

Bldg "D" - 1000 GPM, Bldg "C" - 1250 GPM, Bldg "B" - 1250 GPM, Main Bldg "A" - 2000 GPM  
HANDOUT #17 GPM

## PRE-INCIDENT SURVEY 2/8/12

Building Name: My Mechanic Survey #: 94

Street Address: 5731 US 264 W

City, State, Zip: Washington NC

Primary Use: Garage Construction Type: Wood Frame

Possible Entry: \_\_\_\_\_

Possible Occupancy: A.M. \_\_\_\_\_ P.M. \_\_\_\_\_

Known Handicapped Personnel: \_\_\_\_\_

### NOTIFY IN CASE OF EMERGENCY

Name: Bernardino Hernandez DE LA CRUZ Name: \_\_\_\_\_

Phone: 940-8022 Phone: \_\_\_\_\_

### BUILDING CONSTRUCTION

Roof Type: Metal Floor Construction: Slabs

Roof Construction: Truss

Basement Construction Type: \_\_\_\_\_ Height of Basement: \_\_\_\_\_

Number of Stories: 1 Height of Each Story: 10

Main Bldg. Length: 600 Width: 39.6 Height: 10 Calculated from attic

See attachments for other Bldgs.

Attic Area: \_\_\_\_\_ Size: L \_\_\_\_\_ X W \_\_\_\_\_ X H \_\_\_\_\_

### UTILITY TYPES

Gas: space heaters Type: \_\_\_\_\_

Gas Shut Off Valve Location: \_\_\_\_\_

Electric: Washington Utilities Phase: 1

Panel Location: SE corner (Corner on C wall)

Alarm Location: \_\_\_\_\_

### EXPOSURES

North: \_\_\_\_\_ FT. West: \_\_\_\_\_ FT. South: \_\_\_\_\_ FT. East: \_\_\_\_\_

Type: \_\_\_\_\_ Type: \_\_\_\_\_ Type: \_\_\_\_\_ Type: \_\_\_\_\_

**SUPPRESSION CRITERIA**

Needed Fire Flow: \_\_\_\_\_ Total Water Supply: \_\_\_\_\_

Fuel Load: \_\_\_\_\_ Rate of Flow: \_\_\_\_\_

**HYDRANT LOCATIONS**

(1) \_\_\_\_\_ Flow: \_\_\_\_\_ Unit: \_\_\_\_\_

(2) \_\_\_\_\_ Flow: \_\_\_\_\_ Unit: \_\_\_\_\_

(3) \_\_\_\_\_ Flow: \_\_\_\_\_ Unit: \_\_\_\_\_

(4) \_\_\_\_\_ Flow: \_\_\_\_\_ Unit: \_\_\_\_\_

**OTHER WATER RESOURCES**

(1) \_\_\_\_\_

(2) \_\_\_\_\_

(3) \_\_\_\_\_

**SPECIAL RESOURCES**

(1) \_\_\_\_\_

(2) \_\_\_\_\_

(3) \_\_\_\_\_

**MUTUAL AID**

(1) \_\_\_\_\_ Assignment: \_\_\_\_\_

(2) \_\_\_\_\_ Assignment: \_\_\_\_\_

(3) \_\_\_\_\_ Assignment: \_\_\_\_\_

**STAGING AREA**

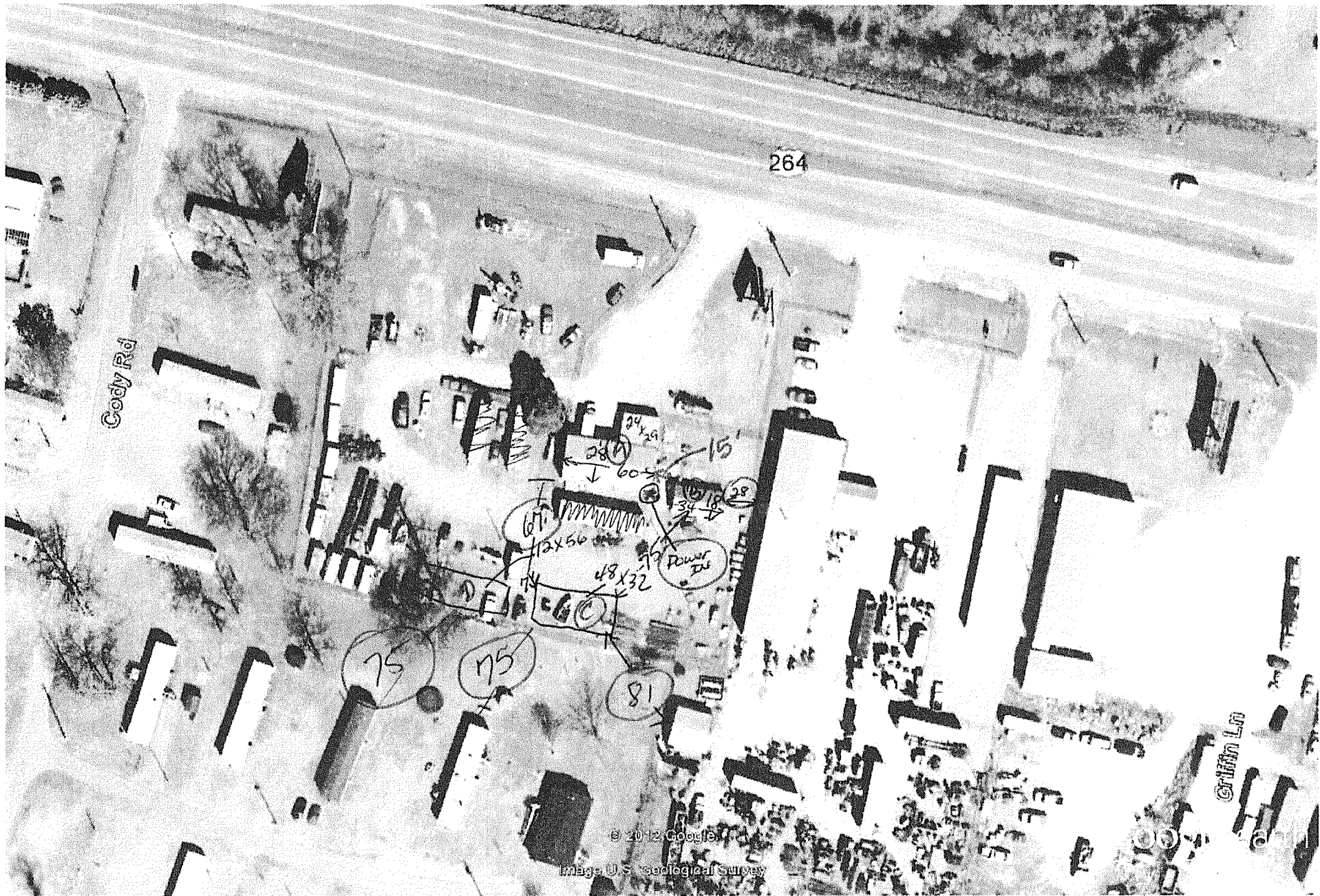
Primary: \_\_\_\_\_

Secondary: \_\_\_\_\_

**MISCELLANEOUS INFORMATION**

Sprinkler Connection: \_\_\_\_\_

Standpipe Connection: \_\_\_\_\_



Google earth

feet  
meters

100

500

My Mechanic

5731 US 264W

Structure Name My Mechanic Main Bldg - "A"  
 Structure Address 5731 US 264 W

| Length | Width | Sq Ft | Sq Root | X 18   | X construction type | GPM sum 1 | X Occupancy | GPM sum 2 |
|--------|-------|-------|---------|--------|---------------------|-----------|-------------|-----------|
| 60     | 39.6  | 2376  | 48.74   | 877.40 | 1.5                 | 1316.09   | 1.15        | 1513.51   |

| Exposure % add | Exposure add GPM | Exposure per side (75% max) Total Side A | Exposure per side 75% max Side B | Exposure per side 75% max Side C | Exposure per side 75% max Side D | Total GPM with exposures |
|----------------|------------------|------------------------------------------|----------------------------------|----------------------------------|----------------------------------|--------------------------|
| 25%            | 378.38           |                                          | 288                              | 136                              | 0                                | 2073.51                  |
| 19%            | 287.57           |                                          | 136                              |                                  |                                  |                          |
| 14%            | 211.89           |                                          | 0                                |                                  |                                  |                          |
| 9%             | 136.22           |                                          |                                  |                                  |                                  |                          |
| 75%            | 1135.13          | Total A, B, C, D                         |                                  |                                  |                                  |                          |
|                | MAX              | 560                                      | Column J, K, L and M             |                                  |                                  |                          |

Round off to nearest 250 GPM for flows less than 2500 GPM, the nearest 500 GPM over 2500 GPM

| Column F            |
|---------------------|
| Fire Resistive 0.6  |
| Non-combustible 0.8 |
| Ordinary 1          |
| Wood Frame 1.5      |

| Column H                                                                                            |
|-----------------------------------------------------------------------------------------------------|
| .75 if Mostly non-combustible contents                                                              |
| .85 if Limited combustibles (apartments, churches, schools, hospitals)                              |
| 1.0 if Mostly combustible (restraunts, sheds, garages)                                              |
| 1.15 if Free burning contents (post offices, horse stables, feed mills, repair garages, ag storage) |
| 1.25 if Rapid burning (aircraft hangers, tires, flammable liquids, wood working)                    |

**FIRE FLOW NEEDED**  
**GPM**  
**2000.00**

| Total GPM with exposures | Add 50% for each floor above ground floor | # of floors | Total to add for floors above | Sub-total with floors added | If wood shingles on roof add 500 GPM |
|--------------------------|-------------------------------------------|-------------|-------------------------------|-----------------------------|--------------------------------------|
| 2000.00                  | 1000                                      | 0           | 0.00                          | 2000.00                     | 0 2000.00                            |

Structure Name My Mechanics - Bldg "B"  
 Structure Address 5731 US 264-W

East of Main Bldg.

| Length | Width | Sq Ft | Sq Root | X 18   | X construction type | GPM sum 1 | X Occupancy | GPM sum 2 |
|--------|-------|-------|---------|--------|---------------------|-----------|-------------|-----------|
| 34     | 18    | 612   | 24.74   | 445.30 | 1.5                 | 667.94    | 1.25        | 834.93    |

| Exposure % add | Exposure add GPM | Exposure per side (75% max) Total Side A | Exposure per side 75% max Side B | Exposure per side 75% max Side C | Exposure per side 75% max Side D | Total GPM with exposures |
|----------------|------------------|------------------------------------------|----------------------------------|----------------------------------|----------------------------------|--------------------------|
| 25%            | 208.73           | 209                                      | 0                                | 159                              | 75                               | 1277.93                  |
| 19%            | 158.64           |                                          | 0                                |                                  |                                  |                          |
| 14%            | 116.89           |                                          | 0                                |                                  |                                  |                          |
| 9%             | 75.14            |                                          |                                  |                                  |                                  |                          |
| 75%            | 626.20           | Total A, B, C, D                         |                                  |                                  |                                  |                          |
|                | MAX              | 443                                      | Column J, K, L and M             |                                  |                                  |                          |

Round off to nearest 250 GPM for flows less than 2500 GPM, the nearest 500 GPM over 2500 GPM

| Column F            |
|---------------------|
| Fire Resistive 0.6  |
| Non-combustible 0.8 |
| Ordinary 1          |
| Wood Frame 1.5      |

| Column H                                                                                            |
|-----------------------------------------------------------------------------------------------------|
| .75 if Mostly non-combustible contents                                                              |
| .85 if Limited combustibles (apartments, churches, schools, hospitals)                              |
| 1.0 if Mostly combustible (restraunts, sheds, garages)                                              |
| 1.15 if Free burning contents (post offices, horse stables, feed mills, repair garages, ag storage) |
| 1.25 if Rapid burning (aircraft hangers, tires, flammable liquids, wood working)                    |

**FIRE FLOW NEEDED**  
**GPM**  
**1250.00**

| Total GPM with exposures | Add 50% for each floor above ground floor | # of floors | Total to add for floors above | Sub-total with floors added | If wood shingles on roof add 500 GPM |
|--------------------------|-------------------------------------------|-------------|-------------------------------|-----------------------------|--------------------------------------|
| 1250.00                  | 625                                       | 0           | 0.00                          | 1250.00                     | 0                                    |
|                          |                                           |             |                               |                             | 1250.00                              |

Structure Name My Mechanic  
 Structure Address 5731 US 264 W

Bldg "C" (behind Main Bldg.)  
 NOT used by  
 Business

| Length | Width | Sq Ft | Sq Root | X 18   | X construction type | GPM sum 1 | X Occupancy | GPM sum 2 |
|--------|-------|-------|---------|--------|---------------------|-----------|-------------|-----------|
| 48     | 32    | 1536  | 39.19   | 705.45 | 1                   | 705.45    | 1           | 705.45    |

| Exposure % add | Exposure add GPM | Exposure per side (75% max) Total Side A | Exposure per side 75% max Side B | Exposure per side 75% max Side C | Exposure per side 75% max Side D | Total GPM with exposures |
|----------------|------------------|------------------------------------------|----------------------------------|----------------------------------|----------------------------------|--------------------------|
| 25%            | 176.36           | 64                                       | 0                                | 64                               | 64                               | 1137.45                  |
| 19%            | 134.04           | 64                                       | 0                                |                                  | 176                              |                          |
| 14%            | 98.76            |                                          | 0                                |                                  |                                  |                          |
| 9%             | 63.49            |                                          |                                  |                                  |                                  |                          |
| 75%            | 529.09           | Total A, B, C, D                         |                                  |                                  |                                  |                          |
|                | MAX              | 432                                      | Column J, K, L and M             |                                  |                                  |                          |

Round off to nearest 250 GPM for flows less than 2500 GPM, the nearest 500 GPM over 2500 GPM

| Column F            |
|---------------------|
| Fire Resistive 0.6  |
| Non-combustible 0.8 |
| Ordinary 1          |
| Wood Frame 1.5      |

| Column H                                                                                            |
|-----------------------------------------------------------------------------------------------------|
| .75 If Mostly non-combustible contents                                                              |
| .85 If Limited combustibles (apartments, churches, schools, hospitals)                              |
| 1.0 If Mostly combustible (restaurants, sheds, garages)                                             |
| 1.15 If Free burning contents (post offices, horse stables, feed mills, repair garages, ag storage) |
| 1.25 If Rapid burning (aircraft hangers, tires, flammable liquids, wood working)                    |

**FIRE FLOW NEEDED**  
**GPM**  
**1250.00**

| Total GPM with exposures | Add 50% for each floor above ground floor | # of floors | Total to add for floors above | Sub-total with floors added | If wood shingles on roof add 500 GPM |
|--------------------------|-------------------------------------------|-------------|-------------------------------|-----------------------------|--------------------------------------|
| 1250.00                  | 625                                       | 0           | 0.00                          | 1250.00                     | 0                                    |
|                          |                                           |             |                               |                             | 1250.00                              |

Structure Name My Mechanic - Bldg "D" - Behind Main Bldg.  
 Structure Address 5731 US 264 W  
*Not used.  
 Office trailer*

| Length | Width | Sq Ft | Sq Root | X 18   | X construction type | GPM sum 1 | X Occupancy | GPM sum 2 |
|--------|-------|-------|---------|--------|---------------------|-----------|-------------|-----------|
| 56     | 12    | 672   | 25.92   | 466.61 | 1.5                 | 699.92    | 1           | 699.92    |

| Exposure % add | Exposure add GPM | Exposure per side (75% max) Total Side A | Exposure per side 75% max Side B | Exposure per side 75% max Side C | Exposure per side 75% max Side D | Total GPM with exposures |
|----------------|------------------|------------------------------------------|----------------------------------|----------------------------------|----------------------------------|--------------------------|
| 25%            | 174.98           | 63                                       | 175                              | 63                               | 0                                | 1063.92                  |
| 19%            | 132.98           | 0                                        | 0                                | 63                               | 0                                |                          |
| 14%            | 97.99            |                                          | 0                                |                                  |                                  |                          |
| 9%             | 62.99            |                                          |                                  |                                  |                                  |                          |
| 75%            | 524.94           | Total A, B, C, D                         |                                  |                                  |                                  |                          |
|                | MAX              | 364                                      |                                  |                                  |                                  |                          |

| Column F            |
|---------------------|
| Fire Resistive 0.6  |
| Non-combustible 0.8 |
| Ordinary 1          |
| Wood Frame 1.5      |

| Column H                                                                                            |
|-----------------------------------------------------------------------------------------------------|
| .75 if Mostly non-combustible contents                                                              |
| .85 if Limited combustibles (apartments, churches, schools, hospitals)                              |
| 1.0 if Mostly combustible (restaurants, sheds, garages)                                             |
| 1.15 if Free burning contents (post offices, horse stables, feed mills, repair garages, ag storage) |
| 1.25 if Rapid burning (aircraft hangers, tires, flammable liquids, wood working)                    |

| Column J, K, L and M              |
|-----------------------------------|
| If up to 10 feet add 25% per side |
| If 11 to 30 feet add 19% per side |
| If 31 to 60 feet add 14% per side |
| If 61 to 100 feet add 9% per side |

Round off to nearest 250 GPM for flows less than 2500 GPM, the nearest 500 GPM over 2500 GPM

| Total GPM with exposures | Add 50% for each floor above ground floor | # of floors | Total to add for floors above | Sub-total with floors added | If wood shingles on roof add 500 GPM |
|--------------------------|-------------------------------------------|-------------|-------------------------------|-----------------------------|--------------------------------------|
| 1000.00                  | 500                                       | 0           | 0.00                          | 1000.00                     | 0                                    |
|                          |                                           |             |                               |                             | 1000.00                              |

**FIRE FLOW NEEDED GPM**  
**1000.00**