SHEET INDEX

| | SHT # | SHEET TITLE | |
|---------|-------|----------------------------|--|
| GENERAL | | | |
| | L-000 | LANDSCAPE COVER SHEET | |
| | S-100 | SURVEY | |
| | G-001 | GENERAL NOTES | |
| | L-100 | SHEET INDEX | |
| | L-101 | DEMO PLAN | |
| CML | | | |
| | C-100 | NOTES AND DETAILS | |
| | C-101 | TRENCH DRAIN DETAILS | |
| | C-102 | LITH ITY PLAN SHEET 1 OF A | |

| CIVIL | | | |
|-------|-------|---------------------------|--|
| | C-100 | NOTES AND DETAILS | |
| | C-101 | TRENCH DRAIN DETAILS | |
| | C-102 | UTILITY PLAN SHEET 1 OF 4 | |
| | C-103 | UTILITY PLAN SHEET 2 OF 4 | |
| | C-104 | UTILITY PLAN SHEET 3 OF 4 | |
| | C-105 | UTILITY PLAN SHEET 4 OF 4 | |
| | C-106 | EROSION CONTROL PLAN | |
| | C-107 | EROSION CONTROL NOTES | |
| | | | |

| E-000 | ELECTRICAL SYMBOLS AND ABBREVIATIONS |
|-------|--------------------------------------|
| E-101 | ELECTRICAL DEMO PLAN A |
| E-102 | ELECTRICAL DEMO PLAN B |
| E-201 | ELECTRICAL PLAN A |
| E-202 | ELECTRICAL PLAN B |

| | E-202 | ELECTRICAL PLAN B | |
|---------|-------|--------------------------|--|
| GRADING | | | |
| | L-200 | GRADING PLAN AND PROFILE | |
| | L-201 | GRADING PLAN AND PROFILE | |
| | L-202 | GRADING PLAN AND PROFILE | |
| | L-203 | GRADING PLAN AND PROFILE | |

| LAYOUT | | | |
|--------|-------|-------------------|--|
| | L-300 | LAYOUT PLAN | |
| | L-301 | LAYOUT PLAN | |
| | L-302 | LAYOUT PLAN | |
| | L-303 | LAYOUT PLAN | |
| | L-304 | ENLARGEMENT PLANS | |
| | L-305 | ENLARGEMENT PLANS | |
| | | | |

| L-400 | PLANTING PLAN | |
|-------|----------------|---|
| L-401 | PLANTING PLAN | |
| L-402 | PLANTING PLAN | |
| L-403 | PLANTING PLAN | |
| | L-401 L-402 | L-401 PLANTING PLAN L-402 PLANTING PLAN |

| DETAILS | | | |
|---------|-------|-------------------------------------|--|
| | L-500 | COLUMN DETAILS | |
| | L-501 | STAIR DETAILS | |
| | L-502 | WALL DETAILS | |
| | L-503 | PAVING DETAILS | |
| | L-504 | LIGHTING DETAILS | |
| | L-505 | PLANTING DETAILS | |
| | L-506 | FURNISHING DETAILS | |
| | L-507 | ARCHWAY MONUMENTS (NOT IN CONTRACT) | |

| IRRIGATION | | | |
|------------|--------|------------------------------|--|
| | IR-100 | IRRIGATION NOTES AND SYMBOLS | |
| | IR-101 | IRRIGATION PLAN | |
| | IR-102 | IRRIGATION PLAN | |
| | IR-103 | IRRIGATION PLAN | |
| | IR-104 | IRRIGATION PLAN | |
| | IR-200 | IRRIGATION DETAILS | |
| | IR-201 | IRRIGATION DETAILS | |
| | | | |



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





niversity Multi-Modi Facility (Metro 2017 IDIQ -Work Order #3)

STUDIONSITE
1209 HARNEY STREET, OMAHA NE 68102
PHONE-402 281 1800

Consulting Group, Inc.

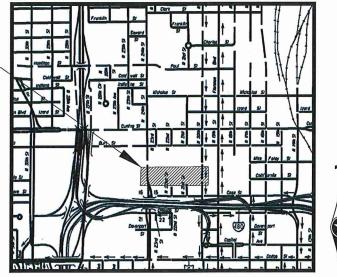
11422 Miracle Hills Drive Omaha, Nebraska 68154 402-778-5025

ate: 2018/05/18

Project Name:
CU PEDESTRIAN
MALL DESIGN
Issued For / Phase:

CONSTRUCTION

PROJECT LOCATION —



VICINITY MAP

Drawn By: KN Reviewed By: MSS Revisions:

Date No. Remarks

Sheet Name:

LANDSCAPE COVER SHEET

Sheet Number:

L-000

APPROVED BY





Omaha, Nebraska 68154 402-778-5025

-Sanitary Manhole

_RIM=1035.38 ----

INV N: 1004.39 (15" VCP)

INV E: 1003.97 (15" VCP)

-Sanitary Manhole

Grass INV E: 1003.67 (15" VCP)

Curb Grate Inlet

GIS#0021981B

-Curb Grate Inlet

GIS#0021186B

RIM: 1036.80

─Grate Inlet

RIM: 1034.39

- F.F.=1035.92

- Area Inlet

RIM: 1034.64

INV N: 1032.99 (12" RCP)

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

RIM: 1035.60

INV N: 1003.67 (15" VCP)

✓ INV SW: 1024.27 (6" PVC)

INV E: 1031.75 (15" RCP)

Creighton University

INV N: 1031.00 (12" RCP)

INV N: 1031.93 (16" RCP)

INV S:1031.95 (12" RCP)

Alley VAC. (PUBLIC UTIL

GIS#0021146

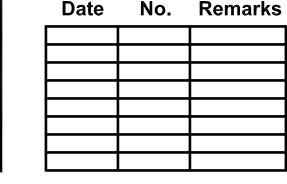
RIM=1035.38

Grass

GIS#0021141

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

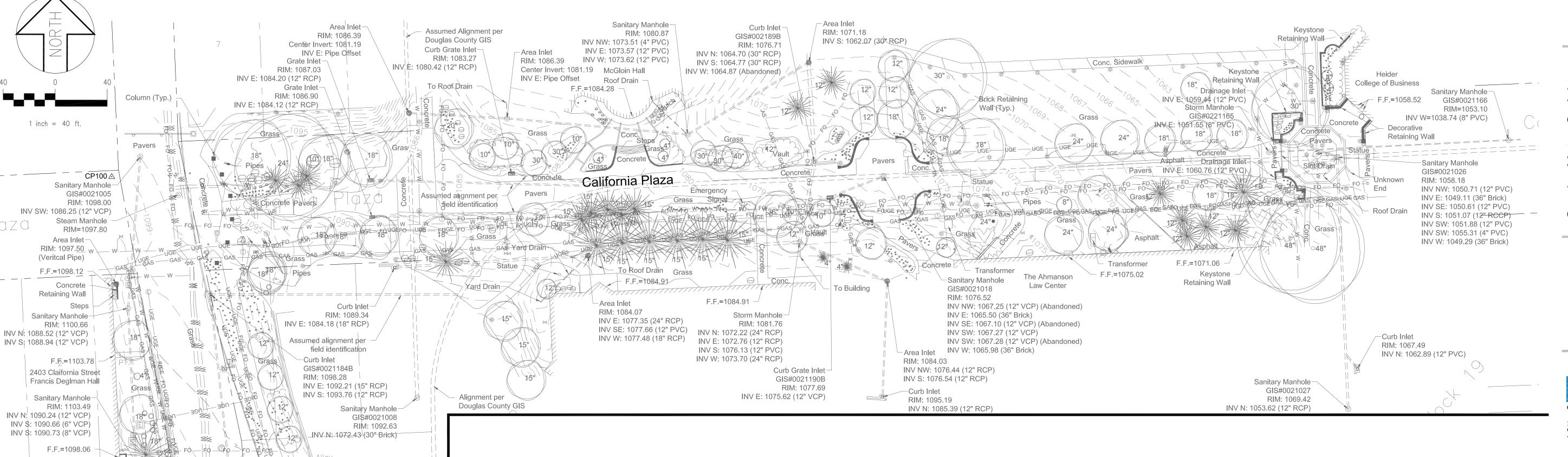
Drawn By: Reviewed By: BLY Revisions:



Sheet Name:

TOPOGRAPHIC SURVEY

Sheet Number:





Concrete

Unknown End

Curb Inlet

GIS#0021183B

Sanitary Manhole-

RIM: 1104.34

[NV N: 1097.12 (12" RCP)

INV N: 1092.59 (6" VQP)

INV NNW: 1094.30 (4" PVC)

INV W: 1087.78 (6" VCP)

INV WNW: 1094.29 (4" PVC)

RIM: 1100.97

Retaining Wall

Æ.⊭1103.7<u>3</u>

LAND SURVEYORS CERTIFICATION

Grouping of

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

12/21/2017

Sanitary Manhole

INV N: 1084.26 (36" Brick)

GIS#0021103

RIM: 1094.53

LEGEND

_____W____ **WATER**

----GAS---- **GAS**

——FO—— **FIBER OPTIC**

----UGE---- UNDERGROUND ELECTRIC

----OHE---- OVERHEAD ELECTRIC

TREELINE / BRUSHLINE

GAS VALVE

UNKNOWN VALVE

WATER MANHOLE

GAS MANHOLE

POLE / BOLLARD

FIRE HYDRANT

TRAFFIC SIGNAL

TRAFFIC SIGNAL W\ MAST ARM

LIGHT POLE w/ MAST ARM

DECIDUOUS TREE w/ TRUNK DIAMETER

CONIFEROUS TREE w/ TRUNK DIAMETER

YARD LITE

SPRINKLER

SIGN

PULLBOX

TELEPHONE PEDESTAL

ELECTRICAL PEDESTAL

TELEPHONE MANHOLE

ELECTRICAL MANHOLE

DATE P.L.S. #619

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.

PROJECT CONTROL

CP#100 - SET CUT 'X' IN NW CORNER OF 24TH STREET & CALIFORNIA CONTROL POINT PLAZA. NORTH ±12' TO TRAFFIC SIGNAL "WALK" SIGN. SE ±19' TO WATER MANHOLE. WEST ±17' TO LIGHT POLE. FOUND PROPERTY CORNER NORTHING=547533.569' ——X—— CHAINLINK FENCE 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'

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

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'

ELEV.=1054.51'

ELEV.=1033.76'

SEWER NOTE

ALL SANITARY AND STORM SEWER PIPE MATERIAL AND SIZE ARE ESTIMATED FROM THE SURFACE OF THE STRUCTURE. ALL PIPE

GIS#0021145

RIM=1035.26

Center Invert: 1001.16

NV SW: 1022.87 (24" RCP

Retaining Wall

INV NE: 1023.43 (24" RCP)

INV W: 1027.21 (Unknown)

INV NE: 1029.95 (12" VCP)

INV S: 1030.60 (12" RCP)

INV W: 1030.41 (12" VCP)

NV NE: 1026.15 (8" PVC)

INV S:1026.28 (18" VCP)

Sanitary Manhole-

Sanitary Manhole-

Center Invert: 1031.53

Center Invert: 1031.54

RIM=1031.53

RIM=1038.09

) EASE.|(1203—275) —

Transformer

Sanitary Manhole –

INV N: 1030.42 (18" VCP)

INV S.1030.58 (18" VCP)

GIS#0021101

RIM=1092.53

- Unknown End

\$anitary Manhole-

GIS#0021224

RIM=1036.51

INV N: Pipe Offset

INV S: Pipe Offset

Keystone

Storm Manhole

Unknown End

Pavers

Storm Manhole-

GIS#0021033

__RIM: 1036.51

GIS#0021033

MATERIAL AND SIZE ARE SUBJECT TO VERIFICATION BY THE END USER.

GENERAL NOTES

- 1. 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.
- 2. 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.
- 3. VERIFY ALL CONDITIONS AT JOB SITE AND NOTIFY ARCHITECT OF DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING WORK.
- 4. 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.
- 5. 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.
- 6. 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
- 7. 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.
- 8. 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.
- 9. ALL LAYOUT DIMENSIONS ARE FROM PLAN VIEW CALCULATIONS. ACTUAL FIELD DIMENSIONS MAY VARY FROM PLAN DUE TO ACTUAL LENGTHS ALONG A SLOPED SURFACE.
- 10. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
- 11. 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.
- 12. 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.
- 13. 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.
- 14. 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.
- 15. CONTRACTOR IS TO VERIFY ALL QUANTITIES. IN CASE OF ANY DISCREPANCIES, GRAPHICALLY SHOWN MATERIAL QUANTITIES SHALL TAKE PRECEDENCE.
- 16. 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.
- 17. COORDINATE PROPOSED WALKS AND RAMPS WITH ANY EXISTING CONDITIONS INCLUDING PUBLIC SIDEWALKS. STAKE PROPOSED WALKS AND REVIEW IN FIELD WITH ARCHITECT PRIOR TO FORMING.
- 18. 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.
- 19. 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:

- 1. LOCATE ALL UNDERGROUND UTILITY LINES PRIOR TO THE START OF WORK. PROTECT ALL EXISTING UNDERGROUND UTILITIES DURING THE COURSE OF WORK.
- 2. ELEVATIONS FOR ALL GRADING WORK WILL BE ESTABLISHED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF NEBRASKA.
- 3. 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.
- 4. 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.
- 6. 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.
- 7. REFER TO CIVIL ENGINEER'S PLANS FOR MANHOLES, DRAINS AND STRUCTURES.
- 8. REFER TO GRADING CROSS SECTIONS FOR TYPICAL GRADING CONDITIONS.
- 9. GRADES SHOWN ARE FINISH GRADES.
- 10. CONFLICTS OR DISCREPANCIES WITH GRADES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNERS REPRESENTATIVE PRIOR TO PROCEEDING WITH WORK.
- 11. 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.
- 12. 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

- 1. FIELD STAKE ALL TREE AND SHRUB LOCATIONS BASED UPON THESE PLANS. OBTAIN ARCHITECT'S APPROVAL OF STAKED LOCATIONS PRIOR TO PLANTING.
- 2. PROVIDE MATCHING SIZES AND FORMS FOR EACH TREE TO BE INSTALLED.
- 3. PLANT MATERIAL TO BE HEALTHY SPECIMENS, FREE FROM DISEASE OR DAMAGE.
- 4. ALL PLANT MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE AMERICAN STANDARDS FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMAN.
- 5. ALL ROOT WRAPPING MADE OF METAL, SYNTHETIC OR PLASTIC MATERIAL SHALL BE REMOVED AT TIME OF PLANTING.
- 6. ALL PLANT MATERIAL SHALL BE SELECTED AT THE NURSERIES BY THE PROJECT ARCHITECT. PLANT MATERIAL IS SUBJECT TO REVIEW AND APPROVAL BY ARCHITECT BEFORE INSTALLATION.
- 7. ALL PLANT AND STAKES SHALL BE SET PLUMB UNLESS OTHERWISE NOTED.
- 8. THE CONTRACTOR SHALL REFER TO THE CONTRACT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- 9. PLANT QUANTITIES ARE PROVIDED FOR CONTRACTOR'S CONVENIENCE ONLY AND SHALL BE VERIFIED BY CONTRACTOR BY REVIEWING PLANTING PLAN SYMBOLS AND PLANT SPACING.
- 10. ALL DECIDUOUS TREES SHALL BE WRAPPED. REFER TO SPECIFICATIONS FOR WRAP TYPE AND TIMING.
- 11. 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.
- 12. 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 NEGLECT BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE. REFER TO SPECIFICATIONS.
- 13. 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.
- 14. ALL SHRUB AREAS ARE TO BE PREPARED AS CONTINUOUS BEDS.

DEMOLITION NOTES

- 1. 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.
- 2. LIGHT POLES AND FIXTURE AS INDICATED ARE TO BE REMOVED FROM SITE AND DISPOSED OF BY THE CONTRACTOR.
- 3. 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.
- 4. 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.
- 5. CALL 811 PRIOR TO DIGGING OR DEMOLITION.

ABBREVIATIONS

NOM

NTS

NOMINAL

NOT TO SCALE

| AVG | ARCHITECT AVERAGE | OD OPP | OUTSIDE DIAMETER OPPOSITE |
|--------------------------|----------------------------------|---------------|---------------------------------------|
| 3&B | BALLED AND BURLAPPED | PA | PLANTING AREA |
| BLDG | BUILDING | PC | POINT OF CURVATURE |
| BLDG BM | BENCHMARK | PERF | PERFORATE(D) |
| BOC | BACK OF CURB | PED | PEDESTRIAN |
| 30C 3R | BOTTOM OF RAMP | PED | PERIMETER |
| on 3S | BOTTOM OF NAME BOTTOM OF STEP | PENIVI PL | PROPERTY LINE |
| 3W | BOTTOM OF STEP BOTTOM OF WALL | POB | POINT OF BEGINNING |
| 3 7 7 | BOTTOW OF WALL | PSF | POUNDS PER SQUARE FOOT |
| CAL | CALIPER | PSI | POUNDS PER SQUARE INCH |
| OF. | CUBIC FEET | PT | POINT, POINT OF TANGENCY |
| CIP | CAST-IN-PLACE | PVC | POLYVINYL CHLORIDE |
| CJ | CONTROL JOINT | PVMT | PAVEMENT |
| CL | CENTERLINE | PVR | PAVER(S) |
| CLR | CLEAR(ANCE) | | |
| COMP | COMPACTED | QTY | QUANTITY |
| CONC | CONCRETE | 5 | DARWIG |
| CONT | CONTINUOUS | R | RADIUS |
| CONTR | CONTRACTOR | RE | REFERENCE |
| CU | CUBIC | REINF | REINFORCE(D), (ING) |
| DBL | DOUBLE | REQ'D REV | REQUIRED |
| DBL DEG | DEGREE | RIM | REVISION(S), REVISED RIM ELEVATION |
| DEG DEMO | DEMOLISH, DEMOLITION | ROW | RIGHT-OF-WAY |
| DIA | DIAMETER | RP | RADIUS POINT |
| DIM | DIMENSION | 1 11 | |
| ON. | DOWN | SAN | SANITARY |
| OTL | DETAIL | SCH | SCHEDULE |
| DWG | DRAWING | SD | STORM DRAIN |
| | | SEC | SECTION |
| ĒΑ | EACH | SF | SQUARE FOOT (FEET) |
| ΞF | EACH FACE | SHT | SHEET |
| EJ | EXPANSION JOINT | SIM | SIMILAR |
| ELEV | ELEVATION | SPECS | SPECIFICATIONS |
| ELECT | ELECTRICAL | SQ | SQUARE |
| ENG | ENGINEER | STA | STATION |
| EQ FOT | EQUAL | STD | STANDARD |
| EST NA | ESTIMATE | STL | STEEL |
| EW EXIST | EACH WAY EXISTING | STRUCT SYM | STRUCTURAL SYMMETRICAL |
| _/ ,, | _, | CTIVI | |
| -G | FINISHED GRADE | TBC | TOP OF BACK OF CURB |
| FIN | FINISH | TC | TOP OF CURB |
| -L | FLOW LINE | THK | THICK |
| FOB | FACE OF BUILDING | TLF | TOP OF LIGHT FOOTING |
| OW | FACE OF WALL | TO | TOP OF |
| -S -T | FINISH SURFACE | TOPO | TOPOGRAPHY |
| -T -TG | FOOT (FEET) FOOTING | TR TRANS | TOP OF RAMP TRANSFORMER |
| 10 | LOCING | THANS TS | TOP OF STEP |
| ЭA | GAUGE | TW | TOP OF WALL |
| 3A GAL | GALLON | TYP | TYPICAL |
| GALV | GALVANIZED | | · · · · · - |
| GB | GRADE BREAK | UNFIN | UNFINISHED |
| ЭC | GENERAL CONTRACT(OR) | | |
| ЭРМ | GALLON PER MINUTE | VAR | VARIES |
| | | VERT | VERTICAL |
| HORIZ | HORIZONTAL | VEH | VEHICLE |
| HP □T | HIGH POINT | VOL | VOLUME |
| НT | HEIGHT | W/ | WITH |
| D | INSIDE DIAMETER | vv/ W/O | WITHOUT |
| NV | INVERT ELEVATION | W/O WT | WEIGHT |
| N | INCHES | WWF | WELDED WIRE FABRIC |
| NCL | INCLUDE(D) | | , |
| RR | IRRIGATION | YD | YARD |
| JT | JOINT(S) | | |
| JN | LINEAR | | |
| _IIN _P | LOW POINT | | |
| -' -T | LIGHT | | |
| 4ATI | MATERIAL | | |
| MATL | MATERIAL MAYIMLIM | | |
| ИАХ ИЕСН | MAXIMUM MECHANICAL | | |
| VILUII | MANHOLE | | |
| | | | |
| ИΗ | | | |
| ЛН ЛIN | MINIMUM MISCELLANEOUS | | |
| MH MIN MISC NIC | MINIMUM | | |



IDIQ r #3)

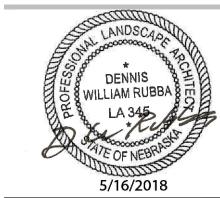
ina Metro-Creightor versity Multi-Modal Facility Metro 2017 IDIQ -



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

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

CONSTRUCTION



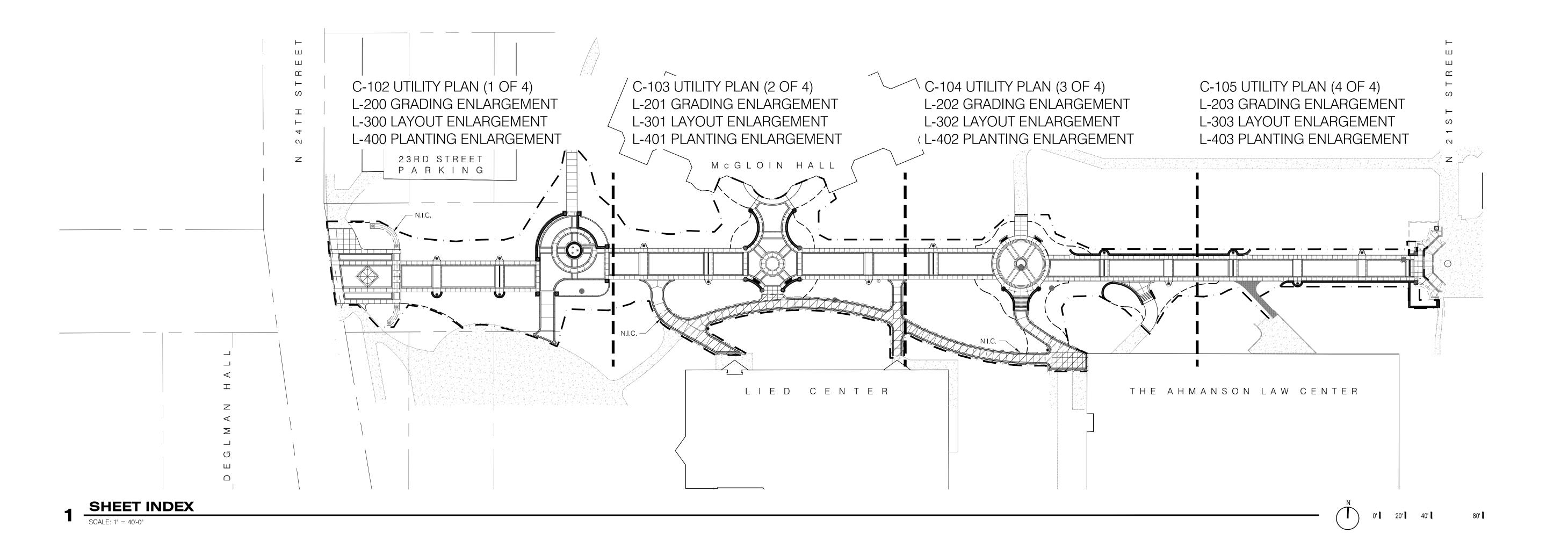
Drawn By: KN Reviewed By: MSS Revisions:

| Date | No. | Remark |
|------|-----|--------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Sheet Name:

GENERAL NOTES

Sheet Number:





University Multi-Modal
Facility
(Metro 2017 IDIQ Work Order #3)

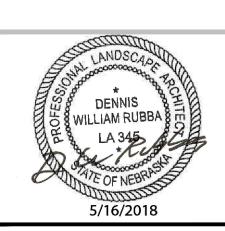




11422 Miracle Hills Drive Omaha, Nebraska 68154 402-778-5025

Date: 2018/05/18

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



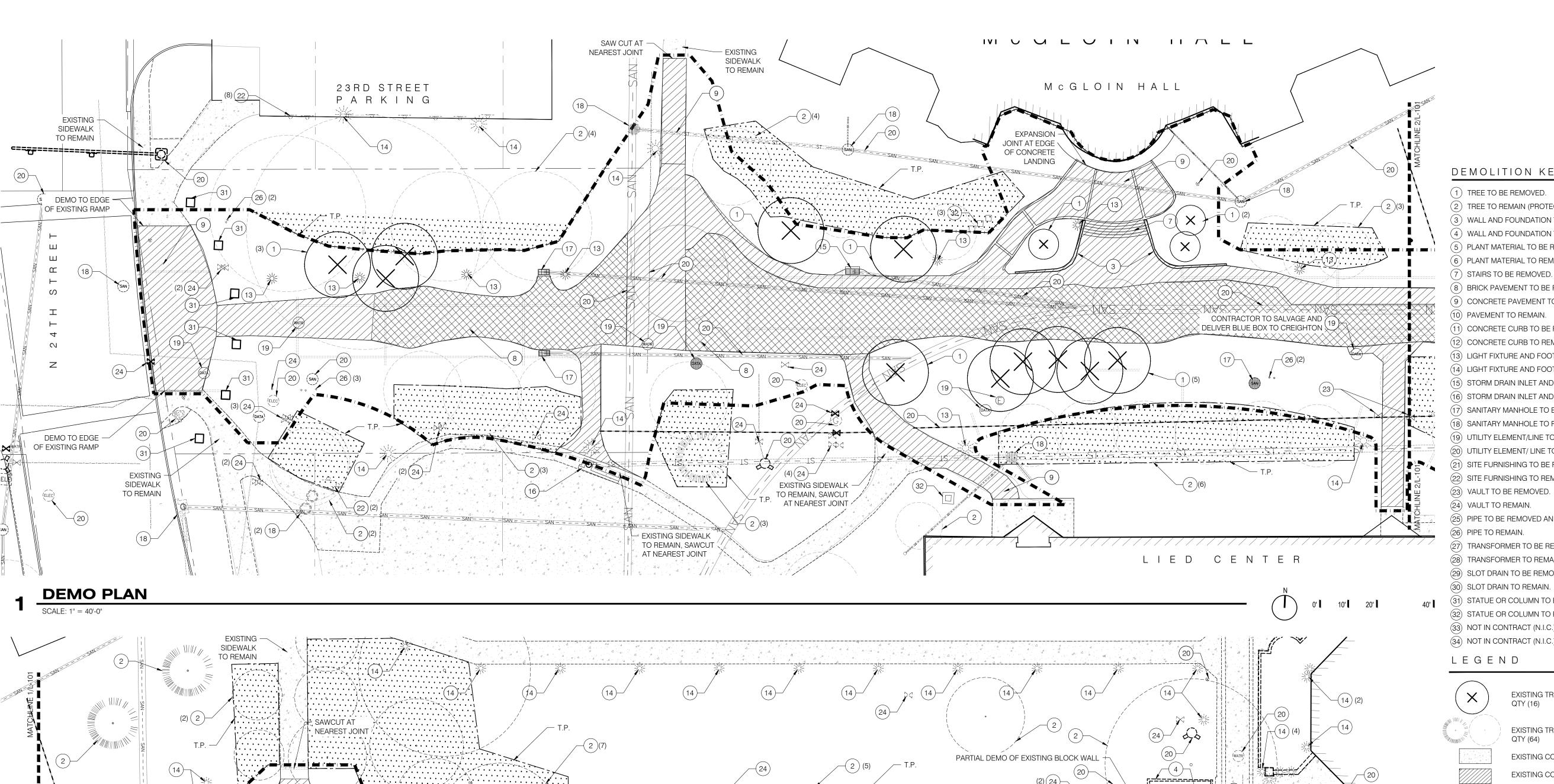
Drawn By: KN Reviewed By: MSS Revisions:

| Date | No. | Remarks |
|------|-----|---------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Sheet Name:

SHEET INDEX

Sheet Number:





DEMOLITION KEYNOTES

(1) TREE TO BE REMOVED.

 $2\,)\;\;$ TREE TO REMAIN (PROTECT ROOT ZONE).

WALL AND FOUNDATION TO BE REMOVED.

WALL AND FOUNDATION TO REMAIN

PLANT MATERIAL TO BE REMOVED.

6) PLANT MATERIAL TO REMAIN.

BRICK PAVEMENT TO BE REMOVED.

) CONCRETE PAVEMENT TO BE REMOVED

) PAVEMENT TO REMAIN.

) CONCRETE CURB TO BE REMOVED.

12) CONCRETE CURB TO REMAIN.

) LIGHT FIXTURE AND FOOTING TO BE REMOVED

UTILITY ELEMENT/LINE TO BE REMOVED AND REPLACED/READJUSTED

UTILITY ELEMENT/ LINE TO REMAIN.

(21) SITE FURNISHING TO BE REMOVED.

22) SITE FURNISHING TO REMAIN.

) VAULT TO BE REMOVED.

TRANSFORMER TO BE REMOVED.

(28) TRANSFORMER TO REMAIN.

(29) SLOT DRAIN TO BE REMOVED.

(30) SLOT DRAIN TO REMAIN.

STATUE OR COLUMN TO BE REMOVED.

STATUE OR COLUMN TO REMAIN

(34) NOT IN CONTRACT (N.I.C.) ELEMENT/LINE TO REMAIN.

LEGEND

EXISTING TREE TO BE REMOVED

EXISTING TREE TO REMAIN

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

LIMIT OF WORK

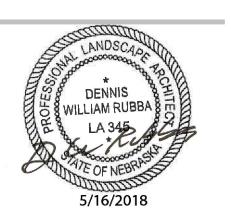


11422 Miracle Hills Drive Omaha, Nebraska 68154 402-778-5025

Date: 2018/05/18

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

100% CONSTRUCTION



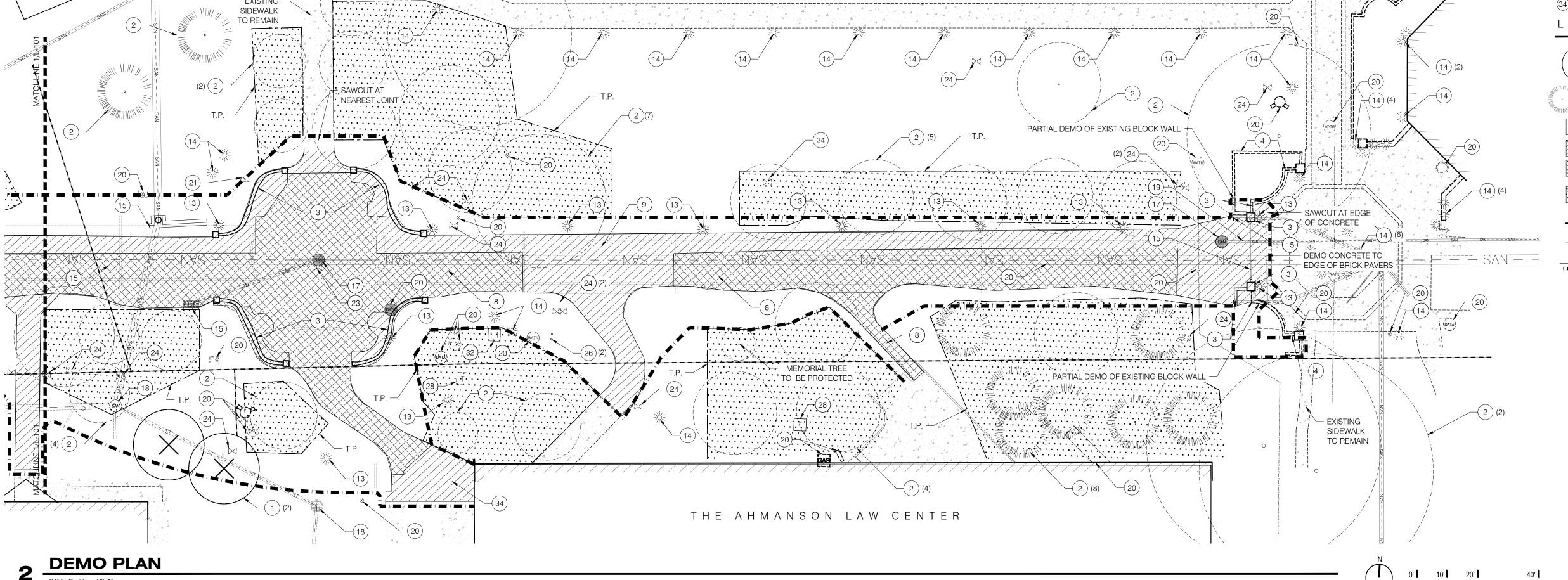
Drawn By: KN Reviewed By: MSS Revisions:

| Date | No. | Remarks |
|------|-----|---------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Sheet Name:

DEMO PLAN

Sheet Number:



STORM SEWER NOTES

- 1. INLETS AND MANHOLES SHALL BE LOCATED IN ACCORDANCE WITH THE COORDINATES SHOWN. THE LENGTHS OF PIPES MAY VARY ACCORDINGLY.
- 2. THE CONTRACTOR IS REFERRED TO THE FOLLOWING CITY OF OMAHA STANDARD PLATES:
 - 700-23 CONCRETE COLLAR AND SEWER TAP
 - 700-24
 - STORM SEWER MANHOLE 700-40
- 700-90 CAST IRON MANHOLE RINGS AND COVERS, MANHOLE STEPS
- 3. TRENCH BACKFILL SHALL BE COMPACTED AS SPECIFIED BY THE GEOTECHNICAL ENGINEER.
- STORM SEWER MATERIALS: THE FOLLOWING MATERIALS ARE GENERALLY APPROVED FOR STORM
- 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.
- 6. CONCRETE FOR STORM SEWER STRUCTURES SHALL BE L65M 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.
- 7. ALL STORM SEWER CONSTRUCTED IN THE PUBLIC RIGHT OF WAY SHALL BE REINFORCED CONCRETE
- 8. 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.

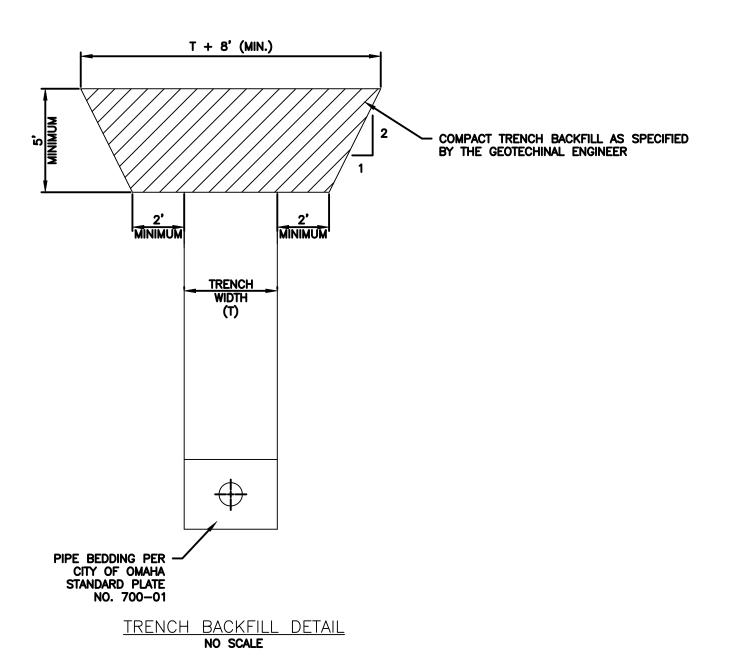
SOIL CONDITIONING

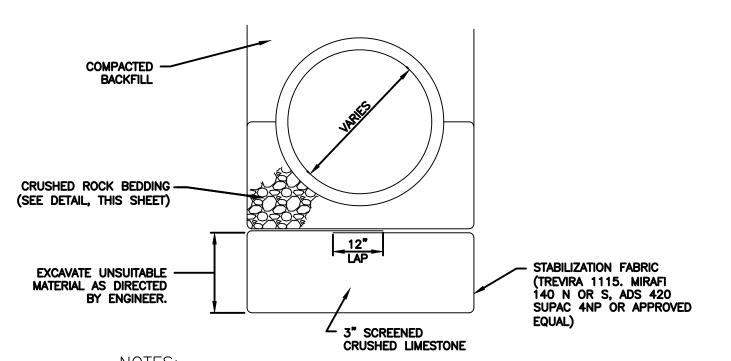
- 1. THE PROJECT IS A LINEAR PROJECT IN NATURE AND SHALL BE CONSIDERED A MAINTENACE PROJECT BY DEFINITION. WITH THE EXISTING UTILITIES AND STRUCTURES IN THE AREA OF THE PROJECT, THE BMP BE SUITED SHALL BE SOIL CONDITIONING.
- 2. SOIL SHALL BE CONDITIONED IN LOCATIONS DISTURBED BY THE PROPOSED GRADING AND IMPROVEMENTS ASSOCIATED WITH THE PROJECT.
- 2. EXISTING VEGETATION, INCLUDING TURF, SHALL BE REMOVED AND THE GROUND SHALL BE TILLED TO A MINIMUM DEPTH OF 6".
- 3. 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.
- 4. FINE GRADING OF THE SITE SHALL BE COMPLETED WITH NO MORE THAN TWO EQUIPMENT PASSES TO REDUCE THE POTENTIAL FOR SOIL COMPACTION.
- 5. 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.
- 2. COMPOST SHALL HAVE A MOISTURE CONTENT THAT HAS NO VISIBLE FREE WATER OR DUST PRODUCED WHEN HANDLING THE MATERIAL
- 3. COMPOST CRITERIA:

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

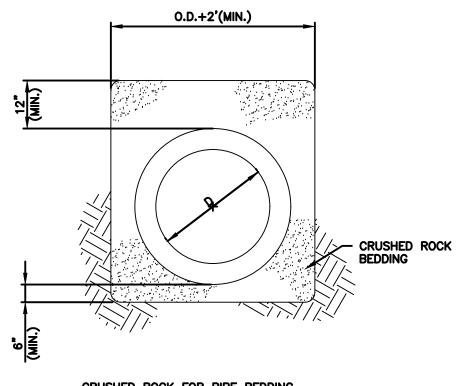




CRUSHED ROCK FOR TRENCH STABILIZATION SHALL CONFORM TO THE REQUIREMENTS OF SECTION 700 OF THE PROJECT SPECIFICATIONS EXCEPT THAT THE GRADATION SHALL BE AS FOLLOWS:

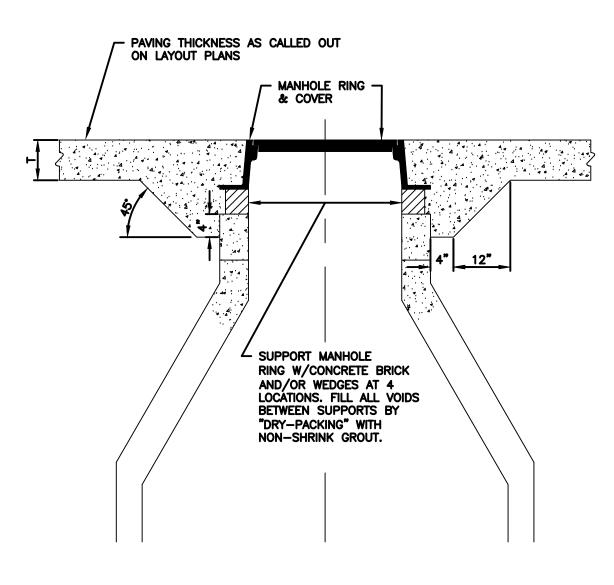
| SIEVE SIZE | PERCENTAGE PASSIN |
|------------|-------------------|
| 2 1/2 INCH | 90-100 |
| 2 INCH | 35-70 |
| 1 1/2 INCH | 0-15 |
| 3/4 INCH | 0-5 |
| | |

STORM SEWER TRENCH STABILIZATION DETAIL NO SCALE



CRUSHED ROCK FOR PIPE BEDDING SHALL CONFORM TO THE REQUIREMENTS OF SECTION 700.

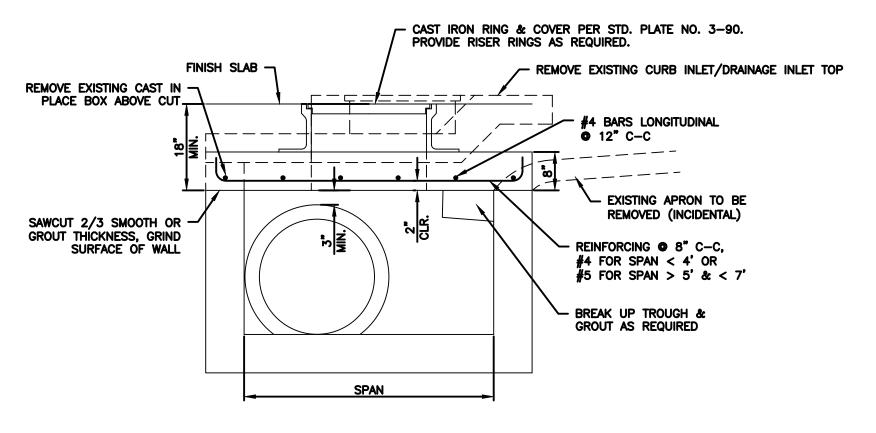
P.V.C./H.D.P.E. STORM SEWER BEDDING DETAIL NO SCALE



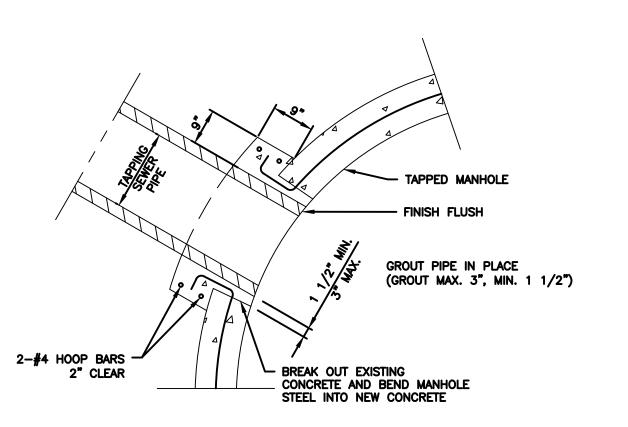
MANHOLE ADJUSTMENT DETAIL NO SCALE

NOTES:

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



CONVERT CURB INLET/DRAINAGE INLET TO FLATTOP MANHOLE NO SCALE



MANHOLE TAP DETAIL NO SCALE



a Metro—Creighton rsity Multi—Modal Facility Metro 2017 IDIQ -Work Order #3) er

aha





Omaha, Nebraska 68154 402-778-5025

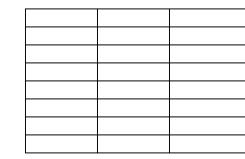
2018/05/16 Date: **Project Name: CU PEDESTRIAN** MALL DESIGN Issued For / Phase:

CONSTRUCTION



Drawn By: Reviewed By: MLK Revisions:

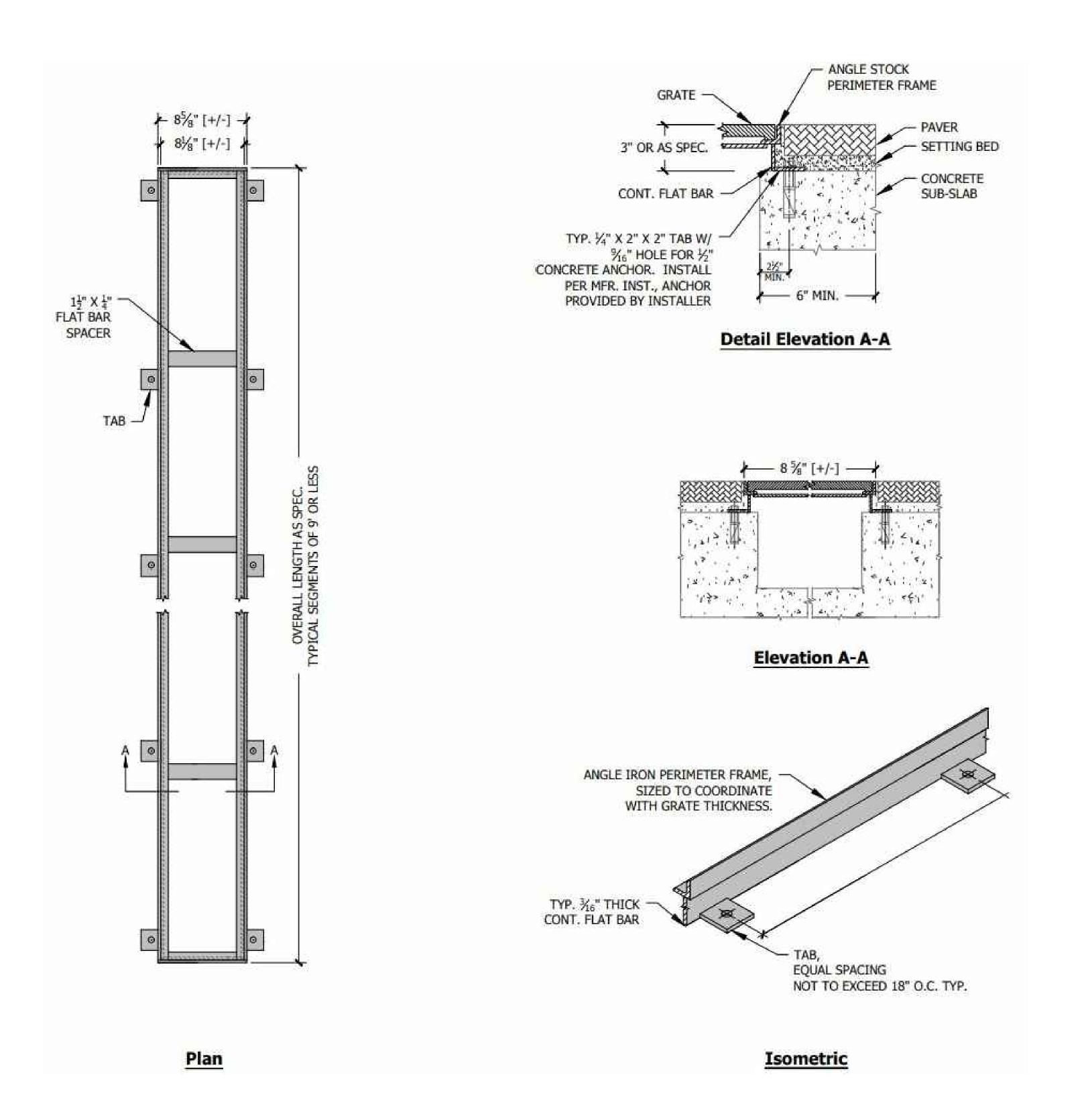
Date No. Remarks



Sheet Name:

NOTES AND DETAILS

Sheet Number:





Omaha Metro—Creighton University Multi—Modal Facility (Metro 2017 IDIQ -Work Order #3)

Omal Omal Creighton Creighton 100%



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

Date: 2018/05/16

Project Name: CU PEDESTRIAN MALL DESIGN

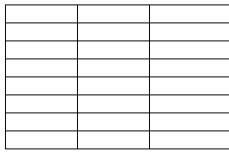
Issued For / Phase:

CONSTRUCTION



Drawn By: MTK Reviewed By: MLK Revisions:

Date No. Remarks



Sheet Name:

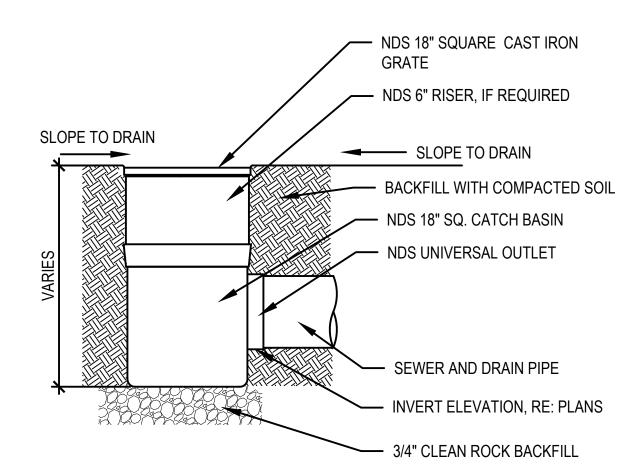
TRENCH DRAIN DETAILS

Sheet Number:

C-101

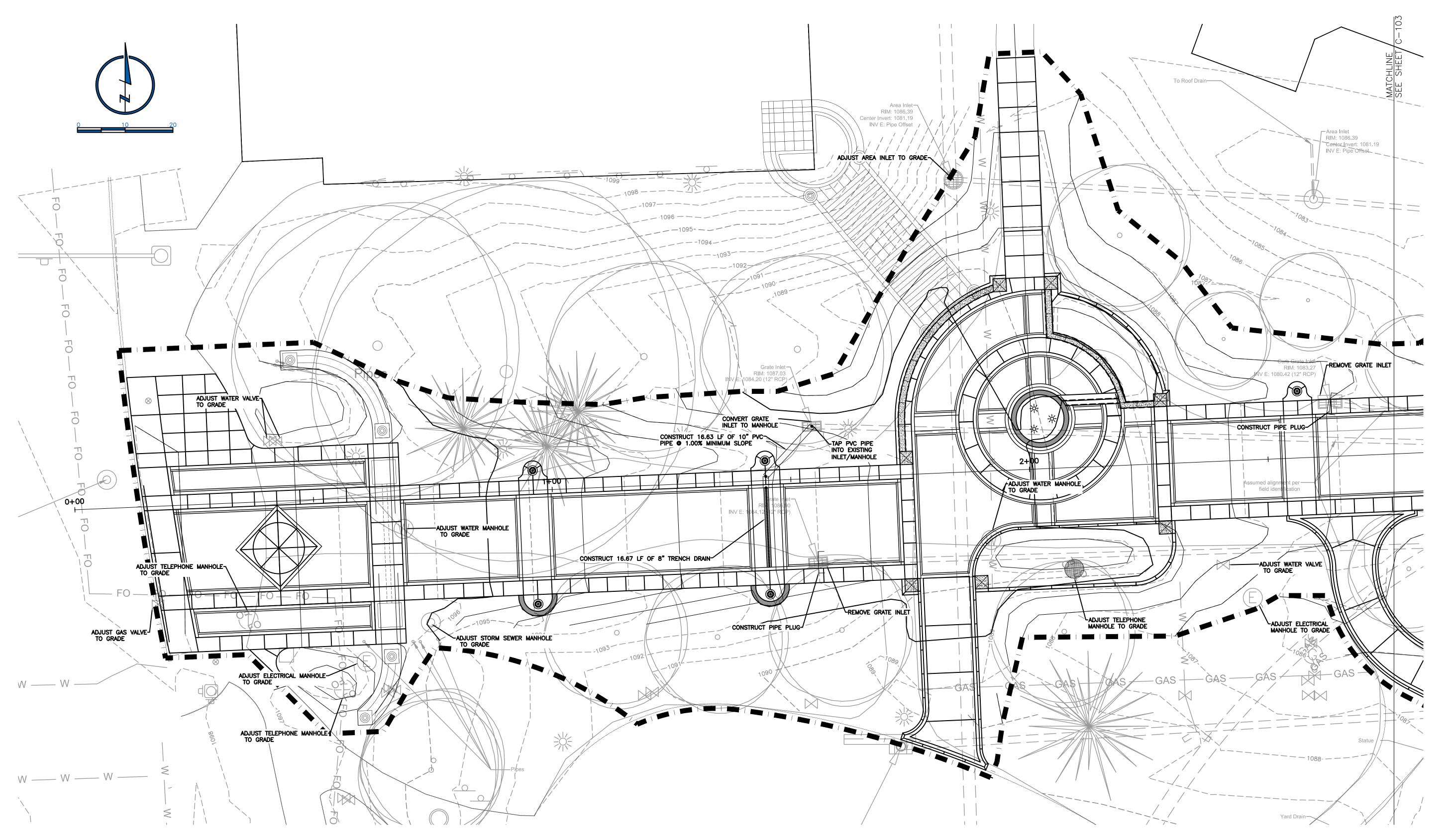
NOTES:

- 1. 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.
- 2. TRENCH DRAIN CHANNEL BASE SHALL CONSIST OF A 4" PCC CAST—IN—PLACE SLAB WHICH IS MONOLITHIC WITH THE ADJACENT CONCRETE BASE.
- 3. 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





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.



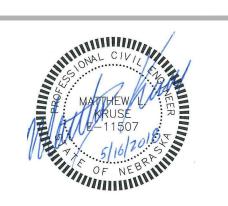
Omaha Metro—Creighton University Multi—Modal Facility (Metro 2017 IDIQ -Work Order #3)



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

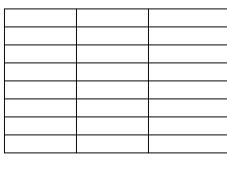
Date: 2018/05/16 Project Name: CU PEDESTRIAN MALL DESIGN Issued For / Phase:

CONSTRUCTION



Drawn By: MTK Reviewed By: MLK Revisions:

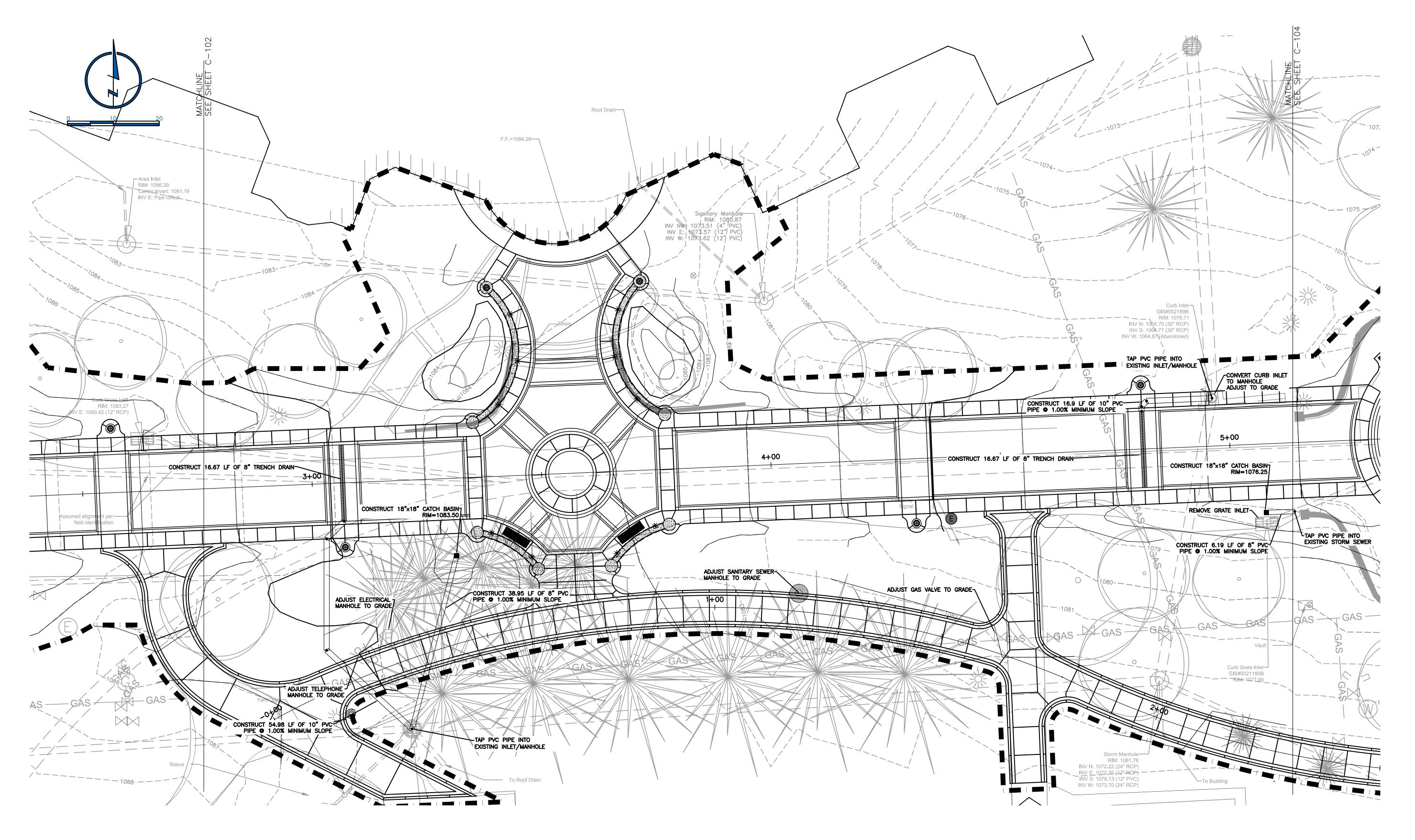
Date No. Remarks



Sheet Name:

UTILITY PLAN SHEET 1 OF 4

Sheet Number:





- 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.



ind Metro—Creignto versity Multi—Modo Facility (Metro 2017 IDIQ -

LAMP RYNEARSON & ASSOCIATES

14710 West Dodge Road, Suite 100 402.496.2498 | P
Omaha, Nebraska 68154-2027 402.496.2730 | F
www.LRA-Inc.com



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

Date: 2018/05/16

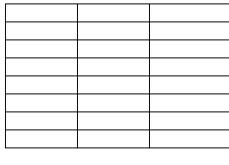
Project Name:
CU PEDESTRIAN
MALL DESIGN
Issued For / Phase:

CONSTRUCTION



Drawn By: MTK Reviewed By: MLK Revisions:

Date No. Remarks

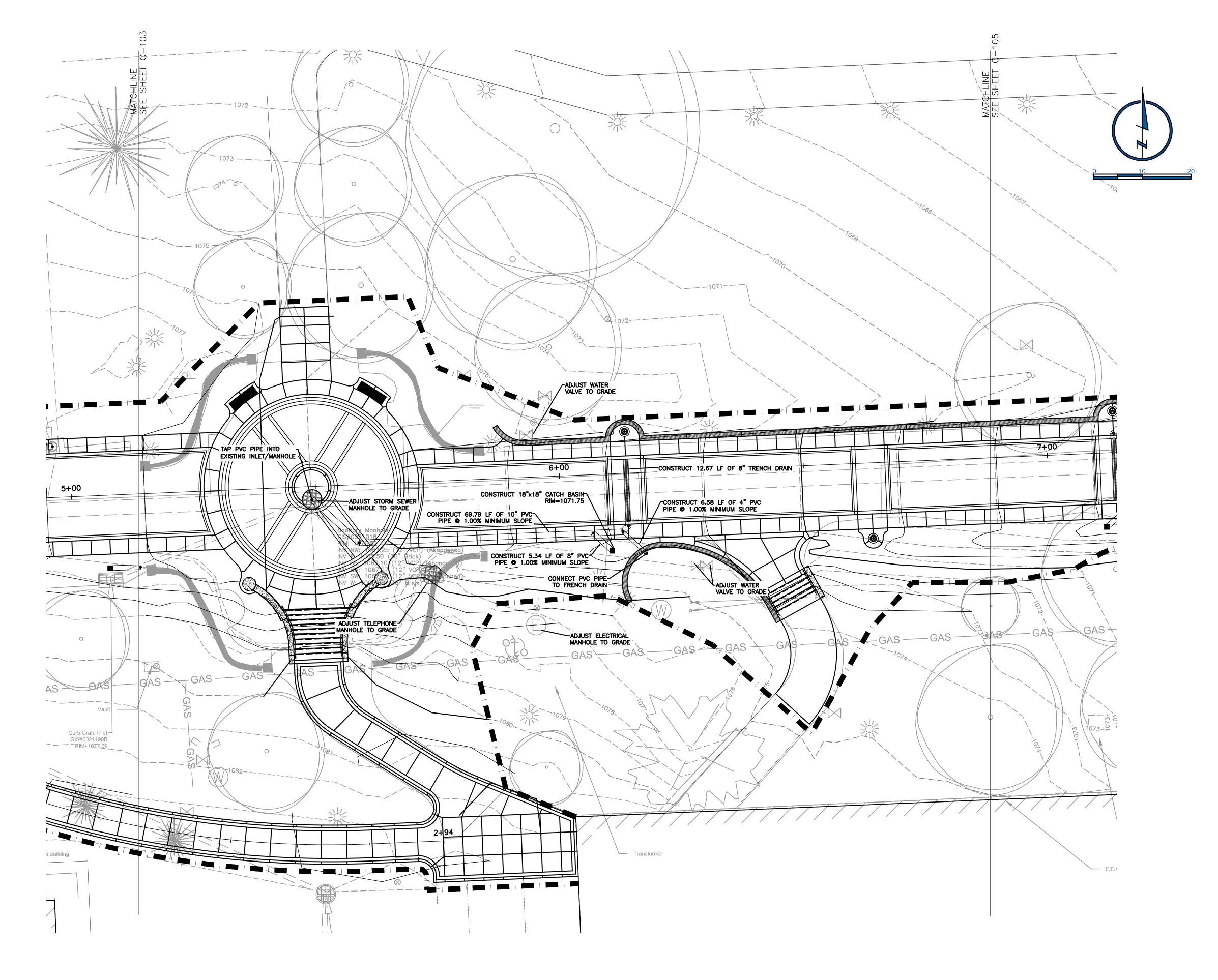


Sheet Name:

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.



Omaha Metro—Creighton
University Multi—Modal
Facility
(Metro 2017 IDIQ Work Order #3)

LAMP RYNEARSON & ASSOCIATES 14710 West Dodge Road, Suite 100 Omaha, Nebraska 68154-2027 www.LRA-Inc.com



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

Date: 2018/05/16
Project Name:
CU PEDESTRIAN

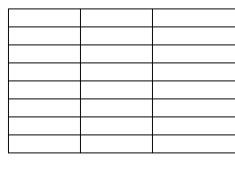
MALL DESIGN Issued For / Phase:

CONSTRUCTION



Drawn By: MTK Reviewed By: MLK Revisions:

Date No. Remarks

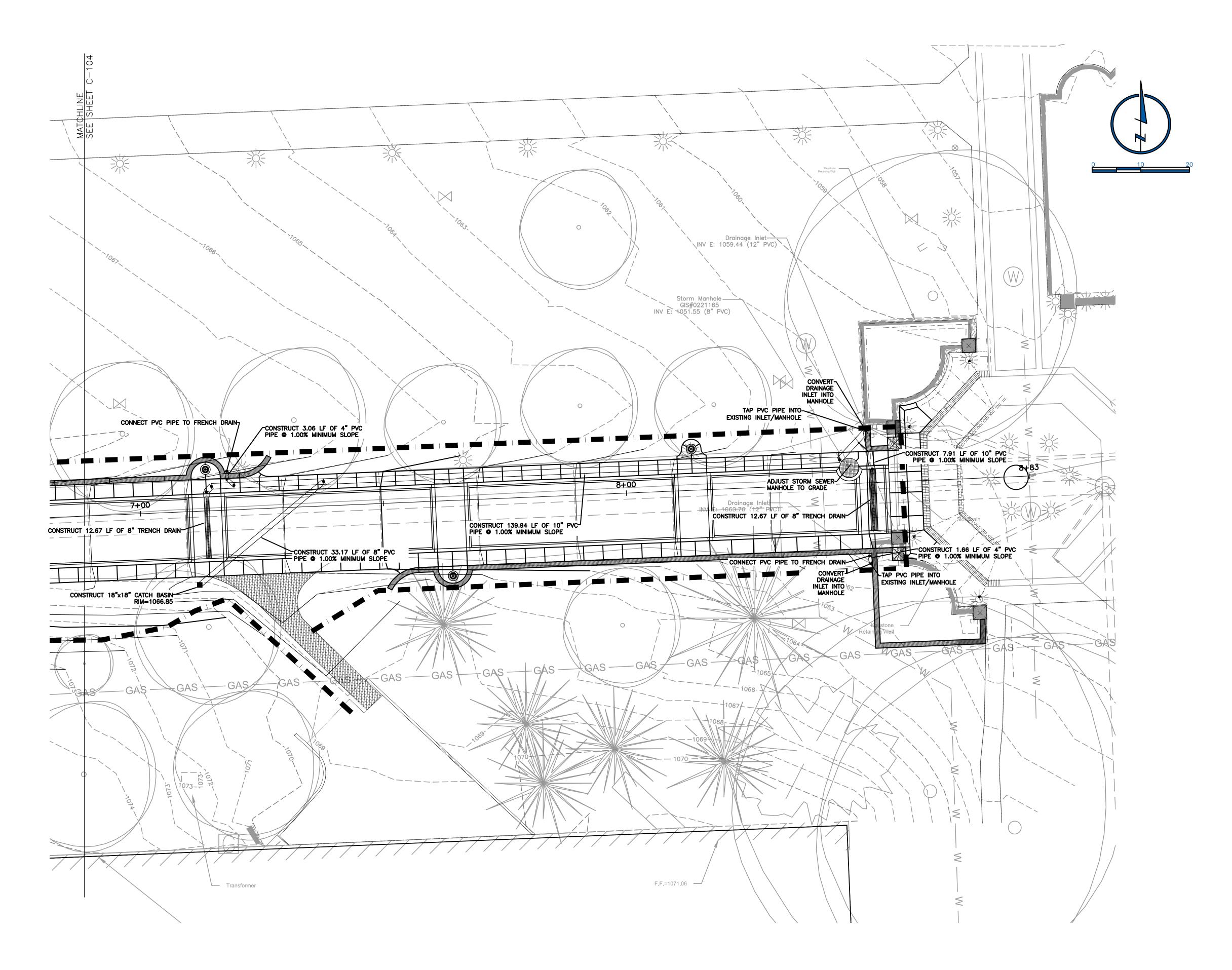


Sheet Name:

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.



Omaha Metro—Creighton
University Multi—Modal
Facility
(Metro 2017 IDIQ Work Order #3)





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

Date: 2018/05/16

Project Name:
CU PEDESTRIAN
MALL DESIGN

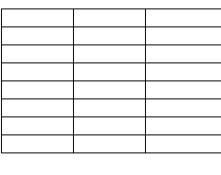
Issued For / Phase:

CONSTRUCTION



Drawn By: MTK Reviewed By: MLK Revisions:

Date No. Remarks

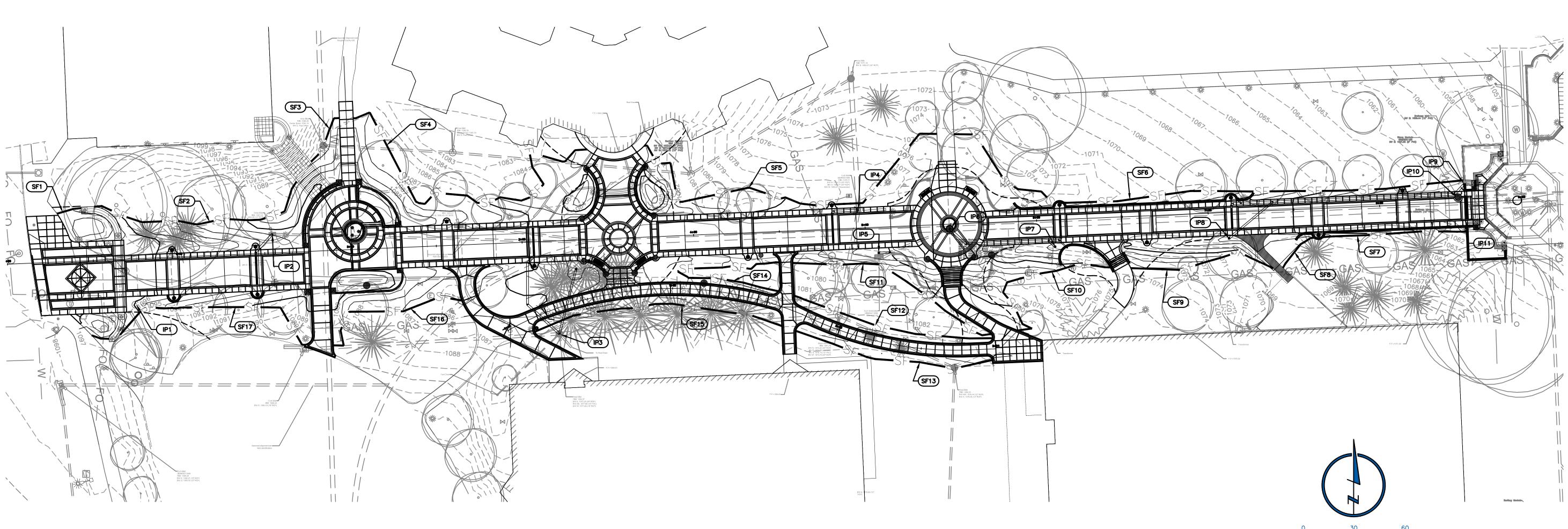


Sheet Name:

UTILITY PLAN SHEET 4 OF 4

Sheet Number:

C-105







2018/05/16 Project Name: CU PEDESTRIAN MALL DESIGN

CONSTRUCTION

Issued For / Phase:

Drawn By: MTK Reviewed By: MLK Revisions:

Date No. Remarks

Sheet Name:

EROSION CONTROL PLAN

Sheet Number:

<u>NOTES</u>

- 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 CONTRO | OL SUMMARY TABLE |
|---------------------------|---|
| EROSION CONTROL MEASURES: | SILT FENCE, ROCK ACCESS ROAD AND INLET PROTECTION |

| 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-SFXX | 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. |

STORM WATER POLLUTION PREVENTION KEYNOTES

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

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 9.6. 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.

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. <u>CONSTRUCTION ENTRANCE</u> 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 TANK OF THE WA UNDER ANY CIRCUMSTANCES.
- 2. <u>SILT FENCE</u> 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-SEEDED AS SOON AS SUCH AREAS ARE IDENTIFIED. CONTROL WEEDS BY MOWING.
- 5. <u>PERMANENT SEEDING</u> 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 SEEDED 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 INATIONAL ARE RESPONSIBLE, RE-ESTABLISH THE STAND FOLLOWING SEEDBED AND SEEDING RECOMMENDATIONS.
- 6. <u>MULCHING</u> 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. <u>SOIL STABILIZATION BLANKETS & MATTING</u> 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
- 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 RAINS, 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

| <u>NUMBER</u> | NAME | LOCATION |
|---|--|---|
| 9.5.2 9.5.4 9.5.5 9.5.7 9.5.8 9.5.14 | NAME CONSTRUCTION ENTRANCE SILT FENCE STORM DRAIN INLET PROTECTION TEMPORARY DIVERSION DIKE TEMPORARY FILL DIVERSION TEMPORARY SEDIMENT TRAP TEMPORARY SEDIMENT BASIN DUST CONTROL TEMPORARY SEEDING PERMANENT SEEDING MULCHING SOIL STABILIZATION BLANKETS & MATTING SANITARY WASTE MANAGEMENT SOLID WASTE MANAGEMENT MATERIAL DELIVERY AND STORAGE STREET CLEANING / SWEEPING | OMAHA REGIONAL STORMWATER DESIGN MANUAL OMAHA |
| | VEHICLE AND EQUIPMENT FUELING SWPPP NOTIFICATION SIGN | OMAHA REGIONAL STORMWATER DESIGN MANUAL OMAHA REGIONAL STORMWATER DESIGN MANUAL |

THE OMAHA REGIONAL STORMWATER DESIGN MANUAL CAN BE FOUND AT http://www.omahastormwater.org.

| BMP RESPONSIBILITY TABLE | | | | | | | | | |
|---|--|--|--------------------|--|--|--|--|--|--|
| MAJOR ACTIVITY | CONTROL MEASURES | TIMING | RESPONSIBLE PARTY | | | | | | |
| | 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 | | | | | | |
| GRADING | 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 CONTRACT | | | | | | | |
| PAVING | CONTINUE TO UTILIZE AND MAINTAIN ITEMS LISTED UNDER GRADING CONTROL MEASURES | AS OFTEN AS NEEDED AND AS RECOMMENDED BY INSPECTOR | GENERAL CONTRACTOR | | | | | | |
| | CLEAN ONSITE PAVEMENT TO REMOVE MUD AND DIRT | AS OFTEN AS NEEDED AND AS RECOMMENDED BY INSPECTOR | GENERAL CONTRACTOR | | | | | | |
| WATER, POWER, GAS AND UTILITIES CONTINUE TO UTILIZE AND MAINTAIN ITEMS LISTED UNDER GRADING, SEWERS AND PAVING | | AS OFTEN AS NEEDED AND AS RECOMMENDED BY INSPECTOR | GENERAL CONTRACTOR | | | | | | |
| BUILDING | CLEAN ONSITE PAVEMENT TO REMOVE MUD/DIRT FROM ADJACENT STREETS | PRIOR TO DISTURBANCE OF LOT | GENERAL CONTRACTOR | | | | | | |
| CONSTRUCTION | PERIODIC STREET SWEEPING TO MANAGE SEDIMENTATION | AS OFTEN AS NEEDED TO PREVENT MIGRATION OF SEDIMENT | GENERAL CONTRACTOR | | | | | | |



ha Metro—Creighton versity Multi—Modal Facility (Metro 2017 IDIQ -Work Order #3) er

aha .





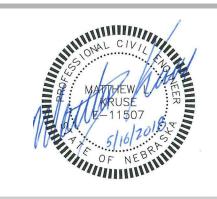
Omaha, Nebraska 68154 402-778-5025

2018/05/16 Date:

Project Name: **CU PEDESTRIAN** MALL DESIGN

Issued For / Phase:

CONSTRUCTION



Drawn By: Reviewed By: MLK Revisions:

Date

Sheet Name:

EROSION CONTROL NOTES

Sheet Number:

| ELECTRICAL SYMBOLS | | | | | | | | |
|--|---|--|--|--------------------|--|--|--|--|
| LLC INICAL STIVIDOLS LIGHTING AND POWER | | | | | | | | |
| SYMBOL | DESCRIPTION | SYMBOL | DESCRIPTION DESCRIPTION | SYMBOL | DESCRIPTION | | | |
| # | SURFACE MOUNTED CEILING FIXTURE (# INDICATES FIXTURE NUMBER IN SCHEDULE) | # | SURFACE MOUNTED WALL FIXTURE (# INDICATES FIXTURE NUMBER IN SCHEDULE) | ⊗ # | CEILING MOUNTED EXIT LIGHT WITH DIRECTIONAL ARROW, SHADING INDICATES FACE (# INDICATES FIXTURE NUMBER IN SCHEDULE) | | | |
| # ©# | RECESSED MOUNTED CEILING FIXTURE (# INDICATES FIXTURE NUMBER IN SCHEDULE) | —————————————————————————————————————— | RECESSED MOUNTED WALL FIXTURE (# INDICATES FIXTURE NUMBER IN SCHEDULE) | \$ # | WALL OR END MOUNTED EXIT LIGHT WITH ARROW, SHADING INDICATES FACE (# INDICATES FIXTURE NUMBER IN SCHEDULE) | | | |
| · # · | PENDANT MOUNTED CEILING FIXTURE (# INDICATES FIXTURE NUMBER IN SCHEDULE) | — #— — #— | STRIP LIGHT (# INDICATES FIXTURE NUMBER IN SCHEDULE) BRACKET FIXTURE (# INDICATES FIXTURE NUMBER IN SCHEDULE) | * | COMBINATION CEILING MOUNTED EXIT/ EMERGENCY BATTERY LIGHT WITH DIRECTIONAL ARROW, SHADING INDICATES FACE (# INDICATES FIXTURE NUMBER IN SCHEDULE) | | | |
| <u>#</u> Ø# | IN GRADE/FLOOR FIXTURE (# INDICATES FIXTURE NUMBER IN SCHEDULE) | # V# | FIXTURE TRACK (# INDICATES FIXTURE NUMBER IN SCHEDULE) TRACK MOUNTED FIXTURE (# INDICATES FIXTURE NUMBER IN SCHEDULE) | * | COMBINATION WALL MOUNTED EXIT/EMERGENCY BATTERY LIGHT WITH DIRECTIONAL ARROW, SHADING INDICATES FACE (# INDICATES FIXTURE NUMBER IN SCHEDULE) | | | |
| # | SHADING INDICATES FIXTURE ON EMERGENCY CIRCUIT OR WITH BATTERY BACKUP UNDERCABINET LIGHT (# INDICATES FIXTURE NUMBER IN SCHEDULE) | ** | CEILING FAN - NUMBER OF BLADES IN SCHEDULE (# INDICATES FIXTURE NUMBER IN SCHEDULE) | # | EMERGENCY BATTERY LIGHT (# INDICATES FIXTURE NUMBER IN SCHEDULE) ABOVE GRADE FIXTURE (# INDICATES FIXTURE NUMBER IN SCHEDULE) | | | |
| <u> </u> | ARROW INDICATES WALL WASH FIXTURE | 4 | THEATER SPOT LIGHT (# INDICATES FIXTURE NUMBER IN SCHEDULE) | □ - (;) | POLE LUMINAIRE(S) (# INDICATES FIXTURE NUMBER IN SCHEDULE) | | | |
| S | SINGLE POLE SWITCH | Ψ | SIMPLEX RECEPTACLE | | LIGHTING PANEL - FLUSH MOUNTED | | | |
| S ₂ | DOUBLE POLE SWITCH 3-WAY SWITCH | $oldsymbol{\Phi}^{G,T,U}$ | DUPLEX RECEPTACLE "G" SUBSCRIPT INDICATES GFCI, "T" SUBSCRIPT INDICATES TAMPER RESISTANT TYPE, "U" SUBSCRIPT | (2000) | LIGHTING PANEL - SURFACE MOUNTED DIMMING/RELAY PANEL | | | |
| S ₄ | 4-WAY SWITCH | ₽ | INDICATES COMBINATION USB CHARGING STATION AUTOMATICALLY CONTROLLED DUPLEX RECEPTACLE | | DISTRIBUTION PANEL, SWITCHBOARD, OR | | | |
| S _D | DOOR SWITCH | ₩ • | ISOLATED GROUND DUPLEX RECEPTACLE | T | MOTOR CONTROL CENTER TRANSFORMER | | | |
| SMC | MOMENTARY CONTACT SWITCH | π Φ | HOSPITAL GRADE DUPLEX RECEPTACLE | ATS | AUTOMATIC TRANSFER SWITCH | | | |
| ST | TIMER SWITCH | π • | RED DUPLEX RECEPTACLE | | ENCLOSED CIRCUIT BREAKER | | | |
| STE | SINGLE POLE MANUAL MOTOR STARTER WITH THERMAL OVERLOAD AND PILOT LIGHT | <u>"</u> | DUPLEX RECEPTACLE - SPLIT WIRED | | SINGLE PHASE MAGNETIC MOTOR STARTER | | | |
| S | SWITCH AND FUSE | <u></u> | DRYER RECEPTACLE NEMA 14-30 (125/250V 30A) | ⊠ | THREE PHASE MAGNETIC MOTOR STARTER | | | |
| <u> </u> | SWITCH AND FUSTAT | <u></u> | SPECIAL PURPOSE RECEPTACLE (NEMA CONFIGURATION AS NOTED) | ⊠ ^j | COMBINATION MAGNETIC STARTER/DISCONNECT | | | |
| | MANUAL DIMMER OR FAN SPEED CONTROL (# INDICATES WATTAGE: "6"-600W, | | HORIZONTAL MOUNTED DUPLEX RECEPTACLE | ㅁ | SAFETY SWITCH (FUSED UNLESS OTHERWISE NOTED) | | | |
| # | "10"-1000W, "15"-1500W, "20"-2000W, "F"-FAN SPEED CONTROL) | ₩ | RANGE RECEPTACLE NEMA 14-50 (125/250V 50A) | M # | MOTOR (# INDICATES HORSEPOWER) | | | |
| ♦ # | CEILING MOUNTED OCCUPANCY SENSOR (# INDICATES FIXTURE NUMBER IN SCHEDULE) | ₩w | WELDER RECEPTACLE NEMA 6-50 (250V 50A) | РВ | PULL BOX | | | |
| \$ # | WALL MOUNTED OCCUPANCY SENSOR/SWITCH (# INDICATES FIXTURE NUMBER IN SCHEDULE) | # | DOUBLE DUPLEX RECEPTACLE | φ | WALL MOUNTED JUNCTION BOX | | | |
| 8 | PUSH BUTTON STATION | # | (1) DUPLEX, (1) DUPLEX AUTOMATICALLY CONTROLLED | | JUNCTION BOX ("F" INDICATES FLOOR, "C" INDICATES CEILING) | | | |
| ® | PHOTOCELL CEILING MOUNTED | • | ISOLATED GROUND DOUBLE DUPLEX RECEPTACLE | | BRANCH CIRCUIT - EXPOSED | | | |
| P | PHOTOCELL WALL MOUNTED | # | RED DOUBLE DUPLEX RECEPTACLE | | BRANCH CIRCUIT - CONCEALED IN CEILING OR WALL | | | |
| (b) | TIME SWITCH | Φ | RECEPTACLE IN AV BACKBOX | /- ~ | BRANCH CIRCUIT - CONCEALED IN FLOOR (UNDERGROUND IF EXTERIOR) | | | |
| R | RELAY | ф | WALL CLOCK HANGER RECEPTACLE | | HOMERUN TO PANEL (NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS) | | | |
| ER | EMERGENCY LIGHTING RELAY | Ø | CEILING MOUNTED DUPLEX RECEPTACLE | | SPECIAL PURPOSE HOMERUN AS INDICATED | | | |
| X | LIGHTING CONTACTOR | 凝 | CEILING MOUNTED DOUBLE DUPLEX RECEPTACLE | | CIRCUIT DOWN | | | |
| ••• | COMBINATION POWER/DATA FLOOR OUTLET ("#" INDICATES DEVICE TYPE IN SCHEDULE) | Ø | CEILING MOUNTED RED DUPLEX RECEPTACLE | <u> </u> | CIRCUIT UP | | | |
| • AV | COMBINATION POWER/AV FLOOR OUTLET ("#" INDICATES DEVICE TYPE IN SCHEDULE) | 0 | CEILING MOUNTED SPECIAL PURPOSE RECEPTACLE | > | CONDUIT STUB-OUT | | | |
| • • • # | COMBINATION POWER/DATA/AV FLOOR OUTLET ("#" INDICATES DEVICE TYPE IN SCHEDULE) | Ø | CEILING MOUNTED SIMPLEX RECEPTACLE | \sim | CIRCUIT BREAK | | | |
| ® | COMBINATION POWER/DATA/AV TABLETOP OUTLET ("#" INDICATES DEVICE TYPE IN SCHEDULE) | • | FLOOR MOUNTED DUPLEX RECEPTACLE | | CORD AND PLUG | | | |
| | MULTI-OUTLET ASSEMBLY ~ LENGTH AS INDICATED | Ø | RECEPTACLE IN AV BACKBOX | | LIGHTING CIRCUIT/ZONE BOUNDARY | | | |
| XXX | MECH EQUIPMENT WITH ELEC CONNECTION SEE MECHANICAL/ELECTRICAL COORDINATION SCHEDULE | XX-##> | LIGHTING ZONE CIRCUIT DESIGNATION, "XX" INDICATES PANEL NAME, "##" INDICATES CIRCUIT NUMBER | | | | | |

| | SITE LIGHTING SCHEDULE | | | | | | | | | | |
|------|------------------------|---|---|----------------------------------|---------|---|------------------|-------------------|------------------|---------------------------------|---------|
| MARK | MANUFACTURER | CATALOG NO. | BEAM DISTRIB. LAMP DATA VOLTS FIXTURE QUAN. PER POLE FIXTURE AND POLE FINISH (F1 | | | | | POLE HT. (FT.) | POLE TYPE | DESCRIPTION | REMARKS |
| 1 | ANTIQUE STREET LAMPS | ATL23-D-32LED 700MA-4K- ACT-MVOLT-N5-SF-ANBK | N5 | LED, 5600 LUMENS, 77W, 4000K | 120-277 | 1 | ASL BLACK | 11 | PA RF1CIT 11 | ACORN LUMINAIRE AND ASL POLE | 1, 2 |
| 2 | ANTIQUE STREET LAMPS | ATL23-D-32LED 700MA-4K- ACT-MVOLT-N5-SF-ANBK | N5 | LED, 5600 LUMENS, 77W, 4000K | 120-277 | 1 | ASL BLACK | 8.5 | PA RF1CIT 8.5 | ACORN LUMINAIRE AND ASL POLE | 1, 3 |
| 3 | SISTEMALUX | S.6320N-UNV-14/2.6329 | - | LED, 346 LUMENS, 12.4W, 3000K | 120-277 | - | ALUMINUM GRAY | - | - | WALL RECESSED LUMINAIRE | 4 |

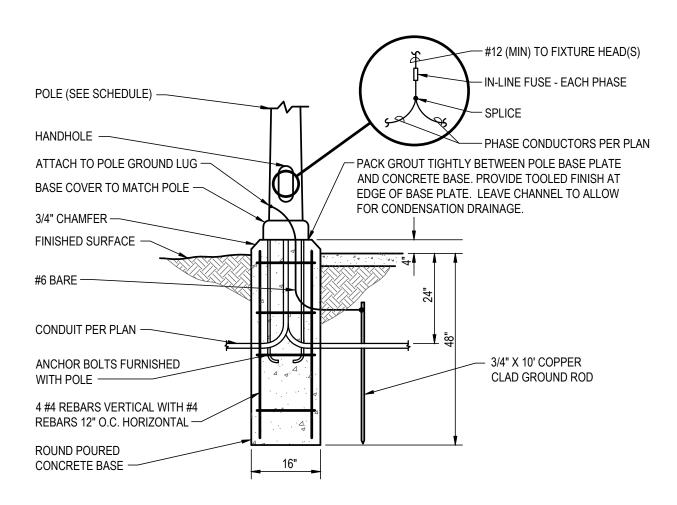
- a SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS FOR LUMINAIRES, LAMPS, AND BALLASTS.
- b CONTRACTOR TO VERIFY LIGHT FIXTURE CATALOG NUMBER AND INSTALLATION REQUIREMENTS PRIOR TO ORDERING.
- c POLE TYPE DESCRIPTION (ABC): A SHAPE, R-ROUND, S-SQUARE; B PROFILE, S-STRAIGHT, T-TAPERED; C MATERIAL, A-ALUMINUM, S-STEEL
- d PROVIDE INTERNAL VIBRATION DAMPENER FOR EACH POLE.
- e EQUIVALENT FIXTURES TO THE ABOVE ARE SUBJECT TO OWNER, ARCHITECT, AND ENGINEER APPROVAL.

- 1 PROVIDE ASL POLE WITH 2 DUPLEX WEATHERPROOF RECEPTACLES, ONE HIGH AND ONE LOW. PROVIDE WITH BANNER ARM MOUNTING PROVISIONS.
- 2 SEE DETAIL 1/E-000 FOR POLE BASE INSTALLATION.
- 3 SEE DETAILS 4/L-504 & 5/L504 FOR POLE MOUNTING.
- 4 SEE DETAIL 2/L-502. MOUNT FIXURE AT 12" TO CENTER FROM TOP OF WALL.

| | CONTACTOR SCHEDULE | | | | | | | | |
|------|--------------------|----------------|----------------|----|-------|------------------------|------------------|---|---------|
| MARK | ELEC. HELD | MECH | MECH HELD | | POLES | CIRCUITS CONTROLLED | CONTROLLED BY | NAMEPLATE | REMARKS |
| | | 2 WIRE CONT | 3 WIRE CONT | | | | | | |
| C1 | | X | | 30 | 6 | H1C-13,15, L1D-45, 49 | PHOTOCELL | PEDESTRIAN MALL POLE LIGHTS AND TOP RECEPTACLES | 1 |

a COORDINATE COIL VOLTAGE WITH APPLICATION. PROVIDE CIRCUIT AS REQUIRED TO POWER CONTROLS UNLESS OTHERWISE NOTED.

1 SQUARE D TYPE LXG OR APROVED EQUIVALENT.



GENERAL NOTES

- 1. THIN LINE ITEMS INDICATE EXISTING TO REMAIN. BOLD LINE ITEMS INDICATE NEW
- 2. REPAIR OR REPLACE BUILDING ELEMENTS THAT ARE DAMAGED AS PART OF ELECTRICAL WORK.
- 3. IN AREAS WITH PRECAST PANELS OR WALLS, COORDINATE INSTALLATION OF FLUSH-MOUNTED DEVICE BOXES AND CONCEALED CONDUITS WITH PRECAST PANEL SUPPLIER SUCH THAT CONDUIT AND, BOXES ARE CAST WITHIN EACH WALL SECTION. FURNISH CONDUIT AND BOXES TO PRECAST SUPPLIER FOR EMBEDDING
- 4. SITE LIGHTING LUMINAIRE LOCATIONS ARE APPROXIMATE. COORDINATE EXACT LOCATIONS WITH CIVIL ENGINEER/DRAWINGS.

1209 HARNEY STREET, OMAHA NE 68102 PHONE: 402 281 1800



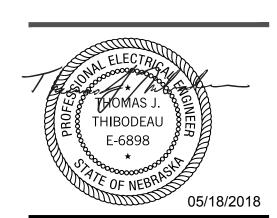
11422 Miracle Hills Drive Omaha, Nebraska 68154 402-778-5025

2018/05/18 Date:

Project Name: CU PEDESTRIAN MALL DESIGN

Issued For / Phase:

CONSTRUCTION



Drawn By: JJW Reviewed By: TJT Revisions:

Date No. Remarks

| Date | 140. | i verriar K |
|------|------|-------------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Sheet Name: ELECTRICAL SYMBOLS AND ABBREVIATIONS Sheet Number:

POLE BASE

| | | | | ABBREVIATIONS | | | | |
|---|--|--|---|--|---|--|---|--|
| A AMP AC ALTERNATING CURRENT ACEG AC EQUIPMENT GROUND AFF ABOVE FINISHED FLOOR AHJ AUTHORITY HAVING JURISDICTION ALF ALUMINUM FRAME DOOR APPROX APPROXIMATELY ASHRAE AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS ASME AMERICAN SOCIETY OF MECHANICAL ENGINEERS ASTM STANDARD SPECIFICATIONS OF THE AMERICAN SOCIETY FOR TESTING MATERIALS ATS AUTOMATIC TRANSFER SWITCH AUX AUXILIARY AV ACID VENT, AUDIOVISUAL AVG AVERAGE AVI AUTOMATIC VEHICLE IDENTIFICATION AW ACID WASTE AWG AMERICAN WIRE GAUGE BAS BUILDING AUTOMATION SYSTEM BFP BACKFLOW PREVENTER BICSI BUILDING INDUSTRY CONSULTING SERVICE INTERNATIONAL BLDG BUILDING BTC BONDING CONDUCTOR FOR TELECOMMUNICATION BTU BRITISH THERMAL UNIT BTUH BRITISH THERMAL UNIT PER HOUR | C CONDUIT CAB CABINET CATV CABLE TELEVISION CB CIRCUIT BREAKER CCTV CLOSED CIRCUIT TELEVISION CFH CUBIC FEET PER HOUR CFM CUBIC FEET PER MINUTE CKT CIRCUIT CL CENTER LINE CLEC COMPETITIVE LOCAL EXCHANGE CARRIER CLG CEILING CLR CLEAR CM COMMUNICATIONS CABLE CMP COMMUNICATIONS PLENUM CABLE CMP COMMUNICATIONS RISER CABLE COAX COAXIAL CABLE CO-OSP CUSTOMER OWNER-OUTSIDE PLANT CPVC CHLORINATED POLYVINYL CHLORIDE CRAC COMPUTER ROOM AIR CONDITIONER CT COOLING TOWER, CABLE TRAY CV CONSTANT VOLUME DAS DISTRIBUTION ANTENNA SYSTEM DD DOUBLE DUCT DIA DIAMETER DISC DISCONNECT DIST DISTRIBUTION DN DOWN DP DEMARCATION POINT DPS DOOR POSITION SWITCH DVR DIGITAL VIDEO RECORDER | ER EQUIPMENT ROOM EXH EXHAUST EXIST EXISTING | FO FIBER OPTIC FOV FIELD OF VIEW FP FIBER PANEL FT FEET FURN FURNISHED FW FILTERED WATER G GAS GA GAUGE GALV GALVANIZED GC GENERAL CONTRACTOR GEC GROUNDING ELECTRODE CONDUCTOR GEN GENERATOR GFCI GROUND FAULT CIRCUIT INTERRUPTER GND GROUND GPM GALLONS PER MINUTE HGT HEIGHT HH HANDHOLE HMF HOLLOW METAL FRAME DOOR HP HORSEPOWER, HEAT PUMP HTG HEATING HVAC HEATING, VENTILATING AND AIR CONDITIONING HW HOT WATER HWC HOT WATER CIRCULATING HZ HERTZ IC INTERCOM IDC INSULATION DISPLACEMENT CONNECTOR IDF INTERMEDIATE DISTRIBUTION FRAME IDS INTRUSION DETECTION SYSTEM IE INVERT ELEVATION | IP INTERNET PROTOCOL ISP INSIDE PLANT J-BOX JUNCTION BOX KCMIL THOUSAND CIRCULAR MILS KV KILOVOLT KVA KILOVOLT AMPERE KW KILOWATT LAN LOCAL AREA NETWORK LBM LATCH BOLT MONITOR LBS POUNDS R LEC LOCAL EXCHANGE CARRIER LTG LIGHTING MA MAKEUP AIR MATV MASTER ANTENNA TELEVISION MAU MAKEUP AIR UNIT (MAX) MAXIMUM MBH 1000 BTU/HOUR MC MAIN CROSS CONNECT MCB MAIN CIRCUIT BREAKER MDF MAIN DISTRIBUTION FRAME MECH MECHANICAL MERV MINIMUM EFFICIENCY REPORTING VALUE (MIN) MINIMUM MISC MISCELLANEOUS MLO MAIN LUGS ONLY MM MULTIMODE MOA MINIMUM OUTDOOR AIR MPOE MAIN POINT OF ENTRANCE MTD MOUNTING | MUTOA MULTI USER TELECOMMUNICATIONS OUTLET ASSEMBLY MXA MIXED AIR NC NORMALLY CLOSED NEC NATIONAL ELECTRICAL CODE NEMA NATIONAL FIRE PROTECTION ASSOCIATION NIC NOT IN CONTRACT NO NORMALLY OPEN NOM NOMINAL NPW NON-POTABLE WATER NTS NOT TO SCALE NVE NETWORK VIDEO ENCODER NVR NETWORK VIDEO RECORDER OA OUTSIDE AIR OC ON CENTER OPE OWNER PROVIDED ELECTRONICS OR OPERATOR ROOM OSP OUTSIDE PLANT PABX PRIVATE AUTOMATIC BRANCH EXCHANGE PB PULLBOX PBO PROVIDE BY OTHERS PBX PRIVATE BRANCH EXCHANGE PDU POWER DISTRIBUTION UNIT PERP PERPENDICULAR PIC PLASTIC INSULATED CABLE PIV POST INDICATOR VALVE PLBG PLUMBING | PNL PANEL POE POWER OVER ETHERNET POP POINT OF PRESENCE PP PATCH PANEL PRV PRESSURE REGULATING VALVE PS PLASTER SINK PSF POUNDS PER SQUARE FOOT PSI POUNDS PER SQUARE INCH PSTN PUBLIC SWITCH TELEPHONE NETWORK PTAC PACKAGED TERMINAL AIR CONDITIONER PTZ PAN-TILT-ZOOM PVC POLYVINYL CHLORIDE PWR POWER RA RETURNAIR REQD REQUIRED RGS RIGID GALVANIZED STEEL RH RELATIVE HUMIDITY RLFA RELIEF AIR RM ROOM RO REVERSE OSMOSIS WATER RPBFP REDUCED PRESSURE BACKFLOW PREVENTER RQE REQUEST TO EXIT SA SUPPLY AIR, SOUND ATTENUATOR SAN SANITARY SCH SCHEDULE SCTP SCREENED TWISTED PAIR SCW SOFT COLD WATER SHW SOFT HOT WATER (SIM) SIMILAR SLAB SEALED LEAD ACID BATTERY SM SPRINKLER MAIN, SINGLE MODE | SMACNA SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION SPD SURGE PROTECTIVE DEVICE SPECS SPECIFICATIONS SS STAINLESS STEEL SSD SUB SOIL DRAIN SSI SECURITY SYSTEMS INTEGRATOR SSS SURGEON SCRUB SINK ST STORM STD STANDARD STP SHIELDED TWISTED PAIR SW SWITCH SWBD SWITCHBOARD SWGR SWITCHGEAR T TRANSFORMER T-1 TRUNK LEVEL 1 TBB TELECOMMUNICATIONS BONDING BACKBONE TBBIBC TELECOMMUNICATIONS BONDING BACKBONE INTERCONNECTING BONDING CONDUCTOR TC TELECOMMUNICATIONS CLOSET TEL TELETHONE TELECOMMUNICATIONS TEMP TEMPERATURE TGB TELECOMMUNICATIONS TEMP TEMPERATURE TGB TELECOMMUNICATIONS MAIN GROUNDING BUSBAR TR TELECOMMUNICATIONS ROOM TTB TELEPHONE TERMINAL BOARD | TV TELEVISION TVSS TRANSIENT VOLTAGE SURGE SUPPRESSION (TYP) TYPICAL UG UNDERGROUND UL UNDERWRITERS LABORATORY UNO UNLESS NOTED OTHERWISE UPS UNINTERRUPTIBLE POWER SUPPLY US UTILITY SINK UTP UNSHIELDED TWISTED PAIR V VOLT, VENT VD VOLUME DAMPER VERT VERTICAL VFC VARIABLE FREQUENCY CONTROL VOIP VOICE OVER INTERNET PROTOCOL VTR VENT THROUGH ROOF W WATER, WATT WAN WIDE AREA NETWORK WAP WIRELESS ACCESS POINT WG WATER GUAGE WMP WIRE MANAGEMENT PANEL WP WEATHERPROOF WSA WIRE SIZING AMPS WSHP WATER SOURCE HEAT PUMP WTH WIRE TRANSFORMER |

© COPYRIGHT 2018 Permission to reproduce all or part of this drawing is hereby granted solely for the limited purpose of construction of this project or archiving. Unauthorized copying, disclosure or construction use without written permission of Alvine Engineering is prohibited by copyright law.

NOTE:
DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL, SHOP AND OTHER APPROPRIATE DRAWING OR AT SITE. LAY OUT AND COORDINATE ALL WORK PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, AND CODES AND VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF CLEARANCE FOR ALL TRADES. READ SPECIFICATIONS.



1800 O Street, Suite 104 13431 Broadway Extension, Suite 101 400 East Court Ave, Suite 130 1201 Cass Street Omaha, Nebraska 68102 Lincoln, Nebraska 68508 Oklahoma City, Oklahoma 73114 Des Moines, Iowa 50309 Phone: (402) 346-7007 Phone: (402) 477-6161 Phone: (405) 936-3480

Oklahoma City:

SYMBOLS INDICATED HERE AND NOT USED IN THE CONTRACT DOCUMENTS DO NOT APPLY TO THIS PROJECT. ADDITIONAL SYMBOLS AND ABBREVIATIONS MAY BE INDICATED IN THE CONTRACT DOCUMENTS.



niversity Multi-Modal Facility (Metro 2017 IDIQ -

Univ

studio INSITE
1209 HARNEY STREET, OMAHA NE 68102
PHONE: 402 281 1800

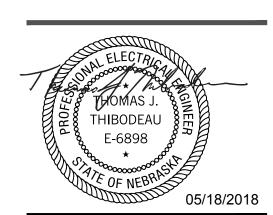


11422 Miracle Hills Drive Omaha, Nebraska 68154 402-778-5025

Date: 2018/05/18

Project Name:
CU PEDESTRIAN
MALL DESIGN
Issued For / Phase:

CONSTRUCTION



Drawn By: JJW Reviewed By: TJT Revisions:

Date No. Remarks

Sheet Name:

© COPYRIGHT 2018

Permission to reproduce all or part of this drawing is hereby

granted solely for the limited purpose of construction of this project or archiving. Unauthorized copying, disclosure or construction use without written permission of Alvine

NOTE:
DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND

CLEARANCES FROM ARCHITECTURAL, STRUCTURAL,

LAY OUT AND COORDINATE ALL WORK PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR

SHOP AND OTHER APPROPRIATE DRAWING OR AT SITE.

OPERATION, MAINTENANCE, AND CODES AND VERIFY

Oklahoma City:

Omaha, Nebraska 68102 Lincoln, Nebraska 68508 Oklahoma City, Oklahoma 73114 Des Moines, Iowa 50309

1800 O Street, Suite 104 13431 Broadway Extension, Suite 101 400 East Court Ave, Suite 130

NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF CLEARANCE FOR

Engineering is prohibited by copyright law.

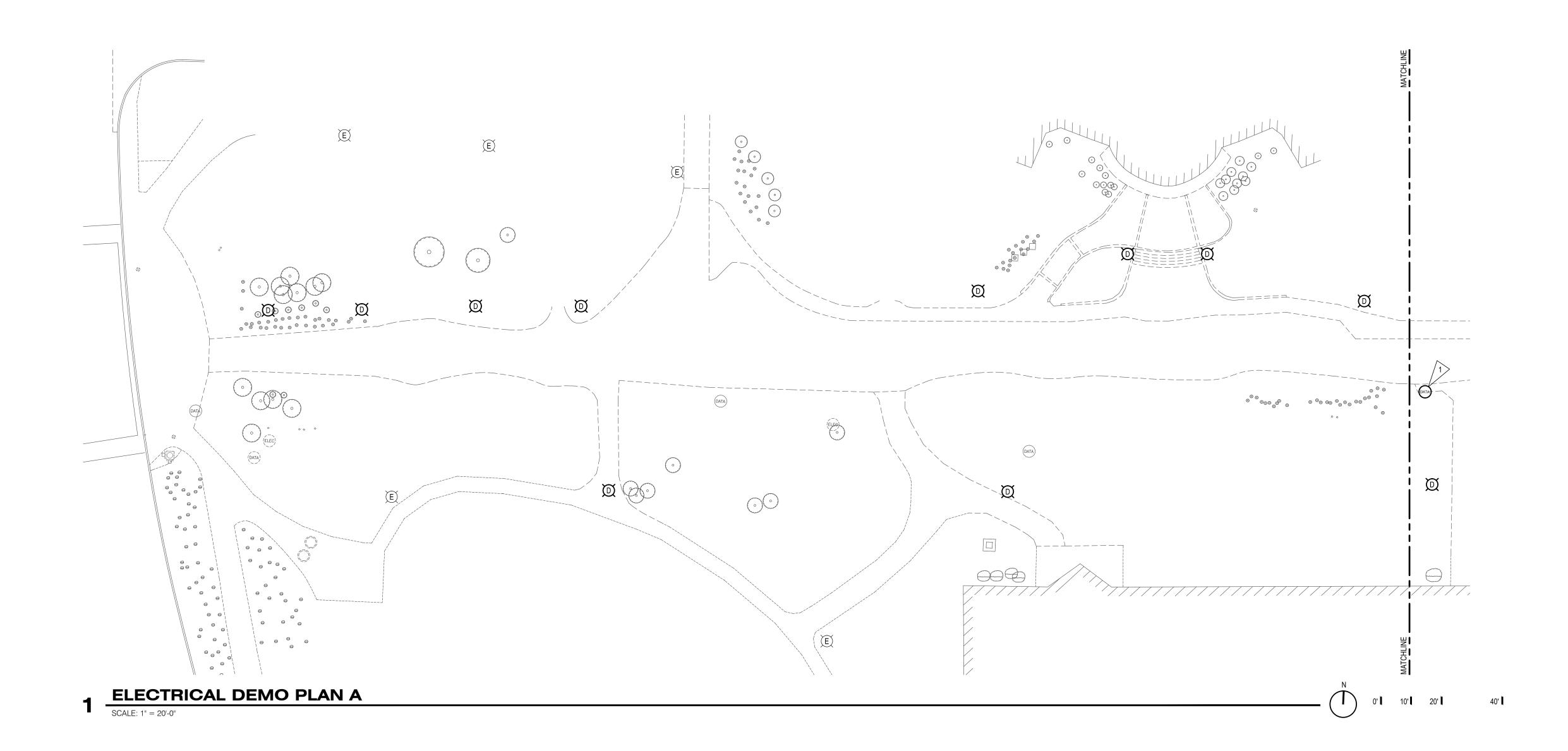
ALL TRADES. READ SPECIFICATIONS.

Phone: (402) 346-7007 Phone: (402) 477-6161 Phone: (405) 936-3480

1201 Cass Street

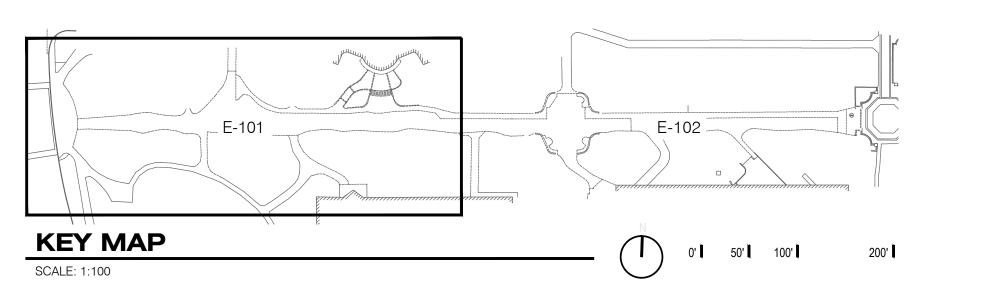
ELECTRICAL DEMO PLAN A Sheet Number:

E-101



GENERAL NOTES

- 1. 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 QUAZITE "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
- 4. SEE LANDSCAPE DRAWINGS FOR ADDITIONAL ELECTRICAL DEMOLITION ITEMS.
 DISCONNECT AND REMOVE ELECTRICAL DEVICES, EQUIPMENT, AND ASSOCIATED
 WIRING AS REQUIRED TO ACCOMMODATE NEW WORK.
- 5. THE OWNER SHALL HAVE FIRST SALVAGE RIGHTS TO ALL FIXTURES, DEVICES AND EQUIPMENT REMOVED. COORDINATE WITH OWNER PRIOR TO DEMOLITION.

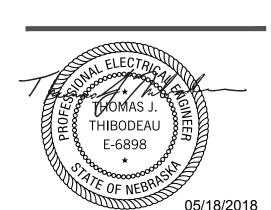






11422 Miracle Hills Drive Omaha, Nebraska 68154 402-778-5025

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



Drawn By: JJW Reviewed By: TJT

© COPYRIGHT 2018

Permission to reproduce all or part of this drawing is hereby

granted solely for the limited purpose of construction of this project or archiving. Unauthorized copying, disclosure or construction use without written permission of Alvine

NOTE:
DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND

CLEARANCES FROM ARCHITECTURAL, STRUCTURAL,

LAY OUT AND COORDINATE ALL WORK PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR

SHOP AND OTHER APPROPRIATE DRAWING OR AT SITE.

OPERATION, MAINTENANCE, AND CODES AND VERIFY

Oklahoma City:

Omaha, Nebraska 68102 Lincoln, Nebraska 68508 Oklahoma City, Oklahoma 73114 Des Moines, Iowa 50309

1800 O Street, Suite 104 13431 Broadway Extension, Suite 101 400 East Court Ave, Suite 130

NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF CLEARANCE FOR

Engineering is prohibited by copyright law.

ALL TRADES. READ SPECIFICATIONS.

Phone: (402) 346-7007 Phone: (402) 477-6161 Phone: (405) 936-3480

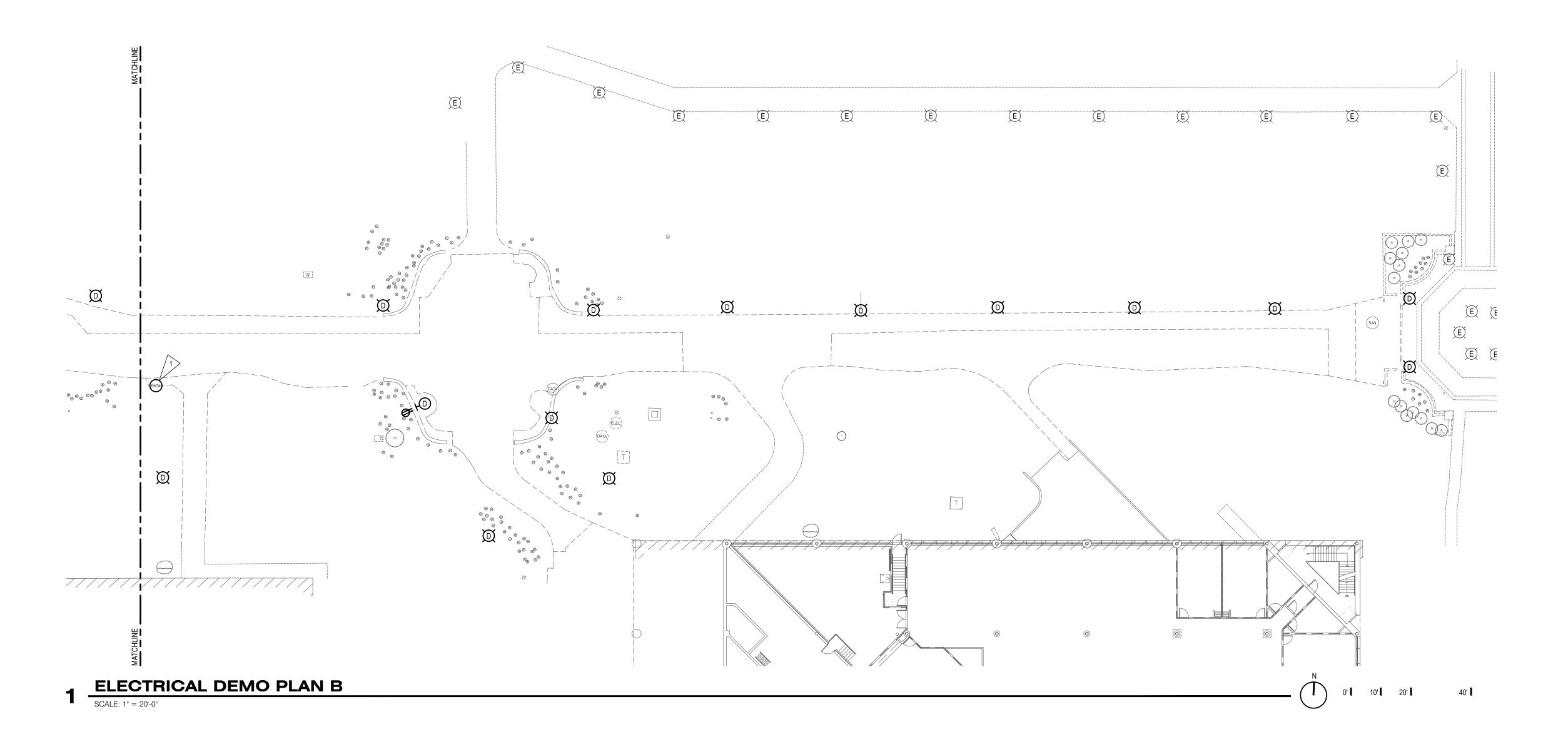
1201 Cass Street

Revisions: Date No. Remarks

Sheet Name:

ELECTRICAL DEMO PLAN B

Sheet Number:

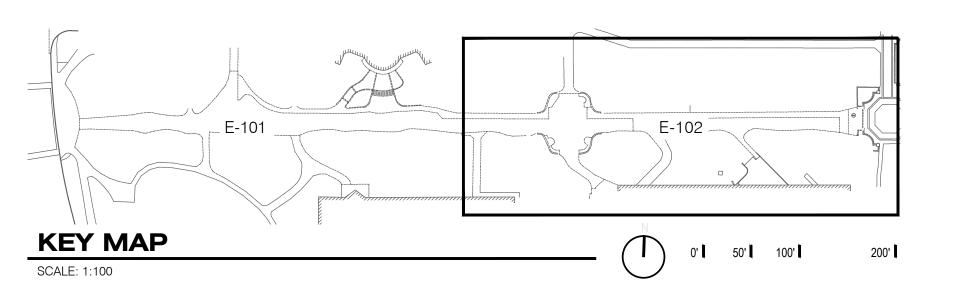


FLAG NOTES

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

GENERAL NOTES

- 1. 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 QUAZITE "PC" STYLE, SIZE AS REQUIRED, LABELED "ELECTRIC". WHERE EXISTING CIRCUITS ARE NOT REUSED, REMOVE CONDUCTORS AND ASSOCIATED ACCESSIBLE CONDUIT BACK TO THE SOURCE.
- 2. EXISTING FIXTURES INDICATED AS "E" SHALL REMAIN. CONNECTION TO EXISTING BRANCH CIRCUIT SHALL REMAIN.
- 3. REMOVE DEMOLISHED ITEMS FROM PROJECT SITE AND PROPERLY DISPOSE OF
- 4. SEE LANDSCAPE DRAWINGS FOR ADDITIONAL ELECTRICAL DEMOLITION ITEMS. DISCONNECT AND REMOVE ELECTRICAL DEVICES, EQUIPMENT, AND ASSOCIATED WIRING AS REQUIRED TO ACCOMMODATE NEW WORK.
- 5. THE OWNER SHALL HAVE FIRST SALVAGE RIGHTS TO ALL FIXTURES, DEVICES AND EQUIPMENT REMOVED. COORDINATE WITH OWNER PRIOR TO DEMOLITION.







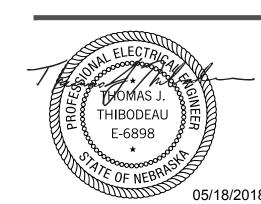


11422 Miracle Hills Drive Omaha, Nebraska 68154 402-778-5025

2018/05/18 Project Name: CU PEDESTRIAN MALL DESIGN

CONSTRUCTION

Issued For / Phase:



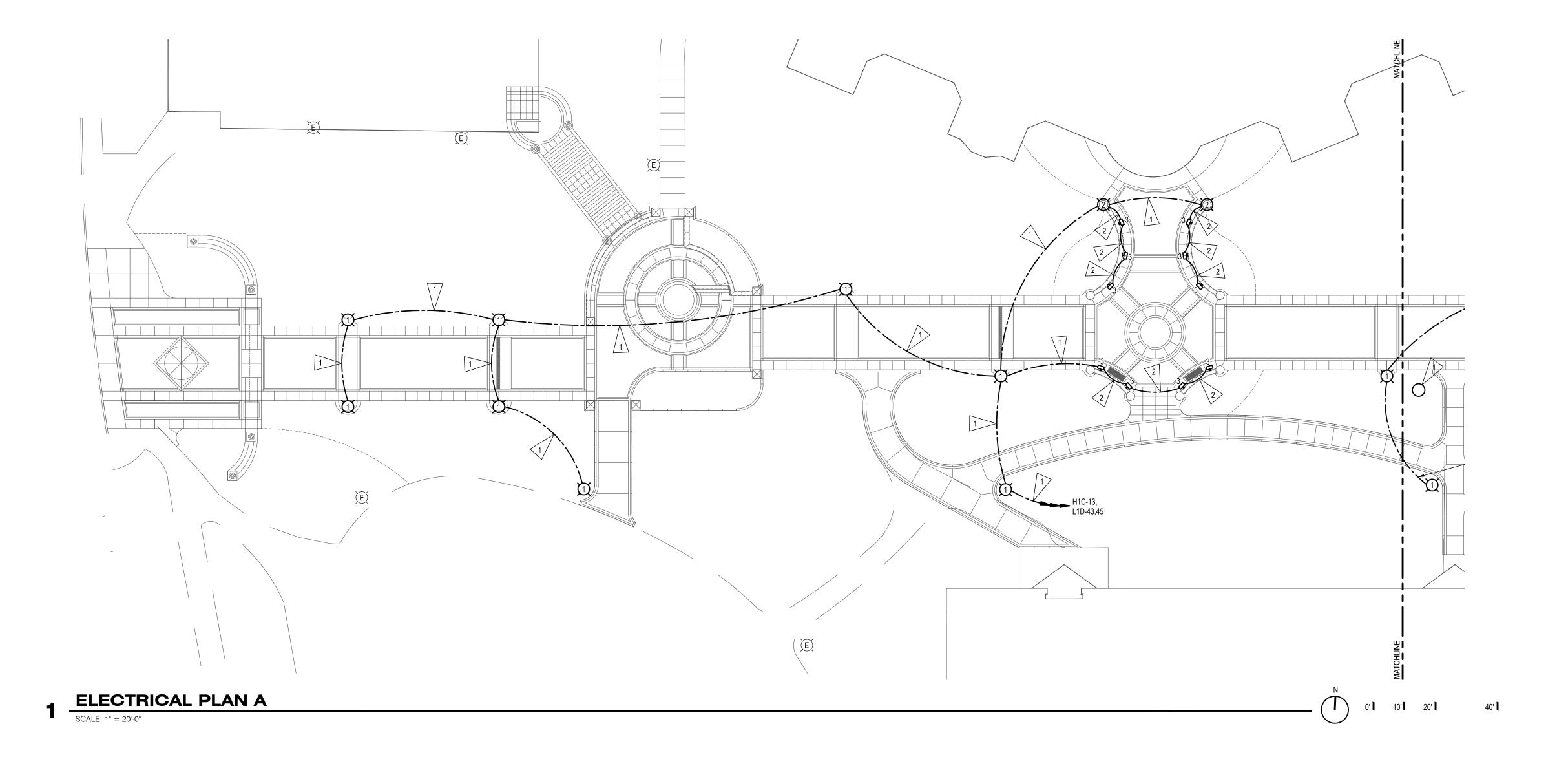
Drawn By: JJW Reviewed By: TJT

Revisions: Date No. Remarks

Sheet Name:

ELECTRICAL PLAN A

Sheet Number:



FLAG NOTES

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

2 #10, AND #10 GND IN 3/4" C.

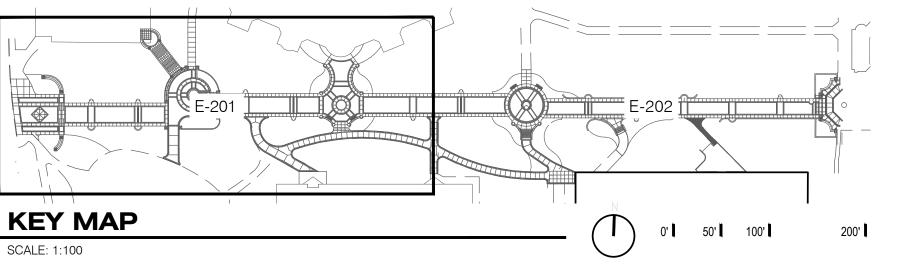
GENERAL NOTES

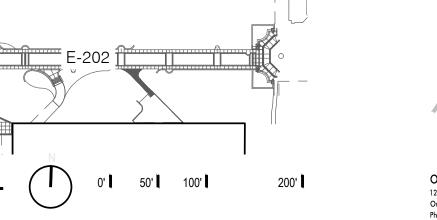
1. THE LOWER RECEPTACLES ON TYPE 1 AND 2 POLES SHALL BE CONNECTED TO ONE 20/1 SPARE (L1D-43) IN EXISTING PANEL L1D.

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.

> **KEY MAP** 0' | 50' | 100' |





1201 Cass Street

© COPYRIGHT 2018

Permission to reproduce all or part of this drawing is hereby

granted solely for the limited purpose of construction of this project or archiving. Unauthorized copying, disclosure or construction use without written permission of Alvine

NOTE:
DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL,

SHOP AND OTHER APPROPRIATE DRAWING OR AT SITE.

INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, AND CODES AND VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF CLEARANCE FOR

LAY OUT AND COORDINATE ALL WORK PRIOR TO

Engineering is prohibited by copyright law.

ALL TRADES. READ SPECIFICATIONS.

1800 O Street, Suite 104 13431 Broadway Extension, Suite 101 400 East Court Ave, Suite 130 Omaha, Nebraska 68102 Lincoln, Nebraska 68508 Oklahoma City, Oklahoma 73114 Des Moines, Iowa 50309 Phone: (402) 346-7007 Phone: (402) 477-6161 Phone: (405) 936-3480



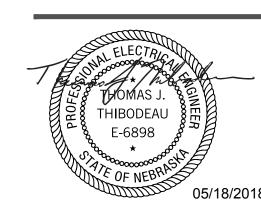
1209 HARNEY STREET, OMAHA NE 68102 PHONE: 402 281 1800



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

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

CONSTRUCTION



Drawn By: JJW Reviewed By: TJT

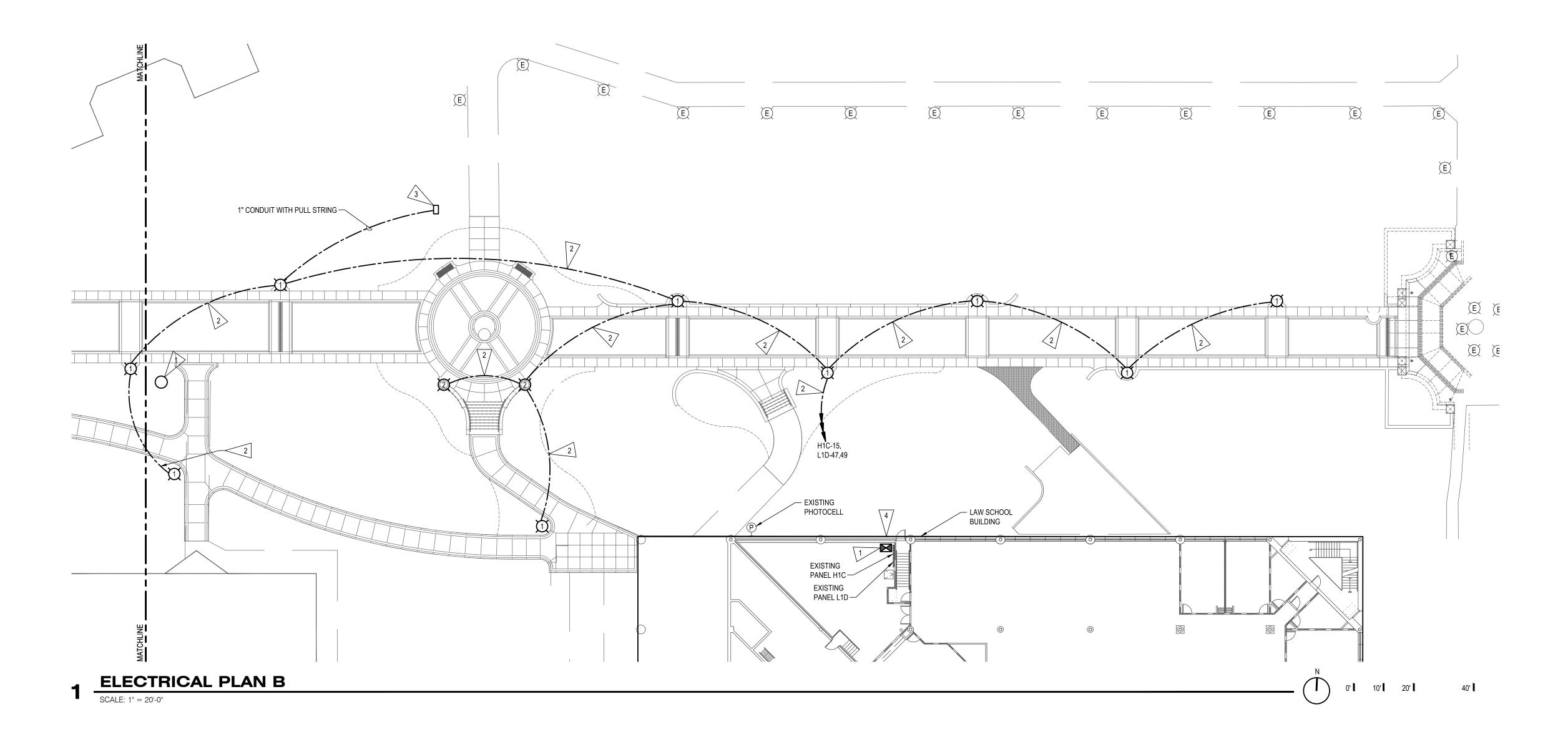
Revisions: Date No. Remarks

| | |
|------|--|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

Sheet Name:

ELECTRICAL PLAN B

Sheet Number:



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 #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.

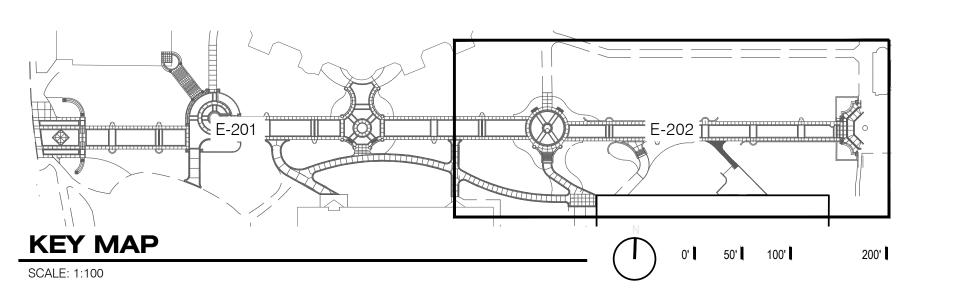
4 ROUTE CONDUITS UP EXTERIOR OF BUILDING AND ENTER BUILDING IN CRAWL SPACE BELOW EXISTING PANELS. PAINT EXPOSED CONDUITS TO MATCH SURROUNDING SURFACE.

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.

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.



© COPYRIGHT 2018

Permission to reproduce all or part of this drawing is hereby

granted solely for the limited purpose of construction of this project or archiving. Unauthorized copying, disclosure or construction use without written permission of Alvine

NOTE:
DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND
STATE FROM ABOUTECTURAL STRUCTURAL.

CLEARANCES FROM ARCHITECTURAL, STRUCTURAL,

LAY OUT AND COORDINATE ALL WORK PRIOR TO

SHOP AND OTHER APPROPRIATE DRAWING OR AT SITE.

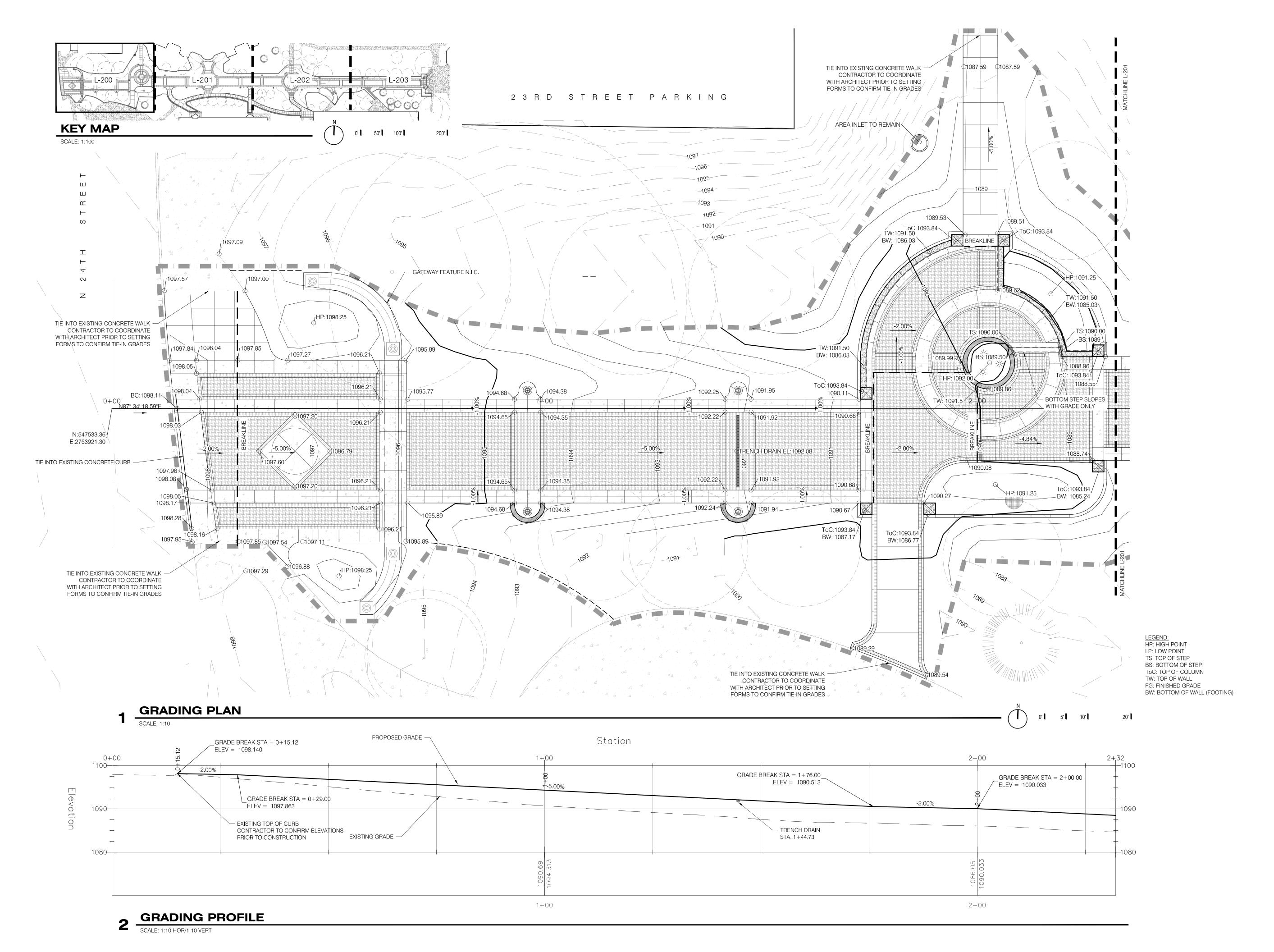
INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR

OPERATION, MAINTENANCE, AND CODES AND VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF CLEARANCE FOR

Engineering is prohibited by copyright law.

ALL TRADES. READ SPECIFICATIONS.







University Multi-Modal Facility (Metro 2017 IDIQ -Work Order #3)





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



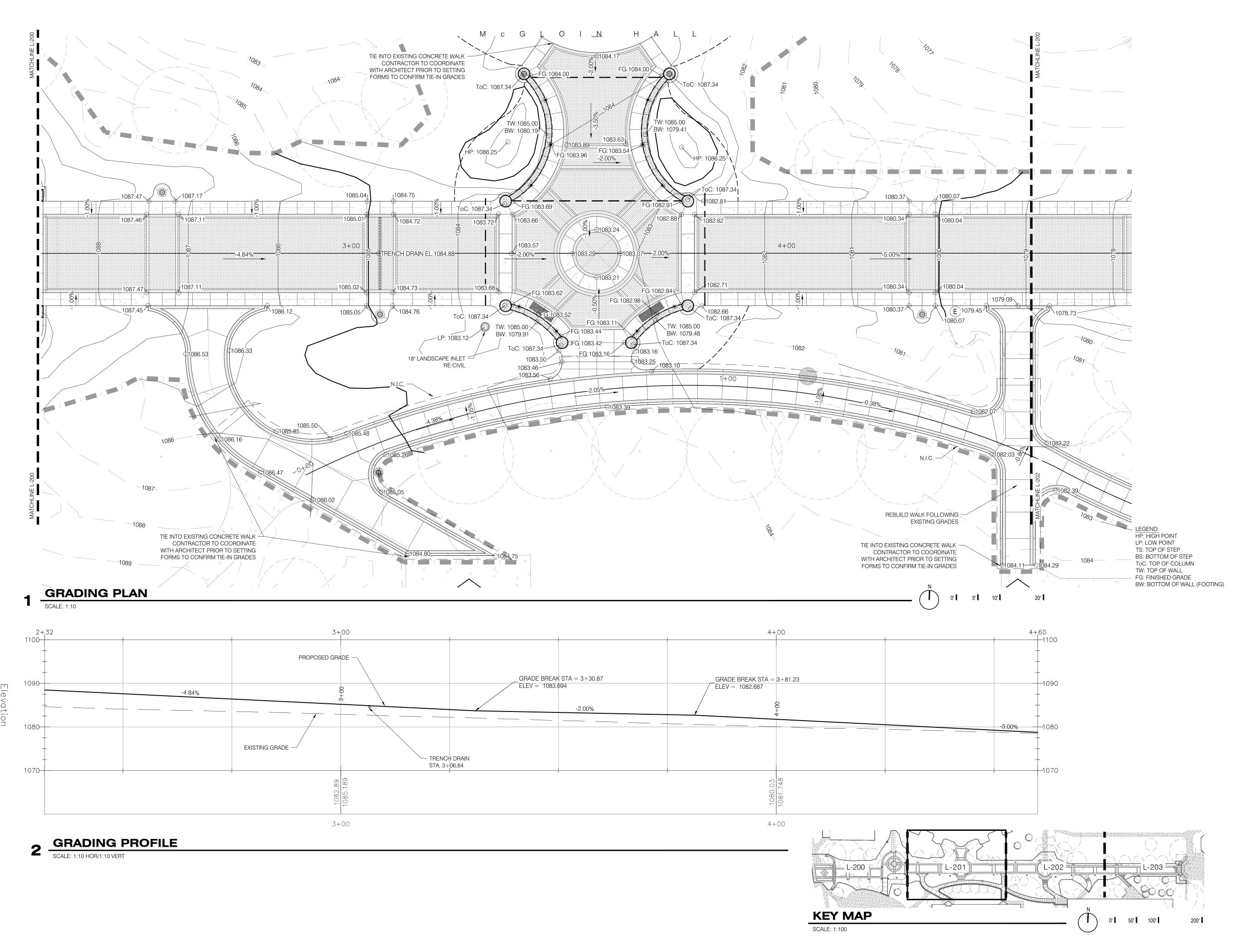
Drawn By: KN Reviewed By: MSS Revisions:

| Date | No. | Remarks |
|------|-----|---------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Sheet Name:

GRADING PLAN AND PROFILE

Sheet Number:





maha Metro-Creightor Jniversity Multi-Modal Facility

studioINSITE

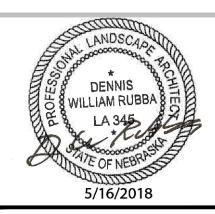
1209 HARNEY STREET, OMAHA NE 68102
PHONE: 402 281 1800



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: KN Reviewed By: MSS Revisions:

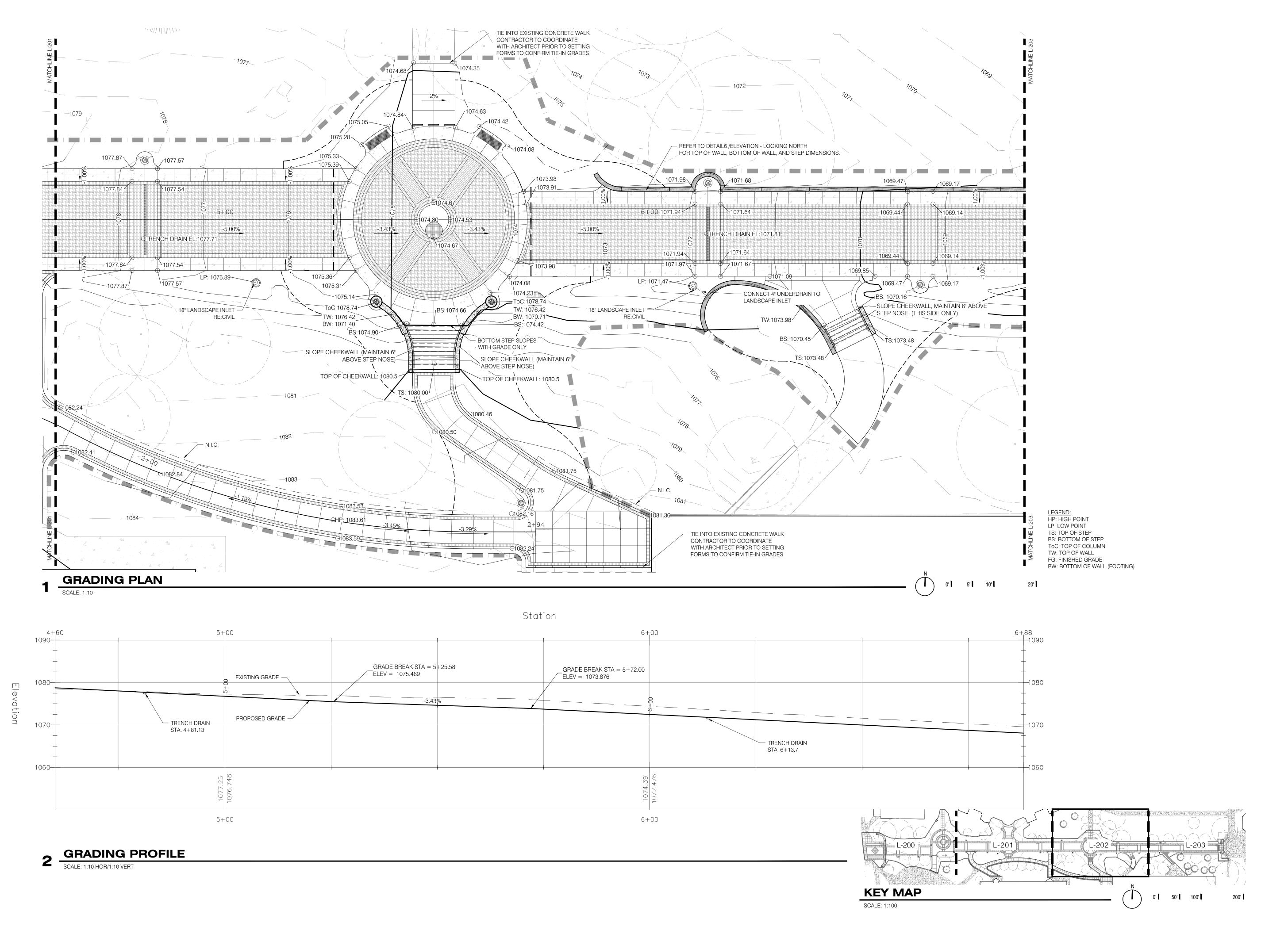
| Date | No. | Remarks |
|------|-----|---------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Sheet Name:

GRADING PLAN AND PROFILE

Sheet Number:

L-20′





University Multi-Modal
Facility
(Metro 2017 IDIQ Work Order #3)

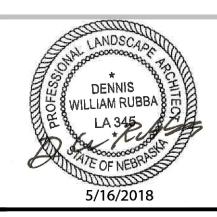




11422 Miracle Hills Drive Omaha, Nebraska 68154 402-778-5025

Date: 2018/05/18

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



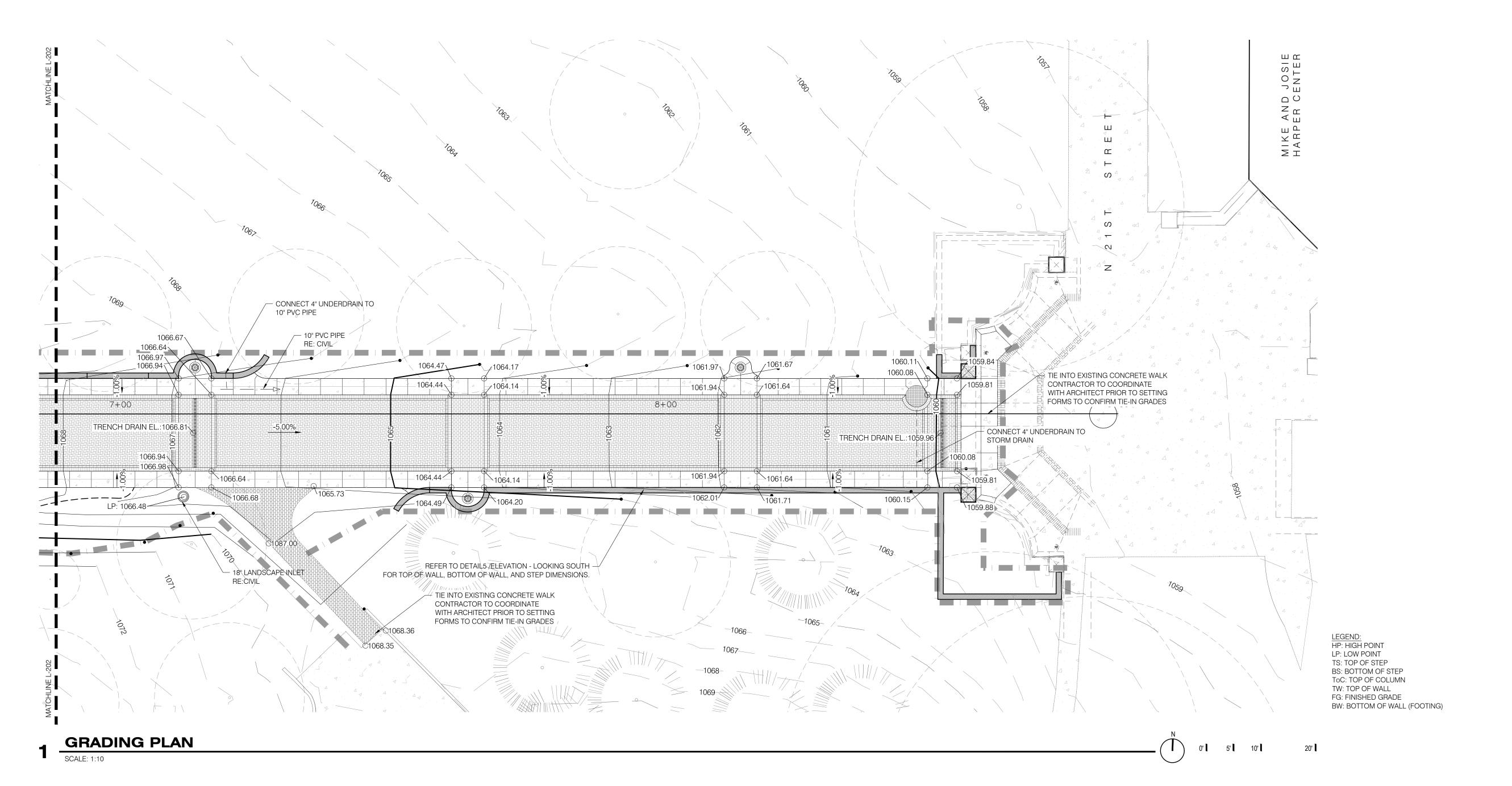
Drawn By: KN Reviewed By: MSS Revisions:

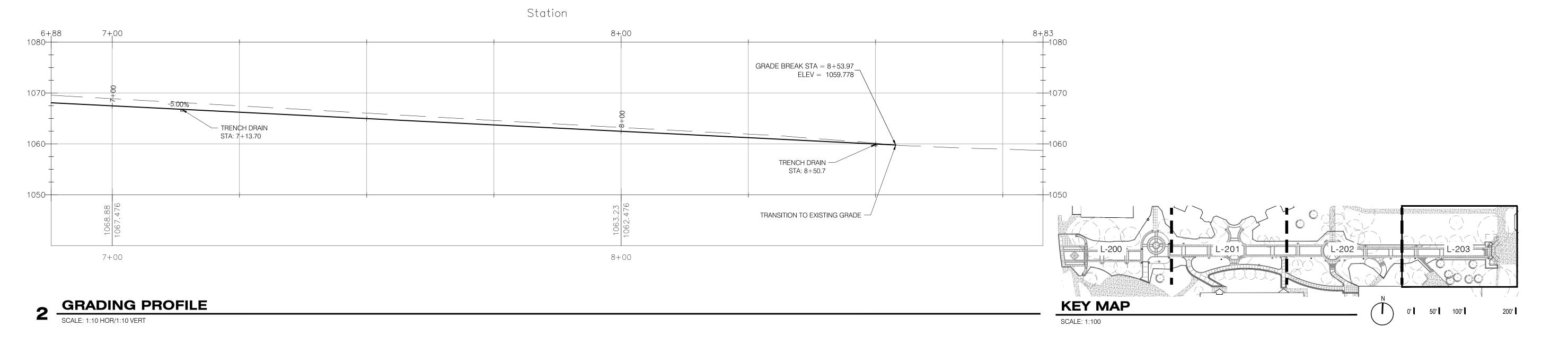
| Date | No. | Remarks |
|------|-----|---------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Sheet Name:

GRADING PLAN AND PROFILE

Sheet Number:







University Multi-Modal
Facility
(Metro 2017 IDIQ -



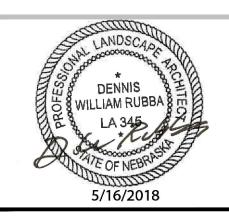


11422 Miracle Hills Drive Omaha, Nebraska 68154 402-778-5025

Date:

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

2018/05/18



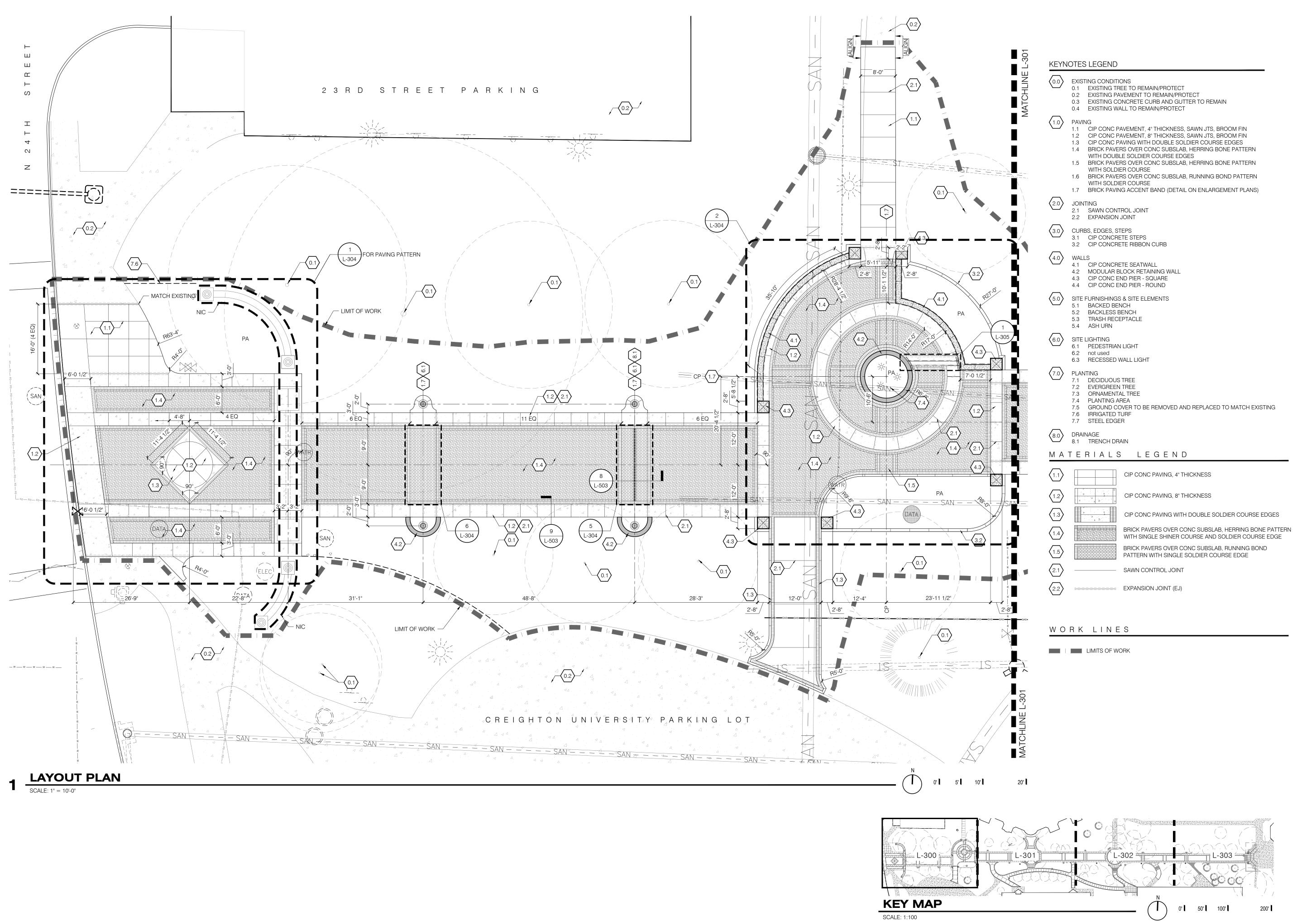
Drawn By: KN Reviewed By: MSS Revisions:

| Date | NO. | Remarks |
|------|-----|---------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Sheet Name:

GRADING PLAN AND PROFILE

Sheet Number:





iaria Metro-Creignton Niversity Multi-Modal Facility

studioINSITE

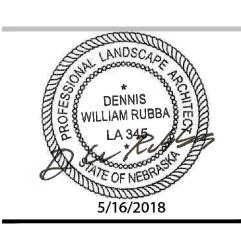
1209 HARNEY STREET, OMAHA NE 68102
PHONE: 402 281 1800



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



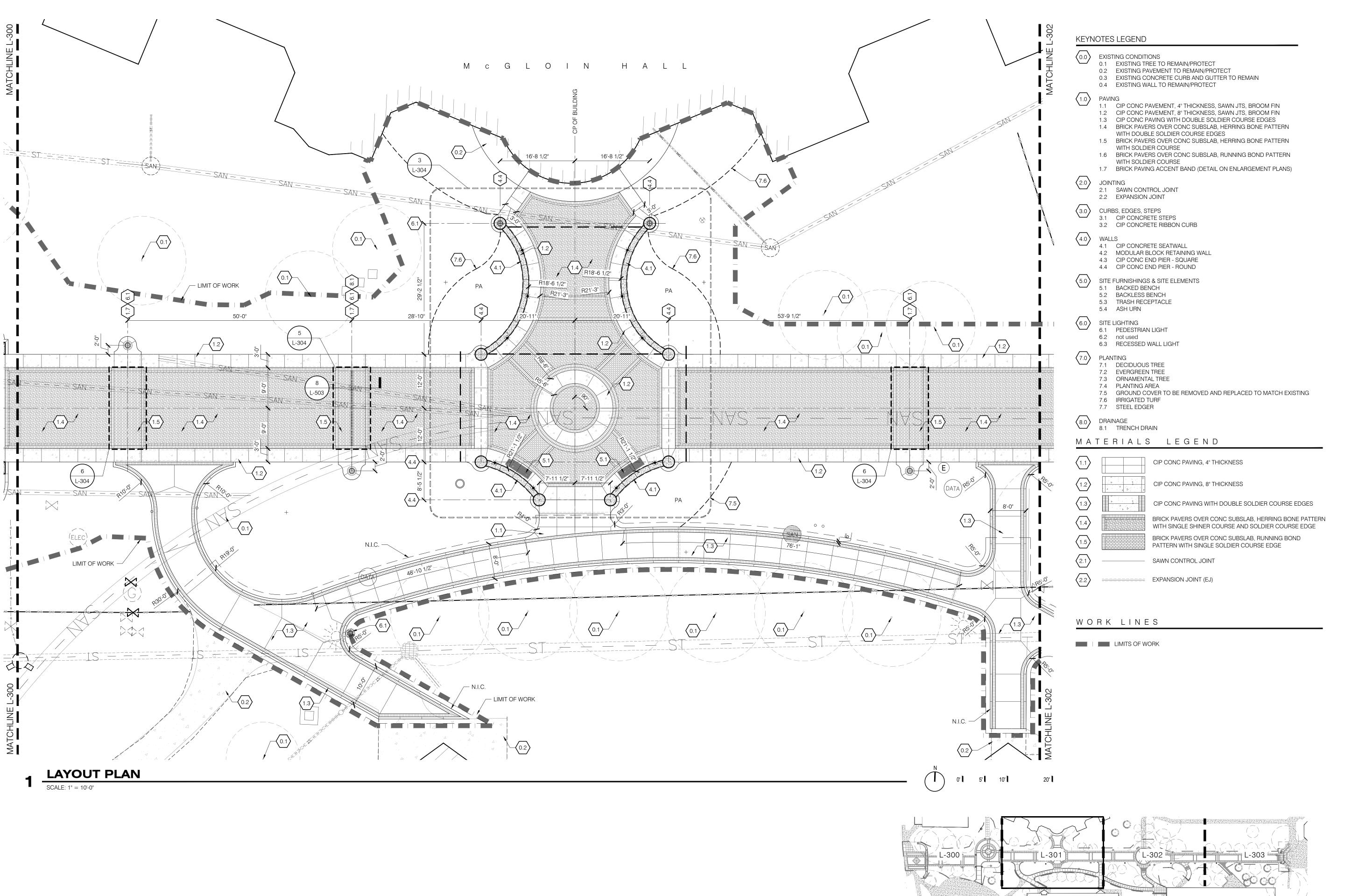
Drawn By: KN Reviewed By: MSS Revisions:

| Date | NO. | Remarks |
|------|-----|---------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Sheet Name:

LAYOUT PLAN

Sheet Number:



KEY MAP

SCALE: 1:100



aha Metro-Creightor iiversity Multi-Modal Facility

studioINSITE

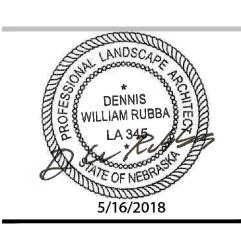
1209 HARNEY STREET, OMAHA NE 68102
PHONE: 402 281 1800



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: KN Reviewed By: MSS Revisions:

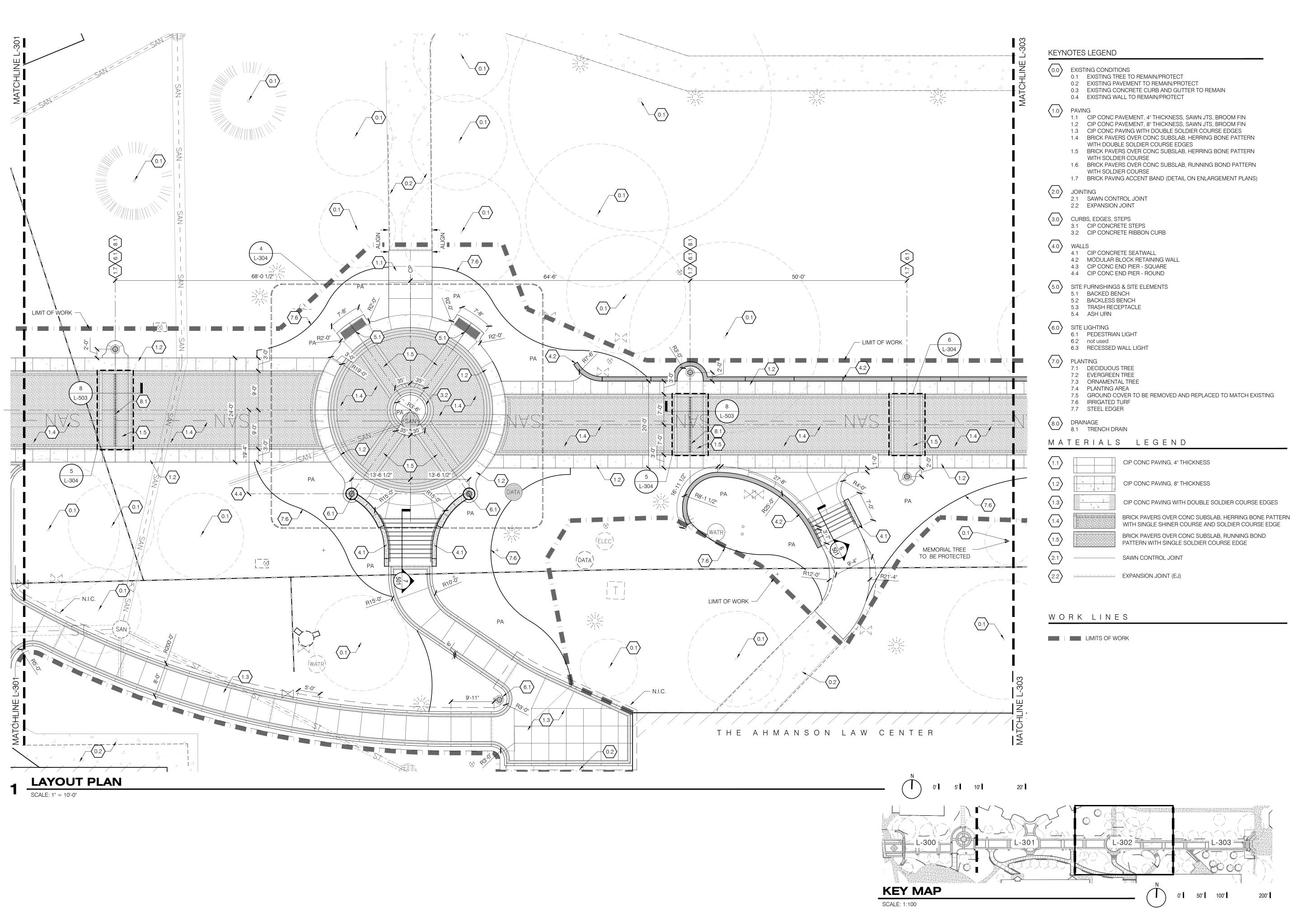
| | Date | NO. | Remarks |
|--|------|-----|---------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Sheet Name:

LAYOUT PLAN

Sheet Number:

0' 50' 100'





in a Metro-Creignton iversity Multi-Modal Facility

studioINSITE

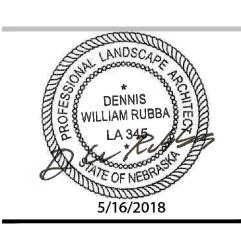
1209 HARNEY STREET, OMAHA NE 68102
PHONE: 402 281 1800



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



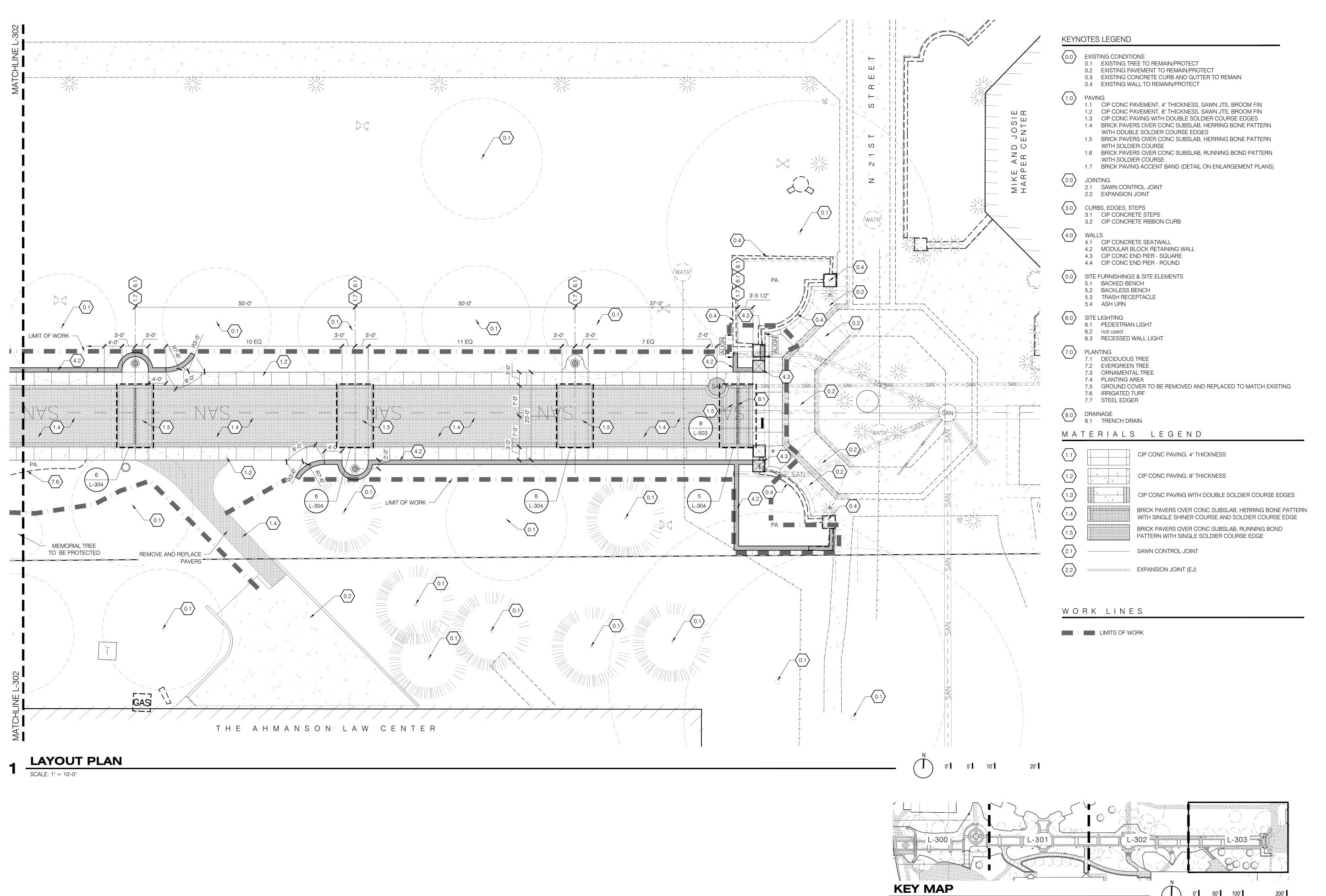
Drawn By: KN Reviewed By: MSS Revisions:

| Date | No. | Remarks |
|------|-----|---------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Chaat Nama

LAYOUT PLAN

Sneet Mulliper.



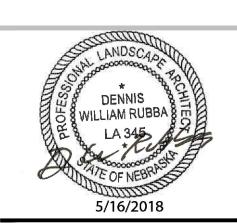


1209 HARNEY STREET, OMAHA NE 68102 PHONE: 402 281 1800



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

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



Drawn By: KN Reviewed By: MSS Revisions:

| Date | No. | Remarks |
|------|-----|---------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

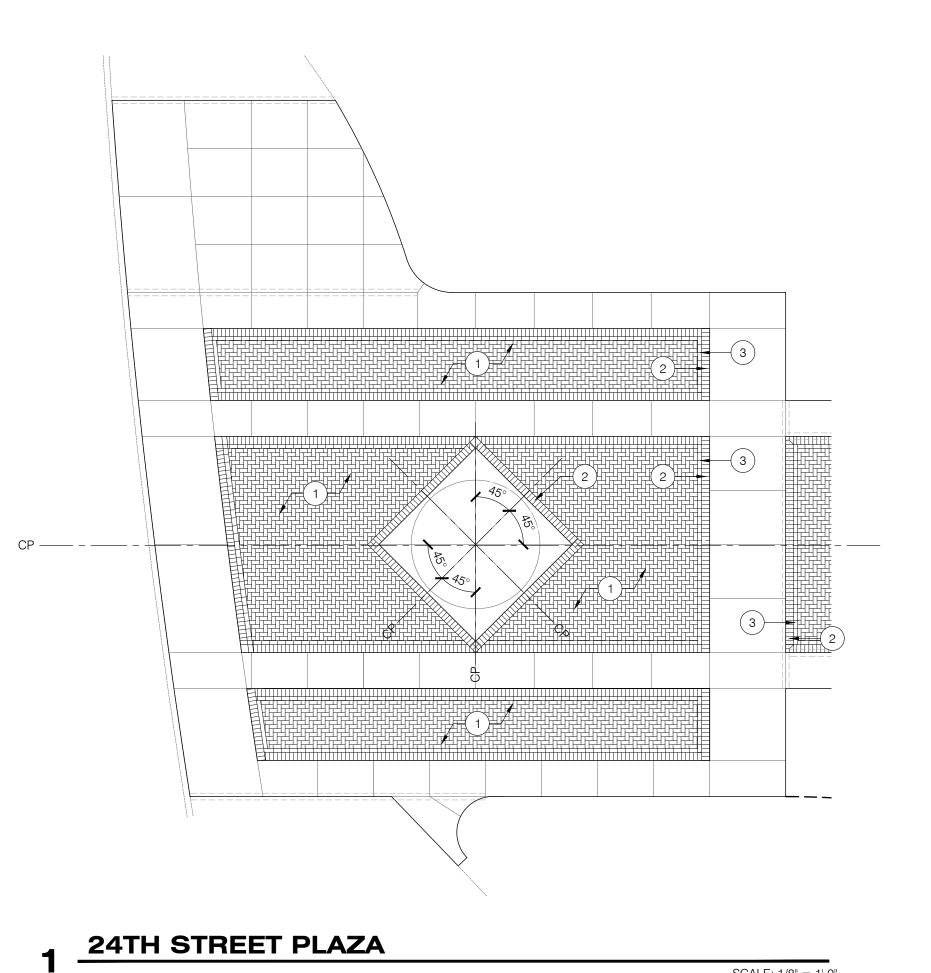
Sheet Name:

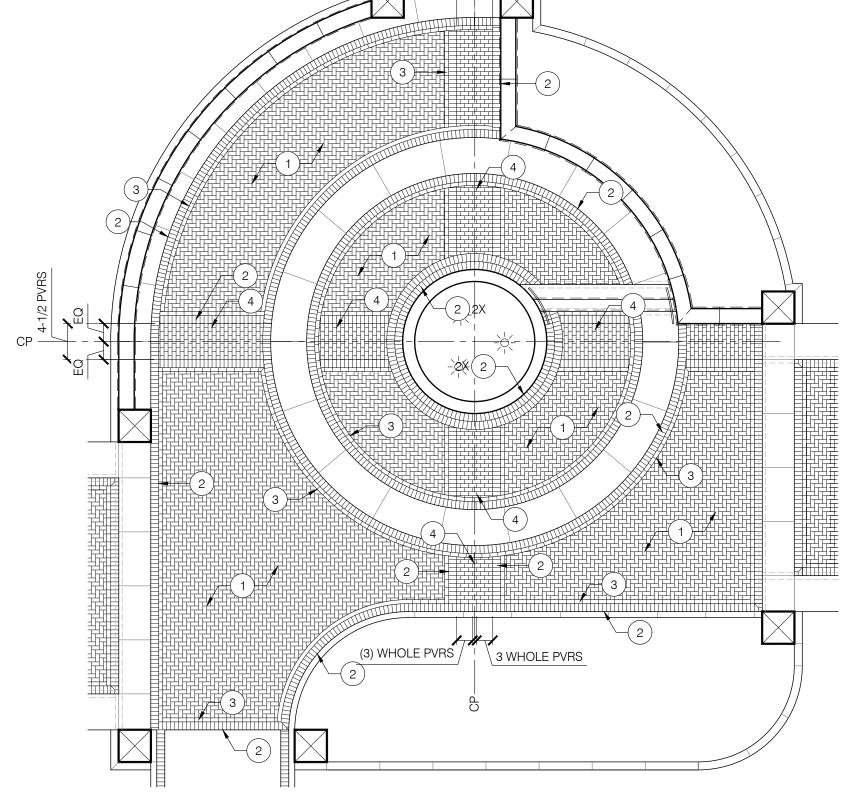
LAYOUT PLAN

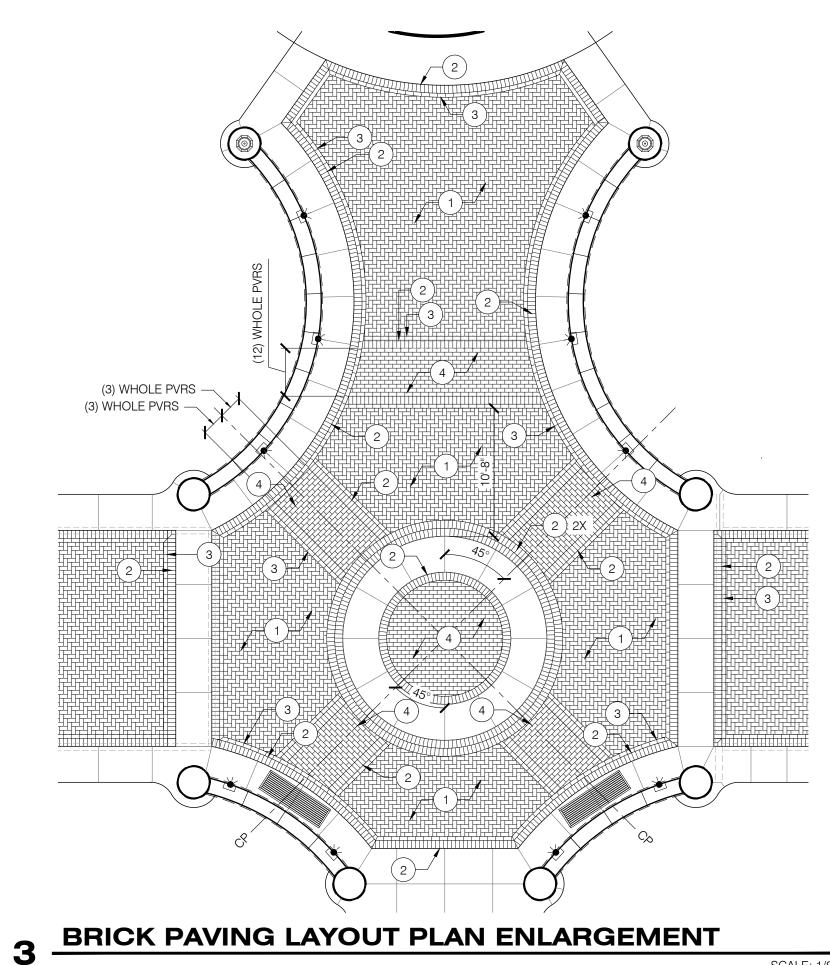
Sheet Number:

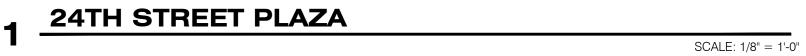
0' 50' 100'

SCALE: 1:100

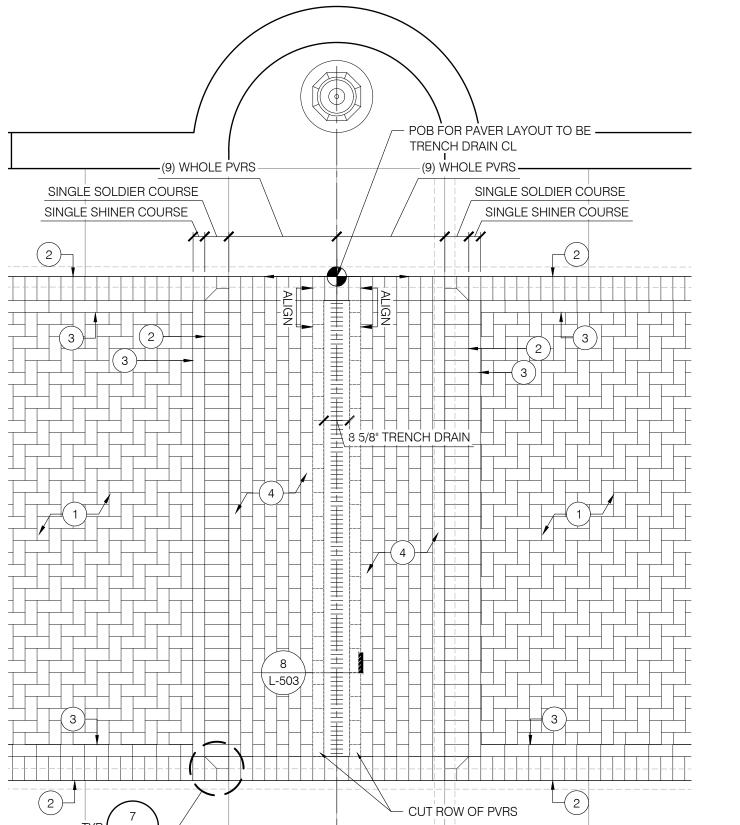




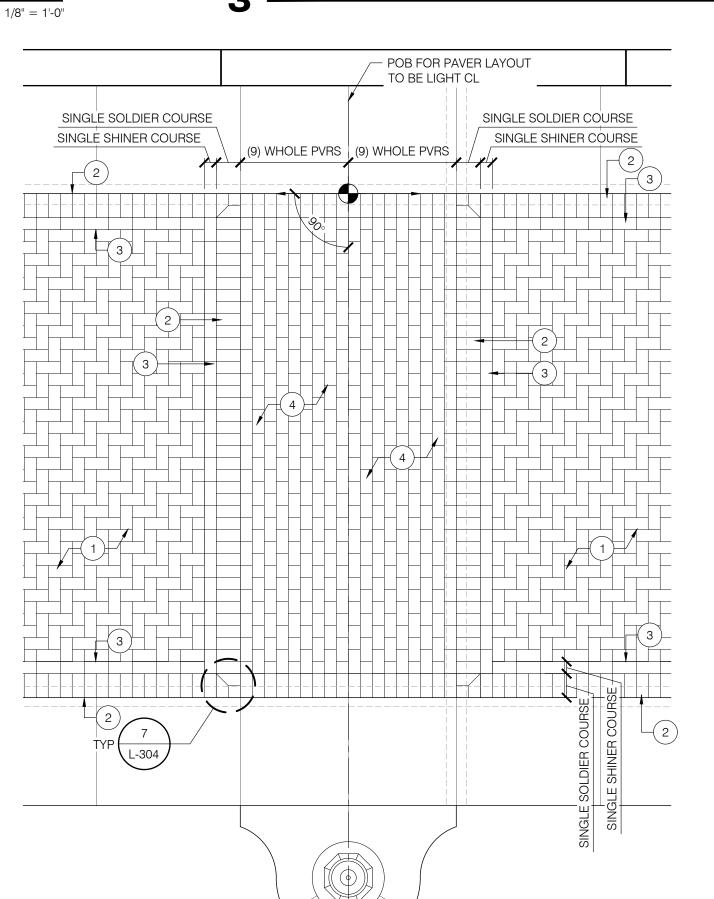




(5) WHOLE PVRS — CENTERED ON CP

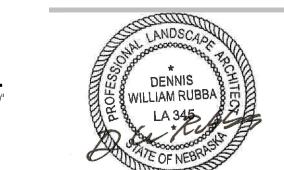


2 BRICK PAVING LAYOUT PLAN ENLARGEMENT



Project Name: CU PEDESTRIAN MALL DESIGN Issued For / Phase: 100% CONSTRUCTION ---- 4" X 4" PAVER - MITRE CUT FULL PAVER AT CORNERS

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



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

Date:

2018/05/18

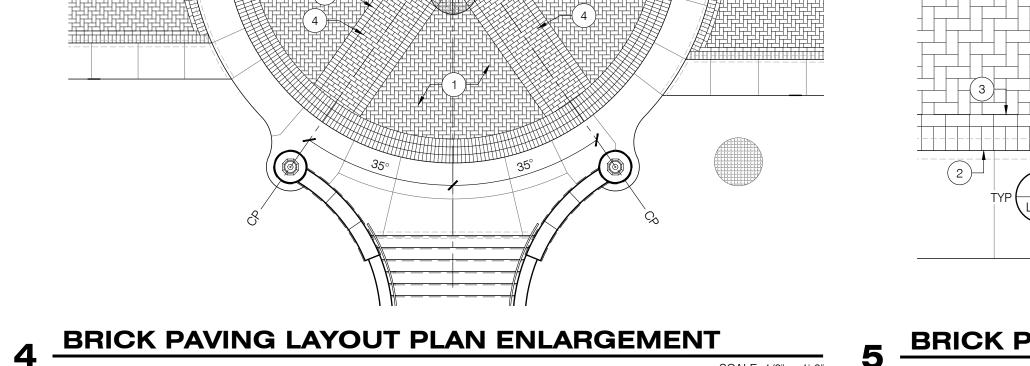
Drawn By: KN Reviewed By: MSS Revisions:

| Date | No. | Remarks |
|------|-----|---------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Sheet Name:

ENLARGEMENT PLANS

Sheet Number:



5 BRICK PAVING TRENCH DRAIN ACCENT DETAIL

BRICK PAVING ACCENT DETAIL

1. 4" X 8" X 2-1/4" THK WIRE CUT BRICK PAVERS. CHEROKEE BLEND BY CLOUD CERAMICS, OR APPROVED EQUAL.

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

2. PROVIDE MOCK-UP FOR APPROVAL IN FIELD. IF APPROVED, MOCK-UP CAN BE USED INCORPORATED INTO FINAL

BRICK PAVER DETAILS

HERRINGBONE PATTERN FIELD TYP

SINGLE SOLDIER COURSE

SINGLE SHINER COURSE

RUNNING BOND

PAVER LEGEND







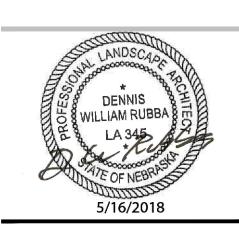
11422 Miracle Hills Drive Omaha, Nebraska 68154 402-778-5025

2018/05/18 Date:

Project Name: CU PEDESTRIAN MALL DESIGN

Issued For / Phase: 100%

CONSTRUCTION



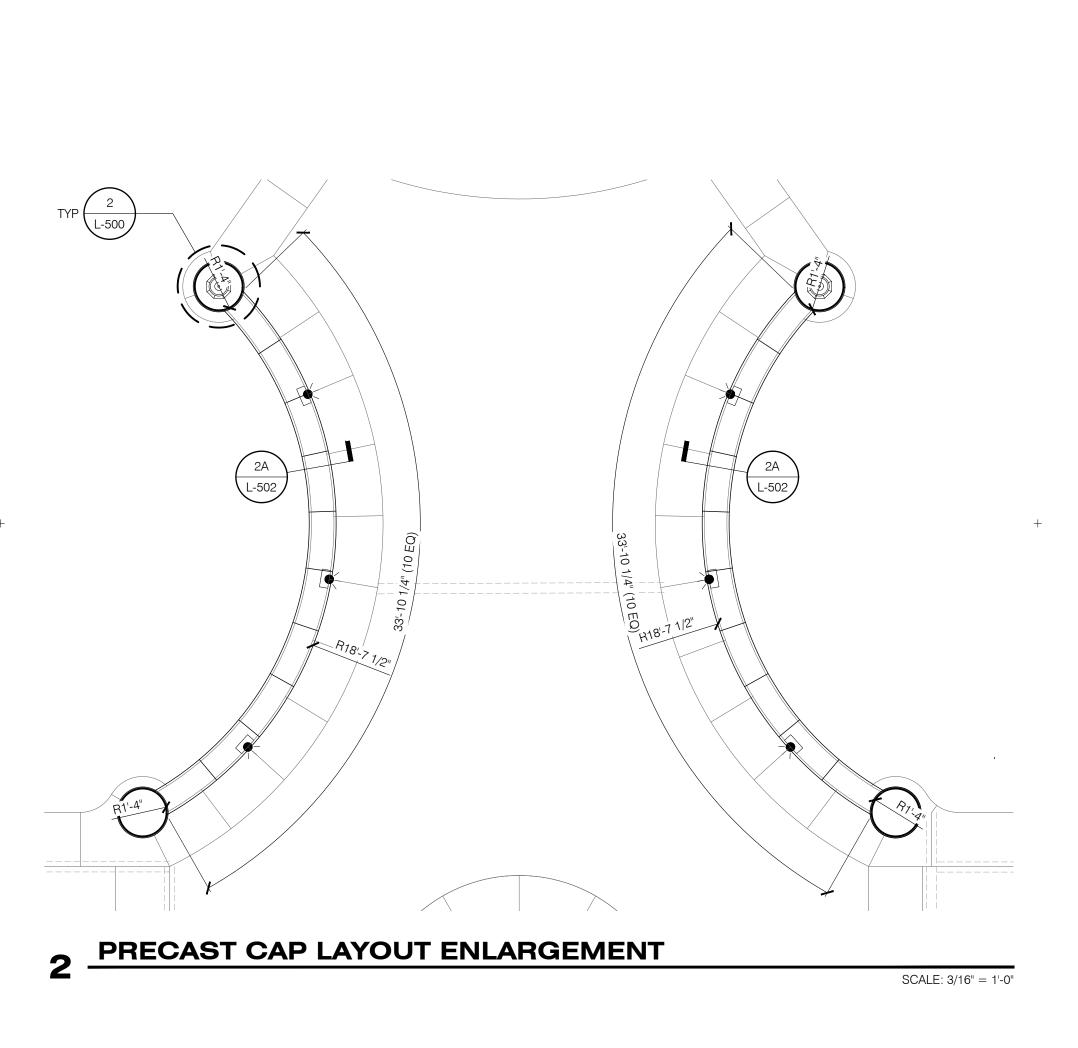
Drawn By: KN Reviewed By: MSS Revisions:

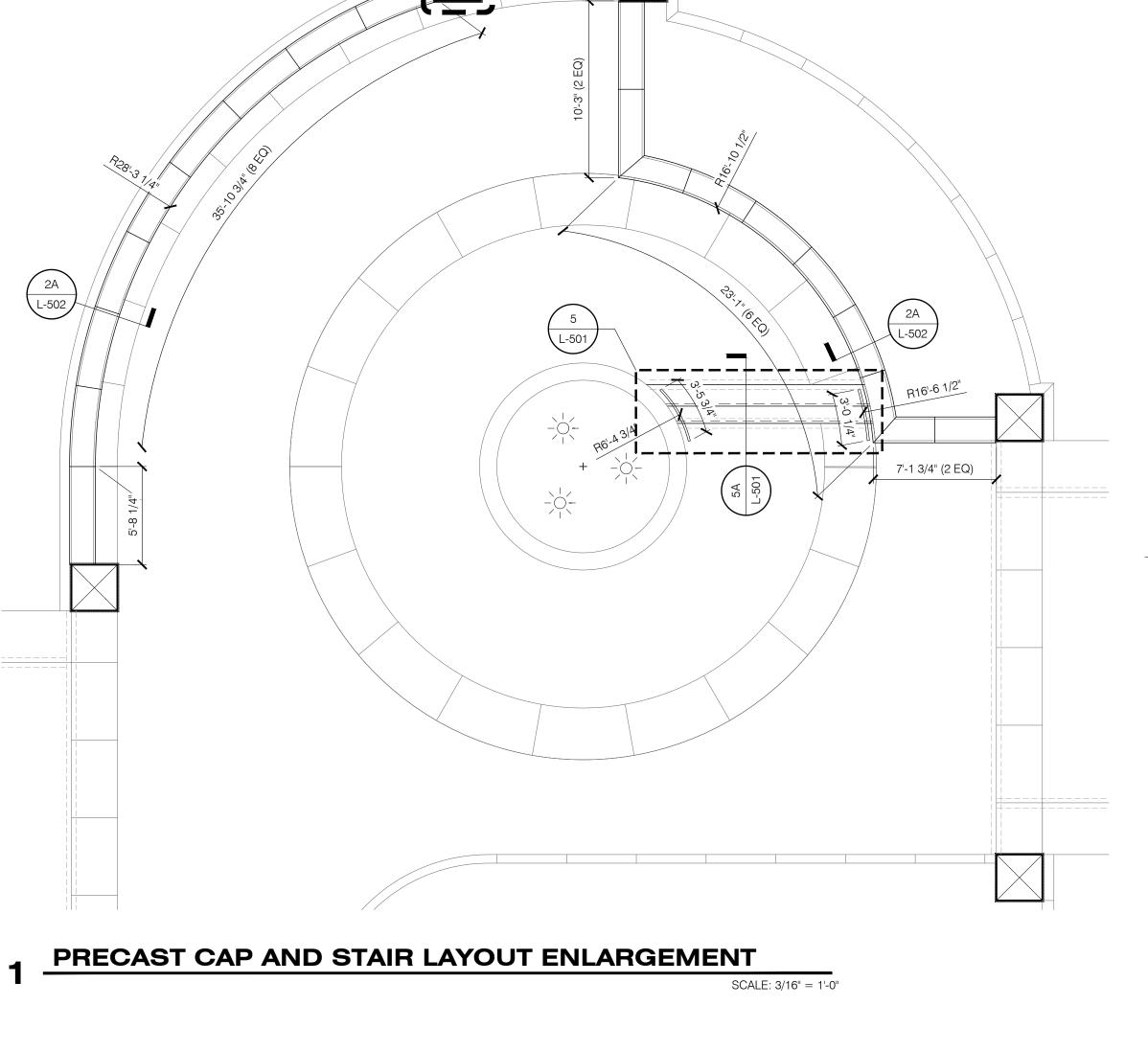
| Date | No. | Remarks |
|------|-----|---------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Sheet Name:

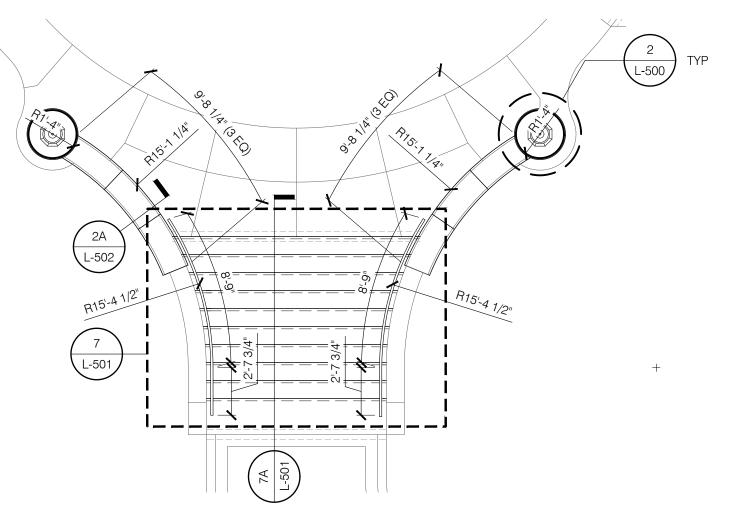
ENLARGEMENT **PLANS**

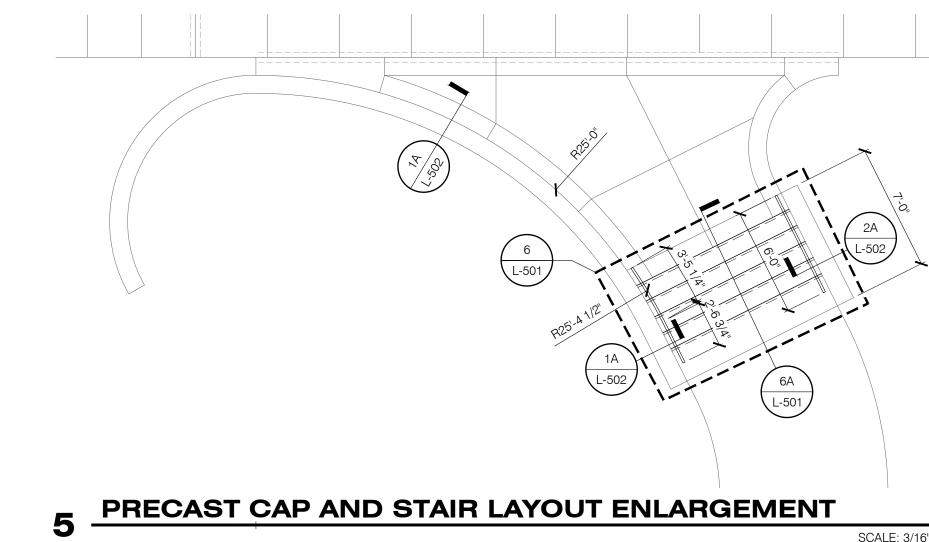
Sheet Number:





SCALE: 3/16" = 1'-0"



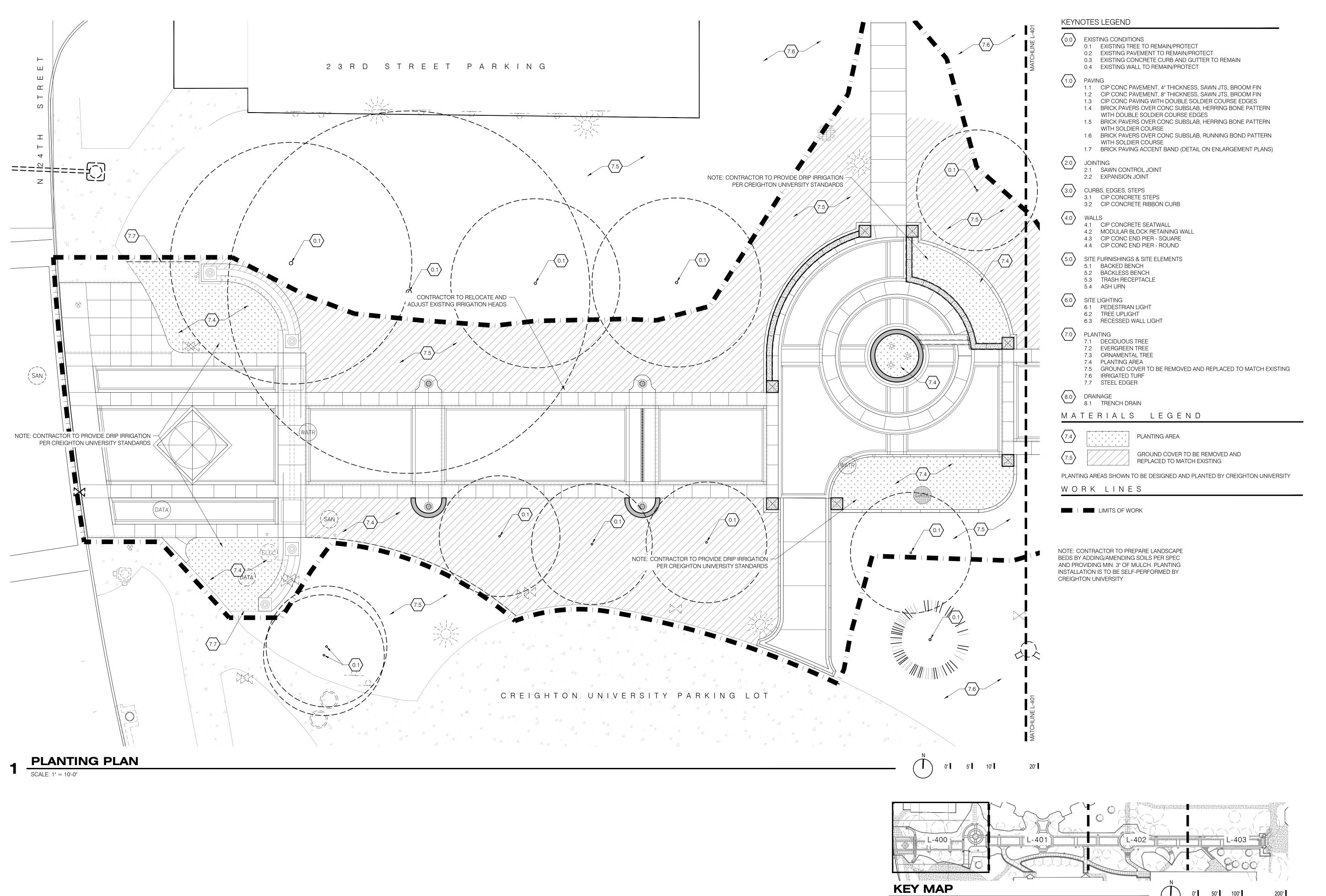


3 PRECAST CAP LAYOUT ENLARGEMENT

PRECAST CAP AND STAIR LAYOUT ENLARGEMENT

SCALE: 3/16" = 1'-0"

SCALE: 3/16" = 1'-0"



SCALE: 1:100



aha Metro-Creighton iversity Multi-Modal Facility

Facility

(Metro 2017 IDIQ

Work Order #3)

studio INSITE

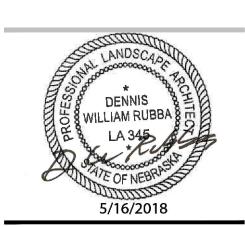
1209 HARNEY STREET, OMAHA NE 68102
PHONE: 402 281 1800



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



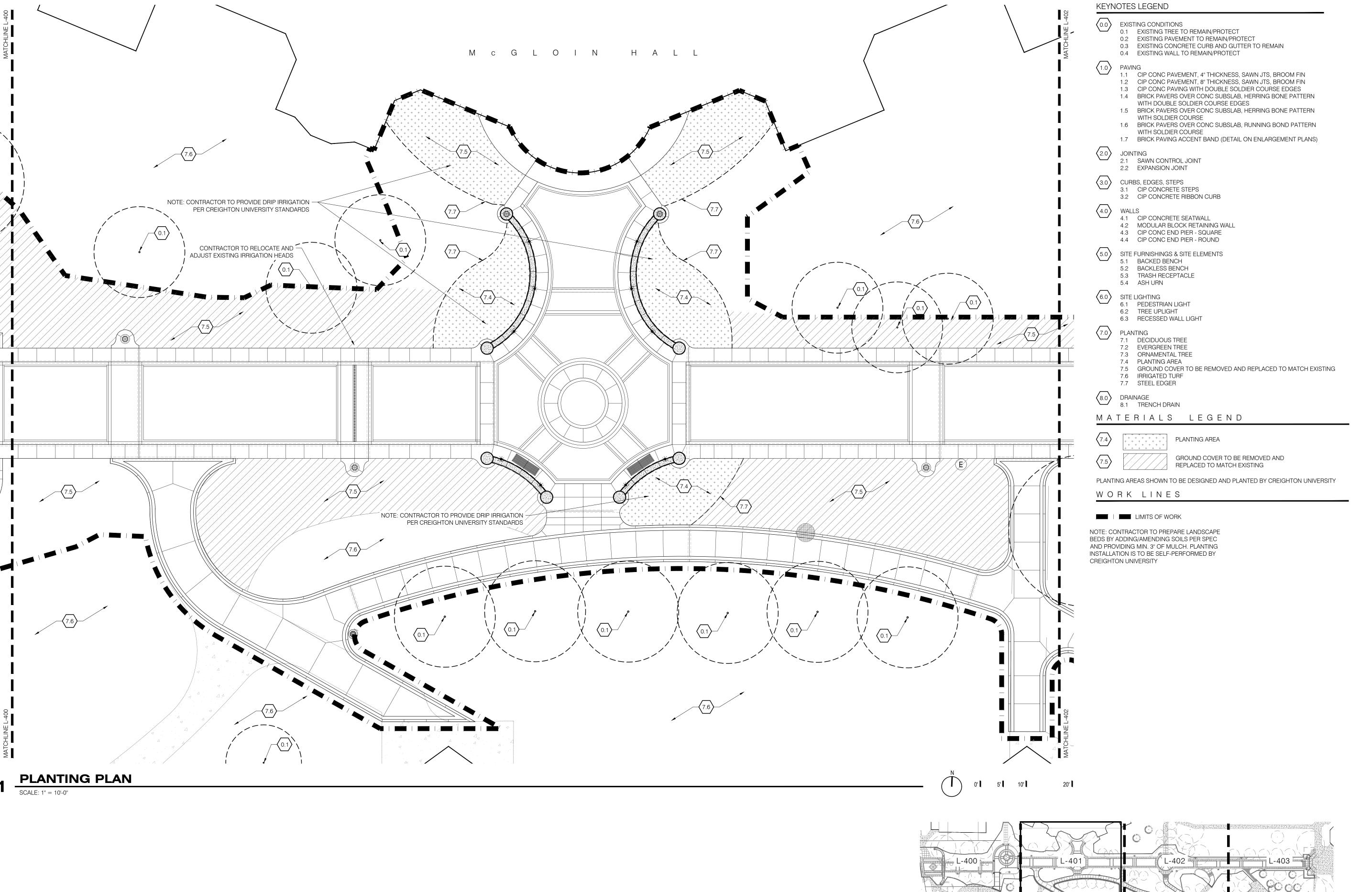
Drawn By: KN Reviewed By: MSS Revisions:

| Date | No. | Remarks |
|------|-----|---------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Sheet Name:

PLANTING PLAN

Sheet Number:



KEY MAP



iversity Multi-Modal

studioINSITE

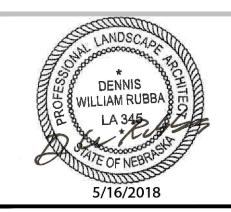
1209 HARNEY STREET, OMAHA NE 68102
PHONE: 402 281 1800



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: KN Reviewed By: MSS Revisions:

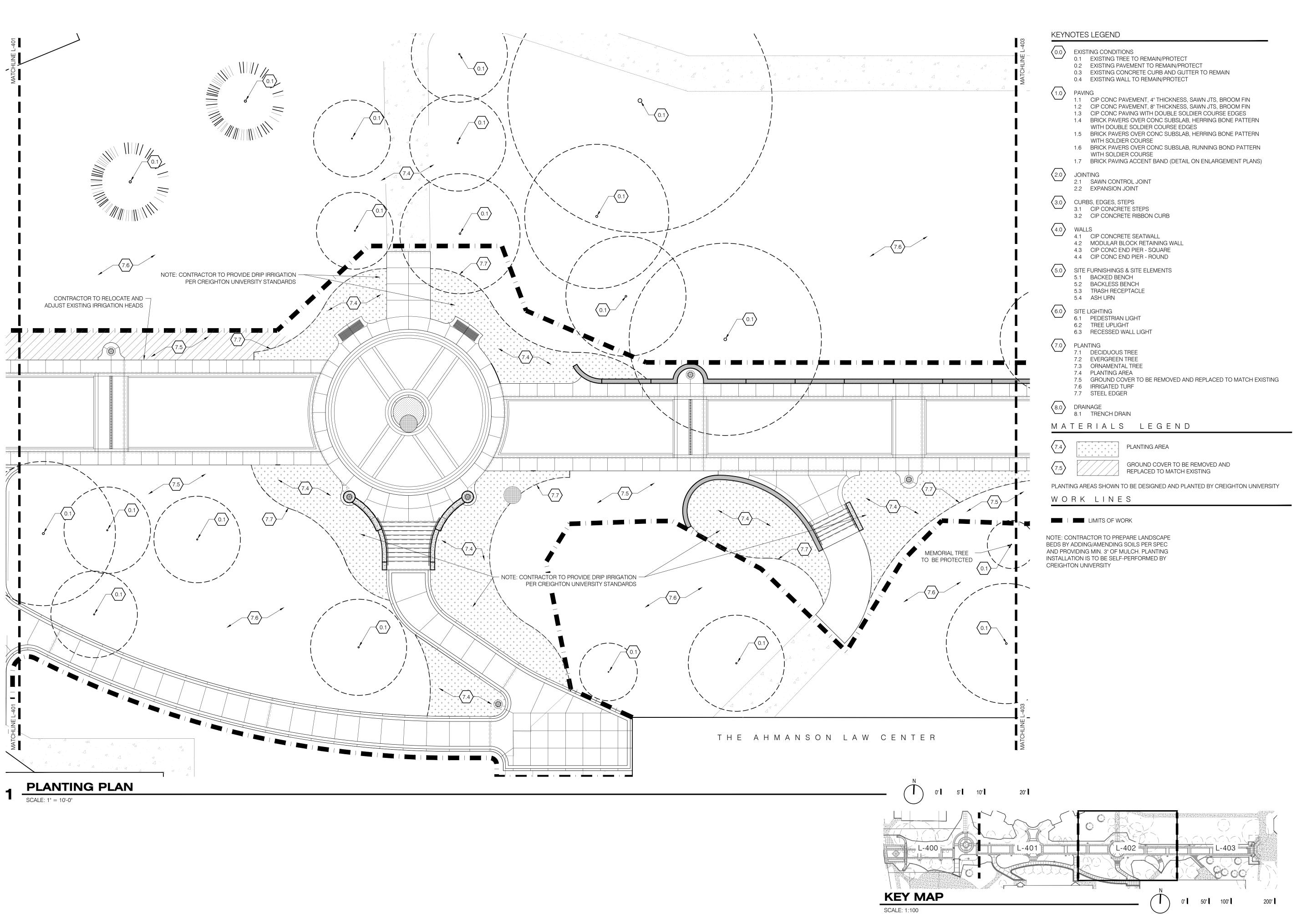
| | Date | No. | Remarks |
|---|------|-----|---------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| ļ | | | |

Sheet Name:

PLANTING PLAN

Sheet Number:

L-40'





niversity Multi-Modal Facility

studioINSITE

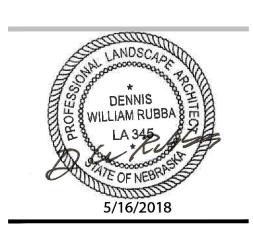
1209 HARNEY STREET, OMAHA NE 68102
PHONE: 402 281 1800



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



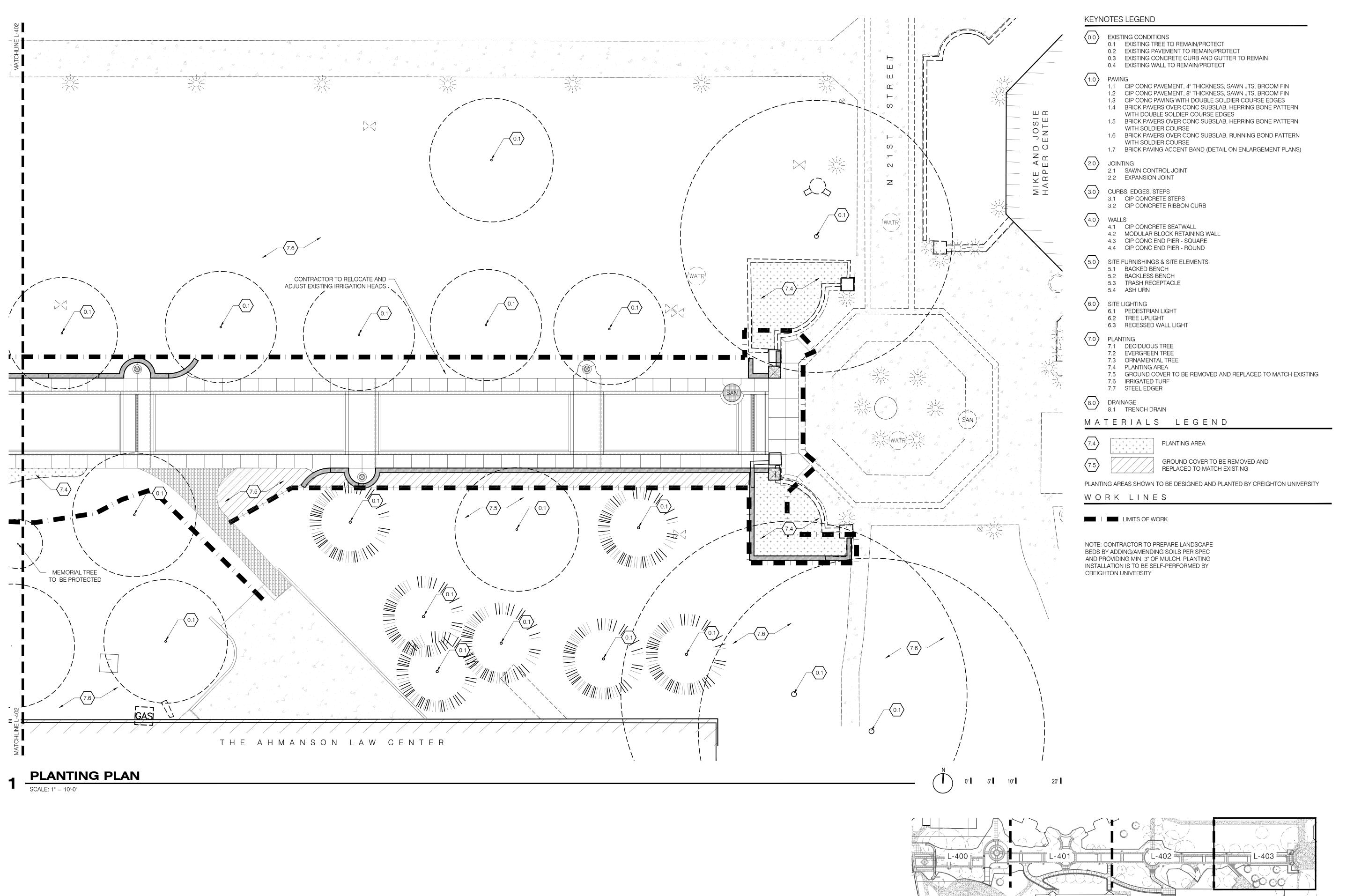
Drawn By: KN Reviewed By: MSS Revisions:

| Date | NO. | Kemarks |
|------|-----|---------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Sheet Name:

PLANTING PLAN

Sheet Number:



KEY MAP

SCALE: 1:100



iaha Metro-Creighton iversity Multi-Modal Facility

studioINSITE

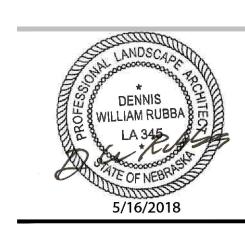
1209 HARNEY STREET, OMAHA NE 68102
PHONE: 402 281 1800



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: KN Reviewed By: MSS Revisions:

| Date | No. | Remarks |
|------|-----|----------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | <u> </u> |

Sheet Name:

PLANTING PLAN

Sheet Number:

0' 50' 100'



1209 HARNEY STREET, OMAHA NE 68102 PHONE: 402 281 1800

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

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

DENNIS WILLIAM RUBBA 5/16/2018

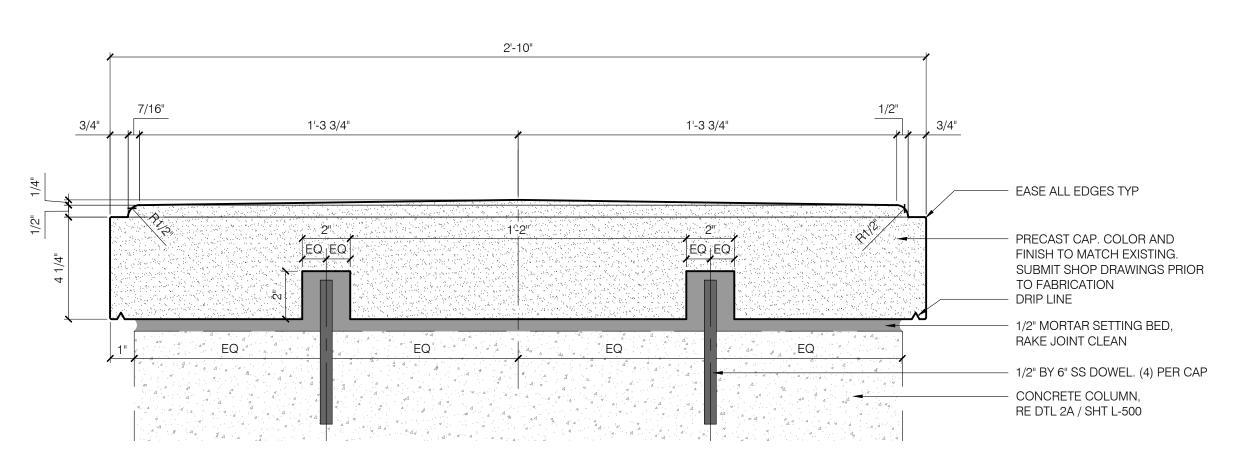
Drawn By: KN Reviewed By: MSS Revisions:

Date No. Remarks

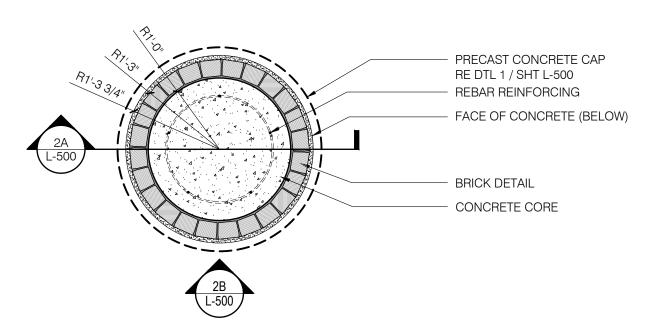
Sheet Name:

COLUMN DETAILS

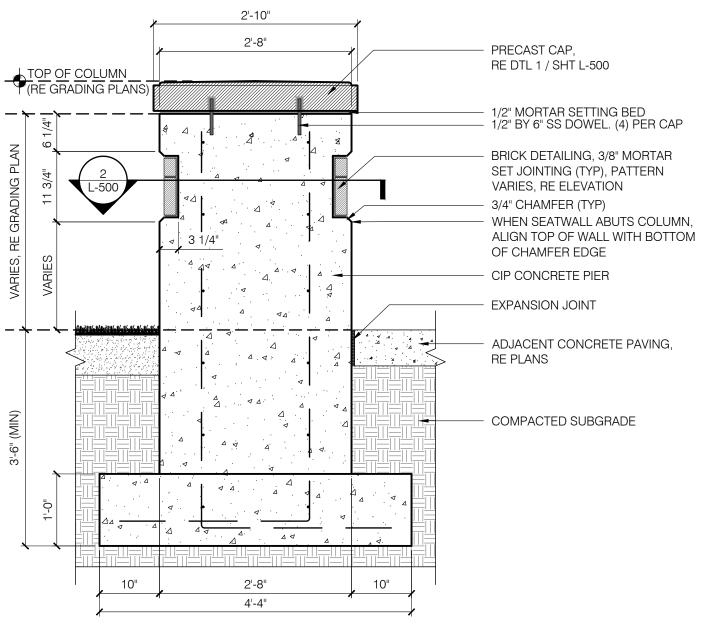
Sheet Number:



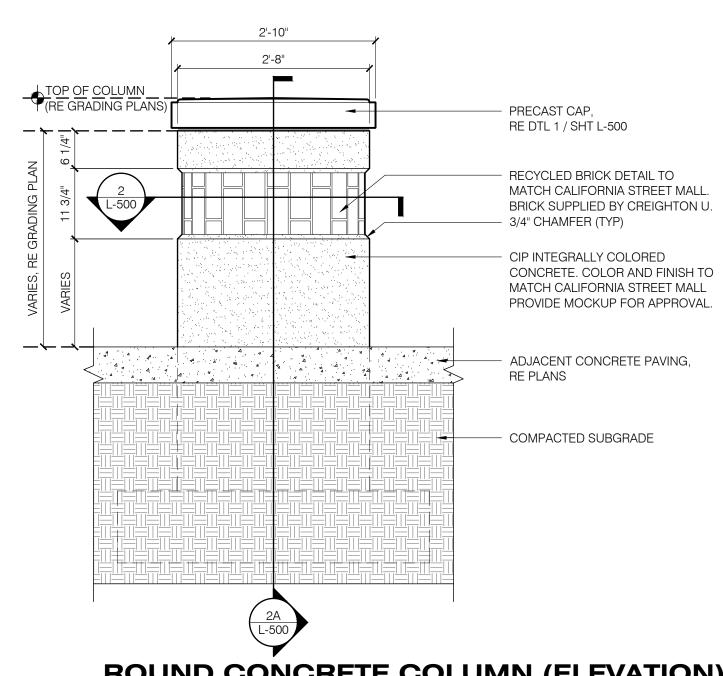
PRECAST CAP AT ROUND COLUMN SCALE: 3" = 1'-0"



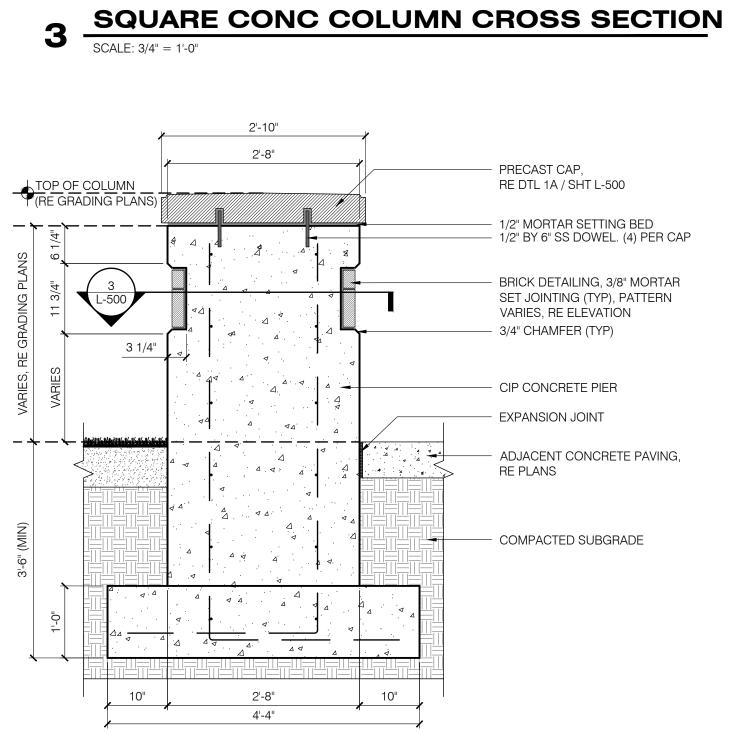
2 ROUND CONC COLUMN CROSS SECTION SCALE: 3/4" = 1'-0"







2B ROUND CONCRETE COLUMN (ELEVATION)



2'-8" TOP OF COLUMN (RE GRADING PLANS) RE DTL 1A / SHT L-500 PRECAST CAP, 1/2" MORTAR SETTING BED RE DTL 1A / SHT L-500 1/2" BY 6" SS DOWEL. (4) PER CAP RECYCLED BRICK DETAIL TO BRICK DETAILING, 3/8" MORTAR MATCH CALIFORNIA STREET MALL. SET JOINTING (TYP), PATTERN VARIES, RE ELEVATION BRICK SUPPLIED BY CREIGHTON U. 3/4" CHAMFER (TYP) CIP INTEGRALLY COLORED CONCRETE. COLOR AND FINISH TO MATCH CALIFORNIA STREET MALL PROVIDE MOCKUP FOR APPROVAL ADJACENT CONCRETE PAVING, ADJACENT CONCRETE PAVING, RE PLANS - COMPACTED SUBGRADE - COMPACTED SUBGRADE

2'-10"

1'-3 3/4"

EQ

EASE ALL EDGES TYP

PRECAST CAP. COLOR AND FINISH TO MATCH EXISTING.

TO FABRICATION

- 2"x2" CONT GROUT CHANNEL

DRIP LINE
1/2" MORTAR SETTING BED,

RAKE JOINT CLEAN

CONCRETE COLUMN, RE DTL 3A / SHT L-500

3B SQUARE CONCRETE COLUMN (ELEVATION)

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

SUBMIT SHOP DRAWINGS PRIOR

1/2" BY 6" SS DOWEL. (4) PER CAP

1'-3 3/4"

EQ.

FACE OF CONCRETE (BELOW)

REBAR REINFORCING

RE DTL 1A / SHT L-500

PRECAST CAP

CONCRETE CORE BRICK DETAIL

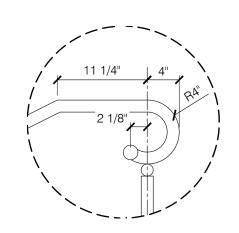
EQ 4

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

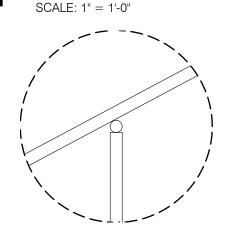
2'-10"

2'-8"

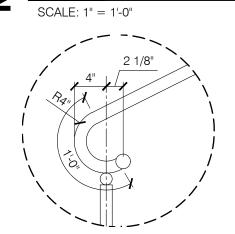
3A SQUARE CONCRETE COLUMN (SECTION) SCALE: 3/4" = 1'-0"



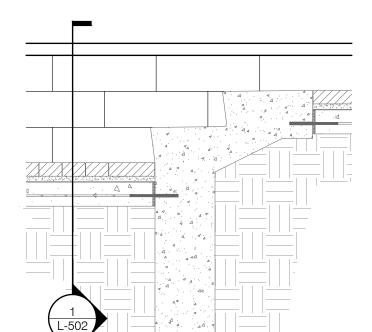
HANDRAIL DETAIL AT TOS SCALE: 1" = 1'-0"



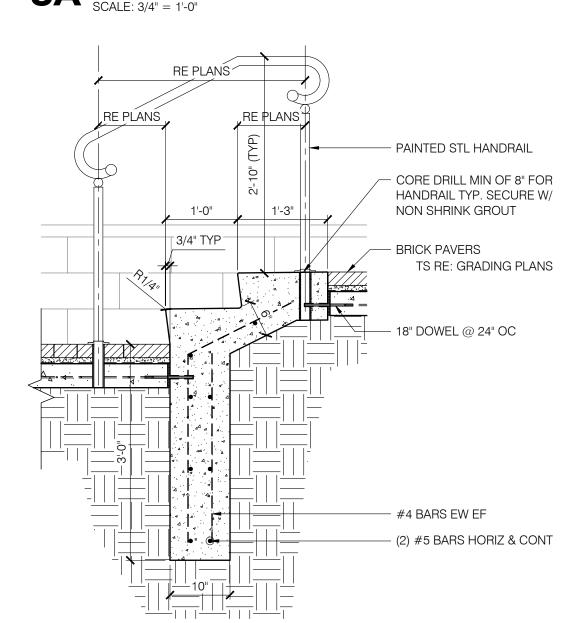
HANDRAIL MID SUPPORT



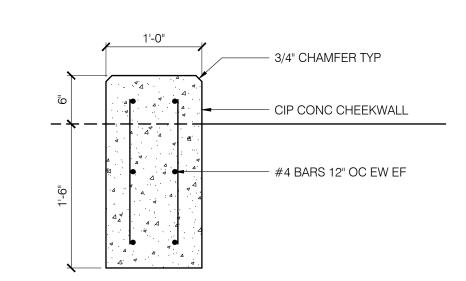
3 HANDRAIL DETAIL AT BOS SCALE: 1" = 1'-0"



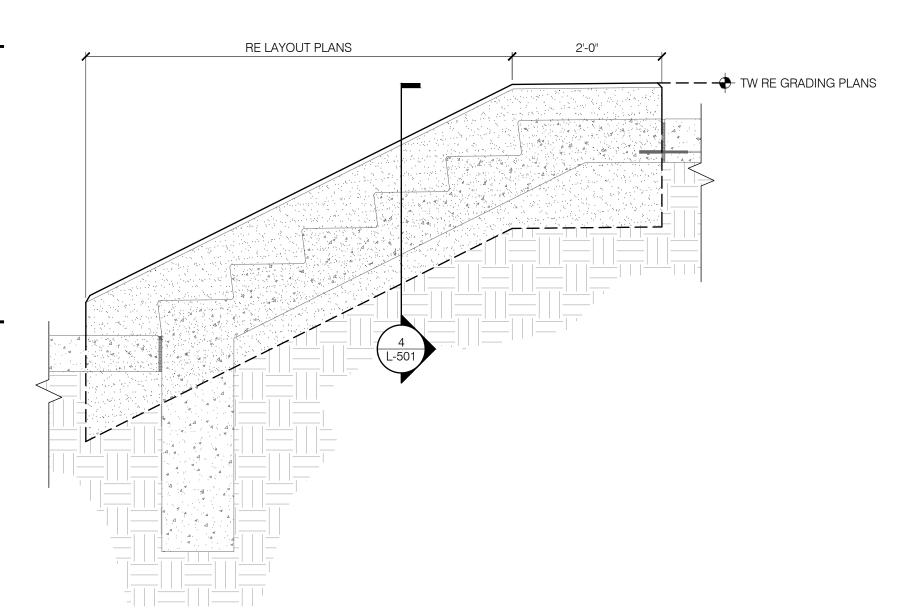
5A STEPS AT 23RD ST (ELEV) SCALE: 3/4" = 1'-0"



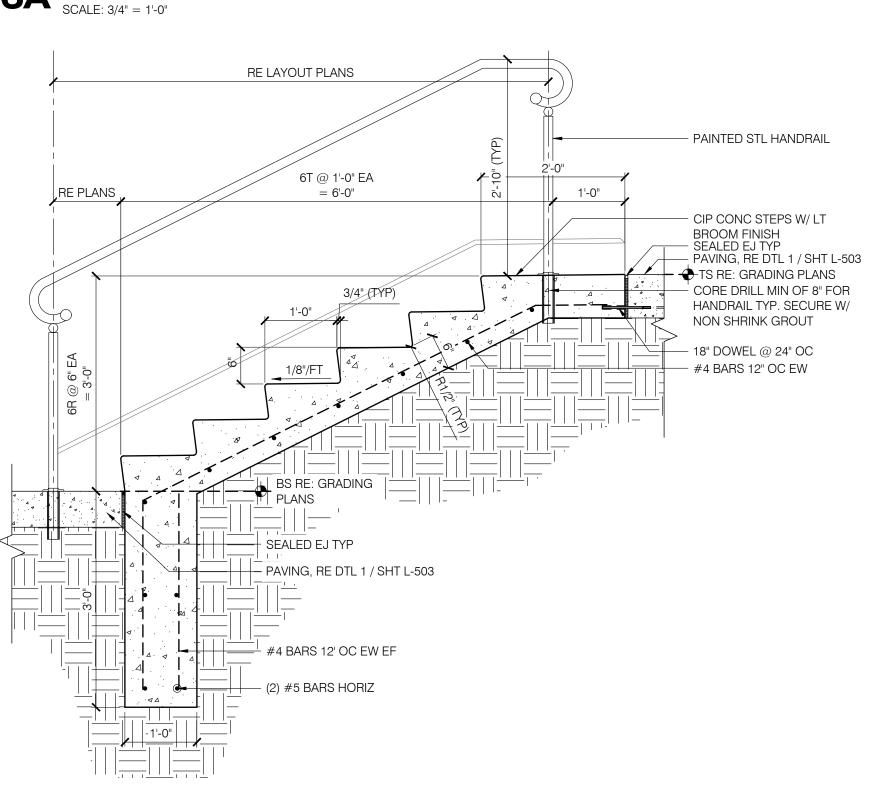
STEPS AT 23RD STSCALE: 3/4" = 1'-0"



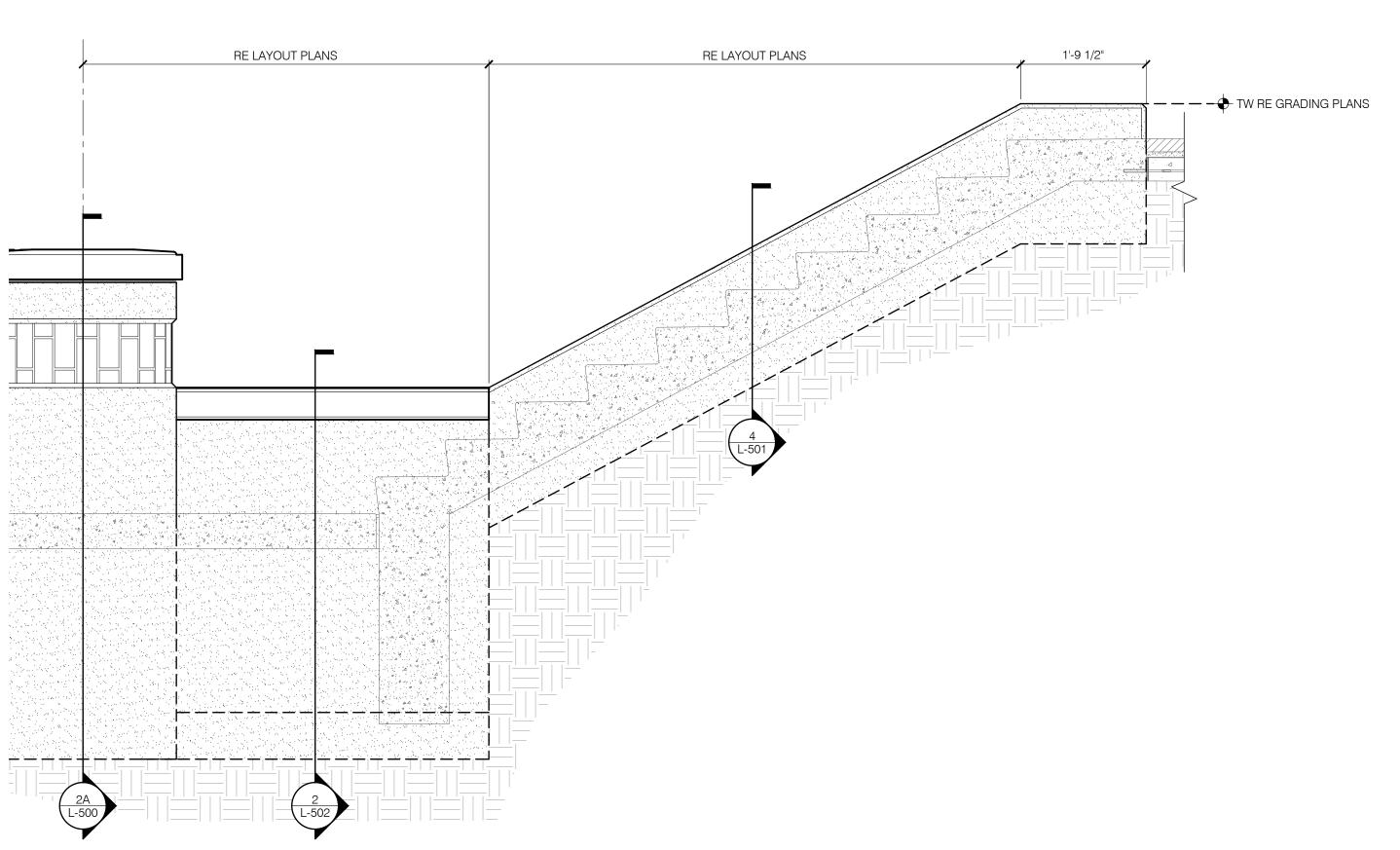
4 CONCRETE CHEEK WALL ADJ STEPS SCALE: 1" = 1'-0"



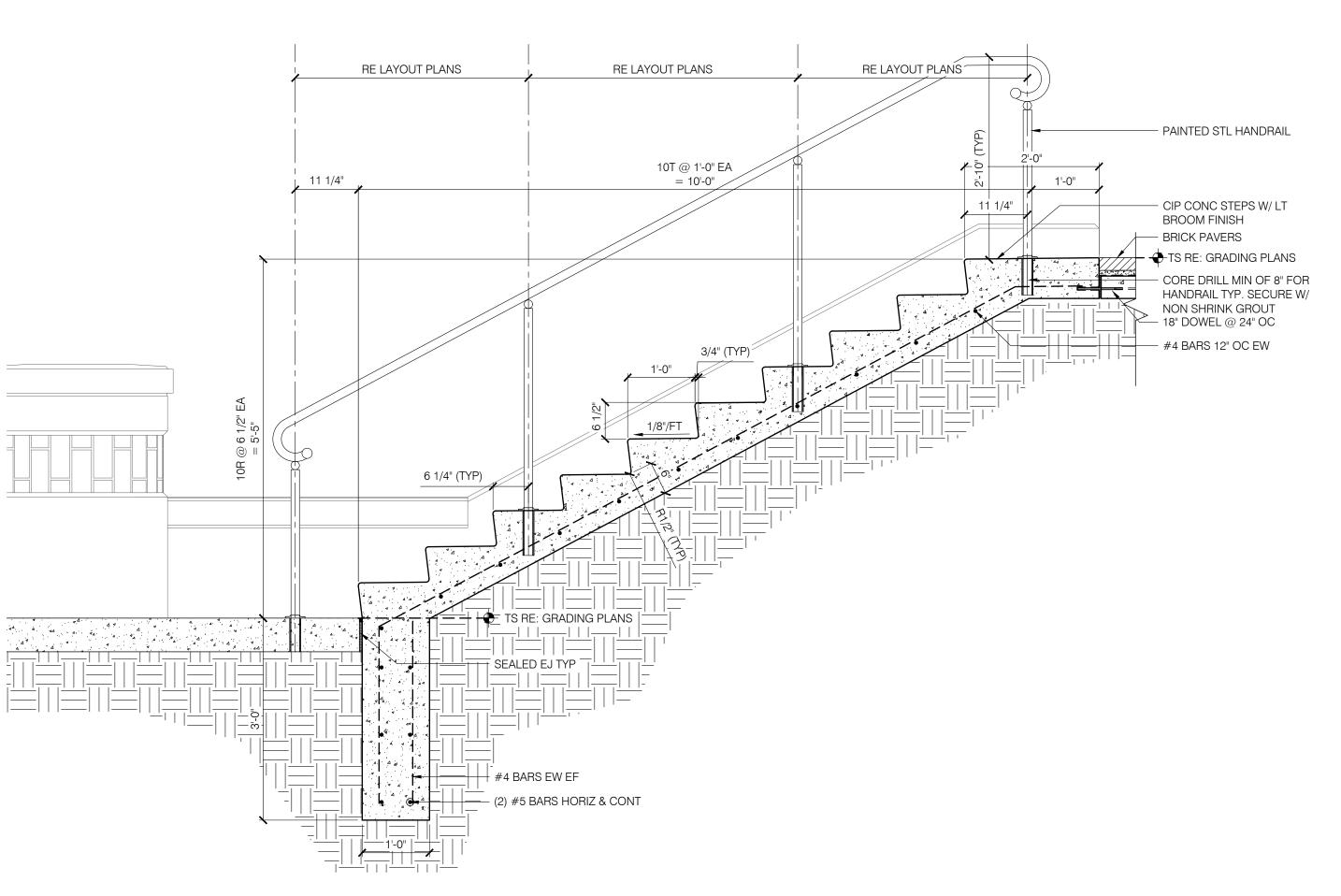
6A STEPS AT LAW CENTER (ELEV) SCALE: 3/4" = 1'-0"



STEPS AT LAW CENTER SCALE: 3/4" = 1'-0"



7A STEPS AT LAW CENTER (ELEV) SCALE: 3/4" = 1'-0"



STEPS AT LAW CENTER SCALE: 3/4" = 1'-0"

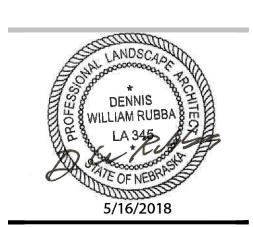






11422 Miracle Hills Drive Omaha, Nebraska 68154 402-778-5025

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



Drawn By: KN Reviewed By: MSS Revisions:

| Date | No. | Remarks |
|------|-----|---------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Sheet Name:

STAIR DETAILS

Sheet Number:



1209 HARNEY STREET, OMAHA NE 68102 PHONE: 402 281 1800

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

2018/05/18 Date: Project Name:

CU PEDESTRIAN MALL DESIGN Issued For / Phase:

100% CONSTRUCTION

Drawn By: KN Reviewed By: MSS Revisions:

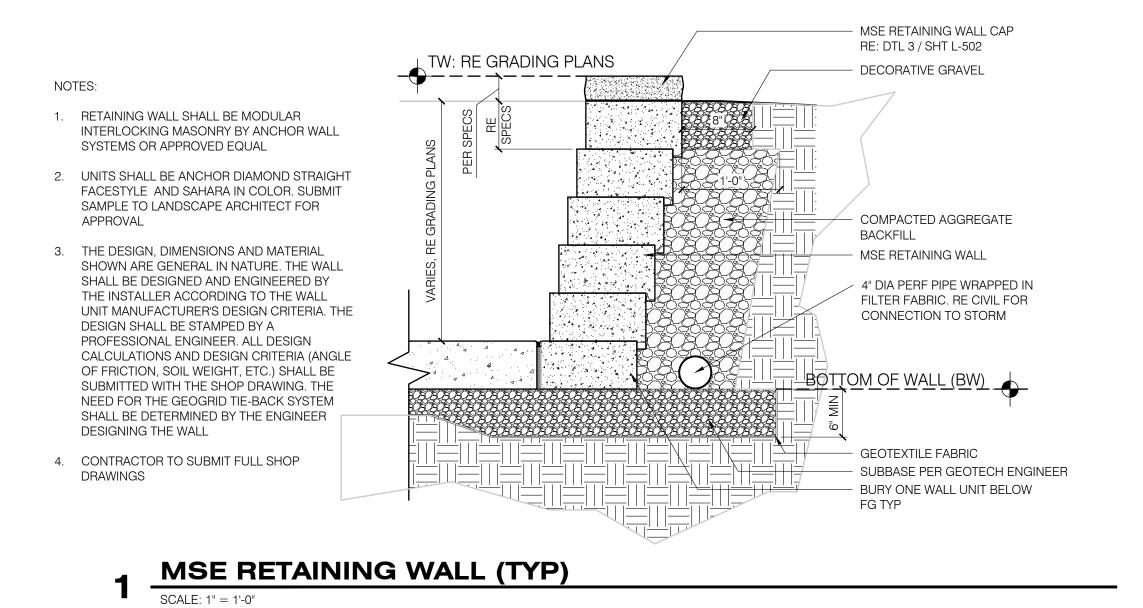
| Date | No. | Remarks |
|------|-----|---------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Sheet Name:

WALL DETAILS

Sheet Number:

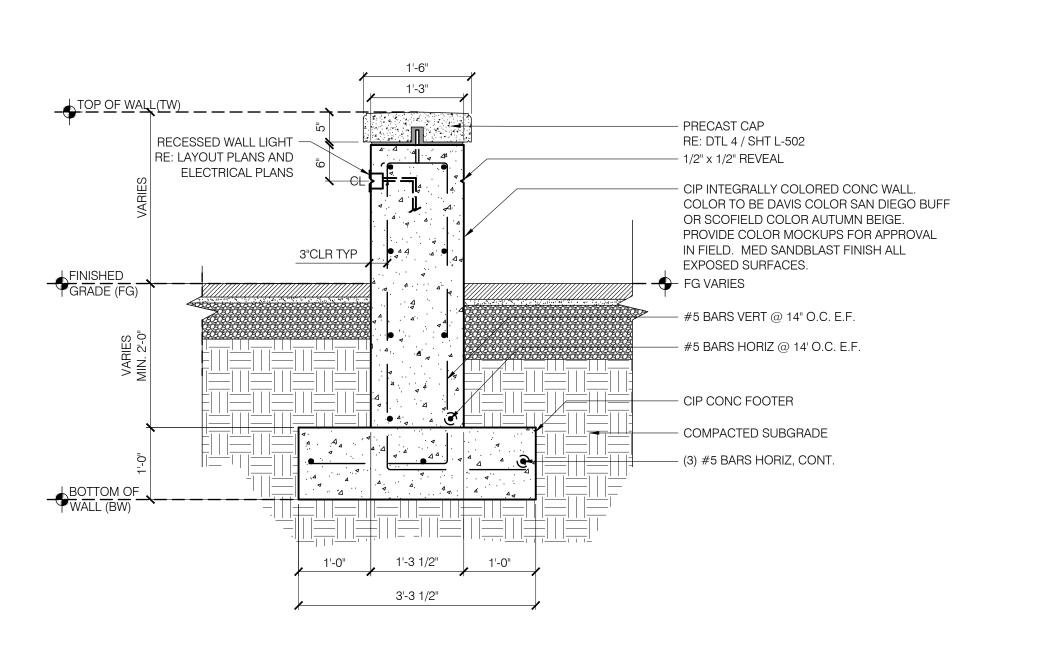
L-502



EQ MSE RETAINING WALL CAP TO MATCH EXISTING, RE SPECS FOR TYPE, SIZE, AND COLOR GLUE WALL CAP TO TOP BLOCK COURSE PER MANUFACTURER RECOMMENDATIONS. EQ EQ MSE RETAINING WALL BLOCK TO MATCH EXISTING, RE SPECS FOR TYPE, SIZE, AND COLOR RE DTL 1 / SHT L-502 FOR WALL DETAIL 1. SUBMIT SAMPLE OF CAP FOR APPROVAL 2. GLUE CAP TO TOP BLOCK COURSE. SUBMIT GLUE PRODUCT FOR APPROVAL.

3 MSE BLOCK CAP AT MSE BLOCK WALL

SCALE: 3" = 1'-0"



PEDESTRIAN LIGHT -BULB-OUT FOR -PEDESTRIAN LIGHT RE: LIGHTING DETAILS CAPSTONE -RE: DETAILS 10'-11 1/4" 5'-5 1/2" 5'-5 1/2" 10'-11 1/4" 10'-11 1/4" 5'-5 1/2" 5'-5 1/2" 10'-11 1/4" TW: 1066.31 6'-0" EX. ELEVATION (BEHIND WALL) GRAVEL BASE

8 1/4"

8 1/4"

PRECAST CAP AT CIP CONC WALL

SCALE: 3" = 1'-0"

- EASE ALL EDGES TYP

TO FABRICATION

RAKE JOINT CLEAN

PRECAST CAP. COLOR AND

FINISH TO MATCH EXISTING.

2"x2" CONT GROUT CHANNEL

1/2" X 6" SS DOWEL. (2) PER CAP

1. SUBMIT SAMPLE OF PRECAST FOR APPROVAL

2. CONTRACTOR TO SUBMIT FULL SHOP DRAWINGS

3. CAULK AND SEAL JOINTS. SUBMIT CAULK COLOR FOR APPROVAL

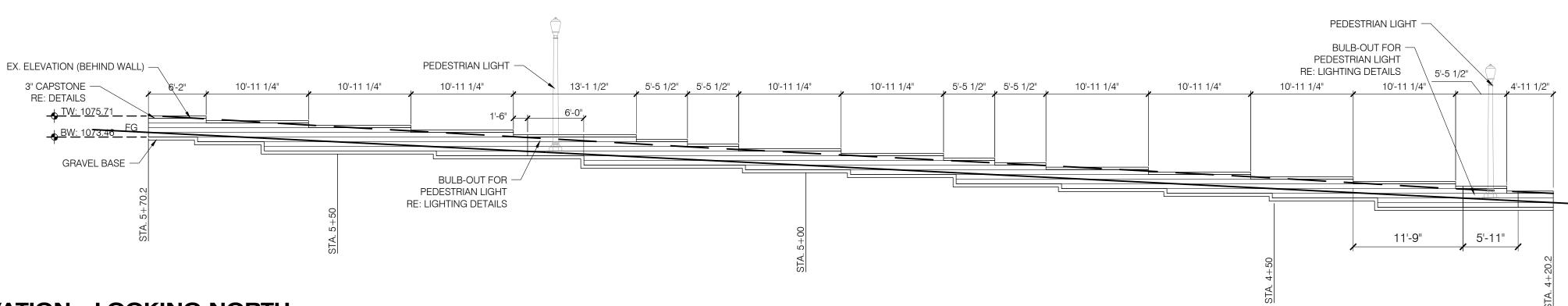
- DRIP LINE - 1/2" MORTAR SETTING BED,

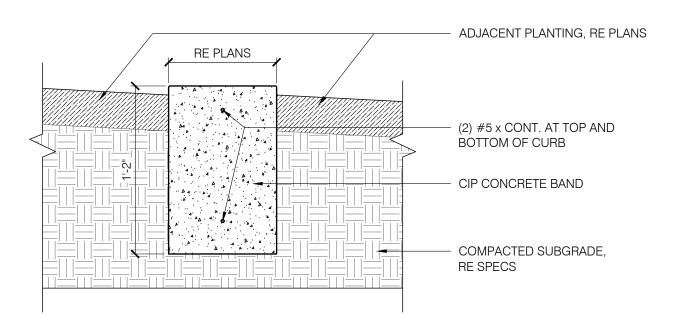
SUBMIT SHOP DRAWINGS PRIOR

2 CIP CONC WALL (TYP)

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

5 ELEVATION - LOOKING SOUTH





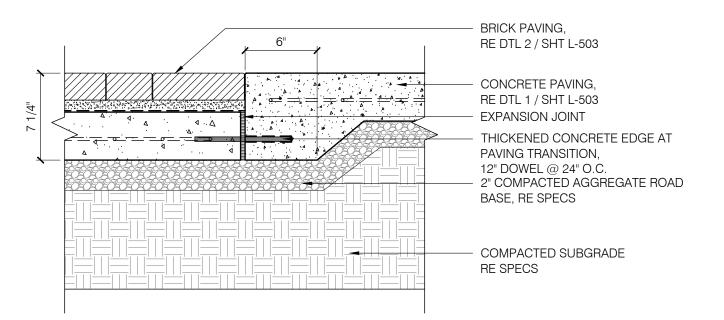
10 FLUSH CIP CONCRETE RIBBON CURB

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

- ADJACENT WALL OR STRUCTURE - 1/4" R TOOLED ALL EXPOSED **EDGES** - 1/2" DEPTH SEALANT, RAKED SMOOTH AND CONCAVE - 1/2" POLYETHYLENE EXPANSION JOINT FILLER W/ 1/2" PEEL STRIP SEALED EXPANSION JOINT @ STRUCTURE, 1/4" WIDE, FULL EXPANSION JOINT, 1/4" WIDE, **FULL DEPTH** SAWN CONTROL JOINT, 3/16" WIDE, 1/3 SLAB DEPTH. OVERCUTTING OF SAWN JTS WILL NOT BE ACCEPTED DECORATIVE JOINT, 3/16" X 1/4" SEALED COLD JOINT, 1/4" WIDE, FULL DEPTH COMPACTED SUBGRADE, RE SPECS

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

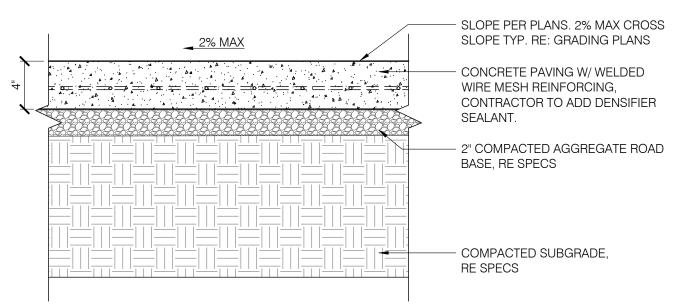
CONCRETE JOINTING DETAIL 6



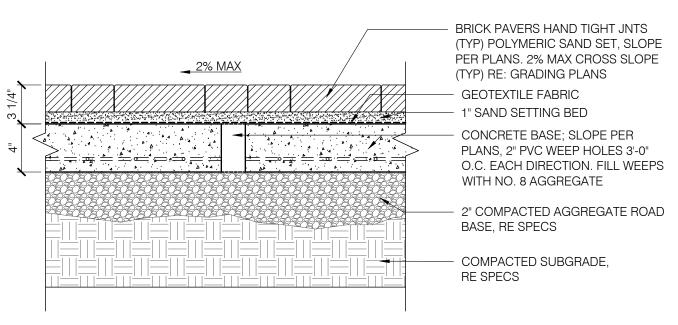
BRICK PAVERS ADJ CONCRETE SCALE: 1 1/2" = 1'-0"

2% MAX _ - 1/2" RADII CIP CONC TURN DOWN EDGE W/ WELDED WIRE MESH REINFORCING, CONTRACTOR TO ADD DENSIFIER SEALANT. RE PLANS: FINISH AND SCORING. #4 BAR X 2'-0' _ @ 12" OC (2) #4 BARS HORIZ AND CONT EQUALLY SPACED ADJACENT PLANTING, RE PLANS 2" COMPACTED AGGREGATE ROAD BASE, RE SPECS - COMPACTED SUBGRADE, RE SPECS

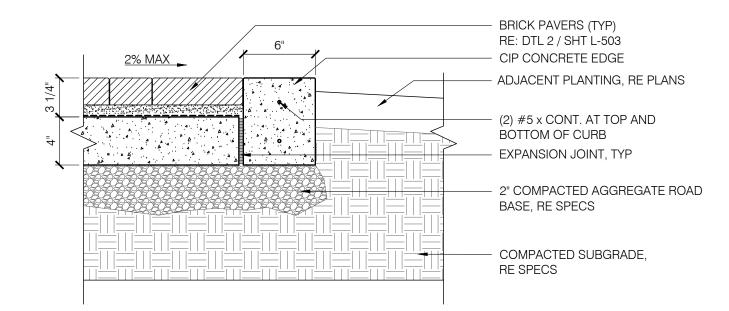
THICKENED CONCRETE EDGE SCALE: 1 1/2" = 1'-0"



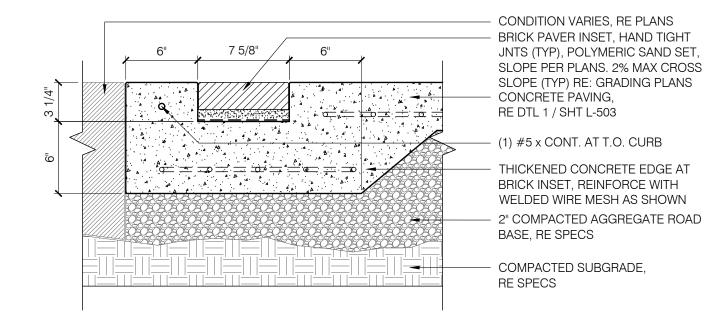
4in CIP CONCRETE PAVING



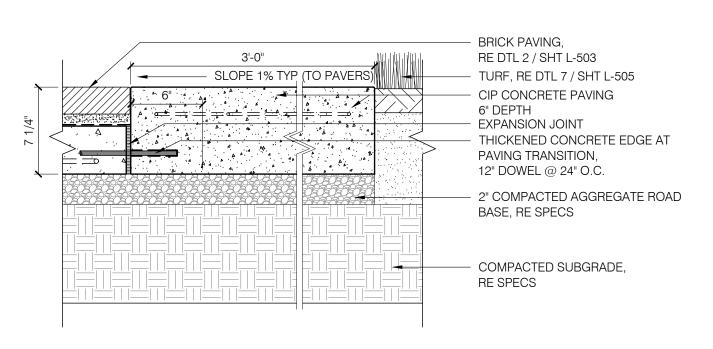
BRICK ON CONCRETE SUBSLAB 2



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



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



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



Omaha Metro-Creighton
University Multi-Modal
Facility
(Metro 2017 IDIQ Work Order #3)



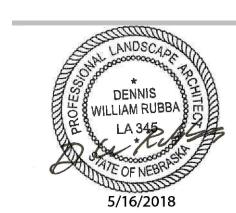
1209 HARNEY STREET, OMAHA NE 68102



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

PHONE: 402 281 1800

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



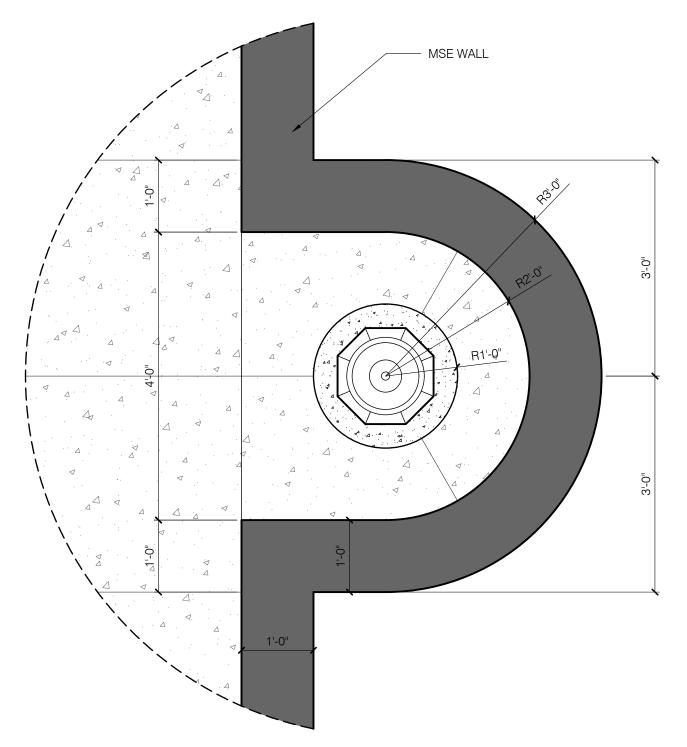
Drawn By: KN Reviewed By: MSS Revisions:

| Date | No. | Remarks |
|------|-----|---------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

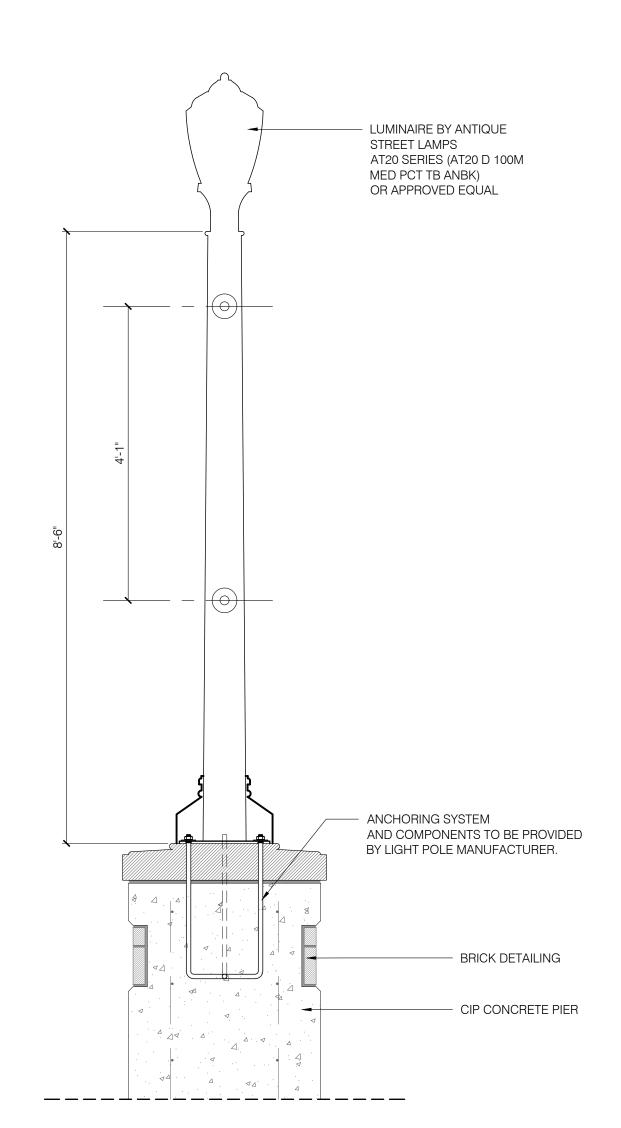
Sheet Name:

PAVING DETAILS

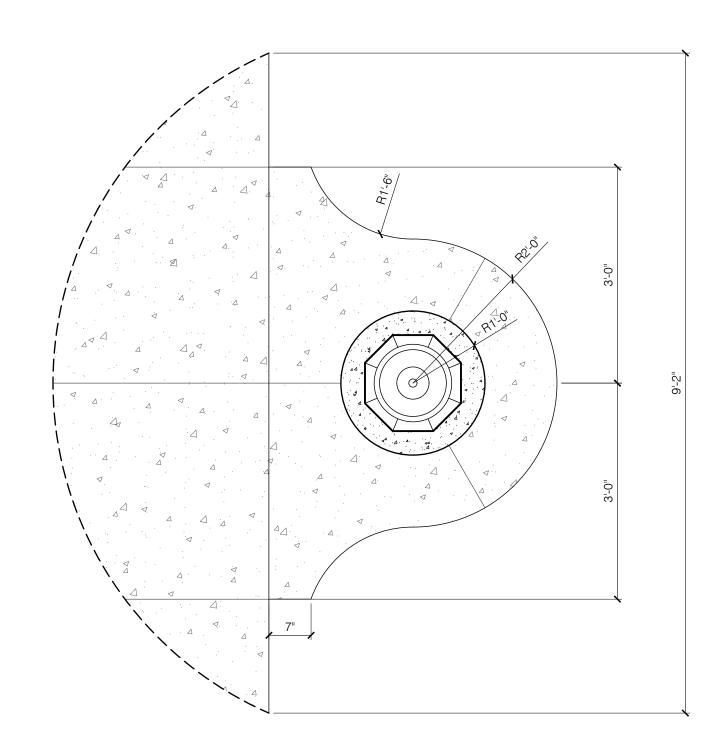
Sheet Number:



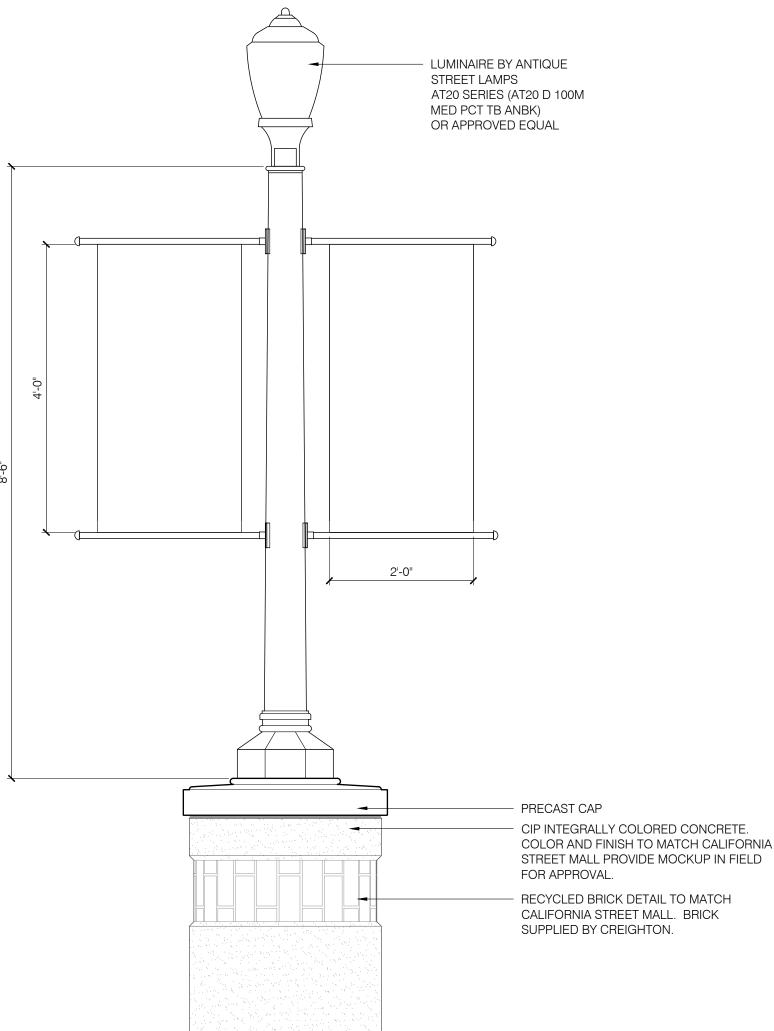
PED LIGHT AT RETAINING WALL SCALE: 3/4" = 1'-0"



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



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



5 PED LIGHT ON COLUMN (FRONT ELEVATION)

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



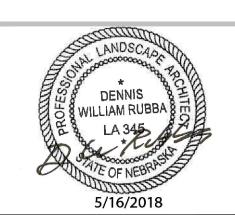
STUDIONSITE
1209 HARNEY STREET, OMAHA NE 68102
PHONE: 402 281 1800



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: KN Reviewed By: MSS Revisions:

| Date | No. | Remarks |
|------|-----|---------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Sheet Name: LIGHTING DETAILS

Sheet Number:



PED LIGHT BY ANTIQUE STREET LAMPS ROCKFORD SERIES (PI RF16 9 ANBK)

FINISH GRADE

FOOTING, RE: SHEET E-000

OR APPROVED EQUAL



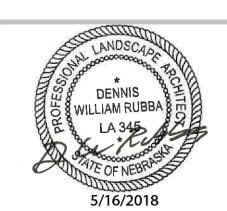
Omaha Metro-Creighton
University Multi-Modal
Facility
(Metro 2017 IDIQ Work Order #3)



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: KN Reviewed By: MSS Revisions:

| Date | No. | Remarks |
|----------|-----|---------|
| | | |
| | | |
| | | |
| <u> </u> | | |
| | | |
| | | |

Sheet Name:

— PLANTING BED WITH SPECIFIED MULCH

- STAKE EDGING WITH METAL STAKES
PER MANUFACTURER'S RECOMMENDATION

LAWN AS SPECIFIED

- 6" BLACK STEEL EDGING

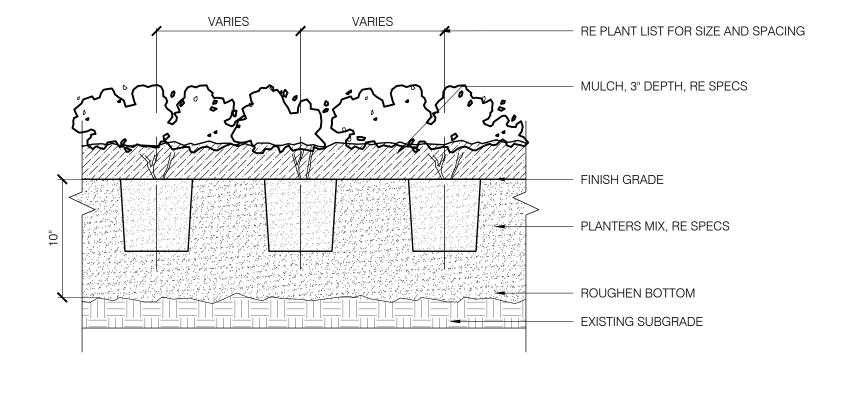
1. SET ALL EDGING 1" ABOVE FINISH GRADE AS SHOWN.

3. ALL JOINTS SHALL BE SECURELY STAKED.

2. EDGING SHALL ABUT ALL CONCRETE CURBS AND WALKS PERPENDICULAR AND FLUSH WITH TOP OF CONCRETE.

PLANTING DETAILS

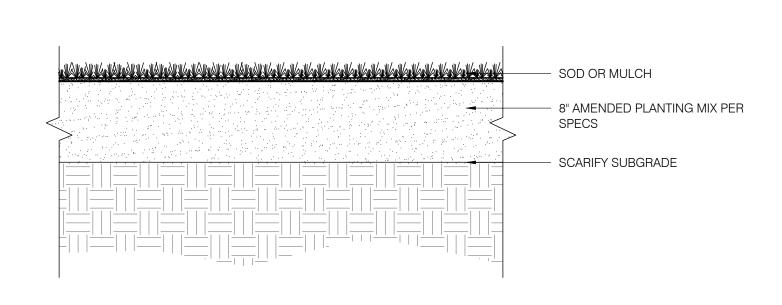
Sheet Number:



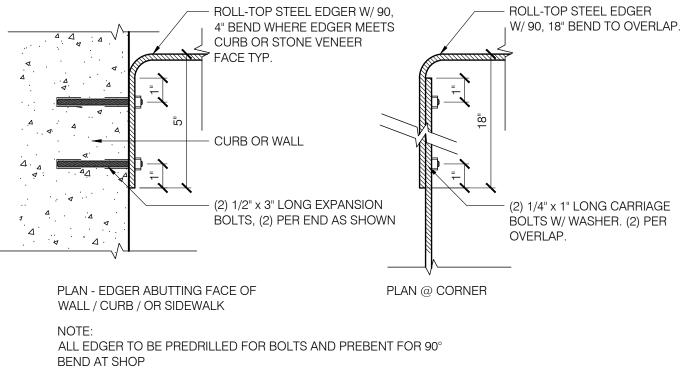
4 GROUNDCOVER PLANTING SCALE: 1 1/2" = 1'-0"

7 TOPSOIL & BED PREP DETAIL

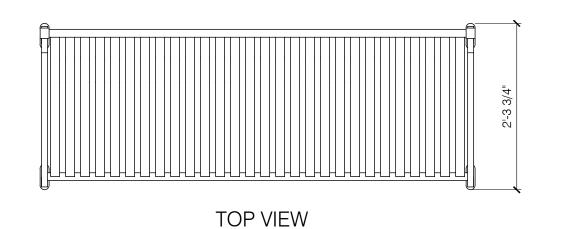
SCALE: 1 1/2" = 1'-0"



BEND AT SHOP

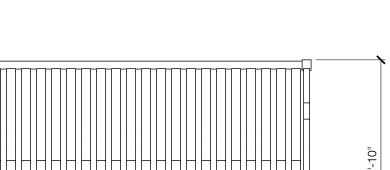


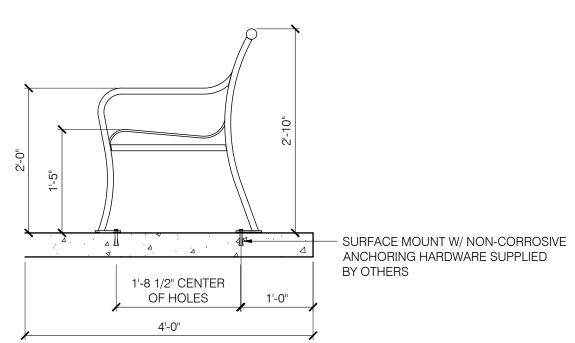
9 STEEL EDGING N.T.S.



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

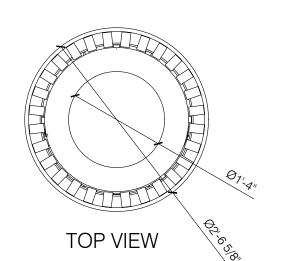
5'-11" O.C.

6'-0"

4 ^Δ. . . . Δ _{4 Δ}

BENCH WITH BACK

3/4" = 1'-0"

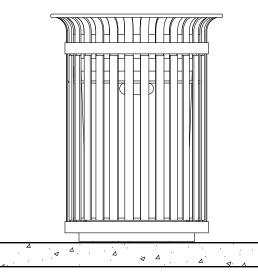


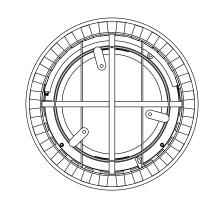
VERTICAL STRAPS -5/16" X 1 1/2" STEEL FLAT BAR
 TOP RING - Ø 5/8" STEEL ROUND BAR
 SUPPORT RINGS - 1/4" X 2" STEEL FLAT BAR

RIGHT SIDE VIEW

- 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
- 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

TRASH RECEPTICAL

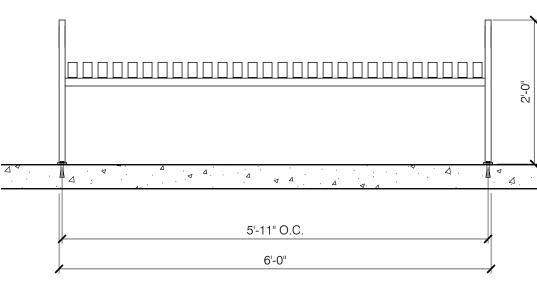
MOUNTING DETAIL

BOTTOM VIEW

TOP VIEW

- SEAT STRAPS 5/16" X 1 1/2" STEEL FLAT BAR
- SUPPORT PIPES Ø 1.315" X .133" STEEL PIPE
- 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)

RIGHT SIDE VIEW



SURFACE MOUNT W/ NON-CORROSIVE ANCHORING HARDWARE SUPPLIED 1'-8 1/2" CENTER OF HOLES 4'-0"

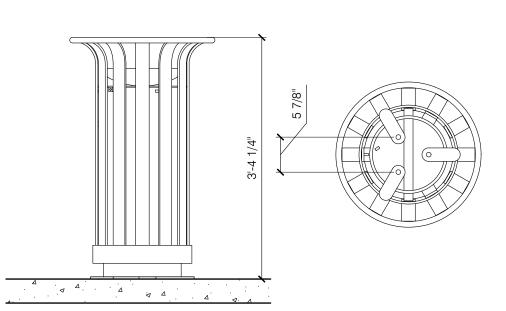
FRONT VIEW

BENCH - BACKLESS 3/4" = 1'-0"

MATERIALS LIST

- VERTICAL STRAPS -1/4" X 1 1/2" STEEL FLAT BAR TOP RING Ø 5/8" STEEL ROUND BAR
- SUPPORT RINGS 1/4" X 2" STEEL FLAT BAR
 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
- 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

TOP VIEW



FRONT VIEW

BOTTOM VIEW MOUNTING DETAIL

4 ASH URN

3/4" = 1'-0"

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

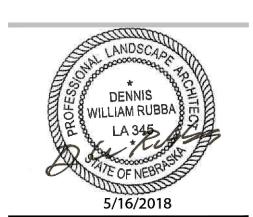
1209 HARNEY STREET, OMAHA NE 68102 PHONE: 402 281 1800



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

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

100% CONSTRUCTION

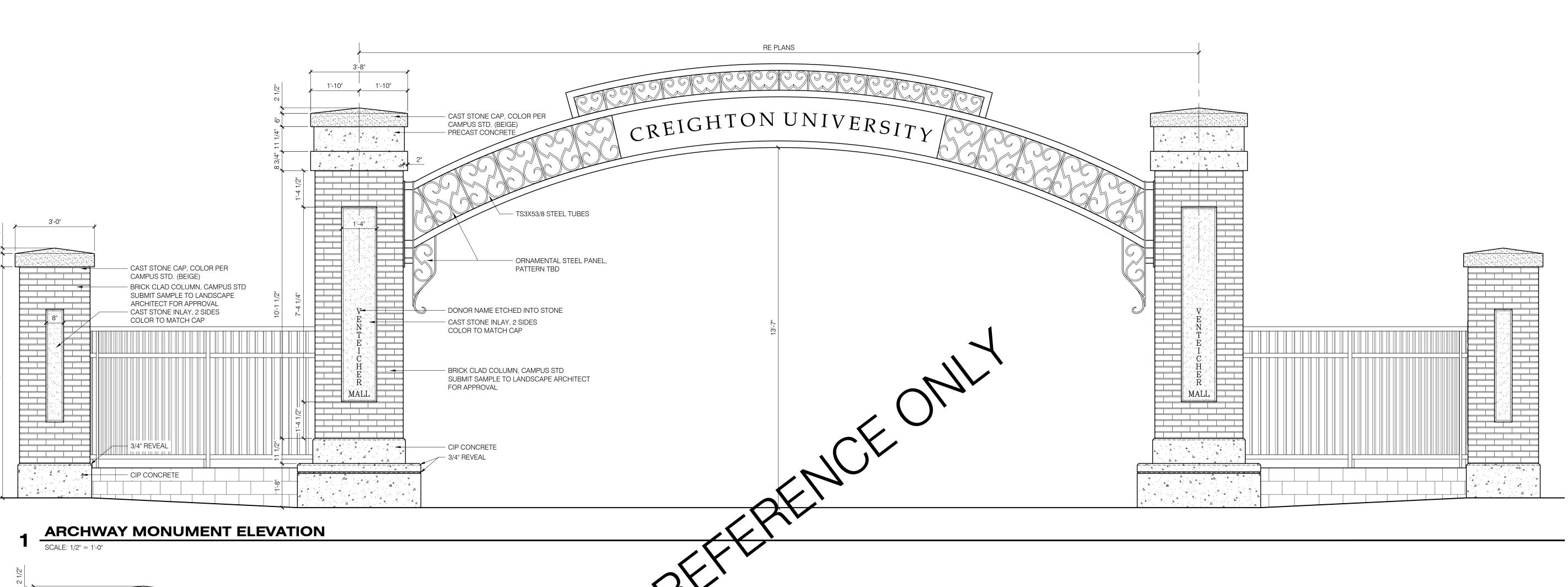


Drawn By: KN Reviewed By: MSS Revisions:

| Date | No. | Remarks |
|------|-----|---------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Sheet Name: FURNISHING DETAILS

Sheet Number:





University Multi-Modal Facility (Metro 2017 IDIQ -Work Order #3)

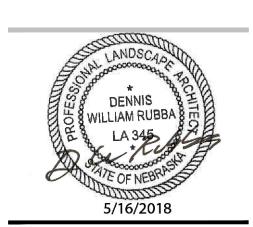
studioINSITE
1209 HARNEY STREET, OMAHA NE 68102
PHONE: 402 281 1800

ENGINEER:
PLANNERS
DESIGNER
Consulting Group, Inc.

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: KN Reviewed By: MSS Revisions:

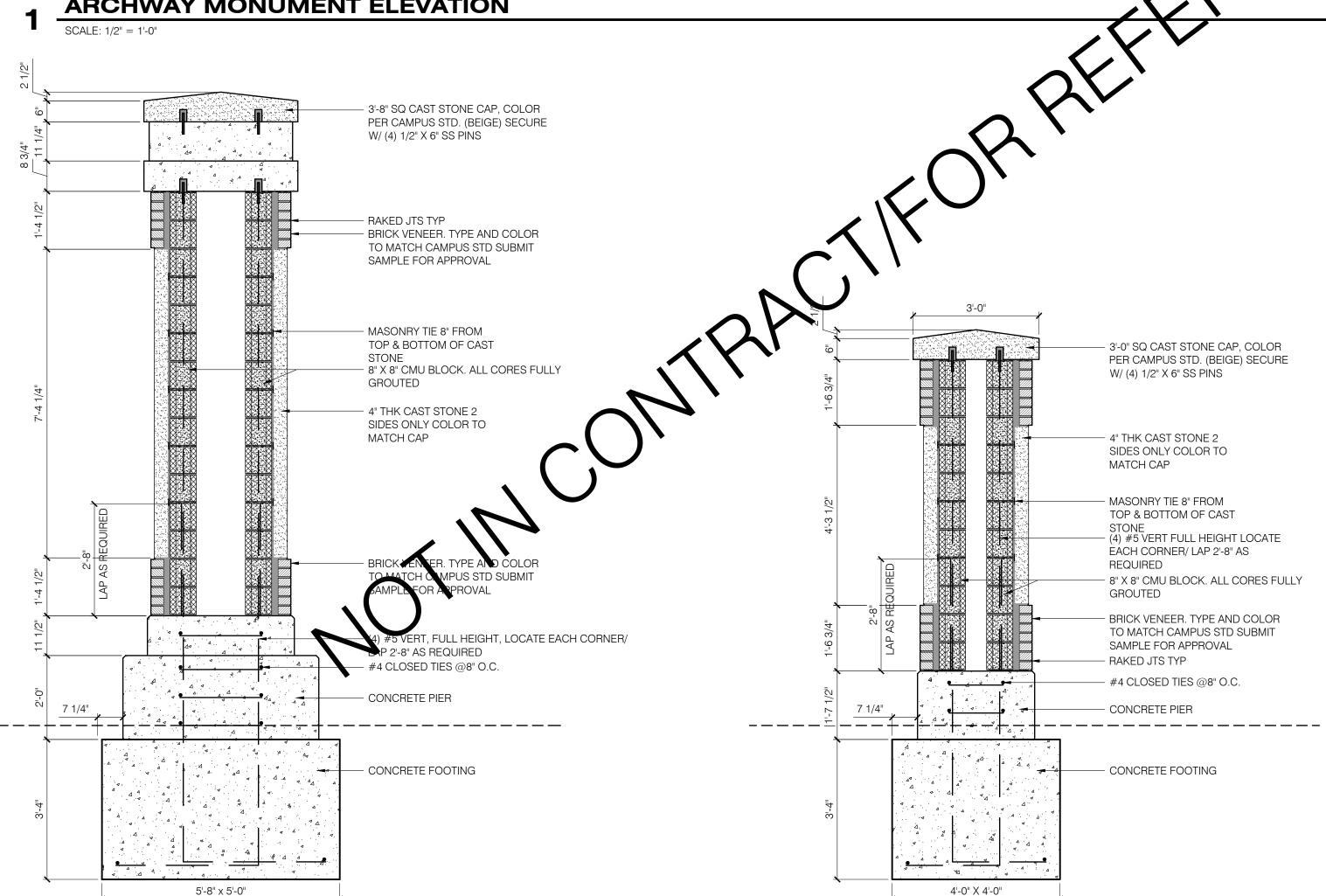
| Date | No. | Remarks |
|------|-----|---------|
| | | |
| | | |
| | | |
| | | |
| | | |

Sheet Name:

ARCHWAY MONUMENTS

Sheet Number:

L-507



3 ARCHWAY COLUMN (9.5 FT HEIGHT)

IRRIGATION CONSTRUCTION NOTES

- 1. 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.
- 2. 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 OR 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.
- 3. 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

- 4. 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'-O" 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'-O" 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.
- 5. 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 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.
- 6. 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.
- 7. DRIP IRRIGATION REFER TO IRRIGATION DETAIL SHEET FOR DRIP EMITTER QUANTITIES AND PLACEMENT.

2" PVC (1)

- 8. UNLABELED PIPING ALL UNLABELED LATERAL PIPING SHALL BE 1" MINIMUM UNLESS OTHERWISE NOTED.
- 9. 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.

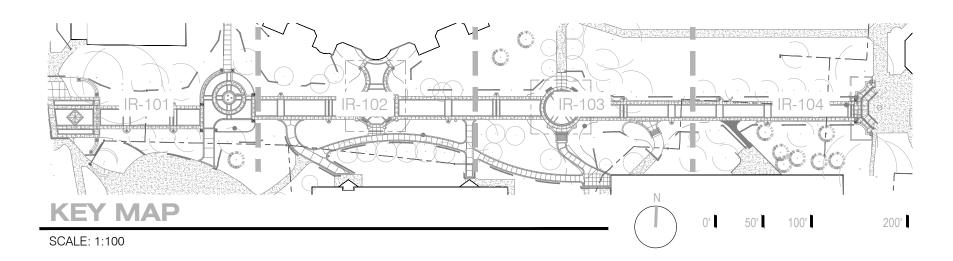
| SLEEVED PIPE SIZE/WIRE QUANTITY | REQUIRED SLEEVE SIZE & (QUANTITY) |
|---------------------------------|-----------------------------------|
| 3/4" - 11/4" PIPING | 2" PVC (1) |
| 1½" - 2" PIPING | 4" PVC (1) |
| 21/2" - 3" PIPING | 6" PVC (1) |

1-25 CONTROL WIRES

- 10. 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.
- 11. ADJUSTMENT CONTRACTOR SHALL FINE TUNE/ADJUST THE IRRIGATION SYSTEM TO REDUCE/AVOID OVERSPRAY ONTO HARD SURFACES BY ADJUSTING NOZZLE DIRECTION AND NOZZLE RADIUS.
- 12. 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.
- 13. 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.
- 14. 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.
- 15. 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.
- 16. DEMO NOTE -ALL IRRIGATION PIPING AND FITTINGS WILL BE ABANDONED IN PLACE, UNLESS THEY ARE EXCAVATED WITH NEW GRADING AND WILL BE THE CONTRACTORS 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



| SYMBOL | MANUFACTURER | MODEL NO. | DESCRIPTION | DETAIL NO. | |
|-----------|--------------|---|--|------------|--|
| 666 | RAIN BIRD | 1806-SAM-PRS WITH MPR SERIES NOZZLE | POPUP SPRAY HEAD | 11 | |
| • • • | RAIN BIRD | 1806-SAM-PRS WITH SST, CORNER NOZZLE | POPUP 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 | 5006FCSAMRNP 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-33-DRC | QUICK COUPLING VALVE | 9 | |
| | | | ELECTRIC CONTROLLER (EXISTING) | 1 & 2 | |
| N/5 | CARSON | REFER TO SPECIFICATIONS AND DETAILS | VALVE BOXES | N/S | |
| M | LEGEND | T-400NL - 2½" AND SMALLER | GATE VALVE | 7 | |
| • | LEEMCO | LINE SIZE - 4" AND SMALLER | GASKET GATE VALVE W/ RESTRAINTS | 8 | |
| N/5 | 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 | |
| WS | | | WIRE SPLICE BOX | 3 | |
| `_/~_/ | TORO | BLUE STRIPE | POLY DRIP TUBING -3/4" MIN. WIDTH | 16 | |
| \oplus | RAIN BIRD | XCZ-100-PRF | DRIP VALVE ASSEMBLY | 14 | |
| ▶ | | | DRIP LINE BLOW-OUT STUB | 16 | |
| N/S | RAIN BIRD | XERI-BUG | DRIP EMITTERS | 15 | |
| (Ē) | | | (EXISTING) CONTROLLER | | |
| \bowtie | | | (EXISTING) ISOLATION GATE VALVE | | |
| | | | (EXISTING) CONTROL VALVE | | |
| • | | | (EXISTING) ROTOR | | |
| | | | (EXISTING) MAINLINE | | |
| | | | (EXISTING) LATERAL LINE | | |
| | | | (EXISTING) SLEEVES | | |
| | 1 PM | • | CONTROLLER & STATION NO. CONTROL VALVE SIZE | | |

| LATERAL PIPE SIZING | | | | | | |
|---------------------|----------------------------------|--|--|--|--|--|
| GUIDE | | | | | | |
| PIPE SIZE (IN) | CLASS 200 PVC FLOW RATE (GPM) | | | | | |
| 1" | 9-16 | | | | | |
| 11/4" | 17-24 | | | | | |
| 1½" | 25-36 | | | | | |
| 2" | 37-55 | | | | | |
| 2½" | 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 CONTRACTORS RESPONSIBILITY TO REMOVE AND DISPOSE OF.

WIRES TO WHICH CONTROLLER - SEE CONSTRUCTION NOTES

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.









letro-Creightory Multi-Modal acility b 2017 IDIQ - k Order #3) ersity Campus, Omaha, N

University Mult Facility (Metro 2017 II

ah





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

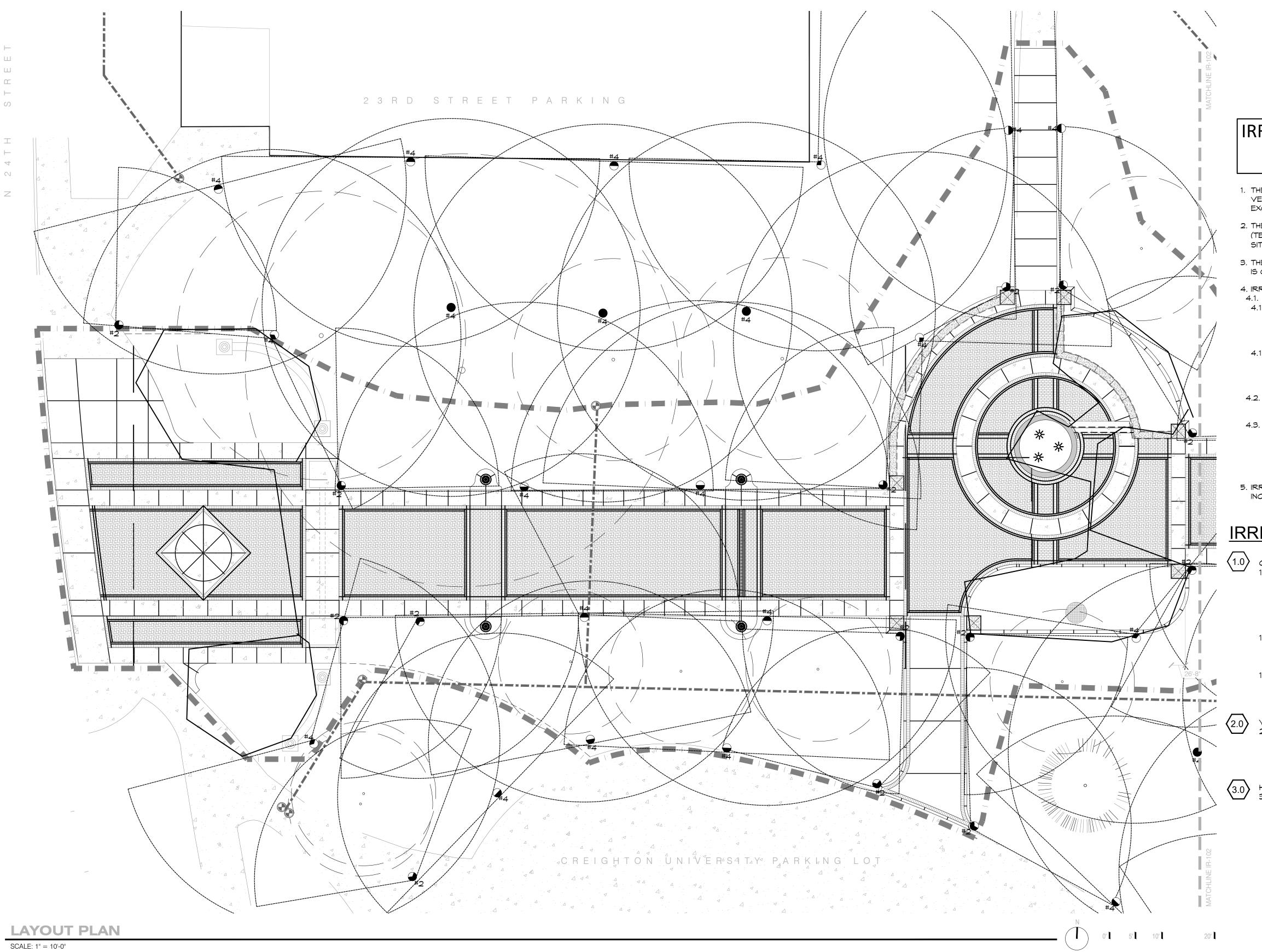
Drawn By: KJD
Reviewed By: JSB
Revisions:
Date No. Remarks

Date No. Remai

Sheet Name:

IRRIGATION NOTES &

IR-100





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.

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 (MIDER THAN 25 FEET) SHALL BE IRRIGATED WITH GEAR DRIVEN ROTOR HEADS WITH A MINIMUM PRECIPITATION RATE OF .45" PER HOUR FOR A FULL CIRCLE
- 4.2. SHRUB BED AREAS BED AREAS MITH 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

- 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.
- 1.3 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 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



eightor -Modal Metro-Crersity Multi-Facility

1209 HARNEY STREET, OMAHA NE 68102 PHONE: 402 281 1800



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

Date: 2018/05/18

Project Name:

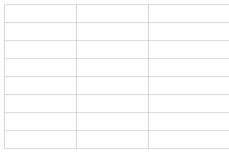
CU PEDESTRIAN MALL DESIGN

Issued For / Phase: 100%

CONSTRUCTION

Drawn By: Reviewed By: JSB Revisions:

Date No. Remarks



Sheet Name:

IRRIGATION PLAN

Sheet Number:



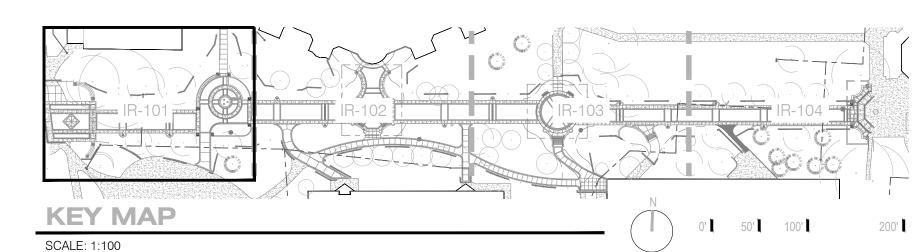
IR-2 **IRRIGATION DEMO PLAN** IR-3 & IR-4 IRRIGATION PLAN

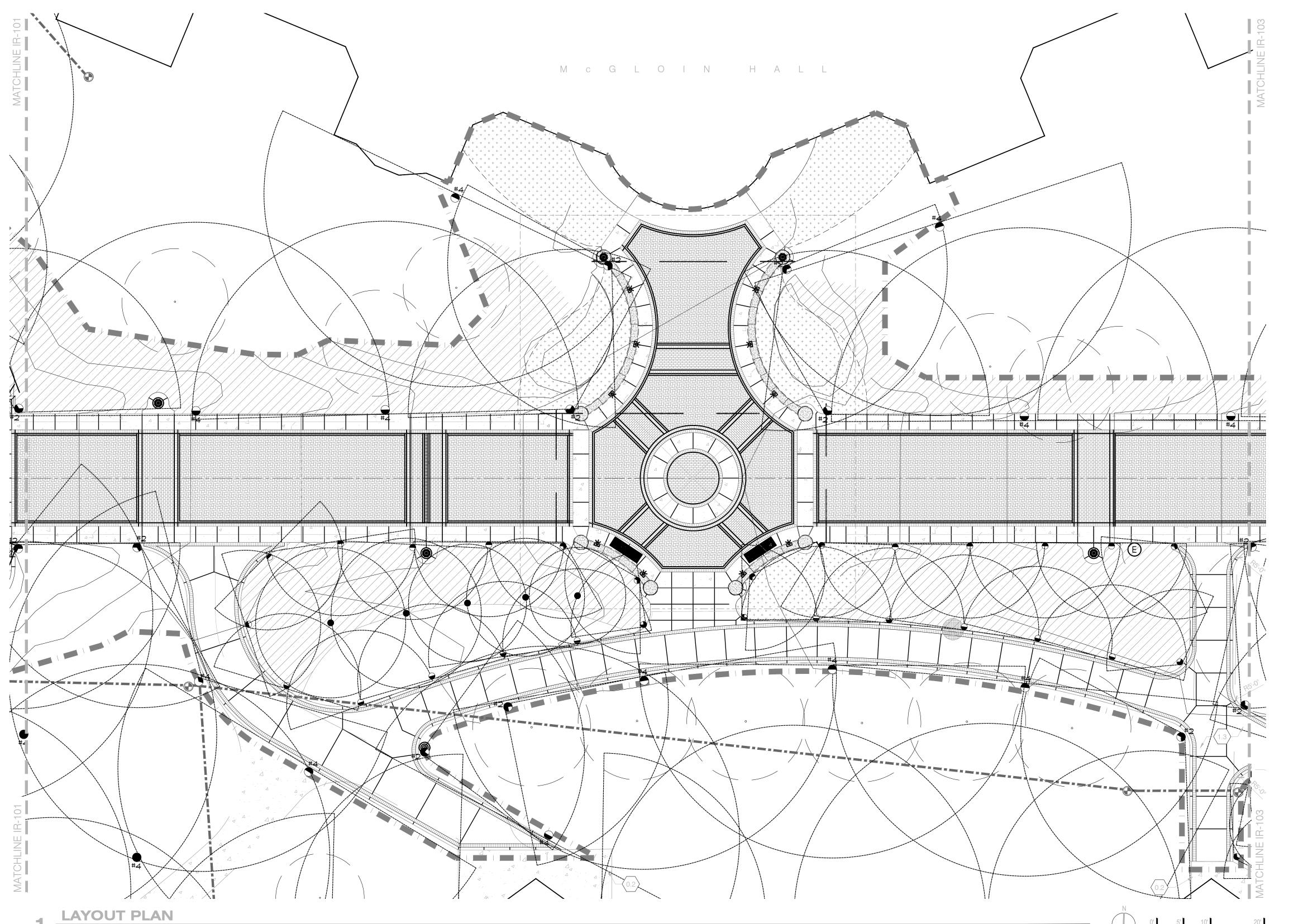
IR-1 & IR-5 IRRIGATION DETAILS

IR-1

IR-1









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
- 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 MEATHER SENSING DEVICE.

IRRIGATION DEMO KEY NOTES

- 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.
 - 1.3 FIELD LOCATE AND REMOVE EXISTING CONTROL VALVES AND VALVE BOXES AT THIS APPROXIMATE LOCATION. RETURN TO COLLEGE MAINTENANCE STAFF.
- VALVE CONTROL WIRE 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.
- HEADS AND LATERAL PIPING 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



eightor -Modal JOCre
y Multion
-acility
o 2017 In'
k Or

1209 HARNEY STREET, OMAHA NE 68102 PHONE: 402 281 1800



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: Reviewed By: JSB Revisions:

Date No. Remarks

Sheet Name:

IRRIGATION PLAN

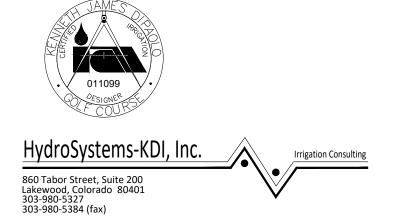
Sheet Number:

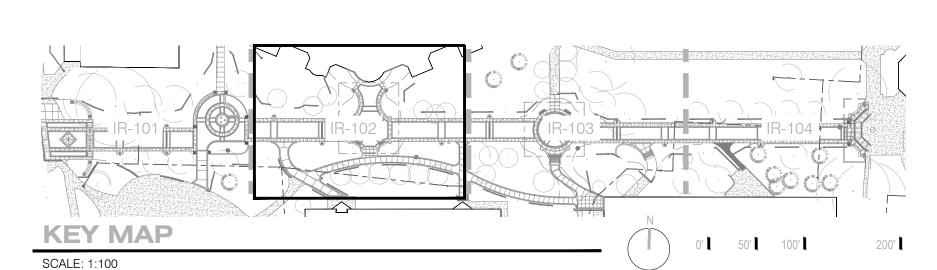
REFER TO SHEET IRRIGATION NOTES IRRIGATION SCHEDULE

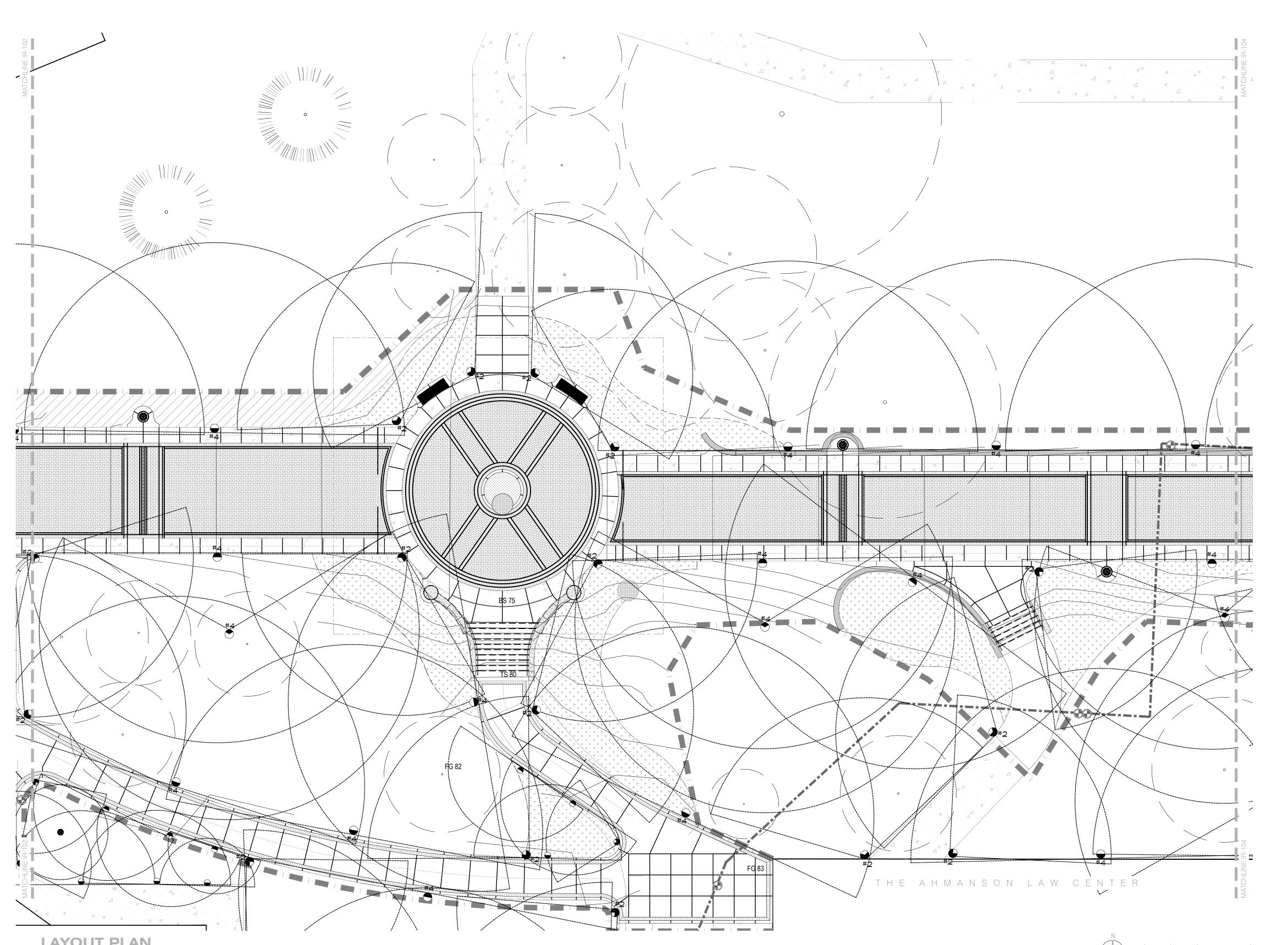
IR-1 IRRIGATION DEMO PLAN IR-3 & IR-4 IRRIGATION PLAN

IR-1 & IR-5 IRRIGATION DETAILS

IR-1









Call before you dig. CALL 3 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, 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.
- 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
- 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 MEATHER SENSING DEVICE.

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
 - 1.2 FIELD LOCATE AND PROTECT EXISTING MAINLINE AND WIRES AT THIS APPROXIMATE LOCATION, TO REMAIN OPERATIONAL DURING CONSTRUCTION.
 - 1.3 FIELD LOCATE AND REMOVE EXISTING CONTROL VALVES AND VALVE BOXES AT THIS APPROXIMATE LOCATION. RETURN TO COLLEGE MAINTENANCE STAFF.
- YALYE CONTROL WIRE 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.
 - HEADS AND LATERAL PIPING 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



ntor

1209 HARNEY STREET, OMAHA NE 68102 PHONE: 402 281 1800



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: Reviewed By: JSB Revisions:

Date No. Remarks

Sheet Name:

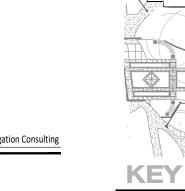
IRRIGATION PLAN

Sheet Number:

IR-103

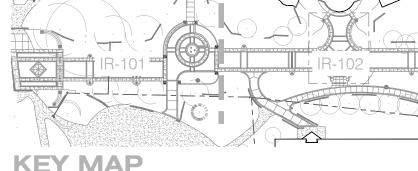


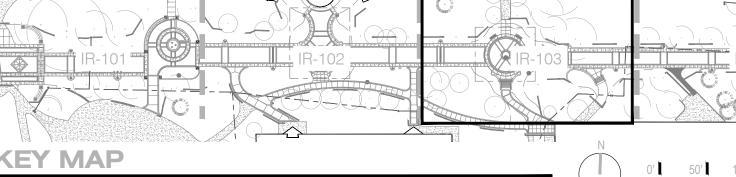
860 Tabor Street, Suite 200 Lakewood, Colorado 80401 303-980-5327 303-980-5384 (fax)



SCALE: 1:100



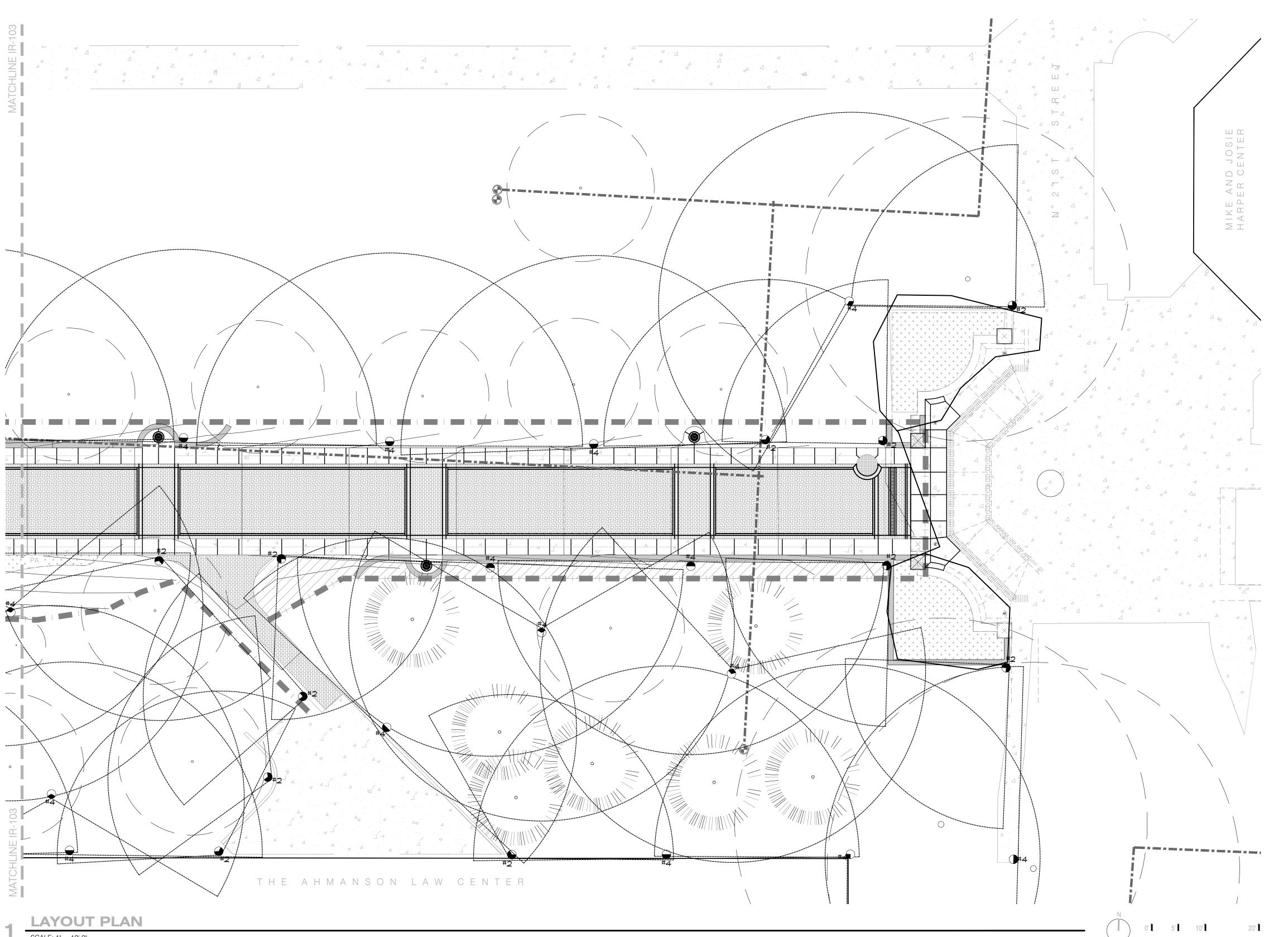




REFER TO SHEET

IR-1 **IRRIGATION NOTES** IR-1 IRRIGATION SCHEDULE IRRIGATION DEMO PLAN IR-3 & IR-4 IRRIGATION PLAN

IR-1 & IR-5 IRRIGATION DETAILS





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.

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.
- 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
- 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 MEATHER SENSING DEVICE.

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
 - 1.2 FIELD LOCATE AND PROTECT EXISTING MAINLINE AND WIRES AT THIS APPROXIMATE LOCATION, TO REMAIN OPERATIONAL DURING CONSTRUCTION.
 - 1.3 FIELD LOCATE AND REMOVE EXISTING CONTROL VALVES AND VALVE BOXES AT THIS APPROXIMATE LOCATION. RETURN TO COLLEGE MAINTENANCE STAFF.
- VALVE CONTROL WIRE 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.

HEADS AND LATERAL PIPING 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



eightor -Modal JOCrey Multions acility o 2017 In





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

Date: 2018/05/18

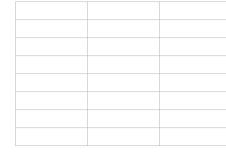
Project Name:

CU PEDESTRIAN MALL DESIGN

Issued For / Phase: CONSTRUCTION

Drawn By: Reviewed By: JSB Revisions:

Date No. Remarks



Sheet Name:

IRRIGATION PLAN

Sheet Number:



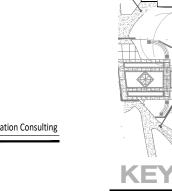
IR-1 **IRRIGATION NOTES** IR-1 IRRIGATION SCHEDULE IRRIGATION DEMO PLAN

IR-3 & IR-4 IRRIGATION PLAN

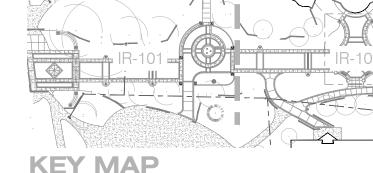
IR-1 & IR-5 IRRIGATION DETAILS

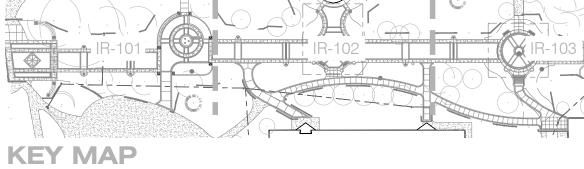


860 Tabor Street, Suite 200 Lakewood, Colorado 80401 303-980-5327 303-980-5384 (fax)



SCALE: 1:100













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

2018/05/18 Date: Project Name:

CU PEDESTRIAN MALL DESIGN Issued For / Phase:

CONSTRUCTION

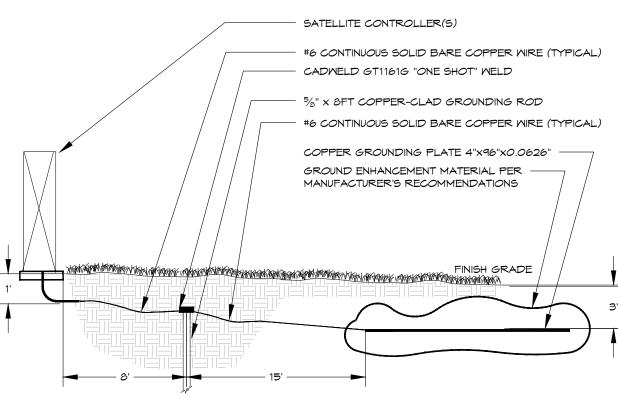
Drawn By: Reviewed By: JSB

Revisions: Date No.

Sheet Name:

IRRIGATION DETAILS

Sheet Number:



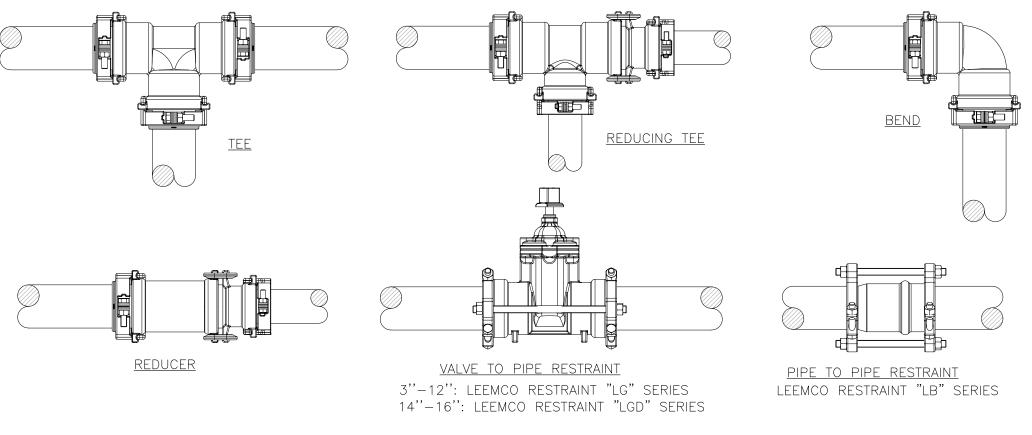
GROUNDING PLATE DESIGN CONSISTS OF ONE VERTICAL &-FOOT COPPER CLAD GROUNDING ROD (AT LEAST EIGHT FEET FROM THE EQUIPMENT), AND ONE COPPER GROUNDING PLATE PER 40 STATIONS REQUIRING GROUNDING. INSTALL GROUNDING PLATE HORIZONTALLY, THREE FEET DEEP AND 15' FROM THE GROUNDING ROD. SHOULD MULTIPLE RODS/PLATES BE REQUIRED, THEY SHALL BE PLACED A MINIMUM OF 3 LINEAR FEET FROM EACH OTHER. REFER TO ASIC STANDARDS FOR MORE

NOTE: PERFORM CADMELD CONNECTION TO GROUNDING ROD(5) AND PLACEMENT OF

WIRE SPLICE BOX

TYPICAL

CONTROLLER GROUNDING



| PIPE | | BENI | SC | | | REDUCERS | > | DEAD | END |
|------|-----|------|----------|-----------|-------|-----------|---------------|-------|---------|
| SIZE | 11° | 22° | 45° | > | 1STEP | 2STEP | | BLIND | SERV.B. |
| 2" | 90° | 1' | 2′ | 6′ | 3STEP | _ | _ | 19′ | 6′ |
| 2,5" | 1′ | 2′ | 4′ | 9′ | 4′ | - | _ | 23′ | 10′ |
| 3" | 2′ | 3′ | 6′ | 11' | 8′ | 10′ | - | 30' | 15, |
| 4" | 2' | 4′ | 9′ | 20 | 14′ | 20 | 31′ | 43 | 40/ |
| 8" | 3 | ρò | 13 15 | 201 | 30 | 40 55/ | 53′ | 75′ | 70′ |
| 10" | 5′ | 9′ | 19' | 30 45′ | 36' | 56' | 63' | 96' | 90′ |
| 12" | 5′ | 10′ | 21′ | 53′ | 38′ | 60′ | 73 | 112′ | 110′ |

- 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 FITTING TO PIPE
- RESTRAINT, VALVE TO PIPE RESTRAINT, AND PIPE TO PIPE RESTRAINT AS REQUIRED.

SECURE CONTROLLER TO

ELECTRIC CONTROLLER

CONTROL WIRE QUANTITY

PVC CONDUIT M/ SMEEP ELL

NOTE: COORDINATE INSTALLATION OF CONDUIT WITH

CONSTRUCTION OF FOUNDATION AND FLOOR.

(TYP. UNDEGROUND LOCATIONS)

MALL WITH ANCHOR BOLTS

EMT MALE APAPTER W/ WASHER & LOCK RING

EMT MALE ADAPTER & PVC FEMALE ADAPTER

EMT CONDUIT - SIZE TO ACCOMMODATE

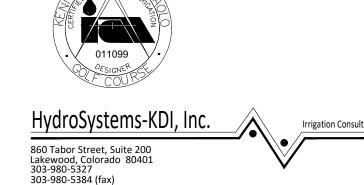
SECURE CONDUIT TO WALL 18" O.C.

- 3. PIPE JOINTS WITHIN THE RESTRAINED LENGTH REQUIREMENT MUST BE RESTRAINED WITH PIPE TO PIPE RESTRAINTS. 4. SERVICE TEES AND COUPLINGS MITHIN THE RESTRAINED LENGTH REQUIREMENT MUST BE RESTRAINED MITH FITTING TO PIPE
- 5. CONTACT TONY GARNER @ (208) 631-7787, 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

IRRIGATION SLEEVING





10" ROUND VALVE BOX. BRAND "GV"

ON LID OF VALVE BOX. REFER TO

GATE VALVE W/ WHEEL HANDLE AND

3/4" CRUSHED GRAVEL SUMP - FILL

6" CLASS 160 PVC SLEEVE BOTTOM TO BE NOTCHED AND CONTACT TOP OF PRESSURE MAINLINE

PAVER BRICKS (MIN. 2 EA.)

TO EQUAL GATE VALVE DIAMETER

PVC PRESSURE MAINLINE

FILTER FABRIC INSTALLED ON TOP OF GRAVEL BASE

WRAP & TAPE AT SIDES OF

VALVE BOX.

UNDISTURBED SOIL

SCH. 40 PVC MALE ADAPTER (2) - SIZE

BOX TO WITHIN 2" OF TOP OF 6"

TECHNICAL SPECIFICATIONS.

FINISH GRADE

SOLID WEDGE DISC.

PVC ACCESS SLEEVE®

REFER TO SHEET

FINISH GRADE

ELECTRIC CONTROLLER

INTERIOR WALL MOUNT

IR-1 **IRRIGATION NOTES**

IRRIGATION SCHEDULE **IRRIGATION DEMO PLAN**

CAP OR DEAD END ISOLATION VALVE

IR-3 & IR-4 IRRIGATION PLAN

IR-1 & IR-5 IRRIGATION DETAILS

PAVED SURFACE CURB AND GUTTER (IF APPLICABLE) 18" MIN. ROUGH GRADE 2" PVC PIPE SLEEVE MARKER -INSTALL AT BOTH ENDS OF EACH SLEEVE LOCATION AND EXTEND AT LEAST 3' ABOVE GRADE. SPRAY EXPOSED PORTION OF MARKER WITH PURPLE FLUORESCENT PAINT. 24" MIN. SEAL ENDS OF SLEEVE WITH CLOTH DUCT TAPE (TYPICAL)

PVC SLEEVING (TYPICAL) ALL SLEEVE MATERIAL PER IRRIGATION SCHEDULE, SIZE AS NOTED ON PLAN. INSTALL SLEEVES IN SIDE-BY-SIDE CONFIGURATION WHERE MULTIPLE SLEEVES ARE TO BE INSTALLED. SPACE SLEEVES 4" TO 6" APART. DO NOT

6

GATE VALVE -SMALL

NOTE: REFER TO TECHNICAL SPECIFICATIONS FOR MINIMUM

4-6" BODIES: 1

12" BODIES: 18"

SPRAY HEAD LATERAL

TRENCH

KHAMA GRADE

4-6" BODIES:

12" BODIES: 24

ROTOR LATERAL PIPING

BACKFILL MATERIAL (TYP.)

TRACER WIRE - DIRECT

BURIAL, SOLID COPPER.

FOR SIZE & COLORING

REFER TO SPECIFICATIONS

SPECIFICATIONS)

CONTROL WIRE BUNDLE OR TWO

WIRE COMMUNICATION CABLE (PER

GROUNDING PLATE(S) IN OWNER'S PRESENCE PRIOR TO BACKFILL.

10" ROUND VALVE BOX WITH T-TOP COVER. FINISHED GRADE. WIRE ACCESS LOOP, COIL 24" OF WIRE AROUND A $\frac{3}{4}$ " PIPE NIPPLE (10 REVOLUTIONS MINIMUM). PAVER BRICKS (MIN. 2 EA.) DIRECTIONS AS SPECIFIED. MAINLINE INSTALLED AT SPECIFIED DEPTH

DRYCONN BLUE OR TAN CONNECTORS 4" CL200 PVC SLEEVE TO ALLOW FOR COMPACTION OF GRAVEL LEVELING BED.

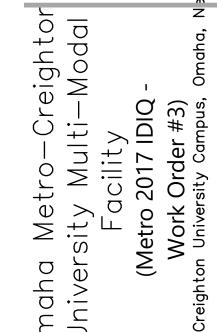
3/4" CRUSHED GRANITE COMPACTED TO 95% M.P.D., EXTEND BEYOND VALVE BOX IN ALL

WITH WIRE BUNDLE IN TRENCH ADJACENT TO MAINLINE. SEE IRRIGATION TRENCH FILTER FABRIC INSTALLED ON TOP OF GRAVEL BASE. WRAP & TAPE AT SIDES OF VALVE BOX.

SET TOP OF BOX LEVEL WITH FINISHED GRADE IN TURF
 AREAS AND LEVEL WITH TOP OF MULCH IN SHRUB BEDS.

2. USE STANDARD RECTANGULAR VALVE BOX WITH T-TOP LID FOR SPLICES OF MORE THAN TWENTY (20) WIRES.

STACK SLEEVES VERTICALLY. CONTRACTOR TO COORDINATE WITH FLATWORK INSTALLER TO BRAND A "O" IN SIDEMALK OR CURB AT BOTH ENDS OF SLEEVE CROSSING.



1209 HARNEY STREET, OMAHA NE 68102 PHONE: 402 281 1800

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

2018/05/18 Project Name:

CU PEDESTRIAN MALL DESIGN Issued For / Phase:

CONSTRUCTION

Drawn By:

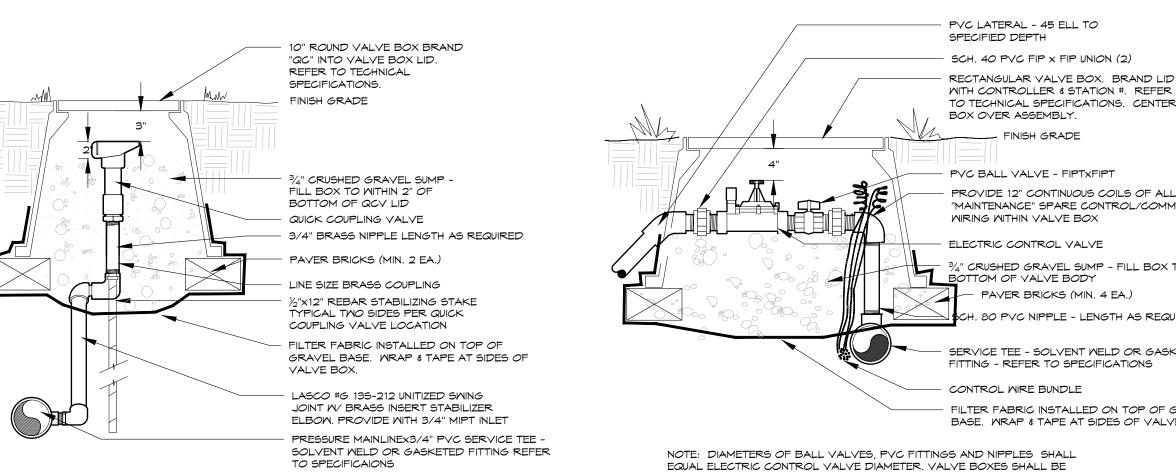
Reviewed By: JSB Revisions:

Date No. Remarks

Sheet Name:

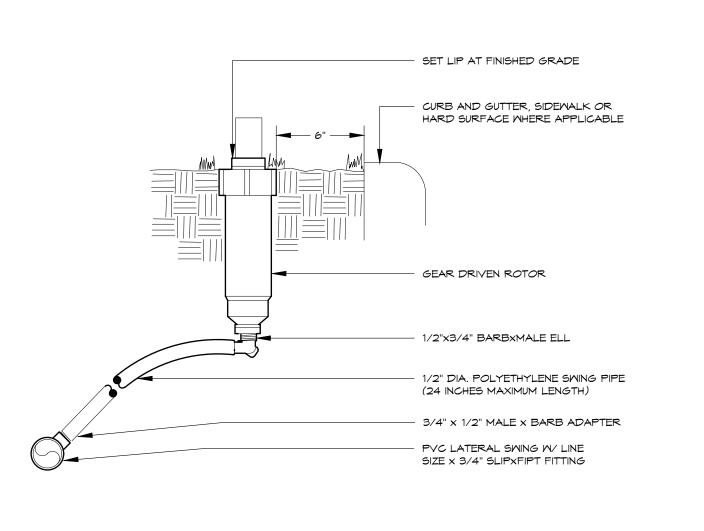
IRRIGATION DETAILS

Sheet Number:



QUICK COUPLING VALVE

APPLY TEFLON TAPE TO ALL THREADED NIPPLES



1. BRAND (GV) INTO VALVE BOX LID WITH 1" HIGH LETTERS MIN.

GATE VALVE 3" PLUS

2. SET TOP OF VALVE BOX LID LEVEL WITH FINISHED GRADE OF ADJACENT TURF GRASS

AREAS. 3. PROVIDE MINIMUM 4" CLEAR BETMEEN TOP OF STACK AND UNDERSIDE OF VALVE BOX LID.

10" ROUND VALVE BOX WITH BOLT DOWN TEE COVER, SEE SPECIFICATIONS.

4" CLASS 200 P.V.C. VALVE STACK. EXTEND STACK

ISOLATION VALVE ASSEMBLY. STACK NOT TO REST ON PIPE.

SLOTTED TO SLIP OVER AND EXTEND BELOW

3/4" CRUSHED GRANITE COMPACTED. EXTEND 6"

BEYOND VALVE BOX IN ALL DIRECTIONS.

FILTER FABRIC INSTALLED ON TOP OF GRAVEL BASE. WRAP & TAPE AT SIDES OF

HAND OPENING ISOLATION VALVE, SEE

UNDISTURBED SOIL

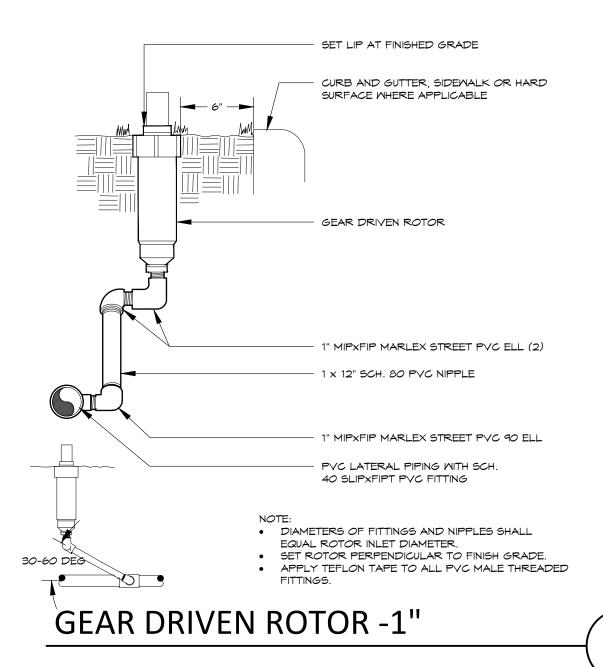
SPECIFICATIONS. DIMENSION OF ISOLATION VALVE TO MATCH DIAMETER OF MAINLINE PIPE.

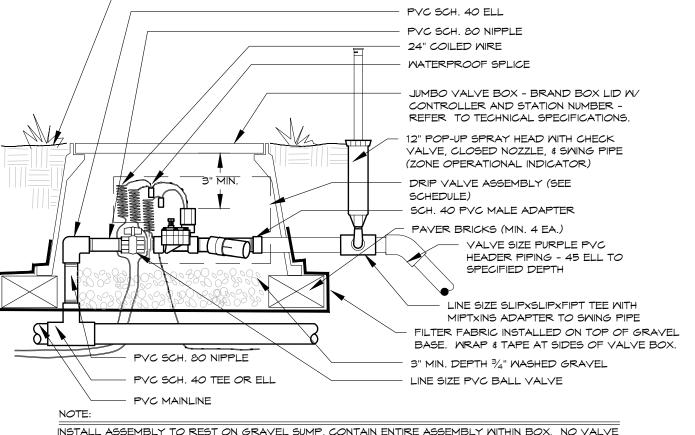
6 MIL POLY SHEETING BOND BREAKER BETWEEN.

CONCRETE SUPPORT BLOCK, 2 CUBIC FEET MINIMUM.

SET HEAD PERPENDICULAR TO FINISH GRADE

GEAR DRIVEN ROTOR -3/4"





FINISH GRADE

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

14

13

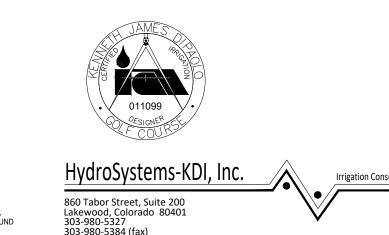
REFER TO SHEET

IR-1 IRRIGATION NOTES IR-1 IRRIGATION SCHEDULE IRRIGATION DEMO PLAN

IR-3 & IR-4 IRRIGATION PLAN

IR-1 & IR-5 IRRIGATION DETAILS





SET BOTTOM OF CAP AT GRADE

CURB & GUTTER, SIDEWALK OR

1/2" DIA. POLYETHYLENE SMING PIPE (24 INCHES. MAXIMUM LENGTH)

3/4" x 1/2" MALE x BARB ADAPTER

PVC LATERAL SWING W/ LINE

SIZE x 3/4" SLIPXFIPT FITTING

SET HEAD PERPENDICULAR TO FINISH GRADE.

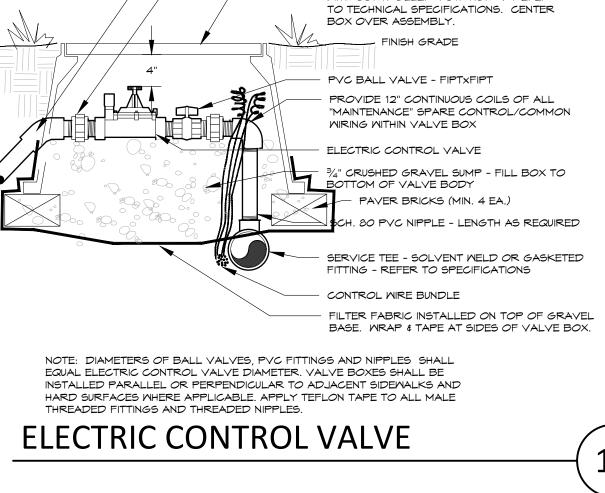
POP-UP SPRAY HEAD

APPLY TEFLON TAPE TO MALE PVC THREADED FITTINGS.

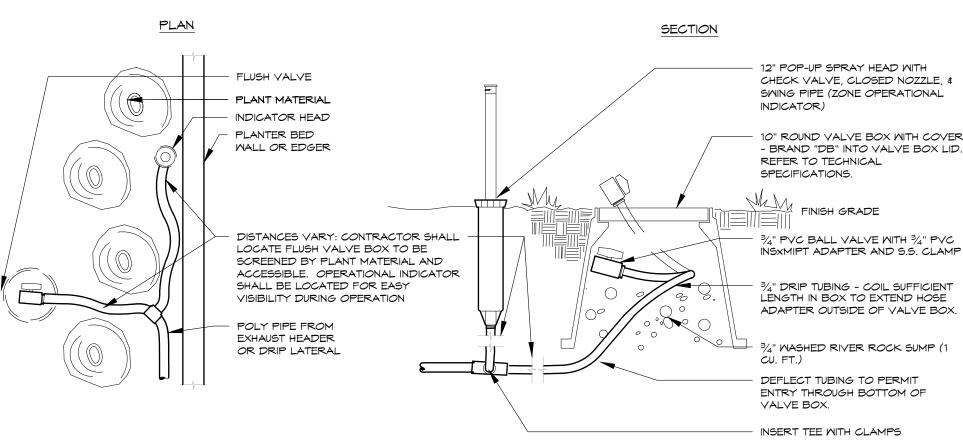
HARD SURFACE WHERE APPLICABLE

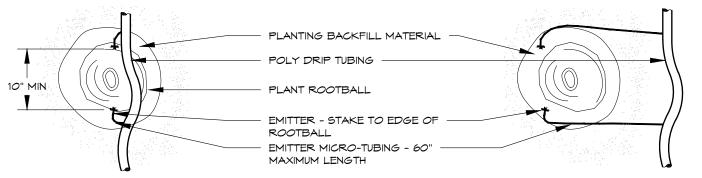
POP-UP SPRAY HEAD

1/2" MALEXBARB ELL





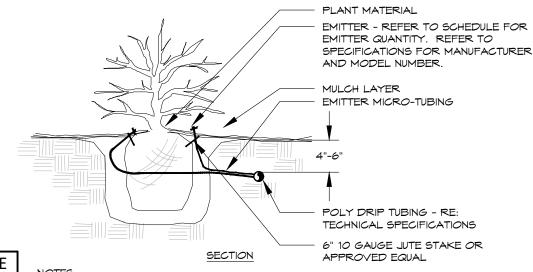




<u>PLAN</u>

<u>DOWN</u> 4:1(+)-SLOPE

| PLANT SIZE | EMITTER FLOW RATE | EMITTER QTY. AT MULCHED BED LOCATIONS | EMITTER QTY. AT NATIN SEED LOCATIONS |
|------------------------|----------------------|---------------------------------------|---|
| 1 - 2 GALLON MATERIAL | 0.5 GPH | ONE EACH | ONE EACH |
| 5 GALLON MATERIAL | 0.5 GPH | TWO EACH | TMO EACH |
| 1½" CALIPER TREE | 1.0 GPH | THREE EACH | FOUR EACH |
| 2" CALIPER TREE | 1.0 GPH | FOUR EACH | SIX EACH |
| 2½" CALIPER TREE | 1.0 GPH | SIX EACH | EIGHT EACH |
| 3" CALIPER TREE | 1.0 GPH | EIGHT EACH | TEN EACH |
| 3½" CALIPER TREE | 1.0 GPH | NINE EACH | ELEVEN EACH |
| 4" CALIPER TREE | 1.0 GPH | TEN EACH | TMELVE EACH |
| 6 FT. CONIFEROUS TREE | 1.0 GPH | FOUR EACH | SIX EACH |
| 8 FT. CONIFEROUS TREE | 1.0 GPH | SIX EACH | NINE EACH |
| 10 FT. CONIFEROUS TREE | 1.0 GPH | EIGHT EACH | TMELVE EACH |
| 12 FT. CONIFEROUS TREE | 1.0 GPH | TEN EACH | FOURTEEN EACH |



- 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" AND A
- FLUSH ALL LINES THOROUGHLY, INCLUDING EMITTER MICRO-TUBING PRIOR TO EMITTER INSTALLATION.
- IF PLANTING ON A 4:1 SLOPE OR STEEPER, INSTALL BOTH EMITTERS ON UPHILL SIDE OF ROOT BALL.
- EMITTERS SHALL BE SELF-FLUSHING, PRESSURE COMPENSATING-TYPE UNLESS NOTED OTHERWISE WITHIN TECHNICAL SPECIFICATIONS.
 DRIP VALVE ZONES ARE DESIGNED TO ACCOUNT FOR DIFFERENCES IN PLANT
- REQUIREMENTS (HYDROZONES) AND SUN EXPOSURE.

 CONTRACTOR SHALL ENSURE HYDROZONES ARE VALVED SEPARATELY AS SHOWN
- SITE CONDITIONS MAY DICTATE THAT MULTIPLE SUN EXPOSURES ARE VALVED TOGETHER DURING THE DESIGN PROCESS. CONTRACTOR SHALL ADJUST EMITTER
- SCHEDULE AS FOLLOWS: •• EMITTER QUANTITIES SHALL REMAIN THE SAME BUT EMITTER GALLONAGES SHALL BE DOUBLED FOR PLANTS WITH SOUTH AND WEST EXPOSURES.
- EMITTER QUANTITIES AND GALLONAGE SHALL BE AS SHOWN IN SCHEDULE FOR PLANTS WITH NORTH AND EAST EXPOSURES.

 PLANTINGS WITH NORTH AND EAST EXPOSURE SHALL DICTATE VALVE RUN-TIMES
- AND CONTRACTOR SHALL ADJUST SCHEDULING ACCORDINGLY.

DRIP EMITTER

BELOW GRADE

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

2018/05/18 Date:

1209 HARNEY STREET, OMAHA NE 68102 PHONE: 402 281 1800

a Metro-Creightor rsity Multi-Modal Facility Metro 2017 IDIQ -Work Order #3)

)maha Univers

Project Name:

CU PEDESTRIAN

MALL DESIGN Issued For / Phase:

CONSTRUCTION

Drawn By: KJD Reviewed By: JSB Revisions:

Sheet Name:

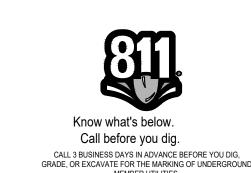
IRRIGATION DETAILS

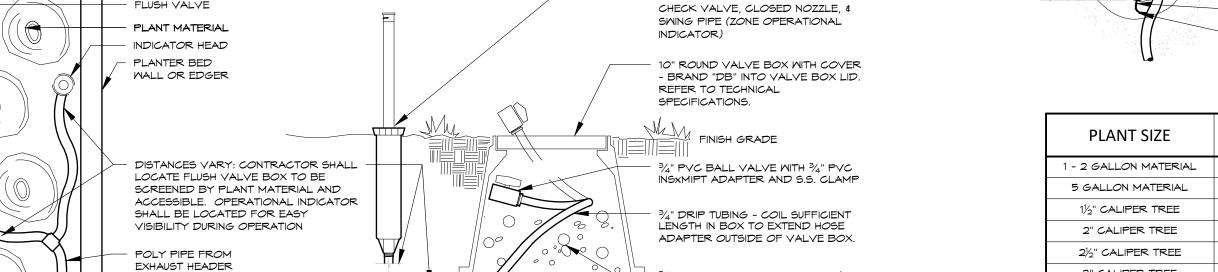
Sheet Number:





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





DRIP FLUSH VALVE WITH OPERATIONAL INDICATOR

REFER TO SHEET

IR-1

IR-1

IR-2

IR-3 & IR-4

IRRIGATION NOTES

IRRIGATION PLAN

IR-1 & IR-5 IRRIGATION DETAILS

IRRIGATION SCHEDULE

IRRIGATION DEMO PLAN