

# OPINION OF PROBABLE CONSTRUCTION COST FOR

#### HERITAGE BUILDING GROUP

## GAUGLER TRACT - RESIDENTIAL DEVELOPMENT

NEW HANOVER TOWNSHIP, MONTGOMERY COUNTY, PA 9/6/2007

BEI#: P03-0109.01

#### Prepared by: BOHLER ENGINEERING, INC 1600 MANOR DRIVE, CHALFONT, PA 18914

			Prepared By: Checked By:	GD DW
	QUANTITY	<u>UNIT</u>	UNIT COST	TOTAL COST
SITE WORK				
Construction mobilization & Stakeout Site Monuments Site Pins Belgian Block Curb Concrete Curb Roadway Bituminous Pavement 1-1/2 " Wearing Course 1-1/2" Binder Course 5" BCBC 6" 2A Stone Subbase Residential Driveways 1-1/2" Wearing Course 1-1/2" Binder Course 4" 2A Stone Subbase 4" Concrete sidewalk Concrete Driveway Aprons	1 44 82 6,024 594 11,670 11,670 11,670 4,838 4,838 4,838 23,541 1,620	LS EA LF LF SY SY SY SY SY SY SY SF SF	\$50,000.00 \$225.00 \$95.00 \$9.00 \$10.00 \$3.50 \$4.00 \$7.00 \$9.00 \$3.50 \$4.00 \$6.00 \$3.20 \$13.00	\$50,000.00 \$9,900.00 \$7,790.00 \$54,216.00 \$5,940.00 \$40,845.00 \$46,680.00 \$105,030.00 \$16,933.00 \$19,352.00 \$29,028.00 \$75,331.20 \$21,060.00
		-	Subtotal:	\$563,795.20
EARTHWORK				
Strip Topsoil Respread Topsoil Cut to Fill Import & Place Fill Rock Excavation	30,639 25,522 47,542 47,542 1,915	CY CY CY CY CY	\$4.00 \$4.00 \$10.00 \$18.00 \$2.00	\$122,556.00 \$102,088.00 \$475,420.00 \$855,756.00 \$3,830.00 \$1,559,650.00
STRIPING & SIGNAGE				
Painted Stop Bars Painted Crosswalk Painted Directional Arrows Striping Street Signs Traffic Control Signs	4 1 4 1 4 40	EA LS EA LS EA EA	\$100.00 \$700.00 \$80.00 \$250.00 \$300.00 \$200.00	\$400.00 \$700.00 \$320.00 \$250.00 \$1,200.00 \$8,000.00

### STORM DRAINAGE

STORM DRAINAGE				
Detention Basin Construction 15" RCP 18" RCP 21" RCP 24" RCP 24" x 38" RCP Manholes Type M Inlets Double Type M Inlet Type C Inlets 4' x 4' Outlet structure 24" Concrete Headwall 24" x 38" Concrete Headwall 42" Concrete Headwall 48" Concrete Headwall D50= 12" Rip Rap, with Filter Fabric	1 848 567 199 1,240 36 6 4 1 34 1 1 2 2	LS LF LF LF EA EA EA EA EA EA EA CY	\$50,000.00 \$16.00 \$17.00 \$19.00 \$22.00 \$36.00 \$4,000.00 \$1,080.00 \$1,500.00 \$1,240.00 \$3,400.00 \$1,600.00 \$1,800.00 \$2,080.00 \$68.00	\$50,000.00 \$13,568.00 \$9,639.00 \$3,781.00 \$27,280.00 \$1,296.00 \$24,000.00 \$4,320.00 \$1,500.00 \$42,160.00 \$1,040.00 \$1,600.00 \$3,600.00 \$4,160.00 \$7,820.00
LANDSCAPING				
Earnst Basin Seed (ernmx-127) Mulch Shade Trees (2 1/2-3" cal.) Evergreen Trees (6-7' ht.) Ornamental Trees (2-1/2-3" cal., 8-14' ht.) Shrubs (24-36" ht.)	55,000 60 150 39 33 263	SF CY EA EA EA	\$0.18 \$40.00 \$400.00 \$180.00 \$275.00 \$50.00	\$9,900.00 \$2,400.00 \$60,000.00 \$7,020.00 \$9,075.00 \$13,150.00
LIGHTING				
100W single pole mounted street light	9	EA _	\$2,200.00	\$19,800.00
			Subtotal:	\$19,800.00
UTILITY	:4	E4	\$2,000.00	\$8,000.00
Utility Pole Relocation	4	EA -	Subtotal:	\$8,000.00
CON EDGGION & GED CONTROL			Subtotai.	\$6,000.00
SOIL EROSION & SED. CONTROL				
30" Silt Fence Supter Silt Fence Tree Protection Fence Temporary 18" RCP Barrel Temporary Riser Erosion Control Lining Construction Entrance	330 1,280 300 10 1 590 2	LF LF LF EA SY EA	\$3.00 \$4.00 \$5.00 \$19.00 \$250.00 \$1.50 \$1,800.00	\$990.00 \$5,120.00 \$1,500.00 \$190.00 \$250.00 \$885.00 \$3,600.00
WATER				
10" DIP	779	LF	\$34.00	\$26,486.00
		-	Subtotal	\$26,486.00

#### SANITARY

8" PVC	2932	LF	\$28.00	\$82,096.00
10" PVC	1715	LF	\$22.40	\$38,416.00
4' Diameter Manhole (0'-8' deep)	4	EA	\$1,450.00	\$5,800.00
4' Diameter Manhole (8'-12' deep)	10	EA	\$2,000.00	\$20,000.00
4' Diameter Manhole (12'-16' deep)	1	EA	\$2,750.00	\$2,750.00
		_	Subtotal	\$149,062.00
AS-BUILT				
Preparation of As-Built Drawings	1	LS	\$2,000.00	\$2,000.00
		-	Subtotal:	\$2,000.00

SUBTOTAL:

\$2,652,907.20

CONSTRUCTION STAKEOUT:

\$79,587.22

15% CONTINGENCY:

\$397,936.08

TOTAL:

\$3,130,430.50

#### NOTE:

- 1.) This preliminary opinion of probable construction cost has been prepared based upon review of plans entitled Final Land Development Plans as prepared by Bohler Engineering, Inc., dated 12/30/04. Last revised 9/6/07.
- 2.) The unit pricing included is appropriate and is based upon available pricing indices or this firms historical experience in the general geographical area as a result of same, it is only approximate. For utilization as a budget estimate, same must be updated by current market conditions and other constructability factors.
- 3.) This opinion of probable construction cost excludes costs that may be associated with the dewatering, unforeseen sub-surface conditions, environmental conditions, earth work, adverse weather conditions, material requirements, temporary utility installations, electrical transformer costs, water meter costs, etc. This estimate is not to be utilized for proforma or finance purposes.

P.001/004 F-482 T-322 New Britain Corporate Center 1600 Manor Drive, Suite 200 Chalfont, PA 18914 215,996,9100 215.996.9102 fax

January 17, 2007 Via Fed Ex - Economy

Doug Brown, P.E. Brown Consulting Engineers, LLC Allentown, PA 18106-0192

Re:

Proposed Gaugler Residential

Route 663

New Hanover Township Montgomery County, PA

P03-0109.01

Dear Doug:

Euclosed please find one (1) copy of the Opinion of Probable Construction Cost as dated 12/26/06. The OPC has been revised to include additional construction costs per your November 21, 2006 review letter as follows:

1. Construction Mobilization & Stakeout \$50,000

2. Site Clearing & Earthwork Total \$2,905,042

3. Detention Basin Construction \$50,000

4. Site Monuments & Pins Site Monuments=\$9,900 and Site Pins=\$7,790

5. Utility Pole Relocation \$8,000

6. Separation Costs for PaDOT Improvements along North Charlotte Street Bonded through PennDOT.

7. Preparation of As-Built Drawings \$20,000

Thank you for your attention to this matter, please call me with any questions.

Sincerely,

David E. Weaver, P.E.

DEW/cn

encs.

508,480.9900

cc: Nina Seidel, Heritage Building Group

518,438,9900

Frank Bartle, Esq.

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Other Office Locations:

E Warrenton, VA ■ Sterling, VA ■ Ronkonkoma, NY ■ Warren, NJ E Towson, MD ■ Purchase, NY E Southborough, MA R Albany, NY 540.349.4500 703.709.9500 410.821,7900 908,668,8300 631,738,1200 914,251,9800

Civil & Consulting Engineers • Surveyors • Traffic Consultants • Environmental & Geotechnical Engineers www.bohlereng.com



# OPINION OF PROBABLE CONSTRUCTION COST FOR

#### HERITAGE BUILDING GROUP

#### GAUGLER TRACT - RESIDENTIAL DEVELOPMENT NEW HANOVER TOWNSHIP, MONTGOMERY COUNTY, PA 12/26/2006 BEI #! P03-0109.01

#### Prepared by: BOHLER ENGINEERING, INC 1600 MANOR DRIVE, CHALFONT, PA 18914

			Prepared By: Checked By:	LC DW
	QUANTITY	<u>UNIT</u>	UNIT_COST	TOTAL COST
SITE WORK				iş.
JII WOUNT				
Construction mobilization & Stakeout	1	LS	\$50,000.00	\$50,000.00
Site Monuments	44	EA	\$225.00	\$9,900.00
Site Pins	82	EA	\$95.00 \$9.00	\$7,790.00
Belgian Block Curb	6,024 594	LF LF		\$54,216.00 \$5,940.00
Concrete Curb	594	LF	\$10.00	30,340.00
Roadway Bituminous Pavement 1-1/2 " Wearing Course	11,670	SY	\$3.50	\$40,845.00
1-1/2 Wearing Course 1-1/2" Binder Course	11,670	SY	\$4.00	\$46,680.00
6" BCBC	11,670	SY	\$7.00	\$81,690.00
6" 2A Stone Subbase	11,670	SY	\$9.00	\$105,030.00
Residential Driveways			****	
1-1/2" Wearing Course	4,838	SY	\$3.50	\$16,933.00
1-1/2" Binder Course	4,838	SY	\$4.00	\$19,352.00
4" 2A Stone Subbase	4,838	SY	\$6.00	\$29,028.00
4" Concrete sidewalk	23,541	SF	\$3.20	\$75,331.20
Concrete Driveway Aprons	1,620	SF	\$13.00	\$21,060.00
		-	Subtotal:	\$563,795.20
EARTHWORK				<b>€</b>
Strip Topsoil	33,837	CY	\$4.00	\$135,348.00
Respread Topsoil	27,845	CY	\$4.00	\$111,380.00
Cut to Fill	94,803	CY	\$10.00	\$948,030.00
Import & Place Fill	94,803	CY	\$18.00	\$1,706,454.00
Export Fill	0	CY	\$12,00	\$0.00
Rock Excavation	1,915	CY	\$2.00	\$3,830.00
			Subtotal:	\$2,905,042.00
STRIPING & SIGNAGE				
	8		M400 00	0.400.00
Painted Stop Bars	4	EA	\$100.00	\$400.00
Painted Crosswalk	1	LS	\$700.00	\$700.00
Painted Directional Arrows	4	EΑ	\$80.00	\$320.00
Striping	1	LS	\$250.00	\$250.00
Street Signs	4	EA	\$300.00	\$1,200.00 \$8,000.00
Traffic Control Signs	40 .	EA	\$200.00	φο,υυυ.υυ
		•	Subtotal:	\$10,870.00

### STORM DRAINAGE

STORM DRAINAGE				
Detention Basin Construction 15" RCP 18" RCP 21" RCP 24" RCP 24" x 38" RCP 42" RCP 48" RCP Manholes Type M Inlets Double Type M Inlet Type C Inlets 4' x 4' Outlet structure 24" Concrete Headwall 24" x 38" Concrete Headwall	1 1168 528 252 1043 36 246 163 5 4 1 34 1	LS LF LF LF LF LF LF LF LF LF LF LF LF LF	\$50,000.00 \$16.00 \$17.00 \$19.00 \$22.00 \$36.00 \$47.00 \$59.00 \$4,000.00 \$1,080.00 \$1,500.00 \$1,240.00 \$3,400.00 \$1,600.00 \$1,600.00	\$50,000.00 \$18,688.00 \$8,976.00 \$4,788.00 \$22,946.00 \$1,296.00 \$11,562.00 \$9,617.00 \$20,000.00 \$4,320.00 \$1,500.00 \$42,160.00 \$3,400.00 \$1,600.00 \$3,600.00
42" Concrete Headwall	2	EA	\$2,080.00	\$4,160.00
48" Concrete Headwall	115	CY	\$68.00	\$7,820.00
D50= 12" Rip Rap, with Filter Fabric	2.2.2	-	Subtotal:	\$217,473.00
LANDSCAPING			23 186	00 003 04
Eamst Basin Seed (emmx-127)	55,000	SF	\$0.18 \$40.00	\$9,900.00 \$2,400.00
Mulch	60	GY EA	\$350.00	\$52,500.00
Shade Trees (2 1/2-3" cal.)	150 39	EA	\$180.00	\$7,020.00
Evergreen Trees (6-7' ht.)	33	EA	\$275.00	\$9,075.00
Ornamental Trees (2-1/2-3" cal., 8-14' ht.)	263	EA	\$45.00	\$11,835.00
Shrubs (24-36" ht.)		_		600 700 00
			Subtotal:	\$92,730.00
LIGHTING				
100W single pole mounted street light	9	EA	\$2,200.00	\$19,800.00
		•	Subtotal:	\$19,800,00
UTILITY				## 000 OD
Utility Pole Relocation	4	EA	\$2,000.00	\$8,000.00
			Subtotal:	\$8,000.00
SOIL EROSION & SED. CONTROL				4044.40
30" Silt Fence	330	LF	\$3.00	\$990.00
Supter Silt Fence	1,280	LF	\$4.00	\$5,120.00 \$1,500.00
Tree Protection Fence	300 -	LF	\$5.00 £10.00	\$1,500.00
Temporary 18" RCP Barrel	10	LF EA	\$19.00 \$250.00	\$250.00
Temporary Riser	1	EA SY	\$250.00 \$1.50	\$885.00
Erosion Control Lining	590 2	EA	\$1,800.00	\$3,600,00
Construction Entrance	2	D.		
*			Subtotal:	\$12,535.00
AS-BUILT				
Preparation of As-Built Drawings	1	LS	\$2,000.00	\$2,000.00
ÿ			Subtotal:	\$2,000.00

SUBTOTAL: \$3,832,245.20

CONSTRUCTION STAKEOUT:

\$114,967.36 \$574,836.78

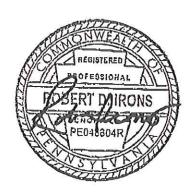
15% CONTINGENCY: TOTAL:

\$4,522,049.34

NOTE:

1.) This preliminary opinion of probable construction cost has been prepared based upon review of plans entitled Final Land Development Plans as prepared by Bohler Engineering, Inc., dated 12/30/04. Last revised 12/05/06.

- 2.) The unit pricing included is appropriate and is based upon available pricing indices or this firms historical experience in the general geographical area as a result of same, it is only approximate. For utilization as a budget estimate, same must be updated by current market conditions and other constructability factors.
- 3.) This opinion of probable construction cost excludes costs that may be associated with the dewatering, unforeseen sub-surface conditions, environmental conditions, earth work, adverse weather conditions, material requirements, temporary utility installations, electrical transformer costs, water meter costs, etc. This estimate is not to be utilized for proforma or finance purposes.





**New Britain Corporate Center** 1600 Manor Drive, Suite 200 Chalfont, PA 18914 215,996,9100 215.996.9102 fax

September 12, 2006 Via Fed Ex - Economy

Doug Brown, P.E. Brown Consulting Engineers, LLC Allentown, PA 18106-0192

Re:

Proposed Gaugler Residential

Route 663

New Hanover Township Montgomery County, PA

P03-0109.01

Dear Doug:

Enclosed please find one (1) copy of the Opinion of Probable Construction Cost as dated 9/12/06, which has been revised to correlate to the land development plans, dated 8/30/06.

Thank you for your attention to this matter, please call me with any questions.

Sincerely,

BOHLER ENGINEERING, INC.

David E. Weaver, P.E.

DEW/jh

cc: Nina Seidel, Heritage Building Group

Frank Bartle, Esq.

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Other Office Locations:



#### OPINION OF PROBABLE CONSTRUCTION COST FOR

### HERITAGE BUILDING GROUP

## GAUGLER TRACT - RESIDENTIAL DEVELOPMENT

NEW HANOVER TOWNSHIP, MONTGOMERY COUNTY, PA

9/12/2006 BEI #: P03-0109.01

### Propared by: BOHLER ENGINEERING, INC 1600 MANOR DRIVE, CHALFONT, PA 18914

*			Prepared By: Checked By:	LC DW
	QUANTITY	UNIT	UNIT COST	TOTAL COST
SITE WORK				
Belgian Block Curb	6,024	LF	\$9.00	\$54,216.00
Concrete Curb	594	LF	\$10.00	\$5,940.00
Roadway Bituminous Pavement	44.070	ov.	<b>#0 #0</b>	040 D47 00
1-1/2" Wearing Course 1-1/2" Binder Course	11,670	SY SY	\$3.50	\$40,845.00
5" BCBC	11,670 11,670	SY	\$4.00	\$46,680.00
6" 2A Stone Subbase	11,670	SY	\$7.00 \$9.00	\$81,690.00 \$105,030.00
Residential Driveways	11,070	31	φ9.00	\$105,050,00
1-1/2" Wearing Course	4,838	SY	\$3.50	\$16,933.00
1-1/2" Rinder Course	4 838	SY	\$4.00	\$19,352.00
4" 2A Stone Subbase	4,838	SY	\$6.00	\$29,028.00
4" Concrete sidewalk	23,541	ŞF	\$3.20	\$75,331.20
Concrete Driveway Aprons	1,620	SF	\$13.00	\$21,060.00
		-	Subtotal;	\$496,105.20
STRIPING & SIGNAGE			ountotal.	0.100,100,20
Painted Stop Bars	4	EA	\$100.00	\$400.00
Painted Crosswalk	1	LS	\$700.00	\$700.00
Painted Directional Arrows	4	EA	\$80,00	\$320.00
Striping	1	LS	\$250.00	\$250.00
Street Signs	4	EA	\$300,00	\$1,200.00
Traffic Control Signs	40	EA	\$200.00	\$8,000.00
		0 <del>.=</del>	Subtotal:	\$10,870.00
STORM DRAINAGE				
15" RCP	1168	LF	\$16.00	\$18,688.00
18" RCP	528	LF	\$17.00	\$8,976.00
21" RCP	252	LF	\$19.00	\$4,788.00
24" RCP	1043	LF	\$22.00	\$22,946,00
24" x 38" RCP	36	LF	\$36.00	\$1,296.00
42" RCP	246	LF	\$47.00	\$11,562.00
48" RCP	163	LF	\$59.00	\$9,617.00
Manholes Trace Milelan	5	EA	\$4,000.00	\$20,000.00
Type M Inlets	4	EA	\$1,080.00	\$4,320.00
Double Type M Inlet Type C Inlets	1	EA	\$1,500.00	\$1,500.00
4' x 4' Outlet structure	34 1	EA	\$1,240.00	\$42,160.00
24" Concrete Headwall	1	ea ea	\$3,400.00 \$1,040.00	\$3,400.00 \$1,040.00
24" x 38" Concrete Headwall	1	EA	\$1,600.00	\$1,600.00
		1	\$ 1,000,00	0 11000100

SEP.13'20	06 06:35 2159969102	BOHLER PA			#7082 P.003
	42" Concrete Headwall 48" Concrete Headwall D50= 12" Rip Rap, with Filter Fabric	2 2 115	EA EA ÇY	\$1,800.00 \$2,080.00 \$68.00	\$3,600.00 \$4,160.00 \$7,820.00
			_	Subtotal:	\$167,473.00
	LANDSCAPING				
	Earnst Basin Seed (emmx-127) Mulch Shade Trees (2 1/2-3" cal.) Evergreen Trees (6-7' ht.) Ornamental Trees (2-1/2-3" cal., 8-14' ht.) Shrubs (24-36" ht.)	55,000 60 150 39 33 263	SF CY EA EA EA	\$0,18 \$40.00 \$350,00 \$180.00 \$275.00 \$45.00	\$9,900.00 \$2,400.00 \$52,500,00 \$7,020.00 \$9,075.00 \$11,835.00
	LIGHTING				
	100W single pole mounted street light	9	EA	\$2,200.00	\$19,800.00
			_	Subtotal:	\$19,800.00
	SOIL EROSION & SED. CONTROL				
	30" Silt Fence Supter Silt Fence Tree Protection Fence Temporary 18" RCP Barrel Temporary Riser Erosion Control Lining Construction Entrance	330 1,280 300 10 1 590 2	LF LF LF EA SY EA	\$3.00 \$4.00 \$5.00 \$19.00 \$250.00 \$1.50 \$1,800.00	\$990.00 \$5,120,00 \$1,500.00 \$190.00 \$250.00 \$885.00 \$3,600.00
		· 4.		A. 107A741	\$700 F40 F0

SUBTOTAL:

\$799,513.20

CONSTRUCTION STAKEOUT:

\$23,985,40

15% CONTINGENCY:

\$119,926.98

TOTAL:

\$943,425.58

#### NOTE:

- 1.) This preliminary opinion of probable construction cost has been prepared based upon review of plans entitled Preliminary Land Development Plans as prepared by Bohler Engineering, P.C., dated 12/30/04. Last revised 8/30/06.
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