



LINCOLN SQUARE IMPROVEMENTS

WORCESTER, MASSACHUSETTS

BID DOCUMENTS
11-04-2024-rev.

PREPARED FOR:

CITY MANAGER

ERIC D. BATISTA

INTERIM COMMISSIONER

ROBERT L. MOYLAN, JR., P.E.

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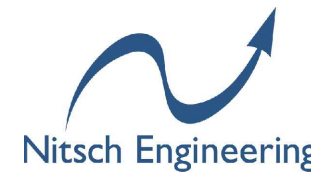
PREPARED BY:



LANDSCAPE ARCHITECT

**RAY DUNETZ LANDSCAPE
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NITSCH ENGINEERING, INC.

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WORCESTER, MA 01608
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ELECTRICAL ENGINEER

**JOHN MURPHY, JR. ELECTRICAL
CONSTRUCTION & ENGINEERING, INC.**

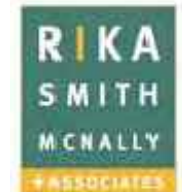
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STONE CONSERVATOR

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GEOTECHNICAL ENGINEER

**LAHLAF GEOTECHNICAL
CONSULTING, INC.**

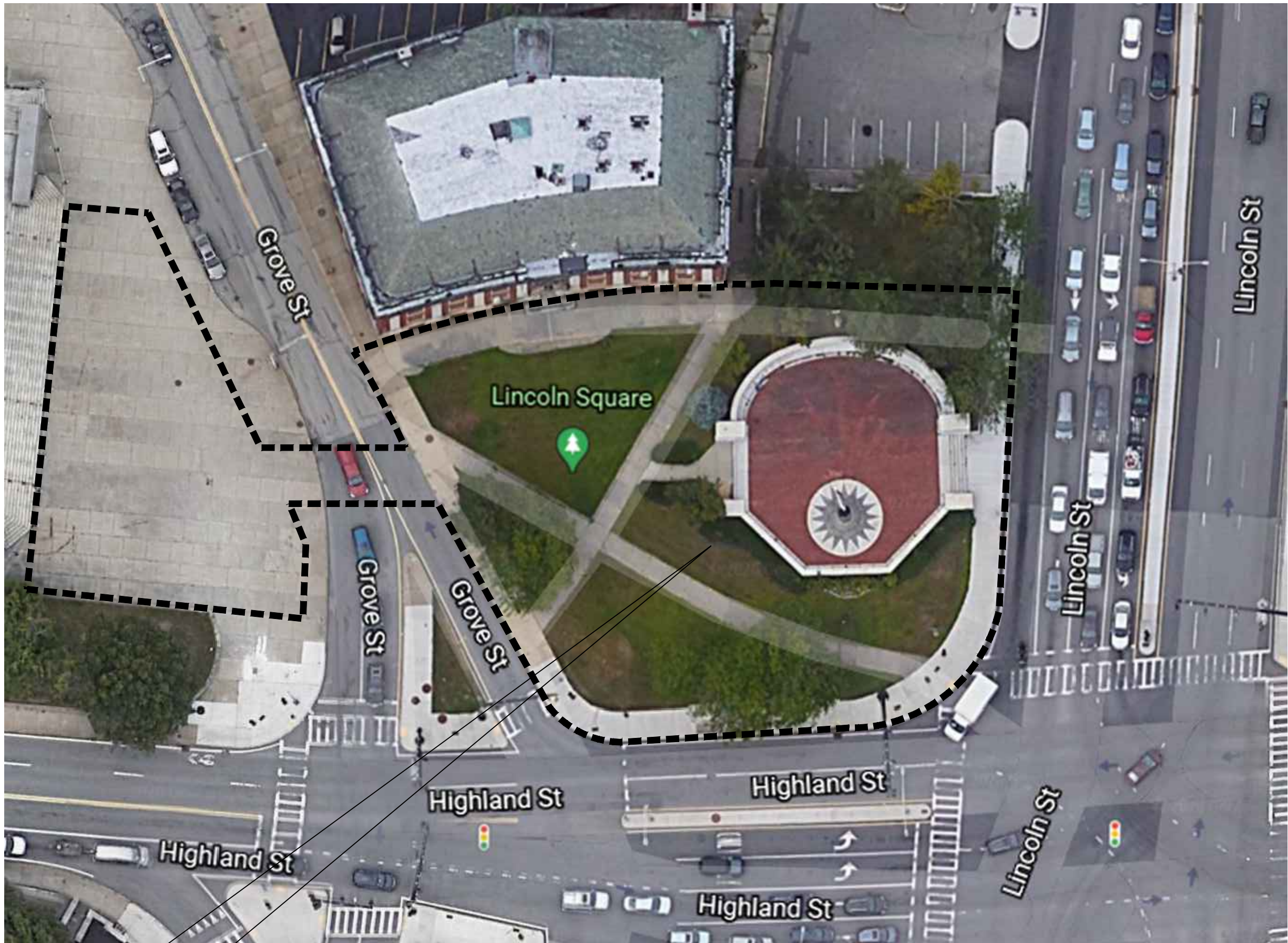
23 MCGINN WAY
BILLERICA, MA 01821
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IRRIGATION DESIGN

AQUEOUS CONSULTANTS

1 DUNDEE PARK DRIVE, SUITE 10
ANDOVER, MA 01810
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SITE



**LOCATION MAP
WORCESTER, MA**

DRAWING INDEX

- L-0.0 COVER SHEET
- L-0.1 NOTES, LEGENDS AND ABBREVIATIONS
- L-0.2 CONSTRUCTION SEQUENCING PLANS & NOTES
- EX-1 EXISTING CONDITIONS
- L-1.0 SITE PREPARATION PLAN - PHASE ONE
- L-1.1 SITE PREPARATION PLAN - PHASE THREE
- L-2.0 MATERIALS PLAN
- L-3.0 LAYOUT PLAN
- L-4.0 GRADING PLAN
- L-5.0 PLANTING PLAN AND PLANTING DETAILS
- L-6.0 SITE DETAILS
- L-6.1 SITE DETAILS
- C-0.1 GENERAL NOTES
- C-1.0 DEMOLITION AND EROSION CONTROL PLAN
- C-2.0 SITE UTILITY PLAN
- C-3.0 EROSION AND SEDIMENT CONTROL DETAILS
- C-4.0 CIVIL SITE DETAILS
- E-0.1 ELECTRICAL LEGEND
- E-1.1 ELECTRICAL PLAN
- E-2.1 ELECTRICAL DETAILS
- R-1.1 MASONRY RESTORATION
- R-1.2 MASONRY RESTORATION
- R-1.3 MASONRY RESTORATION
- R-1.4 MASONRY RESTORATION
- R-1.5 MASONRY DETAILS & TREATMENT QUANTITIES
- S-1.0 STRUCTURAL NOTES AND GENERAL PLAN
- S-2.0 FOUNDATION PLAN VIEW
- S-3.0 FOUNDATION SECTION VIEW
- S-4.0 MEMORIAL FOUNDATION DEMOLITION PLAN
- S-5.0 FOOTING PLAN VIEWS
- S-6.0 FOUNDATION SECTION VIEWS
- IR-1.0 IRRIGATION LAYOUT PLAN
- IR-2.0 IRRIGATION DETAILS - 1
- IR-2.1 IRRIGATION DETAILS - 2



Sheet No.:

L-0.0

Sheet Name:

COVER SHEET

Contract No.

Date

06.19.2024

Scale

N/A

Drawn

SD

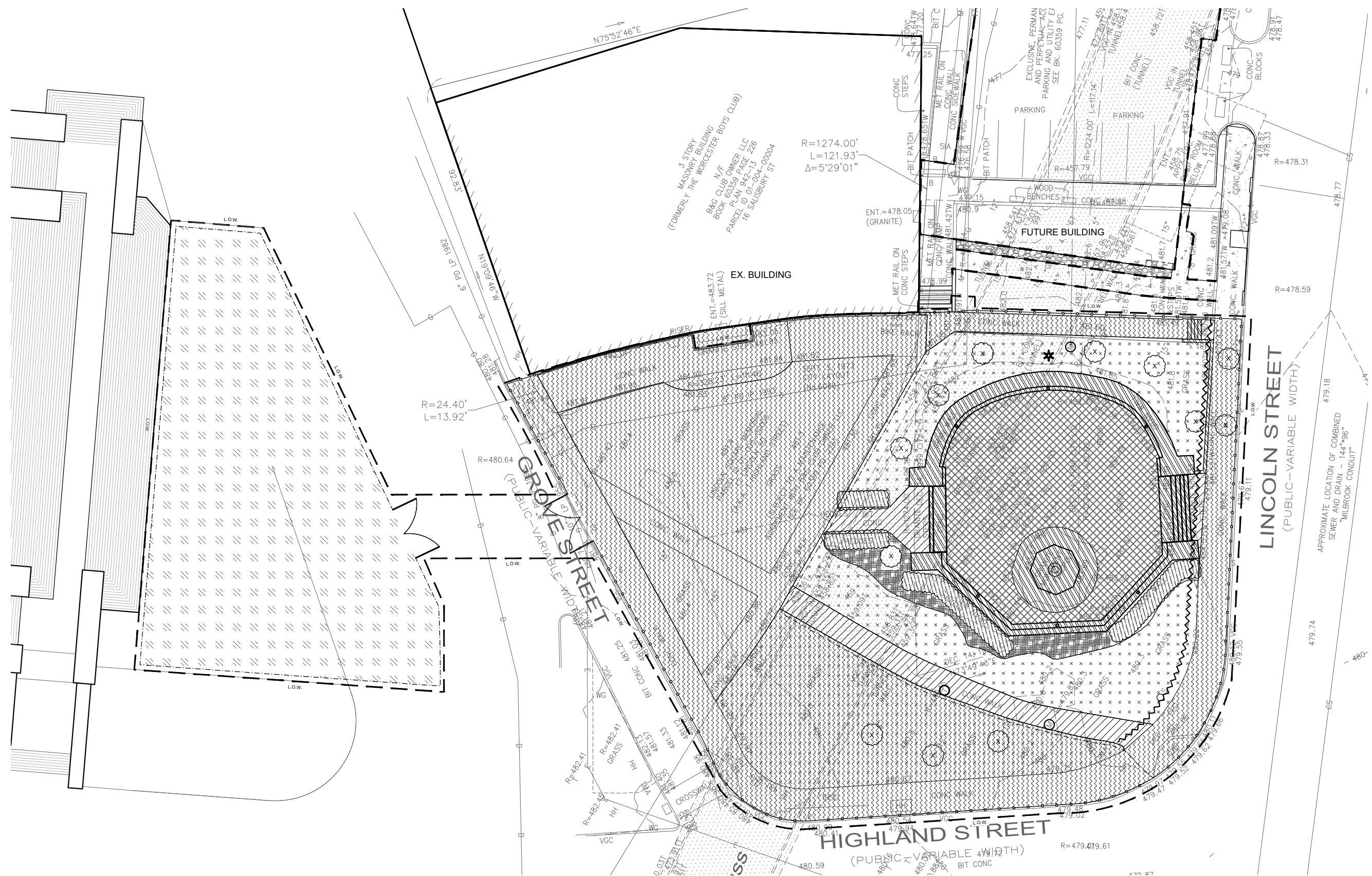
Checked

RD

Project Name:

**LINCOLN SQUARE IMPROVEMENTS
WORCESTER, MA**

LIST OF ABBREVIATIONS @:..... AT &..... AND ANGLE 10'..... ARC LENGTH APPROX..... APPROXIMATE B&B..... BALLED AND BURLAPPED B.C..... BOTTOM OF CURB BC..... BUILDING CONTRACTOR (N/C) BLDG..... BUILDING BF..... BOTTOM OF FENCE B.O.F..... BOTTOM OF FOOTING BW..... BOTTOM OF WALL B/S..... BOTH SIDES BS..... BOTTOM OF STEP B/W..... BOTH WAYS BIT. CONC..... BITUMINOUS CONCRETE CAL..... CALIPER C.I.P..... CAST IN PLACE CB..... CATCH BASIN C..... CENTERLINE CLF..... CHAIN LINK FENCE CIR..... CIRCLE CLR..... CLEAR CNTL..... CONTROL COMP..... COMPACTED CONC..... CONCRETE CONT..... CONTINUOUS CW..... COLD WATER Ø DIA..... DIAMETER DIM..... DIMENSION DIMEN..... DIMENSION E.F..... EACH FACE EJ..... EXPANSION JOINT EA..... EACH EL..... ELEVATION ELEC..... ELECTRICAL LINE ELEV..... ELEVATION EQ..... EQUAL EX..... EXISTING FDN..... FOUNDATION FG..... FINISH GRADE FIN. GR..... FINISH GRADE FTG..... FOOTING FTN..... FOUNTAIN GC..... GENERAL BIDDING CONTRACTOR H.D. GALV..... HOT DIP GALVANIZED HP..... HIGH POINT HORIZ..... HORIZONTAL HR..... HANDRAIL HT..... HEIGHT I.D..... INSIDE DIAMETER INV..... INVERT ELEVATION JT..... JOINT L..... LENGTH L.P..... LIGHT POLE LOW..... APPROXIMATE LIMIT OF WORK LP..... LOW POINT MAX..... MAXIMUM MH..... MANHOLE MIN..... MINIMUM NIC..... NOT IN CONTRACT NO..... NUMBER NTS..... NOT TO SCALE O.C..... ON CENTER O.D..... OUTSIDE DIAMETER OWH..... OVERHEAD WIRES OPP..... OPPOSITE %..... PERCENT PC..... POINT OF CURVATURE PERF..... PERFORATED PLTG..... PLANTING P.O.B..... PLACE OF BEGINNING PVG..... PAVING PVMT..... PAVEMENT R..... RADIUS RP..... RADIUS POINT REINF..... REINFORCEMENT REQ..... REQUIRED SC..... SAWCUT SIM..... SIMILAR SPRD..... SPREAD S.S..... STAINLESS STEEL T..... TANGENT TC..... TOP OF CURB TH..... THRESHOLD T.O.B..... TOP OF BENCH TF..... TOP OF FENCE T.O.F..... TOP OF FOOTING TS..... TOP OF STEP TW..... TOP OF WALL TYP..... TYPICAL UP..... UTILITY POLE VERT..... VERTICAL V..... VERIFY W..... WATER LINE W/..... WITH W/G..... WATER GATE LEGENDS SITE PREPARATION LEGEND APPROX. LIMIT OF WORK SAWCUT EX. PAVEMENT CONSTRUCTION FENCE CONSTRUCTION FENCE, BY OTHERS FILTER BARRIER, SEE CIVIL DWGS. REMOVE EX. CONC. PAVING SALVAGE EX. GRANITE CAP WALL, TREADS AND PAVING REMOVE EX. BRICK PAVING REMOVE EX. MULCH AND PLANTINGS LAYDOWN AREA LAYDOWN AREA PERFORMED BY OTHERS SITE PREPARATION AREA PERFORMED - BASE BID TREE PREVIOUSLY REMOVED BY OTHERS REMOVE EX. HEDGES STRIP EX. LAWN LAYOUT & MATERIALS LEGEND NEW CONC. PAVING NEW PERMEABLE UNIT PAVER NEW RESET STONE PAVING NEW COBBLE STONE EDGE NEW METAL FENCE NEW WEEP CHANNEL NEW BENCH NEW TRASH RECEPTACLE NEW LIGHT POLE NEW SECURITY CAMERA, SEE ELEC. DWGS. NEW IRRIGATION CONDUITS, SEE IRRIGATION DWGS. NEW ELECTRIC HANDHOLE NEW COMMUNICATIONS HANDHOLE GRADING LEGEND EXISTING CONTOUR NEW SPOT GRADE NEW CONTOUR EX. SPOT GRADE DIRECTION OF SLOPE AND PERCENTAGE PLANTING LEGEND NEW TREE OR SHRUB NEW GROUNDCOVER NEW LAWN GENERAL CONDITIONS NOTES: 1. CONTRACTOR SHALL BE FAMILIAR WITH DRAWINGS AND SPECIFICATIONS PRIOR TO BIDDING. 2. CONTRACTOR SHALL CONFORM TO ALL FEDERAL, STATE AND LOCAL CODES. 3. CONTRACTOR SHALL SECURE ALL PERMITS THAT MAY BE REQUIRED FROM ALL JURISDICTIONS AFFECTED BY THIS WORK. 4. PRIOR TO COMMENCING ANY WORK, THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES IN ACCORDANCE WITH THE "DIG SAFE" NOTIFICATION PROCEDURES PROMOTED BY RESPECTIVE UTILITY COMPANIES. THE DIG SAFE TELEPHONE NUMBER FOR MASSACHUSETTS IS 811. 5. CONTRACTOR SHALL BE AWARE THAT THE EXISTING CONDITIONS SURVEY FOR THE ADJACENT BOYS' CLUB DEVELOPMENT PROJECT DO NOT MATCH THE EXISTING CONDITIONS SURVEY PREPARED BY NITSCH ENGINEERING DATED 02/25/21 AS CONTAINED IN THIS DRAWING SET. 6. CONTRACTOR SHALL FOLLOW PHASING PLAN SHOWN ON L-0.2 AND AS DESCRIBED IN THE PROJECT MANUAL. 7. CONTRACTOR SHALL COORDINATE WITH THE BUILDING CONTRACTOR FOR ALL CONSTRUCTION PHASING AND WORK INCLUDING SITE ACCESS, SITE SAFETY, AND CONSTRUCTION FENCING. 8. STORAGE AREAS FOR CONTRACTOR'S EQUIPMENT AND MATERIALS SHALL BE WITHIN LIMIT OF WORK. 9. ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS SHALL BE PROTECTED TO PREVENT TRACKING OF MUD ONTO PUBLIC WAYS. ANY MUD ON PUBLIC WAYS ORIGINATING FROM THE JOB SITE SHALL BE CLEANED DAILY BY THE CONTRACTOR. 10. CONTRACTOR'S EQUIPMENT AND VEHICLES SHALL BE PARKED ON PAVED SURFACES ONLY. NO PARKING ON TURF AREAS. 11. THE GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS IN THE FIELD AND REPORT ANY DISCREPANCIES BETWEEN PLANS AND ACTUAL CONDITIONS TO THE OWNER'S REPRESENTATIVE PRIOR TO STARTING WORK. 12. APPROXIMATE LIMIT OF WORK IS SHOWN ON THE DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE DUE TO OPERATIONS INSIDE AND OUTSIDE OF THE CONTRACT LIMIT LINE. ANY AREA OUTSIDE THE LIMIT OF WORK THAT IS DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER. 13. CONTRACTOR IS RESPONSIBLE FOR SECURING THE WORK SITE THE DURING CONSTRUCTION. 14. IF DISCREPANCIES ARE DISORDERED BETWEEN THE DRAWINGS AND SPECIFICATIONS THE SPECIFICATION TAKE PRECEDENT. 15. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING CONDITIONS. 16. CONTRACTOR SHALL STORE AND PROTECT SALVAGED MATERIALS OFF SITE UNTIL REINSTALLATION. 17. CONTRACTOR TO PROTECT EXISTING TUNNEL DURING CONSTRUCTION. EROSION CONTROL NOTES: 1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL EROSION CONTROL MEASURES AND MAINTAIN IT THROUGH OUT THE COURSE OF CONSTRUCTION. SITE PREPARATION NOTES 1. ALL ITEMS TO BE REMOVED SHALL BE LEGALLY DISPOSED OF OFF-SITE BY THE CONTRACTOR. 2. CONTRACTOR SHALL DOCUMENT EXISTING LOCATIONS OF SALVAGED AND RELOCATED STONE PAVING, STONE GUTTER, FLAGPOLE BASE, FLAGPOLE, DECORATIVE METAL ELEMENTS, AND MASONRY PRIOR TO DISASSEMBLY OF THE MEMORIAL. SEE R-SERIES DRAWINGS. 3. ALL ITEMS EXCEPT THE WAR MEMORIAL FOUNDATION REQUIRING REMOVAL SHALL REMOVED TO FULL DEPTH TO INCLUDE BASE MATERIAL FOOTINGS OR FOUNDATIONS AND LEGALLY DISPOSED OF OFF-SITE BY CONTRACTOR. THE MEMORIAL AND FLAGPOLE FOUNDATIONS SHALL BE REMOVED TO 12 INCH BELOW NEW FINISH GRADE. 4. CONTRACTOR SHALL REMOVE EXISTING TOPSOIL TO FULL DEPTH. 5. AT ALL LOCATIONS WHERE PAVEMENT ABUTS NEW CONSTRUCTION THE EDGE OF THE EXISTING CURB OR PAVEMENT SHALL BE SAWCUT TO A CLEAN, SMOOTH EDGE. LAYOUT NOTES: 1. ALL NEW SITE IMPROVEMENTS SHALL BE LAID OUT BY A REGISTERED CIVIL ENGINEER OR SURVEYOR ENGAGED BY THE CONTRACTOR AND APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. 2. ALL LINES AND DIMENSIONS ARE PARALLEL OR PERPENDICULAR TO THE LINES FROM WHICH THEY ARE MEASURED UNLESS OTHERWISE INDICATED ON THE DRAWINGS. 3. ALL LAYOUTS FOR WALKS SHALL BE ADEQUATELY STAKED BY THE CONTRACTOR AND APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION. 4. THE CONTRACTOR SHALL ESTABLISH PERMANENT CONSTRUCTION BENCHMARKS. MAINTAIN ALL ESTABLISHED BOUNDS AND BENCHMARKS AND REPLACE AS DIRECTED ANY WHICH ARE DESTROYED OR DISTURBED. 5. ALL SIGNS TO BE FIELD LOCATED AND APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. 6. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING CONDITIONS THAT ARE DUE TO CONSTRUCTION OPERATIONS. 7. CONTRACTOR SHALL SALVAGE ALL ITEMS SHOWN IN DRAWINGS OR REQUESTED BY OWNER'S REPRESENTATIVE. GRADING NOTES: 1. CONTRACTOR SHALL VERIFY ALL GRADES IN THE FIELD AND SHALL REPORT ANY DISCREPANCIES BETWEEN EXISTING AND PROPOSED CONDITIONS TO THE OWNER'S REPRESENTATIVE. 2. PITCH EVENLY BETWEEN SPOT GRADES. ALL PAVED AREAS MUST PITCH TO DRAIN AT A MINIMUM SLOPE OF ONE-SIXTEENTH INCH (1/16") PER FOOT. ANY DISCREPANCIES NOT ALLOWING THIS TO OCCUR SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE PRIOR TO CONTINUING WORK. 3. CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY INTO EXISTING, PROVIDING VERTICAL CURVES OR ROUNDINGS AT ALL TOP AND BOTTOM OF SLOPES. 4. MAXIMUM CROSSPITCH OF ALL WALKS IS 2%. THE MAXIMUM SLOPE ON WALKS IS 4.75%. ANY DISCREPANCIES NOT ALLOWING THIS TO OCCUR SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE. 5. ALL GRADING SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD AND THE AMERICANS WITH DISABILITIES ACT STANDARDS FOR BUILDINGS AND FACILITIES, LATEST EDITION. IN CASE OF CONFLICT BETWEEN REGULATIONS, THE GUIDELINE PROVIDING GREATER ACCESS SHALL APPLY. 6. CONTRACTOR SHALL MAINTAIN OR ADJUST TO PROPOSED FINISH GRADE AS NECESSARY ALL UTILITY AND SITE STRUCTURES SUCH A LIGHT POLES, SIGN POSTS, MANHOLES, CATCH BASINS, HAND HOLES, WATER AND GAS GATES, HYDRANTS, ETC., FROM MAINTAINED UTILITY AND SITE SYSTEMS UNLESS OTHERWISE NOTED ON UTILITY DRAWINGS OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. 7. MAINTAIN AND PROTECT THE INTEGRITY OF THE EXISTING DRAINAGE SYSTEM AT ALL TIMES, UNLESS OTHERWISE NOTED ON DRAWINGS. 8. ANY IDENTIFIED DEPRESSION SHALL BE FILLED WITH LOAM, SUFFICIENT TO ENSURE THAT SOIL IS LEVEL WITH SURROUNDING GRADE AFTER SETTLEMENT, AND SEEDED. PLANTING NOTES: 1. PROVIDE 6" DEPTH OF NEW TOPSOIL AT ALL LAWN AND AREAS. 2. SEED ALL DISTURBED AREAS. 3. IF DISCREPANCIES EXIST BETWEEN THE NUMBER OF PLANTS DRAWN ON THE PLANTING PLAN AND THE NUMBER OF PLANTS IN THE PLANT SCHEDULE, THE PLANTING PLAN SHALL GOVERN. 4. ALL NEW PLANT MATERIAL SHALL CONFORM TO THE MINIMUM GUIDELINES ESTABLISHED FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. IN ADDITION, ALL NEW PLANT MATERIAL FOR THE PROJECT SHALL BE OF SPECIMEN QUALITY. 5. ALL NEW PLANTS TO BE BALLED AND BURLAPPED OR CONTAINER-GROWN, UNLESS OTHERWISE NOTED ON THE PLANT SCHEDULE. 6. THE CONTRACTOR SHALL SUPPLY ALL NEW PLANT MATERIAL IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING SHOWN ON THE DRAWINGS. 7. ANY PROPOSED SUBSTITUTIONS OF PLANT SPECIES SHALL BE MADE WITH PLANTS OF EQUIVALENT OVERALL FORM, HEIGHT, BRANCHING HABIT, FLOWER, LEAF, COLOR, FRUIT AND CULTURE. ALL SUBSTITUTIONS SHALL REQUIRE WRITTEN APPROVAL OF THE OWNER'S REPRESENTATIVE. 8. ALL NEW TREES SHALL BE TAGGED AND APPROVED BY THE OWNER'S REPRESENTATIVE AT THE NURSERY PRIOR TO DELIVERY TO THE SITE. 9. CONTRACTOR SHALL LOCATE AND VERIFY ALL EXISTING UTILITY LINES PRIOR TO PLANTING AND REPORT ANY CONFLICTS TO THE OWNER'S REPRESENTATIVE. 10. CONTRACTOR SHALL STAKE LOCATION OF ALL PROPOSED PLANTING FOR APPROVAL BY OWNER'S REPRESENTATIVE PRIOR TO THE COMMENCEMENT OF PLANTING. 11. NEW TREES SHALL BE SET 3" HIGHER THAN PREVIOUS GRADE. NO TREE, SHALL BE PLANTED BEFORE ACCEPTANCE OF ROUGH GRADING. 12. CONTRACTOR SHALL PROVIDE FULL DEPTHS OF LOAM AS NOTED ON DETAILS AND AS SPECIFIED, FOR ALL PLANTING. 13. IN AREAS WHERE EXISTING PAVEMENTS ARE REMOVED AND ARE PROPOSED AS TURF, THE CONTRACTOR SHALL REMOVE THE PAVEMENT AND BASE, PROVIDE FILL AND 6" TOPSOIL PRIOR TO SEEDING. 14. LOAM AND SEED ALL DISTURBED AREAS THAT ARE NOT PROPOSED AS PAVEMENT OR PLANT BEDS. 15. ALL NEW PLANTS SHALL BE MULCHED WITH 2" MIN. DEPTH OF MULCH. RAY DUNETZ LANDSCAPE ARCHITECTURE, INC. 179 GREEN STREET BOSTON, MA 02130 617-524-6265 T 06.19.24 BID DOCUMENTS DATE REVISION REVISIONS NORTH STAMP LINCOLN SQUARE IMPROVEMENTS WORCESTER, MA PROJECT NOTES, LEGENDS AND ABBREVIATIONS DRAWING TITLE CONTRACT NO. DATE06.19.24 DRAWNSD CKDRD SCALEAS SHOWN SHEET NO. L-0.1
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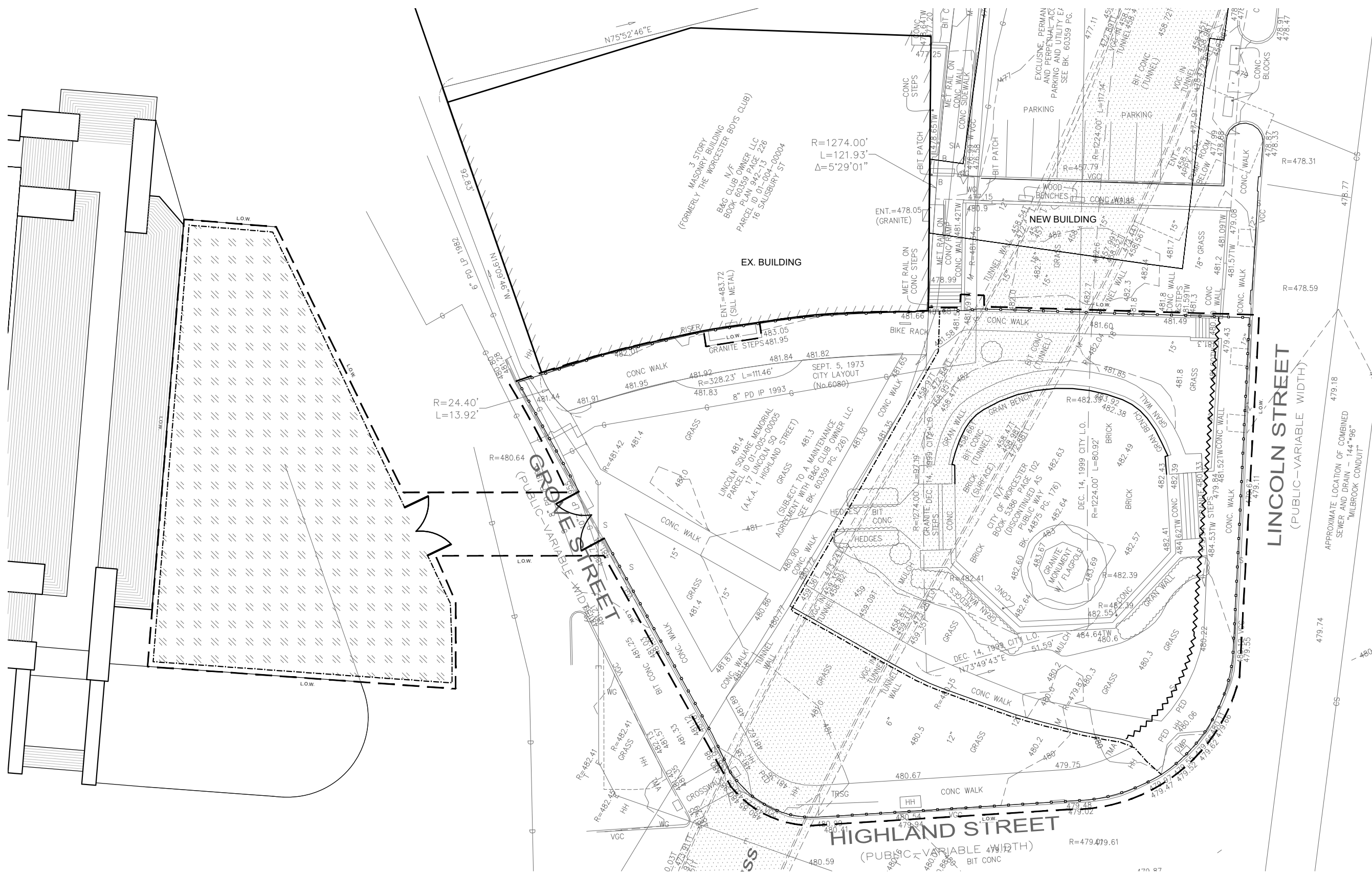
NOTES:

- BIDDING GENERAL CONTRACTOR SHALL FURNISH AND ERECT CONSTRUCTION FENCING AT PLAZA OUTSIDE THE WORCESTER AUDITORIUM ACROSS GROVE STREET.
- BIDDING GENERAL CONTRACTOR TO SALVAGE STONE MEMORIAL, FLAGPOLE WITH BASE AND GRANITE COPING, AND STEPS AND MOVE TO THE FENCED-IN AREA OUTSIDE THE WORCESTER AUDITORIUM ACROSS GROVE STREET.
- BIDDING GENERAL CONTRACTOR TO SALVAGE EAGLE AND METAL PLAQUES AND PLACE IN GRATES. CONTRACTOR SHALL PLACE CRATES IN THE AUDITORIUM IN COORDINATION WITH WORCESTER PARKS DEPARTMENT.
- BIDDING GENERAL CONTRACTOR TO REMOVE VEGETATION SURROUNDING MEMORIAL, AND REMAINING SITE ELEMENTS AND LEGALLY DISPOSE OF OFF SITE.
- BIDDING GENERAL CONTRACTOR TO CAP EXISTING UTILITIES 2' BELOW FINISH GRADE.
- BIDDING GENERAL CONTRACTOR TO BACKFILL WITH ORDINARY BORROW TO PROPOSED FINISH SUBGRADES.
- BUILDING GENERAL CONTRACTOR TO PROVIDE ACCESS THROUGH SHARED SPACE TO SIDEWALK AT THE WORCESTER AUDITORIUM.
- SEE SHEETS
L-1.0 SITE PREPARATION PLAN
C-1.0 DEMOLITION AND EROSION CONTROL PLAN
S-4.0 MEMORIAL FOUNDATION DEMOLITION PLAN

1 BASE BID PHASE ONE | COMPLETE WITHIN 90 DAYS OF NOTICE TO PROCEED
SCALE: 1"=30'-0"



3 ADD ALTERNATE #1: PHASE THREE | BEGINNING APRIL 1, 2026; COMPLETION BY APRIL 30, 2027.
SCALE: 1"=30'-0"



NOTES:

- BIDDING GENERAL CONTRACTOR TO ALLOW BUILDING CONTRACTOR (N/C) TO UTILIZE SITE FOR STOCKPILES AND CRANE PLACEMENT.
- BIDDING GENERAL CONTRACTOR TO PROVIDE ACCESS TO EXISTING BUILDING AND NEW BUILDING CONSTRUCTION NORTH OF SITE UNTIL END OF PROJECT.

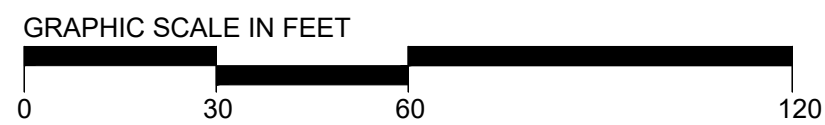
2 ADD ALTERNATE #1: PHASE TWO | FROM END OF PHASE ONE THROUGH MARCH 31, 2026
SCALE: 1"=30'-0"

NOTES:

- UPON COMPLETION OF NEW BUILDING, BUILDING CONTRACTOR WILL CLEAR SITE OF STOCKPILES, REMOVE EQUIPMENT, ROUGH GRADE AND RETURN SITE TO BIDDING CONTRACTOR.
- BIDDING CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION OPERATIONS INCLUDING SITE ACCESS AND REMAINING SITE PREPARATION ITEMS WITH BUILDING CONTRACTOR.
- BIDDING CONTRACTOR SHALL COORDINATE WITH BUILDING CONTRACTOR ON ADJUSTMENT OF CONSTRUCTION FENCE TO BE LOCATED ALONG FULL LENGTH OF SIDEWALK.
- BIDDING CONTRACTOR SHALL REMOVE REMAINING PORTIONS OF CONCRETE PAVEMENT ALONG THE FACE OF THE EXISTING BUILDING.
- BIDDING GENERAL CONTRACTOR SHALL COMPLETE LINCOLN SQUARE IMPROVEMENTS INCLUDING ALL STONE AND METAL RESTORATION.
- SEE SHEETS:
L-1.1 SITE PREPARATION PLAN - PHASE THREE
L-2.0 MATERIALS PLAN
L-3.0 LAYOUT PLAN
L-4.0 GRADING PLAN
L-5.0 PLANTING PLAN AND PLANTING DETAILS
L-6.0 SITE DETAILS
L-6.1 SITE DETAILS
C-0.1 GENERAL NOTES
C-1.0 UTILITY DEMOLITION AND EROSION CONTROL PLAN
C-2.0 SITE UTILITY PLAN
C-3.0 EROSION AND SEDIMENT CONTROL DETAILS
C-4.0 CIVIL SITE DETAILS
E-0.1 ELECTRICAL LEGEND
E-1.1 ELECTRICAL PLAN
E-2.1 ELECTRICAL DETAILS
R-1.1 MASONRY RESTORATION
R-1.2 MASONRY RESTORATION
R-1.3 MASONRY RESTORATION
R-1.4 MASONRY RESTORATION
R-1.5 MASONRY DETAILS & TREATMENT QUANTITIES
S-1.0 STRUCTURAL NOTES AND GENERAL PLAN
S-2.0 FOUNDATION PLAN VIEW
S-3.0 FOUNDATION SECTION VIEW
S-4.0 MEMORIAL FOUNDATION DEMOLITION PLAN
S-5.0 FOOTING PLAN VIEWS
S-6.0 FOUNDATION SECTION VIEWS
IR-1.0 IRRIGATION LAYOUT PLAN
IR-2.0 IRRIGATION DETAILS - 1
IR-2.1 IRRIGATION DETAILS - 2

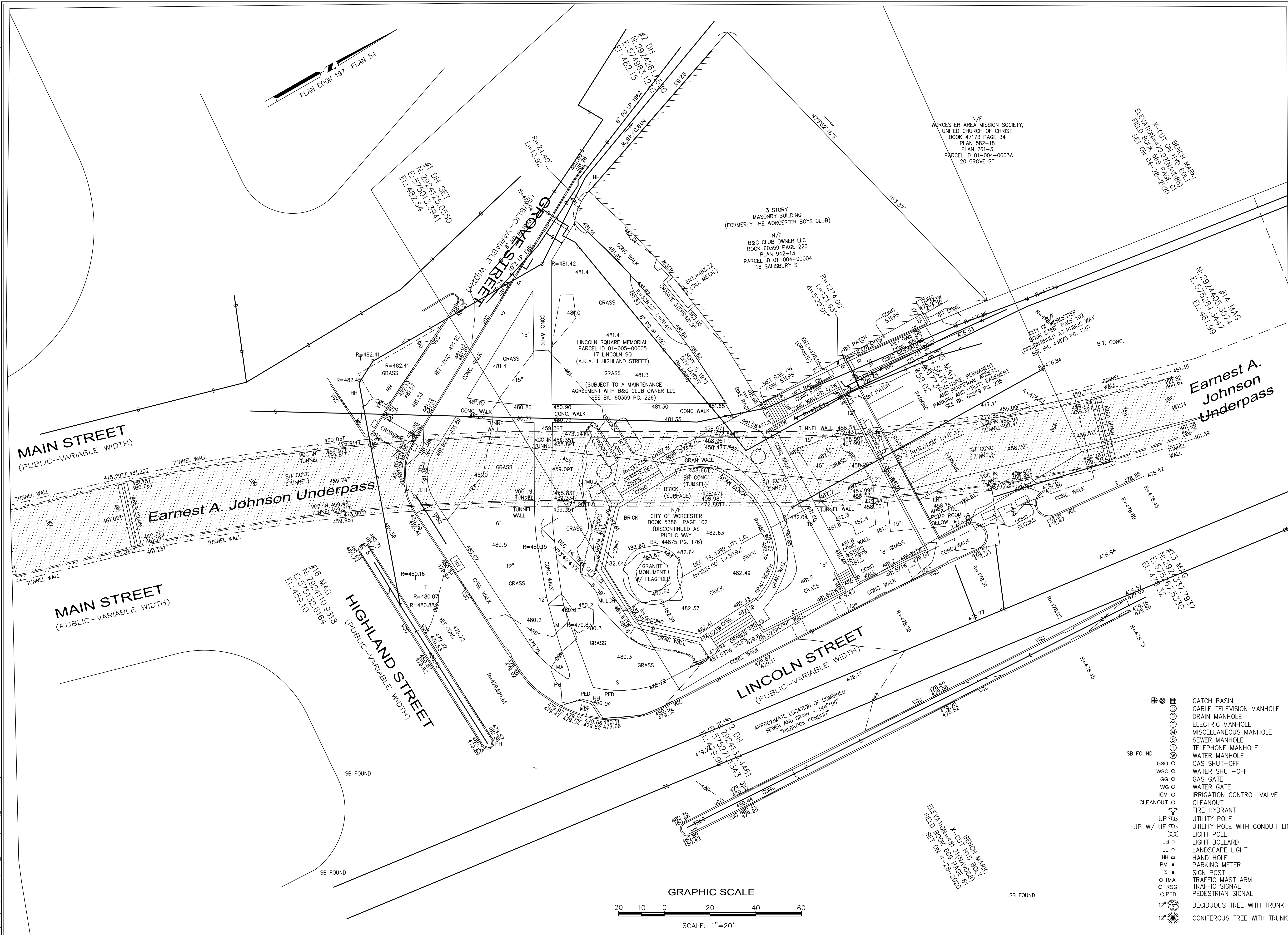
ADD ALTERNATE #1:

- RESTORATION AND CONSERVATION OF ALL METAL WORK, FLAGPOLE, AND STONE WORK.
- RE-INSTALLATION OF METAL WORK, FLAGPOLE, AND STONE MEMORIAL INCLUDING ALL ASSOCIATED EARTHWORK (E.G., AGGREGATE SOIL PIERS).
- CONSTRUCTION OF SITE IMPROVEMENTS INCLUDING ALL PAVING, FENCING, ELECTRICAL, UTILITY, AND DRAINAGE WORK, AND INSTALLATION OF NEW SITE FURNISHINGS, IRRIGATION SYSTEM, AND PLANTINGS, AND SEEDING OF NEW LAWNS.



RAY DUNETZ LANDSCAPE
ARCHITECTURE, INC.
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BOSTON, MA 02130
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NOTES

- THIS DOCUMENT IS AN INSTRUMENT OF SERVICE OF NITSCH ENGINEERING. IT IS ISSUED TO RAY DUNETZ LANDSCAPE ARCHITECTURE FOR PURPOSES RELATED DIRECTLY AND SOLELY TO NITSCH ENGINEERING'S SCOPE OF SERVICES UNDER CONTRACT WITH RAY DUNETZ LANDSCAPE ARCHITECTURE FOR IMPROVEMENTS TO LINCOLN SQUARE AND WORLD WAR II MEMORIAL IN WORCESTER, MA. ANY USE OR REUSE OF THIS DOCUMENT FOR ANY REASON BY ANY PARTY FOR PURPOSES UNRELATED DIRECTLY AND SOLELY TO SAID CONTRACT AND PROJECT SHALL BE AT THE USER'S SOLE AND EXCLUSIVE RISK AND LIABILITY, INCLUDING LIABILITY FOR VIOLATION OF COPYRIGHT LAWS, UNLESS WRITTEN AUTHORIZATION IS GIVEN THEREFOR BY NITSCH ENGINEERING.
- THE PURPOSE OF THIS PLAN IS TO SHOW EXISTING CONDITIONS AS THE RESULT OF AN ON-THE-GROUND INSTRUMENT SURVEY WHICH OCCURRED APRIL 27-28, 2020.
- ELEVATION REFERS TO NAVD88 VERTICAL BASED ON GPS-RTK OBSERVATIONS.
- THIS PLAN WAS PREPARED WITHOUT THE BENEFIT OF A TITLE SEARCH AND MAY NOT DISCLOSE ANY MATTERS THAT MAY BE REVEALED BY ONE.
- THIS PLAN DOES NOT SHOW UNWRITTEN OR UNRECORDED EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT AND VISIBLE USES OF THE LAND. THIS PLAN DOES NOT GUARANTEE THAT NO SUCH EASEMENTS EXIST.
- LEGAL STATUS OF EASEMENTS, WAYS AND RESTRICTIONS NOT DETERMINED BY THIS SURVEY.
- THE INFORMATION CONTAINED ON THE DISK OR ELECTRONIC DRAWING FILE ACCOMPANYING THIS PLAN MUST BE COMPARED TO THE SEALED AND SIGNED HARD COPY OF THE PLAN TO ENSURE THE ACCURACY OF ALL INFORMATION AND TO ENSURE NO CHANGES, ALTERATIONS, OR MODIFICATIONS HAVE BEEN MADE. RELIANCE SHALL NOT BE MADE ON A DOCUMENT TRANSMITTED BY COMPUTER OR OTHER ELECTRONIC MEANS UNLESS FIRST COMPARED TO THE ORIGINAL SEALED DOCUMENT ISSUED AT THE TIME OF THE SURVEY. DUE TO THE CRITICAL NATURE OF SURVEYING, DATA ACQUISITION, AND AUTOCAD PLAN DEVELOPMENT, IF CRITICAL DIMENSIONAL INFORMATION IS NEEDED AND IS NOT SPECIFICALLY SHOWN ON THE ELECTRONIC DRAWING FILE, PLEASE CONTACT NITSCH ENGINEERING.

UTILITY INFORMATION STATEMENT

- THE SUB-SURFACE UTILITY INFORMATION SHOWN HEREON IS COMPILED BASED ON FIELD SURVEY INFORMATION, RECORD INFORMATION AS SUPPLIED BY THE APPROPRIATE UTILITY COMPANIES, AND PLAN INFORMATION SUPPLIED BY THE CLIENT, IF ANY; THEREFORE WE CANNOT GUARANTEE THE ACCURACY OF SAID COMPILED SUB-SURFACE INFORMATION TO ANY CERTAIN DEGREE OF STATED TOLERANCE. ONLY PHYSICALLY LOCATED SUB-SURFACE UTILITY FEATURES FALL WITHIN NORMAL STANDARD OF CARE ACCURACIES.
- THE LOCATIONS OF UNDERGROUND PIPES, CONDUITS, AND STRUCTURES HAVE BEEN DETERMINED FROM SAID INFORMATION, AND ARE APPROXIMATE ONLY. COMPILED LOCATIONS OF ANY UNDERGROUND STRUCTURES, NOT VISIBLY OBSERVED AND LOCATED, CAN VARY FROM THEIR ACTUAL LOCATIONS.
- ADDITIONAL BURIED UTILITIES/STRUCTURES MAY BE ENCOUNTERED.
- THE STATUS OF UTILITIES, WHETHER ACTIVE, ABANDONED, OR REMOVED, IS AN UNKNOWN CONDITION AS FAR AS OUR COMPILED OF THIS INFORMATION.
- IT IS INCUMBENT UPON INDIVIDUALS USING THIS INFORMATION TO UNDERSTAND THAT COMPILED UTILITY INFORMATION IS NOT EXACT, AND IS SUBJECT TO CHANGE BASED UPON VARYING PLAN INFORMATION RECEIVED AND ACTUAL LOCATIONS.
- THE ACCURACY OF MEASURED UTILITY INVERTS AND PIPE SIZES IS SUBJECT TO FIELD CONDITIONS, THE ABILITY TO MAKE VISUAL OBSERVATIONS, DIRECT ACCESS TO THE VARIOUS ELEMENTS AND OTHER MATTERS.
- THE PROPER UTILITY ENGINEERING/COMPANY SHOULD BE CONSULTED AND THE ACTUAL LOCATIONS OF SUBSURFACE STRUCTURES SHOULD BE VERIFIED IN THE FIELD (V.I.F.) BEFORE PLANNING FUTURE CONNECTIONS. CONTACT THE DIG SAFE CALL CENTER AT 1-888-344-7233, SEVENTY-TWO HOURS PRIOR TO EXCAVATION, BLASTING, GRADING, AND/OR PAVING.

LEGEND

	CATCH BASIN		HANDICAP PARKING
	CABLE TELEVISION MANHOLE		SPOT ELEVATION
	DRAIN MANHOLE		CHAIN LINK FENCE
	ELECTRIC MANHOLE		VERTICAL GRANITE CURB
	MISCELLANEOUS MANHOLE		WHEELCHAIR RAMP
	SEWER MANHOLE		RIM ELEVATION EQUALS
	TELEPHONE MANHOLE		INVERT ELEVATION EQUALS
	WATER MANHOLE		TOP OF HOOD ELEVATION EQUALS
	GAS SHUT-OFF		TOP OF WATER
	WATER SHUT-OFF		NO PIPES VISIBLE
	GAS GATE		TOP OF WATER
	WATER GATE		TRAFFIC CONTROL BOX
	IRRIGATION CONTROL VALVE		UNDERGROUND LOOP DETECTOR
	CLEANOUT		DETECTABLE WARNING PANEL
	FIRE HYDRANT		TOP OF WALL ELEVATION
	UTILITY POLE		ELEVATION IN TUNNEL (CEILING)
	UTILITY POLE WITH CONDUIT LINE TO GROUND		ELEVATION IN TUNNEL (ROAD)
	LIGHT POLE		UNDERGROUND CABLE TELEVISION LINE
	LIGHT BOLLARD		UNDERGROUND DRAIN LINE
	LANDSCAPE LIGHT		UNDERGROUND ELECTRIC LINE
	HAND HOLE		UNDERGROUND GAS LINE
	PARKING METER		UNDERGROUND SEWER LINE
	SIGN POST		UNDERGROUND TELEPHONE LINE
	TRAFFIC MAST ARM		UNDERGROUND WATER LINE
	TRAFFIC SIGNAL		OVERHEAD WIRES
	PEDESTRIAN SIGNAL		BENCH MARK
	DECIDUOUS TREE WITH TRUNK DIAMETER		
	CONIFEROUS TREE WITH TRUNK DIAMETER		

EXISTING CONDITIONS

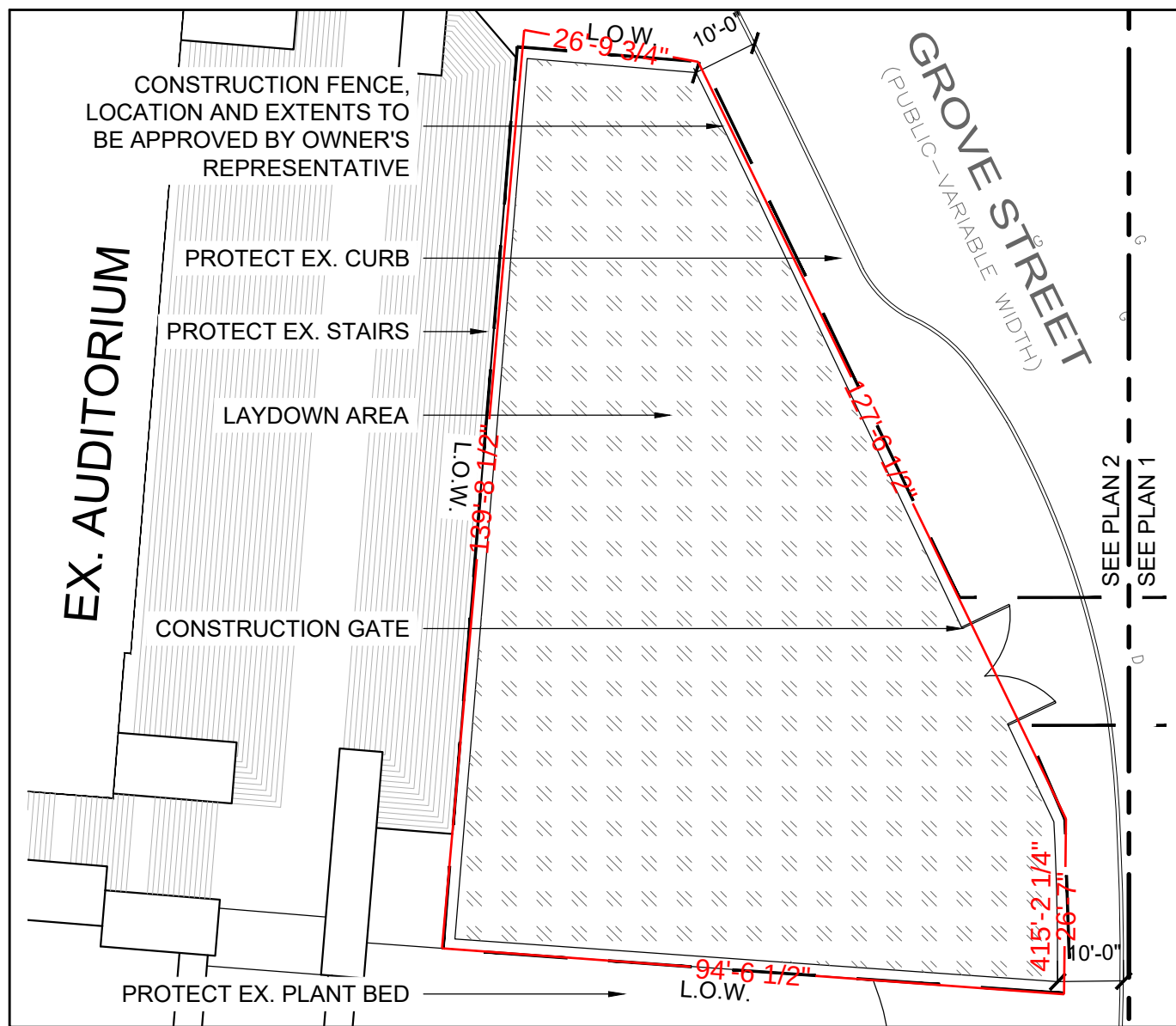
LINCOLN SQUARE AND THE WORLD WAR II MEMORIAL IMPROVEMENT
LINCOLN SQUARE, WORCESTER, MA

PREPARED FOR:
RAY DUNETZ LANDSCAPE ARCHITECTURE
179 GREET STREET, BOSTON, MA 02130

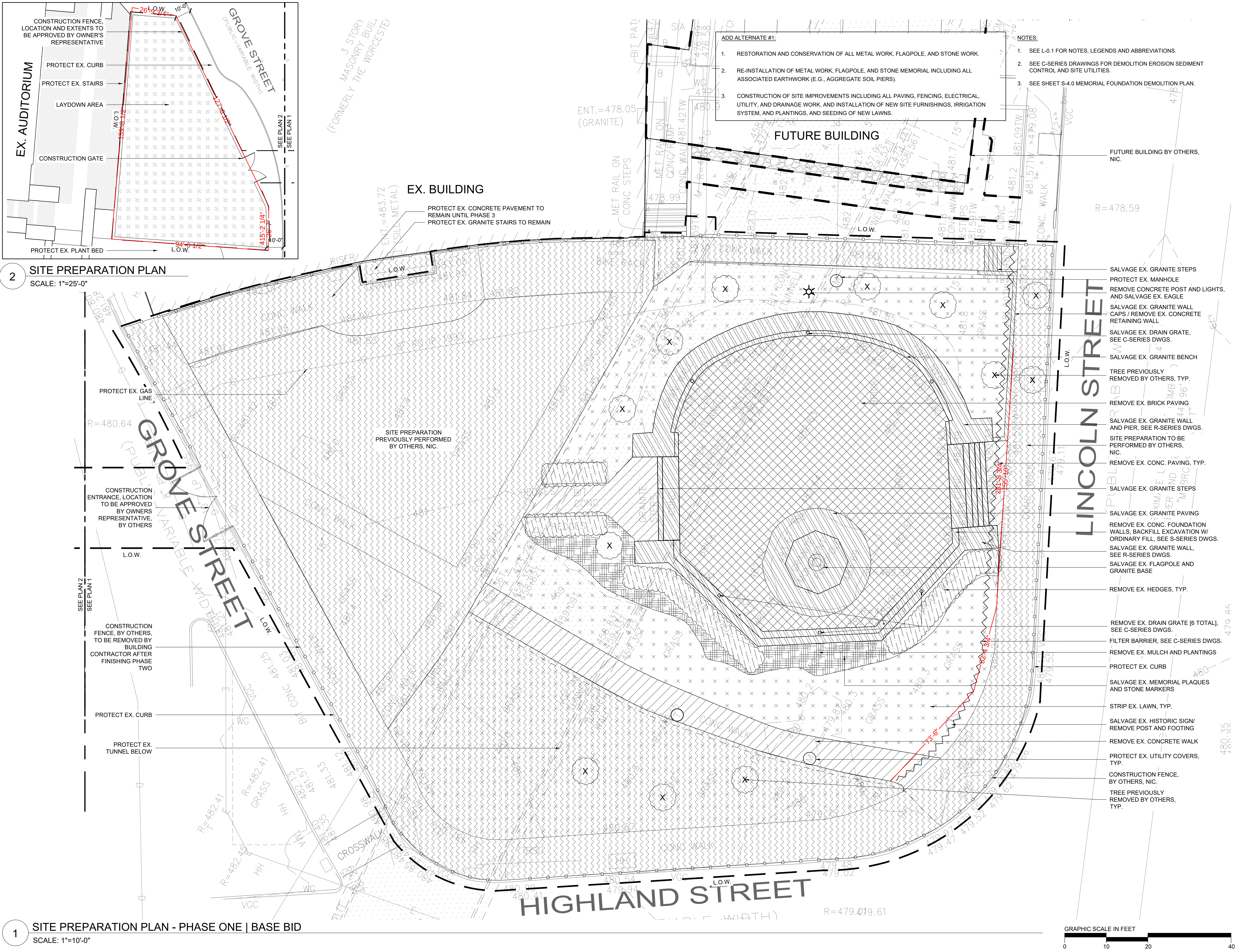
SHEET:1

EX-1

OF 1 REV.



2 SITE PREPARATION PLAN
SCALE: 1"=25'-0"



1 SITE PREPARATION PLAN - PHASE ONE | BASE BID
SCALE: 1"=10'-0"

- ADD ALTERNATE #1:
- RESTORATION AND CONSERVATION OF ALL METAL WORK, FLAGPOLE, AND STONE WORK.
 - RE-INSTALLATION OF METAL WORK, FLAGPOLE, AND STONE MEMORIAL INCLUDING ALL ASSOCIATED EARTHWORK (E.G., AGGREGATE SOIL PIERS).
 - CONSTRUCTION OF SITE IMPROVEMENTS INCLUDING ALL PAVING, FENCING, ELECTRICAL, UTILITY, AND DRAINAGE WORK, AND INSTALLATION OF NEW SITE FURNISHINGS, IRRIGATION SYSTEM, AND PLANTINGS, AND SEEDING OF NEW LAWNS.
- NOTES:
- SEE L-0.1 FOR NOTES, LEGENDS AND ABBREVIATIONS.
 - SEE C-SERIES DRAWINGS FOR DEMOLITION EROSION SEDIMENT CONTROL AND SITE UTILITIES.
 - SEE SHEET S-4.0 MEMORIAL FOUNDATION DEMOLITION PLAN.

FUTURE BUILDING BY OTHERS, NIC.

- SALVAGE EX. GRANITE STEPS
- PROTECT EX. MANHOLE
- REMOVE CONCRETE POST AND LIGHTS, AND SALVAGE EX. EAGLE
- SALVAGE EX. GRANITE WALL CAPS / REMOVE EX. CONCRETE RETAINING WALL
- SALVAGE EX. DRAIN GRATE, SEE C-SERIES DWGS.
- SALVAGE EX. GRANITE BENCH
- TREE PREVIOUSLY REMOVED BY OTHERS, TYP.
- REMOVE EX. BRICK PAVING
- SALVAGE EX. GRANITE WALL AND PIER, SEE R-SERIES DWGS.
- SITE PREPARATION TO BE PERFORMED BY OTHERS, NIC.
- REMOVE EX. CONC. PAVING, TYP.
- SALVAGE EX. GRANITE STEPS
- SALVAGE EX. GRANITE PAVING
- REMOVE EX. CONC. FOUNDATION WALLS, BACKFILL EXCAVATION W/ ORDINARY FILL, SEE S-SERIES DWGS.
- SALVAGE EX. GRANITE WALL, SEE R-SERIES DWGS.
- SALVAGE EX. FLAGPOLE AND GRANITE BASE
- REMOVE EX. HEDGES, TYP.
- REMOVE EX. DRAIN GRATE [6 TOTAL], SEE C-SERIES DWGS.
- FILTER BARRIER, SEE C-SERIES DWGS.
- REMOVE EX. MULCH AND PLANTINGS
- PROTECT EX. CURB
- SALVAGE EX. MEMORIAL PLAQUES AND STONE MARKERS
- STRIP EX. LAWN, TYP.
- SALVAGE EX. HISTORIC SIGN/ REMOVE POST AND FOOTING
- REMOVE EX. CONCRETE WALK
- PROTECT EX. UTILITY COVERS, TYP.
- CONSTRUCTION FENCE, BY OTHERS, NIC.
- TREE PREVIOUSLY REMOVED BY OTHERS, TYP.



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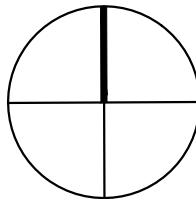
LINCOLN SQUARE IMPROVEMENTS
WORCESTER, MA

SITE PREPARATION PLAN - PHASE ONE

DRAWING TITLE	L-1.0
CONTRACT NO.	
DATE	
DRAWN	
CKD	
SCALE	AS SHOWN
SHEET NO.	



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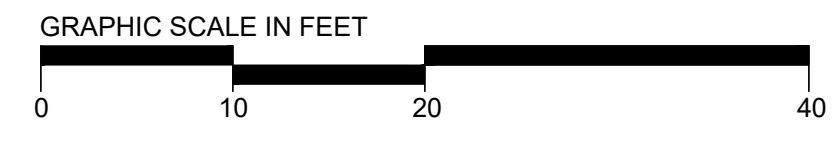
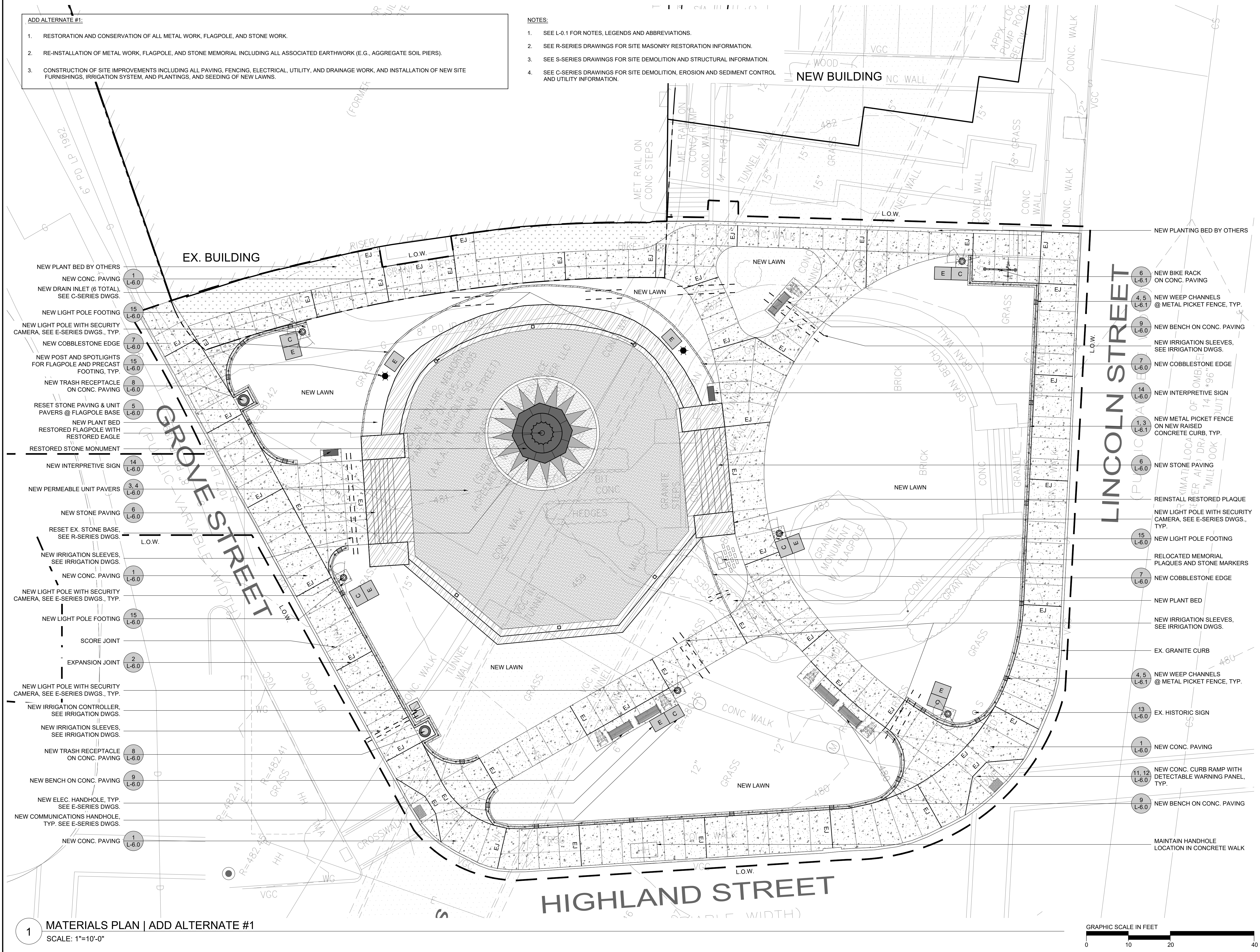
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DATE		REVISION	
REVISIONS			
			
NORTH		STAMP	
LINCOLN SQUARE IMPROVEMENTS WORCESTER, MA			
PROJECT			
SITE PREPARATION PLAN - PHASE THREE ADD ALTERNATE #1			
DRAWING TITLE			
CONTRACT NO.		L-1.1	
DATE 06.19.24			
DRAWN SD			
CKD RD			
SCALE AS SHOWN			
SHEET NO.			

ADD ALTERNATE #1:

1. RESTORATION AND CONSERVATION OF ALL METAL WORK, FLAGPOLE, AND STONE WORK.
2. RE-INSTALLATION OF METAL WORK, FLAGPOLE, AND STONE MEMORIAL INCLUDING ALL ASSOCIATED EARTHWORK (E.G., AGGREGATE SOIL PIERS).
3. CONSTRUCTION OF SITE IMPROVEMENTS INCLUDING ALL PAVING, FENCING, ELECTRICAL, UTILITY, AND DRAINAGE WORK, AND INSTALLATION OF NEW SITE FURNISHINGS, IRRIGATION SYSTEM, AND PLANTINGS, AND SEEDING OF NEW LAWNS.

NOTES:

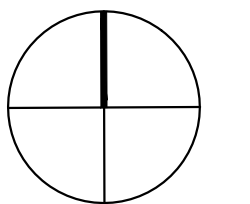
1. SEE L-0.1 FOR NOTES, LEGENDS AND ABBREVIATIONS.
2. SEE R-SERIES DRAWINGS FOR SITE MASONRY RESTORATION INFORMATION.
3. SEE S-SERIES DRAWINGS FOR SITE DEMOLITION AND STRUCTURAL INFORMATION.
4. SEE C-SERIES DRAWINGS FOR SITE DEMOLITION, EROSION AND SEDIMENT CONTROL AND UTILITY INFORMATION.



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MATERIALS PLAN |
ADD ALTERNATE #1

DRAWING TITLE

CONTRACT NO.

DATE 06.19.24

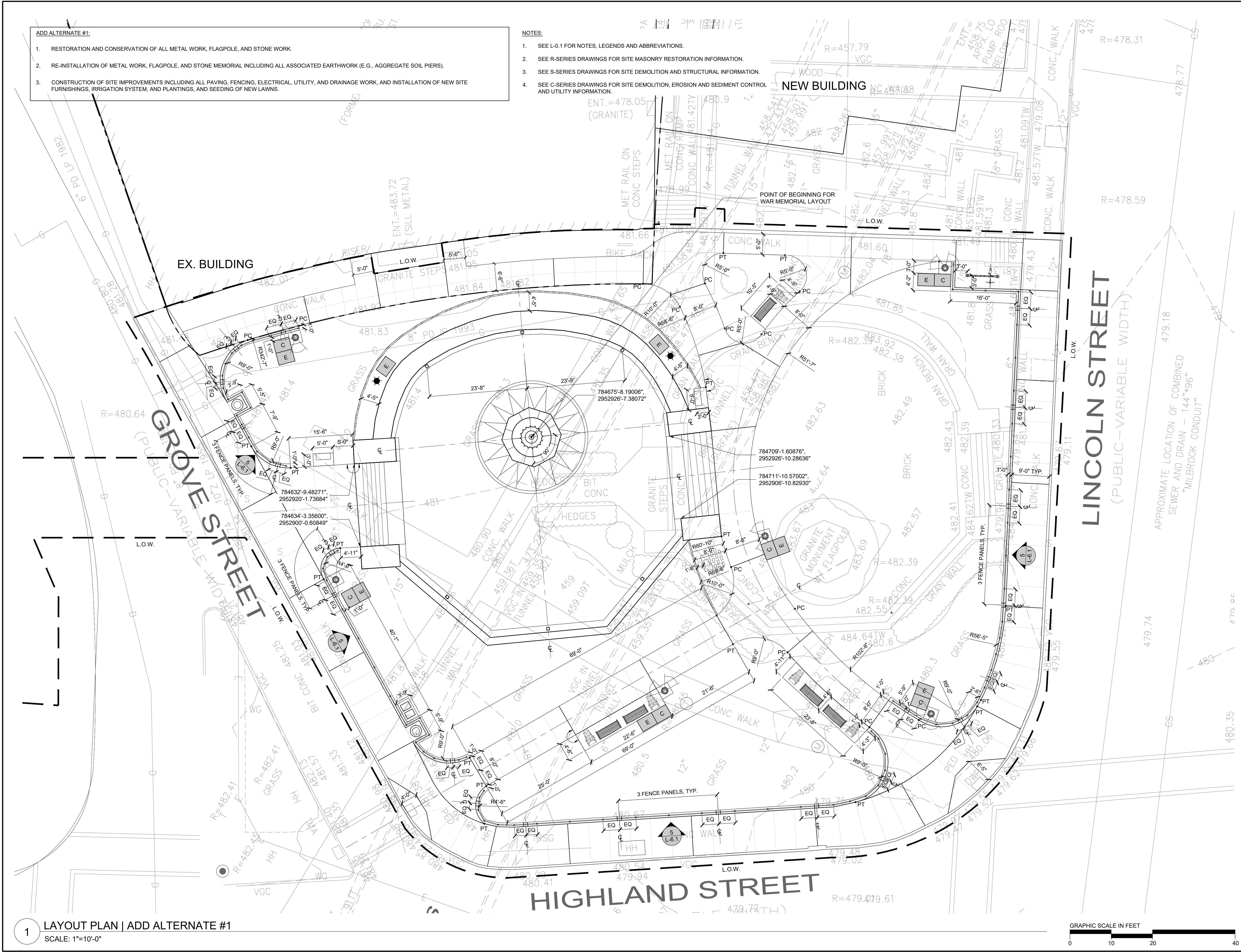
DRAWN SD

CKD RD

SCALE AS SHOWN

L-2.0

SHEET NO.



- ADD ALTERNATE #1:
1. RESTORATION AND CONSERVATION OF ALL METAL WORK, FLAGPOLE, AND STONE WORK.
 2. RE-INSTALLATION OF METAL WORK, FLAGPOLE, AND STONE MEMORIAL INCLUDING ALL ASSOCIATED EARTHWORK (E.G., AGGREGATE SOIL PIERS).
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- NOTES:
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 2. SEE R-SERIES DRAWINGS FOR SITE MASONRY RESTORATION INFORMATION.
 3. SEE S-SERIES DRAWINGS FOR SITE DEMOLITION AND STRUCTURAL INFORMATION.
 4. SEE C-SERIES DRAWINGS FOR SITE DEMOLITION, EROSION AND SEDIMENT CONTROL AND UTILITY INFORMATION.

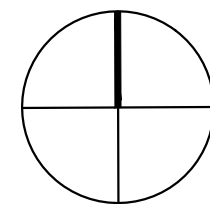
1 LAYOUT PLAN | ADD ALTERNATE #1
SCALE: 1"=10'-0"



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LAYOUT PLAN |
ADD ALTERNATE #1

DRAWING TITLE
CONTRACT
NO.

DATE 06.19.24

DRAWN SD

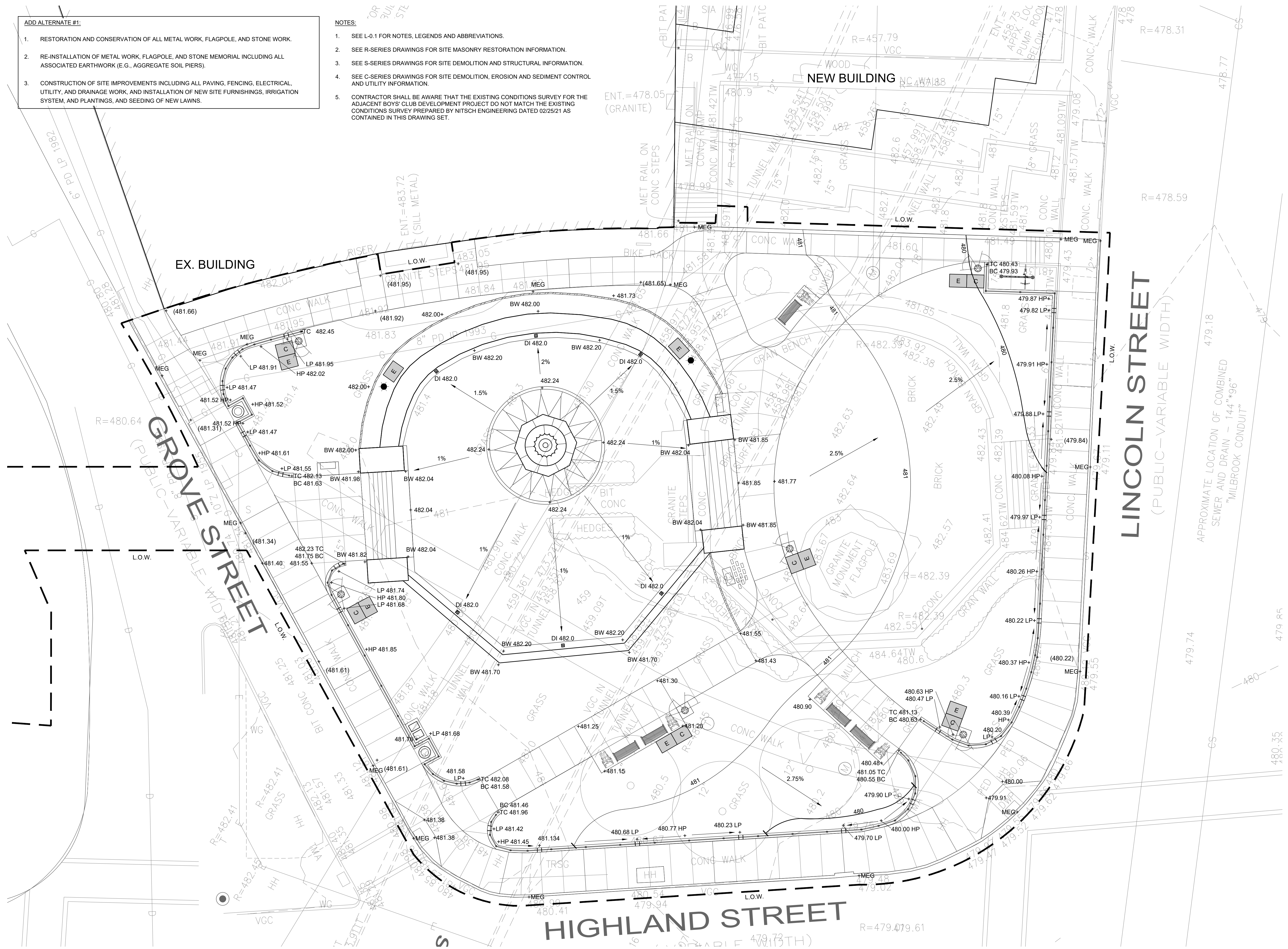
CKD RD

SCALE AS SHOWN SHEET NO.

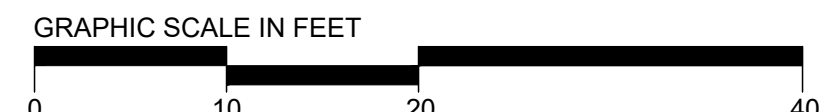
L-3.0

- ADD ALTERNATE #1:
- RESTORATION AND CONSERVATION OF ALL METAL WORK, FLAGPOLE, AND STONE WORK.
 - RE-INSTALLATION OF METAL WORK, FLAGPOLE, AND STONE MEMORIAL INCLUDING ALL ASSOCIATED EARTHWORK (E.G., AGGREGATE SOIL PIERS).
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- NOTES:
- SEE L-0.1 FOR NOTES, LEGENDS AND ABBREVIATIONS.
 - SEE R-SERIES DRAWINGS FOR SITE MASONRY RESTORATION INFORMATION.
 - SEE S-SERIES DRAWINGS FOR SITE DEMOLITION AND STRUCTURAL INFORMATION.
 - SEE C-SERIES DRAWINGS FOR SITE DEMOLITION, EROSION AND SEDIMENT CONTROL AND UTILITY INFORMATION.
 - CONTRACTOR SHALL BE AWARE THAT THE EXISTING CONDITIONS SURVEY FOR THE ADJACENT BOYS' CLUB DEVELOPMENT PROJECT DO NOT MATCH THE EXISTING CONDITIONS SURVEY PREPARED BY NITSCH ENGINEERING DATED 02/25/21 AS CONTAINED IN THIS DRAWING SET.



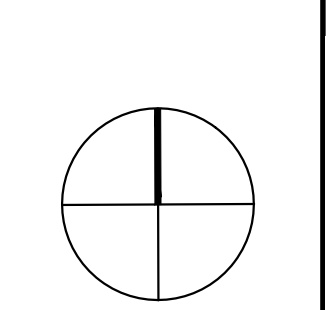
1 GRADING PLAN | ADD ALTERNATE #1
SCALE: 1"=10'-0"



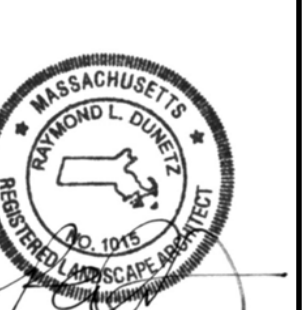
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PROJECT

GRADING PLAN |
ADD ALTERNATE #1

DRAWING TITLE

CONTRACT
NO.

DATE 06.19.24

DRAWN SD

CKD RD

SCALE AS SHOWN

L-4.0

SHEET NO.

PLANT LIST

KEY	QTY	BOTANICAL NAME	COMMON NAME	MIN. SIZE	REMARKS
TREES					
LS	4	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	5" CAL.	LOWEST BRANCH @ 5' HT. TYP.
LT	3	LIRIODENDRON TULIPIFERA 'EMERALD CITY'	EMERALD CITY TULIP TREE	5" CAL.	LOWEST BRANCH @ 5' HT. TYP.
QR	3	QUERCUS RUBRA	NORTHERN RED OAK	5" CAL.	LOWEST BRANCH @ 5' HT. TYP.
TA	3	TILIA AMERICANA	AMERICAN LINDEN	5" CAL.	LOWEST BRANCH @ 5' HT. TYP.
SHRUBS AND GROUND COVER					
CA	25	CLETHRA ALNIFOLIA 'RUBY SPICE'	RUBY SPICE SUMMERSWEET	5 GAL.	
LM	290	LIRIOPE MUSCARI 'BIG BLUE'	BIG BLUE LILY TURF	1 QUART	PLANT 18" OC

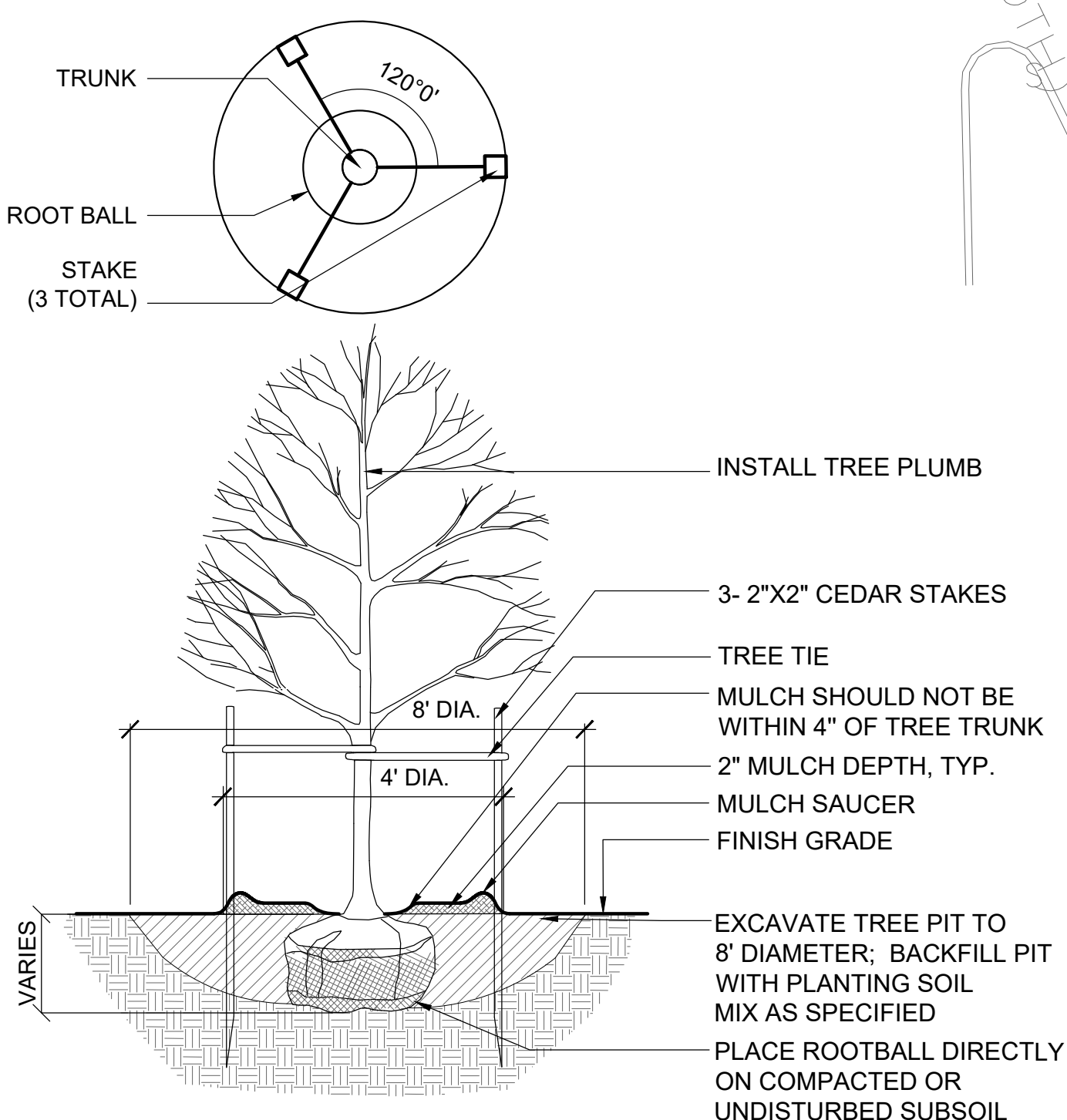
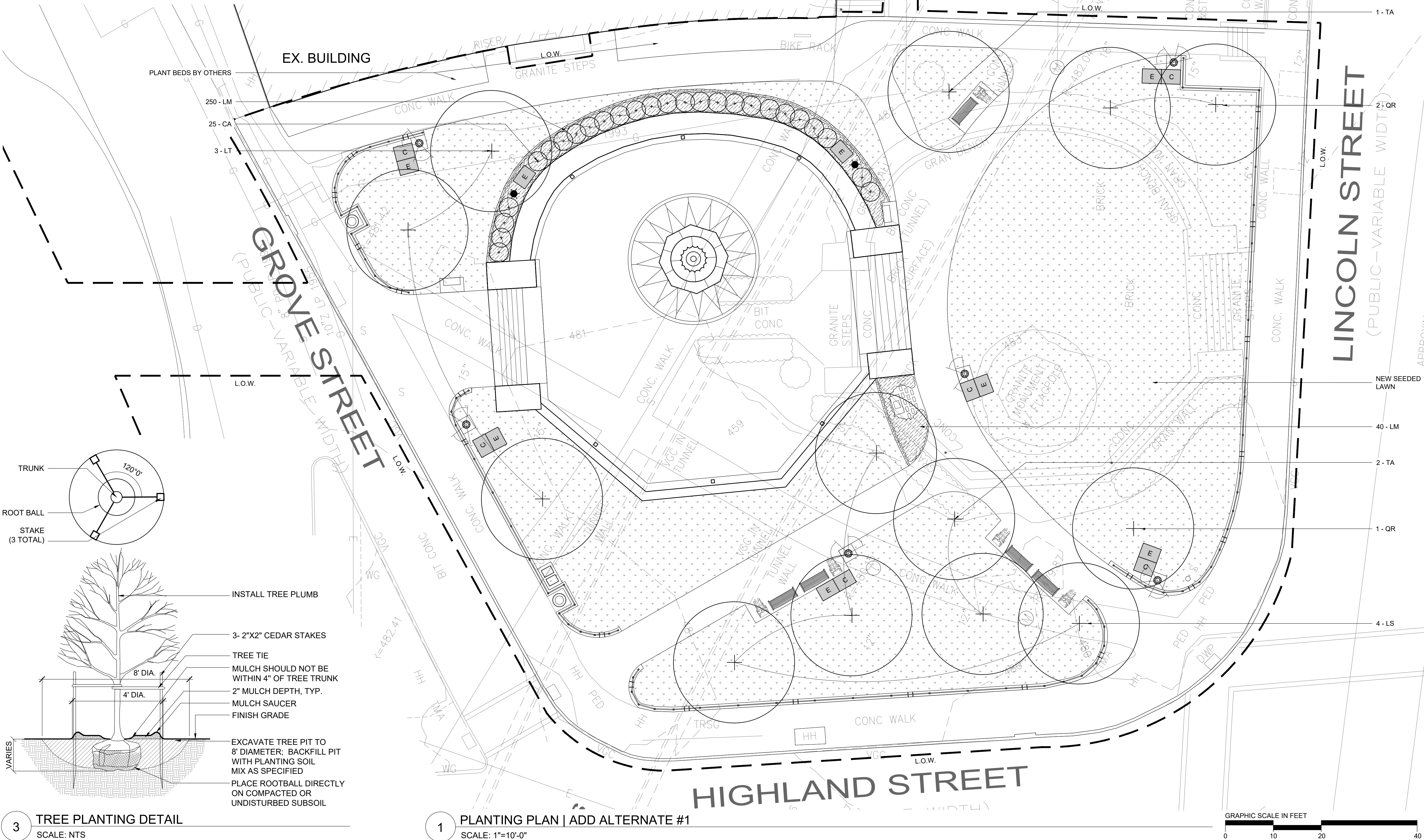
2 SHRUB AND GROUDCOVER PLANTING DETAIL
SCALE: NTS

ADD ALTERNATE #1:

- RESTORATION AND CONSERVATION OF ALL METAL WORK, FLAGPOLE, AND STONE WORK.
- RE-INSTALLATION OF METAL WORK, FLAGPOLE, AND STONE MEMORIAL INCLUDING ALL ASSOCIATED EARTHWORK (E.G., AGGREGATE SOIL PIERS).
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NOTES:

- SEE L-0.1 FOR NOTES, LEGEND AND ABBREVIATIONS.
- NOTE ALL PLANTINGS AND LAWN TO BE IRRIGATED.



3 TREE PLANTING DETAIL
SCALE: NTS

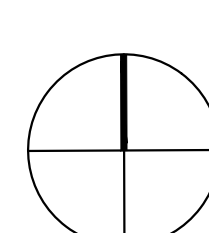
1 PLANTING PLAN | ADD ALTERNATE #1
SCALE: 1\"/>



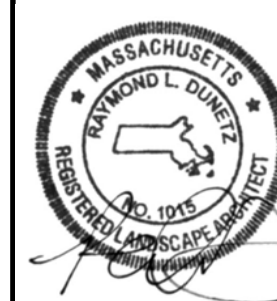
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PLANTING PLAN AND
PLANTING DETAILS |
ADD ALTERNATE #1

DRAWING TITLE

CONTRACT NO.

DATE 06.19.24

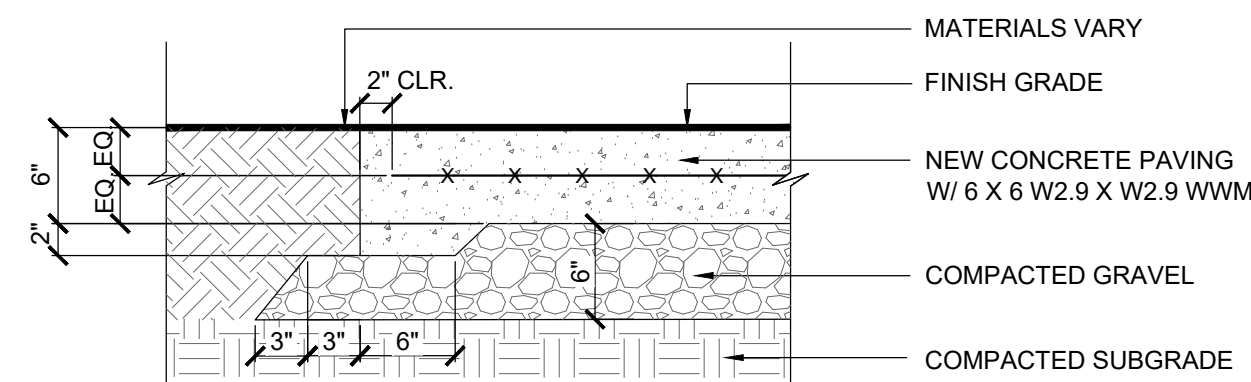
DRAWN SD

CKD RD

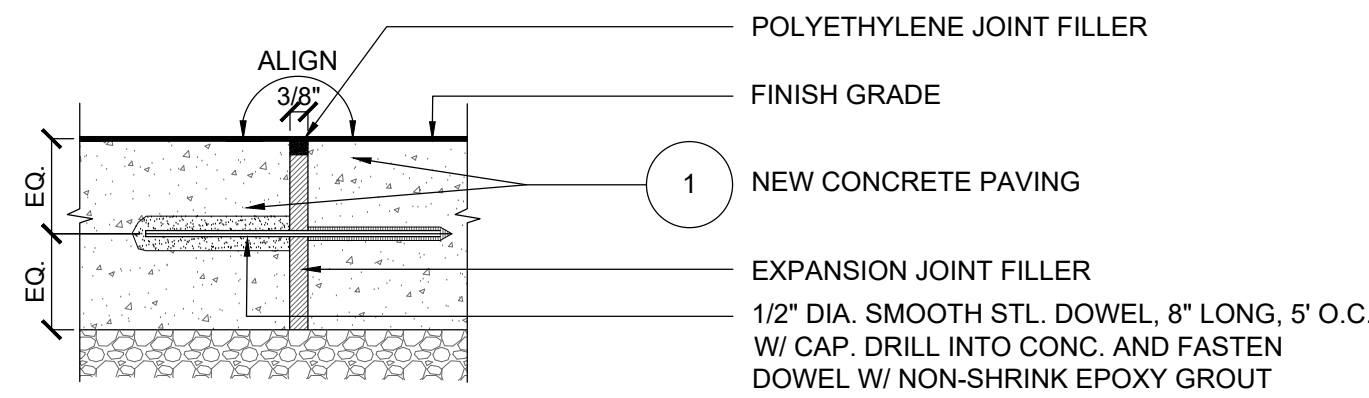
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L-5.0

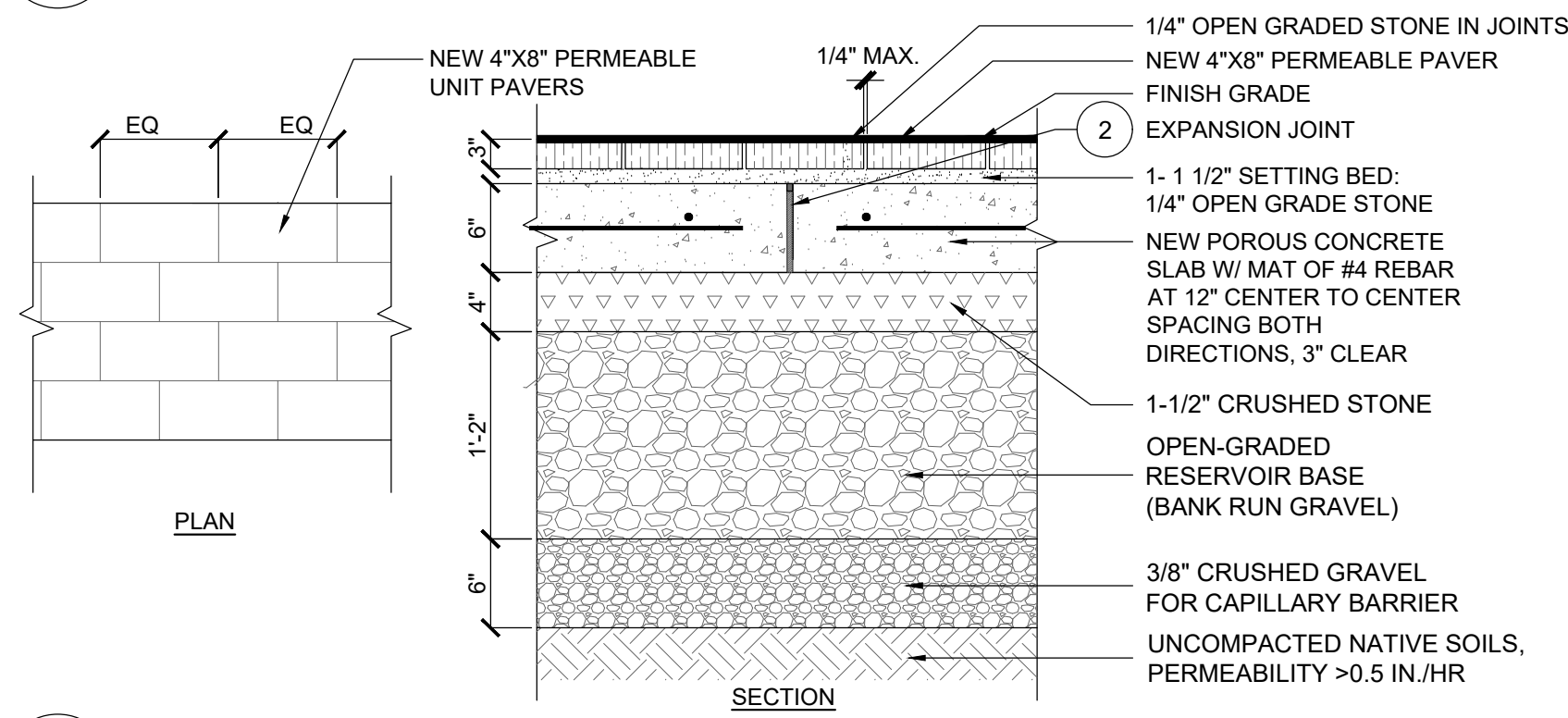
SHEET NO.



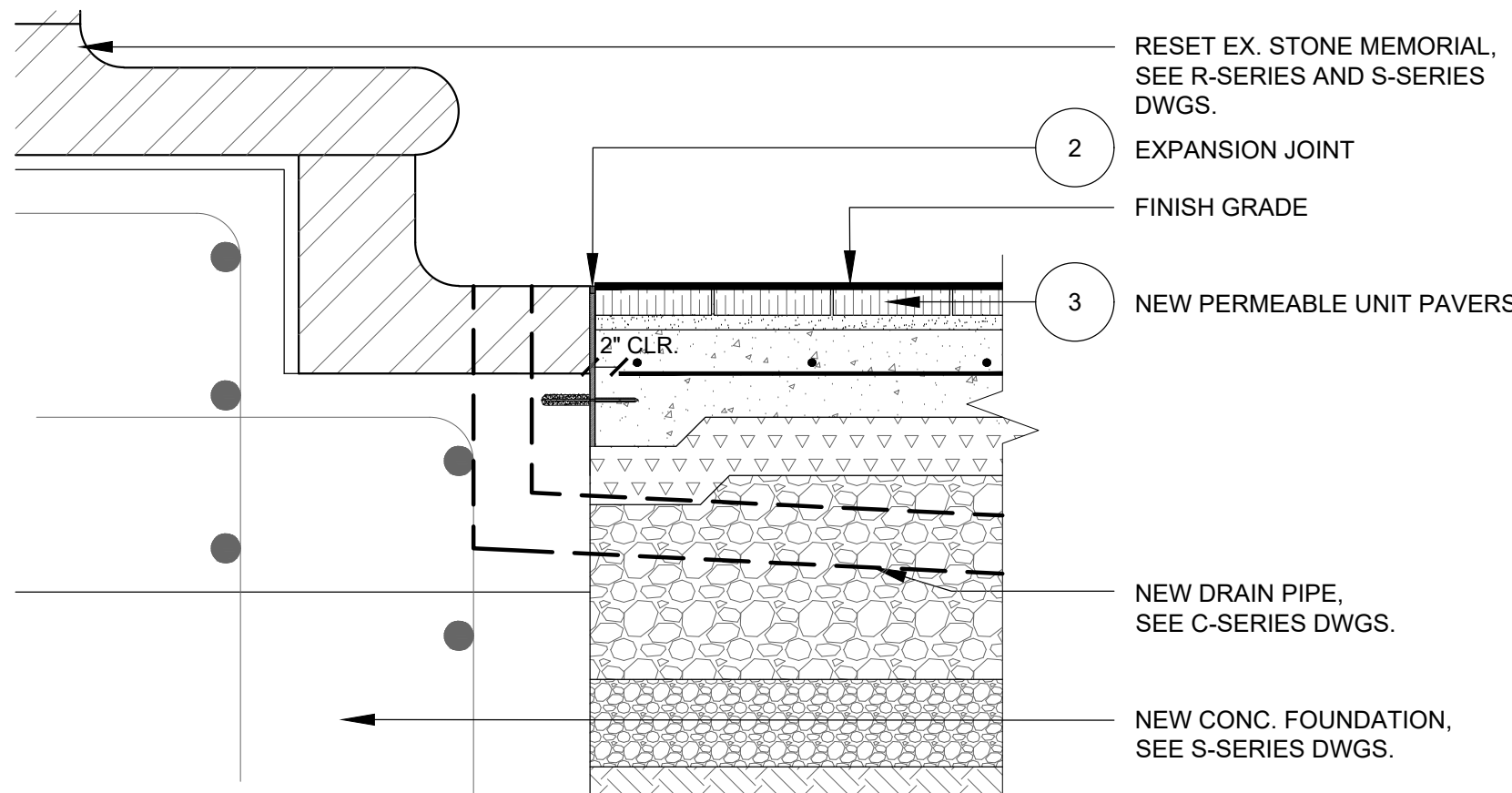
1 CONCRETE PAVING - SECTION
SCALE: 1"=1'-0"



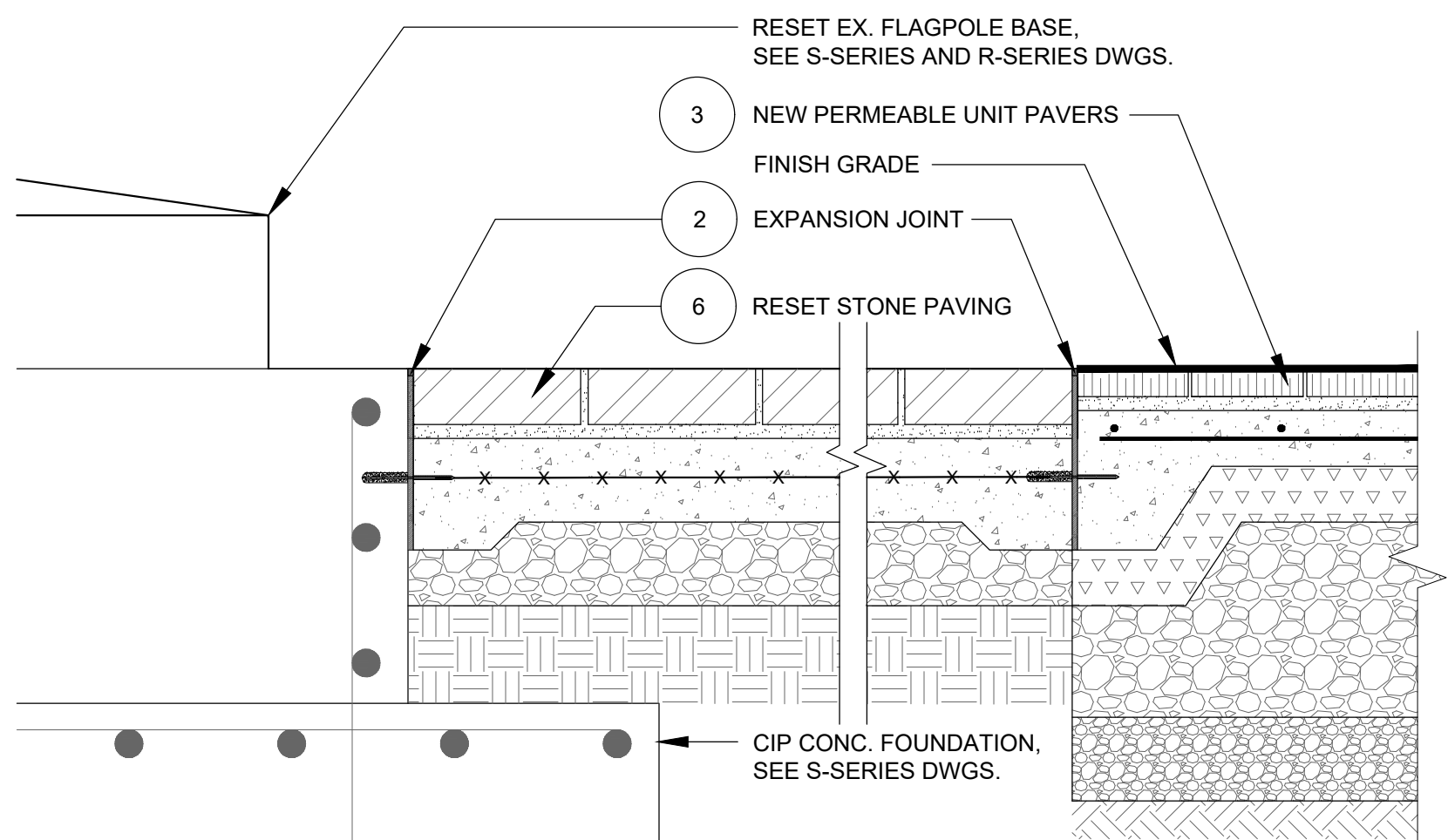
2 EXPANSION JOINT - SECTION
SCALE: 3"=1'-0"



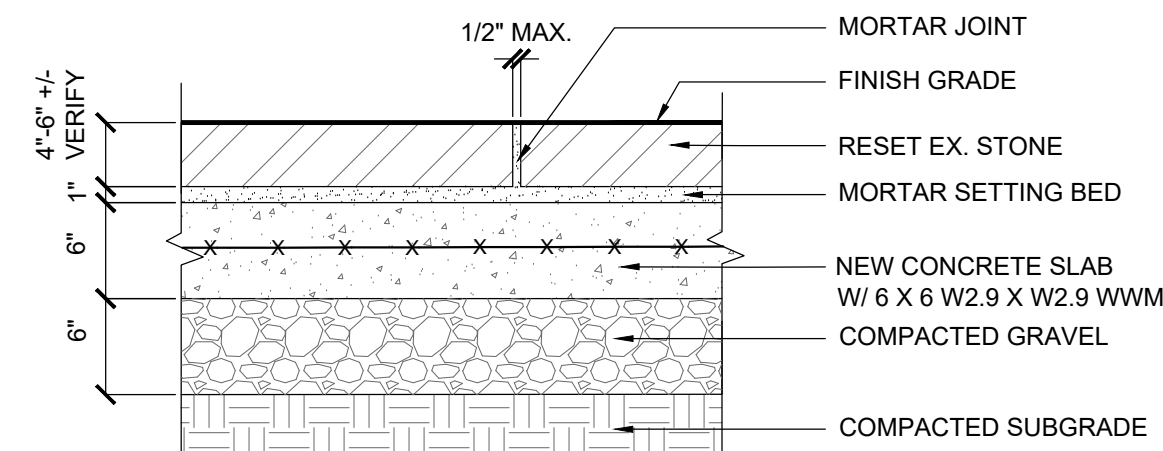
3 PERMEABLE UNIT PAVERS - PLAN AND SECTION
SCALE: 1"=1'-0"



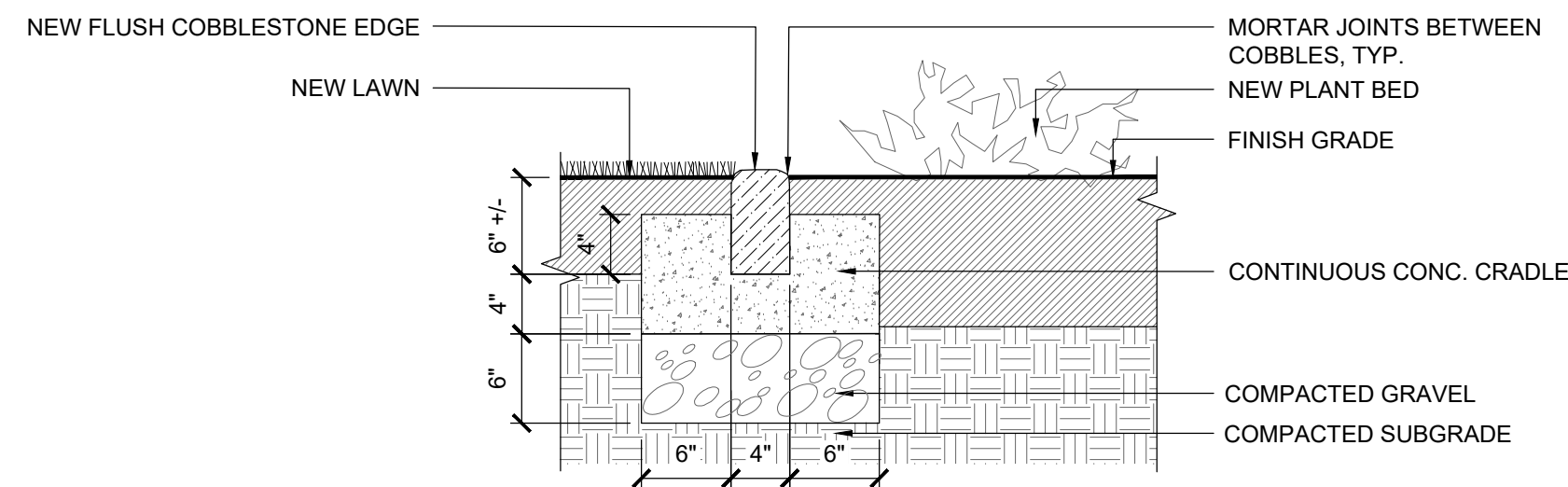
4 UNIT PAVERS @ BENCH - SECTION
SCALE: 1"=1'-0"



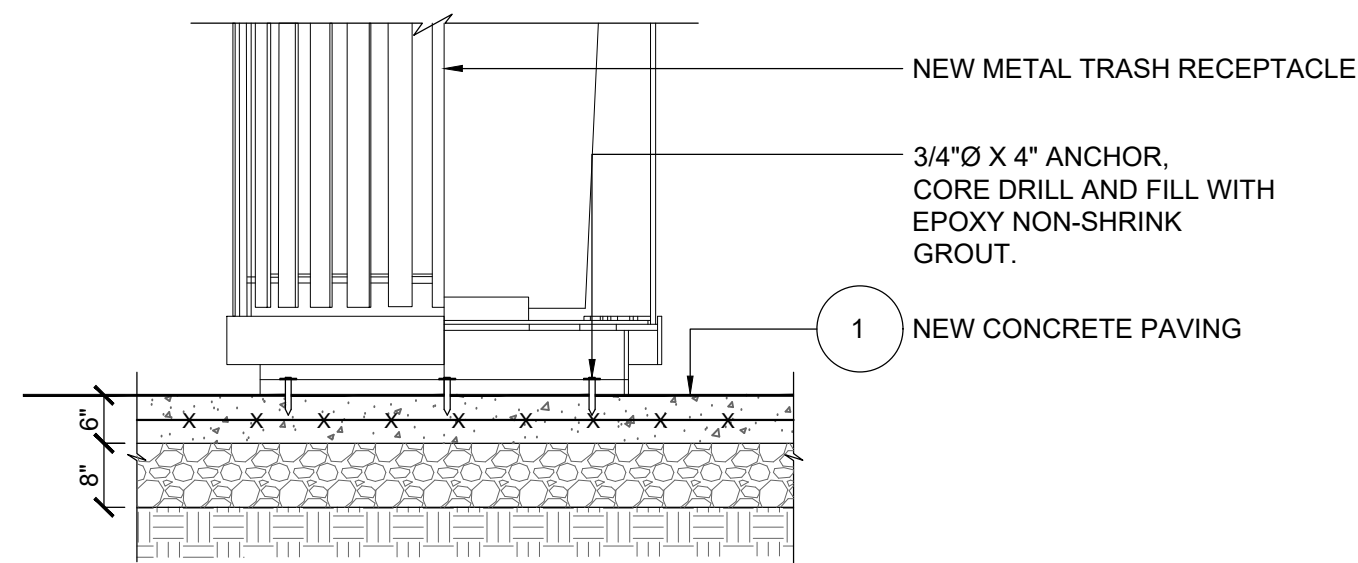
5 STONE PAVING & UNIT PAVERS @ FLAGPOLE BASE - SECTION
SCALE: 1"=1'-0"



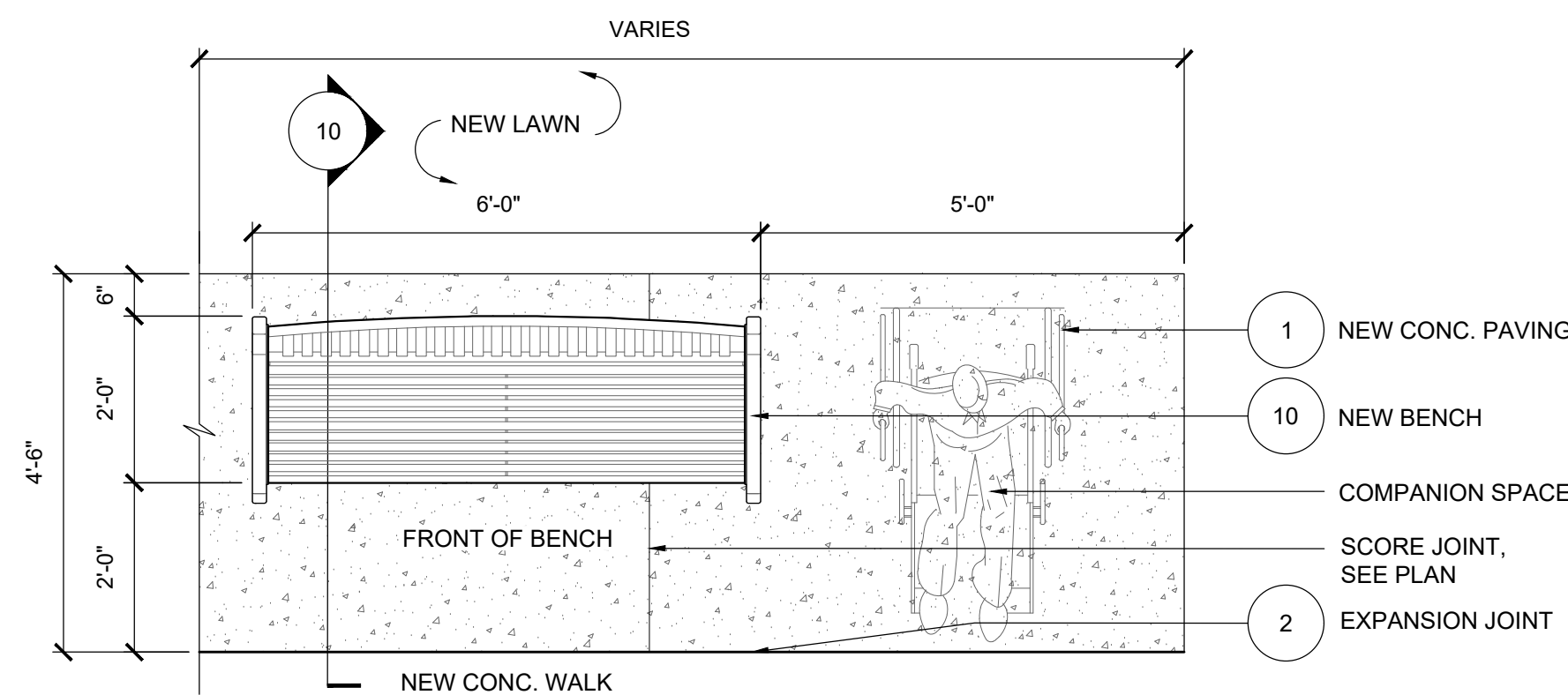
6 STONE PAVING - SECTION
SCALE: 1"=1'-0"



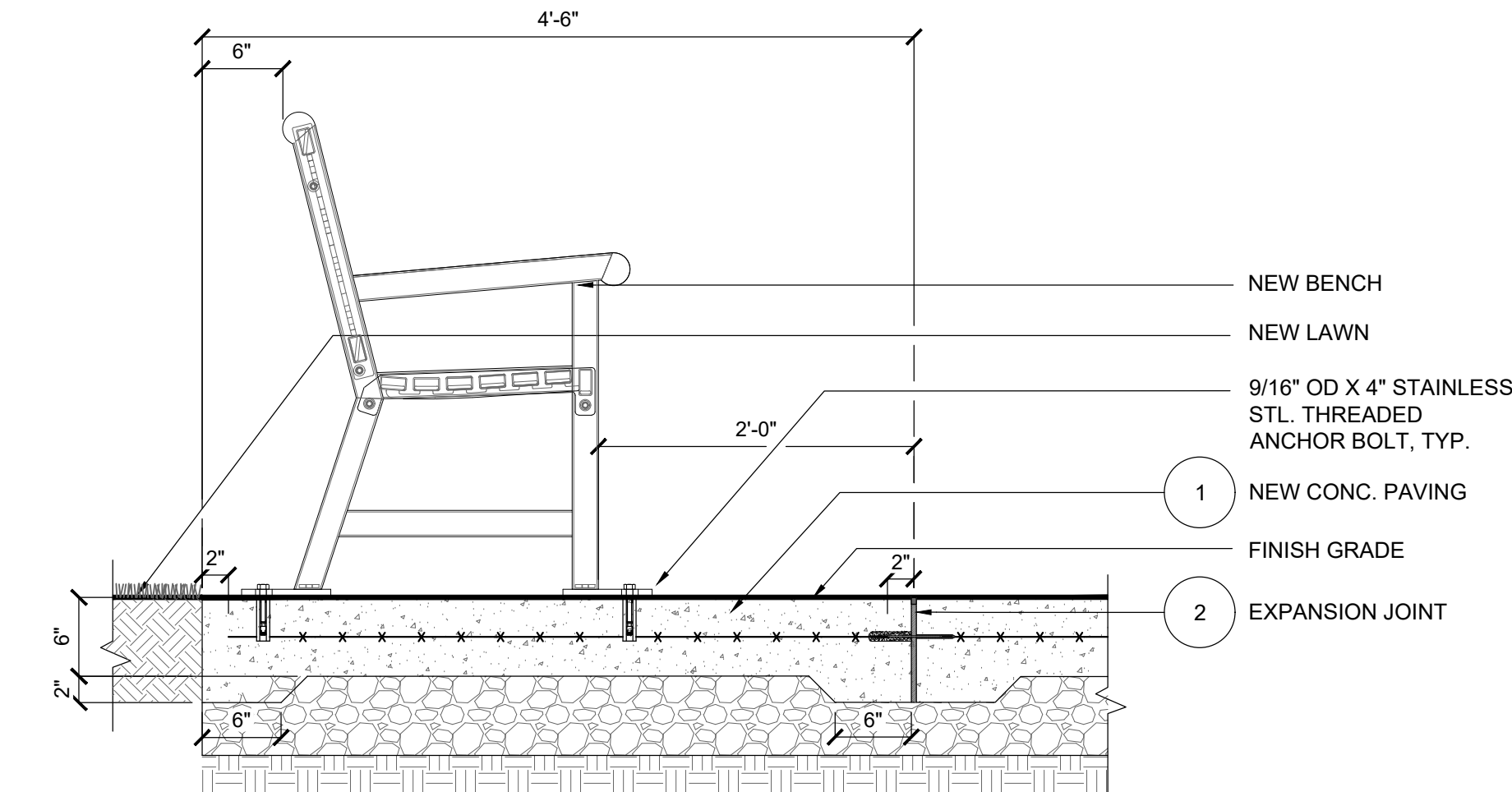
7 COBBLESTONE EDGE - SECTION
SCALE: 1"=1'-0"



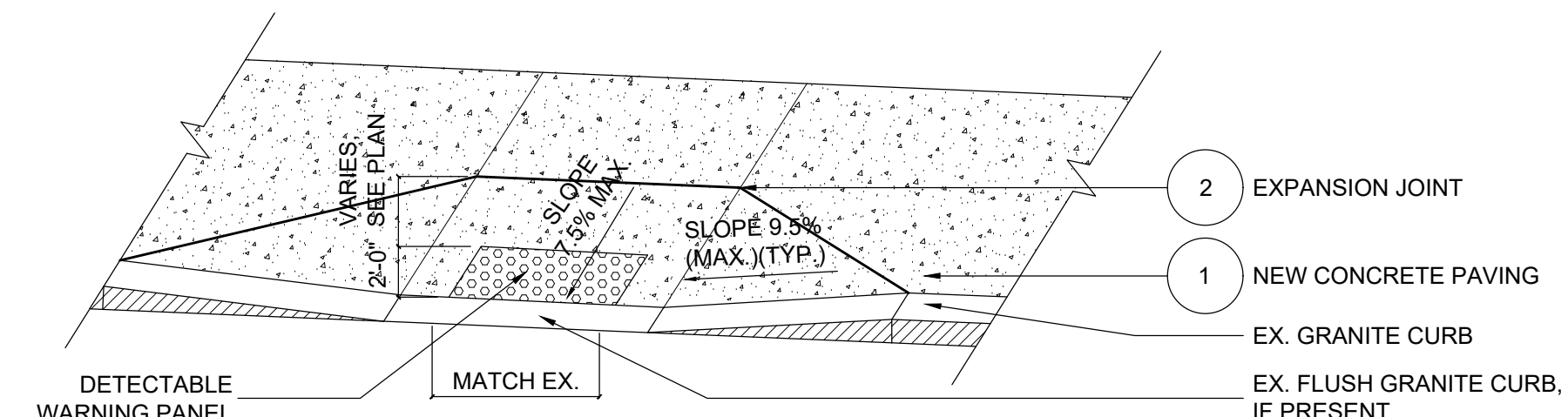
8 TRASH RECEPTACLE ON CONC. PAVING - SECTION
SCALE: 1/2"=1'-0"



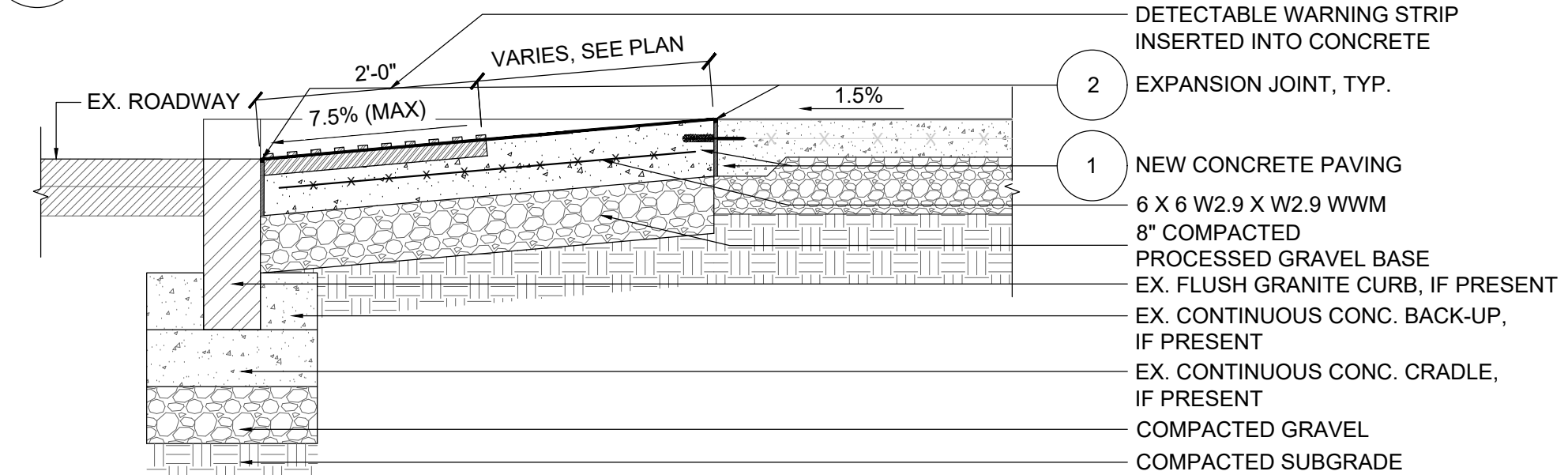
9 BENCH ON CONC. PAVING - ENLARGEMENT
SCALE: 1/2"=1'-0"



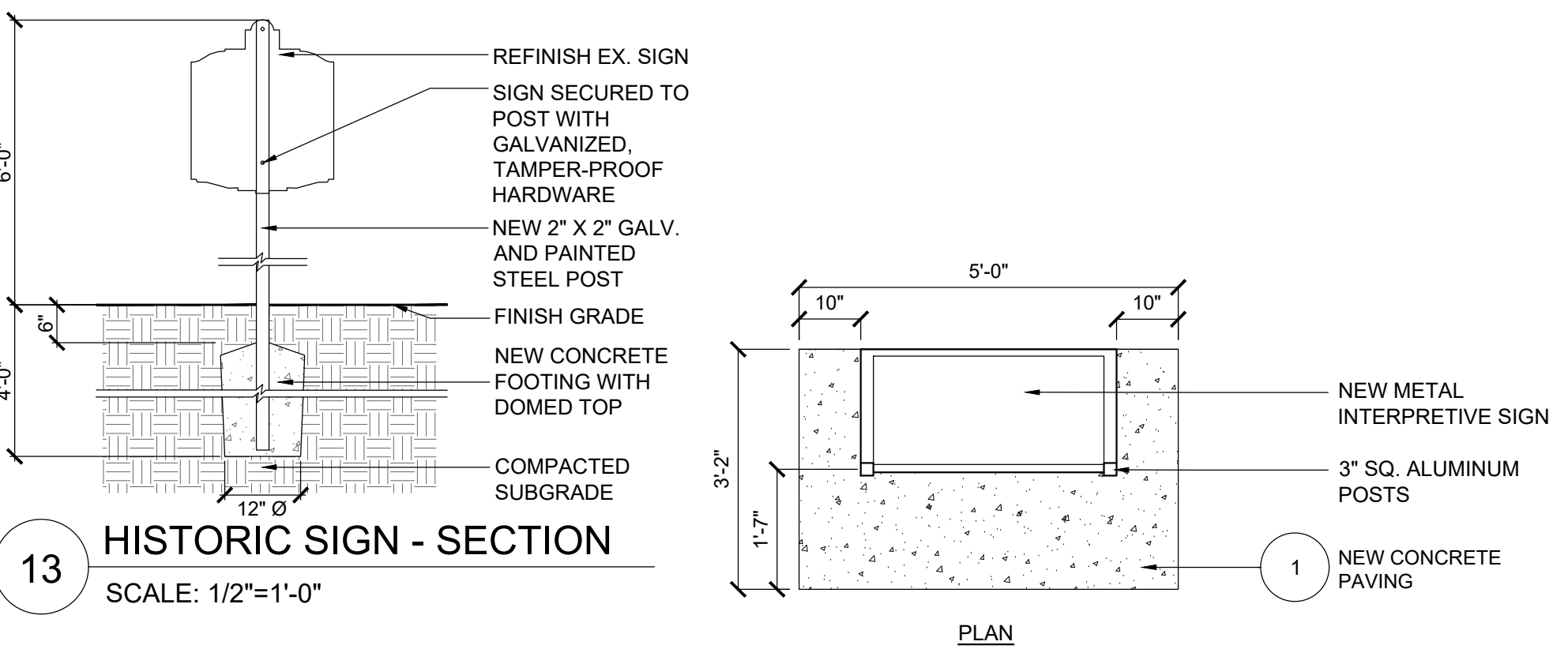
10 BENCH ON CONC. PAVING - SECTION
SCALE: 1"=1'-0"



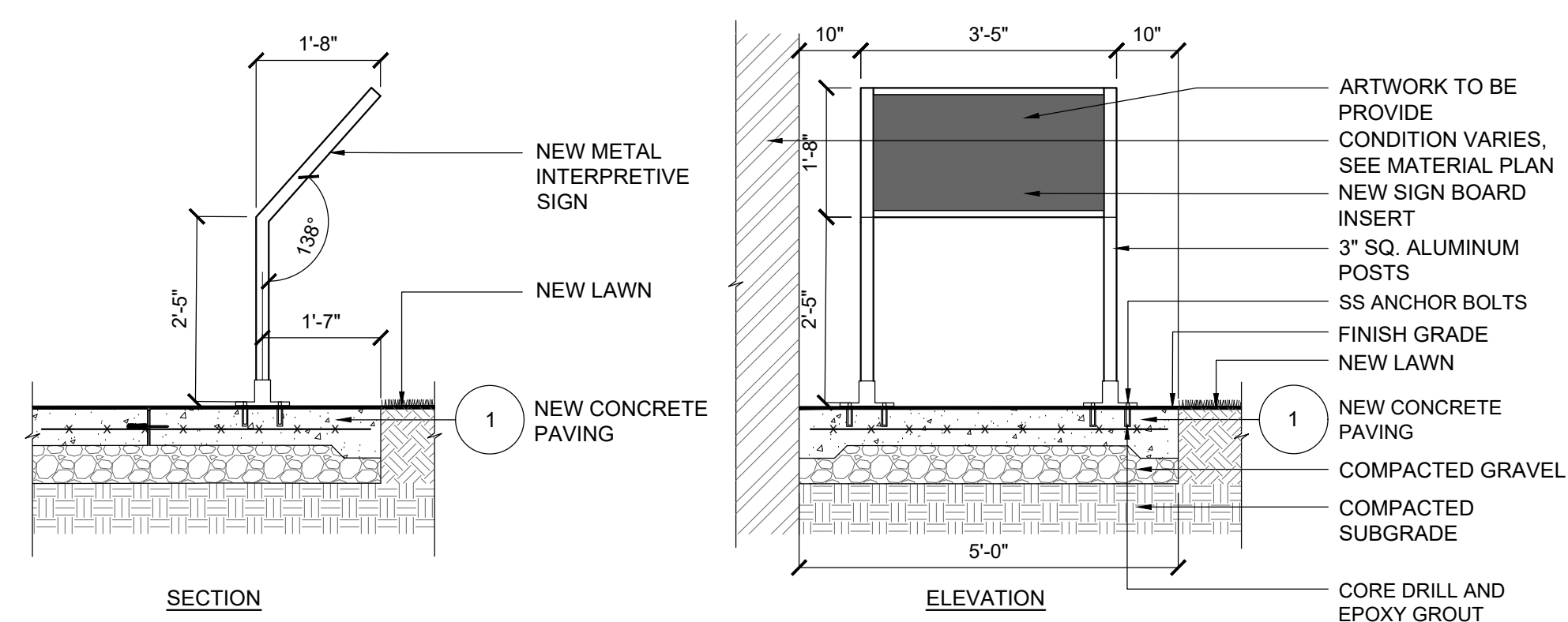
11 CONC. CURB RAMP WITH DETECTABLE WARNING PANEL
SCALE: 1/4"=1'-0"



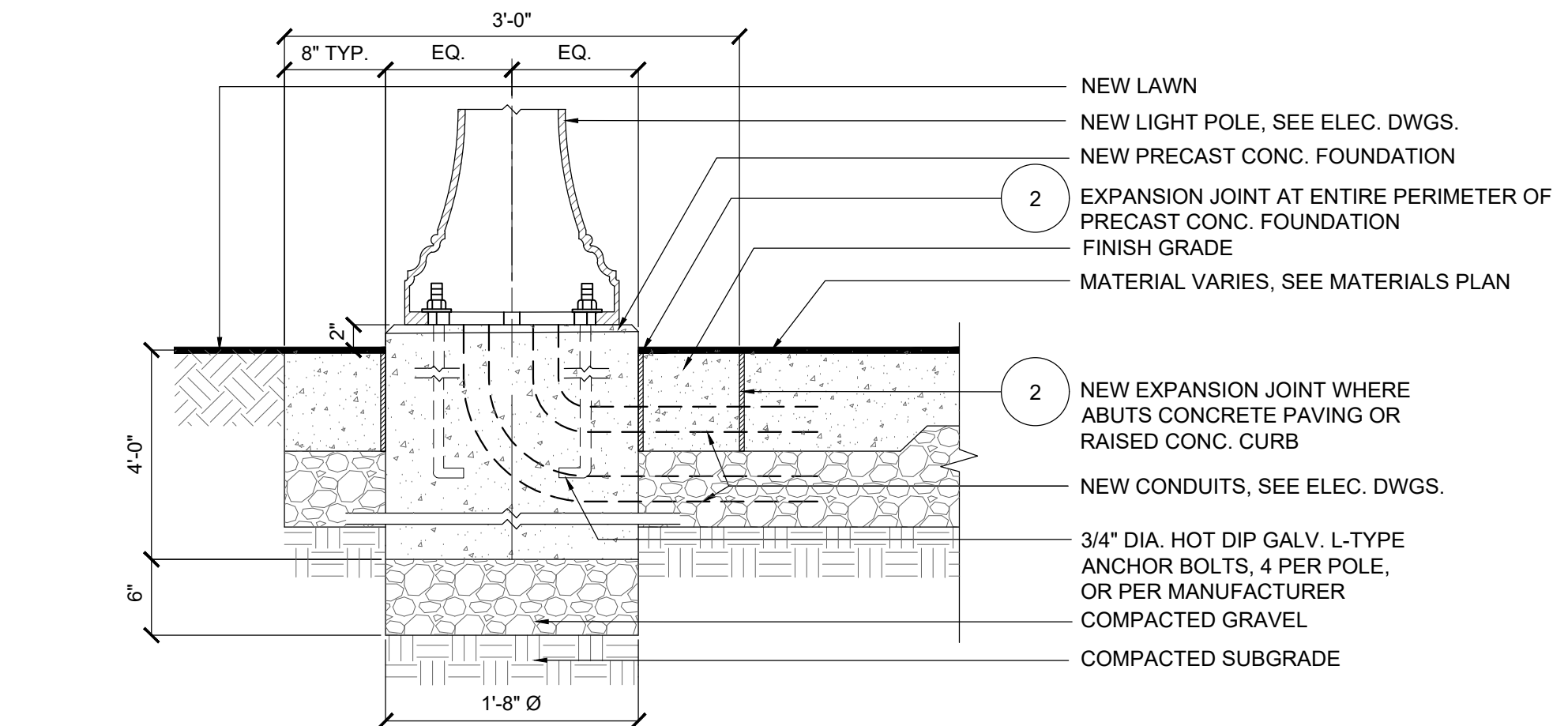
12 CONC. CURB RAMP WITH DETECTABLE WARNING PANEL - SECTION
SCALE: 3/4"=1'-0"



13 HISTORIC SIGN - SECTION
SCALE: 1/2"=1'-0"



14 INTERPRETIVE SIGN - PLAN, SECTION & ELEVATION
SCALE: 1/2"=1'-0"



15 LIGHT POLE FOOTING - SECTION
SCALE: 1"=1'-0"



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rdla

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NORTH

STAMP

LINCOLN SQUARE
IMPROVEMENTS
WORCESTER, MA

PROJECT

SITE DETAILS |
ADD ALTERNATE #1

DRAWING TITLE

CONTRACT NO.

DATE 06.19.24

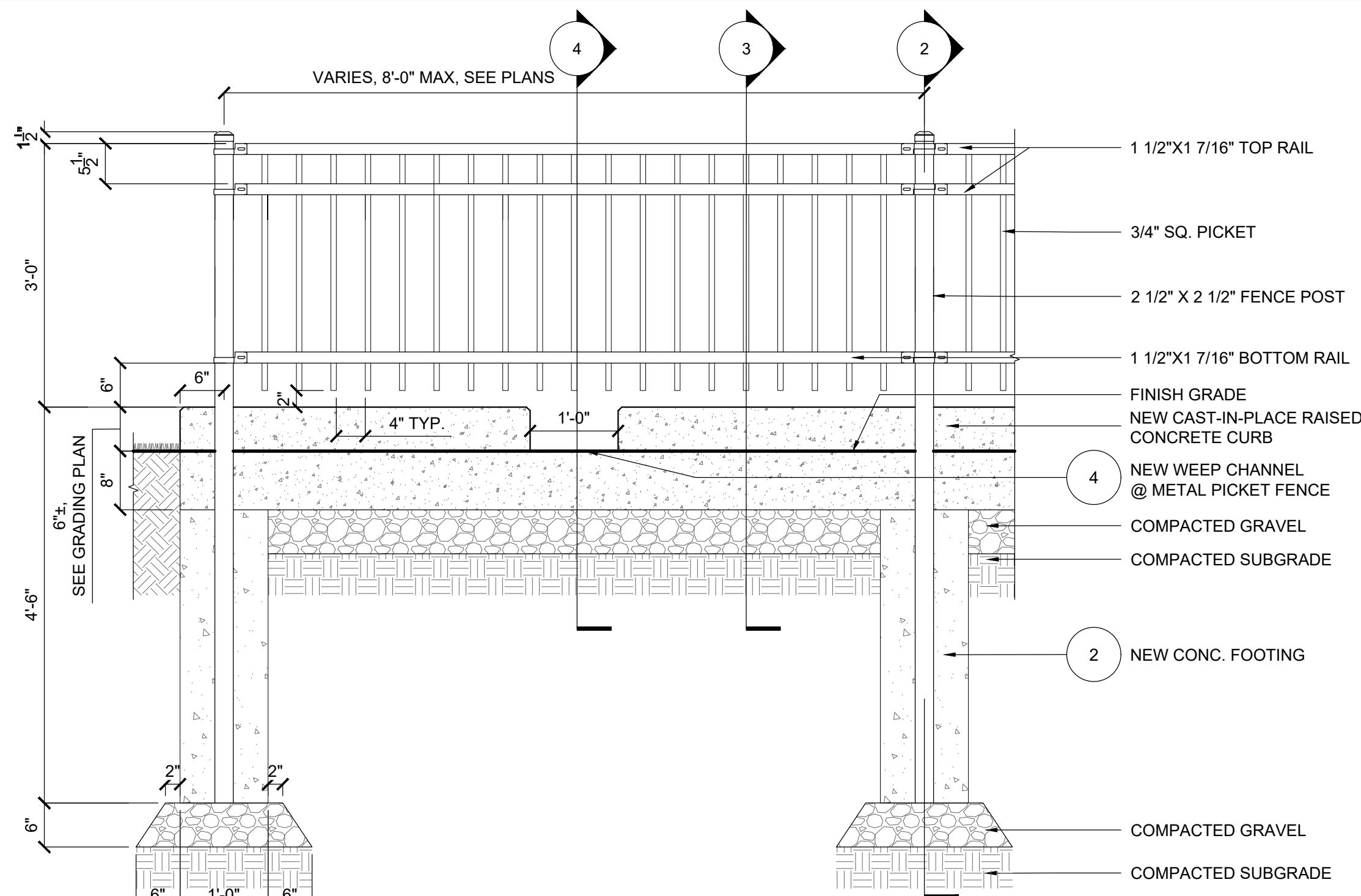
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CKD RD

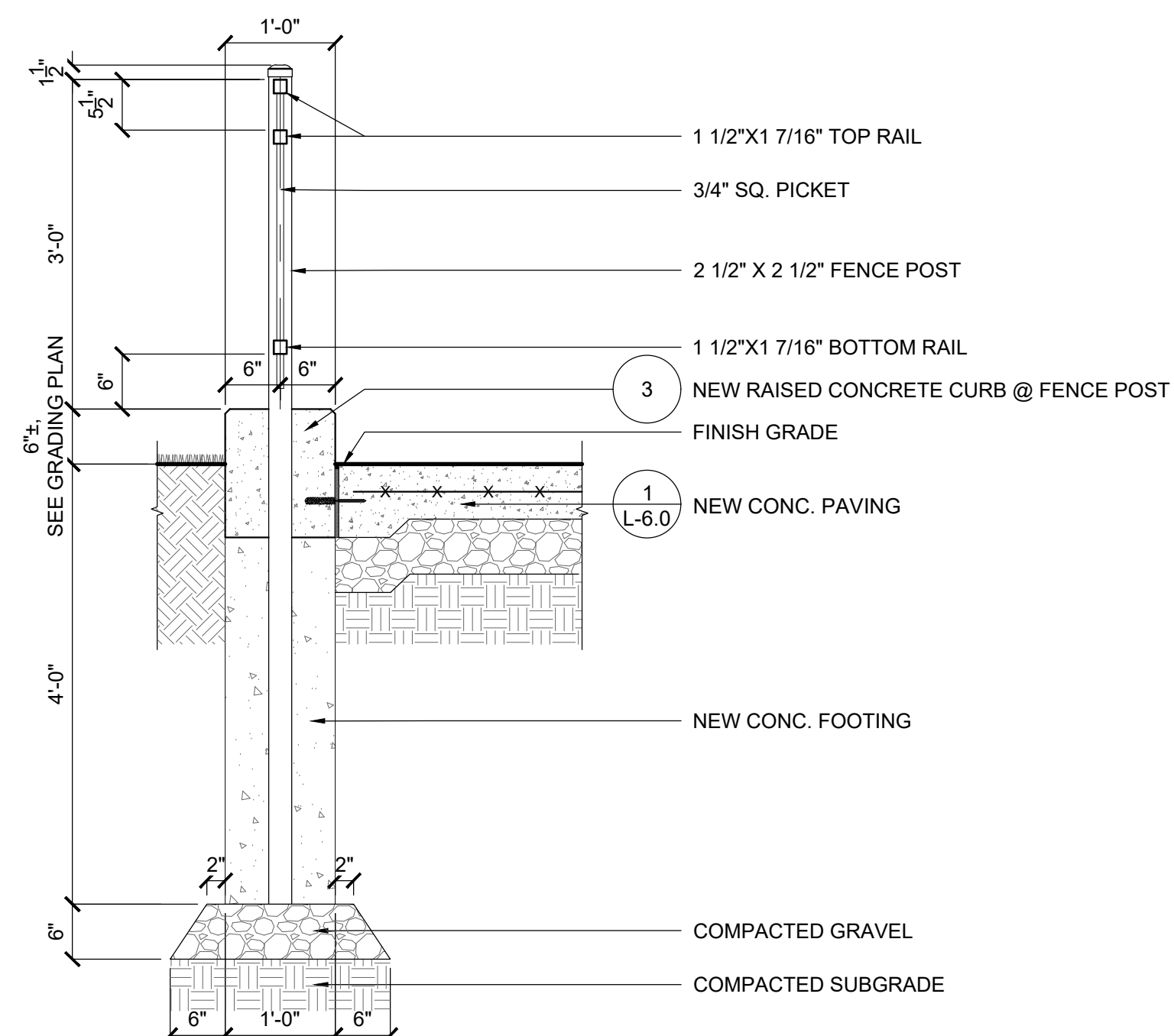
SCALE AS SHOWN

L-6.0

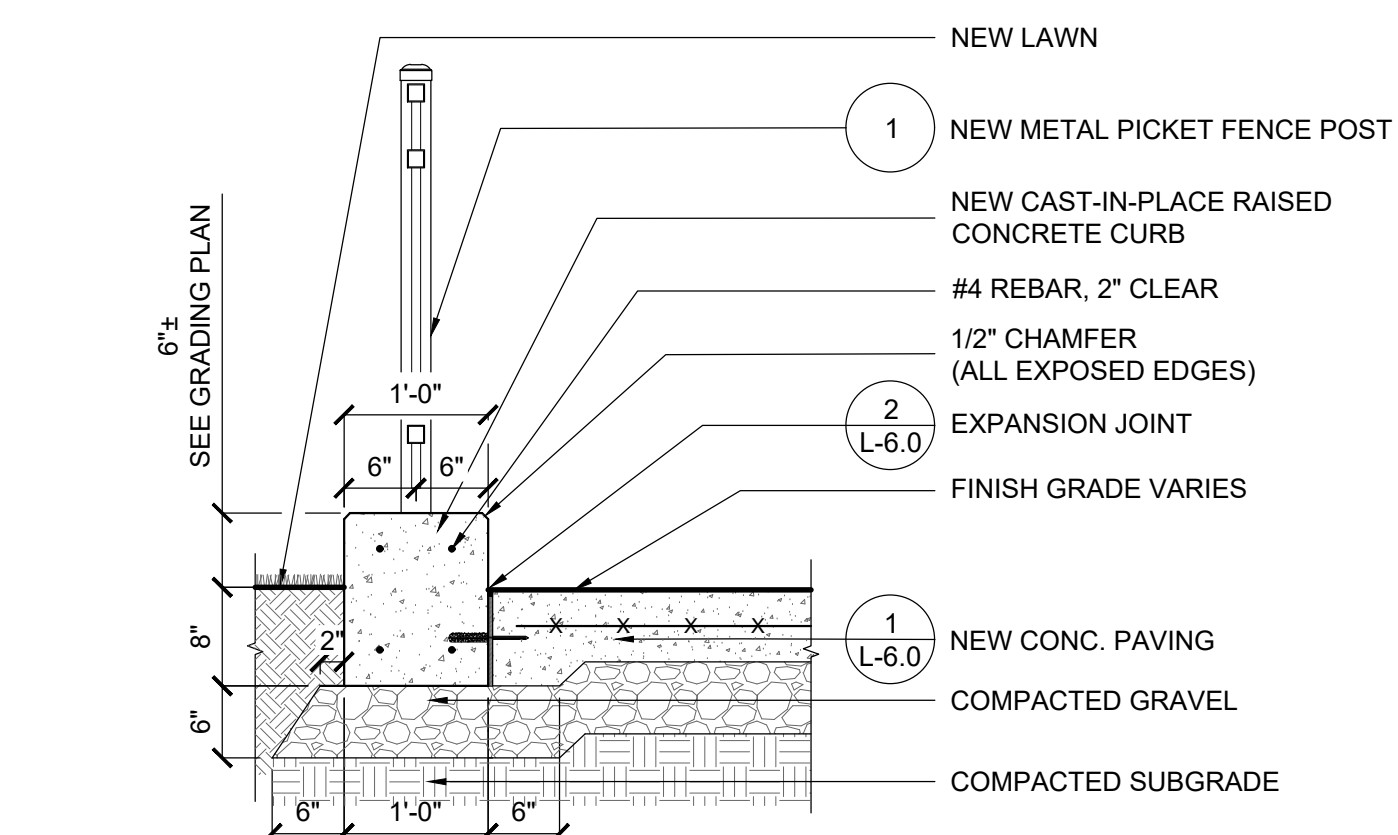
SHEET NO.



1 METAL PICKET FENCE - ELEVATION
SCALE: 3/4"=1'-0"

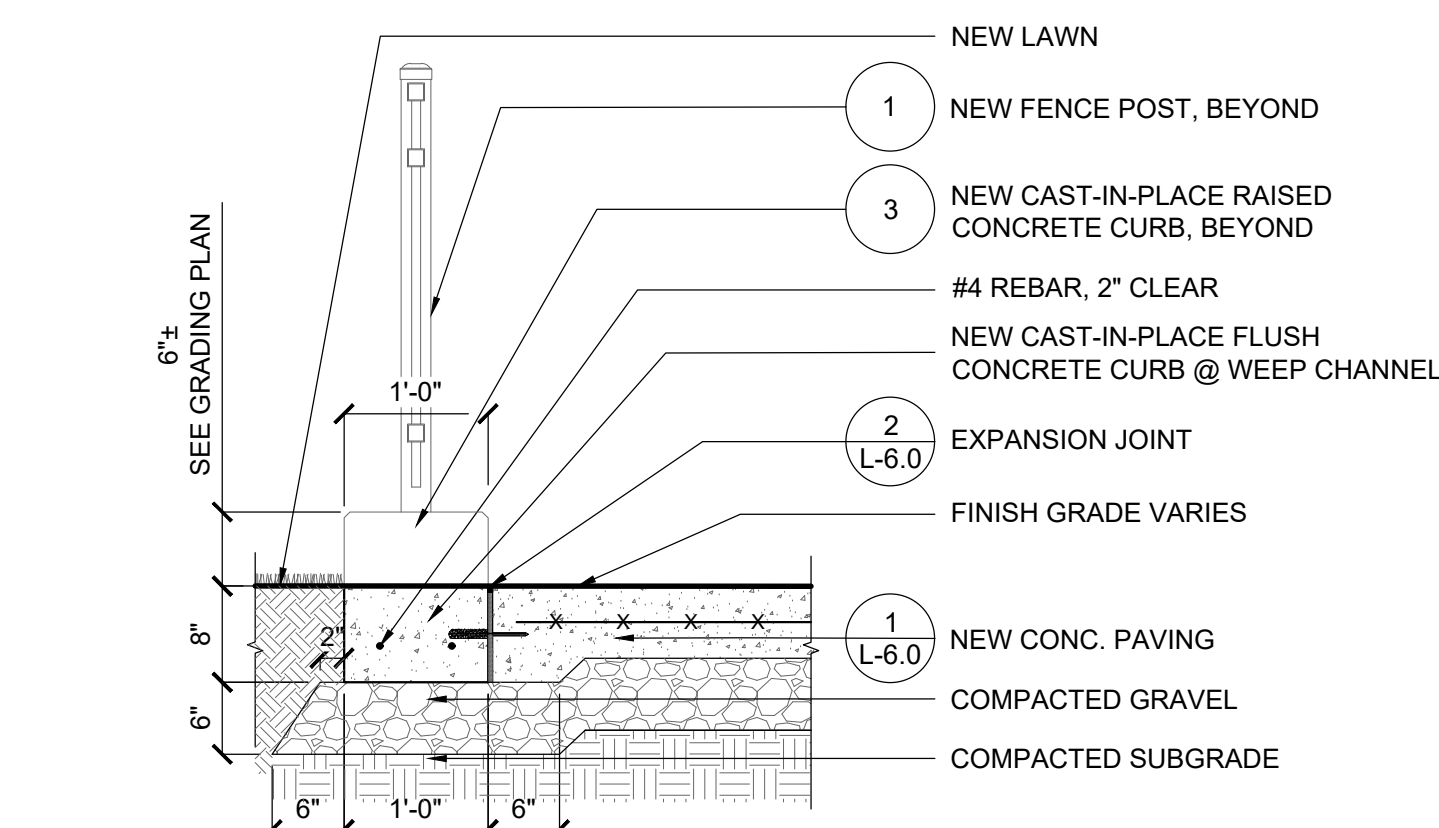
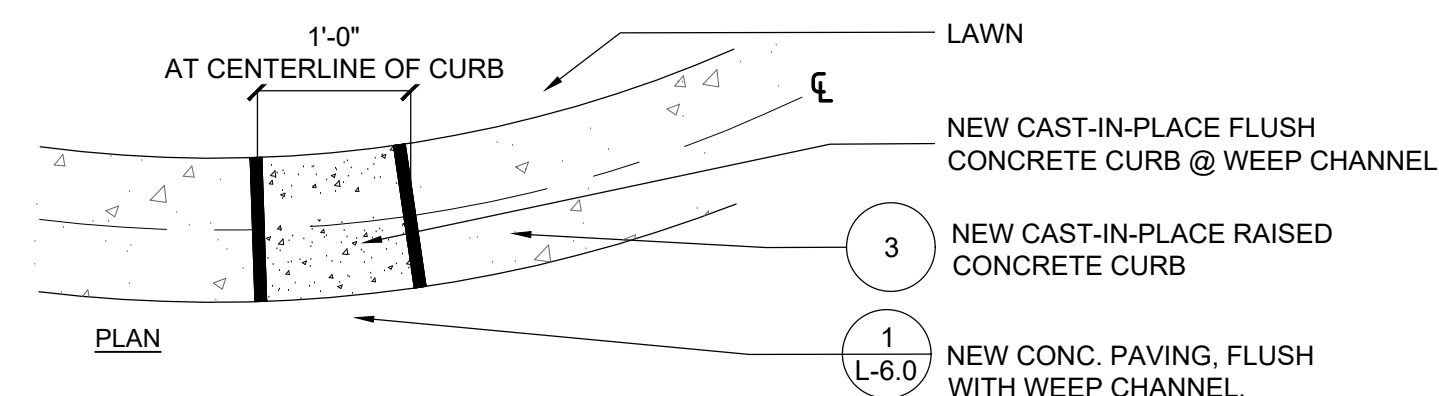


2 CONCRETE FOOTING @ FENCE POST - SECTION
SCALE: 3/4"=1'-0"

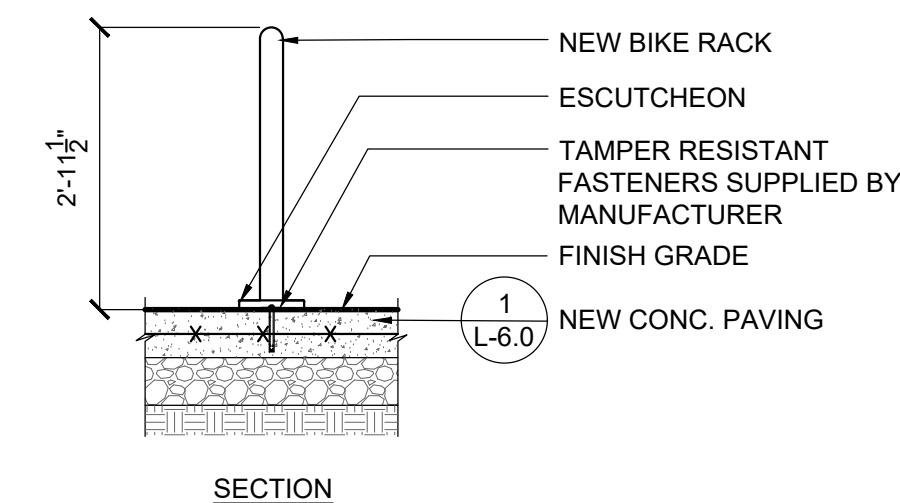


3 RAISED CONCRETE CURB @ FENCE POST - SECTION
SCALE: 3/4"=1'-0"

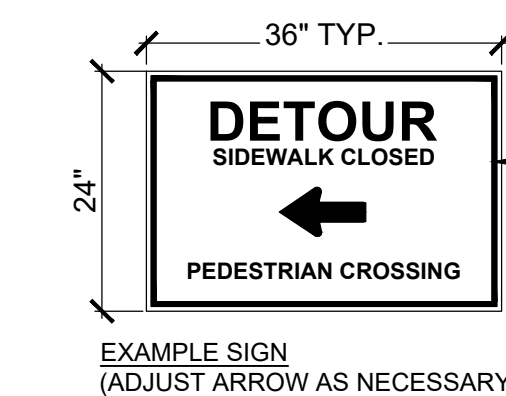
NOTE: FOR CLARITY, METAL PICKET FENCE NOT SHOWN IN THIS PLAN VIEW.



4 WEEP CHANNEL @ METAL PICKET FENCE- SECTION
SCALE: 3/4"=1'-0"



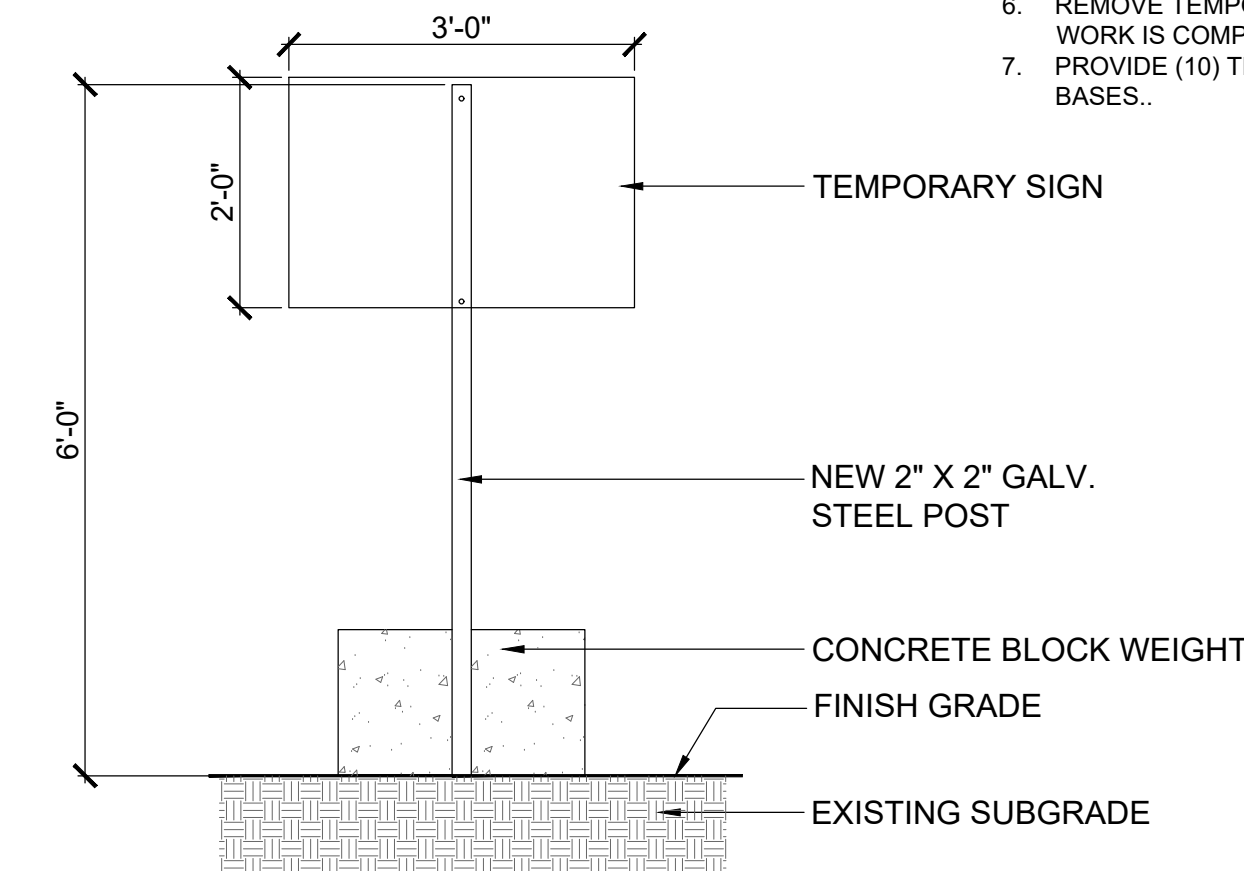
6 BIKE RACK ON CONC. PAVING - SECTION
SCALE: 1/2"=1'-0"



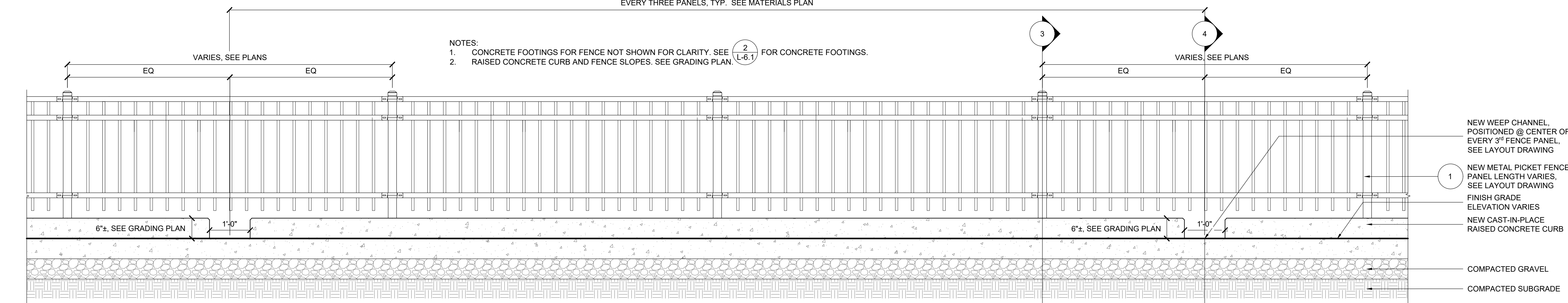
EXAMPLE SIGN
(ADJUST ARROW AS NECESSARY)

NOTES:

1. THE TYPICAL BACKGROUND COLOR: SAFETY ORANGE (R: 255, G: 121, B: 0), BORDER AND TEXT BLACK
2. THE SIGN'S DIMENSIONS ARE 24" X 36"
3. CONTRACTOR SHALL FASTEN SIGNS TO 2" SQ. GALV. STEEL TUBULAR POSTS. CONTRACTOR SHALL PROVIDE A SIGN PLAN AND COORDINATE LOCATION OF SIGNS WITH OWNER'S REPRESENTATIVE.
4. FASTEN SIGN TO EXISTING POSTS AS POSSIBLE.
5. REMOVE TEMPORARY SIGNS WHEN WORK IS COMPLETED.
6. PROVIDE (10) TEN SIGNS, POSTS, AND BASES.



7 CONSTRUCTION SIGNS
SCALE: 1/2"=1'-0"



5 WEEP CHANNEL @ METAL PICKET FENCE - SECTION
SCALE: 3/4"=1'-0"

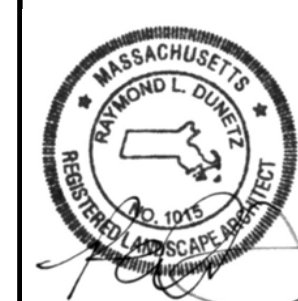
- NOTES:
1. CONCRETE FOOTINGS FOR FENCE NOT SHOWN FOR CLARITY. SEE (2 L-6.1) FOR CONCRETE FOOTINGS.
 2. RAISED CONCRETE CURB AND FENCE SLOPES. SEE GRADING PLAN.



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**LINCOLN SQUARE
IMPROVEMENTS**
WORCESTER, MA

PROJECT

**SITE DETAILS |
ADD ALTERNATE #1**

DRAWING TITLE

CONTRACT
NO.

DATE 06.19.24

DRAWN SD

CKD RD

SCALE AS SHOWN

L-6.1

SHEET NO.

DEMOLITION NOTES:

1. SITE PREPARATION AND DEMOLITION SHALL INCLUDE THOSE AREAS WITHIN THE LIMIT OF WORK LINE AS SHOWN ON THE CONTRACT DOCUMENTS.
2. ANY AREA OUTSIDE THE LIMIT OF WORK THAT IS DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
3. CONSULT ALL OF THE DRAWINGS AND SPECIFICATIONS FOR COORDINATION REQUIREMENTS BEFORE COMMENCING DEMOLITION.
4. THE CONTRACTOR SHALL COORDINATE SITE DEMOLITION EFFORTS WITH ALL TRADES THAT MAY BE AFFECTED BY THE WORK.
5. MEMORIAL AND FLAGPOLE SHALL BE REMOVED TO BASE MATERIAL AND FOOTINGS OR FOUNDATIONS AT LEAST 12 INCHES BELOW FINISHED GRADE AS REQUIRED TO FACILITATE CONSTRUCTION, AND LEGALLY DISPOSED OF OFFSITE BY CONTRACTOR. SEE S-DRAWINGS FOR CONCRETE FOUNDATION DEMOLITION INFORMATION.
6. UTILITY PIPES DESIGNATED TO BE ABANDONED IN PLACE SHALL BE PLUGGED AT THEIR ENDS WITH WATERTIGHT BRICK MASONRY OR CEMENT MORTAR WITH A MINIMUM THICKNESS OF 8 INCHES.
7. UTILITY PIPES DESIGNATED TO BE REMOVED SHALL CONSIST OF THE COMPLETE REMOVAL AND DISPOSAL OF THE ENTIRE LENGTH OF PIPE AND BACKFILL AND 95% COMPACTION OF THE VOID WITH ORDINARY BORROW. WHEN THE VOID IS WITHIN THE FOOTPRINT OF THE NEW BUILDING, GRAVEL BORROW SHALL BE USED TO BACKFILL THE VOID.
8. UTILITY STRUCTURES DESIGNATED TO BE ABANDONED IN PLACE SHALL HAVE THEIR CAST IRON CASTINGS REMOVED AND DISPOSED, INLET AND OUTLET PIPES PLUGGED, THE BOTTOM OF THE STRUCTURES SHALL BE BROKEN, THE VOID OF THE STRUCTURES SHALL BE BACKFILLED AND COMPACTED TO 95% WITH ORDINARY BORROW OR FLOWABLE FILL, AND THE TOP OF THE STRUCTURE SHALL BE REMOVED SO THAT IT IS AT LEAST 36 INCHES BELOW FINISH GRADE.
9. UTILITY STRUCTURES DESIGNATED TO BE REMOVED SHALL CONSIST OF THE REMOVAL AND DISPOSAL OF CAST IRON CASTINGS, PLUGGING OF INLET AND OUTLET PIPES, REMOVAL OF THE STRUCTURE, AND BACKFILL AND 95% COMPACTION OF THE VOID WITH ORDINARY BORROW. WHEN HE VOID IS WITHIN THE FOOTPRINT OF THE NEW BUILDING, GRAVEL BORROW SHALL BE USED TO BACKFILL THE VOID.
10. ALL DEBRIS GENERATED DURING SITE PREPARATION ACTIVITIES SHALL BE LEGALLY DISPOSED OF OFFSITE.
11. AT ALL LOCATIONS WHERE EXISTING CURBING, CONCRETE PAVEMENT OR BITUMINOUS CONCRETE ROADWAY ABUTS NEW CONSTRUCTION, THE EDGE OF THE EXISTING CURB OR PAVEMENT SHALL BE SAW CUT TO A CLEAN, SMOOTH EDGE.
12. EXTEND DESIGNATED LIMIT OF WORK AS NECESSARY TO ACCOMPLISH ROUGH GRADING, EROSION CONTROL, TREE PROTECTION, AND SITE WORK AS REQUIRED BY THESE DRAWINGS AND SPECIFICATIONS.
13. THE CONTRACTOR SHALL REMOVE FROM THE SITE ALL RUBBISH AND DEBRIS FOUND THEREON. STORAGE OF SUCH MATERIALS ON THE PROJECT SITE WILL NOT BE PERMITTED. THE CONTRACTOR SHALL LEAVE THE SITE IN SAFE, CLEAN, AND LEVEL CONDITION UPON COMPLETION OF THE SITE DEMOLITION WORK.
14. THE CONTRACTOR SHALL REMOVE FROM THE AREA OF CONSTRUCTION PAVEMENT, CONCRETE, CURBING, POLES AND FOUNDATIONS, ISLANDS, TREE BERMS AND OTHER FEATURES WITHIN THE LIMITS OF CONSTRUCTION AS REQUIRED TO ACCOMMODATE NEW CONSTRUCTION WHETHER SPECIFIED ON THE DRAWINGS OR NOT.

EROSION AND SEDIMENT CONTROL NOTES:

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE LATEST EDITION OF THE "MASSACHUSETTS EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS" PREPARED BY DEPARTMENT OF ENVIRONMENTAL PROTECTION, BUREAU OF RESOURCE PROTECTION, AND THE CURRENT NPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES.
2. MEANS OF EROSION AND SEDIMENT PROTECTION AS NOTED ON THE DRAWINGS INDICATE MINIMUM RECOMMENDED PROVISIONS. THE CONTRACTOR IS RESPONSIBLE FOR FINAL SELECTION AND PLACEMENT OF EROSION AND SEDIMENTATION CONTROLS BASED ON ACTUAL SITE CONDITIONS AND CONSTRUCTION CONDITIONS. ADDITIONAL MEANS OF PROTECTION SHALL BE PROVIDED BY THE CONTRACTOR AS REQUIRED FOR CONTINUED OR UNFORESEEN EROSION PROBLEMS, OR AS DIRECTED BY CONTROLLING MUNICIPAL AUTHORITIES, AT NO ADDITIONAL EXPENSE TO THE OWNER.
3. AN EROSION CONTROL BARRIER SHALL BE INSTALLED ALONG THE EDGE OF PROPOSED DEVELOPMENT AS INDICATED IN THE PLAN PRIOR TO COMMENCEMENT OF DEMOLITION OR CONSTRUCTION OPERATIONS.
4. SEDIMENT CONTROL MEASURES SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF AND DURING ALL PHASES OF CONSTRUCTION AND BE CONSTRUCTED PRIOR TO AND IMMEDIATELY AFTER ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON THE SITE.
5. AFTER ANY SIGNIFICANT RAINFALL (GREATER THAN 0.25 INCHES OF RAINFALL WITHIN 24 HOURS), SEDIMENT CONTROL STRUCTURES SHALL BE INSPECTED FOR INTEGRITY. ANY DAMAGE SHALL BE CORRECTED IMMEDIATELY.
6. PERIODIC INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES SHALL BE PROVIDED TO ENSURE THAT THE INTENDED PURPOSE IS ACCOMPLISHED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SEDIMENT LEAVING THE LIMIT OF WORK. SEDIMENT CONTROL MEASURES SHALL BE IN WORKING CONDITION AT THE END OF EACH WORKING DAY.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING SEDIMENT FROM ENTERING ANY STORM DRAINAGE SYSTEM AND FROM BEING CONVEYED TO ANY WETLAND RESOURCE AREA, PUBLIC WAYS, ABUTTING PROPERTY, OR OUTSIDE OF THE PROJECT LIMITS.
8. THE CONTRACTOR SHALL PROTECT ALL DRAINAGE SWALES AND GROUND SURFACES WITHIN THE LIMIT OF WORK FROM EROSION CONDITIONS. STRAW BALE, CRUSHED STONE OR EQUIVALENT CHECK DAMS ARE TO BE PROVIDED AT A MAXIMUM OF TWO HUNDRED (200) FOOT SPACING, OR LESS AS SITE-SPECIFIC CONDITIONS WARRANT, WITHIN ALL DRAINAGE SWALES AND DITCHES AND AT UPSTREAM SIDES OF ALL DRAINAGE INLETS.
9. ALL STOCK PILES SHALL BE PROTECTED AND LOCATED A MINIMUM OF 100' FROM EXISTING WETLAND RESOURCE AREAS & WITHIN THE LIMIT OF WORK.
10. ANY SEDIMENT TRACKED ONTO PAVED AREAS SHALL BE SWEEPED AT THE END OF EACH WORKING DAY.
11. ALL SEDIMENT RETAINED BY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE LEGALLY DISPOSED OF OFFSITE.
12. TEMPORARY DIVERSION DITCHES, PERMANENT DITCHES, CHANNELS, EMBANKMENTS, AND ANY DENUDED SURFACE THAT WILL BE EXPOSED FOR A PERIOD OF 14 CALENDAR DAYS OR MORE SHALL BE CONSIDERED CRITICAL VEGETATION AREAS. THESE AREAS SHALL BE STABILIZED/PROTECTED WITH APPROPRIATE EROSION CONTROL MATTING OR OTHER EROSION CONTROL METHODS.
13. DUST SHALL BE CONTROLLED BY WATERING OR OTHER APPROVED METHODS AS DIRECTED BY THE PERMITTING AUTHORITY OR OWNER.
14. THE CONTRACTOR SHALL USE TEMPORARY SEEDING, MULCHING, OR OTHER APPROVED STABILIZATION MEASURES TO PROTECT EXPOSED AREAS DURING PROLONGED CONSTRUCTION OR OTHER LAND DISTURBANCE. STOCKPILES THAT WILL BE EXPOSED FOR LONGER THAN 14 DAYS SHALL BE STABILIZED.
15. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL EROSION AND SEDIMENT CONTROLS AT THE COMPLETION OF SITE CONSTRUCTION, BUT ONLY WHEN DIRECTED BY THE CITY OF WORCESTER CONSERVATION AGENT. STABILIZE OR SEED BARE AREAS LEFT AFTER EROSION CONTROL REMOVAL.
16. ALL EROSION AND SEDIMENT CONTROLS FROM ENABLING PHASE SHALL BE MAINTAINED AS NEEDED.

EARTH MOVING NOTES:

1. ALL TOPSOIL ENCOUNTERED WITHIN THE WORK AREA SHALL BE STRIPPED TO ITS FULL DEPTH AND STOCKPILED FOR REUSE. EXCESS TOPSOIL SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE DIRECTED BY THE OWNER. TOPSOIL PILES SHALL REMAIN SEGREGATED FROM EXCAVATED SUBSURFACE SOIL MATERIALS.
2. ALL PROPOSED TOP OF CURB ELEVATIONS ARE SIX INCHES (6") ABOVE BOTTOM OF CURB ELEVATIONS UNLESS OTHERWISE NOTED.
3. THE CONTRACTOR SHALL BLEND NEW GRADING SMOOTHLY INTO EXISTING GRADING AT LIMITS OF GRADING.
4. WHERE NEW PAVING MEETS EXISTING PAVING, MEET LINE AND GRADE OF EXISTING PAVING WITH SMOOTH TRANSITION BETWEEN EXISTING AND NEW SURFACES.
5. THE CONTRACTOR SHALL VERIFY EXISTING GRADES IN THE FIELD AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE OWNER'S REPRESENTATIVE PRIOR TO STARTING WORK.
6. SURPLUS MATERIALS SHALL BE REMOVED FROM THE SITE UNLESS DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE. REFER TO EARTHWORK SPECIFICATIONS.
7. ANY AREAS OUTSIDE OF THE LIMIT OF WORK THAT ARE DISTURBED SHALL BE RESTORED BY THE CONTRACTOR TO THE PRE-CONSTRUCTION CONDITION/GRADE AT NO COST TO THE OWNER.
8. EXCAVATION REQUIRED WITHIN PROXIMITY OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO ADDITIONAL COST TO OWNER.

GENERAL NOTES:

1. TOPOGRAPHIC DATA, PROPERTY LINE INFORMATION, AND EXISTING SITE FEATURES WERE OBTAINED FROM A PLAN ENTITLED "EXISTING CONDITIONS PLAN", PREPARED BY NITSCH ENGINEERING BASED ON AN ON-THE-GROUND INSTRUMENT SURVEY DATED 2/25/2021.
2. FLOODPLAIN INFORMATION WAS OBTAINED FROM THE FLOOD INSURANCE RATE MAP (FIRM) NO. 25027C0018E. THE SITE IS IN ZONE X, AN AREA OF MINIMAL FLOOD HAZARD.
3. THE CONTRACTOR SHALL COMPLY WITH MASSACHUSETTS GENERAL LAWS CHAPTER 82, SECTION 40, AS AMENDED, WHICH STATES THAT NO ONE MAY EXCAVATE IN THE COMMONWEALTH OF MASSACHUSETTS EXCEPT IN AN EMERGENCY WITHOUT 72 HOURS NOTICE, EXCLUSIVE OF SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS, TO NATURAL GAS PIPELINE COMPANIES, AND MUNICIPAL UTILITY DEPARTMENTS THAT SUPPLY GAS, ELECTRICITY, TELEPHONE, OR CABLE TELEVISION SERVICE IN OR TO THE CITY OR TOWN WHERE THE EXCAVATION IS TO BE MADE. THE CONTRACTOR SHALL CALL "DIG SAFE" AT 1-888-DIG-SAFE.
4. THE CONTRACTOR SHALL COMPLY WITH MASSACHUSETTS GENERAL LAWS CHAPTER 82A, ALSO REFERRED TO AS JACKIE'S LAW, AS DETAILED IN SECTION 520 CMR 14.00 OF THE CODE OF MASSACHUSETTS REGULATIONS.
5. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES, REGULATIONS AND SAFETY CODES IN THE CONSTRUCTION OF ALL IMPROVEMENTS.
6. THE LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES ARE APPROXIMATE AND ALL UTILITIES MAY NOT BE SHOWN. PRESENCE AND LOCATIONS OF ALL UTILITIES WITHIN THE LIMIT OF WORK MUST BE DETERMINED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING AND CONTACTING THE CONTROLLING AUTHORITIES AND/OR UTILITY COMPANIES RELATIVE TO THE LOCATIONS AND ELEVATIONS OF THEIR LINES. THE CONTRACTOR SHALL KEEP A RECORD OF ANY DISCREPANCIES OR CHANGES IN THE LOCATIONS OF ANY UTILITIES SHOWN OR ENCOUNTERED DURING CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER AND NITSCH ENGINEERING. ANY DAMAGE RESULTING FROM THE FAILURE OF THE CONTRACTOR TO MAKE THESE DETERMINATIONS AND CONTACTS SHALL BE BORNE BY THE CONTRACTOR.
7. THE CONTRACTOR SHALL, THROUGHOUT CONSTRUCTION, TAKE ADEQUATE PRECAUTIONS TO PROTECT ALL WALKS, GRADING, SIDEWALKS AND SITE DETAILS OUTSIDE OF THE LIMIT OF WORK AS DEFINED ON THE DRAWINGS AND SHALL REPAIR AND REPLACE OR OTHERWISE MAKE GOOD AS DIRECTED BY THE ENGINEER OR OWNER'S DESIGNATED REPRESENTATIVE ANY SUCH OR OTHER DAMAGE SO CAUSED.
8. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AND ALL CONSTRUCTION MEANS AND METHODS.
9. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE SITE AND CONSTRUCTION DOCUMENTS TO DEVELOP A THOROUGH UNDERSTANDING OF THE PROJECT, INCLUDING ANY SPECIAL CONDITIONS AND CONSTRAINTS.
10. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE PROJECT SITE AND TO VERIFY ALL CONDITIONS IN THE FIELD AND REPORT DISCREPANCIES BETWEEN PLANS AND ACTUAL CONDITIONS TO THE OWNER OR OWNER'S REPRESENTATION IMMEDIATELY.
11. THE CONTRACTOR SHALL CONDUCT ALL NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN ALL NECESSARY CONSTRUCTION PERMITS.
12. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE ESTABLISHMENT AND USE OF ALL VERTICAL AND HORIZONTAL CONSTRUCTION CONTROLS.
13. ELEVATIONS REFER TO NAVD 1988 BASED ON GPS RTK OBSERVATIONS.
14. FOR SOIL INFORMATION REFER TO GEOTECHNICAL REPORT.

UTILITY NOTES:

1. ALL UTILITY CONNECTIONS ARE SUBJECT TO THE APPROVAL OF, AND GRANTING OF PERMITS BY, THE LOCAL MUNICIPALITY. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL PERMITS AND APPROVALS RELATED TO UTILITY WORK PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR OBTAINING ALL PERMISSIONS FOR, AND FOR CONDUCTING ALL PREPARATIONS RELATED TO, WORK AFFECTING ANY UTILITIES WITHIN THE JURISDICTION OF ANY NON-MUNICIPAL UTILITY COMPANY, INCLUDING BUT NOT LIMITED TO ELECTRIC, TELEPHONE, AND/OR GAS. THE CONTRACTOR SHALL NOTIFY ALL APPROPRIATE AGENCIES, DEPARTMENTS, AND UTILITY COMPANIES, IN WRITING, AT LEAST 7 DAYS (OR PER UTILITY COMPANY REQUIREMENT) AND NOT MORE THAN 30 DAYS PRIOR TO ANY CONSTRUCTION.
3. THE CONTRACTOR SHALL MAINTAIN UTILITIES SERVICING BUILDINGS AND FACILITIES WITHIN OR OUTSIDE THE PROJECT LIMIT UNLESS THE INTERRUPTION OF SERVICE IS COORDINATED WITH THE OWNER.
4. ALL WATER, SEWER, AND DRAIN WORK SHALL BE PERFORMED ACCORDING TO THE REQUIREMENTS AND STANDARD SPECIFICATIONS OF THE LOCAL MUNICIPALITY.
5. GAS, TELECOMMUNICATIONS AND ELECTRIC SERVICES ARE TO BE DESIGNED BY EACH UTILITY COMPANY IN COORDINATION WITH THE MECHANICAL, ELECTRIC, AND PLUMBING CONSULTANTS.
6. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES OF NEW UTILITIES WITH GAS, TELECOMMUNICATION AND ELECTRICAL SERVICES.
7. INSTALL WATER LINES WITH A MINIMUM OF FIVE FEET OF COVER AND A MAXIMUM OF SEVEN FEET COVER FROM THE FINAL DESIGN GRADES.
8. MAINTAIN 10 FEET HORIZONTAL SEPARATION AND 18 INCHES VERTICAL SEPARATION (WATER OVER SEWER) BETWEEN SEWER AND WATER LINES. WHEREVER THERE IS LESS THAN 10 FEET OF HORIZONTAL SEPARATION AND 18 INCHES OF VERTICAL SEPARATION BETWEEN A PROPOSED OR EXISTING SEWER LINE TO REMAIN AND A PROPOSED OR EXISTING WATER LINE TO REMAIN BOTH WATER MAIN AND SEWER MAIN SHALL BE CONSTRUCTED OF MECHANICAL JOINT CEMENT LINED DUCTILE IRON PIPE FOR A DISTANCE OF 10- FEET ON EITHER SIDE OF THE CROSSING. ONE (1) FULL LENGTH OF WATER PIPE SHALL BE CENTERED OVER THE SEWER AT THE CROSSING.
9. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES EXCEPT THOSE NOTED TO BE ABANDONED AND/OR REMOVED & DISPOSED.
10. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR TRENCHING, BACKFILLING, AND SURFACE RESTORATION FOR GAS UTILITY SYSTEMS.
11. ALL ONSITE UTILITIES SHALL BE INSTALLED UNDERGROUND UNLESS OTHERWISE NOTED.
12. ALL EXISTING AND PROPOSED MANHOLE FRAMES, COVERS, VALVES, CLEANOUTS, CASTINGS, ETC. SHALL BE RAISED TO FINISHED GRADE PRIOR TO FINAL GRADING AND PAVING CONSTRUCTION.
13. ALL GRATES IN WALKWAYS SHALL BE ADA COMPLIANT.
14. DRAINAGE TO BE COORDINATED AND INSTALLED AFTER AGGREGATE PIERS.

PROPOSED LEGEND

	LIMIT OF WORK
	EXISTING UTILITY TO BE ABANDONED, REMOVED AND DISPOSED IF IN CONFLICT WITH NEW SITE IMPROVEMENTS, OR AS INDICATED ON DRAWINGS
	EROSION CONTROL BARRIER
	CONSTRUCTION FENCE
	DOMESTIC WATER PIPE
	FIRE PROTECTION PIPE
	SANITARY SEWER PIPE
	STORM DRAIN PIPE
	GAS PIPE
	ELECTRIC DUCTBANK
	TELECOM DUCTBANK
	INLET PROTECTION
	MATCH LINE
	CENTERLINE
	CLEANOUT
	AREA DRAIN
	ACCESS BASIN
	DRAIN MANHOLE
	WATER QUALITY STRUCTURE
	CATCH BASIN
	DOUBLE CATCH BASIN
	WATER QUALITY INLET
	SEWER MANHOLE
	TELECOM MANHOLE
	ELECTRIC MANHOLE
	WATER VALVE
	FIRE HYDRANT

ABBREVIATIONS

AB	ACCESS BASIN
AD	AREA DRAIN
BC	BOTTOM OF CURB ELEVATION
BW	BOTTOM OF WALL ELEVATION
CB	CATCH BASIN
CCB	CAPE COD BERM
CI	CAST IRON
CJ	CONTROL JOINT
CL	CENTER LINE
CO	CLEANOUT
COP	CENTER OF PIPE
CP	CARRIER PIPE
CPP	CORRUGATED POLYETHYLENE PIPE
DCB	DOUBLE CATCH BASIN
DI	DUCTILE IRON PIPE CEMENT LINED
DMH	DRAIN MANHOLE
EHH	ELECTRIC HANDHOLE
EJ	EXPANSION JOINT
EGI	EXTERIOR GREASE INTERCEPTOR
EMH	ELECTRIC MANHOLE
FD	FOUNDATION DRAIN
FFE	FINISHED FLOOR ELEVATION
HP	HIGH POINT
HYD	FIRE HYDRANT
INV	INVERT ELEVATION
LF	LINEAR FEET
LOW	LIMIT OF WORK
LP	LOW POINT
LW	LAB WASTE
M&P	MAINTAIN AND PROTECT
NIC	NOT IN CONTRACT
OC	ON CENTER
OCS	OUTLET CONTROL STRUCTURE
PD	PERIMETER DRAIN
PERF	PERFORATED
PVC	POLYVINYL CHLORIDE PIPE
R&D	REMOVE AND DISPOSE
R&R	REMOVE AND RESET
R&S	REMOVE AND STOCKPILE
RD	ROOF DRAIN
RIM	RIM ELEVATION
SMH	SEWER MANHOLE
SS	SEWER SERVICE
TC	TOP OF CURB ELEVATION
TW	TOP OF WALL ELEVATION
TSW	TOP OF SEAT WALL
THH	TELECOM HANDHOLE
TMH	TELECOM MANHOLE
TOP	TOP OF PIPE
TOD	TOP OF DUCT BANK
TYP	TYPICAL
UD	UNDERDRAIN
USD	UNDERSLAB DRAIN
VGC	VERTICAL GRANITE CURB
WQI	WATER QUALITY INLET
WQS	WATER QUALITY STRUCTURE
WV	WATER VALVE



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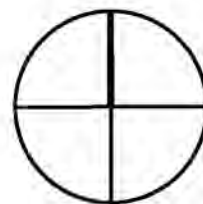
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LINCOLN SQUARE
IMPROVEMENTS

WORCESTER, MA

PROJECT

GENERAL NOTES

DRAWING TITLE

CONTRACT
NO.

DATE 03.15.24

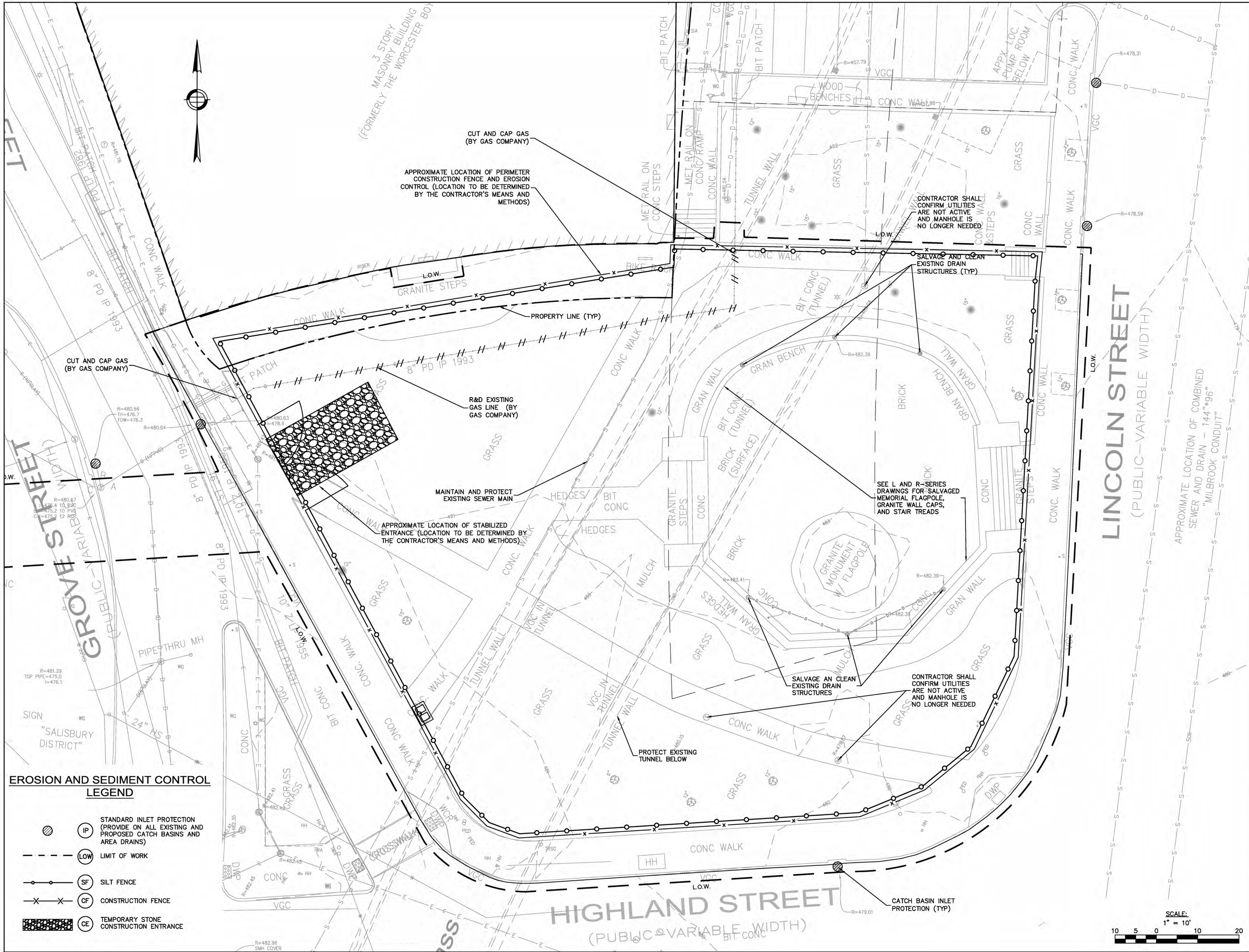
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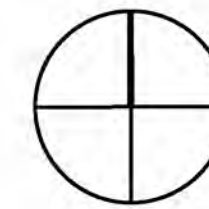
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LINCOLN SQUARE
IMPROVEMENTS
WORCESTER, MA

PROJECT
UTILITY DEMOLITION AND
EROSION AND SEDIMENT
CONTROL PLAN

DRAWING TITLE
CONTRACT
NO.

DATE 03.15.24

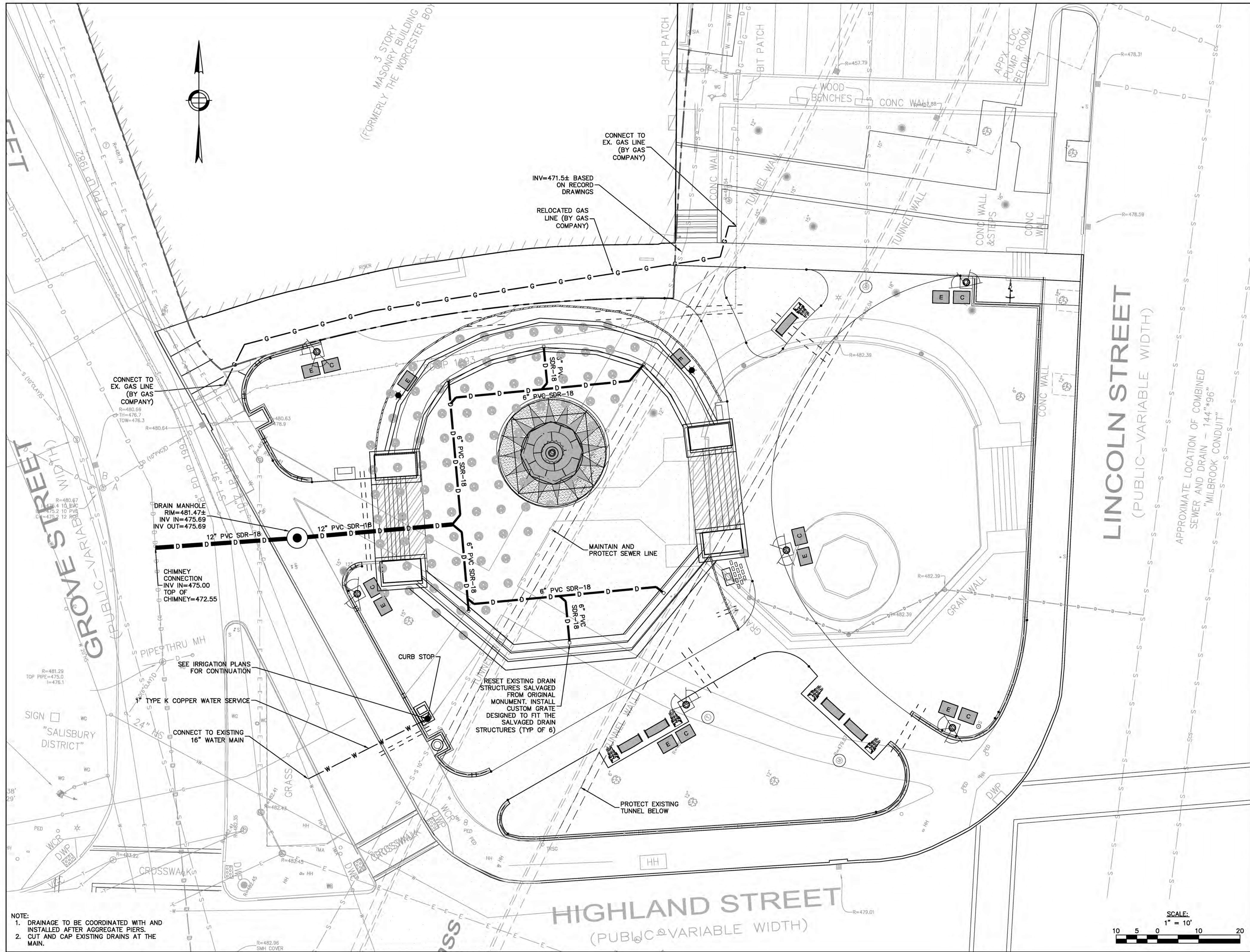
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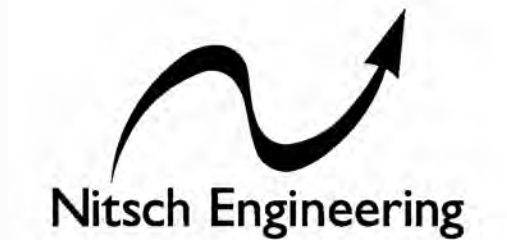
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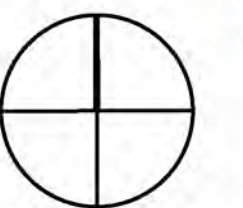


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**LINCOLN SQUARE
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PROJECT

SITE UTILITY PLAN

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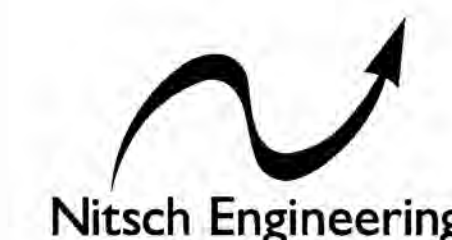
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**LINCOLN SQUARE
IMPROVEMENTS**
WORCESTER, MA

PROJECT

**EROSION AND SEDIMENT
CONTROL DETAILS**

DRAWING TITLE

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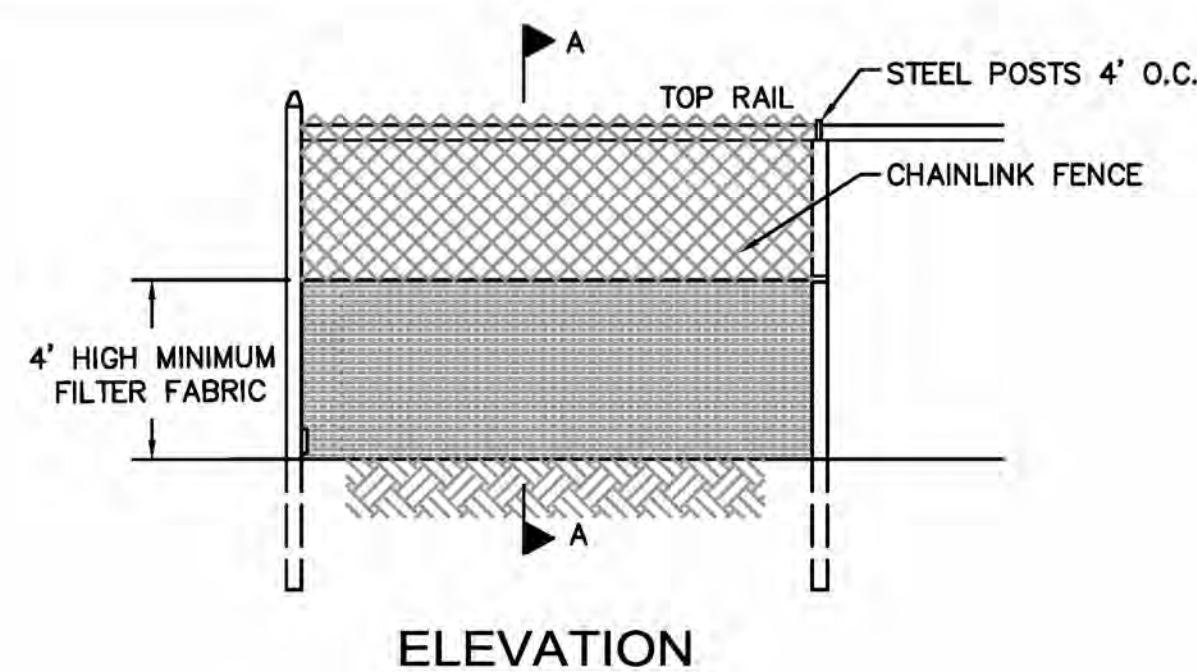
DRAWN JYV

CKD RD

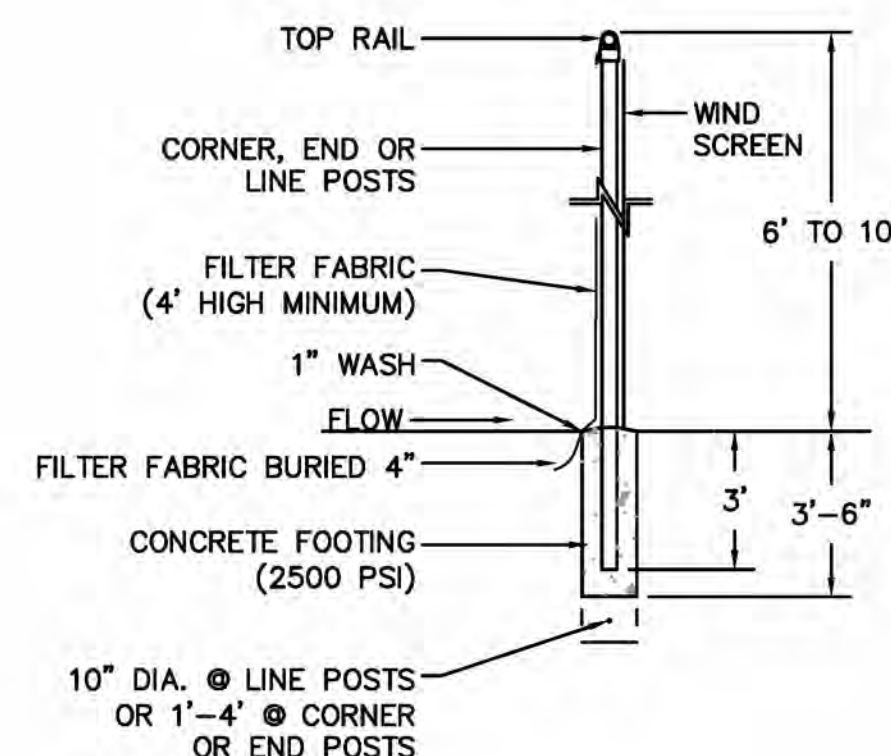
SCALE AS SHOWN

C-3.0

SHEET NO.



ELEVATION

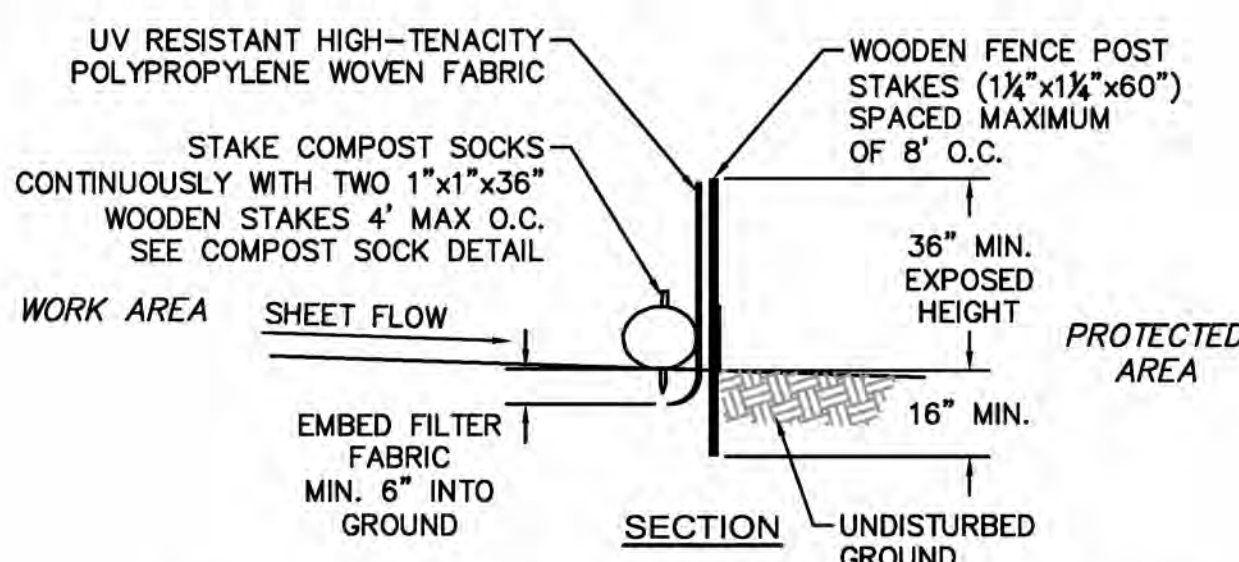
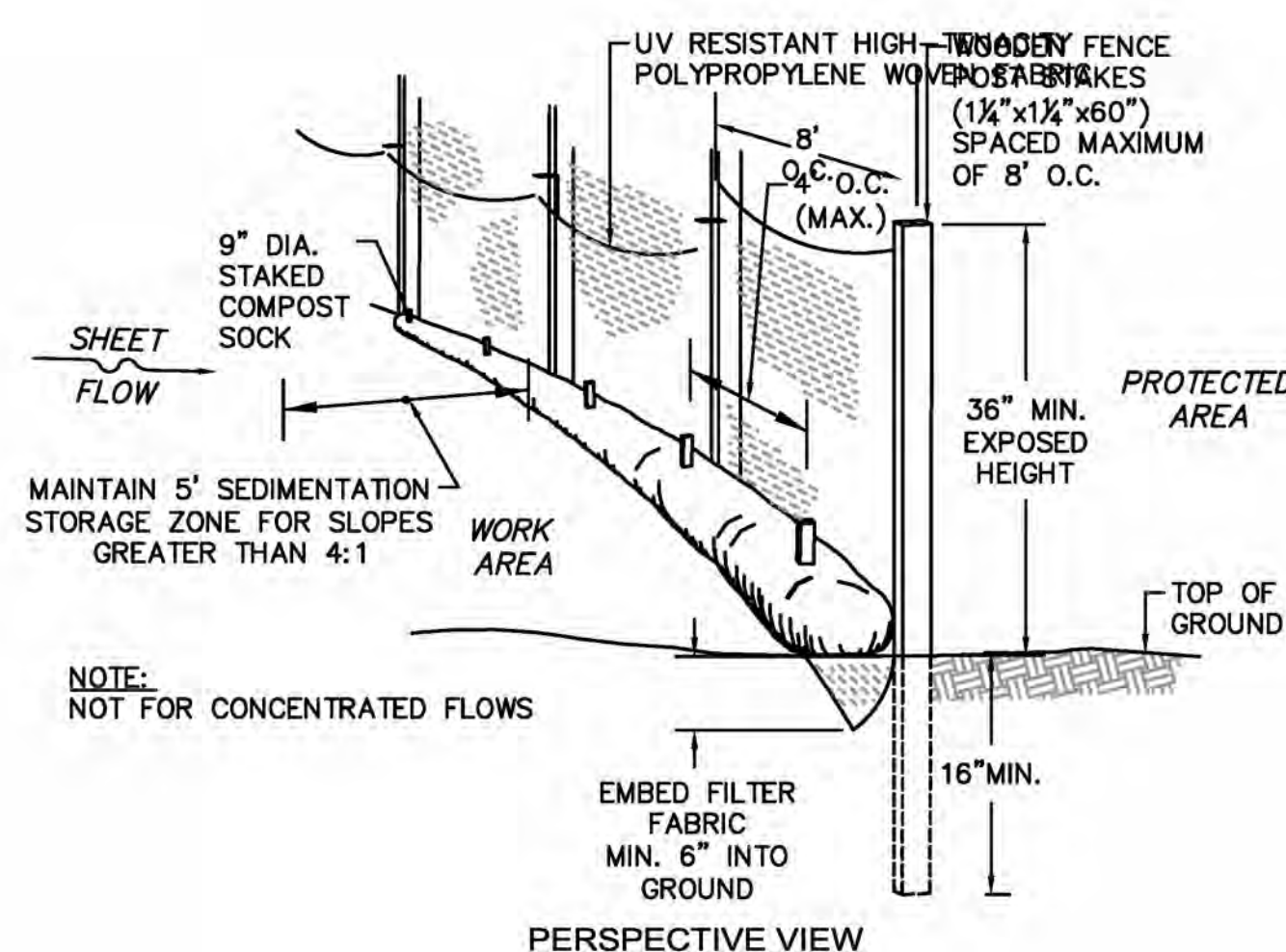


SECTION

- CHAINLINK FENCE SHALL BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES.
- FILTER FABRIC SHALL BE FASTENED SECURELY TO CHAINLINK FENCE WITH TIES SPACED HORIZONTALLY 24" AS THE TOP AND MIDSECTION.
- WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6"
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL SHALL BE REMOVED WHEN SEDIMENT BUILD-UP REACHES 50% OF THE HEIGHT OF THE FILTER FABRIC.
- MAINTENANCE OF SILT FENCE SHALL BE RECORDED TO IN THE SWPPP

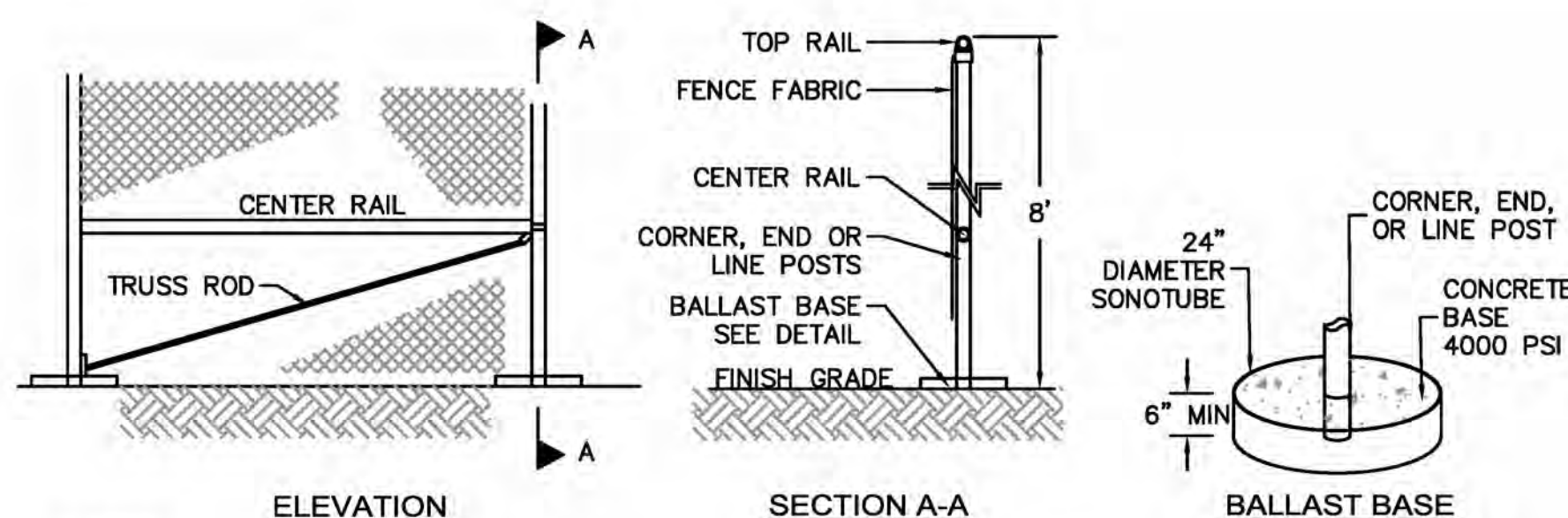
**PERIMETER EROSION CONTROL BARRIER
SUPER SILT FENCE**

NOT TO SCALE



**PERIMETER EROSION CONTROL BARRIER
SILT FENCE DETAIL WITH COMPOST SOCK**

NOT TO SCALE



ELEVATION

SECTION A-A

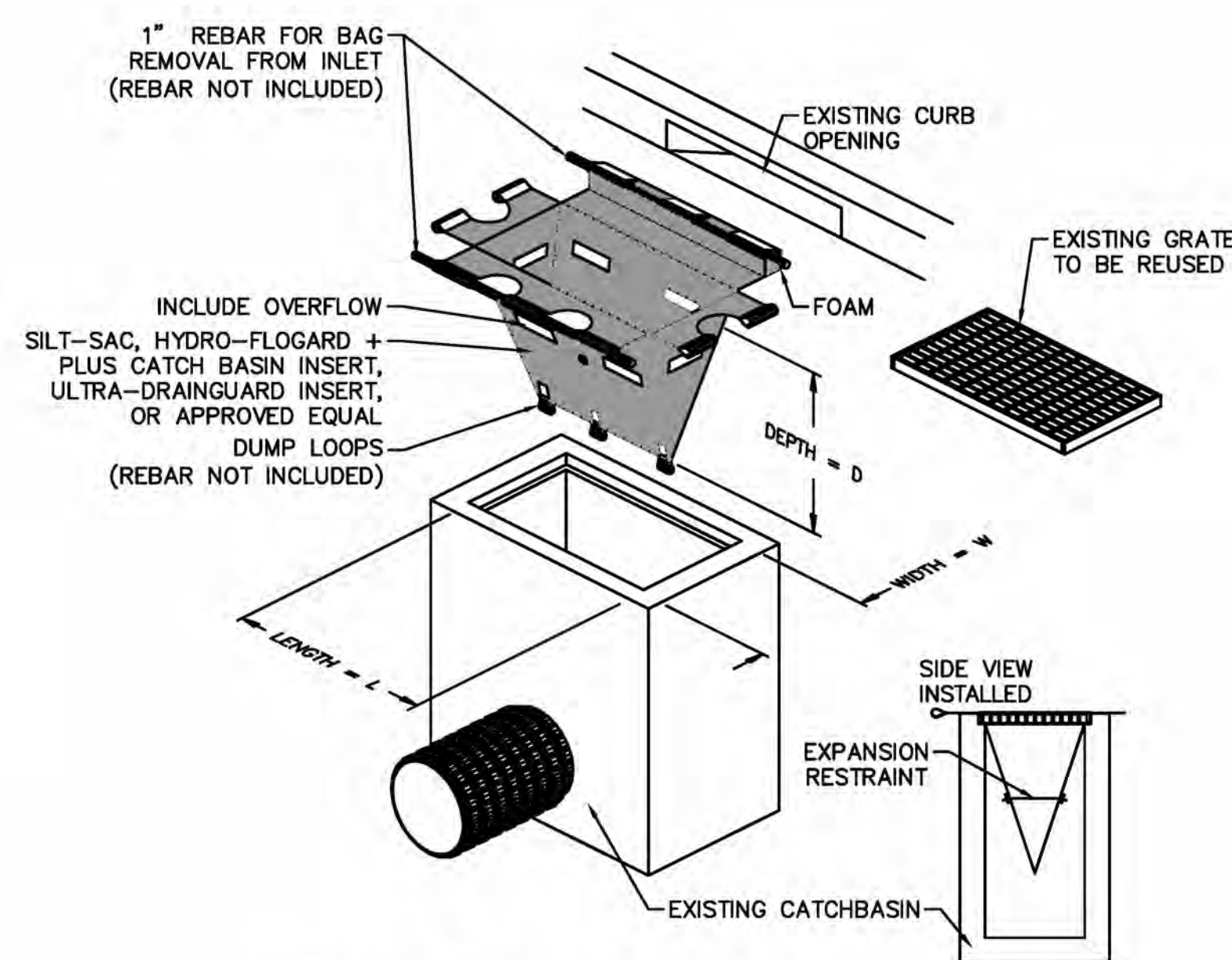
BALLAST BASE

NOTES

- END, GATE AND CORNER POSTS SHALL BE BRACED TO ADJACENT LINE POSTS. (MORE THAN 30' CHANGE IN DIRECTION CONSTITUTES A CORNER)
- FABRIC SHALL BE 0.148" GAUGE MIN. WIRE, WOVEN INTO APPROXIMATELY 2" DIAMOND MESH.
- ZINC-COATED STEEL FABRIC BASE METAL SHALL BE COATED WITH PRIME WESTERN SPELTER OR EQUAL.
- ALUMINUM COATED STEEL FABRIC BASE METAL SHALL BE COATED WITH ALUMINUM ALLOY.
- LINE POSTS SHALL BE 2 1/2" O.D. END OR CORNER POSTS SHALL BE 3" O.D.
- THE CONTRACTOR IS RESPONSIBLE FOR SURFACE RESTORATION ONCE THE FENCE IS REMOVED.
- THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE TEMPORARY CONSTRUCTION FENCE AT THE CONCLUSION OF THE PROJECT.

**TEMPORARY CHAIN LINK CONSTRUCTION FENCE
WITH BALLAST BASE**

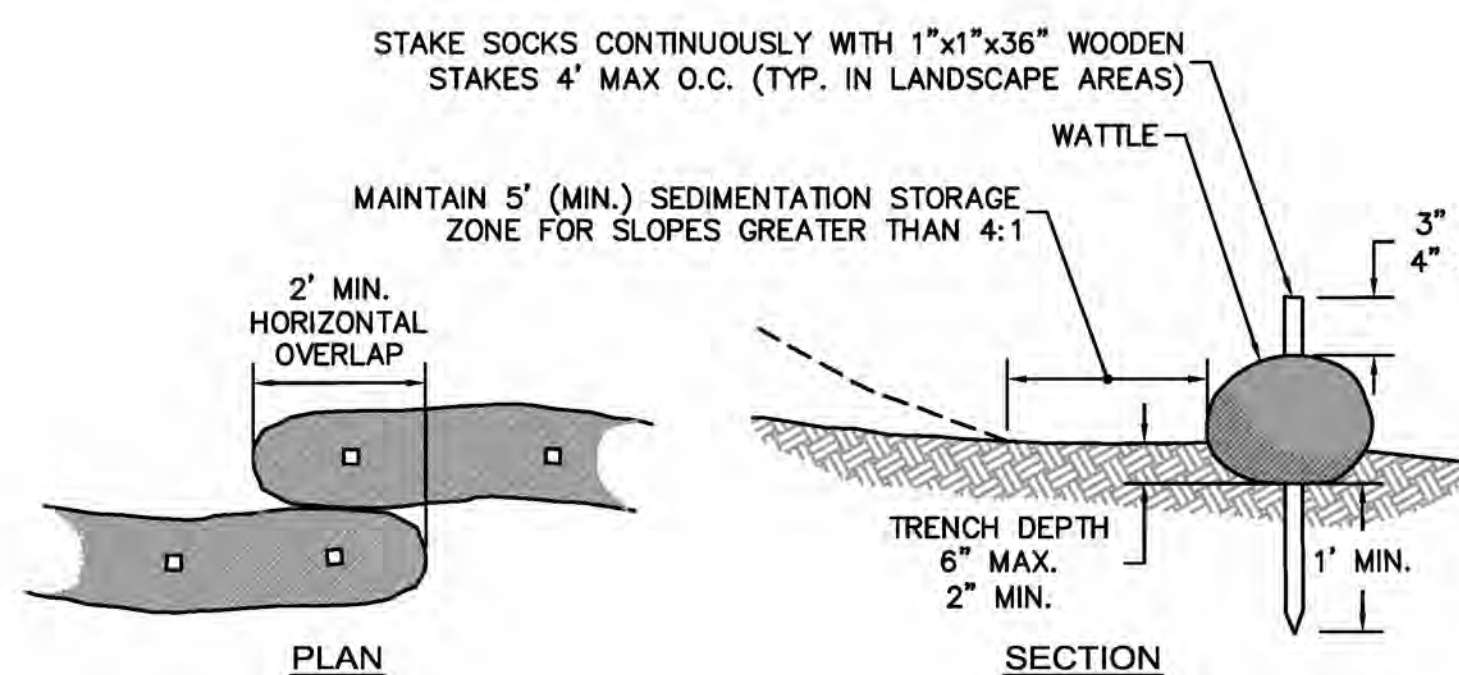
NOT TO SCALE



THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS SHEET, OVERLAND OR CONCENTRATED FLOWS (NOT GREATER THAN 1 CFS). THE METHOD CAN DRAIN FLAT AREA TO STEEP SLOPES. INLET CAPACITY WILL BE DECREASED WITH THIS METHOD AND THE CONTRACTOR SHALL EXPECT PONDING DURING HIGH FLOW EVENTS.

**INLET PROTECTION DETAIL
CATCH BASIN WITH SILTATION SACK**

NOT TO SCALE

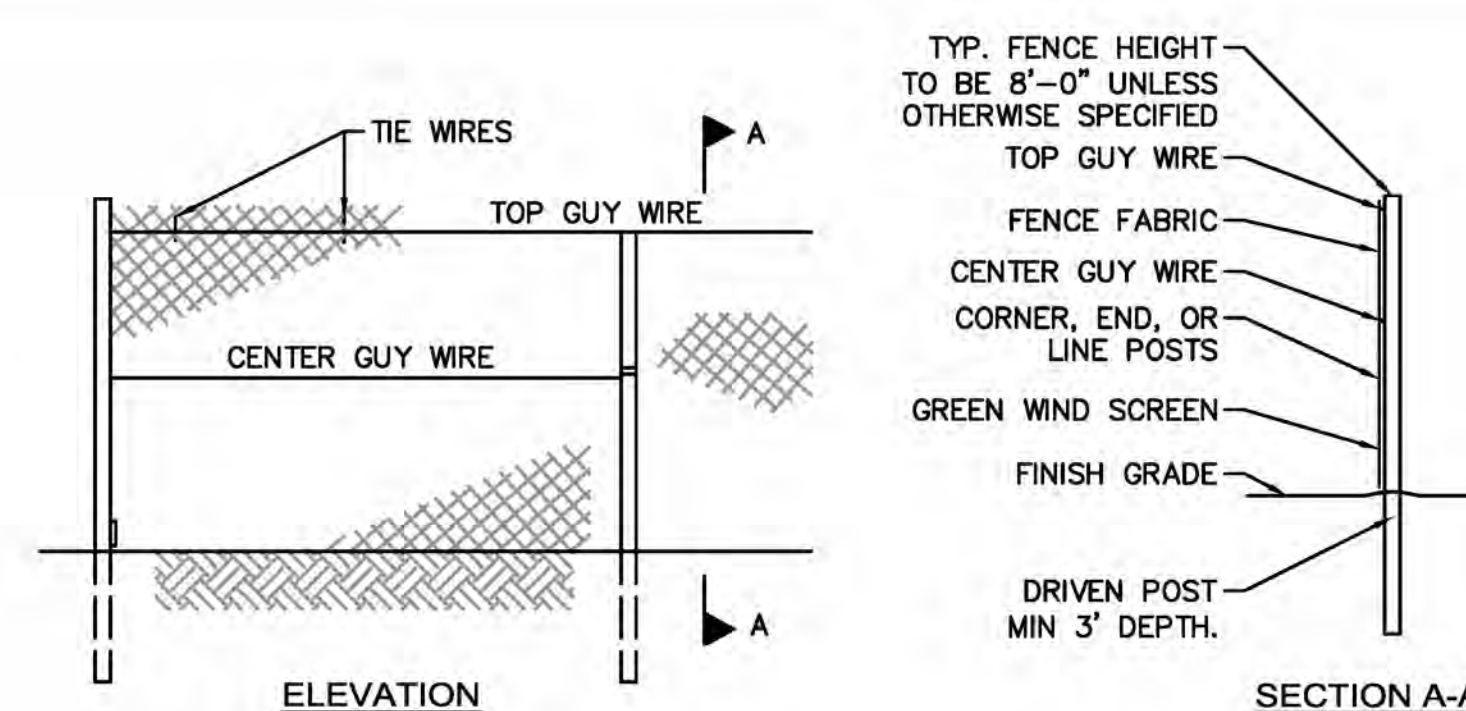


PLAN

SECTION

COMPOST SOCK DETAIL

NOT TO SCALE



ELEVATION

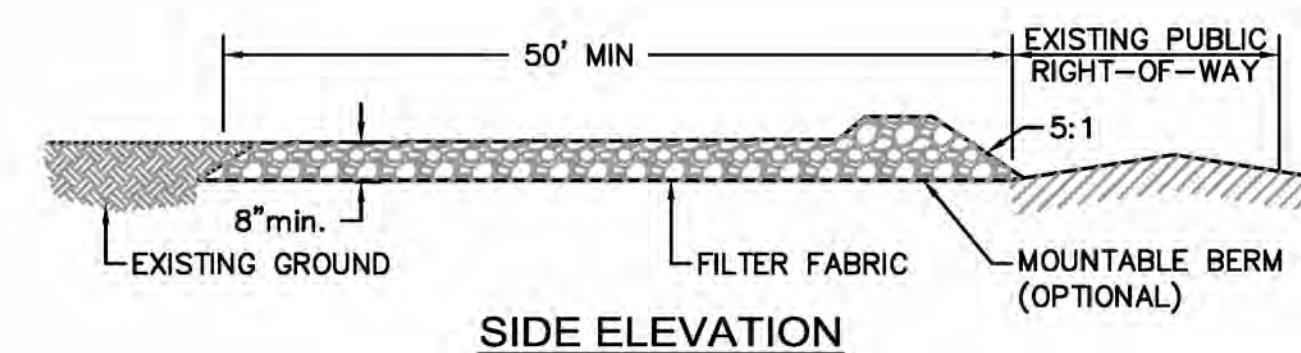
SECTION A-A

CONSTRUCTION FENCE AND GATE NOTES:

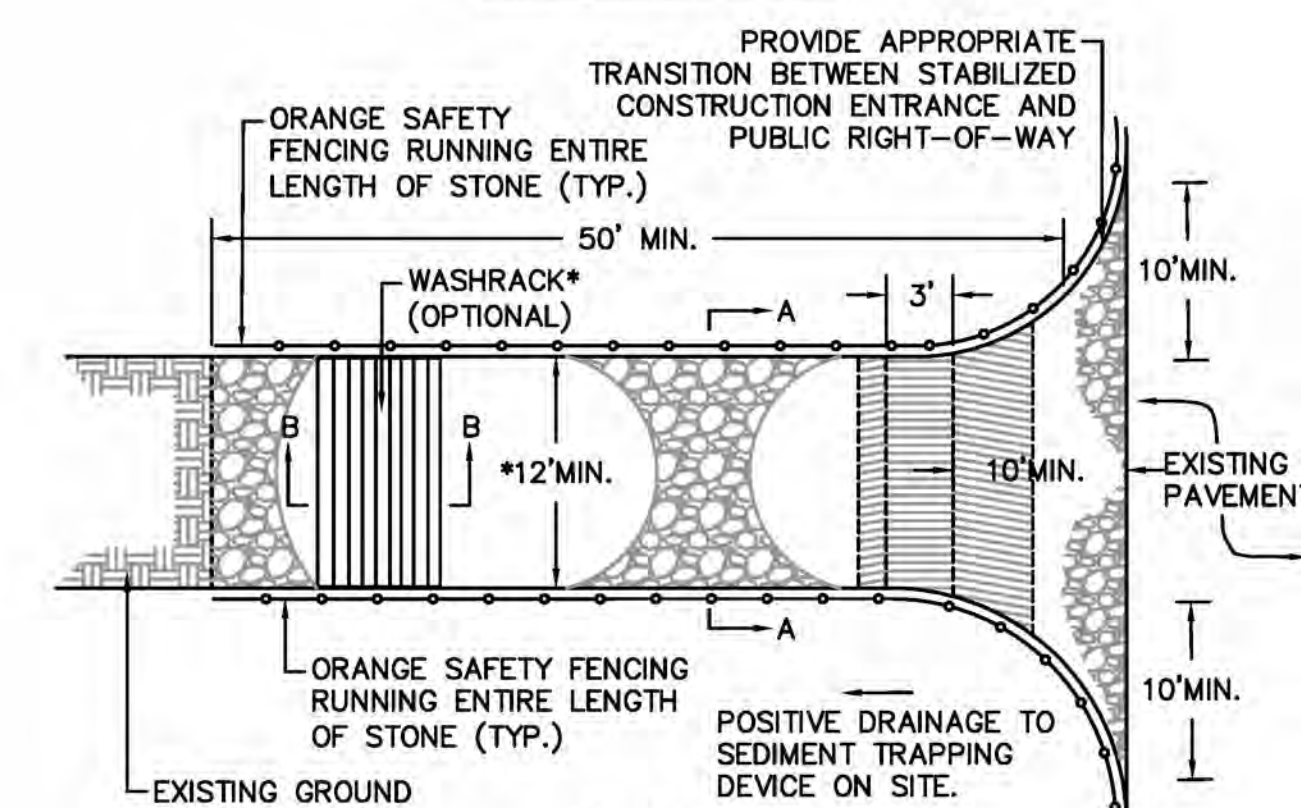
- FABRIC SHALL BE 0.148" WIRE, WOVEN INTO APPROXIMATELY 2" DIAMOND MESH.
- THE FENCE FABRIC SHALL BE ZINC COATED STEEL OR ALUMINUM COATED STEEL.
- FENCE POSTS SHALL RECEIVE THE SAME COATING AND TREATMENT AS THE FENCE FABRIC (DESCRIBED ABOVE).
- THE CONTRACTOR SHALL ADD A GREEN WIND SCREEN
- LINE POSTS SHALL BE 2 1/2" O.D. END OR CORNER POSTS SHALL BE 3" O.D.
- THE CONTRACTOR IS RESPONSIBLE FOR SURFACE RESTORATION ONCE THE FENCE IS REMOVED.
- THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE TEMPORARY CONSTRUCTION FENCE AT THE CONCLUSION OF THE PROJECT.

CHAIN LINK CONSTRUCTION FENCE

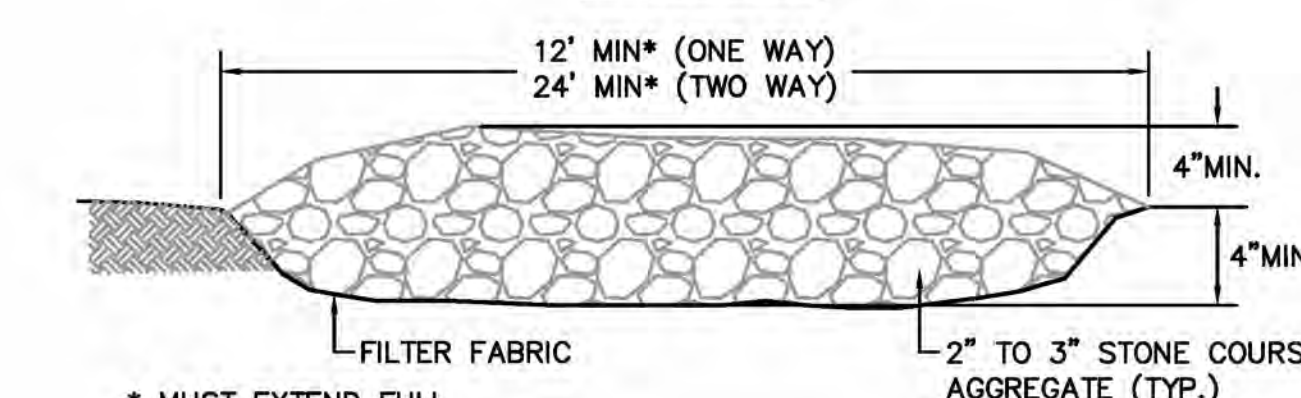
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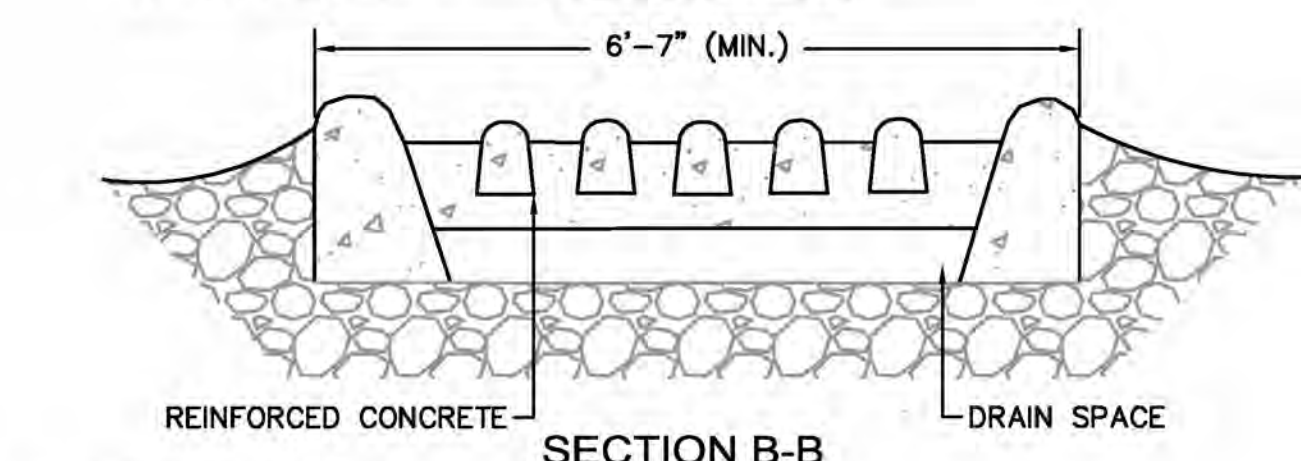
SIDE ELEVATION



PLAN VIEW



SECTION A-A



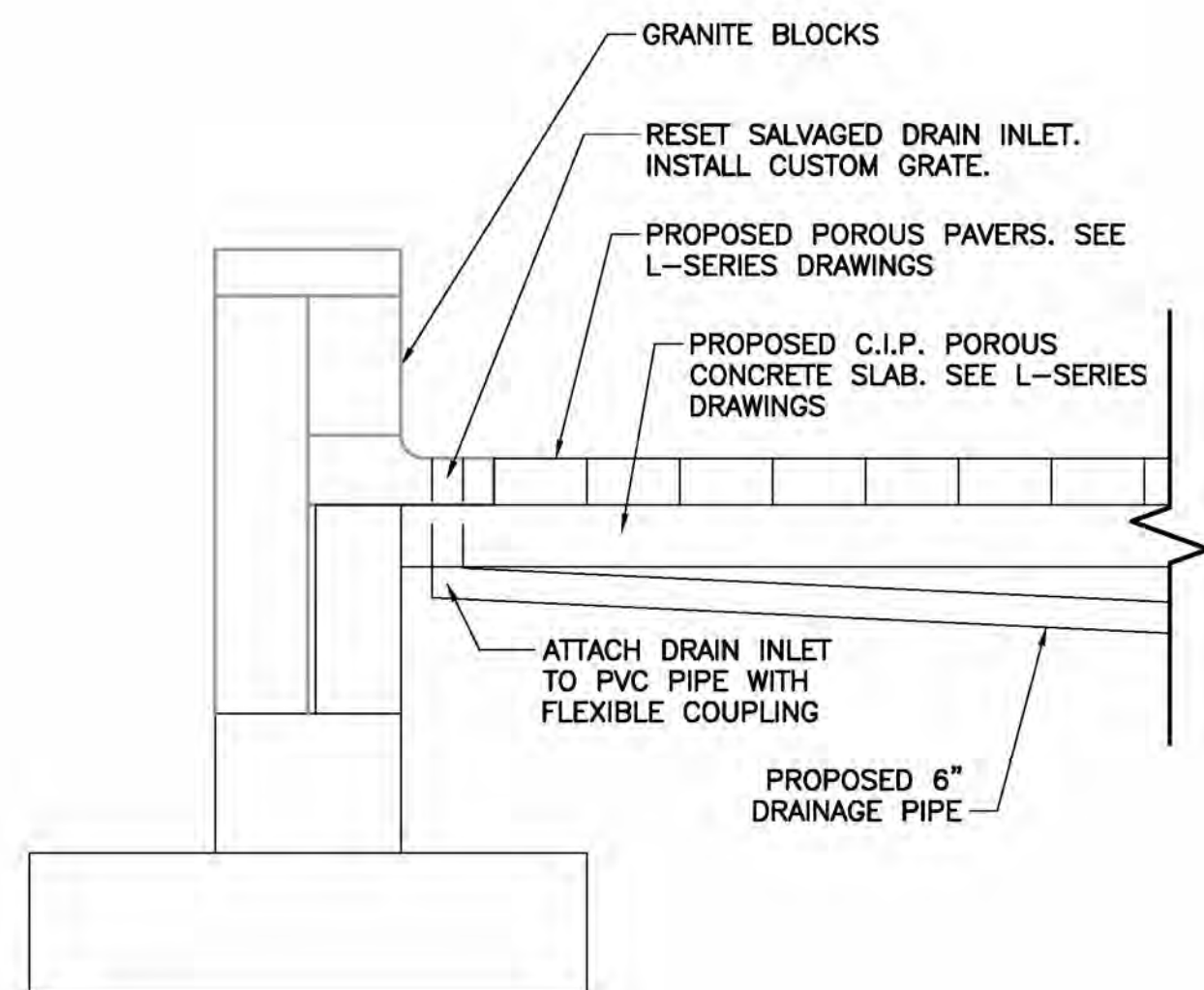
SECTION B-B

CONSTRUCTION SPECIFICATIONS

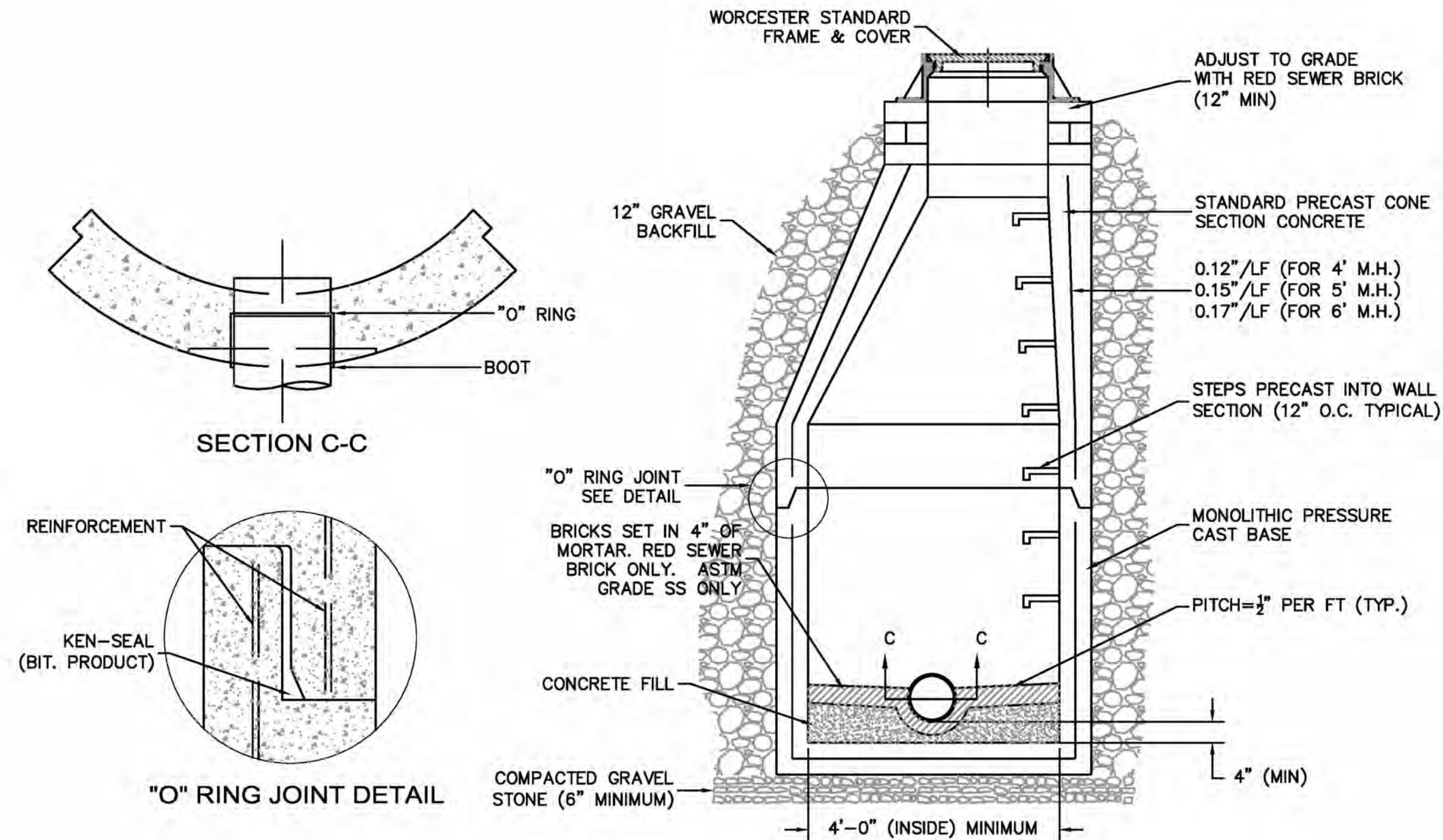
- LENGTH - GREATER THAN OR EQUAL TO 50 FEET
- WIDTH - TWELVE FOOT MINIMUM (ONE WAY), TWENTY FOUR FOOT MINIMUM (TWO WAY), BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
- SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM SHALL BE PERMITTED.
- THICKNESS - 8"
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED.

STABILIZED CONSTRUCTION ENTRANCE

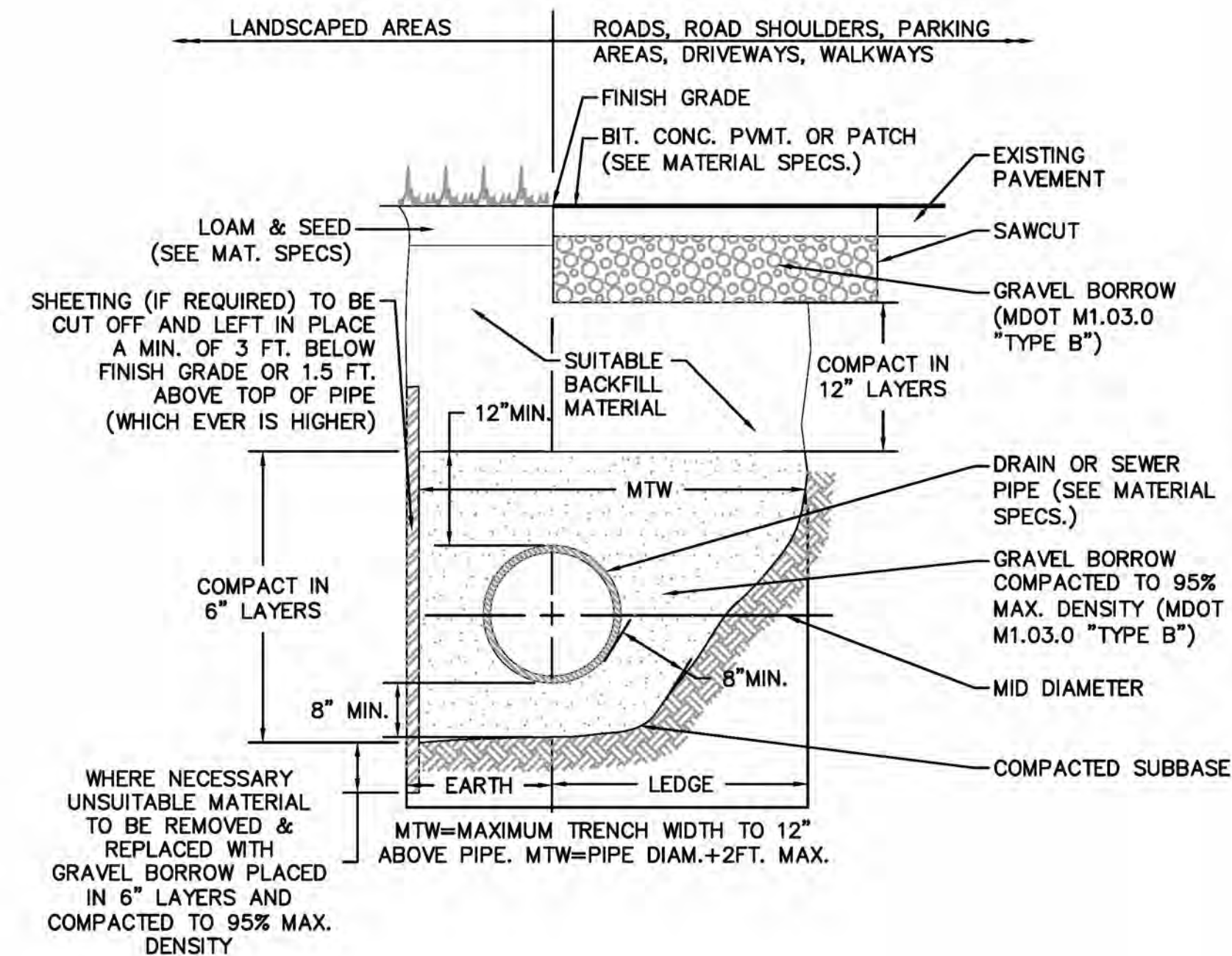
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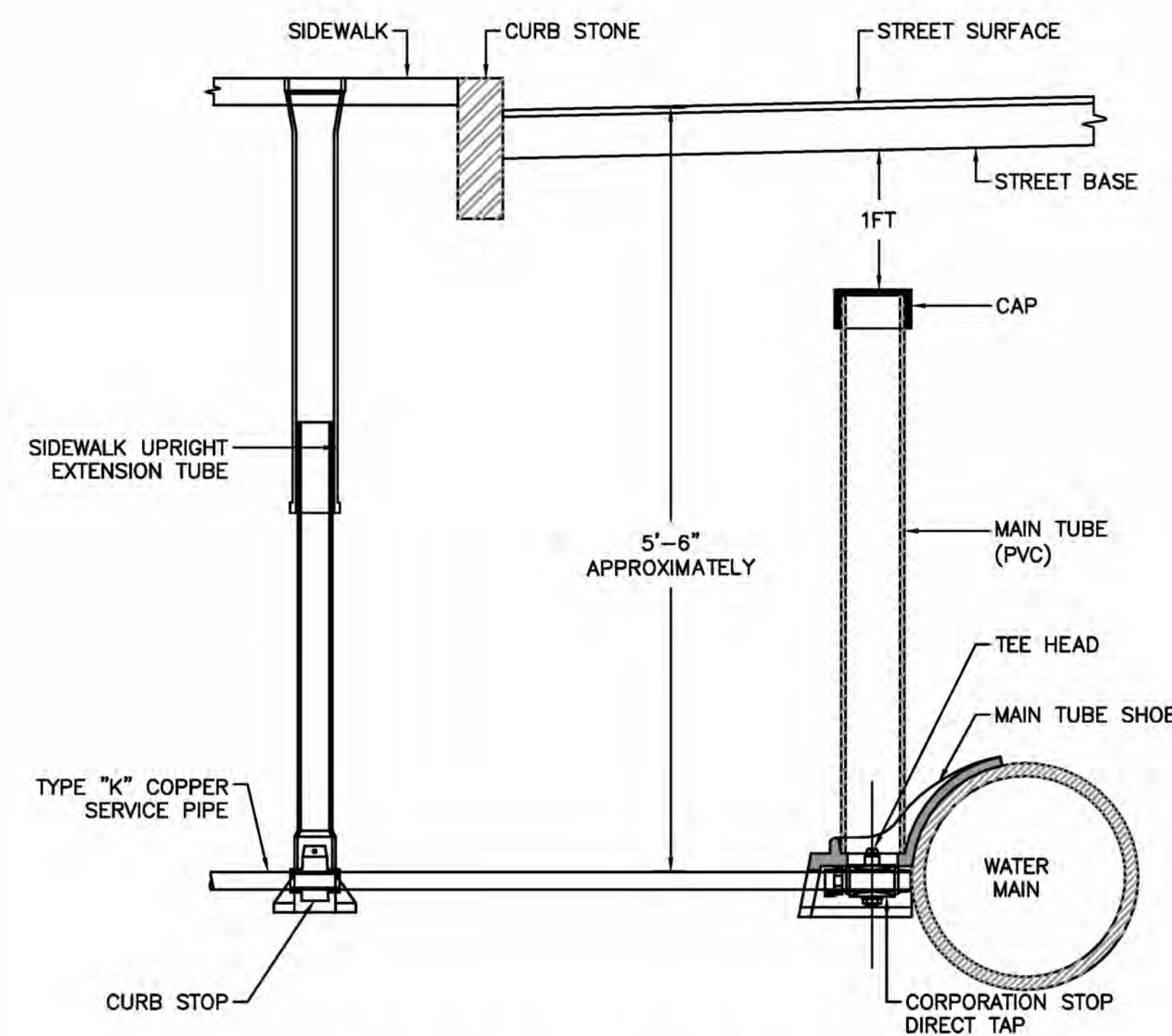
AREA DRAIN DETAIL
NOT TO SCALE



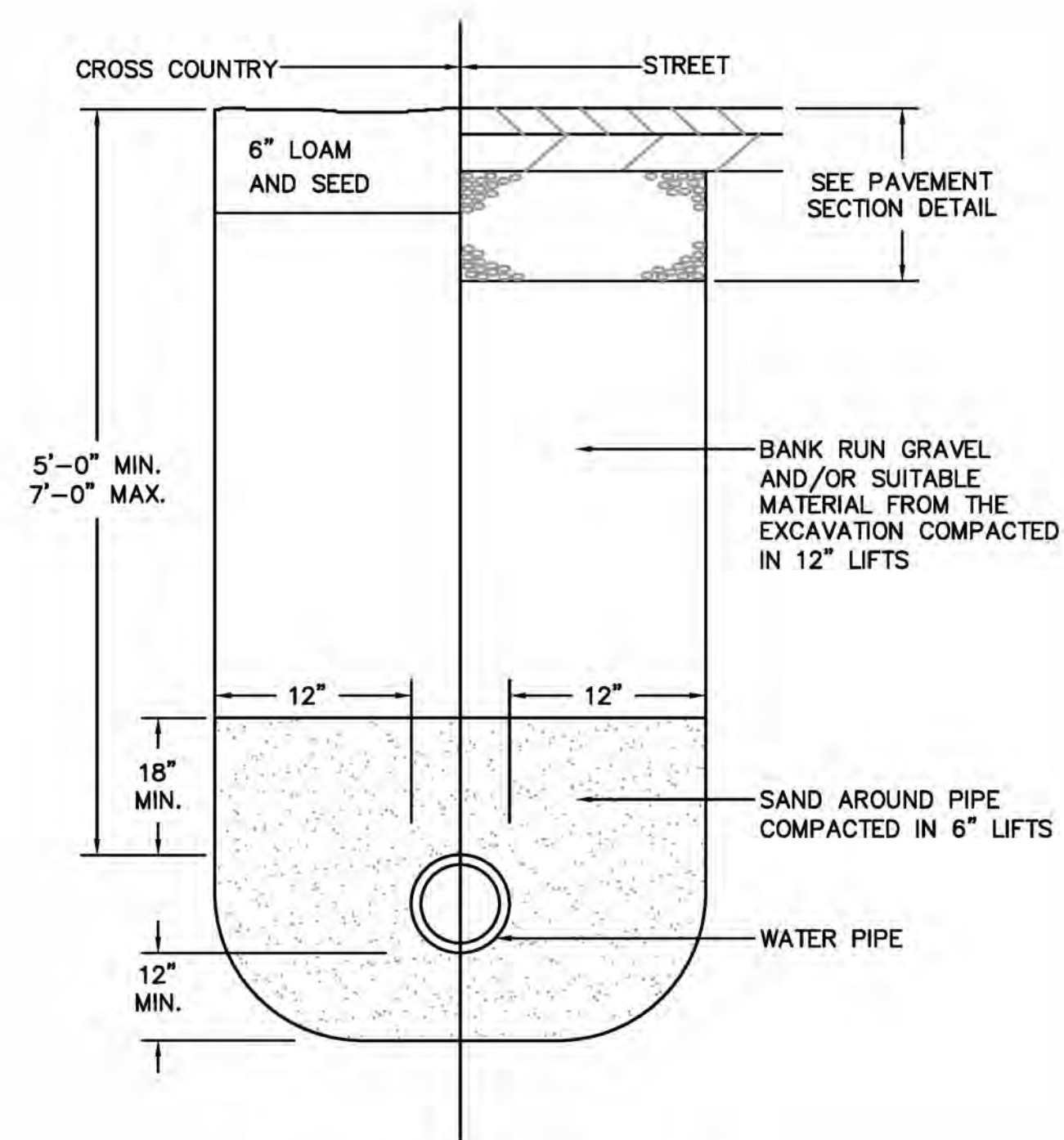
STANDARD WORCESTER MANHOLE
NOT TO SCALE



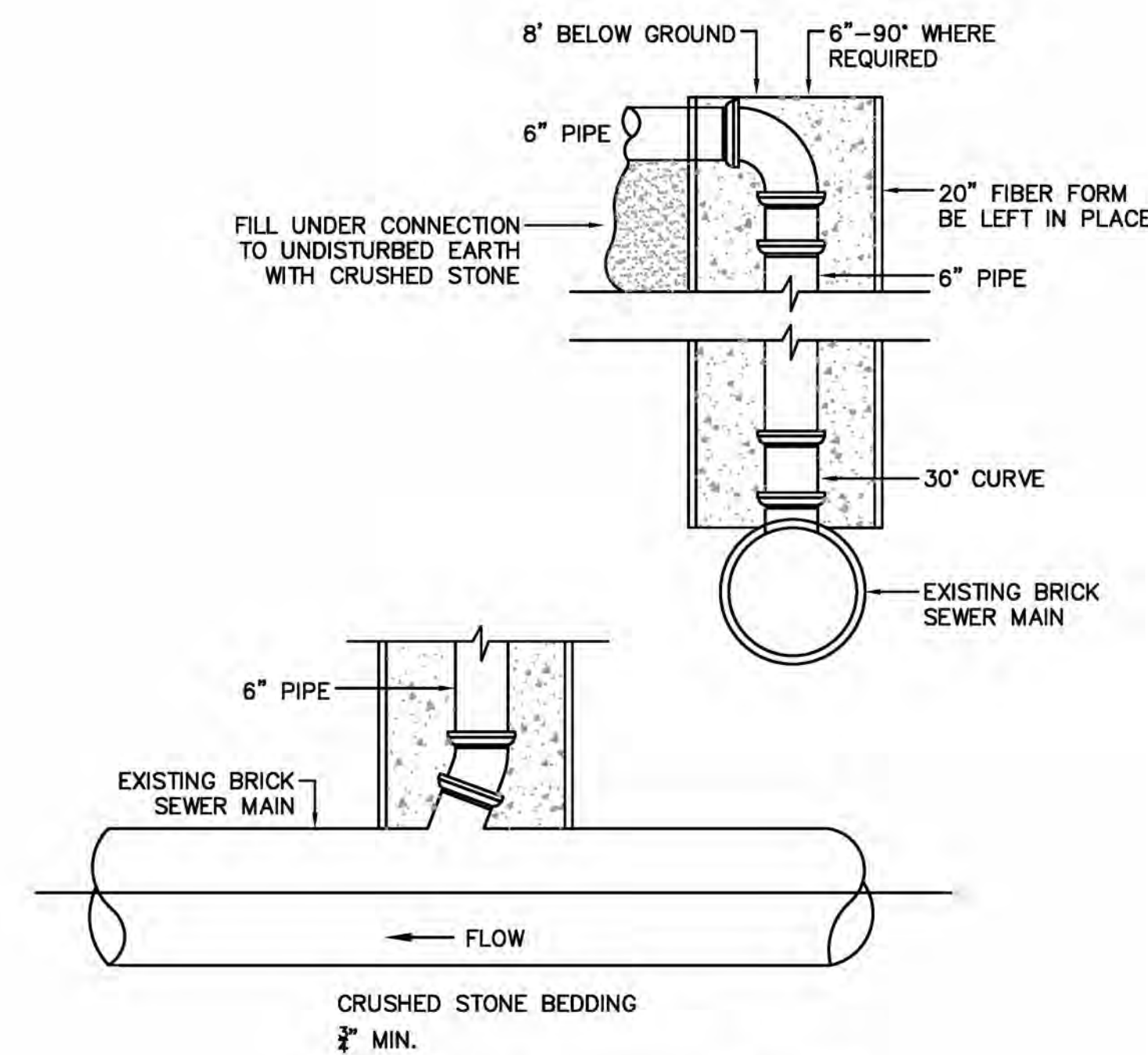
STANDARD TRENCH DETAIL FOR UTILITY PIPE
NOT TO SCALE



WATER CONNECTION DETAIL FOR 3/4\"/>



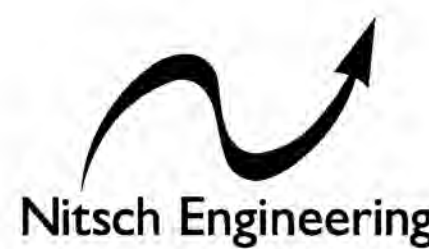
WATER TRENCH DETAIL
NOT TO SCALE



TYPICAL CHIMNEY DETAIL
NOT TO SCALE



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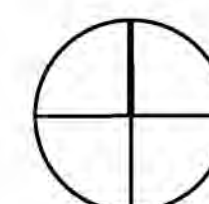


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NORTH



**LINCOLN SQUARE
IMPROVEMENTS**
WORCESTER, MA

PROJECT

CIVIL SITE DETAILS

DRAWING TITLE
CONTRACT NO.

DATE 03.15.24

DRAWN JYW

CKD RD

SCALE AS SHOWN

C-4.0

SHEET NO.

AL-2

326

FLUORESCENT LIGHT FIXTURE.

FIXTURE KEYING SYSTEM A1 =
FIXTURE TYPE
32= CIRCUIT #
b= SWITCH CONTROL

SWITCHES

(TYPICALLY MTD 48" AFF - UNID.)

S

S₃

S_p

S₄

SINGLE POLE SWITCH.

THREE-WAY SWITCH.

SINGLE POLE SWITCH AND PILOT LIGHT.

FOUR-WAY SWITCH.

WIRING AND RACEWAY - NO. OF DIAGONAL LINES INDICATES NO. #12 AVG. ABSENCE OF LINES INDICATES 2 #12 AVG - UNLESS NOTED OTHERWISE, 'G' INDICATES INSULATED GROUND WIRE.

HOMERUN TO PANEL - NO. OF ARROWS INDICATES NO. OF 20AMP/1 POLE CIRCUITS TO PANEL - UNLESS NOTED OTHERWISE.

LV

P

S

T

CTV

UFA

LOW VOLTAGE SWITCHING SYSTEM WIRING.

UNDERGROUND PRIMARY ELECTRIC SERVICE

UNDERGROUND SECONDARY ELECTRIC SERVICE

UNDERGROUND TELEPHONE SERVICE

UNDERGROUND CABLE TV SERVICE

UNDERGROUND FIRE ALARM SERVICE

4"CONDUIT SLEEVE FOR TELEPHONE THRU WAY OR ACROSS CORRIDOR - LOCATE ABOVE CEILING

MISCELLANEOUS

 CLOSED CIRCUIT TV CAMERA

SITE SYMBOLS

MH

TMH

HH

IC

ELECTRIC MANHOLE

TELEPHONE MANHOLE

HAND HOLE

TWO WIRE INTERNET BASED IRRIGATION CONTROLLER

ABBREVIATIONS

A	AMPERES OR ANTENNA	GFI	GROUND FAULT INTERRUPTER	PVC	POLYVINYL CHLORIDE
ADA	AMERICANS WITH DISABILITIES ACT	GND/G	GROUND OR GROUNDING	PW	POWER
AFF	ABOVE FINISH FLOOR	KAIC	THOUSAND AMPERE INTERRUPTING CAPACITY	QTY	QUANTITY
AFG	ABOVE FINISH GRADE	KCMIL	THOUSAND CIRCULAR MILS	R	RECESSED
AHJ	AUTHORITY HAVING JURISDICTION	KD	KNICK OUTS	REQ'D	REQUIRED
AIC	AMPERE INTERRUPTING CAPACITY	KVA	KILOVOLT AMPERES	S	SURFACE
AWG	AMERICAN WIRE GAUGE	KW	KILOWATTS	SP	SPARE
BFG	BELOW FINISH GRADE	LIU	LIGHT INTERFACE UNIT	SPD	SURGE PROTECTION DEVICE
BLDG	BUILDING	LPR	LICENSE PLATE READER (CAMERA)	STP	SHIELDED TWISTED PAIR
C	CONDUIT	MC	METAL CLAD CABLE	STR	STRANDED
CAT	CATALOG	MCB	MAIN CIRCUIT BREAKER	SW	SWITCH
CB	CIRCUIT BREAKER	MISC	MISCELLANEOUS	TC	TIME CLOCK
CCTV	CLOSED CIRCUIT TV	NEC	NATIONAL ELECTRIC CODE	TEL	TELEPHONE
CKT	CIRCUIT	NEMA	NATIONAL ELECTRICAL MANUFACTURES ASSOCIATION	TELCO	TELEPHONE COMPANY
s	CENTERLINE	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION	UG	UNDERGROUND
CLG	CEILING	NIC	NOT IN CONTRACT	UL	UNDERWRITERS LABORATORIES
CU	COPPER	NTS	NOT TO SCALE	UNV.	UNIVERSAL
DIA	DIAMETER	P	POLE	UNO	UNLESS NOTED OTHERWISE
DWG	DRAWING	PH	PHASE	V	VOLT
E.C.	ELECTRICAL CONTRACTOR	PNL	PANEL	VD	VOLTAGE DROP
EX	EXISTING	PoE	POWER OVER ETHERNET	VT	VOLTAGE TRANSFORMER
FLA	FULL LOAD AMPERES	POS	PROVIDED UNDER OTHER SECTIONS	W	WIRE OR WALL
FM	FACTORY MUTUAL			WAP	WIRELESS ACCESS POINT
FMC	FLEXIBLE METAL CONDUIT			W/	WITH
FT	FEET			WP	WEATHER PROOF

MECHANICAL EQUIPMENT

JUNCTION BOX - SIZE AS REQUIRED.

JUNCTION BOX - WITH FLEXIBLE CONNECTION TO EQUIPMENT.

MECHANICAL DAMPER WITH THERMAL SWITCH FURNISH AND INSTALL BY ELECTRICAL CONTRACTOR.

MOTOR - NUMERAL INDICATES HORSEPOWER

NEMA 3R HEAVY DUTY DISCONNECT SWITCH

FUSED DISCONNECT SWITCH

UNFUSED DISCONNECT SWITCH

INDICATES TIME DELAY FUSE SIZE.

INDICATES SAFETY SWITCH SIZE

POWER

120/208 VOLT, 3 PHASE, 4 WIRE PANELBOARD. (SURFACE MOUNTED)

SURGE PROTECTION DEVICE

RECEPTACLES (MOUNTED 18" AFF. TO CL - UNID.)

20AMP, 120VOLT SINGLE RECEPTACLE

20AMP, 120VOLT DUPLEX OUTLET; 'C' INDICATES MTD. @ 42" A.F.F. OR ABOVE COUNTER.

20AMP, 120VOLT DOUBLE DUPLEX OUTLET. 'C' INDICATES MTD. 42" A.F.F. OR ABOVE COUNTER.

20AMP, 120VOLT DUPLEX - GROUND FAULT INTERRUPTER TYPE MTD. 42" UP OR ABOVE COUNTER, 'GFI' INDICATES GFCI WITH WEATHER PROOF COVER MTD. 18" UP.

EXISTING EQUIPMENT

DOTTED DENOTES EXISTING EQUIPMENT.

EXISTING EQUIPMENT TO BE REMOVED AND CIRCUIT PULLED BACK TO NEXT ACTIVE OUTLET/BACK TO PANEL.

EXISTING EQUIPMENT TO REMAIN.

EXISTING EQUIPMENT TO BE REMOVED AND RELOCATED.

NEW LOCATION OF RELOCATED EXISTING EQUIPMENT.

EXISTING EQUIPMENT TO BE REMOVED AND NEW EQUIPMENT TO BE INSTALLED IN SAME LOCATION.

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER	CATALOG NO.	MTG.	MTG HEIGHT	VOLTAGE	INPUT WATTS	LUMENS	LAMPS			REMARKS
								No.	WATTAGE	TYPE	
P1	MEYER	MOND4-69-830-009-N-B-P	P		UNV.	69	6,048	1	69	LED	REFER TO NOTE 6.
P2P	MEYER	69-830-036-N-B-P	P		UNV.	69	6,048	1	69	LED	REFER TO NOTE 6.
P3	MEYER	MOND4-69-830-036R-N-B-P	P		UNV.	69	6,048	1	69	LED	REFER TO NOTE 6.
SL1	HALOPHANE	NORTH YORKSHIRE SERIES POLE - POLE NYA16SLSL5J17SCDBK-ABGRP156A FG BK BA 100P 24 IN 1A BD SL5 AC BK BA100P 24 IN 1A BD SL5 AC BK ASSY 4685 GDP3P2040KMVOLTMSBKST1BKPR7PCLL	P	19	120	-	-	1	-	LED	PROVIDE MCAP-2B AND BRAD 3 ADAPTER FOR SL2 + SL3 LIGHT FIXTURE. FOR NEMA 3 MOUNTING FOR CAMERA NETWORK JB ON POLES. INSTALL TNUT3/8-100SM.

LIGHTING FIXTURE GENERAL NOTES:

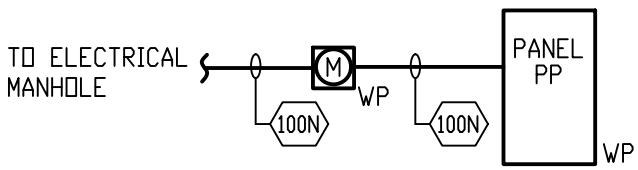
- ALL BALLASTS SHALL BE OF THE ENERGY SAVINGS, HIGH POWER FACTOR TYPE, AND THD LESS THAN 10%.
- FURNISH FIXTURES WITH ALL REQUIRED MOUNTING HARDWARE. WHERE RECESSED LIGHTING FIXTURES ARE TO BE INSTALLED IN PLASTER, ACOUSTIC TILE OR GYPSUM BOARD, PLASTER FRAMES, FINISH TRIM, FITTINGS AND SUPPORTS SHALL BE FURNISHED AND INSTALLED TO MEET THE ARCHITECTURAL AND STRUCTURAL CONDITIONS AT EACH LOCATION.
- ALL LIGHTING FIXTURES SHALL BE PROVIDED WITH THE REQUIRED LAMPS AND SHALL BE RATED 120-VOLTS UNLESS OTHERWISE NOTED. LAMPS SHALL BE SP30 (3000K) UNLESS OTHERWISE NOTED.
- E.C. IS RESPONSIBLE FOR OBTAINING ALL THE CORRECT HARDWARE TO MOUNT ALL THE SECURITY CAMERAS TO THE NEW LIGHT POLES. MODIFY THE POLES TO ACCEPT THE CAMERAS AND WIRING.
- THE LIGHT POLE IS TO MEET CITY OF WORCESTER STANDARDS. PLUS, HAVE COMPARTMENTS FOR LOW VOLTAGE AND POWER. ORDER SLAXWIRELSBK RFD- 319317 AUXILIARY CHANNEL KIT. ALSO, MUST GET MOUNTING STUDS FOR SUPPORT OF SIEMENS NEMA 3R ENCLOSURE. MOUNTING OF ENCLOSURE IS BY E.C.
- E.C. IS TO USE LYTPOLES MODEL 205-6018-25-VD-AB-BLACK LIGHT POLE FOR FIXTURES P1,P2P, AND P3 LIGHT FIXTURES. E.C. IS TO ADJUST THE LIGHT FIXTURES TO SHINE ON THE FLAG.

PANEL SCHEDULE

120/208V, 3Ø, 4W

PANEL SCHEDULE

PANEL NO.	LOCATION	MTG	MAIN BUS AMP'S	MAIN CB	KAIC RATING	BRANCH CKT BREAKER (AMPS). KAIC RATING OF THE BRANCH C.B.'S WILL MATCH KAIC RATING OF PANEL																						TOTAL POLES	OTHERS		
						1 POLE						1 POLE ARC FAULT		1 POLE GROUND FAULT		1 POLE ARC/GF		2 POLE						3 POLE							
						15	20	30	40	50	60	15	20	15	20	15	20	15	20	30	40	50	60	15	20	30	40			50	60
PP	IN WEATHER PROOF ENCLOSURE	S	100	100	10										10														30		

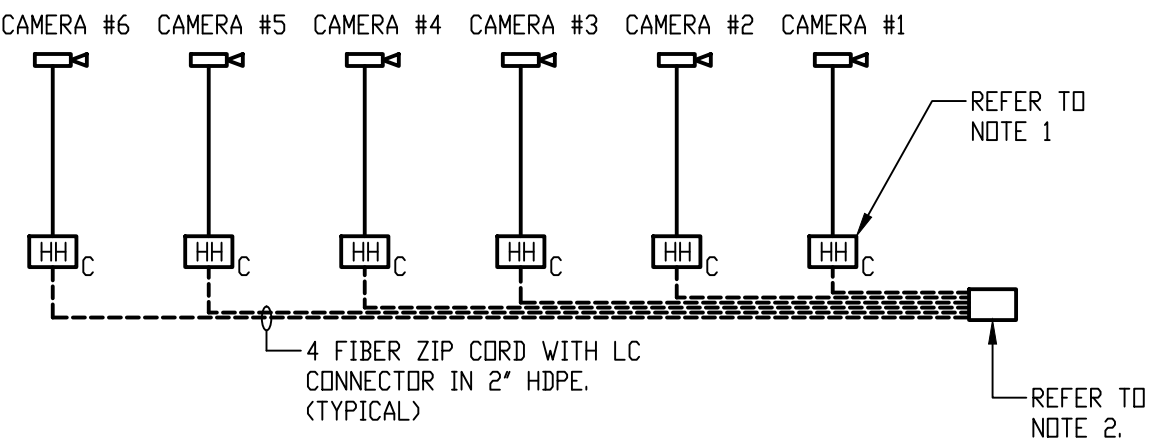


PARTIAL RISER DIAGRAM

SCALE: NTS

NOTES:

- E.C. TO PROVIDE ARC FLASH LABEL IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) SECTION 110.16
- COORDINATE SHORT CIRCUIT RATING OF ELECTRICAL EQUIPMENT WITH LOCAL UTILITY.
- PROVIDE LABEL ON ELECTRICAL SERVICE PANEL OF AVAILABLE FAULT CURRENT. PER ARTICLE 110.24 IN THE 2023 NATIONAL ELECTRICAL CODE. COORDINATE THIS WITH LOCAL UTILITY COMPANY.
- PROVIDE SURGE SUPPRESSORS FOR ALL NEW ELECTRIC PANELS AT THE MAIN SERVICE. WIRE PER MANUFACTURERS RECOMMENDATIONS.
- E.C. IS TO VERIFY HOT OR COLD METER SEQUENCE WITH THE UTILITY.
- E.C. IS TO INSTALL TWO (2) 3/4" X 10 FOOT GROUND RODS. CONNECT PANEL PP WITH #6 COPPER WIRE.
- INSTALL WEATHER PROOF GFI OUTLET WITHIN THE ENCLOSURE. CONNECT TO CIRCUIT 10 IN PANEL PP.



CAMERA RISER DIAGRAM

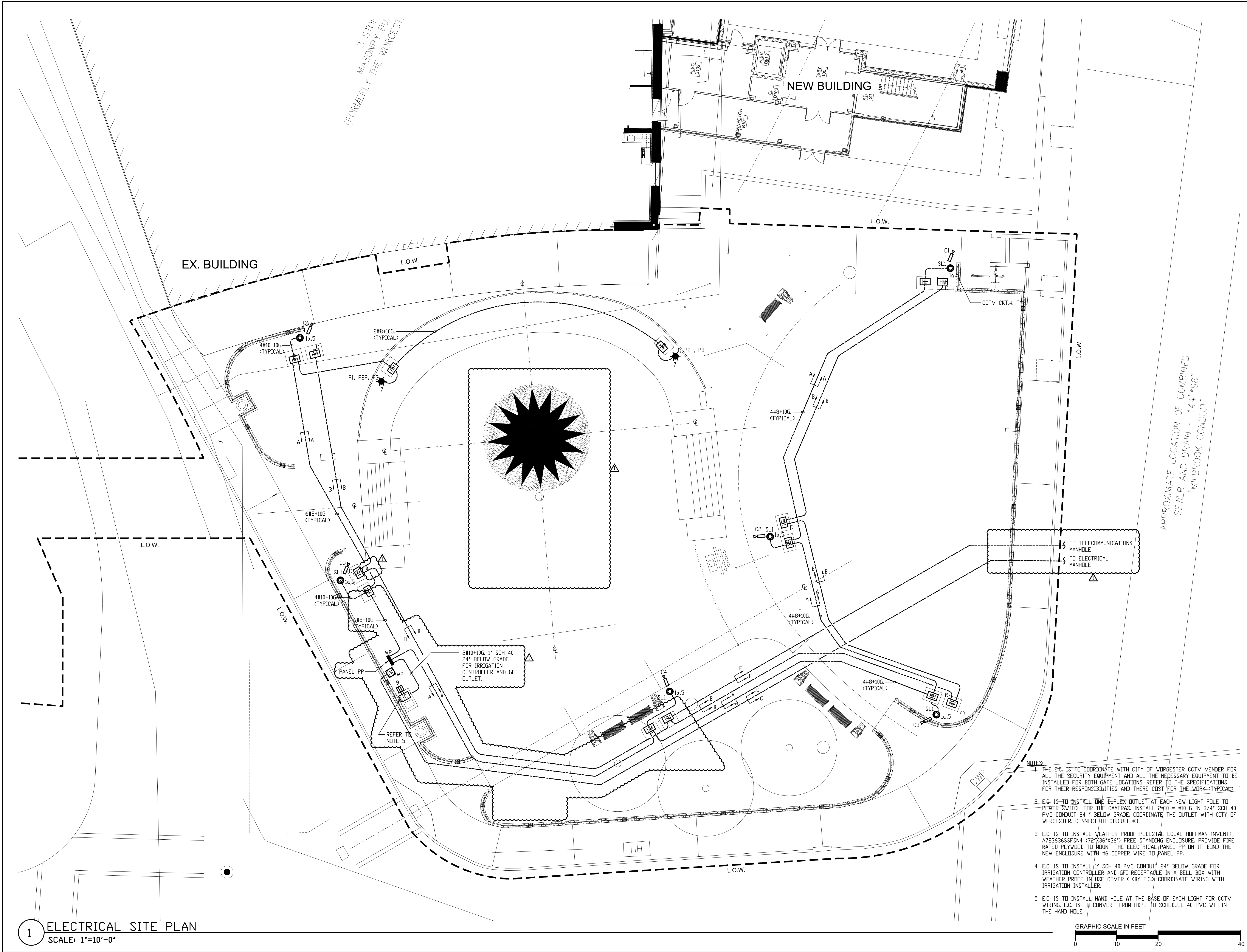
SCALE: NTS

NOTES:

- E.C. IS TO CONVERT HPPE CONDUIT TO SCHEDULE 40 PVC. INSTALL ONE COMMUNICATION HAND HOLE AT THE BASE OF EACH POLE AS SHOWN ON THE DRAWINGS. INSTALL 3/4" SCH40 PVC CONDUIT FROM HAND HOLE TO NEW LIGHT POLE. WIRE PER CITY OF WORCESTER REQUIREMENTS.
- EXTEND WIRING INTO NEW ELECTRICAL ENCLOSURE NEXT TO PANEL PP.



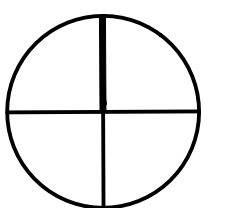
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03/25/24 REVISION 1
03/15/24 BID DOCUMENTS
DATE REVISION

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WORCESTER, MA

PROJECT

ELECTRICAL
SITE PLAN
ADD ALTERNATE #1

DRAWING TITLE

CONTRACT
NO.

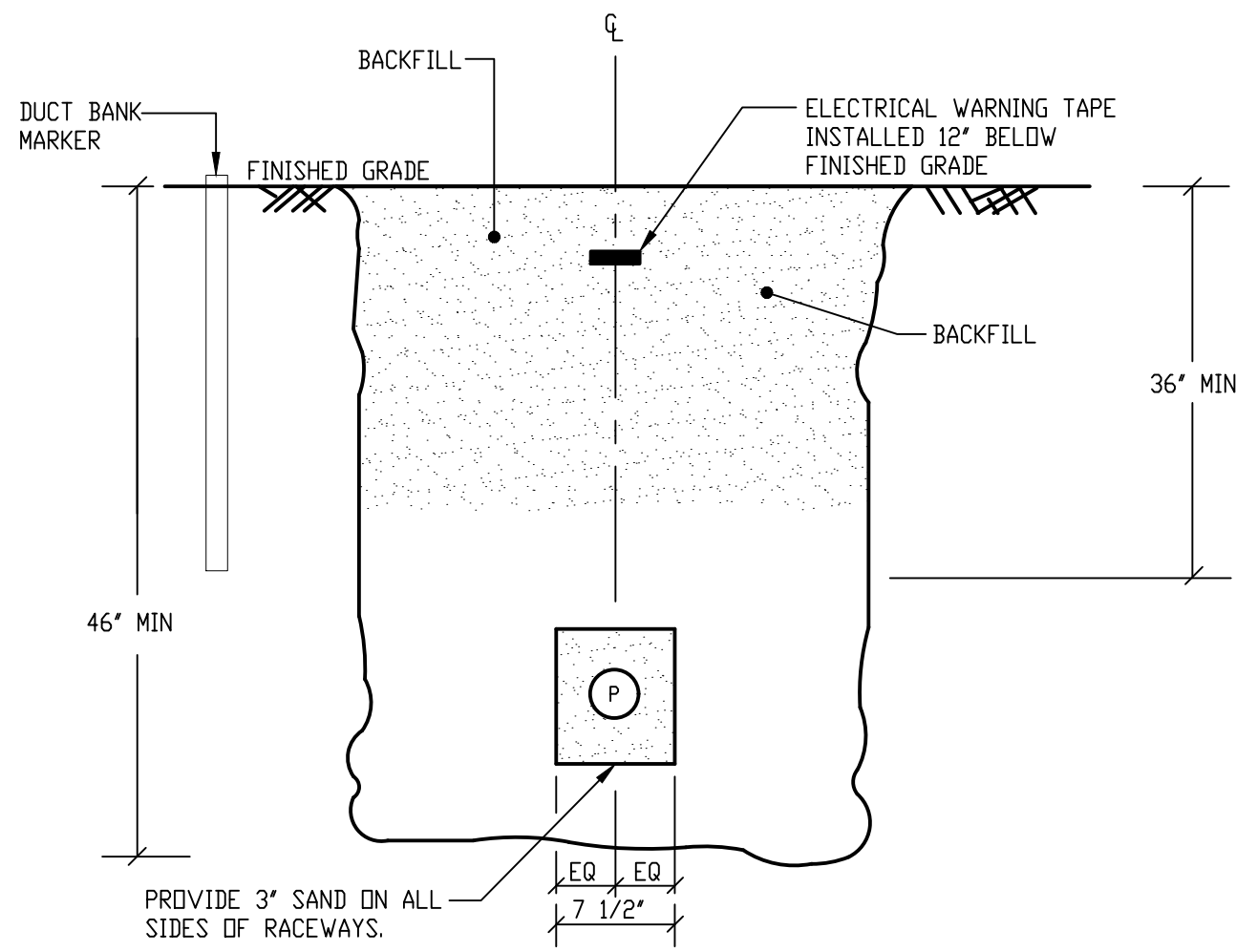
DATE 03.15.24

DRAWN MTG

CKD JUM

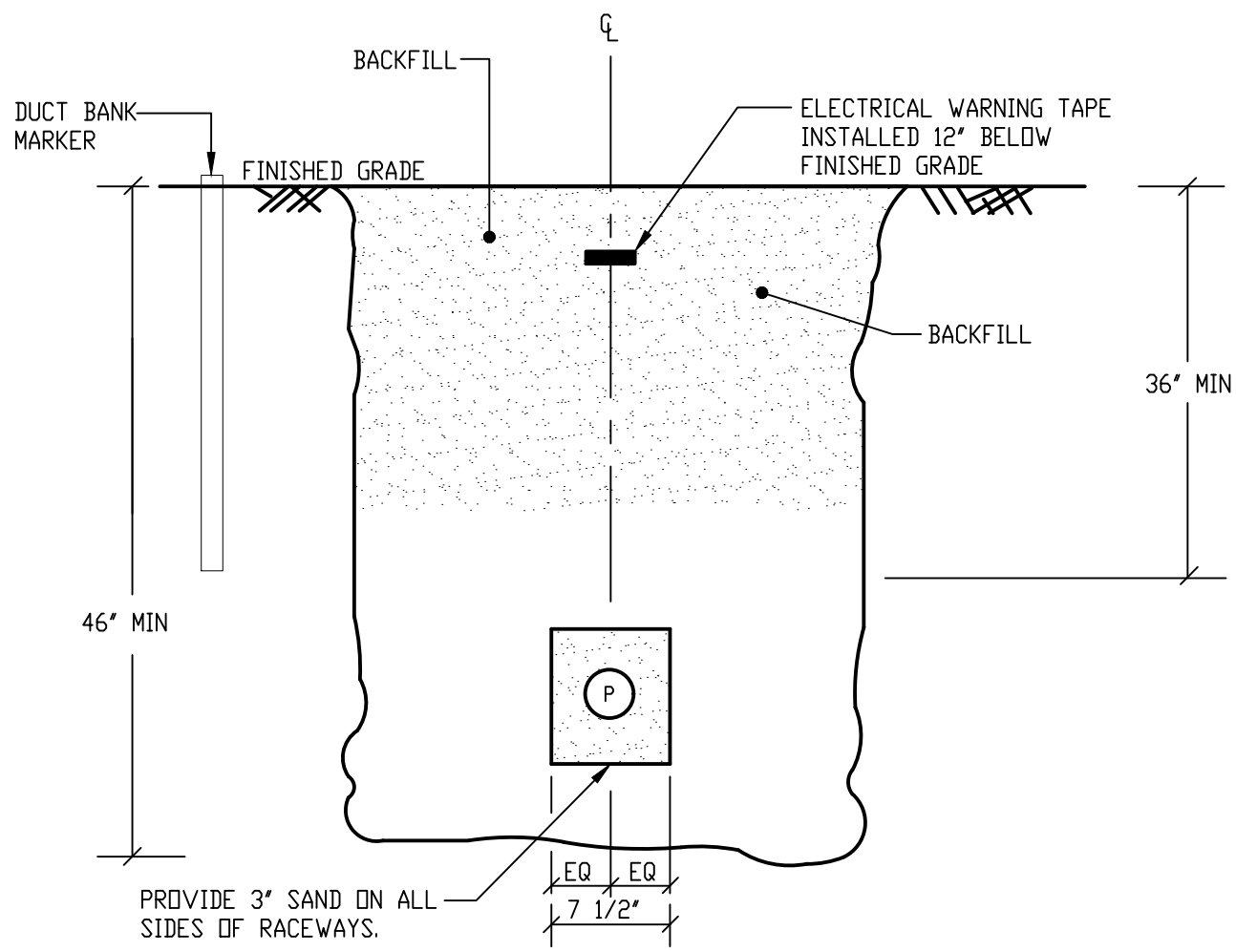
SCALE 1"=10'-0" SHEET NO.

E1.1



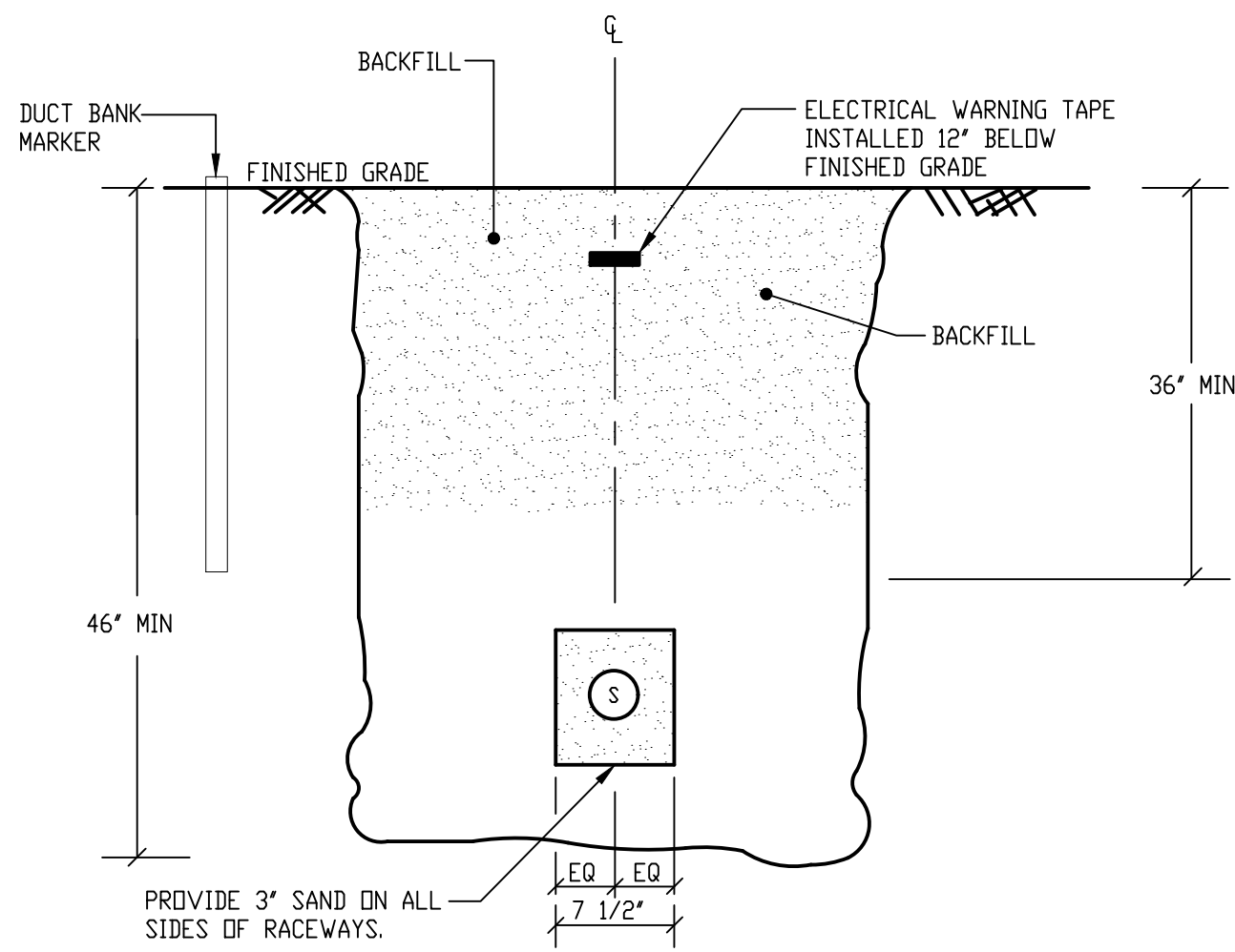
① DUCT BANK SECTION A-A
SCALE: NTS

(P) 1" ELEC. - SCHED 40 PVC



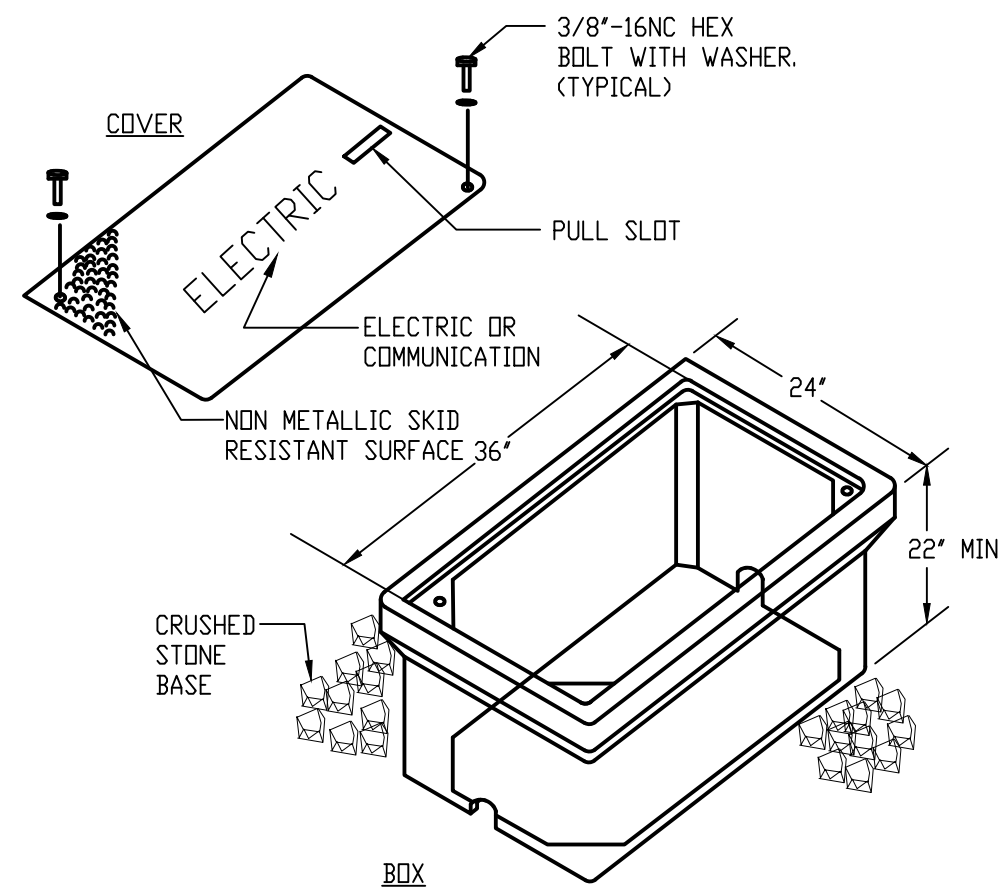
④ DUCT BANK SECTION D-D
SCALE: NTS

(P) 2" ELEC. - SCHED 40 PVC



② DUCT BANK SECTION B-B
SCALE: NTS

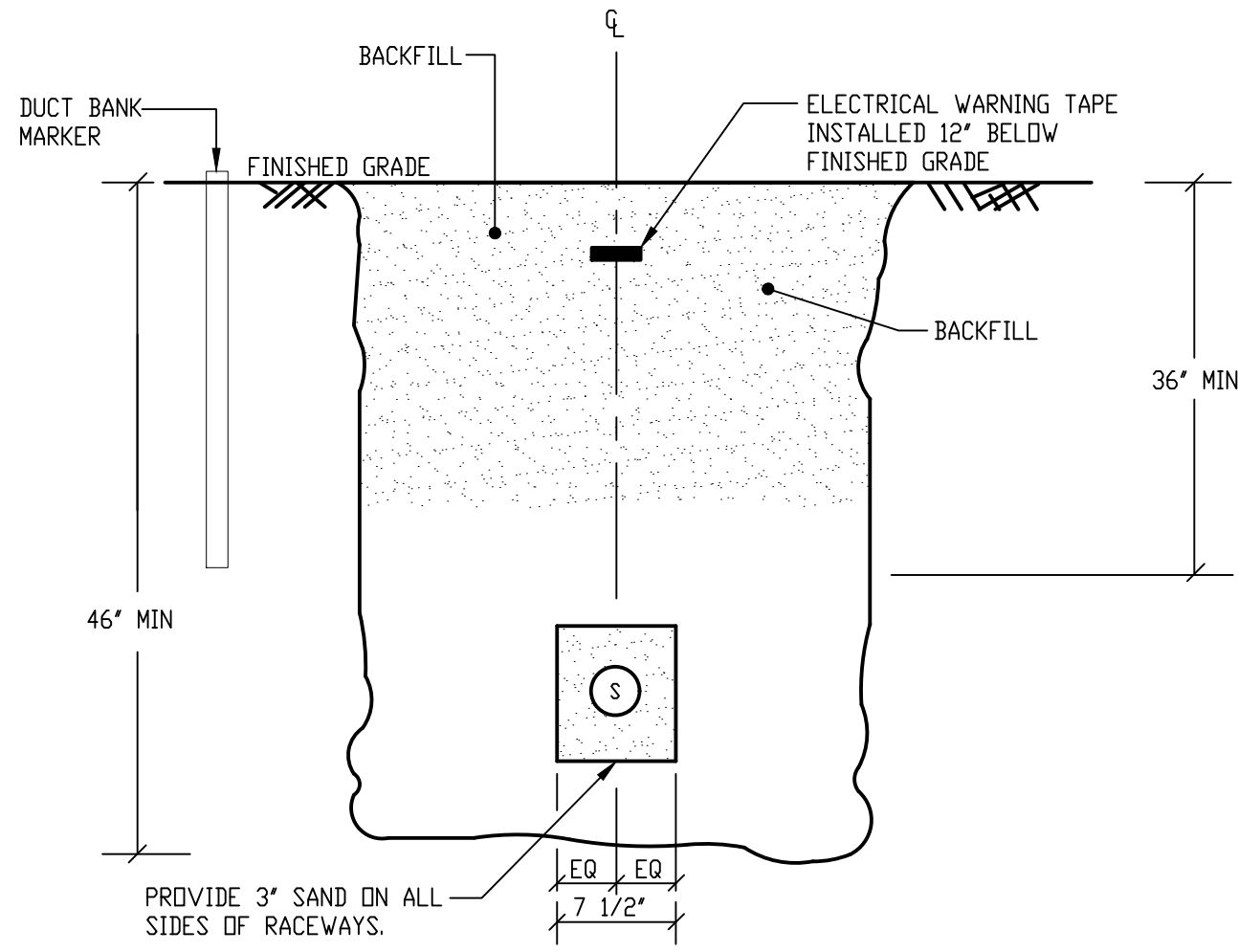
(S) 1" COMMUNICATIONS - HDPE



⑤ TYPICAL HANDHOLE PULLBOX DETAIL
SCALE: NTS

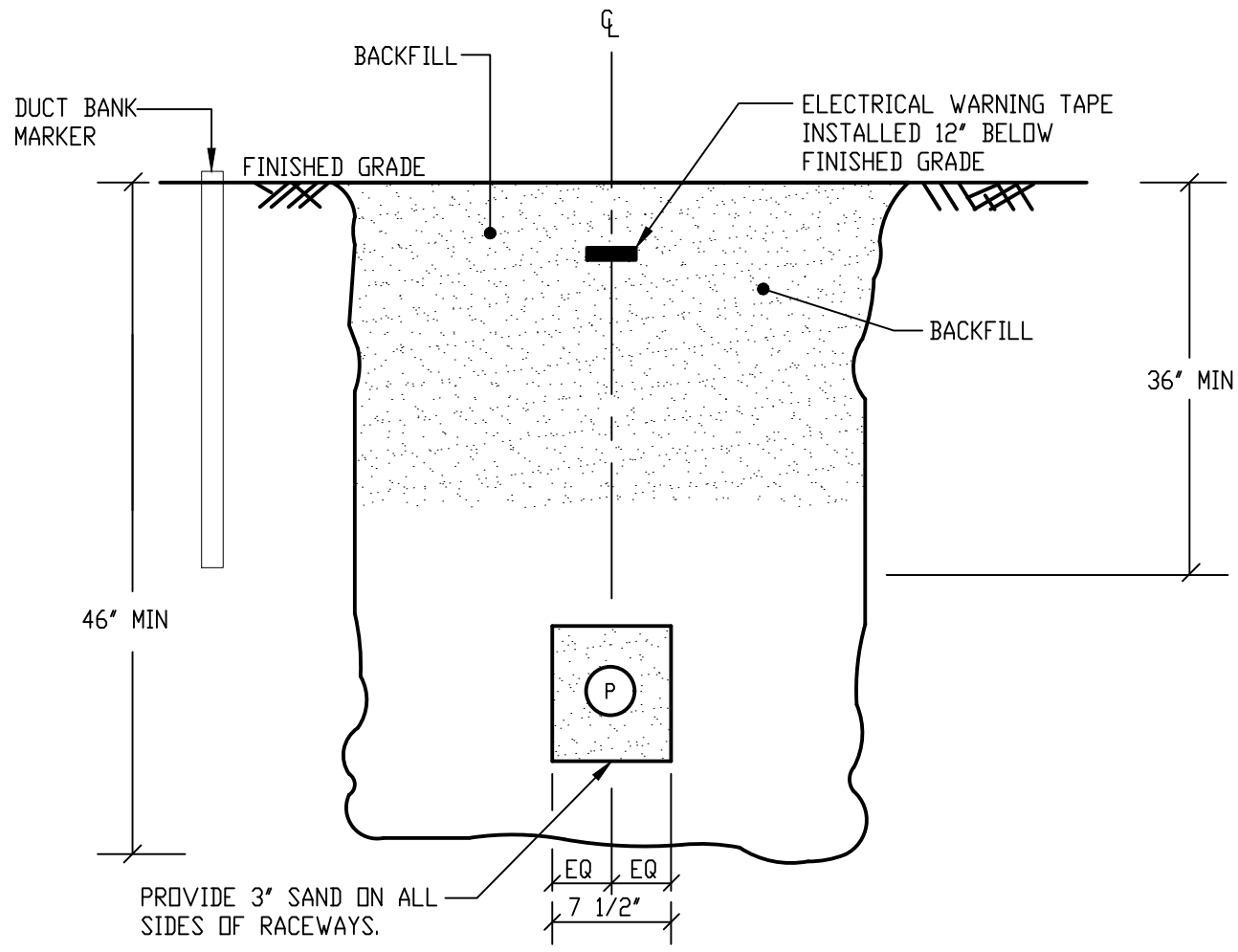
NOTES:

1. THIS HANDHOLE IS INTENDED FOR NON-DELIBERATE VEHICULAR TRAFFIC ONLY.
2. HANDHOLE SHALL BE PREFABRICATED POLYMER AGGREGATE EQUAL TO QUARTZITE OR EQUAL PRECAST CONCRETE CONSTRUCTION.
3. DIMENSIONS SHOWN ARE MINIMUM DIMENSIONS. CONTRACTOR TO SIZE ALL HANDHOLES PER MASSACHUSETTS ELECTRICAL CODE.



③ DUCT BANK SECTION C-C
SCALE: NTS

(S) 2" COMMUNICATIONS - HDPE



⑥ DUCT BANK SECTION E-E
SCALE: NTS

(P) 1-1/2" ELEC. - SCHED 40 PVC

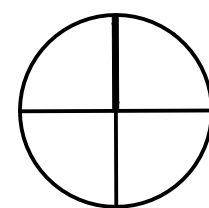


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03/15/24 BID DOCUMENTS

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IMPROVEMENTS
WORCESTER, MA

PROJECT

ELECTRICAL
DETAILS
ADD ALTERNATE #1

DRAWING TITLE

CONTRACT NO.

DATE

03.15.24

DRAWN

MTG

CKD

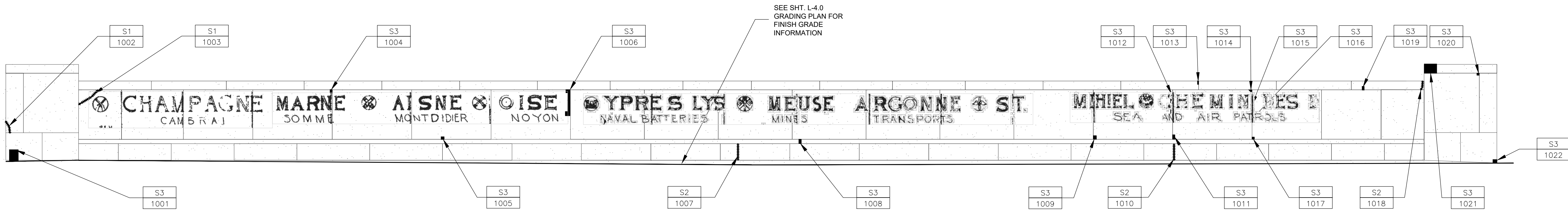
JJM

SCALE

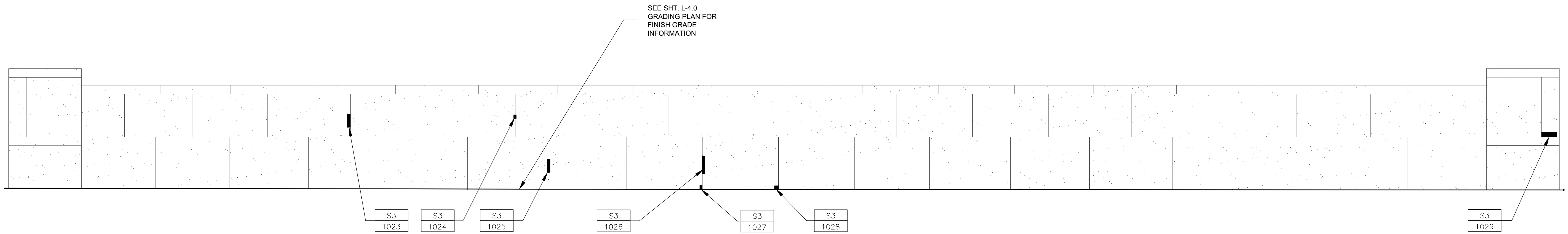
NTS

SHEET NO.

E2.1

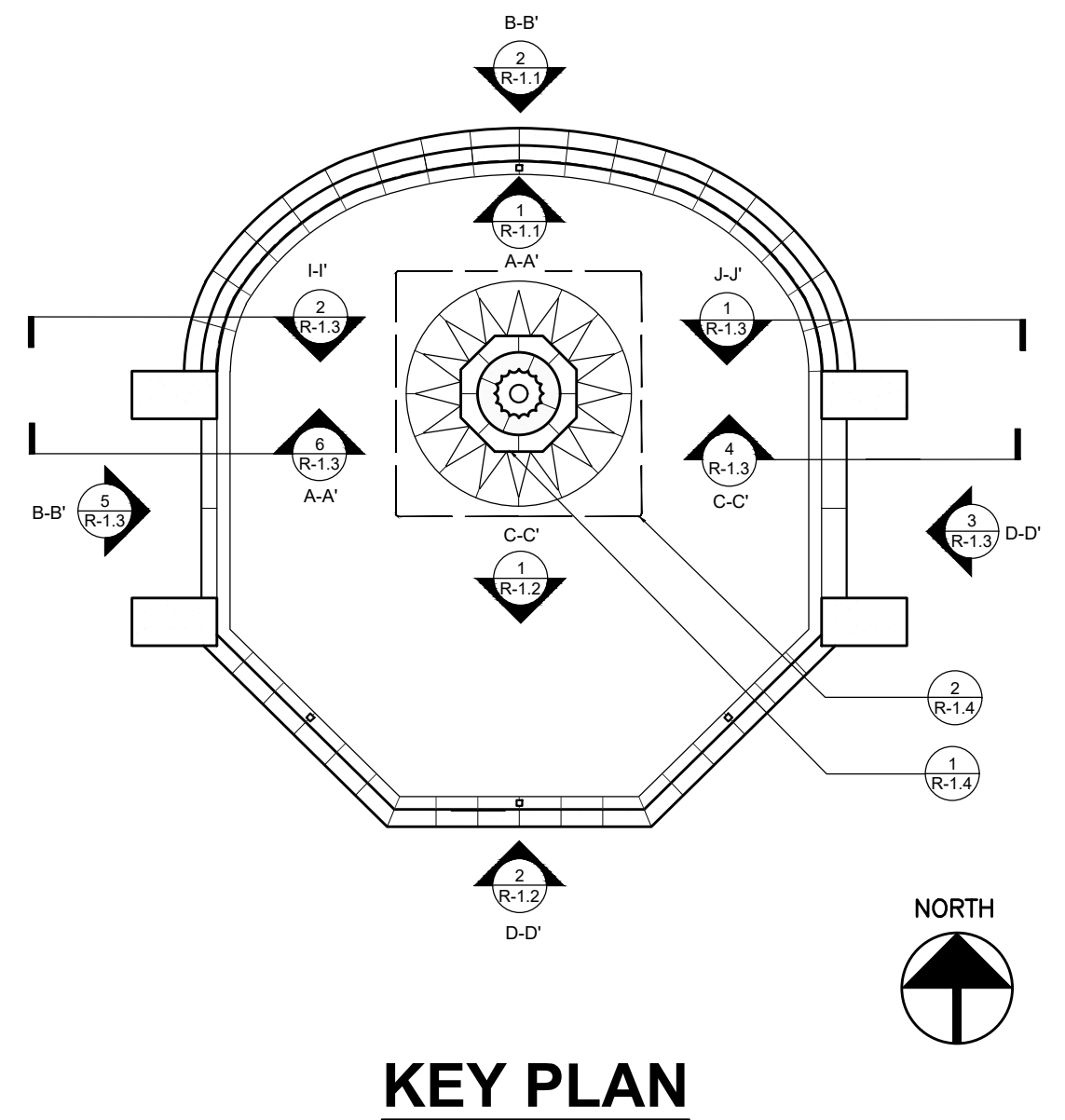


1 WAR MEMORIAL "WHISPERING WALL" - ELEVATION A-A'
SCALE: 1/4" = 1'-0"



2 WAR MEMORIAL "WHISPERING WALL"- ELEVATION B-B'
SCALE: 1/4" = 1'-0"

GENERAL MASONRY RESTORATION NOTES		SHEET KEYNOTES & LEGEND	
1. GRAPHIC INDICATIONS OF WORK SPECIFIED ON DRAWINGS ARE INTENDED TO GIVE LOCATION OF REPAIR AND APPROXIMATE SIZE OF REPAIR ONLY. ALL WORK SHOULD BE FIELD VERIFIED.	2. CLEAN 100% OF MASONRY UNLESS OTHERWISE NOTED USING DESIGNATED CHEMICAL CLEANERS AND LOW PRESSURE WATER RINSE AS DETERMINED BY FIELD TESTING. IN ADDITION TO GENERAL CLEANING REMOVE METALLIC STAINING, BIOLOGICAL GROWTH, CARBON DEPOSITS, PAINT AND EFFLORESCENCE. ASSUME 25% OF STONE SURFACES WILL REQUIRE RUST STAIN REMOVAL. METHODS FOR CLEANING WILL VARY ON DIFFERENT SURFACES DEPENDING ON THE LEVEL OF SOILING. FOLLOW REQUIREMENTS OF SPECIFICATION SECTION 040110.	3. ALL RESTORATION CLEANING SHALL BE PERFORMED AFTER DISMANTLING OF MASONRY AND PRIOR TO ALL REPAIR AND REINSTALLATION WORK.	4. DOCUMENT, SALVAGE AND STORE 100% OF GRANITE. FOLLOW REQUIREMENTS OF SPECIFICATION SECTION 024291.
5. REPAIR GRANITE AS INDICATED ON THE DRAWINGS PRIOR TO REINSTALLATION. FOLLOW REQUIREMENTS OF SPECIFICATION SECTION 040140.	6. REBUILD 100% OF GRANITE TO NEW CONFIGURATION, INCLUDING GRANITE TREADS AND GRANITE GUTTER. SEE L-SERIES DRAWINGS FOR RESETTING GRANITE TREADS AT MEMORIAL ENTRANCES. SEE S-SERIES DRAWINGS FOR ALL MEMORIAL FOUNDATION INFORMATION.	7. REBUILD AND POINT 100% OF MORTAR JOINTS IN MASONRY WITH APPROVED MORTAR TO MATCH EXISTING. FOLLOW REQUIREMENTS OF SPECIFICATION SECTION 040513.	8. PERFORM A FINAL MASONRY WASHDOWN AFTER ALL MASONRY RESTORATION AND REBUILDING WORK IS COMPLETE.
9. ADDITIONAL FAILING CRACK REPAIRS OR UNDOCUMENTED CRACKS MAY BE DISCOVERED AFTER REMOVAL AND CLEANING. COMPLETE REPAIRS PRIOR TO REINSTALLATION WORK. PROVIDE A UNIT COST FOR ADDITIONAL CRACK REPAIR.	10. DECORATIVE BRONZE AT FLAGPOLE: CLEAN, RESTORE AND REPLACE (WHERE NOTED) EXISTING DECORATIVE BRONZE FEATURES. REFER TO SPECIFICATION SECTION 050170.	11. TREATMENT NOTE: SEE NOTE ON DRAWING	12. TREATMENT NOTE: SEE NOTE ON DRAWING



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BUILDING CONSERVATION ASSOCIATES, INC.
RESTORATION CONSULTANT
10 LANGLEY ROAD NEWTON CENTRE MA 02459

6.19.24 BID DOCUMENTS

DATE REVISION

REVISIONS

NORTH

STAMP

LINCOLN SQUARE
IMPROVEMENTS
WORCESTER, MA

MASONRY RESTORATION
ADD ALTERNATE #1

DRAWING TITLE
NO.

DATE 6.19.24

DRAWN LNH

CKD L.JH

SCALE AS SHOWN

SHEET NO.

R-1.1



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STAMP

LINCOLN SQUARE
IMPROVEMENTS
WORCESTER, MA

PROJECT

MASONRY RESTORATION
ADD ALTERNATE #1

DRAWING TITLE

CONTRACT
NO.

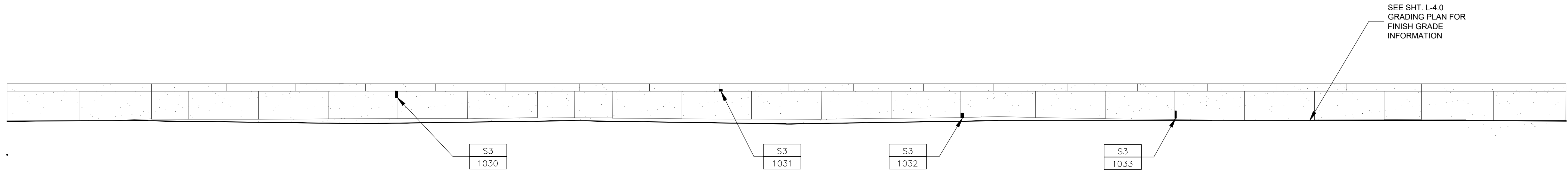
DATE 6.19.24

DRAWN LN

CKD LJH

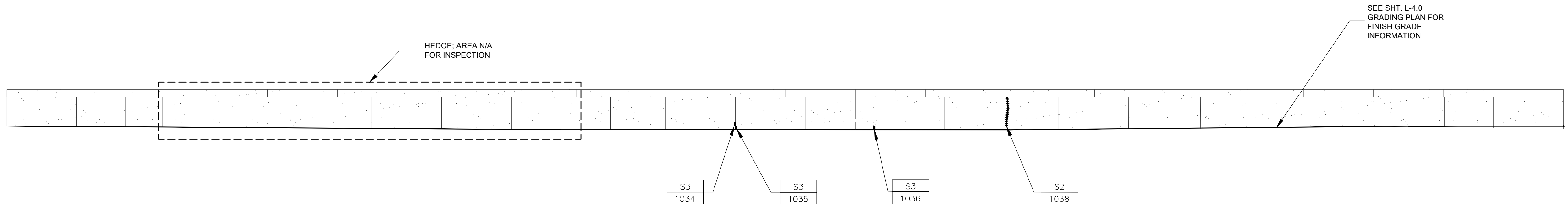
SCALE AS SHOWN SHEET NO.

R-1.2



1 WAR MEMORIAL - ELEVATION C-C'

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



2 WAR MEMORIAL - ELEVATION D-D'

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

GENERAL MASONRY RESTORATION NOTES

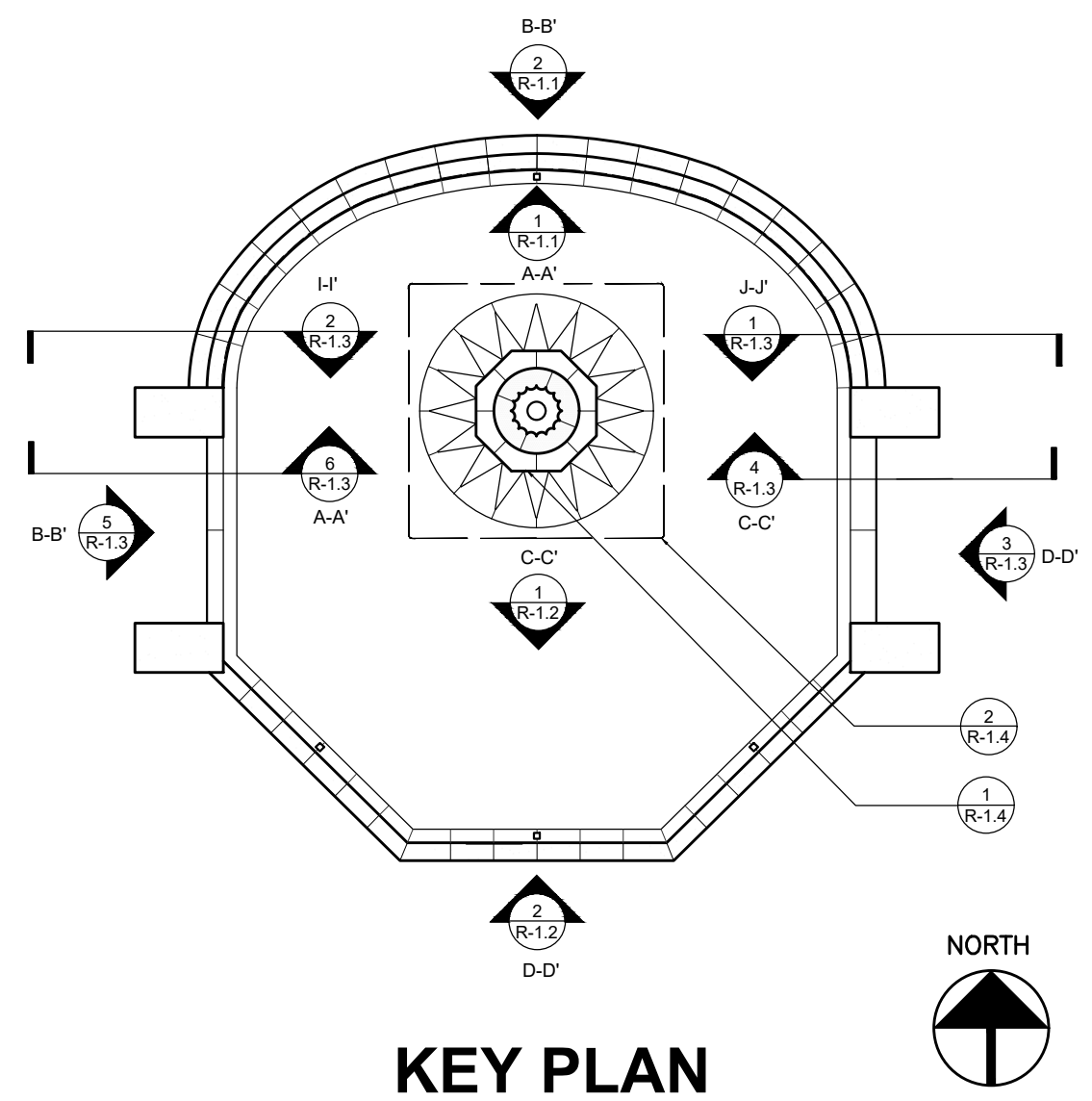
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- DECORATIVE BRONZE AT FLAGPOLE: CLEAN, RESTORE AND REPLACE (WHERE NOTED) EXISTING DECORATIVE BRONZE FEATURES. REFER TO SPECIFICATION SECTION 050170.

SHEET KEYNOTES & LEGEND

RESTORATION TAG:

- | | |
|------|--|
| XX | -TREATMENT CODE |
| XXXX | -TAG ID |
| S1 | REPAIR CRACK WITH COMPOSITE PATCHING MORTAR. SEE DETAIL 1/R-1.5 |
| S2 | REPAIR CRACK BY PINNING AND PATCHING WITH COMPOSITE PATCHING MORTAR. SEE DETAILS 4/R-1.5 AND 6/R-1.5 |
| S3 | INSTALL GRANITE DUTCHMAN. SEE DETAIL 2/R-1.5 |
| S4 | INSTALL GRANITE DUTCHMAN PLUG. SEE DETAIL 3/R-1.5 |
| S5 | REMOVE BRONZE METALLIC STAINING |

TREATMENT NOTE: SEE NOTE ON DRAWING



KEY PLAN



BUILDING CONSERVATION ASSOCIATES, INC.
RESTORATION CONSULTANT
10 LANGLEY ROAD NEWTON CENTRE MA 02459

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REVISIONS

NORTH

STAMP

LINCOLN SQUARE
IMPROVEMENTS
WORCESTER, MA

PROJECT

MASONRY RESTORATION
ADD ALTERNATE #1

DRAWING TITLE

CONTRACT

NO.

DATE

6.19.24

DRAWN

LNH

CKD

LJH

SCALE

AS SHOWN

SHEET NO.

R-1.3

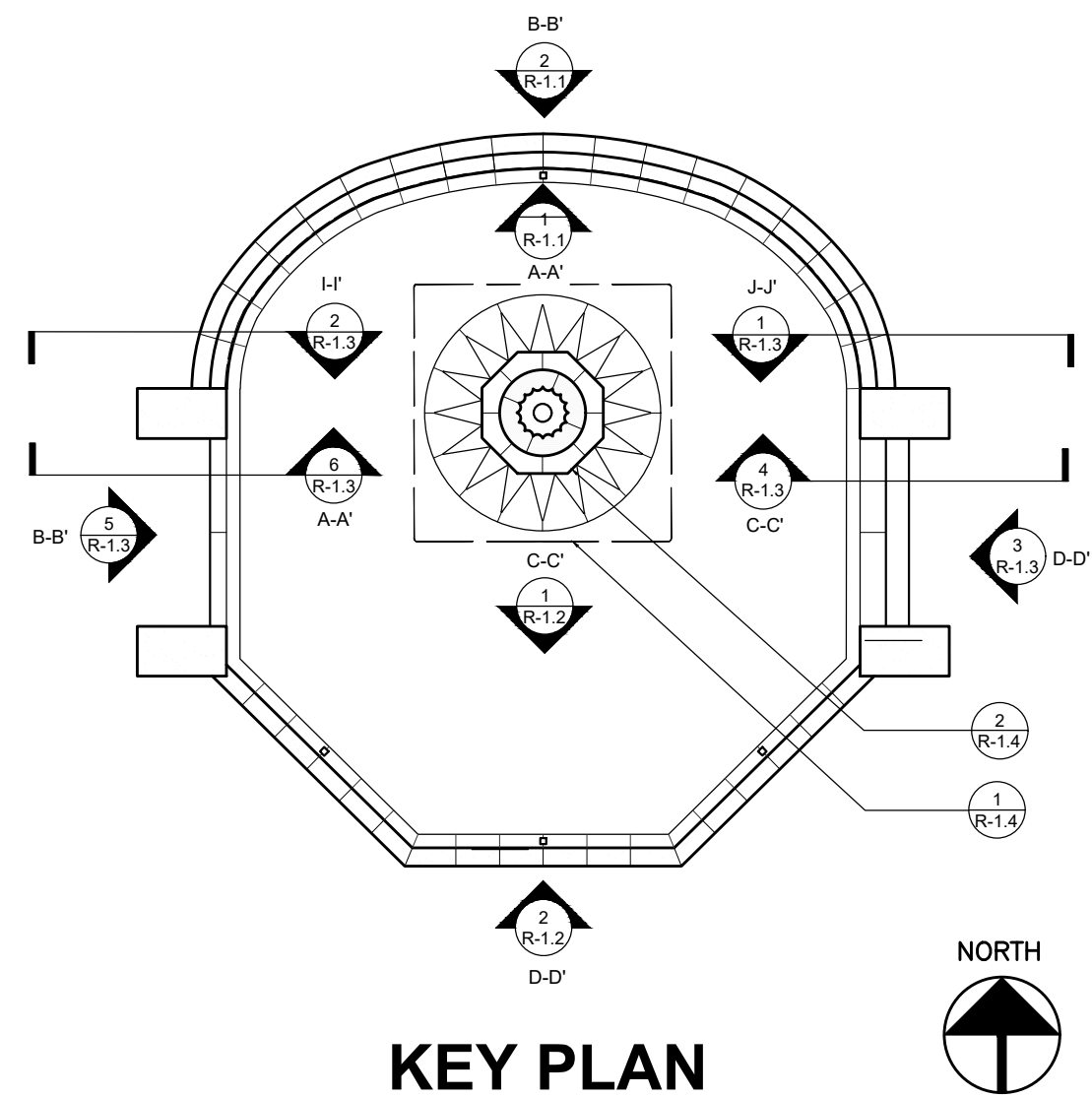
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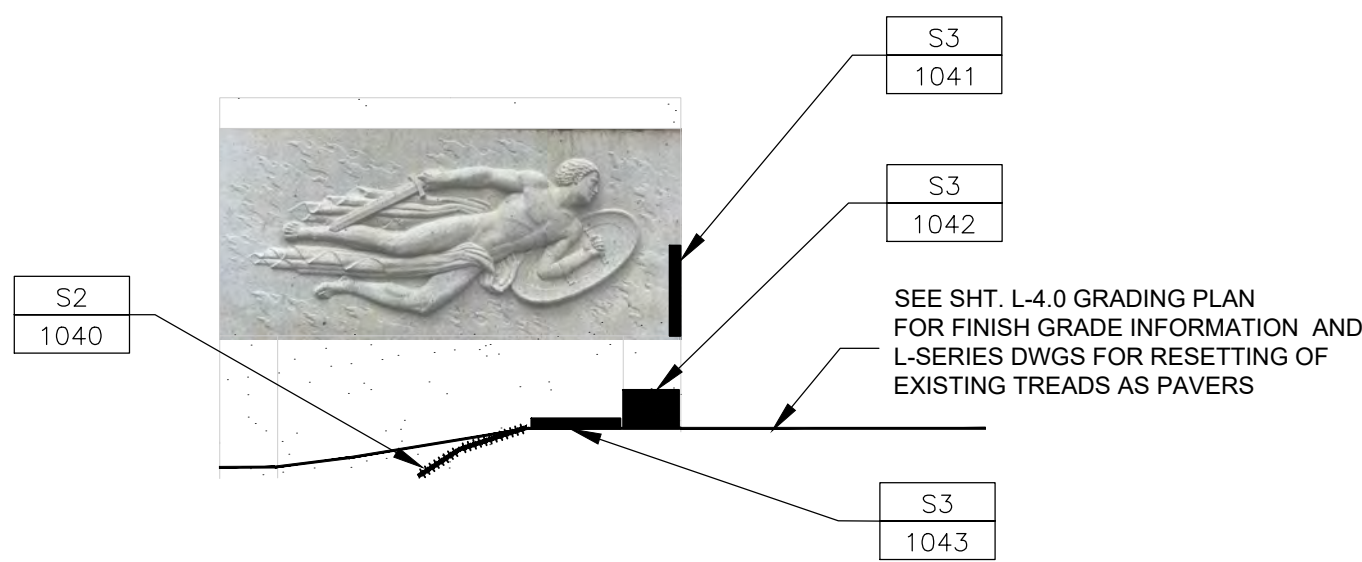
SHEET KEYNOTES & LEGEND

RESTORATION TAG:

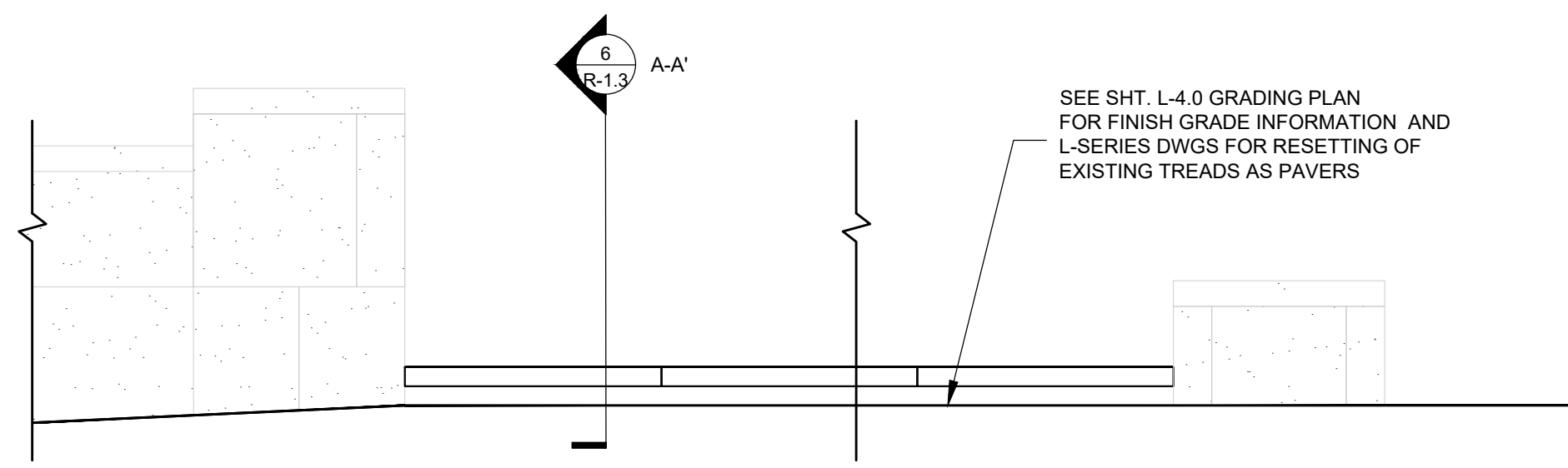
XX	-TREATMENT CODE
XXXX	-TAG ID
S1	REPAIR CRACK WITH COMPOSITE PATCHING MORTAR. SEE DETAIL 1/R-1.5
S2	REPAIR CRACK BY PINNING AND PATCHING WITH COMPOSITE PATCHING MORTAR. SEE DETAILS 4/R-1.5 AND 6/R-1.5
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S4	INSTALL GRANITE DUTCHMAN PLUG. SEE DETAIL 3/R-1.5
S5	REMOVE BRONZE METALLIC STAINING
	TREATMENT NOTE: SEE NOTE ON DRAWING



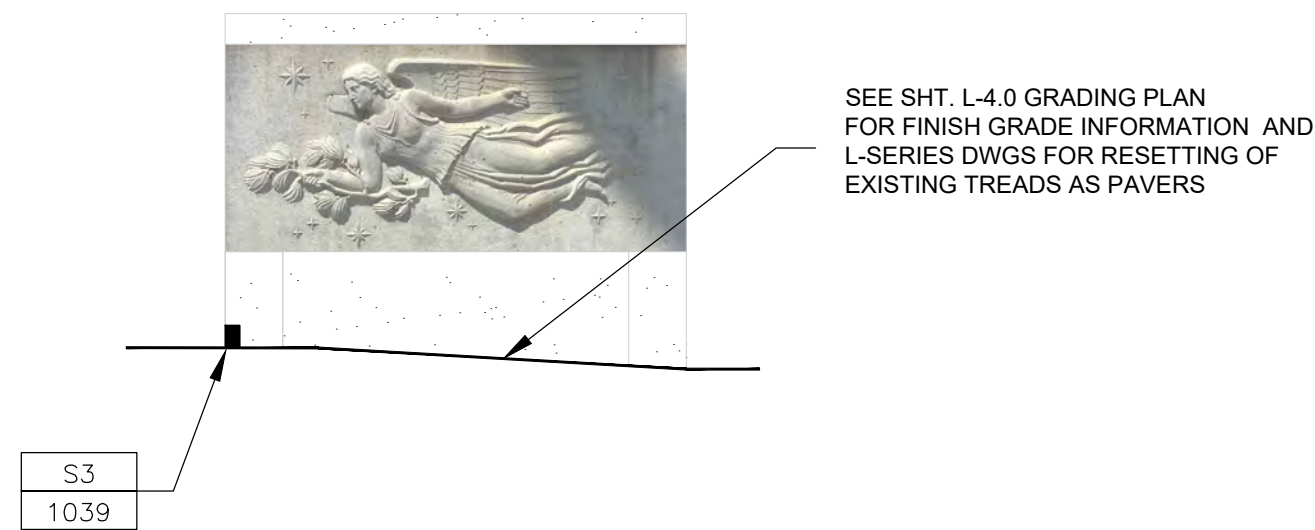
KEY PLAN



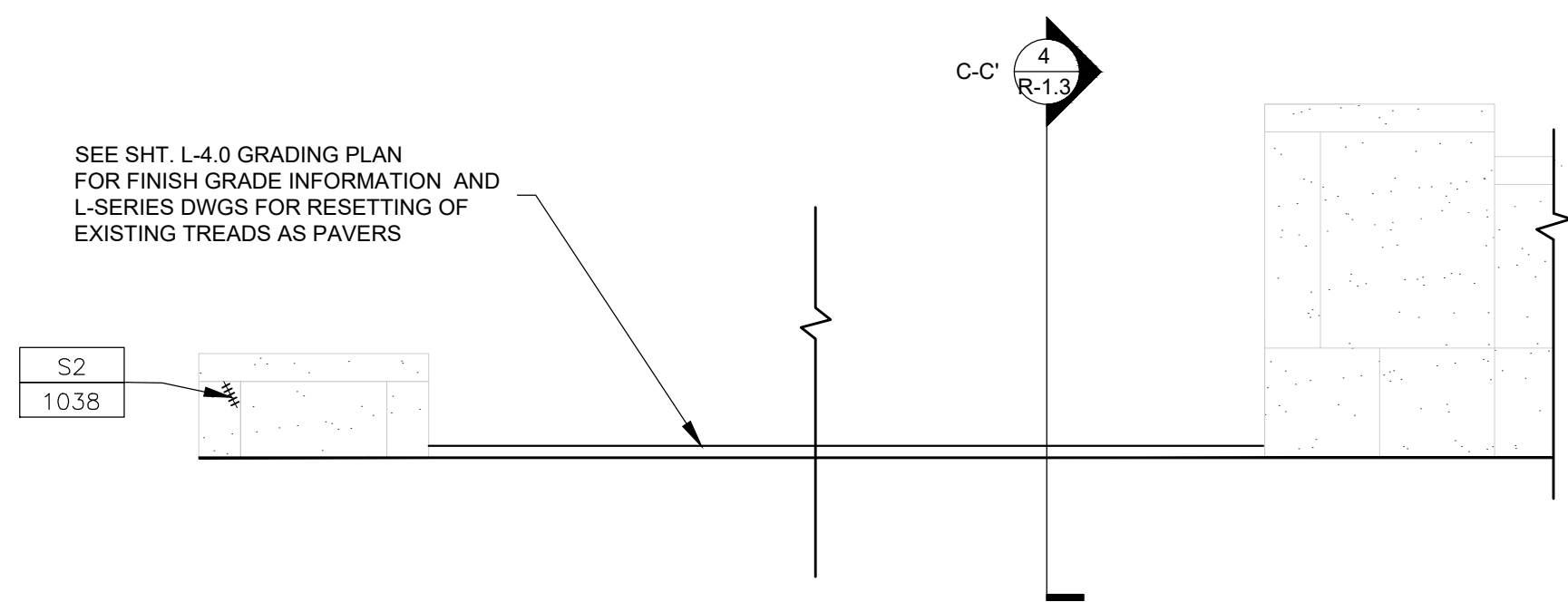
6 WAR MEMORIAL- SECTION - ELEVATION A-A'
SCALE: 1/4" = 1'-0"



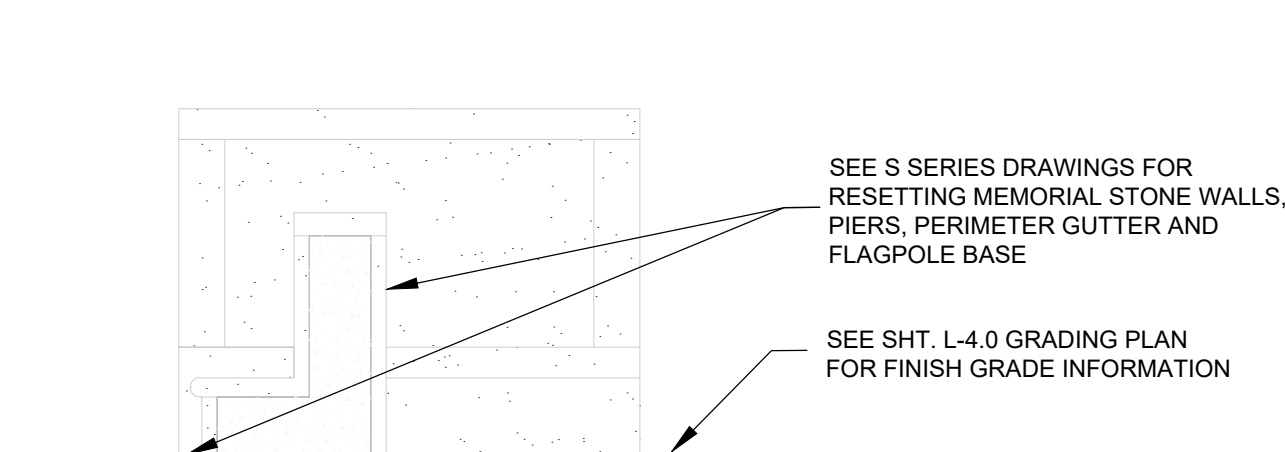
5 WAR MEMORIAL - SECTION - ELEVATION B-B'
SCALE: 1/4" = 1'-0"



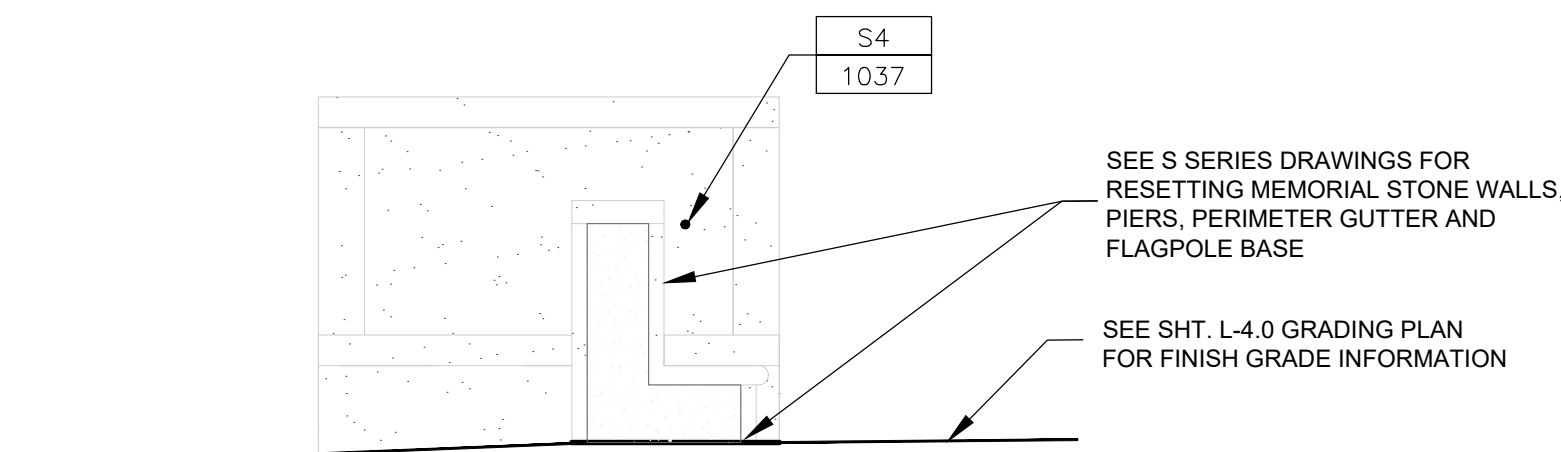
4 WAR MEMORIAL SECTION-ELEVATION C-C'
SCALE: 1/4" = 1'-0"



3 WAR MEMORIAL SECTION - ELEVATION D-D'
SCALE: 1/4" = 1'-0"



2 GRANITE WALL SECTION I-I'
SCALE: 1/4" = 1'-0"



1 GRANITE WALL SECTION-ELEVATION J-J'
SCALE: 1/4" = 1'-0"



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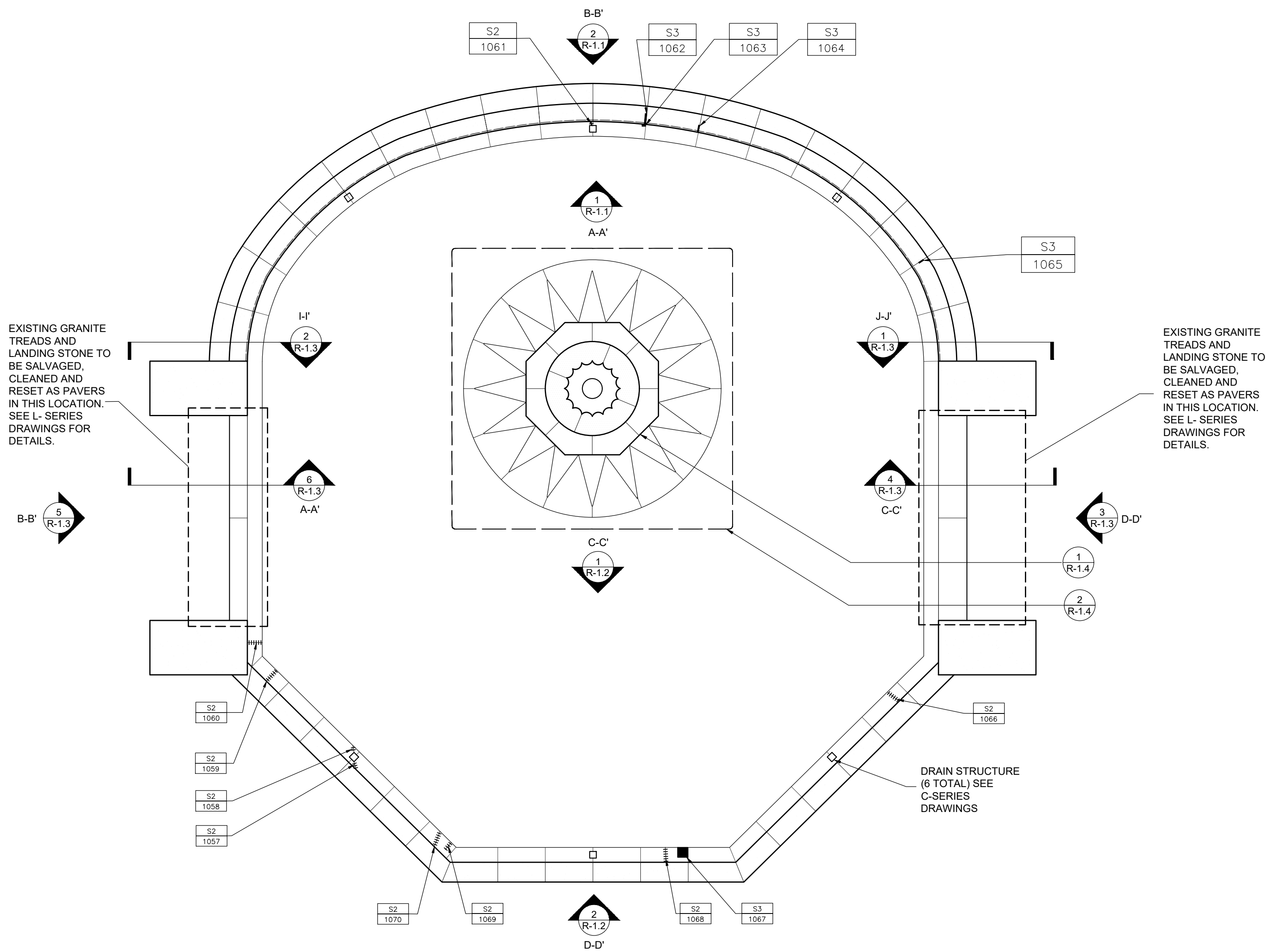
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SHEET KEYNOTES & LEGEND

RESTORATION TAG:

	-TREATMENT CODE -TAG ID
	REPAIR CRACK WITH COMPOSITE PATCHING MORTAR. SEE DETAIL 1/R-1.5
	REPAIR CRACK BY PINNING AND PATCHING WITH COMPOSITE PATCHING MORTAR. SEE DETAILS 4/R-1.5 AND 6/R-1.5
	INSTALL GRANITE DUTCHMAN. SEE DETAIL 2/R-1.5
	INSTALL GRANITE DUTCHMAN PLUG. SEE DETAIL 3/R-1.5
	REMOVE BRONZE METALLIC STAINING
	TREATMENT NOTE: SEE NOTE ON DRAWING

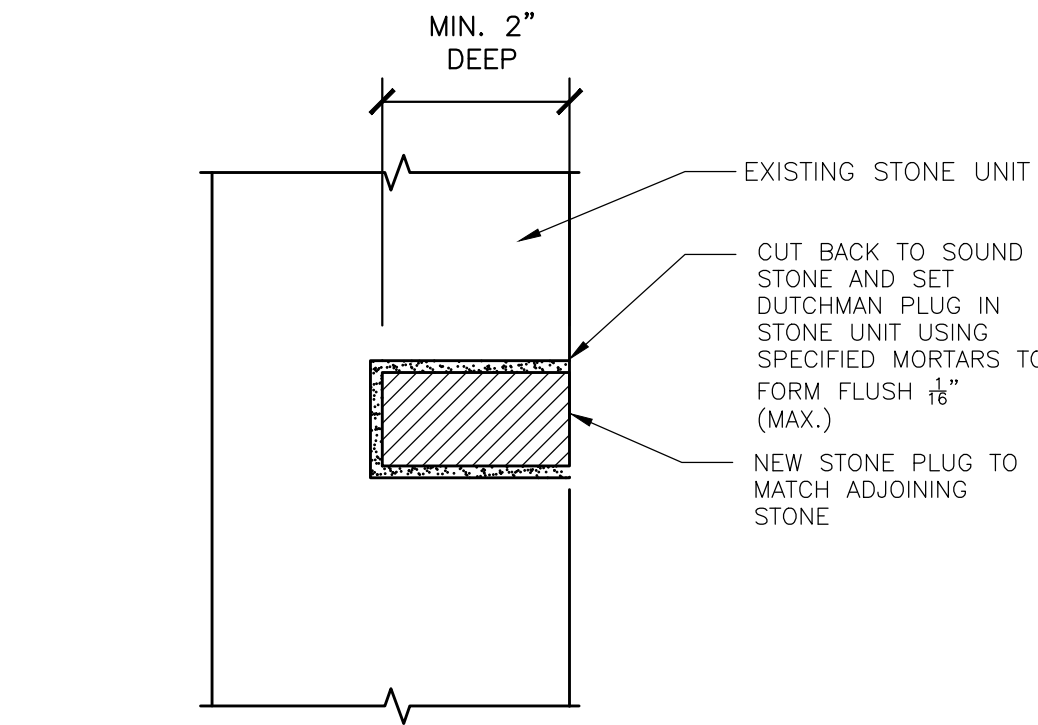


SUMMARY OF TREATMENTS
AND QUANTITIES

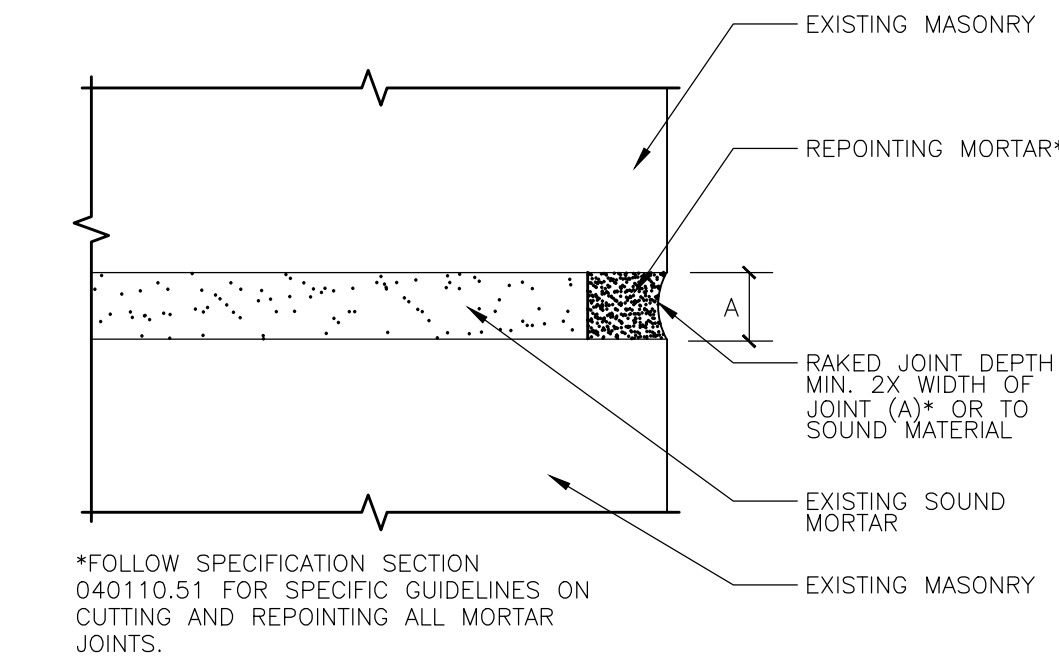
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1002	S1	12.01	LINEAR INCH
1003	S1	22.13	LINEAR INCH
1004	S3	5.77	SQ. INCH
1005	S3	6.22	SQ. INCH
1006	S3	58.8	SQ. INCH
1007	S2	15.07	LINEAR INCH
1008	S3	8.48	SQ. INCH
1009	S3	8.97	SQ. INCH
1010	S2	15.03	LINEAR INCH
1011	S3	7.96	SQ. INCH
1012	S3	29.73	SQ. INCH
1013	S3	2.98	SQ. INCH
1014	S3	4.63	SQ. INCH
1015	S3	2.98	SQ. INCH
1016	S3	2.98	SQ. INCH
1017	S3	4.05	SQ. INCH
1018	S2	8.9	LINEAR INCH
1019	S3	5.91	SQ. INCH
1020	S3	3.92	SQ. INCH
1021	S3	94.34	SQ. INCH
1022	S3	11.06	SQ. INCH
1023	S3	30.53	SQ. INCH
1024	S3	7.06	SQ. INCH
1025	S3	30.53	SQ. INCH
1026	S3	31.84	SQ. INCH
1027	S3	7.06	SQ. INCH
1028	S3	9.31	SQ. INCH
1029	S3	60.14	SQ. INCH
1030	S3	10.22	SQ. INCH
1031	S3	2.91	SQ. INCH
1032	S3	8.2	SQ. INCH
1033	S3	6.16	SQ. INCH
1034	S3	3.1	SQ. INCH
1035	S3	3.1	SQ. INCH
1036	S3	3.1	SQ. INCH
1037	S4	1	UNIT COUNT
1038	S2	23.93	LINEAR INCH
1038	S2	8.41	LINEAR INCH
1039	S3	20.47	SQ. INCH
1040	S2	31.17	LINEAR INCH
1041	S3	66.3	SQ. INCH
1042	S3	145.43	SQ. INCH
1043	S3	62.59	SQ. INCH
1044	S5	5.06	SQ. FEET
1045	S3	8.08	SQ. INCH
1046	S5	2.51	SQ. FEET
1047	S3	6.29	SQ. INCH
1049	S3	18.72	SQ. INCH
1050	S3	5.41	SQ. INCH
1051	S3	5.49	SQ. INCH
1052	S3	6.29	SQ. INCH
1053	S2	6.34	LINEAR INCH
1054	S2	21.07	LINEAR INCH
1055	S3	10.9	SQ. INCH
1056	S3	5.45	SQ. INCH
1057	S2	10.01	LINEAR INCH
1058	S2	8.09	LINEAR INCH
1059	S2	17.81	LINEAR INCH
1060	S2	17.81	LINEAR INCH
1061	S2	5.24	LINEAR INCH
1062	S3	20.8	SQ. INCH
1063	S3	12.03	SQ. INCH
1064	S3	10.93	SQ. INCH
1065	S3	7	SQ. INCH
1066	S2	17.86	LINEAR INCH
1067	S3	148.48	SQ. INCH
1068	S2	19.17	LINEAR INCH
1069	S2	11.53	LINEAR INCH
1070	S2	18.96	LINEAR INCH

TREATMENT QUANTITY TOTALS

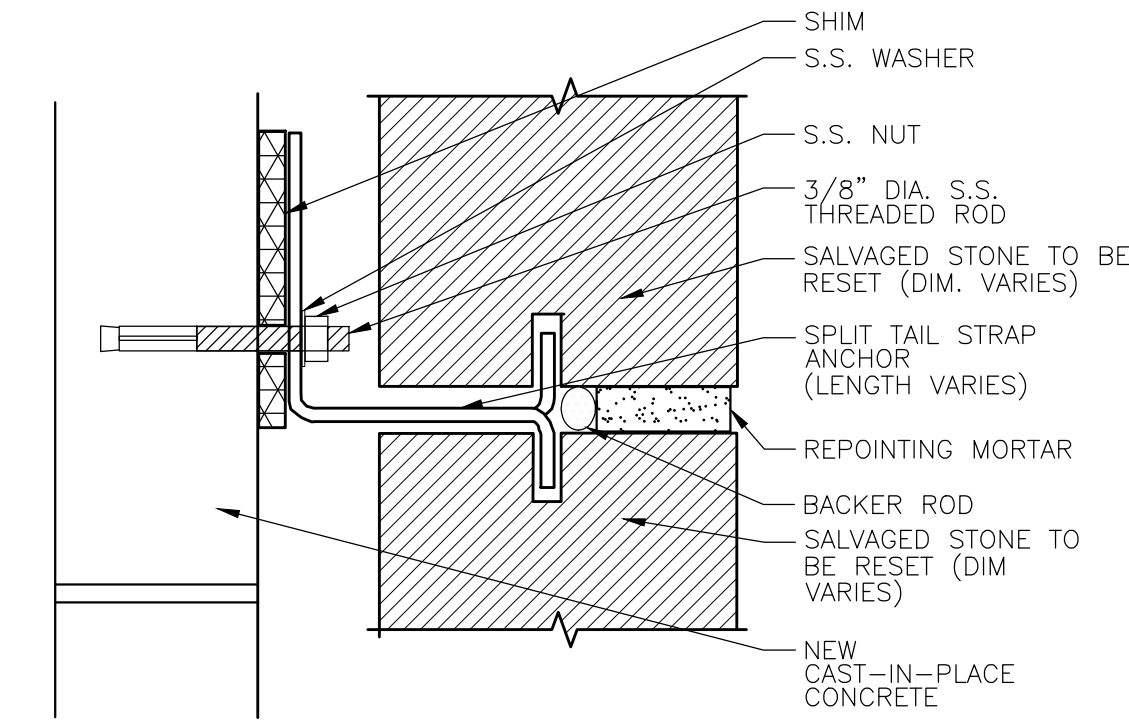
CODE	TOTAL EST SIZE	UNITS
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S2	21	LINEAR FEET
S3	8	SQ. FEET
S4	1	UNIT COUNT
S5	8	SQ. FEET



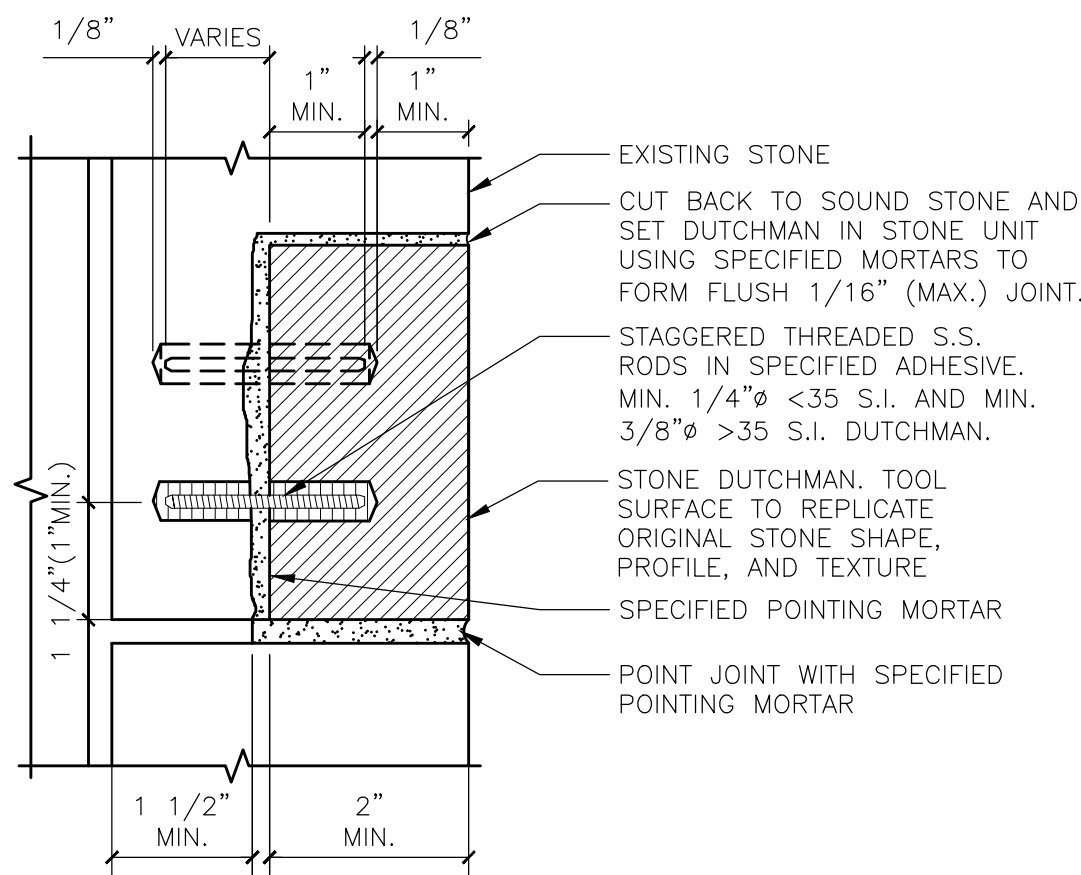
3 DUTCHMAN AT ANCHOR REMOVAL
NOT TO SCALE



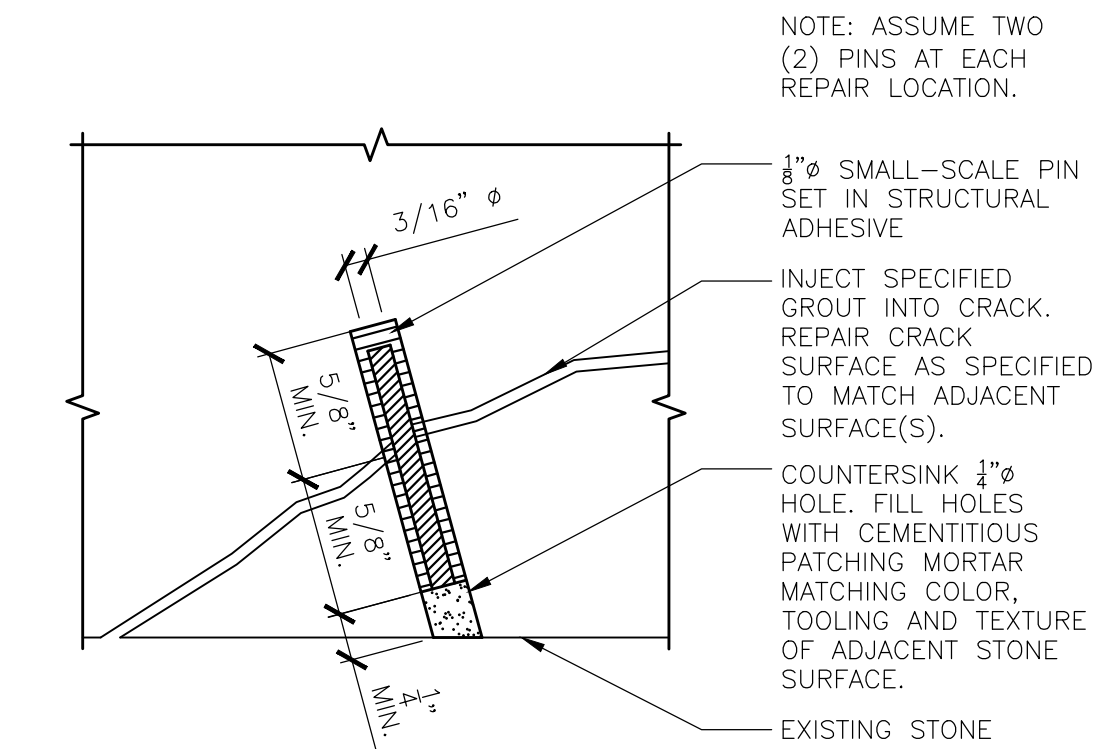
7 REPOINTING - SECTION
NOT TO SCALE



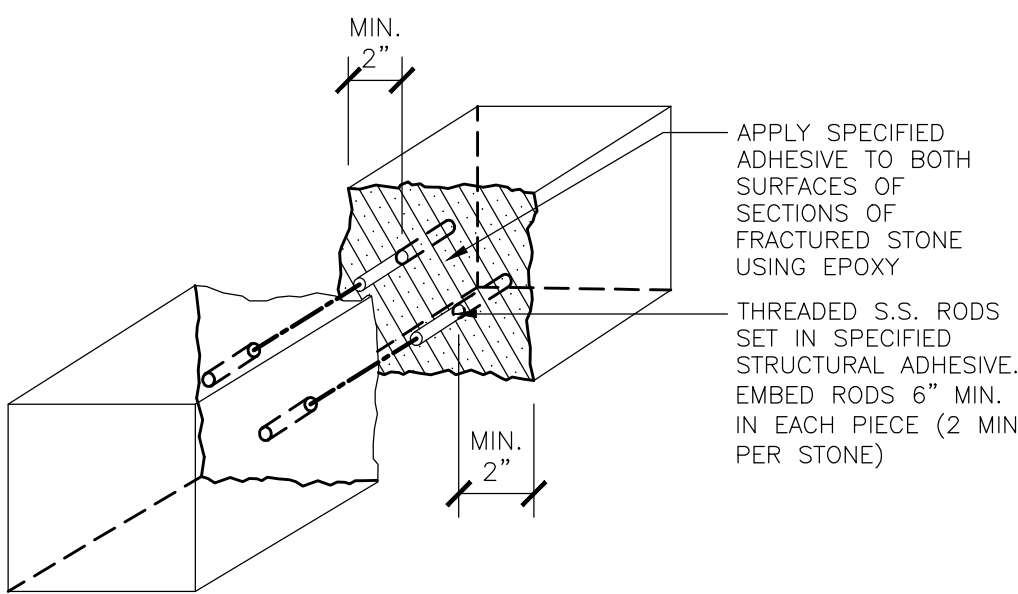
5 SPLIT TAIL STRAP ANCHOR - SECTION
NOT TO SCALE



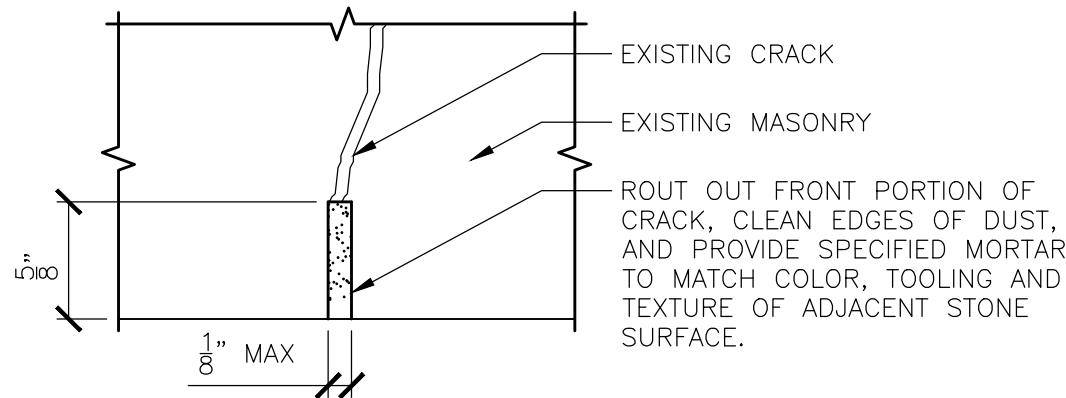
2 DUTCHMAN DETAIL - SECTION
NOT TO SCALE



6 PLAN SECTION SHOWING SMALL-SCALE
PIN SET IN ADHESIVE REPAIR
NOT TO SCALE



4 BLIND PIN STONE REPAIR
NOT TO SCALE



1 PLAN SECTION SHOWING
ROUT AND FILL CRACK REPAIR
NOT TO SCALE



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PROJECT
MASONRY DETAILS AND
TREATMENT QUANTITIES
ADD ALTERNATE #1

DRAWING TITLE

CONTRACT
NO.

DATE 6.19.24

DRAWN LN

CKD LJH

SCALE AS SHOWN SHEET NO.

R-1.5

GENERAL NOTES:

DESIGN

IN ACCORDANCE WITH THE 9TH EDITION MASSACHUSETTS STATE BUILDING CODE (MSBC) AND THE 2015 INTERNATIONAL BUILDING CODE (IBC) WITH MASSACHUSETTS AMENDMENTS FOR THE RECOMMENDED SOIL CHARACTERISTICS PROVIDED IN THE GEOTECHNICAL REPORT AND 100 PSF OF LIVE LOAD SURCHARGE PER THE 2016 ASCE/SEI 7 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.

EXCAVATIONS

CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THE COMPLETE SAFETY OF THE PROJECT'S EXCAVATIONS AND CONSTRUCTION, AND FOR PREVENTING ANY DAMAGE TO ADJACENT PROPERTIES INCLUDING BUT NOT LIMITED TO EXISTING STREETS, PARKING LOTS, BUILDINGS AND UTILITY LINES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGNING AND PROVIDING TEMPORARY SUPPORT OF EXCAVATION (S.O.E.) SYSTEMS AS NECESSARY FOR INTEGRITY OF THE SITE'S EXISTING ELEMENTS AND THE SAFE COMPLETION OF THE WORK.

CONTRACTOR'S S.O.E. SHALL BE DESIGNED AND STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE COMMONWEALTH OF MASSACHUSETTS. THE CONTRACTOR'S DESIGN SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL.

GEOTECHNICAL REPORT

SEE GEOTECHNICAL REPORT DATED JANUARY 14, 2021 BY LGCI

FOUNDATIONS

FOUNDATIONS MAY BE ALTERED, IF NECESSARY, TO SUIT CONDITIONS ENCOUNTERED DURING CONSTRUCTION, WITH THE PRIOR APPROVAL OF THE ENGINEER.

ALL FOOTINGS SHALL BEAR ON 6IN OF STRUCTURAL FILL OVERLYING AGGREGATE PIERS IN ACCORDANCE WITH THE GEOTECHNICAL REPORT. NO FOOTINGS SHALL BE CAST IN WATER OR ON FROZEN GROUND.

LAYOUT COORDINATION

SEE ARCHITECTURAL DRAWINGS FOR COORDINATES AND CONTROL POINT TO DETERMINE LOCATIONS AND LAYOUT OF THE PROPOSED WALLS. FOUNDATIONS FOR THE WALLS SHALL BE LAID OUT BASED ON THE WALL LOCATIONS SET IN THE ARCHITECTURAL DRAWINGS. FINAL WALL DIMENSIONS SHALL BE TAKEN FROM ARCHITECTURAL DRAWINGS, ANY WALL CURVATURE DETAILS PROVIDED ON STRUCTURAL DRAWINGS ARE FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING SITE CONDITIONS VIA SURVEY, FIELD MEASUREMENTS, TEST PROBES, TEST PITS, AND ANY OTHER MEANS PRIOR TO CONSTRUCTION.

EXISTING INFORMATION

DIMENSIONS, LOCATIONS, ELEVATIONS, AND DETAILS OF EXISTING STRUCTURES ARE BASED ON SURVEYS PERFORMED BY NITSCH ON 04/27/2020, 04/28/2020, AND 09/09/2020.

UNSUITABLE MATERIAL

ALL UNSUITABLE MATERIAL SHALL BE REMOVED WITHIN THE LIMITS OF THE FOUNDATIONS OF THE MEMORIAL TO AT LEAST 12 INCHES BELOW THE BOTTOM OF EXCAVATION FOR THE PROPOSED STRUCTURAL FOUNDATIONS AND BE DISPOSED OF LEGALLY, AS DIRECTED BY THE ENGINEER.

REINFORCEMENT

1. REINFORCING STEEL SHALL BE EPOXY COATED AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM A775 GRADE 60. ALL SUPPORTING DEVICES SHALL BE EPOXY COATED. UNLESS OTHERWISE NOTED ON THE CONSTRUCTION DRAWINGS, ALL CONTACT LAP SPLICES SHALL BE ACI CLASS B, LAPPED AS FOLLOWS;

MODIFICATION	CONDITION	#4 BARS	#5 BARS
1.	NONE	21"	26"
2.	12 INCHES OF CONCRETE BELOW BAR	29"	36"
3.	COATED BARS, COVER < 3db, OR CLEAR SPACING < 6db	31"	39"
4.	COATED BARS, ALL OTHER CASES	25"	31"
5.	CONDITION 2. AND 3.	35"	44"
6.	CONDITION 2. AND 4.	34"	43"

IF THE ABOVE BARS ARE SPACED 6 INCHES OR MORE ON CENTER, THE LAP LENGTH SHALL BE 80% OF THE LAP LENGTH GIVEN ABOVE. ALL OTHER BARS SHALL BE LAPPED AS SHOWN ON THE CONSTRUCTION DRAWINGS.

2. REINFORCEMENT SHALL BE PLACED A CLEAR DISTANCE OF 3 INCHES FROM THE FACE OF CONCRETE, UNLESS OTHERWISE SHOWN ON THE PLANS.

DOWEL BAR SPLICERS

DOWEL BAR SPLICERS SHALL HAVE THE SAME COATINGS AS THE REINFORCING BARS THEY ARE SPLICING.

CONCRETE MIXES

1. ALL CAST-IN-PLACE FOOTINGS AND STEM WALLS SHALL BE 4000 PSI, 1 1/2 IN., 565 CEMENT CONCRETE.
2. ALL CAST-IN-PLACE CONCRETE FOR THE PLAZA SLAB SHALL BE POROUS - SEE LANDSCAPE DRAWINGS FOR ADDITIONAL DETAILS.

GROUTED SPLICE SLEEVES

MECHANICAL REBAR SPLICES BY MEANS OF GROUT-FILLED STEEL SLEEVES INTO WHICH A NON-SHRINK, HIGH STRENGTH GROUT IS INTRODUCED USING A LOW PRESSURE PUMP, THE SPLICE TO MEET THE TYPE 1 OR TYPE 2 REQUIREMENTS OF ACI 318.

ASSOCIATED DRAWINGS

SEE L-SERIES DRAWINGS FOR SITE PREPARATION, SITE LAYOUT, GRADING, AND LANDSCAPING DETAILS.

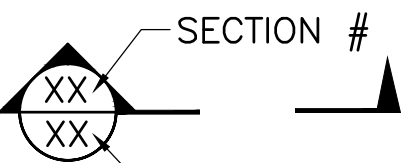
SEE C-SERIES DRAWINGS FOR DETAILS ON DEMOLITION, EROSION AND SEDIMENT CONTROL, SITE UTILITY, AND CIVIL DETAILS.

SEE R-SERIES DRAWINGS FOR DETAILS ON REMOVAL, RESTORATION, AND REPLACEMENT OF GRANITE MONUMENT PIECES.

ABBREVIATIONS

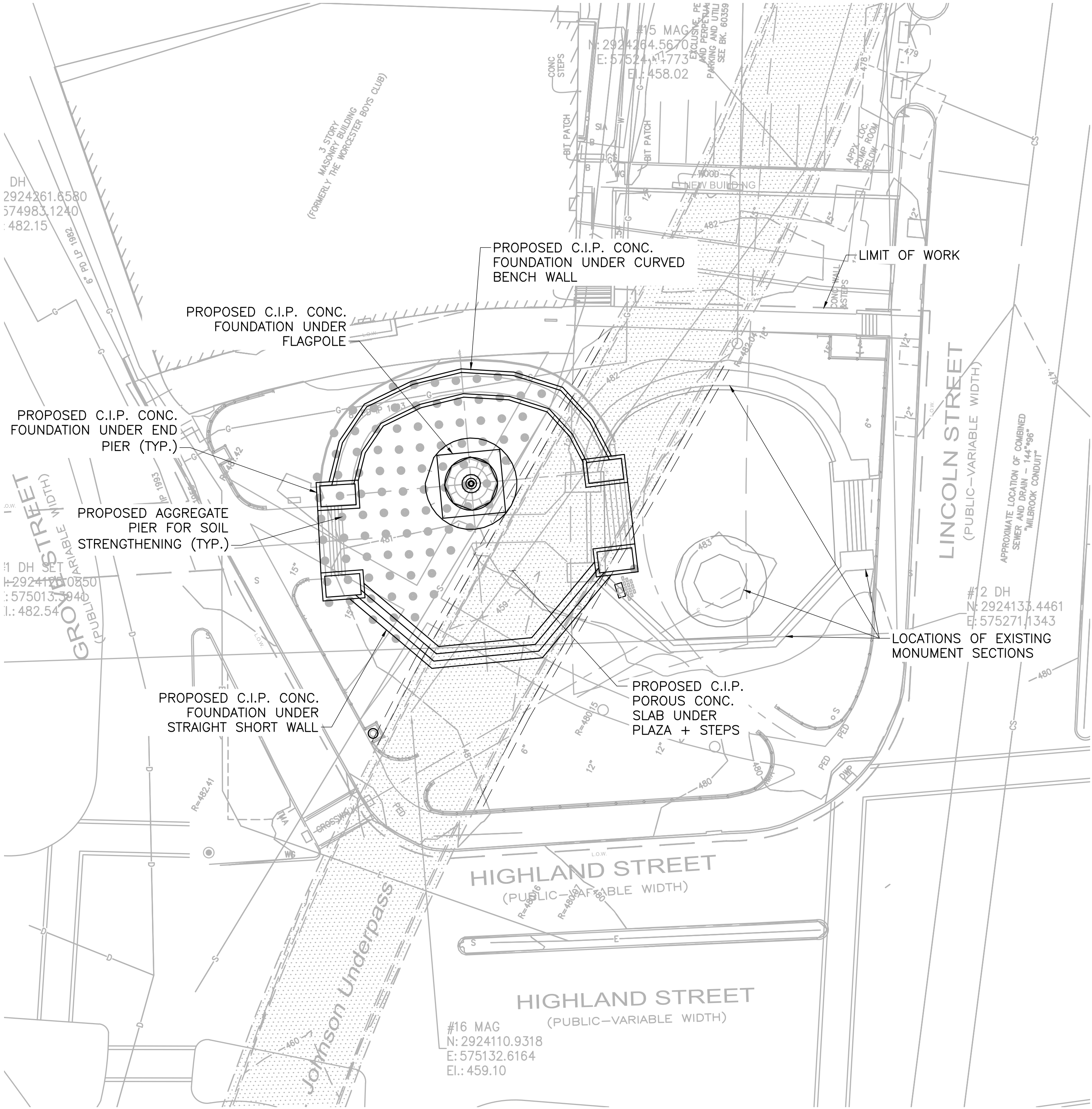
B.F.	BACK FACE	E.F.	EACH FACE	MAX.	MAXIMUM
CL.	CLEAR	EL.	ELEVATION	N.	NORTH
C.I.P.	CAST-IN-PLACE	EXIST.	EXISTING	O.C.	ON CENTER
CONC.	CONCRETE	EXP.	EXPANSION	PROP.	PROPOSED
CONST.	CONSTRUCTION	F.F.	FRONT FACE	S.	SOUTH
DL	DEAD LOAD	JT.	JOINT	TYP.	TYPICAL
DWGS	DRAWINGS	MIN.	MINIMUM	T&B	TOP AND BOTTOM

SECTION MARK



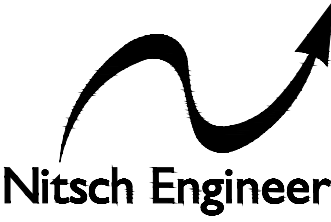
SHEET NUMBER ON WHICH THE VIEW IS SHOWN

ADD ALT #1



GENERAL STRUCTURAL PLAN

SCALE: 1" = 20'-0"



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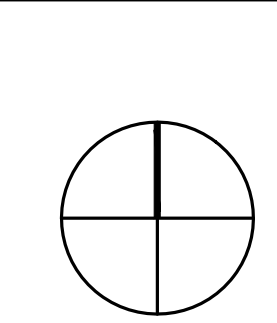
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STRUCTURAL NOTES
AND GENERAL PLAN

DRAWING TITLE

CONTRACT NO.

DATE 06.19.2024

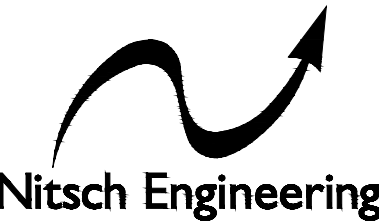
DRAWN JTJ

CKD MMS

SCALE AS SHOWN

S-1.0

SHEET NO.



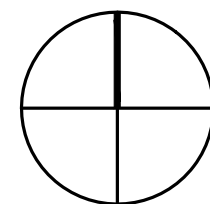
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**LINCOLN SQUARE
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FOUNDATION PLAN VIEW

DRAWING TITLE

CONTRACT

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DATE

06.19.2024

DRAWN

JTJ

CKD

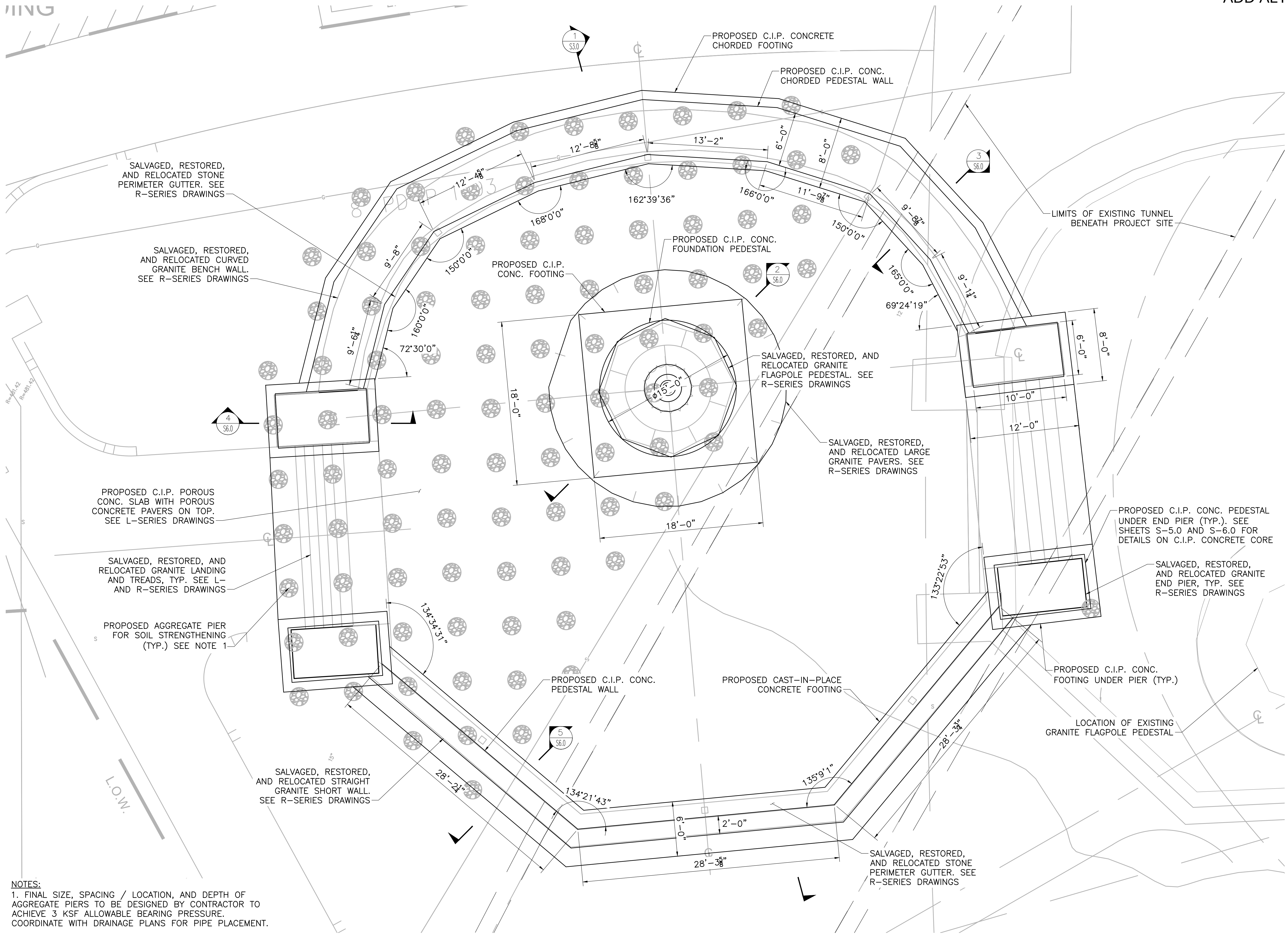
MMS

SCALE

AS SHOWN

S-2.0

SHEET NO.

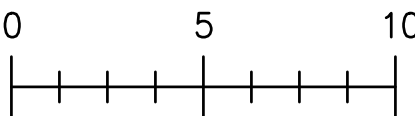


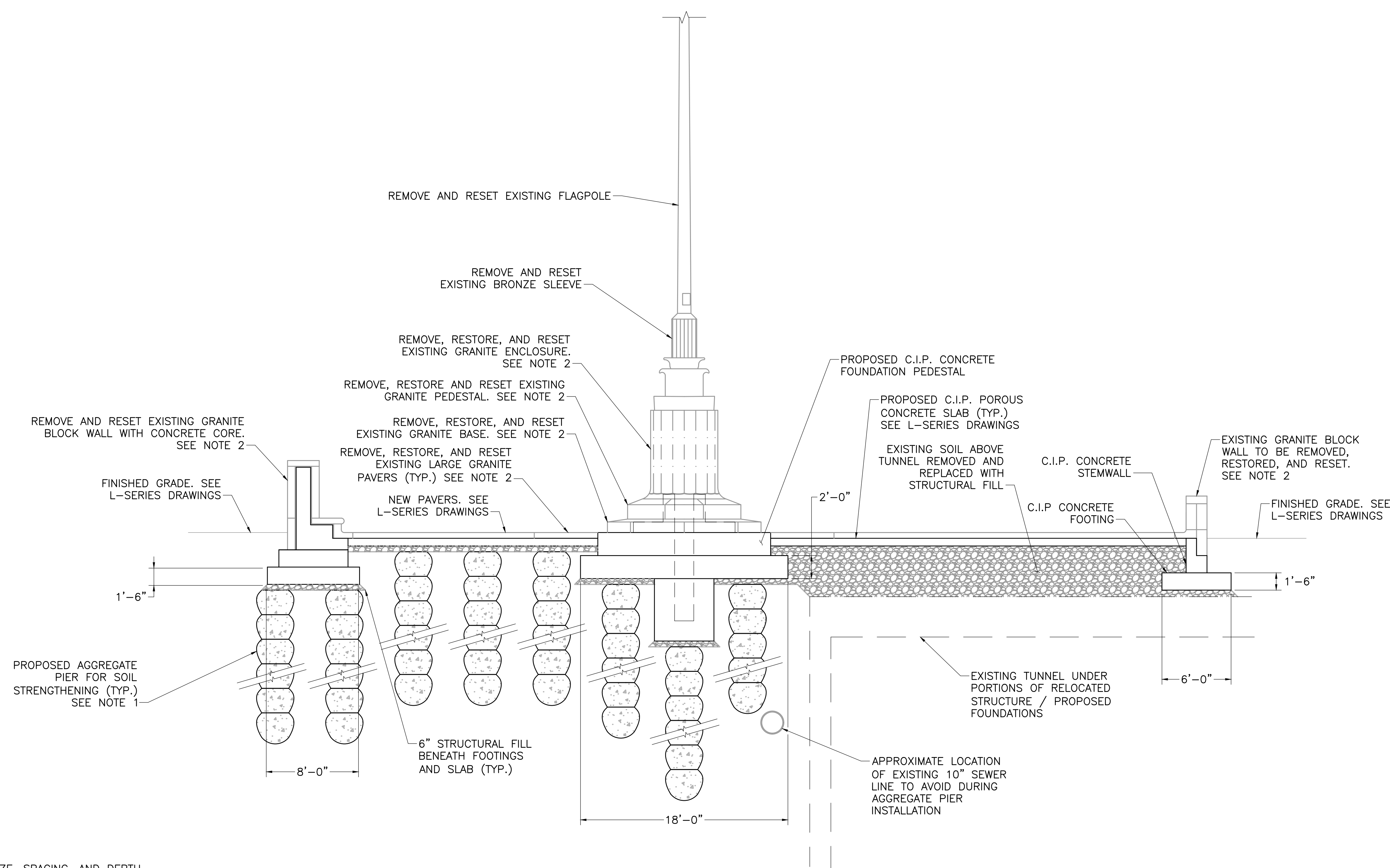
NOTES:
1. FINAL SIZE, SPACING / LOCATION, AND DEPTH OF AGGREGATE PIERS TO BE DESIGNED BY CONTRACTOR TO ACHIEVE 3 KSF ALLOWABLE BEARING PRESSURE. COORDINATE WITH DRAINAGE PLANS FOR PIPE PLACEMENT.

2. DIMENSIONS SHOWN ON THIS SHEET REFER TO PROPOSED CONCRETE FOUNDATIONS. PROPOSED DIMENSIONS ARE BASED ON THE EXISTING MONUMENT LAYOUT AS DETERMINED BY THE FIELD SURVEY. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. LAYOUT OF FOOTINGS MAY BE ADJUSTED SLIGHTLY AS NECESSARY TO FIT THE MONUMENT STRUCTURE.

PLAN VIEW OF PROPOSED MONUMENT FOUNDATION

SCALE: 1" = 5'-0"

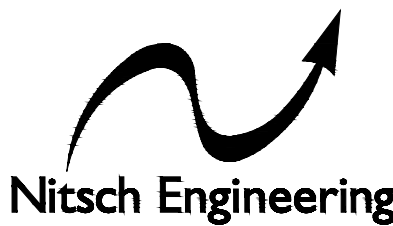




NOTES:
1. FINAL SIZE, SPACING, AND DEPTH TO BE DESIGNED BY CONTRACTOR TO ACHIEVE 3 KSF ALLOWABLE BEARING PRESSURE.
2. REFER TO R-SERIES DRAWINGS FOR MASONRY RESTORATION.

SECTION 1 — PROPOSED MONUMENT FOUNDATION

SCALE: 1" = 5'-0"



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**FOUNDATION SECTION
VIEW**

DRAWING TITLE

CONTRACT
NO.

DATE 06.19.2024

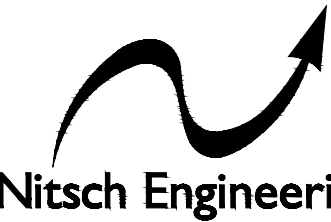
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SHEET NO.



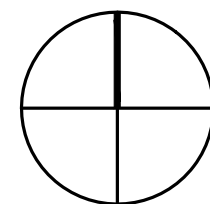
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**MEMORIAL FOUNDATION
DEMOLITION PLAN**

DRAWING TITLE

CONTRACT
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CKD MMS

SCALE AS SHOWN

S-4.0

SHEET NO.

DENOTES LIMITS OF EXIST. GRANITE
MEMORIAL SECTIONS TO BE REMOVED,
RESTORED, AND RELOCATED. SEE
R-SERIES DRAWINGS. EXISTING MEMORIAL
CONCRETE FOUNDATIONS TO BE SAWCUT
AND REMOVED AT LEAST 12 INCHES
BELOW FINISHED GRADE AS TO
FACILITATE CONSTRUCTION AND BE
LEGALLY DISPOSED OF OFF SITE. SEE
L- AND C-SERIES DRAWINGS

CURVED GRANITE
BENCH WALL. SEE
R-SERIES DRAWINGS

GRANITE PERIMETER
GUTTER. SEE
R-SERIES DRAWINGS

GRANITE END PIER
(TYP.) SEE R-SERIES
DRAWINGS

GRANITE STEPS (TYP.)
SEE R-SERIES
DRAWINGS

LARGE GRANITE
PAVERS. SEE
R-SERIES DRAWINGS

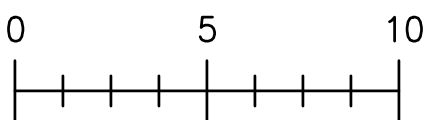
GRANITE FLAGPOLE
PEDESTAL. SEE
R-SERIES DRAWINGS

GRANITE PERIMETER
GUTTER. SEE
R-SERIES DRAWINGS

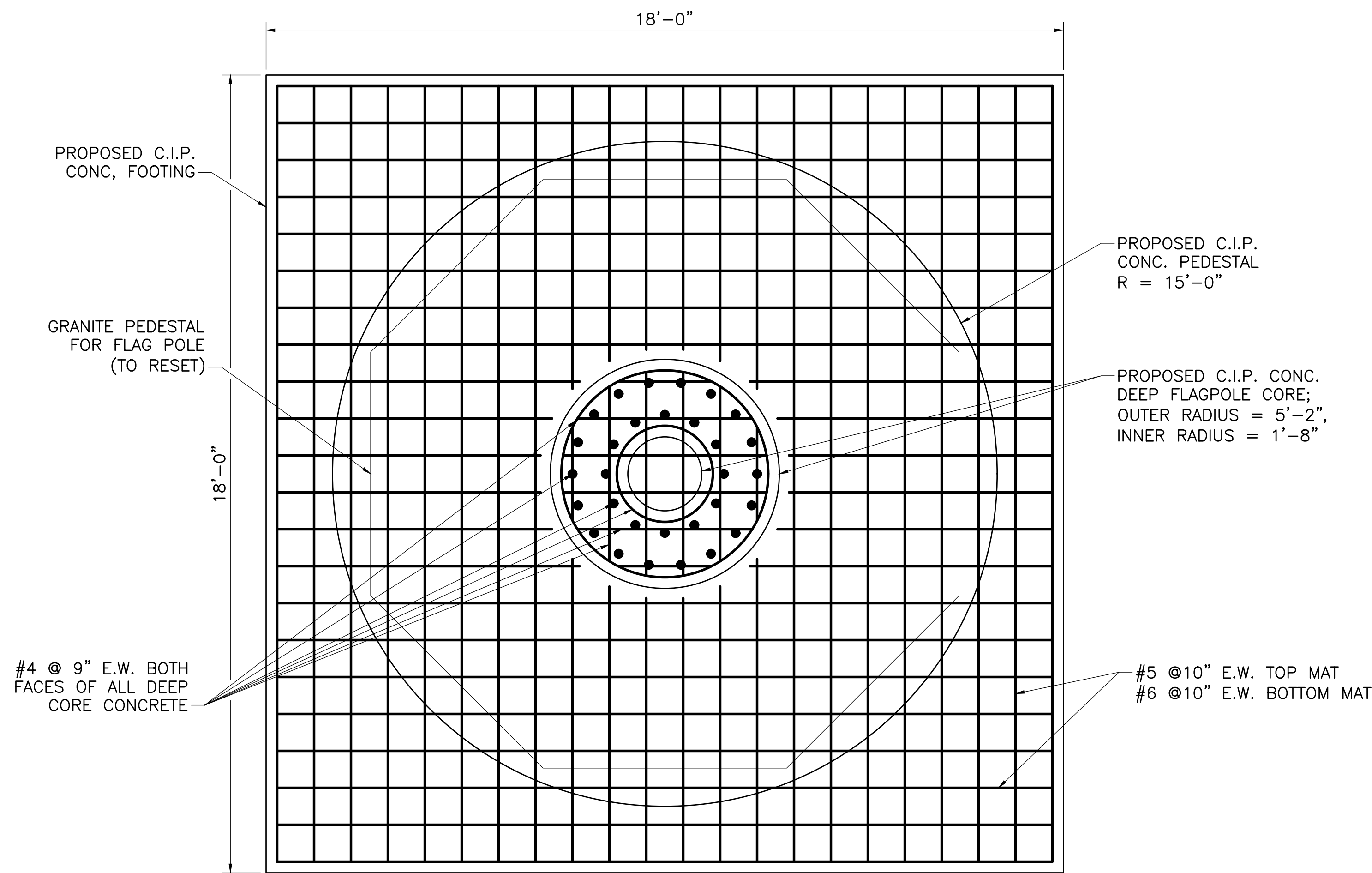
STRAIGHT GRANITE
SHORT WALL. SEE
R-SERIES DRAWINGS

MEMORIAL FOUNDATION DEMOLITION PLAN

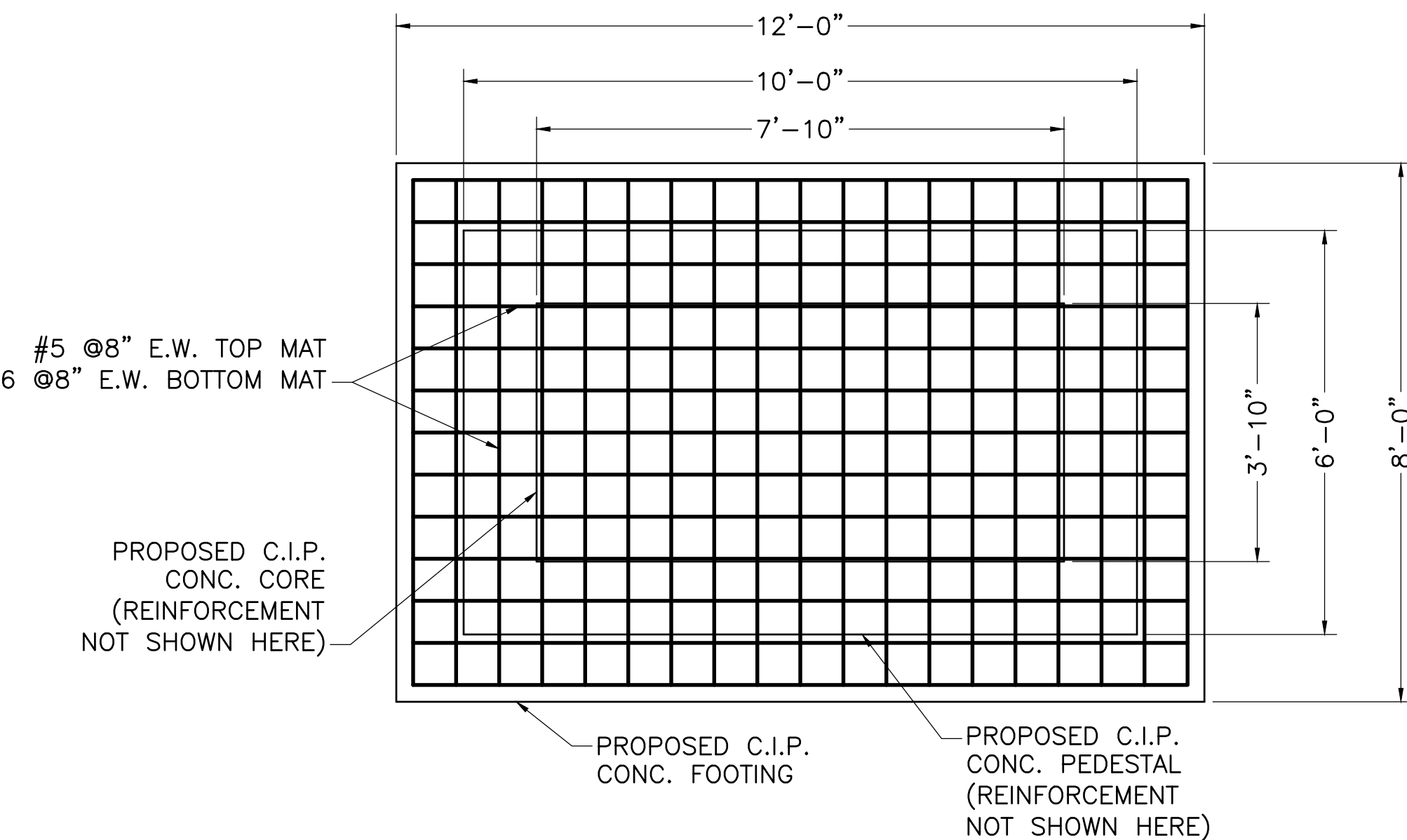
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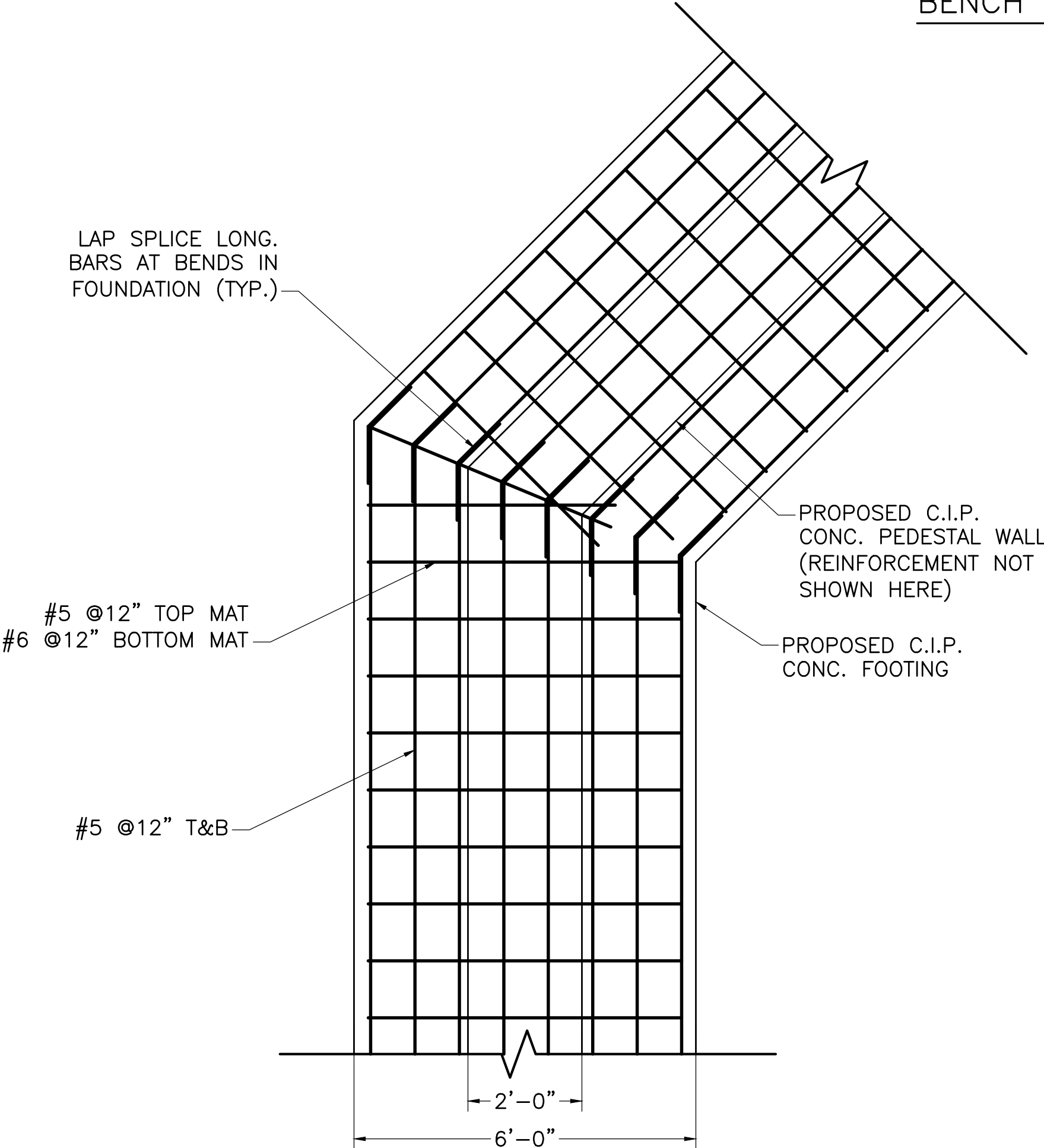
ADD ALT #1



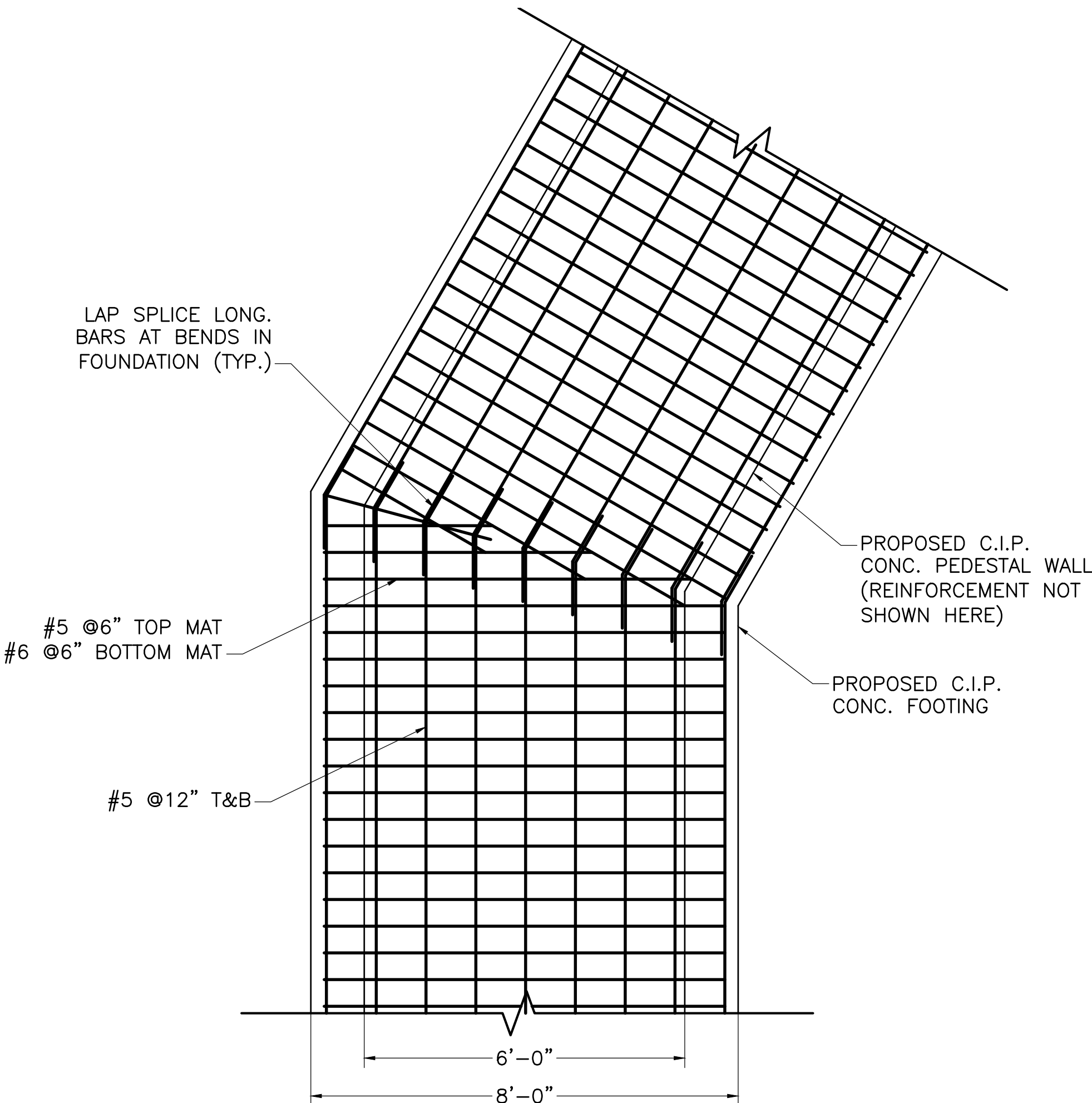
FLAG POLE FOUNDATION PLAN VIEW
SCALE: $\frac{1}{2}$ " = 1'-0"



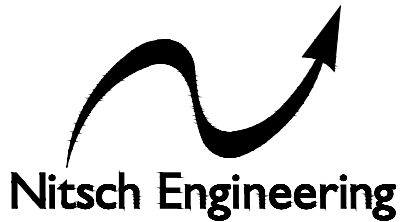
END PIER FOUNDATION PLAN VIEW
SCALE: $\frac{1}{2}$ " = 1'-0"



SHORT WALL FOUNDATION PLAN VIEW
SCALE: $\frac{1}{2}$ " = 1'-0"



BENCH WALL FOUNDATION PLAN VIEW
SCALE: $\frac{1}{2}$ " = 1'-0"



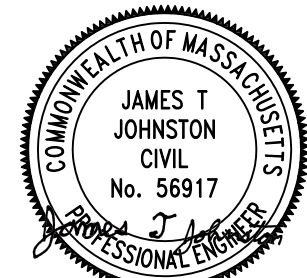
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**FOOTING PLAN
VIEWS**

DRAWING TITLE

CONTRACT
NO.

DATE 06.19.2024

DRAWN JTJ

CKD MMS

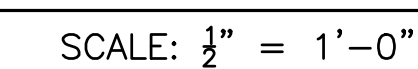
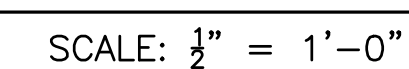
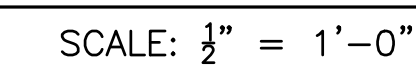
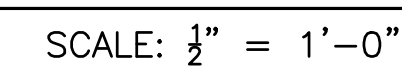
SCALE AS SHOWN

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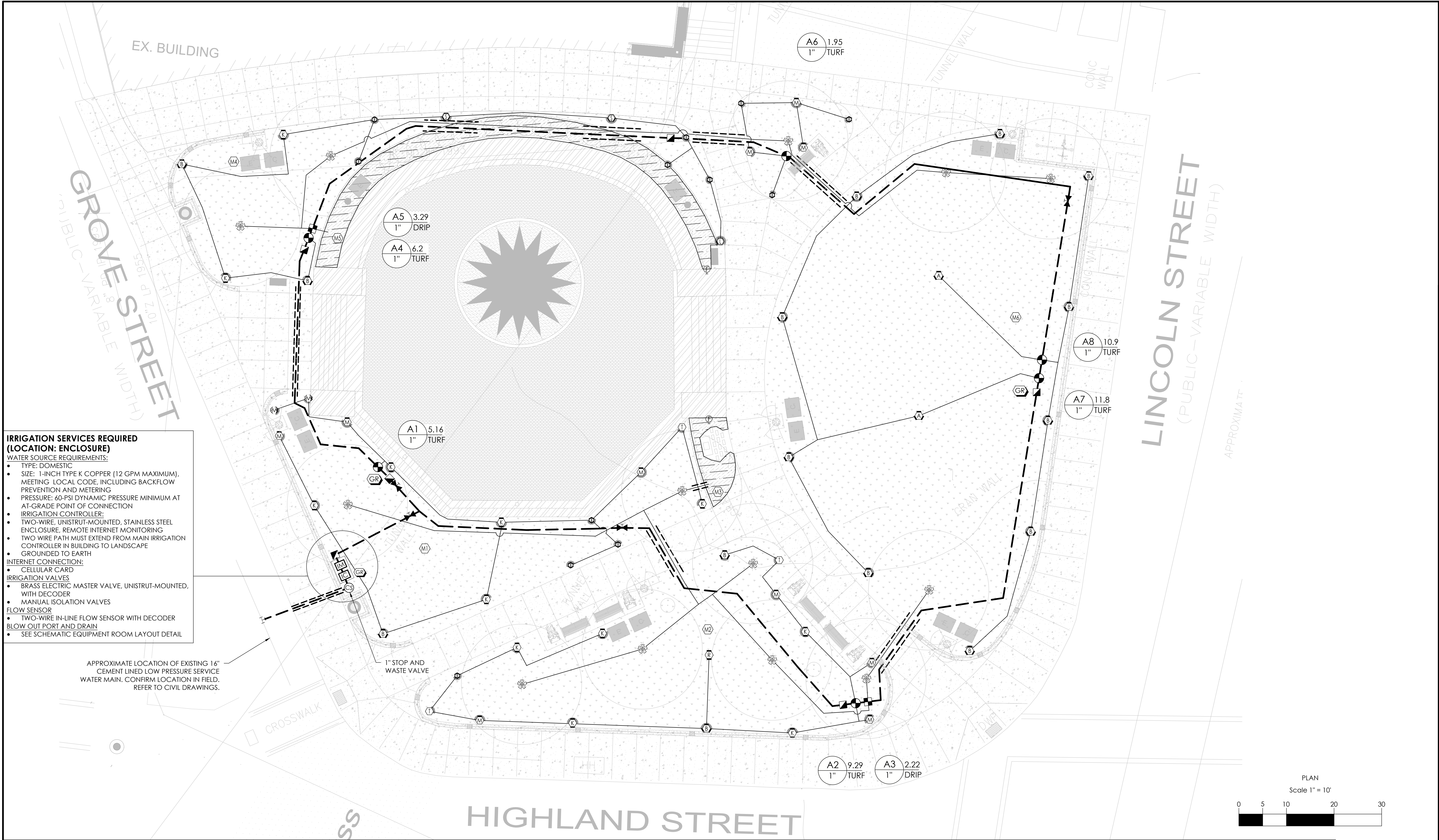
NOTES

1. SEE L-SERIES DRAWINGS FOR DETAILS ON POROUS PAVERS AND CONCRETE SLAB, TYP.
2. DIMENSIONS OF INTERIOR CONCRETE CORE SECTIONS SHALL BE DETERMINED / FIELD—VERIFIED BY THE CONTRACTOR.
3. BOTTOMS OF FOUNDATIONS SHALL BE CONSTRUCTED AT LEAST 4'-0" BELOW FINISHED GRADE FOR FROST PROTECTION.

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S-6.0



- IRRIGATION SERVICES REQUIRED
(LOCATION: ENCLOSURE)**
- WATER SOURCE REQUIREMENTS:**
- TYPE: DOMESTIC
 - SIZE: 1-INCH TYPE K COPPER (12 GPM MAXIMUM), MEETING LOCAL CODE, INCLUDING BACKFLOW PREVENTION AND METERING
 - PRESSURE: 60-PSI DYNAMIC PRESSURE MINIMUM AT AT-GRADE POINT OF CONNECTION
 - IRRIGATION CONTROLLER:
 - TWO-WIRE, UNISTRUT-MOUNTED, STAINLESS STEEL ENCLOSURE, REMOTE INTERNET MONITORING
 - TWO WIRE PATH MUST EXTEND FROM MAIN IRRIGATION CONTROLLER IN BUILDING TO LANDSCAPE
 - GROUNDED TO EARTH
- INTERNET CONNECTION:**
- CELLULAR CARD
- IRRIGATION VALVES**
- BRASS ELECTRIC MASTER VALVE, UNISTRUT-MOUNTED, WITH DECODER
 - MANUAL ISOLATION VALVES
- FLOW SENSOR**
- TWO-WIRE IN-LINE FLOW SENSOR WITH DECODER
 - BLOW OUT PORT AND DRAIN
 - SEE SCHEMATIC EQUIPMENT ROOM LAYOUT DETAIL

APPROXIMATE LOCATION OF EXISTING 16" CEMENT LINED LOW PRESSURE SERVICE WATER MAIN. CONFIRM LOCATION IN FIELD. REFER TO CIVIL DRAWINGS.

A5 3.29
1" DRIP

A4 6.2
1" TURF

A1 5.16
1" TURF

A6 1.95
1" TURF

A8 10.9
1" TURF

A7 11.8
1" TURF

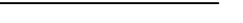
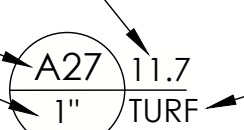
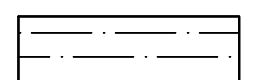
A2 9.29
1" TURF

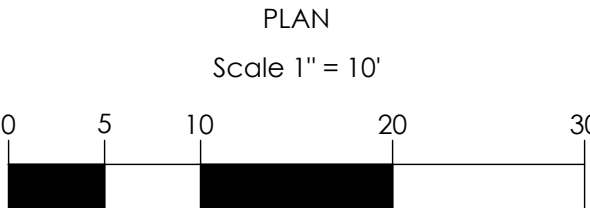
A3 2.22
1" DRIP

IRRIGATION NOTES

1. SEE IRRIGATION DETAILS AND SPECIFICATIONS SECTION 328400 FOR ADDITIONAL REQUIRED INFORMATION. SEE LANDSCAPE PLANS FOR ADDITIONAL INFORMATION.
2. COORDINATE FINAL LOCATION OF IRRIGATION AND VALVE BOXES WITH FINAL APPROVED LANDSCAPE. IN GENERAL, PLACE ALL VALVE BOXES WITHIN PLANTER BEDS TO MAXIMUM EXTENT PRACTICABLE FOR AT-GRADE LANDSCAPE.
3. ALL PIPE AND VALVE LOCATIONS ARE DIAGRAMMATIC FOR CLARITY; CONTRACTOR SHALL FIELD VERIFY.
4. SPECIFIED VALVE BOX LOCATIONS AND COLORS SHALL BE APPROVED BY LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE.
5. ALL CONTROL WIRE SHALL BE 14/2 AWG TWO-WIRE, DIRECT BURIAL, INSTALLED PARALLEL TO MAINLINE WITH DBY/R-6 WIRE SPLICE KITS.
6. IRRIGATION SYSTEM IS DESIGNED FOR DOMESTIC SUPPLY AT 12 GPM MAXIMUM. SYSTEM TO PRODUCE 60-PSI DYNAMIC PRESSURE MINIMUM AT EACH AT-GRADE IRRIGATION POINT OF CONNECTION. CONTRACTOR SHALL TEST DYNAMIC PRESSURE BEFORE STARTING WORK AND REPORT ANY DEVIATION TO THE OWNER'S REPRESENTATIVE BEFORE CONTINUING.
7. INSTALL CONTROLLER AS LOCATED APPROXIMATELY ON DRAWINGS, AS DIRECTED BY OWNER'S REPRESENTATIVE. HARD WIRE TO 120 VOLT, DEDICATED 20-AMP CIRCUIT. POWER SUPPLY USING LICENSED ELECTRICIAN. COORDINATE WITH SITE COMMUNICATIONS CONTRACTOR TO PROVIDE INTERNET SERVICE TO IRRIGATION CONTROLLER.
8. COORDINATE LOCATION OF ALL EXISTING AND FUTURE UTILITIES ON SITE, CONTACT PROPER AUTHORITIES AND UTILITY COMPANIES BEFORE THE START OF WORK.

IRRIGATION MATERIAL LIST

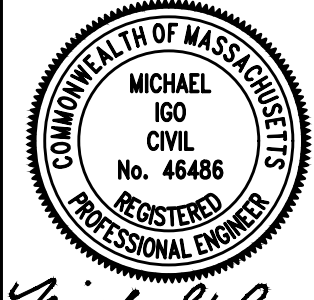
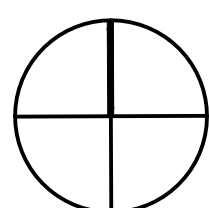
SYMBOL	NAME	DETAIL #	SYMBOL	NAME	DETAIL #	SYMBOL	NAME	DETAIL #	
	TWO-WIRE, INTERNET BASED IRRIGATION CONTROLLER	1,2		IRRIGATION MAINLINE 1-INCH PVC SCHEDULE 40	10		MANUAL FLUSHING VALVE	14	
	IRRIGATION MECHANICAL SPACE:	1,2		IRRIGATION LATERAL PVC SCHEDULE 40 (1-INCH OR AS NOTED)	10	FLOW (GPM) VALVE NUMBER VALVE SIZE (INCHES)  VALVE LABEL IRRIGATION TYPE			
			1-INCH WATER METER		PIPE SLEEVE: PVC SDR 35 SOLVENT WELD (6-INCH OR AS NOTED)				11
			1-INCH BACKFLOW PREVENTER		6-INCH POP-UP SPRINKLER (CORNER)				15
			1-INCH PRESSURE REDUCING MASTER VALVE		6-INCH POP-UP SPRINKLER (STRIP)				
	1-INCH FLOW SENSOR		6-INCH POP-UP SPRINKLER (EXTRA SMALL)						
	1-INCH CONNECTION IN STREET	1,2		6-INCH POP-UP SPRINKLER (SMALL)	12	DESIGN BY:  AQUEOUS CONSULTANTS, LLC 1 Dundee Park Drive, Suite 10 Andover, MA 01810 (978) 470-1695 www.aqueous.net			
	SPRINKLER ZONE VALVE	3		6-INCH POP-UP SPRINKLER (MEDIUM)					
	1-INCH DRIP ZONE VALVE	3		6-INCH POP-UP SPRINKLER (LARGE)					
	1-INCH ISOLATION VALVE	4		PLANTED AREA TO RECEIVE DRIPLINE 18" ROW SPACING					
	QUICK COUPLING VALVE	5		TREE/SHRUB RINGS 2' AND 3' DIAMETER CENTERED ON TRUNK/ROOT BALL	13	  Know what's below. Call before you dig.			
	GROUNDING ROD WITH LIGHTNING ARRESTOR	7							
	SOIL MOISTURE SENSOR	8							



RAY DUNETZ LANDSCAPE
ARCHITECTURE, INC.
179 GREEN STREET
BOSTON, MA 02130
617-524-6265 T

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IRRIGATION LAYOUT PLAN
ADD ALTERNATE #1

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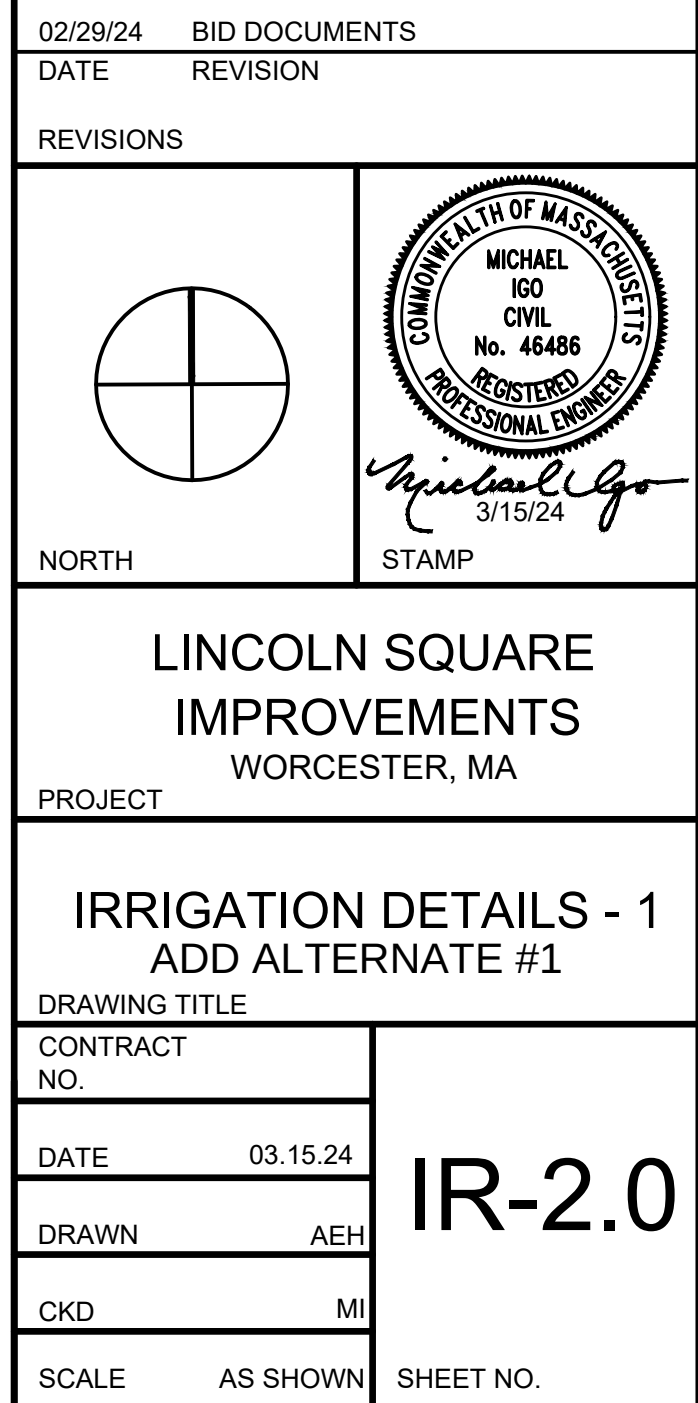
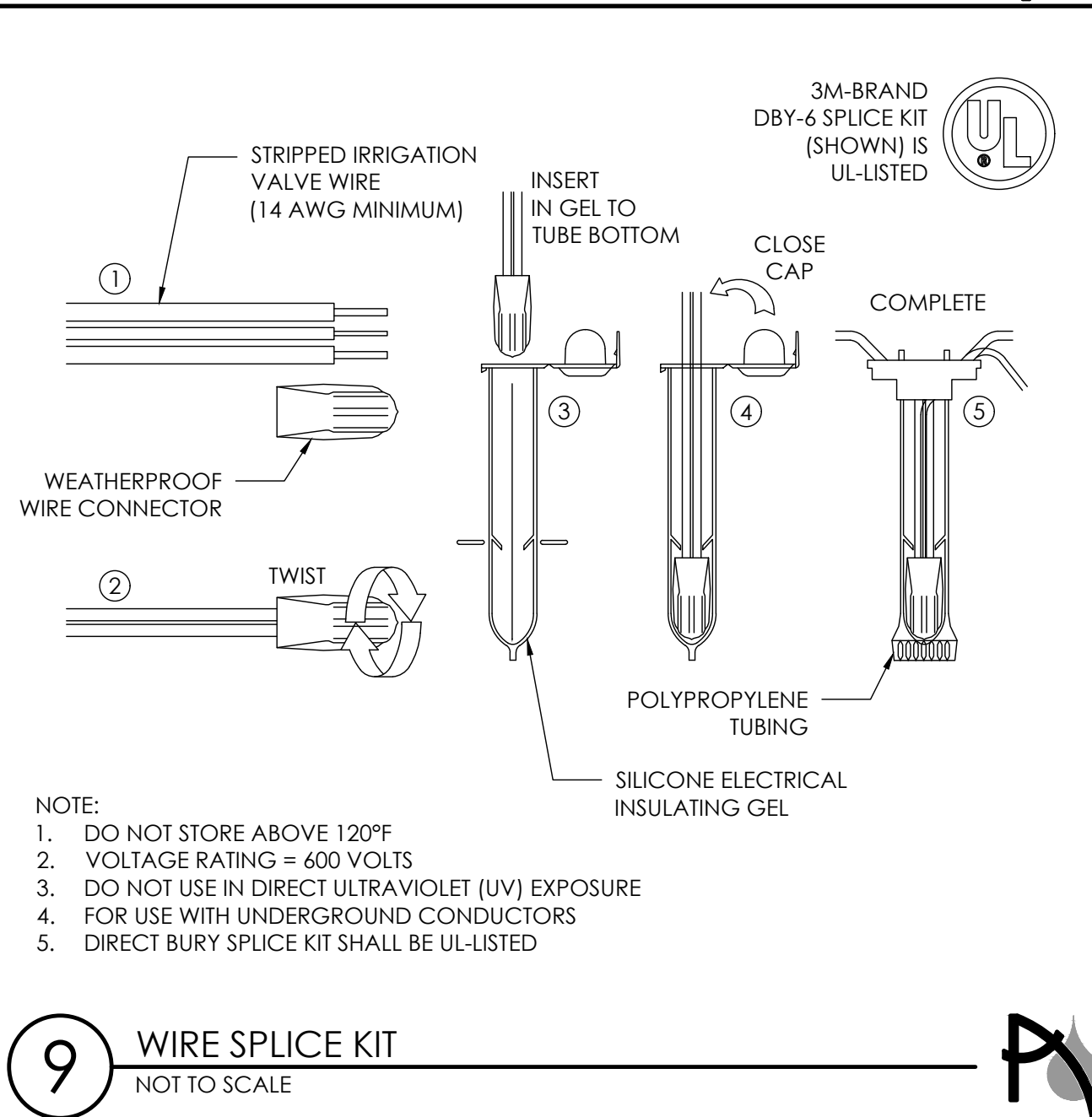
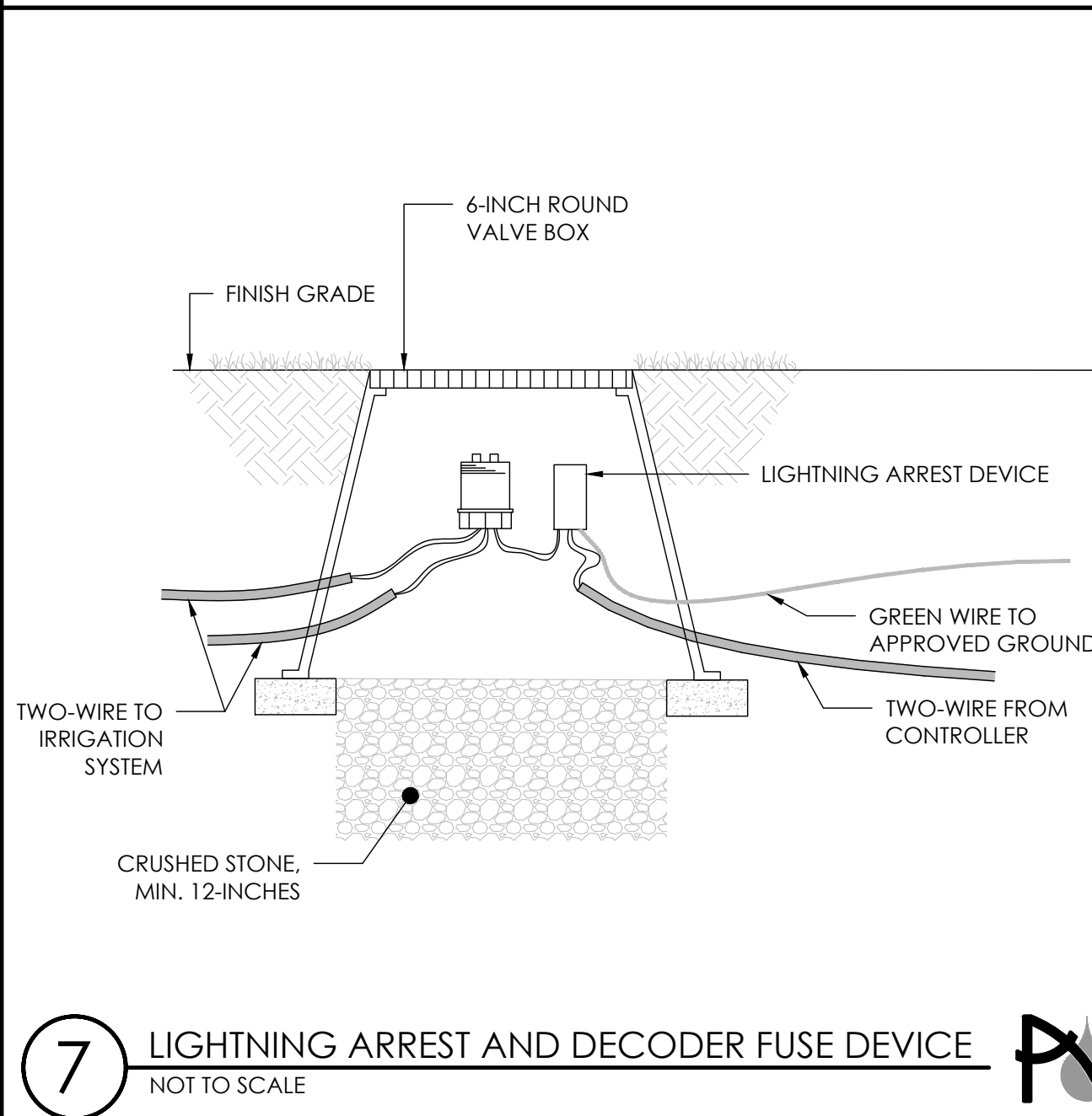
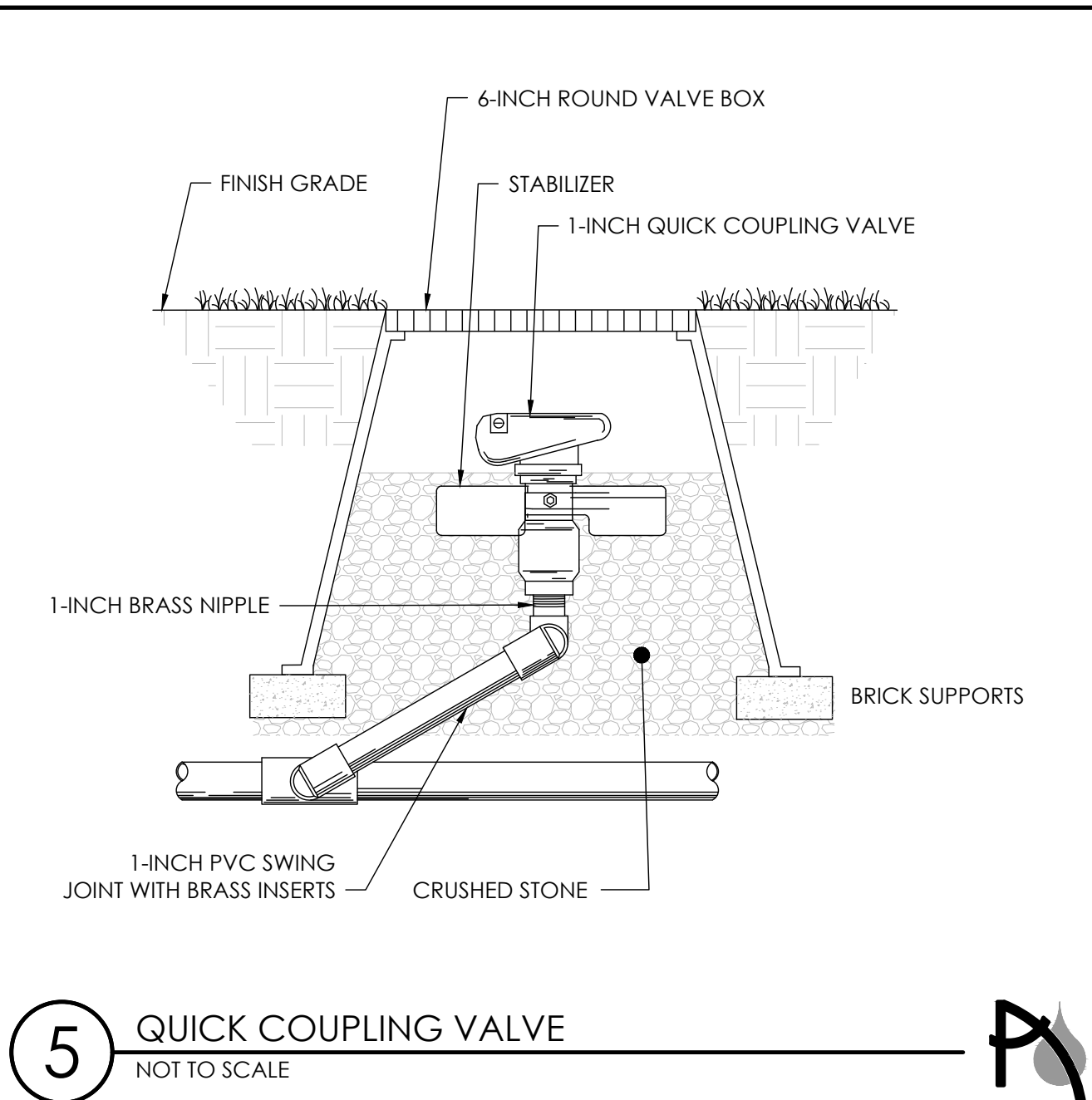
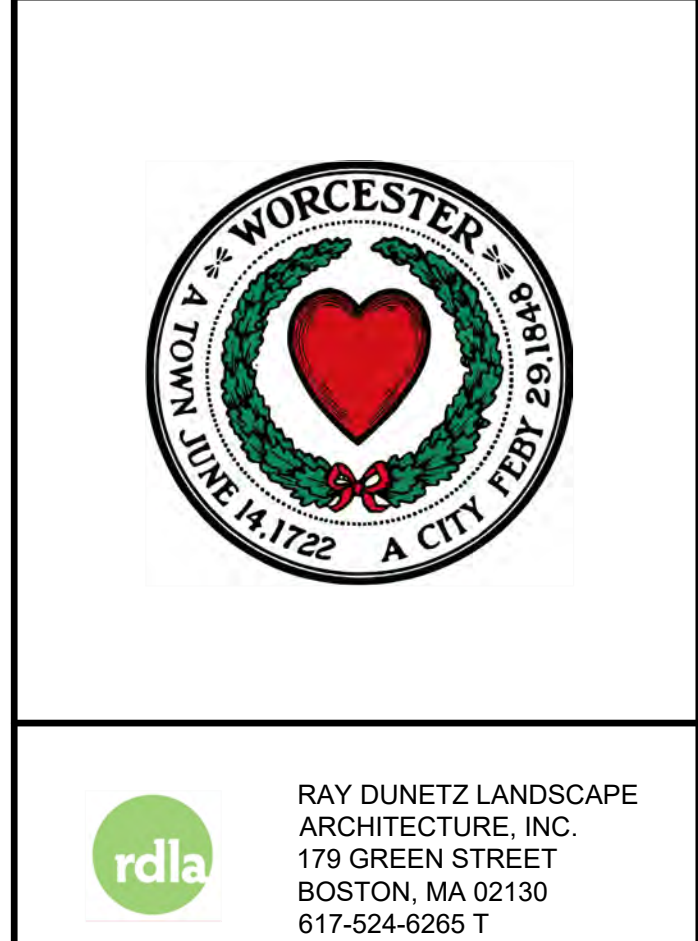
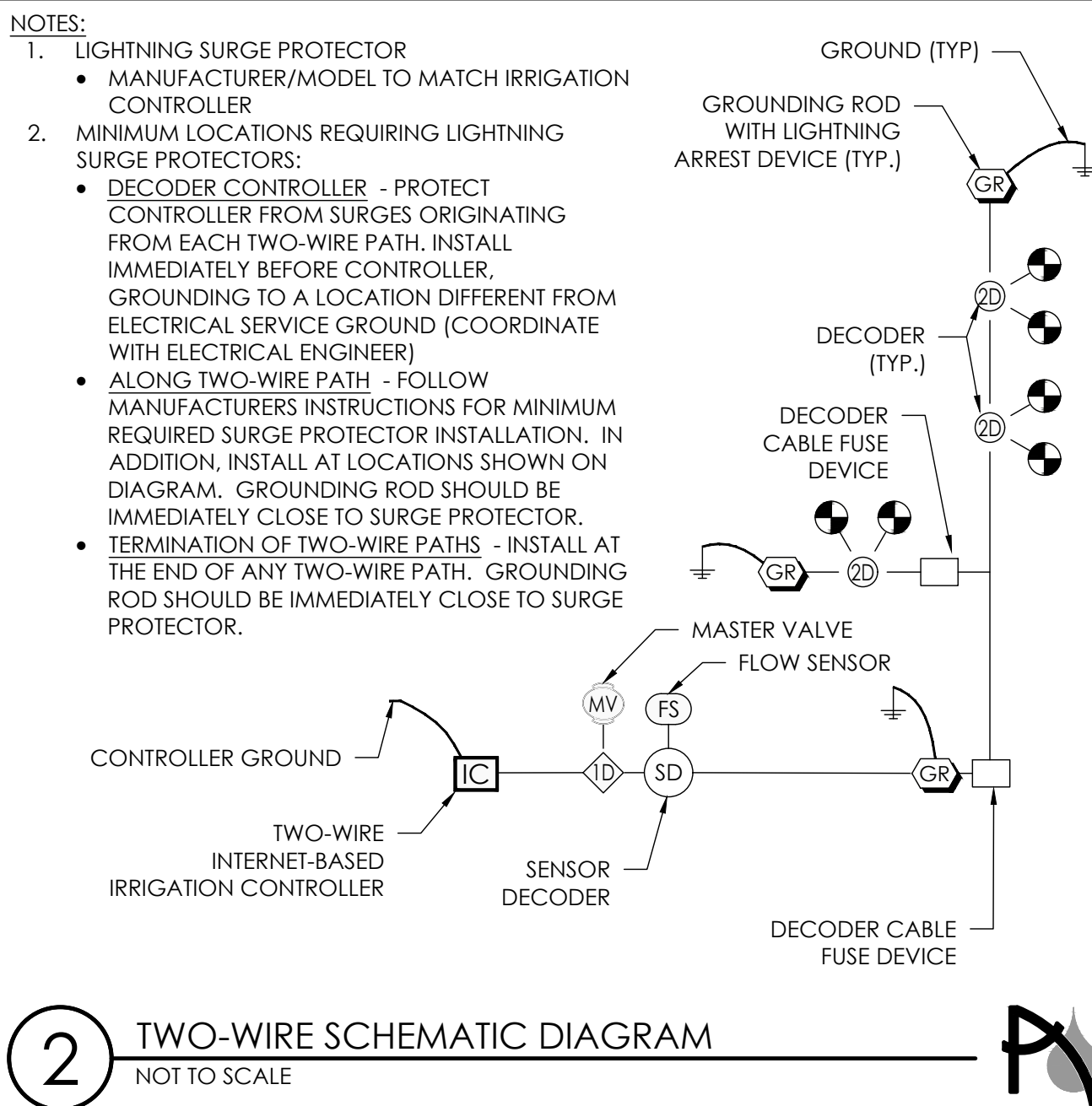
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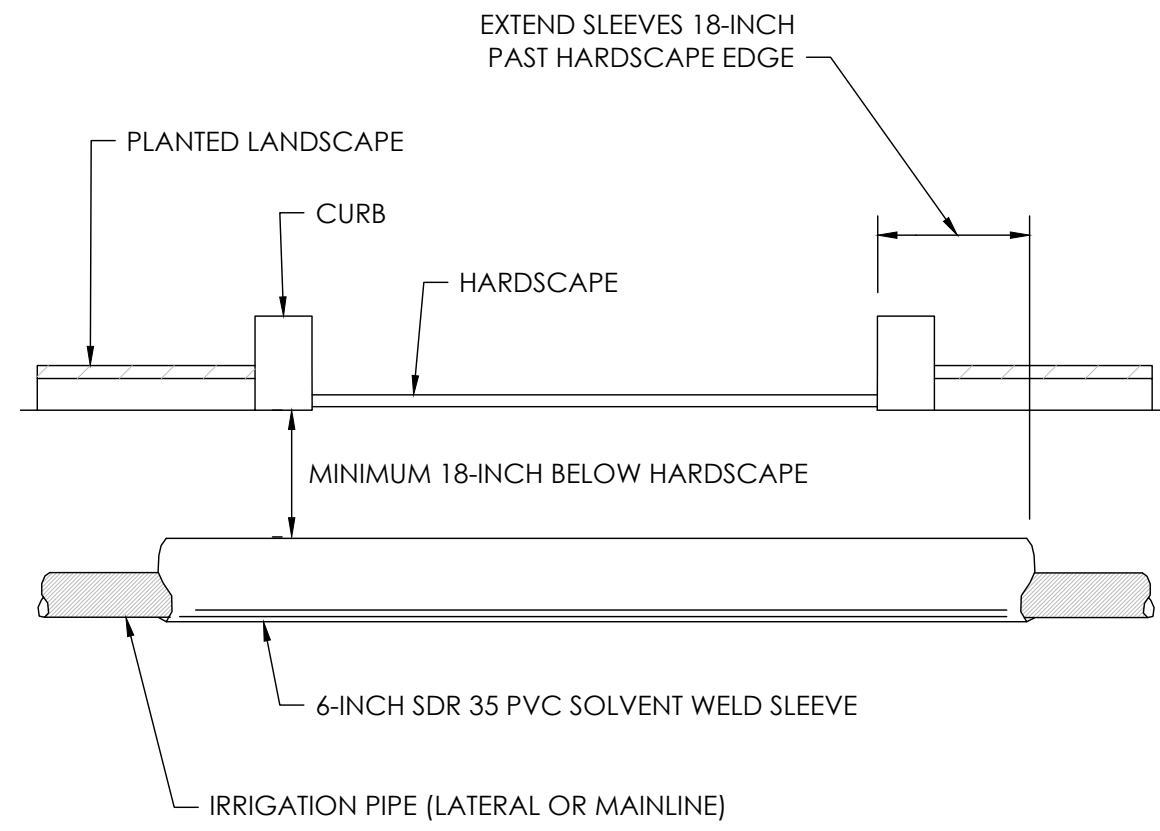
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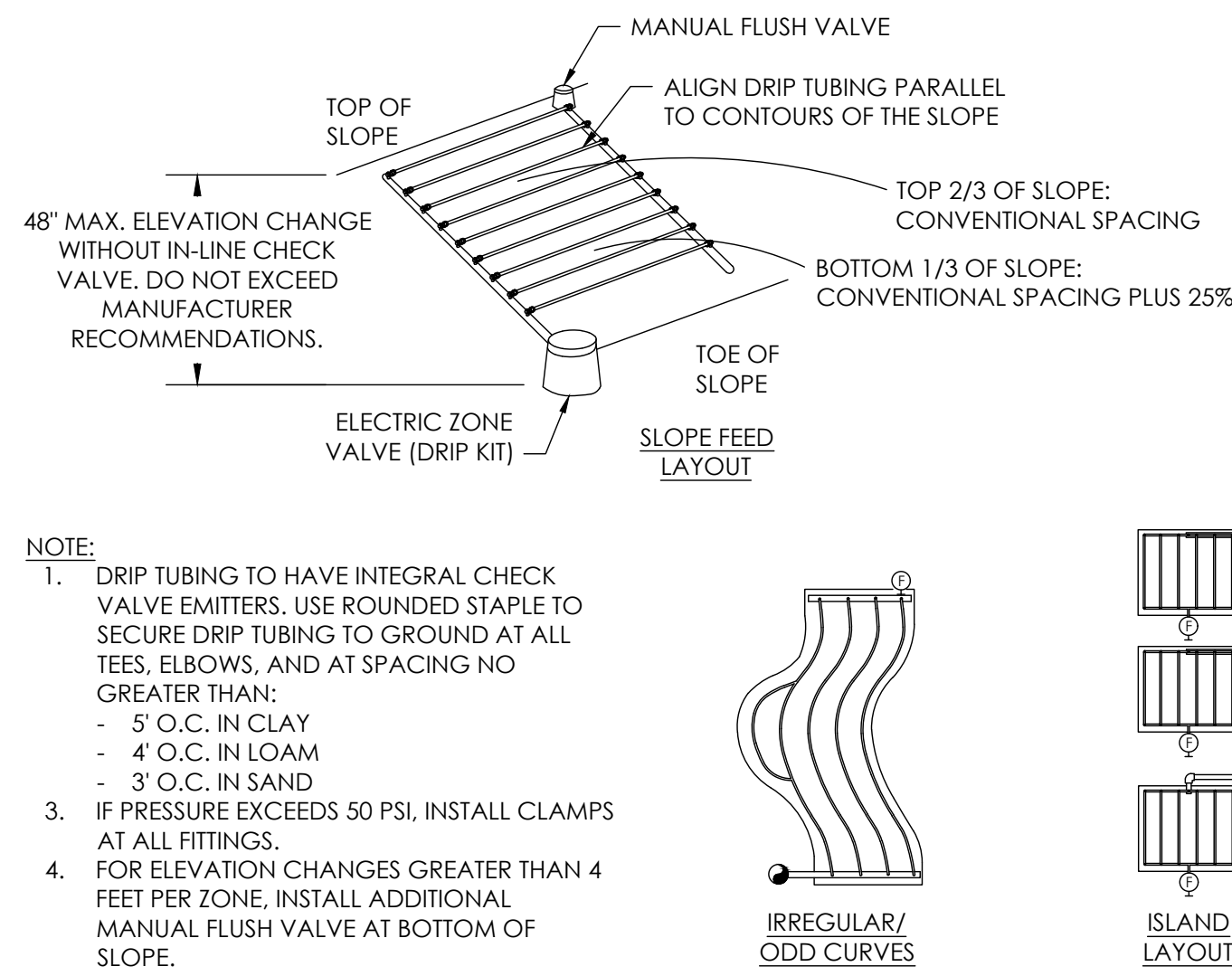
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SHEET NO.

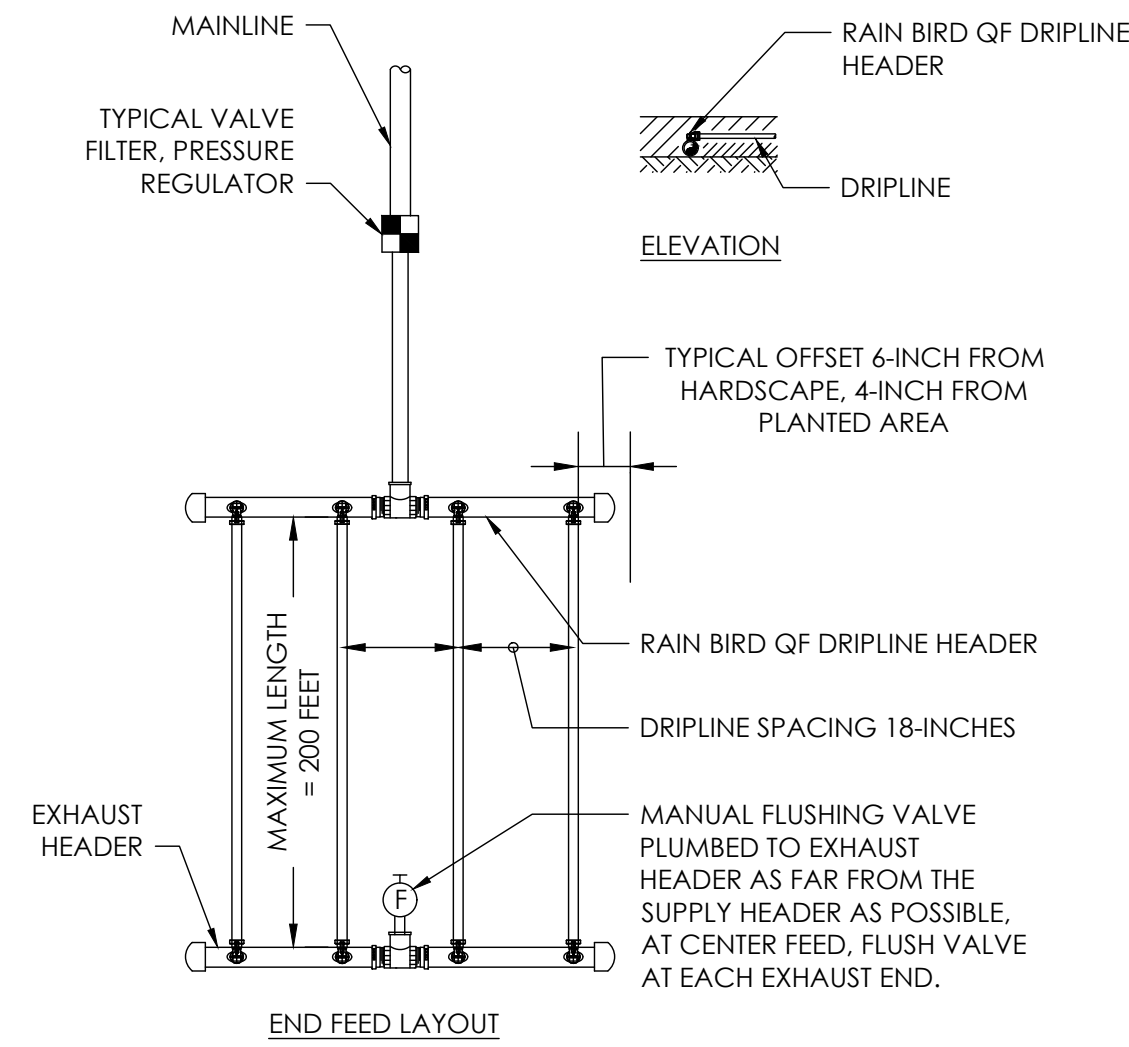




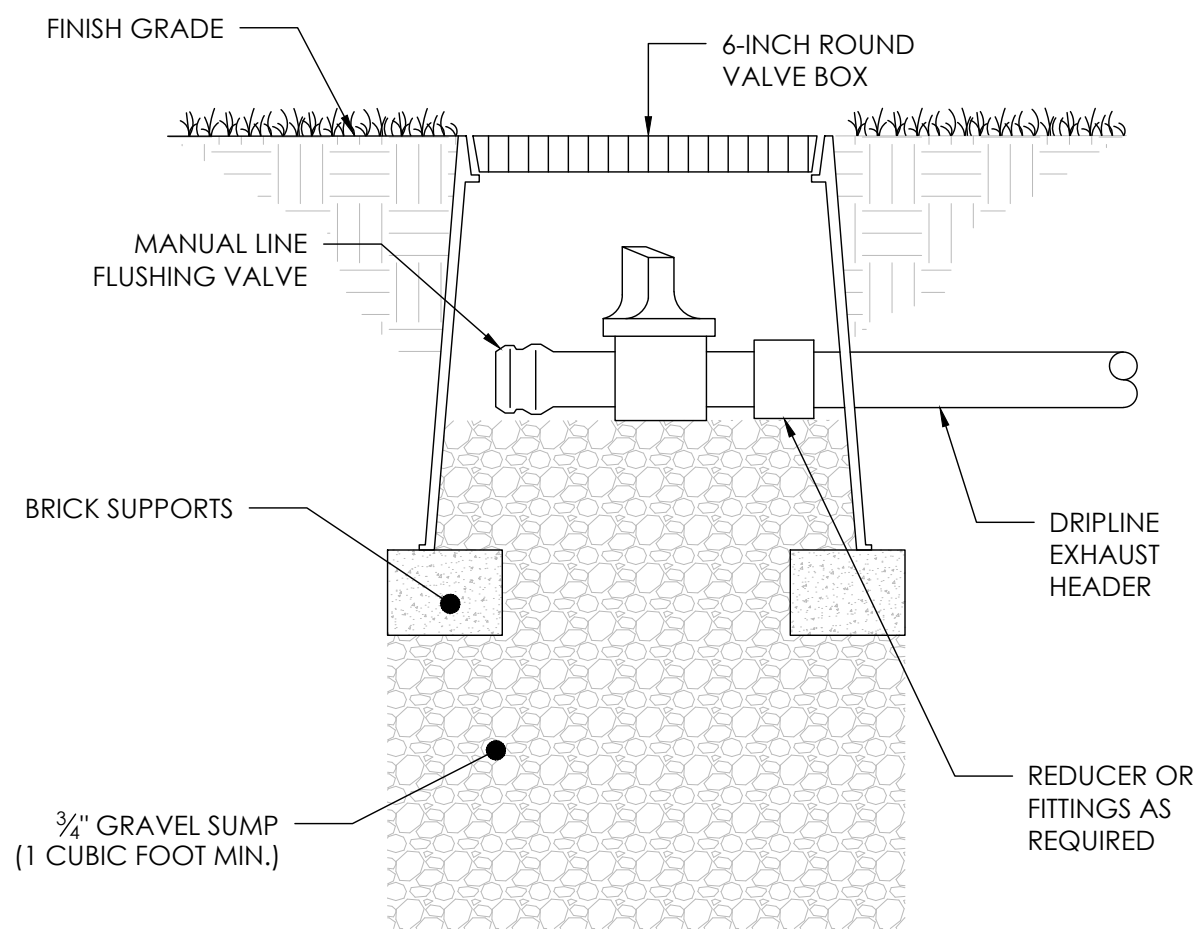
11 SLEEVE UNDER HARDSCAPE
NOT TO SCALE



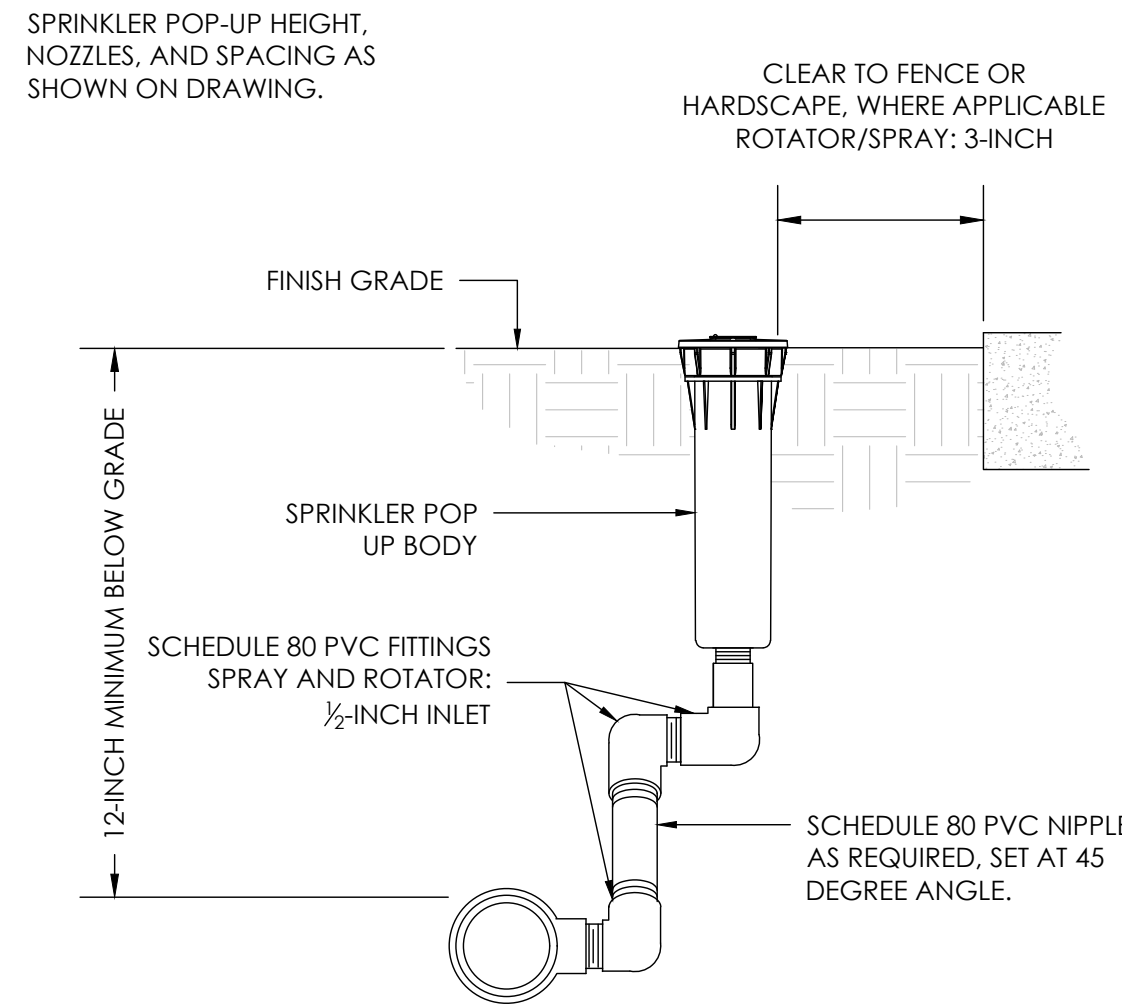
12 PLANTER BED IRRIGATION
NOT TO SCALE



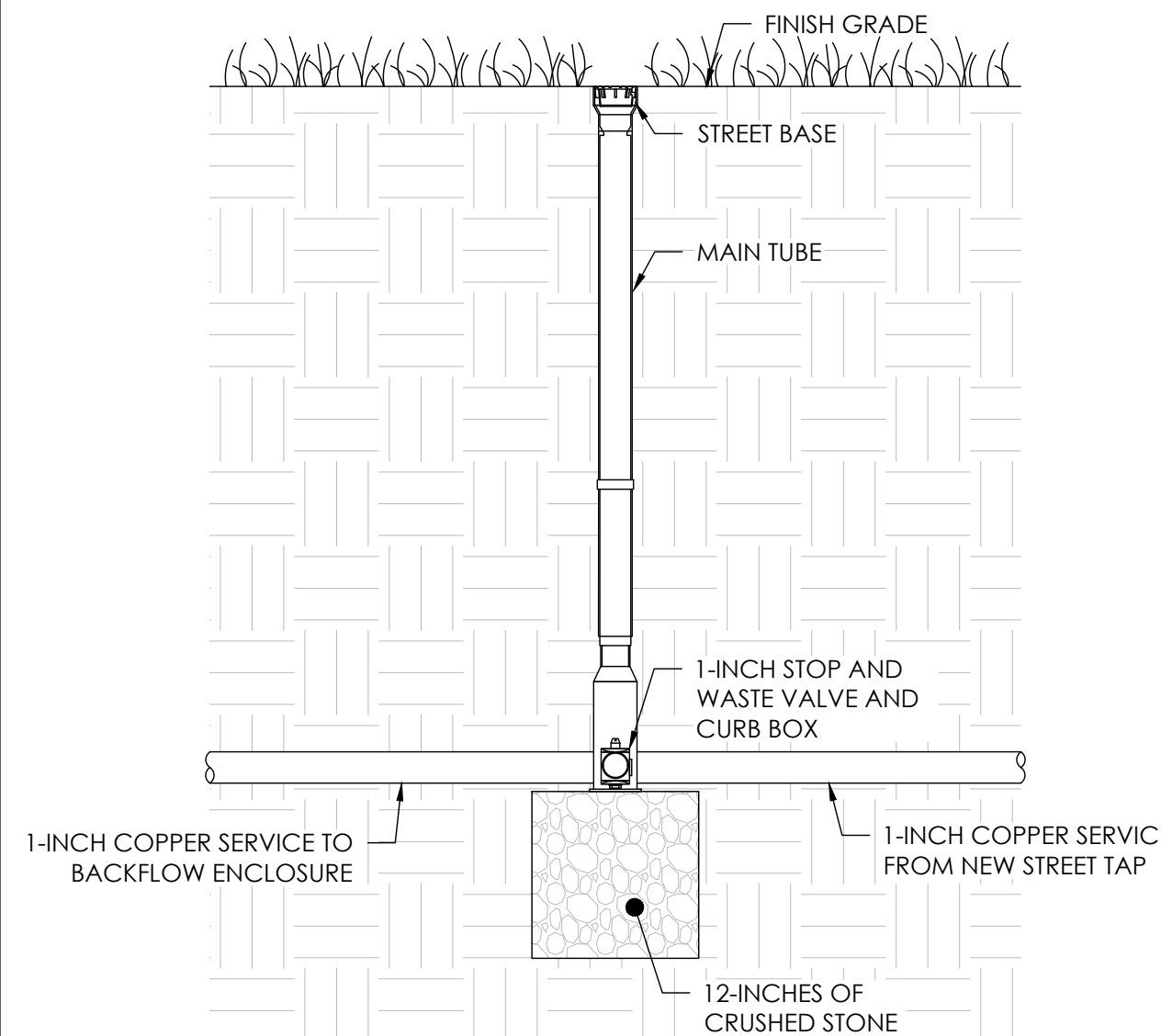
13 TREE DRIP IRRIGATION IN LANDSCAPE
NOT TO SCALE



14 MANUAL FLUSH VALVE
NOT TO SCALE



15 6-INCH POP-UP SPRINKLER
NOT TO SCALE



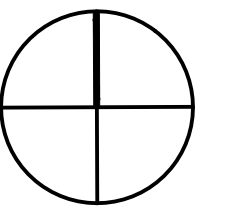
16 STOP AND WASTE VALVE
NOT TO SCALE



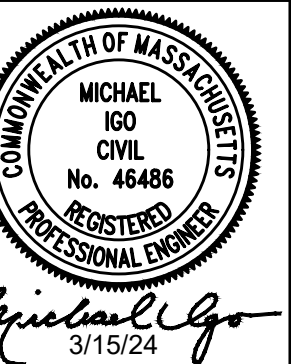
RAY DUNETZ LANDSCAPE
ARCHITECTURE, INC.
179 GREEN STREET
BOSTON, MA 02130
617-524-6265 T

02/29/24 BID DOCUMENTS
DATE REVISION

REVISIONS



NORTH



STAMP

LINCOLN SQUARE
IMPROVEMENTS
WORCESTER, MA

PROJECT

IRRIGATION DETAILS - 2
ADD ALTERNATE #1

DRAWING TITLE

CONTRACT NO.

DATE 03.15.24

DRAWN AEH

CKD MI

SCALE AS SHOWN

IR-2.1

SHEET NO.