**ID** | **Task Name**                                                                 | **Duration** |
---|---|---|
1  | To Start after frozen integration design - timescales TBC                  | 0 days       |
2  | Civil Engineering Design                                                 | 4 wks        |
3  | Procurement                                                             | 90 days      |
4  | Produce Specification for works                                          | 4 wks        |
5  | Procurement request with Framework lead                                   | 2 wks        |
6  | Tender Period                                                            | 4 wks        |
7  | Tender Evaluation                                                        | 4 wks        |
8  | Tender award                                                             | 0 days       |
9  | Exchange contracts and mobilisation                                      | 4 wks        |
10 | Construction Works                                                       | 35 days      |
11 | Works Start                                                              | 0 days       |
12 | Set up site and isolate works area                                       | 1.2 wks      |
13 | Drilling and installation of transport fixtures                          | 0.4 wks      |
14 | Modifications to existing drainage                                      | 21 days      |
15 | Saw cutting                                                              | 0.4 wks      |
16 | Remove existing drainage and make good                                   | 0.4 wks      |
17 | Core out concrete                                                       | 0.8 wks      |
18 | Install drainage                                                        | 0.8 wks      |
19 | Pour concrete                                                           | 1 day        |
20 | Detector Enabling Works                                                 | 25 days      |
21 | Saw cutting                                                              | 0.4 wks      |
22 | Core out concrete                                                       | 1.2 wks      |
23 | Making good/ concrete base                                               | 0.4 wks      |
24 | Clear site and demobilise                                               | 0.8 wks      |
25 | Completion                                                              | 0 days       |

**Assumptions:**
- Initial programme is not situated in terms of dates as frozen integration design will be required. Programme begins at that point.
- No account has been taken of other internal CERN work required eg transportation studies, radiation protection work, access works, installation of detector or supply of services.
- Estimate based on stated trench geometry
- Allowance made for modifications to drainage. This assumes removal of existing transverse drain at base of tunnel and replacement with two new transverse drains
- It is assumed no significant radiation protection measures are required as part of the works.
- Based on 2 No. 8 hour working shifts per day, 6 days/ week.
- Transportation of materials is assumed to be handled by others without major constraints on works.
- Procurement assumed to be via framework contracts
- Further study required for: tunnel structural analysis, existing drainage condition, confirmation of depth of drainage membrane.