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CEDAR BROOKE
SUBDIVISION OBSERVATION REPORT

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HR GREEN JOB NO. 86120056

Cedar Brooke Subdivision Observation Report

HR Green has performed a review of the available documents for the subdivision improvements located in the Cedar Brook subdivision and field observation of the work completed by the developer. Subsequently, HR Green has compiled a punchlist of unfinished items that were part of the proposed improvements per the available subdivision documents.

The Cedar Brook Subdivision Observation Report includes the following items:

- Punchlist identifying the outstanding and deficient subdivision improvement items
- Detention Basin Verification and Exhibit A
- Parcel Identification (Exhibit B)
- Engineer's Opinion of Probable Cost (E.O.P.C.) (Exhibit C)
- Location Map (Exhibit D)

The following documents were used in preparing the punchlist scope of work:

- Plat of Subdivision
- Improvement Plans for Cedar Brook Subdivision, dated June 9, 2006, prepared by V3 Companies of Illinois, Ltd.
- Pavement cores performed through HR Green
- Photographs

The following documents were unavailable:

- Landscaping plans
- Record drawings
- Developer agreements
- Soil borings
- Meeting minutes
- Daily field reports

I. PUNCHLIST

It is recommended that acceptance of this subdivision be contingent upon the completion of the noted outstanding and deficient items, and subsequent observation and approval by the Village of Homer Glen.

Roadway

Roadway improvements were observed for compliance with the approved subdivision improvement plans. The subdivision pavement includes the Hot-Mix Asphalt (HMA) binder course without the HMA surface course. HR Green had pavement cores taken at random locations on the roadways to identify the actual binder course and aggregate base course thicknesses.

The following table includes the planned pavement depths and actual pavement depths at locations randomly chosen on the roadways.

Roadway	Plan Surface Depth	Actual Surface Depth	Plan Binder Depth	Actual Binder Depth	Plan Agg. Base Cse. Depth	Actual Agg. Base Cse. Depth
Cinnamon Creek West Lane (Urban)	1.5"	0"	2.5"	2.75"	12"	10"
Cinnamon Creek West Lane (Rural)	1.5"	0"	2.5"	2.75"	12"	10"
Ginger Lane	1.5"	0"	2.5"	2"	12"	10"
Nutmeg Avenue	1.5"	0"	2.5"	2.5"	12"	12"

Notes:

1. Surface course remains unpaved.
2. Cinnamon Creek West Lane (Urban) is the section with curb and gutter that connects Nutmeg Avenue to Cedar Road.
3. Cinnamon Creek West Lane (Rural) is the section with proposed stone shoulders, without curb and gutter, residing from the western subdivision limit to Nutmeg Avenue.

The difference between the binder course elevations and the gutter elevations will require between an estimated 1.5" to 2.25" of HMA surface course overlay thickness throughout Cedar Brook. There were no indications of existing binder course failure that would dictate correction work such as pavement patching throughout the roadways. It is recommended that the binder course that exists be cold milled along the edge of the roadway for a section along the north side of Ginger Lane where the top of binder course elevation is higher than required and which would result in less than 1.5" of HMA overlay in areas without the recommended milling corrections. The cold milling is necessary to provide the minimum 1.5" HMA surface course thickness as shown in the plans. Variable depth cold milling between 0" and 1.5" is recommended to achieve the average 1.75" of HMA surface course overlay thickness. Cold milling the existing surface course pavement to establish a butt joint at the north improvement limit of Nutmeg Avenue at 151st St. and the east improvement limit of Cinnamon Creek West Lane at Cedar Road will also be necessary.

The following pavement improvements are recommended prior to acceptance of the subdivision by the Village of Homer Glen.

Roadway	HMA Surface Course, Mix 'C', N50	HMA Surface Removal, Variable Depth (0" to 1.5")	HMA Surface Removal – Butt Joint	Aggregate Shoulders, Type B (6")
Cinnamon Creek West Lane (Urban)	327 Tons (2,598 SY at 2.25")	N/A	89 SY (80' X 10')	N/A
Cinnamon Creek West Lane (Rural)	108 Tons (1,283 SY at 1.5")	N/A	N/A	84 Tons (550' X 2' wide along both edges of roadway at 6" deep)
Ginger Lane	407 Tons (4,158 SY at 1.75")	39 SY (50' X 7')	N/A	N/A
Nutmeg Avenue	256 Tons (3,049 SY at 1.5")	N/A	31 SY (28' X 10')	N/A
TOTALS:	1,098 Tons	39 SY	120 SY	84 Tons

Note: Due to binder course elevation deficiencies and roadway settlement, HR Green provided estimated average surface course thicknesses necessary to finish paving the roadway according to plan.

Prior to the pavement improvements, combination concrete curb and gutter replacement will be necessary. The curb and gutter is to be removed and replaced. Each section shall be cut to full depth, removed and replaced with dowel bars, proper form work and finishing techniques.

The following table includes sections of curb and gutter determined to be unacceptable because of heaving, settlement and/or damage.

Roadway	Combination Concrete Curb and Gutter Removal and Replacement
Cinnamon Creek West Lane (Urban)	N/A
Cinnamon Creek West Lane (Rural)	N/A
Ginger Lane	25 FT Lot 2/3: 10' Lot 4/5: 10' Lot 24: 5'

Nutmeg Avenue	55 FT Lot 13/14: 10' Lot 14/15: 10' Lot 15: 10' Lot 18: 15' Lot 20: 10'
TOTAL:	80 FT

Storm Sewer Appurtenances

Storm Sewer structures were observed for compliance with the approved subdivision improvement plans. It is recommended that all storm sewer structures be cleaned in addition to the correction of any deficiencies prior the Village of Homer Glen taking ownership and maintenance responsibilities of the storm sewer system.

It is recommended that the following defects be repaired prior to Village acceptance of the subdivision.

Item No.	Structure #	Defect/Corrective Action
1.	INL ST 2-6	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench ▪ Remove straw bales and filter fabric
2.	INL ST 2-7	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench ▪ Remove straw bales and filter fabric
3.	INL ST 2-9	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench ▪ Remove filter fabric
4.	INL ST 2-11	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench
5.	INL ST 2-13	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide missing grate ▪ Provide concrete bench
6.	INL ST 3-8	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench ▪ Remove filter fabric
7.	INL ST 3-10	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench ▪ Remove filter fabric

8.	INL ST 1-7	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench ▪ Remove filter fabric
9.	INL ST 4-2	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench
10.	INL ST 5-4	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench
11.	INL ST 5-5	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench ▪ Remove filter fabric
12.	INL ST 7-1	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench
13.	INL ST 6-1	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Frame adjustment due to curb and gutter repair ▪ Provide concrete bench
14.	INL ST 3-5	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench ▪ Remove straw bales and filter fabric
15.	INL ST 3-6	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench ▪ Remove straw bales and filter fabric
16.	CB ST 2-8	<ul style="list-style-type: none"> ▪ Clean out debris
17.	CB ST 2-10	<ul style="list-style-type: none"> ▪ Clean out debris
18.	CB ST 2-12	<ul style="list-style-type: none"> ▪ Clean out debris
19.	CB ST 3-7	<ul style="list-style-type: none"> ▪ Clean out debris
20.	CB ST 3-9	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Remove filter fabric
21.	CB ST 3-2	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Remove filter fabric
22.	CB ST 4-1	<ul style="list-style-type: none"> ▪ Clean out debris
23.	CB ST 5-2	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Remove filter fabric
24.	CB ST 5-3	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Remove filter fabric
25.	CB ST 1-1	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Frame adjustment due to curb and gutter repair
26.	CB ST 2-1	<ul style="list-style-type: none"> ▪ Clean out debris
27.	MH ST 2-3	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench ▪ Install steps

28.	MH ST 2-4	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench ▪ Remove straw bales and filter fabric ▪ Backfill sunken area next to manhole
29.	MH ST 2-5	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench ▪ Remove straw bales and filter fabric
30.	MH ST 1-3	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench
31.	MH ST 1-4	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench
32.	MH ST 1-5	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench ▪ Remove filter fabric
33.	MH ST 1-6	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench ▪ Remove filter fabric
34.	MH ST 3-1	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench ▪ Install steps ▪ Replace closed lid with open lid
35.	MH ST 3-3	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench ▪ Remove filter fabric
36.	MH ST 3-4	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench ▪ Install steps ▪ Remove straw bales and filter fabric
37.	MH ST 3-3A	<ul style="list-style-type: none"> ▪ Could not locate. Assume buried. Adjust to match final grade. ▪ Clean out debris (Assumed) ▪ Provide concrete bench (Assumed)
38.	MH ST 1-2	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench ▪ Remove filter fabric
39.	MH ST 2-2	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench ▪ Remove filter fabric
40.	MH ST 10-1 RESTRICTOR	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Install 2 orifice hoods
41.	MH ST 5-1	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide concrete bench
42.	FES 5-1	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide missing grate
43.	FES 4-1	<ul style="list-style-type: none"> ▪ Clean out debris

44.	FES 3-1	<ul style="list-style-type: none"> ▪ Clean out debris
45.	FES 7-1	<ul style="list-style-type: none"> ▪ Clean out debris
46.	FES 1-1	<ul style="list-style-type: none"> ▪ Clean out debris
47.	FES 2-1	<ul style="list-style-type: none"> ▪ Clean out debris
48.	FES 6-1	<ul style="list-style-type: none"> ▪ Clean out debris
49.	FES 8-1	<ul style="list-style-type: none"> ▪ Clean out debris
50.	FES 8-2	<ul style="list-style-type: none"> ▪ Clean out debris
51.	FES 10-1	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Properly install grate lying next to FES
52.	FES 10-2	<ul style="list-style-type: none"> ▪ Clean out debris
53.	12" FES (SW corner of Large pond – Lot 31)	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide grate
54.	12" FES (Creek near SW corner of Large pond – Lot 31)	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Re-affix grate
55.	36" FES North (SW corner of Large pond – Lot 31)	<ul style="list-style-type: none"> ▪ Clean out debris
56.	36" FES South (SW corner of Large pond – Lot 31)	<ul style="list-style-type: none"> ▪ Clean out debris ▪ Provide grate
57.	36" FES North (Creek near SW corner of Large pond – Lot 31)	<ul style="list-style-type: none"> ▪ Clean out debris
58.	36" FES South (Creek near SW corner of Large pond – Lot 31)	<ul style="list-style-type: none"> ▪ Clean out debris

59.	12" storm sewer between north and south ponds – Lot 31 (includes 2 12" FES)	<ul style="list-style-type: none"> ▪ Install 24' of storm sewer and two 12" end sections
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Note: The 12" storm sewer installation noted in item 59 is the result of previously installed storm sewer becoming disassembled due to assumed lack of stability and wash-out of previous backfill. Assume furnishing new material due to damage. Included in the storm sewer installation would be backfill with compacted engineered fill and Grade 4 Riprap per IDOT specifications.

Sanitary Sewer Appurtenances

Sanitary Sewer manholes were observed for compliance with the approved subdivision improvement plans. It is HR Green's understanding that the sanitary sewer system is owned and maintained by Illinois American Water. These improvements are not owned and maintained by the Village of Homer Glen, however, it would be beneficial to observe the sanitary sewer manholes to identify any defects to the structures that could impact other public infrastructure improvements and threaten the health and safety of the public.

A lift station was proposed within the Cedar Brook subdivision on Lot 32. There are indications that the lift station attempted to be installed, but was never completed. Existing well and pump components were observed, however, no electrical controls and/or associated panels were observed. It is recommended that the Village of Homer Glen further evaluate the status of the lift station system to determine the outstanding items and process involved in completing the lift station for operation and Village acceptance of the subdivision. HR Green has included an estimated cost for further evaluation of the lift station and completion of the electrical system including wiring, control equipment and housing, which can be found in Exhibit C.

It is recommended that the following defects be coordinated with Illinois American Water for review and correction prior to Village acceptance of the subdivision.

Item No.	Structure #	Defect/Corrective Action
1.	Lift Station	<ul style="list-style-type: none"> ▪ Further evaluation and completion
2.	SMH 2	<ul style="list-style-type: none"> ▪ Frame appears to be too high. Adjust to match final grade.
3.	SMH 4	<ul style="list-style-type: none"> ▪ Frame appears to be too high. Adjust to match final grade.
4.	SMH 11	<ul style="list-style-type: none"> ▪ Frame appears to be too low. Adjust to match final grade.

5.	SMH 17	<ul style="list-style-type: none"> ▪ Clean out. Manhole flow channel is not visible due to silt and debris within the structure.
6.	SMH 18	<ul style="list-style-type: none"> ▪ Replace existing lid with one that includes the word "Sanitary"
7.	SMH 19	<ul style="list-style-type: none"> ▪ Replace existing lid with one that includes the word "Sanitary"

Note: The letter "S" is marked in the curb to identify sanitary sewer service crossing locations.

Watermain Appurtenances

Watermain fire hydrants, valve boxes and water service buffalo boxes were observed for compliance with the approved subdivision improvement plans. It is HR Green's understanding that the water supply system is owned and maintained by Illinois American Water. These improvements are not owned and maintained by the Village of Homer Glen, however, it would be beneficial to observe the watermain appurtenances to identify any defects that could impact other public infrastructure improvements and threaten the health and safety of the public.

HR Green was not responsible to determine if the valves serving water service lines, fire hydrants or watermain mainline were operable (keyable). Assumptions were made based on the visual condition of the appurtenances and the recommended associated repairs. It is recommended to have the Village of Homer Glen/Illinois American Water determine if every valve within the subdivision, which may not be identified in the punch list, is functioning properly prior to performing corrections to water main appurtenances to establish any adjustments to the scope of work.

HR Green observed that the water service buffalo boxes were installed outside of the proposed Right-Of-Way. The proposed Right-Of-Way limit is 17.5' from the back of curb and the buffalo boxes were located at an average 22' from the back of curb. Although the buffalo boxes reside outside of the Right-Of-Way and on private property, HR Green included buffalo box correction work in the punchlist.

It is recommended that the following defects be coordinated with Illinois American Water for review and correction prior to Village acceptance of the subdivision.

Item No.	Appurtenance #	Defect/Corrective Action
1.	FH 12	<ul style="list-style-type: none"> ▪ Spin to face north
2.	FH 19	<ul style="list-style-type: none"> ▪ Auxiliary valve appears to be set too low. Adjust to match final grade.
3.	Valve Vault 2	<ul style="list-style-type: none"> ▪ Could not locate. Assume buried and adjustment will be necessary.

4.	Valve Vault 10	<ul style="list-style-type: none"> ▪ Could not locate. Assume buried and adjustment will be necessary.
5.	Valve Vault 13	<ul style="list-style-type: none"> ▪ Not a valve vault. Is valve box, cracked and in need of replacement.
6.	B-Box Lot 1	<ul style="list-style-type: none"> ▪ Could not locate. Assume damaged and replacement will be necessary.
7.	B-Box Lot 2	<ul style="list-style-type: none"> ▪ Appears to be set too low. Adjust to match finished grade.
8.	B-Box Lot 3	<ul style="list-style-type: none"> ▪ Appears to be set too low. Adjust to match finished grade.
9.	B-Box Lot 8	<ul style="list-style-type: none"> ▪ Appears to be set too low. Adjust to match finished grade.
10.	B-Box Lot 10	<ul style="list-style-type: none"> ▪ Could not locate. Assume damaged and replacement will be necessary.
11.	B-Box Lot 11	<ul style="list-style-type: none"> ▪ Appears to be set too low. Adjust to match finished grade.
12.	B-Box Lot 15	<ul style="list-style-type: none"> ▪ Could not locate. Assume damaged and replacement will be necessary.
13.	B-Box Lot 16	<ul style="list-style-type: none"> ▪ Appears to be set too low. Adjust to match finished grade.
14.	B-Box Lot 17	<ul style="list-style-type: none"> ▪ B-Box is damaged and needs to be replaced.
15.	B-Box Lot 18	<ul style="list-style-type: none"> ▪ Could not locate. Assume damaged and replacement will be necessary.
16.	B-Box Lot 20	<ul style="list-style-type: none"> ▪ Could not locate. Assume damaged and replacement will be necessary.
17.	B-Box Lot 24	<ul style="list-style-type: none"> ▪ Appears to be set too low. Adjust to match finished grade.
18.	B-Box Lot 28	<ul style="list-style-type: none"> ▪ Could not locate. Assume damaged and replacement will be necessary.

Notes:

1. The letter "W" is marked in the curb to identify water service crossing locations.
2. Water service buffalo boxes that appeared higher than future finished surrounding grades have not been identified in the deficiency list, as they can be lowered with minimal effort during the sidewalk and restoration improvements.

Sidewalk

Sidewalk improvements were observed for compliance with the approved subdivision improvement plans. The plans for Cedar Brook include providing a 5' wide sidewalk throughout the entire subdivision. Lot 7 (model home) is the only improved lot and sidewalk was installed adjacent to the property. The punchlist includes completing

proposed sidewalk adjacent to undeveloped lots within the public Right-Of-Way and correcting any deficient sidewalk the exists.

It is critical to adhere to the State of Illinois American’s with Disabilities Act (A.D.A.) requirements set forth for sidewalk approaches made accessible to the handicap. In order to obtain conformance with the plans and the State of Illinois requirements, A.D.A. compliant sidewalk approach improvements have been included in this report where sidewalk approaches are proposed or need corrections.

The following table includes recommendations for sidewalk related improvements to be performed prior to Village acceptance of the subdivision.

Roadway	P.C.C. Sidewalk (5” depth)	Detectable Warnings
Cinnamon Creek West Lane (Urban)	3,395 SF Lot 1: 202’ X 5’ Lot 26: 178’ X 5’ Lot 27: 133’ X 5’ Lot 28: 166’ X 5’	N/A
Cinnamon Creek West Lane (Rural)	N/A	N/A
Ginger Lane	10,165 SF Lot 1: 139’ X 5’ Lot 2: 115’ X 5’ Lot 3: 115’ X 5’ Lot 4: 115’ X 5’ Lot 5: 115’ X 5’ Lot 6: 121’ X 5’ Lot 8: 113’ X 5’ Lot 9: 115’ X 5’ Lot 10: 136’ X 5’ Lot 21: 140’ X 5’ Lot 22: 294’ X 5’ Lot 23: 125’ X 5’ Lot 24: 115’ X 5’ Lot 25: 115’ X 5’ Lot 26: 160’ X 5’	32 SF (NE corner at Nutmeg Avenue: 4’ X 2’) (SE corner at Nutmeg Avenue: 4’ X 2’) (NW corner at Cinnamon Creek West Lane: 4’ X 2’) (NE corner at Cinnamon Creek West Lane: 4’ X 2’)

Nutmeg Avenue	9,635 SF	
	Lot 10: 220' X 5'	
	Lot 11: 158' X 5'	
	Lot 12: 186' X 5'	
	Lot 13: 123' X 5'	
	Lot 14: 137' X 5'	
	Lot 15: 130' X 5'	
	Lot 16: 115' X 5'	
	Lot 17: 115' X 5'	
	Lot 18: 126' X 5'	
Lot 19: 126' X 5'		
Lot 20: 126' X 5'		
Lot 21: 200' X 5'		
Lot 28: 165' X 5'		
TOTALS:	23,195 SF	56 SF

Note: 2" of aggregate base course is to be included for the sidewalk improvements per the improvement plans.

Street Lighting

Street lighting improvements were included in the Cedar Brooke improvement plans. Decorative street lighting exists throughout the subdivision and the light poles appear to match or be near the proposed locations included in the plans. Non-decorative street lights were proposed per the improvement plans. As it is HR Green's understanding that decorative street lighting exists in many residential subdivisions within the Village of Homer Glen, replacement of the existing decorative street lighting with non-decorative street lighting has not been incorporated as a punchlist item. A visual day time observation of the street lighting indicated that two street light heads do not match the style head included for the remaining poles throughout the subdivision. A visual night time observation of the street lighting indicated that the street lights were not functioning. The lighting system may not be energized as a result of there being no homes, with exception of a model home, established within the subdivision. HR Green recommends that further evaluation of the street lighting system be performed by the Village of Homer Glen to confirm adequate operation prior to acceptance of the subdivision. An estimated cost to investigate the system status has been included in Exhibit C.

It is recommended that the following defects be repaired prior to Village acceptance of the subdivision.

Item No.	Street Light	Defect/Corrective Action
1.	LP 4	<ul style="list-style-type: none"> ▪ Replace head with a style head that matches those included throughout the subdivision
2.	LP 5	<ul style="list-style-type: none"> ▪ Replace head with a style head that matches those included throughout the subdivision

3.	General	▪ Evaluate operational status of lighting system.
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Signage and Pavement Markings

No signage exists within the Cedar Brooke subdivision. The improvement plans include regulatory signage and street name signs throughout.

Pavement markings for stop bars and were included in the improvement plans but do not exist. Pavement markings to be provided for the subdivision which have been included in this report should be installed upon completing the HMA surface course overlay.

The following table includes the recommended signage and pavement marking improvements to be performed prior to Village acceptance of the subdivision.

Roadway	R1-1 (Stop Signs) 30" X 30"	R7-1 (No Parking This Side) 18" X 24"	R2-1 (Speed Limit 25) 24" X 30"	Street Name Signs	Stop Bar Pavement Markings (24" - White)
Cinnamon Creek West Lane (Urban)	1 EA (At Cedar Rd.)	1 EA (STA. 25+00 RT)	2 EA (STA. 20+30 RT; STA.27+90 LT)	3 EA (At Nutmeg Ave., Ginger Ln. and Cedar Rd.)	15 FT (At Cedar Rd.)
Cinnamon Creek West Lane (Rural)	N/A	N/A	N/A	N/A	N/A
Ginger Lane	2 EA (At Cinnamon Creek West Ln. and Nutmeg Ave.)	N/A	N/A	2 EA (At Cinnamon Creek West Ln. and Nutmeg Ave.)	30 FT (At Cinnamon Creek West Ln.: 15'; At Nutmeg Ave.: 15')
Nutmeg Avenue	1 EA (At 151 st St.)	N/A	1 EA (STA. 20+30 RT)	3 EA (At 151 st St., Ginger Ln. and Cinnamon Creek West Ln.)	15 FT (At 151 st St.)
TOTALS:	4 EA	1 EA	3 EA	8 EA	60 FT

Notes:

1. Regulatory signs are to include one post per sign. 1 post is to be included per 2 street name signs.
2. Street name sign types chosen by the Village are recommended to be in accordance with the Manual on Uniform Traffic Control Devices (M.U.T.C.D.).
3. Paint pavement markings are recommended to be installed.

Restoration and Landscaping

Restoration improvements within the public Right-Of-Way parkway areas are recommended for Village acceptance of the subdivision. The recommended restoration improvements consist of weed removal, placement of topsoil, seed, fertilizer and erosion control blanketing within the parkway areas between the sidewalk and the back of curb along with the space between the back of the proposed sidewalk and the Right-Of-Way line. Some excavation may be necessary in the parkway areas to accommodate a proper amount of topsoil for adequate turf growth and this work would be performed as part of the topsoil placement preparation. It is recommended that all sewer and water appurtenances be level with the desired finished restoration grades.

An estimated quantity of topsoil needed to complete the restoration improvements within the parkway has been included in the punchlist. Two topsoil stockpiles remain on Lot 1 and Lot 2. An estimated volume of the topsoil stockpile has been calculated. Furnishing topsoil from outside of the subdivision site will not be necessary as a result of the topsoil stockpile quantity being in excess of the estimated volume required to complete the parkway restoration improvements. It is recommended that the topsoil needed to complete the restoration be pulverized from the stockpiles and placed on site. It is recommended that the balance of the stockpiled topsoil no longer needed for the restoration improvements be hauled off site. Upon hauling the topsoil off site, it is recommended that the area remaining be provided with seed, fertilizer and erosion control blanket. HR Green has provided an estimated cost for the removal of the stockpile material.

Landscaping plans for Cedar Brook were unavailable for HR Green to compare the intended landscaping improvements to what currently exists. With the understanding that trees will need to be provided within the parkways prior to Village acceptance of the subdivision, HR Green has included an estimated quantity of trees following Village of Homer Glen tree spacing criteria (40' c-c) as specified in the Village's Subdivision Ordinance.

HR Green has also included the option of restoring areas outside of the Right-Of-Way parkway areas that were impacted by grading improvements as proposed in the improvement plans (Lots 31, 32, 33 and 35). These areas appear to have never been restored or landscaped. The optional restoration work would include topsoil, seed, fertilizer and erosion control blanket. HR Green was not able to determine if any project specific plantings were in place surrounding the basins on Lots 31, 32, 33 and 35, as the landscape plans were unavailable. If the Village desires native plantings around the

ponds, HR Green does have landscape architects on staff and we can provide these native landscape services for additional costs.

The following table includes the recommended restoration and parkway tree improvements necessary to obtain Village acceptance of the subdivision.

Roadway / Area	Restoration (Topsoil, Seed, Fertilizer and Erosion Control Blanket)	Parkway Trees	Topsoil Removal
Cinnamon Creek West Lane (Urban)	1,856 SY (North side: 679' X 12.5') (South side: 865' X 9.5')	39 EA (40' spacing within 1,544')	N/A
Cinnamon Creek West Lane (Rural)	2,506 SY (North side: 550' X 20.5') (South side: 550' X 20.5')	28 EA (40' spacing within 1,100')	N/A
Ginger Lane	2,805 SY (North and east sides: 1,083' X 12.5') (South and west sides: 937' X 12.5')	51 EA (40' spacing within 2,020')	N/A
Nutmeg Avenue	2,663 SY (West side: 951' X 12.5') (East side: 966' X 12.5')	48 EA (40' spacing within 1,917')	N/A
Lots 1 & 2 (Topsoil stockpile location)	3,111 SY (North stockpile: 140' X 140') (South stockpile: 140' X 60')	N/A	8,732 CY (North: 140' X 140' X 10' = 7,259 CY) + (South: 140' X 60' X 10' = 3,111 CY) - (Parkway restoration area at 6" deep = 1,638 CY)
TOTALS:	12,941 SY	166 EA	8,732 CY

Notes:

1. Assume an average of 6" of topsoil placement necessary for restoration.
2. Parkway tree type to be determined by the Village of Homer Glen in accordance with Tree Preservation Ordinance 06-014.

The following table includes the optional restoration areas to be considered by the Village for acceptance of the subdivision.

Optional Area	Optional Restoration (Topsoil, Seed, Fertilizer and Erosion Control Blanket)	Topsoil Removal (Balance after restoring optional area)
Lot 31 (Surrounding Large Pond, small pond and area west of Lot 11)	7,821 SY (Large pond: 800' X 50'; Small pond: 130' X 30', 120' X 40', 125' X 50', 180' X 25'; West of Lot 11: 140' X 80')	7,863 CY 8,732 CY – (Lot 31 restoration volume at 4" deep = 869 CY)
Lot 32/35 (Surrounding Pond and south of Cinnamon Creek West Lane)	4,806 SY (Pond: 100' X 35', 150' X 10', 100' X 55', 150' X 45'; South of Cinnamon Creek West Lane: 650' X 40')	7,329 CY 7,863 CY – (Lot 32 restoration volume at 4" deep = 534 CY)
Lot 33 (Surrounding Pond)	4,067 SY (Pond: 1,220' X 30')	6,877 CY 7,329 CY – (Lot 33 restoration volume at 4" deep = 452 CY)
TOTALS:	16,694 SY	6,877 CY

Notes:

1. Assume 4" topsoil depth for restoration of optional areas.
2. Topsoil Removal quantities shown are estimated final volumes to be removed from the project site after utilizing the processed topsoil for the optional areas.

Erosion Control

Existing erosion control measures that are commonly used such as perimeter erosion barrier and filter fabric for inlet and pipe protection become no longer applicable after vegetation has developed for areas that were once solely comprised of earth material such as clay or other soils and subject to erosion. In most cases, enough vegetation will develop such that the vegetation itself becomes a means of erosion control. HR Green determined that vegetation growth has become established throughout the Cedar Brook subdivision, which includes the Right-Of-Way, private lots and outlots. As a result, the existing perimeter erosion barrier and filter fabric (inlet and pipe protection) measures are recommended to be removed unless otherwise indicated. Filter fabric removal is covered in the storm sewer deficiency list.

The following table includes the perimeter erosion barrier recommended for removal prior to Village acceptance of the subdivision.

Location	Perimeter Erosion Barrier Removal
Lot 1	50 FT
Lot 10	250 FT
Lot 11	50 FT
Lot 21	50 FT
Lot 26	50 FT
Lot 27	50 FT
TOTAL:	500 FT

During the erosion control observation, there were areas identified where erosion has occurred in the past, creating several eroded voids within the ground surface at various areas. Some of these areas may not be subject to future erosion issues due to surrounding vegetation but they are assumed as hazardous to pedestrians walking through the areas due to the differential in grades. It is recommended that these areas be corrected by means of re-grading or filling the eroded areas with earth material and restoring the surface with seed, fertilizer and erosion control blanket.

The following table includes the recommended erosion corrections to be performed prior to Village acceptance of the subdivision.

Location	Erosion Corrections
Lot 10	167 SY (100' X 15')

Note: Erosion corrections work includes necessary earth moving operations, necessary furnishing of placement of earth material from on site and placement of vegetation seed and erosion control blanket.

Lift Station Pavement

The Cedar Brooke improvement plans include a proposed lift station pavement area that does not exist. The area currently exists as a combination of stone and earth with vegetation. The work involved to install the pavement would be grading the area and the installation of an aggregate base course, HMA binder and surface courses.

The following table includes the recommended lift station pavement improvements for Village acceptance of the subdivision.

Location	Aggregate Base Course, Type B (8")	HMA Binder Course, IL-19, N50	HMA Surface Course, Mix 'C', N50
Lift Station	414 SY (74.5' X 50')	46 Tons (414 SY at 2")	46 Tons (414 SY at 2")

Note: Grading and preparing the subgrade for the lift station pavement would be necessary and included in the scope of work for the aggregate base course.

Bike Path Improvements

The Cedar Brook improvement plans include a proposed 8' wide asphalt bike path to be installed along the north side of the subdivision within the 151st Street Right-Of-Way, along the east side of the subdivision within the Cedar Road Right-Of-Way and along the south side of Cinnamon Creek West Lane. The bike path does not exist.

The following table includes the bike path improvements necessary to comply with the subdivision plans and allow for Village acceptance of the subdivision.

Location	Earthwork	Aggregate Base Course, Type B (5")	HMA Surface Course, Mix 'C', N50
North side along 151 st Street	874 CY (1,180' X 10' X 2')	1,049 SY (1,180' X 8')	117 Tons (1,049 SY at 2")
East side along Cedar Road	911 CY (1,230' X 10' X 2')	1,093 SY (1,230' X 8')	122 Tons (1,093 SY at 2")
South side of Cinnamon Creek West Lane	889 CY (1,200' X 10' X 2')	1,067 SY (1,200' X 8')	120 Tons (1,067 SY at 2")
TOTALS:	2,674 CY	3,209 SY	359 Tons

Notes:

1. The proposed bike path work would entail incidental restoration to areas impacted during construction.
2. The proposed bike path and existing ground elevations are unknown. As a result, quantities for earth excavation and/or fill to accommodate the installation of the bike path must be assumed. An estimated amount of earthwork is included assuming 10' X 2' of earthwork necessary per foot of bike path.

Pedestrian Bridges

The improvement plans for Cedar Brook include three pedestrian bridges connected to the proposed bike path at waterway crossings. Should the Village pursue the installation of the bike path and pedestrian bridges as included in the plans, HR Green has included estimated costs for the pedestrian bridges, which can be found in Exhibit C.

The following are the pedestrian bridge locations and lengths included in the plans that are recommended for installation with the bike path prior to Village acceptance of the subdivision.

Item #	Location	Length of Pedestrian Bridge
1.	151 st Street (North of Lot 31)	60 FT
2.	Cedar Road (East of Lot 33)	54 FT
3.	South side of lot 32	20 FT
TOTAL:		134 FT

Guardrail Improvements

The improvement plans include proposed guardrail along the north and south sides of Cinnamon Creek West Lane (Rural) at the creek crossing. The guardrail is proposed along the outside of the roadway edges to protect the public from the drop off into the creek.

The following table includes the proposed guardrail recommended to be installed prior to Village acceptance of the subdivision.

Location	Steel Plate Beam Guardrail, Type A, 6 FT Posts
Cinnamon Creek Drive (North and south sides)	75 FT (37.5' X 2)

II. DETENTION BASIN VERIFICATION

Proposed and Existing Drainage Features Summary

HR Green performed topographical survey services on the Cedar Brooke Subdivision on June 6th, 2012. The specific information collected included topography of the subdivision's stormwater detention basins including interconnecting storm sewer pipes and structures adjacent to said detention basins in their existing conditions. The basins were surveyed along their top of bank and down to the surface water elevations. This analysis was based on the Engineering Plans dated 06/09/06 prepared by V3 Consultants. Drainage calculations were not available for our analysis. There are four stormwater basins. See Exhibits A1 through A4. Pond A is controlled by three culvert pipes as listed below. Pond B was constructed online with a creek and does not have a proposed restrictor control structure. The outfall for this pond is a 3' x 8' box culvert. Ponds C and D both are interconnected with a 21" pipe. They are controlled by a dual restrictor (structure #6164). The 2-year storm is controlled by a 2.5" orifice within the restrictor manhole wall. The 100-year storm is controlled by a 3.8" orifice within the wall. Below is a summary of the proposed and existing conditions of the control structures.

POND A (LOT 31)			
	PROPOSED	EXISTING	DIFFERENCE
2 YEAR RESTRICTOR INV ELEV. (diameter)	741.50 (12" CULVERT)	741.23 (12" CULVERT)	0.27' LOW
100 YEAR RESTRICTOR INV ELEV. (diameter)	742.00 (2-36" CULVERTS)	741.74 (2-36" CULVERTS)	0.26' LOW
100 YEAR EMERGENCY OVERFLOW WEIR ELEV.	747.50	745.80	1.7' LOW

POND B (LOT 33)			
	PROPOSED	EXISTING	DIFFERENCE
OUTFLOW PIPE INV ELEV. (diameter)	736.90 (3'X8' BOX CULVERT)	736.77 (3'X8' BOX CULVERT)	0.13' LOW
100 YEAR EMERGENCY OVERFLOW WEIR ELEV.	741.50	740.90	0.60' LOW

POND C (LOT 34 NORTH)			
	PROPOSED	EXISTING	DIFFERENCE
EQUALIZER OUTFALL PIPE INV ELEV. (diameter)	735.0 (21")	734.84 (21")	0.16' LOW
100 YEAR EMERGENCY OVERFLOW ELEV.	742.00	741.10	0.9' LOW

POND D (LOT 34 SOUTH)			
	PROPOSED	EXISTING	DIFFERENCE
WEIR WALL- TOP ELEV.	740.00	739.59	0.41' LOW
2 YEAR RESTRICTOR INV ELEV. (diameter)	734.90 (2.5")	734.39 (3")	0.51' LOW (0.5" Too Large)
100 YEAR RESTRICTOR INV ELEV. (diameter)	738.00 (3.8")	737.44 (4")	0.56' LOW (0.2" Too Large)
100 YEAR EMERGENCY OVERFLOW WEIR ELEV.	740.20	739.10	1.10' LOW

Volume Determination Summary

Cedar Brooke Subdivision's stormwater basins existing contour areas were imported into an Excel spreadsheet to calculate the volume of provided storage using the average end area method. The proposed storage volume was not included on the plans and the drainage calculations were not available. To determine the proposed volume, the plan contours were digitized and calculated with the same method as the existing volume.

POND A (LOT 31)			
	PROPOSED	EXISTING	DIFFERENCE
NWL	741.50	741.20	0.30' LOW
HWL	747.50	745.80	1.70' LOW
STORAGE VOLUME (AC.FT.)	6.35	4.40	1.95 Shortage

POND B (LOT 33)			
	PROPOSED	EXISTING	DIFFERENCE
NWL	739.00	739.00	ASSUMED EQUAL
HWL	741.50	740.90	0.60' LOW
STORAGE VOLUME (AC.FT.)	4.22	2.96	1.26 Shortage

POND C (LOT 34 NORTH)			
	PROPOSED	EXISTING	DIFFERENCE
NWL	735.00	734.80	0.20' LOW
HWL	740.00	739.10	0.90' LOW
STORAGE VOLUME (AC.FT.)	1.61	1.51	0.10 Shortage

POND D (LOT 34 SOUTH)			
	PROPOSED	EXISTING	DIFFERENCE
NWL	735.00	734.80	0.20' LOW
HWL	740.00	739.10	0.90' LOW
STORAGE VOLUME (AC.FT.)	1.12	1.07	0.05 Shortage

Conclusions

Pond A

The restrictor pipes were all constructed an average of 0.27' low. The 100-year emergency overflow was constructed 1.7' lower than the proposed elevation. This results in a reduced storage volume for the basin. This basin does not comply with the design plans. A detailed review of the original drainage calculations or a hydraulic analysis would be required to determine the impact of these deviations.

Pond B

The outflow pipe was constructed 0.13' low which is within an acceptable construction tolerance. This outfall is below the NML elevation of 739.00 stated on the plans so it is assumed that the creek has an existing NWL at the same elevation. The 100-year emergency overflow was constructed 0.6' lower than the proposed elevation. This results in a reduced storage volume for the basin. This basin does not comply with the design plans. A detailed review of the original drainage calculations or a hydraulic analysis would be required to determine the impact of these deviations.

Pond C

The outflow equalizer pipe was constructed 0.16' low which is within an acceptable construction tolerance. This pond did not have a designed emergency overflow weir. For this analysis we have assumed it to be the top of berm at an elevation of 742.00. The existing overflow elevation was determined to be 741.10, 0.9' lower than proposed. This does not affect the storage volume of the basin because it is interconnected to Pond D which controls the ultimate HWL and overflow for both basins. The Pond D was overflow constructed 1.1' low which results in a reduction to the storage volume. This basin does not comply with the design plans.

Pond D

In Pond D the diameter of the 2 year restrictor orifice was constructed 0.5" larger than was proposed. The 100-year restrictor orifice was constructed 0.2" larger than was proposed. These deviations would result in a stormwater release rate that is greater than the rate proposed. Both The 100-year emergency overflow and the weir wall were constructed lower than their proposed elevations. This results in a reduced storage volume for both basin C and D. This basin does not comply with the design plans. A detailed review of the original drainage calculations or a hydraulic analysis would be required to determine the impact of these deviations

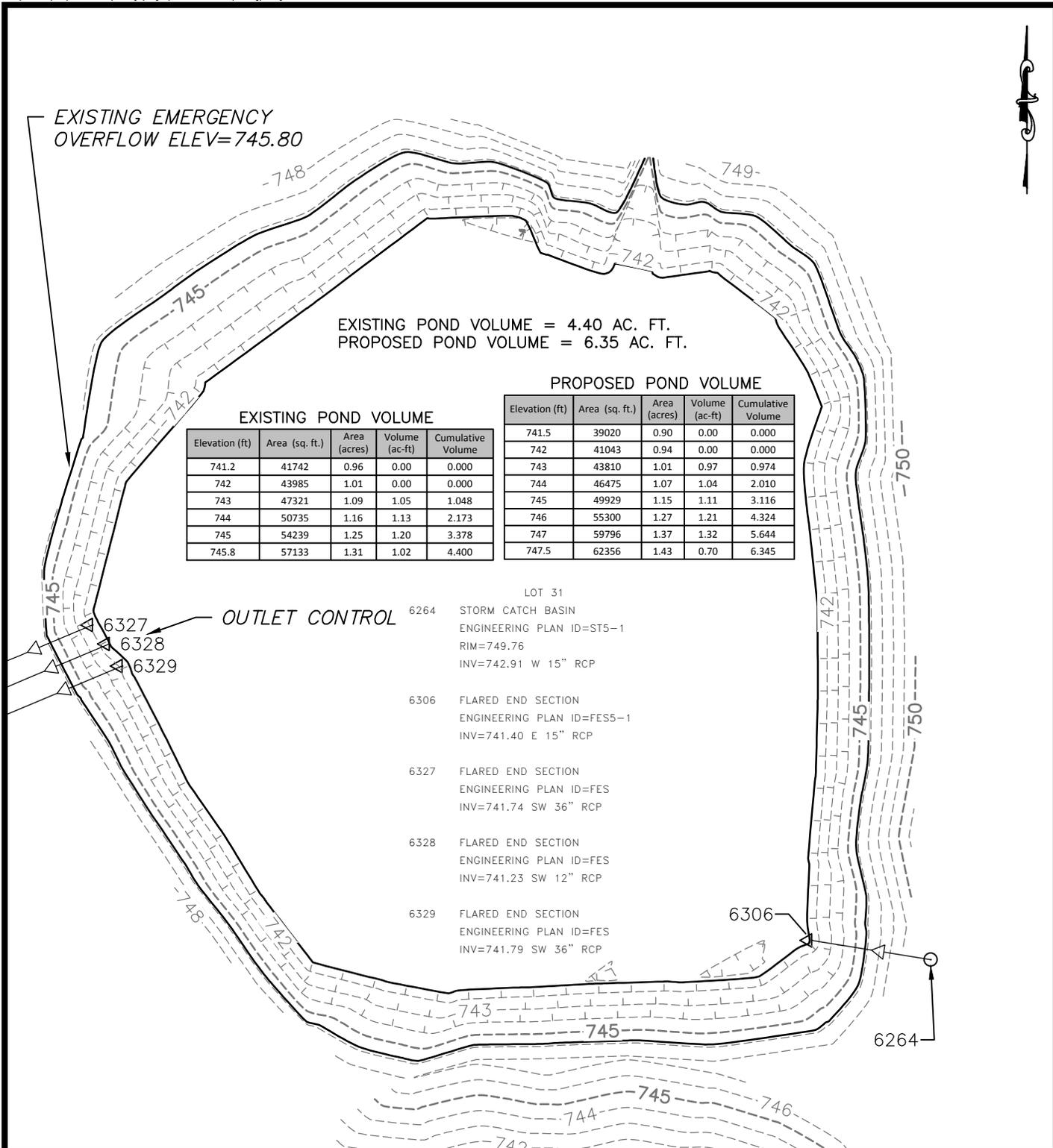
The combined shortage of storage volume for all four ponds is 3.35 ac.ft which is a 25% lower than the proposed volume. If corrective measures are deemed necessary, adjustments to the overflow weir or outfall pipes can be evaluated. Likewise, a detailed analysis of the original design calculations and existing site conditions would be necessary.

III. PARCEL IDENTIFICATION

HR Green has researched the specific ownership of both private and public improvement property in the Cedar Brook subdivision. The parcel data was obtained by utilizing 2011 tax records through the Will County Treasurer's Office. There are 35 lots within the subdivision numbered 1 through 33. Lots 1 through 30 are private lots for home building, Lots 31 through 33 and 35 are outlots serving basins and open area and Lot 34 serves Cinnamon Creek West Lane (Rural). Please refer to Exhibit B for parcel identification.

IV. ENGINEER'S OPINION OF PROBABLE COST

The punch list items included in this report have been identified as construction action items with assigned quantities of work and associated unit pricing necessary to correct the deficiencies and complete the outstanding improvements necessary for Village acceptance of the subdivision. HR Green utilized 2012 unit prices for cost estimation purposes. Please refer to Exhibit C for the Engineer's Opinion of Probable Cost.



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Illinois Professional Design Firm # 184-001322



323 Alana Drive,
 New Lenox, Illinois 60451
 t. 815.462.9324 f. 815.462.9328
 www.segroupinc.com

CEDAR BROOKE
 LOT 31

DATE:
 6/20/2012

HORIZ. SCALE:
 NOT TO SCALE

DWN. BY: DSN. BY: CHK. BY:
 BDE N/A MD

PROJECT NO.
 86120056

SHEET NO.
 1 OF 1

- 6001 STORM CATCH BASIN
ENGINEERING PLAN ID=ST2-1
F/L=748.67
INV=739.77 S 24" RCP
- 6096 FLARED END SECTION
ENGINEERING PLAN ID=FES2-1
INV=739.14 N 24" RCP
- 6114 FLARED END SECTION
ENGINEERING PLAN ID=FES1-1
INV=738.91 N 21" RCP
- 6337 STORM CATCH BASIN
ENGINEERING PLAN ID=ST1-1
F/L=747.43
INV=739.03 S 21" RCP
- 6043 BOX CULVERT 3' X 8'
ENGINEERING PLAN ID=N/A
INV=736.77 W
- 6089 BOX CULVERT 4' X 5'
ENGINEERING PLAN ID=N/A
INV=740.39 NE
- 6090 CULVERT PIPE
ENGINEERING PLAN ID=N/A
INV=738.66 NE 18" RCP

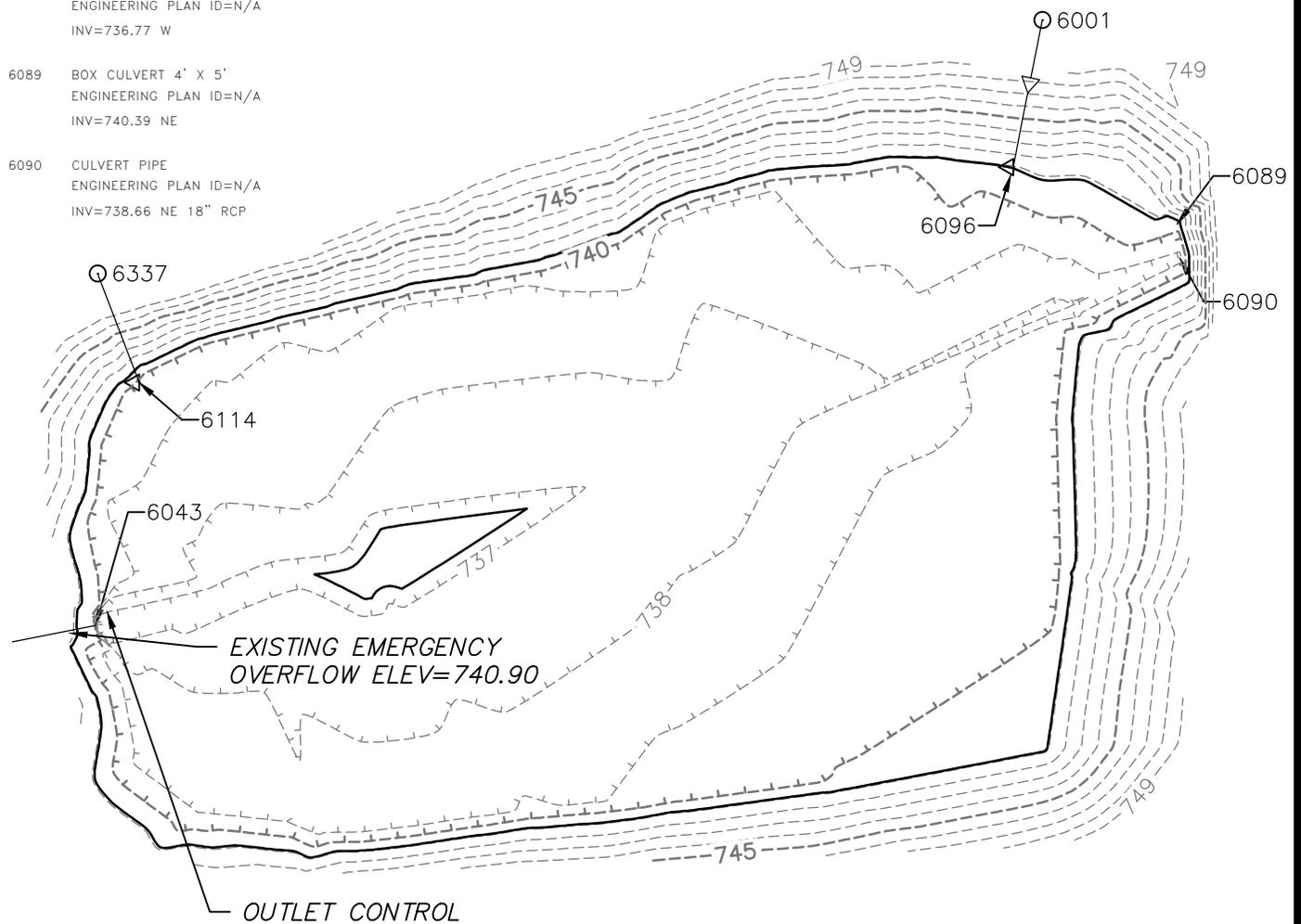
EXISTING POND VOLUME

Elevation (ft)	Area (sq. ft.)	Area (acres)	Volume (ac-ft)	Cumulative Volume
739	51734	1.19	0.00	0.000
740	71473	1.64	1.41	1.408
740.9	78819	1.81	1.55	2.960

PROPOSED POND VOLUME

Elevation (ft)	Area (sq. ft.)	Area (acres)	Volume (ac-ft)	Cumulative Volume
739	68362	1.57	0.00	0.000
741.5	78766	1.81	4.22	4.218

EXISTING POND VOLUME = 2.96 AC. FT.
 PROPOSED POND VOLUME = 4.22 AC. FT.



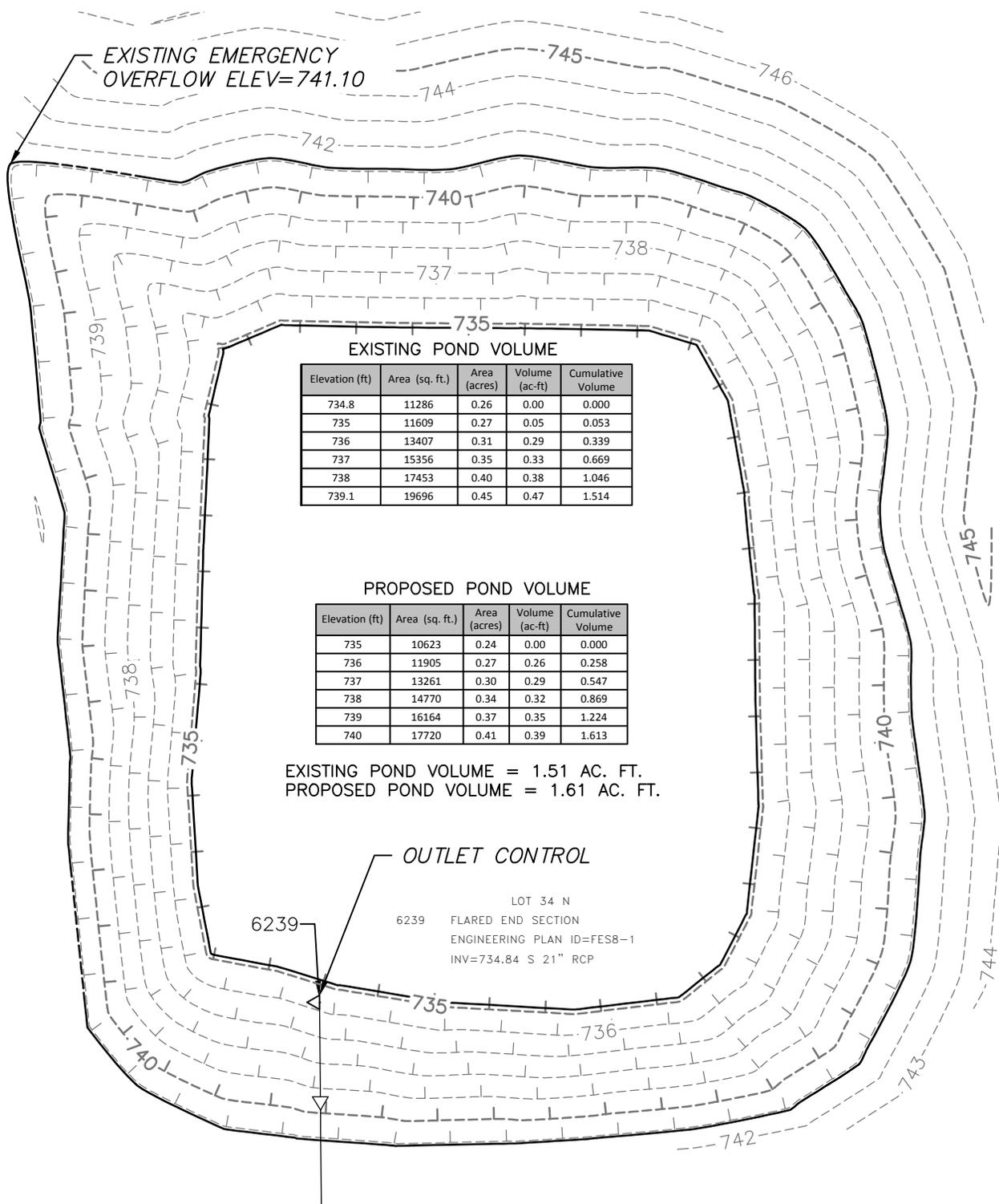
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Illinois Professional Design Firm # 184-001322

HRGreen
 323 Alana Drive,
 New Lenox, Illinois 60451
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 www.secgroupinc.com

CEDAR BROOKE
 LOT 33

DATE:
6/20/2012
 HORIZ. SCALE:
NOT TO SCALE
 DWN. BY: BDE N/A
 DSN. BY: N/A
 CHK. BY: MD
 PROJECT NO.
86120056
 SHEET NO.
1 OF 1



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Illinois Professional Design Firm # 184-001322



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CEDAR BROOKE

LOT 34 NORTH

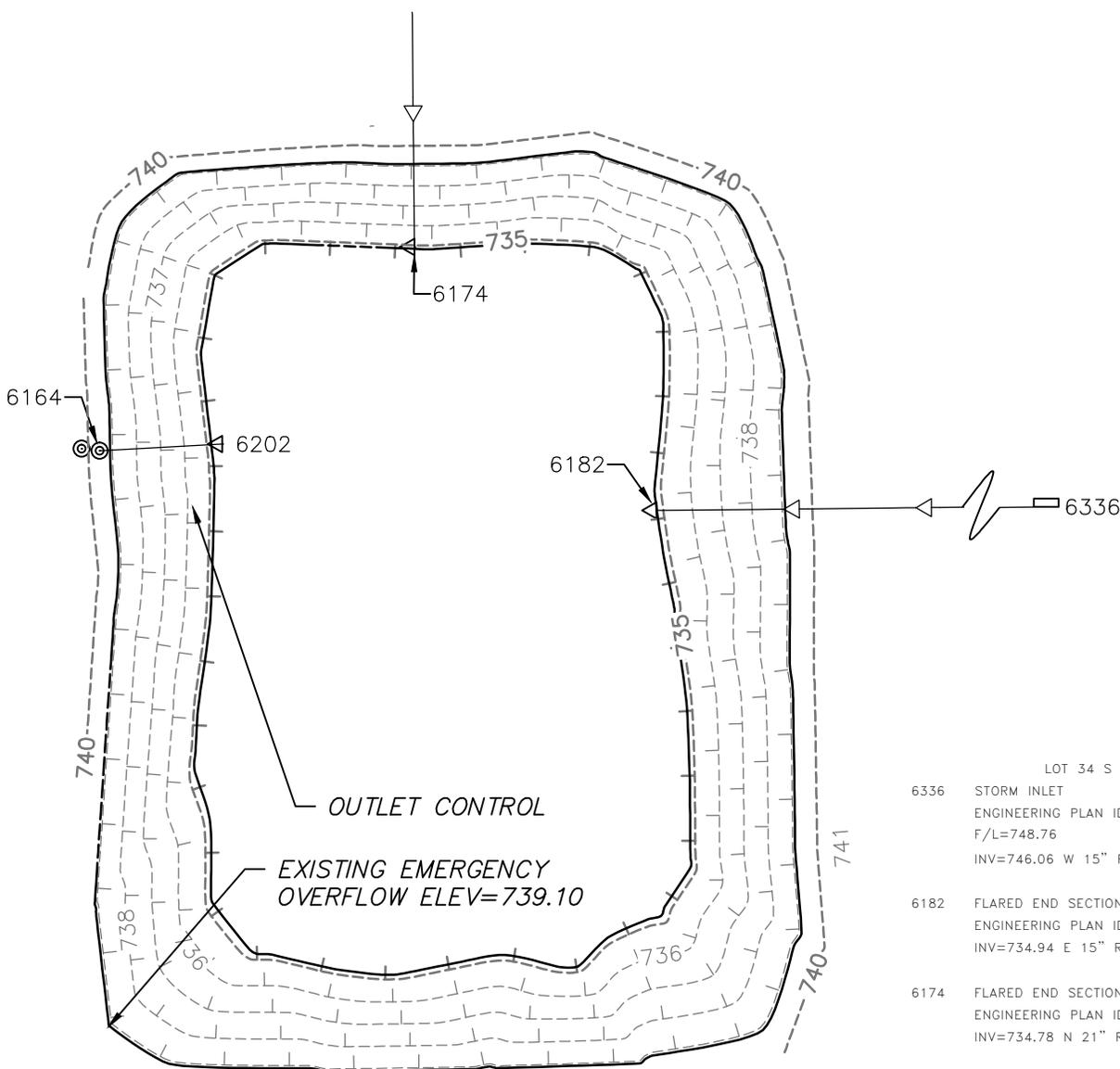
DATE:
 6/20/2012

HORIZ. SCALE:
 NOT TO SCALE

DWN. BY: DSN. BY: CHK. BY:
 BDE N/A MD

PROJECT NO.
 86120056

SHEET NO.
 1 OF 1



- LOT 34 S
- 6336 STORM INLET
ENGINEERING PLAN ID=ST6-1
F/L=748.76
INV=746.06 W 15" RCP
 - 6182 FLARED END SECTION
ENGINEERING PLAN ID=FES6-1
INV=734.94 E 15" RCP
 - 6174 FLARED END SECTION
ENGINEERING PLAN ID=FES8-2
INV=734.78 N 21" RCP
 - 6202 FLARED END SECTION
ENGINEERING PLAN ID=FES10-1
INV=734.83 E 24" RCP
 - 6164 STORM MANHOLE (RESTRICTOR)
ENGINEERING PLAN ID=FES10-1
RIM=742.09
INV=734.79 E 24" RCP
TOP OF WALL=739.59
ORFFICE_UPPER=737.44 4"
ORFFICE_LOWER=734.39 3"

PROPOSED POND VOLUME

Elevation (ft)	Area (sq. ft.)	Area (acres)	Volume (ac-ft)	Cumulative Volume
735	6863	0.16	0.00	0.000
736	7956	0.18	0.17	0.170
737	9114	0.21	0.20	0.366
738	10365	0.24	0.22	0.589
739	11603	0.27	0.25	0.841
740	12602	0.29	0.28	1.119

EXISTING POND VOLUME

Elevation (ft)	Area (sq. ft.)	Area (acres)	Volume (ac-ft)	Cumulative Volume
734.8	7729	0.18	0.00	0.000
735	8004	0.18	0.04	0.036
736	9381	0.22	0.20	0.235
737	10847	0.25	0.23	0.467
738	12405	0.28	0.27	0.734
739	14054	0.32	0.30	1.038
739.1	14224	0.33	0.03	1.070

EXISTING POND VOLUME = 1.07 AC. FT.
 PROPOSED POND VOLUME = 1.12 AC. FT.

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Illinois Professional Design Firm # 184-001322



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 www.secgroupinc.com

CEDAR BROOKE
 LOT 34 SOUTH

DATE: 6/20/2012			
HORIZ. SCALE: NOT TO SCALE			
DWN. BY:	DSN. BY:	CHK. BY:	
BDE	N/A	MD	
PROJECT NO. 86120056			
SHEET NO. 1 OF 1			



EXHIBIT B Cedar Brooke Parcel Identification

Lot Number	Permanent Index Number (PIN)	Property Owner	Property Address	Property Street	Property City	Property State	Property Zip	Owner Address	Owner Street	Owner City	Owner State	Owner Zip
1	16-05-16-103-010-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
2	16-05-16-103-009-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
3	16-05-16-103-008-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
4	16-05-16-103-007-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
5	16-05-16-103-006-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
6	16-05-16-103-005-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
7	16-05-16-103-004-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
8	16-05-16-103-003-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
9	16-05-16-103-002-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
10	16-05-16-103-001-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
11	16-05-16-101-004-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
12	16-05-16-101-005-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
13	16-05-16-101-006-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
14	16-05-16-101-007-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
15	16-05-16-101-008-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
16	16-05-16-101-009-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
17	16-05-16-101-010-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
18	16-05-16-102-004-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
19	16-05-16-102-003-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
20	16-05-16-102-002-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
21	16-05-16-102-001-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
22	16-05-16-102-007-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
23	16-05-16-102-008-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
24	16-05-16-102-009-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
25	16-05-16-102-010-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
26	16-05-16-102-011-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
27	16-05-16-102-006-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
28	16-05-16-102-005-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
29	16-05-16-101-001-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
30	16-05-16-101-002-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
31	16-05-16-101-003-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
32	16-05-16-105-002-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
33	16-05-16-105-003-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
34	16-05-16-104-001-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491
35	16-05-16-105-001-0000	STONE CREEK PARTNERS LLC						13907	W 159TH ST	HOMER GLEN	IL	60491

Notes:

1. Lots 31-33 and 35 contain basins and open area and Lot 34 serves Cinnamon Creek West Lane (Rural) per the improvement plans.
2. Subdivision plat recorded on 12/01/2006.
3. Information based upon 2011 property tax records.
4. Will County's current available documentation does not reflect recent property activity since 2011. Current information will be available as provided by Will County.



EXHIBIT C
Cedar Brooke - Engineer's Opinion of Probable Cost (July, 2012)

ROADWAY NAME		CINNAMON CREEK WEST LANE (URBAN)	CINNAMON CREEK WEST LANE (RURAL)	GINGER LANE	NUTMEG AVENUE	VARIOUS AREAS (PUBLIC AND PRIVATE LOTS)	TOTAL		
ROADWAY LIMITS		NUTMEG AVENUE TO CEDAR ROAD	WEST LIMIT TO NUTMEG AVENUE	NUTMEG AVENUE TO CINNAMON CREEK WEST LANE	151ST STREET TO CINNAMON CREEK WEST LANE			UNIT COST	ESTIMATED COST
LENGTH (FOOT)		835	550	1,015	980		3,380		
WIDTH (FOOT)		28	21	28	28				
EXTRA AREA (SQ YD)				1,000			1,000		
AREA (SQ YD)		2,598	1,283	4,158	3,049		11,088		
BITUMINOUS MATERIALS (PRIME COAT)	GAL	260	128	416	305		1,109	\$2.00	\$2,218.00
AGGREGATE (PRIME COAT)	TON	5	3	8	6		22	\$20.00	\$440.00
HOT-MIX ASPHALT SURFACE COURSE, MIX 'C', N50	TON	327	108	407	256		1,098	\$70.00	\$76,860.00
AGGREGATE SHOULDERS, TYPE B	TON		84				84	\$40.00	\$3,360.00
HMA SURFACE REMOVAL, VARIABLE DEPTH (0" TO 1.5")	SQ YD			39			39	\$2.50	\$97.50
HMA SURFACE REMOVAL - BUTT JOINT	SQ YD	89			31		120	\$15.00	\$1,800.00
COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FT			25	55		80	\$30.00	\$2,400.00
PORTAND CEMENT CONCRETE SIDEWALK (5")	SQ FT	3,395		10,165	9,635		23,195	\$6.00	\$139,170.00
DETECTABLE WARNINGS	SQ FT			32	24		56	\$30.00	\$1,680.00
R1-1 STOP SIGNS (30" X 30")	EACH	1		2	1		4	\$250.00	\$1,000.00
R2-1 SPEED LIMIT 25 (24" X 30")	EACH	2			1		3	\$250.00	\$750.00
R7-1 NO PARKING THIS SIDE (18" X 24")	EACH	1					1	\$250.00	\$250.00
STREET NAME SIGNS	EACH	3		2	3		8	\$225.00	\$1,800.00
SIGN POSTS	EACH	7		3	6		16	\$125.00	\$2,000.00
PAVEMENT MARKINGS - LINE 24"	FT	15		30	15		60	\$3.00	\$180.00
CLEANING INLETS	EACH					15	15	\$100.00	\$1,500.00
CLEANING CATCH BASINS	EACH					11	11	\$225.00	\$2,475.00
CLEANING MANHOLES	EACH					15	15	\$185.00	\$2,775.00
CLEANING END SECTIONS	EACH					17	17	\$100.00	\$1,700.00
CLEANING SANITARY MANHOLE	EACH					1	1	\$750.00	\$750.00
CONCRETE BENCH FOR INLET	EACH					15	15	\$125.00	\$1,875.00
CONCRETE BENCH FOR MANHOLE	EACH					14	14	\$350.00	\$4,900.00
REMOVE STRAW BALES AT DRAINAGE STRUCTURE	EACH					7	7	\$50.00	\$350.00
FRAMES TO BE ADJUSTED	EACH					8	8	\$250.00	\$2,000.00
STEP INSTALLATION FOR STORM SEWER STRUCTURE	EACH					3	3	\$150.00	\$450.00
ORIFICE HOODS	EACH					2	2	\$500.00	\$1,000.00
BACKFILL STRUCTURE	EACH					1	1	\$300.00	\$300.00
STORM SEWERS, CLASS A (RCP), TYPE IV, 12"	FT					24	24	\$200.00	\$4,800.00
PRECAST REINFORCED CONCRETE FLARED END SECTION, 12"	EACH					2	2	\$500.00	\$1,000.00
GRATING FOR CONCRETE FLARED END SECTION, 12"	EACH					3	3	\$325.00	\$975.00
GRATING FOR CONCRETE FLARED END SECTION, 36"	EACH					1	1	\$700.00	\$700.00
TYPE 11 GRATE	EACH					1	1	\$200.00	\$200.00
CLOSED LID REPLACEMENT	EACH					1	1	\$125.00	\$125.00
OPEN LID REPLACEMENT	EACH					1	1	\$125.00	\$125.00
VALVE BOX REPLACEMENT	EACH					1	1	\$200.00	\$200.00
VALVE BOX ADJUSTMENT	EACH					1	1	\$150.00	\$150.00
WATER SERVICE BUFFALO BOX REPLACEMENT	EACH					7	7	\$325.00	\$2,275.00
WATER SERVICE BUFFALO BOX ADJUSTMENT	EACH					6	6	\$125.00	\$750.00
TURN FIRE HYDRANT	EACH					1	1	\$250.00	\$250.00
STREET LIGHT HEAD REMOVAL AND REPLACEMENT	EACH					2	2	\$1,000.00	\$2,000.00
TOPSOIL PLACEMENT	SQ YD	1,856	2,506	2,805	2,663	3,111	12,941	\$6.00	\$77,646.00
SEEDING, CLASS 1A	ACRE	0.38	0.52	0.58	0.55	0.64	2.67	\$3,000.00	\$8,010.00
FERTILIZER	POUND	103	140	157	149	173	722	\$5.00	\$3,610.00
EROSION CONTROL BLANKET	SQ YD	1,856	2,506	2,805	2,663	3,111	12,941	\$2.50	\$32,352.50
PARKWAY TREE	EACH	39	28	51	48		166	\$380.00	\$63,080.00
EROSION CORRECTIONS	SQ YD					167	167	\$6.50	\$1,085.50
PERIMETER EROSION BARRIER REMOVAL	FT					500	500	\$1.00	\$500.00
OPTIONAL RESTORATION	SQ YD					16,694	16,694	\$8.50	\$141,899.00
TOPSOIL REMOVAL	CU YD					8,732	8,732	\$11.00	\$96,052.00
LIFT STATION COMPLETION	L SUM					1	1	\$25,000.00	\$25,000.00
STREET LIGHTING EVALUATION	L SUM					1	1	\$5,000.00	\$5,000.00
STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FT POSTS	FT					75	75	\$30.00	\$2,250.00
HMA SURFACE COURSE, MIX 'C', N50 (LIFT STATION PVMT.)	TON					46	46	\$70.00	\$3,220.00
HMA BINDER COURSE, IL-19, N50 (LIFT STATION PVMT.)	TON					46	46	\$65.00	\$2,990.00
AGGREGATE BASE COURSE, TYPE B (8") (LIFT STATION PVMT.)	SQ YD					414	414	\$10.00	\$4,140.00
EARTHWORK (BIKE PATH)	CU YD					2,674	2,674	\$30.00	\$80,220.00
HMA SURFACE COURSE, MIX 'C', N50 (BIKE PATH)	TON					359	359	\$125.00	\$44,875.00
AGGREGATE BASE COURSE, TYPE B (5") (BIKE PATH)	SQ YD					3,209	3,209	\$8.00	\$25,672.00
PEDESTRIAN BRIDGE (BIKE PATH)	FT					134	134	\$2,000.00	\$268,000.00

Notes:

1. Bituminous Materials (Prime Coat) = 0.1 Gal/SY.
2. Aggregate (Prime Coat) = 0.002 Ton/SY.
3. Filter fabric removal assumed to be included in cleaning of drainage structures.
4. Fertilizer includes Nitrogen, Phosphorous and Potassium nutrient types at 90lb/acre per nutrient type.
5. Cost for Storm Sewer includes engineered backfill and Grade 4 riprap above trench.
6. Price for Step Installation for Storm Sewer Structure is per structure, not per step.
7. PCC Sidewalk (5") includes 2" of aggregate base course. Any excavation for the sidewalk is incidental to the pay item.
8. Topsoil Placement includes weed removal, incidental excavation, on-site pulverizing and placement of topsoil (6" average depth) for restoration areas.
9. Optional Restoration unit price includes weed removal, on-site pulverizing and placement of topsoil (4"), seeding, fertilizer and erosion control blanket.
10. Topsoil Removal quantity is the estimated remaining quantity of topsoil upon completing the Topsoil Placement work. The balance of topsoil removal upon completing the Optional Restoration work is estimated to be 6,877 CY. Associated revised cost for Topsoil Removal = 6,877 CY X \$11/CY = \$75,647.00 in lieu of \$96,052.00 (per 8,732 CY).
11. The Village may be able to coordinate with area contractors for the removal and disposal of the excess topsoil stockpile material at significantly lower costs, as the material may benefit other projects.
12. 2012 unit prices are utilized for the Engineer's Opinion of Probable Cost.

SUB TOTAL:	\$1,153,232.50
CONTINGENCY (10%):	\$115,323.25
PREPARATION OF CONTRACT PROPOSALS FOR BIDDING, SUBSEQUENT CONTRACT AWARD AND CONSTRUCTION OBSERVATION (4%):	\$50,742.23
TOTAL:	\$1,319,297.98



PROJECT LOCATION

REVISIONS		
#	DATE:	BY:
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		



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 Illinois Professional Design Firm
 # 184-001322

**VILLAGE OF HOMER GLEN
 CEDAR BROOKE
 LOCATION MAP**



SHEET ORIENTATION

DATE: 7/19/2012		
HORIZ. SCALE: N.T.S.		
DWN. BY: RCB	DSN. BY: MJA	CHK. BY: MJA
PROJECT NO. 86120056		
SHEET NO.		

Exhibit D