

# Landscape Concept

## DESIGN NARRATIVE

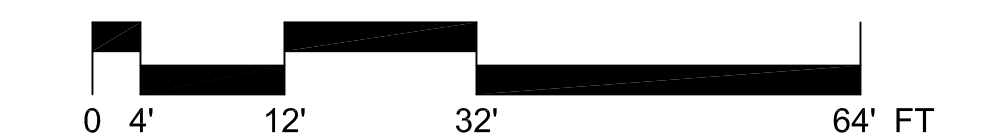
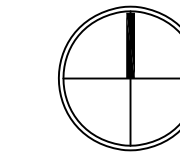
THE DOS RIOS WATER PLAY FEATURE CONSISTS OF TWO AREAS WITH THE RIVER CONFLUENCE AREA TO THE WEST AND THE WATER POCKET AREA TO THE EAST. THE RIVER CONFLUENCE AREA WILL FEATURE TWO PRIMARY SOURCES OF WATER REPRESENTING THE FLOWS OF THE COLORADO AND GUNNISON RIVERS, SOURCING FROM CLIMBABLE STACKED STONE AREAS WITH WATER FLOWING OFF THE STONES AND INTO A RUNNEL CHANNEL FLOWING TO THE WEST AND SLOPING AT A MINIMUM OF 1%. (5) DECK JETS ARE LOCATED ALONG THE RUNNEL ROUTE PROVIDING STREAMS OF WATER TO A MAXIMUM HEIGHT OF 6'. AFTER THE JOINING OF THE FLOWS FROM EACH RIVER FEATURE, THE FULL COMPLIMENT OF WATER TERMINATES IN A SUMP AND IS ROUTED VIA A GRAVITY DRAIN TO A PRECAST BYPASS PIT CONTAINING A PRIMARY STRAINER AND A DRAIN CONNECTION TO SANITARY SEWER VIA A BURIED GATE VALVE WITH STEM EXTENSION. AFTER PASSING THE BYPASS/STRAINER PIT, THE WATER FLOWS VIA GRAVITY TO A 5000 GALLON PRECAST CISTERN WHERE WATER IS DRAFTED BY THE DISPLAY PUMP AND FILTER PUMPS. THE CISTERN IS TO BE PROVIDED WITH AN OVERFLOW PIPE, SUMP PUMP AND A WATER LEVEL CONTROL SYSTEM. BOTH THE BYPASS PIT AND CISTERN ARE TO BE PROVIDED WITH ALUMINUM ACCESS HATCHES.

THE WATER POCKET AREA WILL FEATURE (6) SPRAY AND LIGHTING ASSEMBLIES THAT DELIVER A FINE WETTING SPRAY AT EACH LOCATION. WATER FROM EACH SPRAY ASSEMBLY CAN DRAIN DIRECTLY THROUGH THE ASSEMBLY OR FLOW VIA GRAVITY INTO A RUNNEL SLOPING AT A MINIMUM OF 1% TO A DRAIN GRILL AT THE BOTTOM OF THE RUNNEL.

AN ADDITIONAL FEATURE WILL BE A SERIES OF FOG MANIFOLDS LOCATED AT EACH OF THE RIVER SOURCES, CONCEALED BETWEEN THE STACKED STONES AND PROVIDING A DENSE FOG EFFECT AT EACH LOCATION. SIMILAR FOG MANIFOLDS ARE LOCATED BENEATH STONES AT EACH OF THE WATER POCKETS.

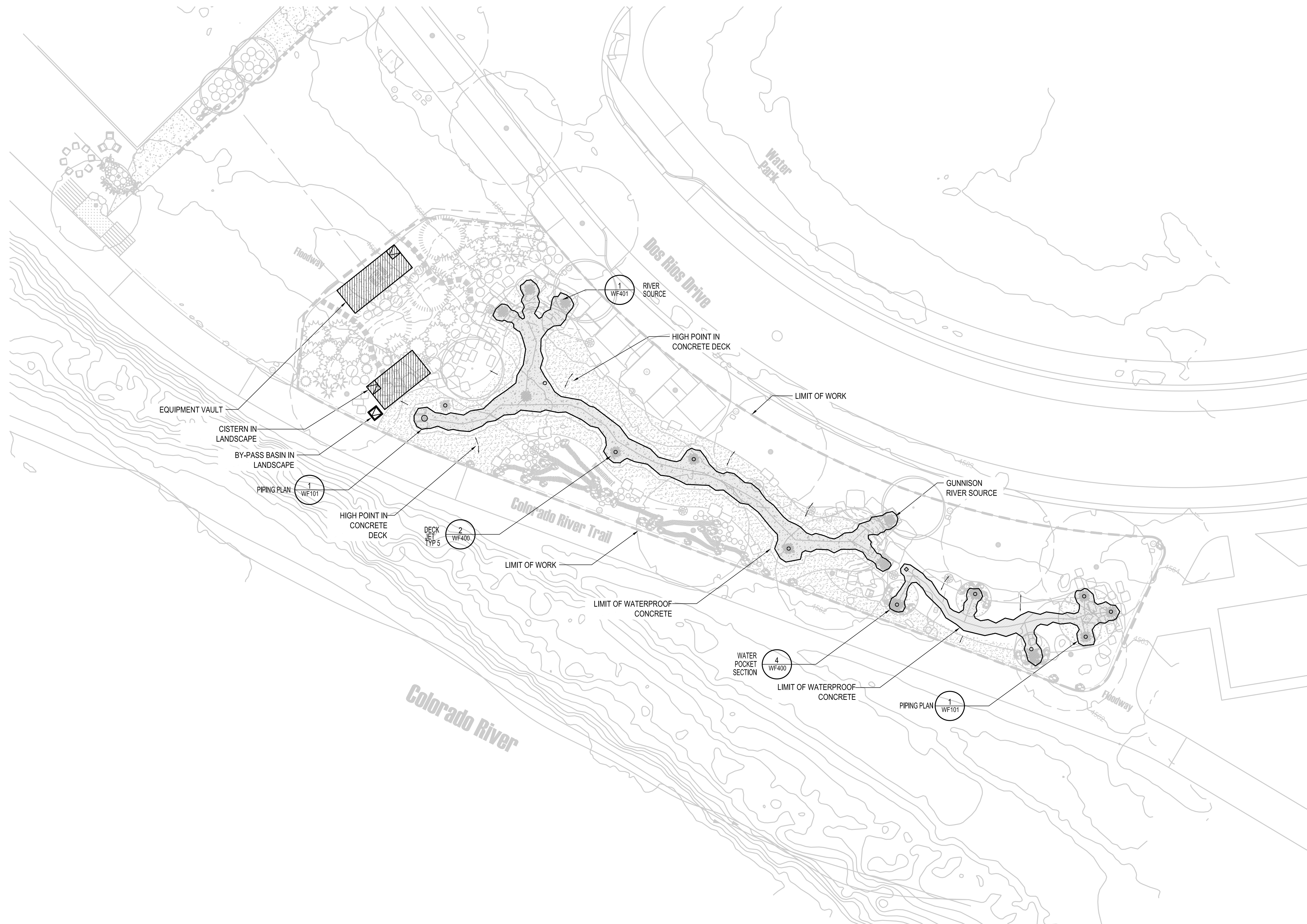
THE DESIGN/BUILD CONTRACTOR WILL BE RESPONSIBLE FOR FINALIZING ALL WATER EFFECTS, LOCATIONS AND ARRANGEMENTS OF EACH DISPLAY FEATURE.

THE WETTED WATER PLAY AREA SHALL BE CONSTRUCTED OF CONCRETE WITH A NON SLIP FINISH AND A WATERPROOF ADMIXTURE. THE WETTED AREA WILL DRAIN TO THE RUNNEL AND ALL CONCRETE AND SOFTSCAPE AREA BEYOND THE WETTED WATER PLAY AREA SHALL SLOPE AWAY FROM THE CONCRETE HIGH POINT.



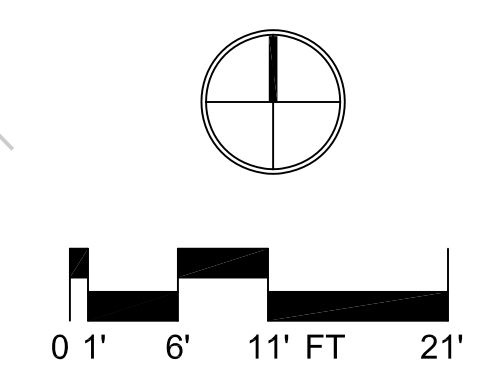
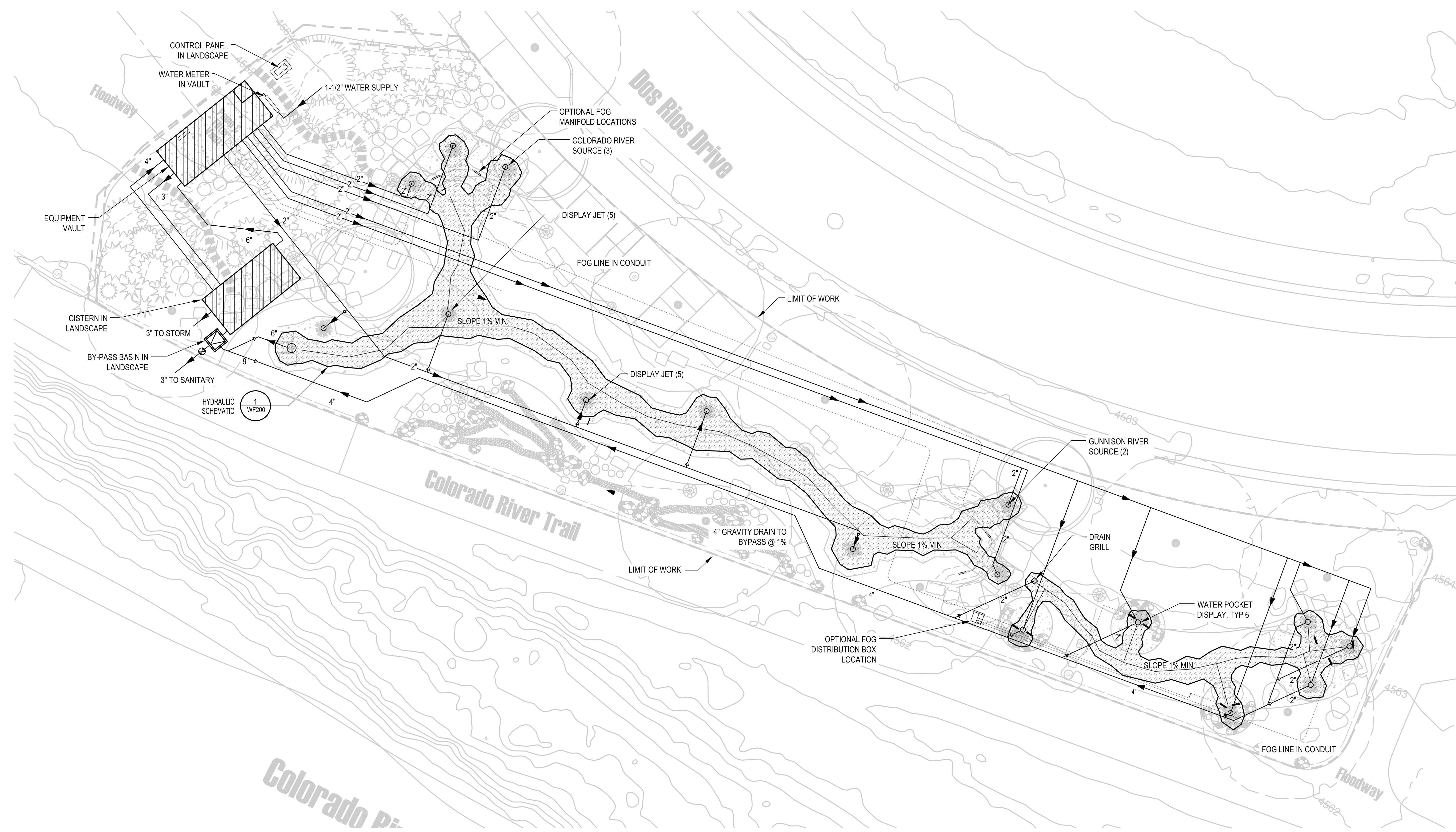
## GENERAL NOTES

1. DESIGN BUILD CONTRACTOR TO COORDINATE LOCATION OF MECHANICAL VAULT, CISTERN AND BYPASS PIT WITH EXISTING SITE CONDITIONS.
2. PIPE ROUTING SHOWN ON THE DRAWING IS DIAGRAMMATIC AND IS OPTIMIZED WITH THE KNOWN CONDITIONS ON THE SITE. THE SUBCONTRACTOR SHALL DETERMINE THE EXACT ROUTING AT THE SITE TO AVOID CONFLICT WITH THE SITE CONDITIONS. AVOID ROUTING OF PIPING THAT CREATES TRAPPED CONDITIONS.
3. ALL PIPING BETWEEN THE POOLS AND EQUIPMENT SPACES SHALL BE INSTALLED DEAD LEVEL OR SLOPED TOWARD THE EQUIPMENT SPACES UNLESS OTHERWISE INDICATED ON THESE DRAWINGS.
4. WHERE FERROUS AND NONFERROUS PIPING IS JOINED, PROVIDE DIELECTRIC FITTINGS.
5. PROVIDE A WATERSTOP OR FLASHING FLANGE AS APPROPRIATE AND AS SHOWN ON THE DETAILS ON EACH PENETRATION INTO THE WATER FEATURE SLAB.
6. PIPING IN PARALLEL OR CROSSING SHALL HAVE A 2" CLEARANCE TO OTHER PIPING UNLESS OTHERWISE NOTED IN THE DRAWINGS.
7. PROVIDE PIPE SUPPORTS AND HANGERS AS NECESSARY TO MAINTAIN ALIGNMENT, PREVENT STRESSES AND ALLOW FOR THE REMOVAL AND MAINTENANCE OF FUNCTIONAL EQUIPMENT. PIPING SHALL NOT BE SUPPORTED BY THE EQUIPMENT.
8. PROVIDE UNION AND/OR FLANGES AS SHOWN AND AS REQUIRED TO FACILITATE REMOVAL OF ALL VALVES AND EQUIPMENT.
9. PROVIDE DRAIN LINES FOR ALL PIPING DOWNSTREAM OF CHECK VALVES TO ENSURE DRAINAGE OF ALL PIPING SYSTEMS. PROVIDE DRAIN LINES FOR ALL EQUIPMENT AND EXTEND TO NEAREST DRAIN.
10. PROVIDE VALVE TAGS FOR ALL VALVES UNDER THIS WORK AND PROVIDE A SCHEMATIC DIAGRAM WITH VALVE NUMBERS AND FUNCTION LAMINATED IN PLASTIC. MOUNT IN A CLEARLY VISIBLE AREA OF EACH EQUIPMENT SPACE.
11. PIPE IDENTIFICATION SHALL BE PER ALL APPLICABLE CODES.
12. PUMPS TO BE SET ON MINIMUM 6" THICK CONCRETE PLINTHS.
13. INSTALLATION TO COMPLY WITH ALL LOCAL CODES AND 680-51 OF THE NATIONAL ELECTRIC CODE.



1 WATER PARK SITE PLAN  
SCALE: 1/16"=1'

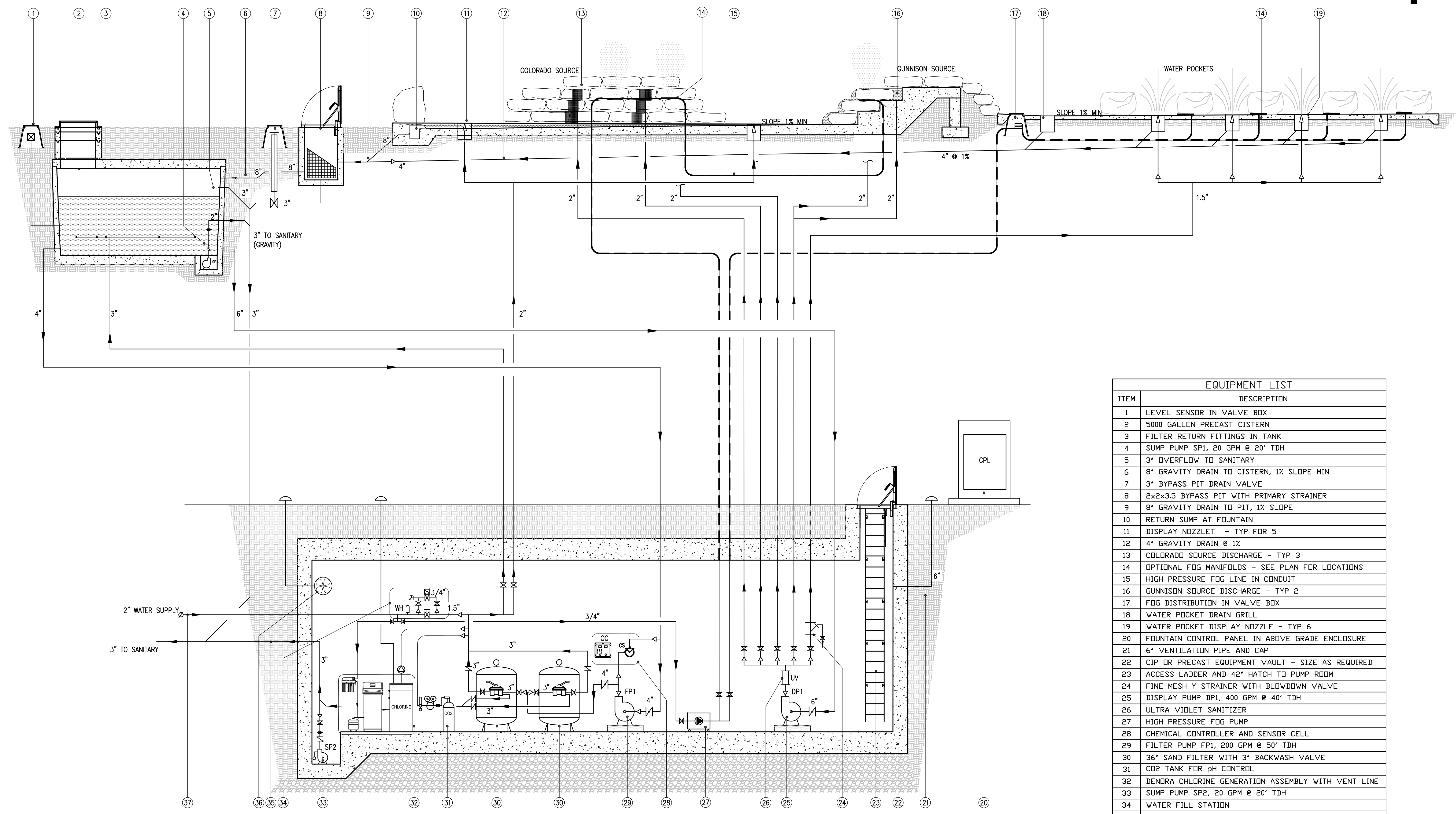




### PIPING NOTES

- ALL PIPING SUPPORTING NOZZLES SHALL BE RED BRASS WITH THREADED FITTINGS.
- PIPING MATERIALS: UNLESS OTHERWISE NOTED ON THESE DRAWINGS, ALL PIPING FOR THE WATER FEATURES SHALL BE AS FOLLOWS:  
 PRESSURE PIPING IN THE EQUIPMENT VAULT  
 1-1/4" AND SMALLER: COPPER OR BRASS WITH WROUGHT OR CAST SOLDERED FITTINGS.  
 1 1/2" AND LARGER: SCHEDULE 80 PVC  
 BEYOND THE EQUIPMENT SPACES :  
 SCHEDULE 80 PVC  
 GRAVITY DRAINS, PIPING DRAINS AND POOL DRAINS:  
 SCHEDULE 80 PVC

**1 WATER PARK PIPING PLAN**  
SCALE: 3/32"=1'



EQUIPMENT LIST	
ITEM	DESCRIPTION
1	LEVEL SENSOR IN VALVE BOX
2	5000 GALLON PRECAST CISTERN
3	FILTER RETURN FITTINGS IN TANK
4	SUMP PUMP SP1, 20 GPM @ 20' TDH
5	3" OVERFLOW TO SANITARY
6	8" GRAVITY DRAIN TO CISTERN, 1% SLOPE MIN.
7	3" BYPASS PIT DRAIN VALVE
8	2x2x3.5 BYPASS PIT WITH PRIMARY STRAINER
9	8" GRAVITY DRAIN TO PIT, 1% SLOPE
10	RETURN SUMP AT FOUNTAIN
11	DISPLAY NOZZLET - TYP FOR 5
12	4" GRAVITY DRAIN @ 1%
13	COLORADO SOURCE DISCHARGE - TYP 3
14	OPTIONAL FOG MANIFOLDS - SEE PLAN FOR LOCATIONS
15	HIGH PRESSURE FOG LINE IN CONDUIT
16	GUNNISON SOURCE DISCHARGE - TYP 2
17	FOG DISTRIBUTION IN VALVE BOX
18	WATER POCKET DRAIN GRILL
19	WATER POCKET DISPLAY NOZZLE - TYP 6
20	FOUNTAIN CONTROL PANEL IN ABOVE GRADE ENCLOSURE
21	6" VENTILATION PIPE AND CAP
22	CIP OR PRECAST EQUIPMENT VAULT - SIZE AS REQUIRED
23	ACCESS LADDER AND 42" HATCH TO PUMP ROOM
24	FINE MESH Y STRAINER WITH BLOWDOWN VALVE
25	DISPLAY PUMP DP1, 400 GPM @ 40' TDH
26	ULTRA VIOLET SANITIZER
27	HIGH PRESSURE FOG PUMP
28	CHEMICAL CONTROLLER AND SENSOR CELL
29	FILTER PUMP FP1, 200 GPM @ 50' TDH
30	36" SAND FILTER WITH 3" BACKWASH VALVE
31	CO2 TANK FOR pH CONTROL
32	DENDRA CHLORINE GENERATION ASSEMBLY WITH VENT LINE
33	SUMP PUMP SP2, 20 GPM @ 20' TDH
34	WATER FILL STATION
35	3" DISCHARGE TO SANITARY
36	VENTILATION FAN WITH 6" VENT PIPE AND CAP
37	1.5" WATER SUPPLY WITH BACKFLOW PREVENTION

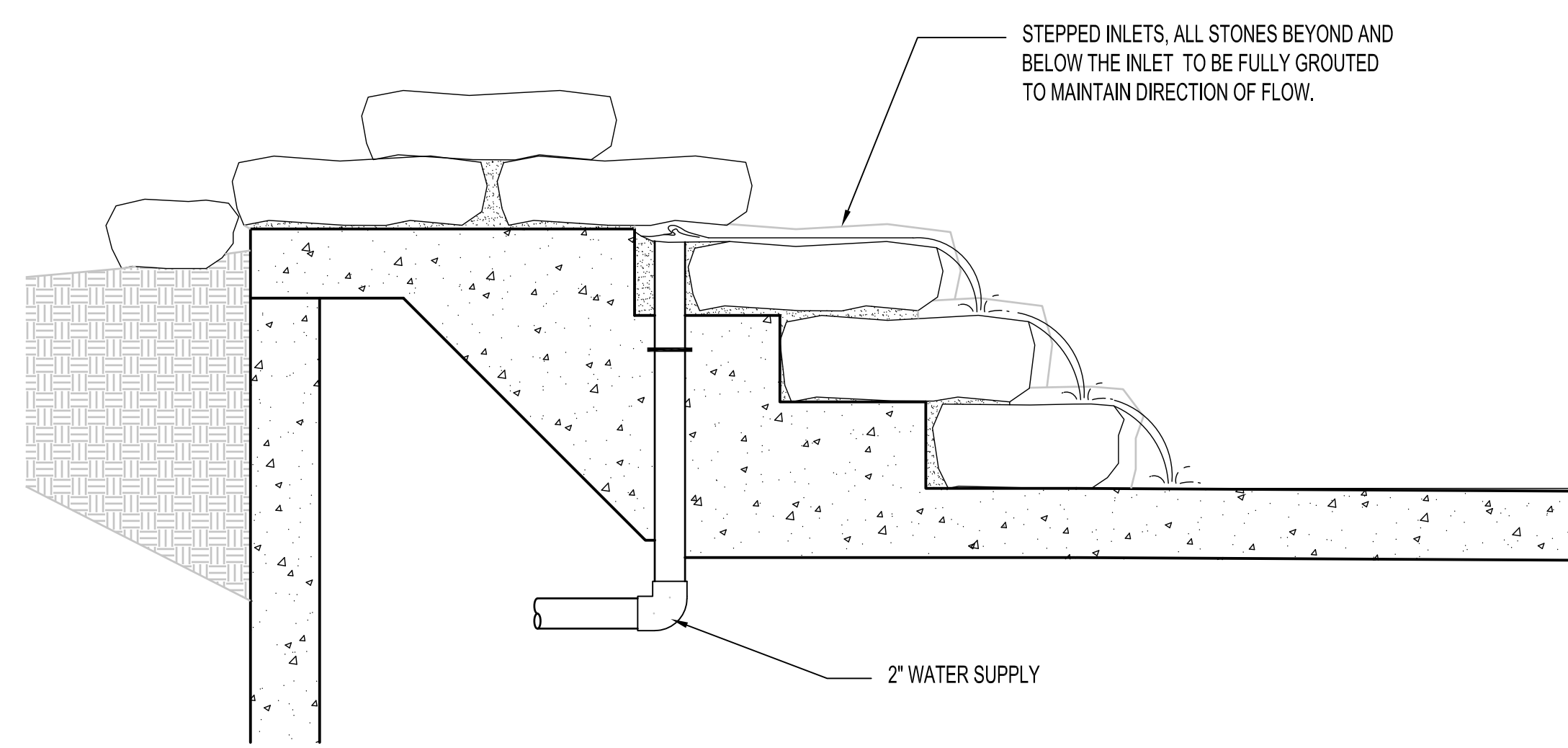
## 1 WATER FEATURE HYDRAULIC SCHEMATIC

SCALE: NOT TO SCALE

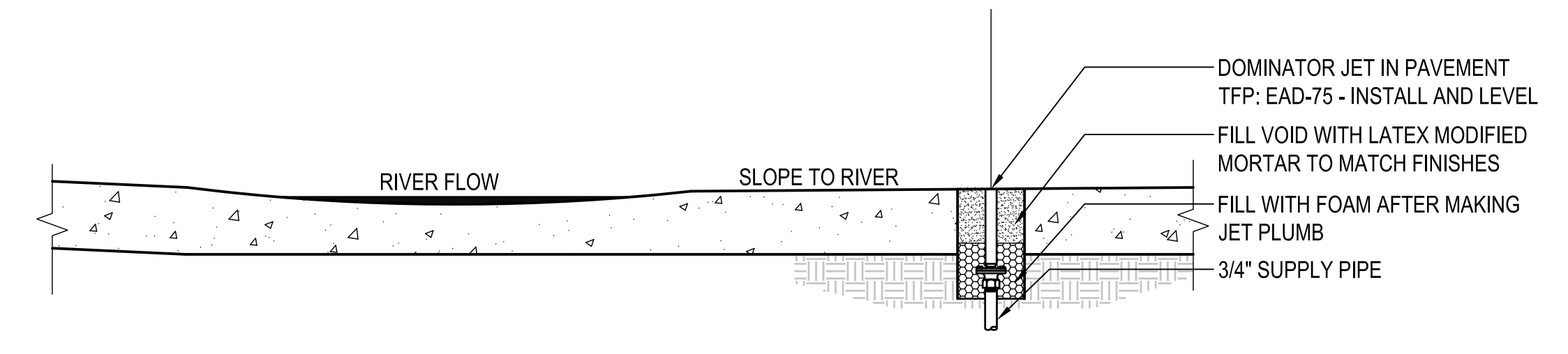
### SYMBOLS

	CENTRIFUGAL PUMP - END SUCTION		BALL VALVE		PRESSURE SWITCH		WATER LEVEL SENSOR
	LINT STRAINER AND DRAIN		GATE VALVE		FLOW SWITCH		CHEMICAL CONTROLLER - pH, ORP
	ECCENTRIC REDUCER		SOLENOID VALVE		AUTOMATIC AIR VENT		CHEMICAL SENSOR CELL
	CONCENTRIC REDUCER		PIPE REDUCTION		PRESSURE GAUGE W/GAUGE COCK		CHEMICAL SENSOR - PIPE MOUNTED
	FLEXIBLE COUPLING		UNION		COMPOUND PRESSURE GAUGE		FLEXIBLE HOSE COUPLING
	BUTTERFLY VALVE		PIPING DRAIN W/ VALVE		WATER HAMMER ARRESTOR		WYE STRAINER
	CHECK VALVE		FLOW METER		BACKFLOW PREVENTOR		MOTORIZED BALL VALVE
							MOTORIZED BUTTERFLY VALVE
							PRESSURE REDUCING VALVE
							CENTRIFUGAL PUMP - SPLIT CASE
							VENTURI INJECTION MANIFOLD

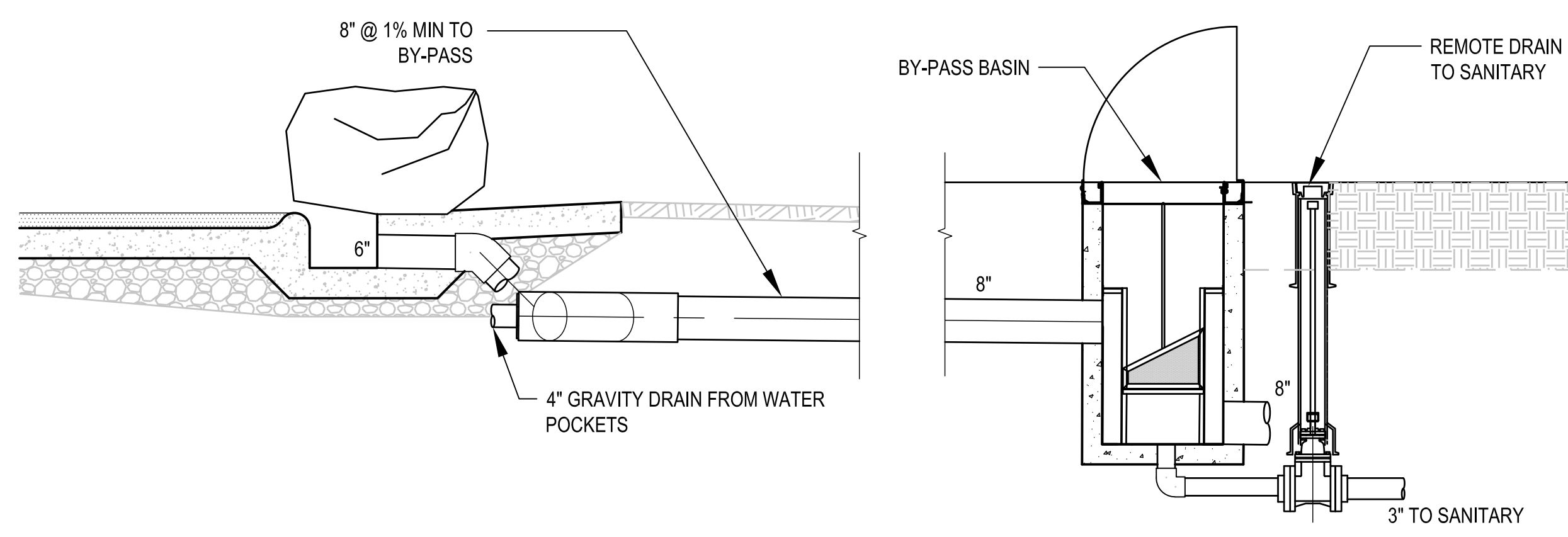




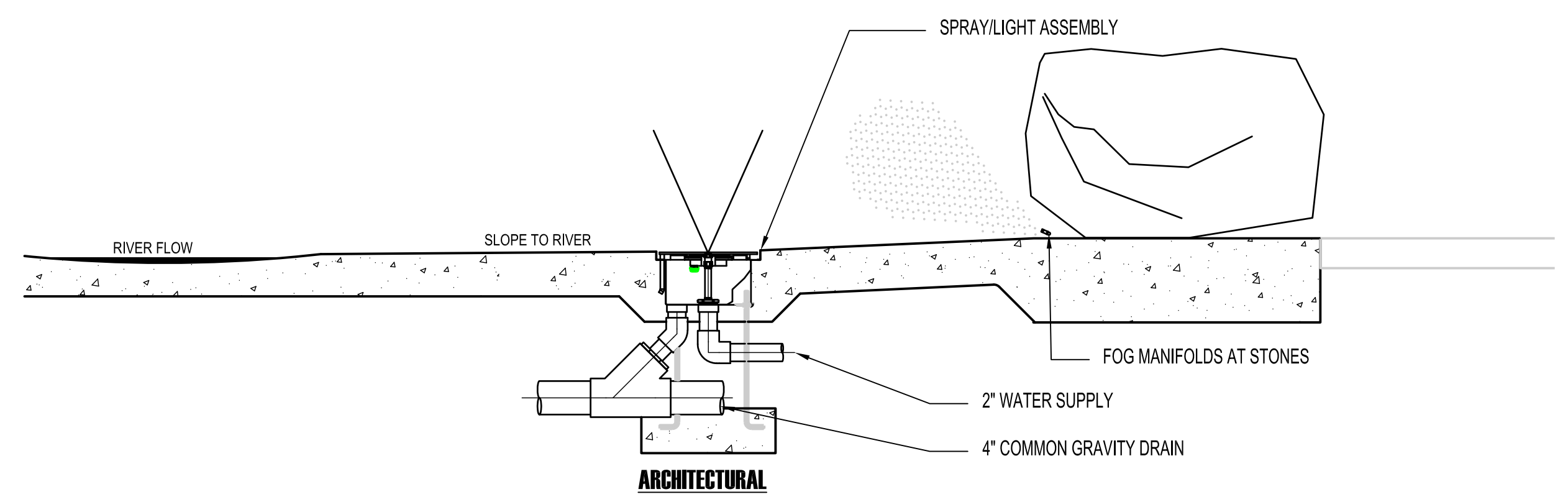
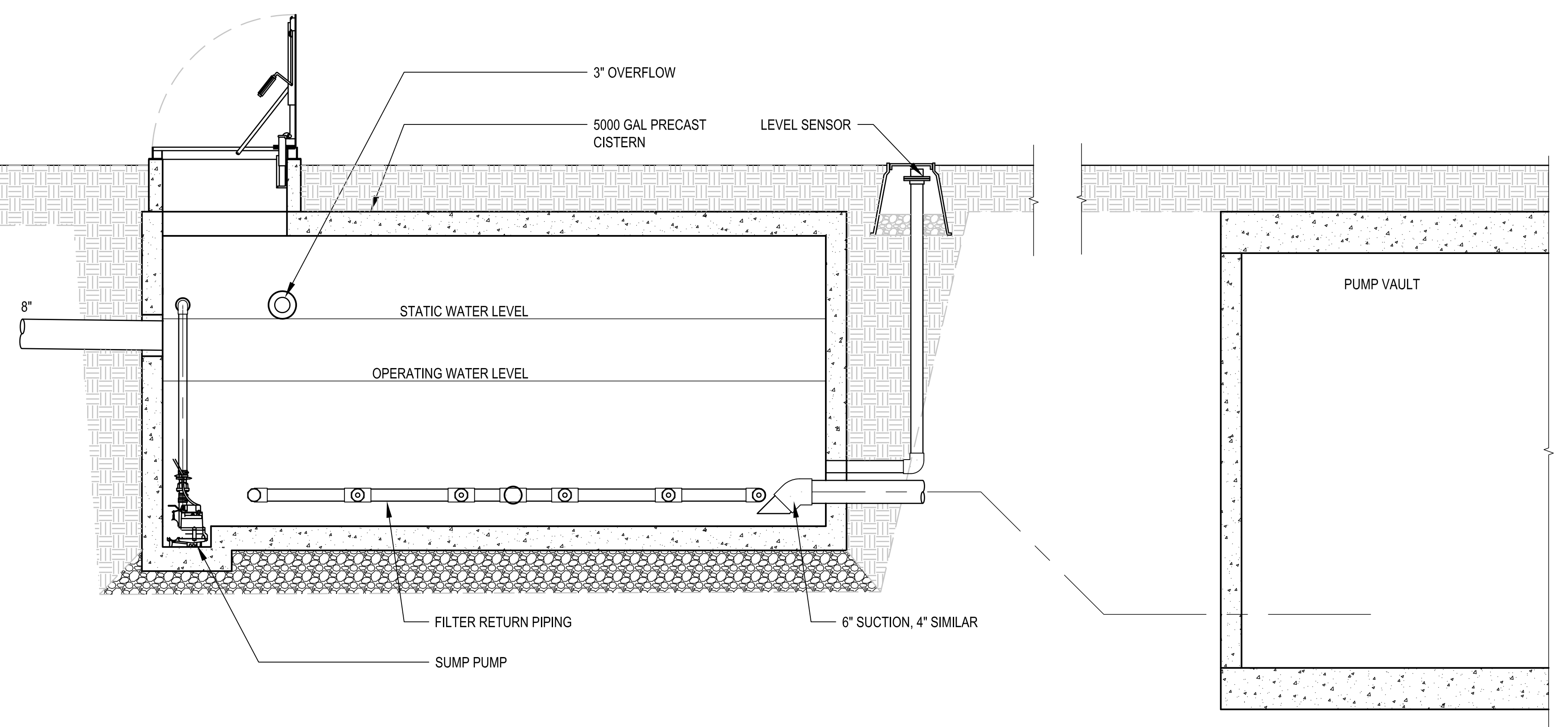
1 RIVER ORIGIN-TYP.-2  
SCALE: 3/4"=1'



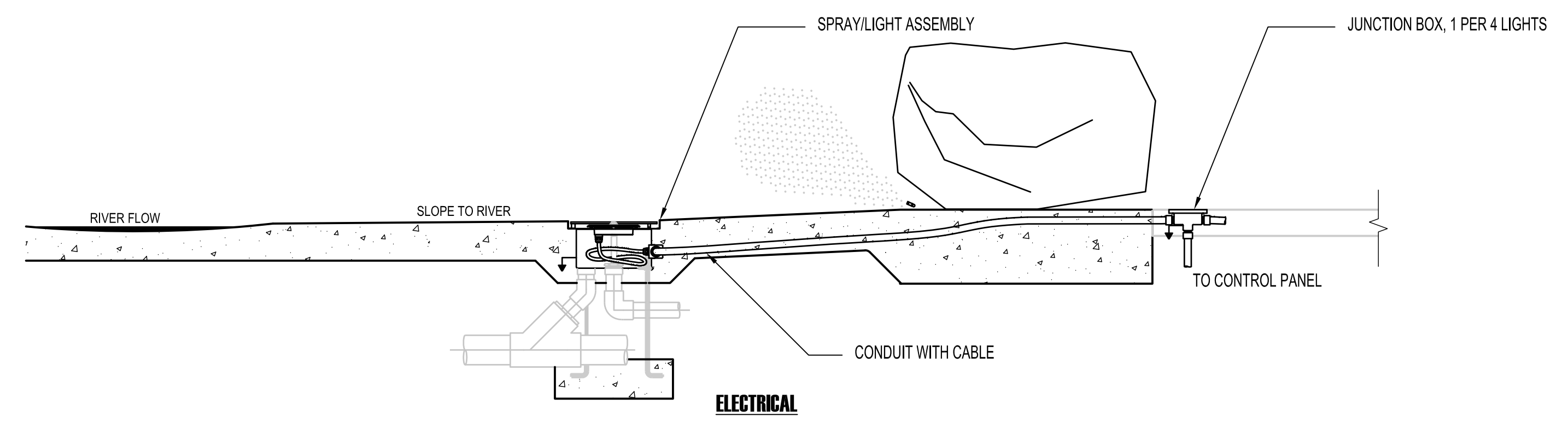
2 DECK JET  
SCALE: 3/4"=1'



3 RIVER TERMINUS  
SCALE: 3/4"=1'



3 WATER POCKETS  
SCALE: 3/4"=1'







1 RIVER SOURCE  
SCALE: NOT TO SCALE



2 DECK JET  
SCALE: NOT TO SCALE



3 WATER POCKET  
SCALE: NOT TO SCALE



4 FOG FITTING  
SCALE: NOT TO SCALE