SCHEDULE A – WATER

1. IMP Demand Projections and Capital Projects

The City of Ottawa Infrastructure Master Plan (IMP) includes infrastructure projects to serve Tewin and the South Urban Community (SUC) within the 2046 planning period and, as described in the IMP, oversizes infrastructure to provide post-period capacity. The ultimate infrastructure sizing needs for longer-term growth is reflected in Figure 1 extracted from the 2024 IMP.

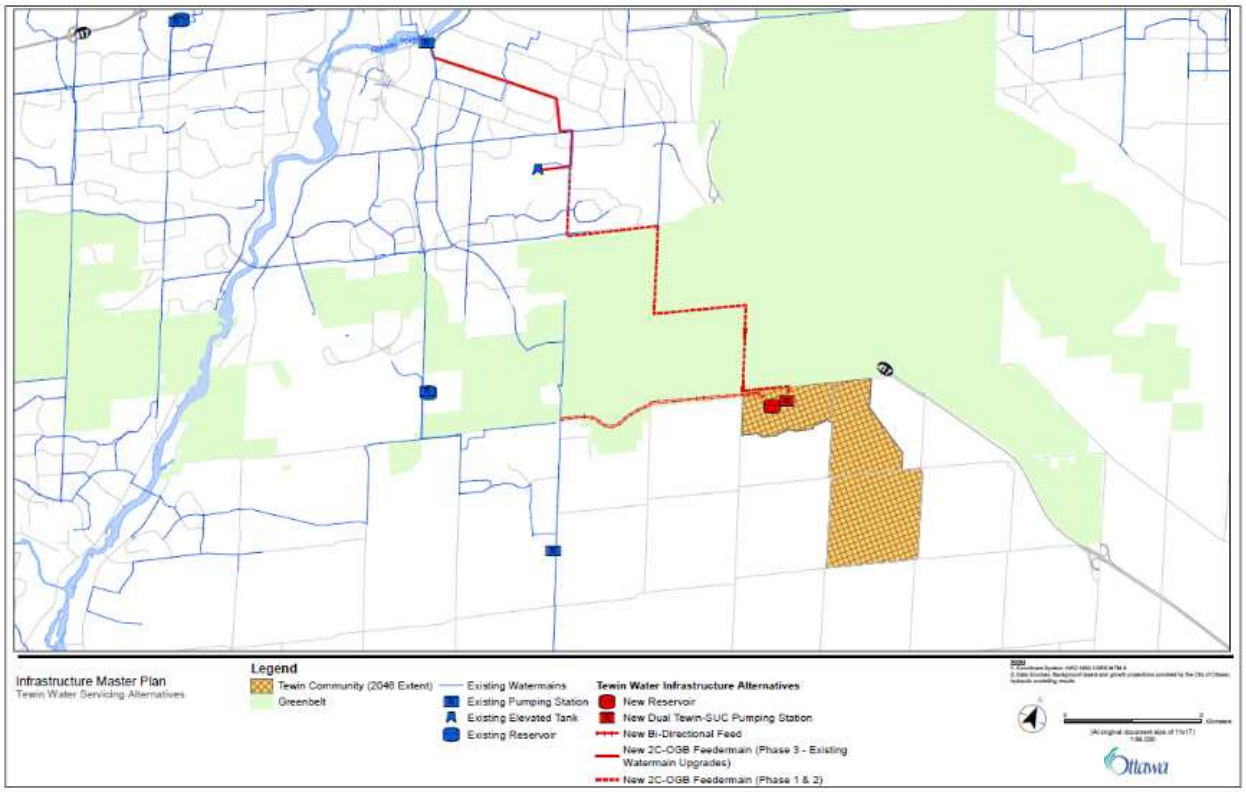

Figure 1. IMP Water Servicing Solution.

It is understood by Tewin's engineering team that the IMP proposed system has a post-period supply of 90.5 MLD, which is equivalent to up to 65,000 single family homes[1]. The IMP capital projects and anticipated timing are listed in Table 1. The proposed infrastructure would cost $392.3M, with the delivery of $276.1M of infrastructure concentrated between 2029 and 2034. This level of planned post-period capacity places significant financial pressures on any party involved in the capital financing, including front-ending parties and the City of Ottawa.

[1] DSEL calculations based on current design standards, equal to a gross developable area of 4,450 ha.

Project	Timing	Gross Cost[1]
2C-OGB Water Feed Phase 1 & 2	2029-2034	$177.4M
Bi-Directional Water Feed	2029-2034	$53.8M
New 2C-OGB Water Feed Phase 3	2034-2039	$84.2M
Tewin Pump Station & Reservoir Phase 1	2029-2034	$44.9M
Tewin Pump Station & Reservoir Phase 2	2034-2039	$19.2M
Conroy Tank Feed	2034-2039	$12.8M
Total	**-**	**$392.3M**

1. Costs are modified from Table 15-5 of the IMP (2024) based on City Correspondence on DC Background Study.

Table 1. IMP Water Projects Cost Estimate.

The City of Ottawa, with Tewin as the primary stakeholder, is undertaking a Municipal Class EA process to review the IMP-identified water infrastructure projects and identify and refine the appropriate day one and ultimate projects required to service development in Tewin and South Urban Communities.

2. Proposed Capital Projects

The Tewin Master Servicing Study lays out a phased solution that appropriately aligns growth with capital investments in infrastructure, without precluding future growth to fund future contiguous system expansions in an efficient and cost-effective manner. The Master Servicing Study, submitted to the City of Ottawa in June 2025, details the series of phased water infrastructure projects displayed in Figure 2Figure 1 which are a viable alternative to the oversized IMP-proposed projects.

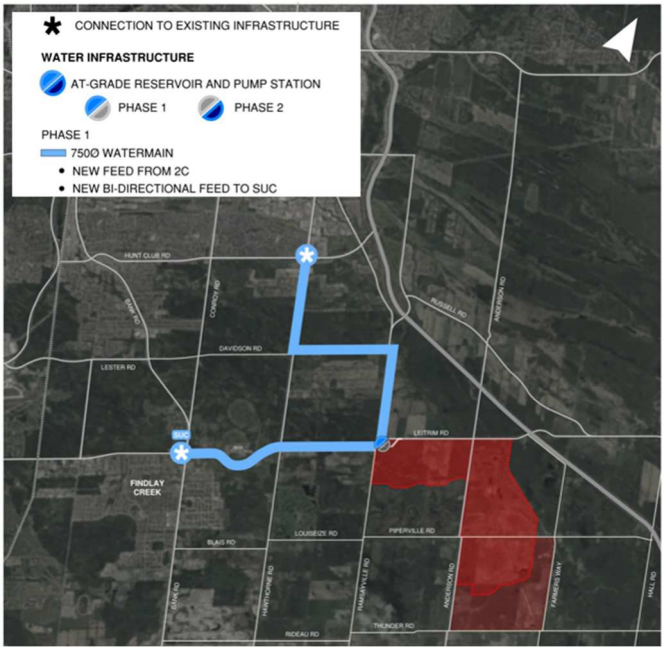

Figure 2. Tewin Proposed Day One Water Servicing Alternative.

If similar servicing and financing objectives are carried in the Municipal Class EA, it is anticipated that the process will arrive at a comparable set of capital projects. The capital projects presented in the MSS are listed with anticipated timing and costs in Table 1. The gross cost of proposed infrastructure at $306.1M[2] with delivery of infrastructure between 2029 and post-2046 – representing deferred costs compared to the original IMP-proposed infrastructure, which more appropriately aligns capital expenditures with in-period growth. The first phase of water infrastructure is anticipated to cost $116.3M.

Project	Timing	Gross Cost Estimate (2025)
Phase 1 2C-OGB Water Feed [750mm dia]	2029-2034	$39.24M
Phase 2 2C-OGB Water Feed [750mm dia]	2029-2034	$19.09M
PPC Twin 2C-OGB Water Feed [1050mm] - Along Phase 1	Post 2046	$56.34M
PPC Twin 2C-OGB Water Feed [1050mm] - Along Phase 2	Post 2046	$27.41M
Bi-Directional Water Feed [750mm dia]	2029-2034	$25.38M
PPC Bi-Directional Water Feed Twin [600mm dia]	Post 2046	$23.42M
Phase 3 Billings Bridge to Conroy Water Feed [1200mm dia]	2034-2039	$43.92M
Pump Station & Reservoir (Tewin Day 1)[1]	2029-2034	$32.59M
Pump Station & Reservoir (Tewin Expansion)[1]	2034-2039	$9.92M
Tewin Pump Station & Reservoir Phase 2 (SUC)[1]	2034-2039	$19.23M
Conroy Tank Feed [750mm dia]	2034-2039	$3.94M
PPC Conroy Tank Feed [1050mm dia]	Post 2046	$5.66M
Total		**$306.14M**

1. Land acquisition costs have not been carried in estimates.

Table 2. Tewin Alternate Project Costs.

3. Financial Principles

The allocation of costs for the proposed phased water infrastructure will be guided by the principle of proportionate demand and fairness. Each component—such as trunk mains, pumping stations, and reservoirs—will be assessed individually, since the geographic extent and timing of benefiting areas differ. The cost of each component will be distributed according to the relative demand it serves, recognizing three categories of beneficiaries:

1. The existing population that derives benefit from system reinforcement or reliability improvements (Benefit to Existing);
2. Anticipated population and employment growth within the current planning horizon (in-period growth); and,
3. The post-period benefit, representing capacity available for development beyond 2046.

This proportional-demand approach ensures that each benefiting area contributes fairly to the infrastructure that directly supports it.

[2] Costing is a Class D estimate from a DSEL subconsultant, reviewed by DSEL.

In keeping with the City's established cost-sharing and development-charge methodologies, allocations will reflect fairness, transparency, and no double-charging. Each component's benefiting areas will be clearly identified through hydraulic modeling and functional design. Where developers front-end a work, cost recovery will follow the same proportional split through applicable Development Charges (DCs) or area-specific DCs, consistent with the City's front-ending and credit policies. The allocation will be capacity-based rather than timing-based, ensuring neutrality regardless of the sequencing of development, and will be revisited as future design, servicing, and DC background studies refine system capacities and benefiting areas. In the context of the Tewin Financial Plan, fairness and equity will be achieved by distributing costs based on proportion of capacity used - amongst benefiting parties. This same fairness and equity principle based on proportionate capacity used has been employed in Ottawa and in other jurisdictions to distribute these costs between existing, new (in period), new (post period) development in a fair manner. The future Tewin Areas Specific Background Study should detail equitable distribution of costs attributable to new development across the various proposed land uses and different types of development projects.

It is proposed that post-period capacity of the above water infrastructure be assessed as a unique benefiting area in the development charge background study such that the cost allocations to SUC, Tewin, and PPC are applied on the fair principles of proportionate demands.

4. Funding Mechanism

The capital projects identified in Table 2 qualify as DC-eligible projects. The City is currently collecting the Outside the Greenbelt (OGB) Area-Specific Development Charge (ASDC), which includes OGB's proportionate share of the Infrastructure Master Plan (IMP) water infrastructure. These allocations may be refined in future DC Background Studies as conceptual and functional designs are advanced through the ongoing Municipal Class Environmental Assessment (MCEA) process.

The required water infrastructure for Tewin will be financed through two ASDCs:

1. The OGB ASDC, already in place and collecting revenues; and
2. A Tewin ASDC, to apply to development within the Tewin UBE Lands.

Consistent with Annex 12 of the Official Plan, Day One projects will be front-ended by the Tewin landowners, with recoveries from the OGB ASDC as soon as funds are available. There are four projects to be front-ended by the Tewin landowners, and they are those from which the UBE Lands benefit, as listed in Table 3.

Project	Anticipated Timing	Gross Cost Estimate	Recoveries from OGB	Tewin Net Cost
Phase 1 2C-OGB Water Feed [750mm dia]	2029-2034	$ 39.24M	$9.79M	$29.45M
Phase 2 2C-OGB Water Feed [750mm dia]	2029-2034	$ 19.09M	$4.76M	$14.33M
Bi-Directional Water Feed [750mm dia] *Option 1	2029-2034	$ 25.38M	$23.42M	$1.96M[1]
Pump Station & Reservoir (Tewin Day 1)	2029-2034	$ 32.59M	$0M	$32.59M
Total		**$ 116.30M**	**$37.97M**	**$78.33M**

1. The bi-directional water feed provides supply to SUC and redundancy for Tewin, as such flow cannot be the basis for cost sharing - $1.96M is the oversizing cost attributable to Tewin.

Table 3. Day One DC-Eligible Water Projects.

The Tewin landowners may recover front-ended costs either through DC credits for the work they perform under the water DC category or be guaranteed 30- to 60-day repayment from the City of paid Development Charges. This approach ensures the timely delivery of essential water and servicing infrastructure within the Tewin UBE Lands with an appropriate financial burden matched to approved growth.

Recognizing Tewin's benefit from City-wide Water infrastructure, development within the UBE Lands will participate in the City-wide Water DC program.

5. Example of Magnitude of Development Charges

For the purposes of calculating anticipated development charges for the Tewin, OGB, and PPC areas, cost allocations were established based on the above principles. The proposed phased infrastructure, with front-ending of Day One water infrastructure by Tewin Landowners, would result in an ASDC of $6,134 per single dwelling unit for the UBE Lands. Development outside of Tewin benefiting from the proposed water infrastructure would pay on average $5,209 per single dwelling unit, based on the financial principles noted above. Development within the UBE Lands would continue to pay the City-wide DC component for water, which is $148 per SDU as of April 1st, 2025. The UBE Lands effective total Water DC and ASDC is estimated to be $6,282 per SDU.