79	bake affected areas bleed up for maintenance	Tue 7/12/11	Tue 7/12/11	78	80	4 hrs	8 hrs	Mech Vac Tech[200%]
80	align detector and laser as requested (to be defined later)	Wed 10/12/11	Thu 10/13/11	79	269	2 days	32 hrs	Mech Align Tech[200%]
81								
82	install slow raster & Calorimeter	Tue 6/14/11	Fri 10/7/11			81.25 days	446 hrs	
83	survey holes for stand	Tue 6/14/11	Wed 6/15/11	153	84,156	0.5 days	8 hrs	Mech Align Tech[200%]
84	Drill holes	Wed 6/15/11	Wed 6/15/11	83	85,157	0.5 days	8 hrs	Mech Inst Tech Lite[200%]
85	mount stand	Wed 6/15/11	Thu 6/16/11	84,7	86,158	0.5 days	16 hrs	Mech Inst Tech Lite[400%]
86	survey stand	Thu 6/30/11	Thu 6/30/11	85,184	87,159	1 day	16 hrs	Mech Align Tech[200%]
87	grout stand	Fri 7/1/11	Fri 7/1/11	86	88	0.5 days	16 hrs	Mech Inst Tech Lite[400%]
88	grout set up time	Fri 7/1/11	Wed 7/6/11	87	89	2 days	0 hrs	
89	Strip Forms & Clean up Area	Wed 7/6/11	Wed 7/6/11	88	90	0.5 days	8 hrs	Mech Inst Tech Lite[200%]
90	install slow raster Girder	Thu 7/7/11	Thu 7/7/11	89	91,97	0.5 days	8 hrs	Mech Inst Tech Lite[200%]
91	install Calorimeter	Thu 7/7/11	Thu 7/7/11	90,147	92,103	0.5 days	8 hrs	Mech Inst Tech Lite[200%]
92	2A Survey of Slow Raster & Calorimeter	Fri 7/8/11	Fri 7/8/11	91,185	93	1 day	16 hrs	Mech Align Tech[200%]
93	connect beam line	Mon 7/11/11	Mon 7/11/11	92	94	0.13 days	2 hrs	Mech Vac Tech[200%]
94	pump down beam line	Mon 7/11/11	Tue 7/12/11	93	95	8 hrs	16 hrs	Mech Vac Tech[200%]
95	Leak Check Beam lines	Tue 7/12/11	Wed 7/13/11	94	97	8 hrs	16 hrs	Mech Vac Tech[200%]
96	2B Final Survey of Slow Raster & Calorimeter	Mon 10/3/11	Mon 10/3/11	216	137	1 day	16 hrs	Mech Align Tech[200%]
97	install Slow Raster PS	Wed 7/13/11	Thu 7/14/11	90,95	98	1 day	8 hrs	Fast Electronics (Physics)
98	install and connect raster controls and power	Thu 7/14/11	Fri 7/15/11	97	99	1 day	8 hrs	Fast Electronics (Physics)
99	Overall System Installation of Calorimeter controls	Fri 7/15/11	Fri 7/22/11	98	100	5 days	40 hrs	ICD Elec Tech
100	ops check slow raster	Fri 7/22/11	Mon 7/25/11	99	101	1 day	8 hrs	Fast Electronics (Physics)
101	software checkout and ops check of Slow Raster	Mon 8/1/11	Wed 8/3/11	100	269	3 days	24 hrs	OPS Software
102	Calorimeter System Work	Fri 7/8/11	Wed 10/7/11			65 days	120 hrs	
103	Overall System Installation	Fri 7/8/11	Thu 7/14/11	3,91	104,107SS	5 days	40 hrs	ICD Elec Tech
104	Field Testing Hardware & Software	Mon 10/3/11	Wed 10/5/11	58,103	105	2.5 days	40 hrs	ICD Elec Tech, OPS Soft
105	Final Hardware & Software Checkout	Wed 10/5/11	Fri 10/7/11	104	269	2.5 days	40 hrs	ICD Elec Tech, OPS Soft
106	Beam Current Monitor (BCM)	Fri 7/8/11	Mon 10/3/11			61 days	84 hrs	
107	Hardware Removal , Re-Assembly & Fabrication	Fri 7/8/11	Wed 7/13/11	103SS	108	4 days	32 hrs	ICD Elec Tech
108	Field Testing Hardware & Software	Thu 7/14/11	Mon 7/18/11	107	109,111,11	2.5 days	20 hrs	ICD Elec Tech
109	Field Testing Hardware & Software	Mon 7/18/11	Mon 7/18/11	108	110,112,11	0.5 days	4 hrs	OPS Software
110	BCM data to Hall A DAQ	Tue 7/19/11	Tue 7/19/11	109	269,111,11	1 day	8 hrs	ICD Elec Eng
111	BCM Final System Checkout	Mon 10/3/11	Mon 10/3/11	108,110,1(269		1 day	16 hrs	ICD Elec Eng, ICD Elec T
112	BCM Final System Checkout	Mon 10/3/11	Mon 10/3/11	108,109,1(269		0.5 days	4 hrs	OPS Software
113								
114	remove dual quads & install new upside down girder	Thu 7/7/11	Tue 10/4/11			62.5 days	554 hrs	
115	disconnect water and power on dual quad assem	Thu 7/7/11	Thu 7/7/11	3	116	0.5 days	8 hrs	Mech Inst Tech Lite[200%]
116	bleed up vacuum	Thu 7/7/11	Thu 7/7/11	115	117	0.5 days	8 hrs	Mech Vac Tech[200%]
117	disconnect vacuum lines	Fri 7/8/11	Fri 7/8/11	116	118	1 day	16 hrs	Mech Vac Tech[200%]
118	remove quad girder	Tue 7/12/11	Tue 7/12/11	117	119	4 hrs	8 hrs	Mech Inst Tech Lite[200%]
119	remove lead from 3 inch beam line	Tue 7/12/11	Wed 7/13/11	118	120	1 day	32 hrs	Mech Inst Tech Lite[400%]
120	install new beam line	Wed 7/13/11	Thu 7/14/11	119	121	1 day	16 hrs	Mech Vac Tech[200%]
121	install new upside down girder	Thu 7/14/11	Fri 7/15/11	120	122,130	1 day	16 hrs	Mech Inst Tech Lite[200%]
122	2A Survey of Upside Down Girder	Fri 7/15/11	Mon 7/18/11	121	194	1 day	16 hrs	Mech Align Tech[200%]
123	install controls Cables	Thu 7/21/11	Wed 7/27/11	131		4 days	32 hrs	ICD Elec Tech
124	Install power cabling	Thu 7/21/11	Fri 7/22/11	131		1 day	16 hrs	DC Elec Tech[200%]
125	install BLM	Thu 7/21/11	Fri 7/22/11	131	127	1 day	8 hrs	SAF Elec Tech
126	Harp System Instrumentation	Fri 7/22/11	Tue 8/16/11			17.5 days	160 hrs	
127	Overall System Installation	Fri 7/22/11	Fri 8/12/11	3,125	128	15 days	120 hrs	ICD Elec Tech
128	Field Testing Hardware & Software	Fri 8/12/11	Mon 8/15/11	41,127	129	1.25 days	20 hrs	ICD Elec Tech, OPS Soft
129	Final System Checkout	Mon 8/15/11	Tue 8/16/11	128	269	1.25 days	20 hrs	ICD Elec Tech, OPS Soft
130	connect beam line	Fri 7/15/11	Mon 7/18/11	121	131	1 day	16 hrs	Mech Vac Tech[200%]
131	install vacuum pump and controls	Mon 7/18/11	Thu 7/21/11	130	136,132,12	3 days	48 hrs	Mech Vac Tech[200%]
132	Vacuum Instrumentation	Thu 7/21/11	Fri 7/29/11	131		6 days	56 hrs	
133	Vacuum Instrumentation configuration	Thu 7/21/11	Thu 7/28/11	3	134	5 days	40 hrs	ICD Elec Tech
134	Field Testing Hardware & Software	Thu 7/28/11	Thu 7/28/11	133	135	0.5 days	8 hrs	ICD Elec Tech, OPS Soft
135	Final System Checkout	Fri 7/29/11	Fri 7/29/11	134	269	0.5 days	8 hrs	ICD Elec Tech, OPS Soft
136	pump down and leak check girder	Thu 7/21/11	Mon 7/25/11	131	138,169SS	2 days	32 hrs	Mech Vac Tech[200%]
137	2B Final survey beam line	Tue 10/4/11	Tue 10/4/11	96	175	0.5 days	8 hrs	Mech Align Tech[200%]
138	reinstall lead removed for 3 inch beam pipe	Wed 8/10/11	Wed 8/10/11	136	269,139	1 day	32 hrs	Mech Inst Tech Lite[400%]
139	Run Klixon cable from tray to power supply	Thu 8/11/11	Thu 8/11/11	138	140	0.5 days	4 hrs	DC Elec Tech
140	Run cable from junction box to 2 BD correctors	Thu 8/11/11	Fri 8/12/11	139	141	1 day	8 hrs	DC Elec Tech
141	HCO for 2 BD correctors: all cables	Fri 8/12/11	Fri 8/12/11	140	142	0.25 days	2 hrs	DC Elec Tech



Task Name	Start	Finish	Predecessor	Successor	Duration	Work	Resource Names
142 System check out	Fri 8/12/11	Tue 8/16/11	141	269	1.5 days	12 hrs	OPS Software
144 remove long girder	Tue 5/31/11	Tue 6/14/11			10.75 days	176 hrs	
145 remove lead shielding	Tue 5/31/11	Tue 5/31/11	3	147	1 day	32 hrs	Mech Inst Tech Lite[400%]
146 disconnect beam line diagnostics	Tue 5/31/11	Tue 5/31/11	3	147	1 day	16 hrs	ICD Elec Tech[200%]
147 Remove Calorimeter	Wed 6/1/11	Wed 6/1/11	146,145	148,91	0.5 days	8 hrs	Mech Inst Tech Lite[200%]
148 disconnect vacuum equipment	Tue 6/7/11	Wed 6/8/11	147	149	2 days	32 hrs	Mech Vac Tech[200%]
149 remove water and control lines	Thu 6/9/11	Thu 6/9/11	148	150	1 day	16 hrs	Mech Inst Tech Lite[200%]
150 Remove lead shielding around camera	Fri 6/10/11	Fri 6/10/11	149	151	1 day	32 hrs	Mech Inst Tech Lite[400%]
151 remove girder	Mon 6/13/11	Mon 6/13/11	150	152	2 hrs	8 hrs	Mech Inst Tech Lite[400%]
152 remove girder stands	Mon 6/13/11	Mon 6/13/11	151	153	0.5 days	16 hrs	Mech Inst Tech Lite[400%]
153 remove stand grout	Mon 6/13/11	Tue 6/14/11	152	83	1 day	16 hrs	Mech Inst Tech Lite[200%]
155 install FZ1 magnet	Wed 6/15/11	Fri 11/11/11			105.25 days	664 hrs	
156 survey holes for stands	Wed 6/15/11	Wed 6/15/11	83	182	0.5 days	8 hrs	Mech Align Tech[200%]
157 Drill holes	Wed 6/15/11	Thu 6/16/11	84	158,183	1 day	16 hrs	Mech Inst Tech Lite[200%]
158 mount stands	Tue 6/21/11	Wed 6/22/11	157,9,85	159,184	2 days	64 hrs	Mech Inst Tech Lite[400%]
159 survey stands	Fri 7/1/11	Fri 7/1/11	158,86	160,185	1 day	16 hrs	Mech Align Tech[200%]
160 grout stands	Tue 7/5/11	Tue 7/5/11	159	161,186	0.75 days	24 hrs	Mech Inst Tech Lite[400%]
161 grout set up time	Tue 7/5/11	Thu 7/7/11	160	162	2 days	0 hrs	
162 Strip Forms & Clean up Area	Thu 7/7/11	Fri 7/8/11	161	163,165	0.5 days	8 hrs	Mech Inst Tech Lite[200%]
163 Run cable from Power Supply to Junction Box	Fri 7/8/11	Fri 7/8/11	162,54	164	0.5 days	8 hrs	Electrician (Tech)[200%]
164 Run cable from Junction Box to FZ1 Magnet	Fri 7/8/11	Mon 7/11/11	163	246	0.5 days	8 hrs	Electrician (Tech)[200%]
165 install FZ1 magnet	Fri 7/8/11	Mon 7/11/11	22,10,162	166	1 day	32 hrs	Mech Inst Tech Lite[400%]
166 2A survey FZ1 magnet	Mon 7/11/11	Tue 7/12/11	165	167	1 day	16 hrs	Mech Align Tech[200%]
167 ops check magnets	Tue 7/12/11	Tue 7/19/11	166	168	5 days	40 hrs	DC Elec Tech
168 install FZ beam line supports	Tue 7/19/11	Wed 7/20/11	167	169	1 day	16 hrs	Mech Inst Tech Lite[200%]
169 install beam lines and beam diagnostics	Fri 7/22/11	Thu 7/28/11	168,136,55	170	5 days	80 hrs	Mech Vac Tech[200%]
170 install vacuum system	Fri 7/29/11	Thu 8/4/11	169	171	5 days	80 hrs	Mech Vac Tech[200%]
171 reposition all metal valve	Fri 8/5/11	Fri 8/5/11	170	172	1 day	16 hrs	Mech Vac Tech[200%]
172 install Mechanical portion of beamline instrumentation	Mon 8/8/11	Thu 8/11/11	171	173	4 days	32 hrs	Mech Vac Tech
173 pump down beam line	Fri 8/12/11	Mon 8/15/11	172	174	2 days	32 hrs	Mech Vac Tech[200%]
174 leak check beam lines	Tue 8/16/11	Tue 8/16/11	173	177	1 day	16 hrs	Mech Vac Tech[200%]
175 2B Survey FZ1 Magnet	Tue 10/4/11	Tue 10/4/11	137	176	0.5 days	8 hrs	Mech Align Tech[200%]
176 survey beam lines	Wed 10/5/11	Wed 10/5/11	175	210	1 day	16 hrs	Mech Align Tech[200%]
177 ops check	Wed 8/17/11	Fri 8/19/11	174	178,198	3 days	48 hrs	Mech Vac Tech[200%],ICD Elec Tech
178 software checkout and ops check	Mon 10/31/11	Wed 11/2/11	177	179,269	2.5 days	40 hrs	OPS Software,ICD Elec Tech
179 Commission for FZ1	Wed 11/9/11	Fri 11/11/11	268,178	272	2.5 days	40 hrs	DC Elec Tech[200%]
181 install FZ2 magnet	Wed 6/15/11	Fri 11/11/11			104.75 days	936 hrs	
182 survey holes for stands	Wed 6/15/11	Thu 6/16/11	156		1 day	16 hrs	Mech Align Tech[200%]
183 Drill holes	Thu 6/16/11	Fri 6/17/11	157	184	1 day	16 hrs	Mech Inst Tech Lite[200%]
184 mount stands	Thu 6/23/11	Wed 6/29/11	158,183,12	185,86	5 days	96 hrs	Mech Inst Tech Lite[400%]
185 survey stands	Tue 7/5/11	Tue 7/5/11	184,159	186,92	1 day	16 hrs	Mech Align Tech[200%]
186 grout stands	Wed 7/6/11	Wed 7/6/11	185,160	187	0.75 days	24 hrs	Mech Inst Tech Lite[400%]
187 grout set up time	Wed 7/6/11	Fri 7/8/11	186	188	2 days	0 hrs	
188 Strip Forms & Clean up Area	Fri 7/8/11	Mon 7/11/11	187	189	0.5 days	8 hrs	Mech Inst Tech Lite[200%]
189 Run cable from Power Supply to Junction Box	Mon 7/11/11	Mon 7/11/11	188,55	190	0.5 days	8 hrs	Electrician (Tech)[200%]
190 Run cable from Junction Box to FZ1 Magnet	Mon 7/11/11	Tue 7/12/11	189	191,246	0.5 days	8 hrs	Electrician (Tech)[200%]
191 Run CAT5 cables from BSY to Hall A for both FZ magnets	Tue 7/12/11	Wed 7/13/11	190	192	1 day	0 hrs	
192 Terminate CAT5 at power supply for both FZ magnets	Wed 7/13/11	Thu 7/14/11	191	193	1 day	16 hrs	DC Elec Tech[200%]
193 install FZ2 magnets	Thu 7/14/11	Fri 7/15/11	192,22,12	194	1 day	32 hrs	Mech Inst Tech Lite[400%]
194 2A survey FZ2 magnets	Mon 7/18/11	Tue 7/19/11	193,122	195	1 day	16 hrs	Mech Align Tech[200%]
195 install and connect DC power to magnets	Tue 7/19/11	Wed 7/20/11	194	196	1 day	8 hrs	ICD Elec Tech
196 ops check magnets	Wed 7/20/11	Wed 7/27/11	195	197	5 days	40 hrs	ICD Elec Tech
197 install FZ beam line supports	Wed 8/3/11	Thu 8/4/11	196,16,18,1	198	2 days	32 hrs	Mech Inst Tech Lite[200%]
198 install beam lines and beam diagnostics	Mon 8/22/11	Fri 8/26/11	197,47,17	199,201	5 days	80 hrs	Mech Vac Tech[200%]
199 install vacuum system	Mon 8/29/11	Fri 9/2/11	198	200	5 days	80 hrs	Mech Vac Tech[200%]
200 reposition all metal valve	Tue 9/6/11	Tue 9/6/11	199,65	208	1 day	16 hrs	Mech Vac Tech[200%]
201 Viewer System Instrumentation	Mon 8/29/11	Mon 9/12/11	198	205	10 days	120 hrs	
202 Overall System Installation	Mon 8/29/11	Fri 9/2/11	28	203	5 days	40 hrs	ICD Elec Tech
203 Field Testing Hardware & Software	Tue 9/6/11	Thu 9/8/11	25,202	204	2.5 days	40 hrs	ICD Elec Tech,OPS Software
204 Final System Checkout	Thu 9/8/11	Mon 9/12/11	203	269	2.5 days	40 hrs	ICD Elec Tech,OPS Software
205 Harp System Instrumentation	Tue 9/13/11	Thu 9/15/11	201	208	2.5 days	40 hrs	
206 Field Testing Hardware & Software	Tue 9/13/11	Wed 9/14/11	41	207	1.25 days	20 hrs	ICD Elec Tech,OPS Software
207 Final System Checkout	Wed 9/14/11	Thu 9/15/11	206	269	1.25 days	20 hrs	ICD Elec Tech,OPS Software
208 pump down beam line	Thu 9/15/11	Mon 9/19/11	205,200	209	2 days	32 hrs	Mech Vac Tech[200%]
209 leak check beam lines	Mon 9/19/11	Tue 9/20/11	208	216	1 day	16 hrs	Mech Vac Tech[200%]

