

OMAHA METRO-CREIGHTON UNIVERSITY MULTI-MODAL FACILITY (Metro 2017 IDIQ - Work Order #3)

CREIGHTON UNIVERSITY CAMPUS, OMAHA, NEBRASKA
NE-04-0044 SPEC NO. 34-17
100% CONSTRUCTION DOCUMENTS



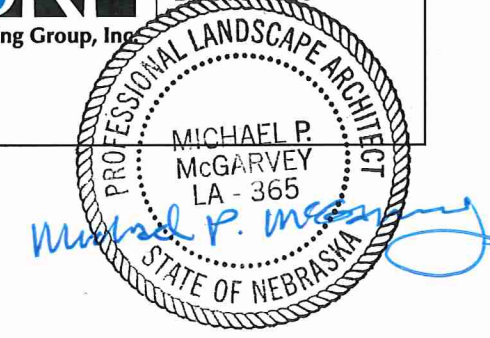
Omaha Metro-Creighton
University Multi-Modal
Facility
(Metro 2017 IDIQ -
Work Order #3)
Creighton University Campus, Omaha, Nebraska
100% CONST. DOCUMENTS

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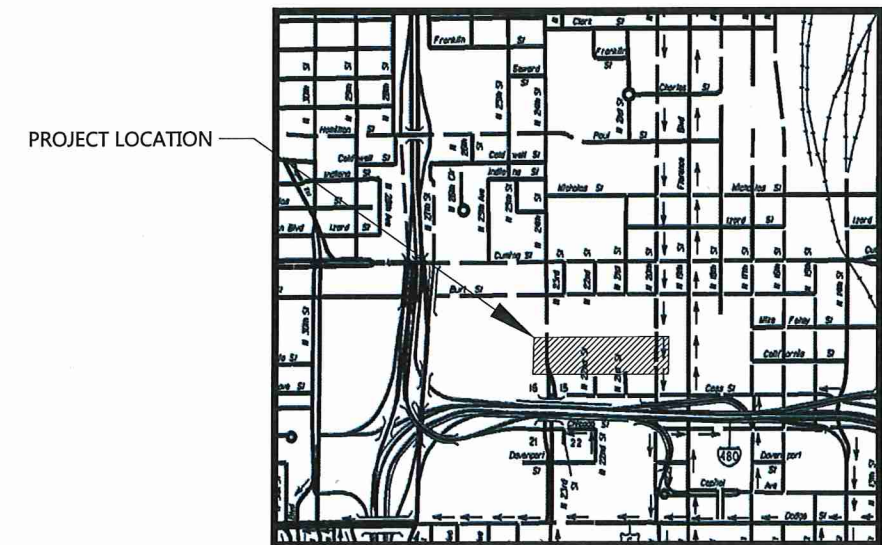
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COORDINATING PROFESSIONAL

ENGINEERS
PLANNERS
DESIGNERS



Date: 2018/05/18
Project Name:
CU PEDESTRIAN
MALL DESIGN
Issued For / Phase:
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CONSTRUCTION



VICINITY MAP
(NO SCALE)

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Revisions:

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Sheet Name:
LANDSCAPE COVER
SHEET
Sheet Number:
L-000

APPROVED BY:

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 COVER SHEET.dwg - 100% LANDSCAPE COVER SHEET





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Date: 2018/05/18

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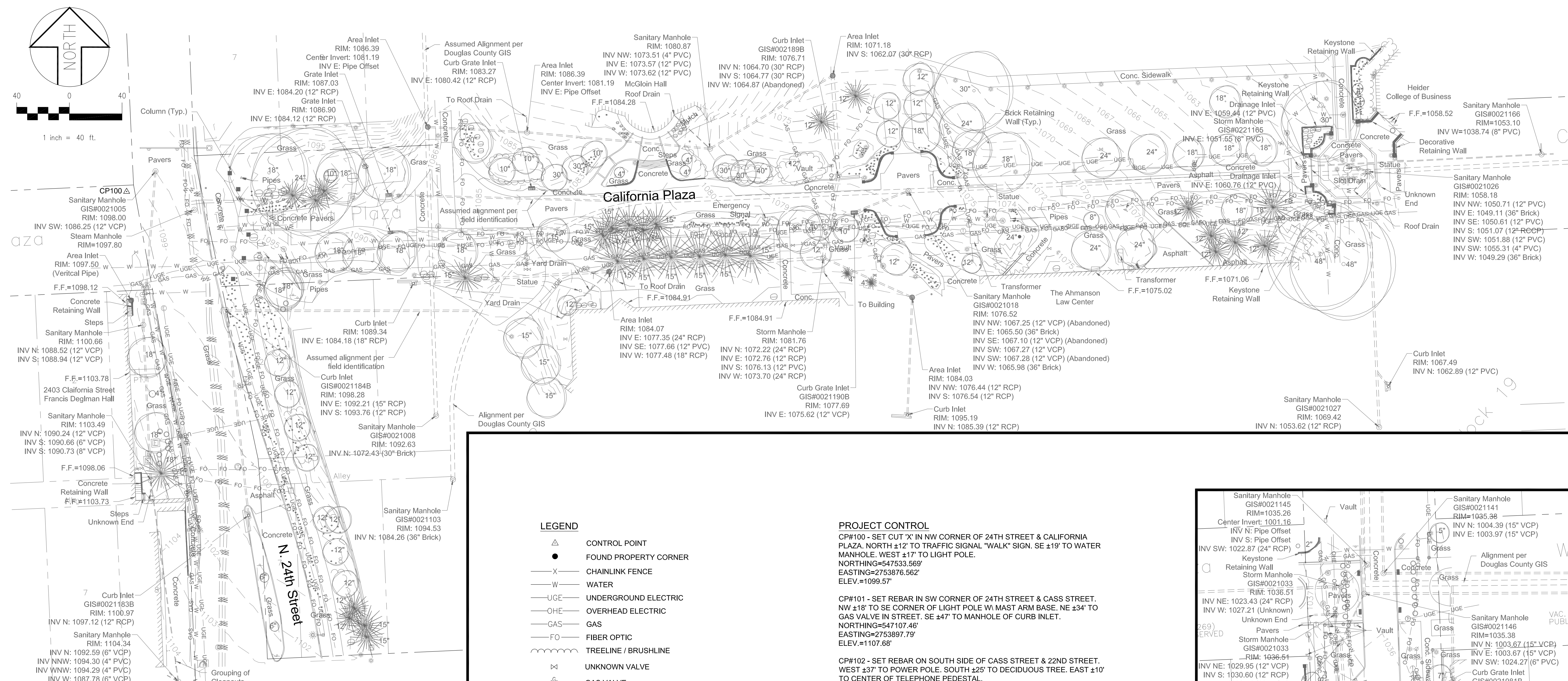
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SURVEY
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S-100



- LEGEND**
- △ CONTROL POINT
 - FOUND PROPERTY CORNER
 - X- CHAINLINK FENCE
 - W- WATER
 - UGE- UNDERGROUND ELECTRIC
 - OHE- OVERHEAD ELECTRIC
 - GAS- GAS
 - FO- FIBER OPTIC
 - TREELINE / BRUSHLINE
 - ⊠ UNKNOWN VALVE
 - ⊠ GAS VALVE
 - ⊠ TELEPHONE PEDESTAL
 - ⊠ ELECTRICAL PEDESTAL
 - ⊠ WATER MANHOLE
 - ⊠ TELEPHONE MANHOLE
 - ⊠ ELECTRICAL MANHOLE
 - ⊠ GAS MANHOLE
 - POLE / BOLLARD
 - PULLBOX
 - ⊠ FIRE HYDRANT
 - ⊠ TRAFFIC SIGNAL
 - ⊠ TRAFFIC SIGNAL W/ MAST ARM
 - ⊠ YARD LITE
 - ⊠ LIGHT POLE w/ MAST ARM
 - ⊠ SIGN
 - SPRINKLER
 - DECIDUOUS TREE w/ TRUNK DIAMETER
 - ⊠ CONIFEROUS TREE w/ TRUNK DIAMETER

PROJECT CONTROL

CP#100 - SET CUT 'X' IN NW CORNER OF 24TH STREET & CALIFORNIA PLAZA, NORTH ±12' TO TRAFFIC SIGNAL "WALK" SIGN, SE ±19' TO WATER MANHOLE, WEST ±17' TO LIGHT POLE.
NORTHING=547533.569'
EASTING=2753876.562'
ELEV.=1099.57'

CP#101 - SET REBAR IN SW CORNER OF 24TH STREET & CASS STREET, NW ±18' TO SE CORNER OF LIGHT POLE W/ MAST ARM BASE, NE ±34' TO GAS VALVE IN STREET, SE ±47' TO MANHOLE OF CURB INLET.
NORTHING=547107.46'
EASTING=2753897.79'
ELEV.=1107.68'

CP#102 - SET REBAR ON SOUTH SIDE OF CASS STREET & 22ND STREET, WEST ±37' TO POWER POLE, SOUTH ±25' TO DECIDUOUS TREE, EAST ±10' TO CENTER OF TELEPHONE PEDESTAL.
NORTHING=547143.89'
EASTING=2754502.16'
ELEV.=1114.48'

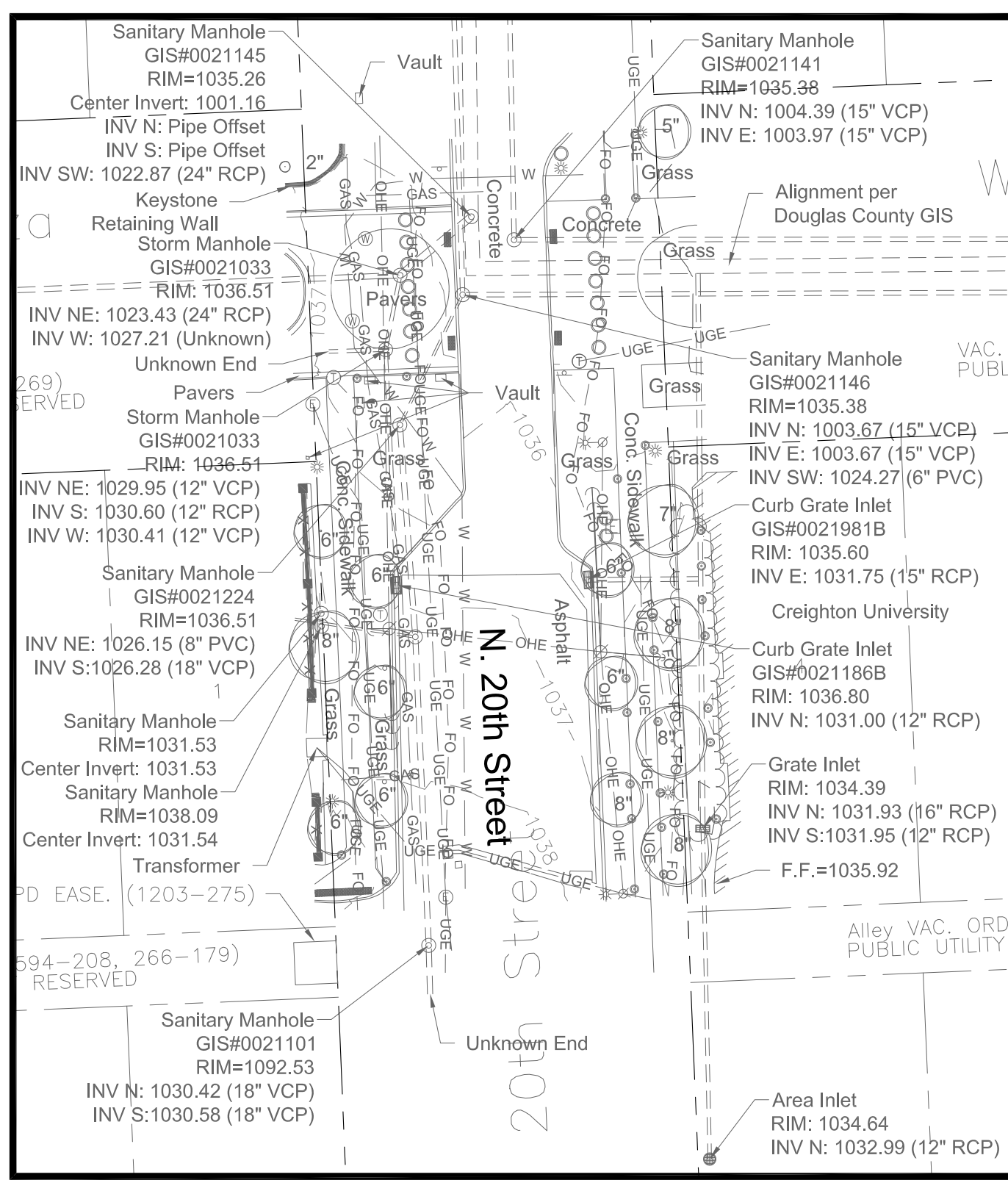
CP#103 - SET CUT 'X' ON SE CORNER OF 20TH STREET AND CASS STREET, NW ±12' TO CATV MANHOLE, SE ±10' TO POWER POLE, SOUTH ±39' TO WOODEN LIGHT POLE W/ MAST ARM.
NORTHING=5477172.71'
EASTING=2755216.87'
ELEV.=1054.51'

CP#104 - SET REBAR ON NE CORNER OF 20TH STREET AND BURT STREET, SW ±17' TO LIGHT POLE, NW ±42' TO "NO PARKING" SIGN, SE ±26' TO HIGH LINE POWER POLE.
NORTHING=548406.40'
EASTING=2755188.51'
ELEV.=1033.76'

RW BASE - SET REBAR IN NE CORNER OF PARKING LOT ON SOUTH SIDE OF BURT STREET, SE ±14' TO MANHOLE OF CURB INLET, NORTH ±13' TO NW CORNER OF VAULT BOX, ENE ±45' TO MANHOLE IN DRIVEWAY.
NORTHING=548250.53'
EASTING=2754284.02'
ELEV.=1058.74'

SEWER NOTE

ALL SANITARY AND STORM SEWER PIPE MATERIAL AND SIZE ARE ESTIMATED FROM THE SURFACE OF THE STRUCTURE. ALL PIPE MATERIAL AND SIZE ARE SUBJECT TO VERIFICATION BY THE END USER.



LAND SURVEYORS CERTIFICATION
I HEREBY CERTIFY THAT THIS PLAT, MAP, SURVEY OR REPORT WAS MADE BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY REGISTERED LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEBRASKA.

Cory J. Gross
CORY J. GROSS P.L.S. #619
12 / 21 / 2017
DATE

UTILITY WARNING:
UNDERGROUND UTILITIES AS SHOWN ARE PER DIGGERS HOTLINE LOCATORS AND AVAILABLE UTILITY COMPANY RECORDS. ADDITIONAL UNDERGROUND UTILITIES MAY BE PRESENT.
RW ENGINEERING & SURVEYING GIVES NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ACCURACY OF THIS UNDERGROUND SITE DATA. RW ENGINEERING & SURVEYING WILL NOT BE RESPONSIBLE FOR ANY DAMAGE TO UNDERGROUND FACILITIES WHICH OCCUR FROM THE USE OF THE INFORMATION PROVIDED.

GENERAL NOTES

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL CONCURRENT WORK BY OTHER TRADES. PROVIDE SLEEVES AS REQUIRED FOR DRAINAGE, IRRIGATION AND ELECTRICAL LINES. IRRIGATION AND ELECTRICAL SLEEVES AND SUBSURFACE DRAINAGE SYSTEMS SHALL BE CONSTRUCTED PRIOR TO PAVING AND LANDSCAPE WORK.
- EXISTING BUILDINGS, GRADING, EASEMENTS AND UTILITIES ARE BASED ON SURVEY INFORMATION AND INFORMATION PROVIDED BY CREIGHTON UNIVERSITY. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING PRIOR TO CONSTRUCTION.
- VERIFY ALL CONDITIONS AT JOB SITE AND NOTIFY ARCHITECT OF DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING WORK.
- THE ARCHITECT ASSUMES NO RESPONSIBILITY FOR THE UTILITIES OR STRUCTURES NOT SHOWN ON THE DRAWINGS. CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING OVER OR NEAR EXISTING GAS MAINS AND ELECTRICAL LINES. CONTRACTOR IS TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES, ABOVE AND BELOW GRADE, PRIOR TO EXCAVATION OR TRENCHING. NOTIFY ARCHITECT OF ANY DISCREPANCIES OR CONFLICTS. DAMAGE SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER.
- A SYSTEM OF DIAGRAMMATIC SYMBOLS AND NOTATIONS IS USED IN THESE DRAWINGS. REVIEW NOTATION CAREFULLY AND NOTIFY ARCHITECT AND REQUEST CLARIFICATION OF ANY UNCLEAR NOTATION OR DISCREPANCY PRIOR TO COMMENCING WORK.
- ALL SYMBOLS ARE SHOWN DIAGRAMMATIC ALLY ILLUSTRATING APPROXIMATE LOCATION OF EXISTING AND PROPOSED MATERIALS. ANY DISCREPANCIES OR CONFLICTS BETWEEN EXISTING AND PROPOSED CONDITIONS SHALL BE REPORTED TO THE ARCHITECT.
- LIMIT OF WORK LINE FOR CONSTRUCTION IS SHOWN DIAGRAMMATICALLY AND OCCURS AT BACK OF CURB, EDGE OF ROAD, FACE OF BUILDING WALL OR PROPERTY LINE EXCEPT WHERE OTHERWISE NOTED. WHERE LIMIT OF WORK IS SHOWN IN LANDSCAPE AREAS, LIMIT DISTURBANCE TO UNDISTURBED AREAS AND REINSTATE LANDSCAPE AS SHOWN ON PLANS.
- ALL LAYOUT DIMENSIONS ARE TO TOP OF CURB (TOC), BASE OF CURB, (BOC), FACE OF WALL, (FOW) OR FACE OF BUILDING (FOB) UNLESS OTHERWISE NOTED.
- ALL LAYOUT DIMENSIONS ARE FROM PLAN VIEW CALCULATIONS. ACTUAL FIELD DIMENSIONS MAY VARY FROM PLAN DUE TO ACTUAL LENGTHS ALONG A SLOPED SURFACE.
- WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
- DIMENSIONS MARKED "VERIFY" ARE TO BE FIELD MEASURED. ANY FIELD DISCREPANCIES FROM THE NOTED DIMENSIONS ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO FURTHER WORK.
- SPECIAL CONSIDERATION HAS BEEN GIVEN TO THE DESIGN AND INTENDED RELATIONSHIP BETWEEN LANDSCAPE MATERIALS, FINISHES AND LAYOUT IN RELATIONSHIP TO THE ARCHITECTURE AND/OR STREET, CURB & GUTTER AND SIDEWALK SYSTEMS. PAVEMENT JOINTING, FINISHES, COLOR AND GRADES HAVE BEEN STRICTLY COORDINATED. CONSTRUCTION OF THESE SYSTEMS SHALL ALSO BE STRICTLY COORDINATED.
- REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION PERTAINING TO THE PROJECT MATERIALS, PROCEDURES AND INSTALLATION. WORK INSTALLED NOT IN COMPLIANCE WITH THE SPECIFICATIONS IS SUBJECT TO REMOVAL AT CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING IMPROVEMENTS FROM DAMAGE. ALL SUCH IMPROVEMENTS AND STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR RECONSTRUCTED SATISFACTORY TO THE ARCHITECT AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR IS TO VERIFY ALL QUANTITIES. IN CASE OF ANY DISCREPANCIES, GRAPHICALLY SHOWN MATERIAL QUANTITIES SHALL TAKE PRECEDENCE.
- CONTOUR LINES ARE SHOWN ON LANDSCAPE PLANS FOR REFERENCE ONLY. REFER TO GRADING PLANS FOR SPOT ELEVATIONS AND DRAINAGE INFORMATION. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO COMPLETION OF ROUGH GRADING WORK.
- COORDINATE PROPOSED WALKS AND RAMPS WITH ANY EXISTING CONDITIONS INCLUDING PUBLIC SIDEWALKS. STAKE PROPOSED WALKS AND REVIEW IN FIELD WITH ARCHITECT PRIOR TO FORMING.
- NOTHING IN THE CONTRACT DOCUMENTS SHALL CREATE, NOR SHALL BE CONSTRUED TO CREATE, ANY CONTRACTUAL RELATIONSHIP BETWEEN THE ARCHITECT AND THE CONTRACTOR OR ANY SUBCONTRACTOR.
- THE ARCHITECT IS NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR FOR SAFETY PRECAUTIONS OR PROBLEMS UTILIZED IN CONNECTION WITH THE WORK, AND HE WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

GRADING NOTES

CONTRACTOR SHALL COMPLY WITH THE FOLLOWING:

- LOCATE ALL UNDERGROUND UTILITY LINES PRIOR TO THE START OF WORK. PROTECT ALL EXISTING UNDERGROUND UTILITIES DURING THE COURSE OF WORK.
- ELEVATIONS FOR ALL GRADING WORK WILL BE ESTABLISHED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF NEBRASKA.
- ALL FINISHED GRADES SHALL PROVIDE FOR NATURAL RUNOFF OF WATER WITHOUT LOW SPOTS OR POCKETS. SET FLOW LINES ACCURATELY. PROVIDE A MAXIMUM SLOPE OF 3:1, A MINIMUM 2% GRADIENT IN LAWNS AND PLANTING BEDS, AND A MINIMUM OF 1% GRADIENT IN NOT MOWN SEEDED AREAS. PROVIDE A MINIMUM 1% GRADIENT IN PAVED AREAS.
- THE EXISTING AND PROPOSED ELEVATIONS OF FLATWORK SIDEWALKS, AND CURBS, PAVING, ETC AS SHOWN HEREON ARE BASED ON EXTRAPOLATION OF FIELD SURVEY DATA AND EXISTING CONDITIONS. AT CRITICAL AREAS, CONTRACTOR SHALL HAVE FORMWORK INSPECTED AND APPROVED BY ARCHITECT PRIOR TO PLACING CONCRETE. MINOR ADJUSTMENTS, AS APPROVED BY THE ARCHITECT, TO PROPOSED GRADES, INVERTS, ETC MAY BE REQUIRED TO PREVENT PONDING.
- FOR SEEDED, SODDED AND PLANTED AREAS, HOLD FINISHED GRADES A MINIMUM DISTANCE BELOW THE TOP OF ADJACENT PAVEMENT OR CURBS AS SHOWN IN THE PLANTING DETAILS.
- SLOPE FINISH GRADE EVENLY BETWEEN SPOT ELEVATIONS. GRADUALLY ROUND OFF TOPS AND TOES OF SLOPES TO PRODUCE A SMOOTH AND CONTINUOUS TRANSITION BETWEEN SLOPES AND ADJACENT AREAS.
- REFER TO CIVIL ENGINEERS PLANS FOR MAN-HOLES, DRAINS AND STRUCTURES.
- REFER TO GRADING CROSS SECTIONS FOR TYPICAL GRADING CONDITIONS.
- GRADES SHOWN ARE FINISH GRADES.
- CONFLICTS OR DISCREPANCIES WITH GRADES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNERS REPRESENTATIVE PRIOR TO PROCEEDING WITH WORK.
- KEEP VEHICLES AND HEAVY EQUIPMENT AWAY FROM EXISTING TREES. MAINTAIN TREE PROTECTION FENCING IN LOCATIONS SHOWN ON DEMOLITION PLAN FOR THE DURATION OF GRADING WORK.
- DAMAGE TO PAVEMENT, CURBS, UNDERGROUND UTILITIES, TREES, WALLS, OR AREAS OUTSIDE THE LIMIT OF GRADING WORK SHOWN ON THE PLANS WILL BE RESTORED TO ITS ORIGINAL CONDITION BY THE CONTRACTOR AT NO COST TO THE OWNER.

PLANTING NOTES

- FIELD STAKE ALL TREE AND SHRUB LOCATIONS BASED UPON THESE PLANS. OBTAIN ARCHITECT'S APPROVAL OF STAKED LOCATIONS PRIOR TO PLANTING.
- PROVIDE MATCHING SIZES AND FORMS FOR EACH TREE TO BE INSTALLED.
- PLANT MATERIAL TO BE HEALTHY SPECIMENS, FREE FROM DISEASE OR DAMAGE.
- ALL PLANT MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE AMERICAN STANDARDS FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMAN.
- ALL ROOT WRAPPING MADE OF METAL, SYNTHETIC OR PLASTIC MATERIAL SHALL BE REMOVED AT TIME OF PLANTING.
- ALL PLANT MATERIAL SHALL BE SELECTED AT THE NURSERY BY THE PROJECT ARCHITECT. PLANT MATERIAL IS SUBJECT TO REVIEW AND APPROVAL BY ARCHITECT BEFORE INSTALLATION.
- ALL PLANT AND STAKES SHALL BE SET PLUMB UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL REFER TO THE CONTRACT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- PLANT QUANTITIES ARE PROVIDED FOR CONTRACTOR'S CONVENIENCE ONLY AND SHALL BE VERIFIED BY CONTRACTOR BY REVIEWING PLANTING PLAN SYMBOLS AND PLANT SPACING.
- ALL DECIDUOUS TREES SHALL BE WRAPPED. REFER TO SPECIFICATIONS FOR WRAP TYPE AND TIMING.
- PLANT AND EDGING LAYOUT SHALL TAKE PRECEDENCE OVER IRRIGATION EQUIPMENT LOCATIONS. INSTALLED VALVE BOXES WHICH CONFLICT WITH ACCEPTED PLANT AND EDGING LAYOUT SHALL BE MOVED TO A LOCATION BETWEEN PLANTS AS DIRECTED BY ARCHITECT AT NO ADDITIONAL COST TO OWNER.
- CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL PLANT MATERIALS INCLUDING SOD/SEED AREAS IN A HEALTHY STATE DURING CONSTRUCTION. ANY DAMAGE TO PLANT MATERIAL DUE TO NEGLIGENCE BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE. REFER TO SPECIFICATIONS.
- PROJECT INCLUDES IRRIGATION AND UTILITY SYSTEMS, MANY OF WHICH ARE CLOSE TO THE FINISHED SURFACE. VERIFY LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO PLANTING. ANY CONFLICTS SHALL BE RESOLVED IN THE FIELD BY THE ARCHITECT.
- ALL SHRUB AREAS ARE TO BE PREPARED AS CONTINUOUS BEDS.

DEMOLITION NOTES

- A SITE WALK WITH THE CONTRACTOR AND ARCHITECT SHALL BE CONDUCTED PRIOR TO THE DEMOLITION PHASE. ITEMS TO BE REMOVED WILL BE PAINTED WITH PINK SPRAY PAINT TO ID.
- LIGHT POLES AND FIXTURE AS INDICATED ARE TO BE REMOVED FROM SITE AND DISPOSED OF BY THE CONTRACTOR.
- CONTRACTOR TO VERIFY THAT EXISTING CONDITIONS OF THE SITE ARE ACCURATELY REPRESENTED ON THE DRAWINGS. ALL UTILITIES SHOULD BE FIELD VERIFIED. DEPTH OF UTILITIES TO BE FIELD VERIFIED.
- CONSTRUCTION AROUND EXISTING ELEMENTS SHOULD BE IN CAREFUL CONSIDERATION TO NOT CAUSE DAMAGE TO EXISTING ELEMENTS. CONTRACTOR TO CONTACT CREIGHTON UNIVERSITY AND THE DESIGN TEAM SHOULD ANY QUESTIONS ARISE REGARDING EXISTING ELEMENTS.
- CALL 811 PRIOR TO DIGGING OR DEMOLITION.

ABBREVIATIONS

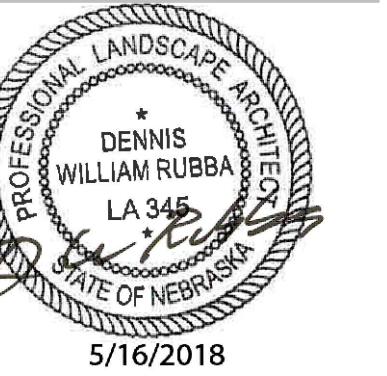
APROX	APPROXIMATE	OC	ON CENTER(S)
ARCH	ARCHITECT	OD	OUTSIDE DIAMETER
AVG	AVERAGE	OPP	OPPOSITE
B&B	BALLED AND BURLAPPED	PA	PLANTING AREA
BLDG	BUILDING	PC	POINT OF CURVATURE
BM	BENCHMARK	PERF	PERFORATE(D)
BOC	BACK OF CURB	PED	PEDESTRIAN
BR	BOTTOM OF RAMP	PERM	PERIMETER
BS	BOTTOM OF STEP	PL	PROPERTY LINE
BW	BOTTOM OF WALL	POB	POINT OF BEGINNING
CAL	CALIPER	PSF	POUNDS PER SQUARE FOOT
CF	CUBIC FEET	PSI	POUNDS PER SQUARE INCH
CIP	CAST-IN-PLACE	PT	POINT, POINT OF TANGENCY
CJ	CONTROL JOINT	PVC	POLYVINYL CHLORIDE
CL	CENTERLINE	PVMT	PAVEMENT
CLR	CLEAR(ANCE)	PVR	PAVER(S)
COMP	COMPACTED	QTY	QUANTITY
CONC	CONCRETE	R	RADIUS
CONT	CONTINUOUS	RE	REFERENCE
CONTR	CONTRACTOR	REINF	REINFORCE(D), (ING)
CU	CUBIC	REQD	REQUIRED
DBL	DOUBLE	REV	REVISION(S), REVISED
DEG	DEGREE	RIM	RIM ELEVATION
DEMO	DEMOLISH, DEMOLITION	ROW	RIGHT-OF-WAY
DIA	DIAMETER	RP	RADIUS POINT
DIM	DIMENSION	SAN	SANITARY
DN	DOWN	SCH	SCHEDULE
DTL	DETAIL	SD	STORM DRAIN
DWG	DRAWING	SEC	SECTION
EA	EACH	SF	SQUARE FOOT (FEET)
EF	EACH FACE	SHT	SHEET
EJ	EXPANSION JOINT	SIM	SIMILAR
ELEV	ELEVATION	SPECS	SPECIFICATIONS
ELECT	ELECTRICAL	SQ	SQUARE
ENG	ENGINEER	STA	STATION
EQ	EQUAL	STD	STANDARD
EST	ESTIMATE	STL	STEEL
EW	EACH WAY	STRUCT	STRUCTURAL
EXIST	EXISTING	SYM	SYMMETRICAL
FG	FINISHED GRADE	TBC	TOP OF BACK OF CURB
FIN	FINISH	TC	TOP OF CURB
FL	FLOW LINE	THK	THICK
FOB	FACE OF BUILDING	TLF	TOP OF LIGHT FOOTING
FOW	FACE OF WALL	TO	TOP OF
FS	FINISH SURFACE	TOPO	TOPOGRAPHY
FT	FOOT (FEET)	TR	TOP OF RAMP
FTG	FOOTING	TRANS	TRANSFORMER
GA	GAUGE	TS	TOP OF STEP
GAL	GALLON	TW	TOP OF WALL
GALV	GALVANIZED	TYP	TYPICAL
GB	GRADE BREAK	UNFIN	UNFINISHED
GC	GENERAL CONTRACT(OR)	VAR	VARIABLES
GPM	GALLON PER MINUTE	VERT	VERTICAL
HORIZ	HORIZONTAL	VEH	VEHICLE
HP	HIGH POINT	VOL	VOLUME
HT	HEIGHT	W/	WITH
ID	INSIDE DIAMETER	W/O	WITHOUT
INV	INVERT ELEVATION	WT	WEIGHT
IN	INCHES	WWF	WELDED WIRE FABRIC
INCL	INCLUDE(D)	YD	YARD
IRR	IRRIGATION		
JT	JOINT(S)		
LIN	LINEAR		
LP	LOW POINT		
LT	LIGHT		
MATL	MATERIAL		
MAX	MAXIMUM		
MECH	MECHANICAL		
MH	MANHOLE		
MIN	MINIMUM		
MISC	MISCELLANEOUS		
NIC	NOT IN CONTRACT		
NOM	NOMINAL		
NTS	NOT TO SCALE		



Omaha Metro-Creighton
 University Multi-Modal
 Facility
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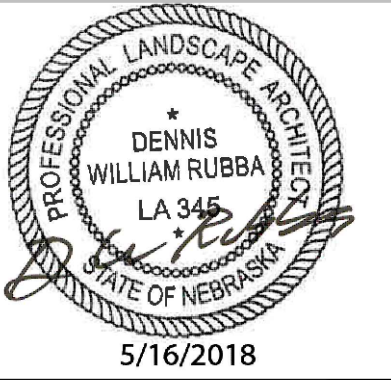


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Sheet Name:
 GENERAL NOTES

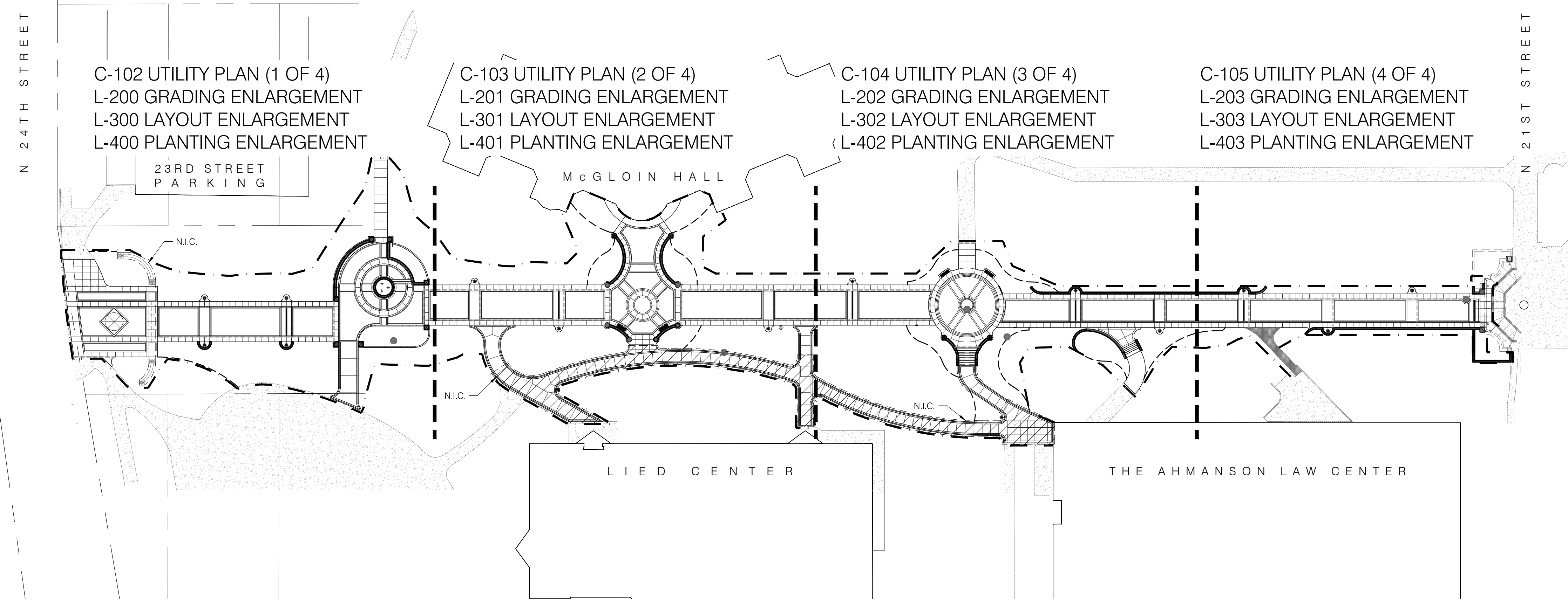
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Sheet Name:
SHEET INDEX
Sheet Number:
L-100



1 SHEET INDEX
SCALE: 1" = 40'-0"



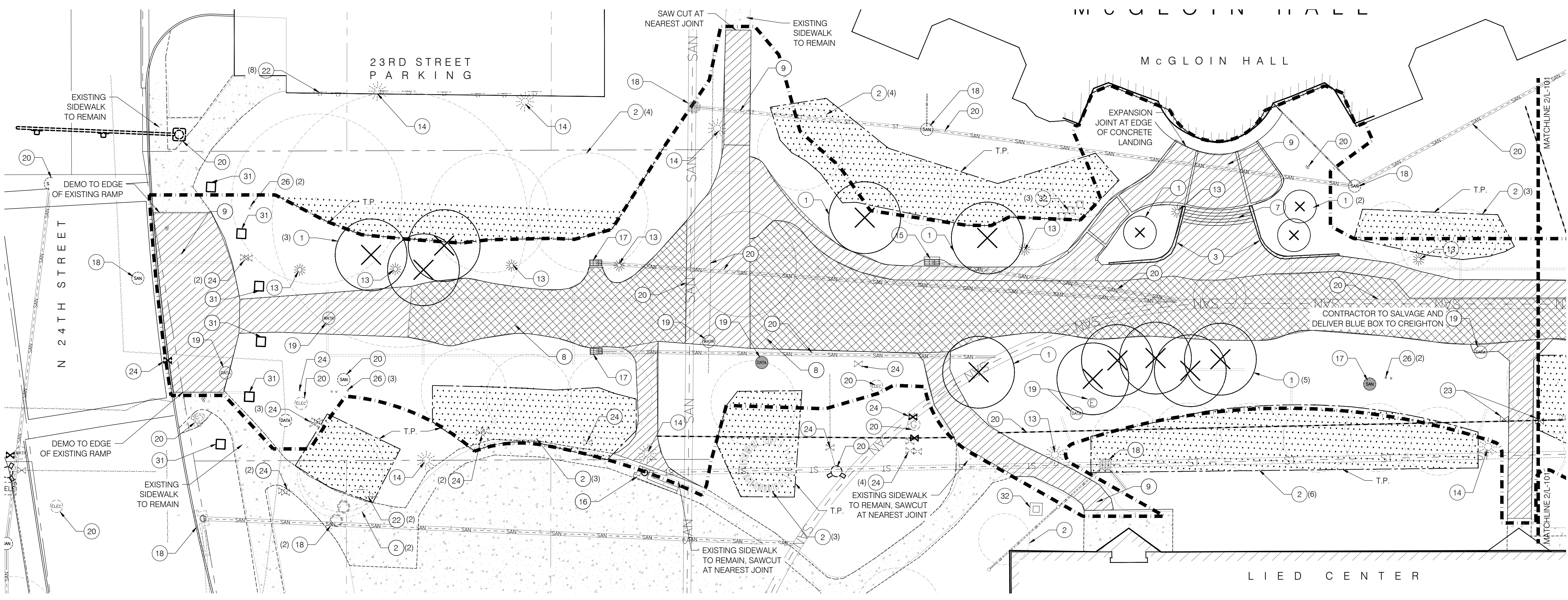


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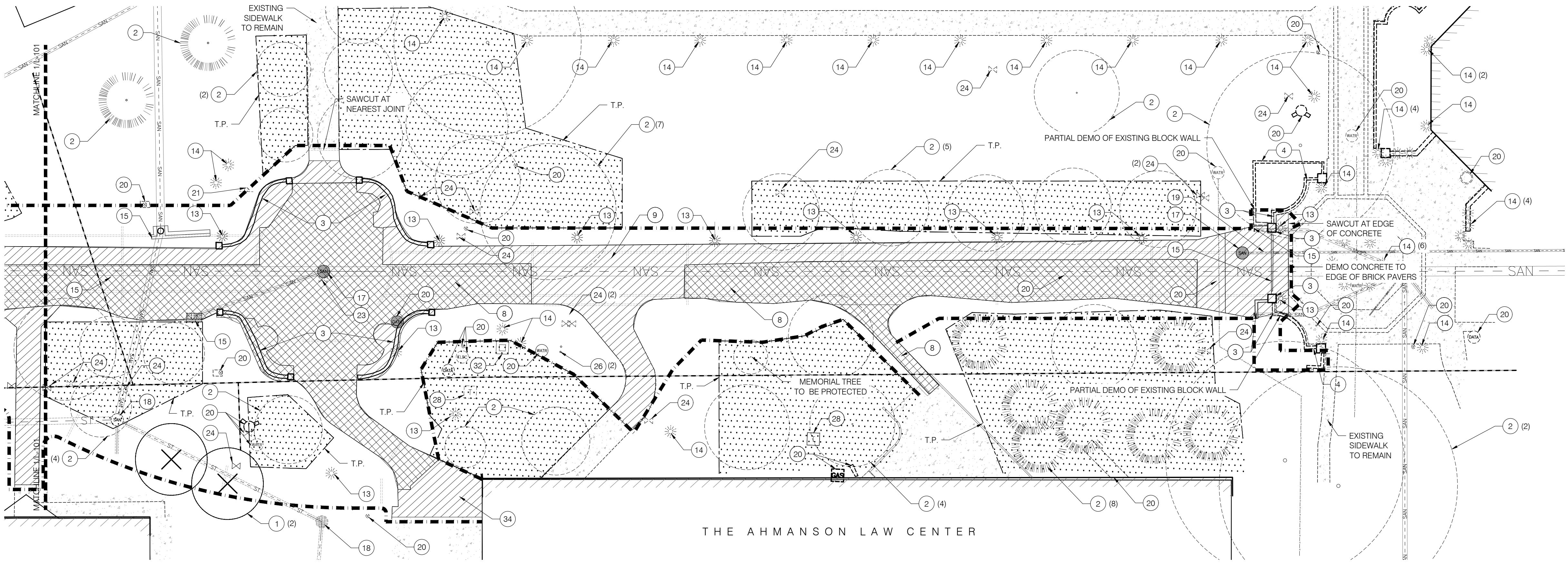
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Sheet Name:
DEMO PLAN

Sheet Number:
L-101



1 DEMO PLAN
SCALE: 1" = 40'-0"



2 DEMO PLAN
SCALE: 1" = 40'-0"



DEMOLITION KEYNOTES

- 1 TREE TO BE REMOVED.
- 2 TREE TO REMAIN (PROTECT ROOT ZONE).
- 3 WALL AND FOUNDATION TO BE REMOVED.
- 4 WALL AND FOUNDATION TO REMAIN.
- 5 PLANT MATERIAL TO BE REMOVED.
- 6 PLANT MATERIAL TO REMAIN.
- 7 STAIRS TO BE REMOVED.
- 8 BRICK PAVEMENT TO BE REMOVED.
- 9 CONCRETE PAVEMENT TO BE REMOVED.
- 10 PAVEMENT TO REMAIN.
- 11 CONCRETE CURB TO BE REMOVED.
- 12 CONCRETE CURB TO REMAIN.
- 13 LIGHT FIXTURE AND FOOTING TO BE REMOVED.
- 14 LIGHT FIXTURE AND FOOTING TO REMAIN.
- 15 STORM DRAIN INLET AND MANHOLE TO BE REMOVED AND REPLACED.
- 16 STORM DRAIN INLET AND MANHOLE TO REMAIN, VERIFY OPERATIONAL.
- 17 SANITARY MANHOLE TO BE REMOVED AND REPLACED/ADJUSTED, RE-CIVIL.
- 18 SANITARY MANHOLE TO REMAIN, VERIFY OPERATIONAL.
- 19 UTILITY ELEMENT/LINE TO BE REMOVED AND REPLACED/READJUSTED.
- 20 UTILITY ELEMENT/ LINE TO REMAIN.
- 21 SITE FURNISHING TO BE REMOVED.
- 22 SITE FURNISHING TO REMAIN.
- 23 VAULT TO BE REMOVED.
- 24 VAULT TO REMAIN.
- 25 PIPE TO BE REMOVED AND REPLACED/READJUSTED.
- 26 PIPE TO REMAIN.
- 27 TRANSFORMER TO BE REMOVED.
- 28 TRANSFORMER TO REMAIN.
- 29 SLOT DRAIN TO BE REMOVED.
- 30 SLOT DRAIN TO REMAIN.
- 31 STATUE OR COLUMN TO BE REMOVED.
- 32 STATUE OR COLUMN TO REMAIN.
- 33 NOT IN CONTRACT (N.I.C.) ELEMENT/LINE TO BE REMOVED AND REPLACED.
- 34 NOT IN CONTRACT (N.I.C.) ELEMENT/LINE TO REMAIN.

LEGEND

- EXISTING TREE TO BE REMOVED
QTY (16)
- EXISTING TREE TO REMAIN
QTY (64)
- EXISTING CONCRETE TO REMAIN
- EXISTING CONCRETE TO BE REMOVED
- EXISTING BRICK PAVEMENT TO BE REMOVED
- AREA CONSIDERED TO BE SENSITIVE DEMO BOUNDARY. CONTRACTOR TO TAKE EXTREME CAUTION WHEN EXCAVATING IN THIS AREA.
- TREE PROTECTION - ORANGE FENCE (T.P.)
- LIMITS OF EARTHWORK
- RIGHT OF WAY
- LIMIT OF WORK

STORM SEWER NOTES

- INLETS AND MANHOLES SHALL BE LOCATED IN ACCORDANCE WITH THE COORDINATES SHOWN. THE LENGTHS OF PIPES MAY VARY ACCORDINGLY.
- THE CONTRACTOR IS REFERRED TO THE FOLLOWING CITY OF OMAHA STANDARD PLATES:
 - 700-01 STORM BEDDING
 - 700-23 CONCRETE COLLAR AND SEWER TAP
 - 700-24 PIPE PLUG
 - 700-40 STORM SEWER MANHOLE
 - 700-90 CAST IRON MANHOLE RINGS AND COVERS, MANHOLE STEPS
- TRENCH BACKFILL SHALL BE COMPACTED AS SPECIFIED BY THE GEOTECHNICAL ENGINEER.
- STORM SEWER MATERIALS: THE FOLLOWING MATERIALS ARE GENERALLY APPROVED FOR STORM SEWER CONSTRUCTION:
 - A. POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE AND VENT PIPE. PVC PIPE SHALL BE TYPE 1, GRADE 1 AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM D2665-02AEO AND SHALL BE INSTALLED AS REQUIRED BY ASTM D2321-00.
- CONCRETE FOR STORM SEWER STRUCTURES SHALL BE L6SM USING TYPE II PORTLAND CEMENT. THE CEMENT FOR MANHOLE GROUT SHALL BE THE SAME AS THAT FOR MANHOLE CONCRETE AND SHALL MEET THE REQUIREMENTS OF THE CITY OF OMAHA STANDARD SPECIFICATIONS.
- ALL STORM SEWER CONSTRUCTED IN THE PUBLIC RIGHT OF WAY SHALL BE REINFORCED CONCRETE PIPE (RCP).
- THE CONTRACTOR INSTALLING SEWER SHALL HOLD A VALID SEWER LAYER'S LICENSE AND SHALL OBTAIN ALL REQUIRED PERMITS. PERMITTING FEES SHALL BE PAID BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

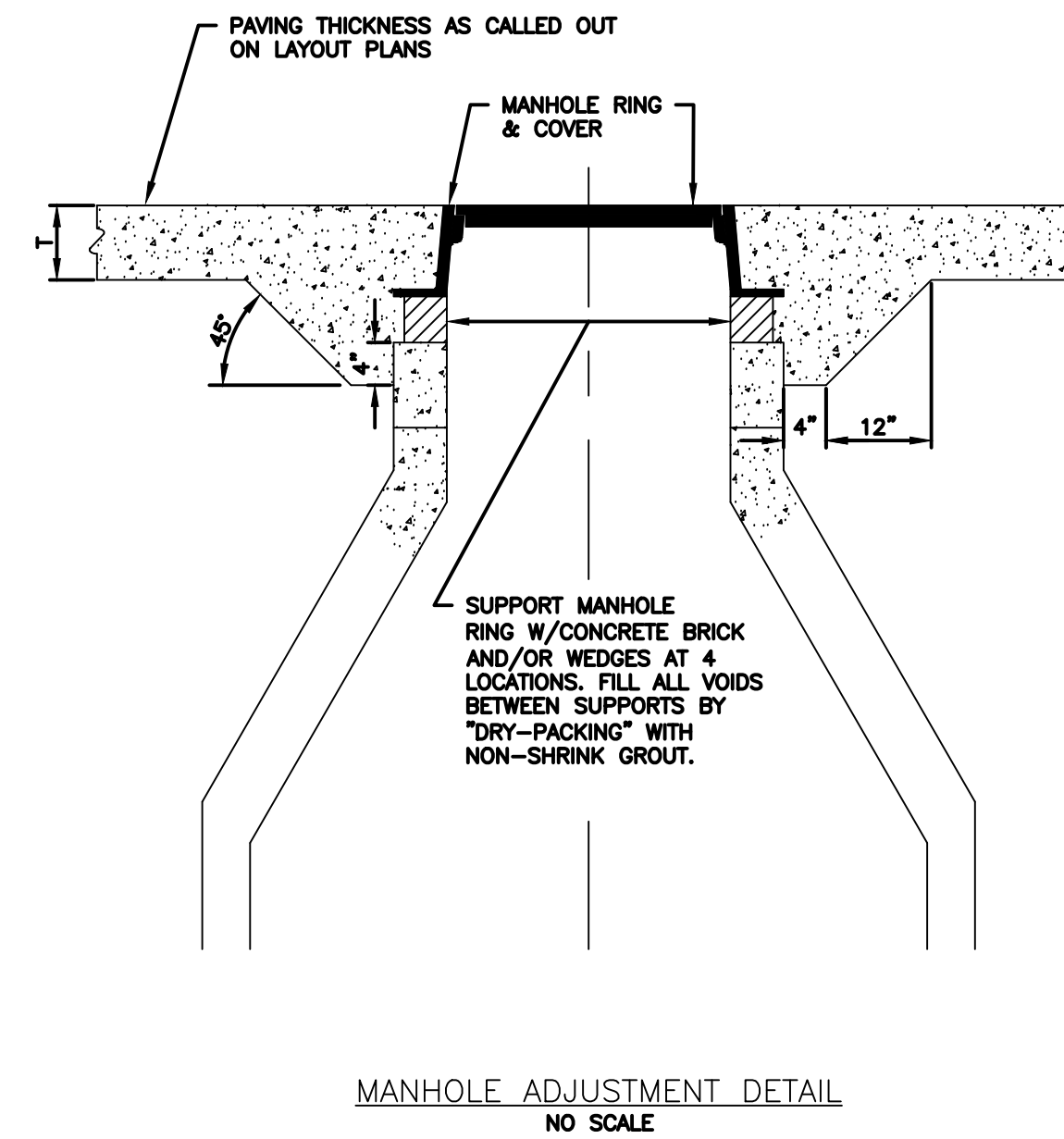
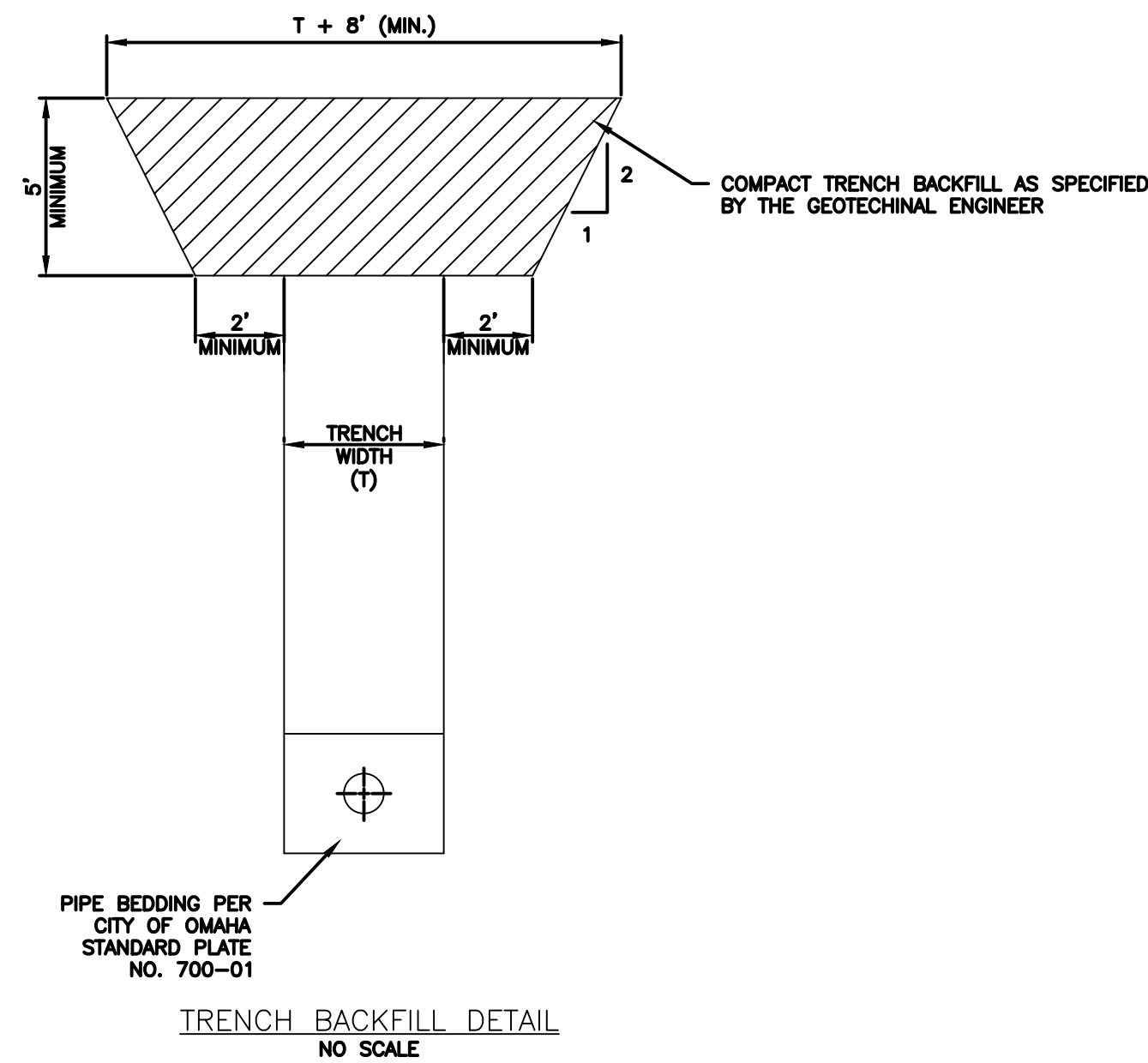
SOIL CONDITIONING

- THE PROJECT IS A LINEAR PROJECT IN NATURE AND SHALL BE CONSIDERED A MAINTENANCE PROJECT BY DEFINITION. WITH THE EXISTING UTILITIES AND STRUCTURES IN THE AREA OF THE PROJECT, THE BMP BE SUITED SHALL BE SOIL CONDITIONING.
- SOIL SHALL BE CONDITIONED IN LOCATIONS DISTURBED BY THE PROPOSED GRADING AND IMPROVEMENTS ASSOCIATED WITH THE PROJECT.
- EXISTING VEGETATION, INCLUDING TURF, SHALL BE REMOVED AND THE GROUND SHALL BE TILLED TO A MINIMUM DEPTH OF 6".
- A 3" LAYER OF ORGANIC COMPOST SHALL BE PLACED ON TOP OF THE TILLED GROUND AND SUBSEQUENTLY BE TILLED INTO A DEPTH OF 6" OF EXISTING SOIL. OMAGROW, IF AVAILABLE, IS AN ACCEPTABLE ALTERNATE FOR COMPOST. IF USED, ONLY A 2" LAYER OF OMAGROW IS REQUIRED.
- FINE GRADING OF THE SITE SHALL BE COMPLETED WITH NO MORE THAN TWO EQUIPMENT PASSES TO REDUCE THE POTENTIAL FOR SOIL COMPACTION.
- VEGETATIVE COVER SHALL BE ESTABLISHED IMMEDIATELY AFTER FINE GRADING.

ORGANIC COMPOST

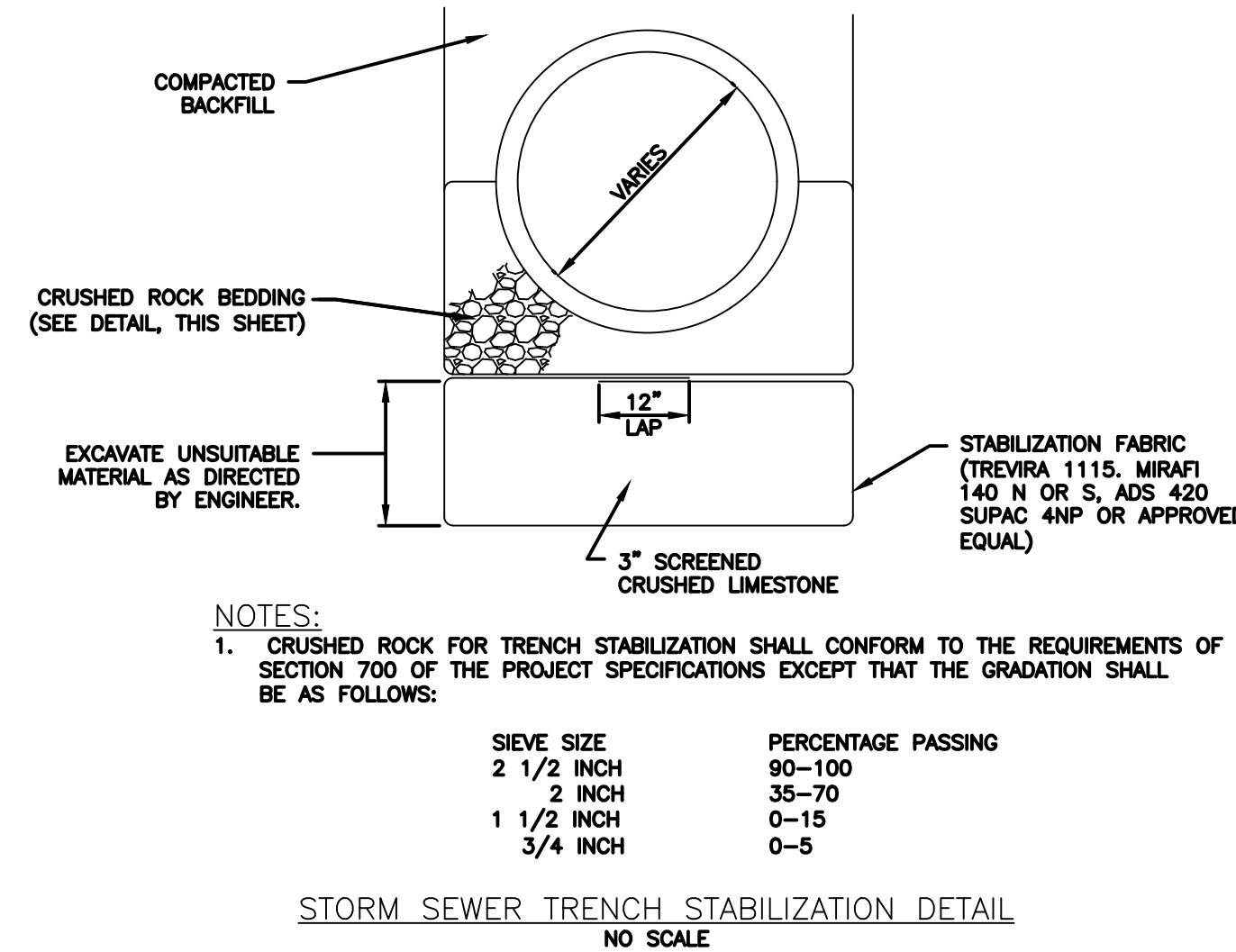
- ORGANIC COMPOST SHALL BE DERIVED FROM PLANT MATERIAL, SHALL BE WELL COMPOSTED, FREE OF VIABLE WEED SEEDS AND STABILIZED WITH REGARD TO OXYGEN CONSUMPTION AND CARBON DIOXIDE GENERATION. ANIMAL OR POULTRY MANURE SHALL NOT BE ACCEPTABLE.
- COMPOST SHALL HAVE A MOISTURE CONTENT THAT HAS NO VISIBLE FREE WATER OR DUST PRODUCED WHEN HANDLING THE MATERIAL.
- COMPOST CRITERIA:

	MIN.	MAX.
ORGANIC MATTER CONTENT	35%	65%
CARBON/NITROGEN RATIO	-	25:1
PH	6	8
BULK DENSITY (LBS/CU FT)	40	50



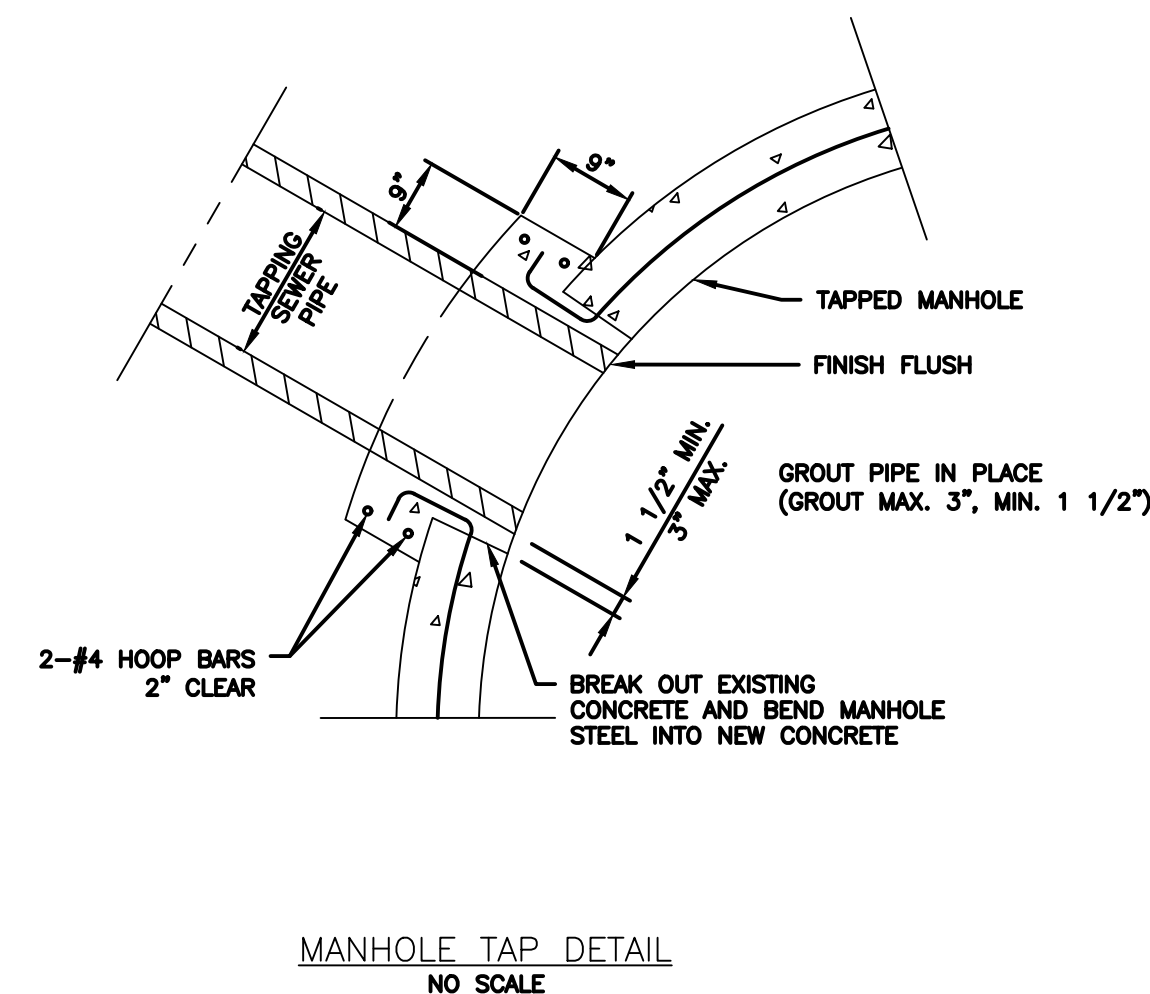
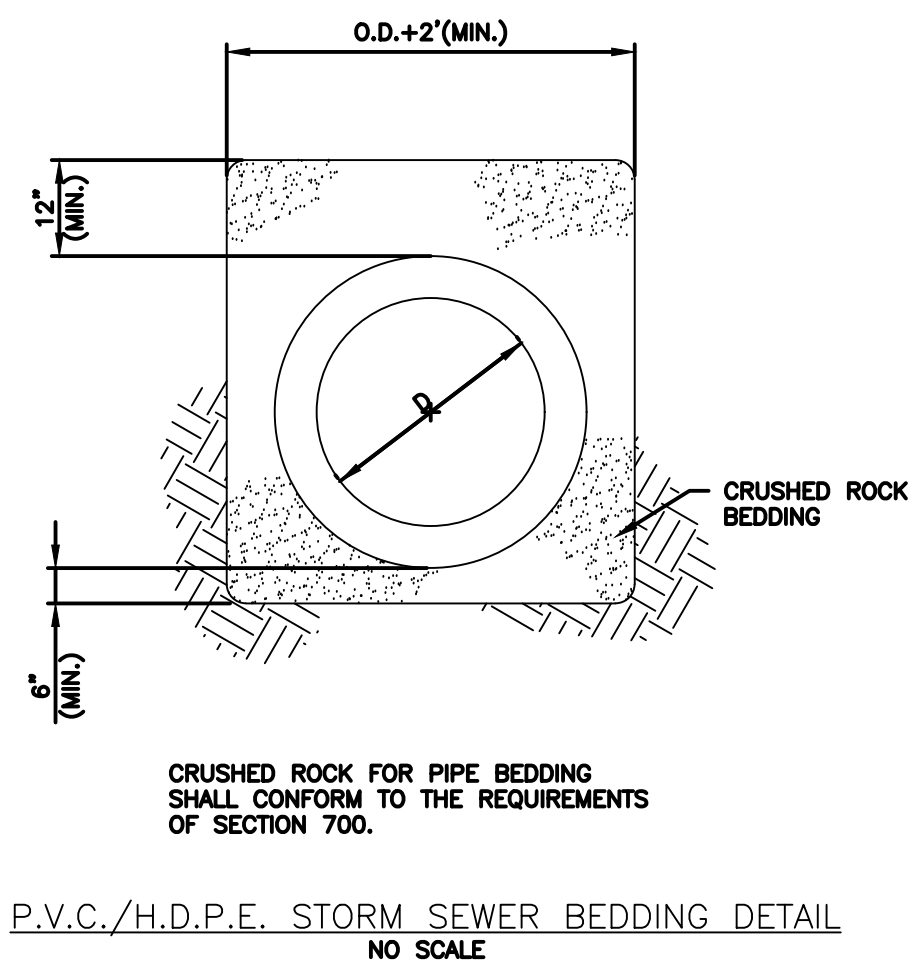
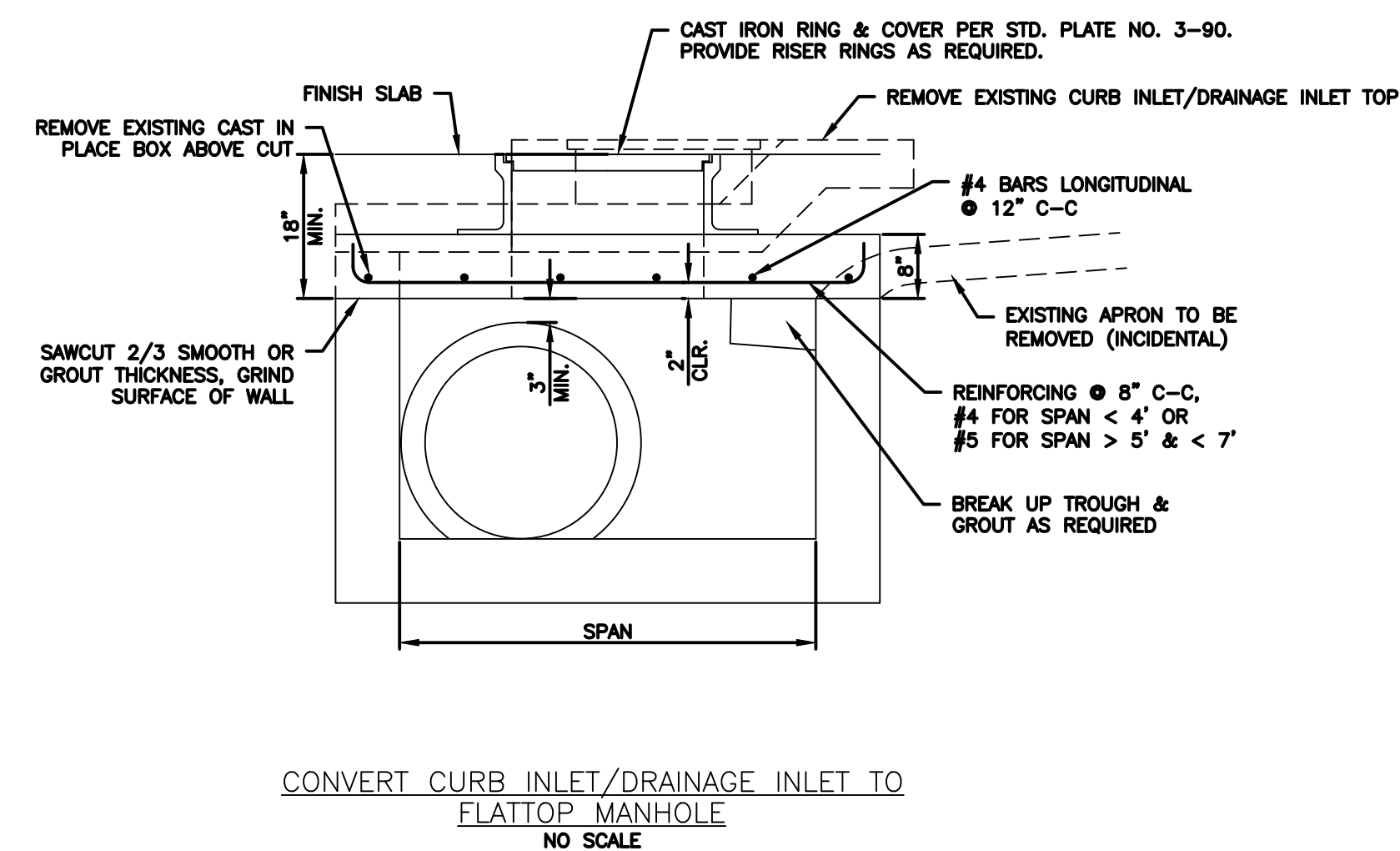
NOTES:

- GROUT SHALL BE FIVE STAR R SPECIAL GROUT 150 OR OTHER APPROVED NON-SHRINK, SULFATE-RESISTANT GROUT.
- TO PREVENT TRAFFIC OVER UNGROUTED MANHOLE PLACE TYPE II BARRICADE OVER MANHOLE DURING JOINT SAWING AND MAINTAIN BARRICADE UNTIL GROUT HAS REACHED 3000PSI COMPRESSIVE STRENGTH.



- NOTES:**
- CRUSHED ROCK FOR TRENCH STABILIZATION SHALL CONFORM TO THE REQUIREMENTS OF SECTION 700 OF THE PROJECT SPECIFICATIONS EXCEPT THAT THE GRADATION SHALL BE AS FOLLOWS:

SIEVE SIZE	PERCENTAGE PASSING
2 1/2 INCH	90-100
2 INCH	35-70
1 1/2 INCH	0-15
3/4 INCH	0-5



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Date: 2018/05/16

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Revisions:

Date	No.	Remarks

Sheet Name:

**NOTES AND
DETAILS**

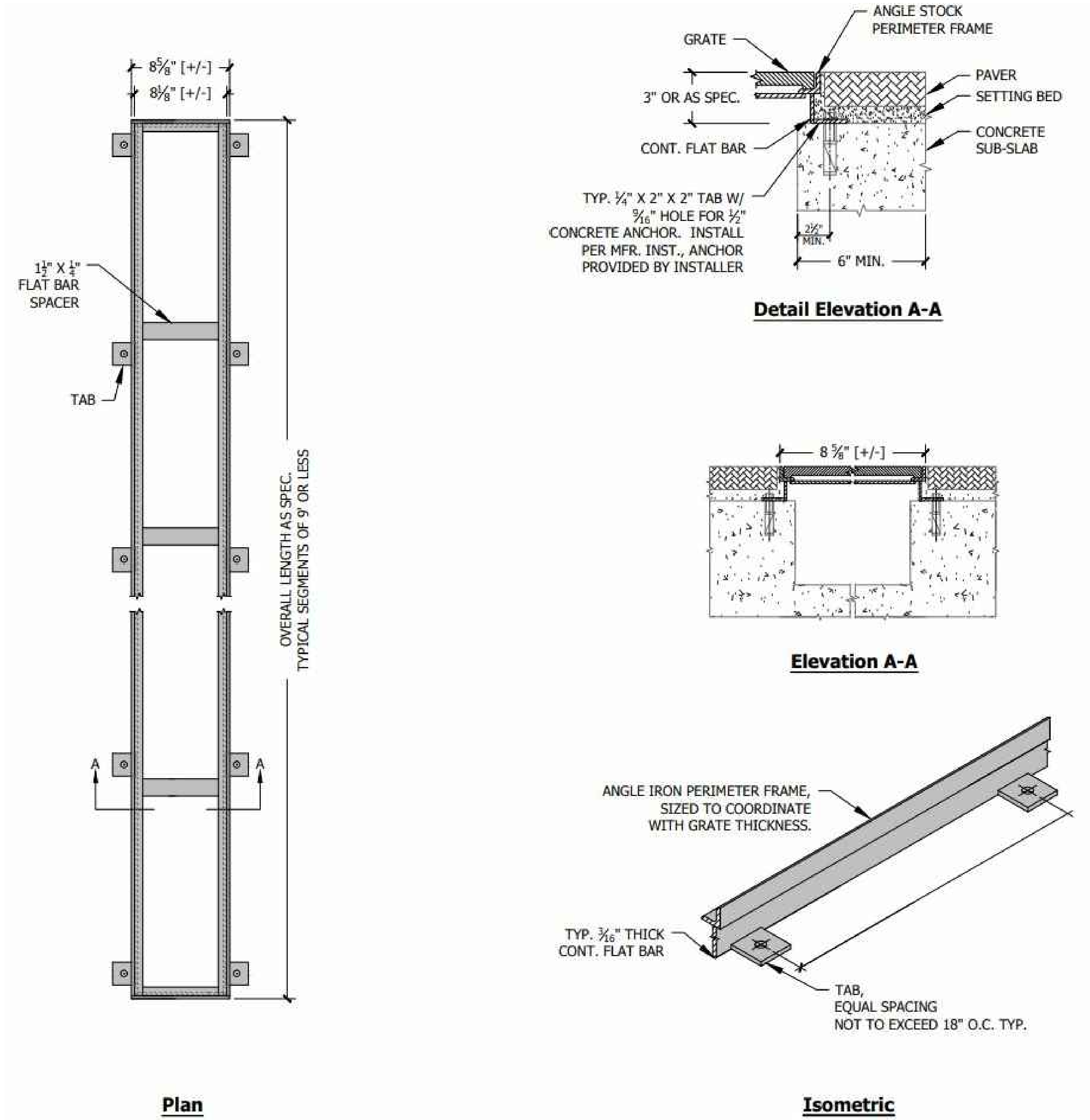
Sheet Number:

C-100

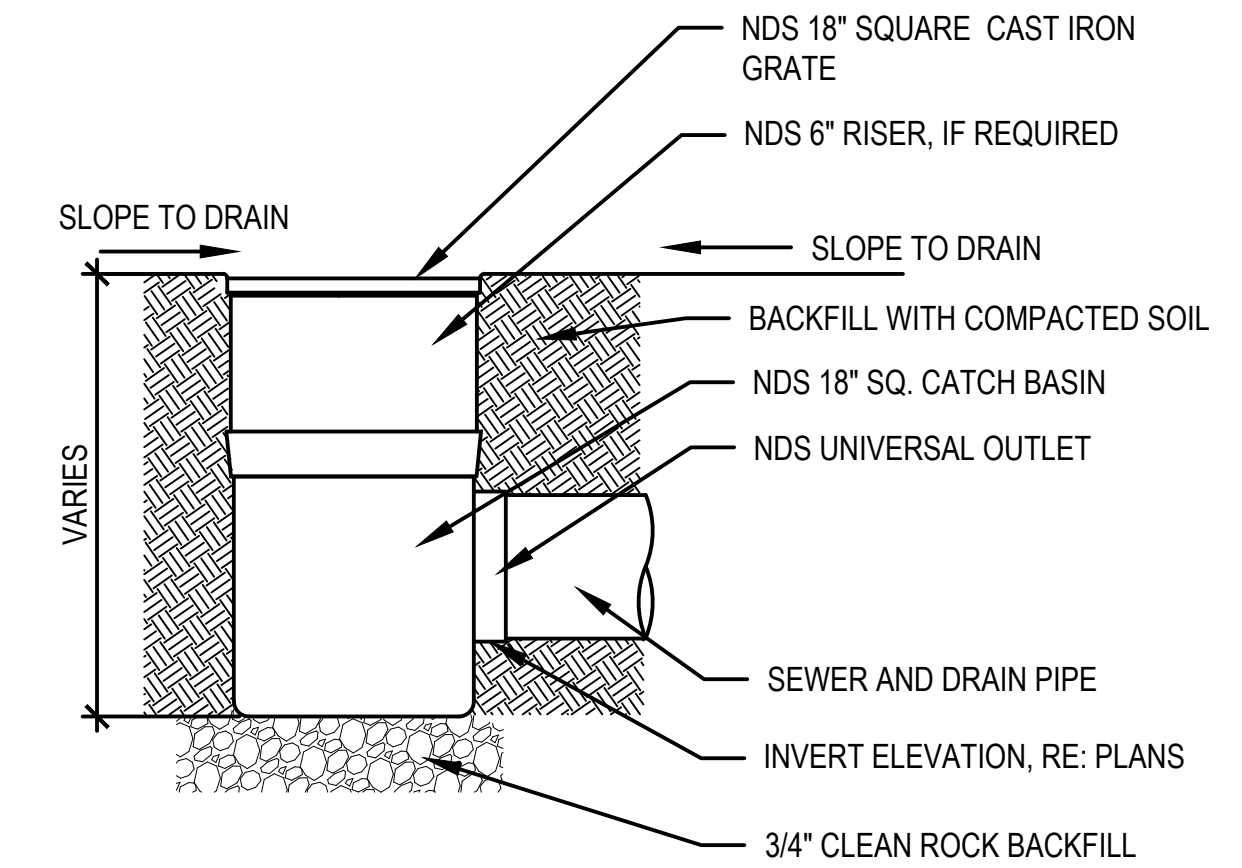


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- NOTES:**
- TRENCH DRAIN CHANNEL SHALL BE 8" WIDE BY 17" DEEP (EXCLUDING GRATE ASSEMBLY) AT THE OUTLET (DOWNSTREAM) END, WITH THE DEPTH LINEARLY DECREASING AT A RATE OF 1.00% TO THE UPSTREAM END.
 - TRENCH DRAIN CHANNEL BASE SHALL CONSIST OF A 4" PCC CAST-IN-PLACE SLAB WHICH IS MONOLITHIC WITH THE ADJACENT CONCRETE BASE.
 - TRENCH DRAIN GRATE SHALL BE URBAN ACCESSORIES 8"x18" DOUBLE WAVE GRATE OR APPROVED EQUIVALENT.



INSTALL PER MANUFACTURERS RECOMMENDATION FOR PAVEMENT AND TURF AREAS.

CATCH BASIN DETAIL
NO SCALE

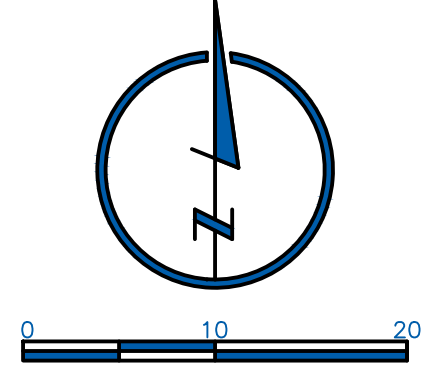
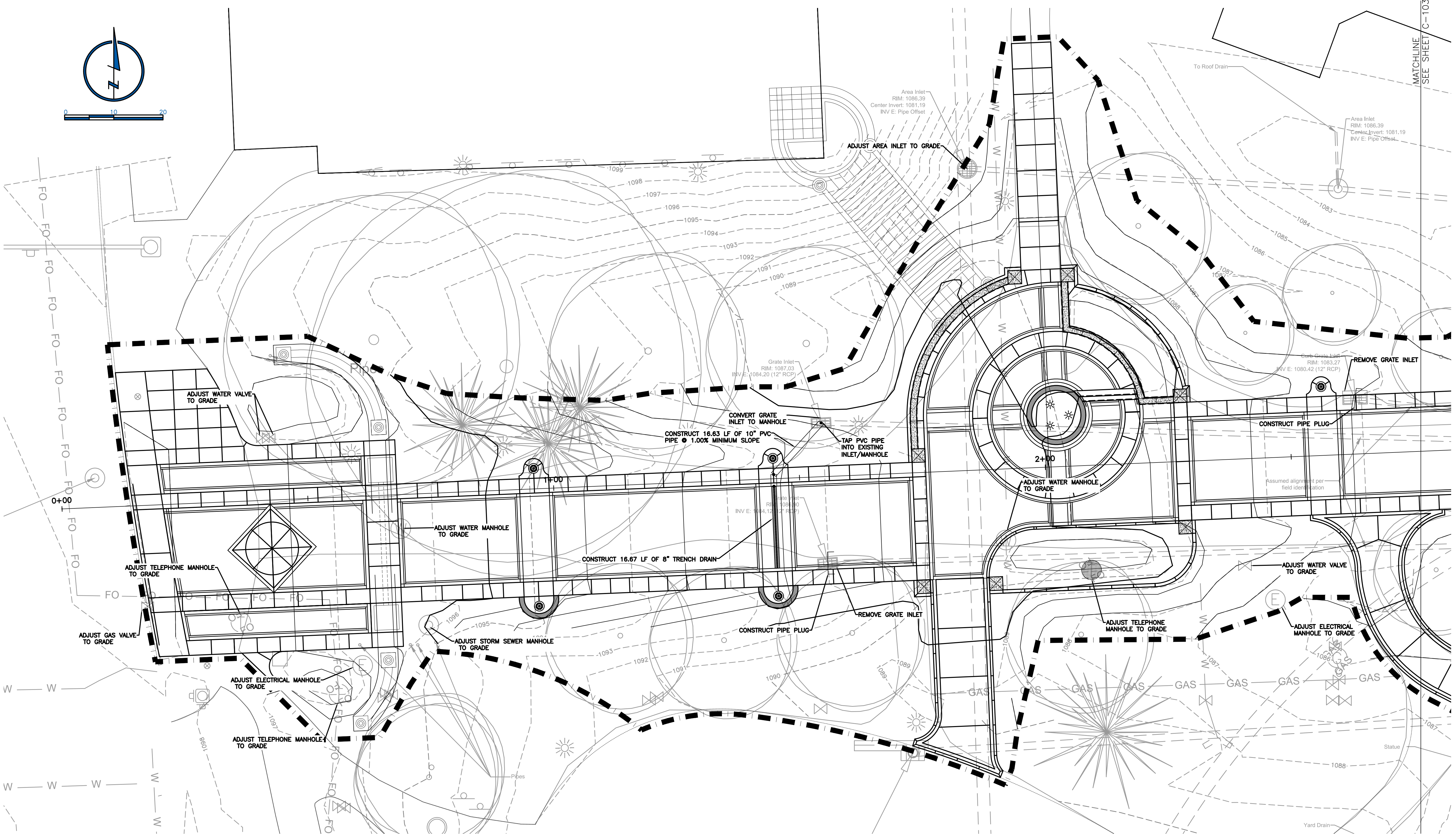


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Reviewed By: MLK
Revisions:

Date	No.	Remarks

Sheet Name:
**UTILITY PLAN
SHEET 1 OF 4**

Sheet Number:
C-102



- GENERAL NOTES**
1. FIELD VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION. REPORT ANY FIELD DISCREPANCIES TO THE ENGINEER.
 2. SEE DETAIL SHEET C-101 FOR TRENCH DRAIN DETAILS.

Date: 2018/05/16

Project Name:
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Revisions:

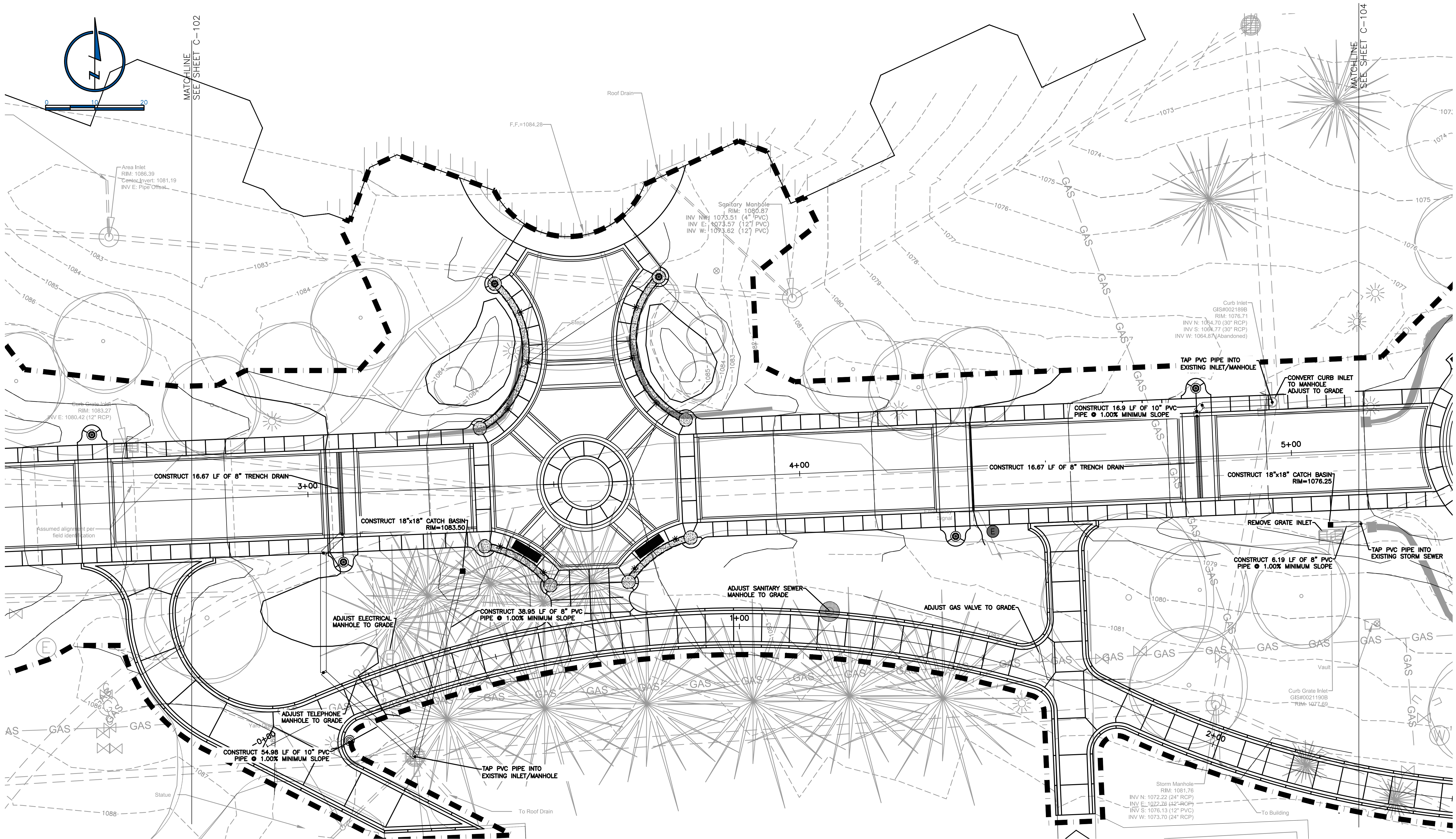
Date	No.	Remarks

Sheet Name:

**UTILITY PLAN
SHEET 2 OF 4**

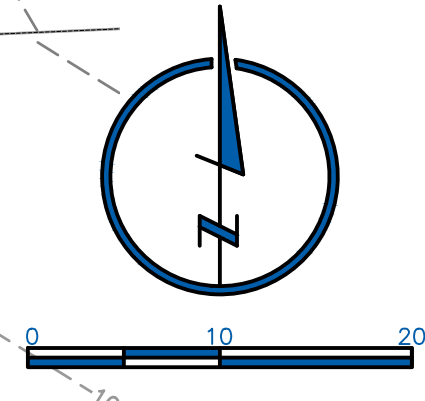
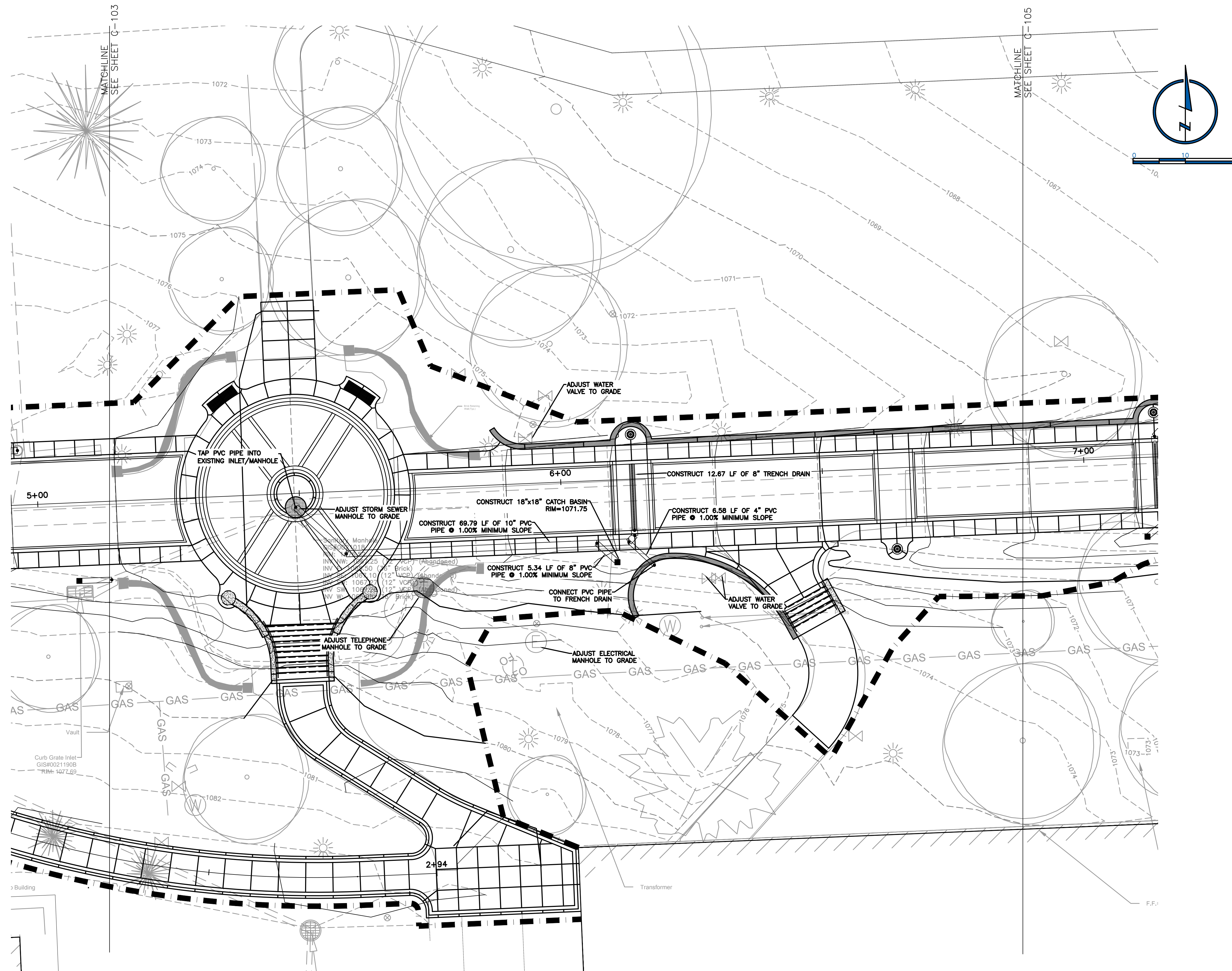
Sheet Number:

C-103



GENERAL NOTES

1. FIELD VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION. REPORT ANY FIELD DISCREPANCIES TO THE ENGINEER.
2. SEE DETAIL SHEET C-101 FOR TRENCH DRAIN DETAILS.



GENERAL NOTES

1. FIELD VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION. REPORT ANY FIELD DISCREPANCIES TO THE ENGINEER.
2. SEE DETAIL SHEET C-101 FOR TRENCH DRAIN DETAILS.

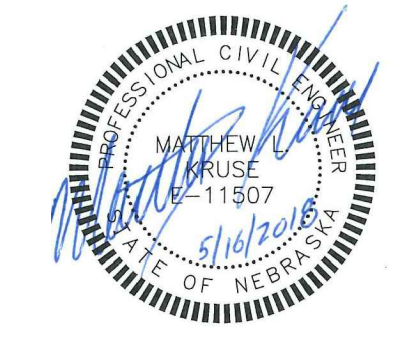


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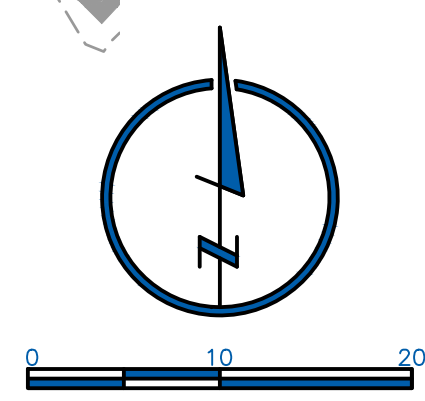
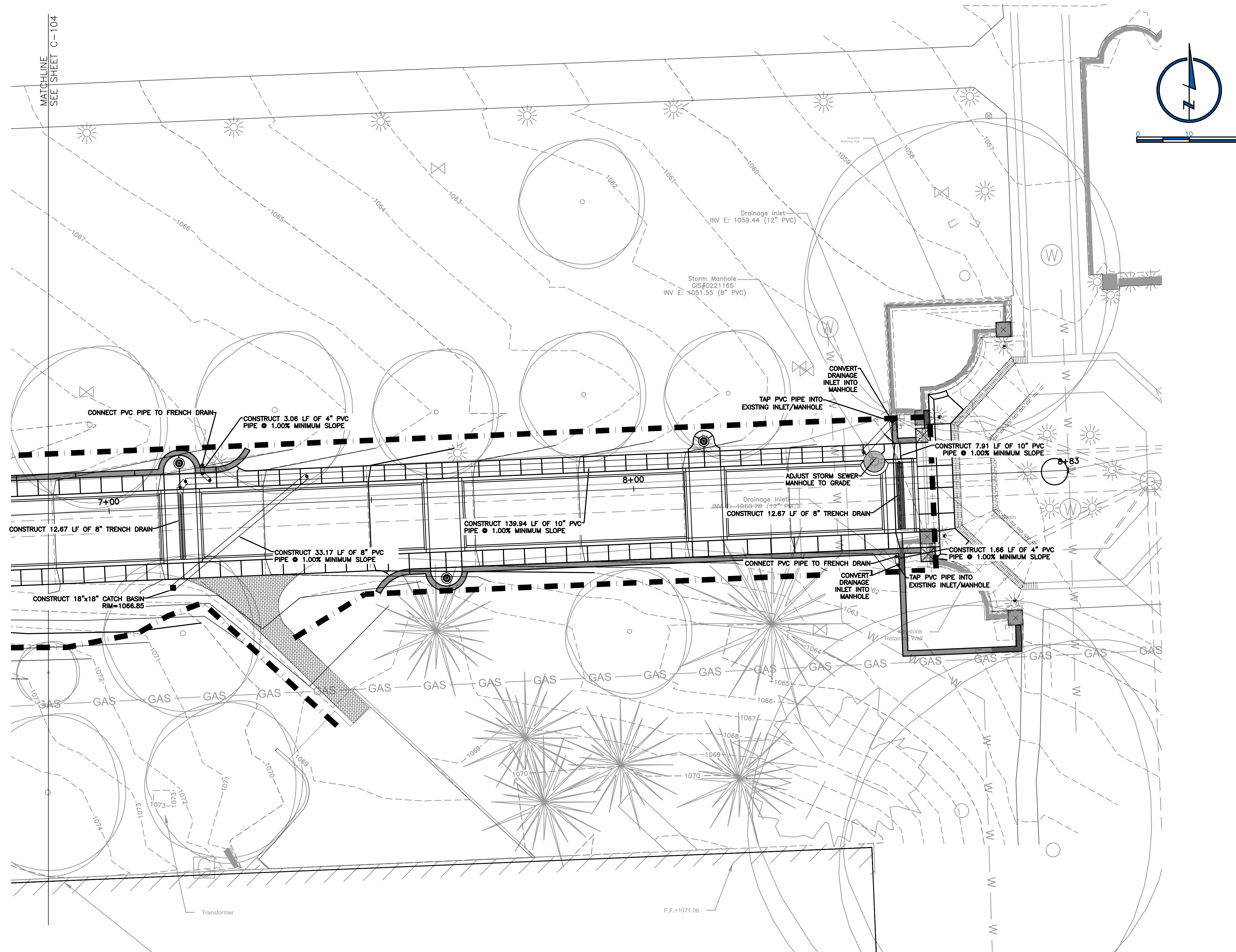
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Date	No.	Remarks

Sheet Name:
UTILITY PLAN SHEET 3 OF 4
 Sheet Number:
C-104



GENERAL NOTES

1. FIELD VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION. REPORT ANY FIELD DISCREPANCIES TO THE ENGINEER.
2. SEE DETAIL SHEET C-101 FOR TRENCH DRAIN DETAILS.



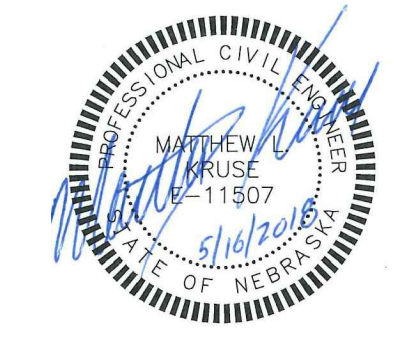
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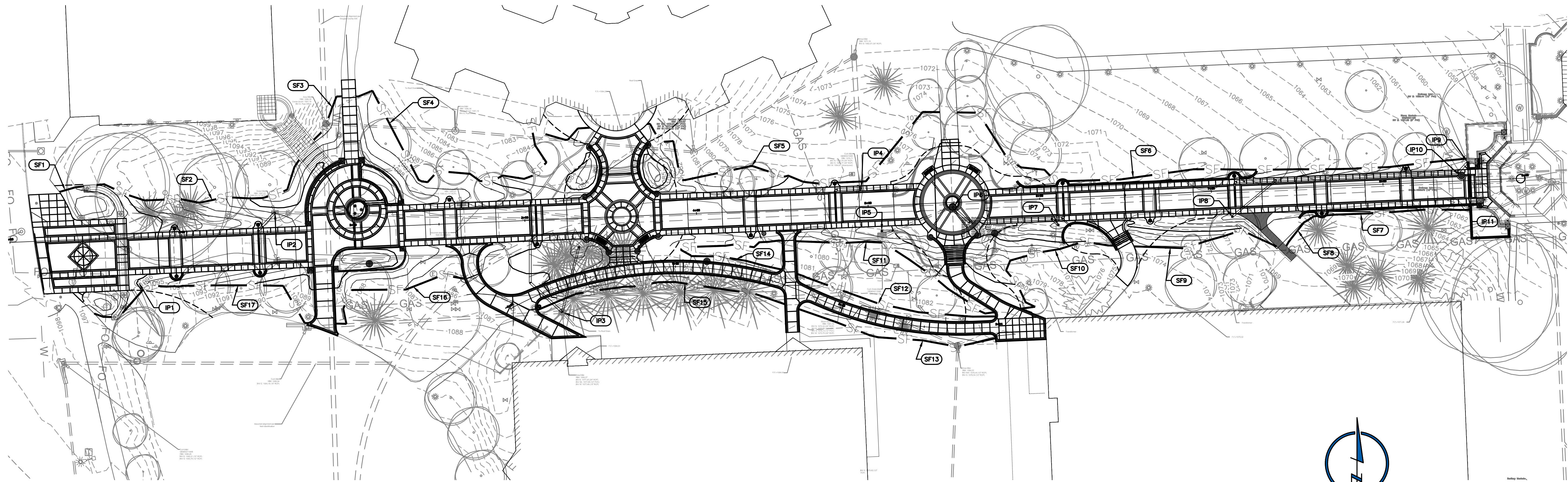


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Reviewed By: MLK
Revisions:

Date	No.	Remarks

Sheet Name:
**UTILITY PLAN
SHEET 4 OF 4**

Sheet Number:
C-105



STORM WATER POLLUTION PREVENTION KEYNOTES	
NUMBER	KEYNOTE
*	AS NEEDED OR DIRECTED BY THE ENGINEER THE CONTRACTOR SHALL INSTALL AND MAINTAIN A STABILIZED VEHICLE AND EQUIPMENT PARKING AREA. ALTERNATE LOCATION MUST BE APPROVED BY THE CONSTRUCTION ENGINEER.
*	AS NEEDED OR DIRECTED BY THE ENGINEER JOB TRAILER TO BE LOCATED AS SHOWN; ALTERNATE LOCATION MUST BE APPROVED BY THE CONSTRUCTION ENGINEER.
*	AS NEEDED OR DIRECTED BY THE ENGINEER THE CONTRACTOR SHALL INSTALL AND MAINTAIN A SANITARY WASTE RECEPTACLE PER STANDARD SPECIFICATION 9.6.2, OMAHA REGIONAL STORMWATER DRAINAGE MANUAL. ALTERNATE LOCATION MUST BE APPROVED BY THE CONSTRUCTION ENGINEER.
*	AS NEEDED OR DIRECTED BY THE ENGINEER THE CONTRACTOR SHALL INSTALL AND MAINTAIN A SOLID WASTE RECEPTACLE PER STANDARD SPECIFICATION 9.6.3, OMAHA REGIONAL STORMWATER DRAINAGE MANUAL. ALTERNATE LOCATION MUST BE APPROVED BY THE CONSTRUCTION ENGINEER.
*	AS NEEDED OR DIRECTED BY THE ENGINEER THE CONTRACTOR SHALL INSTALL AND MAINTAIN A DESIGNATED VEHICLE AND EQUIPMENT FUELING AREA PER STANDARD SPECIFICATION 9.6.6, OMAHA REGIONAL STORMWATER DRAINAGE MANUAL. ALTERNATE LOCATION MUST BE APPROVED BY THE CONSTRUCTION ENGINEER.
*	AS NEEDED OR DIRECTED BY THE ENGINEER THE CONTRACTOR SHALL INSTALL AND MAINTAIN A DESIGNATED MATERIAL DELIVERY AND STORAGE AREA PER STANDARD SPECIFICATION 9.6.4, OMAHA REGIONAL STORMWATER DRAINAGE MANUAL. ALTERNATE LOCATION MUST BE APPROVED BY THE CONSTRUCTION ENGINEER.
*	CONTRACTOR SHALL INSTALL AND MAINTAIN A STABILIZED CONSTRUCTION ENTRANCE PER STANDARD SPECIFICATION 9.5.5, OMAHA REGIONAL STORMWATER DRAINAGE MANUAL.
*	CONTRACTOR SHALL SEED AND MULCH ALL DISTURBED AREAS OUTSIDE OF R.O.W. WITH TYPE "TEMPORARY SEED MIX" AFTER WORK IS COMPLETE. CONTRACTOR SHALL NOT DO ANY OF THIS WORK WITHOUT APPROVAL FROM OWNER OR ENGINEER.
IP1-IPX	CONTRACTOR SHALL INSTALL AND MAINTAIN INLET PROTECTION AS SHOWN PER STANDARD SPECIFICATION 9.5.5, OMAHA REGIONAL STORMWATER DRAINAGE MANUAL.
SF1-SFX	CONTRACTOR SHALL INSTALL AND MAINTAIN SILT FENCE AS SHOWN PER STANDARD SPECIFICATION 9.5.4, OMAHA REGIONAL STORMWATER DRAINAGE MANUAL.
LT1- LTX	CONTRACTOR SHALL INSTALL AND MAINTAIN A LEVEL TERRACE PER STANDARD SPECIFICATION 9.5.9, OMAHA REGIONAL STORMWATER DRAINAGE MANUAL.
WQ1-WQX	CONTRACTOR SHALL INSTALL AND MAINTAIN TEMPORARY SEDIMENT BASIN, THESE BASINS WILL BE CONVERTED TO PERMANENT WATER QUALITY PONDS AT A LATER DATE.
M1-MX	CONTRACTOR SHALL INSTALL AND MAINTAIN ROLLED EROSION CONTROL TYPE II PER SECTION 9.5.24 OF THE OMAHA REGIONAL STORM WATER MANUAL. ROLLED EROSION CONTROL SHALL BE NORTH AMERICAN GREEN SC150 OR APPROVED EQUIVALENT. CONTRACTOR SHALL NOT DO ANY OF THIS WORK WITHOUT APPROVAL FROM OWNER OR ENGINEER.

*TO BE DETERMINED IN THE FIELD BY THE CONSTRUCTION ENGINEER, OWNER, AND GENERAL CONTRACTOR.

NOTES

1. COMPACTION REQUIREMENTS WILL BE DETERMINED BY THE GEOTECHNICAL ENGINEER.
2. PROPOSED CONTOURS ARE FINISHED GRADE/TOP OF PAVEMENT ELEVATIONS. NOT SUBGRADE ELEVATIONS.
3. ALL SPOT ELEVATIONS IN PAVEMENT ARE TOP OF SLAB UNLESS NOTED OTHERWISE.

NOTE:
THESE EROSION CONTROL DEVICES ARE SHOWN IN PROPOSED LOCATIONS. IF THE CONTRACTOR WISHES TO USE ALTERNATE LOCATIONS IT MUST BE APPROVED BY THE CONSTRUCTION ENGINEER.

EROSION CONTROL SUMMARY TABLE	
EROSION CONTROL MEASURES:	SILT FENCE, ROCK ACCESS ROAD, AND INLET PROTECTION



Drawn By: MTK
Reviewed By: MLK
Revisions:

Date	No.	Remarks

Sheet Name:
EROSION CONTROL PLAN
Sheet Number:
C-106

GENERAL NOTES

1. ALL OPERATORS/CONTRACTORS MUST CONFIRM WITH THE APPLICANT THAT ANY AND ALL APPLICABLE GOVERNMENTAL APPROVALS HAVE BEEN RECEIVED PRIOR TO THE START OF WORK.
2. BMP'S MAY NOT BE REMOVED WITHOUT INSPECTOR AND APPLICABLE GOVERNMENTAL APPROVAL.
3. THE APPLICANT, INSPECTOR, AND CONTRACTORS/OPERATORS MUST ADHERE TO ALL GOOD HOUSEKEEPING BMP'S PRESENTED WITHIN THE OMAHA REGIONAL STORMWATER DESIGN MANUAL CHAPTER 9 SECTION 9.5. GOOD HOUSEKEEPING BMP'S FOCUS ON KEEPING THE WORK SITE CLEAN AND ORDERLY WHILE HANDLING MATERIALS AND WASTE IN A MANNER THAT ELIMINATES THE POTENTIAL FOR POLLUTANT RUNOFF. GOOD HOUSEKEEPING BMP'S SUCH AS SANITARY WASTE MANAGEMENT (9.6.2), SOLID WASTE MANAGEMENT (9.6.3), MATERIAL DELIVERY & STORAGE (9.6.4), STREET CLEANING / SWEEPING (9.6.5), AND VEHICLE & EQUIPMENT FUELING (9.6.6) MUST BE ADDRESSED WHEN APPLICABLE. THE AFOREMENTIONED PUBLICATION CAN BE FOUND AT [HTTP://WWW.OMAHASTORMWATER.ORG](http://www.omahastormwater.org).

BMP'S MAINTENANCE SCHEDULE

THE FOLLOWING MAINTENANCE SCHEDULE HAS BEEN PROVIDED. THE INSPECTOR MUST PERFORM THE INSPECTIONS. THE OPERATOR/CONTRACTOR MUST PERFORM ALL NEEDED MAINTENANCE. FURTHERMORE, ALL EROSION CONTROL FEATURE REQUIRING MAINTENANCE MAY NOT BE LISTED BELOW. THE OPERATOR/CONTRACTOR AND INSPECTOR MUST PERFORM THEIR RESPECTIVE DUTIES ON ALL BMP'S THAT ARE NOT LISTED BELOW AS WELL.

1. **CONSTRUCTION ENTRANCE** – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR THE WASHING AND REWORKING OF EXISTING STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY. THE USE OF WATER TRUCKS TO REMOVE MATERIALS DROPPED, WASHED, OR TRACKED ONTO ROADWAYS WILL NOT BE PERMITTED UNDER ANY CIRCUMSTANCES.
2. **SILT FENCE** – THE MAINTENANCE MEASURES ARE AS FOLLOWS: (2.1) SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL, ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY; (2.2) CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED SILT FENCE RESULTING FROM END RUNS AND UNDERCUTTING; (2.3) SHOULD THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY; (2.4) SEDIMENT DEPOSITS MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER; AND (2.5) ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
3. **STORM DRAIN INLET PROTECTION** – THE MAINTENANCE MEASURES ARE AS FOLLOWS: (3.1) STRUCTURES SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NECESSARY AND (3.2) STRUCTURES SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
4. **TEMPORARY SEEDING** – AREAS WHICH FAIL TO ESTABLISH VEGETATIVE COVER ADEQUATE TO PREVENT RILL EROSION WILL BE RE-SEEDDED AS SOON AS SUCH AREAS ARE IDENTIFIED. CONTROL WEEDS BY MOWING.
5. **PERMANENT SEEDING** – THE MAINTENANCE MEASURES ARE AS FOLLOWS: (9.1) IN GENERAL, A STAND OF VEGETATION CANNOT BE DETERMINED TO BE FULLY ESTABLISHED UNTIL IT HAS BEEN MAINTAINED FOR ONE FULL YEAR AFTER PLANNING; (9.2) NEW SEEDLINGS SHALL BE SUPPLIED WITH ADEQUATE MOISTURE, SUPPLY WATER AS NEEDED, ESPECIALLY LATE IN THE SEASON, IN ABNORMALLY HOT OR DRY CONDITIONS, OR ON ADVERSE SITES, WATER APPLICATIONS SHALL BE CONTROLLED TO PREVENT EXCESSIVE RUNOFF; (9.3) INSPECT ALL SEEDDED AREAS FOR FAILURES AND MAKE NECESSARY REPAIRS, REPLACEMENTS, AND RESEEDINGS WITHIN THE PLANTING SEASON, IF POSSIBLE; [9.3.A] IF STAND IS INADEQUATE FOR EROSION CONTROL, OVER SEED AND FERTILIZE USING HALF OF THE RATES ORIGINALLY SPECIFIED; [9.3.B] IF STAND IS 60% DAMAGED, RE-ESTABLISH FOLLOWING SEEDBED AND SEEDING RECOMMENDATIONS; [9.3.C] IF STAND HAS LESS THAN 40% COVER, RE-EVALUATE CHOICE OF PLANT MATERIALS AND QUANTITIES OF LIME AND FERTILIZER, THE SOIL MUST BE TESTED TO DETERMINE IF ACIDITY OR NUTRIENT IMBALANCES ARE RESPONSIBLE, RE-ESTABLISH THE STAND FOLLOWING SEEDBED AND SEEDING RECOMMENDATIONS.
6. **MULCHING** – ALL MULCHES AND SOIL COVERINGS SHOULD BE INSPECTED PERIODICALLY (PARTICULARLY AFTER RAINSTORMS) TO CHECK FOR EROSION. WHERE EROSION IS OBSERVED IN MULCHED AREAS, ADDITIONAL MULCH SHOULD BE APPLIED. NETS AND MATS SHOULD BE INSPECTED AFTER RAINSTORMS FOR DISLOCATION OR FAILURE. IF WASHOUTS OR BREAKAGE OCCUR, REINSTALL NETTING OR MATTING AS NECESSARY AFTER REPAIRING DAMAGE TO THE SLOPE OR DITCH. INSPECTIONS SHOULD TAKE PLACE UNTIL GRASSES ARE FIRMLY ESTABLISHED. WHERE MULCH IS USED IN CONJUNCTION WITH ORNAMENTAL PLANTINGS, INSPECT PERIODICALLY THROUGHOUT THE YEAR TO DETERMINE IF MULCH IS MAINTAINING COVERAGE OF THE SOIL SURFACE; REPAIR AS NEEDED.
7. **SOIL STABILIZATION BLANKETS & MATTING** – ALL SOIL STABILIZATION BLANKETS AND MATTING SHOULD BE INSPECTED PERIODICALLY FOLLOWING INSTALLATION, PARTICULARLY AFTER RAINSTORMS TO CHECK FOR EROSION AND UNDERMINING. ANY DISLOCATION OR FAILURE SHOULD BE REPAIRED IMMEDIATELY. IF WASHOUTS OR BREAKAGE OCCURS, REINSTALL THE MATERIAL AFTER REPAIRING DAMAGE TO THE SLOPE OR DITCH. CONTINUE TO MONITOR THESE AREAS UNTIL WHICH TIME THEY BECOME PERMANENTLY STABILIZED; AT THAT TIME AN ANNUAL INSPECTIONS SHOULD BE ADEQUATE.
8. **STREET CLEANING / SWEEPING** – THE MAINTENANCE MEASURES ARE AS FOLLOWS: (12.1) EVALUATE ACCESS POINTS DAILY FOR SEDIMENT TRACKING; (12.2) WHEN TRACKED OR SPILLED SEDIMENT IS FOUND ON PAVED SURFACES, IT WILL BE REMOVED DAILY DURING TIMES OF HEAVY TRACK-OUT SUCH AS DURING RAIN; CLEANING MAY BE DONE SEVERAL TIMES THROUGHOUT THE DAY; (12.3) UNKNOWN SPILLS OR OBJECTS WILL NOT BE MIXED WITH THE SEDIMENT; AND (12.4) IF SEDIMENT IS MIXED WITH OTHER POLLUTANTS, IT WILL BE DISPOSED OF PROPERLY AT AN AUTHORIZED LANDFILL.

STANDARD DETAILS

NUMBER	NAME	LOCATION
9.5.2	CONSTRUCTION ENTRANCE	OMAHA REGIONAL STORMWATER DESIGN MANUAL
9.5.4	SILT FENCE	OMAHA REGIONAL STORMWATER DESIGN MANUAL
9.5.5	STORM DRAIN INLET PROTECTION	OMAHA REGIONAL STORMWATER DESIGN MANUAL
9.5.7	TEMPORARY DIVERSION DIKE	OMAHA REGIONAL STORMWATER DESIGN MANUAL
9.5.8	TEMPORARY FILL DIVERSION	OMAHA REGIONAL STORMWATER DESIGN MANUAL
9.5.14	TEMPORARY SEDIMENT TRAP	OMAHA REGIONAL STORMWATER DESIGN MANUAL
9.5.15	TEMPORARY SEDIMENT BASIN	OMAHA REGIONAL STORMWATER DESIGN MANUAL
9.5.16	DUST CONTROL	OMAHA REGIONAL STORMWATER DESIGN MANUAL
9.5.19	TEMPORARY SEEDING	OMAHA REGIONAL STORMWATER DESIGN MANUAL
9.5.20	PERMANENT SEEDING	OMAHA REGIONAL STORMWATER DESIGN MANUAL
9.5.22	MULCHING	OMAHA REGIONAL STORMWATER DESIGN MANUAL
9.5.23	SOIL STABILIZATION BLANKETS & MATTING	OMAHA REGIONAL STORMWATER DESIGN MANUAL
9.6.2	SANITARY WASTE MANAGEMENT	OMAHA REGIONAL STORMWATER DESIGN MANUAL
9.6.3	SOLID WASTE MANAGEMENT	OMAHA REGIONAL STORMWATER DESIGN MANUAL
9.6.4	MATERIAL DELIVERY AND STORAGE	OMAHA REGIONAL STORMWATER DESIGN MANUAL
9.6.5	STREET CLEANING / SWEEPING	OMAHA REGIONAL STORMWATER DESIGN MANUAL
9.6.6	VEHICLE AND EQUIPMENT FUELING	OMAHA REGIONAL STORMWATER DESIGN MANUAL
9.6.7	SWPPP NOTIFICATION SIGN	OMAHA REGIONAL STORMWATER DESIGN MANUAL

THE OMAHA REGIONAL STORMWATER DESIGN MANUAL CAN BE FOUND AT [HTTP://WWW.OMAHASTORMWATER.ORG](http://www.omahastormwater.org).

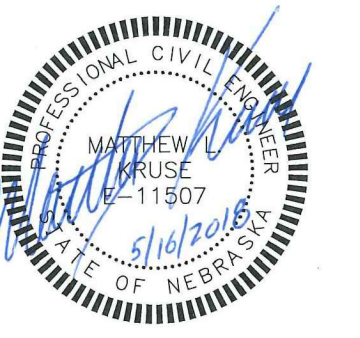
BMP RESPONSIBILITY TABLE			
MAJOR ACTIVITY	CONTROL MEASURES	TIMING	RESPONSIBLE PARTY
GRADING	ROCK ACCESS ROAD	PRIOR TO STRIPPING	GENERAL CONTRACTOR
	SILT BASINS	PRIOR TO STRIPPING	GENERAL CONTRACTOR
	SILT FENCE	PRIOR TO STRIPPING	GENERAL CONTRACTOR
	TRASH CONTAINERS	PRIOR TO STRIPPING	GENERAL CONTRACTOR
	RESTROOM FACILITIES	PRIOR TO STRIPPING	GENERAL CONTRACTOR
	FUEL CONTAINMENT	PRIOR TO STRIPPING	GENERAL CONTRACTOR
	AREA CLEANUP OF ANY TRACKED MUD/DIRT FROM ADJACENT STREETS	DAILY	GENERAL CONTRACTOR
	USE OF WATER TRUCK TO CONTROL WINDBLOWN DUST	AS OFTEN AS NEEDED AND AS RECOMMENDED BY INSPECTOR	GENERAL CONTRACTOR
SEWERS	CONTINUE TO UTILIZE AND MAINTAIN ITEMS LISTED UNDER GRADING CONTROL MEASURES	AS OFTEN AS NEEDED AND AS RECOMMENDED BY INSPECTOR	GENERAL CONTRACTOR
PAVING	CONTINUE TO UTILIZE AND MAINTAIN ITEMS LISTED UNDER GRADING CONTROL MEASURES	AS OFTEN AS NEEDED AND AS RECOMMENDED BY INSPECTOR	GENERAL CONTRACTOR
WATER, POWER, GAS AND UTILITIES	CLEAN ONSITE PAVEMENT TO REMOVE MUD AND DIRT	AS OFTEN AS NEEDED AND AS RECOMMENDED BY INSPECTOR	GENERAL CONTRACTOR
	CONTINUE TO UTILIZE AND MAINTAIN ITEMS LISTED UNDER GRADING, SEWERS AND PAVING	AS OFTEN AS NEEDED AND AS RECOMMENDED BY INSPECTOR	GENERAL CONTRACTOR
BUILDING CONSTRUCTION	CLEAN ONSITE PAVEMENT TO REMOVE MUD/DIRT FROM ADJACENT STREETS	PRIOR TO DISTURBANCE OF LOT	GENERAL CONTRACTOR
	PERIODIC STREET SWEEPING TO MANAGE SEDIMENTATION	AS OFTEN AS NEEDED TO PREVENT MIGRATION OF SEDIMENT	GENERAL CONTRACTOR



Omaha Metro – Creighton University Multi-Modal Facility
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 Project Name: CU PEDESTRIAN MALL DESIGN
 Issued For / Phase: CONSTRUCTION

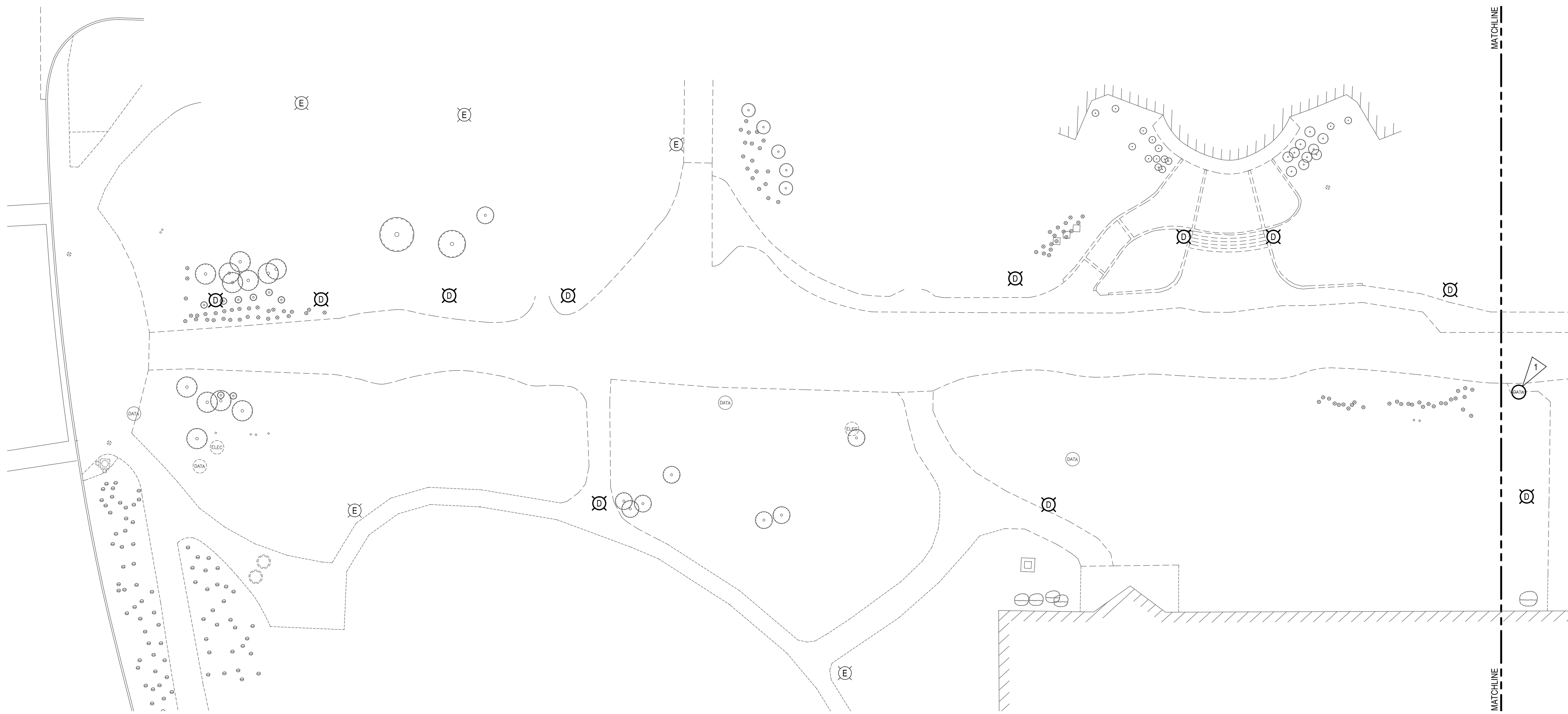


Drawn By: MTK
 Reviewed By: MLK
 Revisions:

Date	No.	Remarks

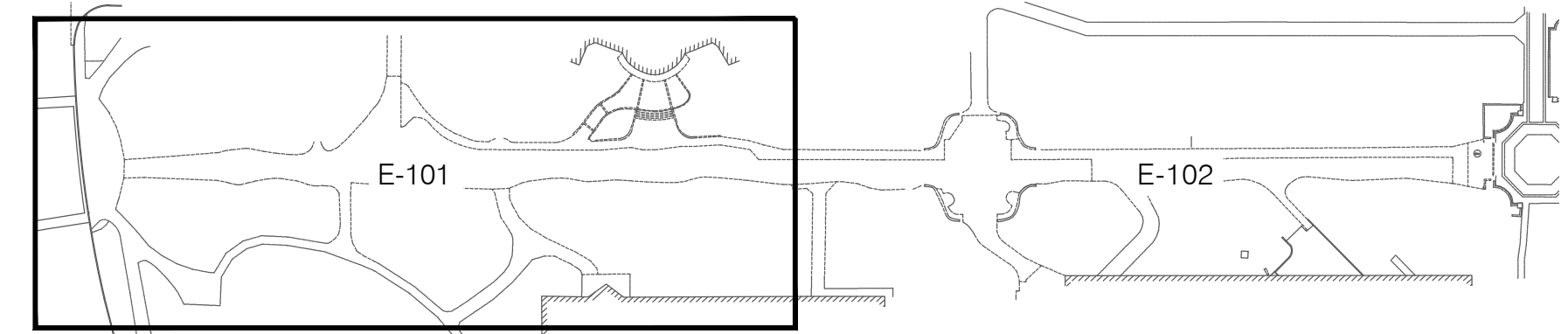
Sheet Name: **EROSION CONTROL NOTES**
 Sheet Number: **C-107**

Date	No.	Remarks



1 ELECTRICAL DEMO PLAN A
 SCALE: 1" = 20'-0"

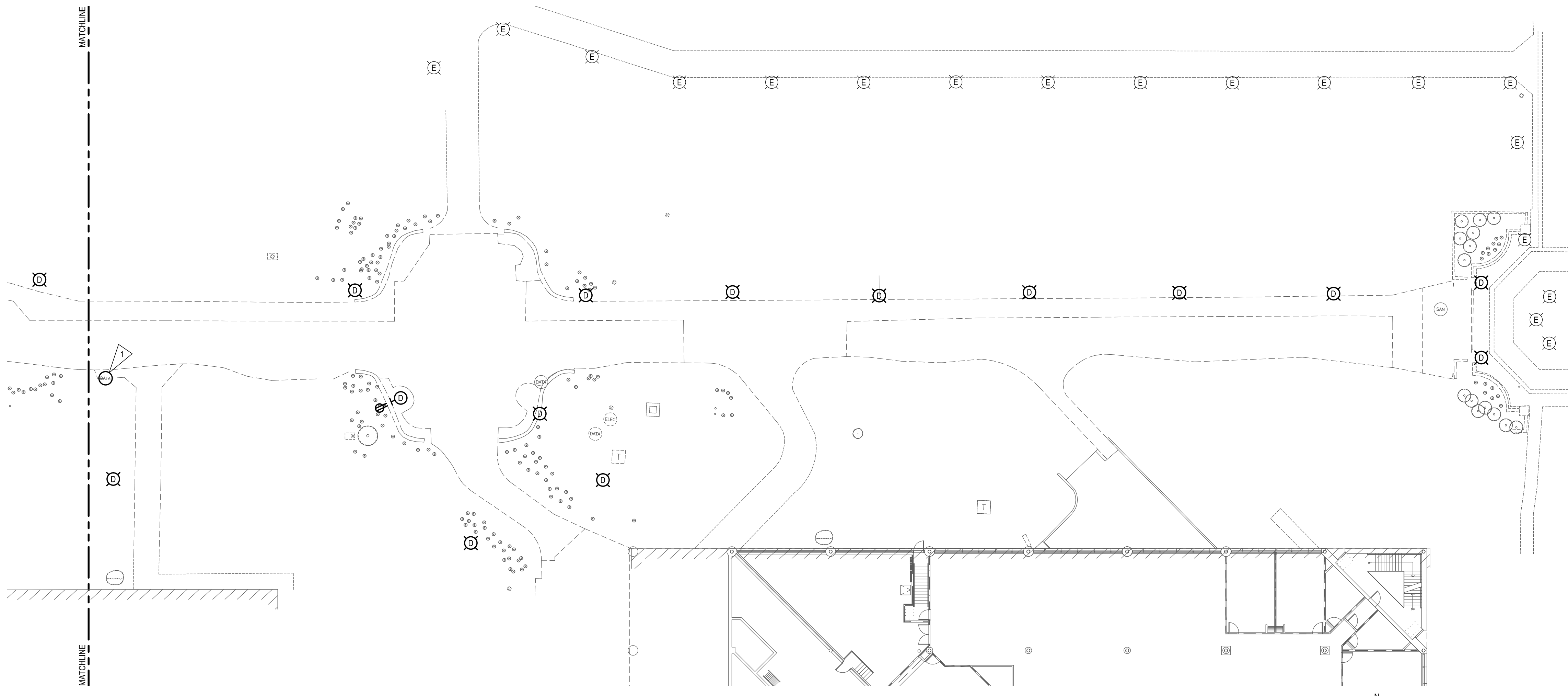
- GENERAL NOTES**
- REMOVE EXISTING FIXTURES INDICATED AS "D". REMOVAL SHALL INCLUDE CONCRETE BASE AND ASSOCIATED WIRING. WHERE BRANCH CIRCUIT MUST REMAIN TO SERVE OTHER EXISTING FIXTURES PROVIDE IN-GRADE JUNCTION BOX AND NEW WIRING AS REQUIRED TO MAINTAIN CONTINUITY. BOX SHALL BE QUARTZITE "PC" STYLE, SIZE AS REQUIRED, LABELED "ELECTRIC". WHERE EXISTING CIRCUITS ARE NOT REUSED, REMOVE CONDUCTORS AND ASSOCIATED ACCESSIBLE CONDUIT BACK TO THE SOURCE.
 - EXISTING FIXTURES INDICATED AS "E" SHALL REMAIN. CONNECTION TO EXISTING BRANCH CIRCUIT SHALL REMAIN.
 - REMOVE DEMOLISHED ITEMS FROM PROJECT SITE AND PROPERLY DISPOSE OF ITEMS.
 - SEE LANDSCAPE DRAWINGS FOR ADDITIONAL ELECTRICAL DEMOLITION ITEMS. DISCONNECT AND REMOVE ELECTRICAL DEVICES, EQUIPMENT, AND ASSOCIATED WIRING AS REQUIRED TO ACCOMMODATE NEW WORK.
 - THE OWNER SHALL HAVE FIRST SALVAGE RIGHTS TO ALL FIXTURES, DEVICES AND EQUIPMENT REMOVED. COORDINATE WITH OWNER PRIOR TO DEMOLITION.



KEY MAP
 SCALE: 1:100

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Date	No.	Remarks



1 ELECTRICAL DEMO PLAN B
 SCALE: 1" = 20'-0"

FLAG NOTES

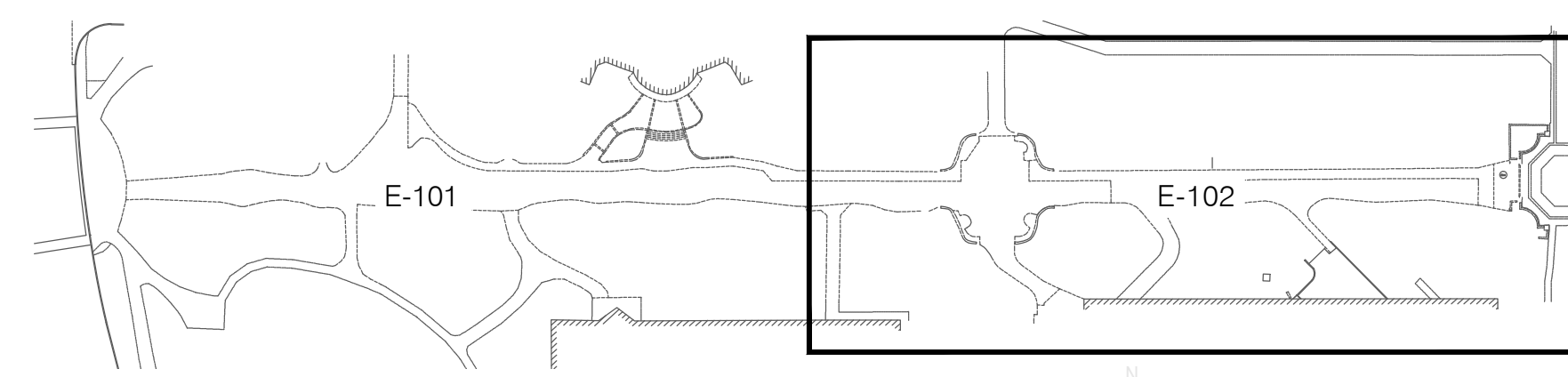
- 1 REMOVE CONCRETE BASE, CONDUIT, AND ASSOCIATED WIRING FROM BLUE PHONE.

GENERAL NOTES

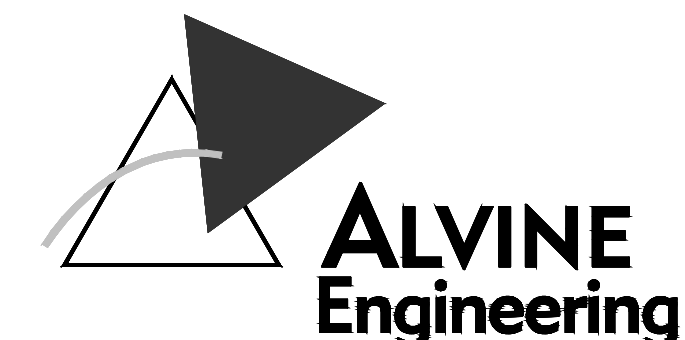
- REMOVE EXISTING FIXTURES INDICATED AS "D". REMOVAL SHALL INCLUDE CONCRETE BASE AND ASSOCIATED WIRING. WHERE BRANCH CIRCUIT MUST REMAIN TO SERVE OTHER EXISTING FIXTURES PROVIDE IN-GRADE JUNCTION BOX AND NEW WIRING AS REQUIRED TO MAINTAIN CONTINUITY. BOX SHALL BE QUARTZITE "PC" STYLE, SIZE AS REQUIRED, LABELED "ELECTRIC". WHERE EXISTING CIRCUITS ARE NOT REUSED, REMOVE CONDUCTORS AND ASSOCIATED ACCESSIBLE CONDUIT BACK TO THE SOURCE.
- EXISTING FIXTURES INDICATED AS "E" SHALL REMAIN. CONNECTION TO EXISTING BRANCH CIRCUIT SHALL REMAIN.
- REMOVE DEMOLISHED ITEMS FROM PROJECT SITE AND PROPERLY DISPOSE OF ITEMS.
- SEE LANDSCAPE DRAWINGS FOR ADDITIONAL ELECTRICAL DEMOLITION ITEMS. DISCONNECT AND REMOVE ELECTRICAL DEVICES, EQUIPMENT, AND ASSOCIATED WIRING AS REQUIRED TO ACCOMMODATE NEW WORK.
- THE OWNER SHALL HAVE FIRST SALVAGE RIGHTS TO ALL FIXTURES, DEVICES AND EQUIPMENT REMOVED. COORDINATE WITH OWNER PRIOR TO DEMOLITION.

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KEY MAP
 SCALE: 1:100



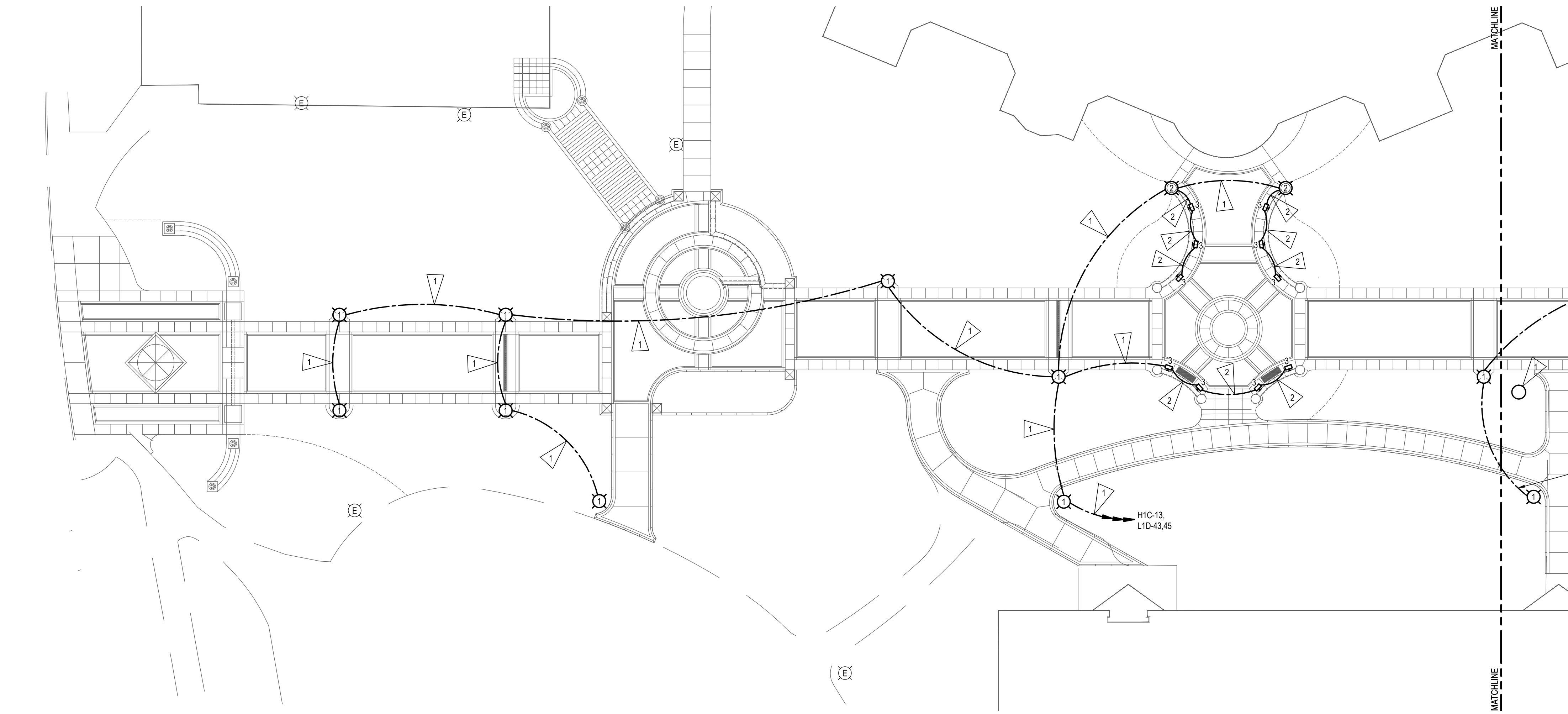
Omaha: 1201 Cass Street, Omaha, Nebraska 68102, Phone: (402) 346-7007
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 Oklahoma City: 13431 Broadway Extension, Suite 101, Oklahoma City, Oklahoma 73114, Phone: (405) 936-3480
 Des Moines: 400 East Court Ave, Suite 100, Des Moines, Iowa 50309, Phone: (515) 243-0569

Revisions:

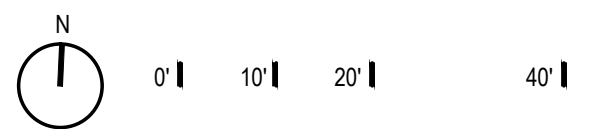
Date	No.	Remarks



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1 ELECTRICAL PLAN A
 SCALE: 1" = 20'-0"



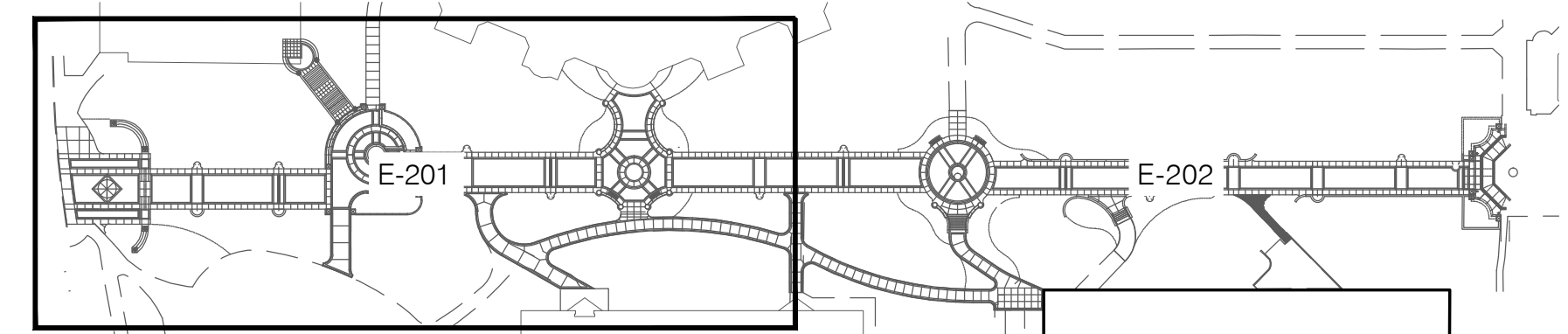
FLAG NOTES

- 1 2 #10 (LIGHTING), 4 #6 (RECEPTACLES) AND #6 GROUND IN 1-1/4" C.
- 2 2 #10, AND #10 GND IN 3/4" C.

GENERAL NOTES

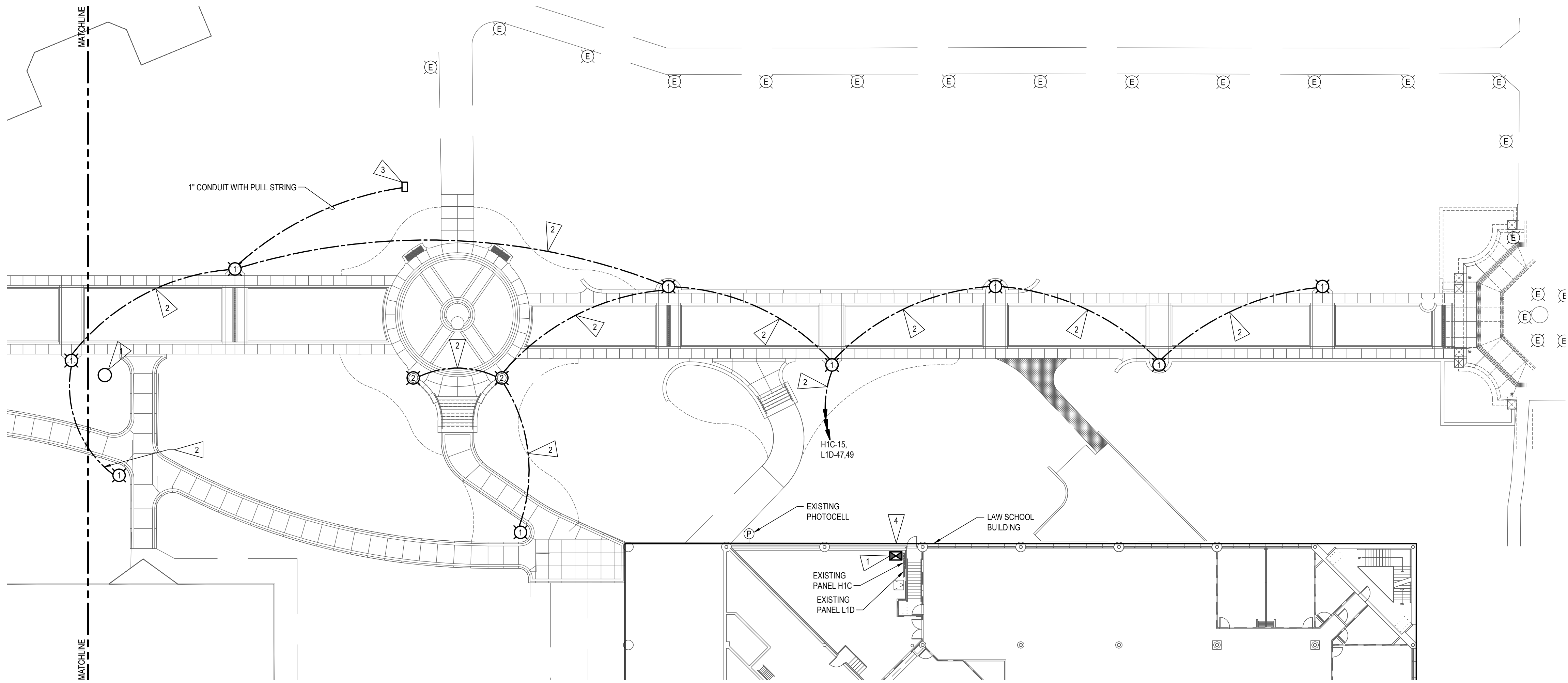
1. THE LOWER RECEPTACLES ON TYPE 1 AND 2 POLES SHALL BE CONNECTED TO ONE 20/1 SPARE (L1D-43) IN EXISTING PANEL L1D.
2. THE UPPER RECEPTACLES ON TYPE 1 AND 2 POLES SHALL BE CONNECTED THRU CONTACTOR C1 TO ONE 20/1 SPARE (L1D-45) IN EXISTING PANEL L1D.
3. THE FIXTURES ON TYPE 1 AND 2 POLES SHALL BE CONNECTED THRU CONTACTOR C1 TO ONE 20/1 SPARE (H1C-13) IN EXISTING PANEL H1C.

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KEY MAP
 SCALE: 1:100

Date	No.	Remarks



1 ELECTRICAL PLAN B
 SCALE: 1" = 20'-0"

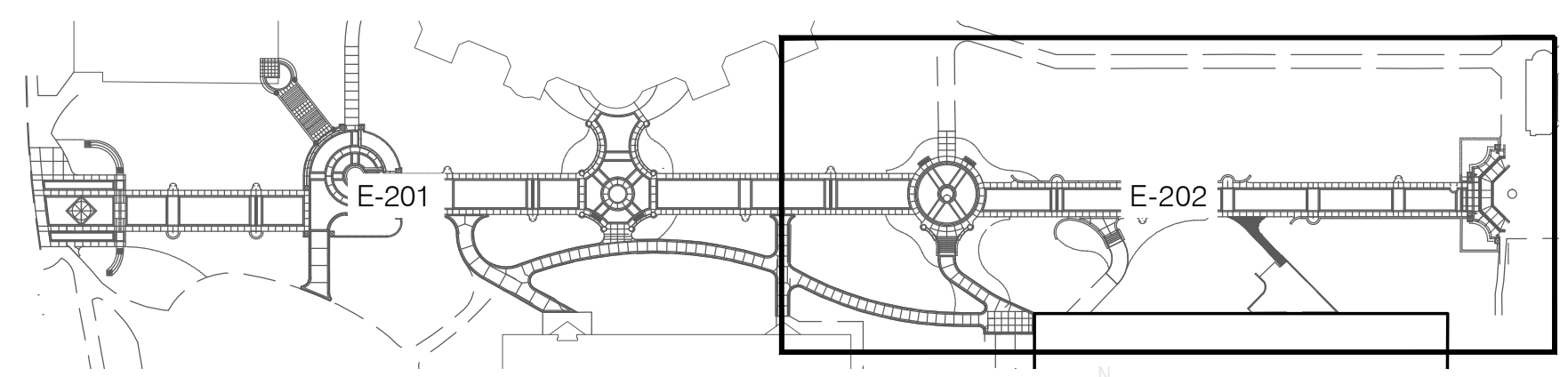
FLAG NOTES

- 1 PROVIDE NEW CONTACTOR C1 AND LOCATE ADJACENT TO EXISTING CONTACTORS. SEE CONTACTOR SCHEDULE ON E-000. CONNECT CONTROL INPUT TO EXISTING PHOTOCELL.
- 2 2 #10 (LIGHTING), 4 #8 (RECEPTACLES) AND #8 GROUND IN 1" C.
- 3 PROVIDE QUAZITE "PC" STYLE IN-GRADE JUNCTION BOX WITH "ELECTRIC" LABEL FOR FUTURE LIGHTS. BOX SHALL BE 13"W X 24"L X 12"D.
- 4 ROUTE CONDUITS UP EXTERIOR OF BUILDING AND ENTER BUILDING IN CRAWL SPACE BELOW EXISTING PANELS. PAINT EXPOSED CONDUITS TO MATCH SURROUNDING SURFACE.

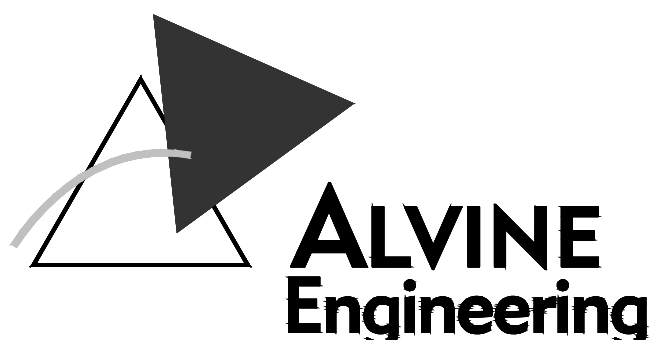
GENERAL NOTES

- 1. THE LOWER RECEPTACLES ON TYPE 1 AND 2 POLES SHALL BE CONNECTED TO ONE 20/1 SPARE (L1D-47) IN EXISTING PANEL L1D.
- 2. THE UPPER RECEPTACLES ON TYPE 1 AND 2 POLES SHALL BE CONNECTED THRU CONTACTOR C1 TO ONE 20/1 SPARE (L1D-49) IN EXISTING PANEL L1D.
- 3. THE FIXTURES ON TYPE 1 AND 2 POLES SHALL BE CONNECTED THRU CONTACTOR C1 TO ONE 20/1 SPARE (H1C-15) IN EXISTING PANEL H1C.

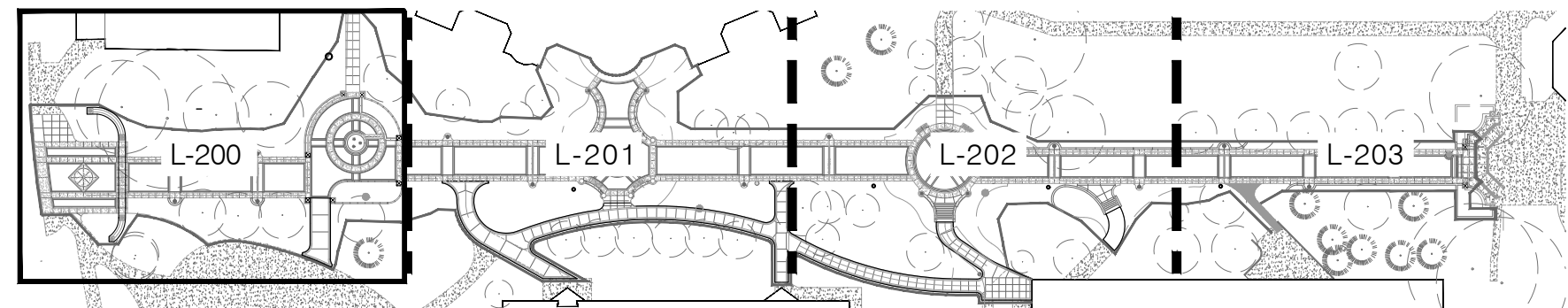
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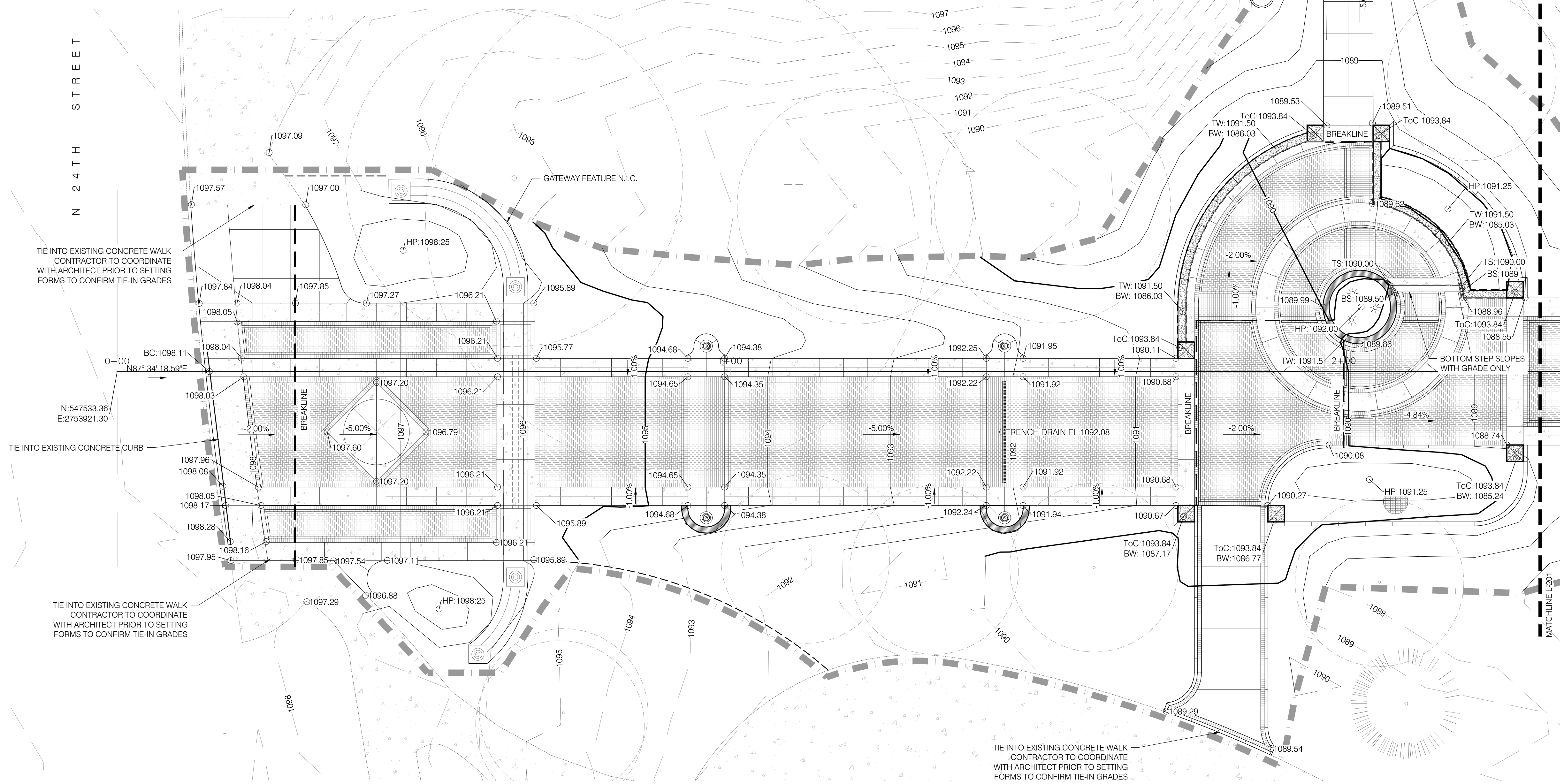


KEY MAP

SCALE: 1:100



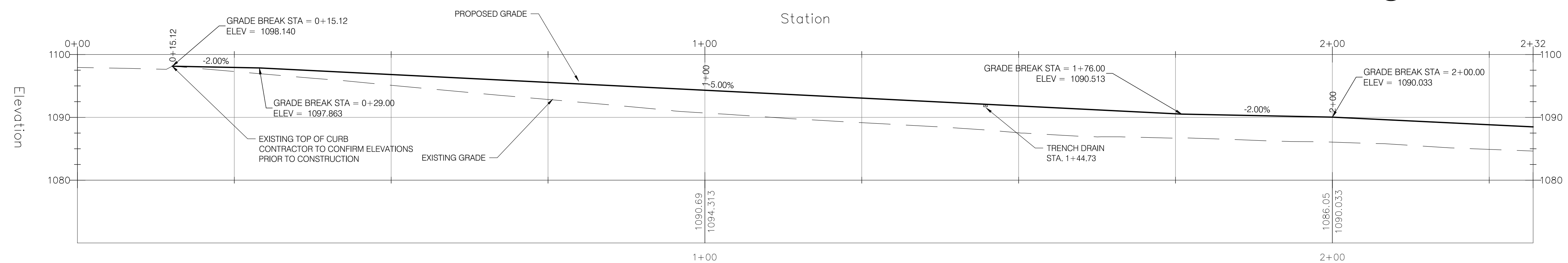
23RD STREET PARKING



LEGEND:
 HP: HIGH POINT
 LP: LOW POINT
 TS: TOP OF STEP
 BS: BOTTOM OF STEP
 ToC: TOP OF COLUMN
 TW: TOP OF WALL
 FG: FINISHED GRADE
 BW: BOTTOM OF WALL (FOOTING)

1 GRADING PLAN

SCALE: 1:10



2 GRADING PROFILE

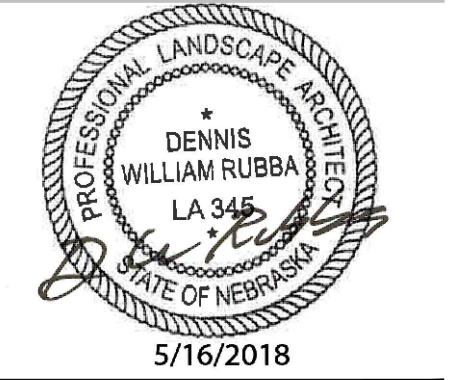
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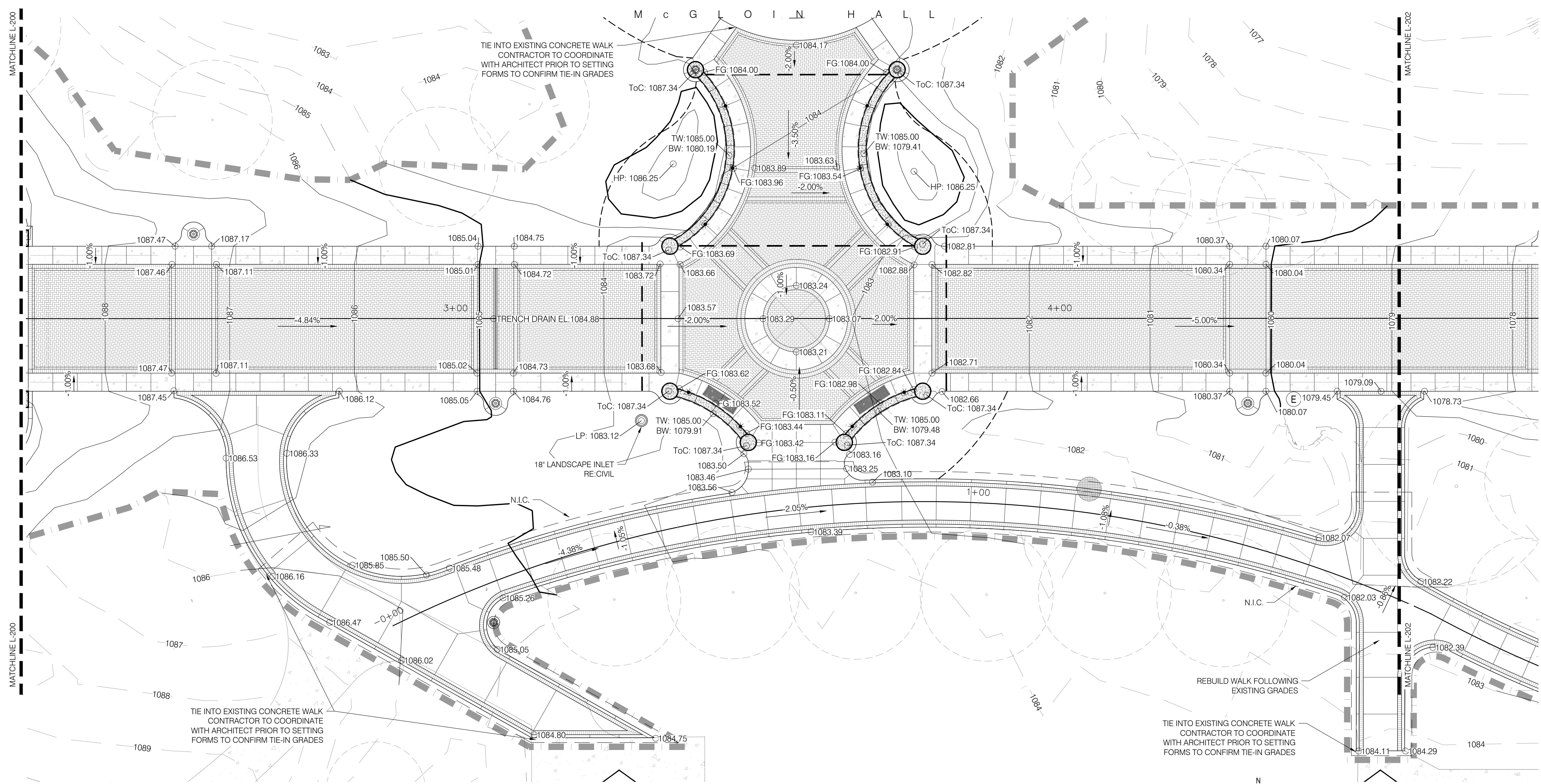
Drawn By: KN
 Reviewed By: MSS
 Revisions:

Date	No.	Remarks

Sheet Name:
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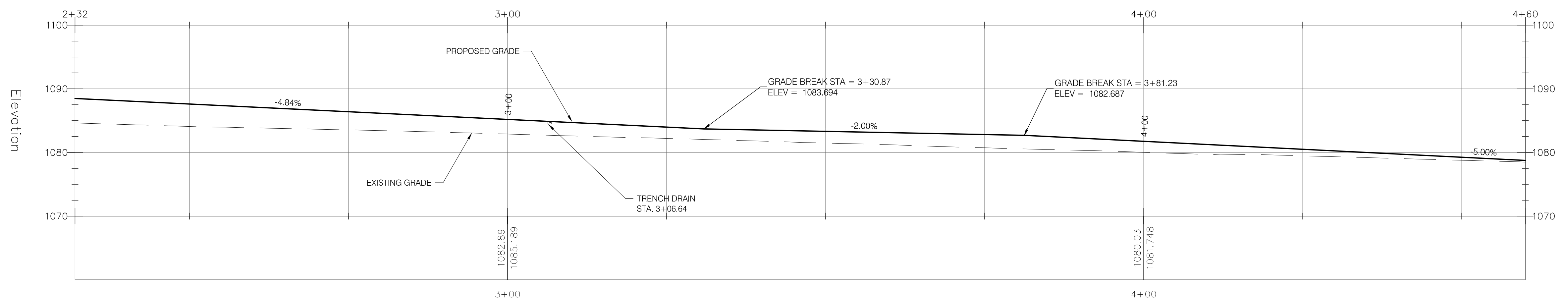
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Date	No.	Remarks

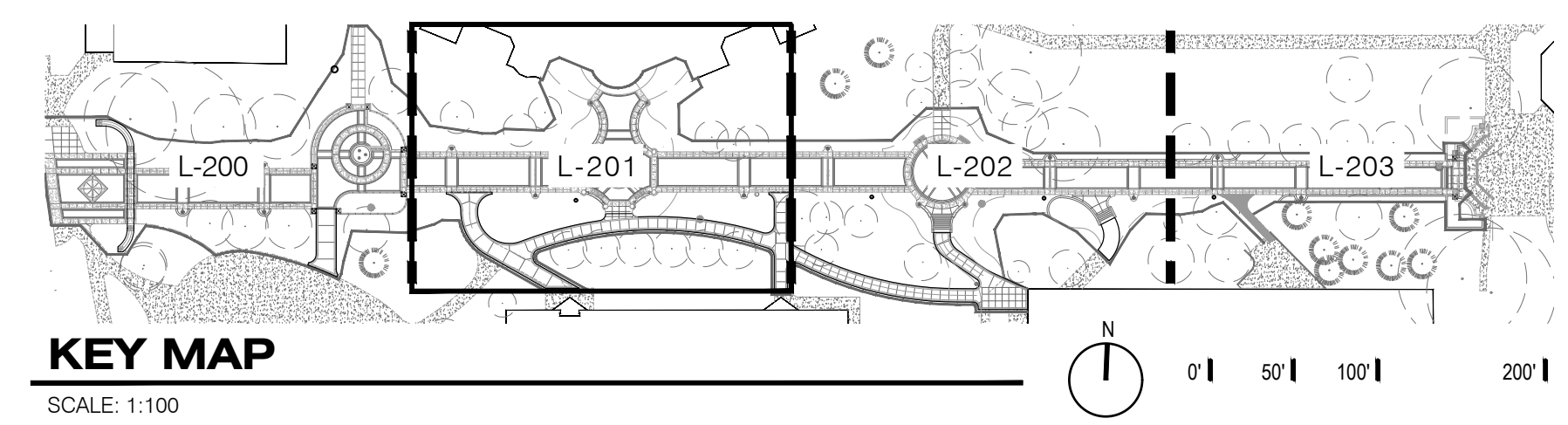


LEGEND:
HP: HIGH POINT
LP: LOW POINT
TS: TOP OF STEP
BS: BOTTOM OF STEP
ToC: TOP OF COLUMN
TW: TOP OF WALL
FG: FINISHED GRADE
BW: BOTTOM OF WALL (FOOTING)

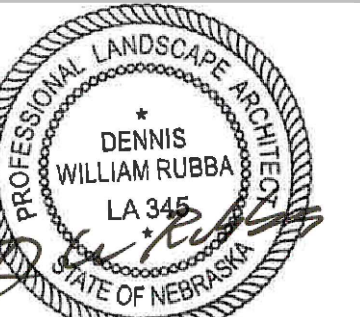
1 GRADING PLAN
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2 GRADING PROFILE
SCALE: 1:10 HOR/1:10 VERT



KEY MAP
SCALE: 1:100



5/16/2018

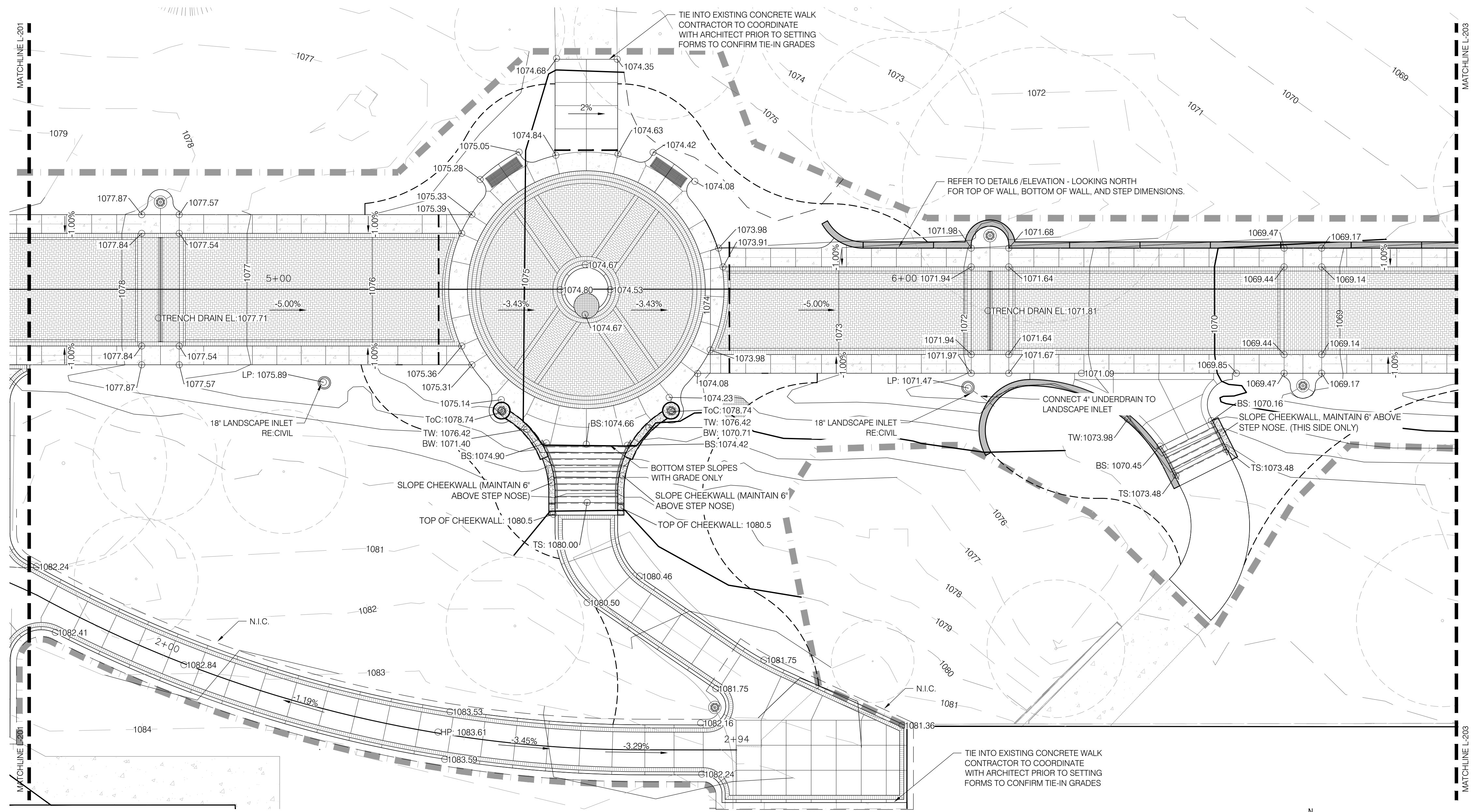
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Revisions:

Date	No.	Remarks

Sheet Name:
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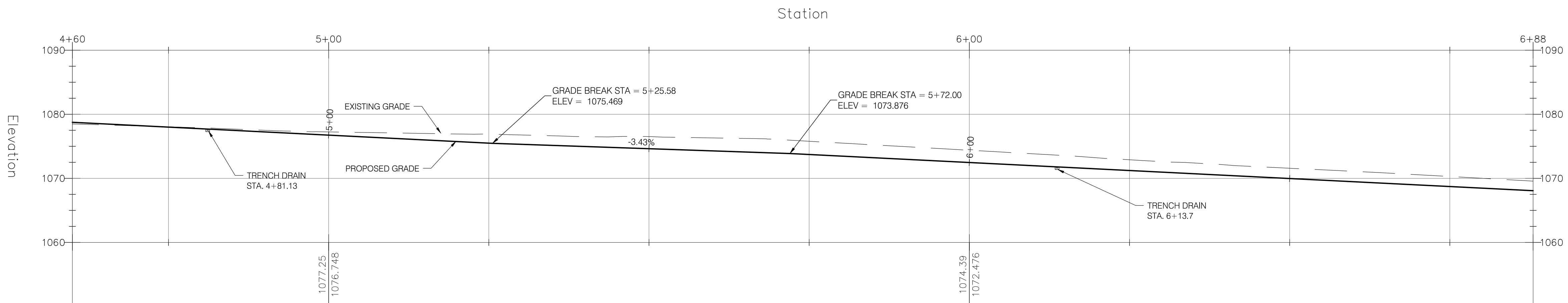
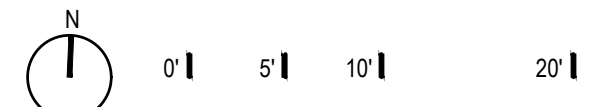
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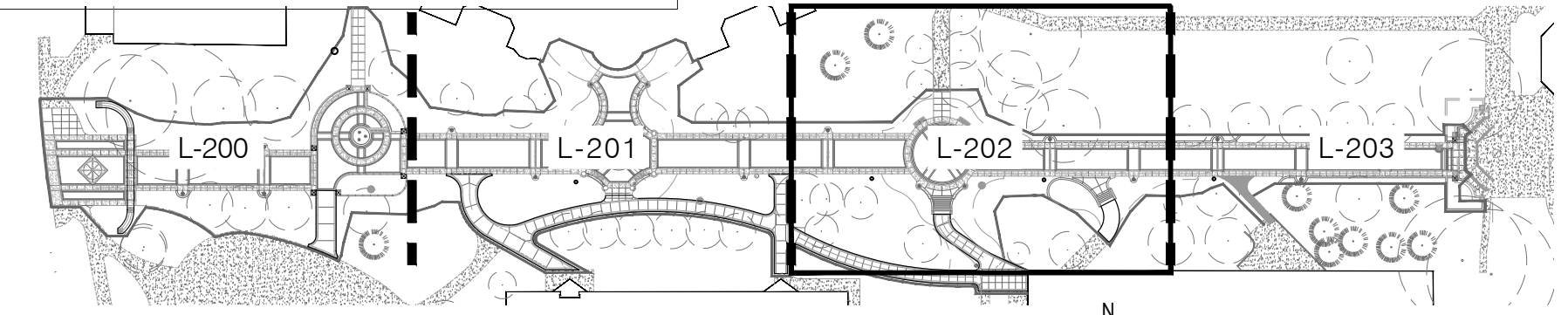
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SCALE: 1:10



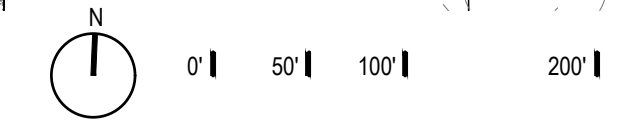
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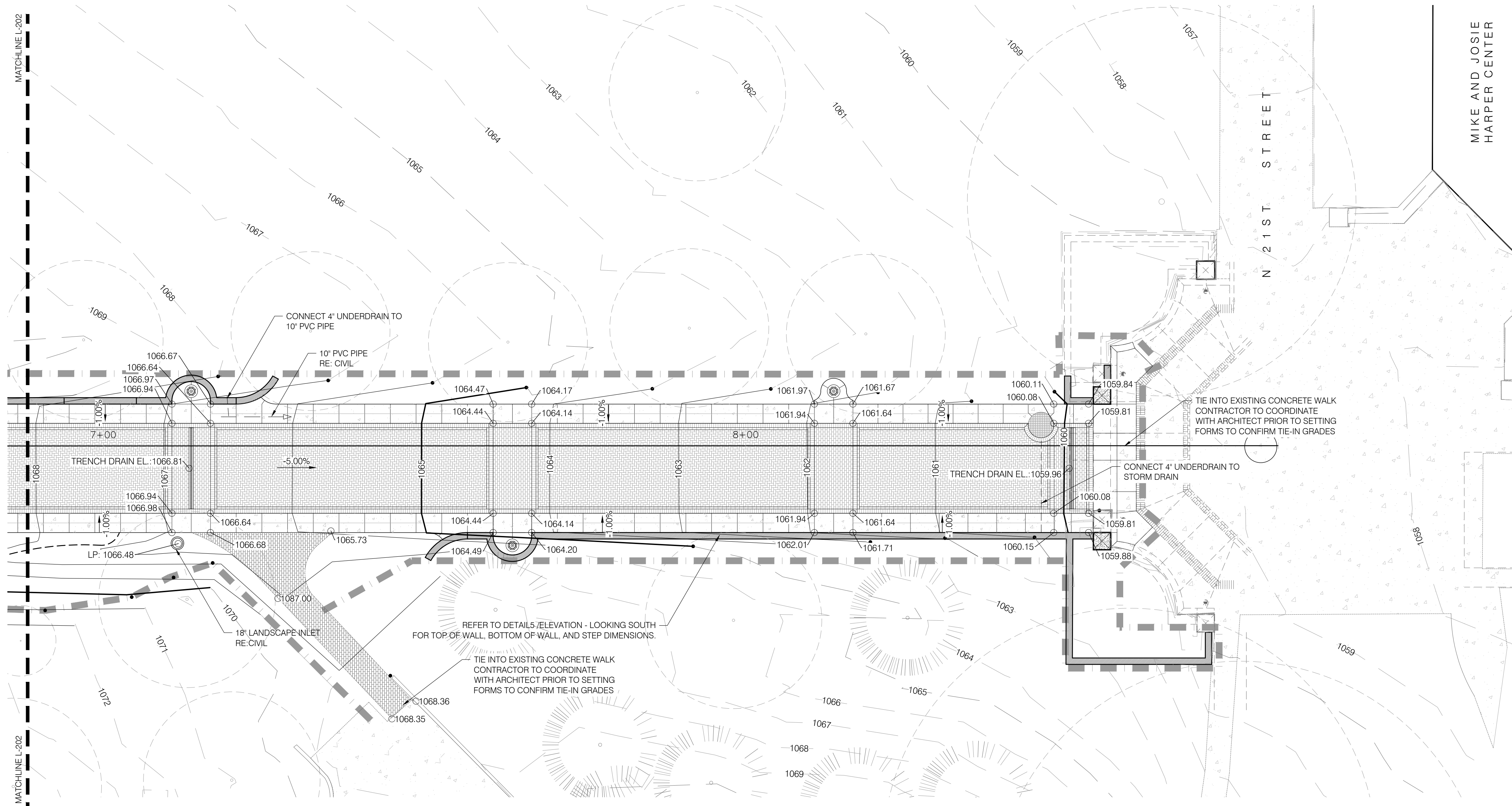
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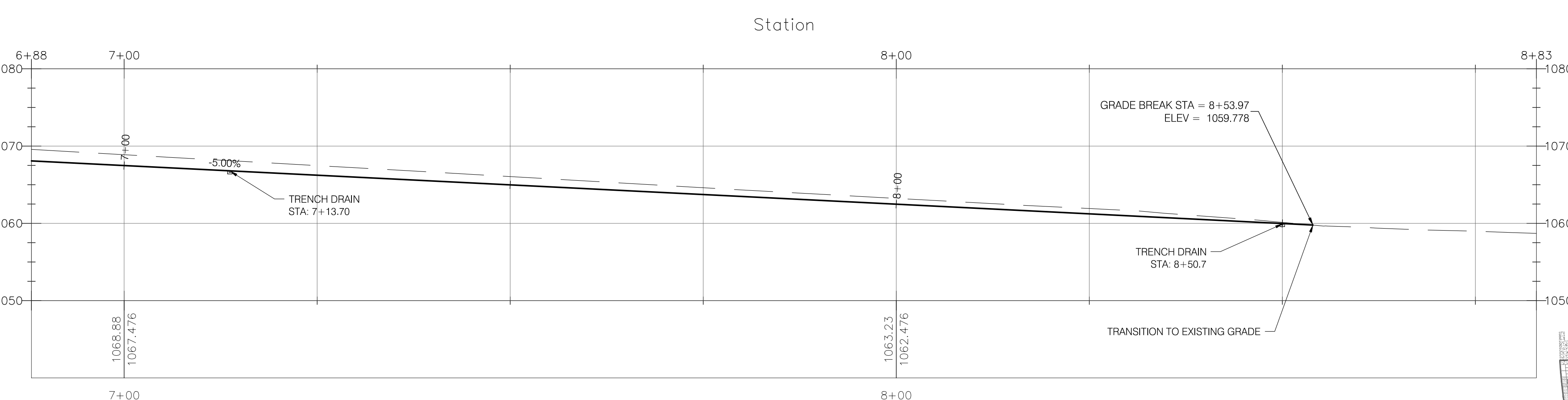
KEY MAP

SCALE: 1:100

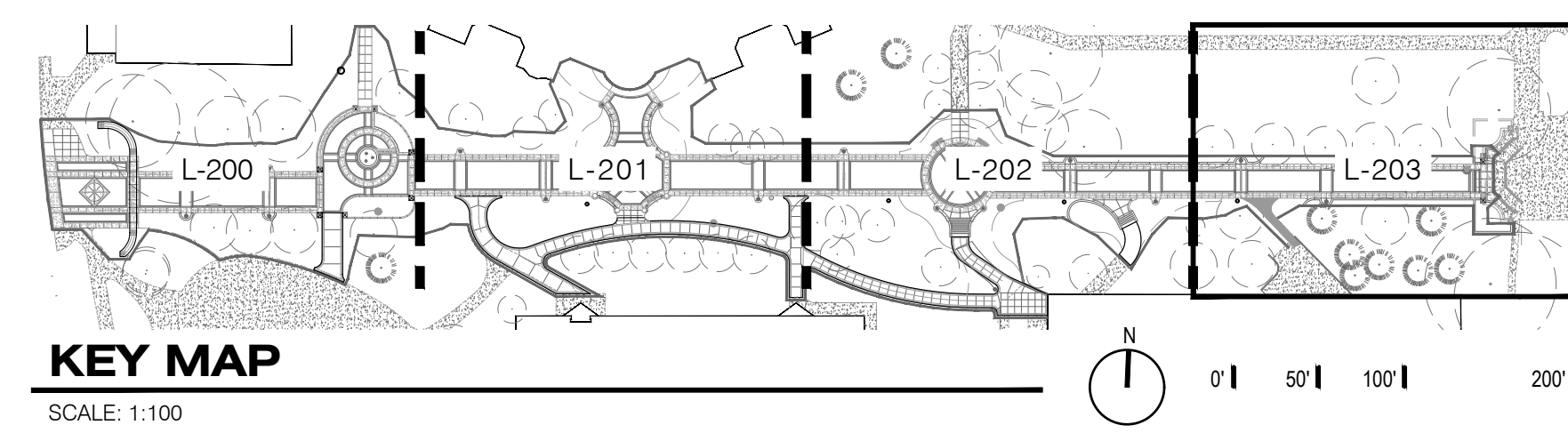




1 GRADING PLAN
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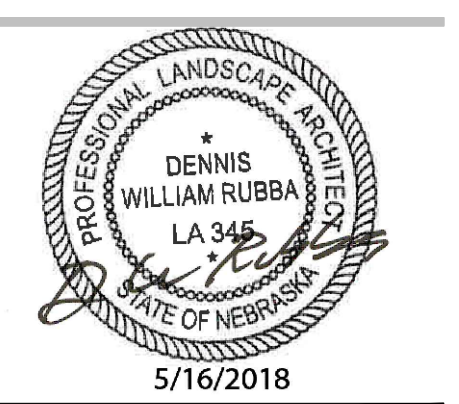
2 GRADING PROFILE
SCALE: 1:10 HOR/1:10 VERT



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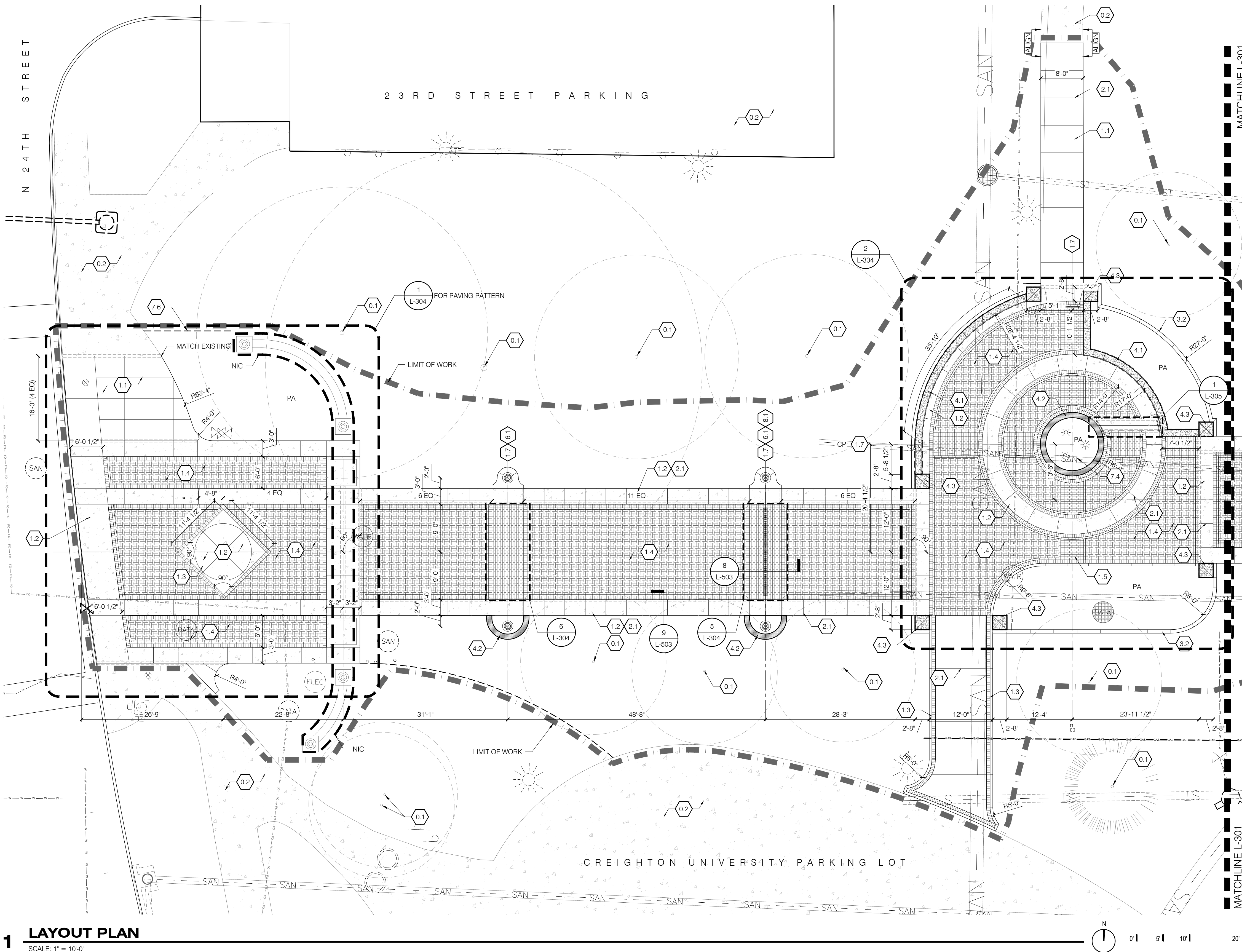
Date: 2018/05/18
Project Name:
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Reviewed By: MSS
Revisions:

Date	No.	Remarks

Sheet Name:
GRADING PLAN AND
PROFILE
Sheet Number:
L-203

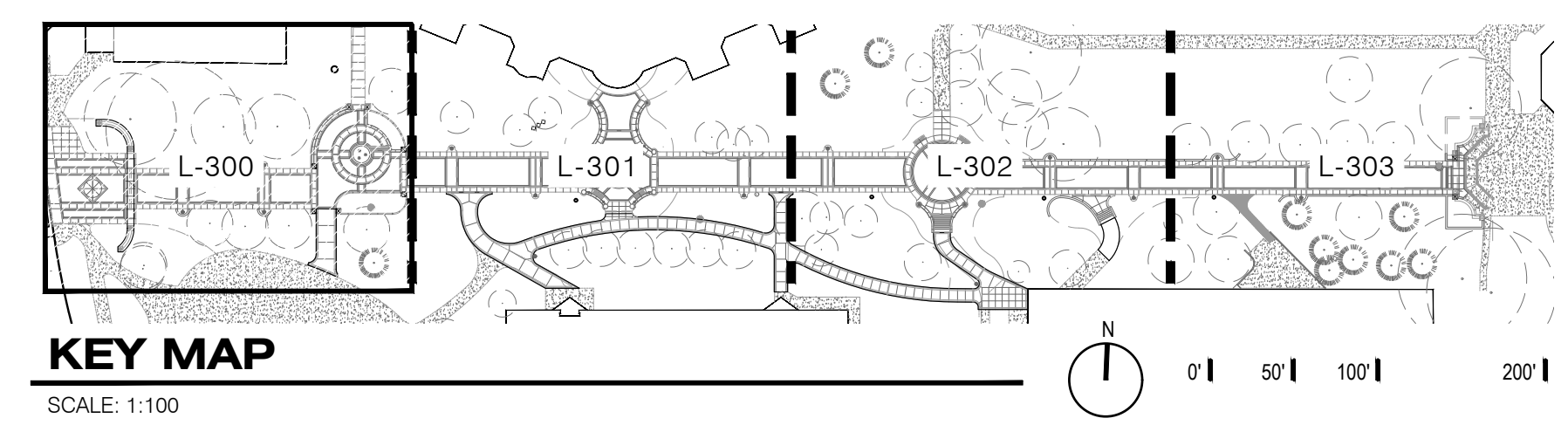


- KEYNOTES LEGEND**
- 0.0 EXISTING CONDITIONS
 - 0.1 EXISTING TREE TO REMAIN/PROTECT
 - 0.2 EXISTING PAVEMENT TO REMAIN/PROTECT
 - 0.3 EXISTING CONCRETE CURB AND GUTTER TO REMAIN
 - 0.4 EXISTING WALL TO REMAIN/PROTECT
 - 1.0 PAVING
 - 1.1 CIP CONC PAVING, 4" THICKNESS, SAWN JTS, BROOM FIN
 - 1.2 CIP CONC PAVING, 8" THICKNESS, SAWN JTS, BROOM FIN
 - 1.3 CIP CONC PAVING WITH DOUBLE SOLDIER COURSE EDGES
 - 1.4 BRICK PAVERS OVER CONC SUBSLAB, HERRING BONE PATTERN WITH DOUBLE SOLDIER COURSE EDGES
 - 1.5 BRICK PAVERS OVER CONC SUBSLAB, HERRING BONE PATTERN WITH SOLDIER COURSE
 - 1.6 BRICK PAVERS OVER CONC SUBSLAB, RUNNING BOND PATTERN WITH SOLDIER COURSE
 - 1.7 BRICK PAVING ACCENT BAND (DETAIL ON ENLARGEMENT PLANS)
 - 2.0 JOINTING
 - 2.1 SAWN CONTROL JOINT
 - 2.2 EXPANSION JOINT
 - 3.0 CURBS, EDGES, STEPS
 - 3.1 CIP CONCRETE STEPS
 - 3.2 CIP CONCRETE RIBBON CURB
 - 4.0 WALLS
 - 4.1 CIP CONCRETE SEATWALL
 - 4.2 MODULAR BLOCK RETAINING WALL
 - 4.3 CIP CONC END PIER - SQUARE
 - 4.4 CIP CONC END PIER - ROUND
 - 5.0 SITE FURNISHINGS & SITE ELEMENTS
 - 5.1 BACKED BENCH
 - 5.2 BACKLESS BENCH
 - 5.3 TRASH RECEPTACLE
 - 5.4 ASH URN
 - 6.0 SITE LIGHTING
 - 6.1 PEDESTRIAN LIGHT
 - 6.2 not used
 - 6.3 RECESSED WALL LIGHT
 - 7.0 PLANTING
 - 7.1 DECIDUOUS TREE
 - 7.2 EVERGREEN TREE
 - 7.3 ORNAMENTAL TREE
 - 7.4 PLANTING AREA
 - 7.5 GROUND COVER TO BE REMOVED AND REPLACED TO MATCH EXISTING
 - 7.6 IRRIGATED TURF
 - 7.7 STEEL EDGER
 - 8.0 DRAINAGE
 - 8.1 TRENCH DRAIN

- MATERIALS LEGEND**
- 1.1 CIP CONC PAVING, 4" THICKNESS
 - 1.2 CIP CONC PAVING, 8" THICKNESS
 - 1.3 CIP CONC PAVING WITH DOUBLE SOLDIER COURSE EDGES
 - 1.4 BRICK PAVERS OVER CONC SUBSLAB, HERRING BONE PATTERN WITH SINGLE SOLDIER COURSE AND SOLDIER COURSE EDGE
 - 1.5 BRICK PAVERS OVER CONC SUBSLAB, RUNNING BOND PATTERN WITH SINGLE SOLDIER COURSE EDGE
 - 2.1 SAWN CONTROL JOINT
 - 2.2 EXPANSION JOINT (EJ)

- WORK LINES**
- LIMITS OF WORK

1 LAYOUT PLAN
SCALE: 1" = 10'-0"



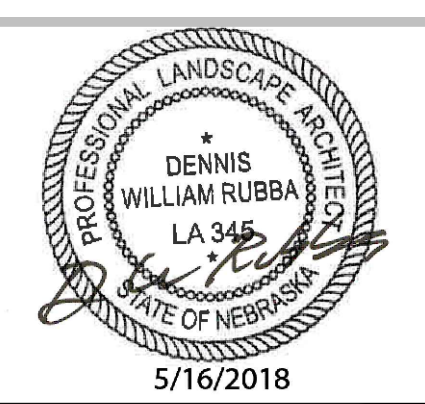
KEY MAP
SCALE: 1:100



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Date: 2018/05/18
Project Name:
**CU PEDESTRIAN
MALL DESIGN**
Issued For / Phase:
**100%
CONSTRUCTION**

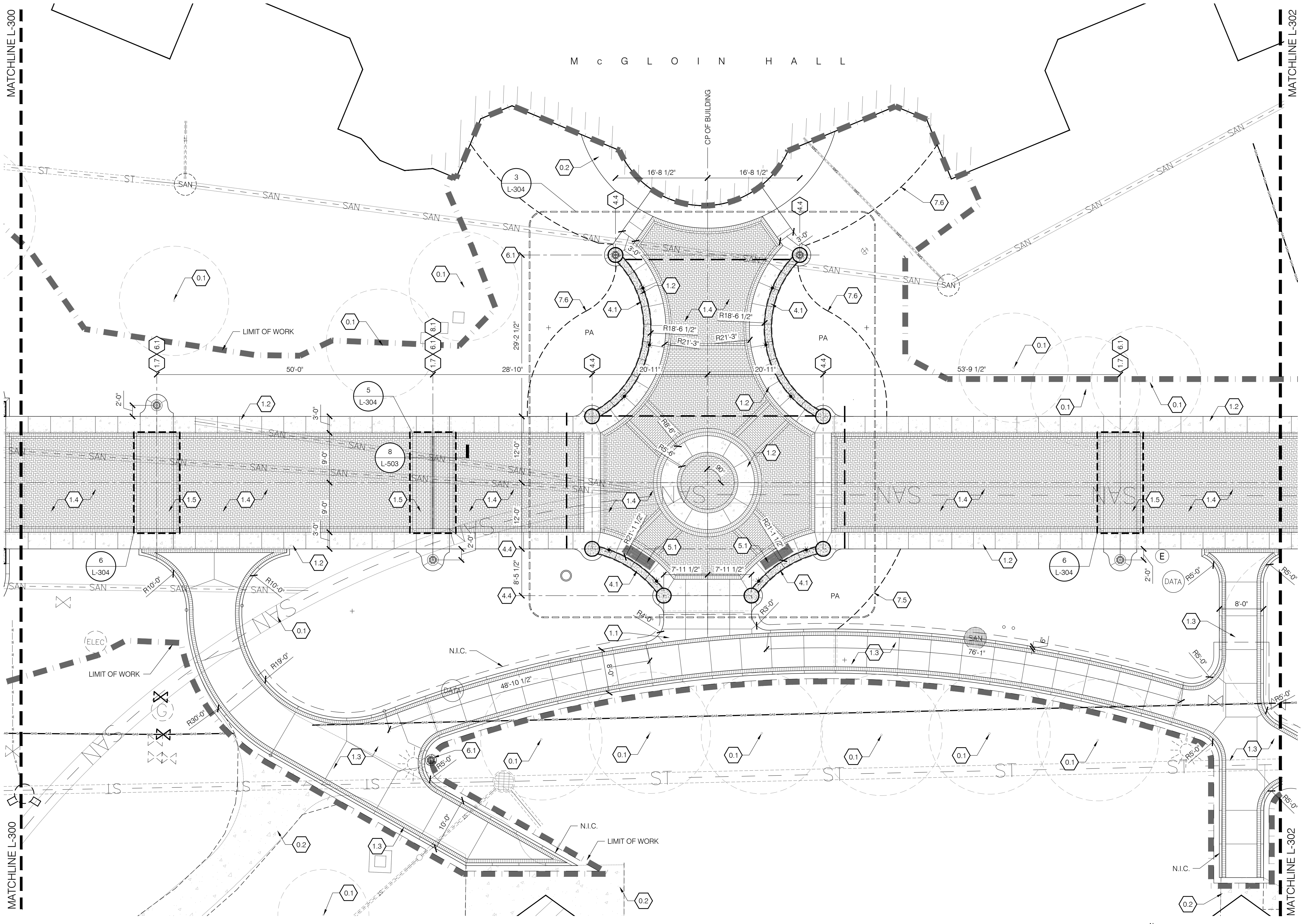


Drawn By: KN
Reviewed By: MSS
Revisions:

Date	No.	Remarks

Sheet Name:
LAYOUT PLAN

Sheet Number:
L-300

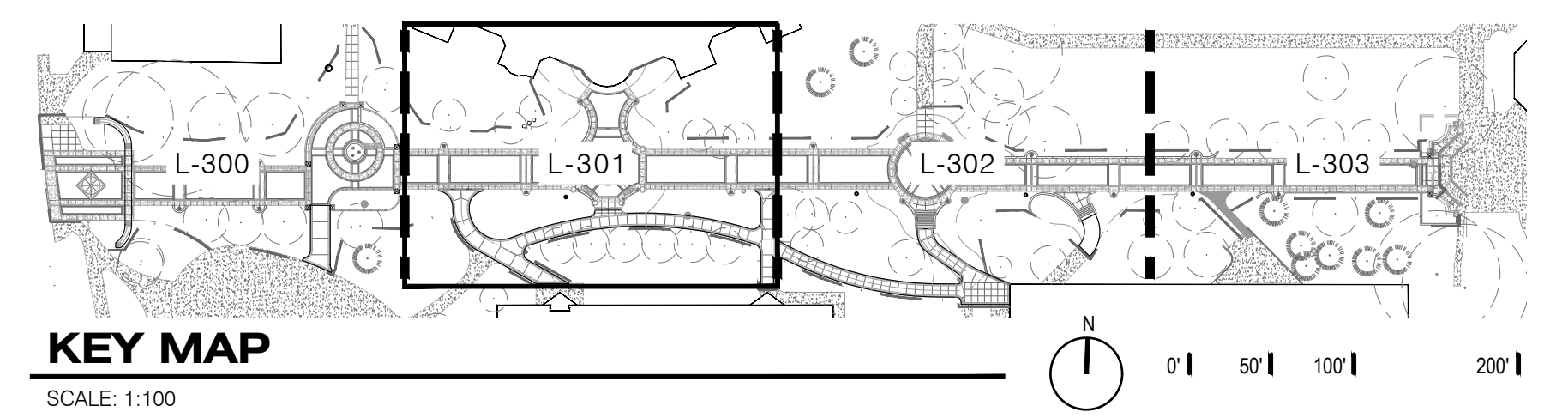


- KEYNOTES LEGEND**
- 0.0 EXISTING CONDITIONS
 - 0.1 EXISTING TREE TO REMAIN/PROTECT
 - 0.2 EXISTING PAVEMENT TO REMAIN/PROTECT
 - 0.3 EXISTING CONCRETE CURB AND GUTTER TO REMAIN
 - 0.4 EXISTING WALL TO REMAIN/PROTECT
 - 1.0 PAVING
 - 1.1 CIP CONC PAVING, 4" THICKNESS, SAWN JTS, BROOM FIN
 - 1.2 CIP CONC PAVING, 8" THICKNESS, SAWN JTS, BROOM FIN
 - 1.3 CIP CONC PAVING WITH DOUBLE SOLDIER COURSE EDGES
 - 1.4 BRICK PAVERS OVER CONC SUBSLAB, HERRING BONE PATTERN WITH DOUBLE SOLDIER COURSE EDGES
 - 1.5 BRICK PAVERS OVER CONC SUBSLAB, HERRING BONE PATTERN WITH SOLDIER COURSE
 - 1.6 BRICK PAVERS OVER CONC SUBSLAB, RUNNING BOND PATTERN WITH SOLDIER COURSE
 - 1.7 BRICK PAVING ACCENT BAND (DETAIL ON ENLARGEMENT PLANS)
 - 2.0 JOINTING
 - 2.1 SAWN CONTROL JOINT
 - 2.2 EXPANSION JOINT
 - 3.0 CURBS, EDGES, STEPS
 - 3.1 CIP CONCRETE STEPS
 - 3.2 CIP CONCRETE RIBBON CURB
 - 4.0 WALLS
 - 4.1 CIP CONCRETE SEATWALL
 - 4.2 MODULAR BLOCK RETAINING WALL
 - 4.3 CIP CONC END PIER - SQUARE
 - 4.4 CIP CONC END PIER - ROUND
 - 5.0 SITE FURNISHINGS & SITE ELEMENTS
 - 5.1 BACKED BENCH
 - 5.2 BACKLESS BENCH
 - 5.3 TRASH RECEPTACLE
 - 5.4 ASH URN
 - 6.0 SITE LIGHTING
 - 6.1 PEDESTRIAN LIGHT
 - 6.2 not used
 - 6.3 RECESSED WALL LIGHT
 - 7.0 PLANTING
 - 7.1 DECIDUOUS TREE
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 - 7.3 ORNAMENTAL TREE
 - 7.4 PLANTING AREA
 - 7.5 GROUND COVER TO BE REMOVED AND REPLACED TO MATCH EXISTING
 - 7.6 IRRIGATED TURF
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 - 8.1 TRENCH DRAIN

- MATERIALS LEGEND**
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 - 1.5 BRICK PAVERS OVER CONC SUBSLAB, RUNNING BOND PATTERN WITH SINGLE SOLDIER COURSE EDGE
 - 2.1 SAWN CONTROL JOINT
 - 2.2 EXPANSION JOINT (EJ)

- WORK LINES**
- LIMITS OF WORK

1 LAYOUT PLAN
SCALE: 1" = 10'-0"



Date	No.	Remarks

KEYNOTES LEGEND

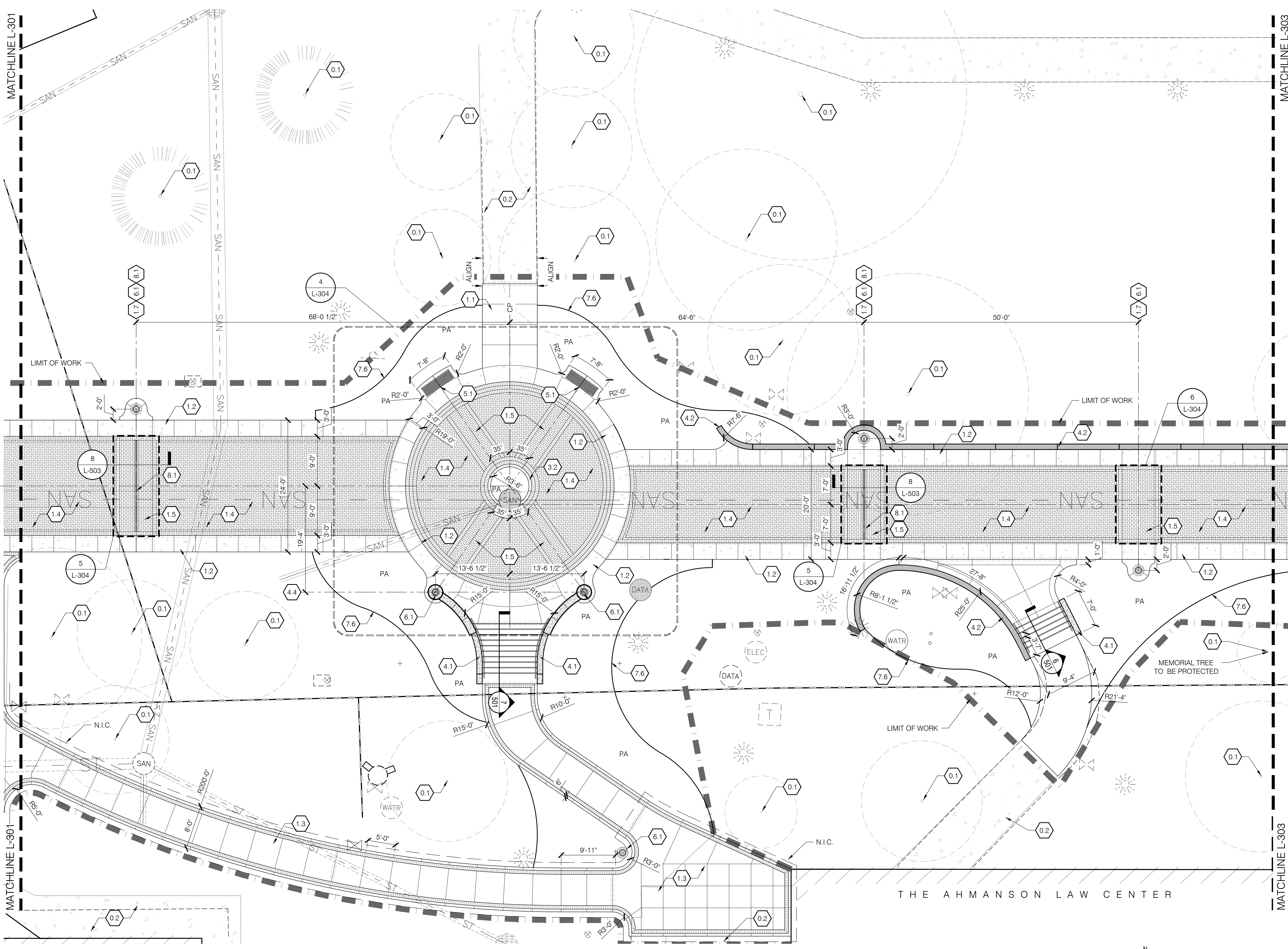
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 - 8.1 TRENCH DRAIN

MATERIALS LEGEND

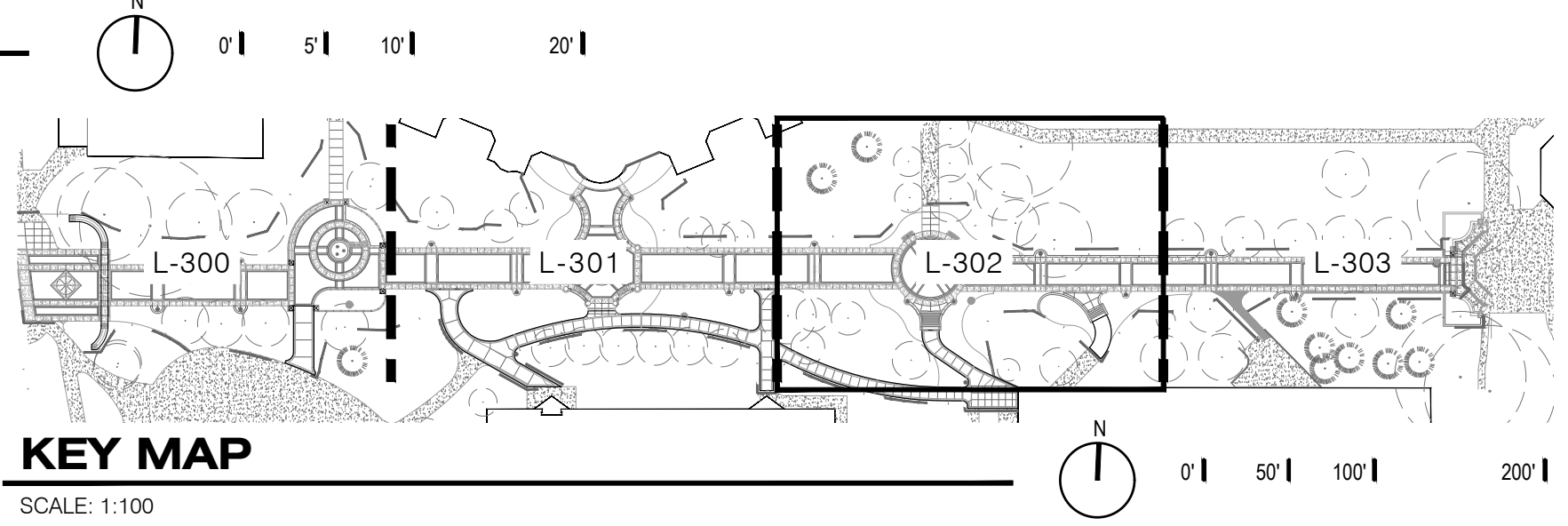
- 1.1 [Pattern] CIP CONC PAVING, 4" THICKNESS
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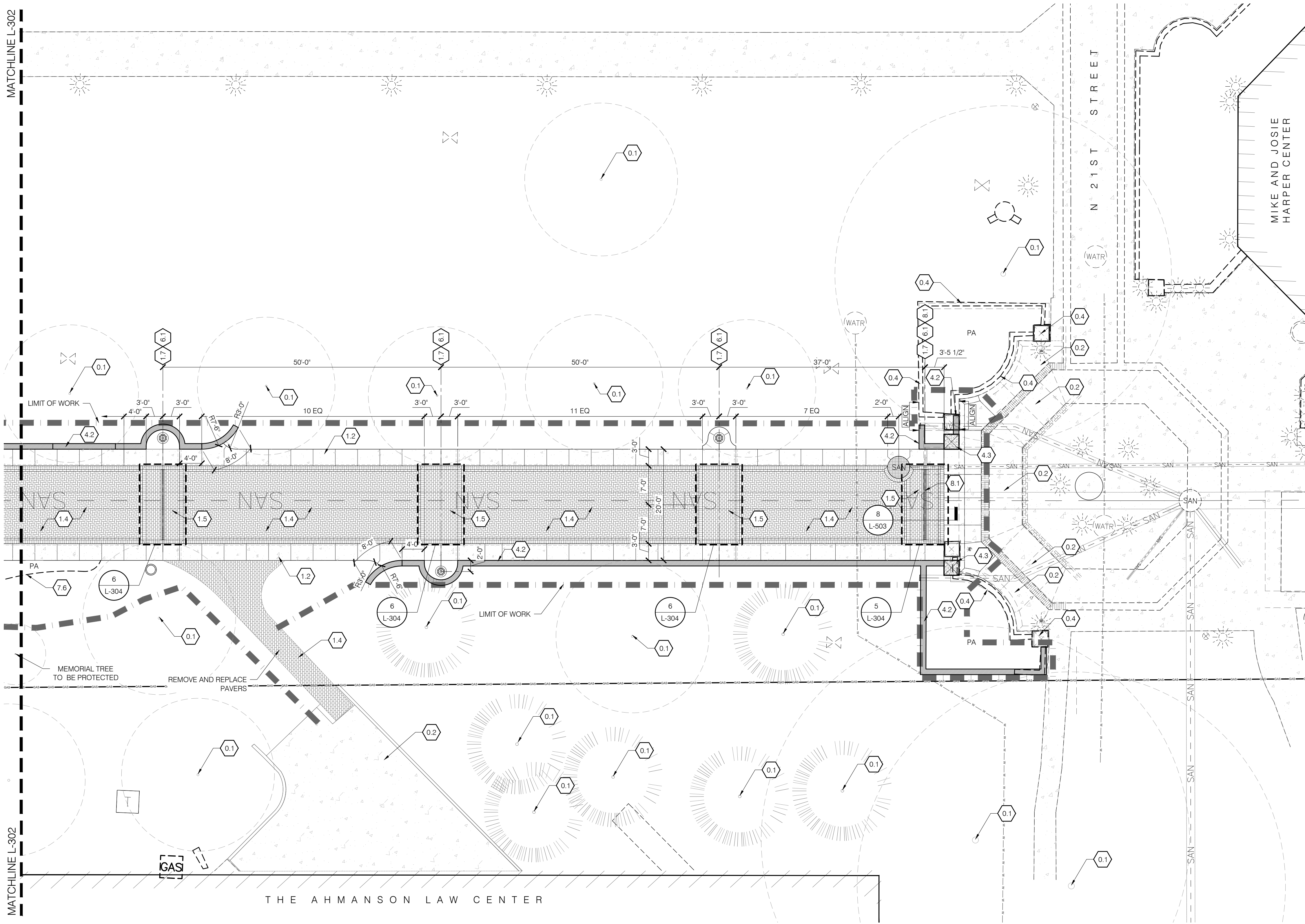
WORK LINES

- [Symbol] LIMITS OF WORK



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WORK LINES

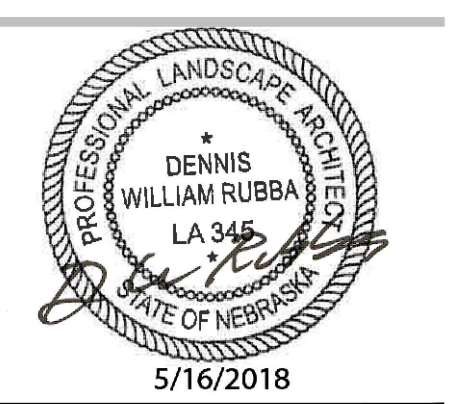
- [Symbol] LIMITS OF WORK



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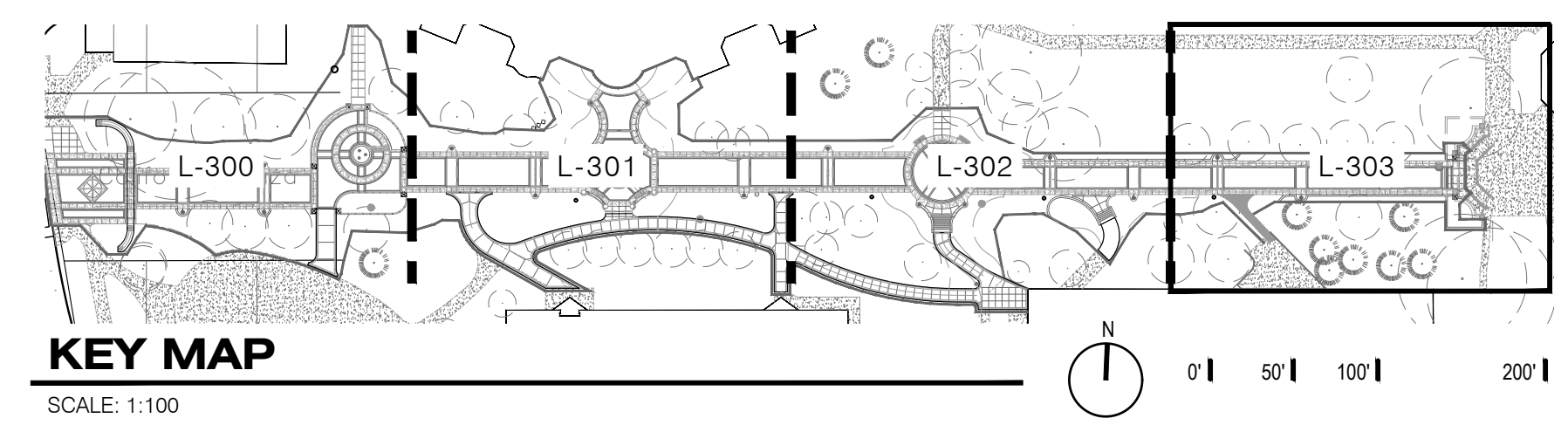


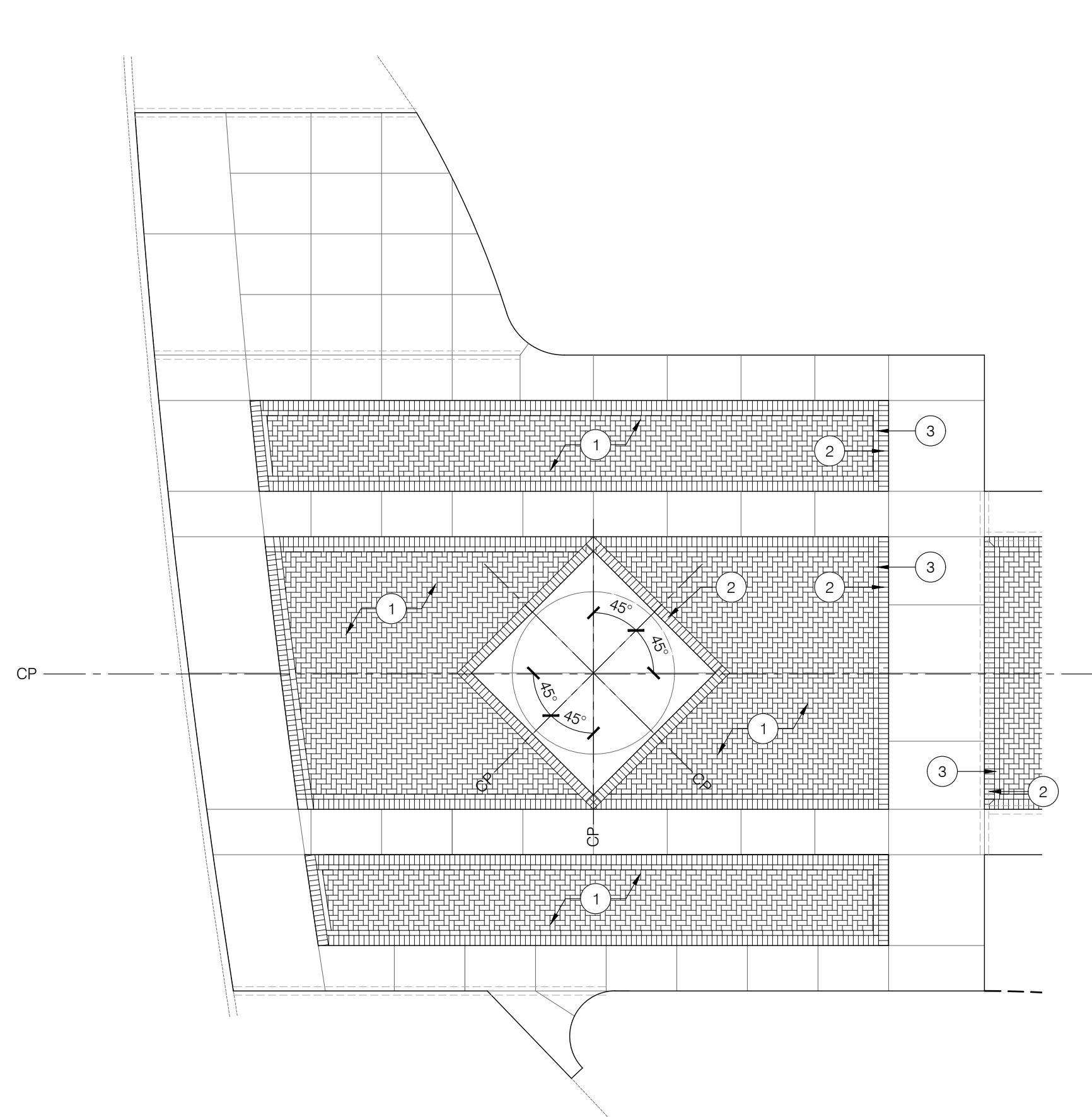
Drawn By: KN
Reviewed By: MSS
Revisions:

Date	No.	Remarks

Sheet Name:
LAYOUT PLAN
Sheet Number:
L-303

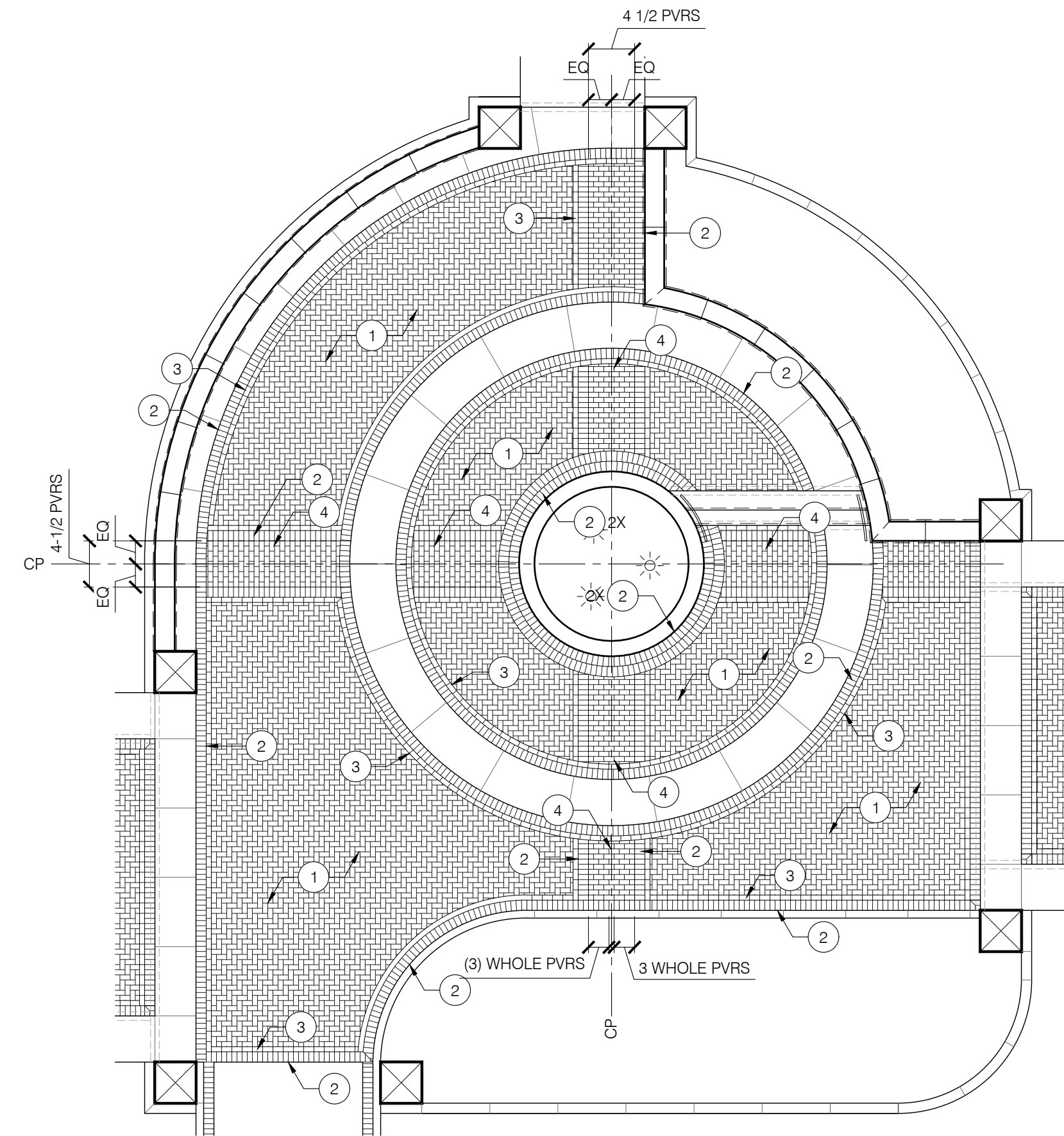
1 LAYOUT PLAN
SCALE: 1" = 10'-0"





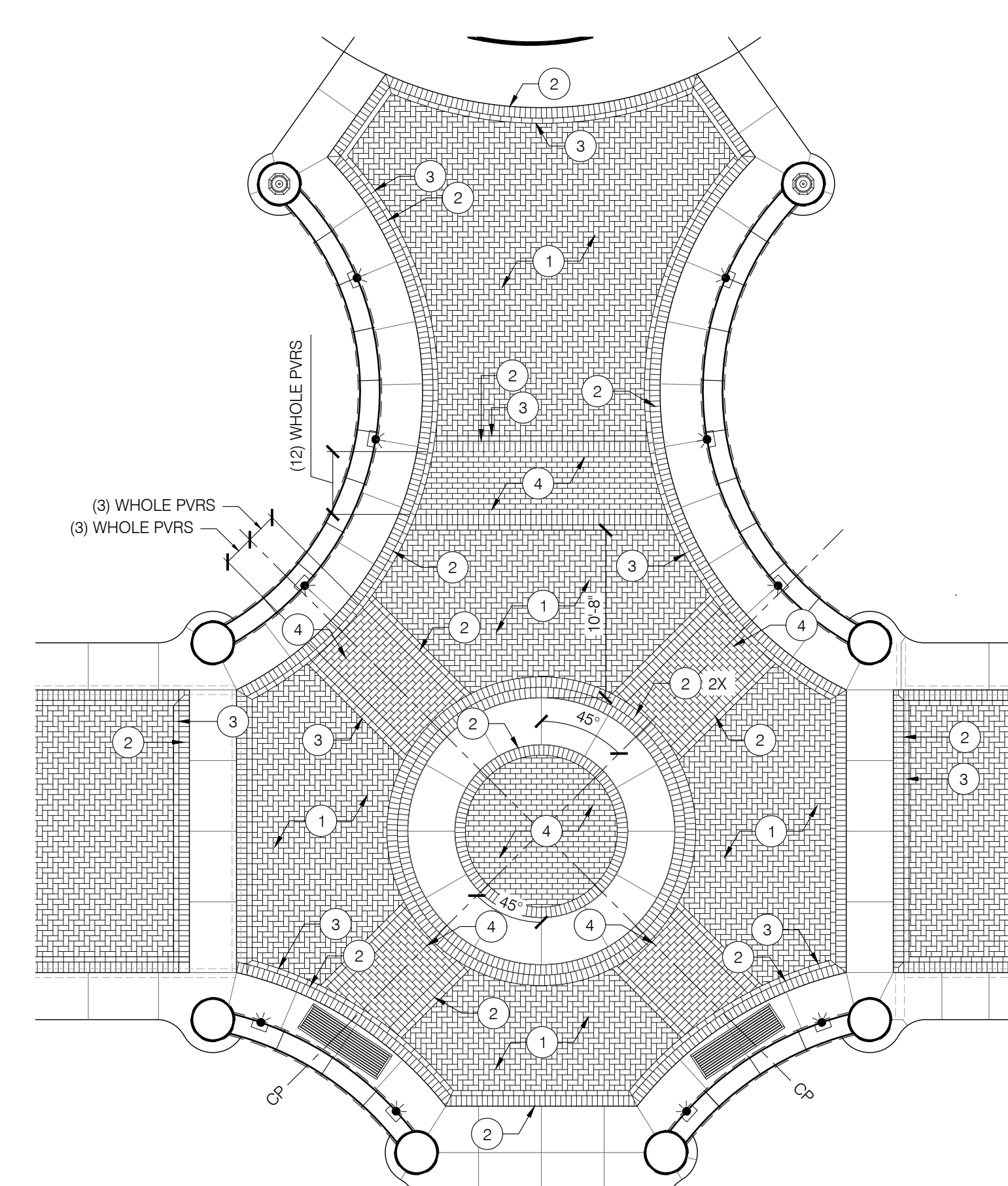
1 24TH STREET PLAZA

SCALE: 1/8" = 1'-0"



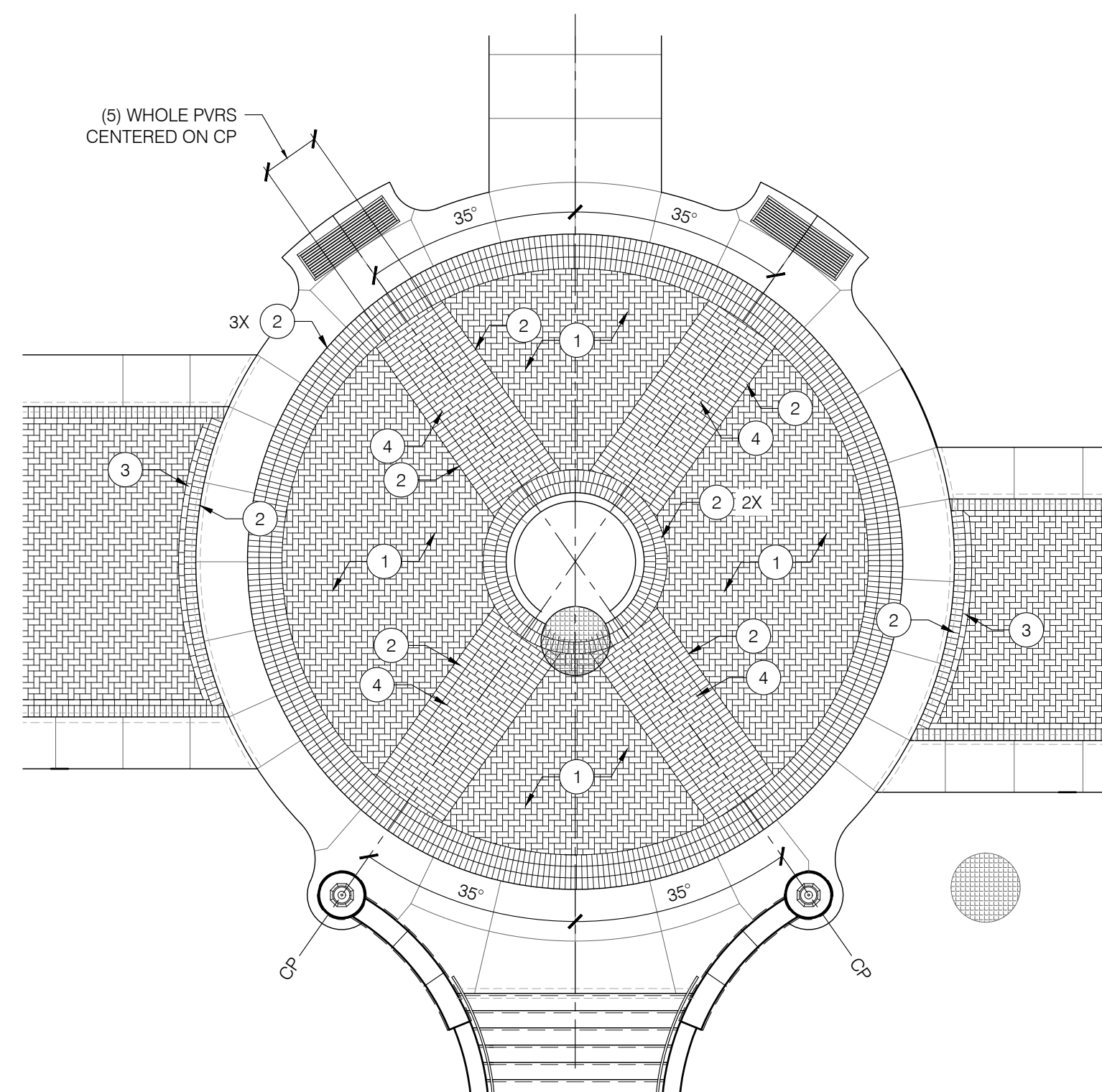
2 BRICK PAVING LAYOUT PLAN ENLARGEMENT

SCALE: 1/8" = 1'-0"



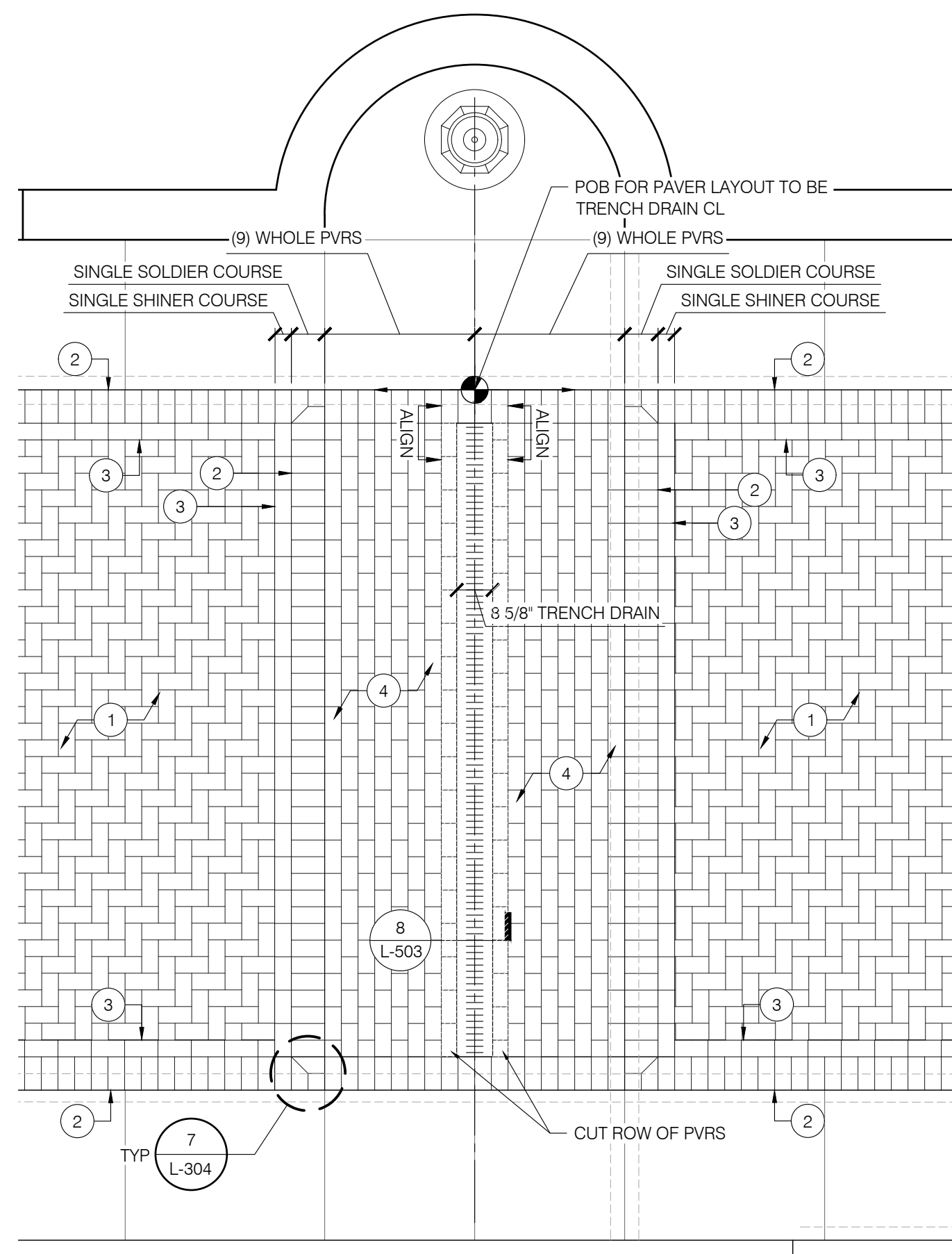
3 BRICK PAVING LAYOUT PLAN ENLARGEMENT

SCALE: 1/8" = 1'-0"



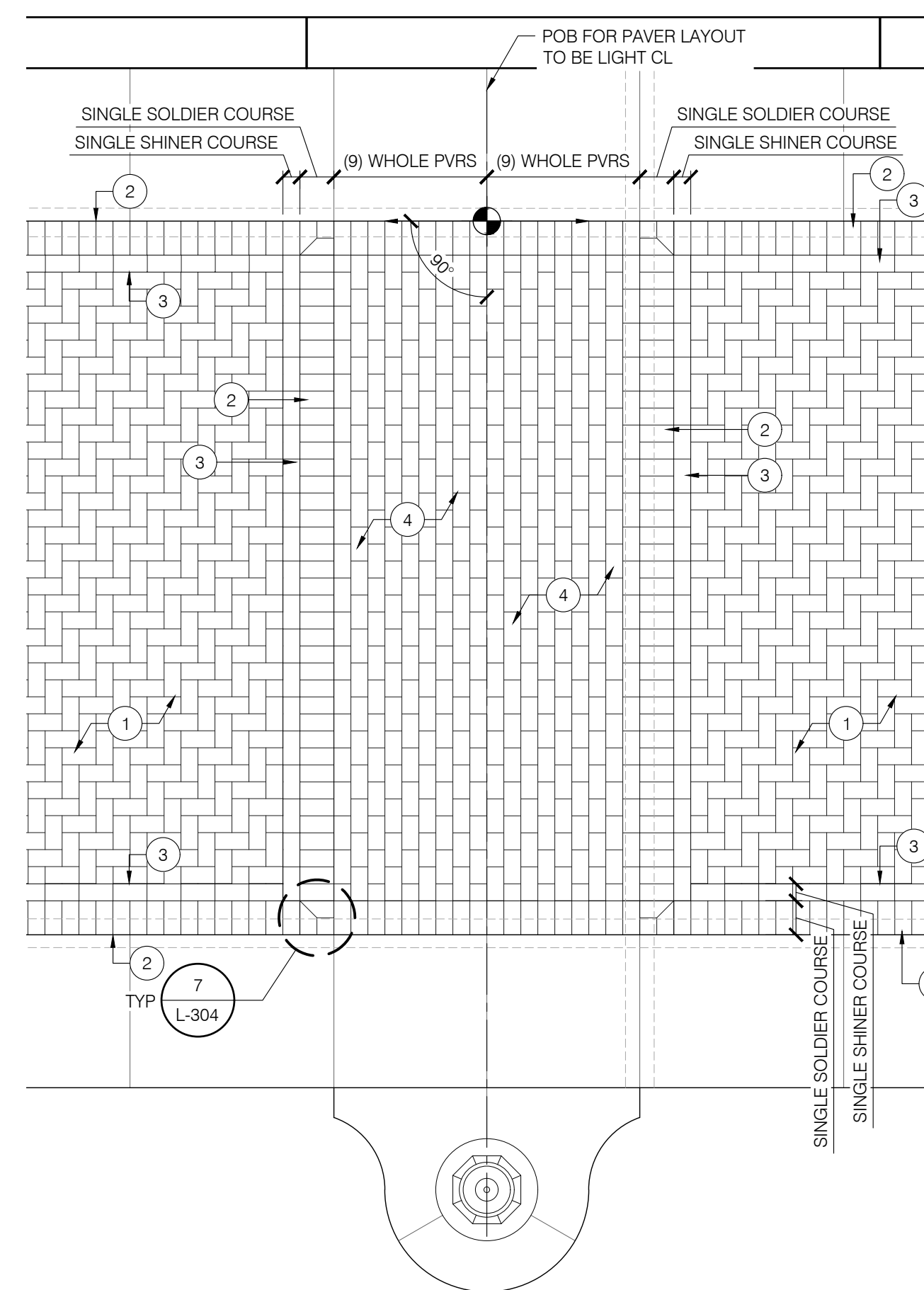
4 BRICK PAVING LAYOUT PLAN ENLARGEMENT

SCALE: 1/8" = 1'-0"



5 BRICK PAVING TRENCH DRAIN ACCENT DETAIL

SCALE: 3/8" = 1'-0"



6 BRICK PAVING ACCENT DETAIL

SCALE: 3/8" = 1'-0"

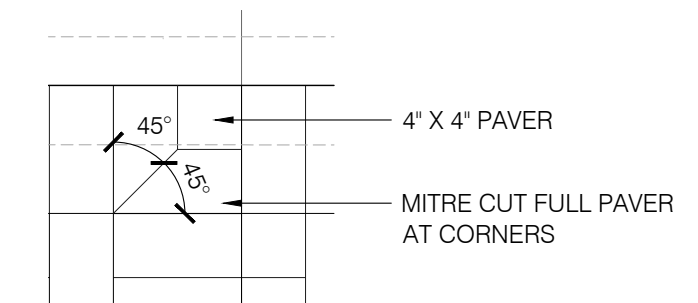
7 BRICK PAVER DETAILS

SCALE: 1" = 1'-0"

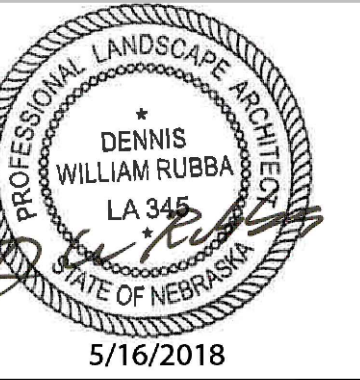
PAVER LEGEND

- ① HERRINGBONE PATTERN FIELD TYP
- ② SINGLE SOLDIER COURSE
- ③ SINGLE SHINER COURSE
- ④ RUNNING BOND

1. 4" X 8" X 2-1/4" THK WIRE CUT BRICK PAVERS, CHEROKEE BLEND BY CLOUD CERAMICS, OR APPROVED EQUAL.
2. PROVIDE MOCK-UP FOR APPROVAL IN FIELD. IF APPROVED, MOCK-UP CAN BE USED INCORPORATED INTO FINAL PRODUCT.



Date	No.	Remarks



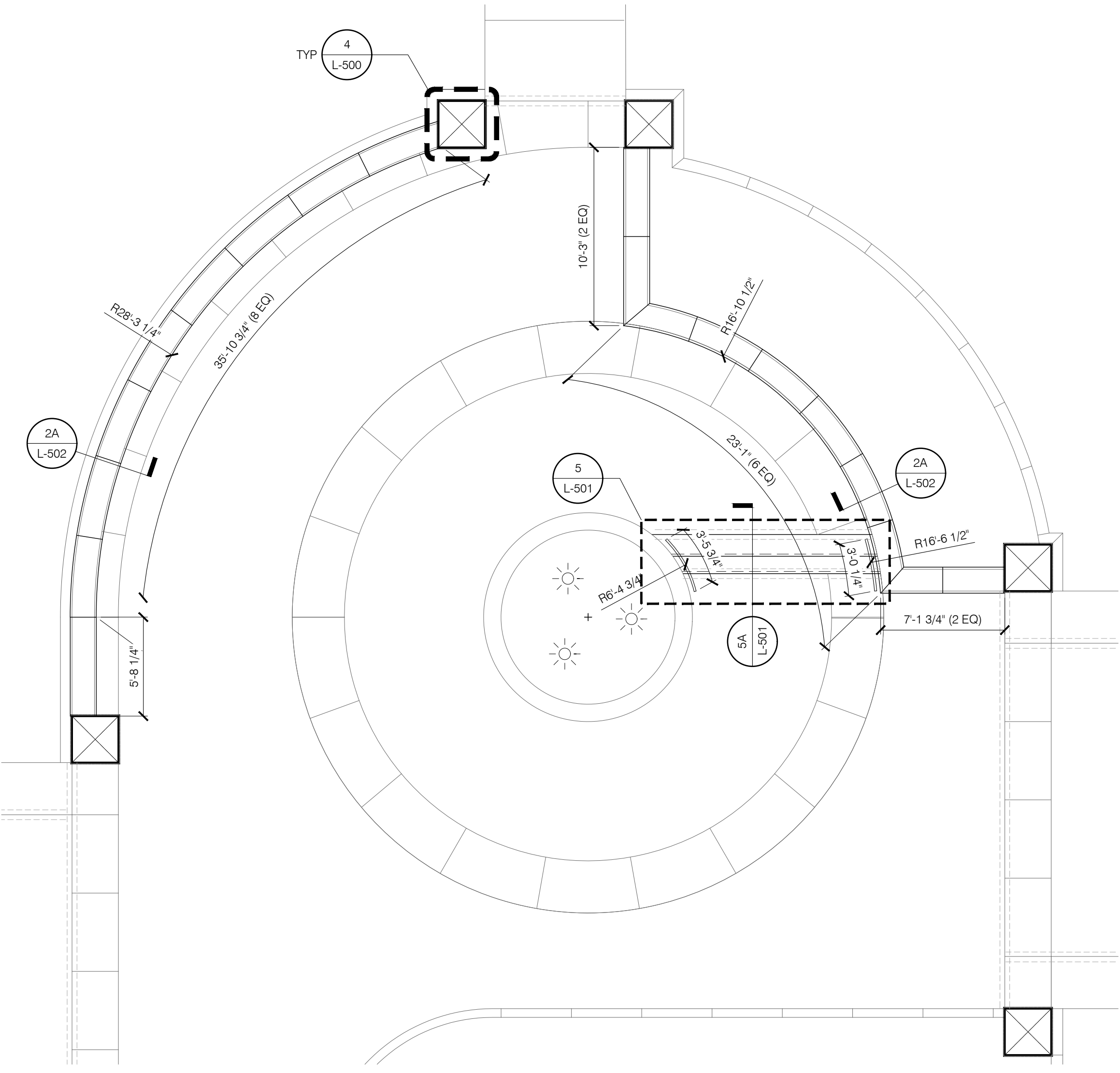
5/16/2018

Drawn By: KN
Reviewed By: MSS
Revisions:

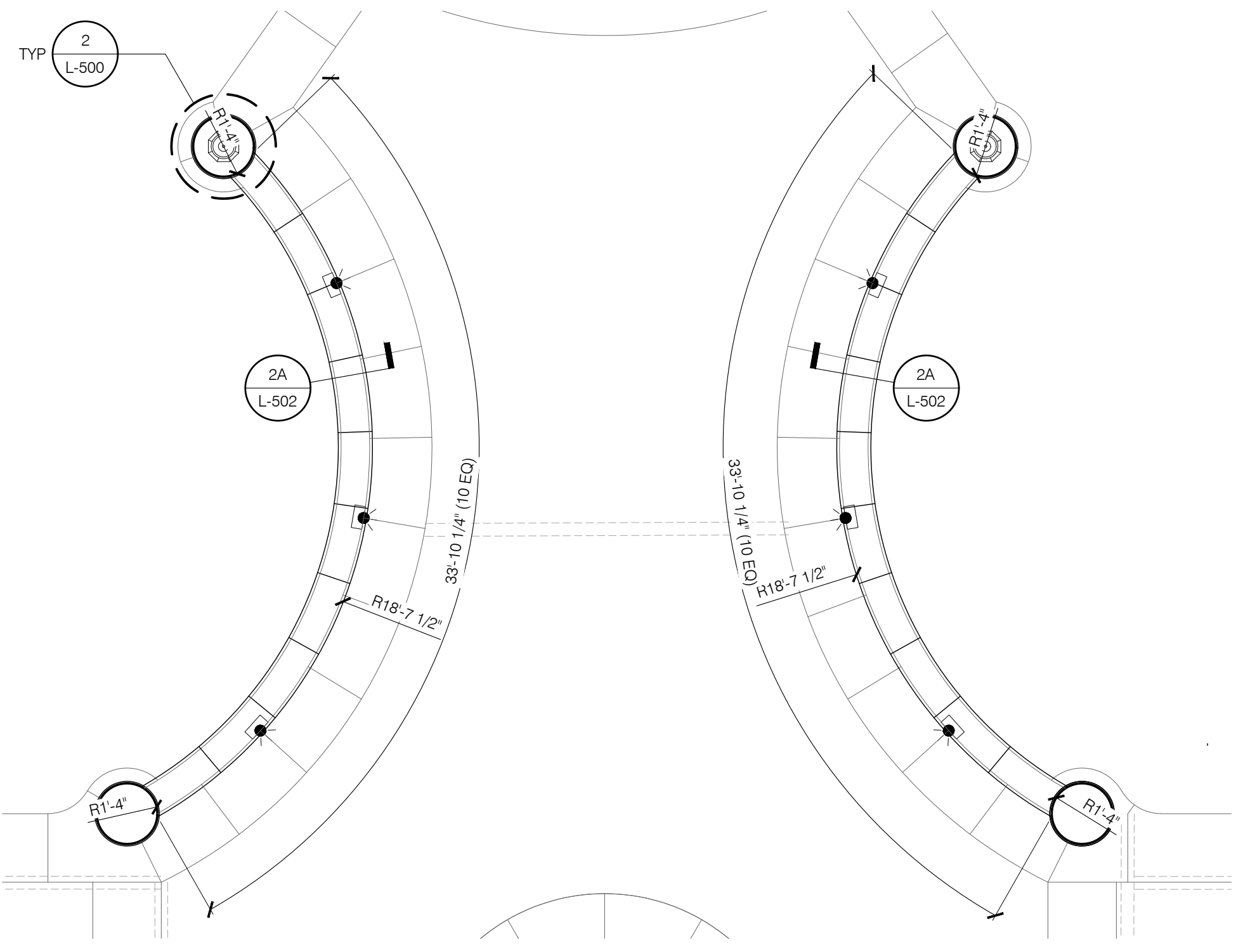
Date	No.	Remarks

Sheet Name:
**ENLARGEMENT
PLANS**
Sheet Number:

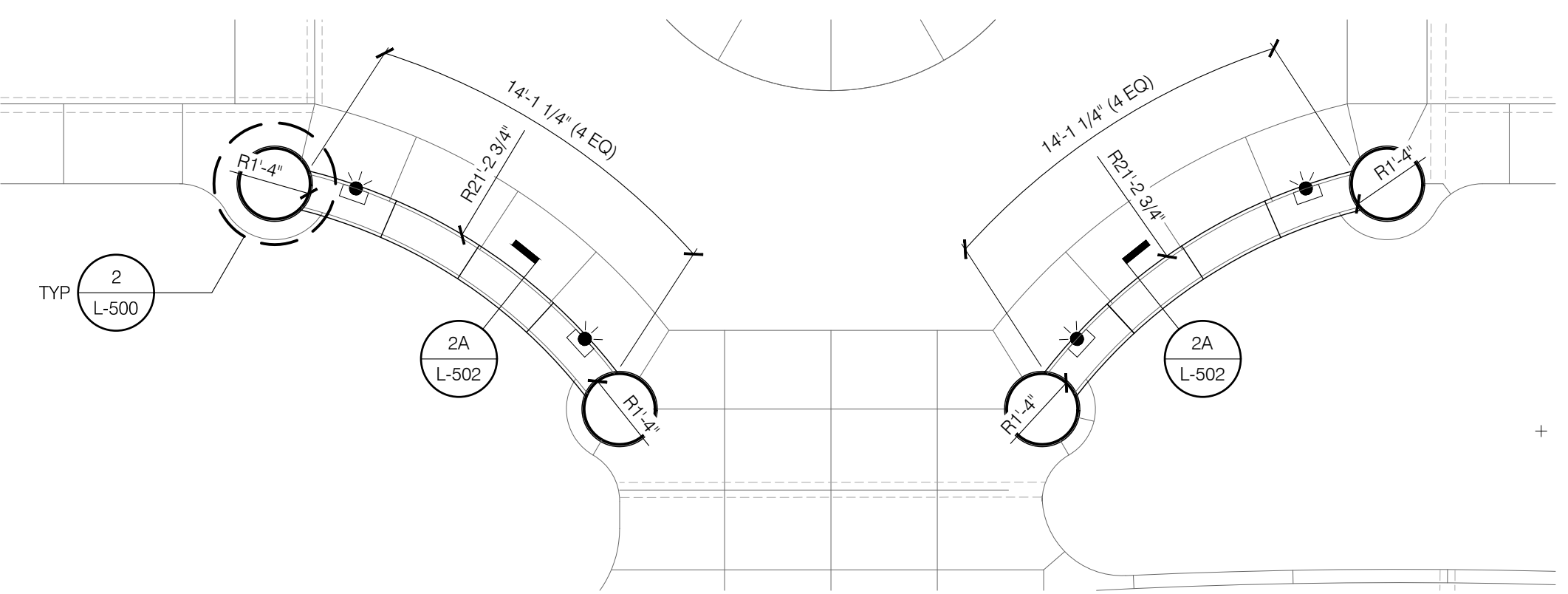
L-305



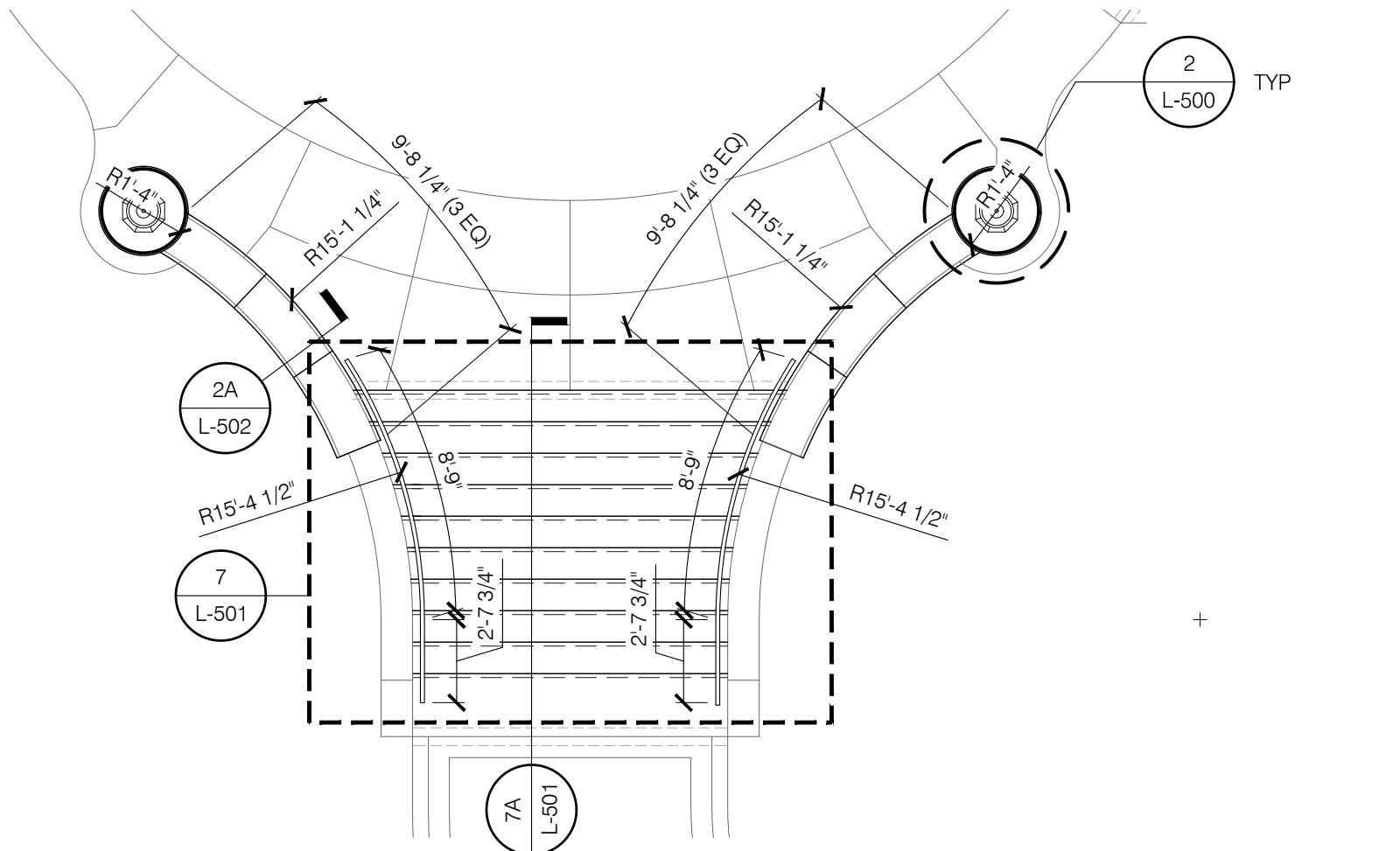
1 PRECAST CAP AND STAIR LAYOUT ENLARGEMENT
SCALE: 3/16" = 1'-0"



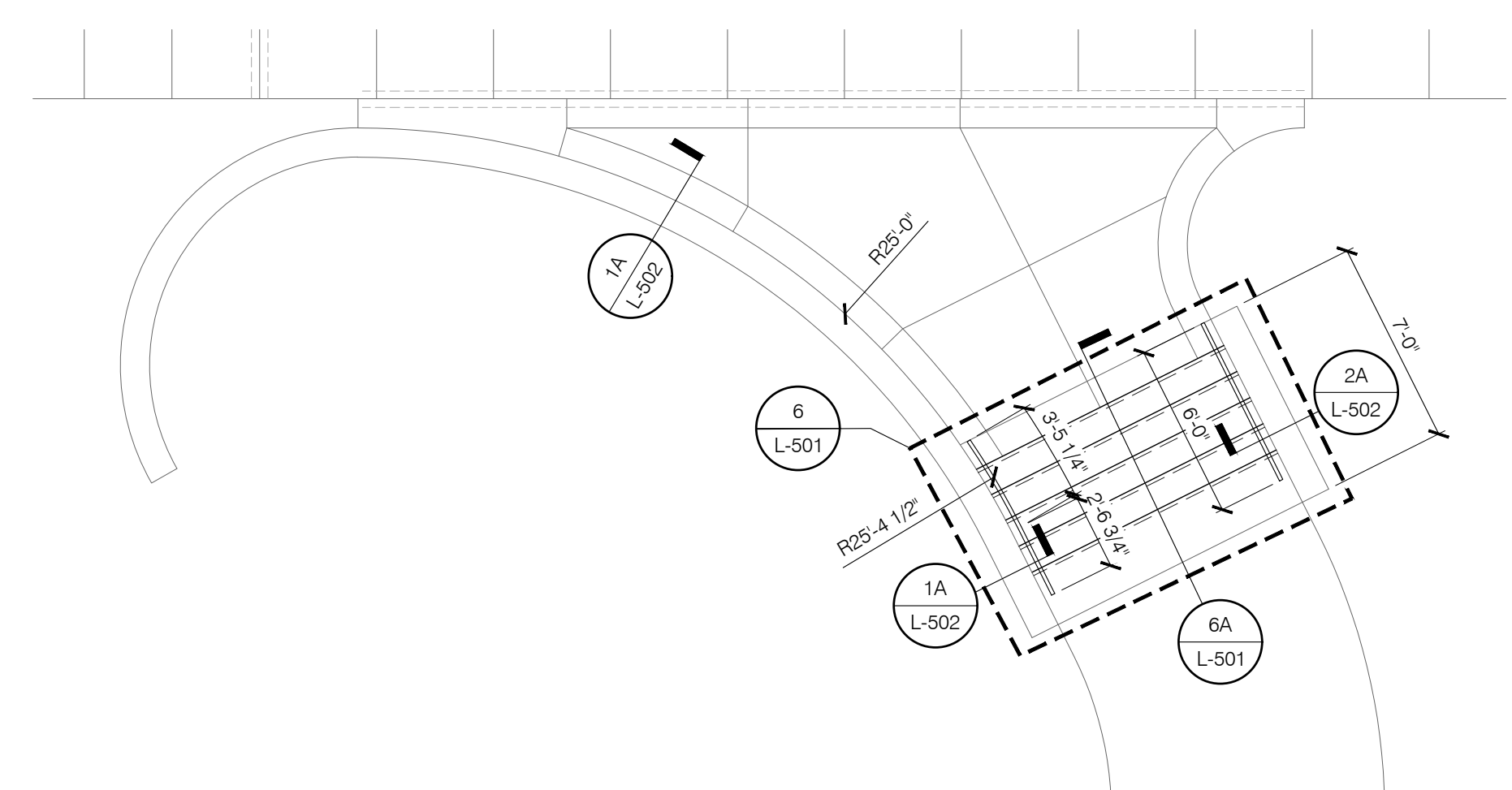
2 PRECAST CAP LAYOUT ENLARGEMENT
SCALE: 3/16" = 1'-0"



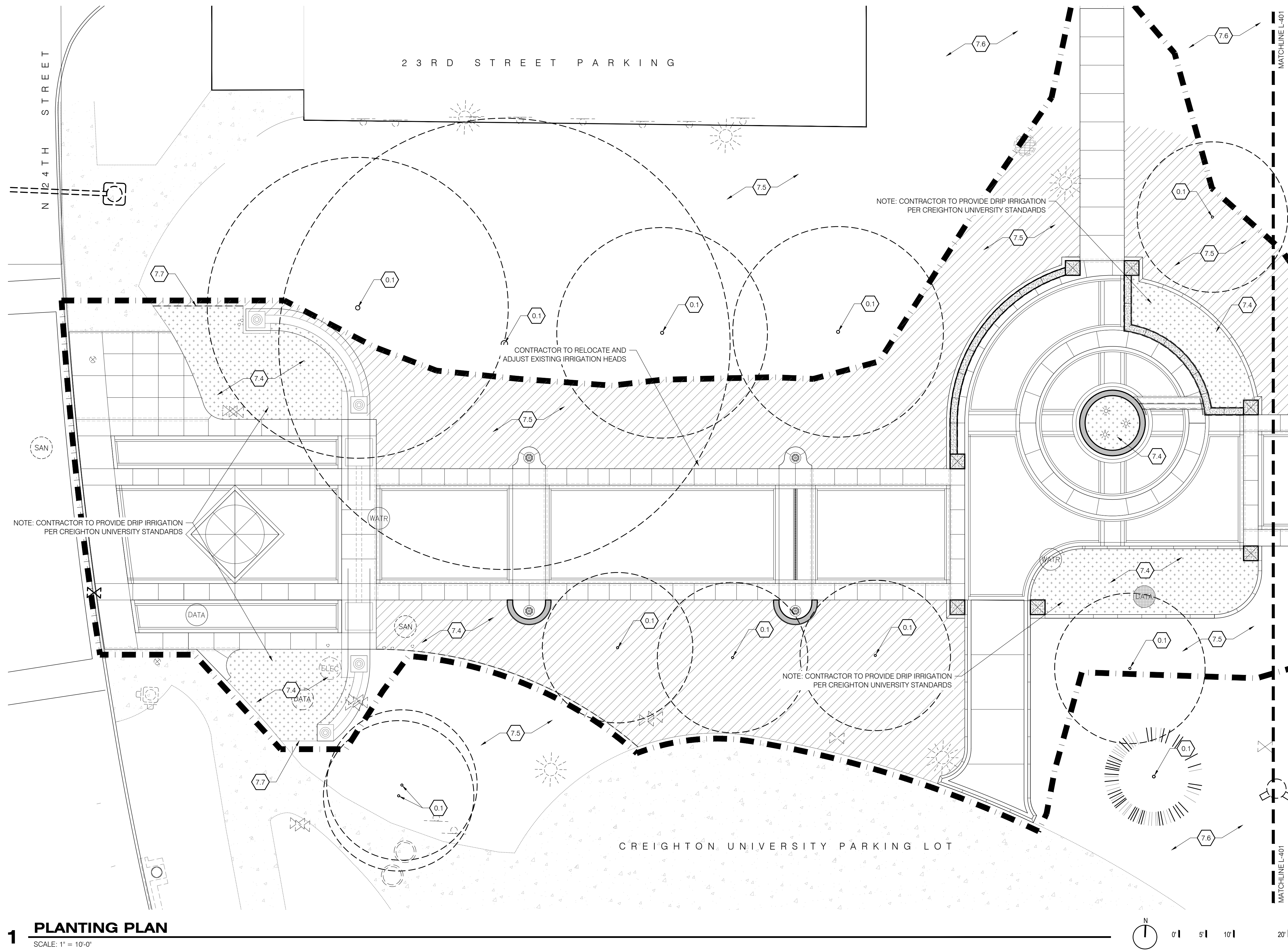
3 PRECAST CAP LAYOUT ENLARGEMENT
SCALE: 3/16" = 1'-0"



4 PRECAST CAP AND STAIR LAYOUT ENLARGEMENT
SCALE: 3/16" = 1'-0"



5 PRECAST CAP AND STAIR LAYOUT ENLARGEMENT
SCALE: 3/16" = 1'-0"



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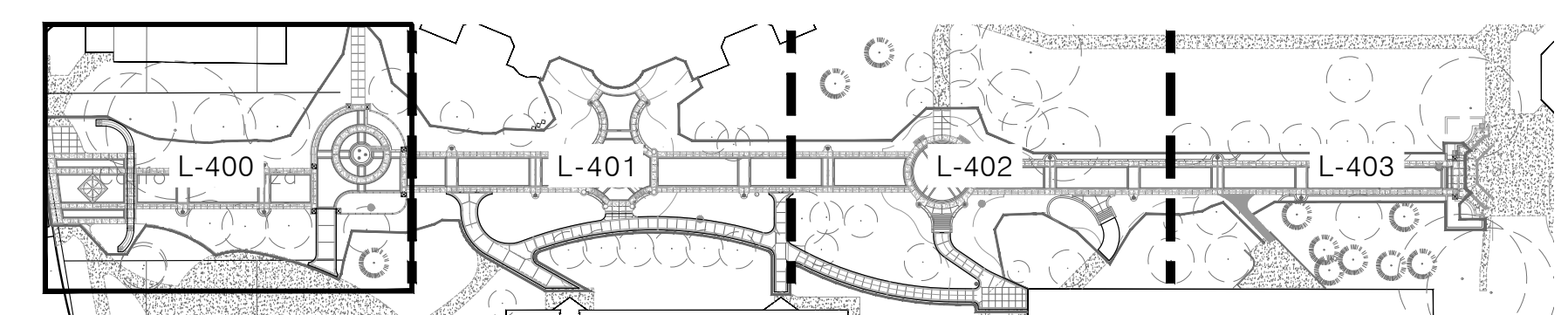
PLANTING AREAS SHOWN TO BE DESIGNED AND PLANTED BY CREIGHTON UNIVERSITY

WORK LINES

- LIMITS OF WORK

NOTE: CONTRACTOR TO PREPARE LANDSCAPE BEDS BY ADDING/AMENDING SOILS PER SPEC AND PROVIDING MIN. 3" OF MULCH. PLANTING INSTALLATION IS TO BE SELF-PERFORMED BY CREIGHTON UNIVERSITY

1 PLANTING PLAN
SCALE: 1" = 10'-0"



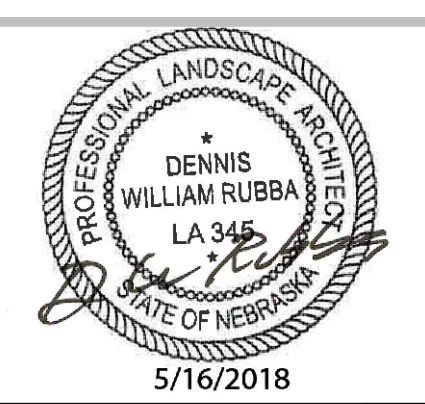
KEY MAP
SCALE: 1:100



Omaha Metro-Creighton
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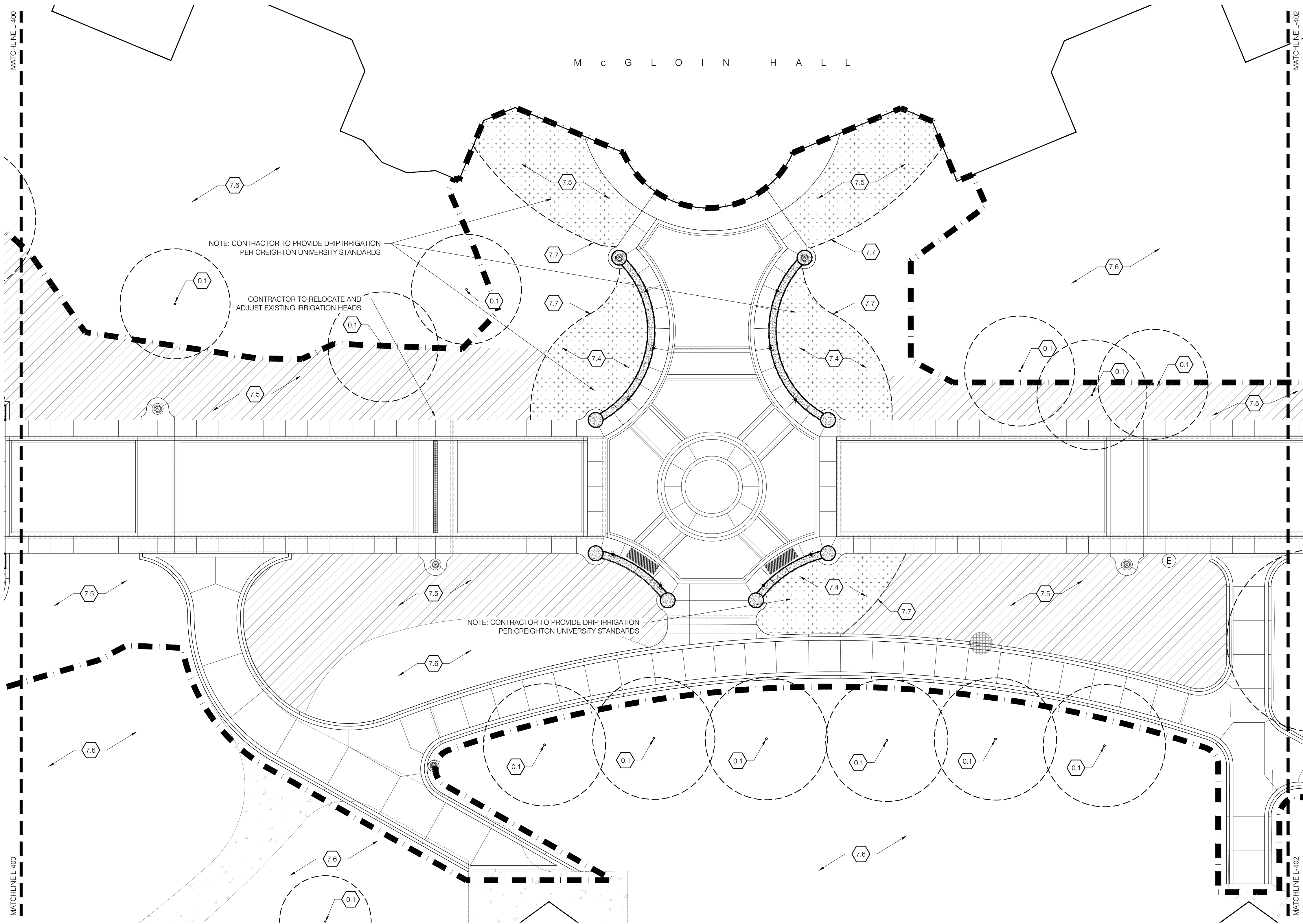
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Reviewed By: MSS
Revisions:

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Sheet Name:
PLANTING PLAN
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L-400



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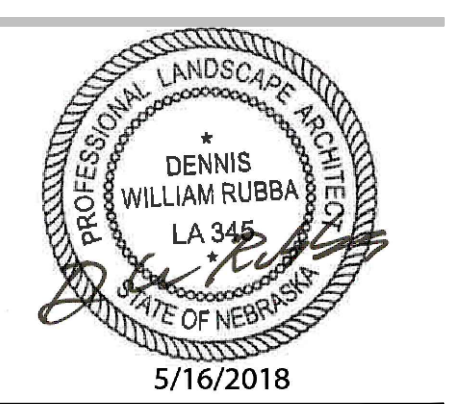
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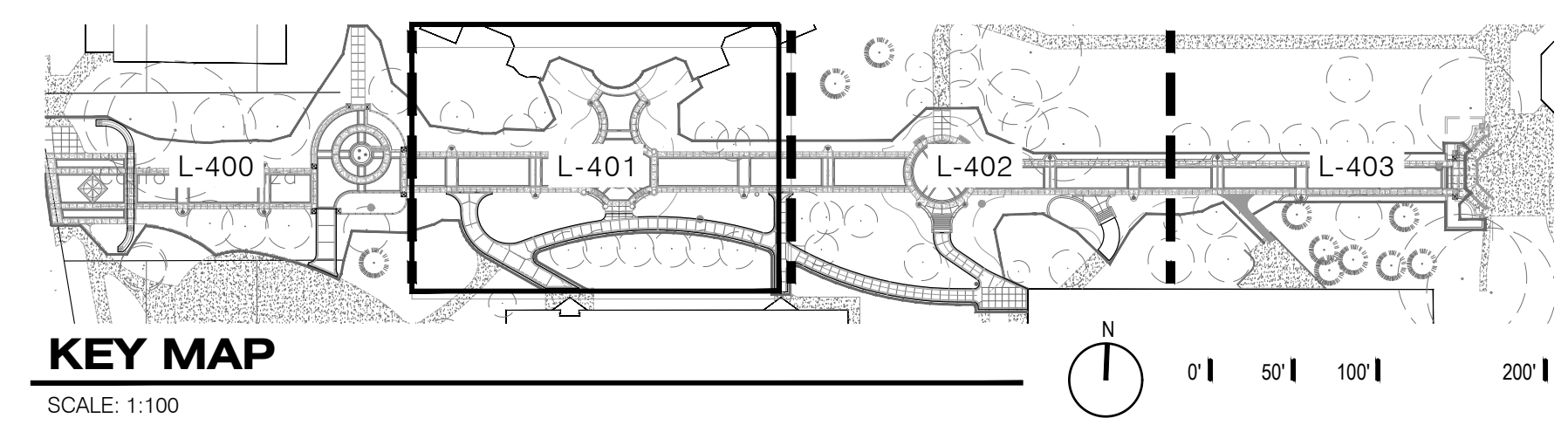
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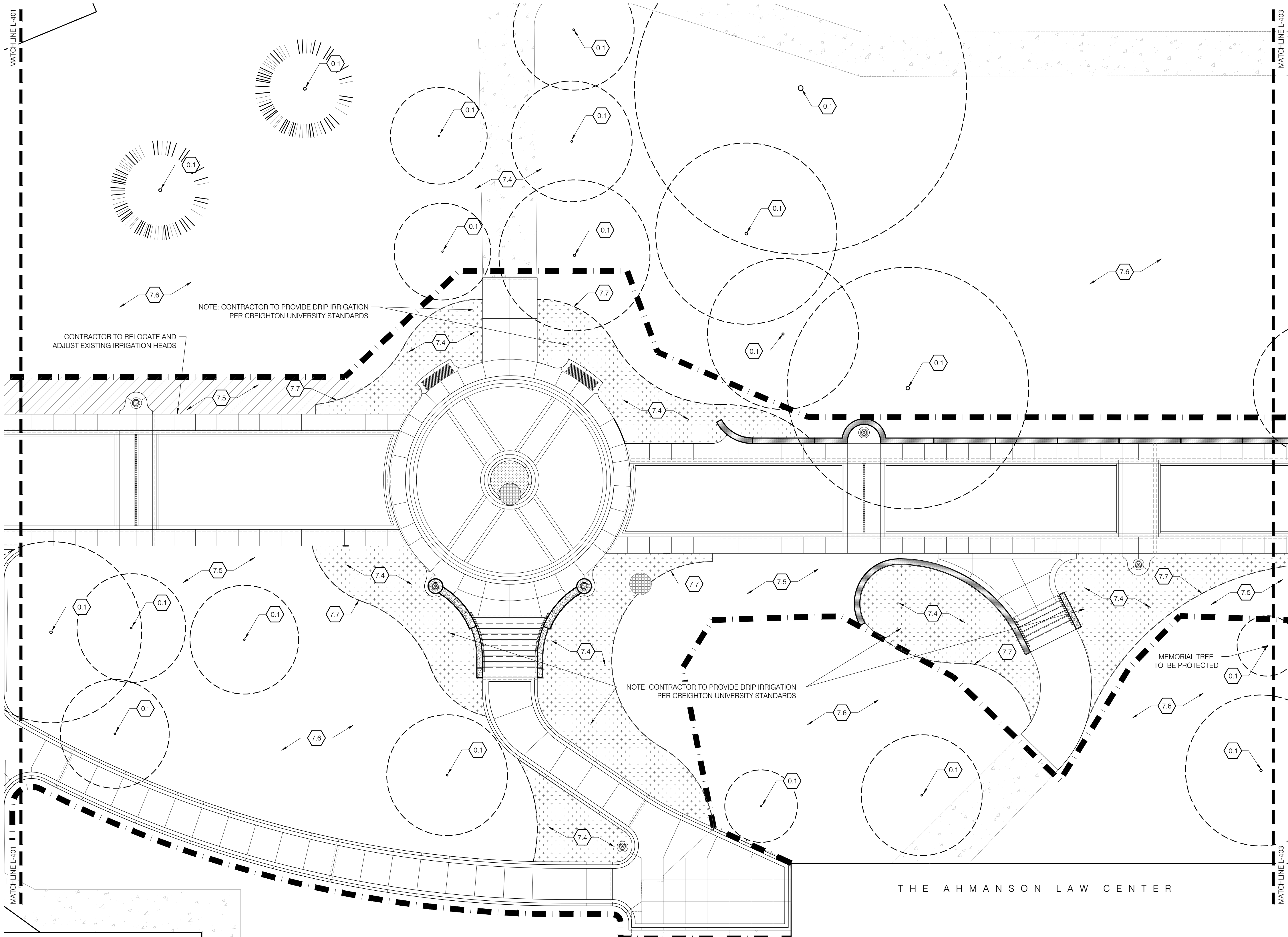


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Reviewed By: MSS
Revisions:

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Sheet Name:
PLANTING PLAN
Sheet Number:
L-401





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 - 1.2 CIP CONC PAVEMENT, 8" THICKNESS, SAWN JTS, BROOM FIN
 - 1.3 CIP CONC PAVING WITH DOUBLE SOLDIER COURSE EDGES
 - 1.4 BRICK PAVERS OVER CONC SUBSLAB, HERRING BONE PATTERN WITH DOUBLE SOLDIER COURSE EDGES
 - 1.5 BRICK PAVERS OVER CONC SUBSLAB, HERRING BONE PATTERN WITH SOLDIER COURSE
 - 1.6 BRICK PAVERS OVER CONC SUBSLAB, RUNNING BOND PATTERN WITH SOLDIER COURSE
 - 1.7 BRICK PAVING ACCENT BAND (DETAIL ON ENLARGEMENT PLANS)
- 2.0 JOINTING
 - 2.1 SAWN CONTROL JOINT
 - 2.2 EXPANSION JOINT
- 3.0 CURBS, EDGES, STEPS
 - 3.1 CIP CONCRETE STEPS
 - 3.2 CIP CONCRETE RIBBON CURB
- 4.0 WALLS
 - 4.1 CIP CONCRETE SEATWALL
 - 4.2 MODULAR BLOCK RETAINING WALL
 - 4.3 CIP CONC END PIER - SQUARE
 - 4.4 CIP CONC END PIER - ROUND
- 5.0 SITE FURNISHINGS & SITE ELEMENTS
 - 5.1 BACKED BENCH
 - 5.2 BACKLESS BENCH
 - 5.3 TRASH RECEPTACLE
 - 5.4 ASH URN
- 6.0 SITE LIGHTING
 - 6.1 PEDESTRIAN LIGHT
 - 6.2 TREE UPLIGHT
 - 6.3 RECESSED WALL LIGHT
- 7.0 PLANTING
 - 7.1 DECIDUOUS TREE
 - 7.2 EVERGREEN TREE
 - 7.3 ORNAMENTAL TREE
 - 7.4 PLANTING AREA
 - 7.5 GROUND COVER TO BE REMOVED AND REPLACED TO MATCH EXISTING
 - 7.6 IRRIGATED TURF
 - 7.7 STEEL EDGER
- 8.0 DRAINAGE
 - 8.1 TRENCH DRAIN

MATERIALS LEGEND

- 7.4 PLANTING AREA
- 7.5 GROUND COVER TO BE REMOVED AND REPLACED TO MATCH EXISTING

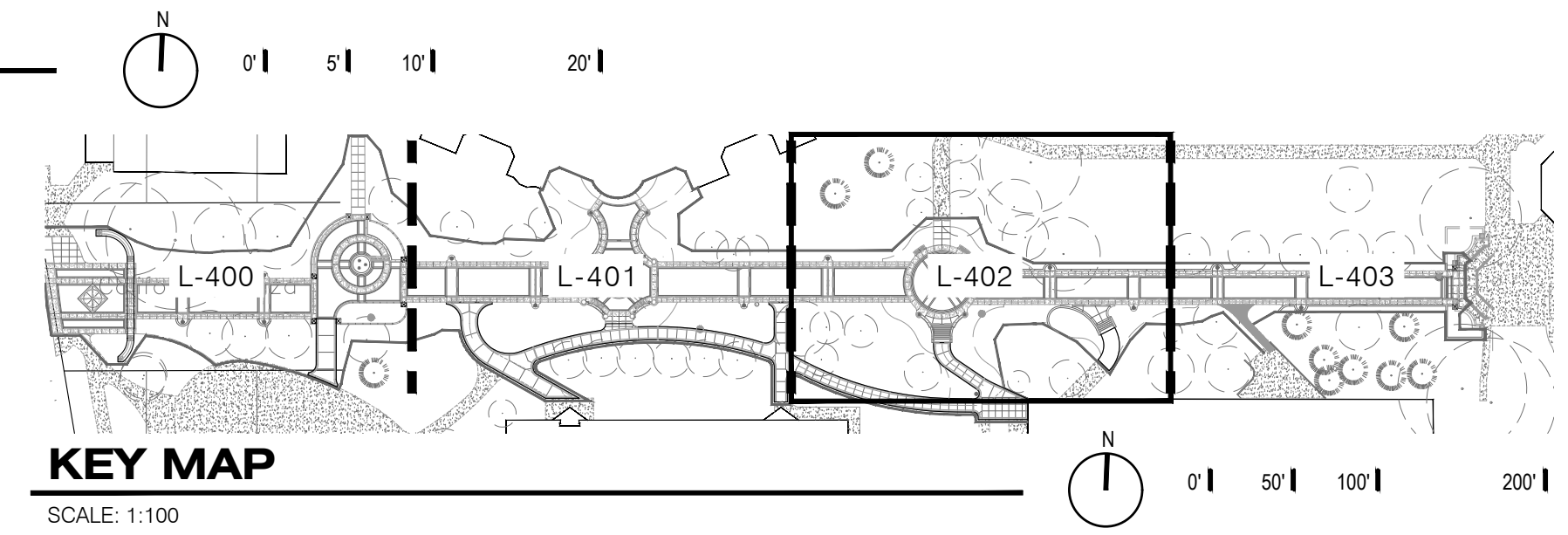
PLANTING AREAS SHOWN TO BE DESIGNED AND PLANTED BY CREIGHTON UNIVERSITY

WORK LINES

- LIMITS OF WORK

NOTE: CONTRACTOR TO PREPARE LANDSCAPE BEDS BY ADDING/AMENDING SOILS PER SPEC AND PROVIDING MIN. 3" OF MULCH. PLANTING INSTALLATION IS TO BE SELF-PERFORMED BY CREIGHTON UNIVERSITY

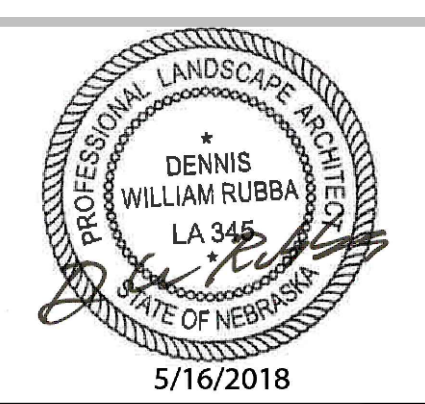
1 PLANTING PLAN
SCALE: 1" = 10'-0"



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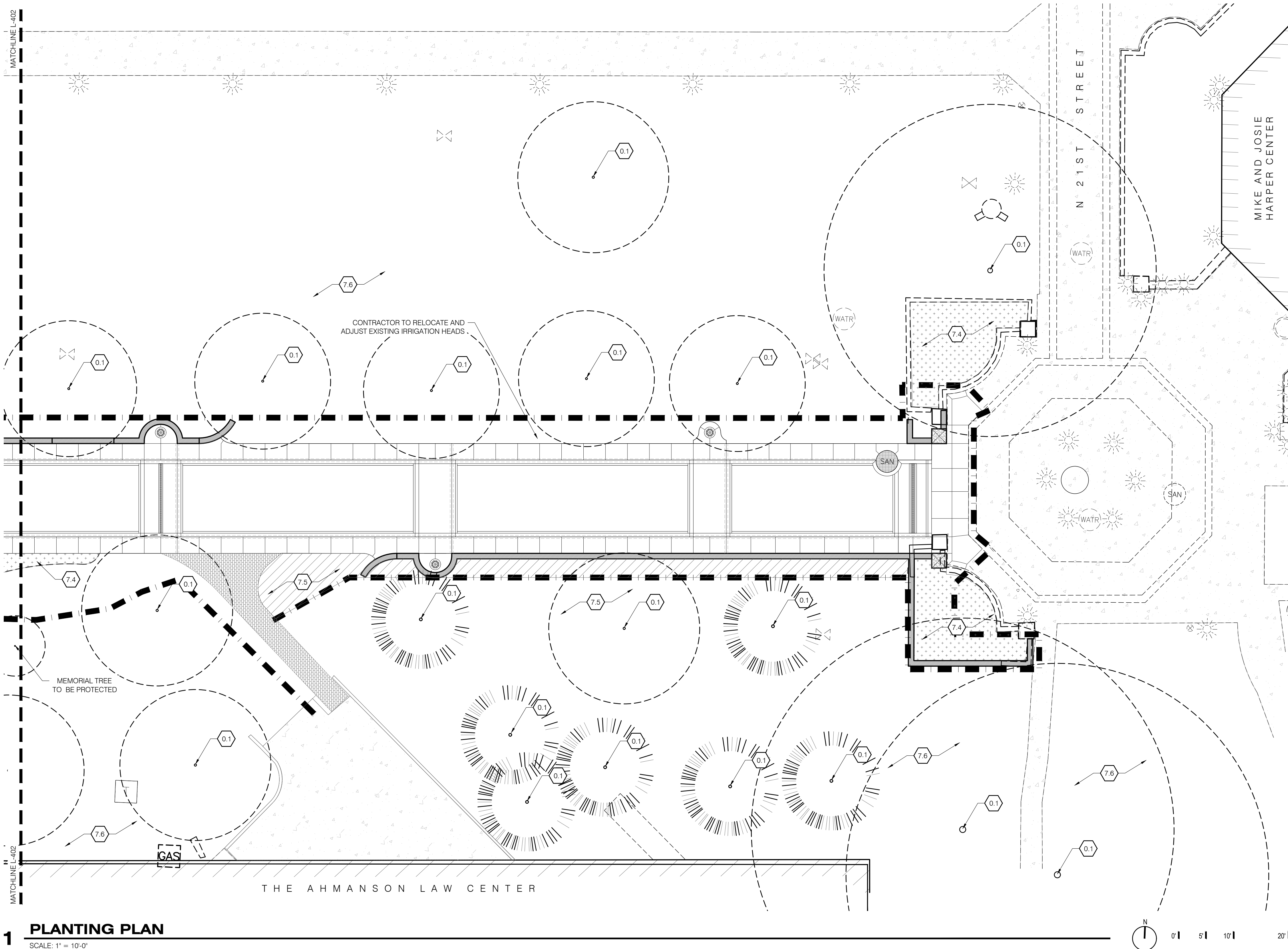
Date: 2018/05/18
Project Name:
**CU PEDESTRIAN
MALL DESIGN**
Issued For / Phase:
**100%
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Drawn By: KN
Reviewed By: MSS
Revisions:

Date	No.	Remarks

Sheet Name:
PLANTING PLAN
Sheet Number:
L-402



KEYNOTES LEGEND

- 0.0 EXISTING CONDITIONS
 - 0.1 EXISTING TREE TO REMAIN/PROTECT
 - 0.2 EXISTING PAVEMENT TO REMAIN/PROTECT
 - 0.3 EXISTING CONCRETE CURB AND GUTTER TO REMAIN
 - 0.4 EXISTING WALL TO REMAIN/PROTECT
- 1.0 PAVING
 - 1.1 CIP CONC PAVEMENT, 4" THICKNESS, SAWN JTS, BROOM FIN
 - 1.2 CIP CONC PAVEMENT, 8" THICKNESS, SAWN JTS, BROOM FIN
 - 1.3 CIP CONC PAVING WITH DOUBLE SOLDIER COURSE EDGES
 - 1.4 BRICK PAVERS OVER CONC SUBSLAB, HERRING BONE PATTERN WITH DOUBLE SOLDIER COURSE EDGES
 - 1.5 BRICK PAVERS OVER CONC SUBSLAB, HERRING BONE PATTERN WITH SOLDIER COURSE
 - 1.6 BRICK PAVERS OVER CONC SUBSLAB, RUNNING BOND PATTERN WITH SOLDIER COURSE
 - 1.7 BRICK PAVING ACCENT BAND (DETAIL ON ENLARGEMENT PLANS)
- 2.0 JOINTING
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 - 2.2 EXPANSION JOINT
- 3.0 CURBS, EDGES, STEPS
 - 3.1 CIP CONCRETE STEPS
 - 3.2 CIP CONCRETE RIBBON CURB
- 4.0 WALLS
 - 4.1 CIP CONCRETE SEATWALL
 - 4.2 MODULAR BLOCK RETAINING WALL
 - 4.3 CIP CONC END PIER - SQUARE
 - 4.4 CIP CONC END PIER - ROUND
- 5.0 SITE FURNISHINGS & SITE ELEMENTS
 - 5.1 BACKED BENCH
 - 5.2 BACKLESS BENCH
 - 5.3 TRASH RECEPTACLE
 - 5.4 ASH URN
- 6.0 SITE LIGHTING
 - 6.1 PEDESTRIAN LIGHT
 - 6.2 TREE UPLIGHT
 - 6.3 RECESSED WALL LIGHT
- 7.0 PLANTING
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 - 8.1 TRENCH DRAIN

MATERIALS LEGEND

- 7.4 PLANTING AREA
- 7.5 GROUND COVER TO BE REMOVED AND REPLACED TO MATCH EXISTING

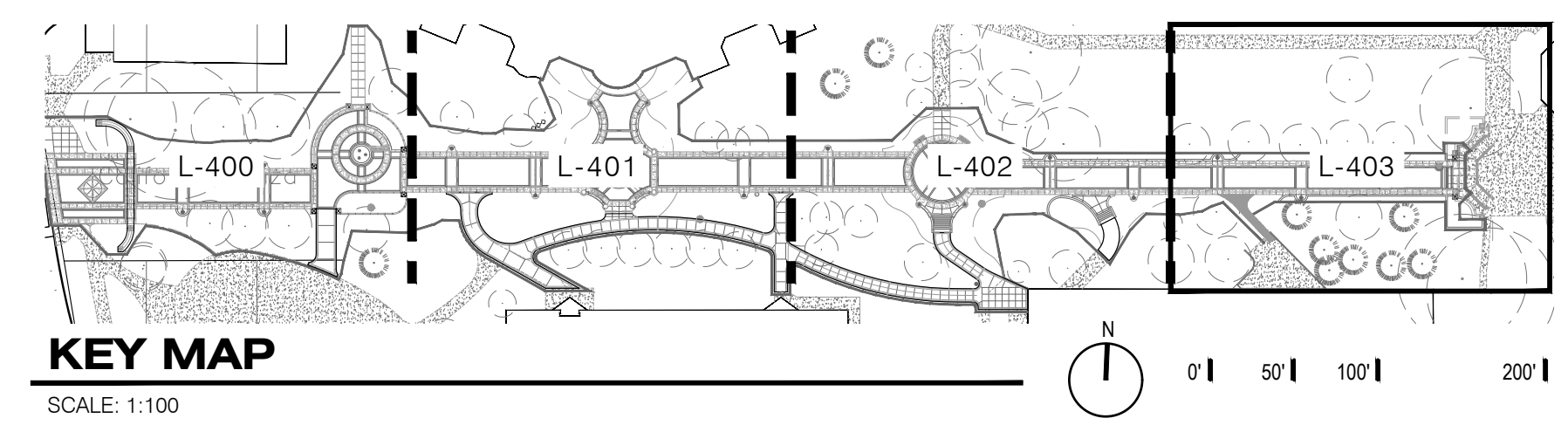
PLANTING AREAS SHOWN TO BE DESIGNED AND PLANTED BY CREIGHTON UNIVERSITY

WORK LINES

- LIMITS OF WORK

NOTE: CONTRACTOR TO PREPARE LANDSCAPE BEDS BY ADDING/AMENDING SOILS PER SPEC AND PROVIDING MIN. 3" OF MULCH. PLANTING INSTALLATION IS TO BE SELF-PERFORMED BY CREIGHTON UNIVERSITY

1 PLANTING PLAN
SCALE: 1" = 10'-0"



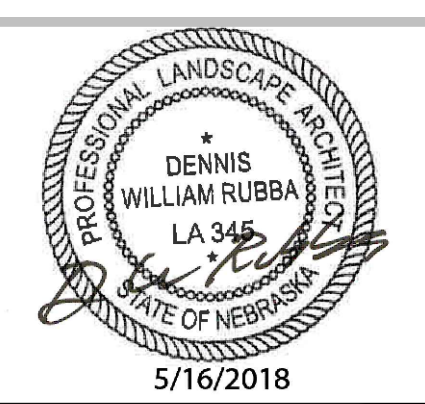
KEY MAP
SCALE: 1:100



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Project Name:
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Issued For / Phase:
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Drawn By: KN
Reviewed By: MSS
Revisions:

Date	No.	Remarks

Sheet Name:
PLANTING PLAN
Sheet Number:
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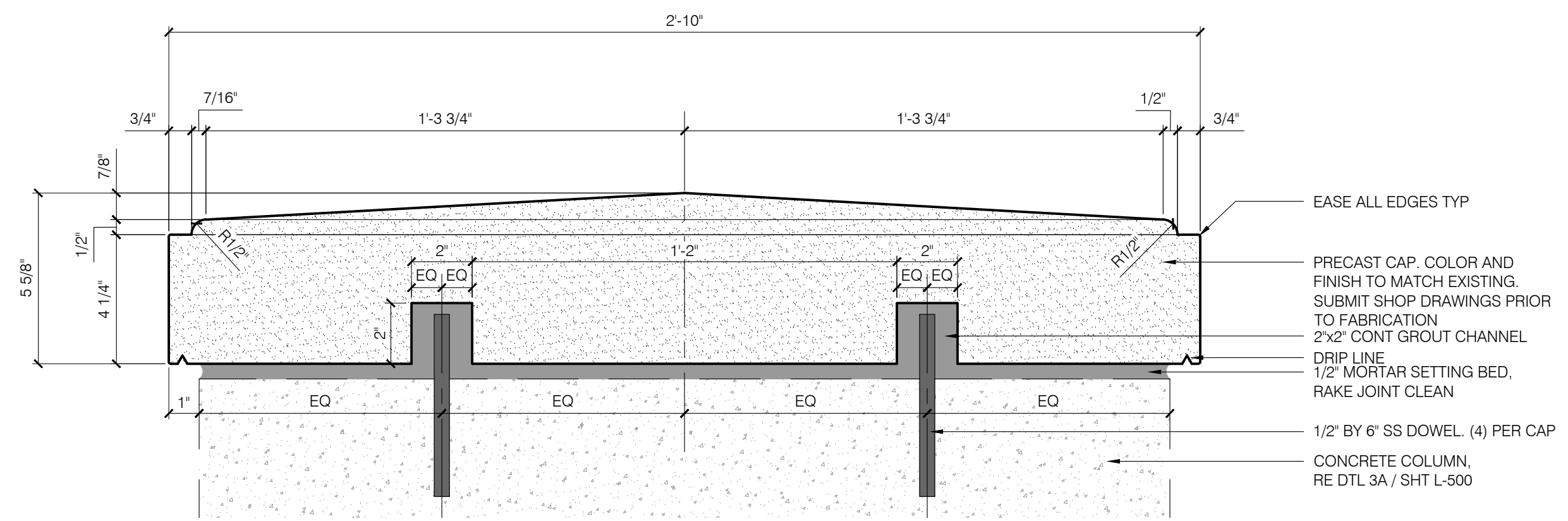


Drawn By: KN
Reviewed By: MSS
Revisions:

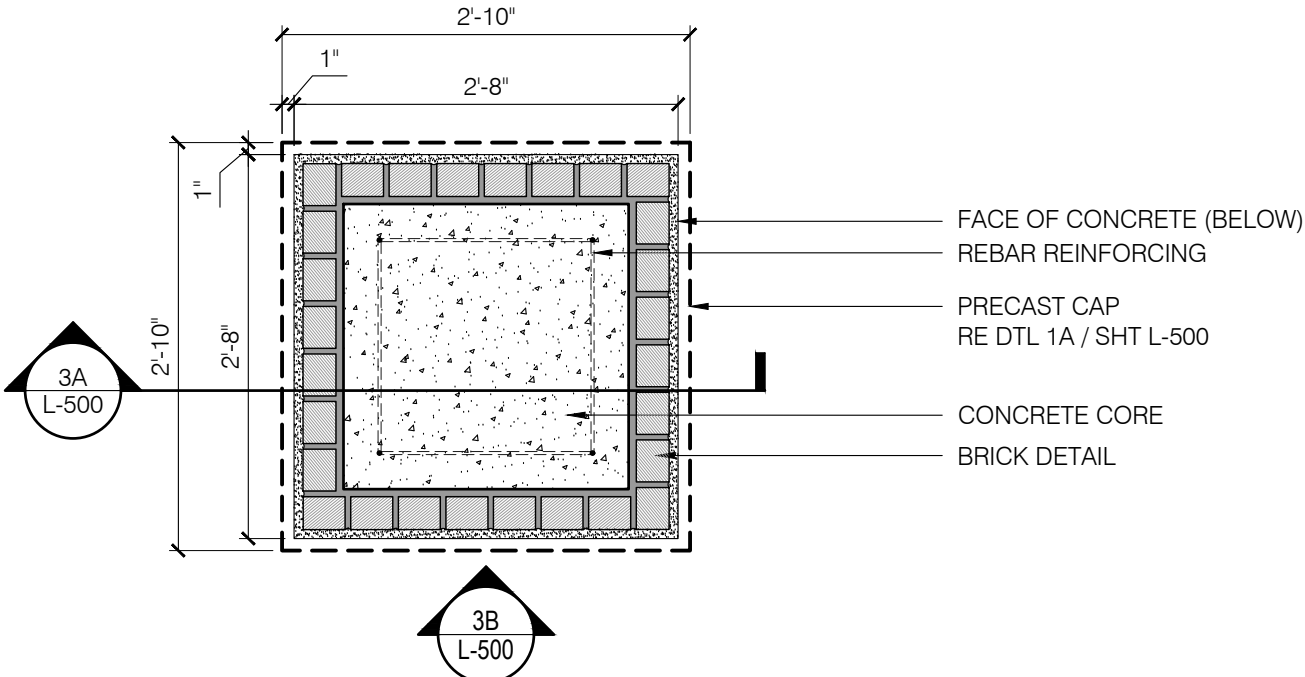
Date	No.	Remarks

Sheet Name:
COLUMN DETAILS

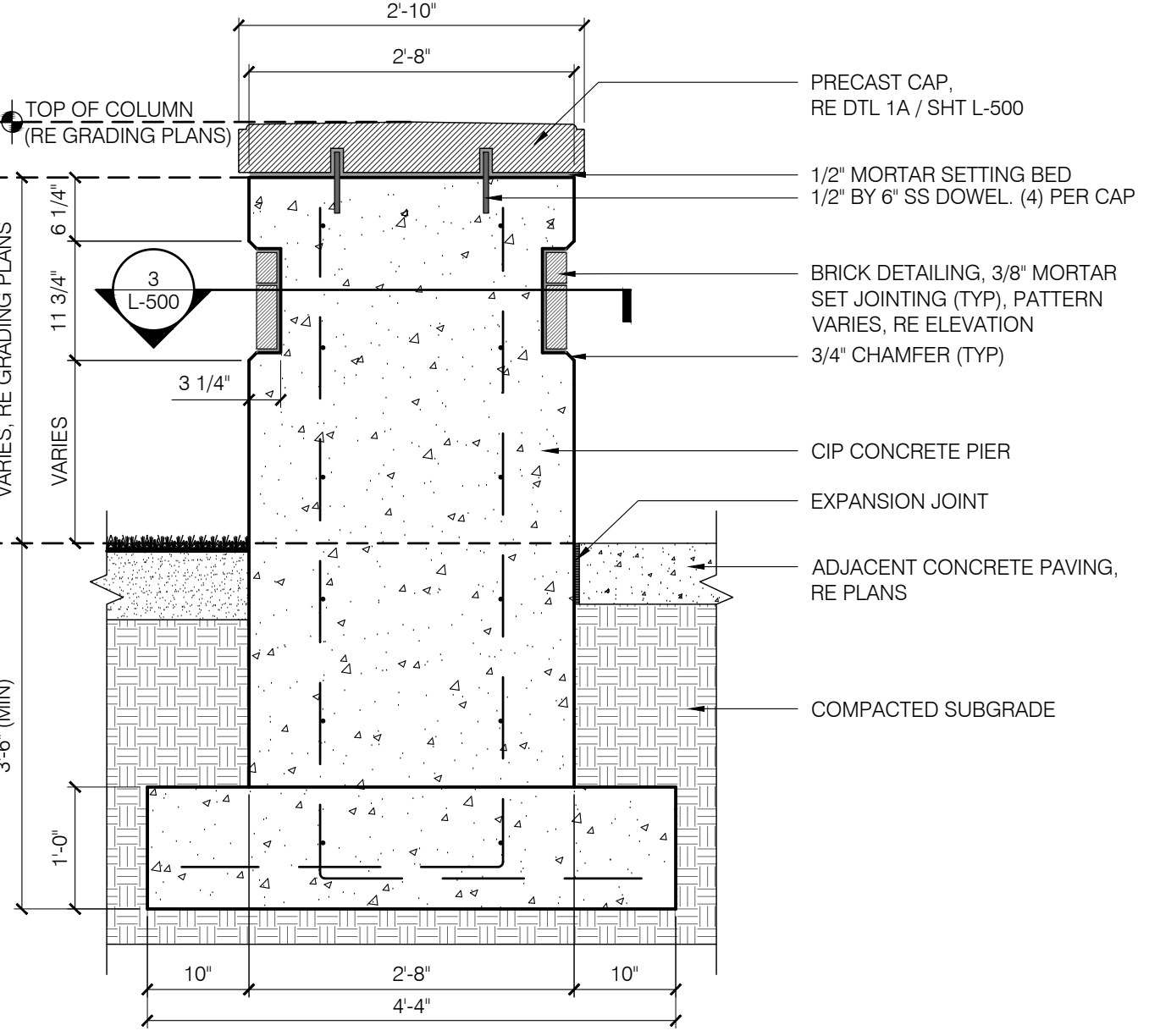
Sheet Number:
L-500



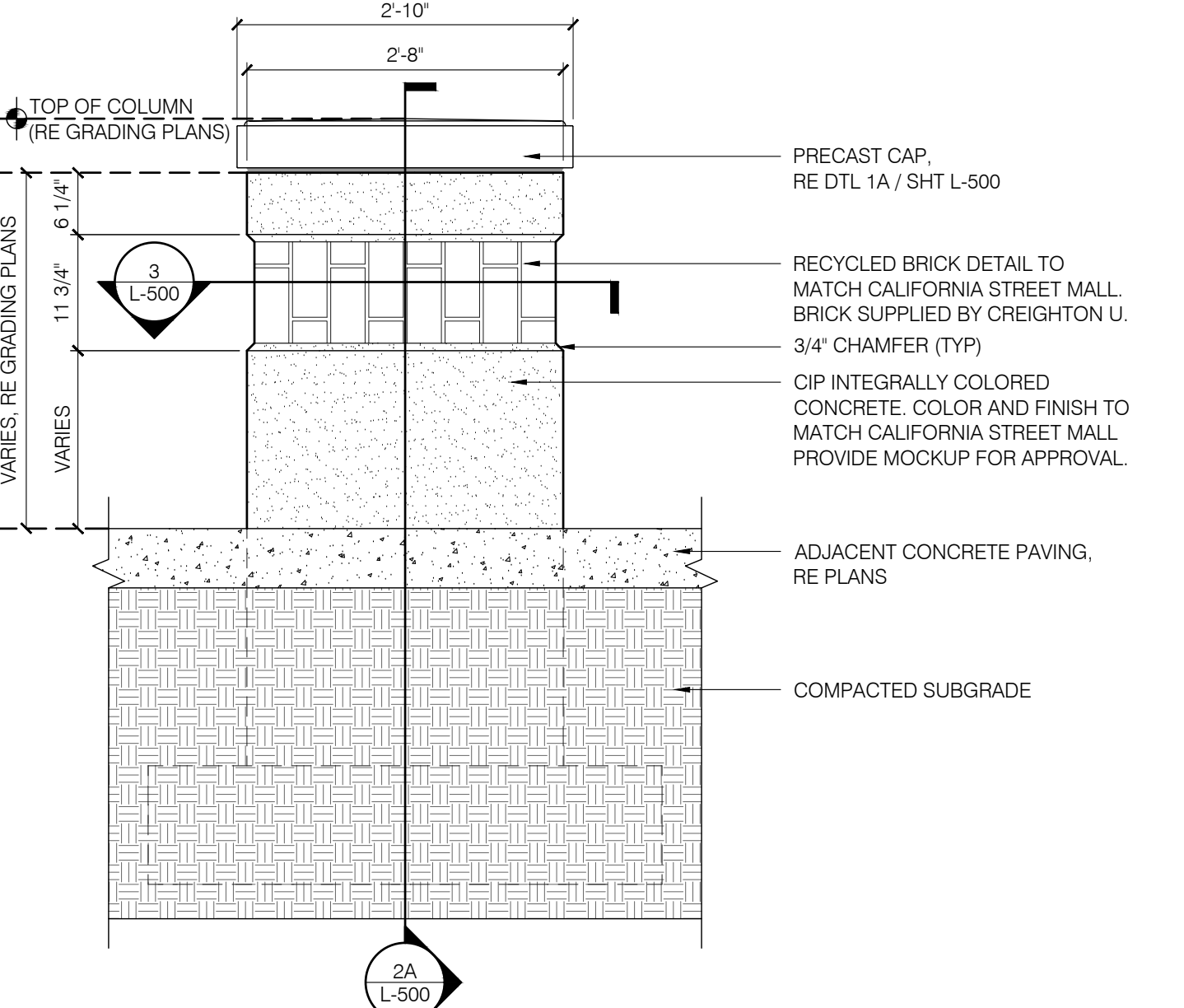
1A PRECAST CAP AT SQUARE COLUMN
SCALE: 3/4" = 1'-0"



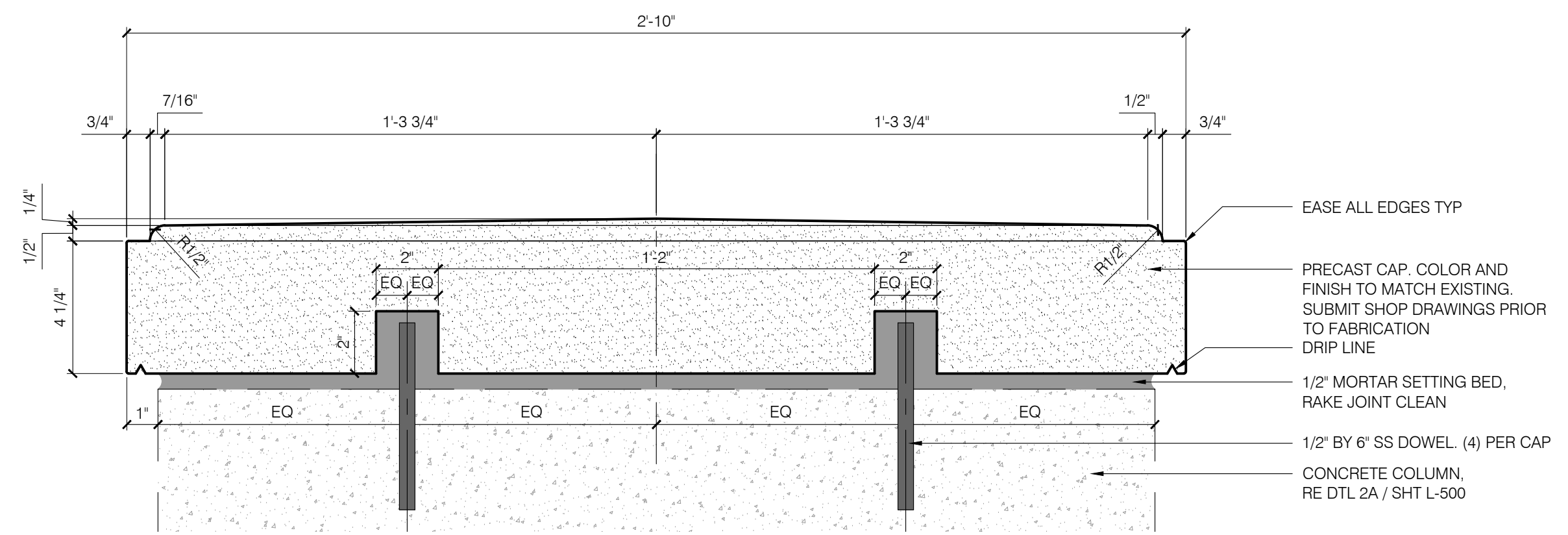
3 SQUARE CONC COLUMN CROSS SECTION
SCALE: 3/4" = 1'-0"



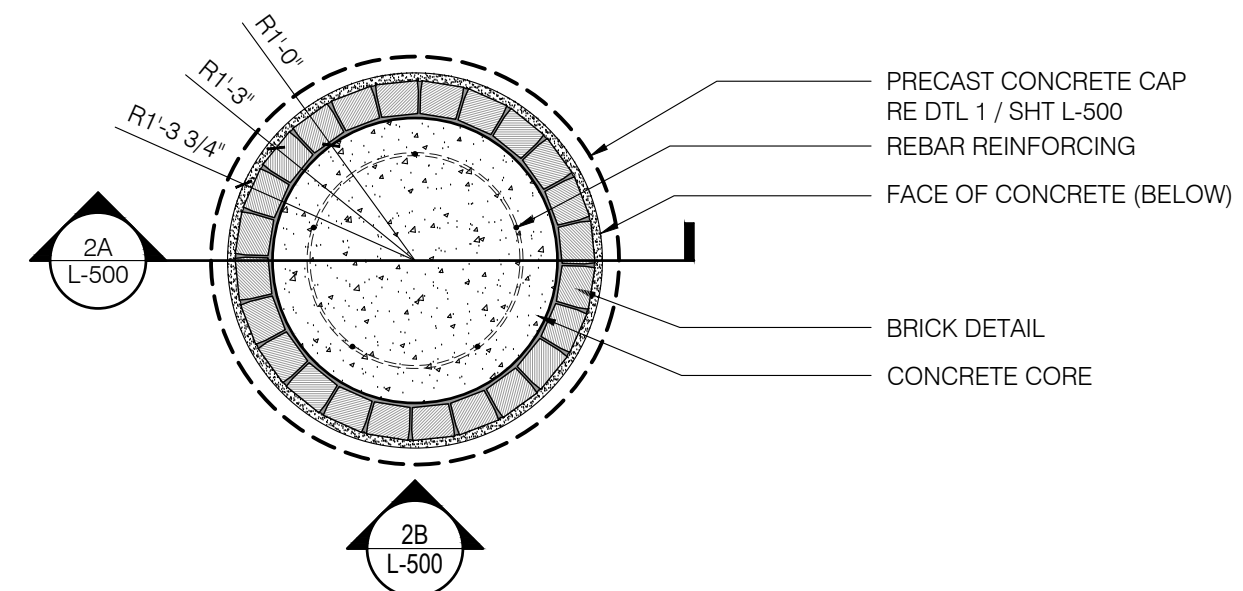
3A SQUARE CONCRETE COLUMN (SECTION)
SCALE: 3/4" = 1'-0"



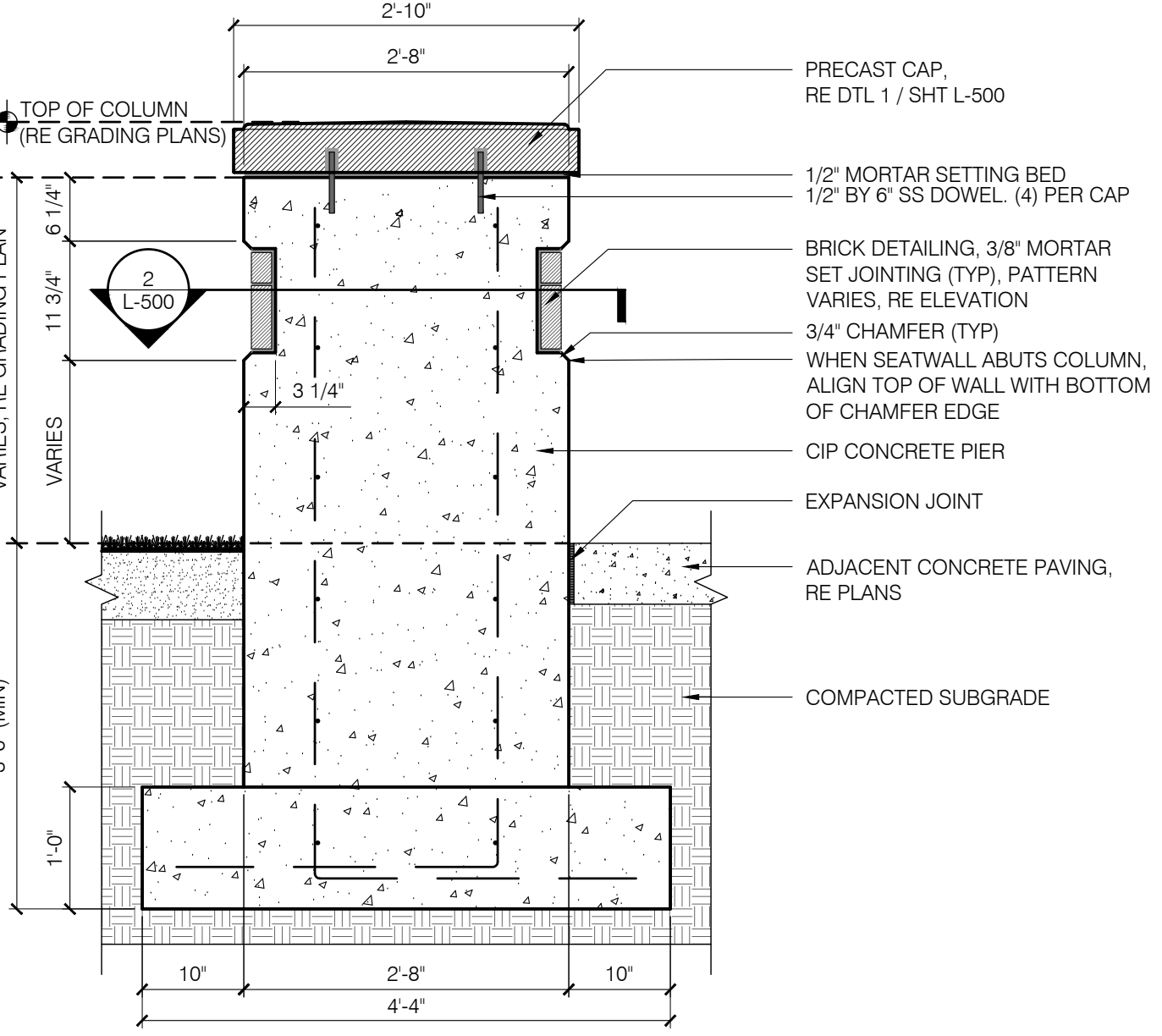
3B SQUARE CONCRETE COLUMN (ELEVATION)
SCALE: 3/4" = 1'-0"



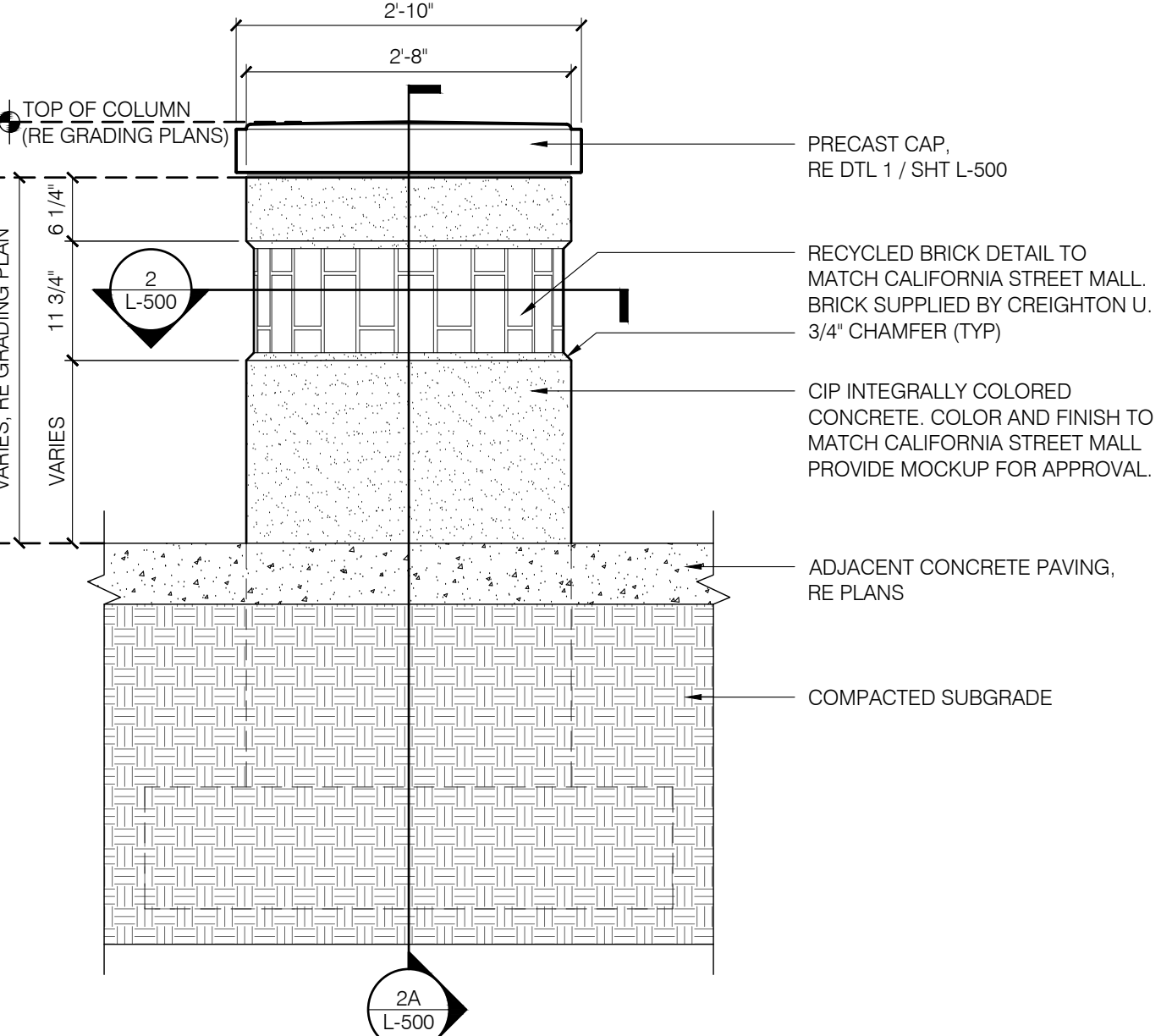
1 PRECAST CAP AT ROUND COLUMN
SCALE: 3/4" = 1'-0"



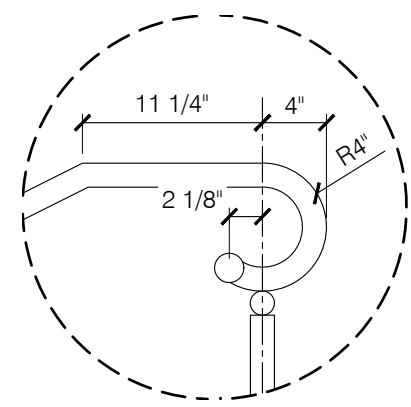
2 ROUND CONC COLUMN CROSS SECTION
SCALE: 3/4" = 1'-0"



2A ROUND CONCRETE COLUMN (SECTION)
SCALE: 3/4" = 1'-0"

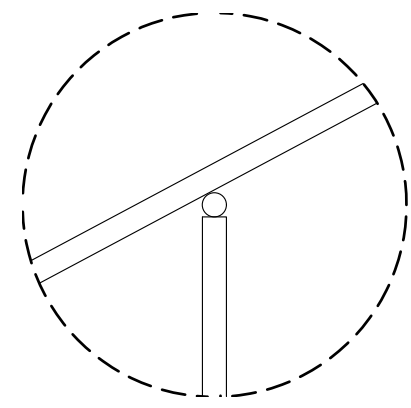


2B ROUND CONCRETE COLUMN (ELEVATION)
SCALE: 3/4" = 1'-0"



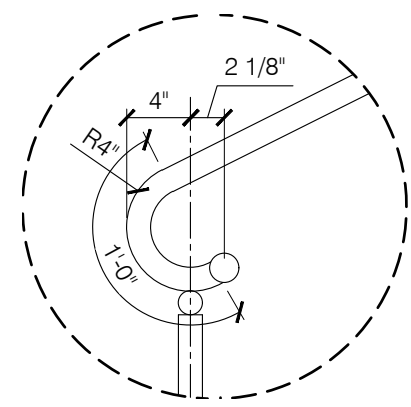
1 HANDRAIL DETAIL AT TOS

SCALE: 1" = 1'-0"



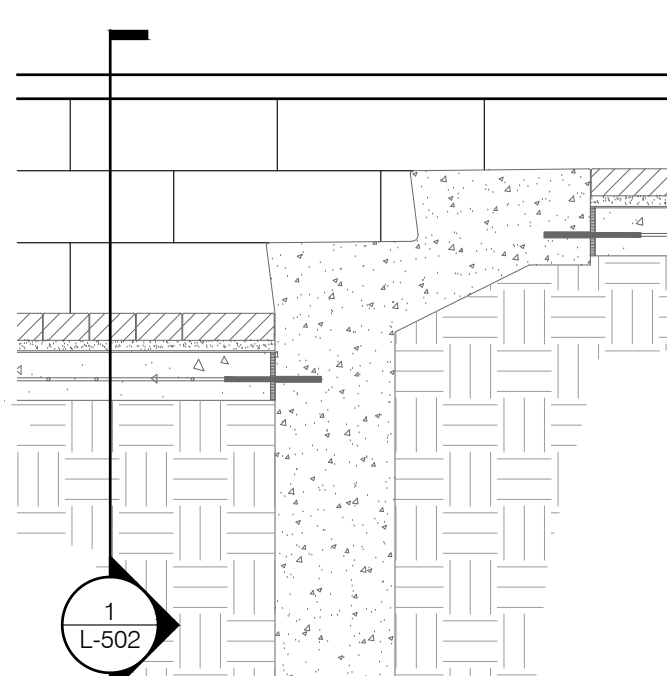
2 HANDRAIL MID SUPPORT

SCALE: 1" = 1'-0"



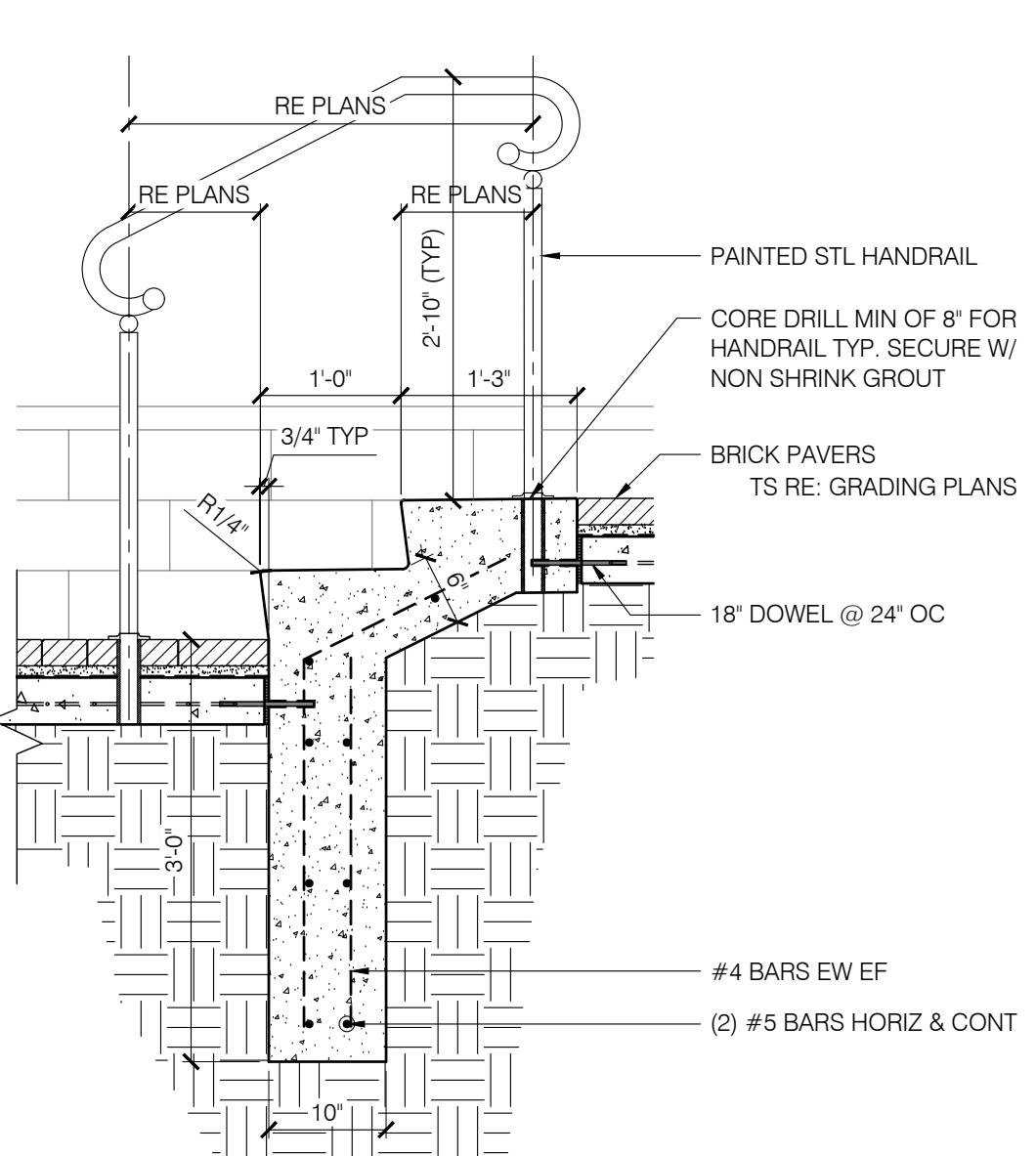
3 HANDRAIL DETAIL AT BOS

SCALE: 1" = 1'-0"



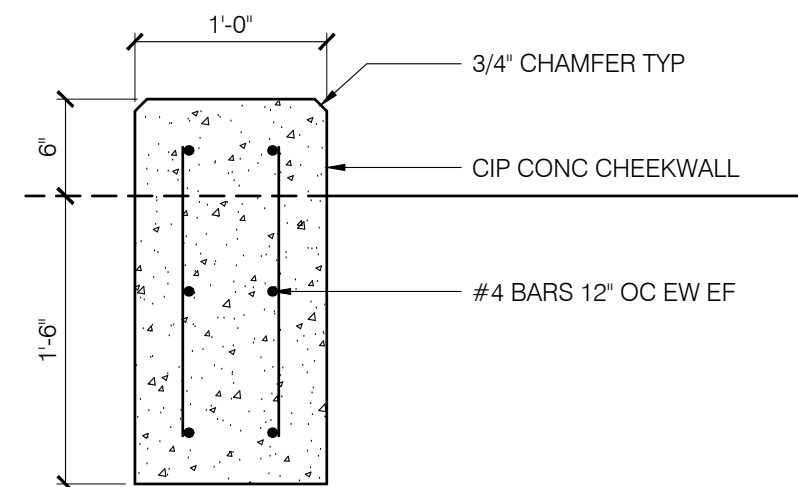
5A STEPS AT 23RD ST (ELEV)

SCALE: 3/4" = 1'-0"



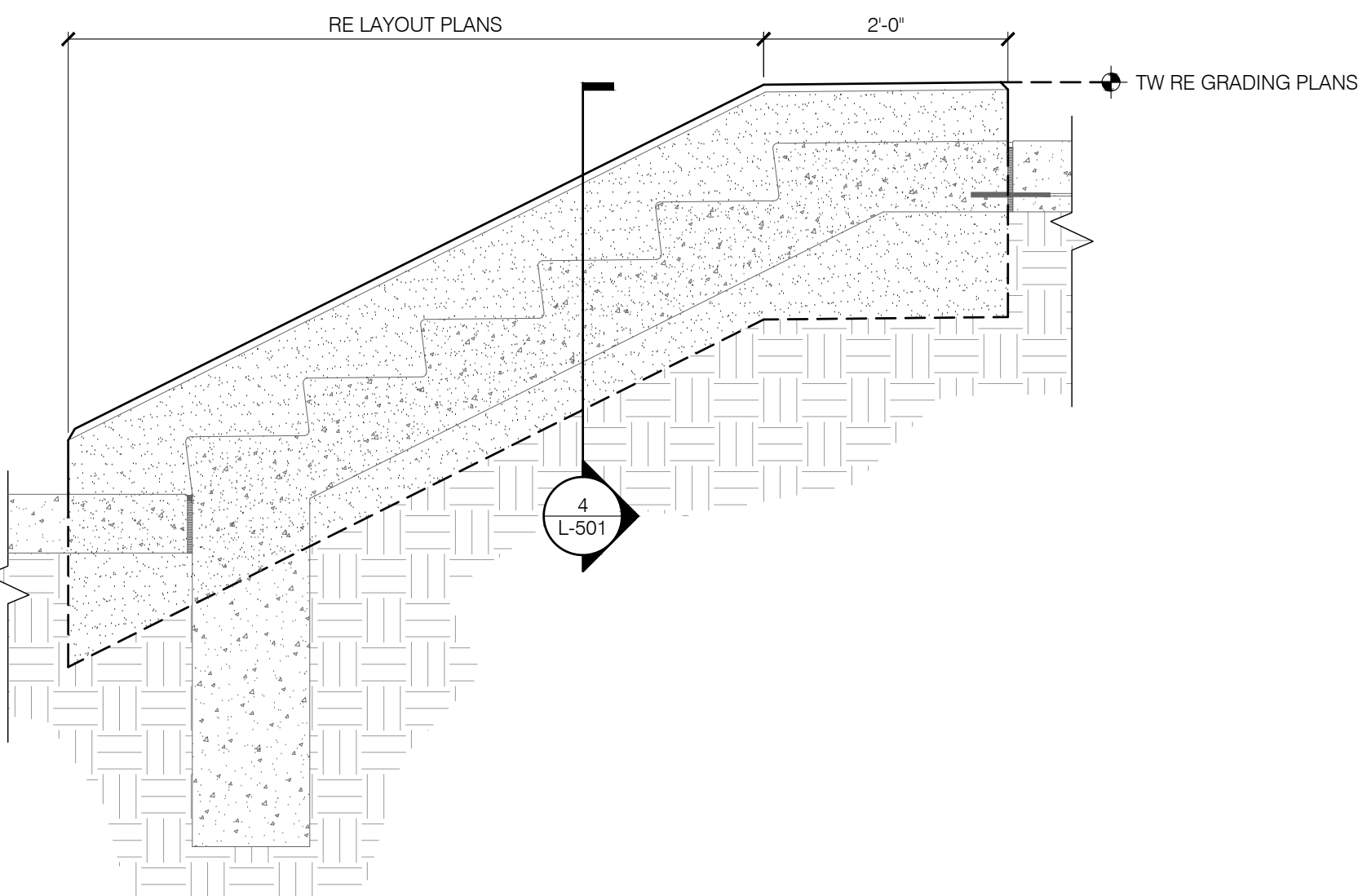
5 STEPS AT 23RD ST

SCALE: 3/4" = 1'-0"



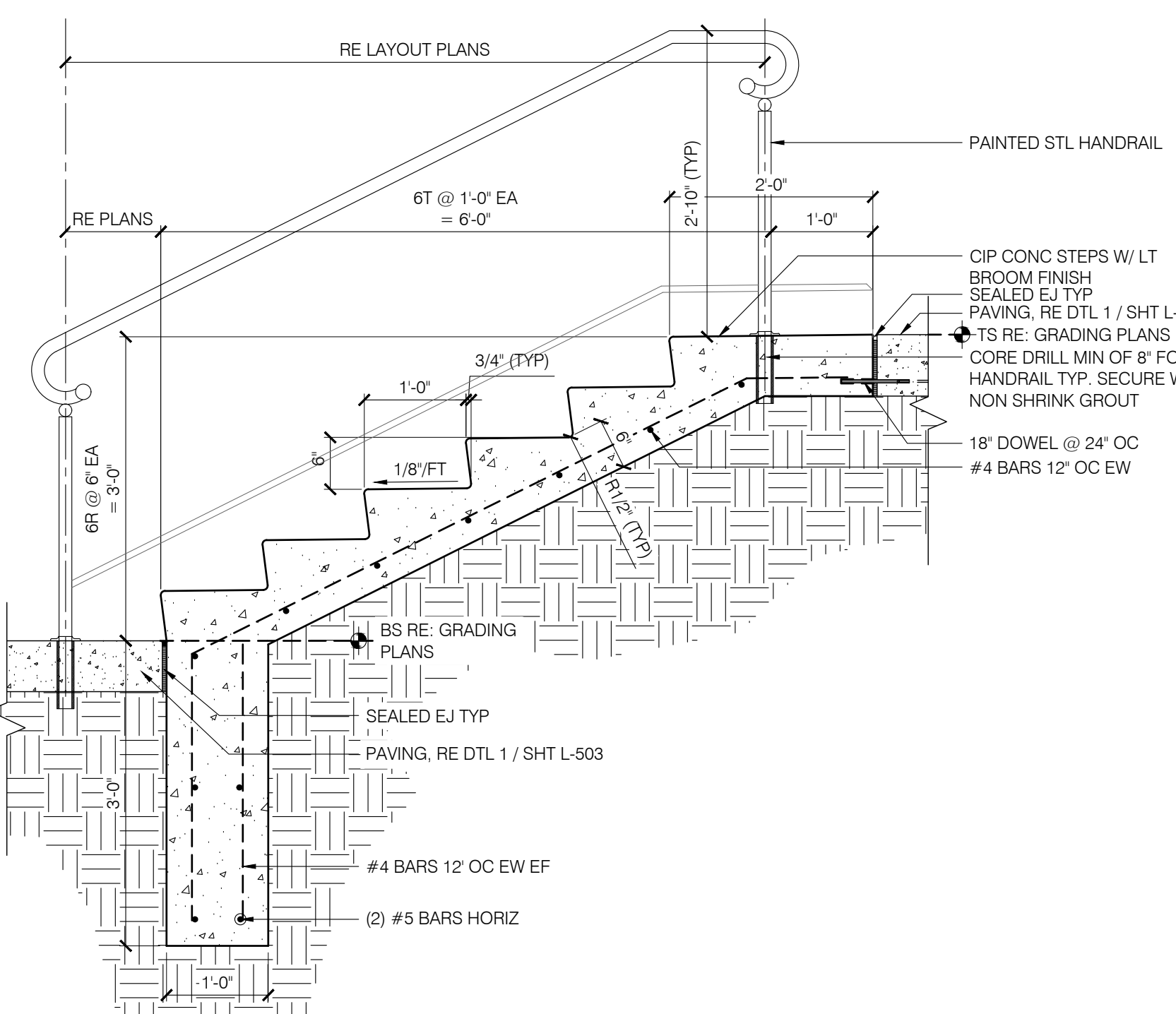
4 CONCRETE CHEEK WALL ADJ STEPS

SCALE: 1" = 1'-0"



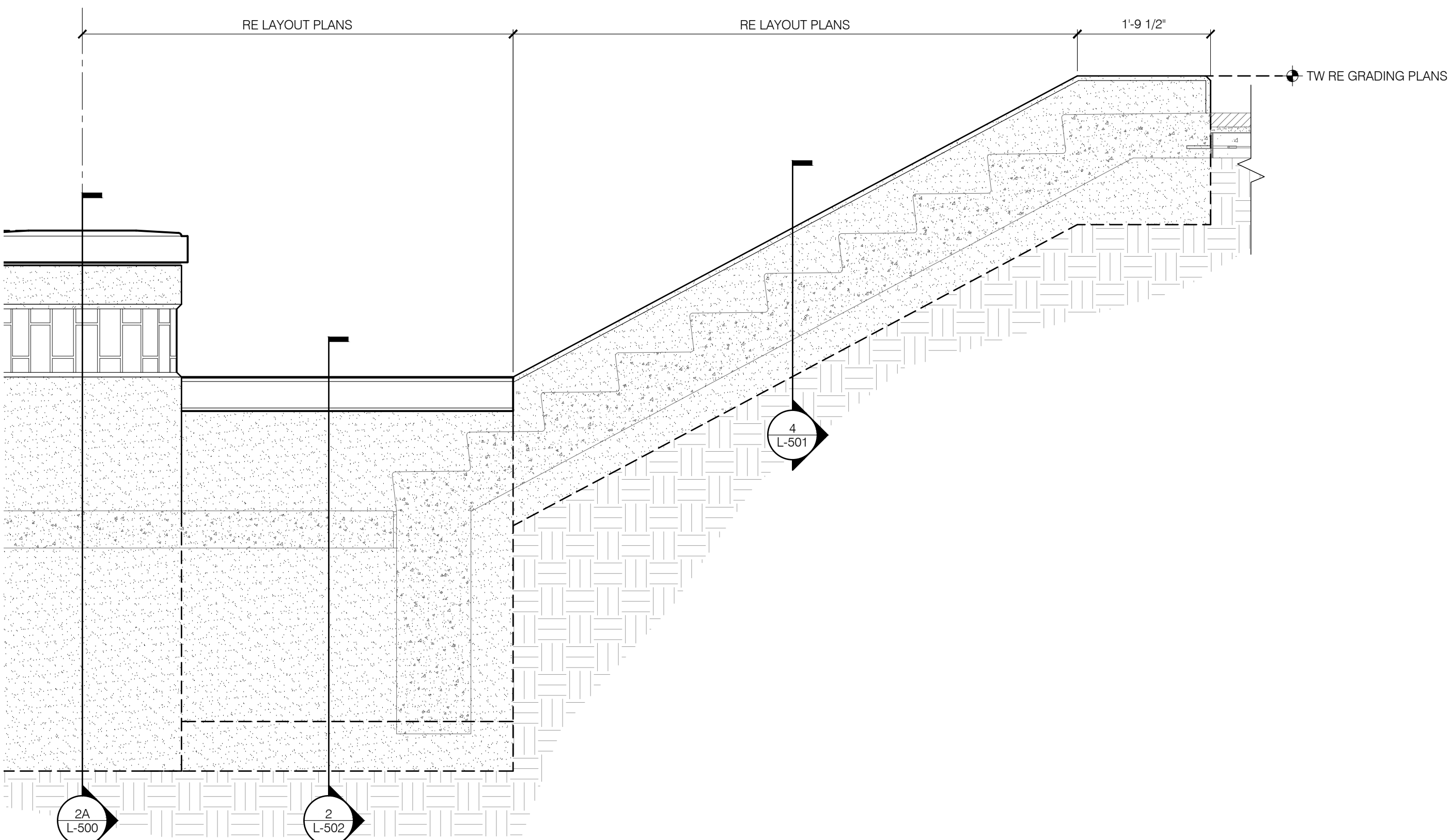
6A STEPS AT LAW CENTER (ELEV)

SCALE: 3/4" = 1'-0"



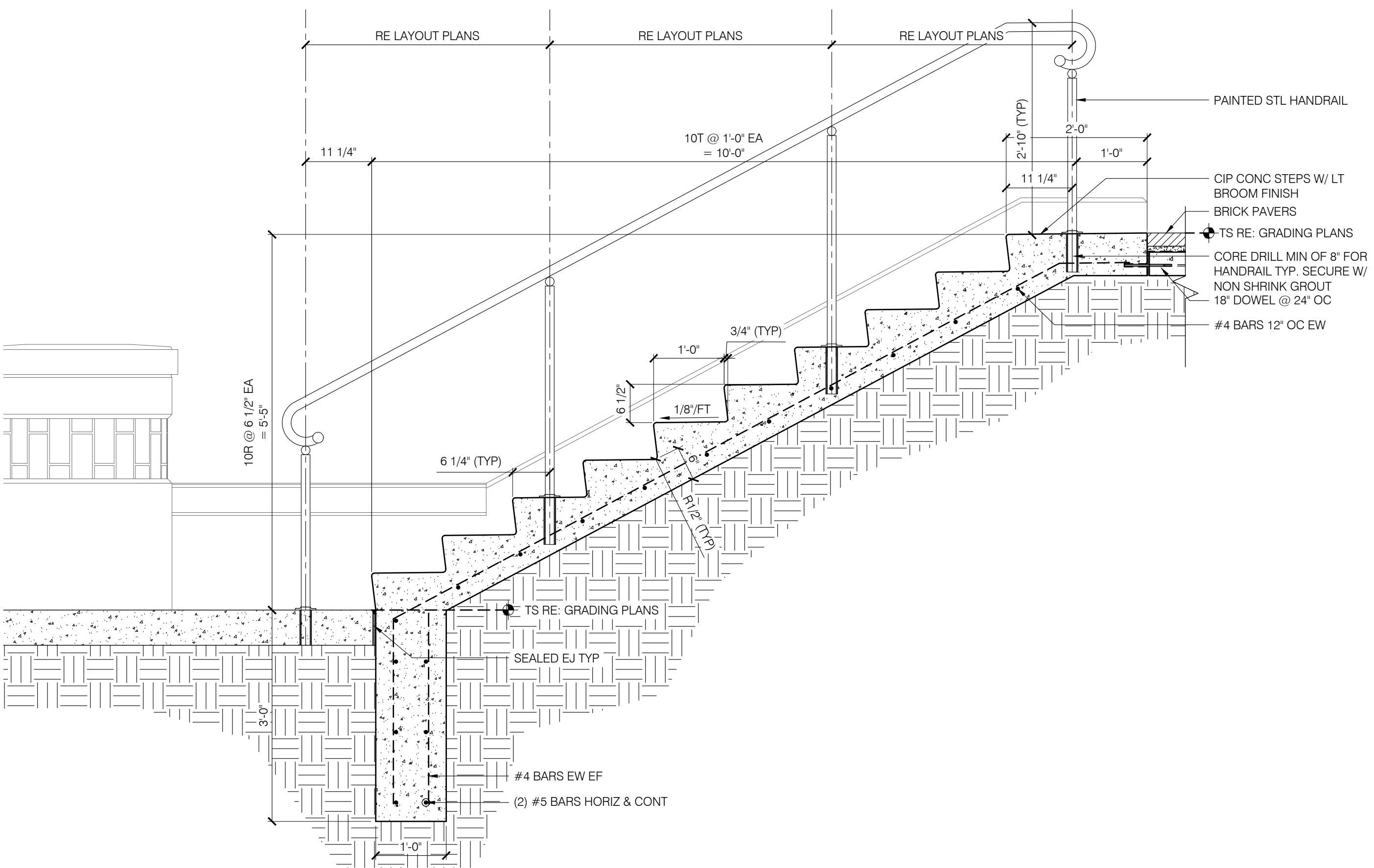
6 STEPS AT LAW CENTER

SCALE: 3/4" = 1'-0"



7A STEPS AT LAW CENTER (ELEV)

SCALE: 3/4" = 1'-0"



7 STEPS AT LAW CENTER

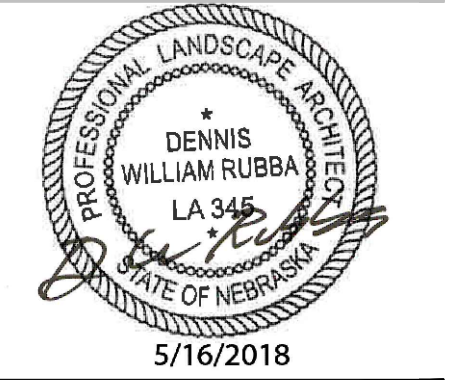
SCALE: 3/4" = 1'-0"



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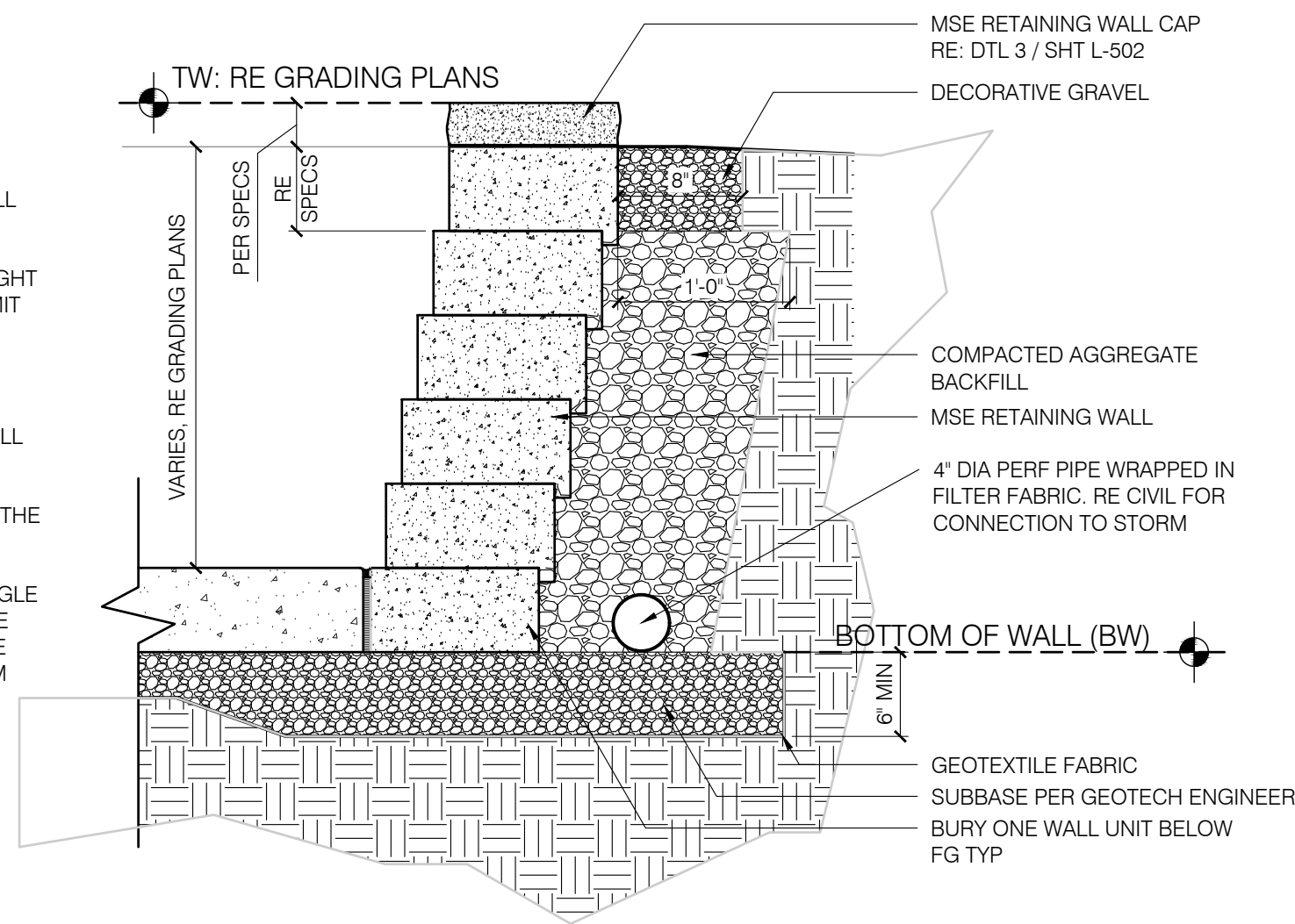
Drawn By: KN
Reviewed By: MSS
Revisions:

Date	No.	Remarks

Sheet Name:
STAIR DETAILS
Sheet Number:
L-501

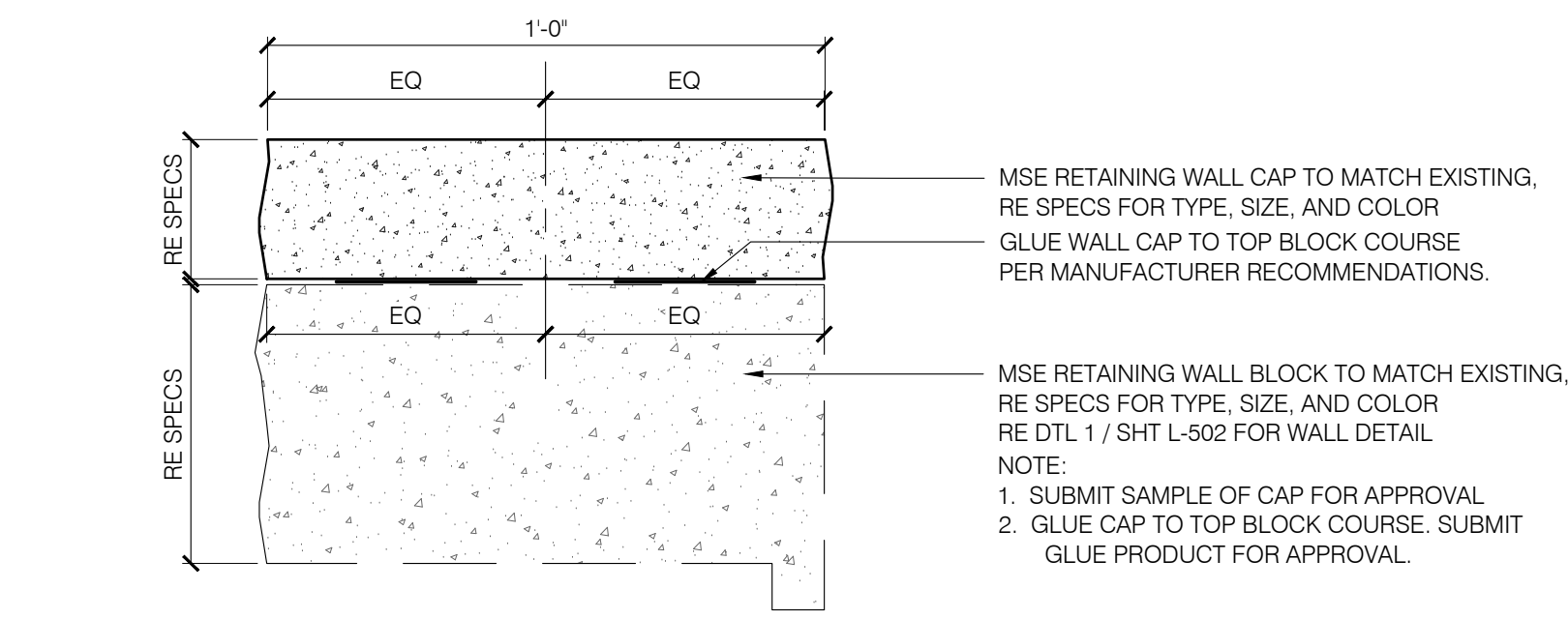
NOTES:

1. RETAINING WALL SHALL BE MODULAR INTERLOCKING MASONRY BY ANCHOR WALL SYSTEMS OR APPROVED EQUAL
2. UNITS SHALL BE ANCHOR DIAMOND STRAIGHT FACESTYLE AND SAHARA IN COLOR. SUBMIT SAMPLE TO LANDSCAPE ARCHITECT FOR APPROVAL
3. THE DESIGN, DIMENSIONS AND MATERIAL SHOWN ARE GENERAL IN NATURE. THE WALL SHALL BE DESIGNED AND ENGINEERED BY THE INSTALLER ACCORDING TO THE WALL UNIT MANUFACTURER'S DESIGN CRITERIA. THE DESIGN SHALL BE STAMPED BY A PROFESSIONAL ENGINEER. ALL DESIGN CALCULATIONS AND DESIGN CRITERIA (ANGLE OF FRICTION, SOIL WEIGHT, ETC.) SHALL BE SUBMITTED WITH THE SHOP DRAWING. THE NEED FOR THE GEOGRID TIE-BACK SYSTEM SHALL BE DETERMINED BY THE ENGINEER DESIGNING THE WALL.
4. CONTRACTOR TO SUBMIT FULL SHOP DRAWINGS



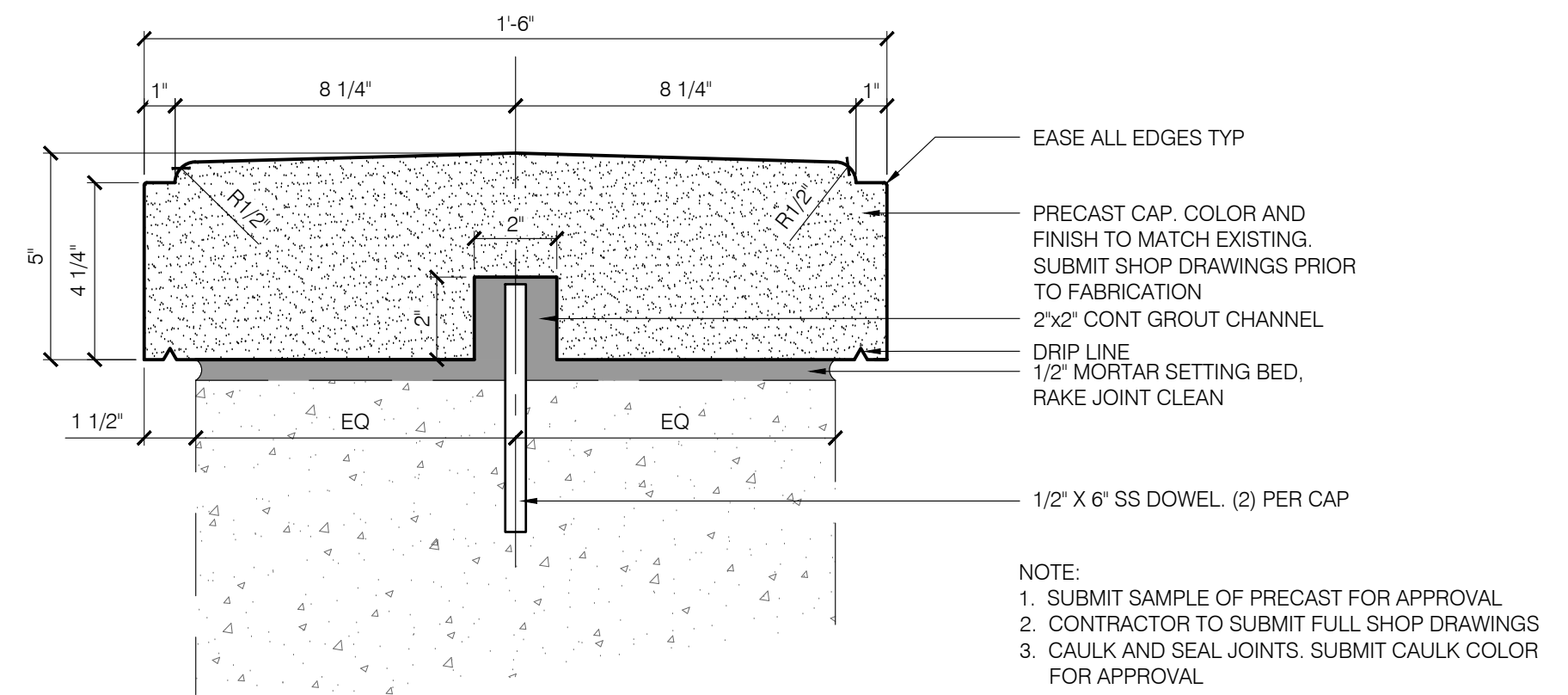
1 MSE RETAINING WALL (TYP)

SCALE: 1" = 1'-0"



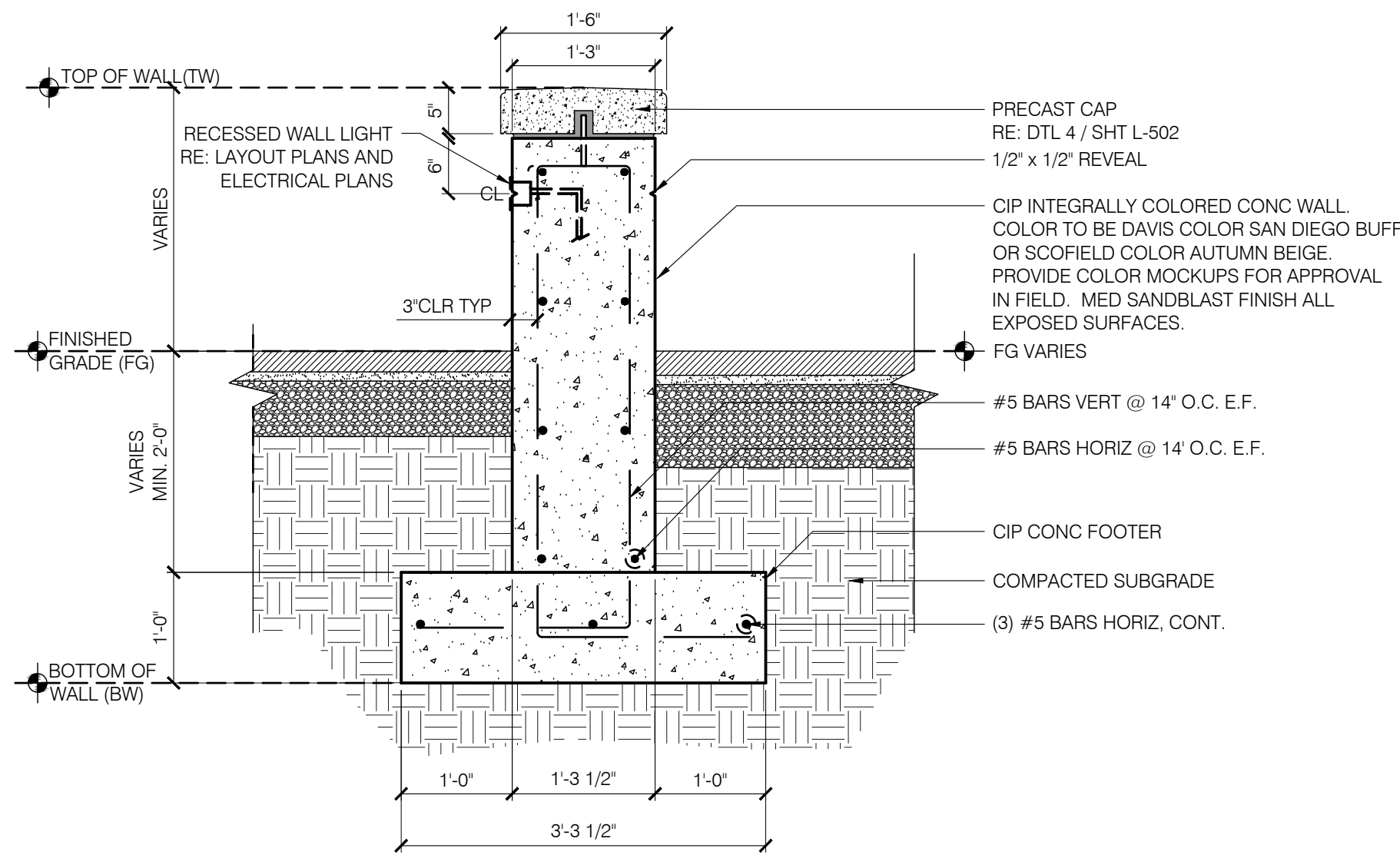
3 MSE BLOCK CAP AT MSE BLOCK WALL

SCALE: 3" = 1'-0"



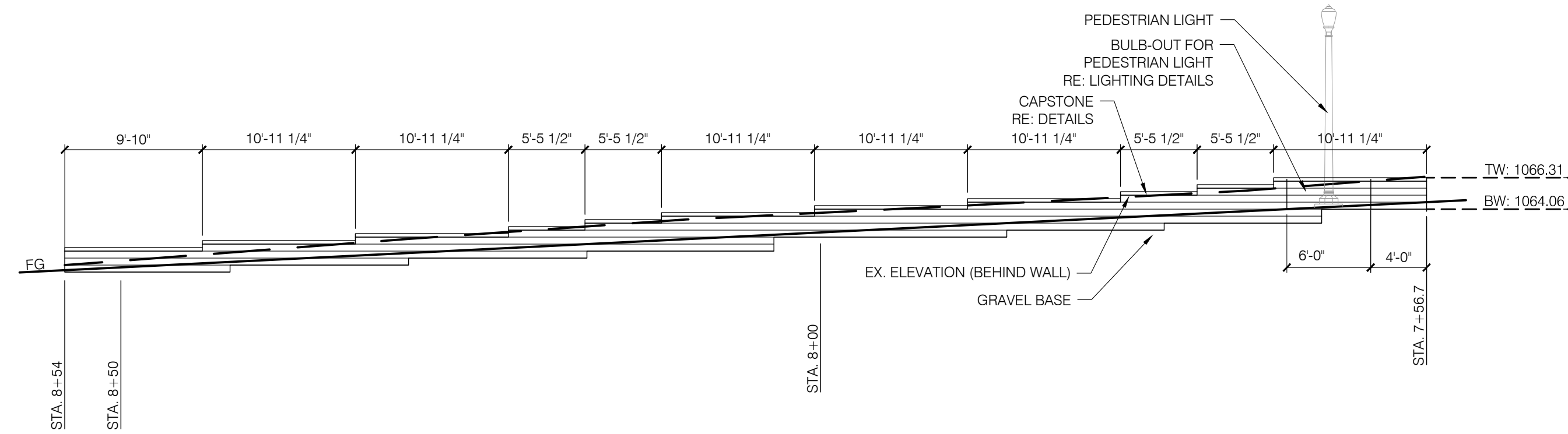
4 PRECAST CAP AT CIP CONC WALL

SCALE: 3" = 1'-0"



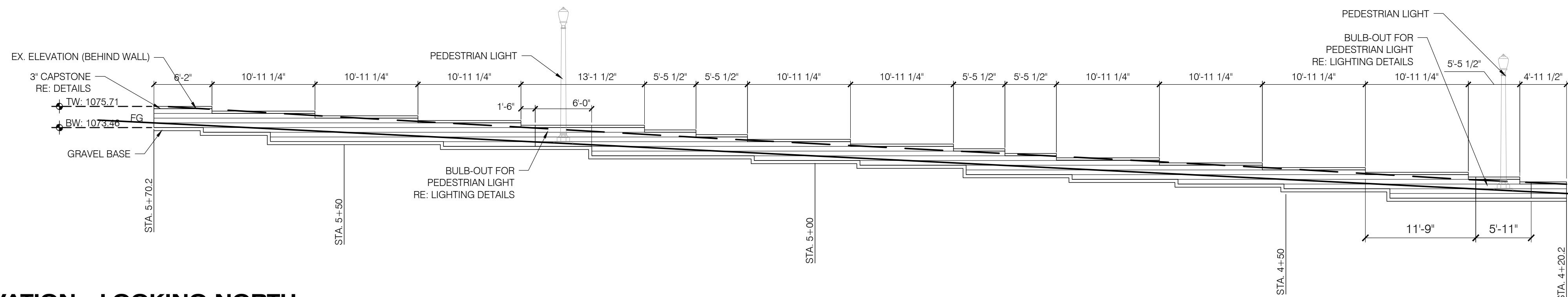
2 CIP CONC WALL (TYP)

SCALE: 3/4" = 1'-0"



5 ELEVATION - LOOKING SOUTH

N.T.S.

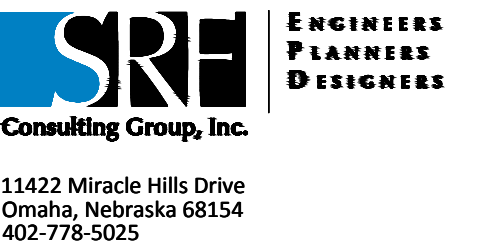


6 ELEVATION - LOOKING NORTH

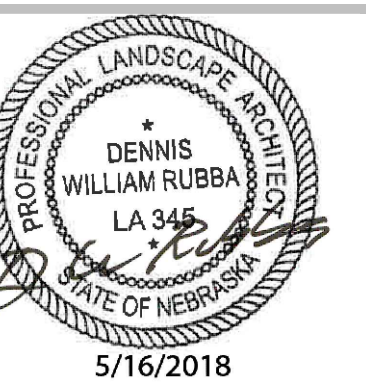
N.T.S.



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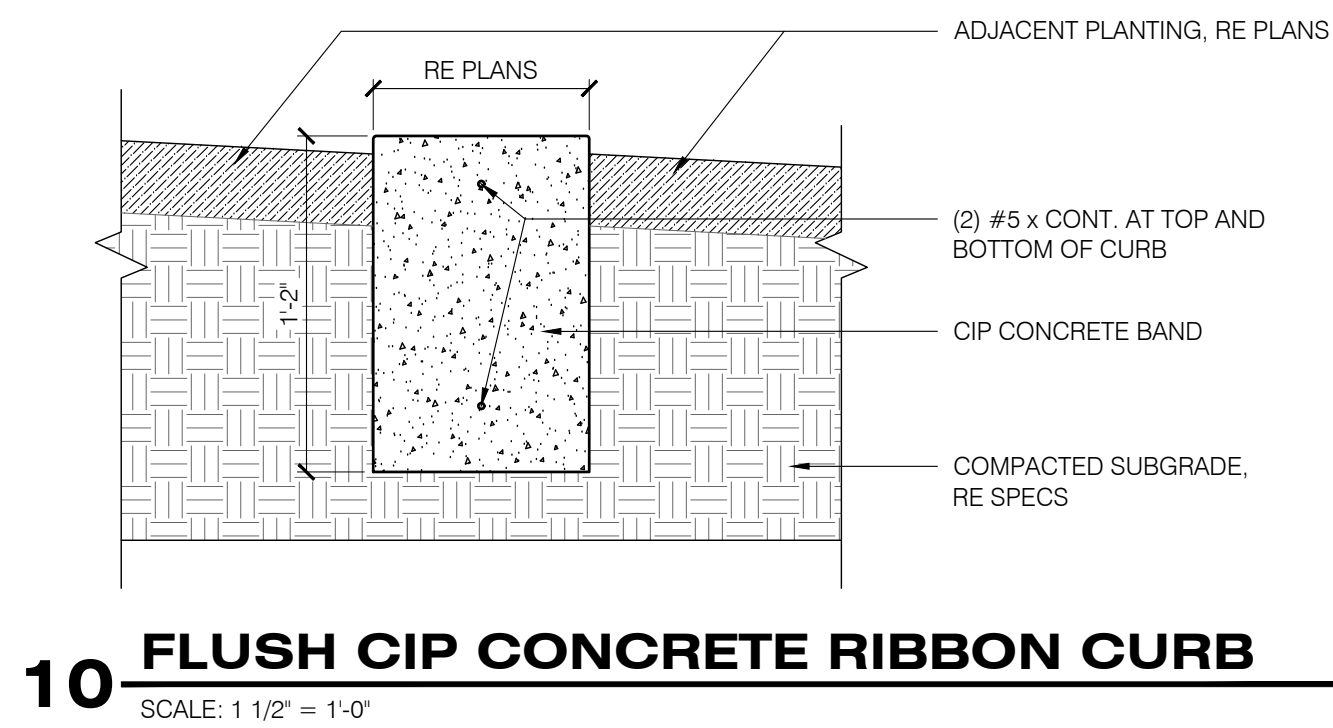
Date: 2018/05/18
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MALL DESIGN
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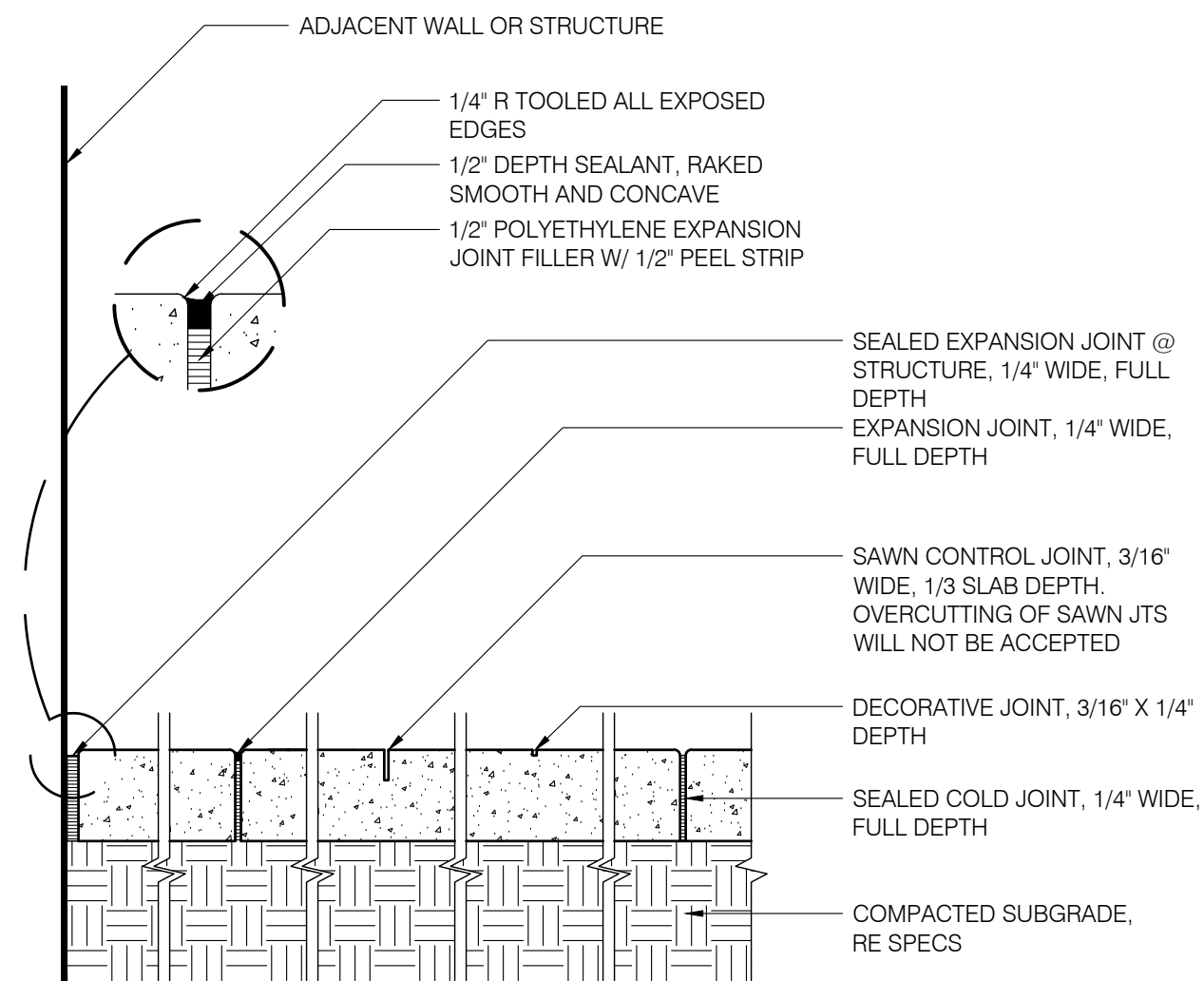
Drawn By: KN
Reviewed By: MSS
Revisions:

Date	No.	Remarks

Sheet Name:
WALL DETAILS
Sheet Number:
L-502

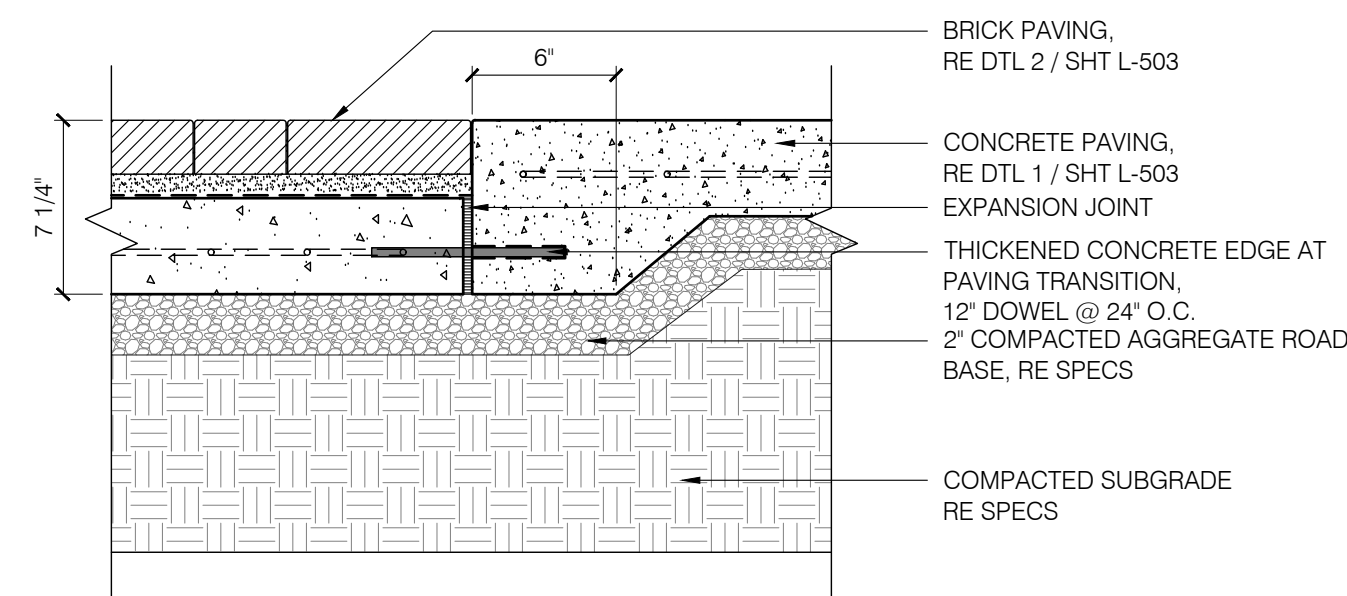


10 FLUSH CIP CONCRETE RIBBON CURB
SCALE: 1 1/2" = 1'-0"

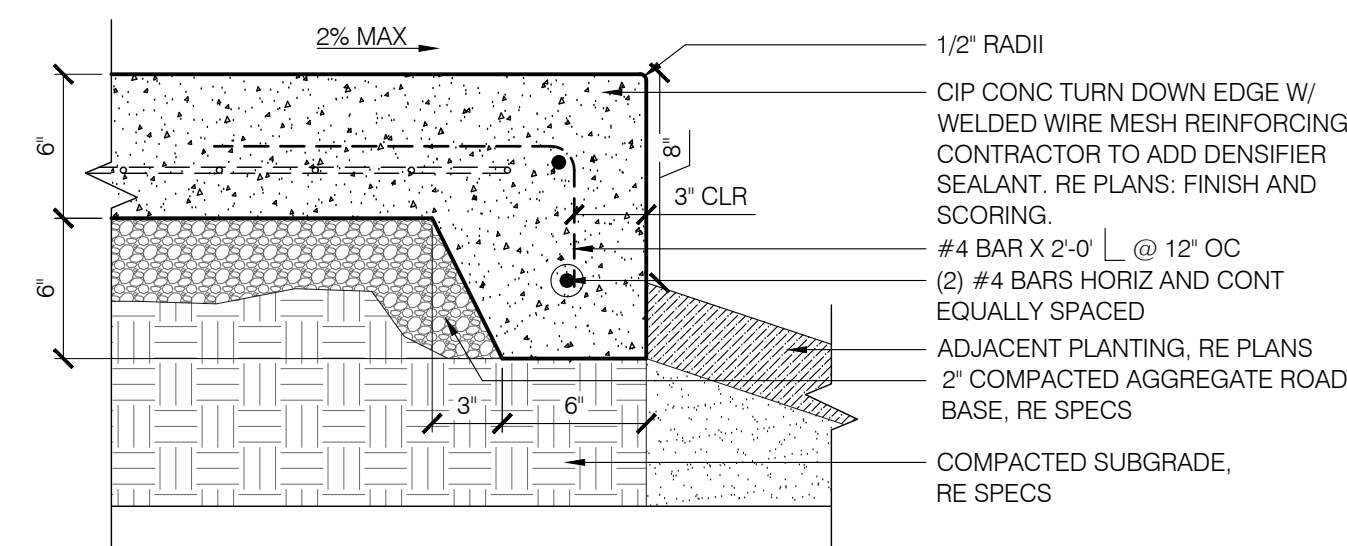


NOTES:
1. RE LAYOUT PLANS FOR JOINT LOCATIONS
2. SEALANT TO MATCH ADJACENT CONCRETE. SUBMIT SAMPLE FOR APPROVAL

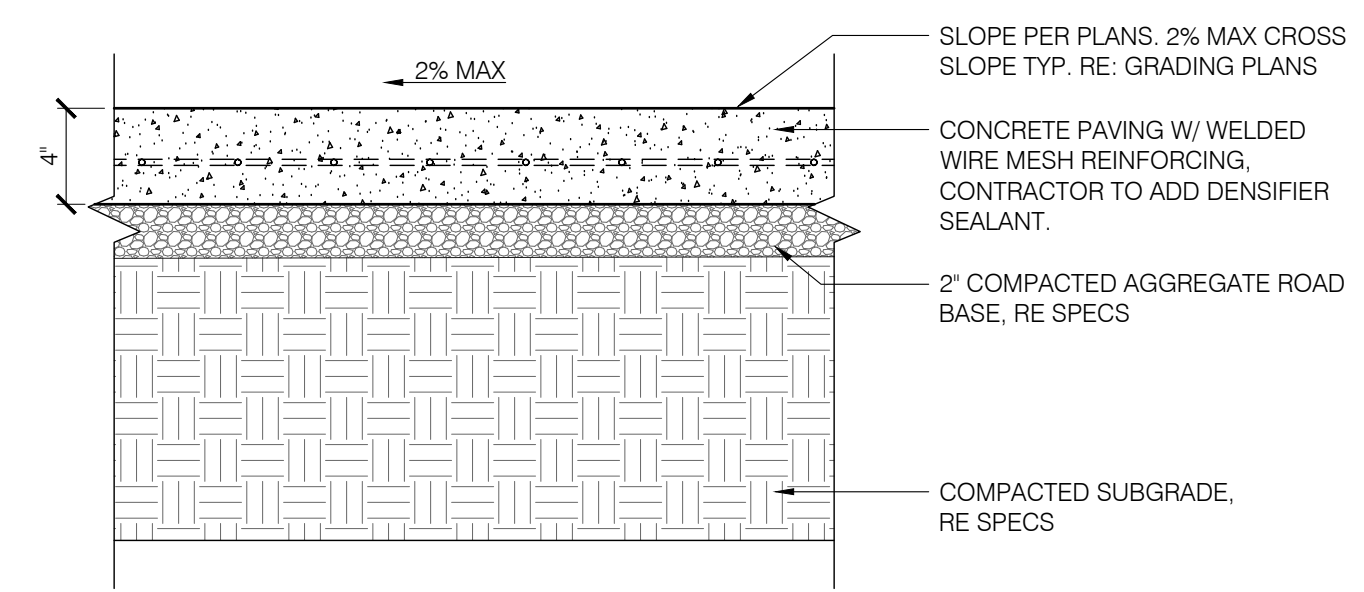
6 CONCRETE JOINTING DETAIL
SCALE: 1 1/2" = 1'-0"



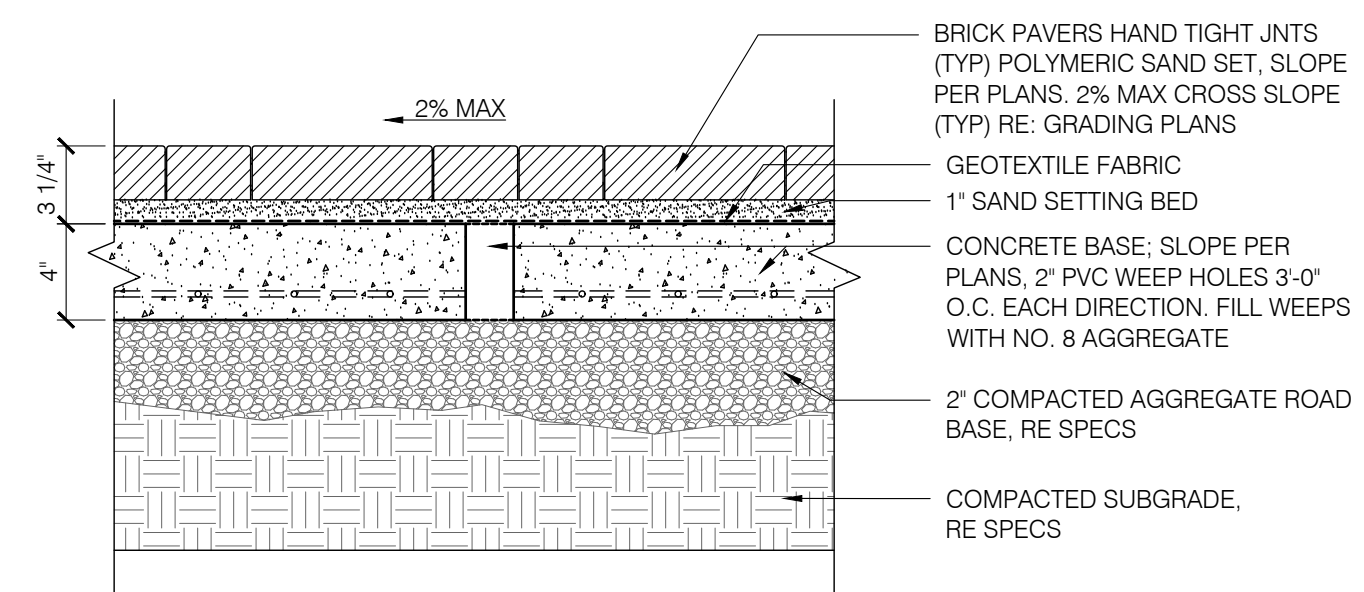
7 BRICK PAVERS ADJ CONCRETE
SCALE: 1 1/2" = 1'-0"



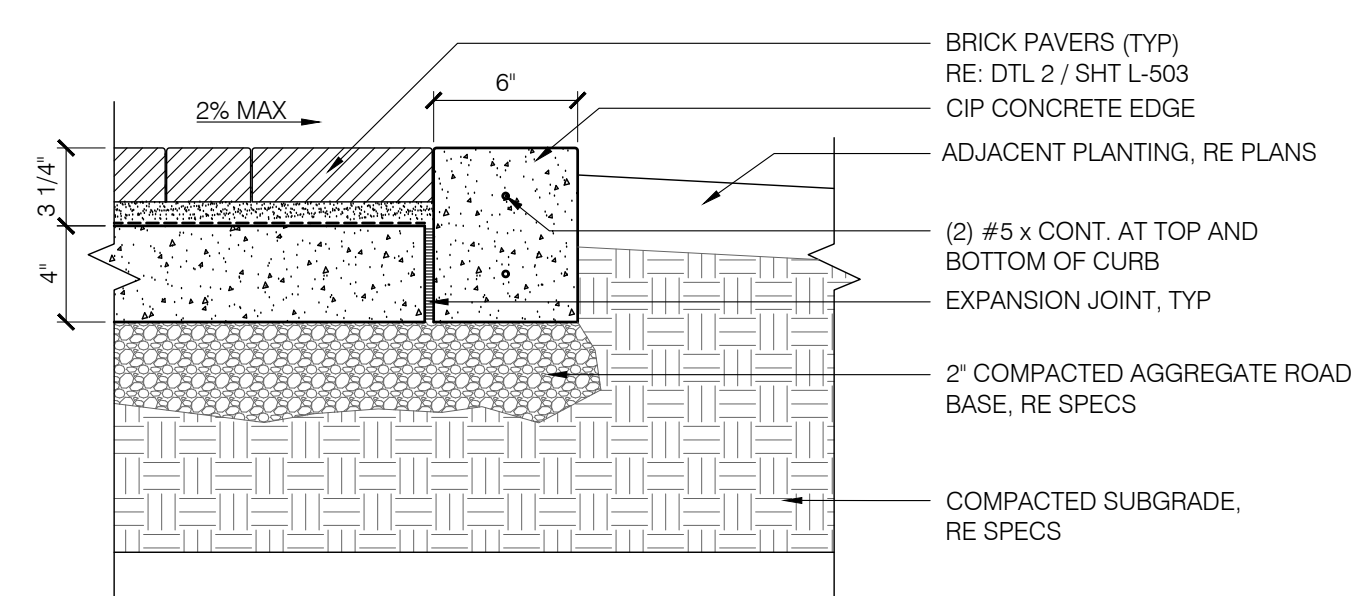
9 THICKENED CONCRETE EDGE
SCALE: 1 1/2" = 1'-0"



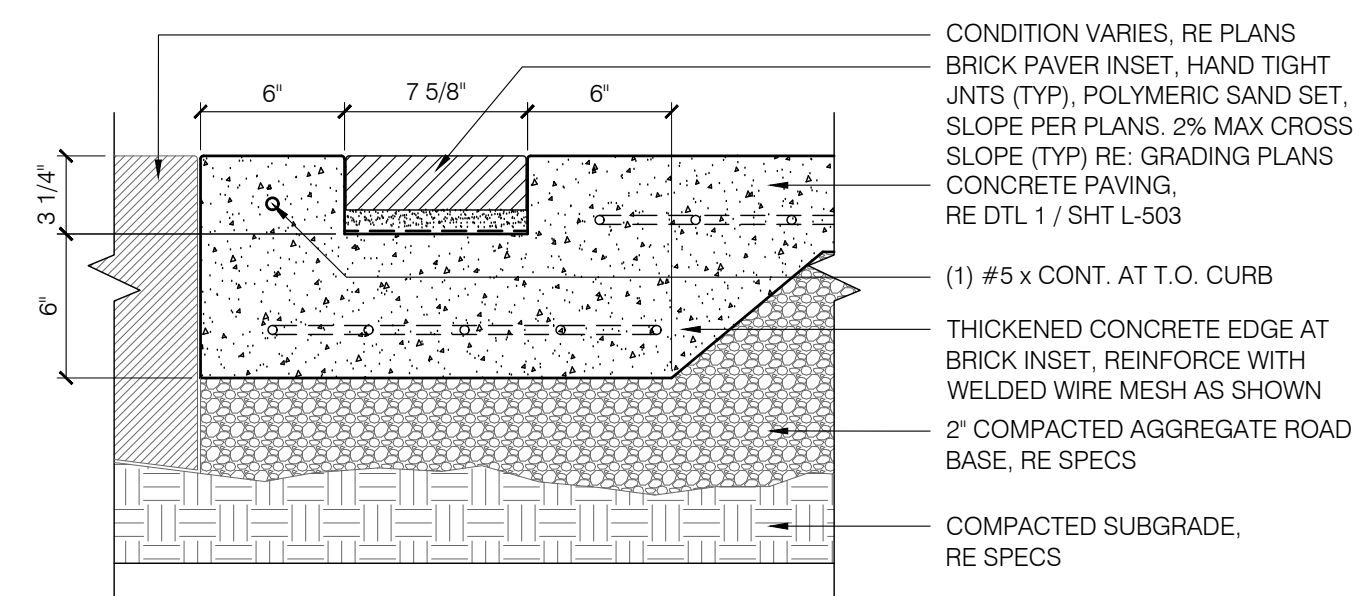
1 4in CIP CONCRETE PAVING
SCALE: 1 1/2" = 1'-0"



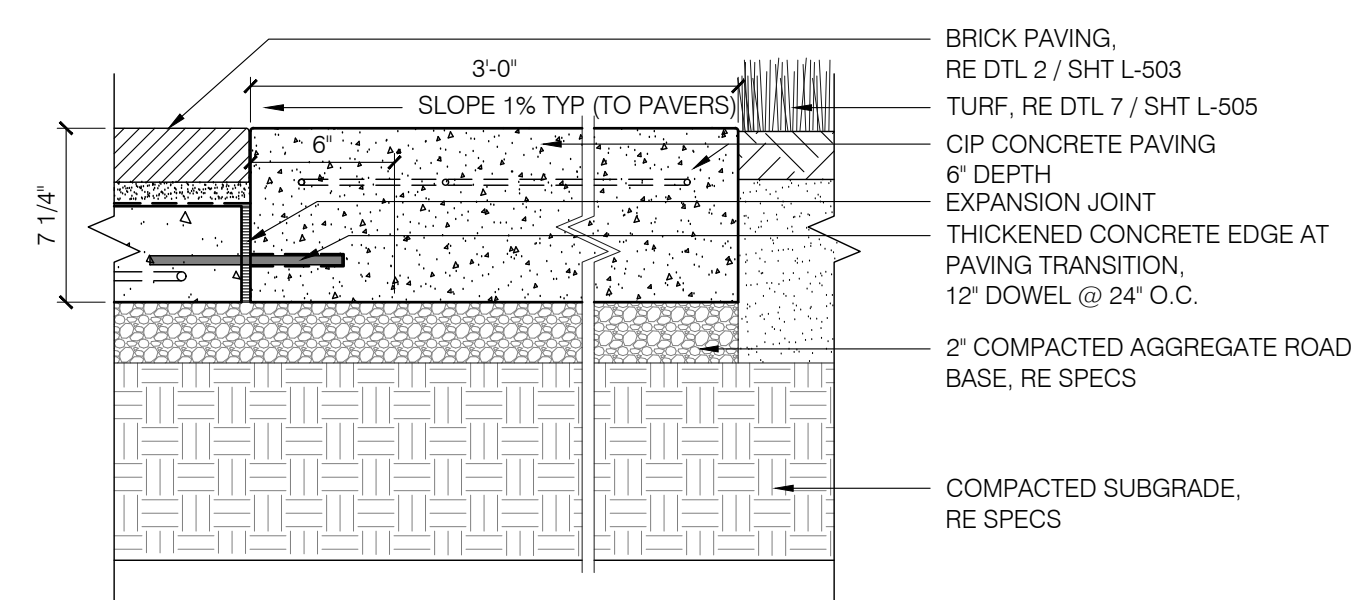
2 BRICK ON CONCRETE SUBSLAB
SCALE: 1 1/2" = 1'-0"



3 CONCRETE BRICK EDGING
SCALE: 1 1/2" = 1'-0"



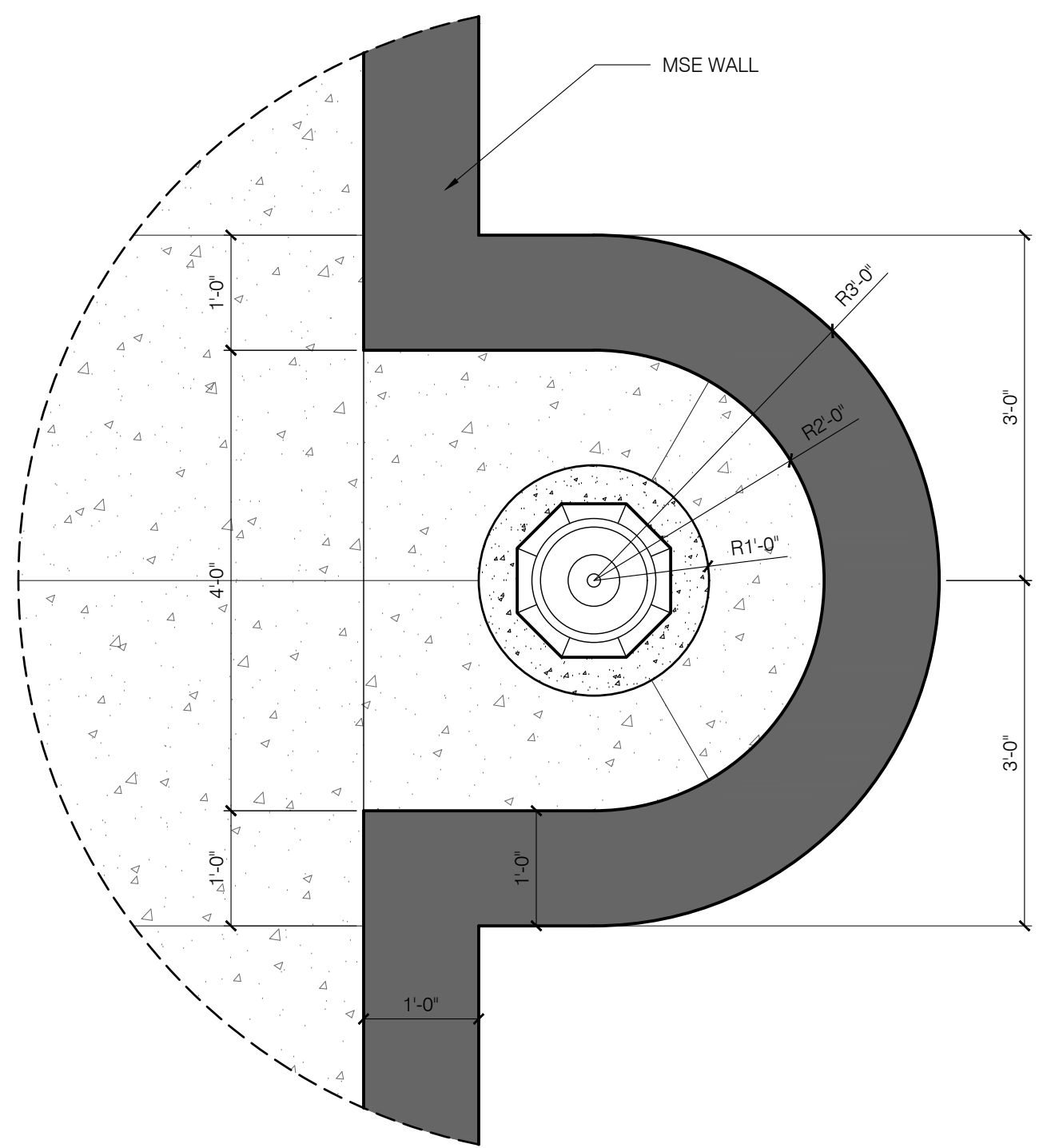
4 BRICK SOLDIER COURSE INSET
SCALE: 1 1/2" = 1'-0"



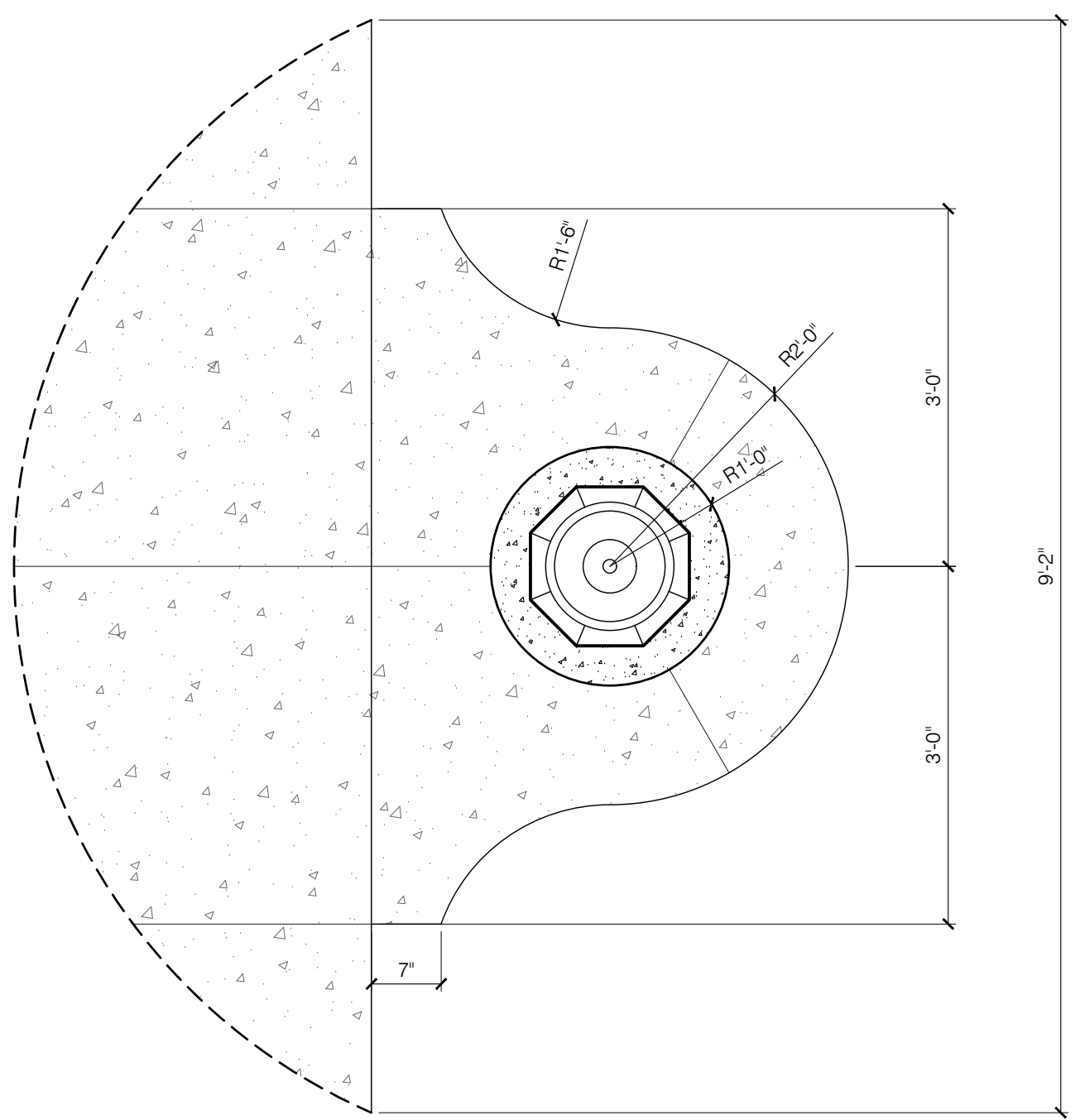
5 36in CONCRETE BAND
SCALE: 1 1/2" = 1'-0"

Date	No.	Remarks

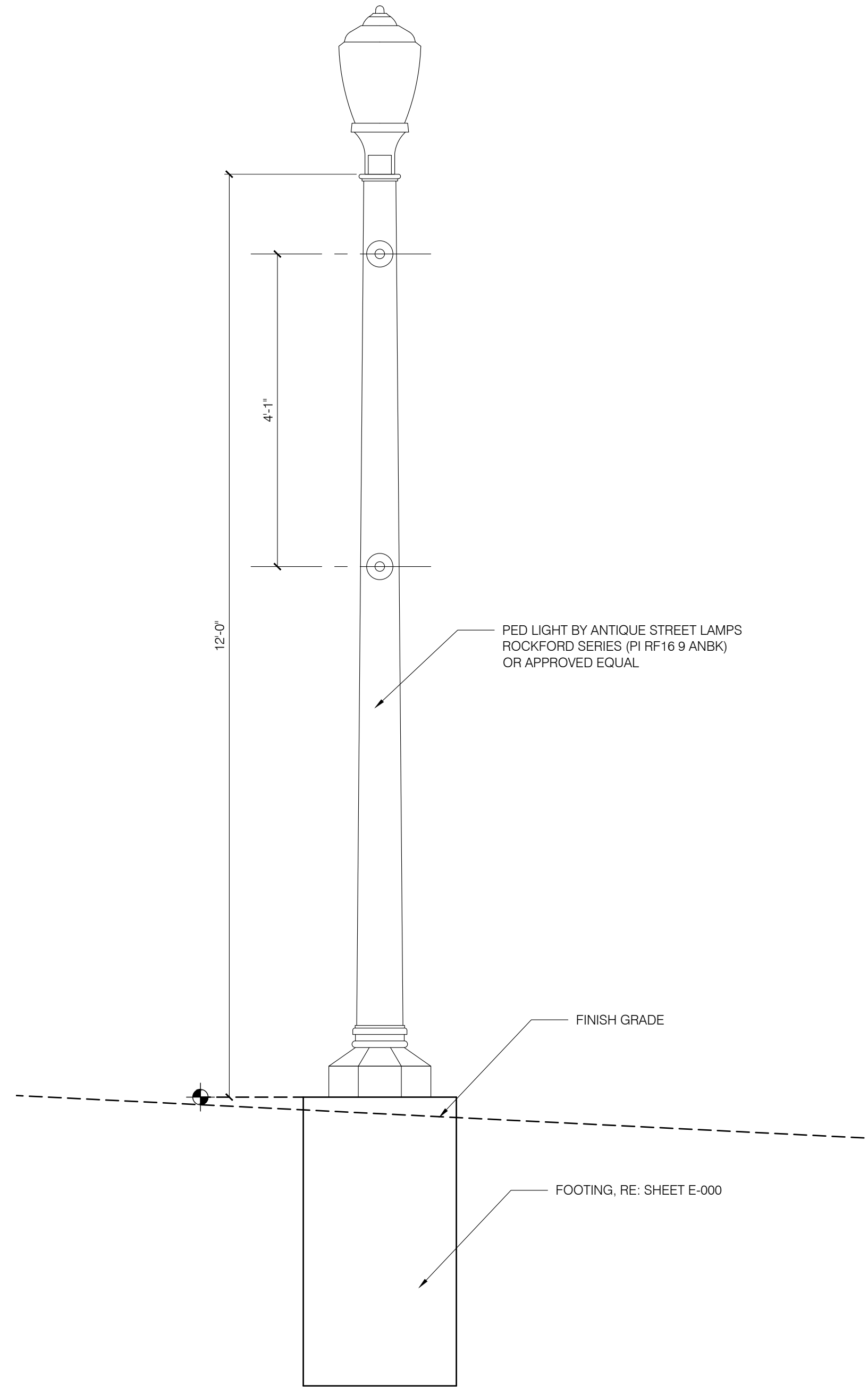
Date	No.	Remarks



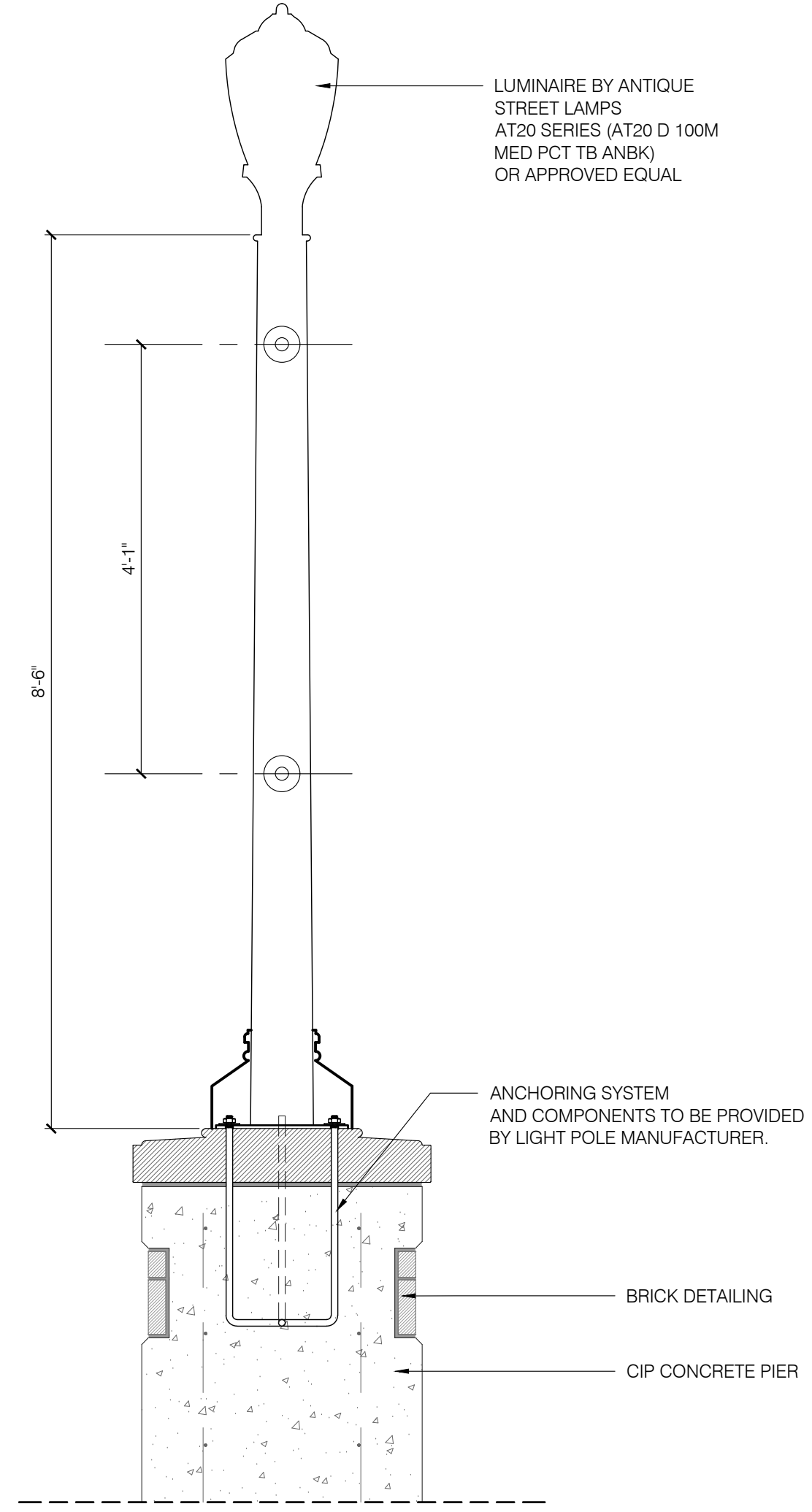
1 PED LIGHT AT RETAINING WALL
SCALE: 3/4" = 1'-0"



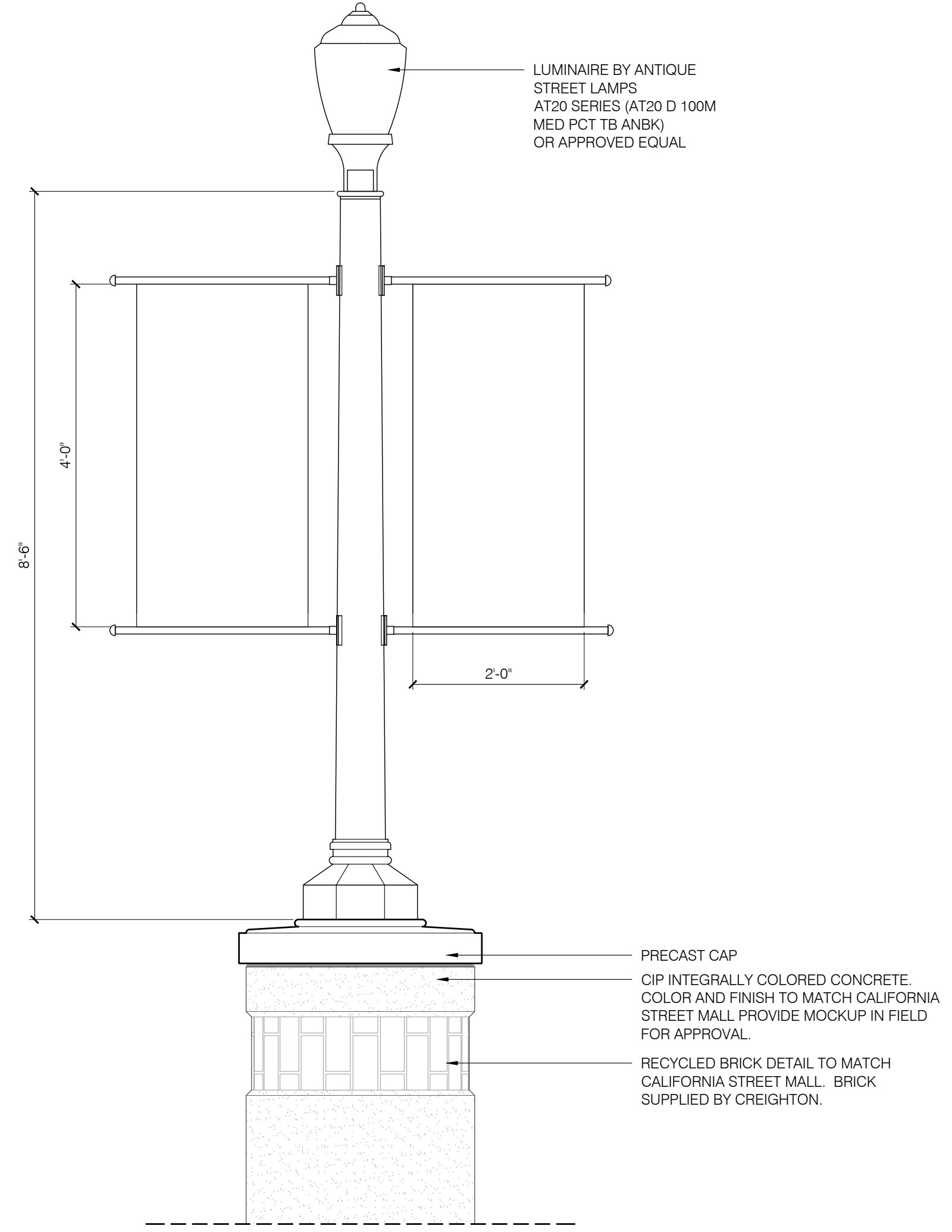
2 PED LIGHT CONC BULBOUT
SCALE: 3/4" = 1'-0"



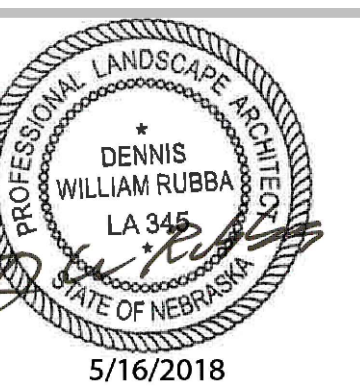
3 PED LIGHT AT GRADE (FRONT ELEVATION)
SCALE: 3/4" = 1'-0"



4 PED LIGHT ON COLUMN (SECTION)
SCALE: 3/4" = 1'-0"



5 PED LIGHT ON COLUMN (FRONT ELEVATION)
SCALE: 3/4" = 1'-0"

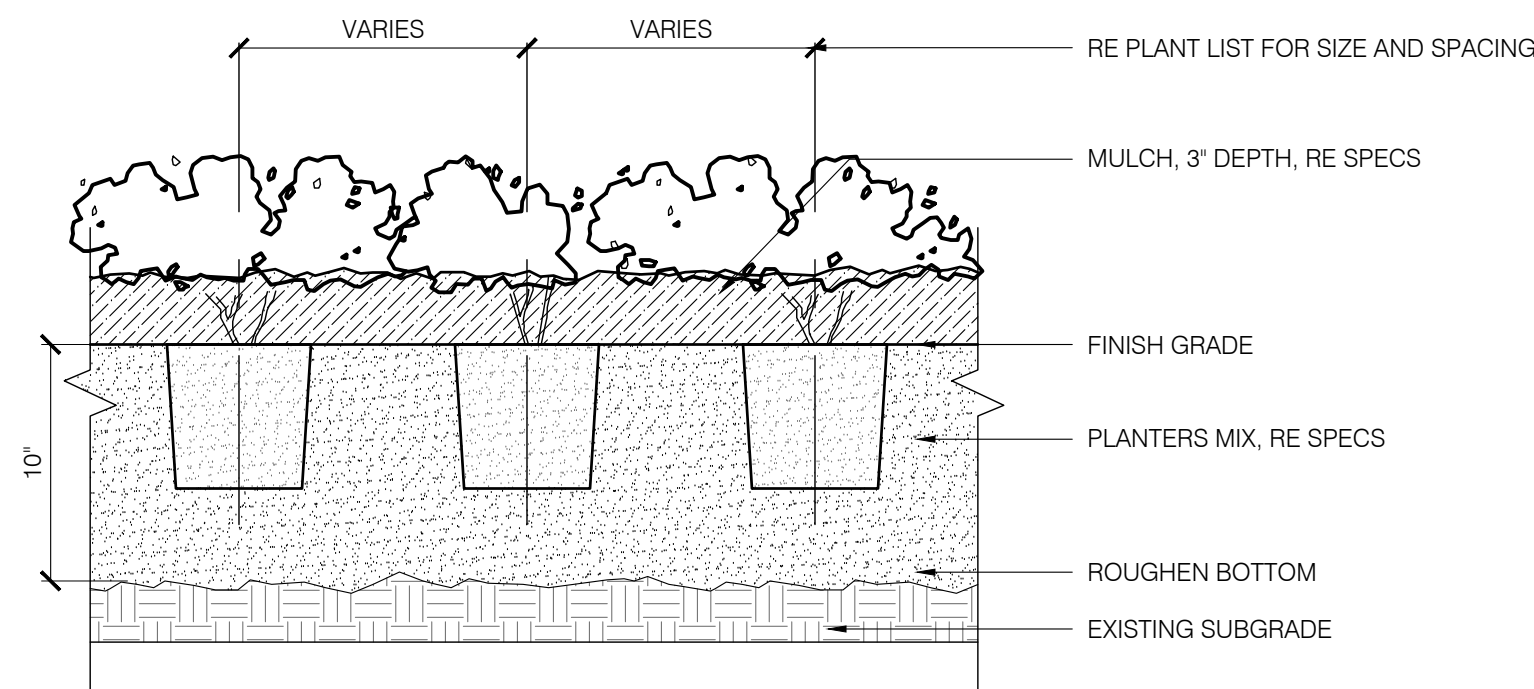


Drawn By: KN
Reviewed By: MSS
Revisions:

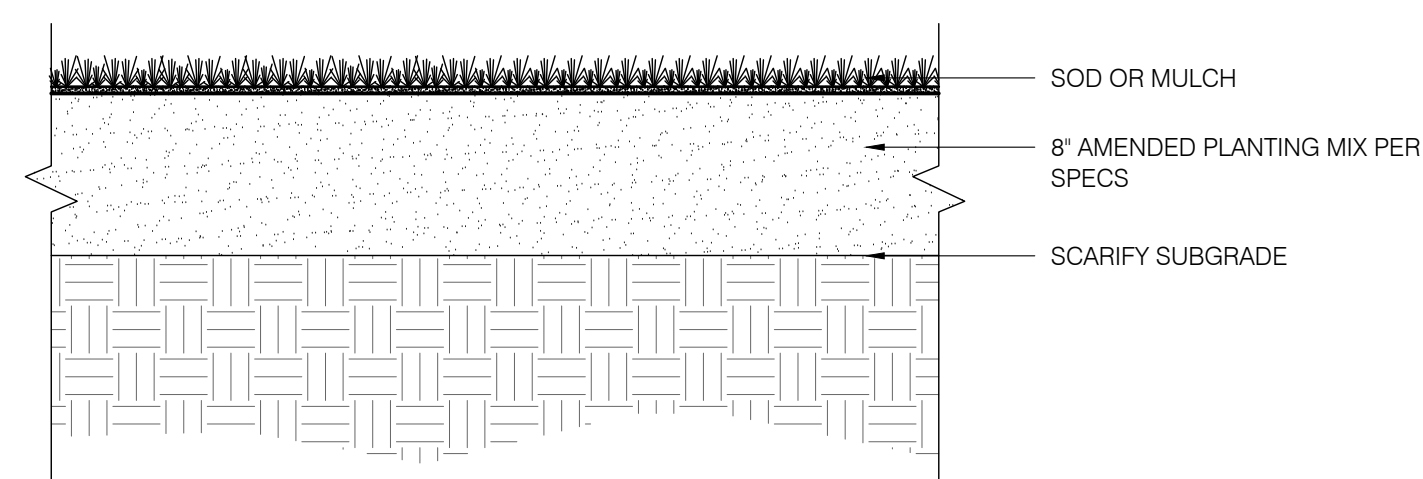
Date	No.	Remarks

Sheet Name:
PLANTING DETAILS

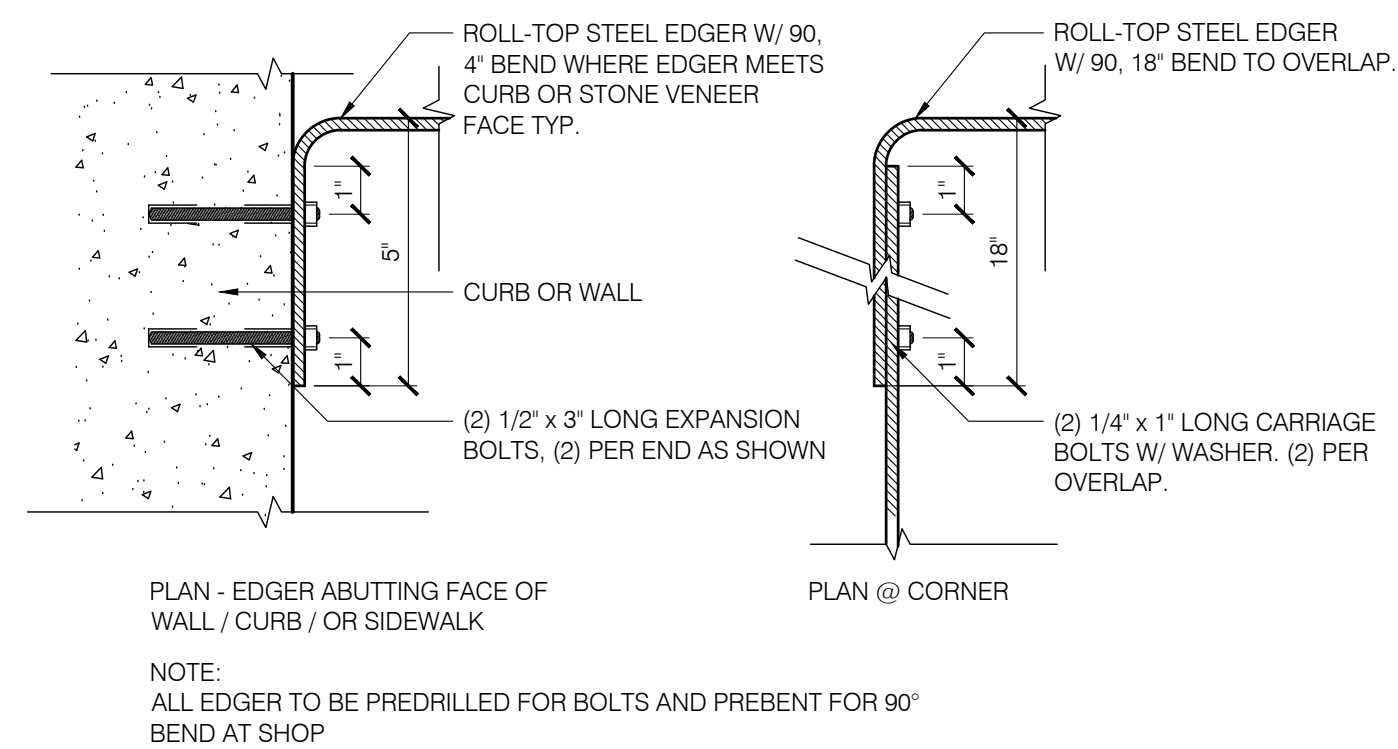
Sheet Number:
L-505



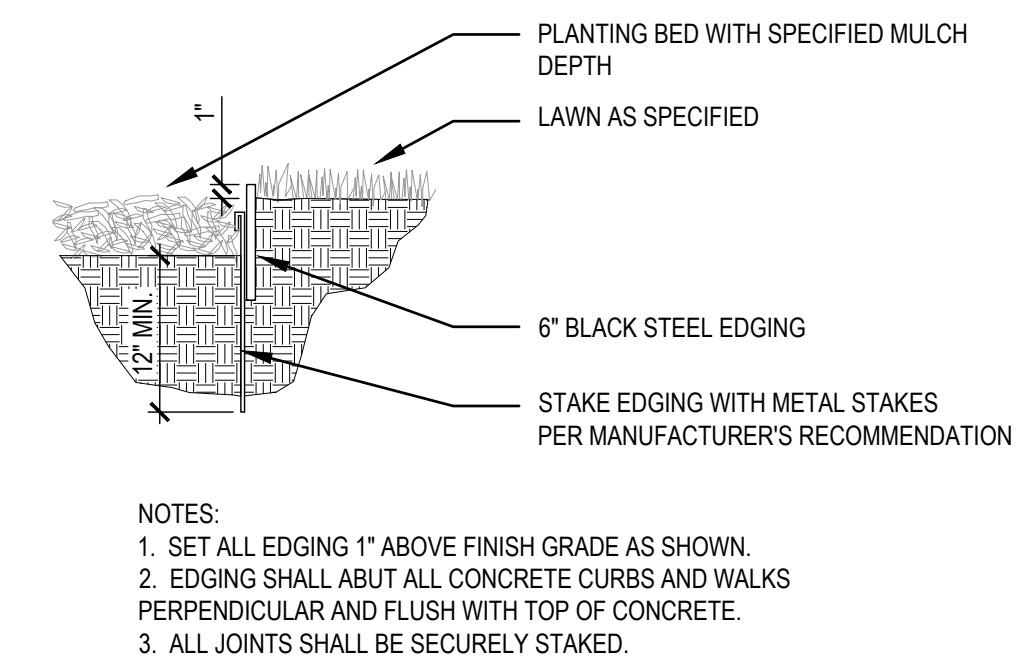
4 GROUNDCOVER PLANTING
SCALE: 1 1/2" = 1'-0"



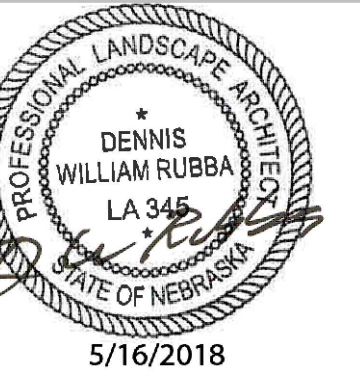
7 TOPSOIL & BED PREP DETAIL
SCALE: 1 1/2" = 1'-0"



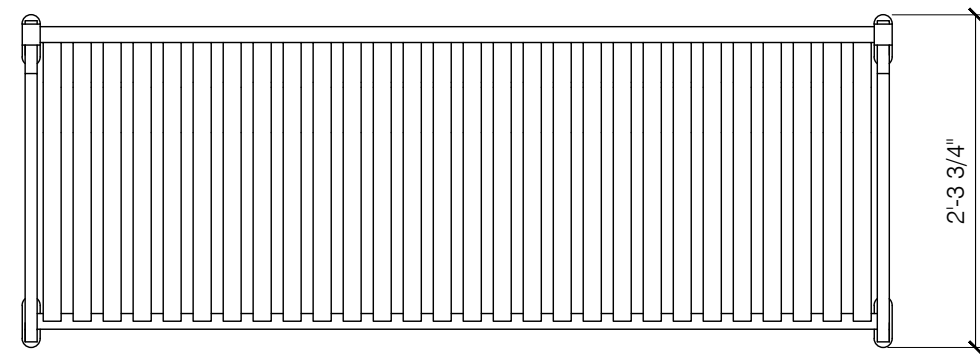
8 STEEL EDGER CONNECTION DETAIL
SCALE: 3" = 1'-0"



9 STEEL EDGING
N.T.S.

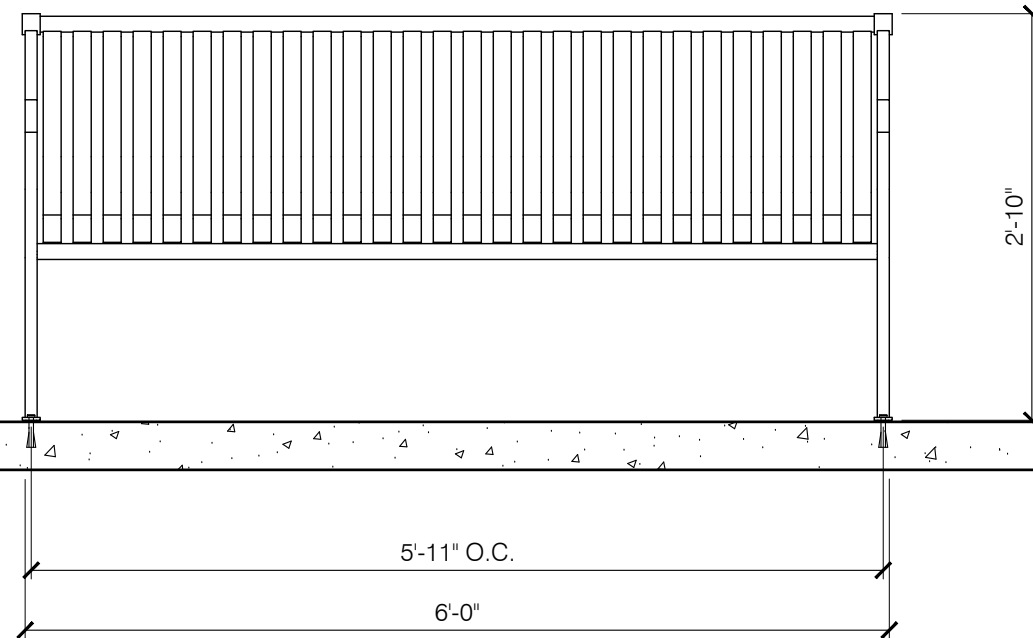


Date	No.	Remarks

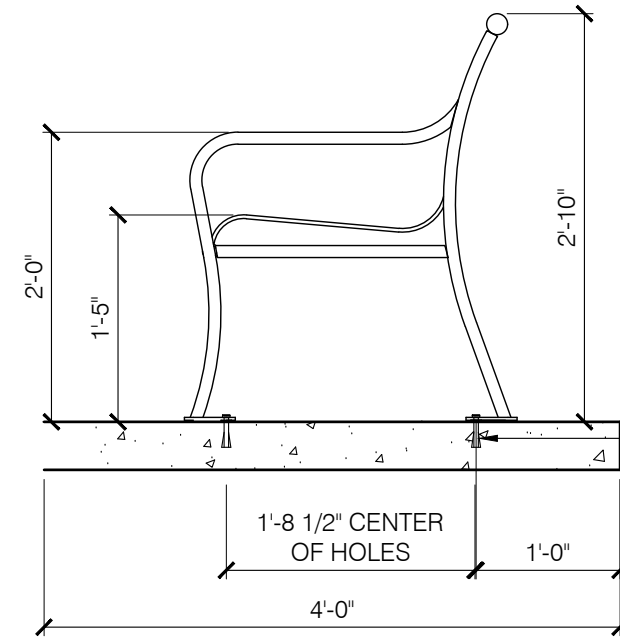


TOP VIEW

- MATERIALS LIST
1. SEAT STRAPS - 5/16" X 1 1/2" STEEL FLAT BAR
 2. SUPPORT PIPES - Ø 1.315" X .133" STEEL PIPE
 3. END UNITS - 1" SQUARE SOLID STEEL BAR
 4. SURFACE MOUNT PLATES - 1/4" X 1 1/2" STAINLESS STEEL PLATE WITH 9/16" MOUNTING HOLE
 5. MOUNTED WITH FOUR Ø 1/2" X 4-5" STAINLESS STEEL ANCHOR BOLTS (CREIGHTON TO SUPPLY)



FRONT VIEW

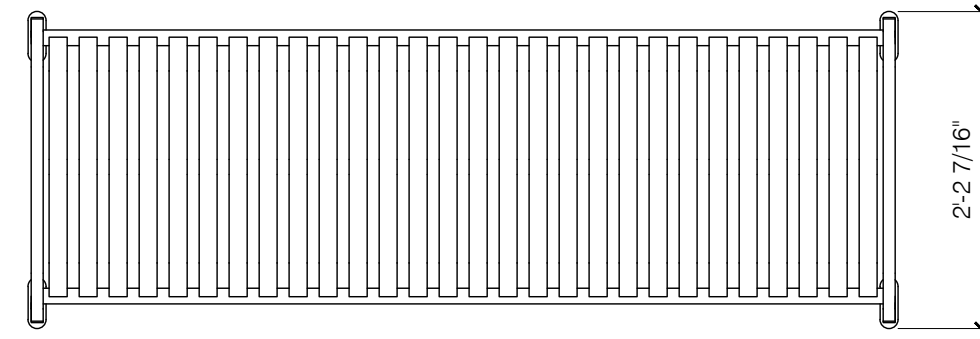


RIGHT SIDE VIEW

SURFACE MOUNT W/ NON-CORROSIVE ANCHORING HARDWARE SUPPLIED BY OTHERS

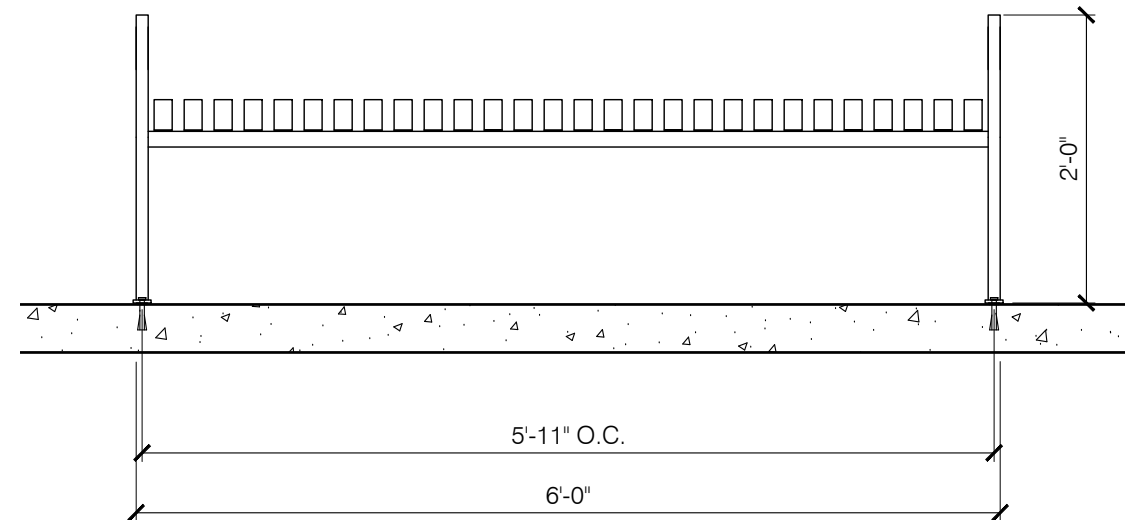
1 BENCH WITH BACK

3/4" = 1'-0"

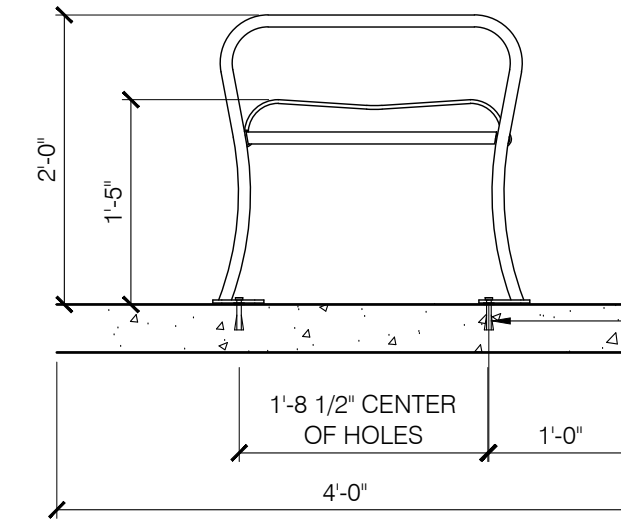


TOP VIEW

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FRONT VIEW



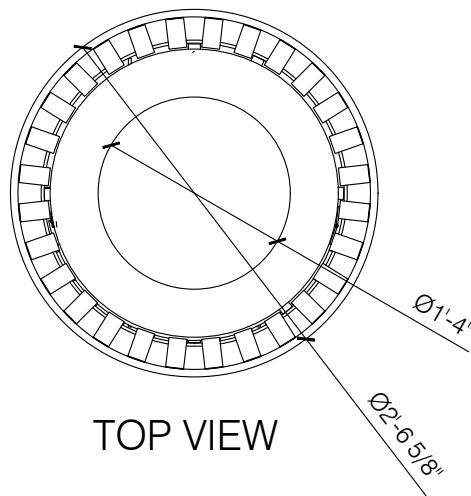
RIGHT SIDE VIEW

SURFACE MOUNT W/ NON-CORROSIVE ANCHORING HARDWARE SUPPLIED BY OTHERS

2 BENCH - BACKLESS

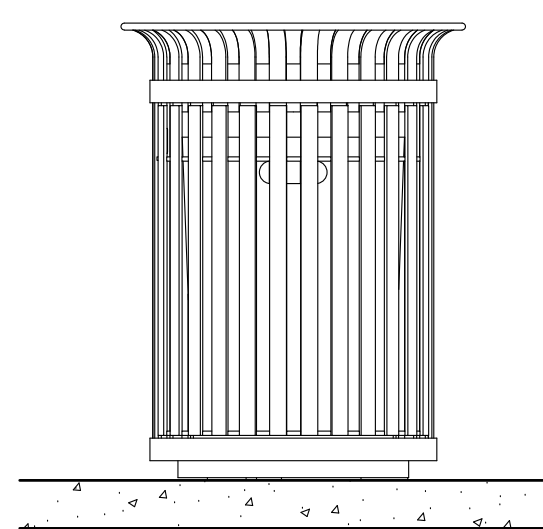
3/4" = 1'-0"

NOTE: SITE FURNISHINGS SHALL BE PER SPECIFICATION & CREIGHTON STANDARD, OR APPROVED EQUAL.

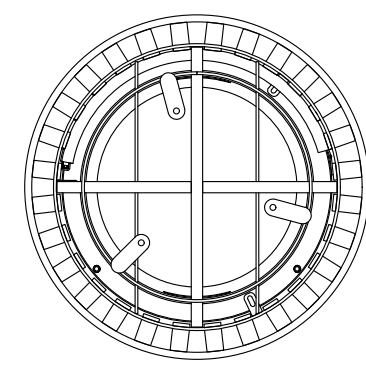


TOP VIEW

- MATERIALS LIST
1. VERTICAL STRAPS - 5/16" X 1 1/2" STEEL FLAT BAR
 2. TOP RING - Ø 5/8" STEEL ROUND BAR
 3. SUPPORT RINGS - 1/4" X 2" STEEL FLAT BAR
 4. SUPPORT BARS - 1/2" X 1" STEEL FLAT BAR
 5. SURFACE MOUNT PLATES - 1/4" X 1 1/2" STAINLESS STEEL PLATE WITH 9/16" MOUNTING HOLE
 6. LID Ø 24" X .075" WALL STEEL LID ATTACHED TO BASKET WITH STAINLESS STEEL AIRLINE CABLE
 7. HINGED DOOR WITH STAINLESS STEEL LATCH AND HINGES
 8. MOUNTED WITH THREE Ø 1/2" X 4-5" STAINLESS STEEL ANCHOR BOLTS
 9. 36 GALLON RIGID PLASTIC LINER WITH HANDLES INCLUDED



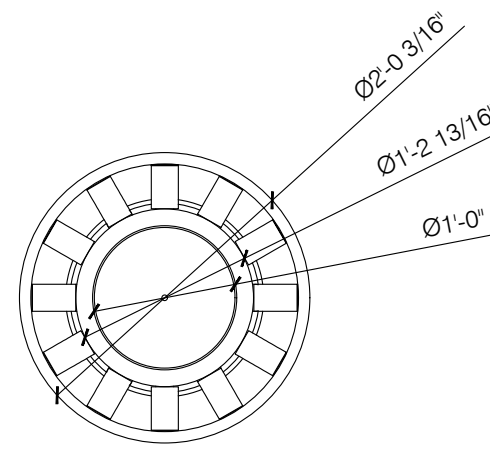
FRONT VIEW



BOTTOM VIEW
MOUNTING DETAIL

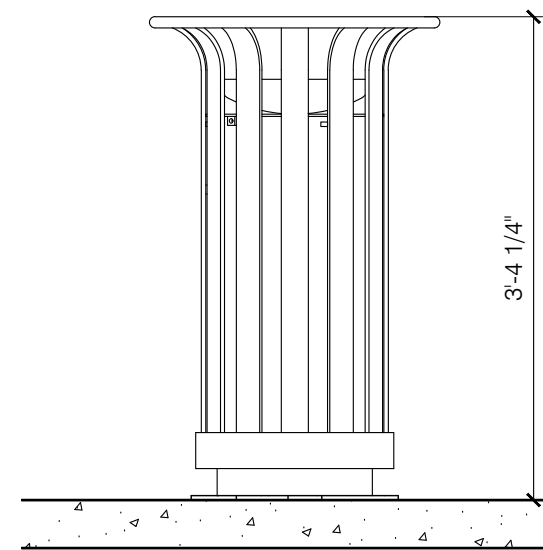
3 TRASH RECEPTICAL

3/4" = 1'-0"

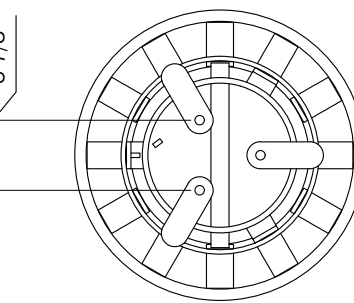


TOP VIEW

- MATERIALS LIST
1. VERTICAL STRAPS - 1/4" X 1 1/2" STEEL FLAT BAR
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 6. ASH INLAY - 13 GA. STAINLESS STEEL ASH INLAY
 7. LID Ø 24" X .075" WALL STEEL LID ATTACHED TO BASKET WITH STAINLESS STEEL AIRLINE CABLE
 8. MOUNTED WITH THREE Ø 1/2" X 4-5" STAINLESS STEEL ANCHOR BOLTS



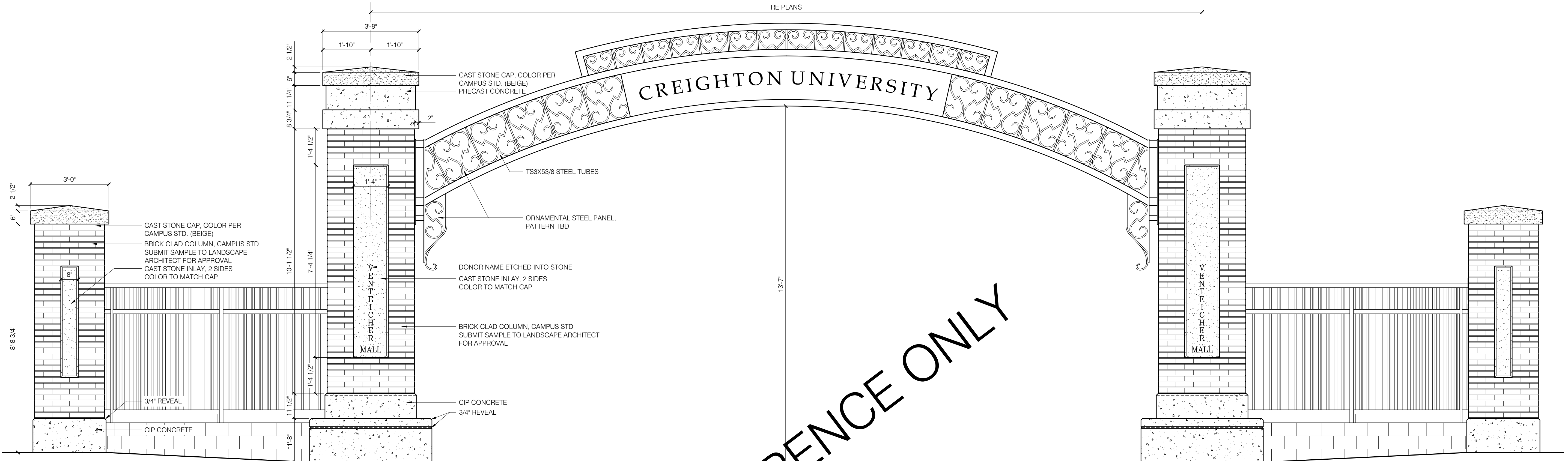
FRONT VIEW



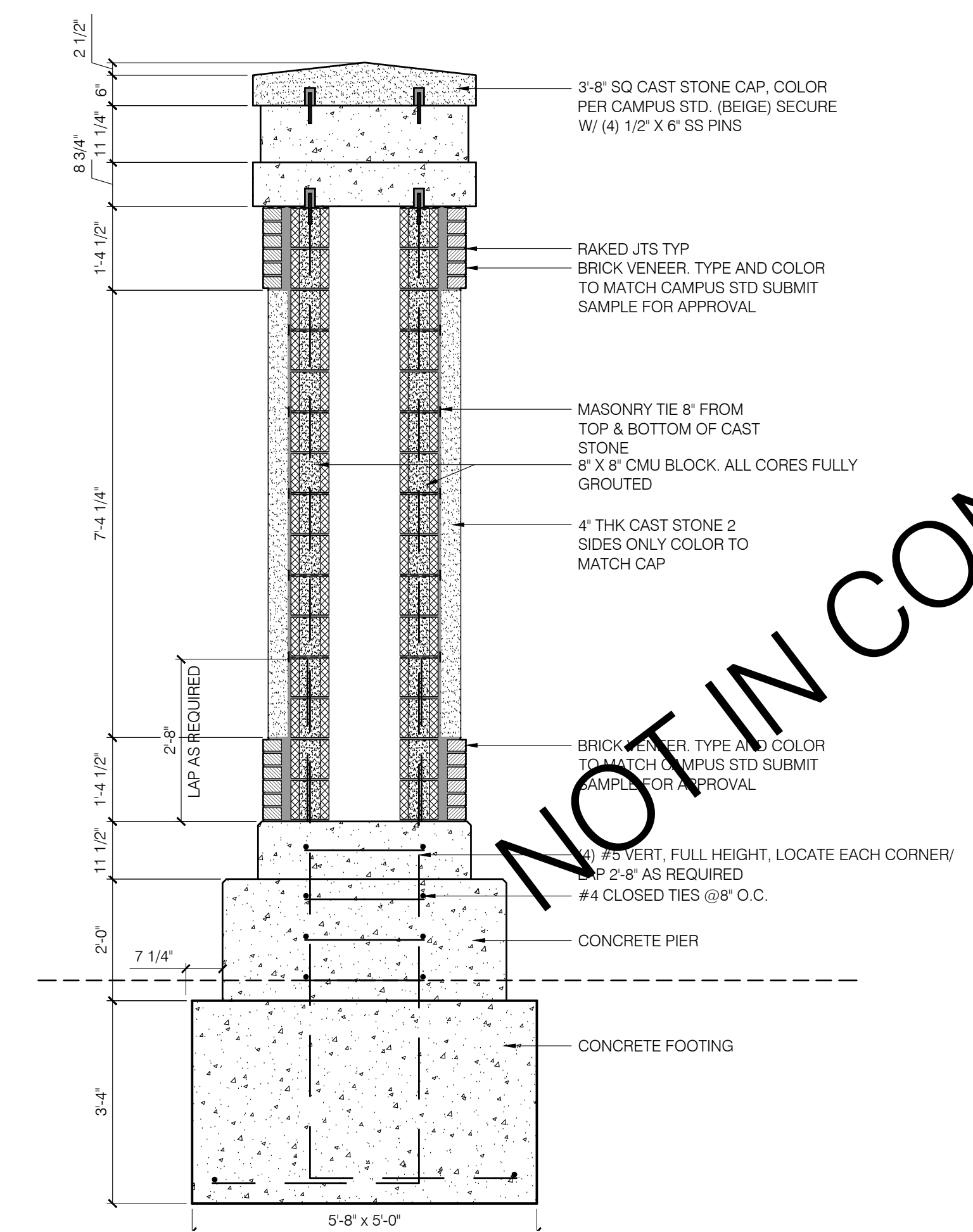
BOTTOM VIEW
MOUNTING DETAIL

4 ASH URN

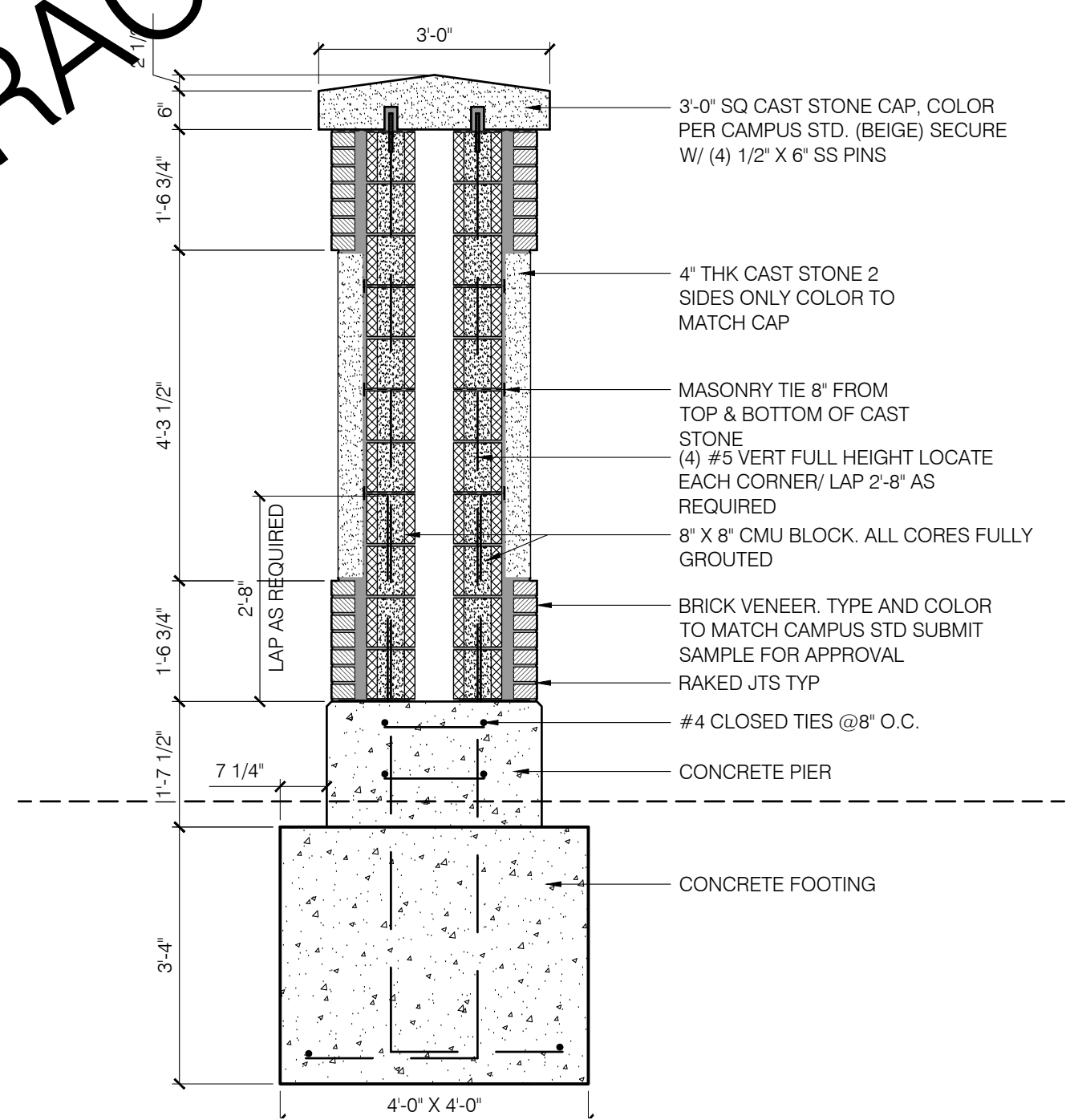
3/4" = 1'-0"



1 ARCHWAY MONUMENT ELEVATION
SCALE: 1/2" = 1'-0"



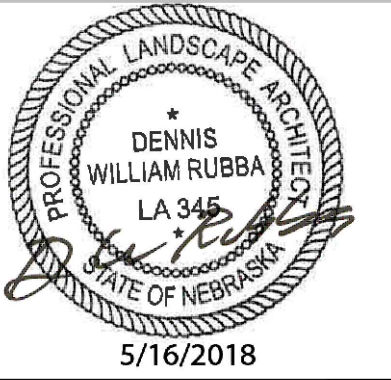
2 ARCHWAY COLUMN (15 FT HEIGHT)
SCALE: 1/2" = 1'-0"



3 ARCHWAY COLUMN (9.5 FT HEIGHT)
SCALE: 1/2" = 1'-0"

NOT IN CONTRACT/FOR REFERENCE ONLY

Date: 2018/05/18
Project Name:
CU PEDESTRIAN
MALL DESIGN
Issued For / Phase:
100%
CONSTRUCTION



Drawn By: KN
Reviewed By: MSS
Revisions:

Date	No.	Remarks

Sheet Name:
ARCHWAY
MONUMENTS
Sheet Number:

L-507

IRRIGATION CONSTRUCTION NOTES

- DRAWINGS AND BASE INFORMATION - ALL BASE AND PLANTING INFORMATION HAVE BEEN PROVIDED BY STUDIO-INSITE. THE CONTRACTOR IS RESPONSIBLE TO NOTIFY HYDROSYSTEMS-KDI OF ANY DISCREPANCIES BETWEEN THE UTILITY OR PLANTING PLANS AND THE IRRIGATION PLAN. IF CONTRACTOR FAILS TO NOTIFY HYDROSYSTEMS-KDI AND MAKES CHANGES TO THE IRRIGATION SYSTEM DESIGN, HE ASSUMES ALL COSTS AND LIABILITIES ASSOCIATED WITH THOSE FIELD CHANGES. REFER TO SPECIFICATIONS FOR ADDITIONAL PROJECT REQUIREMENTS. CONTACT IRRIGATION CONSULTANT FOR CURRENT SPECIFICATIONS IF NOT PROVIDED.
- SYSTEM PRESSURE - HYDROSYSTEMS-KDI HAS CONTACTED THE LOCAL WATER DISTRICT THAT SERVES THIS SITE AND THEY HAVE BEEN TOLD THAT THE STATIC WATER PRESSURE IN THIS AREA SHOULD BE (TBD) PSI. THE CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY PRESSURE PRIOR TO COMMENCING ANY CONSTRUCTION AND NOTIFY HYDROSYSTEMS-KDI OF ANY VARIANCE FROM THE STATED PRESSURE IMMEDIATELY. WRITTEN DOCUMENTATION OF PRESSURE TEST AND RESULTS SHALL BE PROVIDED TO HYDROSYSTEMS-KDI AT CONSTRUCTION ONSET. IF CONTRACTOR FAILS TO FIELD VERIFY PRESSURE AND/OR NOTIFY HYDROSYSTEMS-KDI OF ANY VARIATIONS FROM THIS PRESSURE, THEN HE ASSUMES ALL CONSTRUCTION AND ENGINEERING COSTS ASSOCIATED WITH SYSTEM MODIFICATIONS REQUIRED TO ACCOMMODATE ACTUAL SITE PRESSURE. THIS SYSTEM HAS BEEN DESIGNED FOR A REQUIRED STATIC PRESSURE OF (TBD) PSI MINIMUM.

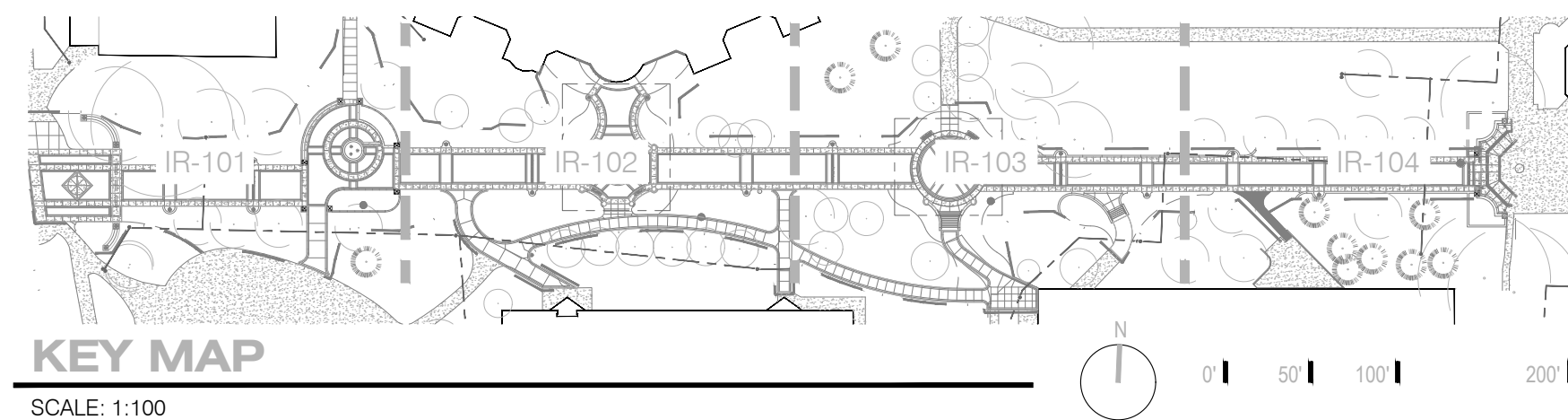
BLUEGRASS TURF	2.03" PER WEEK PEAK SEASON
ORNAMENTAL PLANTINGS	0.83" PER WEEK PEAK SEASON
- IRRIGATION SYSTEM OPERATION INTENT - THIS IRRIGATION SYSTEM HAS BEEN DESIGNED TO IRRIGATE THE ESTABLISHED LANDSCAPE WITHIN A 6 NIGHT PER WEEK, 8 HOUR PER NIGHT WATERING WINDOW. ESTABLISHMENT WATERING WILL REQUIRE UP TO TWICE AS MUCH IRRIGATION FOR A FOUR TO SIX WEEK PERIOD. THE DESIGN IS BASED ON THE FOLLOWING PROJECTED WEEKLY APPLICATION RATES AFTER ESTABLISHMENT. THESE FIGURES ARE BASED ON A 30-YEAR AVERAGE WEATHER DATA AND WILL NEED TO BE ADJUSTED DUE TO SEASONAL CHANGES AND WEATHER CONDITIONS ABOVE AND BELOW THE AVERAGE VALUES UTILIZED.

BLUEGRASS TURF	2.03" PER WEEK PEAK SEASON
ORNAMENTAL PLANTINGS	0.83" PER WEEK PEAK SEASON
- EQUIPMENT INSTALLATION - IT IS THE INTENT OF THIS DESIGN THAT ALL IRRIGATION EQUIPMENT BE INSTALLED WITHIN PROPERTY LIMITS AND WITHIN LANDSCAPED AREAS. ANY EQUIPMENT OTHER THAN VALVE BOXES OR SLEEVING THAT CONTAINS PIPE OR WIRES SHOWN OUTSIDE OF THESE LIMITS IS SHOWN IN THAT LOCATION FOR GRAPHICAL CLARITY ONLY. ALL VALVE BOXES SHALL BE INSTALLED A MINIMUM OF 2'-0" FROM EDGE OF ANY PAVED SURFACES UNLESS SPECIFICALLY INDICATED ON PLANS. BOXES INSTALLED IN OPEN TURF AREAS SHALL BE KEPT TO EDGES AND STAKED FOR REVIEW IF ALONG HIGH TRAFFIC AREAS. ALL VALVE BOXES SHALL BE PLACED A MINIMUM OF 3'-0" FROM THE CENTERLINE OF ANY DRAINAGE SWALE. ALL VALVE BOXES WITHIN PAVEMENT SHALL BE TIER 15 RATED BOXES FOR HEAVY DUTY NON-DELIBERATE TRAFFIC. BOX LID COLOR SHALL MATCH ADJACENT MATERIALS, I.E. GREEN IN TURF, TAN IN WOOD MULCH, GRAY IN STONE MULCH, PURPLE FOR RECLAIMED WATER SYSTEMS (IF REQUIRED). REFER TO LANDSCAPE PLANS FOR MATERIAL COLORS AND TYPES. ALL BOXES SHALL BE INSTALLED TO BE FLUSH WITH GRADE AND IN AN ORDERLY MANNER.
- PIPING INSTALLATION - IRRIGATION PIPING SHALL MAINTAIN A MINIMUM DISTANCE FROM BUILDING FOUNDATIONS OF 5 FEET OR AS DESCRIBED IN SOILS REPORT, WHICHEVER IS GREATER. NO SPRAY IRRIGATION SHALL OCCUR WITHIN 10 FEET OF THE FOUNDATION. NO DRIP IRRIGATION SHALL OCCUR WITHIN 5 FEET OF THE FOUNDATION UNLESS SOIL MOISTURE SENSORS ARE INSTALLED ON VALVES SERVICING THESE AREAS. ALL IRRIGATION PIPING AND EMISSION DEVICES LOCATED ON TOP OF OR WITHIN BUILDING STRUCTURE SHALL CONFORM TO WATERPROOFING CONSULTANT REQUIREMENTS. PIPE ROUTING MAY BE SHOWN WITHIN THESE DISTANCES FOR GRAPHICAL CLARITY ONLY.
- POP-UP SPRAY NOZZLES - CONTRACTOR TO INSTALL PLASTIC NOZZLES ON ALL POP-UP SPRAY HEADS. INSTALL 15 SERIES NOZZLES ON ALL HEADS SPACED AT 12' TO 14'. INSTALL 12 SERIES NOZZLES ON ALL HEADS SPACED 10' TO 11'. INSTALL 10 SERIES NOZZLES ON ALL HEADS SPACED AT 8' TO 9'. INSTALL 8 SERIES NOZZLES ON ALL HEADS SPACED AT 6' TO 7'. INSTALL 5' NOZZLES ON ALL HEADS SPACED AT 5'. INSTALL SIDE STRIP NOZZLES ON ALL HEADS WITH AN "S" DESIGNATION AND RIGHT AND LEFT CORNER STRIP NOZZLES ON ALL HEADS WITH AN "L" OR "R" DESIGNATION. VARIABLE ARC NOZZLES SHOULD BE UTILIZED ADJACENT TO CURVILINEAR SHRUB BEDS OR FOR ANY ANGLES THAT ARE NOT A STANDARD NOZZLE ANGLE. WHERE INDICATE.
- DRIP IRRIGATION - REFER TO IRRIGATION DETAIL SHEET FOR DRIP EMITTER QUANTITIES AND PLACEMENT.
- UNLABELED PIPING - ALL UNLABELED LATERAL PIPING SHALL BE 1" MINIMUM UNLESS OTHERWISE NOTED.
- SLEEVING - ALL SLEEVING UNDER PAVED SURFACES SHOWN ON PLANS IS BY CONTRACTOR UNLESS OTHERWISE NOTED. SLEEVING SHALL BE INSTALLED IN THE SIZES AND QUANTITIES SHOWN ON PLANS OR BASED ON THE SCHEDULE BELOW. WHERE SLEEVES ARE SHOWN, BUT NOT LABELED, FOLLOW THE SCHEDULE BELOW. ALL MAINLINE, CONTROL WIRES AND DRIP LINES UNDER PAVED SURFACES ARE TO BE INSTALLED IN SLEEVING. ALL MAINLINE SLEEVE LOCATIONS TO INCLUDE A SEPARATE WIRE SLEEVE.

SLEEVED PIPE SIZE/WIRE QUANTITY	REQUIRED SLEEVE SIZE & (QUANTITY)
3/4" - 1 1/4" PIPING	2" PVC (1)
1 1/2" - 2" PIPING	4" PVC (1)
2 1/2" - 3" PIPING	6" PVC (1)
1-25 CONTROL WIRES	2" PVC (1)
- SPARE CONTROL WIRES - CONTRACTOR SHALL EXTEND SPARE WIRES (ONE COMMON AND 2 CONTROL WIRES) FROM EACH CONTROLLER TO THE END OF THE MAINLINE SERVING THAT CONTROLLER OR AS SHOWN ON THE PLANS. INSTALL SPARE WIRES IN 10' ROUND VALVE BOX WITH QUICK COUPLING VALVE. REFER TO SPECIFICATIONS FOR WIRE COLOR. SEE IRRIGATION SCHEDULE FOR ADDITIONAL INFORMATION.
- ADJUSTMENT - CONTRACTOR SHALL FINE TUNE/ADJUST THE IRRIGATION SYSTEM TO REDUCE/AVOID OVERSPRAY ONTO HARD SURFACES BY ADJUSTING NOZZLE DIRECTION AND NOZZLE RADIUS.
- PLANS AND SPECIFICATIONS - CONTRACTOR RESPONSIBLE TO ENSURE WORK CONFORMS TO PLANS AND SPECIFICATIONS. AT ONSET OF CONSTRUCTION, VERIFY PLANS ARE CURRENT. WHERE REQUIRED BY CITY OR TOWN, CONTRACTOR SHALL CONSTRUCT ONLY OFF CITY OR TOWN STAMPED PLANS. REVISIONS TO CITY OR TOWN STAMPED PLANS SHALL CONFORM TO CITY OR TOWN FIELD CHANGE PROCEDURES AND DOCUMENTATION.
- EXISTING IRRIGATION DAMAGE - CONTRACTOR SHALL REPAIR OR REPLACE ANY EXISTING IRRIGATION SYSTEMS DAMAGED DURING NEW INSTALLATION. REPAIR OR REPLACEMENT SHALL BE DETERMINED BY OWNER OR OWNER'S REPRESENTATIVE AND PAID FOR BY THE LANDSCAPE CONTRACTOR.
- EXISTING IRRIGATION COORDINATION - EXISTING IRRIGATION SYSTEM SHALL NOT BE TURNED OFF FOR MORE THAN 24 HOURS MAXIMUM. CONTRACTOR SHALL COORDINATE TURN OFF OF SYSTEM WITH OWNER OR MAINTENANCE STAFF 12 HOURS PRIOR TO ANY NEW CONSTRUCTION.
- SIMULTANEOUS ZONE OPERATION - THIS IRRIGATION SYSTEM HAS BEEN DESIGNED TO OPERATE MULTIPLE ZONES SIMULTANEOUSLY BASED ON INDIVIDUAL ZONE FLOW. THE DESIGN IS INTENDED TO OPERATE MULTIPLE VALVES, UP TO THE MAXIMUM FLOW IN THE POINT OF CONNECTION NOTE. REFER TO CONTROLLER SPECIFICATION FOR MAXIMUM SIMULTANEOUS VALVE COUNT.
- DEMO NOTE - ALL IRRIGATION PIPING AND FITTINGS WILL BE ABANDONED IN PLACE, UNLESS THEY ARE EXCAVATED WITH NEW GRADING AND WILL BE THE CONTRACTOR'S RESPONSIBILITY TO REMOVE AND DISPOSE OF. THERE MAY BE MULTIPLE PIPES UNDERGROUND, FROM OLD SPRINKLER SYSTEM, IN ADDITION TO THE CURRENT SYSTEM PIPING, CONTRACTOR WILL BE RESPONSIBLE TO REMOVE ALL PIPING THAT IS EXPOSED DURING NEW CONSTRUCTION.

REFER TO SHEET

- IR-1 IRRIGATION NOTES
- IR-1 IRRIGATION SCHEDULE
- IR-2 IRRIGATION DEMO PLAN
- IR-3 & IR-4 IRRIGATION PLAN
- IR-1 & IR-5 IRRIGATION DETAILS



IRRIGATION SCHEDULE				
SYMBOL	MANUFACTURER	MODEL NO.	DESCRIPTION	DETAIL NO.
	RAIN BIRD	1806-SAM-PRS WITH MFR SERIES NOZZLE	POPUF SPRAY HEAD	11
	RAIN BIRD	1806-SAM-PRS WITH SST, CORNER NOZZLE	POPUF SPRAY HEAD	11
	RAIN BIRD	5006PCSAMRNP WITH #NOZ	GEAR DRIVEN ROTOR	12
	RAIN BIRD	5006PCSAMRNP WITH #NOZ	GEAR DRIVEN ROTOR	12
	RAIN BIRD	5006PCSAMRNP WITH #NOZ	GEAR DRIVEN ROTOR	12
	RAIN BIRD	5006PCSAMRNP WITH #NOZ	GEAR DRIVEN ROTOR	12
	RAIN BIRD	5006PCSAMRNP WITH #NOZ	GEAR DRIVEN ROTOR	12
	HUNTER	I-25-SS WITH #NOZZLE	GEAR DRIVEN ROTOR	13
	HUNTER	I-25-SS WITH #NOZZLE	GEAR DRIVEN ROTOR	13
	HUNTER	ICV-FS	ELECTRIC CONTROL VALVE	10
	HUNTER	HQ-93-DRG	QUICK COUPLING VALVE	9
			ELECTRIC CONTROLLER (EXISTING)	1 & 2
N/S	CARSON	REFER TO SPECIFICATIONS AND DETAILS	VALVE BOXES	N/S
	LEGEND	T-400NL - 2 1/2" AND SMALLER	GATE VALVE	7
	LEEMCO	LINE SIZE - 4" AND SMALLER	GASKET GATE VALVE W/ RESTRAINTS	8
N/S	LEEMCO		MECHANICAL JOINT RESTRAINTS	5
		CLASS 200 RT - 3" & LARGER	PVC MAINLINE	4
		CLASS 200 BE	PVC LATERAL	4
		CLASS 160 BE	PVC SLEEVING	6
			WIRE SPLICE BOX	3
	TORO	BLUE STRIPE	POLY DRIP TUBING - 3/4" MIN. WIDTH	16
	RAIN BIRD	XGZ-100-PRF	DRIP VALVE ASSEMBLY	14
			DRIP LINE BLOW-OUT STUB	16
N/S	RAIN BIRD	XERI-BUG	DRIP EMITTERS	15
			(EXISTING) CONTROLLER	
			(EXISTING) ISOLATION GATE VALVE	
			(EXISTING) CONTROL VALVE	
			(EXISTING) ROTOR	
			(EXISTING) MAINLINE	
			(EXISTING) LATERAL LINE	
			(EXISTING) SLEEVES	
			CONTROLLER & STATION NO.	
			CONTROL VALVE SIZE	
			NUMBER OF SPARE WIRES - 2 CONTROL AND 1 SPARE WIRES TO WHICH CONTROLLER - SEE CONSTRUCTION NOTES	

LATERAL PIPE SIZING GUIDE	
PIPE SIZE (IN)	CLASS 200 PVC FLOW RATE (GPM)
1"	9-16
1 1/4"	17-24
1 1/2"	25-36
2"	37-55
2 1/2"	56-85
3"	86-120

IMPORTANT DEMO NOTE

ALL IRRIGATION PIPING AND FITTINGS WILL BE ABANDONED IN PLACE, UNLESS THEY ARE EXCAVATED WITH NEW GRADING AND WILL BE THE CONTRACTOR'S RESPONSIBILITY TO REMOVE AND DISPOSE OF.

THERE MAY BE MULTIPLE PIPES UNDERGROUND, FROM OLD SPRINKLER SYSTEM, IN ADDITION TO THE CURRENT SYSTEM PIPING. CONTRACTOR WILL BE RESPONSIBLE TO REMOVE ALL PIPING THAT IS EXPOSED DURING NEW CONSTRUCTION.

EXISTING IRRIGATION DAMAGE - CONTRACTOR SHALL REPAIR OR REPLACE ANY EXISTING IRRIGATION SYSTEMS DAMAGED DURING NEW INSTALLATION. REPAIR OR REPLACEMENT SHALL BE DETERMINED BY OWNER OR OWNER'S REPRESENTATIVE AND PAID FOR BY THE LANDSCAPE CONTRACTOR.



Omaha Metro - Creighton University Multi-Modal Facility
 (Metro 2017 IDIQ - Work Order #3)
 Creighton University Campus, Omaha, Neb
 90% CONST. DOCUMENTS



Date: 2018/05/18

Project Name:
CU PEDESTRIAN MALL DESIGN

Issued For / Phase:
100% CONSTRUCTION

Drawn By: **KJD**
Reviewed By: **JSB**

Revisions:

Date	No.	Remarks

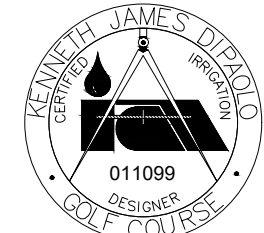
Sheet Name:
IRRIGATION NOTES & SCHEDULE

Sheet Number:

IR-100



CALL 3 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.



HydroSystems-KDI, Inc. Irrigation Consulting

860 Tabor Street, Suite 200
Lakewood, Colorado 80401
303-980-5322
303-980-5384 (fax)

N 24TH STREET

23RD STREET PARKING

CREIGHTON UNIVERSITY PARKING LOT



Know what's below.
Call before you dig.
CALL 3 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG.
GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES.



Omaha Metro-Creighton
University Multi-Modal
Facility
(Metro 2017 IDIQ -
Work Order #3)
Creighton University Campus, Omaha, Neb
90% CONST. DOCUMENTS

IRRIGATION DEVELOPMENT DESIGN NOTES

- THE MAINLINE SYSTEM WILL BE DESIGNED SUCH THAT VELOCITIES WITHIN THE MAINLINE PIPING DO NOT EXCEED FIVE FEET PER SECOND.
- THE MAXIMUM FLOW RATE REQUIRED FOR THE SITE IS (TBD) GPM. THE STATIC PRESSURE AVAILABLE AT THE SITE IS (TBD) PSI.
- THE IRRIGATION INFORMATION SHOWN ON THESE PLANS IS CONCEPTUAL.
- IRRIGATION DESIGN APPROACH
 - TURF AREAS
 - SMALL AREAS (25 FEET WIDE OR LESS) SHALL BE IRRIGATED WITH FIXED NOZZLE POP-UP SPRAY HEADS WITH MATCHED PRECIPITATION NOZZLES. NOZZLES SHALL BE SIZES TO PROVIDE HEAD TO HEAD COVERAGE.
 - LARGE TURF AREAS (WIDER THAN 25 FEET) SHALL BE IRRIGATED WITH GEAR DRIVEN ROTOR HEADS WITH A MINIMUM PRECIPITATION RATE OF .45" PER HOUR FOR A FULL CIRCLE HEAD.
 - SHRUB BED AREAS - BED AREAS WITH PLANT MATERIAL ONE GALLON IN SIZE OR LARGER SHALL BE DRIP IRRIGATED.
 - PERENNIAL AND ANNUAL BED AREAS - PERENNIAL AND ANNUAL BED AREAS SHALL BE SPRAY IRRIGATED WITH 12" POP-UP SPRAY HEADS WITH A MAXIMUM SPACING OF 10' O.C. OR IN AREAS ARE LESS THAN 10 FT. WIDE SHALL BE IRRIGATED WITH SUBSURFACE IRRIGATION.
- IRRIGATION SYSTEM SHALL BE FULLY AUTOMATIC AND INCLUDE A WEATHER SENSING DEVICE.



11422 Miracle Hills Drive
Omaha, Nebraska 68154
402-778-5025

IRRIGATION DEMO KEY NOTES

- CONTROL VALVES AND MAINLINE PIPING
 - ALL EXISTING MAINLINE PIPING IN DEMO AREA, TO BE ABANDONED IN PLACE, UNLESS IT IS EXCAVATED WITH NEW GRADING AND THEN IT WILL BE THE CONTRACTORS RESPONSIBILITY TO REMOVE AND DISPOSE OF ALL EXPOSED PIPING.
 - FIELD LOCATE AND PROTECT EXISTING MAINLINE AND WIRES AT THIS APPROXIMATE LOCATION, TO REMAIN OPERATIONAL DURING CONSTRUCTION.
 - FIELD LOCATE AND REMOVE EXISTING CONTROL VALVES AND VALVE BOXES AT THIS APPROXIMATE LOCATION. RETURN TO COLLEGE MAINTENANCE STAFF.
- VALVE CONTROL WIRE
 - ALL EXISTING WIRES WILL BE ABANDONED IN PLACE, UNLESS THEY ARE EXCAVATED WITH NEW GRADING AND THEN IT WILL BE THE CONTRACTORS RESPONSIBILITY TO REMOVE AND DISPOSE OF.
- HEADS AND LATERAL PIPING
 - FIELD LOCATE AND REMOVE EXISTING ROTOR HEADS WITHIN DEMO AREA, RETURN TO COLLEGE MAINTENANCE STAFF. ALL EXISTING LATERAL LINES WILL BE ABANDONED IN PLACE, UNLESS THEY ARE EXCAVATED WITH NEW GRADING AND THEN IT WILL BE THE CONTRACTORS RESPONSIBILITY TO REMOVE AND DISPOSE OF.

Date: 2018/05/18

Project Name:
**CU PEDESTRIAN
MALL DESIGN**
Issued For / Phase:
**100%
CONSTRUCTION**

Drawn By: KJD
Reviewed By: JSB
Revisions:

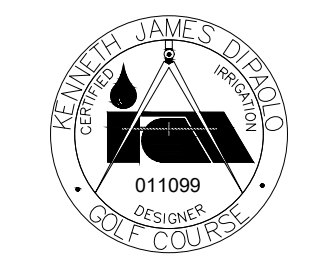
Date	No.	Remarks

Sheet Name:
**IRRIGATION
PLAN**
Sheet Number:

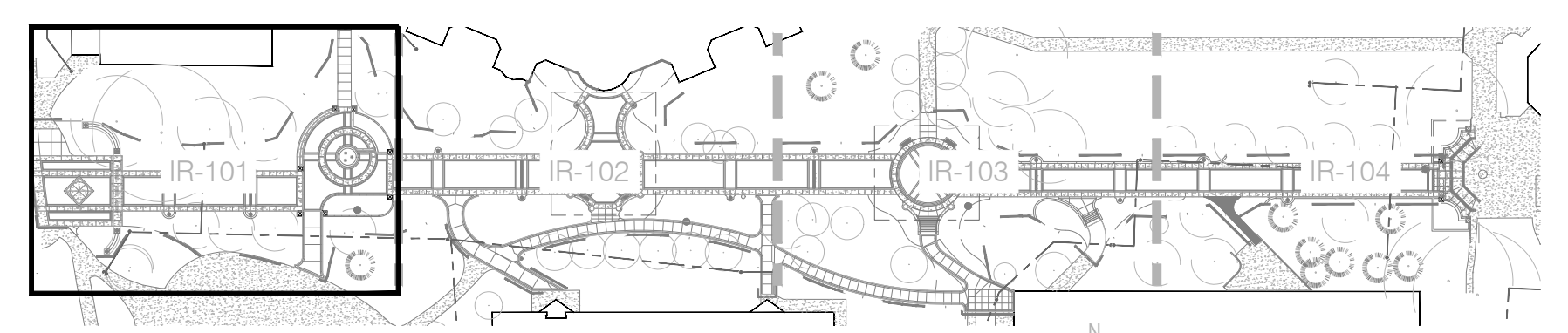
IR-101

1 LAYOUT PLAN SCALE: 1" = 10'-0"

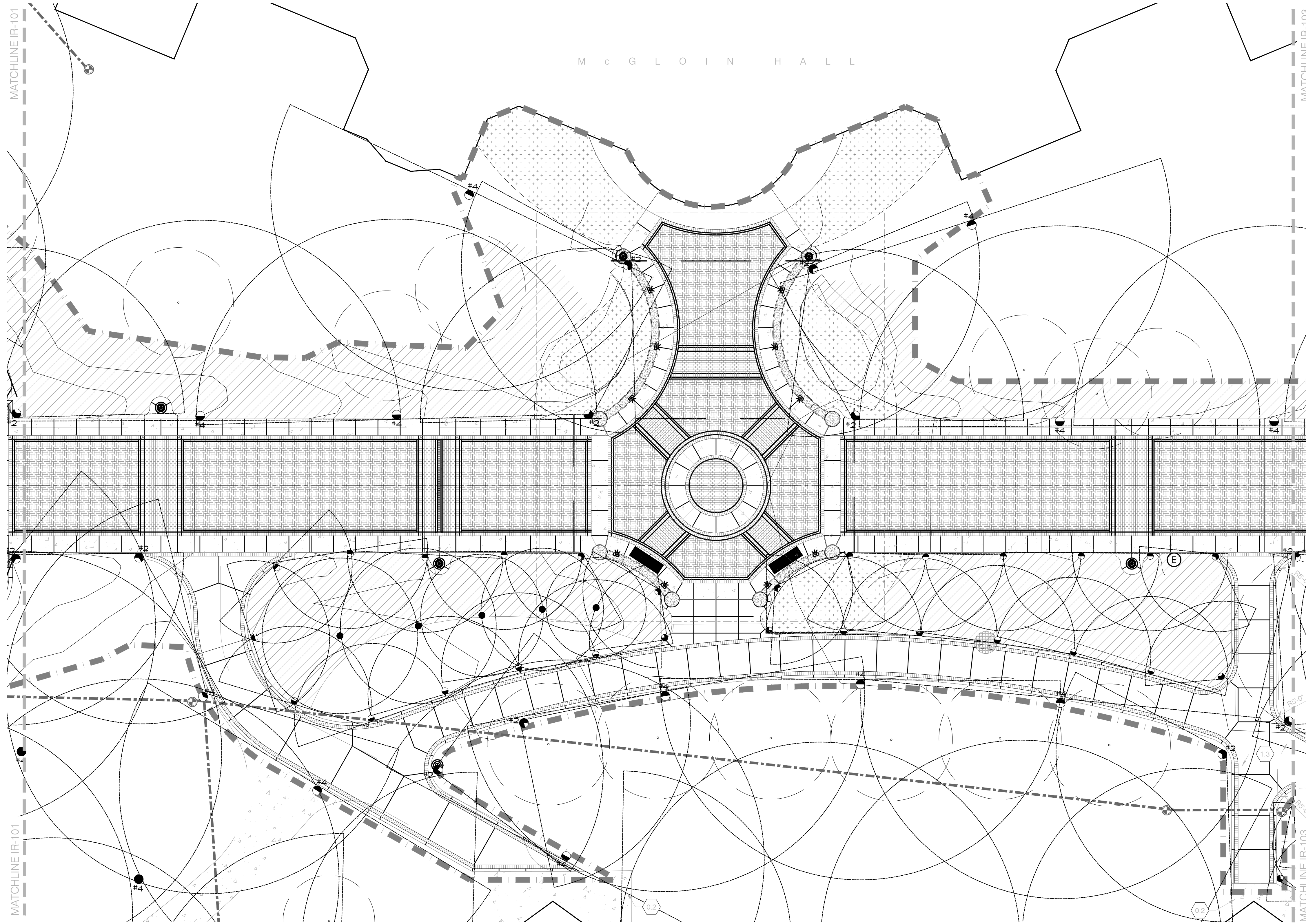
- REFER TO SHEET
- IR-1 IRRIGATION NOTES
 - IR-1 IRRIGATION SCHEDULE
 - IR-2 IRRIGATION DEMO PLAN
 - IR-3 & IR-4 IRRIGATION PLAN
 - IR-1 & IR-5 IRRIGATION DETAILS



HydroSystems-KDI, Inc.
860 Tabor Street, Suite 200
Lakewood, Colorado 80401
303-980-5327
303-980-5384 (fax)

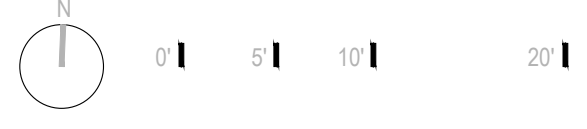


KEY MAP
SCALE: 1:100



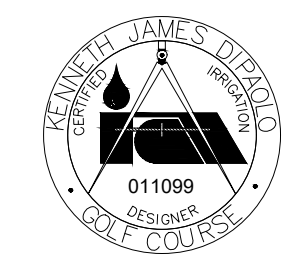
1 LAYOUT PLAN

SCALE: 1" = 10'-0"

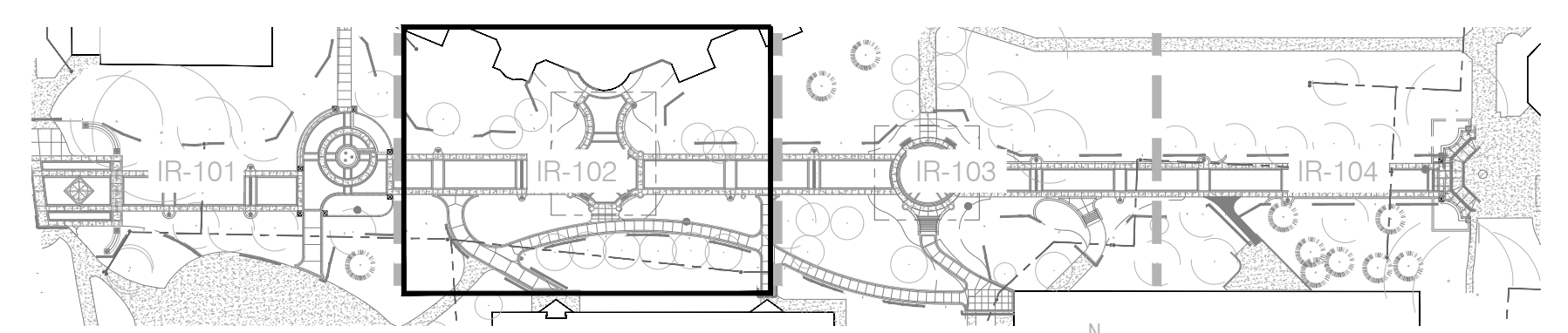


REFER TO SHEET

- IR-1 IRRIGATION NOTES
- IR-1 IRRIGATION SCHEDULE
- IR-2 IRRIGATION DEMO PLAN
- IR-3 & IR-4 IRRIGATION PLAN
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KEY MAP

SCALE: 1:100



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 GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

IRRIGATION DEVELOPMENT DESIGN NOTES

1. THE MAINLINE SYSTEM WILL BE DESIGNED SUCH THAT VELOCITIES WITHIN THE MAINLINE PIPING DO NOT EXCEED FIVE FEET PER SECOND.
2. THE MAXIMUM FLOW RATE REQUIRED FOR THE SITE IS (TBD) GPM. THE STATIC PRESSURE AVAILABLE AT THE SITE IS (TBD) PSI.
3. THE IRRIGATION INFORMATION SHOWN ON THESE PLANS IS CONCEPTUAL.
4. IRRIGATION DESIGN APPROACH
 - 4.1. TURF AREAS
 - 4.1.1. SMALL AREAS (25 FEET WIDE OR LESS) SHALL BE IRRIGATED WITH FIXED NOZZLE POP-UP SPRAY HEADS WITH MATCHED PRECIPITATION NOZZLES. NOZZLES SHALL BE SIZES TO PROVIDE HEAD TO HEAD COVERAGE.
 - 4.1.2. LARGE TURF AREAS (WIDER THAN 25 FEET) SHALL BE IRRIGATED WITH GEAR DRIVEN ROTOR HEADS WITH A MINIMUM PRECIPITATION RATE OF .45" PER HOUR FOR A FULL CIRCLE HEAD.
 - 4.2. SHRUB BED AREAS - BED AREAS WITH PLANT MATERIAL ONE GALLON IN SIZE OR LARGER SHALL BE DRIP IRRIGATED.
 - 4.3. PERENNIAL AND ANNUAL BED AREAS - PERENNIAL AND ANNUAL BED AREAS SHALL BE SPRAY IRRIGATED WITH 12" POP-UP SPRAY HEADS WITH A MAXIMUM SPACING OF 10' O.C. OR IN AREAS ARE LESS THAN 10 FT. WIDE SHALL BE IRRIGATED WITH SUBSURFACE IRRIGATION.
5. IRRIGATION SYSTEM SHALL BE FULLY AUTOMATIC AND INCLUDE A WEATHER SENSING DEVICE.

IRRIGATION DEMO KEY NOTES

- 1.0 CONTROL VALVES AND MAINLINE PIPING
 - 1.1 ALL EXISTING MAINLINE PIPING IN DEMO AREA, TO BE ABANDONED IN PLACE, UNLESS IT IS EXCAVATED WITH NEW GRADING AND THEN IT WILL BE THE CONTRACTORS RESPONSIBILITY TO REMOVE AND DISPOSE OF ALL EXPOSED PIPING.
 - 1.2 FIELD LOCATE AND PROTECT EXISTING MAINLINE AND WIRES AT THIS APPROXIMATE LOCATION, TO REMAIN OPERATIONAL DURING CONSTRUCTION.
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 - 2.1 ALL EXISTING WIRES WILL BE ABANDONED IN PLACE, UNLESS THEY ARE EXCAVATED WITH NEW GRADING AND THEN IT WILL BE THE CONTRACTORS RESPONSIBILITY TO REMOVE AND DISPOSE OF.
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 - 3.1 FIELD LOCATE AND REMOVE EXISTING ROTOR HEADS WITHIN DEMO AREA, RETURN TO COLLEGE MAINTENANCE STAFF. ALL EXISTING LATERAL LINES WILL BE ABANDONED IN PLACE, UNLESS THEY ARE EXCAVATED WITH NEW GRADING AND THEN IT WILL BE THE CONTRACTORS RESPONSIBILITY TO REMOVE AND DISPOSE OF.



Omaha Metro-Creighton University Multi-Modal Facility
 (Metro 2017 IDIQ - Work Order #3)
 Creighton University Campus, Omaha, Neb
 90% CONST. DOCUMENTS



11422 Miracle Hills Drive
 Omaha, Nebraska 68154
 402-778-5025

Date: 2018/05/18

Project Name:
CU PEDESTRIAN MALL DESIGN
 Issued For / Phase:
100% CONSTRUCTION

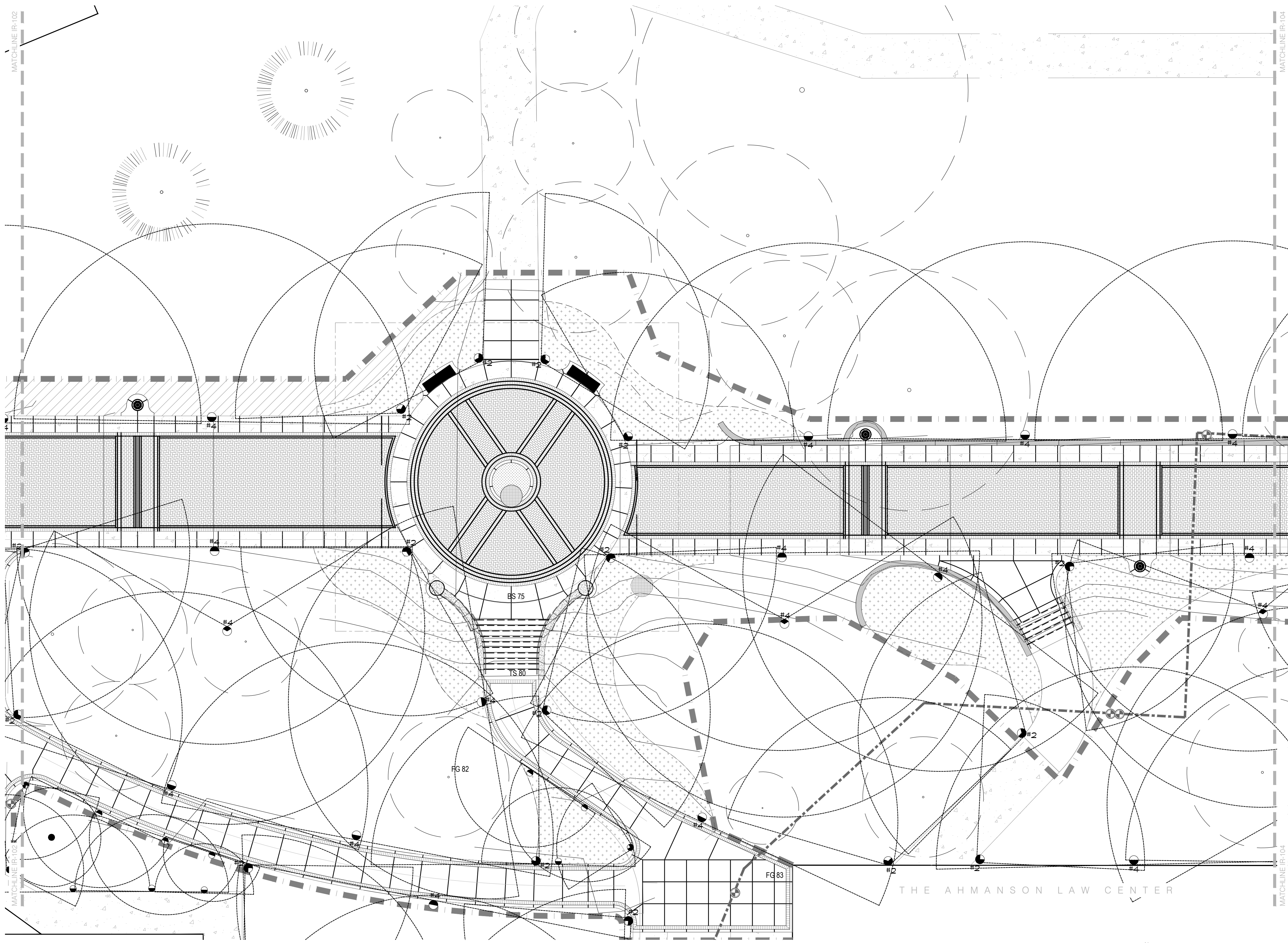
Drawn By: KJD
 Reviewed By: JSB

Revisions:

Date	No.	Remarks

Sheet Name:
 IRRIGATION PLAN
 Sheet Number:

IR-102



1 LAYOUT PLAN
SCALE: 1" = 10'-0"

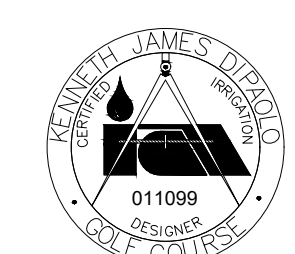
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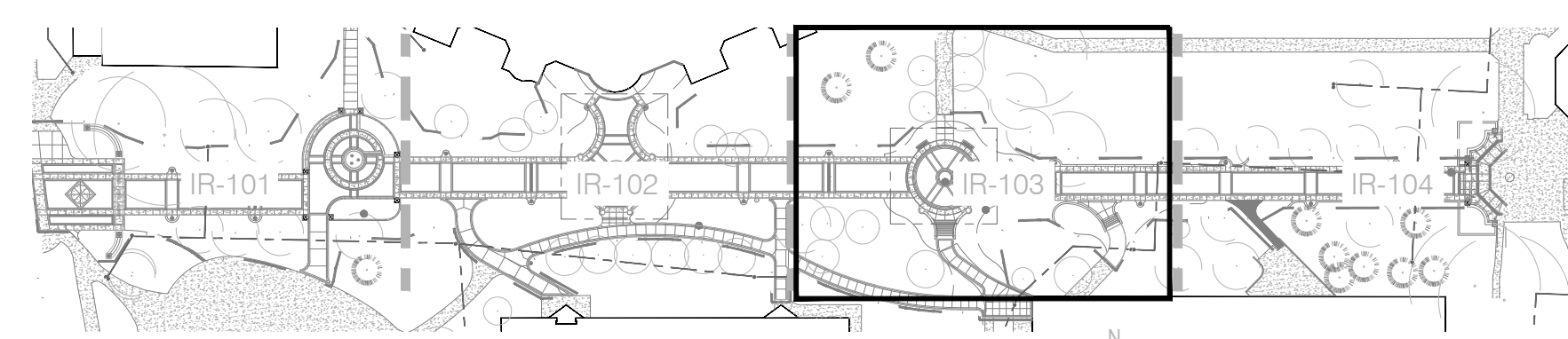
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KEY MAP
SCALE: 1:100



CALL 3 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG. GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.



Omaha Metro-Creighton University Multi-Modal Facility
(Metro 2017 IDIQ - Work Order #3)
Creighton University Campus, Omaha, Neb
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402-778-5025

Date: 2018/05/18
Project Name: CU PEDESTRIAN MALL DESIGN
Issued For / Phase: 100% CONSTRUCTION

Drawn By: KJD
Reviewed By: JSB

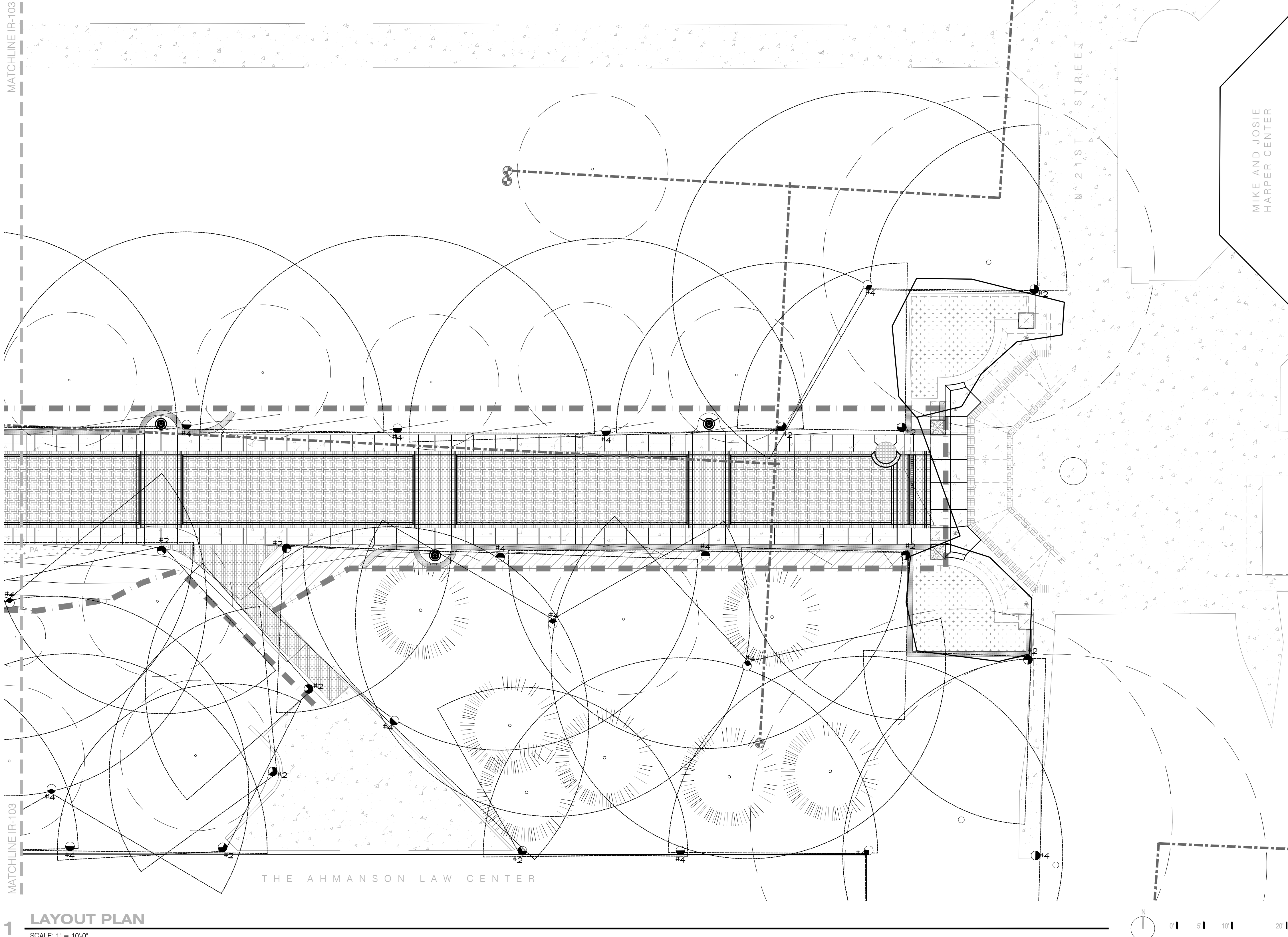
Revisions:

Date	No.	Remarks

Sheet Name: IRRIGATION PLAN
Sheet Number:

IR-103

MATCHLINE IR-103



1 LAYOUT PLAN
SCALE: 1" = 10'-0"



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Facility
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IRRIGATION DEMO KEY NOTES

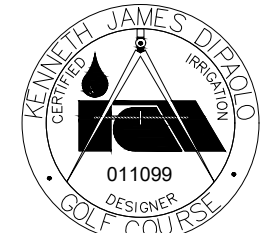
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Date: 2018/05/18
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**CU PEDESTRIAN
MALL DESIGN**
Issued For / Phase:
**100%
CONSTRUCTION**

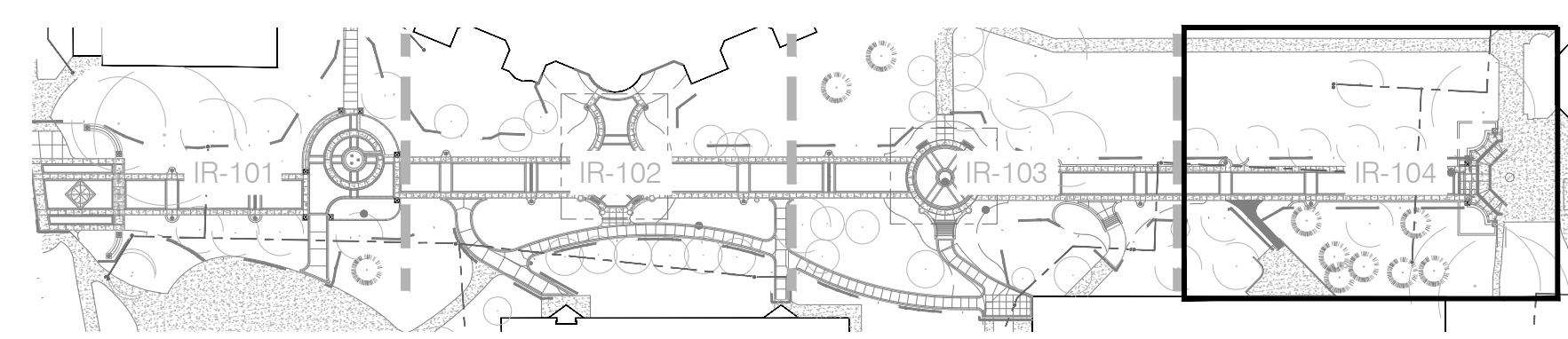
Drawn By: KJD
Reviewed By: JSB
Revisions:

Date	No.	Remarks

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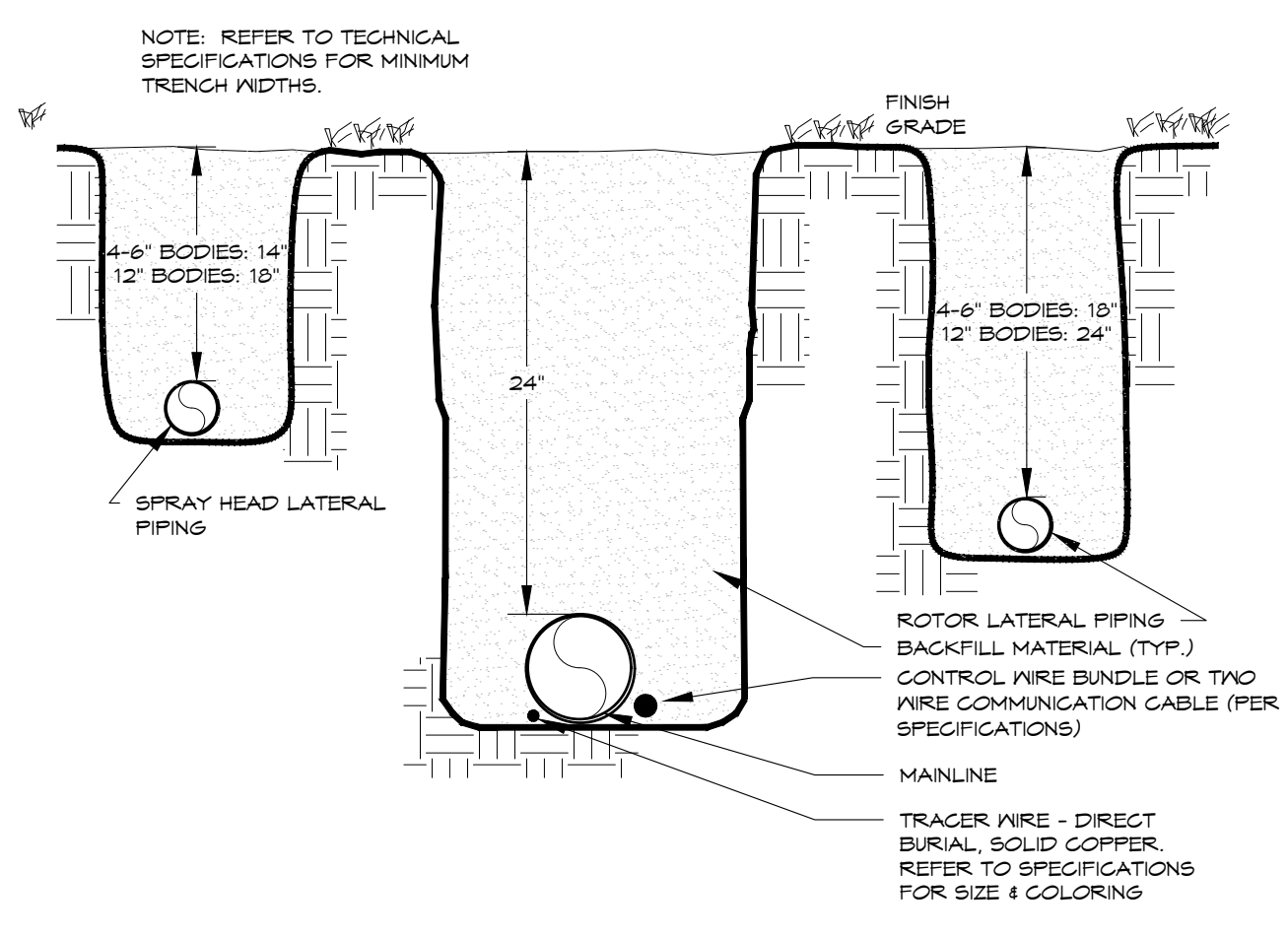
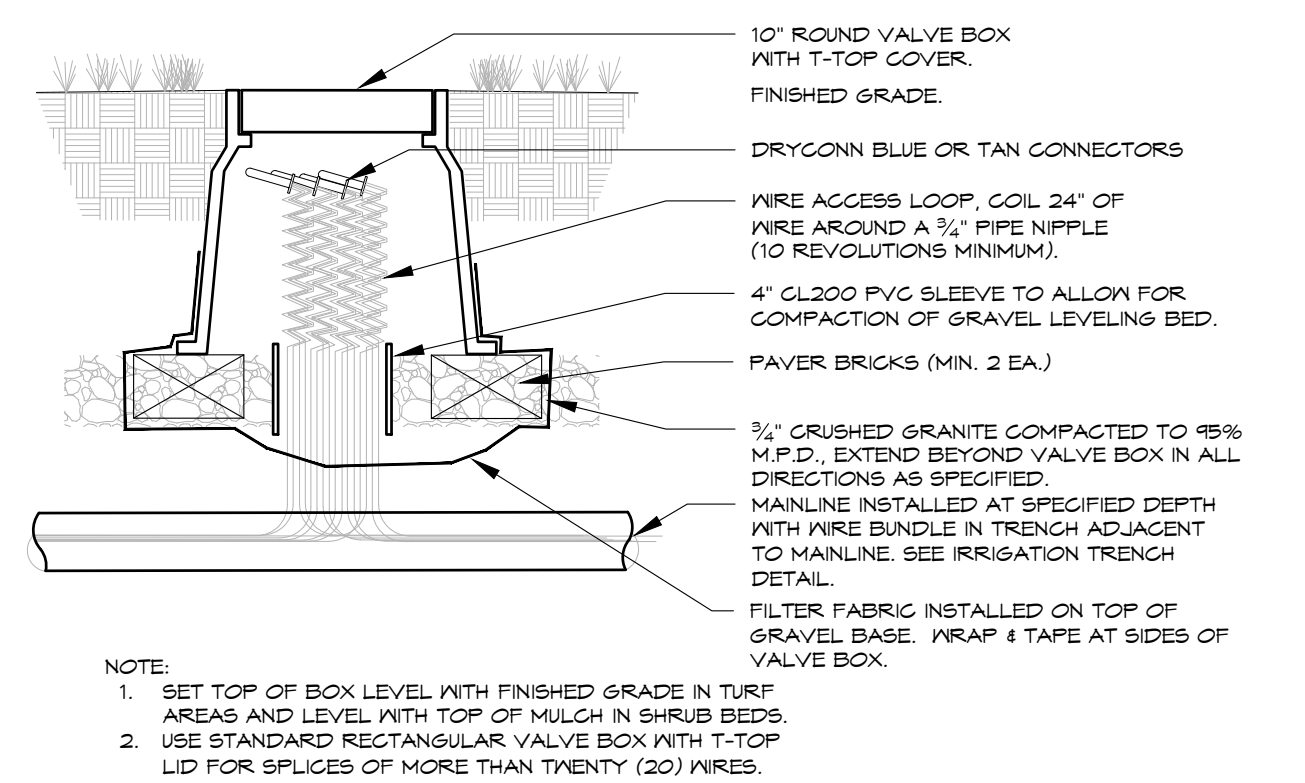
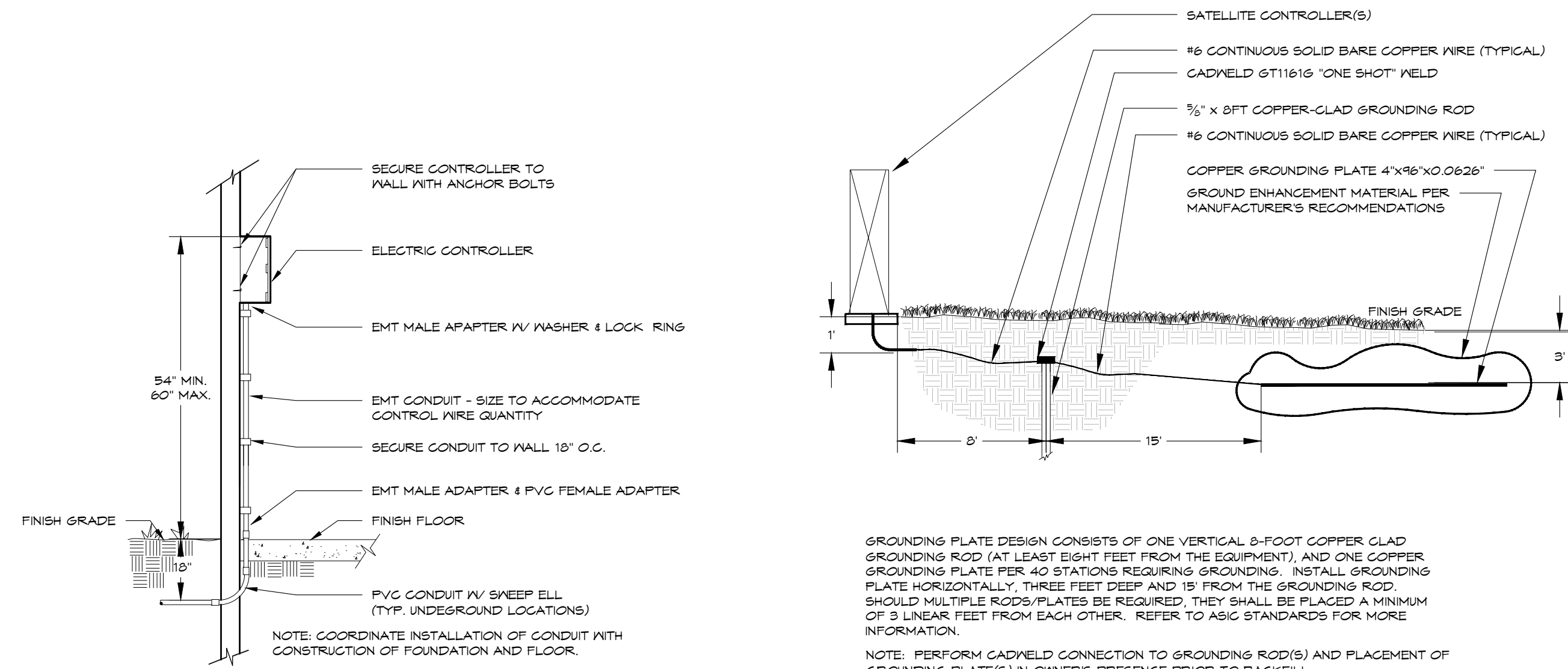


KEY MAP
SCALE: 1:100

Sheet Name:
**IRRIGATION
PLAN**
Sheet Number:

IR-104

Date	No.	Remarks

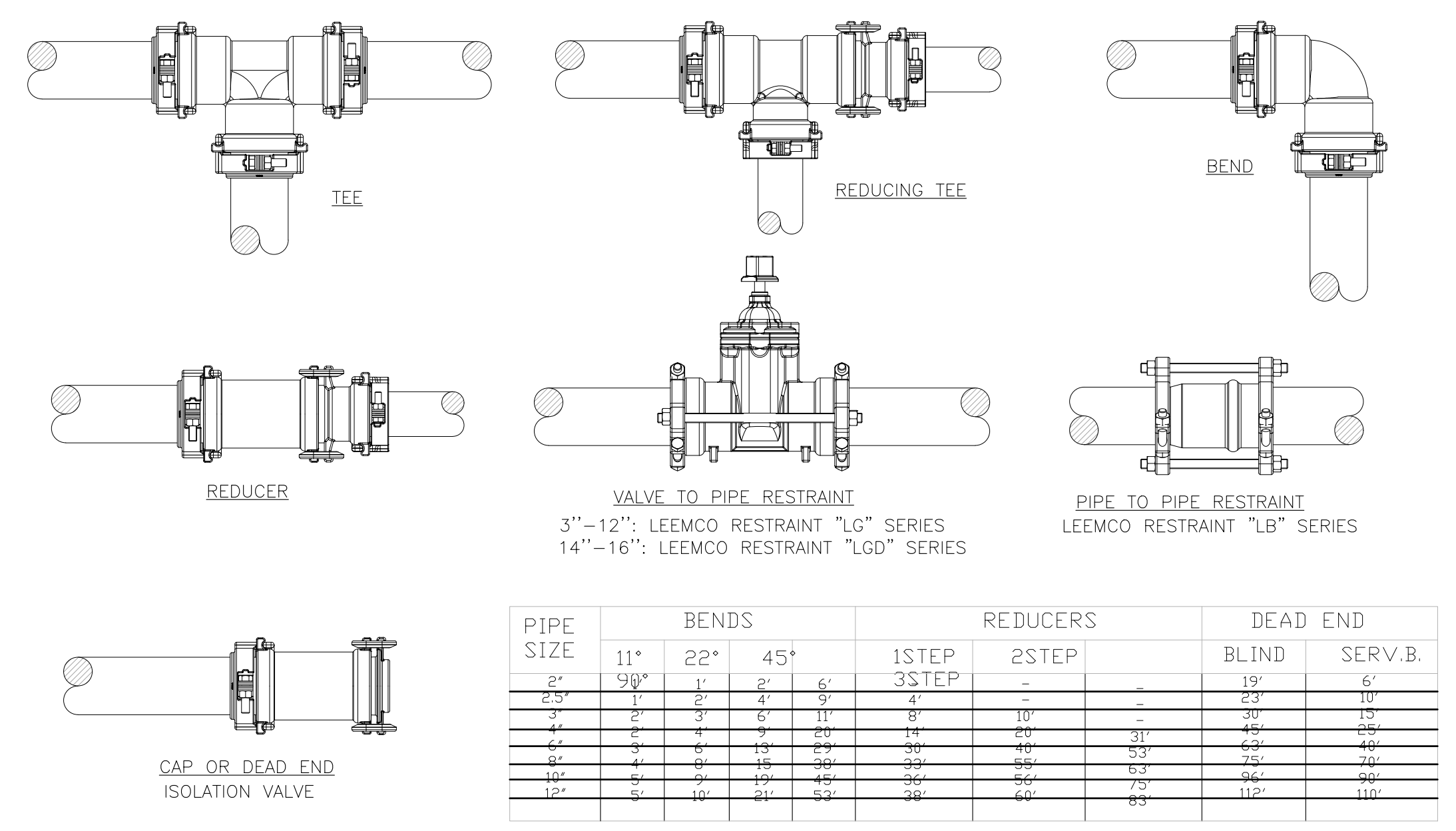


**ELECTRIC CONTROLLER
INTERIOR WALL MOUNT** 1

CONTROLLER GROUNDING 2

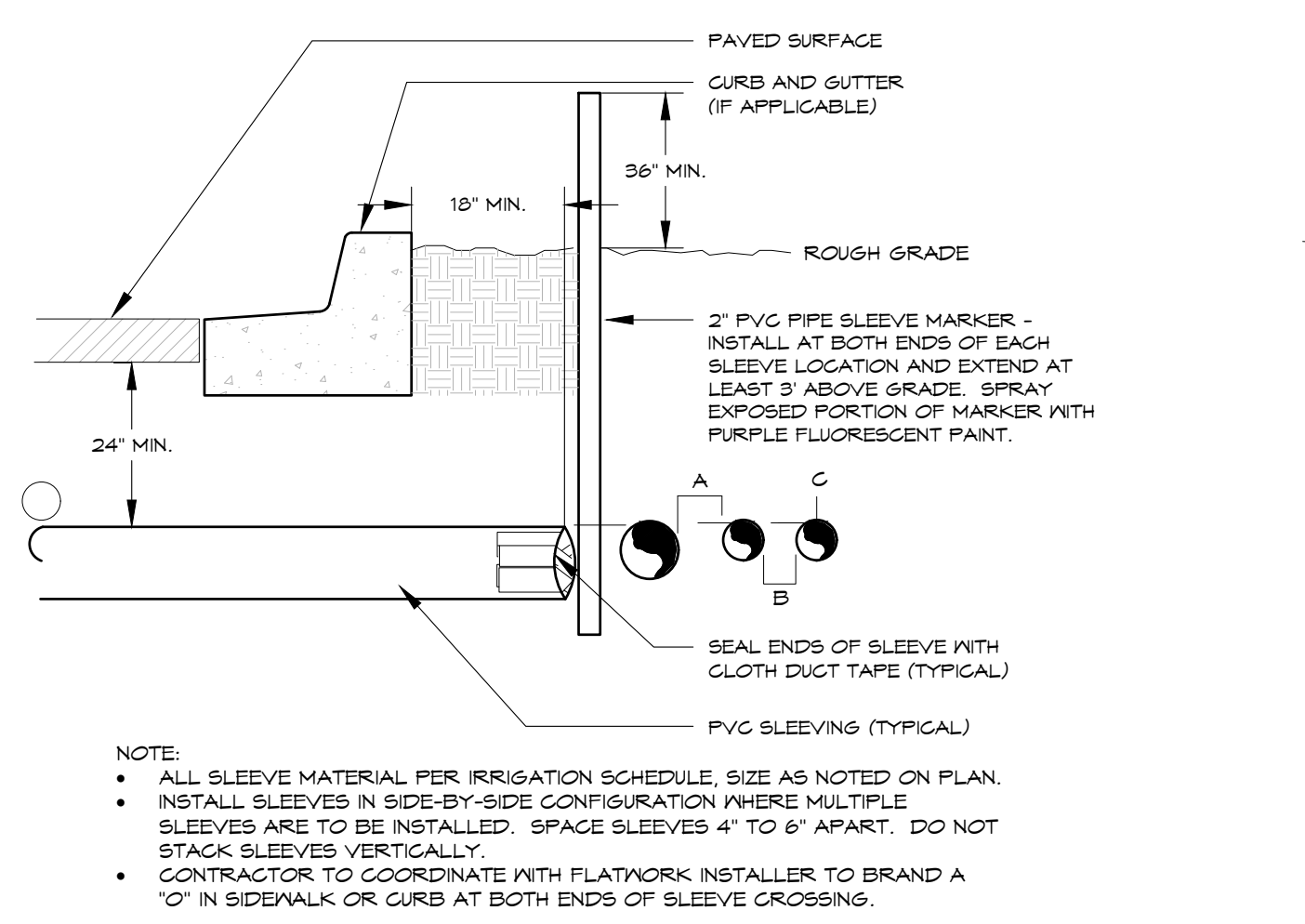
**WIRE SPLICE BOX
TYPICAL** 3

TRENCH 4

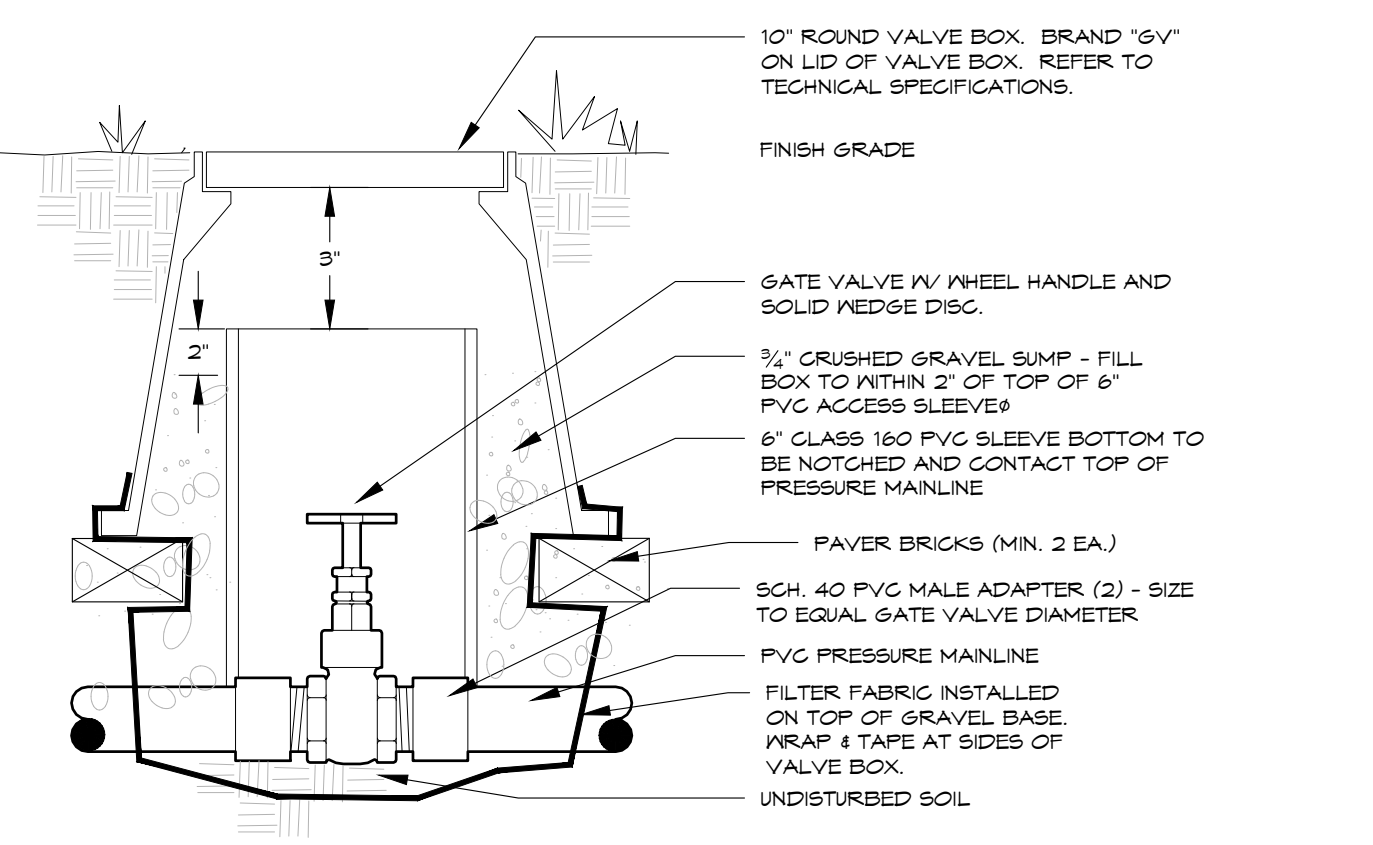


NOTES:
1. THE RESTRAINT SCHEMES HERE ARE FOR SYSTEM PRESSURES UP TO 125 PSI. FOR HIGHER PRESSURES, CALL THE LEEMCO FACTORY.
2. EACH FITTING AND VALVE BELL MUST BE RESTRAINED TO THE LENGTH OF PIPE NOTED IN THE TABLE USING FITTINGS TO PIPE RESTRAINT, VALVE TO PIPE RESTRAINT, AND PIPE TO PIPE RESTRAINT AS REQUIRED.
3. PIPE JOINTS WITHIN THE RESTRAINED LENGTH REQUIREMENT MUST BE RESTRAINED WITH PIPE TO PIPE RESTRAINTS.
4. SERVICE TEES AND COUPLINGS WITHIN THE RESTRAINED LENGTH REQUIREMENT MUST BE RESTRAINED WITH FITTINGS TO PIPE RESTRAINTS.
5. CONTACT TONY GARNER @ (208) 691-7107, THE LEEMCO REPRESENTATIVE, FOR ALL QUESTIONS CONCERNING LEEMCO PRODUCTS. COORDINATE AN INSTALLATION CLINIC WITH TONY GARNER PRIOR TO INSTALLING THE MAINLINE.

LEEMCO FITTINGS/JOINT RESTRAINTS - 3" + LARGER 5

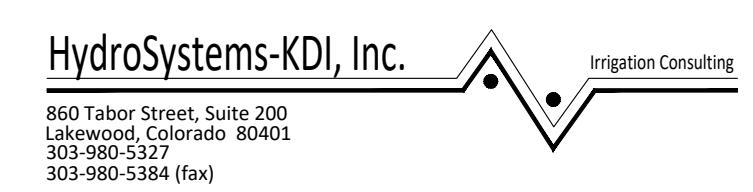
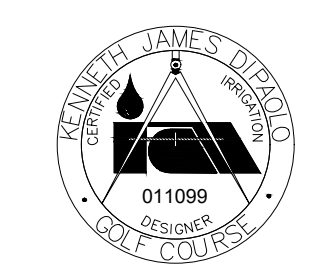


IRRIGATION SLEEVE 6

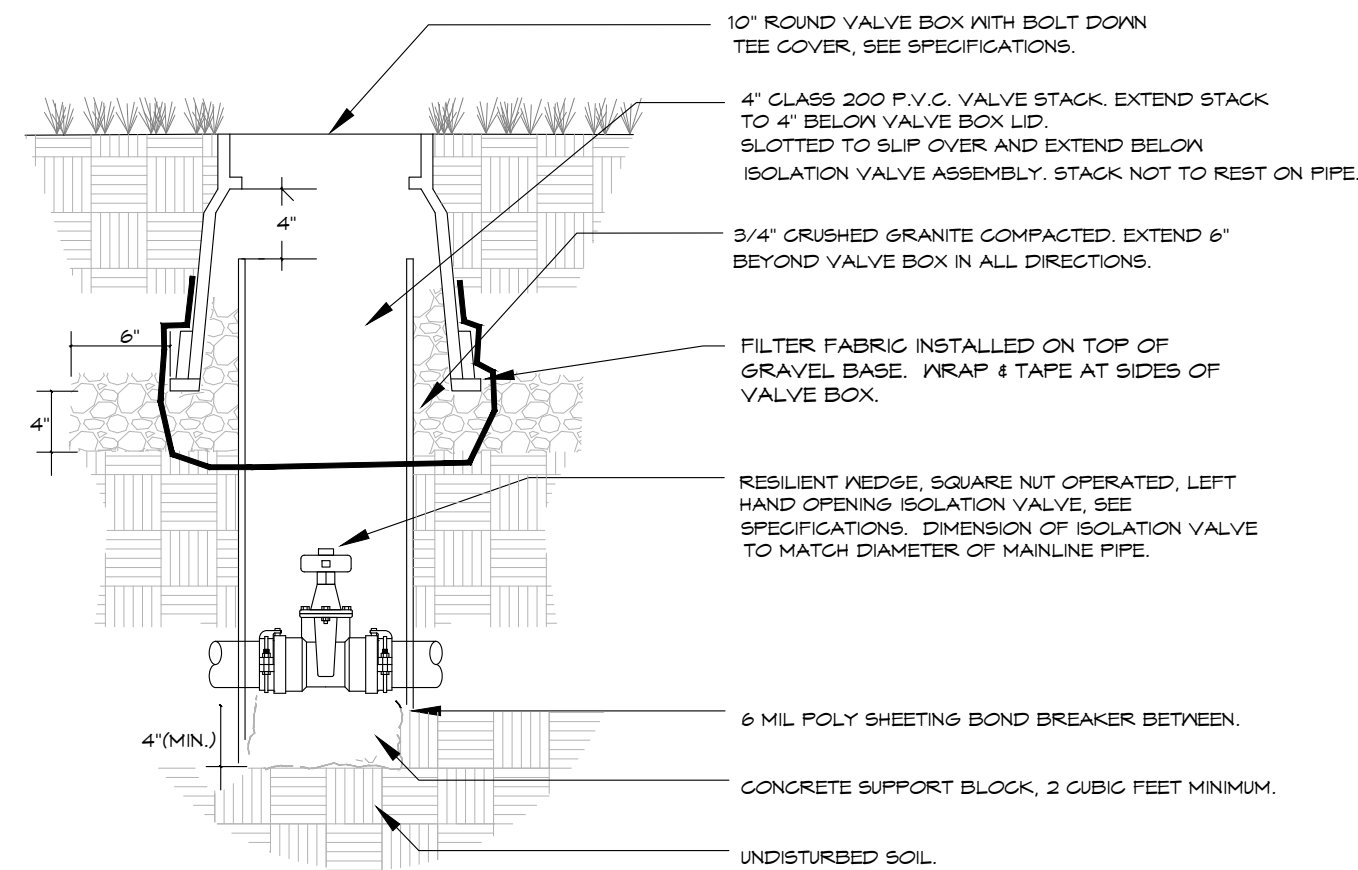


GATE VALVE - SMALL 7

- REFER TO SHEET
- IR-1 IRRIGATION NOTES
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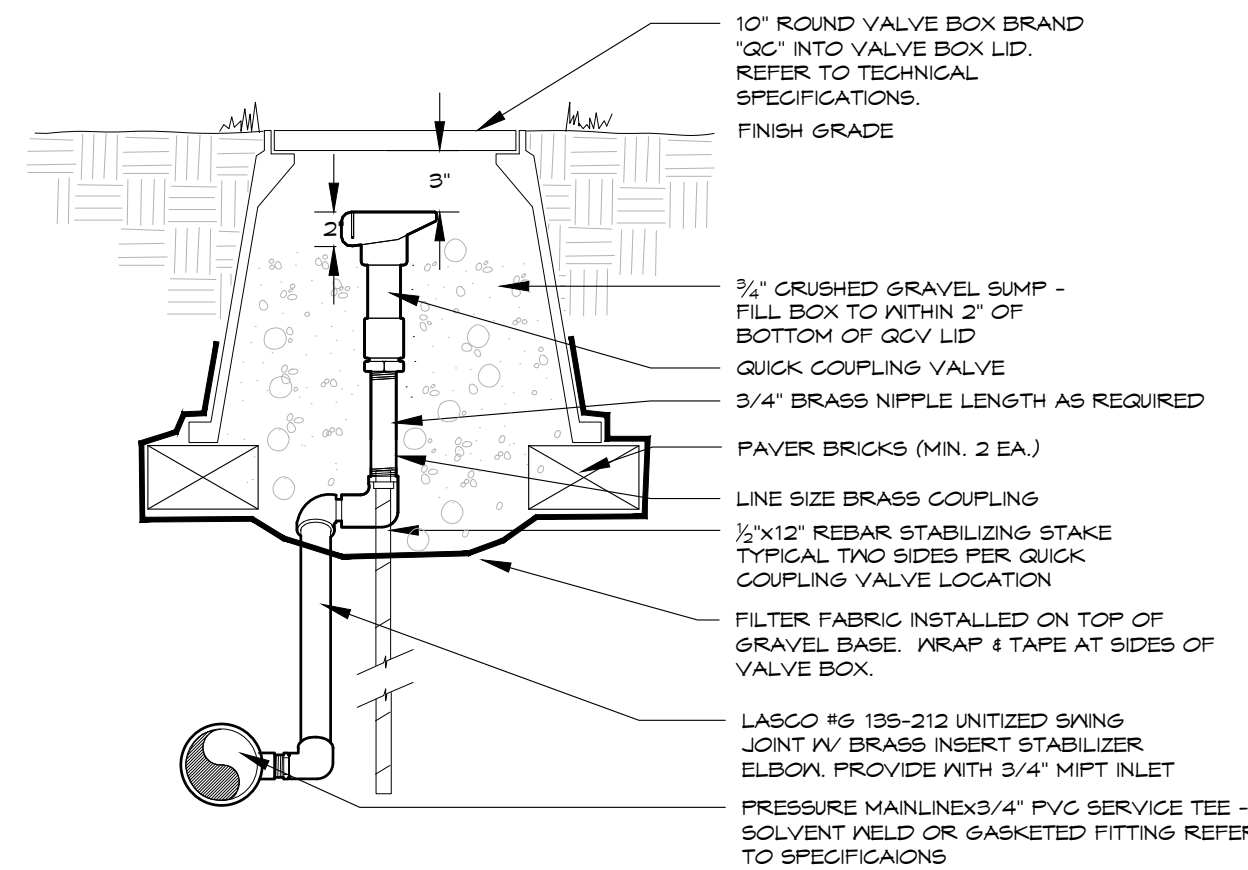
Date	No.	Remarks



- NOTES:
1. BRAND (SV) INTO VALVE BOX LID WITH 1" HIGH LETTERS MIN.
 2. SET TOP OF VALVE BOX LID LEVEL WITH FINISHED GRADE OF ADJACENT TURF GRASS AREAS.
 3. PROVIDE MINIMUM 4" CLEAR BETWEEN TOP OF STACK AND UNDERSIDE OF VALVE BOX LID.

GATE VALVE 3" PLUS

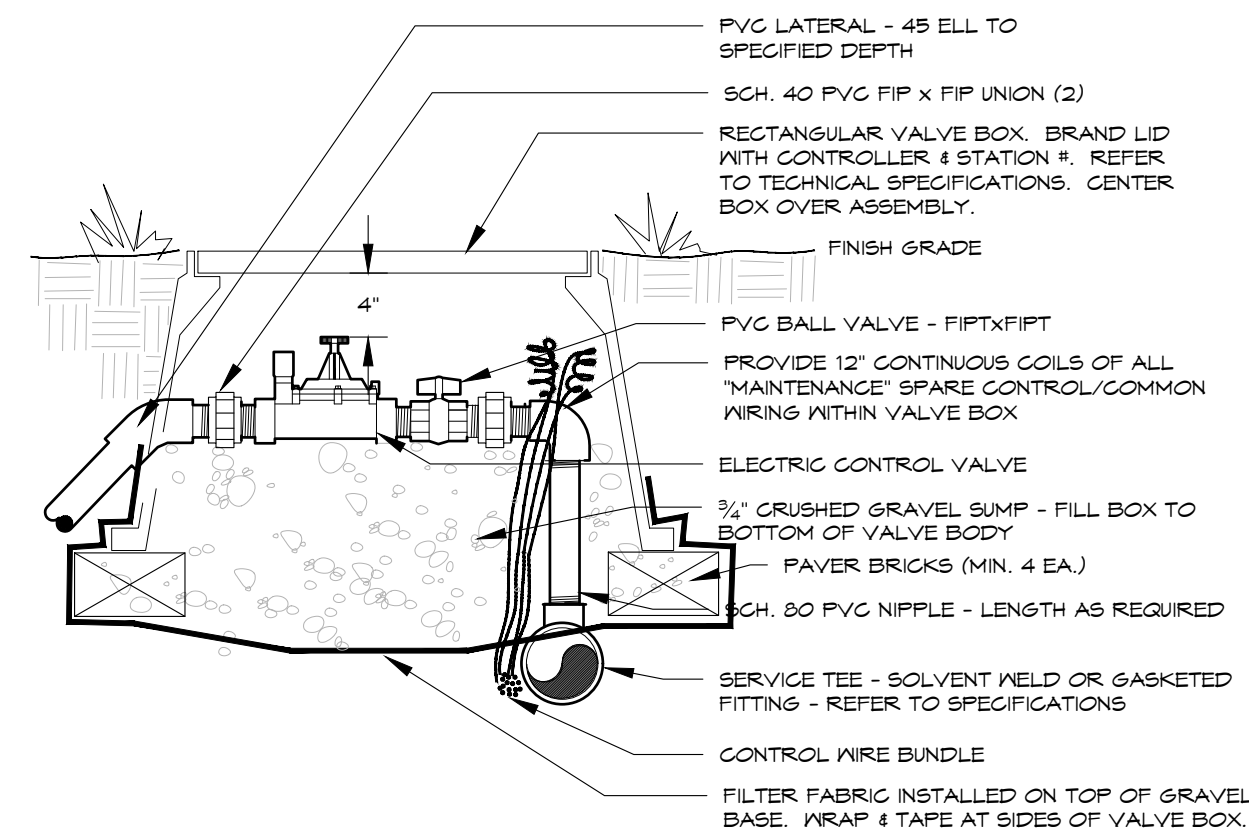
8



APPLY TEFLON TAPE TO ALL THREADED NIPPLES

QUICK COUPLING VALVE

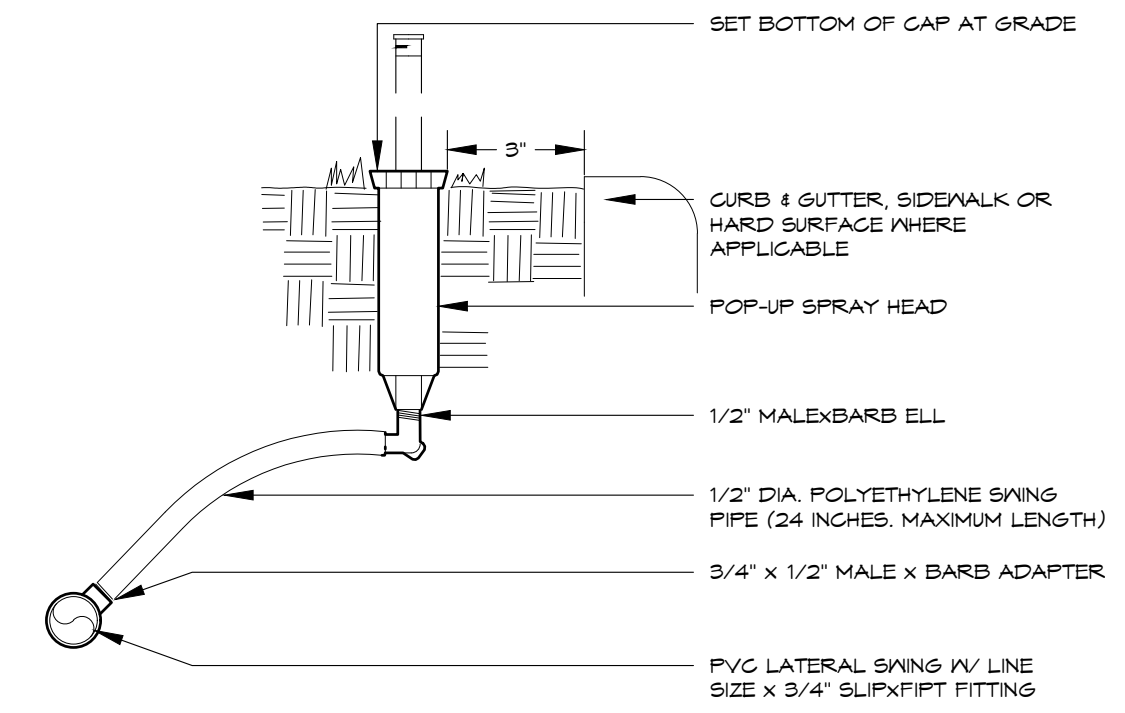
9



NOTE: DIAMETERS OF BALL VALVES, PVC FITTINGS AND NIPPLES SHALL EQUAL ELECTRIC CONTROL VALVE DIAMETER. VALVE BOXES SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO ADJACENT SIDEWALKS AND HARD SURFACES WHERE APPLICABLE. APPLY TEFLON TAPE TO ALL MALE THREADED FITTINGS AND THREADED NIPPLES.

ELECTRIC CONTROL VALVE

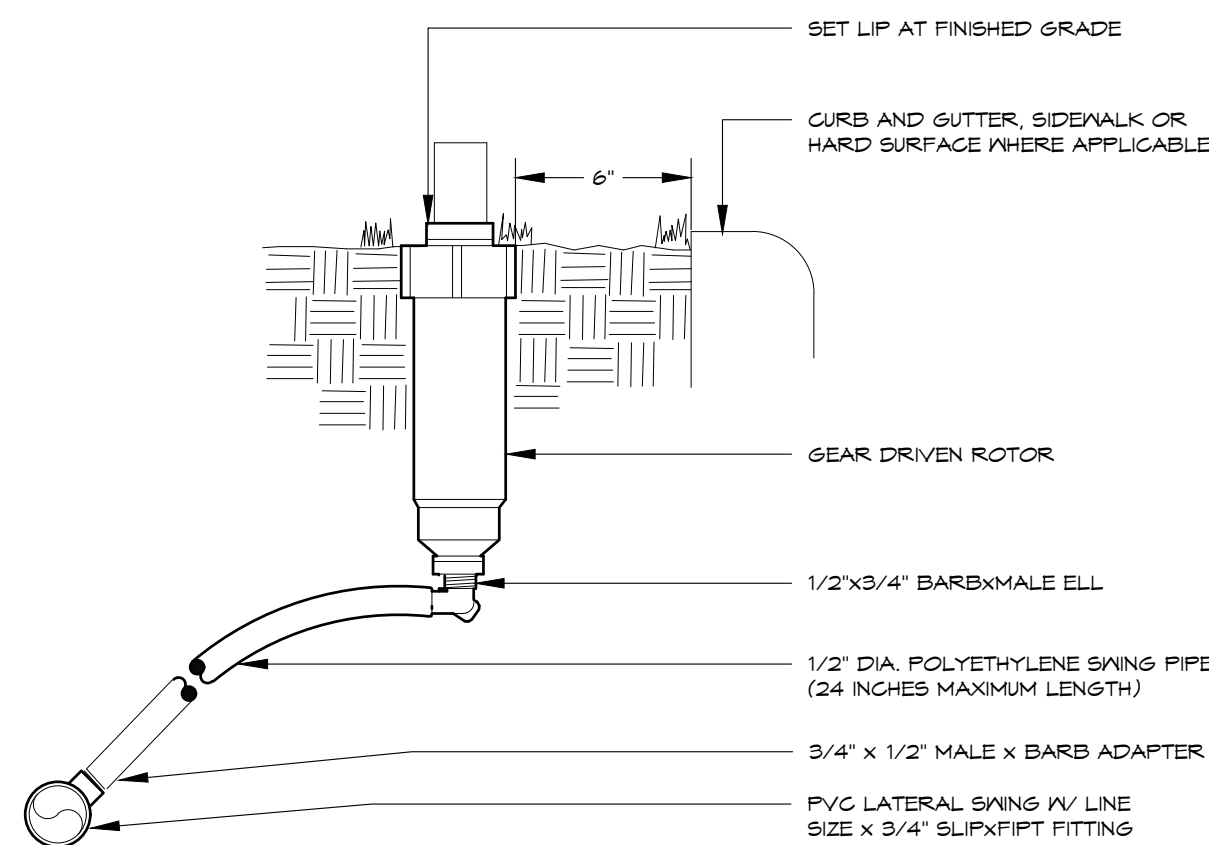
10



- NOTE:
- SET HEAD PERPENDICULAR TO FINISH GRADE.
 - APPLY TEFLON TAPE TO MALE PVC THREADED FITTINGS.

POP-UP SPRAY HEAD

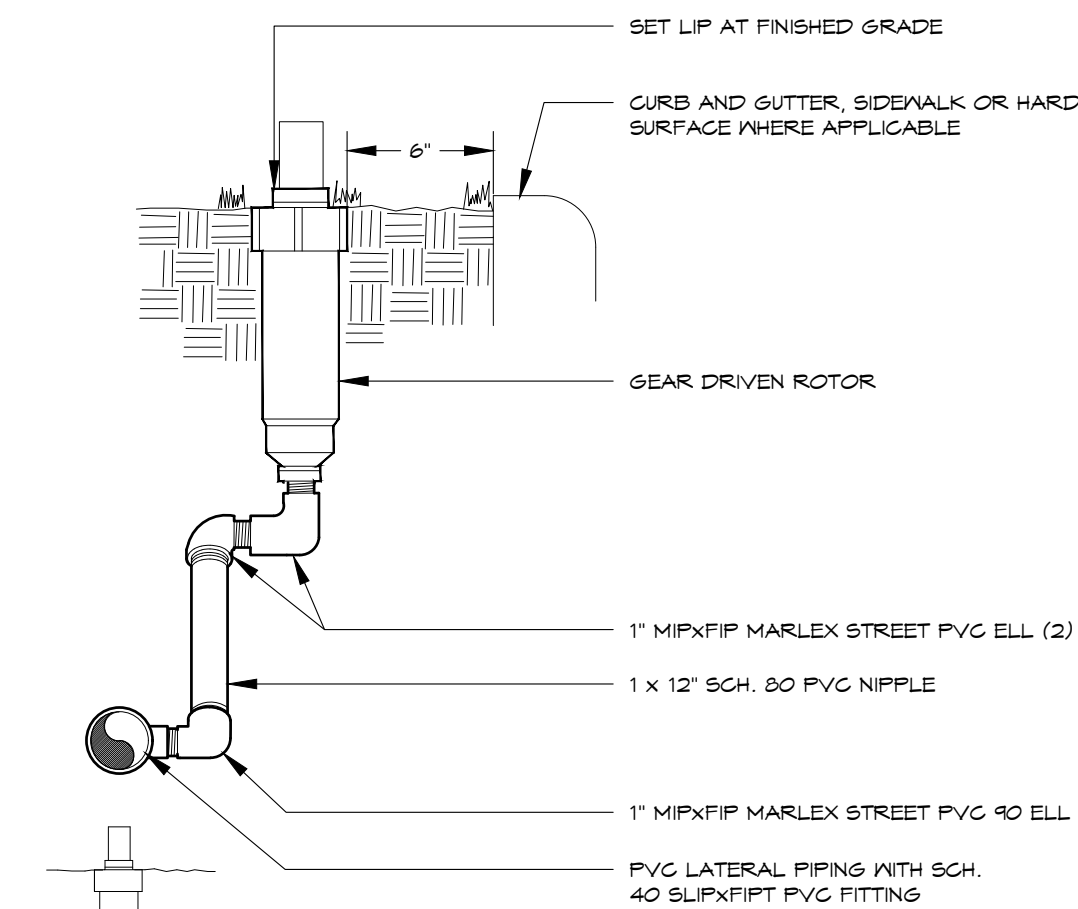
11



SET HEAD PERPENDICULAR TO FINISH GRADE

GEAR DRIVEN ROTOR -3/4"

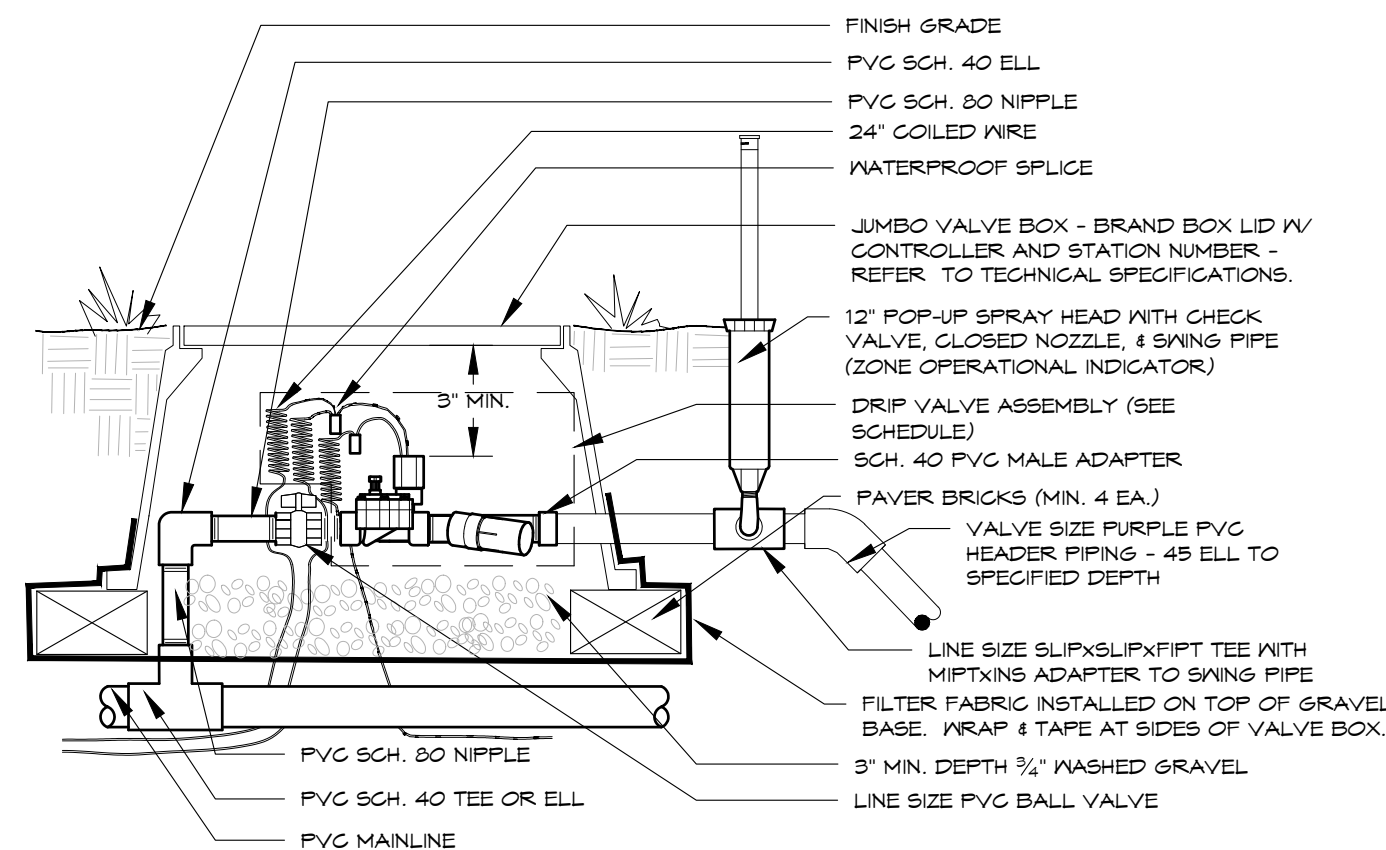
12



- NOTE:
- DIAMETERS OF FITTINGS AND NIPPLES SHALL EQUAL ROTOR INLET DIAMETER.
 - SET ROTOR PERPENDICULAR TO FINISH GRADE.
 - APPLY TEFLON TAPE TO ALL PVC MALE THREADED FITTINGS.

GEAR DRIVEN ROTOR -1"

13



NOTE:
INSTALL ASSEMBLY TO REST ON GRAVEL SUMP. CONTAIN ENTIRE ASSEMBLY WITHIN BOX. NO VALVE BOX EXTENSIONS WILL BE ACCEPTED. PROVIDE 3"-4" CLEARANCE BETWEEN TOP OF CONTROL VALVE SOLENOID AND BOTTOM OF VALVE BOX LID. TOP OF VALVE BOX TO BE FLUSH WITH FINISH GRADE. VALVE BOX SHALL NOT REST ON DRIP TUBING.

DRIP VALVE

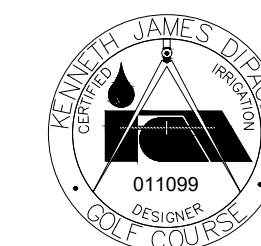
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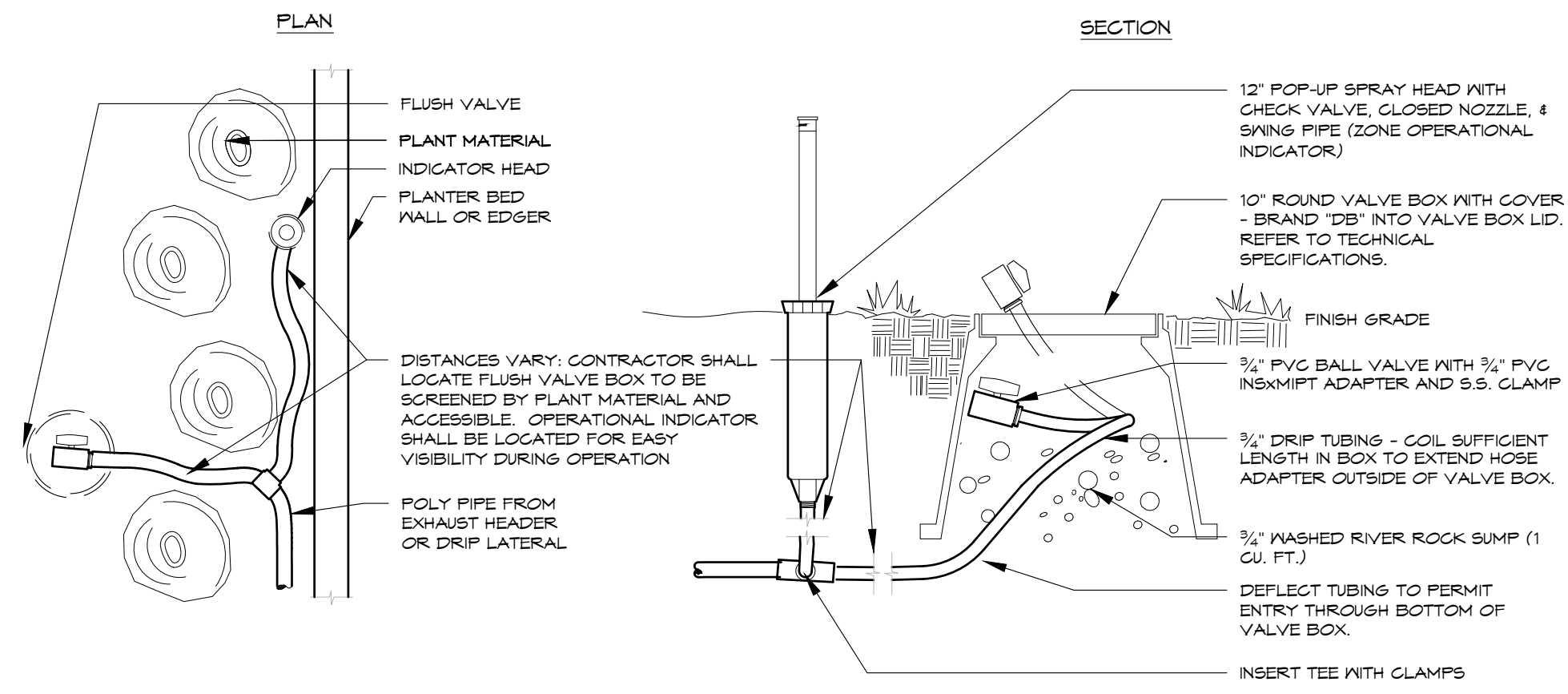
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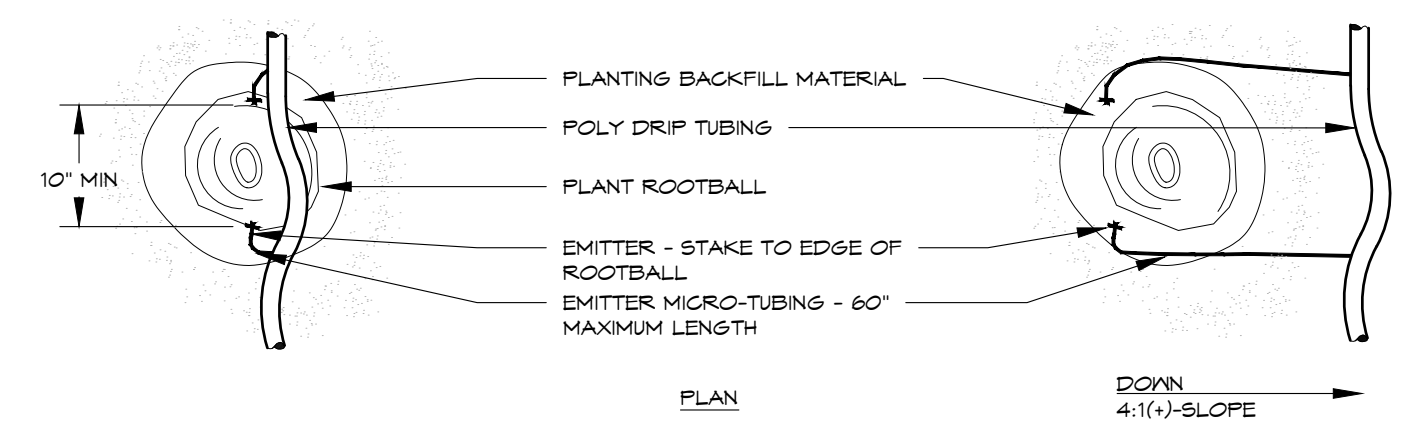


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**DRIP FLUSH VALVE
WITH OPERATIONAL INDICATOR**

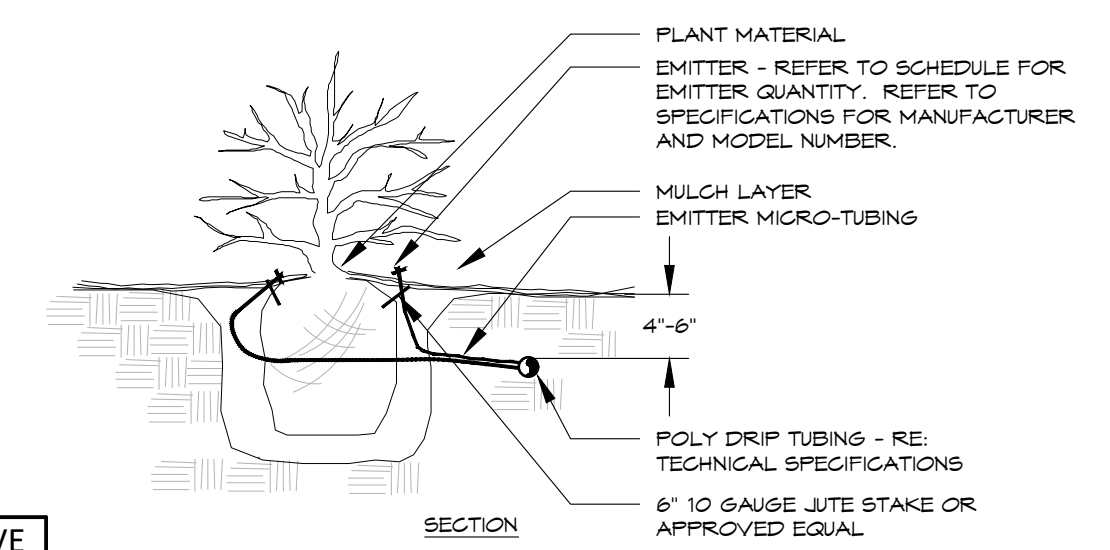
15



PLANT SIZE	EMITTER FLOW RATE	EMITTER QTY. AT MULCHED BED LOCATIONS	EMITTER QTY. AT NATIVE SEED LOCATIONS
1 - 2 GALLON MATERIAL	0.5 GPH	ONE EACH	ONE EACH
5 GALLON MATERIAL	0.5 GPH	TWO EACH	TWO EACH
1 1/2\"/>			

**DRIP EMITTER
BELOW GRADE**

16



- NOTES:
- INSTALL EMITTERS ON OPPOSING SIDES OF ROOTBALL. THREE OR MORE EMITTERS SHALL BE EQUALLY SPACED AROUND ROOT BALL.
 - EMITTERS ARE TO BE INSTALLED TO CLEAR SURFACE BY A MINIMUM OF 1\"/>

REFER TO SHEET

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Revisions:

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