hGA + Sca
capitol restoration collaborative

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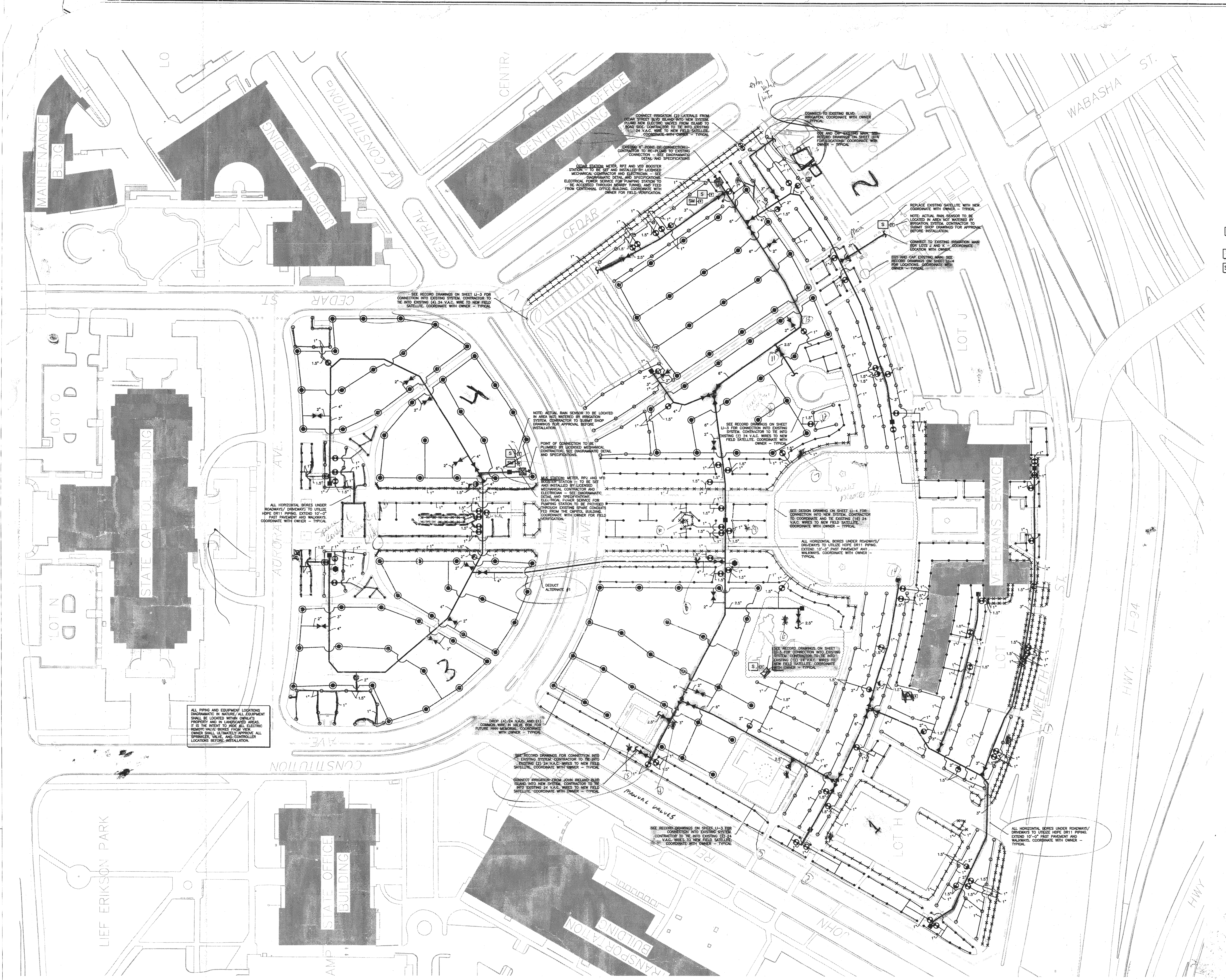
GENERAL NOTES

1. Demolition to remove systems and components shall be limited to preserve existing historic building components and finishes. Please refer to the Architectural Demolition Drawings for more information on acceptable demolition approach

0 30 60 120
SCALE: 1" = 60'



SITE IRRIGATION PLAN

SCALE: 1" = 60'-0"

NORTH

LEGEND

- ● TORO MINI8–4P ROTOR – (Q) 1.0 (H) 2.0 (F) 3.0 NOZZLES NOZZLES AND SPACING SUBJECT TO CHANGE AS PER STAKING
- × TORO 570Z–4P 12' PCD SPRAY HEAD NOZZLES AND SPACING SUBJECT TO CHANGE AS PER STAKING
- ○ TORO TR50–P–90 ROTOR – (Q) 2.0 (H) 4.5 (F) 6.0 NOZZLES NOZZLES AND SPACING SUBJECT TO CHANGE AS PER STAKING
- ◉ TORO 855–46–546 GOLF SPRINKLER – F.C./P.C. NOZZLES AND SPACING SUBJECT TO CHANGE AS PER STAKING
- ■ TORO 474–00 Q.C.V.
- TORO P220–27–04 (1" UNLESS NOTED) P.R. VALVE #70 PSI REG. ROTOR ZONES AND #50 PSI REG. SPRAY ZONES
- ◑ TORO P220–27–06 (1-1/2" UNLESS NOTED) P.R. VALVE #70 PSI REG. ROTOR ZONES AND #50 PSI REG. SPRAY ZONES
- ⋈ NIBCO RT/RW ISOLATION VALVE W/ VALVE BOX (OR APPROVED EQUAL) (SEE DETAIL)
- ⬢ 1" BERMAD AIR AND VACUUM RELIEF (OR EQUAL) W/1" ISOLATION BALL VALVE & WYE STRAINER W/ 40 MESH STAINLESS SCREEN (LOCATED IN JUMBO VALVE BOX) – SEE DETAIL (TO BE FIELD LOCATED ON MAINS BY IRRIGATION CONSULTANT)
- MAIN LINE CLASS 200 PVC 6" – 2 1/2" GASKETED
- LATERAL PIPING CLASS 200 – SIZED ON PLAN (1" #100 POLY)
- CEN TORO SENTINEL CENTRAL #SGIS–5–0 AND UPS POWER WITH (3) SHHR 102–2447 HAND-HELD RADIOS. CENTRAL SHALL COME COMPLETE WITH ANTENNA, CABLE, AND GROUNDING. CONTRACTOR TO SUPPLY 1000' ADDITIONAL OF SERIAL CABLE. ACTUAL LENGTH TO BE CONFIRMED WITH MANUFACTURE BEFORE ORDERING AND INSTALLATION.
- S TORO SENTINEL SATELLITE #SSA–K–XX–PSI–6–N–S–4 WITH RAIN SWITCH BYPASS. CONFIRM LOCATION WITH OWNER AND OWNERS REPRESENTATIVE.
- SM TORO SENTINEL MAP TO SATELLITE #SSAMN–XX–PSI–6–N–S–4 WITH RAIN SWITCH BYPASS. CONFIRM LOCATION WITH OWNER AND OWNERS REPRESENTATIVE.

NOTE: FIELD SATELLITES (120 VAC) TO BE WIRED BY LICENSED ELECTRICIAN AND ALL 24 VAC TO BE PERFORMED BY AUTHORIZED LOW VOLTAGE CONTRACTOR. ACTUAL POWER LOCATIONS TO BE CONFIRMED WITH OWNER. – TYPICAL

- NEW 8" HDPE DR11 PIPING SLEEVE WITH 3" WIRE SLEEVE BORE – SEE PLAN AND DETAIL

NOTE: PIPING AND WIRING CROSSING BELOW HARD SURFACES GREATER THAN 3'–0" SHALL BE ENCLOSED IN 4" PVC SLEEVE OR A MINIMUM OF 2" GREATER THAN THE LARGEST DIAMETER PIPE.

- CONTROLLER LIMITS

DESIGN NOTES

1. ALL PRODUCT APPLICATIONS AND INSTALLATIONS MUST MEET MANUFACTURER'S REQUIREMENTS.
2. FLOW RATES THROUGH PVC PIPING NOT TO EXCEED MANUFACTURER'S RECOMMENDATIONS.
3. PIPING AS SHOWN IS DIAGRAMMATIC IN NATURE. ALL PIPING TO BE LOCATED WITHIN OWNER'S PROPERTY LINES.
4. CONTRACTOR IS RESPONSIBLE FOR PROPER OPERATION OF IRRIGATION SYSTEM. SYSTEM SHALL NOT EXCEED MANUFACTURER'S RECOMMENDATIONS AND SHALL WATER ALL SEEDED AND SODDED AREAS NOTED. IRRIGATION PLAN IS INTENDED TO INCLUDE EVERYTHING NECESSARY TO THE PROPER OPERATION OF SAID IRRIGATION SYSTEM. IF ADJUSTMENTS ARE REQUIRED, CONTRACTOR SHALL MAKE ADJUSTMENTS FOR SAME.
5. IRRIGATION PLANS SHALL HAVE PRECEDENCE OVER IRRIGATION SPECIFICATIONS. ANY DISCREPANCIES BETWEEN THESE TWO DOCUMENTS MUST BE BROUGHT TO THE ATTENTION OF THE OWNERS REPRESENTATIVE BEFORE INSTALLATION.
6. IT IS THE INTENT TO KEEP IRRIGATION WATER OFF OF ALL BUILDINGS, SIDEWALKS AND PARKING AREAS. IT WILL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FIELD TUNE EACH SPRINKLER AS TO KEEPING IRRIGATION ADJUSTED TO GRASSED AND SEEDED AREAS ONLY. IT WILL ALSO BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO SUPPLY THE OWNER WITH AN OPERATING SCHEDULE THAT WORKS WITH EXISTING PLANS AND ANY FIELD ADJUSTMENTS.
7. IT IS THE INTENT OF THE IRRIGATION DESIGN TO ACHIEVE HEAD TO HEAD COVERAGE IN ALL SODDED AND SEEDED AREAS. IT WILL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO ADJUST FOR SAME.
8. IRRIGATION CONTRACTOR SHALL PROVIDE OWNERS REPRESENTATIVE WITH ALL SHOP DRAWINGS OF PROPOSED IRRIGATION INSTALLATION.
9. ZONE VALVES TO BE TAGGED USING BRASS OR PLASTIC LABEL IDENTIFYING ZONE AND NUMBER.

PLUMBING NOTES

1. ALL MAIN LINE PIPING FITTINGS SHALL BE THRUST BLOCKED – SEE DETAILS AND THRUST BLOCK/JOINT RESTRAINT NOTES.
2. USE DUCTILE IRON DEEP BELL FITTINGS ON SIZES 2 1/2" OR LARGER. – SEE SPECIFICATIONS
3. ~~CONTRACTOR SHALL NOTIFY OWNER FOR INSPECTION OF SYSTEM BEFORE BACKFILL.~~

PROGRAMMING NOTES

1. ALL VALVES SHALL HAVE SINGLE #14 HOT WIRE RUNNING BACK TO RESPECTIVE SATELLITE. NO #12 COMMON WIRES SHALL BE MIXED WITH OTHER SATELLITES. CONTRACTOR SHALL SUPPLY IRRIGATION DESIGN CONSULTANT WITH AS-STAKED DRAWINGS AND ILLUSTRATE ALL 120 V.A.C. AND 24 V.A.C. WIRE ROUTING AS INSTALLED.

ELECTRICAL NOTES

1. ALL 120 V.A.C. POWER SPLICES AT FIELD SATELLITES.
2. ALL POWER WIRE TAPS AND CONNECTIONS SHALL CONFORM TO WITH LOCAL AND STATE CODES AND PERFORMED BY LICENSED ELECTRICIAN.
3. 24" LOOP OF WIRE LOCATED AT EACH VALVE.
4. ALL 24 V.A.C. SECONDARY WIRING SHALL BE (RED) #14 HOT AND (WHITE) #12 COMMON. (ONE HOT WIRE PER VALVE) 5. ALL WIRE SHALL HAVE ENOUGH SLACK AS TO ACCOMMODATE FOR EXPANSION AND/OR CONTRACTION.
6. ALL WIRE TO BE UL APPROVED FOR DIRECT BURIAL.
7. ALL 120 V.A.C. PRIMARY, AND 24 V.A.C. SECONDARY POWER TO BE INSTALLED AS PER STATE AND LOCAL CODES. SIZED AS PER PLAN WITH GROUND WIRE; MEETING N.E.C. REQUIREMENTS.
8. ALL 24 V.A.C. FIELD SPLICES SHALL BE NOTED ON "AS-BUILT" DRAWINGS AND LOCATED IN ECONO VALVE BOX AND MARKED.
9. PROVIDE (6) SPARE CONTROL WIRE(S) FROM EACH CONTROLLER ALONG ENTIRE MAIN LINE AND MARKED IN FURTHEST VALVE BOX (WIRES SHALL BE MARKED "SPARE")
10. DIRECT BURY MINIMUM #14 GAUGE YELLOW SINGLE STRAND COPPER TRACER WIRE WITH MAIN LINE AND LATERAL PIPING, AND MARKED TRACER WIRE. SPECIFY COLOR AND SHOW LOCATION IN SHOP DRAWING SUBMITTALS.

CONTROLLER NOTES

1. ALL SATELLITE LOCATIONS ON PLAN ARE DIAGRAMMATIC IN NATURE AND FINAL LOCATION WILL BE COORDINATED WITH OWNERS REPRESENTATIVE AND GENERAL CONTRACTOR FOR ACTUAL ELECTRICAL 120 V.A.C. LOCATIONS. ALL CONTROLLER EQUIPMENT SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS FOR THE PROPER OPERATION OF SAID CONTROL SYSTEM WHETHER MENTIONED OR NOT AT NO ADDITIONAL COST TO OWNER.

= 6" Mainline
= 4" Mainline
= 3" Mainline
= 2.5" Mainline
= 2.0" Mainline
= yellow Trace Wire
= 6 extra field Wires

National Waterworks 763-560-5300

EC design
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SAO PROJECT# 02380GDX

MINNESOTA CAPITOL MALL
St. Paul, MN

REVISIONS: 1 2 3 4 5 6

DRAWING TITLE: SITE IRRIGATION PLAN
SCALE: 1" = 60'-0"

DATE: 5/15/06

SHEET #: LI-1

FOR INFORMATION ONLY

Know what's below. Call before you dig. 811

KEY PLAN
C B A

Minnesota State Capitol Restoration — Preserving our past. Preparing our future.

Minnesota State Capitol Repairs, Restoration, & Preservation

75 Rev Dr. Martin Luther King Jr Blvd
Saint Paul, MN 55155
STATE PROJECT NUMBER - 02CB0015

NOT FOR CONSTRUCTION

NO	DESCRIPTION	DATE
1	ADD #1	06/28/2013

REVISION HISTORY - THIS SHEET

HGA NO: 0476-061-00

IRRIGATION PLAN - OWNER PROVIDED

WORK PACKAGE 1

LI100

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