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March 30, 2021

Mark Cowie
Industrial Equities Guelph Corp
161 Bay Street, Suite 3930
Toronto, ON M5J 2S1

email: mark.cowie@cowiecapital.com

Dear Mr. Cowie:

**SOUTHGATE BUSINESS PARK
264 CRAWLEY ROAD – POTENTIAL MUNICIPAL SANITARY SERVICING**

As requested, we have reviewed the potential municipal sanitary servicing of the existing 264 Crawley Road, Guelph. This letter supersedes our November 23, 2020 letter of the same topic, and has been updated to address comments received from the City of Guelph (Ms. Lindsay Sulatycki) by email on March 9, 2021.

BACKGROUND

IBI Group, under the direction of Mr. John Perks, MBA, P.Eng. as senior Engineer, has been the Engineer of record for the municipal engineering (design and construction) of the Southgate Business Park.

The Southgate Business Park includes approximately 200 acres of land south of Clair Road West, east of Crawley Road (having frontage onto the Hanlon), and north of Maltby Road West. Southgate Drive, to date, has been extended approximately 1,400m south of Clair Road West, with plans to ultimately extend it to Maltby Road West.



EXISTING CONDITIONS

An existing home of “Heritage Interest” currently exists on 264 Crawley Road. Historically this property was serviced by a private septic system and a private water well. It is understood the water well still exists and has not been decommissioned.

The septic system was decommissioned with the development of the adjacent lands in circa 2009, and the residence on 264 Crawley Road has remained unoccupied since that date due to the removal of the former private septic system due to adjacent development, and no replacement of the system being implemented.

To our knowledge, there are no plans to extend municipal sanitary along Crawley Road, nor would it likely be financially justifiable given there are only two residential properties that might utilize the sewer in addition to 264 Crawley Road. All remaining undeveloped land with frontage onto Crawley Road are zoned industrial, and also have frontage onto Southgate Drive. These lands have been planned and are designed to be serviced by the municipal servicing on Southgate Drive.

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A final property on Crawley Road is the two acre home/office located at the northeastern corner of Crawley and Maltby which is presumably serviced by private servicing (i.e., water well and septic system) as no existing municipal infrastructure exists at that location.

Finally, it is noted that Crawley Road has significant elevation relief (over 6.5m), and has a significant “rolling” vertical alignment along its length which would make extension of a sanitary sewer challenging, if not impossible.

PROPOSED SANITARY SERVICING OPTIONS

There are two possible options for providing sanitary servicing – a piped solution to a municipal receiver, or a private septic system. These are explored below:

1. Municipal Sanitary Servicing (Piped Solution)

We have been asked to review the feasibility of providing municipal sanitary servicing to 264 Crawley Road. The only existing or proposed municipal sanitary sewer in proximity to 264 Crawley Road is the previously described sanitary sewer on Southgate Drive. Existing private industrial/development land lies between 264 Crawley Road and Southgate Drive, and accordingly a sanitary sewer could not be extended directly to the subject property from Southgate Drive.

However, as a possibility, a route for a sanitary pipe from 264 Crawley Road might be possible as follows:

- From 265 Crawley Road southerly along Crawley Road 300m to the existing watermain service easement running between Crawley Road and Southgate Drive;
- Along the existing watermain easement to Southgate Drive (approx. 360m); and,
- Connection to the Southgate Road sanitary sewer in the temporary cul-de-sac at the existing southern terminus of Southgate Drive.

Note, the easement referenced above is legally known as Part 9 on 61R-10808 (formerly Part 7 on 61R-10368), with the easement described in Instrument WC182137.

The above potential route is approximately 660m long. The feasibility of this route assumes:

- The City will allow it (both the pipe on Crawley Road and on the easement);
- The private property owner of the watermain easement would allow the use of the easement for the sanitary pipe, and would be cooperative in amending the easement.

To utilize this route for a piped outlet, two conveyance options exist:

a. Gravity Option:

A gravity pipe could be constructed. Assuming a minimum slope of 0.5%, it was found that there would be a significant length along the route where there would be insufficient cover on the sanitary, and in fact the sewer would be above ground elevation by upwards of 2m in the worst-case location (near Crawley Road) which is obviously not feasible. Refer to attached redlined plan.

Even if the sanitary was feasible to construct (which it is not), the capital construction cost would be significant (likely in the order of \$220,000 – refer to attached estimate).

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b. Pumping Option

A forcemain could be constructed to receive sanitary pumped from 264 Crawley Road. For this option, a private sump and pump would be installed on the 264 Crawley Road property, and a forcemain installed along the previously described gravity sanitary route.

Unlike the gravity option, this option is physically feasible. The capital cost is in the order of \$170,000 (refer to attached estimate).

For both the Gravity and Pumped options, there are other complicating issues that need to be considered:

- The proposed route utilizing the watermain easement will leave a long length (660m) of sanitary sewer infrastructure that will need to be maintained in perpetuity;
- The capital cost (\$170,000 to \$220,000) is uneconomical considering the single small use it services;
- There is question of who would own the piped infrastructure given it services a single use and that it resides on public property;
- As noted above, the watermain easement between Crawley and Southgate is across private lands and would need cooperation from the private land owner to modify the easement's purpose/use, as well as additional costs to secure this change (legal, OLS, land owner compensation, etc.). The cooperation of the private land owner is not guaranteed.

Given the significant distance (660m), the large capital cost, as well as maintenance and ownership issues, in relation to the relatively small use proposed at 264 Crawley Road, we believe the piped option is not viable or justifiable.

2. Private Septic System

Historically 264 Crawley Road was serviced with a private septic system. Given the small size of the subject property (and thus the small sanitary load resulting), given the subject property is well removed from any municipal water supply wells, and given there is not a viable municipal sanitary solution, we believe a private septic system is an appropriate servicing solution for 264 Crawley Road.

The capital (in the order of \$15,000) and ongoing maintenance costs for the private septic system would be the property owner's responsibility and would be reasonable in magnitude to the size of the use.

If the private septic system option is chosen as the servicing solution, the proposed use of 264 Crawley Road should be considered, and proper zoning put in place by the City, with the understanding that a private septic system would be utilized to service the property. A detailed design and municipal approval of the septic system would be required.

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SUMMARY & RECOMMENDATIONS:

Given the preceding analysis, we conclude that there is no viable piped municipal sanitary servicing option for 264 Crawley Road – the cost and long-term maintenance of a piped solution is not economically viable given the small scale of use on 264 Crawley Road, and the issues with respect to the Crawley/Southgate watermain easement pose challenge, complication and additional cost and risk.

We recommend that a private septic system is the only viable solution to providing sanitary servicing for 264 Crawley Road. To facilitate this solution, municipal approval would be required, and a detailed septic system design prepared. Note, given 264 Crawley Road is an “existing lot of record”, has a “failed” septic system, and municipal services are “not available” (viable) this recommendation is in accord with the Guelph Official Plan (section 6.1.20) which states (emphasis added):

“The City will not permit development on partial services except where necessary to address a failed individual on-site water service or individual on-site sewage services on an existing lot of record and only where municipal services are not available or are not expected to be available within 2 years.”

We trust this information and analysis is of assistance for your planning of 264 Crawley Road. Should you have any questions or concerns, please do not hesitate to contact the undersigned.

Yours truly,

IBI GROUP



John Perks, MBA, P.Eng.
Associate Director

JRP/ms

Attachment

cc: Mr. Matthew Midgley (via email: mmidgley@cowiecapital.com)
Ms. Astrid Clos (via email: astrid.clos@ajcplanning.ca)

264 Crawley Road - Sanitary Servicing via GRAVITY

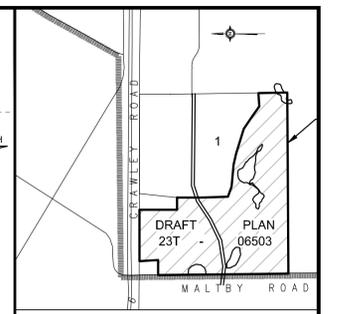
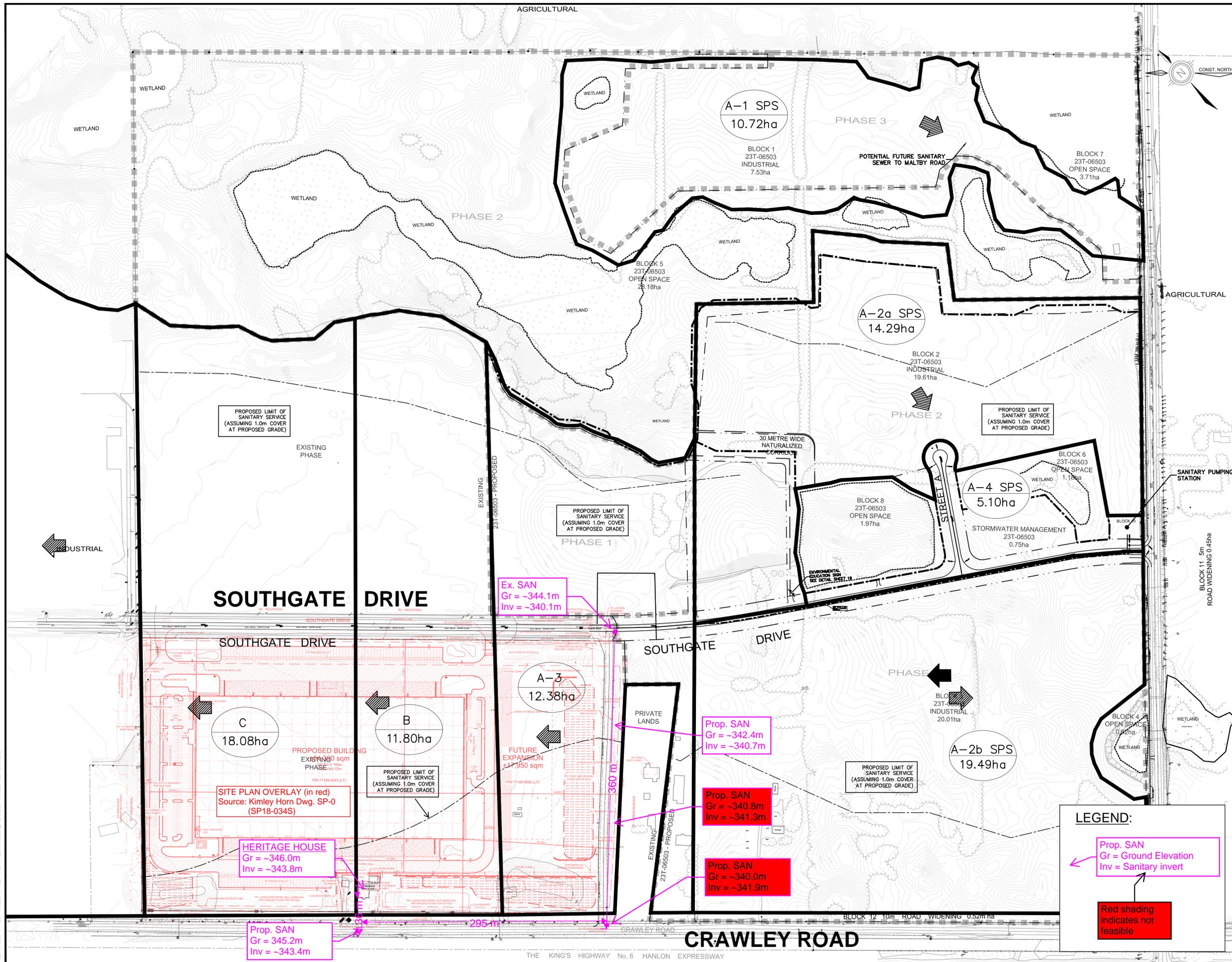
March 29, 2021

Work Description	Units	Quantity	Unit price	Cost
Connection from house to sewer	LS	1.0	\$ 10,000	\$ 10,000
Supply and install pipe	m	650.0	\$ 150	\$ 97,500
Supply and install manholes	ea	8.0	\$ 5,000	\$ 40,000
Break into existng manhole and repair	LS	1.0	\$ 1,500	\$ 1,500
Dispose of surplus material offsite	m3	630.0	\$ 15	\$ 9,450
Restore Shoulder (290m x 2.5m):				
Gran B	tonne	815.6	\$ 13	\$ 10,603
Gran A	tonne	326.3	\$ 15	\$ 4,894
Restore vegetated area (350m x 2.5m)	m2	875.0	\$ 10	\$ 8,750
Restore Asphalt (15m x 2.5m):				
Gran B	tonne	42.2	\$ 13	\$ 548
Gran A	tonne	14.1	\$ 15	\$ 211
Asphalt	tonne	7.0	\$ 100	\$ 703
SubTotal				\$ 184,159
Cont + Eng. (20%)				\$ 36,832
TOTAL				\$ 220,991

264 Crawley Road - Sanitary Servicing via FORCEMAIN

March 29, 2021

Work Description	Units	Quantity	Unit price	Cost
Supply and install sump and pump system	LS	1.0	\$ 10,000	\$ 10,000
Supply and install forcemain	m	680.0	\$ 140	\$ 95,200
Break into manhole and repair	LS	1.0	\$ 1,000	\$ 1,000
Dispose of surplus material offsite	m3	630.0	\$ 15	\$ 9,450
Restore Shoulder (290m x 2.5m):				
Gran B	tonne	815.6	\$ 13	\$ 10,603
Gran A	tonne	326.3	\$ 15	\$ 4,894
Restore vegetated area (350m x 2.5m)	m2	875.0	\$ 10	\$ 8,750
Restore Asphalt (15m x 2.5m):				
Gran B	tonne	42.2	\$ 13	\$ 548
Gran A	tonne	14.1	\$ 15	\$ 211
Asphalt	tonne	7.0	\$ 100	\$ 703
SubTotal				\$ 141,359
Cont + Eng. (20%)				\$ 28,272
TOTAL				\$ 169,631



NOTES:
 1. ALL WORK TO BE DONE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE CITY OF GUELPH, AND ONTARIO PROVINCIAL STANDARDS, EXCEPT WHERE NOTED.
 2. THE CONTRACTOR SHALL NOTIFY THE CITY OF GUELPH AND THE ENGINEER AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.

- LEGEND:**
- PUMPED FLOW
 - GRAVITY FLOW
 - SANITARY CATCHMENT AREA NUMBER
- AREA (ha)
 - SANITARY CATCHMENT AREA BOUNDARY
 - GRCA FLAGGED FEATURES (NOVEMBER 2005)
 - BUFFER LIMIT
 - PHASING LINE
 - DEVELOPMENT LIMIT
 - PROPERTY LINE
- BENCHMARK - BM#2 (NEW 1981) ELEV. = 332.685
 Benchmark plots set 81.01.20 on fly end on conc. base of directory sign for "Horton Industrial Park" on S. Ely side of Laird Road near Horton Exp. Plots in 0.50m above ground. Elevation: City datum 92.03
 Geoid: 1981.49 Geoidic Metric: 332.685

THE POSITION OF POLES, LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

No.	DATE	DESCRIPTION	BY:
5	DEC 16/13	SIXTH SUBMISSION	PMC JRP
4	JUN 24/13	FIFTH SUBMISSION	PCK JRP
3	OCT 2/12	FOURTH SUBMISSION	PCK JRP
2	DEC 19/11	THIRD SUBMISSION	PCK JRP
1	OCT 18/11	SECOND SUBMISSION	PCK JRP

ISSUES/REVISIONS

CITY OF Guelph
 Making a Difference

ENGINEERING SERVICES

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SOUTHGATE BUSINESS PARK
 OVERALL CONTRIBUTING SANITARY DRAINAGE AREAS

264 CRAWLEY ROAD SANITARY SERVICING ANALYSIS

November 17, 2020

SCALE: HOR: 1:2000	CONSULTANT DRAWING No. KE-1743
DATE DRAWN: NOVEMBER 25, 2010	CITY CONTRACT No. XX
DESIGN BY: E. CERIC	CHECKED BY: J. PERKS
CITY REFERENCE No. XX	SHEET 8

LEGEND:

Prop. SAN
 Gr = Ground Elevation
 Inv = Sanitary invert

Red shading indicates not feasible

LAST SAVED BY: patrick.ouliet DATE: Jan 08, 2014 - 12:05pm
 FILE NAME: 1743E-Phase III-P&P FOR PLOTTING.dwg LAYOUT NAME: 08-Sanitary