

FINAL PROPOSAL REPORT

**3095 BOSTWICK ROAD
PART OF LOT 76 & 77, CONCESSION EAST OF THE NORTH
BRANCH OF THE TALBOT ROAD
SOUTH SIDE OF PACK ROAD, WEST OF BOSTWICK ROAD
NORTH TALBOT COMMUNITY**

CITY OF LONDON

PREPARED BY



AUGUST 2024

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1.0 INTRODUCTION

Zelinka Priamo Ltd., Arcadis Professional Services (Canada) Inc., and MTE Consultants Inc., on behalf of Southside Construction Management Limited, are pleased to submit this Final Proposal Report for the property located in the southwest quadrant of Southdale Road West and Bostwick Road known municipally as 3095 Bostwick Road and known legally as Part of Lot 76 & 77, Concession East of the North Branch of the Talbot Road.

The lands for subdivision ('subject lands') are generally rectangular in shape with multiple vehicular connections to previous phases of Talbot Village (Figure 1) through Raleigh Boulevard, Mersea Street, Jack England Drive, and Frontier Avenue. The subject lands have an area of approximately 11.2 hectares (26.7 acres). The subject lands are part of a larger land holding also owned by the applicant.

The majority of the subject lands consists of agricultural fields, along with a wooded area, and wetland feature. The subject lands are generally flat in topography, gently sloping towards the northeast for drainage purposes. There are no structures on the subject lands.



Figure 1: Subject Lands & Context

The subject lands are currently designated as ‘Neighbourhoods’ under the City’s Official Plan (The London Plan) and are zoned as ‘Urban Reserve (UR3)’ in the City of London Z.-1 Zoning By-law. The proposal seeks to rezone the subject lands to facilitate low and medium density residential uses in a form compatible with surrounding land uses. A portion of the wooded area, and compensation for relocated wetland features will be zoned Open Space and dedicated to the City as Parkland dedication. A portion of the subject lands are within the Upper Thames River Regulated Area, and

The proposed development consists of the following:

- 74 single detached lots;
- 38 street townhouse units;
- One (1) open space block;
- Extension of Raleigh Boulevard, and Jack England Drive; and
- Two (2) new municipal Right-of-Ways.

This proposal will be considered as Phase 8 of the Talbot Village subdivision and is surrounded by earlier phases of the Talbot Village community to the west, south, and east.

2.0 PLANNING ACT, RSO 1990

In considering a draft plan of subdivision, the Planning Act states that regard shall be had for the items in Section 51(24). The proposed draft plan of subdivision addresses the items as follows:

- a) the effect of development of the proposed subdivision on matters of provincial interest as referred to in section 2;
 - The proposed development is consistent with the policies of the Provincial Policy Statement and is consistent with matters of provincial interest as demonstrated in Section 3.0 of this report.
- b) whether the proposed subdivision is premature or in the public interest;
 - The Southwest Area of the City of London has been experiencing fast residential growth in the form of multiple types of dwellings. Furthermore, the subject lands are designated for residential uses in the Municipal OP, and are planned for residential development and form part of a larger community already partially developed (Talbot Village). It has been demonstrated that sufficient servicing capacity exists for the proposed development. As such, the proposed subdivision is not premature and is in the public interest.
- c) whether the plan conforms to the official plan and adjacent plans of subdivision, if any;

- The proposed draft plan of subdivision is consistent with the London Plan. The proposed lot/block layout is consistent with the existing community to the south and west. The proposed extension of Raleigh Boulevard will provide a new access to this community for better traffic flow and emergency vehicle connection.
- d) the suitability of the land for the purposes for which it is to be subdivided;
- There are no significant constraints that would prevent the proposed development on the subject lands.
- e) the number, width, location and proposed grades and elevations of highways, and the adequacy of them, and the highways linking the highways in the proposed subdivision with the established highway system in the vicinity and the adequacy of them;
- Access to the proposed subdivision is from Old Garrison through multiple connections, and a new connection to Southdale Road West, as well as an extension of Raleigh Boulevard which connects to Phase 2 of Talbot Village. The proposed widths and grades of roads in the subdivision are according to Municipal standards.
- f) the dimensions and shapes of the proposed lots;
- The proposed lot/block layout is appropriate for the subdivision of the subject lands consistent with existing lot fabric and proposed zoning.
- g) the restrictions or proposed restrictions, if any, on the land proposed to be subdivided or the buildings and structures proposed to be erected on it and the restrictions, if any, on adjoining land;
- The lands are proposed to be developed for single detached dwellings and street townhomes, consistent with dwellings in the surrounding neighbourhood and the similar zoning restrictions. The subject lands are also already designated for the proposed use.
- h) conservation of natural resources and flood control;
- The existing wooded area is to be retained as per the policies of the London Plan. In addition, a wetland compensation area is being created to consolidate a small portion of an existing wetland on the subject lands, as well as a small portion of a wetland from a previous phase of Talbot Village.
- i) the adequacy of utilities and municipal services;
- Existing municipal services exist and are available and adequate for the proposed subdivision. Services will be extended where necessary to service the proposed subdivision.
- j) the adequacy of school sites;

- The subject lands are well serviced by various school boards, with existing and planned schools already within the Talbot Village Community. Some bussing to the alternative board schools may be necessary.
- k) the area of land, if any, within the proposed subdivision that, exclusive of highways, is to be conveyed or dedicated for public purposes;
 - An open space block will be conveyed to the Municipality as per comments received from the initial meeting with staff. Any shortfall of physical land dedication for Parkland will be made up through cash-in-lieu.
- l) the extent to which the plan's design optimizes the available supply, means of supplying, efficient use and conservation of energy;
 - The plan creates direct and efficient vehicle connections to the arterial street system. Energy saving construction materials will be utilized where possible in the construction process.
- m) the interrelationship between the design of the proposed plan of subdivision and site plan control matters relating to any development on the land, if the land is also located within a site plan control area designated under subsection 41 (2) of this Act or subsection 114 (2) of the City of Toronto Act, 2006. 1994, c. 23, s. 30; 2001, c. 32, s. 31 (2); 2006, c. 23, s. 22 (3, 4).
 - Single detached dwellings are not subject to site plan control, as per the City of London Site Plan Control By-Law

3.0 PROVINCIAL POLICY STATEMENT (PPS)

The Provincial Policy Statement 2020 ('PPS'), issued under the authority of Section 3 of the Planning Act "provides policy direction on matters of provincial interest related to land use planning" in order to ensure efficient, cost-efficient development and the protection of resources. Development applications are required to be consistent with these policies.

Development of the subject lands is consistent with the PPS and the provision for "managing and directing land use to achieve efficient and resilient development and land use patterns" as follows:

Provincial Policy Statement (2020) Policy Analysis Table	
<i>Policy</i>	<i>Response</i>
<p><u>Section 1.1.1 Managing and Directing Land Use [...]</u></p> <p>Healthy, liveable and safe communities are sustained by:</p>	<p>The proposed development is within an existing settlement area that is an area of focus for future residential growth. The proposed development will provide a range of single detached and street townhouse dwellings.</p>

<ul style="list-style-type: none"> a) promoting efficient development and land use patterns which sustain the financial well-being of the Province and municipalities over the long term; b) accommodating an appropriate affordable and market-based range and mix of residential types (including single-detached, additional residential units, multi-unit housing, affordable housing and housing for older persons), employment (including industrial and commercial), institutional (including places of worship, cemeteries and long-term care homes), recreation, park and open space, and other uses to meet long-term needs; d) avoiding development and land use patterns that would prevent the efficient expansion of settlement areas in those areas which are adjacent or close to settlement areas g) ensuring that necessary infrastructure and public service facilities are or will be available to meet current and projected needs 	<p>The subject lands are designated for future residential growth, and municipal services are available through the previous phases of Talbot Village.</p>
<p style="text-align: center;"><u>Section 1.1.2 Settlement Areas</u></p> <p>Sufficient land shall be made available to accommodate an appropriate range and mix of land uses to meet projected needs for a time horizon of up to 25 years, informed by provincial guidelines. However, where an alternate time period has been established for specific areas of the Province as a result of a provincial planning exercise or a provincial plan, that time frame may be used for municipalities within the area.</p> <p>Within settlement areas, sufficient land shall be made available through intensification and redevelopment and, if necessary, designated growth areas.</p> <p>Nothing in policy 1.1.2 limits the planning for infrastructure, public service facilities and employment areas beyond a 25-year time horizon.</p>	<p>The subject lands are currently in a settlement area. The lands are designated for residential growth, and the proposed range of housing types meets the needs of the growing settlement area and continuing growth of the Southwest Area.</p>
<p style="text-align: center;"><u>Section 1.1.3.1 Settlement Areas</u></p> <p>Settlement areas shall be the focus of growth and development.</p>	<p>The subject lands are within the Urban Growth Boundary of the City of London.</p>
<p style="text-align: center;"><u>Section 1.1.3.2 Settlement Areas</u></p> <p>Land use patterns within settlement areas shall be based on densities and a mix of land uses which:</p>	<p>The proposed development offers a mix of housing options which are consistent with the planned function of the lands in the City’s OP. Surrounding developments offer higher density uses, and when</p>

<p>efficiently use land and resources; are appropriate for, and efficiently use, the infrastructure and public service facilities which are planned or available, and avoid the need for their unjustified and/or uneconomical expansion;</p>	<p>the Talbot Village community is looked at holistically, there is a wide range of housing types, and densities. The proposed development builds on the existing community and is able to be serviced through the adjacent phases of Talbot Village.</p>
<p>Section 1.1.3.6 Settlement Areas New development taking place in designated growth areas should occur adjacent to the existing built-up area and should have a compact form, mix of uses and densities that allow for the efficient use of land, infrastructure and public service facilities.</p>	<p>The proposed development is adjacent the existing low density residential uses in the Talbot Village community. With the availability of full municipal services, the proposed development will be of a continuation of compact and dense urban form. The proposed development offers a mix of residential uses from low to medium density uses.</p>
<p>Section 1.4.3 Housing Planning authorities shall provide for an appropriate range and mix of housing types and densities to meet projected requirements of current and future residents of the regional market area by:</p> <ul style="list-style-type: none"> b) permitting and facilitating: <ul style="list-style-type: none"> 1. all housing options required to meet the social, health, economic and well-being requirements of current and future residents, including special needs requirements and needs arising from demographic changes and employment opportunities; c) directing the development of new housing towards locations where appropriate levels of infrastructure and public service facilities are or will be available to support current and projected needs; d) promoting densities for new housing which efficiently use land, resources, infrastructure and public service facilities, and support the use of active transportation and transit in areas where it exists or is to be developed; 	<p>The proposed development will have single detached dwellings, and street townhouses dwellings. These housing types are a continuation of those seen in previous phases of Talbot Village. The existing municipal service systems have been examined as part of the proposal to ensure adequate capacity exists for the proposed uses.</p>
<p>Section 1.6.6.2 Sewage, Water and Stormwater Municipal sewage services and municipal water services are the preferred form of servicing for settlement areas to support protection of the environment and minimize potential risks to human health and safety. Within settlement areas with existing municipal sewage services and municipal water services, intensification and redevelopment shall be promoted wherever feasible to optimize the use of the services.</p>	<p>The proposed development will utilize existing municipal infrastructure that has been determined to have capacity for the proposed development.</p>
<p>Section 2.1.1 Natural Heritage Natural features and areas shall be protected for the long term.</p>	<p>The adjacent natural heritage feature has been designated as significant and through the provided</p>

	<p>EIS, appropriate buffering distances have been established. The Draft Plan of Subdivision includes an Open Space block that incorporates the feature, including the wetland compensation area and its buffers. The wetland compensation area includes wetland compensation agreed upon from a previous phase of the Talbot Village community.</p>
<p>Section 2.6.3 Cultural Heritage and Archaeology Planning authorities shall not permit development and site alteration on adjacent lands to protected heritage property except where the proposed development and site alteration has been evaluated and it has been demonstrated that the heritage attributes of the protected heritage property will be conserved.</p>	<p>A stage 1 & 2 Archaeological Assessment was undertaken for the subject lands, and no significant features were located requiring further study. As such, the Ministry has cleared the subject lands of any potential archaeological significance.</p>

Based on the above the proposed development is consistent with the policies of the Provincial Policy Statement.

4.0 THE LONDON PLAN



Figure 2: Excerpt from The London Plan - Place Type Map

The subject lands are designated 'Neighbourhoods' Place Type in the London, and contain Neighbourhood Connector roadways. The permitted uses within this Place Type include single detached, semi-detached, duplex, converted, and townhouse dwellings, in addition to secondary suites, home occupations, and group homes. Parcels with frontage onto a Neighbourhood

Connector are also permitted triplexes, and small-scale community facilities. The proposed low and medium density residential development is consistent with the permitted uses under the London Plan. The road network is also reflective of the approved connector system in the London Plan. No amendments to the London Plan are required.

5.0 ZONING BY-LAW

The subject lands are currently zoned “Urban Reserve (UR3)” in the City of London Zoning Bylaw. This zone is applied to large areas of land in order to provide for future comprehensive development on those lands.

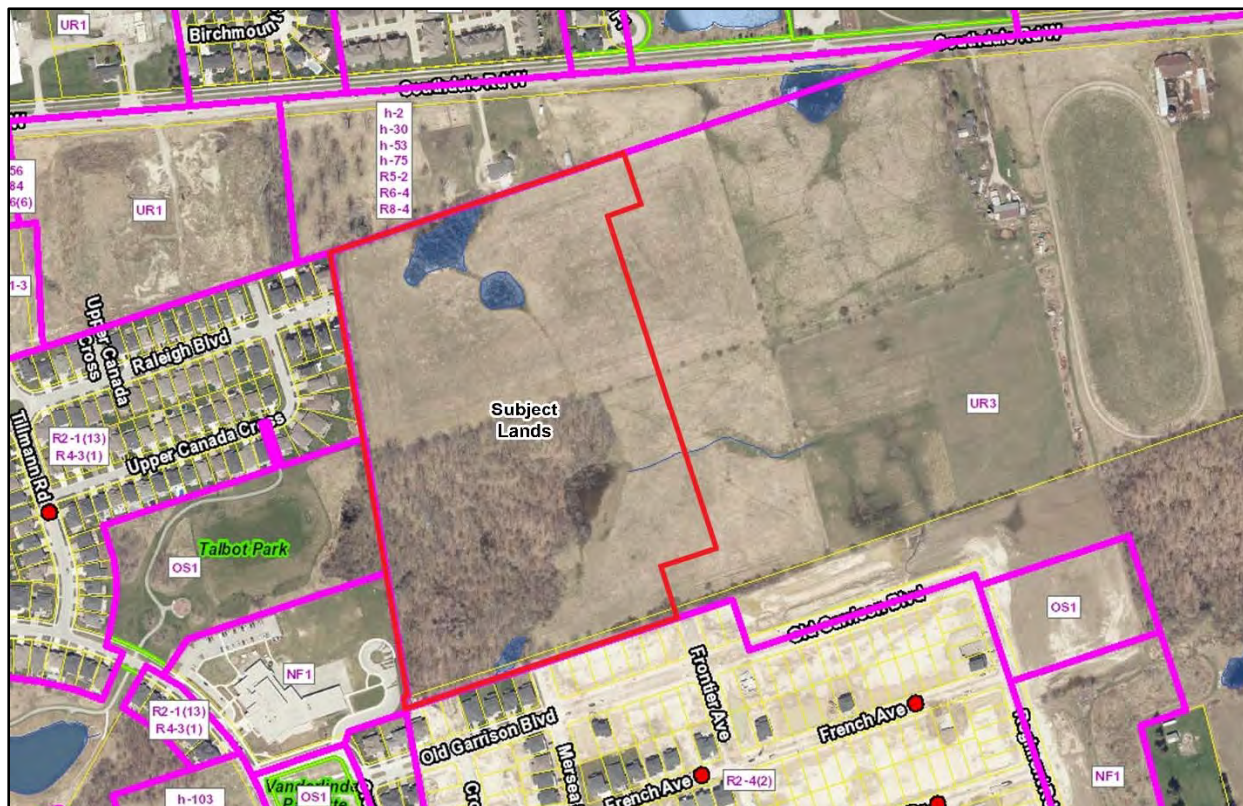


Figure 3: Excerpt from the City of London Zoning By-law

The proposed development will require a Zoning By-law Amendment to bring the subject lands under a new zone that would implement the proposed low density residential development. At this time, the proposed Zones are ‘Residential (R2-3(6)) with special provisions addressing lot frontage, front, interior side yard setbacks, and lot coverage, ‘Residential (R4-4(2))’, and ‘Open Space (OS5)’. The special provisions are as follows:

- i) Lot Frontage 11.0 metre (36 feet) (Minimum):
- ii) Front Yard Setback, 3.0 metre (9.8 feet) Main Dwelling (Minimum):

- iii) Front Yard Depth 5.5 metre (18.0 feet) for Garages (Minimum.):
- iv) Interior Side Yard Depth (Minimum): 1.2 metre (3.9 feet), except where there is no attached garage, then 3.0 metre (9.8 feet) is required on one side
- v) Lot Coverage (%)(Maximum): 45 percent, except that any unenclosed porch shall not be included in the calculation of lot coverage.

The above noted special provisions are generally consistent with provisions provided throughout the Talbot Village Community. The proposed zoning will provide for a similar development pattern through this new phase of Talbot Village with the balance of the community.

6.0 AREA STUDIES

The subject lands are located within the Southwest Area Secondary Plan, and the North Talbot Area Plan. Both the Secondary Plan and Area Plan identify a majority of the subject lands as Low Density Residential with Medium Density Residential around the centre square and/or along Southdale Road West. The low and medium-density residential development proposed is in keeping with the designations outlined in both Plans for the subject lands. The proposed street townhouses will provide a transitional land use to higher density uses along Southdale Road West, consistent with the land use designation within SWAP. The street pattern reflects the approved street system set out in both Plans. The lands with frontage along Southdale Road West which are designated as Medium Density Residential and under separate ownership are planned for a higher density development consistent with a recently approved OPA/ZBA application. It is expected that as Talbot Village continues to grow towards Bostwick Road, higher density development will be proposed consistent with the Secondary Plan, and even potential higher density uses towards the Southdale Road and Bostwick intersection..

7.0 EXISTING CONDITIONS

The site is currently cultivated for agricultural purposes except for the wooded area. The topography of the subject lands is relatively flat with only minor grade changes across the property.

The surrounding land uses are a residential to the west, south, and north, with emerging residential and agricultural uses to the east.

7.1 ENVIRONMENTAL CONDITIONS

Background

North Talbot Community Plan (1999) included an overview of the natural heritage features on the broader North Talbot Community Planning area. Woodland Evaluation guidelines were in their

infancy back in 1999 but the woodlands were reviewed utilizing the Draft document at the time to guide decisions for the ultimate Natural Heritage system in the post development setting. The wooded area next to Phase 8 The woodland was sparsely vegetated in historic air photos [Figure 4 of the Community Plan- Appendix n-1] and the groundlayer was heavily impacted by prior logging and ongoing livestock grazing. There was no defined linkage from these features towards other natural heritage systems beyond the boundaries. As a result, the community plan viewed the site under three scenarios:

- 1) Protection of existing features, regardless of significance
- 2) Protect as above and expand boundaries or,
- 3) Revised boundaries and system linkage enhancement

The North Talbot Community plan determined a re-orientation of the Natural Heritage system to enhance connectivity to the Dingman Creek corridor was preferable to retention of degraded habitats surrounded by development. In the report conclusions:

“Upland terrestrial patches are in a degraded condition and are situated at the back of the former farm lots to provide fuel wood, timber, maple syrup production and livestock grazing areas....Terrestrial vegetation will be introduced in a revised orientation within the enhancement areas to better respond to landform and to align more closely with the nearby, more significant Dingman Creek Natural Heritage Feature. This reorientation and proposed enhancement measures will thereby provide ecological benefits not currently derived from the existing isolated vegetation patches.”

Southwest Area Plan (SWAP, 2014), included these lands in the Official Plan amendments proposed for the study area. The area of Phase 8 is designated Low Density Residential on Schedule A – Land Use and identified wetlands in the north portion of Phase 8 as PSW on Schedule B (this feature is now considered Non-PSW based on a review by the province in 2019). No other vegetation patches are noted in the Phase 8 area of the SWAP plans.

London Plan maps indicate a Green Space block on Map 1 with the westerly half already developed as a school. The west half is identified as an Unevaluated Vegetation Patch on Map 5, despite the evaluation and studies completed through the North Talbot Community Plan and SWAP. However, the London Plan, acknowledges the SWAP plan as a Secondary Plan which constitute part of the London Plan (pg 403, London Plan May 23 2019). As such, Phase 8 would follow the direction of SWAP. Also, the London Plan and SWAP maps have not been updated to reflect the change in the wetland status in 2019 to Non-PSW.

Current Conditions

The canopy of Community 1 [see vegetation map] is a 4 ha woodland dominated by American Basswood and Black Walnut, and Hawthorn species are dominant in the understorey along with Common Buckthorn, Gray Dogwood, and Tartarian Honeysuckle. Garlic Mustard, White Avens, Black Raspberry, and Common Burdock are frequently found in the ground layer. Inclusion 'a' is a Meadow Marsh inclusion (~0.2 ha) along the east of Community 1. This Feature was a former watering pond that has since been partially filled and farmed (about 10 years ago). What remains is a small ephemerally wet meadow marsh. As noted in the Background Section above, the removal of the woodland feature was already contemplated as part of a re-orientation of the natural heritage system to provide improved linkage to Dingman Creek as opposed to surrounding the features with development. This removal was compensated in the re-naturalization of the enhancement areas downgradient to this feature.

Community c and b are now considered non-PSW as a result of a review by the province in 2019. The City has not updated their Official Plan maps to reflect this change. Community c is a 0.3 ha deciduous swamp. Community b, which lies about 20 m to the southeast of Community c is less than 0.1 ha. Both features are considered ephemeral as they dry out during the summer.

In a screening review of the complete development of Phase 8 lands with the Ministry of Environment, Conservation and Parks, there were no issues regarding potential contravention of the Endangered Species Act (ESA) provided mitigation measures were followed (email, K. Markham, February February 17 2021).

Development Proposal

The current development plan has offered to retain a large portion of Community 1. The plan is to also relocate the wetlands on site and associated with the City of London Widening and road connection to Southdale, next to the retained woods. The total Open Space Block covers 4 ha. From an ecological perspective, this consolidation of natural heritage features into one location provides for better habitat long term compared to isolation of existing features.

7.2 SITE CONTAMINATION

The present use of the subject lands is cropland with no record of contamination.

7.3 ARCHAEOLOGICAL/BUILT HERITAGE CONCERNS

As the North Talbot area is an area of high archaeological potential (North Talbot Area Plan) and multiple significant sites have been located within the area, an archaeological study has been undertaken and completed. The final report has been entered into the database at the Ministry.

8.0 SUBDIVISION DESIGN

The proposed development has a total area of 11.22 hectares. Based on the Draft Plan of Subdivision Prepared by Zelinka Priamo Ltd. in July 2024 (Project No. SPE/LON/12-02), 74 Single Detached, 36 Townhouse lots, and one open space block (113) are proposed on the subject lands. The lots are sized to accommodate all required setbacks along the property lines. Access to the proposed development is provided off Raleigh Boulevard from the west and off Jack England Drive and Mersea Street from the south and southwest of the site. The lot sizes of single detached in the Draft Plan and townhouse lot lengths are anticipated to be similar to those existing within the established Talbot Village subdivision to the west and south.

9.0 EXISTING SERVICES – OVERVIEW

The servicing strategy for storm drainage, stormwater management, sanitary servicing and water servicing for Talbot Village Phase 8 (previously Phase 2 Topping Lands) will be consistent with the overall servicing plan presented in the Talbot Village Phase 7 (previously Phase 1 Topping Lands) and North Talbot Community Plan dated December 2019. The subject development lands serve as an extension to the Talbot Village Phase 7 (Phase 1 Topping Lands) -Talbot Village subdivision. They will generally be serviced from the existing infrastructure installed through the development of Phases 1 to 6 of Talbot Village.

Wastewater from the subject development will be conveyed through the existing Talbot Village Subdivision to the existing 600mm sanitary trunk sewer on Colonel Talbot Road which flows to a new pumping station further south. This new system is designed to accommodate the subject lands. Water servicing will be provided off a looped connection to the Phase 2,5, and 6 Talbot Village and Talbot Village Phase 7 (Phase 1 Topping Lands) high-level system. The system will also be looped to connect with the Southdale Road high-level trunk watermain.

Stormwater management for both quality and quantity control will be provided by the existing regional SWM facilities installed in previous phases of Talbot Village. The internal storm trunk system and overland flow routes created through Talbot Village Phases 5 and 6 were designed to convey both minor and major storm runoff from the proposed Phase 8 development lands.

The North Talbot Community is ultimately tributary to Dingman Creek, and SWM controls have been designed with established tributary design criteria. LID controls will be created within the proposed development lands in accordance with City of London policies.

During Phase 7 (Phase 1B, Topping Lands), one new road connection will be made to Southdale Road, which borders the subject development lands along the north limit. The location and function of this connection are consistent with the road network strategies developed through the North Talbot Community Plan.

The above services will be discussed in more detail in subsequent sections of this report.

10.0 SANITARY SERVICING

10.1 PROPOSED SANITARY SEWERSHED

As outlined in Figure 1-Sanitary Drainage Areas, Talbot Village Phase 8 (Previously Phase 2-Topping Lands (TL)) and MTE 735 Southdale Road West Development are expected to be constructed in the near future. Phase 8 is inclusive of 74 single family residential dwellings and 38 townhouses, and the MTE 735 Southdale Road West Development is inclusive of 878 high density residential units. Proposed populations were derived using the City of London's Chapter 3 Sanitary Sewer Guideline. The Phase 8 population is equal to 313 (74 lots @ 3p/lot + 38 lots @ 2.4p/lot) persons and contributing area is equal to 11.22 ha. The MTE development at 735 Southdale Road West has an equivalent population of 1405 (231 units/ha @ 1.6p/unit) persons and a contributing area of 3.80 ha

The Phase 8 and 735 Southdale development sanitary discharge will be carried to the existing 600mm diameter trunk main on Colonel Talbot Road via proposed sanitary sewers within the Phase 8 development area and the existing sanitary sewers to the southwest of the development site. This area is generally defined by Southdale Road West to the north, Walsh Drive to the east, Pack Road to the south and the existing Talbot Village Subdivision to the west.

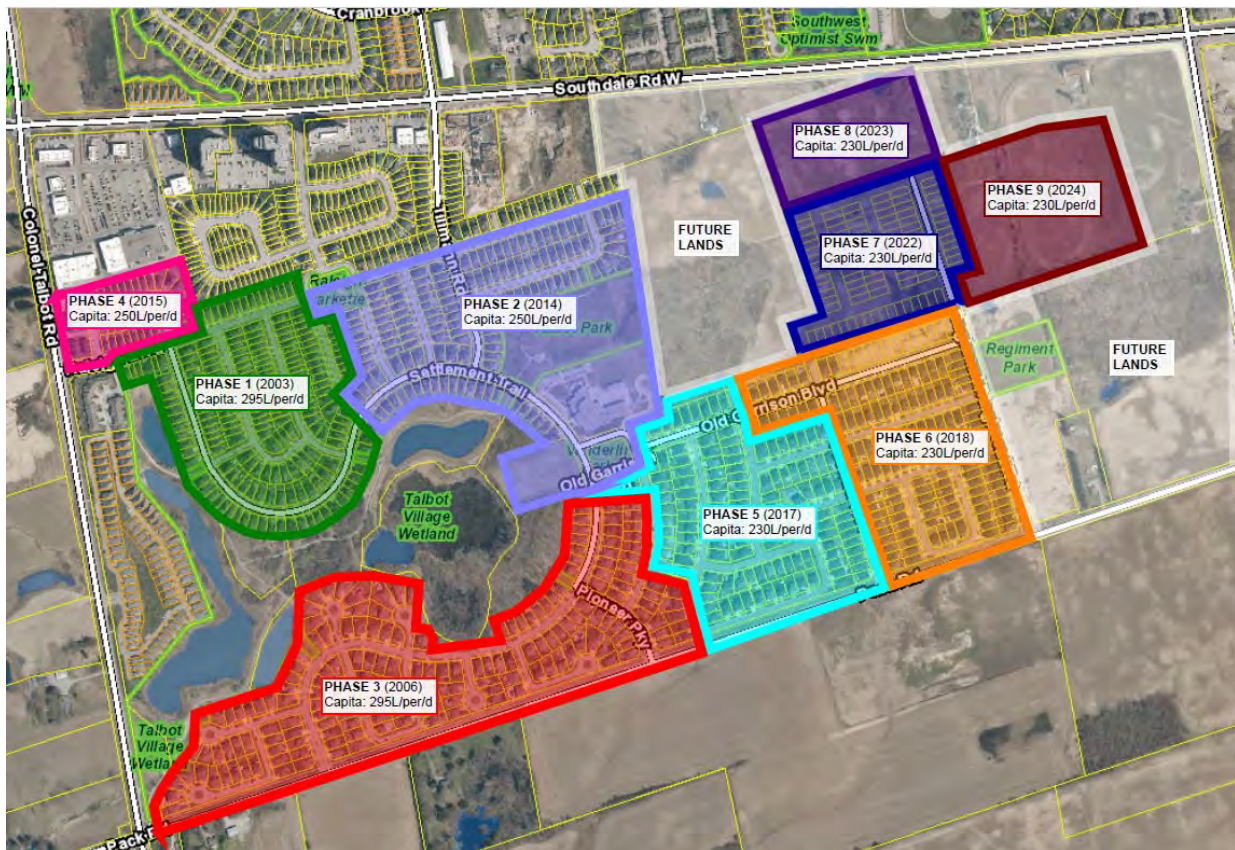
11.0 SERVICING STRATEGY

The area's natural topography is such that Phase 8 Lands generally slope from the northeast to the southwest. An existing 200mm sewer stub is located at the north end of Mersea Street. The stub has sufficient depth to service Phase 8 by Gravity. As illustrated in Figure 1-Sanitary Drainage Areas, the stub at north end of Mersea Street is designed to accommodate a total sanitary flow 22.62 L/s.

As shown in Figure 1-Sanitary Drainage Areas, sub-catchment A-1, A-2 and A-3 will drain to the existing 200mm sanitary sewer at the north end of Mersea Street. The proposed sanitary discharge from the sub-catchments will total 18.19 L/s.

Per the City of London’s Chapter 03 Sanitary Sewers Guideline, new development (Phase 7, 8 and 735 Southdale) sanitary discharge rates were determined using the per capita rate of 230 L/cap/day (+10% Uncertainty). The sanitary discharge rate from existing lots and existing Talbot Village Phases 1 and 3 lots contributing to existing sewers were determined using wet weather inclusive per capita rate of 295 L/cap/day (+10% Uncertainty). The sanitary discharge rate from existing Talbot Village Phases 2 and 4 lots contributing to existing sewers were determined using wet weather inclusive per capita rate of 250 L/cap/day (+10% Uncertainty). The sanitary discharge rate allocations can be seen in the figure below:

Talbot Village Sanitary Discharge Allocations



Therefore, the receiving sewer stub will have capacity to support the Phase 8 Talbot Village development (inclusive of the 735 Southdale development), as the total expected sanitary discharge to be serviced by the 200mm sanitary stub at the north end of Mersea Street is 19.76 L/s, which is less than the maximum pipe capacity of 22.62 L/s.

A full downstream sanitary sewer capacity analysis was conducted to confirm if the existing downstream receiving sewers can support the increase in sanitary flow from the proposed Phase

8 development. The results of the analysis can be found in Appendix A. The results of the analysis show that all receiving sewers are operating under free flow conditions (No surcharging).

The maximum pipe utilization (Actual Peak Flow / Design Peak Flow) is 93.35%.

11.1 SANITARY OUTLETS

A 450mm diameter trunk sewer was installed as part of the Talbot Village Phase 3 works. This sewer extends from the downstream end of Phases 5 and 6 of the development through Talbot Village along Settlement Trail and then directed to a 600mm diameter sanitary trunk sewer, which flows to a southerly Pumping Station and ultimately to the Oxford Wastewater Treatment Facility with sufficient capacity to accommodate any increase in flows due to the proposed development from Phase 8 and the MTE development at 735 Southdale Road West.

12.0 WATER SERVICING

12.1 WATER SERVICING STRATEGY

Within this sector of the City of London, the water distribution network functions as two distinct pressure zones: a low-level system which encompasses most of the City and a high-level system which services an area roughly defined as a band which extends across the southern end of the City between Commissioners Road and Southdale Road. The high-level system is then fed from three secondary booster pumping stations – the Westmount Pumping Station, the Springbank Pumping Station and the Pond Mills Pumping Station.

The cut-off point between the two systems have been established to be at an elevation of 275m as the low-level system operating pressures are insufficient to provide adequate service for general system operations or fire protection above this elevation.

Generally, most of the eastern half of the North Talbot Community Area lies above elevation 275m and, as such, would need to be serviced off the high-level system. This approach is consistent with the preliminary servicing studies completed as part of the North Talbot Community Plan and the water modelling studies conducted with the servicing for the Talbot Village Subdivision – most recently the November 9, 2022 Water Servicing Report for Talbot Village Phase 7 (now Ph 1-Topping Lands), and the 2016 Water Distribution report completed for Phases 5 and 6.

As illustrated in Figure 2, the new development would be serviced from high level system with 335m hydraulic grade line from three existing 200mm diameter watermains, on Raleigh Boulevard (west side of the subject site) at Mersea Street and Frontier Avenue. There will also be a connection (4th connection) to the 250mm watermain on Raleigh Boulevard (east side of the subject site) to be constructed during the development of Talbot Village Phase 7 (Phase 1B).

Water modelling will be completed during detail design to confirm the adequacy of these connection points and the sizing of the internal water network for short-term and long-term conditions. These four connection points into the high-level system will provide a fully looped system to service the new development.

Water service connections for the townhouse units are to be as per standard SW7.1 for narrow lot servicing.

12.2 PROJECTED WATER DEMANDS

The following provides a calculation of Average Day and Maximum Day demands for the proposed 74 Single Detached lots (@ 3p/Lot) and 38 townhouse lots (@ 2.4 p.p.u.). A peak hour analysis will be completed for the future modelling as part of the detail design.

	Number of Lots	Population	Average Day Demand @ 270 l/c/d	Maximum Day @ 3.5 P.F
Single	74	222 @ 3 p/Lot	59.9 cu.m/day	210 cu.m/day
Townhouse	38	92 @ 2.4 ppu	24.8 cu.m/day	87 cu.m/day
Total	112	314 ppl	84.7 cu.m/day	297 cu.m/day

13.0 STORMWATER MANAGEMENT

13.1 STORMWATER MANAGEMENT REQUIREMENTS

The proposed development is located within the Dingman Creek Subwatershed area. The existing Talbot Village SWM facility has been designed to provide the required storage volumes for an overall drainage area as identified in the North Talbot Community Plan, including the proposed development of Talbot Village Subdivision Phase 7 (former Phases 1, and 1B Topping Lands) and Phase 8 (former Phase 2 Topping Lands).

During the design phase of Talbot Village Phase 2, the Talbot Village SWM Report was updated to reflect the current City of London design requirements. The existing facility meets or exceeds current City requirements and as such onsite SWM measures will not be required for this development, unless downstream capacity constraints exist.

13.2 PROPOSED STRATEGY FOR STORMWATER

All end-of-pipe SWM requirements will be met through the existing permanent SWM facility, consistent with the North Talbot Community Plan and the Talbot Village Stormwater Management Functional Design Report. This development will be designed to promote soft best management practices (BMPs and LIDs) where possible in accordance with the City of London's requirements, although it is noted that due to the lower permeable soils identified within Phase 7 (former Phases 1, and 1B Topping Land), there is a limited number of BMP's that can be incorporated.

Similar to the surrounding phases of Talbot Village, the proposed lot density for former Phase 1, 1B and 2 Topping Lands is significantly lower than the permissible lot density and as such, the overall imperviousness within the proposed Draft Plan is likely to be less than assumed within the SWM report. Stormwater Management modelling and flow assessments are not required for this development as SWM requirements have been addressed off-site, and the runoff produced by this development will be less than initially envisioned.

13.3 STORMWATER DRAINAGE PATTERN (PHASE 8)

The post development drainage pattern has been referenced in Figure 3.

Area A02 represents the north portion of Phase 8 where a network of storm sewers and manholes along the Phase 8 internal streets of Raleigh Boulevard, Street A and Steet B will collect drainage via catchbasins and potentially catchbasin manholes and ultimately connect to the proposed 750 mm storm sewer along the easement. A small area east to Area A02, identified as A05 on Figure 3, drains east to Phase 7 (former Phase 1B). Areas A01 and A03 represents the existing wooded area, proposed wetlands, and back lots draining to the woodlands and proposed wetlands. Drainage from A01 will drain uncontrolled to the west to the existing storm pond and PSW. Whereas Area A03 will be graded to create a new wetland within its limits. A berm will be constructed at the west and north limits of the Phase 8-easement in order to control the water required to sustain the proposed wetland and wooded area. Area A03 has therefore been designated as the Wetland Compensation Area. Drainage in excess of the volume of standing water required to maintain the proposed wetland in A03 will overflow into the existing ditch inlet drain at the intersection of the easement and Jack England Drive. The south-east corner of Phase 8, identified as Area A04, drains to the existing 900mm diameter storm stub at Mersea Street via proposed 750 mm storm sewer on Jack England Drive.

As mentioned, there is an existing 750mm stub at the north end of Frontier Avenue. The proposed easement-750 mm storm sewer will connect to the existing manhole (MH ST2) at the intersection of Jack England Drive and Frontier Avenue via the noted 750mm stub. Another proposed 750

mm storm sewer will exit MH ST2 towards the west on Jack England Drive and connect to the 900 mm storm sewer along Mersea Street via the existing 900mm diameter stub at the north end of Mersea Street. The 750mm diameter storm sewer on Jack England Drive is proposed to be more than 1.50m above the existing 750mm diameter storm sewer on Frontier Avenue.

Flows at MH ST2 will first exit south via the existing 750 mm storm pipe on Frontier Street as it is at a lower invert. When surcharged the flows will be diverted to the proposed 750 mm storm sewer going west on Jack England Drive. Flows will then flow south via the existing 900 mm storm sewer along Mersea Street. Please refer to Figure 3: Storm Drainage for the preliminary storm sewer design and layout.

13.4 STORMWATER DRAINAGE ALLOCATION

Storm drainage allocation details for Phase 8 has been presented in Figure 4: Existing Storm Drainage Areas. As shown in Figure 4, the existing 900mm storm sewer stub on Mersea Street is designed for catchment area 294, which has an area A of 7.86ha and a runoff coefficient C of 0.50, resulting in $AC(294) = 3.93$. Comparing this with the post- development condition shown in Figure 3, Area A03 = 3.37ha and C = 0.36 (per City of London Chapter 05 Storm Sewers Guideline), $AC(A03) = 1.21$. Therefore, the 900mm diameter stub has enough capacity for post-development flows from A01, and there is no need to provide further quantity control.

Also from Figure 4, it can be seen that the existing 750mm stub on Frontier Avenue is designed for Area 295. Area 295 has an area A of 3.81ha and a runoff coefficient C of 0.55 resulting in $AC(295) = 2.10$. In the proposed post development condition, as shown in Figure 3, Area A02 = 4.81 and C=0.55 (per City of London Chapter 05 Storm Sewers Guideline and C values used from Phase 1-TP), $AC(A02) = 2.64$ is slightly greater than 2.10. However, the combined proposed

AC for Areas 294 and 295 is 6.03 (allowable) which is greater than the combined proposed AC for Areas A01 and A02 of 3.85. Therefore, a flow splitter has been proposed to split flows to both the Mersea Street and the Frontier Avenue stubs, thereby negating the need for further quantity control. However, this is a conservative approach as lesser flows will exit the Phase 8 development due to the proposed Area A03 being designated as the Wetland Compensation Area. As mentioned in Section 12.3, a berm will be constructed at the west and north limits of the Phase 8-easement in order to maintain standing water required to sustain the proposed Wetland Compensation Area. Only flows in excess of the volume of standing water required to maintain the proposed Wetland Compensation Area will overflow into the minor storm sewer system. During detailed design, further information and calculations will be provided to meet the allowable flow rates into each of these two existing storm stubs.

Phase 8 flows will be directed through storm sewers in the previously constructed Phases 5 and 6 and will ultimately drain to the existing trunk 1650mm storm sewer on Colonel Talbot Road, which was constructed as part of Talbot Village Phase 3. The trunk storm sewer drains westerly towards an existing forebay (F2) which was built as part of Talbot Village Phase 3.

13.5 WETLAND COMPENSATION AREA

The area designated on Figure 3 as A03, has been identified as a Wetland Compensation Area. As mentioned in Section 12.2, Area A03 will be graded to contain flows up to the standing water and maintain standing water required to sustain the proposed wetland and wooded area. A Water Balance study has been carried out to determine how this proposed Wetland Compensation Area will be maintained. For details on the proposed Wetland Compensation Area and Water Balance, please refer to the reports titled:

- 'Hydrogeological Assessment: Final Report – Southside Management Limited', prepared by EXP, August 2024; and
- 'Talbot Village Phase 8 Environmental Impact Study', prepared by MTE Consultants, August 2024.

13.6 EROSION AND SEDIMENT CONTROL

Temporary erosion and sediment control (ESC) for construction must be provided on-site; and all erosion and sediment control BMPs shall be designed, constructed and maintained in accordance with the City's Design Specifications & Requirements Manual – Chapter 10: Erosion and Sediment Control (2024) and/or other City requirements where applicable. In order to minimize sediments from leaving the site during the development works, sediment control measures such as Mud-Mats, Sediment Control Fences, Double Sediment Control Fences, Cut-off Swales, Rock-Check Dams, Straw-Bale Filters and Sediment Traps will be implemented.

The ESC features will be regularly monitored during construction and all necessary repairs shall be performed in a timely manner. All sediment trapped or localized in areas of intense erosion and sedimentation shall be safely disposed. Please refer to Figure 6 titled Erosion and Sediment Control for details of the proposed ESC measures.

14.0 TRANSPORTATION

14.1 TRANSPORTATION BACKGROUND STUDIES

A significant amount of transportation planning and analysis was completed in conjunction with the North Talbot Community Plan as outlined in the August 1999 study. That study provided the

framework for the establishment of the internal road pattern and connecting streets for the entire community area including the east portion of the community plan within which the current development plan is situated. Most of the planning and development assumptions made at the time that the original study was undertaken are still relevant and much of the Talbot Village Community has proceeded in a pattern consistent with the development concept that was presented in that study.

14.2 INTERNAL ROAD NETWORK

The internal road network for Talbot Village Phase 8 is generally consistent with the road hierarchy and modified grid pattern established within the earlier phases of development. However unlike the previous phases, the proposed development uses the standard 20.0m ROW for local roads instead of the previously used narrower ROW. While the narrow ROWs brought the built form closer together, it did not have the desired impact on traffic calming, and they created challenges for utilities within the boulevard.

This road network pattern and hierarchy was applied and accepted within the community plan for its inherent traffic calming qualities and ability to address cut-through traffic originating from adjacent arterial roads including Southdale Road, Colonel Talbot Road and to a lesser extent Bostwick Road and Pack Road.

The locations of the main access points to Phases 5 & 6 to the south, and a continuation of Raleigh Boulevard from the west are consistent with those identified within the community plan.

14.3 EXTERNAL ROAD NETWORK

The North Talbot Community Planning area is serviced by and generally bounded by the following arterial roads: Southdale Road to the north; Colonel Talbot Road to the west; Bostwick Road to the east; and Pack Road to the south. Each of these arterial roads currently consist of a two lane rural cross-section. Planned upgrades from 2 lanes to 4 lanes on Southdale Road from Wonderland Road to Colonel Talbot Road have been identified within the London Transportation Master Plan for 2028. In addition, the 2 lane extension of Bradley Avenue to Bostwick Road & Pack Road has been identified to occur in 2028.

14.4 BICYCLE AND PEDESTRIAN CONSIDERATIONS

Pedestrian sidewalks will be provided on all primary, secondary and local streets within the proposed development in accordance with the Community Plan and the general subdivision planning standards of the City of London. The on-street bike route system through the Westmount Community, which currently uses Farnham Road will be extended into the North Talbot

Community area using Bostwick Road and the North Talbot internal road network with the eventual extension of Old Garrison Blvd.

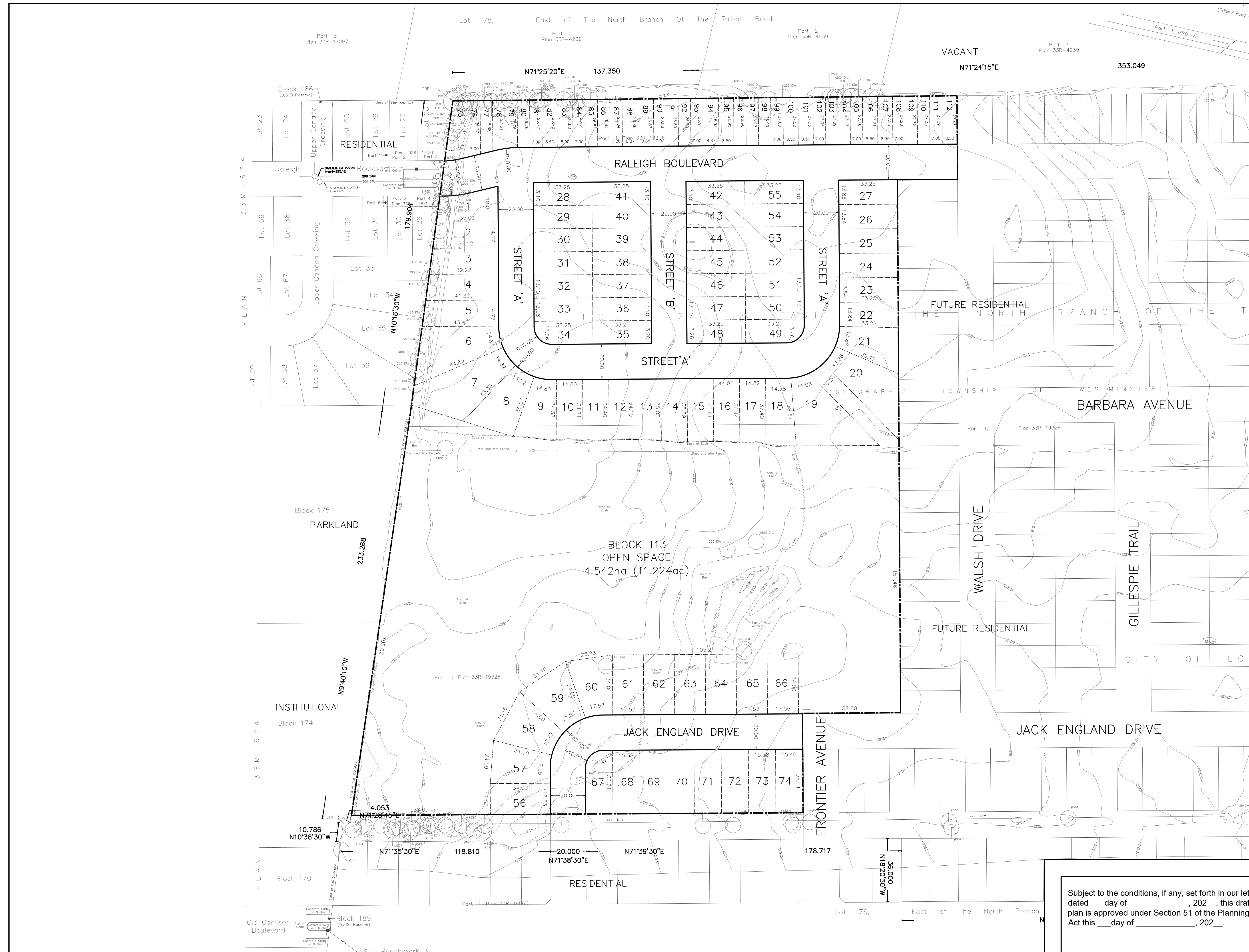
15.0 PARKS PLANNING

15.1 NATURAL HERITAGE SYSTEM

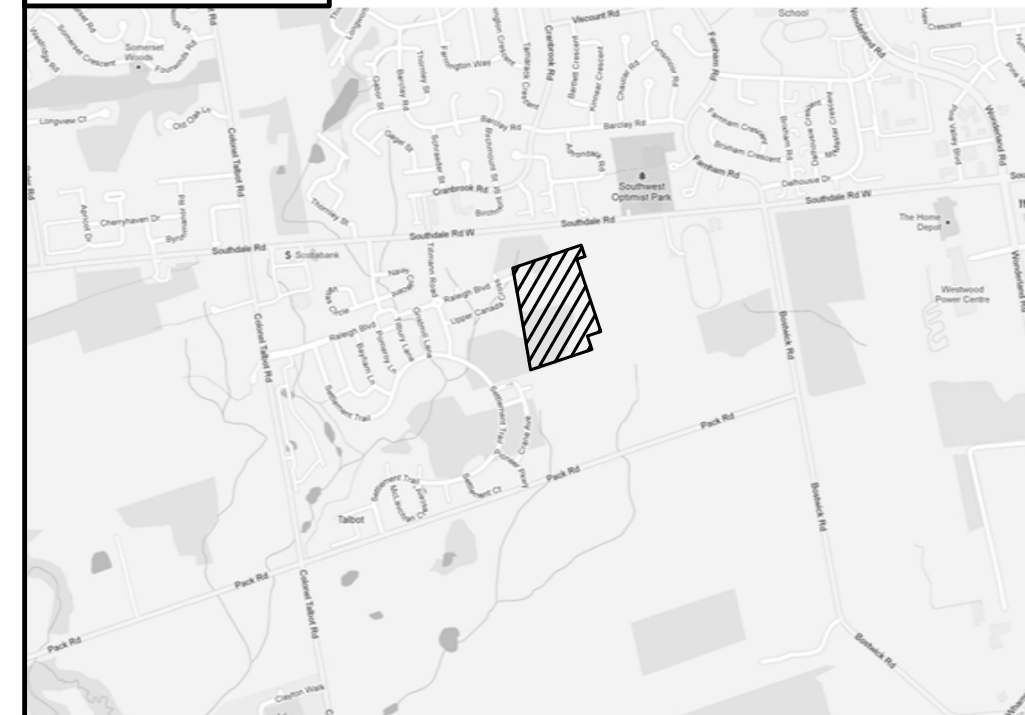
Natural heritage features on the subject lands are discussed in Section 6.1 of this report and the provided Environmental Impact Study. The wooded area is to be retained, and compensation for relocated wetland features is also proposed within the same Open Space Block as shown on the proposed Draft Plan of Subdivision. A portion of the subject lands are identified as being within the Conservation Authority's Regulated Limit (Schedule B2) and any issues arising from these matters will be discussed during the draft approval process.

16.0 MISCELLANEOUS

The application for Zoning By-law Amendment will be brought forward concurrently with the Plan of Subdivision application.



KEY PLAN



(GEOGRAPHIC TOWNSHIP OF WESTMINSTER)
CITY OF LONDON
COUNTY OF MIDDLESEX

INFORMATION REQUIRED UNDER SECTION 51 (17) OF THE PLANNING ACT

E) As shown K) All municipal services to be available
F) As shown L) As shown

PROPOSED LAND USES AND AREAS

RESIDENTIAL, SINGLE DETACHED (LOTS 1-74)	4.060 ha
RESIDENTIAL, STREET TOWNHOUSE (LOTS 75-112)	0.799 ha
OPEN SPACE (BLOCK 113)	4.542 ha
PROPOSED ROADS	1.828 ha
TOTAL	11.219 ha

OWNER'S CERTIFICATE
TOPPING BROS. LAND CORP.
HEREBY CONSENTS TO THE FILING OF THIS PLAN IN DRAFT FORM

DATED _____
Topping Bros. Land Corp., Authorized Signature _____

OWNER'S CERTIFICATE
TOPPING FAMILY FARM INC.
HEREBY CONSENTS TO THE FILING OF THIS PLAN IN DRAFT FORM

DATED _____
Topping Family Farm Inc., Authorized Signature _____

SURVEYOR'S CERTIFICATE
I HEREBY CERTIFY THAT THE BOUNDARIES OF THE LAND TO BE SUBDIVIDED AND THEIR RELATIONSHIP TO THE ADJACENT LANDS ARE ACCURATELY SHOWN ON THIS PLAN.

Jason Wilband, ONTARIO LAND SURVEYOR DATED _____
for Archibald, Gray & McKay Ltd.

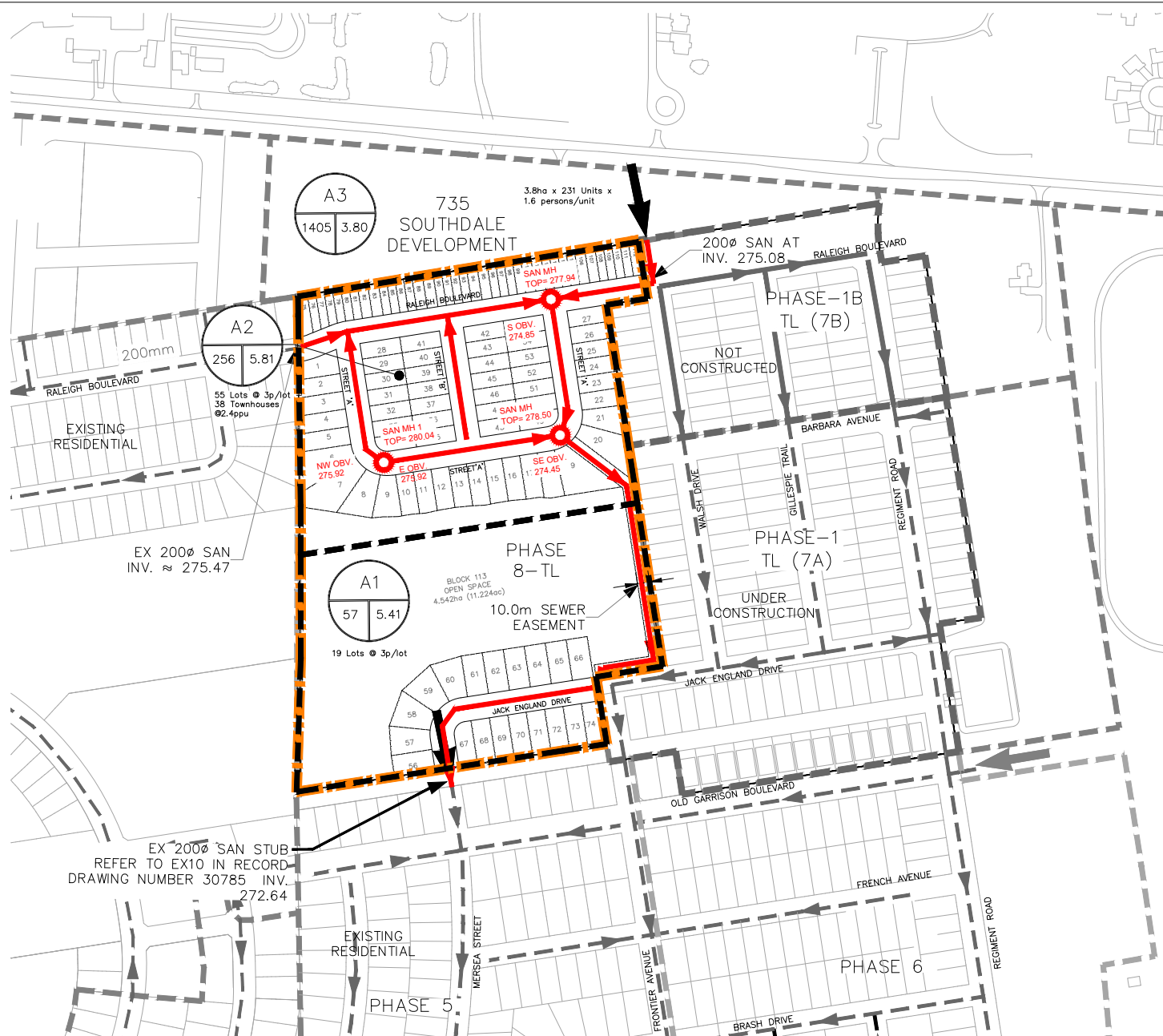
NO.	REVISION	DATE	INITIAL

ZELINKA PRIAMO LTD
A Professional Planning Practice

318 Wellington Road, London, Ontario N6C 4P4
Tel: (519) 474-7137 Fax: (519) 474-2284 e-mail: zp@zplan.com

DRAWN BY CTK	PROJECT NO. SPE/LON/12-02
DATE JULY 2024	SCALE 1:1,000

Subject to the conditions, if any, set forth in our letter dated ___ day of ___, 202___, this draft plan is approved under Section 51 of the Planning Act this ___ day of ___, 202___.



LEGEND:

- Area No.
- Population
- Area (Hectares)
- PHASE 8
- PHASES 1 AND 1B TOPPING LAND
- DRAINAGE BOUNDARY
- SANITARY SEWER
- OUTLET LOCATION



203 - 350 Oxford Street West
 London ON N6H 1T3 Canada
 tel 519 472 7328
 fax 519 472 9354

SANITARY DRAINAGE AREAS

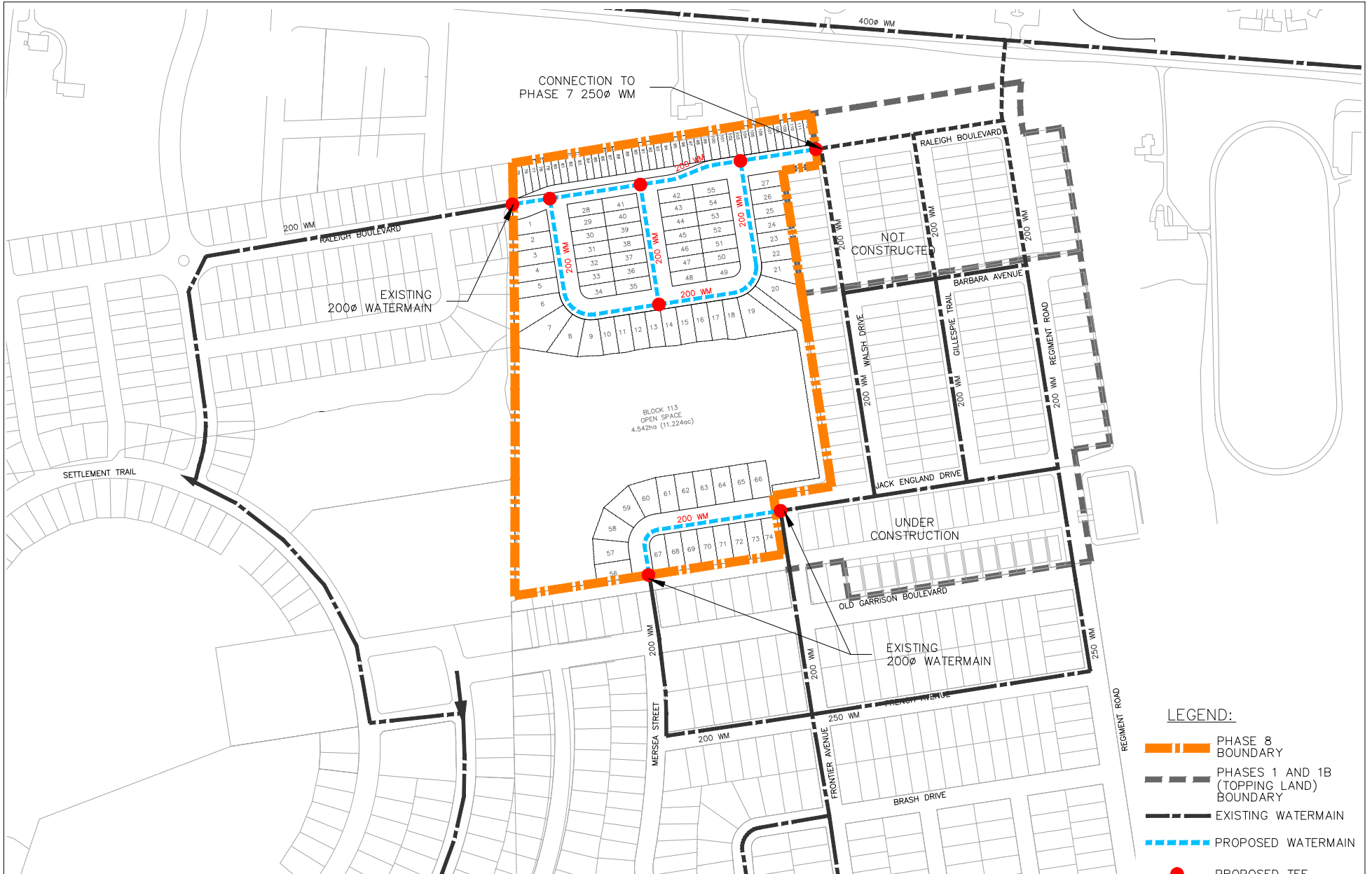
TALBOT VILLAGE PHASE 8

SCALE: 1:5,000

DATE: JUL 2024

FIGURE NO.

FIGURE 1



- LEGEND:**
- PHASE 8 BOUNDARY
 - PHASES 1 AND 1B (TOPPING LAND) BOUNDARY
 - EXISTING WATERMAIN
 - PROPOSED WATERMAIN
 - PROPOSED TEE



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 London ON N6H 1T3 Canada
 tel 519 472 7328
 fax 519 472 9354

WATER SYSTEM CONNECTIONS

TALBOT VILLAGE PHASE 8

SCALE: 1:5,000

DATE: JUL 2024

FIGURE NO.

FIGURE 2



203 - 350 Oxford Street West
 London ON N6H 1T3 Canada
 tel 519 472 7328
 fax 519 472 9354

POST DEVELOPMENT STORM DRAINAGE

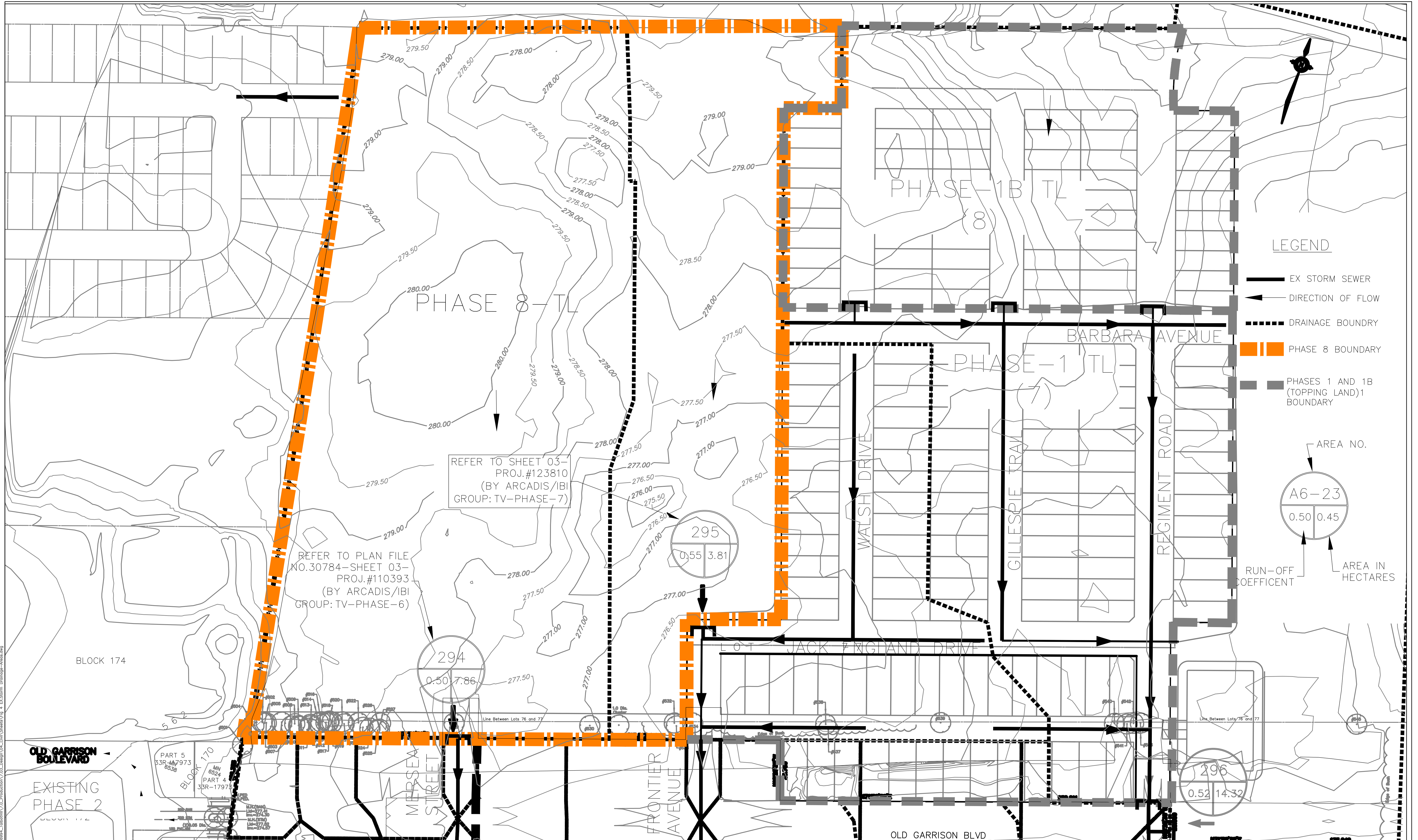
SCALE: 1:5,000

DATE: JUL 2024

TALBOT VILLAGE PHASE 8

FIGURE NO.

FIGURE 3

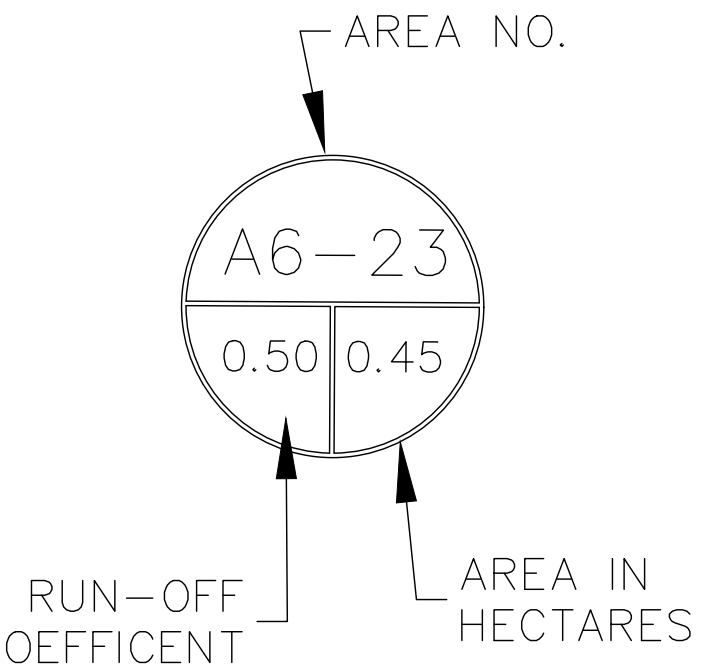


REFER TO SHEET 03-
 PROJ. #123810
 (BY ARCADIS/IBI
 GROUP: TV-PHASE-7)

REFER TO PLAN FILE
 NO. 30784-SHEET 03-
 PROJ. #110393
 (BY ARCADIS/IBI
 GROUP: TV-PHASE-6)

LEGEND

- EX STORM SEWER
- DIRECTION OF FLOW
- - - DRAINAGE BOUNDARY
- ▬ PHASE 8 BOUNDARY
- ▬ PHASES 1 AND 1B (TOPPING LAND)1 BOUNDARY



BLOCK 174

OLD GARRISON BOULEVARD

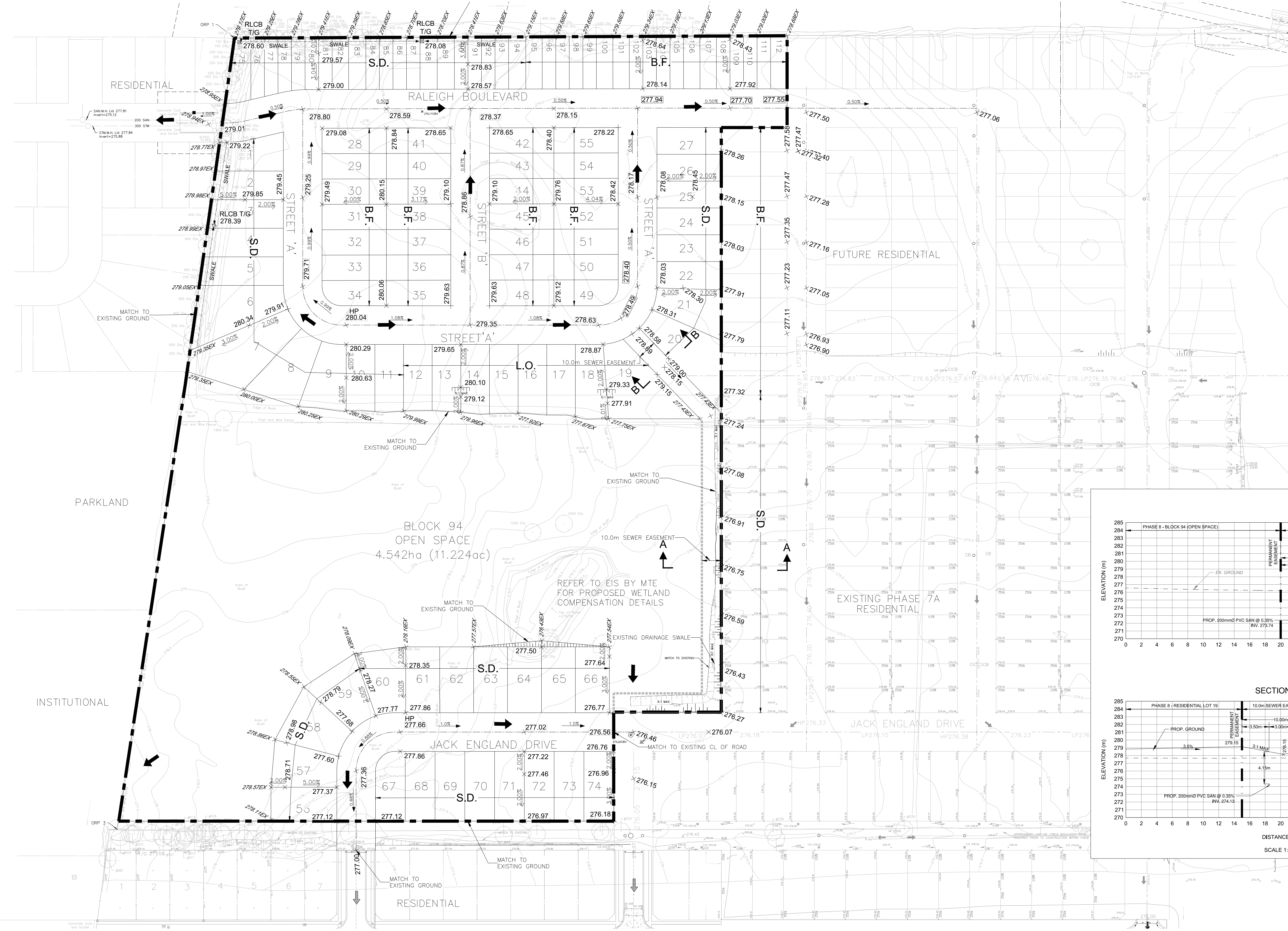
EXISTING PHASE 2



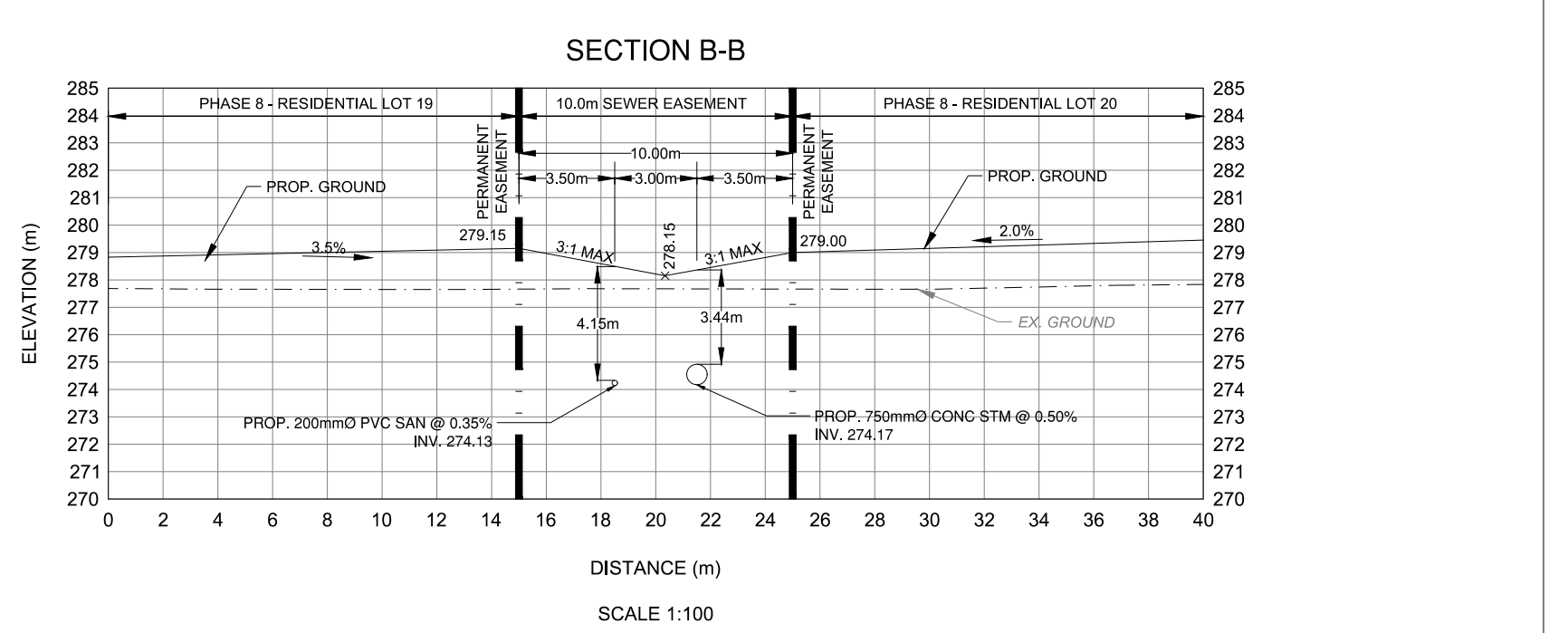
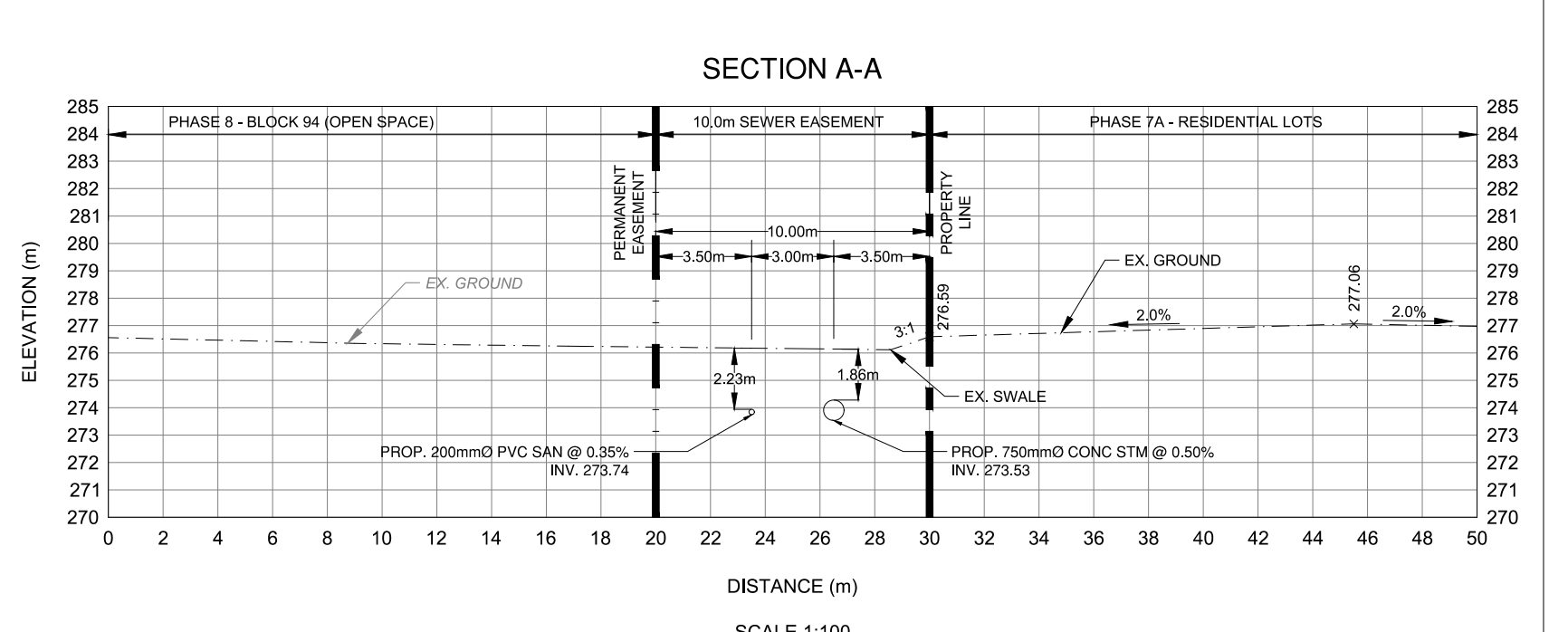
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 tel 519 472 7328
 fax 519 472 9354

EXISTING STORM DRAINAGE AREAS

TALBOT VILLAGE PHASE 8



- LEGEND:**
- PHASE 8 LIMIT
 - EASEMENT
 - DIRECTION OF OVERLAND FLOW (ULTIMATE)
 - DIRECTION OF OVERLAND FLOW (EXISTING)
 - FINISHED ROAD ELEVATION
 - FINISHED ELEVATION
 - PROPOSED LOT GRADE
 - PROPOSED SWALE
 - 3:1 MAX SLOPE
 - SANITARY MANHOLE
 - STORM MANHOLE
 - CATCHBASIN OR CURB INLET CATCHBASIN (AS NOTED)
 - COMMUNITY MAILBOX
 - LIGHT STANDARD
 - EXISTING TREE
 - REMOVE TREE
 - S.D.** SPLIT DRAIN LOT
 - B.F.** BACK TO FRONT DRAIN LOT
 - L.O.** LOOKOUT LOT



EXISTING SERVICES	DRAWING #, SOURCE	CONSTRUCTION DATE	CONSTRUCTED SERVICES	COMPLETION	DETAILS	No.	REVISIONS	DATE	CONSULTANT
					DESIGN	BH	1	FIGURE	2024-07-19
					DRAWN BY	MZ			
					CHECKED	BH			
					APPROVED	GR			
					DATE			2024-07-19	

CONSULTANT OR DIVISION

203 - 350 Oxford Street West
London ON N6H 1T3 Canada
tel 519 472 7328 fax 519 472 9354
arcadis.com

ENGINEER'S STAMP

TALBOT VILLAGE - PHASE 8

SCALE

SCALE - 1 : 500

TITLE

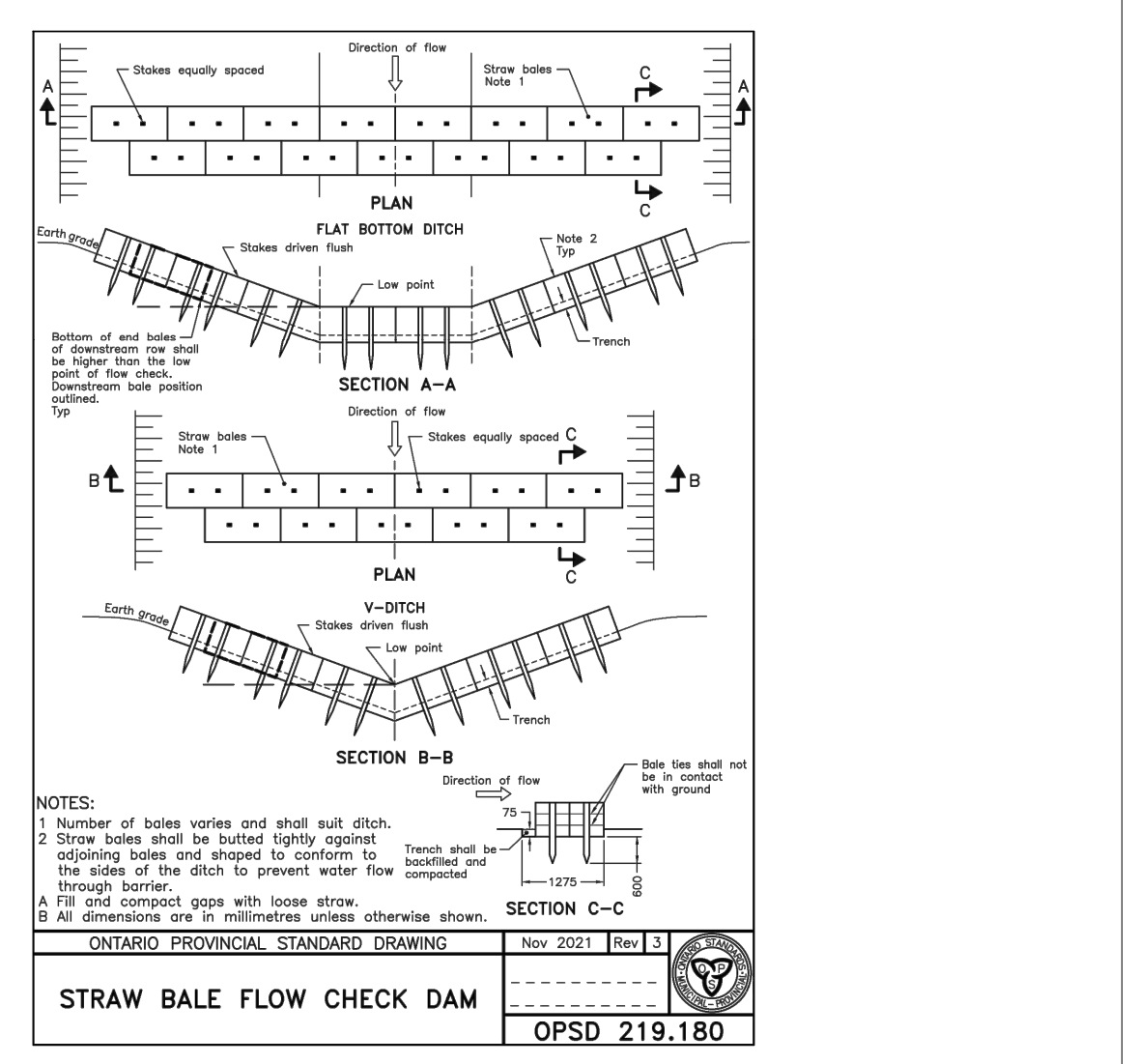
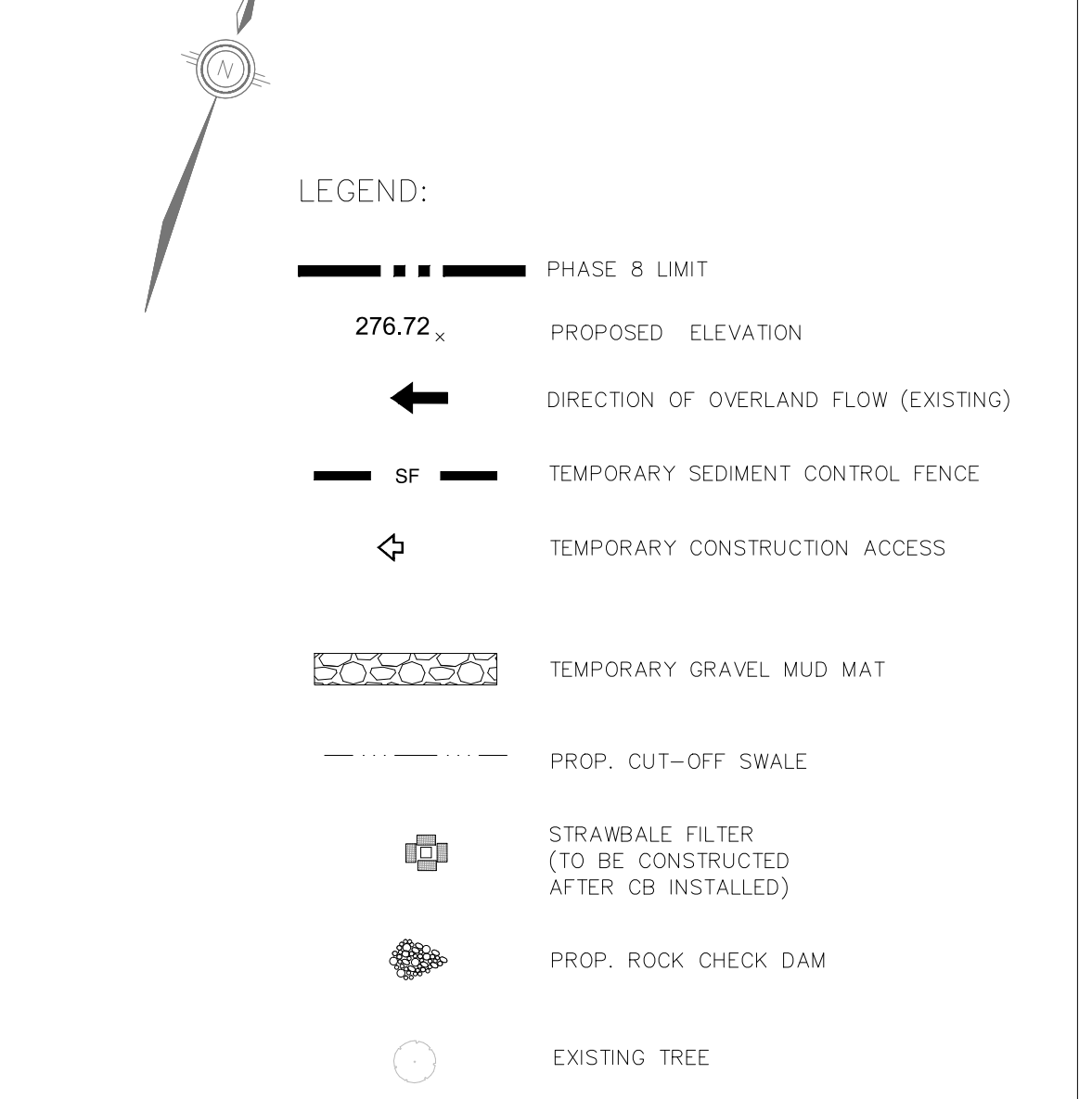
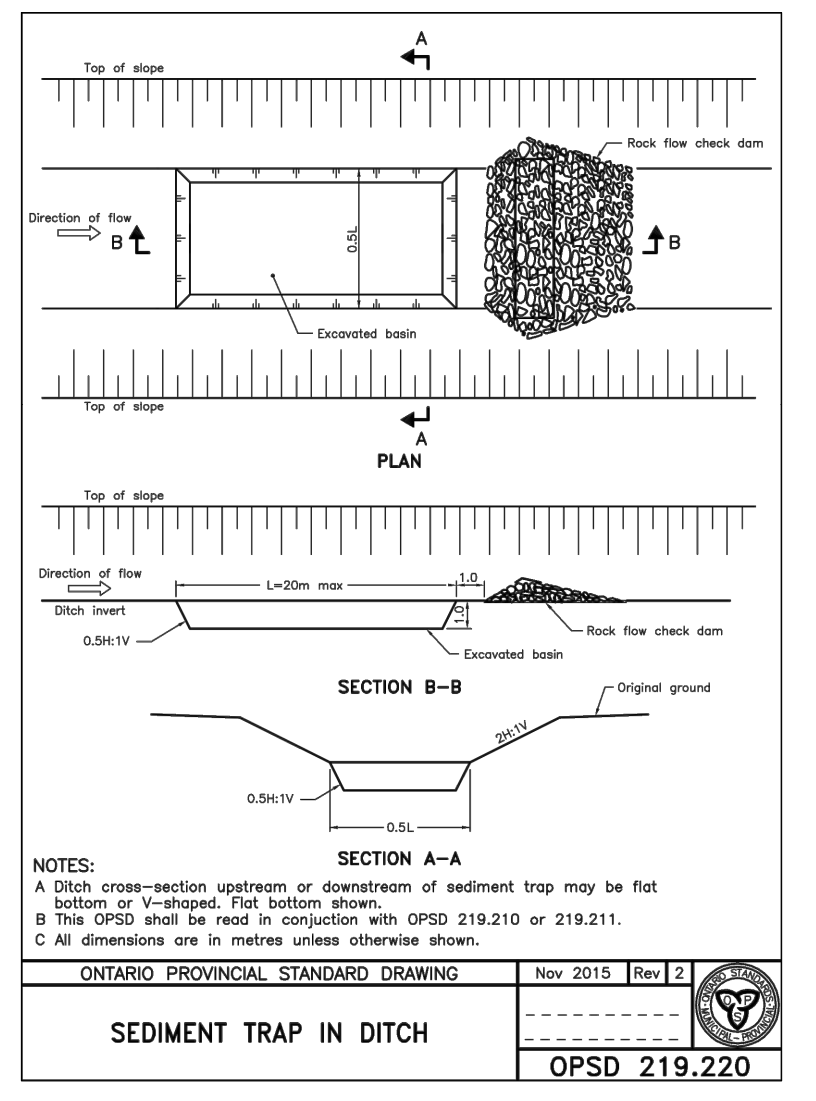
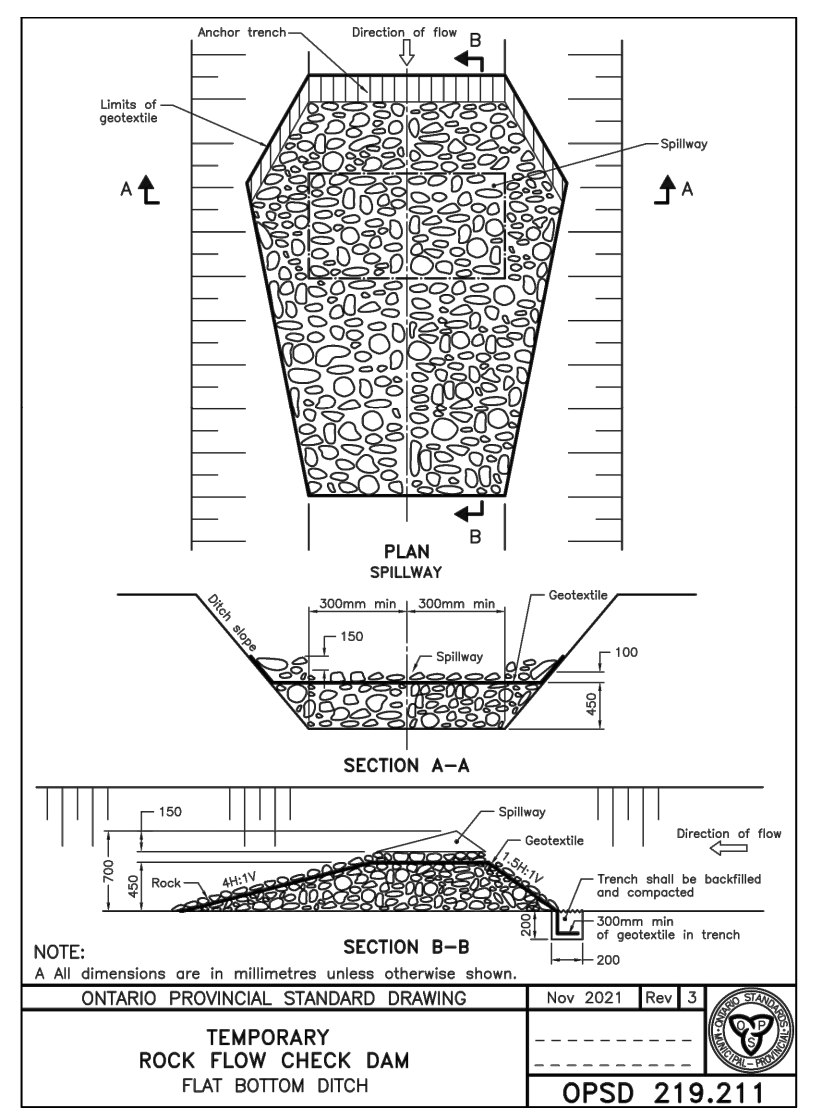
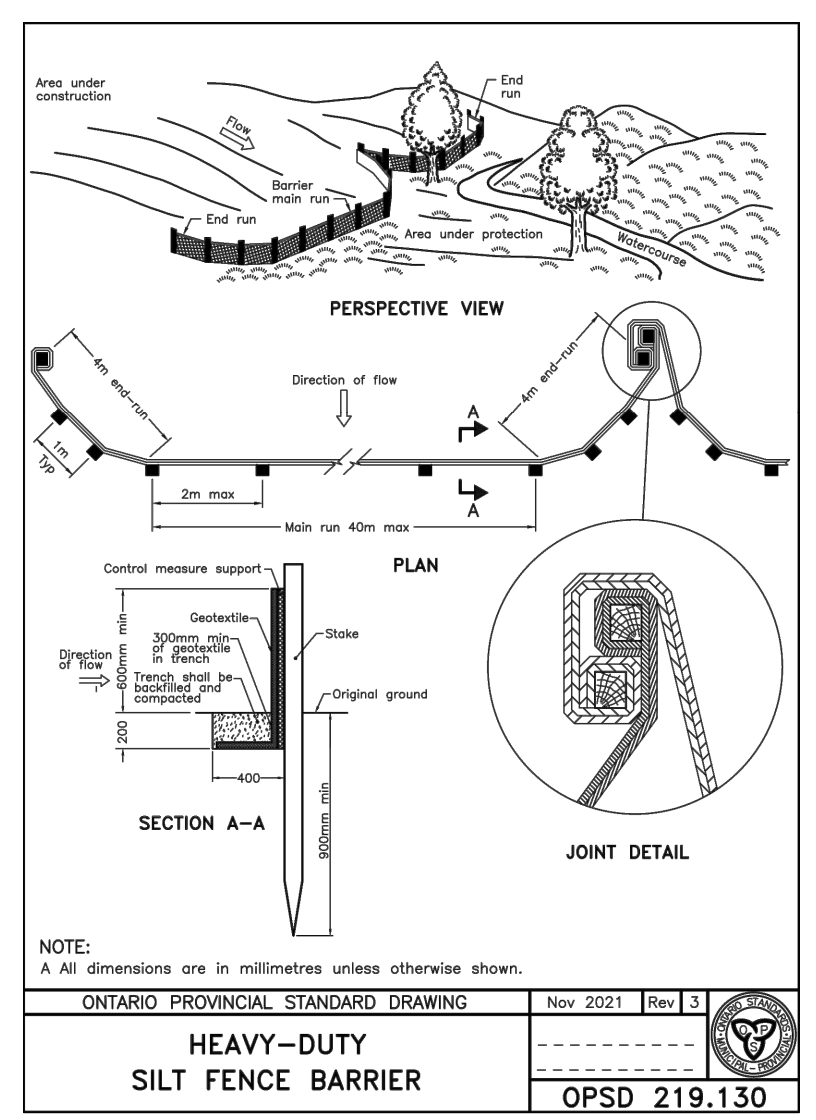
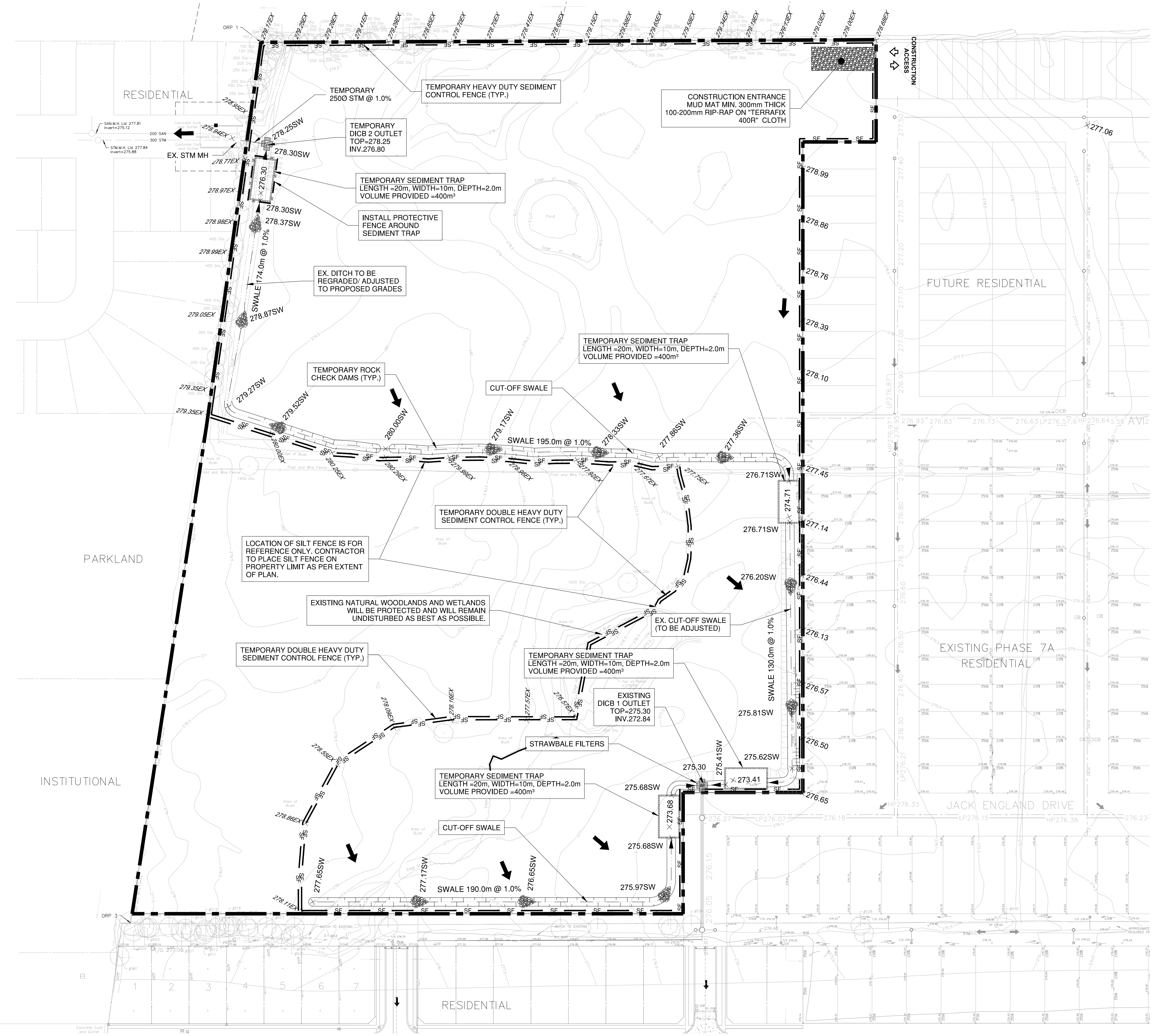
TALBOT VILLAGE - PHASE 8
SOUTHSIDE CONSTRUCTION MANAGEMENT

GRADING PLAN

PROJECT No. 146994

FIG. No. 5

PLAN FILE No.



EXISTING SERVICES	DRAWING #, SOURCE	CONSTRUCTION DATE	CONSTRUCTED SERVICES	COMPLETION	DETAILS	No.	REVISIONS	DATE	CONSULTANT
					DESIGN	BH	1	FIGURE	2024-07-19
					DRAWN BY	MZ			
					CHECKED	BH			
					APPROVED	SB			
					DATE			2024-07-19	



ENGINEER'S STAMP

TALBOT VILLAGE - PHASE 8

SCALE: 1:500

TITLE: TALBOT VILLAGE - PHASE 8 SOUTHSIDE CONSTRUCTION MANAGEMENT EROSION AND SEDIMENT CONTROL

PROJECT No. 146994

FIG. No. 6

PLAN FILE No.

POPULATION DENSITIES

	Lot Basis	Hectare Basis
LOW DENSITY	3.0 ppu	30 upha
MED. DENSITY	2.4 ppu	75 upha
HIGH DENSITY	1.6 ppu	150 upha
COMMERCIAL	----- ppu	100 ppha
INDUSTRIAL	----- ppu	68 ppha
	----- ppu	169 ppha

SANITARY SEWER DESIGN SHEET
CITY OF LONDON

Proposed Servicing Strategy

EX SEWAGE (INCL. Phase 1 & 3)
EX SEWAGE (INCL. UNCERTAINTY)
UNCERTAINTY
INFILTRATION
PEAKING FACTOR

PROP SEWAGE (Phase 5, 6, 7 & 8)
PROP SEWAGE (INCL. UNCERTAINTY)

DESIGN CRITERIA

= 295.00 l/cap/day 0.0034 l/cap/s
0.0038 l/cap/s
= 10%
= 8640 l/ha/day 0.1000 l/s/ha
= 1+(14/(4+P^0.5))

= 230.00 l/cap/day 0.0027 l/cap/s
0.0029 l/cap/s

DATE August 2024

DESIGN	MM
CHECKED	SR
PROJECT	Talbot Village

Phase 2 & 4 SEWAGE = 250.00 l/cap/day 0.0029 l/cap/s
Phase 2 & 4 SEWAGE (INCL. UNCERTAINTY) 0.0032 l/cap/s

PROJECT NAME: **Talbot Villages - Phase 8**

LOCATION			AREA			POPULATION					SEWAGE FLOW							SEWER DESIGN					PROFILE				%			
STREET	FROM	TO	NET OR GROSS	DELTA HEC.	TOTAL HEC.	PER HEC.	PER LOT	No. OF LOTS	DELTA POP.	TOTAL POP.	TALBOT VILLAGE EX. PHASE	PROP. POP.	TALBOT VILLAGE PROP. PHASE	PEAKING FACT.	TOTAL INFIL. l/sec	SECT. SEW. l/sec	DEV SEW. l/sec	TOTAL SEW. l/sec	TOTAL l/sec	SIZE mm	n	SLOPE %	CAP. l/sec	VEL. m/sec	LENGTH m	FALL IN SEWER	DROP D/S MH	INVERT ELEV.		CAPACITY UTILIZED
																												U.S.	D.S.	
Regiment Road	BY7074	BY2322	GROSS	11.95	11.95		3	0	0	0	-	309	Phase 7	4.07	1.20	0.00	3.65	3.65	4.84	250	0.013	0.28	31.42	0.64	98.5	0.276	0.125	270.62	270.35	15.41%
Regiment Road	BY2322	BY2326	GROSS	1.76	13.71		3	5	15	15	Phase 6			4.06	1.37	0.18		3.83	5.20	375	0.013	0.15	67.37	0.61	97.2	0.146	0.025	270.20	270.05	7.72%
Regiment Road	BY2326	BY2325	GROSS	1.53	15.24		3	5	15	30	Phase 6			4.06	1.52	0.18		4.01	5.53	375	0.013	0.15	67.37	0.61	93.4	0.140	0.025	270.03	269.89	8.21%
Brash Drive	BY2325	BY2329	GROSS	2.41	17.64		3	12	36	66	Phase 6			4.04	1.76	0.42		4.43	6.19	375	0.013	0.15	67.37	0.61	91.8	0.138	0.025	269.86	269.72	9.19%
Brash Drive	BY2329	BY2211	GROSS	1.47	19.11		3	20	60	126	Phase 6			4.00	1.91	0.70		5.13	7.04	375	0.013	0.15	67.37	0.61	84.9	0.127	0.025	269.70	269.57	10.45%
Brash Drive	BY2211	BY7036	GROSS	1.78	20.89		3	23	69	195	Phase 6			3.97	2.09	0.79		5.92	8.01	375	0.013	0.15	67.37	0.61	74.1	0.111	0.025	269.54	269.43	11.88%
Brash Drive	BY7036	BY2109	GROSS	0.10	20.99		3	1	3	198	Phase 6			3.97	2.10	0.03		5.95	8.05	375	0.013	1.35	203.22	1.84	14.5	0.196	0.025	270.14	269.95	3.96%
Crown Grant Road (East)	BY2109	BY2123	GROSS	1.71	22.70		3	22	66	264	Phase 6	204	Phase 7	3.87	2.27	0.74	2.29	8.98	11.25	375	0.013	0.19	76.21	0.69	77.6	0.147	0.025	269.32	269.17	14.76%
Crown Grant Road (East)	BY2123	BY2122	GROSS	0.31	23.01		3	3	9	273	Phase 5			3.86	2.30	0.10		9.08	11.38	375	0.013	0.12	60.75	0.55	22.3	0.027	0.025	269.16	269.13	18.73%
Crown Grant Road (East)	BY2122	BY2121	GROSS	0.33	23.34		3	4	12	285	Phase 5			3.86	2.33	0.13		9.21	11.54	375	0.013	0.11	58.54	0.53	39.4	0.043	0.025	269.13	269.08	19.71%
Crown Grant Road (East)	BY2121	BY2119	GROSS	0.49	23.83		3	5	15	300	Phase 5			3.86	2.38	0.17		9.38	11.76	375	0.013	0.13	62.95	0.57	90.8	0.118	0.025	269.08	268.96	18.68%
Crown Grant Road (East)	BY2119	BY2118	GROSS	0.32	24.15		3	3	9	309	Phase 5			3.85	2.42	0.10		9.48	11.89	375	0.013	0.14	65.16	0.59	67.6	0.095	0.025	268.94	268.82	18.25%
Crown Grant Road (East)	BY2118	BY2120	GROSS	0.40	24.55		3	4	12	321	Phase 5			3.85	2.46	0.13		9.61	12.06	375	0.013	0.16	69.58	0.63	78.4	0.125	0.025	268.81	268.69	17.34%
Crown Grant Road (East)	BY2120	BY2117	GROSS	0.26	24.81		3	2	6	327	Phase 5			3.85	2.48	0.07		9.68	12.16	375	0.013	0.13	62.95	0.57	82.4	0.107	0.075	268.64	268.54	19.31%
Pack Road	BY2117	BY2132	GROSS	0.06	24.87		3	1	3	330	Phase 5	1717	Phase 8 & 735 Southdale	3.50	2.49	0.03	17.43	27.14	29.63	450	0.013	0.79	252.88	1.59	25.1	0.198	0.025	268.44	268.24	11.72%
Pack Road	BY2132	BY7040	GROSS	0.13	25.00		3	1	3	333	Phase 5			3.50	2.50	0.03		27.17	29.67	450	0.013	0.27	147.91	0.93	48.3	0.130	0.025	268.18	268.04	20.06%
Pack Road	BY7008	BY1956	GROSS	0.13	25.14		3	1	3	336	Phase 3			3.50	2.51	0.04		27.21	29.72	450	0.013	0.42	184.49	1.16	51.0	0.214	0.025	268.04	267.83	16.11%
Pioneer Parkway	BY1956	BY1955	GROSS	0.52	25.65		3	6	18	354	Phase 3			3.50	2.57	0.24		27.45	30.01	450	0.013	0.30	155.86	0.98	59.7	0.179	0.025	267.43	267.25	19.26%
Pioneer Parkway	BY1955	BY1954	GROSS	0.23	25.88		3	2	6	360	Phase 3			3.50	2.59	0.08		27.53	30.12	450	0.013	0.28	151.09	0.95	46.2	0.129	0.025	267.22	267.09	19.93%
Pioneer Parkway	BY1954	BY1929	GROSS	2.60	28.48		3	28	84	444	Phase 3			3.48	2.85	1.11		28.64	31.49	450	0.013	0.25	143.14	0.90	86.7	0.217	0.025	267.07	266.85	22.00%
Settlement Trail	BY1929	BY1928	GROSS	1.48	29.96		3	16	48	492	Phase 3			3.48	3.00	0.63		29.27	32.26	450	0.013	0.32	160.63	1.01	49.4	0.158	0.025	266.77	266.61	20.09%
Settlement Trail	BY1928	BY1927	GROSS	0.50	30.46		3	6	18	510	Phase 3			3.48	3.05	0.24		29.51	32.55	450	0.013	0.30	155.86	0.98	47.3	0.142	0.025	266.59	266.45	20.89%
Settlement Trail	BY1927	BY1926	GROSS	0.38	30.84		3	4	12	522	Phase 3			3.47	3.08	0.16		29.67	32.75	450	0.013	0.32	160.63	1.01	47.5	0.152	0.025	266.44	266.29	20.99%
Settlement Trail	BY1926	BY1925	GROSS	1.54	32.38		3	13	39	561	Phase 3			3.47	3.24	0.51		30.18	33.42	450	0.013	0.30	155.86	0.98	38.7	0.116	0.025	266.27	266.16	21.44%
Settlement Trail	BY1925	BY1924	GROSS	0.23	32.60		3	2	6	567	Phase 3			3.47	3.26	0.08		30.26	33.52	450	0.013	0.26	144.73	0.91	49.1	0.128	0.025	266.13	266.01	23.16%
Settlement Trail	BY1924	BY1923	GROSS	0.95	33.55		3	8	24	591	Phase 3			3.46	3.36	0.32		30.58	33.93	450	0.013	0.62	224.25	1.41	52.7	0.327	0.025	265.70	265.38	15.13%
Settlement Trail	BY1923	BY1922	GROSS	0.35	33.90		3	3	9	600	Phase 3			3.46	3.39	0.12		30.70	34.09	450	0.013	0.35	168.59	1.06	46.2	0.162	0.025	265.35	265.19	20.22%
Settlement Trail	BY1922	BY1921	GROSS	1.96	35.87		3	17	51	651	Phase 3			3.46	3.59	0.67		31.37	34.96	450	0.013	0.40	179.72	1.13	50.2	0.201	0.025	265.09	264.89	19.45%
Settlement Trail	BY1921	BY1920	GROSS	0.31	36.18		3	3	9	660	Phase 3			3.46	3.62	0.12		31.49	35.11	450	0.013	0.30	155.86	0.98	33.7	0.101	0.025	264.85	264.75	22.52%
Settlement Trail	BY1920	BY1919	GROSS	0.13	36.30		3	1	3	663	Phase 3			3.46	3.63	0.04		31.53	35.16	450	0.013	0.29	154.27	0.97	28.4	0.082	0.025	264.73	264.65	22.79%
Settlement Trail	BY1919	BY1918	GROSS	2.50	38.81		3	23	69	732	Phase 3			3.45	3.88	0.90		32.43	36.31	450	0.013	0.29	154.27	0.97	28.4	0.082	0.025	264.62	264.54	23.54%
Settlement Trail	BY1918	BY1917	GROSS	0.03	38.83		3	0	0	732	Phase 3			3.45	3.88	0.00		32.43	36.31	450	0.013	0.21	130.42	0.82	18.5	0.039	0.025	264.32	264.28	27.84%
Settlement Trail	BY1917	BY1916	GROSS	0.18	39.01		3	2	6	738	Phase 3			3.45	3.90	0.08		32.51	36.41	450	0.013	0.25	143.14	0.90	16.8	0.042	0.025	264.25	264.20	25.44%
Settlement Trail	BY1916	BY1915	GROSS	0.28	39.29		3	3	9	747	Phase 3			3.45	3.93	0.12		32.63	36.56	450	0.013	0.15	109.74	0.69	35.9	0.054	0.025	264.18	264.13	33.31%
Settlement Trail	BY1915	BY1914	GROSS	0.36	39.65		3	4	12	759	Phase 3			3.44	3.97	0.16		32.79	36.75	450	0.013	0.17	117.69	0.74	36.9	0.063	0.025	264.10	264.03	31.23%
Loyalist Place	BY1914	BY1938	GROSS	0.94	40.59		3	10	30	789	Phase 3			3.44	4.06	0.39		33.18	37.24	450	0.013	0.36	171.77	1.08	24.8	0.089	0.025	263.94	263.86	21.68%

POPULATION DENSITIES

	Lot Basis	Hectare Basis
LOW DENSITY	3.0 ppu	30 upha
MED. DENSITY	2.4 ppu	75 upha
HIGH DENSITY	1.6 ppu	150 upha
COMMERCIAL	----- ppu	100 ppha
INDUSTRIAL	----- ppu	68 ppha
	----- ppu	169 ppha

SANITARY SEWER DESIGN SHEET
CITY OF LONDON

Proposed Servicing Strategy

EX SEWAGE (INCL. Phase 1 & 3)	=	295.00	l/cap/day	0.0034	l/cap/s
EX SEWAGE (INCL. UNCERTAINTY)				0.0038	l/cap/s
UNCERTAINTY	=	10%			
INFILTRATION	=	8640	l/ha/day	0.1000	l/s/ha
PEAKING FACTOR	=	1+(14/(4+P^0.5))			
PROP SEWAGE (Phase 5, 6, 7 & 8)	=	230.00	l/cap/day	0.0027	l/cap/s
PROP SEWAGE (INCL. UNCERTAINTY)				0.0029	l/cap/s

DESIGN CRITERIA

DATE August 2024

DESIGN	MM
CHECKED	SR
PROJECT	Talbot Village

Phase 2 & 4 SEWAGE	=	250.00	l/cap/day	0.0029	l/cap/s
Phase 2 & 4 SEWAGE (INCL. UNCERTAINTY)				0.0032	l/cap/s

PROJECT NAME: **Talbot Villages - Phase 8**

LOCATION			AREA			POPULATION					SEWAGE FLOW					SEWER DESIGN					PROFILE				% CAPACITY UTILIZED					
STREET	FROM	TO	NET OR GROSS	DELTA HEC.	TOTAL HEC.	PER HEC.	PER LOT	No. OF LOTS	DELTA POP.	TOTAL POP.	TALBOT VILLAGE EX. PHASE	PROP. POP.	TALBOT VILLAGE PROP. PHASE	PEAKING FACT.	TOTAL INFIL. l/sec	SECT. SEW. l/sec	DEV SEW. l/sec	TOTAL SEW. l/sec	TOTAL l/sec	SIZE mm	n	SLOPE %	CAP. l/sec	VEL. m/sec		LENGTH m	FALL IN SEWER	DROP D/S MH	INVERT ELEV.	
																												U.S.	D.S.	
Mersea Street	BY7035	BY2106	GROSS	15.48	15.48		3	2	6	6	-	1717	Phase 8 & 735 Southdale	3.64	1.55	0.06	18.13	18.19	19.74	200	0.013	0.47	22.62	0.72	44.5	0.209	0.025	272.64	272.43	87.26%
Mersea Street	BY2106	BY2124	GROSS	0.96	16.44		3	9	27	33	Phase 5		3.63	1.64	0.28			18.47	20.05	200	0.013	0.48	22.62	0.72	35.2	0.169	0.025	272.40	272.23	88.66%
Mersea Street	BY2124	BY2125	GROSS	0.34	16.79		3	4	12	45	Phase 5		3.63	1.68	0.13			18.60	19.94	200	0.013	0.43	21.36	0.68	62.4	0.268	0.025	272.20	271.94	93.35%
Mersea Street	BY2125	BY2126	GROSS	0.40	17.18		3	5	15	60	Phase 5		3.63	1.72	0.16			18.76	20.01	200	0.013	0.97	32.36	1.03	63.1	0.612	0.025	271.90	271.29	61.83%
Mersea Street	BY2126	BY2127	GROSS	0.43	17.62		3	6	18	78	Phase 5		3.62	1.76	0.19			18.95	20.08	200	0.013	0.95	32.04	1.02	58.6	0.557	0.025	271.22	270.66	62.68%
Mersea Street	BY2127	BY2128	GROSS	0.33	17.95		3	4	12	90	Phase 5		3.62	1.79	0.13			19.08	20.05	200	0.013	0.93	31.73	1.01	31.7	0.295	0.025	270.58	270.29	63.20%
Stoery Chase	BY2128	BY2131	GROSS	0.74	18.68		3	8	24	114	Phase 5		3.62	1.87	0.25			19.33	20.25	200	0.013	0.46	22.31	0.71	51.0	0.235	0.025	270.24	270.01	90.76%
Stoery Chase	BY2131	BY2130	GROSS	0.12	18.81		3	1	3	117	Phase 5		3.61	1.88	0.03			19.36	20.04	200	0.013	0.44	21.68	0.7	23.8	0.105	0.025	270.00	269.90	92.44%
Stoery Chase	BY2130	BY2114	GROSS	0.06	18.87		3	0	0	117	Phase 5		3.61	1.89	0.00			19.36	20.02	200	0.013	0.49	22.93	0.7	32.9	0.161	0.025	269.87	269.71	87.29%
Crown Grant Road (South)	BY2114	BY2115	GROSS	2.36	21.22		3	25	75	192	Phase 5		3.60	2.12	0.78			20.14	21.03	200	0.013	0.63	26.08	0.8	42.9	0.270	0.025	269.63	269.36	80.65%
Crown Grant Road (South)	BY2115	BY2116	GROSS	0.28	21.51		3	3	9	201	Phase 3		3.60	2.15	0.09			20.23	20.37	200	0.013	0.71	27.65	0.9	31.1	0.221	0.025	269.30	269.08	73.67%
Crown Grant Road (South)	BY2116	BY2117	GROSS	0.44	21.94		3	5	15	216	Phase 3		3.60	2.19	0.16			20.39	20.48	200	0.013	0.65	26.39	0.8	51.1	0.332	0.025	269.06	268.73	77.62%

Note:	Red	Red text indicates subcatchments that Phase 8, Phase 7 and MTE 735 Southdale Development populations and areas are applied.
	Green	Location where line Mersea Street Connection drains into Regiment Road Connection
	Purple	Location where Frontier Ave Connection drains into Regiment Road Connection