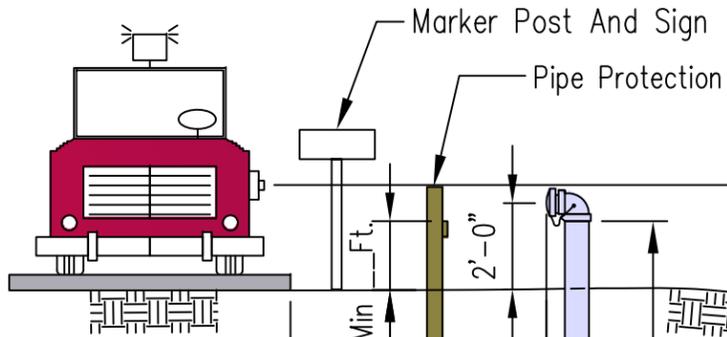
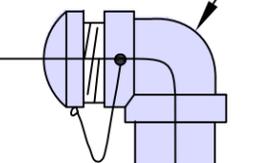
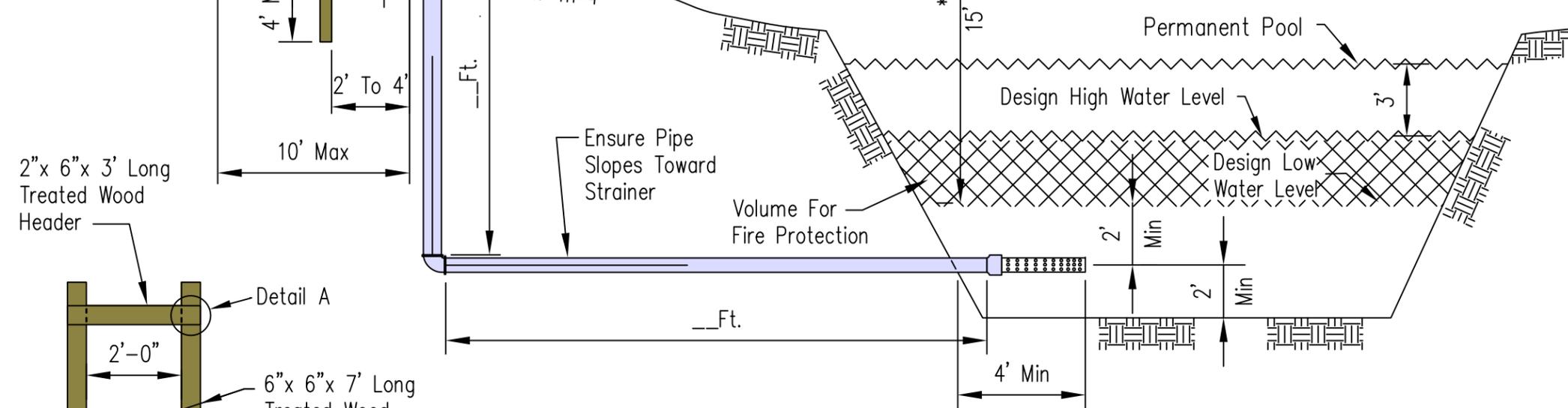


NOTE:
Check with local Fire Department
for approved type of connection.

Dry Hydrant Adapter
Head Kit ASTM 2466
___" x 90° Elbow

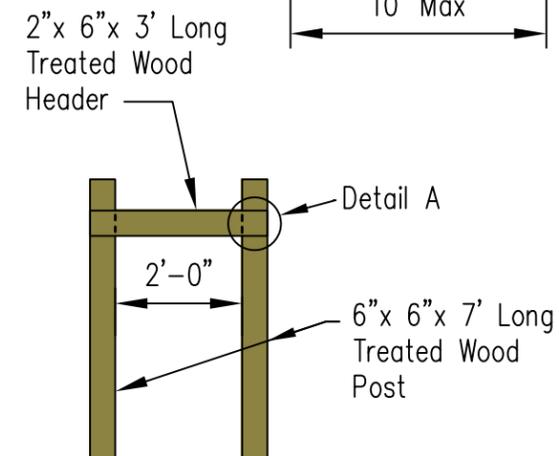


NOTE:
*If pump elevation is
higher than steamer fitting
(truck pump inlet), measure
H from pump level.

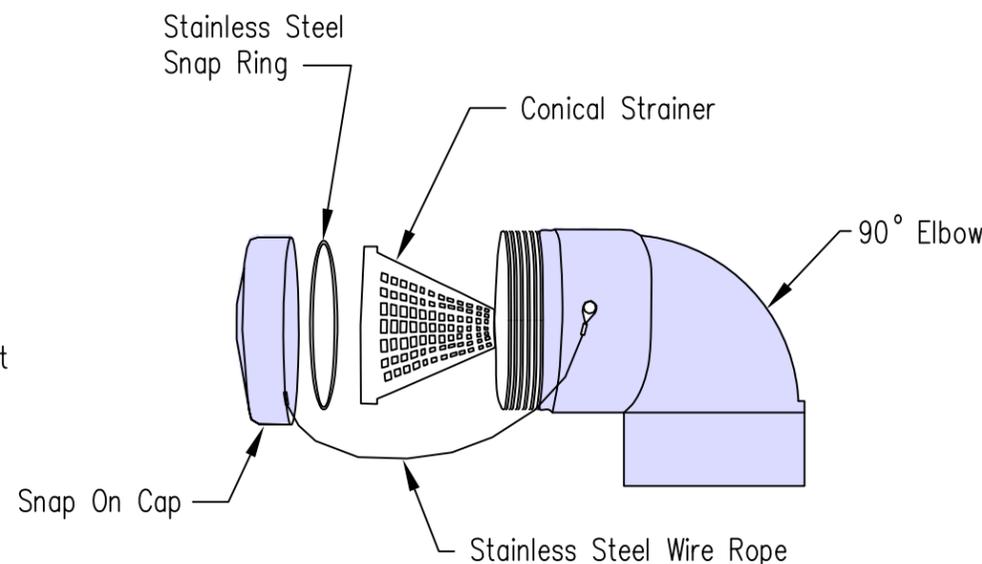
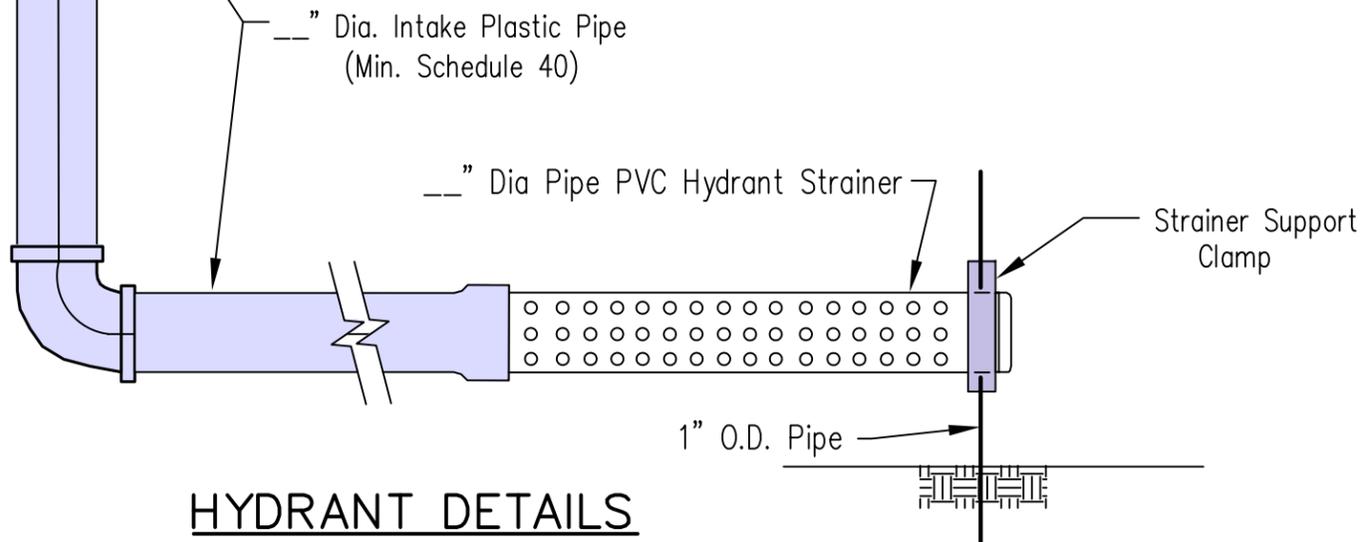


PROFILE OF INSTALLATION

PIPE PROTECTION



HYDRANT DETAILS



DRY HYDRANT HEAD

| | |
|----------|-------------|
| Date | 8/13 |
| Designed | M. QUINONES |
| Drawn | |
| Checked | |
| Approved | |

**90 DEGREE DRY FIRE HYDRANT
DETAILS & DESIGN SHEET**



| | |
|-------------|-----------|
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| | |
|-----------|----------|
| Landowner | Location |
|-----------|----------|

Not To Scale

Calculating Required Lift

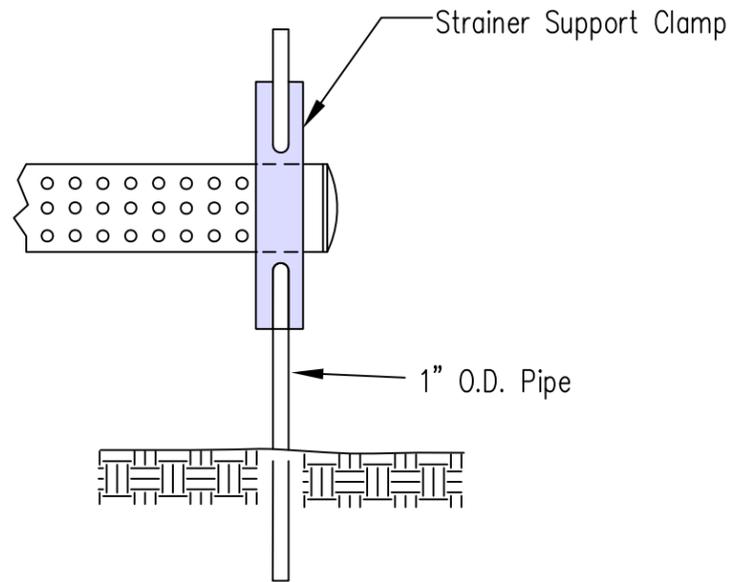
$$\text{Total Required Lift} = \text{Head Loss in Hydrant Fittings And Guard} + \text{Head Loss In Intake Pipe (HL)} + \text{Static Lift (H)}$$

Using 500 Gallons/Min.

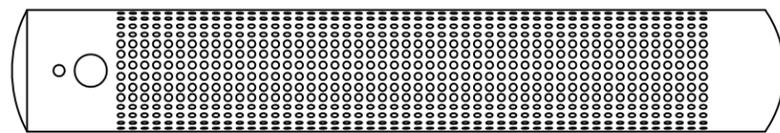
$$\text{Total Required Lift} = 7.6' + L \times \frac{\text{HL}}{100} + H = 7.6' + \text{---} + \text{---} = \text{---}$$

Using 250 Gallons/Min

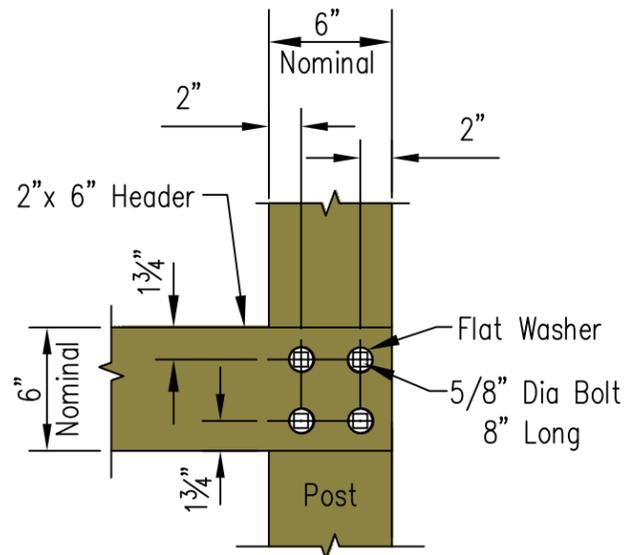
$$\text{Total Required Lift} = 1.9' + L \times \frac{\text{HL}}{100} + H = 1.9' + \text{---} + \text{---} = \text{---}$$



STRAINER SUPPORT CLAMP



PVC DRY HYDRANT STRAINER



DETAIL A

BILL OF MATERIAL

| Material | Qty |
|-------------------------------------|--------|
| Dry Hydrant Head Kit 90° Elbow | 1 Each |
| ___ Inch PVC Strainer Kit | 1 Each |
| Strainer Support And Clamp | 1 Each |
| ___ Inch Dia PVC Schedule 40 Pipe | Feet |
| ___ Inch Dia PVC 90° Elbow | 1 Each |
| Reflective Sign And Steel Post | 1 Each |
| <u>Pipe Protection</u> | |
| Treated Wood Post 6"x 6" x 7' Long | 2 Each |
| Treated Wood Header 2"x 6"x 3' Long | 1 Each |
| 5/8" Bolt 8" Lg/W Nuts & Washers | 8 Each |

HEAD LOSS IN FEET (HL)

| Gallons Per Minute | Plastic Pipe | Smooth Steel Pipe |
|--------------------|--------------|-------------------|
| 500 | 2.3 | 5.3 |
| 250 | 0.6 | 1.3 |

NOTES:

- Total required lift value not to exceed 20 feet.
- Static lift (H) from design low water level to top of fire truck pumping connection or centerline of pump (which ever is higher) not to exceed 15 feet.
- L = total length of PVC pipe
- Minimum water volume of 4,000 cubic feet represents a flow of 250 gallons per minute for 2 hours. This volume should be available after 50-year frequency, 12-month duration drought.

Assumptions for Volume computation:

- Runoff during drought: None.
- Pond Surface Evaporation During Drought: 3 feet.
- Top Water Surface Elevation For Volume Computation: 3 feet below the permanent pool elevation (generally the crest of the principal spillway) due to evaporation during the drought.
- Bottom Water Surface Elevation For Volume Computation: 2 feet above the dry hydrant inlet centerline in the pond to prevent vortex during pumping.

Disclaimer:

This drawing documents volume of water available. It assumes 4,000 cubic feet of water is adequate to provide fire protection for one event. The Natural Resources Conservation Service does not warrant the conditions which represent a 50-year frequency drought nor any local capabilities to deliver water to fire scene.

| | |
|--|------------------------|
| Total Volume (3 feet below permanent pool) | _____ft ³ |
| - Total Volume (2 feet above dry hydrant inlet centerline) | - _____ft ³ |
| = Volume (fire protection) | = _____ft ³ |
| Minimum Volume (fire protection) 4,000 ft ³ | |

| | |
|----------|-------------|
| Date | 8/13 |
| Designed | M. Quinones |
| Drawn | |
| Checked | |
| Approved | |

**90 DEGREE DRY FIRE HYDRANT
DETAILS & DESIGN SHEET**



| | |
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| Landowner | | Location | |
|-----------|--|----------|--|

Not To Scale