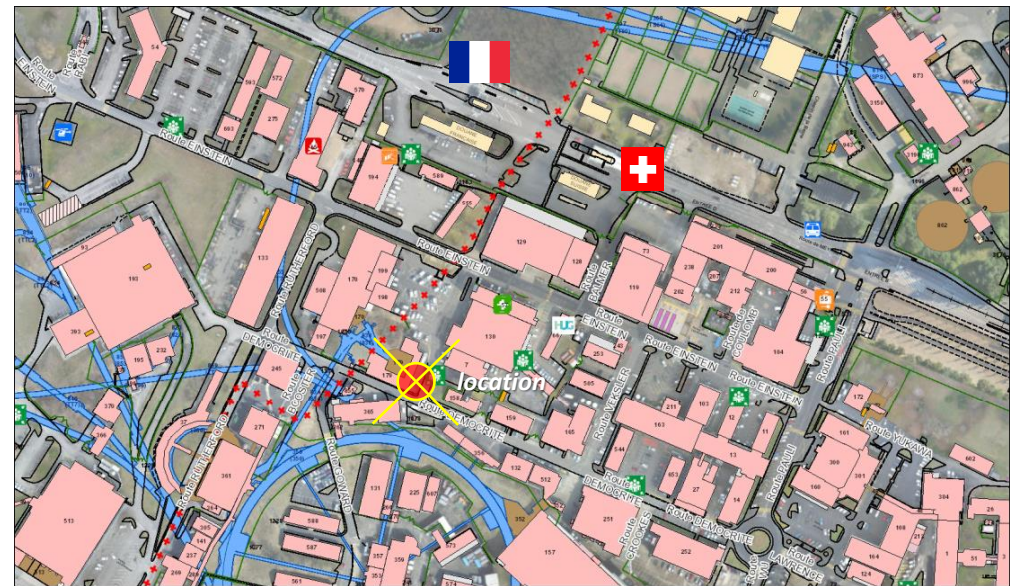
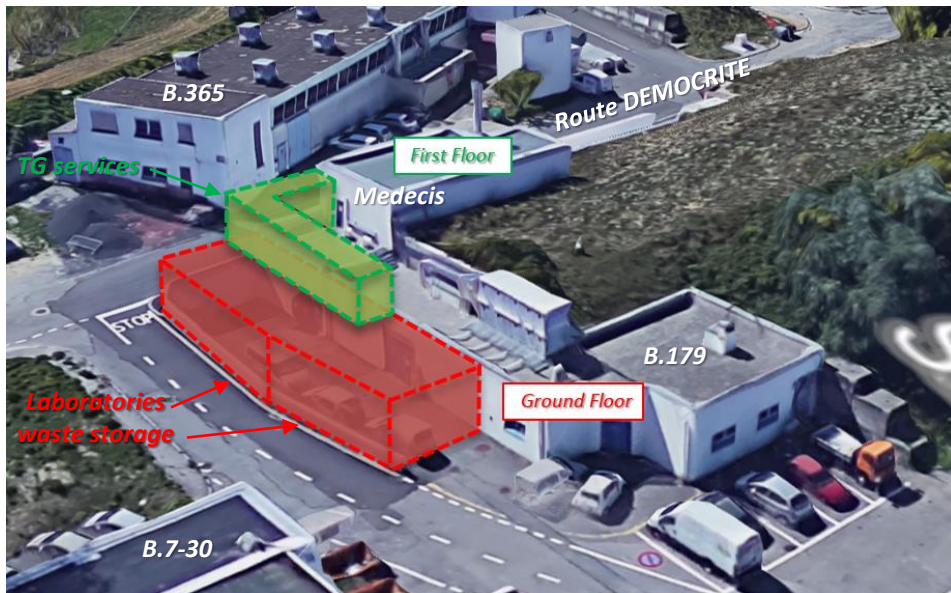


14:00	Welcome and registration at Building 33	<i>(M. Manfredi)</i>
14:15	Transfer to conference room → 104/R-A10	
14:30 - 14:50	Agenda, Introduction to CERN and presentation of technical documents	<i>(M. Manfredi)</i>
14:50 – 15:10	Working on the CERN site	<i>(S. Cherault)</i>
15:10 – 15:30	Presentation of commercial documents	<i>(S. Magnan)</i>
15:30 – 16:00	Questions – Answers	<i>(All)</i>
16:00 – 17:00	Visit of the site	<i>(M. Manfredi)</i>
17:00	Transfer to Building 33	

IT-4519/SMB – Bidders Conference

<https://indico.cern.ch/event/842631/>



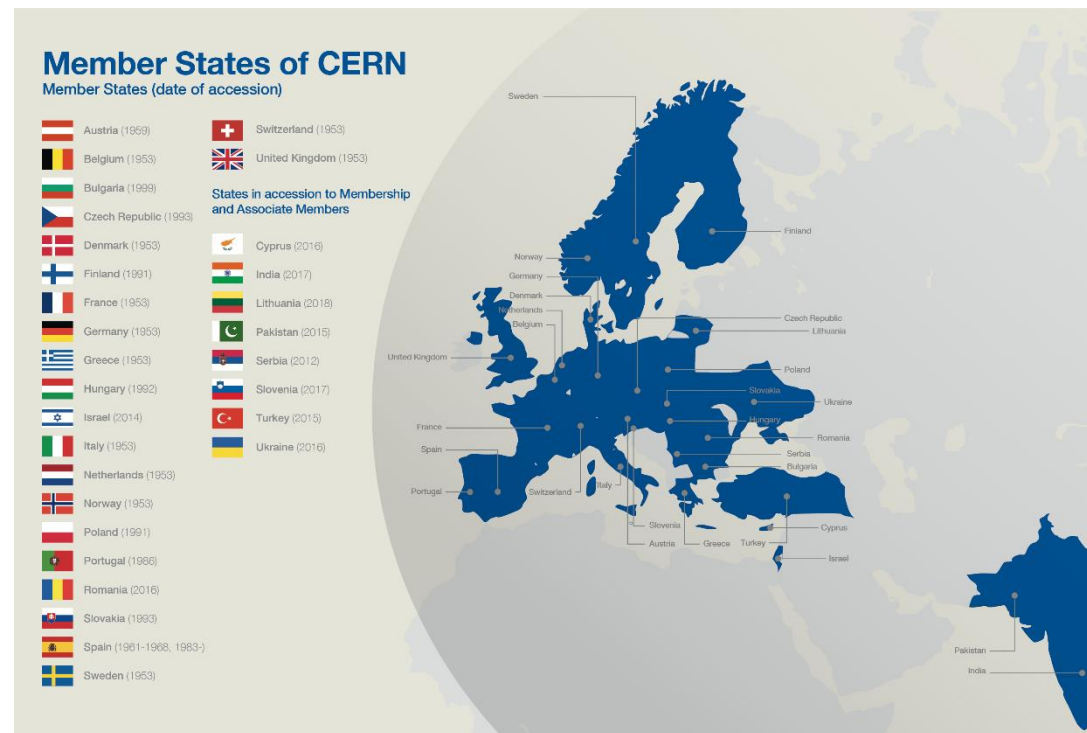
Location – Meyrin site (Swiss side)
Internal client : EN/STI

1. Introduction at CERN
2. Description of the project
3. Tender documents
4. Key dates and time for completion

❖ Year of Foundation --> 1954 by 12 European States ;

❖ Today --> 2019

- CERN has 23 Member States.
- Slovenia and Cyprus are Associate Members State in the pre-stage to Membership ;
- Turkey, Pakistan, Ukraine, India and Lithuania are Associate Members States;
- Non-Member States with co-operation agreements ;
- Scientific contacts.

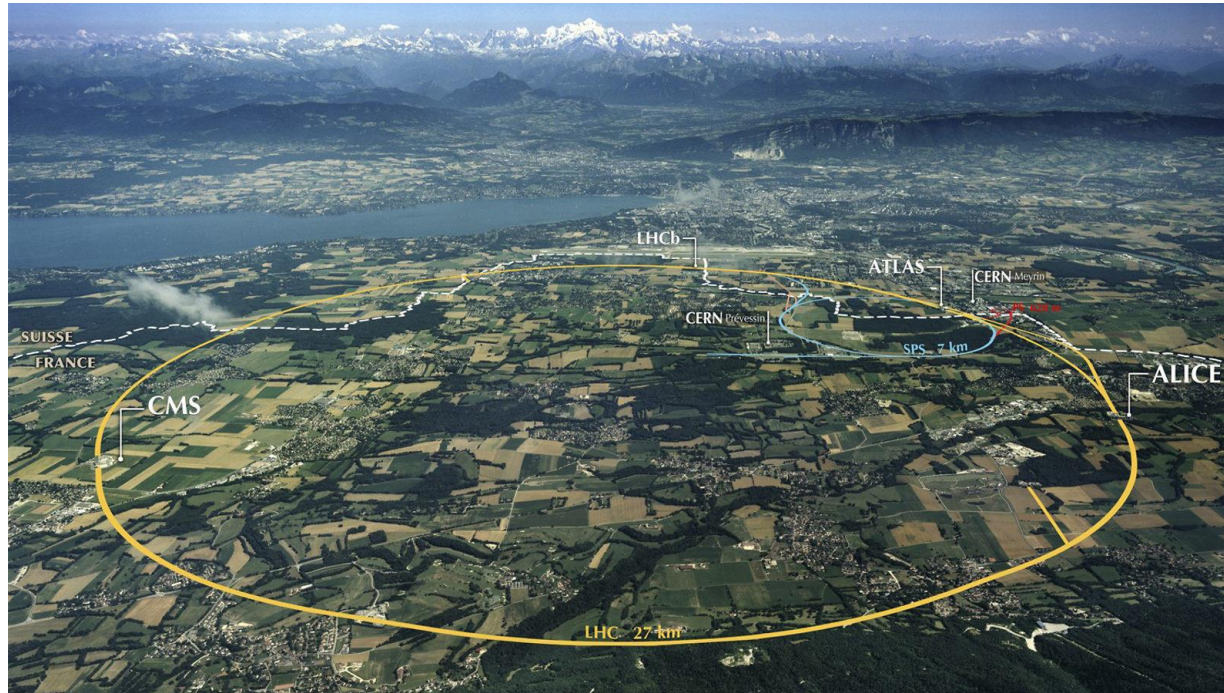


❖ Aim of the Organization

<http://home.cern/about/member-states>

At CERN, the European Organization for Nuclear Research, physicists and engineers are probing the fundamental structure of the universe. They use the world's largest and most complex scientific instruments to study the basic constituents of matter – the fundamental particles

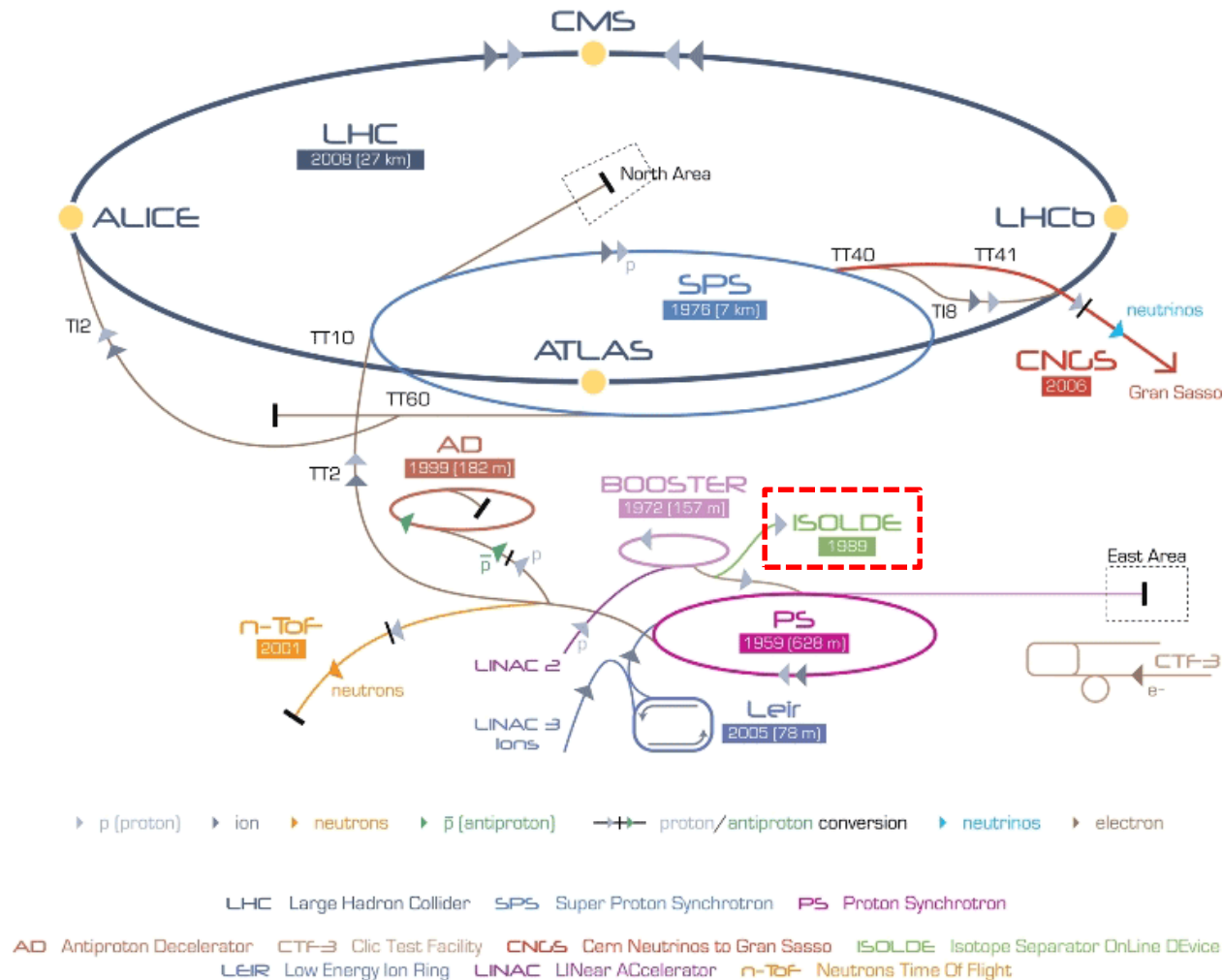
- ❖ Location --> Astride the Franco-Swiss border near Geneva



- ❖ Some numbers --> People and Budget in 2018

- 2'667 Staff and 836 Fellows ;
- > 12'500 Users ;
- 1'313.4 MCHF

❖ An accelerator complex unique in the world



2. Description of the project – main features (1)

❖ Ground Floor (RDC) -> Laboratories (class A)

➤ Production Laboratory

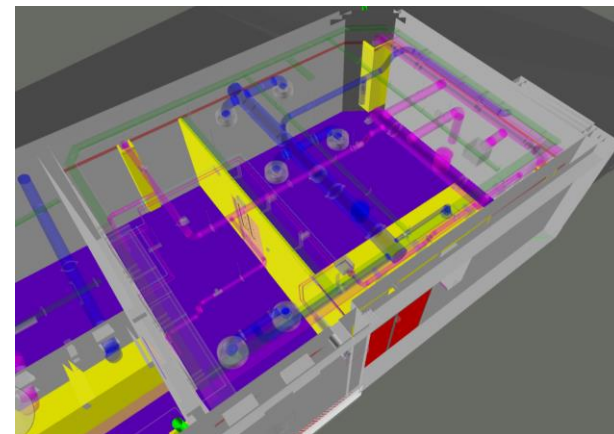
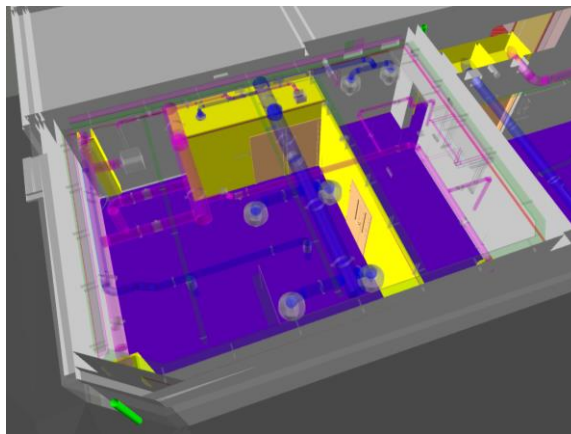
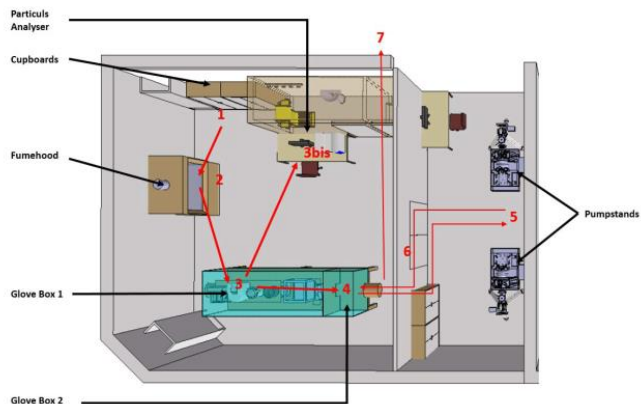
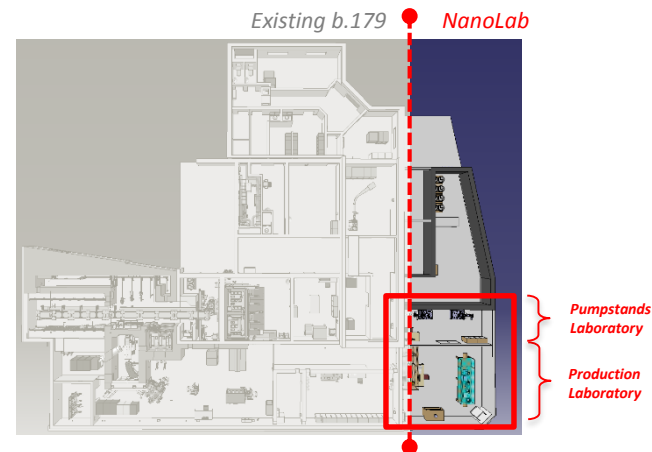
- Labo surface $\approx 45\text{m}^2$. Height under false ceiling = 270cm. -60Pa (operation) -800Pa (fire scenario)
- Structure : standard concrete slabs and walls (except partition wall) + reservations
- Coating finishes : smooth washable floor w/ upturns (resin) / paint works on walls & ceiling
- False ceiling : 90cm height for technical services (not in CE scope) + reservations
- Removable personnel/material airlocks (SAS $\approx 5\text{m}^2$) + reservations. -40Pa (operation) -800Pa (fire scenario)
- Cores on existing concrete wall twd existing building

➤ Pumpstands Laboratory

- Labo surface $\approx 22\text{m}^2$. Height under false ceiling = 270cm. -60Pa (operation) -800Pa (fire scenario)
- Structure : standard concrete slabs and walls (except partition wall) + reservations
- Coating finishes : smooth washable floor w/ upturns (resin) / paint works on walls & ceiling
- False ceiling : 90cm height for technical services (not in CE scope) + reservations
- Cores on existing concrete wall twd existing buildings

☐ Both Laboratories make a single fire compartment : Walls -> REI90 ; Doors EI60 (w/ access control system)

☐ Partition wall btw LABS : up to false ceiling / removable / washable / + reservations



❖ Ground Floor (RDC) -> Buffer Area and Corridor

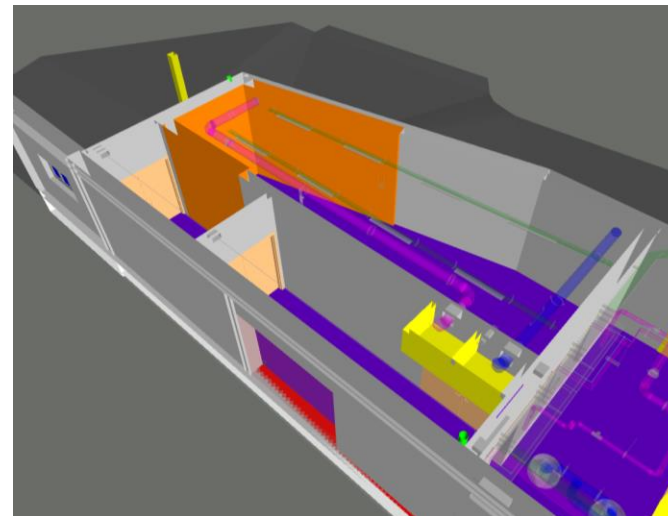
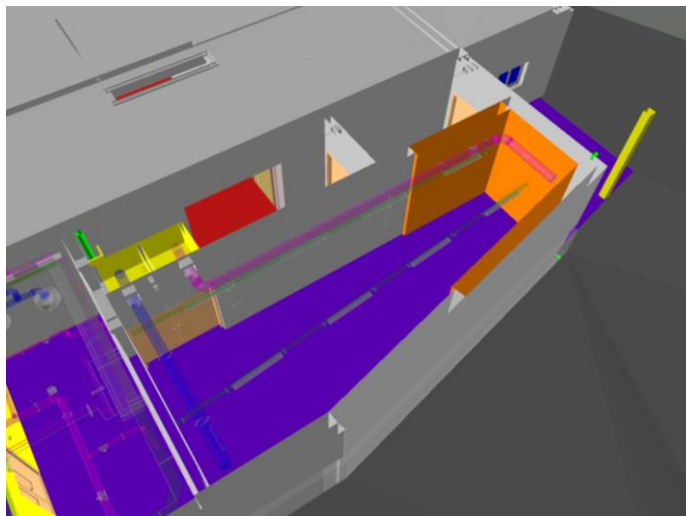
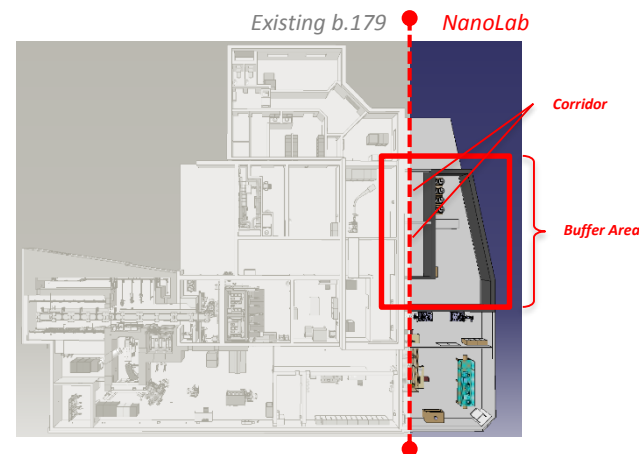
➤ Buffer Area

- Buffer surface $\approx 50\text{m}^2$. No false ceiling required. -60Pa (operation) -800Pa (fire scenario)
- Technical services (not in CE scope) suspended on the ceiling
- Structure : standard concrete slabs/walls (except northern part to be made in reinforced magnetite concrete, 3.9t/m^3 , 40cm thick) + reservations
- Coating finishes : smooth washable floor w/ upturns (resin) / paint works on walls & ceiling
- Openings/cores on new walls btwn Buffer/Corridor and Buffer/Labo

➤ Corridor --> divided in two parts (by internal door) to create an airlock needed for handling operation

- Corridors surface $\approx 25\text{m}^2$. No false ceiling required. -20Pa and 0Pa under-pressure
- Structure : standard concrete slabs and walls + reservations
- Coating finishes : smooth washable floor w/ upturns (resin) / paint works on walls & ceiling
- Local fire breakers EI90 to protect air ducts (extraction)
- Also used as evacuation path for b.179 users (doors equipped w/ panic bar)

- ❑ Buffer Area is a single fire compartment: Walls -> REI90 ; Door EI60 (w/ access control system)



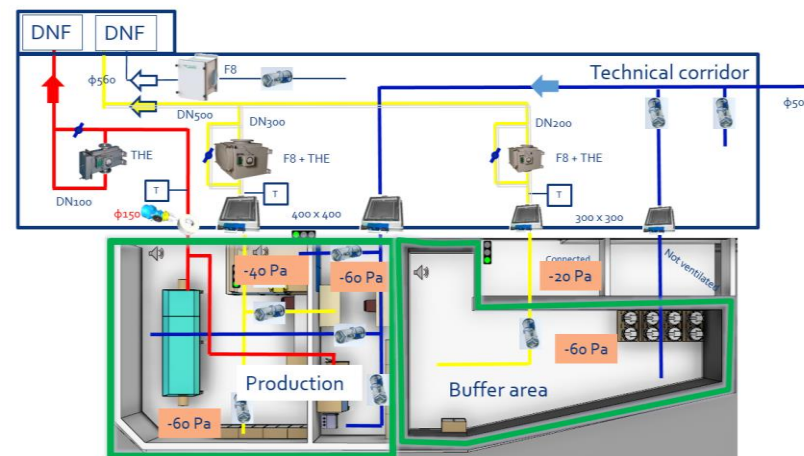
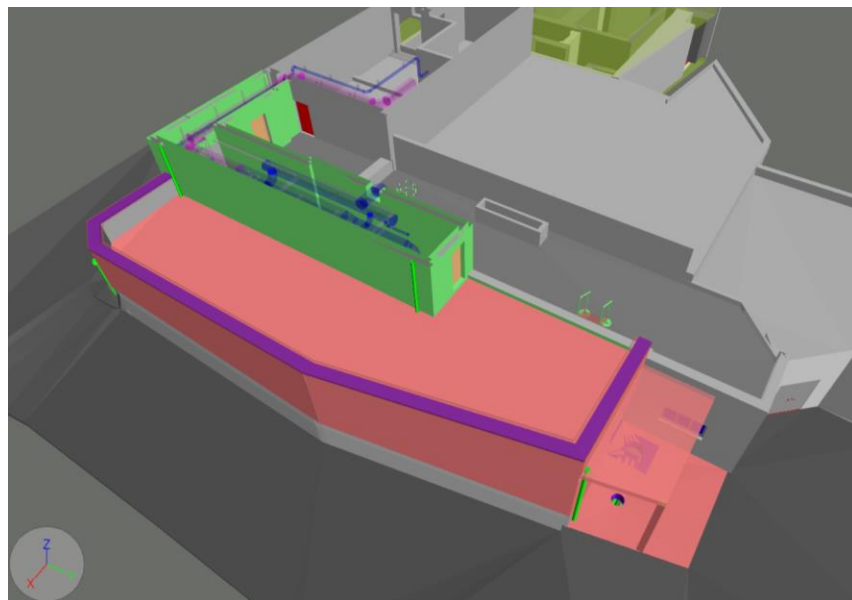
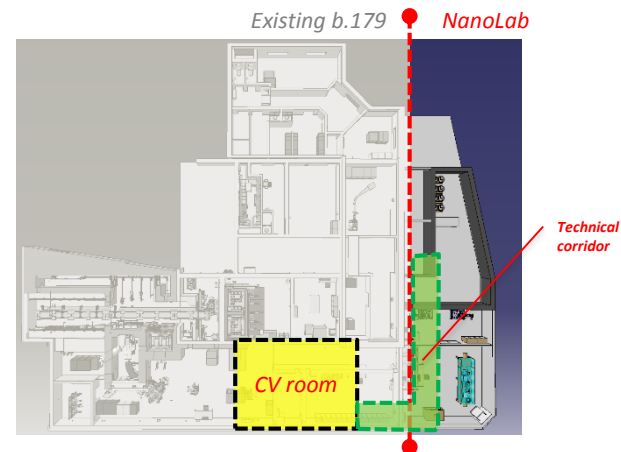
❖ First Floor (R1) -> Technical corridor

➤ Technical corridor --> house technical services (not in CE scope) to be connected to the existing infrastructure.

- Corridor minimum width $\approx 2\text{m}$ (above the extension)
- Structure : standard concrete slabs (reservations) and walls
- No false ceiling required. Technical services (not in CE scope) are fixed on walls or suspended and equipment stand on slab
- Coating finishes : anti-dust coating + walls/floor/ceiling painting.

➤ External arrangement features :

- Shall be protected with a lightweight metallic roof (3,8m free height to be kept)
- Coating finishes : smooth concrete slab w/o step towards internal corridor (for transport reasons)
- Existing EL pull chamber shall be preserved
- Staircase btw roofs and ladders + water retention on labs' roof



2. Description of the project – definition of the work

❖ The civil engineering contractor(s) is responsible for the works:

- Installation of the worksite -> §6.1;
- Earthworks and backfilling -> §6.2;
- Demolition and dismantling (existing doors) -> §6.3;
- Pipes and drainage networks -> §6.4, §6.15;
- Asphalt surfacing, kerbs and road markings -> §6.5;
- Reinforced concrete for foundations, invert, walls, slabs + cores on b.179 -> §6.6;
- Waterproofing and insulation system, including rainwater retention device -> §6.7;
- Facades and insulation system -> §6.8;
- Supply / Installation external metal doors and joinery -> §6.9, §6.13;
- Plaster coating (walls / ceiling) and paint works on ceiling (final) walls (1st layer) -> §6.10, §6.11;
- Plaster-boarding (also EI90 fire resistant) and false ceiling -> §6.10;
- Paint works (walls) and resin floor covering -> §6.11, §6.12;
- Supply / Installation of internal metal doors -> §6.9;
- Industrial partition (airlock and internal wall) and doors -> §6.10;
- fire breaker filling on reservations -> §6.14.


Phase 1 : Cat.1 / WoCS + §4.2 TS

- ONLY Civil Engineering WORKS on site
- Technical corridor FINAL HANDOVER
- Ground floor air & water-tight + PARTIAL HANDOVER

Phase 2 : Cat2 / WoCS + §4.2 TS

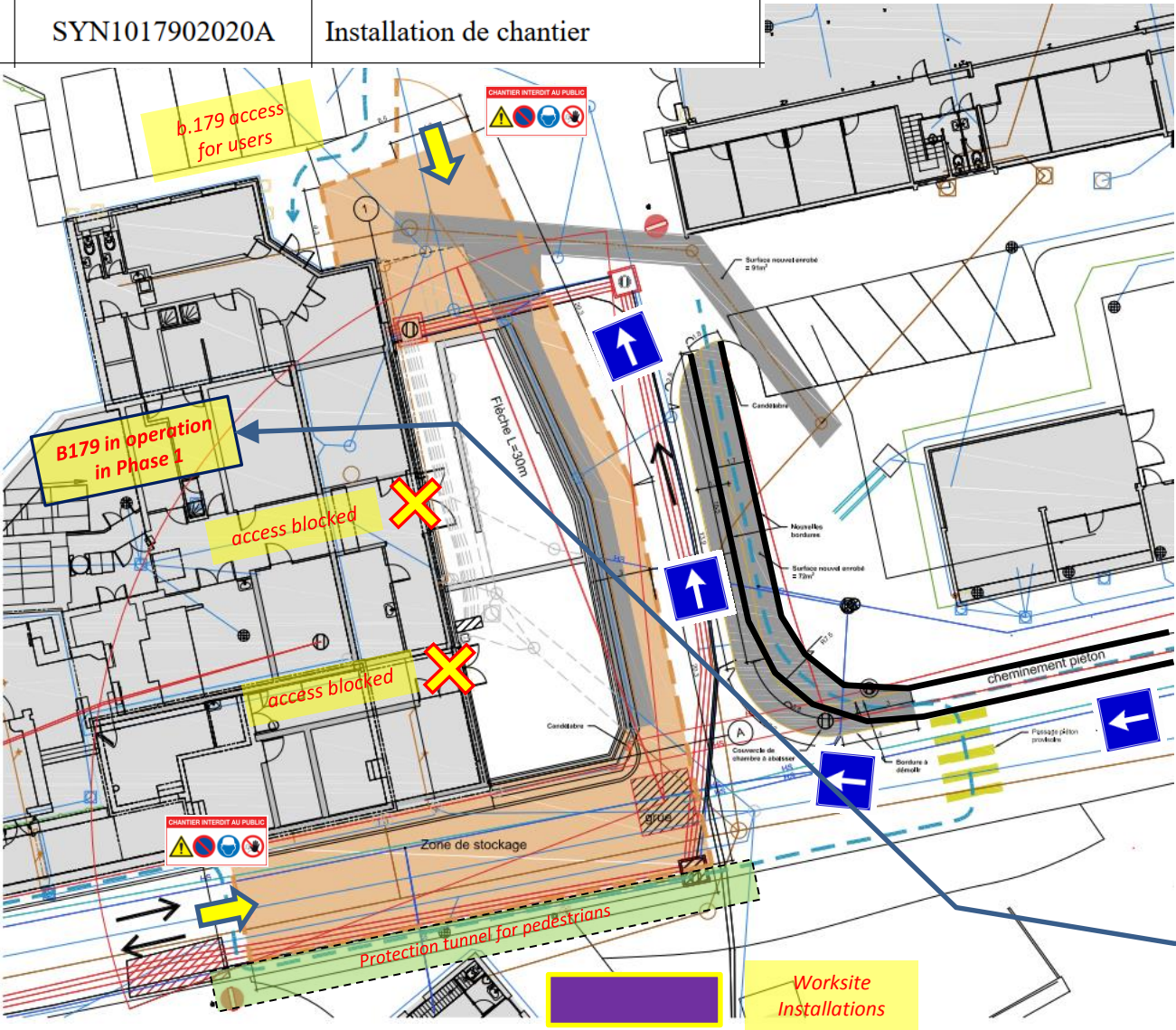
- Works in COORDINATION with others Contractors
- Ground floor FINAL HANDOVER

❖ Responsibility for design §3.5 :

- CIVIL ENGINEER :  Design, Execution and as-built drawings for structural elements ;
- CONTRACTOR(S) : Execution and as-built drawings for the finishing work, in particular the details of façades, waterproofing, insulation, minor metalwork, false ceiling, industrial partitions, doors, etc.,

2. Description of the project – worksite conditions (1)

0202	SYN1017902020A	Installation de chantier
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Phase 1 : Cat.1 / WoCS + §4.2 TS

Légende

Zone de chantier

Nouvel enrobé

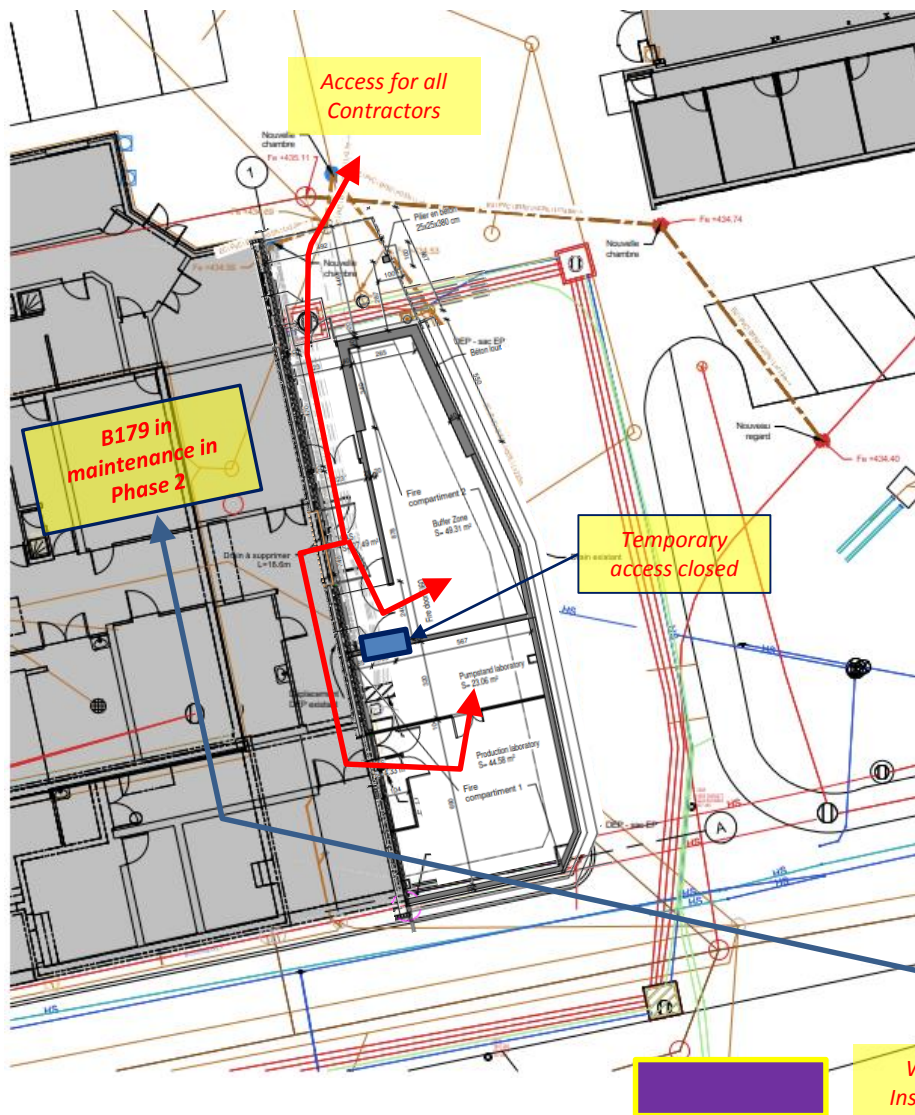
Bâtiment existant

As indicated in §5.2 + §6.1 of TS

- Storage areas (material/tool)
- Road signage (outside)
- Worksite barracks and toilets
- Worksite fences, access and signage
- Protection tunnel for pedestrians (outside)
- Water/waste material treatment
- Existing blds/equipment protection
- Temporary structures and lifting device
- ...

- Transport issues (inside building or outside through material door) ;
 - Coordination with CE works (punctual interruption of the worksite activities).





Phase 2 : Cat.2 / WoCS + §4.2 TS

[illegible]

DRAFT for discussion

- Coordination with others Contractors to be considered
- Worksite installations (lighting/ventilation) allowing execution of Phase 2 activities
- After closing of temporary access, Contractor's personnel shall pass through existing building corridor (no waste / no dust are accepted)

❖ Cf. § 3.3 of Technical Specification (before start of Works) - abstract

- Plan d'Assurance Qualité (PAQ) incluant entre autres
 - La description complète et claire des méthodes de travail et des moyens de protection qui seront mis en œuvre, ainsi que du matériel et des effectifs;
 - Les fiches techniques des produits à mettre en œuvre et fiches de données sécurité ;
 - Fiche de contrôle qualité fond de fouille, béton (armature, coffrage, bétonnage cure des bétons), étanchéité toiture, portes et obturations coupe-feu ;
 - La liste des sous-traitants et fournisseurs ;
 - La gestion des non conformités ;
 - La liste des contrôles qualités (Points de contrôle, Points d'arrêt) ;
 - Le plan de gestion des déchets de chantier selon la SIA 430 ;
 - Le plan de gestion des eaux de chantier selon la SIA 431.

necessary for audit purposes and made available to CERN and relevant Swiss control authorities (police feu -> attestations AEAI, ORaP, etc..)

❖ Administrative documents

- Tender Form + Annexes
- Form of Contract

❖ Technical documents

- Description and Quantity Estimate (DQE)
- Technical Specification and its Annexes:
 - Annex A: Document “Working on the CERN site”
 - Annex B: Tender Drawings (structural engineer -> Synaxis)
 - Annex C: Architectural Drawings (Delta Architects)
 - Annex D: EDMS 1182826 v.7 ; Instructions for a SUSI Access Control System
 - Annex E: Work and Safety Coordination Plan (WSPC / PCTS)
 - Annex F: Permit to dig template
 - Annex G: Building 179 existing drawings

4. Key dates and time for completion

PHASE 1 :

- ❖ Key dates --> see §2.5 of the Technical Specification ;
- ❖ Commencement date --> 06/01/2020 (to be confirmed by a Work Order two weeks before the actual commencement date) ;
- ❖ Time for completion --> not later than 16/10/2020.

PHASE 2 :

- ❖ Key dates --> see §2.5 of the Technical Specification ;
- ❖ Commencement date --> 22/02/2021 (to be confirmed by a Work Order two weeks before the actual commencement date) ;
- ❖ Time for completion --> not later than 30/04/2021.

Thanks, questions ?