



GENERAL DESCRIPTION

THE EXISTING IRRIGATION SYSTEM WILL BE EXPANDED TO IRRIGATE NEW BURIAL SECTIONS AND REVISED FOR THE NEW COLUMBARIUM AREA. NEW MAINLINE PIPE, LATERAL PIPE, REMOTE CONTROL VALVES, ISOLATION GATE VALVES, AND ROTOR SPRINKLERS WILL BE INSTALLED TO IRRIGATE THE NEW AREAS.

VALVE-IN HEAD ROTOR SPRINKLERS WILL BE USED TO IRRIGATE BURIAL SECTIONS, POP-UP ROTOR SPRINKLERS ON REMOTE CONTROL VALVE ZONES WILL IRRIGATE ALONG THE ROADWAYS AND ESTABLISHMENT AREAS. THE SPRAY SPRINKLER ZONES WILL BE REMOVED FORM THE COLUMBARIUM EXPANSION

THE POINT OF CONNECTION IS THE EXISTING 4-INCH IRRIGATION MAINLINE PIPE DOWN STREAM OF ACCESS DRIVE. THE WATER SOURCE IS POTABLE.

NEW IRRIGATION WILL BE ZONED IDENTICALLY TO THE EXISTING SYSTEM WITH AREAS ALIGNING ROADS, AND BURIAL SECTIONS.

A NEW SATELLITE IRRIGATION CONTROLLER COMPATIBLE WITH THE EXISTING CENTRAL CONTROL SYSTEM WILL BE INSTALLED.

**FLAG NOTES**

① ROUTE MAINLINE PIPE 3--FEET FROM BACK OF CURB TO AVOID TREE PLANTING.

② IRRIGATION CONTROLLER: INSTALL PEDESTAL MOUNT IRRIGATION CONTROLLER IN THE APPROXIMATE LOCATION INDICATED. ELECTRICAL POWER WILL BE PROVIDED TO WITHIN 5--FEET OF CONTROLLER LOCATION. COORDINATE EXACT LOCATION OF ELECTRICAL POWER WITH THE NECESSARY TRADES ON SITE. PROVIDE ALL NECESSARY CONDUIT AND CONDUCTORS BETWEEN ELECTRICAL POWER SOURCE AND IRRIGATION CONTROLLER. FINAL LOCATION OF IRRIGATION CONTROLLER SHALL BE APPROVED BY THE CO/COR PRIOR TO CONSTRUCTION. REFER TO INSTALLATION DETAILS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION ON CONTROLLER. INSTALL CONTROL WIRE NOT ROUTED WITH IRRIGATION PIPE IN CL 200 PVC CONDUIT WITH DETECTABLE WIRE WARNING TAPE 3--INCHES OVER THE CONDUIT, PROVIDE AND INSTALL STANDARD SIZE IRRIGATION VALVE BOX FOR A PULL BOX AT EACH CHANGE OF DIRECTION IN SLEEVE.

③ INSTALL THREE CONTROL WIRES AND ONE COMMON WIRE FROM THE RESPECTIVE CONTROLLER TO EACH OF THE REMOTE CONTROL VALVE ASSEMBLIES INDICATED FOR USE AS SPARE WIRE IN CASE OF CONTROL WIRE FAILURE. PROVIDE A 3--FOOT COILED LENGTH OF EACH SPARE WIRE IN ALL REMOTE CONTROL VALVE BOXES. ROUTE SPARE WIRE IN SUCH A MANNER THAT WIRE IS ROUTED WITH ALL MAINLINE PIPES.

④ AIR VACUUM RELIEF VALVE ASSEMBLY LOCATION SHOWN IS APPROXIMATE. VERIFY THE LOCATION OF THE HIGHEST ELEVATION ON THE MAINLINE AND INSTALL THE AIR VACUUM RELIEF VALVE ASSEMBLY AT THE HIGH POINT IN THIS AREA.

⑤ INSTALL SOLVENT WELD PVC PIPE IN SLEEVES, USE JOINT RESTRAINTS ON BELL JOINT CLOSEST TO BOTH SIDES OF THE SLEEVE FOR ROAD CROSSINGS.

⑥ CONTRACTOR RESPONSIBLE FOR REPAIRING OR REPLACING 18 HEADS DURING THE TURF RESTORATION OF THE TEMPORARY PARKING AREA. IRRIGATION CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH LANDSCAPE CONTRACTOR TO INSTALL NEW HEADS FOR TURF RESTORATION.

⑦ EXCAVATE AND EXPOSE CAPPED LATERAL PIPE SADDLES OR TEES CAPPED DURING DEMOLITION AND INSTALL NEW SPRINKLERS AND SWING JOINTS IN APPROXIMATE LOCATION SHOWN.

⑧ EXCAVATE AND EXPOSE LATERAL PIPE CAPPED DURING DEMOLITION AND INSTALL NEW LATERAL SPRINKLERS, AND SWING JOINTS IN APPROXIMATE LOCATION SHOWN. MAKE CONNECTION USING PVC SCH 40 SOLVENT WELD REPAIR COUPLINGS.

⑨ PIPE ROUTING SHOWN IS DIAGRAMMATIC FOR GRAPHIC CLARITY, INSTALL ALL PIPE AND IRRIGATION RELATED COMPONENTS IN TURF AND LANDSCAPED AREAS.

**DEMOLITION FLAG NOTES**

D1 EXCAVATE AND EXPOSE EXISTING REMOTE CONTROL VAVLE ASSEMBLY INDICATED DOWN TO THE SERVICE TEE AND REMOVE. CAP TEE WITH DUCTILE IRON PLUG AND RESTRAIN. DO NOT DISTURB THE EXISTING CONTROL WIRE, RECONNECT THE COMMON GROUND WIRE, PLACE SPLICE OVER THE UNUSED CONTROL WIRE AND PLACE SPLICES IN THE EXISTING VALVE BOX. DISCONNECT THE UNUSED CONTROL WIRE AT THE CONTROLLER AND ZERO OUT THE RUN TIME FOR THAT STATION.

D2 EXCAVATE AND EXPOSE EXISTING LATERAL PIPE AT APPROXIMATE LOCATION INDICATED. CUT LATERAL PIPE AND CAP USING A PVC SCH 40 SOLVENT WELD CAP. BACKFILL HOLES AND COMPACT TO MATCH EXISTING CONDITIONS. MARK LOCATION WITH 6--INCH ROUND VALVE BOX.

D3 EXCAVATE AND EXPOSE EXISTING SPRINKLER ASSEMBLY AT APPROXIMATE LOCATION SHOWN. REMOVE SPRINKLER ASSEMBLY AND TURN OVER TO COR. IF SPRINKLER IS WITHIN THE SPRINKLER DEMOLITION BOUNDARY, PIPE IS TO BE ABANDONED IN PLACE. BACKFILL HOLES AND COMPACT TO EXISTING CONDITIONS.

D4 VERIFY OPERATION OF ALL REMOTE CONTROL VALVES AND SPRINKLERS IN THIS AREA PRIOR TO DEMOLITION OR CONSTRUCTION. EXCAVATE AND EXPOSE EXISTING SPRINKLERS, REMOTE CONTROL VALVE ASSEMBLIES, AND VALVE BOXES WITHIN DEMOLITION BOUNDARY INDICATED. REMOVE ASSEMBLIES AND TURN OVER TO COR. CAP PVC RISER ON SUPPLY SIDE OF REMOTE CONTROL VALVE WITH PVC SCH 40 CAP. ABANDON LATERAL PIPE IN PLACE. VERIFY WHICH IRRIGATION CONTROLLER OPERATES THE REMOTE CONTROL VALVES AND PROTECT WIRING FOR FUTURE USE. REPAIR ANY EXISTING IRRIGATION SYSTEM COMPONENT DAMAGED BY THE NEW CONSTRUCTION.

D5 EXCAVATE AND EXPOSE EXISTING SPRINKLER AT APPROXIMATE LOCATION SHOWN. INSTALL A 1/2--INCH THREADED SCH 40 PVC CAP AT THE TOP OF THE SWING JOINT SADDLE OR TEE ON THE LATERAL PIPE. MARK SPRINKLER LOCATION WITH PAINT AT THE EDGE OF THE PAVEMENT.

D6 SHUT OFF IRRIGATION ZONES WITHIN TEMPORARY PARKING AREA AT THE REMOTE CONTROL VALVE.

GENERAL NOTES

- THE SYSTEM DESIGN ASSUMES A MINIMUM DYNAMIC PRESSURE FOR THE IRRIGATION SYSTEM OF 75 PSI AT A MAXIMUM DISCHARGE OF 240 GPM AT THE POINT--OF--CONNECTION. CONTRACTOR TO VERIFY EXISTING PUMP OPERATION PRESSURE AND FLOW AT POINT OF CONNECTION, REPORT ANY DISCREPANCIES TO OWNER'S REPRESENTATIVE.
- READ THOROUGHLY AND BECOME FAMILIAR WITH THE SPECIFICATIONS AND INSTALLATION DETAILS FOR THIS AND RELATED WORK PRIOR TO CONSTRUCTION. CONFIRM EXACT LIMITS OF IRRIGATED AREA AND ALL EXISTING AND FUTURE HARDSCAPE AND BURIAL AREAS PRIOR TO CONSTRUCTION.
- COORDINATE UTILITY LOCATES (CALL BEFORE YOU DIG: 811) OF UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND CONDITIONS BEFORE EXCAVATING.
- 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, OR 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.
- THE DRAWINGS ARE DIAGRAMMATIC. THEREFORE, THE FOLLOWING SHOULD BE NOTED:
  - IRRIGATION COMPONENTS MAY BE SHOWN OUTSIDE PLANTING AREAS FOR CLARITY.
  - AVOID CONFLICTS BETWEEN THE IRRIGATION SYSTEM, PLANTING MATERIALS, ARCHITECTURAL FEATURES, STORM DRAINS, AND BURIAL PLOTS.
  - INSTALL IRRIGATION PIPE AND WIRING IN LANDSCAPED AREAS WHENEVER POSSIBLE.
- SELECT NOZZLES FOR ROTARY SPRINKLERS WHICH PROVIDE COMPLETE AND ADEQUATE COVERAGE IF SITE CONDITIONS ARE NOT AS SHOWN. CAREFULLY ADJUST THE RADIUS OF THROW AND ARC OF EACH ROTARY SPRINKLER TO PROVIDE THE BEST PERFORMANCE AND MINIMIZE OVERSPRAY.
- WITH REGARD TO PIPE SIZING, THE FOLLOWING SHOULD BE NOTED:

IF A SECTION OF UNSIZED PIPE IS LOCATED BETWEEN TWO 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.
- CONTRACTOR MUST SUPPLY A SYSTEM THAT PROVIDES FULL COVERAGE TO EACH SECTION. IF ADDITIONAL SPRINKLERS ARE NEEDED, THEY ARE TO BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
- PROVIDE THE FOLLOWING COMPONENTS TO THE OWNER PRIOR TO THE COMPLETION OF THE PROJECT:
  - TWO OPERATING KEYS FOR EACH TYPE OF MANUALLY OPERATED VALVE.
  - FOUR OF EACH SERVICING WRENCH OR TOOL NEEDED FOR COMPLETE ACCESS, ADJUSTMENT, AND REPAIR OF ALL ROTARY SPRINKLERS.
  - FIVE VALVE--IN--HEAD SPRINKLERS, FIVE ROTOR SPRINKLERS
  - TWO QUICK COUPLING KEYS FOR MANUAL QUICK COUPLING VALVES.
- CONTRACTOR IS RESPONSIBLE FOR FINAL VALVE BOX AND SPRINKLER ELEVATION IN RELATION TO THE SURROUNDING FINAL GRADE. INSTALL VALVE BOXES IN SOD AREAS WITH THE THE LID TOP 1--1/2 INCHES ABOVE SURROUNDING FINAL GRADE.
- ALL MAINLINE ISOLATION VALVES AND DUCTILE IRON FITTINGS 3--INCH AND LARGER MUST BE INSTALLED WITH MECHANICAL JOINT RESTRAINTS PER SPECIFICATIONS AND INSTALLATION DETAILS.

LEGEND

— SLEEVING

--- EXISTING PVC IRRIGATION MAINLINE PVC

— IRRIGATION MAINLINE PIPE CL 200 PVC

----- IRRIGATION SUBMAINLINE PIPE CL 200 PVC

— POINT--OF--CONNECTION (P.O.C.)

— LATERAL PIPE: CL160 PVC (1" UNLESS OTHERWISE INDICATED)

⊗ ISOLATION GATE VALVE ASSEMBLY

⊕ QUICK COUPLING VALVE ASSEMBLY

⌘ AIR VACUUM RELIEF VALVE ASSEMBLY

⊙ REMOTE CONTROL VALVE ASSEMBLY

⌚ FLOWER WATER STATION

⊙ POP--UP SPRAY SPRINKLER: TORO 570Z--PRX, RADIUS: 17' STREAM SPRAY FLOW (GPM): H--1.20

⊙ RADIUS: 15' MPR SPRAY FLOW (GPM): Q--0.92 H--1.85 F--3.70

⊙ VALVE--IN--HEAD SPRINKLER TORO FLEX800 55 @ 65PSI  
\*SYMBOL WITH HALO IS FULL CIRCLE  
\*SYMBOL WITHOUT HALO IS PART CIRCLE  
\*NUMBER WITHIN IS NOZZLE

NOZZLE	FLOW(GPM)	RADIUS(FEET)
⊙	35	34.1
⊙	35	72'

POP--UP ROTOR SPRINKLER: TORO T--5 @ 70 PSI  
\*SYMBOL WITH HALO IS FULL CIRCLE  
\*SYMBOL WITHOUT HALO IS PART CIRCLE  
\*NUMBER WITHIN IS NOZZLE

NOZZLE	FLOW(GPM)	RADIUS(FEET)
⊙	6	7.25
⊙	4	1.8
⊙	4	36'

④ IRRIGATION CONTROLLER ASSEMBLY: REFER TO SPECIFICATIONS, 48 STATIONS AVAILABLE: 44 USED

4-1  
66  
1  
-  
INDICATES CONTROLLER AND DECODER NUMBER  
INDICATES LATERAL DISCHARGE IN GPM  
INDICATES REMOTE CONTROL VALVE SIZE IN INCHES

⊙ INDICATES EXISTING SPRINKLER

--- INDICATED DEMOLITION BOUNDARY

Revisions:

Date

CONSULTANTS:

Terracon

Consulting Engineers and Scientists

131 12th St. North  
Bismarck, ND 58103  
P (701) 223-1200  
F (701) 443-0302

SHULBARGER SURVEYING

COMPANY, INC.

PEAKS TO PLAINS DESIGN

404 NORTH 51ST STREET, SUITE 405  
BISMARCK, MONTANA 58101  
(406) 294-9499 • (406) 294-9410 FAX  
WWW.PEAKSTOPPLAINS.COM

Aqua Engineering Inc.

Innovative Water Solutions

3202 West Main  
Suite C  
Rapid City, South Dakota 57702  
phone:605.343.9606 fax:605.341.7395

Albertson Engineering Inc.

ARCHITECT/ENGINEERS:

JOHN D. LEONARD

Professional Irrigation Designer

46102

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517 7th street  
rapid city sd 57701  
p 605.342.9470  
f 605.342.2377  
www.4front.biz

4 FRONT DESIGN INC.

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IRRIGATION NOTES AND LEGEND

Approved Project Director

Project Title

SALISBURY NATIONAL CEMETERY GRAVESITE EXPANSION

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SALISBURY NATIONAL CEMETERY  
SALISBURY, NC

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BID DOCUMENTS

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