Project: Proposed Replacement of ACM (Asbestos Containing Materials) Slates to Herbertstown National School, located In Herbertstown, Co. Limerick and Associated Works

Client: Herbertstown National School Board of Management

Job No.: 25FPC027

Current Issue: T1

Current Stage: Tender

No. of Pages: 17

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| **T1** | First Issue | 07/10/2025 | M. Ryan | B. Browne |
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TENDER ISSUE

Designer's Assessment of Safety during Construction and Maintenance taking account of the Principles of Prevention. This assessment has been carried out as recommended in the ACEI / IEI / RIAI publication "Designing for Safety". Before reading this assessment you are advised to refer to that document and in particular, but not exclusively to, paragraphs 19-22 inclusive)

Tick (X) the appropriate Yes, TBC or No box below, and if a hazard exists describe it in the left-hand column below and describe the decisions and actions to be taken in the right hand column below. If in doubt tick TBC for the hazard until such time as it has been established, beyond doubt, whether the hazard exists or not.

Fortress Planning

## Design Risk Assessment

| No | Key Hazards<br>Identified Where a heading below includes a number in brackets, please refer to the corresponding advice note at the end of this document. Eg: | YES<br>Applies to this project | To be confirmed | NO<br>N/A for this project | Decisions/Action<br>List the decisions and actions to be taken to eliminate, reduce, evaluate, combat, adapt etc, the risks present at this stage. (See also the Principles of Prevention copied in at the end of this document) | |
|---|---|---|---|---|---|---|
| **1** | **Burial Under Earthfall:** | | | X | **Actions to be taken to reduce the risk:-** | **Action By:-** |
| 1.1 | Designer not aware of any risk. | | | | | N/A |
| **2** | **Engulfment in Swampland:** (15)<br>Architectural designer not aware of any risk. | | | X | | N/A |
| **3** | **Falling From a Height:** (15) | X | | | | |
| 3.1 | 3.1.1 During the course of the works there is a risk of falling from a height e.g. scaffold, works on or near edges of roofs. Works requiring use of ladder of scaffold etc.<br><br>3.1.2 There is a risk of temporary structures collapsing or materials and tools falling or dropping onto people below.<br><br>3.1.3 There is a risk of working at high levels in high winds.<br><br>See 8. Work on or near a Fragile roof<br><br>See 26. After Build Maintenance | | | | Example of actions to be taken to reduce the risk:- Suitable edge protection, safety harness equipment and safe working platforms should be provided to eliminate the risk. Safe access to roof perimeters is to be provided during the course of the construction works.<br><br>Limit for ladders during construction, cleaning and maintenance operations eg:<br><br>• Sequence work to provide hard standing for mobile access equipment.<br><br>• On completion the surrounding perimeter is to provide a suitable hard standing for mobile access equipment for cleaning and maintenance purposes. | Main Contractor / PSCS |
| **4** | **Unstable Ground:** (15) | | | X | | |
| 4.1 | Designer not aware of any risk. | | | | | N/A |
| **5** | **Underground Services:** (12, 13) | | | X | | N/A |
| 5.1 | Designer not aware of any risk. | | | | | N/A |
| **6** | **Undermining Existing Foundations:** (15) | | | X | | N/A |
| 6.1 | 6.1.1 The risk of undermining foundations is considered to be low.<br><br>See 7. Works or Near Existing Boundaries / Structures<br><br>See 14. Demolition | | | | | Main Contractor / PSCS |

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| **7** | **Work on or Near Existing Boundaries / Structures:** (15) | X | | | | |
| 7.1 | 7.1.1 Works are required adjacent to existing structures:-<br><br>7.1.2 Injury as a result of collapse of structures during works.<br><br>See 14. Demolition | | | | Example of actions to be taken to reduce the risk:-<br><br>Any buttress, temporary support or temporary structure to be designed, installed and maintained to withstand any foreseeable loads which may be imposed on it, and must only be used for the purposes for which it is so designed, installed and maintained.<br><br>No part of a structure shall be so loaded as to render it unsafe to any person A detailed method statement outlining the works proposals including temporary works proposals should be prepared.<br><br>Dust and noise reduction techniques, such as silencers, should be used on equipment and plant. Normal good housekeeping procedures should prevail during the operation in particular, holding skips and other containers should be kept moistened and/or covered. The construction area should be cleaned on a daily basis or more frequently if required, to maintain an environment as free from dust as possible.<br><br>Construction workers should wear protective clothing, which should be removed before leaving the construction zone. | Main Contractor / PSCS |
| **8** | **Work on or Near Fragile Roof:** (16) | X | | | | |
| 8.1 | 8.1.1 Fall through the roof can result in serious injury or death.<br><br>8.1.2 Falling from height. Even if the roof doesn't break immediately, losing balance near edges can cause falls.<br><br>8.1.3 Structural collapse. Fragile roofs may give way | | | | Conduct a risk assessment before work.<br><br>Use safety harnesses, edge protection, or scaffolding.<br><br>Do not walk on fragile sections unless properly supported (e.g., using crawl boards).<br><br>Clearly signpost and barricade hazardous areas. | Main Contractor / PSCS |

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| | unpredictably due to rot, age, or poor support.<br><br>8.1.4 Cuts and abrasions. Broken roof sheets (e.g., asbestos cement) can cause lacerations.<br><br>8.1.5 Exposure to hazardous materials. The existing roof contains asbestos which causes respiratory risks if damaged.<br><br>See 3. Falling from a height<br><br>See 26. After Build Maintenance | | | | Train workers in fragile roof awareness.<br><br>Remove all ACM-containing slates, ensuring asbestos is handled by licensed contractors following all regulations. | |
| **9** | **Installation of Scaffolding:** (17) | X | | | | |
| 9.1 | 9.1.1 The proposed developments require access up to 2 storeys and the use of scaffold is envisaged. Example of Hazard (non exhaustive):-<br><br>9.1.2 Risk of death or injury from falling from a height without suitable guarding while working form a height.<br><br>9.1.3 Risk of collapse of scaffold or access ladders due to poor supervision, maintenance or incorrect/insufficient fixings.<br><br>9.1.4 There is a potential risk of collapse due to high winds.<br><br>See 3. Falling from a height | | | | Example of actions to be taken to reduce the risk:-<br><br>Scaffolds should be designed, erected, altered and dismantled only by competent people and the work should always be carried out under the direction of a competent supervisor.<br><br>Contractor to keep records of inspection, maintenance, repair or modification that meet the requirements.<br><br>Employ off site assembled components for items such as mechanical ductwork and consider prefabrication generally so that subassemblies can be erected at ground level and then safely lifted into place to reduce the requirement or duration for scaffolding and working at height.<br><br>Reduce the need for working and maintenance at height by ensuring an adequate base to allow safe working of mechanical lifting plant. | Main Contractor / PSCS |

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| **10** | **Collective Protection Needed:** | X | | | | |
| 10.1 | 10.1.1 The works may require temporary works i.e. formwork, false work, shoring, temp bracing, temp underpinning, access scaffolding, crane, protection of vehicular and pedestrian traffic etc. Example of Hazard (non exhaustive):-<br><br>10.1.2 Poor design leading to failure of temporary works leading to injury or death.<br><br>10.1.3 Pupils, staff and visitors may be at risk from Contractor's activities on existing entrance road and footpath to the school main entrance as well as around the existing buildings confining the area of works and crane set up. | | | | Example of actions to be taken to reduce the risk:-<br><br>A professional engineer should be employed to act as the "designer of temporary works" and be responsible for the design and the preparation of the drawings for the temporary works.<br><br>During the erection or dismantling ensure that partially assembled structures or components are supported to safely withstand any loads likely to be imposed on them.<br><br>Workers delivering materials to or working on a temporary decking or formwork must be aware of the safe carrying capacity of the surface and of precautions necessary to prevent overloading.<br><br>Contractor to maintain clean and safe footpaths around the site and erect site hoardings as appropriate. | Main Contractor / PSCS / PSCS |
| **11** | **Chemicals:** (18, 19, 20, 21, 22, 23) | | X | | | |
| 11.1 | 11.1.1 The works may require operations that involve chemical or biological substances.<br><br>11.1.2 Use of solvents, adhesives, sealants, foams, epoxy resin and acids etc. during works.<br><br>11.1.3 Pouring of concrete and use of lime mortars.<br><br>11.1.4 Waterborne disease, mould growth, bird droppings<br><br>11.1.5 Physical contact or inhalation of gases, noxious fumes, dust and vapours may lead to injury. | | | | Example of actions to be taken to reduce the risk:-<br><br>Materials and substances to used strictly in accordance with the manufacturers recommendations and instructions.<br><br>Water based paints and varnishes to be used internally.<br><br>Ensure adequate ventilation to works within confined spaces. Ensure the use of PPE at all times.<br><br>On the basis of site investigation identify the presence of any hazardous materials. | Main Contractor / PSCS |

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| | See 13. Asbestos<br><br>See 15. Lead<br><br>See 17. Biological<br><br>See 35. Carcinogens | | | | | |
| **12** | **Confined Spaces:** (20) | | | X | | |
| 12.1 | Designer not aware of any risk. | | | | | N/A |
| **13** | **Asbestos:** (18) | X | | | | |
| 13.1 | This hazard relates to existing roof where the ACM Slates are being replaced.<br><br>13.1.1 Inhalation of asbestos fibres. The primary hazard. Breathing in asbestos fibres can cause serious lung diseases, including asbestosis, lung cancer, and mesothelioma.<br><br>Risk increases when slates are broken, drilled, or cut.<br><br>13.1.2 Fragility and fall risk. Asbestos cement slates are brittle, making walking on them dangerous.<br><br>Can crack under weight, leading to falls or injuries.<br><br>13.1.3 Cuts and abrasions. Broken slates have sharp edges, which can cause physical injury.<br><br>13.1.4 Environmental contamination. Improper handling can release fibres into the surrounding environment, creating a risk for others on site.<br><br>13.1.5 Hidden damage. Slates may appear intact but have internal fractures, increasing the risk of accidental fibre release.<br><br>13.1.6 Legal and regulatory risks. Asbestos is a controlled material. Unauthorized removal or disturbance can result in legal penalties and non-compliance with safety regulations. | | | | Conduct a risk assessment before work.<br><br>Use safety harnesses, edge protection, or scaffolding.<br><br>Do not walk on fragile sections unless properly supported (e.g., using crawl boards).<br><br>Clearly signpost and barricade hazardous areas.<br><br>Train workers in fragile roof awareness.<br><br>Remove any ACM-containing slates before extension building works reach the wall plate, ensuring asbestos is handled by licensed contractors following all regulations. | Main Contractor / PSCS |

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| **14** | **Demolition:** (21) | X | | | | |
| 14.1 | 14.1.1 Demolition is restricted to removal of ACM Slates, battens and membrane<br><br>14.1.2 Hidden/Unknown Materials. Presence of asbestos-containing materials (ACMs) identified (e.g., slates, corrugated sheets).<br><br>See 13. Asbestos<br><br>Lead paint, contaminated timbers, or hazardous adhesives.<br><br>See 15. Lead<br><br>14.1.3 Falls from Height. Even on a single-storey structure, workers may be exposed to falls when removing roof coverings.<br><br>14.1.4 Manual Handling & Falling Debris. Risk of injury from handling heavy/deteriorated materials.<br><br>Falling roof timbers, masonry, or slates during demolition.<br><br>14.1.5 Dust and Airborne Particles. Silica dust from masonry.<br><br>Asbestos or other hazardous fibres if present.<br><br>See 13. Asbestos<br><br>14.1.6 Services Hazards. Unidentified or live utilities (electricity, water) concealed within the existing roof.<br><br>14.1.7 Fire Risk. If hot works (cutting, burning) are used during demolition.<br><br>14.1.8 Noise and Vibration. May impact not only workers but also the stability of the protected structure and surrounding environment. | | | | Structural instability<br>- Structural survey before works.<br>- Sequence demolition carefully to maintain stability.<br>- Competent engineer to oversee.<br><br>Damage to fabric<br>- Works supervised by competent professional.<br>- Use hand tools where possible (limit mechanical impact).<br>- Protect adjacent walls, windows, and finishes with coverings.<br>- Monitor vibration if machinery used.<br><br>Hidden/unknown hazardous materials<br>- Licensed contractors to remove ACMs before works.<br>- Safe handling & disposal in line with regulations.<br>- PPE including RPE where required.<br><br>Falls from height<br>- Use scaffolding, edge protection, and fall arrest systems.<br>- Exclusion zones below work areas.<br>- Safe access platforms instead of ladders where possible<br><br>Manual handling & falling debris<br>- Mechanical aids for lifting heavy materials.<br>- Team lifting for awkward loads.<br>- Exclusion zones beneath demolition areas.<br>- Hard hats and protective footwear mandatory.<br><br>Dust and airborne particles<br>- Wet suppression or local extraction for masonry dust. | Main Contractor / PSCS |

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| | | | | | - RPE (Respiratory Protective Equipment) as appropriate.<br>- Stop work if asbestos suspected until specialist assessment complete<br><br>Unidentified live services<br>- Survey and isolate all services before work begins.<br>- Lock-off/tag-out procedures.<br>- Verify with testing equipment prior to demolition.<br><br>Fire risk from hot works<br>- Hot works permit system.<br>- Fire extinguishers on site.<br>- No combustible material left unprotected near works.<br><br>Confined/restricted workspace<br>- Pre-plan material removal routes.<br>- Limit worker numbers in tight spaces.<br>- Maintain clear escape routes at all times.<br><br>Noise & vibration<br>- Low-impact demolition techniques preferred.<br>- Hearing protection as required. | |
| **15** | **Lead:** (21) | | | X | | |
| 15.1 | Designer not aware of any risk. | | | | | N/A |
| **16** | **Ionising Radiation:** (25) | | | X | | |
| 16.1 | Designer not aware of any risk. | | | | | N/A |
| **17** | **Biological:** (18, 19, 20, 21, 22, 23) | | X | | | |
| 17.1 | 17.1.1 It has been assumed for the purposes of preparing design solutions that no ground contamination may be anticipated.<br><br>Example of Hazard (non exhaustive):- | | | | Example of actions to be taken to reduce the risk:-<br><br>On the basis of site investigations identify the presence of any hazardous materials and report findings and recommendations to PSDP. | Main Contractor / PSCS |

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| | Inflammatory skin condition caused by exposure to irritants contained in industrial materials.<br><br>See 11, Chemical<br><br>See 13. Asbestos<br><br>See 15. Lead<br><br>See 35. Carcinogens | | | | | |
| **18** | **Overhead Lines:** (13, 14, 26) | | X | | | |
| 18.1 | Designer not aware of any risk. | | | | | N/A |
| **19** | **Drowning:** (27) | | | X | | |
| 19.1 | Designer not aware of any risk. | | | | | N/A |
| **20** | **Underground Works:** (27) | | | X | | |
| 20.1 | Designer not aware of any risk. | | | | | N/A |
| **21** | **Explosives:** (27) | | | X | | |
| 21.1 | Designer not aware of any risk. | | | | | N/A |
| **22** | **Compressed Air Systems / Divers:** (27) | | | X | | |
| 22.1 | Designer not aware of any risk. | | | | | N/A |
| **23** | **Heavy Steel Structures:** (28) | | | X | | |
| 23.1 | Designer not aware of any risk. | | | | | N/A |
| **24** | **Precast Concrete Frames:** (28) | | | X | | |
| 24.1 | Designer not aware of any risk. | | | | | N/A |
| **25** | **Heavy Prefabricated Plant:** (28) | | | X | | |
| 25.1 | Designer not aware of any risk. | | | | | N/A |
| **26** | **After Build Maintenance:** | X | | | | |
| 26.1 | 26.1.1 Elevation treatments that are likely to require maintenance include roof.<br><br>Example of Hazard (non exhaustive):-<br><br>26.1.2 Risk of falling when working at height, cleaning, maintenance and repair, access and falling objects. | | | | Example of actions to be taken to reduce the risk:-<br><br>Finish of materials chosen are durable and should not cause excessive staining. Only periodic maintenance is anticipated.<br><br>A safe access strategy to be devised for routine maintenance and replacement of elements.<br><br>Safe and level surfaces are to be provided to allow mobile plant to allow for the safe cleaning to the entire perimeter. | Main Contractor / PSCS |

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| | 26.1.3 Hazardous substances, manmade mineral fibres, dust etc.<br><br>26.1.4 Use of toxic solvents, cleaning solutions, paints, sealants and adhesives.<br><br>See 3. Falling from a height. | | | | | |
| **27** | **Roof Access:** | X | | | | |
| 27.1 | 27.1.1 Roof Access is not envisaged on a general day to day basis, however access for maintenance and repair and periodic inspection will be required.<br><br>Example of Hazard (non exhaustive):-<br><br>27.1.2 Risk of falling when working or maintaining roofs and plant at height.<br><br>See 3. Falling from a height. | | | | Example of actions to be taken to reduce the risk:-<br><br>Safe access to roofs is proposed via MEWP or scaffolding.<br><br>Finish of roofing material chosen is durable and only periodic maintenance and/or repair is anticipated.<br><br>Safe and level surfaces are to be provided to allow mobile plant to allow for the safe cleaning to the entire perimeter. | Main Contractor / PSCS |
| **28** | **Window Cleaning:** | | | X | | |
| 28.1 | Designer not aware of any risk. | | | | | N/A |
| **29** | **General Cleaning:** | X | | | | |
| 29.1 | 29.1.1 Outside of day-to-day general cleaning, periodic cleaning of the building interior and other external elements (outside of general use areas) will be required such as high level walls, etc.<br><br>Example of Hazard:<br><br>29.1.2 Injury as a result of falling from a height.<br><br>See 26. After Build Maintenance | | | | Example of actions to be taken to reduce the risk:-<br><br>A method statement for cleaning and regular maintenance should be prepared.<br><br>Maintenance and cleaning at high level around the external perimeter to be undertaken using extended cleaning pole.<br><br>Safe and level surfaces are to be provided to allow for the safe cleaning to the entire perimeter. | Main Contractor / PSCS |
| **30** | **Statutory Inspections:** | X | | | | |
| 30.1 | 30.1.1 Statutory inspections may be undertaken as part of the construction process or as part of an inspection process at a later date.<br><br>Example of Hazard (non exhaustive):-<br><br>30.1.2 Falling from heights. | | | | Example of actions to be taken to reduce the risk:-<br><br>Those unfamiliar with the building should be accompanied at all times by someone familiar with the construction process, the building layout the plant and services installed and associated risks.<br><br>Refer to all relevant safety files prior to inspections. | Main Contractor / PSCS |

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| **31** | **Plant Maintenance:** | | | X | | |
| 31.1 | Designer not aware of any risk. | | | | | N/A |
| **32** | **Contaminated ground:** | | | X | | |
| 32.1 | Designer not aware of any risk. | | | | | N/A |
| **33** | **Site Restrictions**: (2, 3, 4, 5, 6) | X | | | | |
| 33.1 | 33.1.1 Note some Specific site restrictions apply and are indicated in the preliminary Health and Safety Plan and the Works Requirements Documents. Note the site will be active during construction works so risk is high.<br><br>Example of Hazard (non exhaustive):-<br><br>33.1.2 Injuries occurring as a result of poorly secured site / increased traffic movements both on site and in the immediate vicinity.<br><br>33.1.3 Site operations generally including lifting of heavy goods, excavations, general deliveries, storage of materials, etc. | | | | Example of actions to be taken to reduce the risk:-<br><br>The PSCS is to liaise with the PSDP and submit a detail Method statement and health and safety plan regarding proposal to comply with the Site Restrictions.<br><br>Contractor to prevent unauthorised access and ensure safe public pedestrian routes for general and emergency access as well as agree set down locations.<br><br>Delivers of materials and storage to be within site area and be safely cordoned off.<br><br>Liaise with ESB regarding the protection to be required on site.<br><br>Apply exclusion zones around cranes and heavy plant. | Main Contractor / PSCS |
| **34** | **Other Work Activities:** (7, 8, 9, 10, 11) | X | | | | |
| 34.1 | 34.1.1 Injuries may occur while trying to move materials / people to work areas. Persons or plant may have to travel adjacent to excavations.<br><br>Example of Hazard (non exhaustive):-<br><br>34.1.2 Potential death or injury to construction personnel from accidents between personnel and plant machinery. | | | | Example of actions to be taken to reduce the risk:-<br><br>Contractors to take measures to ensure the safety of construction personnel.<br><br>Personnel access routes and material lift zones to be separated if possible. Clear signage of these routes to be maintained. | Main Contractor / PSCS |

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| **35** | **Carcinogens:** (22) | X | | | | |
| 35.1 | 35.1.1 Substances classified as carcinogens include zinc chromate and certain classes of bituminous substances which are used in caulking and sealants.<br><br>See 12. Chemical | | | | Example of actions to be taken to reduce the risk:-<br><br>Contractors to take measures to ensure the safety of construction personnel.<br><br>Protective clothing and masks to be provided for personnel when using materials containing substances classified as carcinogens.<br><br>Contractor to notify the Project Supervisor Design Process if any of these materials will be used on site. | Main Contractor / PSCS |
| **36** | **Other Hazards:** | X | | | | |
| 36.1 | Continuation of existing residential activities during the course of construction<br><br>36.1.1 Access to the roads adjacent the site will be shared with residents.<br><br>36.1.2 Noise, dust, emissions and vibration effects to adjoining properties occupants during construction works: Example of Hazard (non exhaustive):-<br><br>36.1.3 Regular exposure to high levels of noise causes hearing loss.<br><br>36.1.4 Dust and emissions from demolition and construction work can impact on air quality.<br><br>36.1.5 Vibration White Finger (VWF) triggered by continuous use of vibrating hand-held machinery | | | | Example of actions to be taken to reduce the risk:-<br><br>This item to be discussed as part of the contractor site inductions.<br><br>Contractor to note the “National Guidelines for the prevention of Nosocomial Invasive Aspergillosis during construction/renovation Activities”<br><br>All site personnel to be fully trained and be provided with protective clothing / equipment required.<br><br>Plan site layout–machinery and dust causing activities should be located away from adjoining properties.<br><br>It is essential to have effective dust and emission control measures in place for every dust generating activity carried out on site.<br><br>Erect effective barriers around dusty activities or the site boundary.<br><br>Contactor to seek to lower exhaust emissions from off road construction vehicles and plant used. | Main Contractor / PSCS |

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| | | | | | Effective vehicle cleaning and specific fixed wheel washing on leaving site and damping down of haul routes. All loads entering and leaving site to be covered. No site runoff of water or mud.<br><br>To avoid vibration use a mechanical vehicle e.g. mini digger rather than hand-held tools, use noise and vibration reduced tools when selecting one for purchase/hire, wear heavy duty gloves and do not use hand-held equipment for prolonged periods but stop and take a break or change work practice. | |

Items to be drawn to the attention of contractor(s): (For inclusion in Preliminary H&S Plan). List any risk that will be passed on to the Contractor and they will have to consider at Tender Stage and Construction Stage.
**Note:** Only risks that are deemed, by the Designer, to be significant and unusual, and which the Contractor cannot reasonably know about or deduce, should be drawn to the contractor's attention. Information about risks that a Contractor could be expected to routinely identify and deal with should not be included. To do otherwise could result in significant information being swamped by a mass of routine everyday information.

**Risks that the client has taken responsibility for** (at this stage)
List any risks that the Client has agreed to take responsibility for at this stage. Acceptance by client must be in writing and must accompany this document.

TENDER ISSUE

# Advice Notes

**Non-exhaustive list of parameters to be considered:**

1. State land uses for area adjoining site and on roads to the site entrance.

   Assess location of proposed site entrance in relation to existing uses and activities especially in relation to dust, noise, dangerous processes and traffic. Note access arrangements to those parts of the site which will continue to be used by the client.

2. Review working hours with Client, having regard to the adjacent land uses and buildings and note any restrictions on such hours.

3. The contractor is to install suitable hoarding and ensure site remains secure at all times.

   Site parking restrictions.

   Storage restrictions, segregated from the works.

   Cleaning regime is to be implemented on site and this will include access roads to site.

4. Impact of traffic on immediate local environment.

5. Traffic management plan for the site.

   The contractor is to take into account pedestrian traffic especially near the site entrances and feeder roads to the site.

   Highlight any schools or other heavily pedestrianised areas near the site or site entrance.

6. Separation of site traffic to (adjacent) premises must be established where possible.

   The contractor is to ensure and maintain fire vehicle, bin and delivery access to buildings adjacent to the site at all times.

   Separation of site traffic and traffic to (adjacent) premises must be established where possible. Speed limits.

   The contractor shall implement an appropriate booking in and out system for all site operatives and visitors.

   Procedures to safepass and other certification methods.

   Contractors personnel shall carry appropriate (and visible) identification at all times on site.

   The contractor shall implement a site specific Health and Safety induction procedure.

   Vehicular and personnel routes shall be separated on site especially near the access to the site.

   Review access times to the site.

7. Obtain advice from Client and include.

8. Layout of existing and new services included in drawing package. Known services to be identified with the Client and Engineer prior to commencement on site. All diverted services to be documented. Reference to complexity of project is needed.

9. Fixtures, and fittings of machinery review with Client/Services Engineers. Will Electrical terminations and data terminations be required for equipment and machinery?

10 State if new services are to be installed by services providers such as Bord Gaís, ESB, etc. as separate contract to the Client

11. To be advised by the Design Team and Client if and when other items of work activities become known.

12. Obtain advice from Client, Civil Engineer and/or Services Engineer and include here.

    Enter drawing numbers of relevant drawings if any.

13. Obtain advice from Client, Civil Engineer and/or Services Engineer and include here.

    Enter drawings numbers of relevant drawings if any.

    If services are to be re-located prior to commencement of other works on site.

    Service Engineer to assess and advise, include advice.

14. Obtain advice from Client, Civil Engineer and/or Services Engineer and include here.

Enter drawings numbers of relevant drawings if any.

If services are to be re-located these should be re-located prior to commencement of other works on site, Services Engineer to assess and advise, include advice.

Where electrical cables are near access roads or cross (site) traffic routes, and external roads an assessment is to be made of the design to establish if this risk can be eliminated or reduced.

Where this cannot be eliminated protective measures must be put in place at the outset of the contract, Services Engineer to assess and advise, include advise.

15. Works involving particular risks, which would be appropriate to specify in the Preliminary Safety and Health Plan are:

- Items 1 & 2 of the Schedule 1 where the existence of a particular risk would not be evident and reasonably deducible from drawings or other support documentation to a competent Project Supervisor for Construction Process.
- Items 3 to 10 of Schedule 1 where such risks are reasonably foreseeable by the Project Supervisor Design Stage.

**Non-Exhaustive List of Work involving particular risks to the safety and health of persons at work**

1. Work which puts persons at work at risk of burial under earthfalls, engulfment in swampland or falling from a height, where the risk is particularly aggravated by the nature of the work or processes used or by the environment at the place of work or site.
2. Work which puts persons at work at risk from chemical or biological substances constituting a particular danger to the safety and health of such persons or involving a legal requirement for health monitoring.
3. Work with ionising radiation requiring the designation of controlled or supervised areas as defined in Article 20 of Directive 80/836/Euratom.
4. Work near high voltage power lines.
5. Work exposing persons at work to the risk of drowning.
6. Work on wells, underground earthworks and tunnels.
7. Work carried out by divers at work having a system of air supply.
8. Work carried out in a caisson with a compressed-air atmosphere.
9. Work involving the use of explosives.
10. Work involving the assembly or dismantling of heavy prefabricated components.

In preparing this section of the Preliminary Safety and Health Plan ensure full consultation with the Structural, Civil and Services Engineers and Temporary Works Designer and include their advice where relevant.

16. Project Supervisor for Construction Stage is to assess risk already outlined for existing fragile roofing materials and more specifically for roof lights if they exist.

17. The installation of high level services at all levels requires extreme caution and care including all scaffolding, etc.

High level Systems should, where possible, be commissioned prior to scaffolding removal to reduce the necessity for hoists, etc. Method statement required.

The use of collective protective measures such as nets and mobile platforms is to be considered by the Contractor wherever possible during the erection of the works.

An assessment should be made to review if the work can be avoided or reduced, where not possible to eliminate this type of work control measures as stated above are to be requested.

18 Where friable asbestos is identified, and prior to the main renovation work continuing, the asbestos must be removed.

This in most cases, will involve employing a specialist contractor who will give 28 days notification to the HSA and will also prepare a method statement outlining the exact procedures to follow in order to remove the asbestos safely.

All data sheets must be retained for the Safety and Health file.

[For building constructed prior to the mid 1970's an inspection report by expert organisation is to be included in the Preliminary Safety and Health Plan with request to monitor the site for potential of concealed Asbestos especially with regard to insulation and services]

19. Obtain advice from the Client and include.

20. Obtain advice from the Client and include.

Obtain advice from the Services Consultants that the design of the service ducts, plant rooms is reviewed and assessed and that sufficient space is provided for installation, commissioning and maintenance.

21. Lead paint has not been used in significant quantities since the mid 1970s.

    Where disturbed during construction or accessible to children after completion, lead should be removed at the earliest possible time during construction. Lead content in paint to be assessed, if applicable, and included in the Preliminary Safety and Health Plan.

22. Substances classified as carcinogens include zinc chromate, and certain classes of bituminous substances, which are used in caulking or sealants.

    [Obtain advice from the Design Team and Client. If no advice is received state that the Project Supervisor Design Process has not been notified by the Design Team or Client of any materials that may present an exceptional hazard or risk. No R45/R49 substances specified. Note: fire-stopping and cavity barriers executed in mineral fibre quilts and batts will be used to be non-shed variety and where cut suitable masks to be used and gloves and other site personnel to be provided with suitable protection where working near works involving putting up of batts and quilts.

23. These are a component of many coatings, sealant and foams, particularly of "two pack" coatings or urethanes.

    Obtain advice from the Design Team and Client. If no advice received state that the Project Supervisor Design Process has not been notified by the Design Team or Client of any materials that present an exceptional hazard or risk. In case of use, all people involved must be fully trained in the use of same.

24. Obtain advice from the Design Team and Client. If no advice received state that the Project Supervisor Design Process has not been notified by the Design Team or Client of any materials that present an exceptional hazard or risk. No such substances are to be used by the Contractor unless no equivalent alternative exist. In case of use, all people involved must be fully trained in the use of same.

25. Are ionisation smoke detectors to be installed throughout the building. Obtain advice from Services Engineers and Client of any equipment to be installed

    Ionising radiation is also used in airport and other security systems where property or people are scanned.

26. Obtain advice from Client, Civil Engineer and/or Services Engineer and include here.

    Enter drawing number of relevant drawings if any.

    If services are to be re-located these should be re-located prior to commencement of other works on site or at the earliest possible time. Services Engineer to assess and advise, include advise.

    Where electrical overhead powerlines are near access roads or cross (site) traffic routes, an assessment is to be made of the design if this risk can be eliminated or reduced, where this cannot be eliminated protective measures must be put in place at the outset of the contract, Services Engineer to assess and advise, include advice.

27. Obtain advice from Client, Civil Engineer and Services Engineers and include.

    Ponds, rivers, culverts shown on Civil Engineering drawing number(s) and included in Appendix B.

    Obtain advice from Client, Civil Engineer and Services Engineers on each specified topic and include.

28. Fabrication, delivery and erection of structural steelwork and precast concrete panels should be the subject of a detailed method statement from the Main Contractor and Temporary Work Designer to be lodged with the Project Supervisor Construction Stage and the Project Supervisors Design Process prior to commencement.

    Where boilers, Air Handling Units and associated plant are to be lifted into high level plant rooms, a Method statement should be required. The M & E contractor is to advise the Project Supervisor Construction Stage on this prior to the construction stage of the project.

**The Principles of Prevention:**

Regulation 15(1) of S.I. No. 291 of 2013 states that all designers must take account of the General Principles of Prevention which are contained in Schedule 3 to the Safety, Health and Welfare at Work Act 2005. They are as follows:

a) The avoidance of risks.
b) The evaluation of unavoidable risks.
c) The combating of risks at source.
d) The adaptation of work to the individual, especially as regards the design of places of work, the choice of work equipment and the choice of systems of work with a view, in particular to alleviating monotonous work, and work at a predetermined work rate and to reducing their effect on health.
e) The adaptation of the place of work to technical progress.
f) The replacement of dangerous articles, substances or systems of work by non-dangerous or less dangerous articles, substances or systems of work.
g) The development of an adequate prevention policy in relation to safety, health and welfare at work which takes account of technology, organisation of work, working conditions, social factors and the influence of factors related to the working environment.
h) The giving to collective protective measures priority over individual protective measures.
i) The giving of appropriate training and instructions to employees.

It should be noted that:

- Only risks that can reasonably be foreseen at design stage can be assessed.
- Risks to those building and to those who might be affected by this work (eg: members of the public) must be considered. Risks during construction, and subsequent maintenance or repairs must be considered.
- Risk assessment may be simple or elaborate depending on the nature of the project and the risk in question. Conventions, generally taken, define a “hazard” as a condition or event with the potential to cause harm, and define a “risk” as the probability (P) that harm from a particular hazard will occur, combined with the likely severity (S) of the harm. R = S x P. Note: it is accepted that this is a very subjective area where good judgement counts more than rigid formulae.
- As the project proceeds, designers need to assess the design and the materials to be used, to establish whether a risk is being introduced and to consider whether this risk can be removed or minimised.