



Sheffield Local Plan

Report on Public Transport and Active Travel Impacts and Potential Mitigation

August 2023

SYSTRA



SHEFFIELD LOCAL PLAN – APPENDICES TO REPORT ON PUBLIC TRANSPORT AND ACTIVE TRAVEL IMPACTS AND POTENTIAL MITIGATION

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APPENDIX A – SHEFFIELD LOCAL PLAN SITE-SPECIFIC PLANNING CONDITIONS

A number of Sheffield Local Plan sites already have planning permission in place, with conditions attached to the planning consents in a number of cases as tabulated below.

SITE REF.	PLANNING CONSENT STATUS	PLANNING REFERENCE	RELEVANT PLANNING CONDITION(S)
S00023	Under Construction	19/03944/FUL	<ul style="list-style-type: none"> - A review of tactile paving and lowered kerb locations in the vicinity of the development site (and provision of new facilities where necessary) to assist pedestrians and wheel-chair users crossing the road and to fit with new pedestrian desire-lines created by the development. - Footway resurfacing/reconstruction and kerbing works along Alma Street and Russell Street abutting the development site frontage and extending across the Kelham Island Tavern frontage, all in accordance with the SCC Urban Design Compendium.
S00046	Under Construction	20/00958/FUL	<ul style="list-style-type: none"> - Reconstruction of the footways along the site frontages
S00746	Under Construction	21/01999/REM	<ul style="list-style-type: none"> - The provision of appropriate cycling infrastructure around and into the site that will connect to Local Authority pedestrian and cycle infrastructure in the vicinity of the development and ensure the continued safe and free movement of pedestrians and cyclists.
S00759	Under Construction	18/00242/FUL	<ul style="list-style-type: none"> - All the footways adjacent to the site shall be reconstructed to Sheffield City Councils Urban Design Compendium specifications or suitable alternative to be agreed in writing with the Local Planning Authority, to ensure an appropriate quality of footway to cope with the additional pedestrian traffic generated by the development.
S02180	Under Construction	16/04487/FUL	<ul style="list-style-type: none"> - New cycle route on Pond Street adjacent to the development connecting with existing cycle routes on Pond Street and Broad Street West; - Footway improvements to the highway in Fitzalan Square and Flat Street adjacent to the listed building in Urban Design Compendium Primary Palette;

SITE REF.	PLANNING CONSENT STATUS	PLANNING REFERENCE	RELEVANT PLANNING CONDITION(S)
			<ul style="list-style-type: none"> - Footway improvements to the highway on Pond Street and the remaining part of Flat Street to Urban Design Compendium secondary palette; - New street lighting to Bakers' Hill and Steps and associated minor footway works required for safety reasons; - Changes to the area of footway and steps at the junction of Pond Hill, Pond Street and Flat Street to improve intervisibility, access and reduce conflict where the cycle route and the pedestrian desire lines cross; - Relocation of the pedestrian crossing on Flat Street to a position to be approved by the Local Planning Authority.
S02277	Full Permission but not started	20/00873/FUL	<ul style="list-style-type: none"> - The entire footway adjacent to the site should be reconstructed with the appropriate urban design compendium palette or similar with specifications appropriate to the location, all to the satisfaction and approval of the Local Planning Authority.
S02299	Full Permission but not started	22/02459/FUL	<ul style="list-style-type: none"> - The provision and potential relocation of bus stop number 37023045 to a specification to be confirmed by SYMCA.
S02401	Outline Permission	18/04773/OUT	<ul style="list-style-type: none"> - Any necessary signing, lighting, surfacing and other improvement works to SHE/145 - public footpath, SHE/643 - public footpath, SHE/CT/32 - cycle track - Investigate the pedestrian route beyond the site boundary along Woofindin Avenue and Whiteley Wood Road, to the junction with Hanginwater Road, including the requirement for crossing facilities on Whiteley Wood Road/Hangingwater Road.
S02744	Full Permission but not started	20/03193/FUL	<ul style="list-style-type: none"> - A fully detailed public realm scheme covering the entire red line boundary area of the site on King Street, Angel Street and High Street, including: <ul style="list-style-type: none"> (a) Full materials and planting specification, which shall link to the layout, design, material palette and planting of the Grey to Green scheme;

SITE REF.	PLANNING CONSENT STATUS	PLANNING REFERENCE	RELEVANT PLANNING CONDITION(S)
			<p>(b) Full details of street furniture, which shall match the City Centre palette;</p> <p>(c) The design and layout of the vehicular junction between King Street and Angel Street;</p>
S02915	Construction Suspended	19/02186/FUL	<ul style="list-style-type: none"> - The footways adjacent to the site frontage on Hoyle Street, Doncaster Street, Ellis Street and Meadow Street (where relevant to that phase) should be reconstructed to Sheffield City Council's Urban Design Compendium palette.
S03193	Under Construction	19/00054/FUL	<ul style="list-style-type: none"> - Provision of signal controlled site access with pedestrian crossing facilities and advance stop lines for bicycles (MOVA operated) - Provision of bus stop facilities (including the provision of shelters and raised footways to ease boarding/alighting) at 4 locations to be agreed in writing by the Local Planning Authority - A change of operating mode at Vaughton Hill traffic signals from vehicle detection to MOVA operation and provision of advance stop lines for bicycles. - Provision of measures to assist pedestrians crossing Manchester Road in the vicinity of the proposed southern emergency access en route to the proposed northbound bus stop likely to comprise a pedestrian refuge with speed traffic management. - Provision of improvements to the surfacing of the bicycle connection to the Trans Pennine Trail (No 67) from the end of Station Road in a southerly direction, in substantial accordance with the alignment indicated in dashed markings on the submitted drawing number M1075-EN-333 (Cycle Route Layout Plan) to a rural standard. - The provision of wayfinding signage for cyclists within the site
S03506	Full Permission but not started	20/01030/FUL	<ul style="list-style-type: none"> - Resurfacing Stepney Street as needed to provide a shared surface from its Broad Street junction
S03529	Under Construction	19/03779/FUL	<ul style="list-style-type: none"> - Reconstruction of footways round the perimeter of the development site in accordance with the Urban Design Compendium, including the provision of pedestrian drop crossings and tactile paving to facilitate unhindered wheelchair mobility

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SITE REF.	PLANNING CONSENT STATUS	PLANNING REFERENCE	RELEVANT PLANNING CONDITION(S)
			<ul style="list-style-type: none"> - Provision of push-button controlled pedestrian crossing facilities at the junction of Wellington Street with Rockingham Street, relocate and reconfigure the signal controller to introduce a pedestrian phase, undertake factory acceptance testing, configuration, site acceptance testing /commissioning.
S03608	Full Permission but not started	22/01621/FUL	<ul style="list-style-type: none"> - The reconstruction and upgrading of all footways directly adjoining the site's frontage to Bowling Green Street, South Parade and Ward Street in the Urban Design Compendium palette
S03987	Under Construction	19/01836/FUL	<ul style="list-style-type: none"> - Reconstruction of footways round the perimeter of the development site in accordance with the Urban Design Compendium, including the provision of pedestrian drop crossings and tactile paving to facilitate unhindered wheelchair mobility. - Provision of push-button controlled pedestrian crossing facilities at the junction of Wellington Street with Rockingham Street, relocate and reconfigure the signal controller to introduce a pedestrian phase, undertake factory acceptance testing, configuration, site acceptance testing/commissioning.
S04123	Full Permission but not started	21/01102/FUL	<ul style="list-style-type: none"> - Resurfacing of the adjacent footways, including the provision of servicing facilities on Farm Road

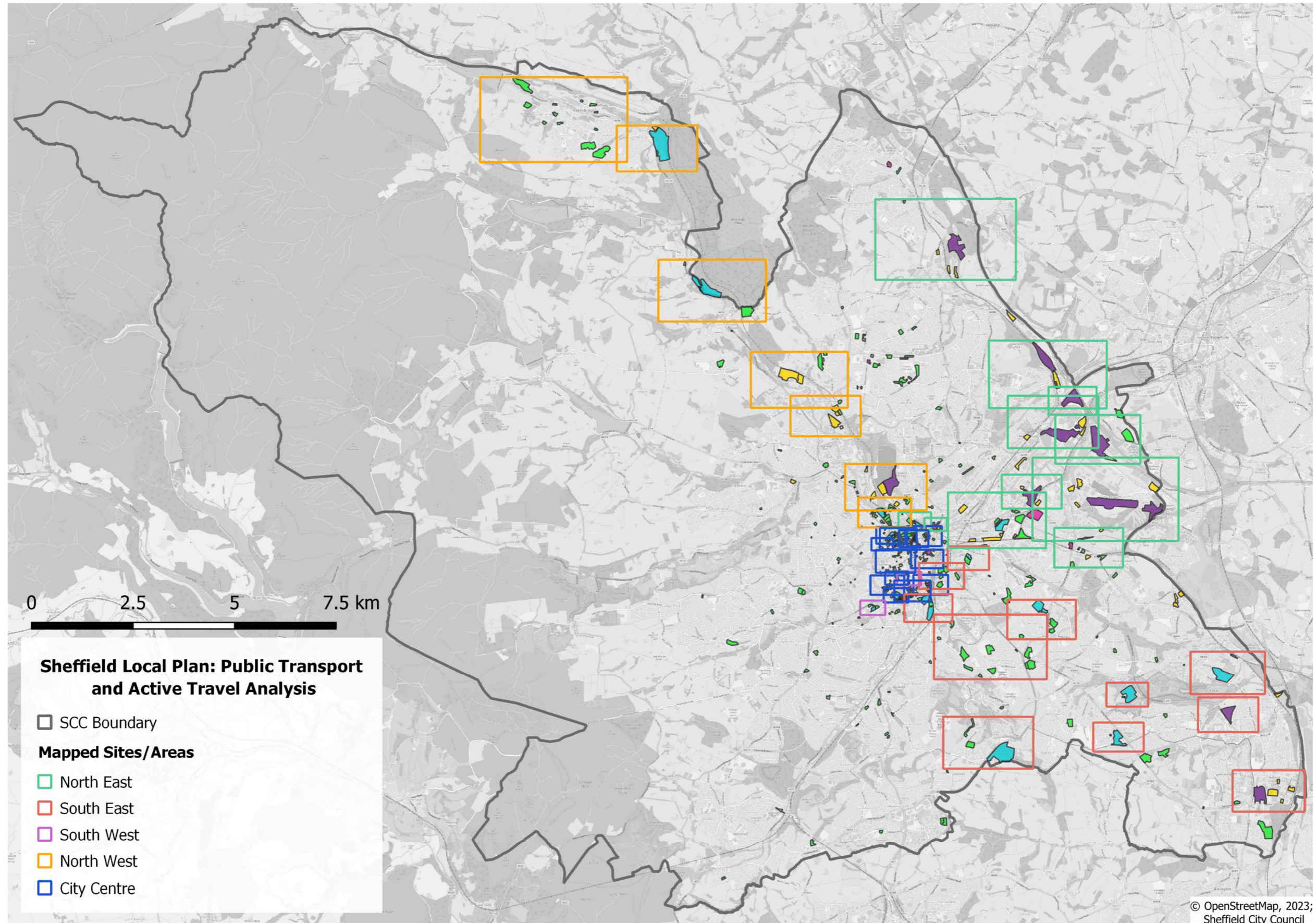
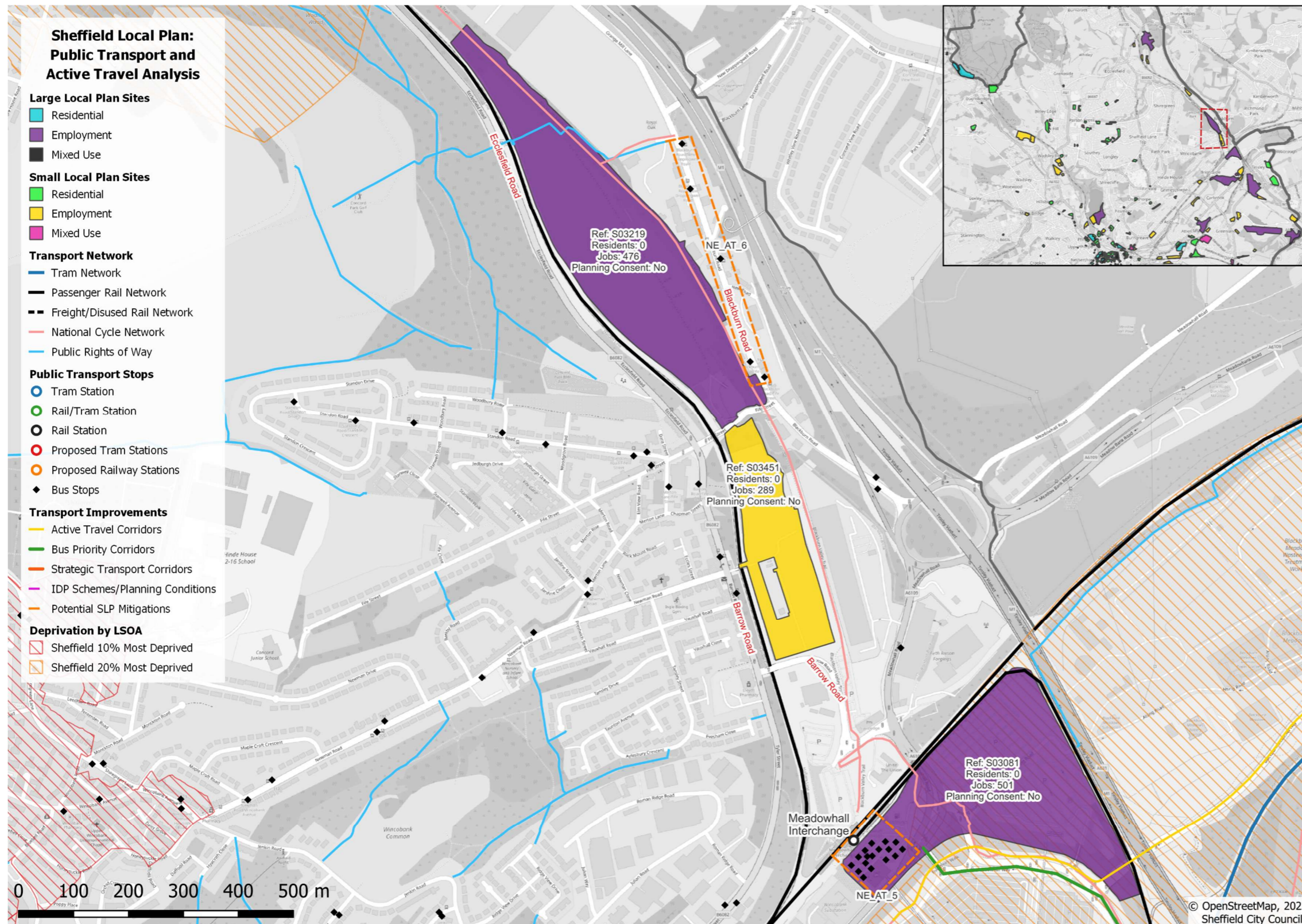


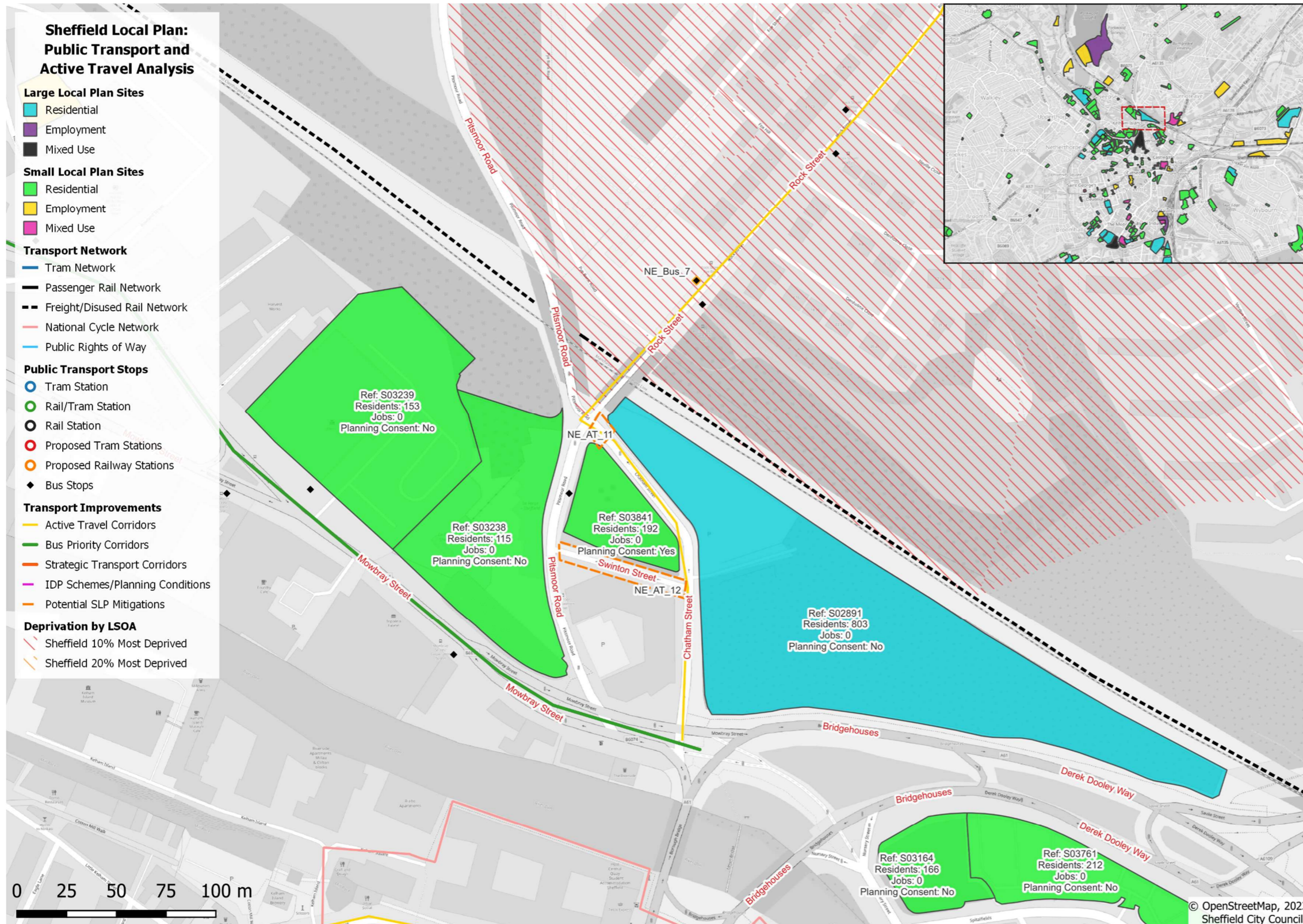
Figure 1. City-wide index map showing extent of Local Plan sites considered

APPENDIX B – PROPOSED MITIGATION MEASURES FOR NORTH-EAST SHEFFIELD



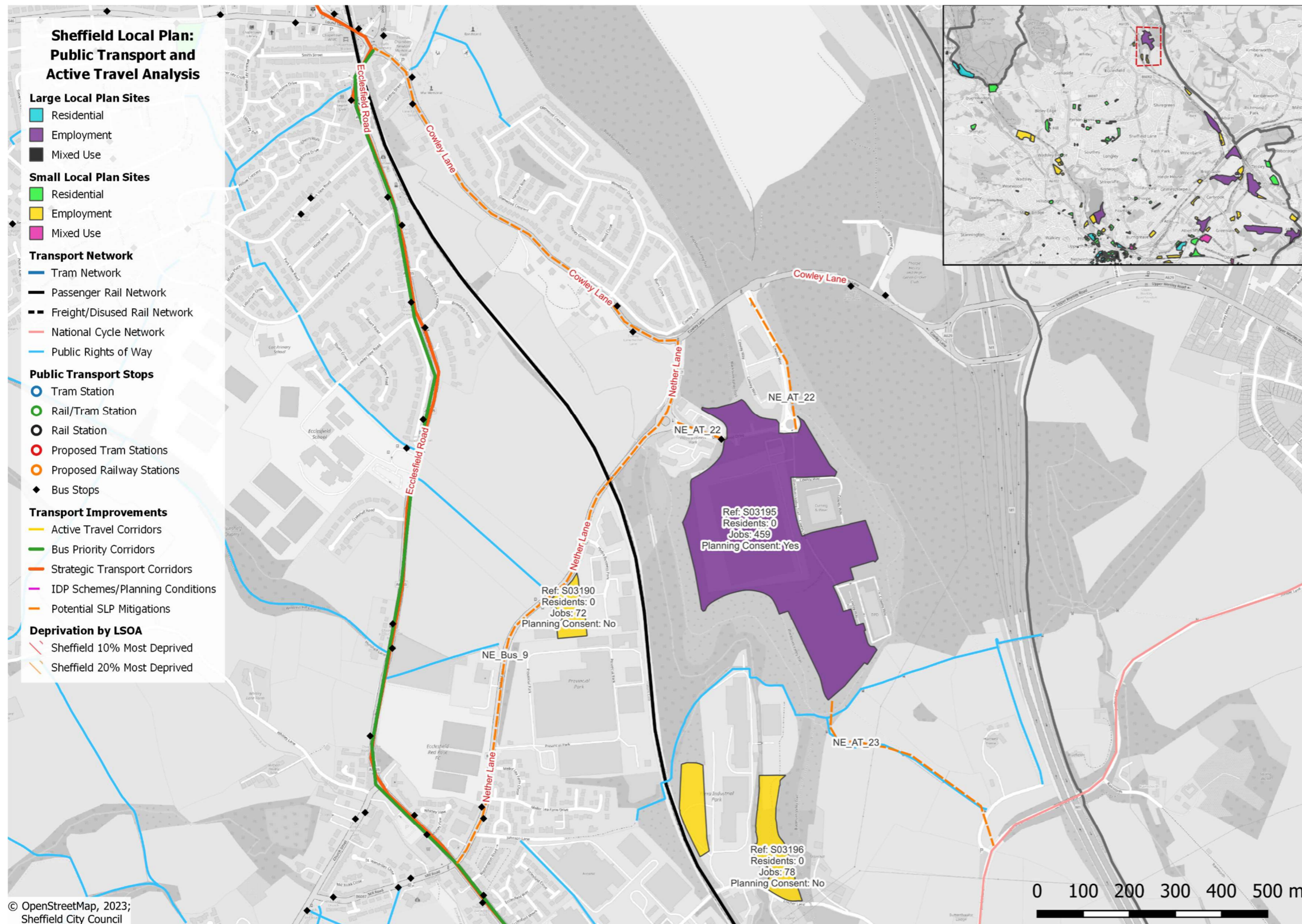
Blackburn Road

- **Current Status:** Brownfield sites bounded by rail line to the west and by Blackburn Road to the east. Blackburn Valley Trail NCN route runs north-south, providing access to Meadowhall Interchange. Rail line can be crossed via PRow and Fife Street.
- **Proposed Public Transport Measures:** Increase frequency of 137 bus service (currently hourly) to twice-hourly or better [NE_Bus_5].
- **Proposed Active Travel Measures:**
 - Installation of one or more appropriate crossing facilities on Blackburn Road to provide access from site S03219 to southbound bus stop(s) [NE_AT_6]
 - Investigate LTN 1/20 compliance and signposting of Blackburn Valley Trail NCN route which runs adjacent to site S03219 (although SCC have indicated that NCN route is sub-optimal and that improvements along Ecclesfield Road would be preferred) [NE_AT_7]



Bridgehouses / Mowbray Street

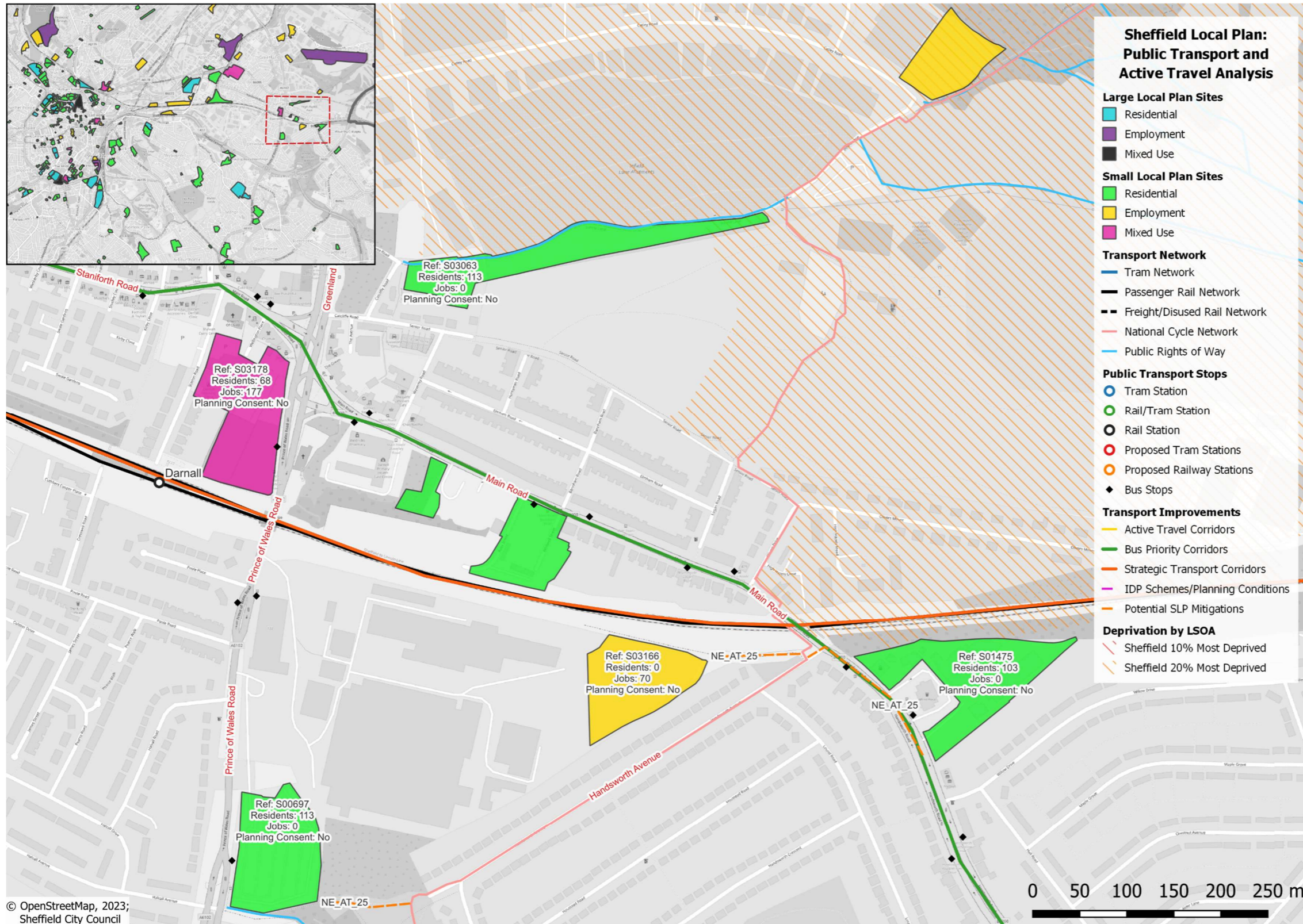
- Current Status:** Large residential site and smaller residential sites located to north of busy A61 and south of rail line, both of which pose notable severance issues. Crossings are already in place across the A61 to access the city centre, with a bus priority corridor along Mowbray Street and an active travel corridor along Rock Street.
- Proposed Public Transport Measures:**
 - Provision of bus shelter with facilities at Rock Street / Pye Bank Road northbound bus stop [NE_Bus_7]
- Proposed Active Travel Measures:**
 - Signalised crossing at existing traffic signals on Chatham Street near junction with Pitsmoor Road/Rock Street – may feature in Northern Communities CRSTS active travel scheme [NE_AT_11]
 - Installation of pedestrian crossing on Swinton Street (though mitigation may be provided via Northern Communities CRSTS active travel scheme) [NE_AT_12]



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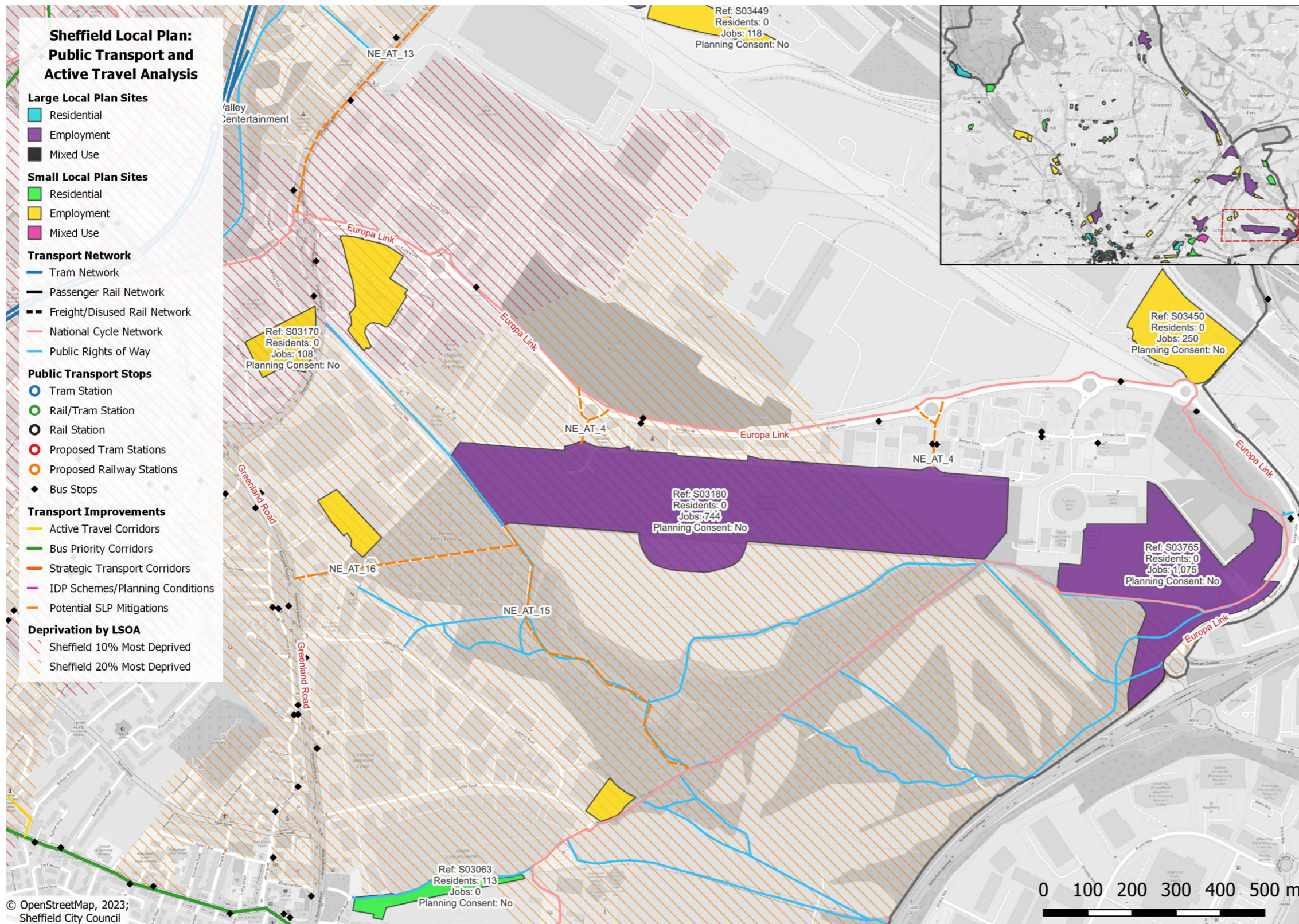
Cowley Lane / Nether Lane

- **Current Status:** Site proposed to north of existing industrial estate on Nether Lane, however Nether Lane is not currently served by buses and Cowley Lane is only served by Rotherham – Chapelton buses. Active Travel markings already in place around Cowley Lane/Nether Lane junction.
- **Proposed Public Transport Measures:** Investigate potential of rerouting one or more of 1, 2 and 83 bus services along Nether Lane and Cowley Lane to better serve employment sites (rerouted buses would then be able to rejoin Ecclesfield Road). Ecclesfield Road is designated as a bus priority corridor, but is an unattractive walking distance from site S03195 and existing industrial estate [NE_Bus_9]
- **Proposed Active Travel Measures:**
 - Ensure provision of adequate active mode access from site S03195 to Cowley Lane / Nether Lane [NE_AT_22]
 - Review quality of links to NCN route to south, upgrade if required [NE_AT_23]



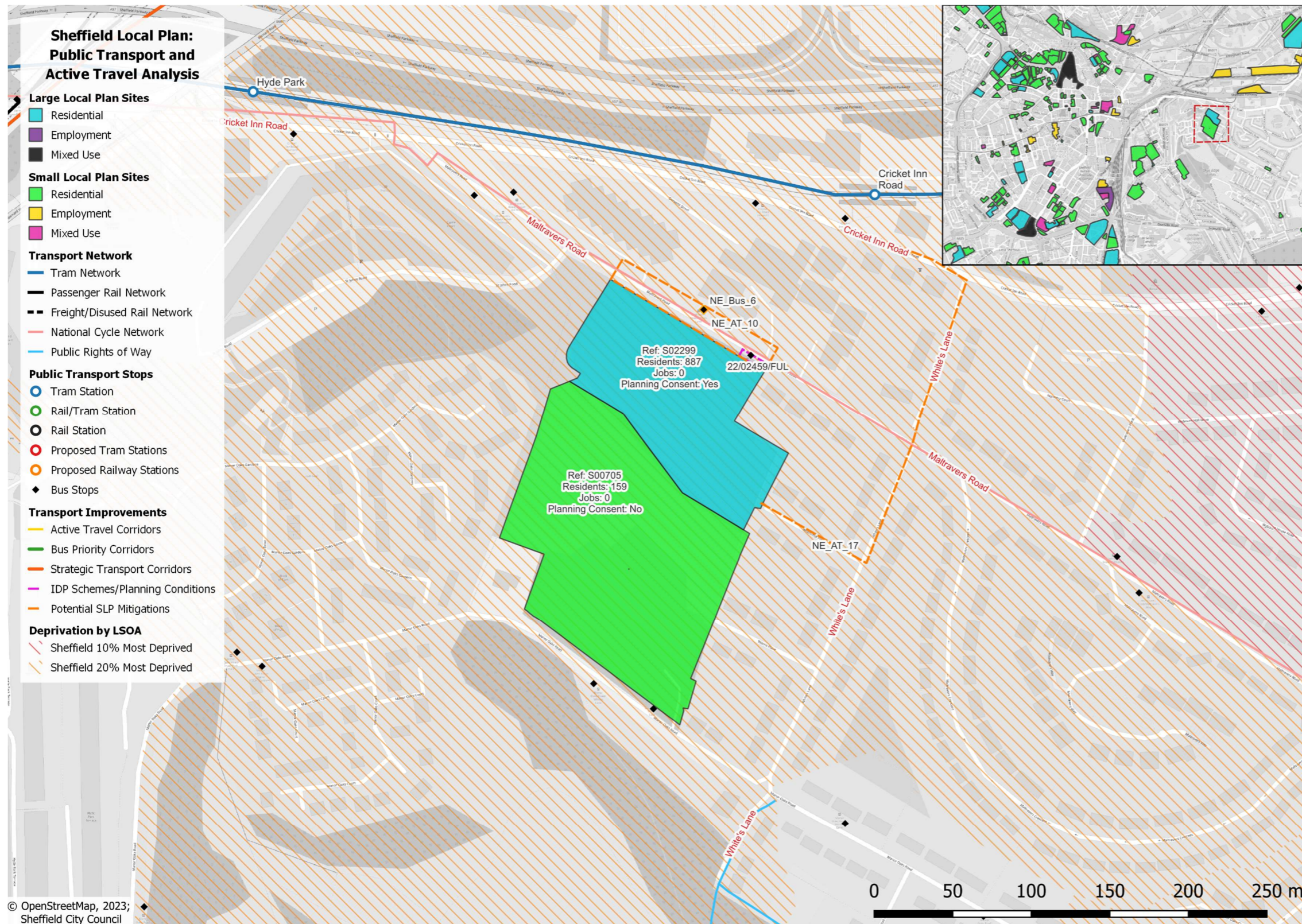
Darnall

- **Current Status:** Cluster of proposed sites (predominantly residential) located within close proximity of Darnall train station and Staniforth Road bus priority corridor. Darnall Mini Holland scheme is expected to improve active travel mobility in the area.
- **Proposed Public Transport Measures:** Investigate potential of additional bus service or improvement of frequency of 9/18 services on Prince of Wales Road to provide improved north-south bus link from sites and Darnall train station [NE_Bus_12]
- **Proposed Active Travel Measures:**
 - Ensure provision of links from sites to Darnall train station and bus stops (dependent on scale and scope of Darnall Mini Holland scheme) [NE_AT_24]
 - Ensure provision of active links from sites south of rail line to NCN route along Handsworth Avenue [NE_AT_25]



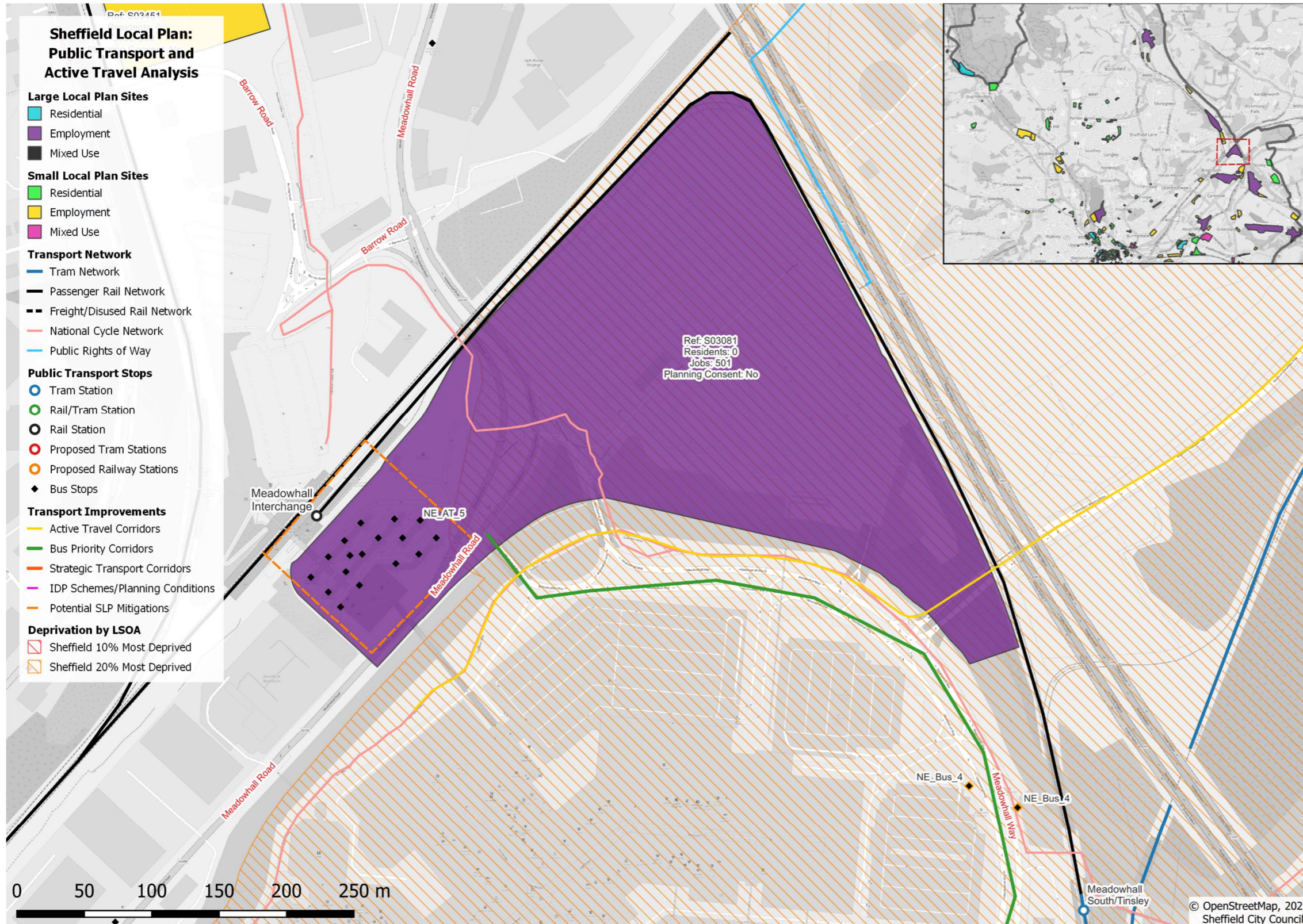
Europa Link (AMID)

- **Current Status:** Brownfield sites located within large business park on Sheffield-Rotherham border. Served by A1 bus every 40 minutes. NCN route and PRowS located to the south, however the terrain is hilly.
- **Proposed Public Transport Measures:** Improve frequency of A1 bus service and expand operating window (currently ends at 7pm) [NE_Bus_3]
- **Proposed Active Travel Measures:**
 - Ensure provision of links to upgraded NCN route along Europa Link (NCN route goes through site S03765 - access dependent on site design) [NE_AT_4]
 - Provide links to the bridleway through Tinsley Park Woods with surface improvement to provide a link to Darnall/Woodhouse [NE_AT_15]
 - Investigate potential of providing pedestrian/cycle access through Tinsley Park cemetery to provide route to Greenland Road [NE_AT_16]



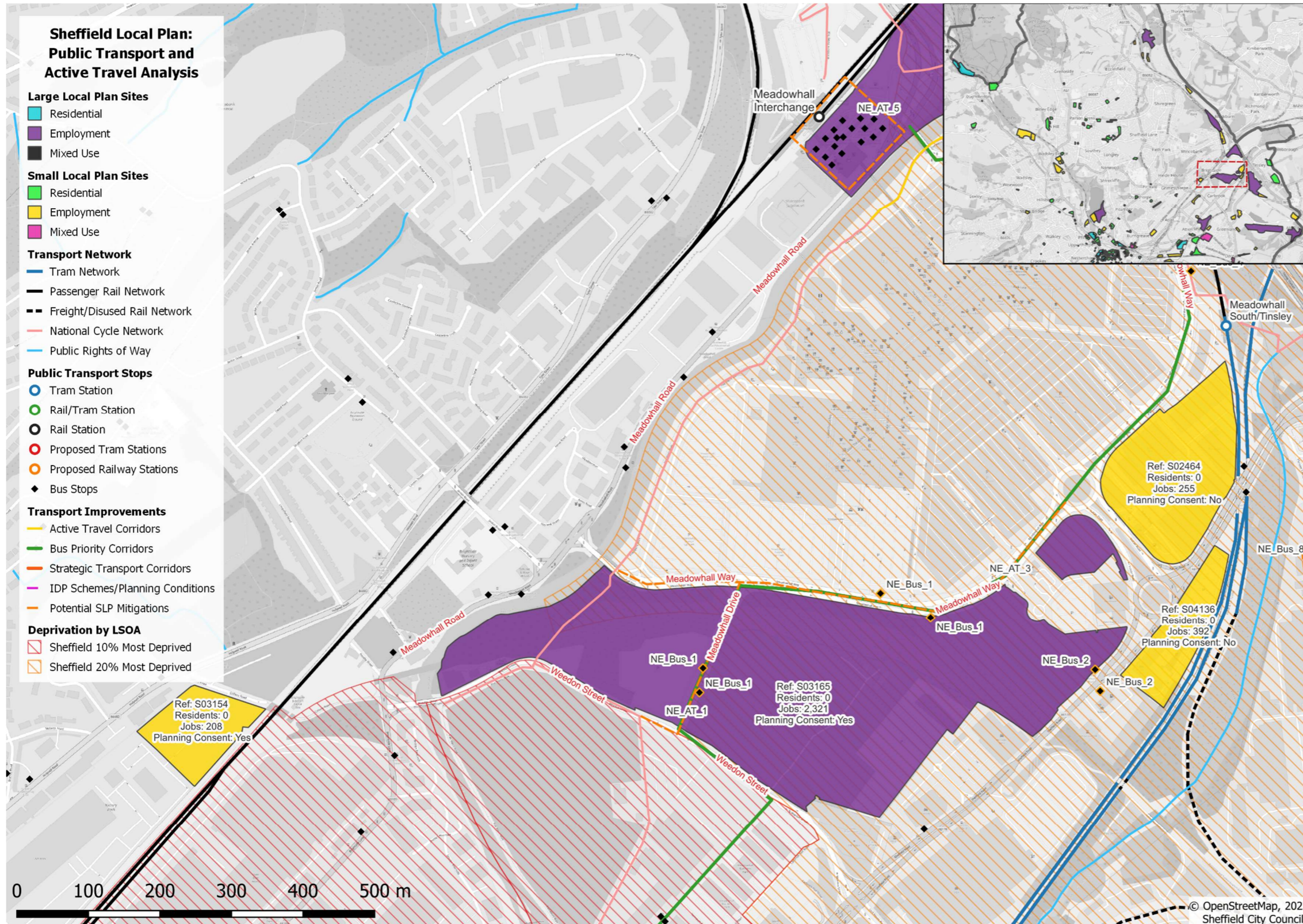
Maltravers Road

- **Current Status:** Adjoining housing sites located in predominantly residential area. Bus stops to north of site S02299 on Maltravers Road served by frequent 24 and 25 services (run every 20 minutes). Hyde Park/Cricket Inn Road tram stops located within reasonable walking distance.
- **Proposed Public Transport Measures:** Planning condition for site S02299 in place to provide westbound bus stop. Provision of bus shelter with facilities at Maltravers Road / Whites Lane eastbound stop should also be ensured [NE_Bus_6]
- **Proposed Active Travel Measures:**
 - Installation of appropriate crossing facility on Maltravers Road to provide access to eastbound bus stops [NE_AT_10]
 - Ensure provision of active travel links to Cricket Inn Road stop via Whites Lane [NE_AT_17]



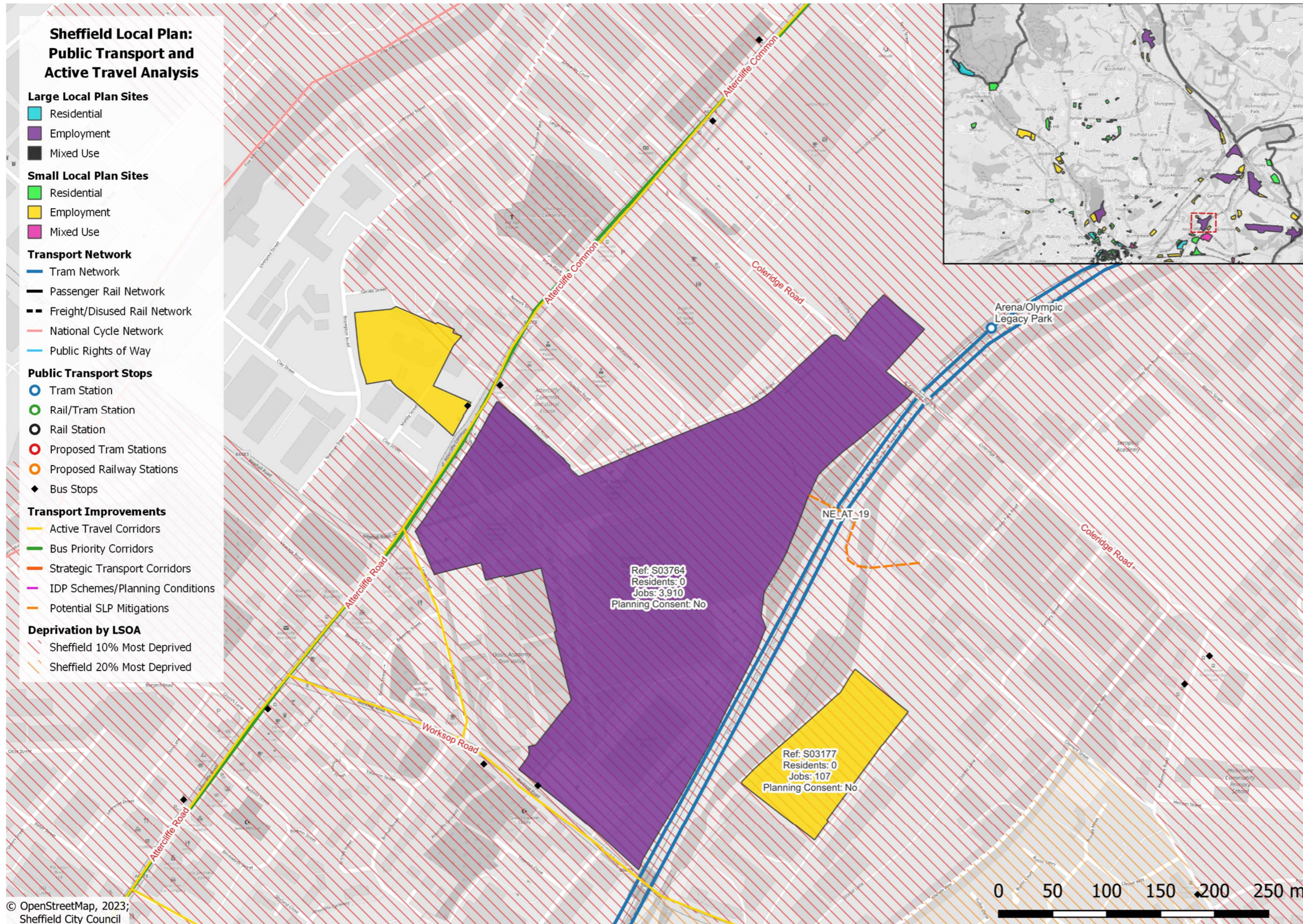
Meadowhall Interchange

- **Current Status:** Site allocation covers current Meadowhall staff car park, as well as Meadowhall Interchange, with access to shopping centre via road bridges and dedicated footbridges (from car park and Interchange). Five Weirs Walk NCN route runs along southern bank of River Don.
- **Proposed Public Transport Measures:** No public transport measures proposed, given the proximity of Meadowhall Interchange, which provides rail and bus access (although bus facilities are dependent on site design as allocation covers existing Interchange building). Bus priority corridor already proposed by SCC.
- **Proposed Active Travel Measures:**
 - Ensure adequate access between site and Meadowhall Interchange via active modes [NE_AT_5]
 - Ensure adequate access between site and Meadowhall shopping centre via active modes – are existing footbridges to be retained? [NE_AT_18]



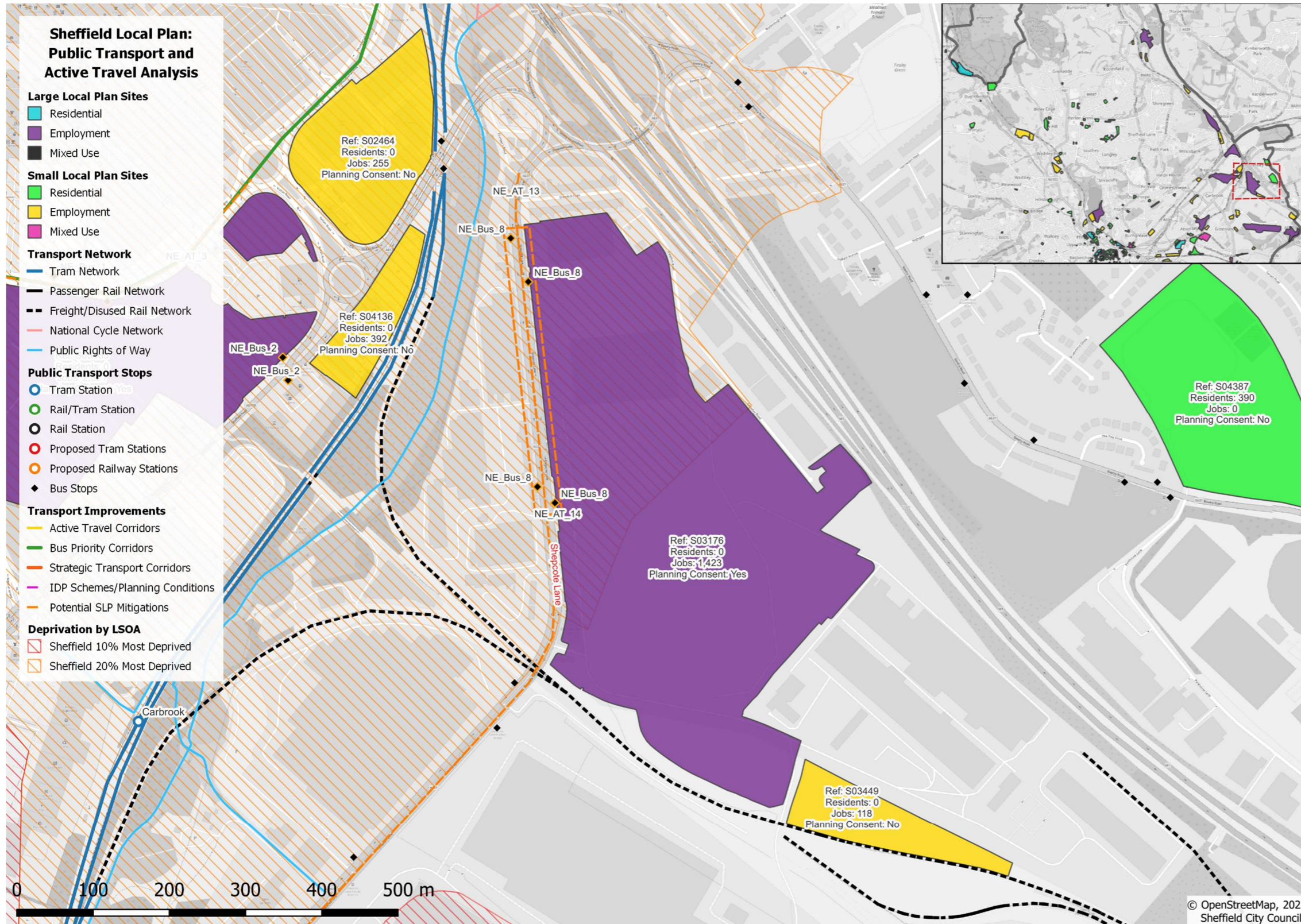
Meadowhall Way

- **Current Status:** Sites located to south of Meadowhall shopping centre, however severance is caused by dual carriageway Meadowhall Way. Unsignalised crossings (dropped kerbs, tactile paving) located at Meadowhall Drive/Meadowhall Way.
- **Proposed Public Transport Measures:**
 - RTPI at bus stops on Meadowhall Drive (site design-dependent) & Meadowhall Way south of shopping centre – both on bus priority corridor [NE_Bus_1]
 - Provision of bus shelters with facilities on Sheffield Road to east of site S03165 [NE_Bus_2]
- **Proposed Active Travel Measures:**
 - Shared footway or on-road cycleway along Meadowhall Drive, linking with NCN route on Carbrook Street [NE_AT_1]
 - Ensure NCN route along Weedon Street and Carbrook Street is LTN 1/20 compliant and signposted [NE_AT_2]
 - Cycleway on Meadowhall Way between NCN route and office park [NE_AT_3]



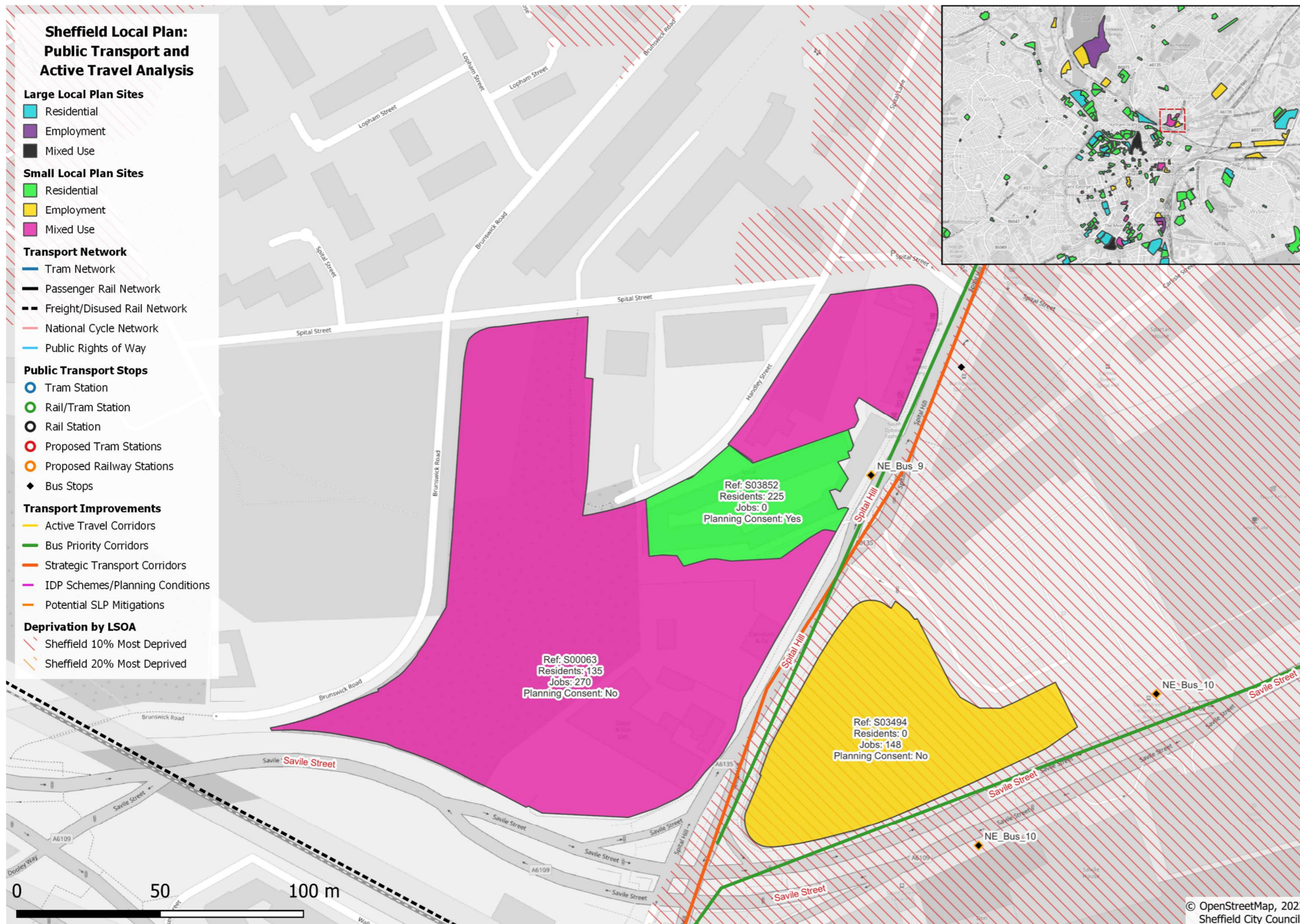
Olympic Legacy Park

- **Current Status:** Large site located near to Arena/Olympic Legacy Park tram stop as well as busy A6178, which is designated as a bus priority corridor and active travel route. Active travel improvements also planned along Worksop Road to the south-east. Tram line crossings via Coleridge Road, Worksop Road and Brown Bayley Bridge.
- **Proposed Public Transport Measures:** No public transport measures proposed, given the proximity of Arena/Olympic Legacy Park tram stop and bus priority corridor and access to bus services on Attercliffe Road.
- **Proposed Active Travel Measures:**
 - Ensure provision of adequate AT links and wayfinding signage between site S03764 and Arena / OLP tram stop [NE_AT_9]
 - Review condition and LTN 1/20 compliance of footbridge over tram line and upgrade if required [NE_AT_19]
 - Provide active link to Worksop Road active travel corridor [NE_AT_20]



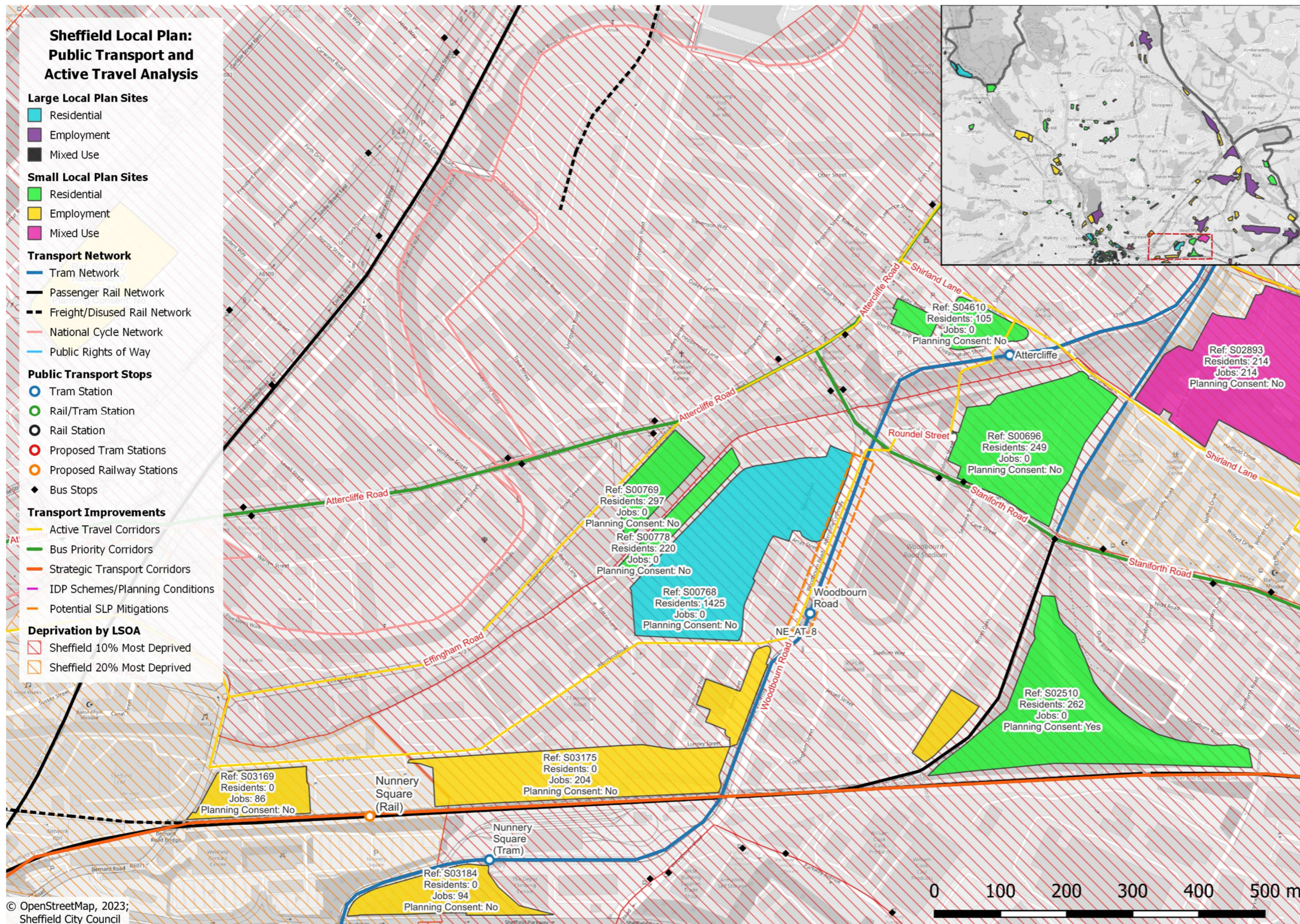
Shepcote Lane

- **Current Status:** Former large factory site in industrial area, bounded by M1 to the east. Shepcote Lane to the west of site S03176 is dual carriageway with few formal crossing points. Severance to tram caused by canal.
- **Proposed Public Transport Measures:** Provision of bus shelters with facilities on Shepcote Lane [NE_Bus_8]
- **Proposed Active Travel Measures:**
 - Provision of shared footway or on-road cycleway (both directions) along Shepcote Lane [NE_AT_13]
 - Installation of appropriate crossing facilities along Shepcote Lane to provide access to northbound bus stops [NE_AT_14]



Spital Hill

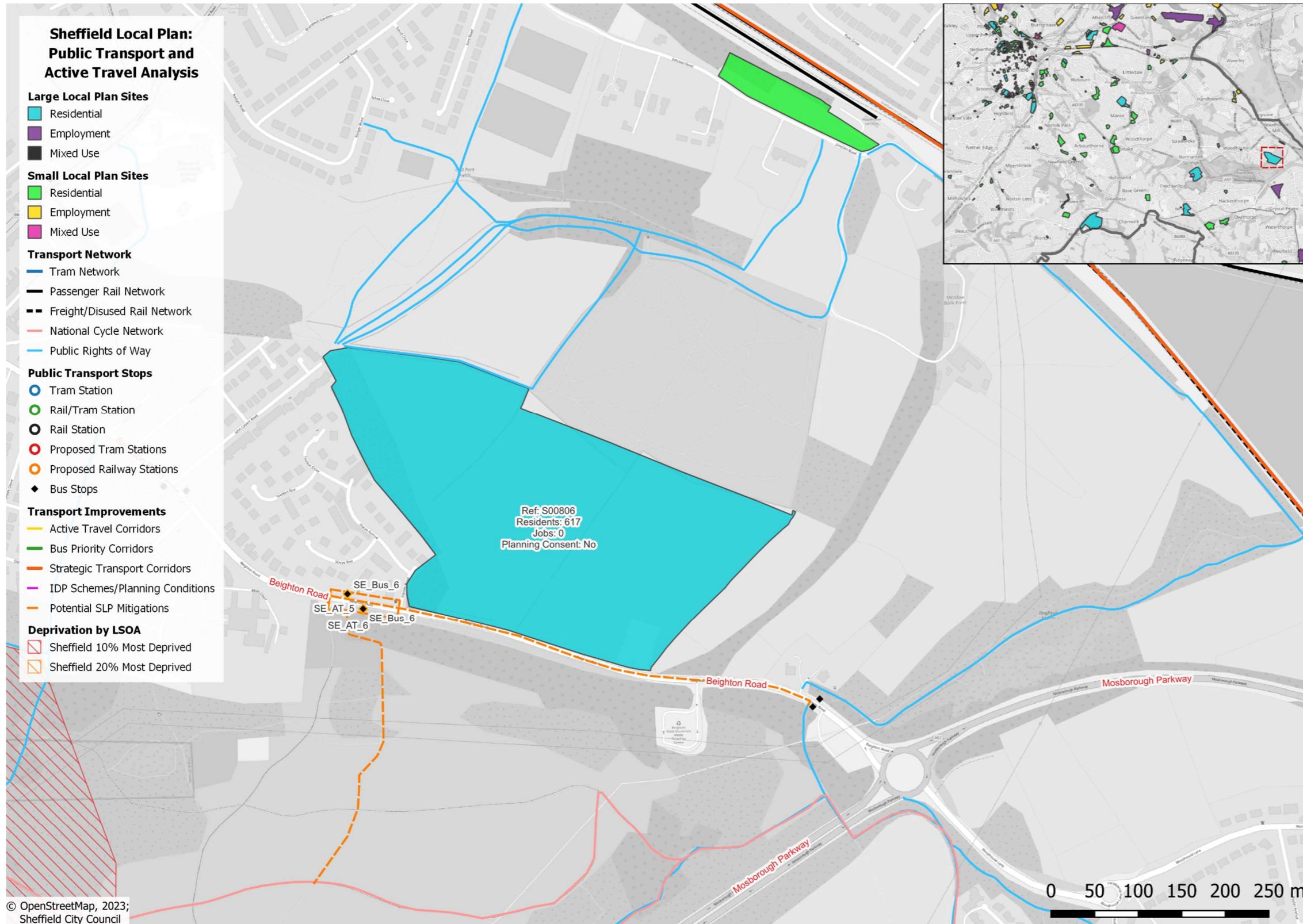
- **Current Status:** Cluster of small housing, employment and mixed use sites located at north-eastern edge of Sheffield city centre. Frequent bus services available from A6135 Spital Hill and Savile Street, which are designated as bus priority corridors. Severance to city centre caused by Savile Street and rail line, placing emphasis on Spital Hill as an active route.
- **Proposed Public Transport Measures:**
 - RTPI provision at bus stops on Savile Street to south of site S03494 [NE_Bus_10]
 - Provide northbound bus stop with RTPI and appropriate facilities on Spital Hill in proximity to sites S00063 and S03852 [NE_Bus_11]
- **Proposed Active Travel Measures:**
 - Ensure access to Spital Hill from relevant Local Plan sites via active modes via shared footways/cycleways, wayfinding, etc. [NE_AT_21]



Woodbourn Road

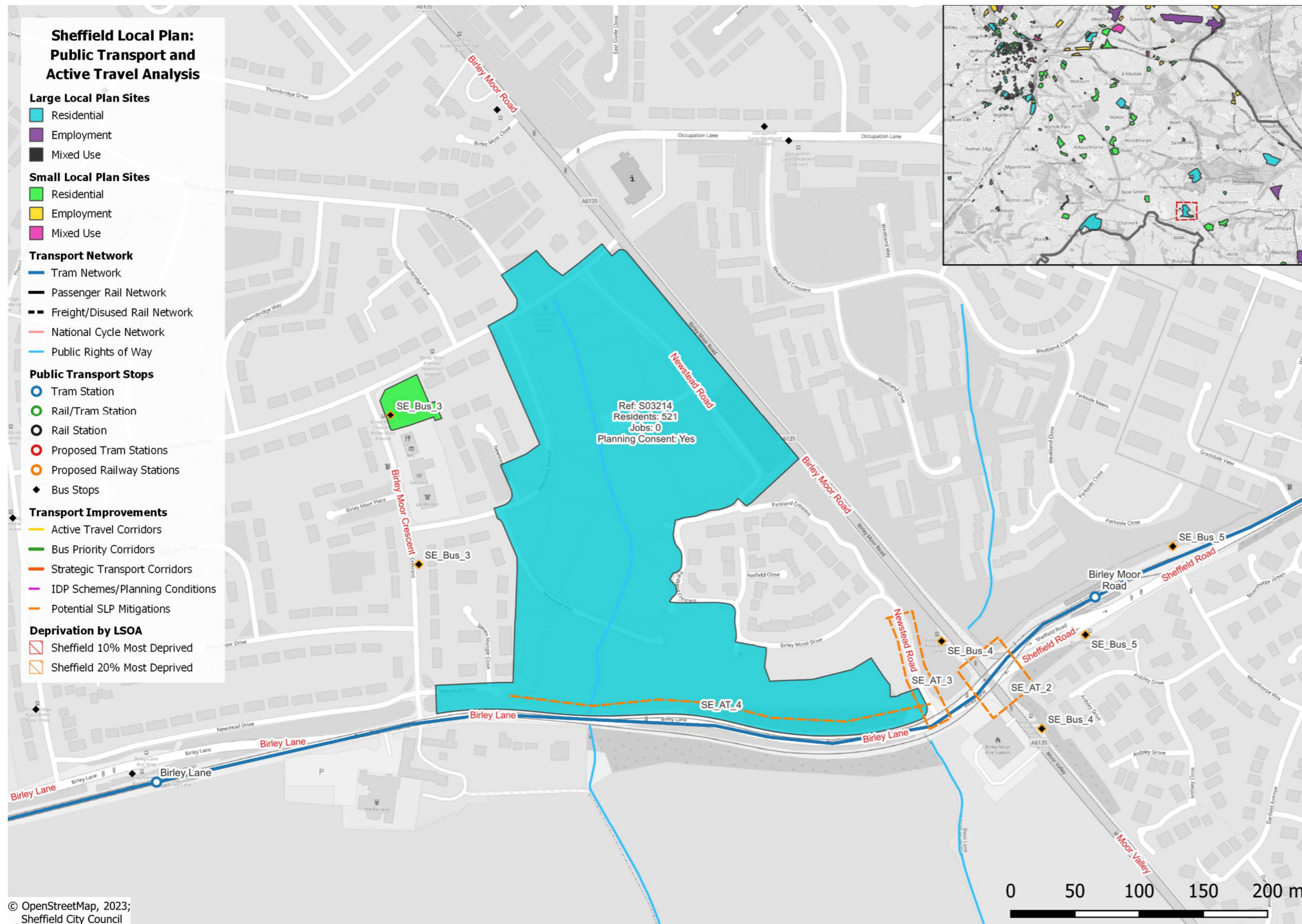
- **Current Status:** Cluster of housing, employment and mixed use sites located within close proximity of Woodbourn Road and Attercliffe tram stops. Woodbourn Road crosses rail line to the south, whilst Attercliffe Road and Staniforth Road are designated as bus priority corridors.
- **Proposed Public Transport Measures:** No public transport measures proposed, given the proximity of tram stops at Woodbourn Road, Attercliffe and Nunnery Square, as well as designation of bus priority corridors and accessibility of bus stops/services.
- **Proposed Active Travel Measures:**
 - Installation of appropriate pedestrian and cycle crossing facility to provide access from site S00768 to Woodbourn Road tram stop [NE_AT_8]

APPENDIX C – PROPOSED MITIGATION MEASURES FOR SOUTH-EAST SHEFFIELD



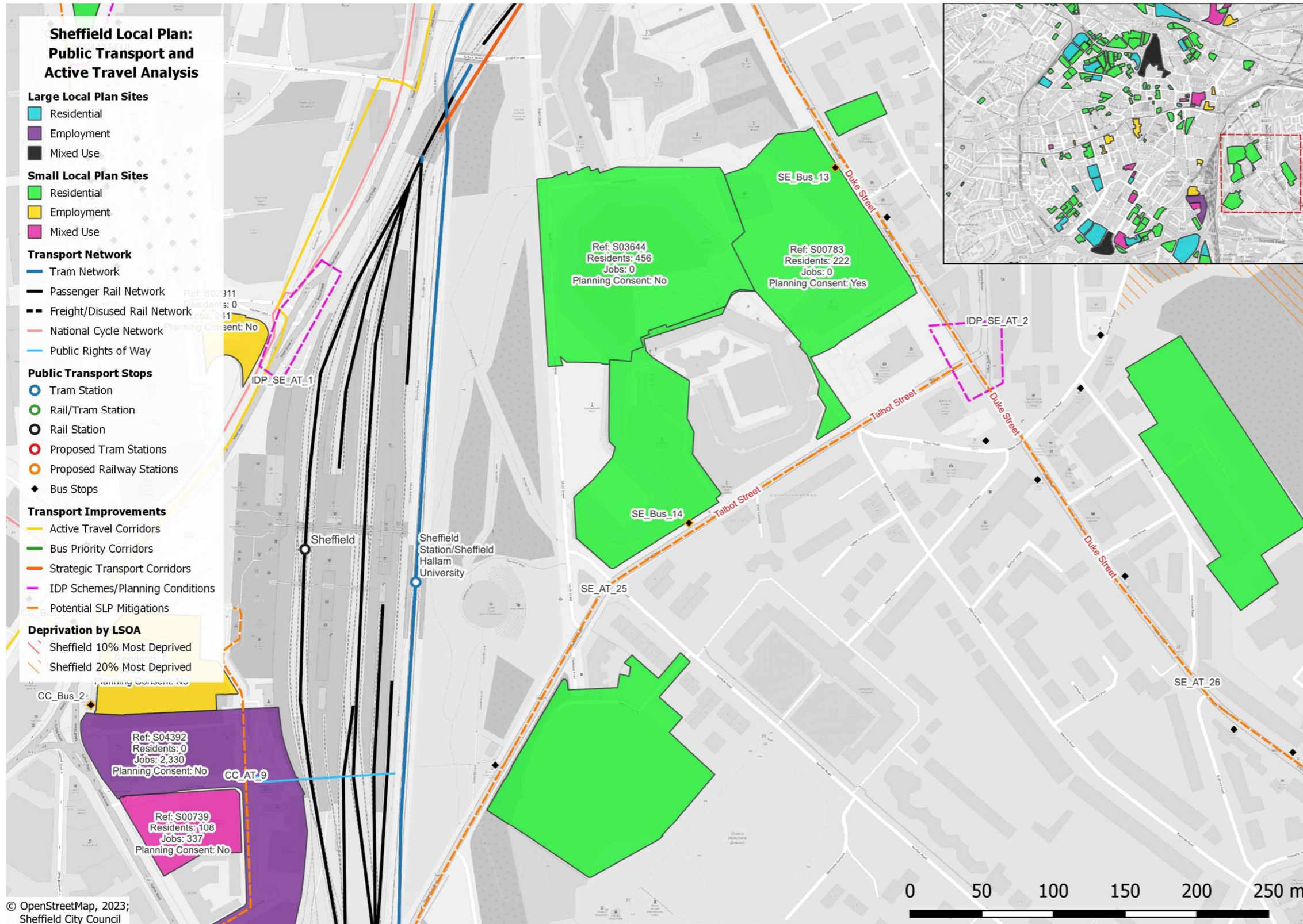
Beighton Road

- **Current Status:** Solitary large residential site located adjacent to existing residential estate. Bus services available from Beighton Road, providing access to city centre. NCN route to the south runs through Shire Brook Valley Nature Reserve.
- **Proposed Public Transport Measures:** Provision of RTPI at bus stops on Beighton Road / Massey Road; upgrading of eastbound bus stop to match westbound bus stop [SE_Bus_6]
- **Proposed Active Travel Measures:**
 - Installation of appropriate crossing facility on Beighton Road adjacent to site S00806 and bus stops [SE_AT_5]
 - Provision of cycle link along Beighton Road/through Linley Bank Meadows to link with NCN route [SE_AT_6]
 - Ensure adequate footways/cycleways and crossings to access Woodhouse rail station (around 1.6km to north west via Beighton Road and Station Road) [SE_AT_21]



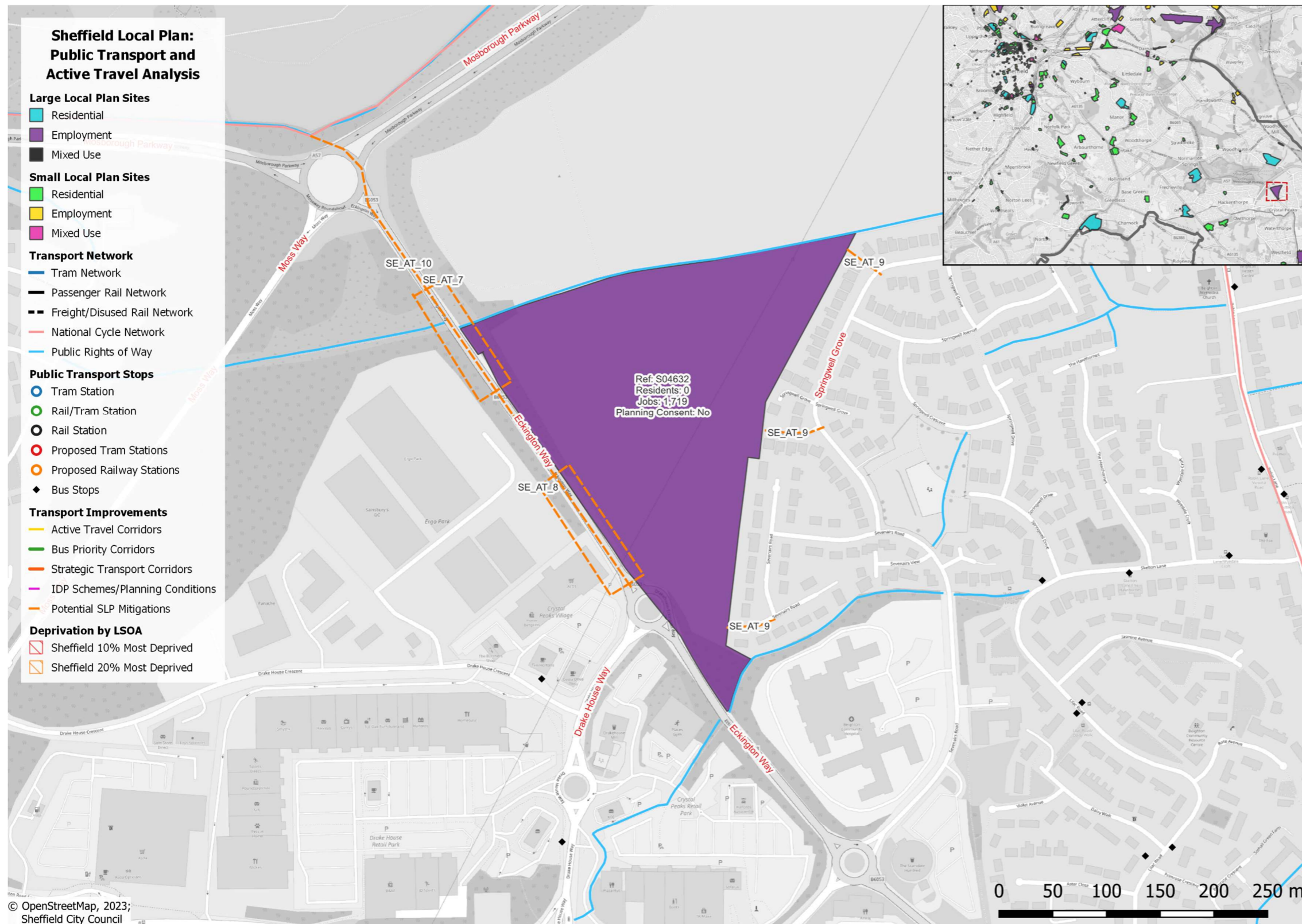
Birley Moor Road

- **Current Status:** Adjacent to existing residential estate, bounded to east by the A6135 Birley Moor Road and to south by Birley Lane and tram line. Birley Lane and Birley Moor Road tram stops located within reasonable walking distance of the site.
- **Proposed Public Transport Measures:**
 - Provision of bus shelters with facilities at Birley Moor Crescent stops [SE_Bus_3]
 - Provision of bus shelters with facilities at Birley Moor Road stops [SE_Bus_4]
 - Provision of RTP1 at bus stop opposite tram stop on Sheffield Road [SE_Bus_5]
- **Proposed Active Travel Measures:**
 - Signalised crossing facilities at Birley Moor Road / Sheffield Road (junction has been investigated previously, to be reconsidered by SCC) [SE_AT_2]
 - Pedestrian crossing on Newstead Road, near Birley Lane junction [SE_AT_3]
 - Upgrade footway adjacent to Birley Lane to meet LTN 1/20 standards [SE_AT_4]



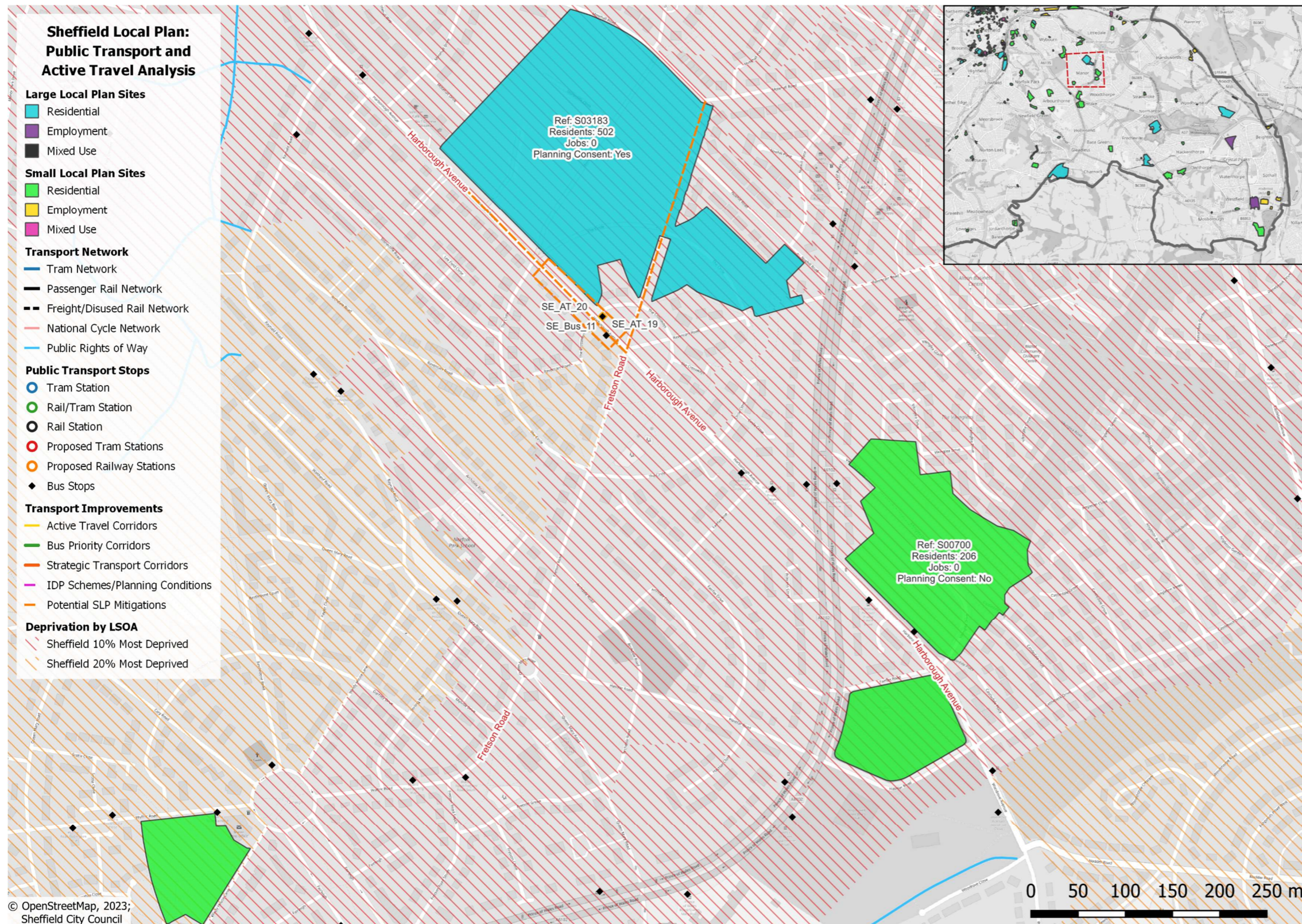
East of Sheffield Station

- **Current Status:** Cluster of smaller residential sites located to the east of Sheffield Station, on existing Park Hill estate. Easy access to Sheffield Station and tram stop to the west, with bus services on Duke Street to the east.
- **Proposed Public Transport Measures:**
 - Provide bus shelter with facilities and RTPI at Duke Street/Weigh Lane stop [SE_Bus_13]
 - Provide bus shelter with facilities at Talbot Street/Talbot Crescent stop [SE_Bus_14]
- **Proposed Active Travel Measures:**
 - Ensure quality/LTN 1/20 compliance of active links between sites and Sheffield Station/tram stop [SE_AT_24]
 - Shared footway or on-road cycleway along Talbot Street, from Duke Street to Granville Road tram stop [SE_AT_25]
 - Shared footway or on-road cycleway along Duke Street to aid north-south access by active modes [SE_AT_26]



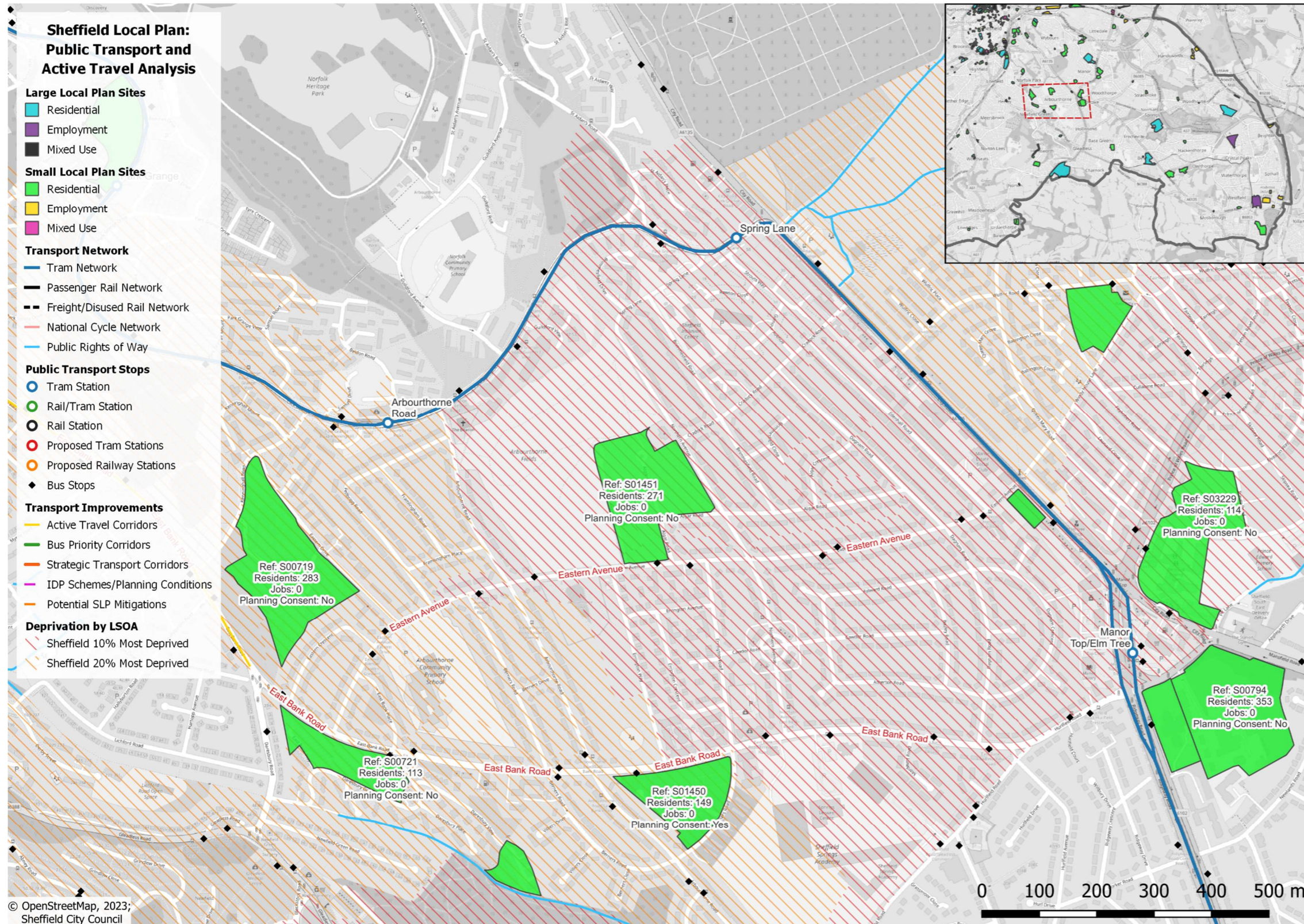
Eckington Way (Crystal Peaks)

- **Current Status:** Greenfield site bounded to the west by Eckington Way and to the east by an existing residential estate. There are no footways or crossings located along Eckington Way, and the PRoW to the north is paved but designated as pedestrian-only.
- **Proposed Public Transport Measures:**
 - Expand operating window of number 7 bus service, dependent on site S04632 use and operating hours [SE_Bus_12]
- **Proposed Active Travel Measures:**
 - Installation of appropriate crossing facility on Eckington Way in vicinity of PRoW [SE_AT_7]
 - Installation of footway(s) and crossings on Eckington Way to provide access to Crystal Peaks retail park [SE_AT_8]
 - Provision of adequate pedestrian/cyclist access to Springwell housing estate from development [SE_AT_9]
 - Investigate upgrading of PRoW north of site S04632 to allow cycles [SE_AT_22]



Harborough Avenue

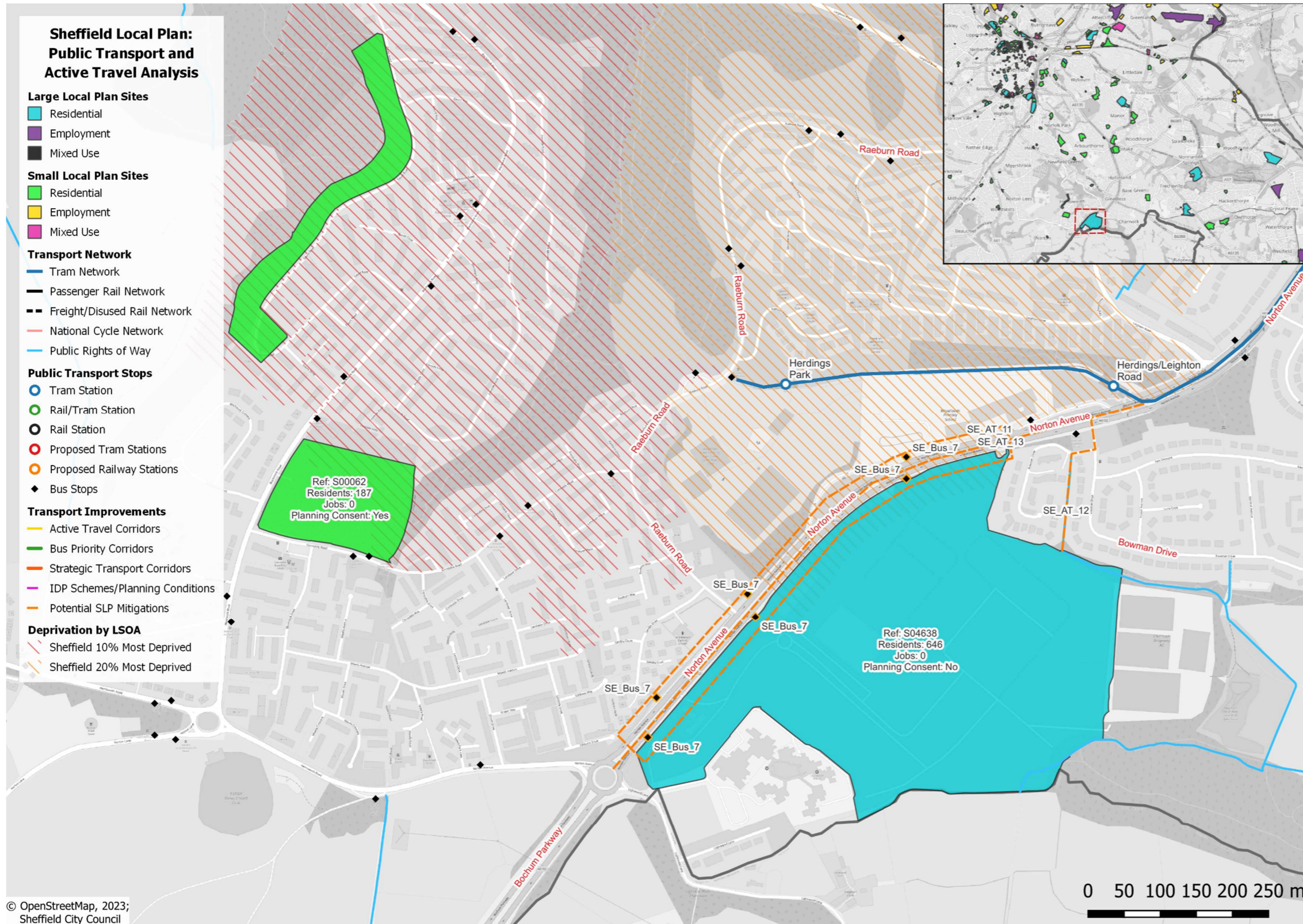
- **Current Status:** Large housing site located in existing residential estate with smaller residential sites also allocated south of A6102 Prince of Wales Road. Lack of tram and rail stations within vicinity of site places emphasis on bus and active travel.
- **Proposed Public Transport Measures:**
 - Provision of bus shelter with facilities at Harborough Avenue / The Crossways southbound stop [SE_Bus_11]
- **Proposed Active Travel Measures:**
 - Provision of AT links through the site and along Harborough Avenue to provide access to bus stops at Harborough Avenue / The Crossways [SE_AT_19]
 - Installation of appropriate crossing facility on Harborough Avenue in vicinity of bus stops [SE_AT_20]



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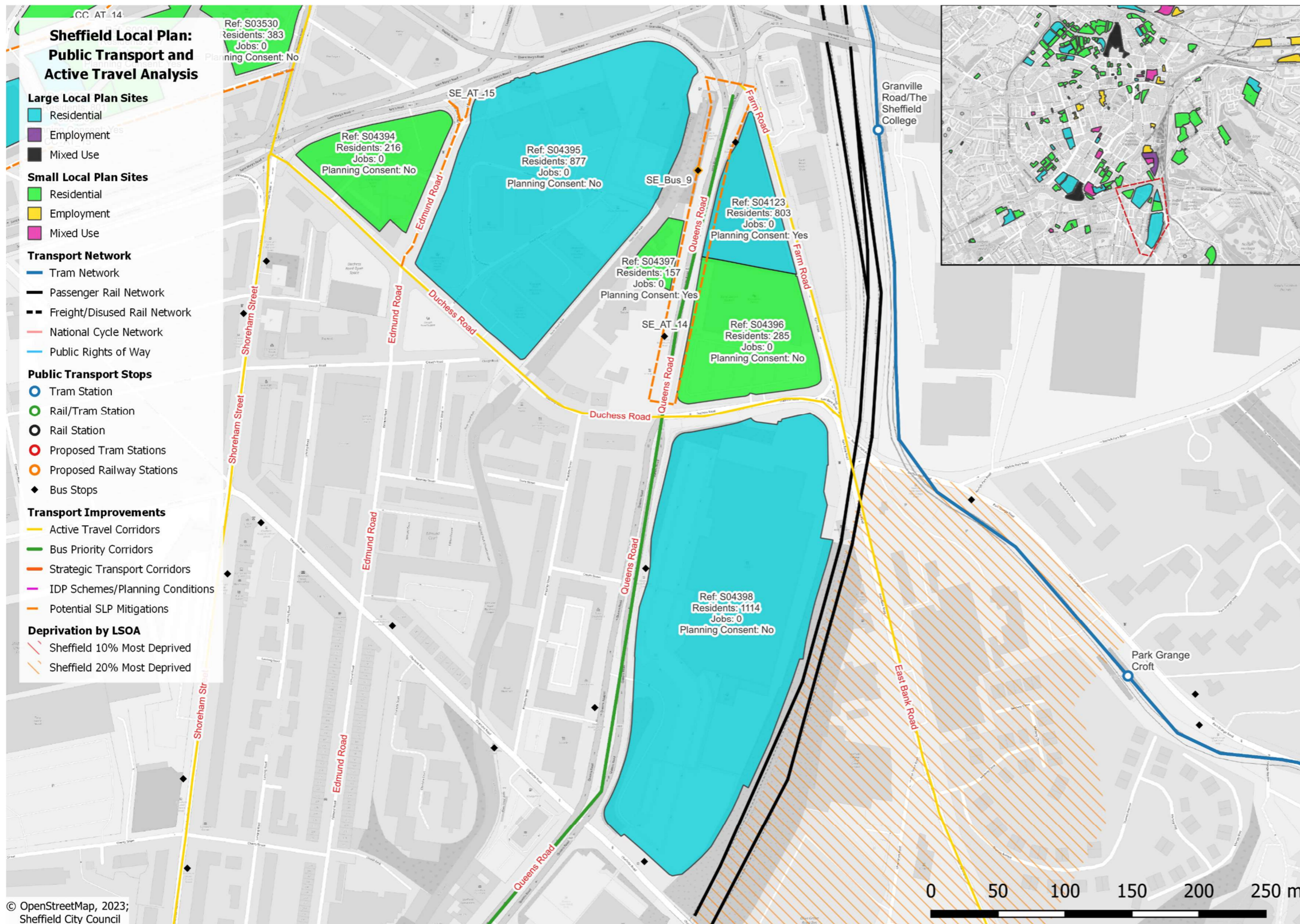
Manor Top

- **Current Status:** Cluster of smaller residential sites located around tram network to the south east of Sheffield city centre. Deprivation of area may increase reliance on public transport services if households do not have private car access.
- **Proposed Public Transport Measures:**
 - Increase frequency of 41 (currently hourly) bus service which runs along Eastern Avenue [SE_Bus_15]
 - Review provision of bus shelters at key bus stops in vicinity of Local Plan sites [SE_Bus_16]
- **Proposed Active Travel Measures:**
 - Ensure provision of active travel links (shared footways/segregated cycleways where possible) between Local Plan sites and bus stops/tram stops [SE_AT_27]
 - Ensure access to East Bank Road active travel corridor from sites S00719 and S00721 [SE_AT_28]



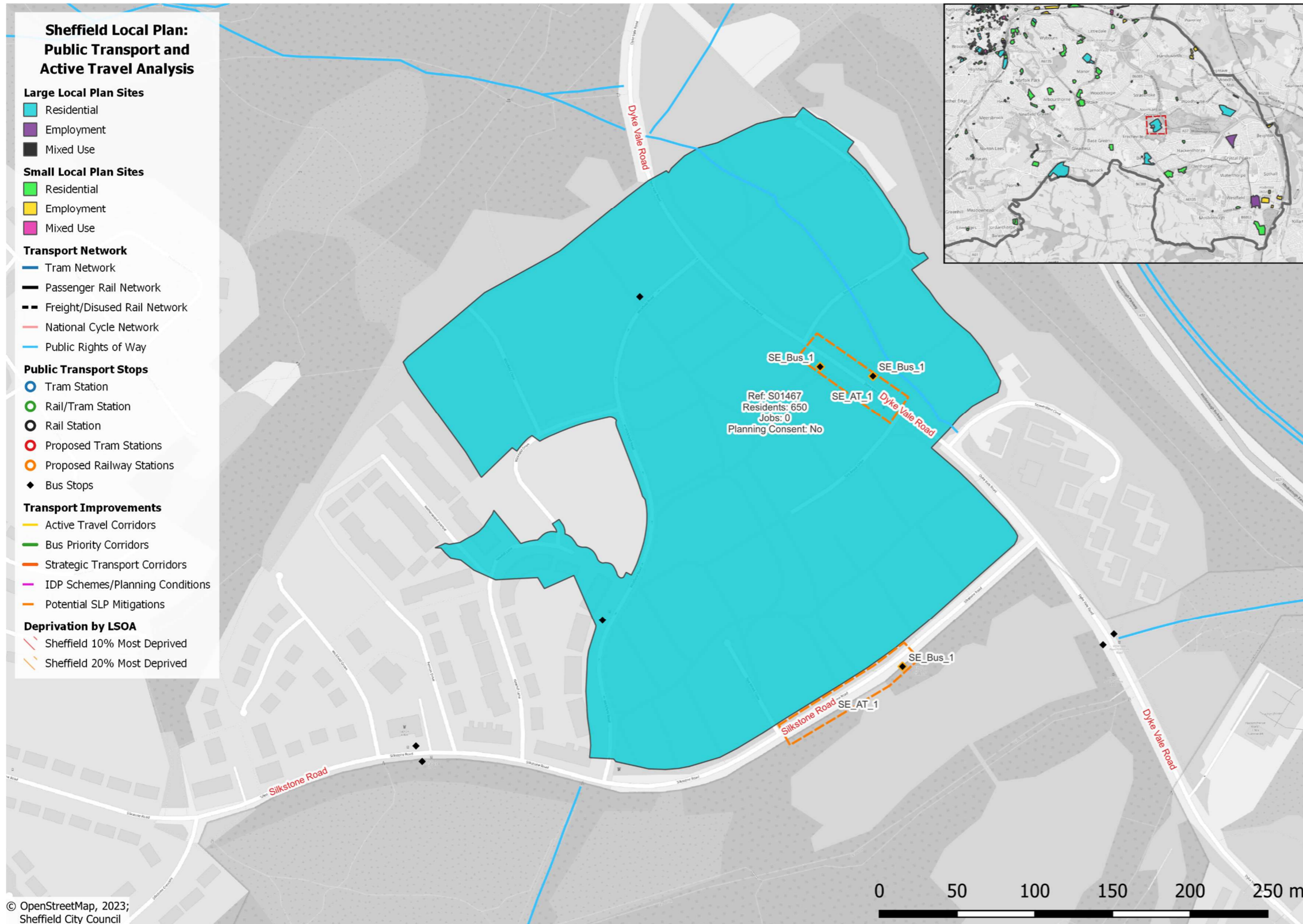
Norton Aerodrome

- **Current Status:** Large residential site located on former Norton Aerodrome, bounded to west and north by dual carriageway Norton Avenue. Bus stops located on Norton Avenue, whilst Herdings Park and Herdings/Leighton Road tram stops are also accessible from the site.
- **Proposed Public Transport Measures:**
 - Provision of bus shelters with facilities at all stops along Norton Avenue within vicinity of site [SE_Bus_7]
- **Proposed Active Travel Measures:**
 - Installation of crossing facilities on Norton Road to provide access to northbound bus stops [SE_AT_11]
 - Provision of adequate access to Herdings/Leighton Road tram stop via Bowman Drive [SE_AT_12]
 - Provision of active travel link along Norton Avenue in both directions between Herdings/Leighton Road tram stop and Bochum Parkway [SE_AT_13]



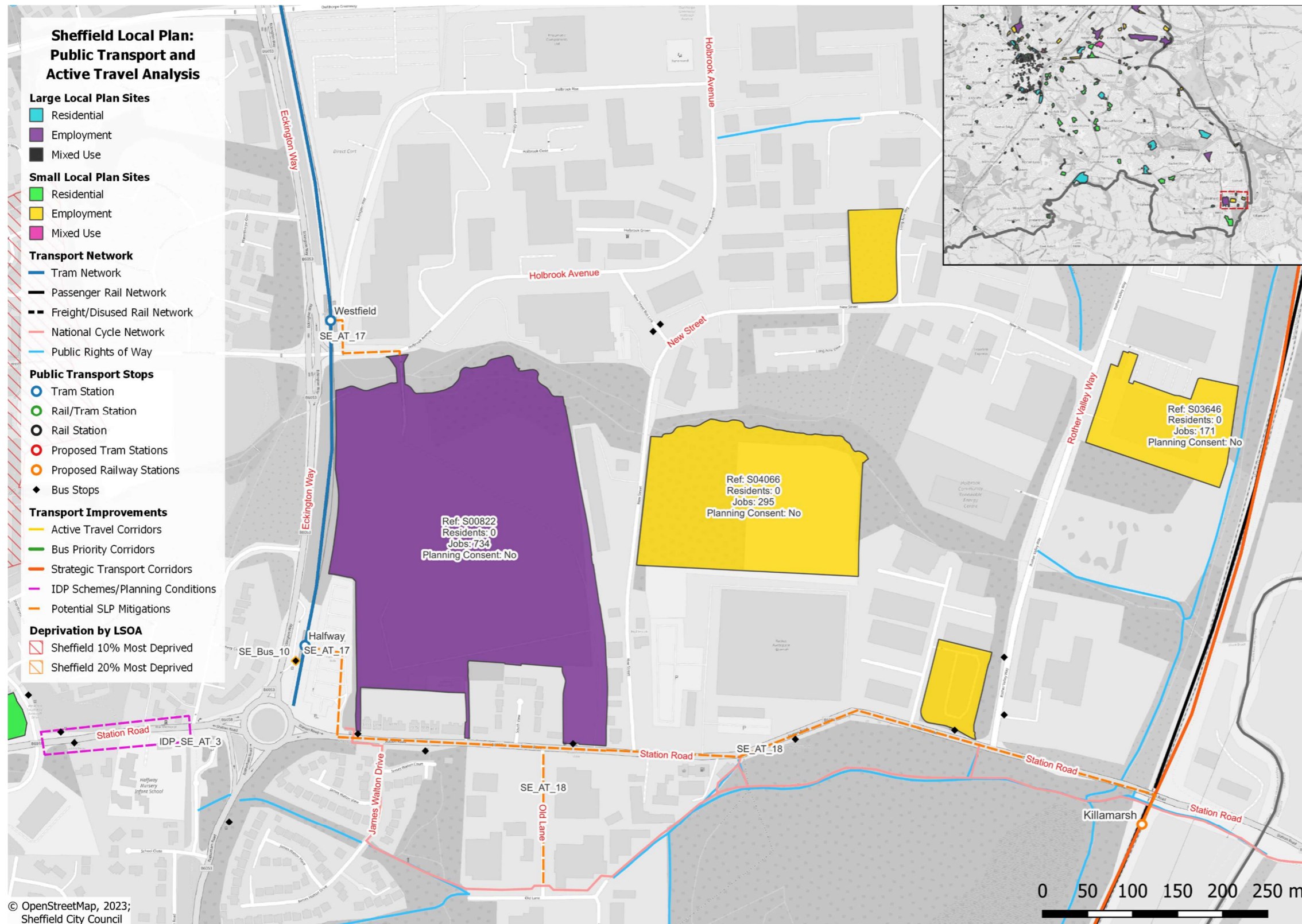
Queens Road

- **Current Status:** Cluster of small and large residential sites located to the immediate south-east of Sheffield City Centre, on brownfield sites. Severance to east caused by rail line (crossing available via Farm Road), whilst tram services are accessible via Granville Road. Active travel improvements already planned via corridors on Duchess Road and Farm Road.
- **Proposed Public Transport Measures:**
 - Provision of bus shelter with facilities at northbound Queens Road / St Mary's Road stop [SE_Bus_9]
- **Proposed Active Travel Measures:**
 - Installation of crossing facilities on Queens Road to provide access to northbound bus stop for site S04123 and southbound bus stop for site S04395, to provide improved access to bus stops on A61 south bus priority corridor [SE_AT_14]



Silkstone Road / Dyke Vale Road

- **Current Status:** Suburban area with limited bus connectivity at present. Some bus stops already in place, though amenities are basic.
- **Proposed Public Transport Measures:**
 - Implement RTPI provision at bus stops on Silkstone Road and Dyke Vale Road to improve bus user experience. [SE_Bus_1]
 - Increase frequency of hourly 41 service which serves Wickfield Road, Silkstone Road and Dyke Vale Road [SE_Bus_2]
 - Expand timetable of hourly 55 service which serves Silkstone Road to cover peak commuting periods [SE_Bus_2]
- **Proposed Active Travel Measures:**
 - Provide pedestrian crossings to Silkstone Road and Dyke Vale Road bus stops [SE_AT_1]
 - Investigate quality of PRoWs and upgrade if required to link with primary school to the south and secondary school to the north [SE_AT_23]



Station Road (Halfway)

- Current Status:** Large site located adjacent to Halfway park & ride site, and just south of Westfield tram stop. Smaller employment sites located to the east along New Street and Rother Valley Way. NCN route located to south, with potential Killamarsh rail station east via Station Road.
- Proposed Public Transport Measures:**
 - Provision of RTP1 at Halfway P&R stop to aid wayfinding and multi-modal interchanges [SE_Bus_10]
- Proposed Active Travel Measures:**
 - Ensure provision of adequate AT links from site S00822 to Halfway and Westfield tram stops (may be dependent on site design) [SE_AT_17]
 - Investigate provision of AT link to potential Killamarsh rail station via Station Rd and/or NCN route/PRoW (dependent on status of Barrow Hill Restoring Your Railway bid) [SE_AT_18]

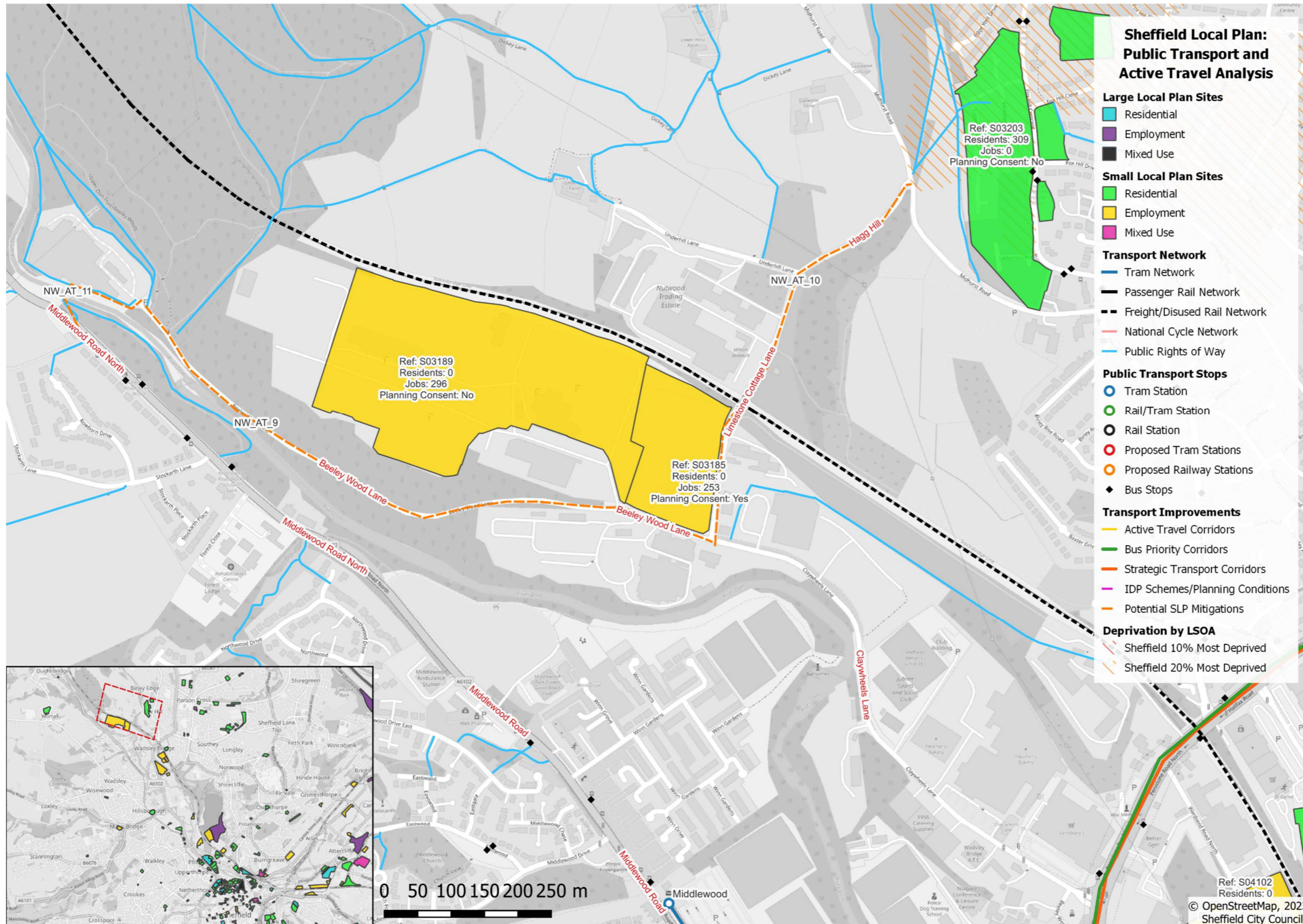
APPENDIX D – PROPOSED MITIGATION MEASURES FOR SOUTH-WEST SHEFFIELD



Pomona Street / Summerfield Street

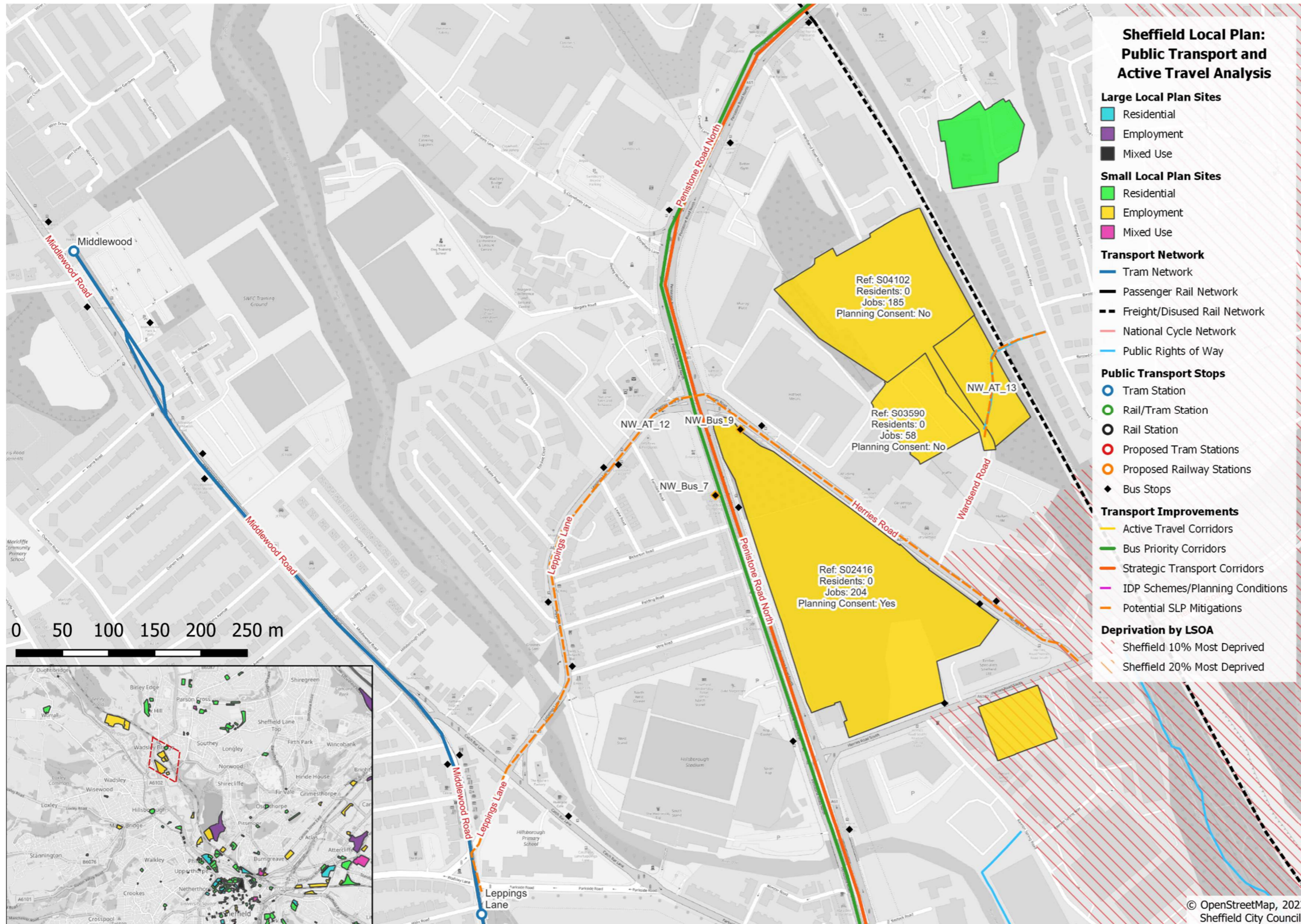
- **Current Status:** Large residential site and smaller residential sites located immediately south-west of Sheffield City Centre. All sites already have planning consent, however surrounding streets could benefit from minor improvements to better integrate active travel network.
- **Proposed Public Transport Measures:**
 - RTPI provision at bus stops on Ecclesall Road to aid wayfinding [SW_Bus_1]
 - Provision of bus shelter with facilities at eastbound bus stop on Ecclesall Road (currently only a pole with flag in place) [SW_Bus_2]
- **Proposed Active Travel Measures:**
 - Provision of link between bus stops on Ecclesall Road and planned AT corridor on Summerfield Street / Napier Street, providing connection to Connecting Sheffield Nether Edge Wedge scheme [SW_AT_1]

APPENDIX E – PROPOSED MITIGATION MEASURES FOR NORTH-WEST SHEFFIELD



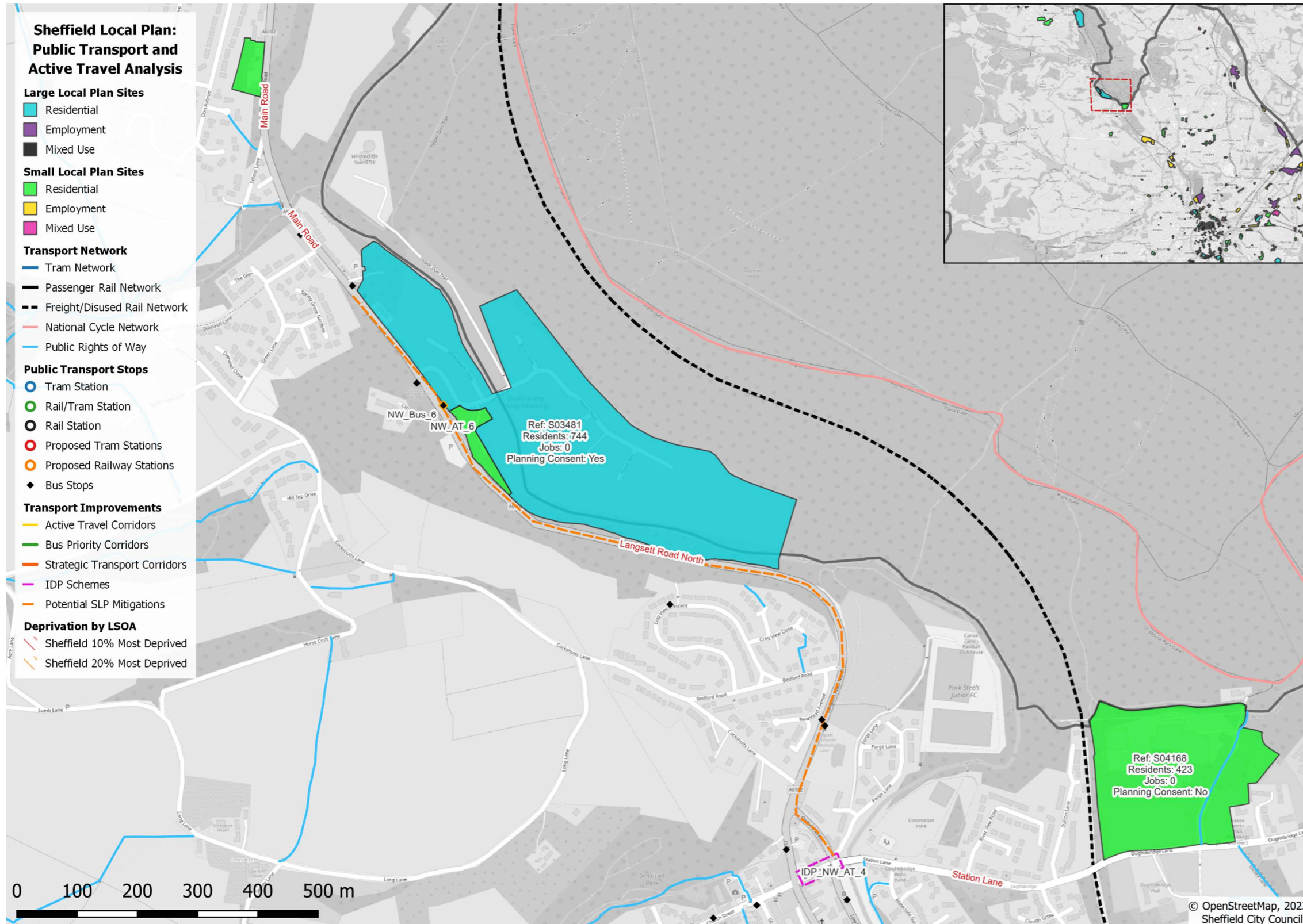
Beeley Wood Lane

- **Current Status:** Poor accessibility, given relatively secluded location away from main roads and public transport stops, as well as severance caused by River Don. Shared footway along Claywheels Lane.
- **Proposed Public Transport Measures:** Middlewood Road North bus stops accessed by hourly 57 service, however access requires crossing river (see below). Stops on A61 offer access to many more services, but are around 1km away via Claywheels Lane. Investigate potential of rerouting bus service(s) to better serve sites [NW_Bus_11]
- **Proposed Active Travel Measures:**
 - Extend existing shared footway/cycleway along Beeley Wood Lane to provide link to A61 corridor [NW_AT_9]
 - AT link between sites along Limestone Cottage Ln / Hagg Hill (although terrain may present an issue) [NW_AT_10]
 - Investigate quality of footbridge across River Don and upgrade if required to connect with Middlewood [NW_AT_11]



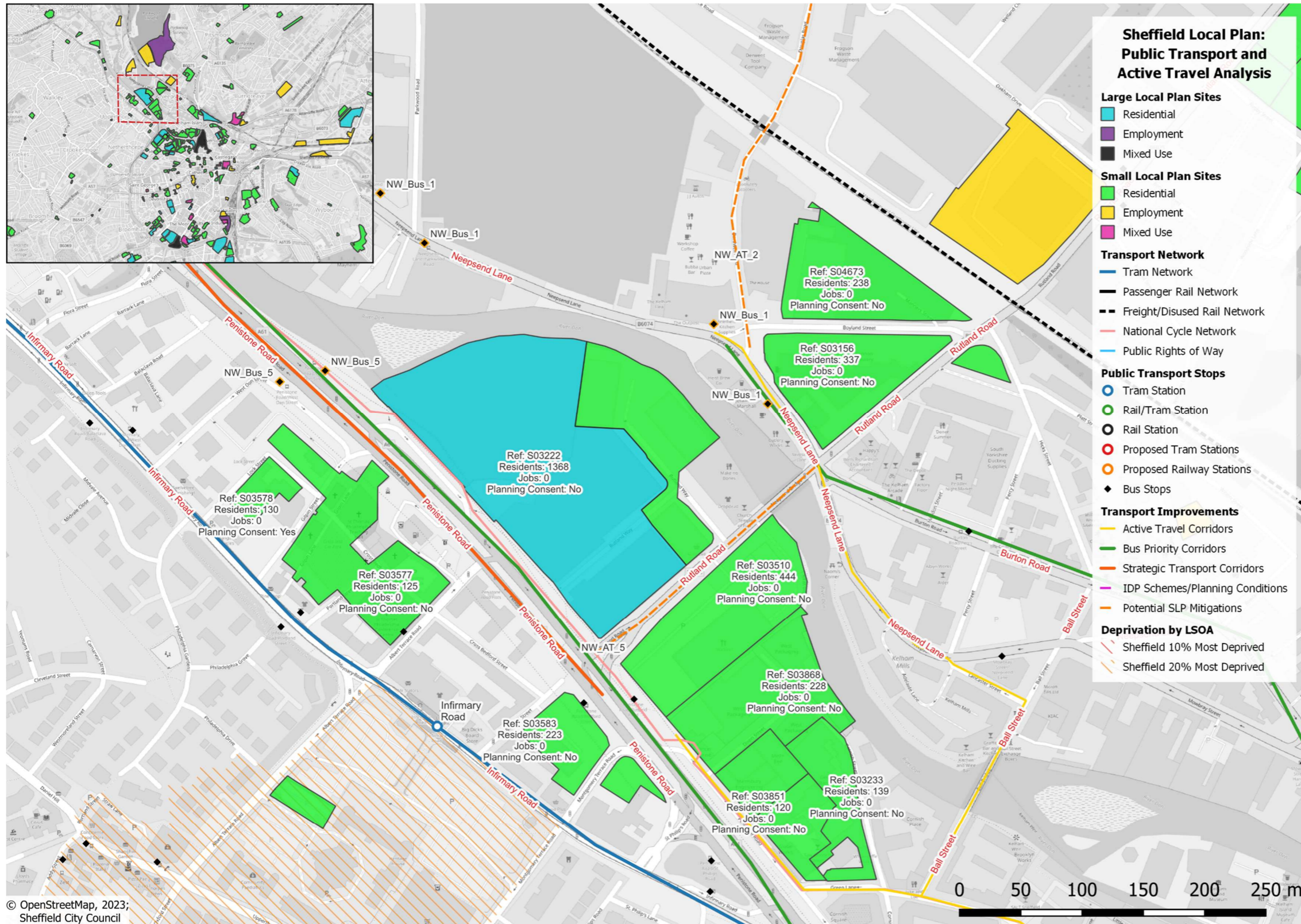
Herries Road / Leppings Lane

- **Current Status:** Cluster of small employment sites located to the east of the A61 Penistone Road North, which is designated as a bus priority corridor. Leppings Lane tram stop also located within reasonable walking distance.
- **Proposed Public Transport Measures:**
 - Provision of bus shelter with facilities at northbound Penistone Road North/ Leppings Lane stop [NW_Bus_7]
 - Increase frequency of 18 bus service (currently hourly) along Herries Road [NW_Bus_8]
 - Provision of bus shelter with facilities at northbound Herries Road/ Penistone Road North stop [NW_Bus_9]
- **Proposed Active Travel Measures:**
 - Provision of shared footway or on-road cycleway along Herries Road and Leppings Lane to access Leppings Lane tram stop [NW_AT_12]
 - Review quality of PRoW over rail line from Warsdend Road [NW_AT_13]



Main Road / Langsett Road North

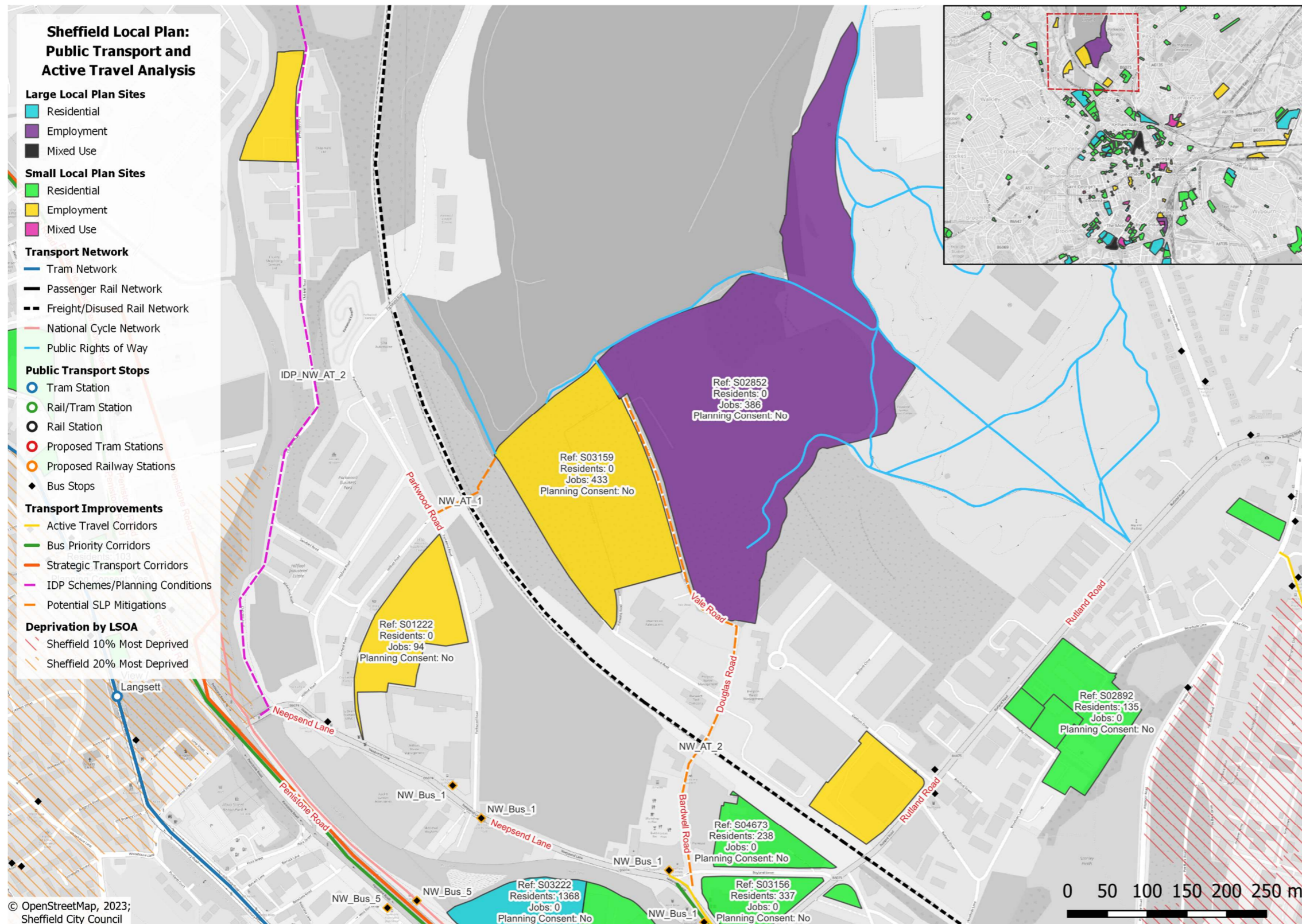
- **Current Status:** Large residential site located to the north of Oughtibridge, adjacent to Langsett Road North. Site already has planning consent in place, however minor changes could ensure adequate public transport access to site.
- **Proposed Public Transport Measures:** Relocation of Main Road/Langsett Road North southbound bus stop to allow for provision of bus shelter with facilities [NW_Bus_6]
- **Proposed Active Travel Measures:** Potential footway improvements (mainly widening where possible) to link site with northern Oughtibridge and road safety scheme at Bridge Hill (designated on map as IDP_NW_AT_4) [NW_AT_6]



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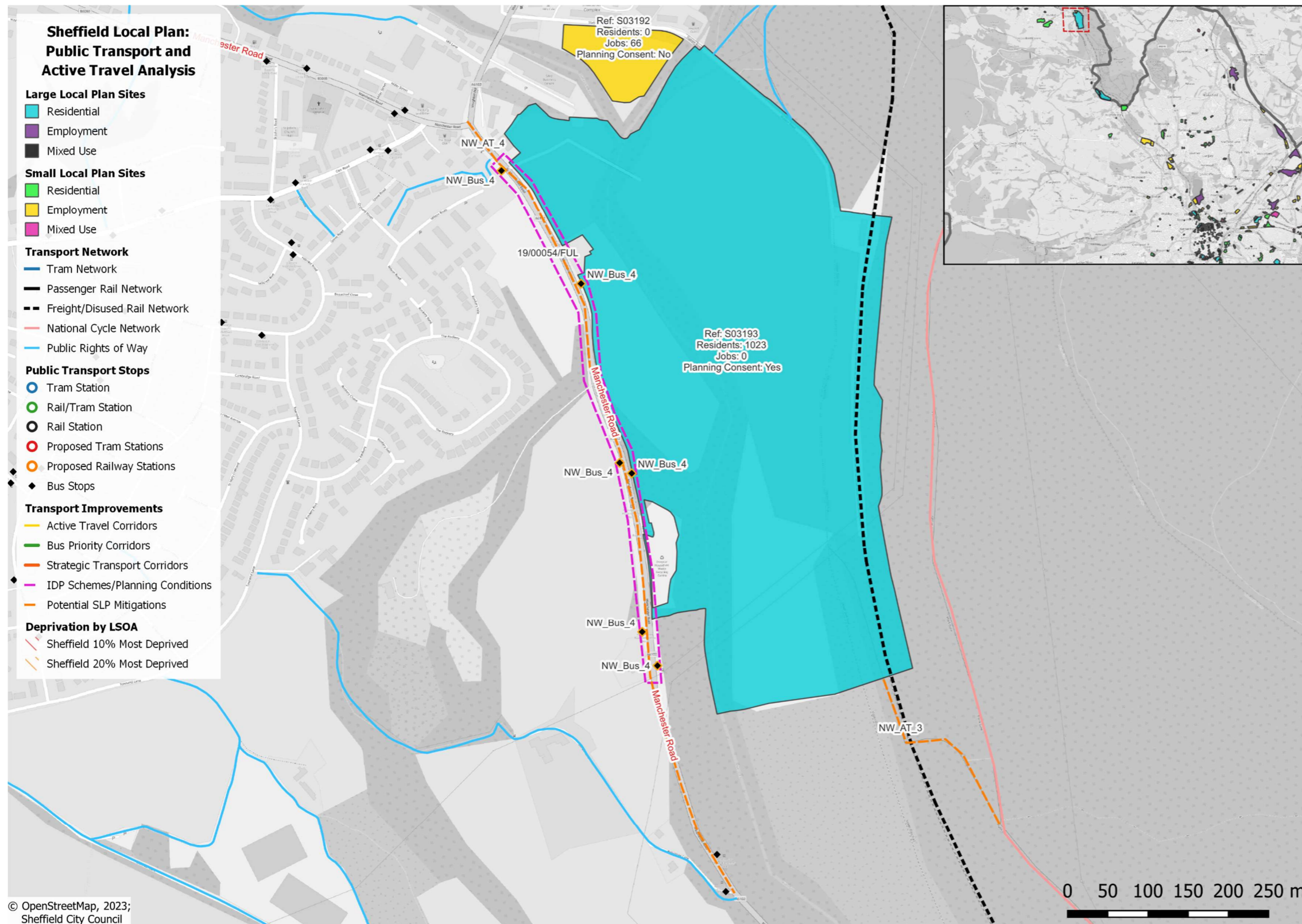
Penistone Road / Rutland Road

- **Current Status:** Cluster of small and large residential sites located around the A61 Penistone Road and Rutland Road, in former industrial area. Penistone Road designated as a bus priority corridor, whilst Neepsend Lane and Ball Street are designated as active travel corridors to provide access towards the city centre.
- **Proposed Public Transport Measures:**
 - Provision of bus shelters with facilities at Penistone Rd / West Don St stops (both directions) [NW_Bus_5]
- **Proposed Active Travel Measures:**
 - Provision of active travel corridor along Rutland Road (over River Don) to link with active travel and bus priority corridors (although current bridge is listed with insufficient space to widen footways, meaning a parallel active travel bridge is necessary) [NW_AT_5]
 - Review quality of NCN along Penistone Road to Shalesmoor area [NW_AT_7]



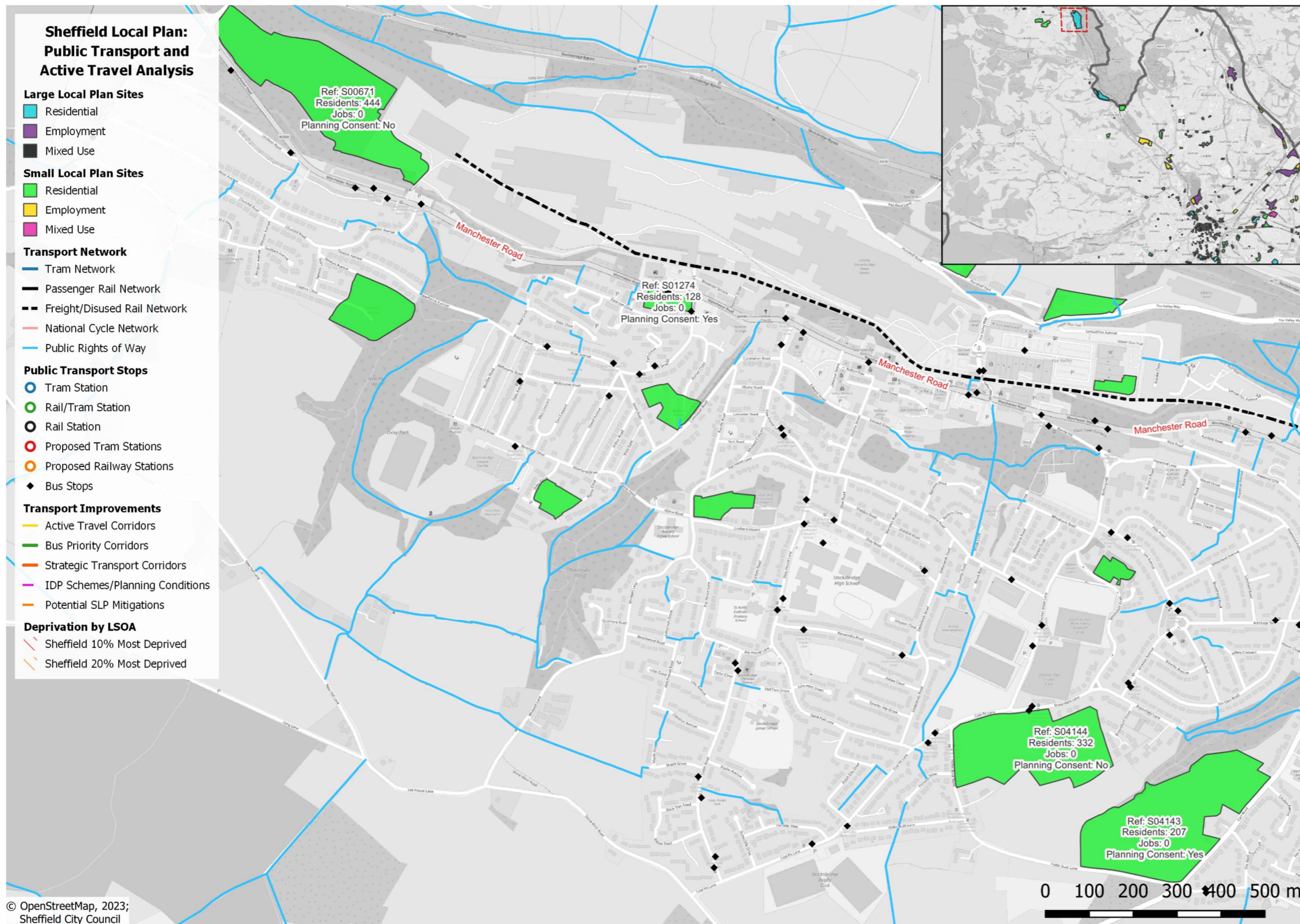
Sheffield Ski Village

- **Current Status:** Poor public transport and active travel accessibility, given relatively secluded location away from main roads and public transport stops, as well as severance caused by Stocksbridge rail line.
- **Proposed Public Transport Measures:** Neepsend Lane bus stops used by 7 and 8 services (each run every 30 minutes). Ensure that stops are of sufficient quality and accessible from site (needs to align to Housing Zone North plans) [NW_Bus_1]
- **Proposed Active Travel Measures:**
 - Review quality of existing footbridge over rail line and route to Hillfoot area via Neepsend Lane [NW_AT_1]
 - Improve active travel route along Bardwell Road/Vale Road/Douglas Road to provide a direct link connecting sites S03159/S02852 with Neepsend Lane active travel corridor [NW_AT_2]
 - Investigate quality of PRoWs to the east through Parkwood Springs (alignment with previous LUF bid) [NW_AT_8]



Station Road, Deepcar

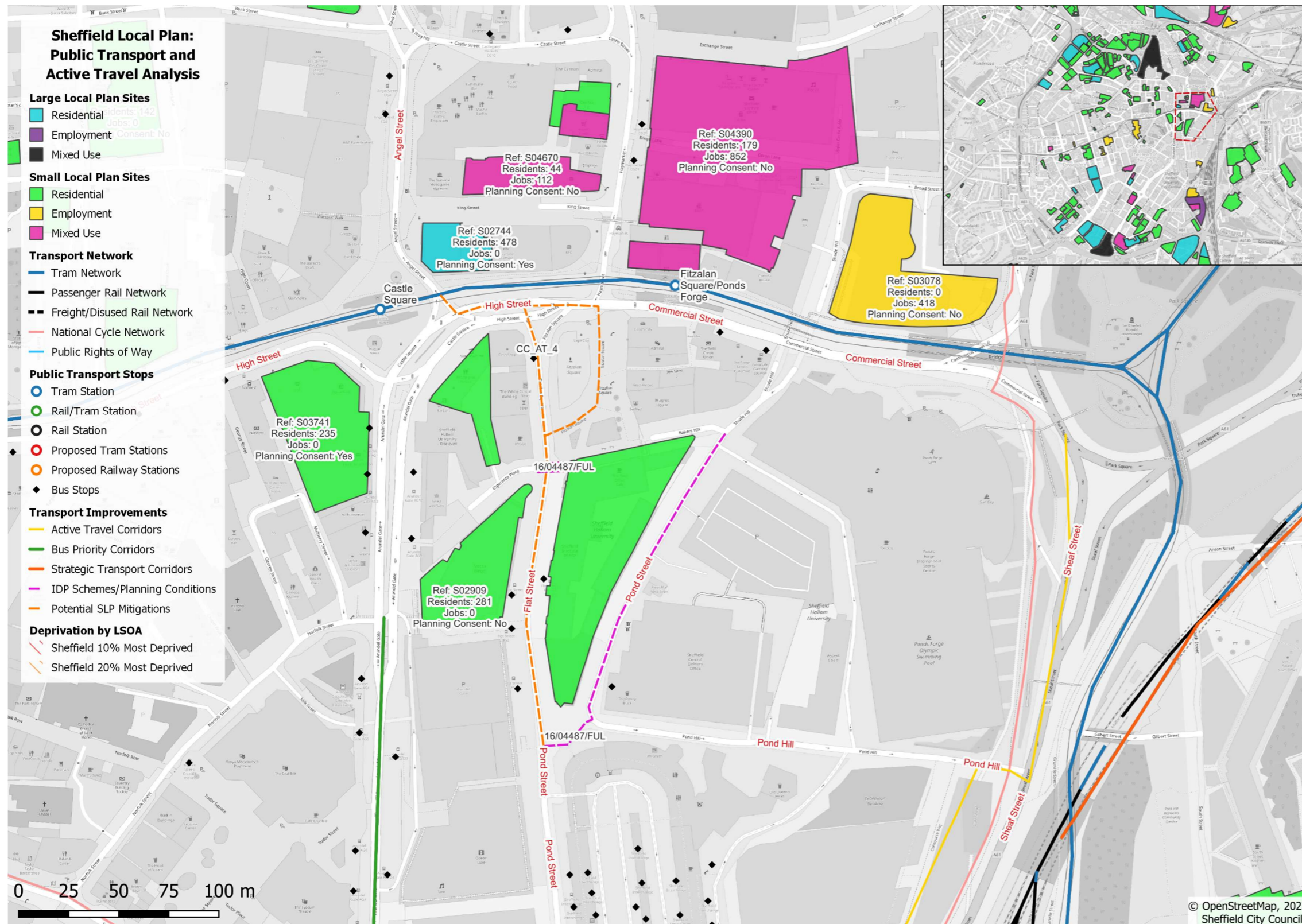
- **Current Status:** Large residential site located to the east of the A6102 Manchester Road in Deepcar. Rail line to east causes severance issues, whilst twice-hourly bus services provide access between city centre and Stocksbridge. Manchester Road placemaking scheme (including bus stop and active travel provision) is ongoing.
- **Proposed Public Transport Measures:**
 - Investigate building out bus stops on Manchester Road to provide bus shelters and improve bus priority (relocation of stops already required via planning condition [NW_Bus_4])
- **Proposed Active Travel Measures:**
 - Investigate quality of existing crossing across Stocksbridge rail line to give access to NCN route [NW_AT_3]
 - Provision of a segregated cycleway along Manchester Road in both directions (given traffic flows on Manchester Road) [NW_AT_4]



Stocksbridge

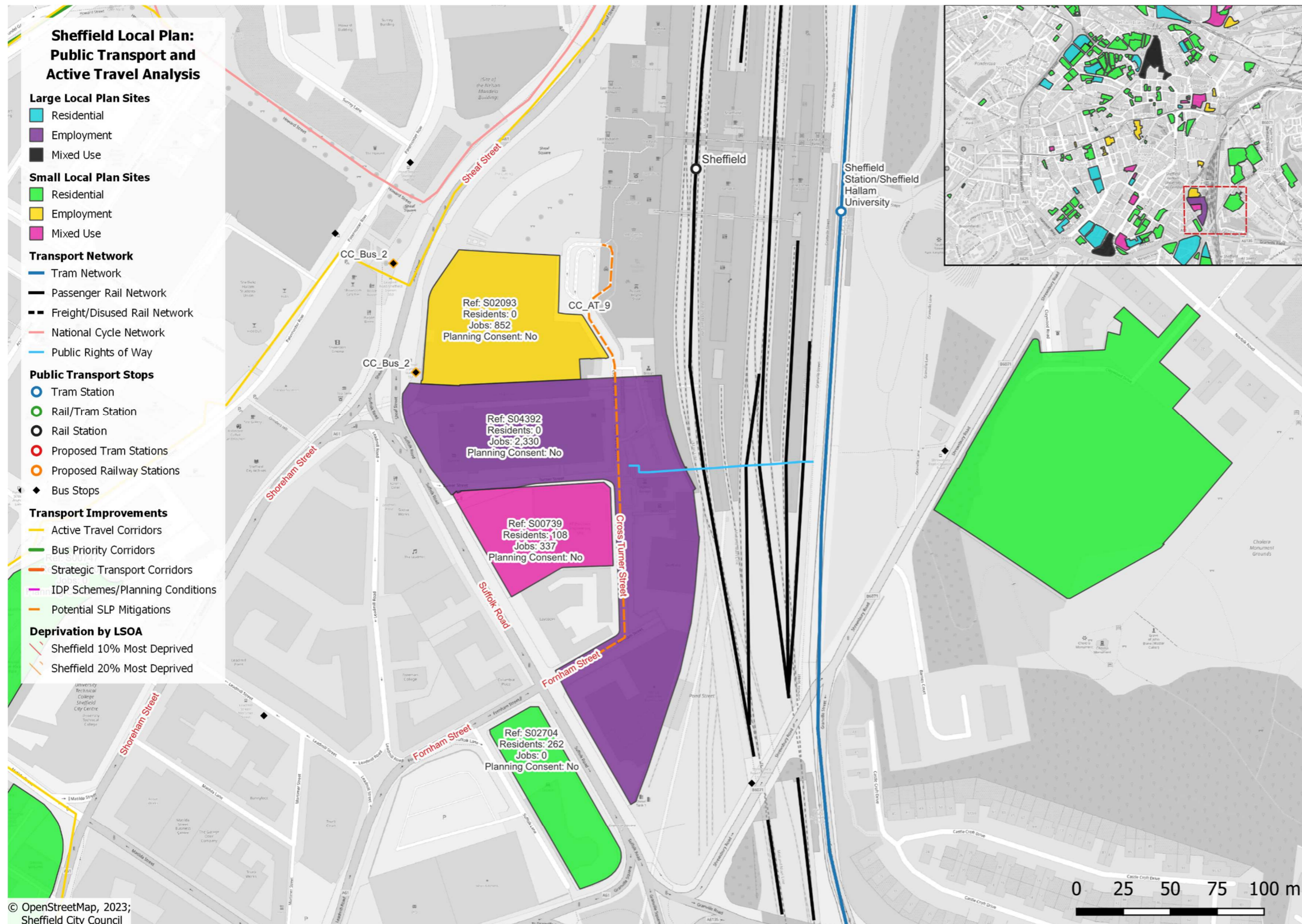
- **Current Status:** Cluster of smaller residential sites located across residential part of Stocksbridge south of Manchester Road, with green space to south. 57/57a bus service provides frequent access to Sheffield City Centre from various stops.
- **Proposed Public Transport Measures:**
 - Review quality of bus stops in vicinity of Local Plan sites, e.g. provision of shelters, waiting facilities, etc. [NW_Bus_10]
- **Proposed Active Travel Measures:**
 - Ensure quality of active links and PRowWs across residential areas, making use of green spaces and public realm improvements where possible [NW_AT_14]
 - Provide traffic calming measures in vicinity of Local Plan sites to discourage car use for short journeys and increase safety of non-car users [NW_AT_15]

APPENDIX F – PROPOSED MITIGATION MEASURES FOR SHEFFIELD CITY CENTRE



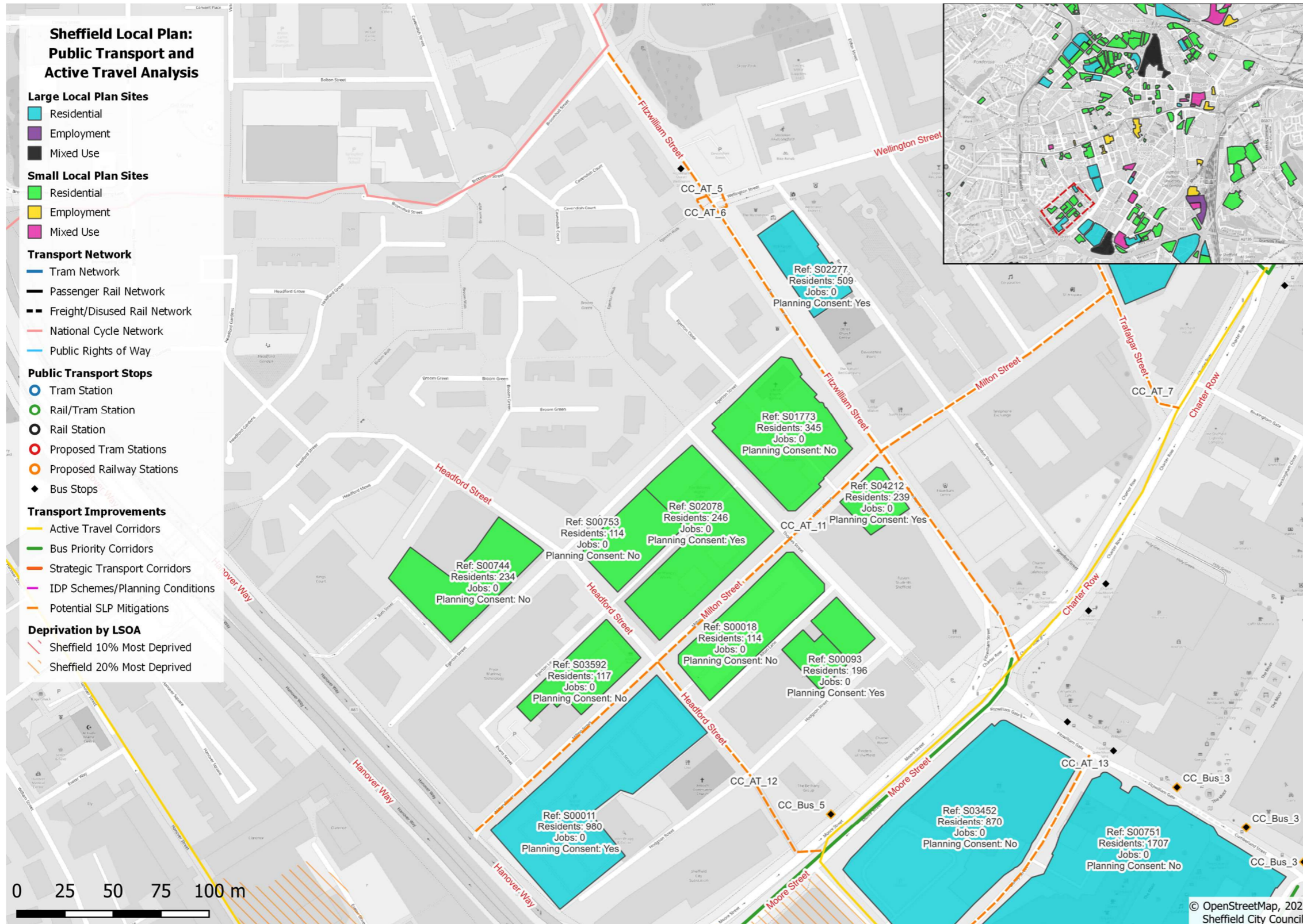
Angel Street / High Street

- **Current Status:** Cluster of site allocations located to north-east of city centre, with tram network running through the middle of the cluster. Castle Square and Fitzalan Square/Ponds Forge tram stops are relatively accessible, with multiple crossings and pedestrianised areas.
- **Proposed Public Transport Measures:** No public transport measures proposed, given the proximity of tram stops at Castle Square and Fitzalan Square/Ponds Forge, as well as accessibility of bus services from Sheffield Interchange to the south.
- **Proposed Active Travel Measures:**
 - Provision of AT link along Flat Street to junction of Flat Street/Pond Street/Pond Hill, linking with Angel Street pedestrianised area at its northern end [CC_AT_4]



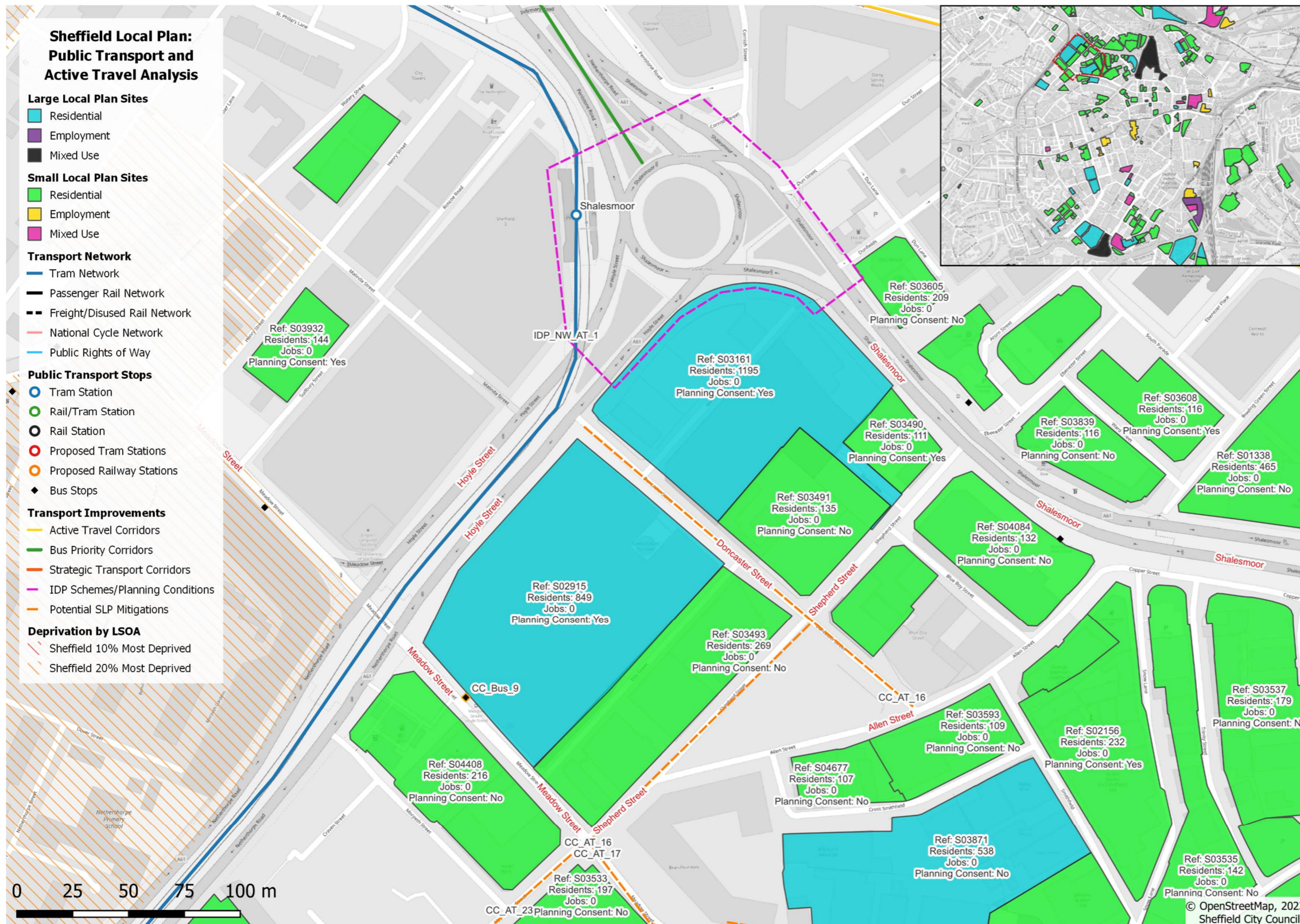
Cross Turner Street (Sheffield Station)

- **Current Status:** Area immediately adjacent to Sheffield Station, with large employment site (S04392) allocated alongside smaller employment and mixed-use sites. Access across rail lines provided via footbridge designated as PRoW, which also provides access to Sheffield Station tram stop.
- **Proposed Public Transport Measures:**
 - Provision of RTP1 at bus stops on the A61 to the north of site S04392 [CC_Bus_2]
- **Proposed Active Travel Measures:**
 - Provision of attractive AT links along Fornham Street / Cross Turner Street to Sheffield Station - needs to be linked into ongoing Station Masterplan work. SCC have commented that this route is well-used by taxis, so may require a 'bigger-picture' investigation of station access from the south [CC_AT_9]



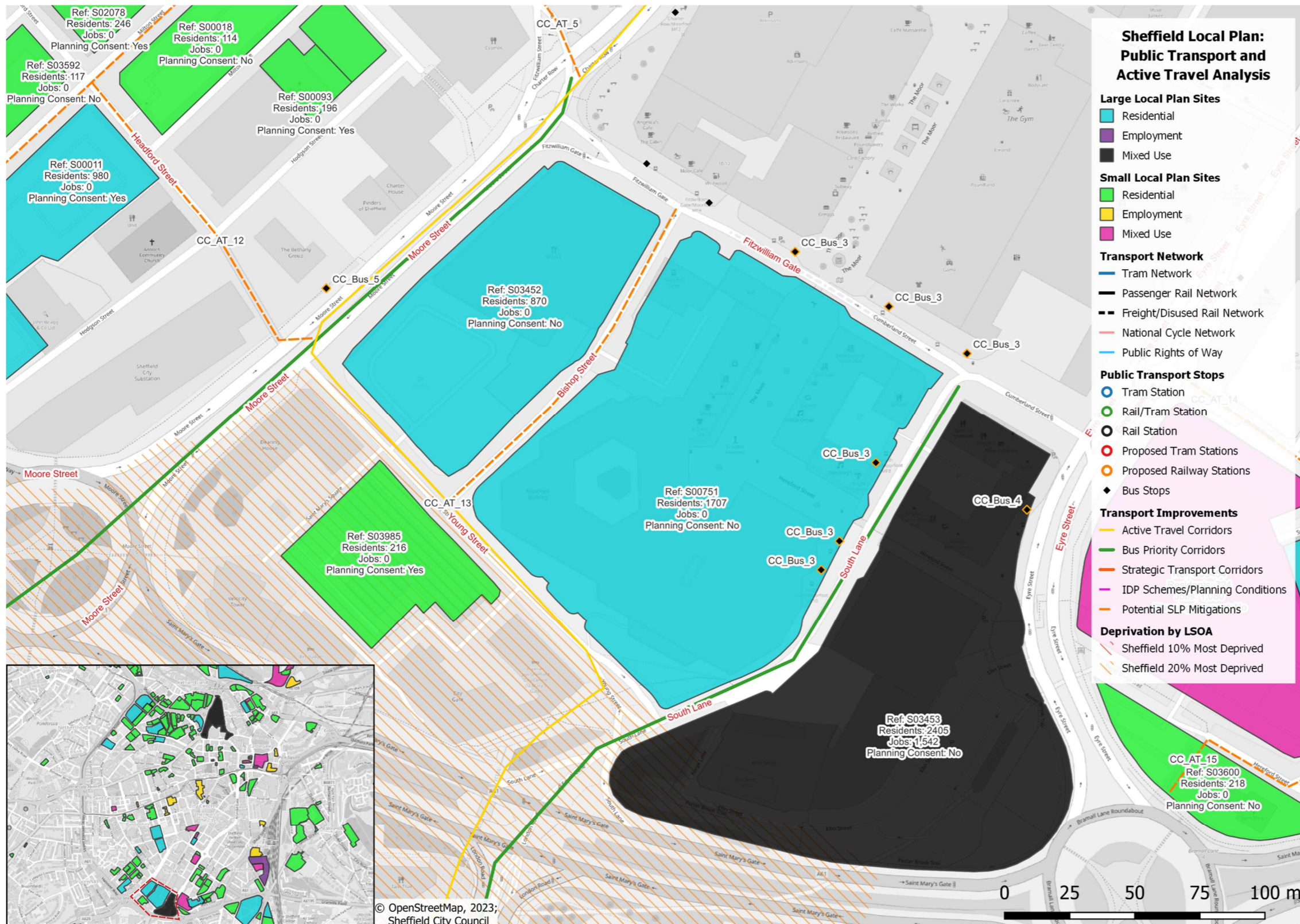
Fitzwilliam Street / Milton Street

- **Current Status:** Large residential site allocated to east of Fitzwilliam Street, with smaller residential sites allocated south of existing residential estate. Bus priority and active travel corridors run along Moore Street to the south, with NCN route to north
- **Proposed Public Transport Measures:**
 - Provision of bus shelter with facilities at Moore Street/Fitzwilliam Street stop, with potential build out if required [CC_Bus_5]
- **Proposed Active Travel Measures:**
 - On-road cycleway along Fitzwilliam Street, or parallel route along Bowdon Street/Trafalgar Street [CC_AT_5]
 - Installation of signalised pedestrian/cycle crossing at Fitzwilliam St / Wellington St intersection [CC_AT_6]
 - On-road cycleway and crossing facilities along Milton Street, with pedestrian crossing at Hanover Way junction (may depend on vehicle flow) [CC_AT_11]



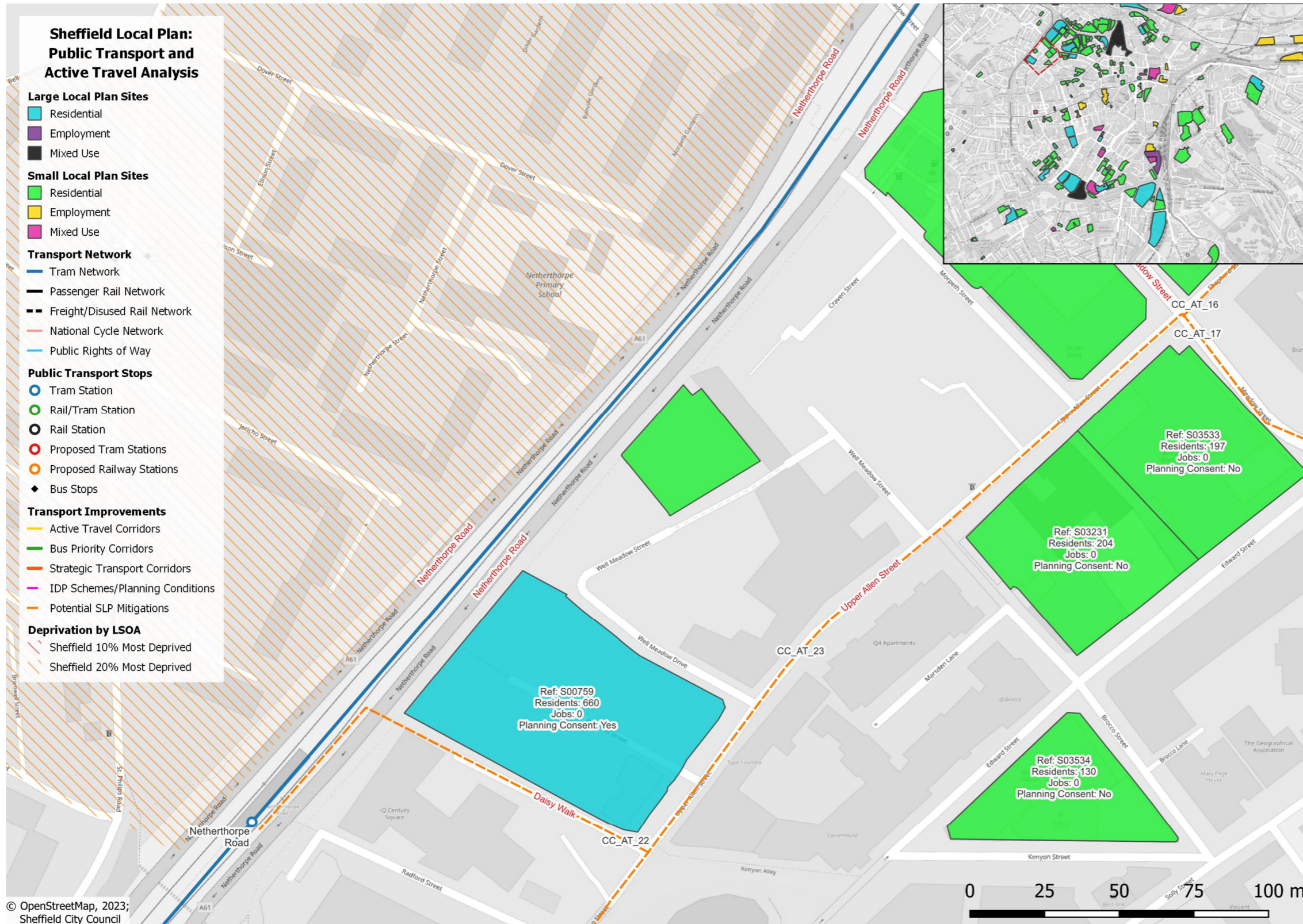
Hoyle Street (Shalesmoor)

- **Current Status:** Notable cluster of large and small residential sites to the north-west of Sheffield city centre, bounded to west by Hoyle Street and to north by the A61. Shalesmoor Gateway scheme should improve access across busy main roads.
- **Proposed Public Transport Measures:**
 - Access to Shalesmoor tram stop dependent on scope of Shalesmoor Gateway scheme, pending final design.
 - Expansion of 31 bus service timetable to increase frequency (currently hourly) and run later into evening [CC_Bus_6]
 - Upgrade of existing bus shelter on Meadow Street [CC_Bus_9]
 - Provision of RTP1 at bus stops on A61 Shalesmoor [CC_Bus_10]
- **Proposed Active Travel Measures:**
 - On-road cycleway along Doncaster Street from Allen Street, with pedestrian crossing at intersection with Hoyle Street – needs to align with Shalesmoor Gateway scheme [CC_AT_16]



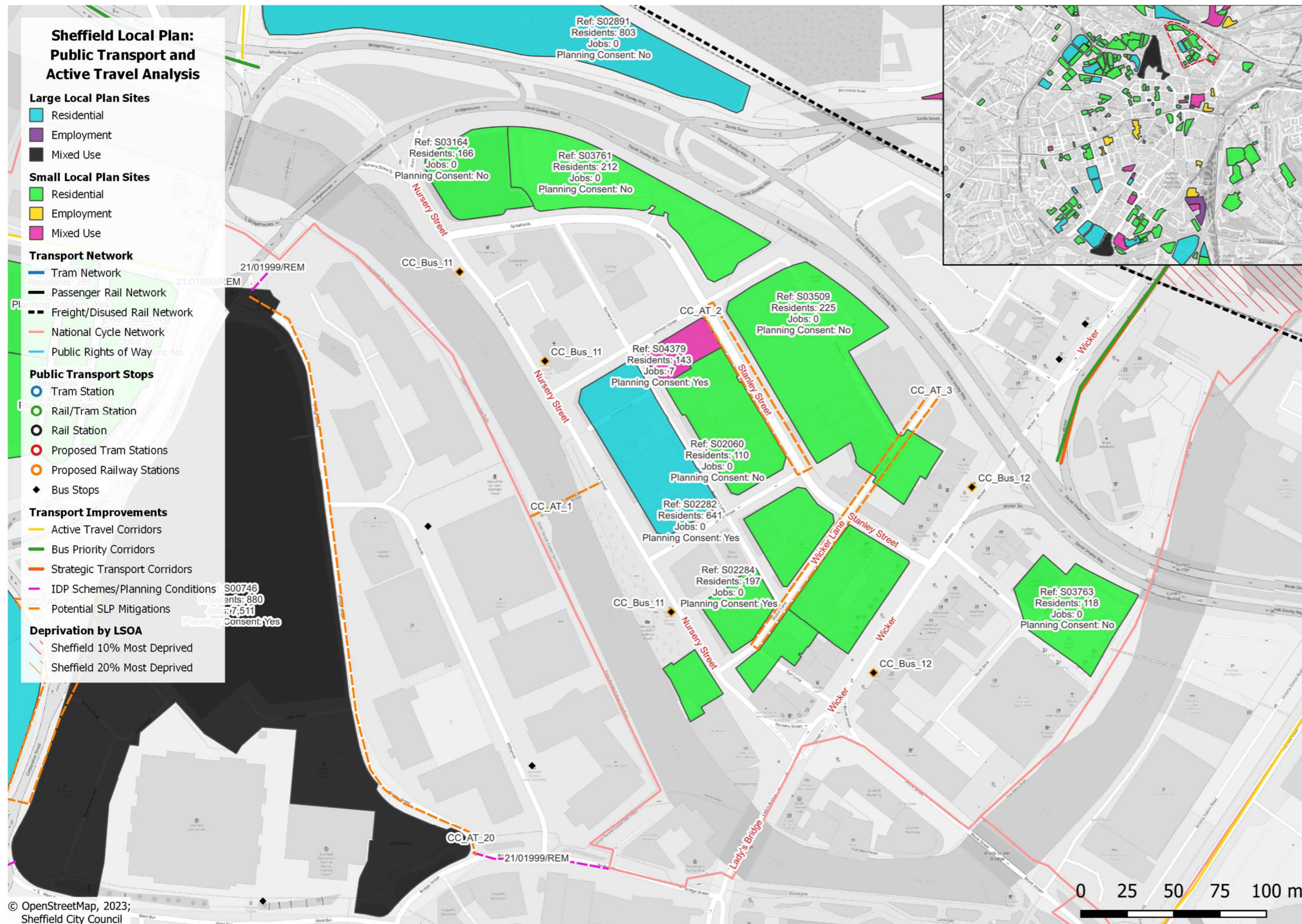
Moorfoot

- **Current Status:** Large residential and mixed use sites covering large retail units and current Council offices, bounded by St Mary's Gate to the south. South Lane designated as bus priority corridor, with frequent bus services available on Fitzwilliam Gate.
- **Proposed Public Transport Measures:**
 - Provision of RTP1 at bus stops on South Lane and Moor Market [CC_Bus_3]
 - Provision of RTP1 at Moor Market / Eyre Street bus stop [CC_Bus_4]
- **Proposed Active Travel Measures:**
 - Provision of cycleway along Bishop Street to link with Fitzwilliam Gate and Moore Street – needs to link with ongoing Moorfoot Masterplan [CC_AT_13]



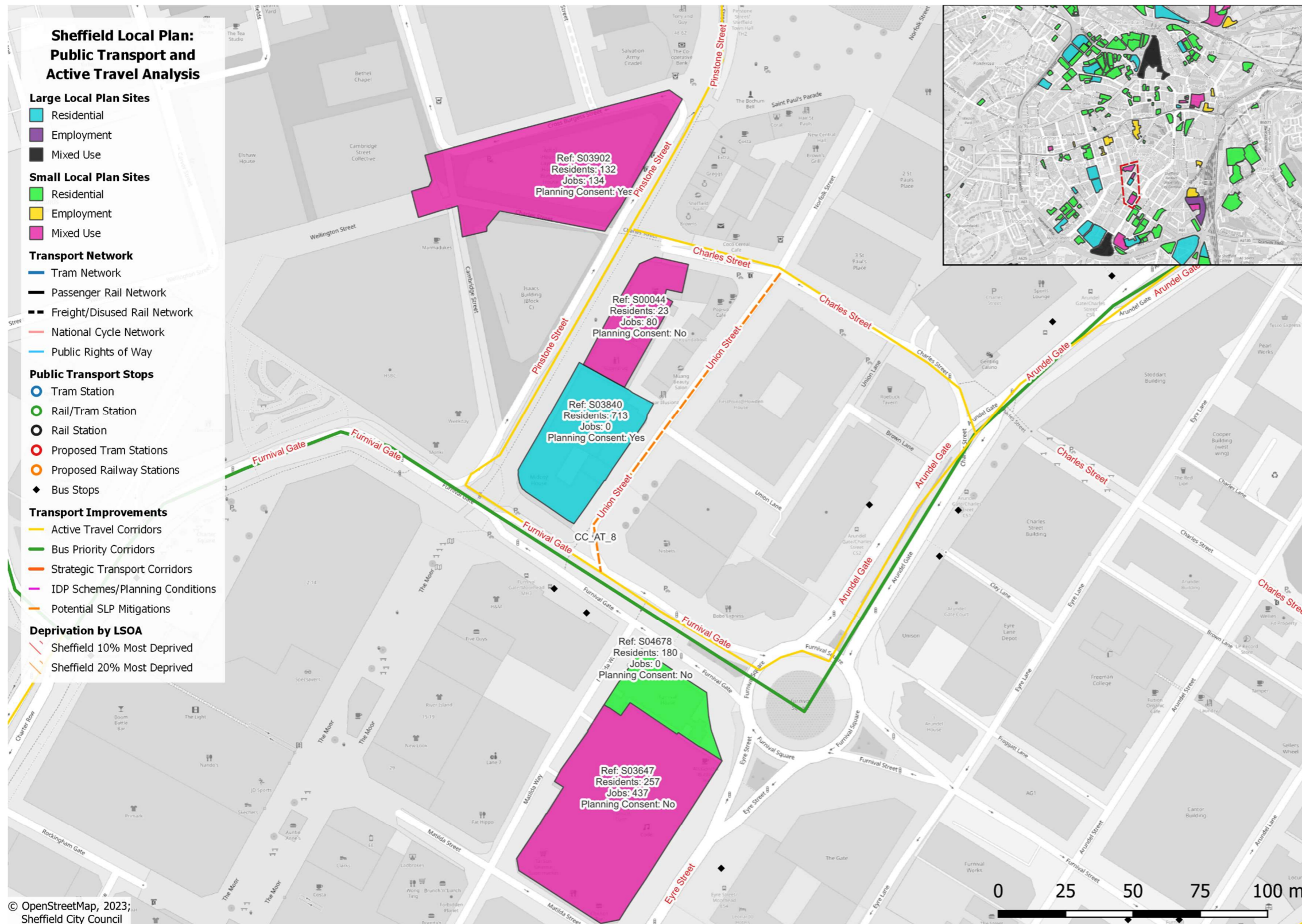
Netherthorpe Road

- **Current Status:** Large residential site located adjacent to Netherthorpe Road, with smaller residential sites located in close proximity. Nearest bus services within reasonable walking distance located 300m to south on Broad Street, with Netherthorpe Road tram stop much closer.
- **Proposed Public Transport Measures:**
 - Existing planning condition in place (18/00242/FUL) to make improvements to Netherthorpe Road tram stop.
- **Proposed Active Travel Measures:**
 - Ensure provision of AT link from site S00759 to provide access via subway to Netherthorpe Road tram stop [CC_AT_22]
 - Provide active travel link from Meadow Street to bus stops on Broad Lane, via Upper Allen Street and Beet Street [CC_AT_23]



Nursery Street

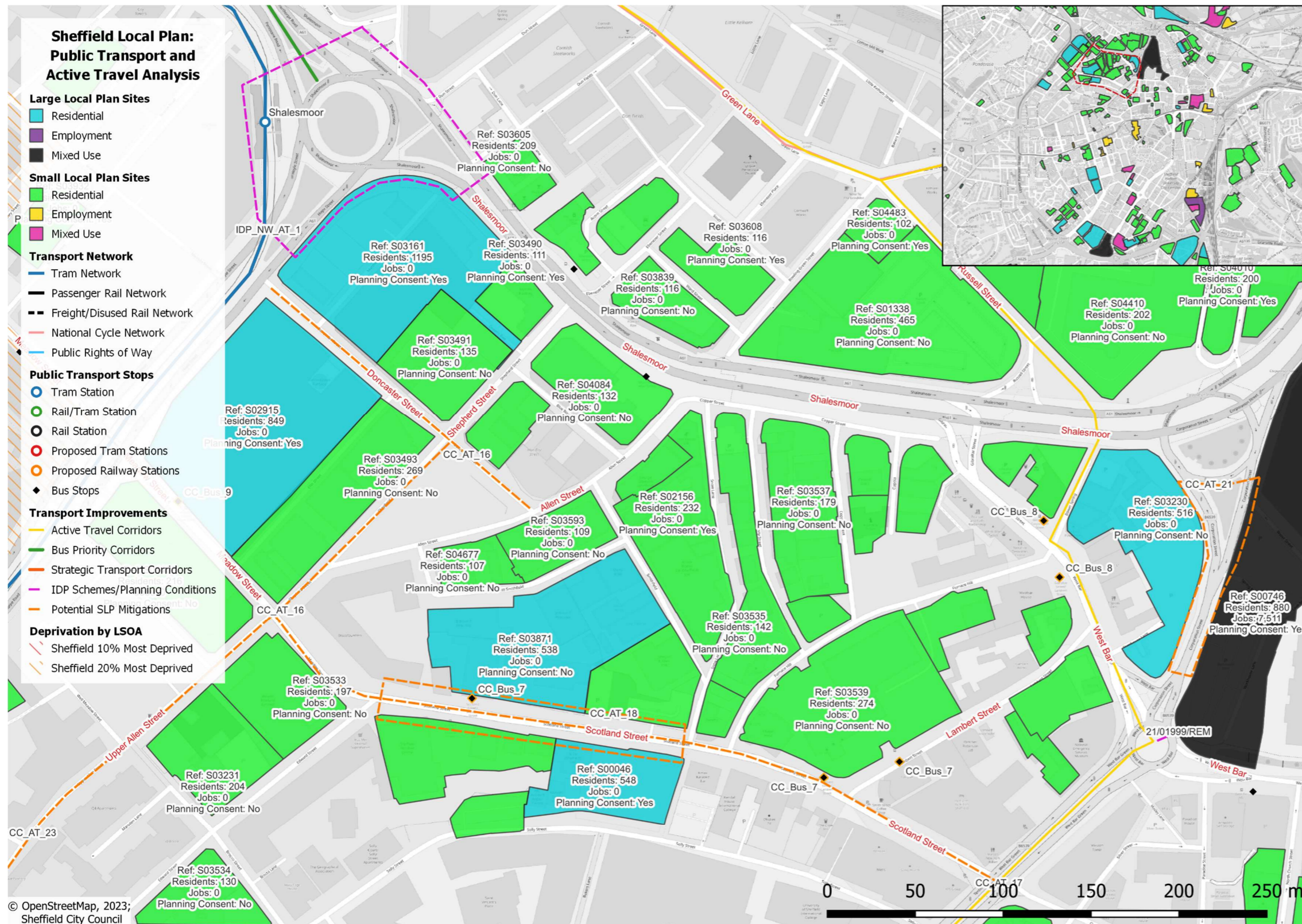
- **Current Status:** Former industrial area at north-east edge of city centre, well served by buses. Nursery Street footbridge and Lady's Bridge are crucial to reducing severance to city centre by active modes.
- **Proposed Public Transport Measures:**
 - Provide bus shelters with facilities and RTPi at Nursery Street stops, with potential bus stop build out to provide space and give bus priority [CC_Bus_11]
 - Provide RTPi at bus stops on Wicker, to improve bus user experience and wayfinding [CC_Bus_12]
- **Proposed Active Travel Measures:**
 - Investigate quality of route to Nursery Street footbridge from sites [CC_AT_1]
 - Traffic reduction and/or traffic calming measures on Stanley Street to improve pedestrian safety [CC_AT_2]
 - Improve public realm on Wicker Lane to enhance attractiveness of active travel to and from Nursery Street [CC_AT_3]



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Pinstone Street / Furnival Gate

- **Current Status:** Large residential site and smaller mixed-use/residential sites located within a cluster in the heart of Sheffield City Centre. Furnival Gate and Arundel Gate are designated as bus priority corridors, with an active travel corridor linking Furnival Gate, Arundel Gate and Pinstone Street.
- **Proposed Public Transport Measures:**
 - Provision of RTPI at northbound bus stop on Arundel Gate [CC_Bus_13]
 - Provision of bus shelters with facilities and RTPI at southbound bus stops on Arundel Gate [CC_Bus_14]
- **Proposed Active Travel Measures:**
 - Provision of on-road cycleway along Union Street – would tie in with city centre TCF scheme, which includes Union Street in its scope [CC_AT_8]



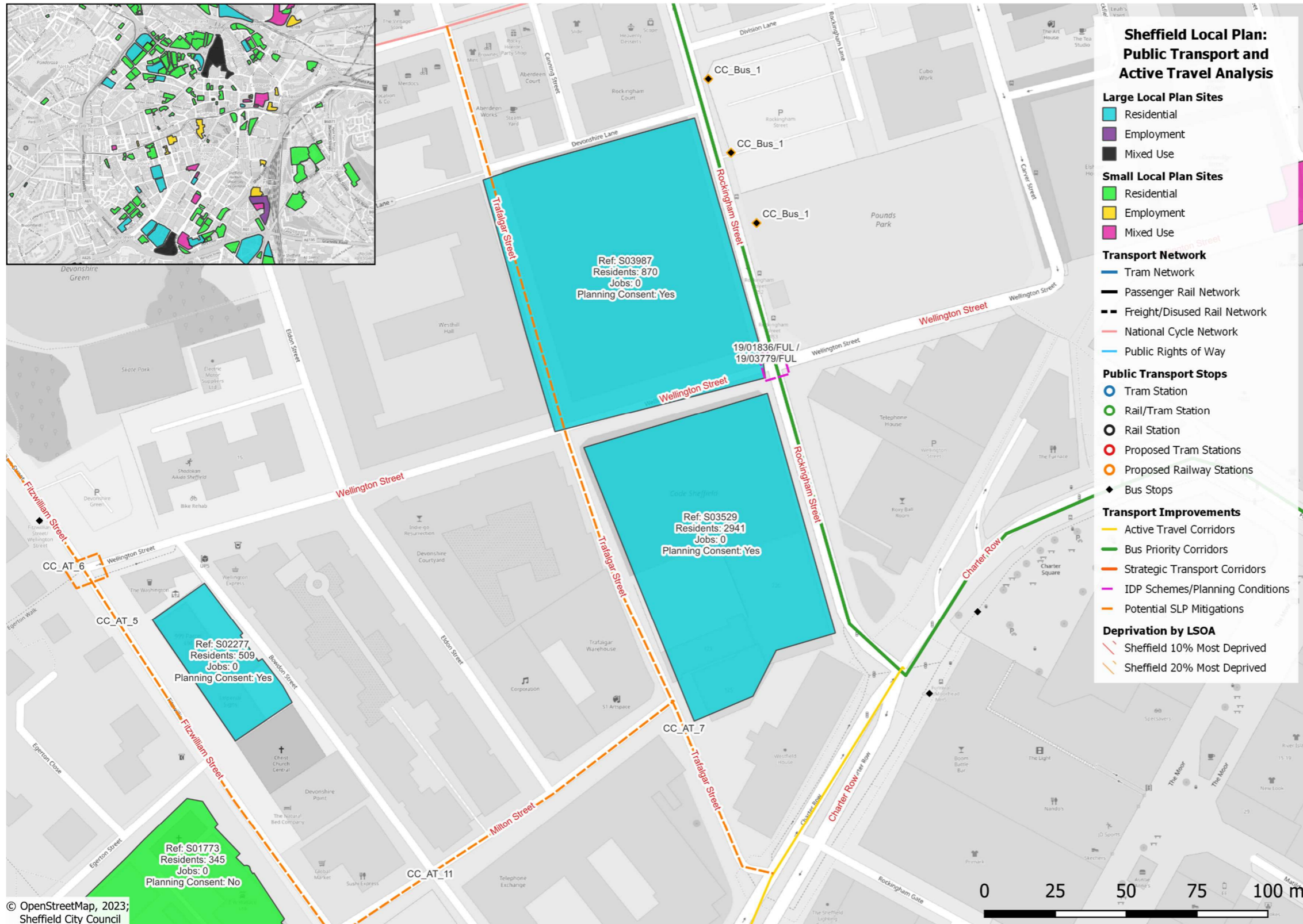
Scotland Street

- **Current Status:** Cluster of large and small located north and south of Scotland Street, within broader cluster located around the Shalesmoor area. Shalesmoor tram stop located around 500m away, however more frequent buses would improve access (current 31 service along Scotland Street only runs hourly and ends at around 19:00)
- **Proposed Public Transport Measures:**
 - Improve frequency and operating window of 31 service to better serve sites [CC_Bus_6]
 - Provision of bus shelters with facilities at Scotland St / Lambert St and Scotland St / Meadow St, with bus stop build out if necessary [CC_Bus_7]
- **Proposed Active Travel Measures:**
 - On-road cycleway along Scotland Street to link active corridors on Upper Allen Street and West Bar Green [CC_AT_17]
 - Installation of appropriate crossing facilities on Scotland Street [CC_AT_18]



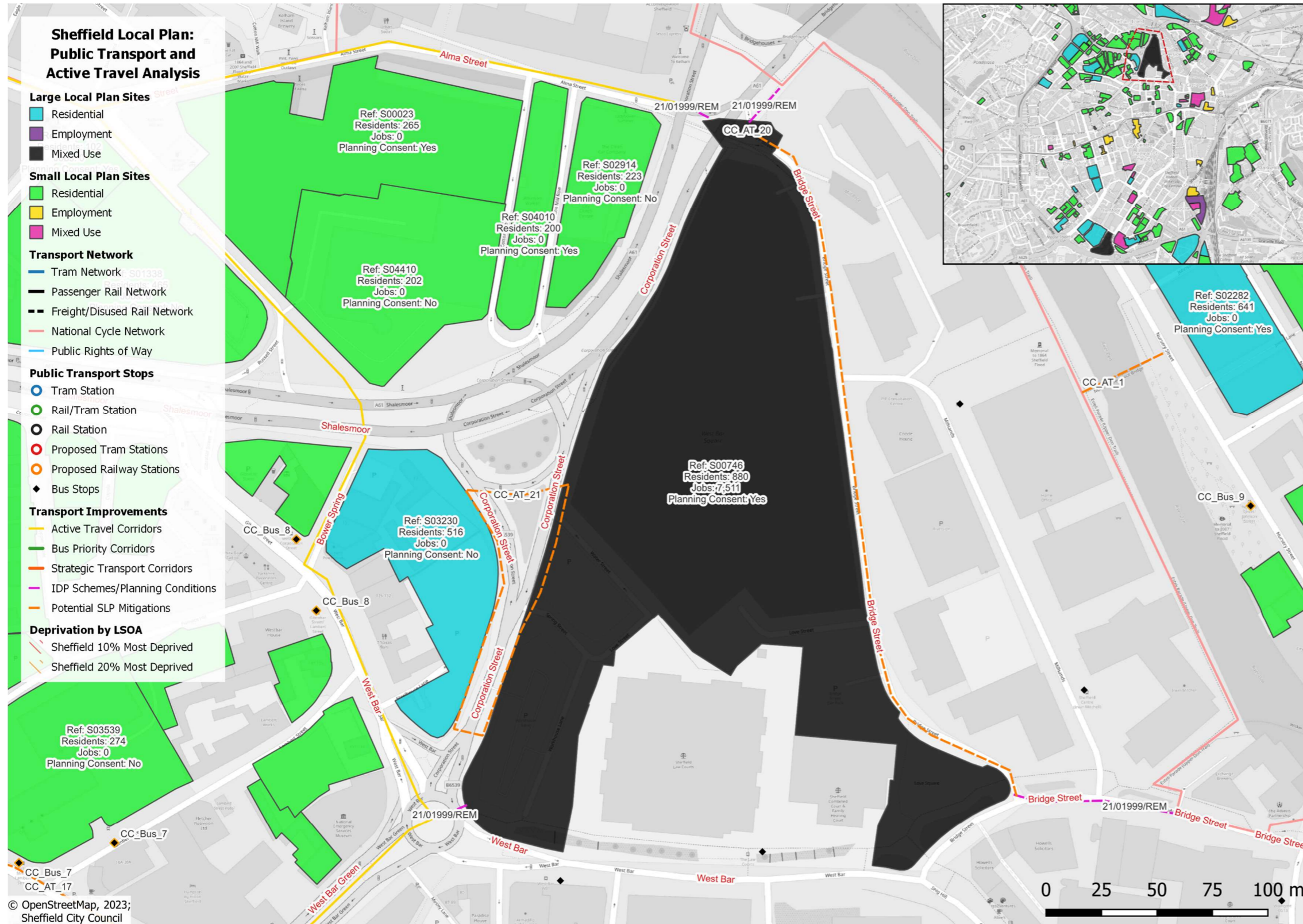
Sylvester Street / Mary Street

- **Current Status:** Cluster of residential and mixed use sites located to south of Sheffield City Centre. Active travel corridor planned for Shoreham Street/Matilda Street/Sidney Street, whilst Moor Market area to the west offers good bus access.
- **Proposed Public Transport Measures:**
 - Provision of RTP1 at Moor Market / Eyre St bus stop [CC_Bus_4]
- **Proposed Active Travel Measures:**
 - Provision of on-road cycleway along Jessop Street/Sylvester Street/Sidney Street, possibly using a modal filter (route is already well used and would link to active travel corridor) [CC_AT_14]
 - Retention of active link on to Mary Street, with on-road cycleway along Mary Street to link with A61 AT corridor & Bramall Lane subway [CC_AT_15]



Wellington Street

- **Current Status:** Large residential sites near to the heart of Sheffield City Centre. Rockingham Street designated as bus priority corridor, with NCN route to the north and active travel corridor to the south on Charter Row.
- **Proposed Public Transport Measures:**
 - Provision of bus shelters with facilities and RTP1 at bus stops on Rockingham Street (although this may be space-constrained) [CC_Bus_1]
- **Proposed Active Travel Measures:**
 - Planning condition in place for both large sites to provide signalised pedestrian crossing facilities at the junction of Wellington Street and Rockingham Street
 - Provision of on-road cycleway along Tralagar Street between Charter Row and West Street [CC_AT_7]



West Bar Square

- **Current Status:** Large mixed-use site located on brownfield land, with residential sites to the west across Corporation Street. Site S00746 already has planning consent, however minor improvements would help to integrate site with the surrounding area.
- **Proposed Public Transport Measures:**
 - Provide bus shelter with facilities and RTPI at eastbound stop on West Bar [CC_Bus_15]
 - Provide RTPI at westbound bus stop on West Bar to aid wayfinding [CC_Bus_16]
 - Provide bus shelter with facilities at bus stop on Millsands [CC_Bus_17]
- **Proposed Active Travel Measures:**
 - Planning condition already in place to ensure active mode accessibility through site S00746, as well as from site to NCN Route and active corridor
 - Crossing on Corporation Street (south of Plum Street) to provide access south of A61 roundabout from West Bar to Kelham Island/Shalesmoor [CC_AT_21]



West Street

- **Current Status:** Cluster of small residential and employment sites located north and south of West Street/City Hall tram stops.
- **Proposed Public Transport Measures:**
 - Provision of RTPi at bus stops west of West Street tram stop [CC_Bus_18]
 - Provision of RTPi at bus stop at West Street / Rockingham Street [CC_Bus_19]
 - Expansion of eastbound waiting shelter and possible provision of westbound waiting shelter (space-dependent) at West Street tram stop [CC_Tram_1]
- **Proposed Active Travel Measures:**
 - Ensure provision of active links from sites south of the tram line to NCN route and active travel corridor along Leopold Street/Peace Gardens [CC_AT_24]
 - Ensure provision of active links from sites around Broad Lane / Townhead Street roundabout to Leopold Street active travel corridor [CC_AT_25]

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Bangkok, Beijing, Brisbane, Delhi, Hanoi, Hong Kong, Manila,
Seoul, Shanghai, Singapore, Shenzhen, Taipei

Africa:

Abidjan, Douala, Johannesburg, Kinshasa, Libreville, Nairobi

Latin America:

Lima, Mexico, Rio de Janeiro, Santiago, São Paulo

North America:

Little Falls, Los Angeles, Montreal, New-York, Philadelphia,
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