

Committee(s): Streets & Walkways Sub Committee Planning & Transportation Committee	Date(s): 4 December 2018 18 December 2018
Subject: Major Highway Activities 2018 & 2019	Public
Report of: Director of the Built Environment	For Information
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Summary

The City's statutory Network Management Duty includes a responsibility to minimise disruption to its road network, needing officers to work closely with major project sponsors, utility companies, developers, our own contractors and key Members to co-ordinate activities and minimise the impact of works on our streets.

In discharging that responsibility, the City continues to focus on:

- balancing the need to keep projects on track with the need to minimise congestion and road danger risk to traffic and pedestrians (especially vulnerable road users);
- ensuring the needs of City businesses, residents and visitors are also considered;
- maximising the opportunity to combine works together to minimise their overall impact;
- identifying & promoting safe and effective ways to reduce work durations;
- working with Transport for London and our neighbouring authorities to ensure the needs of the wider transport network are considered.

Key to that effort remains:

- the close level of contact between officers, utilities, developments and projects;
- the ability to find, influence and negotiate innovative solutions to construction problems and programmes with contractors;
- understanding, programming and managing the City's own long-term programme of projects;
- continuing the development of the City's various communication channels through which upcoming activities are publicised.

To that end, 2018 has so far seen 516 days of disruption saved through collaborative working, additional political oversight to the most significant activities, and permanent change to the underlying road network unaffected by the need to accommodate some of the highest volumes of temporary works in recent years.

Looking ahead, work volumes from developers and utilities in particular are expected to remain high, but the challenge set by the Transport Strategy (once adopted) is likely to focus on reducing the impact of construction sites & street works, particularly in terms of road danger, freight, noise, air quality and the extent to which they occupy space on the highway.

Recommendation(s)

Members are asked to receive this report.

Main Report

Background

1. The Traffic Management Act 2004 placed a Network Management Duty on the City of London Corporation to ensure the 'expeditious movement of traffic' on both its road network and the road networks of its neighbouring authorities.
2. To help deliver that statutory function, the Highways team within the Transportation and Public Realm Division of the Department of the Built Environment (DBE) permits and co-ordinates all major activities on the City's highway, including:
 - a. Road closures and diversions;
 - b. Major building site operations, including Construction Logistics Plans, vehicle loading bays and mobile crane works;
 - c. Street works by utilities;
 - d. Highway works by the City's term contractor, JB Riney, and highway structural repair works by DBE's Structures Team;
 - e. Works by major transport infrastructure providers, such as Transport for London, Crossrail and Thames Tideway;
 - f. Special events;
 - g. Parking permissions & suspensions for major deliveries, removals and filming operations.
3. Whilst enabling applicants to safely deliver works that are the lifeblood of the Square Mile, the aim is equally to minimise the individual and cumulative impact on City businesses, residents and the public at large.

Limitations to the Consent Process

4. The City exercises its authority to control activity on-street through the issue of scaffold & hoarding licences, permits to dig up the street, traffic orders to allow roads to be closed, approval of Construction Logistics Plans for developments and the granting of parking dispensations & bay suspensions for lorries to deliver.
5. However, the City has to act reasonably in exercising these powers, and its ability to control the pace and detail behind major works has a number of limitations.

That means the City must rely on its knowledge & influence to co-ordinate and manage that activity, rather than relying on its limited regulatory authority. For example:

- a. Utilities retain wide-ranging statutory powers to excavate the highway, particularly in emergencies.
- b. Developers can decide when to trigger their planning application and start work.
- c. We are obliged by the Highways Act 1980 to issue scaffold licences on request (albeit we can impose conditions), and there is no effective legislative mechanism to fine or penalise building sites that overrun.
- d. As Strategic Transport Authority, TfL have the authority to implement wider Mayoral transport policy initiatives such as Cycle Super Highway that affect our network, and their management of traffic signals across London also means they can significantly influence the ability of that network to absorb temporary traffic disruption.
- e. Crossrail, the Bank Station Capacity upgrade and Thames Tideway projects come with bespoke powers enabled by Acts of Parliament that assume primacy of their works over other projects. They have disapplied many of the City's normal controls and have deliberately limited the ability of local authorities to change, prevent or delay those works.

Political Oversight

6. Given the volume & technical complexity involved in managing these activities, Members have previously agreed a series of delegations to enable DBE to effectively deliver this function on a day-to-day basis.
7. However, in response to Member concerns regarding effective political oversight, a more structured political engagement process was implemented to ensure appropriate and proportionate oversight of DBE's delegated authority for the most significant activities.
8. The vast majority of applications continue to be managed by 'Business as Usual' protocols under DBE's existing delegations, but regular briefings now take place for the Chairman and Deputy Chairmen of the Streets & Walkways and Planning & Transportation Committees in advance of major activities being agreed.
9. This ensures a greater degree of political oversight for those activities judged to have the greatest likelihood of impacting City stakeholders, with officers held to account for ensuring that all reasonable steps have been taken to minimise the disruption, reduce the duration and publicise such works.

Current Position

10. The table below shows the breakdown of road closure applications by source over the last six years.

Road Closure Application Volumes

Type / Year	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Developments	107	101	155	231	175	214
Utilities	52	62	67	89	95	91
Emergencies	69	26	57	68	38	35
CoL	25	40	85	89	78	93
Other	8	3	18	17	51	88
Total	261	232	382	494	437	521

11. In recent years, the City has enjoyed its largest development boom since 2008, and although this is usually to be welcomed as a sign of a healthy City economy, the current concentration of development requires road space for scaffolds, hoardings, lorries and logistics, as well as associated utility connections.
12. Last year saw another increase in road closure applications for buildings and development activity, ensuring this sector remains the largest single reason for roads to be closed. Although most of these applications are for side streets and / or take place at weekends (for activities like crane operations), a significant number are for much longer periods to facilitate day to day construction activity.
13. In parallel, the number of road closure applications from utilities continues to be high by historic standards. These are often linked to developments who require upgraded and diverse supplies from multiple utilities. This demand is also reflected in the number of permit applications received from utilities to excavate the City's highway (see below).

Utility Street Works Permit Applications

Year	2012	2013	2014	2015	2016	2017	2018
Total Permit Applications	3331	3319	3099	3074	3448	4400	3670*

* Projection based on permit application volumes from Jan-Sept 2018.

14. Last year saw a significant increase in utility permits, partly because of a crackdown by officers on utility defects, but also because of the downstream impact of the development boom driving the need for additional power, heating, cooling and telecom requirements.
15. As in previous years, officers continue to be proactive in identifying opportunities to combine works from different contractors, thereby reducing the need for yet more closures. This resulted in 516 days of disruption saved on the network between January and October this year - an exceptionally high number for any highway authority - and reflects the level of co-operation from utilities in using round table discussions to draw out medium and long-term plans.
16. Finally, special events and filming represent many of the closures deemed 'other' in the table above. The annual Committee report on special events (due early next year) will provide more information on both aspects, but this continued

increase reflects the desire from the artistic and sporting sectors to use the City as a backdrop. It also suggests the City needs to be vigilant in considering & approving closures for these purposes in future.

Major Works & Schemes for 2019

17. This section of the report looks ahead to the major works expected to take place in the next 12 months, with an outline calendar and map of locations contained in Appendices 1 & 2. Activities are categorised under the four main sources, namely:

- a. Development activities
- b. Major infrastructure projects
- c. Utility works
- d. City of London projects

Development Activities

18. Almost 50 development sites are currently in the City's Considerate Contractor Scheme, and such high volumes have historically indicated a thriving Square Mile. However, this concentration of activity also results in an inevitable reduction in road and footway space available for the public, adding large numbers of heavy goods vehicles to our streets, and causing disruption to nearby businesses & residents for the duration of the site.

19. The impacts of such activities are typically minimised through the approval of Construction Logistics Plans conditioned from the planning stage, as well as from close day-to-day contact and cooperation with developers and their contractors. (A review of the detailed arrangements for site hoardings, scaffolds and loading bays will form part of the wider review of obstructions to our footways & streets under the Transport Strategy early next year.)

20. However, as DBE's weekly Traffic Management Bulletin notes, of the 25 streets currently closed for long terms works, more than 60% are for development activities, including public realm enhancement for developments undertaken by the City using its term highway contractor (JB Riney). The majority of these public realm works are designed to be delivered with little or no network impact, with typical examples over the next year being:

- Bartholomew Close for Helical
- The London Development (Shoe Lane)
- 22 Bishopsgate
- 100 Bishopsgate
- 2-6 Cannon St

21. Nevertheless, some elements of development-related activity do have the potential to impact the road network, and in that context, the key activities to note for 2019 are briefly as follows:

100 Liverpool St

22. This development by British Land has had an impact on pedestrian flows at Liverpool St station and has required a closure of the bus station until August 2019. To compensate, bus stands and stops have been relocated to Finsbury Circus and other nearby streets, and a moratorium on major works in the key bus corridors nearby has also been applied.

60-70 St Mary Axe

23. As part of the road resurfacing planned for this development, opportunities are being explored to lower some of the utilities in Bevis Marks that currently sit just below the surface. This investment would prolong the life of the new surface but could require major works from the respective utilities to deliver. If achievable, this would likely happen no earlier than Q4 2019.

Scalpel / Leadenhall St Pedestrian Crossing

24. With the completion of the Scalpel development in Leadenhall St, the last remaining aspect of public realm enhancement adjacent to the site will be the creation of a raised pedestrian crossing at the junction of Lime St and St Mary Axe. This will involve major works across the width of Leadenhall St and is currently programmed for Q1 2019 as part of the Thames Water works noted later in this report.

Major Infrastructure Projects

Crossrail

25. The well-publicised delay in completing Crossrail has ensured the project will remain a visible presence in the Square Mile until next Autumn. However, the nature of the project is changing, with the Farringdon East site already becoming an oversite development, the lorry holding area in London Wall being removed in December, and with the City taking possession at Moorfields and Liverpool St in January to begin the public realm works around those station entrances.
26. Members will recall the City reached agreement with Crossrail to undertake these public realm works, and core areas around each station will be completed by Riney in time for the new opening date. However, it is important to note that with oversite development activity above and around each of the stations (in particular at Lindsey St and 100 Liverpool St), completion of all the Crossrail-related public realm works will be a long-term process lasting into 2022 as construction areas gradually become available.

Thames Tideway

27. The impact of Thames Water's project to connect the outfall from the River Fleet at Blackfriars to London's 'super sewer' received considerable publicity earlier this year. This was due to the potential need in 2019 to fully close the Embankment for six months to divert two large gas mains. However, subject to final confirmation by Cadent Gas, Tideway now believe they can manage that risk to their infrastructure without a mains diversion or road closure.
28. In terms of other construction impact, the riverside walkway and down ramp from Blackfriars Bridge to the Embankment will remain closed until the completion of the

project in 2021, whilst Tideway are also now seeking consent to use White Lion Hill as a lorry holding area (albeit keeping the street open to general traffic).

Bank Station Capacity Upgrade

29. The Bank station upgrade remains highly active, with the project on course to deliver a new Northern Line tunnel and station entrance in Cannon St by 2022 that will include step free access to the Northern and DLR lines. The scheme continues to be serviced from its construction sites in Arthur St and Cannon St, but the next major milestone will be the need to connect the new tunnel to the live Northern Line running tunnels.
30. This work will require the Bank branch of the Northern Line to be closed for several weeks, and although the exact date is still to be confirmed, we understand this is now programmed for summer 2021. Officers remain in close contact with the project, with this blockade being a key point of interest given its implications for on-street pedestrian volumes, particularly near Moorgate and London Bridge.

Utility Works

31. As noted above, the need to facilitate the current boom in development activity has helped drive a high volume of general utility activity. However, as Members are only too aware, the most noticeable impact from utility works in the last year has come from just one company, namely Cadent Gas.

Cadent

32. Although Members may recall the recent investment from Cadent (formally National Grid Gas) to upgrade their medium & low pressure gas mains from Aldgate to Newgate St, the last 12 months have seen major gas leaks in Gracechurch St, Cannon St, Fenchurch St, Fore St, Tudor St, Ludgate Hill, Austin Friars, Newgate St, Beech St, Cheapside and St Martins le Grand.
33. Cadent realise that significant long-term investment is required as they come under increasing pressure to act, not just from the City and other Central London authorities (who are experiencing the same issues) but also from the industry regulator and the Health & Safety Executive. They have established an initial five-year funding window to address the most significant high-risk mains, and where possible, Cadent have proactively accelerated that funding to undertake replacement works (as opposed to just repairs) in Gracechurch St, Fore St and part of Fenchurch St.
34. As a result, we fully expect Cadent to seek the City's cooperation in completing several of these gas main replacement schemes during the course of 2019 & 2020. Although not yet confirmed & programmed, it is highly likely that such works will involve some of those streets listed above, and given their depth below the surface, they will be particularly challenging to replace.
35. Such works will have the potential to be disruptive and may appear slow to complete (despite extended working hours) as other utility chambers have to be demolished and cables diverted in order to reach them.

36. However, some locations could be quicker if the new plastic pipes can be fed inside the old ones provided the existing mains are laid in a straight line. In addition, opportunities for collaborative works by other utilities will always be explored, illustrated by the 209 days of disruption saved by co-ordinating other works into the closure of Gracechurch St / Cannon St earlier this year.
37. Discussions are continuing to establish the extent of Cadent's upcoming work programme, and details will be provided to all Members and other stakeholders as / when they become available. Planned works on the gas network cannot typically take place during the winter months, so works are likely to take place in Q2-Q3 2019, starting with the two highest risk priorities at Fenchurch St and Cannon St. In the meantime, officers will continue to provide e-mail updates to Members when emergency works are triggered given they happen at little or no notice.

Power Supplies to 1 Leadenhall & the Eastern City Cluster

38. It is understood that the 1 Leadenhall development will require a significant increase in its power supply requirements for the site, and this is likely to be over & above the capacity of UK Power Networks to meet from local supplies. As a result, this development is expected to trigger a series of major excavations as new power cables are laid from the UKPN substations at Limeburner Lane (to the west) and from Osbourne St in Tower Hamlets (to the east), both having been upgraded to deliver these extra power loads.
39. Ideally, such connections would take into account the wider capacity needs of the Eastern City Cluster because further developments that come on line are equally likely to require additional power. However, there are two major constraints to the concept of UKPN expanding their supply capacity in one go.
- a. UKPN still face rules from the industry regulator prohibiting 'investment ahead of need' as this distorts the market for power supplies;
 - b. Recent Government deregulation of the utility industry means that non-utility companies (or Independent Connection Partners - ICPs) can now install and maintain connections to the utility network, meaning that other companies can effectively bid against Thames Water, Cadent and UKPN to connect developments to the water, gas & electricity networks respectively.
40. The consequences of these two issues is that UKPN can no-longer plan on the assumption they will win the contracts to connect future Eastern City Cluster developments to their network. With the regulator preventing them from investing in spare capacity to give them a competitive advantage, there is now a real prospect that each development will require its own powers supplies to be delivered separately, with multiple excavations by different companies of the same streets.
41. Clearly such a course of events would be significantly & unnecessarily disruptive to the City's road network, and officers are negotiating at a number of levels to see whether a compromise is possible. However, in terms of 1 Leadenhall, trial

holes by Reach Active (an ICP) to establish a viable route for these additional supplies are taking place now, with the works themselves beginning in Q1 2019.

Thames Water Victorian Mains Replacements

42. Thames Water had considered their project to replace large parts of their crumbling mains network long since closed, but they now believe some works need to be revisited and potentially redone at a small number of key locations. This was partly the reason for the recent leak (and road closure) in Cheapside, and Thames Water believe similar repairs will soon be needed in Old Broad St and Leadenhall St.
43. In terms of timing, Old Broad St will be influenced by the closure of Liverpool St bus station (noted above), but at Leadenhall St the intention is to combine these Thames Water works with the Leadenhall St pedestrian crossing, the power supply investigations for 1 Leadenhall and various utility diversion & disconnection works for 6-8 Bishopsgate into a joint road closure during Q1 2019.
44. By combining these works together, this closure is already expected to save around 150 days of disruption, and a major information campaign is about to be launched to publicise the works.

City of London Projects

45. The vast majority of the City's own planned public realm, road safety and highway maintenance programme is expected to have little impact on the road network, with activities sensitively programmed to avoid clashes with other works and minimising local impacts.
46. In terms of major projects with the potential to affect traffic, the Structures team within DBE have a series of works to replace and / or repair various structures within their remit. Timing & consent for these are still subject to the Gateway approval process as well as TfL & LB Southwark approval for works on the Thames bridges, but during 2019 & 2020, the following works are likely to take place:
 - a. Replacement of the waterproofing and bearings on London Bridge
 - b. Waterproofing and structural repairs on Southwark Bridge
 - c. Repairs to the underground pipe subway at Snow Hill / Holborn Viaduct
 - d. Structural investigations under Lindsey St
 - e. Waterproofing of the car park structure beneath London Wall
47. In the context of the last item above, waterproofing and resurfacing of the London Wall / Wood St junction is needed to conclude the public realm changes for London Wall Place. It will be highly challenging to constrain what will be a major set of noisy works to weekends, so a short weekday closure of London Wall may be required at some point next year.

Corporate & Strategic Implications

48. The activity outlined above helps create a safe, effective and fit-for-purpose environment for the City community to flourish in the long term. Development activity in particular is traditionally a sign of a thriving Square Mile, but it brings with it a need for road and footway space for construction, essential utility connections and additional heavy vehicle traffic.
49. The City has a series of statutory duties to maintain safe highways for the public to enjoy, to regulate activity that takes place on its streets and to co-ordinate that activity to ensure its impact is minimised. As a result, the focus must continue to be meeting these statutory requirements and to deliver safer streets, but at the same time to ensure the City retains its competitive edge & remains an attractive place to live, work and visit.
50. These duties, objectives and outcomes will also be re-examined as part of the upcoming Transport Strategy, which will focus on the pace, safety aspect and space needed for works, as well as the wider aspects of freight management, air quality and noise impact.

Conclusion

51. The City's approach to network management continues to focus on identifying the needs of these major projects early, to combine them where possible, and to keep them apart when necessary. With the support & guidance from appropriate political oversight, this requires officers to:
- a. establish the dependency between separate projects;
 - b. understand their potential conflicts and impacts, and;
 - c. engage with project managers early and often to ensure that disruption can be minimised through a combination of regulation, negotiation and influence.
52. With the development boom continuing, significant utility works underway and projects such as Crossrail, Thames Tideway and Bank Station Capacity Upgrade well on track, co-ordinating works on the City's road network will remain a challenge into the longer term.
53. However, the City must continue to ensure the co-operation of major project sponsors, utility companies and developers in co-ordinating their works programmes and reducing their durations in order to limit both the direct and cumulative impact on the public at large.

Appendices

- Appendix 1 – Major Works Timeline
- Appendix 2 – Major Works Map

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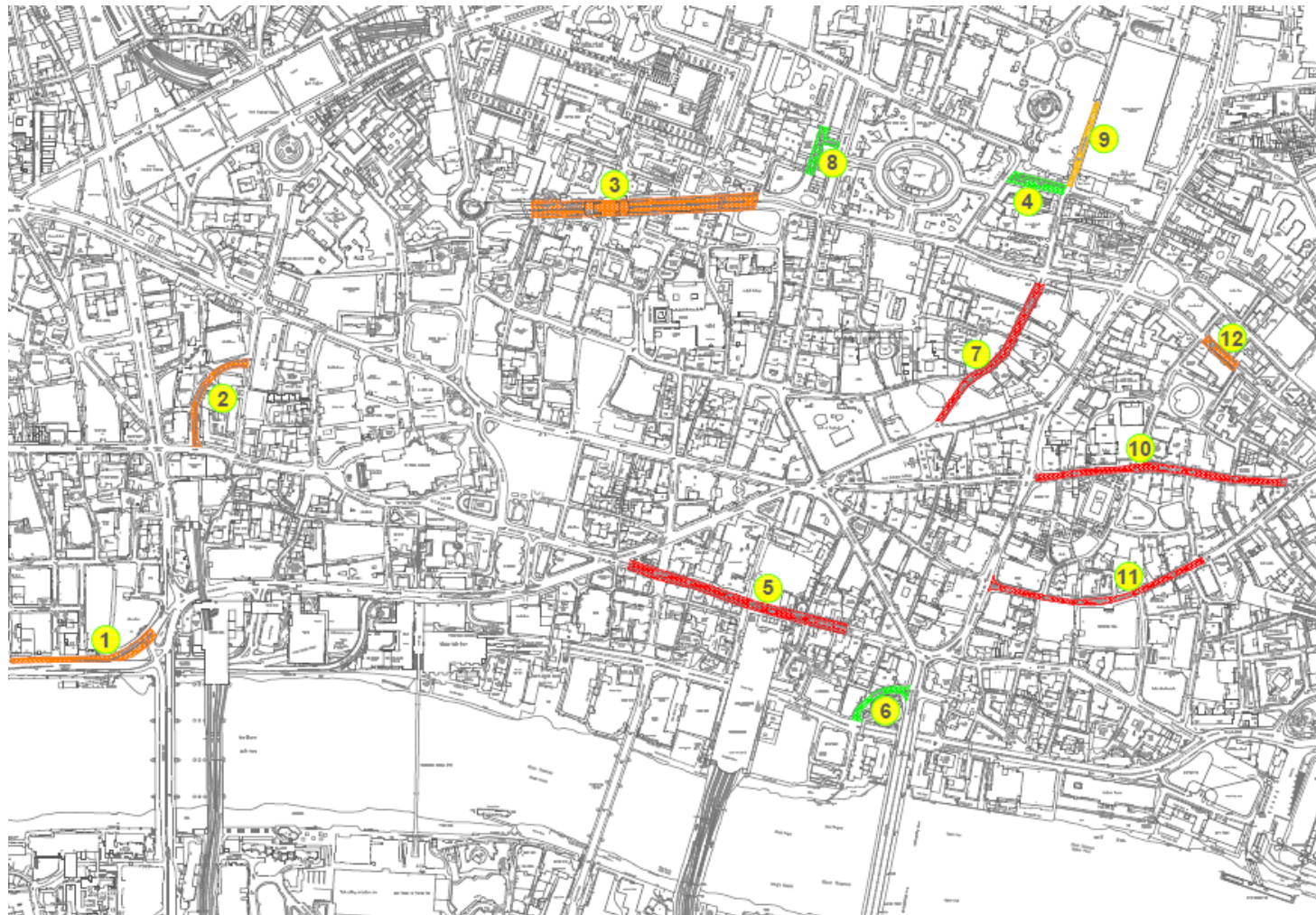
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Appendix 1 – Major Works Timeline 2019

(High, Medium & Low Impact schemes)

	High	Medium	Low
Q1 Jan-Mar	<p>Leadenhall St – Combined CoL / UKPN / TWU works</p>	<p>Liverpool St Bus Station – McAlpine (100 L’pool St)</p> <p>London Wall / Wood St resurfacing (London Wall Place)</p> <p>Blackfriars slip closure (Tideway)</p>	<p>Liverpool St, Moorfields - Crossrail public realm</p> <p>Arthur St – Bank Station Northern Line upgrade</p>
Q2 Apr-June	<p>Fenchurch St or Cannon St - Cadent</p>	<p>Liverpool St Bus Station – McAlpine (100 L’pool St)</p> <p>London Wall – CoL Waterproofing</p> <p>1 Leadenhall power connections</p> <p>Blackfriars slip closure (Tideway)</p>	<p>Liverpool St, Moorfields - Crossrail public realm</p> <p>Arthur St – Bank Station Northern Line upgrade</p>
Q3 July-Sept	<p>Fenchurch St or Cannon St – Cadent</p> <p>Old Broad Street – Thames Water</p> <p>London Bridge – CoL Waterproofing</p>	<p>Liverpool St Bus Station – McAlpine (100 L’pool St)</p> <p>London Wall – CoL Waterproofing</p> <p>1 Leadenhall power connections</p> <p>Blackfriars slip closure (Tideway)</p>	<p>Liverpool St, Moorfields - Crossrail public realm</p> <p>Arthur St – Bank Station Northern Line upgrade</p>
Q4 Oct-Dec	<p>London Bridge – CoL Waterproofing</p>	<p>Bevis Marks utilities (70 St Mary Axe)</p> <p>1 Leadenhall power connections</p> <p>Blackfriars slip closure (Tideway)</p>	<p>Arthur St – Bank Station Northern Line upgrade</p>

Appendix 2 – Major Works Map



CITY OF LONDON Major Works Timeline 2019

- 1. BLACKFRIARS SLIP CLOSURE (Victoria Embankment)**
Thames Tideway Tunnel Construction & Diversions
- 2. LEADENHALL POWER CONNECTIONS**
Limeburner Lane
- 3. LONDON WALL/WOOD STREET (Resurfacing & Waterproofing)**
London Wall Place
- 4. LIVERPOOL STREET (Public Realm)**
Crossrail
- 5. CANNON STREET**
Cadent Gas
- 6. ARTHUR STREET (Bank Station Northern Line Upgrade)**
London Underground/Drageados
- 7. OLD BROAD STREET**
Thames Water
- 8. MOORFIELDS (Public Realm)**
Crossrail
- 9. LIVERPOOL STREET BUS STATION (100 Liverpool Street)**
McAlpine
- 10. LEADENHALL STREET (Combined Works)**
City of London/UKPN/TWU Works
- 11. FENCHURCH STREET**
Cadent Gas
- 12. BEVIS MARKS (70 St. Mary Axe)**
Various Utility Works