

INSTALLATION GENERAL NOTES

1. READ THOROUGHLY AND BECOME FAMILIAR WITH THE SPECIFICATIONS AND INSTALLATION DETAILS FOR THIS AND RELATED WORK PRIOR TO CONSTRUCTION.
2. COORDINATE UTILITY LOCATES ("CALL BEFORE YOU DIG") OF UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
3. DO NOT PROCEED WITH THE INSTALLATION OF THE IRRIGATION SYSTEM WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS OR GRADE DIFFERENCES EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. IF DISCREPANCIES IN CONSTRUCTION DETAILS, LEGEND, NOTES, OR SPECIFICATIONS ARE DISCOVERED, BRING ALL SUCH OBSTRUCTIONS OR DISCREPANCIES TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE.
4. THE DRAWINGS ARE DIAGRAMMATIC. THEREFORE, THE FOLLOWING SHOULD BE NOTED:
 - A. ALTHOUGH IRRIGATION COMPONENTS MAY BE SHOWN OUTSIDE PLANTING AREAS FOR CLARITY, INSTALL IRRIGATION PIPE AND WIRING IN LANDSCAPED AREAS WHENEVER POSSIBLE.
 - B. TREE AND SHRUB LOCATIONS AS SHOWN ON LANDSCAPE PLANS TAKE PRECEDENCE OVER IRRIGATION EQUIPMENT LOCATIONS. AVOID CONFLICTS BETWEEN THE IRRIGATION SYSTEM, PLANTING MATERIALS, AND ARCHITECTURAL FEATURES.
 - C. USE ONLY STANDARD TEES AND ELBOW FITTINGS. USE OF CROSS TYPE FITTINGS IS NOT ALLOWED.
5. PROVIDE THE FOLLOWING COMPONENTS TO THE OWNER PRIOR TO THE COMPLETION OF THE PROJECT:
 - A. TWO (2) OPERATING KEYS FOR EACH TYPE OF MANUALLY OPERATED VALVES.
 - B. TWO (2) OF EACH SERVICING WRENCH OR TOOL NEEDED FOR COMPLETE ACCESS, ADJUSTMENT, AND REPAIR OF ALL ROTARY SPRINKLERS.
7. SELECT NOZZLES FOR SPRAY AND ROTARY SPRINKLERS WITH ARCS WHICH PROVIDE COMPLETE AND ADEQUATE COVERAGE WITH MINIMUM OVERSPRAY FOR THE SITE CONDITIONS. CAREFULLY ADJUST THE RADIUS OF THROW AND ARC OF COVERAGE OF EACH ROTARY SPRINKLER TO PROVIDE THE BEST PERFORMANCE.
8. THE IRRIGATION CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF IRRIGATION SLEEVING. SLEEVES ARE REQUIRED FOR BOTH PIPING AND ELECTRICAL WIRING AT EACH HARDSCAPE CROSSING. COORDINATE INSTALLATION OF SLEEVING WITH OTHER TRADES. ANY PIPE OR WIRE WHICH PASSES BENEATH EXISTING HARDSCAPE WHERE SLEEVING WAS NOT INSTALLED WILL REQUIRE HORIZONTAL BORING BY THE IRRIGATION CONTRACTOR.
9. INSTALL ALL ELECTRICAL POWER TO THE IRRIGATION CONTROL SYSTEM IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND ALL APPLICABLE LOCAL ELECTRIC UTILITY CODES.
10. THE FOLLOWING SHOULD BE NOTED REGARDING PIPE SIZING: IF A SECTION OF UNSIZED PIPE IS LOCATED BETWEEN THE IDENTICALLY SIZED SECTIONS, THE UNSIZED PIPE IS THE SAME NOMINAL SIZE AS THE TWO SIZED SECTIONS. THE UNSIZED PIPE SHOULD NOT BE CONFUSED WITH THE DEFAULT PIPE SIZE NOTED IN THE LEGEND.
11. INSTALL TWO (2) #14 AWG CONTROL WIRES FROM CONTROLLER LOCATION TO EACH DEAD-END OF MAINLINE FOR USE AS SPARES IN CASE OF CONTROL WIRE FAILURE. COIL 3 FEET OF WIRE IN VALVE BOX.
12. REFER TO PROPOSED MAINLINE AND SLEEVING PLAN, DESIGNED BY HYDROSYSTEMS, FOR MORE PUMP STATION INFORMATION.
13. PRIOR TO CONSTRUCTION OF PHASE 3, CONTROLLERS "A" AND "B" (PHASE 2) SHALL NOT OPERATE SIMULTANEOUSLY.

IRRIGATION LEGEND

- SLEEVES: CLASS 200 PVC
- EXISTING IRRIGATION MAINLINE PIPE, CLASS 200 PVC (4-INCH UNLESS OTHERWISE NOTED)
- CONTROL WIRE IN 1-INCH WIRE CONDUIT (MARK WITH WARNING TAPE)
- LATERAL PIPE TO SPRINKLERS: CLASS 200 PVC (1-INCH SIZE UNLESS OTHERWISE INDICATED)
- LATERAL PIPE TO EMITTERS: UV RADIATION RESISTANT POLYETHYLENE (3/4-INCH SIZE, ROUTING IS DIAGRAMMATIC)
- UNCONNECTED PIPE CROSSING
- POINT-OF-CONNECTION (POC) ASSEMBLY
- IRRIGATION PUMP STATION
- ⊕ ISOLATION GATE VALVE ASSEMBLY
- ⊕ QUICK COUPLING VALVE ASSEMBLY
- ⊕ REMOTE CONTROL VALVE ASSEMBLY FOR SPRINKLER LATERALS
- ⊕ POP-UP SPRAY SPRINKLER: RAIN BIRD 1000-SAM-FRS W/15 SERIES NOZZLE
PRESSURE: 30 PSI RADIUS: 15 FEET
FLOW (GPM): Q - 0.33 H - 1.25 F - 3.70
- ⊕ POP-UP SPRAY SPRINKLER: RAIN BIRD 1000-SAM-FRS W/10 SERIES NOZZLE
PRESSURE: 30 PSI RADIUS: 10 FEET
FLOW (GPM): Q - 0.33 H - 0.79 F - 1.51

- POP-UP ROTOR SPRINKLER: HUNTER I-20 ADS
PRESSURE: 50 PSI
- | | | |
|----------------|-------------|---------------|
| ⊕ 2.0LA NOZZLE | RADIUS: 28' | FLOW: 2.1 GPM |
| ⊕ 2.5LA NOZZLE | RADIUS: 33' | FLOW: 2.8 GPM |
| ⊕ 3.5LA NOZZLE | RADIUS: 38' | FLOW: 3.5 GPM |
| ⊕ 4.5LA NOZZLE | RADIUS: 43' | FLOW: 4.4 GPM |
| ⊕ 10SR NOZZLE | RADIUS: 18' | FLOW: 1.0 GPM |
| ⊕ 15SR NOZZLE | RADIUS: 25' | FLOW: 1.5 GPM |
| ⊕ 2.0 NOZZLE | RADIUS: 30' | FLOW: 2.0 GPM |
| ⊕ 3.0 NOZZLE | RADIUS: 40' | FLOW: 2.7 GPM |
| ⊕ 3.5 NOZZLE | RADIUS: 42' | FLOW: 3.4 GPM |
| ⊕ 4.0 NOZZLE | RADIUS: 43' | FLOW: 4.2 GPM |
| ⊕ 6.0 NOZZLE | RADIUS: 45' | FLOW: 5.5 GPM |
| ⊕ 8.0 NOZZLE | RADIUS: 45' | FLOW: 7.6 GPM |
- FC = PART CIRCLE SR = SHORT RADIUS NOZZLES
- ⊗ REMOTE CONTROL VALVE ASSEMBLY FOR DRIP LATERALS
 - ⊕ FLUSH CAP ASSEMBLY
 - ⊕ IRRIGATION CONTROLLER UNIT:
 - CONTROLLER A: IRRITROL MC-32PLUS-B: 31 STA. USED
 - CONTROLLER B: IRRITROL MC-29PLUS-B: 32 STA. USED
 - CONTROLLER C: IRRITROL MC-8PLUS-B: 8 STA. USED
 - ⊕ INDICATES CONTROLLER AND STATION NUMBER
 - ⊕ INDICATES LATERAL DISCHARGE (GPM)
 - ⊕ INDICATES VALVE SIZE (INCHES)
 - ⊕ INDICATES SPRINKLER RISER POP-UP HEIGHT (4-INCH UNLESS OTHERWISE NOTED)
 - ⊕ APPROXIMATE TREE LOCATIONS

CONSTRUCTION NOTES

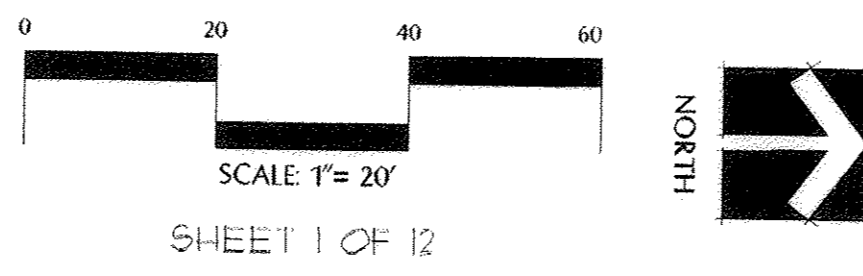
1. CONTRACTOR SHALL STUBOUT 1-INCH MAINLINE PIPE FOR FUTURE USE BY THE HOMEOWNER. INSTALL PVC BALL VALVE IN 10" ROUND VALVE BOX, PER DETAILS, AS INDICATED ON DRAWINGS.
2. PEDESTAL MOUNT THE IRRIGATION CONTROLLER AT THE APPROXIMATE LOCATION SHOWN. COORDINATE ELECTRICAL POWER TO THE CONTROLLER WITH THE OWNER'S REPRESENTATIVE. CARE SHOULD BE TAKEN TO INSTALL THE IRRIGATION CONTROLLER IN A LOCATION THAT IS ACCESSIBLE FOR MAINTENANCE BEHIND PLANT MATERIAL. FINAL LOCATION TO BE APPROVED BY OWNER'S REPRESENTATIVE.

Phase II Mainline ends north side of sidewalk north of 88

**IRRIGATION PLAN
BUFFALO CREEK SUBDIVISION**

WELLINGTON, COLORADO

DATE: MARCH 25, 2004
REVISIONS:



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