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| THIS FORM IS TO IDENTIFY PROJECT HAZARDS AND TO MINIMISE THE RISKS TO PERSONS AND/OR DAMAGE TO PROPERTY. | | | | | | |
| Project: | LSt project | Work Order No. | WO-000024 | Start Date | 26/08/2020 00:00:00 | |
| Principal Contractor: |  | Working Contractor |  | Finish date | 27/08/2020 00:00:00 | |
| Site Manager: |  |  |  | Phone | 0 | |
| Address: | Noida,Noida,Uttar Pradesh,India,201301 | | | | | |
| Scope of Work: | Test | | | | | |
| Hazardous Materials: | Confined spaces identified,Working at heights,Radiation (antennas etc),Asbestos identified,Working in isolation,Electrical,Fire / hot works,In wall/underground services,Unguarded machinery,Chemical / Biological,Hazardous Manual Tasks,Noise / Vibration,Uneven / slippery surfaces, | | | | | |
| Referenced Legislation: | Workplace Health & Safety Act 2011,Code of Practice: Work Health & Safety Risks,Code of Practice : Work health and safety consultation and co-operation and co-ordination, | | | | | |
| Licenses and Permits: | Hot Works,High Access equipment permit,Work at Heights/in Ceiling/on Roof,Confined Space,Electrical(LV),Electrical(HV),Excavation,Coring/Penetration,Demolition,Radiation,Blasting,Fuel Farm, | | | | | |
| Person Responsible for SWMS Compliance: |  | Date SWMS Received: | 26/08/2020 00:00:00 | | |
| What measures are in place to ensure compliance with the SWMS: | The SWMS are sent electronically via an automated system that ensures that each worker has read and signed the SWMS before the work starts | | | | | |

PPE SECTION

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| PPE Required |  | PPE Required |  |
| Hard hat |  |  |  |
| Safety glasses |  |  |  |
| High vis clothing |  |  |  |
| Fire Extinguisher |  |  |  |
| Breathing Apparatus |  |  |  |
| Face shield |  |  |  |
| Fall Arrest/ Restraint |  |  |  |
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| RISK LEVEL | POSSIBLE COURSES OF ACTION (Table explanation = back page) |  | CONSEQUENCES (C) | | | | |
| LIKELIHOOD (L) | 1 INSIGNIFICANT | 2 MINOR | 3 MODERATE | 4 MAJOR | 5 CATASOPHIC |
| NEGLIGIBLE | Task Supervisor / Leader to monitor | 5 Almost Certain | Medium 5 | High 10 | High 15 | Extreme 20 | Extreme 25 |
| LOW | Task Supervisor / Leader to manage by routine procedures. | 4 Likely | Low 4 | Medium 8 | High 12 | High 16 | Extreme 20 |
| MEDIUM | Manager to manage by specific monitoring or procedures. | 3 Possible | Low 3 | Low 6 | Medium 9 | High 12 | High 15 |
| HIGH | Manager to manage via detailed Task JSEA. | 2 Unlikely | Negligible 2 | Low 4 | Low 6 | Medium 8 | High 10 |
| EXTREME | Manager to manage via detailed plan to reduce risk. | 1 Rare | Negligible 1 | Negligible 2 | Low 3 | Low 4 | Medium 5 |

Steps-table Section

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| Item | Task & or Category of Hazard(Delete & Add items that are / not relevant) | What are the Specific Hazards? | Area of Impact | Risk | Before | Controls | Methods of Controlling Hazards | Risk | After | Controls | Who is responsible |
| L | C | S | L | C | S |
| 1 | Arrive on site and set up exclusion zones with suitable access points for material and plant delivery. | Public access to site Risk of injury to the public and site | Poor planning of suitable access to site. Poor site storage of materials | 7 | 11 | 77 | Set up suitable exclusion zones including signs to provide access and protect the public. Establish a site specific management plan (as required) for site deliveries. Store materials in accordance with SDS on site. | 5 | 9 | 45 | Site Manager |
| 2 | Inspection of work area and access. | Slip, trip and falls on objects on the ground and slippery uneven surfaces. Lack of communication and site awareness. Unsafe access to work area and lack of security. Shock or electrocution Inclement weather conditions | • Fractures and / or dislocations • Sprains and strains • Cuts, lacerations, puncture wounds • Abrasions, bruises and contusions. Personal injury Struck by mobile plant Slips and trip and falls Striking other in-ground services. | 7 | 11 | 77 | Follow traffic management plan of the Principal contractor. Assess intended site.  Ensure: Sufficient room for delivery of materials  o Located away from traffic/vehicles/pedestrians (develop appropriate traffic management plan if required – include physical barriers, caution signs, etc) National Construction induction (all workers) Site induction by Principal Contractor Conduct Toolbox Talk before work commences.    Establish exclusion zone and Keep clear of operating radius of machine (discuss with operator in tool box meeting).  Clear access to work area Wear suitable footwear Follow security requirements for site. Check site records/ “Dial before dig” check. Voltage stick check of existing live / dead cables. Wear protective clothing and PPE | 4 | 9 | 36 | Site Manager |
| 3 | Pre-start inspection of mobile plant and manual equipment, PPE and work area. | Mobile plant operation | -Incompetent operator of plant -Plant failure |  |  |  | Inspect all equipment to be used for the job. Ensure: Ensure:  - Plant operator has proven experience and or ticket to operate machine. - Conduct daily prestart checks on mobile plant and record in log book. - Restricted access to work area by using barriers and place caution signs as needed to create exclusion zone for mobile plant.   - Work area is clear of any unnecessary obstructions   - PPE is available and is being used as required   - SDS are available for all PVC solvent cleaner and glue being used. Worker to follow requirements including PPE.   - Hand tools, battery powered angle grinder in safe working order with guarding fitted.    Ensure services are identified and decommissioned. | 9 | 11 | 99 | Site Manager |
| 4 | Locate and excavate trench to required width and depth to specification for gas fitters /plumber’s requirements. | Mobile plant operation - Dust   - Hazardous Manual Tasks - lifting, carrying, putting down objects, repetitious movements, vibration, pushing, pulling, awkward, twisting, bending positions, Contact with falling object. | -Incompetent operator of plant -Hit by mobile plant bucket - Poor access to trench  -Trench collapse -Leg injuries - Muscular stress/ Musculoskeletal Disorder. - Noise |  |  |  | Ensure: - Plant operator has proven experience and or ticket to operate machine.  - Plumbing team to communicate with plant operator to ensure that there is no contact between workers and machine.   - Install fixed ladder for trench access   - Bench strut or batter as required by spoil material. - Use water spray to reduce dust - Extreme dust wear P1/P2 dust mask - Progressively remove any material from location to avoid stockpiling (consider fire hazards, leaching to environment etc.) - Material disposed of in approved location - Traffic management plan is in use for movement of loading machinery and trucks arriving and leaving site - Wear allocated PPE - Avoid long periods of repetitive movements - Avoid awkward and sustained positions - Use two or more people for lifting & moving heavy / awkward equipment - Regular breaks. - Wear hearing protection near mobile plant. | 9 | 11 | 99 | Site Manager |
| 5 | Cut position and connect gas lines to prepared trenches. | - Inappropriate equipment for task – ladder - Open access to work area   - Hazardous Manual Tasks - lifting, carrying, putting down objects, repetitious movements, vibration, pushing, pulling, awkward, twisting, bending positions, Contact with falling object. | - Crushing - Fractures and / or dislocations - Sprains and strains - Cuts, lacerations, puncture wounds - Abrasions, bruises and contusions - Dust inhalation  - Muscular stress/ Musculoskeletal Disorder. | 7 | 11 | 77 | Ensure: - Solid, stable base and temporary fixing of ladder in trench.   - barricades and appropriate warning signs to prevent unauthorised entry  - SDS are available for all PVC solvent cleaner and glue being used. Worker to follow requirements including PPE.     - Avoid long periods of repetitive movements - Avoid awkward and sustained positions - Use two or more people for lifting & moving heavy / awkward work pieces - Regular breaks. | 9 | 11 | 99 | Site Manager |
| 6 | Inspect and test line. Backfill trench and remove exclusion zone. | - Hazardous Manual Tasks - lifting, carrying, putting down objects, repetitious movements, vibration, pushing, pulling, awkward, twisting, bending positions, Contact with falling object. | - Crushing - Fractures and / or dislocations - Sprains and strains - Cuts, lacerations, puncture wounds - Abrasions, bruises and contusions - Dust inhalation  - Muscular stress/ Musculoskeletal Disorder. | 7 | 11 | 77 | - Avoid long periods of repetitive movements - Avoid awkward and sustained positions - Use two or more people for lifting & moving heavy / awkward work pieces Regular breaks | 9 | 11 | 99 | Site Manager |
| 7 | Demobilise the site for restoration of public access. | Slip and trip hazards. | Poor housekeeping. Poor client communication | 7 | 11 | 77 | - Ensure that all trip hazards are removed and slip surfaces dried or left with warning signs. - Ensure client is informed that works are complete | 4 | 9 | 36 | Site Manager |

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| # | Name of Employee | Signature | Date Signed |
|  | Tech Emplyee | &&Tech\_Emplyee\_2172 | &&SignTech\_Emplyee\_date\_2172 |
|  | &&Employee2\_Name | &&Emp2\_Signature | &&Signature2\_Date |
|  | &&Employee3\_Name | &&Emp3\_Signature | &&Signature3\_Date |
|  | &&Employee4\_Name | &&Emp4\_Signature | &&Signature4\_Date |
|  | &&Employee5\_Name | &&Emp5\_Signature | &&Signature5\_Date |
|  | &&Employee6\_Name | &&Emp6\_Signature | &&Signature6\_Date |
|  | &&Employee7\_Name | &&Emp7\_Signature | &&Signature7\_Date |
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| LIKELIHOOD | DESCRIPTION | | | | |
| PERCEPTION (PE) | ANECDOTAL (AN) | FACTUAL (FA) | OPPORTUNISM (OP) | PROBABILITY (PR) |
| 1 RARE | May occur only in exceptional circumstances. | - | - | - | Less than 1% (e.g. less than 1% chance of occurring during the project period). |
| 2 UNLIKELY | Is not expected to occur. | No recorded incidents or anecdotal evidence. | No recent incidents in associated organisations, facilities or communities. | Little opportunity, reason or means to occur. | % |
| 3 POSSIBLE | Might occur at some time. | Few, infrequent, random recorded incidents or little anecdotal evidence. | Very few incidents in associated or comparable organisations, facilities or communities. | Some opportunity, reason or means to occur. | 5% |
| 4 LIKELY | Will probably occur in most circumstances. | Regular recorded incidents and strong anecdotal evidence. | - | Considerable opportunity, reason or means to occur. | 20% |
| 5 ALMOST CERTAIN | Is expected to occur in most circumstances. | High level of recorded incidents and / or strong anecdotal evidence. | Strong likelihood the event will recur. | Great opportunity, reason or means to occur. | 100% |

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| CONSEQUENCES | IMPACT | | | |
| HEALTH AND SAFETY | ENVIRONMENT | COMMUNITY | OPERATIONS |
| 1 INSIGNIFICANT | Near Miss Incident or Minor Injury requiring first aid treatment only. | Brief spill incident. No environmental damage. | No impact, issues or delays. | No impact, issues or delays. Staff able to function at 100%. |
| 2 MINOR | Medical Treatment only | Minor spill. Pollutant on site. No environmental damage | Minor impact, issues or delays easily resolved. | Minor impact, issues or delays easily resolved. Staff able to function well. |
| 3 MODERATE | Lost Time Injury | Escape of pollutant causing environmental damage. | Moderate impact, issues or delays. | Moderate impact, issues or delays. Staff inconvenienced and ability to perform duties is impacted. |
| 4 MAJOR | Death or permanent disability | Significant pollution on and off site < $500k. | Major impact, issues or delays. | Major impact, issues or delays. Staff seriously impacted and have difficulty in performing duties. |
| 5 CATASTROPHIC | Multiple deaths | Long term environmental damage. | Significant impact, issues or delay. | Significant impact, issues or delay. Staff unable to perform their duties. |

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