

Corporate Report

NO: L002

COUNCIL DATE: February 12, 2007

REGULAR COUNCIL - Land Use

TO: Mayor & Council DATE: February 9, 2007

FROM: General Manager, Engineering FILE: 5260-07

XC: 6520-20 (DOUG)

SUBJECT: Douglas Neighbourhood Concept Plan – 10 Year Servicing Plan Update

RECOMMENDATION

1. That Council adopt the engineering servicing and financial strategies as outlined in this report and as specified in the Douglas Servicing Report (available under separate cover), as a means of managing engineering services for this neighbourhood.

2. That the DCC eligible items for sewer, water and drainage be added to the 10 year plan once a development works agreement for the financial shortfall for each infrastructure element is secure

INTENT

This is a companion report to the report **Douglas Neighbourhood Concept Plan** – **Major Amendment**, and the intent of this report is to obtain Council approval to revise the 10 Year Servicing Plan to reflect the infrastructure requirements necessary to support proposed amended Douglas NCP. The Douglas Neighbourhood Concept Plan – Major Amendment report includes schematics and detailed descriptions of the servicing plans.

BACKGROUND

The 10 Year Servicing Plan was endorsed by Council in March 2006 to support DCC By-law No. 15973 adopted by Council in June 2006. The 10 Year Servicing Plan is produced in conjunction with amendments to the DCC By-law, which typically occur about every 3 to 4 years.

Priorities for servicing infrastructure to support development throughout Surrey change with time as new NCPs evolve and existing NCPs are amended to respond to the development industry. The intent in future is to revise the 10 Year Servicing Plan more often to ensure it reflects the evolving development priorities and emerging NCPs. Since the DCC By-law and rates remain unchanged between revisions to the 10 Year Servicing

Plan major revisions through NCP's must be cost neutral in order to keep the overall City DCC program stable.

DISCUSSION

The Transportation, Water, Sewerage, and Drainage servicing studies done to support the proposed major amendment to the Douglas NCP identified infrastructure that serviced only the NCP as well as some main trunks that will help service other adjacent areas. Some of these works are DCC eligible works and thus can be considered for inclusion in the 10 Year Servicing Plan. There is considerable development interest in the Douglas NCP at present – especially with the major amendments proposed in the companion report. In fact roughly 60% of the Douglas NCP lands are under active Land Development application.

Staff have reassessed all infrastructure related to the Douglas NCP in the 10 Year Servicing Plan and propose to delete the redundant projects and replace them with the new proposed Douglas NCP DCC projects as in Appendix A. The value of projects proposed to be added are higher than the value proposed for deletion, thus for the City wide DCC rates to remain unchanged development works agreements will be required to make this area self funded and will have to be secure before the items are added.

DEVELOPMENT PHASING

The first phase will be dependent upon the construction of the following major infrastructure before development can occur in this NCP.

- A 500mm low pressure water main connecting the proposed high pressure water main on 24 Ave at 164 St. to the existing 450mm water main at 14 Ave and King George Highway in order to provide a continuous feeder main.
- An interim PRV at 24 Ave and 164 Street to reduce the pressure from the 142m HGL to 110m HGL. Since the PRV is interim, and therefore is not DCC reimbursable.
- Install 300mm main on 172 St from 0 Ave to 2 Ave, and 2 Ave from 172 St to 175A St.
- Douglas Sewerage Pump Station #2 around 17500 block 4 Ave complete with standby generator, emergency storage and forcemain.
- Semiahmoo Sewerage Pump Station upgrade at 16025 8 Ave. The related works (standby generator, forcemain diversion and sewerage tank will be funded from City wide DCC's).
- Emergency storage and standby generator at existing Douglas Pump Station if development occurs in the Western sewer sub catchment.
- Upgrade Campbell River Headwall/Culverts under Highway No. 99
- A 1650mm storm trunk main on 176 St from 4 Ave to Campbell River (East Catchment)
- A 1500mm storm trunk main and outfall to Semiahmoo Bay at 0 Ave. (West Catchment)

The construction of the above major works and services will allow the other phases to proceed and in turn finance subsequent phases of servicing as the market demands allow.

FINANCING

A comprehensive financial analysis is included in the NCP Amendment engineering report. The details of all the necessary DCC infrastructure have been identified and the costs are included.

Road Network Financing Requirements

Updated Douglas NCP has a few minor changes compare to the original road network plan. These changes are adding several local road segments to provide better connectivity and internal circulation options throughout the neighbourhood.

All the NCP area roads, except the 4 Avenue segment east of 172 Street which is a collector is classified as local road (172 Street-Special through local, through local and limited local roads) and are planed to be financed/constructed by developments. In addition the proposed 4 roundabouts along 172 Street shown on the traffic control map are all planned to bi financed by the developers, as well as the medians along 4 Avenue and 172 Street.

Since the updated traffic impact study proposed a new roundabout at the intersection of 172 Street and 4 Avenue its construction cost will be obtained from the developments on the south side of 4 Avenue. In particular, the southeast corner development is required to contribute 50% of the construction cost in addition to providing required land dedication on the northwest, northeast and southeast corner of the intersection of 172 Street and 4 Avenue. Other 50% will be secured from the southwest corner development.

The north half of 4 Avenue will be paid by the City if upgrade is required (1m gravel shoulder on the agricultural side) since this is a designated collector road.

Water, Sewer and Drainage Network Financing Requirements

The following table summarizes the projected DCC revenues and construction costs for the water, sewer and drainage engineering service. The revenues are based on the current DCC by-law. Growth projections are based on the densities proposed in the NCP Amendment document for a total of 1176 units.

Projected DCC Re	venues and Expend	ditures at Build-o	ut
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Services	Projected DCC Revenue (\$)	Projected DCC Expenditures (\$)	Shortfall (\$)
Water	1,625,239	3,191,950	- 1,566,711
Sanitary Sewer	2,292,965	7,074,350	- 4,781,385
Storm Sewer	2,812,010	4,655,800	- 1,843,790

As shown in the table above, funding for sanitary sewer servicing, drainage and water have significant shortfalls in this NCP area. Using the surplus in one service area to offset the shortfall in another is not consistent with Surrey's current DCC by-law as each service area has its own separate accounts and is funded on a City wide basis.

The shortfalls will be dealt with by applying area specific charge in addition to the current DCCs or by putting the burden of covering the shortfalls on the first developer. The first major developers in the area cover approximately 50% of the area to be developed, indicated they will be initiating development works agreements to cover the initial shortfalls. The proposed levy would be approximately \$121,000 per hectare, which is equivalent to approximately \$5,900 per residential unit.

CONCLUSION

Should Council approve the recommendations in the report **Douglas NCP – Major Amendment**, it is recommended that Council also approve the revisions to the 10 Year Servicing Plan to reflect the infrastructure requirements necessary to support proposed amended Douglas NCP, and reflect emerging strong development industry interest in this area of Surrey.

Paul Ham, P. Eng. General Manager, Engineering

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Attachment

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APPENDIX A

Deleted Items

Asset	Project ID	Description	Value (\$)
Water	5018	2400M of 300mm / 176 St: 4 Ave - 16 Ave	1,704,000
	4972	500M of 300mm / 0 Ave: 174 St – 175 St	284,000
Sewer	6480	Douglas Pump Station Upgrade	1,500,000
	10013	Douglas Emergency Storage	350,000
	9843	Semiahmoo Pump Station Upgrade	600,000
Drainage	6664	Detention Pond #2 / 4 Ave 176 St	2,000,000
	6663	250M – 525mm – Storm Sewer Replacement	183,600
		170 St: 5 Ave to 6 Ave	
	6661	Detention Pond / 1 Ave 170 St	1,200,000
	6660	600M – 600mm / 4 Ave: 175 St to Campbell	364,000
		River	

Eligible New Items

Asset	Project ID	Description	Value (\$)
Water	10953	2015M of 500mm/164 St: 24 Ave – 14 Ave	2,115,750
		(City upsize from 350 dia to 500 dia at	
		\$584,350) Upsizing cost included	
	10954	655M of 300mm / 2 Ave: 172 St – 175A St	465,050
Sewer		450 mm dia Sewer Upgrade at 8 Ave from 164A	
	10937	to 165A St	310,000
		Douglas Pump Station # 2 c/w Storage 4 Ave	
	10938	and approx 175 St	1,600,000
		Douglas Pump # 2 Forcemain 4 Ave: 171 St to	
	10939	175 St	507,300
	10941	Sewer Upsize at 4 Ave: 174 St to PS #2	58,400
	10942	Sewer Upsize at 174 St: 3A to 4 Ave	36,500
	10943	Sewer Upsize at 174 St: 3 to 3A Ave	17,850
	10944	Sewer Upsize at 174 St: 2 to 3 Ave	66,300
	10013	Douglas Emergency Storage 200 block 171 St	300,000
		Douglas PS # 1 Standby Generator 200 block	
	10945	171 St	100,000
	9843	Semiahmoo Pump Station Upgrade 16025 8 Ave	1,800,000
Drainage	6660	900M – 1650 mm 173 St at 3A Ave to Campbell	2,339,000
Dramage	10955	Culvert Upgrade Hwy 99	150,000
	10956	Peace Park Drive 0 A Ave to Outfall	1,956,000