

306-B-007

557 Riverside St.

Fabrication shop

Phoenix Welding,

**00235 Proposed Building (pre)**

Type III 24-hr Rainfall=3.00" (2-Year Storm)

Prepared by SEBAGO TECHNICS INC.

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7/15/05

Area (sf)	CN	Description
14,669	98	Paved parking & roofs
11,509	80	>75% Grass cover, Good, HSG D
3,662	77	Woods, Good, HSG D
7,070	73	Brush, Good, HSG D
36,910	86	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.3	150	0.0230	0.1		<b>Sheet Flow, A to B</b> Grass: Dense n= 0.240 P2= 3.00"
15.9	141	0.0035	0.1		<b>Shallow Concentrated Flow, B to C</b> Forest w/Heavy Litter Kv= 2.5 fps
35.2	291	Total			

**Subcatchment 4S: 4S**

Runoff = 4.60 cfs @ 12.32 hrs, Volume= 0.472 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr Rainfall=3.00"

Area (sf)	CN	Description
57,791	84	50-75% Grass cover, Fair, HSG D
149,814	77	Woods, Good, HSG D
5,055	98	Paved parking & roofs
2,636	91	Gravel roads, HSG D
215,296	80	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.1	135	0.0370	0.2		<b>Sheet Flow, A to B</b> Grass: Short n= 0.150 P2= 3.00"
4.8	291	0.0045	1.0		<b>Shallow Concentrated Flow, B to C</b> Grassed Waterway Kv= 15.0 fps
7.0	215	0.0105	0.5		<b>Shallow Concentrated Flow, C to D</b> Woodland Kv= 5.0 fps
21.9	641	Total			

**Subcatchment 5S: (new node)**

Runoff = 0.42 cfs @ 12.54 hrs, Volume= 0.054 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr Rainfall=3.00"

Area (sf)	CN	Description
29,411	77	Woods, Good, HSG D

**00235 Proposed Building (pre)**

Type III 24-hr Rainfall=3.00" (2-Year Storm)

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
32.7	150	0.0170	0.1		<b>Sheet Flow, A to B</b> Woods: Light underbrush n= 0.400 P2= 3.00"
3.7	135	0.0150	0.6		<b>Shallow Concentrated Flow, B to C</b> Woodland Kv= 5.0 fps
36.4	285	Total			

**Subcatchment 6S: (new node)**

Runoff = 0.47 cfs @ 12.46 hrs, Volume= 0.056 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr Rainfall=3.00"

Area (sf)	CN	Description
30,264	77	Woods, Good, HSG D

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
29.5	150	0.0220	0.1		<b>Sheet Flow, A to B</b> Woods: Light underbrush n= 0.400 P2= 3.00"
1.3	40	0.0100	0.5		<b>Shallow Concentrated Flow, B to C</b> Woodland Kv= 5.0 fps
30.8	190	Total			

**Subcatchment 7S: 7S**

Runoff = 4.19 cfs @ 12.17 hrs, Volume= 0.350 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr Rainfall=3.00"

Area (sf)	CN	Description
47,117	98	Paved parking & roofs
7,477	91	Gravel roads, HSG D
6,963	77	Woods, Good, HSG D
26,146	84	50-75% Grass cover, Fair, HSG D
6,215	80	>75% Grass cover, Good, HSG D
93,918	91	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.5	120	0.0208	0.2		<b>Sheet Flow, A to B</b> Grass: Short n= 0.150 P2= 3.00"
0.7	70	0.0286	1.7		<b>Shallow Concentrated Flow, B to C</b> Nearly Bare & Untilled Kv= 10.0 fps
0.1	17	0.0200	2.9		<b>Shallow Concentrated Flow, C to D</b> Paved Kv= 20.3 fps
12.3	207	Total			

**00235 Proposed Building (pre)**

Type III 24-hr Rainfall=3.00" (2-Year Storm)

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**Reach SP1: (new node)**

Inflow = 1.88 cfs @ 12.15 hrs, Volume= 0.151 af  
Outflow = 1.88 cfs @ 12.15 hrs, Volume= 0.151 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP2: (new node)**

Inflow = 0.34 cfs @ 12.28 hrs, Volume= 0.035 af  
Outflow = 0.34 cfs @ 12.28 hrs, Volume= 0.035 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP3: (new node)**

Inflow = 0.87 cfs @ 12.49 hrs, Volume= 0.108 af  
Outflow = 0.87 cfs @ 12.49 hrs, Volume= 0.108 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP4: (new node)**

Inflow = 4.60 cfs @ 12.32 hrs, Volume= 0.472 af  
Outflow = 4.60 cfs @ 12.32 hrs, Volume= 0.472 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP5: (new node)**

Inflow = 0.42 cfs @ 12.54 hrs, Volume= 0.054 af  
Outflow = 0.42 cfs @ 12.54 hrs, Volume= 0.054 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP6: (new node)**

Inflow = 0.47 cfs @ 12.46 hrs, Volume= 0.056 af  
Outflow = 0.47 cfs @ 12.46 hrs, Volume= 0.056 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP7: Site Stormdrain Network**

Inflow = 4.19 cfs @ 12.17 hrs, Volume= 0.350 af  
Outflow = 4.19 cfs @ 12.17 hrs, Volume= 0.350 af, Atten= 0%, Lag= 0.0 min

**00235 Proposed Building (pre)**

*Type III 24-hr Rainfall=3.00" (2-Year Storm)*

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Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**00235 Proposed Building (pre)**

Type III 24-hr Rainfall=4.70" (10-Year Storm)

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
Runoff by SCS TR-20 method, UH=SCS, Type III 24-hr Rainfall=4.70"  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: 1S**

Tc=11.1 min CN=91 Area=40,652 sf Runoff= 3.26 cfs 0.271 af

**Subcatchment 2S: 2S**

Tc=18.1 min CN=73 Area=23,382 sf Runoff= 0.89 cfs 0.084 af

**Subcatchment 3S: 3S**

Tc=35.2 min CN=86 Area=36,910 sf Runoff= 1.65 cfs 0.210 af

**Subcatchment 4S: 4S**

Tc=21.9 min CN=80 Area=215,296 sf Runoff= 9.88 cfs 1.006 af

**Subcatchment 5S: (new node)**

Tc=36.4 min CN=77 Area=29,411 sf Runoff= 0.97 cfs 0.123 af

**Subcatchment 6S: (new node)**

Tc=30.8 min CN=77 Area=30,264 sf Runoff= 1.08 cfs 0.127 af

**Subcatchment 7S: 7S**

Tc=12.3 min CN=91 Area=93,918 sf Runoff= 7.29 cfs 0.626 af

**Reach SP1: (new node)**

Inflow= 3.26 cfs 0.271 af  
Outflow= 3.26 cfs 0.271 af

**Reach SP2: (new node)**

Inflow= 0.89 cfs 0.084 af  
Outflow= 0.89 cfs 0.084 af

**Reach SP3: (new node)**

Inflow= 1.65 cfs 0.210 af  
Outflow= 1.65 cfs 0.210 af

**Reach SP4: (new node)**

Inflow= 9.88 cfs 1.006 af  
Outflow= 9.88 cfs 1.006 af

**Reach SP5: (new node)**

Inflow= 0.97 cfs 0.123 af  
Outflow= 0.97 cfs 0.123 af

**Reach SP6: (new node)**

Inflow= 1.08 cfs 0.127 af  
Outflow= 1.08 cfs 0.127 af

**Reach SP7: Site Stormdrain Network**

Inflow= 7.29 cfs 0.626 af  
Outflow= 7.29 cfs 0.626 af

**Runoff Area = 10.786 ac Volume = 2.446 af Average Depth = 2.72"**

**00235 Proposed Building (pre)**

Type III 24-hr Rainfall=4.70" (10-Year Storm)

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**Subcatchment 1S: 1S**

Runoff = 3.26 cfs @ 12.15 hrs, Volume= 0.271 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr Rainfall=4.70"

Area (sf)	CN	Description
24,863	98	Paved parking & roofs
15,789	80	>75% Grass cover, Good, HSG D
40,652	91	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.7	72	0.0290	0.2		<b>Sheet Flow, A to B</b> Grass: Short n= 0.150 P2= 3.00"
3.7	214	0.0190	1.0		<b>Shallow Concentrated Flow, B to C</b> Short Grass Pasture Kv= 7.0 fps
0.7	90	0.0120	2.2		<b>Shallow Concentrated Flow, C to D</b> Paved Kv= 20.3 fps
11.1	376	Total			

**Subcatchment 2S: 2S**

Runoff = 0.89 cfs @ 12.26 hrs, Volume= 0.084 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr Rainfall=4.70"

Area (sf)	CN	Description
23,382	73	Brush, Good, HSG D

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.1	80	0.0310	0.2		<b>Sheet Flow, A to B</b> Grass: Short n= 0.150 P2= 3.00"
11.0	215	0.0170	0.3		<b>Shallow Concentrated Flow, B to C</b> Forest w/Heavy Litter Kv= 2.5 fps
18.1	295	Total			

**Subcatchment 3S: 3S**

Runoff = 1.65 cfs @ 12.48 hrs, Volume= 0.210 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr Rainfall=4.70"

**00235 Proposed Building (pre)**

Type III 24-hr Rainfall=4.70" (10-Year Storm)

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Area (sf)	CN	Description
14,669	98	Paved parking & roofs
11,509	80	>75% Grass cover, Good, HSG D
3,662	77	Woods, Good, HSG D
7,070	73	Brush, Good, HSG D
36,910	86	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.3	150	0.0230	0.1		<b>Sheet Flow, A to B</b> Grass: Dense n= 0.240 P2= 3.00"
15.9	141	0.0035	0.1		<b>Shallow Concentrated Flow, B to C</b> Forest w/Heavy Litter Kv= 2.5 fps
35.2	291	Total			

**Subcatchment 4S: 4S**

Runoff = 9.88 cfs @ 12.31 hrs, Volume= 1.006 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr Rainfall=4.70"

Area (sf)	CN	Description
57,791	84	50-75% Grass cover, Fair, HSG D
149,814	77	Woods, Good, HSG D
5,055	98	Paved parking & roofs
2,636	91	Gravel roads, HSG D
215,296	80	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.1	135	0.0370	0.2		<b>Sheet Flow, A to B</b> Grass: Short n= 0.150 P2= 3.00"
4.8	291	0.0045	1.0		<b>Shallow Concentrated Flow, B to C</b> Grassed Waterway Kv= 15.0 fps
7.0	215	0.0105	0.5		<b>Shallow Concentrated Flow, C to D</b> Woodland Kv= 5.0 fps
21.9	641	Total			

**Subcatchment 5S: (new node)**

Runoff = 0.97 cfs @ 12.51 hrs, Volume= 0.123 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr Rainfall=4.70"

Area (sf)	CN	Description
29,411	77	Woods, Good, HSG D



**Subcatchment 6S: (new node)**

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
32.7	150	0.0170	0.1		Sheet Flow, A to B
3.7	135	0.0150	0.6		Woods: Light underbrush n=0.400 P2=3.00" Shallow Concentrated Flow, B to C
	285				Woodland Kv=5.0 fps
Total					
36.4					

Runoff = 1.08 cfs @ 12.44 hrs, Volume= 0.127 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=4.70"

Area (sf) CN Description

30,264	77	Woods, Good, HSG D
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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
29.5	150	0.0220	0.1		Sheet Flow, A to B
1.3	40	0.0100	0.5		Woods: Light underbrush n=0.400 P2=3.00" Shallow Concentrated Flow, B to C
Total					
190					

**Subcatchment 7S: 7S**

Runoff = 7.29 cfs @ 12.17 hrs, Volume= 0.626 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=4.70"

Area (sf) CN Description

47,117	98	Paved parking & roofs			
7,477	91	Gravel roads, HSG D			
6,963	77	Woods, Good, HSG D			
26,146	84	50-75% Grass cover, Fair, HSG D			
6,215	80	>75% Grass cover, Good, HSG D			
Weighted Average					
93,918					

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.5	120	0.0208	0.2		Sheet Flow, A to B
0.7	70	0.0286	1.7		Grass: Short n=0.150 P2=3.00" Shallow Concentrated Flow, B to C
0.1	17	0.0200	2.9		Nearly Bare & Untilled Kv=10.0 fps Shallow Concentrated Flow, C to D
Total					
207					

12.3

**Reach SP1: (new node)**

Inflow = 3.26 cfs @ 12.15 hrs, Volume = 0.271 af  
 Outflow = 3.26 cfs @ 12.15 hrs, Volume = 0.271 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP2: (new node)**

Inflow = 0.89 cfs @ 12.26 hrs, Volume = 0.084 af  
 Outflow = 0.89 cfs @ 12.26 hrs, Volume = 0.084 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP3: (new node)**

Inflow = 1.65 cfs @ 12.48 hrs, Volume = 0.210 af  
 Outflow = 1.65 cfs @ 12.48 hrs, Volume = 0.210 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP4: (new node)**

Inflow = 9.88 cfs @ 12.31 hrs, Volume = 1.006 af  
 Outflow = 9.88 cfs @ 12.31 hrs, Volume = 1.006 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP5: (new node)**

Inflow = 0.97 cfs @ 12.51 hrs, Volume = 0.123 af  
 Outflow = 0.97 cfs @ 12.51 hrs, Volume = 0.123 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP6: (new node)**

Inflow = 1.08 cfs @ 12.44 hrs, Volume = 0.127 af  
 Outflow = 1.08 cfs @ 12.44 hrs, Volume = 0.127 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP7: Site Stormdrain Network**

Inflow = 7.29 cfs @ 12.17 hrs, Volume = 0.626 af  
 Outflow = 7.29 cfs @ 12.17 hrs, Volume = 0.626 af, Atten=0%, Lag=0.0 min



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
 Runoff by SCS TR-20 method, UH=SCS, Type III 24-hr Rainfall=5.50"  
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: 1S

Tc=11.1 min CN=91 Area=40,652 sf Runoff=3.91 cfs 0.328 af

Subcatchment 2S: 2S

Tc=18.1 min CN=73 Area=23,382 sf Runoff=1.17 cfs 0.111 af

Subcatchment 3S: 3S

Tc=35.2 min CN=86 Area=36,910 sf Runoff=2.02 cfs 0.260 af

Subcatchment 4S: 4S

Tc=21.9 min CN=80 Area=215,296 sf Runoff=12.50 cfs 1.278 af

Subcatchment 5S: (new node)

Tc=36.4 min CN=77 Area=29,411 sf Runoff=1.24 cfs 0.158 af

Subcatchment 6S: (new node)

Tc=30.8 min CN=77 Area=30,264 sf Runoff=1.38 cfs 0.163 af

Subcatchment 7S: 7S

Tc=12.3 min CN=91 Area=93,918 sf Runoff=8.74 cfs 0.758 af

Reach SP1: (new node)

Inflow=3.91 cfs 0.328 af  
 Outflow=3.91 cfs 0.328 af

Reach SP2: (new node)

Inflow=1.17 cfs 0.111 af  
 Outflow=1.17 cfs 0.111 af

Reach SP3: (new node)

Inflow=2.02 cfs 0.260 af  
 Outflow=2.02 cfs 0.260 af

Reach SP4: (new node)

Inflow=12.50 cfs 1.278 af  
 Outflow=12.50 cfs 1.278 af

Reach SP5: (new node)

Inflow=1.24 cfs 0.158 af  
 Outflow=1.24 cfs 0.158 af

Reach SP6: (new node)

Inflow=1.38 cfs 0.163 af  
 Outflow=1.38 cfs 0.163 af

Reach SP7: Site Stormdrain Network

Inflow=8.74 cfs 0.758 af  
 Outflow=8.74 cfs 0.758 af

Runoff Area = 10.786 ac Volume = 3.056 af Average Depth = 3.40"

**Subcatchment 1S: 1S**  
 Runoff = 3.91 cfs @ 12.15 hrs, Volume = 0.328 af  
 Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=5.50"

Area (sf)	CN	Description	Tc Length (min)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24,863	98	Paved parking & roofs	6.7	0.0290	0.2	Sheet Flow, A to B	
15,789	80	>75% Grass cover, Good, HSG D	3.7	0.0190	1.0	Grass: Short n= 0.150 P2= 3.00"	
40,652	91	Weighted Average	0.7	0.0120	2.2	Short Grass Pasture Kv= 7.0 fps	
11.1	376	Total	11.1			Shallow Concentrated Flow, B to C	
						Shallow Concentrated Flow, C to D	
						Paved Kv= 20.3 fps	

**Subcatchment 2S: 2S**  
 Runoff = 1.17 cfs @ 12.26 hrs, Volume = 0.111 af  
 Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=5.50"

Area (sf)	CN	Description	Tc Length (min)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23,382	73	Brush, Good, HSG D	7.1	0.0310	0.2	Sheet Flow, A to B	
18.1	295	Total	11.0	0.0170	0.3	Grass: Short n= 0.150 P2= 3.00"	
						Shallow Concentrated Flow, B to C	
						Forest w/Heavy Litter Kv= 2.5 fps	

**Subcatchment 3S: 3S**  
 Runoff = 2.02 cfs @ 12.48 hrs, Volume = 0.260 af  
 Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=5.50"

**Subcatchment 4S: 4S**

Runoff = 12.50 cfs @ 12.30 hrs, Volume = 1.278 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=5.50"

Area (sf)	CN	Description	Tc Length (min)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14,669	98	Paved parking & roots	19.3	0.0230	0.1	Sheet Flow, A to B	
11,509	80	>75% Grass cover, Good, HSG D	15.9	0.0035	0.1	Grass: Dense n=0.240 P2=3.00"	
3,662	77	Woods, Good, HSG D	35.2	291	Total	Forest w/Heavy Litter Kv=2.5 fps	
7,070	73	Brush, Good, HSG D					Weighted Average
36,910	86						Weighted Average

**Subcatchment 5S: (new node)**

Runoff = 12.24 cfs @ 12.51 hrs, Volume = 0.158 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=5.50"

Area (sf)	CN	Description	Tc Length (min)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
57,791	84	50-75% Grass cover, Fair, HSG D	10.1	0.0370	0.2	Sheet Flow, A to B	
149,814	77	Woods, Good, HSG D	4.8	0.0045	1.0	Grass: Short n=0.150 P2=3.00"	
5,055	98	Paved parking & roots	7.0	0.0105	0.5	Shallow Concentrated Flow, B to C	
2,636	91	Gravel roads, HSG D	21.9	641	Total	Grassed Waterway Kv=15.0 fps	
215,296	80						Weighted Average
215,296	80						Weighted Average

Area (sf) CN Description  
 29,411 77 Woods, Good, HSG D

**Subcatchment 6S: (new node)**

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
32.7	150	0.0170	0.1		Sheet Flow, A to B
3.7	135	0.0150	0.6		Woods: Light underbrush n=0.400 P2=3.00" Shallow Concentrated Flow, B to C
	285				Woodland Kv=5.0 fps
Total					

Runoff = 1.38 cfs @ 12.43 hrs, Volume = 0.163 af

Runoff by SCS TR-20 method, UH=SCS, Time Span=5.00-20.00 hrs, dt=0.05 hrs  
 Type III 24-hr Rainfall=5.50"

Area (sf) CN Description

30,264	77	Woods, Good, HSG D
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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
29.5	150	0.0220	0.1		Sheet Flow, A to B
1.3	40	0.0100	0.5		Woods: Light underbrush n=0.400 P2=3.00" Shallow Concentrated Flow, B to C
Total					

**Subcatchment 7S: 7S**

Runoff = 8.74 cfs @ 12.17 hrs, Volume = 0.758 af

Runoff by SCS TR-20 method, UH=SCS, Time Span=5.00-20.00 hrs, dt=0.05 hrs  
 Type III 24-hr Rainfall=5.50"

Area (sf) CN Description

47,117	98	Paved parking & roofs
7,477	91	Gravel roads, HSG D
6,963	77	Woods, Good, HSG D
26,146	84	50-75% Grass cover, Fair, HSG D
6,215	80	>75% Grass cover, Good, HSG D
93,918	91	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.5	120	0.0208	0.2		Sheet Flow, A to B
0.7	70	0.0286	1.7		Grass: Short n=0.150 P2=3.00" Shallow Concentrated Flow, B to C
0.1	17	0.0200	2.9		Nearly Bare & Untilled Kv=10.0 fps Shallow Concentrated Flow, C to D
Total					

**Reach SP1: (new node)**

Inflow = 3.91 cfs @ 12.15 hrs, Volume= 0.328 af  
 Outflow = 3.91 cfs @ 12.15 hrs, Volume= 0.328 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span=5.00-20.00 hrs, dt=0.05 hrs

**Reach SP2: (new node)**

Inflow = 1.17 cfs @ 12.26 hrs, Volume= 0.111 af  
 Outflow = 1.17 cfs @ 12.26 hrs, Volume= 0.111 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span=5.00-20.00 hrs, dt=0.05 hrs

**Reach SP3: (new node)**

Inflow = 2.02 cfs @ 12.48 hrs, Volume= 0.260 af  
 Outflow = 2.02 cfs @ 12.48 hrs, Volume= 0.260 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span=5.00-20.00 hrs, dt=0.05 hrs

**Reach SP4: (new node)**

Inflow = 12.50 cfs @ 12.30 hrs, Volume= 1.278 af  
 Outflow = 12.50 cfs @ 12.30 hrs, Volume= 1.278 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span=5.00-20.00 hrs, dt=0.05 hrs

**Reach SP5: (new node)**

Inflow = 1.24 cfs @ 12.51 hrs, Volume= 0.158 af  
 Outflow = 1.24 cfs @ 12.51 hrs, Volume= 0.158 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span=5.00-20.00 hrs, dt=0.05 hrs

**Reach SP6: (new node)**

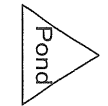
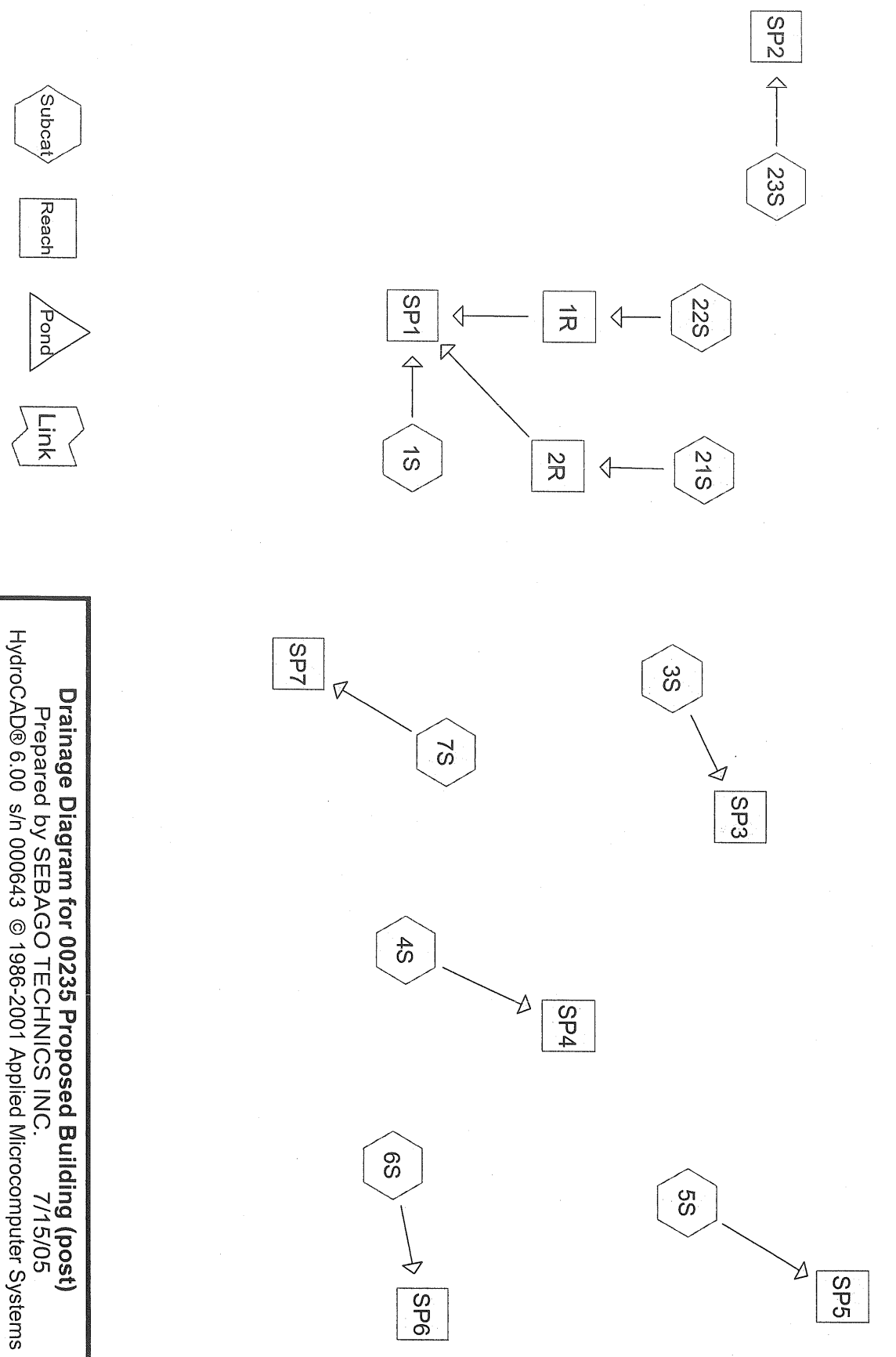
Inflow = 1.38 cfs @ 12.43 hrs, Volume= 0.163 af  
 Outflow = 1.38 cfs @ 12.43 hrs, Volume= 0.163 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span=5.00-20.00 hrs, dt=0.05 hrs

**Reach SP7: Site Stormdrain Network**

Inflow = 8.74 cfs @ 12.17 hrs, Volume= 0.758 af  
 Outflow = 8.74 cfs @ 12.17 hrs, Volume= 0.758 af, Atten=0%, Lag=0.0 min







**Drainage Diagram for 00235 Proposed Building (post)**  
 Prepared by SEBAGO TECHNICIS INC. 7/15/05  
 HydroCAD® 6.00 s/n 000643 © 1986-2001 Applied Microcomputer Systems

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
 Runoff by SCS TR-20 method, UH=SCS, Type III 24-hr Rainfall=3.00"  
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: (new node)  
 Tc=8.7 min CN=91 Area=40,652 sf Runoff=2.01 cfs 0.151 af

Subcatchment 3S: (new node)  
 Tc=35.2 min CN=86 Area=36,910 sf Runoff=0.87 cfs 0.108 af

Subcatchment 4S: (new node)  
 Tc=21.9 min CN=80 Area=215,296 sf Runoff=4.60 cfs 0.472 af

Subcatchment 5S: (new node)  
 Tc=36.4 min CN=77 Area=29,411 sf Runoff=0.42 cfs 0.054 af

Subcatchment 6S: (new node)  
 Tc=30.8 min CN=77 Area=30,264 sf Runoff=0.47 cfs 0.056 af

Subcatchment 7S: (new node)  
 Tc=12.3 min CN=91 Area=93,918 sf Runoff=4.19 cfs 0.350 af

Subcatchment 21S: (new node)  
 Tc=3.3 min CN=89 Area=14,653 sf Runoff=0.80 cfs 0.050 af

Subcatchment 22S: (new node)  
 Tc=1.9 min CN=93 Area=16,263 sf Runoff=1.04 cfs 0.066 af

Subcatchment 23S: (new node)  
 Tc=5.8 min CN=80 Area=310 sf Runoff=0.01 cfs 0.001 af

Reach 1R: (new node)  
 Inflow=1.04 cfs 0.066 af  
 Outflow=1.04 cfs 0.066 af

Reach 2R: (new node)  
 Inflow=0.80 cfs 0.050 af  
 Outflow=0.80 cfs 0.050 af

Reach SP1: (new node)  
 Inflow=3.44 cfs 0.268 af  
 Outflow=3.44 cfs 0.268 af

Reach SP2: (new node)  
 Inflow=0.01 cfs 0.001 af  
 Outflow=0.01 cfs 0.001 af

Reach SP3: (new node)  
 Inflow=0.87 cfs 0.108 af  
 Outflow=0.87 cfs 0.108 af

Reach SP4: (new node)  
 Inflow=4.60 cfs 0.472 af  
 Outflow=4.60 cfs 0.472 af

Reach SP5: (new node)

Inflow=0.42 cfs 0.054 af  
Outflow=0.42 cfs 0.054 af

Reach SP6: (new node)

Inflow=0.47 cfs 0.056 af  
Outflow=0.47 cfs 0.056 af

Reach SP7: (new node)

Inflow=4.19 cfs 0.350 af  
Outflow=4.19 cfs 0.350 af

Runoff Area = 10.966 ac Volume = 1.308 af Average Depth = 1.43"

Type III 24-hr Rainfall=3.00" (2-Year Storm)

Subcatchment 1S: (new node)

Runoff = 2.01 cfs @ 12.12 hrs, Volume = 0.151 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=3.00"

Area (sf)	CN	Description
24,863	98	Paved parking & roots
15,789	80	>75% Grass cover, Good, HSG D
40,652	91	Weighted Average
Tc Length (min)	Slope (ft/ft)	Velocity (ft/sec)
6.7	0.0290	0.2
Sheet Flow, A to B	Grass: Short n= 0.150 P2= 3.00"	
1.3	214	0.0190
Shallow Concentrated Flow, B to C	Paved Kv= 20.3 fps	
0.7	90	0.0120
Shallow Concentrated Flow, C to D	Paved Kv= 20.3 fps	
8.7	376	Total

Subcatchment 3S: (new node)

Runoff = 0.87 cfs @ 12.49 hrs, Volume = 0.108 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=3.00"

Area (sf)	CN	Description
14,669	98	Paved parking & roots
11,509	80	>75% Grass cover, Good, HSG D
3,662	77	Woods, Good, HSG D
7,070	73	Brush, Good, HSG D
36,910	86	Weighted Average
Tc Length (min)	Slope (ft/ft)	Velocity (ft/sec)
19.3	150	0.0230
Sheet Flow, A to B	Grass: Dense n= 0.240 P2= 3.00"	
15.9	141	0.0035
Shallow Concentrated Flow, B to C	Forest w/Heavy Litter Kv= 2.5 fps	
35.2	291	Total

Type III 24-hr Rainfall=3.00" (2-Year Storm)

**Subcatchment 4S: (new node)**

Runoff = 4.60 cfs @ 12.32 hrs, Volume= 0.472 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=3.00"

Area (sf)	CN	Description
57,791	84	50-75% Grass cover, Fair, HSG D
149,814	77	Woods, Good, HSG D
5,055	98	Paved parking & roofs
2,636	91	Gravel roads, HSG D
215,296	80	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.1	135	0.0370	0.2		Sheet Flow, A to B
4.8	291	0.0045	1.0		Grass: Short n= 0.150 P2= 3.00"
					Shallow Concentrated Flow, B to C
					Grassed Waterway Kv= 15.0 fps
7.0	215	0.0105	0.5		Shallow Concentrated Flow, C to D
					Woodland Kv= 5.0 fps
21.9	641	Total			

**Subcatchment 5S: (new node)**

Runoff = 0.42 cfs @ 12.54 hrs, Volume= 0.054 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=3.00"

Area (sf)	CN	Description			
29,411	77	Woods, Good, HSG D			
32.7	150	0.0170	0.1		Sheet Flow, A to B
					Woods: Light underbrush n= 0.400 P2= 3.00"
3.7	135	0.0150	0.6		Shallow Concentrated Flow, B to C
					Woodland Kv= 5.0 fps
36.4	285	Total			

**Subcatchment 6S: (new node)**

Runoff = 0.47 cfs @ 12.46 hrs, Volume= 0.056 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=3.00"

Type III 24-hr Rainfall=3.00" (2-Year Storm)

Area (sf)	CN	Description
30,264	77	Woods, Good, HSG D
Tc Length (min)	Slope (ft/ft)	Velocity (ft/sec)
29.5	150	0.0220
		Capacity (cfs)
		Description
Sheet Flow, A to B		0.1
Woods: Light underbrush n=0.400 P2=3.00"		0.5
Shallow Concentrated Flow, B to C		
Woodland Kv=5.0 fps		
190	Total	30.8

**Subcatchment 7S: (new node)**

Runoff = 4.19 cfs @ 12.17 hrs, Volume= 0.350 at

Runoff by SCS TR-20 method, UH=SCS, Time Span=5.00-20.00 hrs, dt=0.05 hrs  
 Type III 24-hr Rainfall=3.00"

Area (sf)	CN	Description
47,117	98	Paved parking & roofs
7,477	91	Gravel roads, HSG D
6,963	77	Woods, Good, HSG D
26,146	84	50-75% Grass cover, Fair, HSG D
6,215	80	>75% Grass cover, Good, HSG D
93,918	91	Weighted Average
Tc Length (min)	Slope (ft/ft)	Velocity (ft/sec)
11.5	120	0.0208
		Capacity (cfs)
		Description
Sheet Flow, A to B		0.2
Grass: Short n=0.150 P2=3.00"		1.7
Shallow Concentrated Flow, B to C		
Nearly Bare & Untilled Kv=10.0 fps		2.9
Shallow Concentrated Flow, C to D		
Paved Kv=20.3 fps		
207	Total	12.3

**Subcatchment 21S: (new node)**

Runoff = 0.80 cfs @ 12.05 hrs, Volume= 0.050 at

Runoff by SCS TR-20 method, UH=SCS, Time Span=5.00-20.00 hrs, dt=0.05 hrs  
 Type III 24-hr Rainfall=3.00"

Area (sf)	CN	Description
7,691	98	Paved parking & roofs
6,962	80	>75% Grass cover, Good, HSG D
14,653	89	Weighted Average

Subcatchment 22S: (new node)

Runoff = 1.04 cfs @ 12.03 hrs, Volume = 0.066 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=3.00"

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.3	63	0.3300	0.5		Sheet Flow, A to B
0.2	43	0.0330	3.7		Grass: Short n= 0.150 P2= 3.00"
					Shallow Concentrated Flow, B to C
					Paved Kv= 20.3 fps
0.4	91	0.0050	3.8	2.98	Circular Channel (pipe), C to D
					Diam= 12.0" Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.011
0.4	183	0.0180	7.2	5.65	Circular Channel (pipe), D to E
					Diam= 12.0" Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.011
3.3	380	Total			

Subcatchment 23S: (new node)

Runoff = 0.01 cfs @ 12.09 hrs, Volume = 0.001 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=3.00"

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	41	0.0200	1.1		Sheet Flow, A to B
					Smooth surfaces n= 0.011 P2= 3.00"
0.7	42	0.0190	1.0		Shallow Concentrated Flow, B to C
					Short Grass Pasture Kv= 7.0 fps
0.3	44	0.0200	2.9		Shallow Concentrated Flow, C to D
					Paved Kv= 20.3 fps
0.2	58	0.0100	5.4	4.21	Circular Channel (pipe), D to E
					Diam= 12.0" Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.011
0.1	34	0.0120	5.9	4.61	Circular Channel (pipe), E to F
					Diam= 12.0" Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.011
1.9	219	Total			



Tc Length (min)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.8	50	0.0200	0.1	Sheet Flow, A to B
Grass: Short n=0.150 P2=3.00"				

**Reach 1R: (new node)**

Inflow = 1.04 cfs @ 12.03 hrs, Volume= 0.066 af  
 Outflow = 1.04 cfs @ 12.03 hrs, Volume= 0.066 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach 2R: (new node)**

Inflow = 0.80 cfs @ 12.05 hrs, Volume= 0.050 af  
 Outflow = 0.80 cfs @ 12.05 hrs, Volume= 0.050 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP1: (new node)**

Inflow = 3.44 cfs @ 12.07 hrs, Volume= 0.268 af  
 Outflow = 3.44 cfs @ 12.07 hrs, Volume= 0.268 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP2: (new node)**

Inflow = 0.01 cfs @ 12.09 hrs, Volume= 0.001 af  
 Outflow = 0.01 cfs @ 12.09 hrs, Volume= 0.001 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP3: (new node)**

Inflow = 0.87 cfs @ 12.49 hrs, Volume= 0.108 af  
 Outflow = 0.87 cfs @ 12.49 hrs, Volume= 0.108 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP4: (new node)**

Inflow = 4.60 cfs @ 12.32 hrs, Volume= 0.472 af  
 Outflow = 4.60 cfs @ 12.32 hrs, Volume= 0.472 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP5: (new node)**

Inflow = 0.42 cfs @ 12.54 hrs, Volume= 0.054 af  
 Outflow = 0.42 cfs @ 12.54 hrs, Volume= 0.054 af, Atten= 0%, Lag= 0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP6: (new node)**

Inflow = 0.47 cfs @ 12.46 hrs, Volume= 0.056 af  
 Outflow = 0.47 cfs @ 12.46 hrs, Volume= 0.056 af, Atten= 0%, Lag= 0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP7: (new node)**

Inflow = 4.19 cfs @ 12.17 hrs, Volume= 0.350 af  
 Outflow = 4.19 cfs @ 12.17 hrs, Volume= 0.350 af, Atten= 0%, Lag= 0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
 Runoff by SCS TR-20 method, UH=SCS, Type III 24-hr Rainfall=4.70"  
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: (new node)

Tc=8.7 min CN=91 Area=40,652 sf Runoff=3.50 cfs 0.271 af

Subcatchment 3S: (new node)

Tc=35.2 min CN=86 Area=36,910 sf Runoff=1.65 cfs 0.210 af

Subcatchment 4S: (new node)

Tc=21.9 min CN=80 Area=215,296 sf Runoff=9.88 cfs 1.006 af

Subcatchment 5S: (new node)

Tc=36.4 min CN=77 Area=29,411 sf Runoff=0.97 cfs 0.123 af

Subcatchment 6S: (new node)

Tc=30.8 min CN=77 Area=30,264 sf Runoff=1.08 cfs 0.127 af

Subcatchment 7S: (new node)

Tc=12.3 min CN=91 Area=93,918 sf Runoff=7.29 cfs 0.626 af

Subcatchment 21S: (new node)

Tc=3.3 min CN=89 Area=14,653 sf Runoff=1.44 cfs 0.092 af

Subcatchment 22S: (new node)

Tc=1.9 min CN=93 Area=16,263 sf Runoff=1.75 cfs 0.115 af

Subcatchment 23S: (new node)

Tc=5.8 min CN=80 Area=310 sf Runoff=0.02 cfs 0.001 af

Reach 1R: (new node)

Inflow=1.75 cfs 0.115 af  
 Outflow=1.75 cfs 0.115 af

Reach 2R: (new node)

Inflow=1.44 cfs 0.092 af  
 Outflow=1.44 cfs 0.092 af

Reach SP1: (new node)

Inflow=5.99 cfs 0.478 af  
 Outflow=5.99 cfs 0.478 af

Reach SP2: (new node)

Inflow=0.02 cfs 0.001 af  
 Outflow=0.02 cfs 0.001 af

Reach SP3: (new node)

Inflow=1.65 cfs 0.210 af  
 Outflow=1.65 cfs 0.210 af

Reach SP4: (new node)

Inflow=9.88 cfs 1.006 af  
 Outflow=9.88 cfs 1.006 af

Reach SP5: (new node)

Inflow= 0.97 cfs 0.123 af  
Outflow= 0.97 cfs 0.123 af

Reach SP6: (new node)

Inflow= 1.08 cfs 0.127 af  
Outflow= 1.08 cfs 0.127 af

Reach SP7: (new node)

Inflow= 7.29 cfs 0.626 af  
Outflow= 7.29 cfs 0.626 af

Runoff Area = 10.966 ac Volume = 2.571 af Average Depth = 2.81"

**Subcatchment 1S: (new node)**

Runoff = 3.50 cfs @ 12.12 hrs, Volume = 0.271 af  
 Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=4.70"

Area (sf)	CN	Description
24,863	98	Paved parking & roots
15,789	80	>75% Grass cover, Good, HSG D
40,652	91	Weighted Average
Tc Length (min)	Slope (ft/ft)	Velocity (ft/sec)
6.7	72	0.0290
0.2		
<b>Sheet Flow, A to B</b>		
Grass: Short n=0.150 P2=3.00"		
1.3	214	0.0190
Shallow Concentrated Flow, B to C		
Paved Kv=20.3 fps		
0.7	90	0.0120
Shallow Concentrated Flow, C to D		
Paved Kv=20.3 fps		
8.7	376	Total

**Subcatchment 3S: (new node)**

Runoff = 1.65 cfs @ 12.48 hrs, Volume = 0.210 af  
 Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=4.70"

Area (sf)	CN	Description
14,669	98	Paved parking & roots
11,509	80	>75% Grass cover, Good, HSG D
3,662	77	Woods, Good, HSG D
7,070	73	Brush, Good, HSG D
36,910	86	Weighted Average
Tc Length (min)	Slope (ft/ft)	Velocity (ft/sec)
19.3	150	0.0230
0.1		
<b>Sheet Flow, A to B</b>		
Grass: Dense n=0.240 P2=3.00"		
15.9	141	0.0035
Shallow Concentrated Flow, B to C		
Forest w/Heavy Litter Kv=2.5 fps		
35.2	291	Total

**Subcatchment 4S: (new node)**

Runoff = 9.88 cfs @ 12.31 hrs, Volume = 1.006 af  
 Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=4.70"

Area (sf)	CN	Description
57,791	84	50-75% Grass cover, Fair, HSG D
149,814	77	Woods, Good, HSG D
5,055	98	Paved parking & roofs
2,636	91	Gravel roads, HSG D
215,296	80	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.1	135	0.0370	0.2		Sheet Flow, A to B
					Grass: Short n= 0.150 P2= 3.00"
4.8	291	0.0045	1.0		Shallow Concentrated Flow, B to C
					Grassed Waterway Kv= 15.0 fps
7.0	215	0.0105	0.5		Shallow Concentrated Flow, C to D
					Woodland Kv= 5.0 fps
21.9	641	Total			

**Subcatchment 5S: (new node)**

Runoff = 0.97 cfs @ 12.51 hrs, Volume = 0.123 af  
 Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=4.70"

Area (sf)	CN	Description			
29,411	77	Woods, Good, HSG D			
32.7	150	0.0170	0.1		Sheet Flow, A to B
					Woods: Light underbrush n= 0.400 P2= 3.00"
3.7	135	0.0150	0.6		Shallow Concentrated Flow, B to C
					Woodland Kv= 5.0 fps
36.4	285	Total			

**Subcatchment 6S: (new node)**

Runoff = 1.08 cfs @ 12.44 hrs, Volume = 0.127 af  
 Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=4.70"

Area (sf)	CN	Description
30,264	77	Woods, Good, HSG D
Tc Length (min)	Slope (ft/ft)	Velocity (ft/sec)
29.5	150	0.0220
1.3	40	0.0100
Sheet Flow, A to B Woods: Light underbrush n=0.400 P2=3.00"		
Shallow Concentrated Flow, B to C Woodland Kv=5.0 fps		
190	Total	

**Subcatchment 75: (new node)**

Runoff = 7.29 cfs @ 12.17 hrs, Volume= 0.626 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=4.70"

Area (sf)	CN	Description
47,117	98	Paved parking & roofs
7,477	91	Gravel roads, HSG D
6,963	77	Woods, Good, HSG D
26,146	84	50-75% Grass cover, Fair, HSG D
6,215	80	>75% Grass cover, Good, HSG D
93,918	91	Weighted Average
Tc Length (min)	Slope (ft/ft)	Velocity (ft/sec)
11.5	120	0.0208
0.7	70	0.0286
Sheet Flow, A to B Grass: Short n=0.150 P2=3.00"		
Shallow Concentrated Flow, B to C Nearly Bare & Untilled Kv=10.0 fps		
Shallow Concentrated Flow, C to D Paved Kv=20.3 fps		
207	Total	

**Subcatchment 21S: (new node)**

Runoff = 1.44 cfs @ 12.05 hrs, Volume= 0.092 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=4.70"

Area (sf)	CN	Description
7,691	98	Paved parking & roofs
6,962	80	>75% Grass cover, Good, HSG D
14,653	89	Weighted Average

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=4.70"

Runoff = 1.75 cfs @ 12.03 hrs, Volume= 0.115 af

**Subcatchment 22S: (new node)**

Tc Length (min)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.3	63	0.3300	0.5	Sheet Flow, A to B
0.2	43	0.0330	3.7	Grass: Short n= 0.150 P2= 3.00"
0.4	91	0.0050	3.8	Paved Kv= 20.3 fps
0.4	183	0.0180	7.2	Circular Channel (pipe), C to D
0.4	183	0.0180	7.2	Circular Channel (pipe), B to C
0.4	91	0.0050	3.8	Circular Channel (pipe), D to E
0.4	183	0.0180	7.2	Circular Channel (pipe), E to F
3.3	380	Total		

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=4.70"

Runoff = 0.02 cfs @ 12.09 hrs, Volume= 0.001 af

**Subcatchment 23S: (new node)**

Tc Length (min)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	41	0.0200	1.1	Sheet Flow, A to B
0.7	42	0.0190	1.0	Smooth surfaces n= 0.011 P2= 3.00"
0.3	44	0.0200	2.9	Short Grass Pasture Kv= 7.0 fps
0.3	44	0.0200	2.9	Shallow Concentrated Flow, C to D
0.2	58	0.0100	5.4	Paved Kv= 20.3 fps
0.2	58	0.0100	5.4	Circular Channel (pipe), D to E
0.1	34	0.0120	5.9	Circular Channel (pipe), E to F
0.1	34	0.0120	5.9	Circular Channel (pipe), F to G
1.9	219	Total		

Area (sf) CN Description

310	80	>75% Grass cover, Good, HSG D
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Tc Length (min)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.8	50	0.0200	0.1	Sheet Flow, A to B
Grass: Short n=0.150 P2=3.00"				

**Reach 1R: (new node)**

Inflow = 1.75 cfs @ 12.03 hrs, Volume= 0.115 af  
 Outflow = 1.75 cfs @ 12.03 hrs, Volume= 0.115 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span=5.00-20.00 hrs, dt=0.05 hrs

**Reach 2R: (new node)**

Inflow = 1.44 cfs @ 12.05 hrs, Volume= 0.092 af  
 Outflow = 1.44 cfs @ 12.05 hrs, Volume= 0.092 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span=5.00-20.00 hrs, dt=0.05 hrs

**Reach SP1: (new node)**

Inflow = 5.99 cfs @ 12.07 hrs, Volume= 0.478 af  
 Outflow = 5.99 cfs @ 12.07 hrs, Volume= 0.478 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span=5.00-20.00 hrs, dt=0.05 hrs

**Reach SP2: (new node)**

Inflow = 0.02 cfs @ 12.09 hrs, Volume= 0.001 af  
 Outflow = 0.02 cfs @ 12.09 hrs, Volume= 0.001 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span=5.00-20.00 hrs, dt=0.05 hrs

**Reach SP3: (new node)**

Inflow = 1.65 cfs @ 12.48 hrs, Volume= 0.210 af  
 Outflow = 1.65 cfs @ 12.48 hrs, Volume= 0.210 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span=5.00-20.00 hrs, dt=0.05 hrs

**Reach SP4: (new node)**

Inflow = 9.88 cfs @ 12.31 hrs, Volume= 1.006 af  
 Outflow = 9.88 cfs @ 12.31 hrs, Volume= 1.006 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span=5.00-20.00 hrs, dt=0.05 hrs

**Reach SP5: (new node)**

Inflow = 0.97 cfs @ 12.51 hrs, Volume = 0.123 af  
 Outflow = 0.97 cfs @ 12.51 hrs, Volume = 0.123 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP6: (new node)**

Inflow = 1.08 cfs @ 12.44 hrs, Volume = 0.127 af  
 Outflow = 1.08 cfs @ 12.44 hrs, Volume = 0.127 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP7: (new node)**

Inflow = 7.29 cfs @ 12.17 hrs, Volume = 0.626 af  
 Outflow = 7.29 cfs @ 12.17 hrs, Volume = 0.626 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
 Runoff by SCS TR-20 method, UH=SCS, Type III 24-hr Rainfall=5.50"  
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: (new node) Tc=8.7 min CN=91 Area=40,652 sf Runoff= 4.19 cfs 0.328 af

Subcatchment 3S: (new node) Tc=35.2 min CN=86 Area=36,910 sf Runoff= 2.02 cfs 0.260 af

Subcatchment 4S: (new node) Tc=21.9 min CN=80 Area=215,296 sf Runoff= 12.50 cfs 1.278 af

Subcatchment 5S: (new node) Tc=36.4 min CN=77 Area=29,411 sf Runoff= 1.24 cfs 0.158 af

Subcatchment 6S: (new node) Tc=30.8 min CN=77 Area=30,264 sf Runoff= 1.38 cfs 0.163 af

Subcatchment 7S: (new node) Tc=12.3 min CN=91 Area=93,918 sf Runoff= 8.74 cfs 0.758 af

Subcatchment 21S: (new node) Tc=3.3 min CN=89 Area=14,653 sf Runoff= 1.74 cfs 0.113 af

Subcatchment 22S: (new node) Tc=1.9 min CN=93 Area=16,263 sf Runoff= 2.08 cfs 0.138 af

Subcatchment 23S: (new node) Tc=5.8 min CN=80 Area=310 sf Runoff= 0.03 cfs 0.002 af

Reach 1R: (new node) Inflow= 2.08 cfs 0.138 af Outflow= 2.08 cfs 0.138 af

Reach 2R: (new node) Inflow= 1.74 cfs 0.113 af Outflow= 1.74 cfs 0.113 af

Reach SP1: (new node) Inflow= 7.18 cfs 0.579 af Outflow= 7.18 cfs 0.579 af

Reach SP2: (new node) Inflow= 0.03 cfs 0.002 af Outflow= 0.03 cfs 0.002 af

Reach SP3: (new node) Inflow= 2.02 cfs 0.260 af Outflow= 2.02 cfs 0.260 af

Reach SP4: (new node) Inflow= 12.50 cfs 1.278 af Outflow= 12.50 cfs 1.278 af

Reach SP5: (new node)

Inflow=1.24 cfs 0.158 af  
Outflow=1.24 cfs 0.158 af

Reach SP6: (new node)

Inflow=1.38 cfs 0.163 af  
Outflow=1.38 cfs 0.163 af

Reach SP7: (new node)

Inflow=8.74 cfs 0.758 af  
Outflow=8.74 cfs 0.758 af

Runoff Area = 10.966 ac Volume = 3.198 af Average Depth = 3.50"

**Subcatchment 1S: (new node)**

Runoff = 4.19 cfs @ 12.12 hrs, Volume = 0.328 af  
 Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=5.50"

Area (sf)	CN	Description
24,863	98	Paved parking & roots
15,789	80	>75% Grass cover, Good, HSG D
40,652	91	Weighted Average
Tc Length (min)	Slope (ft/ft)	Velocity (ft/sec)
6.7	72	0.0290
Sheet Flow, A to B	0.2	
Grass: Short n= 0.150 P2= 3.00"		
Shallow Concentrated Flow, B to C	2.8	
Paved Kv= 20.3 fps		
Shallow Concentrated Flow, C to D	2.2	
Paved Kv= 20.3 fps		
Shallow Concentrated Flow, C to D	0.7	0.0120
8.7	376	Total

**Subcatchment 3S: (new node)**

Runoff = 2.02 cfs @ 12.48 hrs, Volume = 0.260 af  
 Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=5.50"

Area (sf)	CN	Description
14,669	98	Paved parking & roots
11,509	80	>75% Grass cover, Good, HSG D
3,662	77	Woods, Good, HSG D
7,070	73	Brush, Good, HSG D
36,910	86	Weighted Average
Tc Length (min)	Slope (ft/ft)	Velocity (ft/sec)
19.3	150	0.0230
Sheet Flow, A to B	0.1	
Grass: Dense n= 0.240 P2= 3.00"		
Shallow Concentrated Flow, B to C	0.1	
Forest w/Heavy Litter Kv= 2.5 fps		
35.2	291	Total

**Subcatchment 4S: (new node)**

Runoff = 12.50 cfs @ 12.30 hrs, Volume = 1.278 af  
 Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=5.50"

Area (sf)	CN	Description
57,791	84	50-75% Grass cover, Fair, HSG D
149,814	77	Woods, Good, HSG D
5,055	98	Paved parking & roofs
2,636	91	Gravel roads, HSG D
215,296	80	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.1	135	0.0370	0.2		Sheet Flow, A to B
					Grass: Short n= 0.150 P2= 3.00"
4.8	291	0.0045	1.0		Shallow Concentrated Flow, B to C
					Grassed Waterway Kv= 15.0 fps
7.0	215	0.0105	0.5		Shallow Concentrated Flow, C to D
					Woodland Kv= 5.0 fps
21.9	641	Total			

**Subcatchment 5S: (new node)**

Runoff = 1.24 cfs @ 12.51 hrs, Volume = 0.158 af  
 Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=5.50"

Area (sf)	CN	Description
29,411	77	Woods, Good, HSG D

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
32.7	150	0.0170	0.1		Sheet Flow, A to B
					Woods: Light underbrush n= 0.400 P2= 3.00"
3.7	135	0.0150	0.6		Shallow Concentrated Flow, B to C
					Woodland Kv= 5.0 fps
36.4	285	Total			

**Subcatchment 6S: (new node)**

Runoff = 1.38 cfs @ 12.43 hrs, Volume = 0.163 af  
 Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=5.50"

Area (sf)	CN	Description	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
30,264	77	Woods, Good, HSG D	29.5	150	0.0220	0.1		Sheet Flow, A to B
			1.3	40	0.0100	0.5		Woods: Light underbrush n=0.400 P2=3.00"
								Shallow Concentrated Flow, B to C
								Woodland Kv=5.0 fps
190	Total		30.8					

**Subcatchment 7S: (new node)**

Runoff = 8.74 cfs @ 12.17 hrs, Volume= 0.758 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=5.50"

Area (sf)	CN	Description	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
47,117	98	Paved parking & roofs						
7,477	91	Gravel roads, HSG D						
6,963	77	Woods, Good, HSG D						
26,146	84	50-75% Grass cover, Fair, HSG D						
6,215	80	>75% Grass cover, Good, HSG D						
93,918	91	Weighted Average						

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.5	120	0.0208	0.2		Sheet Flow, A to B
					Grass: Short n=0.150 P2=3.00"
0.7	70	0.0286	1.7		Shallow Concentrated Flow, B to C
					Nearly Bare & Untilled Kv=10.0 fps
0.1	17	0.0200	2.9		Shallow Concentrated Flow, C to D
					Paved Kv=20.3 fps
12.3	207	Total			

**Subcatchment 21S: (new node)**

Runoff = 1.74 cfs @ 12.05 hrs, Volume= 0.113 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr Rainfall=5.50"

Area (sf)	CN	Description
7,691	98	Paved parking & roofs
6,962	80	>75% Grass cover, Good, HSG D
14,653	89	Weighted Average

Subcatchment 22S: (new node)

Runoff = 2.08 cfs @ 12.03 hrs, Volume = 0.138 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr Rainfall=5.50"

Tc Length (min)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.3	63	0.3300	0.5	Sheet Flow, A to B
0.2	43	0.0330	3.7	Grass: Short n= 0.150 P2= 3.00"
0.4	91	0.0050	3.8	Paved Kv= 20.3 fps
0.4	183	0.0180	7.2	Circular Channel (pipe), C to D
0.4	183	0.0180	7.2	Circular Channel (pipe), D to E
0.4	91	0.0050	3.8	Circular Channel (pipe), C to D
0.4	183	0.0180	7.2	Circular Channel (pipe), D to E
3.3	380	Total		

Subcatchment 23S: (new node)

Runoff = 0.03 cfs @ 12.09 hrs, Volume = 0.002 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr Rainfall=5.50"

Tc Length (min)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	41	0.0200	1.1	Sheet Flow, A to B
0.7	42	0.0190	1.0	Smooth surfaces n= 0.011 P2= 3.00"
0.3	44	0.0200	2.9	Shallow Concentrated Flow, B to C
0.3	44	0.0200	2.9	Short Grass Pasture Kv= 7.0 fps
0.2	58	0.0100	5.4	Shallow Concentrated Flow, C to D
0.2	58	0.0100	5.4	Paved Kv= 20.3 fps
0.2	58	0.0100	5.4	Circular Channel (pipe), D to E
0.1	34	0.0120	5.9	Circular Channel (pipe), E to F
0.1	34	0.0120	5.9	Circular Channel (pipe), E to F
1.9	219	Total		



Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.8	50	0.0200	0.1		Sheet Flow, A to B
Grass: Short n=0.150 P2=3.00"					

**Reach 1R: (new node)**

Inflow = 2.08 cfs @ 12.03 hrs, Volume= 0.138 af  
 Outflow = 2.08 cfs @ 12.03 hrs, Volume= 0.138 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach 2R: (new node)**

Inflow = 1.74 cfs @ 12.05 hrs, Volume= 0.113 af  
 Outflow = 1.74 cfs @ 12.05 hrs, Volume= 0.113 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP1: (new node)**

Inflow = 7.18 cfs @ 12.07 hrs, Volume= 0.579 af  
 Outflow = 7.18 cfs @ 12.07 hrs, Volume= 0.579 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP2: (new node)**

Inflow = 0.03 cfs @ 12.09 hrs, Volume= 0.002 af  
 Outflow = 0.03 cfs @ 12.09 hrs, Volume= 0.002 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP3: (new node)**

Inflow = 2.02 cfs @ 12.48 hrs, Volume= 0.260 af  
 Outflow = 2.02 cfs @ 12.48 hrs, Volume= 0.260 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP4: (new node)**

Inflow = 12.50 cfs @ 12.30 hrs, Volume= 1.278 af  
 Outflow = 12.50 cfs @ 12.30 hrs, Volume= 1.278 af, Atten=0%, Lag=0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP5: (new node)**

Inflow = 1.24 cfs @ 12.51 hrs, Volume= 0.158 af  
 Outflow = 1.24 cfs @ 12.51 hrs, Volume= 0.158 af, Atten= 0%, Lag= 0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP6: (new node)**

Inflow = 1.38 cfs @ 12.43 hrs, Volume= 0.163 af  
 Outflow = 1.38 cfs @ 12.43 hrs, Volume= 0.163 af, Atten= 0%, Lag= 0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Reach SP7: (new node)**

Inflow = 8.74 cfs @ 12.17 hrs, Volume= 0.758 af  
 Outflow = 8.74 cfs @ 12.17 hrs, Volume= 0.758 af, Atten= 0%, Lag= 0.0 min  
 Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

## **Exhibit 13: Signage**

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## **Signage**

The existing business sign is proposed to be relocated as shown on the Site Plan. A photograph of the existing sign is included for reference.

# EXISTING SIGN



EXHIBIT 13



**Exhibit 14: Construction Schedule**

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### Construction Schedule

August 2005	Planning Approval
August 16, 2005	Erosion Control Established
August 18, 2005	Site Work Begins
September 12, 2005	Building(s) Starts to go up
October 10, 2005	Loam and Seed site
October 10, 2005	Base Coat Paving
October 25, 2005*	Final Coat
February 2006	Interior building work Complete

\* Paving will be completed just prior to the close of the Batching plants

Ms. Kandi Talbot, Planner  
City of Portland, Maine  
City Hall  
389 Congress Street, 4<sup>th</sup> Floor  
Portland, Maine 04101

Re : Phoenix Welding Co. facilities at 557 Riverside St. Portland, Maine

Dear Ms. Talbot :

Thank you very much for the assistance given by yourself and Mr. Jim Wendel . It has been a great deal of help to us to be informed as to how to best comply with the various code issues that have been addressed.

As previously stated, it has been our understanding that our original permit was to be for both phases of the intended construction , new office and fabrication facility.

This application for an extension of the time frame of our original Building Permit will incorporate, to the best of our understanding and ability, equitable solutions to each of the points brought about in Mr. Wendel's review. Had we known that all of the items detailed by the outside consultant that was utilized were "cast in stone", we would have filed an amended plan, requested a variance, or done both as required.

In addition to being granted a Building Permit for the new fabrication shop we of course need to have the existing temporary Certificate - of - Occupancy converted to a permanent C of O.

Ref: Jim's letter of 12-22-97.  
1. Parking lot striping and final paving.

It is our intent to contract a paving contractor to lay a base coat of asphalt over an enlarged area of the "back lot" once the intended fabrication facility has been erected. Following that, at the contractor's recommendation, the finish coat of asphalt paving will be laid over the entire paved area. Once that is done the lot will be striped for parking provisions.

1A. The extended paving in front of the leech field of the septic system provides additional parking spaces at this time.

2. Sidewalk elevation.

No side walk has been installed in front of the septic system for two reasons. First, is that we have more than adequate room to park all of the employee's vehicles as well as sales persons who call on us. We do no "retail" business, therefore customers do not come here. Secondly, we are told that a City sewer will be installed under Riverside St. in the very near future.

Phoenix Welding

557 Riverside Street  
Portland, Maine 04103

207-797-5832  
FAX 207-797-5833



COPY

20 Mar., 1998



This of course alleviate the requirement of the septic system and leach field. The mounded leach field will be removed after we are connected to the new City Sewage system. The resultant area may become a lawn, or it could become an additional parking lot.

3. Wood Cribbing

Once again we should have requested a variance or submitted an amended plan. The 30" high wood timber retaining wall was installed on two sides of the mounded leach field in order to prevent it from "migrating" over the parking lot. It will be removed along with the mound once we have connected to the sewer.

4. Sidewalk elevation

The concrete walk in front of the new office building was installed at the wrong elevation. We intend to install pre-cast concrete curb blocks that will be pinned to the pavement in order to provide a safety barrier between the parking elevation and the walk way surface.

5. Pine tree barrier.

The southerly pine tree barrier, actually west-southwesterly, was not installed because trees cannot be sustained in what is an *extremely* wet sub-surface drainage swale.

If a "buffer" is required between us and the abutter, we will install a fence. The least long term maintenance requirement would be a chain link fence with slats.

This area is where a lot of the snow from the parking lot snow plowing operations gets piled.

6. Tractor - trailer turn around.

The tractor-trailer units that service our supply and shipping needs have no trouble turning in what is now the "back lot". After the new shop is built, and much of the stock presently stored out side is stored inside, a whole new turning radius will be developed and there will be adequate room to easily turn tractor-trailer units behind the existing 40' square garage.

7. Additional storm drainage catch basins

Should have amended the plan again ! There are actually *two* additional catch basins installed that are not shown on the plans. It is apparent that the northerly catch basin which is installed as shown on plans, *in the middle of a slope*, would be practically useless to prevent the major run off from running into the street. The first additional Catch Basin was installed directly in front of the new office building with the pavement properly pitched to collect the vast majority of storm water which falls on the developed area of Phoenix Welding Co.'s property. The second additional catch basin was installed in an unpaved area at the north end of the above referred drainage swale. This prevents a major run off from behind our property as well as collecting the storm water that runs off from our southwesterly abutter from entering the public roadway above grade.

8. Dumpster enclosure

More grounds for submitting an amended set of plans. Once the new fabrication shop has been built, the dumpster will be relocated. It will be enclosed at that time. It has already been relocated once to be less "unsightly" as well as to alleviate noise to the neighborhood when being dumped.

9. Area lighting

We will install lighting on the buildings that does conform to the details shown on the plans. This will be done as soon as the weather turns.

10. Demolished buildings.

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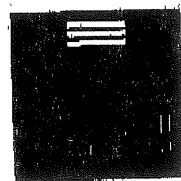
We sincerely hope that the above addresses all of Mr. Jim Wendle's issues in a manner satisfactory to you and the City of Portland Planning and Urban Development department.

Respectfully Submitted  
Don Johnson  
Don Johnson Vice Pres.  
Phoenix Welding Co.

- ROADWAY DESIGN
- ENVIRONMENTAL ENGINEERING
- TRAFFIC STUDIES AND MANAGEMENT
- PERMITTING
- AIRPORT ENGINEERING
- SITE PLANNING
- CONSTRUCTION ADMINISTRATION

DELUCA-HOFFMAN ASSOCIATES, INC.  
CONSULTING ENGINEERS

278 MAIN STREET  
SUITE 8  
SOUTH PORTLAND, MAINE 04106  
TEL. 207 775 1121  
FAX 207 770 0896



**MEMORANDUM**

**TO:** Code Enforcement  
Kandi Talbot, Planner

**FROM:** Jim Wendel, Development Review Coordinator

**DATE:** June 1, 1998

**RE:** Site Plan Review  
Riverside Welders LLC  
557 Riverside Street

A review of the revised site plan has been completed. I offer the following comments.

1. The status of the fence is still not clear; the referenced March 20, 1998 correspondence from the applicant seems to indicate that the chain link fence will be deleted except along the southern property line near Riverside Street. If that is the case than the fence should be deleted from the plan.

2. It is my opinion that the site plan will be problematic for WB-50 trucks to maneuver. In order that a truck can turn around on site easily, recommend that the building be moved to a 75' offset dimension from the southerly property line or the gravel surface be extended a minimum of 5' to the north so that a WB-50 truck can drive around the proposed building.

3. The existing 8" storm drain line from catch basin 1 should be shown connecting to the outlet pipe from the catch basin in Riverside Street.

Should you have any questions please call

1357.0841KX5/11Wweld

COPY

*J. Faling*  
*P. R.*

20 Mar., 1998



557 Riverside Street  
Portland, Maine 04103  
207-797-5832  
FAX 207-797-5893

Ms. Kandi Talbot, Planner  
City of Portland, Maine  
City Hall  
389 Congress Street, 4<sup>th</sup> Floor  
Portland, Maine 04101

Re : Phoenix Welding Co. facilities at 557 Riverside St. Portland, Maine

Dear Ms. Talbot ;

Thank you very much for the assistance given by yourself and Mr. Jim Wendel . It has been a great deal of help to us to be informed as to how to best comply with the various code issues that have been addressed.

As previously stated, it has been our understanding that our original permit was to be for both phases of the intended construction, new office and fabrication facility.

This application for an extension of the time frame of our original Building Permit will incorporate, to the best of our understanding and ability, equitable solutions to each of the points brought about in Mr. Wendel's review. Had we known that all of the items detailed by the outside consultant that was utilized were "cast in stone", we would have filed an amended plan, requested a variance, or done both as required.

In addition to being granted a Building Permit for the new fabrication shop we of course need to have the existing temporary Certificate - of - Occupancy converted to a permanent C of O.

Ref: Jim's letter of 12-22-97.

1. Parking lot striping and final paving.

It is our intent to contract a paving contractor to lay a base coat of asphalt over an enlarged area of the "back lot" once the intended fabrication facility has been erected. Following that, at the contractor's recommendation, the finish coat of asphalt paving will be laid over the entire paved area. Once that is done the lot will be striped for parking provisions.

1A. The extended paving in front of the leech field of the septic system provides additional parking spaces at this time.

2. Sidewalk elevation.

No side walk has been installed in front of the septic system for two reasons. First, is that we have more than adequate room to park all of the employee's vehicles as well as sales persons who call on us. We do no "retail" business, therefore customers do not come here. Secondly, we are told that a City sewer will be installed under Riverside St. in the very near future.

This of course alleviate the requirement of the septic system and leach field. The mounded leach field will be removed after we are connected to the new City Sewage system. The resultant area may become a lawn, or it could become an additional parking lot.

3. Wood Cribbing  
Once again we should have requested a variance or submitted an amended plan. The 30" high wood timber retaining wall was installed on two sides of the mounded leach field in order to prevent it from "migrating" over the parking lot. It will be removed along with the mound once we have connected to the sewer.

4. Sidewalk elevation  
The concrete walk in front of the new office building was installed at the wrong elevation. We intend to install pre-cast concrete curb blocks that will be pinned to the pavement in order to provide a safety barrier between the parking elevation and the walk way surface.

5. Pine tree barrier.  
The southerly pine tree barrier, actually west-southwesterly, was not installed because trees cannot be sustained in what is an *extremely* wet sub-surface drainage swale.  
If a "buffer" is required between us and the abutter, we will install a fence. The least long term maintenance requirement would be a chain link fence with slats.  
This area is where a lot of the snow from the parking lot snow plowing operations gets piled.

6. Tractor - trailer turn around.  
The tractor-trailer units that service our supply and shipping needs have no trouble turning in what is now the "back lot". After the new shop is built, and much of the stock presently stored out side is stored inside, a whole new turning radius will be developed and there will be adequate room to easily turn tractor-trailer units behind the existing 40' square garage.

7. Additional storm drainage catch basins  
Should have amended the plan again ! There are actually *two* additional catch basins installed that are not shown on the plans. It is apparent that the northerly catch basin which is installed as shown on plans, *in the middle of a slope*, would be practically useless to prevent the major run off from running into the street.  
The first additional Catch Basin was installed directly in front of the new office building with the pavement properly pitched to collect the vast majority of storm water which falls on the developed area of Phoenix Welding Co.'s property.  
The second additional catch basin was installed in an unpaved area at the north end of the above referred drainage swale. This prevents a major run off from behind our property as well as collecting the storm water that runs off from our southwesterly abutter from entering the public roadway above grade.

8. Dumpster enclosure

More grounds for submitting an amended set of plans. Once the new fabrication shop has been built, the dumpster will be relocated. It will be enclosed at that time. It has already been relocated once to be less "unsightly" as well as to alleviate noise to the neighborhood when being dumped.

9. Area lighting

We will install lighting on the buildings that does conform to the details shown on the plans. This will be done as soon as the weather turns.

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Respectfully Submitted  
Don Johnson  
Don Johnson Vice Pres.  
Phoenix Welding Co.

**Facsimile Transmittal**

**From: Don Johnson**

**of  
Phoenix Welding Company  
557 Riverside St.  
Portland, Maine 04103**

**Fax 207-797-5893**

**Date: 7 April, 1998**

**To: Ms. Kandice Talbot**

**OF:  
Planning and Urban  
Development  
Dep't.  
Planning Dep't.**

**Fax no. 874-8716-~~8258~~  
756-8258**

**No. of pages incl. cover sheet: (Four-) If all pages not received, call 1-207-797-5832**

**Ms. Talbot : Response to Mr. Jim Wendle's letter regarding C. of O. for the new office bldg, at our 557  
Riverside St. address.**

**Thank You**  
*Don Johnson*  
**Phoenix Welding Co.**  
**Industrial Mechanical Contractors - ASME and API Certified Welding  
Petroleum Piping and Tank Specialists - Shop and Field Fabrication  
Consulting Services - Welding and Quality Control**

*Phoenix Welding*

557 Riverside Street  
Portland, Maine 04103

207-797-5832  
FAX 207-797-5893

20 Mar., 1998

Ms. Kandi Talbot, Planner

City of Portland, Maine

City Hall

389 Congress Street, 4<sup>th</sup> Floor

Portland, Maine 04101

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-1-

Industrial Mechanical Contractors • ASME & API Certified Welding  
• Petroleum Specialist Shop & Field Fabrication  
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*Don Johnson*  
 Don Johnson Vice Pres.  
 Phoenix Welding Co.

FACSIMILE COVER SHEET

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

COMMENTS:

PAGES INCLUDING THIS COVER SHEET:

DATE:

FAX:

PHONE:

COMPANY:

FROM:

FAX:

PHONE:

COMPANY:

TO:

5/5/98

207/879-0896  
207/775-1121

DeLUCA-HOFFMAN ASSOCIATES, INC.

756-8258

ROZANO

KINDI TACBAT

8. How will the roof drain? internal piping from roof drains or external to gutters with downspouts? Recommend that the roof drain connects to the storm drain system.

7. What size is the new water service to the building? Due to the long length of the run will the existing pipe need to be upgraded?

6. If the applicant is proposing to delete the fence then it should be removed from the plan.

5. Additional detail of the existing and proposed storm drain system is needed; pipe sizes and inverts, and pipe slopes for the new pipe. Since this is an amended plan I assume the current file has stormwater calculations to show no adverse impacts from the extended system? If not, than a review of the layout should be performed.

4. The existing contours should be added to the plan; the current grading is not totally clear.

3. Where does the applicant propose to locate the dumpster?

2. Limits of the new paved or gravel surface should be shown on the plan; the limits of the existing pavement should be shown.

1. Truck turnaround; recommend that the new building be moved 5' to a new offset dimension from the side property line of 75'. This will allow a semi-tractor trailer the ability to drive around the building very easily; this assumes that a paved or gravel surface is provided within the fence line currently shown on the plan; approximately 25' to the northerly side, 45' to the rear and at least 35' towards the southerly property line. Catch basin #5 will need to be moved slightly.

A review of the amended site plan dated 4/8/98 has been completed. I offer the following comments.

Site Plan Review  
Phoenix Welding  
557 Riverside Street

April 27, 1998

Jim Wendel, P.E., Development Review Coordinator

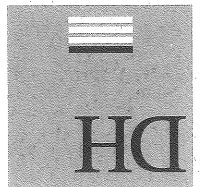
Kandi Talbot, Planner

### MEMORANDUM

- ROADWAY DESIGN
- ENVIRONMENTAL ENGINEERING
- TRAFFIC STUDIES AND MANAGEMENT
- PERMITTING
- AIRPORT ENGINEERING
- SITE PLANNING
- CONSTRUCTION ADMINISTRATION

DELUCA-HOFFMAN ASSOCIATES, INC.  
CONSULTING ENGINEERS

778 MAIN STREET  
SUITE 8  
SOUTH PORTLAND, MAINE 04106  
TEL. 207 775 1121  
FAX 207 879 0896





Emelie A. Ferland Attorney-in-Fact

By: *Emelie A. Ferland*

THE HANOVER INSURANCE COMPANY

Principal

By: *Emelie A. Ferland*

RIVERSIDE WELDERS LIMITED LIABILITY COMPANY

Signed, sealed and dated this 27th day of December, 1995.

NOW, THEREFORE, if the said Principal shall complete said work in accordance with said ~~subdivision regulations~~ <sup>site plan</sup> within a period of two (2) years from the date hereof, then this obligation shall be void; otherwise to remain in full force and effect.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

557 Riverside Street, Portland, Maine

of Phoenix Welding Company prepared by Phoenix Welding Company,

Board of the City of Portland has approved a plan ~~of subdivision~~

THE CONDITION OF THIS OBLIGATION IS SUCH, that, whereas the Planning

severally, firmly by these presents,

hereby bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and

money of the United States of America, to the payment of which, well and truly to be made, we

of Fourteen Thousand and 00/100 dollars (\$14,000.00) lawful

firmly bound unto the City of Portland as obligee, in the penal sum

New Hampshire and authorized to do business in the State of Maine, as Surety, are held and

INSURANCE COMPANY, a corporation organized and existing under the laws of the State of

Limited Liability Company as Principal, and THE HANOVER

KNOW ALL MEN BY THESE PRESENTS, that we, Riverside Welders

SUBDIVISION BOND NO. BCP 1595722



# The Hanover Insurance Company

POWER OF ATTORNEY  
CERTIFIED COPY

KNOW ALL MEN BY THESE PRESENTS: That THE HANOVER INSURANCE COMPANY, a corporation organized and existing under the laws of the State of New Hampshire, does hereby constitute and appoint

- Barbara C. Wakely, Timothy K. Wakely, Pamela J. Rogers, Patrick H. Gagnon, Carmen K. Wilde, Emelie A. Ferland and/or William H. Chase -

of Augusta, Maine and each is to sign, execute, seal, acknowledge and deliver for, and on its behalf, and as its act and deed, at any place within the United States, or, if the following line be filled in, only within the area therein designated

any and all bonds, recognizances, undertakings, contracts of indemnity or other writings obligatory in the nature thereof, as follows:

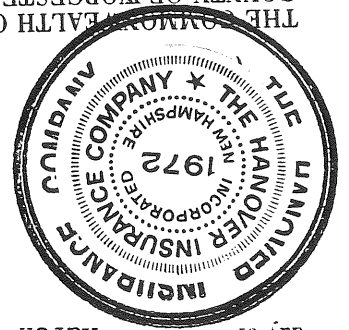
- Any such obligations in the United States, in any amount -

And said Company hereby ratifies and confirms all and whatsoever said Attorney(s)-in-fact may lawfully do in the premises by virtue of these presents.

This appointment is made under and by authority of the following Resolution passed by the Board of Directors of said Company at a meeting held on the seventh day of October, 1981, a quorum being present and voting, which resolution is still in effect

..RESOLVED, That the President or any Vice President in conjunction with any Assistant Vice President be and they are hereby authorized and empowered to appoint Attorneys-in-fact of the Company, in its name and as its acts, to execute and acknowledge for and on its behalf as Surety any and all bonds, recognizances, contracts of indemnity, waivers of citation and all other writings obligatory in the nature thereof, with power to attach thereto the seal of the Company. Any such writings so executed by such Attorneys-in-fact shall be as binding upon the Company as if they had been duly executed and acknowledged by the regularly elected officers of the Company in their own proper persons.

IN WITNESS WHEREOF, THE HANOVER INSURANCE COMPANY has caused these presents to be sealed with its corporate seal, duly attested by its Vice President and its Assistant Vice President, this 10th March 19 95



THE HANOVER INSURANCE COMPANY

Vice President

Assistant Vice President

ss.

THE COMMONWEALTH OF MASSACHUSETTS  
COUNTY OF WORCESTER

On this 10th day of March 19 95, before me came the above named Vice President and Assistant Vice President of The Hanover Insurance Company, to me personally known to be the individuals and officers described herein, and acknowledged that the seal affixed to the preceding instrument is the corporate seal of The Hanover Insurance Company and that the said corporate seal and their signatures as officers were duly affixed and subscribed to said instrument by the authority and

power of the said Vice President and Assistant Vice President of The Hanover Insurance Company, hereby certify that the above and foregoing is a full, true and correct copy of the Original Power of Attorney issued by said Company, and do hereby further certify that the said Power of Attorney is still in full force and effect.

This Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of The Hanover Insurance Company at a meeting held on the 7th day of October, 1981

..RESOLVED, That any and all Powers of Attorney, and Certified Copies of such Powers of Attorney and certification in respect thereto, granted and executed by the President or any Vice President in conjunction with any Assistant Vice President of the Company shall be binding on the Company to the same extent as if all signatures thereon were manually affixed even though one or more of any such signatures thereon may be facsimile.

GIVEN under my hand and the seal of said Company, at Worcester, Massachusetts, this 27th day of December 19 95

Assistant Vice President



CITY OF PORTLAND  
Planning and Urban Development Department

MEMORANDUM

TO:

David Jordan, Code Enforcement Officer

FROM:

James Seymour, Acting Development Review Coordinator

DATE:

May 21, 1996

RE:

Temporary Certificate of Occupancy for Phoenix Welding Company  
557 Riverside Street

I have reviewed the site improvements associated with the 1,350 sq. ft. building for Phoenix Welding Company, 557 Riverside Street and believe it would be acceptable to issue a temporary Certificate of Occupancy. A permanent Certificate of Occupancy should not be issued until the following conditions have been met.

1. One portion of the new parking area where the existing internal driveway was located needs to be paved to be in accordance with the site plan. Since this area is of no immediate importance but for employee and company vehicle parking, site access for storage and maintenance, the applicant has until October 1, 1996 to complete the paving to be in compliance with the approved site plan. Also the applicant has intentions of demolishing some of the existing buildings immediately, based on this information and the applicant obtaining the necessary permits, I believe the above deadline is acceptable.

The applicant shall loam, seed, and mulch all disturbed areas located along the rear of the building and up to the adjacent field. The current wet conditions prohibit machinery to operate. The applicant has until June 10, 1996 to complete this condition.

The applicant shall construct the grades around the catch basin within the parking lot to collect surface runoff. The applicant shall notify the Development Review Coordinator just prior to applying the final layer of pavement to review grading.

The applicant shall submit a completed drainage maintenance agreement to the City for the drainage system which was just recently connected into the City of Portland's storm drain. This condition shall be completed by June 10, 1996.

All remaining landscaping to include shorter shrubs or bushes under the power lines along the southern property line shall be completed immediately and approved by Jeff Turling, City Arborist before June 10, 1996.

Kathi Staples, City Engineer

cc:

PORTLAND.PC0557R1VSD.WPD

**MEMORANDUM**  
**PUBLIC WORKS ENGINEERING**

**To:** Kandi Talbot, Planner  
**From:** Anthony Lombardo, P.E., Project Engineer  
**Date:** May 1, 1998  
**Subject:** Phoenix Welding.....557 Riverside St.

The following comments were generated during Public Works Engineering review of the plans and application dated 4/8/98 and received on 4/20/98:

The latest "Site Plan", dated 4/8/98, does not specify any existing and proposed grading with the exception of a few spot grades.  
The plan does not clearly delineate areas of proposed pavement.  
The plan does not specify the size of the proposed sanitary sewer line exiting the existing garage.  
Does the proposed "Fabrication Shop" have any restroom facilities?  
The site plan does not specify the location of temporary and permanent erosion control measures.

The proposed drainage system does not specify any of the following:  
invert elevations in and out of catch basin structures  
pipe lengths, pipe slopes or pipe sizes  
The proposed storm drain connection into the existing underdrain in Riverside St. is not an acceptable to Public Works. In this instance, a connection into the existing pipe outletting the catch basin is a more acceptable connection.  
The plans do not specify a catch basin detail  
The plans do not provide a typical paved parking lot section detail.



**Engineer Review and Site Inspection Fee Invoice Worksheet**

Address: Pheonix Welding.....557 Riverside Street.....DATE: 5/1/98

**Engineering Review**

To be filled out by Development Review Coordinator and Public Works at time of application.

<b>Planning</b>	<b>Public Works</b>
# of Hours Estimated: (Private Improvements)	# of Hours Estimated: (Public Improvements)
Field Work	Field Work
Memos/Corresp.	Memos/Corresp.
<u>3.0</u>	<u>2.0</u>
<u>1.0</u>	<u>1.0</u>

Review/Analysis	Review/Analysis
Meetings/phone calls	Meetings/phone calls
Total Hours _____ at _____ per hour	Total Hours <u>7.0</u> at <u>\$35</u> per hour
Review Fee (Private): \$ _____	Review Fee (Public): \$ _____
<u>\$245</u>	

Development Review Coordinator Signature \_\_\_\_\_  
Public Works Engineer Signature \_\_\_\_\_

**Site Inspection**

To be filled out by DRC and Public Works at time of Performance Guarantee approval.

<b>Planning</b>	<b>Public Works</b>
Accept 1.7% of Private Improvements P.G.	Accept 1.7% of Private Improvements
\$ _____ (dollar amount)	\$ _____ (dollar amount)
# of Hours Estimated:	# of Hours Estimated:
Field Work	Field Work
Memos/Corresp.	Memos/Corresp.
<u>8.0</u>	<u>8.0</u>

1.0

Review/Analysis

Review/Analysis

Meetings/phone calls

Meetings/phone calls

1.0

Total Hours \_\_\_\_\_ at \_\_\_\_\_ per hour

Total Hours 10.0 at \$35 per hour

Alternate Inspection Fee (Private): \$ \_\_\_\_\_

Alternate Inspection Fee (Public): \$ \_\_\_\_\_

\$350

Development Review Coordinator Signature

Public Works Engineer Signature

CITY OF PORTLAND, MAINE  
ENGINEERING REVIEW FORM

Address of Proposed Site 557 Riverside St. Date \_\_\_\_\_  
Project Description BLDG EXPANSION Job # \_\_\_\_\_  
Applicant PHOENIX HOLDINGS  
Applicant's Mailing Address \_\_\_\_\_

Site Review (Planning Department) Review Engineer: JIM WENNER  
Right-of-Way Review (Public Works Department) Review Engineer: \_\_\_\_\_

Number of Estimated Hours: 20 Number of Estimated Hours: \_\_\_\_\_  
Cost Per Hour: 48.00 Cost Per Hour: \_\_\_\_\_  
Total Amount: 960.00 Total Amount: \_\_\_\_\_

An engineering fee has been assessed in the amount of \_\_\_\_\_ for the review of your project located at \_\_\_\_\_

Please make check payable to the City of Portland. The check should be submitted along with this form to the Portland Planning Department, City of Portland, 4th Floor, 389 Congress Street, Portland, ME 04101. Attn: \_\_\_\_\_

**Office Use Only**  
Invoice Date: \_\_\_\_\_ Received: \_\_\_\_\_ date \_\_\_\_\_  
Planning Revenue Code: \_\_\_\_\_  
Public Works Revenue Code: \_\_\_\_\_

cc: Applicant - white

Planner - blue

Engineer - green

Public Works - yellow

Financial Officer - pink

Review/Inspection Fee File - golden



Mr. Alexander Jaegerman Chief Planner  
City of Portland Building Department  
389 Congress St.  
Portland, Maine 04101

Re : Building Permit No. 951340.  
Phoenix Welding Co.  
557 Riverside St.  
Portland, Maine 04103

Dear Sir :

Phoenix Welding Co. was issued the above referred Building Permit on March 18, 1996. As you are aware, we employed Land Use Consultants at that time to conduct an entire site improvement plan and contribute a Site Development Survey.

The new 28' x 48' office building was constructed and an Occupancy Permit issued. It was recommended that we submit plans for future development at that time.

The "future development" was to be the construction of a Fabrication Shop. All site plans, surveys and improvements conducted include that future structure.

It was, and is, our understanding that Engineered Drawings for the proposed 60' x 120' building will have to be submitted for Review and Approval prior to construction.

For various reasons we have been unable to further pursue that goal until now. With the onset of Winter just around the corner, we respectfully request that, if there is an expiration date connected with the Permit-In - Process, that it be extended until next Spring's construction season.

We are presently developing lay-out drawings and soliciting prices for suitable pre-fabricated metal building structures.

Respectfully Submitted  
Phoenix Welding Co.  
*Don Johnson*  
Don Johnson Vice Pres.

Industrial Mechanical Contractors • ASME & API Certified Welding  
• Petroleum Specialist Shop & Field Fabrication •  
Consulting Services — Welding & Quality Control

27 Oct., 1997

**Engineer Review and Site Inspection Fee Invoice Worksheet**

Address: Pheonix Welding.....557 Riverside Street.....DATE: 5/1/98

**Engineering Review**

To be filled out by Development Review Coordinator and Public Works at time of application.

<p align="center"><b>Planning</b></p> <p># of Hours Estimated: (Private Improvements) _____</p> <p>Field Work _____</p> <p>Memos/Corresp. _____</p> <p>Review/Analysis _____</p> <p>Meetings/phone calls _____</p> <p>Total Hours _____ at \$35 per hour</p> <p>Review Fee (Public): \$ <u>245</u></p> <p>Public Works Engineer Signature _____</p>	<p align="center"><b>Public Works</b></p> <p># of Hours Estimated: (Public Improvements) _____</p> <p>Field Work <u>1.0</u></p> <p>Memos/Corresp. <u>2.0</u></p> <p>Review/Analysis <u>3.0</u></p> <p>Meetings/phone calls <u>1.0</u></p> <p>Total Hours <u>7.0</u> at \$35 per hour</p> <p>Review Fee (Public): \$ <u>245</u></p> <p>Public Works Engineer Signature _____</p>
---	---

**Site Inspection**

To be filled out by DRC and Public Works at time of Performance Guarantee approval.

<p align="center"><b>Planning</b></p> <p># of Hours Estimated: _____</p> <p>Field Work _____</p> <p>Memos/Corresp. _____</p> <p>Review/Analysis _____</p> <p>Meetings/phone calls _____</p> <p>Total Hours _____ at _____ per hour</p> <p>Alternate Inspection Fee (Private): \$ _____</p> <p>Development Review Coordinator Signature _____</p>	<p align="center"><b>Public Works</b></p> <p># of Hours Estimated: _____</p> <p>Field Work <u>8.0</u></p> <p>Memos/Corresp. <u>1.0</u></p> <p>Review/Analysis _____</p> <p>Meetings/phone calls <u>1.0</u></p> <p>Total Hours <u>10.0</u> at \$35 per hour</p> <p>Alternate Inspection Fee (Public): \$ <u>350</u></p> <p>Public Works Engineer Signature _____</p>
--	---



Development Review Coordinator Signature

Public Works Engineer Signature

1.0

1.0

1.0

Review/Analysis

Review/Analysis

Meetings/phone calls

Meetings/phone calls

Total Hours \_\_\_\_\_ at \_\_\_\_\_ per hour

Total Hours 10.0 at \$35 per hour

Alternate Inspection Fee (Private): \$ \_\_\_\_\_

Alternate Inspection Fee (Public): \$ \_\_\_\_\_

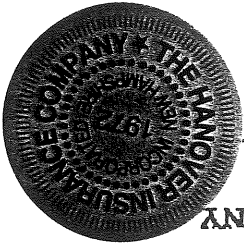
**MEMORANDUM**  
**PUBLIC WORKS ENGINEERING**

**To:** Kandi Talbot, Planner  
**From:** Anthony Lombardo, P.E., Project Engineer  
**Date:** May 1, 1998  
**Subject:** Pheonix Welding.....557 Riverside St.

The following comments were generated during Public Works Engineering review of the plans and application dated 4/8/98 and received on 4/20/98:

- ✓ The latest "Site Plan", dated 4/8/98, does not specify any existing and proposed grading with the exception of a few spot grades.
- ✓ The plan does not clearly delineate areas of proposed pavement.
- ✓ The plan does not specify the size of the proposed sanitary sewer line exiting the existing garage.
- ✓ Does the proposed "Fabrication Shop" have any restroom facilities?
- ✓ The site plan does not specify the location of temporary and permanent erosion control measures.
- ✓ The proposed drainage system does not specify any of the following:
  - invert elevations in and out of catch basin structures
  - pipe lengths, pipe slopes or pipe sizes
- ✓ The proposed storm drain connection into the existing underdrain in Riverside St. is not an acceptable to Public Works. In this instance, a connection into the existing pipe outletting the catch basin is a more acceptable connection.
- ✓ The plans do not specify a catch basin detail
- ✓ The plans do not provide a typical paved parking lot section detail.





Emelie A. Ferland, Attorney-in-Fact

By: *Emelie A. Ferland*  
THE HANOVER INSURANCE COMPANY

Principal

By: *[Signature]*  
RIVERSIDE WELDERS LIMITED LIABILITY COMPANY

Signed, sealed and dated this 11 day of June, 19 98.

NOW THEREFORE, if the said Principal shall complete said work in accordance with said ~~subdivision~~ <sup>site plan</sup> ~~agreements~~ within a period of two (2) years from the date hereof, then this obligation shall be void; otherwise to remain in full force and effect.

Board of the \_\_\_\_\_ City of Portland has approved a plan of ~~subdivision~~ \_\_\_\_\_ prepared by \_\_\_\_\_ of Phoenix Welding Company subject to filing of a bond guaranteeing construction of Phoenix Welding Company, 557 Riverside Street, Portland, Maine

KNOW ALL MEN BY THESE PRESENTS, that we, Riverside Welders Limited Liability Company as Principal, and THE HANOVER INSURANCE COMPANY, a corporation organized and existing under the laws of the State of New Hampshire and authorized to do business in the State of Maine, as Surety, are held and firmly bound unto the \_\_\_\_\_ City of Portland as obligee, in the penal sum of Twenty Seven Thousand Twenty-Eight & 00/100 <sup>dollars</sup> (\$27,028.00) lawful money of the United States of America, to the payment of which, well and truly to be made, we hereby bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

SUBDIVISION BOND NO. BCP 1633548



The Hanover Insurance Company

POWER OF ATTORNEY  
CERTIFIED COPY

KNOW ALL MEN BY THESE PRESENTS: That THE HANOVER INSURANCE COMPANY, a corporation organized and existing under the laws of the State of New Hampshire, does hereby constitute and appoint

- Barbara C. Wakely, Timothy K. Wakely, Pamela J. Rogers, Patrick H. Gagnon, Carmen K. Wilde, Emelie A. Ferland and/or William H. Chase -

of Augusta, Maine and each is to sign, execute, seal, acknowledge and deliver for, and on its behalf, and as its act and deed, at any place within the United States, or, if the following line be filled in, only within the area therein designated

any and all bonds, recognizances, undertakings, contracts of indemnity or other writings obligatory in the nature thereof, as follows:

- Any such obligations in the United States, in any amount -

And said Company hereby ratifies and confirms all and whatsoever said Attorney(s)-in-fact may lawfully do in the premises by virtue of these presents.

This appointment is made under and by authority of the following Resolution passed by the Board of Directors of said Company at a meeting held on the seventh day of October, 1981, a quorum being present and voting, which resolution is still in effect

"RESOLVED, That the President or any Vice President, in conjunction with any Assistant Vice President, be and they are hereby authorized and empowered to appoint Attorneys-in-fact of the Company, in its name and as its acts, to execute and acknowledge for and on its behalf as Surety any and all bonds, recognizances, contracts of indemnity, waivers of citation and all other writings obligatory in the nature thereof, with power to attach thereto the seal of the Company. Any such writings so executed by such Attorneys-in-fact shall be as binding upon the Company as if they had been duly executed and acknowledged by the regularly elected officers of the Company in their own proper persons."

IN WITNESS WHEREOF, THE HANOVER INSURANCE COMPANY has caused these presents to be sealed with its corporate seal duly attested by its Vice President and its Assistant Vice President, this 10th March 19 95

THE HANOVER INSURANCE COMPANY



THE COMMONWEALTH OF MASSACHUSETTS  
COUNTY OF WORCESTER  
ss.

On this 10th day of March 19 95, before me came the above named Vice President and Assistant Vice President of The Hanover Insurance Company, to me personally known to be the individuals and officers described herein, and acknowledged that the seal affixed to the preceding instrument is the corporate seal of The Hanover Insurance Company and that the said corporate seal and their signatures as officers were duly affixed and subscribed to said instrument by the authority and

description of the said corporation. This Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of The Hanover Insurance Company at a meeting held on the 7th day of October, 1981

"RESOLVED, That any and all Powers of Attorney, and Certified Copies of such Powers of Attorney and certification in respect thereto, granted and executed by the President or any Vice President in conjunction with any Assistant Vice President of the Company shall be binding on the Company to the same extent as if all signatures thereon were manually affixed even though one or more of any such signatures thereon may be facsimile."

GIVEN under my hand and the seal of said Company, at Worcester, Massachusetts, this 11th day of June 19 98

*[Signature]*  
Assistant Vice President

1071

52-60/112

RIVERSIDE WELDERS LIMITED LIABILITY CO. 5-95  
557 RIVERSIDE ST. 207-797-5832  
PORTLAND, ME 04103

June 2 19 98

PAY TO THE ORDER OF City of Portland \$ 819.48  
Eight Hundred Nineteen and 48/100 DOLLARS



Key Bank of Maine  
Portland, Maine 04112 138

*Ray J. Luman*

MEMO

⑆01200608⑆ 191384000474⑈ 1071

CITY OF PORTLAND, MAINE  
DEVELOPMENT REVIEW APPLICATION  
PLANNING DEPARTMENT PROCESSING FORM

Applicant Phoenix Welding  
557 Riverside St, Portland, ME 04103  
Applicant's Mailing Address  
Don Johnson  
Consultant/Agent  
797-5832  
797-5893  
Applicant or Agent Daytime Telephone, Fax

Assessor's Reference: Chart-Block-Lot  
306-B-007  
557 Riverside St  
Address of Proposed Site

Proposed Development (check all that apply):  
 New Building  Building Addition  Change Of Use  Residential  
 Office  Retail  Manufacturing  Warehouse/Distribution  Parking Lot  Other (specify) **Fabrication Shop**  
130,280 Sq Ft  
Acreage of Site

Proposed Building square Feet or # of Units  
Zoning  
14-403 Streets Review   
PAD Review   
Historic Preservation   
DEF Local Certification   
Other

**Check Review Required:**

Site Plan (major/minor)  
 Subdivision # of lots  
 Shoreland  
 Flood Hazard  
 Zoning Conditional Use (ZBA/PB)  
Fees Paid: Site Plan \$300.00 Subdivision  
Engineer Review \$360.00 Date: 6/2/98  
Reviewer Jim W  
 Approved  
 Approved w/Conditions see attache  
 Denied

**DRC Approval Status:**  
 Condition Compliance Approval Date 6/12/98 Signature Jim W Date 6/12/98  
 Additional Sheets Attached

**Performance Guarantee**  
 Required\*  Not Required  
\* No building permit may be issued until a performance guarantee has been submitted as indicated below

Performance Guarantee Accepted  
6/12/98 date  
\$27,028.00 amount  
6/11/00 expiration date  
 Performance Guarantee Reduced  
date  
remaining balance  
signature  
 Temporary Certificate Of Occupancy  
date  
signature  
 Final Inspection  
date  
signature

Building Permit  
date  
signature  
 Certificate Of Occupancy  
date  
signature  
 Performance Guarantee Released  
date  
signature  
 Defect Guarantee Submitted  
submitted date  
amount  
signature  
 Defect Guarantee Released  
signature  
expiration date

1071

52-60/112

RIVERSIDE WELDERS LIMITED LIABILITY CO. 5-95  
557 RIVERSIDE ST. 207-797-5832  
PORTLAND, ME 04103

June 2 19 98

PAY TO THE ORDER OF City of Portland \$ 819.48  
Eight Hundred Nineteen and 48/100 DOLLARS



*Paul Johnson*

MEMO

⑆01200608⑆ 191384000474⑆ 1071

DRAINAGE MAINTENANCE AGREEMENT

IN CONSIDERATION OF site plan approval granted by the Planning Board of the City of Portland to a plan entitled Site Plan drawing# 1-557-1996, dated 07/25/96 and filed with the City of Portland, Department of Planning and Urban Development, 389 Congress Street, Portland, Maine, a copy of which is attached hereto as Exhibit I,\* and pursuant to a condition thereof, RIVERSIDE WELERS LLC, a LIMITED LIABILITY COMPANY with a place of business at 557 Riverside Street, the owner of the subject premises, does hereby agree, for itself, its successors and assigns (the "OWNER"), as follows:

That it will, at its own costs and expense and at all times in perpetuity, maintain in good repair and in proper working order the surface water drainage system as shown on said plan, including but not limited to the detention basin or basins and the outlet or outlets therefrom, for the benefit of the said City of Portland, all persons in lawful possession of said premises and abutters thereto; further, that the said City of Portland, said persons in lawful possession and said abutters, or any of them, may enforce this Agreement by an action at law or in equity in any court of competent jurisdiction; further, that after giving the OWNER written notice and a reasonable time to perform, the said City of Portland may, by its authorized agents or representatives, enter upon said premises or any portion thereof for the purpose of performing the aforementioned maintenance of said surface water drainage system in the event of any failure or neglect thereof, the cost and expense thereof to be reimbursed in full to the said City of Portland by the OWNER upon demand.

This Agreement shall not confer upon the said City of Portland or any other person the right to utilize said surface water drainage system for public use or for the development of any other property, and the OWNER shall bear no financial responsibility by virtue of this Agreement for enlarging the capacity of said surface water drainage system for any reason whatsoever.

This Agreement shall bind the undersigned only so long as it retains any interest in said premises, and shall run with the land and be binding upon its successors and assigns as their interests may from time to time appear.

Dated at Portland, Maine this 15 day of August, 1996.

Riverside Welders LLC

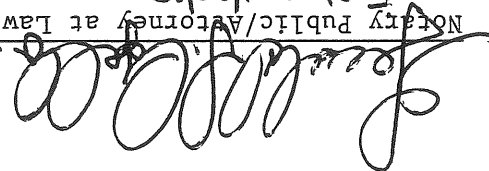
BY *[Signature]* ITS Manager

STATE OF MAINE  
CUMBERLAND, SS.

August 15<sup>th</sup>, 1996

Personally appeared the above-named Don Johnson of Riverside Weldors LLC, of Portland, Me. and acknowledged the foregoing instrument to be his free act and deed in his said capacity, and the free act and deed of said Company

Before me,

  
Notary Public/Attorney at Law  
Expires 11/25/18  
Gerald J. Angello  
Print Name

\* Where this Agreement is a condition of subdivision rather than site plan approval, this clause should instead read "and recored in the Cumberland County Registry of Deed in Plan Book \_\_\_\_\_, Page \_\_\_\_\_, and the drainage plan therefor, filed with the City of Portland, Department of Public Works, 55 Portland Street, Portland, Maine a copy of which is attached hereto as Exhibit 1.

DRAINAGE MAINTENANCE AGREEMENT

IN CONSIDERATION OF site plan approval granted by the Planning Board of the City of Portland to a plan entitled Site Plan drawing# 1-557-1996, dated 07/25/96 and filed with the City of Portland, Department of Planning and Urban Development, 389 Congress Street, Portland, Maine, a copy of which is attached hereto as Exhibit 1,\* and pursuant to a condition thereof, RIVERSIDE WELDERS LLC, a LIMITED LIABILITY COMPANY with a place of business at 557 Riverside Street, the owner of the subject premises, does hereby agree, for itself, its successors and assigns (the "OWNER"), as follows:

That it will, at its own costs and expense and at all times in perpetuity, maintain in good repair and in proper working order the surface water drainage system as shown on said plan, including but not limited to the detention basin or basins and the outlet or outlets therefrom, for the benefit of the said City of Portland, all persons in lawful possession of said premises and abutters thereto; further, that the said City of Portland, said persons in lawful possession and said abutters, or any of them, may enforce this Agreement by an action at law or in equity in any court of competent jurisdiction; further, that after giving the OWNER written notice and a reasonable time to perform, the said City of Portland may, by its authorized agents or representatives, enter upon said premises or any portion thereof for the purpose of performing the aforementioned maintenance of said surface water drainage system in the event of any failure or neglect thereof, the cost and expense thereof to be reimbursed in full to the said City of Portland by the OWNER upon demand.

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Dated at Portland, Maine this 15 day of August, 1996.

~~Riverside Welders LLC~~

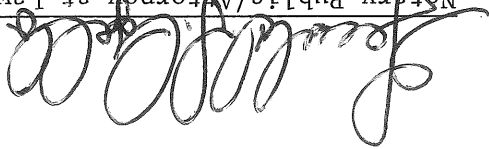
BY  ITS  
Manager



STATE OF MAINE  
CUMBERLAND, SS.

August 15<sup>th</sup>, 1996

Personally appeared the above-named Don Johnson  
of Riverside Weldors LLC, of Portland, Me. and acknowledged the  
foregoing instrument to be his free act and deed in his said capacity,  
and the free act and deed of said Company  
Before me,

  
Notary Public/Attorney at Law  
Expires 11/28/18  
Gerald J. Hygelle  
Print Name

\* Where this Agreement is a condition of subdivision rather than site  
plan approval, this clause should instead read "and recored in the Cumberland  
County Registry of Deed in Plan Book \_\_\_\_\_, Page \_\_\_\_\_, and the  
drainage plan therefor, filed with the City of Portland, Department of  
Public Works, 55 Portland Street, Portland, Maine a copy of which is  
attached hereto as Exhibit 1.



**CITY OF PORTLAND**

June 17, 1998

Don Johnson  
Phoenix Welding  
557 Riverside Street  
Portland, ME 04103

Re: 557 Riverside Street, Fabrication Building

Dear Mr. Johnson:

On June 12, 1998 the Portland Planning Authority granted minor site plan approval for a fabrication shop located at 557 Riverside Street.

The approval is based on the submitted site plan. If you need to make any modifications to the approved site plan, you must submit a revised site plan for staff review and approval.

Please note the following provisions and requirements for all site plan approvals:

1. The site plan approval will be deemed to have expired unless work in the development has commenced within one (1) year of the approval or within a time period agreed upon in writing by the City and the applicant. A one year extension may be granted by this department if requested by the applicant in writing prior to the expiration date of the site plan.
2. A performance guarantee in a form acceptable to the City of Portland and an inspection fee equal to 1.7% of the performance guarantee will have to be posted before beginning any site construction or issuance of a building permit.
3. A defect guarantee, consisting of 10% of the performance guarantee, must be posted before the performance guarantee will be released.
4. Prior to construction, a preconstruction meeting shall be held at the project site with the contractor, development review coordinator, Public Works representative and owner to review the construction schedule and critical aspects of the site work. At that time, the site/building contractor shall provide three (3) copies of a detailed construction schedule to the attending City representatives. It shall be the contractor's responsibility to arrange a mutually agreeable time for the preconstruction meeting.

O:\PLAND\REV\W\R\IVER\557\A\PPR\VL\TR.WPD

**CITY OF PORTLAND, MAINE  
ENGINEERING REVIEW FORM**

Address of Proposed Site: 557 Riverside St.  
 Project Description: Phoenix Landing  
 Applicant: SAA  
 Applicant's Mailing Address: 557 Riverside St. Portland, ME 04103  
 Date: 6/9/98  
 Job #: 19980038

<u>J. Wendel</u> Review Engineer: (Planning Department)	<u>7.5</u> Number of Estimated Hours:	<u>\$48.00</u> Cost Per Hour:	<u>\$3600.00</u> Total Amount:
<u>n/a</u> Review Engineer: (Public Works Department)	<u>n/a</u> Number of Estimated Hours:	<u>n/a</u> Cost Per Hour:	<u>\$3600.00</u> Total Amount:

An engineering fee has been assessed in the amount of \$3600.00 for the review of your project located at 557 Riverside St.

Please make check payable to the City of Portland. The check should be submitted along with this form to the Portland Planning Department, City of Portland, 389 Congress Street, Portland, ME 04101. Attn: K. Taolbat

<b>Office Use Only</b>	
Invoice Date: _____	Received: _____
Planning Revenue Code: _____	date _____
Public Works Revenue Code: _____	

cc: Applicant - white  
 Planner - blue  
 Engineer - green  
 Public Works - yellow  
 Financial Officer - pink  
 Review/Inspection Fee File - golden

**CITY OF PORTLAND, MAINE  
ENGINEERING REVIEW FORM**

Address of Proposed Site: 557 Riverside St. Date: 6/9/98  
 Project Description: Phoenix Welding Job # 19980038  
 Applicant: 50a  
 Applicant's Mailing Address: 557 Riverside St. Portland, ME 04103

Site Review (Planning Department) Review Engineer: J. Wendel  
 Right-of-Way Review (Public Works Department) Review Engineer: n/a

Number of Estimated Hours: 7.5  
 Cost Per Hour: \$48.00  
 Total Amount: \$360.00

An engineering fee has been assessed in the amount of \$360.00 for the review of your project located at 557 Riverside St.

Please make check payable to the City of Portland. The check should be submitted along with this form to the Portland Planning Department, City of Portland, 4th Floor, 389 Congress Street, Portland, ME 04101. Attn: K. Taolbot

<b>Office Use Only</b>	
Invoice Date: _____	Received: _____ date _____
Planning Revenue Code: _____	Public Works Revenue Code: _____

cc: Applicant - white  
 Planner - blue  
 Engineer - green  
 Public Works - yellow  
 Financial Officer - pink  
 Review/Inspection Fee File - golden



Item

LANDSCAPING (attach breakdown of plant materials, quantities, and unit costs)

8. MISCELLANEOUS (6'x160' chain link fence) (attach fence)

TOTAL

GRAND TOTAL

PUBLIC

Quantity

Unit Cost

Subtotal

PRIVATE

Subtotal

Unit Cost

Quantity

\$928.00

\$5.80

160'

\$27,028.00

INSPECTION FEE (to be filled out by City)

A: 1.7% of totals

or

B: Alternative Assessment

Assessed by:

PUBLIC

(name)

PRIVATE

(name)

TOTAL

**RIVERSIDE WELDERS LIMITED LIABILITY CO**  
**557 RIVERSIDE STREET**  
**PORTLAND, MAINE**  
207-797-5832

May 22, 1998

Kandice Talbot  
City of Portland  
389 Congress Street  
Portland, ME 04101

RE: Riverside Welders LLC at Phoenix Welding, 557 Riverside Street

Dear Ms. Talbot:

Here is a follow up on the review of the site plan for the proposed fabrication shop. I hope this addresses all your concerns.

- The existing contour lines from LUC's prints, dated November 10, 1995, along with necessary grades around proposed fabrication shop are shown on prints 1 of 3 and 2 of 3.

- Limits of the existing and new pavement are highlighted in YELLOW on print 2 of 3.

- The existing garage already has a sewer line and was not intended to receive a new line.

- The proposed fabrication shop will have a restroom facility with a 6" diameter septic line tying into the current septic system until the new proposed sewer line is continued up Riverside Street.

- For temporary erosion control measures, the construction of a textile sediment filter barrier will be placed on the Northern side of the property. This is highlighted in PINK on drawing 2 of 3.

- For permanent erosion control measures, gravel will be compacted and reseeded. This is referenced on drawing 3 of 3.

- All existing pipe sizes and inverts have been added. The new pipe sizes, inverts and pipe slopes have also been added. These are highlighted in BLUE on drawing 2 of 3.

- There was no intention to tie into the existing underdrain on Riverside street. The new storm drain will be tied into CB #3 (catch basin). This is shown on drawing 2 of 3.

- Details for a catch basing and a typical paved parking lot section are shown on drawing 3 of 3.

- With the proposed new pavement limits, there will be ample room for semi tractor trailers to maneuver around without having to back onto Riverside St. to get out of the driveway. The dumpster will be located on the S.E. corner of the existing garage with an enclosure. This is shown on drawing 2 of 3.

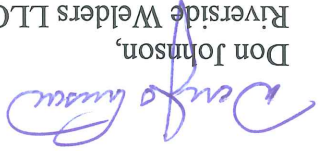
- The fences have been referenced in a letter addressed to Kandice Talbot, Planner for City of Portland, dated March 20, 1998, written by Don Johnson Vice President of Phoenix Welding.

- The size of the new water line will be 1" diameter and will tie into our existing 1" water line. The length of the pipe will have no affect on the water service.

- Roof drain details will be shown on the prints of the prefabricated metal building we will be purchasing. The drains will be tied into catch basin #3 if applicable.

Again, I hope this addresses all your concerns. If they do not, please contact me at 797-5832.

Sincerely,

  
Don Johnson,  
Riverside Welders LLC



On November 21, 2000, the site was reviewed for compliance with the conditions of approval. It is our opinion that a permanent certificate of occupancy could be issued, assuming neither Code Enforcement nor Public Works has any outstanding issues.

**TO:** Code Enforcement  
Kandi Talbot, Planner

**FROM:** Chris Earle, Construction Representative  
Reviewed by Steve Bushey, P.E., Acting Development Review Coordinator

**DATE:** November 21, 2000

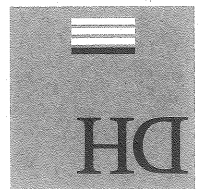
**RE:** Certificate of Occupancy – 577 Riverside Street (Phoenix Welding)

### MEMORANDUM

- ROADWAY DESIGN
- ENVIRONMENTAL ENGINEERING
- TRAFFIC STUDIES AND MANAGEMENT
- PERMITTING
- AIRPORT ENGINEERING
- SITE PLANNING
- CONSTRUCTION ADMINISTRATION

DeLUCA-HOFFMAN ASSOCIATES, INC.  
CONSULTING ENGINEERS

778 MAIN STREET  
SUITE 8  
SOUTH PORTLAND, MAINE 04106  
TEL. 207 775 1121  
FAX 207 879 0896



**MEMORANDUM**

**TO:** Code Enforcement  
Kandi Talbot, Planner

**FROM:** Jim Wendel, P.E., Development Review Coordinator

**DATE:** December 22, 1997

**RE:** Request for Certificate of Occupancy

Phoenix-Welding Company  
557 Riverside Street

---

On December 5, 1997 I reviewed the site for compliance with the approved site plan dated 12/22/95 and a Certificate of Occupancy memo dated May 21, 1996 from Jim Seymour; my comments are:

1. Don Johnson, General Manager, indicated that the final paving has not been completed; consequently no pavement striping has been completed. Also the pavement limit was extended in front of the septic system; depending on what the extra pavement is for, two required parking spaces may be lost.
2. No sidewalk has been constructed in front of the septic system.
3. A wood timber crib wall approximately 30" high has been constructed around the area of the septic system. This was not on the approved plan.
4. A concrete walk was constructed in front of the building; however there is only an approximate 1"-2" reveal on the walk and when the final surface is placed there will be no reveal. The plan required a sidewalk with a 7" reveal.
5. None of the required pine trees along the southerly property line have been planted.
6. It appears that the tractor-trailer turnaround has not been constructed.
7. Additional storm drainage was installed to the site. It is appropriate but is not shown on the plan.

8. The dumpster has no enclosure.

9. The type of lighting installed on the buildings do not conform to the detail shown on the detail sheet.

10. The building across from the proposed building has been removed.

11. The 6' high chain link fence has not been installed.

It is my opinion that all conditions of the site plan approval have not been met and a permanent certificate of occupancy should not be issued until the issues of non-conformance with the approved site plan have been resolved.

c: Kandi Talbot, Planning Department

JN1350.10/disk3/557river



CITY OF PORTLAND, MAINE  
Department of Building Inspection

# Certificate of Occupancy

LOCATION 557 Riverside St

Issued to Riverside Welders Limited Date of Issue 29 May 1996

This is to certify that the building, premises, or part thereof, at the above location, built — altered — changed as to use under Building Permit No. 951340, has had final inspection, has been found to conform substantially to requirements of Zoning Ordinance and Building Code of the City, and is hereby approved for occupancy or use, limited or otherwise, as indicated below.

PORTION OF BUILDING OR PREMISES

APPROVED OCCUPANCY

Entire

Offices

Limiting Conditions: TEMPORARY:

See attached memo from James Seymour to David Jordan listing five (5) conditions of approval.

This certificate supersedes certificate issued

Approved: 5.29.96

(Date)

Inspector

Inspector of Buildings

Notice: This certificate identifies lawful use of building or premises, and ought to be transferred from owner to owner when property changes hands. Copy will be furnished to owner or lessee for one dollar.



CITY OF PORTLAND  
Planning and Urban Development Department  
MEMORANDUM

TO: David Jordan, Code Enforcement Officer

FROM: James Seymour, Acting Development Review Coordinator

DATE: May 21, 1996

RE: Temporary Certificate of Occupancy for Phoenix Welding Company  
557 Riverside Street

I have reviewed the site improvements associated with the 1,350 sq. ft. building for Phoenix Welding company, 557 Riverside Street and believe it would be acceptable to issue a temporary Certificate of Occupancy. A permanent Certificate of Occupancy should not be issued until the following conditions have been met.

1. One portion of the new parking area where the existing internal driveway was located needs to be paved to be in accordance with the site plan. Since this area is of no immediate importance but for employee and company vehicle parking, site access for storage and maintenance, the applicant has until October 1, 1996 to complete the paving to be in compliance with the approved site plan. Also the applicant has intentions of demolishing some of the existing buildings immediately, based on this information and the applicant obtaining the necessary permits, I believe the above deadline is acceptable.

2. The applicant shall loam, seed, and mulch all disturbed areas located along the rear of the building and up to the adjacent field. The current wet conditions prohibit machinery to operate. The applicant has until June 10, 1996 to complete this condition.

3. The applicant shall construct the grades around the catch basin within the parking lot to collect surface runoff. The applicant shall notify the Development Review Coordinator just prior to applying the final layer of pavement to review grading.

4. The applicant shall submit a completed drainage maintenance agreement to the City for the drainage system which was just recently connected into the City of Portland's storm drain. This condition shall be completed by June 10, 1996.

5. All remaining landscaping to include shorter shrubs or bushes under the power lines along the southern property line shall be completed immediately and approved by Jeff Tarling, City Arborist before June 10, 1996.

cc: Kathi Staples, City Engineer

O:\PLAN\CORRESP\DRCTEMP\CO557R\VSJ.WPD

CITY OF PORTLAND, MAINE  
PLANNING BOARD

Jack D. Humeniuk, Chairman  
Barbara A. Vestal, Vice Chairman  
John L. Barker  
Joseph R. DeCoursey  
Michael J. Fenton  
Jadine R. O'Brien  
Kenneth M. Cole, III

July 27, 1988

Mathews, Mathews and Eldridge, Inc.  
R.F.D. #3 Box 334E  
Biddeford, ME 04005

Re: 557 Riverside Street

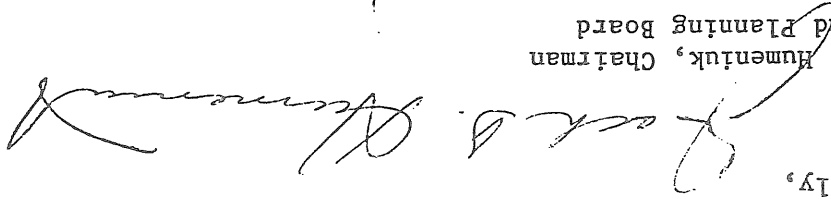
Dear Sir:

On July 26, 1988 the Portland Planning Board voted to approve the site plan for the Portland West Industrial Condominium Project. The approval was granted for the project with the following conditions:

1. That 125 White Pine trees (6-7 foot height min) be maintained or planted on the site to mitigate the lost vegetation as approved by the City Arborist;
2. That the applicant provide a foundation planting design for staff approval;
3. That the dumpsters be grouped into two locations and screened with landscaping and a gated wood fence; and
4. That condominium documents be submitted for staff approval.

The approval is based on the submitted site plan and the findings related to site plan review standards as contained in Planning Report 43-88 and supplemental materials, which is attached. A performance guarantee covering the site improvements as well as an inspection fee payment of 1.7% of the guarantee amount must be submitted to and approved by the Planning Division and Public Works prior to the release of the building permit. If you need to make any modifications to the approved site plan, you must submit a revised site plan for staff review and approval. The site plan approval will be deemed to have expired unless work in the development has commenced within six (6) months of the approval or within a time period agreed upon in writing by the City and the applicant. If there are any questions, please contact the Planning Staff.

Sincerely,

  
Jack D. Humeniuk, Chairman  
Portland Planning Board

DK/ksc

cc: Joseph E. Gray, Jr., Director of Planning and Urban Development  
Alexander Jaegerman, Chief Planner  
David Klenk, Planner  
P. Samuel Hoffses, Chief of Inspection Services  
Warren J. Turner, Zoning Administrator  
George Flaherty, Director of Parks and Public Works  
Thomas Eaton, City Engineer  
Steve Harris, Planning Engineer  
William Boothby, Principal Engineer  
William Bray, City Traffic Engineer  
Benjamin O'Reilly, Superintendent of Parks and Island Services  
Natalie Burns, Associate Corporation Counsel  
Approval Letter File

CITY OF PORTLAND, MAINE  
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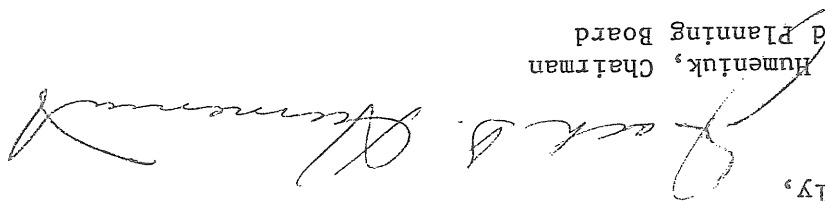
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