NOTES

1) ALL PIPE AND FITTINGS IN DROP CONNECTION SHALL BE THE SAME SIZE AND MATERIAL AS MAIN LINE UNLESS OTHERWISE SHOWN ON THE PLANS.

2) BITUMASTIC SHALL BE USED ON ALL MANHOLE JOINTS, EXCLUDING GRADE RINGS.

3) MANHOLES SHALL BE 60" DIAMETER (MIN.) FOR SEWER MAIN 15" AND LARGER.

4) MANHOLES 80" DIAMETER AND LARGER SHALL HAVE A PROTECTIVE LINING SYSTEM. PROTECTIVE LINING SHALL BE PER CURRENT VWD STANDARD SPECIFICATIONS.

NOTE:
SHEAR COUPLINGS ARE REQUIRED WHEN BELLED ENDS ARE NOT USED.

MINIMUM DIMENSIONS:

<table>
<thead>
<tr>
<th>D</th>
<th>F</th>
<th>G</th>
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<tbody>
<tr>
<td>6&quot; to 8&quot;</td>
<td>6&quot;</td>
<td>4&quot;</td>
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<tr>
<td>10&quot; to 15&quot;</td>
<td>6&quot;</td>
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<tr>
<td>18&quot; to 27&quot;</td>
<td>12&quot;</td>
<td>4&quot;</td>
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DIMENSIONS 'F' & 'G' SHALL BE USED FOR 'D' (INSIDE DIA. OF PIPE) OF THE LARGEST PIPE IN THE MANHOLE.
SECTION D-D

- MANHOLE COVER PROFILE
- A.C. PAVE
- 0.1" EXIST. UNPAVED ROADWAY
- 3 PIECE C.I. MANHOLE FRAME & COVER WITH VALLECITOS WATER DISTRICT, SEWER IN RAISED LETTERS.
- EXIST. PAVED ROADWAY
- GROUT TO GRADE (3" MAX.)
- 36" I.D. SHAFT SEANCE
- E
- PVC SEWER MAIN CONNECTION AT MANHOLE SHALL BE SAND COLLAR WATER STOP FITTING.
- CORE DRILL FOR PIPE & GROUT IN PLACE
- 5" TYP.
- 1/2" VARES
- 1/8" VARES
- DROP M.H. TOE
- SEWER MAIN
- DROP M.H. 1/4 BEND
- POURED MONOLITHIC CONG. BASE
- TOP OF SUPPORT CONCRETE

SECTION E-E

- 3/8" PHILLIPS CONC. ANCH. W/ 6" BLACK-IRON BOLTS;
- SPACE AT 1/2" O.C. EA SIDE.
- SIDE INLET-WHERE NOTED ON PLANS

NOTES:
1) ALL PIPE AND FITTINGS IN DROP CONNECTION SHALL BE THE SAME SIZE AND MATERIAL AS MAIN LINE UNLESS OTHERWISE SHOWN ON THE PLANS.
2) DROP SECTION CHANNEL IN MANHOLE SHALL BE FORMED FOR 8" DIAMETER PIPE UNLESS OTHERWISE SHOWN ON PLANS.
3) CHANNEL INVERTS SHALL BE TRUE TO GRADES AND ALIGNMENT AND FINISHED SMOOTH.
4) SHEAR COUPLINGS ARE REQUIRED WHEN BELLED ENDS ARE NOT USED.
5) BITUMASTIC SHALL BE USED ON ALL MANHOLE JOINTS, EXCLUDING GRADE RINGS.

MINIMUM DIMENSIONS:
(All Manhole Types)

<table>
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<tr>
<th>D</th>
<th>E</th>
<th>G</th>
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<tbody>
<tr>
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</table>

DIMENSIONS "E" & "G" SHALL BE USED FOR "D" (INSIDE DIA. OF PIPE) OF THE LARGEST PIPE IN THE MANHOLE.

TYPE "A" DROP MANHOLE TO BE USED ONLY UPON APPROVAL OF DISTRICT ENGINEER.

REVISIONS
<table>
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<tr>
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<th>APPROVED</th>
<th>DATE</th>
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<tbody>
<tr>
<td>REMOVE STEPS &amp; REVISE &quot;F&quot; &amp; &quot;G&quot;</td>
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<td></td>
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<tr>
<td>ROTATED SECTION</td>
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<tr>
<td>ADDED APPROVAL NOTE</td>
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VALLECITOS WATER DISTRICT STANDARD DRAWING

DATE: JULY 2015

DROP MANHOLE TYPE "A"

BY: 

Drawing No. S-2
NOTES:

1) ALL PIPE AND FITTINGS IN DROP CONNECTION SHALL BE THE SAME SIZE AND MATERIAL AS MAIN LINE UNLESS OTHERWISE SHOWN ON THE PLANS.

2) DROP SECTION CHANNEL IN MANHOLE SHALL BE FORMED FOR 8" DIAMETER PIPE UNLESS OTHERWISE SHOWN ON PLANS.

3) CHANNEL INVERTS SHALL BE TRUE TO GRADES AND ALIGNMENT AND FINISHED SMOOTH.

4) IF DISTANCE 'C' IS GREATER THAN 4'-0" USE MANHOLE TYPE 'A'.

5) SHEAR COUPLINGS ARE REQUIRED WHEN BELLED ENDS ARE NOT USED.

6) BITSUMASTIC SHALL BE USED ON ALL MANHOLE JOINTS, EXCLUDING GRADE RINGS.

SECTION G-G

SECTION H-H

MINIMUM DIMENSIONS:
(All Manhole Types)

<table>
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<tr>
<th>D'</th>
<th>T'</th>
<th>G'</th>
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</table>

DIMENSIONS 'T' & 'G' SHALL BE USED FOR 'D' (INSIDE DIA. OF PIPE) OF THE LARGEST PIPE IN THE MANHOLE.

TYPE "B" DROP MANHOLE TO BE USED ONLY UPON APPROVAL OF DISTRICT ENGINEER.

REVISIONS

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<td></td>
</tr>
<tr>
<td>ROTATED SECTION</td>
<td>10-27-11</td>
<td></td>
</tr>
</tbody>
</table>
NOTES:

1) FINAL APPROVAL WILL NOT BE GRANTED UNLESS THE LETTER "S" IS STAMPED ON CURB AS NOTED ABOVE, AT CORRECT STATION.

2) FINAL APPROVAL WILL NOT BE GRANTED UNLESS THE SEWER LATERALS COMPLY FULLY WITH THIS DRAWING.

3) ALL LATERALS MUST HAVE STATION AND INVERT ELEV, AT PROPERTY LINE NOTED ON "AS-BUILT" DRAWING, OR FINAL APPROVAL WILL NOT BE GRANTED.

4) PROPERTY LINE CLEAN OUTS WILL BE REQUIRED ON ALL LATERALS IF WATER IS NOT SERVED BY THE V.W.O.

5) CONCRETE SUPPORT OF SEWER LATERALS, REQUIRED ON HOT TAPS ONLY.

6) "A" DIMEN. SHALL BE 5.0FT. UNLESS NOTED OTHERWISE ON THE PLANS. FOR LATERALS WHERE COVER IS LESS THAN 4FT. CONC. ENCASMENT WILL BE USE.
NOTES:

1) WHEN "A" DIMEN. IS 5 FT. OR GREATER, CONTRACTOR MAY ELECT TO USE DEEP-CUT LATERAL, WHERE THE SYMBOL "D" IS SHOWN FOR THE INV. ELEV. OF THE LATERAL, AT THE PROP. LINE. "A" SHALL BE CALCULATED BY THE FORMULA: A = \frac{DIA. OF MAIN \times 0.2 \times \text{L}}{2} (ALL DIMEN. IN FEET.)

2) "B" DIMEN. SHALL BE 5.0 FT. UNLESS NOTED OTHERWISE ON THE PLANS. FOR LATERALS WHERE COVER IS LESS THAN 4 FT. CONC. ENCASEMENT WILL BE USE.

3) "D" = DIA. OF SEWER LATERAL, SHALL BE 4" UNLESS NOTED OTHERWISE ON THE PLANS.

4) "L" = LENGTH OF LATERAL-TO BE DETERMINED IN THE FIELD.

5) IN NO INSTANCE SHALL THE WYE CONNECTION OR ANY PART OF THE WYE FITTING BE PLACED UPSTREAM OF THE LATERAL AS STAKED IN THE FIELD.

6) MARKER POSTS SHALL BE AT PROPERTY LINE 3" ABOVE GROUND, IN A PLUMB LINE. EXPOSED PORTION OF STAKE TO BE PAINTED WHITE.

DEEP CUT LATERALS TO BE USED ONLY UPON APPROVAL OF DISTRICT ENGINEER.

VALLECITOS WATER DISTRICT STANDARD DRAWING

DEEP-CUT LATERAL CONNECTION
NOTES:

1.) THE UPPER END OF THE CHIMNEY PIPE SHALL BE 8' BELOW THE GRADE OF THE LOWER CURB, UNLESS OTHERWISE SPECIFIED.

2.) WHERE ONE OR TWO HOUSES CONNECTIONS ARE TO BE JOINED TO THE CHIMNEY PIPE, USE A SINGLE "Y" BRANCH, WHERE THREE HOUSE CONNECTIONS ARE TO BE JOINED, USE A DOUBLE "Y" BRANCH.

3.) WHERE THE CHIMNEY PIPE IS TO BE USED FOR A SINGLE HOUSE CONNECTION FACE "T" TOWARD PROPERTY TO BE SERVED; WHERE USE FOR HOUSE CONNECTIONS ON BOTH SIDES OF THE SEWER, THE HOUSE CONNECTION ON THE RIGHT SIDE OF THE SEWER (LOOKING UP GRADE) SHALL BE CONNECTED TO THE "Y" BRANCH BY A 45° BEND AND THE HOUSE CONNECTION ON THE LEFT SIDE SHALL BE CONNECTED TO THE UPPER END OF THE CHIMNEY BY 4" OR 6" 1/4 BEND, UNLESS OTHERWISE SPECIFIED.

4.) CHIMNEY PIPE USE ONLY UPON APPROVAL OF THE DISTRICT ENGINEER.
NOTE:

1) CLEAN-OUT PIPE MUST BE THE SAME DIAMETER AS HOUSE LINE.

2) FINAL APPROVAL WILL NOT BE GRANTED UNLESS LATERALS COMPLY FULLY WITH THIS DRAWING.

3) REQUIRED WITHIN IMPROVEMENT DISTRICT "A" OR UPON DIRECTION OF DISTRICT ENGINEER.
NOTE:
The sewer main shall be laid for the full length and depth shown on the plans and profile to the point marked dead end (D.E.)

NOTE:
The trench for a dead end shall be excavated only to subgrade, which is the bottom of the sloping pipe and fittings. Should the excavation for any reason be carried below such a grade, it shall be refilled to grade with Type 'A' crushed rock which shall be tamped firm and unyielding. Should a firm and unyielding foundation be unobtainable by this method, a partial concrete cradle shall be employed.
NOTE:
WHERE TRENCH WIDTH EXCEEDS THE WIDTH SPECIFIED IN THE SPECIFICATIONS, CONTRACTOR SHALL FURNISH AND PLACE AT HIS OWN EXPENSE, A CRADLE AS SHOWN ABOVE.
SECTION A-A

1) CONSTRUCT CONTROL MANHOLE ON STRAIGHT RUN OF SEWER PIPE. FLOW SHALL BE STRAIGHT THROUGH AS SHOWN.

2) BOTTOM OF V-NOTCH MUST ALWAYS BE ABOVE MAXIMUM POSSIBLE LEVEL IN DOWNSTREAM CHANNEL TO PREVENT SUBMERGED DISCHARGE CONDITIONS.

3) THE CONTROL MANHOLE SHALL BE A MINIMUM SIZE OF 4 FOOT SQUARE INSIDE OR 4 FOOT INSIDE DIAMETER AND CONSTRUCTED OF CONCRETE BLOCK, BRICK, STANDARD MANHOLE RINGS OR POURRED CONCRETE.

4) CONTROL MANHOLE PLANS ARE TO BE SUBMITTED TO THE ENGINEERING DEPARTMENT OF THE VALLECITOS WATER DISTRICT FOR APPROVAL.

5) FOR 6" OR 8" LINES ONLY.

6) FOR FLOWS OF 10,000 TO 100,000 PER DAY, FOR FLOWS OTHER THAN THOSE SPECIFIED, CONTACT THE DISTRICT.

FRAME & GATE ASSEMBLY

NOTE: ALL MATERIAL FOR GATE AND FRAME TO BE ALUMINUM PLATE.