

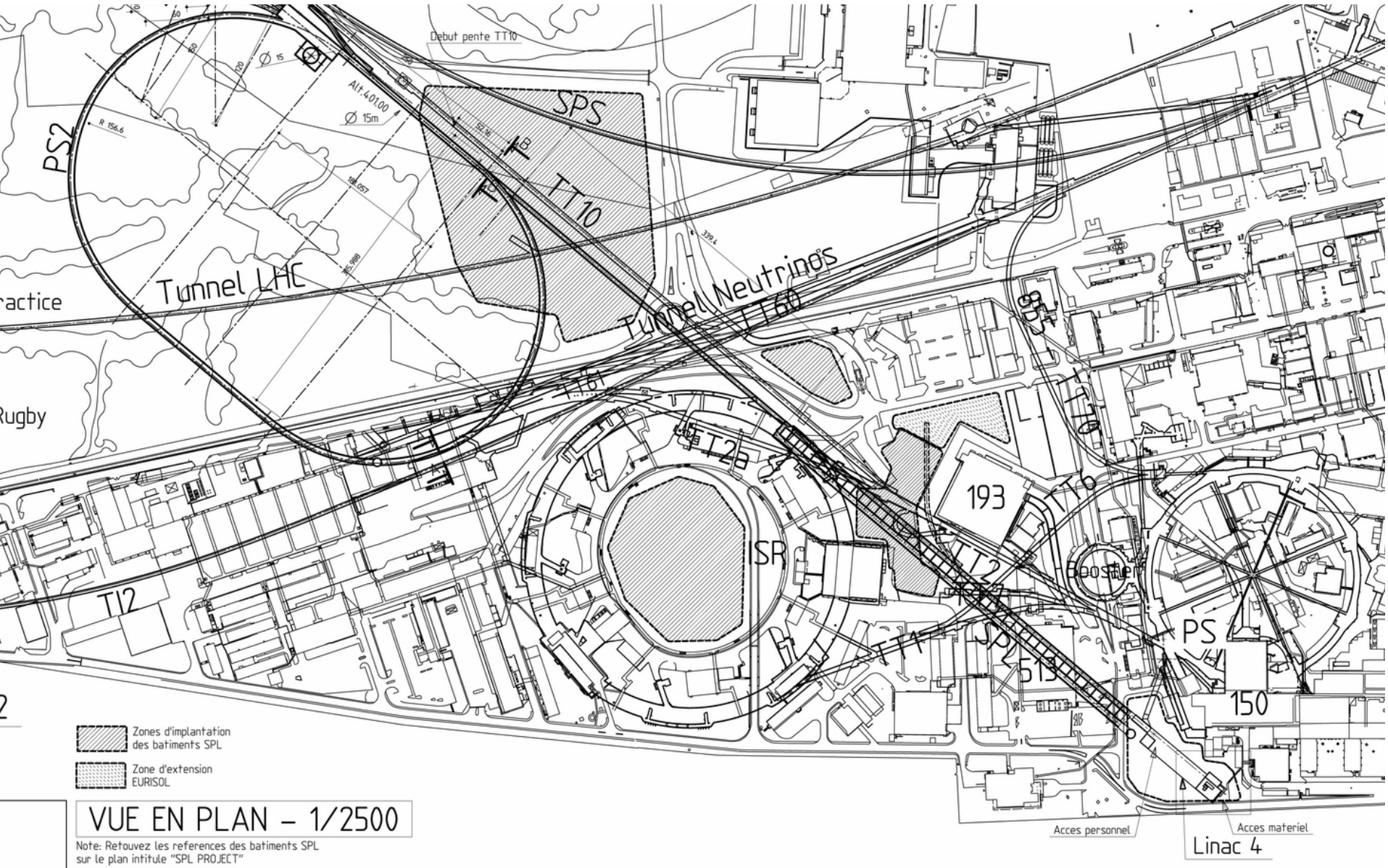
Site meeting

- **New Site study (S. Maury)**
- **Site implementation (N. Lopez)**
- **Linac4 integration (M. Timmins)**
- **Preliminary TS estimation and comparison with the previous South Hall option (N. Lopez)**
- **Discussion**

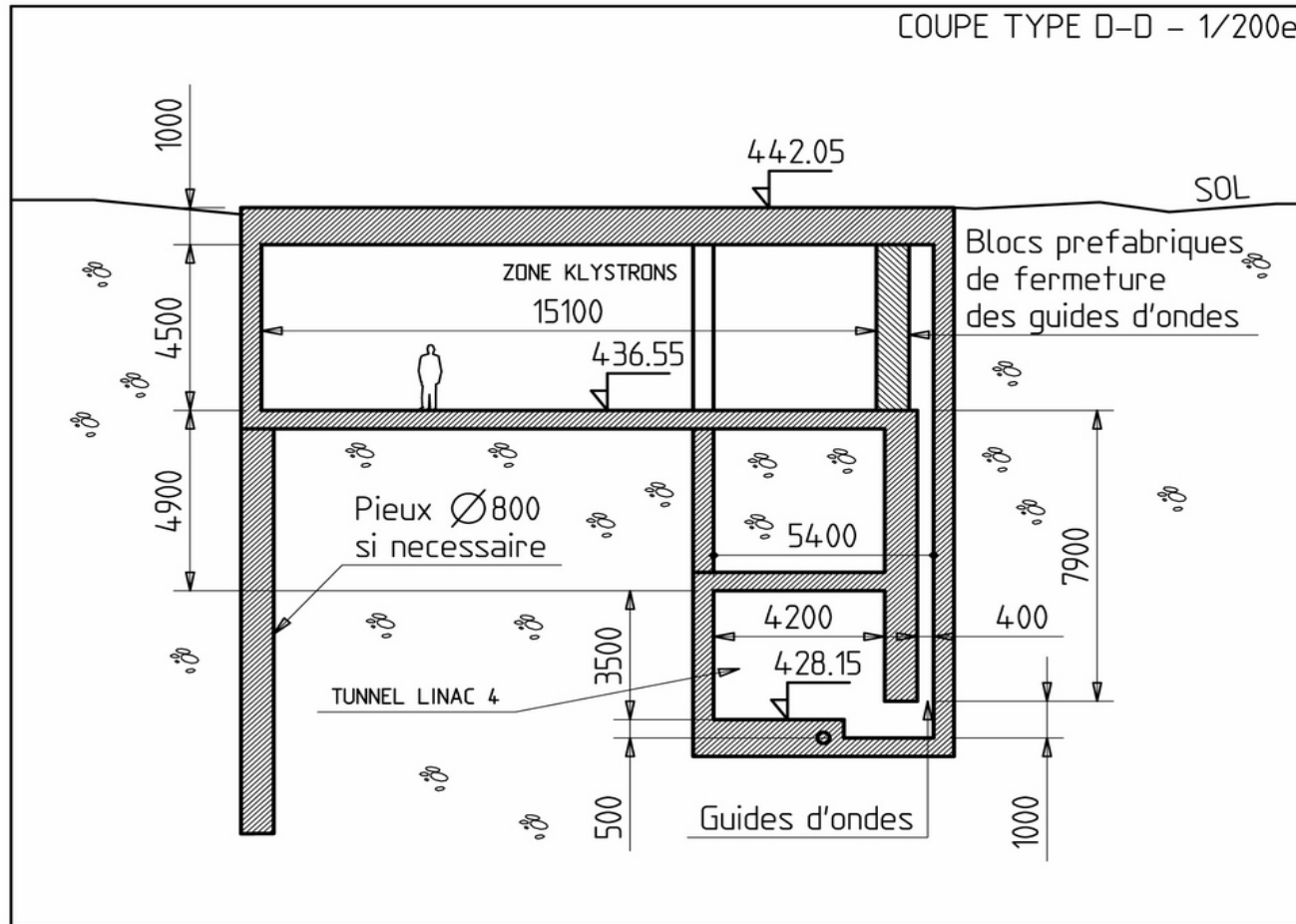
Site status/organization

- Following the meeting last November
- New site for Linac4 and new future accelerators compatible with the present accelerators
- Once a week (Monday) meeting with all experts
- Every 2 months, open meeting to larger audience
- Time for decision (depending on hypothesis)

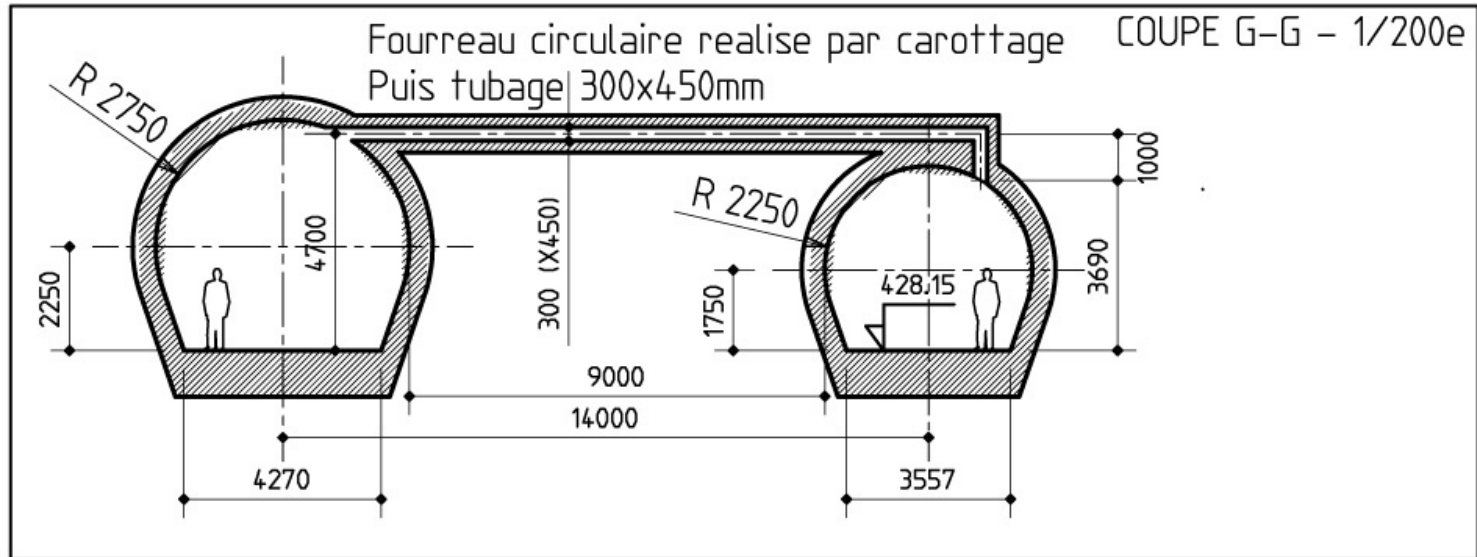
IMPLANTATION - Solution de base



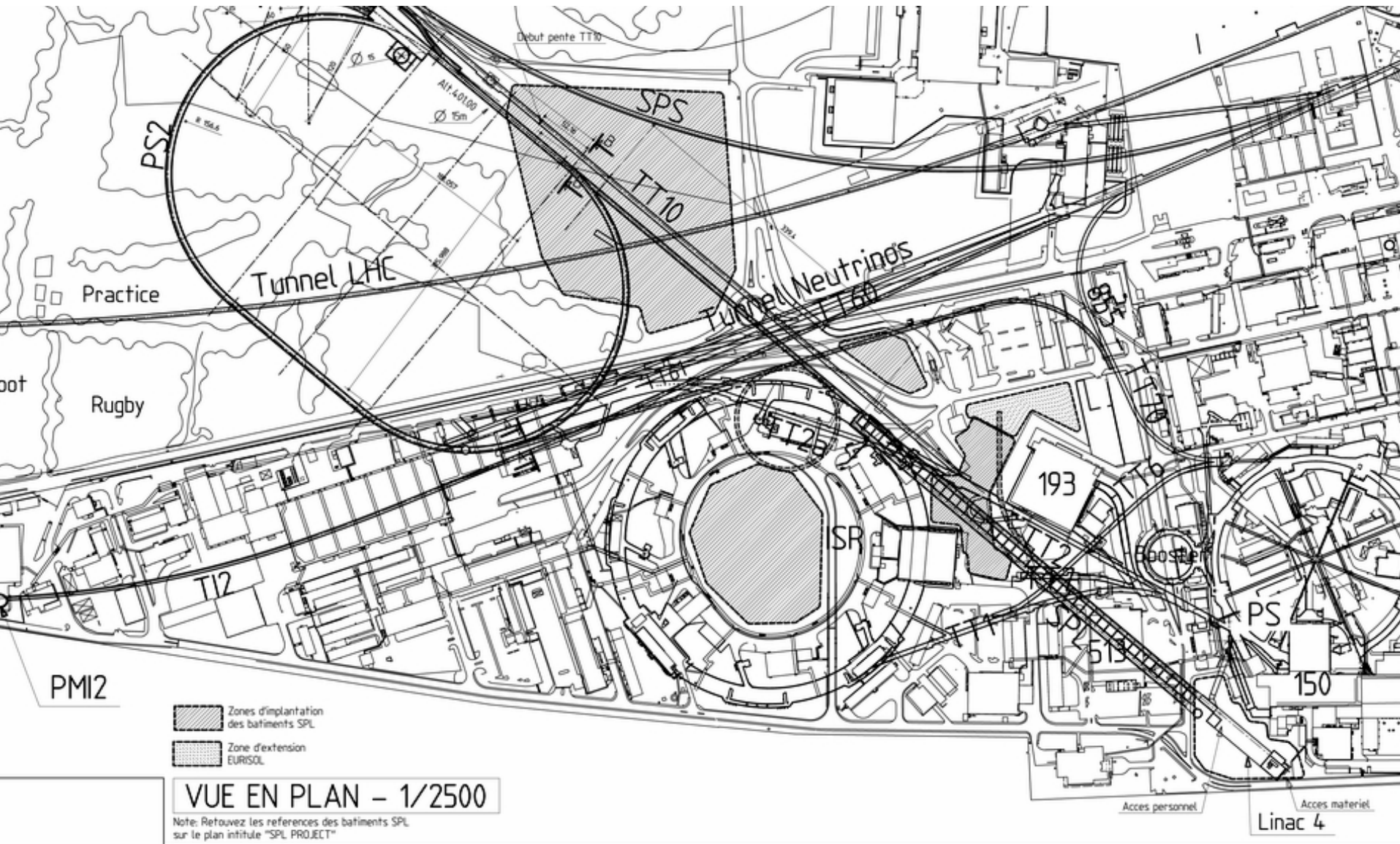
Linac 4 - Coupe type



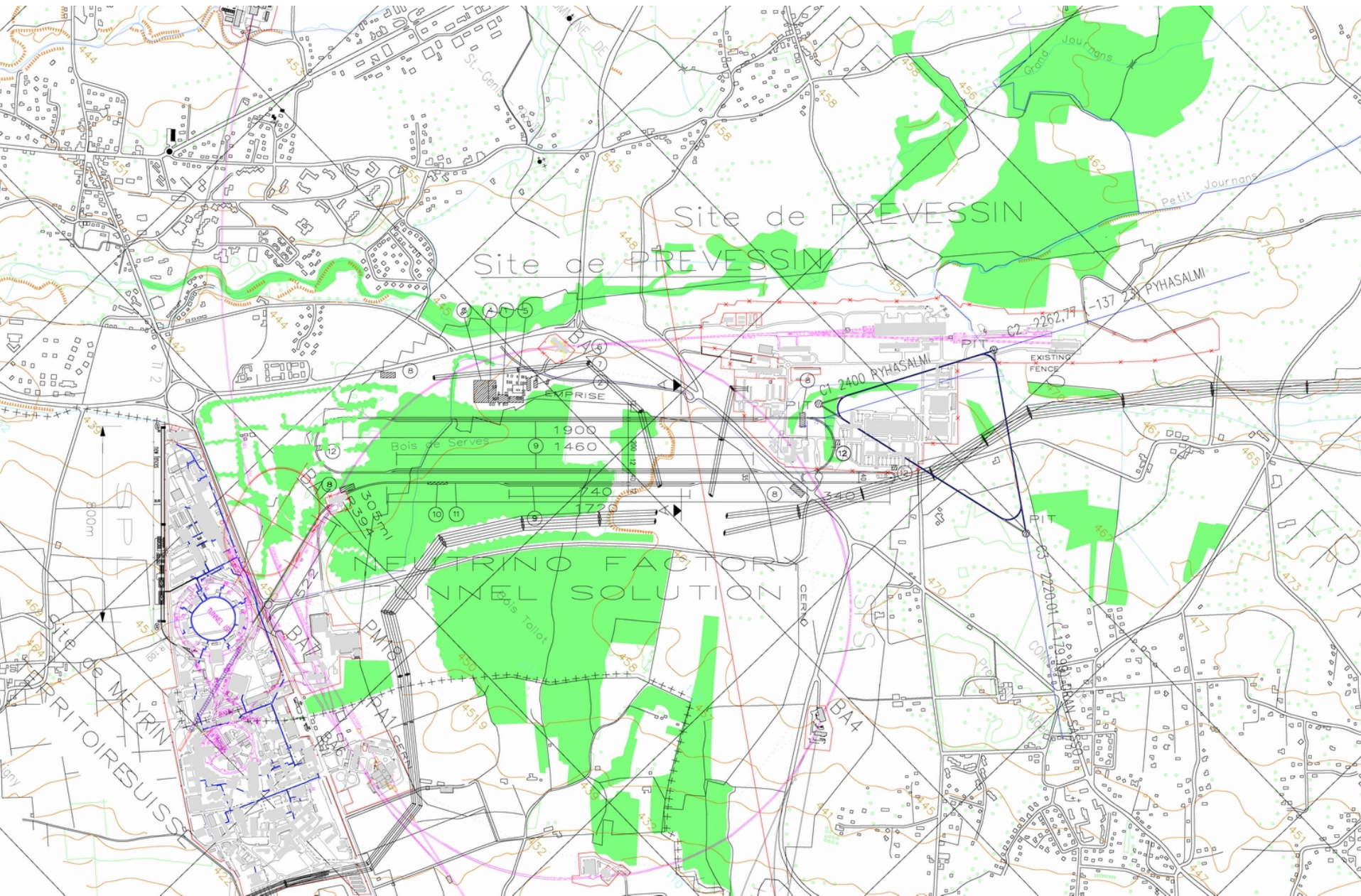
SPL - Coupe type



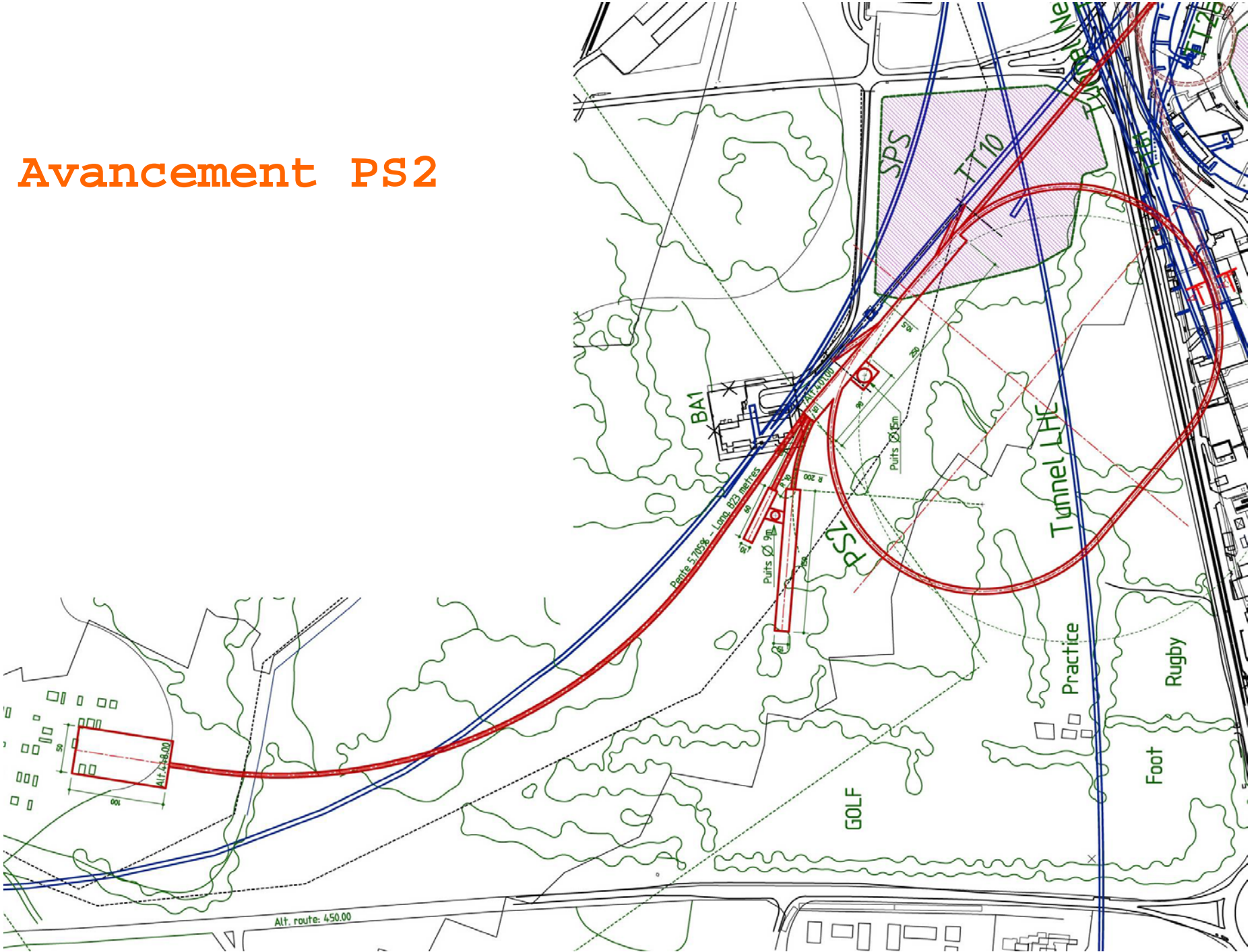
IMPLANTATION - Option Hall Antiproton



PS2 vs Neutrino Factory



Avancement PS2



Physics programme with the new accelerators

Linac4+PSB+PS

- LHC, SPS, PS East Hall, Antiproton, Isolde, CNGS, n-TOF
- Ions (Linac3, LEIR, PS, SPS, LHC)

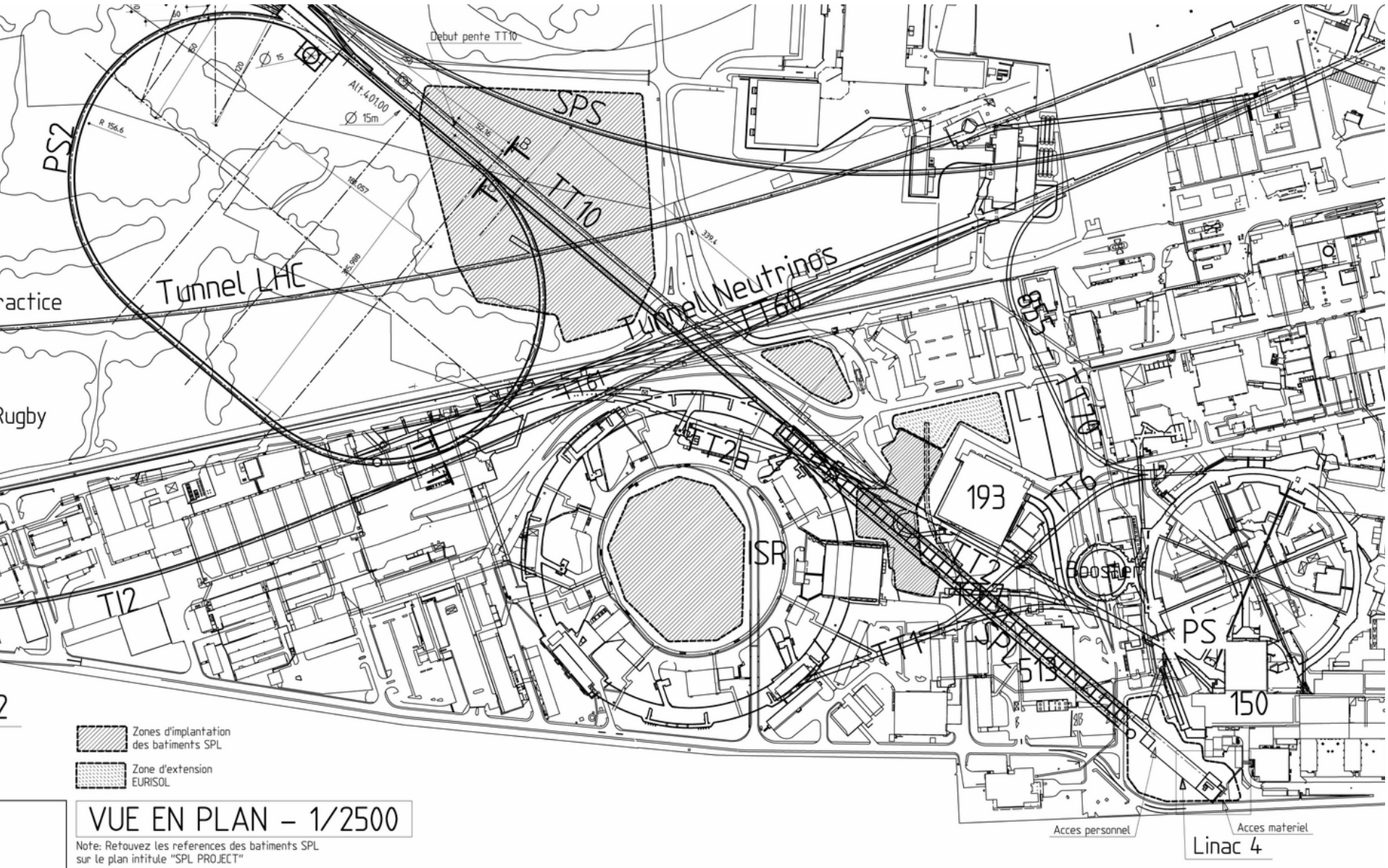
Linac4+PSB+PS(+SPL)

- EURISOL (between 1 and 2 GeV, experiments underground, transfer line between EURISOL and ISOLDE)
- Commissioning of the SPL
- All the other physics programme with the PSB and PS (in parallel with the SPL)
- Ions (Linac3, LEIR, PS, SPS, LHC)

Linac4+SPL+(PS2)

- LHC, SPS, Neutrino, new n-TOF Facility (?)
- PS2 underground in caverns Experimental Area
- Present Antiproton Decelerator (new transfer line)
- Ions (Linac3, LEIR, PS2, SPS, LHC)
 - TT2 transfer line is used+ new short transfer line should be built to connect it to PS2
 - PS2 injection energy ? (or Linac3+LEIR+PS+SPS+LHC ?)

IMPLANTATION - Solution de base



VUE EN PLAN - 1/2500

Note: Retrouvez les references des batiments SPL sur le plan intitule "SPL PROJECT"

Conclusion

- Site compatible with the new accelerators in the future (including RCS)
- Linac4 site compatible with the present accelerators (no long shutdown)
- Still some work needed for the integration of the Linac4
- Schedule not studied yet but end 2012 looks achievable
- The extra cost should be seen as an economical option (no displacement) in the future
- **Time to start the LINAC4 project (if 2012 is the target)**

ETUDE LINAC 4: Conclusions réunion 040507 (dans l'attente du compte-rendu officiel)

- étudier des réductions de coût possibles dans l'implantation retenue (bâtiment klystrons en surface, niveau plus haut pour le linac, etc.)
- optimiser le planning TS et établir le planning général pour l'ensemble
- continuer l'intégration de la maquette (optimisation radioprotection!)
- lancer l'étude d'intégration du linac4 dans le linac2 (blindage?)

COUT ESTIME TS POUR LA SOLUTION ACTUELLE

CHAPITRES	HALL SUD	SOLUTION MAI 07
Démantelement halls 150, 152	985,000	0
Travaux préparatoires halls 150,152	2,165,000	0
Génie civil	3,850,000	19,900,000
Heavy handling&transport	270,000	556,000
Electricité	1,480,000	2,875,400
Cooling/Ventilation	1,395,000	5,363,000
Monitoring&Access	260,500	350,000
Survey	411,000	411,000
<i>Total</i>	10,816,500	29,455,400
Contingencies 15%	1,622,475	4,418,310
TOTAL TS	12,438,975	33,873,710
Arrondi à	12,500,000	33,900,000

ESTIMATION GLOBALE LINAC 4

LINAC4 BUDGETS

Summary – MV 04.05.07

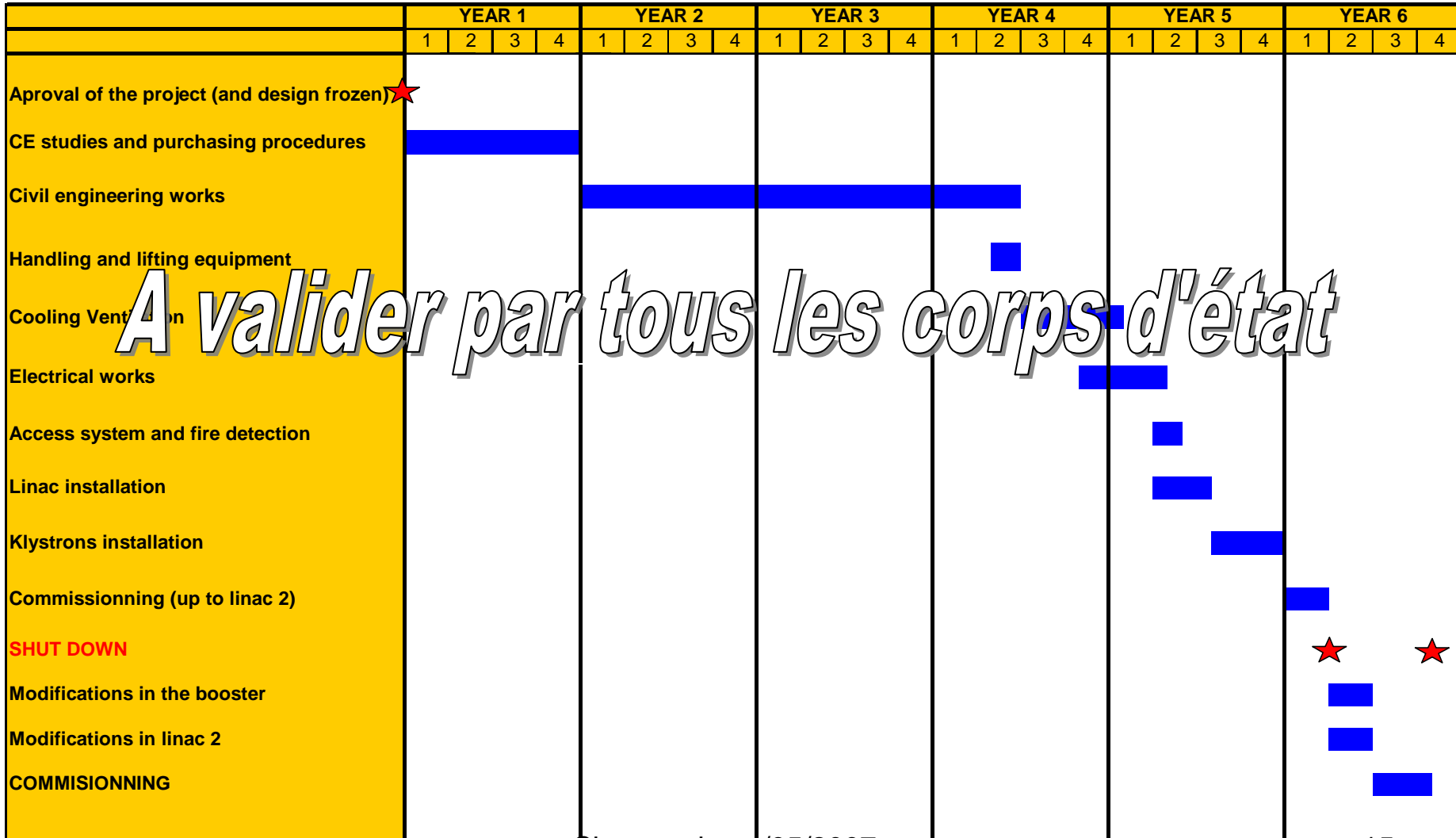
MCHF

	1 03/2006 White Paper	2 12/2006 TDR	3 05/2007 New building
Linac	32.4	37.7	39.0
PSB injection	10.6	10.1	10.1
Building, infrastructure	7.3	9.2	29.5
Contingency	5.0	0	1.4
TOTAL	55.3	57.0	80.0

Not included: **New RFQ (~1 MCHF)**
 Energy ramping (~1 MCHF)

PLANNING

PROVISIONAL PLANNING FOR LINAC 4



A valider par tous les corps d'état

PLANNING

PLANNING PREVISIONNEL DE COORDINATION TS LINAC 4

TACHES	RESP	MOIS																																										
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41		
INFRASTRUCTURE																																												
-GENIE CIVIL																																												
Demol. reservoir et excavation remblais 442 (21400m3)	CE	█																																										
Dev réseaux et excavation klystrons 436 (15400m3)	CE	█																																										
Excavation linac et ligne de transfert en moraine (8454m3)	CE	█																																										
Excavation linac et ligne de transfert molasse, niveau 427 (8219m3)	CE	█																																										
Pieux (200 m)	CE	█																																										
Bétonnage linac sous klystrons, guides d'ondes et puits (3090 m3 b.)	CE	█																																										
Remblayage (4035 m3)	CE	█																																										
Bétonnage ligne de transfert et remblayage (644 m3 b., 4485 m3)	CE	█																																										
Bétonnage chambre klystrons et remblayage (2992 m3 b, 5238 m3)	CE	█																																										
Bâtiments de surface (470m2)	CE	█																																										
Aménagements extérieurs	CE	█																																										
-INSTALLATIONS IC	IC	█																																										
-INSTALLATIONS CV	CV	█																																										
-INSTALLATIONS EL	EL	█																																										
-INSTALLATIONS CSE	CSE	█																																										

Site meeting 4/05/2007

PLANNING

PLANNING DE LANCEMENT LINAC 4

TACHES	RESP	MOIS													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Market survey études/supervision et coordination de sécurité	CE	█	█	█	█										
Appel d'offres études/supervision et coordination de sécurité	CE				█	█	█	█	█						
Etudes pour consultation	BE							█	█	█	█	█			
Etudes d'execution	BE										█	█	█	█	
Market survey travaux	CE							█	█	█	█				
Appel d'offres travaux	CE/BE										█	█	█	█	
Démarrage des travaux	CE														

Nota: les adjudications doivent se faire lors d'un FC