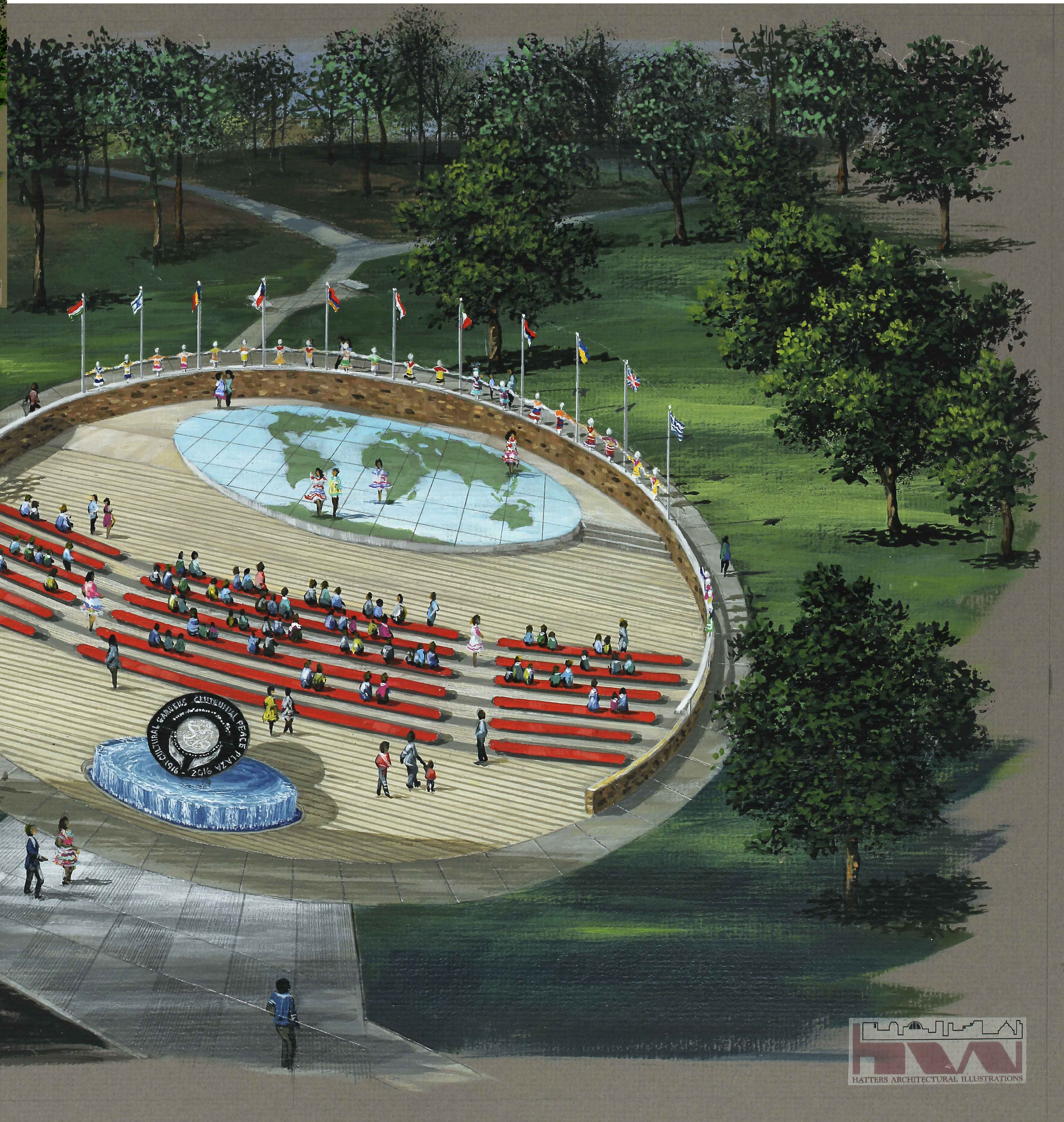


THE CLEVELAND CULTURAL GARDENS FEDERATION CENTENNIAL PEACE PLAZA

ROCKEFELLER PARK - CLEVELAND, OHIO 44108

Wael Khoury, MD, President
Paul Burik, Centennial Commission Chairman
Thomas Turkaly, Centennial Commission Vice-Chairman
Lori Ashyk, Executive Director



Berj A. Shakarian
Architect, NCARB
LEED AP BD+C



ARCHITECT
Berj A. Shakarian, AIA, NCARB, LEED AP BD+C
CIVIL ENGINEER
Stephen Hovancek & Assoc., Inc.
STRUCTURAL ENGINEER
Osborn Engineering
MECHANICAL ENGINEER
Osborn Engineering
ELECTRICAL ENGINEER
Osborn Engineering
FOUNTAIN CONSULTANT
Hydro-Dramatics

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FOUNTAIN / Alternate No. 1, Fountain Assy. (Add)

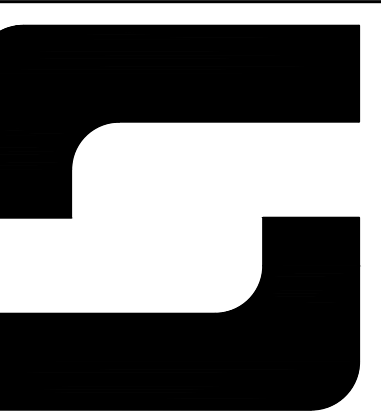
- F - 1.1 FOUNTAIN PIPING & ELECTRICAL PLAN
- F - 2.1 FOUNTAIN EQUIPMENT DETAILS
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PLUMBING / Alternate No. 1, Fountain Assy. (Add)

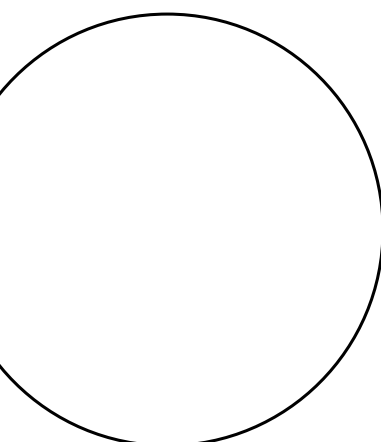
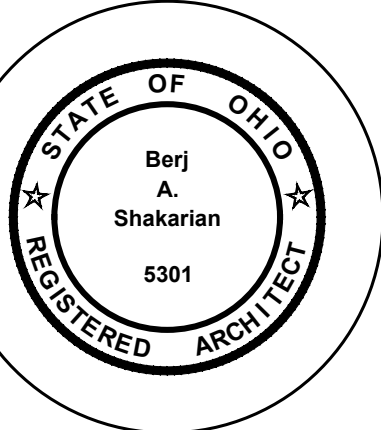
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BERJ A. SHAKARIAN, ARCHITECT
AIA, NCARB, LEED AP BD+C



ROCKEFELLER PARK
1916 - CENTENNIAL PLAZA - 2016
The Cleveland Cultural Gardens Federation
**SECOND BIDDING
TITLE SHEET & INDEX OF DRAWINGS**

REVISIONS	

DRAWN	SCALE
berj	NA
DATE	PROJECT NO.
12/15/2018	

SHEET NO.
G-0.1



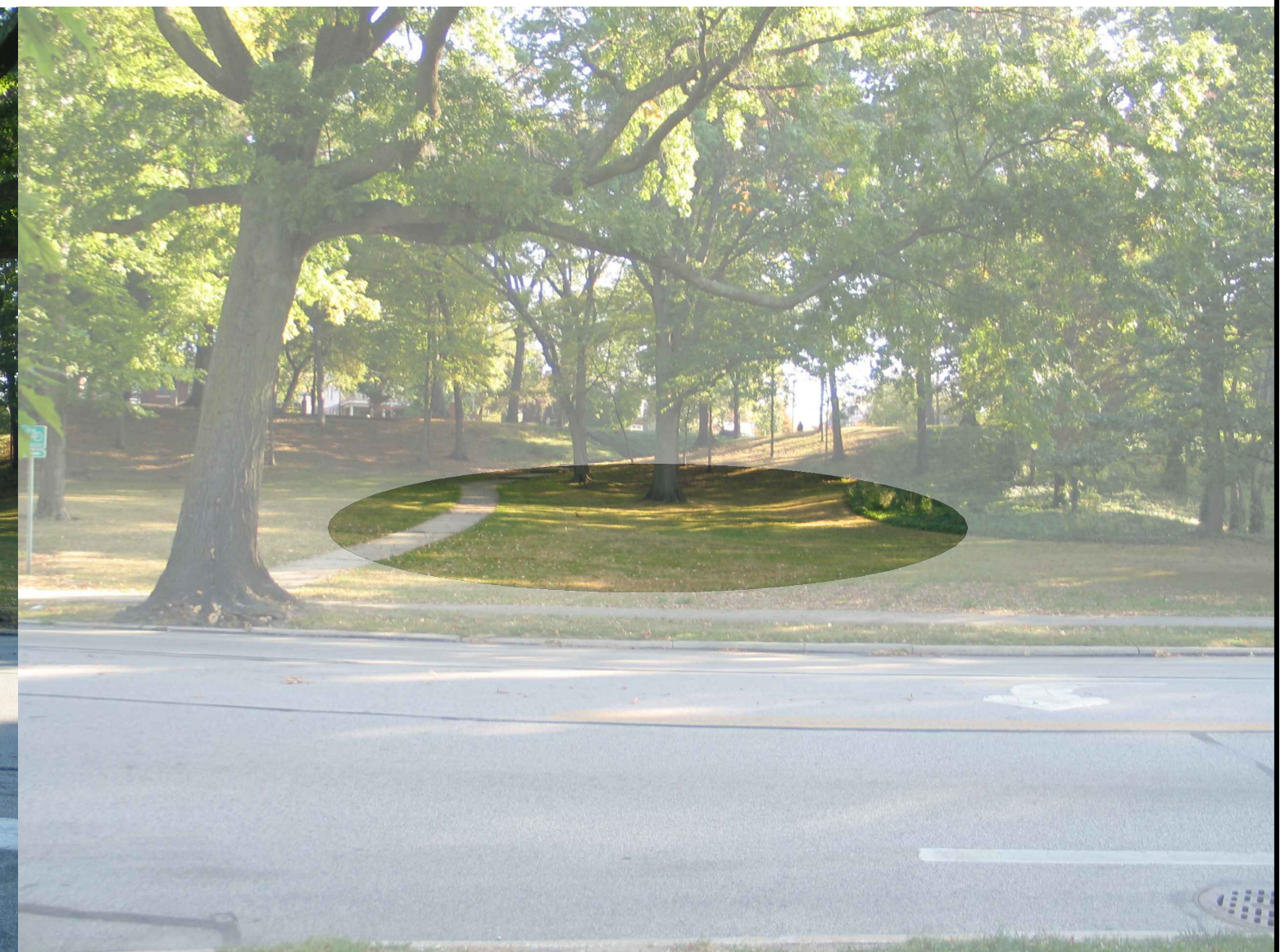
CULTURAL GARDENS ENTRANCE



CCGF KIOSK



CCGF KIOSK



PROJECT SITE LOCATION



PROJECT SITE LOCATION



SITE w. HUNGARIAN GARDEN VIEW



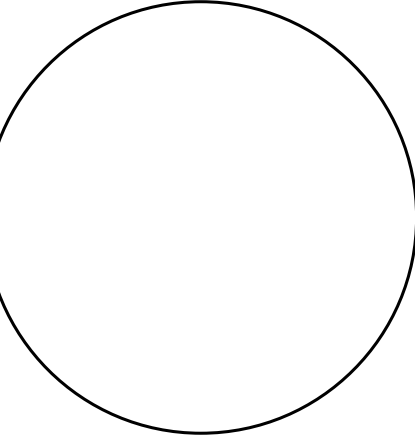
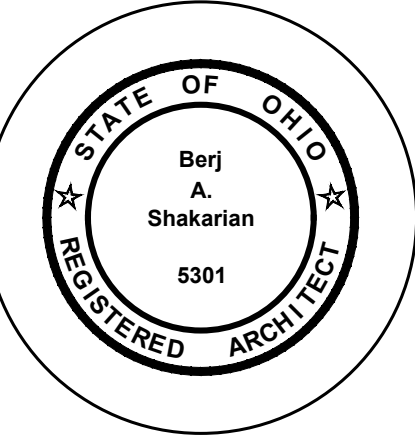
SITE w. EAST BLVD. ENTRANCE VIEW



SITE w. GERMAN GARDEN VIEW



BERJ A. SHAKARIAN, ARCHITECT
AIA, NCARB, LEED AP BD+C



ROCKEFELLER PARK
1916 - CENTENNIAL PLAZA - 2016
The Cleveland Cultural Gardens Federation
PHOTO SURVEY EXISTING CONDITIONS

REVISIONS	

DRAWN	SCALE
berj	NA
DATE	PROJECT NO.
12/15/2018	

SHEET NO.
G-0.2

GENERAL

CONSTRUCTION AND MATERIAL SPECIFICATIONS

THE STANDARD FOR ALL MATERIALS AND/OR WORKMANSHIP SHALL BE AS SPECIFIED IN THE "STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIAL SPECIFICATIONS", DATED JANUARY 1, 2016, OR ANY SUBSEQUENT ISSUES THEREOF AND AS MODIFIED ON THESE PLANS OR IN THE SPECIFICATIONS. THROUGHOUT THE PLANS THE REFERENCE TO SPECIFIC O.D.O.T. ITEM NUMBERS ARE INDICATED. WHERE REFERENCE IS MADE IN THE SPECIFICATIONS TO THE STATE OF OHIO, IT SHALL MEAN THE OWNER; REFERENCE MADE TO THE DEPARTMENT SHALL MEAN THE OWNER; REFERENCE MADE TO THE DIRECTOR SHALL MEAN THE OWNER; AND REFERENCE MADE TO THE ENGINEER SHALL MEAN THE ARCHITECT OR ENGINEER PREPARING THE PROJECT PLANS.

MATERIAL AND WORKMANSHIP SHALL ALSO CONFORM TO THE "UNIFORM STANDARDS FOR SEWAGE IMPROVEMENTS", RELATED GRAPHICS DETAILS OF THE "UNIFORM STANDARD SEWER DETAILS", O.D.O.T. BUREAU OF LOCATION AND DESIGN STANDARD CONSTRUCTION DRAWINGS, THE RULES AND REGULATIONS OF THE CUYAHOGA COUNTY SANITARY ENGINEERING DEPARTMENT AND THE ORDINANCES OF THE CITY OF CLEVELAND. WHERE CONFLICTS OCCUR IN THE ABOVE, THE ENGINEER SHALL DETERMINE THE GOVERNING AUTHORITY. ANY DEFECTS IN THE CONSTRUCTION SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL OBTAIN ALL PERMITS AND LICENSES AS NECESSARY, AND SHALL BE RESPONSIBLE FOR ALL DAMAGES TO THE EXISTING WATER AND SEWERAGE SYSTEM RESULTING FROM NON-CONFORMANCE WITH THE APPLICABLE STANDARDS, THROUGH GENERAL NEGLIGENCE, OR NOT TAKING ANY NECESSARY PRECAUTIONS. THE STANDARD FOR ALL MATERIALS AND/OR WORKMANSHIP, GENERAL PROVISIONS, MEASUREMENT AND PAYMENT SHALL FOLLOW THE ABOVE MENTIONED SOURCES UNLESS OTHERWISE STATED IN THESE NOTES, THE PLANS OR CONTRACT SPECIFICATIONS.

CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH ALL OSHA REQUIREMENTS REGARDING ENTRANCE INTO CONFINED SPACES (MANHOLES, TRENCHES, ETC.) FAILURE TO COMPLY WITH THESE REQUIREMENTS MAY RESULT IN FORFEITURE OF THE CONTRACT.

CONTRACTOR SHALL NOTE THAT THIS PROJECT IS ANTICIPATED TO BE COMPLETED IN ONE CONSTRUCTION SEASON. PRICE INCREASES FOR BID ITEMS WILL NOT BE PERMITTED.

UTILITIES

CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT THE OHIO UTILITY PROTECTION SERVICE. OHIO811.ORG OR CALL 1-800-362-2764 PRIOR TO BEGINNING ANY WORK.

PRE-CONSTRUCTION VIDEO

THE ENTIRE SITE SHALL BE "AUDIO VISUAL" INSPECTED IN ACCORDANCE WITH THE SPECIFICATIONS. PARTICULAR ATTENTION SHALL BE PAID TO AREAS ALONG THE CONSTRUCTION LIMITS, ESPECIALLY CONDITIONS OF DRIVEWAY, WALKS, STRUCTURES AND NEARBY PLANTS. TWO COPIES OF THE VIDEO TAPE SHALL BE PRESENTED TO THE ENGINEER BEFORE ANY WORK COMMENCES.

PRECAUTION AGAINST UTILITY DAMAGE

THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS, AT NO EXPENSE TO THE OWNER, TO AVOID DAMAGE TO EXISTING UNDERGROUND UTILITY LINES DURING THE INSTALLATION OF THE PROPOSED IMPROVEMENTS. IT MAY BE NECESSARY TO CHANGE THE ALIGNMENT OR THE FLOW LINE ELEVATION OF PROPOSED SEWERS DUE TO VARIOUS EXISTING UTILITY LINES AS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL MAKE INVESTIGATIONS TO DETERMINE THE LOCATION OF EXISTING UTILITY LINES PRIOR TO THE INSTALLATION OF THE PROPOSED IMPROVEMENTS. SUCH INVESTIGATIONS SHALL BE AT NO ADDITIONAL COST TO THE OWNER.

MATERIAL/EQUIPMENT STORAGE

CONTRACTOR SHALL BE LIMITED TO STORE EQUIPMENT AND/OR MATERIAL ON THE PROJECT SITE ONLY. ALL MATERIAL MUST BE WITHIN PROJECT LIMITS AND SHALL NOT OBSTRUCT ROADWAY/DRIVEWAY ACCESS OR VISIBILITY TO VEHICLES. EXCESSIVE MATERIAL WHICH PROHIBIT ROADWAY OR DRIVEWAY ACCESS OR IS DETERMINED TO BE A SAFETY RISK SHALL BE REMOVED FROM SITE AT THE CONTRACTOR'S EXPENSE.

POSITIVE DRAINAGE

CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN POSITIVE DRAINAGE ON THE CONSTRUCTION SITE AT ALL TIMES.

CONSTRUCTION LAYOUT STAKES AND SURVEYING

ALL CONSTRUCTION LAYOUT SHALL BE PERFORMED BY A LICENSED PROFESSIONAL SURVEYOR.

EXISTING TREE PROTECTION

ALL TREES IN THE PROJECT LIMITS SHALL BE PROTECTED. NO TREE SHALL BE REMOVED UNLESS SPECIFIC PERMISSION IN WRITING IS OBTAINED FROM THE OWNER.

ITEM 203: EXCAVATION AND EMBANKMENT CONSTRUCTION, AS PER PLAN

ALL APPLICABLE PROVISIONS OF ODOT ITEM 203: EXCAVATION AND EMBANKMENT CONSTRUCTION SHALL APPLY.

THIS WORK INCLUDES ALL NECESSARY EXCAVATION AND EMBANKMENT CONSTRUCTION NECESSARY TO CONSTRUCT THE PROPOSED IMPROVEMENTS TO GRADE.

ANY EXPORT OR IMPORT REQUIRED TO COMPLETE THIS PROJECT SHALL BE INCLUDED IN THE CONTRACT AMOUNT.

ITEM 605: UNDERDRAINS, AS PER PLAN

ALL APPLICABLE PROVISIONS OF ODOT ITEM 605: UNDERDRAINS SHALL APPLY.

THE PIPE FOR THE UNDERDRAINS SHALL BE 707.41 SMOOTH WALL POLYVINYL CHLORIDE UNDERDRAIN PIPE CONFORMING TO ASTM F 758, TYPE PS 46 MINIMUM WITH A MINIMUM OF 4 ROWS OF PERFORATIONS.

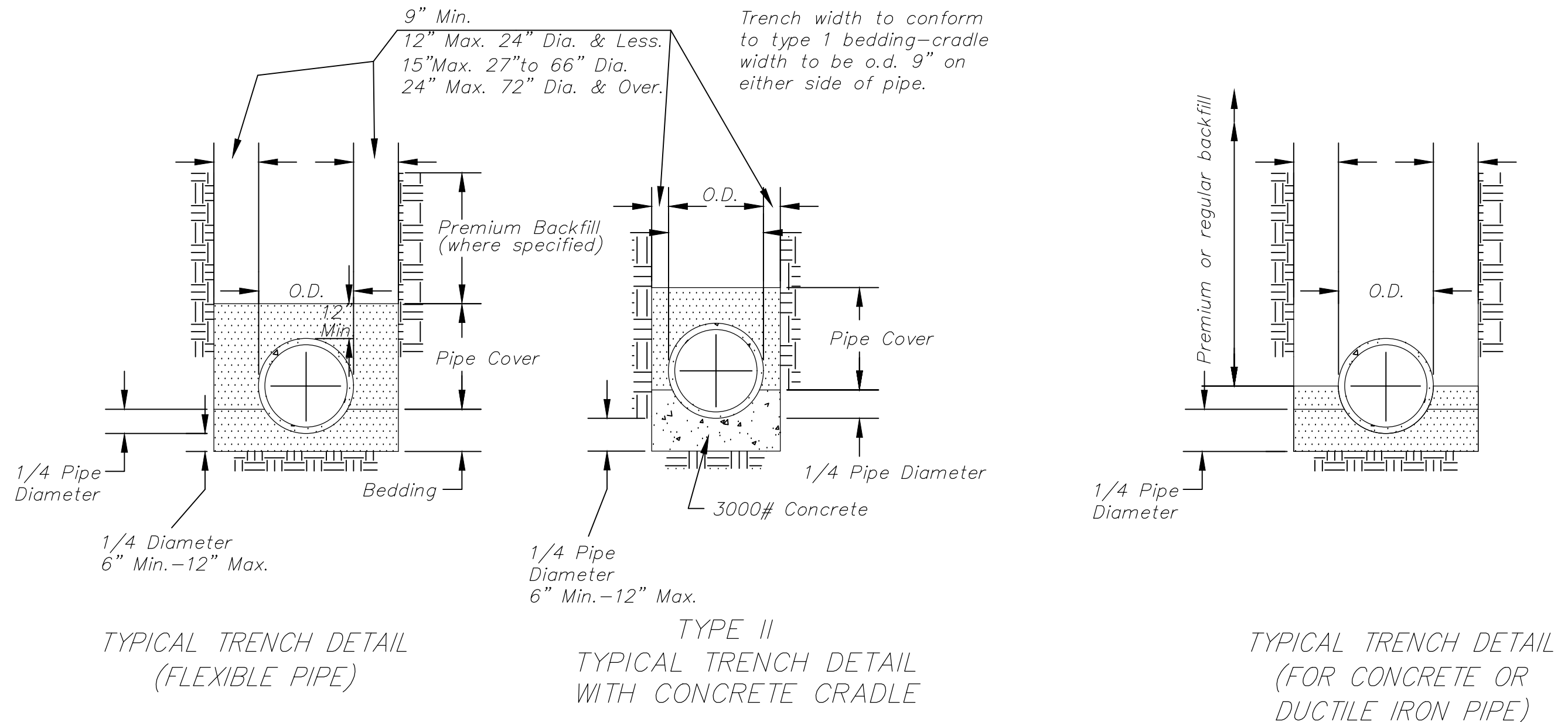
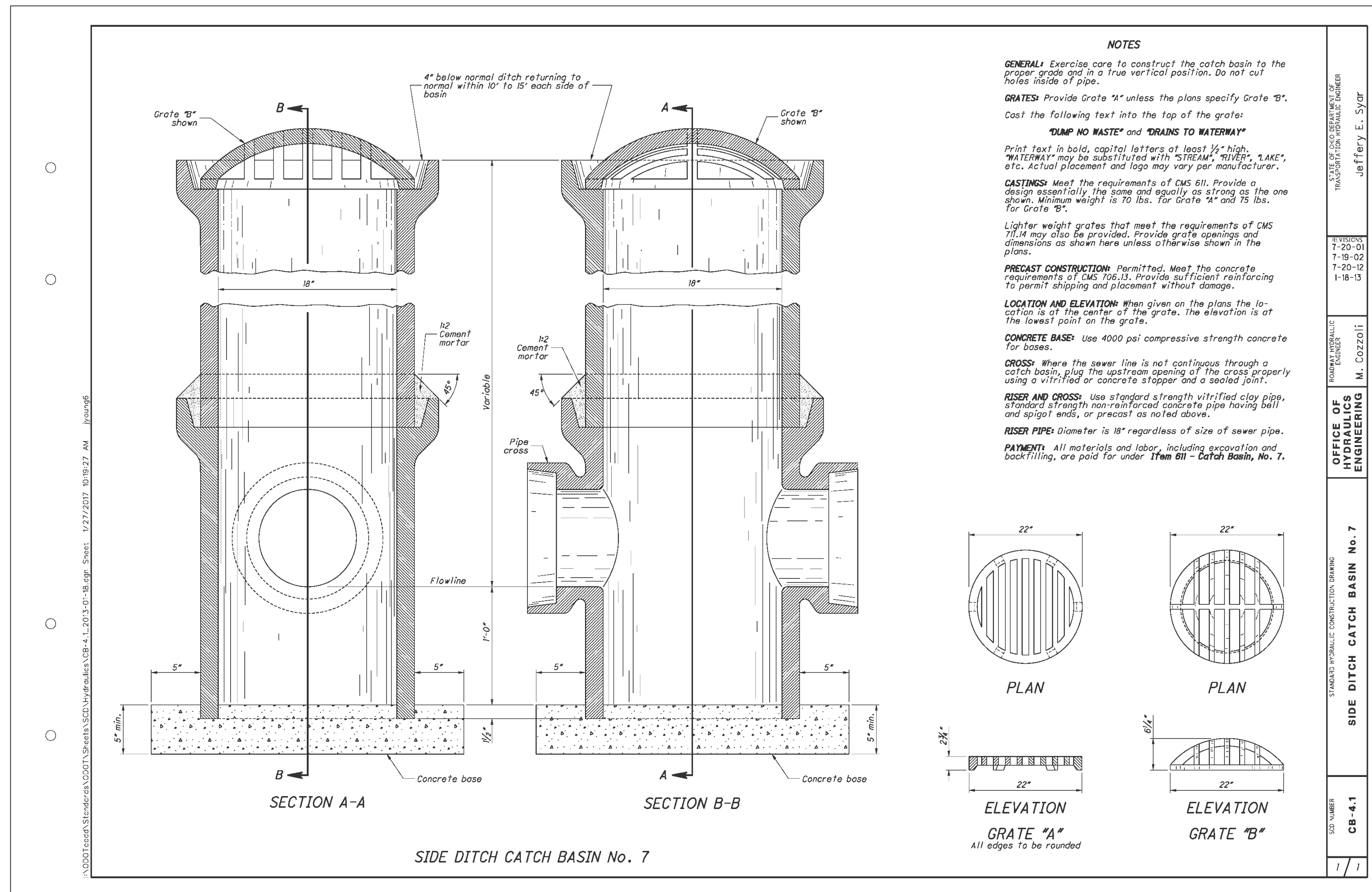
ITEM 611: STORM SEWER, AS PER PLAN

ALL APPLICABLE PROVISIONS OF ODOT ITEM 611: PIPE CULVERTS, SEWERS, DRAINS, AND DRAINAGE STRUCTURES SHALL APPLY.

STORM SEWER PIPE SHALL BE 707.45 POLYVINYL CHLORIDE SOLID WALL PIPE CONFORMING TO ASTM D 3034, SDR 35 WITH PREMIUM JOINTS.

ITEM 660: TOPSOIL, AS PER PLAN

THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 4-INCHES OF TOPSOIL OVER ALL DISTURBED AREAS WHICH ARE TO BE PERMANENTLY SEEDED. THE PLACED TOPSOIL SHALL BE COMPACTED AND THEN THE SURFACE SHALL BE RAKED TO ACCEPT THE PERMANENT SEEDING AND MULCHING.



Premium Backfill shall consist of coarse interlocking aggregate no. 57, 6, 67, 68, 7, 78, or 8, 304, also limestone screenings.

Pipe Cover shall consist of coarse interlocking aggregate no. 57, 6, 67, 68, 7, 78, or 8.

Bedding shall consist of coarse interlocking aggregate no. 57, 6, 67, 68, 7, 78, or 8 for 60" or smaller diameter pipe, for 66" or larger diameter pipe no. 4 aggregate may also be used.

Notes:
Lateral connections to have a minimum bedding depth of 3" coarse aggregate.

Bedding pipe cover & backfill shall consist of crushed limestone only.

The gradation for premium backfill shall be equal to or larger than the gradation used for the pipe cover.

No. 8 stone shall be used for pipe bedding & cover when PVC profile wall pipe is used.

TYPICAL TRENCH DETAILS
N.T.S.

ROCKEFELLER PARK
1916 - CENTENNIAL PLAZA - 2016
The Cleveland Cultural Gardens Federation

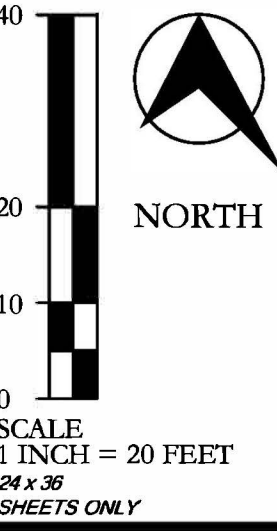
GENERAL NOTES & SITE DETAILS

REVISIONS	

DRAWN TC/AJS	SCALE NONE
DATE 12/15/2018	PROJECT NO.

SHEET NO. C-1.0

GERMAN CULTURAL GARDENS
142,522 S.F. - 3.2719 ACRES
Add.# 1036 East Blvd.



ABBREVIATIONS

AFN..... AUTOMATED FILING NO.
 ASPH..... ASPHALT
 C. or CALC.... CALCULATED
 CL..... CENTER LINE
 CONC..... CONCRETE
 C.D.R..... COUNTY DEED RECORD
 C.M.R..... COUNTY MAP RECORD
 D..... DEED
 EX..... EXISTING
 FD..... FOUND
 MON..... MONUMENT
 O. or OBS..... OBSERVED
 PG..... PAGE
 P/L..... PROPERTY LINE
 P.V.M.T..... PAVEMENT
 R. or REC..... RECORD
 R/W..... RIGHT OF WAY
 U..... USED
 VOL..... VOLUME

SAN..... SANITARY
 STM..... STORM
 WAT..... WATER
 INV..... INVERT

PVC..... POLYVINYL CHLORIDE
 VCP..... VITRIFIED CLAY PIPE
 RCP..... REINFORCED CONCRETE PIPE
 CMP..... CORRUGATED METAL PIPE

GUT..... GUTTER
 TC..... TOP OF CURB

SYMBOL LEGEND (EXISTING)

	CENTER LINE
	PROPERTY LINE
	CONSOLIDATED LOTS
	IRON PIN/PIPE FOUND
	IRON PIN SET
	MONUMENT BOX FOUND
	DRILL HOLE FOUND
	DRILL HOLE SET
	EXISTING FIRE HYDRANT
	EXISTING WATER VALVE
	EXISTING WATER CORP STOP
	EXISTING WATER METER
	EXISTING SQUARE INLET BASIN
	EXISTING ELECTRIC MANHOLE
	EXISTING FLAG POLE
	EXISTING SIGNAL POLE
	EXISTING LIGHT POLE
	LIGHT POLE BASE
	EXISTING TRAFFIC SIGN
	EXISTING TREE
	EX. STORM SEWER
	EX. WATER LINE
	EX. FENCE
	EX. OVERHEAD LINES
	EX. GAS LINE
	EX. UNDERGROUND ELECT.
	EX. UNDERGROUND TELE.
	EX. OVERHEAD UTILITY LINE

The underground utilities shown have been located from field survey information and existing drawings. The surveyor makes no guarantees that the underground utilities shown comprise all such utilities in the area, either in service or abandoned.

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The surveyor has not physically located the underground utilities.

OHIO Utilities Protection SERVICE
 Call Before You Dig
 1-800-362-2764
 A705803000-00A, A705803009-00A
 Also call: OGPUPS @ 1-800-925-0988
 (Ohio Oil & Gas Underground Protection Service)
 - or dial 8-1-1 -

BENCH MARKS:

B.M. #1: TOP OF HYDRANT @ EAST BLVD.	ELEV.=627.66 (NAVD88)
B.M. #2: X SET IN SE CORNER OF TRAFFIC BASE	ELEV.=592.69 (NAVD88)

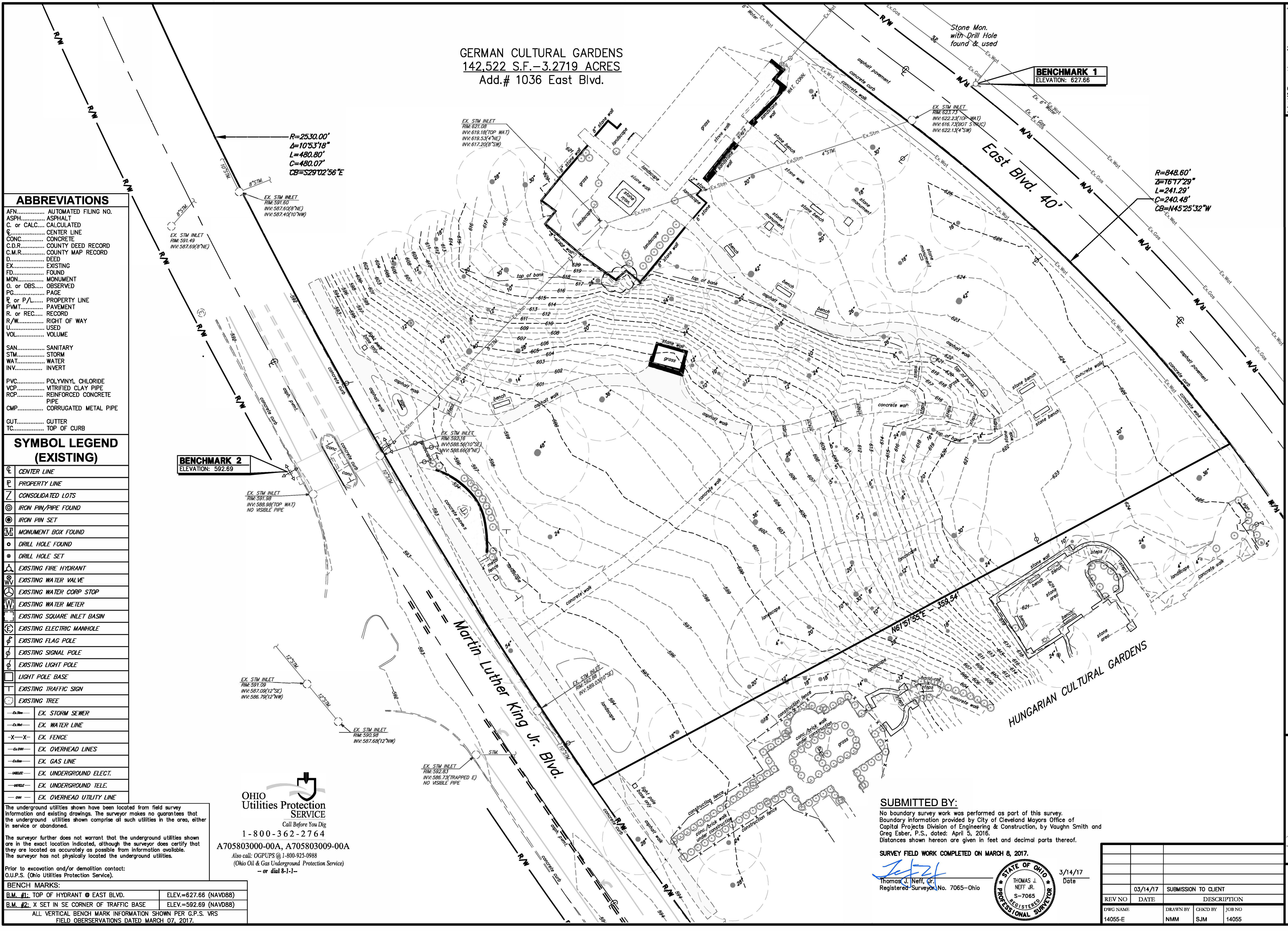
ALL VERTICAL BENCH MARK INFORMATION SHOWN PER G.P.S. VRS FIELD OBSERVATIONS DATED MARCH 07, 2017.

BENCHMARK 2
ELEVATION: 592.69

BENCHMARK 1
ELEVATION: 627.66

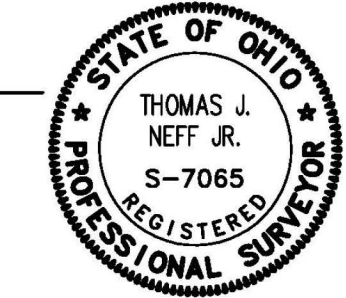
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 $\Delta=1053'18''$
 $L=480.80'$
 $C=480.07'$
 $CB=S29'02'56''E$

$R=848.60'$
 $\Delta=167'29''$
 $L=241.29'$
 $C=240.49'$
 $CB=N45'25'32''W$



SUBMITTED BY:
 No boundary survey work was performed as part of this survey. Boundary information provided by City of Cleveland Mayors Office of Capital Projects Division of Engineering & Construction, by Vaughn Smith and Greg Esber, P.S., dated: April 5, 2016.
 Distances shown hereon are given in feet and decimal parts thereof.

SURVEY FIELD WORK COMPLETED ON MARCH 8, 2017.
 Thomas J. Neff, Jr.
 Registered Surveyor No. 7065-Ohio



3/14/17
Date

REV NO	DATE	DESCRIPTION
03/14/17		SUBMISSION TO CLIENT
DWG NAME	DRAWN BY	CHKD BY
14055-E	NMM	SJM
		JOB NO
		14055

GERMAN CULTURAL GARDENS - 1036 East Boulevard
 Existing Conditions Survey for the German Cultural Gardens Plaza
 CITY OF CLEVELAND, CUYAHOGA COUNTY, STATE OF OHIO

NEFF & ASSOCIATES
 Civil Engineers + Landscaping Architects + Planners + Surveyors
 8405 York Road | Parma Heights, Ohio 44130
 Tel: 440.886.3100 | Fax: 440.886.3104
 www.neff-associates.com

SHEET NO.
C-2.0

GERMAN CULTURAL GARDENS
142,522 S.F. - 3.2719 ACRES
Add.# 1036 East Blvd.

ABBREVIATIONS

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- TC..... TOP OF CURB

SYMBOL LEGEND (EXISTING)

- CL CENTER LINE
- PL PROPERTY LINE
- Z CONSOLIDATED LOTS
- IP IRON PIN/PIPE FOUND
- IS IRON PIN SET
- MB MONUMENT BOX FOUND
- DF DRILL HOLE FOUND
- DS DRILL HOLE SET
- EFH EXISTING FIRE HYDRANT
- EWV EXISTING WATER VALVE
- EWCS EXISTING WATER CORP STOP
- EWMT EXISTING WATER METER
- ESIB EXISTING SQUARE INLET BASIN
- EMH EXISTING ELECTRIC MANHOLE
- EP EXISTING FLAG POLE
- ESP EXISTING SIGNAL POLE
- ELP EXISTING LIGHT POLE
- LPB LIGHT POLE BASE
- ETS EXISTING TRAFFIC SIGN
- ET EXISTING TREE

- EX-STM EX. STORM SEWER
- EX-WAT EX. WATER LINE
- EX-FENCE EX. FENCE
- EX-OHL EX. OVERHEAD LINES
- EX-GAS EX. GAS LINE
- EX-UG-ELC EX. UNDERGROUND ELECT.
- EX-UG-TELE EX. UNDERGROUND TELE.
- EX-OHL-UTL EX. OVERHEAD UTILITY LINE

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Prior to excavation and/or demolition contact:
O.U.P.S. (Ohio Utilities Protection Service).

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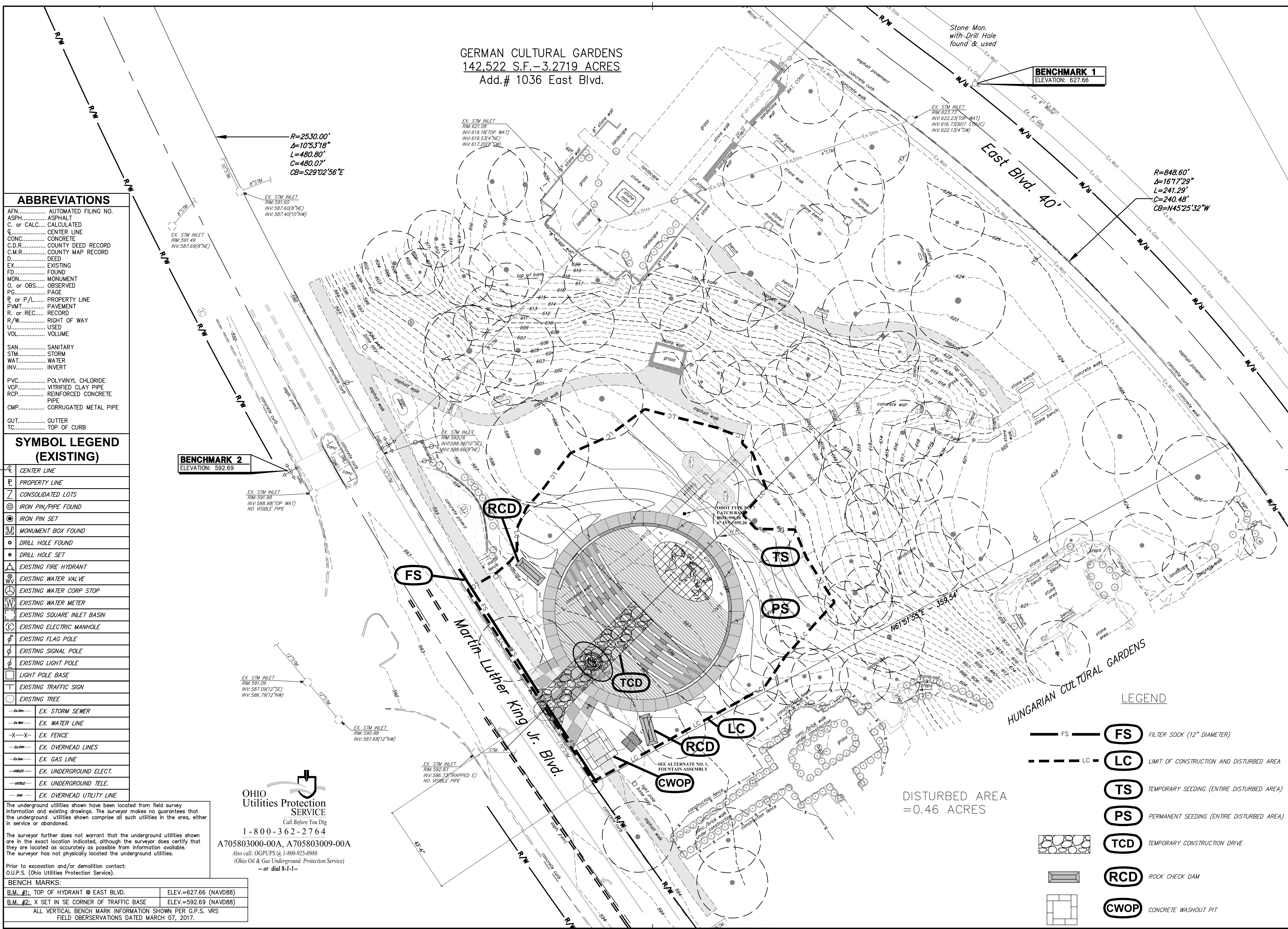
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ALL VERTICAL BENCH MARK INFORMATION SHOWN PER G.P.S. VRS FIELD OBSERVATIONS DATED MARCH 07, 2017.

BENCHMARK 2
ELEVATION: 592.69

BENCHMARK 1
ELEVATION: 627.66



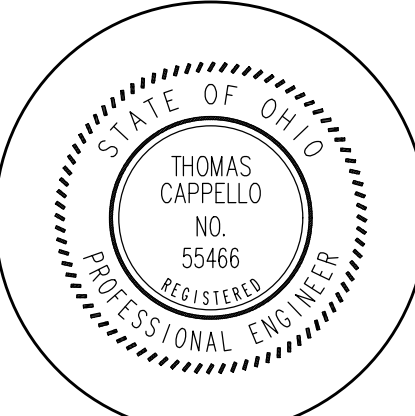
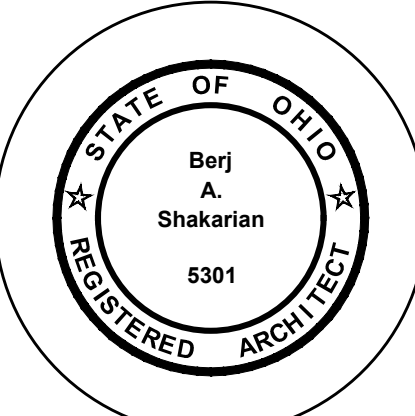
DISTURBED AREA
= 0.46 ACRES

LEGEND

- FS FILTER SOCK (12" DIAMETER)
- LC LIMIT OF CONSTRUCTION AND DISTURBED AREA
- TS TEMPORARY SEEDING (ENTIRE DISTURBED AREA)
- PS PERMANENT SEEDING (ENTIRE DISTURBED AREA)
- TCD TEMPORARY CONSTRUCTION DRIVE
- RCD ROCK CHECK DAM
- CWOP CONCRETE WASHOUT PIT

STEPHEN HOVANCSEK & ASSOC., INC.
TWO MERT DRIVE
RICHMOND HEIGHTS, OHIO 44143
(216) 731-6255 FAX NO. (216) 731-4483

BERJ A. SHAKARIAN, ARCHITECT
AIA, NCARB, LEED AP BD+C

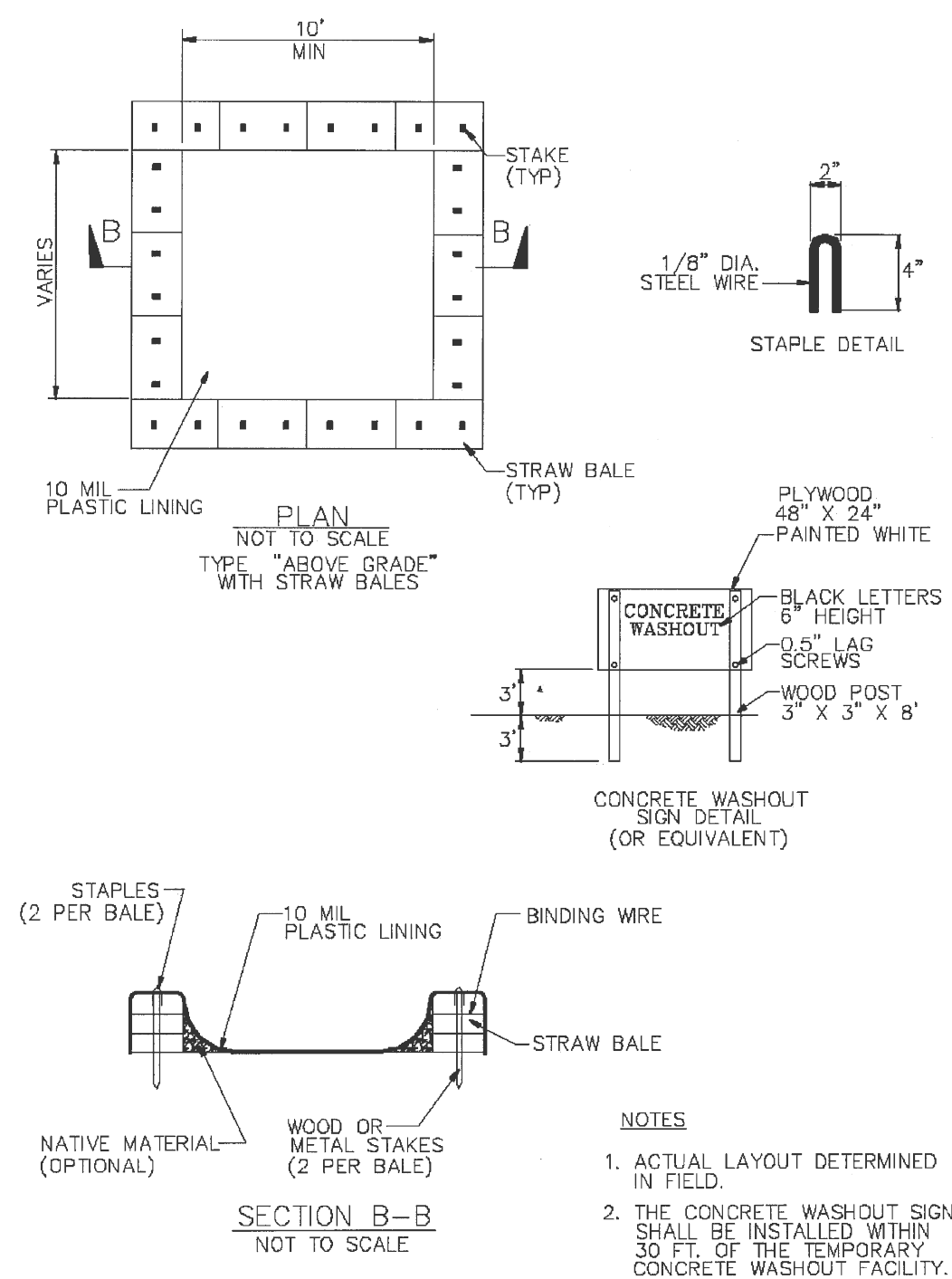


ROCKEFELLER PARK
1916 - CENTENNIAL PLAZA - 2016
The Cleveland Cultural Gardens Federation
SWP3 PLAN

REVISIONS

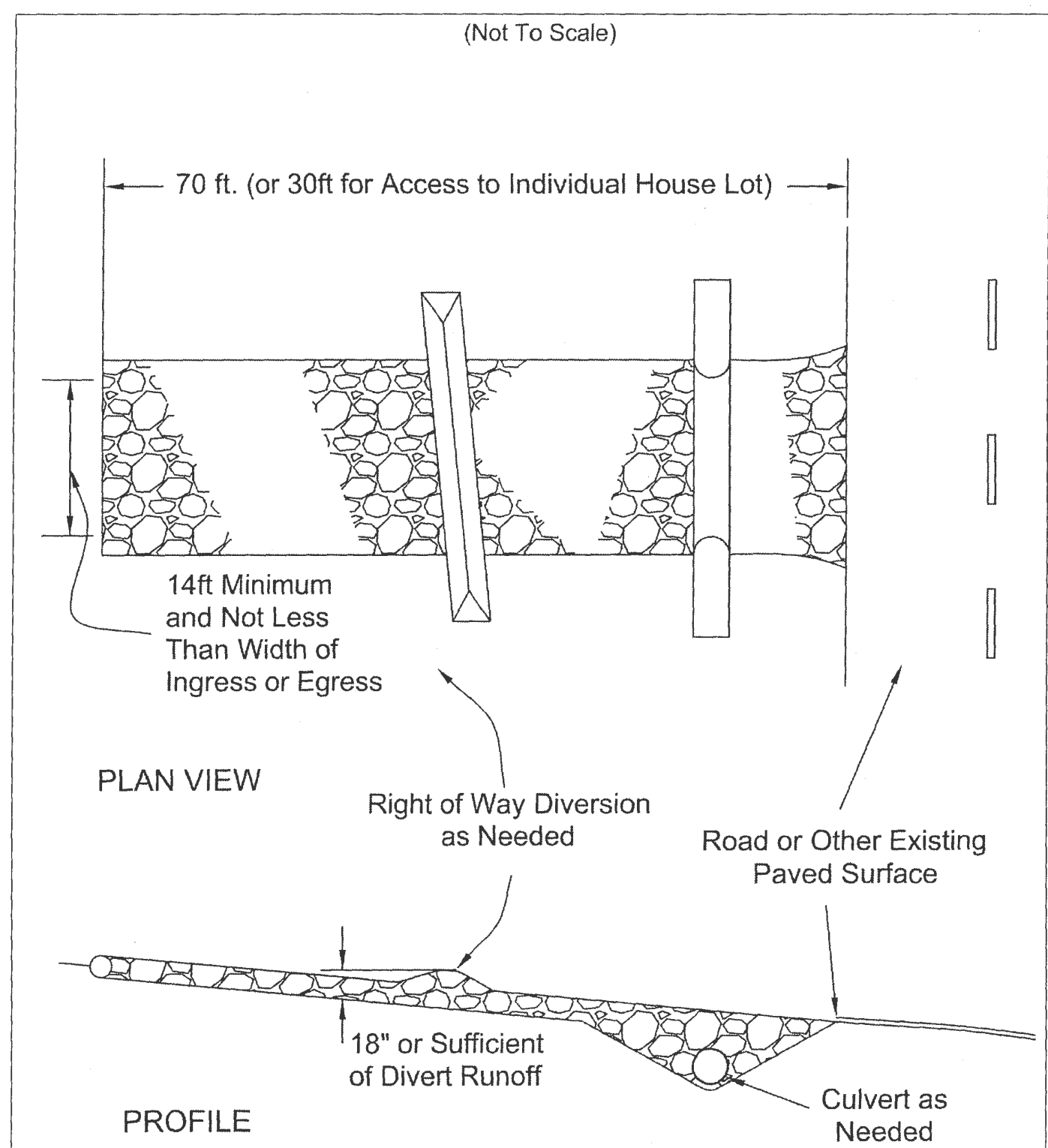
DRAWN TC/AJS	SCALE 1" = 20.0'
DATE 12/15/2018	PROJECT NO.
SHEET NO. C-3.0	

Concrete Waste Management WM-8

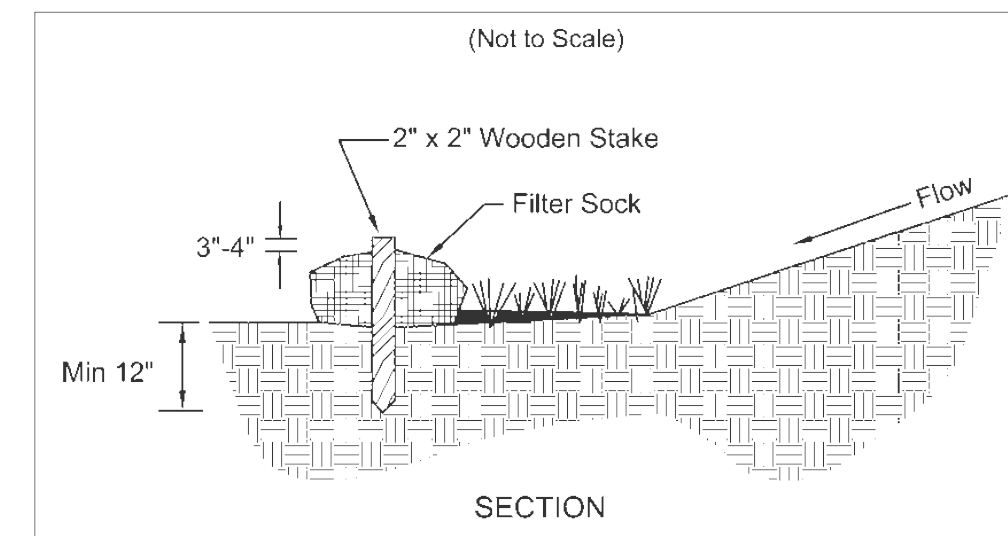


January 2003 California Stormwater BMP Handbook Construction www.calbmphandbook.com 7 of 7

Specifications for Construction Entrance



Specifications for Filter Sock



- Materials - Compost used for filter socks shall be weed, pathogen and insect free and free of any residues, contaminants or other materials toxic to plant growth. They shall be derived from a well-decomposed source of organic matter and consist of a particles ranging from 3/8" to 2".
 - Filter Socks shall be 3 or 5 mil continuous, tubular, HDPE 3/8" knitted mesh netting material, filled with compost passing the above specifications for compost products.
 - Filter socks will be placed on a level line across slopes, generally parallel to the base of the slope or other affected area. On slopes approaching 2:1, additional socks shall be provided at the top and as needed mid-slope.
 - Filter socks intended to be left as a permanent filter or part of the natural landscape, shall be seeded at the time of installation for establishment of permanent vegetation.
 - Filter Socks are not to be used in concentrated flow situations or in runoff channels.
- MAINTENANCE:
- Regularly inspect filter socks after each significant rain, maintaining filter socks in a functional condition at all times.
 - Remove sediments collected at the base of the filter socks when they reach 1/3 of the exposed height of the practice.
 - Where the filter sock deteriorates or fails, it will be repaired or replaced with a more effective alternative.
 - Removal - Filter socks will be dispersed on site when no longer required in such a way as to facilitate and not obstruct seedings.
- INSTALLATION:
- Filter socks will be placed on a level line across slopes, generally parallel to the base of the slope or other affected area. On slopes approaching 2:1, additional socks shall be provided at the top and as needed mid-slope.
 - Filter socks intended to be left as a permanent filter or part of the natural landscape, shall be seeded at the time of installation for establishment of permanent vegetation.

CHAPTER 6 Sediment Controls 50

Specifications for Permanent Seeding

Site Preparation

- Subsoiler, plow, or other implement shall be used to reduce soil compaction and allow maximum infiltration. (Maximizing infiltration will help control both runoff rate and water quality.) Subsoiling should be done when the soil moisture is low enough to allow the soil to crack or fracture. Subsoiling shall not be done on slip-prone areas where soil preparation should be limited to what is necessary for establishing vegetation.
- The site shall be graded as needed to permit the use of conventional equipment for seedbed preparation and seeding.
- Topsoil shall be applied where needed to establish vegetation.

Seedbed Preparation

- Lime—Agricultural ground limestone shall be applied to acid soil as recommended by a soil test. In lieu of a soil test, lime shall be applied at the rate of 100 pounds per 1,000-sq. ft. or 2 tons per acre.
- Fertilizer—Fertilizer shall be applied as recommended by a soil test. In place of a soil test, fertilizer shall be applied at a rate of 25 pounds per 1,000-sq. ft. or 1000 pounds per acre of a 10-10-10 or 12-12-12 analyses.
- The lime and fertilizer shall be worked into the soil with a disk harrow, spring-tooth harrow, or other suitable field implement to a depth of 3 inches. On sloping land, the soil shall be worked on the contour.

Seeding Dates and Soil Conditions

Seeding should be done March 1 to May 31 or August 1 to September 30. If seeding occurs outside of the above-specified dates, additional mulch and irrigation may be required to ensure a minimum of 80% germination. Tillage for seedbed preparation should be done when the soil is dry enough to crumble and not form ribbons when compressed by hand. For winter seeding, see the following section on dormant seeding.

Dormant Seedings

- Seedings should not be made from October 1 through November 20. During this period, the seeds are likely to germinate but probably will not be able to survive the winter.

The following methods may be used for "Dormant Seeding":

- From October 1 through November 20, prepare the seedbed, add the required amounts of lime and fertilizer, then mulch and anchor. After November 20, and before March 15, broadcast the selected seed mixture. Increase the seeding rates by 50% for this type of seeding.
- From November 20 through March 15, when soil conditions permit, prepare the seedbed, lime and fertilizer, apply the selected seed mixture, mulch and anchor. Increase the seeding rates by 50% for this type of seeding.
- Apply seed uniformly with a cyclone seeder, drill, culti-packer seeder, or hydro-seeder (slurry may include seed and fertilizer) on a firm, moist seedbed.
- Where feasible, except when a culti-packer type seeder is used, the seedbed should be firmed following seeding operations with a culti-packer, roller, or light drag. On sloping land, seeding operations should be on the contour where feasible.

Mulching

- Mulch material shall be applied immediately after seeding. Dormant seeding shall be mulched. 100% of the ground surface shall be covered with an approved material.
- Materials
 - Straw—If straw is used it shall be unrotted small-grain straw applied at the rate of 2 tons per acre or 90 pounds (two to three bales) per 1,000-sq. ft. The mulch shall be spread uniformly by hand or mechanically applied so the soil surface is covered. For uniform distribution of hand-spread mulch, divide area into approximately 1,000-sq.-ft. sections and spread two 45-lb. bales of straw in each section.
 - Hydroseeders—If wood cellulose fiber is used, it shall be applied at 2,000 lb./ac. or 46 lb./1,000 sq. ft.
 - Other—Other acceptable mulches include rolled erosion control matings or blankets applied according to manufacturer's recommendations or wood chips applied at 6 tons per acre.

Specifications for Temporary Seeding

Table 7.8.1 Temporary Seeding Species Selection

Seeding Dates	Species	Lb./1000 R2	Lb./Acre
March 1 to August 15	Oats	3	128 (4 Bushel)
	Tall Fescue	1	40
	Annual Ryegrass	1	40
	Perennial Ryegrass	1	40
	Tall Fescue	1	40
	Annual Ryegrass	1	40
	Annual Ryegrass	1.25	55
	Perennial Ryegrass	3.25	142
	Creeping Red Fescue	0.4	17
	Kentucky Bluegrass	0.4	17
August 16th to November	Oats	3	128 (3 bushel)
	Tall Fescue	1	40
	Annual Ryegrass	1	40
	Rye	3	112 (2 bushel)
	Tall Fescue	1	40
	Annual Ryegrass	1	40
	Wheat	3	120 (2 bushel)
	Tall Fescue	1	40
	Annual Ryegrass	1	40
	Perennial Ryegrass	1	40
November 1 to Feb. 29	Annual Ryegrass	1.25	40
	Perennial Ryegrass	3.25	40
	Creeping Red Fescue	0.4	40
	Kentucky Bluegrass	0.4	40
	Use mulch only or dormant seeding		

Note: Other approved species may be substituted.

- Structural erosion and sediment control practices such as diversions and sediment traps shall be installed and stabilized with temporary seeding prior to grading the rest of the construction site.
- Temporary seed shall be applied between construction operations on soil that will not be graded or reworked for 21 days or greater. These idle areas shall be seeded within 7 days after grading.
- The seedbed should be pulverized and loose to ensure the success of establishing vegetation. Temporary seeding should not be postponed if ideal seedbed preparation is not possible.
- Soil Amendments—Temporary vegetation seeding rates shall establish adequate stands of vegetation, which may require the use of soil amendments. Base rates for lime and fertilizer shall be used.
- Seeding Method—Seed shall be applied uniformly with a cyclone spreader, drill, culti-packer seeder, or hydroseeder. When feasible, seed that has been broadcast shall be covered by raking or dragging and then lightly tamped into place using a roller or culti-packer. If hydroseeding is used, the seed and fertilizer will be mixed on-site and the seeding shall be done immediately and without interruption.

Specifications for Temporary Seeding

Mulching Temporary Seeding

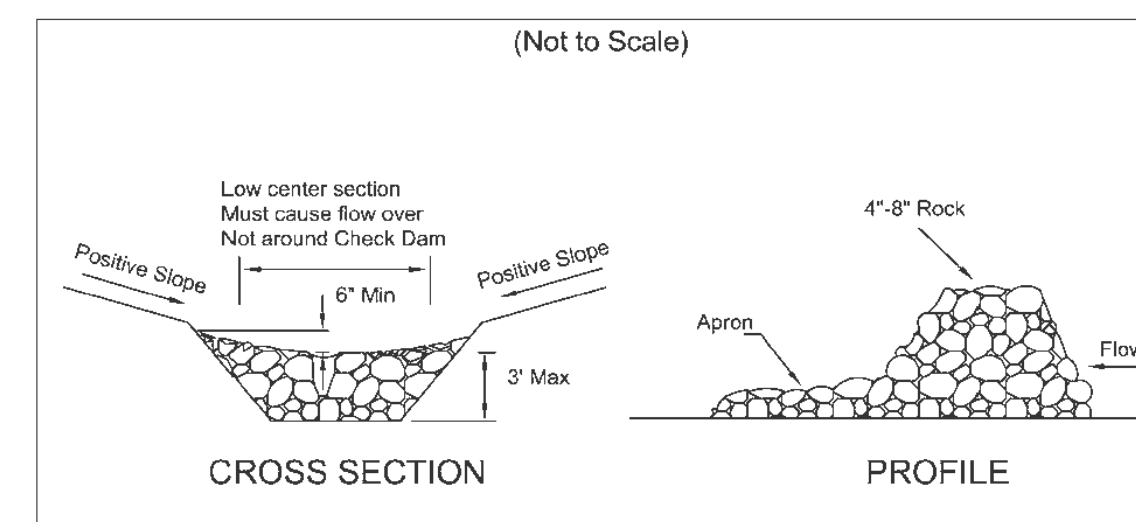
- Applications of temporary seeding shall include mulch, which shall be applied during or immediately after seeding. Seedings made during optimum seeding dates on favorable, very flat soil conditions may not need mulch to achieve adequate stabilization.
- Materials:
 - Straw—If straw is used, it shall be unrotted small-grain straw applied at a rate of 2 tons per acre or 90 lbs./1,000 sq. ft. (2-3 bales)
 - Hydroseeders—If wood cellulose fiber is used, it shall be used at 2000 lbs./ac. or 46 lb./1,000-sq.-ft.
 - Other—Other acceptable mulches include mulch matings applied according to manufacturer's recommendations or wood chips applied at 6 ton/ ac.
- Straw Mulch shall be anchored immediately to minimize loss by wind or water. Anchoring methods:
 - Mechanical—A disk, crimper, or similar type tool shall be set straight to punch or anchor the mulch material into the soil. Straw mechanically anchored shall not be finely chopped but left to a length of approximately 6 inches.
 - Mulch Netting—Netting shall be used according to the manufacturer's recommendations. Netting may be necessary to hold mulch in place in areas of concentrated runoff and on critical slopes.
 - Synthetic Binders—Synthetic binders such as Acrylic DLR (Agri-Tac), DCA-70, Petrosel, Terra Track or equivalent may be used at rates recommended by the manufacturer.
 - Wood-Cellulose Fiber—Wood-cellulose fiber binder shall be applied at a net dry wt. of 750 lb./ac. The wood-cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 lb./100 gal.

AREA REQUIRING PERMANENT STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS
ANY AREA THAT WILL LIE DORMANT FOR ONE YEAR OR MORE	WITHIN 7 DAYS OF THE MOST RECENT DISTURBANCE
ANY AREA WITHIN 50 FEET OF A WATERCOURSE AND AT FINAL GRADE	WITHIN 2 DAYS OF REACHING FINAL GRADE
ANY AREA AT FINAL GRADE	WITHIN 7 DAYS OF REACHING FINAL GRADE WITHIN THAT AREA

AREA REQUIRING TEMPORARY STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS
ANY DISTURBED AREA WITHIN 50 FEET OF A WATERCOURSE AND NOT AT FINAL GRADE	WITHIN 2 DAYS OF MOST RECENT DISTURBANCE, IF THAT AREA WILL REMAIN IDLE FOR MORE THAN 14 DAYS
FOR ALL CONSTRUCTION ACTIVITIES, ANY DISTURBED AREA, INCLUDING SOIL STOCKPILES, THAT WILL BE DORMANT FOR MORE THAN 14 DAYS BUT LESS THAN ONE YEAR, AND NOT WITHIN 50 FEET OF A WATERCOURSE.	WITHIN 7 DAYS OF THE MOST RECENT DISTURBANCE WITHIN THE AREA.
DISTURBED AREA THAT WILL BE IDLE OVER THE WINTER.	PRIOR TO NOVEMBER 1

NOTE: WHERE VEGETATIVE STABILIZATION TECHNIQUES MAY CAUSE STRUCTURAL INSTABILITY OR ARE OTHERWISE UNOBTAINABLE, ALTERNATIVE STABILIZATION TECHNIQUES MUST BE EMPLOYED. THESE TECHNIQUES MAY INCLUDE MULCHING, EROSION MATTING, OR PLACEMENT ON STONE.

Specifications for Rock Check Dam



- The check dam shall be constructed of 4.8 inch diameter stone, placed so that it completely covers the width of the channel. ODOT Type D stone is acceptable, but should be underlain with a gravel filter consisting of ODOT No. 3 or 4 or suitable filter fabric.
- Maximum height of check dam shall not exceed 3.0 feet.
- The midpoint of the rock check dam shall be a minimum of 6 inches lower than the sides in order to direct across the center and away from the channel sides.
- The base of the check dam shall be entrenched approximately 6 inches.
- Spacing of check dams shall be in a manner such that the toe of the upstream dam is at the same elevation as the top of the downstream dam.
- A Splash Apron shall be constructed where check dams are expected to be in use for an extended period of time. A stone apron shall be constructed immediately downstream of the check dam to prevent flows from undercutting the structure. The apron should be 6 in. thick and its length two times the height of the dam.
- Stone placement shall be performed either by hand or mechanically as long as the center of check dam is lower than the sides and extends across entire channel.
- Side slopes shall be a minimum of 2:1.

CHAPTER 5 Temporary Runoff Control 4

Table 7.10.2 Permanent Seeding

Seed Mix	Seeding Rate		Notes:
	Lbs./acre	Lbs./1,000 Sq. Feet	
General Use			
Creeping Red Fescue	20-40	1/2-1	For close mowing & for waterways with <2.0 ft/sec velocity
Domestic Ryegrass	10-20	1/4-1/2	
Kentucky Bluegrass	20-40	1/2-1	
Tall Fescue	40-50	1-1.14	2:1
Turf-type (dwarf) Fescue	90	2:14	
Steep Banks or Cut Slopes			
Tall Fescue	40-50	1-1.14	Do not seed later than August
Crown Vetch	10-20	1/4-1/2	
Tall Fescue	20-30	1/2-3/4	
Flat Pea	20-25	1/2-3/4	Do not seed later than August
Tall Fescue	20-30	1/2-3/4	
Road Ditches and Swales			
Tall Fescue	40-50	1-1.14	2:1
Turf-type (Dwarf) Fescue	90	2:14	
Kentucky Bluegrass	5	0.1	
Lawns			
Kentucky Bluegrass	100-120	2	For shaded areas
Perennial Ryegrass		2	
Kentucky Bluegrass	100-120	2	
Creeping Red Fescue		1-1/2	

Note: Other approved seed species may be substituted.

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STATE OF OHIO REGISTERED ARCHITECT
Berj A. Shakarian
5301

STATE OF OHIO PROFESSIONAL ENGINEER
THOMAS CAPPELLO
NO. 55466

ROCKEFELLER PARK
1916 - CENTENNIAL PLAZA - 2016
The Cleveland Cultural Gardens Federation

SWP3 NOTES & DETAILS

REVISIONS

DRAWN	SCALE
TC/AJS	NONE
DATE	PROJECT NO.
12/15/2018	

SHEET NO.
C-3.1

GERMAN CULTURAL GARDENS
142,522 S.F. - 3.2719 ACRES
Add.# 1036 East Blvd.

ABBREVIATIONS

- AFN..... AUTOMATED FILING NO.
- ASP..... ASPHALT
- C. or CALC.... CALCULATED
- CL..... CENTER LINE
- CONC..... CONCRETE
- C.D.R..... COUNTY DEED RECORD
- C.M.R..... COUNTY MAP RECORD
- D..... DEED
- EX..... EXISTING
- FD..... FOUND
- MON..... MONUMENT
- O. or OBS..... OBSERVED
- PG..... PAGE
- P. or P/L..... PROPERTY LINE
- PVMT..... PAVEMENT
- R. or REC..... RECORD
- R/W..... RIGHT OF WAY
- U..... USED
- VOL..... VOLUME
- SAN..... SANITARY
- STM..... STORM
- WAT..... WATER
- INV..... INVERT
- PVC..... POLYVINYL CHLORIDE
- VCP..... VITRIFIED CLAY PIPE
- RCP..... REINFORCED CONCRETE
- PIPE..... PIPE
- CMP..... CORRUGATED METAL PIPE
- GUT..... GUTTER
- TC..... TOP OF CURB

SYMBOL LEGEND (EXISTING)

	CENTER LINE
	PROPERTY LINE
	CONSOLIDATED LOTS
	IRON PIN/PIPE FOUND
	IRON PIN SET
	MONUMENT BOX FOUND
	DRILL HOLE FOUND
	DRILL HOLE SET
	EXISTING FIRE HYDRANT
	EXISTING WATER VALVE
	EXISTING WATER CORP STOP
	EXISTING WATER METER
	EXISTING SQUARE INLET BASIN
	EXISTING ELECTRIC MANHOLE
	EXISTING FLAG POLE
	EXISTING SIGNAL POLE
	EXISTING LIGHT POLE
	LIGHT POLE BASE
	EXISTING TRAFFIC SIGN
	EXISTING TREE

	EX. STORM SEWER
	EX. WATER LINE
	EX. FENCE
	EX. OVERHEAD LINES
	EX. GAS LINE
	EX. UNDERGROUND ELECT.
	EX. UNDERGROUND TELE.
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Prior to excavation and/or demolition contact:
O.U.P.S. (Ohio Utilities Protection Service).

OHIO Utilities Protection SERVICE
Call Before You Dig
1-800-362-2764
A705803000-00A, A705803009-00A
Also call: OGPUPS @ 1-800-925-0988
(Ohio Oil & Gas Underground Protection Service)
-- or dial 8-1-1 --

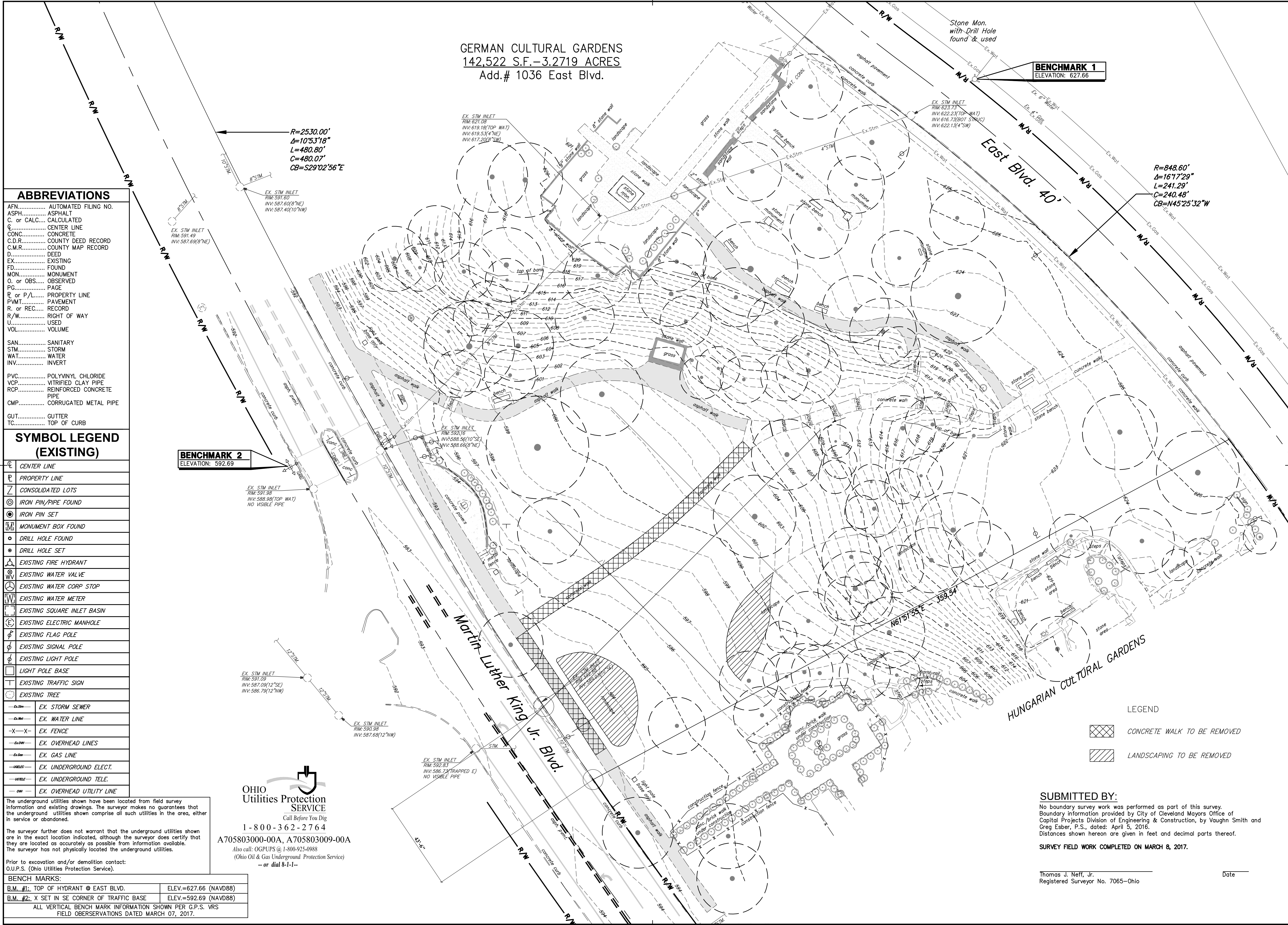
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B.M. #2: X SET IN SE CORNER OF TRAFFIC BASE	ELEV.=592.69 (NAVD88)

ALL VERTICAL BENCH MARK INFORMATION SHOWN PER G.P.S. VRS FIELD OBSERVATIONS DATED MARCH 07, 2017.

BENCHMARK 2
ELEVATION: 592.69

BENCHMARK 1
ELEVATION: 627.66



LEGEND

	CONCRETE WALK TO BE REMOVED
	LANDSCAPING TO BE REMOVED

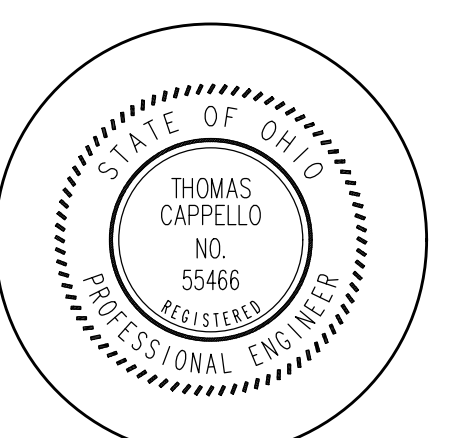
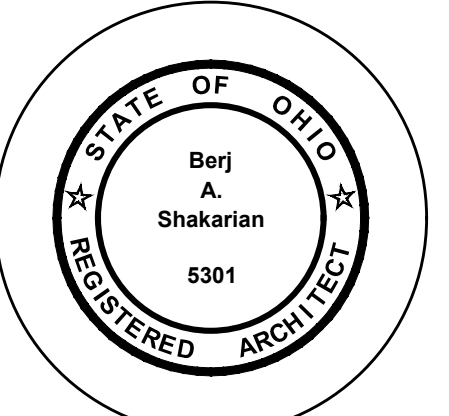
SUBMITTED BY:
No boundary survey work was performed as part of this survey. Boundary information provided by City of Cleveland Mayors Office of Capital Projects Division of Engineering & Construction, by Vaughn Smith and Greg Esber, P.S., dated: April 5, 2016.
Distances shown hereon are given in feet and decimal parts thereof.

SURVEY FIELD WORK COMPLETED ON MARCH 8, 2017.

Thomas J. Neff, Jr.
Registered Surveyor No. 7065-Ohio
Date _____

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ROCKEFELLER PARK
1916 - CENTENNIAL PLAZA - 2016
The Cleveland Cultural Gardens Federation
DEMOLITION PLAN

REVISIONS

DRAWN	SCALE
TC/AJS	1" = 20.0'
DATE	PROJECT NO.
12/15/2018	

SHEET NO.
C-4.0

GERMAN CULTURAL GARDENS
142,522 S.F. - 3.2719 ACRES
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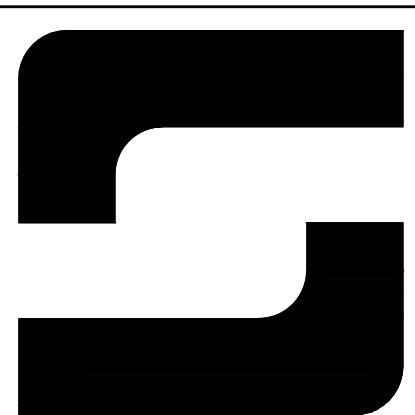
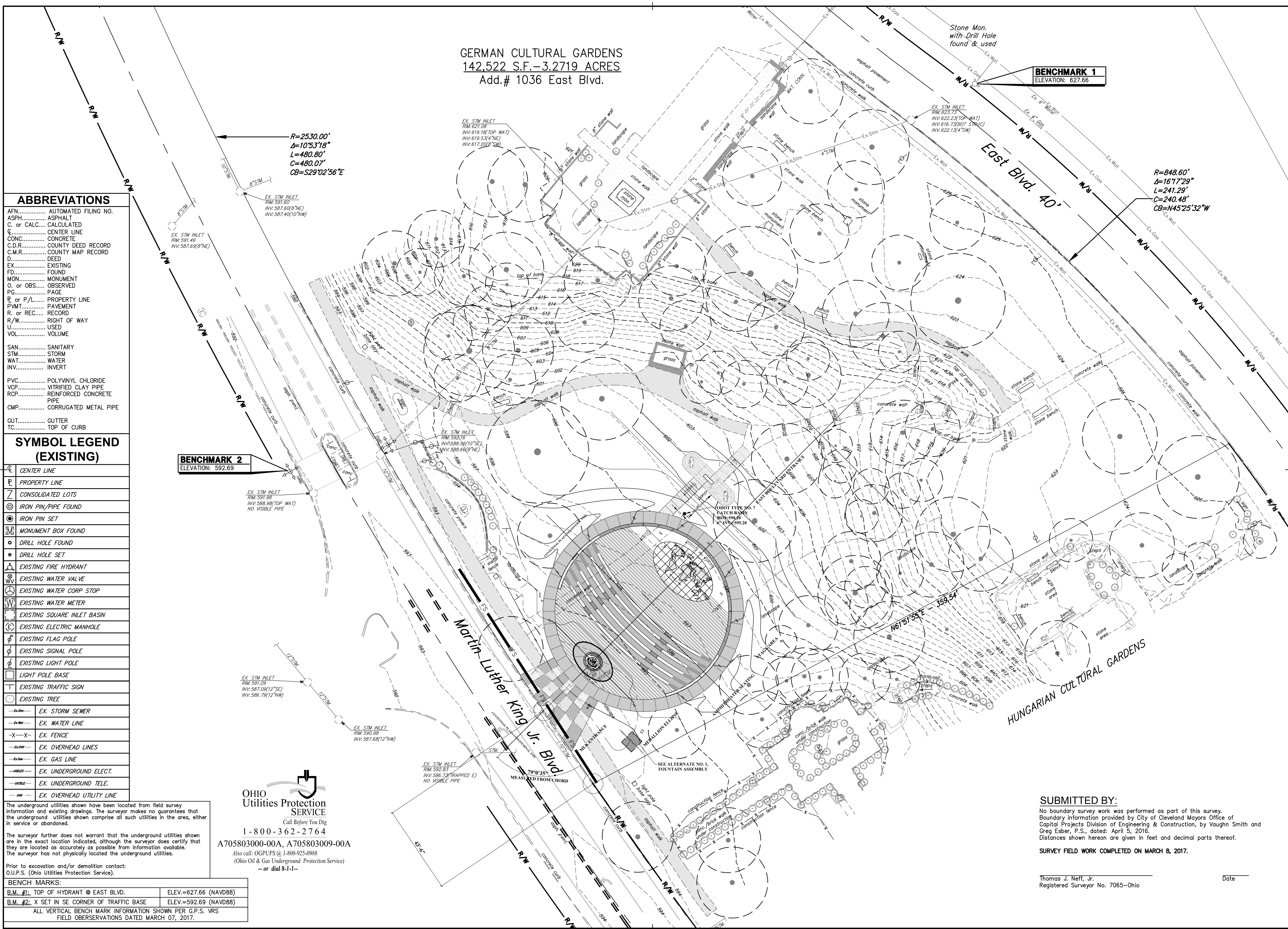
BENCH MARKS:

B.M. #1: TOP OF HYDRANT @ EAST BLVD.	ELEV.=627.66 (NAVD88)
B.M. #2: X SET IN SE CORNER OF TRAFFIC BASE	ELEV.=592.69 (NAVD88)

ALL VERTICAL BENCH MARK INFORMATION SHOWN PER G.P.S. VRS
FIELD OBSERVATIONS DATED MARCH 07, 2017.

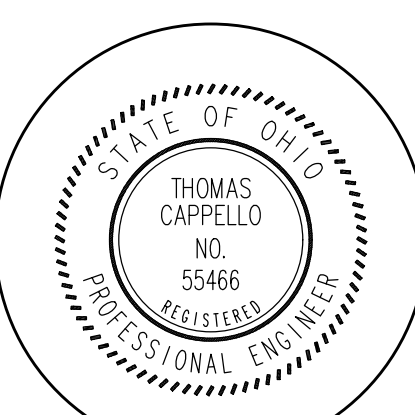
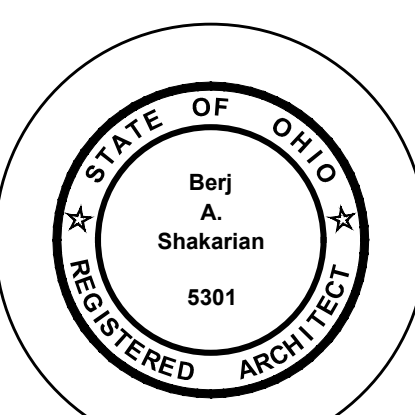
BENCHMARK 2
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ROCKEFELLER PARK
1916 - CENTENNIAL PLAZA - 2016
The Cleveland Cultural Gardens Federation
SITE PLAN NEW CONDITIONS

REVISIONS

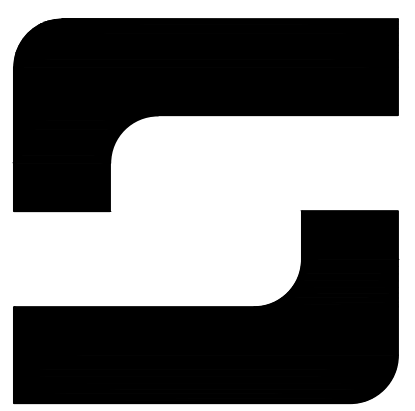
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DATE	12/15/2018	PROJECT NO.	

SHEET NO.
C-5.0

SUBMITTED BY:
No boundary survey work was performed as part of this survey. Boundary information provided by City of Cleveland Mayors Office of Capital Projects Division of Engineering & Construction, by Vaughn Smith and Greg Esber, P.S., dated: April 5, 2016. Distances shown hereon are given in feet and decimal parts thereof.

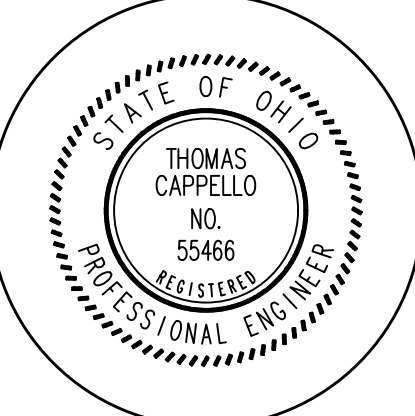
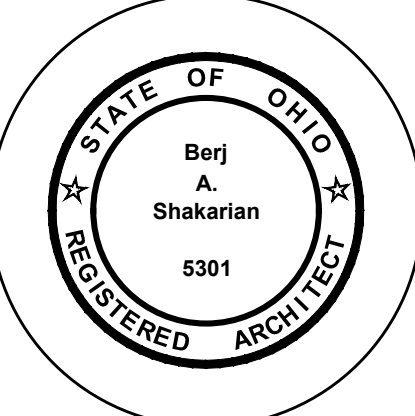
SURVEY FIELD WORK COMPLETED ON MARCH 8, 2017.

Thomas J. Neff, Jr.
Registered Surveyor No. 7065-Ohio
Date



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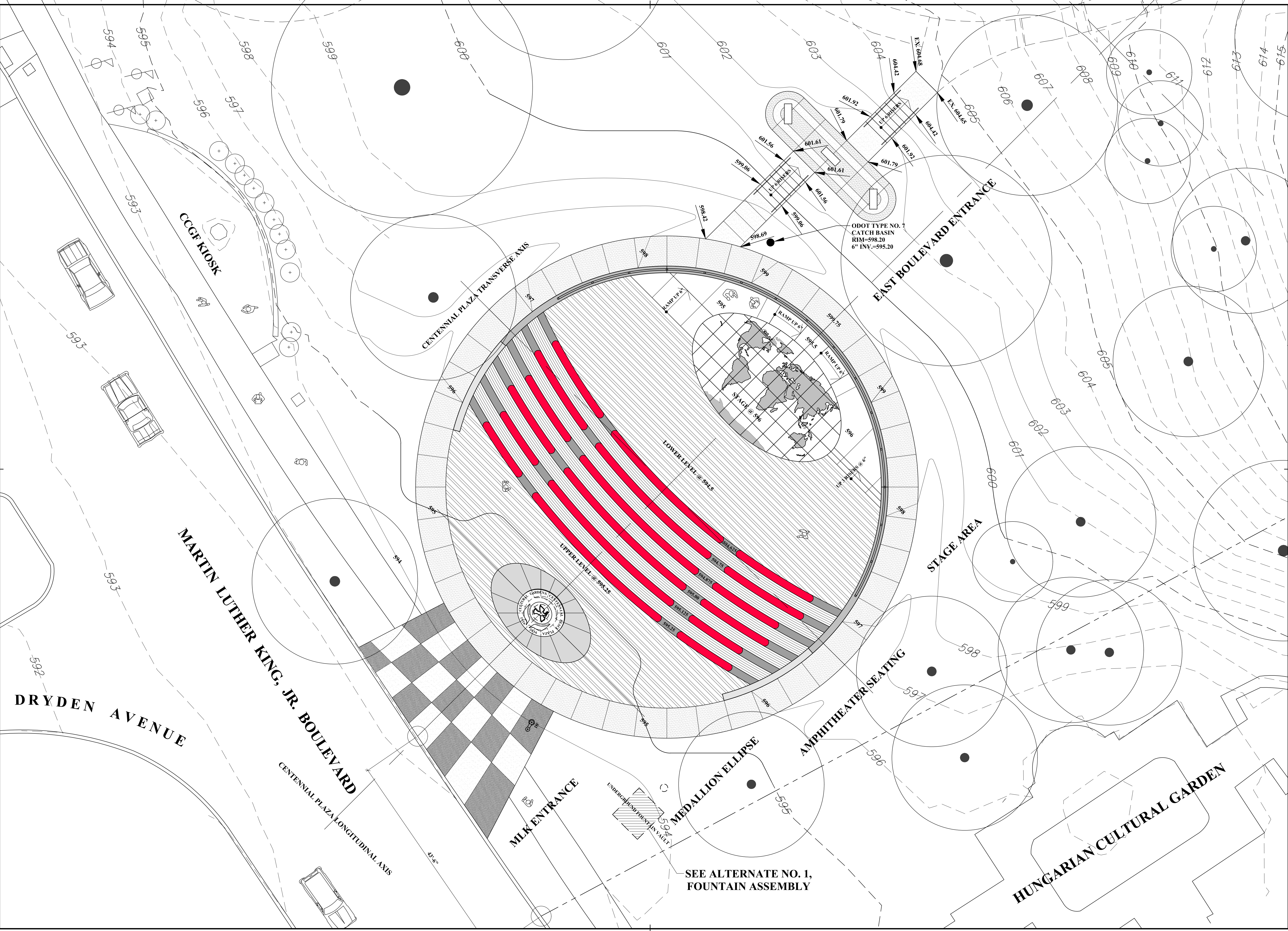


ROCKEFELLER PARK
1916 - CENTENNIAL PLAZA - 2016
 The Cleveland Cultural Gardens Federation
**PARTIAL SITE PLAN GRADING
 NEW CONDITIONS**

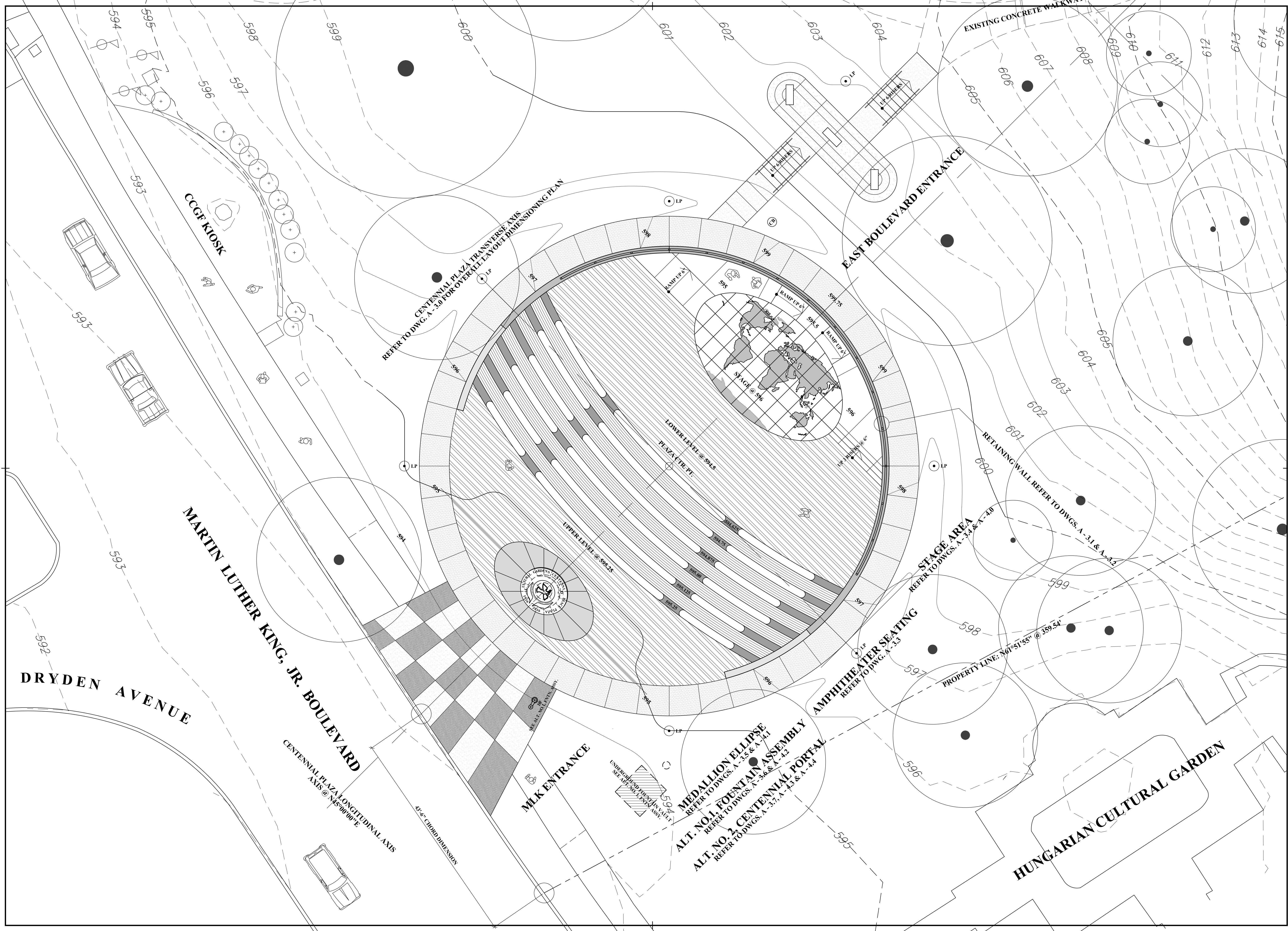
REVISIONS	

DRAWN TC/AJS	SCALE 1/8" = 1'-0"
DATE 12/15/2018	PROJECT NO.

SHEET NO.
C-6.0



SEE ALTERNATE NO. 1,
FOUNTAIN ASSEMBLY



BERJ A. SHAKARIAN, ARCHITECT
AIA, NCARB, LEED AP BD+C

STATE OF OHIO
Berj A. Shakarian
5301
REGISTERED ARCHITECT

ROCKEFELLER PARK
1916 - CENTENNIAL PLAZA - 2016
The Cleveland Cultural Gardens Federation
PARTIAL SITE PLAN NEW CONDITIONS

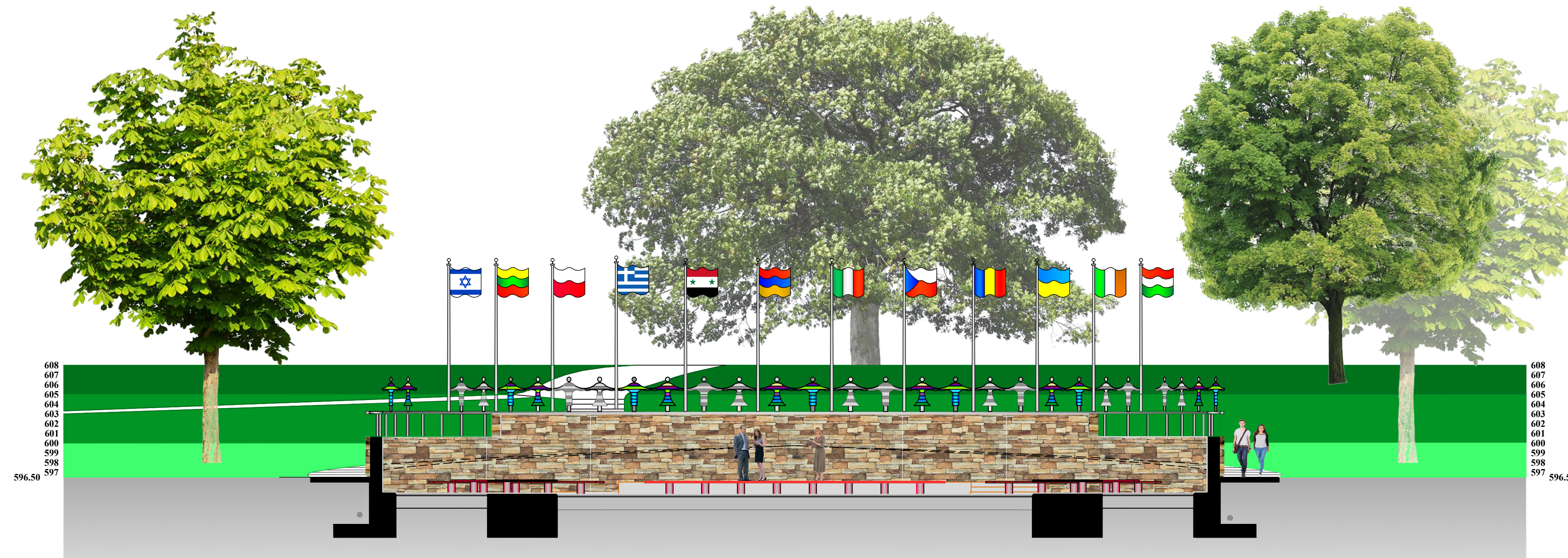
REVISIONS

NO.	DATE	DESCRIPTION

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SCALE: 1/8" = 1'-0"
DATE: 12/15/2018
PROJECT NO.:

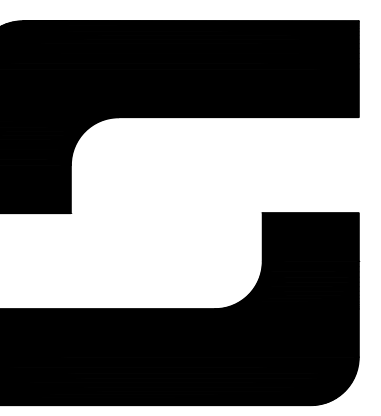


**LONGITUDINAL SECTION
SOUTH-EAST VIEW**

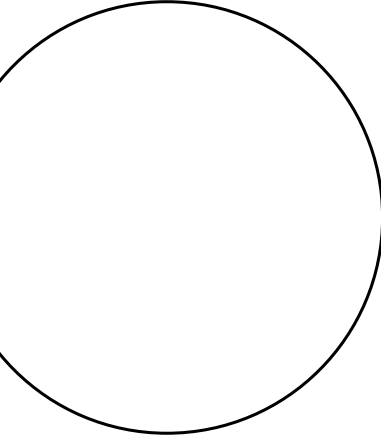
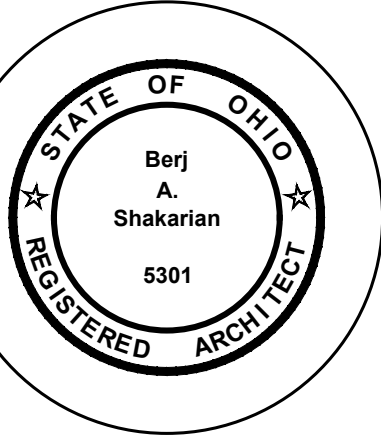


**TRANSVERSE SECTION
NORTH-EAST VIEW**

NOTES: 1. FOUNTAIN ASSEMBLY NOT PART OF BASE BID, REFER TO ALTERNATE NO. 1 (ADD)
2. ORNAMENTAL FIGURES & FLAGPOLES NOT-IN-CONTRACT (NIC)



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SITE SECTIONS NEW CONDITIONS

REVISIONS

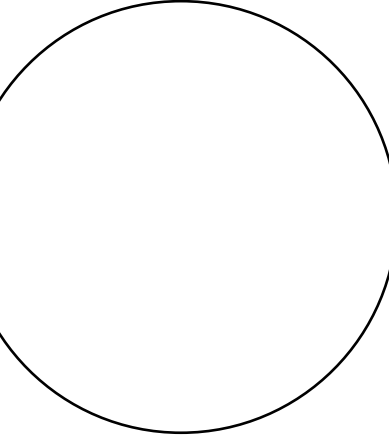
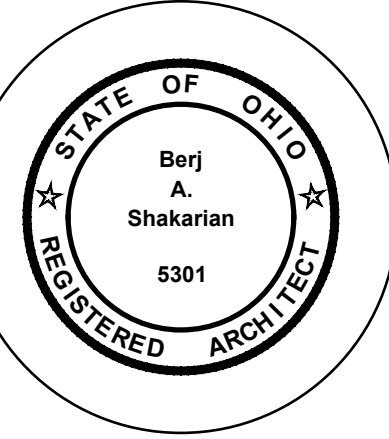
NO.	DATE	DESCRIPTION

DRAWN berj	SCALE 1/8" = 1'-0"
DATE 12/15/2018	PROJECT NO.

SHEET NO.
A-2.0



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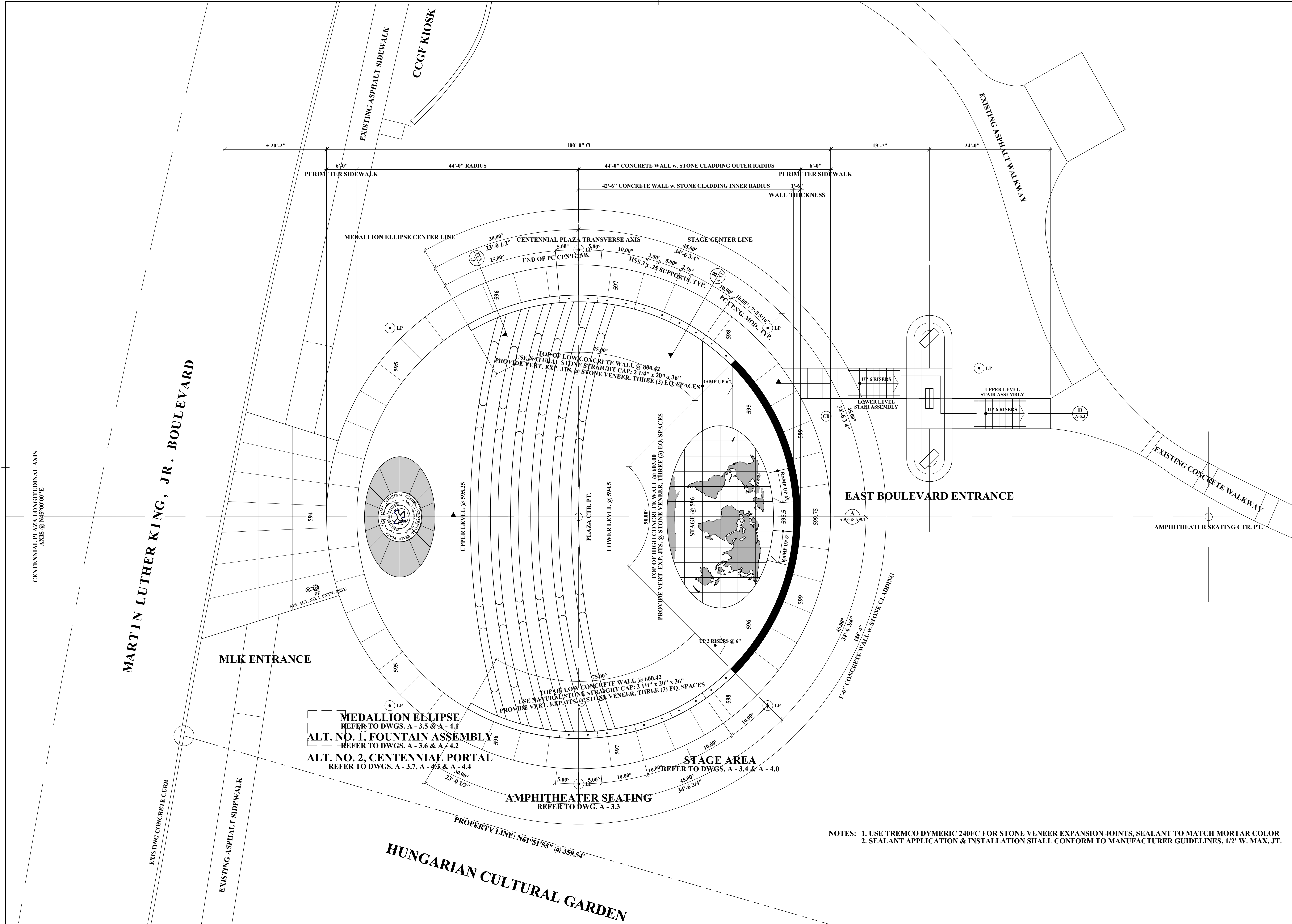


ROCKEFELLER PARK
1916 - CENTENNIAL PLAZA - 2016
The Cleveland Cultural Gardens Federation
RETAINING WALL LAYOUT PLAN

REVISIONS	

DRAWN berj	SCALE 1/8" = 1'-0"
DATE 12/15/2018	PROJECT NO.

	SHEET NO. A-3.1
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NOTES: 1. USE TREMCO DYMERIC 240FC FOR STONE VENEER EXPANSION JOINTS, SEALANT TO MATCH MORTAR COLOR
2. SEALANT APPLICATION & INSTALLATION SHALL CONFORM TO MANUFACTURER GUIDELINES, 1/2" W. MAX. JT.

MARTIN LUTHER KING, JR. BOULEVARD

HUNGARIAN CULTURAL GARDEN

CENTENNIAL PLAZA LONGITUDINAL AXIS
AXIS @ N45°00'00"E

MLK ENTRANCE

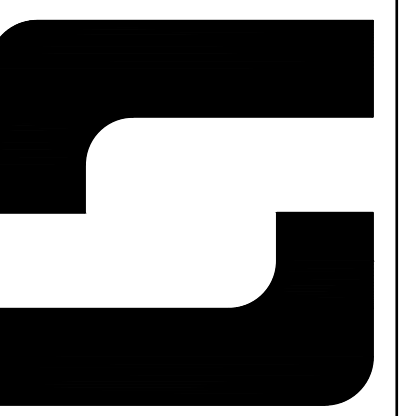
EAST BOULEVARD ENTRANCE

MEDALLION ELLIPSE
REFER TO DWGS. A - 3.5 & A - 4.1
ALT. NO. 1, FOUNTAIN ASSEMBLY
REFER TO DWGS. A - 3.6 & A - 4.2
ALT. NO. 2, CENTENNIAL PORTAL
REFER TO DWGS. A - 3.7, A - 4.3 & A - 4.4

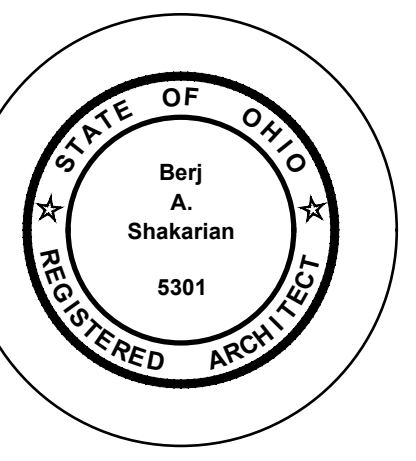
STAGE AREA
REFER TO DWGS. A - 3.4 & A - 4.0

AMPHITHEATER SEATING
REFER TO DWG. A - 3.3

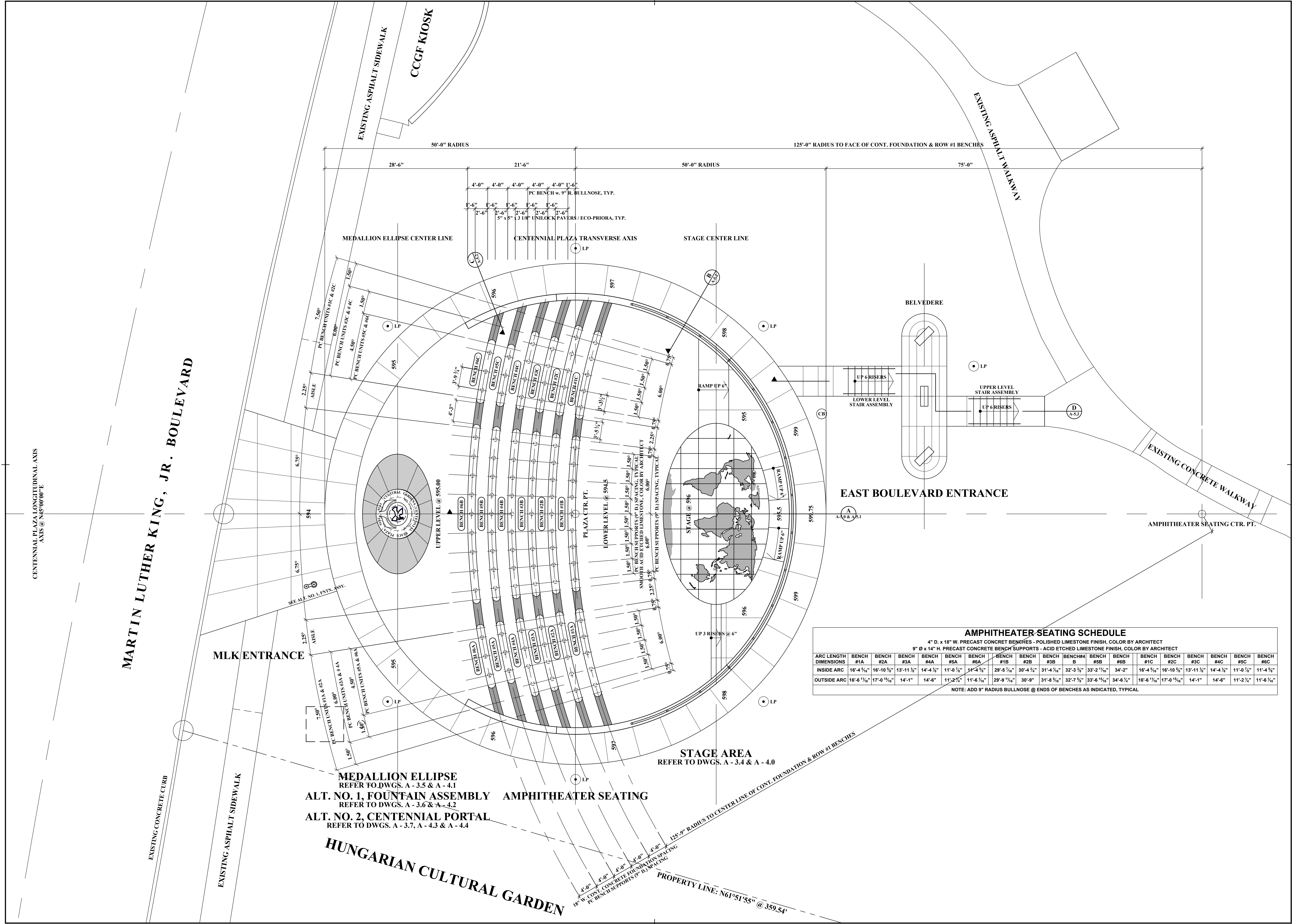
PROPERTY LINE: N61°51'55" @ 359.54'



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ROCKEFELLER PARK
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AMPHITHEATER SEATING AREA PLAN



AMPHITHEATER SEATING SCHEDULE

4" D. x 18" W. PRECAST CONCRETE BENCHES - POLISHED LIMESTONE FINISH, COLOR BY ARCHITECT
9" Ø x 14" H. PRECAST CONCRETE BENCH SUPPORTS - ACID ETCHED LIMESTONE FINISH, COLOR BY ARCHITECT

ARC LENGTH DIMENSIONS	BENCH #1A	BENCH #2A	BENCH #3A	BENCH #4A	BENCH #5A	BENCH #6A	BENCH #1B	BENCH #2B	BENCH #3B	BENCH #4B	BENCH #5B	BENCH #6B	BENCH #1C	BENCH #2C	BENCH #3C	BENCH #4C	BENCH #5C	BENCH #6C
INSIDE ARC	16'-4 3/8"	16'-10 1/8"	13'-11 1/8"	14'-4 1/8"	11'-0 1/8"	11'-4 1/8"	29'-5 1/8"	30'-4 3/8"	31'-4 3/8"	32'-3 3/8"	33'-2 1/8"	34'-2"	16'-4 3/8"	16'-10 1/8"	13'-11 1/8"	14'-4 1/8"	11'-0 1/8"	11'-4 1/8"
OUTSIDE ARC	16'-6 1/8"	17'-0 1/8"	14'-1"	14'-6"	11'-2 1/8"	11'-6 1/8"	29'-9 1/8"	30'-9"	31'-8 3/8"	32'-7 3/8"	33'-6 1/8"	34'-6 1/8"	16'-6 1/8"	17'-0 1/8"	14'-1"	14'-6"	11'-2 1/8"	11'-6 1/8"

NOTE: ADD 9" RADIUS BULLNOSE @ ENDS OF BENCHES AS INDICATED, TYPICAL

REVISIONS

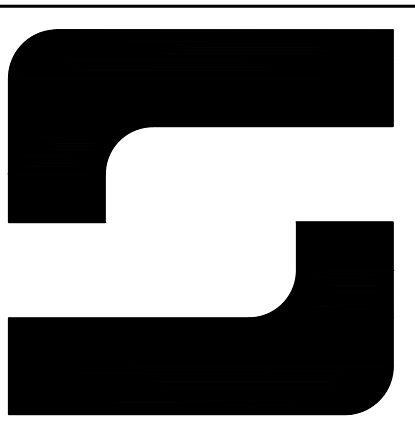
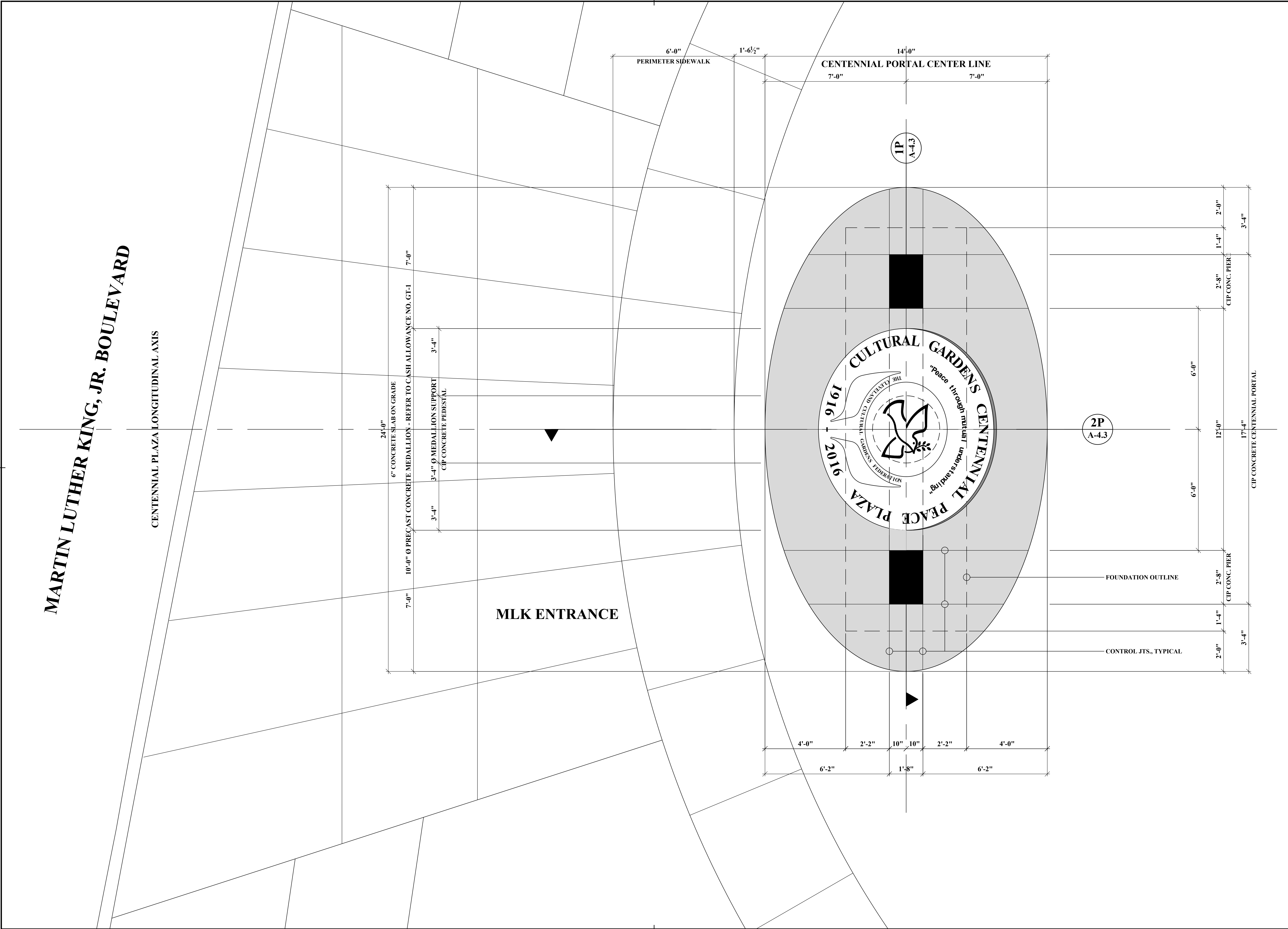
NO.	DESCRIPTION

DRAWN: berj
SCALE: 1/8" = 1'-0"
DATE: 12/15/2018
PROJECT NO.:

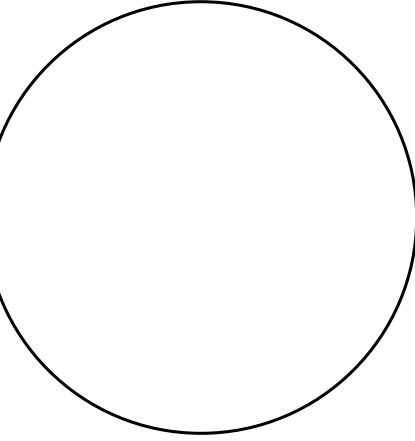
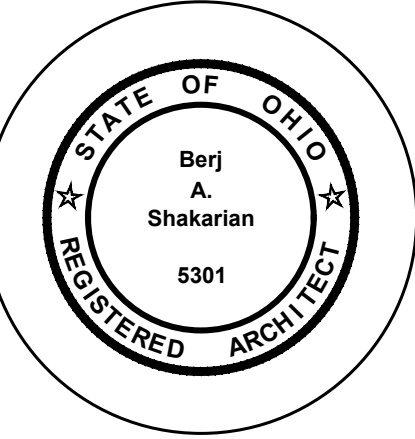
SHEET NO.
A-3.3

MARTIN LUTHER KING, JR. BOULEVARD

CENTENNIAL PLAZA LONGITUDINAL AXIS



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AIA, NCARB, LEED AP BD+C

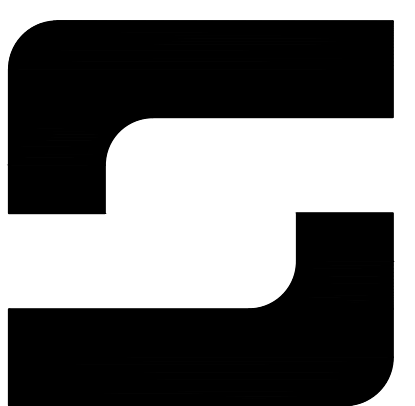


ROCKEFELLER PARK
1916 - CENTENNIAL PLAZA - 2016
The Cleveland Cultural Gardens Federation
CENTENNIAL PORTAL PLAN
ALTERNATE NO. 2 (ADD TO BASE BID)

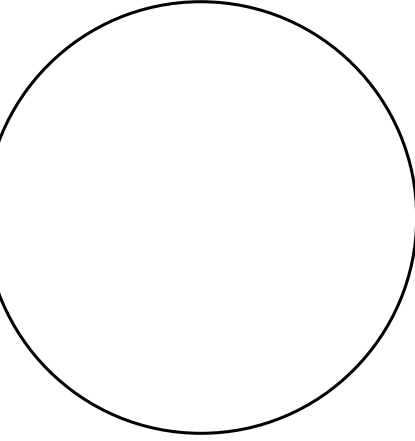
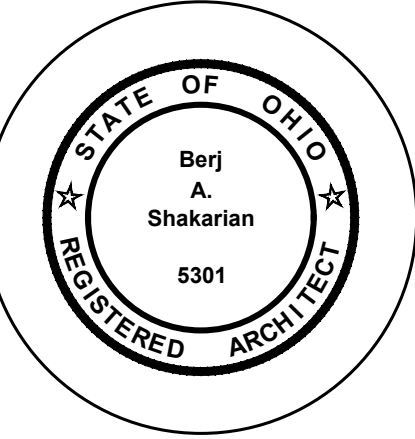
NO.	DESCRIPTION	DATE

DRAWN berj	SCALE 1/2" = 1'-0"
DATE 12/15/2018	PROJECT NO.

SHEET NO.
A-3.7

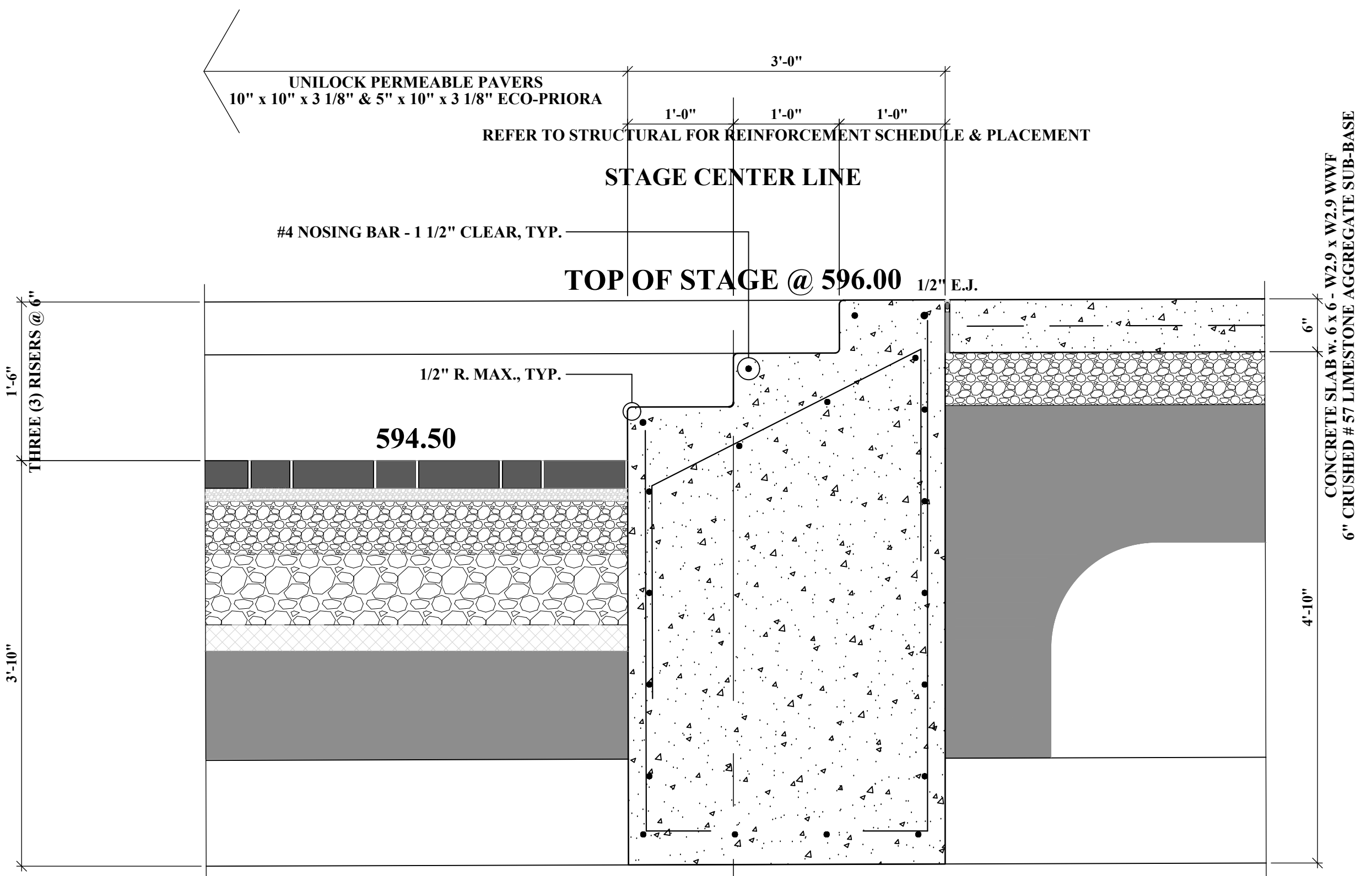


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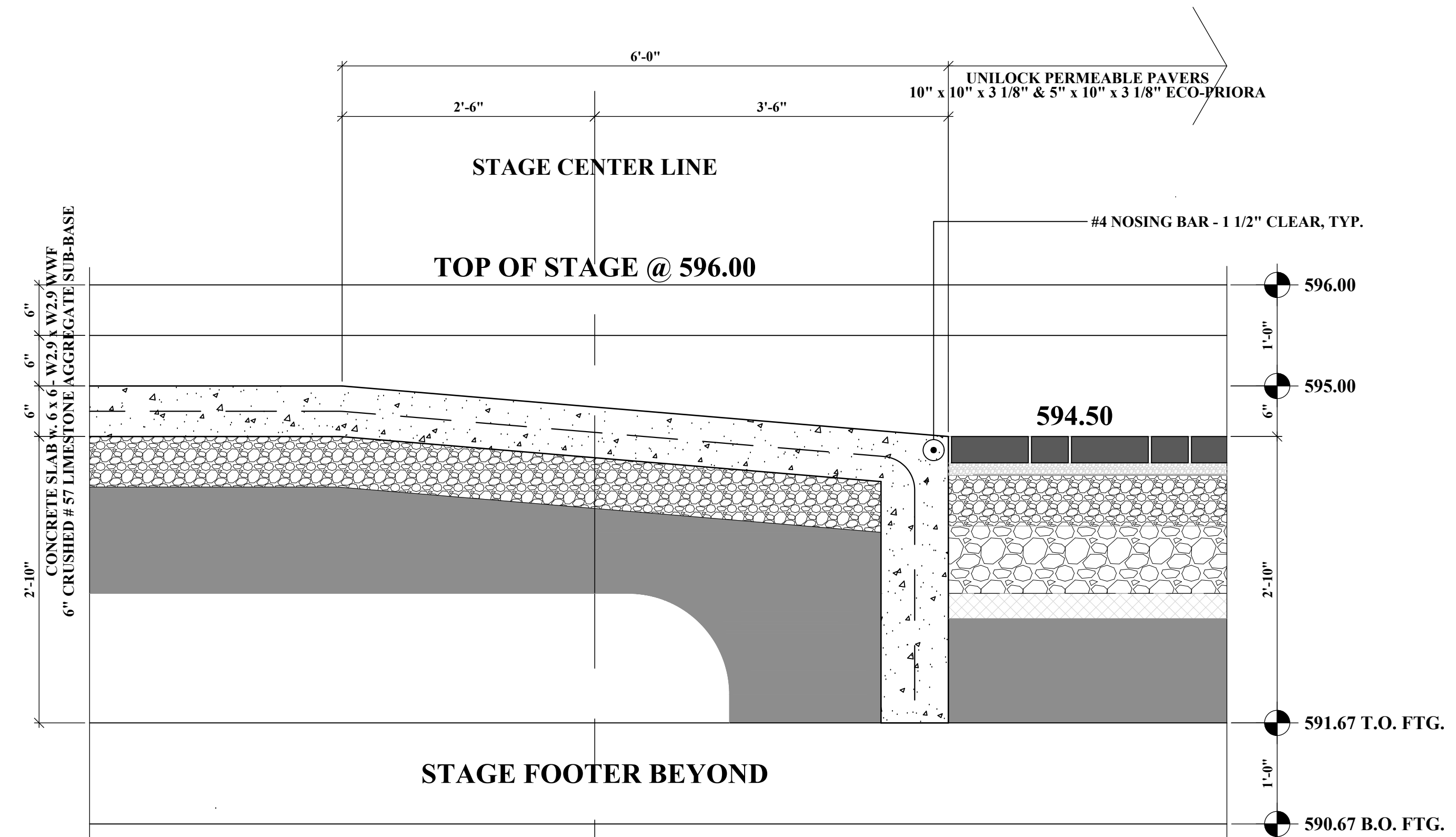


ROCKEFELLER PARK
1916 - CENTENNIAL PLAZA - 2016
The Cleveland Cultural Gardens Federation

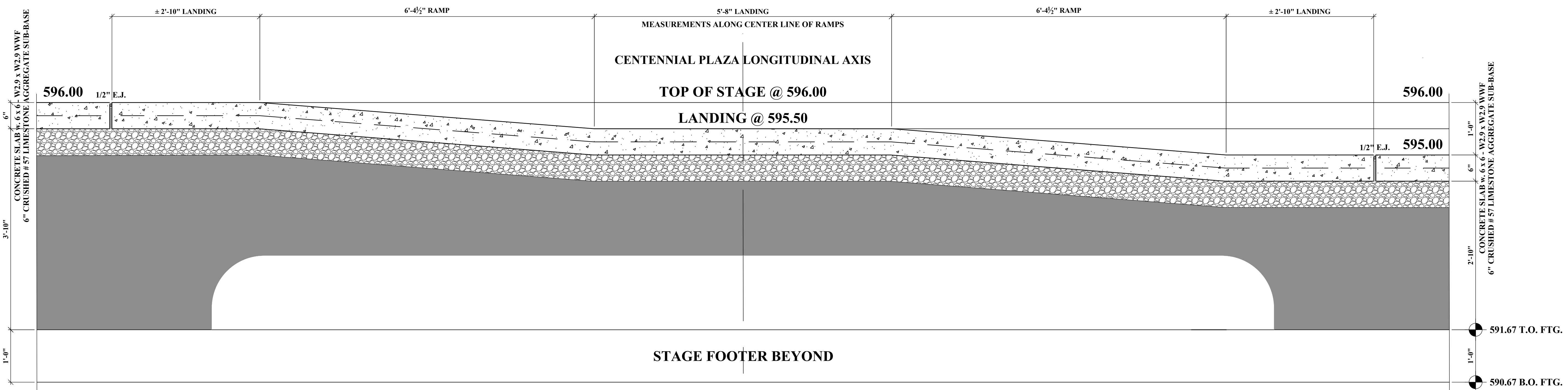
STAGE AREA DETAILS



DETAIL #3s



DETAIL #1s



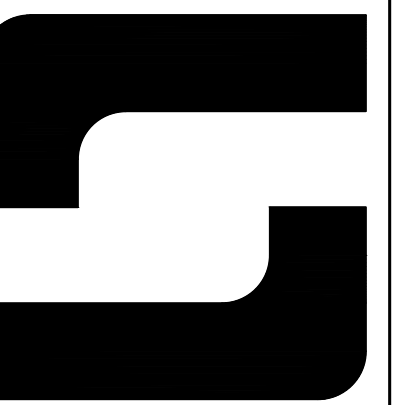
DETAIL #2s

- NOTES:
- 1. REFER TO DWG. A-3.4 STAGE AREA PLAN FOR CONTROL JOINTS (CJ) & EXPANSION JOINTS (EJ) LAYOUT
 - 2. PROVIDE 1/2" EXPANSION JOINT (EJ) @ WALL CONDITIONS, TYPICAL
 - 3. CONTROL JOINTS (CJ) TOOLED (1/4" x 1 1/2") w. NO TOOLED MARKINGS
 - 4. SWEAT FINISH FOR CONCRETE SURFACES UNLESS OTHERWISE NOTED

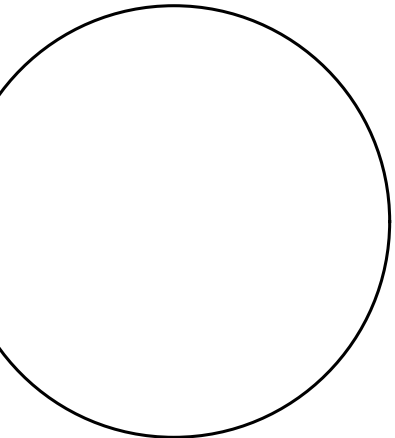
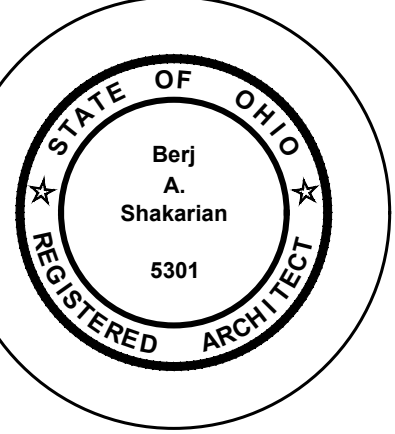
NO.	REVISIONS

DRAWN	SCALE
berj	1" = 1'-0"
DATE	PROJECT NO.
12/15/2018	

SHEET NO.
A-4.0



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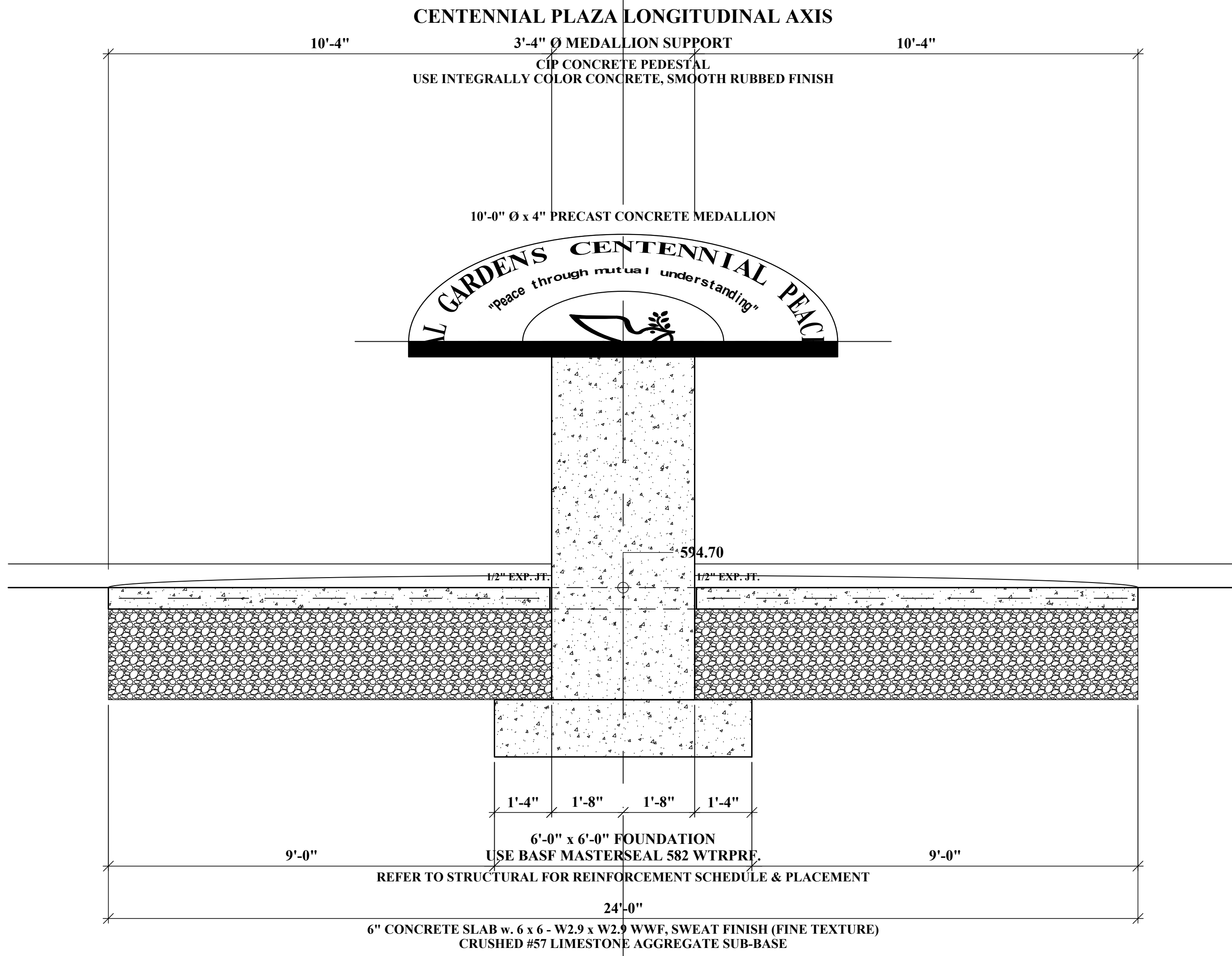


ROCKEFELLER PARK
1916 - CENTENNIAL PLAZA - 2016
The Cleveland Cultural Gardens Federation
**MEDALLION ELLIPSE
ELEVATIONS & SECTIONS**

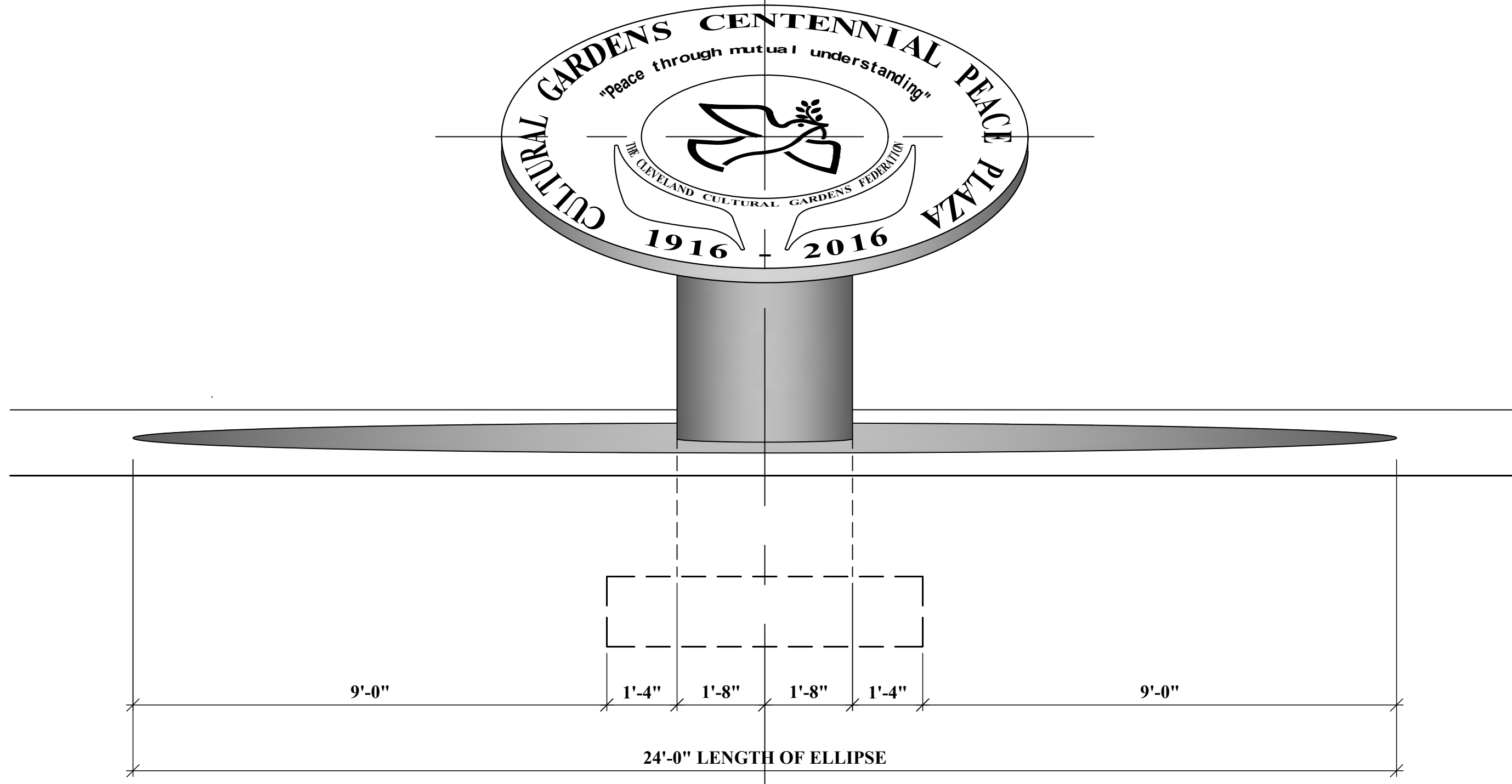
REVISIONS	

DRAWN berj	SCALE 1/2" = 1'-0"
DATE 12/15/2018	PROJECT NO.

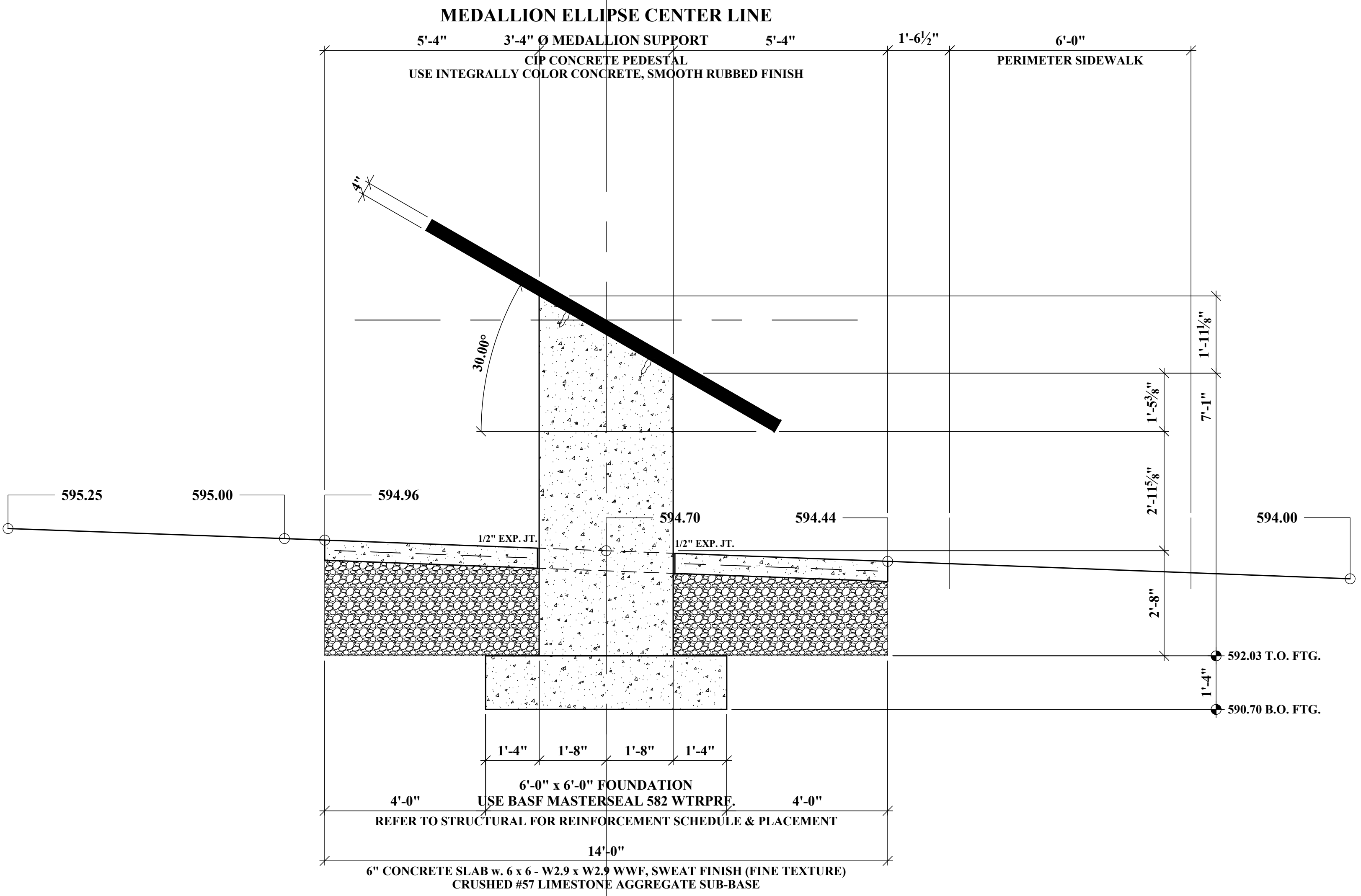
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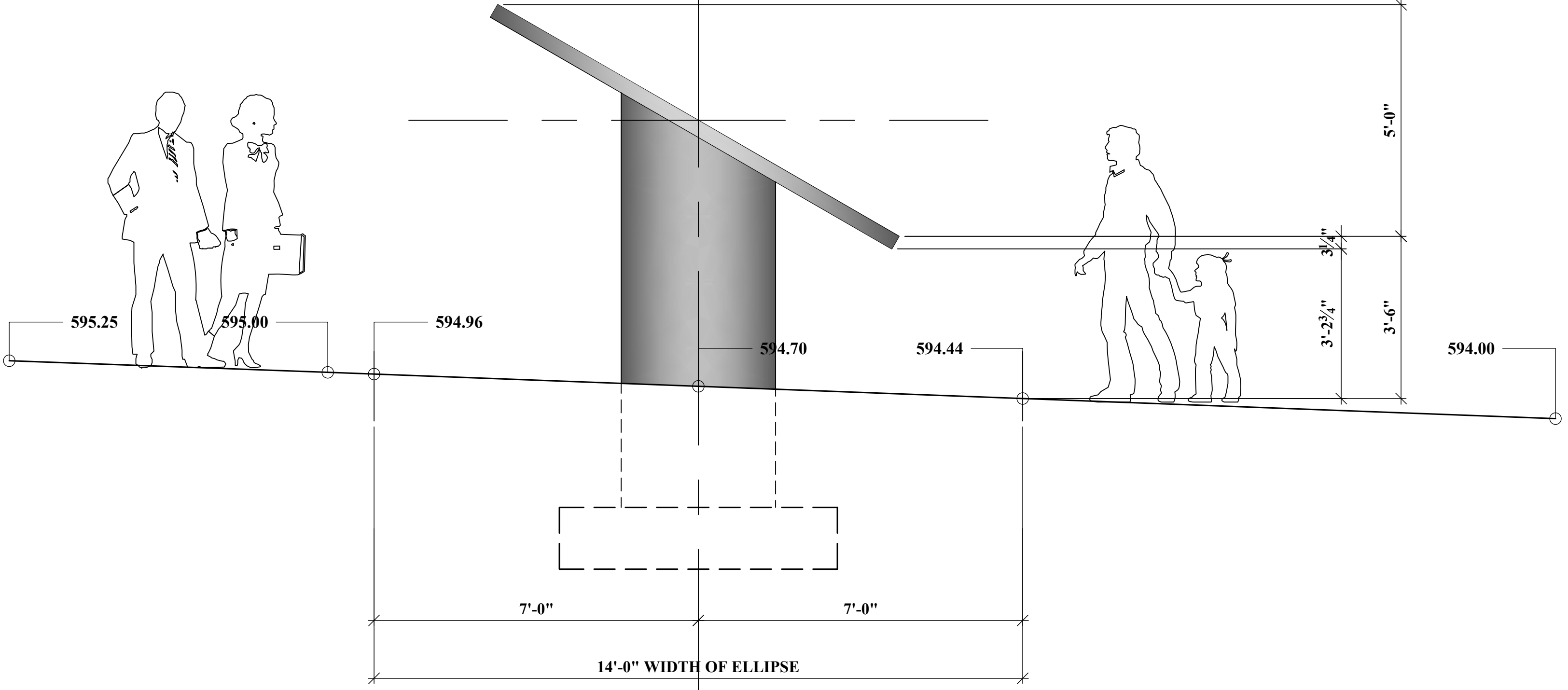
SECTION #1M



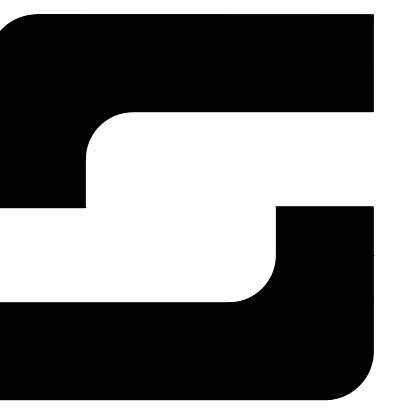
FRONT ELEVATION / MLK, JR. BLVD.



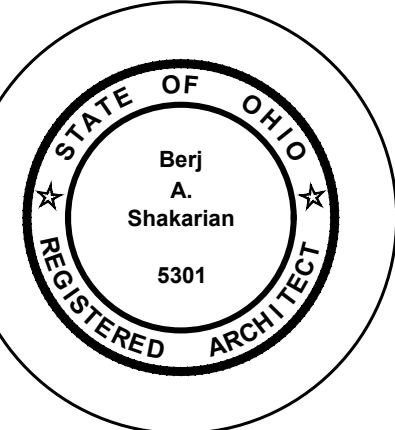
SECTION #2M



SIDE ELEVATION



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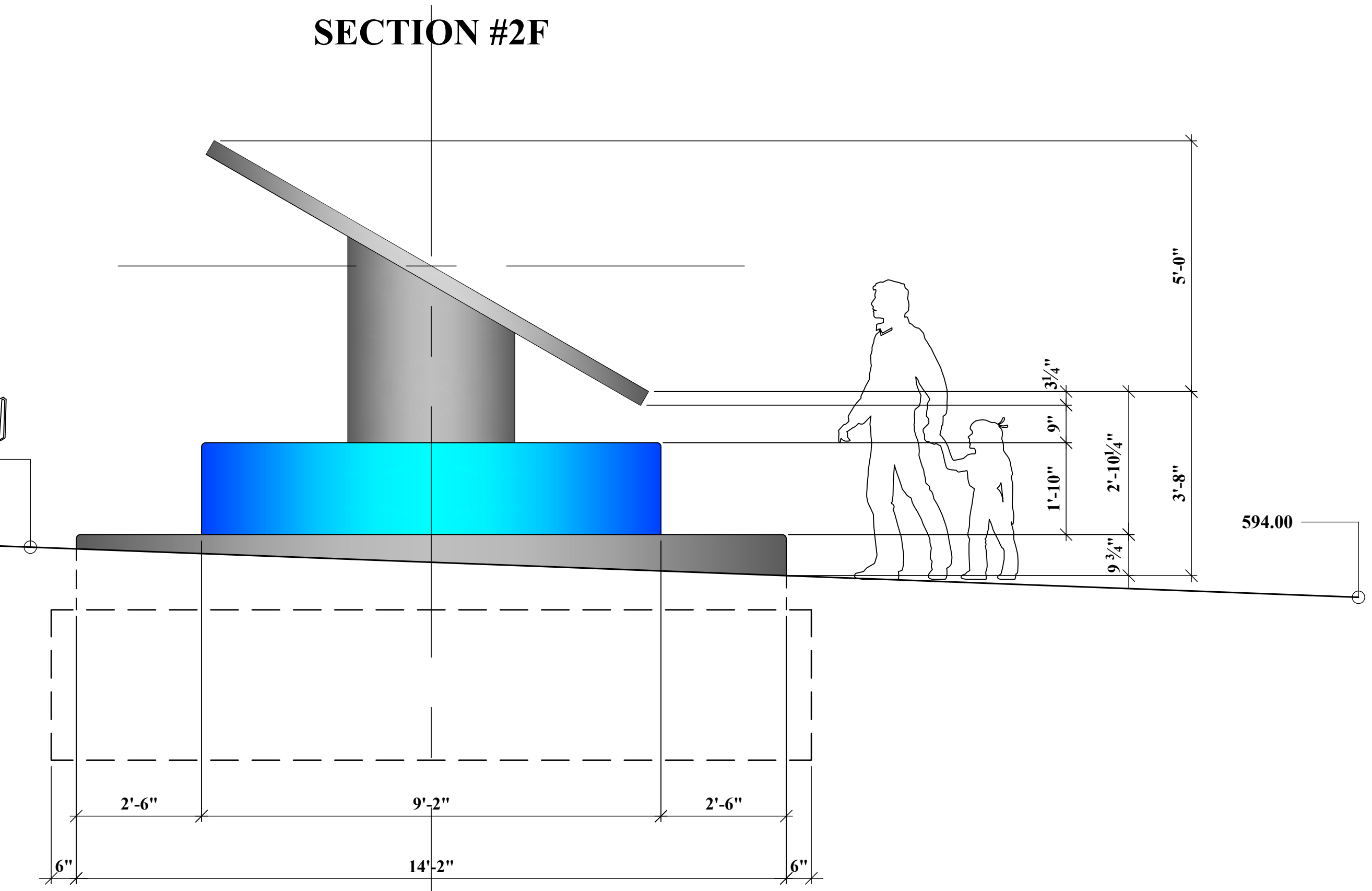
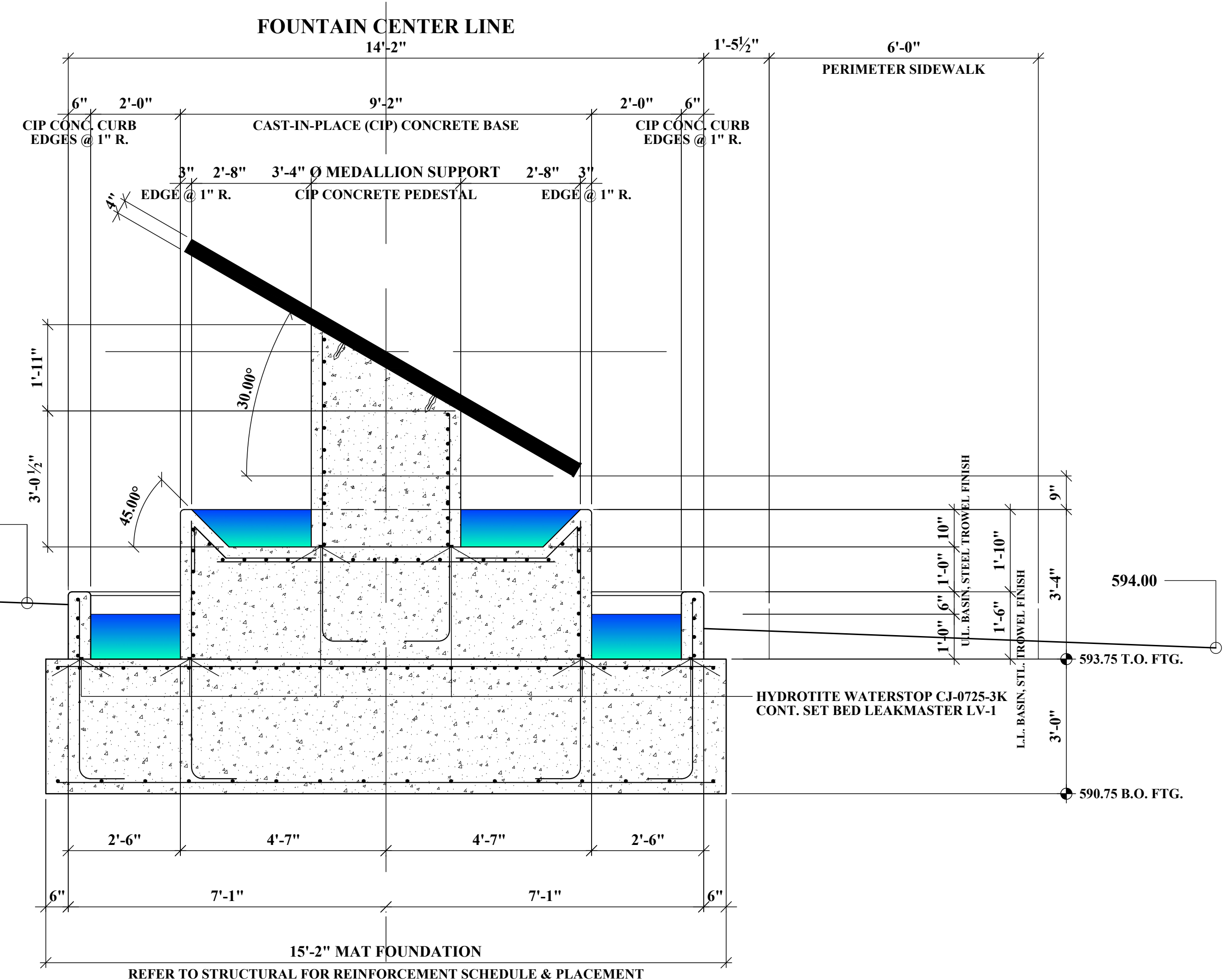
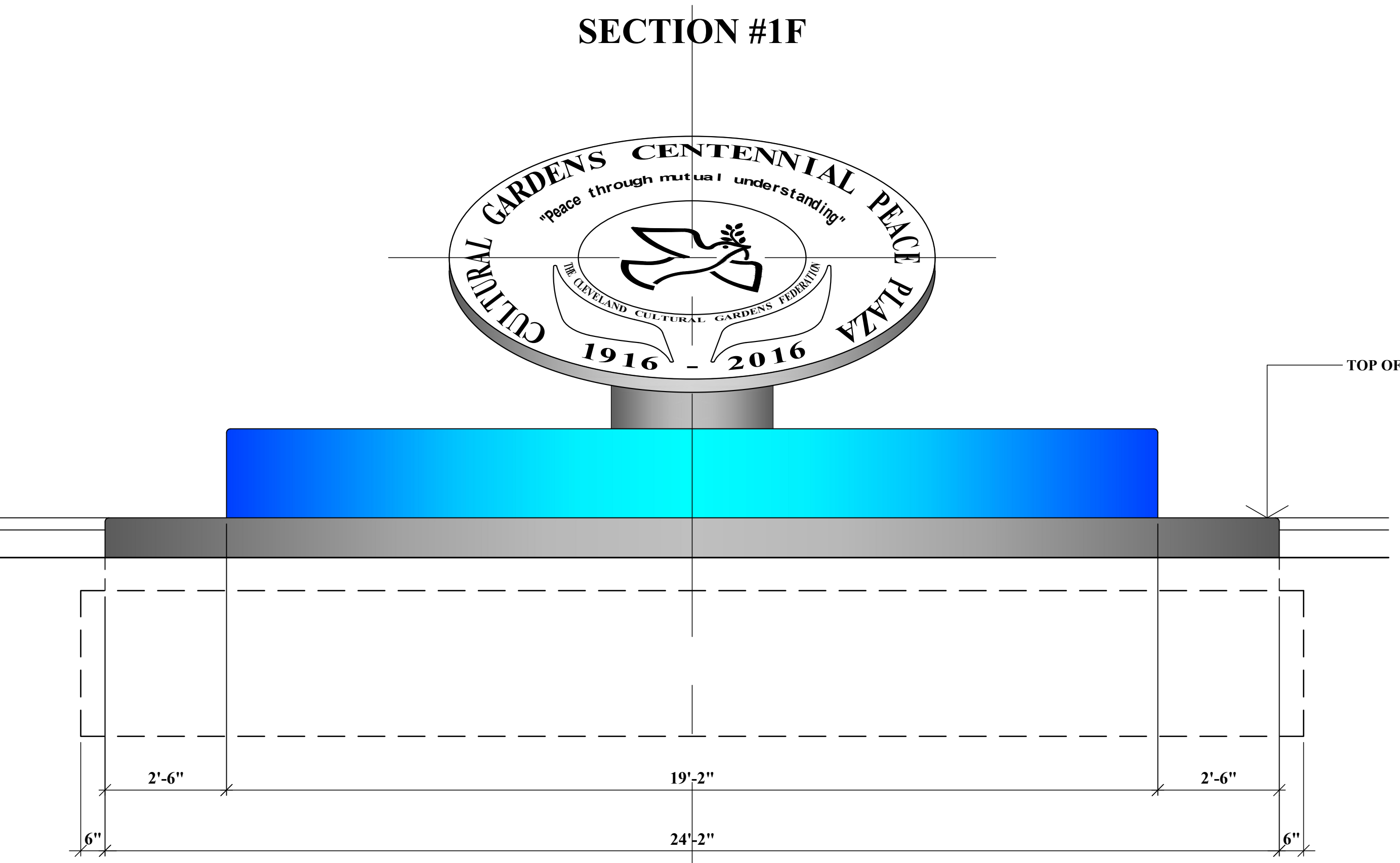
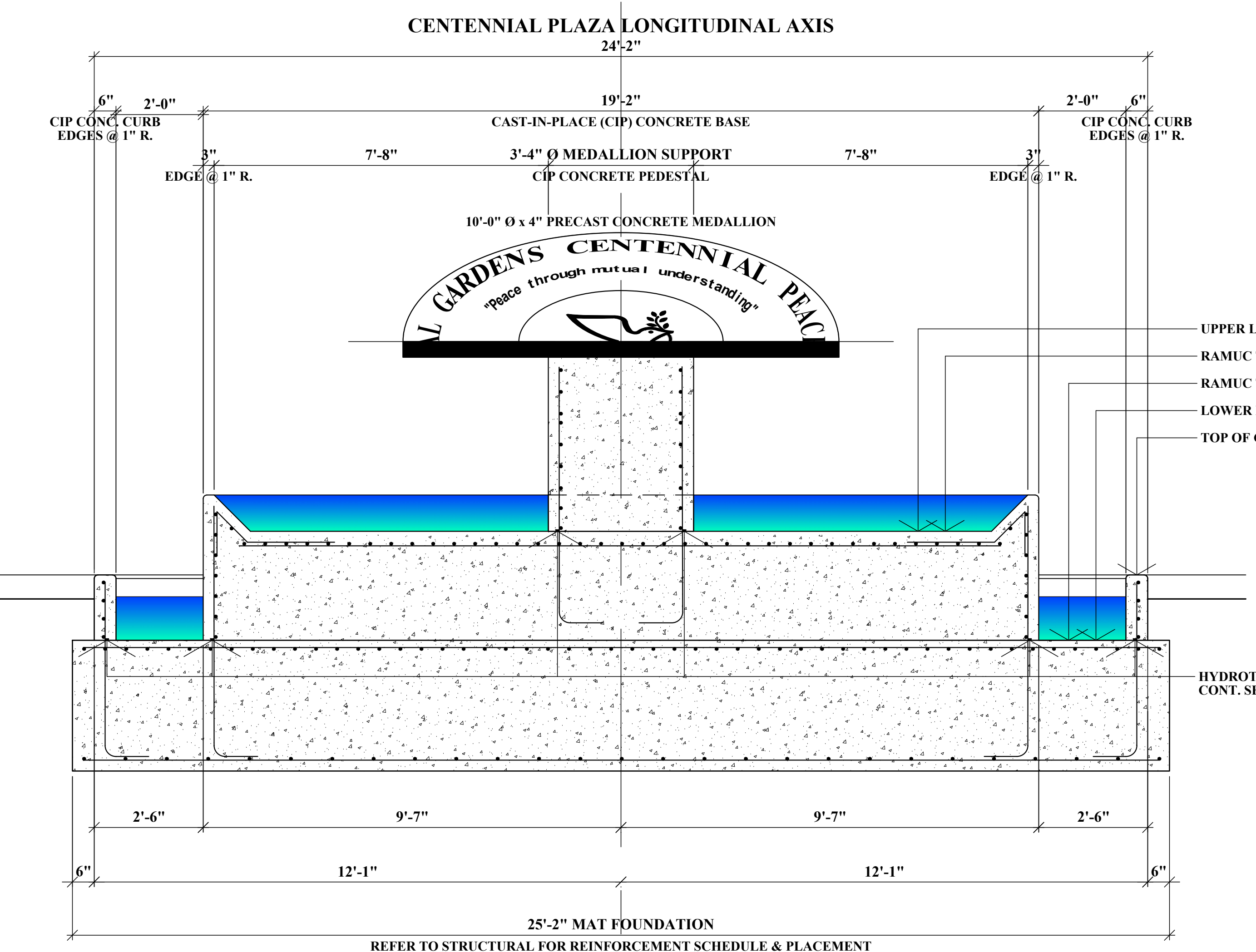


ROCKEFELLER PARK
1916 - CENTENNIAL PLAZA - 2016
The Cleveland Cultural Gardens Federation
**FOUNTAIN ASSEMBLY
ELEVATIONS & SECTIONS**

REVISIONS	

DRAWN berj	SCALE 1/2" = 1'-0"
DATE 12/15/2018	PROJECT NO.

SHEET NO.
A-4.2



FRONT ELEVATION / MLK, JR. BLVD.

SIDE ELEVATION

- UPPER LEVEL BASIN @ 596.25
- RAMUC TYPE EP EPOXY POOL PAINT, DARK BLUE
- RAMUC TYPE EP EPOXY POOL PAINT, DARK BLUE
- LOWER LEVEL BASIN @ 593.75
- TOP OF CIP CONC. CURB @ 595.25

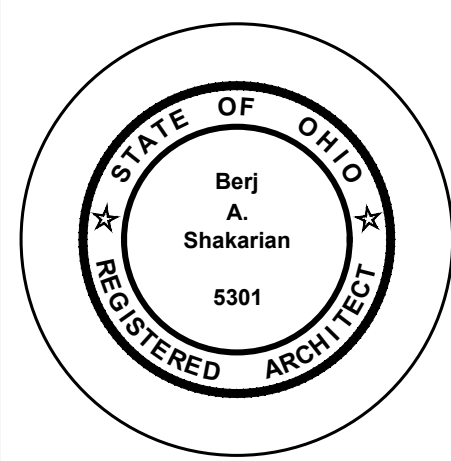
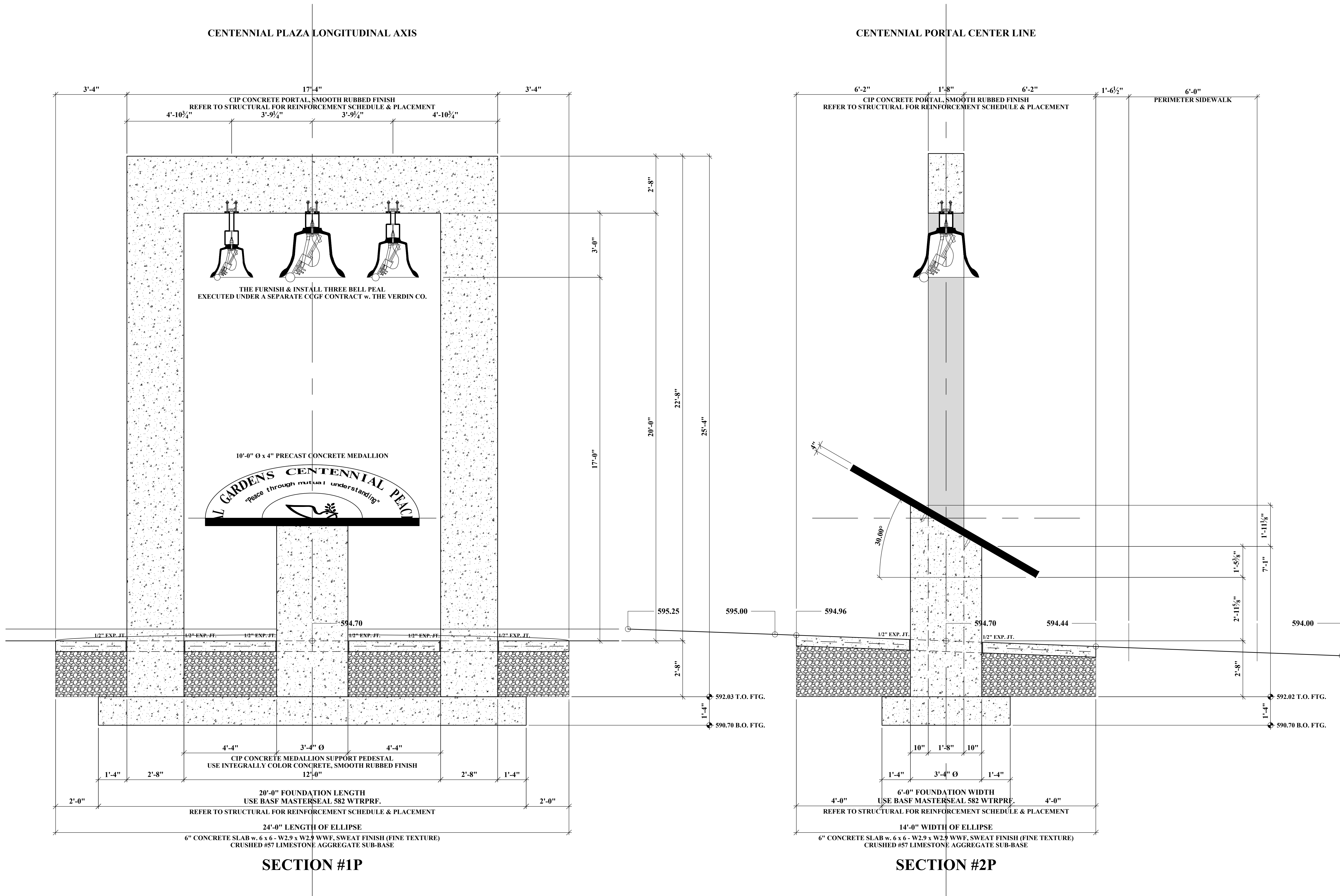
HYDROITTE WATERSTOP CJ-0725-3K
CONT. SET BED LEAKMASTER LV-1

HYDROITTE WATERSTOP CJ-0725-3K
CONT. SET BED LEAKMASTER LV-1

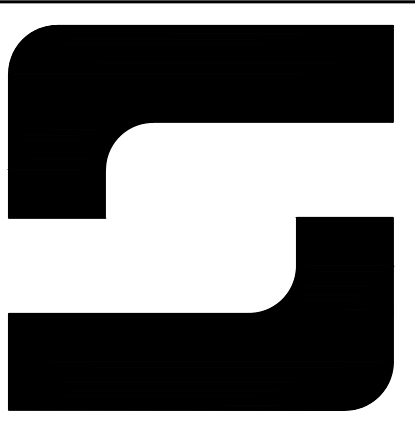
NOTES:
1. SMOOTH RUBBED FINISH FOR ALL EXPOSED CONCRETE SURFACES, UNLESS OTHERWISE NOTED
2. USE INTEGRALLY COLOR CONCRETE FOR CIP CONCRETE CURB & MEDALLION SUPPORT

CENTENNIAL PLAZA LONGITUDINAL AXIS

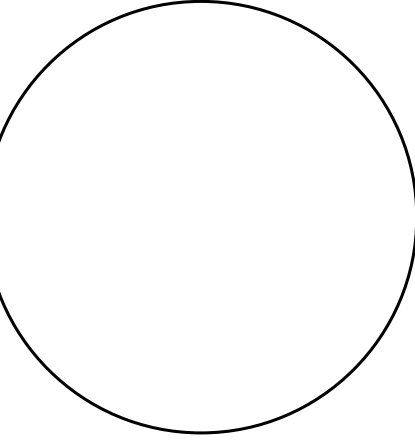
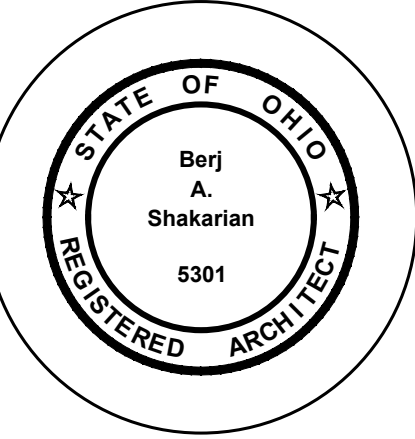
CENTENNIAL PORTAL CENTER LINE



REVISIONS	
DRAWN berj	SCALE 1/2" = 1'-0"
DATE 12/15/2018	PROJECT NO.

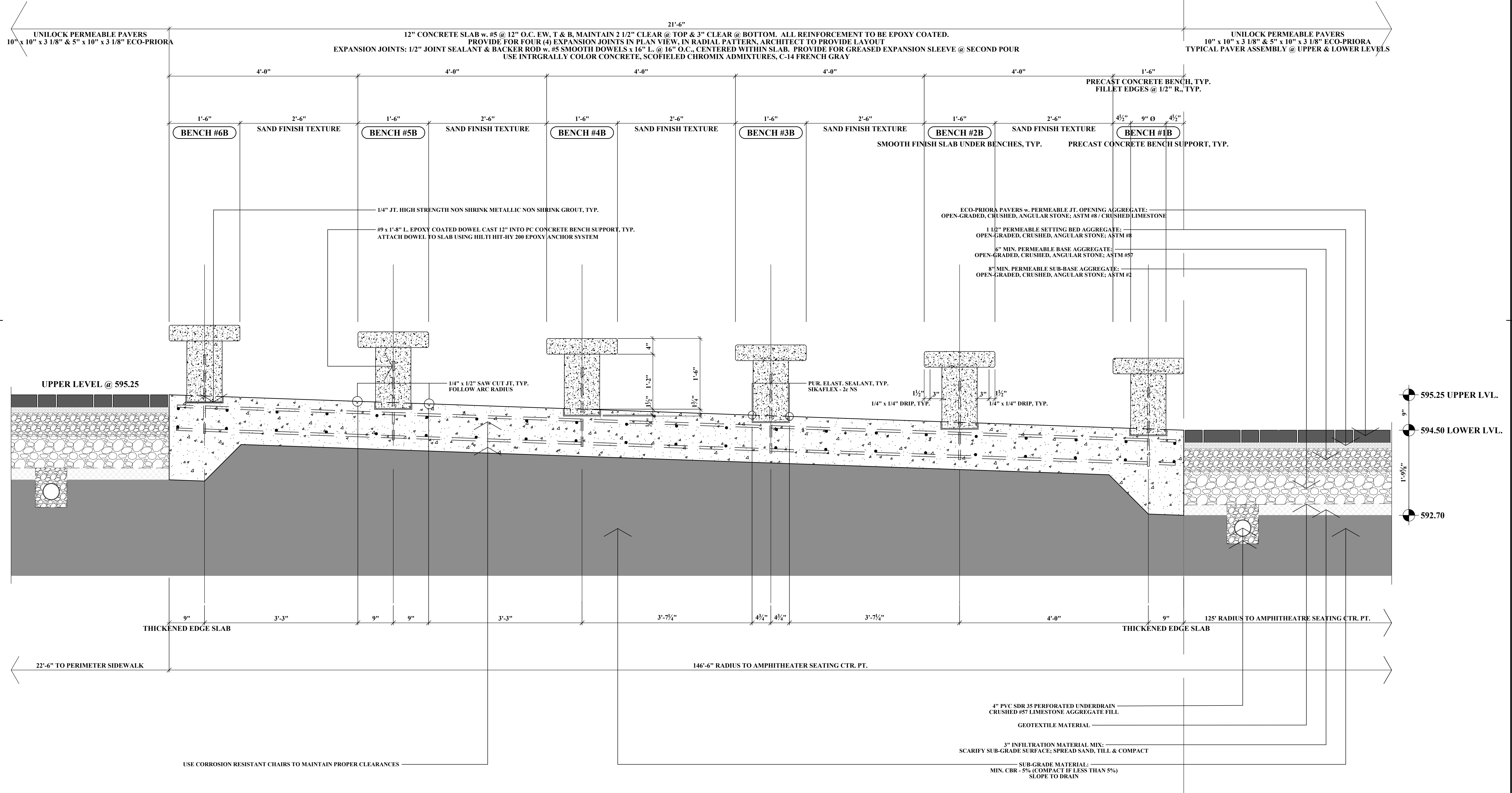


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CENTENNIAL PLAZA TRANSVERSE AXIS

REFER TO DWG. A-3.3 AMPHITHEATER SEATING AREA PLAN FOR BENCHES LAYOUT



ROCKEFELLER PARK
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The Cleveland Cultural Gardens Federation
SECTION "A" - AMPHITHEATER SEATING

REVISIONS	

DRAWN	SCALE
berj	1" = 1'-0"
DATE	PROJECT NO.
12/15/2018	

SHEET NO.
A-5.1a

BUILDING DESIGN CRITERIA

GOVERNING CODE: 2017 OHIO BUILDING CODE IN CONJUNCTION WITH ASCE 7-10
RISK CATEGORY: II
FLOOR LIVE LOADS: ASSEMBLY 100 PSF, LIVE LOAD REDUCTION NONE, ROOF LIVE LOAD 30 PSF, SNOW LOAD: GROUND SNOW LOAD, Pg 30 PSF, FLAT ROOF SNOW LOAD, Pf 30 PSF, SNOW EXPOSURE FACTOR, Ce 1.0, SNOW IMPORTANCE FACTOR 1.0, THERMAL FACTOR, Ct 1.2, SNOW DRIFT PER ASCE-7
WIND LOAD: ULTIMATE DESIGN WIND SPEED (Vult) 115 MPH, NOMINAL DESIGN WIND SPEED (Vdes) 90 MPH, RISK CATEGORY II, WIND EXPOSURE B, COMPONENTS AND CLADDING PER ASCE 7
SEISMIC LOAD: RISK CATEGORY II, SEISMIC IMPORTANCE FACTOR 1.0, SITE SPECTRAL RESPONSE ACCELERATION (Ss) 0.178g, SITE SPECTRAL RESPONSE ACCELERATION (S1) 0.058g, SEISMIC SITE CLASS D, DESIGN SPECTRAL RESPONSE ACCELERATION (Sds) 0.19g, DESIGN SPECTRAL RESPONSE ACCELERATION (Sd1) 0.093g, SEISMIC DESIGN CATEGORY B, LATERAL FORCE RESISTING SYSTEM STRUCTURAL SYSTEM NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE, SEISMIC BASE SHEAR (V) PER ASCE 7, SEISMIC RESPONSE COEFFICIENT (Cs) 0.063, RESPONSE MODIFICATION FACTOR R 3.0, ANALYSIS METHOD EQUIVALENT LATERAL FORCE

GENERAL CONDITIONS

- 1. SEE SPECIFICATIONS FOR QUALITY OF CONSTRUCTION REQUIRED, QUALITY OF WORK, MANUFACTURING AND INDUSTRY STANDARDS, PHYSICAL PROPERTIES OF MATERIALS, CONFORMANCE TO CODES AND REGULATIONS GUARANTEE AND WARRANTY REQUIREMENTS.
2. SEE ARCHITECTURAL, FOUNTAIN, PLUMBING, AND ELECTRICAL DRAWINGS FOR OTHER PERTINENT INFORMATION RELATED TO STRUCTURAL WORK AND COORDINATE AS REQUIRED. CONTRACTOR SHALL COORDINATE STRUCTURAL DRAWINGS WITH ALL OTHER DRAWINGS WITHIN THE CONTRACT DOCUMENTS.
3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND CONDITIONS RELATED TO EXISTING CONSTRUCTION, EXISTING SERVICES, AND THE SITE BEFORE BEGINNING WORK.
4. CONSTRUCTION LOADS SHALL NOT EXCEED DESIGN LIVE LOADS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DESIGN REQUIRED TO SUPPORT CONSTRUCTION EQUIPMENT USED IN CONSTRUCTING THIS PROJECT. ALL EQUIPMENT SUPPORT DESIGN SHALL BE PERFORMED BY AN ENGINEER LICENSED IN THE STATE OF THE PROJECT. SHORING AND RESHORING IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. IF MATERIALS, QUANTITIES, STRENGTHS, OR SIZES INDICATED BY THE DRAWINGS OR SPECIFICATIONS ARE NOT IN AGREEMENT WITH THESE NOTES, THE BETTER QUALITY AND/OR GREATER QUANTITY, STRENGTH, OR SIZE INDICATED, SPECIFIED OR NOTED SHALL BE PROVIDED.
6. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE FOLLOWING ITEMS THAT WILL NOT BE REVIEWED BY THE OWNER, ARCHITECT OR ENGINEER.
a. DEVIATIONS FROM CONTRACT DOCUMENTS.
b. DIMENSIONS, ELEVATIONS, AND CONDITIONS TO BE CONFIRMED AND CORRELATED AT THE SITE.
c. FABRICATION PROCESS INFORMATION.
d. MEANS, METHODS, TECHNIQUES, PROCEDURES OF CONSTRUCTION, AND CONSTRUCTION SAFETY.
e. COORDINATION OF THE WORK OF ALL TRADES.
f. QUALITY ASSURANCE SUBMITTALS.
7. ANY CHANGES TO THE STRUCTURAL SYSTEMS SHALL BE REDESIGNED BY A PROFESSIONAL ENGINEER AT NO COST TO THE OWNER OR THE A/E AND SUBMITTED TO THE A/E FOR REVIEW. SUBMITTAL SHALL BE ACKNOWLEDGED IN WRITING BEFORE BEGINNING CONSTRUCTION. IF CHANGES ARE MADE WITHOUT WRITTEN APPROVAL SUCH CHANGES SHALL BE THE LEGAL AND FINANCIAL RESPONSIBILITY OF THE PARTY MAKING THE CHANGE TO REPLACE OR REPAIR THE CONDITION AS DIRECTED BY THE A/E.
8. CONTRACTOR IS RESPONSIBLE TO UNCOVER AND VISUALLY FIELD VERIFY THE EXISTING CONSTRUCTION PRIOR TO THE START OF ANY WORK AFFECTING THE EXISTING STRUCTURE. CONTRACTOR IS TO REPORT ANY CHANGES OR DISCREPANCIES FROM THOSE SHOWN TO THE A/E.

GEOTECHNICAL REPORT

- 1. A SOILS REPORT HAS NOT BEEN COMPLETED FOR THIS PROJECT.
2. FOUNDATION DESIGN IS BASED ON AN ASSUMED 1500 PSF BEARING PRESSURE ON FIRM UNDISTURBED SOIL. SEE FOUNDATION SECTION OF GENERAL NOTES FOR MORE INFORMATION.
E. CAVATION:
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AVOIDANCE AND CLEANUP OF STREET SPILLAGE OF EXCAVATED OR BACKFILL MATERIALS ENTERING OR LEAVING THE SITE. CLEANUP OF MAJOR SPILLS SHALL BE COMPLETED IMMEDIATELY. OTHER SPILLS SHALL BE CLEANED AT A MINIMUM DAILY. ALL CLEANUP SHALL BE COMPLETED TO THE FULL SATISFACTION OF THE OWNER AND CONSTRUCTION MANAGER.
2. THE CONTRACTOR SHALL PROPERLY MOISTEN SURFACES AS REQUIRED TO PREVENT SOILS FROM BECOMING AIRBORNE AND CREATING A NUISANCE TO NEIGHBORING FACILITIES, THE PUBLIC, AND ANY CONCURRENT WORK ACTIVITIES. THE FINAL DETERMINATION OF THE SUCCESS OF DUST CONTROL MEASURES SHALL BE THE OWNER AND CONSTRUCTION MANAGER.
3. ANY SITE DE-WATERING NECESSARY TO MAINTAIN A SAFE AND EFFICIENT EXCAVATION EFFORT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
4. ALL WORK SHALL BE EXECUTED AND INSPECTED IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL CODES, RULES, ORDINANCES, AND REGULATIONS PERTAINING TO SITE EXCAVATION, FILL, AND SHORING ACTIVITIES.
5. ALL SITE GRADING SHALL BE SLOPED AS NOTED ON THE DRAWINGS, AS NOTED IN THE GEOTECHNICAL REPORT, OR AT A SHALLOWER SLOPE IF REQUIRED TO PROTECT WORKERS AND WORK IN PROGRESS FROM SOIL SLIPPAGE. ALL EXCAVATION ACTIVITIES SHALL BE COMPLETED IN ACCORDANCE WITH OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) REQUIREMENTS AND ALL OTHER APPLICABLE CODES AND ORDINANCES.
6. ANY SHARP OR LARGE OBJECTS PROTRUDING ABOVE THE FINAL ROUGH GRADE SHALL BE REMOVED, RESULTING HOLES SHALL BE FILLED WITH SELECT FILL MEETING THE REQUIREMENTS AS SET IN THE PROJECT SPECIFICATIONS.
7. ALL EXCESS EXCAVATED MATERIALS THAT ARE NOT REUSABLE SHALL BE REMOVED FROM THE SITE PROPERLY AND LEGALLY DISPOSED AT AN OFF SITE LOCATION. REFERENCE SPECIFICATIONS FOR REQUIREMENTS RELATED TO THE IDENTIFICATION OF HAZARDOUS MATERIAL IN EXCAVATIONS AND REUSE OF EXCAVATED MATERIAL FOR BACKFILL.
8. MUD-MATTING MAY BE REQUIRED TO PROVIDE STABLE SURFACE FOR FORMING AND PLACEMENT OF REINFORCING STEEL AND SUBSEQUENTLY PLACEMENT OF CONCRETE, SEE PROJECT SPECIFICATIONS.

FOUNDATIONS

- 1. THE GENERAL CONTRACTOR AND THE FOUNDATION CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE SURVEY BEFORE STARTING CONSTRUCTION.
2. NOTIFY THE A/E AND OWNER'S REPRESENTATIVE OF ANY UNUSUAL SOIL CONDITION THAT ARE IN VARIANCE WITH TEST BORINGS, SUCH AS SPRING OR SEEPAGE WATER ENCOUNTERED, OR WHEN A DIFFERENT BEARING MATERIAL IS EVIDENT AND THERE IS A QUESTION OF THE BEARING CAPACITY.
3. SET FOUNDATION AT ELEVATION SHOWN, OR ON FIRM UNDISTURBED MATERIAL OF DESIGN BEARING CAPACITY, WHICHEVER IS LOWER. THE GEOTECHNICAL ENGINEER SHALL VERIFY THAT EACH FOOTING PLACED IS BEARING ON DESIGN MATERIAL.
a. ALL SOIL SURROUNDING AND UNDER ALL FOOTINGS, FLOOR SLABS, ETC. SHALL BE PROTECTED FROM FREEZING AND FROST ACTION DURING CONSTRUCTION.
b. WHERE FOOTINGS ARE IN CLOSE PROXIMITY OF SEWERS, DRAINS CONDUITS UNDER FLOOR PIPES, ETC. BOTTOM OF ALL FOOTINGS SHALL BE AT OR BELOW INVERT ELEVATIONS OF ELEMENTS NOTED HEREIN.
4. STEP FOOTINGS AT A RATIO OF ONE (1) VERTICAL TO TWO (2) HORIZONTAL, WITH A MAXIMUM VERTICAL STEP OF 2'-0". UNLESS NOTED OTHERWISE.
5. SITE PREPARATION, STRIPPING, PROOF ROLLING, FILLING AND BACKFILLING SHALL BE DONE IN COMPLIANCE WITH PROJECT SPECIFICATIONS AND IN CONJUNCTION WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT. ALL FILL MATERIAL SHALL MEET THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS.
6. INUNDATION AND LONG TERM EXPOSURE OF BEARING SURFACES, WHICH WILL RESULT IN DETERIORATION OF BEARING FORMATIONS, SHALL BE PREVENTED. EXCAVATION TO FINAL BEARING ELEVATION SHALL NOT BE MADE UNTIL JUST PRIOR TO PLACING FOUNDATIONS.
7. BACKFILLING AGAINST FOUNDATION/BASEMENT WALLS SHALL NOT BE PERMITTED UNTIL THE SUPPORTING FLOORS ARE IN PLACE AND ARE ABLE TO RESIST THE IMPOSED LATERAL FORCES. EXCEPT FOR CANTILEVER RETAINING WALLS OR UNLESS NOTED OTHERWISE ON DRAWINGS, THE WALLS ARE SUPPORTED BY THE FLOOR ABOVE AND BELOW. PROPER TEMPORARY BRACING MAY BE USED IN LIEU OF THE FLOOR SUPPORT BASED UPON THE DESIGN BY A PROFESSIONAL ENGINEER. THE DESIGN OF TEMPORARY BRACING IS THE RESPONSIBILITY OF THE CONTRACTOR.
8. BACKFILL AND FILL MATERIALS SHALL BE FREE OF DEBRIS, WASTE, FROZEN MATERIAL, ORGANIC, AND OTHER DELETERIOUS MATTER.
a. POROUS FILL (SUB-BASE FOR SLAB-ON-GRADE) SHALL BE CRUSHED LIMESTONE COMPACTED, (MINIMUM 6" THICK UNDER SLABS). GRADATION SHALL CONFORM WITH ASTM C33 SIZE #57.
b. DRAINAGE FILL SHALL BE WASHED, UNIFORMLY GRADED MIXTURE OF CRUSHED STONE OR UNCRUSHED GRAVEL AT EXTERIOR WALLS AND RETAINING WALL HAVING THE FOLLOWING GRADATION:
SIEVE SIZE TOTAL % PASSING
1" 100
3/4" 90-100
3/8" 20-55
No. 4 0-10
No. 8 0-5
c. WELL GRADED GRANULAR MATERIAL (#8) SHALL CONFORM WITH ASTM C33.
9. ALL EXCAVATIONS ARE SUBJECT TO THE APPROVAL OF THE OWNER AND TESTING AGENCY WHO SHALL BE CONSULTED WHEN POOR SOIL, WATER, OBSTRUCTIONS, PIPING, ADJACENT SEWERS, EXISTING FOOTINGS, EXCAVATIONS, ETC. ARE ENCOUNTERED.
10. EXCAVATION AND COMPACTION:
a. CARE SHALL BE TAKEN TO NOT TO DISTURB THE BOTTOM OF THE EXCAVATION. EXCAVATION TO FINAL GRADE SHALL NOT BE MADE UNTIL JUST PRIOR TO PLACING CONCRETE.
b. KEEP FOUNDATION EXCAVATIONS FREE OF WATER AT ALL TIMES. REPLACE WEAKENED SOIL WITH LEAN CONCRETE (1500 PSI).
c. BACKFILL AND FILL SHALL BE PLACED IN LIFTS OF 8" MAXIMUM LOOSE DEPTH. EACH LIFT SHALL BE COMPACTED WITH A POWER VIBRATING COMPACTOR OR SIMILAR EQUIPMENT TO ASSURE MAXIMUM COMPACTION OF THE MATERIAL.
11. DEWATERING OF THE SITE MAY BE REQUIRED. METHODS FOR DEWATERING ARE THE CONTRACTORS RESPONSIBILITY. KEEP THE AREA OF WORK DRAINED AND FREE FROM ACCUMULATION OF SURFACE WATER AT ALL TIMES. PROVIDE, OPERATE AND MAINTAIN PUMPS, PUMPING EQUIPMENT, ETC., AS REQUIRED.
12. A TESTING AGENCY, PROVIDED BY THE OWNER, SHALL INSPECT THE CONDITION AND ASSURE THE ADEQUACY OF ALL SUBGRADES, BEARING CAPACITY, FILL AND BACKFILLS BEFORE PLACEMENT OF FOUNDATIONS. TEST RESULTS SHALL BE SENT TO THE ENGINEER AND TO THE OWNER.
a. AT FOOTING SUBGRADES, AT LEAST ONE TEST OF EACH SOIL STRATUM WILL BE PERFORMED TO VERIFY DESIGN BEARING CAPACITIES.
b. TESTING AGENCY WILL TEST COMPACTION OF SOILS IN PLACE ACCORDING TO ASTM D 1556, D2167, D2922, AND ASTM D2937, AS APPLICABLE. TEST PER FOLLOWING:
i. PAVED AND BUILDING SLAB AREAS: AT SUBGRADE AND AT EACH COMPACTED FILL LAYER, AT LEAST 1 TEST FOR EVERY 2000 SQ. FT., BUT IN NO CASE LESS THAN 3 TESTS.
ii. FOOTINGS: AT EACH COMPACTED BACKFILL LAYER AT EACH FOOTING OR 1 TEST FOR EACH 100 FT. OF WALL FOOTING.
c. CONTRACTOR SHALL RECOMPACT AND RETEST UNTIL SPECIFIED COMPACTION IS OBTAINED.

CAST-IN-PLACE CONCRETE

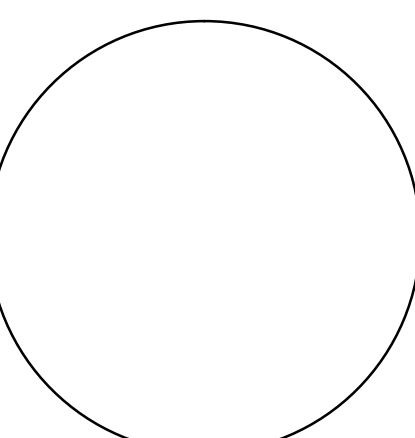
- 1. CAST-IN-PLACE CONCRETE WORK SHALL CONFORM TO THE AMERICAN CONCRETE INSTITUTE CODES AND STANDARDS, ACI 301 "STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE" IS HEREBY MADE A PART OF THESE DRAWINGS. ALL CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 301, EXCEPT AS EXPLICITLY MODIFIED HEREIN.
2. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 318, "THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".
3. CONCRETE SHALL HAVE THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS AT 28 DAYS:
a. 4000 PSI WITHOUT ENTRAINED AIR FOR ALL CONCRETE WITH A MAXIMUM WATER/CEMENT RATIO = 0.45 UNLESS SPECIFICALLY NOTED OTHERWISE.
b. 4000 PSI WITH A MAXIMUM WATER/CEMENT RATIO = 0.45 AND WITH AN ENTRAINED AIR ADMIXTURE CONFORMING WITH ASTM C260 FOR ALL CONCRETE PERMANENTLY EXPOSED TO THE WEATHER. THE AMOUNT OF ENTRAINED AIR SHALL BE 6% ± 1%.
4. WELDED WIRE FABRIC: ASTM A82 AND A185 FOR SMOOTH STEEL WIRE
5. REINFORCING BARS: ASTM 615, GRADE 60 (U.N.C.) WELDING OR TACK WELDING A615 BARS SHALL NOT BE PERMITTED. PROVIDE #6@12" CW EW IN ALL CAST-IN-PLACE CONCRETE UNO.
6. ALL REINFORCEMENT TO BE EPOXY COATED UNO.
7. REINFORCING BARS FOR WELDED APPLICATIONS SHALL CONFORM WITH A706, 60KSI YIELD STRENGTH.
8. ALL WELDED WIRE FABRIC SHALL BE CHAIRED TO ITS PROPER HEIGHT AND MAINTAINED AT THE PROPER LEVEL THROUGHOUT THE CONCRETE PLACING OPERATION. LIFTING OF WELDED WIRE FABRIC WITH A HOOK DURING CONCRETE PLACEMENT SHALL NOT BE PERMITTED.
9. BEND ALL HORIZONTAL WALL AND BEAM BARS AROUND ALL CORNERS, UNLESS OTHERWISE NOTED. PROVIDE ACI LAP EACH SIDE.
10. REINFORCING BARS REQUIRED FOR PROPER SUPPORT OF PRINCIPAL REINFORCING SHALL BE DETAILED AND SUPPLIED BY THE CONTRACTOR WHETHER OR NOT THEY ARE INDICATED ON THE DRAWINGS. THE MINIMUM BAR SIZE SHALL BE #4 AND THE MAXIMUM SPACING SHALL BE 36" ON CENTER FOR ALL BARS THAT NEED SUPPORT. WELDED WIRE FABRIC SHALL NOT BE USED FOR THE SUPPORT OF PRINCIPAL REINFORCING.
11. PROVIDE CORROSION RESISTANT ACCESSORIES SUCH AS GRAY PLASTIC CHAIRS OR CHAIRS WITH PLASTIC COATED TIPS, IN ALL EXPOSED CONCRETE CONSTRUCTION. PRECAST CONCRETE CUBES OR SAND PLATE CHAIRS SHALL BE USED FOR THE SUPPORT OF REINFORCING ON GRADE. CONCRETE BLOCK OR CLAY MASONRY BRICK ARE NOT PERMITTED.
12. NO CONCRETE SHALL BE PLACED UNTIL THE PROPOSED CONCRETE MIX AND TEST HAVE BEEN SUBMITTED TO AND REVIEWED BY THE ARCHITECT AND AFTER THE CONTRACTOR HAS RECEIVED WRITTEN ACKNOWLEDGEMENT.
13. ALL CEMENT SHALL BE TYPE I OR TYPE III, BLENDED CEMENTS SHALL NOT BE USED.
14. CONCRETE SHALL BE DISCHARGED AT THE SITE WITHIN 1 1/2 HOURS AFTER WATER HAS BEEN ADDED TO THE CEMENT AND AGGREGATES. ADDITION OF WATER TO THE MIX AT THE PROJECT SITE WILL NOT BE PERMITTED. ALL WATER MUST BE ADDED AT THE BATCH PLANT. SLUMP MAY BE ADJUSTED ONLY THROUGH THE USE OF ADDITIONAL WATER REDUCING ADMIXTURE OR HIGH RANGE WATER REDUCING ADMIXTURE.
15. ALL CONCRETE SHALL CONTAIN A WATER REDUCING ADMIXTURE CONFORMING TO ASTM C494, TYPE A, F OR G.
16. CALCIUM CHLORIDE SHALL NOT BE PERMITTED NOR SHALL ANY ADMIXTURE CONTAINING CALCIUM CHLORIDE BE PERMITTED.
17. ALL CONCRETE EXPOSED TO THE WEATHER OR IN A LOCATION VULNERABLE TO DEICERS SHALL CONTAIN AN AIR-ENTRAINED ADMIXTURE CONFORMING TO ASTM C260. THE AMOUNT OF ENTRAINED AIR SHALL BE 6% ± 1.0%.
18. PROVIDE CONSTRUCTION JOINTS IN ACCORDANCE WITH ACI 318. SUBMIT DRAWINGS SHOWING SEQUENCE AND DIRECTION OF POUR TO PERMIT SLAB SHRINKAGE FOR ENGINEER'S REVIEW.
19. WHERE CONSTRUCTION JOINTS ARE REQUIRED BUT ARE NOT INDICATED ON THE DRAWINGS, THEY SHALL BE LOCATED AT MIDSPAN OF BEAMS, SLABS, AND WALLS, AND SHALL BE SUBJECT TO REVIEW BY THE A/E OR OWNER, UNLESS OTHERWISE NOTED OR SHOWN ON THE DRAWINGS. PROVIDE A CONTINUOUS SHEAR KEY IN SLABS AND WALLS, AND A MINIMUM OF TWO CONTINUOUS HORIZONTAL KEYS IN BEAMS AND EACH JOIST. THE MINIMUM KEY SIZE SHALL BE 1 1/2" DEEP BY 1/3 THE DEPTH OR WIDTH OF THE MEMBER. AT CONCRETE SLABS ON STEEL DECK, SUPPORTED BY STEEL BEAMS, CONSTRUCTION JOINTS SHALL BE PLACED AT MIDSPAN OF DECK AND MID-WAY BETWEEN BEAMS.
20. ALL CONSTRUCTION JOINTS BELOW GRADE SHALL HAVE WATERSTOPS, UNLESS NOTED OTHERWISE.
21. VERIFY WITH ARCHITECTURAL DRAWINGS FOR TOP OF STRUCTURAL SLAB, BONDED TOPPING, WEARING SLAB AND SLAB ON GRADE ELEVATIONS.
22. SEE ARCHITECTURAL DRAWINGS FOR LOCATION AND EXTENT OF SPECIAL FINISHES OR TREATMENTS TO CONCRETE.
23. COORDINATE ALL WORK RELATED TO OWNER-SUPPLIED EQUIPMENT OR EQUIPMENT SUPPLIED BY ANOTHER CONTRACTOR BY USING ONLY CERTIFIED EQUIPMENT DRAWINGS.
24. DETERMINE SIZE AND LOCATION OF MECHANICAL EQUIPMENT, AND MAKE PROVISIONS FOR BOLTS, SLEEVES, PADS, OPENINGS, DRAINS, ANCHOR RODS AND EMBEDDED ITEMS ETC. IN ACCORDANCE WITH THE MANUFACTURER'S CERTIFIED DRAWINGS. THIS WORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED.
25. PROVIDE TOOLED CONTROL JOINTS IN ALL SLABS ON GRADE WITHOUT TOOL MARKS. THE MAXIMUM SPACING OF JOINTS SHALL BE 36 TIMES THE SLAB THICKNESS IN BOTH DIRECTIONS, UNLESS OTHERWISE NOTED.
26. OPENINGS:
a. OPENINGS SHOWN ARE FOR BIDDING PURPOSES ONLY. RECONCILE THEIR EXACT SIZES AND LOCATIONS WITH HVAC, PLUMBING, AND OTHER REQUIREMENTS BEFORE PROCEEDING WITH WORK.
b. ALL SLAB OPENINGS SHALL BE LOCATED WITHIN THE MIDDLE HALF OF THE SPAN IN EACH DIRECTION UNLESS SPECIFICALLY APPROVED BY THE STRUCTURAL ENGINEER.
c. OPENINGS SHALL NOT BE PROVIDED IN FRAMED SLABS, BEAMS, JOISTS, COLUMNS, AND WALLS UNLESS SHOWN ON STRUCTURAL DRAWINGS. IF ANY OPENING NOT SHOWN ON THE PLANS IS REQUIRED, SECURE APPROVAL OF THE A/E BEFORE PROCEEDING.
d. PROVIDE 1/2 NUMBER OF BARS INTERRUPTED PLUS ONE TYPICAL EACH FACE OF OPENING. PROVIDE TWO #5 BARS AROUND ALL SLAB AND WALL OPENINGS, EXTENDING 2'-0" BEYOND OPENING IN EVERY DIRECTION UNLESS NOTED. OPENINGS NOT EXCEEDING 18" x 18" MAY BE SLEEVED AS REQUIRED BY WORKING THE REINFORCING STEEL AROUND THEM.
27. REINFORCING BAR LAP SPLICES AND ANCHORAGE LENGTH SHALL CONFORM WITH TABLE MINIMUM LAP SPLICE AND ANCHORAGE DIMENSION TABLE AS PROVIDED WITHIN THESE GENERAL NOTES.
28. TOP LAYER OF REINFORCING STEEL IN BEAMS, SLABS, JOISTS AND FOOTINGS SHALL BE CONSIDERED TOP BARS REGARDLESS OF THICKNESS OF CONCRETE BELOW THE BARS.
29. MECHANICAL BAR SPLICE DEVICES THAT PROVIDE A FULL TENSION SPLICE WITH A CAPACITY OF 125 PERCENT OF THE BAR YIELD STRENGTH MAY BE USED. ALL SPLICES SHALL BE VISUALLY INSPECTED BY A QUALIFIED INSPECTOR TO VERIFY THAT THE SPLICE HAS BEEN MADE PROPERLY.
30. BONDBREAKER MATERIAL SHALL BE 30 POUND FELT PAPER.

REINFORCING BAR CLEARANCE TABLE
LOCATION CLEARANCE
CONCRETE CAST AGAINST & PERMANENTLY EXPOSED TO EARTH OR MUD SLAB 3"
COLUMNS AND PIERS (VERT REINF) 2"
COLUMN TIES 1 1/2"
WALLS INTERIOR FACE 1"
WALLS EXTERIOR FACE #5 AND SMALLER 1 1/2"
WALLS EXTERIOR FACE #6 AND LARGER 2"
CURBS 1 1/2"
SLABS ON DECK (WWF) 1"
SLABS ON GRADE (WWF) 1/3 SLAB THICKNESS FROM TOP OF SLAB

REINFORCING LAP LENGTH SCHEDULES
Fc = 4000 P.S.I. NORMAL WEIGHT
BAR SIZE TOP BAR LENGTH (IN.) OTHER BAR LENGTH (IN.)
CATEGORY CATEGORY
1 2 3 4 5 6 1 2 3 4 5 6
3 18 18 18 18 18 18 16 16 16 16 16 16
4 26 24 24 24 24 24 20 19 19 19 19 19
5 40 32 30 30 30 30 31 25 23 23 23 23
6 57 45 40 36 36 36 44 35 31 28 28 28
7 77 62 54 43 42 42 59 48 42 33 33 33
8 102 81 71 57 51 48 78 63 55 44 39 37
9 129 103 90 72 64 55 99 79 69 56 50 42
10 163 131 114 92 82 65 126 101 88 70 63 50
11 200 160 140 112 100 80 154 123 108 86 77 62

CATEGORY DETERMINATION TABLE FOR SCHEDULES ABOVE
CONCRETE COVER CENTER TO CENTER BAR SPACING STRUCTURAL ELEMENTS
≤ 3d > 3d < 4d ≥ 4d < 6d ≥ 6d
LONGITUDINAL BARS IN BEAMS, COLUMNS, INNER LAYER OF WALLS AND SLABS
ALL OTHER REINFORCING BARS
ALL OTHER REINFORCING BARS

d = NOMINAL BAR DIAMETER.

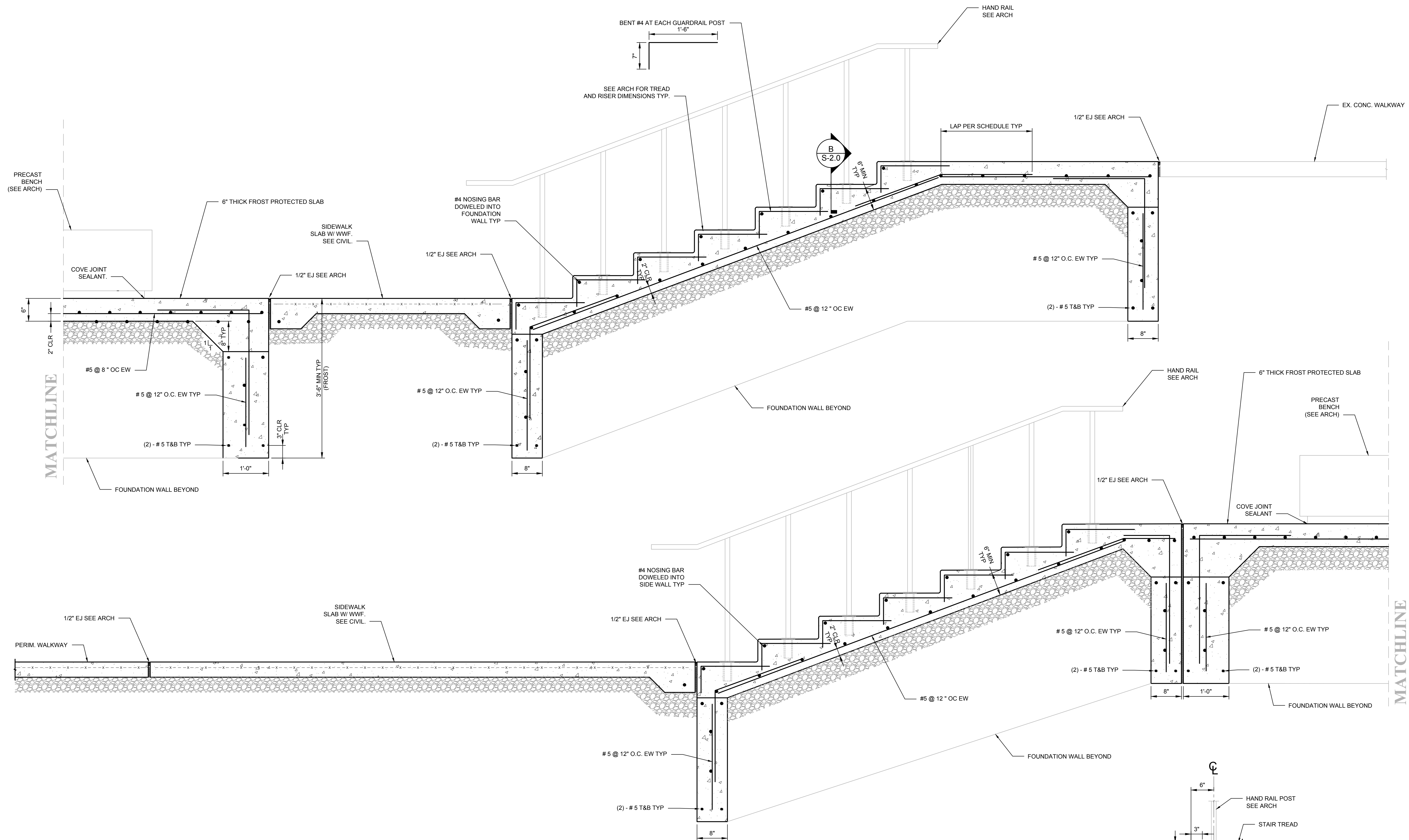


ROCKEFELLER PARK
1916 - CENTENNIAL PLAZA - 2016
The Cleveland Cultural Gardens Federation
STRUCTURAL GENERAL NOTES 1 OF 2

REVISIONS table with columns for description and date.

DRAWN SCW SCALE SEE PLAN
DATE 12/15/2018 PROJECT NO. J20170781.000

SHEET NO. S-0.1

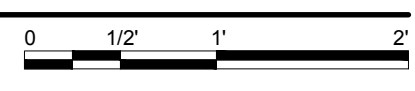


A SECTION

SCALE: 1" = 1'-0"

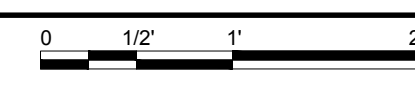
NOTE:

- 1) ALL REINFORCEMENT TO BE EPOXY COATED.
- 2) SEE ARCHITECTURAL DRAWINGS FOR ELEVATIONS AND DIMENSIONS.



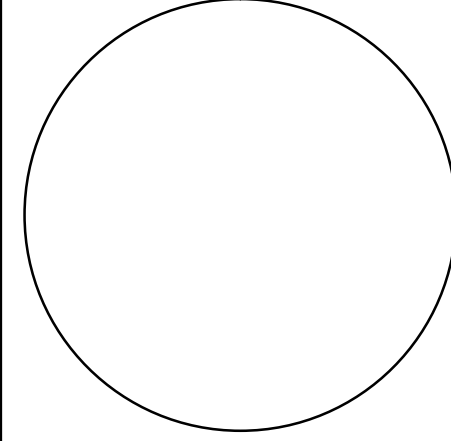
B SECTION

SCALE: 1" = 1'-0"



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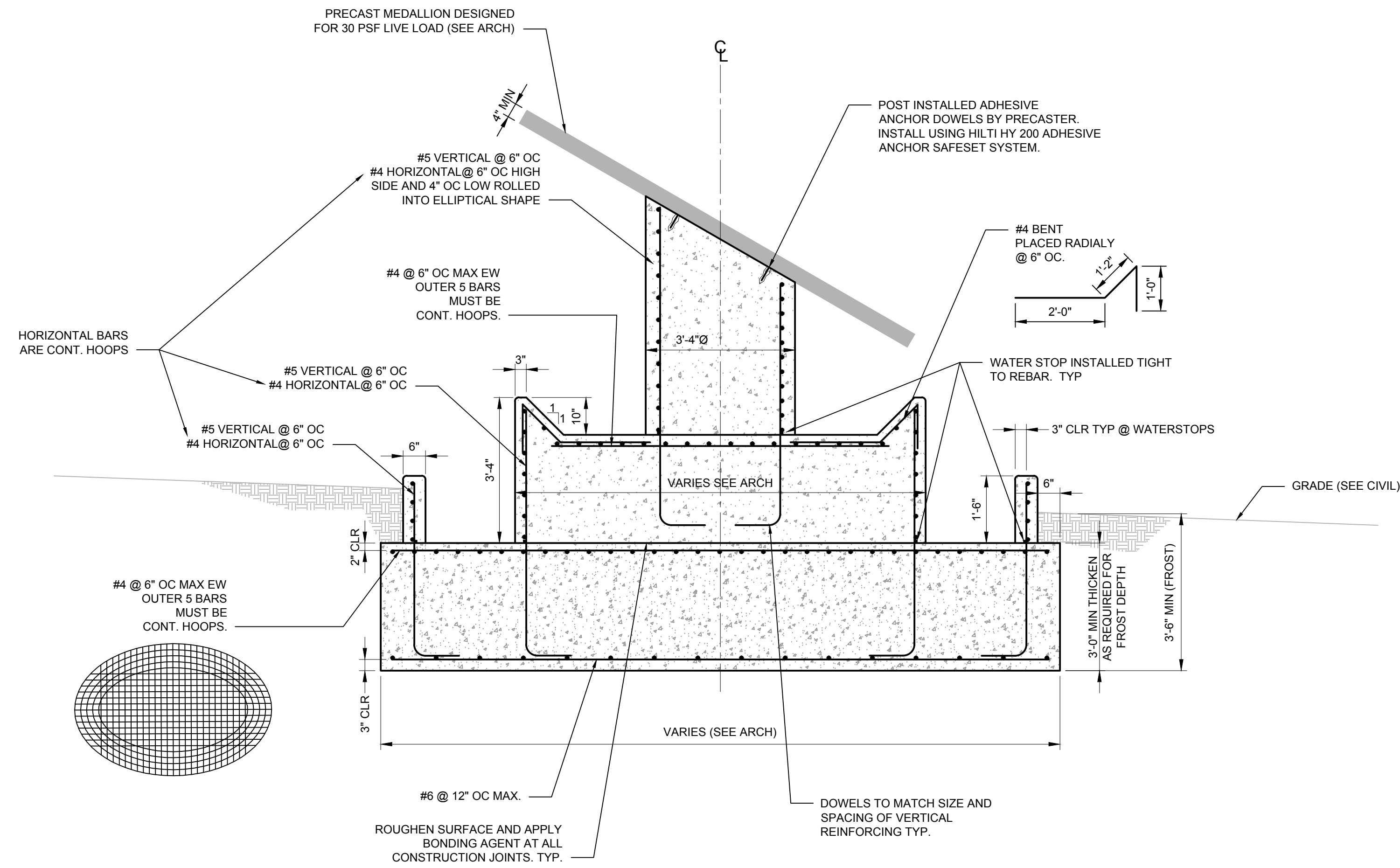


ROCKEFELLER PARK
1916 - CENTENNIAL PLAZA - 2016
The Cleveland Cultural Gardens Federation
SECTIONS "A" & "B" @ EAST BOULEVARD ENTRANCE

REVISIONS	

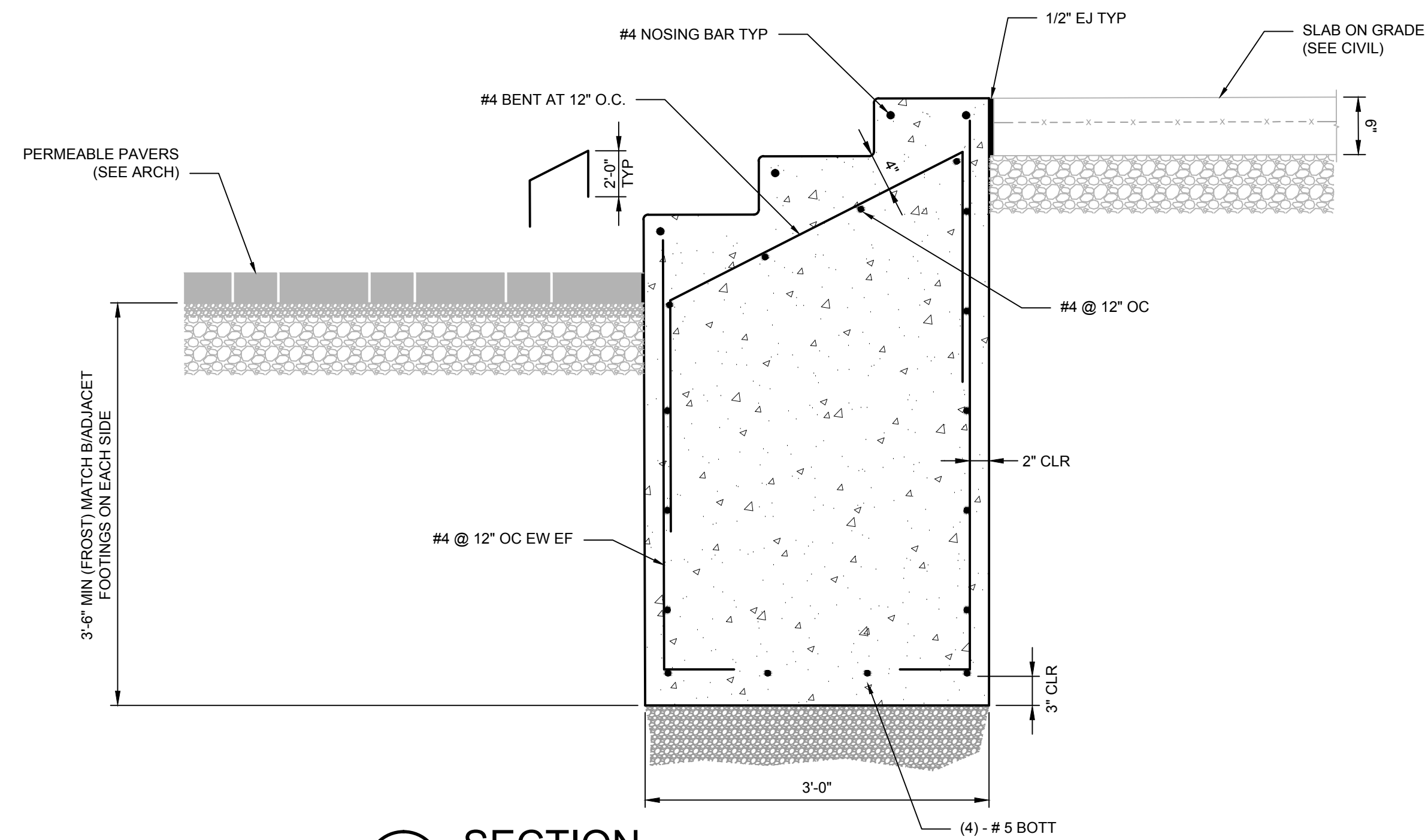
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DATE 12/15/2018	PROJECT NO. J20170781.000

SHEET NO.
S-2.0



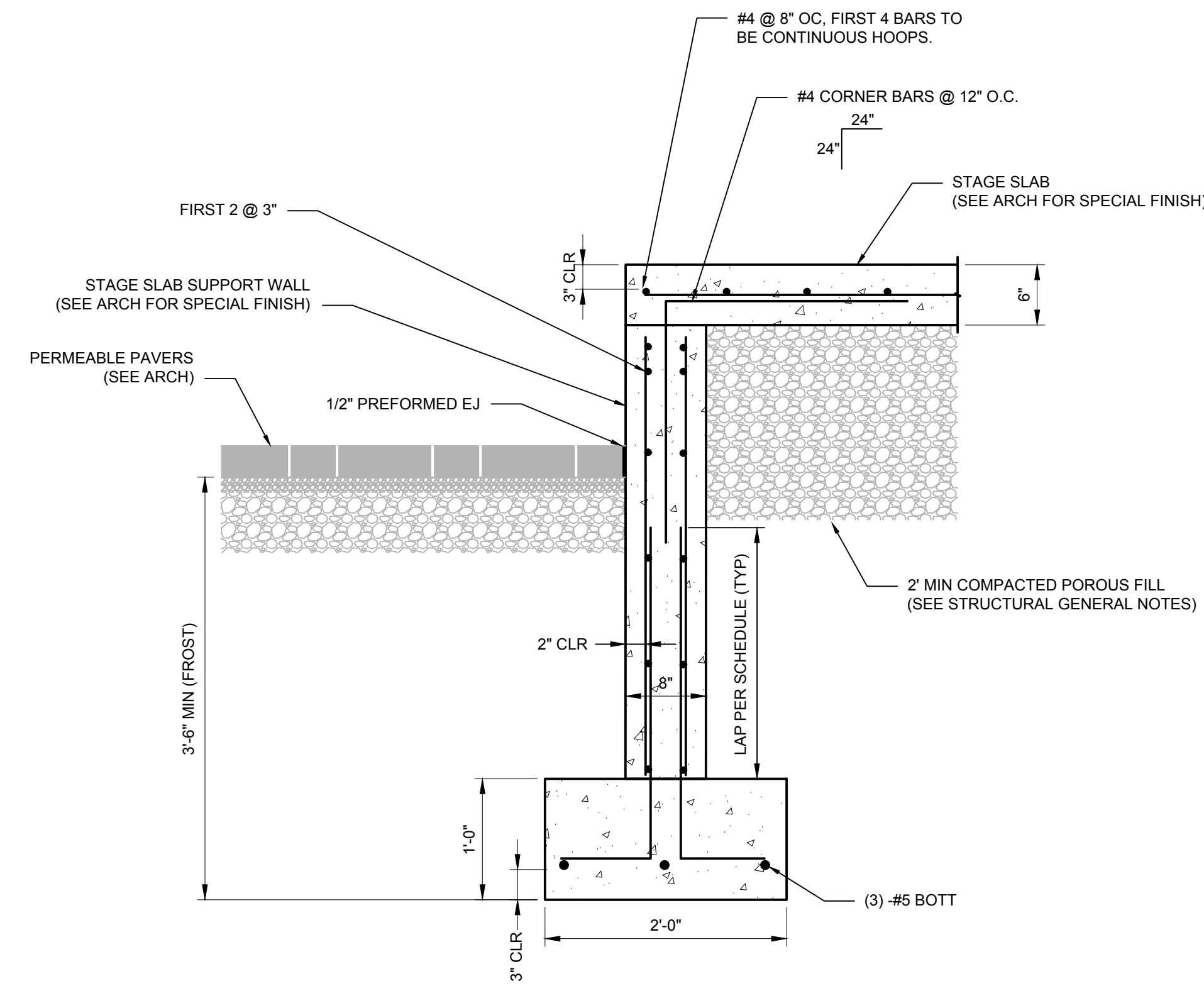
F ALT 1 SECTION
SCALE: 1/2" = 1'-0"

- NOTES:
- 1) ALL REINFORCING TO BE EPOXY COATED.
 - 2) SEE ARCH FOR ALL DIMENSIONS AND ELEVATIONS NOT SHOWN ON STRUCTURAL DRAWINGS.
 - 3) COORDINATE WITH FOUNTAIN CONSULTANT DRAWINGS FOR INSTALLATION OF FOUNTAIN ACCESSORIES.



H SECTION
SCALE: 1" = 1'-0"

NOTE: ALL REINFORCING TO BE EPOXY COATED.
SEE ARCH FOR TREAD AND RISER DIMENSIONS AND SLAB/PAVER ELEVATIONS.



G SECTION
SCALE: 1" = 1'-0"

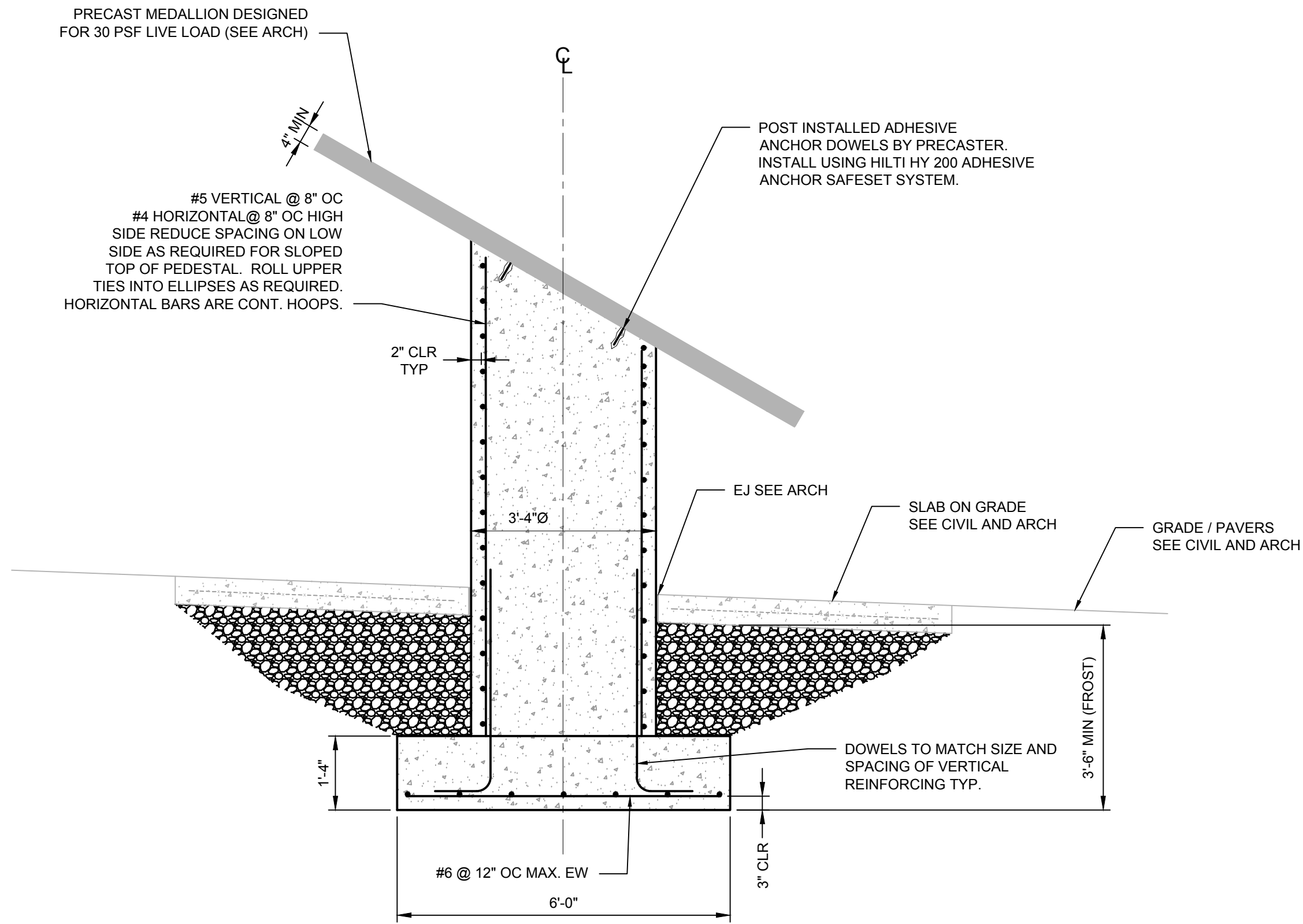
NOTE: ALL REINFORCING TO BE EPOXY COATED.
SEE ARCH FOR TREAD AND RISER DIMENSIONS AND SLAB/PAVER ELEVATIONS.

NOTE: STEM WALL FOR STAGE IS TO BE REINFORCED WITH #5 @ 12" OC VERTICAL & #4 @ 12" HORIZONTAL EACH FACE

REVISIONS	

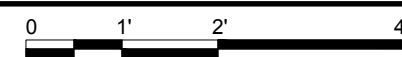
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DATE 12/15/2018	PROJECT NO. J201.0.31.000

SHEET NO. S-2.2

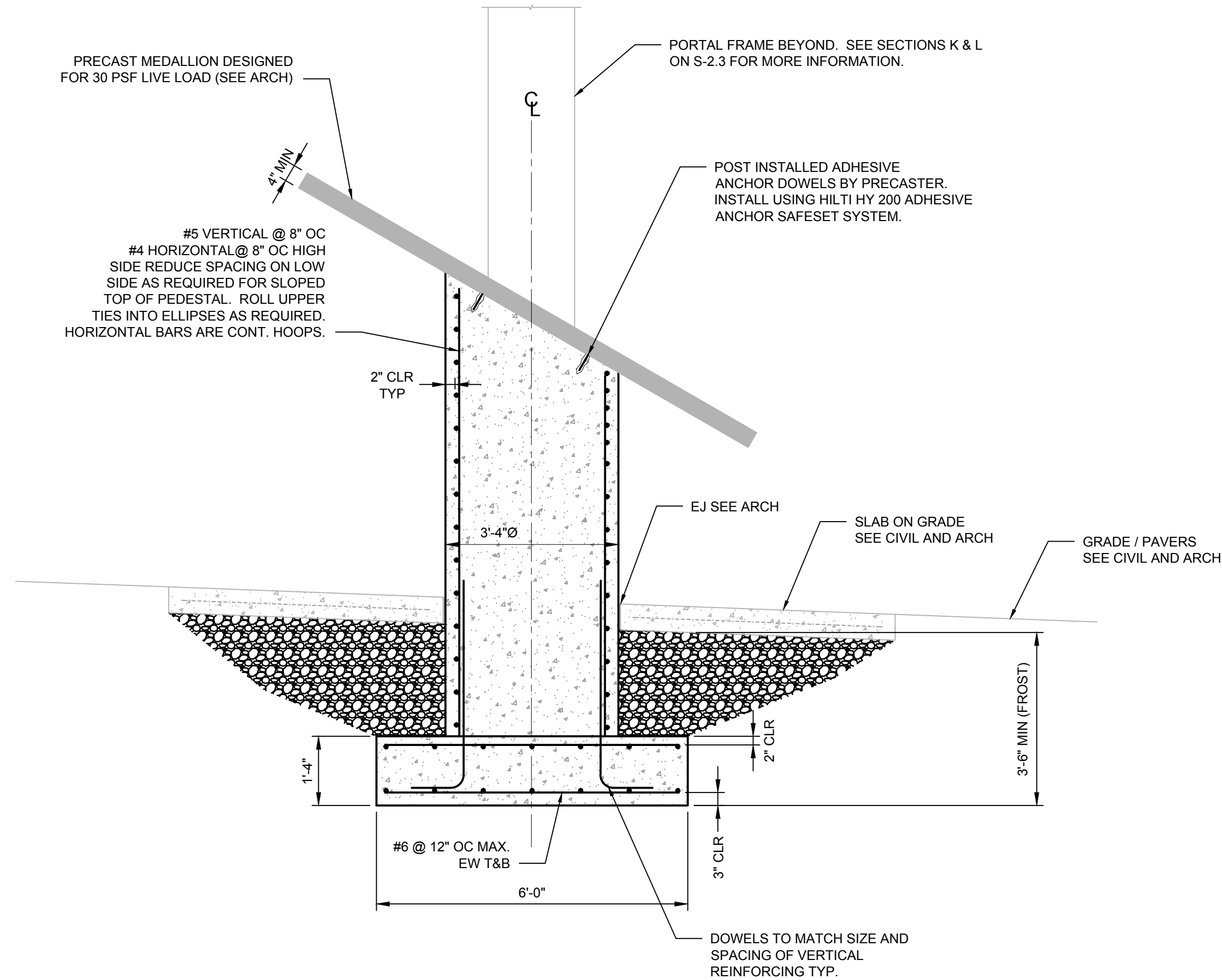


I SECTION

SCALE: 1/2" = 1'-0"



- NOTES:
 1) ALL REINFORCING TO BE EPOXY COATED.
 2) SEE ARCH FOR ALL DIMENSIONS AND ELEVATIONS NOT SHOWN ON STRUCTURAL DRAWINGS.

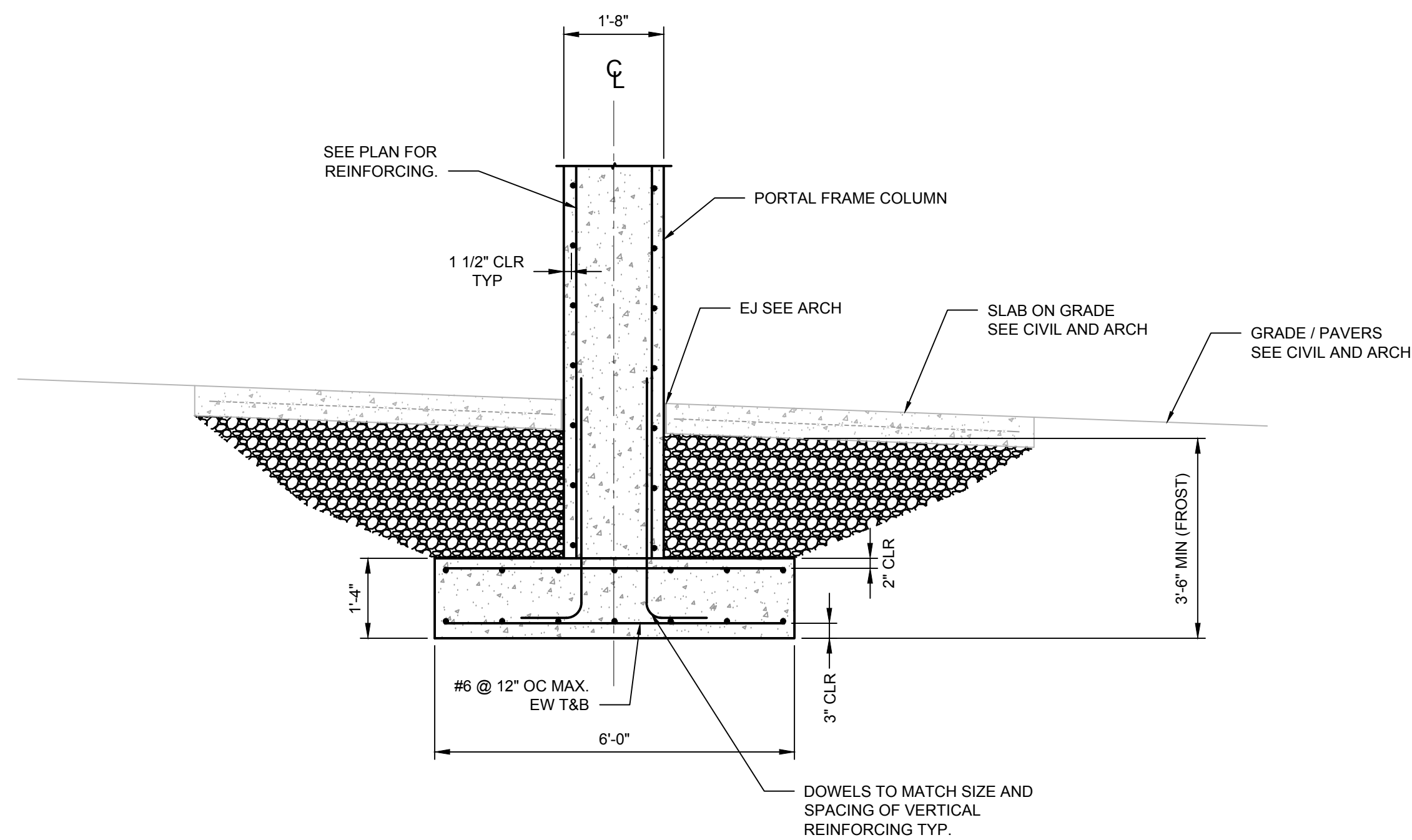


J ALT 2 SECTION

SCALE: 1/2" = 1'-0"

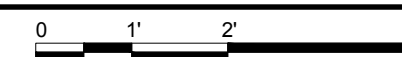


- NOTES:
 1) ALL REINFORCING TO BE EPOXY COATED.
 2) SEE ARCH FOR ALL DIMENSIONS AND ELEVATIONS NOT SHOWN ON STRUCTURAL DRAWINGS.

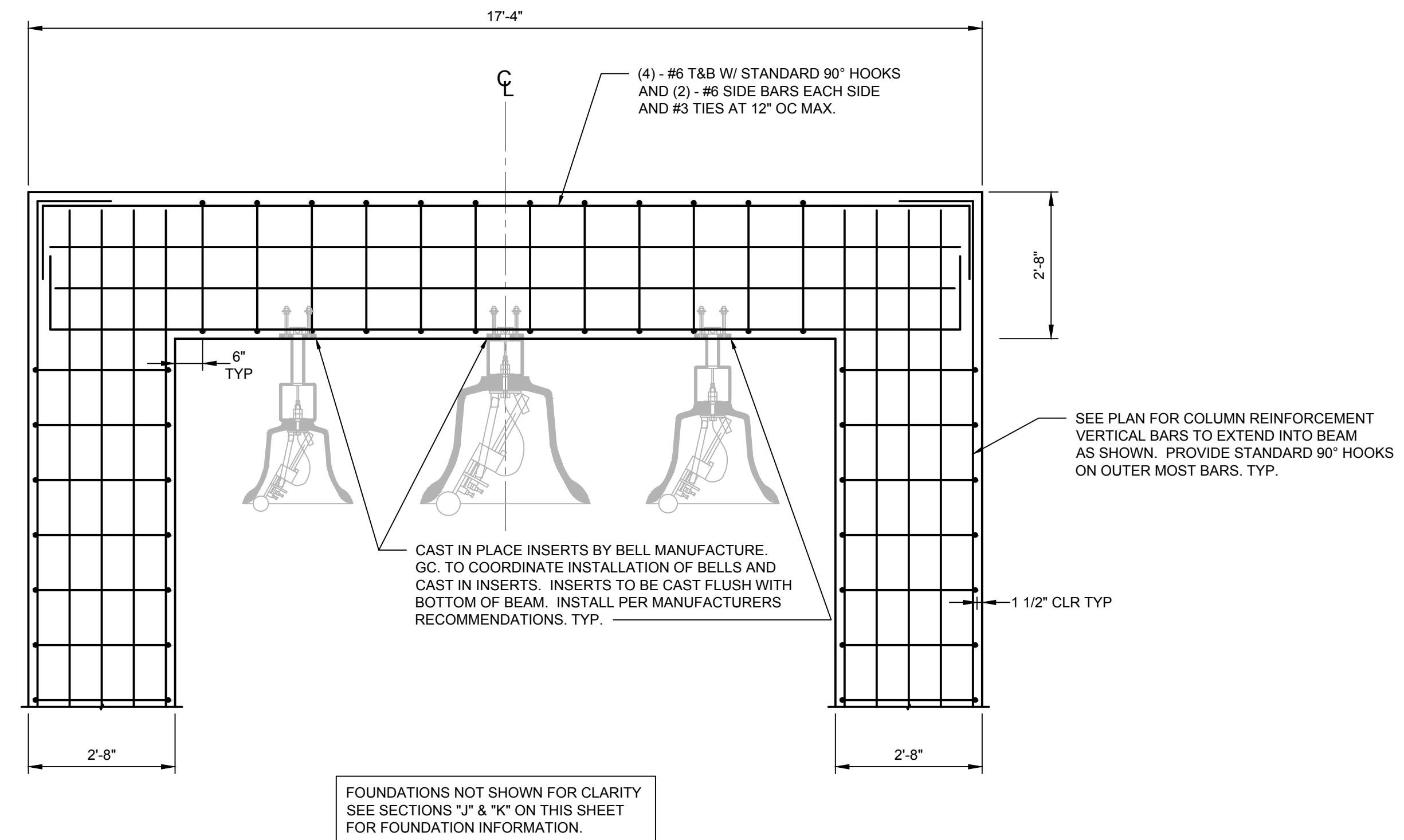


K ALT 2 SECTION

SCALE: 1/2" = 1'-0"



- NOTES:
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 2) SEE ARCH FOR ALL DIMENSIONS AND ELEVATIONS NOT SHOWN ON STRUCTURAL DRAWINGS.

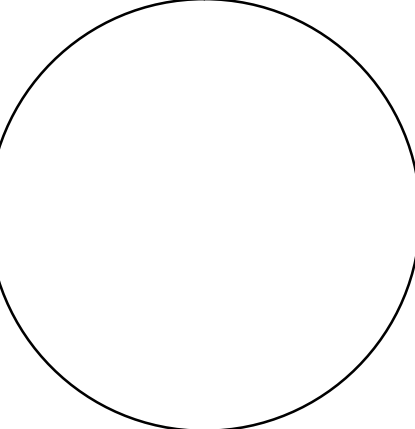


L ALT 2 SECTION

SCALE: 1/2" = 1'-0"



- NOTES:
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 2) SEE ARCH FOR ALL DIMENSIONS AND ELEVATIONS NOT SHOWN ON STRUCTURAL DRAWINGS.



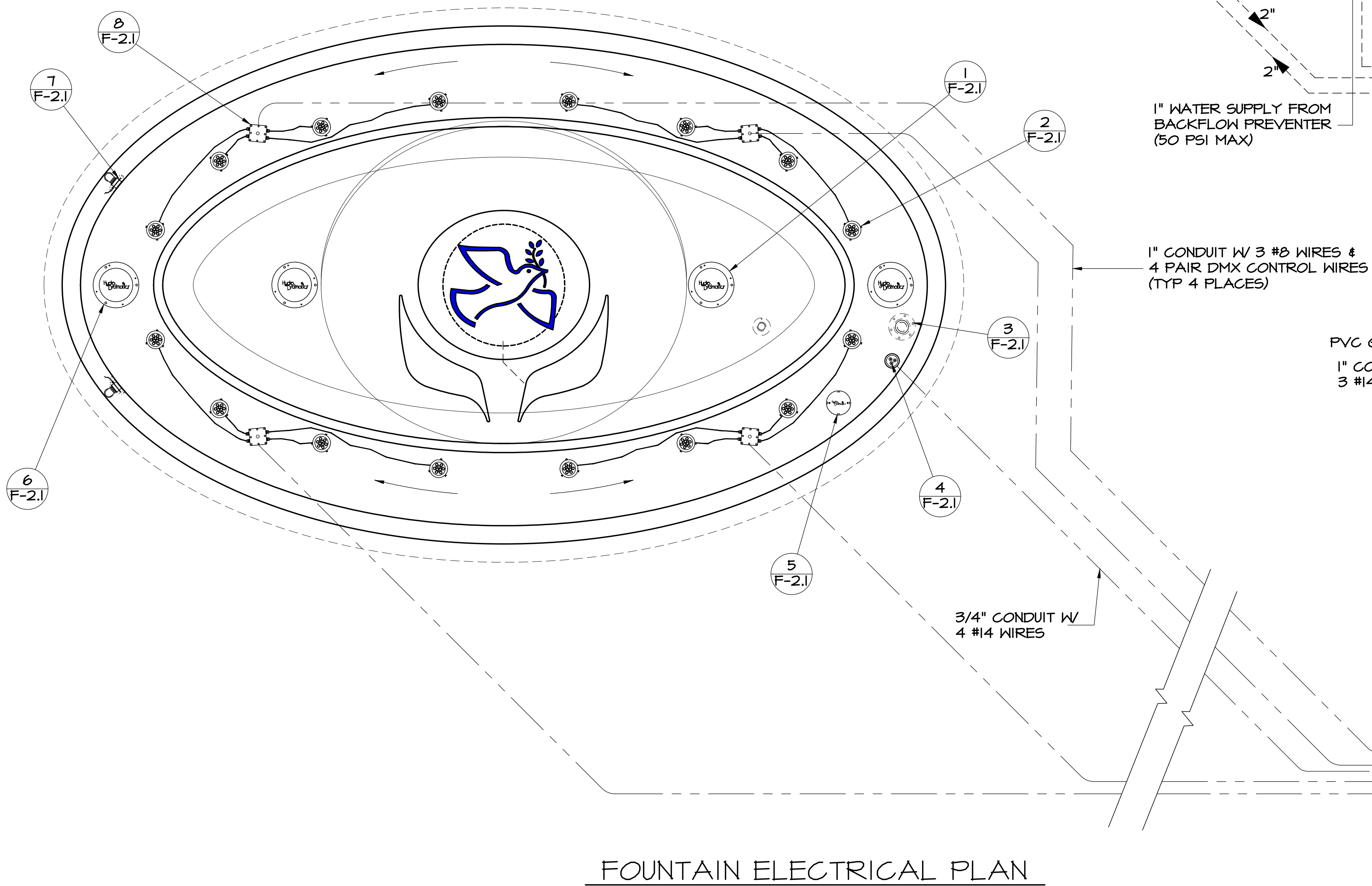
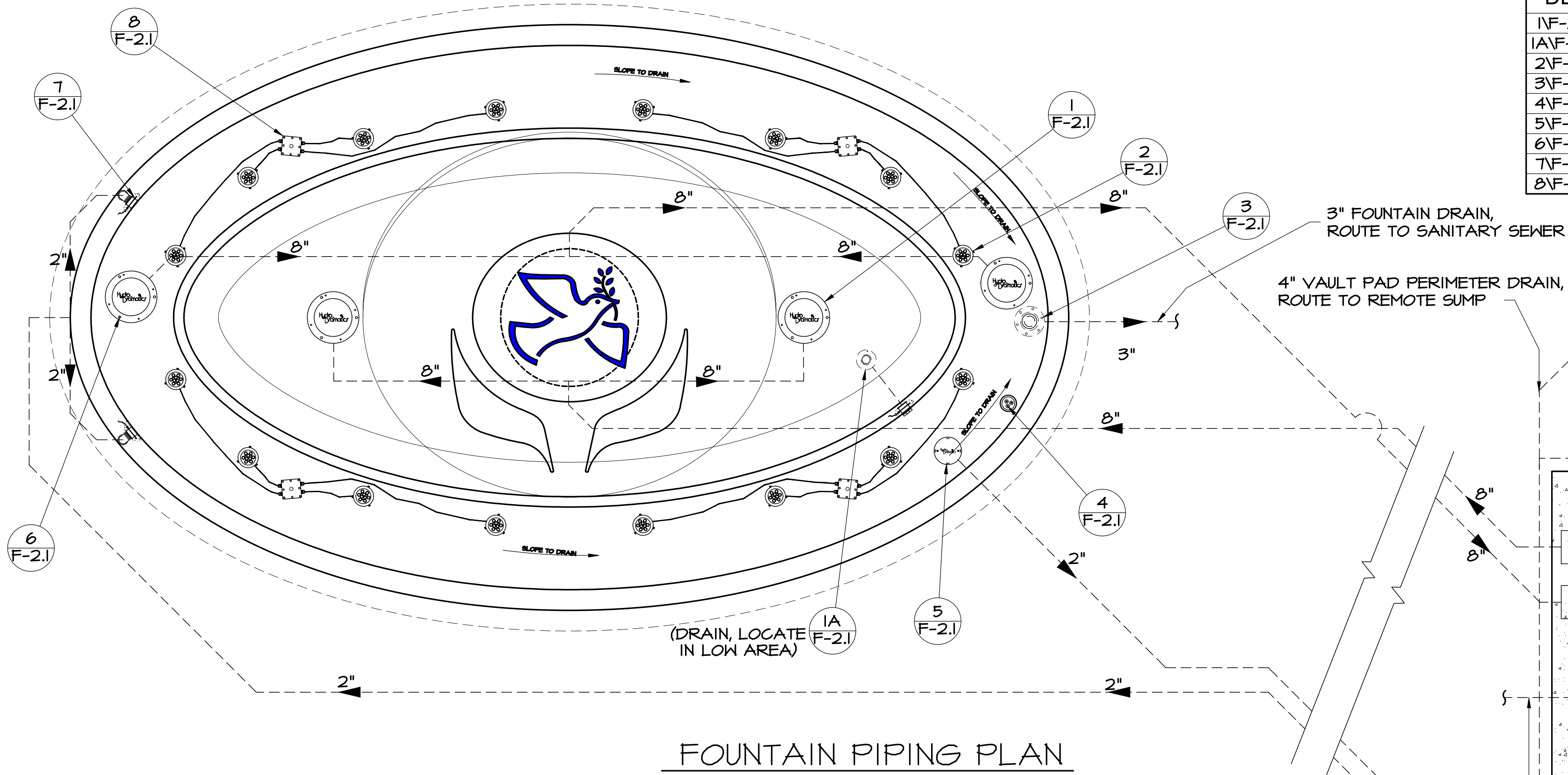
ROCKEFELLER PARK
1916 - CENTENNIAL PLAZA - 2016
 The Cleveland Cultural Gardens Federation
SECTIONS "I", "J", "K", & L

REVISIONS	

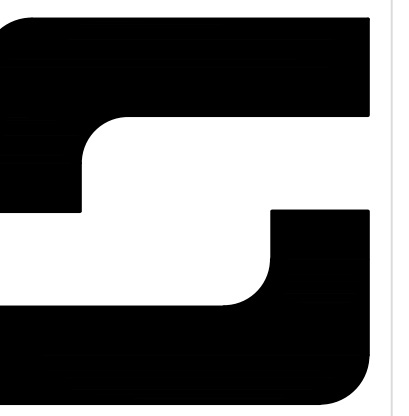
DRAWN	SCALE
SCW	SEE PLAN
DATE	PROJECT NO.
12/15/2018	J20170781.000

SHEET NO.
S-2.3

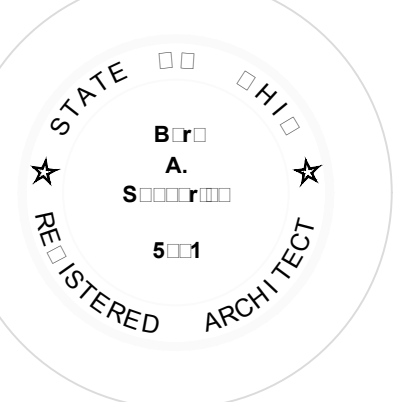
DET	TY	QTY	IN	DESCRIPTION
1F-2.1	2		HDDPI558	15" STAINLESS STEEL DIVERTER PLATE W/ FIBERGLASS SUMP, 8" INLET
1AF-2.1	2		O200WS/WP	2" WATER STOP COUPLING, UPPER & LOWER POOL (PLUG IN LOWER POOL STOP)
2F-2.1	16		LEDO4000I	12/24VDC, 30W LED RGBW LIGHT W/ STAND & 9' CORD, 44 DEG OPTICS
3F-2.1	1		DOA-300	3" OVERFLOW STANDPIPE AND DRAIN FITTING
4F-2.1	1		ES6-300	CONDUIT MOUNT LEVEL SENSOR
5F-2.1	1		AVF862B	8" STAINLESS STEEL ANTI-VORTEX PLATE WITH CYCOLAC SUMP, 2" OUTLET
6F-2.1	2		HDAVP1558	15" STAINLESS STEEL ANTI-VORTEX PLATE W/ FIBERGLASS SUMP, 8" OUTLET
7F-2.1	2		F4683	2" WATERSTOP COUPLING (FOR FILTER RETURN WATER)
8F-2.1	4		EBJ-208	JUNCTION BOX WITH CORD SEALS (4), 1" STUB-UP AND POTTING COMPOUND



- 3" FOUNTAIN DRAIN, ROUTE TO SANITARY SEWER
 2" SUMP PUMP DISCHARGE, ROUTE TO STORM SEWER
 REMOTE SUMP (FOR DETAIL SEE DWG F5.I)
 2" VAULT SUMP PUMP DISCHARGE, ROUTE TO SANITARY SEWER
 DIRECT BURIAL VAULT, FOR DETAILS SEE DRAWING F-3.I
 VAULT SUMP PUMP
 2" FILTER BACKWASH LINE, ROUTE TO SANITARY SEWER
 8" VENT CAP (2)
 REMOTE SUMP (FOR DETAIL SEE DWG F5.I)
 PVC GRADE BOX
 1" CONDUIT W/ 3 #12 AND 3 #14 WIRES
 3/4" CONDUIT W/ 4 #14 WIRES
 1" CONDUIT W/ 3 #8 WIRES & 4 PAIR DMX CONTROL WIRES (TYP 4 PLACES)
 1" WATER SUPPLY FROM BACKFLOW PREVENTER (50 PSI MAX)
 (DRAIN, LOCATE IN LOW AREA)
 2" VAULT SUMP PUMP DISCHARGE, ROUTE TO SANITARY SEWER
- PLUMBING NOTES:**
- PIPING LOCATIONS ARE DIAGRAMMATIC ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION REFERENCE
 - AN ASTERISK (*) INDICATES EQUIPMENT PROVIDED BY HYDRO DRAMATICS, ALL ELSE BY FOUNTAIN CONTRACTOR
 - ALL DIRECTIONAL CHANGES IN PIPING SHOULD BE RESTRAINED WITH THRUST BLOCKS
 - ALL PIPING TEES SHOULD BE EQUAL IN SIZE TO THAT OF THE LARGEST CONNECTED PIPE
 - ALL PIPING TO BE PIPED EQUAL IN LENGTH, ELEVATION NUMBER OF FITTINGS, ETC. TO PROVIDE EQUAL SUPPLY AND / OR RETURN FROM FITTING OR NOZZLE
 - ALL PIPING TO FOUNTAIN COMPONENTS TO BE FURNISHED AND INSTALLED BY PLUMBING CONTRACTOR, INCLUDING PIPE, FITTINGS, BOLTS, NUTS, GASKETS AND ANY PIPE SUPPORTS OR HANGERS.
 - ALL SUCTION PIPING SHALL BE SCHEDULE 40 PVC PRESSURE PIPE AND FITTINGS. ALL DISCHARGE PIPING SMALLER THAN 4" SHALL BE SCHEDULE 40 PVC PRESSURE PIPE & FITTINGS. ALL DISCHARGE PIPING 4" AND LARGER SHALL BE SCHEDULE 80 PVC PRESSURE PIPE AND FITTINGS.
 - ALL SUCTION AND DISCHARGE PIPING SHALL HAVE AN UNINTERRUPTED 2% MINIMUM SLOPE BACK TO THE VAULT OR EQUIPMENT ROOM (WHICHEVER APPLICABLE) TO INSURE PROPER DRAINAGE DURING COLD WEATHER. ANY EXISTING CONSTRUCTION SHOULD BE CORE DRILLED, ANY NEW CONSTRUCTION SHOULD BE SLEEVED TO ALLOW LINES TO PASS THROUGH WITHOUT ALTERING THE SLOPE OF THE PIPE. IF A WATER TRAP IS UNAVOIDABLE, EITHER DRAIN VALVES SHOULD BE INSTALLED AT THE LOW SPOT OR PIPES SHOULD BE BLOWN OUT AND PLUGGED TO AVOID FREEZING.
 - ELECTRICAL COMPONENTS ARE SHOWN FOR LOCATION REFERENCES ONLY.
 - DO NOT SCALE DRAWINGS.
 - ALL POOL FITTINGS AND EQUIPMENT SHALL BE LOCATED TO PROVIDE ACCESSIBILITY AFTER ALL ARCHITECTURAL COMPONENTS ARE COMPLETE.
- ELECTRICAL NOTES:**
- ALL METAL IN CONCRETE MUST BE GROUNDED WITH #8 BARE COPPER WIRES TO REBAR. IF REBAR IS EPOXY COATED OR NOT USED, INSTALL GROUND ROD, AND GROUND FITTING TO GROUND.
 - ALL EQUIPMENT, DEVICES AND COMPONENTS ARE TO BE INSTALLED IN ACCORDANCE WITH THE NEC AND ANY OTHER APPLICABLE CODES. THE ROUTES, LOCATIONS, ETC. INDICATED ARE DIAGRAMMATIC AND IT IS THE INTENT THAT THESE ARE INSTALLED IN ACCORDANCE WITH THE APPLICABLE CODES, NOT OTHER APPLICABLE CODES.
 - ANY ELECTRIC PENETRATIONS THROUGH CONCRETE MUST BE RED BRASS PIPE (R.B.P.).
 - AN ASTERISK (*) INDICATES EQUIPMENT PROVIDED BY HYDRO DRAMATICS, ALL ELSE BY FOUNTAIN CONTRACTOR.
 - ALL CONDUIT ELECTRICAL PENETRATIONS MUST BE VERTICALLY PLUMB.
 - ALL WIRE INSIDE CONDUIT SHOULD BE THIN COPPER.
 - JUNCTION BOXES MUST BE INSTALLED LEVEL, HAVE SEALED CONDUIT ENTRANCES, AND BE FILLED WITH AN APPROVED POTTING COMPOUND.
 - ALL LIGHTING CIRCUITS MUST HAVE SEPARATE NEUTRALS FOR G.F.I. CIRCUITS.
 - ALL CONDUIT AND WIRING TO FOUNTAIN COMPONENTS SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
 - CONDUIT LOCATIONS ARE DIAGRAMMATIC ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION REFERENCE.
 - DO NOT SCALE DRAWINGS.
 - PLUMBING COMPONENTS ARE SHOWN FOR LOCATION REFERENCE ONLY.
 - ALL ELECTRICAL FITTINGS AND EQUIPMENT SHALL BE LOCATED TO PROVIDE ACCESSIBILITY AFTER ALL ARCHITECTURAL COMPONENTS ARE COMPLETE.
 - ALL DMX WIRING TO BE 2 PAIR #24 AWG BELDEN Y64114 DMX FLEX OR APPROVED EQUAL.
- CONDUIT FOR POWER SUPPLY, PROVIDE 230V, 1PH, 100A 3 WIRE SERVICE PLUS GRD



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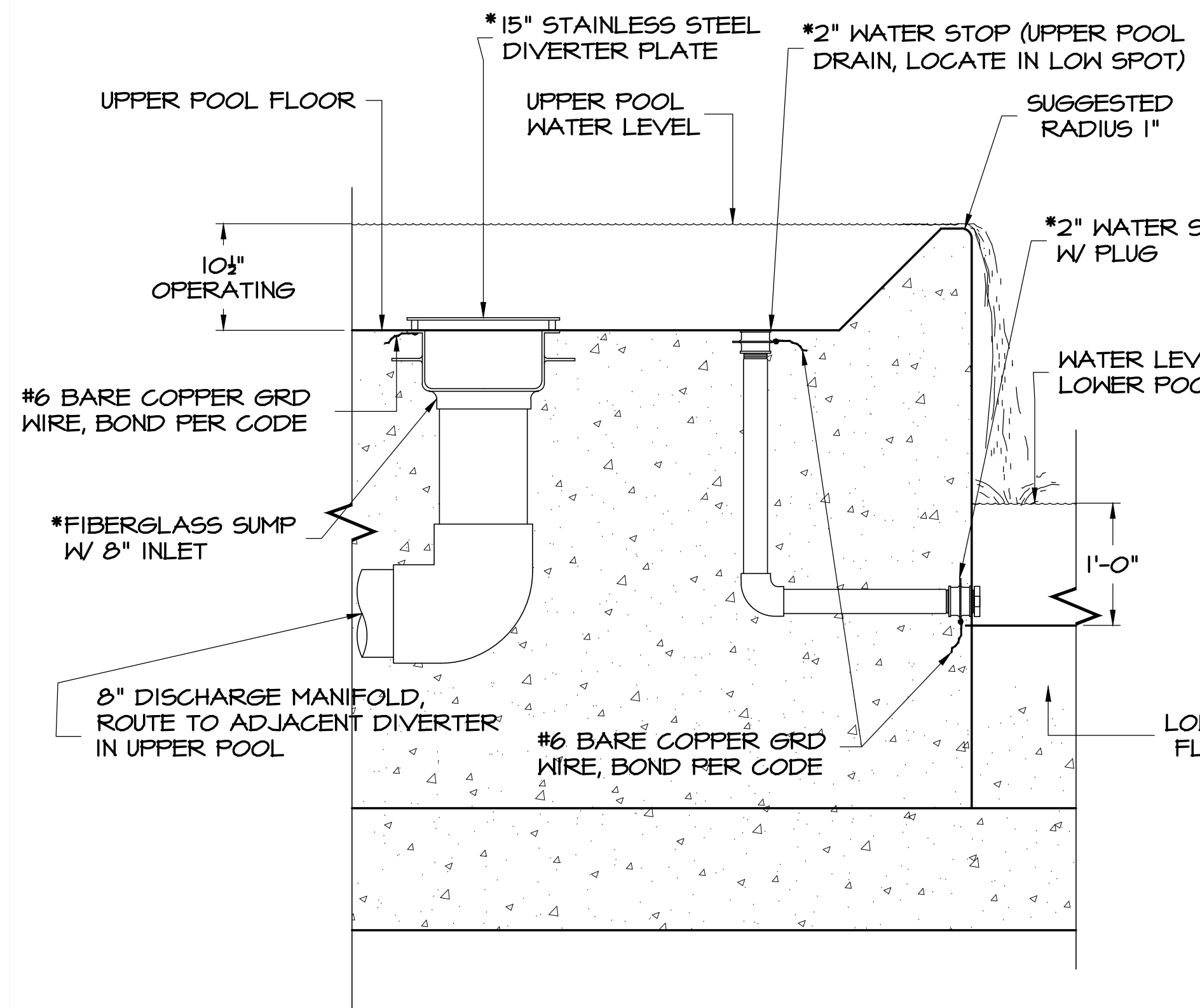


ROCKEFELLER PARK
1916 - CENTENNIAL PLAZA - 2016
 The Cleveland Cultural Gardens Federation
FOUNTAIN PIPING & ELECTRICAL PLAN

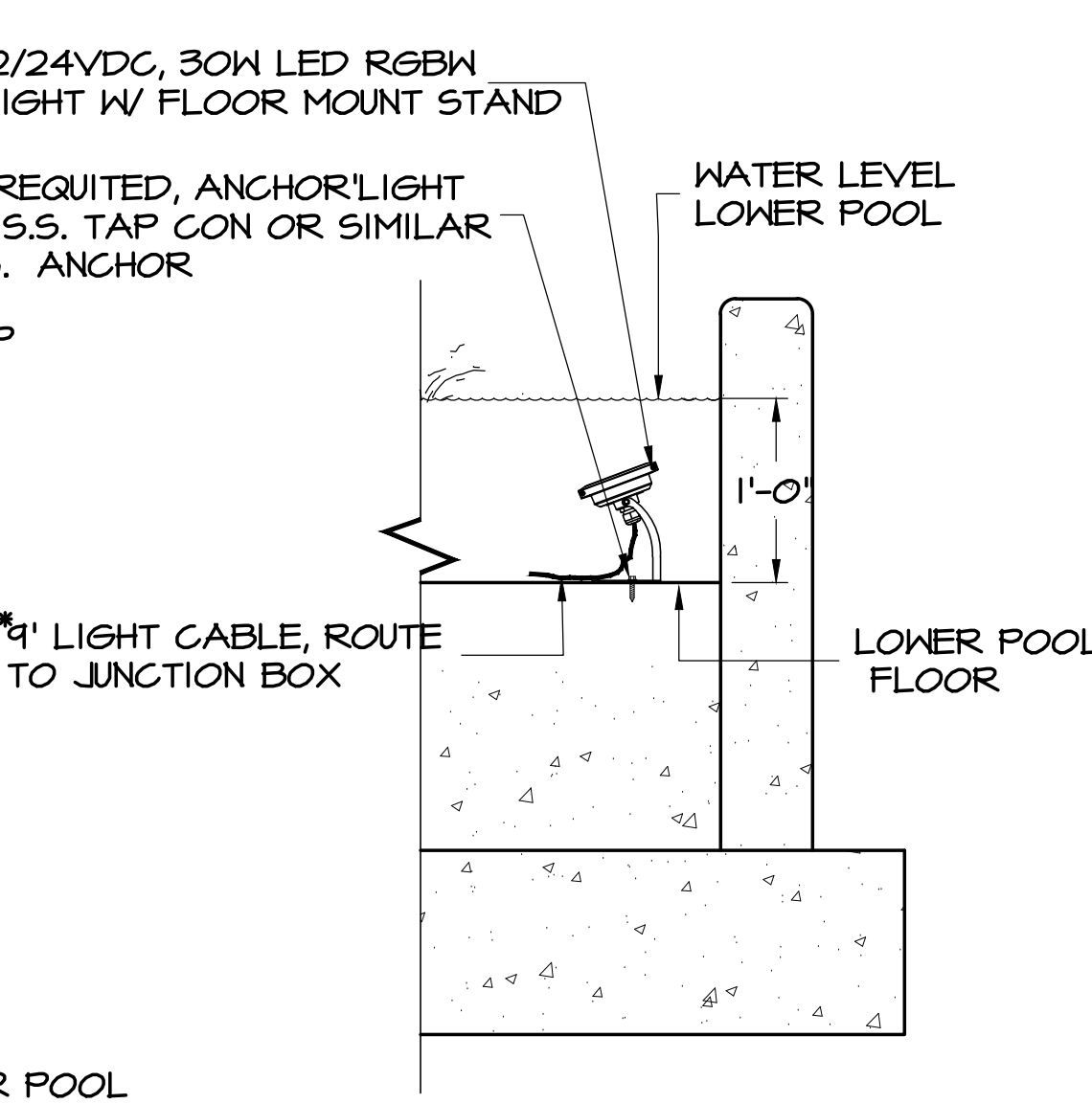
REVISIONS	

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DATE	PROJECT NO.
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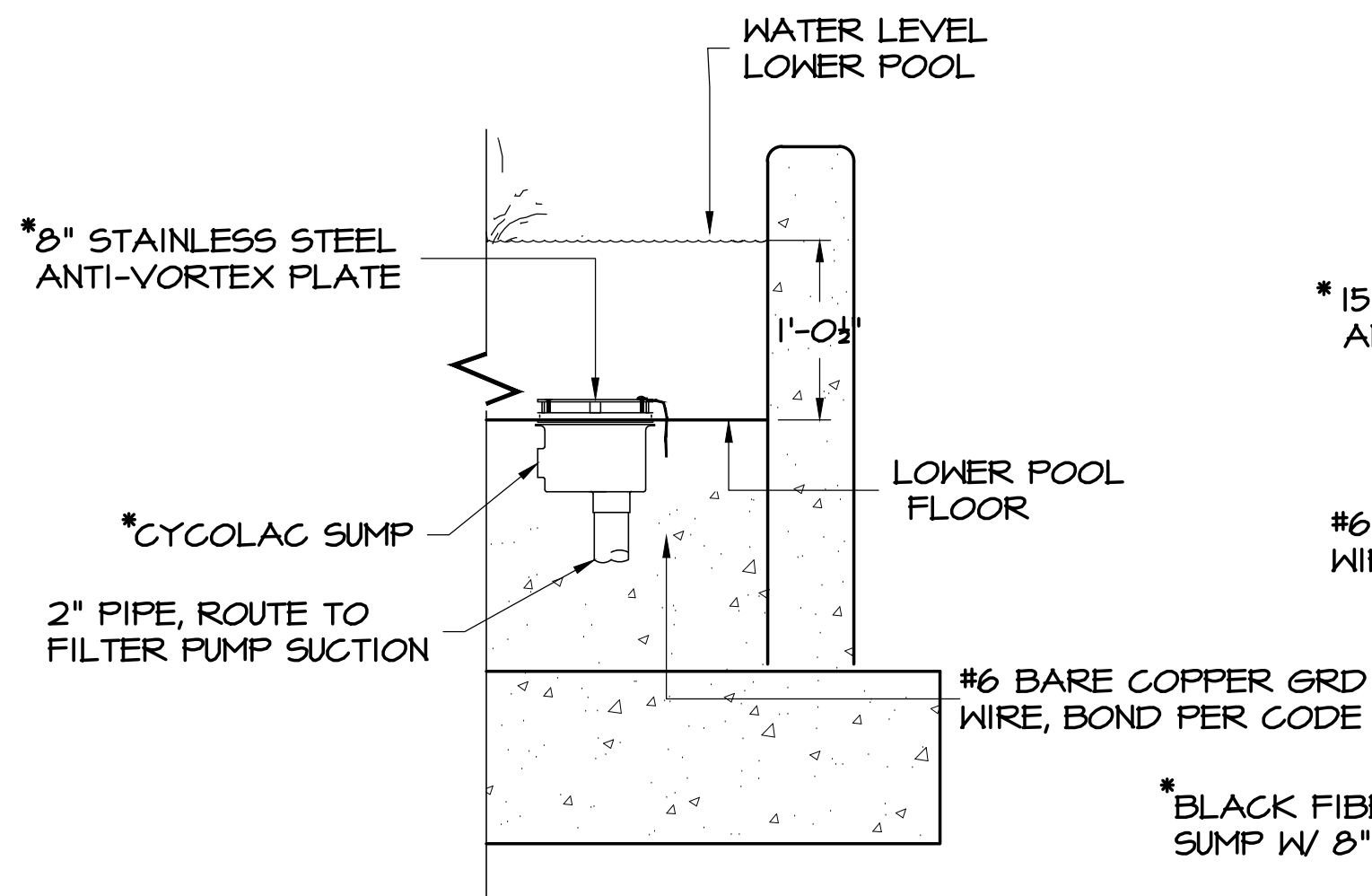
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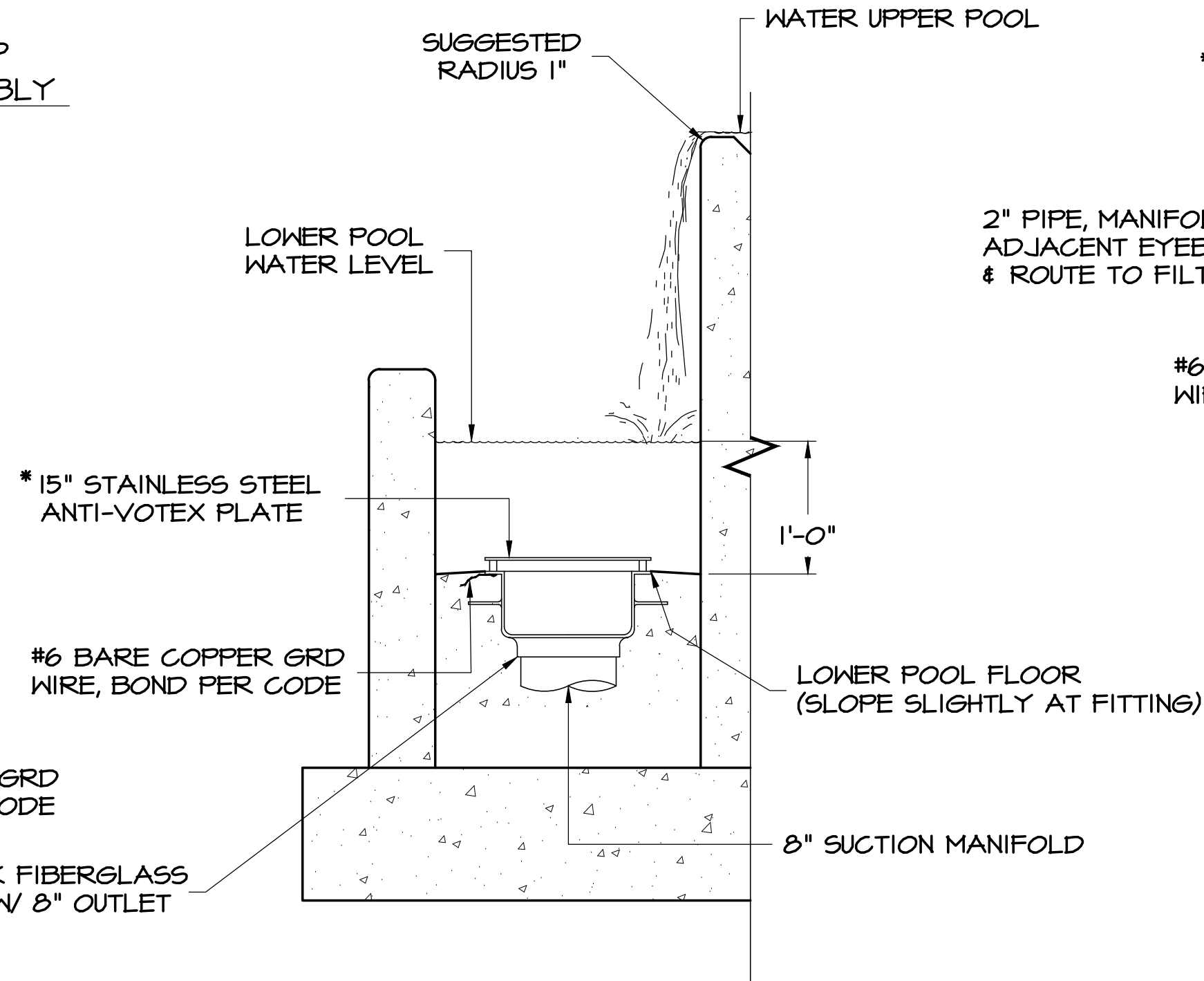
2 12/24VDC-30W LED WHITE LIGHT W/ STAND
SCALE: 1" = 1"



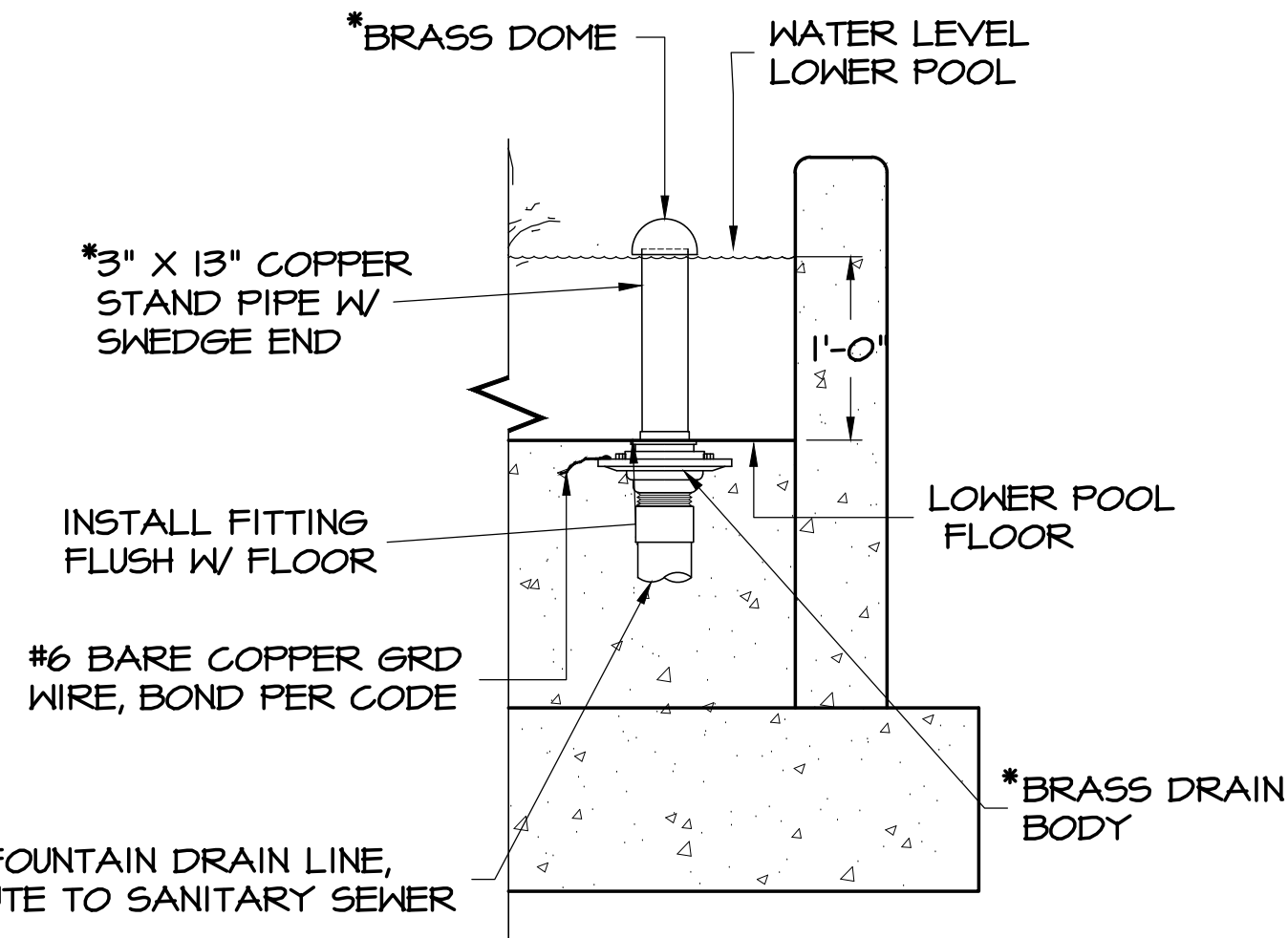
1 1A 15" DIVERTER PLATE & SUMP
& UPPER POOL DRAIN ASSEMBLY
SCALE: 1" = 1"



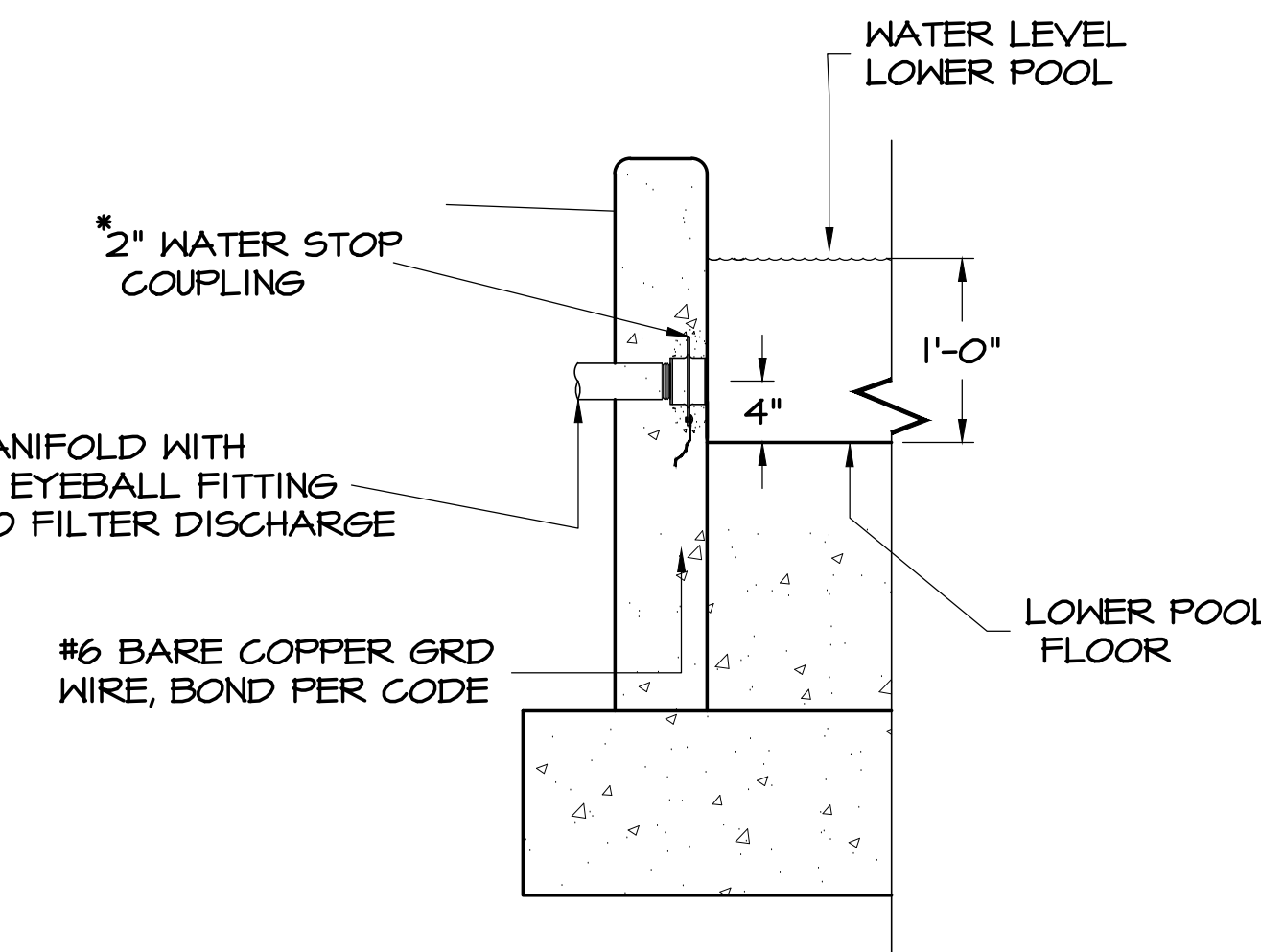
5 8" ANTI-VORTEX PLATE & SUMP
SCALE: 1" = 1"



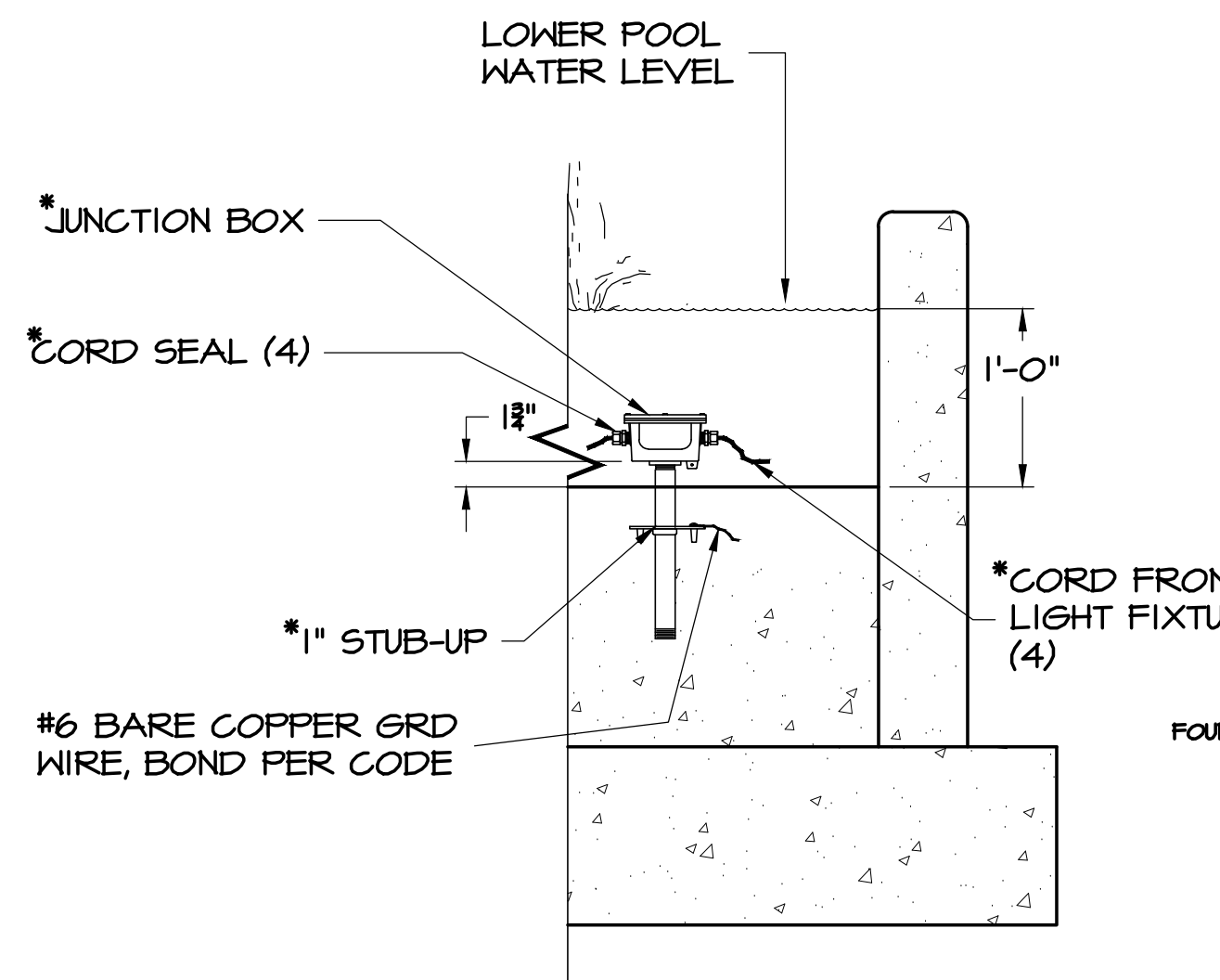
6 15" ANTI-VORTEX PLATE & SUMP
SCALE: 1" = 1"



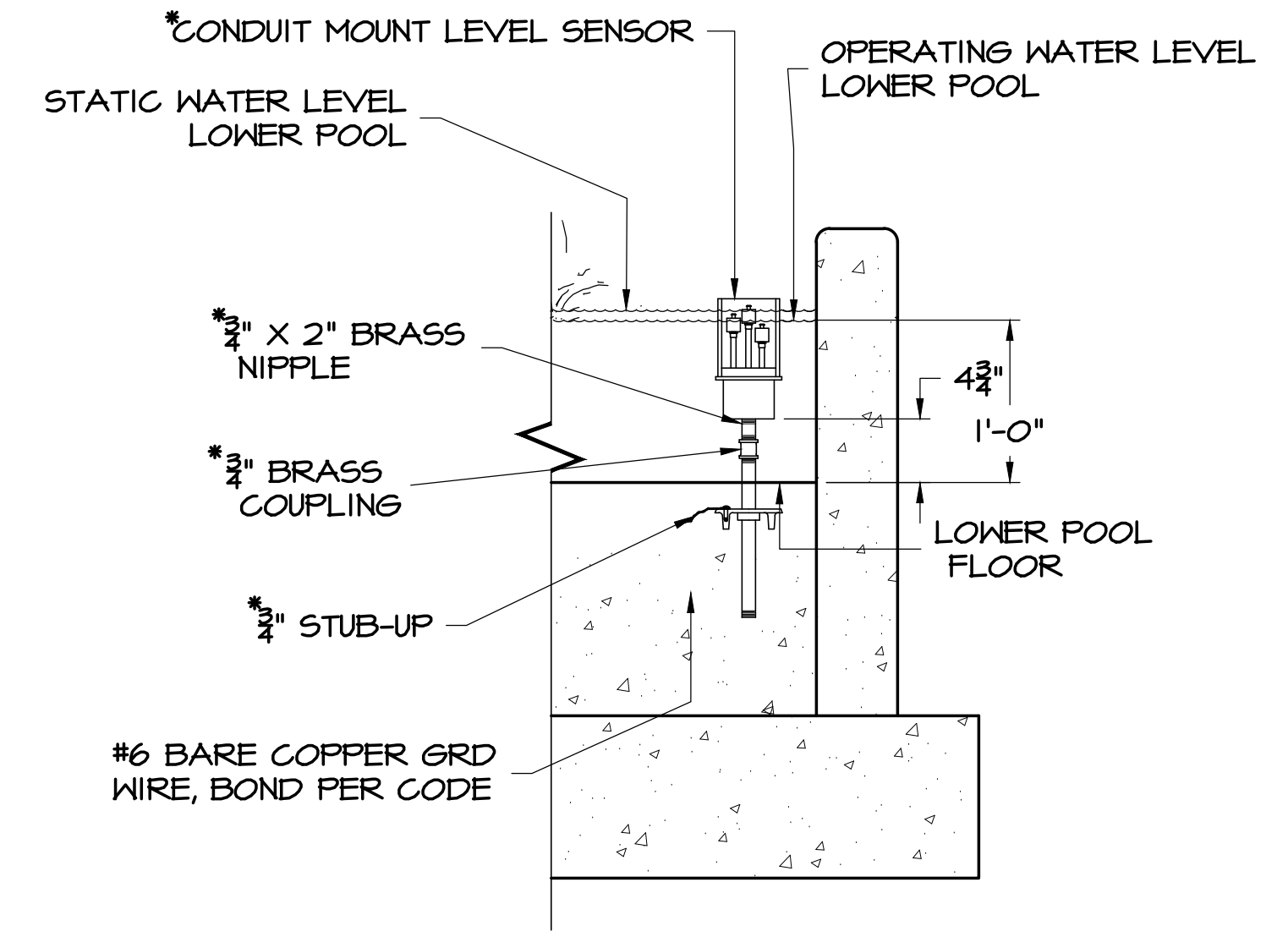
3 3" OVERFLOW STANDPIPE & DRAIN FITTING
SCALE: 1" = 1"



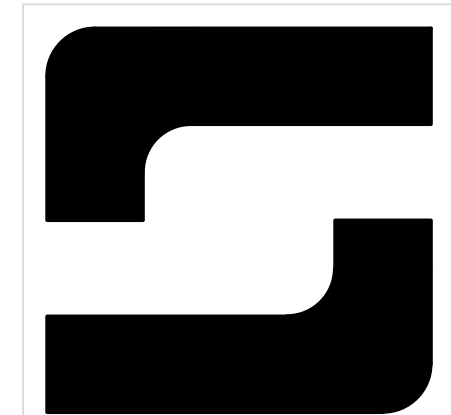
7 WATER STOP W/ ADJUSTABLE EYEBALL INLET
SCALE: 1" = 1"



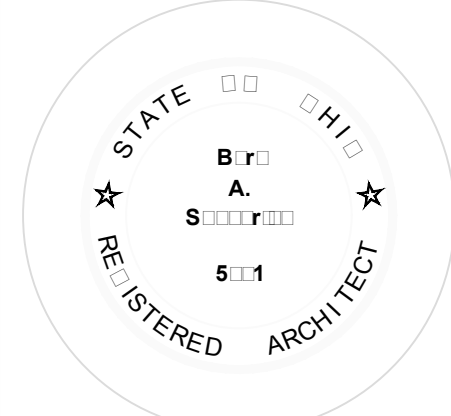
8 JUNCTION BOX W/ CORD SEALS, STUB-UP & POTTING COMPOUND
SCALE: 1" = 1"



4 CONDUIT MOUNT WATER LEVEL SENSOR
SCALE: 1" = 1"



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M.A., N.CARB., LEED AP BD+C

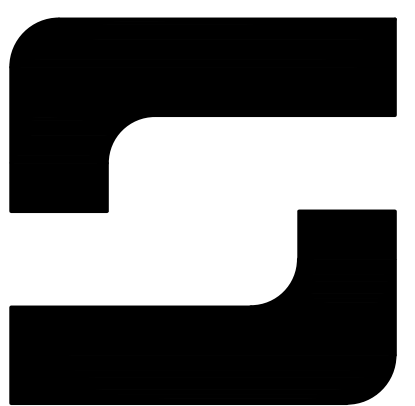


ROCKEFELLER PARK
1916 - CENTENNIAL PLAZA - 2016
The Cleveland Cultural Gardens Federation
FOUNTAIN EQUIPMENT DETAILS

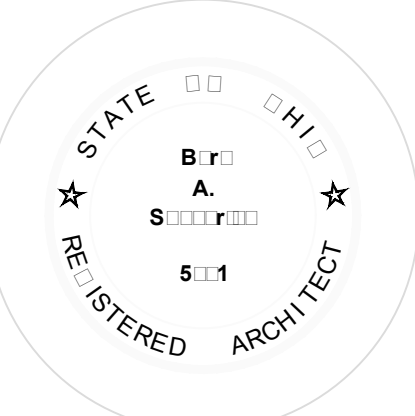
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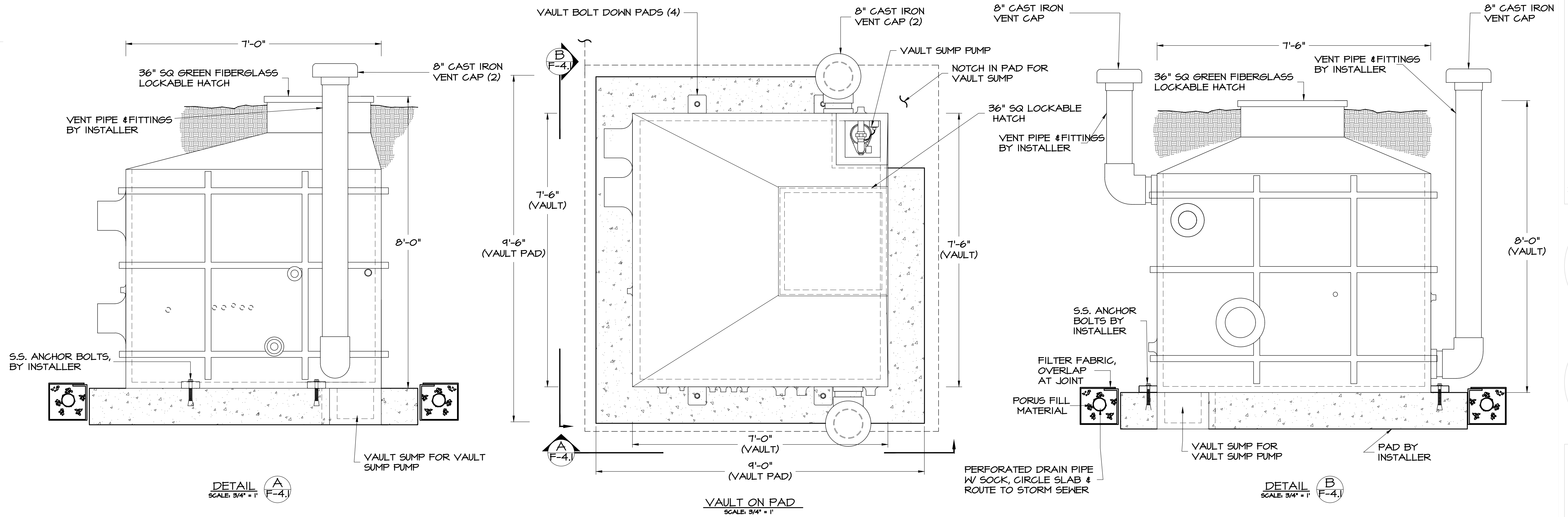
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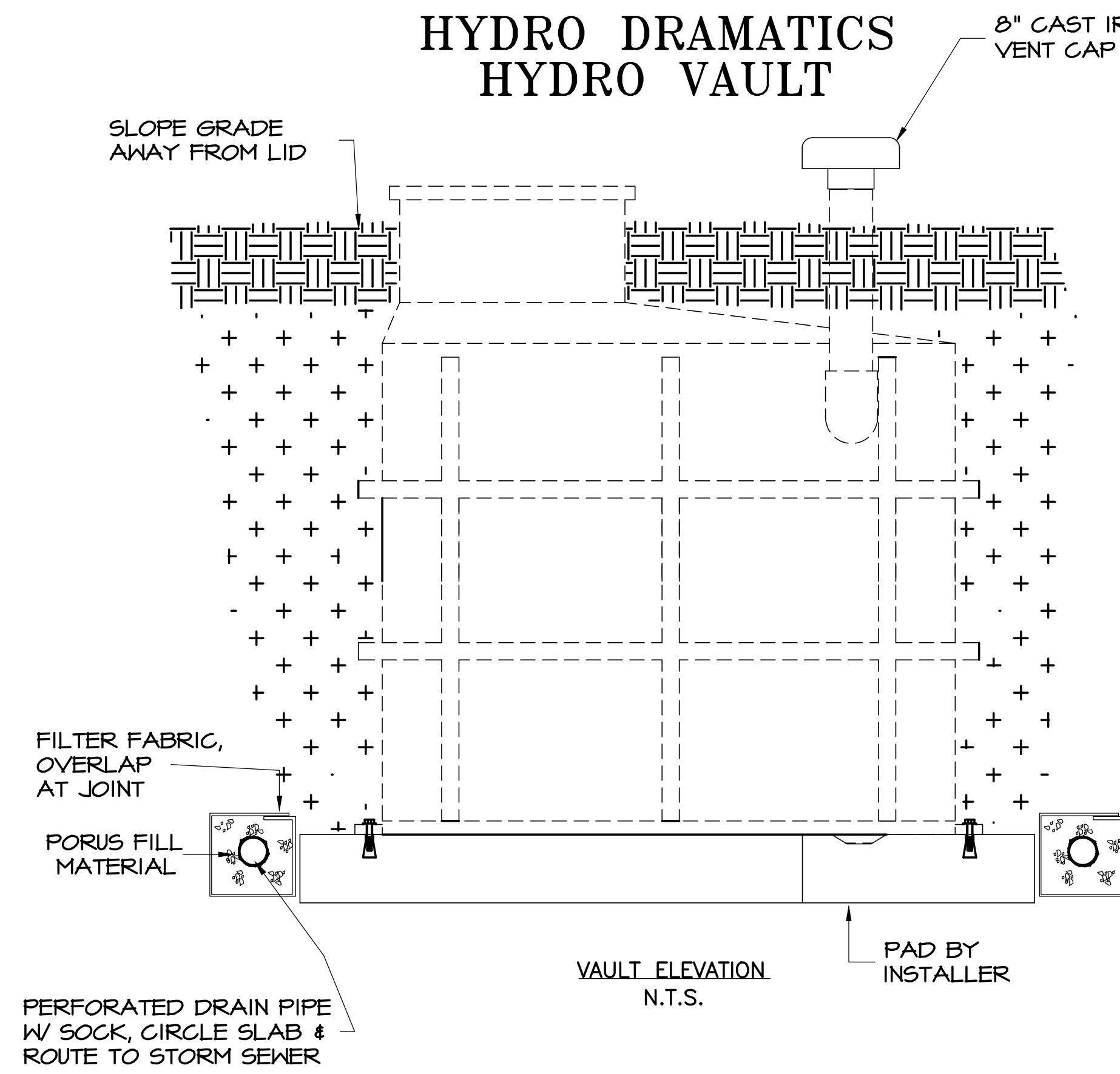
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VAULT EXTERIOR

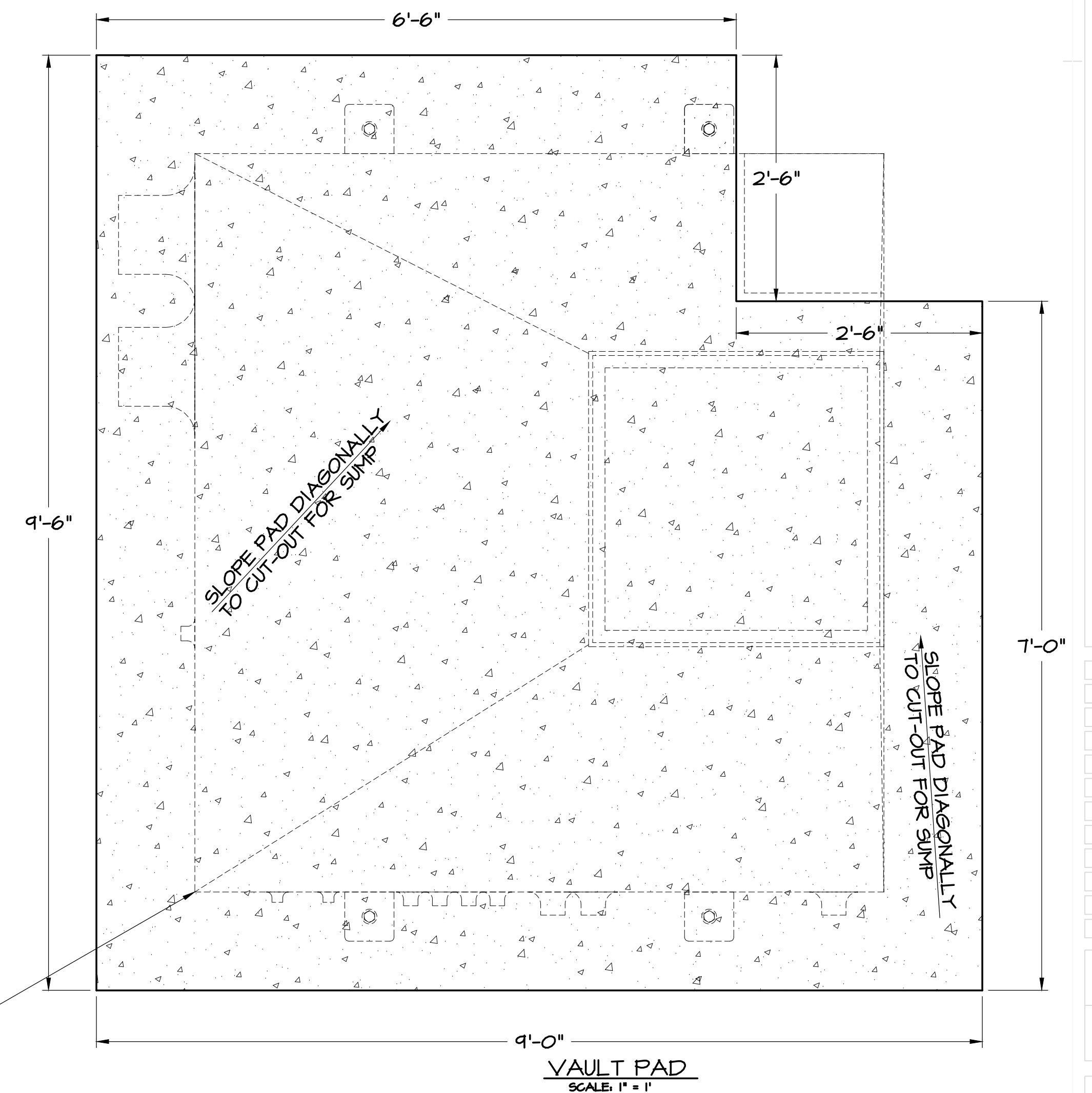


VAULT EXTERIOR
SCALE: 3/4" = 1"



"HYDRO-VAULT" INSTALLATION NOTES

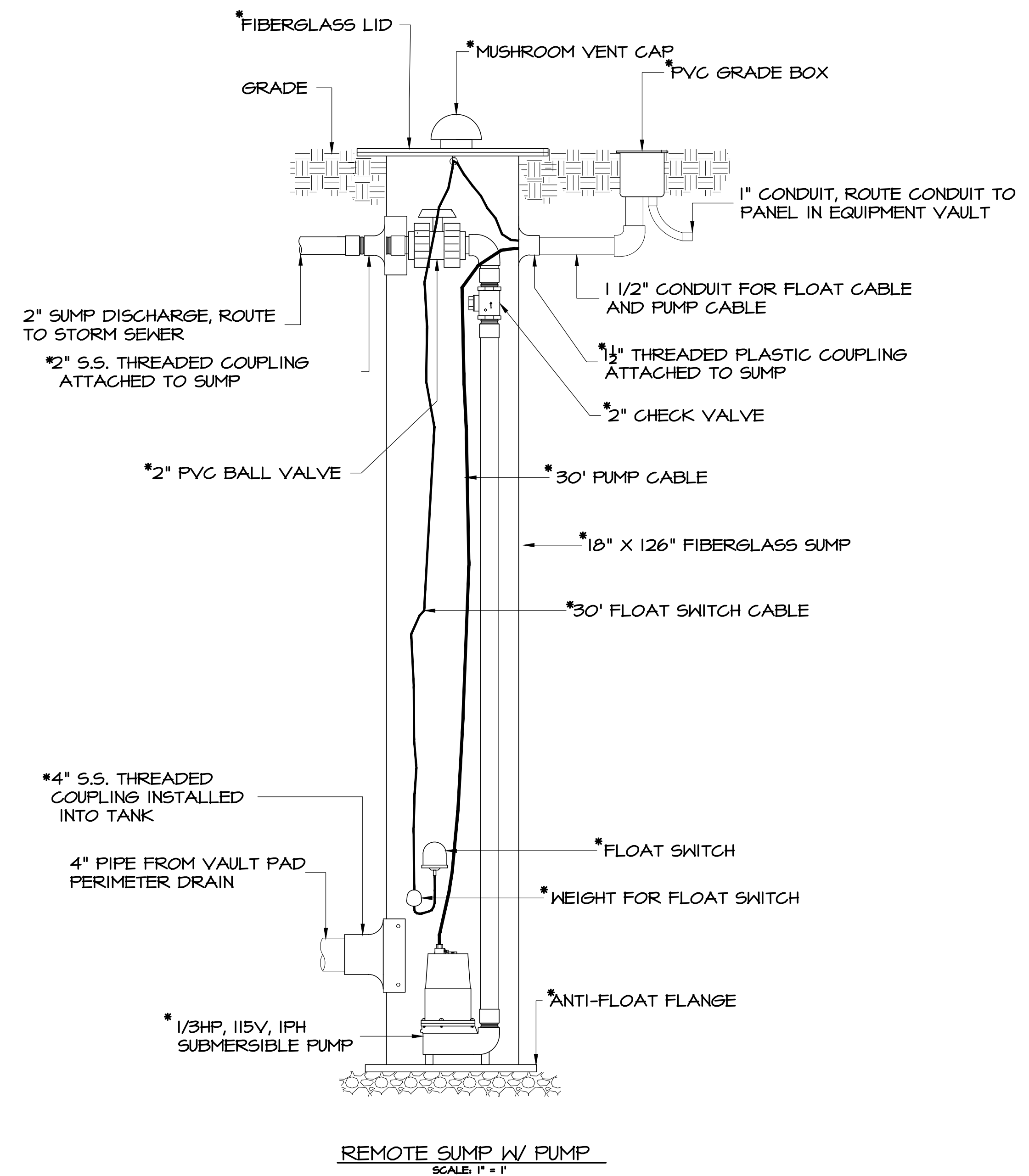
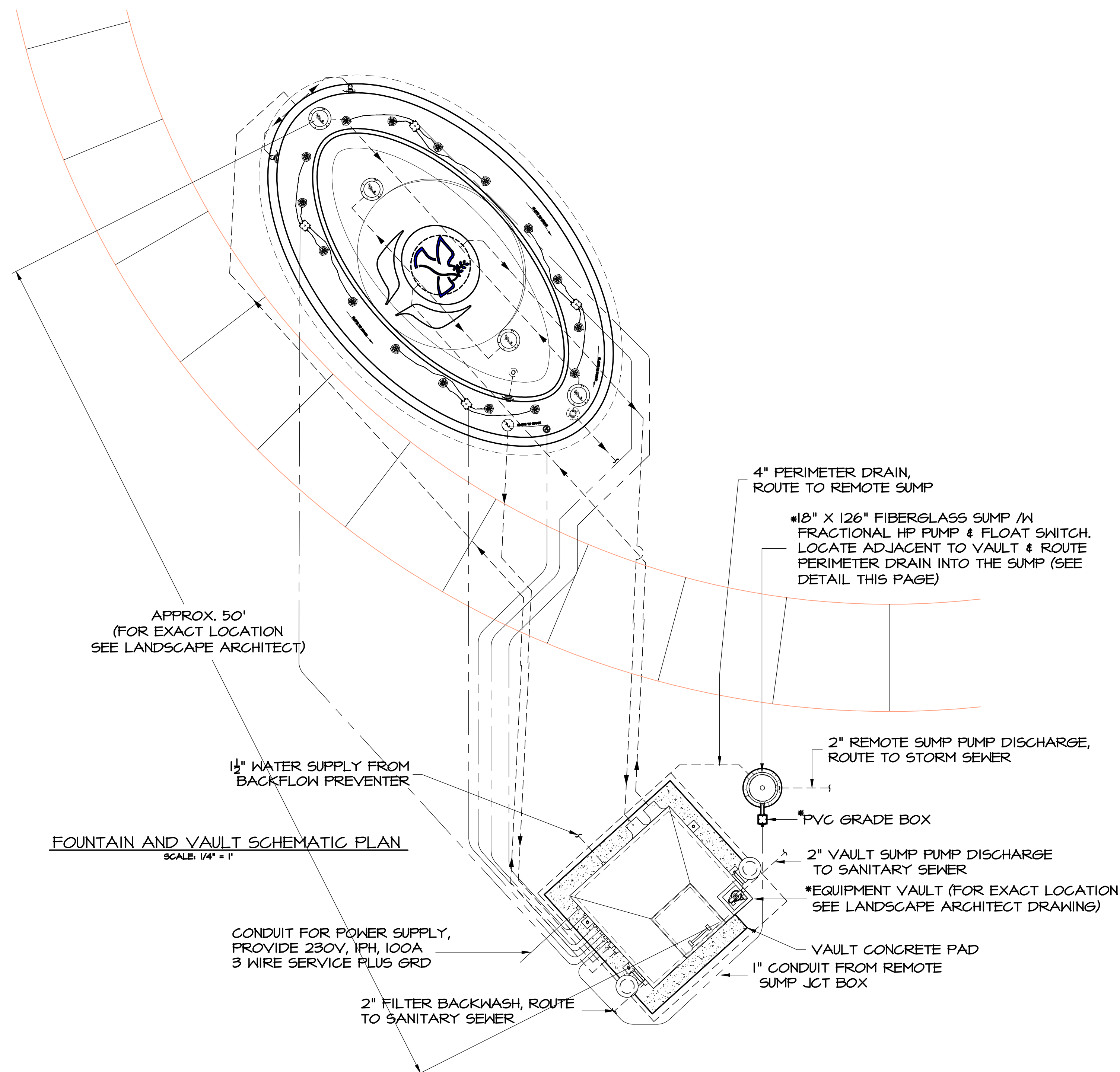
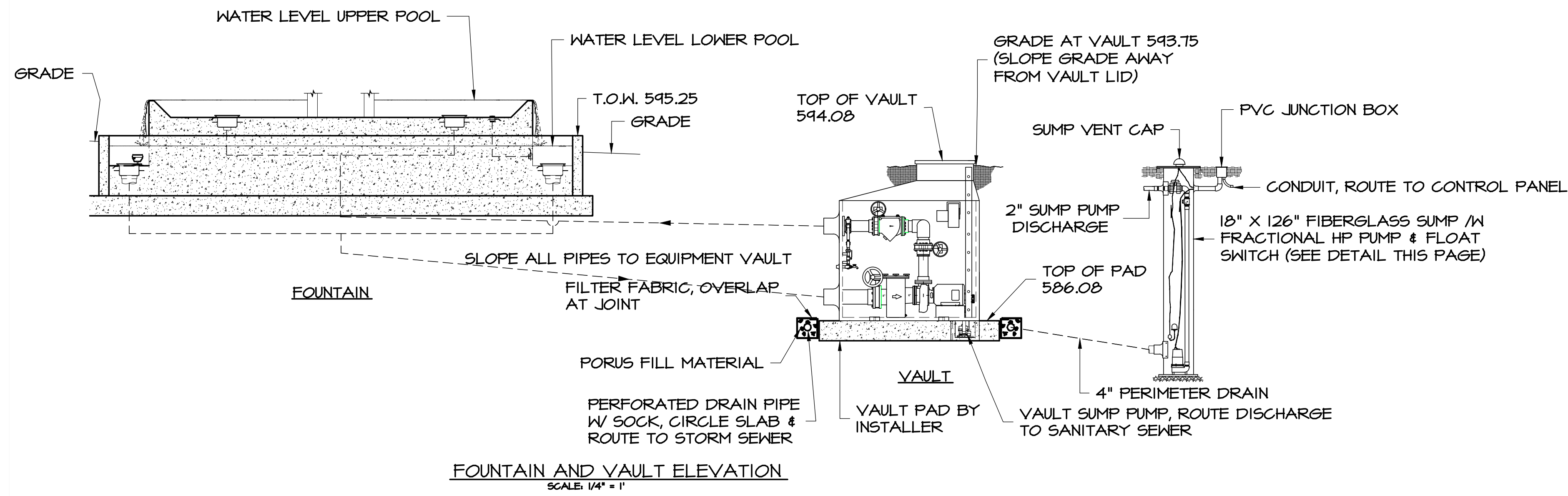
1. CHECK "HYDRO VAULT" ON ARRIVAL FOR INTERIOR AND EXTERIOR SHIPPING DAMAGE.
2. STORE "HYDRO VAULT" IN A DRY AREA. WATER WILL DAMAGE VAULT ELECTRICAL EQUIPMENT.
3. PRECAUTIONS, BASED ON LOCAL CONDITIONS, MUST BE TAKEN TO PREVENT ANY MOVEMENT OF THE "HYDRO VAULT".
4. PROVIDE ADEQUATE DRAINAGE TO REMOVE WATER FROM "HYDRO VAULT" LOCATION. VAULT MUST NOT STAND IN WATER.
5. PROVIDE ADEQUATE INTERIOR BRACING DURING BACKFILLING TO PREVENT DAMAGE TO FIBERGLASS SHELL.
6. EXTEND VENT PIPES TO AN ELEVATION THAT WILL PREVENT WATER FROM ENTERING.
7. INSTALL SCREEN WIRE OR OTHER MATERIAL ON VENT PIPES TO KEEP OUT VERMIN AND INSECTS.
8. USE ONLY NYLON STRAPPING FOR RIGGING. DO NOT USE CHAINS.
9. FOR BEDDING AND BACKFILL USE CLEAN PEA GRAVEL TYPE MATERIAL, A, NATURALLY ROUNDED AGGREGATE OF 1/4" NOMINAL SIZE, RANGING FROM 1/8" TO 3/4" DIA., CLEAN AND FREE FLOWING. IF GRAVEL IS NOT AVAILABLE, CLEAN STONE CRUSHINGS 1/8" TO 1/2" DIA., CLEAN AND FREE FLOWING, MAY BE USED.
10. NEVER TURN OFF ELECTRICITY TO "HYDRO VAULT" EXCEPT WHEN MAINTENANCE IS REQUIRED. SUMP PUMP AND FAN SHOULD REMAIN OPERATIONAL AT ALL TIMES.
11. IMMEDIATELY UPON SETTING VAULT IN EXCAVATION, HOOK-UP ELECTRIC TO SUMP PUMP AND OR CONNECT DRAIN PIPE. PIPE DISCHARGE AWAY FROM EXCAVATION.



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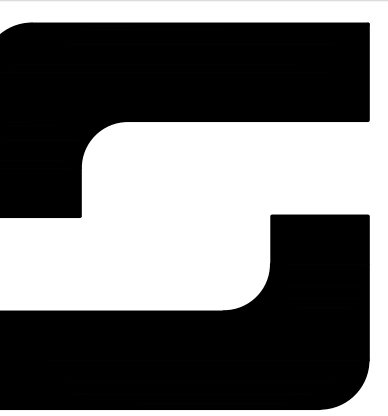


PLUMBING NOTES:

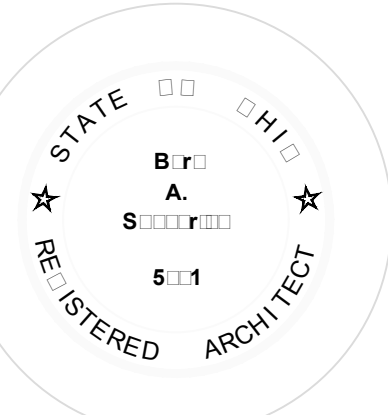
- ① PIPING LOCATIONS ARE DIAGRAMMATIC ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION REFERENCE
- ② AN ASTERISK (*) INDICATES EQUIPMENT PROVIDED BY HYDRO DRAMATICS, ALL ELSE BY FOUNTAIN CONTRACTOR
- ③ ALL DIRECTIONAL CHANGES IN PIPING SHOULD BE RESTRAINED WITH THRUST BLOCKS
- ④ ALL PIPING TEES SHOULD BE EQUAL IN SIZE TO THAT OF THE LARGEST CONNECTED PIPE
- ⑤ ALL PIPING TO BE PIPED EQUAL IN LENGTH, ELEVATION NUMBER OF FITTINGS, ETC. TO PROVIDE EQUAL SUPPLY AND / OR RETURN FROM FITTING OR NOZZLE
- ⑥ ALL PIPING TO FOUNTAIN COMPONENTS TO BE FURNISHED AND INSTALLED BY PLUMBING CONTRACTOR, INCLUDING PIPE, FITTINGS, BOLTS, NUTS, GASKETS AND ANY PIPE SUPPORTS OR HANGERS.
- ⑦ ALL SUCTION PIPING SHALL BE SCHEDULE 40 PVC PRESSURE PIPE AND FITTINGS. ALL DISCHARGE PIPING SMALLER THAN 4" SHALL BE SCHEDULE 40 PVC PRESSURE PIPE & FITTINGS. ALL DISCHARGE PIPING 4" AND LARGER SHALL BE SCHEDULE 80 PVC PRESSURE PIPE AND FITTINGS.
- ⑧ ALL SUCTION AND DISCHARGE PIPING SHALL HAVE AN UNINTERRUPTED 2% MINIMUM SLOPE BACK TO THE VAULT OR EQUIPMENT ROOM (WHICHEVER APPLICABLE) TO INSURE PROPER DRAINAGE DURING COLD WEATHER. ANY EXISTING CONSTRUCTION SHOULD BE CORE DRILLED, ANY NEW CONSTRUCTION SHOULD BE SLEEVED TO ALLOW LINES TO PASS THROUGH WITHOUT ALTERING THE SLOPE OF THE PIPE. IF A WATER TRAP IS UNAVOIDABLE, EITHER DRAIN VALVES SHOULD BE INSTALLED AT THE LOW SPOT OR PIPES SHOULD BE BLOWN OUT AND PLUGGED TO AVOID FREEZING.
- ⑨ ELECTRICAL COMPONENTS ARE SHOWN FOR LOCATION REFERENCES ONLY.
- ⑩ DO NOT SCALE DRAWINGS.
- ⑪ ALL POOL FITTINGS AND EQUIPMENT SHALL BE LOCATED TO PROVIDE ACCESSIBILITY AFTER ALL ARCHITECTURAL COMPONENTS ARE COMPLETE.

ELECTRICAL NOTES:

- ① ALL METAL IN CONCRETE MUST BE GROUNDED WITH #8 BARE COPPER WIRES TO REBAR. IF REBAR IS EPOXY COATED OR NOT USED, INSTALL GROUND ROD, AND GROUND FITTING TO GROUND.
- ② ALL EQUIPMENT, DEVICES AND COMPONENTS ARE TO BE INSTALLED IN ACCORDANCE WITH THE NEC AND ANY OTHER APPLICABLE CODES. THE ROUTES, LOCATIONS, ETC. INDICATED ARE DIAGRAMMATIC AND IT IS THE INTENT THAT THESE ARE INSTALLED IN ACCORDANCE WITH THE APPLICABLE CODES. ANY OTHER APPLICABLE CODES.
- ③ ANY ELECTRIC PENETRATIONS THROUGH CONCRETE MUST BE RED BRASS PIPE (R.B.P.).
- ④ AN ASTERISK ** INDICATES EQUIPMENT PROVIDED BY HYDRO DRAMATICS, ALL ELSE BY FOUNTAIN CONTRACTOR.
- ⑤ ALL CONDUIT \ ELECTRICAL PENETRATIONS MUST BE VERTICALLY PLUMB.
- ⑥ ALL WIRE INSIDE CONDUIT SHOULD BE THIN COPPER.
- ⑦ JUNCTION BOXES MUST BE INSTALLED LEVEL, HAVE SEALED CONDUIT ENTRANCES, AND BE FILLED WITH AN APPROVED POTTING COMPOUND.
- ⑧ ALL LIGHTING CIRCUITS MUST HAVE SEPARATE NEUTRALS FOR G.F.I. CIRCUITS.
- ⑨ ALL CONDUIT AND WIRING TO FOUNTAIN COMPONENTS SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
- ⑩ CONDUIT LOCATIONS ARE DIAGRAMMATIC ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION REFERENCE.
- ⑪ DO NOT SCALE DRAWINGS.
- ⑫ PLUMBING COMPONENTS ARE SHOWN FOR LOCATION REFERENCE ONLY.
- ⑬ ALL ELECTRICAL FITTINGS AND EQUIPMENT SHALL BE LOCATED TO PROVIDE ACCESSIBILITY AFTER ALL ARCHITECTURAL COMPONENTS ARE COMPLETE.



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 MA, NCARB, LEED AP BD+C



ROCKEFELLER PARK
1916 - CENTENNIAL PLAZA - 2016
 The Cleveland Cultural Gardens Federation
FOUNTAIN OVERALL PLAN & ELEVATIONS

REVISIONS

NO.	DATE	DESCRIPTION

DRAWN DEH SCALE AS SHOWN
 DATE 12/15/2018 PROJECT NO.

SHEET NO.

PLUMBING NOTES

- PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE PLUMBING SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED, AND AS REQUIRED BY STATE AND LOCAL CODES.
- ANY EXISTING CONDITIONS SHOWN ON DRAWINGS REFLECT INFORMATION FURNISHED BY THE OWNER AND ARE ACCURATE TO THE BEST KNOWLEDGE OF THE ENGINEER. FIELD CONDITIONS MAY VARY FROM THOSE SHOWN ON DRAWINGS. THE CONTRACTOR IS TO MAKE ARCHITECT/OWNER'S REPRESENTATIVE AWARE OF ANY DISCREPANCIES BETWEEN DRAWINGS AND ACTUAL FIELD CONDITIONS PRIOR TO COMMENCING WORK.
- PRIOR TO COMMENCING WORK, PLUMBING CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION OF SERVICES, INVERT ELEVATIONS OF UNDERFLOOR SANITARY LINES, AND SIZES OF PIPING TO BE RE-USED.
- CONTRACT DOCUMENT DRAWINGS FOR PLUMBING WORK ARE DIAGRAMMATIC AND ARE INTENDED TO CONVEY SCOPE AND GENERAL ARRANGEMENT ONLY.
- INSTALL ALL PLUMBING FIXTURES, EQUIPMENT, AND APPURTENANCES IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS, CONTRACT DOCUMENTS, AND APPLICABLE CODES AND REGULATIONS.
- THE LOCATIONS OF ALL ITEMS SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS THAT ARE NOT DEFINITELY FIXED BY DIMENSIONS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS NECESSARY TO SECURE THE BEST CONDITIONS AND RESULTS MUST BE DETERMINED BY THE PROJECT SITE CONDITIONS AND SHALL HAVE THE APPROVAL OF THE ENGINEER BEFORE BEING INSTALLED. DO NOT SCALE DRAWINGS.
- COORDINATE CONSTRUCTION OF ALL PLUMBING WORK WITH ARCHITECTURAL, STRUCTURAL, CIVIL, ELECTRICAL, ETC., SHOWN ON OTHER CONTRACT DOCUMENT DRAWINGS.
- COORDINATE EXACT LOCATIONS OF ALL GAS, COLD WATER, AND MAKE-UP WATER CONNECTIONS TO HVAC EQUIPMENT AND EXACT LOCATIONS OF FLOOR AND HUB DRAINS FOR HVAC EQUIPMENT WITH THE HVAC CONTRACTOR PRIOR TO INSTALLATION.
- ALL PLUMBING WORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED. OFFSETS IN PIPING AROUND OBSTRUCTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO OWNER.
- VERIFY EXACT LOCATIONS OF ALL FLOOR AND ROOF DRAINS WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR PROPER PLACEMENT WITH RESPECT TO SLOPES. COORDINATE THE INSTALLATION WITH THE APPROPRIATE CONTRACTOR.
- UNLESS OTHERWISE INDICATED, PLUMBING WORK STOPS AT A POINT 5'-0" OUTSIDE THE BUILDING. COORDINATE EXACT LOCATION INCLUDING INVERT ELEVATION WITH SITE UTILITY CONTRACTOR.
- MAINTAIN A MINIMUM OF 6'-8" CLEARANCE TO UNDERSIDE OF PIPES AND SUSPENDED EQUIPMENT THROUGHOUT ACCESS ROUTES IN MECHANICAL ROOMS.
- ALL TESTS SHALL BE COMPLETED BEFORE ANY PLUMBING EQUIPMENT OR PIPING INSULATION IS APPLIED.
- WHERE TWO OR MORE ITEMS OF THE SAME TYPE OF EQUIPMENT ARE REQUIRED, THE PRODUCT OF ONE MANUFACTURER SHALL BE USED.
- CONCRETE HOUSEKEEPING PADS TO SUIT PLUMBING EQUIPMENT SHALL BE SIZED AND LOCATED BY THE PLUMBING CONTRACTOR. MINIMUM CONCRETE PAD THICKNESS SHALL BE 4 INCHES. PAD SHALL EXTEND BEYOND THE EQUIPMENT A MINIMUM OF 4 INCHES ON EACH SIDE. CONCRETE HOUSEKEEPING PADS SHALL BE PROVIDED BY THE GENERAL CONTRACTOR. IT SHALL BE THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR TO COORDINATE SIZE AND LOCATION OF CONCRETE HOUSEKEEPING PADS WITH GENERAL CONTRACTOR & WITH APPROVAL OF THE OWNER'S REPRESENTATIVE.
- ALL MISCELLANEOUS STEEL REQUIRED TO ENSURE PROPER INSTALLATION SHALL BE FURNISHED AND INSTALLED BY THE PLUMBING CONTRACTOR.
- PROVIDE ACCESS PANELS FOR INSTALLATION IN WALLS AND CEILINGS, WHERE REQUIRED, TO SERVICE VALVES AND OTHER CONCEALED PLUMBING EQUIPMENT. ACCESS PANELS SHALL BE TURNED OVER TO GENERAL CONTRACTOR FOR INSTALLATION.
- ALL EQUIPMENT, PIPING, ETC. SHALL BE SUPPORTED AS REQUIRED TO PROVIDE A VIBRATION FREE INSTALLATION.
- PROVIDE FLEXIBLE CONNECTIONS IN ALL PIPING SYSTEMS CONNECTED TO PUMPS AND OTHER EQUIPMENT WHICH REQUIRE VIBRATION ISOLATION. FLEXIBLE CONNECTIONS SHALL BE PROVIDED AS CLOSE TO THE EQUIPMENT AS POSSIBLE OR AS INDICATED ON THE DRAWINGS.
- CONTRACTOR TO INFORM THE STRUCTURAL ENGINEER IN WRITING OF ANY SINGLE SUSPENDED LOAD IN EXCESS OF 400 LBS.
- RUN ALL SANITARY AND STORM PIPING WITH 1% MINIMUM GRADE UNLESS OTHERWISE NOTED. HORIZONTAL VENT PIPING SHALL BE GRADED TO DRIP BACK TO SOIL OR WASTE PIPE BY GRAVITY. 2" PIPING SHALL BE RUN AT 2% MINIMUM SLOPE.
- ELEVATIONS AS SHOWN ON THE DRAWINGS ARE TO THE CENTERLINE OF ALL PRESSURE PIPING AND TO THE INVERT OF ALL GRAVITY PIPING.
- ADJUST SEWER INVERTS TO KEEP TOPS OF PIPE IN LINE WHERE PIPE SIZE CHANGES.
- MAINTAIN A MINIMUM OF 4'-6" OF GROUND COVER OVER ALL UNDERGROUND WATER MAINS AND A MINIMUM OF 3'-0" OF GROUND COVER OVER ALL UNDERGROUND SEWERS AND DRAINS OUTSIDE OF BUILDING.
- PROVIDE SHUTOFF VALVES IN ALL DOMESTIC HOT AND COLD WATER PIPING SYSTEM BRANCHES.
- INSTALL PIPING SO THAT ALL VALVES, STRAINERS, UNIONS, TRAPS, FLANGES, AND OTHER APPURTENANCES REQUIRING ACCESS ARE ACCESSIBLE.
- WHERE DOMESTIC COLD AND HOT WATER PIPING DROPS INTO A CHASE, THE SIZE SHOWN FOR THE PIPE DROPS SHALL BE USED TO THE LAST FIXTURE.
- INSTALL ALL PIPING WITHOUT FORCING OR SPRINGING AND CLEAR OF DOORS AND WINDOWS.
- ALL ABOVE GROUND PIPING SHALL GRADE TO LOW POINTS. PROVIDE HOSE END DRAIN VALVES AT THE BOTTOM OF ALL RISERS AND LOW POINTS.
- ALL VALVES (EXCEPT CONTROL VALVES) AND STRAINERS SHALL BE FULL SIZE (FULL PORT) OF PIPE BEFORE REDUCING SIZE TO MAKE CONNECTIONS TO EQUIPMENT AND CONTROLS AND SHALL BE ADJUSTED FOR SMOOTH AND EASY OPERATION.
- PROVIDE CHAINWHEEL OPERATORS FOR ALL VALVES IN EQUIPMENT ROOMS MOUNTED GREATER THAN 7'-0" ABOVE FLOOR LEVEL; CHAIN SHALL EXTEND TO 5'-0" ABOVE FLOOR LEVEL.
- PROVIDE ALL PLUMBING FIXTURES AND EQUIPMENT WITH ACCESSIBLE STOPS.
- PROVIDE CLEANOUTS IN SANITARY AND STORM DRAINAGE SYSTEMS AT ENDS OF RUNS, AT CHANGES IN DIRECTION, NEAR THE BASE OF STACKS, EVERY 100 FEET IN HORIZONTAL RUNS AND ELSEWHERE AS INDICATED. ALL CLEANOUTS SHALL BE FULL SIZE OF PIPE FOR PIPE SIZES 4 INCHES AND SMALLER AND SHALL BE 4 INCHES FOR PIPE SIZES LARGER THAN 4 INCHES.
- ALL BALANCING VALVES SHALL BE PROVIDED WITH POSITION INDICATORS AND MAXIMUM ADJUSTABLE STOPS (MEMORY STOPS).
- ALL FLOOR DRAINS AND FLOOR SINKS SHALL BE TRAP PRIMED. FLOOR DRAINS IN TOILET ROOMS SHALL BE PRIMED THROUGH THE NEAREST WATER CLOSET FLUSH VALVE. ALL OTHERS SHALL HAVE DEDICATED TRAP PRIMERS.
- WATER AND DRAIN PIPING SHALL NOT BE RUN THROUGH OR ABOVE ELECTRICAL SWITCH GEAR OR ROOMS, ELEVATOR SHAFTS, ELEVATOR MACHINE ROOMS, OR TELEPHONE ROOMS.
- THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COMPONENTS, ADAPTERS, AND FITTINGS TO MAKE FINAL CONNECTIONS TO ALL PLUMBING FIXTURES AS WELL AS FIXTURES PROVIDED BY OTHER CONTRACTORS.
- THE DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY; WHATEVER IS CALLED FOR IN ONE SHALL BE REQUIRED AS IF CALLED FOR IN BOTH. WHERE CONFLICTS BETWEEN THE SPECIFICATIONS AND DRAWINGS MAY OCCUR, THE MOST COSTLY OF THE TWO OPTIONS SHALL TAKE PRECEDENCE.
- ALL PLUMBING WORK IS FOR ALTERNATE #1 - FOUNTAIN ASSEMBLY.

PLUMBING ABBREVIATIONS

AAV	AIR ADMITTANCE VALVE	L	LAVATORY
AD	AREA DRAIN	LF	LAVATORY FAUCET
AFF	ABOVE FINISHED FLOOR	MB	MOP BASIN
AFG	ABOVE FINISHED GRADE	NO	NORMALLY OPEN
AG	AIR GAP	NC	NORMALLY CLOSED
BFF	BELOW FINISHED FLOOR	NPS	NOMINAL PIPE SIZE
BFG	BELOW FINISHED GRADE	PC	PLUMBING CONTRACTOR
BFP	BACKFLOW PREVENTER	PD	PUMP DISCHARGE
BOP	BOTTOM OF PIPE	PRV	PRESSURE REDUCING VALVE
CA	COMPRESSED AIR	PS	PREFAB SHOWER STALL
CO	CLEANOUT	PSIG	POUNDS PER SQUARE INCH
CW	COLD WATER (DOMESTIC)	PVC	POLYVINYL CHLORIDE
DCDA	DOUBLE CHECK DETECTOR ASSEMBLY	RD	ROOF DRAIN
DD	DECK DRAIN	RPBFP	REDUCED PRESSURE BACKFLOW PREVENTER
DN	DOWN	RPDA	REDUCED PRESSURE DETECTOR ASSEMBLY
DS	DOWNSPOUT	RP	HOT WATER RECIRCULATION PUMP
DWH	DOMESTIC WATER HEATER	RRW	RECYCLED RAINWATER
DWG(S)	DRAWING(S)	RRW	RECYCLED RAINWATER
DWV	DRAIN, WASTE, AND VENT	SAN	SANITARY
ED	EMERGENCY ROOF DRAIN	SH	SHOWER FAUCET
EDS	EMERGENCY DOWNSPOUT	SI	SEDIMENT INTERCEPTOR
EEW	EMERGENCY EYEWASH	SR	SHOWER RECEPTOR
EWC	ELECTRIC WATER COOLER	SS	SERVICE SINK
FCO	FLOOR CLEANOUT	SV	STACK VENT
FCW	FILTERED COLD WATER	TD	TRENCH DRAIN
FD	FLOOR DRAIN	TMV	THERMOSTATIC MIXING VALVE
FF	FINISHED FLOOR	TP	TRAP PRIMER
FFD	FUNNEL FLOOR DRAIN	TW	TEMPERED WATER
FG	FINISHED GRADE	TYP	TYPICAL
FHW	FILTERED HOT WATER	UG	UNDERGROUND
FS	FLOOR SINK	UR	URINAL
G	NATURAL GAS	V	VENT
GC	GENERAL CONTRACTOR	VS	VENT STACK
GW	GREASE WASTE	VTR	VENT THROUGH ROOF
HB	HOSE BIB	W	WASTE
HD	HUB DRAIN	WC	WATER CLOSET
HW	HOT WATER (DOMESTIC)	WCO	WALL CLEANOUT
HWR	HOT WATER RECIRC.	WH	WALL HYDRANT (FREEZEPROOF)
IE	INVERT ELEVATION	WS	WASTE STACK
IW	INDIRECT WASTE		
IWH	INSTANTANEOUS WATER HEATER (ELECTRIC)		

* CERTAIN ABBREVIATIONS LISTED ABOVE MAY NOT APPLY TO THIS PROJECT.

PLUMBING PIPING LEGEND

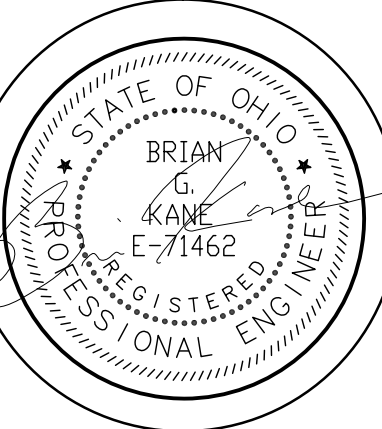
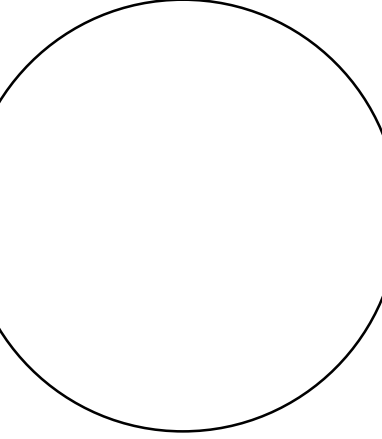
SYMBOL	DESCRIPTION
	SANITARY UNDERGROUND
	SANITARY ABOVEGROUND
	SANITARY VENT
	STORM ABOVEGROUND
	STORM UNDERGROUND
	EMERGENCY STORM
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER (F AS NOTED)
	DOMESTIC HOT WATER RECIRC
	RECYCLED RAINWATER
	NATURAL GAS
	PERFORATED PVC FOUNDATION DRAIN
	EXISTING TO BE REMOVED

* CERTAIN ITEMS IN THE LEGEND ABOVE MAY NOT APPLY TO THIS PROJECT. DARK PIPING INDICATES NEW PIPING AND LIGHT INDICATES EXISTING.

PIPING & VALVE LEGEND

	GATE VALVE
	GLOBE VALVE
	BALL VALVE
	BUTTERFLY VALVE
	PLUG VALVE
	NEEDLE VALVE
	CHECK VALVE / BACK WATER VALVE
	WYE STRAINER
	THREE-WAY VALVE
	MODULATING CONTROL VALVE
	TWO POSITION CONTROL VALVE
	THREE-WAY MODULATING CONTROL VALVE
	THREE-WAY TWO POSITION CONTROL VALVE
	MOTOR OPERATED VALVE
	SOLENOID VALVE
	PRESSURE REGULATING VALVE
	PRESSURE REDUCING VALVE
	PRESSURE RELIEF VALVE
	BACK FLOW PREVENTOR
	FLEXIBLE CONNECTION
	WATER BALANCE VALVE/CIRCUIT SETTER
	UNION
	FLANGED CONNECTION FOR EQUIPMENT REMOVAL
	BLIND FLANGE
	CAP OR PLUG
	QUICK CONNECTOR
	ELBOW - TURNED DOWN
	ELBOW - TURNED UP
	TEE - DOWN
	TEE - UP
	TOP CONNECTION
	BOTTOM CONNECTION
	REDUCER
	FLOOR DRAIN WITH TRAP
	FLOOR SINK WITH TRAP
	SHOWER HEAD
	THERMOMETER WITH THERMOWELL
	PRESSURE GAUGE VALVE SHUTOFF
	DRAIN - 3/4 INCH BALL VALVE WITH HOSE END CONNECTION WITH BRASS CAP
	VENT - 1/2 INCH BALL VALVE WITH HOSE END CONNECTION WITH BRASS CAP
	VENT THRU ROOF
	PIPE BREAK
	WATER OR NATURAL GAS METER
	CONNECT TO EXISTING
	LIMIT OF DEMOLITION

* CERTAIN ABBREVIATIONS LISTED ABOVE MAY NOT APPLY TO THIS PROJECT.



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PLUMBING LEGENDS, NOTES, AND ABBREVIATIONS

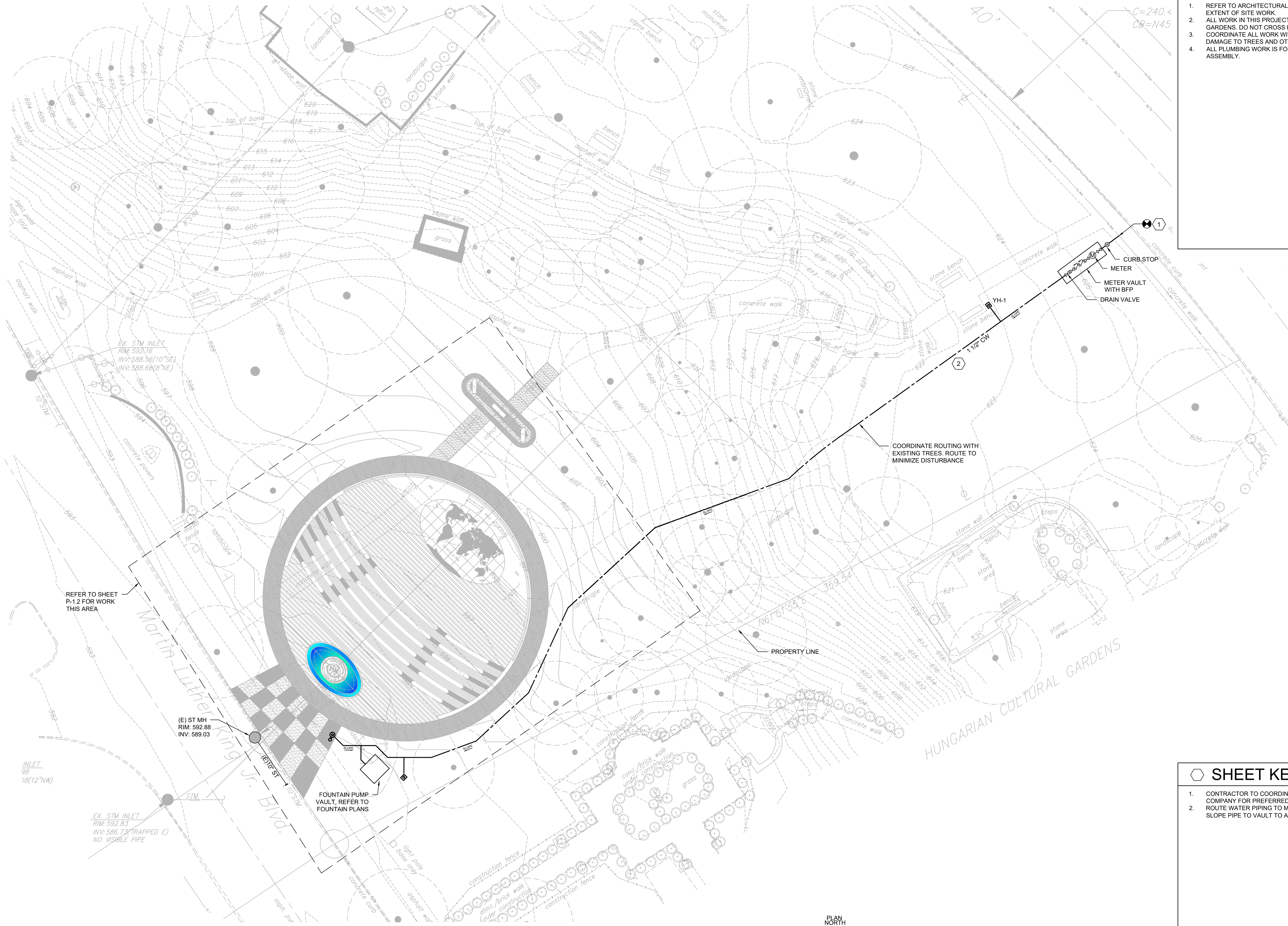
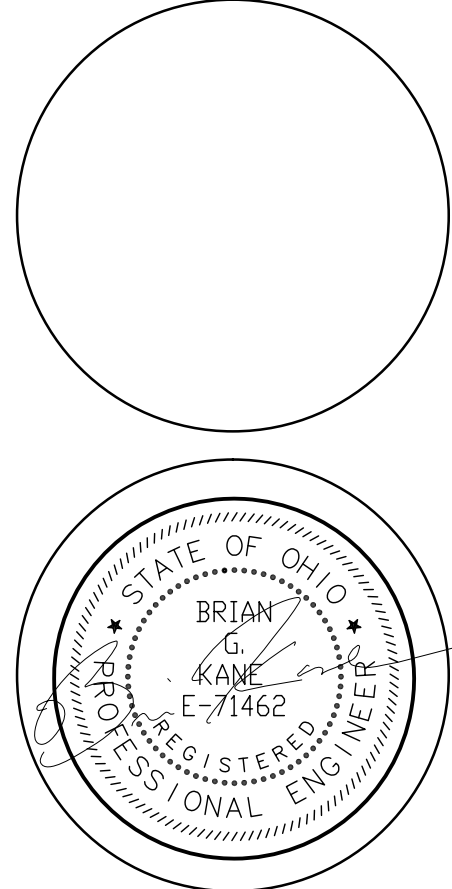
REVISIONS	
DRAWN	SCALE
SPE	SEE PLAN
DATE	PROJECT NO.
12/15/2018	J20170781.000

SHEET NO.
P-0.1

- ### GENERAL NOTES
- REFER TO ARCHITECTURAL PLANS FOR VAULT LOCATION AND EXTENT OF SITE WORK.
 - ALL WORK IN THIS PROJECT TO BE WITHIN GERMAN PORTION OF GARDENS. DO NOT CROSS PROPERTY LINE.
 - COORDINATE ALL WORK WITH EXISTING SITE CONDITIONS. LIMIT DAMAGE TO TREES AND OTHER EXISTING SITE COMPONENTS.
 - ALL PLUMBING WORK IS FOR ALTERNATE #1 - FOUNTAIN ASSEMBLY.

BERJ A. SHAKARIAN, ARCHITECT
AIA, NCARB, LEED AP BD+C

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1 ENLARGED PLUMBING PLAN (ALTERNATE 1)
SCALE: 1/8" = 1'-0"

SHEET KEYNOTES

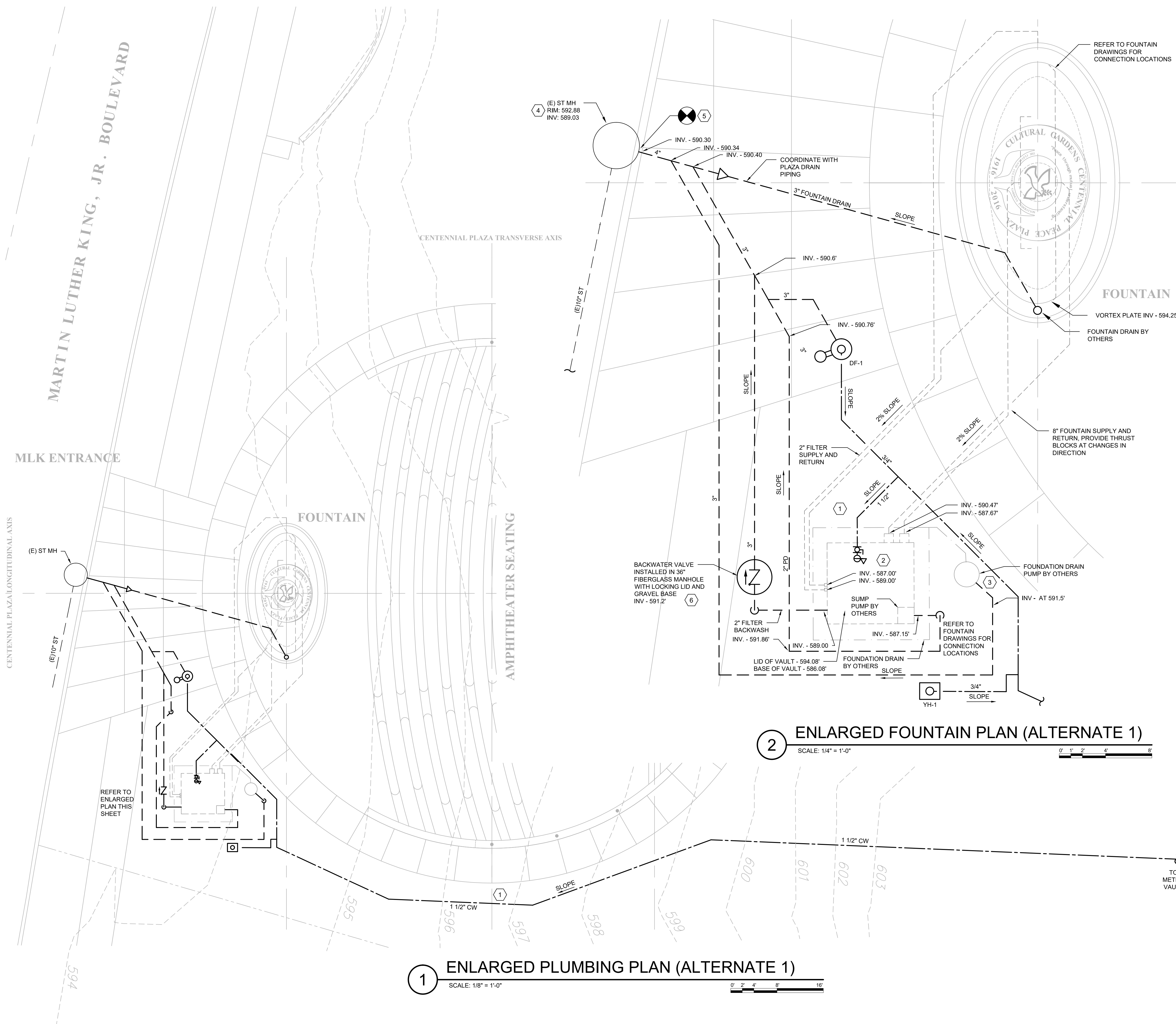
- CONTRACTOR TO COORDINATE WITH CLEVELAND WATER COMPANY FOR PREFERRED TAP LOCATION AND REQUIREMENTS.
- ROUTE WATER PIPING TO MAINTAIN DEPTH BELOW FROST LINE. SLOPE PIPE TO VAULT TO ALLOW FOR SEASONAL DRAINAGE.

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SITE PLUMBING PLAN (ALTERNATE 1)

REVISIONS	

DRAWN SPE	SCALE SEE PLAN
DATE 12/15/2018	PROJECT NO. J20170781.000

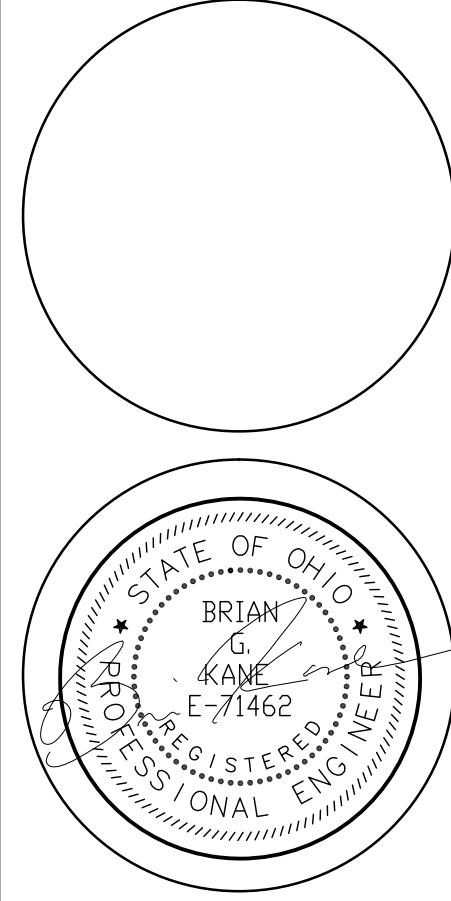
SHEET NO.
P-1.1



1 ENLARGED PLUMBING PLAN (ALTERNATE 1)
SCALE: 1/8" = 1'-0"

2 ENLARGED FOUNTAIN PLAN (ALTERNATE 1)
SCALE: 1/4" = 1'-0"

- ### GENERAL NOTES
- REFER TO ARCHITECTURAL PLANS FOR VAULT LOCATION AND EXTENT OF SITE WORK.
 - ALL WORK IN THIS PROJECT TO BE WITHIN GERMAN PORTION OF GARDENS. DO NOT CROSS PROPERTY LINE.
 - COORDINATE ALL WORK WITH EXISTING SITE CONDITIONS. LIMIT DAMAGE TO TREES AND OTHER EXISTING SITE COMPONENTS.
 - COORDINATE DRAIN PIPING WITH AMPHITHEATER DRAINAGE.
 - COORDINATE WITH FOUNTAIN DRAWINGS, SEE SHEET F.1 THROUGH FS.1.
 - ALL PLUMBING WORK IS FOR ALTERNATE #1 - FOUNTAIN ASSEMBLY.
- ### SHEET KEYNOTES
- ROUTE WATER PIPING TO ALLOW DRAINING DOWN SYSTEM WITHIN FOUNTAIN VAULT.
 - INSTALL DRAIN VALVE UPSTREAM OF CONNECTION TO FOUNTAIN EQUIPMENT. PROVIDE PRESSURE REDUCING VALVE SET TO 45 PSI.
 - COORDINATE OUTLET OF SUMP DISCHARGE WITH REQUIRED PIPE INVERT.
 - CONTRACTOR TO FIELD VERIFY EXISTING MANHOLE BEFORE STARTING WORK.
 - CORE DRILL AND PROVIDE WATER TIGHT CONNECTION FOR NEW 4" DRAIN LINE TO EXISTING MANHOLE. INV. = 590.3".
 - PROVIDE 3" BACKWATER VALVE SIMILAR TO SIOUX CHIEF PROCHECK. INSTALL BACKWATER VALVE IN Ø36" x 36" DEEP FIBERGLASS MANHOLE WITH LOCKING LID. PROVIDE GRAVEL BASE TO ALLOW MANHOLE TO DRAIN.



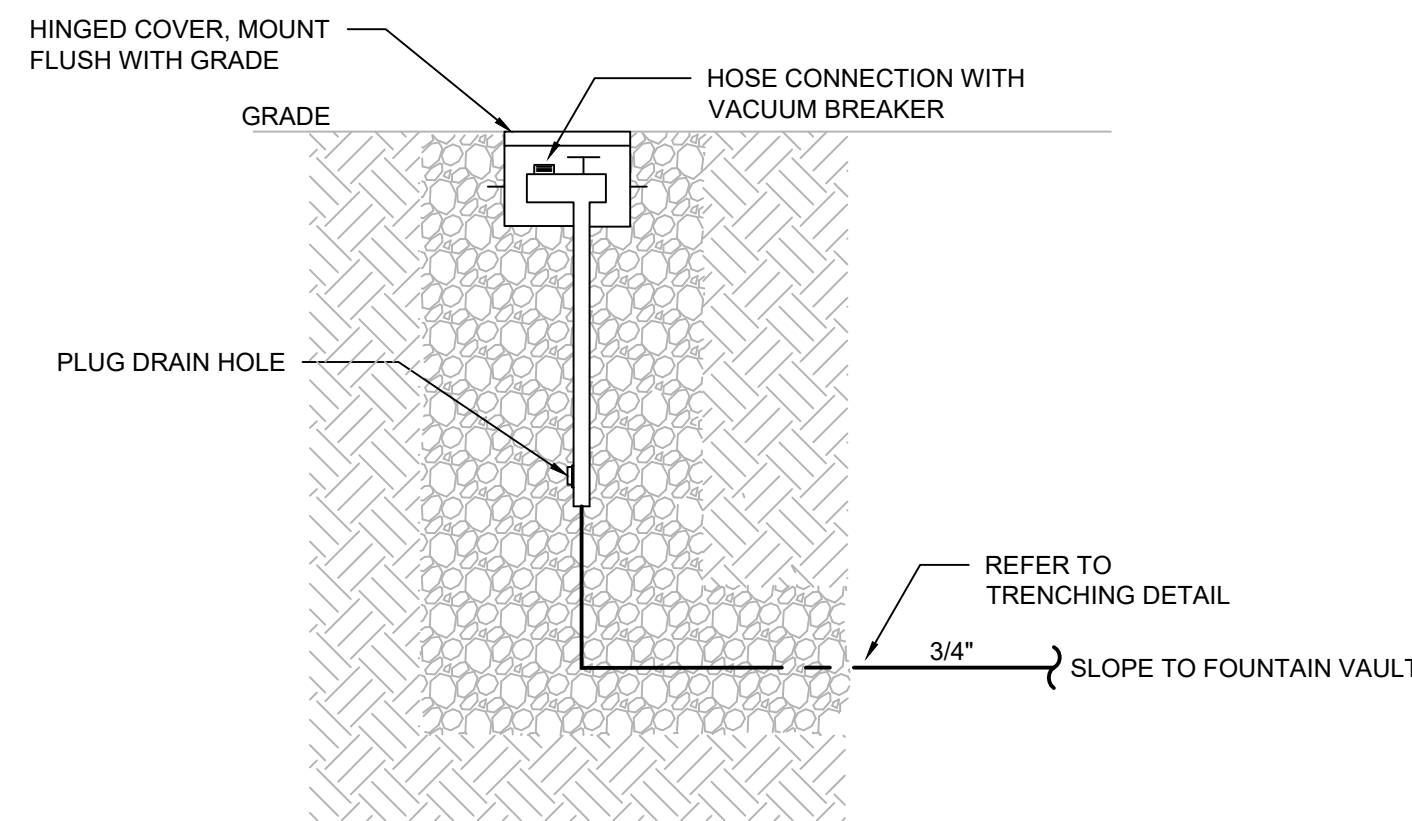
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ENLARGED PLUMBING PLAN (ALTERNATE 1)

REVISIONS	

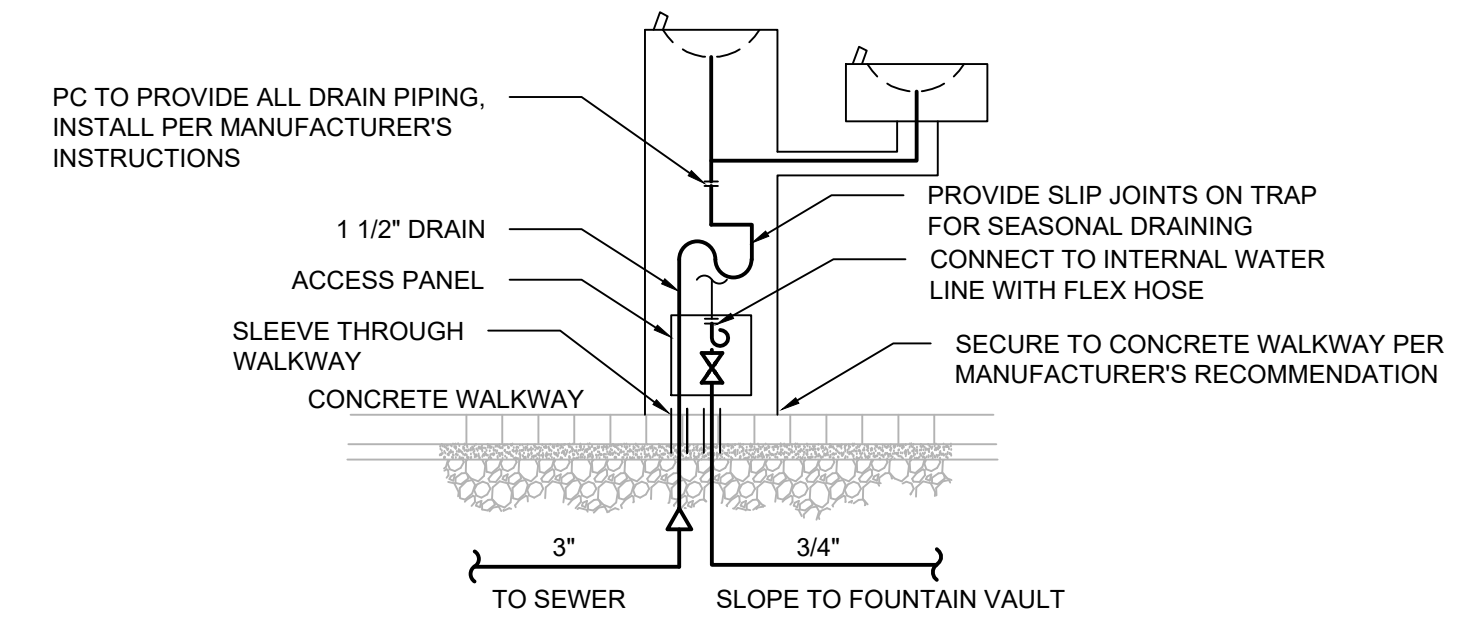
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DATE 12/15/2018	PROJECT NO. J20170781.000

GENERAL NOTE:
ALL PLUMBING WORK IS FOR ALTERNATE #1 - FOUNTAIN ASSEMBLY

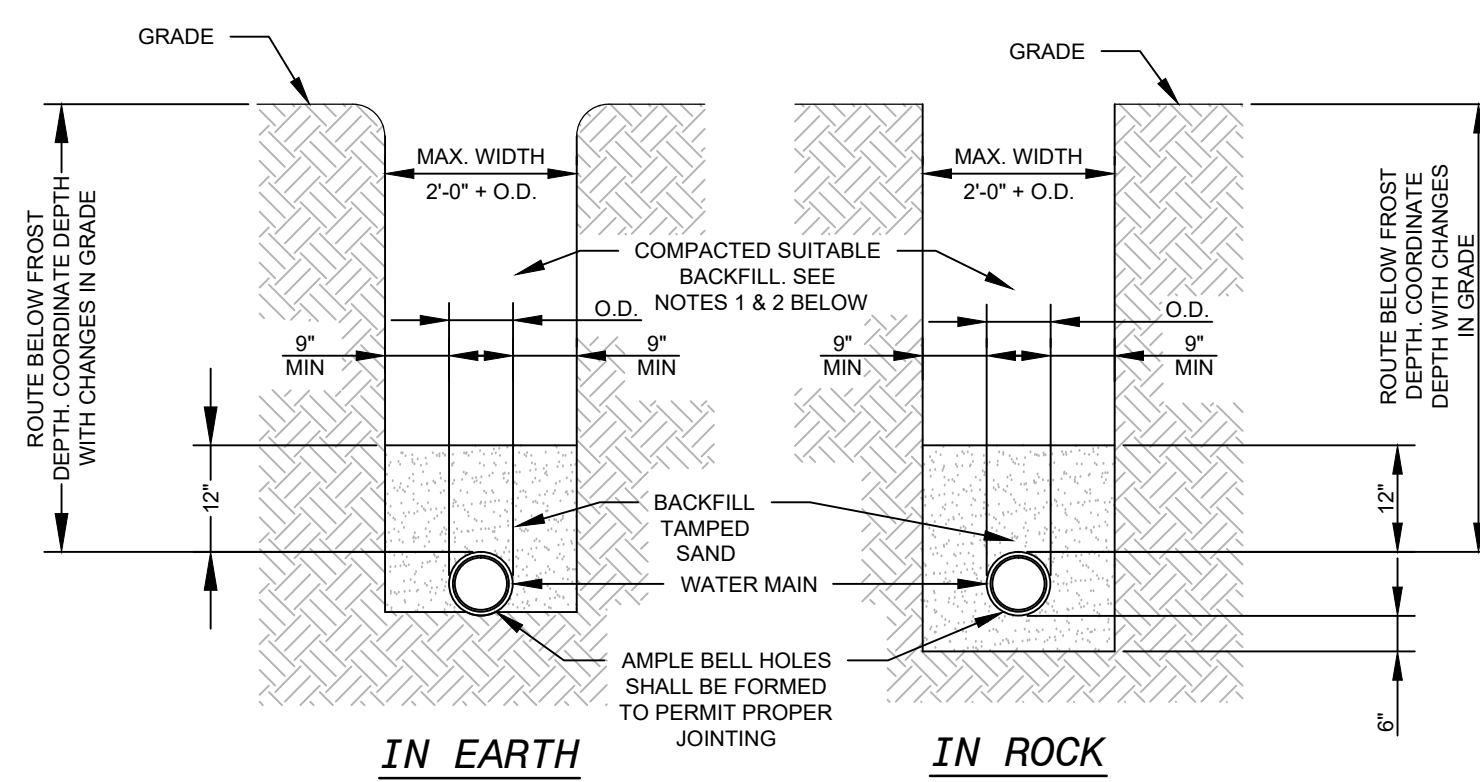
PLUMBING EQUIPMENT SCHEDULE				
MARK	COMPONENT	MFR.	MODEL	DESCRIPTION
BFP	BACKFLOW PREVENTER	WATTS	LF007	ASSE 1015 DOUBLE CHECK VALVE BACK FLOW PREVENTOR, WITH REPLACEABLE CHECKS FOR REPAIR & TESTING AND CAST IRON BODY. CONFIRM REQUIREMENTS WITH CLEVELAND WATER DEPARTMENT
DF-1	DRINKING FOUNTAIN	HALSEY TAYLOR	4420	FREE STANDING, BI-LEVEL, PEDESTAL, LAMINAR FLOW DRINKING FOUNTAIN, VANDAL RESISTANT FRONT BUTTON ACTIVATION. PROVIDE TRAP AND SHUT-OFF VALVE. COORDINATE COLOR WITH ARCHITECT
YH-1	YARD HYDRANT	WADE	8801	BRONZE, ENCASED GROUND HYDRANT, KEY OPERATED LOCK, 3/4" HOSE CONNECTION WITH VACUUM BREAKER. HEAVY DUTY HINGED COVER. PLUG DRAIN VALVE



5 YARD HYDRANT (YH-1) DETAIL
NOT TO SCALE

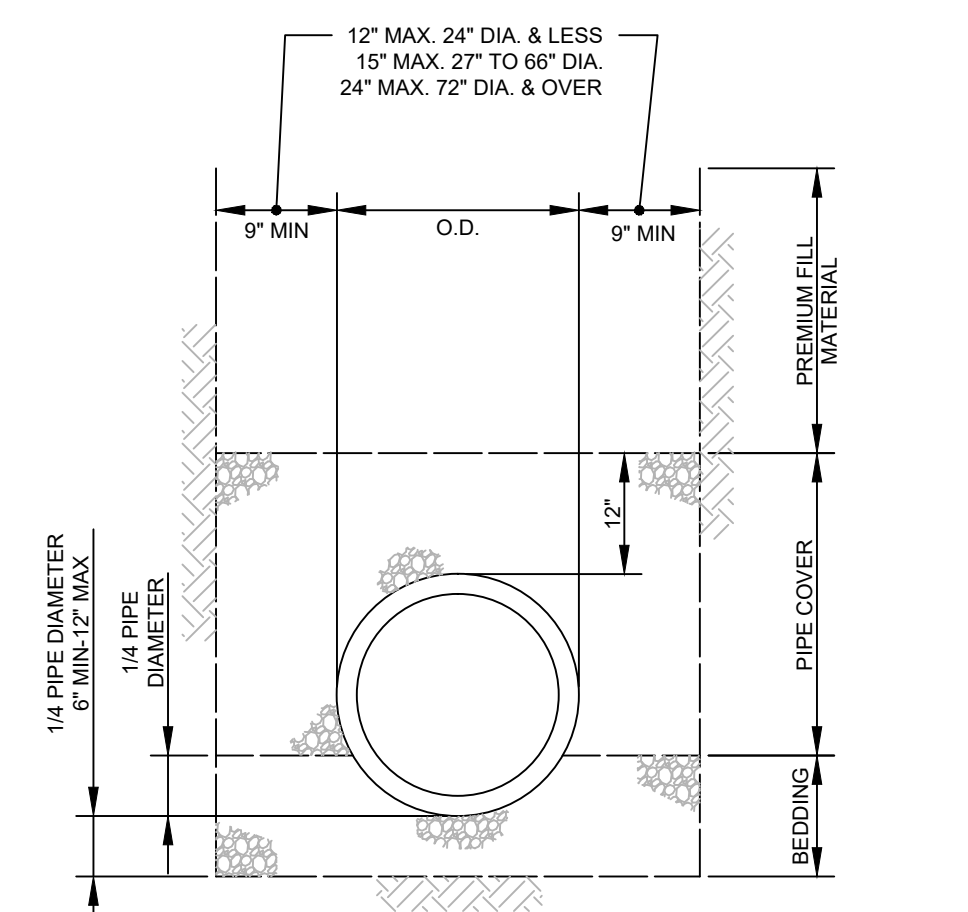


4 DRINKING FOUNTAIN DETAIL
NOT TO SCALE



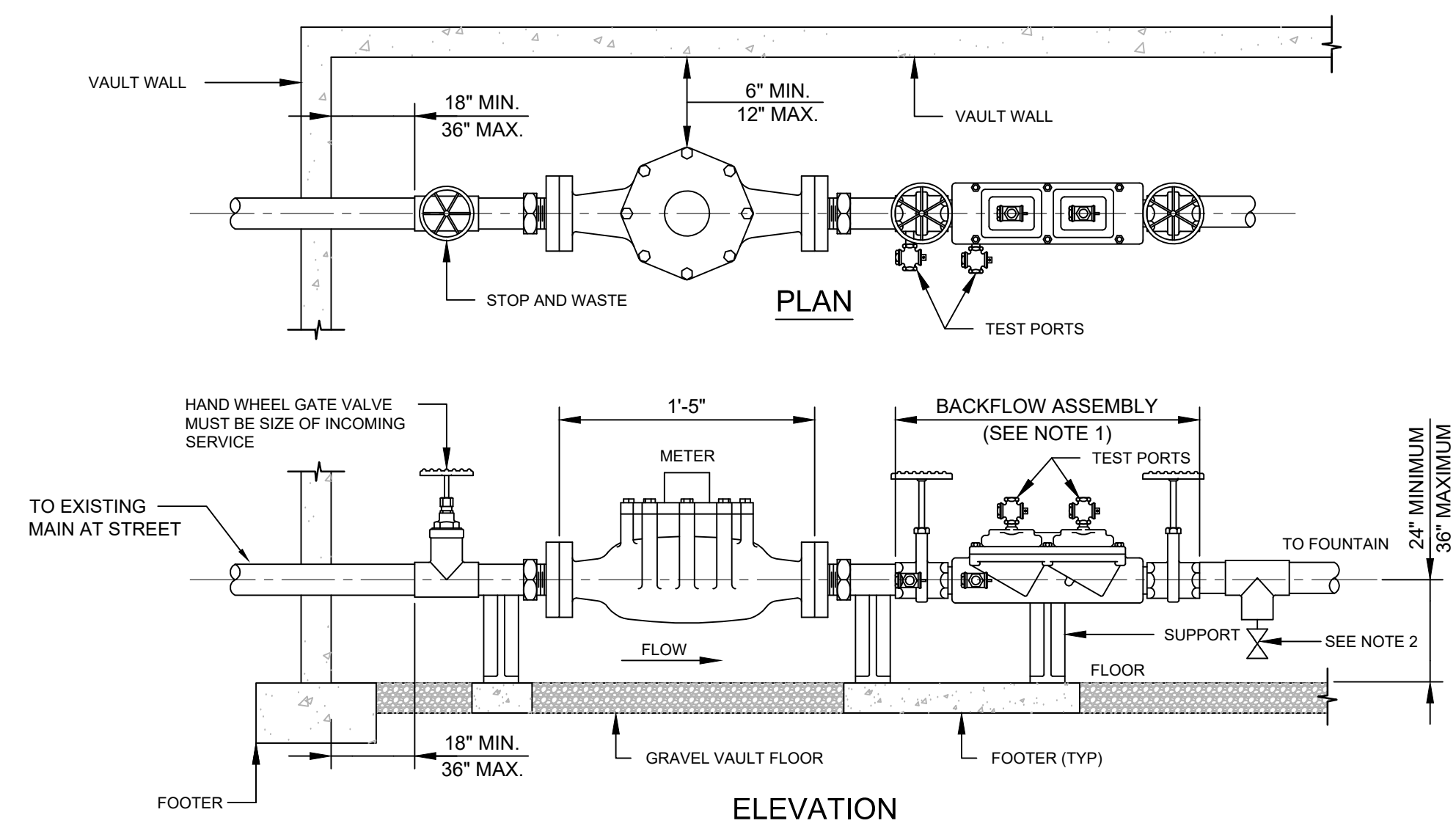
- NOTES:
- 1) PREMIUM BACKFILL REQUIRED UNDER EXISTING OR FUTURE PAVEMENTS, SIDEWALKS, AND/OR DRIVES OR WHEN REQUIRED BY LOCAL MUNICIPALITY.
 - 2) PREMIUM BACKFILL SHALL BE LIMESTONE SCREENINGS GRADED PER ODOT 304.02 OR ODOT 411. NO SLAG IS PERMITTED.
 - 3) CONTRACTOR SHALL USE SPECIAL CARE IN PLACING THE SAND BEDDING BACKFILL, SO AS TO AVOID SCRAPING OF THE EXTERIOR COATING, INJURING THE PIPE, DISTORTING OR MOVING THE PIPE WHEN COMPACTING THE SAME. THE SAND BEDDING BACKFILL SHALL BE TAMPED IN SIX (6) INCH LAYERS, SIMULTANEOUSLY ON EACH SIDE OF THE PIPE, AND THOROUGHLY COMPACTED SO AS TO PROVIDE A SOLID BACKING AGAINST THE EXTERNAL SURFACE OF THE PIPE.
 - 4) MINIMUM COMPACTION FOR ALL SAND BEDDING BACKFILL, BACKFILL AND PREMIUM BACKFILL SHALL BE 95% STANDARD PROCTOR.
 - 5) PAVEMENT, SIDEWALK OR DRIVES TO BE INSTALLED IN ACCORDANCE WITH LOCAL MUNICIPALITY'S SPECIFICATIONS.

3 WATER MAIN TRENCH DETAIL
NOT TO SCALE



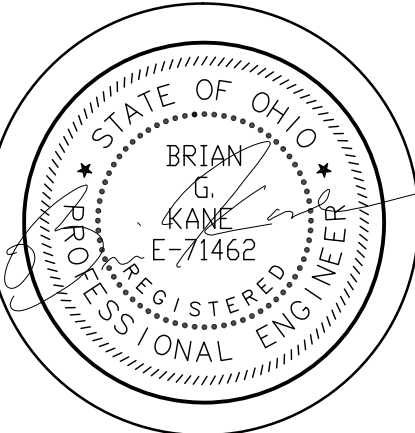
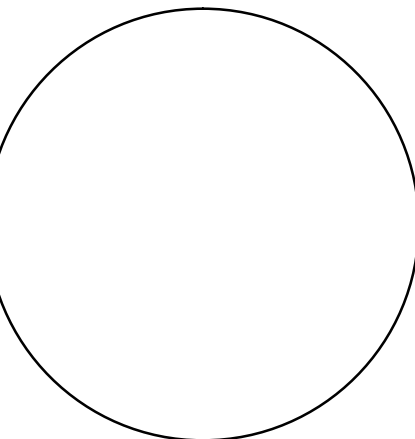
- NOTES:
- 1.) PREMIUM FILL MATERIALS SHALL CONSIST OF AGGREGATE MATERIAL PER SPECIFICATION SECTION 02050 AND SHALL BE PLACED IN ALL LOCATIONS UNDER OR WITHIN TWO (2) FEET OF PAVEMENT AND WITHIN TWENTY (20) FEET OF BUILDINGS.
 - 2.) COMMON FILL MATERIAL MAY BE USED IN OTHER AREAS.
 - 3.) PIPE COVER SHALL CONSIST OF COARSE INTERLOCKING AGGREGATE No. 6, 67, 7, 78 OR 8.
 - 4.) BEDDING SHALL CONSIST OF COARSE INTERLOCKING AGGREGATE No. 6, 67, 68, 7, 78 OR 8.

2 SEWER TRENCH DETAIL
NOT TO SCALE



- NOTES:
1. FOR TYPE AND MODEL OF BACKFLOW DEVICE REQUIRED CONTACT THE BACKFLOW UNIT AT (216) 864-3944.
 2. DRAIN/ VENT VALVE FOR WINTERIZATION IS REQUIRED. MUST BE PLACED DOWNSTREAM OF BACKFLOW PREVENTER. USE THIS VALVE AS VENT FOR DRAINING WATER LINE IN FOUNTAIN VAULT.

1 BACKFLOW ASSEMBLY FOR VAULTS
NOT TO SCALE



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PLUMBING DETAILS AND SCHEDULE

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ELECTRICAL SYMBOL LEGEND

NOTE: NOT ALL SYMBOLS ARE USED

SYMBOL	DESCRIPTION
HALF TONE LINE:	DENOTES BACKGROUND OR EXISTING
THIN SOLID LINES:	DENOTES DEVICES, EQUIPMENT, ETC. EXISTING TO REMAIN
DASHED LINES:	DENOTES DEVICES, EQUIPMENT, ETC. TO BE REMOVED
HEAVY SOLID LINES:	DENOTES NEW OR RELOCATED DEVICES, EQUIPMENT, ETC.
HEAVY PHANTOM LINES:	DENOTES NEW OR RELOCATED CONDUIT, EQUIPMENT, ETC. UNDERGROUND OR BELOW GRADE
NP-1,3,5	HOME RUN TO PANELBOARD, CIRCUIT DESIGNATION ADJACENT TO ARROW, 'NP-1,3,5' DENOTES HOMERUN TO PANELBOARD 'NP' WITH WIRING CONNECTED TO CIRCUITS 1, 3, AND 5.
-x-x-x-	GROUND CONDUCTOR (G), UNDERGROUND ELECTRICAL CONDUCTOR (E), UNDERGROUND TELEPHONE CONDUCTOR (T)
⊙	3/4-INCH BY 10 FEET 0 INCH LONG COPPER-CLAD GROUND ROD.
⊕	JUNCTION BOX
PB	PULL BOX
+HH* / XX-YY	QUAD RECEPTACLE, 20 AMPERE, 125 VOLT, 2 POLE, 3 WIRE GROUNDING TYPE, NEMA 5-20R, MOUNTED 18"A.F.F. UNLESS OTHERWISE NOTED (+HH*). PANEL # AS INDICATED (XX), CIRCUIT AS INDICATED (YY).
GFCI / +HH* / XX-YY	GROUND FAULT INTERRUPTER TYPE DUPLEX RECEPTACLE, 20 AMPERE, 125 VOLT, 2 POLE, 3 WIRE GROUNDING TYPE, NEMA 5-20R, MOUNTED 18" A.F.F. UNLESS OTHERWISE NOTED (+HH*). PANEL # AS INDICATED (XX), CIRCUIT AS INDICATED (YY).
	SURFACE PANELBOARD 120/208 VOLT, 3-PHASE, 4-WIRE
	DISCONNECT SWITCH - NON-FUSIBLE
	DISCONNECT SWITCH - FUSIBLE/BREAKER
x ⊙ / y ⊙	TYPICAL POLE MOUNTED FLOOD LIGHT - "X" INDICATES TYPE, "Y" INDICATES POLE NUMBER.
HH	HAND HOLE. SIZE AS REQUIRED BY N.E.C.
⊙ / ⊙	METERED SERVICE DROP. REFER TO DETAILS ON DWG. E5.2.
CT	CURRENT TRANSFORMER
	TRANSFORMER
	SWITCH AND FUSE UNIT (LOW VOLTAGE)
XX AT / YY AF	CIRCUIT BREAKER, "XX" TRIP SIZE, "YY" FRAME SIZE
	FUSE
	GROUND

GENERAL ELECTRICAL DEMOLITION NOTES:

- REMOVE ALL ELECTRICAL EQUIPMENT, DEVICES, BOXES, CONDUIT AND WIRE IN THE AREA OF NEW CONSTRUCTION UNLESS OTHERWISE NOTED. CONDUIT, WIRE AND ELECTRIC DEVICES WHICH MAY PASS THRU THE AREA OF NEW CONSTRUCTION AND/OR MAY BE AFFECTED BY DEMOLITION SHALL REMAIN OR, IF REQUIRED, SHALL BE RE-WORKED TO KEEP THOSE ITEMS OPERATIONAL.
- AREAS AND SERVICES ADJACENT TO DEMOLITION AREAS SHALL BE PROTECTED FROM THE DEMOLITION PROCESS. PROTECTIVE MEASURES SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL WORK AND SHALL BE MAINTAINED CONTINUOUSLY UNTIL DEMOLITION IS COMPLETED.
- ALL DEMOLITION AND MATERIAL REMOVAL OPERATIONS SHALL BE CAREFULLY AND SAFELY CARRIED OUT. ELECTRICAL CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR HIS SAFE PRACTICES AND OPERATIONS.
- PROTECTIVE MEASURES SHALL BE TAKEN DURING DEMOLITION TO PROTECT THE NEW EQUIPMENT THAT HAS BEEN INSTALLED. THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY DAMAGE TO THE NEWLY INSTALLED LIGHT POLES, FIXTURES, FEEDERS, PANELBOARDS, SERVICE DROPS, ETC.
- ALL ELECTRICAL EQUIPMENT, OUTLETS, SWITCHES, ETC., AND OTHER SALVAGEABLE MATERIAL NOT OTHERWISE SPECIFIED SHALL BECOME THE PROPERTY OF THE ELECTRICAL CONTRACTOR.
- MATERIAL OF NO SALVAGEABLE VALUE INCLUDING CONDUIT, WIRE AND TRASH RESULTING FROM THE NEW & DEMOLITION WORK SHALL BE REMOVED BY THE ELECTRICAL CONTRACTOR PROMPTLY FROM THE JOB SITE AND PROPERLY DISPOSED OF IN A LEGAL MANNER. NO BURNING SHALL BE PERMITTED ON THE SITE.
- IT SHALL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO CONDUCT ALL DEMOLITION IN ACCORDANCE WITH OSHA, EPA, AND ALL OTHER APPLICABLE CODES AND REGULATIONS FOR TYPE OF WORK.
- IT SHALL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL EXISTING UTILITIES IN WORK AREA PRIOR TO INITIATION OF DEMOLITION ACTIVITIES.
- DISCONNECT ALL WIRING AT THE POINT OF ORIGIN. ALL CONDUIT, WIRE, FITTINGS, BOXES, ETC. SHALL BE COMPLETELY REMOVED. DISCONNECTION FROM UTILITY SOURCE SHALL BE DONE BY CPP. REMOVAL OF ALL ELECTRICAL SHALL BE DONE BY CONTRACTOR.
- ANY ITEM INTENDED TO BE REMOVED BUT NOT SHOWN SHALL BE VERIFIED AND REMOVED BY THE ELECTRICAL CONTRACTOR AT NO ADDITIONAL COST.
- DEMOLITION DRAWINGS OF ALL DISCIPLINES MUST BE CHECKED AND ALL ASSOCIATED ELECTRICAL DEVICES OF EQUIPMENT REMOVED BY OTHERS MUST BE REMOVED.
- SHIFT AND REROUTE (IF REQUIRED) ANY EXISTING CONDUIT WHICH MAY INTERFERE WITH NEW CONSTRUCTION. ALL DEVICES REMAINING MUST BE LEFT IN A CLEAN AND OPERATING CONDITION.
- ALL DEMOLITION WORK SHALL BE PERFORMED IN AN ORDERLY FASHION WITHOUT ANY DAMAGE TO EXISTING STRUCTURES, SITE, SURFACES AND SYSTEMS.
- COORDINATE ELECTRICAL WORK WITH OTHER TRADES AS AND WHEN REQUIRED.
- TEMPORARY LIGHTING SHALL BE BY ELECTRICAL CONTRACTOR. COORDINATE ALL TEMPORARY ELECTRICAL SERVICES WITH OWNER'S SITE REPRESENTATIVE. THE EXISTING UTILITY POLE LIGHTING SHALL REMAIN OPERATIONAL DURING CONSTRUCTION. PROVIDE TEMPORARY LIGHTING DURING ALL TIMES BETWEEN WHEN THE NEW WORK HAS BEEN COMMISSIONED AND THE OLD HAS BEEN DISCONNECTED. PROVIDE TEMPORARY LIGHTING AS REQUIRED BY THE CPP, THE CITY OF CLEVELAND AND/OR ARCHITECT/ENGINEER.
- THE CONTRACTOR SHALL FURNISH AND INSTALL ADDITIONAL CONDUIT AND WIRE AS REQUIRED AND EXTEND EXISTING CIRCUITING TO FIXTURES AND DEVICES WHICH REMAIN BUT WHICH MAY BE AFFECTED BY EXISTING FIXTURES AND DEVICES BEING REMOVED AND/OR RELOCATED. FULL EXTENT OF WORK REQUIRED SHALL BE FIELD VERIFIED.

GENERAL ELECTRICAL NOTES:

- THE CONTRACTOR SHALL VISIT THE SITE OF THE WORK TO FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS AND THEIR PROPOSAL SHALL INCLUDE ALL CONTINGENCIES NECESSARY FOR THE COMPLETION OF THEIR WORK REGARDING SUCH EXISTING CONDITIONS.
- THERE SHALL BE NO SUBSTITUTIONS UNLESS THE CONTRACTOR HAS OBTAINED WRITTEN APPROVAL FROM THE OWNER AFTER HAVING SUBMITTED AN ALTERNATIVE PROPOSAL COMPLETE WITH A DESCRIPTION OF DEVIATION FROM THE SPECIFICATIONS AND A STATEMENT OF BENEFITS TO BE DERIVED SHOULD SUCH A PROPOSED SUBSTITUTE BE ACCEPTED.
- ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST NATIONAL ELECTRICAL CODE, OSHA REQUIREMENTS, AND LOCAL REQUIREMENTS, ALL AS INTERPRETED BY THOSE HAVING JURISDICTION.
- BEFORE DOING ANY WORK WHICH MIGHT ENTAIL A FULL OR PARTIAL SHUTDOWN, THE ELECTRICAL CONTRACTOR SHALL INFORM THE OWNER & UTILITY SO THAT A SCHEDULED SHUTDOWN ARRANGEMENT CAN BE MADE, TAKING EVERY PRECAUTION THAT THE ELECTRICAL SYSTEM IS OPERATING SATISFACTORILY. ALL UTILITY WORK SHALL BE COORDINATED WITH CPP. CPP SHALL MAKE FINAL CONNECTIONS & DISCONNECTIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED LABOR, MATERIAL, EQUIPMENT, CONDUIT, WIRE, BOXES, FIXTURES, POLES, FUSES, ETC. FOR A COMPLETE AND OPERATIONAL LIGHTING & POWER DISTRIBUTION SYSTEM.
- THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED TO SHOW THE APPROXIMATE LOCATIONS OF POLES, FIXTURES, SERVICE DROPS, CONNECTIONS, REDESTALS, OUTLETS, CONDUIT, JUNCTION BOXES AND EQUIPMENT. DIMENSIONS PRESENTED ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND ALL DIMENSIONS, WHETHER SHOWN ON THE DRAWINGS OR SCALED, SHALL BE VERIFIED IN THE FIELD.
- THE ELECTRICAL CONTRACTOR SHALL SECURE ALL PERMITS AND PAY ALL FEES THAT ARE REQUIRED BY THE APPLICABLE LOCAL AND STATE LAWS.
- A CONTINUOUS CONDUIT SHALL NOT BE CONSTRUED TO SATISFY THE REQUIREMENTS FOR A GROUNDING SYSTEM. A SEPARATE GROUND WIRE SHALL BE PROVIDED INTERCONNECTING ALL EXPOSED CONDUCTIVE EQUIPMENT, TO THE COMMON GROUND BUS USING APPROPRIATE GROUND FITTINGS. GROUNDING CONDUCTORS SHALL BE SIZED IN ACCORDANCE WITH NEC TABLE 250-122. THE GROUNDING CONDUCTOR MUST BE RUN WITHIN THE CONDUCTOR RACEWAY TOGETHER WITH THE SUPPLY CONDUCTOR.
- PVC COATED RIGID GALVANIZED STEEL CONDUIT SHALL BE USED FOR ALL FEEDERS ABOVE GRADE. PVC SCHEDULE-80 CONDUIT SHALL BE USED FOR ALL UNDERGROUND FEEDERS BELOW ANY PAVED OR FINISHED SURFACES. PVC SCHEDULE-40 CONDUIT MAY BE USED FOR UNDERGROUND FEEDERS IN GRASS AREA ONLY. ALL WIRING TO BE IN CONDUIT.
- CONDUIT FITTINGS, DEVICE ENCLOSURES AND ASSOCIATED ACCESSORIES SHALL BE OF CROUSE HINDS OR APPLETON MANUFACTURE.
- REFER TO PVC TO RGS TRANSITION DETAIL, (#3) ON DWG. E5.1 FOR TYPICAL UNDERGROUND TO EXPOSED CONDUIT TRANSITIONS.
- WIRE SHALL BE COPPER TYPE THWN/THHN, 75 DEGREES C, STRANDED.
- LIGHTING FIXTURES SHALL BE AS INDICATED.
- INSTALL PULL BOXES, JUNCTION BOXES, SPLICE BOXES AND FITTINGS WHERE SHOWN AND AT OTHER LOCATIONS AS NECESSARY. ALL BOXES SHALL BE STAINLESS STEEL AND SHALL HAVE SCREW COVERS. ALL FITTINGS SHALL BE CAST MALLEABLE TYPE.
- IDENTIFY WITH LEGIBLE AND DURABLE MARKING, EACH DISCONNECTING MEANS INDICATING ITS PURPOSE.
- ALL 120 VOLT, SINGLE PHASE 15 AND 20 AMPERE RECEPTACLE OUTLETS USED BY THE WORKMEN SHALL BE PROTECTED BY A "GROUND FAULT INTERRUPTER".
- ALL RECEPTACLES, SWITCHES AND DEVICES SHALL HAVE PANEL AND CIRCUIT NUMBER IDENTIFY WITH LEGIBLE AND DURABLE MARKING ON COVER PLATE. OWNER WILL INDICATE IF MARKINGS ARE ON THE FRONT OR BACK OF COVER.

GENERAL ELECTRICAL NOTES CONT:

- ALL LABOR AND MATERIAL FURNISHED BY THE CONTRACTOR AS PART OF THIS CONTRACT SHALL BE GUARANTEED FOR A PERIOD OF TWO YEARS FROM DATE OF ACCEPTANCE BY THE OWNER. ANY DEFECTS WHICH APPEAR WITHIN THE GUARANTEE PERIOD SHALL BE PROMPTLY REPAIRED OR REPLACED AT THE OWNER'S DISCRETION, WITHOUT ADDITIONAL COST TO THE OWNER.
- ALL EQUIPMENT GROUNDS SHALL BE TERMINATED WITH COMPRESSION FITTINGS AND STAINLESS STEEL BOLTS OR IN PANEL GROUND BAR.
- BEFORE DRILLING ANY HOLES IN WALLS OR FLOORS THE AREA MUST BE CHECKED FOR EXISTING EMBEDDED OBSTRUCTIONS.
- IT IS RECOMMENDED THAT THE BIDDERS VISIT THE SITE FOR THIS CONTRACT AND VERIFY THE EXISTING SYSTEMS.
- COORDINATE ALL NEW WORK WITH THE EXISTING ELECTRICAL SYSTEMS AND CPP.
- REFERENCE CPP WO #68274.
- COORDINATE ALL CONSTRUCTION OF ALL ELECTRICAL WORK WITH ARCHITECTURAL, STRUCTURAL, CIVIL, PLUMBING, FOUNTAIN, ETC SHOWN ON OTHER CONTRACT DOCUMENTS.
- SUMMARY OF ALTERNATES:
 - ALTERNATE 1 - ADD TO BASE BID. INCLUDE ALL MATERIAL AND LABOR ASSOCIATED WITH INSTALLING, CONNECTING, EQUIPMENT, HARDWARE, ASSOCIATED WORK, ETC. WITH THE INSTALLATION OF THE FOUNTAIN.
 - ALTERNATE 2 - ADD TO BASE BID. INCLUDE ALL MATERIAL AND LABOR ASSOCIATED WITH INSTALLING, CONNECTING, EQUIPMENT, HARDWARE, ASSOCIATED WORK, ETC. WITH THE INSTALLATION OF THE BELLS.
- NOTE: ONLY BASE BID, ALTERNATE 1 OR ALTERNATE 2 WILL BE ACCEPTED. ALTERNATE 1 AND ALTERNATE 2 WILL NOT BOTH BE ACCEPTED.

ALTERNATE 1 - FOUNTAIN ELECTRICAL NOTES:

- INSTALL ALL FOUNTAIN ELECTRICAL PER MANUFACTURERS INSTALLATION INSTRUCTIONS.
- ALL METAL IN CONCRETE MUST BE GROUNDED WITH #8 BARE COPPER WIRES TO REBAR. IF REBAR IS EPOXY COATED OR NOT USED, INSTALL GROUND ROD, GROUND FITTING TO GROUND.
- ALL EQUIPMENT, DEVICES AND COMPONENTS ARE TO BE INSTALLED IN ACCORDANCE WITH THE NEC AND ANY OTHER APPLICABLE CODES, THE ROUTES, LOCATIONS, ETC INDICATED ARE DIAGRAMMATIC AND IT IS THE INTENT THAT THESE ARE INSTALLED IN ACCORDANCE WITH THE APPLICABLE CODES.
- ANY PENETRATIONS THROUGH CONCRETE MUST BE RED BRASS PIPE (R.B.P).
- ALL CONDUIT AND ELECTRICAL PENETRATIONS MUST BE VERTICALLY PLUMB.
- ALL WIRING INSIDE CONDUIT SHALL BE THWN COPPER.
- JUNCTION BOXES MUST BE INSTALLED LEVEL, HAVE SEALED CONDUIT ENTRANCES, AND BE FILLED WITH AN APPROVED POTTING COMPOUND.
- ALL LIGHTING CIRCUITS MUST HAVE SEPARATE NEUTRALS FOR GFI CIRCUITS.
- ALL CONDUIT AND WIRING TO FOUNTAIN COMPONENTS SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
- CONDUIT LOCATIONS ARE DIAGRAMMATIC ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION REFERENCE.
- PLUMBING COMPONENTS ARE SHOWN FOR LOCATION REFERENCE ONLY.
- ALL ELECTRICAL FITTINGS AND EQUIPMENT SHALL BE LOCATED TO PROVIDE ACCESSIBILITY AFTER ALL ARCHITECTURAL COMPONENTS ARE COMPLETE.
- ALL DMX WIRING TO BE 2 PAIR #24 AWG BELDEN Y64114 DMX FLEX OR APPROVED EQUAL.
- ELECTRICAL CONTRACTOR SHALL COORDINATE ALL WORK WITH ALL OTHER TRADES ARCHITECT, ENGINEER AND OWNER; AND WITH ARCHITECTURAL, STRUCTURAL, CIVIL, PLUMBING, FOUNTAIN, ETC SHOWN ON OTHER CONTRACT DOCUMENTS.

ALTERNATE 2 - CENTENNIAL PORTAL WITH BELLS ELECTRICAL NOTES:

- THE BELLS ARE TO BE FURNISHED, INSTALLED, AND PROGRAMMED UNDER A SEPARATE CCGF CONTRACT WITH THE BELL MANUFACTURER. ROUGH-IN ALL ELECTRICAL WORK AS OUTLINED HEREIN AS PART OF ALTERNATE #2.
- ALL METAL IN CONCRETE MUST BE GROUNDED WITH #8 BARE COPPER WIRES TO REBAR. IF REBAR IS EPOXY COATED OR NOT USED, INSTALL GROUND ROD, GROUND FITTING TO GROUND.
- ALL EQUIPMENT, DEVICES AND COMPONENTS ARE TO BE INSTALLED IN ACCORDANCE WITH THE NEC AND ANY OTHER APPLICABLE CODES, THE ROUTES, LOCATIONS, ETC INDICATED ARE DIAGRAMMATIC AND IT IS THE INTENT THAT THESE ARE INSTALLED IN ACCORDANCE WITH THE APPLICABLE CODES.
- ANY PENETRATIONS THROUGH CONCRETE MUST BE RED BRASS PIPE (R.B.P).
- ALL CONDUIT AND ELECTRICAL PENETRATIONS MUST BE VERTICALLY PLUMB.
- ALL WIRING INSIDE CONDUIT SHALL BE THWN COPPER OR AS DESIGNATED BY BELL MANUFACTURER.
- ALL CONDUIT AND WIRING TO CENTENNIAL PORTAL BELL COMPONENTS SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
- CONDUIT LOCATIONS ARE DIAGRAMMATIC ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION REFERENCE.
- ALL ELECTRICAL FITTINGS AND EQUIPMENT SHALL BE LOCATED TO PROVIDE ACCESSIBILITY AFTER ALL ARCHITECTURAL COMPONENTS ARE COMPLETE.
- ELECTRICAL CONTRACTOR SHALL COORDINATE ALL WORK WITH ALL OTHER TRADES ARCHITECT, ENGINEER AND OWNER; AND WITH ARCHITECTURAL, STRUCTURAL, CIVIL, ETC SHOWN ON OTHER CONTRACT DOCUMENTS.
- ITEMS FURNISHED BY BELL MANUFACTURER INCLUDE: BELLS, STRIKERS, AND BELL ELECTRICAL CONTROL ENCLOSURE. BELL ELECTRICAL CONTROL ENCLOSURE SHALL INCLUDE FLANGE MOUNTED DISCONNECT, ENVIRONMENTAL CONTROLS, LOW VOLTAGE COMPONENTS, LINE VOLTAGE COMPONENTS, CONTROLS, SOFTWARE CONTROLLER, ETC.

ABBREVIATIONS

AC	ABOVE COUNTER	GND	GROUND
AFF	ABOVE FINISHED FLOOR	G.V.	GENSET VENDOR
AFG	ABOVE FINISHED GRADE	HSP	HOUSE SERVICE PANEL
AHU	AIR HANDLING UNIT	IP	INVERTER PANEL
AST	ABOVEGROUND STORAGE TANK	LP	LIGHTING PANEL
ATS	AUTOMATIC TRANSFER SWITCH	MCC	MOTOR CONTROL CENTER
BSI	BUILDING SYSTEM INTERFACE	MDP	MAIN DISTRIBUTION PANEL
C	CONDUIT	N.I.C.	NOT IN CONTRACT
CAC	CEILING MOUNTED CAMERA	(N)	NEW WORK
CAW	WALL MOUNTED CAMERA	NL	NIGHT LIGHT
C.B.	CIRCUIT BREAKER	PNL	PANEL
CKT	CIRCUIT	PP	POWER PANEL
CP	CONTROL PANEL	RGS	RIGID GALVANIZED STEEL
CON.	CONTRACTOR	(R)	RELOCATED
CT	CURRENT TRANSFORMER	(R&R)	REMOVE AND RELOCATE
(D&R)	DISCONNECT AND REMOVE	(REP)	REPLACE
DDC	DIRECT DIGITAL CONTROL	RP	RECEPTACLE PANEL
DP	DISTRIBUTION PANEL	SE	SERVICE ENTRANCE
(E)	EXISTING	SWBD	SWITCHBOARD
EF	EXHAUST FAN	TP	TECHNOLOGY POWER PANEL
EG	EQUIPMENT GROUND	UC	UNDER COUNTER
EL	EMERGENCY LIGHTING	U.G.	UNDERGROUND
EMT	ELECTRICAL METALLIC TUBING	UST	UNDERGROUND STORAGE TANK
EW	ELECTRIC WATER COOLER	UPS	UNINTERRUPTABLE POWER SUPPLY
FACP	FIRE ALARM CONTROL PANEL	VP	VANDAL PROOF
GAP	GENSET ANNUNCIATOR PANEL	WIU	WHILE IN USE
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	WP	WEATHERPROOF

ROCKEFELLER PARK
1916 - CENTENNIAL PLAZA - 2016
The Cleveland Cultural Gardens Federation
ELECTRICAL LEGEND & GENERAL NOTES

REVISIONS	

DRAWN	SCALE
MRB	SEE PLAN
DATE	PROJECT NO.
12/15/2018	J20170781.000
SHEET NO.	
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STREET LIGHTING AND METERED POWER PANEL ELECTRICAL NOTES:

1. THE CONTRACTOR SHALL INSTALL THE STREET LIGHTING & METERED POWER PANEL CONDUIT SYSTEM, CONDUCTORS, PULL BOXES, LIGHT POLES, LUMINAIRES, BASES, PULLING ALL WIRES, BRACKET ARMS, ANCHOR BOLTS, CONNECTIONS, TESTING, EXCAVATION, BACKFILL, ETC FOR A COMPLETE AND OPERATIONAL SYSTEM.
2. THE CONTRACTOR SHALL INSTALL THE LIGHTING CONDUIT SYSTEM, CONDUCTORS, PULL BOXES, LIGHT POLE FOUNDATIONS, LIGHT POLES, LUMINAIRES, PULLING ALL WIRES, BRACKET ARMS, POWER SERVICE, METER SOCKET, METER, POWER PEDESTAL, LIGHTING CONTROLS, WEATHERHEADS, WALL MOUNTED UNDERPASS LUMINAIRES, AND ALL WIRING UP TO CPP UTILITY CONNECTION POINT.
3. ALL WORK SHALL BE INSTALLED BY A CITY OF CLEVELAND AND CPP QUALIFIED ELECTRICAL CONTRACTOR.
4. CLEVELAND PUBLIC POWER (C.P.P.) WILL MAKE ALL FINAL CONNECTIONS FOR THE STREET LIGHTING SYSTEM AND PRIVATE METERED SYSTEM TO THEIR MAINS. C.P.P. WILL RELOCATE ALL SERVICE LATERAL WIRES AS REQUIRED. THE CONTRACTOR SHALL PROVIDE ALL WORK INDICATED ON PLANS, SPECIFICATIONS AND PER CPP STANDARDS.
5. ALL ELECTRICAL WORK PERFORMED SHALL BE IN ACCORDANCE WITH CLEVELAND PUBLIC POWER DETAILS AND SPECIFICATIONS AND THE NATIONAL ELECTRIC CODE (NEC). CONTACT JAMES FERGUSON AT CLEVELAND PUBLIC POWER AT 216-420-7704 EXT 183 TO OBTAIN THE CURRENT C.P.P. SPECIFICATIONS, FEES, PERMITS, TESTING AND INSPECTION REQUIREMENTS.
6. REFERENCE CPP WO #68274 FOR THIS PROJECT.
7. THE CONDUIT SHALL BE PERMANENTLY MARKED ON THE OUTSIDE AT REGULAR INTERVALS WITH THE MANUFACTURER'S NAME, TRADEMARK, NOMINAL DUCT DIAMETER, TYPE AND YEAR OF MANUFACTURE.
8. CONDUIT COUPLINGS, CONNECTORS AND SWEEPS FOR ALL CONDUITS SHALL BE BY THE SAME MANUFACTURER AS THE CONDUITS.
9. PROVIDE ALL PIPE BENDS, SWEEPS, COUPLINGS, DUCT PLUGS, SPACERS, ELBOWS AND FITTINGS, BOND BREAKER, FINAL CLEANING AND MANDRELLING OF EACH CONDUIT, AND THE RISER STUB UP FOR POWER SERVICE AS SHOWN ON THE DETAIL SHEET.
10. PROVIDE ALL CONDUITS WITH A 400 LB PULL LINE.
11. PROVIDE EXPANSION FITTINGS AS REQUIRED. EXPANSION FITTINGS SHALL BE OZ TYPE AX, CROUSE HINDS TYPE XJG, APPLETON TYPE AX, OR EQUAL APPROVED BY THE ENGINEER. EACH EXPANSION FITTING SHALL PROVIDE EITHER 4 OR 8 INCHES TOTAL MOVEMENT AS SPECIFIED BY THE PLAN DETAILS AND SHALL HAVE AN EXTERNAL COPPER BONDING JUMPER, UNLESS SPECIFIED OTHERWISE BY THE PLAN DETAILS.
12. PROVIDE DEFLECTION COUPLINGS AS REQUIRED. DEFLECTION COUPLINGS SHALL BE OZ TYPE DX, CROUSE HINDS TYPE XD, APPLETON TYPE DF, OR EQUAL APPROVED BY THE ENGINEER. EACH DEFLECTION COUPLING SHALL HAVE AN EXTERNAL COPPER BONDING JUMPER, UNLESS SPECIFIED OTHERWISE BY THE PLAN DETAILS.
13. CONTRACTOR SHALL PROVIDE METER SOCKET ENCLOSURES WHERE REQUIRED. METER SOCKET ENCLOSURES SHALL MEET CPP'S SPECIFICATIONS. METER SOCKET ENCLOSURES SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR; OR RELOCATED AS INDICATED ON THE PLANS.
14. LIGHT POLE SHALL BE ROUND TAPERED MOUNTED ON NEW BASE.
15. CONTRACTOR SHALL PROVIDE 2-POLE, FUSED, QUICK DISCONNECT "Y" CONNECTOR KIT WITH 10A FUSING IN EACH POLE BASE.
16. CONTRACTOR SHALL PROTECT ALL EXISTING AND PROPOSED LIGHT POLES UNTIL ALL CONSTRUCTION AND DEMOLITION ACTIVITIES ARE COMPLETE. THE PROTECTION SHALL BE PROVIDED FROM GRADE TO 6'-0" ABOVE GRADE AT A MINIMUM. THE PROTECTION SHALL CONSIST OF BURLAP MATERIAL, OR EQUAL, SECURED AROUND THE POLE BASE AND SHALL PROTECT THE POLE FROM GOUGING, DENTS, SCRAPES, AND SPRAYING BY FOREIGN SUBSTANCES.
17. CONTRACTOR SHALL FACTORY PAINT THE NEW POLES AND FIXTURES BRONZE WITH A POWDER COATED CORROSION RESISTANT FINISH. COLOR AS SPECIFIED BY OWNER/ARCHITECT.
18. THE POLE AND BRACKET ARM SHALL BE FIBERGLASS AND THE COLOR SHALL BE BRONZE. THE BRACKET ARM SHALL HAVE A TWO-FOOT UPSWEEP OR AS DESIGNED ON PLANS. APPROVED PRODUCT MANUFACTURER'S ARE WHATLEY, SHAKESPEARE COMPOSITE STRUCTURES OR APPROVED EQUAL.
19. LUMINAIRES SHALL BE FLOOD LIGHT STYLE, MULTI-VOLT, LED, AND AS INDICATED ON PLANS. LUMINAIRE SHALL INCLUDE AN INTEGRAL 8-PIN PHOTO-ELECTRIC CELL WITH OCCUPANCY SENSOR AND DIMMING CAPABILITY. WHEN THERE IS NO OCCUPANCY, FIXTURE SHALL DIM TO 70% OUTPUT. APPROVED PRODUCTS BY GE, COOPER, KING LUMINAIRE PRODUCTS-STRESSCRETE GROUP, OR APPROVED EQUAL.
20. ALL LUMINAIRES, POLES, ETC. SHALL BE APPROVED BY C.P.P. PRIOR TO PURCHASE.

CPP SPECIFICATION:

- D.11 ROUND, TAPERED FIBERGLASS STREET LIGHT POLES**
- THIS SPECIFICATION SECTION SHALL COVER STANDARD FLOOD LIGHT POLES.
- ALL POLES SHALL BE HOLLOW, TRUNCATED CONE OF SUITABLE WALL THICKNESS AND TAPER. THE TAPER SHALL BE UNIFORM FROM TOP TO BOTTOM (ANY SECTION SHALL BE CIRCULAR). POLES SHALL HAVE TENON TOPS.
- ANY POLE PROVIDED SHALL NOT WEIGH LESS THAN 95% OF THE MANUFACTURER'S ADVERTISED OR SPECIFIED WEIGHT.
- FIBERGLASS POLES FURNISHED AS PART OF THIS SPECIFICATION SHALL BE CAPABLE OF BEING FITTED AS FOLLOWS:
1. FLOOD LIGHT LUMINAIRE AND MAST ARM AT TOP OF POLE.
 2. UP TO THREE FLOODLIGHTS AT TOP OF POLE.
 3. FLOOD LIGHT LUMINAIRE AT TWENTY-SEVEN (27) FEET ABOVE BASE OF POLE.
 4. DUPLEX RECEPTACLE AT 30 INCHES ABOVE BASE OF POLE.
 5. BAND MOUNTED BANNER UTILIZING BANNER SAVING BRACKETS (MAX. 20 SQUARE FEET FOR A SIGNAL BANNER) LOCATED IN THE AREA BETWEEN FIFTEEN (15) AND TWENTY-THREE (23) FEET ABOVE THE BASE OF POLE.
- D.11.1 WIND LOADING**
THE POLES FURNISHED AS PART OF THIS SPECIFICATION SHALL BE DESIGNED IN ACCORDANCE WITH 90 MPH (30% GUST FACTOR) AASHTO WIND LOADING. CERTIFIED MATHEMATICAL WIND LOAD CALCULATIONS MUST BE SUBMITTED TO C.P.P. FOR ACCEPTANCE.
- D.11.2 MATERIAL**
THE REINFORCING GLASS SHALL BE A COMMERCIAL GRADE OF "E" GLASS FIBERS IN CONTINUOUS FILAMENT, WOVEN FILAMENTS, CHOPPED STRAND FORMS OR A COMBINATION OF THE SAME. THE GLASS FIBERS SHALL BE TREATED WITH A COUPLING AGENT COMPATIBLE WITH THE RESIN USED. THE POLE SHALL BE NON-CONDUCTIVE AND CHEMICALLY INERT. THE THERMOSETTING RESIN SHALL CONTAIN ULTRAVIOLET INHIBITORS.
- D.11.3 SURFACE**
THE POLE EXTERIOR SURFACE SHALL BE SMOOTH AND UNIFORM IN TEXTURE AND COLOR SHOULD NOT CONTAIN ANY EXPOSED FIBERS. NATURAL FINISH WILL NOT BE ACCEPTED.
- A NON WOVEN POLYESTER TAPE IS TO BE DOUBLE WRAPPED OVER THE UNCURED FIBERGLASS POLE. THE POLYESTER FABRIC IS TO PRE-SATURATED WITH EPOXY RESIN TO IMPREGNATE THE POLE AND INSURE A POSITIVE BOND. THE POLYESTER FABRIC TAPE IS TO BE APPLIED TO THE POLE TO MAINTAIN SURFACE INTEGRITY WITHOUT SIGNIFICANT NOTICEABLE CHANGE IN APPEARANCE TO ULTRAVIOLET, CHEMICALS, AND EXTREME WEATHER CONDITIONS.
- THE FINISH COAT SHALL BE A HIGHLY WEATHER RESISTANT, COLOR PIGMENTED POLYURETHANE AND SHALL HAVE A DRY FILM THICKNESS OF 1 1/2 MILS MINIMUM. COLOR INCLUDING ALL STANDARD COLORS, TO BE BRONZE (OR AS DESIGNATED BY OWNER/ARCHITECT).
- THE SURFACE IS TO BE TESTED FOR A MINIMUM OF 2,500 HOURS OF ACCELERATED TESTING IN ACCORDANCE WITH ASTM G-53, LATEST REVISION. THE RESULTS SHALL INDICATE NO FIBER EXPOSURE, CRAZING, OR CHECKING. THERE MAY BE ONLY SLIGHT CHALKING AND COLOR MAT ONLY DULL SLIGHTLY.
- D.11.4 REINFORCING**
THE STANDARD STREETLIGHT POLES SHALL BE REINFORCED IN THE AREA BETWEEN FOURTEEN (14) FEET AND TWENTY-FOUR (24) FEET ABOVE THE GROUND LINE TO ALLOW BAND MOUNTING OR HOLIDAY ORNAMENTS OR BANNERS.
- D.11.5 DUPLEX RECEPTACLE**
A WEATHERPROOF 120 V ELECTRICAL DUPLEX OUTLET SHALL BE INSTALLED AT THIRTY (30) INCHES ABOVE THE BASE ON THE FLOOD LIGHT POLE.
- D.11.6 POLE TOP**
THE POLE TOP FOR THE STANDARD STREET LIGHT POLES IS 27 FEET IN HEIGHT AND SHALL BE EITHER 2, OR 3, 3/8" O.D. X 2 1/2" LONG HEAVY DUTY TENDON. THE TENDON SHALL BE ALUMINUM OR STEEL PERMANENTLY ATTACHED TO THE POLE SHAFT. THE TENON SHALL BE STRAIGHT WITH NO TAPER AND COATED WITH MATCHING URETHANE FINISH. STANDARD STREETLIGHT POLES SHALL ALSO BE SUPPLIED WITH A TENON CAP. ALL TENONS WILL BE SECURED WITH THREE SETS OF SCREWS.
- D.11.7 PULL WIRES**
POLES SHALL HAVE PULL WIRES INSTALLED TO FACILITATE INSTALLATION OF CONDUCTORS.
- D.11.8 HAND HOLE**
EACH POLE SHALL HAVE A HAND HOLE WITH A NON METALLIC, REMOVABLE, LOCKABLE COVER AND GASKET. THE COVER SHALL BE SECURED IN AT LEAST TWO LOCATIONS. THE COVER SHALL BE THE SAME COLOR AND TEXTURE AS THE POLE. THE HAND HOLE SHALL BE 2-1/2" X 5" FOR THE STANDARD FLOOD LIGHT POLE.
- D.11.9 SHIPPING**
EACH POLE SHALL BE INDIVIDUALLY WRAPPED WITH PLASTIC SHRINK WRAP FILM OR POLYBAGGED FOR PROTECTION DURING SHIPPING AND STORAGE.
- D.11.10 BASE PLATE AND COVE ANCHOR BASE POLES**
A ONE PIECE, STEEL (HOT DIPPED GALVANIZED) ANCHOR BASE CASTING SHALL BE PROVIDED WHICH IS PERMANENTLY ATTACHED TO THE BOTTOM OF THE POLE. THE BASE SHALL BE ADHESIVELY BONDED TO THE POLE AND SHALL BE MECHANICALLY LOCKED TO THE POLE IN SUCH A MANNER THAT IT CANNOT COME LOOSE EVEN IF THE ADHESIVE BOND FAILS. THE ANCHOR BASE CASTING SHALL BE CAPABLE OF COVERING A BOLT CIRCLE RANGE OF 11" TO 15"
A REMOVABLE CLAM-SHELL STYLE COVER OF THE SAME MATERIAL AND COLOR AS THE POLE SHALL BE PROVIDED THAT COMPLETELY SURROUNDS THE BASE. HARDWARE SHALL BE STAINLESS STEEL.
- D.11.11 ANCHOR RODS FOR ANCHOR BASE POLES**
ONE SET OF FOUR (4) GALVANIZED 1 INCH ANCHOR RODS 40 (36*4)

INCHES IN LENGTH, EACH WITH TWO NUTS AND TWO WASHERS, SHALL BE FURNISHED WITH EACH POLE ASSEMBLY. ANCHOR BOLTS SHALL CONFORM TO LATEST ASTM SPECIFICATION FOR HIGH STRENGTH, GALVANIZED ANCHOR BOLTS, 50,000 PSI MINIMUM.

D.11.12 LOADING TEST

THE MANUFACTURER SHALL PROVIDE ONE (1) SET OF SHOP DRAWINGS FOR THE POLE AND CERTIFIED TEST DATA FOR DEFLECTION AND ULTIMATE STRENGTH SHALL ALSO BE SUBMITTED WITH THE BID. ALL TESTING IS TO BE PERFORMED ON THE POLE WITH THE APPROPRIATE SIZE HAND HOLE LOCATED ON THE COMPRESSION SIDE.

1. A HORIZONTAL LOAD IS TO BE APPLIED ON 100 POUND INCREMENTS AT A POINT 12 INCHES FROM THE TOP UNTIL AN ULTIMATE TOP LOAD OF 1,400 POUNDS HAS BEEN APPLIED. THE POLE SHALL WITHSTAND A MINIMUM OF 1,400 POUNDS OF HORIZONTAL LOAD BEFORE FAILURE.

UNDER THE SAME TEST PROCEDURE, THE MAXIMUM DEFLECTION UNDER 100 POUND LOADING SHALL BE 4% OF THE ABOVE GROUND LENGTH OF THE POLE.

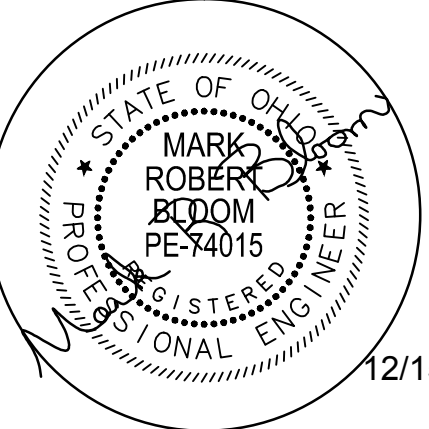
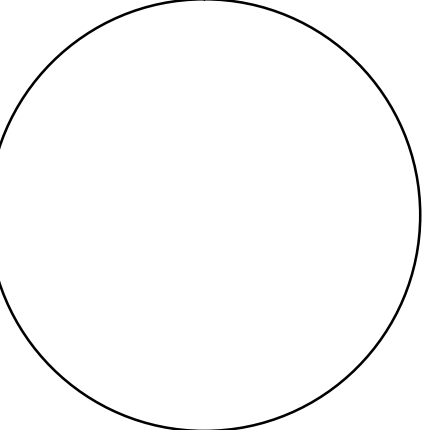
2. A HORIZONTAL LOAD IS TO BE APPLIED IN 100 POUND INCREMENTS AT A POINT 12 INCHES FROM THE TOP OF THE POLE. THE LOAD IS TO BE HELD FOR FIVE (5) MINUTES WITHOUT POLE FAILURE AND THE POLE IS TO HAVE NO MORE THAN 1% PERMANENT DEFLECTION AFTER UNLOADING.

D.11.13 INVENTORY IDENTIFICATION

ALL POLES, DAVIT ARMS AND BASES SHALL BE PERMANENTLY MARKED WITH INVENTORY CODES SUPPLIED AT TIME OF ORDER. MARKINGS SHALL BE SUCH THAT THEY CAN NOT BE REMOVED BY HAND OR FADED OR OTHERWISE OBLITERATED BY RAIN, SNOW, WIND, SUN OR OTHER WEATHER CONDITIONS ENCOUNTERED IN OUTDOOR STORAGE.

D.11.14 SAMPLE

PROVIDE A COMPLETE FLOOD LIGHT POLE ASSEMBLY THAT INCLUDES THE POLE, HAND HOLE COVER, BASE PLATE, CLAM SHELL COVER, BRACKET, ETC FOR EVALUATION AND APPROVAL. FLOOD LIGHT POLE ASSEMBLY SAMPLE MAY BE USED ON THE PROJECT AFTER APPROVAL.



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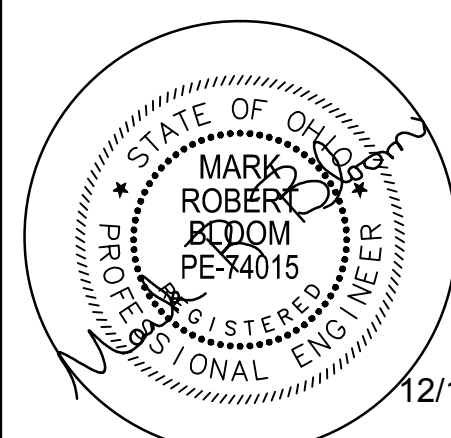
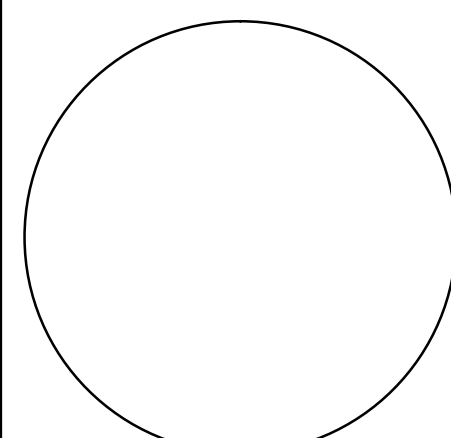
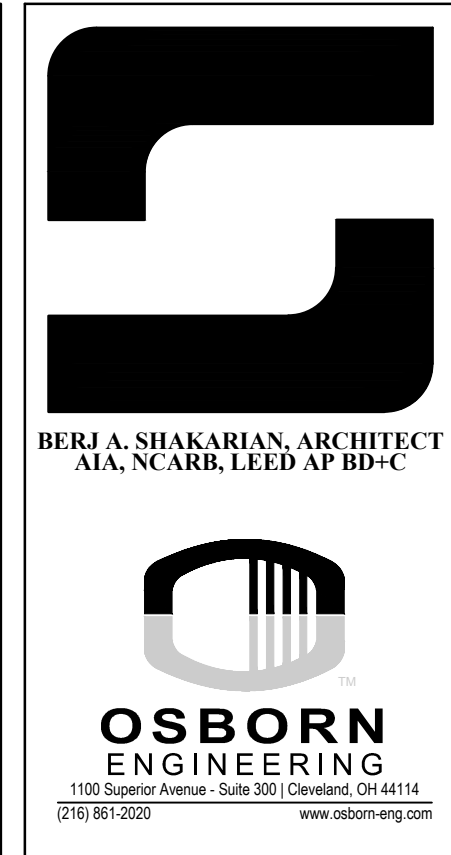
ROCKEFELLER PARK
1916 - CENTENNIAL PLAZA - 2016
The Cleveland Cultural Gardens Federation
CPP GENERAL NOTES & SPECIFICATIONS

REVISIONS	

DRAWN MRB	SCALE SEE PLAN
DATE 12/15/2018	PROJECT NO. J20170781.000

SHEET NO.
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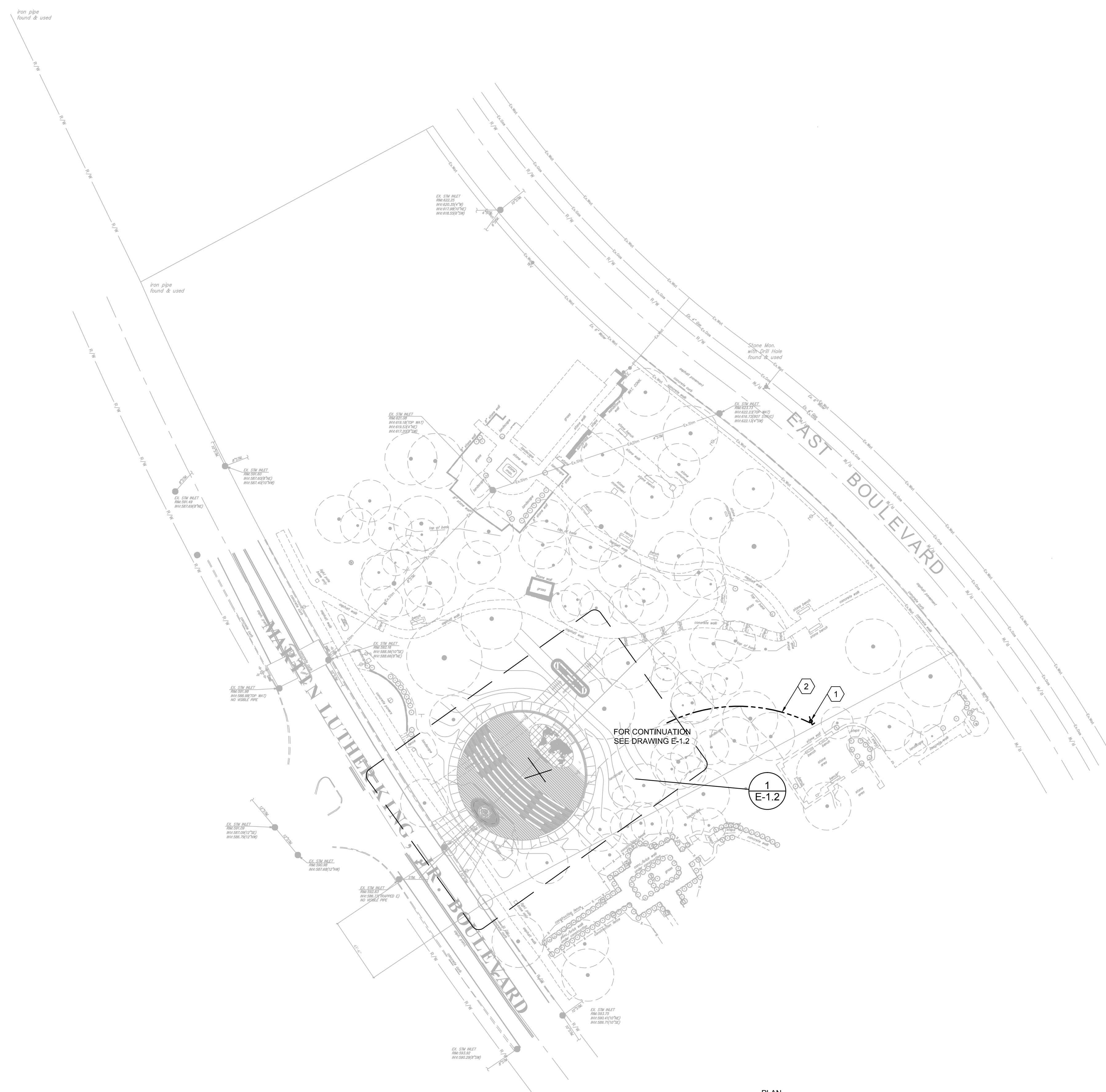
- CURRENT READING CHECKS OF RESPECTIVE PHASES. A MINIMUM OF CIRCUIT CONNECTIONS SHALL BE REARRANGED TO BALANCE, AS CLOSELY AS POSSIBLE, THE LOAD IN THE PANEL.
1. ALL RECEPTACLES, SWITCHES AND OTHER WIRING DEVICES SHALL BE LABELED WITH CIRCUIT NUMBER AND PANEL NAME ON COVER. USE ENGRAVED BLACK LETTERS ON PLASTIC COVERS OR CLEAR TAPE WITH BLACK LETTERS ON OTHERS FACEPLATE TYPES.
2. WIRING DEVICE COLOR SHALL BE IVORY, OR AS DIRECTED BY ARCHITECT.
3. PROVIDE TOTALLY ENCLOSED, 20 AMPERE, 120/277 VOLT, QUIET A/C GENERAL USE SNAP SWITCHES.
4. SWITCHES SHALL BE SPECIFICATION GRADE AS MANUFACTURED BY HUBBELL, P&S, OR LEVITON.
5. PROVIDE NEMA CONFIGURATION 5-20R DUPLEX 125 VOLT GROUNDING TYPE RECEPTACLES RATED FOR 20 AMPERES UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
6. RECEPTACLES SHALL BE INDUSTRIAL GRADE AS MANUFACTURED BY HUBBELL, P&S OR LEVITON.
7. RECEPTACLES REQUIRING AMPERAGES, VOLTAGES OR CONFIGURATIONS DIFFERENT FROM THE DUPLEX CONVENIENCE RECEPTACLES ABOVE SHALL BE AS INDICATED ON THE DRAWINGS.
8. PROVIDE OTHER RECEPTACLES OF A QUALITY, MATERIAL AND WORKMANSHIP EQUAL TO THAT SPECIFIED FOR DUPLEX CONVENIENCE RECEPTACLES.
9. PROVIDE COVER OR DEVICE PLATES FOR OUTLET BOXES AS FOLLOWS UNLESS OTHERWISE NOTED:
- a. EXTERIOR AREAS: COPPER FREE ALUMINUM WITH GRAY, POWDER EPOXY FINISH, GASKET, WEATHERPROOF, CROUSE-HINDS "MIL RD" FOR DUPLEX RECEPTACLES AND WIRS FOR SINGLE RECEPTACLES OR EQUAL
 - b. TELEPHONE, COMMUNICATION, AND SIGNAL OUTLET PLATES, SHALL MATCH THOSE USED FOR RECEPTACLES AND SWITCHES. ALL OUTLET AND/OR JUNCTION BOXES SHALL BE COMPLETE WITH A COVER PLATE BY THIS CONTRACTOR.
 - c. WHERE DEVICES ARE GANGED, THEY SHALL BE INSTALLED UNDER A COMMON COVERPLATE.
11. LOCATE THE SWITCHES 44" ABOVE THE FINISHED FLOOR ELEVATION TO CENTER OR NEAREST BLOCK COURSE (WITHIN A.D.A. REQUIREMENTS), UNLESS OTHERWISE INDICATED. THE LONG DIMENSION OF THE SWITCHES SHALL BE VERTICAL.
12. LOCATE RECEPTACLES 18" ABOVE THE FINISHED FLOOR ELEVATION TO CENTER OR NEAREST BLOCK COURSE (WITHIN A.D.A. REQUIREMENTS), UNLESS NOTED OTHERWISE. THE LONG DIMENSION OF RECEPTACLES SHALL BE VERTICAL AND GROUND POLE UP.
- T. SAFETY SWITCHES**
1. SAFETY SWITCHES SHALL BE THE ENCLOSED HEAVY-DUTY TYPE (TYPE HD) WITH QUICK-MAKE, QUICK-BREAK MECHANISM AND EXTERNAL PAD LOCKABLE OPERATING HANDLE.
2. SAFETY SWITCHES SHALL BE RATED FOR 240 VOLTS AS APPLICABLE. THEY SHALL BE HORSEPOWER RATED WHEN USED IN MOTOR CIRCUITS.
3. SAFETY SWITCHES SHALL BE FUSIBLE OR NON-FUSIBLE 2, 3, OR 4 POLE AS INDICATED ON THE DRAWINGS.
4. SAFETY SWITCHES SHALL BE SINGLE THROW UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
5. SAFETY SWITCHES SHALL INCLUDE DPDT AUXILIARY CONTACT SWITCH FOR PRE-ACTION INTERCONNECTION WHEN REQUIRED BY EQUIPMENT MANUFACTURER.
6. ENCLOSURES SHALL BE NEMA 4X SS OUTDOORS UNLESS OTHERWISE INDICATED ON DRAWINGS.
7. MANUFACTURER SHALL BE SQUARE D, EATON, CUTLER HAMMER OR APPROVED EQUAL. ALL SAFETY SWITCHES SHALL BE BY ONE MANUFACTURER.
8. MOUNT THE SAFETY SWITCHES SECURELY BETWEEN 3' X 6' LEVELS ABOVE THE FLOOR UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
9. PROVIDE PERMANENT LABELING PER SPECIFICATIONS. PROVIDE PERMANENT LABELING ON FUSIBLE DISCONNECTS REFLECTING REDUCED FUSE AND WIRE SIZE ACCORDINGLY.
- U. PANELBOARDS**
1. PANELBOARDS SHALL BE ENCLOSED DEAD FRONT SAFETY TYPE WITH FEATURES AND RATINGS AS SCHEDULED ON THE DRAWINGS.
2. PANELS KNOWN AS "LOAD CENTERS" ARE UNACCEPTABLE.
3. MOLDED CASE CIRCUIT BREAKERS SHALL BE AS SCHEDULED ON THE DRAWINGS AND SPECIFIED IN THIS DIVISION.
4. ALL BUS BARS SHALL BE RECTANGULAR SOLID COPPER.
5. SPACE, WHERE SHOWN IN PANEL SCHEDULES, DESIGNATES SPACE FOR FUTURE PROTECTIVE DEVICES AND SHALL INCLUDE BUS AND SUPPORT.
6. INSTALL CABINETS SO THAT CENTER OF THE TOP BREAKER DOES NOT EXCEED 6'-6" ABOVE THE GRADE.
7. ENTRIES ON DIRECTORY CARDS SHALL BE TYPED, COMPLETE AND ACCURATE.
8. ALL BOLTED CONNECTIONS SHALL BE TORQUED IN ACCORDANCE WITH MANUFACTURER'S STANDARDS.
9. ELECTRICAL CONTRACTOR SHALL ARRANGE CIRCUITS AS NEAR AS POSSIBLE TO CIRCUIT NUMBERS ON THE DRAWINGS. AT COMPLETION OF JOB, ELECTRICAL CONTRACTOR SHALL TAKE
4. PHOTOMETRIC REQUIREMENTS
- a. OPTICAL ASSEMBLIES: LEDS SHALL BE PROVIDED WITH DISCREET OVER OPTICAL ELEMENTS TO PROVIDE PROPER DISTRIBUTIONS. ALL LEDS SHALL PROVIDE THE SAME OPTICAL PATTERN SUCH THAT CATASTROPHIC FAILURES OF INDIVIDUAL LEDS WILL NOT CONSTITUTE A LOSS IN THE DISTRIBUTION PATTERN.
 - b. ILLUMINANCE: THE ILLUMINANCE SHALL NOT DECREASE BY MORE THAN 30% OVER THE EXPECTED OPERATING LIFE. THE MEASUREMENTS SHALL BE CALIBRATED TO STANDARD PHOTOPIC CALIBRATIONS.
 - c. LIGHT COLOR/QUALITY: THE LUMINAIRE SHALL HAVE A CORRELATED COLOR TEMPERATURE (CCT) RANGE OF 4,000K TO 4,500K. THE COLOR RENDITION INDEX (CRI) SHALL BE 80 OR GREATER. BINNING OF LEDS SHALL CONFORM TO ANSI/ IESNA E17-2010.
- 5. THERMAL MANAGEMENT**
- a. THE THERMAL MANAGEMENT (OF THE HEAT GENERATED BY THE LEDS) SHALL BE OF SUFFICIENT CAPACITY TO ASSURE PROPER OPERATION OF THE LUMINAIRE OVER THE EXPECTED USEFUL LIFE.
 - b. THE LED MANUFACTURER'S MAXIMUM THERMAL PAD TEMPERATURE FOR THE EXPECTED LIFE SHALL NOT BE EXCEEDED.
 - c. THERMAL MANAGEMENT SHALL BE PASSIVE BY DESIGN. THE USE OF FANS OR OTHER MECHANICAL DEVICES SHALL NOT BE ALLOWED.
 - d. THE LUMINAIRE SHALL HAVE A MINIMUM HEAT SINK SURFACE SUCH THAT LED MANUFACTURER'S MAXIMUM JUNCTION TEMPERATURE IS NOT EXCEEDED AT MAXIMUM RATED AMBIENT TEMPERATURE.
 - e. THE HEAT SINK MATERIAL SHALL BE ALUMINUM.
- 6. PHYSICAL AND MECHANICAL REQUIREMENTS**
- a. THE LUMINAIRE SHALL BE A SINGLE, SELF-CONTAINED DEVICE, NOT REQUIRING ON-SITE ASSEMBLY FOR INSTALLATION. THE POWER SUPPLY FOR THE LUMINAIRE SHALL BE INTEGRAL TO THE UNIT.
 - b. THE ASSEMBLY AND MANUFACTURING PROCESS FOR THE LED LUMINAIRE SHALL BE DESIGNED TO ASSURE ALL INTERNAL COMPONENTS ARE ADEQUATELY SUPPORTED TO WITHSTAND MECHANICAL SHOCK AND VIBRATION FROM HIGH WINDS AND OTHER SOURCES.
 - c. THE ELECTRONICS/POWER SUPPLY ENCLOSURE SHALL MEET THE REQUIREMENTS FOR NEMA/UL WET LOCATION.
 - d. DOOR SHALL BE HINGED AND SECURED TO THE HOUSING IN A MANNER TO PREVENT ITS ACCIDENTAL OPENING.
 - e. THE CIRCUIT BOARD AND POWER SUPPLY SHALL BE CONTAINED INSIDE THE LUMINAIRE. ELECTROLYTIC CAPACITORS USED IN THE POWER SUPPLIES SHALL BE RATED FOR -40°F TO 220°F (-40°C TO +105°C), LONG LIFE (> 5000 HOURS), AND OPERATED AT NO MORE THAN 70% OF THEIR RATED VOLTAGE, AND 70% OF RATED CURRENT.
- 4. PHOTOMETRIC REQUIREMENTS**
1. GROUND ALL EQUIPMENT PER N.E.C.
2. ALL CONDUITS SHALL CONTAIN A CODE-SIZED GROUND WIRE SIZE PER N.E.C. IN ADDITION TO THE CONDUCTORS SHOWN ON THE PLANS. WHERE CIRCUIT CONDUCTORS ARE INCREASED IN SIZE FOR VOLTAGE DROP, THE GROUND WIRE SIZE SHALL BE INCREASED PROPORTIONATELY.
3. WHERE AN ISOLATED, INSULATED GROUND IS REQUIRED A SEPARATE GREEN GROUND SHALL BE RUN FROM THE PANEL GROUND BUS TO THE ISOLATED GROUND CONNECTION OF THE DEVICE SERVED. IN NO CASE SHALL THE SYSTEM GROUND (WIRE AND ASSOCIATED OUTLET BOXES, CONDUIT AND BUILDING STEEL) BE ALLOWED TO CONTACT THE ISOLATED GROUND (GREEN WIRE AND DEVICE GROUND).
- V. GROUNDING**
1. GENERAL: EXCEPT AS OTHERWISE INDICATED, PROVIDE LED LUMINAIRES, OF TYPES AND SIZES INDICATED ON FIXTURE SCHEDULES.
2. MATERIAL AND SPECIFICATIONS FOR EACH LUMINAIRE ARE AS FOLLOWS:
- a. EACH LUMINAIRE SHALL CONSIST OF AN ASSEMBLY THAT UTILIZES LEDS AS THE LIGHT SOURCE. IN ADDITION, A COMPLETE LUMINAIRE SHALL CONSIST OF A HOUSING, LED ARRAY, AND ELECTRONIC DRIVER (POWER SUPPLY).
 - b. EACH LUMINAIRE SHALL BE RATED FOR A MINIMUM OPERATIONAL LIFE OF 50,000 HOURS AT AN AVERAGE OPERATING TIME OF 12.0 HOURS PER DAY. THIS LIFE RATING MUST BE CONDUCTED 40C AMBIENT TEMPERATURE.
 - c. THE RATED OPERATING TEMPERATURE RANGE SHALL BE -30°C TO +40°C.
 - d. EACH LUMINAIRE IS CAPABLE OF OPERATING ABOVE 100°F (37°C), BUT NOT EXPECTED TO COMPLY WITH PHOTOMETRIC REQUIREMENTS AT ELEVATED TEMPERATURES.
 - e. PHOTOMETRY MUST BE COMPLIANT WITH IESNA LM-79 AND SHALL BE CONDUCTED AT 25°C AMBIENT TEMPERATURE.
 - f. THE INDIVIDUAL LEDS SHALL BE CONSTRUCTED SUCH THAT A CATASTROPHIC LOSS OR THE FAILURE OF ONE LED WILL NOT RESULT IN THE LOSS OF THE ENTIRE LUMINAIRE.
 - g. LUMINAIRE SHALL BE CONSTRUCTED SUCH THAT LED MODULES MAY BE REPLACED OR REPAIRED WITHOUT REPLACEMENT OF WHOLE LUMINAIRE.
 - h. EACH LUMINAIRE SHALL BE LISTED WITH UNDERWRITERS LABORATORY, INC. UNDER UL1598 FOR LUMINAIRES, OR AN EQUIVALENT STANDARD FROM A NATIONALLY RECOGNIZED TESTING LABORATORY.
 - i. LUMINAIRE SHALL HAVE A SEVEN (7) YEAR MANUFACTURER'S WARRANTY.
- 3. ELECTRICAL REQUIREMENTS**
- a. POWER CONSUMPTION: MAXIMUM POWER CONSUMPTION ALLOWED FOR THE LUMINAIRE SHALL BE DETERMINED BY APPLICATION. THE LUMINAIRE SHALL NOT CONSUME POWER IN THE OFF STATE.
 - b. OPERATION VOLTAGE: THE LUMINAIRE SHALL OPERATE FROM A 60 HZ ±3 HZ AC LINE OVER A VOLTAGE RANGING FROM 108 VAC TO 305 VAC. THE FLUCTUATIONS OF LINE VOLTAGE SHALL HAVE NO VISIBLE EFFECT ON THE LUMINOUS OUTPUT.
 - c. POWER FACTOR: THE LUMINAIRE SHALL HAVE A POWER FACTOR OF 0.90 OR GREATER.
 - d. THD: TOTAL HARMONIC DISTORTION (CURRENT AND VOLTAGE) INDUCED INTO AN AC POWER LINE BY A LUMINAIRE SHALL NOT EXCEED 20 PERCENT.
 - e. SURGE SUPPRESSION: THE LUMINAIRE ON-BOARD CIRCUITRY SHALL INCLUDE FUSED SURGE PROTECTION DEVICES (SPD) TO WITHSTAND HIGH REPEITION NOISE TRANSIENTS AS A RESULT OF UTILITY LINE SWITCHING, NEARBY LIGHTNING STRIKES, AND OTHER INTERFERENCE. THE SPD SHALL PROTECT THE LUMINAIRE FROM DAMAGE AND FAILURE FOR COMMON MODE TRANSIENT PEAK VOLTAGES UP TO 10 KV (MINIMUM) AND TRANSIENT PEAK CURRENTS UP TO 5 KA (MINIMUM). SPD SHALL CONFORM TO UL 1449 DEPENDING OF THE COMPONENTS USED IN THE DESIGN. SPD PERFORMANCE SHALL BE TESTED PER THE PROCEDURES IN ANSI/IEEE C62.41-1992 (OR CURRENT EDITION) FOR CATEGORY C (STANDARD). THE SPD SHALL FAIL IN SUCH A WAY AS THE LUMINAIRE WILL NO LONGER OPERATE. THE SPD SHALL BE FIELD REPLACEABLE.
 - f. EACH LUMINAIRE SHALL HAVE INTEGRAL UL LISTED CLASS II POWER SUPPLIES. CLASS I POWER SUPPLIES WILL NOT BE ACCEPTABLE.
 - g. OPERATIONAL PERFORMANCE: THE LED CIRCUITRY SHALL PREVENT VISIBLE FLICKER TO THE UNAIDED EYE OVER THE VOLTAGE RANGE SPECIFIED ABOVE.
 - h. RF INTERFERENCE: LED DRIVERS MUST MEET CLASS A EMISSION LIMITS REFERRED IN FEDERAL COMMUNICATIONS COMMISSION (FCC) TITLE 47,
- SUBPART B. SECTION 15 REGULATIONS CONCERNING THE EMISSION OF ELECTRONIC NOISE.
- i. DRIVERS SHALL HAVE A CLASS A SOUND RATING.



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ROCKEFELLER PARK
1916 - CENTENNIAL PLAZA - 2016
The Cleveland Cultural Gardens Federation
ELECTRICAL SPECIFICATIONS
SHEET 2 OF 2

REVISIONS	
DRAWN MRB	SCALE SEE PLAN
DATE 12/15/2018	PROJECT NO. J20170781.000
SHEET NO. E-0.4	



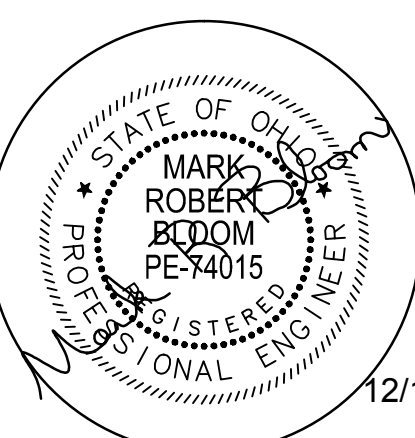
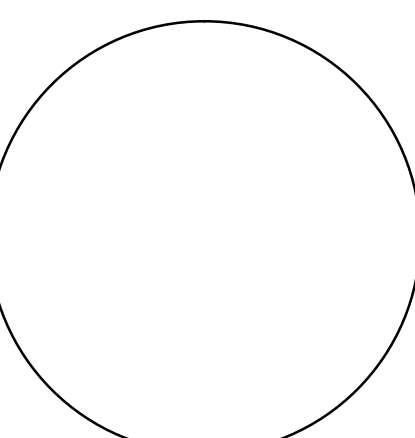
1 OVERALL ELECTRICAL PLAN
SCALE: 1" = 40'

GENERAL NOTES

- REFER TO THE ELECTRICAL SYMBOL LEGEND AND NOTES ON DRAWING E-0.1, STREET LIGHTING AND METERED SERVICE ELECTRICAL NOTES ON DRAWING E-0.2, ELECTRICAL SPECIFICATIONS ON DRAWING E-0.3 & E-0.4, AND ELECTRICAL DETAILS AND SCHEDULES ON DRAWING E-5.1, E-5.2 & E-5.3.
- COORDINATE ALL PROPOSED WORK WITH CLEVELAND PUBLIC POWER (CPP). CPP SHALL CONNECT THE NEW CONDUCTORS TO THE EXISTING UTILITY SOURCES AT POLE; THE CONTRACTOR SHALL PERFORM ALL NEW WORK AS INDICATED ON PLANS.
- ALL CIRCUITS SHALL BE RUN WITH INDIVIDUAL COPPER NEUTRAL CONDUCTORS. CIRCUITS SHALL NOT SHARE NEUTRAL WIRES.
- CONDUIT ROUTING SHOWN IS DIAGRAMMATICAL ONLY. CONTRACTOR SHALL FIELD VERIFY EXACT FEEDER LENGTH, CONDUIT PATH, ETC. CONTRACTOR SHALL PROVIDE BORING OR RE-ROUTING OF UNDERGROUND CONDUIT WHERE PATH CONFLICTS WITH EXISTING TREE ROOTS, ROCKS, OR ANY OTHER UNDERGROUND MATERIAL. CONTRACTOR SHALL BE RESPONSIBLE TO RESTORE IN-KIND ANY WALKWAY OR ROADWAY SECTIONS WHERE CUT TO ROUTE UNDERGROUND CONDUITS.
- PROTECT ALL NEW LIGHT POLES, FIXTURES, AND LIGHT POLE BASES UNTIL ALL CONSTRUCTION ACTIVITIES ARE COMPLETED AS REQUIRED; TYPICAL FOR ALL. THE PROTECTION SHALL BE PROVIDED FROM GRADE TO 6'-0" ABOVE GRADE AT A MINIMUM. THE PROTECTION SHALL CONSIST OF BURLAP MATERIAL, OR EQUAL, SECURED AROUND THE POLE BASE AND SHALL PROTECT THE POLE FROM GOUGING, DENTS, SCRAPES AND SPRAYING BY FOREIGN SUBSTANCES.
- FOR ALL UNDERGROUND FEEDERS, INSTALL PER TYPICAL DIRECT BURY CONDUIT SECTION DETAIL 4 ON DRAWING E-5.1.
- WHEN TRANSITIONING FROM UNDERGROUND TO ABOVE GROUND TRANSITION FROM PVC TO RGS PER TYPICAL TRANSITION PVC TO RGS DETAIL 3 ON DRAWING E-5.1.
- REFERENCE CPP WO #68274 WHEN CONTACTING CPP REGARDING THIS PROJECT.
- PVC SCHEDULE 80 CONDUIT SHALL BE USED FOR ALL TRANSITIONS AND ALL FEEDERS LOCATED UNDERNEATH PAVED OR FINISHED SURFACES. PVC SCHEDULE 40 CONDUIT IS PERMITTED WHERE INSTALLED IN GRASS AREAS.
- SEE PARTIAL ONE-LINE DIAGRAM ON DRAWING E-5.3 FOR ADDITIONAL WORK.

SHEET KEYNOTES

- NEW CPP UTILITY SERVICE ENTRANCE DROP. CPP TO REMOVE EXISTING POLE, PROVIDE NEW UTILITY POLE AND NEW 200A AERIAL SERVICE UP TO CONTRACTOR'S INSTALLED WEATHERHEAD ON POLE; CONTRACTOR TO PROVIDE BALANCE. FURNISH AND INSTALL AS INDICATED ON STREET POLE POWER SERVICE DETAIL ON DRAWING E-5.2. COORDINATE INSTALLATION WITH CPP. CPP WILL MAKE FINAL CONNECTIONS. SEE PARTIAL ONE-LINE DIAGRAM ON DRAWING E-5.1.
- FURNISH AND INSTALL NEW SERVICE ENTRANCE UNDERGROUND FEEDER FROM NEW CPP UTILITY SERVICE ENTRANCE DROP AT POLE TO NEW METERED SERVICE PANELBOARD (CGCP-PNL, USE 3#4/0, 1#4EG, 3" C. SEE DRAWING E-1.2 FOR CONTINUATION. SEE PARTIAL ONE-LINE DIAGRAM ON DRAWING E-5.1.



ROCKEFELLER PARK
1916 - CENTENNIAL PLAZA - 2016
 The Cleveland Cultural Gardens Federation
OVERALL ELECTRICAL PLAN

REVISIONS	

DRAWN MRB	SCALE SEE PLAN
DATE 12/15/2018	PROJECT NO. J20170781.000

SHEET NO.
E-1.1

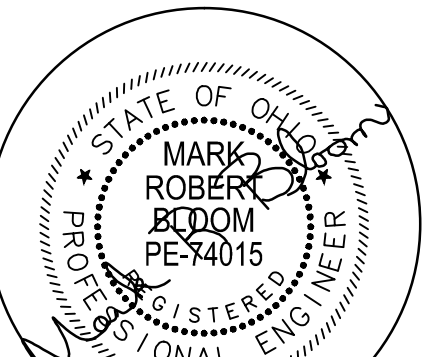
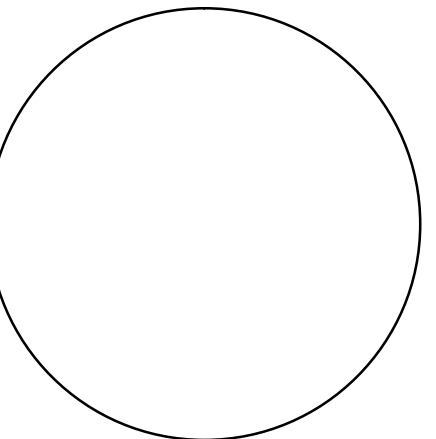
12/15/18

GENERAL NOTES

- REFER TO THE ELECTRICAL SYMBOL LEGEND AND NOTES ON DRAWING E-0.1, STREET LIGHTING AND METERED SERVICE ELECTRICAL NOTES ON DRAWING E-0.2, ELECTRICAL SPECIFICATIONS ON DRAWING E-0.3 & E-0.4, AND ELECTRICAL DETAILS AND SCHEDULES ON DRAWING E-5.1, E-5.2 & E-5.3.
- COORDINATE ALL PROPOSED WORK WITH CLEVELAND PUBLIC POWER (CPP). CPP SHALL CONNECT THE NEW CONDUCTORS TO THE EXISTING UTILITY SOURCES AT POLE. THE CONTRACTOR SHALL PERFORM ALL NEW WORK AS INDICATED ON PLANS.
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- FOR ALL UNDERGROUND FEEDERS, INSTALL PER TYPICAL DIRECT BURY CONDUIT SECTION DETAIL 4 ON DRAWING E-5.1.
- WHEN TRANSITIONING FROM UNDERGROUND TO ABOVE GROUND TRANSITION FROM PVC TO RGS PER TYPICAL TRANSITION PVC TO RGS DETAIL 3 ON DRAWING E-5.1.
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- SEE PARTIAL ONE-LINE DIAGRAM ON DRAWING E-5.3 FOR ADDITIONAL WORK.

SHEET KEYNOTES

- FURNISH AND INSTALL SERVICE ENTRANCE DISCONNECT, CPP METER, WIREWAY, PANELBOARD 'CGCP-PNL', EQUIPMENT RACK, STAINLESS STEEL UNISTRUT, CONCRETE BASES, GROUNDING, ETC AS PER METERED SERVICE PANELBOARD RACK DETAIL 5 ON DRAWING E-5.1 AND CONNECT PER PARTIAL ONE-LINE DIAGRAM DETAIL 6 ON DRAWING E-5.1. SEE PANEL SCHEDULE DETAIL 3 ON DRAWING E-5.2. COORDINATE FINAL AND EXACT LOCATION IN THE FIELD WITH ARCHITECT / OWNER. FOR ALTERNATE 2 - FURNISH AND INSTALL BELL CONTROL PANEL ENCLOSURE.
- FURNISH AND INSTALL NEW SERVICE ENTRANCE UNDERGROUND FEEDER FROM NEW METERED SERVICE PANELBOARD RACK TO CPP SERVICE ENTRANCE DROP AT POLE. USE 3#4/0, 1#4EG, 3" C. SEE DRAWING E-1.1 FOR CONTINUATION.
- FURNISH, INSTALL AND CONNECT NEW FLOOD LIGHT POLE. PROVIDE POLE, BASE, DECORATIVE CLAM SHELL BASE COVER, LUMINAIRES, FOUNDATION, GROUNDING, DEVICES, BRACKETS, GROUND BOX, ETC. REFER TO LIGHT POLE FOUNDATION DETAIL 1 AND GROUND BOX DETAIL 2 ON DRAWING E-5.1 FOR INSTALLATION DETAILS AND REQUIREMENTS. FIELD AIM THE FLOOD LIGHTS AS DIRECTED BY OWNER/ARCHITECT/ENGINEER. COORDINATE EXACT LOCATION WITH ARCHITECT AND FIELD CONDITIONS. SEE LUMINAIRE SCHEDULE ON DRAWING E-5.2. PROVIDE WITH 120VAC, 20A GFCI RECEPTACLE, WEATHERPROOF, INTEGRAL WITH POLE AND CONNECT TO DEDICATED BRANCH CIRCUIT. ARCHITECT TO PROVIDE LAYOUT DIMENSIONS.
- FURNISH AND INSTALL NEW UNDERGROUND SERVICE FROM NEW PANELBOARD 'CBCP-PNL' TO NEW FLOODLIGHTS VIA NEW GROUND BOXES. SEE CPP DETAILS ON DRAWING E-5.3.
- FURNISH AND INSTALL NEW 120VAC, 20A, QUAD, GFCI, WEATHERPROOF, WHILE IN USE COVERS, WEATHERPROOF BOXES RECESSED INTO NEW WALL. COORDINATE INSTALLATION WITH NEW WALL CONSTRUCTION. PROVIDE IN CAST ALUMINUM BOXES WITH HEAVY DUTY COVER PLATES. RECEPTACLES SHALL BE INDUSTRIAL GRADE, IVORY, TAMPER RESISTANT. CONNECT TO NEW PANELBOARD 'CG-CP-1' AS INDICATED ON PLANS. USE 2#10, 1#10EG 1" C. ARCHITECT TO PROVIDE LAYOUT DIMENSIONS.
- ALTERNATE 1 - CONNECT NEW FOUNTAIN ELECTRICAL CONTROLLER TO NEW PANELBOARD 'CGCP-PNL', CIRCUITS 2 & 4, VIA NEW UNDERGROUND FEEDER.
- ALTERNATE 1 - FURNISH, INSTALL AND CONNECT NEW UNDERGROUND FEEDER FROM NEW PANELBOARD 'CGCP-PNL', CIRCUITS 2 & 4, TO FOUNTAIN CONTROLLER. USE 3#1, 1#6EG, 2" C.
- ALTERNATE 1 - NEW FOUNTAIN. FURNISH, INSTALL AND CONNECT NEW FEEDERS FROM NEW FOUNTAIN CONTROLLER TO FOUNTAIN EQUIPMENT. INSTALL AND CONNECT ONE (1) NEW JUNCTION BOX AND INSTALL AND CONNECT FOUR (4) NEW LED LIGHTS AT FOUR (4) LOCATIONS. USE 3#8, 1#10EG, & 4 PAIR DMX CONTROL WIRES IN 1" C TO EACH JUNCTION BOX. FURNISH AND INSTALL NEW LIQUID LEVEL SENSOR AND CONNECT, USE 4#12, 1#12EG IN 1" C. SEE FOUNTAIN INSTALLATION DRAWINGS FOR ALL REQUIREMENTS. INSTALL ALL EQUIPMENT PER MANUFACTURERS INSTALLATION INSTRUCTIONS.
- ALTERNATE 1 - INSTALL AND CONNECT NEW SUMP PUMP FLOAT AND SUMP PUMP AT REMOTE SUMP TO NEW FOUNTAIN CONTROLLER. REFER TO ONE-LINE DIAGRAM ON SHEET E-5.1 FOR ADDITIONAL INFORMATION. COORDINATE EXACT LOCATION IN THE FIELD WITH MECHANICAL CONTRACTOR. INSTALL PER MANUFACTURERS INSTALLATION INSTRUCTIONS.
- ALTERNATE 2 - INSTALL AND CONNECT NEW BELL ELECTRICAL CONTROLLER (CONTROLLER AND ENCLOSURE PROVIDED BY BELL MANUFACTURER). INSTALL ON NEW ELECTRICAL EQUIPMENT RACK PER MANUFACTURERS INSTALLATION INSTRUCTIONS. CONNECT TO NEW PANELBOARD 'CGCP-PNL', CIRCUITS 20 & 22 AND CIRCUIT 24. PROGRAM PER MANUFACTURER INSTALLATION INSTRUCTIONS AND OWNER.
- ALTERNATE 2 - FURNISH AND INSTALL NEW UNDERGROUND FEEDER FROM NEW BELL ELECTRICAL CONTROLLER TO BELL PORTAL PER TYPICAL DIRECT BURY CONDUIT SECTION DETAIL 4 ON DRAWING E-5.1. TRANSITION PER TYPICAL TRANSITION PVC TO RGS DETAIL 3 ON DRAWING E-5.1. COORDINATE EMBEDDED CONDUITS AND CONNECTIONS WITH BELL PORTAL INSTALLER. USE 8#8, 1#10EG 1-1/4" C.
- ALTERNATE 2 - CONNECT FEEDER TO BELLS FOR CENTENNIAL PORTAL AS REQUIRED. COORDINATE EMBEDDED CONDUITS AND CONNECTIONS WITH PORTAL INSTALLER.



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ROCKEFELLER PARK

1916 - CENTENNIAL PLAZA - 2016

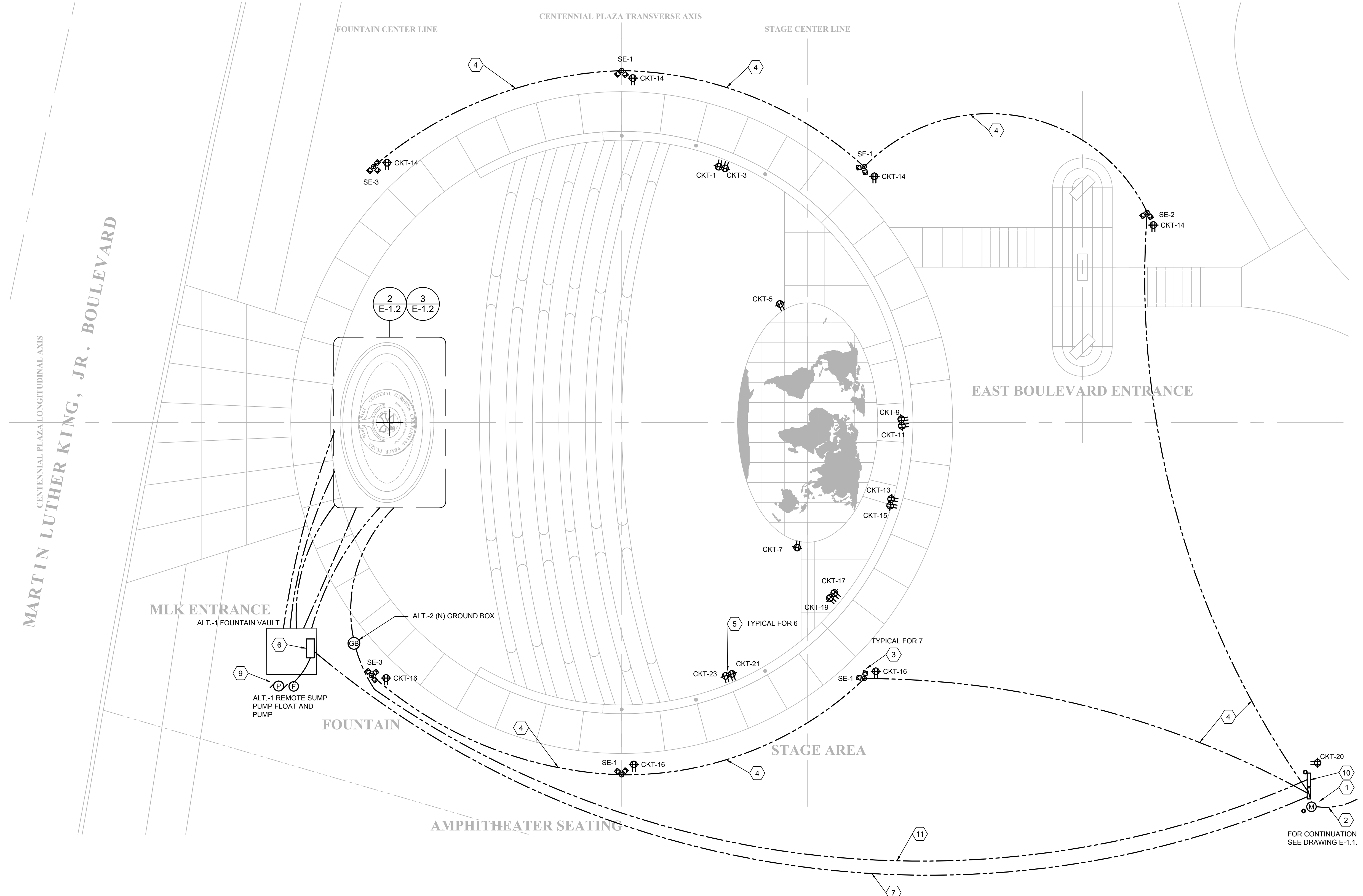
The Cleveland Cultural Gardens Federation

ENLARGED ELECTRICAL PLAN

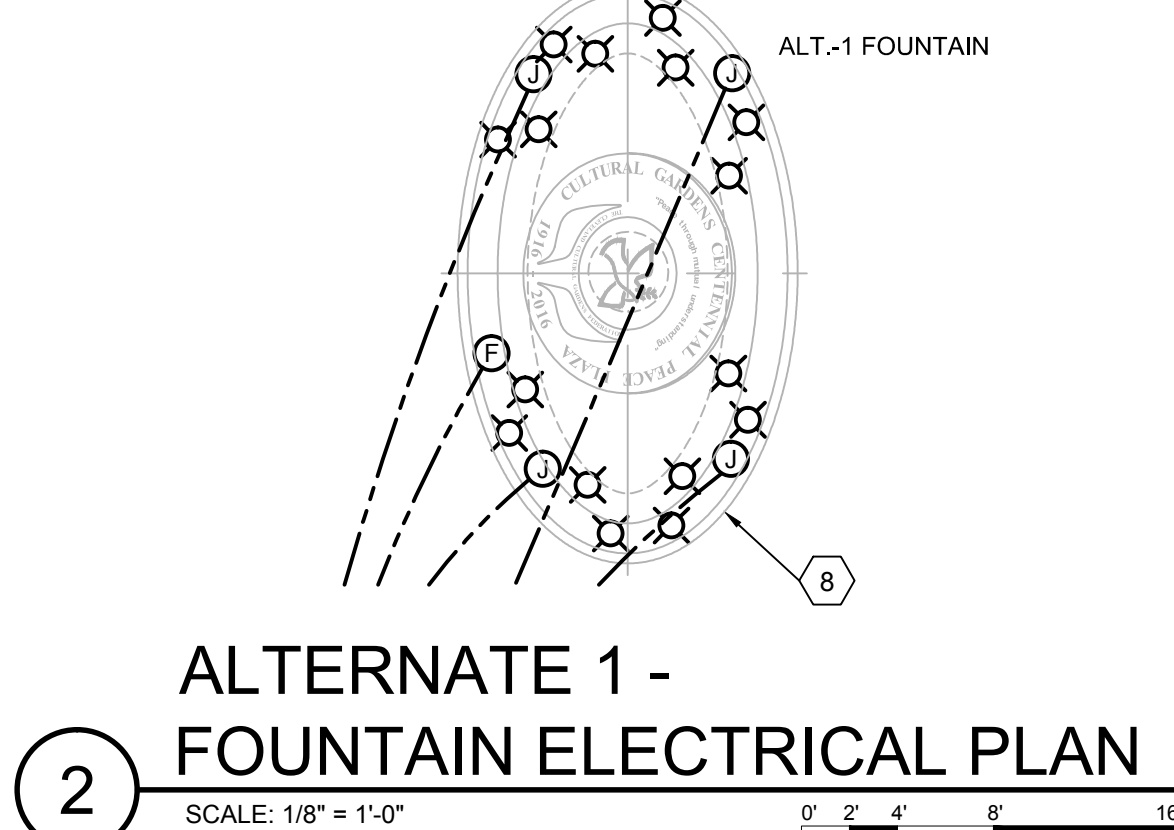
REVISIONS	

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MRB	SEE PLAN
DATE	PROJECT NO.
12/15/2018	J20170781.000

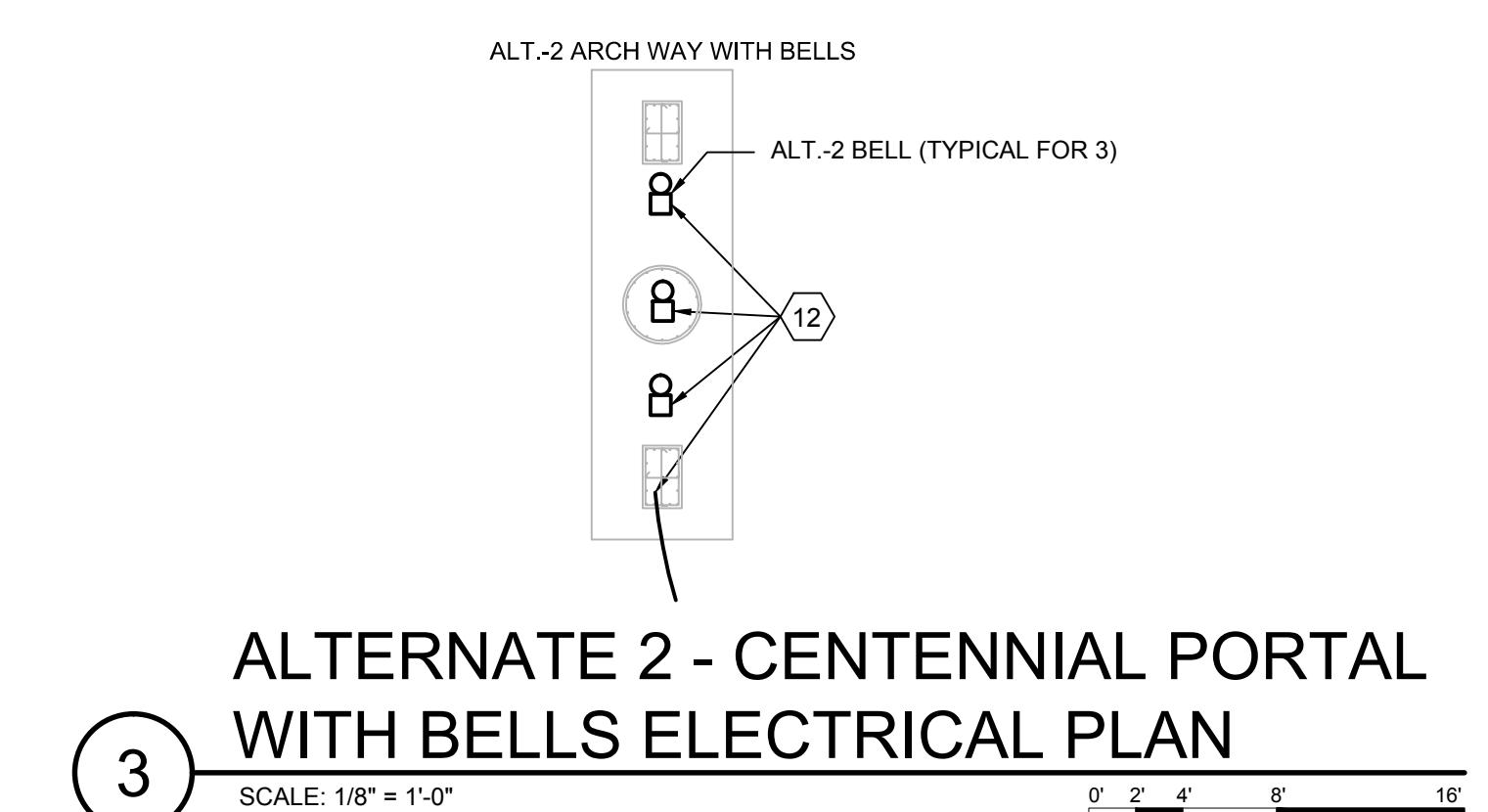
SHEET NO.	E-1.2
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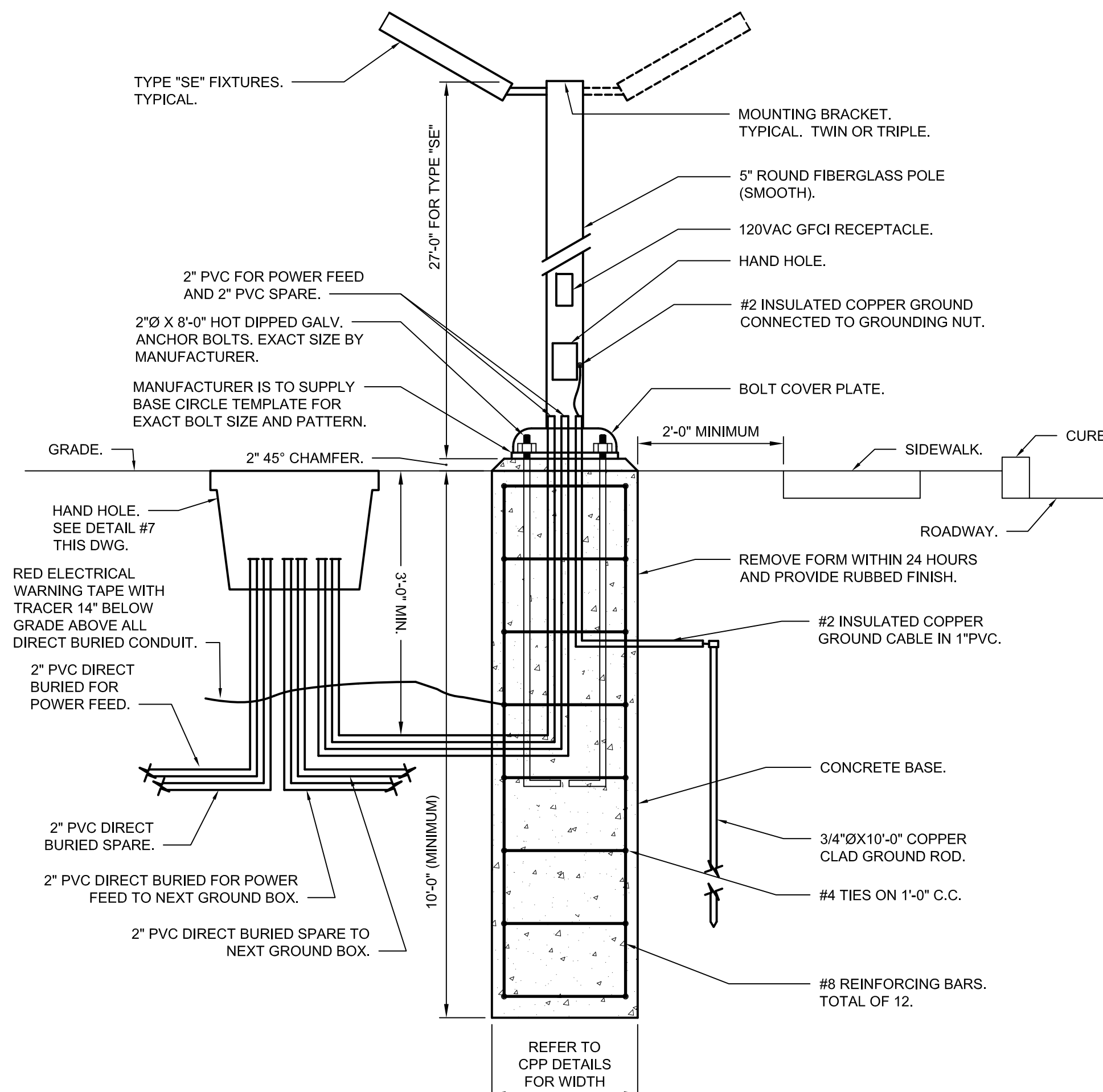
1 ENLARGED ELECTRICAL PLAN
SCALE: 1/8" = 1'-0"



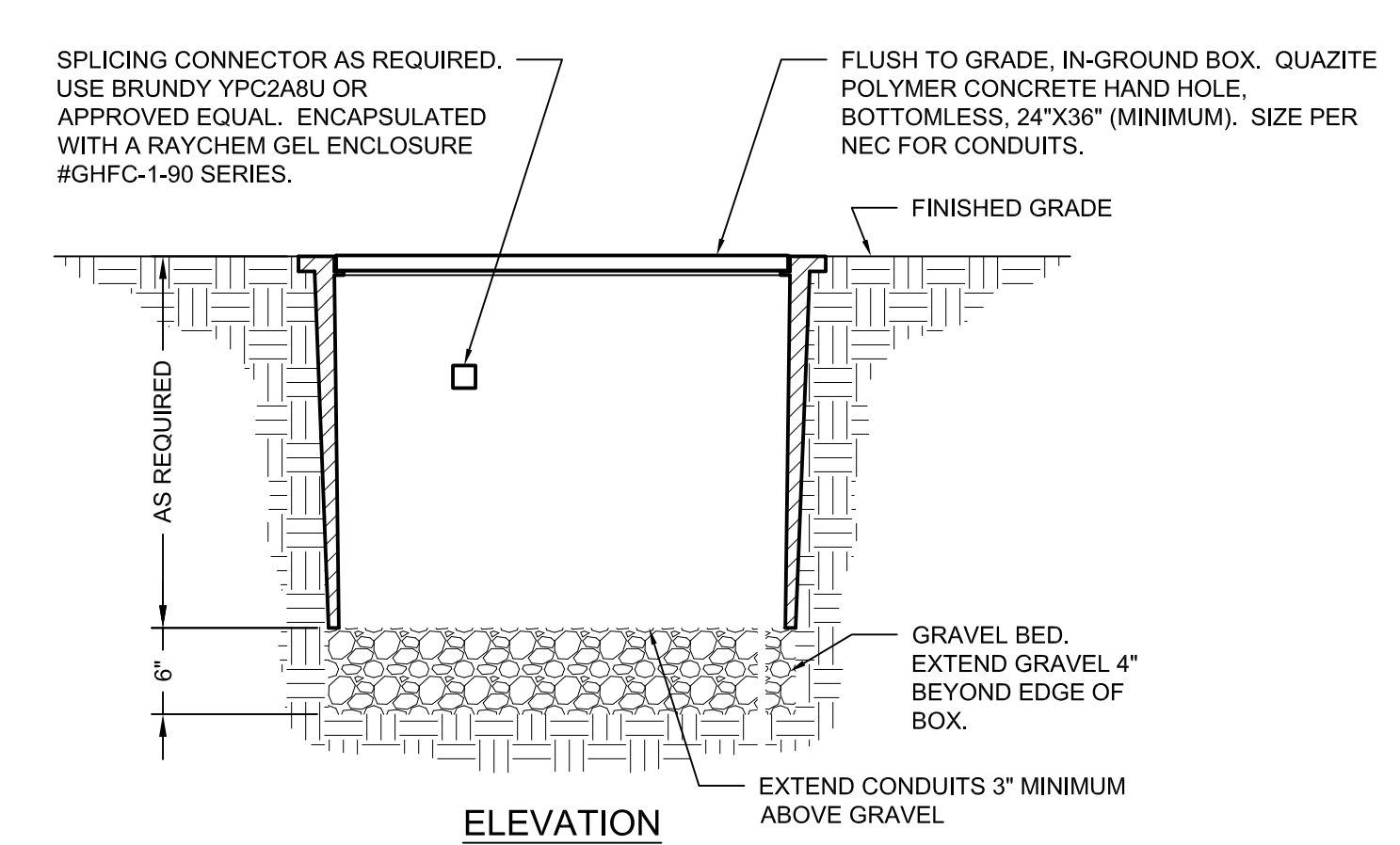
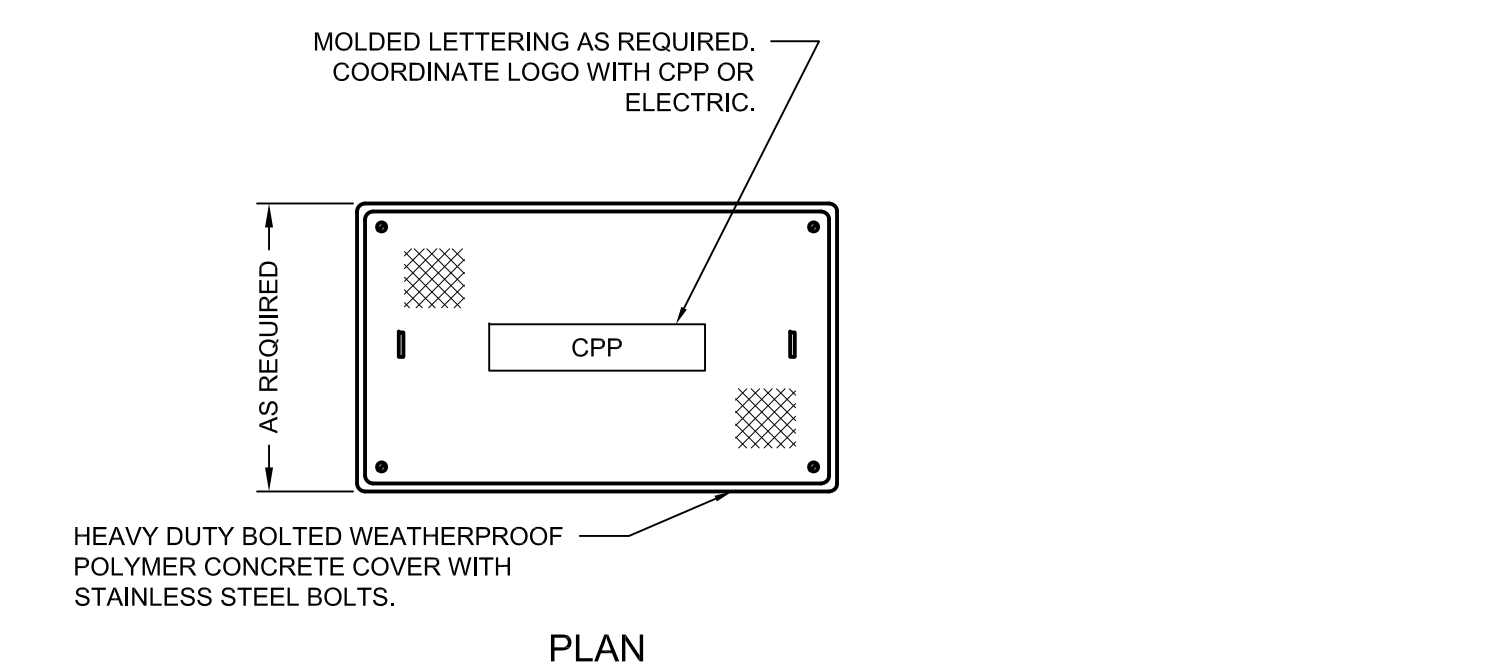
2 ALTERNATE 1 - FOUNTAIN ELECTRICAL PLAN
SCALE: 1/8" = 1'-0"



3 ALTERNATE 2 - CENTENNIAL PORTAL WITH BELLS ELECTRICAL PLAN
SCALE: 1/8" = 1'-0"

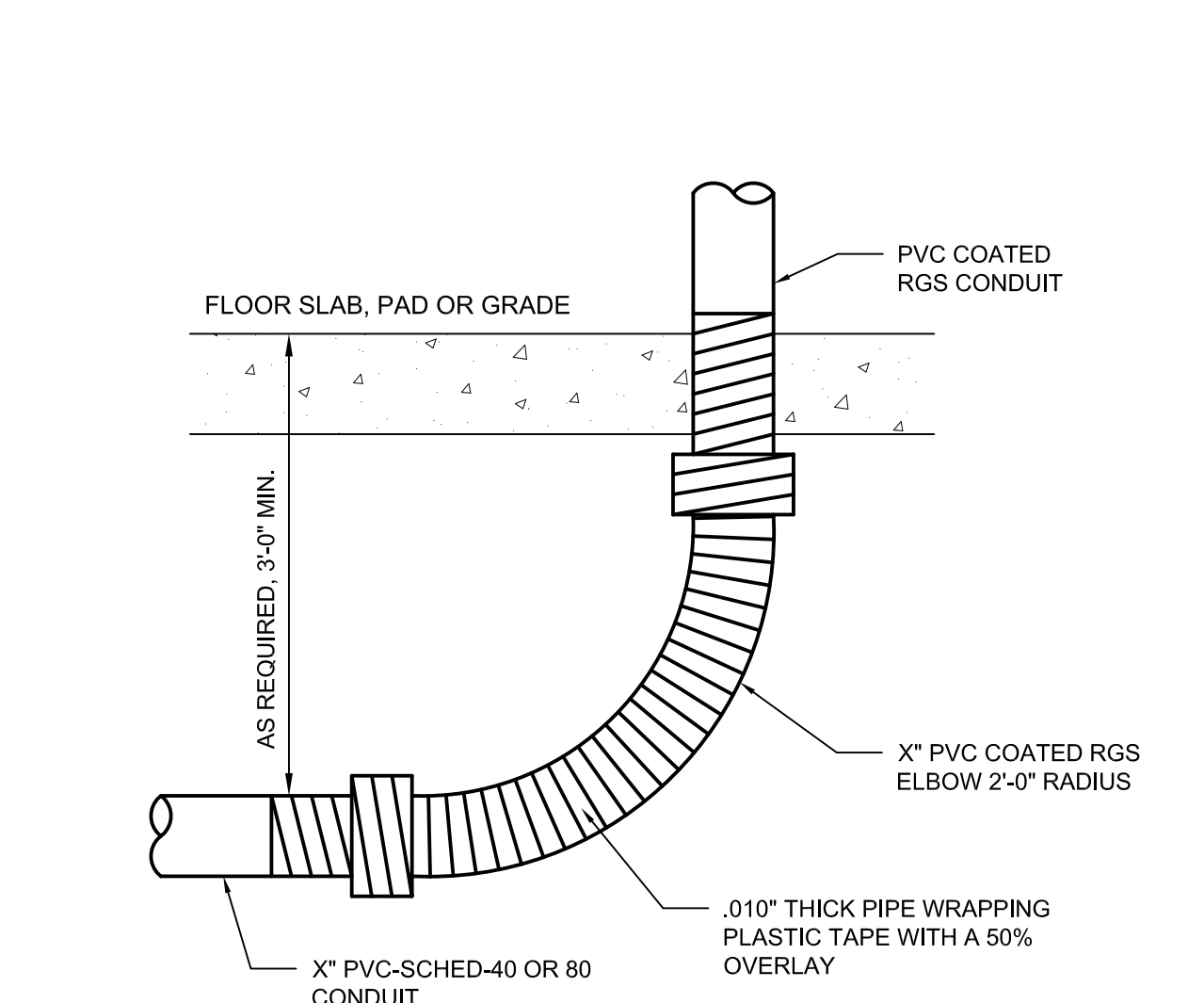


1 LIGHT POLE AND GROUND BOX DETAIL
NOT TO SCALE

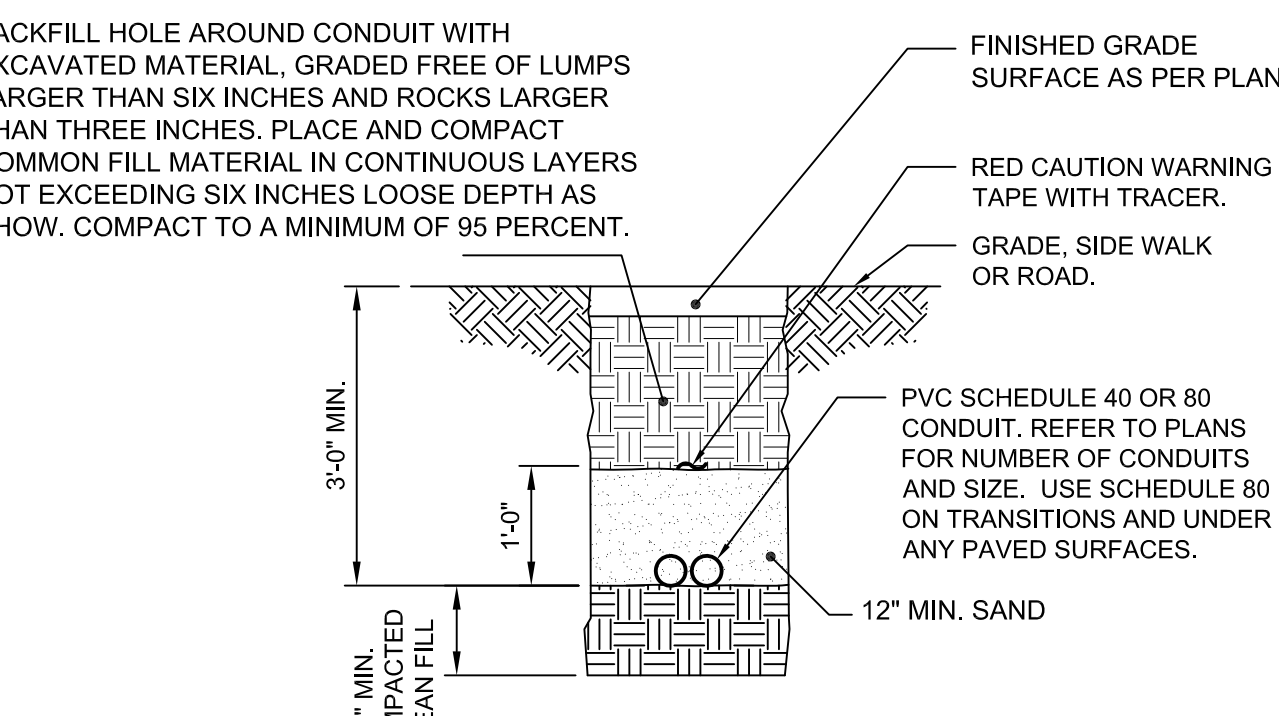


- NOTES:**
- COORDINATE SIZE WITH N.E.C. REQUIREMENTS AND CPP.
 - ALL GROUND BOXES/HAND HOLES SHALL COMPLY WITH ANSI 77 TIER 15 RATING (SUBJECT TO OCCASIONAL NON-DELIBERATE HEAVY VEHICULAR TRAFFIC).

2 GROUND BOX/HAND HOLE DETAIL
NOT TO SCALE

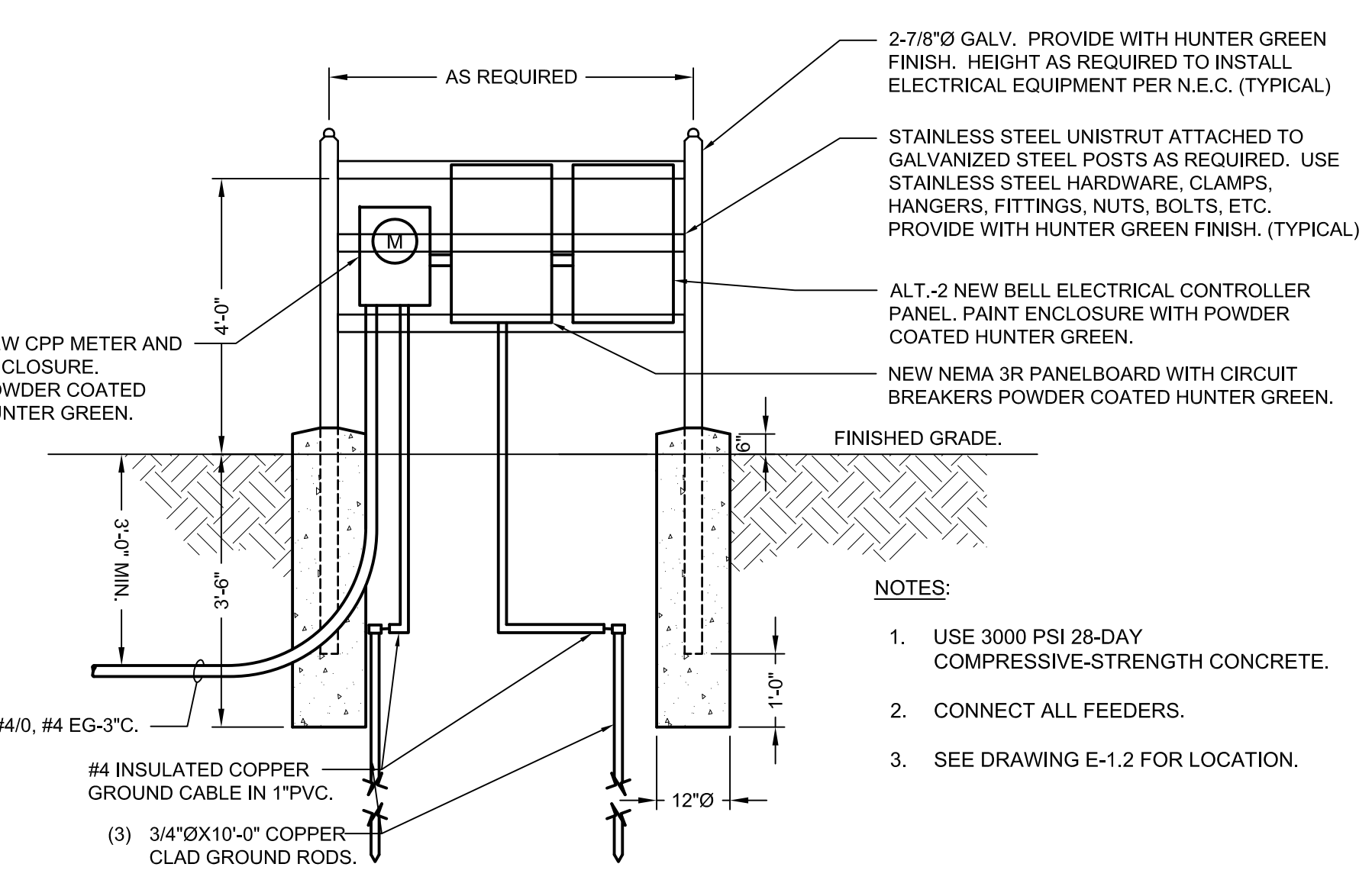


3 TYPICAL CONDUIT TRANSITION PVC TO RGS DETAIL
NOT TO SCALE



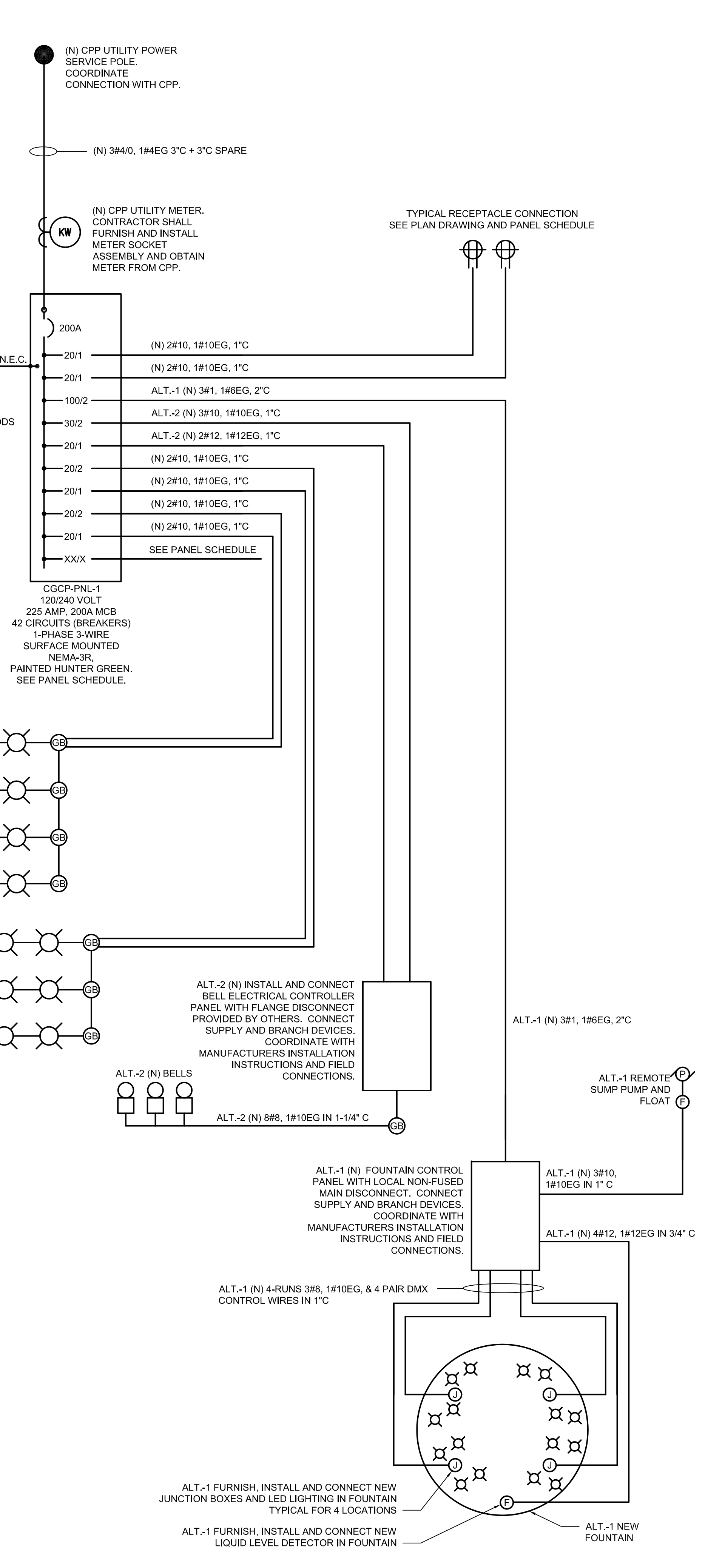
- NOTES:**
- CONTRACTOR SHALL LOCATE UNDERGROUND CONDUIT AT A MINIMUM OF 10'-0\"/>

4 TYPICAL DIRECT BURY CONDUIT SECTION
NOT TO SCALE



- NOTES:**
- USE 3000 PSI 28-DAY COMPRESSIVE-STRENGTH CONCRETE.
 - CONNECT ALL FEEDERS.
 - SEE DRAWING E-1.2 FOR LOCATION.

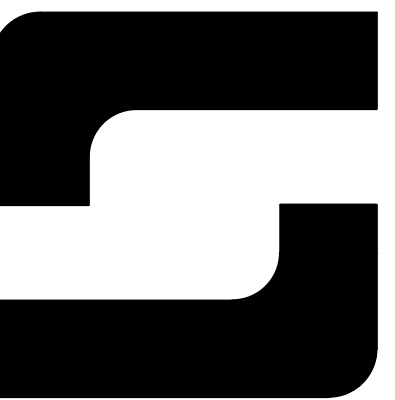
5 METERED SERVICE PANELBOARD RACK DETAIL
NOT TO SCALE



6 PARTIAL ONE-LINE DIAGRAM DETAIL
NOT TO SCALE

12/15/18

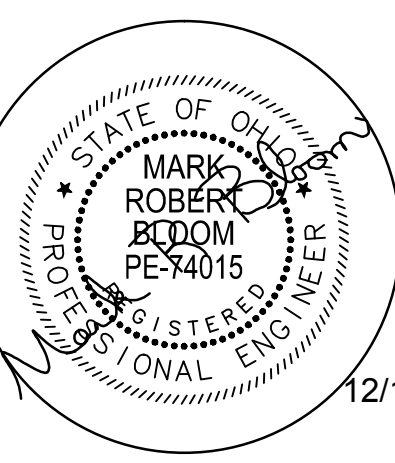
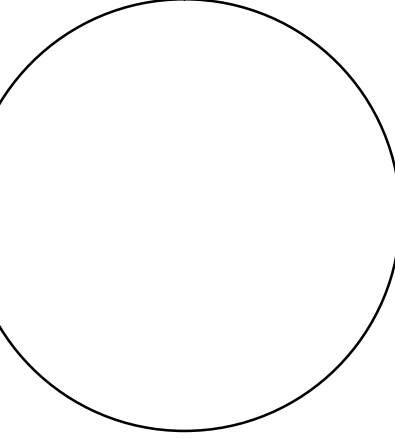
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DATE	PROJECT NO.
12/15/2018	J20170781.000
SHEET NO.	
E-5.1	



BERJ A. SHAKARIAN, ARCHITECT
AIA, NCARB, LEED AP BD+C



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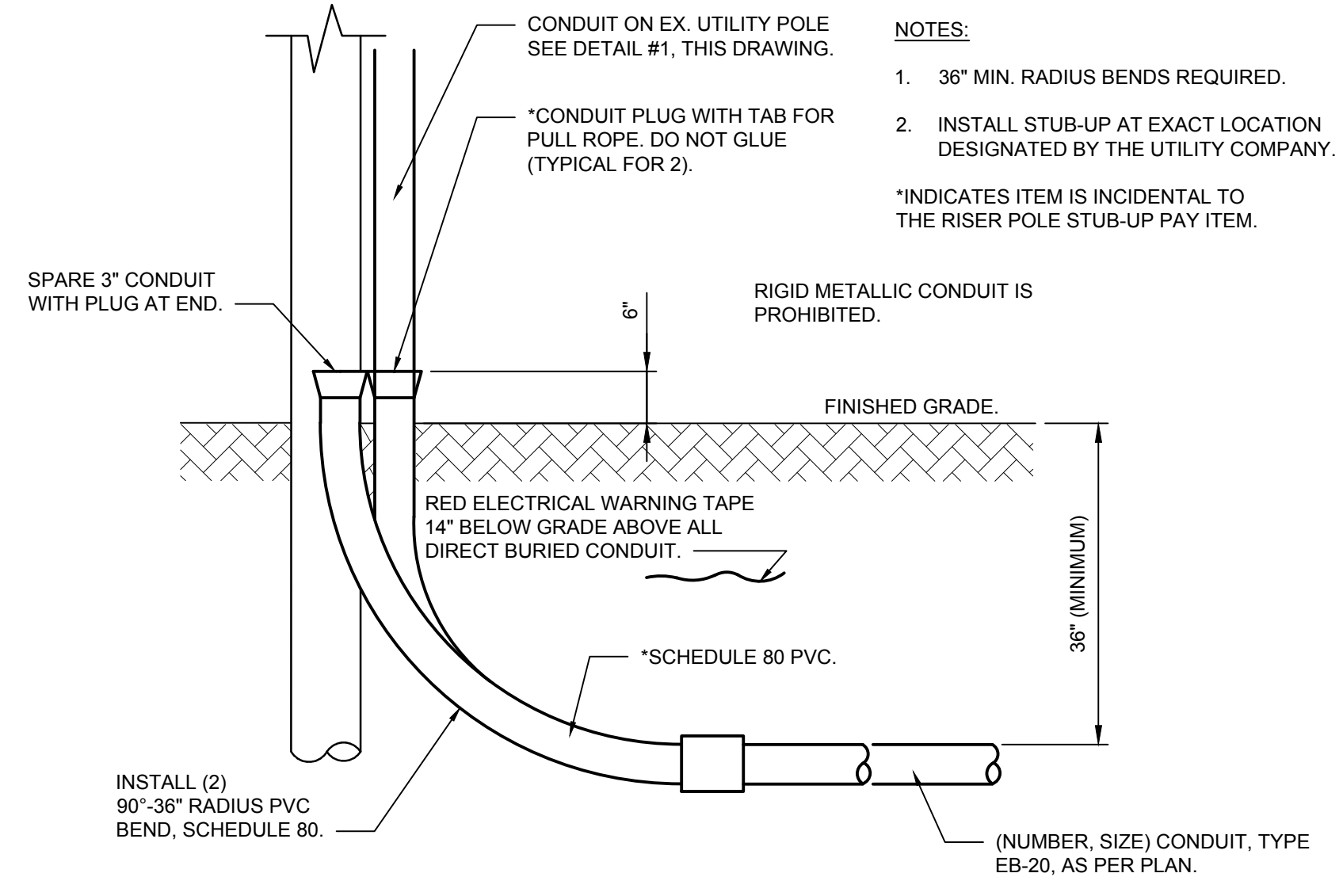
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DATE 12/15/2018	PROJECT NO. J20170781.000

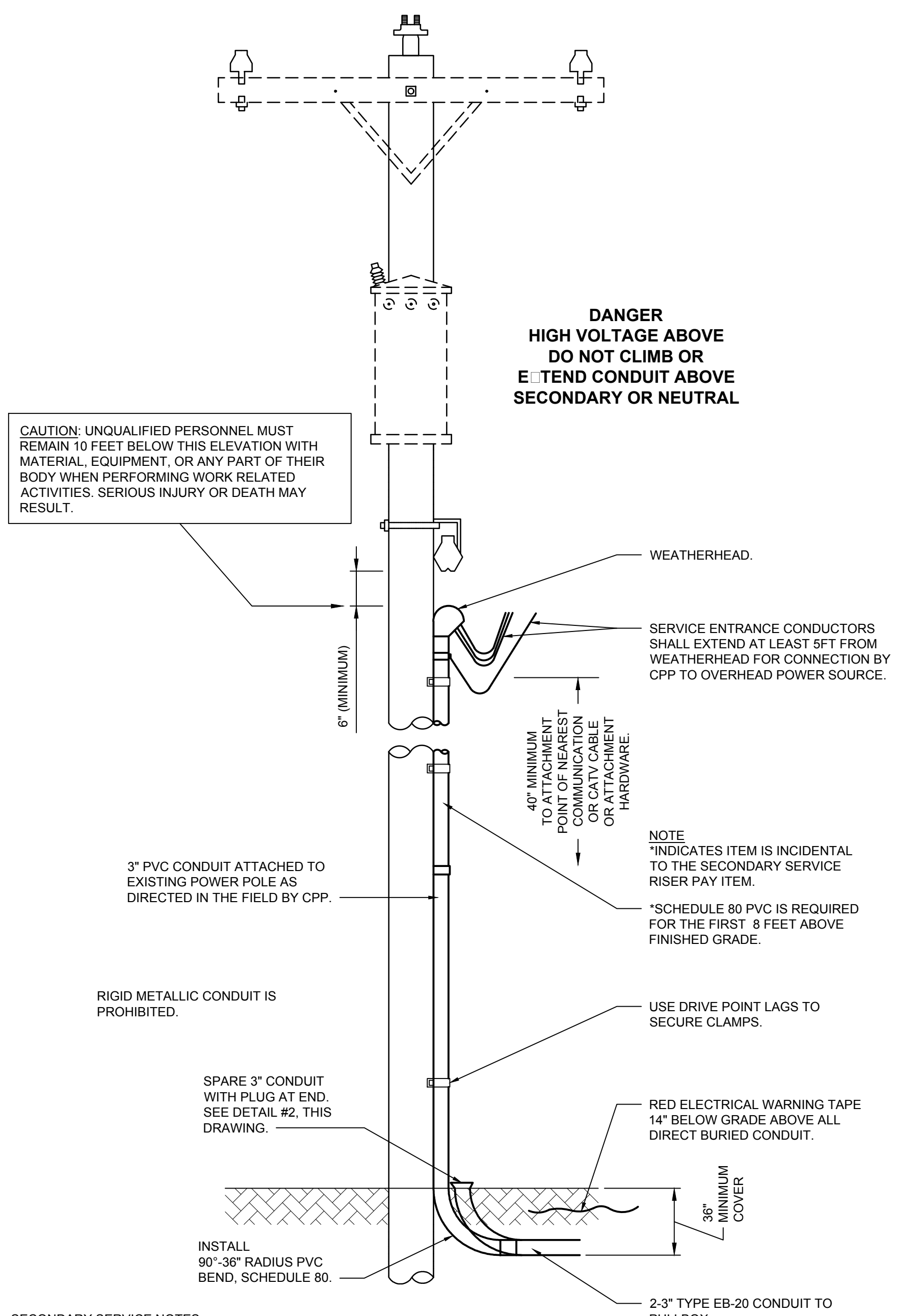
SHEET NO.
E-5.2

CONDUCTOR SIZE	DESCRIPTION	BREAKER POLE	AMPS		BREAKER POLE	AMPS		DESCRIPTION	CONDUCTOR SIZE			
			A	B		A	B					
2#10, 1#10EG	STAGE RECEPTACLE	1	20	5.0	1	2	65.0	2	100	ALT.-1 FOUNTAIN CONTROL PANEL	3#1, 1#6EG	
2#10, 1#10EG	STAGE RECEPTACLE	1	20	5.0	5.0	3	4	65.0	2	20	FLOOD LIGHTS - GROUP 1	2#10, 1#10EG
2#10, 1#10EG	STAGE RECEPTACLE	1	20	5.0	5.0	7	8	14.0	2	20	FLOOD LIGHTS - GROUP 2	2#10, 1#10EG
2#10, 1#10EG	STAGE RECEPTACLE	1	20	5.0	9	10	12.0	2	20	FLOOD LIGHTS - GROUP 2	2#10, 1#10EG	
2#10, 1#10EG	STAGE RECEPTACLE	1	20	5.0	11	12	12.0	1	20	LIGHT POLE - RECEPTACLES - G1	2#10, 1#10EG	
2#10, 1#10EG	STAGE RECEPTACLE	1	20	5.0	13	14	5.0	1	20	LIGHT POLE - RECEPTACLES - G2	2#10, 1#10EG	
2#10, 1#10EG	STAGE RECEPTACLE	1	20	5.0	15	16	5.0	1	20	RECEPTACLE AT PANELBOARD	2#10, 1#10EG	
2#10, 1#10EG	STAGE RECEPTACLE	1	20	5.0	17	18	5.0	1	20	RECEPTACLE AT PANELBOARD	2#10, 1#10EG	
2#10, 1#10EG	STAGE RECEPTACLE	1	20	5.0	19	20	12.0	2	30	ALT.-2 BELL CONTROLLER PANEL	3#10, 1#10EG	
2#10, 1#10EG	STAGE RECEPTACLE	1	20	5.0	21	22	12.0	1	20	ALT.-2 BELL CNTRL. AUX. 120VAC	2#12, 1#12EG	
2#10, 1#10EG	STAGE RECEPTACLE	1	20	5.0	23	24	5.0	1	20	SPARE		
SPARE		1	20		25	26		1	20	SPARE		
SPARE		1	20		27	28		1	20	SPARE		
SPARE		1	20		29	30		1	20	SPARE		
SPARE		2	15		31	32		1	20	SPARE		
BLANK					33	34		1		BLANK		
BLANK		1	20		35	36		1		BLANK		
BLANK		1			37	38		1		BLANK		
BLANK		1			39	40		1		BLANK		
BLANK		1			41	42		1		BLANK		
AMPS PER PHASE		30.00		30.00		113.00		113.00		AMPS PER PHASE		
AMPS:		BUS A	143.00	MAIN BREAKER		200A		Total kVA:		A	B	
		BUS B	143.00	CONDUIT SIZE		3"				17,160	17,160	
		FEEDER SIZE		SOURCE		3#4/0, 1#4EG		A.I.C. SYM		22000 (MINIMUM)		
		UTILITY		KVA DEMAND						34.320		

3 PANELBOARD 'CGCP-PNL' SCHEDULE
NOT TO SCALE



2 STREET POLE POWER SERVICE DETAIL
NOT TO SCALE



- SECONDARY SERVICE NOTES:**
- CPP CONDUIT SYSTEMS SHALL BE INSTALLED PER NEC AND LOCAL REQUIREMENTS.
 - CPP PROVIDE AND INSTALL SERVICE LATERAL AND RISER GUARD PER COMPANY CONSTRUCTION STANDARDS.
 - DO NOT EXTEND CONDUIT ABOVE THE SECONDARY OR NEUTRAL POSITION AT ANY TIME.
 - CONDUIT SHALL MAINTAIN A MINIMUM CLEARANCE OF 6" BELOW THE SECONDARY OR NEUTRAL.
 - CUSTOMER SHALL PROVIDE ADDITIONAL CONTINUOUS CABLE OF SUFFICIENT LENGTH (5 FT MINIMUM) TO CONNECT WITH OVERHEAD SOURCE.
 - COMPANY SHALL DETERMINE THE LOCATION / POSITION OF VERTICAL RISERS ON THE POLE BASED ON TRAFFIC FLOW AND LOCATION OF CATV, OR TELEPHONE CO. ATTACHMENTS.

1 STREET POLE POWER SERVICE DETAIL
NOT TO SCALE

ELECTRICAL LUMINAIRE SCHEDULE - SITE LIGHTING							
TYPE	DESCRIPTION	VOLTAGE	LAMPS	FIXTURE WATTS	MANUFACTURER	CATALOG	REMARKS
SE-1	TWO (2) FLOOD LIGHTS WITH ADJUSTABLE TWIN ARM DISTRIBUTION PROVIDED ON 27' POLE.	MVOLT	LED	(2) 297 W	GENERAL ELECTRIC ALTERNATES: STREETWORKS (EATON) OR APPROVED EQUAL	EVOLVE SERIES EFH1-01-0-EE-77-7-40-A-DKBZ-F-R	39000 NOMINAL LUMENS; LED DRIVER; TWIN MOUNTED ON 27'-0" FIBERGLASS POLE. PROVIDE WITH INTEGRAL PHOTOCELL WITH OCCUPANCY AND DIMMING CONTROL. REFER TO DETAIL 1 ON DRAWING E-5.1. SEE DRAWING E-0.2 FOR ADDITIONAL REQUIREMENTS.
SE-2	TWO (2) FLOOD LIGHTS WITH ADJUSTABLE TWIN ARM DISTRIBUTION PROVIDED ON 27' POLE.	MVOLT	LED	(2) 125 W	GENERAL ELECTRIC ALTERNATES: STREETWORKS (EATON) OR APPROVED EQUAL	EVOLVE SERIES EFN-B-0-F3-7-40-AX-DKBZ-F-R	15000 NOMINAL LUMENS; LED DRIVER; TWIN MOUNTED ON 27'-0" FIBERGLASS POLE. PROVIDE WITH INTEGRAL PHOTOCELL WITH OCCUPANCY AND DIMMING CONTROL. REFER TO DETAIL 1 ON DRAWING E-5.1. SEE DRAWING E-0.2 FOR ADDITIONAL REQUIREMENTS.
SE-3	THREE (3) FLOOD LIGHTS WITH ADJUSTABLE TRIPLE ARM DISTRIBUTION PROVIDED ON 27' POLE.	MVOLT	LED	(2) 297 W + (1) 98 W	GENERAL ELECTRIC ALTERNATES: STREETWORKS (EATON) OR APPROVED EQUAL	EVOLVE SERIES EFH1-01-0-EE-77-7-40-AX-DKBZ-F-R AND EVOLVE SERIES EFN-B-0-ES-7-40-AX-DKBZ-F-R	39000 NOMINAL LUMENS; LED DRIVER; MOUNTED ON THE OUTSIDE OF TRIPLE MOUNT BRACKET ON 27'-0" FIBERGLASS POLE. PROVIDE WITH INTEGRAL PHOTOCELL WITH OCCUPANCY AND DIMMING CONTROL. 13000 NOMINAL LUMENS; LED DRIVER; MOUNTED ON CENTER OF TRIPLE MOUNT BRACKET ON 27'-0" FIBERGLASS POLE. PROVIDE WITH INTEGRAL PHOTOCELL WITH OCCUPANCY AND DIMMING CONTROL. FIELD AIM AT FOUNTAIN. REFER TO DETAIL 1 ON DRAWING E-5.1. SEE DRAWING E-0.2 FOR ADDITIONAL REQUIREMENTS AND

- LUMINAIRE SCHEDULE NOTES:**
- LIGHT FIXTURES SHALL CONFORM TO CPP SPECIFICATIONS AND REQUIREMENTS.
 - LIGHT FIXTURE COLOR TEMPERATURE SHALL BE 4000K MINIMUM.
 - NOMINAL LUMEN VALUES MAY VARY BETWEEN DIFFERENT MANUFACTURERS OF SAME TYPE OF LUMINAIRE. NOMINAL LUMEN VALUES GIVEN IN REMARKS SECTION ARE THE VALUES USED FOR DESIGN.
 - LUMINAIRES AND POLES SHALL BE PROVIDED WITH 7 YEAR WARRANTY.
 - PROVIDE LUMINAIRES WITH AN INTEGRAL 8-PIN PHOTO-ELECTRIC CELL WITH OCCUPANCY SENSOR AND DIMMING CAPABILITY. WHEN THERE IS NO OCCUPANCY, FIXTURE SHALL DIM TO 70% OUTPUT.
 - IF ALTERNATE LUMINAIRES OR SUBSTITUTIONS ARE TO BE PROVIDED, CONTRACTOR SHALL PROVIDE A PHOTOMETRIC POINT-BY-POINT LAYOUT EQUIVALENT TO THE BASIS OF DESIGN LIGHTING CALCULATION AS PART OF THE SHOP DRAWING SUBMITTAL. IES POINT-BY-POINT CALCULATION SHALL CONFORM TO THE IES RECOMMENDATIONS FOR LIGHT LOSS FACTOR, POINT SPACING, ETC.

4 LIGHTING FIXTURE SCHEDULE
NOT TO SCALE

CLEVELAND PUBLIC POWER GENERAL CONSTRUCTION NOTES:
(Drawing # 9385)

Contact Ohio Utilities Protection Service, two working days prior to start of construction. In Ohio, call toll free 1-800-362-2764. It's the Law.

All power conduit runs are to be constructed by using 2", 4", or 5" PVC schedule EB conduits, as depicted on the plans, encased with a 3" concrete envelope, unless otherwise noted on the plans or specifications. The concrete envelope is to be 4000 psi (City of Cleveland Concrete Mix). When conduits are not encased in concrete in the utility easement area, all conduit runs are to be constructed using 2", 4" or 5" Schedule DB.

All primary conduit runs are to be installed at a minimum of 30" below existing and/or proposed grades and secondary conduit runs are to be installed at a minimum of 24" below existing and/or proposed grades.

All Vertical and horizontal curves shall have a minimum radius of no less than 30 feet. These curves are to be constructed by using 2' 6" chord lengths and appropriate 5-degree couplings, or as noted on plan view. See "conduit curve construction chart". The Engineering Department of Cleveland Public Power must approve any other curve design, field changes, or the use of preformed radius bends.

A rugged polyethylene material warning tape capable of resisting high or low pH conditions must be placed above the electrical conduit bank. This warning tape is to be six inches wide, red in color, and imprinted with the words, "DANGER - BURIED HIGH VOLTAGE CABLES BELOW". This tape is to be placed 6" above the newly installed duct bank. This shall conform with the standards as set by Ohio Utilities Protection Service.

As an option, contractor may elect to encase CPP's conduits in red concrete. Both methods are approved by Cleveland Public Power and are recommended by Ohio Utilities Protection Service.

All manhole outside walls and conduits runs are to have a minimum clearance of 5' (face to face), horizontally from all water lines. Vertical clearance shall be at a minimum of 1' 6", or as shown on profile sheets of the project. Clearance between other utilities shall be 1 foot, unless noted otherwise. CPP's duct bank shall cross over or under other utilities at an angle of no less than 45 degrees.

Page 2

Each newly constructed manhole shall be free of all foreign objects and debris. The contractor shall also provide a pulling line in each of the new conduits.

The contractor shall provide Cleveland Public Power with as-built plans of newly installed conduit system, showing both vertical and horizontal locations. These locations shall be at 50' intervals. All elevations are to be based on Cuyahoga County Regional Geodetic Surveys.

BACKFILL MATERIAL AND BACKFILLING PROCEDURES

Sand may only be used as indicated on the plan details for items such as conduit cover. The sand material shall be natural river or bank sand: free of silt, clay, loam, friable or soluble materials and organic matter. The backfill shall be installed in 4 inch (4") lifts and compacted using mechanical means only. Compact to within 12" of sub grade and each layer of backfill to 95% maximum dry density as determined by Standard Proctor Test (ASTM D698). The use of water for compaction is prohibited, example flooding or puddling.

Employ a placement method that does not disturb or damage conduit encasement.

Do not backfill over wet, frozen or unstable sub grade surfaces.

FLOWABLE FILL SPECIFICATION FOR UTILITY TRENCHES

PART 1 CERTIFICATION OF COMPLIANCE

Material must come from a plant with a current Certificate of Compliance demonstrating the ability of mix design to meet the specified requirements. Certificates in excess of one year will not be accepted. Certificates must contain the name of supplier, date, contract number and mix design data on each delivery ticket.

PART 11 MATERIALS

All materials shall conform to the applicable requirements stated herein.
1. Cement shall be ASTM C-150 Type 1
2. The use of Fly Ash is strictly prohibited

Page 3

3. Fine aggregate shall conform to ODOT Specification 703.03. Fine aggregate for Mortar or Grout. (ODOT Construction and Materials Specifications most current edition). The use of spent foundry sand or core is strictly prohibited.

PART 111 PERFORMANCE ENHANCING ADMIXTURE

An air-enhancing admixture shall be incorporated in the mix that will have an effect of lowering the water/cement ratio to 95 and 105 lbs/cubic foot. The air entrained content for the mix shall be 30% to eliminate/minimize the excessive water and segregation. Compressive strengths shall have a range of 50 PSI to 80 PSI at 28 days will be required if additional excavation by machine or hand is required.

Approved Admixtures

Manufacturer	Product
a) Master Builders	Rheofil
b) Axim	Fow Air
c) W.R. Grace	Darafil
d) Or approved equal	

PART IV FLOWABLE FILL MIX DESIGN

The mix design shall be proportional as follows:

Cement (Type 1)	50 lbs/cubic yard
Sand (SSD)	2475 lbs/cubic yard
Water	25 gallons/cubic yard
Admixture (air)	3 oz/cubic yard

Variations of the aforementioned mix design are strictly prohibited

PART V APPLICATION

- Flowable fill shall begin 12" above the top of pipe and continue in the trench to the concrete base.
- Material for pipe bedding and pipe zone to a minimum depth of 12 inches over the top of the pipe shall be specified by the utility.
- Exposed bolts and valves exposed in the trench should be wrapped with polyethylene material conforming to ODOT 748.07 (8 mil thick).

Page 4

- Cover all joints in clay pipe in the trench area with polyethylene material before pouring flowable fill. Repair all observed openings in any pipe or manhole in the trench area prior to backfilling with flowable fill. Repair techniques shall be in accordance with the utility company's standard repair procedures.
- Contact the respective utility owner for repair procedures.

CONCRETE DESIGN MIX (CITY OF CLEVELAND)

Under this section of these specifications the contractor is required to submit a separate mix design for each combination of cement type, aggregate type, and concrete supplier they will use under this contract. Each mix shall be designed in accordance with ASTM C94-94 Option C and as herein modified.

REQUIREMENT

Minimum twenty-eight (28) 4000 psi for 28 days compressive strength test. Four cylinders will be taken and tested per ASTM C-39-94. One to be tested at seven days and the remaining three will be tested at twenty-eight days. Acceptance will be based on the average results of the three cylinders.

Minimum Cement Constant

650 lbs. Per cubic yard. The cement shall conform to ASTM C-150-94 or C-595-94.

Water Cement Ratio

0.45 Maximum

Slump

Three inches (3") Nominal, as per ASTM C-94-94 (2"-4" actual). The use of chemical admixtures meeting ASTM C-494, to increase the slump to a maximum of 7", may be used with prior written approval of the Division of Engineering and Construction Inspector. If this option is selected the admixture and resultant slump shall be submitted for approval.

Air Content

Four percent (4%) to seven and one-half percent (7 1/2 %) ASTM C-173-94 or C-231-94.

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Aggregate size

No. 57 for course aggregate shall be limestone, gravel or crushed air-cooled blast furnace slag. Both course and fine aggregate are as per ASTM C 33-94.

If crushed air-cooled blast furnace slag is used it shall meet all of the requirements of ODOT 703.01 and ODOT 703.02. Copies of all tests and certifications for the crushed air-cooled blast furnace slag, if used, shall be submitted as part of the concrete mix design.

When high early strength is required, ASTM C-150-94 Type 111 A cement or admixtures in accordance with ASTM C-494-94 shall be used.

PAVEMENT REPAIR

Concrete Pavement

All pavement openings shall be sawed full depth and have smooth vertical faces. Dowels shall be required as per dowel table.

Concrete repaving shall be performed in such a manner that the entire lane and/or slab in which the repair area is located shall be restored. Should any portion of the repair area extend into an adjacent lane and/or slab, that lane or slab shall also be repaved.

Asphalt Pavement

All asphalt openings shall be sawed full depth and have smooth vertical faces. Dowels shall be required as per the dowel table.

Asphalt resurfacing shall be performed in such a manner that the entire lane in which the repairs are located shall be restored. Should any portion of the repair area extend into an adjacent lane, that lane shall also be resurfaced. For pavements with a width of 40' or less, a lane is considered 1/2 the pavement width.

Extend over cut in longitudinal direction two feet (2') into undisturbed sub grade.

Page 6

Brick Pavement

All streets within the City of Cleveland that are currently brick paved, shall be replaced with brick, or as directed by the inspector representing the Division of Engineering and Construction of the City of Cleveland.

The contractor under this section of the specifications shall construct concrete base, pavement, sidewalk, driveway aprons, curb and gutter sections, handicap ramps, and integral radius curb and walk. This includes the restoration of all adjacent surfaces, which are disturbed by this construction at no cost to the City of Cleveland and/or Cleveland Public Power. Contractor shall take any and all measures to ensure vandals do not deface concrete with graffiti, footprints, tire tracks, and rocks etc.

REGULATIONS GOVERNING THE LAYING OF CONCRETE SIDEWALKS, APRONS AND CURBING

Concrete walks shall be of one-course construction and shall be four inches (4") in thickness, except in the downtown district where they must be six inches (6") in thickness. Concrete for walks, curbs, drives, and aprons shall be Class "C" concrete as per item 608 and Special of the "Supplemental to State Specifications for the City of Cleveland - 1967".

When concrete walks are laid on clay, an extra excavation to a depth of one-and-one-half inches (1 1/2") must be made and filled with sand and gravel, to act as a foundation to the four inches of sidewalk proper.

No blocks of concrete shall be larger than six feet (6') and the joints must be cut by the use of an approved "Grooving Tool" making a groove one-fourth inches (1/4") deep. All edges shall be rounded with an approved "Edging Tool" to a radius of one-fourth inch (1/4").

Existing aprons and drive areas of the walk must be constructed of concrete. Aprons and the area of walk over which vehicles drive must be no less than six inches (6") in thickness, and must be laid in accordance with Supplemental to State Specifications for the City of Cleveland.

At all water meter covers, gas boxes, hydrants, or other obstructions, neatly fitted openings shall be cut in the sidewalk. No walk shall be laid until all these obstructions have been raised or lowered to the correct elevations.

Page 7

No obstruction shall be placed in front of any catch basin, fire hydrant, fire alarm box or letter box, or near enough to the same to interfere with their use.

No change in the width of the walk to be laid shall be made from that of existing walks on the street at the time work is done under this permit, unless specially permitted by the Director of Public Service. Trees, lawns, and shrubbery shall not be interfered with or destroyed by any work performed by the contractor. Walks must be laid to the same grade as existing walks on the street, unless permission for change of grade is obtained from the Director of Public Service.

Only one-half (1/2) of sidewalk in the business district can be obstructed at one time, unless contractor has an obstruction permit. Gutters must be left open at all times.

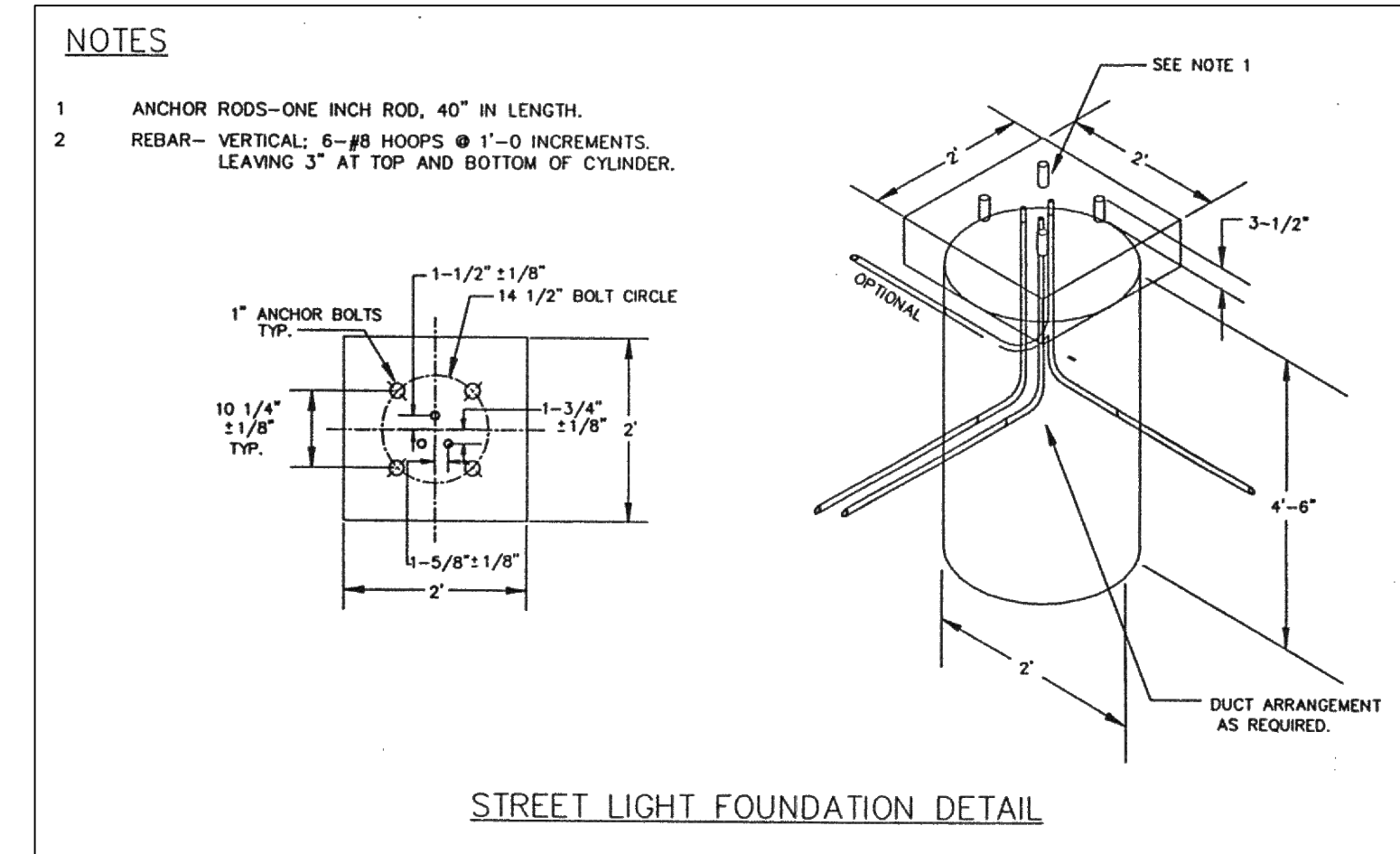
The spacing between the walk and the curb line must be graded to allow water drainage, and must be of a gradual slope from walk to the curb line.

The contractor is responsible for removing all dirt and rubbish caused by his work.

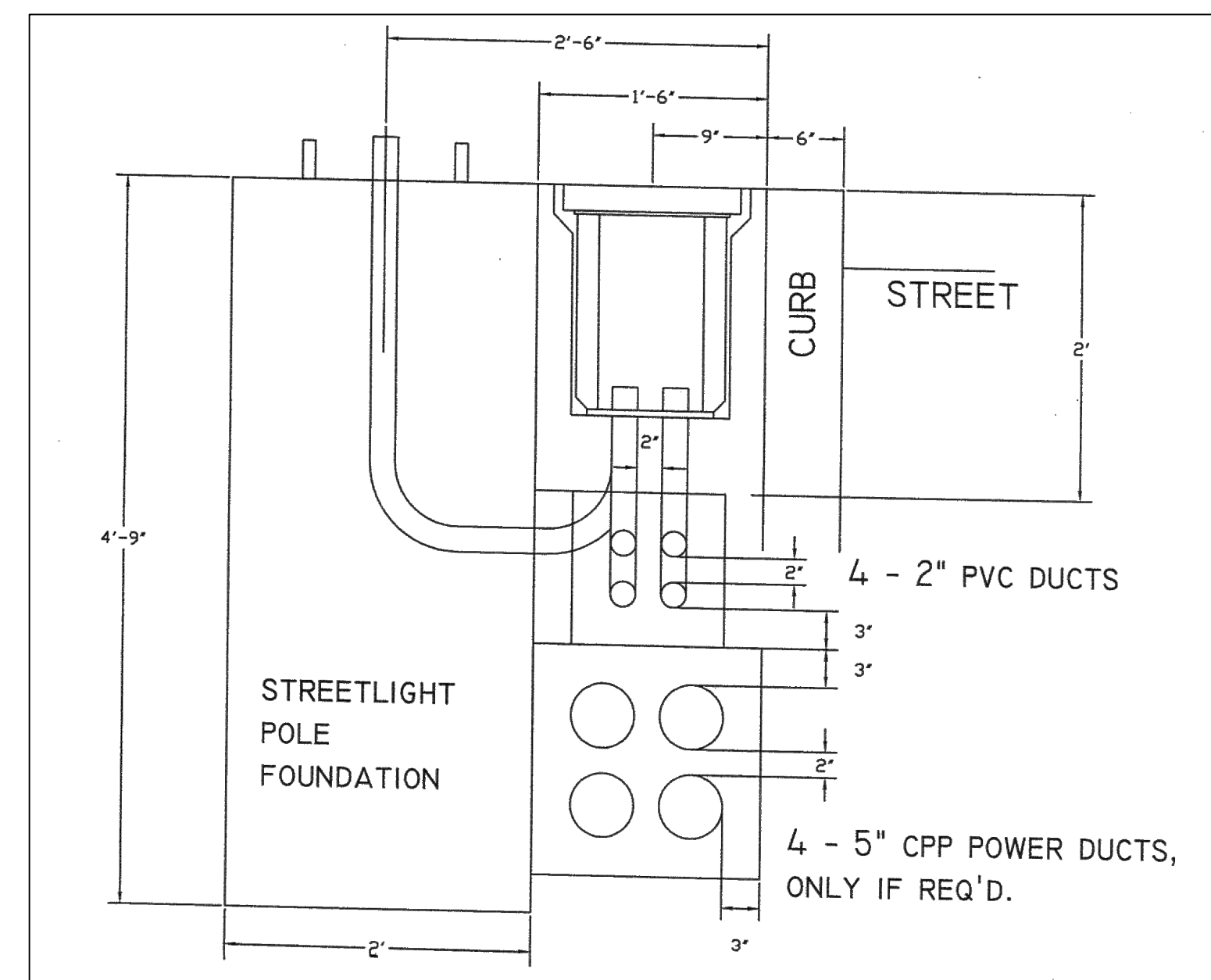
FAILURE OF A CONTRACTOR TO COMPLY WITH THESE REGULATIONS SHALL RESULT IN THE WITHHOLDING OF FUTURE PERMITS AND SHALL SUBJECT THE HOLDER OF THIS PERMIT TO THE PENALTIES PRESCRIBED IN THE SIDEWALK ORDINANCE.

CURBING: Curbing shall conform to the standards established for size and quality in the district in which it is to be installed. Cast-in-place concrete curbs and Integral curbs, where used, shall conform to detail Plan No. ME-246 of City of Cleveland.

Copies of these specifications and plans for Pavement Repair and Laying of Concrete Sidewalks may be obtained, upon request, from the Division of Engineering and Construction of The City of Cleveland.



1 CPP STREET LIGHT FOUNDATION DETAIL
NOT TO SCALE



2 CPP PULL BOX INSTALLATION DETAIL
NOT TO SCALE

CPP DETAILS ARE PROVIDED FOR REFERENCE. INFORMATION PROVIDED ON PLANS SHALL TAKE PRECEDENCE OVER CPP DETAILS UNLESS OTHERWISE NOTED. VERIFY EXACT DIMENSIONS, REQUIREMENTS, ETC. WITH FIELD CONDITIONS AND WITH CPP.

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STATE OF OHIO
MARK ROBERT BCDOM
PE-94015
PROFESSIONAL ENGINEER

ROCKEFELLER PARK

1916 - CENTENNIAL PLAZA - 2016
The Cleveland Cultural Gardens Federation

CPP DETAILS

REVISIONS	
DRAWN	SCALE
MRB	SEE PLAN
DATE	PROJECT NO.
12/15/2018	J20170781.000
SHEET NO.	
E-5.3	