KLAMATH RIVER
RENEWAL CORPORATION

FALL CREEK FISH HATCHERY
ISSUED FOR CONSTRUCTION
### Sheet Symbols

#### Site Plan Line Types

- Fence Line
- Overhead Power
- Major Contour
- Minor Contour
- Edge of Waterline
- Toe of Slope
- Top of Bank
- Sanitary Sewer
- Storm Drain
- Edge of Pavement
- Edge of Gravel
- Wasteline
- Silt Fence
- Construction Marker
- Gas Line
- Irrigation Line
- Water Line
- Telephone Line
- Communication Line
- Overhead Electrical/Power Line
- Underground Electrical
- Property Line
- Existing Overhead Power Line
- Existing Overhead Power & Telephone Line
- Existing Telephone Line
- Existing Buried Telephone Line Evidenced by Pedestals & Warning Markers
- Existing Fence Line
- Project Boundary
- Tree Protection Fence
- Turf/Grass Curtain
- Silt Fencing
- Cotters
- Ordinary High Water
- Grade Break

#### Site Plan Symbols

- Arrow indicates direction of plan north
- Dashed Line with Arrows
- Change of Pipe MTL
- End of Pipe
- Diameter
- Angle
- Manhole
- Electric Box
- Storm Drain Manhole
- Fire Hydrant
- Pole Anchor
- Power Pole
- Light Pole
- Sidewalk
- Existing Headwall
- Existing Monitoring Station
- Existing Fence
- State Plane Coordinate Marker
- Existing Green
- Existing Building Structures
- Existing Storm Sewer/Drainage
- Existing Water Main
- Existing 4" Water Mains
- Existing Electrical Outlet
- Existing Power Pole
- Existing Telephone Pedestal
- Pump
- Test Pit Location
- Gravel
- Spread Footing
- Spread Footing
- Corner Post
- Grade Beam

#### Miscellaneous Symbols

- Rock Type as Noted (Plan/Section)
- Red Rock
- Existing Grade (Section)
- New Soil (Section)
- Concrete (Section/Plan)
- Sands, Gravel (Plan/Section)
- Steel (Section)
- Masonry (Plan)
- Wood, S2S Type as Noted (Section)
- Wood, S2S Type as Noted (Section)
- Roof Ribs (Plan/Section)
- Roof Insulation (Section)
- Asphalt Concrete Pavement Surface (Plan/Section)
- Grass/Gravel (Plan)
- Matt Insulation (Section)
- New Construction
- Existing
- Existing to be Removed or Demolished
- Clearing and Grubbing

#### Architectural Symbols

- Elevation Identification
- Elevation Sheet Number
- Room Name
- Room Identification
- Room Number
- Key Note
- Door Number
- Assembly Tag
- Window Identification
- Window Type (Letter or Number)
- Datum Point
- Control Point or Work Point

#### Concrete Schedule Marks

- Footing
- Spread Footing
- Spread Footing
- Corner Post
- Grade Beam

#### General Notes

1. All symbols are not necessarily used. This is a standard drafting showing common symbols on this project.
2. Screening or shadows of work is used to indicate existing components to be replaced. Proposed improvements to highlight selected trade work. Refer to context of each drawing for symbols.
OVERALL PLAN AND PROJECT CONTROL

NOTE: * INDICATES CONTROL POINT OUTSIDE OF PLAN VIEW AREA AND NOT SHOWN.

SCALE: 1" = 80'
DRAIN PIPING DESIGN CRITERIA

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAXIMUM FLOW DEPTH - RADIUS DIAMETER</td>
<td>72M</td>
</tr>
<tr>
<td>MINIMUM CLEANOUT VELOCITY</td>
<td>2.0 ft/s</td>
</tr>
<tr>
<td>ADULT HOLDING ORifice COEFFICIENT</td>
<td>0.62</td>
</tr>
<tr>
<td>ADULT HOLDING NUMBER OF DEVICES</td>
<td>6</td>
</tr>
<tr>
<td>PRESSURE PIPE ROUGHNESS COEFFICIENT</td>
<td>0.0013</td>
</tr>
<tr>
<td>OPEN CHANNEL PIPE ROUGHNESS COEFFICIENT</td>
<td>0.013</td>
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</tbody>
</table>

SHEET NOTES:
1. DESIGN FLOW IS MAXIMUM DESIGN FLOW, FLOW DEPTH CORRESPONDS TO THE MAXIMUM DESIGN FLOW.
2. ALL SURFACE FLOW DRAIN PIPING, STUDY WATER PIPING, AND FISH RELEASE PIPING NOT SHOWN ON THIS SHEET FOR CLARITY.
3. F/F INLET CONFIGURATIONS AT THE CHochen Oregon Lane." ALLOW FOR SURFACE FLOW TOFLOW FROM THE UPPER REACH OF THE DRAIN PIPE.
4. 2° 6" DRAINAGE DRAINS DRAIN PIPE, EQUIDISTANT WITH VENT PIPE TO IMPROVE PRESSURE FLOW TO THE CHochen Oregon Lane. DRAIN PIPE AND THE TRUNK LINE.
5. PIPE RISERS AT THE ADULT HOLDING PENS WILL INCREASE THE DRAIN PIPES TO FILL AT Aprox 5-10 ft for FULL FLOW. WHEN THE FILLING IS COMPLETED, THE ADULT HOLDING PENS WILL BE FULLY FLOW. THE PRESSURE FLOW, AND FOR LOWER FLOW RATES, THE RISER WILL BE SLIGHTLY LOWER. IN NO CASE DOES THE PRESSURE FLOW DAMAGE AN INFRASTRUCTURE OF THE UPPER SITE DRAIN SYSTEMS.

ABBREVIATIONS:
S = PIPE SLOPE
G = MAXIMUM DISCHARGE
D = FLOW DEPTH

DRAIN PIPING HYDRAULIC PROFILE

SCALE IN' S
<table>
<thead>
<tr>
<th>COMMONLY USED FUNCTIONS</th>
<th>DR DRAIN</th>
<th>FE FISHEING (NOTE 5)</th>
<th>FW FLOOD WATER</th>
<th>SW STREET WATERS (NON-POISONOUS)</th>
<th>SR SEWER</th>
<th>WD WASTE DRAIN</th>
<th>SD STORM DRA N</th>
<th>SC SLUICING, UNDERDRAIN COLLECTOR</th>
<th>H REFRIGERANT</th>
</tr>
</thead>
<tbody>
<tr>
<td>WATER</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>SEE NOTE 16</td>
</tr>
</tbody>
</table>

**TYPICAL PIPE DESIGNATION:**

- **FLUID DIA.**
- **FLUID ABBR.**

**NOTES:**

- **Pipe sizing requirements for this flow may be determined by cross-drainage or contraction shall produce the pipe material schedule shown on the drawings and specifications for that pipe diameter.**

<table>
<thead>
<tr>
<th>GROUP NO.</th>
<th>PIPE MATERIAL</th>
<th>HYPHENS / (O/R)</th>
<th>LINES AND COATINGS</th>
<th>PIPING MATERIAL SCHEDULE (SEE NOTE 1)</th>
</tr>
</thead>
</table>

**NOT APPLICABLE**

**SOURCE:**

Klamath River Renewal Corporation
Fall Creek Fish Hatchery
Piping Schedule

**DESIGNER:** J. Illig

**DRAWN:** R. Goll

**CHECK:** J. Boag

**DATE:** 08/10/01

**PROJECT #:** 10010