"LINDEN WESTERN

SITE FIRE SAFETY PLAN

Fire Risk Category: High Risk Environment ☒ Low Risk Environment ☐

CONTRACT:	**NRR**
ADDRESS:	Radstock Regeneration Scheme Area 3 Off Frome Road Radstock BA3 3PT (ST 690547)
START DATE:	**Aug / Sept 2015**
SITE MANAGER:	**Simon Foy**
PREPARED BY:	**Simon Foy**
DATE:	**1/8/15**
REVISON NO.	**001**

What to consider when completing Section 4 - Fire Safety Risk Assessment

1. Fire Hazards

Fire starts when heat (source of ignition) comes into contact with fuel (anything that burns), and oxygen (air). **You need to keep sources of ignition and fuel apart.**

How could a fire start?
Think about heaters, lighting, naked flames, electrical equipment, hot processes such as welding, grinding, cigarettes, matches and anything else that gets very hot or could cause sparks.

What could burn?
Packaging, rubbish and furniture could all burn, just like the more obvious fuels such as petrol, lpg, paint, varnish and white spirit. Also think about wood, paper, plastic, rubber and foam – what is the fire rating of materials being bought onto the site will some burn more easily if so which ones?

What could trigger an explosion?
Gas mains, dust, oxygen enriched chambers, oxygen cylinders, LPG, highly flammable gases, electrical substations, high voltage electric cables etc.

2. People at Risk

Everyone is at risk if there is a fire. Think whether the risk is greater for some because of when or where they work, such as persons working in confined spaces, next to electrical distribution works, timber frame buildings, multi-storey buildings, using highly flammable materials, undertaking hot works etc. Also consider those who are not at work but may be at risk e.g. partial occupation of buildings, visitors, persons working or living in adjacent dwellings, children or others who may be especially vulnerable, persons who may be called in to extinguish any fire.

3. Evaluate and ACT

Firstly think about what you have found Steps 1 & 2 above. What are the risks of a fire starting and what are the risks to people in the building or nearby? You should ensure that:

- you have kept fuel and heat / sparks apart as far as reasonably practicable
- nothing is available to use should someone try to start a fire deliberately i.e. remove / secure any fuel that an arsonist could use, secure your site to prevent entry or to reduce the spread of fire.
- there is a process to ensure everyone is made aware should a fire occur
- there is someone appointed to take control if a fire should occur
- persons are appointed to make sure everyone is out of the building
- persons have been trained in the use of any fire fighting equipment to use if necessary to preserve life
- a sufficient number of escape routes are available and clearly signed
- emergency lighting is available as necessary i.e. night time work or where low illumination possible
- maintenance of all alarms, equipment and systems to assist persons escape in the event of fire
- monitoring is undertaken regularly to identify any defects or unsafe conditions

4. Record, Plan and Train

All findings and controls should be recorded in this fire safety plan.
Emergency Plans should have been produced in what to do in the event of fire
Staff should be informed and trained and practice drills planned and recorded as they are carried out
Staff should be appointed to ensure controls stated in this plan are in place, checking and reviewing control measures, monitoring and telling others of the plans and controls.
Plans should be in place to cover for persons who are absent from the workplace to undertake their role if necessary
Communication with fire authority and others who may be affected by fire should be carried out regularly.

5. Review

This fire safety plan and risk assessment should be kept under regular review as the effectiveness of controls can be reduced or structural changes mean additional controls are required. A person should be nominated to be responsible for updating this fire safety plan as necessary.

If any significant changes or risk or you have to make significant changes to this plan you must tell others who may be affected and if necessary re-train staff.

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Risk Ratings

RISK RATING = Likelihood (L) x Severity (S)		HAZARD SEVERITY (S)				
		1	2	3	4	5
		Negligible Negligible injury, no absence from work	**Slight** Minor injury requiring first aid treatment	**Moderate** Injury leading to a lost time accident	**High** Involving a single persons serious injury/death	**Very High** Multiple serious injuries/death
1	**Very Unlikely** A freak combination of factors would be required for an incident / accident to result	LOW	LOW	LOW	LOW	LOW
2	**Unlikely** A rare combination of factors would be required for an incident /accident to result	LOW	LOW	LOW	MEDIUM	MEDIUM
3	**Possible** Could happen when accidental factors are present but otherwise unlikely	LOW	LOW	MEDIUM	HIGH	HIGH
4	**Likley** Not certain to happen but an additional factor may result in an incident/accident	LOW	MEDIUM	HIGH	HIGH	HIGH
5	**Very Likely** Almost inevitable that an incident / accident would result	LOW	MEDIUM	HIGH	HIGH	HIGH

LOW RISK (Score 1-6)	**May be acceptable, however, review task to see if risk can be reduced further**
MEDIUM RISK (Score 8-10)	**Task should only proceed with appropriate consultation with specialist personnel and HS&E team. Where possible the task should be refined to take account of the hazards involved or the risks should be reduced further prior to task commencement**
HIGH RISK (Score 12-25)	**Task must not proceed. It should be redfined further control measures put in place to reduce risk. The controls should be re-assessed for adequacy prior to work commencement.**

SECTION 1

1 Introduction

This Fire Safety Plan is to be completed by the project's appointed Fire Co-ordinator **before** works commence on site. It should be completed with the site specific control measures to be implemented to reduce the likelihood of injury or damage due to fire to as low as reasonably practicable.

The controls included should be in compliance with the general precautions identified in this document, the Galliford Try HS&E Standard "Fire Prevention" HS&E-STD-F01, and the Joint Code of Practice Fire Prevention on Construction Sites (Insurer's mandatory requirement). The guidance documents listed in HS&E-STD-F01 should be used to assist in the identification of hazards and controls to reduce the risks from the hazards to as low as reasonably practicable.

If this project includes timber frame erection the requirements identified in the Galliford Try Best Practice Guidance for Timber Frames HS&E-BPG-H03-101 should also be referenced.

A project specific Fire Safety Plan must be produced and the controls implemented in respect of all contracts. Where the client's own Fire Safety Plan has to be complied with as a contractual obligation i.e. M.O.D., Royal Household etc., these requirements may supersede this Fire Safety Plan. The Fire Co-ordinator should review any Fire Safety Plans provided by clients and ensure that they are suitable to ensure the safety of persons undertaking duties on behalf of Galliford Try. If there are concerns re the adequacy of client's / others fire safety plans these should be escalated with the CDMC / Business Unit Management.

The Fire Co-ordinator should wherever practical, ensure the project's programme has been prepared to achieve the early installation and operations of the permanent fire precautions. Where existing fire precautions exist, these should be maintained, protected and utilised (without compromising their integrity) wherever possible.

Further advice on the preparation of this Fire Safety Plan is available on request from your HS&E Advisor.

1.1 Core Galliford Try Fire Safety Measures

The specific controls can only be identified by risk assessment. Timber Frames and High-rise constructions sites e.g. High Risk Category projects will require additional fire precaution controls to those used in general construction areas and if considered a high risk project additional advice sought from a specialist to assist in calculating additional controls e.g. fire curtains due to radiant fire risks.

The following safety measures are identified as standard requirements only.

(a) *Heating and Cooking*

The following hierarchy of heating and cooking will apply:

Electrical Items:	Microwave oven Baby burco water heater Kettle Electric hob
Drying Rooms:	Barrel heaters are to be mounted off the floor and shielded with wire mesh
Gas:	Gas is only to be used as a last resort. **All** gas appliances are to be fitted and inspected by qualified gas fitters (registered)

(b) *Inspection Regimes*

The inspection regime for electrical items is as per the Best Practice Guidance HS&E-BPG-E01-101.

Where temporary gas installation is provided, tests should be carried out as per the installer's recommendations.

Weekly inspection of fire prevention / fire fighting / fire alarm equipment and fire escape routes is to be carried out and recorded on the Workplace Fire Inspection Log HS&E-FRM-F01-05.

(c) Hot Works
All cutting/welding and other processes where sparks/heat may be generated or flame used, will be carried out under a "Hot Work Permit" (HS&E-FRM-F01-04) issued by the appointed person(s).

(d) Temporary Lighting
Free standing tungsten lighting and halogen lamps (tripod mounted) will not be permitted to be used. Intrinsically safe lighting must be used where there is risk of flammable gasses, enriched oxygen or other gases being present, accidentally released etc. Temporary lighting should be inspected weekly to identify any damage.

(e) Flammable Liquids and Liquefied Petroleum Gases – Low Risk Sites Only
The minimum requirement for storage of flammable fuels will be within a bunded bowser. Where petrol is required this should be contained in a steel jerry can with the maximum of 5 gallons allowed to be on site. The container should be clearly labelled with its contents, highly flammable signage, and a fire proof cabinet should be provided for it to be stored in when not in use.

(f) *Fuelling of Plant / Equipment*
There will be designated / signed refuelling areas with relevant fire extinguishers located nearby.

(g) Waste Materials
All waste is a potential fire risk and should subsequently be removed from site as soon as possible. The siting of waste skips should be away from combustible materials, other structures and should be covered / locked where there is a foreseeable risk of arson.

(h) Fire Points / Fire Equipment
The specific number of fire points required will be identified during the assessment and included the specific section of this plan. All fire points will consist of the following equipment as a minimum.

- 1 x red fire box
- 2 x fire extinguisher (type to be determined by fire risk assessment)
- 1 x red back board
- 1 x fire action notice (regulation)
- 1 x fire escape route map
- 1 x fire point notice

As a minimum requirement a fire point will be located at the top and bottom of every stair (not housing sites) or floor landing and at every fire exit. High risk environments shall have interlinked fire alarm call points other projects should be assessed as to the most effective method of raising the alarm for early evacuation – interlinked are deemed the most effective by the HSE but if other is used e.g. hand bells a clear risk assessment and practice evacuation should be undertaken to ensure controls are effective.

(i) Temporary Buildings
Temporary buildings should be located at least 10 metres away from the building under construction, refurbishment or other permanent buildings. Where this distance is not possible all temporary cabins/offices provided for use should be AT LEAST 30 minute fire resistant and comply with the requirements of BS 476.

(j) *Site Security*
The site should be secured against unauthorised access by the use of hoarding, where this is not possible flammable liquids stores, LPG storage and combustible material stores must be fenced or suitably protected.

(k) *Temporary Covering Materials*
Where temporary coverings are provided they should be made of a UKAS accredited fire retardant material so they do not add to the fire loads and prevent the potential for fire growth and spread.

(l) *Confined Space Work*
Tools used in a confined space will be intrinsically safe and low voltage – specific risk assessment, permit to enter etc.

(m) *Smoking*
No smoking is allowed in the workplace, if designated areas are provided they should be designed to new legislative requirements for smoking shelters. “No smoking” signs should be located at the entrance to the site and any buildings and rules regarding smoking explained during site inductions.

(n) *Means of Raising the Alarm*
All workplaces will be provided with a suitable means of raising the alarm in the event of fire, the type of system will be selected specific to the site and it will be identified on the Emergency Notice and communicated to all persons at the time of induction.

(o) *Actions to take in the event of emergency*
The Emergency Notice HS&E-FRM-H04-01 should be completed with the specific emergency details and this information should be communicated to all persons at their site induction and the notice posted on the site notice board.

SECTION 2

2 RESPONSIBILITIES

Appointed Persons	RESPONSIBLE PERSON
Contract Fire Safety Co-ordinator & Date of training Deputy Fire Safety Co-ordinator & Date of training	**SIMON FOY JUNE 2014**
Client Fire Co-ordinator	
Fire Marshall (s)	**SIMON FOY JUNE 2014**

Fire Safety Co-ordinator / Deputy

- Be fully conversant with the Joint Code of Practice for Fire Prevention on Construction Sites
- Where timber frame construction to also be conversant with UKTFA fire recommendations
- To have an understanding of suitable fire controls as identified in HSG 168
- Produce and update the Construction Fire Safety Plan and assessment
- Produce and update a site fire plan / drawing
- Liaise with the local emergency services and agree provision for water supplies
- Ensure persons are appointed to undertake the following tasks:

Preparation and Review of Fire Safety Plan, Fire Route / Escape signage and up date site plan with fire routes etc	**SIMON FOY OR ASSISTANT**
Undertake Workplace Weekly Fire Inspections / review security measures, temporary electrical installations and keep records of inspections	**SIMON FOY OR ASSISTANT**
Arrange for Re-fill, maintenance of Fire Extinguishers etc	**SIMON FOY OR ASSISTANT**
Arranging Practice Evacuations & keeping records of such and identifying corrective actions	**SIMON FOY OR ASSISTANT**
Check all power/ heaters/fuels / LPG etc secure at the end of the working day.	**SIMON FOY OR ASSISTANT**
Persons appointed to issue Hot Work Permits	**SIMON FOY OR ASSISTANT**
Person to communicate fire risks and emergency actions to workers.	**SIMON FOY OR ASSISTANT**

The address of the nearest emergency fire station is:
FARRINGTON ROAD
PAULTON
AVON
BS397LW

The travel distance from the fire station to this site is approximately: …6…. Miles.

SECTION 3

3 SITE LAYOUT

Provide a copy of a site drawing insert in this section of the Fire Plan and also display clearly for information to employees, contractors and others

Ensure the following are clearly identified on the site drawing as necessary:

Drawing(s) Ref. No:

	Y	N/A
Fire Assembly Points	X	
Fire Points	X	
Fire Escapes Routes	X	
Access for Emergency Vehicles	X	
Position of Water Mains, Risers or Hydrants	X	
Hazards – e.g. holes in floors / roof		X
Temporary Buildings	X	
Flammable Stores inside buildings		X
Flammable Store outside buildings		X
Designated Smoking Areas	X	
Waste Disposal Areas	X	

Record all reviews of Fire Safety Plan Drawing

Date	Reason for Update	Updated by	Revision No.
3/5/15	PROVISIONAL FIRE PLAN DETAILS TO BE CONFIRMED		

SECTION 4 – FIRE RISK ASSESSMENT

FIRE RISK IDENTIFICATION & SITE SPECIFIC CONTROLS

For fire to start there needs to be an ignition source, fuel and oxygen. To assess the fire risks on site, including those from the site offices, the potential ignition sources and potential fuel to feed a fire should be identified and eliminated / reduced / controlled. This section should identify the potential fire hazards specific to the site e.g. identify fire hazards due to sources of ignition e.g. soldering, presence of plant / equipment, electrical equipment, oxygen enrichment etc followed by risk reduction controls to minimise the likelihood of injury and reduce fire spread e.g. the provision of fire alarms, fire escape routes, fire fighting equipment etc.

The risk rating used to show the likelihood and severity prior to the controls, then identify the site specific controls that should be implemented to eliminate or reduce the risk of fire starting, or to minimise the consequences should a fire occur. The author should then identify the residual risk rating when controls have been implemented.

Where the building is a timber frame construction or in a high risk environment, the use of Fire Specialists should be considered – See the HS&E Intranet for Register of Fire Specialists currently in use by the GT Group.

The controls should be briefed to all persons identified as being at risk; the controls should be regularly reviewed and if changes in work are made the fire risk assessment reviewed to include additional controls as identified. Any amendments should be re-briefed to those persons at risk and those managing the works.

4.1 Ignition Sources

Ignition source **Heating and Cooking**	**Persons at Risk**
Risk Rating Before Controls: **High** ☐ Medium ☒ Low ☐ N/A ☐	Site Staff
Identified Risks: Electrical Fault Over heating Site Specific Controls :Regular PAT testing Use of correct heaters etc , not fan heaters	
Risk Rating After Controls : **High** ☐ Medium ☐ Low x☐ N/A ☐	

Ignition Source **Smoking Areas**	**Persons at Risk**
Risk Rating Before Controls: **High** x Medium ☐ Low ☐ N/A ☐	
Identified Risks: Unregulated smoking Site Specific Controls: Provide smoking area Provide smoking bins	
Risk Rating After Controls : **High** ☐ Medium ☐ Low ☒ N/A ☐	

Ignition Source **Temporary Emergency Lighting**	**Persons at Risk**
Risk Rating Before Controls: **High** ☐ Medium ☒ Low ☐ N/A ☐	
Identified Risks: Over heating , by being left on evenings and week end Site Specific Controls: End of day checks	
Risk Rating After Controls : **High** ☐ Medium ☐ Low ☒ N/A ☐	

Ignition source **Hot Works Regime**	**Persons at Risk**
Risk Rating Before Controls: **High** ☒ Medium ☐ Low ☐ N/A ☐	
Identified Risks: Ignition of combustible materials Site Specific Controls: Site security heras off s	
Risk Rating After Controls : **High** ☐ Medium ☐ Low ☒ N/A ☐	

Ignition Sources: **Security Measures / Prevention of Arson**	**Persons at Risk**
Risk Rating Before Controls: **High** ☐ Medium ☐ Low ☐ N/A ☒	
Identified Risks: Site Specific Controls	
Risk Rating After Controls : **High** ☐ Medium ☐ Low ☐ N/A ☐	

Ignition Source: **Ground Works / striking utilities**	**Persons at Risk**
Risk Rating Before Controls: **High** ☒ Medium ☐ Low ☐ N/A ☐	
Identified Risks: Use off machine near know and unknown utilities Site Specific Controls: Locate known services Check for unknown services Use of permit to dig	
Risk Rating After Controls : **High** ☐ Medium ☐ Low ☒ N/A ☐	

Ignition Source: **Confined Spaces Works – Oxygen enrichment, gases**	**Persons at Risk**
Risk Rating Before Controls: **High** ☐ Medium ☐ Low ☐ N/A ☒	
Identified Risk: Site Specific Controls:	
Risk Rating After Controls : **High** ☐ Medium ☐ Low ☐ N/A ☐	

Ignition Source: **Temporary Electricity & Gas Supplies / Maintenance**	**Persons at Risk**
Risk Rating Before Controls: **High** ☐ Medium ☒ Low ☐ N/A ☐	
Identified Risks: Electric only faults to temp offices and temp supplies Site Specific Controls: Regular checks and PAT testing Use of 110 v equipment	
Risk Rating After Controls : **High** ☐ Medium ☐ Low ☒ N/A ☐	

Ignition source : **Plant / equipment**	**Persons at Risk**
Risk Rating Before Controls: **High** ☐ Medium ☒ Low ☐ N/A ☐	
Identified Risks: Fuel filling Fuel leaks Site Specific Controls: Plant checks No smoking while refuelling	
Risk Rating After Controls : **High** ☐ Medium ☐ Low ☒ N/A ☐	

2. Fuel Sources

Fuel: **Flammable Liquids and LPG**	**Persons at Risk**
Risk Rating Before Controls: **High** ☒ Medium ☐ Low ☐ N/A ☐	
Identified Risks: Explosion Vandalism Site Specific Controls: Correct use of storage areas	
Risk Rating After Controls : **High** ☐ Medium ☐ Low ☐ N/A ☐	

Fuel **Combustible Materials Storage**	**Persons at Risk**
Risk Rating Before Controls: **High** ☒ Medium ☐ Low ☐ N/A ☐	
Identified Risks: Vandalism In contact with ignition source Site Specific Controls: Storage in designated areas	
Risk Rating After Controls : **High** ☐ Medium ☐ Low ☒ N/A ☐	

Fuel: **Waste Material Management**	**Persons at Risk**
Risk Rating Before Controls: **High** ☐ Medium ☒ Low ☐ N/A ☐	
Identified Risks Build up of flammable material Vandalism Site Specific Controls: Regular removal of waste Secure site	
Risk Rating After Controls : **High** ☐ Medium ☐ Low ☒ N/A ☐	

3. Risk Reduction

Risk Reduction **Temporary Buildings / Accommodation** **(include location, fire protection, construction and maintenance)**	**Persons at Risk**
Risk Rating Before Controls: **High** ☐ Medium ☒ Low ☐ N/A ☐	
Identified Risks: Faulty wiring Vandalism Overheating Site Specific Controls: Regular checks Site secure Night time turning off	
Risk Rating After Controls : **High** ☐ Medium ☐ Low ☒ N/A ☐	

Risk Reduction **Fire Escape Routes**	**Persons at Risk**
Risk Rating Before Controls: **High** ☐ Medium ☒ Low ☐ N/A ☐	
Identified Risks: Blocked fire routes Poorly defined routes Site Specific Controls: Weekly checks	
Risk Rating After Controls : **High** ☐ Medium ☐ Low ☒ N/A ☐	

Risk Reduction **Preventing / reducing Fire & Smoke Spread**	**Persons at Risk**
Risk Rating Before Controls: **High** ☐ Medium ☒ Low ☐ N/A ☐	
Identified Risks: Too much materials and waste on site Excessive plastic materials Site Specific Controls: Good housekeeping	
Risk Rating After Controls : **High** ☐ Medium ☐ Low ☒ N/A ☐	

Risk Reduction **Fire Extinguishers & Fire Points**	**Persons at Risk**
Risk Rating Before Controls: **High** ☐ Medium ☒ Low ☐ N/A ☐	

Identified Risks:
Not in place
Missing

Site Specific Controls:
Regular weekly checks

Risk Rating After Controls :
High ☐ Medium ☐ Low ☒ N/A ☐

Risk Reduction **Training / Instruction / Communication**	**Persons at Risk**
Risk Rating Before Controls: **High** ☐ Medium ☒ Low ☐ N/A ☐	

Identified Risks:
Lack of training, notices etc

Site Specific Controls:
Trained marshals
Weekly checks

Risk Rating After Controls :
High ☐ Medium ☐ Low ☒ N/A ☐

Risk Reduction **Plans, Liaison with Emergency Services & Access for Emergency Vehicles**	**Persons at Risk**
Risk Rating Before Controls: **High** ☐ Medium ☒ Low ☐ N/A ☐	

Identified Risks:
Lack of training, notices etc

Site Specific Controls:
Trained marshals
Weekly checks
Tool Box talks and inductions

Risk Rating After Controls :
High ☐ Medium ☐ Low ☒ N/A ☐

Risk Reduction **Monitoring – Tests & Drills**	**Persons at Risk**
Risk Rating Before Controls: **High** ☐ Medium ☒ Low ☐ N/A ☐	
Identified Risks No drills Systems not working Site Specific Controls: Weekly checks	
Risk Rating After Controls : **High** ☐ Medium ☐ Low ☒ N/A ☐	

Risk Reduction: **Fire Spread by radiant heat or other on site**	**Persons at Risk**
Risk Rating Before Controls: **High** ☐ Medium ☐ Low ☐ N/A ☐	
Identified Risks: Heaters left on Heaters too near combustible material Site Specific Controls: Use of competent staff Tool box talks Daily checks Hot work systems	
Risk Rating After Controls : **High** ☐ Medium ☐ Low ☒ N/A ☐	

Risk Reduction: **Fire Spread by radiant heat to adjacent properties**	**Persons at Risk**
Risk Rating Before Controls: **High** ☐ Medium ☒ Low ☐ N/A ☐	
Identified Risks: Heaters left on Heaters too near combustible material Site Specific Controls: Use of competent staff Tool box talks Daily checks Hot work systems	
Risk Rating After Controls : **High** ☐ Medium ☐ Low ☒ N/A ☐	

RISK REVIEW / AMENDEMENTS

Date	Item No.	Amendment to control Required	Date Amendment Done