Demolition and Construction Management Plan

Project Information

- Project Name: 2 Semi Detached Houses, Harefield
- Location: Adjacent to 28 Ash Grove, UB9 6EX
- Client: P&S Developments Ltd
- Project Manager: PCAL Ltd
- Date: 1st March 2024

1. Phasing of Development Works

Phase 1: Pre-Construction Preparation

- Site Preparation
- Clear the site of any existing structures or obstacles.
- Grade the land and prepare it for construction.
- Utility Connections
- Arrange for utility connections (water, electricity, gas, sewage) to the site.
- Ensure compliance with local regulations.

Phase 2: Construction

- Foundation and Groundwork
- Excavate and lay the foundation.
- Install necessary drainage systems.
- Superstructure Construction
- Erect the structural framework of the house.
- Install roofing and exterior walls.
- Interior Construction
- Complete interior framing, including walls and partitions.
- Install plumbing, electrical, and HVAC systems.
- Exterior Finishes
- Apply exterior finishes such as siding, brickwork, or stucco.
- Install doors, windows, and roofing materials.
- Interior Finishes
- Install flooring, paint walls, and complete interior trim work.
- Install kitchen and bathroom fixtures.

Phase 3: Post-Construction

- Inspections and Approvals
- Schedule inspections for building regulations compliance.
- Obtain necessary approvals from local authorities.
- Handover and Occupancy
- Conduct a final walkthrough with the client.
- Hand over the keys and necessary documentation to the owner.
- Post-Occupancy Evaluation

- Address any post-occupancy issues.
- Gather feedback from the client for future improvement.

2. Vehicle Access, Site Access and Protection of Neighboring Sites

a) Types of Vehicles Involved:
1. Excavation Vehicles: Small excavators for initial site preparation and larger excavators for foundation work.
2. Concrete Trucks: Delivering concrete for the foundation and superstructure.
3. Delivery Trucks: Transporting building materials like lumber, roofing materials, and fixtures.
4. Utility Installation Vehicles: Trucks for laying utility connections such as water, electricity, gas, and sewage.
5. Construction Vehicles: Including cranes, scaffolding trucks, and personnel transportation.

b) Shared Driveway Management:
- Traffic Management Plan: Develop a comprehensive traffic management plan outlining designated entry and exit points for construction vehicles.
- Neighboring Property Access: Ensure neighboring properties have unimpeded access during construction.
- Scheduled Deliveries: Coordinate with suppliers and schedule deliveries during non-peak hours to minimize disruption.

c) Designated Hours for Development Works:
- Weekday Construction Hours: Monday to Friday, 8:00 AM to 6:00 PM.
- Saturday Construction Hours: If necessary, limited to 9:00 AM to 1:00 PM.
- Noisy Operations: Schedule noisy operations, such as concrete pouring or excavation, during standard working hours to comply with local noise regulations.
- Sunday and Public Holidays: No construction activities to minimize disturbance.

d) Construction Vehicle Coordination:
- Schedule deliveries and construction activities to avoid peak hours and coordinate with neighbouring property owners.
- Use a radio communication system to ensure smooth traffic flow within the shared driveway.

1. Temporary Access Measures:
- Implement temporary protective measures such as heavy-duty mats or panels to prevent damage to driveways or lawns of adjacent properties.
- Use ground protection grids to distribute the weight of heavy vehicles and minimize soil compaction.

2. Neighbourhood Liaison Officer:
Appoint a liaison officer responsible for communicating with neighbours about construction schedules, potential disruptions, and addressing concerns promptly.

e) Prevention of Negative Impact on Adjacent Sites:
- Site Fencing and Screening:

- Erect construction site fencing around the perimeter to contain dust, debris, and noise.
- Use privacy screens to shield neighbouring properties from construction activities.

- Dust and Debris Control:
  - Implement dust control measures, such as regular watering of construction areas, to minimize airborne particles.
  - Use dust barriers and netting to contain debris and prevent it from spreading to adjacent sites.
- Construction Waste Management:
  - Establish a robust waste management plan to ensure proper disposal of construction waste.
  - Schedule regular pickups to prevent accumulation and overflow of waste on-site.
- Noise Mitigation Strategies:
  - Utilise quieter construction equipment where possible.
  - Schedule noisy activities during standard working hours and avoid disruptive tasks during evenings and weekends.
- Regular Site Inspections:
  - Conduct regular site inspections to identify and address any potential issues promptly.
  - Document and communicate progress to the local authorities and neighbours.

Additional Considerations:
- Communication with Neighbors: Maintain open communication with neighboring properties regarding the construction schedule and potential disruptions.
- Environmental Impact: Implement measures to minimize the environmental impact, such as dust control and waste management.
- Health and Safety: Prioritize health and safety, ensuring compliance with regulations and providing notices to neighbors about potential hazards.

By carefully managing vehicle movement, scheduling construction activities, and communicating effectively with neighbors, the development process can proceed smoothly while minimizing adverse effects on the surrounding properties. The shared driveway becomes a critical element in this plan, and its use should be optimized to maintain access for all stakeholders.

3. Mud and Dirt Prevention

a) Preventing Mud and Dirt on Footways and Adjoining Roads:

1. Construction Entrance Matting:
   Install heavy-duty entrance matting at the entrance of the construction site to capture mud and dirt from construction vehicles' wheels and workers' footwear.

2. Gravel Construction Entrance:
   Lay down a gravel construction entrance at the site's access point to act as a buffer, allowing vehicles to shed mud and dirt before reaching public roads.

3. Regular Street Sweeping:
   Arrange for regular street sweeping services to keep footways and adjoining roads clear of accumulated mud and debris caused by construction activities.

4. Temporary Sidewalk Covering:
   Install temporary sidewalk coverings such as plywood or synthetic matting along footways adjacent to the construction site to protect them from mud and dirt.

5. Construction Vehicle Cleaning Zone:
   There will be a specific area within the construction site for cleaning construction vehicles' wheels before they exit onto public roads.

By implementing these measures, the construction site can effectively mitigate the tracking of mud and dirt onto footways and adjoining roads, maintaining a cleaner and safer environment for both construction activities and the surrounding community. The wheel wash facilities add an extra layer of cleanliness, ensuring that construction vehicles leave the site with minimal debris on their wheels, thereby reducing the impact on public roads and footpaths.

4. Traffic Management and Access Arrangements

a) Traffic Management Plans:
Vehicular Access:

- Establish designated entry and exit points for construction vehicles to and from the construction site.
- Coordinate with local authorities to ensure compliance with traffic regulations and obtain necessary permits for temporary road closures or diversions.

Pedestrian Access:

- Maintain a clearly marked and safe pedestrian walkway adjacent to the construction site, utilizing barriers and signage to guide pedestrians safely around the work zone.
- Install temporary pedestrian crossings where needed, ensuring accessibility for residents and passersby.

Working Hours:

- Define specific working hours for vehicular and pedestrian access, with construction vehicle movements scheduled during non-peak hours to minimize disruption.
- Communicate the construction schedule to nearby residents, businesses, and the local community.

Emergency Access:

- Ensure that emergency access routes are always accessible and clearly marked, with provisions for quick evacuation in case of an emergency.
- Coordinate with emergency services to align traffic management plans with their response requirements.

Traffic Control Personnel:

- Employ trained traffic marshals or control personnel at key access points to facilitate the safe movement of vehicles and pedestrians.
- Provide appropriate signage to guide traffic and pedestrians, including speed limits within the construction zone.

b) Parking Provisions and Peak Hour Measures:
Contractor Parking:

- Designate specific areas within the construction site for contractor parking, ensuring that vehicles do not obstruct roadways or neighbouring properties.
- Encourage the use of alternative transportation methods, such as shuttle services or shared carpools, to reduce the number of individual contractor vehicles.

Off-Site Parking:

- Arrange off-site parking facilities for contractors to minimize on-site congestion and ensure that residential streets remain clear.
- Implement a permit system to control contractor parking and prevent unauthorized vehicles from occupying nearby spaces.

Staggered Work Shifts:

- Stagger construction work shifts to reduce the concentration of construction vehicles arriving and departing during peak traffic hours.
- Coordinate with contractors to schedule deliveries and major activities outside of peak commuting times.

By implementing comprehensive traffic management plans and addressing parking provisions for contractors, the construction site can operate efficiently while minimizing disruptions to both vehicular and pedestrian traffic in the surrounding area. Regular communication with the community and proactive measures contribute to a positive relationship between the construction project and the neighbourhood.

5. Air Quality and Dust Control

a) Measures to Reduce Impact on Local Air Quality:

1. Emission Compliance:
   - Ensure all construction equipment meets or exceeds emission standards.
   - Regularly maintain machinery to optimize performance and minimize emissions.

2. Green Transportation:
   - Encourage low-emission or electric vehicles for commuting.
   - Provide incentives for eco-friendly transportation methods.

3. Sustainable Materials:
   - Choose construction materials with low VOC emissions.
   - Opt for eco-friendly and sustainable building materials.

b) Strategies for Minimizing Emissions:

1. Smart Scheduling:
   - Schedule heavy machinery uses during non-peak hours.
   - Reduce idle time through efficient scheduling.

2. Diesel Particulate Filters:
   - Install filters on construction vehicles to reduce particulate matter emissions.

- Regularly inspect and maintain filters.

3. Emission Monitoring:
   - Implement a monitoring program to track and adjust construction practices based on emission levels.

c) Dust Control Measures:

1. Watering and Covering:
   - Water the site regularly to suppress dust.
   - Cover material stockpiles to prevent wind-driven dust.

2. Soil Stabilization:
   - Use soil stabilization techniques to minimise erosion and dust.
   - Store loose materials in enclosed areas.

3. Airborne Dust Monitoring:
   - Conduct regular monitoring around the site perimeter.
   - Adjust control strategies based on monitoring results.

By implementing these measures, the new build house project prioritizes environmental responsibility, aiming to minimize its impact on local air quality and control dust emissions during construction. Regular monitoring and compliance ensure ongoing effectiveness in mitigating potential environmental impacts.

6. Storage of Materials

a) On-site Storage Plan:

1. Zoning and Organization:
   - Designate specific areas for different materials with clear signage.
   - Use secure containers or compounds for valuable items and hazardous materials.

2. Erosion Control Measures:
   - Apply gravel or matting in storage areas to prevent soil erosion.
   - Install barriers to stop debris from entering nearby water sources.

b) Compliance with Regulations:

1. Hazardous Material Handling:
   - Keep an inventory of all materials, especially hazardous ones.
   - Handle, store, and dispose of hazardous materials following regulations.

2. Waste Segregation:
   - Separate recyclables from general waste.
   - Work with licensed waste management for proper disposal.

3. Fire Safety:
   - Place fire extinguishers strategically and have emergency response plans.
   - Store flammable materials away from potential fire sources.

4. Regular Inspections:
   - Regularly check storage areas for safety and environmental compliance.
   - Address deviations promptly.

c) Minimizing Environmental Impact:

1. Recycling Initiatives:
   - Prioritize recycling materials and salvaging demolished structures.
   - Explore reusable storage systems.

2. Low-impact Solutions:
   - Use low-impact ground coverings for storage areas.
   - Consider modular and reusable storage to reduce waste.

3. Community Communication:
   - Share the storage plan with neighbors and address concerns.
   - Promote recycling and waste reduction to the community.

Following this storage plan ensures safe, compliant, and environmentally responsible material management during construction, contributing to a sustainable and community-friendly project.

7. Conclusion

The Demolition and Construction Management Plan for this proposed project emphasizes a commitment to adhering to local regulations and minimizing environmental impact.

The plan underscores the commitment to safety, environmental responsibility, and compliance with local regulations, ensuring a construction process that respects both regulatory requirements and the well-being of the surrounding environment and community.